

Service Service Service

FR970/17 1931

Service Manual

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GENERAL SAFETY NOTES



IMPORTANT SAFETY NOTICE

Proper service and repair is important to the safe, reliable operation of all Philips Consumer Electronics Company** equipment. The service procedures recommended by Philips and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various **CAUTIONS** and **NOTICES** which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It also is important to understand that these **CAUTIONS** and **NOTICES ARE NOT EXHAUSTIVE**. Philips could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, Philips has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by Philips must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.

** Hereafter throughout this manual, Philips Consumer Electronics Company will be referred to as Philips.

WARNING

Critical components having special safety characteristics are identified with a  or "S" by the Ref. No. in the parts list and enclosed within a broken line* (where several critical components are grouped in one area) along with the safety symbol  on the schematics or exploded views. Use of substitute replacement parts which do not have the same specified safety characteristics may create shock, fire, or other hazards. Under no circumstances should the original design be modified or altered without written permission from Philips. Philips assumes no liability, express or implied, arising out of any unauthorized modification of design. Servicer assumes all liability.

- Broken Line _____

SAFETY CHECKS

After the original service problem has been corrected, a complete safety check should be made. Be sure to check over the entire set, not just the areas where you have worked. Some previous servicer may have left an unsafe condition, which could be unknowingly passed on to Your customer. Be sure to check all of the following:

FIRE AND SHOCK HAZARD


IMPLOSION

X-RADIATION

LEAKAGE CURRENT COLD CHECK

LEAKAGE CURRENT HOT CHECK

FIRE AND SHOCK HAZARD

1. Be sure all components are positioned in such a way as to avoid the possibility of adjacent component shorts. This is especially important on those chassis which are transported to and from the service shop.
2. Never release a repaired unit unless all protective devices such as insulators, barriers, covers, strain reliefs, and other hardware have been installed in accordance with the original design.
3. Soldering and wiring must be inspected to locate possible cold solder joints, solder splashes, sharp solder points, frayed leads, pinched leads, or damaged insulation (including the ac cord). Be certain to remove loose solder balls and all other loose foreign particles.
4. Check across-the-line components and other components for physical evidence of damage or deterioration and replace if necessary. Follow original layout, lead length, and dress.
5. No lead or component should touch a receiving tube or a resistor rated at 1 watt or more. Lead tension around protruding metal surfaces or edges must be avoided.
6. Critical components having special safety characteristics are identified with an '**S**' by the Ref. No. in the parts list and enclosed within a broken line* (where several critical components are grouped in one area) along with the safety symbol  on the schematic diagrams and /or exploded views.
7. When servicing any unit, always use a separate isolation transformer for the chassis. Failure to use a separate isolation transformer may expose you to possible shock hazard, and may cause damage to servicing instruments.
8. Many electronic products use a polarized ac line cord (one wide pin on the plug). Defeating this safety feature may create a potential hazard to the servicer and the user. Extension cords which do not incorporate the polarizing feature should never be used.
9. After reassembly of the unit, always perform an [ac leakage test](#) or resistance test from the line cord to all exposed metal parts of the cabinet. Also, check all metal control shafts (with knobs removed), antenna terminals, handles, screws, etc., to be sure the unit may be safely operated without danger of electrical shock.

* **Broken line** _____

IMPLOSION

1. All picture tubes used in current model receivers are equipped with an integral implosion system. Care should always be used, and safety glasses worn, whenever handling any picture tube. Avoid scratching or otherwise damaging the picture tube during installation.
2. Use only replacement tubes specified by the manufacturer.

X-RADIATION

1. Be sure procedures and instructions to all your service personnel cover the subject of X-radiation. Potential sources of X-rays in TV receivers are the picture tube and the high voltage circuits. The basic precaution which must be exercised is to keep the high voltage at the factory recommended level.
2. To avoid possible exposure to X-radiation and electrical shock, only the manufacturer's specified anode connectors must be used.
3. It is essential that the service technician has an accurate HV meter available at all times. The calibration of this meter should be checked periodically against a reference standard.
4. When the HV circuitry is operating properly there is no possibility of an X-radiation problem. High voltage should always be kept at the manufacturer's rated value - no higher - for optimum performance. Every time a color set is serviced, the brightness should be run up and down while monitoring the HV with a meter to be certain that the HV is regulated correctly and does not exceed the specified value. We suggest that you and your technicians review test procedures so that HV and HV regulation are always checked as a standard servicing procedure, and the reason for this prudent routine is clearly understood by everyone. It is important to use an accurate and reliable HV meter. It is recommended that the HV reading be recorded on each customer's invoice, which will demonstrate a proper concern for the customer's safety.
5. When troubleshooting and making test measurements in a receiver with a problem of excessive high voltage, reduce the line voltage by means of a Variac to bring the HV into acceptable limits while troubleshooting. Do not operate the chassis longer than necessary to locate the cause of the excessive HV.
6. New picture tubes are specifically designed to withstand higher operating voltages without creating undesirable X-radiation. It is strongly recommended that any shop test fixture which is to be used with the new higher voltage chassis be equipped with one of the new type tubes designed for this service. Addition of a permanently connected HV meter to the shop test fixture is advisable. The CRT types used in these new sets should never be replaced with any other types, as this may result in excessive X-radiation.
7. It is essential to use the specified picture tube to avoid a possible X-radiation problem.
8. Most TV receivers contain some type of emergency "Hold Down" circuit to prevent HV from rising to excessive levels in the presence of a failure mode. These various circuits should be understood by all technicians servicing them, especially since many hold down circuits are inoperative as long as the receiver performs normally.

LEAKAGE CURRENT COLD CHECK

1. Unplug the ac line cord and connect a jumper between the two prongs of the plug.
2. Turn on the power switch.
3. Measure the resistance value between the jumpered ac plug and all exposed cabinet parts of the receiver, such as screw heads, antennas, and control shafts. When the exposed metallic part has a return path to the chassis, the reading should be between 1 megohm and 5.2 megohms. When the exposed metal does not have a return path to the chassis, the reading must be infinity. Remove the

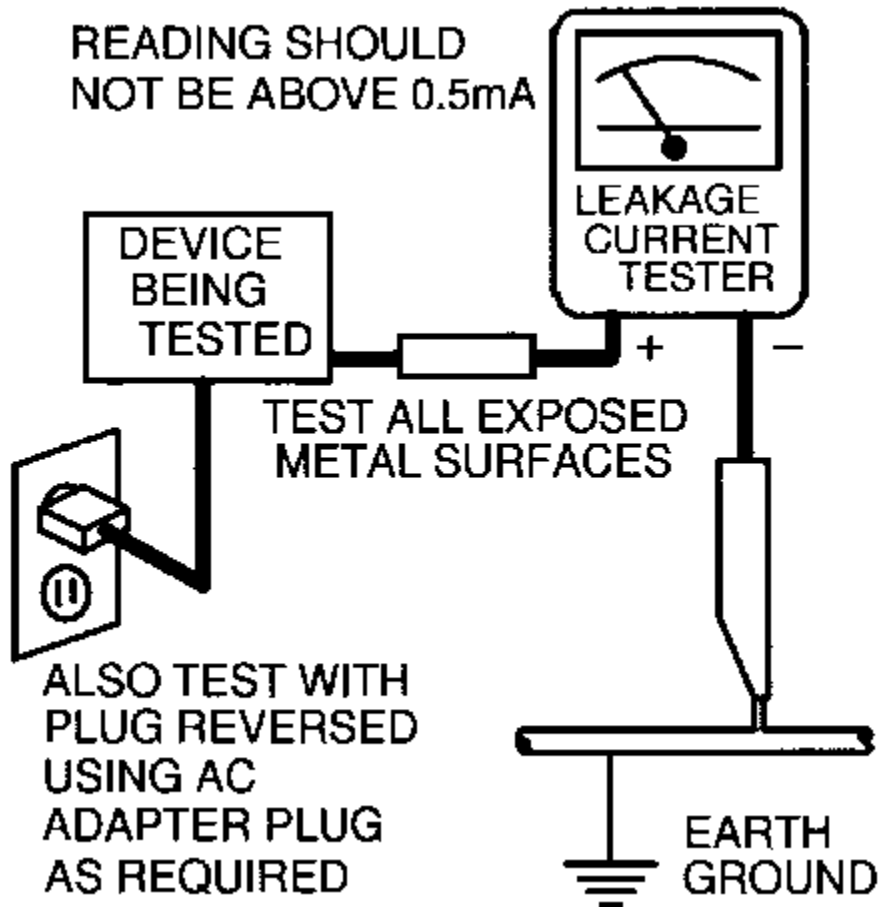
jumper from the ac line cord.

LEAKAGE CURRENT HOT CHECK

1. Do not use an isolation transformer for this test. Plug the completely reassembled receiver directly into the ac outlet.
2. Connect a **1.5k, 10W resistor** paralleled by a **0.15uF. capacitor** between each exposed metallic cabinet part and a **good earth ground** such as a water pipe, as shown below.
3. Use an ac voltmeter with at least 5000 ohms/volt sensitivity to measure the potential across the resistor.
4. **The potential at any point should not exceed 0.75 volts.** A leakage current tester may be used to make this test; leakage current must not exceed 0.5milliamp. If a measurement is outside of the specified limits, there is a possibility of shock hazard. The receiver should be repaired and rechecked before returning it to the customer.
5. **Repeat the above procedure with the ac plug reversed.** (Note: An ac adapter is necessary when a polarized plug is used. Do not defeat the polarizing feature of the plug.)

OR

With the instrument completely reassembled, plug the AC line cord directly into a 120V AC outlet. **(Do not use an isolation transformer during this test.)** Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI) C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 1410, (50.7). **With the instrument AC switch first in the on position and then in the off position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle brackets, metal cabinet, screw heads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milliamp.** Reverse the instrument power cord plug in the outlet and repeat the test. See graphic below.



PICTURE TUBE REPLACEMENT

The primary source of X-radiation in this television receiver is the picture tube. The picture tube utilized in this chassis is specially constructed to limit X-radiation emissions. For continued X-radiation protection, the replacement tube must be the same type as the original, including suffix letter, or a Philips approved type.

PARTS REPLACEMENT

Many electrical and mechanical parts in Philips television sets have special safety related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. The use of a substitute part which does not have the same safety characteristics as the Philips recommended replacement part shown in this service manual may create shock, fire, or other hazards

TV SAFETY NOTES

SAFETY CHECKS

IMPLOSION

X-RADIATION

PICTURE TUBE REPLACEMENT

PARTS REPLACEMENT

WARNING

Before removing the CRT anode cap, turn the unit **OFF** and short the **HIGH VOLTAGE** to the **CRT DAG** ground.

SERVICE NOTE: The **CRT DAG** is not at chassis ground.

TV-VCR COMBI SAFETY NOTES

IMPORTANT SAFETY PRECAUTIONS

Prior to shipment from the factory, our products are strictly inspected for recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

SAFETY PRECAUTIONS FOR TV CIRCUITS

1. Before returning an instrument to the customer, always make a safety check of the entire instrument, including, but not limited to, the following items:
 - a. Be sure that no built-in protective devices are defective or have been defeated during servicing. (1) Protective shields are provided on this chassis to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience. (2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put back in place all protective devices, including but not limited to, nonmetallic control knobs, insulating fishpapers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning. Servicers who defeat safety features or fail to perform safety checks may be liable for any resulting damage.
 - b. Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, (1) spacing between the picture tube and the cabinet mask, (2) excessively wide cabinet ventilation slots, and (3) an improperly fitted and/or incorrectly secured cabinet back cover.
 - c. Do a LEAKAGE CURRENT CHECK

ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER

OR BEFORE CONNECTING THE ANTENNA OR ACCESSORIES.

d. **X-Radiation and High Voltage Limits** - Because the picture tube is the primary potential source of X-radiation in solid-state TV receivers, it is specially constructed to prohibit X-radiation emissions. For continued X-radiation protection, the replacement picture tube must be the same type as the original. Also, because the picture tube shields and mounting hardware perform an X-radiation protection function, they must be correctly in place. High voltage must be measured each time servicing is performed that involves B+, horizontal deflection or high voltage. Correct operation of the X-radiation protection circuits also must be reconfirmed each time they are serviced. (X-radiation protection circuits also may be called "horizontal disable" or "hold down.") Read and apply the high voltage limits and, if the chassis is so equipped, the X-radiation protection circuit specifications given on instrument labels and in the **Product Safety & X-Radiation** Warning note on the service data chassis schematic. High voltage is maintained within specified limits by close tolerance safety-related components/adjustments in the high-voltage circuit. If high voltage exceeds specified limits, check each component specified on the chassis schematic and take corrective action.

2. Read and comply with all caution and safety-related notes on or inside the receiver cabinet, on the receiver chassis, or on the picture tube.

3. **Design Alteration Warning** - Do not alter or add to the mechanical or electrical design of this TV receiver. Design alterations and additions, including, but not limited to circuit modifications and the addition of items such as auxiliary audio and/or video output connections, might alter the safety characteristics of this receiver and create a hazard to the user. Any design alterations or additions will void the manufacturer's warranty and may make you, the servicer, responsible for personal injury or property damage resulting therefrom.

4. **Picture Tube Implosion Protection Warning** - The picture tube in this receiver employs integral implosion protection. For continued implosion protection, replace the picture tube only with one of the same type number. Do not remove, install, or otherwise handle the picture tube in any manner without first putting on shatterproof goggles equipped with side shields. People not so equipped must be kept safely away while picture tubes are handled. Keep the picture tube away from your body. Do not handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; because of potential hazard, do not try to remove such "permanently attached" yokes from the picture tube.

5. **Hot Chassis Warning**


a. Some TV receiver chassis are electrically connected directly to one conductor of the ac power cord and may be serviced safely without an isolation transformer only if the ac power plug is inserted so that the chassis is connected to the ground side of the ac power source. To confirm that the ac power plug is inserted correctly, with an ac voltmeter, measure between the chassis and a known earth ground. If a voltage reading in excess of 1.0V is obtained, remove and reinsert the ac power plug in the opposite polarity and again measure the voltage potential between the chassis and a known earth ground.

b. Some TV receiver chassis normally have 85Vac (RMS) between chassis and earth ground regardless of the ac plug polarity. This chassis can be safety-serviced only with an isolation transformer inserted in the power line between the receiver and the ac power source, for both personnel and test equipment protection. Some TV receiver chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the ac power line. The two ground systems are electrically separated by insulation material that must not be defeated or altered.

6. Observe original lead dress. Take extra care to assure correct lead dress in the following areas: **a.** near sharp edges, **b.** near thermally hot parts - be sure that leads and components do not touch thermally hot parts, **c.** the ac supply, **d.** high voltage, and **e.** antenna wiring. Always inspect in all areas for pinched, out of place, or frayed wiring. Check ac power cord for damage.

7. Components, parts, and/or wiring that appear to have overheated or are otherwise damaged should be replaced with components, parts, or wiring that meet original specifications. Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard.

PRECAUTIONS DURING SERVICE

A. Parts identified by the  symbol are critical for safety. Replace only with part number specified.

B. In addition to safety, other parts and assemblies are specified for conformance with regulations applying to spurious radiation. These must also be replaced only with specified replacements.

Examples: RF converters, RF cables, noise blocking capacitors, and noise blocking filters, etc.

C. Use specified internal wiring. Note especially:

- 1) Wires covered with PVC tubing
- 2) Double insulated wires
- 3) High voltage leads

D. Use specified insulating materials for hazardous live parts. Note especially:

- 1) Insulation Tape
- 2) PVC tubing
- 3) Spacers
- 4) Insulators for transistors

E. When replacing ac primary side components (transformers, power cord, etc.), wrap ends of wires securely about the terminals before soldering.

F. Observe that the wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

G. Check that replaced wires do not contact sharp edged or pointed parts.

H. When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

I. Also check areas surrounding repaired locations.

J. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

K. Crimp type wire connector

When replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, in order to prevent shock hazards, perform carefully and precisely the following steps.

Replacement procedure

- 1) Remove the old connector by cutting the wires at a point close to the connector. **Important:** Do not re-use a connector (discard it).
- 2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.
- 3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.
- 4) Use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

L. When connecting or disconnecting the VCR connectors, first, disconnect the ac plug from the ac supply socket.

SAFETY CHECK AFTER SERVICING

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

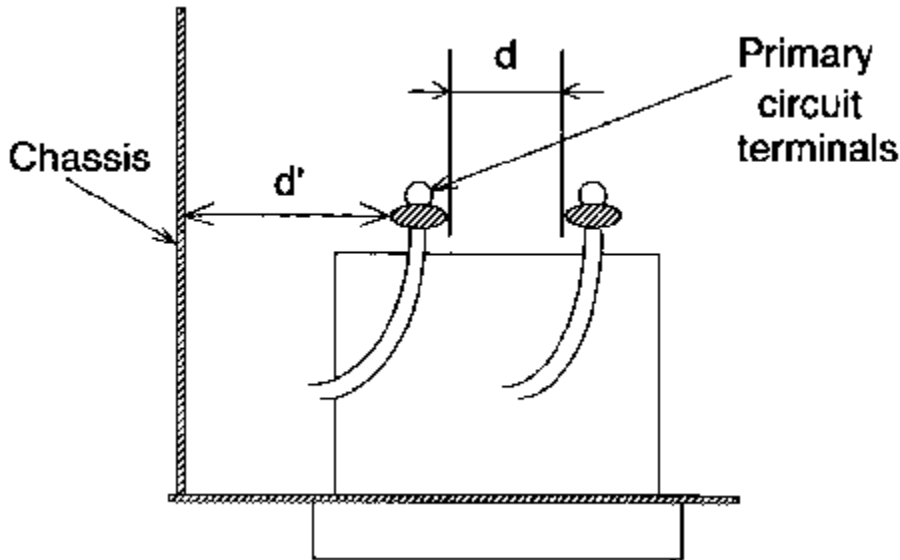
1. Clearance Distance

When replacing primary circuit components, confirm specified clearance distance (d) and (d') between soldered terminals, and between terminals and surrounding metallic parts. (See graphic below)

Table 1 : Ratings for selected area

AC Line Voltage	Region	Clearance Distance (d) (d')
110 to 130 V	USA or CANADA	> 3.2 mm (0.126 inches)

Note: This table is unofficial and for reference only. Be sure to confirm the precise values.



2. LEAKAGE CURRENT CHECKS

VCR SAFETY NOTES

FIRE & SHOCK HAZARD (VCR)

1. Be sure that all components are positioned in such a way to avoid possibility of shorts to adjacent components. This is especially important on those chassis which are transported to and from the repair shop.
2. Always replace all protective devices such as insulators and barriers after working on a set.
3. Check for damaged insulation on wires including the ac cord.
4. Check across-the-line components for damage and replace if necessary.
5. After re-assembly of the unit, always perform an ac leakage test on the exposed metallic parts of the cabinet such as the knobs, antenna terminals, etc. to be sure the set is safe to operate without danger of electrical shock. **Do not use a line isolation transformer during this test.** Use an ac voltmeter having 5000 ohms per volt or more sensitivity in the following manner: Connect a 1500 ohm 10 watt resistor, paralleled by 0.15 MFD ac type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the ac voltage across the combination 1500 ohm resistor and 0.15 MFD capacitor. Reverse the ac plug on the set and repeat ac voltage measurements again for each exposed metallic part. Voltage measured must not exceed 0.6 volts R.M.S. This corresponds to 0.4 milliamp ac. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

GENERAL

Power Supply-This receiver is designed for operation on 120 Volts, 60Hz alternating current (ac) only. Never connect to a supply having a different frequency or voltage.

IMPORTANT NOTICE

This device employs many circuits, components, and mechanical parts designed for protection against fire, shock and RF interference. For continued safety any servicing should be performed by qualified personnel and exact replacement parts should be used. Under no circumstances should the original design be altered.

PRODUCT SAFETY GUIDELINES FOR ALL PRODUCTS

CAUTION: Do not modify any circuit. Service work should be performed only after you are thoroughly familiar with all of the following safety checks. Risk of potential hazards and injury to the user increases if safety checks are not adhered to.

USE A SEPARATE ISOLATION TRANSFORMER FOR THIS UNIT WHEN SERVICING.

PREVENTION OF ELECTROSTATIC DISCHARGE (ESD)

Some semiconductor solid state devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices, Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "antistatic (ESD protected)" can generate an electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION : Be sure no power is applied to the chassis or circuit and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your feet from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device.)

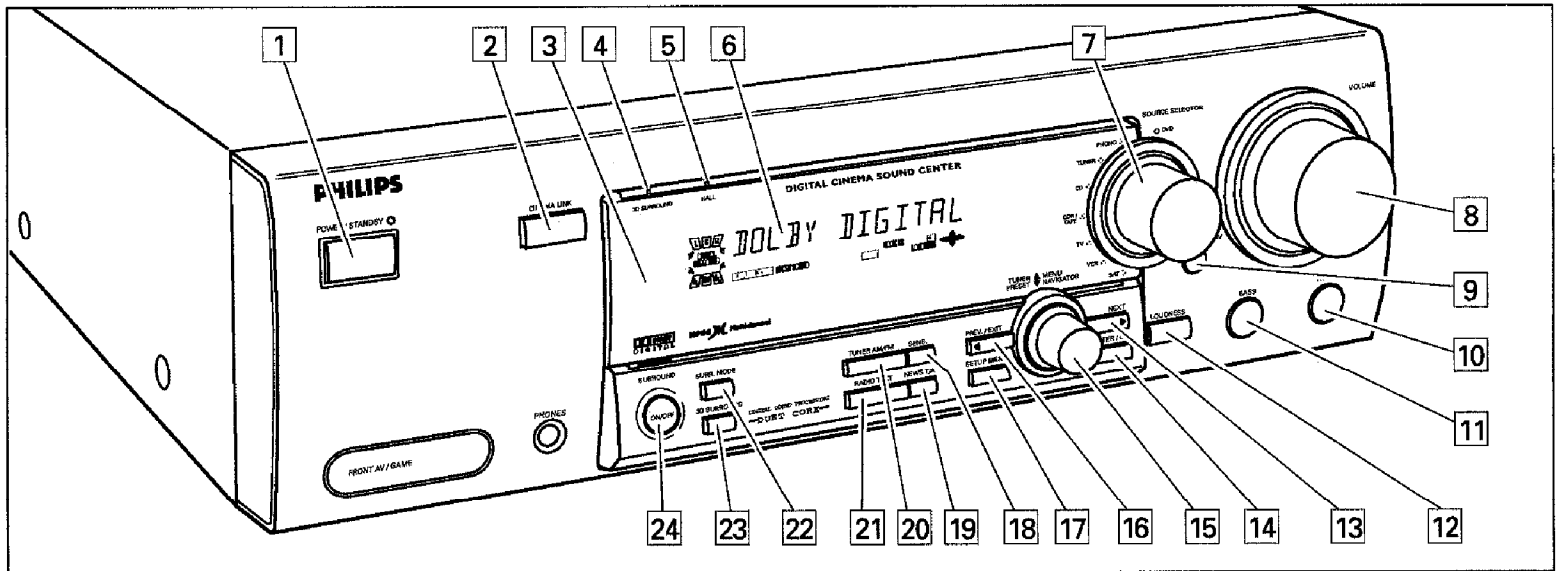
NOTE to CATV system Installer:

This reminder is provided to call the CATV system installer's attention to article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Digital A/V Surround Receiver

FR960/00/17 FR970/00/01/01B/17
MX975D/21/37

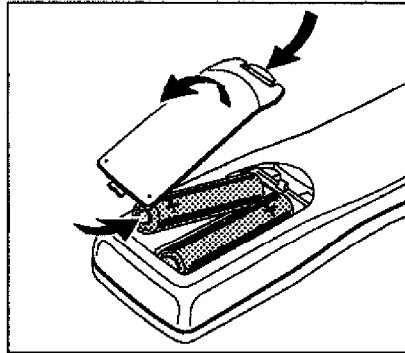




- 1 POWER / STANDBY**Switches the receiver on and off.
- 2 CINEMA LINK**Switches the system control bus between the receiver and the TV on and off.
- 3**Sensor for the infrared remote control.
- 4 3D SURROUND**Control light for virtual 3D surround.
- 5 HALL**Control light for HALL.
- 6**Display
- 7 SOURCE SELECTOR**Selects the different audio and video connectors.
- 8 VOLUME**Increases and decreases the volume level.
- 9 FRONT AV**Selects the FRONT AV / GAME input (FR 970 only).
- 10 TREBLE**Adjusts the treble when used in combination with VOLUME.
- 11 BASS**Adjusts the bass when used in combination with VOLUME.
- 12 LOUDNESS**Switches LOUDNESS on and off.
- 13 NEXT ►**TUNER: searches radio stations. MENU: switches to the next menu level.
- 14 ENTER / OK**Confirms selected menu values.
- 15 TUNER PRESET ◄ MENU NAVIGATOR**
TUNER: switches to the next and previous stored radio station.
MENU: moves upwards and downwards.
- 16 ◀ PREV. / EXIT**TUNER: searches radio stations. MENU: switches to the previous menu level.
- 17 SETUP MENU**Switches the menu on and off.
- 18 SENS.**Switches between low and high tuner sensitivity.
- 19 NEWS/TA**Switches the RDS news and RDS traffic announcement on and off.
- 20 TUNER AM/FM**Switches the wavebands of the tuner.
- 21 RADIO TEXT**Scrolls through the different RDS information.
- 22 SURR. MODE**Switches through the different surround effects.
- 23 3D SURROUND**Switches virtual 3D surround on and off.
- 24 SURROUND ON/OFF**Switches the surround sound on and off.

Remote control usage

Open the battery compartment of the remote control and insert 2 alkaline batteries, type **AA** (R06, UM-3).



Remove batteries if they are flat or the remote control is not going to be used for a long time.

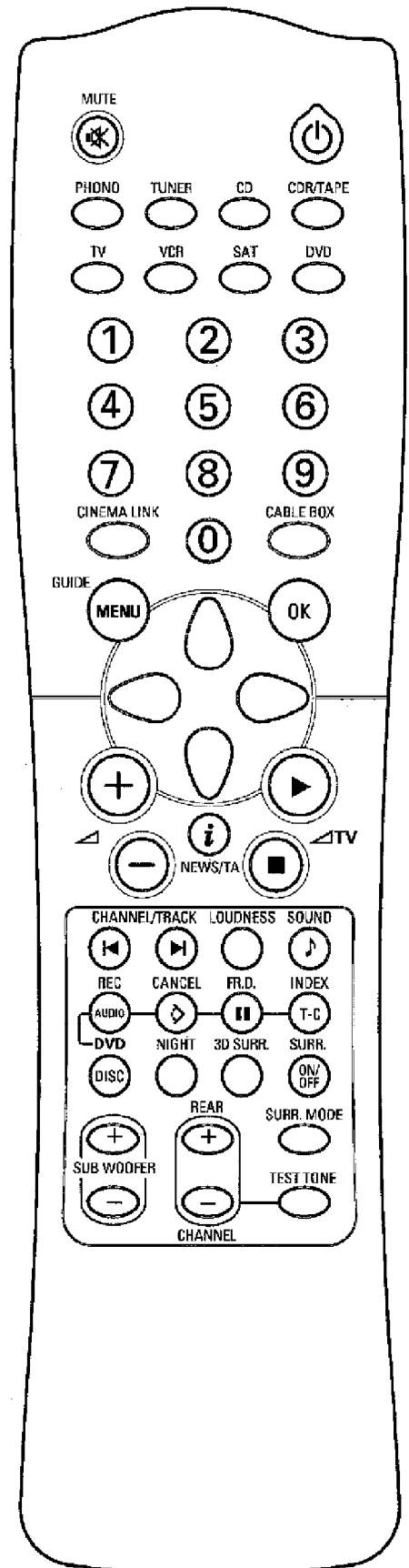
Batteries contain chemical substances, so they should be disposed of properly.

The buttons on the remote control work the same way as the corresponding ones on the receiver.

Important!

You have to press a source button for longer than 2 seconds to switch the sound source on the receiver. Pressing a source button for less than 2 seconds will only switch the remote control to use the commands for the selected product.

The remote control remains tuned to the selected source until another source button on the remote control is pressed. This enables you to operate additional sources (i. e. winding a tape) without changing the source on the receiver.



Remote control buttons

MUTE Mutes the sound of the receiver.
PHONO, TUNER, CD, CDR/TAPE, TV, VCR, SAT, DVD Switches the receiver to standby.

Switches the remote control to the commands of the different products. Selects the sources if pressed longer than 2 seconds. SAT only works with digital/satellite receivers.

1-0 Keys in numbers for tracks, stations or frequencies. Numbers consisting of two figures must be keyed in within 2 seconds.

CINEMA LINK Switches the connection between the receiver and the TV on and off.

CABLE BOX Without function.

MENU GUIDE Switches the menu on and off.

OK Confirms menu options.

Arrow buttons **TUNER**: Moves in the menus.

Right/left arrows are tuning up/down.
CD, CDR: Left/right arrows are searching backwards/forwards, up/down arrows are selecting the next/previous track.

+ / - Increases the receiver volume.

- / + Decreases the receiver volume.

NEWS/TA Switches the functions NEWS and TRAFFIC ANNOUNCEMENT on and off.

TV: Switches teletext on and off.
SAT: Switches the information text on and off.

TV Increases the TV volume.

TV Starts playback.

TV Decreases the TV volume.

CD, CDR, VCR, DVD: Stops playback.

CHANNEL/TRACK Selects the previous preset tuner station.

VCR: Rewinds the tape.

CD, CDR, DVD: Selects the previous track.

TV: Selects the previous channel.

CHANNEL/TRACK Selects the next preset tuner station.

VCR: Fast forwards the tape.

CD, CDR, DVD: Selects the next track.

TV: Selects the next channel.

LOUDNESS Switches LOUDNESS on and off.
SOUND Scrolls through the different smart sounds.

REC, DVD AUDIO **CDR, VCR**: Starts recording.
DVD: Switches audio tracks.

CANCEL, DVD **CD, CDR, SAT, VCR**: Clears a program, cancels selections.
DVD: Switches the view angle.

FR.D, DVD **TUNER**: Switches to FREQUENCY DIRECT.

CD, CDR, VCR, DVD: Pauses playback.
INDEX, DVD T-C **VCR**: Switches the index search on and off.
SAT: Switches the themes on and off.
DVD: Switches between title and chapter.

DISC **CD, CDR, DVD-Changers**: Switches to the next disc.

NIGHT Switches NIGHT MODE on and off.

3D SURR Switches virtual 3D surround on and off.

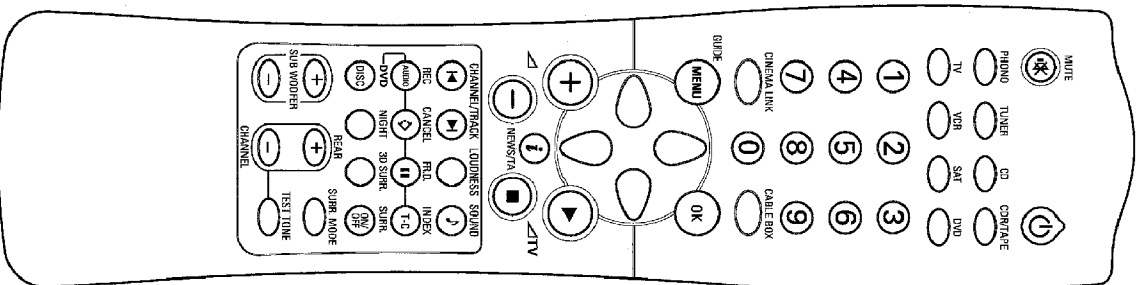
SURR. ON/OFF Switches SURROUND SOUND on and off.

+ / - **SUBWOOFER** Increases/decreases the subwoofer volume.

+ / - **REAR** Increases/decreases the volume of the rear speakers. While test tone is on, the volume of the speakers you are hearing can be increased/decreased with these buttons.

SURR. MODE Scrolls through the different surround modes.

TEST TONE Switches the test tone on and off.
 While test tone is on, the volume of the speakers you are hearing can be increased/decreased with + / - **REAR**.



Programming the universal remote control


You can identify the universal remote control by the inscription **Multibrand/Universal**.

The universal remote control must be programmed to use the codes for your appliances of different brands. This is done by keying in a 4-digit code or by scanning the codes until the correct one is found. We recommend to using the 4-digit code. This method is faster and more reliable. The code scanning method should only be used if you cannot find the code for one of your appliances. The code table can be found at the end of the booklet.

Important!

The buttons of the remote control must be used for programming, not the buttons of the receiver or other appliances.




Programming with the 4-digit code

- 1** Keep the source button for the appliance which should be controlled and  pressed for 3 seconds.
- 2** Key in the 4-digit code for the appliance (codetable at the end of the booklet).

Notes: — If more than 4 digits are entered, the remote control will recognize only the ones keyed in first.

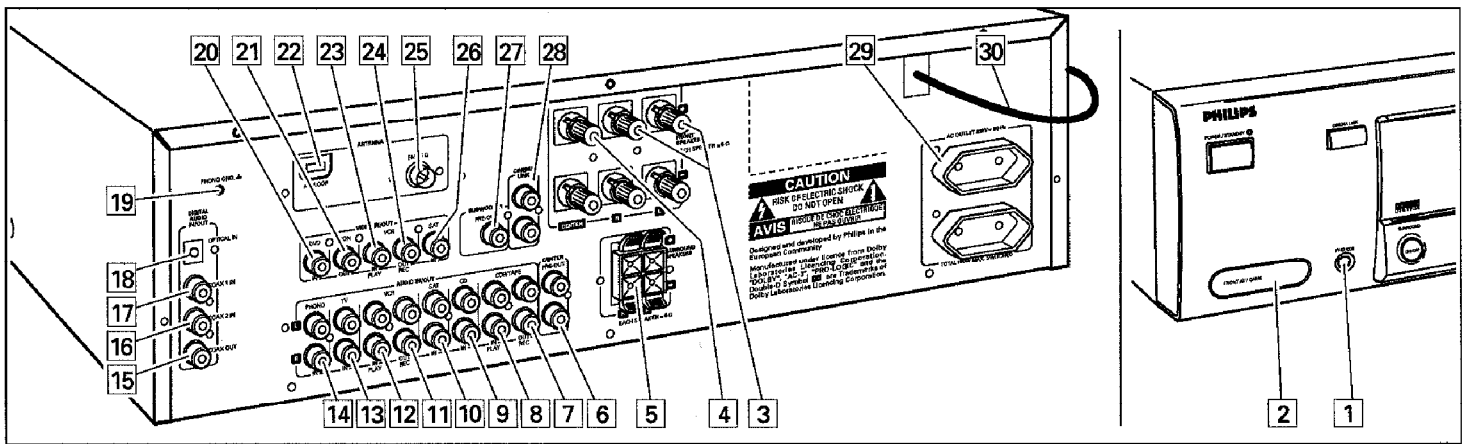
- If you do not key in a code within 30 seconds the remote control will switch off the programming function without changing the code.*

Scanning the codetable

- 1** Switch on the appliance which should be controlled.
 - 2** Keep the source button for the appliance which should be controlled and  pressed for 3 seconds.
 - 3** Press and release  again.
 - The remote control sends the codes for channel up or standby (depending on the selected source) for one brand after the other.
 - 4** As soon as the appliance reacts — switches to the next channel or to standby — press  to confirm the code.
 - The identified code will be used.
- If the set does not react within 2 minutes, the code for this appliance is not stored in the remote control. The code of the remote control will remain unchanged.

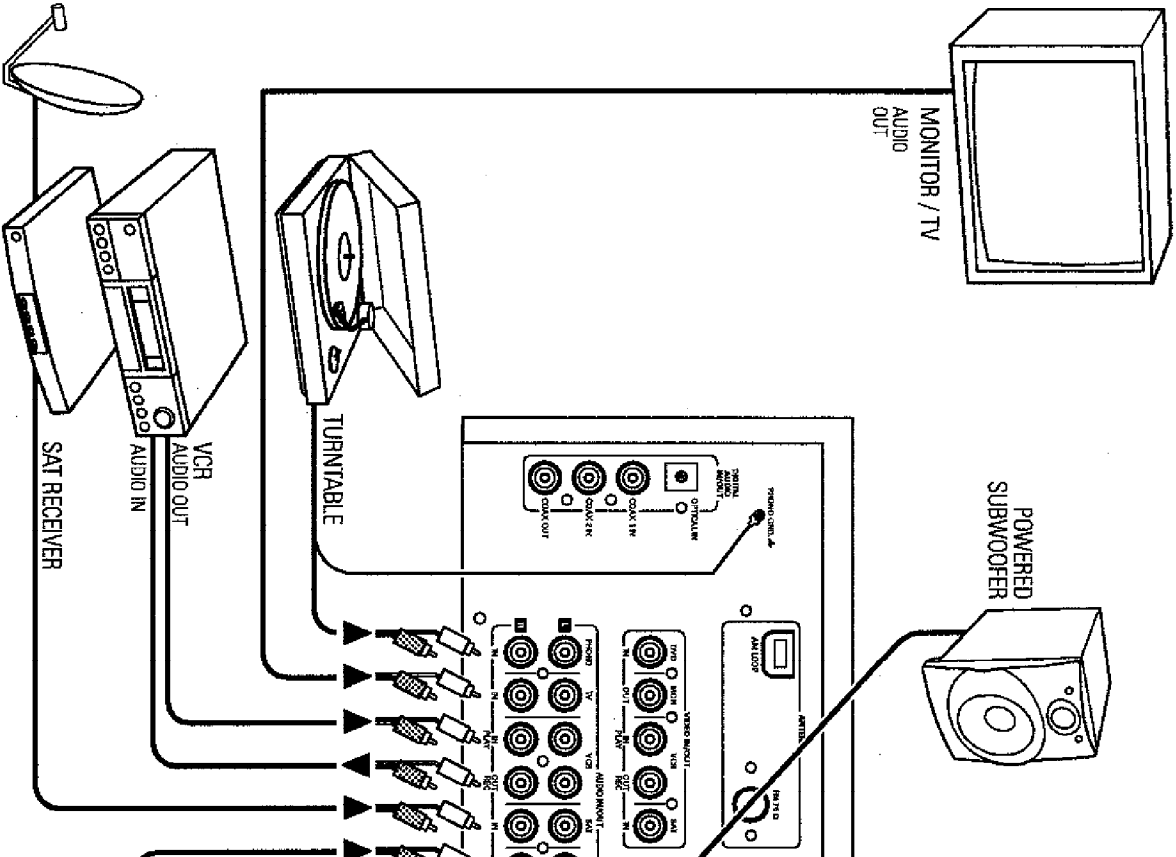
Note: When taking out the batteries of the remote control for more than 1 minute the codes must be reprogrammed.

Once you have found and tested the codes for your various appliances, you may want to write them down.



Connectors	Connectors name	Connect to:
6.3 mm headphone socket at the front	1 PHONES	A headphone with a 6.3 mm plug.
Audio and video inputs at the front (FR 970 only)	2 FRONT AV / GAME	Audio and video out sockets of appliances such as video cameras and game consoles.
FRONT SPEAKERS	3 R, L	Right and left front speaker.
	4 CENTER	Center speaker.
SURROUND SPEAKERS	5 R, L	Right and left surround speaker.
	6 CENTER PRE-OUT	Input of a TV when it is used as the centre speaker (only possible when the CINEMA LINK system bus is connected).
AUDIO IN/OUT	7 CDR/TAPE OUT	Input of a CD recorder or a tape deck.
	8 CDR/TAPE IN	Output of a CD recorder or a tape deck.
	9 CD IN	Output of a CD player.
	10 SAT IN	Output of a satellite system.
	11 VCR OUT	Input of a video recorder.
	12 VCR IN	Output of a video recorder.
	13 TV IN	Output of a TV.
	14 PHONO IN	Output of a turntable.
DIGITAL AUDIO IN/OUT	15 COAX OUT	Coaxial input of digital appliances such as CD recorders or MD recorders.
	16 COAX 2 IN	Coaxial output of digital appliances.
	17 COAX 1 IN	Coaxial output of digital appliances.
	18 OPTICAL IN	Optical output of digital appliances such as DVD players, CD players, CD recorders or MD players.
	19 PHONO GND	Ground cable of a turntable with MM coil.
VIDEO IN/OUT	20 DVD IN	Output of a DVD player.
	21 MON OUT	Input of a monitor (e. g. the TV).
	23 VCR IN	Output of a video recorder.
	24 VCR OUT	Input of a video recorder (for recording).
	26 SAT IN	Output of a satellite system.
Antenna connectors	22 AM LOOP	Frame antenna supplied.
	25 FM 75 Ω	Wire antenna supplied or exterior antenna.
Preamplified outputs	6 CENTER PRE-OUT	Input of a TV when it is used as the centre speaker (only possible when the CINEMA LINK system bus is connected).
	27 SUBWOOFER PRE-OUT	Input of a powered subwoofer.
System control bus	28 CINEMA LINK	System control bus sockets of a Philips TV with CINEMA LINK.
Mains outlets (not on all versions)	29 AC OUTLET	Supplies same voltage as mains. Up to 100 W total permitted load.
Mains lead	30	After all other connections have been made , connect the mains lead to the wall socket.

Audio connections



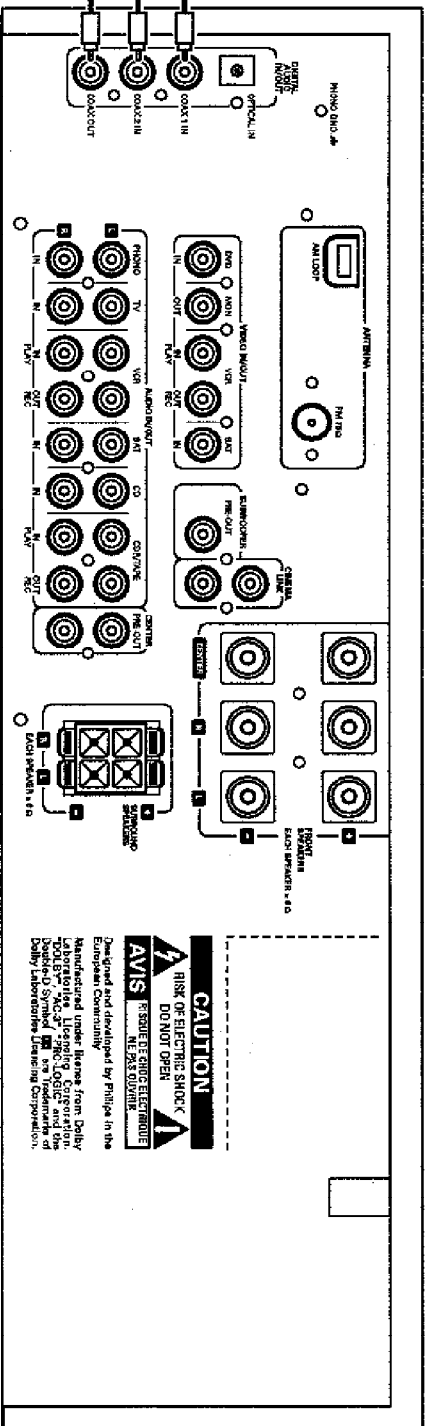
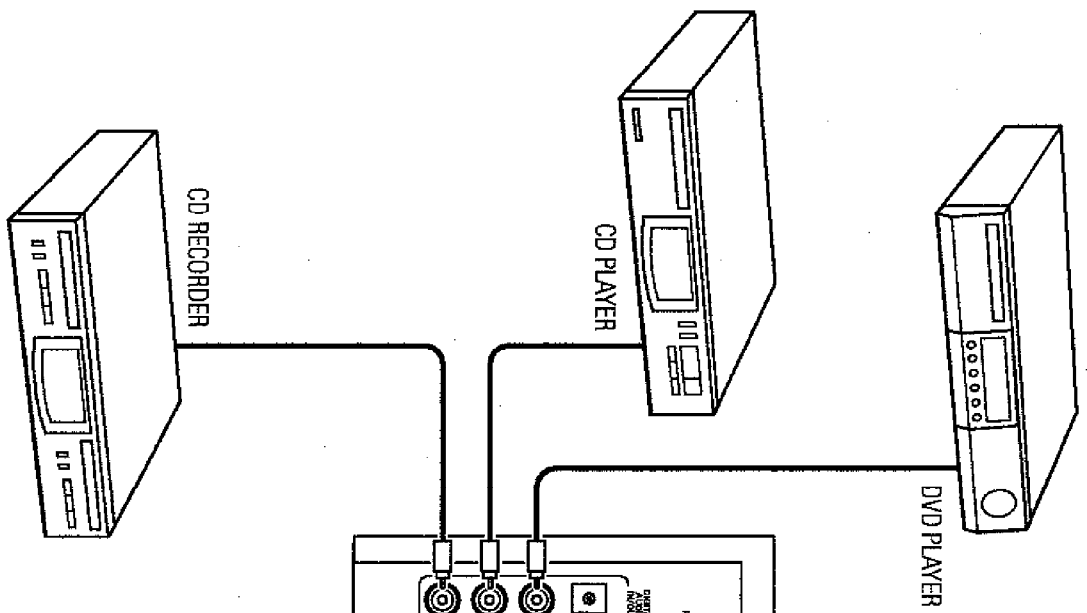
There are analogue and digital connectors available on some appliances. If possible use the digital connection; usually this will result in better sound quality. See "Reassigning a source selection" on how to use the digital connectors of the receiver.

Because of a different kind of output signal, the use of Dolby Digital Laserdisc requires an optional AC-3 RF demodulator.

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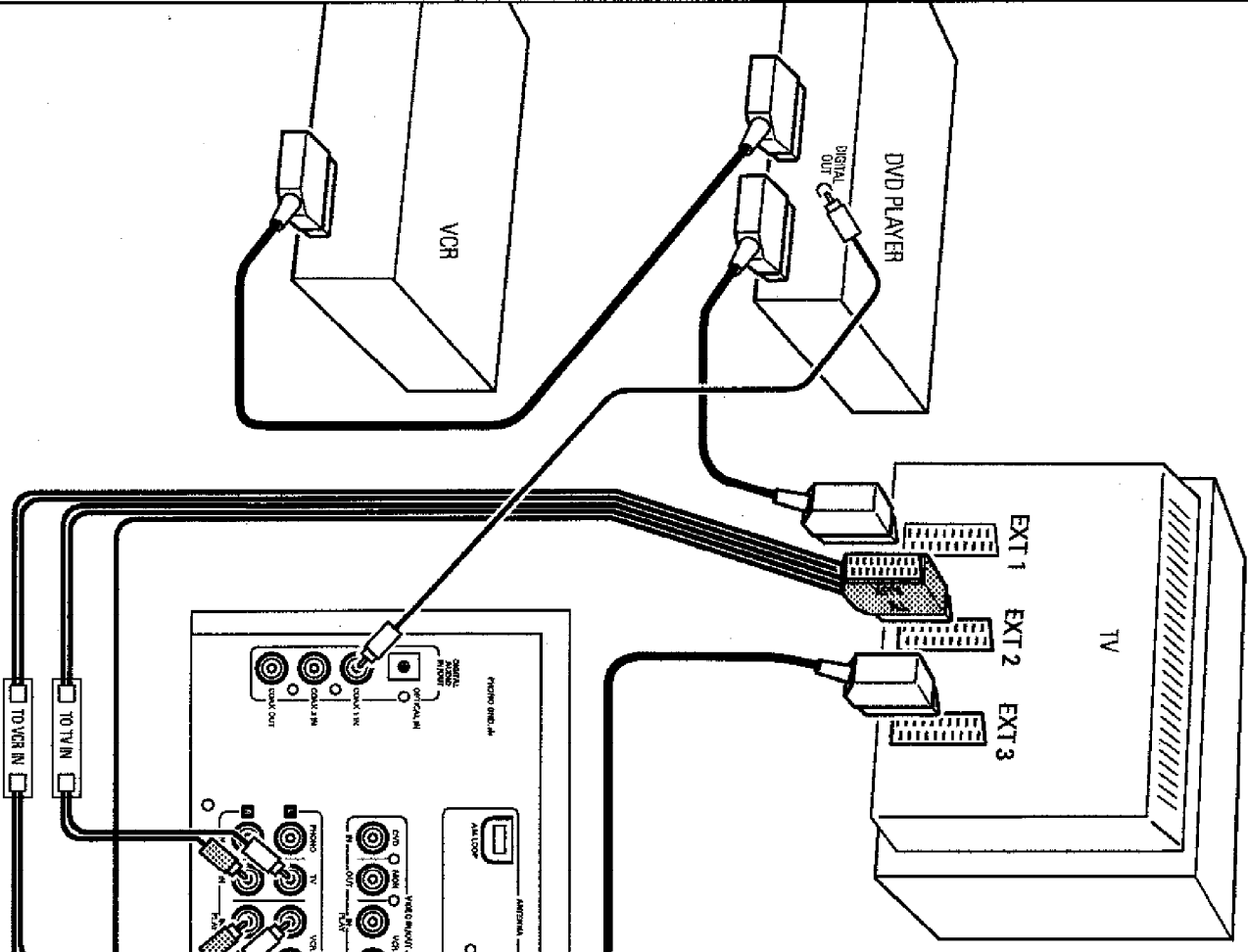
Digital audio connections



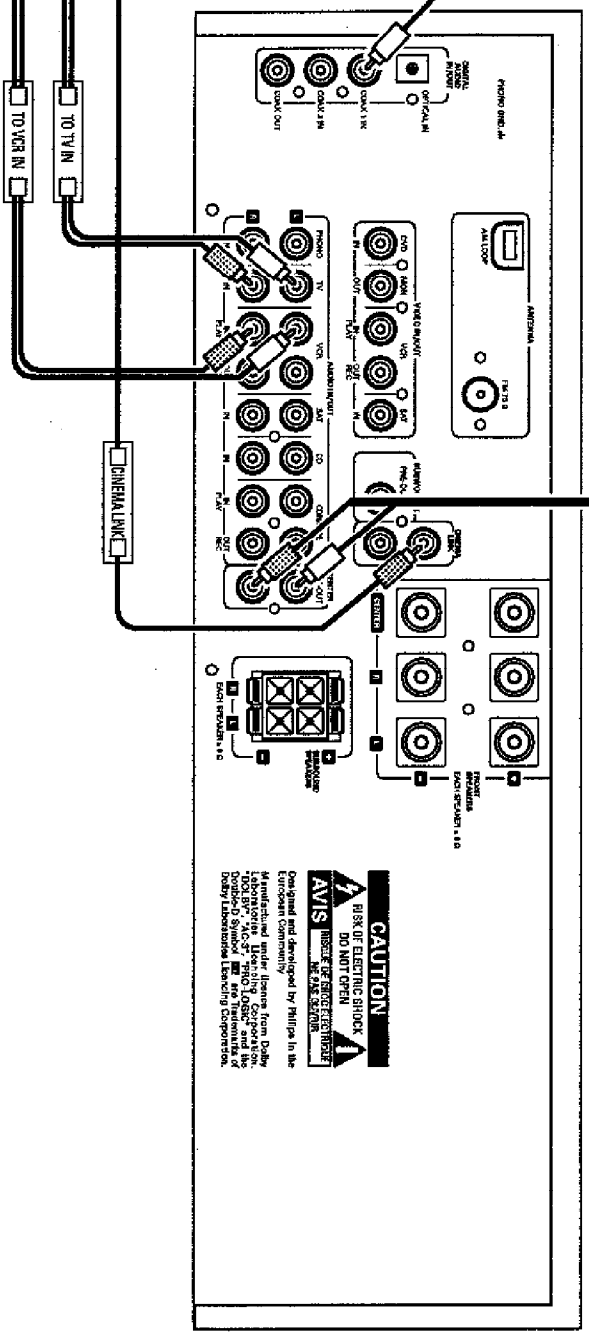
CAUTION
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AVIS REQUIRE EXTREMELY CAREFUL HANDLING
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System control bus, CINEMA LINK

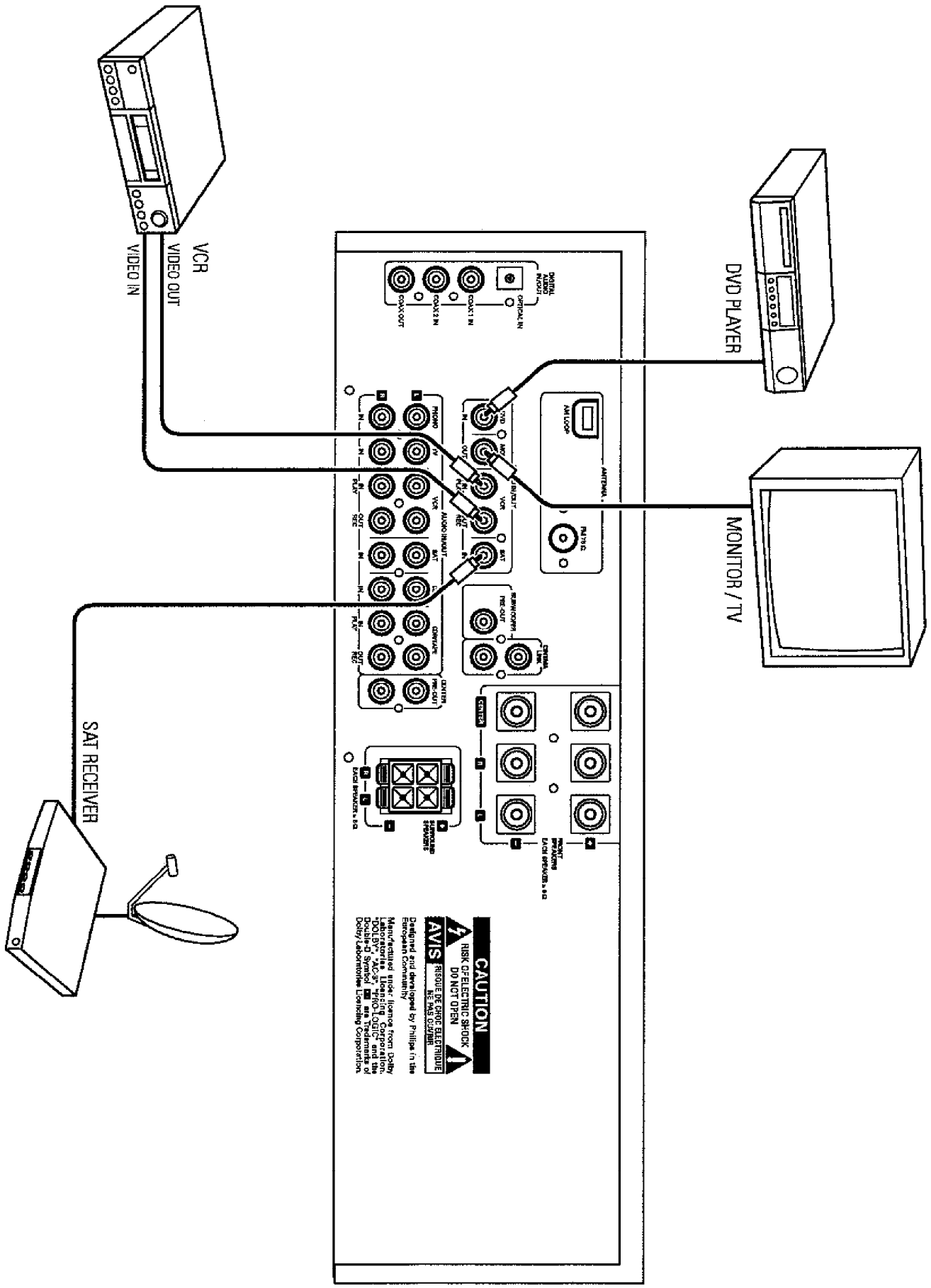


- If the receiver and your Philips TV (or even better in addition a Philips VCR or DVD player) are connected with the CINEMA LINK system bus control, some extra system benefits are offered:
- Upon starting a source the system will automatically switch to that input.
- You may control the system via the TV screen. Depending on the language of the TV, this can be done in your preferred language.
- The TV can function as the center speaker of your system, making a separate center speaker unnecessary.
- By pressing the standby button, you can switch the complete Home Theater System to standby.



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Video connections



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Mains

The type plate is located on the rear of the receiver.

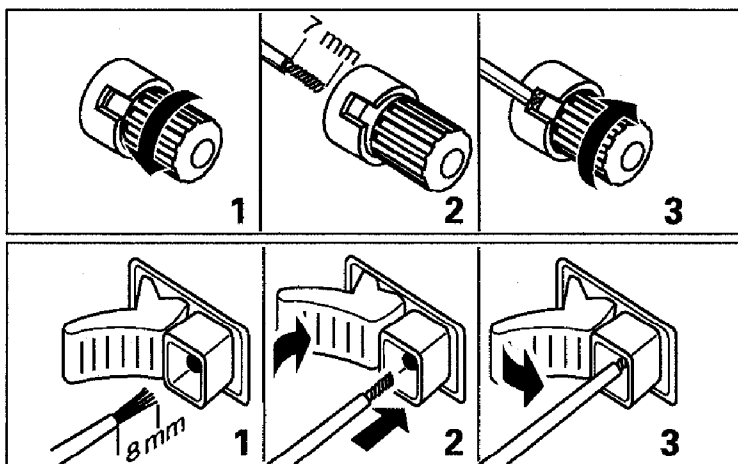
- 1 Check whether the mains voltage as shown on the type plate corresponds to your local mains voltage. If it does not, consult your dealer or service organization.
- 2 Connect the mains cable to the wall socket.

To disconnect the set from the mains completely, remove the mains plug from the wall socket.

For users in the U. K.: please follow the instructions on page 2.

Speaker connections

Some of the speaker connections on the receiver are screw connectors and some are click-fit connectors. Use them as shown below.



- 1 Always connect the coloured (or marked) wire to the coloured terminal and the black (or unmarked) wire to the black terminal.
- 2 Connect:
 - Left front speaker to L (red and black)
 - Right front speaker to R (red and black)
 - Center speaker to CENTER (blue and black)
 - Left surround speaker to SURROUND L (grey and black)
 - Right surround speaker to SURROUND R (grey and black)

TV as the center speaker

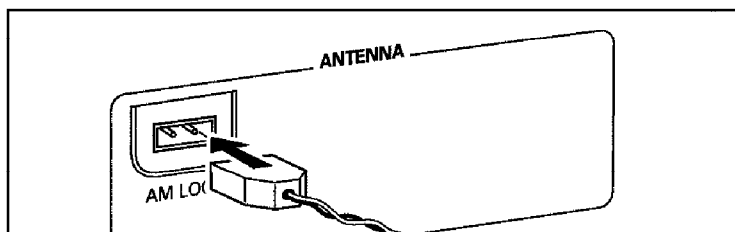
You may use your Philips TV with CINEMA LINK as the center speaker. For TVs with a scart connector an additional audio cinch-to-scart cable is needed. For TV's with cinch connectors additional cinch cables are needed. Look into the instruction manual of your TV on how to use it as the center speaker.

Antenna connections

AM (MW) antenna

The loop antenna supplied is for indoor use only. Position the antenna as far away as possible from the receiver, the TV, the cables, a DVD player, a VCR and other radiation sources.

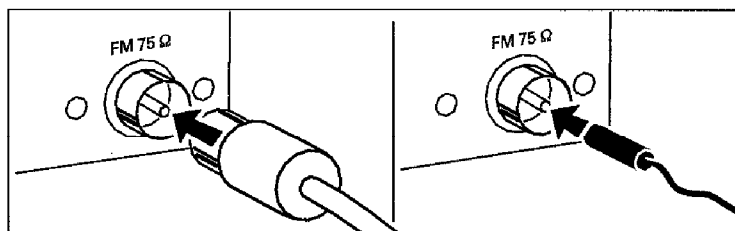
- 1 Fit the plug of the frame antenna to AM LOOP as shown below.
- 2 Turn the antenna for optimum reception.

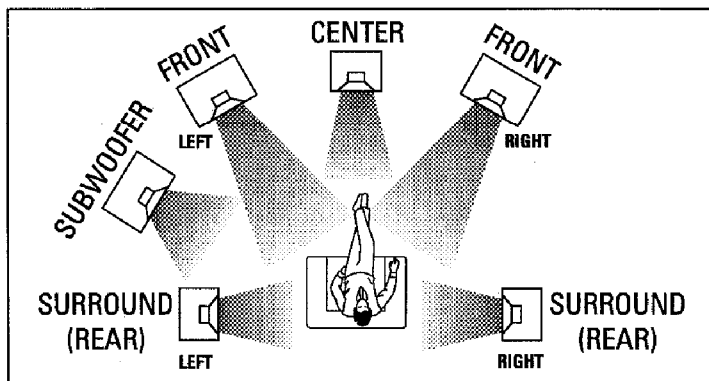


FM antenna

The wire antenna supplied can only be used to receive nearby stations. For better reception we recommend using a cable antenna system or an outdoor antenna.

- 1 Fit the supplied wire antenna to FM 75 Ω as shown below.
 - 2 Move the antenna in different positions for optimum reception.
- If you are using a cable antenna system or an outdoor antenna, fit the antenna plug to FM 75 Ω instead of the wire antenna.





Positioning of the speakers

General hints for positioning

Avoid positioning the speakers in a corner or on the floor as this will boost the bass tones too much. Placing the speakers behind curtains, furniture, etc. will reduce the treble response. The listener should always be able to "see" the speakers.

Each room has different acoustic characteristics and the positioning possibilities are often limited. You can find the best position for your speakers by referring to the picture above.

As a minimum we recommend 5 speakers (2 front, a center, 2 surround) for good surround sound. It is possible to reproduce some kind of surround sound with fewer speakers. This is done by redirecting the signals which are foreseen for the missing speakers to the existing ones. See "Menus" on how to set up the receiver correctly for the number and size of the speakers used.

Positioning the front speakers

The front speakers should be placed right and left in front of the listening position like usual stereo speakers.

Positioning the center speaker

The center speaker should be placed in the center between the two front speakers, e. g. underneath or on top of the TV. The best height for the center speaker is the height of the listener's ears (while seated).

Positioning the surround speakers

The surround speakers should face each other and be in line with, or slightly behind the listener.

Positioning the subwoofer

A subwoofer can be used to enhance the bass performance of your system dramatically. The subwoofer can be positioned anywhere in the room, because it is not possible to locate the source of deep tones. Nevertheless, you should not place the subwoofer in the middle of a room, since the bass could be severely weakened. Do not place any object on the subwoofer.

Speaker setup and testing

The relative volume of the speakers must be adjusted for optimal surround sound. You should be at your usual listening position when adjusting the speaker volume. See "Receiver menus" on how to set up the receiver for the used speakers.

- 1 Press POWER / STANDBY to switch on the receiver.
- 2 Press TEST TONE on the remote control.
 - A test tone coming from the different speakers is heard.
- 3 Press + / - REAR on the remote control to increase/decrease the volume of the actual speaker.
- 4 Press TEST TONE on the remote control.
 - The test tone stops.

Note: If you are not completely satisfied with the volume settings, we recommend making minor adjustments to them during surround sound playback.

Power handling

If the receiver is used at very high power it can produce distortions which may seriously damage your speakers. If distortions occur, reduce the volume and the tone controls to a level where the sound is acceptable again.

To avoid overheating of the set a safety circuit has been built in. Therefore your set may disconnect under extreme conditions. If this happens, switch the set off and let it cool down before reusing it.

Headphones

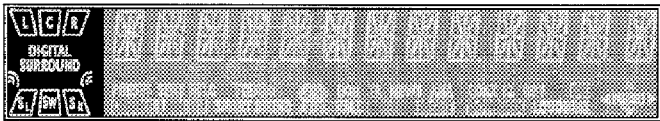
Connecting headphones to PHONES will switch off the speakers. The receiver switches to STEREO and surround sound will be reduced to a stereo signal which is reproducible by standard headphones.

Disconnecting the headphones switches on the speakers again. If you wish to enjoy surround sound again, switch the receiver back to surround sound.

Display

The display of the receiver is divided into 4 sections, which are to be used for the following:

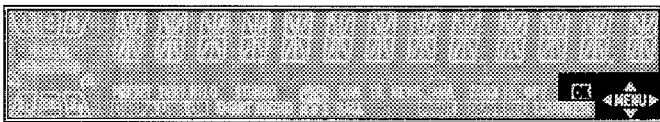
Speaker diagram



A rectangle with a letter in it shows that a speaker is in use. If only a letter is shown, this speaker is not used and its sound is reproduced by the other speakers.

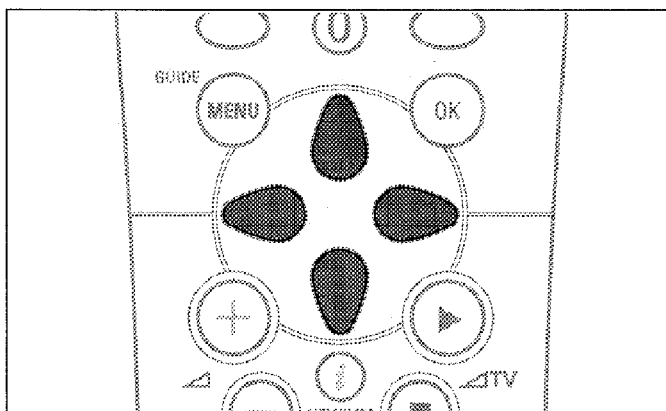
-virtual 3D surround
- SURROUND**surround sound is reproduced
- DIGITAL SURROUND**digital surround sound is reproduced
- L, R**front left and right speaker
- C**center speaker
- SL, SR**surround speakers
- SW**subwoofer

Menu indication

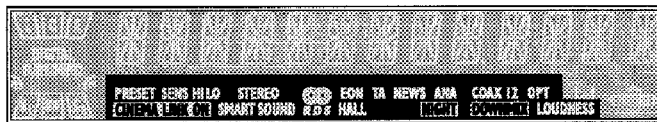


These signs show you if the menu is on or off and indicate in which direction you may move.

- MENU**menu is on
-You may move backwards to the previous menu topic using **◀ PREV. / EXIT** ("left" key on the remote control).
-You may move up in an option list using **◆ MENU NAVIGATOR** ("up" key on the remote control).
-You may move down in an option list using **◆ MENU NAVIGATOR** ("down" key on the remote control).
-You may move forward to the next menu topic using **NEXT ▶** ("right" key on the remote control).
- OK**You may confirm the displayed value.



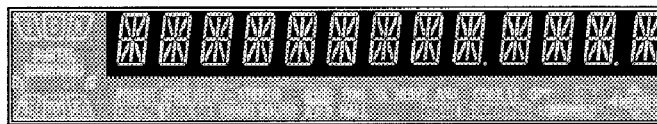
Status lights



Signs showing you various settings and information about the status of the receiver.

- PRESET**Tuner is tuned to a preset radio station.
- SENS HI**Tuner is switched to high sensitivity.
- SENS LO**Tuner is switched to low sensitivity.
- CINEMA LINK ON**CINEMA LINK is active
- STEREO**An FM station is being received in stereo.
- SMART SOUND**One of the preset sound settings of the receiver is being used.
-An RDS station is being received.
- EON**An RDS station with EON is being received.
- HALL**HALL effect is on.
- TA**RDS traffic announcement is on
- NEWS**RDS news announcement is on
- ANA**Analogue input is being used for the playing source.
- NIGHT**NIGHT MODE is on.
- COAX 1**Coaxial digital input COAX 1 is being used for the playing source.
- COAX 2**Coaxial digital input COAX 2 is being used for the playing source.
- DOWNMIX**Incoming multi channel signals are being reduced to fewer output signals (depending on the number of speakers).
- OPT**Optical digital input OPTICAL IN is being used for the playing source.
- LOUDNESS**LOUDNESS is switched on.

Information area



This area is used for feedback of the receiver, tuner frequencies, menu options, values and scrolling text messages.

Receiver menu

The receiver is equipped with a menu system. The menu is used for the setup of the receiver. The different menu options are related to each other in a logical way. Let's assume you have no center speaker connected, and therefore switched *CENTER SPEAKER* to *NO*. If you try to use *VOL CENTER*, a message will be scrolled that this is not possible (*INSTALL CENTER SPEAKER*).

The menu always works the same way. Arrows in the display show you the possible moving directions.

1 Press SETUP MENU.

→ **MENU**, and * *EFFECTS* is displayed.

• You can exit the menu at any time by pressing SETUP MENU.

2 Turn \blacktriangleleft MENU NAVIGATOR until the desired option (or a value) is displayed.

3 Press NEXT \blacktriangleright to choose the displayed option (or ENTER / OK to confirm a value).

- You can leave any option (values remain unchanged) by pressing \blacktriangleleft PREV. / EXIT.

Menu structure

* *EFFECTS*

Switches sound effects.

— *3D SURR*

virtual 3D surround: 0...100 %

* *VOL BALANCE*

Adjusts the relative volume balance between the connected speakers.

— *TEST TONE*

Test tone: on/off

— *VOL FRONT-L*

Volume front left speaker: -50...+50

— *VOL FRONT-R*

Volume front right speaker: -50...+50

— *VOL CENTER*

Volume center speaker: -50...+50

— *VOL REAR-L*

Volume rear left speaker: -50...+50

— *VOL REAR-R*

Volume rear right speaker: -50...+50

— *VOL SUBWOOFER*

Volume subwoofer: -50...+50

* *SPEAKR SETUP*

Selects the used speakers.

— *CENTER SPEAKR*

Center speaker present: yes/no

— *REAR SPEAKR*

Rear speakers present: yes/no

— *SUBW PRESENT*

Subwoofer present: yes/no

* *SPEAKR SIZES*

Chooses the speaker sizes of the used speakers, for optimal sound reproduction. The distance between the usual listening position and the speakers defines the delay time for the surround sound.

— *SUBW PRESENT*

Subwoofer present: yes/no

— *FRONT SIZE*

Left and right front speakers: small/large

— *CENTER SIZE*

Center speaker: small/large

— *REAR SIZE*

Rear speakers: small/large

* *SPK DISTANCE*

Distance between the usual listening position and the speakers. This defines the delay time for the surround sound.

— *DIST L/R*

Distance to front speakers: 1...10 m

— *DISTANCE CNTR*

Distance to center speaker: 1...10 m

— *DISTANCE REAR*

Distance to rear speakers: 1...10 m

* *SELECT INPUT*

Assigns the audio input connectors to the different source selections chosen with SOURCE SELECTOR (see "SOURCE SELECTION" for details).

— *COAX 1*

Digital coaxial input 1, COAX 1 IN

— *COAX 2*

Digital coaxial input 2, COAX 2 IN

— *OPT*

Digital optical input, OPTICAL IN

— *SAT IN*

Analogue audio input SAT IN

— *VCR IN*

Analogue audio input VCR IN

— *TV IN*

Analogue audio input TV IN

— *CDR IN*

Analogue audio input CDR IN

— *CD IN*

Analogue audio input CD IN

* *TUNER*

Setup for preset radio stations (see "TUNER" for details).

— *AUTO INSTALL*

Stores radio stations automatically

— *MAN INSTALL*

Stores radio stations manually

— *GIVE NAME*

Allows to assign names to stored radio stations

— *RESHUFFLE*

Resorts stored radio stations

TV menu

If the receiver is connected to a Philips CINEMA LINK TV via the CINEMA LINK system control bus sockets (see "CONNECTIONS"), you may use the TV to set up the system. An option called RECEIVER will be added to the TV menu.

If CINEMA LINK is on, adjustments on the receiver will be shown on the TV screen for a few seconds. Consult the instruction booklet of your TV on how to use the TV menu. The options offered may vary by TV model.

Switching the connection

- Press CINEMA LINK to switch the connection between the receiver and the TV either on or off.
 - If the connection is switched on, **CINEMA LINK ON** is displayed.

Note: We recommend switching CINEMA LINK off during recording. This avoids unwanted interruptions due to switching TV functions.

If CINEMA LINK is switched on and the TV menu is active, **TV MENU** is displayed and the menu and sound functions on the receiver are locked.

SOURCE SELECTOR

When selecting a source by turning SOURCE SELECTOR, the audio and video inputs with the corresponding name are activated. The incoming signal is reproduced by all audio and – if the source includes a video signal – video outputs of the receiver. It is possible to reassign a source selection to other than these standard inputs.

Source selectedConnectors used

DVD.....	COAX 1 digital audio input and DVD IN video input
PHONO.....	PHONO IN audio input
TUNER	The tuner part of the receiver is used, all inputs are switched off.
CD	CD IN audio input
CDR/TAPE	CDR/TAPE IN audio input
TV.....	TV IN audio input and no video input
VCR	VCR IN audio input and VCR IN video input
SAT	SAT IN audio input and SAT IN video input

Reassigning a source selection

If a source is selected with SOURCE SELECTOR the standard audio input is used. To change this, the source selection must be reassigned to another audio input.

Example: Reassigning [CD] from the analogue CD IN audio input to the digital COAX 2 IN audio input.

- 1 Choose * *SELECT INPUT* from the menu and press NEXT ►.
- 2 Turn SOURCE SELECTOR to select the source which should be reassigned (e. g. [CD]).
→The name of the source is displayed and the light of the source flashes.
- 3 Turn ◆ MENU NAVIGATOR to select the input connectors which should be used (e. g. [CD] → [COAX2]).
- 4 Press ENTER / OK to confirm your selection.
→STORE [] is displayed briefly.
- 5 This source selection is now using the chosen audio input (e. g. [CD] uses the COAX 2 IN input connectors, COAX 2 lights when switching to CD).

Using one source selection for two or more appliances

You may assign more than one source to a source selection. This can be useful when products are connected one after the other in a chain.

Example: A VCR is connected to the TV but only the TV is connected to the receiver. Both SOURCE SELECTOR settings, TV as well as VCR, have to use the TV input connectors.

- 1 Choose * *SELECT INPUT* from the menu and press NEXT ►.
- 2 Turn SOURCE SELECTOR to select the source which should be reassigned (e. g. VCR).
→The name of the source is displayed and the light of the source flashes.
- 3 Turn ◆ MENU NAVIGATOR to select the input connectors which should be used (e. g. VCR → TV IN).
- 4 Press ENTER / OK to confirm your selection.
→STORE [] is displayed briefly.
- 5 This source selection is now using the chosen audio input (e. g. VCR uses the TV IN input connectors, VCR (TV IN) is displayed briefly when switching to VCR).

Playing a source

- 1 Press **POWER / STANDBY** to switch on the receiver.
- 2 Turn **SOURCE SELECTOR** to select a source.
→ The name of the source is displayed.
- You can select the **FRONT AV / GAME** input by pressing **FRONT AV** (FR 970 only).
- 3 Start playback of the source as usual.

Adjusting the sound

- Turn **VOLUME** to adjust the volume.
→ **VOLUME** and the volume level between **0** and **50** is displayed.
 - 1 Press **BASS** or **TREBLE**.
→ **BASS** or **TREBLE** and the actual value are displayed briefly. Then **TURN VOLUME KNOB TO CHANGE** is scrolled.
 - 2 Turn **VOLUME** to adjust the bass or treble.
→ **BASS** or **TREBLE** and the actual value are displayed.
- Note : If VOLUME is not turned within 5 seconds or if any other control is used, the bass or treble adjustment is switched off.*
- Press **SOUND** on the remote control to scroll through the built-in smart sounds: **MOVIE, SPEECH, MUSIC, MULTIMEDIA** and **PERSONAL**. (**PERSONAL** is the user-defined bass and treble setting.)
→ **SMART SOUND** is displayed and the name of the chosen sound profile is scrolled once if smart sound is on.
 - Press **LOUDNESS** to switch loudness either on or off.
→ **LOUDNESS** is displayed if loudness is on.

Recording from a source

If you wish to record from a source you must select it with **SOURCE SELECTOR**. The incoming signal is reproduced by all audio and – if the source includes a video signal – video outputs of the receiver. The sound settings do not affect the recording.

- 1 Turn **SOURCE SELECTOR** (or press **FRONT AV** – FR 970 only) to select the source you want to record from.
→ The name of the source is displayed.
- 2 Prepare the desired recording appliance. It must be connected to one of the outputs of the receiver.
- 3 Start recording on the recording appliance.
- 4 Start the playback of the source as usual.

*Notes: – The audio and video signal of VCR IN is not reproduced by VCR OUT. The same applies to the audio signal of CDR/TAPE IN to CDR/TAPE OUT.
– We recommend not to use the digital output COAX OUT of the receiver to record from an analogue source. Use the analogue output CDR/TAPE instead.*

About surround sound

Surround sound gives you a complete new listening sensation. You will have the feeling of being in the middle of the action, because sound is coming from everywhere around you. Look out for TV broadcasts, audio and video tapes and discs with the **DOLBY SURROUND PRO LOGIC**, **DOLBY DIGITAL** or **MPEG Multichannel** marks which are encoded for multichannel surround sound. You should prefer Dolby Digital or MPEG Multichannel to get the best out of your receiver.

Notice that DVDs do not always carry full multichannel surround. To be sure that a disc is multichannel encoded consult your dealer.

Most ordinary stereo tapes and discs can be replayed using surround sound settings with good results. If the reproduction is distorted in surround mode, switch to normal stereo mode.

The availability of the various surround sound modes described depends on the number of speakers used and the incoming sound information.

Switching surround sound

With surround sound on, you can switch through the different surround modes. Note that the possibilities are related to speaker setup defined in the receivers menu.

If a digital surround signal is detected, the receiver will scroll either **DOLBY DIGITAL** or **MPEG**.

- 1 Press **SURROUND ON/OFF** to switch on the surround sound.
→The surround mode in use is scrolled.
- 2 Press **SURR. MODE** repeatedly to listen to the different surround modes (if available).
→The chosen mode and the speakers used are displayed.
If the incoming multichannel signals are reduced to fewer output signals, **DOWNMIX** is displayed.
- 3 Press **3D SURROUND** to switch virtual 3D surround either on or off.
→A light indicates if virtual 3D surround is on.
- 4 Press **SURROUND ON/OFF** to switch off the surround sound.
→**SURROUND OFF** is scrolled.

Surround sound settings

HALL

The sound reproduction is enhanced and a slight echo is added. This gives the impression of being in a large room.

SURROUND

The surround mode enables normal surround sound reproduction with 4 or 5 speakers. Depending on the source material, Dolby Surround Pro Logic, Dolby Digital or MPEG is reproduced.

PRO LOGIC, DOLBY DIGITAL, MPEG

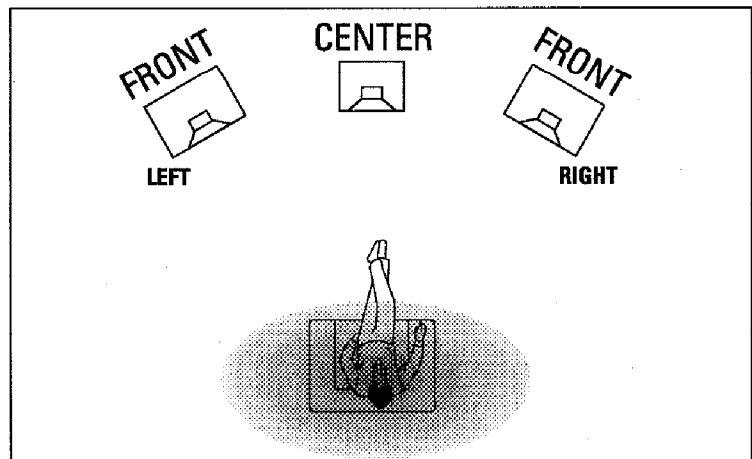
In addition to **SURROUND**, the surround mode used – depending on the source material – will be displayed.

FRONT-3 STEREO

The surround sound is muted. 3 Stereo lets you listen to surround sound without using the surround speakers.

3D SURROUND

The sound of the rear channel is simulated by the front speakers. Surround sound is simulated through the front left, right and center speakers. The position of the listener influences the surround effect. The area where the effect is best is shown in grey.



STEREO

All sound is reproduced and played through the front left and right speakers. This enables standard stereo reproduction.

NIGHT MODE (only on the remote control)

The loud parts of the sound are lowered and the soft passages are raised. You can enjoy surround sound without disturbing sleeping children or neighbours. Night mode only works with Dolby Digital and MPEG, and only if supported by the source material.

Tuning to radio stations

You can search for radio stations by scanning the frequency band. You can also key in the frequency of a known radio station. If an FM station is being broadcast and received in stereo, **STEREO** is shown.

Searching for radio stations

- 1 Turn SOURCE SELECTOR to select the tuner.
→ **TUNER** is displayed.
- 2 Select a waveband by pressing TUNER AM/FM repeatedly.
→ The selected waveband is displayed.
- 3 Keep ◀ or ▶ pressed for approximately 1 second.
→ **SEARCH** is displayed and the tuner tunes to a station with sufficient strength.
- 4 Repeat this procedure until you find the desired station.
 - To fine tune to a weak transmitter, briefly press ◀ or ▶ as often as necessary for optimum reception.

Tuning to a radio station by frequency (with the remote control only)

- 1 Press TUNER.
→ **TUNER** is displayed.
- 2 Press TUNER again to select a different waveband.
→ The selected waveband is displayed.
- 3 Press FR. D..
→ **_** is displayed.
- 4 Use 1-0 to key in the frequency of a radio station.

Note: Only valid numbers within the frequency range of the tuner can be keyed in.

Switching FM sensitivity

You can switch the tuner to a lower search sensitivity, to search only for stations with a strong signal (FM only).

- 1 Turn SOURCE SELECTOR to select the tuner.
→ **TUNER** is displayed.
- 2 Press SENS. on the receiver.
→ Either **SENS HI** or **SENS LO** is displayed for 5 seconds.

*Note: While searching for radio stations, the actual sensitivity is displayed. In this case, **SENS LO** means the tuner is only looking for radio stations with a strong signal.*

Storing radio stations

You may store up to 30 radio stations in the memory. The receiver can select and program radio stations by itself or you can choose them yourself.

Automatic programming

- 1 Choose * **TUNER** from the menu and press NEXT ▶.
- 2 Choose **AUTO INSTALL** and press NEXT ▶.
→ The preset number where programming will start, the waveband and **AUTO** are displayed.
- 3 Turn TUNER PRESET ◄ to change the preset number where programming should start.
- 4 Use TUNER AM/FM to switch to the desired waveband.
- 5 Press ENTER / OK to start programming.
→ **AUTO INSTALL** flashes and all available radio stations are programmed, this may take a few minutes. Programming is done when **AUTO INSTALL** stops flashing.

Manual programming

- 1 Choose * **TUNER** from the menu and press NEXT ▶.
- 2 Choose **MAN INSTALL** and press NEXT ▶.
→ A preset number, the waveband and the frequency are displayed.
- 3 Turn TUNER PRESET ◄ to change to the preset number where the radio station should be stored.
- 4 Tune to the desired radio station (see "Searching for radio stations").
- 5 Press ENTER / OK to confirm your selection.
→ **STORED** is displayed briefly. The radio station is programmed at the chosen preset number.
- 6 Select and store all desired radio stations this way.

Tuning to stored radio stations

- 1 Turn SOURCE SELECTOR to TUNER to select the tuner.
→ TUNER is displayed.
- 2 Turn TUNER PRESET \blacklozenge to select a preset radio station.
→ PRESET, the preset number and station are displayed.

Resorting stored radio stations

After programming radio stations, you might want to change their sequence. RESHUFFLE allows you to exchange the positions of presets.

- 1 Choose * TUNER from the menu and press NEXT \blacktriangleright .
- 2 Choose RESHUFFLE and press NEXT \blacktriangleright .
→ PRESET, a preset number and station are displayed.
- 3 Turn TUNER PRESET \blacklozenge to select a preset station.
- 4 Press ENTER / OK to confirm the selection.
→ The selected preset number SWAP (↔) and a second preset number are displayed.
- 5 Turn TUNER PRESET \blacklozenge to select the other preset station.
- 6 Press ENTER / OK to confirm the exchange.
→ RESHUFFLE is displayed briefly and these two preset numbers are swapped.

Naming radio stations

It is possible to assign a name to any of the preset radio stations. RDS station names also can be overwritten.

- 1 Choose * TUNER from the menu and press NEXT \blacktriangleright .
- 2 Choose GIVE NAME and press NEXT \blacktriangleright .
→ A preset radio station is displayed.
- 3 Turn TUNER PRESET \blacklozenge to select the preset to be renamed.
- 4 Press ENTER / OK to confirm your selection.
→ The existing name or _____ is displayed.
- 5 Turn TUNER PRESET \blacklozenge to select a letter and NEXT \blacktriangleright or \blacktriangleleft PREV. to move to the next or previous position.
- 6 After you have entered the entire name, press ENTER / OK to confirm.
→ STORE is displayed and the name is stored.

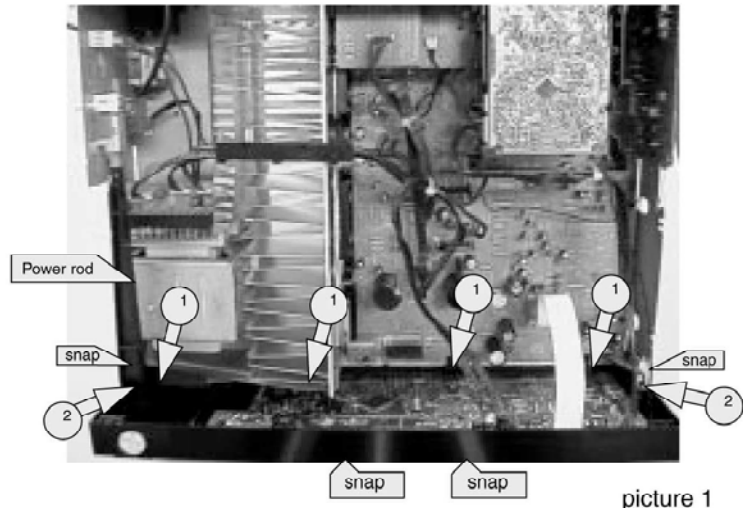
Note: If you want to use the transmitted RDS station name again, simply clear the given name.

Clearing station names

- 1 Use the menu option * TUNER, choose GIVE NAME.
→ A preset radio station is displayed.
- 2 Turn \blacklozenge MENU NAVIGATOR to select the name to be cleared.
- 3 Press ENTER / OK to confirm your selection.
- 4 Press \blacktriangleleft PREV. while the first letter is flashing.
→ CL is flashing to the left of the station name.
- 5 Press ENTER / OK to clear the station name.
Or, if you have changed your mind,
press \blacktriangleleft PREV. to leave the station name as it is.

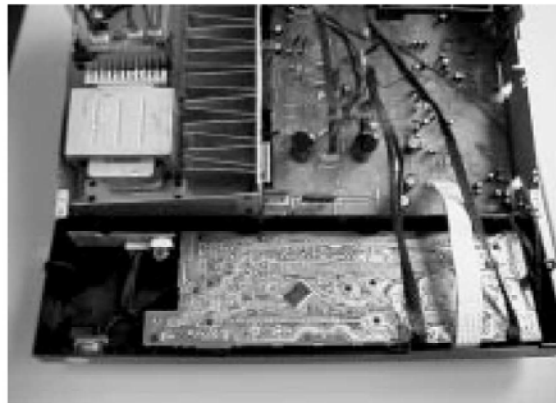
DISMANTLING HINTS

Dismantling of Front



picture 1

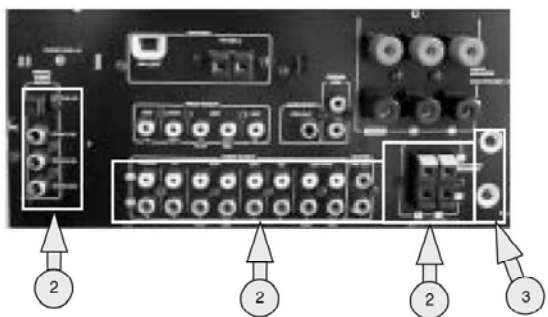
- 1) Remove top cover
- 2) Remove power rod
- 3) Remove 6 x screw as shown in picture 1
- 4) Release two snaps (left & right side front)
- 5) Release two snaps on the bottom side front
- 6) Tipp down front as shown in picture 2



picture 2

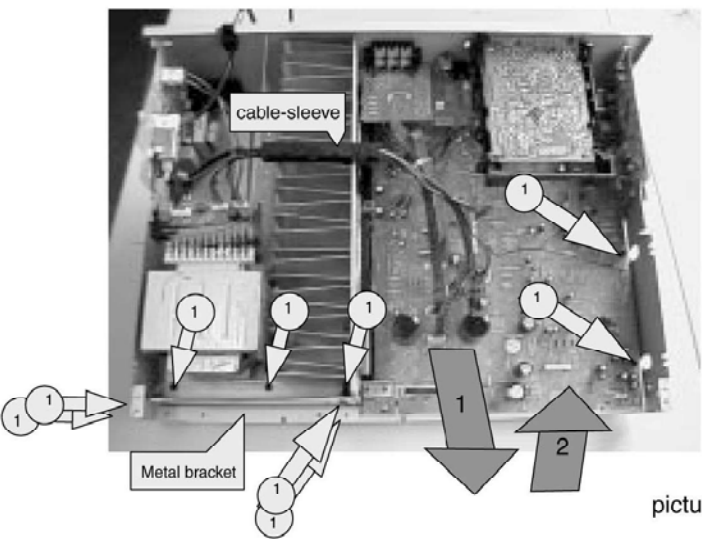
Dismantling of mono board

- 1) Remove front . See picture 1
- 2) Remove whole front (disconnect the wires on the mono board coming from front)



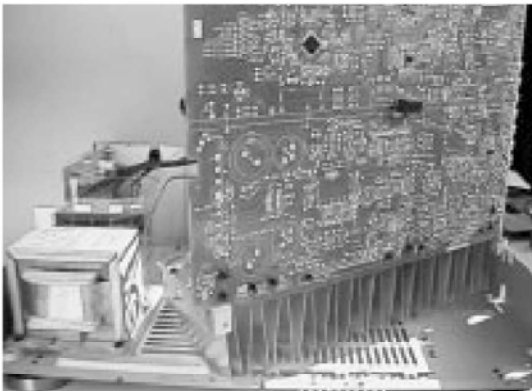
picture 3

- 3) Remove 12 x screws shown in mentioned aria . See picture 3



picture 4

- 4) Remove wires out the cable-sleeve.
- 5) Remove 7 x screw and remove metal metal bracket
- 6) Remove 2 x screw on mono board . See picture 4
- 7) Remove mono board as shown arrow 1 & 2 . See picture 4
- 8) Bring the mono board in the service position as shown in picture 5



picture 5

Legend

1 = Torx M3x6mm (screw with big head)

2 = Torx 3x10mm

3 = Torx M3x6mm

Service position mono board

- 1) Bring front in position as shown in picture 6
- 2) Snap nok of front in bottom to make front stable . See picture 7
- 3) Connect front wiring back to mono board.

*The tuner module doesn't have to be connected. Use an other source (pe.CD)

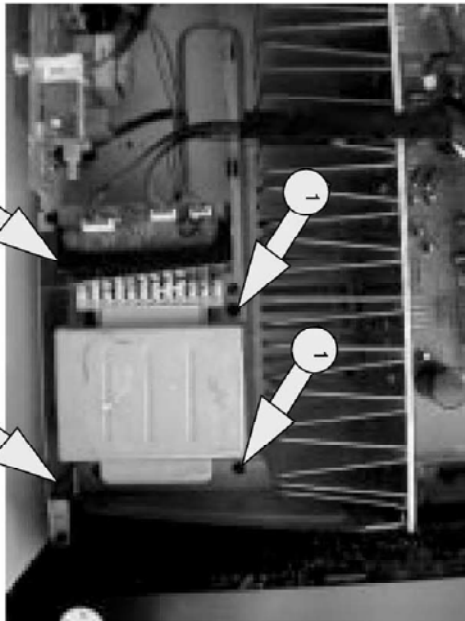


picture 6



picture 7

Dismantling of mains transformer.



picture 8




- 1) Remove power rod
- 2) Remove 4x screw as shown in picture 8

Service position of mains transformer.

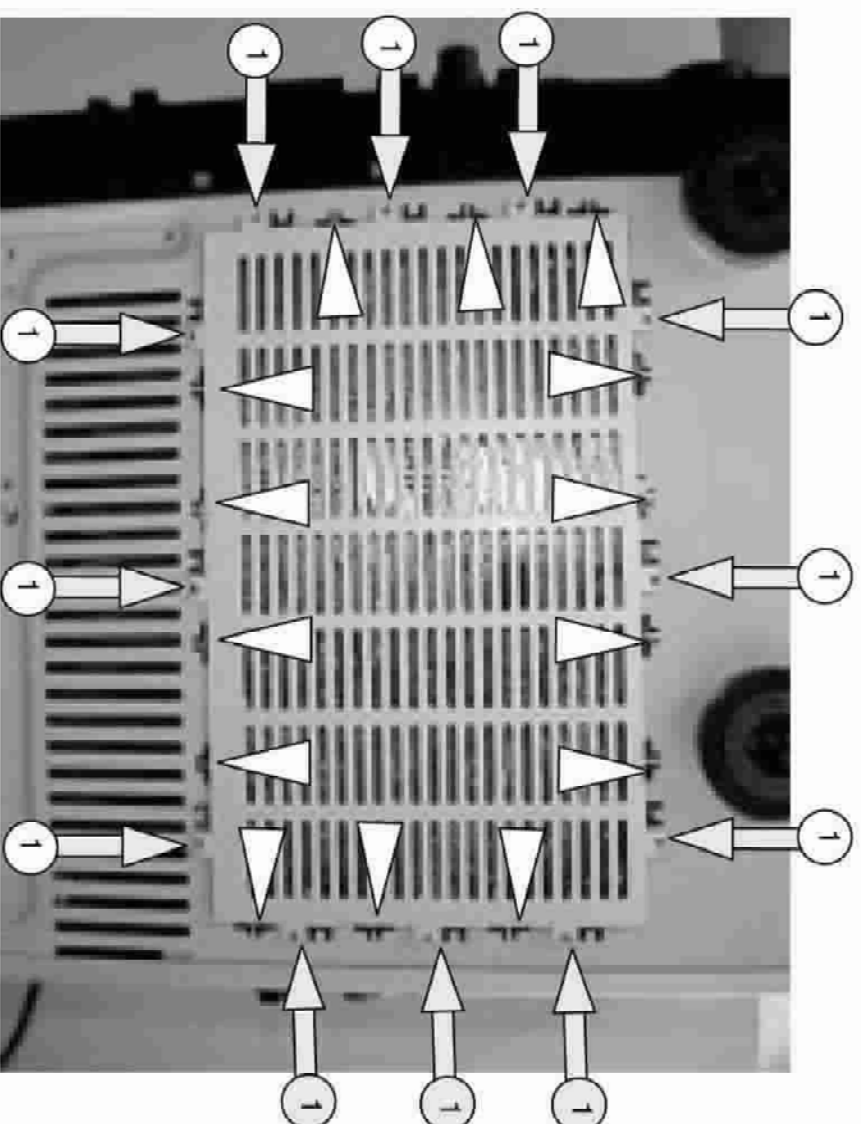


picture 9

- 1) Put mains transformer as shown in picture 9.

Legend	
	= Torx M3x6mm (screw with big head)
	= Torx 3x10mm
	= Torx M3x6mm

Handling service cover



picture 10

- 1) To open the service cover cut 14 x lugs between cover and bottem . See picture 10 (▽)
- 2) To close the service cover put 12 x screw in mentioned holes. See picture 10
Service codenumber 12x Torx M3x6mm screw with big head = 4822 502 14659

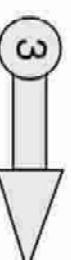
Legend



= Torx M3x6mm (screw with big head)



= Torx 3x10mm

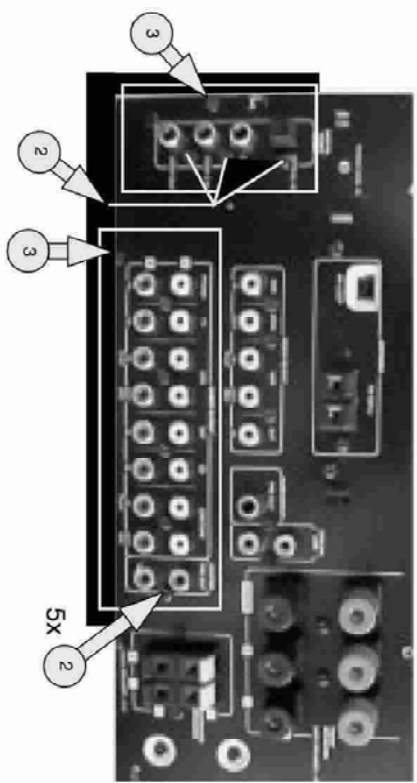


= Torx M3x6mm

DISMANTLING HINTS

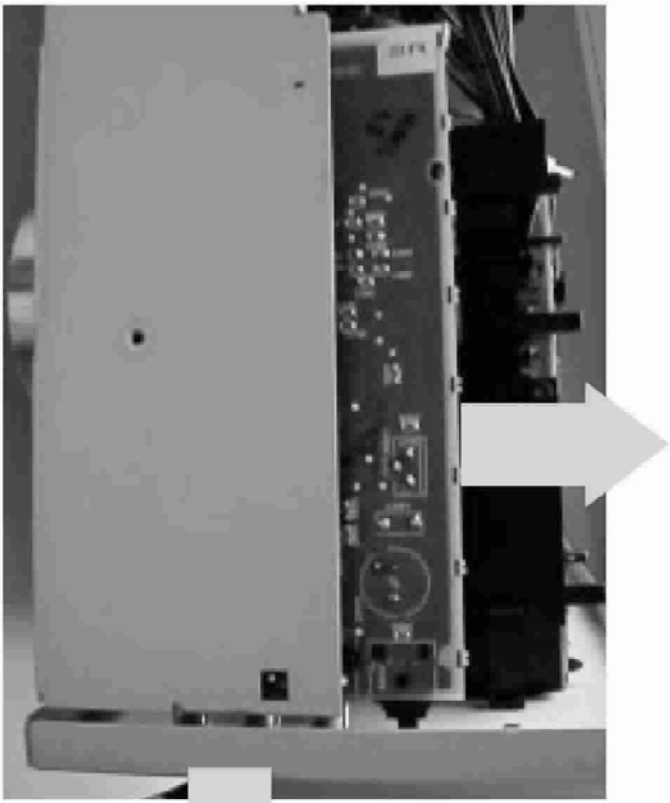
Dismantling of MDM module

1) Remove all the screws mentioned in this area. See picture 11.






picture11

- 2) Remove backplate a little backwards. See arrow 1 (picture 12)
- 3) Pull module out the set as shown in picture 12

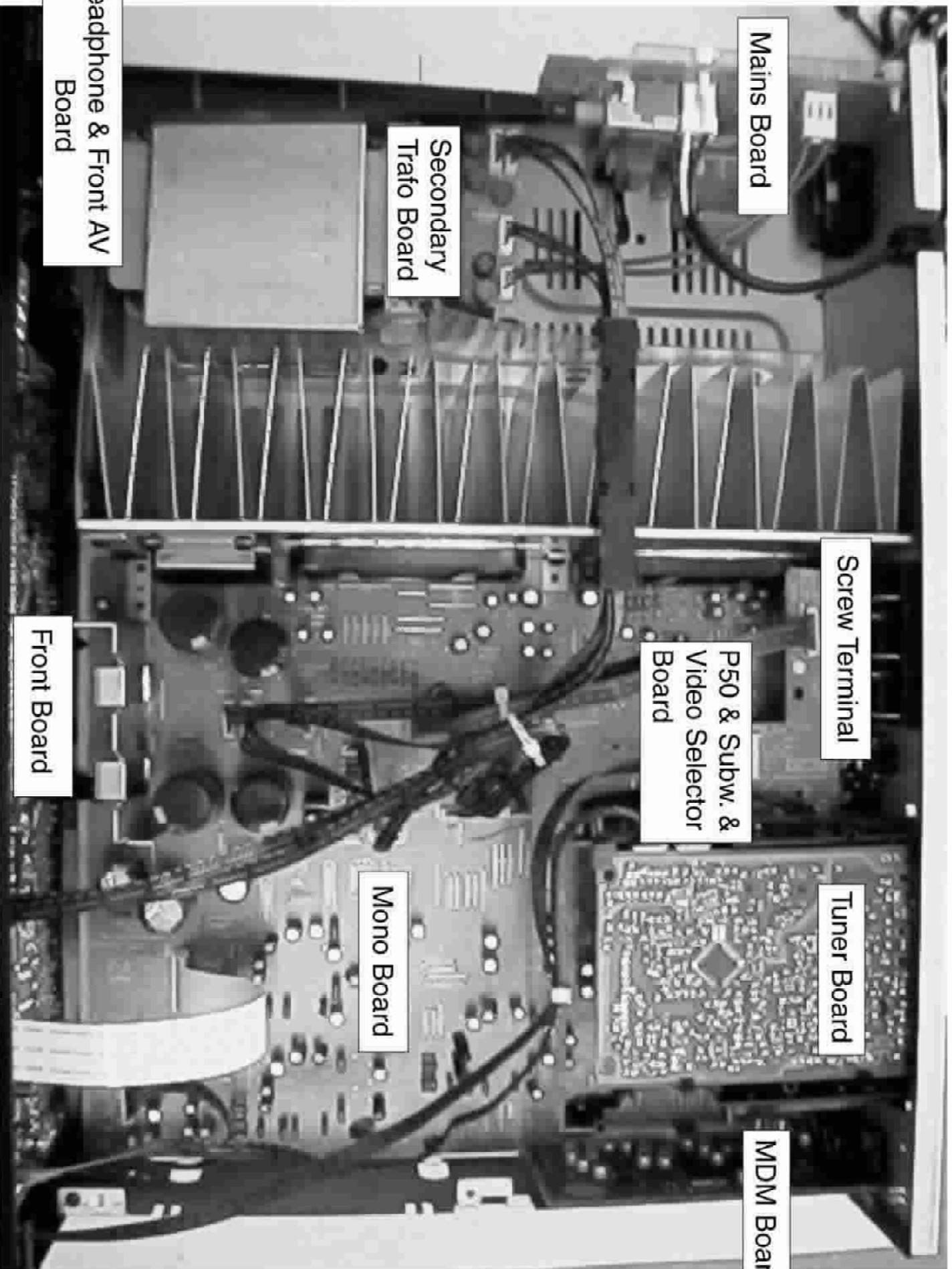


picture12

Legend

	= Torx M3x6mm (screw with big head)
	= Torx 3x10mm
	= Torx M3x6mm

LOCATION OF PRINTED CIRCUIT BOARDS



Mains Board

Secondary Trafo Board

Headphone & Front AV Board

Screw Terminal

P50 & Subw. & Video Selector Board

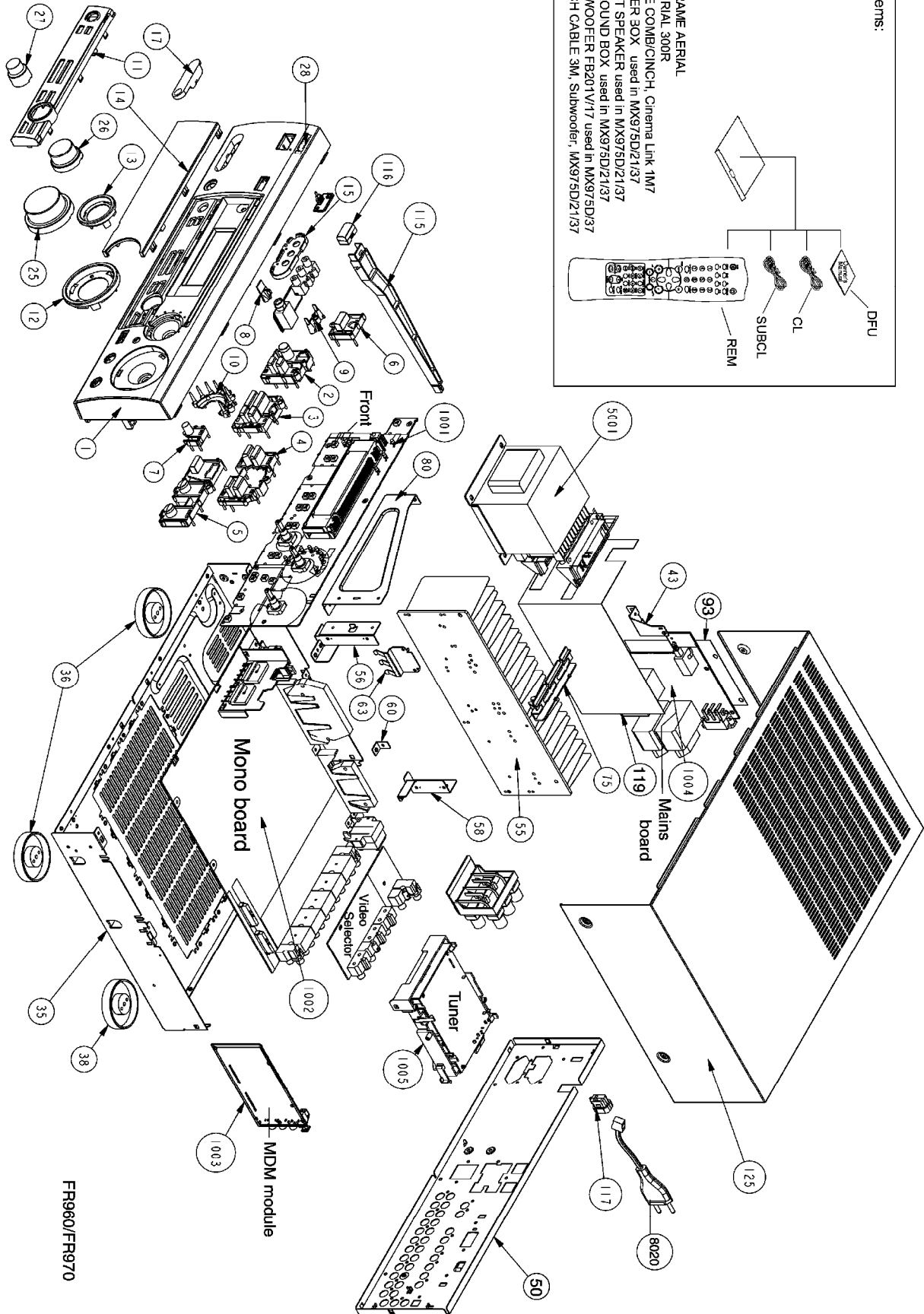
Front Board

Tuner Board

Mono Board

MDM Board

MAIN SYSTEM EXPLODED VIEW



FR960/FR970

General Information

Manual 1931 – FR960, FR970, & MX975D

[Display FR970 Product View](#)

System Information

Note: USA Version - MX975D/37 utilizes the FR970/17

Receiver	Front Speaker	Center Box	Surround Box	Subwoofer
MX975D/21 include:				
FR970/01B	2 x MX975D	MX975D	MX975D	FB201V/01
MX975D/37 include:				
FR970/17	2 x MX975D	MX975D	MX975D	FB201V/17

Version Variations

Type & Versions	FR960		FR970			
	/00	/17	/00	/01/01B	/14	/17
Features & Board in use						
Tuner Board – Tuner 95	X		X			
Tuner Board – ECO 5		X		X	X	X
RDS	X		X		X	
P50 code (cinema link)	X	X	X	X	X	X
AV Front			X	X	X	X
Video selector	X	X	X	X	X	X
Center pre-out	X	X	X	X	X	X
Subwoofer pre-out	X	X	X	X	X	X
# power channels	5	5	5	5	5	5
Mains voltage	230	120	230	120/230	230	120
Voltage selector				X		

Specifications

[Display FR960 Product Specifications](#)

[Display FR970 Product Specifications](#)

Service Tools

Audio Signals Test Disc 14822 397 30184

Measurement Setups

[Display FM Tuner Setup](#)
[Display AM Tuner Setup](#)

Handling Chip Components

[Display Chip Handling Procedures](#)

Abbreviations

A	
ac 0VA	AC 0 Voltage
ac 10VB	AC 10 Voltage
ac 110VB	AC 110 Voltage
ac 120VB	AC 120 Voltage
ac gnd	AC ground
ac h1	AC high voltage 1
ac h2	AC high voltage 2
ac l1	AC low voltage 1
ac l2	AC low voltage 2
ac1	AC voltage 1
ac2	AC voltage 2
ac3	AC voltage 3
amp lr on	Amplifier Left - Right On
amp mute c s	Amplifier mute center surround
amp mute c s sub	Amplifier mute center surround subwoofer
amp mute lr	Amplifier mute Left - Right
amp pd	Amplifier power down
amp prot	Amplifier protection
amp s on	Amplifier surround On
amp stby	Amplifier Standby
av gnd	Audio ground
av l	Audio Left
av r	Audio Right
A/V	Audio/Video
F	
f1	Filament 1
f2	Filament 2
fmute	Fast mute
G	
gnd d	Ground digital
gnd s	Ground signal
H	
hp gnd	Headphone ground
hp l	Headphone Left
hp on	Headphone On
hp r	Headphone Right
hst	Heatsink temperature
L	
ls c	Loudspeaker Center
ls gnd	Loudspeaker ground

ls l	Loudspeaker Left
ls r	Loudspeaker Right
M	
mdm	Multi channel <u>D</u> ecoding <u>M</u> odule
mdm c out	--- Center out
mdm gnd	--- ground
mdm l dmix	--- Downmix Left
mdm l in	--- Left in
mdm l out	--- Left out
mdm r dmix	--- Downmix Right
mdm r in	--- Right in
mdm r out	--- Right out
mdm req	--- request
mdm rst	--- reset
mdm scl	--- I ² C clock
mdm sda	--- I ² C data
mdm sl out	--- surround Left out
mdm sr out	--- surround Right out
mdm sub out	--- subwoofer out
mfd	Mains failure detection
P	
p gnd	P50 ground
p p50	Cinema link P50 code
S	
s gnd	Surround ground
sofac scl	Sofac I ² C clock
sofac1 sda1	Sofac 1 I ² C data1
sofac2 sda2	Sofac 2 I ² C data2
ss ce	Source selector chipenable
ss clk	Source selector clock
ss data	Source selector data
surr pre-out	Surround pre-out
T	
tu clk	Tuner clock
tu da	Tuner data
tu en	Tuner enable
tu gnd	Tuner ground
tu l	Tuner Left
tu r	Tuner Right
tu rds	Tuner RDS
tu stereo	Tuner stereo
V	
v gnd	Video ground
v scl	Video I ² C clock
v sda	Video I ² C data
v sig	Video signal
v sub sur	Video subwoofer surround

SPECIFICATION FR960

General

Mains voltage	: 230V for /00 : 120V for /17
Mains frequency	: 50Hz for /00 : 60Hz for /17
Power consumption	: ≤ 2W at stby
Dimension. wxhxd	: 435x138x350 mm
Remote control	: Multibrand/Universal

Amplifier

Output power	
L+R	: 2x50W at 6Ω D= 0,7% (1kHz)
Center	: 50W at 6Ω D= 0,7% (1kHz)
Surround Left	: 50W at 6Ω D= 0,7% (1kHz)
Surround Right	: 50W at 6Ω D= 0,7% (1kHz)

Distortion (5W)	
40Hz -1kHz	: ≤ 0,05%
20kHz	: ≤ 0,2%

Headphone : 6,3mm stereo jack with switch

Crosstalk between source	—1kHz : ≤ -65dB
(1W) 250Hz – 10kHz	: ≤ -60dB

Crosstalk between channels	-1kHz : ≤ -45dB
(1W) 250Hz – 10kHz	: ≤ -40dB

Frequency response : ≤ 20Hz – ≥ 20kHz (-3dB) Limit

Power stage protection	: Shortcircuit
	: DC (Vout ≥ 10V)
Temperature	: Transformer (≥140° Celcius)
	: Heatsink (≥ 140° Celcius)

Input sensitivity	
Phone	: 5mV impedance 47kΩ/220pf
CD	: 250mV impedance ≥ 47kΩ
CDR/TAPE	: 250mV impedance ≥ 47kΩ
VCR	: 250mV impedance ≥ 47kΩ
TV	: 250mV impedance ≥ 47kΩ
SAT	: 250mV impedance ≥ 47kΩ

Output sensitivity	
CDR/TAPE	: 250mV impedance ≤ 1kΩ
VCR	: 250mV impedance ≤ 1kΩ

Output sensitivity (variable)	
Subwoofer pre-out	: 800mV impedance ≤ 1kΩ
Center pre-out	: 800mV impedance ≤ 1kΩ

Video Selector

Input sensitivity	
DVD/VCR/TV	: 1 Vpp impedance 75Ω
Output sensitivity	
Monitor/VCR	: 1 Vpp impedance 75Ω
Frequency response	: ≤ 50Hz → ≥ 6MHz

Equalizer

Loudness	
(volume ≤ -20dB Ref: 1kHz=0dB)	: 100Hz +6 dB
	: 10kHz +3 dB

Tone control (Ref: 1kHz=0dB)	
	: Bass 100Hz -9dB → +9dB
	: Treble 10kHz -9dB → +9dB

DSC settings		100Hz	1kHz	10kHz
Personal	dB	0	0	0
Movie	dB	+ 4	+0	+4
Speech	dB	- 4	+2	-2
Music	dB	+ 4	- 2	+2
Multimedia	dB	+ 8	0	+6

Multi Channel Decoder

MPEG5.1 / MPEG 7.1 (7.1 downmix to 5.1)
 Dolby Digital (AC-3)
 Linear PCM
 Automatic audio/data type detection (AC-3,MPEG-2,PCM)
 Dolby Pro Logic
 MPEG-2 dual mono channel selection I/II
 MPEG-2 dual stereo channel selection I/II
 Virtual Dolby Surround (422/423)
 Virtual MPEG Digital (522/523)
 Virtual Dolby Digital (522/523)
 Digital Bass Management
 Parallel Stereo Downmix
 Four Stereo (224)
 Volume Control
 Noise Generator (test tone)
 Surround mode selector
 Delay C and SL and SR

Tuner

RDS : Only in /00
 FM

Tuning range : 87.5 – 108MHz

Grid : 50kHz for /00
 : 100kHz for /17

IF frequency : 10.7MHz ±25kHz
 Aerial input : 75 Ω coaxial for /00
 : 300 Ω clickfit for /17

Sensitivity at 26dB S/N : ≤ 7µV
 Selectivity at 600kHz bandwidth : ≥ 50dB
 Image rejection : ≥ 75dB for /00
 : ≥ 25dB for /17

Distortion at RF=1mV,dev.75kHz : ≤ 2% for /00
 : ≤ 3% for /17

-3dB Limiting point : ≤ 7µV
 Crosstalk at RF=1mV,dev.40kHz : ≥ 26dB for /00
 : ≥ 22dB for /17

MW

Tuning range : 522 - 1611kHz for /00
 : 530 - 1700kHz for /17

Grid : 9kHz for /00
 : 10kHz for /17

IF frequency : 450kHz ±1kHz
 Aerial input : Frame aerial
 Sensitivity at 26dB S/N : ≤ 4.0mV/M

Selectivity at 18kHz bandwidth : ≥ 18dB
 IF rejection : ≥ 45dB
 Image rejection : ≥ 28dB
 Distortion at RF=50mV,m=80% : ≤ 5%

LW only in /00

Tuning range : 153 - 279kHz

Grid : 3kHz
 IF frequency : 450kHz ±1kHz
 Aerial input : Frame aerial
 Sensitivity at 26dB S/N : ≤ 6mV/M
 Selectivity at 18kHz bandwidth : ≥ 22dB for /00
 : ≥ 24dB for /17

IF rejection : ≥ 26dB
 Image rejection : ≥ 35dB
 Distortion at RF=50mV,m=80% : ≤ 5%dB

SPECIFICATION FR970

General

Mains voltage	:230V for /00/14 :110V/240 switchable for /01/01B : 120V for /17
Mains frequency	: 50Hz for /00 /14 : 50/60Hz for /01/01B : 60Hz for /17
Power consumption	: ≤ 2W at stby
Dimension. wxhxd	: 435x138x350 mm
Remote control	: Multibrand/Universal

Amplifier

Output power	
L+R	: 2x100W at 6Ω D= 0,7% (1kHz)
Center	: 100W at 6Ω D= 0,7% (1kHz)
Surround Left	: 50W at 6Ω D= 0,7% (1kHz)
Surround Right	: 50W at 6Ω D= 0,7% (1kHz)

Distortion (5W)	
40Hz -1kHz	: ≤ 0,05%
20kHz	: ≤ 0,2%

Headphone : 6,3mm stereo jack with switch

Crosstalk between source	—1kHz : ≤ -65dB
(1W) 250Hz – 10kHz	: ≤ -60dB

Crosstalk between channels	-1kHz : ≤ -45dB
(1W) 250Hz – 10kHz	: ≤ -40dB

Frequency response : ≤ 20Hz – ≥ 20kHz (-3dB) Limit

Power stage protection	: Shortcircuit
	: DC (Vout ≥ 10V)
Temperature	: Transformer (≥140° Celcius)
	: Heatsink (≥ 140° Celcius)

Input sensitivity	
Phono	: 5mV impedance 47kΩ/220pf
CD	: 250mV impedance ≥ 47kΩ
CDR/TAPE	: 250mV impedance ≥ 47kΩ
VCR	: 250mV impedance ≥ 47kΩ
TV	: 250mV impedance ≥ 47kΩ
SAT	: 250mV impedance ≥ 47kΩ
FRONT AV	: 250mV impedance ≥ 22kΩ

Output sensitivity	
CDR/TAPE	: 250mV impedance ≤ 1kΩ
VCR	: 250mV impedance ≤ 1kΩ

Output sensitivity (variable)	
Subwoofer pre-out	: 800mV impedance ≤ 1kΩ
Center pre-out	: 800mV impedance ≤ 1kΩ

Video Selector

Input sensitivity	
DVD/VCR/TV/Front AV	: 1 Vpp impedance 75Ω
Output sensitivity	
Monitor/VCR	: 1 Vpp impedance 75Ω
Frequency response	: ≤ 50Hz → ≥ 6MHz

Equalizer

Loudness	
(volume ≤ -20dB Ref: 1kHz=0dB)	: 100Hz +6 dB
	: 10kHz +3 dB
Tone control (Ref: 1kHz=0dB)	
	: Bass 100Hz -9dB →+9dB
	: Treble 10kHz -9dB →+9dB

DSC settings		100Hz	1kHz	10kHz
Personal	dB	0	0	0
Movie	dB	+ 4	+0	+4
Speech	dB	- 4	+2	- 2
Music	dB	+ 4	- 2	+2
Multimedia	dB	+ 8	0	+6

Multi Channel Decoder

MPEG5.1 / MPEG 7.1 (7.1 downmix to 5.1)
 Dolby Digital (AC-3)
 Linear PCM
 Automatic audio/data type detection (AC-3,MPEG-2,PCM)
 Dolby Pro Logic
 MPEG-2 dual mono channel selection I/II
 MPEG-2 dual stereo channel selection I/II
 Virtual Dolby Surround (422/423)
 Virtual MPEG Digital (522/523)
 Virtual Dolby Digital (522/523)
 Digital Bass Management
 Parallel Stereo Downmix
 Four Stereo (224)
 Volume Control
 Noise Generator (test tone)
 Surround mode selector
 Delay C and SL and SR

Tuner

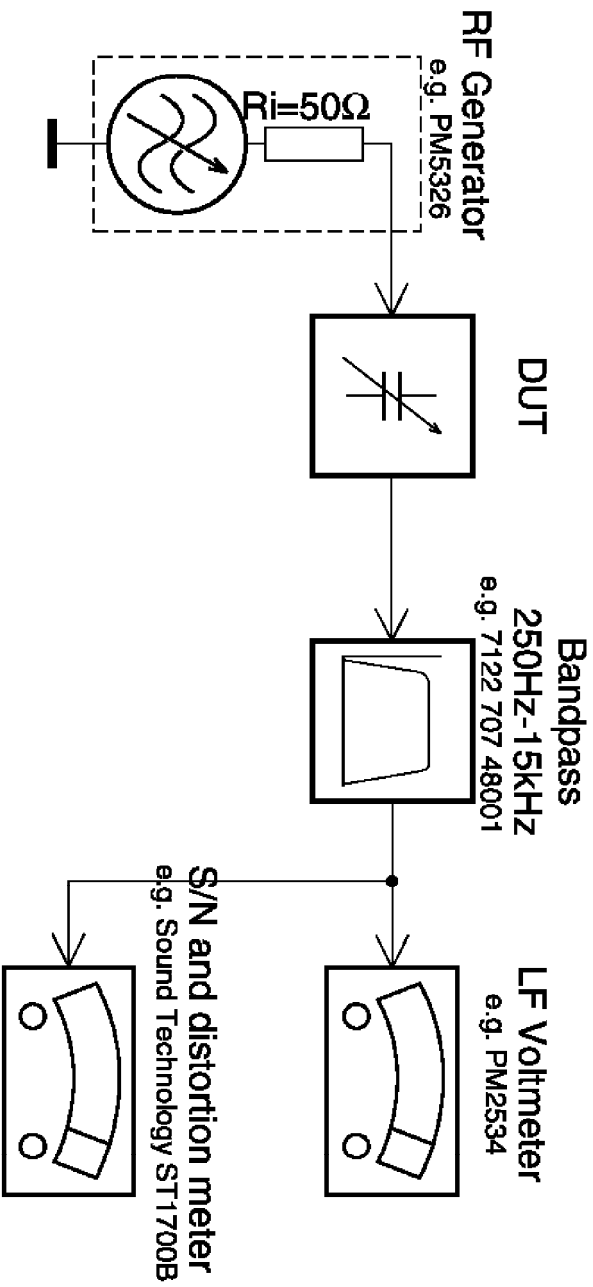
RDS	: Only in /00/14
FM	
Tuning range	: 87.5 – 108MHz
Grid	: 50kHz
	: 100kHz only for /17
	: 50 & 100kHz for /01/01B*
IF frequency	: 10.7MHz ±25kHz
Aerial input	: 75 Ω coaxial
	: 300 Ω clickfit only for /17
Sensitivity at 26dB S/N	: ≤ 7μv
Selectivity at 600kHz bandwidth	: ≥ 50dB
Image rejection	: ≥ 75dB
	: ≥ 25dB only for /17
Distortion at RF=1mV,dev.75kHz	: ≤ 2%
	: ≤ 3% only for /17
-3dB Limiting point	: ≤ 7μV
Crosstalk at RF=1mV,dev.40kHz	: ≥ 26dB
	: ≥ 22dB only for /17

MW	
Tuning range	: 522 - 1611kHz for /00/14
	: 531 - 1602kHz for/01/01B*
	: 530 - 1700kHz for/01/01B*
	: 530 - 1700kHz for /17
Grid	: 9kHz for /00/14
	: 9 & 10kHz for /01/01B*
	: 10kHz for /17
IF frequency	: 450kHz ±1kHz
Aerial input	: Frame aerial
Sensitivity at 26dB S/N	: ≤ 4.0mV/M
Selectivity at 18kHz bandwidth	: ≥ 18dB
IF rejection	: ≥ 45dB
Image rejection	: ≥ 28dB
Distortion at RF=50mV,m=80%	: ≤ 5%

LW only in /00/14	
Tuning range	: 153 - 279kHz
Grid	: 3kHz
IF frequency	: 450kHz ±1kHz
Aerial input	: Frame aerial
Sensitivity at 26dB S/N	: ≤ 6mV/M
Selectivity at 18kHz bandwidth	: ≥ 22dB
	: ≥ 24dB only for /17
IF rejection	: ≥ 26dB
Image rejection	: ≥ 35dB
Distortion at RF=50mV,m=80%	: ≤ 5%dB

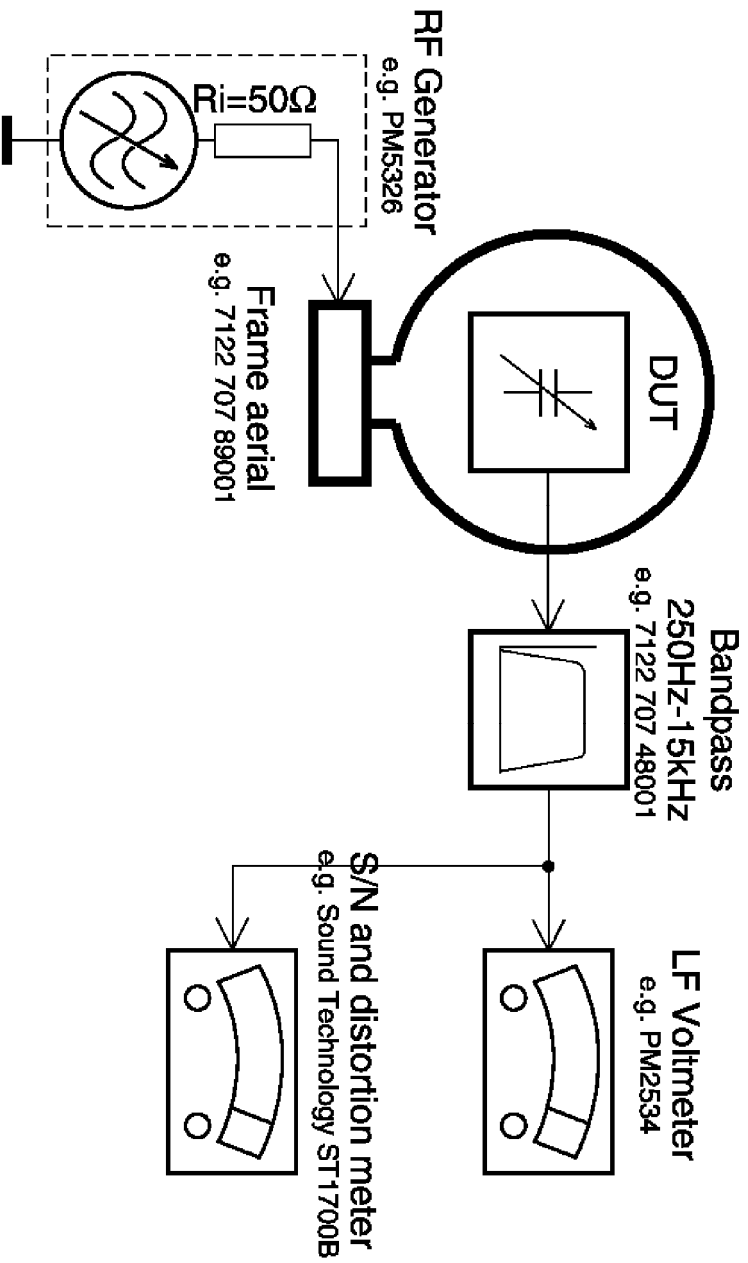
* Setting is software controlled

Tuner FM

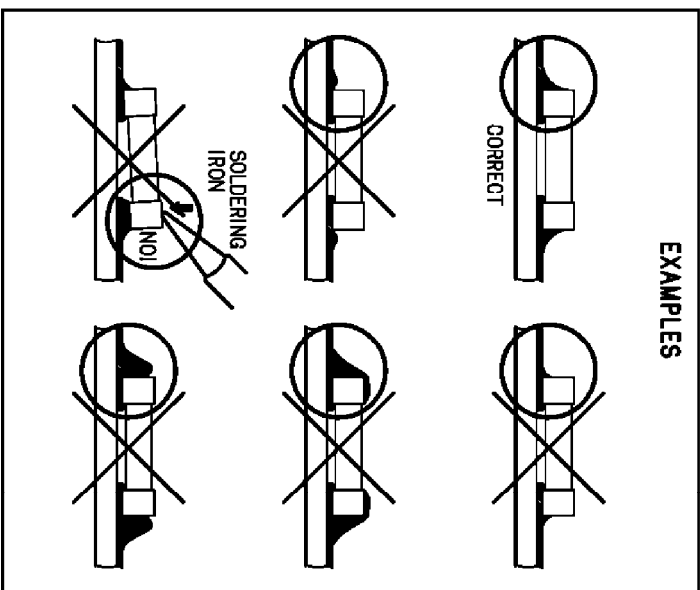
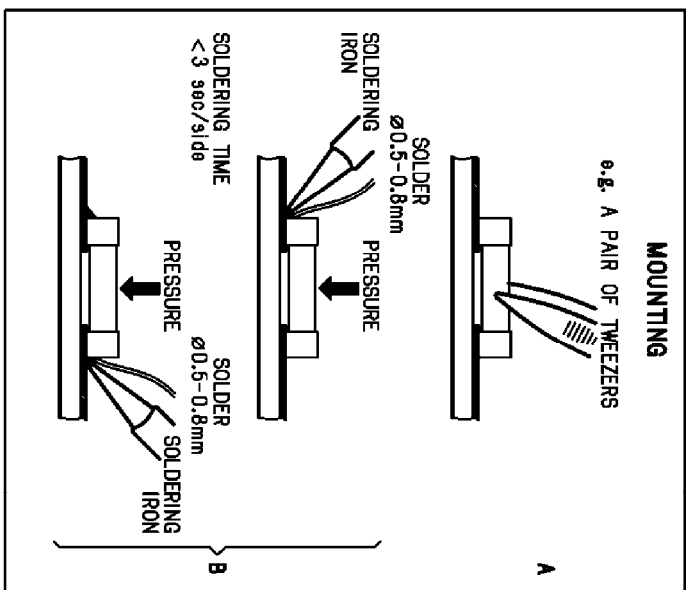
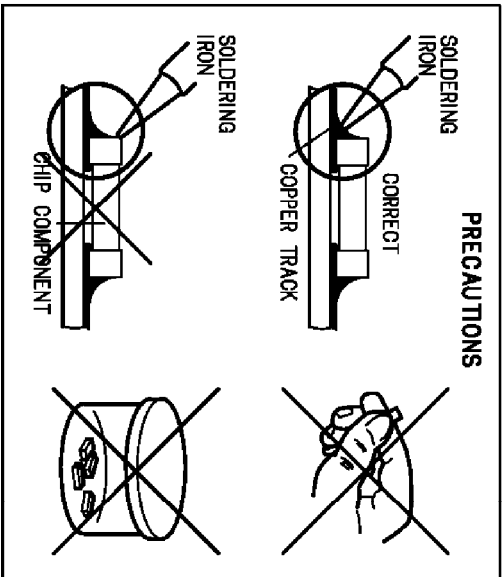
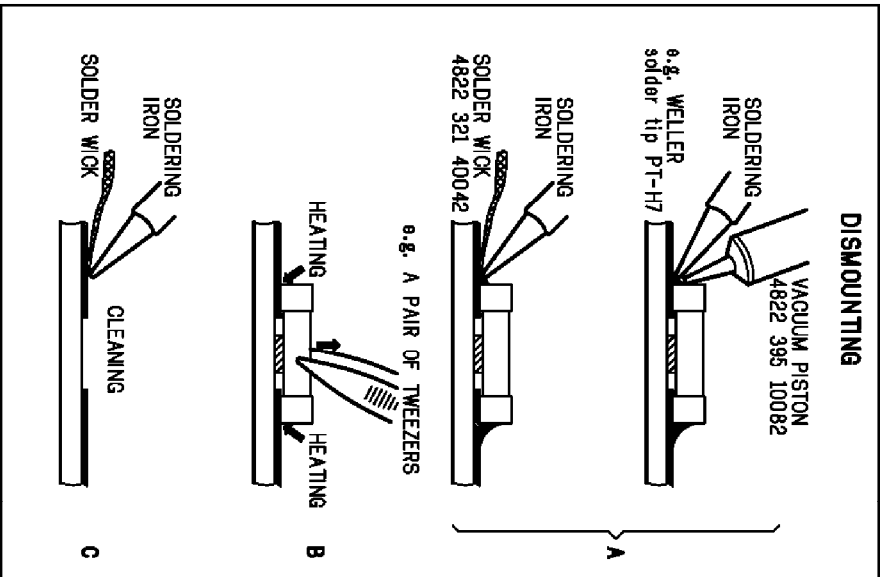
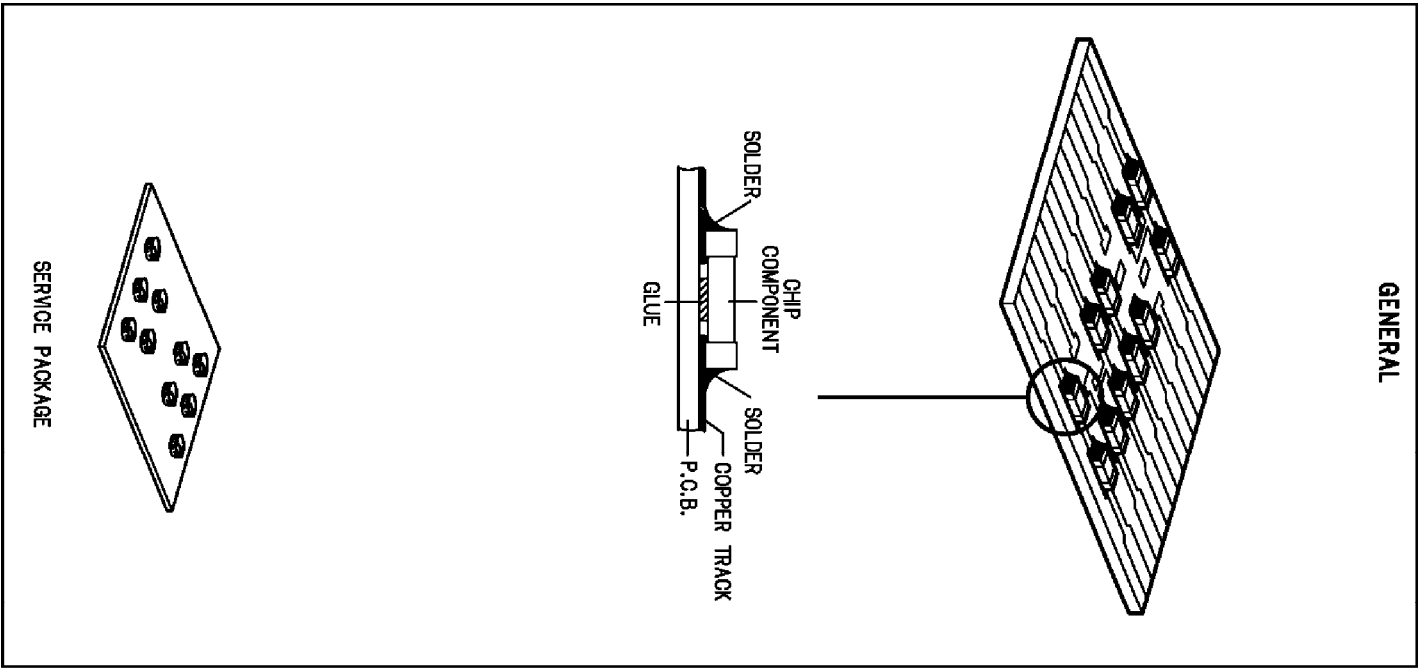


Use a bandpass filter to eliminate hum (50Hz, 100Hz) and disturbance from the pilotone (19kHz, 38kHz).

Tuner AM (MW, LW)



To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday's cage.
Use a bandpass filter (or at least a high pass filter with 250Hz), to eliminate hum (50Hz, 100Hz).



ADJUSTMENT PROCEDURES


[Display Location of Printed Circuit Boards](#)

Safety & ESD Notices

SAFETY



Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

Safety components are marked by the symbol 

WARNING

ESD



WARNING

All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD).

Careless handling during repair can reduce life drastically.

When repairing, make sure that you are connected with the same potential as the mass of the set via a wristband with resistance.

Keep components and tools at this potential.

Block Diagrams

[Display Overall Block Diagram](#)

[Display ECO 5 Tuner Board Block Diagram](#)

[Display Multi-Channel Decoder Block Diagram](#)

Service Test Program

[Display Service Test Program](#)

Tuner Adjustment Table - ECO 5

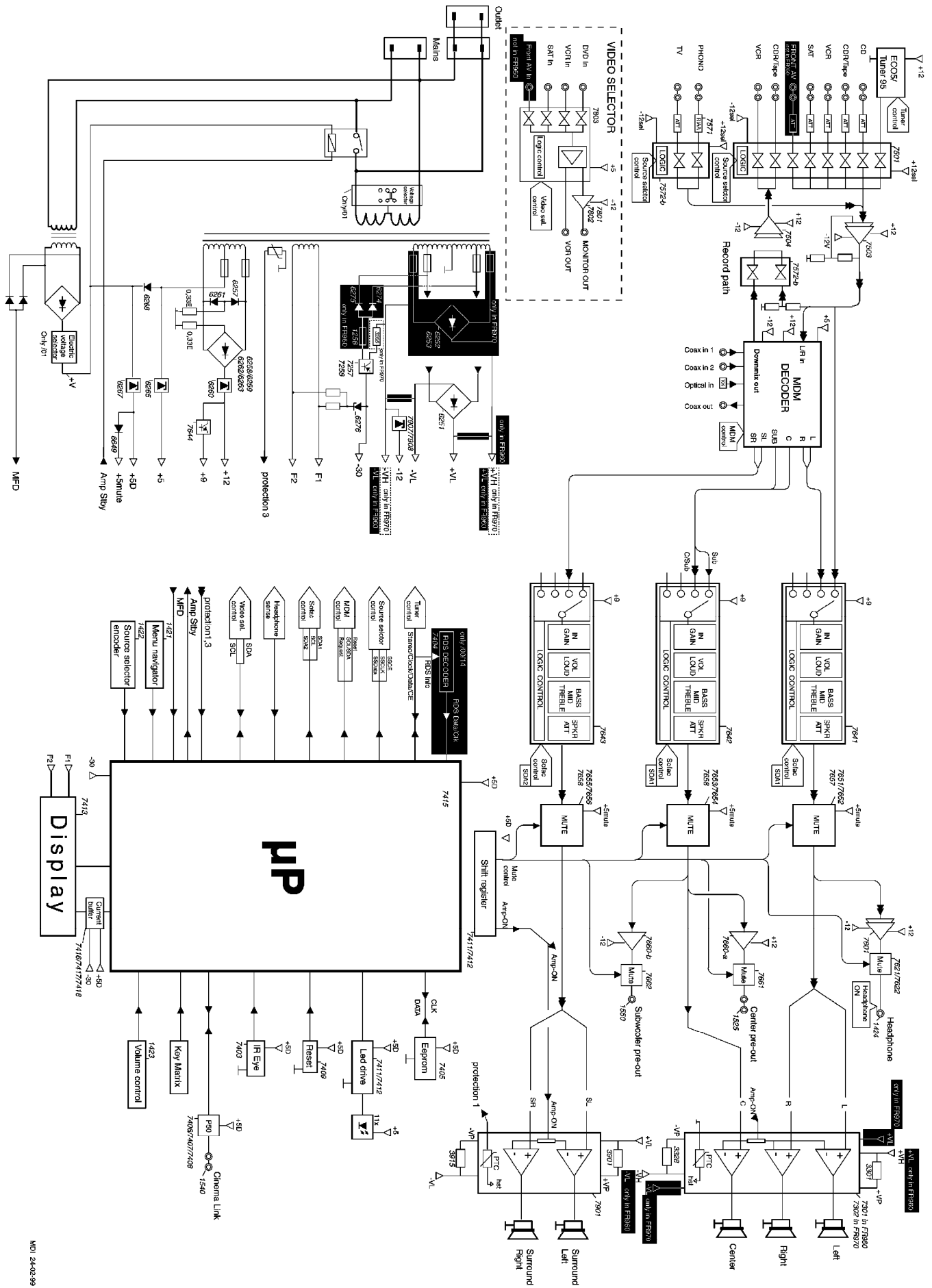
[Display ECO 5 Tuner Adjustment Table](#)

Troubleshooting the Multi-Channel Decoder

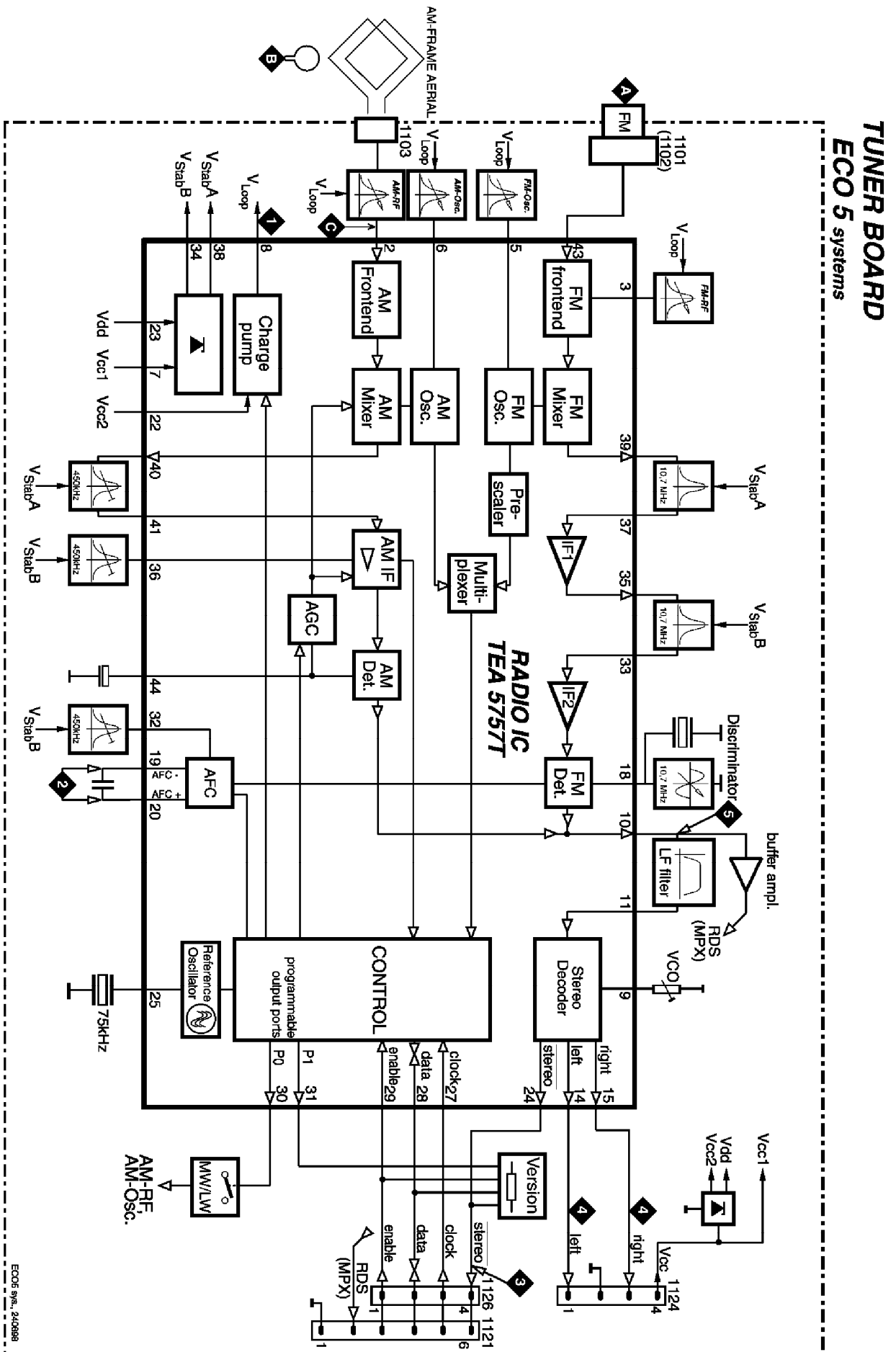
[Display MDM Troubleshooting Chart](#)

Display Overall Block Diagram

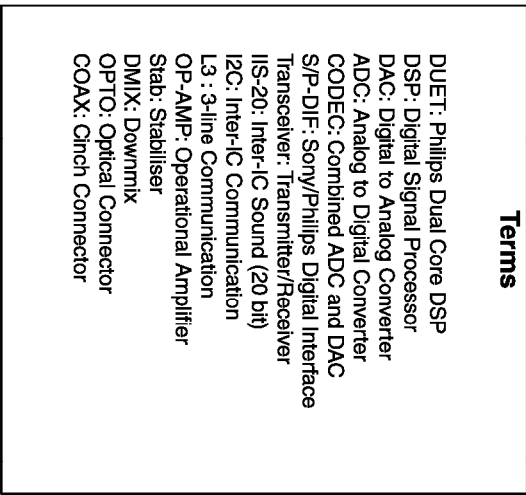
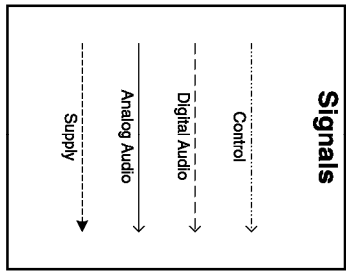
BLOCKDIAGRAM



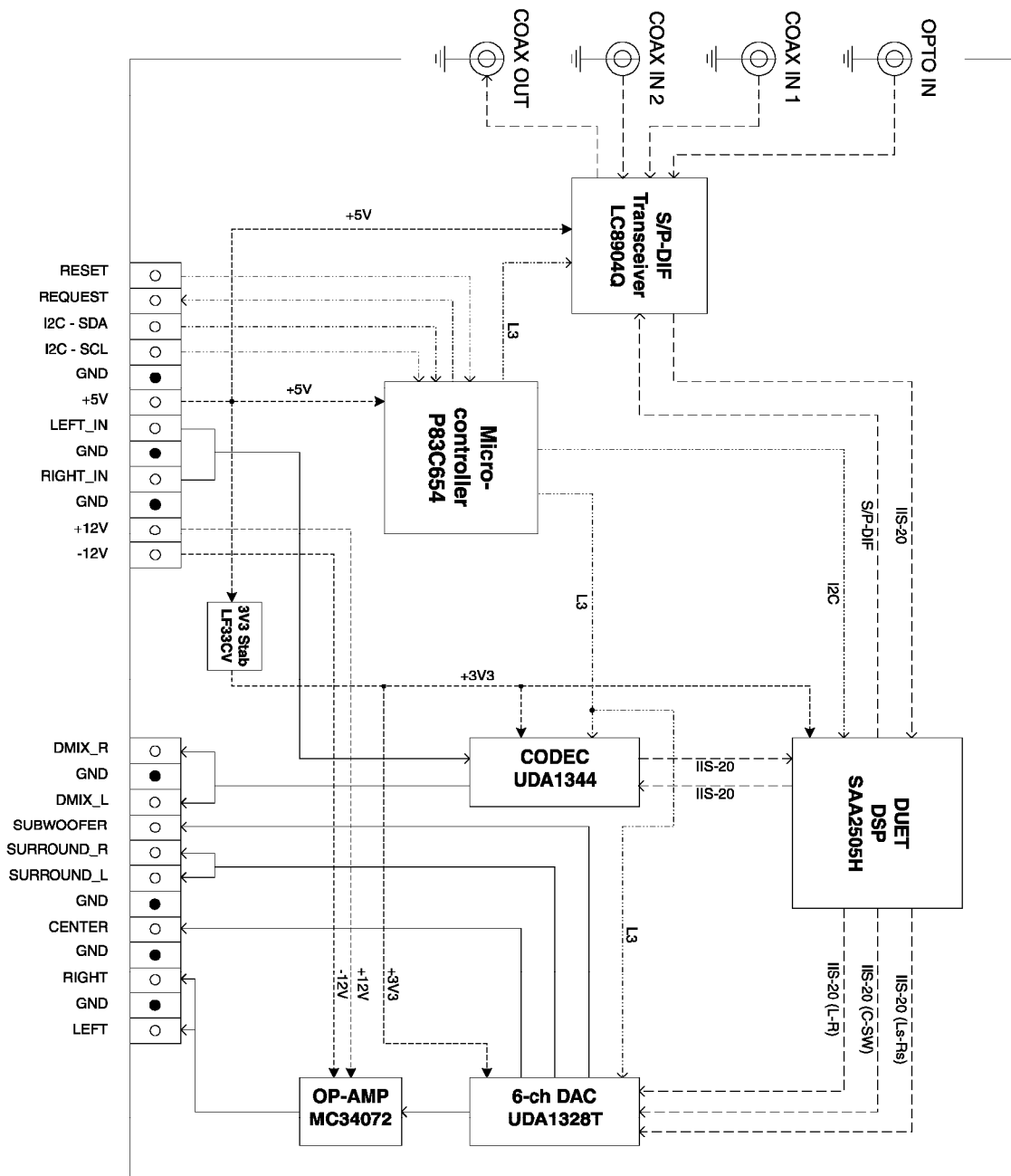
Display ECO 5 Tuner Board Block Diagram



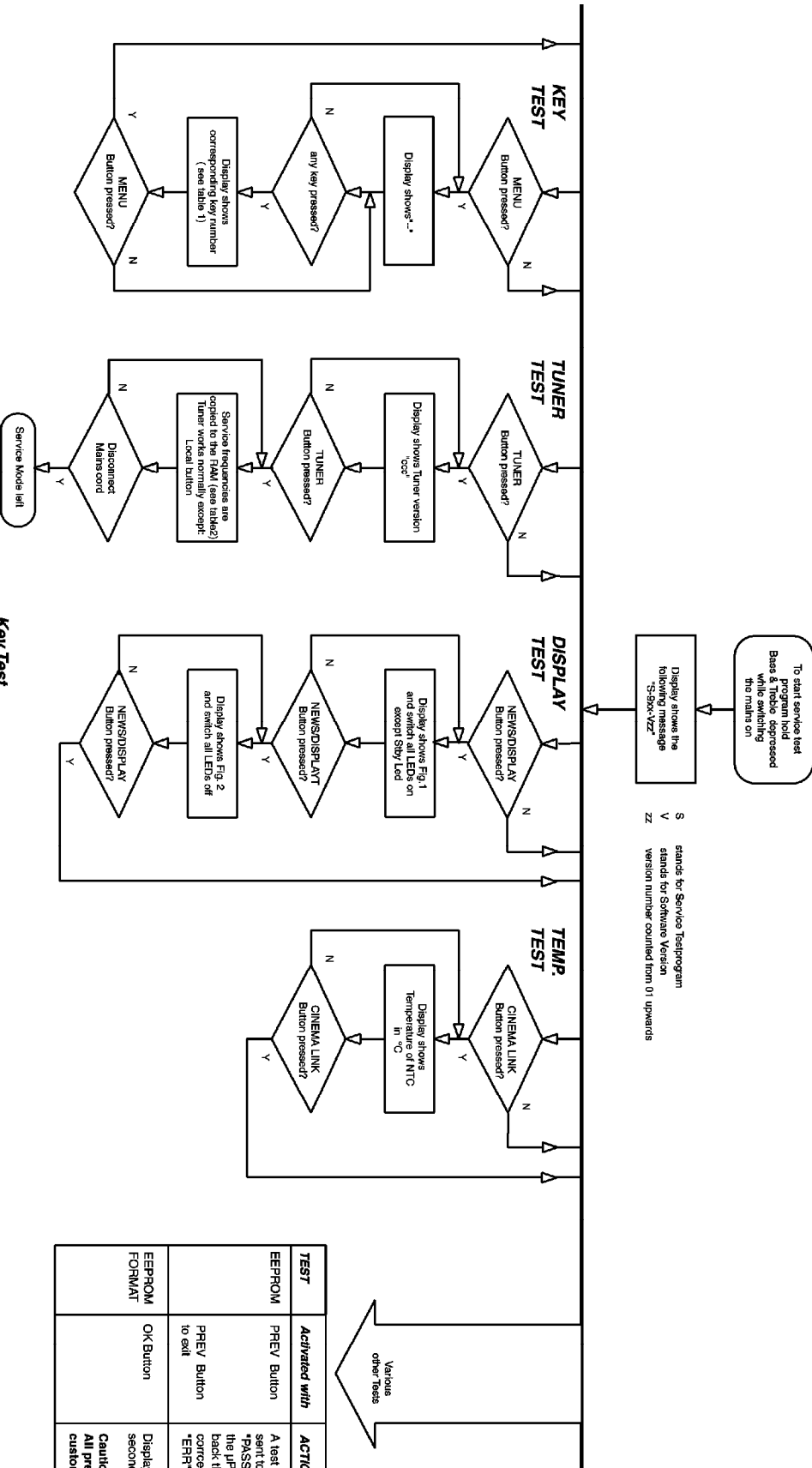
BLOCK-DIAGRAM



MULTI-CHANNEL DECODING MODULE '98



SERVICE TEST PROGRAM



To start service test program hold Bass & Treble depressed while switching the mains on

Display shows the following message "S.9xx-VZ"

S stands for Service Testprogram
V stands for Software Version
ZZ version number counted from 01 upwards

TEST	Activated with	ACTION
EPPROM	PREV Button	A test pattern will be sent to the Eeprom. "PASS" is displayed if the processor read back the test pattern correctly, otherwise "ERR" will be displayed.
EPPROM FORMAT	OK Button	Display shows "NEW" for 1 second.
		Caution! All presets from the customer will be Lost

Key Test

Key	Number	Key	Number	Key	Number
Cinema	1	Sets	7	Loudness	13
Surr. on/off	2	News/T/A	8	Bass	14
Surr. Mode	3	Prev/Exit	9	Table	15
3D Surr.	4	Setup Menu	-	*Front AVV	16
Tuner	5	Next	11		
*Radio Text	6	Enter/OK	12		

*Button Radio Text change in Name/Frequency in 01/17 version
*Button News T/A change in Display in 01/17 version
*Button Front AVV not in FR960

Table 1

Tuner Test

Display info	Europe "EUH" /00	East Eur.-3-band "EEL" /14	East Eur.-2-band "EUU" /14	USA "USA" /17	Oversea "OSE" /01
1	87.5MHz	65.81MHz	65.81MHz	87.5MHz	87.5MHz
2	108MHz	108MHz	108MHz	108MHz	108MHz
3	531kHz	74MHz	74MHz	530kHz	531kHz
4	1602kHz	87.5MHz	87.5MHz	1700kHz	1602kHz
5	558kHz	531kHz	531kHz	560kHz	558kHz
6	1494kHz	1602kHz	1602kHz	1500kHz	1494kHz
7	153kHz	558kHz	558kHz	98MHz	98MHz
8	279kHz	1494kHz	1494kHz		
9	153kHz	153kHz	153kHz		
10	98MHz	279kHz	279kHz		
11	...	198kHz	198kHz		

Table 2

This table is valid for all types of tuners.
Customer presets will not change after this Tuner test!
If a station is tuned then the display flag "OK" will be ON, otherwise it will be OFF.
If the tuned frequency is carrying RDS information, the display flag "RDS" will be ON.
Oversea version: the tuning grid can be switched between 9kHz and 10kHz by pressing the key "TUNER" for longer than 2 seconds. "Grid 9" or "Grid10" will be shown accordingly.
Europe version: the LW can be switched On and Off by pressing the key "TUNER" for longer than 2 seconds. LW OFF or LW ON will be shown accordingly.

Default Data

Source =Tuner--Mode=stereo--Volume=10--SubwooferVol=0
LeftVolume=0--CenterVolume=0--RightVolume=0
RearVolume=0--RearVolume=0--RearVolume=0--Bass=0
Treble=0--Loudness=Off--Smart Sound=Personal--Center
Present=Yes--RearPresent=Yes--FrontSize=large--Center
SubwooferPresent=Yes--CenterSize=Small--RearSize=Small
Eject/D=100--DigiP/C=0x1=DVD
L/RDist=1meter--CenterDist=3meter--RearDist=2meter
For USA /17:
L/RDist=19feet--CenterDist=10feet--RearDist=7feet.
For /01: AM grid is 9kHz
: FM grid is 50kHz

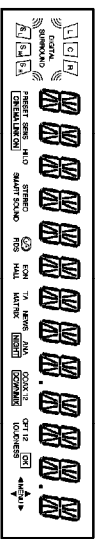


Figure 1

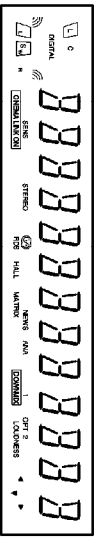
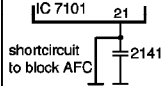
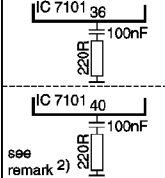
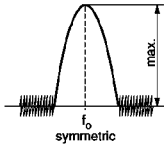
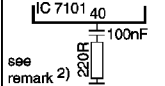

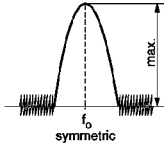


Figure 2

TUNER ADJUSTMENT TABLE (ECO5 FM/MW- and FM/MW/LW - versions with AM-frame aerial)

Waverange	Input frequency	Input	Tuned to	Adjust	Output	Scope/Voltmeter
VARICAP ALIGNMENT						
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)			108MHz	5130	1	8V ±0.2V
			87.5MHz (65.81MHz)	check		4.3V ±0.5V (1.2V ±0.5V)
MW FM/AM-version, 10kHz grid 530 - 1700kHz			1700kHz	5123		8V ±0.2V
			530kHz	check		1.1V ±0.4V
FM/MW-version, 9kHz grid 531 - 1602kHz			1602kHz	5123		6.9V ±0.2V
			531kHz	check		1.1V ±0.4V
LW 153 - 279kHz			279kHz	5122		8V ±0.2V
			153kHz	check		1.1V ±0.4V
MW FM/MW/LW- version, 9kHz grid 531 - 1602kHz			1602kHz	5123	8V ±0.2V	
			531kHz	check	1.1V ±0.4V	
FM IF						
FM	10.7MHz, 50mV continuous wave	F		5119	2	0 ± 3 mV DC
FM RF						
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)	108MHz	A	108MHz	2155	4	MAX
	87.5MHz (65.81MHz)	mod=1kHz Δf=±22.5kHz	87.5MHz (65.81MHz)	5131		
VCO						
FM	98MHz, 1mV continuous wave	A	98MHz	3142	3	152kHz ±1kHz ¹⁾
AM IF						
MW	450kHz connect pin 6 of IC 7101 (AM Osc.) with short wire to ground (pin 4)	C Δf=±15kHz V _{RF} = 3mV		5111	4	
				5112		
AM AFC						
MW		C continuous wave V _{RF} = 10mV		5114	2	0 ± 2 mV DC
AM RF ³⁾						
MW ⁴⁾ FM/MW/LW- and FM/MW-version (9kHz grid) 531 - 1602kHz	1494kHz	B 	1494kHz	2106	4	
	558kHz		558kHz	5102		
LW	198kHz		198kHz	5103		
MW FM/AM-version, 10kHz grid 530 - 1700kHz	1500kHz		Δf = ±30kHz V _{RF} as low as possible	1500kHz			2106
	560kHz	560kHz		5102		

Use service test program. By selecting the TUNER TEST test frequencies will be stored as preset frequencies automatically.

1) If sensitivity of frequency counter is too low adjust to max. channel separation (input signal: stereo left 90% + 9%, adjust output on right channel to minimum)

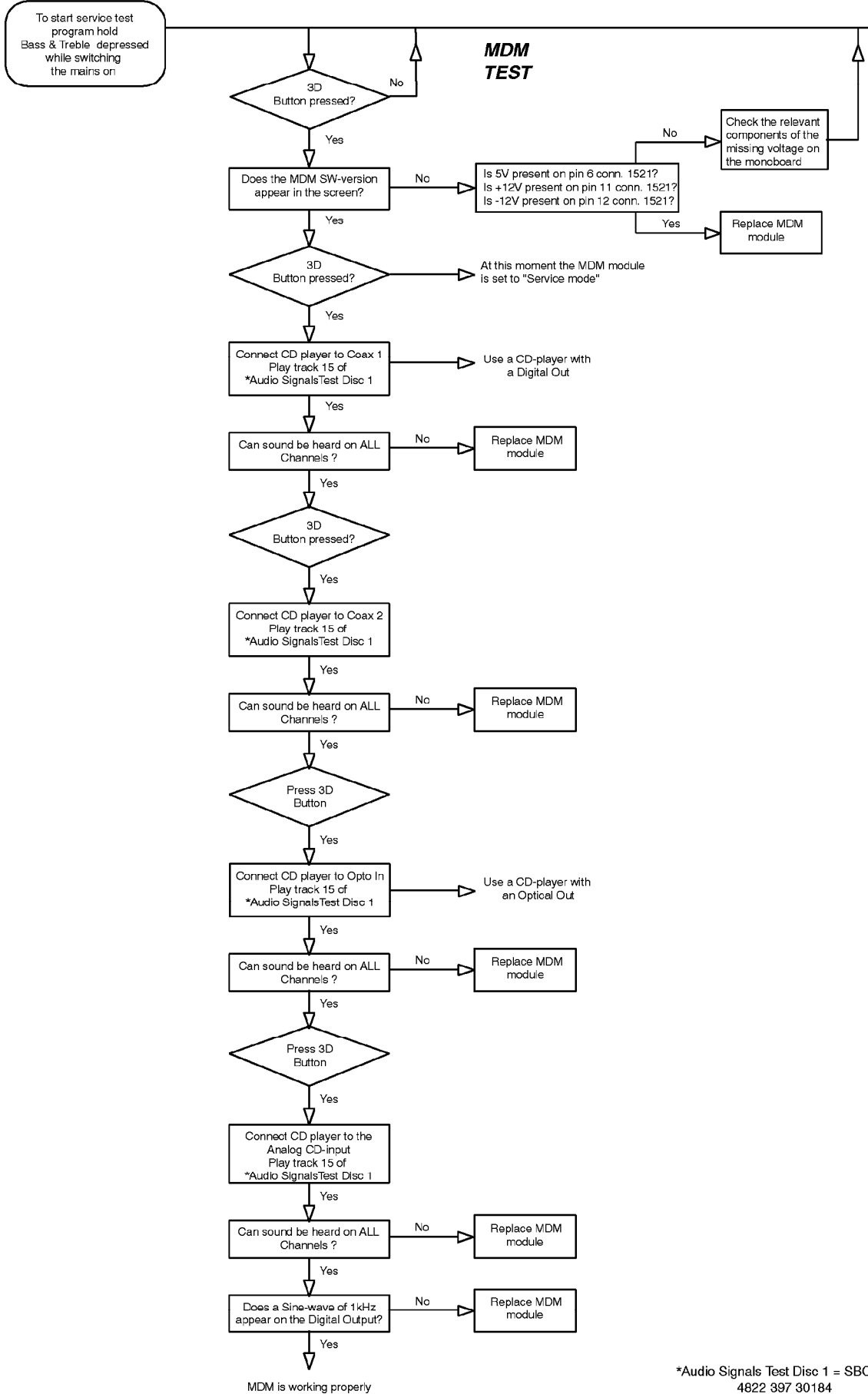
2) RC network serves for damping the IF-filter while adjusting the other one.

3) For AM RF adjustments the original frame antenna has to be used!

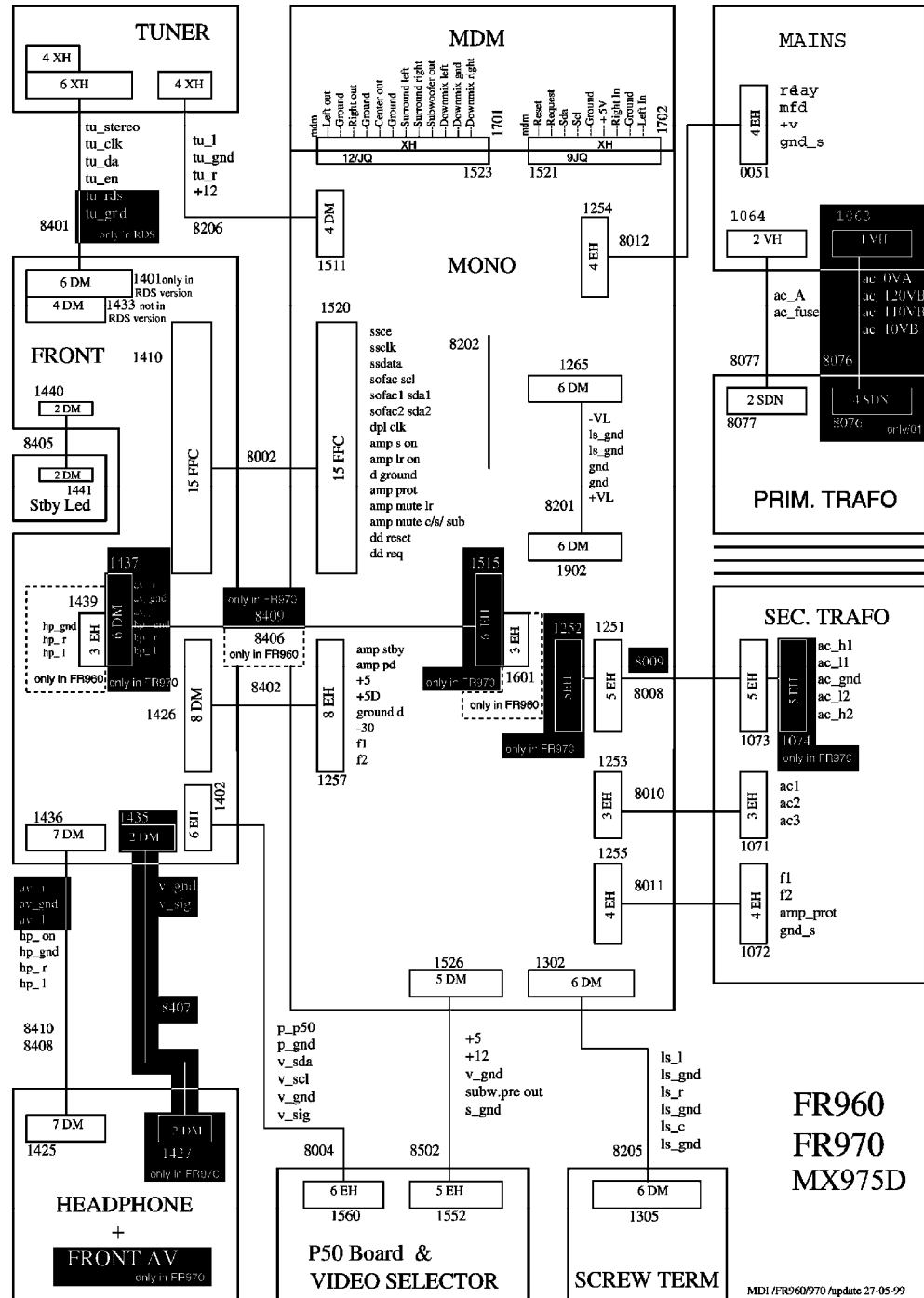
4) MW has to be aligned before LW.

↑ Repeat

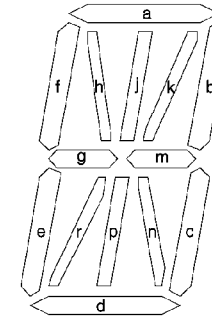
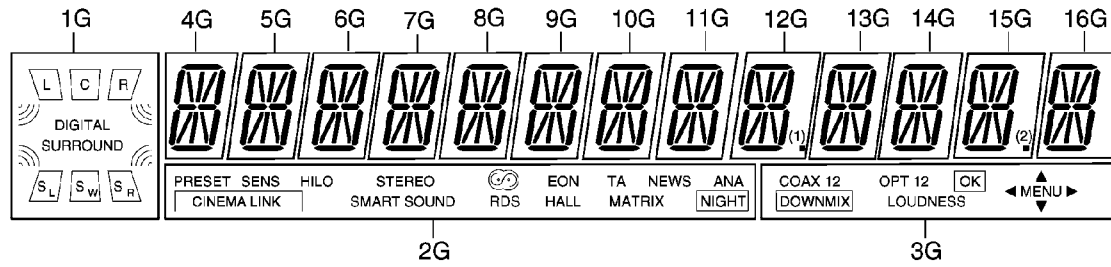
MULTI-CHANNEL DECODING MODULE - Troubleshooting



WIRING DIAGRAM



FTD DISPLAY PIN CONNECTIONS



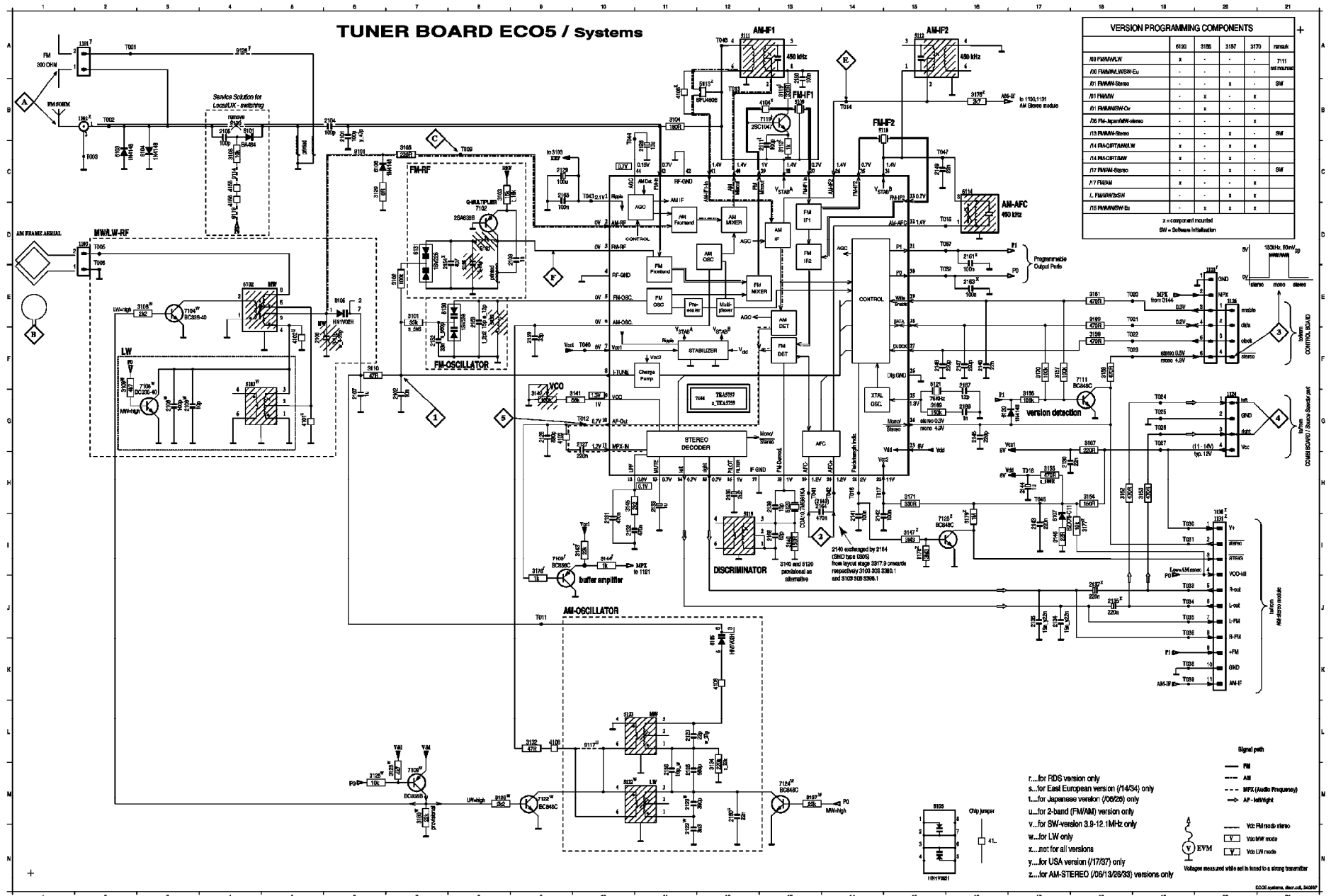
	1G	2G	3G	4G~11G	12G	13G, 14G	15G	16G
P1	L	MATRIX	DOWNMIX	a	a	a	a	a
P2	R	NIGHT	COAX	j p	j p	j p	j p	j p
P3	C	ANA	1(coax)	h	h	h	h	h
P4	(C)	LO	2(coax)	k	k	k	k	k
P5	(S _L)	CINEMA LINK	OPT	b	b	b	b	b
P6	(S _R)	EON	1(opt)	f	f	f	f	f
P7	S _w	HALL	2(opt)	m	m	m	m	m
P8	S(L)	HI	LOUDNESS	g	g	g	g	g
P9	L	NEWS	▼	c	c	c	c	c
P10	S(R)	PRESET	MENU	e	e	e	e	e
P11	R	RDS	▶	r	r	r	r	r
P12		SMART SOUND	OK	n	n	n	n	n
P13		STEREO	◀	d	d	d	d	d
P14	SURROUND	TA	▲	-	■(1)	-	■(2)	-
P15	DIGITAL	SENS	-	-	-	-	-	-

Pin Connection

Pin numbers	544444444433333333332222222222111111111111
	098765432109876543210987654321098765432109876543210987654321
Connection	1234567890123456NNNNNNN11111111PPPPPPNNNNNNNNNNNNFF GGGGGGGGGGGGGGGGCCCCCC543210987654321CCCCCCCCPP11

Pin numbers	66655555555555
	210987654321
Connection	FFNNNNNNNNNN 22PPCCCCCCCC

Note: F1, F2 ----- Filament
 NC ----- No connection
 NP ----- No pin
 1G ~ 16G ----- Grid



191 A 1
192 B 2
193 C 3
194 D 4
195 E 5
196 F 6
197 G 7
198 H 8
199 I 9
200 J 10
201 K 11
202 L 12
203 M 13
204 N 14
205 O 15
206 P 16
207 Q 17
208 R 18
209 S 19
210 T 20
211 U 21

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192 B 2
193 C 3
194 D 4
195 E 5
196 F 6
197 G 7
198 H 8
199 I 9
200 J 10
201 K 11
202 L 12
203 M 13
204 N 14
205 O 15
206 P 16
207 Q 17
208 R 18
209 S 19
210 T 20
211 U 21

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191 A 1
192 B 2
193 C 3
194 D 4
195 E 5
196 F 6
197 G 7
198 H 8
199 I 9
200 J 10
201 K 11
202 L 12
203 M 13
204 N 14
205 O 15
206 P 16
207 Q 17
208 R 18
209 S 19
210 T 20
211 U 21

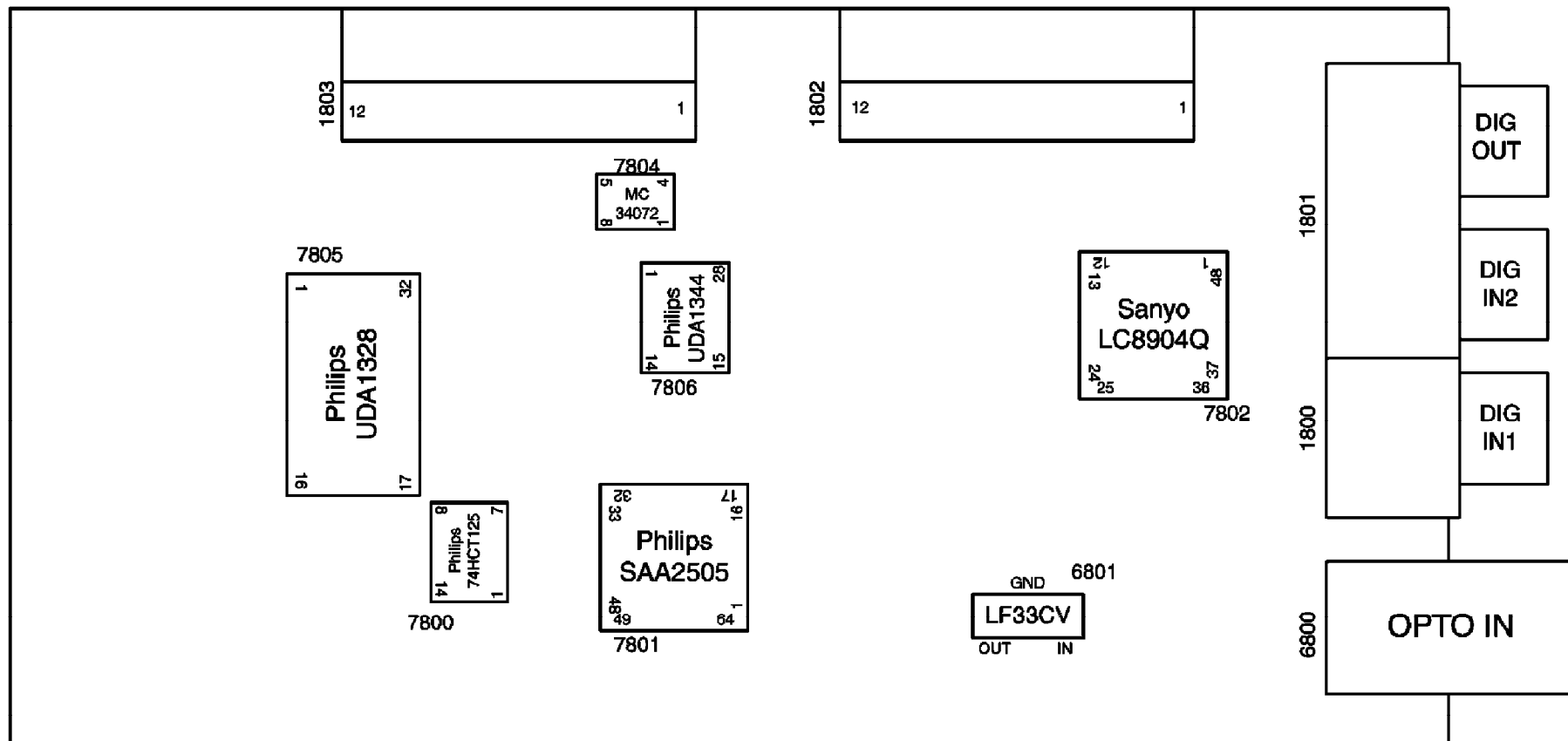
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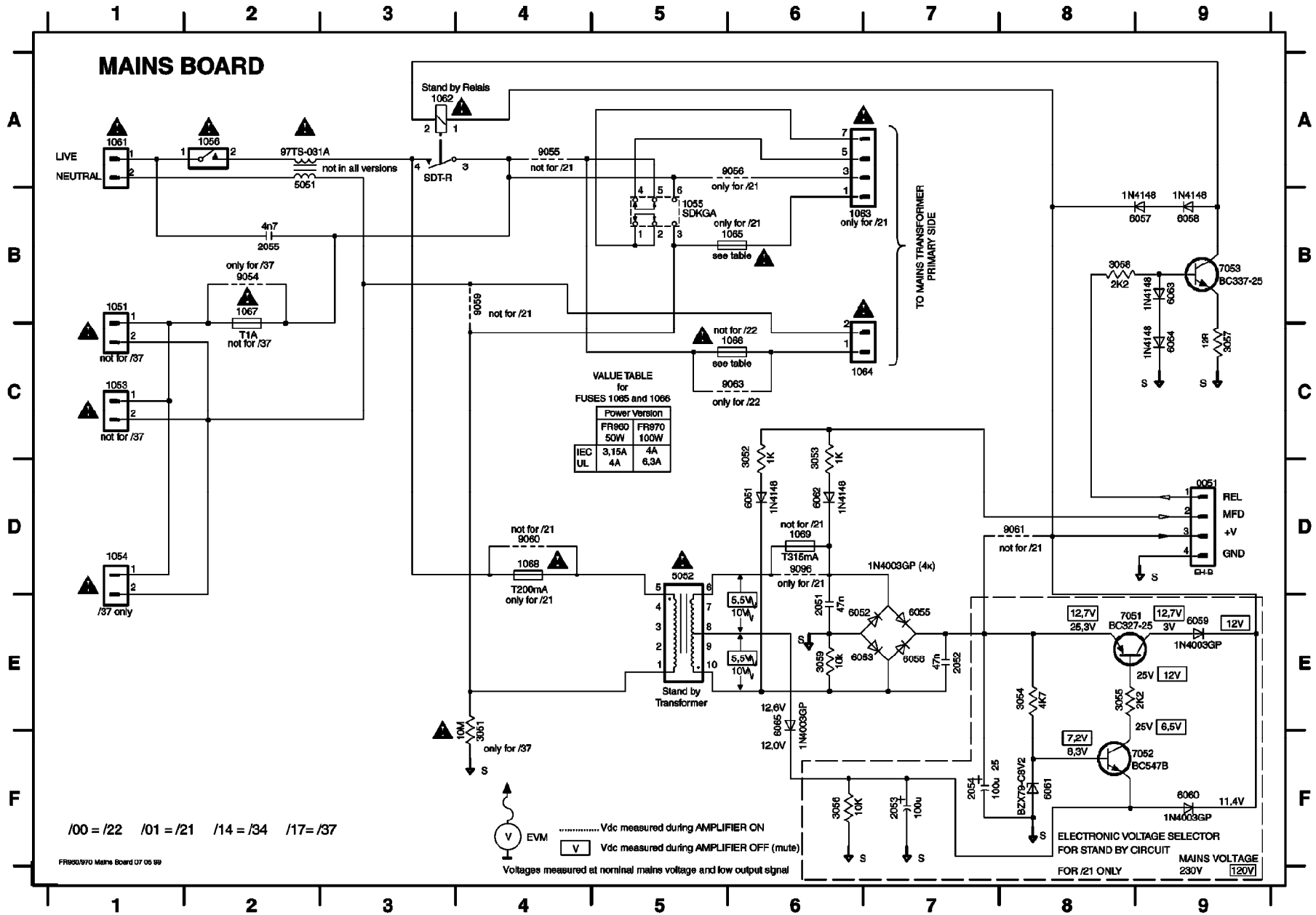
MULTI-CHANNEL DECODER MODULE - No Schematic available

ELECTRICAL PARTSLIST - MDM MODULE

1003	3104 217 05750	MDM Module
1800	4822 267 31729	Connector
1801	4822 267 31448	Connector
6800	4822 218 11487	GP1F32R
6801	4822 209 16978	LF33CV

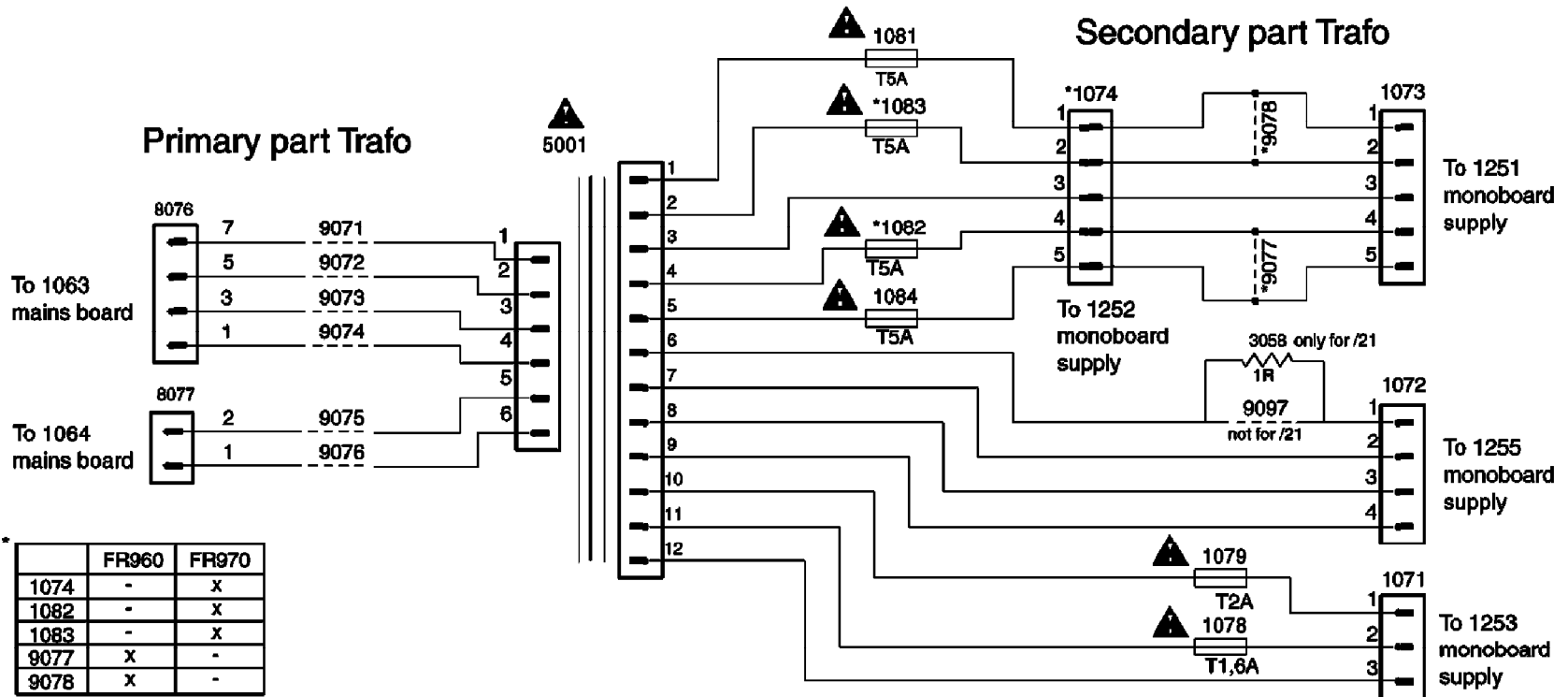
Note: Only the parts mentioned in this list are normal service parts.





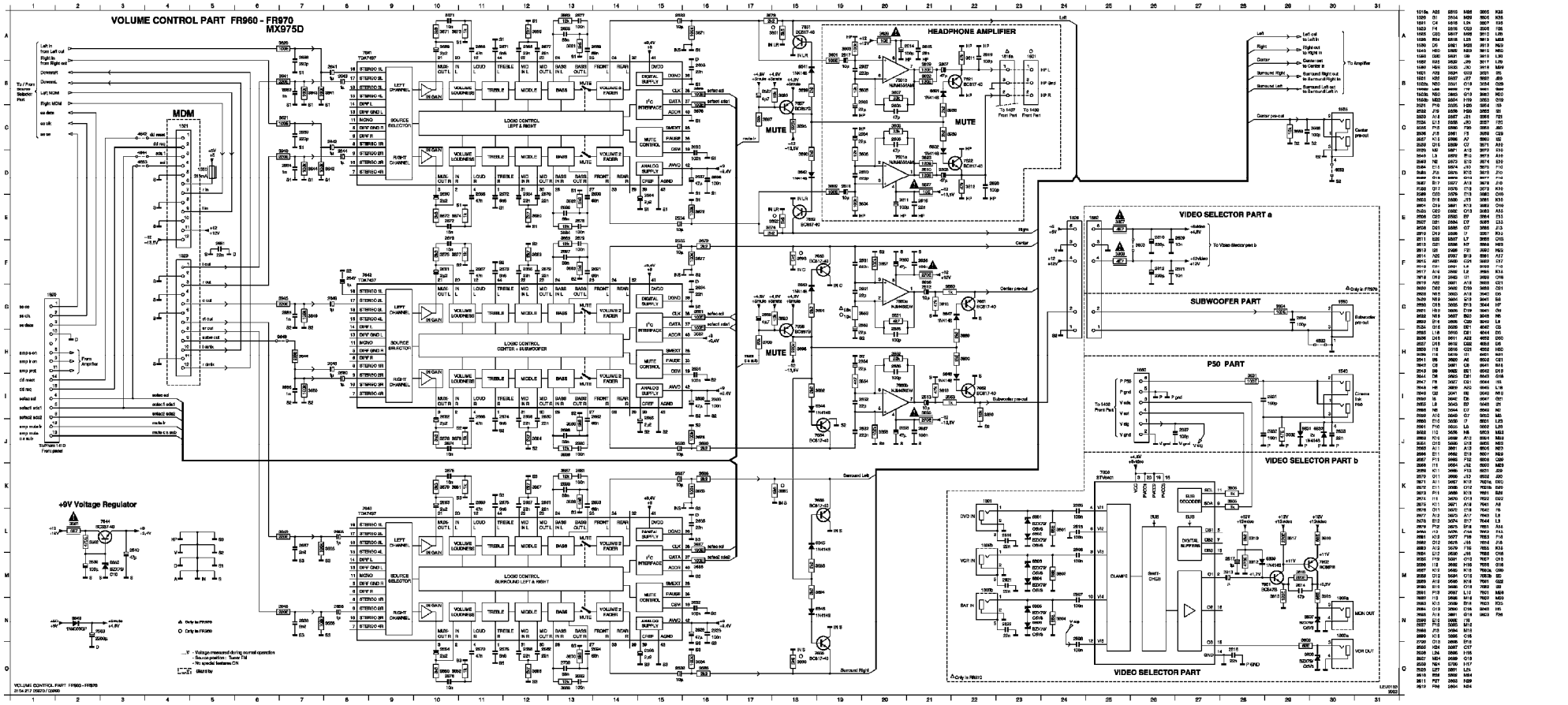
- 0051 D9
- 1051 B1
- 1052 D1
- 1053 C1
- 1064 D1
- 1055 B5
- 1056 A2
- 1061 A1
- 1062 A3
- 1063 B6
- 1064 C6
- 1065 C6
- 1066 C6
- 1067 B2
- 1068 D4
- 1069 D6
- 2051 E6
- 2052 E7
- 2053 F7
- 2054 F7
- 2055 B2
- 3051 F4
- 3052 C6
- 3053 C6
- 3054 E8
- 3055 E6
- 3056 F6
- 3057 C9
- 3058 B6
- 3059 E6
- 5051 A2
- 5052 D5
- 6051 D6
- 6052 E7
- 6053 E6
- 6055 E7
- 6056 E7
- 6057 B9
- 6058 B6
- 6059 E9
- 6060 F9
- 6061 F8
- 6062 D6
- 6063 B6
- 6064 C9
- 6065 F6
- 7051 E6
- 7052 F8
- 7053 B9
- 9051 A2
- 9052 B2
- 9053 A2
- 9054 B2
- 9055 A4
- 9056 A6
- 9057 B6
- 9059 B4
- 9060 D4
- 9061 D6
- 9063 C6
- 9064 A5
- 9065 B1
- 9066 B1
- 9092 E2
- 9093 E2
- 9094 F2
- 9095 F2
- 9096 D6

MAINS TRAF0 PART

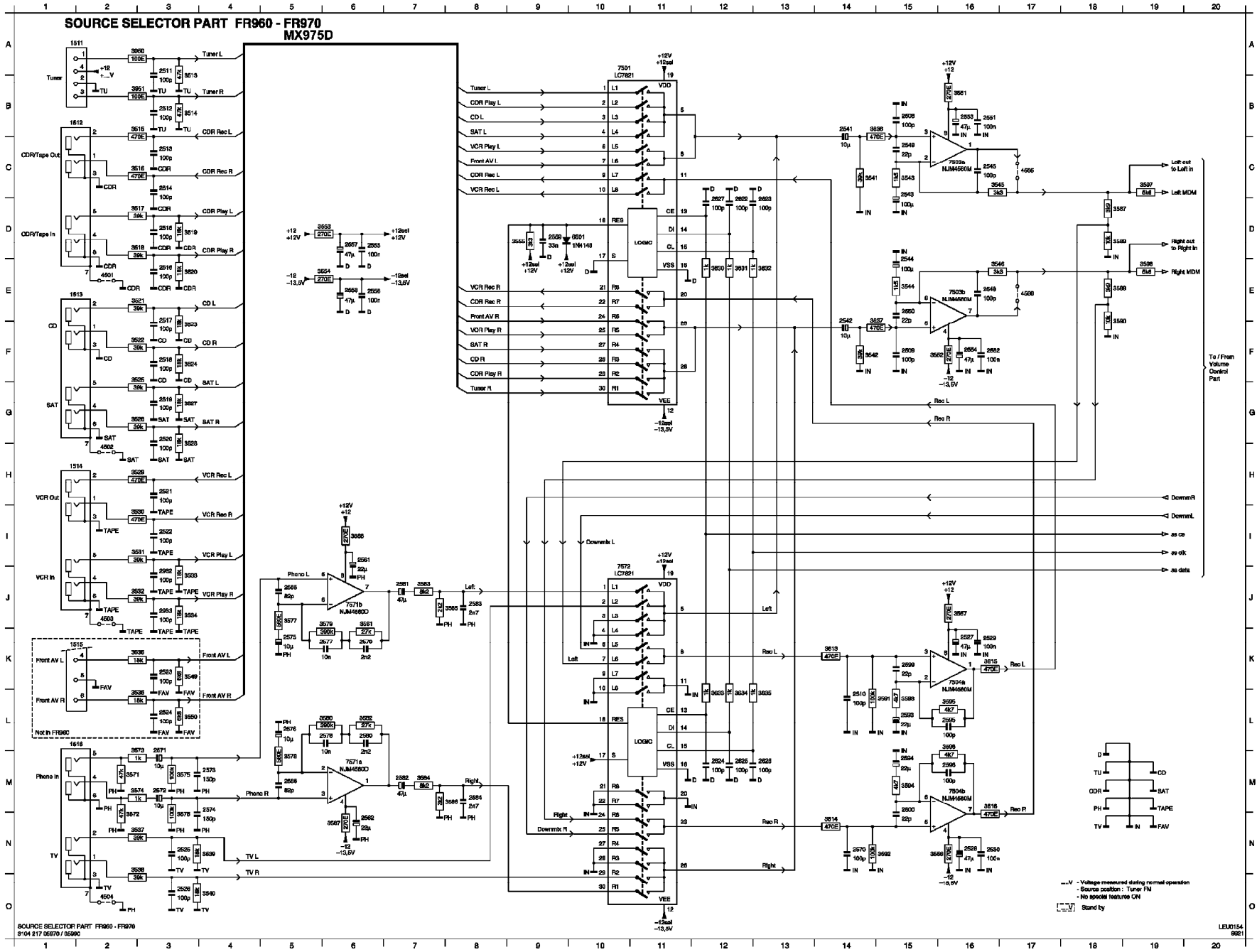


	FR960	FR970
1074	-	X
1082	-	X
1083	-	X
9077	X	-
9078	X	-

/00 = /22 /01 = /21 /14 = /34 /17 = /37

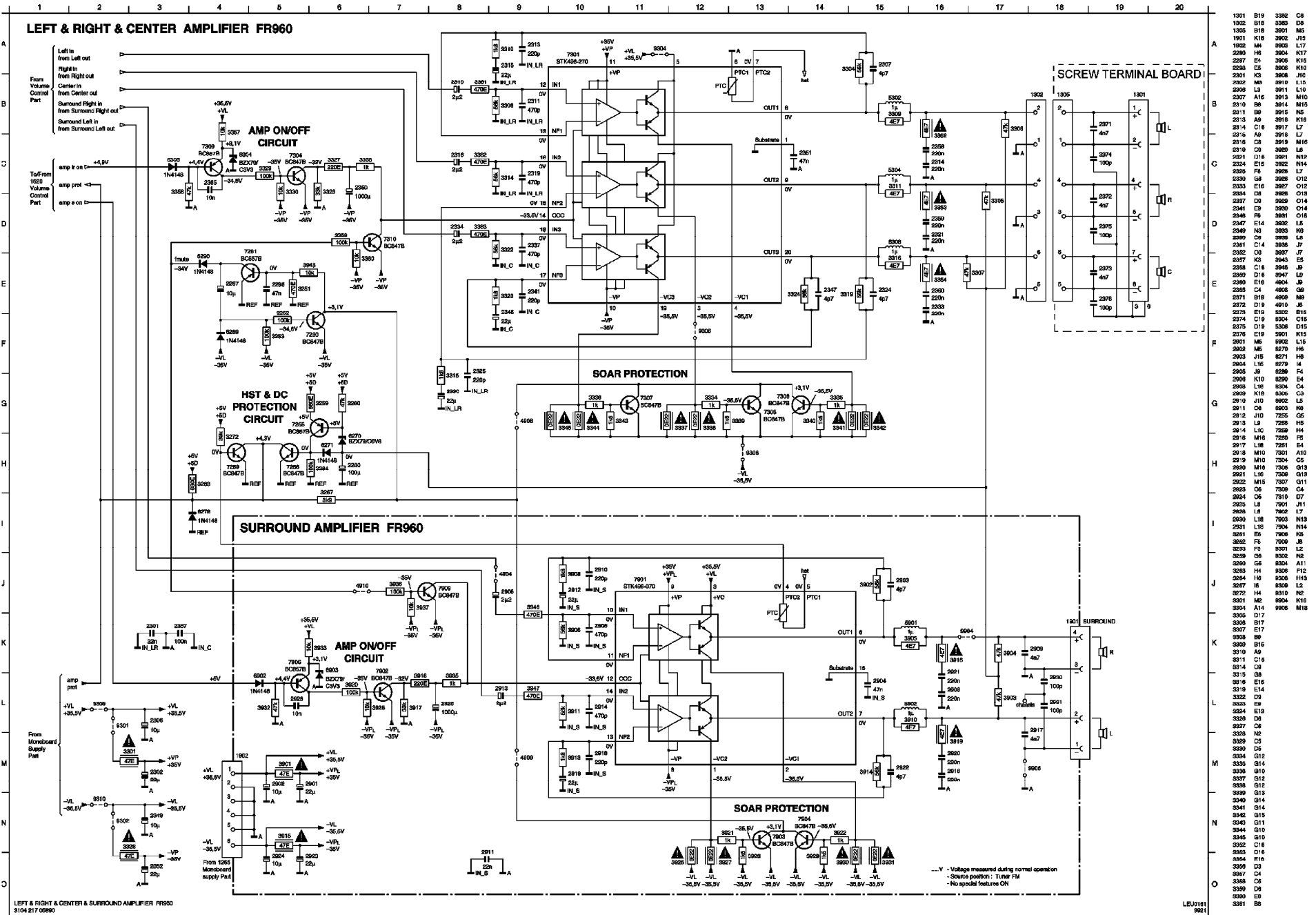


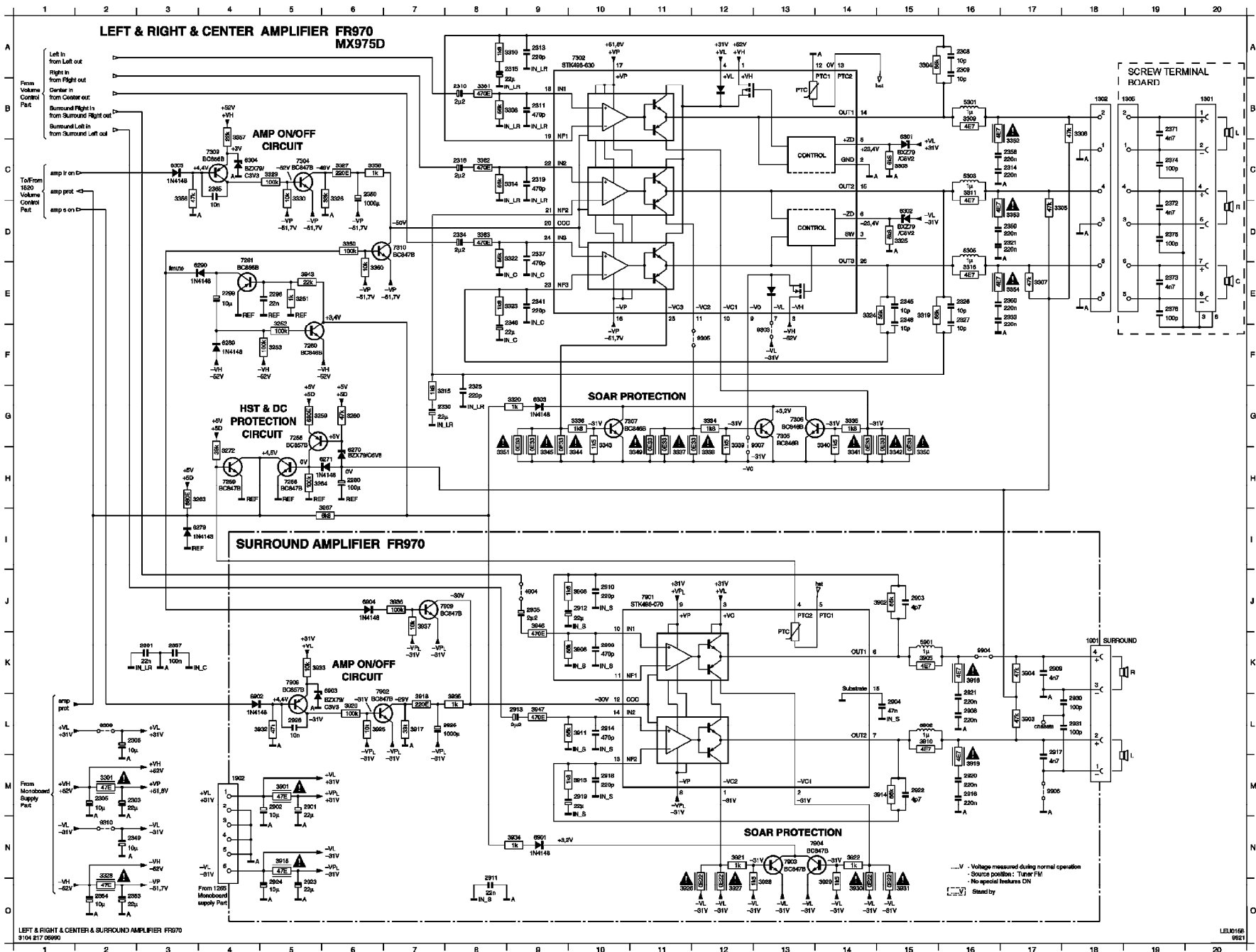
All Models (1931) - MONO BD. - SOURCE SELECTOR PART SCHEMATIC



1511	A1	3557	J6
1512	B1	3558	J6
1513	E1	3557	M5
1514	H1	3571	M2
1515	K1	3572	M2
1516	L1	3573	M2
2008	B16	3574	M2
2009	F16	3575	M3
2010	L14	3576	M3
2011	A2	3577	J5
2012	B2	3578	M6
2013	C3	3579	J6
2014	C3	3580	L3
2015	D3	3581	J6
2016	E3	3582	L6
2017	F3	3583	J7
2018	F3	3584	M7
2019	G3	3585	J6
2020	G3	3586	M6
2021	H3	3587	D18
2022	I3	3588	E18
2023	K3	3589	D18
2024	L3	3590	F18
2025	M3	3591	L15
2026	O3	3592	N15
2027	K16	3593	L16
2028	N18	3594	M15
2029	K16	3595	L16
2030	N16	3596	L16
2031	B14	3597	C19
2032	F14	3598	E19
2033	C16	3513	K14
2034	F16	3514	N14
2035	O16	3515	K16
2036	E16	3516	M16
2037	C18	3517	E18
2038	E16	3518	E12
2039	B18	3519	E12
2040	F18	3520	E13
2041	B16	3521	L12
2042	B16	3522	L12
2043	F16	3523	L13
2044	D9	3524	E14
2045	E6	3525	F14
2046	D6	3526	A2
2047	E6	3527	E2
2048	F6	3528	E2
2049	D9	3529	H2
2050	E9	3530	E2
2051	F9	3531	E2
2052	G9	3532	E2
2053	H9	3533	E2
2054	I9	3534	E2
2055	J9	3535	E2
2056	K9	3536	E2
2057	L9	3537	E2
2058	M9	3538	E2
2059	N9	3539	E2
2060	O9	3540	E2
2061	A10	3541	E2
2062	B10	3542	E2
2063	C10	3543	E2
2064	D10	3544	E2
2065	E10	3545	E2
2066	F10	3546	E2
2067	G10	3547	E2
2068	H10	3548	E2
2069	I10	3549	E2
2070	J10	3550	E2
2071	K10	3551	E2
2072	L10	3552	E2
2073	M10	3553	E2
2074	N10	3554	E2
2075	O10	3555	E2
2076	A11	3556	E2
2077	B11	3557	E2
2078	C11	3558	E2
2079	D11	3559	E2
2080	E11	3560	E2
2081	F11	3561	E2
2082	G11	3562	E2
2083	H11	3563	E2
2084	I11	3564	E2
2085	J11	3565	E2
2086	K11	3566	E2
2087	L11	3567	E2
2088	M11	3568	E2
2089	N11	3569	E2
2090	O11	3570	E2
2091	A12	3571	E2
2092	B12	3572	E2
2093	C12	3573	E2
2094	D12	3574	E2
2095	E12	3575	E2
2096	F12	3576	E2
2097	G12	3577	E2
2098	H12	3578	E2
2099	I12	3579	E2
2100	J12	3580	E2
2101	K12	3581	E2
2102	L12	3582	E2
2103	M12	3583	E2
2104	N12	3584	E2
2105	O12	3585	E2
2106	A13	3586	E2
2107	B13	3587	E2
2108	C13	3588	E2
2109	D13	3589	E2
2110	E13	3590	E2
2111	F13	3591	E2
2112	G13	3592	E2
2113	H13	3593	E2
2114	I13	3594	E2
2115	J13	3595	E2
2116	K13	3596	E2
2117	L13	3597	E2
2118	M13	3598	E2
2119	N13	3599	E2
2120	O13	3600	E2

...V - Voltage measured during no mail operation
 - Source position: Tuner FM
 - No special feature ON
 Stand by

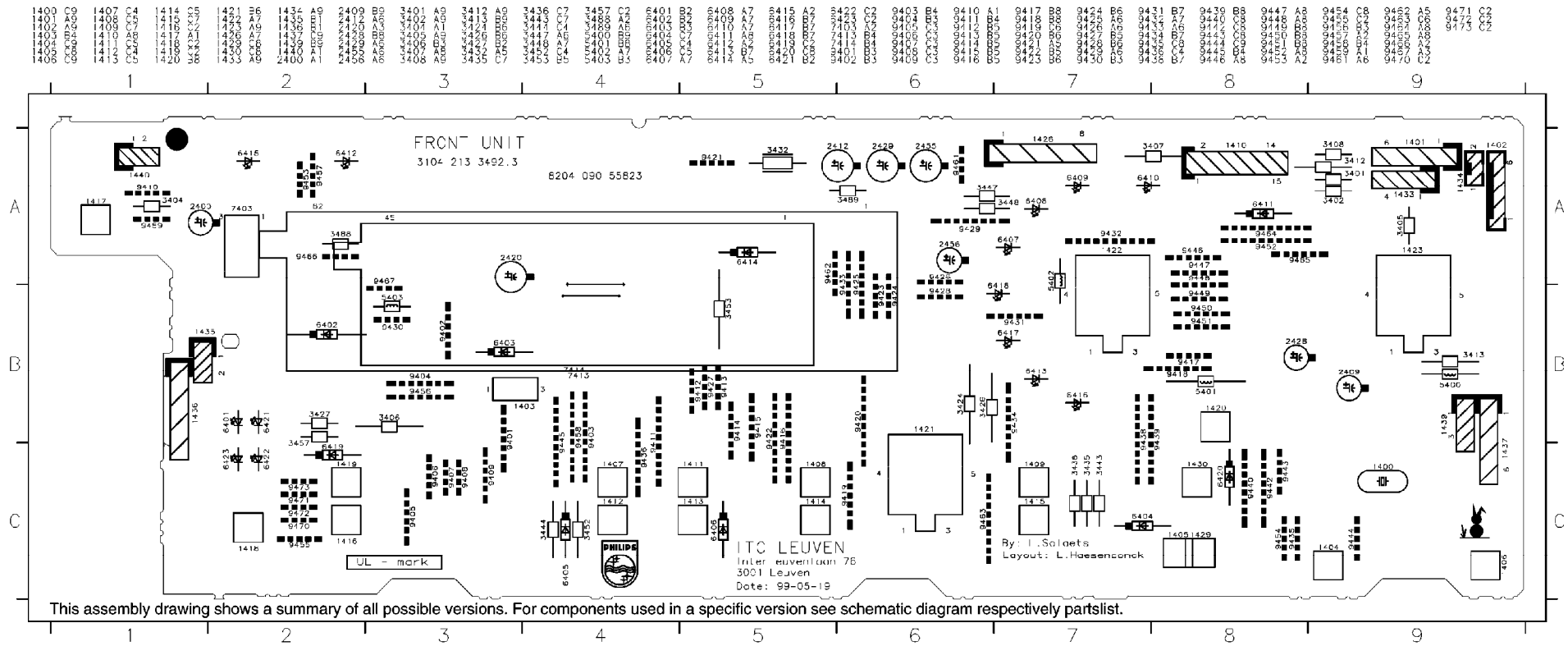




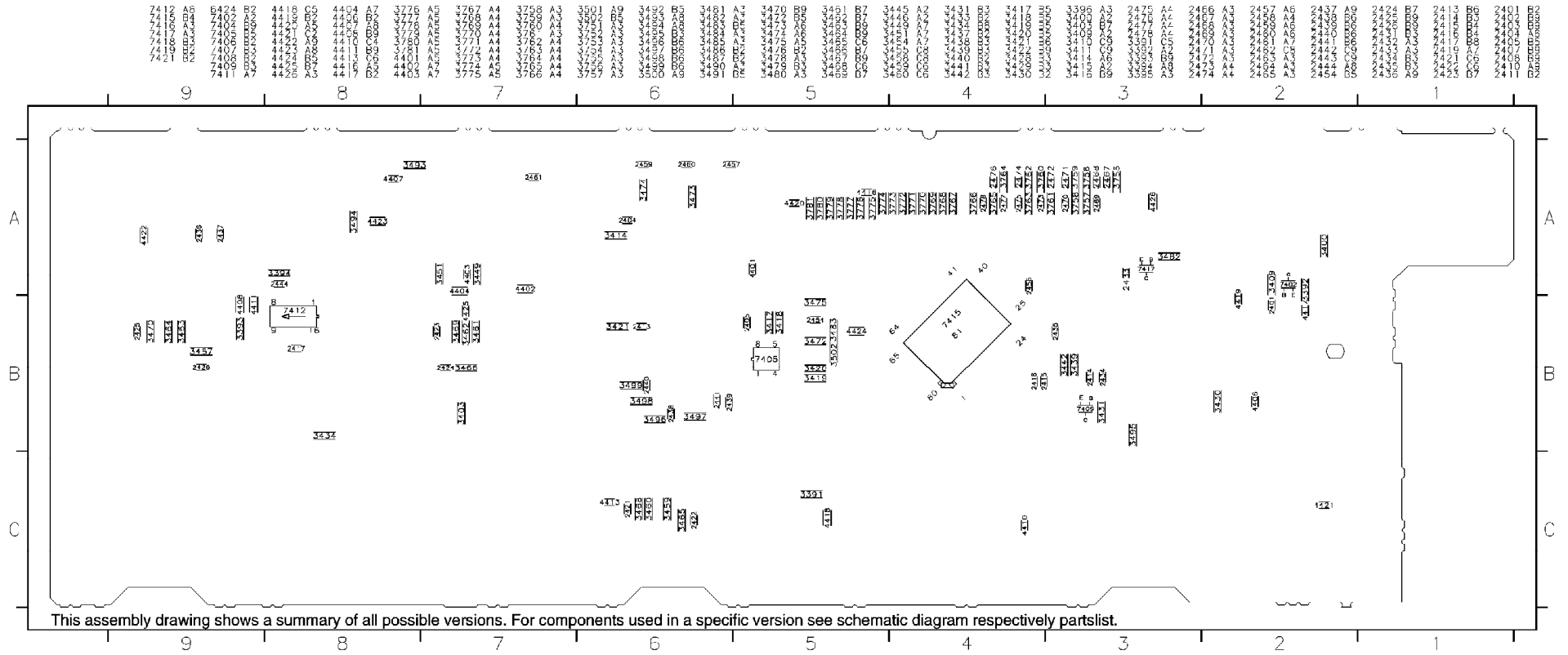
1901	K1B	3854	E17
1902	M4	8825	B5
1903	H6	3367	C4
1904	E5	3368	E5
1905	B16	3853	D17
1906	K17	3854	E17
1907	M4	8825	B5
1908	H6	3367	C4
1909	E5	3368	E5
1910	K3	3858	D6
1911	M2	3901	B6
1912	M2	3902	C8
1913	L2	3363	D8
1914	A16	3901	M5
1915	A16	3902	J14
1916	B9	3903	L17
1917	B9	3904	K17
1918	A9	3906	K16
1919	C17	3906	K10
1920	A8	3908	J10
1921	C8	3910	L15
1922	C9	3911	L10
1923	D17	3913	M10
1924	G8	3914	M14
1925	E16	3915	N5
1926	E16	3916	K18
1927	E16	3917	L7
1928	G7	3917	L7
1929	E17	3919	L7
1930	D8	3919	M16
1931	D8	3920	L6
1932	D9	3920	L6
1933	E10	3922	N14
1934	H8	3926	L5
1935	H8	3926	L5
1936	C6	3928	O19
1937	C6	3929	O11
1938	O2	3930	O14
1939	K3	3931	O15
1940	C4	3932	L4
1941	D17	3933	K5
1942	E17	3934	N8
1943	B19	3936	J7
1944	D19	3943	J9
1945	D19	3947	L9
1946	C19	3948	J9
1947	D19	3947	L9
1948	C19	3948	J9
1949	M5	5301	B16
1950	M5	5303	C16
1951	K10	6920	H8
1952	L16	6271	H5
1953	K17	6279	I5
1954	J10	6920	H8
1955	O8	6290	E3
1956	J10	6921	B15
1957	L9	6922	D15
1958	L10	6923	G9
1959	M10	6901	N9
1960	M10	6902	L4
1961	M10	6903	K9
1962	L16	6904	J6
1963	M15	7295	G5
1964	O5	7296	H5
1965	O5	7298	H4
1966	L7	7380	F6
1967	L5	7391	E4
1968	L16	7392	A10
1969	L16	7394	O8
1970	E5	7395	G13
1971	F5	7398	G13
1972	F5	7397	O10
1973	G5	7399	C4
1974	G9	7310	D7
1975	H3	7901	J11
1976	H5	7902	L5
1977	I5	7903	N13
1978	H4	7904	M13
1979	D17	8205	K3
1980	C15	7909	J7
1981	A16	9809	F13
1982	D17	9808	F12
1983	B16	9907	H12
1984	E17	9909	L2
1985	H8	9908	N2
1986	B16	9904	K16
1987	A8	9908	M17
1988	C16		
1989	C8		
1990	C12		
1991	C8		
1992	C12		
1993	E14		
1994	D15		
1995	D6		
1996	H2		
1997	H12		
1998	H12		
1999	H14		
2000	H14		
2001	H16		
2002	H19		
2003	H9		
2004	H10		
2005	H16		

...V Voltage measured during normal operation
 ... Source position: Tuner F/V
 No special features DN
 ... Ground

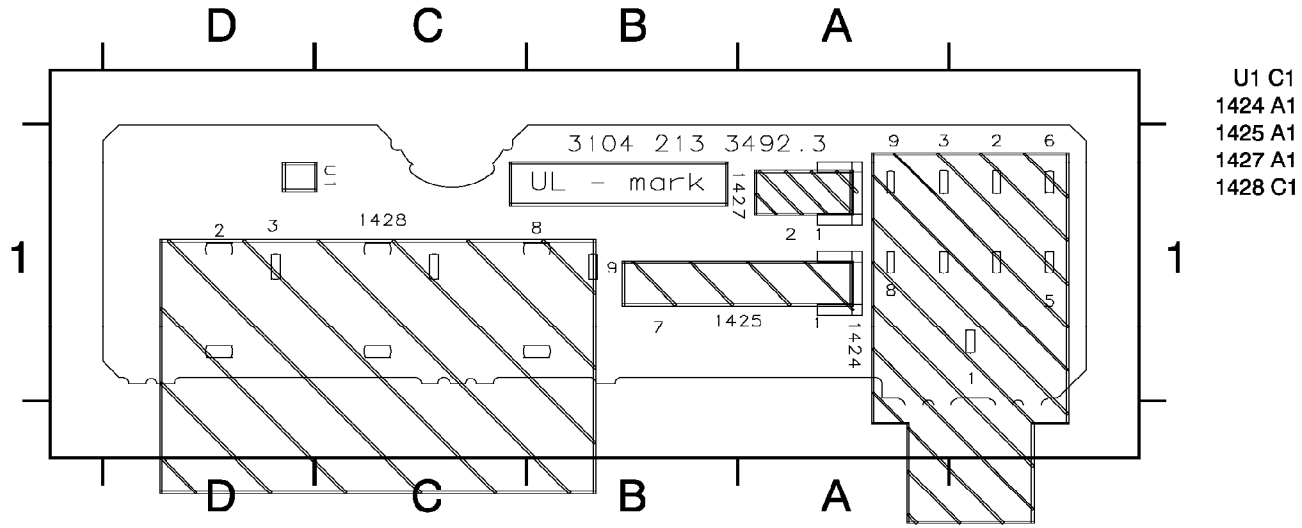
All Models (1931) - FRONT PANEL PCB (TOP VIEW)



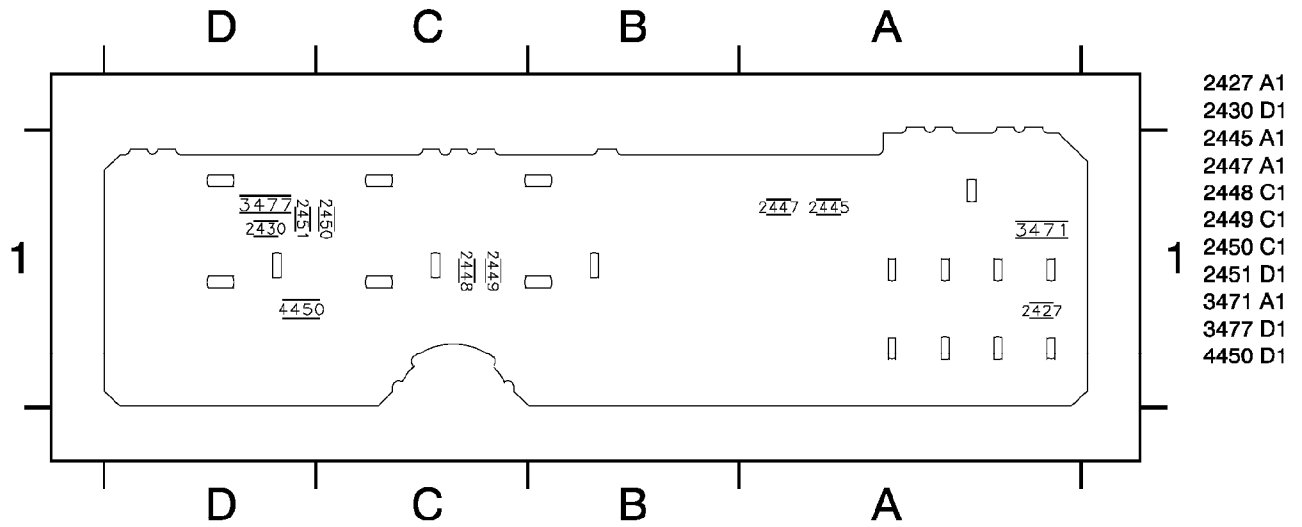
All Models (1931) - FRONT PANEL PCB (BOTTOM VIEW)



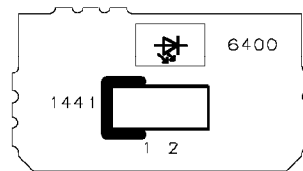
This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram respectively partslist.

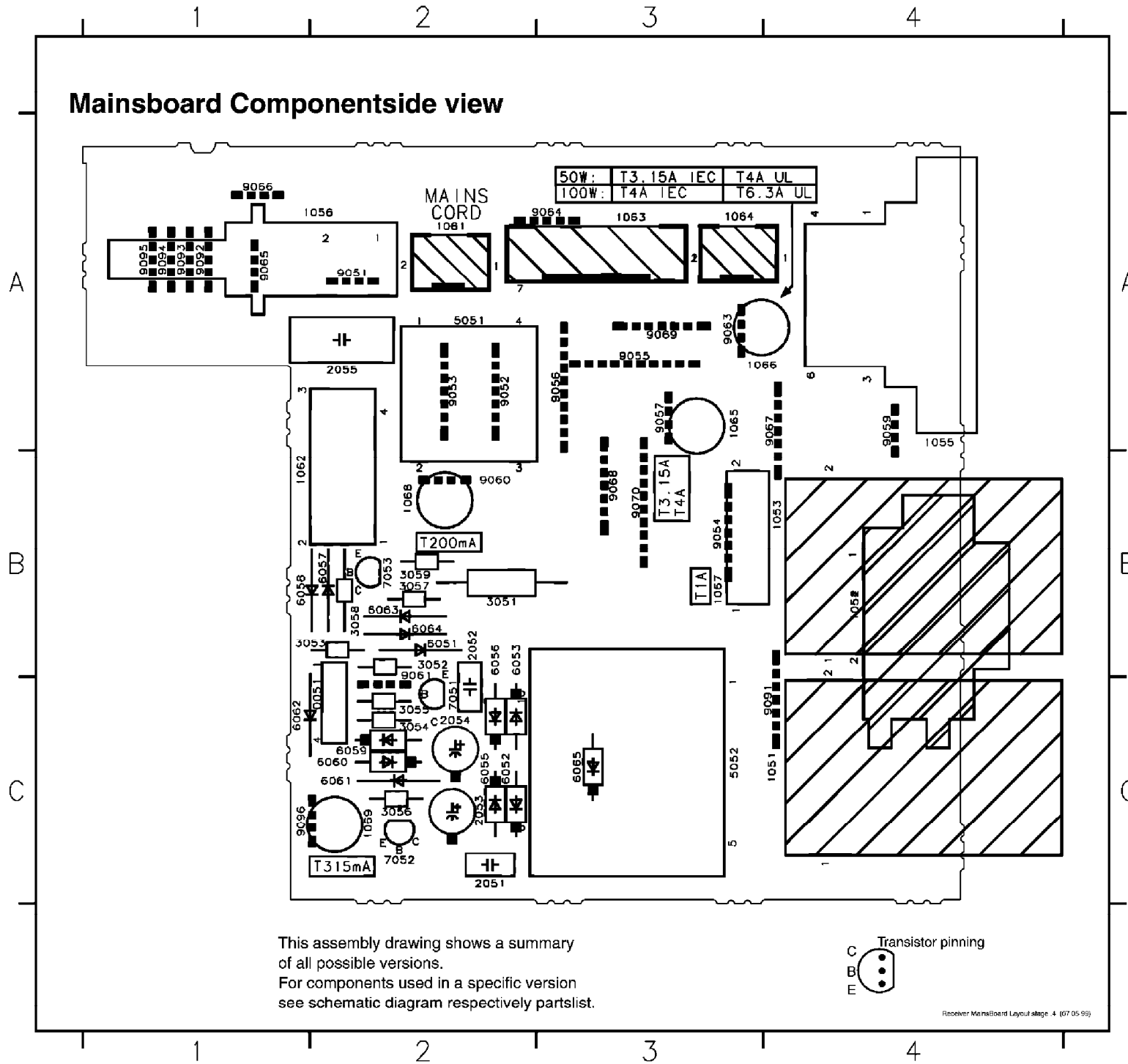


- U1 C1
- 1424 A1
- 1425 A1
- 1427 A1
- 1428 C1



- 2427 A1
- 2430 D1
- 2445 A1
- 2447 A1
- 2448 C1
- 2449 C1
- 2450 C1
- 2451 D1
- 3471 A1
- 3477 D1
- 4450 D1

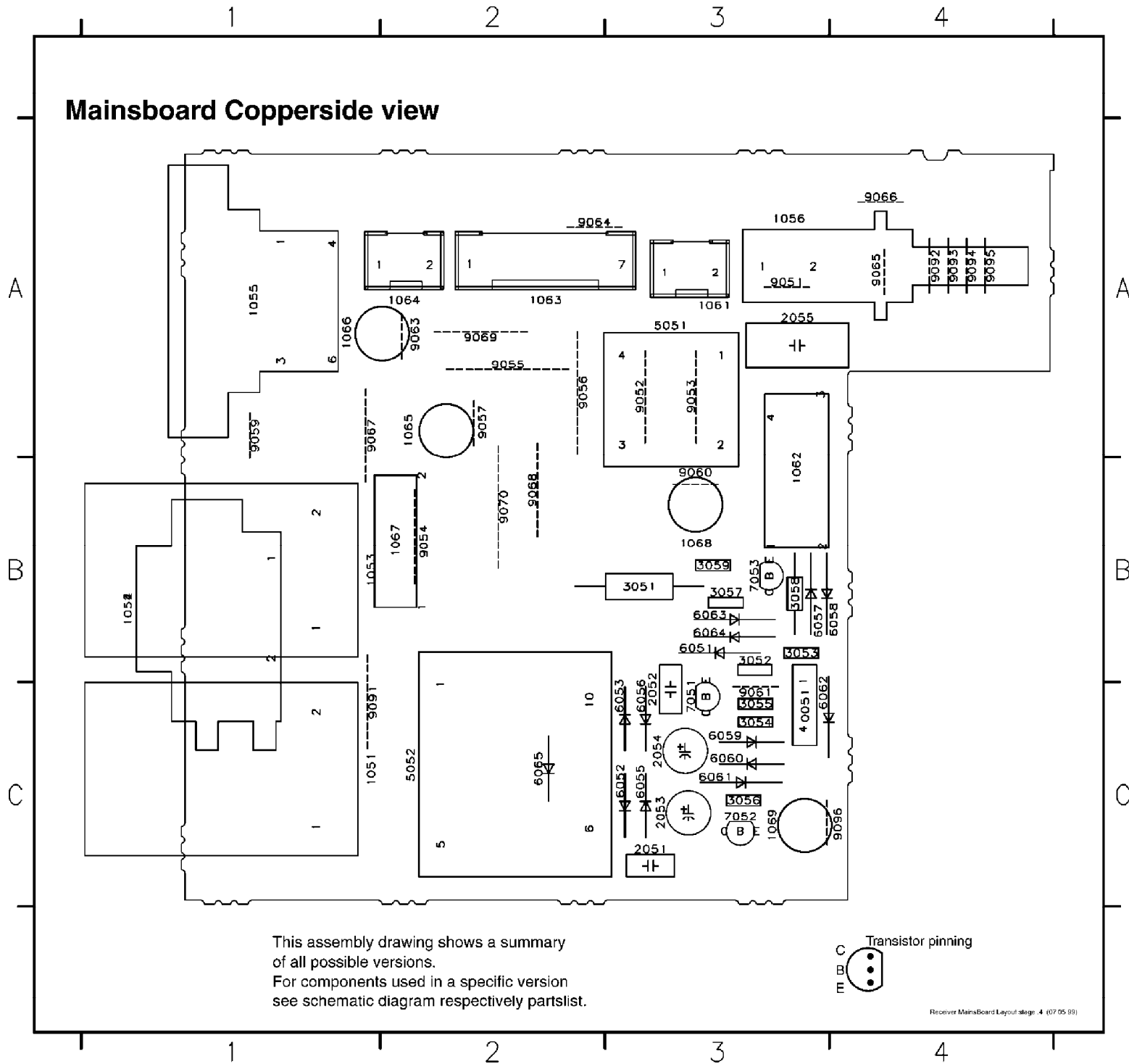




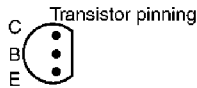
This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram respectively partlist.

- 0051 C2
- 1051 C4
- 1052 B4
- 1053 B4
- 1054 B4
- 1055 A4
- 1056 A2
- 1061 A2
- 1062 B2
- 1063 A3
- 1064 A3
- 1065 A3
- 1066 A3
- 1067 B3
- 1068 B2
- 1069 C2
- 2051 C2
- 2052 C2
- 2053 C2
- 2054 C2
- 2055 A2
- 3051 B2
- 3052 B2
- 3053 B2
- 3054 C2
- 3055 C2
- 3056 C2
- 3057 B2
- 3058 B2
- 3059 B2
- 5051 A2
- 5052 C3
- 6051 B2
- 6052 C2
- 6053 C2
- 6055 C2
- 6056 C2
- 6057 B2
- 6058 B2
- 6059 C2
- 6060 C2
- 6061 C2
- 6062 C2
- 6063 B2
- 6064 B2
- 6065 C3
- 7051 C2
- 7052 C2
- 7053 B2
- 9051 A2
- 9052 A2
- 9053 A2
- 9054 B3
- 9055 A3
- 9056 A3
- 9057 A3
- 9059 A4
- 9060 B2
- 9061 C2
- 9063 A3
- 9064 A3
- 9065 A1
- 9066 A1
- 9067 A4
- 9068 B3
- 9069 A3
- 9070 B3
- 9091 C4
- 9092 A1
- 9093 A1
- 9094 A1
- 9095 A1
- 9096 C1

Mainsboard Copperside view



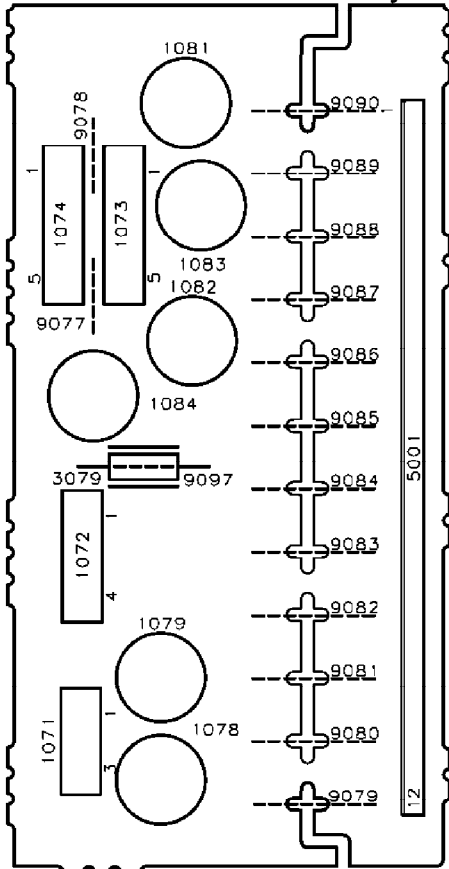
This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram respectively partslist.



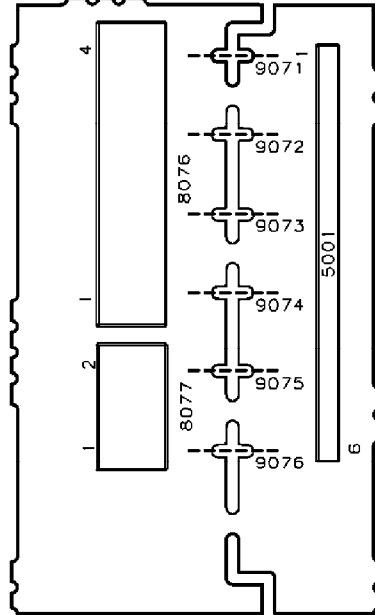
- 0051 C3
- 1051 C1
- 1052 B1
- 1053 B1
- 1054 B1
- 1055 A1
- 1056 A3
- 1061 A3
- 1062 B3
- 1063 A2
- 1064 A2
- 1065 A2
- 1066 A2
- 1067 B2
- 1068 B3
- 1069 C3
- 2051 C3
- 2052 C3
- 2053 C3
- 2054 C3
- 2055 A3
- 3051 B3
- 3052 B3
- 3053 B3
- 3054 C3
- 3055 C3
- 3056 C3
- 3057 B3
- 3058 B3
- 3059 B3
- 5051 A3
- 5052 C2
- 6051 B3
- 6052 C3
- 6053 C3
- 6055 C3
- 6056 C3
- 6057 B3
- 6058 B3
- 6059 C3
- 6060 C3
- 6061 C3
- 6062 C3
- 6063 B3
- 6064 B3
- 6065 C2
- 7051 C3
- 7052 C3
- 7053 B3
- 9051 A3
- 9052 A3
- 9053 A3
- 9054 B2
- 9055 A2
- 9056 A2
- 9057 A2
- 9059 A1
- 9060 B3
- 9061 C3
- 9063 A2
- 9064 A2
- 9065 A4
- 9066 A4
- 9067 A1
- 9068 B2
- 9069 A2
- 9070 B2
- 9091 C1
- 9092 A4
- 9093 A4
- 9094 A4
- 9095 A4
- 9096 C4

Copperside

Interconnection Board
Transformer secondary

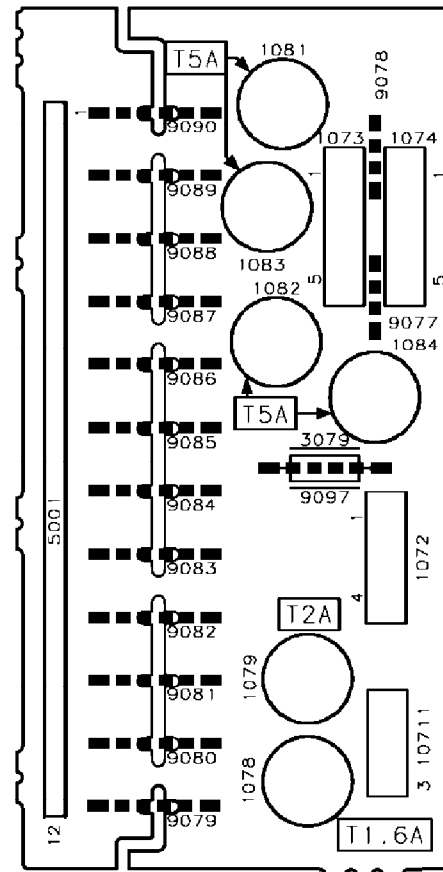


Interconnection Board
Transformer primary

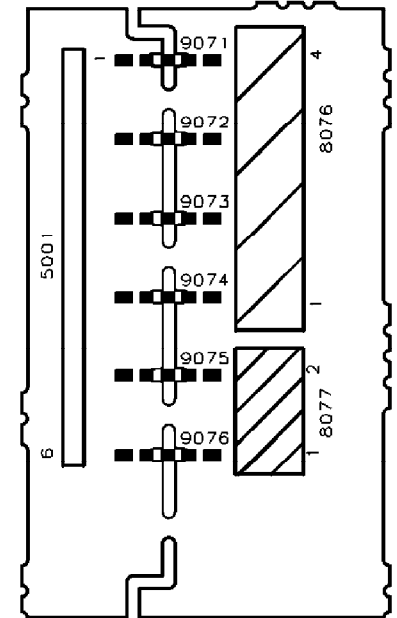


Componentside

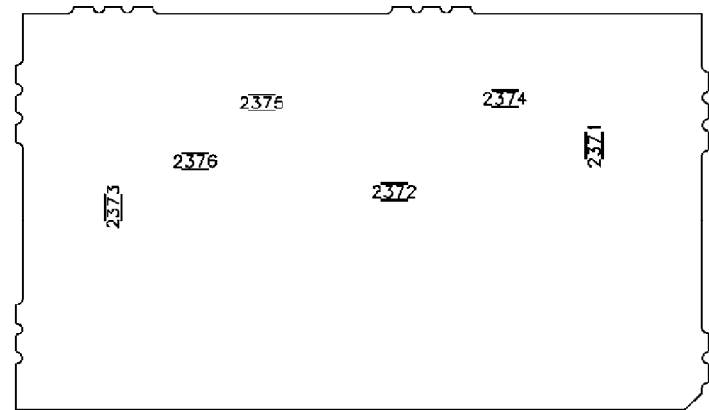
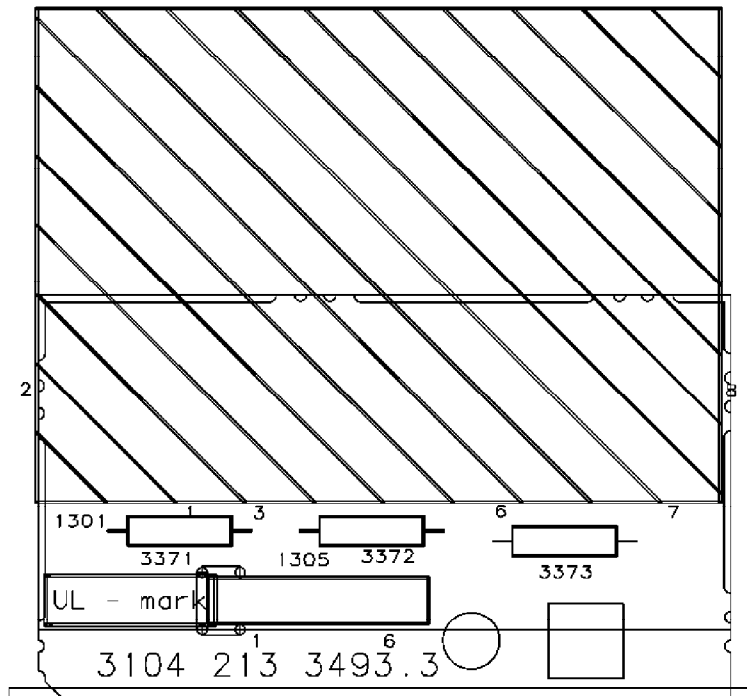
Interconnection Board
Transformer secondary



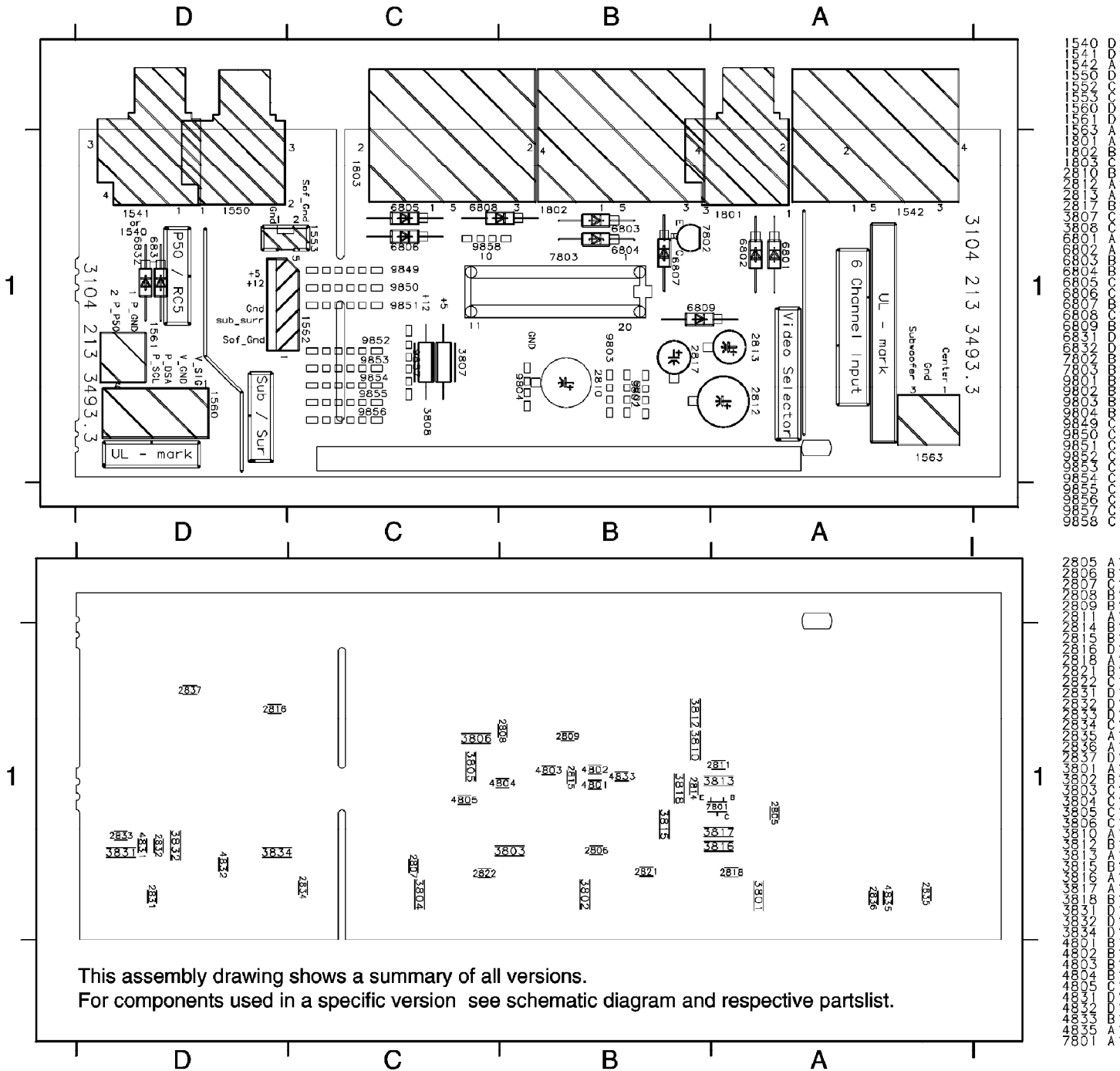
Interconnection Board
Transformer primary



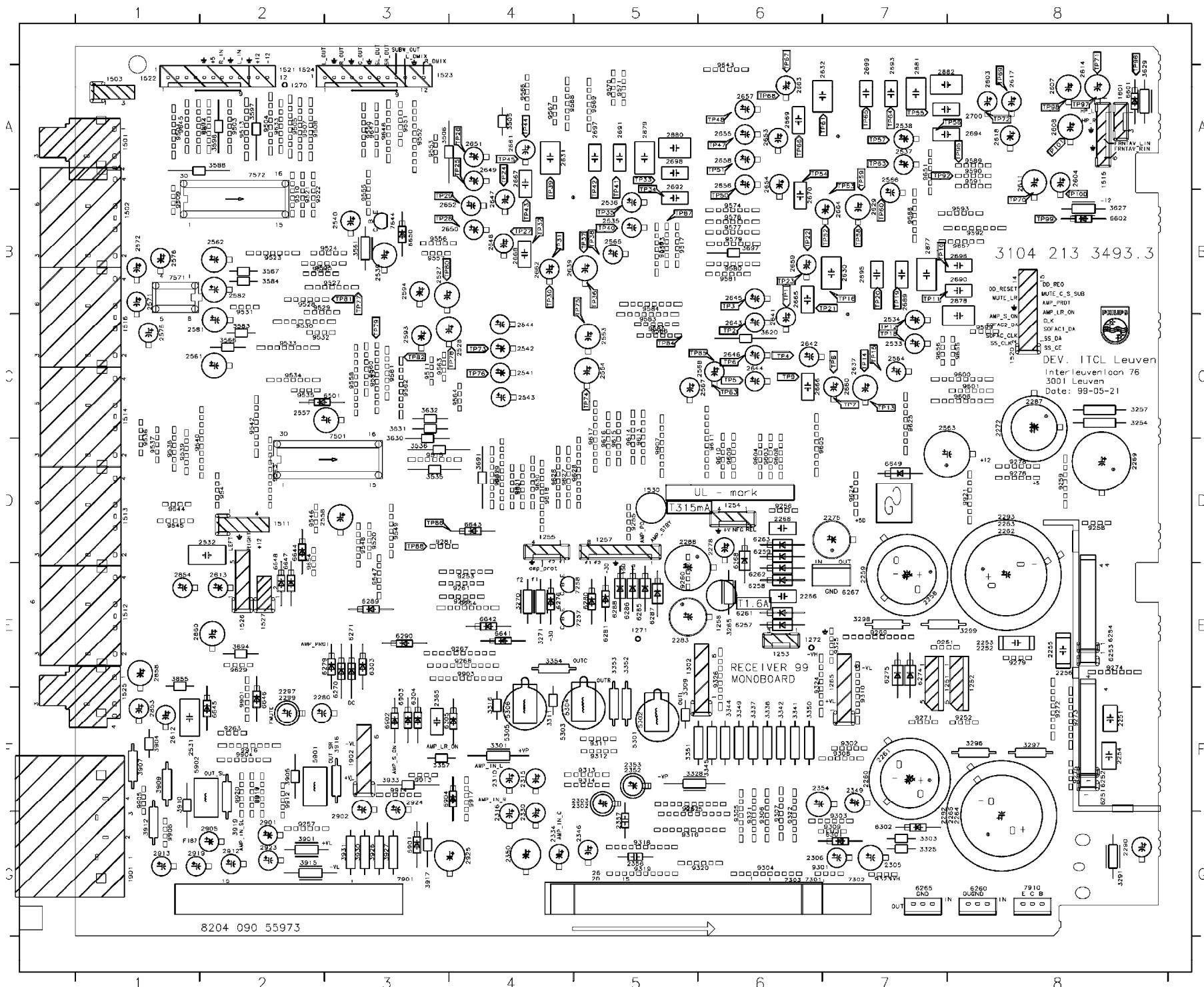
SCREW TERMINAL BOARD - COMPONENT VIEW & COPPER SIDE VIEW



P50/RC5 / VIDEO SELECTOR BOARD - COMPONENT VIEW & COPPER SIDE VIEW



This assembly drawing shows a summary of all versions.
 For components used in a specific version see schematic diagram and respective partslist.



8204 090 55973

RECEIVER
MONOBOARD

UL - mark
315mA

3104 213 3493.3

DEV. ITCL Leuven
Inter Leuven laan 76
3001 Leuven
Date: 99-05-21

00_RESET
WUFC_LR
AMP_PROT
AMP_LR_ON
D.K.
SOFACT_DA
SS_DA
SS_CLK

3257
3254
2289

2255
2256
2257
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2400

FR960PBK - Manual no. 1931

FRONT BOARD ELECTRICAL PARTS LIST

FRONT BOARD ELECTRICAL PARTS LIST		MISCELLANEOUS		RESISTORS	
1400	CRYSTAL (4, 32MH)	4822	242 11033	2470	100pF 5% NP0 50V
1403	CST8,00MT.	4822	242 72066	2471	100pF 5% NP0 50V
1404	SWITCH, PUSH BUTTON.	4822	276 13114	2472	100pF 5% NP0 50V
1405	SWITCH, PUSH BUTTON.	4822	276 13114	2473	100pF 5% NP0 50V
1406	SWITCH, PUSH BUTTON.	4822	276 13114	2474	100pF 5% NP0 50V
1407	SWITCH, PUSH BUTTON.	4822	276 13114	2475	100pF 5% NP0 50V
1408	SWITCH, PUSH BUTTON.	4822	276 13114	2476	100pF 5% NP0 50V
1409	SWITCH, PUSH BUTTON.	4822	276 13114	2477	100pF 5% NP0 50V
1410	15FE- BT- VK- N.	4822	265 10981	2478	100pF 5% NP0 50V
1411	SWITCH, PUSH BUTTON.	4822	276 13114		
1412	SWITCH, PUSH BUTTON.	4822	276 13114	3391	1K 2% 0,25W.
1413	SWITCH, PUSH BUTTON.	4822	276 13114	3392	22K 5% 0,1W.
1414	SWITCH, PUSH BUTTON.	4822	276 13114	3393	22K 5% 0,1W.
1415	SWITCH, PUSH BUTTON.	4822	276 13114	3394	22K 5% 0,1W.
1416	SWITCH, PUSH BUTTON.	4822	276 13114	3395	0R0 JUMP. (0805)
1417	SWITCH, PUSH BUTTON.	4822	276 13114	3400	47R 5% 0,1W.
1418	SWITCH, PUSH BUTTON.	4822	276 13114	3401	10K 1% 0,6W.
1419	SWITCH, PUSH BUTTON.	4822	276 13114	3402	10K 1% 0,6W.
1420	SWITCH, PUSH BUTTON.	4822	276 13114	3403	6K8 1% 0,1W.
1421	SWITCH, ROTARY	4822	273 10372	3404	330E 5% 0,5W
1422	SWITCH, ROTARY	4822	273 10372	3405	22K 5% 0,5W.
1423	ROTARY ENCODER 24P	4822	273 10365	3406	10K 1% 0,6W.
1424	1P YKB21- 5209	4822	265 11584	3407	10K 1% 0,6W.
1428	3P. FEM. CINCH	4822	265 11336	3408	10K 1% 0,6W.
8002	FLEXIBLE FOIL 15P 220MM.	4822	320 12706	3409	1K 2% 0,25W.
	CAPACITORS			3410	2K2 1% 0,1W.
2400	100uF 20% 10V	4822	124 41584	3411	220K 1% 0,1W
2401	1nF 10% X7R 63V	5322	122 31647	3413	1K 1% 0,4W.
2402	63V 330pF PM5.	5322	122 31863	3414	1K 2% 0,25W.
2403	560pF 10% X7R 50V.	4822	122 33173	3415	0R0 JUMP. (0805)
2404	1nF 10% X7R 63V	5322	122 31647	3416	10K 1% 0,1W.
2405	22nF 10% X7R 63V.	5322	122 32654	3417	10K 1% 0,1W.
2407	470pF 10% X7R 63V	5322	122 34099	3418	10K 1% 0,1W.
2408	22nF 10% X7R 63V.	5322	122 32654	3419	10K 1% 0,1W.
2409	2,2uF 20% 50V	4822	124 22652	3420	10K 1% 0,1W.
2410	22nF 10% X7R 63V.	5322	122 32654	3421	10K 1% 0,1W.
2411	220pF 5% NP0 63V	4822	122 33575	3422	10K 1% 0,1W.
2412	47uF 20% 50V	4822	124 41751	3424	1K 1% 0,4W
2413	22nF 10% X7R 63V.	5322	122 32654	3426	1K 1% 0,4W.
2414	22nF 10% X7R 63V.	5322	122 32654	3427	150R 5% 0,5W
2415	22pF 5% 50V	5322	122 32658	3428	27K 5% 0,1W.
2416	22pF 5% 50V	5322	122 32658	3429	22K 5% 0,1W.
2417	22nF 10% X7R 63V.	5322	122 32654	3430	22K 5% 0,1W.
2419	22nF 10% X7R 63V.	5322	122 32654	3431	10K 1% 0,1W.
2420	100uF 20% 10V	4822	124 23432	S 3432	4R7 5% 0,33W
2421	22nF 10% X7R 63V.	5322	122 32654	3433	10K 1% 0,1W.
2422	22nF 10% X7R 63V.	5322	122 32654	3434	22K 5% 0,1W.
2423	22nF 10% X7R 63V.	5322	122 32654	3435	22K 5% 0,5W.
2424	22nF 10% X7R 63V.	5322	122 32654	3436	22K 5% 0,5W.
2425	22nF 10% X7R 63V.	5322	122 32654	3437	100K 1% 0,1W
2426	22nF 10% X7R 63V.	5322	122 32654	3438	220K 1% 0,1W
2427	1nF 10% X7R 63V	5322	122 31647	3439	10K 1% 0,1W.
2428	4,7uF 20% 100V.	4822	124 40769	3440	47R 5% 0,1W.
2429	47uF 20% 50V	4822	124 41751	3441	82K 1% 0,1W.
2430	220pF 5% NP0 63V	4822	122 33575	3442	100K 1% 0,1W
2431	100pF 5% NP0 50V.	5322	122 32531	3443	330E 5% 0,5W
2432	100pF 5% NP0 50V.	5322	122 32531	3444	330E 5% 0,5W
2433	100pF 5% NP0 50V.	5322	122 32531	3445	330R 1% 1,25W.
2434	220nF 80- 20% 50V.	4822	126 13473	3446	330R 1% 1,25W.
2435	220pF 5% NP0 63V	4822	122 33575	3447	330E 5% 0,5W
2436	220pF 5% NP0 63V	4822	122 33575	3448	330E 5% 0,5W
2437	220pF 5% NP0 63V	4822	122 33575	3449	100K 1% 0,1W
2438	220pF 5% NP0 63V	4822	122 33575	3451	10K 1% 0,1W.
2439	220pF 5% NP0 63V	4822	122 33575	3452	330E 5% 0,5W
2440	220pF 5% NP0 63V	4822	122 33575	3453	330E 5% 0,5W
2441	220pF 5% NP0 63V	4822	122 33575	3455	22K 5% 0,1W.
2442	47pF 1% NP0 63V.	4822	126 13692	3457	330E 5% 0,5W
2443	47pF 1% NP0 63V.	4822	126 13692	3458	330R 1% 1,25W.
2444	22nF 10% X7R 63V.	5322	122 32654	3459	10K 1% 0,1W.
2445	4,7nF 10% X7R 63V	5322	126 10223	3460	10K 1% 0,1W.
2447	4,7nF 10% X7R 63V.	5322	126 10223	3461	10K 1% 0,1W.
2448	1nF 10% X7R 63V.	5322	122 31647	3462	10K 1% 0,1W.
2449	1nF 10% X7R 63V.	5322	122 31647	3463	10K 1% 0,1W.
2454	22nF 10% X7R 63V	5322	122 32654	3464	10K 1% 0,1W.
2455	47uF 20% 50V	4822	124 41751	3465	220R 1% 0,1W
2456	47uF 20% 25V	4822	124 40433	3466	220R 1% 0,1W
2457	22nF 10% X7R 63V	5322	122 32654	3467	220R 1% 0,1W
2458	22nF 10% X7R 63V	5322	122 32654	3468	220R 1% 0,1W
2459	22nF 10% X7R 63V	5322	122 32654	3469	220R 1% 0,1W
2460	22nF 10% X7R 63V	5322	122 32654	3470	220R 1% 0,1W
2461	22nF 10% X7R 63V	5322	122 32654	3471	1K 2% 0,25W.
2462	1nF 10% X7R 63V.	5322	122 31647	3472	1K 2% 0,25W.
2463	100pF 5% NP0 50V	5322	122 32531	3473	0R0 JUMP. (0805)
2464	100pF 5% NP0 50V	5322	122 32531	3474	0R0 JUMP. (0805)
2465	100pF 5% NP0 50V	5322	122 32531	3475	100K 1% 0,1W
2466	100pF 5% NP0 50V	5322	122 32531	3477	68R 1% 0,1W.
2467	100pF 5% NP0 50V	5322	122 32531	3478	100K 1% 0,1W
2468	100pF 5% NP0 50V	5322	122 32531	3479	1K 2% 0,25W.
2469	100pF 5% NP0 50V	5322	122 32531	3480	100K 1% 0,1W
				3481	1K 2% 0,25W.
				3482	100K 1% 0,1W
				3483	100K 1% 0,1W

S = Safety Part Be sure to use exact replacement part.

FR960PBK (continued)

3484	1K 2% 0,25W	4822 051 10102	7403	IC, GPU28XP	4822 130 10165
3485	0R0 JUMP. (0805)	4822 051 20008	7404	IC, SAA6579T	4822 209 31981
3491	100K 1% 0,1W	4822 117 10837	7405	IC, M24C08- MN6	4822 209 17445
3493	470R 5% 0,1W	4822 051 20471	7406	TRANSISTOR, BC847B	4822 130 60511
3494	470R 5% 0,1W	4822 051 20471	7407	TRANSISTOR, BC847B	4822 130 60511
3495	470R 5% 0,1W	4822 051 20471	7408	TRANSISTOR, BC847B	4822 130 60511
3496	470R 5% 0,1W	4822 051 20471	7409	TRANSISTOR, BC847B	4822 130 60511
3497	470R 5% 0,1W	4822 051 20471	7411	IC, HEF4094BT	5322 209 11306
3498	470R 5% 0,1W	4822 051 20471	7412	IC, HEF4094BT	5322 209 11306
3499	470R 5% 0,1W	4822 051 20471	7413	FTD DISPLAY, VFD 16- MT- 65GK	2722 171 07168
3500	470R 5% 0,1W	4822 051 20471	7415	IC, TMP87CS71F/ FR970.1	3103 308 83880
3501	470R 5% 0,1W	4822 051 20471	7416	TRANSISTOR, BC847B	4822 130 60511
3751	33K 5% 0,1W	4822 051 20333	7417	TRANSISTOR, BC847B	4822 130 60511
3752	33K 5% 0,1W	4822 051 20333	7418	TRANSISTOR, BC847B	4822 130 60511
3753	33K 5% 0,1W	4822 051 20333			
3754	33K 5% 0,1W	4822 051 20333			
3755	33K 5% 0,1W	4822 051 20333			
3756	33K 5% 0,1W	4822 051 20333			
3757	33K 5% 0,1W	4822 051 20333			
3758	33K 5% 0,1W	4822 051 20333			
3759	33K 5% 0,1W	4822 051 20333			
3760	33K 5% 0,1W	4822 051 20333			
3761	33K 5% 0,1W	4822 051 20333			
3762	33K 5% 0,1W	4822 051 20333			
3763	33K 5% 0,1W	4822 051 20333			
3764	33K 5% 0,1W	4822 051 20333			
3765	33K 5% 0,1W	4822 051 20333			
3766	33K 5% 0,1W	4822 051 20333			
3767	33K 5% 0,1W	4822 051 20333			
3768	33K 5% 0,1W	4822 051 20333			
3769	33K 5% 0,1W	4822 051 20333			
3770	33K 5% 0,1W	4822 051 20333			
3771	33K 5% 0,1W	4822 051 20333			
3772	33K 5% 0,1W	4822 051 20333			
3773	33K 5% 0,1W	4822 051 20333			
3774	33K 5% 0,1W	4822 051 20333			
3775	33K 5% 0,1W	4822 051 20333			
3776	33K 5% 0,1W	4822 051 20333			
3777	33K 5% 0,1W	4822 051 20333			
3778	33K 5% 0,1W	4822 051 20333			
3779	33K 5% 0,1W	4822 051 20333			
3780	33K 5% 0,1W	4822 051 20333			
3781	33K 5% 0,1W	4822 051 20333			
4401	0R0 JUMP. (0805)	4822 051 20008			
4402	0R0 JUMP. (0805)	4822 051 20008			
4403	0R0 JUMP. (0805)	4822 051 20008			
4404	0R0 JUMP. (0805)	4822 051 20008			
4406	0R0 JUMP. (0805)	4822 051 20008			
4407	0R0 JUMP. (0805)	4822 051 20008			
4408	0R0 JUMP. (0805)	4822 051 20008			
4410	0R0 JUMP. (0805)	4822 051 20008			
4411	0R0 JUMP. (0805)	4822 051 20008			
4413	0R0 JUMP. (0805)	4822 051 20008			
4416	0R0 JUMP. (0805)	4822 051 20008			
4417	0R0 JUMP. (0805)	4822 051 20008			
4418	0R0 JUMP. (0805)	4822 051 20008			
4420	0R0 JUMP. (0805)	4822 051 20008			
4421	0R0 JUMP. (0805)	4822 051 20008			
4422	0R0 JUMP. (0805)	4822 051 20008			
4423	0R0 JUMP. (0805)	4822 051 20008			
4424	0R0 JUMP. (0805)	4822 051 20008			
4425	0R0 JUMP. (0805)	4822 051 20008			
4426	0R0 JUMP. (0805)	4822 051 20008			
4450	0R0 JUMP. (0805)	4822 051 20008			
COILS & FILTERS					
5400	LAL02TB2R2J.	4822 157 11477			
5401	LAL02TB2R2J.	4822 157 11477			
5402	LAL02TB2R2J.	4822 157 11477			
5403	LAL02TB2R2J.	4822 157 11477			
SEMICONDUCTORS					
6400	DIODE, LED STAND- BY	4822 130 11606			
6401	DIODE, LTL- 16KPE- P	4822 130 82978			
6402	DIODE, 1N4148	4822 130 30621			
6403	DIODE, 1N4148	4822 130 30621			
6404	DIODE, 1N4148	4822 130 30621			
6405	DIODE, 1N4148	4822 130 30621			
6406	DIODE, 1N4148	4822 130 30621			
6407	DIODE, LTL- 16KPE- P	4822 130 82978			
6408	DIODE, LTL- 16KPE- P	4822 130 82978			
6409	DIODE, LTL- 16KPE- P	4822 130 82978			
6410	DIODE, LTL- 16KPE- P	4822 130 82978			
6412	DIODE, LTL- 16KPE- P	4822 130 82978			
6413	DIODE, LTL- 16KPE- P	4822 130 82978			
6414	DIODE, 1N4148	4822 130 30621			
6415	DIODE, LTL- 16KPE- P	4822 130 82978			
6416	DIODE, LTL- 16KPE- P	4822 130 82978			
6417	DIODE, LTL- 16KPE- P	4822 130 82978			
6418	DIODE, LTL- 16KPE- P	4822 130 82978			
6419	DIODE, 1N4148	4822 130 30621			
6420	DIODE, 1N4148	4822 130 30621			
6421	DIODE, LTL- 16KPE- P	4822 130 82978			
7402	TRANSISTOR, PDA144ET.	4822 130 11607			
ECOS TUNER BOARD PARTS LIST					
ECOS TUNER BOARD PARTS LIST					
MISCELLANEOUS					
1101	Antenna Socket 300R.	4822 267 31505			
1102	Antenna Socket Coax IEC 75R.	4822 267 10283			
CAPACITORS					
2101	100pF 5% 50V	5322 122 32531			
2101	47pF 1% 63V, for USA	4822 126 13692			
2102	10nF 20% 50V	4822 122 33177			
2103	1nF 10% 50V.	5322 122 34123			
2104	100pF 10% 50V.	4822 122 33195			
2106	Trimmer 4-20pF, for LW version	4822 125 50355			
2106	Trimmer 3-11pF 100V.	4822 125 60101			
2107	1uF 10% 63V.	4822 121 51319			
2108	100pF 5% 50V, for LW version	5322 122 32531			
2109	10pF 5% 50V, for LW version	5322 122 32448			
2120	27pF 1% 63V, for LW version.	4822 126 13691			
2120	22pF 5% 50V.	5322 122 32658			
2122	3,3nF 10% 63V, for LW version.	4822 122 33891			
2125	560pF 5% 400V.	4822 121 51381			
2126	330pF 5% 50V	5322 122 31863			
2127	220nF +80/-20% 50V	4822 126 13473			
2128	10uF 20% 50V	4822 124 41579			
2129	100uF 20% 10V.	4822 124 41584			
2130	22nF+80/- 20% 25V.	4822 126 11585			
2131	470nF 16V.	4822 122 33325			
2132	470nF 16V.	4822 122 33325			
2131	470nF +80/- 20% 16V.	4822 126 13482			
2132	470nF +80/- 20% 16V.	4822 126 13482			
2133	1uF 20% 63V.	4822 124 40242			
2134	15nF 5% 63V.	4822 126 13188			
2134	22nF 10% 63V, for USA.	5322 122 32654			
2135	0,22uF 20% 63V	4822 124 40746			
2136	15nF 5% 63V.	4822 126 13188			
2136	22nF 10% 63V, for USA.	5322 122 32654			
2137	0,22uF 20% 63V	4822 124 40746			
2138	2,2uF 20% 50V.	4822 124 41576			
2139	50V 15pF 5%.	4822 126 14236			
2140	470nF 5% 63V	4822 121 51252			
2141	100nF 20% 25V.	4822 126 10002			
2142	100nF 20% 25V.	4822 126 10002			
2143	220nF +80/-20% 50V	4822 126 13473			
2144	1uF 20% 63V.	4822 124 40242			
2145	220pF 5% 50V	4822 122 33575			
2146	220pF 5% 50V	4822 122 33575			
2147	220pF 5% 50V	4822 122 33575			
2148	22nF+80/- 20% 25V.	4822 126 11585			
2149	22nF 10% 63V	5322 122 32654			
2150	100nF 20% 63V.	4822 122 31947			
2152	560pF 5% 63V, for East. Europe	5322 116 80853			
2152	33nF 5% 63V.	4822 126 12105			
2153	12pF 2% 63V, for East. Europe.	4822 122 32139			
2153	15pF 2% 63V.	4822 122 32504			
2155	Trimmer 3-11pF 100V.	4822 125 60101			
2158	10pF 5% 50V, for LW version	5322 122 32448			
2159	33pF 5% 50V.	5322 122 32659			
2160	22nF 10% 63V	5322 122 32654			
2161	100nF 20% 25V.	4822 126 10002			
2163	100nF 20% 25V.	4822 126 10002			
2164	470nF +80/- 20% 16V.	4822 126 13482			
2165	100nF 20% 25V.	4822 126 10002			
2166	1nF 10% 50V.	5322 122 34123			
2167	12pF 2% 63V.	4822 122 32139			
2168	82pF 1% 63V.	4822 126 13695			
RESISTORS					
3101	5k6 5% 0,1W, for East. Europe.	4822 051 20562			
3101	33k 5% 0,1W.	4822 051 20333			
3102	100k 5% 0,1W	4822 051 20104			
3103	18k 1% 0,1W.	4822 117 10965			
3104	180R 1% 0,1W	4822 117 11448			
3105	220R 5% 0,5W	4822 116 83872			
3108	2k2 1% 0,1W, for LW version.	4822 117 11449			
3109	4k7 5% 0,1W, for LW version.	4822 051 20472			
3110	47R 5% 0,5W.	4822 116 52195			
3120	0R Jumper 0805	4822 051 20008			
3123	4k7 5% 0,1W, for LW version.	4822 051 20472			
3125	10k 1% 0,1W, for LW version.	4822 117 10833			

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2274	470nF 10% 16V.	4822 126 14583	2555	100nF Y5V 50V P80M20.	4822 126 13838
2275	1000uF 16V.	4822 124 81144	2556	100nF Y5V 50V P80M20	4822 126 13838
2276	100nF 10% X7R 50V	4822 126 14585	2557	47uF 20% 50V	4822 124 41751
2277	470nF 10% 16V.	4822 126 14583	2558	47uF 20% 50V	4822 124 41751
2278	1uF 20% 63V	4822 124 21913	2559	CER2 50V 33nF PM5	4822 126 12105
2280	100uF 20% 10V	4822 124 41584	2561	22uF 100V	4822 124 40764
2281	100nF Y5V 50V	4822 126 13838	2562	22uF 100V	4822 124 40764
2282	470nF 10% 16V.	4822 126 14583	2563	16V 2200uF 20%	4822 123 14025
2283	220uF 20% 50V.	4822 124 11769	2564	2,2uF 20% 50V	4822 124 22652
2290	10uF 20% 63V.	4822 124 40248	2565	2,2uF 20% 50V	4822 124 22652
2295	10nF 20% X7R 50V	4822 122 33177	2566	2,2uF 20% 50V	4822 124 22652
2297	10uF 20% 63V.	4822 124 40248	2567	4,7uF 20% 100V.	4822 124 40769
2298	47nF 10% X7R 63V.	4822 126 13751	2568	4,7uF 20% 100V.	4822 124 40769
2301	22nF 10%X7R 63V	5322 122 32654	2569	100pF 5% NP0 50V.	5322 122 32531
2302	22uF 50V.	4822 124 81151	2570	100pF 5% NP0 50V.	5322 122 32531
2306	10uF 20% 63V.	4822 124 40248	2571	10uF 20% 63V.	4822 124 40248
2307	4,7pF 5% NP0 50V.	5322 122 32287	2572	10uF 20% 63V.	4822 124 40248
2310	2,2uF 20% 50V	4822 124 22652	2573	150pF 2% NP0 63V.	5322 122 33538
2311	470pF 50V	5322 122 32268	2574	150pF 2% NP0 63V.	5322 122 33538
2313	220pF 5% NP0 63V	4822 122 33575	2575	10uF 20% 63V.	4822 124 40248
2314	220nF 80-20% 50V.	4822 126 13473	2576	10uF 20% 63V.	4822 124 40248
2315	22uF 50V.	4822 124 81151	2577	10nF 20% X7R 50V	4822 122 33177
2316	2,2uF 20% 50V	4822 124 22652	2578	10nF 20% X7R 50V	4822 122 33177
2319	470pF 50V	5322 122 32268	2579	2,2nF10% X7R 63V.	4822 122 33127
2321	220nF 80-20% 50V.	4822 126 13473	2580	2,2nF10% X7R 63V.	4822 122 33127
2324	4,7pF 5% NP0 50V.	5322 122 32287	2581	47uF 20% 50V	4822 124 41751
2325	220pF 5% NP0 63V	4822 122 33575	2582	47uF 20% 50V	4822 124 41751
2330	22uF 50V.	4822 124 81151	2583	2,7nF 50V	2222 861 15272
2333	220nF 80-20% 50V.	4822 126 13473	2584	2,7nF 50V	2222 861 15272
2334	2,2uF 20% 50V	4822 124 22652	2585	82pF 1% NP0 63V	4822 126 13695
2337	470pF 50V	5322 122 32268	2586	82pF 1% NP0 63V	4822 126 13695
2341	220pF 5% NP0 63V	4822 122 33575	2593	22uF 50V.	4822 124 81151
2346	22uF 50V.	4822 124 81151	2594	22uF 50V.	4822 124 81151
2347	4,7pF 5% NP0 50V.	5322 122 32287	2595	100pF 5% NP0 50V.	5322 122 32531
2349	10uF 20% 63V.	4822 124 40248	2596	100pF 5% NP0 50V.	5322 122 32531
2350	220uF 20% 10V	4822 124 40181	2599	22pF 5% 50V.	5322 122 32658
2351	47nF 10% X7R 63V.	4822 126 13751	2600	22pF 5% 50V.	5322 122 32658
2352	22uF 50V.	4822 124 81151	2603	22uF 50V.	4822 124 81151
2357	100nF 50V	4822 126 12882	2604	22uF 50V.	4822 124 81151
2358	220nF 80-20% 50V.	4822 126 13473	2605	47pF 1% NP0 63V	4822 126 13692
2359	220nF 80-20% 50V.	4822 126 13473	2606	47pF 1% NP0 63V	4822 126 13692
2360	220nF 80-20% 50V.	4822 126 13473	2607	47uF 20% 50V	4822 124 41751
2365	10nF 5% 250V.	4822 121 41857	2608	47uF 20% 50V	4822 124 41751
2371	4,7nF 10% X7R 63V	5322 126 10223	2609	220pF 5% NP0 63V	4822 122 33575
2372	4,7nF 10% X7R 63V	5322 126 10223	2610	220pF 5% NP0 63V	4822 122 33575
2373	4,7nF 10% X7R 63V	5322 126 10223	2611	100uF 20% 25V	4822 124 40207
2374	100pF 5% NP0 50V.	5322 122 32531	2612	10uF 20% 63V.	4822 124 40248
2375	100pF 5% NP0 50V.	5322 122 32531	2613	10uF 20% 63V.	4822 124 40248
2376	100pF 5% NP0 50V.	5322 122 32531	2614	100uF 20% 25V	4822 124 40207
2508	100pF 5% NP0 50V.	5322 122 32531	2615	22nF 10% X7R 63V.	5322 122 32654
2509	100pF 5% NP0 50V.	5322 122 32531	2616	22nF 10% X7R 63V.	5322 122 32654
2510	100pF 5% NP0 50V.	5322 122 32531	2617	10uF 20% 63V.	4822 124 40248
2511	100pF 5% NP0 50V.	5322 122 32531	2618	10uF 20% 63V.	4822 124 40248
2512	100pF 5% NP0 50V.	5322 122 32531	2619	100pF 5% NP0 50V.	5322 122 32531
2513	100pF 5% NP0 50V.	5322 122 32531	2620	100pF 5% NP0 50V.	5322 122 32531
2514	100pF 5% NP0 50V.	5322 122 32531	2622	100pF 5% NP0 50V.	5322 122 32531
2515	100pF 5% NP0 50V.	5322 122 32531	2623	100pF 5% NP0 50V.	5322 122 32531
2516	100pF 5% NP0 50V.	5322 122 32531	2624	100pF 5% NP0 50V.	5322 122 32531
2517	100pF 5% NP0 50V.	5322 122 32531	2625	100pF 5% NP0 50V.	5322 122 32531
2518	100pF 5% NP0 50V.	5322 122 32531	2626	100pF 5% NP0 50V.	5322 122 32531
2519	100pF 5% NP0 50V.	5322 122 32531	2627	100pF 5% NP0 50V.	5322 122 32531
2520	100pF 5% NP0 50V.	5322 122 32531	2628	100nF 10% X7R 50V.	4822 126 14585
2521	100pF 5% NP0 50V.	5322 122 32531	2629	47uF 20% 50V	4822 124 41751
2522	100pF 5% NP0 50V.	5322 122 32531	2630	100nF 5% 63V.	5322 121 42386
2525	100pF 5% NP0 50V.	5322 122 32531	2631	100nF 5% 63V.	5322 121 42386
2526	100pF 5% NP0 50V.	5322 122 32531	2632	100nF 5% 63V.	5322 121 42386
2527	47uF 20% 50V	4822 124 41751	2633	22nF 10% X7R 63V.	5322 122 32654
2528	47uF 20% 50V	4822 124 41751	2634	22nF 10% X7R 63V.	5322 122 32654
2529	100nF Y5V 50V P80M20.	4822 126 13838	2635	22nF 10% X7R 63V.	5322 122 32654
2530	100nF Y5V 50V P80M20.	4822 126 13838	2636	100nF 10% X7R 50V.	4822 126 14585
2531	220nF 100V	4822 121 41673	2637	47uF 20% 50V	4822 124 41751
2532	220nF 100V	4822 121 41673	2638	100nF 10% X7R 50V.	4822 126 14585
2533	10uF 20% 63V.	4822 124 40248	2639	47uF 20% 50V	4822 124 41751
2534	10uF 20% 63V.	4822 124 40248	2641	1uF 20% 63V	4822 124 21913
2535	10uF 20% 63V.	4822 124 40248	2642	1uF 20% 63V	4822 124 21913
2536	10uF 20% 63V.	4822 124 40248	2643	1uF 20% 63V	4822 124 21913
2537	10uF 20% 63V.	4822 124 40248	2644	1uF 20% 63V	4822 124 21913
2538	10uF 20% 63V.	4822 124 40248	2647	1uF 20% 63V	4822 124 21913
2539	100uF 20% 25V	4822 124 40207	2648	1uF 20% 63V	4822 124 21913
2540	47uF 20% 25V.	4822 124 40433	2649	1uF 20% 63V	4822 124 21913
2541	10uF 20% 63V.	4822 124 40248	2650	1uF 20% 63V	4822 124 21913
2542	10uF 20% 63V.	4822 124 40248	2655	1uF 20% 63V	4822 124 21913
2543	100uF 10V	4822 124 41584	2656	1uF 20% 63V	4822 124 21913
2544	100uF 10V	4822 124 41584	2659	2,2uF 20% 50V	4822 124 22652
2545	100pF 5% NP0 50V.	5322 122 32531	2660	2,2uF 20% 50V	4822 124 22652
2546	100pF 5% NP0 50V.	5322 122 32531	2661	2,2uF 20% 50V	4822 124 22652
2549	22pF 5% 50V.	5322 122 32658	2662	2,2uF 20% 50V	4822 124 22652
2550	22pF 5% 50V.	5322 122 32658	2663	2,2uF 20% 50V	4822 124 22652
2551	100nF Y5V 50V P80M20.	4822 126 13838	2664	2,2uF 20% 50V	4822 124 22652
2552	100nF Y5V 50V P80M20.	4822 126 13838	2665	47nF 5% 250V.	4822 121 43526
2553	47uF 20% 50V	4822 124 41751	2666	47nF 5% 250V.	4822 121 43526
2554	47uF 20% 50V	4822 124 41751	2667	47nF 5% 250V.	4822 121 43526

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2668	47nF 5% 250V.	4822	121	43526	2912	22uF 50V.	4822	124	81151
2669	47nF 5% 250V.	4822	121	43526	2913	2,2uF 20% 50V.	4822	124	22652
2670	47nF 5% 250V.	4822	121	43526	2914	470pF 50V.	5322	122	32268
2671	6,8nF 10% X7R 63V	5322	122	31866	2916	220nF 80-20% 50V.	4822	126	13473
2672	6,8nF 10% X7R 63V	5322	122	31866	2917	4,7nF 10% X7R 63V	5322	126	10223
2673	6,8nF 10% X7R 63V	5322	122	31866	2918	220pF 5% NP0 63V	4822	122	33575
2674	6,8nF 10% X7R 63V	5322	122	31866	2919	22uF 50V.	4822	124	81151
2675	6,8nF 10% X7R 63V	5322	122	31866	2920	220nF 80-20% 50V.	4822	126	13473
2676	6,8nF 10% X7R 63V	5322	122	31866	2921	220nF 80-20% 50V.	4822	126	13473
2677	22nF 10% X7R 63V.	5322	122	32654	2922	4,7pF 5% NP0 50V.	5322	122	32287
2678	22nF 10% X7R 63V.	5322	122	32654	2923	22uF 50V.	4822	124	81151
2679	22nF 10% X7R 63V.	5322	122	32654	2924	10uF 20% 63V.	4822	124	40248
2680	22nF 10% X7R 63V.	5322	122	32654	2925	220uF 20% 10V	4822	124	40181
2681	22nF 10% X7R 63V.	5322	122	32654	2926	100nF 10% X7R 50V	4822	126	14585
2682	22nF 10% X7R 63V.	5322	122	32654	2928	10nF 20% X7R 50V	4822	122	33177
2683	22nF 10% X7R 63V.	5322	122	32654	2930	100pF 5% NP0 50V.	5322	122	32531
2684	22nF 10% X7R 63V.	5322	122	32654	2931	100pF 5% NP0 50V.	5322	122	32531
2685	22nF 10% X7R 63V.	5322	122	32654	2932	100pF 5% NP0 50V.	5322	122	32531
2686	22nF 10% X7R 63V.	5322	122	32654	2933	100pF 5% NP0 50V.	5322	122	32531
2687	22nF 10% X7R 63V.	5322	122	32654	2937	220pF 50V	4822	126	10794
2688	22nF 10% X7R 63V.	5322	122	32654		RESISTORS			
2689	68nF 5% 63V	5322	121	42465	3251	470R 5% 0,1W	4822	051	20471
2690	68nF 5% 63V	5322	121	42465	3252	100K 1% 0,1W	4822	117	10837
2691	68nF 5% 63V	5322	121	42465	3253	100K 1% 0,1W	4822	117	10837
2692	68nF 5% 63V	5322	121	42465	S 3254	0R33 5% 2W	4822	117	11342
2693	68nF 5% 63V	5322	121	42465	3256	10K 1% 0,1W	4822	117	10833
2694	68nF 5% 63V	5322	121	42465	S 3257	0R33 5% 2W	4822	117	11342
2695	68nF 5% 63V	5322	121	42465	3258	180K 5% 0,1W	4822	051	20184
2696	68nF 5% 63V	5322	121	42465	3259	680R 1% 0,1W	4822	117	10361
2697	68nF 5% 63V	5322	121	42465	3260	47K 1% 0,1W	4822	117	10834
2698	68nF 5% 63V	5322	121	42465	3263	680R 1% 0,1W	4822	117	10361
2699	68nF 5% 63V	5322	121	42465	3264	100K 1% 0,1W	4822	117	10837
2700	68nF 5% 63V	5322	121	42465	3266	22K 5% 0,1W	4822	051	20223
2805	100nF 10% X7R 50V	4822	126	14585	3267	3K9 5% 0,1W	4822	051	20392
2806	100nF 10% X7R 50V	4822	126	14585	3268	3K3 5% 0,1W	4822	051	20332
2807	100nF 10% X7R 50V.	4822	126	14585	3269	3K3 5% 0,1W	4822	051	20332
2809	10nF 10% X7R 63V.	5322	122	34098	S 3270	47R 5% 0,33W	4822	052	10479
2810	220uF 20% 10V.	4822	124	12245	S 3271	47R 5% 0,33W	4822	052	10479
2811	10nF 10% X7R 63V.	5322	122	34098	3272	39K 5% 0,1W	4822	051	20393
2812	220uF 20% 25V	4822	124	80144	S 3291	10R 5% 0,33W	4822	052	10109
2813	1uF 20% 63V	4822	124	21913	3292	15K 1% 0,1W	4822	116	83933
2814	47pF 1% NP0 63V	4822	126	13692	3293	10K 1% 0,1W	4822	117	10833
2815	100nF 10% X7R 16V.	4822	126	14305	3294	10K 1% 0,1W	4822	117	10833
2816	22nF 10% X7R 63V.	5322	122	32654	3295	15K 1% 0,1W	4822	116	83933
2817	1uF 20% 63V	4822	124	21913	S 3301	47R 5% 0,33W	4822	052	10479
2818	22nF 10% X7R 63V.	5322	122	32654	3304	56K 1% 0,1W	4822	117	11148
2821	22nF 10% X7R 63V.	5322	122	32654	3305	47K 1% 0,1W	4822	117	10834
2822	22nF 10% X7R 63V.	5322	122	32654	3306	47K 1% 0,1W	4822	117	10834
2831	100pF 5% NP0 50V.	5322	122	32531	3307	47K 1% 0,1W	4822	117	10834
2832	100nF 10% X7R 50V	4822	126	14585	3308	56K 1% 0,1W	4822	117	11148
2833	22nF 10% X7R 63V.	5322	122	32654	3309	4R7 1% 0,6W	4822	050	24708
2834	100pF 5% NP0 50V.	5322	122	32531	3310	1K8 5% 0,1W	4822	051	20182
2837	100pF 5% NP0 50V.	5322	122	32531	3311	4R7 1% 0,6W	4822	050	24708
2851	22pF 5% 50V.	5322	122	32658	3314	56K 1% 0,1W	4822	117	11148
2852	22pF 5% 50V.	5322	122	32658	3315	1K8 5% 0,1W	4822	051	20182
2853	22uF 50V.	4822	124	81151	3316	4R7 1% 0,6W	4822	050	24708
2854	22uF 50V.	4822	124	81151	3319	56K 1% 0,1W	4822	117	11148
2855	100pF 5% NP0 50V.	5322	122	32531	3322	56K 1% 0,1W	4822	117	11148
2856	100pF 5% NP0 50V.	5322	122	32531	3323	1K8 5% 0,1W	4822	051	20182
2857	100nF 10% X7R 50V.	4822	126	14585	3324	56K 1% 0,1W	4822	117	11148
2858	47uF 20% 50V	4822	124	41751	3326	33K 5% 0,1W	4822	051	20333
2860	47uF 20% 50V	4822	124	41751	3327	220R 1% 0,1W	4822	117	11503
2861	22nF 10% X7R 63V.	5322	122	32654	S 3328	47R 5% 0,33W	4822	052	10479
2868	220pF 50V	4822	122	33575	3329	100K 1% 0,1W	4822	117	10837
2869	220pF 50V	4822	122	33575	3330	10K 1% 0,1W	4822	117	10833
2871	10nF 20% X7R 50V	4822	122	33177	3334	1K 2% 0,25W	4822	051	10102
2872	10nF 20% X7R 50V	4822	122	33177	3335	1K 2% 0,25W	4822	051	10102
2873	10nF 20% X7R 50V	4822	122	33177	3336	1K 2% 0,25W	4822	051	10102
2875	10nF 20% X7R 50V	4822	122	33177	S 3337	0R22 5% 1W	4822	117	11744
2876	10nF 20% X7R 50V	4822	122	33177	S 3338	0R22 5% 1W	4822	117	11744
2877	100nF 5% 63V.	5322	121	42386	3339	1K5 1% 0,1W	4822	117	11139
2878	100nF 5% 63V.	5322	121	42386	3340	1K5 1% 0,1W	4822	117	11139
2879	100nF 5% 63V.	5322	121	42386	S 3341	0R22 5% 1W	4822	117	11744
2880	100nF 5% 63V.	5322	121	42386	S 3342	0R22 5% 1W	4822	117	11744
2881	100nF 5% 63V.	5322	121	42386	3343	1K5 1% 0,1W	4822	117	11139
2882	100nF 5% 63V.	5322	121	42386	S 3344	0R22 5% 1W	4822	117	11744
2883	1nF 50V	5322	126	10511	S 3345	0R22 5% 1W	4822	117	11744
2884	1nF 50V	5322	126	10511	S 3352	4R7 5% 1W	4822	053	10478
2885	1nF 50V	5322	126	10511	S 3353	4R7 5% 1W	4822	053	10478
2886	1nF 50V	5322	126	10511	S 3354	4R7 5% 1W	4822	053	10478
2887	2n2 50V	4822	122	33127	3356	47K 1% 0,1W	4822	117	10834
2888	2n2 50V	4822	122	33127	3357	10K 1% 0,6W	4822	050	21003
2901	22uF 50V.	4822	124	81151	3358	1K 2% 0,25W	4822	051	10102
2902	10uF 20% 63V.	4822	124	40248	3359	100K 1% 0,1W	4822	117	10837
2903	4,7pF 5% NP0 50V.	5322	122	32287	3360	10K 1% 0,1W	4822	117	10833
2904	47nF10% X7R 63V	4822	126	13751	3361	470R 5% 0,1W	4822	051	20471
2905	2,2uF 20% 50V	4822	124	22652	3362	470R 5% 0,1W	4822	051	20471
2906	470pF 50V	5322	122	32268	3363	470R 5% 0,1W	4822	051	20471
2908	220nF 80-20% 50V.	4822	126	13473	3513	47K 5% 0,1W	4822	117	10834
2909	4,7nF 10% X7R 63V	5322	126	10223	3514	47K 5% 0,1W	4822	117	10834
2910	220pF 5% NP0 63V	4822	122	33575	3515	470R 5% 0,1W	4822	051	20471
2911	22nF 10% X7R 63V.	5322	122	32654	3516	470R 5% 0,1W	4822	051	20471

S = Safety Part Be sure to use exact replacement part.

FR960PBK (continued)

3517	39K	5%	0,1W.	4822	051	20393	S	3629	10R	5%	0,33W	4822	052	10109
3519	18K	5%	0,1W.	4822	117	10965		3630	1K	1%	0,4W	4822	050	11002
3520	18K	5%	0,1W.	4822	117	10965		3631	1K	1%	0,4W	4822	050	11002
3520	8K2	5%	0,1W.	4822	051	20822		3632	1K	1%	0,4W	4822	050	11002
3521	39K	5%	0,1W.	4822	051	20393		3633	1K	2%	0,25W.	4822	051	10102
3522	39K	5%	0,1W.	4822	051	20393		3634	1K	2%	0,25W.	4822	051	10102
3523	18K	5%	0,1W.	4822	117	10965		3635	1K	2%	0,25W.	4822	051	10102
3524	18K	5%	0,1W.	4822	117	10965		3636	470R	5%	0,1W	4822	051	20471
3525	39K	5%	0,1W.	4822	051	20393		3637	470R	5%	0,1W	4822	051	20471
3526	39K	5%	0,1W.	4822	051	20393		3641	100K	1%	0,1W	4822	117	10837
3527	18K	5%	0,1W.	4822	117	10965		3642	100K	1%	0,1W	4822	117	10837
3528	18K	5%	0,1W.	4822	117	10965		3643	100K	1%	0,1W	4822	117	10837
3529	470R	5%	0,1W	4822	051	20471		3644	100K	1%	0,1W	4822	117	10837
3530	470R	5%	0,1W	4822	051	20471		3649	100K	1%	0,1W	4822	117	10837
3531	39K	5%	0,1W.	4822	051	20393		3650	100K	1%	0,1W	4822	117	10837
3532	39K	5%	0,1W.	4822	051	20393		3655	100K	1%	0,1W	4822	117	10837
3533	18K	5%	0,1W.	4822	117	10965		3656	100K	1%	0,1W	4822	117	10837
3534	18K	5%	0,1W.	4822	117	10965		3659	2K7	1%	0,1W 0805	4822	117	12955
3537	39K	5%	0,1W.	4822	051	20393		3660	2K7	1%	0,1W 0805	4822	117	12955
3538	39K	5%	0,1W.	4822	051	20393		3661	5K6	5%	0,1W 0805	4822	051	20562
3539	18K	5%	0,1W.	4822	117	10965		3662	5K6	5%	0,1W 0805	4822	051	20562
3540	18K	5%	0,1W.	4822	117	10965		3663	2K7	1%	0,1W 0805	4822	117	12955
3541	39K	5%	0,1W.	4822	051	20393		3664	2K7	1%	0,1W 0805	4822	117	12955
3542	39K	5%	0,1W.	4822	051	20393		3665	5K6	5%	0,1W 0805	4822	051	20562
3543	1K5	5%	0,25W	4822	117	11139		3666	5K6	5%	0,1W 0805	4822	051	20562
3544	1K5	5%	0,25W	4822	117	11139		3667	2K7	1%	0,1W 0805	4822	117	12955
3545	3K3	5%	0,1W.	4822	051	20332		3668	2K7	1%	0,1W 0805	4822	117	12955
3546	3K3	5%	0,1W.	4822	051	20332		3669	5K6	5%	0,1W 0805	4822	051	20562
3551	270R	1%	0,1W	4822	117	11504		3670	5K6	5%	0,1W 0805	4822	051	20562
3552	270R	1%	0,1W	4822	117	11504		3671	100K	1%	0,1W	4822	117	10837
3553	270R	1%	0,1W	4822	117	11504		3672	100K	1%	0,1W	4822	117	10837
3554	270R	1%	0,1W	4822	117	11504		3673	2K2	1%	0,1W	4822	117	11449
3555	3K3	5%	0,1W.	4822	051	20332		3674	2K2	1%	0,1W	4822	117	11449
3556	270R	1%	0,1W	4822	117	11504		3675	100R	5%	0,1W	4822	051	20101
3557	270R	1%	0,1W	4822	117	11504		3676	100R	5%	0,1W	4822	051	20101
3560	1K	2%	0,25W.	4822	051	10102		3677	100K	1%	0,1W	4822	117	10837
S 3561	4R7	5%	0,33W	4822	052	10478		3678	100K	1%	0,1W	4822	117	10837
3562	470R	5%	0,1W	4822	051	20471		3679	2K2	1%	0,1W	4822	117	11449
3563	1K	2%	0,25W.	4822	051	10102		3680	2K2	1%	0,1W	4822	117	11449
3566	270R	5%	0,5W	4822	116	83876		3681	100R	5%	0,1W	4822	051	20101
3567	270R	5%	0,5W	4822	116	83876		3682	100R	5%	0,1W	4822	051	20101
3571	47K	1%	0,1W.	4822	117	10834		3683	100K	1%	0,1W	4822	117	10837
3572	47K	1%	0,1W.	4822	117	10834		3684	100K	1%	0,1W	4822	117	10837
3573	1K	2%	0,25W.	4822	051	10102		3685	2K2	1%	0,1W	4822	117	11449
3574	1K	2%	0,25W.	4822	051	10102		3686	2K2	1%	0,1W	4822	117	11449
3575	100K	1%	0,1W	4822	117	10837		3687	100R	5%	0,1W	4822	051	20101
3576	100K	1%	0,1W	4822	117	10837		3688	100R	5%	0,1W	4822	051	20101
3577	560R	5%	0,1W	4822	051	20561		3689	2K2	1%	0,1W	4822	117	11449
3578	560R	5%	0,1W	4822	051	20561		3690	2K2	1%	0,1W	4822	117	11449
3579	390K	5%	0,1W	4822	051	20394		3691	2K2	5%	0,5W.	4822	116	52256
3580	390K	5%	0,1W	4822	051	20394		3692	2K2	1%	0,1W	4822	117	11449
3581	27K	5%	0,1W.	4822	051	20273		3693	2K2	1%	0,1W	4822	117	11449
3582	27K	5%	0,1W.	4822	051	20273		3694	22K	5%	0,5W.	4822	116	52256
3583	8K2	1%	0,6W.	4822	116	52303		3695	220K	1%	0,1W RC12H	4822	117	13579
3584	8K2	1%	0,6W.	4822	116	52303		3696	10K	1%	0,1W	4822	117	10833
3585	2K2	1%	0,1W.	4822	117	11449		3697	22K	5%	0,5W.	4822	116	52257
3586	2K2	1%	0,1W.	4822	117	11449		3698	220K	1%	0,1W RC12H	4822	117	13579
3587	12K	1%	0,1W.	4822	117	11383		3699	10K	1%	0,1W	4822	117	10833
3588	12K	5%	0,5W.	4822	116	52238		3700	22K0	5%	0,1W	4822	051	20223
3589	10K	1%	0,1W.	4822	117	10833		3801	68R	1%	0,1W.	4822	117	12521
3590	10K	1%	0,1W.	4822	117	10833		3802	68R	1%	0,1W.	4822	117	12521
3591	100K	1%	0,1W	4822	117	10837		3803	68R	1%	0,1W.	4822	117	12521
3592	100K	1%	0,1W	4822	117	10837		3804	68R	1%	0,1W.	4822	117	12521
3593	2K2	1%	0,1W.	4822	117	11449		3805	1K	2%	0,25W.	4822	051	10102
3594	2K2	1%	0,1W.	4822	117	11449		3806	1K	2%	0,25W.	4822	051	10102
3595	4K7	5%	0,1W.	4822	051	20472		S 3807	4R7	5%	0,33W	4822	052	10478
3596	4K7	5%	0,1W.	4822	051	20472		S 3808	4R7	5%	0,33W	4822	052	10478
3597	12K	5%	0,5W.	4822	116	52238		3810	2K2	1%	0,1W.	4822	117	11449
3598	12K	5%	0,5W.	4822	116	52238		3812	470R	5%	0,1W	4822	051	20471
3601	100R	5%	0,1W	4822	051	20101		3813	120R	5%	0,1W	4822	051	20121
3602	100R	5%	0,1W	4822	051	20101		3815	68R	1%	0,1W.	4822	117	12521
3603	100K	1%	0,1W	4822	117	10837		3816	68R	1%	0,1W.	4822	117	12521
3604	100K	1%	0,1W	4822	117	10837		3817	270R	1%	0,1W	4822	117	11504
3605	12K	1%	0,1W.	4822	117	11383		3818	220R	1%	0,1W	4822	117	11503
3606	12K	1%	0,1W.	4822	117	11383		3831	100R	5%	0,1W	4822	051	20101
3607	33K	5%	0,1W.	4822	051	20333		3832	47R	5%	0,1W.	4822	051	20479
3608	33K	5%	0,1W.	4822	051	20333		3834	100R	5%	0,1W	4822	051	20101
3609	120R	5%	0,1W	4822	051	20121		3851	4K7	5%	0,1W.	4822	051	20472
3610	120R	5%	0,1W	4822	051	20121		3852	22K	5%	0,1W.	4822	051	20223
3611	47K	1%	0,1W.	4822	117	10834		3853	10K	1%	0,1W.	4822	117	10833
3612	47K	1%	0,1W.	4822	117	10834		3854	4K7	5%	0,1W.	4822	051	20472
3613	470R	5%	0,1W	4822	051	20471		S 3855	270R	1%	0,1W	4822	116	83876
3614	470R	5%	0,1W	4822	051	20471		S 3856	270R	1%	0,1W	4822	117	11504
3615	470R	5%	0,1W	4822	051	20471		3857	100K	1%	0,1W	4822	117	10837
3616	470R	5%	0,1W	4822	051	20471		3858	100K	1%	0,1W	4822	117	10837
3618	47K	1%	0,1W.	4822	117	10834		3859	10K	1%	0,1W.	4822	117	10833
3619	47K	1%	0,1W.	4822	117	10834		3860	10K	1%	0,1W.	4822	117	10833
3620	100R	5%	0,1W	4822	116	52175		3871	3K3	5%	0,1W.	4822	051	20332
3621	100R	5%	0,1W	4822	051	20101		3872	3K3	5%	0,1W.	4822	051	20332
3622	120R	5%	0,1W	4822	051	20121		3873	1K	2%	0,25W.	4822	051	10102
3623	120R	5%	0,1W	4822	051	20121		3874	1K	2%	0,25W.	4822	051	10102
S 3627	10R	5%	0,33W	4822	052	10109		3875	3K3	5%	0,1W.	4822	051	20332

S = Safety Part Be sure to use exact replacement part.

FR960PBK (continued)

3877	1K	2%	0,25W.	4822	051	10102	4524	OR0 JUMP. (0805)	4822	051	20008
3878	1K	2%	0,25W.	4822	051	10102	4526	OR0 JUMP. (0805)	4822	051	20008
3879	3K3	5%	0,1W.	4822	051	20332	4528	OR0 JUMP. (0805)	4822	051	20008
3880	3K3	5%	0,1W.	4822	051	20332	4529	OR0 JUMP. (0805)	4822	051	20008
3881	1K	2%	0,25W.	4822	051	10102	4530	OR0 JUMP. (0805)	4822	051	20008
3882	1K	2%	0,25W.	4822	051	10102	4531	OR0 JUMP. (0805)	4822	051	20008
3883	12K	1%	0,1W.	4822	117	11383	4532	OR0 JUMP. (0805)	4822	051	20008
3884	12K	1%	0,1W.	4822	117	11383	4533	OR0 JUMP. (0805)	4822	051	20008
3885	12K	1%	0,1W.	4822	117	11383	4537	OR0 JUMP. (0805)	4822	051	20008
3886	12K	1%	0,1W.	4822	117	11383	4538	OR0 JUMP. (0805)	4822	051	20008
3887	12K	1%	0,1W.	4822	117	11383	4539	OR0 JUMP. (0805)	4822	051	20008
3888	12K	1%	0,1W.	4822	117	11383	4540	OR0 JUMP. (0805)	4822	051	20008
3889	2K2	1%	0,1W.	4822	117	11449	4541	OR0 JUMP. (0805)	4822	051	20008
3890	2K2	1%	0,1W.	4822	117	11449	4542	OR0 JUMP. (0805)	4822	051	20008
3891	5K6	5%	0,1W 0805	4822	051	20562	4543	OR0 JUMP. (0805)	4822	051	20008
3892	5K6	5%	0,1W 0805	4822	051	20562	4544	OR0 JUMP. (0805)	4822	051	20008
3893	5K6	5%	0,1W 0805	4822	051	20562	4545	OR0 JUMP. (0805)	4822	051	20008
3895	5K6	5%	0,1W 0805	4822	051	20562	4548	OR0 JUMP. (0805)	4822	051	20008
3896	5K6	5%	0,1W 0805	4822	051	20562	4550	OR0 JUMP. (0805)	4822	051	20008
S 3901	47R	5%	0,33W	4822	052	10479	4551	OR0 JUMP. (0805)	4822	051	20008
3902	56K	1%	0,1W.	4822	117	11148	4552	OR0 JUMP. (0805)	4822	051	20008
3903	47K	1%	0,1W.	4822	117	10834	4553	OR0 JUMP. (0805)	4822	051	20008
3904	47K	5%	0,5W.	4822	116	83884	4555	OR0 JUMP. (0805)	4822	051	20008
3905	4R7	1%	0,6W.	4822	050	24708	4556	OR0 JUMP. (0805)	4822	051	20008
3906	56K	1%	0,1W.	4822	117	11148	4557	OR0 JUMP. (0805)	4822	051	20008
3908	1K8	5%	0,1W.	4822	051	20182	4558	OR0 JUMP. (0805)	4822	051	20008
3910	4R7	1%	0,6W.	4822	050	24708	4559	OR0 JUMP. (0805)	4822	051	20008
3911	56K	1%	0,1W.	4822	117	11148	4560	OR0 JUMP. (0805)	4822	051	20008
3913	1K8	5%	0,1W.	4822	051	20182	4563	OR0 JUMP. (0805)	4822	051	20008
3914	56K	1%	0,1W.	4822	117	11148	4564	OR0 JUMP. (0805)	4822	051	20008
S 3915	47R	5%	0,33W	4822	052	10479	4565	OR0 JUMP. (0805)	4822	051	20008
S 3916	4R7	5%	1W.	4822	053	10478	4566	OR0 JUMP. (0805)	4822	051	20008
3917	33K	1%	0,6W.	4822	050	23303	4642	OR0 JUMP. (0805)	4822	051	20008
3918	220R	1%	0,1W	4822	117	11503	4644	OR0 JUMP. (0805)	4822	051	20008
S 3919	4R7	5%	1W.	4822	053	10478	4651	OR0 JUMP. (0805)	4822	051	20008
3920	100K	1%	0,1W	4822	117	10837	4652	OR0 JUMP. (0805)	4822	051	20008
3921	1K	2%	0,25W.	4822	051	10102	4653	OR0 JUMP. (0805)	4822	051	20008
3922	1K	2%	0,25W.	4822	051	10102	4801	OR0 JUMP. (0805)	4822	051	20008
3925	10K	1%	0,1W.	4822	117	10833	4802	OR0 JUMP. (0805)	4822	051	20008
S 3926	OR22	5%	1W	4822	117	11744	4803	OR0 JUMP. (0805)	4822	051	20008
S 3927	OR22	5%	1W	4822	117	11744	4804	OR0 JUMP. (0805)	4822	051	20008
3928	1K5	1%	0,1W.	4822	117	11139	4805	OR0 JUMP. (0805)	4822	051	20008
3929	1K5	1%	0,1W.	4822	117	11139	4832	OR0 JUMP. (0805)	4822	051	20008
S 3930	OR22	5%	1W	4822	117	11744	4833	OR0 JUMP. (0805)	4822	051	20008
S 3931	OR22	5%	1W	4822	117	11744	4902	OR0 JUMP. (0805)	4822	051	20008
3932	47K	1%	0,1W.	4822	117	10834	4903	OR0 JUMP. (0805)	4822	051	20008
3933	10K	1%	0,6W.	4822	050	21003	4904	OR0 JUMP. (0805)	4822	051	20008
3935	1K	2%	0,25W.	4822	051	10102	4905	OR0 JUMP. (0805)	4822	051	20008
3936	100K	1%	0,1W	4822	117	10837	4908	OR0 JUMP. (0805)	4822	051	20008
3937	10K	1%	0,1W.	4822	117	10833	4909	OR0 JUMP. (0805)	4822	051	20008
3938	2K2	1%	0,1W.	4822	117	11449	4910	OR0 JUMP. (0805)	4822	051	20008
3939	2K2	1%	0,1W.	4822	117	11449	4914	OR0 JUMP. (0805)	4822	051	20008
3940	220R	1%	0,1W	4822	117	11503	4915	OR0 JUMP. (0805)	4822	051	20008
3941	220R	1%	0,1W	4822	117	11503	4916	OR0 JUMP. (0805)	4822	051	20008
3943	10K	1%	0,1W.	4822	117	10833	4917	OR0 JUMP. (0805)	4822	051	20008
3944	220R	1%	0,1W	4822	117	11503	4918	OR0 JUMP. (0805)	4822	051	20008
3945	220R	1%	0,1W	4822	117	11503		COLLS			
3946	470R	5%	0,1W	4822	051	20471	5302	COIL	4822	157	62255
3947	470R	5%	0,1W	4822	051	20471	5304	COIL	4822	157	62255
3948	220R	1%	0,1W	4822	117	11503	5306	COIL	4822	157	62255
3949	220R	1%	0,1W	4822	117	11503	5901	COIL	4822	157	62255
3950	100R	5%		4822	051	20101	5902	COIL	4822	157	62255
3951	100R	5%		4822	051	20101		SEMICONDUCTORS			
4251	OR0 JUMP. (0805)			4822	051	20008	S 6251	DIODE, D5SBA20	4822	130	82078
4252	OR0 JUMP. (0805)			4822	051	20008	6257	DIODE, 1N4003G	4822	130	31878
4254	OR0 JUMP. (0805)			4822	051	20008	6258	DIODE, 1N4003G	4822	130	31878
4255	OR0 JUMP. (0805)			4822	051	20008	6259	DIODE, 1N4003G	4822	130	31878
4256	OR0 JUMP. (0805)			4822	051	20008	6260	DIODE, L7812CP	4822	209	33575
4257	OR0 JUMP. (0805)			4822	051	20008	6261	DIODE, 1N4003G	4822	130	31878
4258	OR0 JUMP. (0805)			4822	051	20008	6262	DIODE, 1N4003G	4822	130	31878
4260	OR0 JUMP. (0805)			4822	051	20008	6263	DIODE, 1N4003G	4822	130	31878
4283	OR0 JUMP. (0805)			4822	051	20008	6265	DIODE, L7805CP	4822	209	31841
4284	OR0 JUMP. (0805)			4822	051	20008	6267	DIODE, L7805CP	4822	209	31841
4285	OR0 JUMP. (0805)			4822	051	20008	6268	DIODE, 1N4003G	4822	130	31878
4287	OR0 JUMP. (0805)			4822	051	20008	6270	DIODE, BZX79-B6V8	4822	130	34278
4320	OR0 JUMP. (0805)			4822	051	20008	6271	DIODE, 1N4148	4822	130	30621
4501	OR0 JUMP. (0805)			4822	051	20008	6274	DIODE, 1N4003G	4822	130	31878
4502	OR0 JUMP. (0805)			4822	051	20008	6275	DIODE, 1N4003G	4822	130	31878
4503	OR0 JUMP. (0805)			4822	051	20008	6276	DIODE, BZX79-B5V6	4822	130	34173
4504	OR0 JUMP. (0805)			4822	051	20008	6279	DIODE, 1N4148	4822	130	30621
4506	OR0 JUMP. (0805)			4822	051	20008	6280	DIODE, BZX79-B10	4822	130	61219
4513	OR0 JUMP. (0805)			4822	051	20008	6281	DIODE, BZX79-B22	4822	130	34441
4514	OR0 JUMP. (0805)			4822	051	20008	6289	DIODE, 1N4148	4822	130	30621
4515	OR0 JUMP. (0805)			4822	051	20008	6290	DIODE, 1N4148	4822	130	30621
4516	OR0 JUMP. (0805)			4822	051	20008	6304	DIODE, BZX79-B3V3	5322	130	31504
4517	OR0 JUMP. (0805)			4822	051	20008	6305	DIODE, 1N4148	4822	130	30621
4518	OR0 JUMP. (0805)			4822	051	20008	6501	DIODE, 1N4148	4822	130	30621
4519	OR0 JUMP. (0805)			4822	051	20008	6601	DIODE, 1N4148	4822	130	30621
4520	OR0 JUMP. (0805)			4822	051	20008	6602	DIODE, 1N4148	4822	130	30621
4521	OR0 JUMP. (0805)			4822	051	20008	6641	DIODE, 1N4148	4822	130	30621
4522	OR0 JUMP. (0805)			4822	051	20008	6642	DIODE, 1N4148	4822	130	30621
4523	OR0 JUMP. (0805)			4822	051	20008	6643	DIODE, 1N4148	4822	130	30621

FR960PBK (continued)

2536	10uF 20% 63V	4822 124 40248	2643	1uF 20% 63V	4822 124 21913
2537	10uF 20% 63V	4822 124 40248	2644	1uF 20% 63V	4822 124 21913
2538	10uF 20% 63V	4822 124 40248	2647	1uF 20% 63V	4822 124 21913
2539	100uF 20% 25V	4822 124 40207	2648	1uF 20% 63V	4822 124 21913
2540	47uF 20% 25V	4822 124 40433	2649	1uF 20% 63V	4822 124 21913
2541	10uF 20% 63V	4822 124 40248	2650	1uF 20% 63V	4822 124 21913
2542	10uF 20% 63V	4822 124 40248	2655	1uF 20% 63V	4822 124 21913
2543	100uF 10V	4822 124 41584	2656	1uF 20% 63V	4822 124 21913
2544	100uF 10V	4822 124 41584	2659	2,2uF 20% 50V	4822 124 22652
2545	100pF 5% NP0 50V	5322 122 32531	2660	2,2uF 20% 50V	4822 124 22652
2546	100pF 5% NP0 50V	5322 122 32531	2661	2,2uF 20% 50V	4822 124 22652
2549	22pF 5% 50V	5322 122 32658	2662	2,2uF 20% 50V	4822 124 22652
2550	22pF 5% 50V	5322 122 32658	2663	2,2uF 20% 50V	4822 124 22652
2551	100nF 50V P80M20	4822 126 13838	2664	2,2uF 20% 50V	4822 124 22652
2552	100nF 50V P80M20	4822 126 13838	2665	47nF 5% 250V	4822 121 43526
2553	47uF 20% 50V	4822 124 41751	2666	47nF 5% 250V	4822 121 43526
2554	47uF 20% 50V	4822 124 41751	2667	47nF 5% 250V	4822 121 43526
2555	100nF 50V P80M20	4822 126 13838	2668	47nF 5% 250V	4822 121 43526
2556	100nF 50V P80M20	4822 126 13838	2669	47nF 5% 250V	4822 121 43526
2557	47uF 20% 50V	4822 124 41751	2670	47nF 5% 250V	4822 121 43526
2558	47uF 20% 50V	4822 124 41751	2671	6,8nF 10% X7R 63V	5322 122 31866
2559	CER2 50V 33nF PM5	4822 126 12105	2672	6,8nF 10% X7R 63V	5322 122 31866
2561	22uF 100V	4822 124 40764	2673	6,8nF 10% X7R 63V	5322 122 31866
2562	22uF 100V	4822 124 40764	2674	6,8nF 10% X7R 63V	5322 122 31866
2563	16V 2200uF 20%	4822 123 14025	2675	6,8nF 10% X7R 63V	5322 122 31866
2564	2,2uF 20% 50V	4822 124 22652	2676	6,8nF 10% X7R 63V	5322 122 31866
2565	2,2uF 20% 50V	4822 124 22652	2677	22nF 10% X7R 63V	5322 122 32654
2566	2,2uF 20% 50V	4822 124 22652	2678	22nF 10% X7R 63V	5322 122 32654
2567	4,7uF 20% 100V	4822 124 40769	2679	22nF 10% X7R 63V	5322 122 32654
2568	4,7uF 20% 100V	4822 124 40769	2680	22nF 10% X7R 63V	5322 122 32654
2569	100pF 5% NP0 50V	5322 122 32531	2681	22nF 10% X7R 63V	5322 122 32654
2570	100pF 5% NP0 50V	5322 122 32531	2682	22nF 10% X7R 63V	5322 122 32654
2571	10uF 20% 63V	4822 124 40248	2683	22nF 10% X7R 63V	5322 122 32654
2572	10uF 20% 63V	4822 124 40248	2684	22nF 10% X7R 63V	5322 122 32654
2573	150pF 2% NP0 63V	5322 122 33538	2685	22nF 10% X7R 63V	5322 122 32654
2574	150pF 2% NP0 63V	5322 122 33538	2686	22nF 10% X7R 63V	5322 122 32654
2575	10uF 20% 63V	4822 124 40248	2687	22nF 10% X7R 63V	5322 122 32654
2576	10uF 20% 63V	4822 124 40248	2688	22nF 10% X7R 63V	5322 122 32654
2577	10nF 20% X7R 50V	4822 122 33177	2689	68nF 5% 63V	5322 121 42465
2578	10nF 20% X7R 50V	4822 122 33177	2690	68nF 5% 63V	5322 121 42465
2579	2,2nF 10% X7R 63V	4822 122 33127	2691	68nF 5% 63V	5322 121 42465
2580	2,2nF 10% X7R 63V	4822 122 33127	2692	68nF 5% 63V	5322 121 42465
2581	47uF 20% 50V	4822 124 41751	2693	68nF 5% 63V	5322 121 42465
2582	47uF 20% 50V	4822 124 41751	2694	68nF 5% 63V	5322 121 42465
2583	2,7nF 50V	2222 861 15272	2695	68nF 5% 63V	5322 121 42465
2584	2,7nF 50V	2222 861 15272	2696	68nF 5% 63V	5322 121 42465
2585	82pF 1% NP0 63V	4822 126 13695	2697	68nF 5% 63V	5322 121 42465
2586	82pF 1% NP0 63V	4822 126 13695	2698	68nF 5% 63V	5322 121 42465
2593	22uF 50V	4822 124 81151	2699	68nF 5% 63V	5322 121 42465
2594	22uF 50V	4822 124 81151	2700	68nF 5% 63V	5322 121 42465
2595	100pF 5% NP0 50V	5322 122 32531	2805	100nF 10% 0805 50V	4822 126 14585
2596	100pF 5% NP0 50V	5322 122 32531	2806	100nF 10% 0805 50V	4822 126 14585
2599	22pF 5% 50V	5322 122 32658	2807	100nF 10% 0805 50V	4822 126 14585
2600	22pF 5% 50V	5322 122 32658	2808	100nF 10% 0805 50V	4822 126 14585
2603	22uF 50V	4822 124 81151	2809	10nF 10% X7R 63V	5322 122 34098
2604	22uF 50V	4822 124 81151	2810	220uF 20% 10V 8X5MM	4822 124 12245
2605	47pF 1% NP0 63V	4822 126 13692	2811	10nF 10% X7R 63V	5322 122 34098
2606	47pF 1% NP0 63V	4822 126 13692	2812	220uF 20% 25V	4822 124 80144
2607	47uF 20% 50V	4822 124 41751	2813	1uF 20% 63V	4822 124 21913
2608	47uF 20% 50V	4822 124 41751	2814	47pF 1% NP0 63V	4822 126 13692
2609	220pF 5% NP0 63V	4822 122 33575	2815	100nF 10% 16V	4822 126 14305
2610	220pF 5% NP0 63V	4822 122 33575	2816	22nF 10% X7R 63V	5322 122 32654
2611	100uF 20% 25V	4822 124 40207	2817	1uF 20% 63V	4822 124 21913
2612	10uF 20% 63V	4822 124 40248	2818	22nF 10% X7R 63V	5322 122 32654
2613	10uF 20% 63V	4822 124 40248	2821	22nF 10% X7R 63V	5322 122 32654
2614	100uF 20% 25V	4822 124 40207	2822	22nF 10% X7R 63V	5322 122 32654
2615	22nF 10% X7R 63V	5322 122 32654	2831	100pF 5% NP0 50V	5322 122 32531
2616	22nF 10% X7R 63V	5322 122 32654	2832	100nF 10% 50V	4822 126 14585
2617	10uF 20% 63V	4822 124 40248	2833	22nF 10% X7R 63V	5322 122 32654
2618	10uF 20% 63V	4822 124 40248	2834	100pF 5% NP0 50V	5322 122 32531
2619	100pF 5% NP0 50V	5322 122 32531	2837	100pF 5% NP0 50V	5322 122 32531
2620	100pF 5% NP0 50V	5322 122 32531	2851	22pF 5% 50V	5322 122 32658
2622	100pF 5% NP0 50V	5322 122 32531	2852	22pF 5% 50V	5322 122 32658
2623	100pF 5% NP0 50V	5322 122 32531	2853	22uF 50V	4822 124 81151
2624	100pF 5% NP0 50V	5322 122 32531	2854	22uF 50V	4822 124 81151
2625	100pF 5% NP0 50V	5322 122 32531	2855	100pF 5% NP0 50V	5322 122 32531
2626	100pF 5% NP0 50V	5322 122 32531	2856	100pF 5% NP0 50V	5322 122 32531
2627	100pF 5% NP0 50V	5322 122 32531	2857	100nF 10% X7R 50V	4822 126 14585
2628	100nF 10% 50V	4822 126 14585	2858	47uF 20% 50V	4822 124 41751
2629	47uF 20% 50V	4822 124 41751	2860	47uF 20% 50V	4822 124 41751
2630	100nF 5% 63V	5322 121 42386	2861	22nF 10% X7R 63V	5322 122 32654
2631	100nF 5% 63V	5322 121 42386	2868	220pF 50V	4822 122 33575
2632	100nF 5% 63V	5322 121 42386	2869	220pF 50V	4822 122 33575
2633	22nF 10% X7R 63V	5322 122 32654	2871	10nF 20% X7R 50V	4822 122 33177
2634	22nF 10% X7R 63V	5322 122 32654	2872	10nF 20% X7R 50V	4822 122 33177
2635	22nF 10% X7R 63V	5322 122 32654	2873	10nF 20% X7R 50V	4822 122 33177
2636	100nF 10% 50V	4822 126 14585	2875	10nF 20% X7R 50V	4822 122 33177
2637	47uF 20% 50V	4822 124 41751	2876	10nF 20% X7R 50V	4822 122 33177
2638	100nF 10% 50V	4822 126 14585	2877	100nF 5% 63V	5322 121 42386
2639	47uF 20% 50V	4822 124 41751	2878	100nF 5% 63V	5322 121 42386
2641	1uF 20% 63V	4822 124 21913	2879	100nF 5% 63V	5322 121 42386
2642	1uF 20% 63V	4822 124 21913	2880	100nF 5% 63V	5322 121 42386

S = Safety Part Be sure to use exact replacement part.

FR960PBK (continued)

2881	100nF 5% 63V.	5322 121 42386	3339	1K5 1% 0,1W.	4822 117 11139
2882	100nF 5% 63V.	5322 121 42386	3340	1K5 1% 0,1W.	4822 117 11139
2883	1nF 50V	5322 126 10511	S 3341	0R33 5% 2W	4822 117 11342
2884	1nF 50V	5322 126 10511	S 3342	0R33 5% 2W	4822 117 11342
2885	1nF 50V	5322 126 10511	3343	1K5 1% 0,1W.	4822 117 11139
2886	1nF 50V	5322 126 10511	S 3344	0R33 5% 2W	4822 117 11342
2887	2n2 50V	4822 122 33127	S 3345	0R33 5% 2W	4822 117 11342
2888	2n2 50V	4822 122 33127	S 3349	0R33 5% 2W	4822 117 11342
2901	22uF 50V.	4822 124 81151	S 3350	0R33 5% 2W	4822 117 11342
2902	10uF 20% 63V.	4822 124 40248	S 3351	0R33 5% 2W	4822 117 11342
2903	4,7pF 5% NPO 50V.	5322 122 32287	S 3352	4R7 5% 1W.	4822 053 10478
2904	47nF 10% X7R 63V	4822 126 13751	S 3353	4R7 5% 1W.	4822 053 10478
2905	2,2uF 20% 50V	4822 124 22652	S 3354	4R7 5% 1W.	4822 053 10478
2906	470pF 50V	5322 122 32268	3356	47K 1% 0,1W.	4822 117 10834
2908	220nF 80- 20% 50V	4822 126 13473	3357	22K 5% 0,5W.	4822 116 52257
2909	4,7nF 10% X7R 63V	5322 126 10223	3358	1K 2% 0,25W.	4822 051 10102
2910	220pF 5% NPO 63V	4822 122 33575	3359	100K 1% 0,1W	4822 117 10837
2911	22nF 10% X7R 63V.	5322 122 32654	3360	10K 1% 0,1W.	4822 117 10833
2912	22uF 50V.	4822 124 81151	3361	470R 5% 0,1W	4822 051 20471
2913	2,2uF 20% 50V	4822 124 22652	3362	470R 5% 0,1W	4822 051 20471
2914	470pF 50V	5322 122 32268	3363	470R 5% 0,1W	4822 051 20471
2916	220nF 80- 20% 50V	4822 126 13473	3513	47K 5% 0,1W.	4822 117 10834
2917	4,7nF 10% X7R 63V	5322 126 10223	3514	47K 5% 0,1W.	4822 117 10834
2918	220pF 5% NPO 63V	4822 122 33575	3515	470R 5% 0,1W	4822 051 20471
2919	22uF 50V.	4822 124 81151	3516	470R 5% 0,1W	4822 051 20471
2920	220nF 80- 20% 50V	4822 126 13473	3517	39K 5% 0,1W.	4822 051 20393
2921	220nF 80- 20% 50V	4822 126 13473	3518	39K 5% 0,1W.	4822 051 20393
2922	4,7pF 5% NPO 50V.	5322 122 32287	3519	18K 5% 0,1W.	4822 117 10965
2923	22uF 50V.	4822 124 81151	3520	18K 5% 0,1W.	4822 117 10965
2924	10uF 20% 63V.	4822 124 40248	3521	39K 5% 0,1W.	4822 051 20393
2925	220uF 20% 10V	4822 124 40181	3522	39K 5% 0,1W.	4822 051 20393
2926	100nF 10% X7R 50V.	4822 126 14585	3523	18K 5% 0,1W.	4822 117 10965
2928	10nF 20% X7R 50V	4822 122 33177	3524	18K 5% 0,1W.	4822 117 10965
2930	100pF 5% NPO 50V.	5322 122 32531	3525	39K 5% 0,1W.	4822 051 20393
2931	100pF 5% NPO 50V.	5322 122 32531	3526	39K 5% 0,1W.	4822 051 20393
2932	100pF 5% NPO 50V.	5322 122 32531	3527	18K 5% 0,1W.	4822 117 10965
2933	100pF 5% NPO 50V.	5322 122 32531	3528	18K 5% 0,1W.	4822 117 10965
2937	220pF 50V	4822 126 10794	3529	470R 5% 0,1W	4822 051 20471
	RESISTORS		3530	470R 5% 0,1W	4822 051 20471
3251	1K 2% 0,25W.	4822 051 10102	3531	39K 5% 0,1W.	4822 051 20393
3252	100K 1% 0,1W	4822 117 10837	3532	39K 5% 0,1W.	4822 051 20393
3253	100K 1% 0,1W	4822 117 10837	3533	18K 5% 0,1W.	4822 117 10965
S 3254	0R33 5% 2W	4822 117 11342	3534	18K 5% 0,1W.	4822 117 10965
3256	10K 1% 0,1W.	4822 117 10833	3535	18K 5% 0,5W.	4822 116 52251
S 3257	0R33 5% 2W	4822 117 11342	3536	18K 5% 0,5W.	4822 116 52251
3258	180K 5% 0,1W	4822 051 20184	3537	39K 5% 0,1W.	4822 051 20393
3259	680R 1% 0,1W	4822 117 10361	3538	39K 5% 0,1W.	4822 051 20393
3260	47K 1% 0,1W.	4822 117 10834	3539	18K 5% 0,1W.	4822 117 10965
3263	680R 1% 0,1W	4822 117 10361	3540	18K 5% 0,1W.	4822 117 10965
3264	100K 1% 0,1W	4822 117 10837	3541	39K 5% 0,1W.	4822 051 20393
S 3265	47R 5% 0,33W	4822 052 10479	3542	39K 5% 0,1W.	4822 051 20393
3266	22K 5% 0,1W.	4822 051 20223	3543	1K5 5% 0,25W	4822 117 11139
3267	6K8 1% 0,1W.	4822 117 11507	3544	1K5 5% 0,25W	4822 117 11139
3268	3K3 5% 0,1W.	4822 051 20332	3545	3K3 5% 0,1W.	4822 051 20332
3269	3K3 5% 0,1W.	4822 051 20332	3546	3K3 5% 0,1W.	4822 051 20332
S 3270	47R 5% 0,33W	4822 052 10479	3549	6K8 5% 0,1W.	4822 117 11507
S 3271	47R 5% 0,33W	4822 052 10479	3550	6K8 5% 0,1W.	4822 117 11507
3272	39K 5% 0,1W.	4822 051 20393	3551	270R 1% 0,1W	4822 117 11504
S 3291	10R 5% 0,33W	4822 052 10109	3552	270R 1% 0,1W	4822 117 11504
3292	15K 1% 0,1W.	4822 116 83933	3553	270R 1% 0,1W	4822 117 11504
3293	10K 1% 0,1W.	4822 117 10833	3554	270R 1% 0,1W	4822 117 11504
3294	10K 1% 0,1W.	4822 117 10833	3555	3K3 5% 0,1W.	4822 051 20332
3295	15K 1% 0,1W.	4822 116 83933	3556	270R 1% 0,1W	4822 117 11504
S 3301	47R 5% 0,33W	4822 052 10479	3557	270R 1% 0,1W	4822 117 11504
3303	6K8 5%.	4822 116 83961	3560	1K 2% 0,25W.	4822 051 10102
3304	56K 1% 0,1W.	4822 117 11148	S 3561	4R7 5% 0,33W	4822 052 10478
3305	47K 1% 0,1W.	4822 117 10834	3562	470R 5% 0,1W	4822 051 20471
3306	47K 1% 0,1W.	4822 117 10834	3563	1K 2% 0,25W.	4822 051 10102
3307	47K 1% 0,1W.	4822 117 10834	3566	270R 5% 0,5W	4822 116 83876
3308	56K 1% 0,1W.	4822 117 11148	3567	270R 5% 0,5W	4822 116 83876
3309	4R7 1% 0,6W.	4822 050 24708	3571	47K 1% 0,1W.	4822 117 10834
3310	1K8 5% 0,1W.	4822 051 20182	3572	47K 1% 0,1W.	4822 117 10834
3311	4R7 1% 0,6W.	4822 050 24708	3573	1K 2% 0,25W.	4822 051 10102
3314	56K 1% 0,1W.	4822 117 11148	3574	1K 2% 0,25W.	4822 051 10102
3315	1K8 5% 0,1W.	4822 051 20182	3575	100K 1% 0,1W	4822 117 10837
3316	4R7 1% 0,6W.	4822 050 24708	3576	100K 1% 0,1W	4822 117 10837
3319	56K 1% 0,1W.	4822 117 11148	3577	560R 5% 0,1W	4822 051 20561
3320	1K 2% 0,25W.	4822 051 10102	3578	560R 5% 0,1W	4822 051 20561
3322	56K 1% 0,1W.	4822 117 11148	3579	390K 5% 0,1W	4822 051 20394
3323	1K8 5% 0,1W.	4822 051 20182	3580	390K 5% 0,1W	4822 051 20394
3324	56K 1% 0,1W.	4822 117 11148	3581	27K 5% 0,1W.	4822 051 20273
3325	6K8 5%.	4822 116 83961	3582	27K 5% 0,1W.	4822 051 20273
3326	33K 5% 0,1W.	4822 051 20333	3583	8K2 1% 0,6W.	4822 116 52303
3327	220R 1% 0,1W	4822 117 11503	3584	8K2 1% 0,6W.	4822 116 52303
S 3328	47R 5% 0,33W	4822 052 10479	3585	2K2 1% 0,1W.	4822 117 11449
3329	100K 1% 0,1W	4822 117 10837	3586	2K2 1% 0,1W.	4822 117 11449
3330	10K 1% 0,1W.	4822 117 10833	3587	12K 1% 0,1W.	4822 117 11383
3334	1K8 5% 0,1W.	4822 051 20182	3588	12K 5% 0,5W.	4822 116 52238
3335	1K8 5% 0,1W.	4822 051 20182	3589	10K 1% 0,1W.	4822 117 10833
3336	1K8 5% 0,1W.	4822 051 20182	3590	10K 1% 0,1W.	4822 117 10833
S 3337	0R33 5% 2W	4822 117 11342	3591	100K 1% 0,1W	4822 117 10837
S 3338	0R33 5% 2W	4822 117 11342	3592	100K 1% 0,1W	4822 117 10837

S = Safety Part Be sure to use exact replacement part.

FR960PBK (continued)

3593	2K2	1%	0,1W.	4822	117	11449	3805	1K	2%	0,25W.	4822	051	10102
3594	2K2	1%	0,1W.	4822	117	11449	3806	1K	2%	0,25W.	4822	051	10102
3595	4K7	5%	0,1W.	4822	051	20472	S 3807	4R7	5%	0,33W	4822	052	10478
3596	4K7	5%	0,1W.	4822	051	20472	S 3808	4R7	5%	0,33W	4822	052	10478
3597	12K	5%	0,5W.	4822	116	52238	3810	2K2	1%	0,1W.	4822	117	11449
3598	12K	5%	0,5W.	4822	116	52238	3812	470R	5%	0,1W	4822	051	20471
3601	100R	5%	0,1W	4822	051	20101	3813	120R	5%	0,1W	4822	051	20121
3602	100R	5%	0,1W	4822	051	20101	3815	68R	1%	0,1W.	4822	117	12521
3603	100K	1%	0,1W	4822	117	10837	3816	68R	1%	0,1W.	4822	117	12521
3604	100K	1%	0,1W	4822	117	10837	3817	270R	1%	0,1W	4822	117	11504
3605	12K	1%	0,1W.	4822	117	11383	3818	220R	1%	0,1W	4822	117	11503
3606	12K	1%	0,1W.	4822	117	11383	3831	100R	5%	0,1W	4822	051	20101
3607	33K	5%	0,1W.	4822	051	20333	3832	47R	5%	0,1W.	4822	051	20479
3608	33K	5%	0,1W.	4822	051	20333	3834	100R	5%	0,1W	4822	051	20101
3609	120R	5%	0,1W	4822	051	20121	3851	4K7	5%	0,1W.	4822	051	20472
3610	120R	5%	0,1W	4822	051	20121	3852	22K	5%	0,1W.	4822	051	20223
3611	47K	1%	0,1W.	4822	117	10834	3853	68K	5%	0,1W.	4822	051	20683
3612	47K	1%	0,1W.	4822	117	10834	3854	4K7	5%	0,1W.	4822	051	20472
3613	470R	5%	0,1W	4822	051	20471	S 3855	270R	5%	0,5W	4822	116	83876
3614	470R	5%	0,1W	4822	051	20471	S 3856	270R	1%	0,1W	4822	117	11504
3615	470R	5%	0,1W	4822	051	20471	3857	100K	1%	0,1W	4822	117	10837
3616	470R	5%	0,1W	4822	051	20471	3858	100K	1%	0,1W	4822	117	10837
3618	47K	1%	0,1W.	4822	117	10834	3859	10K	1%	0,1W.	4822	117	10833
3619	47K	1%	0,1W.	4822	117	10834	3860	10K	1%	0,1W.	4822	117	10833
3620	100R	5%	0,1W	4822	116	52175	3871	3K3	5%	0,1W.	4822	051	20332
3621	100R	5%	0,1W	4822	051	20101	3872	3K3	5%	0,1W.	4822	051	20332
3622	120R	5%	0,1W	4822	051	20121	3873	1K	2%	0,25W.	4822	051	10102
3623	120R	5%	0,1W	4822	051	20121	3874	1K	2%	0,25W.	4822	051	10102
S 3627	10R	5%	0,33W	4822	052	10109	3875	3K3	5%	0,1W.	4822	051	20332
S 3629	10R	5%	0,33W	4822	052	10109	3877	1K	2%	0,25W.	4822	051	10102
3630	1K	1%	0,4W	4822	050	11002	3878	1K	2%	0,25W.	4822	051	10102
3631	1K	1%	0,4W	4822	050	11002	3879	3K3	5%	0,1W.	4822	051	20332
3632	1K	1%	0,4W	4822	050	11002	3880	3K3	5%	0,1W.	4822	051	20332
3633	1K	2%	0,25W.	4822	051	10102	3881	1K	2%	0,25W.	4822	051	10102
3634	1K	2%	0,25W.	4822	051	10102	3882	1K	2%	0,25W.	4822	051	10102
3635	1K	2%	0,25W.	4822	051	10102	3883	12K	1%	0,1W.	4822	117	11383
3636	470R	5%	0,1W	4822	051	20471	3884	12K	1%	0,1W.	4822	117	11383
3637	470R	5%	0,1W	4822	051	20471	3885	12K	1%	0,1W.	4822	117	11383
3641	100K	1%	0,1W	4822	117	10837	3886	12K	1%	0,1W.	4822	117	11383
3642	100K	1%	0,1W	4822	117	10837	3887	12K	1%	0,1W.	4822	117	11383
3643	100K	1%	0,1W	4822	117	10837	3888	12K	1%	0,1W.	4822	117	11383
3644	100K	1%	0,1W	4822	117	10837	3889	2K2	1%	0,1W.	4822	117	11449
3649	100K	1%	0,1W	4822	117	10837	3890	2K2	1%	0,1W.	4822	117	11449
3650	100K	1%	0,1W	4822	117	10837	S 3901	47R	5%	0,33W	4822	052	10479
3655	100K	1%	0,1W	4822	117	10837	3902	56K	1%	0,1W.	4822	117	11148
3656	100K	1%	0,1W	4822	117	10837	3903	47K	1%	0,1W.	4822	117	10834
3659	2K7	1%	0,1W 0805	4822	117	12955	3904	47K	5%	0,5W.	4822	116	83884
3660	2K7	1%	0,1W 0805	4822	117	12955	3905	4R7	1%	0,6W.	4822	050	24708
3661	5K6	5%	0,1W 0805	4822	051	20562	3906	56K	1%	0,1W.	4822	117	11148
3662	5K6	5%	0,1W 0805	4822	051	20562	3908	1K8	5%	0,1W.	4822	051	20182
3663	2K7	1%	0,1W 0805	4822	117	12955	3910	4R7	1%	0,6W.	4822	050	24708
3664	2K7	1%	0,1W 0805	4822	117	12955	3911	56K	1%	0,1W.	4822	117	11148
3665	5K6	5%	0,1W 0805	4822	051	20562	3913	1K8	5%	0,1W.	4822	051	20182
3666	5K6	5%	0,1W 0805	4822	051	20562	3914	56K	1%	0,1W.	4822	117	11148
3667	2K7	1%	0,1W 0805	4822	117	12955	S 3915	47R	5%	0,33W	4822	052	10479
3668	2K7	1%	0,1W 0805	4822	117	12955	S 3916	4R7	5%	1W.	4822	053	10478
3669	5K6	5%	0,1W 0805	4822	051	20562	3917	33K	1%	0,6W.	4822	050	23303
3670	5K6	5%	0,1W 0805	4822	051	20562	3918	220R	1%	0,1W	4822	117	11503
3671	100K	1%	0,1W	4822	117	10837	S 3919	4R7	5%	1W.	4822	053	10478
3672	100K	1%	0,1W	4822	117	10837	3920	100K	1%	0,1W	4822	117	10837
3673	2K2	1%	0,1W.	4822	117	11449	3921	1K	2%	0,25W.	4822	051	10102
3674	2K2	1%	0,1W.	4822	117	11449	3922	1K	2%	0,25W.	4822	051	10102
3675	100R	5%	0,1W	4822	051	20101	3925	10K	1%	0,1W.	4822	117	10833
3676	100R	5%	0,1W	4822	051	20101	S 3926	0R22	5%	1W	4822	117	11744
3677	100K	1%	0,1W	4822	117	10837	S 3927	0R22	5%	1W	4822	117	11744
3678	100K	1%	0,1W	4822	117	10837	3928	1K5	1%	0,1W.	4822	117	11139
3679	2K2	1%	0,1W.	4822	117	11449	3929	1K5	1%	0,1W.	4822	117	11139
3680	2K2	1%	0,1W.	4822	117	11449	S 3930	0R22	5%	1W	4822	117	11744
3681	100R	5%	0,1W	4822	051	20101	S 3931	0R22	5%	1W	4822	117	11744
3682	100R	5%	0,1W	4822	051	20101	3932	47K	1%	0,1W.	4822	117	10834
3683	100K	1%	0,1W	4822	117	10837	3933	10K	1%	0,6W.	4822	050	21003
3684	100K	1%	0,1W	4822	117	10837	3934	1K	2%	0,25W.	4822	051	10102
3685	2K2	1%	0,1W.	4822	117	11449	3935	1K	2%	0,25W.	4822	051	10102
3686	2K2	1%	0,1W.	4822	117	11449	3936	100K	1%	0,1W	4822	117	10837
3687	100R	5%	0,1W	4822	051	20101	3937	10K	1%	0,1W.	4822	117	10833
3688	100R	5%	0,1W	4822	051	20101	3938	2K2	1%	0,1W.	4822	117	11449
3689	2K2	1%	0,1W.	4822	117	11449	3939	2K2	1%	0,1W.	4822	117	11449
3690	2K2	1%	0,1W.	4822	117	11449	3940	220R	1%	0,1W	4822	117	11503
3691	2K2	5%	0,5W.	4822	116	52256	3941	220R	1%	0,1W	4822	117	11503
3692	2K2	1%	0,1W.	4822	117	11449	3943	22K	5%	0,1W.	4822	051	20223
3693	2K2	1%	0,1W.	4822	117	11449	3944	220R	1%	0,1W	4822	117	11503
3694	2K2	5%	0,5W.	4822	116	52256	3945	220R	1%	0,1W	4822	117	11503
3695	220K	1%	0,1W RC12H	4822	117	13579	3946	470R	5%	0,1W	4822	051	20471
3696	10K	1%	0,1W.	4822	117	10833	3947	470R	5%	0,1W	4822	051	20471
3697	22K	5%	0,5W.	4822	116	52257	3948	220R	1%	0,1W	4822	117	11503
3698	220K	1%	0,1W RC12H	4822	117	13579	3949	220R	1%	0,1W	4822	117	11503
3699	10K	1%	0,1W.	4822	117	10833	3950	100R	5%	0,1W	4822	051	20101
3700	22K	5%	0,1W.	4822	051	20223	3951	100R	5%	0,1W	4822	051	20101
3801	68R	1%	0,1W.	4822	117	12521	4251	0R0 JUMP. (0805)			4822	051	20008
3802	68R	1%	0,1W.	4822	117	12521	4252	0R0 JUMP. (0805)			4822	051	20008
3803	68R	1%	0,1W.	4822	117	12521	4253	0R0 JUMP. (0805)			4822	051	20008
3804	68R	1%	0,1W.	4822	117	12521	4254	0R0 JUMP. (0805)			4822	051	20008

S = Safety Part Be sure to use exact replacement part.

FR960PBK (continued)

4255	OR0 JUMP. (0805)	4822 051 20008	6263	DIODE, 1N4003G	4822 130 31878
4256	OR0 JUMP. (0805)	4822 051 20008	6265	DIODE, 7805CP	4822 209 31841
4257	OR0 JUMP. (0805)	4822 051 20008	6267	DIODE, L7805CP	4822 209 31841
4258	OR0 JUMP. (0805)	4822 051 20008	6268	DIODE, 1N4003G	4822 130 31878
4260	OR0 JUMP. (0805)	4822 051 20008	6270	DIODE, BZX79-B6V8	4822 130 34278
4283	OR0 JUMP. (0805)	4822 051 20008	6271	DIODE, 1N4148	4822 130 30621
4284	OR0 JUMP. (0805)	4822 051 20008	6276	DIODE, BZX79-B5V6	4822 130 34173
4285	OR0 JUMP. (0805)	4822 051 20008	6279	DIODE, 1N4148	4822 130 30621
4287	OR0 JUMP. (0805)	4822 051 20008	6280	DIODE, BZX79-B10	4822 130 61219
4320	OR0 JUMP. (0805)	4822 051 20008	6281	DIODE, BZX79-B22	4822 130 34441
4504	OR0 JUMP. (0805)	4822 051 20008	6289	DIODE, 1N4148	4822 130 30621
4506	OR0 JUMP. (0805)	4822 051 20008	6290	DIODE, 1N4148	4822 130 30621
4513	OR0 JUMP. (0805)	4822 051 20008	6301	DIODE, BZX79-B8V2	4822 130 34382
4514	OR0 JUMP. (0805)	4822 051 20008	6302	DIODE, BZX79-B8V2	4822 130 34382
4515	OR0 JUMP. (0805)	4822 051 20008	6303	DIODE, 1N4148	4822 130 30621
4516	OR0 JUMP. (0805)	4822 051 20008	6304	DIODE, BZX79-B3V3	5322 130 31504
4517	OR0 JUMP. (0805)	4822 051 20008	6305	DIODE, 1N4148	4822 130 30621
4518	OR0 JUMP. (0805)	4822 051 20008	6501	DIODE, 1N4148	4822 130 30621
4519	OR0 JUMP. (0805)	4822 051 20008	6601	DIODE, 1N4148	4822 130 30621
4520	OR0 JUMP. (0805)	4822 051 20008	6602	DIODE, 1N4148	4822 130 30621
4521	OR0 JUMP. (0805)	4822 051 20008	6641	DIODE, 1N4148	4822 130 30621
4522	OR0 JUMP. (0805)	4822 051 20008	6642	DIODE, 1N4148	4822 130 30621
4523	OR0 JUMP. (0805)	4822 051 20008	6643	DIODE, 1N4148	4822 130 30621
4524	OR0 JUMP. (0805)	4822 051 20008	6644	DIODE, 1N4148	4822 130 30621
4526	OR0 JUMP. (0805)	4822 051 20008	6645	DIODE, 1N4148	4822 130 30621
4528	OR0 JUMP. (0805)	4822 051 20008	6646	DIODE, 1N4148	4822 130 30621
4529	OR0 JUMP. (0805)	4822 051 20008	6647	DIODE, 1N4148	4822 130 30621
4530	OR0 JUMP. (0805)	4822 051 20008	6648	DIODE, 1N4148	4822 130 30621
4531	OR0 JUMP. (0805)	4822 051 20008	6649	DIODE, 1N4003G	4822 130 31878
4532	OR0 JUMP. (0805)	4822 051 20008	S 6650	DIODE, BZX79-B10	4822 130 61219
4533	OR0 JUMP. (0805)	4822 051 20008	6801	DIODE, BZX79-B6V8	4822 130 34278
4537	OR0 JUMP. (0805)	4822 051 20008	6802	DIODE, BZX79-B6V8	4822 130 34278
4538	OR0 JUMP. (0805)	4822 051 20008	6803	DIODE, BZX79-B6V8	4822 130 34278
4539	OR0 JUMP. (0805)	4822 051 20008	6804	DIODE, BZX79-B6V8	4822 130 34278
4540	OR0 JUMP. (0805)	4822 051 20008	6805	DIODE, BZX79-B6V8	4822 130 34278
4541	OR0 JUMP. (0805)	4822 051 20008	6806	DIODE, BZX79-B6V8	4822 130 34278
4542	OR0 JUMP. (0805)	4822 051 20008	6807	DIODE, BZX79-B6V8	4822 130 34278
4543	OR0 JUMP. (0805)	4822 051 20008	6808	DIODE, BZX79-B6V8	4822 130 34278
4544	OR0 JUMP. (0805)	4822 051 20008	6809	DIODE, 1N4148	4822 130 30621
4545	OR0 JUMP. (0805)	4822 051 20008	6831	DIODE, 1N4148	4822 130 30621
4548	OR0 JUMP. (0805)	4822 051 20008	6832	DIODE, 1N4148	4822 130 30621
4550	OR0 JUMP. (0805)	4822 051 20008	6901	DIODE, 1N4148	4822 130 30621
4551	OR0 JUMP. (0805)	4822 051 20008	6902	DIODE, 1N4148	4822 130 30621
4552	OR0 JUMP. (0805)	4822 051 20008	6903	DIODE, BZX79-B3V3	5322 130 31504
4553	OR0 JUMP. (0805)	4822 051 20008	6904	DIODE, 1N4148	4822 130 30621
4555	OR0 JUMP. (0805)	4822 051 20008	7253	TRANSISTOR, BC846B	5322 130 60159
4556	OR0 JUMP. (0805)	4822 051 20008	7255	TRANSISTOR, BC856B	4822 130 60373
4557	OR0 JUMP. (0805)	4822 051 20008	7256	TRANSISTOR, BC846B	5322 130 60159
4558	OR0 JUMP. (0805)	4822 051 20008	7257	TRANSISTOR, BC327-25	4822 130 41246
4559	OR0 JUMP. (0805)	4822 051 20008	7258	TRANSISTOR, BC327-25	4822 130 41246
4560	OR0 JUMP. (0805)	4822 051 20008	7259	TRANSISTOR, BC846B	5322 130 60159
4563	OR0 JUMP. (0805)	4822 051 20008	7260	TRANSISTOR, BC846B	5322 130 60159
4564	OR0 JUMP. (0805)	4822 051 20008	7261	TRANSISTOR, BC856B	4822 130 60373
4565	OR0 JUMP. (0805)	4822 051 20008	7302	IC, STK496-630	4822 209 17507
4566	OR0 JUMP. (0805)	4822 051 20008	7304	TRANSISTOR, BC846B	5322 130 60159
4642	OR0 JUMP. (0805)	4822 051 20008	7305	TRANSISTOR, BC846B	5322 130 60159
4644	OR0 JUMP. (0805)	4822 051 20008	7306	TRANSISTOR, BC846B	5322 130 60159
4651	OR0 JUMP. (0805)	4822 051 20008	7307	TRANSISTOR, BC846B	5322 130 60159
4652	OR0 JUMP. (0805)	4822 051 20008	7309	TRANSISTOR, BC856B	4822 130 60373
4653	OR0 JUMP. (0805)	4822 051 20008	7310	TRANSISTOR, BC846B	5322 130 60159
4801	OR0 JUMP. (0805)	4822 051 20008	7501	IC, LC7821	4822 209 72748
4802	OR0 JUMP. (0805)	4822 051 20008	7503	IC, NJM4560M	4822 209 83357
4803	OR0 JUMP. (0805)	4822 051 20008	7504	IC, NJM4560M	4822 209 83357
4804	OR0 JUMP. (0805)	4822 051 20008	7571	IC, NJM4560DD	4822 209 70157
4805	OR0 JUMP. (0805)	4822 051 20008	7572	IC, LC7821	4822 209 72748
4832	OR0 JUMP. (0805)	4822 051 20008	7601	IC, NJM4556AM	4822 209 31378
4833	OR0 JUMP. (0805)	4822 051 20008	7621	TRANSISTOR, BC817-40	4822 130 42615
4902	OR0 JUMP. (0805)	4822 051 20008	7622	TRANSISTOR, BC817-40	4822 130 42615
4903	OR0 JUMP. (0805)	4822 051 20008	7641	IC, TDA7437T	4822 209 17386
4904	OR0 JUMP. (0805)	4822 051 20008	7642	IC, TDA7437T	4822 209 17386
4905	OR0 JUMP. (0805)	4822 051 20008	7643	IC, TDA7437T	4822 209 17386
4913	OR0 JUMP. (0805)	4822 051 20008	7644	TRANSISTOR, BC337	4822 130 40855
4914	OR0 JUMP. (0805)	4822 051 20008	7651	TRANSISTOR, BC817-40	4822 130 42615
4915	OR0 JUMP. (0805)	4822 051 20008	7652	TRANSISTOR, BC817-40	4822 130 42615
4916	OR0 JUMP. (0805)	4822 051 20008	7653	TRANSISTOR, BC817-40	4822 130 42615
4917	OR0 JUMP. (0805)	4822 051 20008	7654	TRANSISTOR, BC817-40	4822 130 42615
4918	OR0 JUMP. (0805)	4822 051 20008	7655	TRANSISTOR, BC817-40	4822 130 42615
	COILS		7656	TRANSISTOR, BC817-40	4822 130 42615
5301	1uH COIL	4822 157 70599	7657	TRANSISTOR, BC856B	4822 130 60373
5303	1uH COIL	4822 157 70599	7658	TRANSISTOR, BC856B	4822 130 60373
5305	1uH COIL	4822 157 70599	7660	IC, NJM4560M	4822 209 83357
5901	1uH COIL	4822 157 62255	7661	TRANSISTOR, BC817-40	4822 130 42615
5902	1uH COIL	4822 157 62255	7662	TRANSISTOR, BC817-40	4822 130 42615
	SEMICONDUCTORS		7801	TRANSISTOR, BC846B	5322 130 60159
S 6252	DIODE, D3SBA20	4822 130 82079	S 7802	TRANSISTOR, BC557B	4822 130 44568
S 6253	DIODE, D5SBA20	4822 130 82078	7803	IC, STV6401	4822 209 16886
6257	DIODE, 1N4003G	4822 130 31878	7901	IC, STK496-070	4822 209 17385
6258	DIODE, 1N4003G	4822 130 31878	7902	TRANSISTOR, BC846B	5322 130 60159
6259	DIODE, 1N4003G	4822 130 31878	7903	TRANSISTOR, BC846B	5322 130 60159
6260	DIODE, L7812CP	4822 209 33575	7904	TRANSISTOR, BC846B	5322 130 60159
6261	DIODE, 1N4003G	4822 130 31878	7906	TRANSISTOR, BC856B	4822 130 60373
6262	DIODE, 1N4003G	4822 130 31878	7908	TRANSISTOR, BC856B	4822 130 60373

S = Safety Part. Be sure to use exact replacement part.

FR960PBK (continued)

7909	TRANSISTOR, BC846B	5322	130	60159
7910	TRANSISTOR, BD242BFP	9322	139	22687

EXPLODED VIEW PARTS LIST

	EXPLODED VIEW PARTS LIST			
1	FRONT FR960/17	3104	217	52600
1	FRONT FR970/17	3104	217	52610
2	BUTTON HINGE ASSY SURROUND	4822	410	12442
3	BUTTONS HINGE TUNER.	4822	410	12435
4	BUTTON HINGE ASSY MENU	4822	410	12443
5	BUTTONS HINGE BASS TREBLE	4822	410	12436
6	BUTTONS EASY LINK.	4822	410	12437
7	BUTTON HINGE A/V, FR970 only	4822	410	12478
8	LIGHT GUIDE SURROUND	4822	380	10274
9	LIGHT GUIDE VIRTUAL/HALL	3104	214	38460
10	LIGHT GUIDE SELECTOR	4822	380	10277
11	ORN.PLATE ASSY (SILVER).	3104	217	52450
12	RING KNOB VOLUME	3104	217	52130
13	RING KNOB SOURCE SELECTOR.	3104	217	52140
14	WINDOW DISPLAY	3104	217	52260
15	BACKPLATE A/V.	4822	426	10895
17	COVER PLATE ASSY	4822	442	01879
25	KNOB VOLUME (BL)	4822	410	12438
26	KNOB SOURCE SELECTOR (BL).	4822	410	12439
27	KNOB MENU NAV (BL)	4822	410	12441
28	BADGE PHILIPS.	4822	459	10887
36	LEG SILVER	4822	691	10773
38	LEG SILVER	4822	691	10773
115	POWER ROD.	4822	535	10638
116	POWER CAP.	4822	462	11176
117	BUSH, PLASTIC.	4822	532	60948
125	COVERPLATE	4822	442	01817
1003	MULTI CHANNEL DECODING MODULE.	3104	217	05750
S 5001	MAINS TRANSFORMER FR960/17	3103	308	30240
S 5001	MAINS TRANSFORMER FR970/17	4822	146	21225
S 8020	MAINS CORD	4822	321	11464
ANTAM	AM FRAME AERIAL.	4822	303	50082
ANTFM	FM AERIAL 300R	4822	320	11094
CL	CABLE COMB/CINCH, Cinema Link 1M7.	2422	076	00315
CSPK	CENTER BOX used in MX975D/21/37.	3104	219	03860
DFU	Owner's Manual, FR960 - FR970.	3104	215	36130
REM	REMOTE CONTROL	3104	219	03770
FRSPK	FRONT SPEAKER used in MX975D/21/37	3104	219	03850
SSSPK	SURROUND BOX used in MX975D/21/37	3104	219	03750
SUBSPK	SUBWOOFER FB201V/17 used in MX975D/37	3104	219	03730
SUBCL	CINCH CABLE 3M, Subwoofer, MX975D/21/37.	4399	294	03820

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FRONT BOARD ELECTRICAL PARTS LIST

FRONT BOARD ELECTRICAL PARTS LIST			FRONT BOARD ELECTRICAL PARTS LIST		
MISCELLANEOUS			RESISTORS		
1400	CRYSTAL (4, 32MH)	4822 242 11033	2470	100pF 5% NPO 50V	5322 122 32531
1403	CST8,00MT	4822 242 72066	2471	100pF 5% NPO 50V	5322 122 32531
1404	SWITCH, PUSH BUTTON	4822 276 13114	2472	100pF 5% NPO 50V	5322 122 32531
1405	SWITCH, PUSH BUTTON	4822 276 13114	2473	100pF 5% NPO 50V	5322 122 32531
1406	SWITCH, PUSH BUTTON	4822 276 13114	2474	100pF 5% NPO 50V	5322 122 32531
1407	SWITCH, PUSH BUTTON	4822 276 13114	2475	100pF 5% NPO 50V	5322 122 32531
1408	SWITCH, PUSH BUTTON	4822 276 13114	2476	100pF 5% NPO 50V	5322 122 32531
1409	SWITCH, PUSH BUTTON	4822 276 13114	2477	100pF 5% NPO 50V	5322 122 32531
1410	15FE- BT- VK- N	4822 265 10981	2478	100pF 5% NPO 50V	5322 122 32531
1411	SWITCH, PUSH BUTTON	4822 276 13114			
1412	SWITCH, PUSH BUTTON	4822 276 13114	3391	1K 2% 0,25W	4822 051 10102
1413	SWITCH, PUSH BUTTON	4822 276 13114	3392	22K 5% 0,1W	4822 051 20223
1414	SWITCH, PUSH BUTTON	4822 276 13114	3393	22K 5% 0,1W	4822 051 20223
1415	SWITCH, PUSH BUTTON	4822 276 13114	3394	22K 5% 0,1W	4822 051 20223
1416	SWITCH, PUSH BUTTON	4822 276 13114	3395	0R0 JUMP. (0805)	4822 051 20008
1417	SWITCH, PUSH BUTTON	4822 276 13114	3400	47R 5% 0,1W	4822 051 20479
1418	SWITCH, PUSH BUTTON	4822 276 13114	3401	10K 1% 0,6W	4822 050 21003
1419	SWITCH, PUSH BUTTON	4822 276 13114	3402	10K 1% 0,6W	4822 050 21003
1420	SWITCH, PUSH BUTTON	4822 276 13114	3403	6K8 1% 0,1W	4822 117 11507
1421	SWITCH, ROTARY	4822 273 10372	3404	330E 5% 0,5W	4822 116 52219
1422	SWITCH, ROTARY	4822 273 10372	3405	22K 5% 0,5W	4822 116 52257
1423	ROTARY ENCODER 24P	4822 273 10365	3406	10K 1% 0,6W	4822 050 21003
1424	1P YKB21- 5209	4822 265 11584	3407	10K 1% 0,6W	4822 050 21003
1428	3P. FEM. CINCH	4822 265 11336	3408	10K 1% 0,6W	4822 050 21003
8002	FLEXIBLE FOIL 15P 220MM	4822 320 12706	3409	1K 2% 0,25W	4822 051 10102
			3410	2K2 1% 0,1W	4822 117 11449
			3411	220K 1% 0,1W	4822 117 13579
			3413	1K 1% 0,4W	4822 050 11002
			3414	1K 2% 0,25W	4822 051 10102
			3415	0R0 JUMP. (0805)	4822 051 20008
2400	100uF 20% 10V	4822 124 41584	3416	10K 1% 0,1W	4822 117 10833
2401	1nF 10% X7R 63V	5322 122 31647	3417	10K 1% 0,1W	4822 117 10833
2402	63V 330pF PM5	5322 122 31863	3418	10K 1% 0,1W	4822 117 10833
2403	560pF 10% X7R 50V	4822 122 33173	3419	10K 1% 0,1W	4822 117 10833
2404	1nF 10% X7R 63V	5322 122 31647	3420	10K 1% 0,1W	4822 117 10833
2405	22nF 10% X7R 63V	5322 122 32654	3421	10K 1% 0,1W	4822 117 10833
2407	470pF 10% X7R 63V	5322 122 34099	3422	10K 1% 0,1W	4822 117 10833
2408	22nF 10% X7R 63V	5322 122 32654	3424	1K 1% 0,4W	4822 050 11002
2409	2,2uF 20% 50V	4822 124 22652	3426	1K 1% 0,4W	4822 050 11002
2410	22nF 10% X7R 63V	5322 122 32654	3427	150R 5% 0,5W	4822 116 83868
2411	220pF 5% NPO 63V	4822 122 33575	3428	27K 5% 0,1W	4822 051 20273
2412	47uF 20% 50V	4822 124 41751	3429	22K 5% 0,1W	4822 051 20223
2413	22nF 10% X7R 63V	5322 122 32654	3430	22K 5% 0,1W	4822 051 20223
2414	22nF 10% X7R 63V	5322 122 32654	3431	10K 1% 0,1W	4822 117 10833
2415	22pF 5% 50V	5322 122 32658	S 3432	4R7 5% 0,33W	4822 052 10478
2416	22pF 5% 50V	5322 122 32658	3433	10K 1% 0,1W	4822 117 10833
2417	22nF 10% X7R 63V	5322 122 32654	3434	22K 5% 0,1W	4822 051 20223
2419	22nF 10% X7R 63V	5322 122 32654	3435	22K 5% 0,5W	4822 116 52257
2420	100uF 20% 10V	4822 124 23432	3436	22K 5% 0,5W	4822 116 52257
2421	22nF 10% X7R 63V	5322 122 32654	3437	100K 1% 0,1W	4822 117 10837
2422	22nF 10% X7R 63V	5322 122 32654	3438	220K 1% 0,1W	4822 117 13579
2423	22nF 10% X7R 63V	5322 122 32654	3439	10K 1% 0,1W	4822 117 10833
2424	22nF 10% X7R 63V	5322 122 32654	3440	47R 5% 0,1W	4822 051 20479
2425	22nF 10% X7R 63V	5322 122 32654	3441	82K 1% 0,1W	4822 117 11149
2426	22nF 10% X7R 63V	5322 122 32654	3442	100K 1% 0,1W	4822 117 10837
2427	1nF 10% X7R 63V	5322 122 31647	3443	330E 5% 0,5W	4822 116 52219
2428	4,7uF 20% 100V	4822 124 40769	3444	330E 5% 0,5W	4822 116 52219
2429	47uF 20% 50V	4822 124 41751	3445	330R 1% 1,25W	4822 117 13577
2430	220pF 5% NPO 63V	4822 122 33575	3446	330R 1% 1,25W	4822 117 13577
2431	100pF 5% NPO 50V	5322 122 32531	3447	330E 5% 0,5W	4822 116 52219
2432	100pF 5% NPO 50V	5322 122 32531	3448	330E 5% 0,5W	4822 116 52219
2433	100pF 5% NPO 50V	5322 122 32531	3449	100K 1% 0,1W	4822 117 10837
2434	220nF 80- 20% 50V	4822 126 13473	3451	10K 1% 0,1W	4822 117 10833
2435	220pF 5% NPO 63V	4822 122 33575	3452	330E 5% 0,5W	4822 116 52219
2436	220pF 5% NPO 63V	4822 122 33575	3453	330E 5% 0,5W	4822 116 52219
2437	220pF 5% NPO 63V	4822 122 33575	3455	22K 5% 0,1W	4822 051 20223
2438	220pF 5% NPO 63V	4822 122 33575	3457	330E 5% 0,5W	4822 116 52219
2439	220pF 5% NPO 63V	4822 122 33575	3458	330R 1% 1,25W	4822 117 13577
2440	220pF 5% NPO 63V	4822 122 33575	3459	10K 1% 0,1W	4822 117 10833
2441	220pF 5% NPO 63V	4822 122 33575	3460	10K 1% 0,1W	4822 117 10833
2442	47pF 1% NPO 63V	4822 126 13692	3461	10K 1% 0,1W	4822 117 10833
2443	47pF 1% NPO 63V	4822 126 13692	3462	10K 1% 0,1W	4822 117 10833
2444	22nF 10% X7R 63V	5322 122 32654	3463	10K 1% 0,1W	4822 117 10833
2445	4,7nF 10% X7R 63V	5322 126 10223	3464	10K 1% 0,1W	4822 117 10833
2447	4,7nF 10% X7R 63V	5322 126 10223	3465	220R 1% 0,1W	4822 117 11503
2448	1nF 10% X7R 63V	5322 122 31647	3466	220R 1% 0,1W	4822 117 11503
2449	1nF 10% X7R 63V	5322 122 31647	3467	220R 1% 0,1W	4822 117 11503
2454	22nF 10% X7R 63V	5322 122 32654	3468	220R 1% 0,1W	4822 117 11503
2455	47uF 20% 50V	4822 124 41751	3469	220R 1% 0,1W	4822 117 11503
2456	47uF 20% 25V	4822 124 40433	3470	220R 1% 0,1W	4822 117 11503
2457	22nF 10% X7R 63V	5322 122 32654	3471	1K 2% 0,25W	4822 051 10102
2458	22nF 10% X7R 63V	5322 122 32654	3472	1K 2% 0,25W	4822 051 10102
2459	22nF 10% X7R 63V	5322 122 32654	3473	0R0 JUMP. (0805)	4822 051 20008
2460	22nF 10% X7R 63V	5322 122 32654	3474	0R0 JUMP. (0805)	4822 051 20008
2461	22nF 10% X7R 63V	5322 122 32654	3475	100K 1% 0,1W	4822 117 10837
2462	1nF 10% X7R 63V	5322 122 31647	3477	68R 1% 0,1W	4822 117 12521
2463	100pF 5% NPO 50V	5322 122 32531	3478	100K 1% 0,1W	4822 117 10837
2464	100pF 5% NPO 50V	5322 122 32531	3479	1K 2% 0,25W	4822 051 10102
2465	100pF 5% NPO 50V	5322 122 32531	3480	100K 1% 0,1W	4822 117 10837
2466	100pF 5% NPO 50V	5322 122 32531	3481	1K 2% 0,25W	4822 051 10102
2467	100pF 5% NPO 50V	5322 122 32531	3482	100K 1% 0,1W	4822 117 10837
2468	100pF 5% NPO 50V	5322 122 32531	3483	100K 1% 0,1W	4822 117 10837
2469	100pF 5% NPO 50V	5322 122 32531			

FR970 (continued)

3484	1K 2%	0,25W	4822 051	10102	7403	IC, GPU28XP	4822 130	10165
3485	0R0 JUMP. (0805)		4822 051	20008	7404	IC, SAA6579T	4822 209	31981
3491	100K 1%	0,1W	4822 117	10837	7405	IC, M24C08- MN6.	4822 209	17445
3493	470R 5%	0,1W	4822 051	20471	7406	TRANSISTOR, BC847B	4822 130	60511
3494	470R 5%	0,1W	4822 051	20471	7407	TRANSISTOR, BC847B	4822 130	60511
3495	470R 5%	0,1W	4822 051	20471	7408	TRANSISTOR, BC847B	4822 130	60511
3496	470R 5%	0,1W	4822 051	20471	7409	TRANSISTOR, BC847B	4822 130	60511
3497	470R 5%	0,1W	4822 051	20471	7411	IC, HEF4094BT.	5322 209	11306
3498	470R 5%	0,1W	4822 051	20471	7412	IC, HEF4094BT.	5322 209	11306
3499	470R 5%	0,1W	4822 051	20471	7413	FTD DISPLAY, VFD 16- MT- 65GK.	2722 171	07168
3500	470R 5%	0,1W	4822 051	20471	7415	IC, TMP87CS71F/ FR970.1	3103 308	83880
3501	470R 5%	0,1W	4822 051	20471	7416	TRANSISTOR, BC847B	4822 130	60511
3751	33K 5%	0,1W	4822 051	20333	7417	TRANSISTOR, BC847B	4822 130	60511
3752	33K 5%	0,1W	4822 051	20333	7418	TRANSISTOR, BC847B	4822 130	60511
3753	33K 5%	0,1W	4822 051	20333				
3754	33K 5%	0,1W	4822 051	20333				
3755	33K 5%	0,1W	4822 051	20333				
3756	33K 5%	0,1W	4822 051	20333				
3757	33K 5%	0,1W	4822 051	20333				
3758	33K 5%	0,1W	4822 051	20333				
3759	33K 5%	0,1W	4822 051	20333				
3760	33K 5%	0,1W	4822 051	20333				
3761	33K 5%	0,1W	4822 051	20333				
3762	33K 5%	0,1W	4822 051	20333				
3763	33K 5%	0,1W	4822 051	20333				
3764	33K 5%	0,1W	4822 051	20333				
3765	33K 5%	0,1W	4822 051	20333				
3766	33K 5%	0,1W	4822 051	20333				
3767	33K 5%	0,1W	4822 051	20333				
3768	33K 5%	0,1W	4822 051	20333				
3769	33K 5%	0,1W	4822 051	20333				
3770	33K 5%	0,1W	4822 051	20333				
3771	33K 5%	0,1W	4822 051	20333				
3772	33K 5%	0,1W	4822 051	20333				
3773	33K 5%	0,1W	4822 051	20333				
3774	33K 5%	0,1W	4822 051	20333				
3775	33K 5%	0,1W	4822 051	20333				
3776	33K 5%	0,1W	4822 051	20333				
3777	33K 5%	0,1W	4822 051	20333				
3778	33K 5%	0,1W	4822 051	20333				
3779	33K 5%	0,1W	4822 051	20333				
3780	33K 5%	0,1W	4822 051	20333				
3781	33K 5%	0,1W	4822 051	20333				
4401	0R0 JUMP. (0805)		4822 051	20008				
4402	0R0 JUMP. (0805)		4822 051	20008				
4403	0R0 JUMP. (0805)		4822 051	20008				
4404	0R0 JUMP. (0805)		4822 051	20008				
4406	0R0 JUMP. (0805)		4822 051	20008				
4407	0R0 JUMP. (0805)		4822 051	20008				
4408	0R0 JUMP. (0805)		4822 051	20008				
4410	0R0 JUMP. (0805)		4822 051	20008				
4411	0R0 JUMP. (0805)		4822 051	20008				
4413	0R0 JUMP. (0805)		4822 051	20008				
4416	0R0 JUMP. (0805)		4822 051	20008				
4417	0R0 JUMP. (0805)		4822 051	20008				
4418	0R0 JUMP. (0805)		4822 051	20008				
4420	0R0 JUMP. (0805)		4822 051	20008				
4421	0R0 JUMP. (0805)		4822 051	20008				
4422	0R0 JUMP. (0805)		4822 051	20008				
4423	0R0 JUMP. (0805)		4822 051	20008				
4424	0R0 JUMP. (0805)		4822 051	20008				
4425	0R0 JUMP. (0805)		4822 051	20008				
4426	0R0 JUMP. (0805)		4822 051	20008				
4450	0R0 JUMP. (0805)		4822 051	20008				
COILS & FILTERS								
5400	LAL02TB2R2J.		4822 157	11477	2152	560pF 5% 63V, for East. Europe	5322 116	80853
5401	LAL02TB2R2J.		4822 157	11477	2152	33nF 5% 63V.	4822 126	12105
5402	LAL02TB2R2J.		4822 157	11477	2153	12pF 2% 63V, for East. Europe.	4822 122	32139
5403	LAL02TB2R2J.		4822 157	11477	2153	15pF 2% 63V.	4822 122	32504
SEMICONDUCTORS								
6400	DIODE, LED STAND- BY		4822 130	11606	2155	Trimmer 3-11pF 100V.	4822 125	60101
6401	DIODE, LTL- 16KPE- P		4822 130	82978	2158	10pF 5% 50V, for LW version.	5322 122	32448
6402	DIODE, 1N4148.		4822 130	30621	2159	33pF 5% 50V.	5322 122	32659
6403	DIODE, 1N4148.		4822 130	30621	2160	22nF 10% 63V.	5322 122	32654
6404	DIODE, 1N4148.		4822 130	30621	2161	100nF 20% 25V.	4822 126	10002
6405	DIODE, 1N4148.		4822 130	30621	2163	100nF 20% 25V.	4822 126	10002
6406	DIODE, 1N4148.		4822 130	30621	2164	470nF +80/- 20% 16V.	4822 126	13482
6407	DIODE, LTL- 16KPE- P		4822 130	82978	2165	100nF 20% 25V.	4822 126	10002
6408	DIODE, LTL- 16KPE- P		4822 130	82978	2166	1nF 10% 50V.	5322 122	34123
6409	DIODE, LTL- 16KPE- P		4822 130	82978	2167	12pF 2% 63V.	4822 122	32139
6410	DIODE, LTL- 16KPE- P		4822 130	82978	2168	82pF 1% 63V.	4822 126	13695
6412	DIODE, LTL- 16KPE- P		4822 130	82978				
6413	DIODE, LTL- 16KPE- P		4822 130	82978				
6414	DIODE, 1N4148.		4822 130	30621	3101	RESISTORS		
6415	DIODE, LTL- 16KPE- P		4822 130	82978	3101	5k6 5% 0,1W, for East. Europe.	4822 051	20562
6416	DIODE, LTL- 16KPE- P		4822 130	82978	3101	33k 5% 0,1W.	4822 051	20333
6417	DIODE, LTL- 16KPE- P		4822 130	82978	3102	100k 5% 0,1W	4822 051	20104
6418	DIODE, LTL- 16KPE- P		4822 130	82978	3103	18k 1% 0,1W.	4822 117	10965
6419	DIODE, 1N4148.		4822 130	30621	3104	180R 1% 0,1W	4822 117	11448
6420	DIODE, 1N4148.		4822 130	30621	3105	220R 5% 0,5W	4822 116	83872
6421	DIODE, LTL- 16KPE- P		4822 130	82978	3108	2k2 1% 0,1W, for LW version.	4822 117	11449
7402	TRANSISTOR, PDTA144ET.		4822 130	11607	3109	4k7 5% 0,1W, for LW version.	4822 051	20472
					3110	47R 5% 0,5W.	4822 116	52195
					3120	0R Jumper 0805	4822 051	20008
					3123	4k7 5% 0,1W, for LW version.	4822 051	20472
					3125	10k 1% 0,1W, for LW version.	4822 117	10833

S = Safety Part Be sure to use exact replacement part.

FR970 (continued)

3128	2k2 1% 0,1W, for LW version.	4822 117 11449			
3132	47R 5% 0,5W.	4822 116 52195	S 1051		
3134	220k 5% 0,1W	4822 051 20224	S 1053		
3137	22k 5% 0,1W, for LW version.	4822 051 20223	S 1054		
3140	OR Jumper 0805, 5120=CDA10.7MG40K.	4822 051 20008	S 1055		
3140	150R 1% 0,1W, 5120=CDA10.7MG61KA	4822 117 10353	S 1056		
3141	56k 5% 0,1W.	4822 051 20563	S 1061		
3142	Trimmer 100k 30% 0,1W.	4822 100 11163	S 1062		
3143	22k 5% 0,1W, for RDS version	4822 051 20223	S 1063		
3144	1k 2% 0,25W, for RDS version	4822 051 10102	S 1064		
3145	2k2 1% 0,1W.	4822 117 11449	S 1065		
3146	22R 5% 0,1W.	4822 051 20229	S 1065		
3152	470R 5% 0,5W	4822 116 83883	S 1066		
3153	470R 5% 0,1W	4822 051 20471	S 1066		
3154	150R 5% 0,5W	4822 116 83886	S 1066		
3155	470R 5% 0,1W	4822 051 20471	S 1066		
3156	100k 5% 0,1W, for /21/30/33 only	4822 051 20104	S 1067		
3157	100k 5% 0,5W, for East. Europe	4822 116 52234	S 1068		
3158	470R 5% 0,5W	4822 116 83883	S 1069		
3159	470R 5% 0,5W	4822 116 83883	S 1078		
3160	470R 5% 0,5W	4822 116 83883	S 1079		
3161	470R 5% 0,5W	4822 116 83883	S 1081		
3167	220R 1% 0,1W	4822 117 11503	S 1082		
3169	150k 5% 0,1W	4822 051 20154	S 1083		
3170	100k 5% 0,5W	4822 116 52234	S 1084		
3171	330R 5% 0,5W	4822 116 52219	S 5052		
3176	1k 2% 0,25W, for RDS version	4822 051 10102			
4101	OR Jumper 0805, for 2-Band only.	4822 051 20008	2051		
4102	OR Jumper 0805, for 2-Band only.	4822 051 20008	2052		
4103	OR Jumper 0805	4822 051 20008	2053		
4104	OR Jumper 0805	4822 051 20008	2054		
4105	OR Jumper 0805	4822 051 20008	2055		
4106	OR Jumper 0805	4822 051 20008			
4108	OR Jumper 0805	4822 051 20008	S 3051		
4111	OR Jumper 0805	4822 051 20008	3052		
4120	OR Jumper 0805	4822 051 20008	3053		
4150	OR Jumper 1206	4822 051 10008	3054		
4151	OR Jumper 0805	4822 051 20008	3055		
4152	OR Jumper 1206	4822 051 10008	3056		
4153	OR Jumper 1206	4822 051 10008	3057		
4154	OR Jumper 1206	4822 051 10008	3058		
4155	OR Jumper 1206	4822 051 10008	3059		
4156	OR Jumper 0805	4822 051 20008	3079		
4157	OR Jumper 1206	4822 051 10008			
4158	OR Jumper 1206	4822 051 10008	6051		
4159	OR Jumper 1206	4822 051 10008	6052		
4162	OR Jumper 1206	4822 051 10008	6053		
COILS & FILTERS					
5102	MW RF Coil	4822 157 71634	6056		
5103	LW RF Coil, for LW version	4822 157 71635	6057		
5109	Ceram Filter 10,7MHz	4822 242 70665	6058		
5110	Ceram Filter 10,7MHz	4822 242 70665	6059		
5111	AM-IF Filter 450kHz.	4822 158 60511	6060		
5112	AM-IF Filter 450kHz.	4822 157 70302	6061		
5114	AM-IF Filter 450kHz.	4822 157 70302	6062		
5119	Discriminator 10,7MHz.	4822 157 11443	6063		
5120	Cer. Disc. 10,7MG40K	4822 242 82065	6064		
5120	Cer. Disc.10,7MG61KA-TF21.	4822 242 10251	6065		
5121	Quartz 75kHz	4822 242 10261	7051		
5122	Osc. Coil LW, for LW version	4822 157 60517	7052		
5123	Osc. Coil MW	4822 157 60517	7051		
5130	RF-Coil 1.5T	4822 156 30947			
5131	RF-Coil 1.5T	4822 156 30947			
SEMICONDUCTORS					
6103	DIODES, 1N4148	4822 130 30621			
6104	DIODES, 1N4148	4822 130 30621	S 1258		
6105	DIODES, HNV02H-B.	4822 130 83075	1301		
6106	DIODES, 1N4148	4822 130 30621	1512		
6107	DIODES, BZX79-B11.	4822 130 34488	1513		
6120	DIODES, 1N4148, not for /21/30/33.	4822 130 30621	1514		
6130	DIODES, 1SV228	4822 130 82833	1516		
6131	DIODES, 1SV228	4822 130 82833	1520		
7101	IC, TEA5757H/V1.	4822 209 90924	1525		
7102	TRANSISTOR, 2SA838B.	4822 130 60093	S 1530		
7103	TRANSISTOR, BC858C, for RDS version.	4822 130 42513	1540		
7104	TRANSISTOR, BC338-40, for LW version	5322 130 44779	1550		
7105	TRANSISTOR, BC338-40, for LW version	5322 130 44779	1801		
7109	TRANSISTOR, BC858B, for LW version	5322 130 41983	1802		
7111	TRANSISTOR, BC848C	5322 130 42136	1803		
7122	TRANSISTOR, BC848C, for LW version	5322 130 42136	1901		
7124	TRANSISTOR, BC848C, for LW version	5322 130 42136			
MONO BOARD PARTS - FR960					
MONO BOARD PARTS - FR960					
MISCELLANEOUS					
	FUSE 1.6A.		4822 071 51602		
	CON SCREW 6P.		2422 015 19088		
	CINCH 4P		4822 267 31823		
	CINCH 4P		4822 267 31823		
	CINCH 4P		4822 267 31823		
	CINCH 4P		4822 267 31823		
	CINCH 1P		4822 265 10981		
	CINCH 2P		4822 265 11608		
	FUSE 315mA		4822 071 53151		
	CINCH 2P		4822 265 20542		
	CINCH 1P		4822 267 31729		
	CONN. 1P.		4822 267 31996		
	CINCH 2P		4822 265 11619		
	CINCH 2P		4822 265 11619		
	CON. CLICK 4P.		4822 265 11609		
CAPACITORS					
	100nF 5% 250V		5322 121 42578		
	100nF 5% 250V		5322 121 42578		
	4700uF 20% 50V.		4822 124 80415		
	4700uF 20% 50V.		4822 124 80415		
	100nF 5% 63V.		5322 121 42386		
	100nF 5% 63V.		5322 121 42386		
	2200uF 20% 35V		4822 124 11583		
	100nF Y5V 50V		4822 126 13838		
	470nF 10% 16V.		4822 126 14583		
	6800uF 16V		4822 124 12328		
	100nF 10% X7R 50V		4822 126 14585		

MULTI-CHANNEL DECODER MODULE PARTS LIST

MULTI-CHANNEL DECODER MODULE PARTS LIST					
ST					
MISCELLANEOUS					
1003	MDM Module	3104 217 05750			
1800	Connector.	4822 267 31729			
1801	Connector.	4822 267 31448			
6800	GP1F32R.	4822 218 11487			
6801	LF33CV	4822 209 16978			

MAINS BOARD PARTS LIST

S = Safety MAINS BOARD PARTS LIST Use exact replacement part.

FR970 (continued)

2274	470nF 10% 16V.	4822 126 14583	2555	100nF Y5V 50V P80M20.	4822 126 13838
2275	1000uF 16V.	4822 124 81144	2556	100nF Y5V 50V P80M20	4822 126 13838
2276	100nF 10% X7R 50V	4822 126 14585	2557	47uF 20% 50V	4822 124 41751
2277	470nF 10% 16V.	4822 126 14583	2558	47uF 20% 50V	4822 124 41751
2278	1uF 20% 63V	4822 124 21913	2559	CER2 50V 33nF PM5	4822 126 12105
2280	100uF 20% 10V	4822 124 41584	2561	22uF 100V	4822 124 40764
2281	100nF Y5V 50V	4822 126 13838	2562	22uF 100V	4822 124 40764
2282	470nF 10% 16V.	4822 126 14583	2563	16V 2200uF 20%	4822 123 14025
2283	220uF 20% 50V.	4822 124 11769	2564	2,2uF 20% 50V	4822 124 22652
2290	10uF 20% 63V.	4822 124 40248	2565	2,2uF 20% 50V	4822 124 22652
2295	10nF 20% X7R 50V	4822 122 33177	2566	2,2uF 20% 50V	4822 124 22652
2297	10uF 20% 63V.	4822 124 40248	2567	4,7uF 20% 100V.	4822 124 40769
2298	47nF 10% X7R 63V.	4822 126 13751	2568	4,7uF 20% 100V.	4822 124 40769
2301	22nF 10%X7R 63V	5322 122 32654	2569	100pF 5% NP0 50V.	5322 122 32531
2302	22uF 50V.	4822 124 81151	2570	100pF 5% NP0 50V.	5322 122 32531
2306	10uF 20% 63V.	4822 124 40248	2571	10uF 20% 63V.	4822 124 40248
2307	4,7pF 5% NP0 50V.	5322 122 32287	2572	10uF 20% 63V.	4822 124 40248
2310	2,2uF 20% 50V	4822 124 22652	2573	150pF 2% NP0 63V.	5322 122 33538
2311	470pF 50V	5322 122 32268	2574	150pF 2% NP0 63V.	5322 122 33538
2313	220pF 5% NP0 63V	4822 122 33575	2575	10uF 20% 63V.	4822 124 40248
2314	220nF 80-20% 50V.	4822 126 13473	2576	10uF 20% 63V.	4822 124 40248
2315	22uF 50V.	4822 124 81151	2577	10nF 20% X7R 50V	4822 122 33177
2316	2,2uF 20% 50V	4822 124 22652	2578	10nF 20% X7R 50V	4822 122 33177
2319	470pF 50V	5322 122 32268	2579	2,2nF10% X7R 63V.	4822 122 33127
2321	220nF 80-20% 50V.	4822 126 13473	2580	2,2nF10% X7R 63V.	4822 122 33127
2324	4,7pF 5% NP0 50V.	5322 122 32287	2581	47uF 20% 50V	4822 124 41751
2325	220pF 5% NP0 63V	4822 122 33575	2582	47uF 20% 50V	4822 124 41751
2330	22uF 50V.	4822 124 81151	2583	2,7nF 50V	2222 861 15272
2333	220nF 80-20% 50V.	4822 126 13473	2584	2,7nF 50V	2222 861 15272
2334	2,2uF 20% 50V	4822 124 22652	2585	82pF 1% NP0 63V	4822 126 13695
2337	470pF 50V	5322 122 32268	2586	82pF 1% NP0 63V	4822 126 13695
2341	220pF 5% NP0 63V	4822 122 33575	2593	22uF 50V.	4822 124 81151
2346	22uF 50V.	4822 124 81151	2594	22uF 50V.	4822 124 81151
2347	4,7pF 5% NP0 50V.	5322 122 32287	2595	100pF 5% NP0 50V.	5322 122 32531
2349	10uF 20% 63V.	4822 124 40248	2596	100pF 5% NP0 50V.	5322 122 32531
2350	220uF 20% 10V	4822 124 40181	2599	22pF 5% 50V.	5322 122 32658
2351	47nF 10% X7R 63V.	4822 126 13751	2600	22pF 5% 50V.	5322 122 32658
2352	22uF 50V.	4822 124 81151	2603	22uF 50V.	4822 124 81151
2357	100nF 50V	4822 126 12882	2604	22uF 50V.	4822 124 81151
2358	220nF 80-20% 50V.	4822 126 13473	2605	47pF 1% NP0 63V	4822 126 13692
2359	220nF 80-20% 50V.	4822 126 13473	2606	47pF 1% NP0 63V	4822 126 13692
2360	220nF 80-20% 50V.	4822 126 13473	2607	47uF 20% 50V	4822 124 41751
2365	10nF 5% 250V.	4822 121 41857	2608	47uF 20% 50V	4822 124 41751
2371	4,7nF 10% X7R 63V	5322 126 10223	2609	220pF 5% NP0 63V	4822 122 33575
2372	4,7nF 10% X7R 63V	5322 126 10223	2610	220pF 5% NP0 63V	4822 122 33575
2373	4,7nF 10% X7R 63V	5322 126 10223	2611	100uF 20% 25V	4822 124 40207
2374	100pF 5% NP0 50V.	5322 122 32531	2612	10uF 20% 63V.	4822 124 40248
2375	100pF 5% NP0 50V.	5322 122 32531	2613	10uF 20% 63V.	4822 124 40248
2376	100pF 5% NP0 50V.	5322 122 32531	2614	100uF 20% 25V	4822 124 40207
2508	100pF 5% NP0 50V.	5322 122 32531	2615	22nF 10% X7R 63V.	5322 122 32654
2509	100pF 5% NP0 50V.	5322 122 32531	2616	22nF 10% X7R 63V.	5322 122 32654
2510	100pF 5% NP0 50V.	5322 122 32531	2617	10uF 20% 63V.	4822 124 40248
2511	100pF 5% NP0 50V.	5322 122 32531	2618	10uF 20% 63V.	4822 124 40248
2512	100pF 5% NP0 50V.	5322 122 32531	2619	100pF 5% NP0 50V.	5322 122 32531
2513	100pF 5% NP0 50V.	5322 122 32531	2620	100pF 5% NP0 50V.	5322 122 32531
2514	100pF 5% NP0 50V.	5322 122 32531	2622	100pF 5% NP0 50V.	5322 122 32531
2515	100pF 5% NP0 50V.	5322 122 32531	2623	100pF 5% NP0 50V.	5322 122 32531
2516	100pF 5% NP0 50V.	5322 122 32531	2624	100pF 5% NP0 50V.	5322 122 32531
2517	100pF 5% NP0 50V.	5322 122 32531	2625	100pF 5% NP0 50V.	5322 122 32531
2518	100pF 5% NP0 50V.	5322 122 32531	2626	100pF 5% NP0 50V.	5322 122 32531
2519	100pF 5% NP0 50V.	5322 122 32531	2627	100pF 5% NP0 50V.	5322 122 32531
2520	100pF 5% NP0 50V.	5322 122 32531	2628	100nF 10% X7R 50V.	4822 126 14585
2521	100pF 5% NP0 50V.	5322 122 32531	2629	47uF 20% 50V	4822 124 41751
2522	100pF 5% NP0 50V.	5322 122 32531	2630	100nF 5% 63V.	5322 121 42386
2525	100pF 5% NP0 50V.	5322 122 32531	2631	100nF 5% 63V.	5322 121 42386
2526	100pF 5% NP0 50V.	5322 122 32531	2632	100nF 5% 63V.	5322 121 42386
2527	47uF 20% 50V	4822 124 41751	2633	22nF 10% X7R 63V.	5322 122 32654
2528	47uF 20% 50V	4822 124 41751	2634	22nF 10% X7R 63V.	5322 122 32654
2529	100nF Y5V 50V P80M20.	4822 126 13838	2635	22nF 10% X7R 63V.	5322 122 32654
2530	100nF Y5V 50V P80M20.	4822 126 13838	2636	100nF 10% X7R 50V.	4822 126 14585
2531	220nF 100V	4822 121 41673	2637	47uF 20% 50V	4822 124 41751
2532	220nF 100V	4822 121 41673	2638	100nF 10% X7R 50V.	4822 126 14585
2533	10uF 20% 63V.	4822 124 40248	2639	47uF 20% 50V	4822 124 41751
2534	10uF 20% 63V.	4822 124 40248	2641	1uF 20% 63V	4822 124 21913
2535	10uF 20% 63V.	4822 124 40248	2642	1uF 20% 63V	4822 124 21913
2536	10uF 20% 63V.	4822 124 40248	2643	1uF 20% 63V	4822 124 21913
2537	10uF 20% 63V.	4822 124 40248	2644	1uF 20% 63V	4822 124 21913
2538	10uF 20% 63V.	4822 124 40248	2647	1uF 20% 63V	4822 124 21913
2539	100uF 20% 25V	4822 124 40207	2648	1uF 20% 63V	4822 124 21913
2540	47uF 20% 25V.	4822 124 40433	2649	1uF 20% 63V	4822 124 21913
2541	10uF 20% 63V.	4822 124 40248	2650	1uF 20% 63V	4822 124 21913
2542	10uF 20% 63V.	4822 124 40248	2655	1uF 20% 63V	4822 124 21913
2543	100uF 10V	4822 124 41584	2656	1uF 20% 63V	4822 124 21913
2544	100uF 10V	4822 124 41584	2659	2,2uF 20% 50V	4822 124 22652
2545	100pF 5% NP0 50V.	5322 122 32531	2660	2,2uF 20% 50V	4822 124 22652
2546	100pF 5% NP0 50V.	5322 122 32531	2661	2,2uF 20% 50V	4822 124 22652
2549	22pF 5% 50V.	5322 122 32658	2662	2,2uF 20% 50V	4822 124 22652
2550	22pF 5% 50V.	5322 122 32658	2663	2,2uF 20% 50V	4822 124 22652
2551	100nF Y5V 50V P80M20.	4822 126 13838	2664	2,2uF 20% 50V	4822 124 22652
2552	100nF Y5V 50V P80M20.	4822 126 13838	2665	47nF 5% 250V.	4822 121 43526
2553	47uF 20% 50V	4822 124 41751	2666	47nF 5% 250V.	4822 121 43526
2554	47uF 20% 50V	4822 124 41751	2667	47nF 5% 250V.	4822 121 43526

S = Safety Part Be sure to use exact replacement part.

FR970 (continued)

2668	47nF 5% 250V.	4822	121	43526	2912	22uF 50V.	4822	124	81151
2669	47nF 5% 250V.	4822	121	43526	2913	2,2uF 20% 50V.	4822	124	22652
2670	47nF 5% 250V.	4822	121	43526	2914	470pF 50V.	5322	122	32268
2671	6,8nF 10% X7R 63V	5322	122	31866	2916	220nF 80-20% 50V.	4822	126	13473
2672	6,8nF 10% X7R 63V	5322	122	31866	2917	4,7nF 10% X7R 63V	5322	126	10223
2673	6,8nF 10% X7R 63V	5322	122	31866	2918	220pF 5% NP0 63V	4822	122	33575
2674	6,8nF 10% X7R 63V	5322	122	31866	2919	22uF 50V.	4822	124	81151
2675	6,8nF 10% X7R 63V	5322	122	31866	2920	220nF 80-20% 50V.	4822	126	13473
2676	6,8nF 10% X7R 63V	5322	122	31866	2921	220nF 80-20% 50V.	4822	126	13473
2677	22nF 10% X7R 63V.	5322	122	32654	2922	4,7pF 5% NP0 50V.	5322	122	32287
2678	22nF 10% X7R 63V.	5322	122	32654	2923	22uF 50V.	4822	124	81151
2679	22nF 10% X7R 63V.	5322	122	32654	2924	10uF 20% 63V.	4822	124	40248
2680	22nF 10% X7R 63V.	5322	122	32654	2925	220uF 20% 10V	4822	124	40181
2681	22nF 10% X7R 63V.	5322	122	32654	2926	100nF 10% X7R 50V	4822	126	14585
2682	22nF 10% X7R 63V.	5322	122	32654	2928	10nF 20% X7R 50V	4822	122	33177
2683	22nF 10% X7R 63V.	5322	122	32654	2930	100pF 5% NP0 50V.	5322	122	32531
2684	22nF 10% X7R 63V.	5322	122	32654	2931	100pF 5% NP0 50V.	5322	122	32531
2685	22nF 10% X7R 63V.	5322	122	32654	2932	100pF 5% NP0 50V.	5322	122	32531
2686	22nF 10% X7R 63V.	5322	122	32654	2933	100pF 5% NP0 50V.	5322	122	32531
2687	22nF 10% X7R 63V.	5322	122	32654	2937	220pF 50V	4822	126	10794
2688	22nF 10% X7R 63V.	5322	122	32654		RESISTORS			
2689	68nF 5% 63V	5322	121	42465	3251	470R 5% 0,1W	4822	051	20471
2690	68nF 5% 63V	5322	121	42465	3252	100K 1% 0,1W	4822	117	10837
2691	68nF 5% 63V	5322	121	42465	3253	100K 1% 0,1W	4822	117	10837
2692	68nF 5% 63V	5322	121	42465	S 3254	0R33 5% 2W	4822	117	11342
2693	68nF 5% 63V	5322	121	42465	3256	10K 1% 0,1W.	4822	117	10833
2694	68nF 5% 63V	5322	121	42465	S 3257	0R33 5% 2W	4822	117	11342
2695	68nF 5% 63V	5322	121	42465	3258	180K 5% 0,1W	4822	051	20184
2696	68nF 5% 63V	5322	121	42465	3259	680R 1% 0,1W	4822	117	10361
2697	68nF 5% 63V	5322	121	42465	3260	47K 1% 0,1W.	4822	117	10834
2698	68nF 5% 63V	5322	121	42465	3263	680R 1% 0,1W	4822	117	10361
2699	68nF 5% 63V	5322	121	42465	3264	100K 1% 0,1W	4822	117	10837
2700	68nF 5% 63V	5322	121	42465	3266	22K 5% 0,1W.	4822	051	20223
2805	100nF 10% X7R 50V	4822	126	14585	3267	3K9 5% 0,1W.	4822	051	20392
2806	100nF 10% X7R 50V	4822	126	14585	3268	3K3 5% 0,1W.	4822	051	20332
2807	100nF 10% X7R 50V.	4822	126	14585	3269	3K3 5% 0,1W.	4822	051	20332
2809	10nF 10% X7R 63V.	5322	122	34098	S 3270	47R 5% 0,33W	4822	052	10479
2810	220uF 20% 10V.	4822	124	12245	S 3271	47R 5% 0,33W	4822	052	10479
2811	10nF 10% X7R 63V.	5322	122	34098	3272	39K 5% 0,1W.	4822	051	20393
2812	220uF 20% 25V	4822	124	80144	S 3291	10R 5% 0,33W	4822	052	10109
2813	1uF 20% 63V	4822	124	21913	3292	15K 1% 0,1W.	4822	116	83933
2814	47pF 1% NP0 63V	4822	126	13692	3293	10K 1% 0,1W.	4822	117	10833
2815	100nF 10% X7R 16V.	4822	126	14305	3294	10K 1% 0,1W.	4822	117	10833
2816	22nF 10% X7R 63V.	5322	122	32654	3295	15K 1% 0,1W.	4822	116	83933
2817	1uF 20% 63V	4822	124	21913	S 3301	47R 5% 0,33W	4822	052	10479
2818	22nF 10% X7R 63V.	5322	122	32654	3304	56K 1% 0,1W.	4822	117	11148
2821	22nF 10% X7R 63V.	5322	122	32654	3305	47K 1% 0,1W.	4822	117	10834
2822	22nF 10% X7R 63V.	5322	122	32654	3306	47K 1% 0,1W.	4822	117	10834
2831	100pF 5% NP0 50V.	5322	122	32531	3307	47K 1% 0,1W.	4822	117	10834
2832	100nF 10% X7R 50V	4822	126	14585	3308	56K 1% 0,1W.	4822	117	11148
2833	22nF 10% X7R 63V.	5322	122	32654	3309	4R7 1% 0,6W.	4822	050	24708
2834	100pF 5% NP0 50V.	5322	122	32531	3310	1K8 5% 0,1W.	4822	051	20182
2837	100pF 5% NP0 50V.	5322	122	32531	3311	4R7 1% 0,6W.	4822	050	24708
2851	22pF 5% 50V.	5322	122	32658	3314	56K 1% 0,1W.	4822	117	11148
2852	22pF 5% 50V.	5322	122	32658	3315	1K8 5% 0,1W.	4822	051	20182
2853	22uF 50V.	4822	124	81151	3316	4R7 1% 0,6W.	4822	050	24708
2854	22uF 50V.	4822	124	81151	3319	56K 1% 0,1W.	4822	117	11148
2855	100pF 5% NP0 50V.	5322	122	32531	3322	56K 1% 0,1W.	4822	117	11148
2856	100pF 5% NP0 50V.	5322	122	32531	3323	1K8 5% 0,1W.	4822	051	20182
2857	100nF 10% X7R 50V.	4822	126	14585	3324	56K 1% 0,1W.	4822	117	11148
2858	47uF 20% 50V	4822	124	41751	3326	33K 5% 0,1W.	4822	051	20333
2860	47uF 20% 50V	4822	124	41751	3327	220R 1% 0,1W	4822	117	11503
2861	22nF 10% X7R 63V.	5322	122	32654	S 3328	47R 5% 0,33W	4822	052	10479
2868	220pF 50V	4822	122	33575	3329	100K 1% 0,1W	4822	117	10837
2869	220pF 50V	4822	122	33575	3330	10K 1% 0,1W.	4822	117	10833
2871	10nF 20% X7R 50V	4822	122	33177	3334	1K 2% 0,25W.	4822	051	10102
2872	10nF 20% X7R 50V	4822	122	33177	3335	1K 2% 0,25W.	4822	051	10102
2873	10nF 20% X7R 50V	4822	122	33177	3336	1K 2% 0,25W.	4822	051	10102
2875	10nF 20% X7R 50V	4822	122	33177	S 3337	0R22 5% 1W	4822	117	11744
2876	10nF 20% X7R 50V	4822	122	33177	S 3338	0R22 5% 1W	4822	117	11744
2877	100nF 5% 63V.	5322	121	42386	3339	1K5 1% 0,1W.	4822	117	11139
2878	100nF 5% 63V.	5322	121	42386	3340	1K5 1% 0,1W.	4822	117	11139
2879	100nF 5% 63V.	5322	121	42386	S 3341	0R22 5% 1W	4822	117	11744
2880	100nF 5% 63V.	5322	121	42386	S 3342	0R22 5% 1W	4822	117	11744
2881	100nF 5% 63V.	5322	121	42386	3343	1K5 1% 0,1W.	4822	117	11139
2882	100nF 5% 63V.	5322	121	42386	S 3344	0R22 5% 1W	4822	117	11744
2883	1nF 50V	5322	126	10511	S 3345	0R22 5% 1W	4822	117	11744
2884	1nF 50V	5322	126	10511	S 3352	4R7 5% 1W.	4822	053	10478
2885	1nF 50V	5322	126	10511	S 3353	4R7 5% 1W.	4822	053	10478
2886	1nF 50V	5322	126	10511	S 3354	4R7 5% 1W.	4822	053	10478
2887	2n2 50V	4822	122	33127	3356	47K 1% 0,1W.	4822	117	10834
2888	2n2 50V	4822	122	33127	3357	10K 1% 0,6W.	4822	050	21003
2901	22uF 50V.	4822	124	81151	3358	1K 2% 0,25W.	4822	051	10102
2902	10uF 20% 63V.	4822	124	40248	3359	100K 1% 0,1W	4822	117	10837
2903	4,7pF 5% NP0 50V.	5322	122	32287	3360	10K 1% 0,1W.	4822	117	10833
2904	47nF10% X7R 63V	4822	126	13751	3361	470R 5% 0,1W	4822	051	20471
2905	2,2uF 20% 50V	4822	124	22652	3362	470R 5% 0,1W	4822	051	20471
2906	470pF 50V	5322	122	32268	3363	470R 5% 0,1W	4822	051	20471
2908	220nF 80-20% 50V.	4822	126	13473	3513	47K 5% 0,1W.	4822	117	10834
2909	4,7nF 10% X7R 63V	5322	126	10223	3514	47K 5% 0,1W.	4822	117	10834
2910	220pF 5% NP0 63V	4822	122	33575	3515	470R 5% 0,1W	4822	051	20471
2911	22nF 10% X7R 63V.	5322	122	32654	3516	470R 5% 0,1W	4822	051	20471

S = Safety Part Be sure to use exact replacement part.

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3517	39K	5%	0,1W	4822	051	20393	S	3629	10R	5%	0,33W	4822	052	10109
3519	18K	5%	0,1W	4822	117	10965		3630	1K	1%	0,4W	4822	050	11002
3520	18K	5%	0,1W	4822	117	10965		3631	1K	1%	0,4W	4822	050	11002
3520	8K2	5%	0,1W	4822	051	20822		3632	1K	1%	0,4W	4822	050	11002
3521	39K	5%	0,1W	4822	051	20393		3633	1K	2%	0,25W	4822	051	10102
3522	39K	5%	0,1W	4822	051	20393		3634	1K	2%	0,25W	4822	051	10102
3523	18K	5%	0,1W	4822	117	10965		3635	1K	2%	0,25W	4822	051	10102
3524	18K	5%	0,1W	4822	117	10965		3636	470R	5%	0,1W	4822	051	20471
3525	39K	5%	0,1W	4822	051	20393		3637	470R	5%	0,1W	4822	051	20471
3526	39K	5%	0,1W	4822	051	20393		3641	100K	1%	0,1W	4822	117	10837
3527	18K	5%	0,1W	4822	117	10965		3642	100K	1%	0,1W	4822	117	10837
3528	18K	5%	0,1W	4822	117	10965		3643	100K	1%	0,1W	4822	117	10837
3529	470R	5%	0,1W	4822	051	20471		3644	100K	1%	0,1W	4822	117	10837
3530	470R	5%	0,1W	4822	051	20471		3649	100K	1%	0,1W	4822	117	10837
3531	39K	5%	0,1W	4822	051	20393		3650	100K	1%	0,1W	4822	117	10837
3532	39K	5%	0,1W	4822	051	20393		3655	100K	1%	0,1W	4822	117	10837
3533	18K	5%	0,1W	4822	117	10965		3656	100K	1%	0,1W	4822	117	10837
3534	18K	5%	0,1W	4822	117	10965		3659	2K7	1%	0,1W 0805	4822	117	12955
3537	39K	5%	0,1W	4822	051	20393		3660	2K7	1%	0,1W 0805	4822	117	12955
3538	39K	5%	0,1W	4822	051	20393		3661	5K6	5%	0,1W 0805	4822	051	20562
3539	18K	5%	0,1W	4822	117	10965		3662	5K6	5%	0,1W 0805	4822	051	20562
3540	18K	5%	0,1W	4822	117	10965		3663	2K7	1%	0,1W 0805	4822	117	12955
3541	39K	5%	0,1W	4822	051	20393		3664	2K7	1%	0,1W 0805	4822	117	12955
3542	39K	5%	0,1W	4822	051	20393		3665	5K6	5%	0,1W 0805	4822	051	20562
3543	1K5	5%	0,25W	4822	117	11139		3666	5K6	5%	0,1W 0805	4822	051	20562
3544	1K5	5%	0,25W	4822	117	11139		3667	2K7	1%	0,1W 0805	4822	117	12955
3545	3K3	5%	0,1W	4822	051	20332		3668	2K7	1%	0,1W 0805	4822	117	12955
3546	3K3	5%	0,1W	4822	051	20332		3669	5K6	5%	0,1W 0805	4822	051	20562
3551	270R	1%	0,1W	4822	117	11504		3670	5K6	5%	0,1W 0805	4822	051	20562
3552	270R	1%	0,1W	4822	117	11504		3671	100K	1%	0,1W	4822	117	10837
3553	270R	1%	0,1W	4822	117	11504		3672	100K	1%	0,1W	4822	117	10837
3554	270R	1%	0,1W	4822	117	11504		3673	2K2	1%	0,1W	4822	117	11449
3555	3K3	5%	0,1W	4822	051	20332		3674	2K2	1%	0,1W	4822	117	11449
3556	270R	1%	0,1W	4822	117	11504		3675	100R	5%	0,1W	4822	051	20101
3557	270R	1%	0,1W	4822	117	11504		3676	100R	5%	0,1W	4822	051	20101
3560	1K	2%	0,25W	4822	051	10102		3677	100K	1%	0,1W	4822	117	10837
S 3561	4R7	5%	0,33W	4822	052	10478		3678	100K	1%	0,1W	4822	117	10837
3562	470R	5%	0,1W	4822	051	20471		3679	2K2	1%	0,1W	4822	117	11449
3563	1K	2%	0,25W	4822	051	10102		3680	2K2	1%	0,1W	4822	117	11449
3566	270R	5%	0,5W	4822	116	83876		3681	100R	5%	0,1W	4822	051	20101
3567	270R	5%	0,5W	4822	116	83876		3682	100R	5%	0,1W	4822	051	20101
3571	47K	1%	0,1W	4822	117	10834		3683	100K	1%	0,1W	4822	117	10837
3572	47K	1%	0,1W	4822	117	10834		3684	100K	1%	0,1W	4822	117	10837
3573	1K	2%	0,25W	4822	051	10102		3685	2K2	1%	0,1W	4822	117	11449
3574	1K	2%	0,25W	4822	051	10102		3686	2K2	1%	0,1W	4822	117	11449
3575	100K	1%	0,1W	4822	117	10837		3687	100R	5%	0,1W	4822	051	20101
3576	100K	1%	0,1W	4822	117	10837		3688	100R	5%	0,1W	4822	051	20101
3577	560R	5%	0,1W	4822	051	20561		3689	2K2	1%	0,1W	4822	117	11449
3578	560R	5%	0,1W	4822	051	20561		3690	2K2	1%	0,1W	4822	117	11449
3579	390K	5%	0,1W	4822	051	20394		3691	2K2	5%	0,5W	4822	116	52256
3580	390K	5%	0,1W	4822	051	20394		3692	2K2	1%	0,1W	4822	117	11449
3581	27K	5%	0,1W	4822	051	20273		3693	2K2	1%	0,1W	4822	117	11449
3582	27K	5%	0,1W	4822	051	20273		3694	2K2	5%	0,5W	4822	116	52256
3583	8K2	1%	0,6W	4822	116	52303		3695	220K	1%	0,1W RC12H	4822	117	13579
3584	8K2	1%	0,6W	4822	116	52303		3696	10K	1%	0,1W	4822	117	10833
3585	2K2	1%	0,1W	4822	117	11449		3697	22K	5%	0,5W	4822	116	52257
3586	2K2	1%	0,1W	4822	117	11449		3698	220K	1%	0,1W RC12H	4822	117	13579
3587	12K	1%	0,1W	4822	117	11383		3699	10K	1%	0,1W	4822	117	10833
3588	12K	5%	0,5W	4822	116	52238		3700	22K0	5%	0,1W	4822	051	20223
3589	10K	1%	0,1W	4822	117	10833		3801	68R	1%	0,1W	4822	117	12521
3590	10K	1%	0,1W	4822	117	10833		3802	68R	1%	0,1W	4822	117	12521
3591	100K	1%	0,1W	4822	117	10837		3803	68R	1%	0,1W	4822	117	12521
3592	100K	1%	0,1W	4822	117	10837		3804	68R	1%	0,1W	4822	117	12521
3593	2K2	1%	0,1W	4822	117	11449		3805	1K	2%	0,25W	4822	051	10102
3594	2K2	1%	0,1W	4822	117	11449		3806	1K	2%	0,25W	4822	051	10102
3595	4K7	5%	0,1W	4822	051	20472	S	3807	4R7	5%	0,33W	4822	052	10478
3596	4K7	5%	0,1W	4822	051	20472	S	3808	4R7	5%	0,33W	4822	052	10478
3597	12K	5%	0,5W	4822	116	52238		3810	2K2	1%	0,1W	4822	117	11449
3598	12K	5%	0,5W	4822	116	52238		3812	470R	5%	0,1W	4822	051	20471
3601	100R	5%	0,1W	4822	051	20101		3813	120R	5%	0,1W	4822	051	20121
3602	100R	5%	0,1W	4822	051	20101		3815	68R	1%	0,1W	4822	117	12521
3603	100K	1%	0,1W	4822	117	10837		3816	68R	1%	0,1W	4822	117	12521
3604	100K	1%	0,1W	4822	117	10837		3817	270R	1%	0,1W	4822	117	11504
3605	12K	1%	0,1W	4822	117	11383		3818	220R	1%	0,1W	4822	117	11503
3606	12K	1%	0,1W	4822	117	11383		3831	100R	5%	0,1W	4822	051	20101
3607	33K	5%	0,1W	4822	051	20333		3832	47R	5%	0,1W	4822	051	20479
3608	33K	5%	0,1W	4822	051	20333		3834	100R	5%	0,1W	4822	051	20101
3609	120R	5%	0,1W	4822	051	20121		3851	4K7	5%	0,1W	4822	051	20472
3610	120R	5%	0,1W	4822	051	20121		3852	22K	5%	0,1W	4822	051	20223
3611	47K	1%	0,1W	4822	117	10834		3853	10K	1%	0,1W	4822	117	10833
3612	47K	1%	0,1W	4822	117	10834		3854	4K7	5%	0,1W	4822	051	20472
3613	470R	5%	0,1W	4822	051	20471	S	3855	270R	1%	0,1W	4822	116	83876
3614	470R	5%	0,1W	4822	051	20471	S	3856	270R	1%	0,1W	4822	117	11504
3615	470R	5%	0,1W	4822	051	20471		3857	100K	1%	0,1W	4822	117	10837
3616	470R	5%	0,1W	4822	051	20471		3858	100K	1%	0,1W	4822	117	10837
3618	47K	1%	0,1W	4822	117	10834		3859	10K	1%	0,1W	4822	117	10833
3619	47K	1%	0,1W	4822	117	10834		3860	10K	1%	0,1W	4822	117	10833
3620	100R	5%	0,1W	4822	116	52175		3871	3K3	5%	0,1W	4822	051	20332
3621	100R	5%	0,1W	4822	051	20101		3872	3K3	5%	0,1W	4822	051	20332
3622	120R	5%	0,1W	4822	051	20121		3873	1K	2%	0,25W	4822	051	10102
3623	120R	5%	0,1W	4822	051	20121		3874	1K	2%	0,25W	4822	051	10102
S 3627	10R	5%	0,33W	4822	052	10109		3875	3K3	5%	0,1W	4822	051	20332

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3877	1K	2%	0,25W.	4822 051 10102	4524	OR0 JUMP. (0805)	4822 051 20008
3878	1K	2%	0,25W.	4822 051 10102	4526	OR0 JUMP. (0805)	4822 051 20008
3879	3K3	5%	0,1W.	4822 051 20332	4528	OR0 JUMP. (0805)	4822 051 20008
3880	3K3	5%	0,1W.	4822 051 20332	4529	OR0 JUMP. (0805)	4822 051 20008
3881	1K	2%	0,25W.	4822 051 10102	4530	OR0 JUMP. (0805)	4822 051 20008
3882	1K	2%	0,25W.	4822 051 10102	4531	OR0 JUMP. (0805)	4822 051 20008
3883	12K	1%	0,1W.	4822 117 11383	4532	OR0 JUMP. (0805)	4822 051 20008
3884	12K	1%	0,1W.	4822 117 11383	4533	OR0 JUMP. (0805)	4822 051 20008
3885	12K	1%	0,1W.	4822 117 11383	4537	OR0 JUMP. (0805)	4822 051 20008
3886	12K	1%	0,1W.	4822 117 11383	4538	OR0 JUMP. (0805)	4822 051 20008
3887	12K	1%	0,1W.	4822 117 11383	4539	OR0 JUMP. (0805)	4822 051 20008
3888	12K	1%	0,1W.	4822 117 11383	4540	OR0 JUMP. (0805)	4822 051 20008
3889	2K2	1%	0,1W.	4822 117 11449	4541	OR0 JUMP. (0805)	4822 051 20008
3890	2K2	1%	0,1W.	4822 117 11449	4542	OR0 JUMP. (0805)	4822 051 20008
3891	5K6	5%	0,1W 0805	4822 051 20562	4543	OR0 JUMP. (0805)	4822 051 20008
3892	5K6	5%	0,1W 0805	4822 051 20562	4544	OR0 JUMP. (0805)	4822 051 20008
3893	5K6	5%	0,1W 0805	4822 051 20562	4545	OR0 JUMP. (0805)	4822 051 20008
3895	5K6	5%	0,1W 0805	4822 051 20562	4548	OR0 JUMP. (0805)	4822 051 20008
3896	5K6	5%	0,1W 0805	4822 051 20562	4550	OR0 JUMP. (0805)	4822 051 20008
S 3901	47R	5%	0,33W	4822 052 10479	4551	OR0 JUMP. (0805)	4822 051 20008
3902	56K	1%	0,1W.	4822 117 11148	4552	OR0 JUMP. (0805)	4822 051 20008
3903	47K	1%	0,1W.	4822 117 10834	4553	OR0 JUMP. (0805)	4822 051 20008
3904	47K	5%	0,5W.	4822 116 83884	4555	OR0 JUMP. (0805)	4822 051 20008
3905	4R7	1%	0,6W.	4822 050 24708	4556	OR0 JUMP. (0805)	4822 051 20008
3906	56K	1%	0,1W.	4822 117 11148	4557	OR0 JUMP. (0805)	4822 051 20008
3908	1K8	5%	0,1W.	4822 051 20182	4558	OR0 JUMP. (0805)	4822 051 20008
3910	4R7	1%	0,6W.	4822 050 24708	4559	OR0 JUMP. (0805)	4822 051 20008
3911	56K	1%	0,1W.	4822 117 11148	4560	OR0 JUMP. (0805)	4822 051 20008
3913	1K8	5%	0,1W.	4822 051 20182	4563	OR0 JUMP. (0805)	4822 051 20008
3914	56K	1%	0,1W.	4822 117 11148	4564	OR0 JUMP. (0805)	4822 051 20008
S 3915	47R	5%	0,33W	4822 052 10479	4565	OR0 JUMP. (0805)	4822 051 20008
S 3916	4R7	5%	1W.	4822 053 10478	4566	OR0 JUMP. (0805)	4822 051 20008
3917	33K	1%	0,6W.	4822 050 23303	4642	OR0 JUMP. (0805)	4822 051 20008
3918	220R	1%	0,1W	4822 117 11503	4644	OR0 JUMP. (0805)	4822 051 20008
S 3919	4R7	5%	1W.	4822 053 10478	4651	OR0 JUMP. (0805)	4822 051 20008
3920	100K	1%	0,1W	4822 117 10837	4652	OR0 JUMP. (0805)	4822 051 20008
3921	1K	2%	0,25W.	4822 051 10102	4653	OR0 JUMP. (0805)	4822 051 20008
3922	1K	2%	0,25W.	4822 051 10102	4801	OR0 JUMP. (0805)	4822 051 20008
3925	10K	1%	0,1W.	4822 117 10833	4802	OR0 JUMP. (0805)	4822 051 20008
S 3926	OR22	5%	1W	4822 117 11744	4803	OR0 JUMP. (0805)	4822 051 20008
S 3927	OR22	5%	1W	4822 117 11744	4804	OR0 JUMP. (0805)	4822 051 20008
3928	1K5	1%	0,1W.	4822 117 11139	4805	OR0 JUMP. (0805)	4822 051 20008
3929	1K5	1%	0,1W.	4822 117 11139	4832	OR0 JUMP. (0805)	4822 051 20008
S 3930	OR22	5%	1W	4822 117 11744	4833	OR0 JUMP. (0805)	4822 051 20008
S 3931	OR22	5%	1W	4822 117 11744	4902	OR0 JUMP. (0805)	4822 051 20008
3932	47K	1%	0,1W.	4822 117 10834	4903	OR0 JUMP. (0805)	4822 051 20008
3933	10K	1%	0,6W.	4822 050 21003	4904	OR0 JUMP. (0805)	4822 051 20008
3935	1K	2%	0,25W.	4822 051 10102	4905	OR0 JUMP. (0805)	4822 051 20008
3936	100K	1%	0,1W	4822 117 10837	4908	OR0 JUMP. (0805)	4822 051 20008
3937	10K	1%	0,1W.	4822 117 10833	4909	OR0 JUMP. (0805)	4822 051 20008
3938	2K2	1%	0,1W.	4822 117 11449	4910	OR0 JUMP. (0805)	4822 051 20008
3939	2K2	1%	0,1W.	4822 117 11449	4914	OR0 JUMP. (0805)	4822 051 20008
3940	220R	1%	0,1W	4822 117 11503	4915	OR0 JUMP. (0805)	4822 051 20008
3941	220R	1%	0,1W	4822 117 11503	4916	OR0 JUMP. (0805)	4822 051 20008
3943	10K	1%	0,1W.	4822 117 10833	4917	OR0 JUMP. (0805)	4822 051 20008
3944	220R	1%	0,1W.	4822 117 11503	4918	OR0 JUMP. (0805)	4822 051 20008
3945	220R	1%	0,1W.	4822 117 11503		COLLS	
3946	470R	5%	0,1W.	4822 051 20471	5302	COIL	4822 157 62255
3947	470R	5%	0,1W.	4822 051 20471	5304	COIL	4822 157 62255
3948	220R	1%	0,1W.	4822 117 11503	5306	COIL	4822 157 62255
3949	220R	1%	0,1W.	4822 117 11503	5901	COIL	4822 157 62255
3950	100R	5%		4822 051 20101	5902	COIL	4822 157 62255
3951	100R	5%		4822 051 20101		SEMICONDUCTORS	
4251	OR0 JUMP. (0805)			4822 051 20008	S 6251	DIODE, D5SBA20	4822 130 82078
4252	OR0 JUMP. (0805)			4822 051 20008	6257	DIODE, 1N4003G	4822 130 31878
4254	OR0 JUMP. (0805)			4822 051 20008	6258	DIODE, 1N4003G	4822 130 31878
4255	OR0 JUMP. (0805)			4822 051 20008	6259	DIODE, 1N4003G	4822 130 31878
4256	OR0 JUMP. (0805)			4822 051 20008	6260	DIODE, L7812CP	4822 209 33575
4257	OR0 JUMP. (0805)			4822 051 20008	6261	DIODE, 1N4003G	4822 130 31878
4258	OR0 JUMP. (0805)			4822 051 20008	6262	DIODE, 1N4003G	4822 130 31878
4260	OR0 JUMP. (0805)			4822 051 20008	6263	DIODE, 1N4003G	4822 130 31878
4283	OR0 JUMP. (0805)			4822 051 20008	6265	DIODE, L7805CP	4822 209 31841
4284	OR0 JUMP. (0805)			4822 051 20008	6267	DIODE, L7805CP	4822 209 31841
4285	OR0 JUMP. (0805)			4822 051 20008	6268	DIODE, 1N4003G	4822 130 31878
4287	OR0 JUMP. (0805)			4822 051 20008	6270	DIODE, BZX79-B6V8	4822 130 34278
4320	OR0 JUMP. (0805)			4822 051 20008	6271	DIODE, 1N4148	4822 130 30621
4501	OR0 JUMP. (0805)			4822 051 20008	6274	DIODE, 1N4003G	4822 130 31878
4502	OR0 JUMP. (0805)			4822 051 20008	6275	DIODE, 1N4003G	4822 130 31878
4503	OR0 JUMP. (0805)			4822 051 20008	6276	DIODE, BZX79-B5V6	4822 130 34173
4504	OR0 JUMP. (0805)			4822 051 20008	6279	DIODE, 1N4148	4822 130 30621
4506	OR0 JUMP. (0805)			4822 051 20008	6280	DIODE, BZX79-B10	4822 130 61219
4513	OR0 JUMP. (0805)			4822 051 20008	6281	DIODE, BZX79-B22	4822 130 34441
4514	OR0 JUMP. (0805)			4822 051 20008	6289	DIODE, 1N4148	4822 130 30621
4515	OR0 JUMP. (0805)			4822 051 20008	6290	DIODE, 1N4148	4822 130 30621
4516	OR0 JUMP. (0805)			4822 051 20008	6304	DIODE, BZX79-B3V3	5322 130 31504
4517	OR0 JUMP. (0805)			4822 051 20008	6305	DIODE, 1N4148	4822 130 30621
4518	OR0 JUMP. (0805)			4822 051 20008	6501	DIODE, 1N4148	4822 130 30621
4519	OR0 JUMP. (0805)			4822 051 20008	6601	DIODE, 1N4148	4822 130 30621
4520	OR0 JUMP. (0805)			4822 051 20008	6602	DIODE, 1N4148	4822 130 30621
4521	OR0 JUMP. (0805)			4822 051 20008	6641	DIODE, 1N4148	4822 130 30621
4522	OR0 JUMP. (0805)			4822 051 20008	6642	DIODE, 1N4148	4822 130 30621
4523	OR0 JUMP. (0805)			4822 051 20008	6643	DIODE, 1N4148	4822 130 30621

S = Safety Part Be sure to use exact replacement part.

FR970 (continued)

6644	DIODE, 1N4148	4822	130	30621	2256	47nF 5% 250V	4822	121	43526
6645	DIODE, 1N4148	4822	130	30621	2259	4700uF 20% 50V	4822	124	80415
6646	DIODE, 1N4148	4822	130	30621	2260	4700uF 20% 50V	4822	124	80415
6647	DIODE, 1N4148	4822	130	30621	2262	4700uF 20% 63V	4822	124	12423
6648	DIODE, 1N4148	4822	130	30621	2264	4700uF 20% 63V	4822	124	12423
6649	DIODE, 1N4003G	4822	130	31878	2266	100nF 5% 63V	5322	121	42386
S 6650	DIODE, BZX79-B10	4822	130	61219	2268	100nF 5% 63V	5322	121	42386
6801	DIODE, BZX79-B6V8	4822	130	34278	2269	2200uF 20% 35V	4822	124	11583
6801	DIODE, LF33CV	4822	209	16978	2270	100nF 50V P80M20	4822	126	13838
6802	DIODE, BZX79-B6V8	4822	130	34278	2271	470nF 10% 16V	4822	126	14583
6803	DIODE, BZX79-B6V8	4822	130	34278	2272	6800uF 16V	4822	124	12328
6804	DIODE, BZX79-B6V8	4822	130	34278	2273	100nF 10% 50V	4822	126	14585
6805	DIODE, BZX79-B6V8	4822	130	34278	2274	470nF 10% 16V	4822	126	14583
6806	DIODE, BZX79-B6V8	4822	130	34278	2275	1000uF 16V	4822	124	81144
6807	DIODE, BZX79-B6V8	4822	130	34278	2276	100nF 10% 50V	4822	126	14585
6808	DIODE, BZX79-B6V8	4822	130	34278	2277	470nF 10% 16V	4822	126	14583
6809	DIODE, 1N4148	4822	130	30621	2278	1uF 20% 63V	4822	124	21913
6831	DIODE, 1N4148	4822	130	30621	2280	100uF 20% 10V	4822	124	41584
6832	DIODE, 1N4148	4822	130	30621	2281	100nF 50V P80M20	4822	126	13838
6902	DIODE, 1N4148	4822	130	30621	2282	470nF 10% 16V	4822	126	14583
6903	DIODE, BZX79-B3V3	5322	130	31504	2290	10uF 20% 63V	4822	124	40248
7253	TRANSISTOR, BC846B	5322	130	60159	2295	10nF 20% X7R 50V	4822	122	33177
7255	TRANSISTOR, BC856B	4822	130	60373	2298	22nF 10% X7R 63V	5322	122	32654
7256	TRANSISTOR, BC846B	5322	130	60159	2299	10uF 20% 100V	5322	124	40641
7257	TRANSISTOR, BC327-25	4822	130	41246	2301	22nF 10% X7R 63V	5322	122	32654
7258	TRANSISTOR, BC327-25	4822	130	41246	2303	22uF 100 V	4822	124	40764
7259	TRANSISTOR, BC846B	5322	130	60159	2305	10uF 20% 100V	5322	124	40641
7260	TRANSISTOR, BC846B	5322	130	60159	2306	10uF 20% 63V	4822	124	40248
7261	TRANSISTOR, BC856B	4822	130	60373	2308	10pF 5% NPO 63V	5322	122	32448
7301	IC, STK496-270	4822	209	17447	-2309	10pF 5% NPO 63V	5322	122	32448
7304	TRANSISTOR, BC846B	5322	130	60159	2310	2,2uF 20% 50V	4822	124	22652
7305	TRANSISTOR, BC846B	5322	130	60159	2311	470pF 50V	5322	122	32268
7306	TRANSISTOR, BC846B	5322	130	60159	2313	220pF 5% NPO 63V	4822	122	33575
7307	TRANSISTOR, BC846B	5322	130	60159	2314	220nF 80- 20% 50V	4822	126	13473
7309	TRANSISTOR, BC856B	4822	130	60373	2315	22uF 50V	4822	124	81151
7310	TRANSISTOR, BC846B	5322	130	60159	2316	2,2uF 20% 50V	4822	124	22652
7501	IC, LC7821	4822	209	72748	2319	470pF 50V	5322	122	32268
7503	IC, NJM4560M	4822	209	83357	2321	220nF 80- 20% 50V	4822	126	13473
7504	IC, NJM4560	9338	800	40685	2325	220pF 5% NPO 63V	4822	122	33575
7571	IC, NJM4560DD	4822	209	70157	2326	10pF 5% NPO 63V	5322	122	32448
7572	IC, LC7821	4822	209	72748	2327	10pF 5% NPO 63V	5322	122	32448
7601	IC, NJM4556AM	4822	209	31378	2330	22uF 50V	4822	124	81151
7621	TRANSISTOR, BC817-40	4822	130	42615	2333	220nF 80- 20% 50V	4822	126	13473
7622	TRANSISTOR, BC817-40	4822	130	42615	2334	2,2uF 20% 50V	4822	124	22652
7641	IC, TDA7437T	4822	209	17386	2337	470pF 50V	5322	122	32268
7642	IC, TDA7437T	4822	209	17386	2341	220pF 5% NPO 63V	4822	122	33575
7643	IC, TDA7437T	4822	209	17386	2345	10pF 5% NPO 63V	5322	122	32448
7644	TRANSISTOR, BC337	4822	130	40855	2346	22uF 50V	4822	124	81151
7651	TRANSISTOR, BC817-40	4822	130	42615	2348	10pF 5% NPO 63V	5322	122	32448
7652	TRANSISTOR, BC817-40	4822	130	42615	2349	10uF 20% 63V	4822	124	40248
7653	TRANSISTOR, BC817-40	4822	130	42615	2350	220uF 20% 10V	4822	124	40181
7654	TRANSISTOR, BC817-40	4822	130	42615	2353	22uF 100 V	4822	124	40764
7655	TRANSISTOR, BC817-40	4822	130	42615	2354	10uF 20% 100V	5322	124	40641
7656	TRANSISTOR, BC817-40	4822	130	42615	2357	100nF 50V	4822	126	12882
7657	TRANSISTOR, BC856B	4822	130	60373	2358	220nF 80- 20% 50V	4822	126	13473
7658	TRANSISTOR, BC856B	4822	130	60373	2359	220nF 80- 20% 50V	4822	126	13473
7660	IC, NJM4560	9338	800	40685	2360	220nF 80- 20% 50V	4822	126	13473
7661	TRANSISTOR, BC817-40	4822	130	42615	2365	10nF 5% 250V	4822	121	41857
7662	TRANSISTOR, BC817-40	4822	130	42615	2371	4,7nF 10% X7R 63V	5322	126	10223
7801	TRANSISTOR, BC846B	5322	130	60159	2372	4,7nF 10% X7R 63V	5322	126	10223
7802	TRANSISTOR, BC557B	4822	130	44568	2373	4,7nF 10% X7R 63V	5322	126	10223
7803	IC, STV6401	4822	209	16886	2374	100pF 5% NPO 50V	5322	122	32531
7901	IC, STK496-070	4822	209	17385	2375	100pF 5% NPO 50V	5322	122	32531
7902	TRANSISTOR, BC846B	5322	130	60159	2376	100pF 5% NPO 50V	5322	122	32531
7903	TRANSISTOR, BC846B	5322	130	60159	2508	100pF 5% NPO 50V	5322	122	32531
7904	TRANSISTOR, BC846B	5322	130	60159	2509	100pF 5% NPO 50V	5322	122	32531
7906	TRANSISTOR, BC856B	4822	130	60373	2510	100pF 5% NPO 50V	5322	122	32531
7908	TRANSISTOR, BC856B	4822	130	60373	2511	100pF 5% NPO 50V	5322	122	32531
7909	TRANSISTOR, BC846B	5322	130	60159	2512	100pF 5% NPO 50V	5322	122	32531
7910	TRANSISTOR, BD242BFP	9322	139	22687	2513	100pF 5% NPO 50V	5322	122	32531
					2514	100pF 5% NPO 50V	5322	122	32531
					2515	100pF 5% NPO 50V	5322	122	32531
					2516	100pF 5% NPO 50V	5322	122	32531
					2517	100pF 5% NPO 50V	5322	122	32531
					2518	100pF 5% NPO 50V	5322	122	32531
					2519	100pF 5% NPO 50V	5322	122	32531
					2520	100pF 5% NPO 50V	5322	122	32531
					2521	100pF 5% NPO 50V	5322	122	32531
					2522	100pF 5% NPO 50V	5322	122	32531
					2523	100pF 5% NPO 50V	5322	122	32531
					2524	100pF 5% NPO 50V	5322	122	32531
					2525	100pF 5% NPO 50V	5322	122	32531
					2526	100pF 5% NPO 50V	5322	122	32531
					2527	47uF 20% 50V	4822	124	41751
					2528	47uF 20% 50V	4822	124	41751
					2529	100nF 50V P80M20	4822	126	13838
					2530	100nF 50V P80M20	4822	126	13838
					2531	220nF 100V	4822	121	41673
					2532	220nF 100V	4822	121	41673
					2533	10uF 20% 63V	4822	124	40248
					2534	10uF 20% 63V	4822	124	40248
					2535	10uF 20% 63V	4822	124	40248

MONO BOARD PARTS - FR970

MONO BOARD PARTS - FR970

MISCELLANEOUS

1301	CON SCREW 6P	2422	015	19088
1512	CINCH 4P	4822	267	31823
1513	CINCH 4P	4822	267	31823
1514	CINCH 4P	4822	267	31823
1516	CINCH 4P	4822	267	31823
1520	15FE-BT-VK-N	4822	265	10981
1525	CINCH 2P	4822	265	11608
S 1530	FUSE 315mA	4822	071	53151
1540	CINCH 2P	4822	265	20542
1550	CINCH 1P	4822	267	31729
1801	CINCH 1P	4822	267	31996
1802	CINCH 2P	4822	265	11619
1803	CINCH 2P	4822	265	11619
1901	CON. CLICK 4P	4822	265	11609
	CAPACITORS			
2251	100nF 5% 250V	5322	121	42578
2253	47nF 5% 250V	4822	121	43526
2254	100nF 5% 250V	5322	121	42578

S = Safety Part Be sure to use exact replacement part.

FR970 (continued)

2536	10uF 20% 63V	4822 124 40248	2643	1uF 20% 63V	4822 124 21913
2537	10uF 20% 63V	4822 124 40248	2644	1uF 20% 63V	4822 124 21913
2538	10uF 20% 63V	4822 124 40248	2647	1uF 20% 63V	4822 124 21913
2539	100uF 20% 25V	4822 124 40207	2648	1uF 20% 63V	4822 124 21913
2540	47uF 20% 25V	4822 124 40433	2649	1uF 20% 63V	4822 124 21913
2541	10uF 20% 63V	4822 124 40248	2650	1uF 20% 63V	4822 124 21913
2542	10uF 20% 63V	4822 124 40248	2655	1uF 20% 63V	4822 124 21913
2543	100uF 10V	4822 124 41584	2656	1uF 20% 63V	4822 124 21913
2544	100uF 10V	4822 124 41584	2659	2,2uF 20% 50V	4822 124 22652
2545	100pF 5% NPO 50V	5322 122 32531	2660	2,2uF 20% 50V	4822 124 22652
2546	100pF 5% NPO 50V	5322 122 32531	2661	2,2uF 20% 50V	4822 124 22652
2549	22pF 5% 50V	5322 122 32658	2662	2,2uF 20% 50V	4822 124 22652
2550	22pF 5% 50V	5322 122 32658	2663	2,2uF 20% 50V	4822 124 22652
2551	100nF 50V P80M20	4822 126 13838	2664	2,2uF 20% 50V	4822 124 22652
2552	100nF 50V P80M20	4822 126 13838	2665	47nF 5% 250V	4822 121 43526
2553	47uF 20% 50V	4822 124 41751	2666	47nF 5% 250V	4822 121 43526
2554	47uF 20% 50V	4822 124 41751	2667	47nF 5% 250V	4822 121 43526
2555	100nF 50V P80M20	4822 126 13838	2668	47nF 5% 250V	4822 121 43526
2556	100nF 50V P80M20	4822 126 13838	2669	47nF 5% 250V	4822 121 43526
2557	47uF 20% 50V	4822 124 41751	2670	47nF 5% 250V	4822 121 43526
2558	47uF 20% 50V	4822 124 41751	2671	6,8nF 10% X7R 63V	5322 122 31866
2559	CER2 50V 33nF PM5	4822 126 12105	2672	6,8nF 10% X7R 63V	5322 122 31866
2561	22uF 100V	4822 124 40764	2673	6,8nF 10% X7R 63V	5322 122 31866
2562	22uF 100V	4822 124 40764	2674	6,8nF 10% X7R 63V	5322 122 31866
2563	16V 2200uF 20%	4822 123 14025	2675	6,8nF 10% X7R 63V	5322 122 31866
2564	2,2uF 20% 50V	4822 124 22652	2676	6,8nF 10% X7R 63V	5322 122 31866
2565	2,2uF 20% 50V	4822 124 22652	2677	22nF 10% X7R 63V	5322 122 32654
2566	2,2uF 20% 50V	4822 124 22652	2678	22nF 10% X7R 63V	5322 122 32654
2567	4,7uF 20% 100V	4822 124 40769	2679	22nF 10% X7R 63V	5322 122 32654
2568	4,7uF 20% 100V	4822 124 40769	2680	22nF 10% X7R 63V	5322 122 32654
2569	100pF 5% NPO 50V	5322 122 32531	2681	22nF 10% X7R 63V	5322 122 32654
2570	100pF 5% NPO 50V	5322 122 32531	2682	22nF 10% X7R 63V	5322 122 32654
2571	10uF 20% 63V	4822 124 40248	2683	22nF 10% X7R 63V	5322 122 32654
2572	10uF 20% 63V	4822 124 40248	2684	22nF 10% X7R 63V	5322 122 32654
2573	150pF 2% NPO 63V	5322 122 33538	2685	22nF 10% X7R 63V	5322 122 32654
2574	150pF 2% NPO 63V	5322 122 33538	2686	22nF 10% X7R 63V	5322 122 32654
2575	10uF 20% 63V	4822 124 40248	2687	22nF 10% X7R 63V	5322 122 32654
2576	10uF 20% 63V	4822 124 40248	2688	22nF 10% X7R 63V	5322 122 32654
2577	10nF 20% X7R 50V	4822 122 33177	2689	68nF 5% 63V	5322 121 42465
2578	10nF 20% X7R 50V	4822 122 33177	2690	68nF 5% 63V	5322 121 42465
2579	2,2nF 10% X7R 63V	4822 122 33127	2691	68nF 5% 63V	5322 121 42465
2580	2,2nF 10% X7R 63V	4822 122 33127	2692	68nF 5% 63V	5322 121 42465
2581	47uF 20% 50V	4822 124 41751	2693	68nF 5% 63V	5322 121 42465
2582	47uF 20% 50V	4822 124 41751	2694	68nF 5% 63V	5322 121 42465
2583	2,7nF 50V	2222 861 15272	2695	68nF 5% 63V	5322 121 42465
2584	2,7nF 50V	2222 861 15272	2696	68nF 5% 63V	5322 121 42465
2585	82pF 1% NPO 63V	4822 126 13695	2697	68nF 5% 63V	5322 121 42465
2586	82pF 1% NPO 63V	4822 126 13695	2698	68nF 5% 63V	5322 121 42465
2593	22uF 50V	4822 124 81151	2699	68nF 5% 63V	5322 121 42465
2594	22uF 50V	4822 124 81151	2700	68nF 5% 63V	5322 121 42465
2595	100pF 5% NPO 50V	5322 122 32531	2805	100nF 10% 0805 50V	4822 126 14585
2596	100pF 5% NPO 50V	5322 122 32531	2806	100nF 10% 0805 50V	4822 126 14585
2599	22pF 5% 50V	5322 122 32658	2807	100nF 10% 0805 50V	4822 126 14585
2600	22pF 5% 50V	5322 122 32658	2808	100nF 10% 0805 50V	4822 126 14585
2603	22uF 50V	4822 124 81151	2809	10nF 10% X7R 63V	5322 122 34098
2604	22uF 50V	4822 124 81151	2810	220uF 20% 10V 8X5MM	4822 124 12245
2605	47pF 1% NPO 63V	4822 126 13692	2811	10nF 10% X7R 63V	5322 122 34098
2606	47pF 1% NPO 63V	4822 126 13692	2812	220uF 20% 25V	4822 124 80144
2607	47uF 20% 50V	4822 124 41751	2813	1uF 20% 63V	4822 124 21913
2608	47uF 20% 50V	4822 124 41751	2814	47pF 1% NPO 63V	4822 126 13692
2609	220pF 5% NPO 63V	4822 122 33575	2815	100nF 10% 16V	4822 126 14305
2610	220pF 5% NPO 63V	4822 122 33575	2816	22nF 10% X7R 63V	5322 122 32654
2611	100uF 20% 25V	4822 124 40207	2817	1uF 20% 63V	4822 124 21913
2612	10uF 20% 63V	4822 124 40248	2818	22nF 10% X7R 63V	5322 122 32654
2613	10uF 20% 63V	4822 124 40248	2821	22nF 10% X7R 63V	5322 122 32654
2614	100uF 20% 25V	4822 124 40207	2822	22nF 10% X7R 63V	5322 122 32654
2615	22nF 10% X7R 63V	5322 122 32654	2831	100pF 5% NPO 50V	5322 122 32531
2616	22nF 10% X7R 63V	5322 122 32654	2832	100nF 10% 50V	4822 126 14585
2617	10uF 20% 63V	4822 124 40248	2833	22nF 10% X7R 63V	5322 122 32654
2618	10uF 20% 63V	4822 124 40248	2834	100pF 5% NPO 50V	5322 122 32531
2619	100pF 5% NPO 50V	5322 122 32531	2837	100pF 5% NPO 50V	5322 122 32531
2620	100pF 5% NPO 50V	5322 122 32531	2851	22pF 5% 50V	5322 122 32658
2622	100pF 5% NPO 50V	5322 122 32531	2852	22pF 5% 50V	5322 122 32658
2623	100pF 5% NPO 50V	5322 122 32531	2853	22uF 50V	4822 124 81151
2624	100pF 5% NPO 50V	5322 122 32531	2854	22uF 50V	4822 124 81151
2625	100pF 5% NPO 50V	5322 122 32531	2855	100pF 5% NPO 50V	5322 122 32531
2626	100pF 5% NPO 50V	5322 122 32531	2856	100pF 5% NPO 50V	5322 122 32531
2627	100pF 5% NPO 50V	5322 122 32531	2857	100nF 10% X7R 50V	4822 126 14585
2628	100nF 10% 50V	4822 126 14585	2858	47uF 20% 50V	4822 124 41751
2629	47uF 20% 50V	4822 124 41751	2860	47uF 20% 50V	4822 124 41751
2630	100nF 5% 63V	5322 121 42386	2861	22nF 10% X7R 63V	5322 122 32654
2631	100nF 5% 63V	5322 121 42386	2868	220pF 50V	4822 122 33575
2632	100nF 5% 63V	5322 121 42386	2869	220pF 50V	4822 122 33575
2633	22nF 10% X7R 63V	5322 122 32654	2871	10nF 20% X7R 50V	4822 122 33177
2634	22nF 10% X7R 63V	5322 122 32654	2872	10nF 20% X7R 50V	4822 122 33177
2635	22nF 10% X7R 63V	5322 122 32654	2873	10nF 20% X7R 50V	4822 122 33177
2636	100nF 10% 50V	4822 126 14585	2875	10nF 20% X7R 50V	4822 122 33177
2637	47uF 20% 50V	4822 124 41751	2876	10nF 20% X7R 50V	4822 122 33177
2638	100nF 10% 50V	4822 126 14585	2877	100nF 5% 63V	5322 121 42386
2639	47uF 20% 50V	4822 124 41751	2878	100nF 5% 63V	5322 121 42386
2641	1uF 20% 63V	4822 124 21913	2879	100nF 5% 63V	5322 121 42386
2642	1uF 20% 63V	4822 124 21913	2880	100nF 5% 63V	5322 121 42386

S = Safety Part Be sure to use exact replacement part.

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2881	100nF 5% 63V	5322 121 42386	3339	1K5 1% 0,1W	4822 117 11139
2882	100nF 5% 63V	5322 121 42386	3340	1K5 1% 0,1W	4822 117 11139
2883	1nF 50V	5322 126 10511	S 3341	0R33 5% 2W	4822 117 11342
2884	1nF 50V	5322 126 10511	S 3342	0R33 5% 2W	4822 117 11342
2885	1nF 50V	5322 126 10511	3343	1K5 1% 0,1W	4822 117 11139
2886	1nF 50V	5322 126 10511	S 3344	0R33 5% 2W	4822 117 11342
2887	2n2 50V	4822 122 33127	S 3345	0R33 5% 2W	4822 117 11342
2888	2n2 50V	4822 122 33127	S 3349	0R33 5% 2W	4822 117 11342
2901	22uF 50V	4822 124 81151	S 3350	0R33 5% 2W	4822 117 11342
2902	10uF 20% 63V	4822 124 40248	S 3351	0R33 5% 2W	4822 117 11342
2903	4,7pF 5% NPO 50V	5322 122 32287	S 3352	4R7 5% 1W	4822 053 10478
2904	47nF 10% X7R 63V	4822 126 13751	S 3353	4R7 5% 1W	4822 053 10478
2905	2,2uF 20% 50V	4822 124 22652	S 3354	4R7 5% 1W	4822 053 10478
2906	470pF 50V	5322 122 32268	3356	47K 1% 0,1W	4822 117 10834
2908	220nF 80- 20% 50V	4822 126 13473	3357	22K 5% 0,5W	4822 116 52257
2909	4,7nF 10% X7R 63V	5322 126 10223	3358	1K 2% 0,25W	4822 051 10102
2910	220pF 5% NPO 63V	4822 122 33575	3359	100K 1% 0,1W	4822 117 10837
2911	22nF 10% X7R 63V	5322 122 32654	3360	10K 1% 0,1W	4822 117 10833
2912	22uF 50V	4822 124 81151	3361	470R 5% 0,1W	4822 051 20471
2913	2,2uF 20% 50V	4822 124 22652	3362	470R 5% 0,1W	4822 051 20471
2914	470pF 50V	5322 122 32268	3363	470R 5% 0,1W	4822 051 20471
2916	220nF 80- 20% 50V	4822 126 13473	3513	47K 5% 0,1W	4822 117 10834
2917	4,7nF 10% X7R 63V	5322 126 10223	3514	47K 5% 0,1W	4822 117 10834
2918	220pF 5% NPO 63V	4822 122 33575	3515	470R 5% 0,1W	4822 051 20471
2919	22uF 50V	4822 124 81151	3516	470R 5% 0,1W	4822 051 20471
2920	220nF 80- 20% 50V	4822 126 13473	3517	39K 5% 0,1W	4822 051 20393
2921	220nF 80- 20% 50V	4822 126 13473	3518	39K 5% 0,1W	4822 051 20393
2922	4,7pF 5% NPO 50V	5322 122 32287	3519	18K 5% 0,1W	4822 117 10965
2923	22uF 50V	4822 124 81151	3520	18K 5% 0,1W	4822 117 10965
2924	10uF 20% 63V	4822 124 40248	3521	39K 5% 0,1W	4822 051 20393
2925	220uF 20% 10V	4822 124 40181	3522	39K 5% 0,1W	4822 051 20393
2926	100nF 10% X7R 50V	4822 126 14585	3523	18K 5% 0,1W	4822 117 10965
2928	10nF 20% X7R 50V	4822 122 33177	3524	18K 5% 0,1W	4822 117 10965
2930	100pF 5% NPO 50V	5322 122 32531	3525	39K 5% 0,1W	4822 051 20393
2931	100pF 5% NPO 50V	5322 122 32531	3526	39K 5% 0,1W	4822 051 20393
2932	100pF 5% NPO 50V	5322 122 32531	3527	18K 5% 0,1W	4822 117 10965
2933	100pF 5% NPO 50V	5322 122 32531	3528	18K 5% 0,1W	4822 117 10965
2937	220pF 50V	4822 126 10794	3529	470R 5% 0,1W	4822 051 20471
RESISTORS					
3251	1K 2% 0,25W	4822 051 10102	3530	470R 5% 0,1W	4822 051 20471
3252	100K 1% 0,1W	4822 117 10837	3531	39K 5% 0,1W	4822 051 20393
3253	100K 1% 0,1W	4822 117 10837	3532	39K 5% 0,1W	4822 051 20393
S 3254	0R33 5% 2W	4822 117 11342	3533	18K 5% 0,1W	4822 117 10965
3256	10K 1% 0,1W	4822 117 10833	3534	18K 5% 0,1W	4822 117 10965
S 3257	0R33 5% 2W	4822 117 11342	3535	18K 5% 0,5W	4822 116 52251
3258	180K 5% 0,1W	4822 051 20184	3536	18K 5% 0,5W	4822 116 52251
3259	680R 1% 0,1W	4822 117 10361	3537	39K 5% 0,1W	4822 051 20393
3260	47K 1% 0,1W	4822 117 10834	3538	39K 5% 0,1W	4822 051 20393
3263	680R 1% 0,1W	4822 117 10361	3539	18K 5% 0,1W	4822 117 10965
3264	100K 1% 0,1W	4822 117 10837	3540	18K 5% 0,1W	4822 117 10965
S 3265	47R 5% 0,33W	4822 052 10479	3541	39K 5% 0,1W	4822 051 20393
3266	22K 5% 0,1W	4822 051 20223	3542	39K 5% 0,1W	4822 051 20393
3267	6K8 1% 0,1W	4822 117 11507	3543	1K5 5% 0,25W	4822 117 11139
3268	3K3 5% 0,1W	4822 051 20332	3544	1K5 5% 0,25W	4822 117 11139
3269	3K3 5% 0,1W	4822 051 20332	3545	3K3 5% 0,1W	4822 051 20332
S 3270	47R 5% 0,33W	4822 052 10479	3546	3K3 5% 0,1W	4822 051 20332
S 3271	47R 5% 0,33W	4822 052 10479	3549	6K8 5% 0,1W	4822 117 11507
3272	39K 5% 0,1W	4822 051 20393	3550	6K8 5% 0,1W	4822 117 11507
S 3291	10R 5% 0,33W	4822 052 10109	3551	270R 1% 0,1W	4822 117 11504
3292	15K 1% 0,1W	4822 116 83933	3552	270R 1% 0,1W	4822 117 11504
3293	10K 1% 0,1W	4822 117 10833	3553	270R 1% 0,1W	4822 117 11504
3294	10K 1% 0,1W	4822 117 10833	3554	270R 1% 0,1W	4822 117 11504
3295	15K 1% 0,1W	4822 116 83933	3555	3K3 5% 0,1W	4822 051 20332
S 3301	47R 5% 0,33W	4822 052 10479	3556	270R 1% 0,1W	4822 117 11504
3303	6K8 5%	4822 116 83961	3557	270R 1% 0,1W	4822 117 11504
3304	56K 1% 0,1W	4822 117 11148	3560	1K 2% 0,25W	4822 051 10102
3305	47K 1% 0,1W	4822 117 10834	S 3561	4R7 5% 0,33W	4822 052 10478
3306	47K 1% 0,1W	4822 117 10834	3562	470R 5% 0,1W	4822 051 20471
3307	47K 1% 0,1W	4822 117 10834	3563	1K 2% 0,25W	4822 051 10102
3308	56K 1% 0,1W	4822 117 11148	3566	270R 5% 0,5W	4822 116 83876
3309	4R7 1% 0,6W	4822 050 24708	3567	270R 5% 0,5W	4822 116 83876
3310	1K8 5% 0,1W	4822 051 20182	3571	47K 1% 0,1W	4822 117 10834
3311	4R7 1% 0,6W	4822 050 24708	3572	47K 1% 0,1W	4822 117 10834
3314	56K 1% 0,1W	4822 117 11148	3573	1K 2% 0,25W	4822 051 10102
3315	1K8 5% 0,1W	4822 051 20182	3574	1K 2% 0,25W	4822 051 10102
3316	4R7 1% 0,6W	4822 050 24708	3575	100K 1% 0,1W	4822 117 10837
3319	56K 1% 0,1W	4822 117 11148	3576	100K 1% 0,1W	4822 117 10837
3320	1K 2% 0,25W	4822 051 10102	3577	560R 5% 0,1W	4822 051 20561
3322	56K 1% 0,1W	4822 117 11148	3578	560R 5% 0,1W	4822 051 20561
3323	1K8 5% 0,1W	4822 051 20182	3579	390K 5% 0,1W	4822 051 20394
3324	56K 1% 0,1W	4822 117 11148	3580	390K 5% 0,1W	4822 051 20394
3325	6K8 5%	4822 116 83961	3581	27K 5% 0,1W	4822 051 20273
3326	33K 5% 0,1W	4822 051 20333	3582	27K 5% 0,1W	4822 051 20273
3327	220R 1% 0,1W	4822 117 11503	3583	8K2 1% 0,6W	4822 116 52303
S 3328	47R 5% 0,33W	4822 052 10479	3584	8K2 1% 0,6W	4822 116 52303
3329	100K 1% 0,1W	4822 117 10837	3585	2K2 1% 0,1W	4822 117 11449
3330	10K 1% 0,1W	4822 117 10833	3586	2K2 1% 0,1W	4822 117 11449
3334	1K8 5% 0,1W	4822 051 20182	3587	12K 1% 0,1W	4822 117 11383
3335	1K8 5% 0,1W	4822 051 20182	3588	12K 5% 0,5W	4822 116 52238
3336	1K8 5% 0,1W	4822 051 20182	3589	10K 1% 0,1W	4822 117 10833
S 3337	0R33 5% 2W	4822 117 11342	3590	10K 1% 0,1W	4822 117 10833
S 3338	0R33 5% 2W	4822 117 11342	3591	100K 1% 0,1W	4822 117 10837
			3592	100K 1% 0,1W	4822 117 10837

S = Safety Part Be sure to use exact replacement part.

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3593	2K2	1%	0,1W.	4822	117	11449	3805	1K	2%	0,25W.	4822	051	10102
3594	2K2	1%	0,1W.	4822	117	11449	3806	1K	2%	0,25W.	4822	051	10102
3595	4K7	5%	0,1W.	4822	051	20472	S 3807	4R7	5%	0,33W.	4822	052	10478
3596	4K7	5%	0,1W.	4822	051	20472	S 3808	4R7	5%	0,33W.	4822	052	10478
3597	12K	5%	0,5W.	4822	116	52238	3810	2K2	1%	0,1W.	4822	117	11449
3598	12K	5%	0,5W.	4822	116	52238	3812	470R	5%	0,1W.	4822	051	20471
3601	100R	5%	0,1W.	4822	051	20101	3813	120R	5%	0,1W.	4822	051	20121
3602	100R	5%	0,1W.	4822	051	20101	3815	68R	1%	0,1W.	4822	117	12521
3603	100K	1%	0,1W.	4822	117	10837	3816	68R	1%	0,1W.	4822	117	12521
3604	100K	1%	0,1W.	4822	117	10837	3817	270R	1%	0,1W.	4822	117	11504
3605	12K	1%	0,1W.	4822	117	11383	3818	220R	1%	0,1W.	4822	117	11503
3606	12K	1%	0,1W.	4822	117	11383	3831	100R	5%	0,1W.	4822	051	20101
3607	33K	5%	0,1W.	4822	051	20333	3832	47R	5%	0,1W.	4822	051	20479
3608	33K	5%	0,1W.	4822	051	20333	3834	100R	5%	0,1W.	4822	051	20101
3609	120R	5%	0,1W.	4822	051	20121	3851	4K7	5%	0,1W.	4822	051	20472
3610	120R	5%	0,1W.	4822	051	20121	3852	22K	5%	0,1W.	4822	051	20223
3611	47K	1%	0,1W.	4822	117	10834	3853	68K	5%	0,1W.	4822	051	20683
3612	47K	1%	0,1W.	4822	117	10834	3854	4K7	5%	0,1W.	4822	051	20472
3613	470R	5%	0,1W.	4822	051	20471	S 3855	270R	5%	0,5W.	4822	116	83876
3614	470R	5%	0,1W.	4822	051	20471	S 3856	270R	1%	0,1W.	4822	117	11504
3615	470R	5%	0,1W.	4822	051	20471	3857	100K	1%	0,1W.	4822	117	10837
3616	470R	5%	0,1W.	4822	051	20471	3858	100K	1%	0,1W.	4822	117	10837
3618	47K	1%	0,1W.	4822	117	10834	3859	10K	1%	0,1W.	4822	117	10833
3619	47K	1%	0,1W.	4822	117	10834	3860	10K	1%	0,1W.	4822	117	10833
3620	100R	5%	0,1W.	4822	116	52175	3871	3K3	5%	0,1W.	4822	051	20332
3621	100R	5%	0,1W.	4822	051	20101	3872	3K3	5%	0,1W.	4822	051	20332
3622	120R	5%	0,1W.	4822	051	20121	3873	1K	2%	0,25W.	4822	051	10102
3623	120R	5%	0,1W.	4822	051	20121	3874	1K	2%	0,25W.	4822	051	10102
S 3627	10R	5%	0,33W.	4822	052	10109	3875	3K3	5%	0,1W.	4822	051	20332
S 3629	10R	5%	0,33W.	4822	052	10109	3877	1K	2%	0,25W.	4822	051	10102
3630	1K	1%	0,4W.	4822	050	11002	3878	1K	2%	0,25W.	4822	051	10102
3631	1K	1%	0,4W.	4822	050	11002	3879	3K3	5%	0,1W.	4822	051	20332
3632	1K	1%	0,4W.	4822	050	11002	3880	3K3	5%	0,1W.	4822	051	20332
3633	1K	2%	0,25W.	4822	051	10102	3881	1K	2%	0,25W.	4822	051	10102
3634	1K	2%	0,25W.	4822	051	10102	3882	1K	2%	0,25W.	4822	051	10102
3635	1K	2%	0,25W.	4822	051	10102	3883	12K	1%	0,1W.	4822	117	11383
3636	470R	5%	0,1W.	4822	051	20471	3884	12K	1%	0,1W.	4822	117	11383
3637	470R	5%	0,1W.	4822	051	20471	3885	12K	1%	0,1W.	4822	117	11383
3641	100K	1%	0,1W.	4822	117	10837	3886	12K	1%	0,1W.	4822	117	11383
3642	100K	1%	0,1W.	4822	117	10837	3887	12K	1%	0,1W.	4822	117	11383
3643	100K	1%	0,1W.	4822	117	10837	3888	12K	1%	0,1W.	4822	117	11383
3644	100K	1%	0,1W.	4822	117	10837	3889	2K2	1%	0,1W.	4822	117	11449
3649	100K	1%	0,1W.	4822	117	10837	3890	2K2	1%	0,1W.	4822	117	11449
3650	100K	1%	0,1W.	4822	117	10837	S 3901	47R	5%	0,33W.	4822	052	10479
3655	100K	1%	0,1W.	4822	117	10837	3902	56K	1%	0,1W.	4822	117	11148
3656	100K	1%	0,1W.	4822	117	10837	3903	47K	1%	0,1W.	4822	117	10834
3659	2K7	1%	0,1W 0805	4822	117	12955	3904	47K	5%	0,5W.	4822	116	83884
3660	2K7	1%	0,1W 0805	4822	117	12955	3905	4R7	1%	0,6W.	4822	050	24708
3661	5K6	5%	0,1W 0805	4822	051	20562	3906	56K	1%	0,1W.	4822	117	11148
3662	5K6	5%	0,1W 0805	4822	051	20562	3908	1K8	5%	0,1W.	4822	051	20182
3663	2K7	1%	0,1W 0805	4822	117	12955	3910	4R7	1%	0,6W.	4822	050	24708
3664	2K7	1%	0,1W 0805	4822	117	12955	3911	56K	1%	0,1W.	4822	117	11148
3665	5K6	5%	0,1W 0805	4822	051	20562	3913	1K8	5%	0,1W.	4822	051	20182
3666	5K6	5%	0,1W 0805	4822	051	20562	3914	56K	1%	0,1W.	4822	117	11148
3667	2K7	1%	0,1W 0805	4822	117	12955	S 3915	47R	5%	0,33W.	4822	052	10479
3668	2K7	1%	0,1W 0805	4822	117	12955	S 3916	4R7	5%	1W.	4822	053	10478
3669	5K6	5%	0,1W 0805	4822	051	20562	3917	33K	1%	0,6W.	4822	050	23303
3670	5K6	5%	0,1W 0805	4822	051	20562	3918	220R	1%	0,1W.	4822	117	11503
3671	100K	1%	0,1W.	4822	117	10837	S 3919	4R7	5%	1W.	4822	053	10478
3672	100K	1%	0,1W.	4822	117	10837	3920	100K	1%	0,1W.	4822	117	10837
3673	2K2	1%	0,1W.	4822	117	11449	3921	1K	2%	0,25W.	4822	051	10102
3674	2K2	1%	0,1W.	4822	117	11449	3922	1K	2%	0,25W.	4822	051	10102
3675	100R	5%	0,1W.	4822	051	20101	3925	10K	1%	0,1W.	4822	117	10833
3676	100R	5%	0,1W.	4822	051	20101	S 3926	0R22	5%	1W.	4822	117	11744
3677	100K	1%	0,1W.	4822	117	10837	S 3927	0R22	5%	1W.	4822	117	11744
3678	100K	1%	0,1W.	4822	117	10837	3928	1K5	1%	0,1W.	4822	117	11139
3679	2K2	1%	0,1W.	4822	117	11449	3929	1K5	1%	0,1W.	4822	117	11139
3680	2K2	1%	0,1W.	4822	117	11449	S 3930	0R22	5%	1W.	4822	117	11744
3681	100R	5%	0,1W.	4822	051	20101	S 3931	0R22	5%	1W.	4822	117	11744
3682	100R	5%	0,1W.	4822	051	20101	3932	47K	1%	0,1W.	4822	117	10834
3683	100K	1%	0,1W.	4822	117	10837	3933	10K	1%	0,6W.	4822	050	21003
3684	100K	1%	0,1W.	4822	117	10837	3934	1K	2%	0,25W.	4822	051	10102
3685	2K2	1%	0,1W.	4822	117	11449	3935	1K	2%	0,25W.	4822	051	10102
3686	2K2	1%	0,1W.	4822	117	11449	3936	100K	1%	0,1W.	4822	117	10837
3687	100R	5%	0,1W.	4822	051	20101	3937	10K	1%	0,1W.	4822	117	10833
3688	100R	5%	0,1W.	4822	051	20101	3938	2K2	1%	0,1W.	4822	117	11449
3689	2K2	1%	0,1W.	4822	117	11449	3939	2K2	1%	0,1W.	4822	117	11449
3690	2K2	1%	0,1W.	4822	117	11449	3940	220R	1%	0,1W.	4822	117	11503
3691	2K2	5%	0,5W.	4822	116	52256	3941	220R	1%	0,1W.	4822	117	11503
3692	2K2	1%	0,1W.	4822	117	11449	3943	22K	5%	0,1W.	4822	051	20223
3693	2K2	1%	0,1W.	4822	117	11449	3944	220R	1%	0,1W.	4822	117	11503
3694	2K2	5%	0,5W.	4822	116	52256	3945	220R	1%	0,1W.	4822	117	11503
3695	220K	1%	0,1W RC12H	4822	117	13579	3946	470R	5%	0,1W.	4822	051	20471
3696	10K	1%	0,1W.	4822	117	10833	3947	470R	5%	0,1W.	4822	051	20471
3697	22K	5%	0,5W.	4822	116	52257	3948	220R	1%	0,1W.	4822	117	11503
3698	220K	1%	0,1W RC12H	4822	117	13579	3949	220R	1%	0,1W.	4822	117	11503
3699	10K	1%	0,1W.	4822	117	10833	3950	100R	5%	0,1W.	4822	051	20101
3700	22K	5%	0,1W.	4822	051	20223	3951	100R	5%	0,1W.	4822	051	20101
3801	68R	1%	0,1W.	4822	117	12521	4251	0R0 JUMP. (0805)			4822	051	20008
3802	68R	1%	0,1W.	4822	117	12521	4252	0R0 JUMP. (0805)			4822	051	20008
3803	68R	1%	0,1W.	4822	117	12521	4253	0R0 JUMP. (0805)			4822	051	20008
3804	68R	1%	0,1W.	4822	117	12521	4254	0R0 JUMP. (0805)			4822	051	20008

S = Safety Part Be sure to use exact replacement part.

FR970 (continued)

4255	OR0 JUMP. (0805)	4822 051 20008	6263	DIODE, 1N4003G	4822 130 31878
4256	OR0 JUMP. (0805)	4822 051 20008	6265	DIODE, 7805CP	4822 209 31841
4257	OR0 JUMP. (0805)	4822 051 20008	6267	DIODE, L7805CP	4822 209 31841
4258	OR0 JUMP. (0805)	4822 051 20008	6268	DIODE, 1N4003G	4822 130 31878
4260	OR0 JUMP. (0805)	4822 051 20008	6270	DIODE, BZX79-B6V8	4822 130 34278
4283	OR0 JUMP. (0805)	4822 051 20008	6271	DIODE, 1N4148	4822 130 30621
4284	OR0 JUMP. (0805)	4822 051 20008	6276	DIODE, BZX79-B5V6	4822 130 34173
4285	OR0 JUMP. (0805)	4822 051 20008	6279	DIODE, 1N4148	4822 130 30621
4287	OR0 JUMP. (0805)	4822 051 20008	6280	DIODE, BZX79-B10	4822 130 61219
4320	OR0 JUMP. (0805)	4822 051 20008	6281	DIODE, BZX79-B22	4822 130 34441
4504	OR0 JUMP. (0805)	4822 051 20008	6289	DIODE, 1N4148	4822 130 30621
4506	OR0 JUMP. (0805)	4822 051 20008	6290	DIODE, 1N4148	4822 130 30621
4513	OR0 JUMP. (0805)	4822 051 20008	6301	DIODE, BZX79-B8V2	4822 130 34382
4514	OR0 JUMP. (0805)	4822 051 20008	6302	DIODE, BZX79-B8V2	4822 130 34382
4515	OR0 JUMP. (0805)	4822 051 20008	6303	DIODE, 1N4148	4822 130 30621
4516	OR0 JUMP. (0805)	4822 051 20008	6304	DIODE, BZX79-B3V3	5322 130 31504
4517	OR0 JUMP. (0805)	4822 051 20008	6305	DIODE, 1N4148	4822 130 30621
4518	OR0 JUMP. (0805)	4822 051 20008	6501	DIODE, 1N4148	4822 130 30621
4519	OR0 JUMP. (0805)	4822 051 20008	6601	DIODE, 1N4148	4822 130 30621
4520	OR0 JUMP. (0805)	4822 051 20008	6602	DIODE, 1N4148	4822 130 30621
4521	OR0 JUMP. (0805)	4822 051 20008	6641	DIODE, 1N4148	4822 130 30621
4522	OR0 JUMP. (0805)	4822 051 20008	6642	DIODE, 1N4148	4822 130 30621
4523	OR0 JUMP. (0805)	4822 051 20008	6643	DIODE, 1N4148	4822 130 30621
4524	OR0 JUMP. (0805)	4822 051 20008	6644	DIODE, 1N4148	4822 130 30621
4526	OR0 JUMP. (0805)	4822 051 20008	6645	DIODE, 1N4148	4822 130 30621
4528	OR0 JUMP. (0805)	4822 051 20008	6646	DIODE, 1N4148	4822 130 30621
4529	OR0 JUMP. (0805)	4822 051 20008	6647	DIODE, 1N4148	4822 130 30621
4530	OR0 JUMP. (0805)	4822 051 20008	6648	DIODE, 1N4148	4822 130 30621
4531	OR0 JUMP. (0805)	4822 051 20008	6649	DIODE, 1N4003G	4822 130 31878
4532	OR0 JUMP. (0805)	4822 051 20008	S 6650	DIODE, BZX79-B10	4822 130 61219
4533	OR0 JUMP. (0805)	4822 051 20008	6801	DIODE, BZX79-B6V8	4822 130 34278
4537	OR0 JUMP. (0805)	4822 051 20008	6802	DIODE, BZX79-B6V8	4822 130 34278
4538	OR0 JUMP. (0805)	4822 051 20008	6803	DIODE, BZX79-B6V8	4822 130 34278
4539	OR0 JUMP. (0805)	4822 051 20008	6804	DIODE, BZX79-B6V8	4822 130 34278
4540	OR0 JUMP. (0805)	4822 051 20008	6805	DIODE, BZX79-B6V8	4822 130 34278
4541	OR0 JUMP. (0805)	4822 051 20008	6806	DIODE, BZX79-B6V8	4822 130 34278
4542	OR0 JUMP. (0805)	4822 051 20008	6807	DIODE, BZX79-B6V8	4822 130 34278
4543	OR0 JUMP. (0805)	4822 051 20008	6808	DIODE, BZX79-B6V8	4822 130 34278
4544	OR0 JUMP. (0805)	4822 051 20008	6809	DIODE, 1N4148	4822 130 30621
4545	OR0 JUMP. (0805)	4822 051 20008	6831	DIODE, 1N4148	4822 130 30621
4548	OR0 JUMP. (0805)	4822 051 20008	6832	DIODE, 1N4148	4822 130 30621
4550	OR0 JUMP. (0805)	4822 051 20008	6901	DIODE, 1N4148	4822 130 30621
4551	OR0 JUMP. (0805)	4822 051 20008	6902	DIODE, 1N4148	4822 130 30621
4552	OR0 JUMP. (0805)	4822 051 20008	6903	DIODE, BZX79-B3V3	5322 130 31504
4553	OR0 JUMP. (0805)	4822 051 20008	6904	DIODE, 1N4148	4822 130 30621
4555	OR0 JUMP. (0805)	4822 051 20008	7253	TRANSISTOR, BC846B	5322 130 60159
4556	OR0 JUMP. (0805)	4822 051 20008	7255	TRANSISTOR, BC856B	4822 130 60373
4557	OR0 JUMP. (0805)	4822 051 20008	7256	TRANSISTOR, BC846B	5322 130 60159
4558	OR0 JUMP. (0805)	4822 051 20008	7257	TRANSISTOR, BC327-25	4822 130 41246
4559	OR0 JUMP. (0805)	4822 051 20008	7258	TRANSISTOR, BC327-25	4822 130 41246
4560	OR0 JUMP. (0805)	4822 051 20008	7259	TRANSISTOR, BC846B	5322 130 60159
4563	OR0 JUMP. (0805)	4822 051 20008	7260	TRANSISTOR, BC846B	5322 130 60159
4564	OR0 JUMP. (0805)	4822 051 20008	7261	TRANSISTOR, BC856B	4822 130 60373
4565	OR0 JUMP. (0805)	4822 051 20008	7302	IC, STK496-630	4822 209 17507
4566	OR0 JUMP. (0805)	4822 051 20008	7304	TRANSISTOR, BC846B	5322 130 60159
4642	OR0 JUMP. (0805)	4822 051 20008	7305	TRANSISTOR, BC846B	5322 130 60159
4644	OR0 JUMP. (0805)	4822 051 20008	7306	TRANSISTOR, BC846B	5322 130 60159
4651	OR0 JUMP. (0805)	4822 051 20008	7307	TRANSISTOR, BC846B	5322 130 60159
4652	OR0 JUMP. (0805)	4822 051 20008	7309	TRANSISTOR, BC856B	4822 130 60373
4653	OR0 JUMP. (0805)	4822 051 20008	7310	TRANSISTOR, BC846B	5322 130 60159
4801	OR0 JUMP. (0805)	4822 051 20008	7501	IC, LC7821	4822 209 72748
4802	OR0 JUMP. (0805)	4822 051 20008	7503	IC, NJM4560M	4822 209 83357
4803	OR0 JUMP. (0805)	4822 051 20008	7504	IC, NJM4560M	4822 209 83357
4804	OR0 JUMP. (0805)	4822 051 20008	7571	IC, NJM4560DD	4822 209 70157
4805	OR0 JUMP. (0805)	4822 051 20008	7572	IC, LC7821	4822 209 72748
4832	OR0 JUMP. (0805)	4822 051 20008	7601	IC, NJM4556AM	4822 209 31378
4833	OR0 JUMP. (0805)	4822 051 20008	7621	TRANSISTOR, BC817-40	4822 130 42615
4902	OR0 JUMP. (0805)	4822 051 20008	7622	TRANSISTOR, BC817-40	4822 130 42615
4903	OR0 JUMP. (0805)	4822 051 20008	7641	IC, TDA7437T	4822 209 17386
4904	OR0 JUMP. (0805)	4822 051 20008	7642	IC, TDA7437T	4822 209 17386
4905	OR0 JUMP. (0805)	4822 051 20008	7643	IC, TDA7437T	4822 209 17386
4913	OR0 JUMP. (0805)	4822 051 20008	7644	TRANSISTOR, BC337	4822 130 40855
4914	OR0 JUMP. (0805)	4822 051 20008	7651	TRANSISTOR, BC817-40	4822 130 42615
4915	OR0 JUMP. (0805)	4822 051 20008	7652	TRANSISTOR, BC817-40	4822 130 42615
4916	OR0 JUMP. (0805)	4822 051 20008	7653	TRANSISTOR, BC817-40	4822 130 42615
4917	OR0 JUMP. (0805)	4822 051 20008	7654	TRANSISTOR, BC817-40	4822 130 42615
4918	OR0 JUMP. (0805)	4822 051 20008	7655	TRANSISTOR, BC817-40	4822 130 42615
	COILS		7656	TRANSISTOR, BC817-40	4822 130 42615
5301	1uH COIL	4822 157 70599	7657	TRANSISTOR, BC856B	4822 130 60373
5303	1uH COIL	4822 157 70599	7658	TRANSISTOR, BC856B	4822 130 60373
5305	1uH COIL	4822 157 70599	7660	IC, NJM4560M	4822 209 83357
5901	1uH COIL	4822 157 62255	7661	TRANSISTOR, BC817-40	4822 130 42615
5902	1uH COIL	4822 157 62255	7662	TRANSISTOR, BC817-40	4822 130 42615
	SEMICONDUCTORS		7801	TRANSISTOR, BC846B	5322 130 60159
S 6252	DIODE, D3SBA20	4822 130 82079	S 7802	TRANSISTOR, BC557B	4822 130 44568
S 6253	DIODE, D5SBA20	4822 130 82078	7803	IC, STV6401	4822 209 16886
6257	DIODE, 1N4003G	4822 130 31878	7901	IC, STK496-070	4822 209 17385
6258	DIODE, 1N4003G	4822 130 31878	7902	TRANSISTOR, BC846B	5322 130 60159
6259	DIODE, 1N4003G	4822 130 31878	7903	TRANSISTOR, BC846B	5322 130 60159
6260	DIODE, L7812CP	4822 209 33575	7904	TRANSISTOR, BC846B	5322 130 60159
6261	DIODE, 1N4003G	4822 130 31878	7906	TRANSISTOR, BC856B	4822 130 60373
6262	DIODE, 1N4003G	4822 130 31878	7908	TRANSISTOR, BC856B	4822 130 60373

S = Safety Part. Be sure to use exact replacement part.

FR970 (continued)

7909	TRANSISTOR, BC846B	5322	130	60159
7910	TRANSISTOR, BD242BFP	9322	139	22687

EXPLODED VIEW PARTS LIST

	EXPLODED VIEW PARTS LIST			
1	FRONT FR960/17	3104	217	52600
1	FRONT FR970/17	3104	217	52610
2	BUTTON HINGE ASSY SURROUND	4822	410	12442
3	BUTTONS HINGE TUNER.	4822	410	12435
4	BUTTON HINGE ASSY MENU	4822	410	12443
5	BUTTONS HINGE BASS TREBLE	4822	410	12436
6	BUTTONS EASY LINK.	4822	410	12437
7	BUTTON HINGE A/V, FR970 only	4822	410	12478
8	LIGHT GUIDE SURROUND	4822	380	10274
9	LIGHT GUIDE VIRTUAL/HALL	3104	214	38460
10	LIGHT GUIDE SELECTOR	4822	380	10277
11	ORN.PLATE ASSY (SILVER).	3104	217	52450
12	RING KNOB VOLUME	3104	217	52130
13	RING KNOB SOURCE SELECTOR.	3104	217	52140
14	WINDOW DISPLAY	3104	217	52260
15	BACKPLATE A/V.	4822	426	10895
17	COVER PLATE ASSY	4822	442	01879
25	KNOB VOLUME (BL)	4822	410	12438
26	KNOB SOURCE SELECTOR (BL).	4822	410	12439
27	KNOB MENU NAV (BL)	4822	410	12441
28	BADGE PHILIPS.	4822	459	10887
36	LEG SILVER	4822	691	10773
38	LEG SILVER	4822	691	10773
115	POWER ROD.	4822	535	10638
116	POWER CAP.	4822	462	11176
117	BUSH, PLASTIC.	4822	532	60948
125	COVERPLATE	4822	442	01817
1003	MULTI CHANNEL DECODING MODULE.	3104	217	05750
S 5001	MAINS TRANSFORMER FR960/17	3103	308	30240
S 5001	MAINS TRANSFORMER FR970/17	4822	146	21225
S 8020	MAINS CORD	4822	321	11464
ANTAM	AM FRAME AERIAL.	4822	303	50082
ANTFM	FM AERIAL 300R	4822	320	11094
CL	CABLE COMB/CINCH, Cinema Link 1M7.	2422	076	00315
CSPK	CENTER BOX used in MX975D/21/37.	3104	219	03860
DFU	Owner's Manual, FR960 - FR970.	3104	215	36130
REM	REMOTE CONTROL	3104	219	03770
FRSPK	FRONT SPEAKER used in MX975D/21/37	3104	219	03850
SSSPK	SURROUND BOX used in MX975D/21/37	3104	219	03750
SUBSPK	SUBWOOFER FB201V/17 used in MX975D/37	3104	219	03730
SUBCL	CINCH CABLE 3M, Subwoofer, MX975D/21/ 37.	4399	294	03820

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FRONT BOARD ELECTRICAL PARTS LIST

FRONT BOARD ELECTRICAL PARTS LIST
MISCELLANEOUS

1400	CRYSTAL (4, 32MH)	4822	242	11033
1403	CST8,00MT.	4822	242	72066
1404	SWITCH, PUSH BUTTON.	4822	276	13114
1405	SWITCH, PUSH BUTTON.	4822	276	13114
1406	SWITCH, PUSH BUTTON.	4822	276	13114
1407	SWITCH, PUSH BUTTON.	4822	276	13114
1408	SWITCH, PUSH BUTTON.	4822	276	13114
1409	SWITCH, PUSH BUTTON.	4822	276	13114
1410	15FE- BT- VK- N.	4822	265	10981
1411	SWITCH, PUSH BUTTON.	4822	276	13114
1412	SWITCH, PUSH BUTTON.	4822	276	13114
1413	SWITCH, PUSH BUTTON.	4822	276	13114
1414	SWITCH, PUSH BUTTON.	4822	276	13114
1415	SWITCH, PUSH BUTTON.	4822	276	13114
1416	SWITCH, PUSH BUTTON.	4822	276	13114
1417	SWITCH, PUSH BUTTON.	4822	276	13114
1418	SWITCH, PUSH BUTTON.	4822	276	13114
1419	SWITCH, PUSH BUTTON.	4822	276	13114
1420	SWITCH, PUSH BUTTON.	4822	276	13114
1421	SWITCH, ROTARY	4822	273	10372
1422	SWITCH, ROTARY	4822	273	10372
1423	ROTARY ENCODER 24P	4822	273	10365
1424	1P YKB21- 5209	4822	265	11584
1428	3P. FEM. CINCH	4822	265	11336
8002	FLEXIBLE FOIL 15P 220MM.	4822	320	12706
CAPACITORS				
2400	100uF 20% 10V	4822	124	41584
2401	1nF 10% X7R 63V	5322	122	31647
2402	63V 330pF PM5.	5322	122	31863
2403	560pF 10% X7R 50V.	4822	122	33173
2404	1nF 10% X7R 63V	5322	122	31647
2405	22nF 10% X7R 63V.	5322	122	32654
2407	470pF 10% X7R 63V	5322	122	34099
2408	22nF 10% X7R 63V.	5322	122	32654
2409	2,2uF 20% 50V	4822	124	22652
2410	22nF 10% X7R 63V.	5322	122	32654
2411	220pF 5% NP0 63V	4822	122	33575
2412	47uF 20% 50V	4822	124	41751
2413	22nF 10% X7R 63V.	5322	122	32654
2414	22nF 10% X7R 63V.	5322	122	32654
2415	22pF 5% 50V	5322	122	32658
2416	22pF 5% 50V	5322	122	32658
2417	22nF 10% X7R 63V.	5322	122	32654
2419	22nF 10% X7R 63V.	5322	122	32654
2420	100uF 20% 10V	4822	124	23432
2421	22nF 10% X7R 63V.	5322	122	32654
2422	22nF 10% X7R 63V.	5322	122	32654
2423	22nF 10% X7R 63V.	5322	122	32654
2424	22nF 10% X7R 63V.	5322	122	32654
2425	22nF 10% X7R 63V.	5322	122	32654
2426	22nF 10% X7R 63V.	5322	122	32654
2427	1nF 10% X7R 63V	5322	122	31647
2428	4,7uF 20% 100V.	4822	124	40769
2429	47uF 20% 50V	4822	124	41751
2430	220pF 5% NP0 63V	4822	122	33575
2431	100pF 5% NP0 50V.	5322	122	32531
2432	100pF 5% NP0 50V.	5322	122	32531
2433	100pF 5% NP0 50V.	5322	122	32531
2434	220nF 80- 20% 50V.	4822	126	13473
2435	220pF 5% NP0 63V	4822	122	33575
2436	220pF 5% NP0 63V	4822	122	33575
2437	220pF 5% NP0 63V	4822	122	33575
2438	220pF 5% NP0 63V	4822	122	33575
2439	220pF 5% NP0 63V	4822	122	33575
2440	220pF 5% NP0 63V	4822	122	33575
2441	220pF 5% NP0 63V	4822	122	33575
2442	47pF 1% NP0 63V.	4822	126	13692
2443	47pF 1% NP0 63V.	4822	126	13692
2444	22nF 10% X7R 63V.	5322	122	32654
2445	4,7nF 10% X7R 63V	5322	126	10223
2447	4,7nF 10% X7R 63V.	5322	126	10223
2448	1nF 10% X7R 63V.	5322	122	31647
2449	1nF 10% X7R 63V.	5322	122	31647
2454	22nF 10% X7R 63V	5322	122	32654
2455	47uF 20% 50V	4822	124	41751
2456	47uF 20% 25V	4822	124	40433
2457	22nF 10% X7R 63V	5322	122	32654
2458	22nF 10% X7R 63V	5322	122	32654
2459	22nF 10% X7R 63V	5322	122	32654
2460	22nF 10% X7R 63V	5322	122	32654
2461	22nF 10% X7R 63V	5322	122	32654
2462	1nF 10% X7R 63V.	5322	122	31647
2463	100pF 5% NP0 50V	5322	122	32531
2464	100pF 5% NP0 50V	5322	122	32531
2465	100pF 5% NP0 50V	5322	122	32531
2466	100pF 5% NP0 50V	5322	122	32531
2467	100pF 5% NP0 50V	5322	122	32531
2468	100pF 5% NP0 50V	5322	122	32531
2469	100pF 5% NP0 50V	5322	122	32531

2470	100pF 5% NP0 50V	5322	122	32531
2471	100pF 5% NP0 50V	5322	122	32531
2472	100pF 5% NP0 50V	5322	122	32531
2473	100pF 5% NP0 50V	5322	122	32531
2474	100pF 5% NP0 50V	5322	122	32531
2475	100pF 5% NP0 50V	5322	122	32531
2476	100pF 5% NP0 50V	5322	122	32531
2477	100pF 5% NP0 50V	5322	122	32531
2478	100pF 5% NP0 50V	5322	122	32531

RESISTORS				
3391	1K 2% 0,25W.	4822	051	10102
3392	22K 5% 0,1W.	4822	051	20223
3393	22K 5% 0,1W.	4822	051	20223
3394	22K 5% 0,1W.	4822	051	20223
3395	0R0 JUMP. (0805)	4822	051	20008
3400	47R 5% 0,1W.	4822	051	20479
3401	10K 1% 0,6W.	4822	050	21003
3402	10K 1% 0,6W.	4822	050	21003
3403	6K8 1% 0,1W.	4822	117	11507
3404	330E 5% 0,5W	4822	116	52219
3405	22K 5% 0,5W.	4822	116	52257
3406	10K 1% 0,6W.	4822	050	21003
3407	10K 1% 0,6W.	4822	050	21003
3408	10K 1% 0,6W.	4822	050	21003
3409	1K 2% 0,25W.	4822	051	10102
3410	2K2 1% 0,1W.	4822	117	11449
3411	220K 1% 0,1W	4822	117	13579
3413	1K 1% 0,4W.	4822	050	11002
3414	1K 2% 0,25W.	4822	051	10102
3415	0R0 JUMP. (0805)	4822	051	20008
3416	10K 1% 0,1W.	4822	117	10833
3417	10K 1% 0,1W.	4822	117	10833
3418	10K 1% 0,1W.	4822	117	10833
3419	10K 1% 0,1W.	4822	117	10833
3420	10K 1% 0,1W.	4822	117	10833
3421	10K 1% 0,1W.	4822	117	10833
3422	10K 1% 0,1W.	4822	117	10833
3424	1K 1% 0,4W	4822	050	11002
3426	1K 1% 0,4W.	4822	050	11002
3427	150R 5% 0,5W	4822	116	83868
3428	27K 5% 0,1W.	4822	051	20273
3429	22K 5% 0,1W.	4822	051	20223
3430	22K 5% 0,1W.	4822	051	20223
3431	10K 1% 0,1W.	4822	117	10833
S 3432	4R7 5% 0,33W	4822	052	10478
3433	10K 1% 0,1W.	4822	117	10833
3434	22K 5% 0,1W.	4822	051	20223
3435	22K 5% 0,5W.	4822	116	52257
3436	22K 5% 0,5W.	4822	116	52257
3437	100K 1% 0,1W	4822	117	10837
3438	220K 1% 0,1W	4822	117	13579
3439	10K 1% 0,1W.	4822	117	10833
3440	47R 5% 0,1W.	4822	051	20479
3441	82K 1% 0,1W.	4822	117	11149
3442	100K 1% 0,1W	4822	117	10837
3443	330E 5% 0,5W	4822	116	52219
3444	330E 5% 0,5W	4822	116	52219
3445	330R 1% 1,25W.	4822	117	13577
3446	330R 1% 1,25W.	4822	117	13577
3447	330E 5% 0,5W	4822	116	52219
3448	330E 5% 0,5W	4822	116	52219
3449	100K 1% 0,1W	4822	117	10837
3451	10K 1% 0,1W.	4822	117	10833
3452	330E 5% 0,5W	4822	116	52219
3453	330E 5% 0,5W	4822	116	52219
3455	22K 5% 0,1W.	4822	051	20223
3457	330E 5% 0,5W	4822	116	52219
3458	330R 1% 1,25W.	4822	117	13577
3459	10K 1% 0,1W.	4822	117	10833
3460	10K 1% 0,1W.	4822	117	10833
3461	10K 1% 0,1W.	4822	117	10833
3462	10K 1% 0,1W.	4822	117	10833
3463	10K 1% 0,1W.	4822	117	10833
3464	10K 1% 0,1W.	4822	117	10833
3465	220R 1% 0,1W	4822	117	11503
3466	220R 1% 0,1W	4822	117	11503
3467	220R 1% 0,1W	4822	117	11503
3468	220R 1% 0,1W	4822	117	11503
3469	220R 1% 0,1W	4822	117	11503
3470	220R 1% 0,1W	4822	117	11503
3471	1K 2% 0,25W.	4822	051	10102
3472	1K 2% 0,25W.	4822	051	10102
3473	0R0 JUMP. (0805)	4822	051	20008
3474	0R0 JUMP. (0805)	4822	051	20008
3475	100K 1% 0,1W	4822	117	10837
3477	68R 1% 0,1W.	4822	117	12521
3478	100K 1% 0,1W	4822	117	10837
3479	1K 2% 0,25W.	4822	051	10102
3480	100K 1% 0,1W	4822	117	10837
3481	1K 2% 0,25W.	4822	051	10102
3482	100K 1% 0,1W	4822	117	10837
3483	100K 1% 0,1W	4822	117	10837

MX975D (continued)

3484	1K 2%	0,25W	4822 051 10102	7403	IC, GPU28XP	4822 130 10165
3485	0R0 JUMP. (0805)	. . . . .	4822 051 20008	7404	IC, SAA6579T	4822 209 31981
3491	100K 1%	0,1W	4822 117 10837	7405	IC, M24C08- MN6.	4822 209 17445
3493	470R 5%	0,1W	4822 051 20471	7406	TRANSISTOR, BC847B	4822 130 60511
3494	470R 5%	0,1W	4822 051 20471	7407	TRANSISTOR, BC847B	4822 130 60511
3495	470R 5%	0,1W	4822 051 20471	7408	TRANSISTOR, BC847B	4822 130 60511
3496	470R 5%	0,1W	4822 051 20471	7409	TRANSISTOR, BC847B	4822 130 60511
3497	470R 5%	0,1W	4822 051 20471	7411	IC, HEF4094BT.	5322 209 11306
3498	470R 5%	0,1W	4822 051 20471	7412	IC, HEF4094BT.	5322 209 11306
3499	470R 5%	0,1W	4822 051 20471	7413	FTD DISPLAY, VFD 16- MT- 65GK.	2722 171 07168
3500	470R 5%	0,1W	4822 051 20471	7415	IC, TMP87CS71F/ FR970.1.	3103 308 83880
3501	470R 5%	0,1W	4822 051 20471	7416	TRANSISTOR, BC847B	4822 130 60511
3751	33K 5%	0,1W	4822 051 20333	7417	TRANSISTOR, BC847B	4822 130 60511
3752	33K 5%	0,1W	4822 051 20333	7418	TRANSISTOR, BC847B	4822 130 60511
3753	33K 5%	0,1W	4822 051 20333			
3754	33K 5%	0,1W	4822 051 20333			
3755	33K 5%	0,1W	4822 051 20333			
3756	33K 5%	0,1W	4822 051 20333			
3757	33K 5%	0,1W	4822 051 20333			
3758	33K 5%	0,1W	4822 051 20333	1101	Antenna Socket 300R.	4822 267 31505
3759	33K 5%	0,1W	4822 051 20333	1102	Antenna Socket Coax IEC 75R.	4822 267 10283
3760	33K 5%	0,1W	4822 051 20333			
3761	33K 5%	0,1W	4822 051 20333	2101	100pF 5% 50V	5322 122 32531
3762	33K 5%	0,1W	4822 051 20333	2101	47pF 1% 63V, for USA	4822 126 13692
3763	33K 5%	0,1W	4822 051 20333	2102	10nF 20% 50V	4822 122 33177
3764	33K 5%	0,1W	4822 051 20333	2103	1nF 10% 50V.	5322 122 34123
3765	33K 5%	0,1W	4822 051 20333	2104	100pF 10% 50V.	4822 122 33195
3766	33K 5%	0,1W	4822 051 20333	2106	Trimmer 4-20pF, for LW version	4822 125 50355
3767	33K 5%	0,1W	4822 051 20333	2106	Trimmer 3-11pF 100V.	4822 125 60101
3768	33K 5%	0,1W	4822 051 20333	2107	1uF 10% 63V.	4822 121 51319
3769	33K 5%	0,1W	4822 051 20333	2108	100pF 5% 50V, for LW version	5322 122 32531
3770	33K 5%	0,1W	4822 051 20333	2109	10pF 5% 50V, for LW version.	5322 122 32448
3771	33K 5%	0,1W	4822 051 20333	2120	27pF 1% 63V, for LW version.	4822 126 13691
3772	33K 5%	0,1W	4822 051 20333	2120	22pF 5% 50V.	5322 122 32658
3773	33K 5%	0,1W	4822 051 20333	2122	3,3nF 10% 63V, for LW version.	4822 122 33891
3774	33K 5%	0,1W	4822 051 20333	2125	560pF 5% 400V.	4822 121 51381
3775	33K 5%	0,1W	4822 051 20333	2126	330pF 5% 50V	5322 122 31863
3776	33K 5%	0,1W	4822 051 20333	2127	220nF +80/-20% 50V	4822 126 13473
3777	33K 5%	0,1W	4822 051 20333	2128	10uF 20% 50V	4822 124 41579
3778	33K 5%	0,1W	4822 051 20333	2129	100uF 20% 10V.	4822 124 41584
3779	33K 5%	0,1W	4822 051 20333	2130	22nF+80/- 20% 25V.	4822 126 11585
3780	33K 5%	0,1W	4822 051 20333	2131	470nF 16V.	4822 122 33325
3781	33K 5%	0,1W	4822 051 20333	2132	470nF 16V.	4822 122 33325
4401	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2131	470nF +80/- 20% 16V.	4822 126 13482
4402	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2132	470nF +80/- 20% 16V.	4822 126 13482
4403	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2133	1uF 20% 63V.	4822 124 40242
4404	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2134	15nF 5% 63V.	4822 126 13188
4406	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2134	22nF 10% 63V, for USA.	5322 122 32654
4407	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2135	0,22uF 20% 63V	4822 124 40746
4408	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2136	15nF 5% 63V.	4822 126 13188
4410	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2136	22nF 10% 63V, for USA.	5322 122 32654
4411	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2137	0,22uF 20% 63V	4822 124 40746
4413	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2138	2,2uF 20% 50V.	4822 124 41576
4416	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2139	50V 15pF 5%.	4822 126 14236
4417	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2140	470nF 5% 63V	4822 121 51252
4418	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2141	100nF 20% 25V.	4822 126 10002
4420	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2142	100nF 20% 25V.	4822 126 10002
4421	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2143	220nF +80/-20% 50V	4822 126 13473
4422	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2144	1uF 20% 63V.	4822 124 40242
4423	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2145	220pF 5% 50V	4822 122 33575
4424	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2146	220pF 5% 50V	4822 122 33575
4425	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2147	220pF 5% 50V	4822 122 33575
4426	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2148	22nF+80/- 20% 25V.	4822 126 11585
4450	0R0 JUMP. (0805)	. . . . .	4822 051 20008	2149	22nF 10% 63V	5322 122 32654
				2150	100nF 20% 63V.	4822 122 31947
				2152	560pF 5% 63V, for East. Europe	5322 116 80853
				2152	33nF 5% 63V.	4822 126 12105
				2153	12pF 2% 63V, for East. Europe.	4822 122 32139
				2153	15pF 2% 63V.	4822 122 32504
				2155	Trimmer 3-11pF 100V.	4822 125 60101
				2158	10pF 5% 50V, for LW version.	5322 122 32448
				2159	33pF 5% 50V.	5322 122 32659
				2160	22nF 10% 63V	5322 122 32654
				2161	100nF 20% 25V.	4822 126 10002
				2163	100nF 20% 25V.	4822 126 10002
				2164	470nF +80/- 20% 16V.	4822 126 13482
				2165	100nF 20% 25V.	4822 126 10002
				2166	1nF 10% 50V.	5322 122 34123
				2167	12pF 2% 63V.	4822 122 32139
				2168	82pF 1% 63V.	4822 126 13695
					RESISTORS	
				3101	5k6 5% 0,1W, for East. Europe.	4822 051 20562
				3101	33k 5% 0,1W.	4822 051 20333
				3102	100k 5% 0,1W	4822 051 20104
				3103	18k 1% 0,1W.	4822 117 10965
				3104	180R 1% 0,1W	4822 117 11448
				3105	220R 5% 0,5W	4822 116 83872
				3108	2k2 1% 0,1W, for LW version.	4822 117 11449
				3109	4k7 5% 0,1W, for LW version.	4822 051 20472
				3110	47R 5% 0,5W.	4822 116 52195
				3120	0R Jumper 0805	4822 051 20008
				3123	4k7 5% 0,1W, for LW version.	4822 051 20472
				3125	10k 1% 0,1W, for LW version.	4822 117 10833

MX975D (continued)

2274	470nF 10% 16V.	4822 126 14583	2555	100nF Y5V 50V P80M20.	4822 126 13838
2275	1000uF 16V.	4822 124 81144	2556	100nF Y5V 50V P80M20	4822 126 13838
2276	100nF 10% X7R 50V	4822 126 14585	2557	47uF 20% 50V	4822 124 41751
2277	470nF 10% 16V.	4822 126 14583	2558	47uF 20% 50V	4822 124 41751
2278	1uF 20% 63V	4822 124 21913	2559	CER2 50V 33nF PM5	4822 126 12105
2280	100uF 20% 10V	4822 124 41584	2561	22uF 100V	4822 124 40764
2281	100nF Y5V 50V	4822 126 13838	2562	22uF 100V	4822 124 40764
2282	470nF 10% 16V.	4822 126 14583	2563	16V 2200uF 20%	4822 123 14025
2283	220uF 20% 50V.	4822 124 11769	2564	2,2uF 20% 50V	4822 124 22652
2290	10uF 20% 63V.	4822 124 40248	2565	2,2uF 20% 50V	4822 124 22652
2295	10nF 20% X7R 50V	4822 122 33177	2566	2,2uF 20% 50V	4822 124 22652
2297	10uF 20% 63V.	4822 124 40248	2567	4,7uF 20% 100V.	4822 124 40769
2298	47nF 10% X7R 63V.	4822 126 13751	2568	4,7uF 20% 100V.	4822 124 40769
2301	22nF 10%X7R 63V	5322 122 32654	2569	100pF 5% NP0 50V.	5322 122 32531
2302	22uF 50V.	4822 124 81151	2570	100pF 5% NP0 50V.	5322 122 32531
2306	10uF 20% 63V.	4822 124 40248	2571	10uF 20% 63V.	4822 124 40248
2307	4,7pF 5% NP0 50V.	5322 122 32287	2572	10uF 20% 63V.	4822 124 40248
2310	2,2uF 20% 50V	4822 124 22652	2573	150pF 2% NP0 63V.	5322 122 33538
2311	470pF 50V	5322 122 32268	2574	150pF 2% NP0 63V.	5322 122 33538
2313	220pF 5% NP0 63V	4822 122 33575	2575	10uF 20% 63V.	4822 124 40248
2314	220nF 80-20% 50V.	4822 126 13473	2576	10uF 20% 63V.	4822 124 40248
2315	22uF 50V.	4822 124 81151	2577	10nF 20% X7R 50V	4822 122 33177
2316	2,2uF 20% 50V	4822 124 22652	2578	10nF 20% X7R 50V	4822 122 33177
2319	470pF 50V	5322 122 32268	2579	2,2nF10% X7R 63V.	4822 122 33127
2321	220nF 80-20% 50V.	4822 126 13473	2580	2,2nF10% X7R 63V.	4822 122 33127
2324	4,7pF 5% NP0 50V.	5322 122 32287	2581	47uF 20% 50V	4822 124 41751
2325	220pF 5% NP0 63V	4822 122 33575	2582	47uF 20% 50V	4822 124 41751
2330	22uF 50V.	4822 124 81151	2583	2,7nF 50V	2222 861 15272
2333	220nF 80-20% 50V.	4822 126 13473	2584	2,7nF 50V	2222 861 15272
2334	2,2uF 20% 50V	4822 124 22652	2585	82pF 1% NP0 63V	4822 126 13695
2337	470pF 50V	5322 122 32268	2586	82pF 1% NP0 63V	4822 126 13695
2341	220pF 5% NP0 63V	4822 122 33575	2593	22uF 50V.	4822 124 81151
2346	22uF 50V.	4822 124 81151	2594	22uF 50V.	4822 124 81151
2347	4,7pF 5% NP0 50V.	5322 122 32287	2595	100pF 5% NP0 50V.	5322 122 32531
2349	10uF 20% 63V.	4822 124 40248	2596	100pF 5% NP0 50V.	5322 122 32531
2350	220uF 20% 10V	4822 124 40181	2599	22pF 5% 50V.	5322 122 32658
2351	47nF 10% X7R 63V.	4822 126 13751	2600	22pF 5% 50V.	5322 122 32658
2352	22uF 50V.	4822 124 81151	2603	22uF 50V.	4822 124 81151
2357	100nF 50V	4822 126 12882	2604	22uF 50V.	4822 124 81151
2358	220nF 80-20% 50V.	4822 126 13473	2605	47pF 1% NP0 63V	4822 126 13692
2359	220nF 80-20% 50V.	4822 126 13473	2606	47pF 1% NP0 63V	4822 126 13692
2360	220nF 80-20% 50V.	4822 126 13473	2607	47uF 20% 50V	4822 124 41751
2365	10nF 5% 250V.	4822 121 41857	2608	47uF 20% 50V	4822 124 41751
2371	4,7nF 10% X7R 63V	5322 126 10223	2609	220pF 5% NP0 63V	4822 122 33575
2372	4,7nF 10% X7R 63V	5322 126 10223	2610	220pF 5% NP0 63V	4822 122 33575
2373	4,7nF 10% X7R 63V	5322 126 10223	2611	100uF 20% 25V	4822 124 40207
2374	100pF 5% NP0 50V.	5322 122 32531	2612	10uF 20% 63V.	4822 124 40248
2375	100pF 5% NP0 50V.	5322 122 32531	2613	10uF 20% 63V.	4822 124 40248
2376	100pF 5% NP0 50V.	5322 122 32531	2614	100uF 20% 25V	4822 124 40207
2508	100pF 5% NP0 50V.	5322 122 32531	2615	22nF 10% X7R 63V.	5322 122 32654
2509	100pF 5% NP0 50V.	5322 122 32531	2616	22nF 10% X7R 63V.	5322 122 32654
2510	100pF 5% NP0 50V.	5322 122 32531	2617	10uF 20% 63V.	4822 124 40248
2511	100pF 5% NP0 50V.	5322 122 32531	2618	10uF 20% 63V.	4822 124 40248
2512	100pF 5% NP0 50V.	5322 122 32531	2619	100pF 5% NP0 50V.	5322 122 32531
2513	100pF 5% NP0 50V.	5322 122 32531	2620	100pF 5% NP0 50V.	5322 122 32531
2514	100pF 5% NP0 50V.	5322 122 32531	2622	100pF 5% NP0 50V.	5322 122 32531
2515	100pF 5% NP0 50V.	5322 122 32531	2623	100pF 5% NP0 50V.	5322 122 32531
2516	100pF 5% NP0 50V.	5322 122 32531	2624	100pF 5% NP0 50V.	5322 122 32531
2517	100pF 5% NP0 50V.	5322 122 32531	2625	100pF 5% NP0 50V.	5322 122 32531
2518	100pF 5% NP0 50V.	5322 122 32531	2626	100pF 5% NP0 50V.	5322 122 32531
2519	100pF 5% NP0 50V.	5322 122 32531	2627	100pF 5% NP0 50V.	5322 122 32531
2520	100pF 5% NP0 50V.	5322 122 32531	2628	100nF 10% X7R 50V.	4822 126 14585
2521	100pF 5% NP0 50V.	5322 122 32531	2629	47uF 20% 50V	4822 124 41751
2522	100pF 5% NP0 50V.	5322 122 32531	2630	100nF 5% 63V.	5322 121 42386
2525	100pF 5% NP0 50V.	5322 122 32531	2631	100nF 5% 63V.	5322 121 42386
2526	100pF 5% NP0 50V.	5322 122 32531	2632	100nF 5% 63V.	5322 121 42386
2527	47uF 20% 50V	4822 124 41751	2633	22nF 10% X7R 63V.	5322 122 32654
2528	47uF 20% 50V	4822 124 41751	2634	22nF 10% X7R 63V.	5322 122 32654
2529	100nF Y5V 50V P80M20.	4822 126 13838	2635	22nF 10% X7R 63V.	5322 122 32654
2530	100nF Y5V 50V P80M20.	4822 126 13838	2636	100nF 10% X7R 50V.	4822 126 14585
2531	220nF 100V	4822 121 41673	2637	47uF 20% 50V	4822 124 41751
2532	220nF 100V	4822 121 41673	2638	100nF 10% X7R 50V.	4822 126 14585
2533	10uF 20% 63V.	4822 124 40248	2639	47uF 20% 50V	4822 124 41751
2534	10uF 20% 63V.	4822 124 40248	2641	1uF 20% 63V	4822 124 21913
2535	10uF 20% 63V.	4822 124 40248	2642	1uF 20% 63V	4822 124 21913
2536	10uF 20% 63V.	4822 124 40248	2643	1uF 20% 63V	4822 124 21913
2537	10uF 20% 63V.	4822 124 40248	2644	1uF 20% 63V	4822 124 21913
2538	10uF 20% 63V.	4822 124 40248	2647	1uF 20% 63V	4822 124 21913
2539	100uF 20% 25V	4822 124 40207	2648	1uF 20% 63V	4822 124 21913
2540	47uF 20% 25V.	4822 124 40433	2649	1uF 20% 63V	4822 124 21913
2541	10uF 20% 63V.	4822 124 40248	2650	1uF 20% 63V	4822 124 21913
2542	10uF 20% 63V.	4822 124 40248	2655	1uF 20% 63V	4822 124 21913
2543	100uF 10V	4822 124 41584	2656	1uF 20% 63V	4822 124 21913
2544	100uF 10V	4822 124 41584	2659	2,2uF 20% 50V	4822 124 22652
2545	100pF 5% NP0 50V.	5322 122 32531	2660	2,2uF 20% 50V	4822 124 22652
2546	100pF 5% NP0 50V.	5322 122 32531	2661	2,2uF 20% 50V	4822 124 22652
2549	22pF 5% 50V.	5322 122 32658	2662	2,2uF 20% 50V	4822 124 22652
2550	22pF 5% 50V.	5322 122 32658	2663	2,2uF 20% 50V	4822 124 22652
2551	100nF Y5V 50V P80M20.	4822 126 13838	2664	2,2uF 20% 50V	4822 124 22652
2552	100nF Y5V 50V P80M20.	4822 126 13838	2665	47nF 5% 250V.	4822 121 43526
2553	47uF 20% 50V	4822 124 41751	2666	47nF 5% 250V.	4822 121 43526
2554	47uF 20% 50V	4822 124 41751	2667	47nF 5% 250V.	4822 121 43526

S = Safety Part Be sure to use exact replacement part.

MX975D (continued)

2668	47nF 5% 250V.	4822	121	43526	2912	22uF 50V.	4822	124	81151
2669	47nF 5% 250V.	4822	121	43526	2913	2,2uF 20% 50V.	4822	124	22652
2670	47nF 5% 250V.	4822	121	43526	2914	470pF 50V.	5322	122	32268
2671	6,8nF 10% X7R 63V	5322	122	31866	2916	220nF 80-20% 50V.	4822	126	13473
2672	6,8nF 10% X7R 63V	5322	122	31866	2917	4,7nF 10% X7R 63V	5322	126	10223
2673	6,8nF 10% X7R 63V	5322	122	31866	2918	220pF 5% NP0 63V	4822	122	33575
2674	6,8nF 10% X7R 63V	5322	122	31866	2919	22uF 50V.	4822	124	81151
2675	6,8nF 10% X7R 63V	5322	122	31866	2920	220nF 80-20% 50V.	4822	126	13473
2676	6,8nF 10% X7R 63V	5322	122	31866	2921	220nF 80-20% 50V.	4822	126	13473
2677	22nF 10% X7R 63V.	5322	122	32654	2922	4,7pF 5% NP0 50V.	5322	122	32287
2678	22nF 10% X7R 63V.	5322	122	32654	2923	22uF 50V.	4822	124	81151
2679	22nF 10% X7R 63V.	5322	122	32654	2924	10uF 20% 63V.	4822	124	40248
2680	22nF 10% X7R 63V.	5322	122	32654	2925	220uF 20% 10V	4822	124	40181
2681	22nF 10% X7R 63V.	5322	122	32654	2926	100nF 10% X7R 50V	4822	126	14585
2682	22nF 10% X7R 63V.	5322	122	32654	2928	10nF 20% X7R 50V	4822	122	33177
2683	22nF 10% X7R 63V.	5322	122	32654	2930	100pF 5% NP0 50V.	5322	122	32531
2684	22nF 10% X7R 63V.	5322	122	32654	2931	100pF 5% NP0 50V.	5322	122	32531
2685	22nF 10% X7R 63V.	5322	122	32654	2932	100pF 5% NP0 50V.	5322	122	32531
2686	22nF 10% X7R 63V.	5322	122	32654	2933	100pF 5% NP0 50V.	5322	122	32531
2687	22nF 10% X7R 63V.	5322	122	32654	2937	220pF 50V	4822	126	10794
2688	22nF 10% X7R 63V.	5322	122	32654		RESISTORS			
2689	68nF 5% 63V	5322	121	42465	3251	470R 5% 0,1W	4822	051	20471
2690	68nF 5% 63V	5322	121	42465	3252	100K 1% 0,1W	4822	117	10837
2691	68nF 5% 63V	5322	121	42465	3253	100K 1% 0,1W	4822	117	10837
2692	68nF 5% 63V	5322	121	42465	S 3254	0R33 5% 2W	4822	117	11342
2693	68nF 5% 63V	5322	121	42465	3256	10K 1% 0,1W	4822	117	10833
2694	68nF 5% 63V	5322	121	42465	S 3257	0R33 5% 2W	4822	117	11342
2695	68nF 5% 63V	5322	121	42465	3258	180K 5% 0,1W	4822	051	20184
2696	68nF 5% 63V	5322	121	42465	3259	680R 1% 0,1W	4822	117	10361
2697	68nF 5% 63V	5322	121	42465	3260	47K 1% 0,1W	4822	117	10834
2698	68nF 5% 63V	5322	121	42465	3263	680R 1% 0,1W	4822	117	10361
2699	68nF 5% 63V	5322	121	42465	3264	100K 1% 0,1W	4822	117	10837
2700	68nF 5% 63V	5322	121	42465	3266	22K 5% 0,1W	4822	051	20223
2805	100nF 10% X7R 50V	4822	126	14585	3267	3K9 5% 0,1W	4822	051	20392
2806	100nF 10% X7R 50V	4822	126	14585	3268	3K3 5% 0,1W	4822	051	20332
2807	100nF 10% X7R 50V.	4822	126	14585	3269	3K3 5% 0,1W	4822	051	20332
2809	10nF 10% X7R 63V.	5322	122	34098	S 3270	47R 5% 0,33W	4822	052	10479
2810	220uF 20% 10V.	4822	124	12245	S 3271	47R 5% 0,33W	4822	052	10479
2811	10nF 10% X7R 63V.	5322	122	34098	3272	39K 5% 0,1W	4822	051	20393
2812	220uF 20% 25V	4822	124	80144	S 3291	10R 5% 0,33W	4822	052	10109
2813	1uF 20% 63V	4822	124	21913	3292	15K 1% 0,1W	4822	116	83933
2814	47pF 1% NP0 63V	4822	126	13692	3293	10K 1% 0,1W	4822	117	10833
2815	100nF 10% X7R 16V.	4822	126	14305	3294	10K 1% 0,1W	4822	117	10833
2816	22nF 10% X7R 63V.	5322	122	32654	3295	15K 1% 0,1W	4822	116	83933
2817	1uF 20% 63V	4822	124	21913	S 3301	47R 5% 0,33W	4822	052	10479
2818	22nF 10% X7R 63V.	5322	122	32654	3304	56K 1% 0,1W	4822	117	11148
2821	22nF 10% X7R 63V.	5322	122	32654	3305	47K 1% 0,1W	4822	117	10834
2822	22nF 10% X7R 63V.	5322	122	32654	3306	47K 1% 0,1W	4822	117	10834
2831	100pF 5% NP0 50V.	5322	122	32531	3307	47K 1% 0,1W	4822	117	10834
2832	100nF 10% X7R 50V	4822	126	14585	3308	56K 1% 0,1W	4822	117	11148
2833	22nF 10% X7R 63V.	5322	122	32654	3309	4R7 1% 0,6W	4822	050	24708
2834	100pF 5% NP0 50V.	5322	122	32531	3310	1K8 5% 0,1W	4822	051	20182
2837	100pF 5% NP0 50V.	5322	122	32531	3311	4R7 1% 0,6W	4822	050	24708
2851	22pF 5% 50V.	5322	122	32658	3314	56K 1% 0,1W	4822	117	11148
2852	22pF 5% 50V.	5322	122	32658	3315	1K8 5% 0,1W	4822	051	20182
2853	22uF 50V.	4822	124	81151	3316	4R7 1% 0,6W	4822	050	24708
2854	22uF 50V.	4822	124	81151	3319	56K 1% 0,1W	4822	117	11148
2855	100pF 5% NP0 50V.	5322	122	32531	3322	56K 1% 0,1W	4822	117	11148
2856	100pF 5% NP0 50V.	5322	122	32531	3323	1K8 5% 0,1W	4822	051	20182
2857	100nF 10% X7R 50V.	4822	126	14585	3324	56K 1% 0,1W	4822	117	11148
2858	47uF 20% 50V	4822	124	41751	3326	33K 5% 0,1W	4822	051	20333
2860	47uF 20% 50V	4822	124	41751	3327	220R 1% 0,1W	4822	117	11503
2861	22nF 10% X7R 63V.	5322	122	32654	S 3328	47R 5% 0,33W	4822	052	10479
2868	220pF 50V	4822	122	33575	3329	100K 1% 0,1W	4822	117	10837
2869	220pF 50V	4822	122	33575	3330	10K 1% 0,1W	4822	117	10833
2871	10nF 20% X7R 50V	4822	122	33177	3334	1K 2% 0,25W	4822	051	10102
2872	10nF 20% X7R 50V	4822	122	33177	3335	1K 2% 0,25W	4822	051	10102
2873	10nF 20% X7R 50V	4822	122	33177	3336	1K 2% 0,25W	4822	051	10102
2875	10nF 20% X7R 50V	4822	122	33177	S 3337	0R22 5% 1W	4822	117	11744
2876	10nF 20% X7R 50V	4822	122	33177	S 3338	0R22 5% 1W	4822	117	11744
2877	100nF 5% 63V.	5322	121	42386	3339	1K5 1% 0,1W	4822	117	11139
2878	100nF 5% 63V.	5322	121	42386	3340	1K5 1% 0,1W	4822	117	11139
2879	100nF 5% 63V.	5322	121	42386	S 3341	0R22 5% 1W	4822	117	11744
2880	100nF 5% 63V.	5322	121	42386	S 3342	0R22 5% 1W	4822	117	11744
2881	100nF 5% 63V.	5322	121	42386	3343	1K5 1% 0,1W	4822	117	11139
2882	100nF 5% 63V.	5322	121	42386	S 3344	0R22 5% 1W	4822	117	11744
2883	1nF 50V	5322	126	10511	S 3345	0R22 5% 1W	4822	117	11744
2884	1nF 50V	5322	126	10511	S 3352	4R7 5% 1W	4822	053	10478
2885	1nF 50V	5322	126	10511	S 3353	4R7 5% 1W	4822	053	10478
2886	1nF 50V	5322	126	10511	S 3354	4R7 5% 1W	4822	053	10478
2887	2n2 50V	4822	122	33127	3356	47K 1% 0,1W	4822	117	10834
2888	2n2 50V	4822	122	33127	3357	10K 1% 0,6W	4822	050	21003
2901	22uF 50V.	4822	124	81151	3358	1K 2% 0,25W	4822	051	10102
2902	10uF 20% 63V.	4822	124	40248	3359	100K 1% 0,1W	4822	117	10837
2903	4,7pF 5% NP0 50V.	5322	122	32287	3360	10K 1% 0,1W	4822	117	10833
2904	47nF10% X7R 63V	4822	126	13751	3361	470R 5% 0,1W	4822	051	20471
2905	2,2uF 20% 50V	4822	124	22652	3362	470R 5% 0,1W	4822	051	20471
2906	470pF 50V	5322	122	32268	3363	470R 5% 0,1W	4822	051	20471
2908	220nF 80-20% 50V.	4822	126	13473	3513	47K 5% 0,1W	4822	117	10834
2909	4,7nF 10% X7R 63V	5322	126	10223	3514	47K 5% 0,1W	4822	117	10834
2910	220pF 5% NP0 63V	4822	122	33575	3515	470R 5% 0,1W	4822	051	20471
2911	22nF 10% X7R 63V.	5322	122	32654	3516	470R 5% 0,1W	4822	051	20471

S = Safety Part Be sure to use exact replacement part.

MX975D (continued)

3517	39K	5%	0,1W	4822	051	20393	S	3629	10R	5%	0,33W	4822	052	10109
3519	18K	5%	0,1W	4822	117	10965		3630	1K	1%	0,4W	4822	050	11002
3520	18K	5%	0,1W	4822	117	10965		3631	1K	1%	0,4W	4822	050	11002
3520	8K2	5%	0,1W	4822	051	20822		3632	1K	1%	0,4W	4822	050	11002
3521	39K	5%	0,1W	4822	051	20393		3633	1K	2%	0,25W	4822	051	10102
3522	39K	5%	0,1W	4822	051	20393		3634	1K	2%	0,25W	4822	051	10102
3523	18K	5%	0,1W	4822	117	10965		3635	1K	2%	0,25W	4822	051	10102
3524	18K	5%	0,1W	4822	117	10965		3636	470R	5%	0,1W	4822	051	20471
3525	39K	5%	0,1W	4822	051	20393		3637	470R	5%	0,1W	4822	051	20471
3526	39K	5%	0,1W	4822	051	20393		3641	100K	1%	0,1W	4822	117	10837
3527	18K	5%	0,1W	4822	117	10965		3642	100K	1%	0,1W	4822	117	10837
3528	18K	5%	0,1W	4822	117	10965		3643	100K	1%	0,1W	4822	117	10837
3529	470R	5%	0,1W	4822	051	20471		3644	100K	1%	0,1W	4822	117	10837
3530	470R	5%	0,1W	4822	051	20471		3649	100K	1%	0,1W	4822	117	10837
3531	39K	5%	0,1W	4822	051	20393		3650	100K	1%	0,1W	4822	117	10837
3532	39K	5%	0,1W	4822	051	20393		3655	100K	1%	0,1W	4822	117	10837
3533	18K	5%	0,1W	4822	117	10965		3656	100K	1%	0,1W	4822	117	10837
3534	18K	5%	0,1W	4822	117	10965		3659	2K7	1%	0,1W 0805	4822	117	12955
3537	39K	5%	0,1W	4822	051	20393		3660	2K7	1%	0,1W 0805	4822	117	12955
3538	39K	5%	0,1W	4822	051	20393		3661	5K6	5%	0,1W 0805	4822	051	20562
3539	18K	5%	0,1W	4822	117	10965		3662	5K6	5%	0,1W 0805	4822	051	20562
3540	18K	5%	0,1W	4822	117	10965		3663	2K7	1%	0,1W 0805	4822	117	12955
3541	39K	5%	0,1W	4822	051	20393		3664	2K7	1%	0,1W 0805	4822	117	12955
3542	39K	5%	0,1W	4822	051	20393		3665	5K6	5%	0,1W 0805	4822	051	20562
3543	1K5	5%	0,25W	4822	117	11139		3666	5K6	5%	0,1W 0805	4822	051	20562
3544	1K5	5%	0,25W	4822	117	11139		3667	2K7	1%	0,1W 0805	4822	117	12955
3545	3K3	5%	0,1W	4822	051	20332		3668	2K7	1%	0,1W 0805	4822	117	12955
3546	3K3	5%	0,1W	4822	051	20332		3669	5K6	5%	0,1W 0805	4822	051	20562
3551	270R	1%	0,1W	4822	117	11504		3670	5K6	5%	0,1W 0805	4822	051	20562
3552	270R	1%	0,1W	4822	117	11504		3671	100K	1%	0,1W	4822	117	10837
3553	270R	1%	0,1W	4822	117	11504		3672	100K	1%	0,1W	4822	117	10837
3554	270R	1%	0,1W	4822	117	11504		3673	2K2	1%	0,1W	4822	117	11449
3555	3K3	5%	0,1W	4822	051	20332		3674	2K2	1%	0,1W	4822	117	11449
3556	270R	1%	0,1W	4822	117	11504		3675	100R	5%	0,1W	4822	051	20101
3557	270R	1%	0,1W	4822	117	11504		3676	100R	5%	0,1W	4822	051	20101
3560	1K	2%	0,25W	4822	051	10102		3677	100K	1%	0,1W	4822	117	10837
S 3561	4R7	5%	0,33W	4822	052	10478		3678	100K	1%	0,1W	4822	117	10837
3562	470R	5%	0,1W	4822	051	20471		3679	2K2	1%	0,1W	4822	117	11449
3563	1K	2%	0,25W	4822	051	10102		3680	2K2	1%	0,1W	4822	117	11449
3566	270R	5%	0,5W	4822	116	83876		3681	100R	5%	0,1W	4822	051	20101
3567	270R	5%	0,5W	4822	116	83876		3682	100R	5%	0,1W	4822	051	20101
3571	47K	1%	0,1W	4822	117	10834		3683	100K	1%	0,1W	4822	117	10837
3572	47K	1%	0,1W	4822	117	10834		3684	100K	1%	0,1W	4822	117	10837
3573	1K	2%	0,25W	4822	051	10102		3685	2K2	1%	0,1W	4822	117	11449
3574	1K	2%	0,25W	4822	051	10102		3686	2K2	1%	0,1W	4822	117	11449
3575	100K	1%	0,1W	4822	117	10837		3687	100R	5%	0,1W	4822	051	20101
3576	100K	1%	0,1W	4822	117	10837		3688	100R	5%	0,1W	4822	051	20101
3577	560R	5%	0,1W	4822	051	20561		3689	2K2	1%	0,1W	4822	117	11449
3578	560R	5%	0,1W	4822	051	20561		3690	2K2	1%	0,1W	4822	117	11449
3579	390K	5%	0,1W	4822	051	20394		3691	2K2	5%	0,5W	4822	116	52256
3580	390K	5%	0,1W	4822	051	20394		3692	2K2	1%	0,1W	4822	117	11449
3581	27K	5%	0,1W	4822	051	20273		3693	2K2	1%	0,1W	4822	117	11449
3582	27K	5%	0,1W	4822	051	20273		3694	22K	5%	0,5W	4822	116	52256
3583	8K2	1%	0,6W	4822	116	52303		3695	220K	1%	0,1W RC12H	4822	117	13579
3584	8K2	1%	0,6W	4822	116	52303		3696	10K	1%	0,1W	4822	117	10833
3585	2K2	1%	0,1W	4822	117	11449		3697	22K	5%	0,5W	4822	116	52257
3586	2K2	1%	0,1W	4822	117	11449		3698	220K	1%	0,1W RC12H	4822	117	13579
3587	12K	1%	0,1W	4822	117	11383		3699	10K	1%	0,1W	4822	117	10833
3588	12K	5%	0,5W	4822	116	52238		3700	22K0	5%	0,1W	4822	051	20223
3589	10K	1%	0,1W	4822	117	10833		3801	68R	1%	0,1W	4822	117	12521
3590	10K	1%	0,1W	4822	117	10833		3802	68R	1%	0,1W	4822	117	12521
3591	100K	1%	0,1W	4822	117	10837		3803	68R	1%	0,1W	4822	117	12521
3592	100K	1%	0,1W	4822	117	10837		3804	68R	1%	0,1W	4822	117	12521
3593	2K2	1%	0,1W	4822	117	11449		3805	1K	2%	0,25W	4822	051	10102
3594	2K2	1%	0,1W	4822	117	11449		3806	1K	2%	0,25W	4822	051	10102
3595	4K7	5%	0,1W	4822	051	20472	S	3807	4R7	5%	0,33W	4822	052	10478
3596	4K7	5%	0,1W	4822	051	20472	S	3808	4R7	5%	0,33W	4822	052	10478
3597	12K	5%	0,5W	4822	116	52238		3810	2K2	1%	0,1W	4822	117	11449
3598	12K	5%	0,5W	4822	116	52238		3812	470R	5%	0,1W	4822	051	20471
3601	100R	5%	0,1W	4822	051	20101		3813	120R	5%	0,1W	4822	051	20121
3602	100R	5%	0,1W	4822	051	20101		3815	68R	1%	0,1W	4822	117	12521
3603	100K	1%	0,1W	4822	117	10837		3816	68R	1%	0,1W	4822	117	12521
3604	100K	1%	0,1W	4822	117	10837		3817	270R	1%	0,1W	4822	117	11504
3605	12K	1%	0,1W	4822	117	11383		3818	220R	1%	0,1W	4822	117	11503
3606	12K	1%	0,1W	4822	117	11383		3831	100R	5%	0,1W	4822	051	20101
3607	33K	5%	0,1W	4822	051	20333		3832	47R	5%	0,1W	4822	051	20479
3608	33K	5%	0,1W	4822	051	20333		3834	100R	5%	0,1W	4822	051	20101
3609	120R	5%	0,1W	4822	051	20121		3851	4K7	5%	0,1W	4822	051	20472
3610	120R	5%	0,1W	4822	051	20121		3852	22K	5%	0,1W	4822	051	20223
3611	47K	1%	0,1W	4822	117	10834		3853	10K	1%	0,1W	4822	117	10833
3612	47K	1%	0,1W	4822	117	10834		3854	4K7	5%	0,1W	4822	051	20472
3613	470R	5%	0,1W	4822	051	20471	S	3855	270R	1%	0,1W	4822	116	83876
3614	470R	5%	0,1W	4822	051	20471	S	3856	270R	1%	0,1W	4822	117	11504
3615	470R	5%	0,1W	4822	051	20471		3857	100K	1%	0,1W	4822	117	10837
3616	470R	5%	0,1W	4822	051	20471		3858	100K	1%	0,1W	4822	117	10837
3618	47K	1%	0,1W	4822	117	10834		3859	10K	1%	0,1W	4822	117	10833
3619	47K	1%	0,1W	4822	117	10834		3860	10K	1%	0,1W	4822	117	10833
3620	100R	5%	0,1W	4822	116	52175		3871	3K3	5%	0,1W	4822	051	20332
3621	100R	5%	0,1W	4822	051	20101		3872	3K3	5%	0,1W	4822	051	20332
3622	120R	5%	0,1W	4822	051	20121		3873	1K	2%	0,25W	4822	051	10102
3623	120R	5%	0,1W	4822	051	20121		3874	1K	2%	0,25W	4822	051	10102
S 3627	10R	5%	0,33W	4822	052	10109		3875	3K3	5%	0,1W	4822	051	20332

S = Safety Part Be sure to use exact replacement part.

MX975D (continued)

3877	1K	2%	0,25W.	4822	051	10102	4524	OR0 JUMP. (0805)	4822	051	20008
3878	1K	2%	0,25W.	4822	051	10102	4526	OR0 JUMP. (0805)	4822	051	20008
3879	3K3	5%	0,1W.	4822	051	20332	4528	OR0 JUMP. (0805)	4822	051	20008
3880	3K3	5%	0,1W.	4822	051	20332	4529	OR0 JUMP. (0805)	4822	051	20008
3881	1K	2%	0,25W.	4822	051	10102	4530	OR0 JUMP. (0805)	4822	051	20008
3882	1K	2%	0,25W.	4822	051	10102	4531	OR0 JUMP. (0805)	4822	051	20008
3883	12K	1%	0,1W.	4822	117	11383	4532	OR0 JUMP. (0805)	4822	051	20008
3884	12K	1%	0,1W.	4822	117	11383	4533	OR0 JUMP. (0805)	4822	051	20008
3885	12K	1%	0,1W.	4822	117	11383	4537	OR0 JUMP. (0805)	4822	051	20008
3886	12K	1%	0,1W.	4822	117	11383	4538	OR0 JUMP. (0805)	4822	051	20008
3887	12K	1%	0,1W.	4822	117	11383	4539	OR0 JUMP. (0805)	4822	051	20008
3888	12K	1%	0,1W.	4822	117	11383	4540	OR0 JUMP. (0805)	4822	051	20008
3889	2K2	1%	0,1W.	4822	117	11449	4541	OR0 JUMP. (0805)	4822	051	20008
3890	2K2	1%	0,1W.	4822	117	11449	4542	OR0 JUMP. (0805)	4822	051	20008
3891	5K6	5%	0,1W 0805	4822	051	20562	4543	OR0 JUMP. (0805)	4822	051	20008
3892	5K6	5%	0,1W 0805	4822	051	20562	4544	OR0 JUMP. (0805)	4822	051	20008
3893	5K6	5%	0,1W 0805	4822	051	20562	4545	OR0 JUMP. (0805)	4822	051	20008
3895	5K6	5%	0,1W 0805	4822	051	20562	4548	OR0 JUMP. (0805)	4822	051	20008
3896	5K6	5%	0,1W 0805	4822	051	20562	4550	OR0 JUMP. (0805)	4822	051	20008
S 3901	47R	5%	0,33W	4822	052	10479	4551	OR0 JUMP. (0805)	4822	051	20008
3902	56K	1%	0,1W.	4822	117	11148	4552	OR0 JUMP. (0805)	4822	051	20008
3903	47K	1%	0,1W.	4822	117	10834	4553	OR0 JUMP. (0805)	4822	051	20008
3904	47K	5%	0,5W.	4822	116	83884	4555	OR0 JUMP. (0805)	4822	051	20008
3905	4R7	1%	0,6W.	4822	050	24708	4556	OR0 JUMP. (0805)	4822	051	20008
3906	56K	1%	0,1W.	4822	117	11148	4557	OR0 JUMP. (0805)	4822	051	20008
3908	1K8	5%	0,1W.	4822	051	20182	4558	OR0 JUMP. (0805)	4822	051	20008
3910	4R7	1%	0,6W.	4822	050	24708	4559	OR0 JUMP. (0805)	4822	051	20008
3911	56K	1%	0,1W.	4822	117	11148	4560	OR0 JUMP. (0805)	4822	051	20008
3913	1K8	5%	0,1W.	4822	051	20182	4563	OR0 JUMP. (0805)	4822	051	20008
3914	56K	1%	0,1W.	4822	117	11148	4564	OR0 JUMP. (0805)	4822	051	20008
S 3915	47R	5%	0,33W	4822	052	10479	4565	OR0 JUMP. (0805)	4822	051	20008
S 3916	4R7	5%	1W.	4822	053	10478	4566	OR0 JUMP. (0805)	4822	051	20008
3917	33K	1%	0,6W.	4822	050	23303	4642	OR0 JUMP. (0805)	4822	051	20008
3918	220R	1%	0,1W.	4822	117	11503	4644	OR0 JUMP. (0805)	4822	051	20008
S 3919	4R7	5%	1W.	4822	053	10478	4651	OR0 JUMP. (0805)	4822	051	20008
3920	100K	1%	0,1W.	4822	117	10837	4652	OR0 JUMP. (0805)	4822	051	20008
3921	1K	2%	0,25W.	4822	051	10102	4653	OR0 JUMP. (0805)	4822	051	20008
3922	1K	2%	0,25W.	4822	051	10102	4801	OR0 JUMP. (0805)	4822	051	20008
3925	10K	1%	0,1W.	4822	117	10833	4802	OR0 JUMP. (0805)	4822	051	20008
S 3926	OR22	5%	1W	4822	117	11744	4803	OR0 JUMP. (0805)	4822	051	20008
S 3927	OR22	5%	1W	4822	117	11744	4804	OR0 JUMP. (0805)	4822	051	20008
3928	1K5	1%	0,1W.	4822	117	11139	4805	OR0 JUMP. (0805)	4822	051	20008
3929	1K5	1%	0,1W.	4822	117	11139	4832	OR0 JUMP. (0805)	4822	051	20008
S 3930	OR22	5%	1W	4822	117	11744	4833	OR0 JUMP. (0805)	4822	051	20008
S 3931	OR22	5%	1W	4822	117	11744	4902	OR0 JUMP. (0805)	4822	051	20008
3932	47K	1%	0,1W.	4822	117	10834	4903	OR0 JUMP. (0805)	4822	051	20008
3933	10K	1%	0,6W.	4822	050	21003	4904	OR0 JUMP. (0805)	4822	051	20008
3935	1K	2%	0,25W.	4822	051	10102	4905	OR0 JUMP. (0805)	4822	051	20008
3936	100K	1%	0,1W.	4822	117	10837	4908	OR0 JUMP. (0805)	4822	051	20008
3937	10K	1%	0,1W.	4822	117	10833	4909	OR0 JUMP. (0805)	4822	051	20008
3938	2K2	1%	0,1W.	4822	117	11449	4910	OR0 JUMP. (0805)	4822	051	20008
3939	2K2	1%	0,1W.	4822	117	11449	4914	OR0 JUMP. (0805)	4822	051	20008
3940	220R	1%	0,1W.	4822	117	11503	4915	OR0 JUMP. (0805)	4822	051	20008
3941	220R	1%	0,1W.	4822	117	11503	4916	OR0 JUMP. (0805)	4822	051	20008
3943	10K	1%	0,1W.	4822	117	10833	4917	OR0 JUMP. (0805)	4822	051	20008
3944	220R	1%	0,1W.	4822	117	11503	4918	OR0 JUMP. (0805)	4822	051	20008
3945	220R	1%	0,1W.	4822	117	11503		COLLS			
3946	470R	5%	0,1W.	4822	051	20471	5302	COIL	4822	157	62255
3947	470R	5%	0,1W.	4822	051	20471	5304	COIL	4822	157	62255
3948	220R	1%	0,1W.	4822	117	11503	5306	COIL	4822	157	62255
3949	220R	1%	0,1W.	4822	117	11503	5901	COIL	4822	157	62255
3950	100R	5%		4822	051	20101	5902	COIL	4822	157	62255
3951	100R	5%		4822	051	20101		SEMICONDUCTORS			
4251	OR0 JUMP. (0805)			4822	051	20008	S 6251	DIODE, D5SBA20	4822	130	82078
4252	OR0 JUMP. (0805)			4822	051	20008	6257	DIODE, 1N4003G	4822	130	31878
4254	OR0 JUMP. (0805)			4822	051	20008	6258	DIODE, 1N4003G	4822	130	31878
4255	OR0 JUMP. (0805)			4822	051	20008	6259	DIODE, 1N4003G	4822	130	31878
4256	OR0 JUMP. (0805)			4822	051	20008	6260	DIODE, L7812CP	4822	209	33575
4257	OR0 JUMP. (0805)			4822	051	20008	6261	DIODE, 1N4003G	4822	130	31878
4258	OR0 JUMP. (0805)			4822	051	20008	6262	DIODE, 1N4003G	4822	130	31878
4260	OR0 JUMP. (0805)			4822	051	20008	6263	DIODE, 1N4003G	4822	130	31878
4283	OR0 JUMP. (0805)			4822	051	20008	6265	DIODE, L7805CP	4822	209	31841
4284	OR0 JUMP. (0805)			4822	051	20008	6267	DIODE, L7805CP	4822	209	31841
4285	OR0 JUMP. (0805)			4822	051	20008	6268	DIODE, 1N4003G	4822	130	31878
4287	OR0 JUMP. (0805)			4822	051	20008	6270	DIODE, BZX79-B6V8	4822	130	34278
4320	OR0 JUMP. (0805)			4822	051	20008	6271	DIODE, 1N4148	4822	130	30621
4501	OR0 JUMP. (0805)			4822	051	20008	6274	DIODE, 1N4003G	4822	130	31878
4502	OR0 JUMP. (0805)			4822	051	20008	6275	DIODE, 1N4003G	4822	130	31878
4503	OR0 JUMP. (0805)			4822	051	20008	6276	DIODE, BZX79-B5V6	4822	130	34173
4504	OR0 JUMP. (0805)			4822	051	20008	6279	DIODE, 1N4148	4822	130	30621
4506	OR0 JUMP. (0805)			4822	051	20008	6280	DIODE, BZX79-B10	4822	130	61219
4513	OR0 JUMP. (0805)			4822	051	20008	6281	DIODE, BZX79-B22	4822	130	34441
4514	OR0 JUMP. (0805)			4822	051	20008	6289	DIODE, 1N4148	4822	130	30621
4515	OR0 JUMP. (0805)			4822	051	20008	6290	DIODE, 1N4148	4822	130	30621
4516	OR0 JUMP. (0805)			4822	051	20008	6304	DIODE, BZX79-B3V3	5322	130	31504
4517	OR0 JUMP. (0805)			4822	051	20008	6305	DIODE, 1N4148	4822	130	30621
4518	OR0 JUMP. (0805)			4822	051	20008	6501	DIODE, 1N4148	4822	130	30621
4519	OR0 JUMP. (0805)			4822	051	20008	6601	DIODE, 1N4148	4822	130	30621
4520	OR0 JUMP. (0805)			4822	051	20008	6602	DIODE, 1N4148	4822	130	30621
4521	OR0 JUMP. (0805)			4822	051	20008	6641	DIODE, 1N4148	4822	130	30621
4522	OR0 JUMP. (0805)			4822	051	20008	6642	DIODE, 1N4148	4822	130	30621
4523	OR0 JUMP. (0805)			4822	051	20008	6643	DIODE, 1N4148	4822	130	30621

MX975D (continued)

6644	DIODE, 1N4148	4822	130	30621	2256	47nF 5% 250V	4822	121	43526
6645	DIODE, 1N4148	4822	130	30621	2259	4700uF 20% 50V	4822	124	80415
6646	DIODE, 1N4148	4822	130	30621	2260	4700uF 20% 50V	4822	124	80415
6647	DIODE, 1N4148	4822	130	30621	2262	4700uF 20% 63V	4822	124	12423
6648	DIODE, 1N4148	4822	130	30621	2264	4700uF 20% 63V	4822	124	12423
6649	DIODE, 1N4003G	4822	130	31878	2266	100nF 5% 63V	5322	121	42386
S 6650	DIODE, BZX79-B10	4822	130	61219	2268	100nF 5% 63V	5322	121	42386
6801	DIODE, BZX79-B6V8	4822	130	34278	2269	2200uF 20% 35V	4822	124	11583
6801	DIODE, LF33CV	4822	209	16978	2270	100nF 50V P80M20	4822	126	13838
6802	DIODE, BZX79-B6V8	4822	130	34278	2271	470nF 10% 16V	4822	126	14583
6803	DIODE, BZX79-B6V8	4822	130	34278	2272	6800uF 16V	4822	124	12328
6804	DIODE, BZX79-B6V8	4822	130	34278	2273	100nF 10% 50V	4822	126	14585
6805	DIODE, BZX79-B6V8	4822	130	34278	2274	470nF 10% 16V	4822	126	14583
6806	DIODE, BZX79-B6V8	4822	130	34278	2275	1000uF 16V	4822	124	81144
6807	DIODE, BZX79-B6V8	4822	130	34278	2276	100nF 10% 50V	4822	126	14585
6808	DIODE, BZX79-B6V8	4822	130	34278	2277	470nF 10% 16V	4822	126	14583
6809	DIODE, 1N4148	4822	130	30621	2278	1uF 20% 63V	4822	124	21913
6831	DIODE, 1N4148	4822	130	30621	2280	100uF 20% 10V	4822	124	41584
6832	DIODE, 1N4148	4822	130	30621	2281	100nF 50V P80M20	4822	126	13838
6902	DIODE, 1N4148	4822	130	30621	2282	470nF 10% 16V	4822	126	14583
6903	DIODE, BZX79-B3V3	5322	130	31504	2290	10uF 20% 63V	4822	124	40248
7253	TRANSISTOR, BC846B	5322	130	60159	2295	10nF 20% X7R 50V	4822	122	33177
7255	TRANSISTOR, BC856B	4822	130	60373	2298	22nF 10% X7R 63V	5322	122	32654
7256	TRANSISTOR, BC846B	5322	130	60159	2299	10uF 20% 100V	5322	124	40641
7257	TRANSISTOR, BC327-25	4822	130	41246	2301	22nF 10% X7R 63V	5322	122	32654
7258	TRANSISTOR, BC327-25	4822	130	41246	2303	22uF 100 V	4822	124	40764
7259	TRANSISTOR, BC846B	5322	130	60159	2305	10uF 20% 100V	5322	124	40641
7260	TRANSISTOR, BC846B	5322	130	60159	2306	10uF 20% 63V	4822	124	40248
7261	TRANSISTOR, BC856B	4822	130	60373	2308	10pF 5% NPO 63V	5322	122	32448
7301	IC, STK496-270	4822	209	17447	-2309	10pF 5% NPO 63V	5322	122	32448
7304	TRANSISTOR, BC846B	5322	130	60159	2310	2,2uF 20% 50V	4822	124	22652
7305	TRANSISTOR, BC846B	5322	130	60159	2311	470pF 50V	5322	122	32268
7306	TRANSISTOR, BC846B	5322	130	60159	2313	220pF 5% NPO 63V	4822	122	33575
7307	TRANSISTOR, BC846B	5322	130	60159	2314	220nF 80- 20% 50V	4822	126	13473
7309	TRANSISTOR, BC856B	4822	130	60373	2315	22uF 50V	4822	124	81151
7310	TRANSISTOR, BC846B	5322	130	60159	2316	2,2uF 20% 50V	4822	124	22652
7501	IC, LC7821	4822	209	72748	2319	470pF 50V	5322	122	32268
7503	IC, NJM4560M	4822	209	83357	2321	220nF 80- 20% 50V	4822	126	13473
7504	IC, NJM4560	9338	800	40685	2325	220pF 5% NPO 63V	4822	122	33575
7571	IC, NJM4560DD	4822	209	70157	2326	10pF 5% NPO 63V	5322	122	32448
7572	IC, LC7821	4822	209	72748	2327	10pF 5% NPO 63V	5322	122	32448
7601	IC, NJM4556AM	4822	209	31378	2330	22uF 50V	4822	124	81151
7621	TRANSISTOR, BC817-40	4822	130	42615	2333	220nF 80- 20% 50V	4822	126	13473
7622	TRANSISTOR, BC817-40	4822	130	42615	2334	2,2uF 20% 50V	4822	124	22652
7641	IC, TDA7437T	4822	209	17386	2337	470pF 50V	5322	122	32268
7642	IC, TDA7437T	4822	209	17386	2341	220pF 5% NPO 63V	4822	122	33575
7643	IC, TDA7437T	4822	209	17386	2345	10pF 5% NPO 63V	5322	122	32448
7644	TRANSISTOR, BC337	4822	130	40855	2346	22uF 50V	4822	124	81151
7651	TRANSISTOR, BC817-40	4822	130	42615	2348	10pF 5% NPO 63V	5322	122	32448
7652	TRANSISTOR, BC817-40	4822	130	42615	2349	10uF 20% 63V	4822	124	40248
7653	TRANSISTOR, BC817-40	4822	130	42615	2350	220uF 20% 10V	4822	124	40181
7654	TRANSISTOR, BC817-40	4822	130	42615	2353	22uF 100 V	4822	124	40764
7655	TRANSISTOR, BC817-40	4822	130	42615	2354	10uF 20% 100V	5322	124	40641
7656	TRANSISTOR, BC817-40	4822	130	42615	2357	100nF 50V	4822	126	12882
7657	TRANSISTOR, BC856B	4822	130	60373	2358	220nF 80- 20% 50V	4822	126	13473
7658	TRANSISTOR, BC856B	4822	130	60373	2359	220nF 80- 20% 50V	4822	126	13473
7660	IC, NJM4560	9338	800	40685	2360	220nF 80- 20% 50V	4822	126	13473
7661	TRANSISTOR, BC817-40	4822	130	42615	2365	10nF 5% 250V	4822	121	41857
7662	TRANSISTOR, BC817-40	4822	130	42615	2371	4,7nF 10% X7R 63V	5322	126	10223
7801	TRANSISTOR, BC846B	5322	130	60159	2372	4,7nF 10% X7R 63V	5322	126	10223
7802	TRANSISTOR, BC557B	4822	130	44568	2373	4,7nF 10% X7R 63V	5322	126	10223
7803	IC, STV6401	4822	209	16886	2374	100pF 5% NPO 50V	5322	122	32531
7901	IC, STK496-070	4822	209	17385	2375	100pF 5% NPO 50V	5322	122	32531
7902	TRANSISTOR, BC846B	5322	130	60159	2376	100pF 5% NPO 50V	5322	122	32531
7903	TRANSISTOR, BC846B	5322	130	60159	2508	100pF 5% NPO 50V	5322	122	32531
7904	TRANSISTOR, BC846B	5322	130	60159	2509	100pF 5% NPO 50V	5322	122	32531
7906	TRANSISTOR, BC856B	4822	130	60373	2510	100pF 5% NPO 50V	5322	122	32531
7908	TRANSISTOR, BC856B	4822	130	60373	2511	100pF 5% NPO 50V	5322	122	32531
7909	TRANSISTOR, BC846B	5322	130	60159	2512	100pF 5% NPO 50V	5322	122	32531
7910	TRANSISTOR, BD242BFP	9322	139	22687	2513	100pF 5% NPO 50V	5322	122	32531
					2514	100pF 5% NPO 50V	5322	122	32531
					2515	100pF 5% NPO 50V	5322	122	32531
					2516	100pF 5% NPO 50V	5322	122	32531
					2517	100pF 5% NPO 50V	5322	122	32531
					2518	100pF 5% NPO 50V	5322	122	32531
					2519	100pF 5% NPO 50V	5322	122	32531
					2520	100pF 5% NPO 50V	5322	122	32531
					2521	100pF 5% NPO 50V	5322	122	32531
					2522	100pF 5% NPO 50V	5322	122	32531
					2523	100pF 5% NPO 50V	5322	122	32531
					2524	100pF 5% NPO 50V	5322	122	32531
					2525	100pF 5% NPO 50V	5322	122	32531
					2526	100pF 5% NPO 50V	5322	122	32531
					2527	47uF 20% 50V	4822	124	41751
					2528	47uF 20% 50V	4822	124	41751
					2529	100nF 50V P80M20	4822	126	13838
					2530	100nF 50V P80M20	4822	126	13838
					2531	220nF 100V	4822	121	41673
					2532	220nF 100V	4822	121	41673
					2533	10uF 20% 63V	4822	124	40248
					2534	10uF 20% 63V	4822	124	40248
					2535	10uF 20% 63V	4822	124	40248

MONO BOARD PARTS - FR970

MONO BOARD PARTS - FR970

MISCELLANEOUS

1301	CON SCREW 6P	2422	015	19088
1512	CINCH 4P	4822	267	31823
1513	CINCH 4P	4822	267	31823
1514	CINCH 4P	4822	267	31823
1516	CINCH 4P	4822	267	31823
1520	15FE-BT-VK-N	4822	265	10981
1525	CINCH 2P	4822	265	11608
S 1530	FUSE 315mA	4822	071	53151
1540	CINCH 2P	4822	265	20542
1550	CINCH 1P	4822	267	31729
1801	CINCH 1P	4822	267	31996
1802	CINCH 2P	4822	265	11619
1803	CINCH 2P	4822	265	11619
1901	CON. CLICK 4P	4822	265	11609
	CAPACITORS			
2251	100nF 5% 250V	5322	121	42578
2253	47nF 5% 250V	4822	121	43526
2254	100nF 5% 250V	5322	121	42578

S = Safety Part Be sure to use exact replacement part.

MX975D (continued)

2536	10uF 20% 63V	4822 124 40248	2643	1uF 20% 63V	4822 124 21913
2537	10uF 20% 63V	4822 124 40248	2644	1uF 20% 63V	4822 124 21913
2538	10uF 20% 63V	4822 124 40248	2647	1uF 20% 63V	4822 124 21913
2539	100uF 20% 25V	4822 124 40207	2648	1uF 20% 63V	4822 124 21913
2540	47uF 20% 25V	4822 124 40433	2649	1uF 20% 63V	4822 124 21913
2541	10uF 20% 63V	4822 124 40248	2650	1uF 20% 63V	4822 124 21913
2542	10uF 20% 63V	4822 124 40248	2655	1uF 20% 63V	4822 124 21913
2543	100uF 10V	4822 124 41584	2656	1uF 20% 63V	4822 124 21913
2544	100uF 10V	4822 124 41584	2659	2,2uF 20% 50V	4822 124 22652
2545	100pF 5% NP0 50V	5322 122 32531	2660	2,2uF 20% 50V	4822 124 22652
2546	100pF 5% NP0 50V	5322 122 32531	2661	2,2uF 20% 50V	4822 124 22652
2549	22pF 5% 50V	5322 122 32658	2662	2,2uF 20% 50V	4822 124 22652
2550	22pF 5% 50V	5322 122 32658	2663	2,2uF 20% 50V	4822 124 22652
2551	100nF 50V P80M20	4822 126 13838	2664	2,2uF 20% 50V	4822 124 22652
2552	100nF 50V P80M20	4822 126 13838	2665	47nF 5% 250V	4822 121 43526
2553	47uF 20% 50V	4822 124 41751	2666	47nF 5% 250V	4822 121 43526
2554	47uF 20% 50V	4822 124 41751	2667	47nF 5% 250V	4822 121 43526
2555	100nF 50V P80M20	4822 126 13838	2668	47nF 5% 250V	4822 121 43526
2556	100nF 50V P80M20	4822 126 13838	2669	47nF 5% 250V	4822 121 43526
2557	47uF 20% 50V	4822 124 41751	2670	47nF 5% 250V	4822 121 43526
2558	47uF 20% 50V	4822 124 41751	2671	6,8nF 10% X7R 63V	5322 122 31866
2559	CER2 50V 33nF PM5	4822 126 12105	2672	6,8nF 10% X7R 63V	5322 122 31866
2561	22uF 100V	4822 124 40764	2673	6,8nF 10% X7R 63V	5322 122 31866
2562	22uF 100V	4822 124 40764	2674	6,8nF 10% X7R 63V	5322 122 31866
2563	16V 2200uF 20%	4822 123 14025	2675	6,8nF 10% X7R 63V	5322 122 31866
2564	2,2uF 20% 50V	4822 124 22652	2676	6,8nF 10% X7R 63V	5322 122 31866
2565	2,2uF 20% 50V	4822 124 22652	2677	22nF 10% X7R 63V	5322 122 32654
2566	2,2uF 20% 50V	4822 124 22652	2678	22nF 10% X7R 63V	5322 122 32654
2567	4,7uF 20% 100V	4822 124 40769	2679	22nF 10% X7R 63V	5322 122 32654
2568	4,7uF 20% 100V	4822 124 40769	2680	22nF 10% X7R 63V	5322 122 32654
2569	100pF 5% NP0 50V	5322 122 32531	2681	22nF 10% X7R 63V	5322 122 32654
2570	100pF 5% NP0 50V	5322 122 32531	2682	22nF 10% X7R 63V	5322 122 32654
2571	10uF 20% 63V	4822 124 40248	2683	22nF 10% X7R 63V	5322 122 32654
2572	10uF 20% 63V	4822 124 40248	2684	22nF 10% X7R 63V	5322 122 32654
2573	150pF 2% NP0 63V	5322 122 33538	2685	22nF 10% X7R 63V	5322 122 32654
2574	150pF 2% NP0 63V	5322 122 33538	2686	22nF 10% X7R 63V	5322 122 32654
2575	10uF 20% 63V	4822 124 40248	2687	22nF 10% X7R 63V	5322 122 32654
2576	10uF 20% 63V	4822 124 40248	2688	22nF 10% X7R 63V	5322 122 32654
2577	10nF 20% X7R 50V	4822 122 33177	2689	68nF 5% 63V	5322 121 42465
2578	10nF 20% X7R 50V	4822 122 33177	2690	68nF 5% 63V	5322 121 42465
2579	2,2nF 10% X7R 63V	4822 122 33127	2691	68nF 5% 63V	5322 121 42465
2580	2,2nF 10% X7R 63V	4822 122 33127	2692	68nF 5% 63V	5322 121 42465
2581	47uF 20% 50V	4822 124 41751	2693	68nF 5% 63V	5322 121 42465
2582	47uF 20% 50V	4822 124 41751	2694	68nF 5% 63V	5322 121 42465
2583	2,7nF 50V	2222 861 15272	2695	68nF 5% 63V	5322 121 42465
2584	2,7nF 50V	2222 861 15272	2696	68nF 5% 63V	5322 121 42465
2585	82pF 1% NP0 63V	4822 126 13695	2697	68nF 5% 63V	5322 121 42465
2586	82pF 1% NP0 63V	4822 126 13695	2698	68nF 5% 63V	5322 121 42465
2593	22uF 50V	4822 124 81151	2699	68nF 5% 63V	5322 121 42465
2594	22uF 50V	4822 124 81151	2700	68nF 5% 63V	5322 121 42465
2595	100pF 5% NP0 50V	5322 122 32531	2805	100nF 10% 0805 50V	4822 126 14585
2596	100pF 5% NP0 50V	5322 122 32531	2806	100nF 10% 0805 50V	4822 126 14585
2599	22pF 5% 50V	5322 122 32658	2807	100nF 10% 0805 50V	4822 126 14585
2600	22pF 5% 50V	5322 122 32658	2808	100nF 10% 0805 50V	4822 126 14585
2603	22uF 50V	4822 124 81151	2809	10nF 10% X7R 63V	5322 122 34098
2604	22uF 50V	4822 124 81151	2810	220uF 20% 10V 8X5MM	4822 124 12245
2605	47pF 1% NP0 63V	4822 126 13692	2811	10nF 10% X7R 63V	5322 122 34098
2606	47pF 1% NP0 63V	4822 126 13692	2812	220uF 20% 25V	4822 124 80144
2607	47uF 20% 50V	4822 124 41751	2813	1uF 20% 63V	4822 124 21913
2608	47uF 20% 50V	4822 124 41751	2814	47pF 1% NP0 63V	4822 126 13692
2609	220pF 5% NP0 63V	4822 122 33575	2815	100nF 10% 16V	4822 126 14305
2610	220pF 5% NP0 63V	4822 122 33575	2816	22nF 10% X7R 63V	5322 122 32654
2611	100uF 20% 25V	4822 124 40207	2817	1uF 20% 63V	4822 124 21913
2612	10uF 20% 63V	4822 124 40248	2818	22nF 10% X7R 63V	5322 122 32654
2613	10uF 20% 63V	4822 124 40248	2821	22nF 10% X7R 63V	5322 122 32654
2614	100uF 20% 25V	4822 124 40207	2822	22nF 10% X7R 63V	5322 122 32654
2615	22nF 10% X7R 63V	5322 122 32654	2831	100pF 5% NP0 50V	5322 122 32531
2616	22nF 10% X7R 63V	5322 122 32654	2832	100nF 10% 50V	4822 126 14585
2617	10uF 20% 63V	4822 124 40248	2833	22nF 10% X7R 63V	5322 122 32654
2618	10uF 20% 63V	4822 124 40248	2834	100pF 5% NP0 50V	5322 122 32531
2619	100pF 5% NP0 50V	5322 122 32531	2837	100pF 5% NP0 50V	5322 122 32531
2620	100pF 5% NP0 50V	5322 122 32531	2851	22pF 5% 50V	5322 122 32658
2622	100pF 5% NP0 50V	5322 122 32531	2852	22pF 5% 50V	5322 122 32658
2623	100pF 5% NP0 50V	5322 122 32531	2853	22uF 50V	4822 124 81151
2624	100pF 5% NP0 50V	5322 122 32531	2854	22uF 50V	4822 124 81151
2625	100pF 5% NP0 50V	5322 122 32531	2855	100pF 5% NP0 50V	5322 122 32531
2626	100pF 5% NP0 50V	5322 122 32531	2856	100pF 5% NP0 50V	5322 122 32531
2627	100pF 5% NP0 50V	5322 122 32531	2857	100nF 10% X7R 50V	4822 126 14585
2628	100nF 10% 50V	4822 126 14585	2858	47uF 20% 50V	4822 124 41751
2629	47uF 20% 50V	4822 124 41751	2860	47uF 20% 50V	4822 124 41751
2630	100nF 5% 63V	5322 121 42386	2861	22nF 10% X7R 63V	5322 122 32654
2631	100nF 5% 63V	5322 121 42386	2868	220pF 50V	4822 122 33575
2632	100nF 5% 63V	5322 121 42386	2869	220pF 50V	4822 122 33575
2633	22nF 10% X7R 63V	5322 122 32654	2871	10nF 20% X7R 50V	4822 122 33177
2634	22nF 10% X7R 63V	5322 122 32654	2872	10nF 20% X7R 50V	4822 122 33177
2635	22nF 10% X7R 63V	5322 122 32654	2873	10nF 20% X7R 50V	4822 122 33177
2636	100nF 10% 50V	4822 126 14585	2875	10nF 20% X7R 50V	4822 122 33177
2637	47uF 20% 50V	4822 124 41751	2876	10nF 20% X7R 50V	4822 122 33177
2638	100nF 10% 50V	4822 126 14585	2877	100nF 5% 63V	5322 121 42386
2639	47uF 20% 50V	4822 124 41751	2878	100nF 5% 63V	5322 121 42386
2641	1uF 20% 63V	4822 124 21913	2879	100nF 5% 63V	5322 121 42386
2642	1uF 20% 63V	4822 124 21913	2880	100nF 5% 63V	5322 121 42386

S = Safety Part Be sure to use exact replacement part.

MX975D (continued)

2881	100nF 5% 63V	5322 121 42386	3339	1K5 1% 0,1W	4822 117 11139
2882	100nF 5% 63V	5322 121 42386	3340	1K5 1% 0,1W	4822 117 11139
2883	1nF 50V	5322 126 10511	S 3341	0R33 5% 2W	4822 117 11342
2884	1nF 50V	5322 126 10511	S 3342	0R33 5% 2W	4822 117 11342
2885	1nF 50V	5322 126 10511	3343	1K5 1% 0,1W	4822 117 11139
2886	1nF 50V	5322 126 10511	S 3344	0R33 5% 2W	4822 117 11342
2887	2n2 50V	4822 122 33127	S 3345	0R33 5% 2W	4822 117 11342
2888	2n2 50V	4822 122 33127	S 3349	0R33 5% 2W	4822 117 11342
2901	22uF 50V	4822 124 81151	S 3350	0R33 5% 2W	4822 117 11342
2902	10uF 20% 63V	4822 124 40248	S 3351	0R33 5% 2W	4822 117 11342
2903	4,7pF 5% NPO 50V	5322 122 32287	S 3352	4R7 5% 1W	4822 053 10478
2904	47nF 10% X7R 63V	4822 126 13751	S 3353	4R7 5% 1W	4822 053 10478
2905	2,2uF 20% 50V	4822 124 22652	S 3354	4R7 5% 1W	4822 053 10478
2906	470pF 50V	5322 122 32268	3356	47K 1% 0,1W	4822 117 10834
2908	220nF 80-20% 50V	4822 126 13473	3357	22K 5% 0,5W	4822 116 52257
2909	4,7nF 10% X7R 63V	5322 126 10223	3358	1K 2% 0,25W	4822 051 10102
2910	220pF 5% NPO 63V	4822 122 33575	3359	100K 1% 0,1W	4822 117 10837
2911	22nF 10% X7R 63V	5322 122 32654	3360	10K 1% 0,1W	4822 117 10833
2912	22uF 50V	4822 124 81151	3361	470R 5% 0,1W	4822 051 20471
2913	2,2uF 20% 50V	4822 124 22652	3362	470R 5% 0,1W	4822 051 20471
2914	470pF 50V	5322 122 32268	3363	470R 5% 0,1W	4822 051 20471
2916	220nF 80-20% 50V	4822 126 13473	3513	47K 5% 0,1W	4822 117 10834
2917	4,7nF 10% X7R 63V	5322 126 10223	3514	47K 5% 0,1W	4822 117 10834
2918	220pF 5% NPO 63V	4822 122 33575	3515	470R 5% 0,1W	4822 051 20471
2919	22uF 50V	4822 124 81151	3516	470R 5% 0,1W	4822 051 20471
2920	220nF 80-20% 50V	4822 126 13473	3517	39K 5% 0,1W	4822 051 20393
2921	220nF 80-20% 50V	4822 126 13473	3518	39K 5% 0,1W	4822 051 20393
2922	4,7pF 5% NPO 50V	5322 122 32287	3519	18K 5% 0,1W	4822 117 10965
2923	22uF 50V	4822 124 81151	3520	18K 5% 0,1W	4822 117 10965
2924	10uF 20% 63V	4822 124 40248	3521	39K 5% 0,1W	4822 051 20393
2925	220uF 20% 10V	4822 124 40181	3522	39K 5% 0,1W	4822 051 20393
2926	100nF 10% X7R 50V	4822 126 14585	3523	18K 5% 0,1W	4822 117 10965
2928	10nF 20% X7R 50V	4822 122 33177	3524	18K 5% 0,1W	4822 117 10965
2930	100pF 5% NPO 50V	5322 122 32531	3525	39K 5% 0,1W	4822 051 20393
2931	100pF 5% NPO 50V	5322 122 32531	3526	39K 5% 0,1W	4822 051 20393
2932	100pF 5% NPO 50V	5322 122 32531	3527	18K 5% 0,1W	4822 117 10965
2933	100pF 5% NPO 50V	5322 122 32531	3528	18K 5% 0,1W	4822 117 10965
2937	220pF 50V	4822 126 10794	3529	470R 5% 0,1W	4822 051 20471
	RESISTORS		3530	470R 5% 0,1W	4822 051 20471
3251	1K 2% 0,25W	4822 051 10102	3531	39K 5% 0,1W	4822 051 20393
3252	100K 1% 0,1W	4822 117 10837	3532	39K 5% 0,1W	4822 051 20393
3253	100K 1% 0,1W	4822 117 10837	3533	18K 5% 0,1W	4822 117 10965
S 3254	0R33 5% 2W	4822 117 11342	3534	18K 5% 0,1W	4822 117 10965
3256	10K 1% 0,1W	4822 117 10833	3535	18K 5% 0,5W	4822 116 52251
S 3257	0R33 5% 2W	4822 117 11342	3536	18K 5% 0,5W	4822 116 52251
3258	180K 5% 0,1W	4822 051 20184	3537	39K 5% 0,1W	4822 051 20393
3259	680R 1% 0,1W	4822 117 10361	3538	39K 5% 0,1W	4822 051 20393
3260	47K 1% 0,1W	4822 117 10834	3539	18K 5% 0,1W	4822 117 10965
3263	680R 1% 0,1W	4822 117 10361	3540	18K 5% 0,1W	4822 117 10965
3264	100K 1% 0,1W	4822 117 10837	3541	39K 5% 0,1W	4822 051 20393
S 3265	47R 5% 0,33W	4822 052 10479	3542	39K 5% 0,1W	4822 051 20393
3266	22K 5% 0,1W	4822 051 20223	3543	1K5 5% 0,25W	4822 117 11139
3267	6K8 1% 0,1W	4822 117 11507	3544	1K5 5% 0,25W	4822 117 11139
3268	3K3 5% 0,1W	4822 051 20332	3545	3K3 5% 0,1W	4822 051 20332
3269	3K3 5% 0,1W	4822 051 20332	3546	3K3 5% 0,1W	4822 051 20332
S 3270	47R 5% 0,33W	4822 052 10479	3549	6K8 5% 0,1W	4822 117 11507
S 3271	47R 5% 0,33W	4822 052 10479	3550	6K8 5% 0,1W	4822 117 11507
3272	39K 5% 0,1W	4822 051 20393	3551	270R 1% 0,1W	4822 117 11504
S 3291	10R 5% 0,33W	4822 052 10109	3552	270R 1% 0,1W	4822 117 11504
3292	15K 1% 0,1W	4822 116 83933	3553	270R 1% 0,1W	4822 117 11504
3293	10K 1% 0,1W	4822 117 10833	3554	270R 1% 0,1W	4822 117 11504
3294	10K 1% 0,1W	4822 117 10833	3555	3K3 5% 0,1W	4822 051 20332
3295	15K 1% 0,1W	4822 116 83933	3556	270R 1% 0,1W	4822 117 11504
S 3301	47R 5% 0,33W	4822 052 10479	3557	270R 1% 0,1W	4822 117 11504
3303	6K8 5%	4822 116 83961	3560	1K 2% 0,25W	4822 051 10102
3304	56K 1% 0,1W	4822 117 11148	S 3561	4R7 5% 0,33W	4822 052 10478
3305	47K 1% 0,1W	4822 117 10834	3562	470R 5% 0,1W	4822 051 20471
3306	47K 1% 0,1W	4822 117 10834	3563	1K 2% 0,25W	4822 051 10102
3307	47K 1% 0,1W	4822 117 10834	3566	270R 5% 0,5W	4822 116 83876
3308	56K 1% 0,1W	4822 117 11148	3567	270R 5% 0,5W	4822 116 83876
3309	4R7 1% 0,6W	4822 050 24708	3571	47K 1% 0,1W	4822 117 10834
3310	1K8 5% 0,1W	4822 051 20182	3572	47K 1% 0,1W	4822 117 10834
3311	4R7 1% 0,6W	4822 050 24708	3573	1K 2% 0,25W	4822 051 10102
3314	56K 1% 0,1W	4822 117 11148	3574	1K 2% 0,25W	4822 051 10102
3315	1K8 5% 0,1W	4822 051 20182	3575	100K 1% 0,1W	4822 117 10837
3316	4R7 1% 0,6W	4822 050 24708	3576	100K 1% 0,1W	4822 117 10837
3319	56K 1% 0,1W	4822 117 11148	3577	560R 5% 0,1W	4822 051 20561
3320	1K 2% 0,25W	4822 051 10102	3578	560R 5% 0,1W	4822 051 20561
3322	56K 1% 0,1W	4822 117 11148	3579	390K 5% 0,1W	4822 051 20394
3323	1K8 5% 0,1W	4822 051 20182	3580	390K 5% 0,1W	4822 051 20394
3324	56K 1% 0,1W	4822 117 11148	3581	27K 5% 0,1W	4822 051 20273
3325	6K8 5%	4822 116 83961	3582	27K 5% 0,1W	4822 051 20273
3326	33K 5% 0,1W	4822 051 20333	3583	8K2 1% 0,6W	4822 116 52303
3327	220R 1% 0,1W	4822 117 11503	3584	8K2 1% 0,6W	4822 116 52303
S 3328	47R 5% 0,33W	4822 052 10479	3585	2K2 1% 0,1W	4822 117 11449
3329	100K 1% 0,1W	4822 117 10837	3586	2K2 1% 0,1W	4822 117 11449
3330	10K 1% 0,1W	4822 117 10833	3587	12K 1% 0,1W	4822 117 11383
3334	1K8 5% 0,1W	4822 051 20182	3588	12K 5% 0,5W	4822 116 52238
3335	1K8 5% 0,1W	4822 051 20182	3589	10K 1% 0,1W	4822 117 10833
3336	1K8 5% 0,1W	4822 051 20182	3590	10K 1% 0,1W	4822 117 10833
S 3337	0R33 5% 2W	4822 117 11342	3591	100K 1% 0,1W	4822 117 10837
S 3338	0R33 5% 2W	4822 117 11342	3592	100K 1% 0,1W	4822 117 10837

S = Safety Part Be sure to use exact replacement part.

MX975D (continued)

3593	2K2	1%	0,1W.	4822	117	11449	3805	1K	2%	0,25W.	4822	051	10102
3594	2K2	1%	0,1W.	4822	117	11449	3806	1K	2%	0,25W.	4822	051	10102
3595	4K7	5%	0,1W.	4822	051	20472	S 3807	4R7	5%	0,33W.	4822	052	10478
3596	4K7	5%	0,1W.	4822	051	20472	S 3808	4R7	5%	0,33W.	4822	052	10478
3597	12K	5%	0,5W.	4822	116	52238	3810	2K2	1%	0,1W.	4822	117	11449
3598	12K	5%	0,5W.	4822	116	52238	3812	470R	5%	0,1W.	4822	051	20471
3601	100R	5%	0,1W.	4822	051	20101	3813	120R	5%	0,1W.	4822	051	20121
3602	100R	5%	0,1W.	4822	051	20101	3815	68R	1%	0,1W.	4822	117	12521
3603	100K	1%	0,1W.	4822	117	10837	3816	68R	1%	0,1W.	4822	117	12521
3604	100K	1%	0,1W.	4822	117	10837	3817	270R	1%	0,1W.	4822	117	11504
3605	12K	1%	0,1W.	4822	117	11383	3818	220R	1%	0,1W.	4822	117	11503
3606	12K	1%	0,1W.	4822	117	11383	3831	100R	5%	0,1W.	4822	051	20101
3607	33K	5%	0,1W.	4822	051	20333	3832	47R	5%	0,1W.	4822	051	20479
3608	33K	5%	0,1W.	4822	051	20333	3834	100R	5%	0,1W.	4822	051	20101
3609	120R	5%	0,1W.	4822	051	20121	3851	4K7	5%	0,1W.	4822	051	20472
3610	120R	5%	0,1W.	4822	051	20121	3852	22K	5%	0,1W.	4822	051	20223
3611	47K	1%	0,1W.	4822	117	10834	3853	68K	5%	0,1W.	4822	051	20683
3612	47K	1%	0,1W.	4822	117	10834	3854	4K7	5%	0,1W.	4822	051	20472
3613	470R	5%	0,1W.	4822	051	20471	S 3855	270R	5%	0,5W.	4822	116	83876
3614	470R	5%	0,1W.	4822	051	20471	S 3856	270R	1%	0,1W.	4822	117	11504
3615	470R	5%	0,1W.	4822	051	20471	3857	100K	1%	0,1W.	4822	117	10837
3616	470R	5%	0,1W.	4822	051	20471	3858	100K	1%	0,1W.	4822	117	10837
3618	47K	1%	0,1W.	4822	117	10834	3859	10K	1%	0,1W.	4822	117	10833
3619	47K	1%	0,1W.	4822	117	10834	3860	10K	1%	0,1W.	4822	117	10833
3620	100R	5%	0,1W.	4822	116	52175	3871	3K3	5%	0,1W.	4822	051	20332
3621	100R	5%	0,1W.	4822	051	20101	3872	3K3	5%	0,1W.	4822	051	20332
3622	120R	5%	0,1W.	4822	051	20121	3873	1K	2%	0,25W.	4822	051	10102
3623	120R	5%	0,1W.	4822	051	20121	3874	1K	2%	0,25W.	4822	051	10102
S 3627	10R	5%	0,33W.	4822	052	10109	3875	3K3	5%	0,1W.	4822	051	20332
S 3629	10R	5%	0,33W.	4822	052	10109	3877	1K	2%	0,25W.	4822	051	10102
3630	1K	1%	0,4W.	4822	050	11002	3878	1K	2%	0,25W.	4822	051	10102
3631	1K	1%	0,4W.	4822	050	11002	3879	3K3	5%	0,1W.	4822	051	20332
3632	1K	1%	0,4W.	4822	050	11002	3880	3K3	5%	0,1W.	4822	051	20332
3633	1K	2%	0,25W.	4822	051	10102	3881	1K	2%	0,25W.	4822	051	10102
3634	1K	2%	0,25W.	4822	051	10102	3882	1K	2%	0,25W.	4822	051	10102
3635	1K	2%	0,25W.	4822	051	10102	3883	12K	1%	0,1W.	4822	117	11383
3636	470R	5%	0,1W.	4822	051	20471	3884	12K	1%	0,1W.	4822	117	11383
3637	470R	5%	0,1W.	4822	051	20471	3885	12K	1%	0,1W.	4822	117	11383
3641	100K	1%	0,1W.	4822	117	10837	3886	12K	1%	0,1W.	4822	117	11383
3642	100K	1%	0,1W.	4822	117	10837	3887	12K	1%	0,1W.	4822	117	11383
3643	100K	1%	0,1W.	4822	117	10837	3888	12K	1%	0,1W.	4822	117	11383
3644	100K	1%	0,1W.	4822	117	10837	3889	2K2	1%	0,1W.	4822	117	11449
3649	100K	1%	0,1W.	4822	117	10837	3890	2K2	1%	0,1W.	4822	117	11449
3650	100K	1%	0,1W.	4822	117	10837	S 3901	47R	5%	0,33W.	4822	052	10479
3655	100K	1%	0,1W.	4822	117	10837	3902	56K	1%	0,1W.	4822	117	11148
3656	100K	1%	0,1W.	4822	117	10837	3903	47K	1%	0,1W.	4822	117	10834
3659	2K7	1%	0,1W 0805	4822	117	12955	3904	47K	5%	0,5W.	4822	116	83884
3660	2K7	1%	0,1W 0805	4822	117	12955	3905	4R7	1%	0,6W.	4822	050	24708
3661	5K6	5%	0,1W 0805	4822	051	20562	3906	56K	1%	0,1W.	4822	117	11148
3662	5K6	5%	0,1W 0805	4822	051	20562	3908	1K8	5%	0,1W.	4822	051	20182
3663	2K7	1%	0,1W 0805	4822	117	12955	3910	4R7	1%	0,6W.	4822	050	24708
3664	2K7	1%	0,1W 0805	4822	117	12955	3911	56K	1%	0,1W.	4822	117	11148
3665	5K6	5%	0,1W 0805	4822	051	20562	3913	1K8	5%	0,1W.	4822	051	20182
3666	5K6	5%	0,1W 0805	4822	051	20562	3914	56K	1%	0,1W.	4822	117	11148
3667	2K7	1%	0,1W 0805	4822	117	12955	S 3915	47R	5%	0,33W.	4822	052	10479
3668	2K7	1%	0,1W 0805	4822	117	12955	S 3916	4R7	5%	1W.	4822	053	10478
3669	5K6	5%	0,1W 0805	4822	051	20562	3917	33K	1%	0,6W.	4822	050	23303
3670	5K6	5%	0,1W 0805	4822	051	20562	3918	220R	1%	0,1W.	4822	117	11503
3671	100K	1%	0,1W.	4822	117	10837	S 3919	4R7	5%	1W.	4822	053	10478
3672	100K	1%	0,1W.	4822	117	10837	3920	100K	1%	0,1W.	4822	117	10837
3673	2K2	1%	0,1W.	4822	117	11449	3921	1K	2%	0,25W.	4822	051	10102
3674	2K2	1%	0,1W.	4822	117	11449	3922	1K	2%	0,25W.	4822	051	10102
3675	100R	5%	0,1W.	4822	051	20101	3925	10K	1%	0,1W.	4822	117	10833
3676	100R	5%	0,1W.	4822	051	20101	S 3926	0R22	5%	1W.	4822	117	11744
3677	100K	1%	0,1W.	4822	117	10837	S 3927	0R22	5%	1W.	4822	117	11744
3678	100K	1%	0,1W.	4822	117	10837	3928	1K5	1%	0,1W.	4822	117	11139
3679	2K2	1%	0,1W.	4822	117	11449	3929	1K5	1%	0,1W.	4822	117	11139
3680	2K2	1%	0,1W.	4822	117	11449	S 3930	0R22	5%	1W.	4822	117	11744
3681	100R	5%	0,1W.	4822	051	20101	S 3931	0R22	5%	1W.	4822	117	11744
3682	100R	5%	0,1W.	4822	051	20101	3932	47K	1%	0,1W.	4822	117	10834
3683	100K	1%	0,1W.	4822	117	10837	3933	10K	1%	0,6W.	4822	050	21003
3684	100K	1%	0,1W.	4822	117	10837	3934	1K	2%	0,25W.	4822	051	10102
3685	2K2	1%	0,1W.	4822	117	11449	3935	1K	2%	0,25W.	4822	051	10102
3686	2K2	1%	0,1W.	4822	117	11449	3936	100K	1%	0,1W.	4822	117	10837
3687	100R	5%	0,1W.	4822	051	20101	3937	10K	1%	0,1W.	4822	117	10833
3688	100R	5%	0,1W.	4822	051	20101	3938	2K2	1%	0,1W.	4822	117	11449
3689	2K2	1%	0,1W.	4822	117	11449	3939	2K2	1%	0,1W.	4822	117	11449
3690	2K2	1%	0,1W.	4822	117	11449	3940	220R	1%	0,1W.	4822	117	11503
3691	2K2	5%	0,5W.	4822	116	52256	3941	220R	1%	0,1W.	4822	117	11503
3692	2K2	1%	0,1W.	4822	117	11449	3943	22K	5%	0,1W.	4822	051	20223
3693	2K2	1%	0,1W.	4822	117	11449	3944	220R	1%	0,1W.	4822	117	11503
3694	2K2	5%	0,5W.	4822	116	52256	3945	220R	1%	0,1W.	4822	117	11503
3695	220K	1%	0,1W RC12H	4822	117	13579	3946	470R	5%	0,1W.	4822	051	20471
3696	10K	1%	0,1W.	4822	117	10833	3947	470R	5%	0,1W.	4822	051	20471
3697	22K	5%	0,5W.	4822	116	52257	3948	220R	1%	0,1W.	4822	117	11503
3698	220K	1%	0,1W RC12H	4822	117	13579	3949	220R	1%	0,1W.	4822	117	11503
3699	10K	1%	0,1W.	4822	117	10833	3950	100R	5%	0,1W.	4822	051	20101
3700	22K	5%	0,1W.	4822	051	20223	3951	100R	5%	0,1W.	4822	051	20101
3801	68R	1%	0,1W.	4822	117	12521	4251	0R0 JUMP. (0805)			4822	051	20008
3802	68R	1%	0,1W.	4822	117	12521	4252	0R0 JUMP. (0805)			4822	051	20008
3803	68R	1%	0,1W.	4822	117	12521	4253	0R0 JUMP. (0805)			4822	051	20008
3804	68R	1%	0,1W.	4822	117	12521	4254	0R0 JUMP. (0805)			4822	051	20008

S = Safety Part Be sure to use exact replacement part.

MX975D (continued)

4255	OR0 JUMP. (0805)	4822 051 20008	6263	DIODE, 1N4003G	4822 130 31878
4256	OR0 JUMP. (0805)	4822 051 20008	6265	DIODE, 7805CP	4822 209 31841
4257	OR0 JUMP. (0805)	4822 051 20008	6267	DIODE, L7805CP	4822 209 31841
4258	OR0 JUMP. (0805)	4822 051 20008	6268	DIODE, 1N4003G	4822 130 31878
4260	OR0 JUMP. (0805)	4822 051 20008	6270	DIODE, BZX79-B6V8	4822 130 34278
4283	OR0 JUMP. (0805)	4822 051 20008	6271	DIODE, 1N4148	4822 130 30621
4284	OR0 JUMP. (0805)	4822 051 20008	6276	DIODE, BZX79-B5V6	4822 130 34173
4285	OR0 JUMP. (0805)	4822 051 20008	6279	DIODE, 1N4148	4822 130 30621
4287	OR0 JUMP. (0805)	4822 051 20008	6280	DIODE, BZX79-B10	4822 130 61219
4320	OR0 JUMP. (0805)	4822 051 20008	6281	DIODE, BZX79-B22	4822 130 34441
4504	OR0 JUMP. (0805)	4822 051 20008	6289	DIODE, 1N4148	4822 130 30621
4506	OR0 JUMP. (0805)	4822 051 20008	6290	DIODE, 1N4148	4822 130 30621
4513	OR0 JUMP. (0805)	4822 051 20008	6301	DIODE, BZX79-B8V2	4822 130 34382
4514	OR0 JUMP. (0805)	4822 051 20008	6302	DIODE, BZX79-B8V2	4822 130 34382
4515	OR0 JUMP. (0805)	4822 051 20008	6303	DIODE, 1N4148	4822 130 30621
4516	OR0 JUMP. (0805)	4822 051 20008	6304	DIODE, BZX79-B3V3	5322 130 31504
4517	OR0 JUMP. (0805)	4822 051 20008	6305	DIODE, 1N4148	4822 130 30621
4518	OR0 JUMP. (0805)	4822 051 20008	6501	DIODE, 1N4148	4822 130 30621
4519	OR0 JUMP. (0805)	4822 051 20008	6601	DIODE, 1N4148	4822 130 30621
4520	OR0 JUMP. (0805)	4822 051 20008	6602	DIODE, 1N4148	4822 130 30621
4521	OR0 JUMP. (0805)	4822 051 20008	6641	DIODE, 1N4148	4822 130 30621
4522	OR0 JUMP. (0805)	4822 051 20008	6642	DIODE, 1N4148	4822 130 30621
4523	OR0 JUMP. (0805)	4822 051 20008	6643	DIODE, 1N4148	4822 130 30621
4524	OR0 JUMP. (0805)	4822 051 20008	6644	DIODE, 1N4148	4822 130 30621
4526	OR0 JUMP. (0805)	4822 051 20008	6645	DIODE, 1N4148	4822 130 30621
4528	OR0 JUMP. (0805)	4822 051 20008	6646	DIODE, 1N4148	4822 130 30621
4529	OR0 JUMP. (0805)	4822 051 20008	6647	DIODE, 1N4148	4822 130 30621
4530	OR0 JUMP. (0805)	4822 051 20008	6648	DIODE, 1N4148	4822 130 30621
4531	OR0 JUMP. (0805)	4822 051 20008	6649	DIODE, 1N4003G	4822 130 31878
4532	OR0 JUMP. (0805)	4822 051 20008	S 6650	DIODE, BZX79-B10	4822 130 61219
4533	OR0 JUMP. (0805)	4822 051 20008	6801	DIODE, BZX79-B6V8	4822 130 34278
4537	OR0 JUMP. (0805)	4822 051 20008	6802	DIODE, BZX79-B6V8	4822 130 34278
4538	OR0 JUMP. (0805)	4822 051 20008	6803	DIODE, BZX79-B6V8	4822 130 34278
4539	OR0 JUMP. (0805)	4822 051 20008	6804	DIODE, BZX79-B6V8	4822 130 34278
4540	OR0 JUMP. (0805)	4822 051 20008	6805	DIODE, BZX79-B6V8	4822 130 34278
4541	OR0 JUMP. (0805)	4822 051 20008	6806	DIODE, BZX79-B6V8	4822 130 34278
4542	OR0 JUMP. (0805)	4822 051 20008	6807	DIODE, BZX79-B6V8	4822 130 34278
4543	OR0 JUMP. (0805)	4822 051 20008	6808	DIODE, BZX79-B6V8	4822 130 34278
4544	OR0 JUMP. (0805)	4822 051 20008	6809	DIODE, 1N4148	4822 130 30621
4545	OR0 JUMP. (0805)	4822 051 20008	6831	DIODE, 1N4148	4822 130 30621
4548	OR0 JUMP. (0805)	4822 051 20008	6832	DIODE, 1N4148	4822 130 30621
4550	OR0 JUMP. (0805)	4822 051 20008	6901	DIODE, 1N4148	4822 130 30621
4551	OR0 JUMP. (0805)	4822 051 20008	6902	DIODE, 1N4148	4822 130 30621
4552	OR0 JUMP. (0805)	4822 051 20008	6903	DIODE, BZX79-B3V3	5322 130 31504
4553	OR0 JUMP. (0805)	4822 051 20008	6904	DIODE, 1N4148	4822 130 30621
4555	OR0 JUMP. (0805)	4822 051 20008	7253	TRANSISTOR, BC846B	5322 130 60159
4556	OR0 JUMP. (0805)	4822 051 20008	7255	TRANSISTOR, BC856B	4822 130 60373
4557	OR0 JUMP. (0805)	4822 051 20008	7256	TRANSISTOR, BC846B	5322 130 60159
4558	OR0 JUMP. (0805)	4822 051 20008	7257	TRANSISTOR, BC327-25	4822 130 41246
4559	OR0 JUMP. (0805)	4822 051 20008	7258	TRANSISTOR, BC327-25	4822 130 41246
4560	OR0 JUMP. (0805)	4822 051 20008	7259	TRANSISTOR, BC846B	5322 130 60159
4563	OR0 JUMP. (0805)	4822 051 20008	7260	TRANSISTOR, BC846B	5322 130 60159
4564	OR0 JUMP. (0805)	4822 051 20008	7261	TRANSISTOR, BC856B	4822 130 60373
4565	OR0 JUMP. (0805)	4822 051 20008	7302	IC, STK496-630	4822 209 17507
4566	OR0 JUMP. (0805)	4822 051 20008	7304	TRANSISTOR, BC846B	5322 130 60159
4642	OR0 JUMP. (0805)	4822 051 20008	7305	TRANSISTOR, BC846B	5322 130 60159
4644	OR0 JUMP. (0805)	4822 051 20008	7306	TRANSISTOR, BC846B	5322 130 60159
4651	OR0 JUMP. (0805)	4822 051 20008	7307	TRANSISTOR, BC846B	5322 130 60159
4652	OR0 JUMP. (0805)	4822 051 20008	7309	TRANSISTOR, BC856B	4822 130 60373
4653	OR0 JUMP. (0805)	4822 051 20008	7310	TRANSISTOR, BC846B	5322 130 60159
4801	OR0 JUMP. (0805)	4822 051 20008	7501	IC, LC7821	4822 209 72748
4802	OR0 JUMP. (0805)	4822 051 20008	7503	IC, NJM4560M	4822 209 83357
4803	OR0 JUMP. (0805)	4822 051 20008	7504	IC, NJM4560M	4822 209 83357
4804	OR0 JUMP. (0805)	4822 051 20008	7571	IC, NJM4560DD	4822 209 70157
4805	OR0 JUMP. (0805)	4822 051 20008	7572	IC, LC7821	4822 209 72748
4832	OR0 JUMP. (0805)	4822 051 20008	7601	IC, NJM4556AM	4822 209 31378
4833	OR0 JUMP. (0805)	4822 051 20008	7621	TRANSISTOR, BC817-40	4822 130 42615
4902	OR0 JUMP. (0805)	4822 051 20008	7622	TRANSISTOR, BC817-40	4822 130 42615
4903	OR0 JUMP. (0805)	4822 051 20008	7641	IC, TDA7437T	4822 209 17386
4904	OR0 JUMP. (0805)	4822 051 20008	7642	IC, TDA7437T	4822 209 17386
4905	OR0 JUMP. (0805)	4822 051 20008	7643	IC, TDA7437T	4822 209 17386
4913	OR0 JUMP. (0805)	4822 051 20008	7644	TRANSISTOR, BC337	4822 130 40855
4914	OR0 JUMP. (0805)	4822 051 20008	7651	TRANSISTOR, BC817-40	4822 130 42615
4915	OR0 JUMP. (0805)	4822 051 20008	7652	TRANSISTOR, BC817-40	4822 130 42615
4916	OR0 JUMP. (0805)	4822 051 20008	7653	TRANSISTOR, BC817-40	4822 130 42615
4917	OR0 JUMP. (0805)	4822 051 20008	7654	TRANSISTOR, BC817-40	4822 130 42615
4918	OR0 JUMP. (0805)	4822 051 20008	7655	TRANSISTOR, BC817-40	4822 130 42615
	COILS		7656	TRANSISTOR, BC817-40	4822 130 42615
5301	1uH COIL	4822 157 70599	7657	TRANSISTOR, BC856B	4822 130 60373
5303	1uH COIL	4822 157 70599	7658	TRANSISTOR, BC856B	4822 130 60373
5305	1uH COIL	4822 157 70599	7660	IC, NJM4560M	4822 209 83357
5901	1uH COIL	4822 157 62255	7661	TRANSISTOR, BC817-40	4822 130 42615
5902	1uH COIL	4822 157 62255	7662	TRANSISTOR, BC817-40	4822 130 42615
	SEMICONDUCTORS		7801	TRANSISTOR, BC846B	5322 130 60159
S 6252	DIODE, D3SBA20	4822 130 82079	S 7802	TRANSISTOR, BC557B	4822 130 44568
S 6253	DIODE, D5SBA20	4822 130 82078	7803	IC, STV6401	4822 209 16886
6257	DIODE, 1N4003G	4822 130 31878	7901	IC, STK496-070	4822 209 17385
6258	DIODE, 1N4003G	4822 130 31878	7902	TRANSISTOR, BC846B	5322 130 60159
6259	DIODE, 1N4003G	4822 130 31878	7903	TRANSISTOR, BC846B	5322 130 60159
6260	DIODE, L7812CP	4822 209 33575	7904	TRANSISTOR, BC846B	5322 130 60159
6261	DIODE, 1N4003G	4822 130 31878	7906	TRANSISTOR, BC856B	4822 130 60373
6262	DIODE, 1N4003G	4822 130 31878	7908	TRANSISTOR, BC856B	4822 130 60373

S = Safety Part. Be sure to use exact replacement part.

MX975D (continued)

7909	TRANSISTOR, BC846B	5322	130	60159
7910	TRANSISTOR, BD242BFP	9322	139	22687

EXPLODED VIEW PARTS LIST

	EXPLODED VIEW PARTS LIST			
1	FRONT FR960/17	3104	217	52600
1	FRONT FR970/17	3104	217	52610
2	BUTTON HINGE ASSY SURROUND	4822	410	12442
3	BUTTONS HINGE TUNER.	4822	410	12435
4	BUTTON HINGE ASSY MENU	4822	410	12443
5	BUTTONS HINGE BASS TREBLE	4822	410	12436
6	BUTTONS EASY LINK.	4822	410	12437
7	BUTTON HINGE A/V, FR970 only	4822	410	12478
8	LIGHT GUIDE SURROUND	4822	380	10274
9	LIGHT GUIDE VIRTUAL/HALL	3104	214	38460
10	LIGHT GUIDE SELECTOR	4822	380	10277
11	ORN.PLATE ASSY (SILVER).	3104	217	52450
12	RING KNOB VOLUME	3104	217	52130
13	RING KNOB SOURCE SELECTOR.	3104	217	52140
14	WINDOW DISPLAY	3104	217	52260
15	BACKPLATE A/V.	4822	426	10895
17	COVER PLATE ASSY	4822	442	01879
25	KNOB VOLUME (BL)	4822	410	12438
26	KNOB SOURCE SELECTOR (BL).	4822	410	12439
27	KNOB MENU NAV (BL)	4822	410	12441
28	BADGE PHILIPS.	4822	459	10887
36	LEG SILVER	4822	691	10773
38	LEG SILVER	4822	691	10773
115	POWER ROD.	4822	535	10638
116	POWER CAP.	4822	462	11176
117	BUSH, PLASTIC.	4822	532	60948
125	COVERPLATE	4822	442	01817
1003	MULTI CHANNEL DECODING MODULE.	3104	217	05750
S 5001	MAINS TRANSFORMER FR960/17	3103	308	30240
S 5001	MAINS TRANSFORMER FR970/17	4822	146	21225
S 8020	MAINS CORD	4822	321	11464
ANTAM	AM FRAME AERIAL.	4822	303	50082
ANTFM	FM AERIAL 300R	4822	320	11094
CL	CABLE COMB/CINCH, Cinema Link 1M7.	2422	076	00315
CSPK	CENTER BOX used in MX975D/21/37.	3104	219	03860
DFU	Owner's Manual, FR960 - FR970.	3104	215	36130
REM	REMOTE CONTROL	3104	219	03770
FRSPK	FRONT SPEAKER used in MX975D/21/37	3104	219	03850
SSSPK	SURROUND BOX used in MX975D/21/37	3104	219	03750
SUBSPK	SUBWOOFER FB201V/17 used in MX975D/37	3104	219	03730
SUBCL	CINCH CABLE 3M, Subwoofer, MX975D/21/ 37.	4399	294	03820