Service Manual

74 AC500/02B/02G/05B, U, K, KS, KH
Audio Console
74 EC500/02B/02G/05B, U, K, KS, KH
Entertainment Console

COMPACT
DIGITAL AUDIO

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Please use this service manual with referring to the user guide (D.F.U.) without fail.

marantz®

model AC500 / EC500

4822 725 51089
First issue : 1995/6
292K8550 10
PCS 85 736

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, **MARANTZ** company has created the ultimate in stereo sound. Only original **MARANTZ** parts can insure that your **MARANTZ** product will continue to perform to the specifications for which it is famous.

Parts for your **MARANTZ** equipment are generally available to our National Marantz Subsidiary or Agent.

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Parts can be ordered either by mail or by Fax.. In both cases, the correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order:

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature: any order form or Fax. must be signed, otherwise such part order will be considered as null and void.

USA

MARANTZ AMERICA, INC.
440 MEDINAH ROAD
ROSELLE, ILLINOIS 60172-2330
USA
PHONE : 708-307-3100
FAX : 708-307-2687

CANADA

LENBROOK INDUSTRIES LIMITED
633 GRANITE COURT,
PICKERING, ONTARIO L1W 3K1
CANADA
PHONE : 416-831-6333
FAX : 416-831-6936

EUROPE

MARANTZ EUROPE B.V.
P.O.BOX 80002
BUILDING SFF2
5600 JB EINDHOVEN
THE NETHERLANDS
PHONE : +31-40-732241
FAX : +31-40-735578

***PROFESSIONAL*-USA**

SUPERSCOPE TECHNOLOGIES, INC.
MARANTZ PROFESSIONAL PRODUCTS
1000 CORPORATE BLVD., SUITE D
AURORA, ILLINOIS 60504 USA
PHONE : 708-820-4800
FAX : 708-820-8103

***PROFESSIONAL*-CANADA**

TC ELECTRONICS CANADA LTD
540 FIRING AVE.
BAIE D'URFÉ, QUEBEC H9X 3T2
CANADA
PHONE : 514-457-4044
FAX : 514-457-5524

TRADING

MARANTZ EUROPE B.V.
P.O.BOX 80002
BUILDING SFF2
5600 JB EINDHOVEN
THE NETHERLANDS
PHONE : +31-40-732241
FAX : +31-40-735578

AUSTRALIA

MARANTZ AUSTRALIA
3 Figtree Drive
Australia Centre
Homebush, NSW2140 AUSTRALIA
PHONE : +61 2 742.8311
FAX : +61 2 7643074

HONG-KONG

FORWARD INTERNATIONAL CORP. LTD.
15 TH FLOOR, REGENT CENTRE,
88 QUEEN'S ROAD, CENTRAL, H. K.
PHONE : +852 521-0883
FAX : +852 521-7835

THAILAND

MRZ STANDARD CO., LTD.
746-750 WANGBURAPA BANGKOK
10200 THAILAND
PHONE : +66 2222 9181
FAX : +66 2225 8871

TAIWAN

PAI-YUING CO., LTD.
6 TH FL NO. 148 SUNG KIANG RORD,
TAIPEI, 10429. TAIWAN R.O.C.
PHONE : +886 (2) 5221304~8
FAX : +886 (2) 5630415

MALAYSIA

WO KEE HONG ELECTRONICS SDN. BHD.
NO. 102 JALAN SS 21/35, DAMANSARA
UTAMA, 47400 PETALING JAYA
SELANGOR DARUL EHSAN,
MALAYSIA
PHONE : +60 3-7184666
FAX : +60 3-7173828

SINGAPORE

WO KEE HONG (SINGAPORE) PTE. LTD.
29, LENG KEE ROAD
SINGAPORE 0315,
PHONE : +65 475-4555
FAX : +65 475-8623

JAPAN—*Technical*

MARANTZ JAPN INC.
35-1, 7-chome, Sagamiono
Sagamihara-shi, Kanagawa
Japan
PHONE : +81 427 48 2181
FAX : +81 427 48 0889

JAPAN—*Parts Order*

MARANTZ JAPN INC.
35-1, 7-chome, Sagamiono
Sagamihara-shi, Kanagawa
Japan
PHONE : +81 427 48 1013
FAX : +81 427 48 9190

日本マランツ株式会社

本　　社〒228 神奈川県相模原市相模大野7丁目35番1号

営業本部〒150 東京都渋谷区恵比寿南1丁目11番9号

SHOCK, FIRE HAZARD SERVICE TEST:

CAUTION: After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

Ref. UL Standard NO.1492.

In case of difficulties, do not hesitate to contact the Technical Department at above mentioned address.

1. TECHNICAL SPECIFICATIONS

FM Tuner Section

Frequency Range ········ 87.5—108.0 MHz
Frequency Stepping ········ 50 kHz
Usable Sensitivity, mono/stereo ········ 1.3 μV(13.5 dBf)
50 dB Quieting Sensitivity, mono/stereo ········ 1.9/25 μV(16.8 dBf/39.2 dBf)
Antenna Terminal ········ 75 ohm caxial
Frequency Response at 65 dBf ········ 20 Hz—15 kHz ± 0.5 dB
S/N at 65 dBf Input(A-WTD), mono/stereo ········ 76/68 dB
THD at 65 dBf Input, mono/stereo ········ 0.2/0.5 %
Stereo Separation at 65 dBf Input(1kHz) ········ 40 dB
Adjacent Channel Sensitivity ········ 60 dB
Image Rejection ········ 98 MHz 50 dB
IF Rejection ········ 70 dB
Auto Preset Scan Tuning Level ········ 100 μV(45 dBf)
De-Emphasis
/02/05 Versions ········ 50 μs
U Version ········ 75 μs
K/KH/KS Versions(Switch : Backside) ········ 50/75 μs
Rec output Level(75kHz Deviation) ········ 940 mVrms

MW/AM Tuner Section

Frequency Range
/02/05/K/KS Versions ········ 531—1602 kHz
U/ K/KH/KS Versions ········ 520—1710 kHz
Frequency Stepping
/02/05 Versions ········ 9 kHz
U Version ········ 10 kHz
K/KH/KS Versions(Switch : Backside) ········ 9 kHz/10 kHz
Usable Sensitivity ········ Loop 500 μV/m
S/N at 5 mV/m Input ········ 50 dB
THD at 5 mV/m 30% Mod. Input ········ 0.5 %
Sensitivity (S/N 20dB ± 10kHz) ········ 25 dB
Image Rejection ········ 40 dB
IF Rejection ········ 60 dB

LW Tuner Section [/02/05 Versions Only]

Frequency Range ········ 152—282 kHz
Usable Sensitivity ········ Loop 1500 μV/m

CD Section(on the rec out)

Channels ········ 2 Channels
Sampling frequency ········ 44.1kHz
Quantization ········ 16-Bit Linear/Channel
Error correction ········ CIRC
D/A conversion ········ 1-Bit Liner/Channel
Noise Shaping ········ 4 Th Order
Oversampling Rate ········ 8 Times
Final Oversampling Rate ········ 32 Times
Wow & Flutter ········ Precision of Quartz
Optical Readout System
(Laser/Wavelength ········ AlGaAs semiconductor/780 nm
Frequency Response(5Hz—20kHz) ········ ± 0.5 dB
Output Level ········ 2 Vrms
S/N(A-WTD) ········ 100 dB
THD(1kHz) ········ 0.005 %
Dynamic Range(1kHz) ········ 96dB
Channel Separation(1kHz) ········ 90dB
Digital Output(Coaxial)
Output On-Off Select : Keys Operation of Front

Preamplifier Section

Input Sensitivity/Impedance ········ 150 mV/22 kohm
Output Level/Impedance ········ 1.0 V/600 ohm
THD(1kHz) ········ 0.01%
Channel Separation(1kHz) ········ 70dB
Frequency Response
Front Output(10kHz—100kHz) ········ +0, -3 dB
Sub Woofer Output(Fixed Level) ········ 60 Hz(18 dB/Octave)
S/N(A-WTD) ········ 85 dB
Treble Control(10 kHz) ········ ± 10 dB
Bass Control(100 Hz) ········ ± 10 dB

Phono Input [AC500 Only]

Input Sensitivity/Impedance ········ 2 mV/47 kohm
Frequency Response(1Hz—20kHz) ········ ± 0.5 dB
S/N(A-WTD) ········ 78 dB
Over Load(1 kHz 1 % THD) ········ 120 mV

Dolby Pro Logic Section [EC500 Only]

Channel Separation(1kHz) ········ 25 dB
Frequency Response(Surround Output:100Hz—6kHz) ········ +0, -3 dB
Sub Woofer Output
(L+R+C)(Level Control: backside) ········ 60 Hz(18 dB/Octave)

Video Section [EC500 Only]

Input Sensitivity/Impedance
Composite Video ········ 1.0 Vp-p/75 ohm
S-Video(Y/C)[U/ K/KH/KS Versions Only] ········ 1.0/0.28 Vp-p/75 ohm
Output Level/Impedance
Composite Video ········ 1.0 Vp-p/75 ohm
S-Video(Y/C)[U/ K/KH/KS Versions Only] ········ 1.0/0.28 Vp-p/75 ohm
Frequency Response(10Hz—8kHz) ········ ± 1.0 dB
S/N ········ 60 dB
On Screen Display
/02/05/K/KH/KS Versions(Select: Remote controller) PAL/SECAM/NTSC
U Version ········ NTSC

Headphone

Output Level(150 mV input) ········ 0—1.0 Vrms(no load)
Output Impedance ········ 47 ohms
Acceptable Impedance Range ········ 8—2000 ohms

Others

Backup Time(After Changed One Hour)
Memory ········ 3 Week
Clock ········ 12 Hour
Clock Deviation ········ < ± 30 sec/month

Power Supply

/02/KS Versions ········ 230 V AC 50 Hz
/05 Version ········ 240 V AC 50Hz
U Version ········ 120V AC 60 Hz
K/KH Versions(Switch : Backside) ········ 110/220 V AC 50/60 Hz
Power Consumption [EC500 Only] ········ 36 W
Power Consumption [AC500 Only] ········ 28 W
Standby Power Consumption ········ 8 W

Cabinet, etc.

Dimensions
Width ········ 16-3/4 inches(420 mm)
Height ········ 4 inches(100 mm)
Depth ········ 13-1/8 inches(334 mm)
Net Weight[EC500 Only] ········ 14.3 lbs(6.5kg)
Net Weight[AC500 Only] ········ 13.6 lbs(6.2kg)
Operation temperatures ········ +5 °C--35 °C
Operating humidity ········ 5%—65%(without Dew)

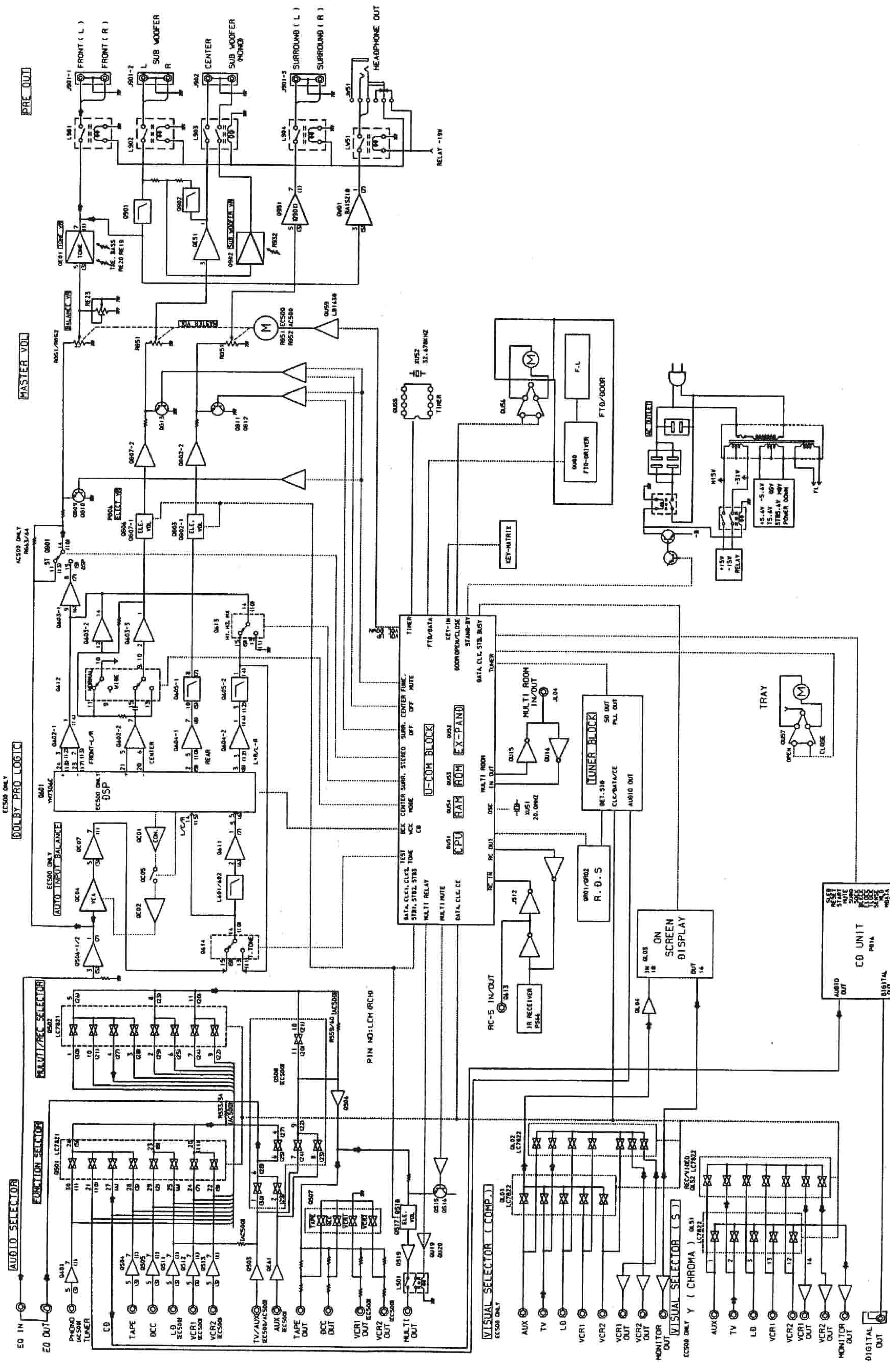
Accessories

Remote control unit (RC500EC) [EC500 Only] ········ 1
Remote control unit (RC500AC) [AC500 Only] ········ 1
CR2032 Lithium Batteries ········ 1
FM Antenna ········ 1
F - Connect Adaptor [U Version Only] ········ 1
AM Loop Antenna ········ 1
Stereo audio cable ········ EC500/AC500, 4/1
Remote Bus cable ········ 1
AC Plug Adaptor [K Version Only] ········ 1

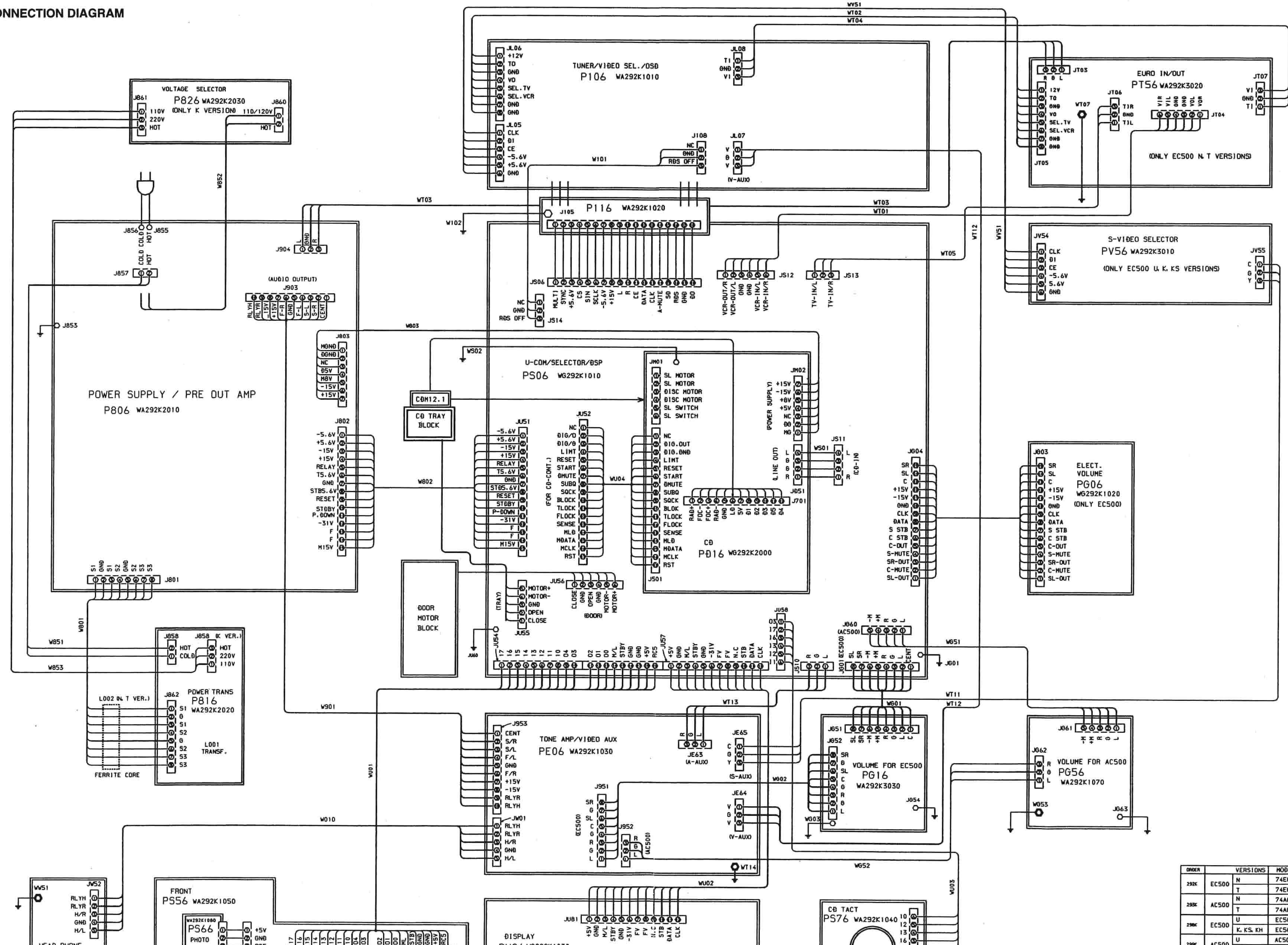
Specifications subject to change without prior notice.

2. BLOCK DIAGRAM AND CONNECTION DIAGRAM

2.1 BLOCK DIAGRAM



2.2 CONNECTION DIAGRAM



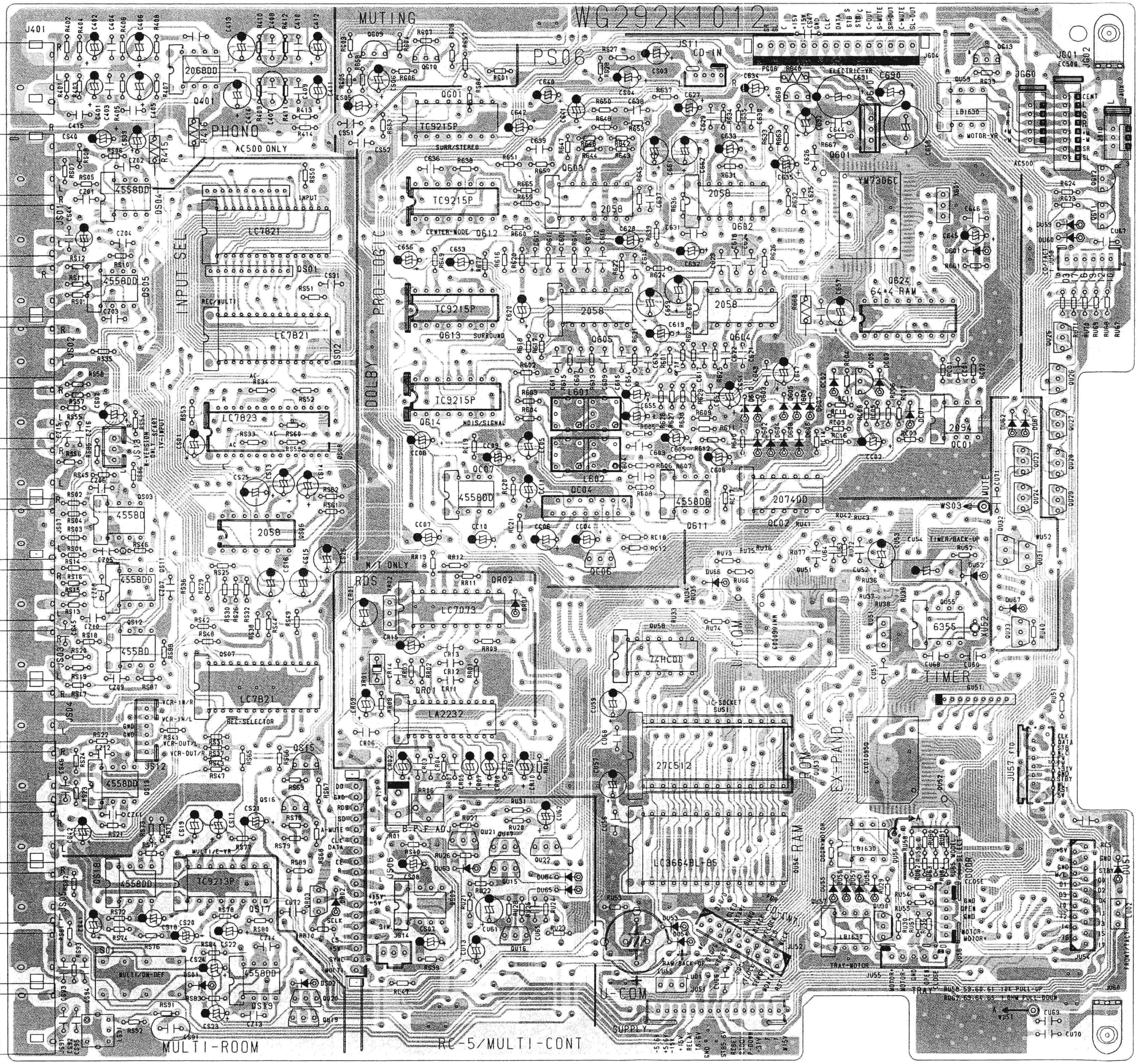
ORDER	VERSIONS		MODEL NAME
292K	EC500	N	74EC500/02B 74EC500/02G
		T	74EC500/05B
293K	AC500	N	74AC500/02B 74AC500/02G
		T	74AC500/05B
298K	EC500	U	EC500U
		K, KS, KH	EC500K, EC500KS, EC500KH
299K	AC500	U	AC500U

PS06

QS05,QS04 Q401 QS01,QS02 QG09 QG10,QG01,Q612,Q613 Q603,Q605 Q602,Q604 Q609 Q601 Q610 Q624 QU59,QG13 QG11,QG12

QS03,QS11,QS12 QS06,QS07,QS08 Q614,QC07,QR01,QR02 QC04,QC06 QU58 Q611 QC02 QU51 QC05 QU55,QC01 QU23~QU29,QU31~QU33

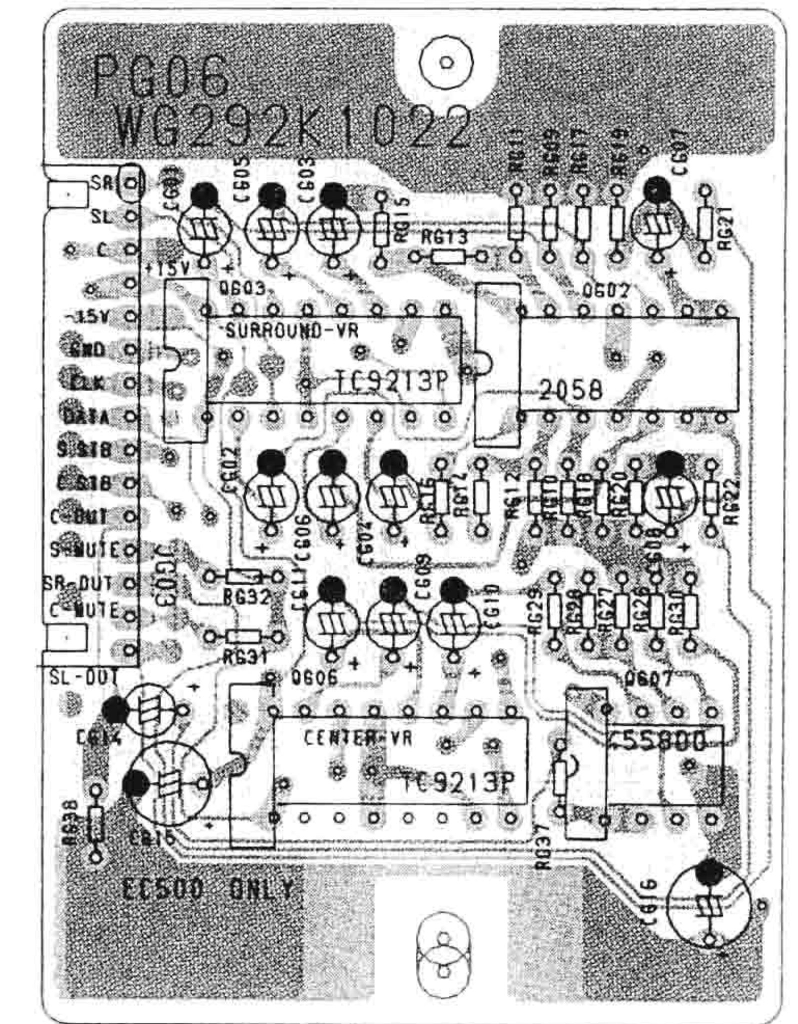
QS13,QS18 QS15~QS17,QS19 QR03,QU19,QU20 QS09 QU21,QU17,QU15,QU22 QU53,QU54 QU57,QU30,QU56 QU52

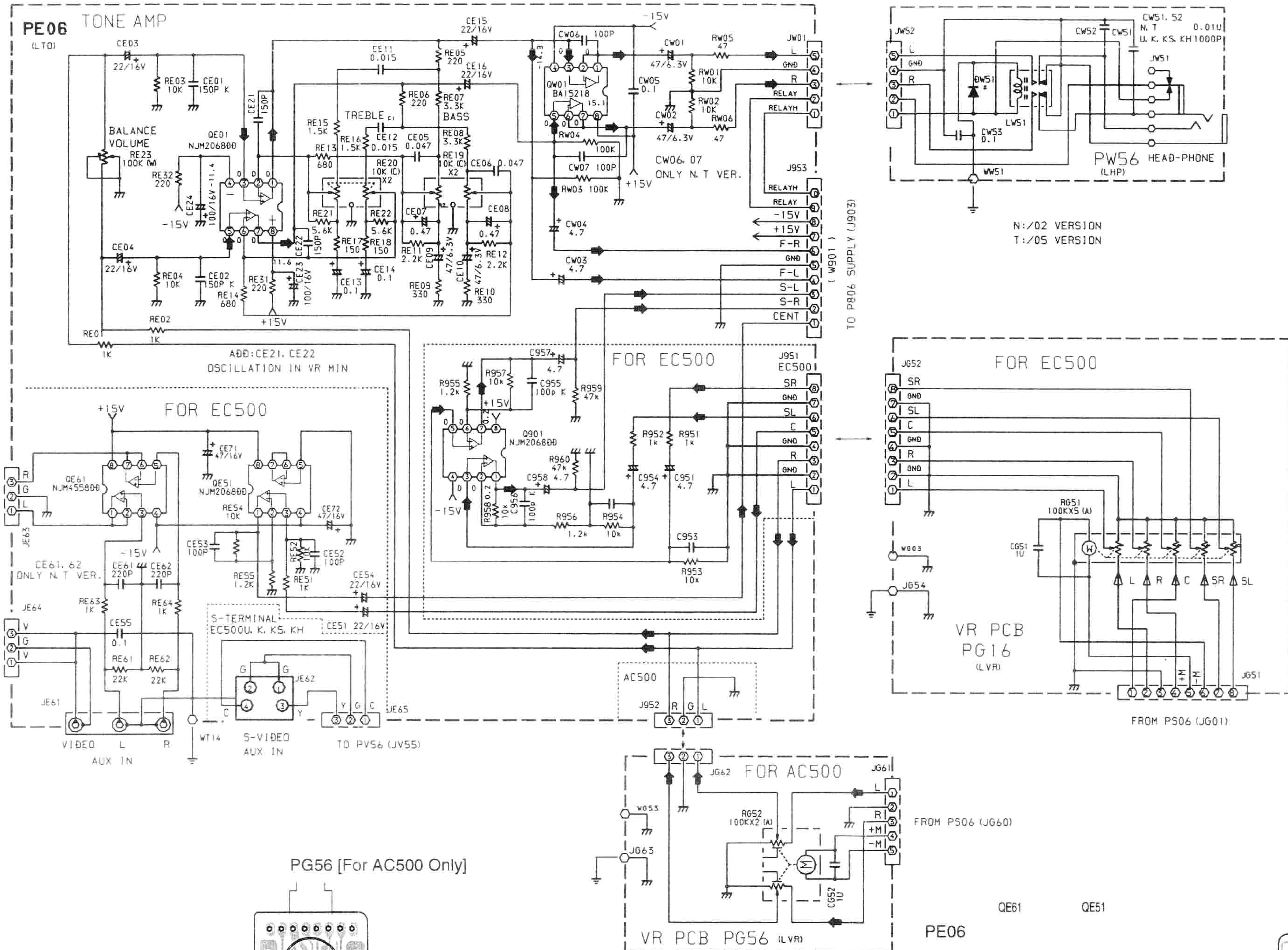


PG06 [For EC500 Only]

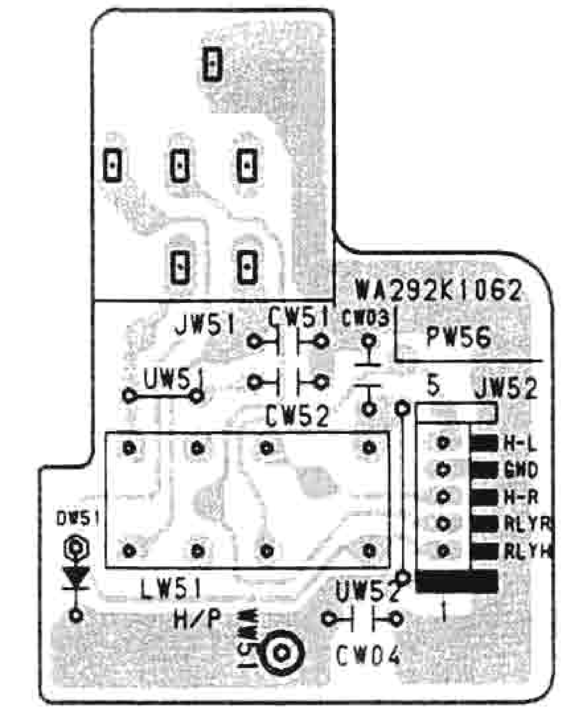
QG03 QG02

QG06 QG07

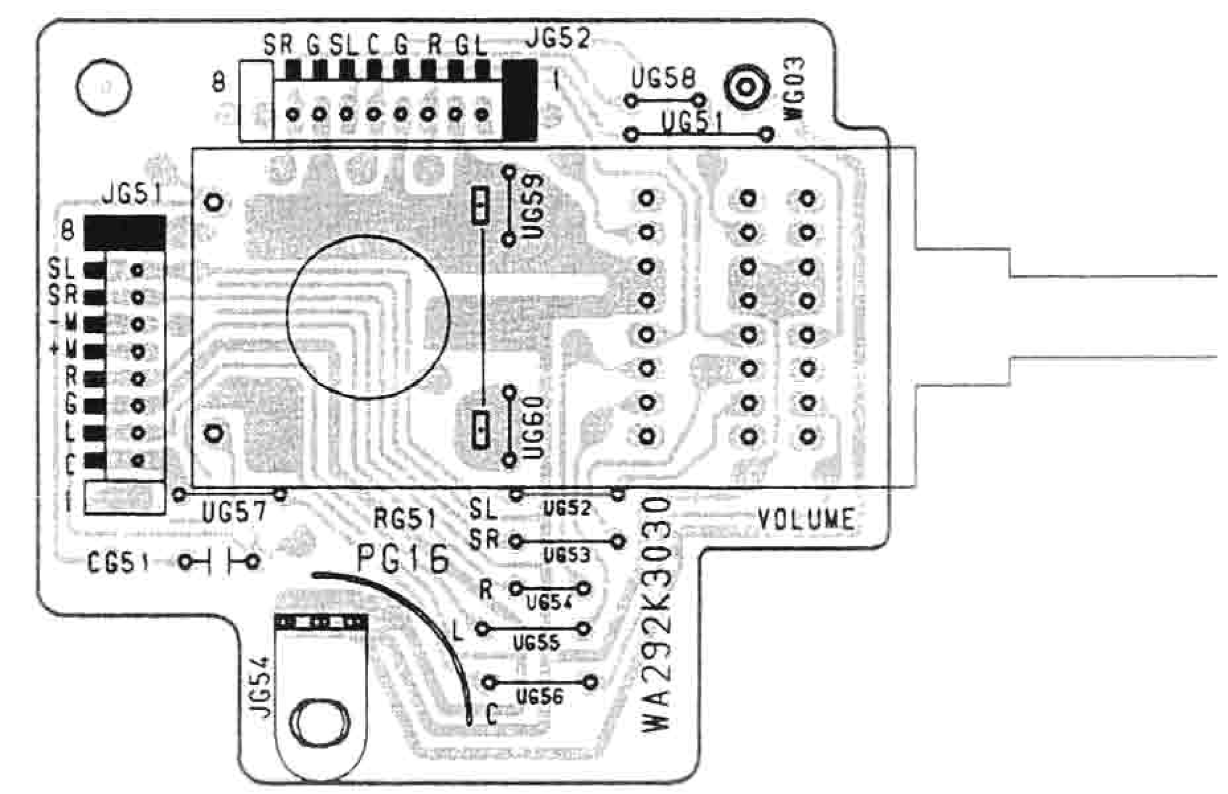




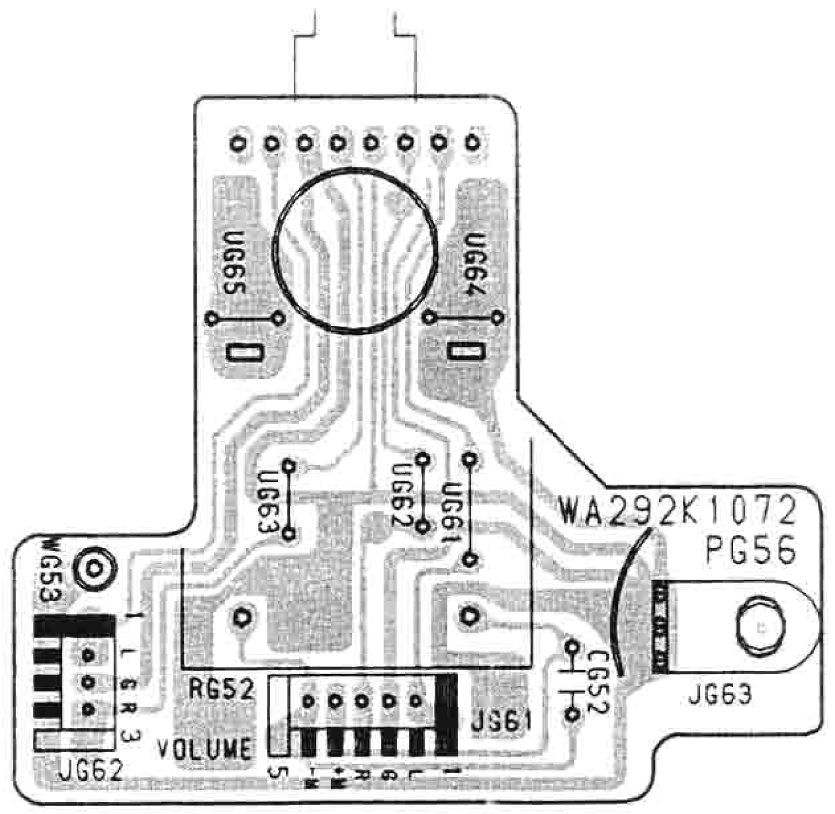
PW56



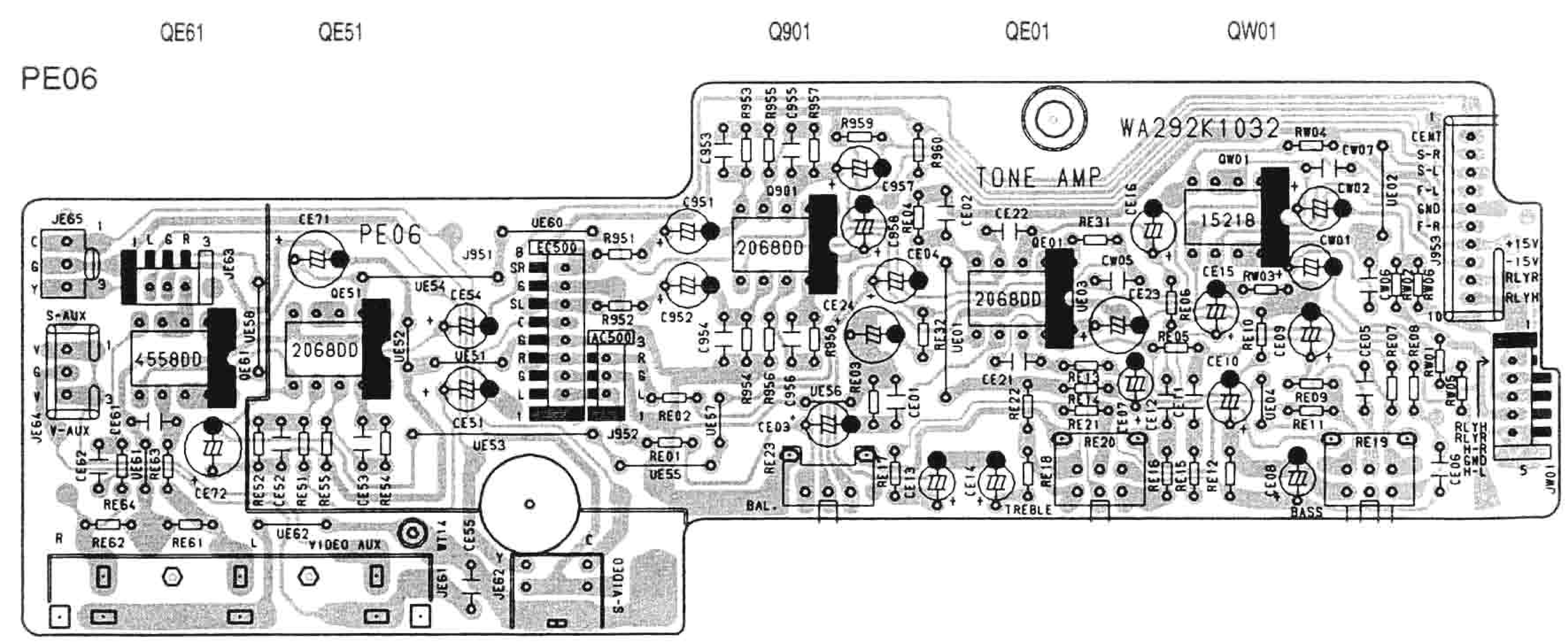
PG16 [For EC500 Only]



PG56 [For AC500 Only]

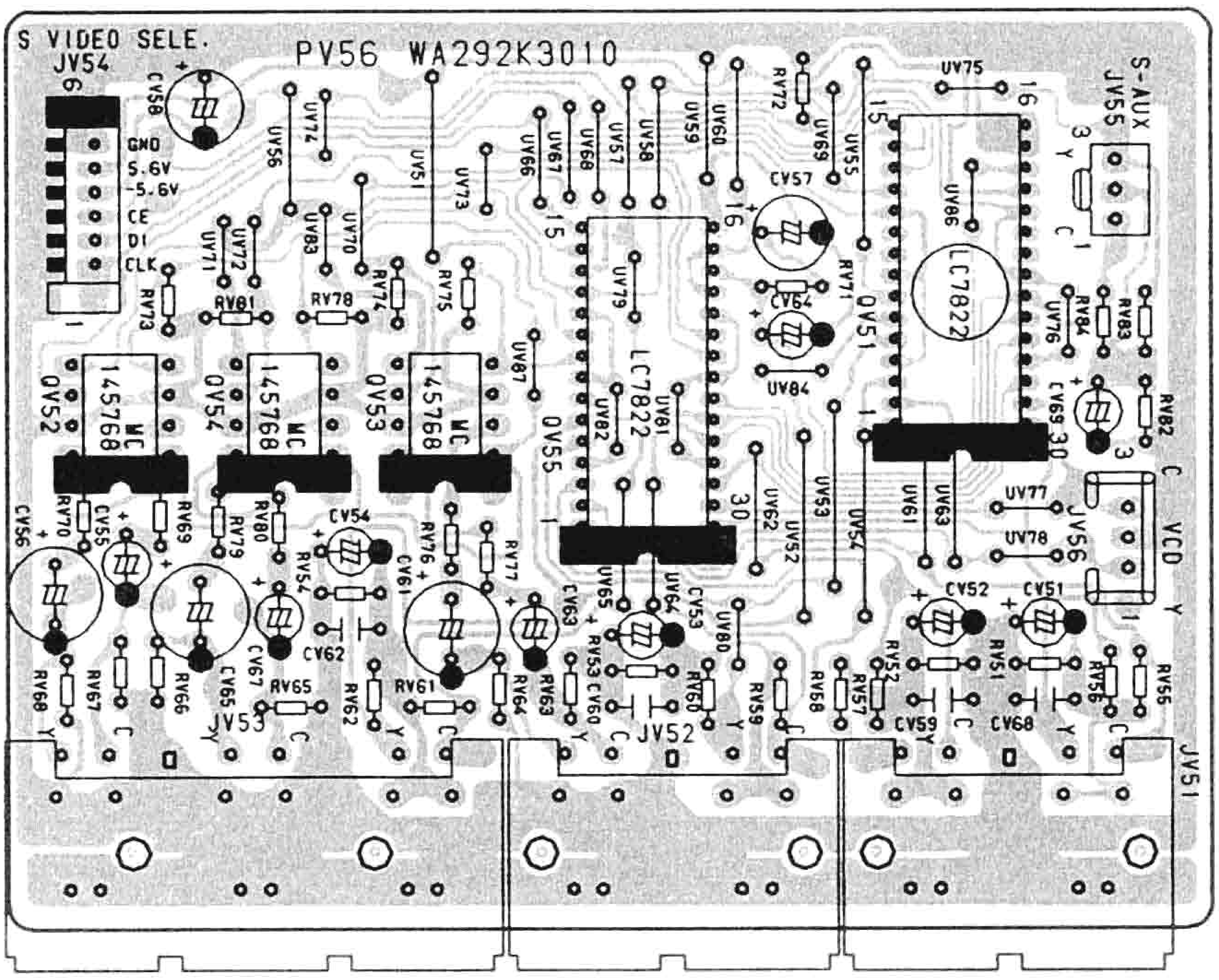


PE06



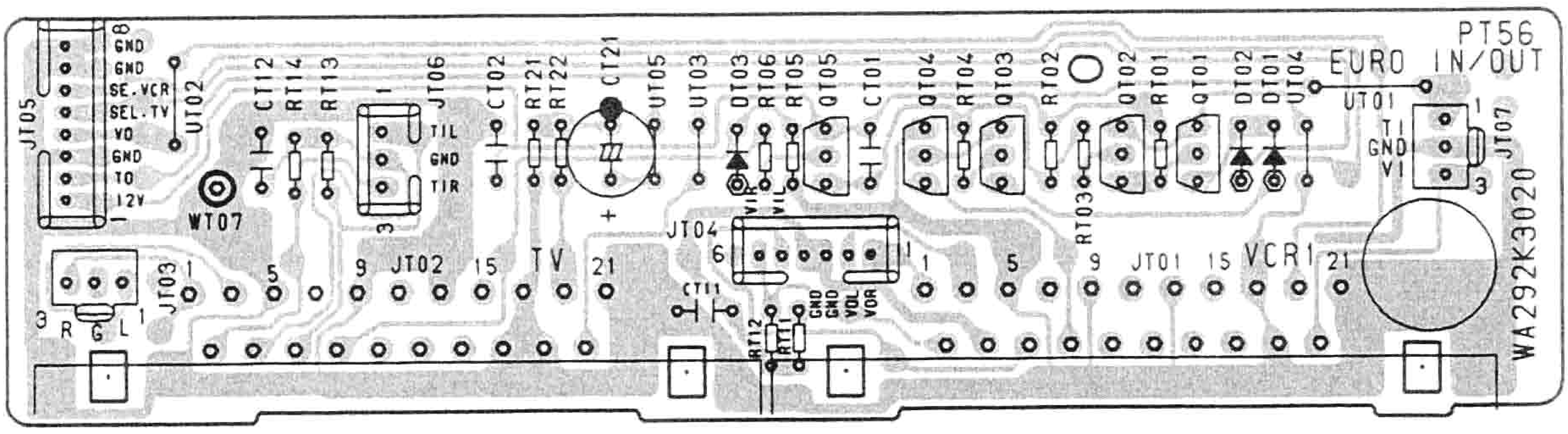
PV56 [For EC500 U, K, KS, KH Only]

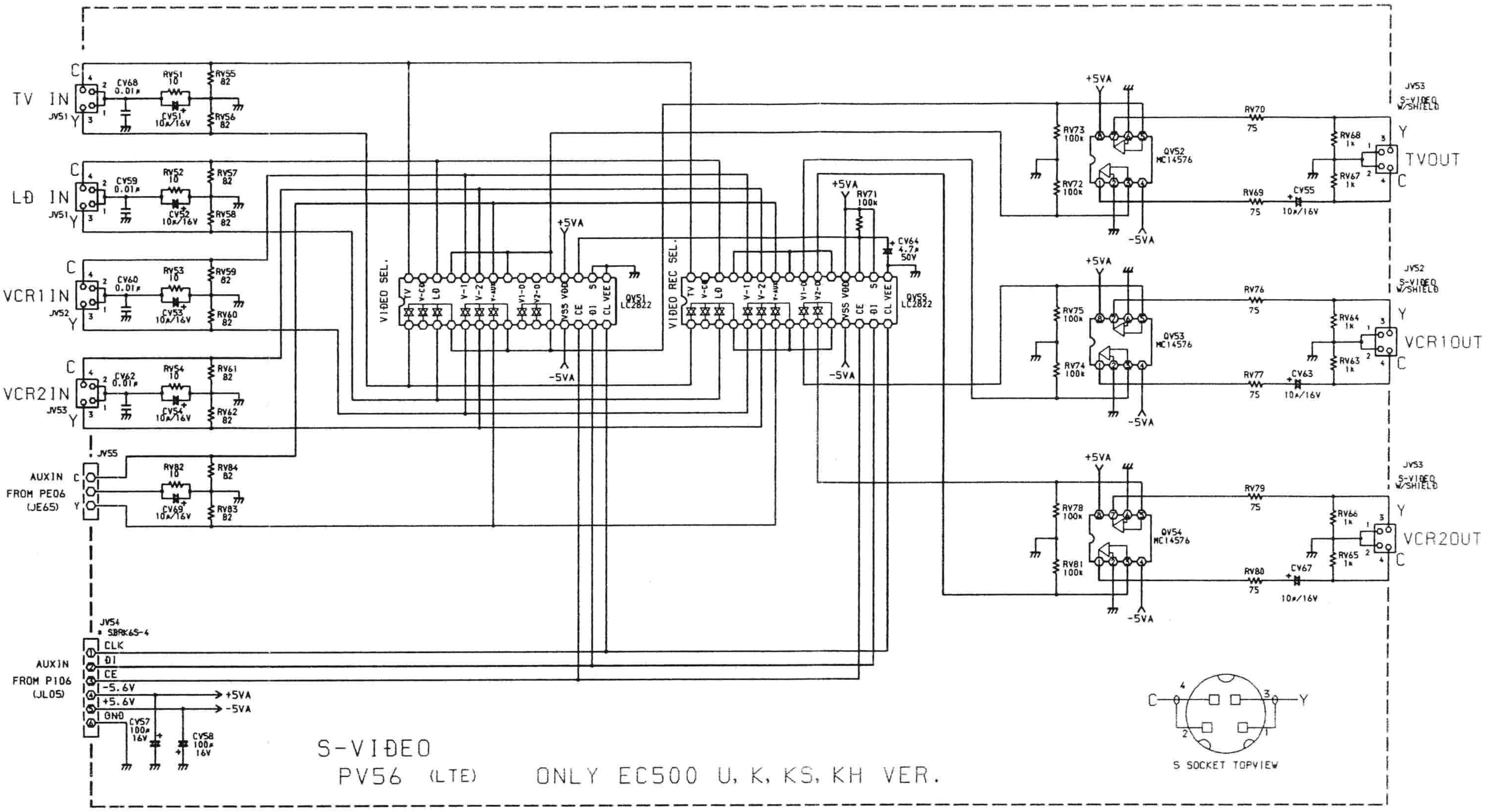
QV52 QV54 QV53 QV55 QV51

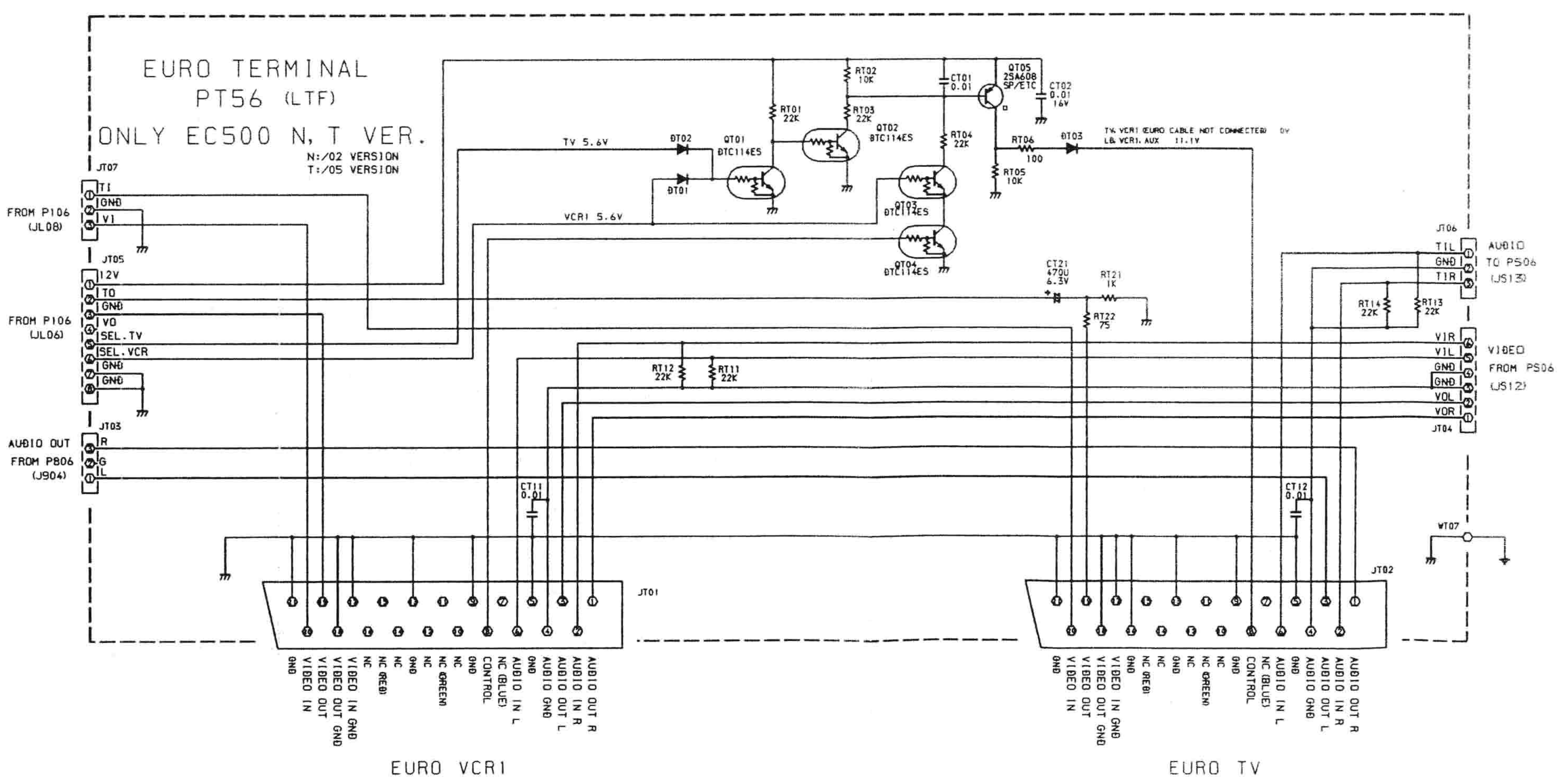


PT56 [For EC500 Europe Only]

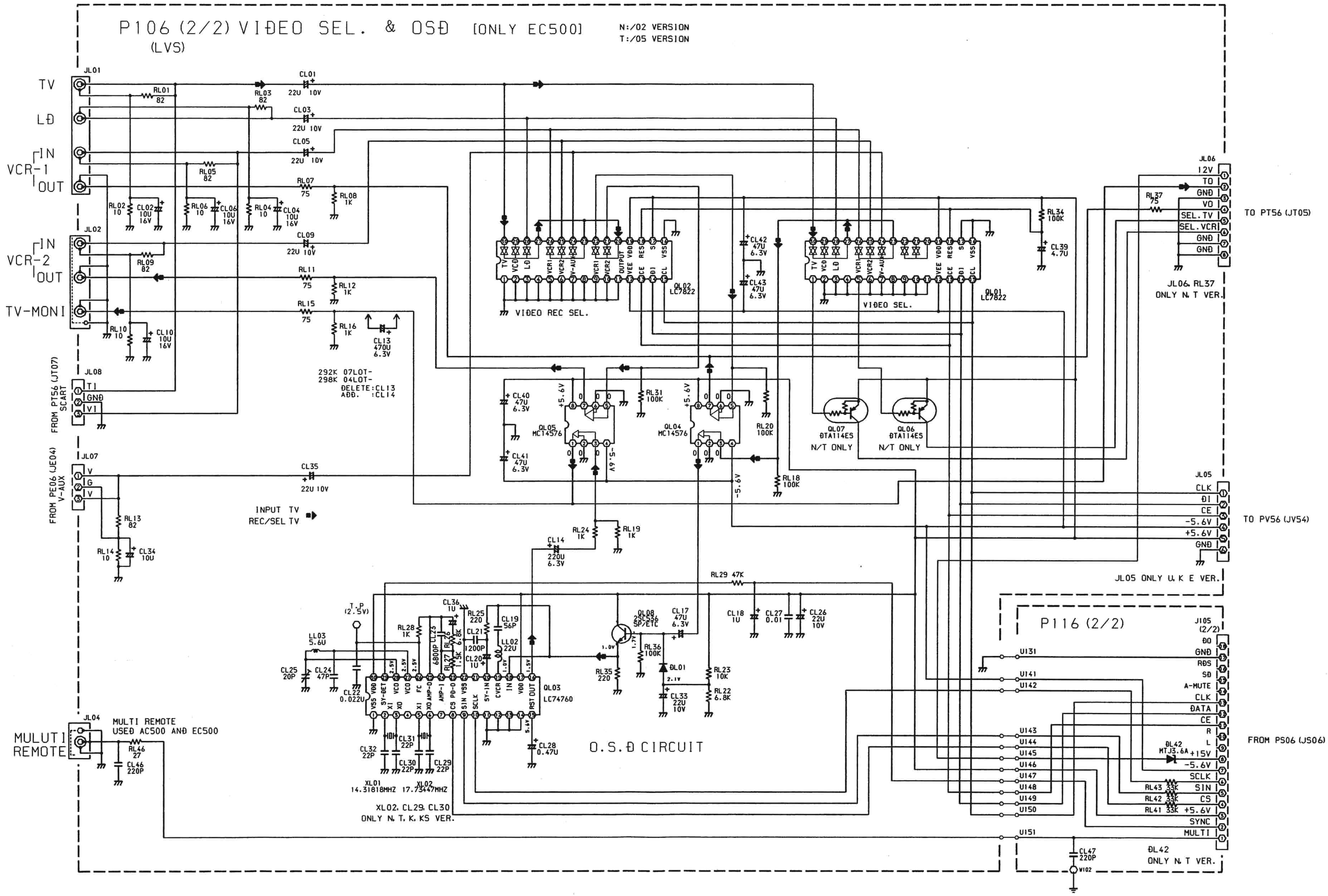
QT05 QT04 QT03 QT02 QT01




TV IN
LD IN
VCR1 IN
VCR2 IN
AUXIN FROM PE06 (JE65)
AUXIN FROM P106 (JL05)
CLK
DI
CE
-5.6V
+5.6V
GND
+5VA
-5VA
VIDEO SEL.
VIDEO REC SEL.
QVS1 LC2822
QVS5 LC2822
QVS2 MC14576
QVS3 MC14576
QVS4 MC14576
TVOUT
VCR1OUT
VCR2OUT
S-VIDEO W/SHIELD
S SOCKET TOPVIEW
S-VIDEO
PV56 (LTE)
ONLY EC500 U, K, KS, KH VER.


EURO TERMINAL
PT56 (LTF)
ONLY EC500 N, T VER.
N:/02 VERSION
T:/05 VERSION
FROM P106 (JL08)
FROM P106 (JL06)
AUDIO OUT FROM P806 (J904)
TV 5.6V
VCR1 5.6V
QT01 DTC114ES
QT02 DTC114ES
QT03 DTC114ES
QT04 DTC114ES
QT05 2SA608 SP/ETC
AUDIO TO PS06 (JS13)
VIDEO FROM PS06 (JS12)
GND
VIDEO IN
VIDEO OUT
VIDEO OUT GND
VIDEO IN GND
NC (RED)
NC
NC (GREEN)
CONTROL
NC (BLUE)
AUDIO IN L
AUDIO GND
AUDIO OUT L
AUDIO IN R
AUDIO OUT R
EURO VCR1
EURO TV

PCS 85 744

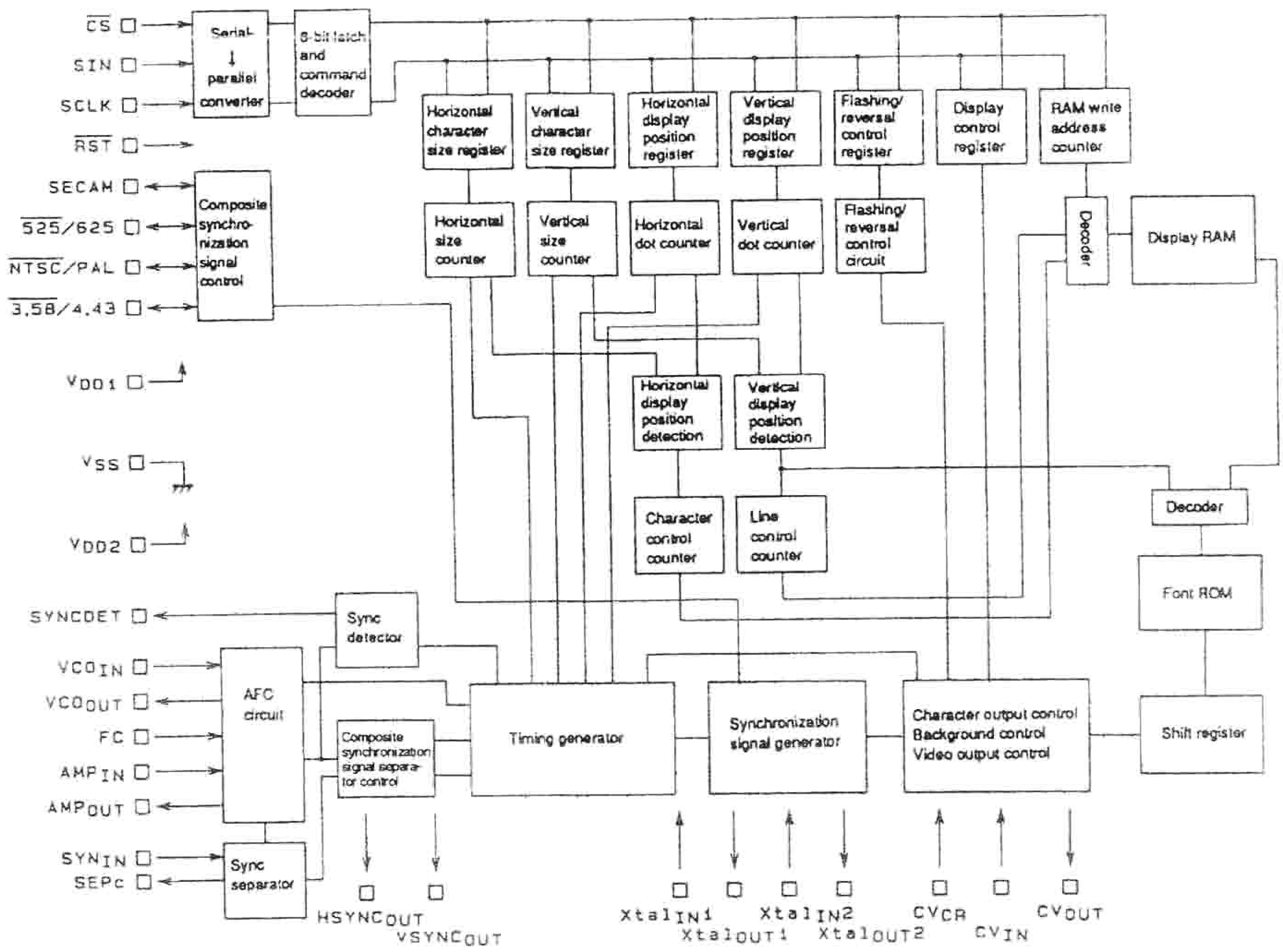


P106 (2/2) VIDEO SEL. & OSD [ONLY EC500]
(LVS)
N:/02 VERSION
T:/05 VERSION
TV
LD
VCR-1 IN
OUT
VCR-2 IN
OUT
TV-MONI
JL01
JL02
JL08
TI
GND
VI
FROM PT56 (JT07) SCART
JL07
V
G
V
FROM PE06 (JE04) V-AUX
JL04
MULTI REMOTE
MULTI REMOTE USED AC500 AND EC500
292K 07LOT-
298K 04LOT-
DELETE:CL13
ADD. :CL14
INPUT TV
REC/SEL TV
VIDEO REC SEL.
QL02 LC7822
VIDEO SEL.
QL01 LC7822
QL05 MC14576
QL04 MC14576
QL07 DTA114ES
N/T ONLY
QL06 DTA114ES
N/T ONLY
JL06
12V
TO
GND
VO
SEL. TV
SEL. VCR1
GND
GND
TO PT56 (JT05)
JL06, RL37 ONLY N, T VER.
JL05
CLK
DI
CE
-5.6V
+5.6V
GND
TO PV56 (JV54)
JL05 ONLY U, K E VER.
P116 (2/2)
J105 (2/2)
DO
GND
RDS
SD
A-MUTE
CLK
DATA
CE
R
L
+15V
-5.6V
SCLK
SIN
CS
+5.6V
SYNC
MULTI
FROM PS06 (JS06)
DL42 MTJ3.6A
DL42 ONLY N, T VER.
QL03 LC74760
O.S.D CIRCUIT
QL08 2SC536 SP/ETC
T.P (2.5V)
XL01 14.31818MHZ
XL02 17.73447MHZ
XL02, CL29, CL30 ONLY N, T, K, KS VER.

Q101,Q104,Q106 QA05 Q150 Q110,QA04,Q151,Q152 QA01

P106 Q112 Q108,Q107Q105 Q102 QL01,Q111 QA03 QA02

QL06~QL08 QL02,QL03 QL04,QL05

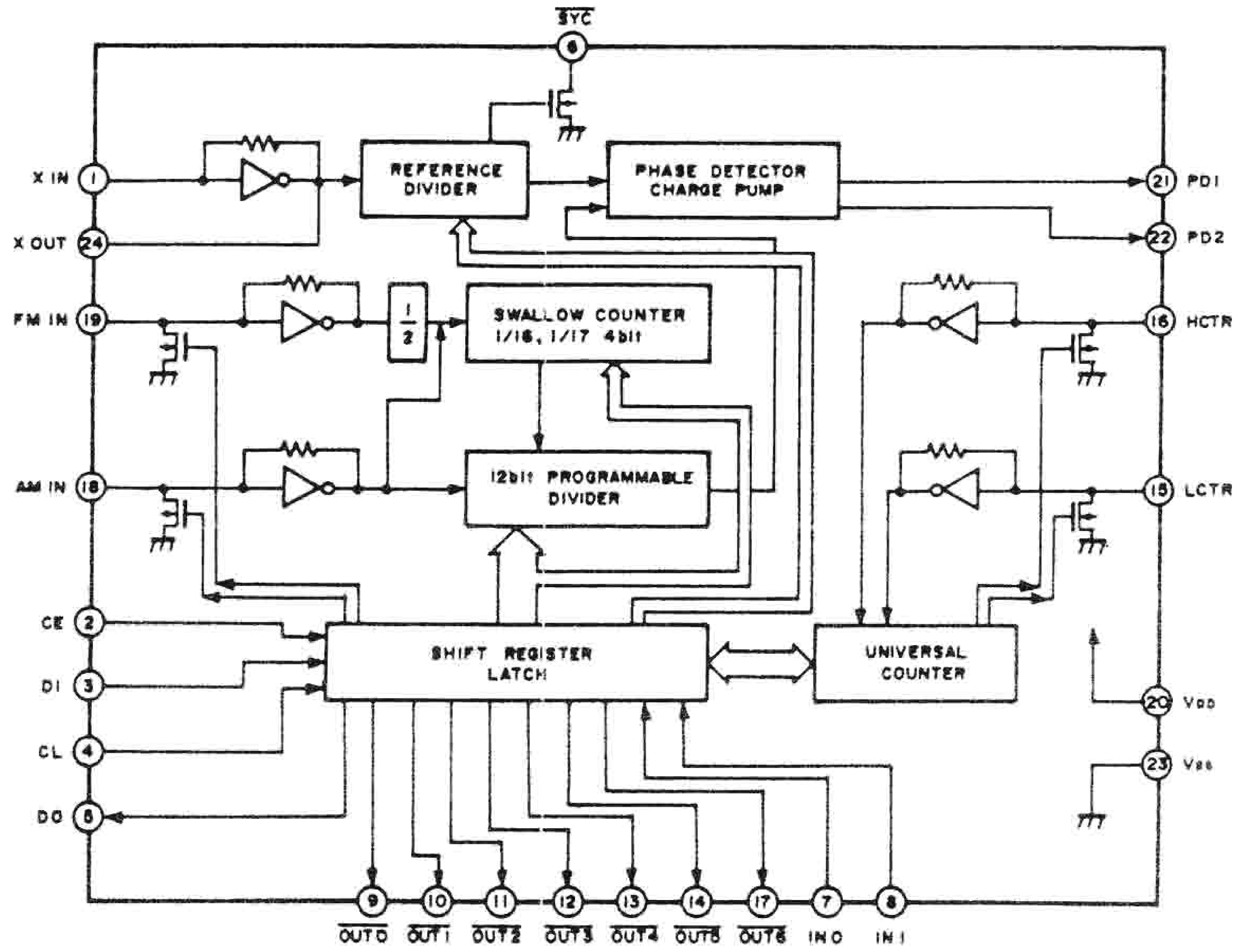


Pin Functions

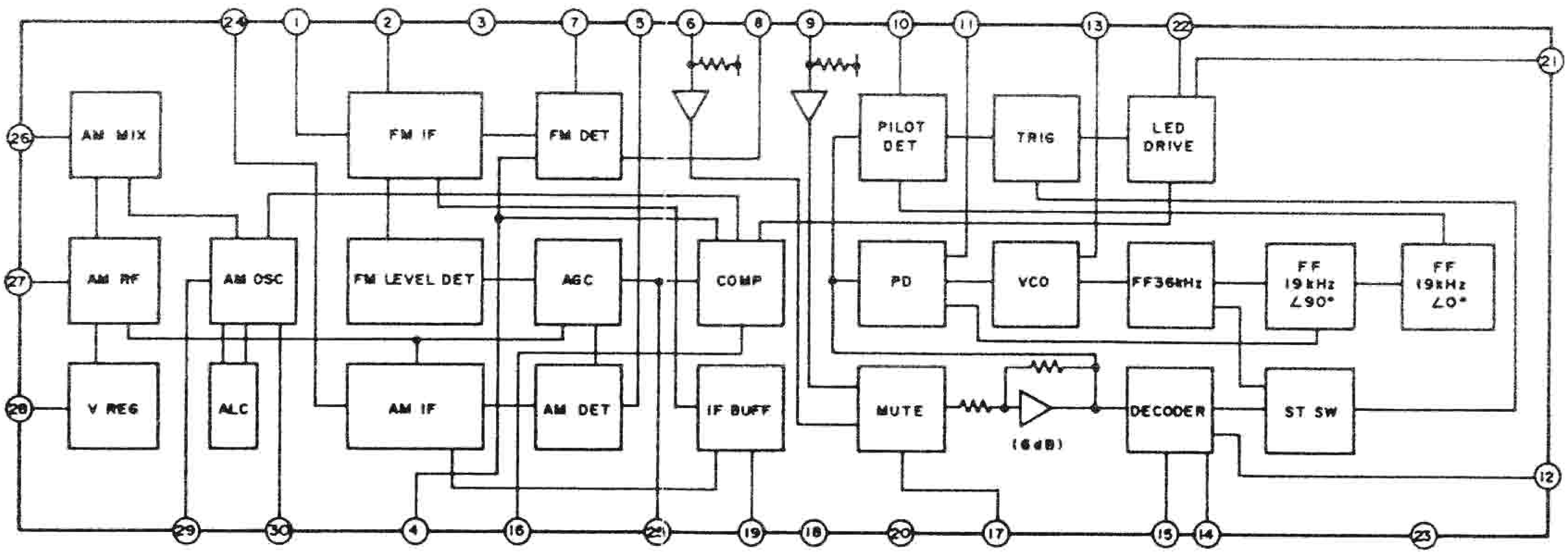
Pin No.	Symbol	Function	Description
1	Vss	Ground	Ground connection
2	$Xtal_{IN1}$	Crystal oscillator connection	Cnnection for the crystal and capacitor used to form the crystal oscillator that generates the internal synchronization signal. (For an NTSC crystal oscillator 4fsc = 14.318 MHz.)
3	$Xtal_{OUT1}$		
4	$HSYNC_{OUT}$	Horizontal synchronization output	Outputs the horizontal synchronization signal (AFC). The polarity can be selected with a metal switch.
5	$Xtal_{IN2}$	Crystal oscillator connection	Connection for the crystal and capacitor used to form the crystal oscillator that generates the internal synchronization signal. (For a PAL crystal oscillator 4fsc = 17.734 MHz.)
6	$Xtal_{OUT2}$		
7	$VSYNC_{OUT}$	Vertical synchronization output	Outputs the vertical synchronization signal. The polarity can be selected with a metal switch.
8	$\overline{CS}$	Enable input	Enables/disables serial data input. Serial data is enabled when this pin is low. Pull-up resistor built in (hysteresis input).
9	SIN	Data input	Serial data input. Pull-up resistor built in (hysteresis input).
10	SCLK	Clock input	Clock input for serial data input. Pull-up resistor built in (hysteresis input).
11	SECAM	SECAM mode switch input	Switches between SECAM and other modes. Low = other modes, High = SECAM mode
12	$\overline{525}$/625	525/625 switch input	Switches between 525 scan lines and 625 scan lines. Low = 525 lines, High = 625 lines
13	$\overline{NTSC}$/PAL	NTSC/PAL switch input	Switches the color mode between NTSC and PAL. Low = NTSC, High = PAL
14	$\overline{3.58}$/4.43	3.85/4.43 switch input	Switch FSC between 3.58 MHz and 4.43 MHz. Low = 3.58, High = 4.43
15	$\overline{RST}$	Reset input	System reset input pin, low is active (reset). Pull-up resistor built in (hysteresis input).
16	CV_{OUT}	Video signal output	Composite video output
17	V_{DD2}	Power supply connection	Power supply connection for composite video signal level generation
18	CV_{IN}	Video signal input	Composite video input
19	CV_{CR}	Video signal input	SECAM chroma signal input
20	$SYNC_{IN}$	Sync separator circuit input	Built-in sync separator circuit video signal input
21	SEP_{C}	Sync separator circuit	Built-in sync separator circuit (AMP out)
22	Vss	Ground	Ground connection
23	PD_{OUT}	Control voltage output	AFC control voltage output
24	AMP_{IN}	AFC filter connection	Filter connection
25	AMP_{OUT}		
26	FC	Control voltage input	AFC control voltage input
27	VCO_{IN}	LC oscillator connection	VCOLC oscillator circuit coil and capacitor connection
28	VCO_{OUT}		
29	$SYNC_{DET}$	External synchronization signal detection output	Outputs the exclusive NOR of the horizontal synchronization signal (AFC) and CSYNC (syncseparator).
30	V_{DD1}	Power supply connection	Power supply connection (+5 V: digital system power supply)

PCS 85 746

Q150: LC7218



Q102: LA1851N

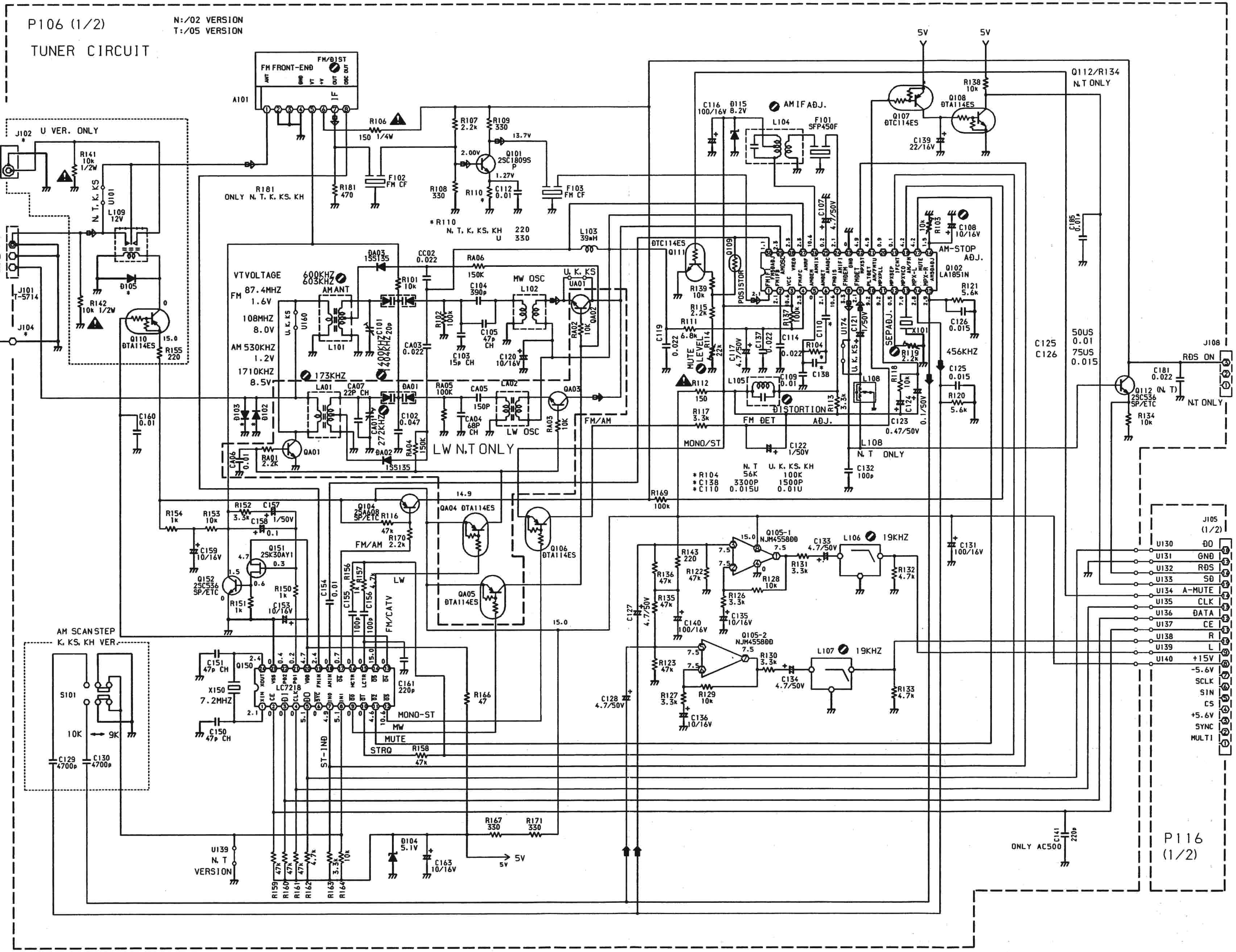


P106

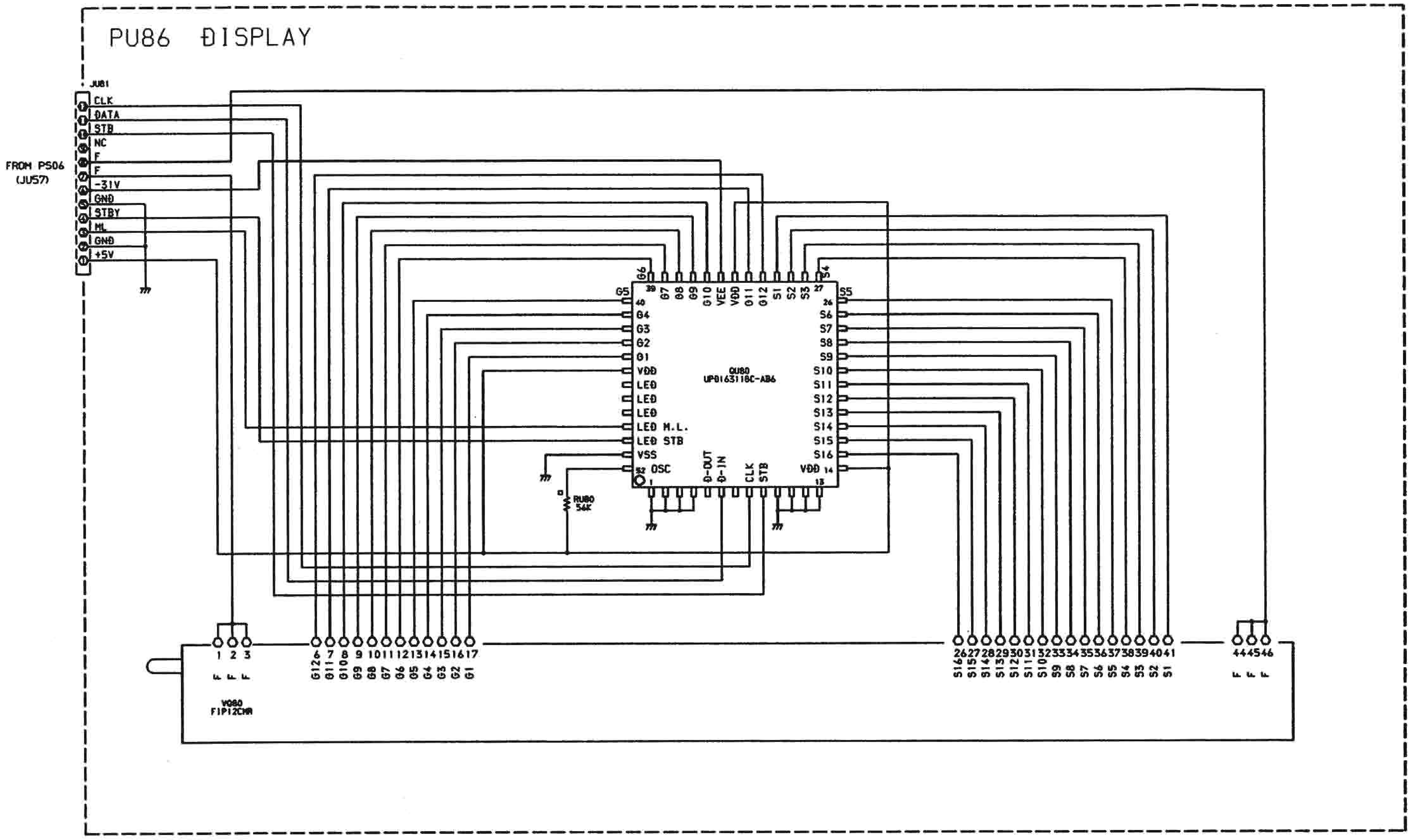
Q101,Q104,Q106 QA05 Q150 Q110,QA04,Q151,Q152 QA01

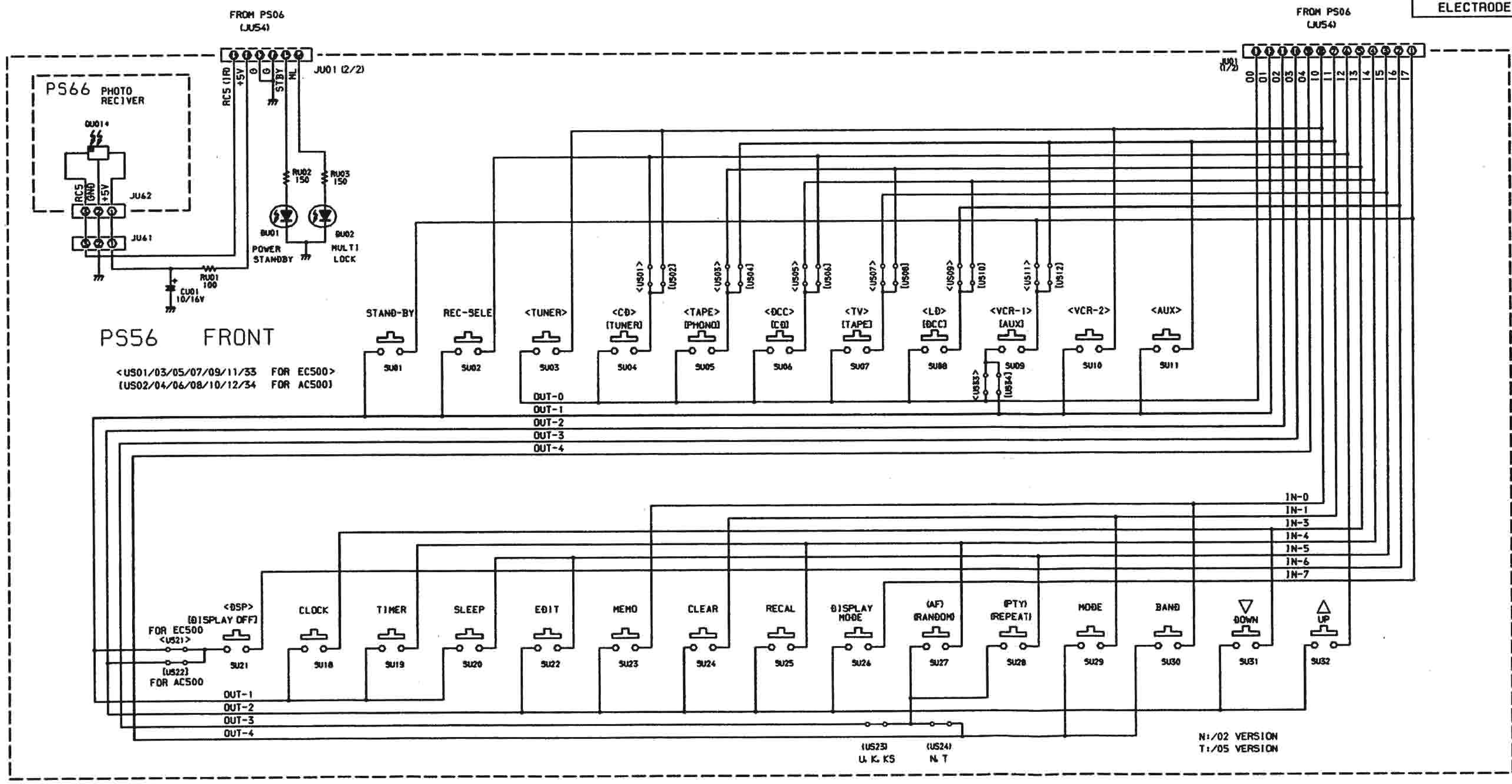
Q112 Q108,Q107Q105 Q102 QL01,Q111 QA03 QA02

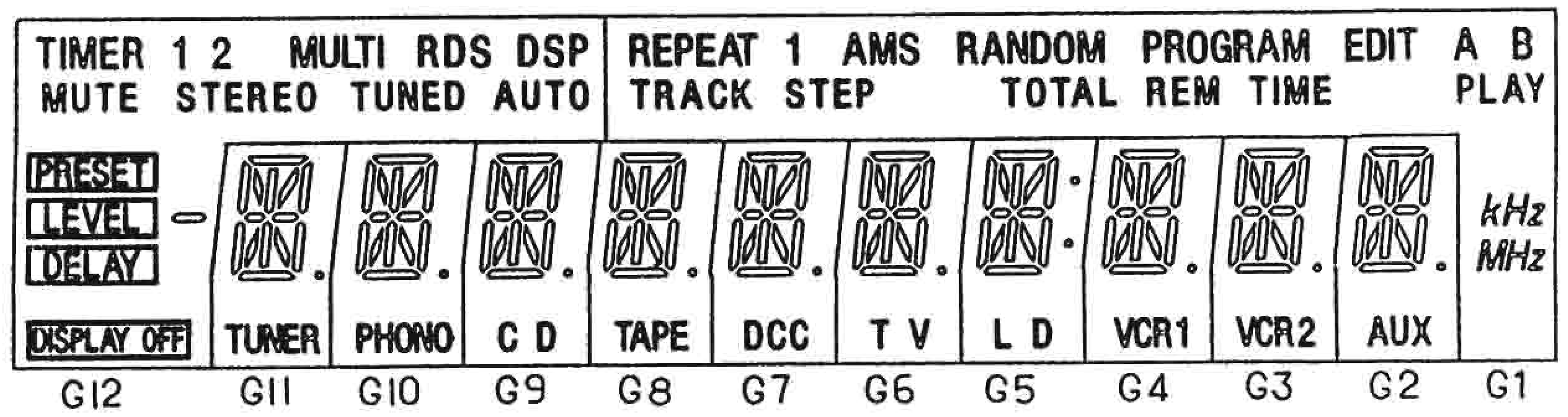
QL06~QL08 QL02,QL03 QL04,QL05


P106 (1/2)
TUNER CIRCUIT
N:/02 VERSION
T:/05 VERSION
FM FRONT-END
FM/DIST
A101
CATV
J102 U VER. ONLY
FM75 Ω
GND
AM
J101 T-5714
J104
R141 10k 1/2W
R142 10k 1/2W
U101
N. T. K. KS
L109 12V
D105
Q110 DTA114ES
R155 220
R106 150 1/4W
F102 FM CF
R181 ONLY N. T. K. KS. KH
R181 470
R107 2.2k
R109 330
13.7V
Q101 2SC1809S
2.00V
1.27V
R108 330
R110
C112 0.01
F103 FM CF
*R110 N. T. K. KS. KH 220 U 330
L103 39nH
VT VOLTAGE
FM 87.4MHZ 1.6V
108MHZ 8.0V
AM 530KHZ 1.2V
1710KHZ 8.5V
600KHZ 603KHZ
AM ANT
173KHZ
400KHZ 404KHZ
272KHZ
DA03 1SS135
CC02 0.022
RA06 150K
MW OSC
L102
U. K. KS
UA01
QA02
LW OSC
LW N.T ONLY
FM/AM
QA01
QA03
DA02 1SS135
C116 100/16V
D115 8.2V
AM IF ADJ.
L104
F101 SFP450F
DTC114ES
Q111
Q109
POSISTOR
MUTE LEVEL
R114 22k
Q102 LA1851N
AM-STOP ADJ.
SEP ADJ.
X101
456KHZ
DISTORTION ADJ.
FM DET
MONO/ST
L108 N. T ONLY
N. T / U. K. KS. KH
*R104 56K 100K
*C138 3300P 1500P
*C110 0.015U 0.01U
5V
R138 10k
Q108 DTA114ES
Q107 DTC114ES
C139 22/16V
Q112/R134 N.T ONLY
C125 C126
50US 0.01
75US 0.015
Q112 2SC536 SP/ETC
R134 10k
J108
RDS ON
FROM PS06 (JS14)
N.T ONLY
Q104 2SA608 SP/ETC
R116 47k
R170 2.2k
FM/AM
QA04 DTA114ES
QA05 DTA114ES
Q106 DTA114ES
Q151 2SK30AY1
Q152 2SC536 SP/ETC
R154 1k
R153 10k
R152 3.3k
C157 1/50V
C159 10/16V
R150 1k
R151 1k
C153 10/16V
AM SCAN STEP K, KS, KH VER.
S101
10K ↔ 9K
C129 4700p
C130 4700p
C151 47p CH
Q150
LC7218
X150 7.2MHZ
C150 47p CH
ST-IND
FM/CATV
LW
MONO-ST
MW
MUTE
STRQ
R158 47k
C161 220p
R166 47
R167 330
R171 330
D104 5.1V
C163 10/16V
5V
U139 N. T VERSION
R159 R160 R161 R162 R163 R164
Q105-1 NJM4558DD
Q105-2 NJM4558DD
L106 19KHZ
L107 19KHZ
C133 4.7/50V
C134 4.7/50V
C131 100/16V
C127 4.7/50V
C128 4.7/50V
C140 100/16V
C135 10/16V
C136 10/16V
R131 3.3k
R130 3.3k
R132 4.7k
R133 4.7k
ONLY AC500
C141 220p
J105 (1/2)
U130 DO
U131 GND
U132 RDS
U133 SD
U134 A-MUTE
U135 CLK
U136 DATA
U137 CE
U138 R
U139 L
U140 +15V
-5.6V
SCLK
SIN
CS
+5.6V
SYNC
MULTI
FROM PS06 (JS06)
P116 (1/2)

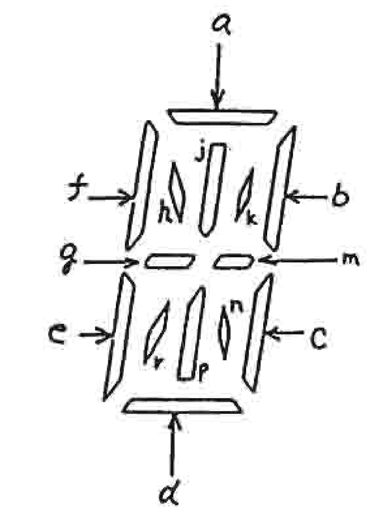
PCS 85 748







	G12	G11	G10	G9	G8	G7	G6	G5	G4	G3	G2	G1
S1	DISPLAY OFF	TUNER	PHONO	CD	TAPE	DCC	TV	LD	VCR1	VCR2	AUX	MHz
S2	DELAY	•	•	•	•	•	•	:	•	•	•	kHz
S3	DSP	d	d	d	d	d	d	d	d	d	d	REPEAT
S4	—	e	e	e	e	e	e	e	e	e	e	1
S5	AUTO	p	p	p	p	p	p	p	p	p	p	AMS
S6	RDS	n	n	n	n	n	n	n	n	n	n	TRACK
S7	MULTI	r	r	r	r	r	r	r	r	r	r	STEP
S8	TUNED	c	c	c	c	c	c	c	c	c	c	RANDOM
S9	2	m	m	m	m	m	m	m	m	m	m	PROGRAM
S10	1	g	g	g	g	g	g	g	g	g	g	TOTAL
S11	TIMER	f	f	f	f	f	f	f	f	f	f	REM
S12	STEREO	h	'h	h	h	b	h	h	h	h	h	TIME
S13	MUTE	a	a	a	a	a	a	a	a	a	a	PLAY
S14	PRESET	b	b	b	b	b	b	b	b	b	b	EDIT
S15	LEVEL	j	j	j	j	j	j	j	j	j	j	A
S16	▭	k	k	k	k	k	k	k	k	k	k	B

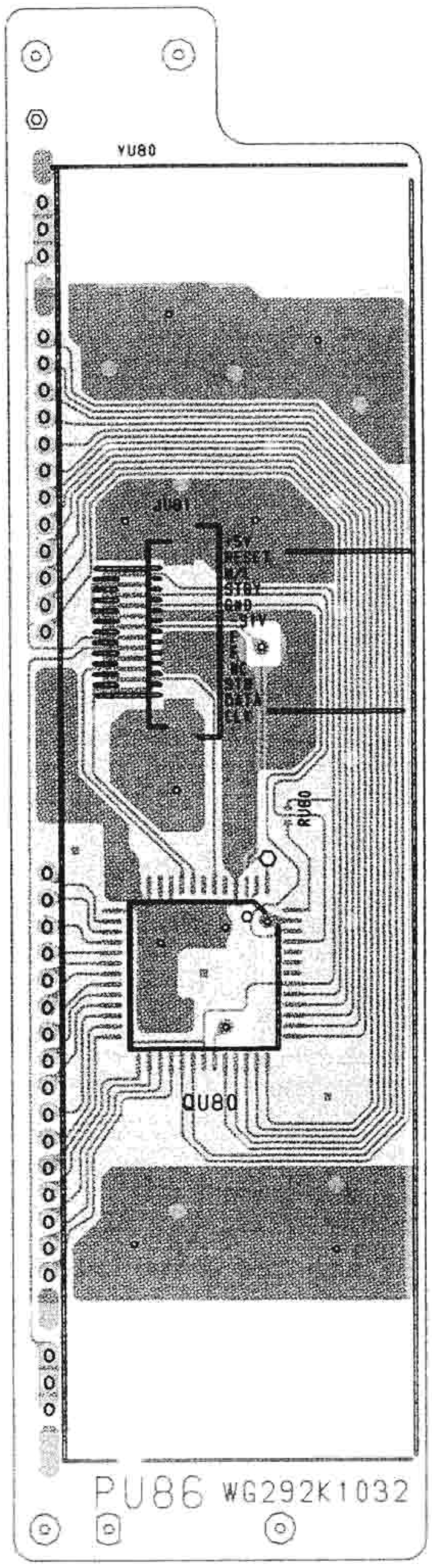


TERMINAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13							
ELECTRODE	F	F	F	NP	NP	G12	G11	G10	G9	G8	G7	G6	G5							
TERMINAL NO.	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
ELECTRODE	G4	G3	G2	G1	NP	NP	NP	NP	NP	NP	NP	NP	P S16	P S15	P S14	P S13	P S12	P S11	P S10	P S9
TERMINAL NO.								34	35	36	37	38	39	40	41	42	43	44	45	46
ELECTRODE								P S8	P S7	P S6	P S5	P S4	P S3	P S2	P S1	NP	NP	F	F	F

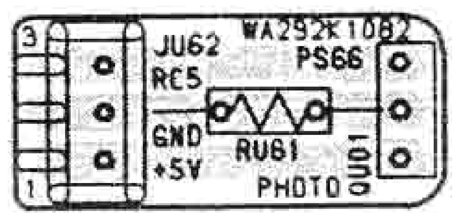
Notes F: Filament NP: No Pin
G: Grid
P: Anode

PU86

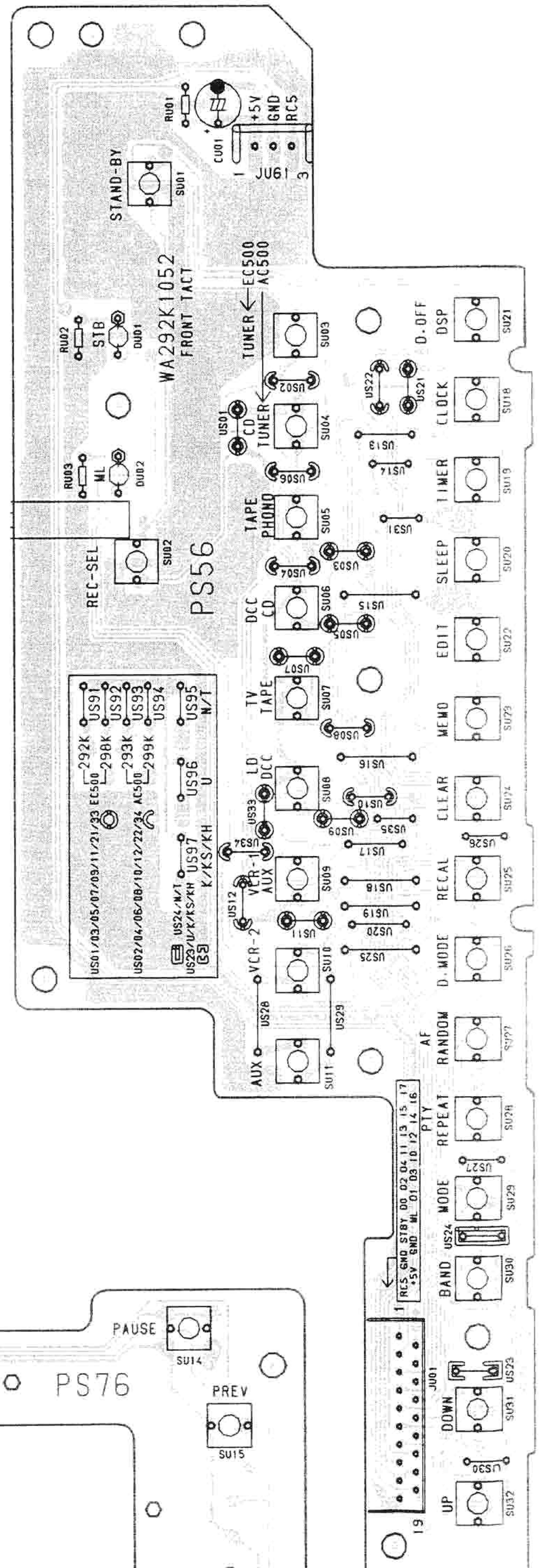
QU80

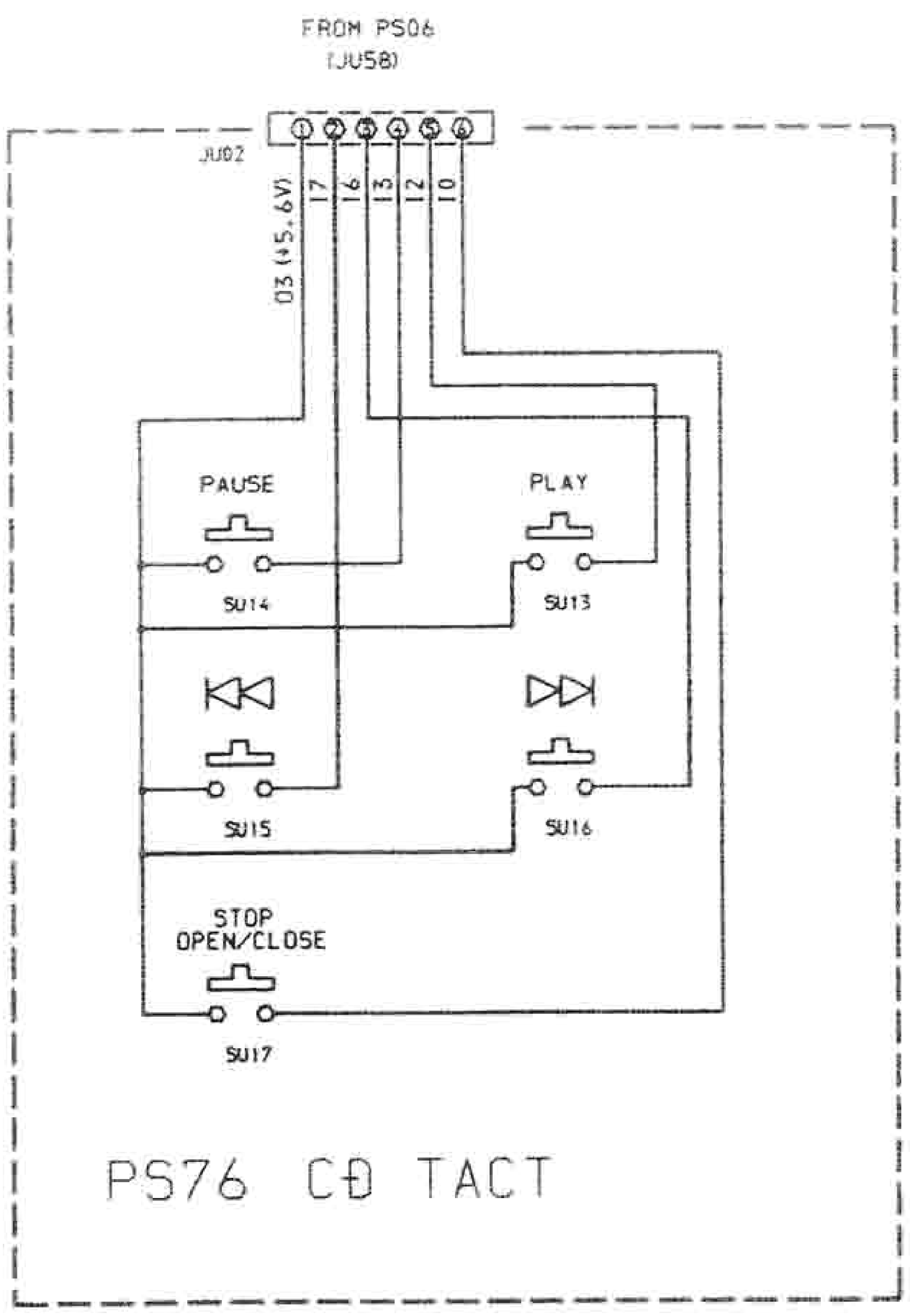


PS66 QU01

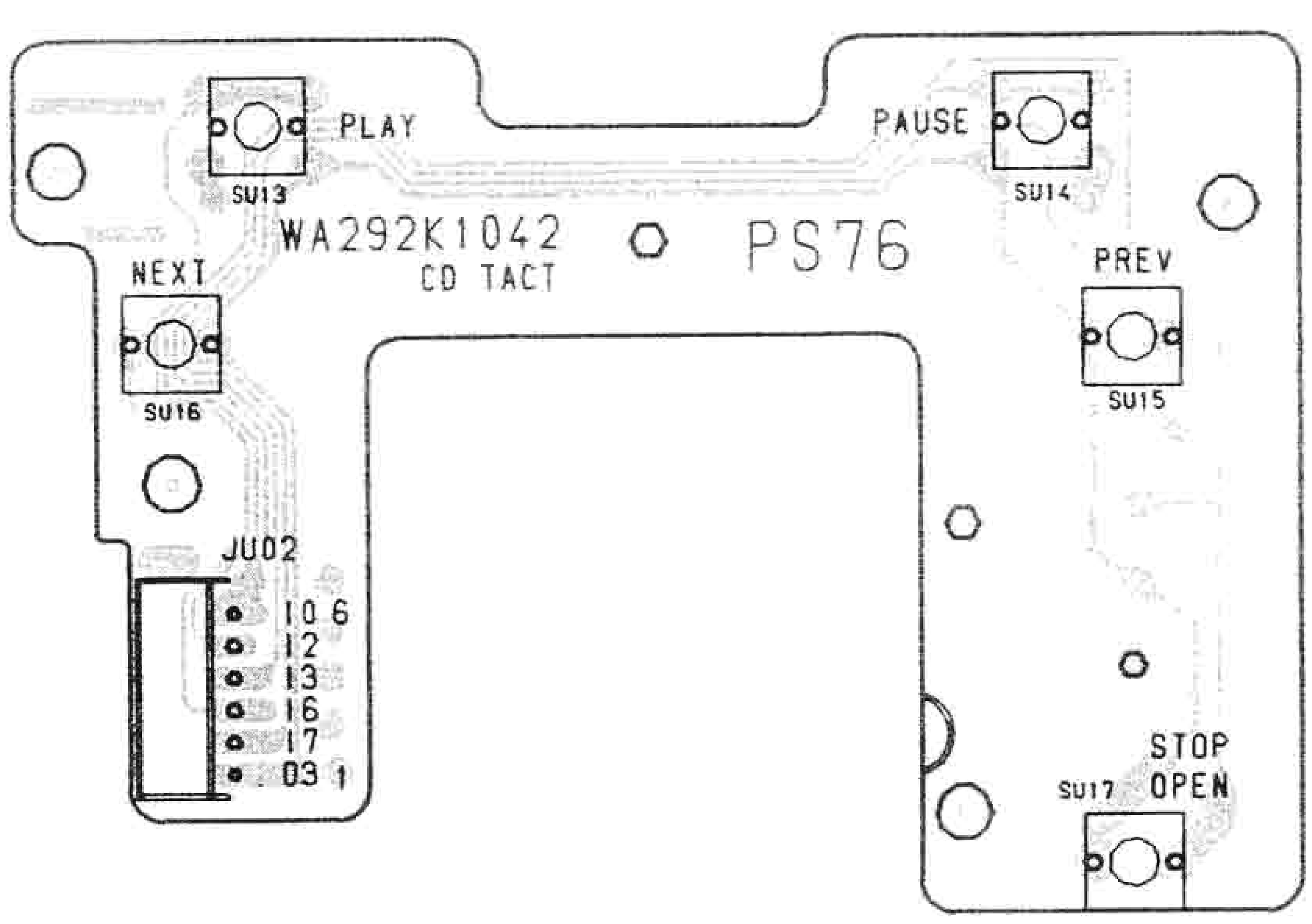


PS56

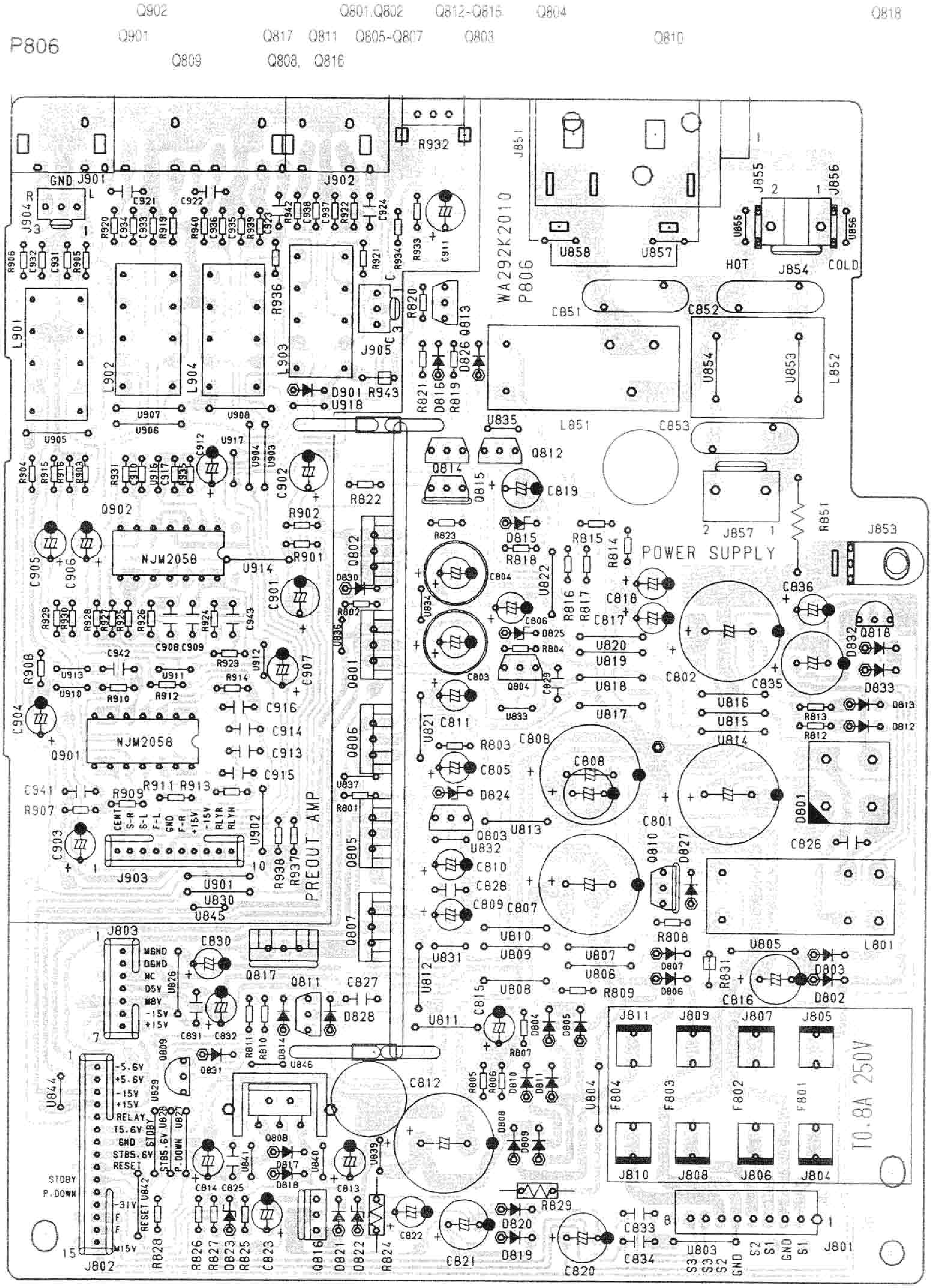




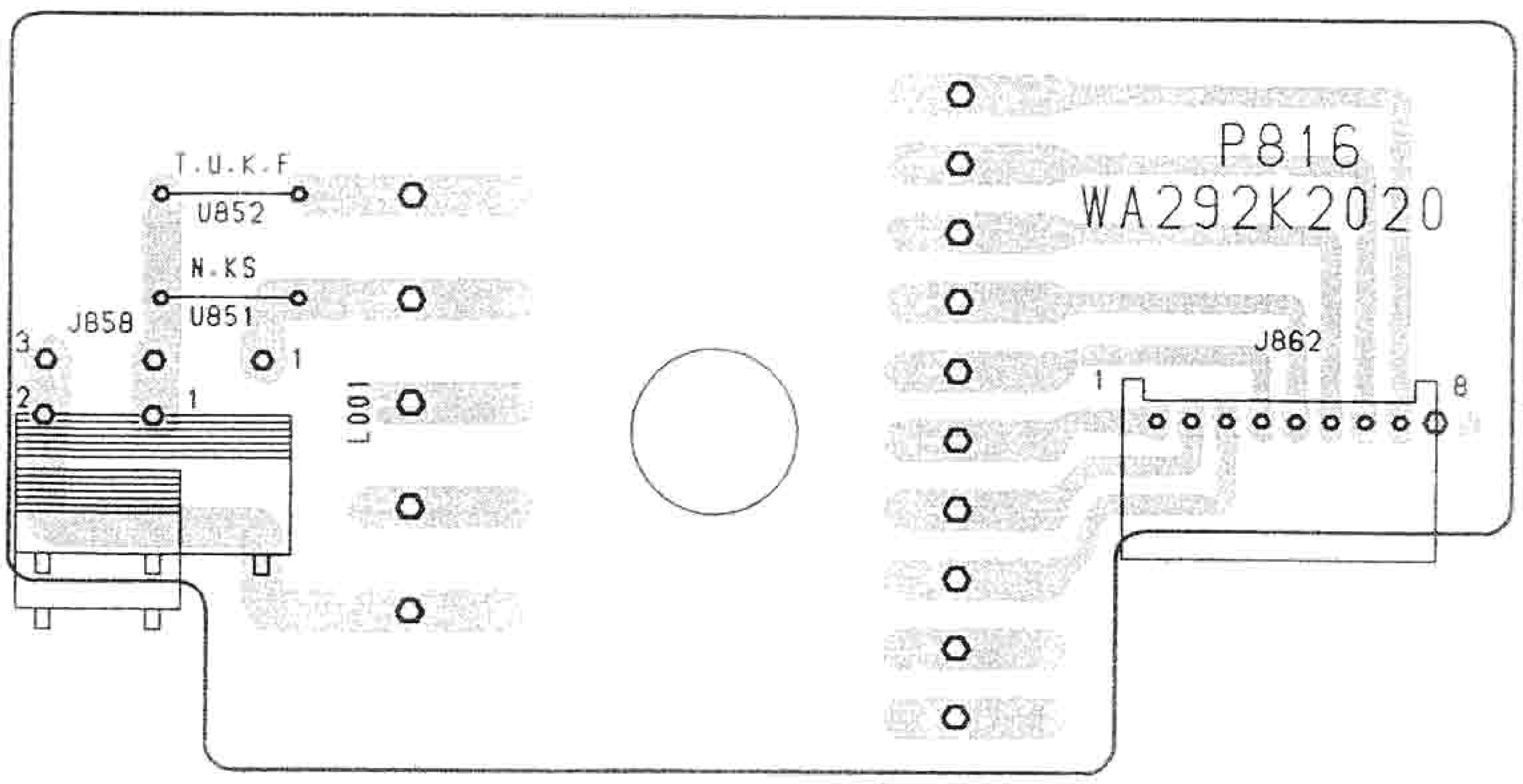
PS76



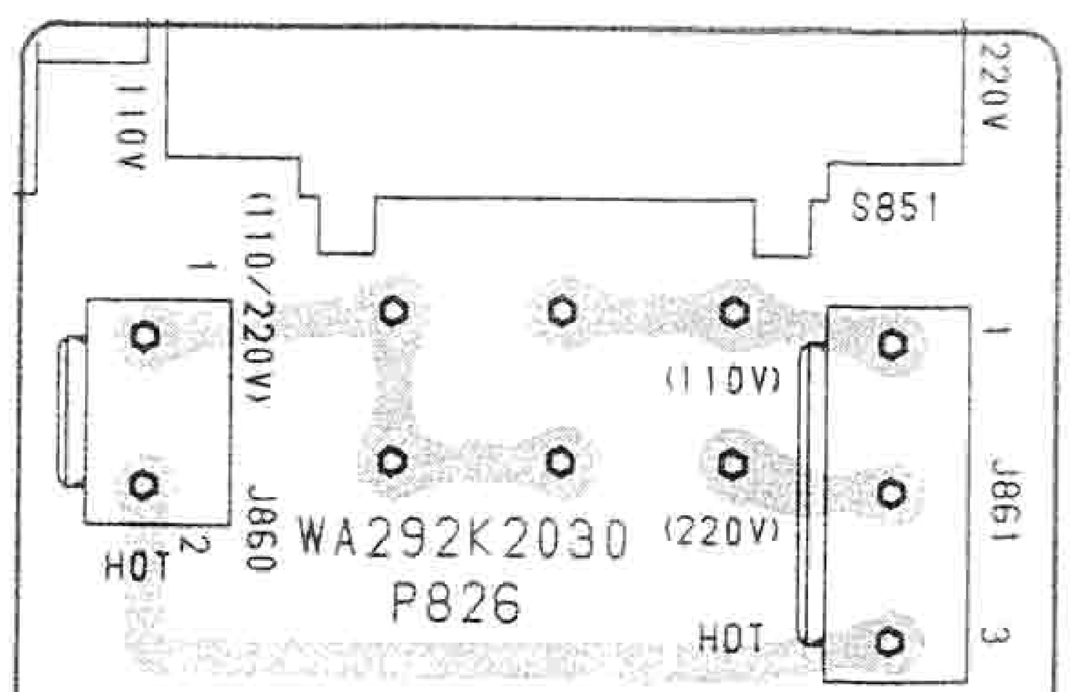
P806

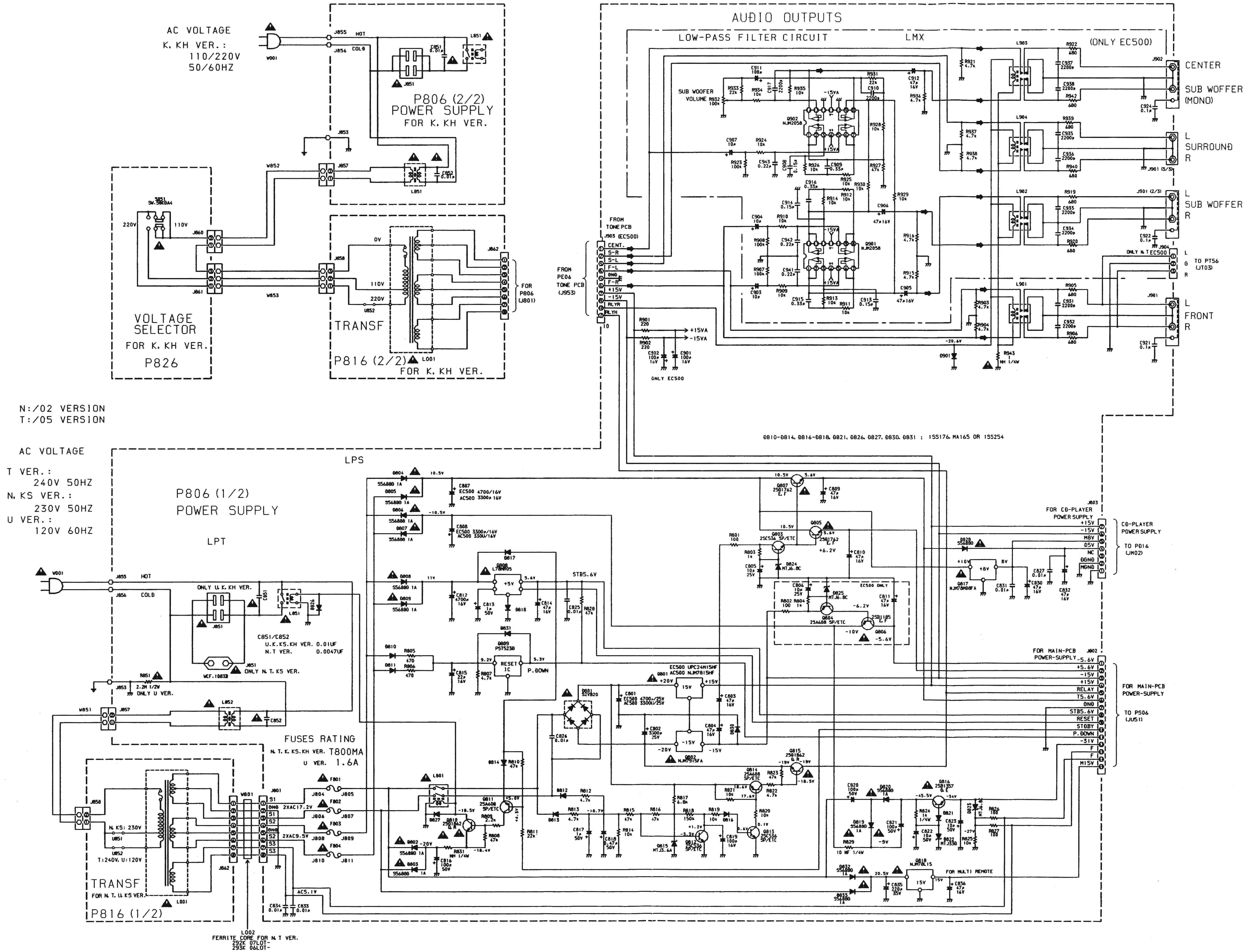


P816



P826 [K, KH VERSION]

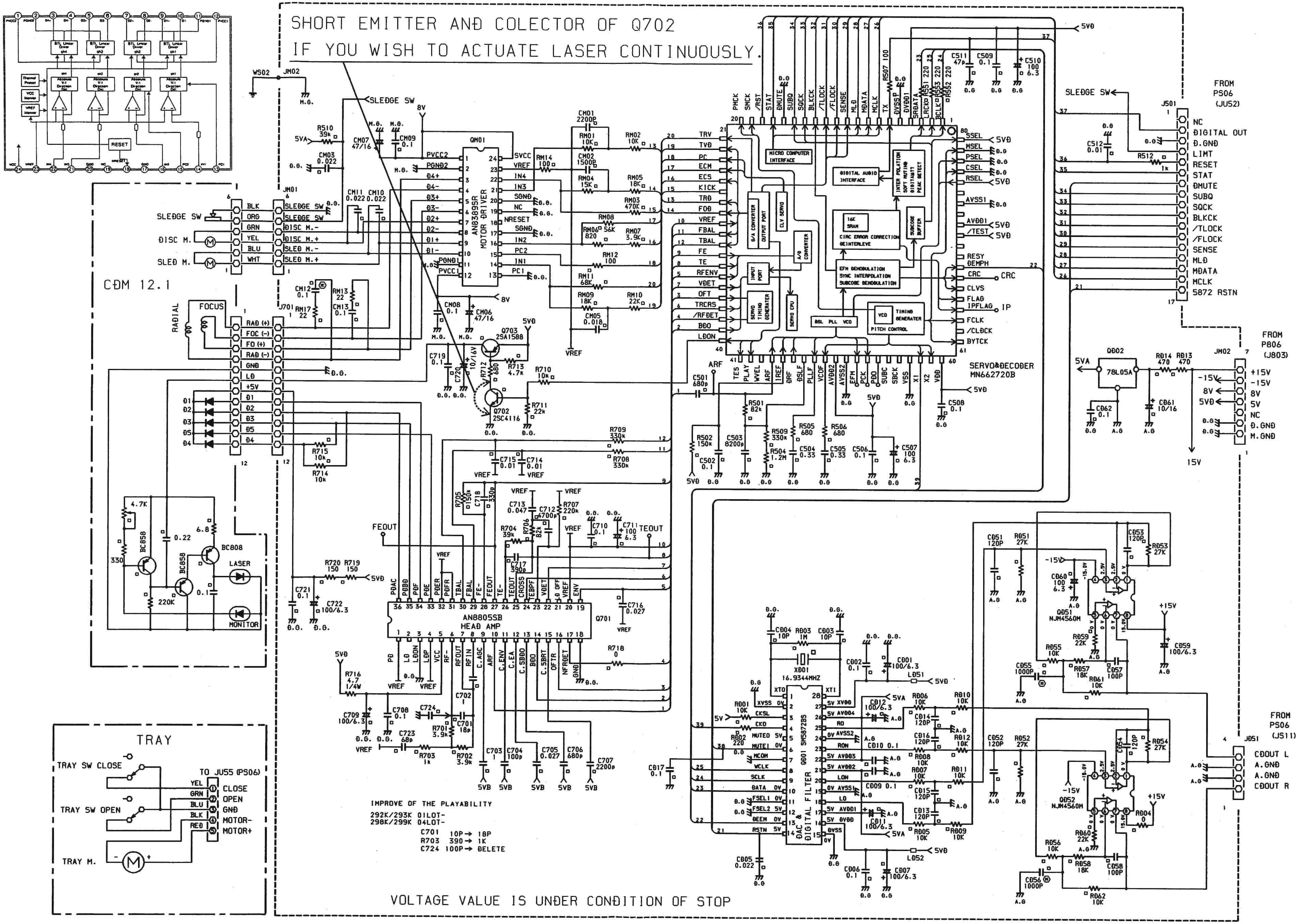




AC VOLTAGE
K, KH VER.:
110/220V
50/60HZ
P806 (2/2)
POWER SUPPLY
FOR K, KH VER.
VOLTAGE SELECTOR
FOR K, KH VER.
P826
TRANSF
P816 (2/2)
FOR K, KH VER.
AUDIO OUTPUTS
LOW-PASS FILTER CIRCUIT
LMX
(ONLY EC500)
CENTER
SUB WOFFER (MONO)
L SURROUND R
L SUB WOFFER R
L FRONT R
N:/02 VERSION
T:/05 VERSION
AC VOLTAGE
T VER.:
240V 50HZ
N, KS VER.:
230V 50HZ
U VER.:
120V 60HZ
P806 (1/2)
POWER SUPPLY
LPS
LPT
FUSES RATING
N, T, K, KS, KH VER. T800MA
U VER. 1.6A
TRANSF
P816 (1/2)
FOR CD-PLAYER POWER SUPPLY
CD-PLAYER POWER SUPPLY
TO PD16 (JM02)
FOR MAIN-PCB POWER-SUPPLY
TO PS06 (JU51)
D810-D814, D816-D818, D821, D826, D827, D830, D831 : 1SS176, MA165 OR 1SS254

PCS 85 752

QM01: AN8389SR



PCS 85 753

PD16

QM01

Q701

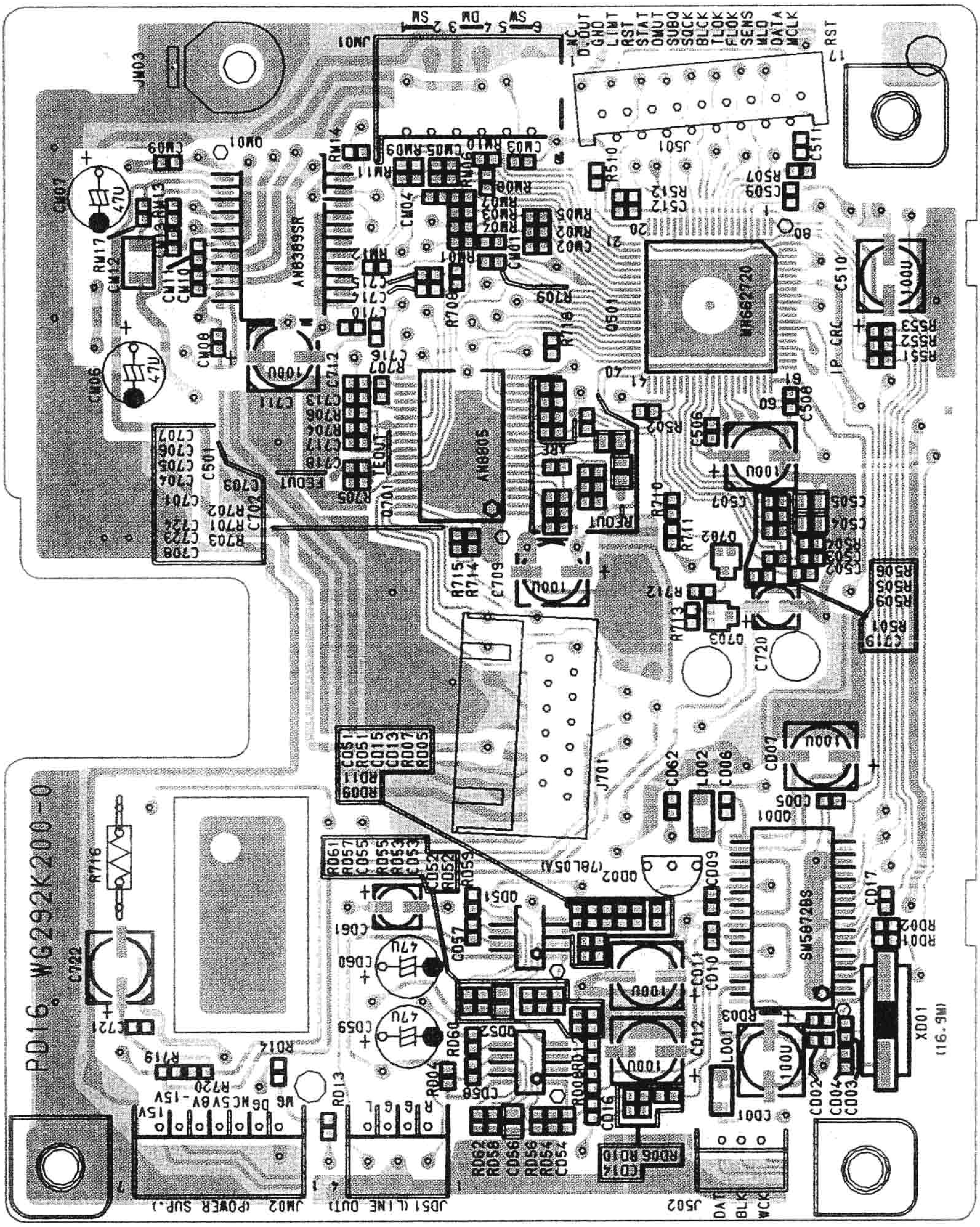
QD51,QD52

Q501

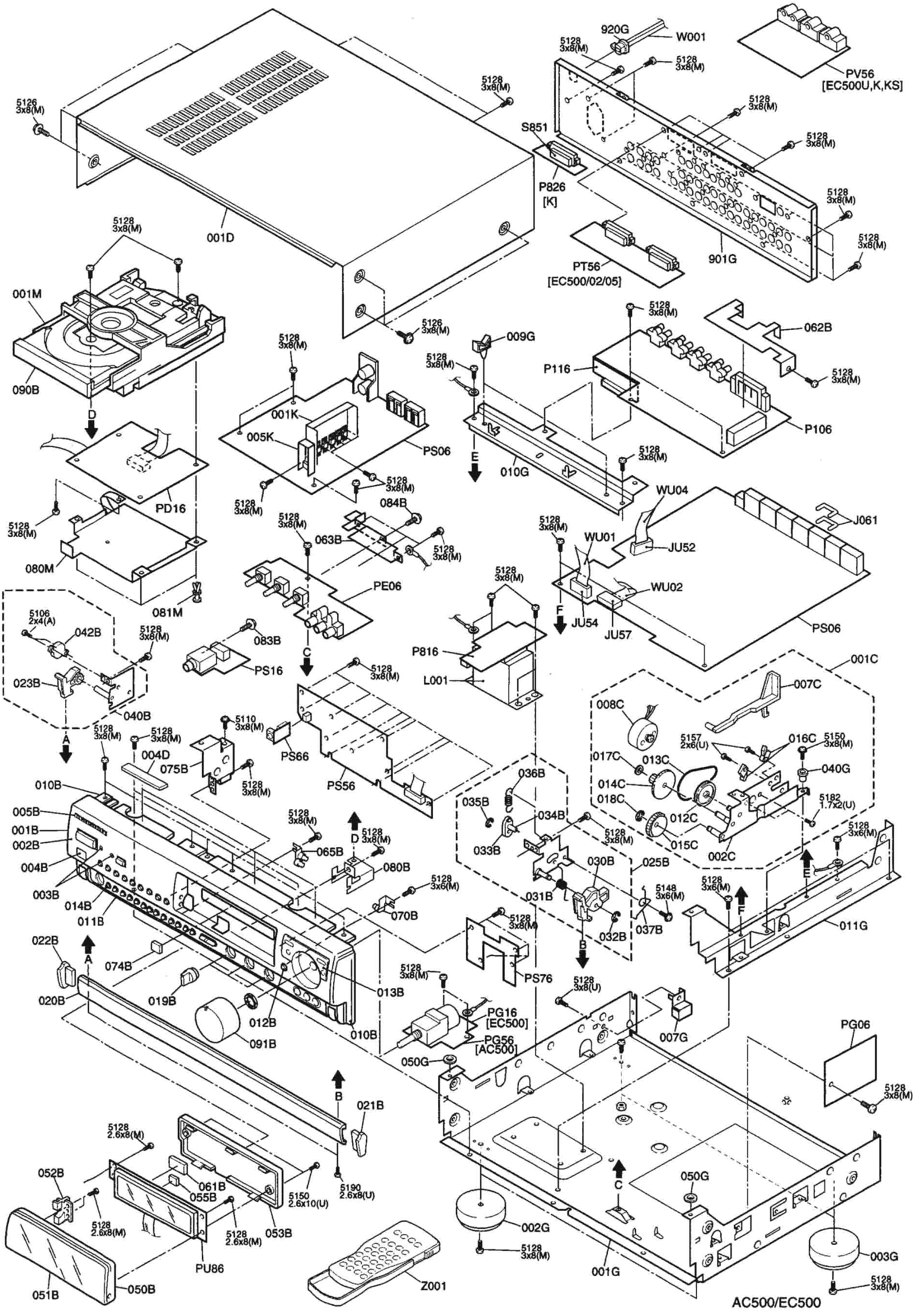
Q702,703

QD02

QD01



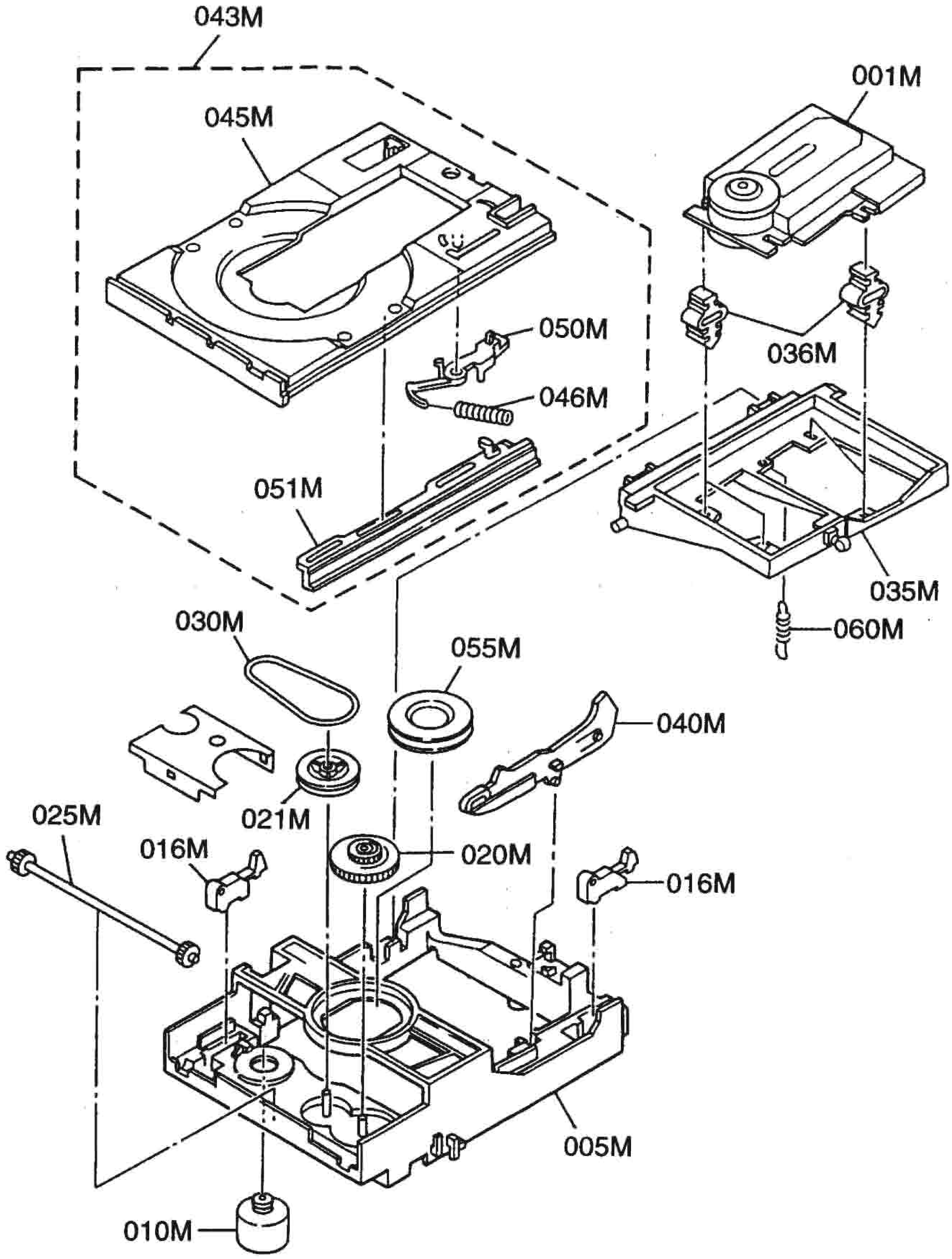
4. EXPLODED VIEW AND PARTS LIST



[VERS :VERSION, U:U.S.A, F:Japan, K:Far East, /XX:Europe]

POS. NO.	VERS. COLOR	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
001B	/02B/05B		FRONT PANEL, KIT [EC500] (BLACK)	292K248500
001B	KB, KS, U		FRONT PANEL, KIT [EC500] (BLACK)	298K248500
001B	/02G		FRONT PANEL, KIT [EC500] (GOLD)	292K248510
001B	KG		FRONT PANEL, KIT [EC500] (GOLD)	298K248510
001B	/02B/05B		FRONT PANEL, KIT [AC500] (BLACK)	293K248500
001B	KB, KS, U		FRONT PANEL, KIT [AC500] (BLACK)	299K248500
001B	/02G		FRONT PANEL, KIT [AC500] (GOLD)	293K248510
001B	KG		FRONT PANEL, KIT [AC500] (GOLD)	299K248510
002B	BLACK	4822 426 51815	FRONT PANEL, [EC500] (BLACK)	292K248010
002B	GOLD	4822 426 51819	FRONT PANEL, [EC500] (GOLD)	292K248110
002B	/02B/05B,KB KS, U	4822 426 51816	FRONT PANEL, [AC500] (BLCAK)	292K248020
002B	/02G,KG	4822 426 51821	FRONT PANEL, [AC500] (GOLD)	292K248120
003B		4822 381 11596	LENS (LED)	292K355010
004B		4822 381 11597	LENS (IR)	292K355020
005B	BLACK		BADGE, MARANTZ (BLACK)	185J251010
005B	GOLD		BADGE, MARANTZ (GOLD)	185J251110
010B	/02B/05B	4822 464 70661	CHASSIS, MOLD FRONT [EC500] (BLACK)	292K105010
010B	KB, KS, U		CHASSIS, MOLD FRONT [EC500] (BLACK)	292K105020
010B	/02G	4822 464 70662	CHASSIS, MOLD FRONT [EC500] (GOLD)	292K105110
010B	KG		CHASSIS, MOLD FRONT [EC500] (GOLD)	292K105120
010B	/02B/05B, K, KS, U	4822 464 70663	CHASSIS, MOLD FRONT [AC500]	292K105210
010B	/02G, KG	4822 464 70664	CHASSIS, MOLD FRONT [AC500]	292K105310
011B	/02B/05B	4822 454 12962	ESCUTCHEON [EC500] (BLACK)	292K063020
011B	KB, KS, U		ESCUTCHEON [EC500] (BLACK)	292K063030
011B	/02G	4822 454 12964	ESCUTCHEON [EC500] (GOLD)	292K063120
011B	KG		ESCUTCHEON [EC500] (GOLD)	292K063130
011B	/02B/05B	4822 454 12963	ESCUTCHEON [AC500] (BLACK)	292K063040
011B	KB, KS, U		ESCUTCHEON [AC500] (BLACK)	292K063050
011B	/02G	4822 454 12965	ESCUTCHEON [AC500] (GOLD)	292K063140
011B	KG		ESCUTCHEON [AC500] (GOLD)	292K063150
012B	BLACK	4822 410 63736	BUTTON, EJECT (BLACK)	292K270010
012B	GOLD	4822 410 63739	BUTTON, EJECT (GOLD)	292K270110
013B	BLACK	4822 410 63737	BUTTON, RUBBER (BLACK)	292K270020
013B	GOLD	4822 410 63741	BUTTON, RUBBER (GOLD)	292K270120
014B	BLACK	4822 410 63738	BUTTON, 15PCS (BLACK)	292K270030
014B	GOLD	4822 410 63742	BUTTON, 15PCS (GOLD)	292K270130
015B		4822 526 20213	MAGNET ASSY	271K305500
019B	BLACK	4822 410 60873	KNOB (BLACK)	426T154010
019B	GOLD	4822 413 41642	KNOB (GOLD)	415T154120
020B	BLACK	4822 426 51817	FRONT PANEL, AL DOOR PANEL [EC500] (BLACK)	292K248030
020B	GOLD	4822 426 51822	FRONT PANEL, AL DOOR PANEL [EC500] (GOLD)	292K248130
020B	BLACK	4822 426 51818	FRONT PANEL, AL DOOR PANEL [AC500] (BLACK)	292K248040
020B	GOLD	4822 426 51823	FRONT PANEL, AL DOOR PANEL [AC500] (GOLD)	292K248140
021B	BLACK		LINING, (R) (BLACK)	292K351010
021B	GOLD		LINING, (R) (GOLD)	292K351110
022B	BLACK		LINING, (L) (BLACK)	292K351020
022B	GOLD		LINING, (L) (GOLD)	292K351120
023B	BLACK		ARM, (L) (BLACK)	292K002020
023B	GOLD		ARM, (L) (GOLD)	292K002120
025B	BLACK		ARM, (R) ASSY (BLACK)	292K002500
025B	GOLD		ARM, (R) ASSY (GOLD)	292K002510
030B	BLACK		ARM, (R) (BLACK)	292K002010
030B	GOLD		ARM, (R) (GOLD)	292K002110
040B			BRACKET, (L) KIT	292K160550
050B	BLACK	4822 426 51813	CASE, (FL DOOR) (BLACK)	292K064010
050B	GOLD	4822 426 51814	CASE, (FL DOOR) (GOLD)	292K064110
051B	/02/05	4822 450 62438	WINDOW, (FL DOOR) RDS	292K158010
051B	K, KS, U		WINDOW, (FL DOOR)	292K158110
052B		4822 522 33563	GEAR, (FL DOOR)	292K058010
053B	BLACK	4822 426 51824	LID, KIT (FL DOOR) (BLACK)	292K257500
053B	GOLD	4822 426 51825	LID, KIT (FL DOOR) (GOLD)	292K257510
060B			STICKER, FL ADHESIVE TAPE [EC500]	056J122010
065B			BRACKET, (L) KIT	292K160530

POS. NO.	VERS. COLOR	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
070B			BRACKET, (R) KIT	292K160520
075B			BRACKET, (GEAR KIT)	292K160300
083B			SCREW	183J010010
084B			SCREW	183J010010
090B	BLACK	4822 454 12961	ESCUTCHEON, TRAY (BLACK)	292K063010
090B	GOLD	4822 426 51812	ESCUTCHEON, TRAY (GOLD)	292K063110
091B	BLACK	4822 413 41907	KNOB, VR (BLACK)	292K154010
091B	GOLD	4822 413 41908	KNOB, VR (GOLD)	292K154110
001C			GEAR, KIT (002~022C)	292K058500
002C		4822 404 21339	BRACKET, KIT	292K160510
007C		4822 404 21283	LEVER	446T354010
008C		4822 361 21687	D.C.MOTOR ASSY	•MM000630R
012C		4822 528 40363	PULLEY	446T262020
013C		4822 358 31264	BELT	446T264010
014C		4822 522 33388	GEAR	446T058010
015C		4822 522 33564	GEAR	292K058020
016C		4822 271 30768	MINI SW, LEAF SW	SM01011530
017C		4822 462 71886	STOPPER, WASHER	009D114210
018C			RG RINGE, E-RING	64002500R0
001D	BLACK		LID, TOP COVER (BLACK)	194J257010
001D	GOLD		LID, TOP COVER (GOLD)	194J257110
001G			CHASSIS, MAIN	292K105050
002G		4822 462 42045	LEG, (FRONT)	183J057010
003G		4822 462 42048	LFG, (REAR)	183J057110
920G	/02, K, KG		BUSHING, AC CORD (HEYCO SR-5N-4)	1455259050
920G	/05, KS, U		BUSHING, AC CORD (NIFCO 2271)	450H259010
⚠W001	KS		A.C.POWER CORD	YC01800340
⚠W001	K		A.C.POWER CORD, 12A 300V	YC01800450
⚠W001	/02	4822 321 10804	A.C.POWER CORD, CEE	YC01800480
⚠W001	/05		A.C.POWER CORD, 5A 250V	YC01800760
⚠W001	U		A.C.POWER CORD, UL/CSA LISTED	YC01800330
WU01		4822 321 62962	JUMPER LEAD, SUMI-CARD 19P 1.25 JU01-JU54 [EC500]	YU19080500
WU02		4822 321 62959	JUMPER LEAD, FFC 12P P-1.0 200MM UL20624 [EC500]	YU12200510
WU04		4822 321 62961	JUMPER LEAD, SUMI-CARD 17P 1.25 JU52-J501 [EC500]	YU12200510
			PACKING	
001T		4822 736 22413	USER MANUAL, [EC500]	292K851310
001T		4822 736 22414	USER MANUAL, [AC500]	293K851310
J061			SHORT PLUG,	YQ01000080
J062	AC500		GND TERMINAL W/M3 [AC500]	YL03010280
J102	U	4822 264 30254	F CONNECTOR T5945-A	YT01010180
Z001		4822 218 10577	UNIT K, REMOTE-CONT RC500EC [EC500]	ZK292K0010
Z001		4822 218 10578	UNIT K, REMOTE-CONT RC500AC [AC500]	ZK293K0010
Z004	U		EXT.ANTENNA	ZA02000070
Z004	/02/05,K,KS		EXT.ANTENNA, FM ANT.75OHM PAL	ZA02800010
Z006			ANT COIL, LA-700HB LOOP	LA00055010
Z007			CONNECTIVE CORD, RCA ST.CORD 1M	ZD01000330
Z008			CONNECTIVE CORD, RCA PIN CORD	ZD00900100
Z009	K		JACK, AC ADAPTER	YJ04001240
Z010	U	4822 264 30265	PLUG, ANT ADAPTOR	YP90000310



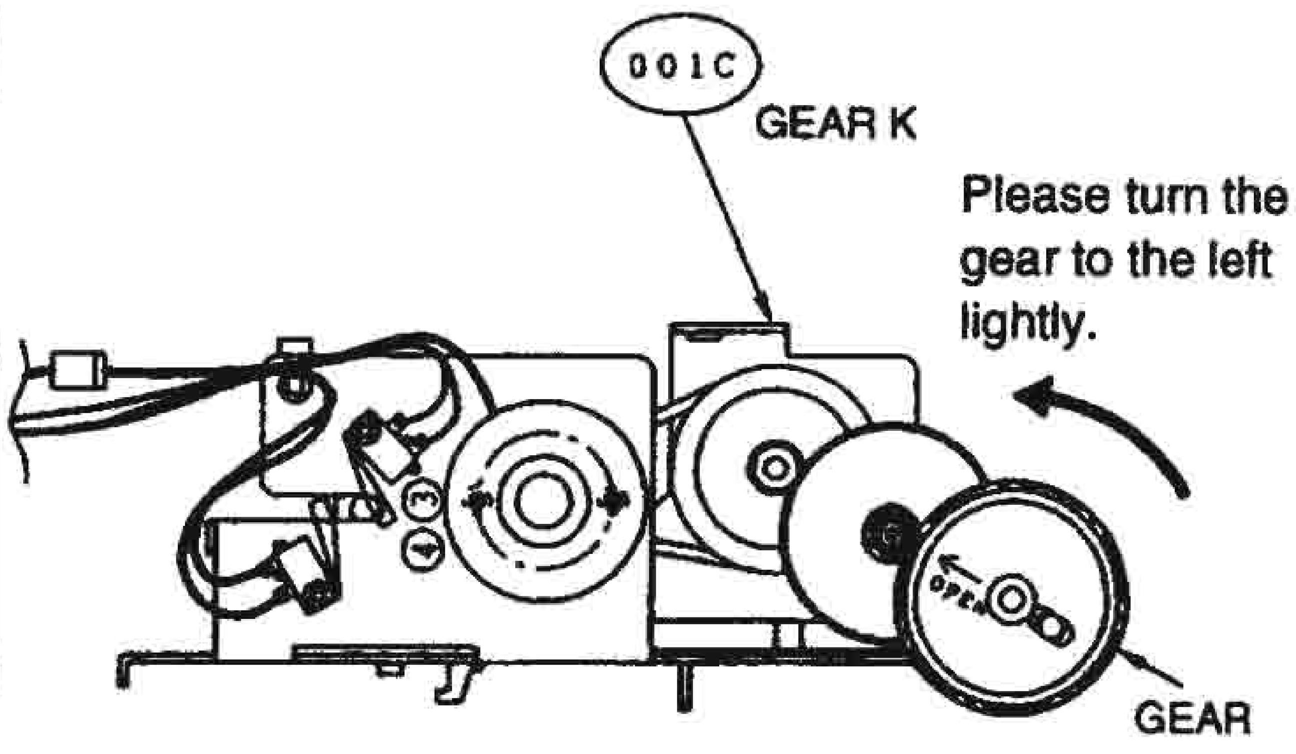
[VERS. :VERSION, U:U.S.A, F:Japan, K:Far East, /XX:Europe]

POS. NO.	VERS. COLOR	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
001M		4822 691 30278	MECHANISM, CDM12.1	292K304500
005M			FRAME K	305K401500
010M		4822 361 21741	D.C.MOTOR	MM0030002R
016M		4822 271 30853	MINI SWITCH	SM01020620
020M		4822 522 33521	GEAR	305K058030
021M		4822 528 81537	PULLEY	305K262010
025M		4822 522 33522	GEAR K	305K058500
030M		4822 358 31314	BELT	305K264010
035M		4822 443 51265	CASE	305K064110
036M			BUFFER, SUSPENSION	305K056010
040M		4822 403 71209	ARM	305K002010
043M		4822 444 50732	CASE, K	305K064500
045M			CASE	305K064010
046M		4822 492 33494	SPRING	305K115010
050M			CAM	305K054010
051M		4822 522 33519	GEAR	305K058010
055M		4822 401 11553	CLAMPER K	305K005500
060M		4822 492 33495	SPRING	305K115020

5. SERVICING HINTS

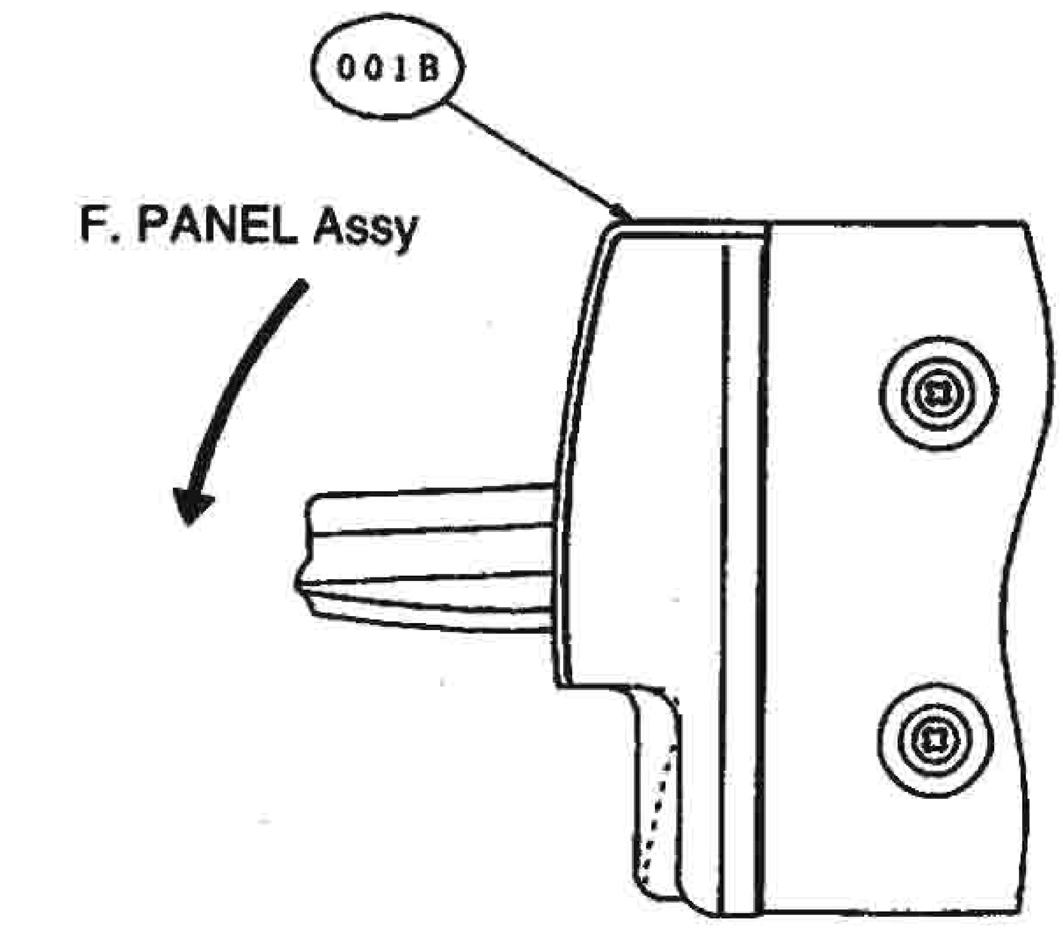
HOW TO SET THE GEAR KIT

1) How to set an OPEN/CLOSE GEAR (black) of the Gear Kits.



As you can see from the above drawing, stop turning the gear at the position where letter of 'OPEN' comes to the side of the monitor.

2) How to set the FL Door Assembly



Please pull down the FL door of the front panel assembly as shown here.

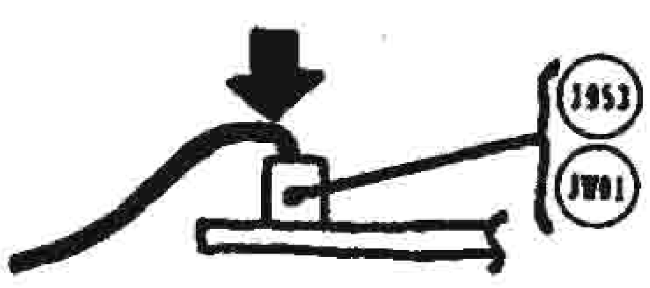
HOW TO SET THE CABLE

Note 1)

Please do not attach clumpers here.
(To avoid touching to the gear kit 001C (black gear)).

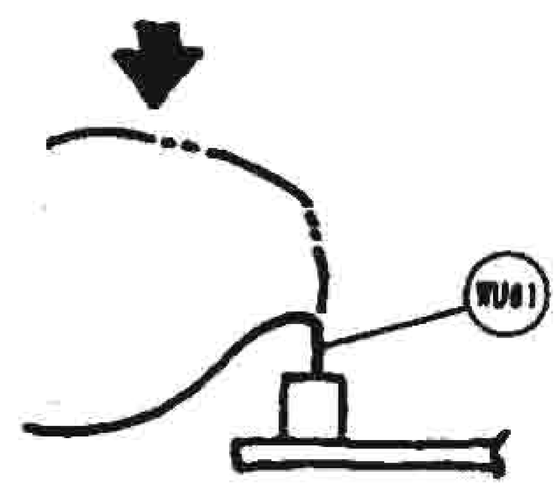
Note 2)

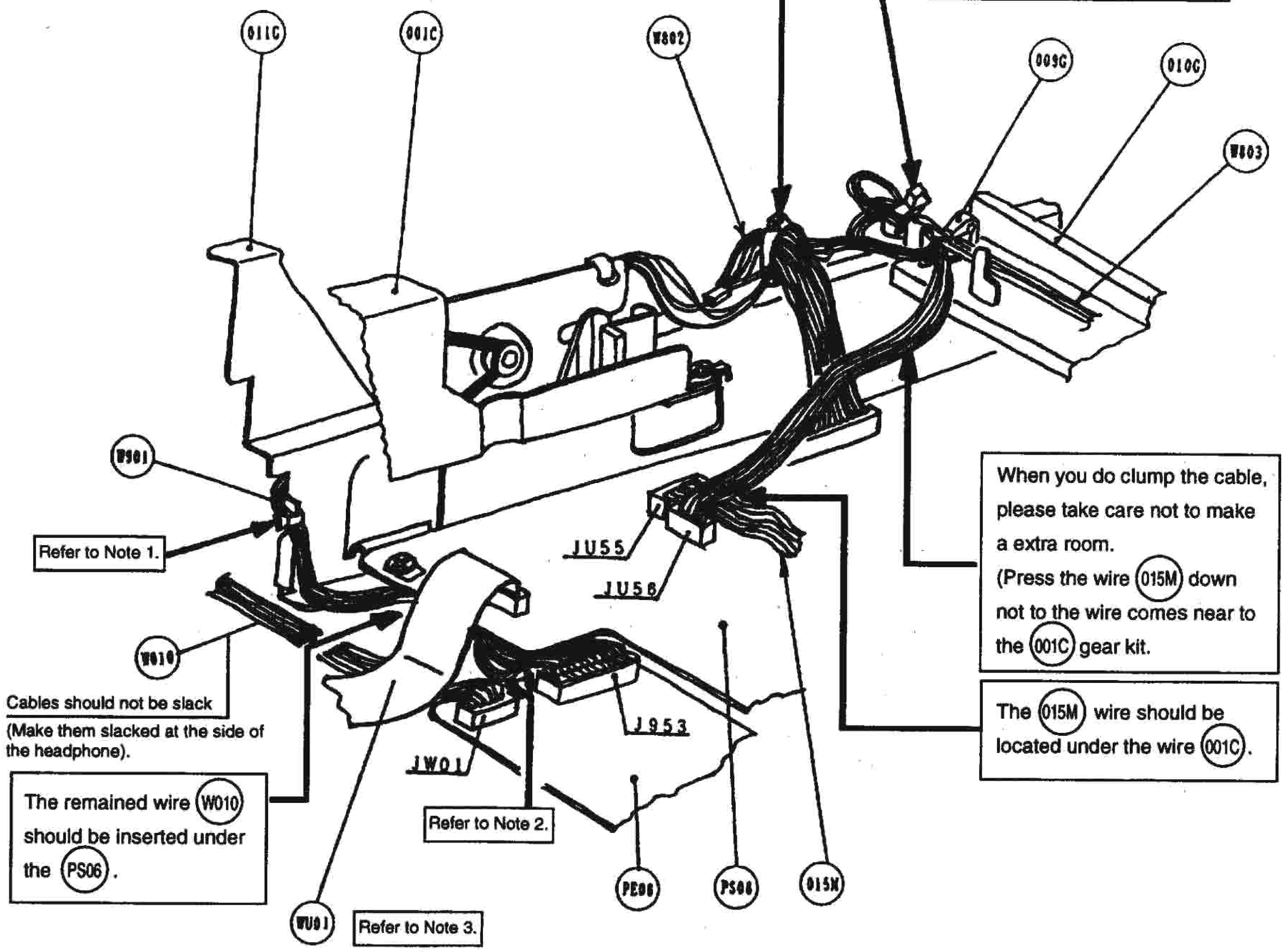
W901 Press the wire like an allow (don' t make the wire bulged).
W010 (To make room for the movement of the door's Flexible Flat Cable).

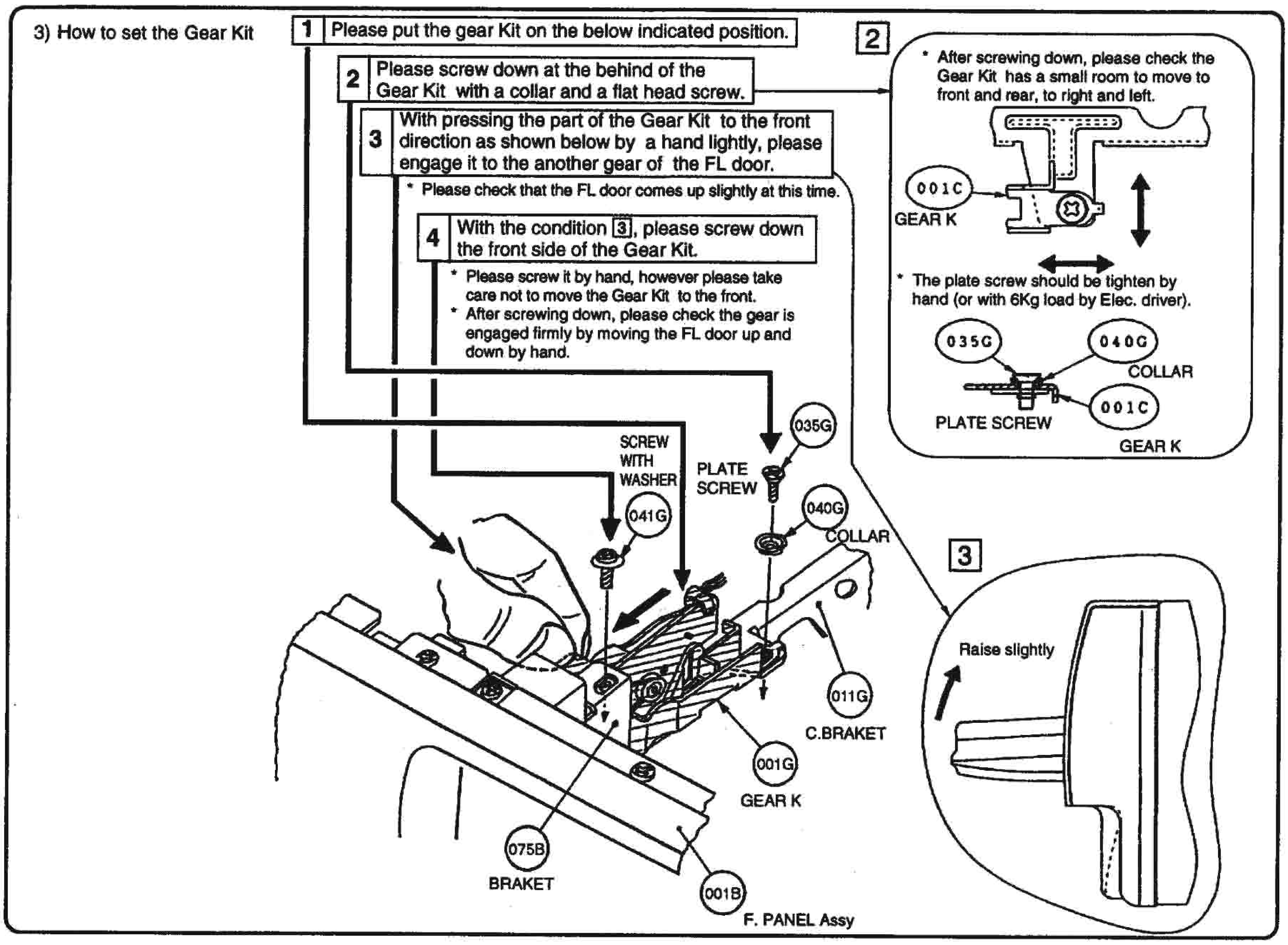


Note 3)

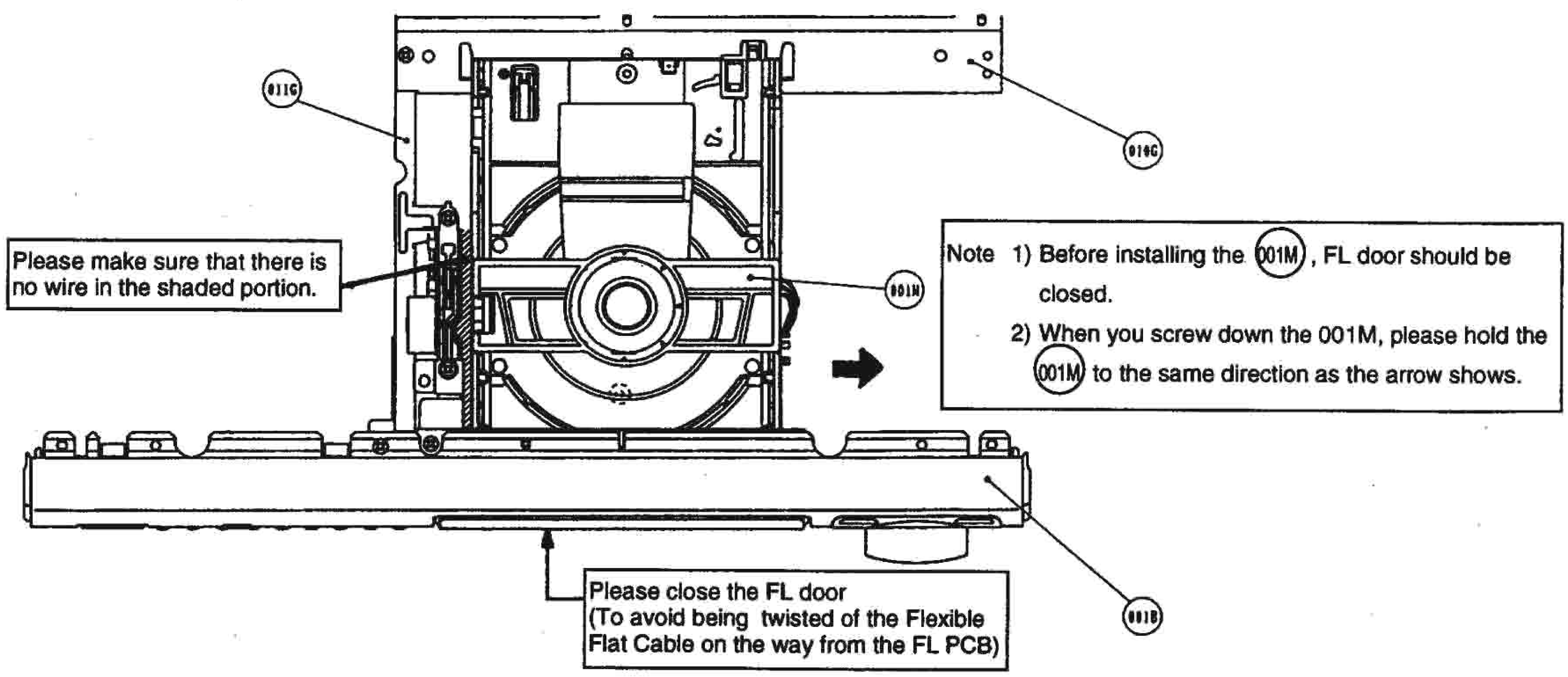
WU01 Press the Flexible Flat Cable as an allow (not to have the wire bulged).

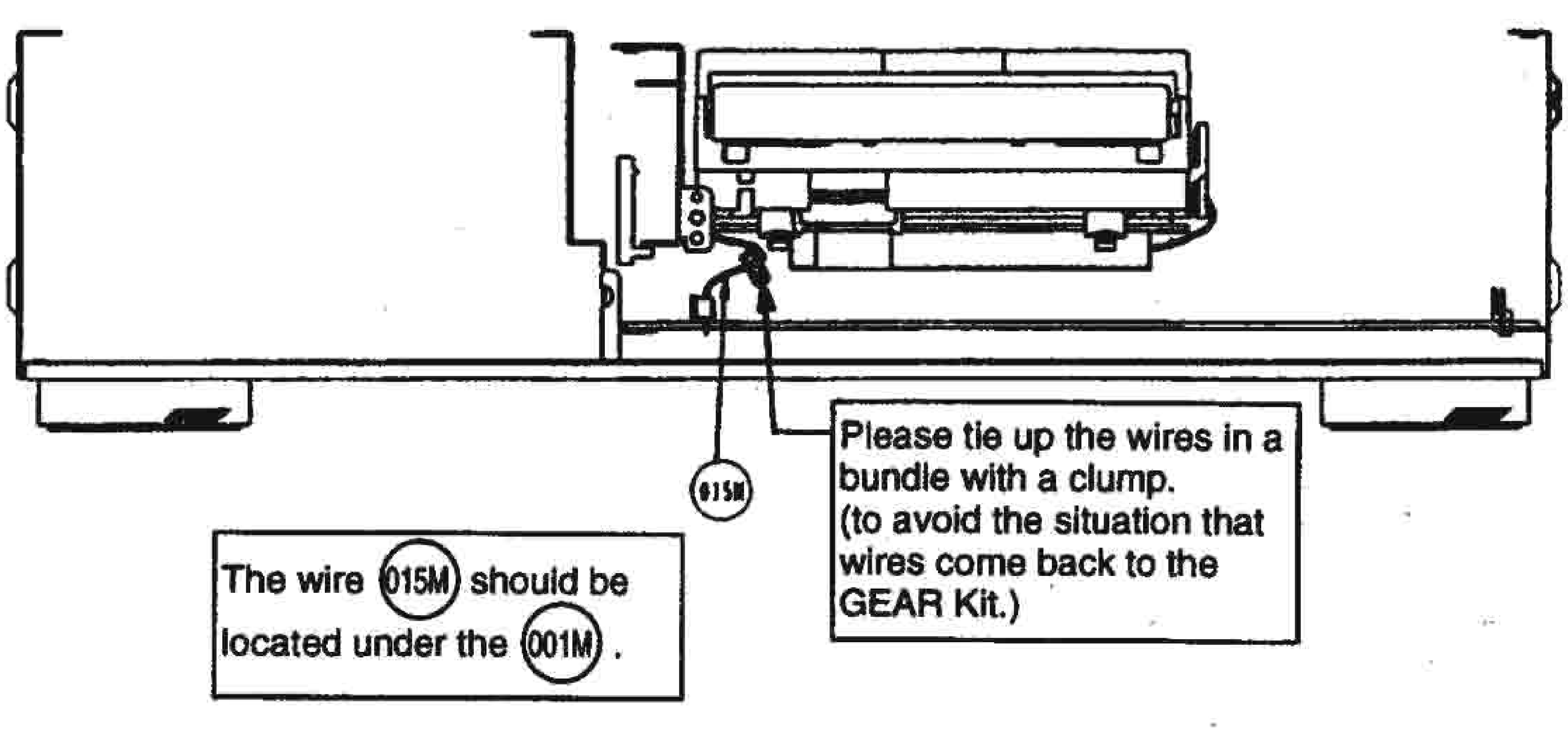






HOW TO SET THE CD LOADER





6. SERVICE MODE

- To enter into the Service Mode, turn the mains plug in while pressing 2 of [STAND BY] and [CLOCK] keys, simultaneously.

- While the biginning 3 seconds, after starting the service mode, the model name and destination and ROM version are indicated.

- To get out from the Service Mode, turn the mains plug out.
  (When you turn on the mains plug in next time, all data and mode information will be disappeared/ cleared.)

- Performance of the Service Mode is as follows:

1. Clock (Press CLOCK button)

1) It takes 10 seconds to have 1 minute advance.
2) The speed of the timer clock is same as above 1).
3) As for Sleep Timer, it takes only 1 second to have 1 minute advance.
   (The Sleep timer does not correspond to the Clock performance).

2. Tuner (Press TUNER button)

To the preset numbers (1 - 13), following tracking point frequencies should be memorized:

Preset number:

1-3 : FM Low frequencies. (AUTO)
4-6 : FM Tracking point frequencies. (AUTO)
7-9 : MW (AM) Tracking point frequencies.
10-13 : If there is LW, tracking point frequencies should be set.
If there is no LW, the frequencies of AM, MW, FM CATV should be set.

		P1~P3	P4	P5	P6
FM	EUPROPE	87.50	90.00	98.00	106.00
[MHz]	USA	87.50	90.00	98.00	106.00
	JAPAN	76.00	78.00	83.00	88.00

		P7	P8	P9	P10
AM	9KHz without LW	603	999	1404	531
[KHz]	9KHz with LW	603	999	1404	171
	10KHz	600	1000	1400	520

		P11	P12	P13
LW	9KHz with LW	207	270	152
CT	USA (CATV)	90.00M	98.00M	106.00M
[KHz]				

3. CD (Press CD button)

There are 2 kinds of modes - (CD) Servo test mode, an Error Indication mode.

1) Servo test mode
   This mode is switched on with [NEXT] and [PREV] keys. FF/REV works with [FF]and [REVIEW] keys. The automatic adjustment value of IC(Q501) MN662720, has already been set-up.

Indications	P00	P01	P02	P03
Focus	OFF	ON	ON	ON
Spindle	OFF	OFF	ON	ON
Tracking	OFF	OFF	ON	ON
Mute	ON	ON	ON	OFF
FF/REV	Possible	Impossible	Possible	Possible

2) Error Indication Mode
   This mode will appear when you press the [PLAY] key at the (CD) Servo Test mode.
   As ordinal cases, if some defaults are detected, error codes are displayed.
   The content for each error code is shown below.

Error code	Error content
2	FOCUS ERROR
7	SUB CODE ERROR
8	T.O.C. ERROR
9	SERVO IC ERROR
10	RADIAL ERROR
11, 12	SLED ERROR
13	TURN TABLE MOTOR ERROR
14	AUTO ADJUST ERROR
16 ~ 20	SEARCH ERROR
30	DOOR ERROR
31	TRAY ERROR
32 ~ 39	KEY INPUT ERROR
46	TRACK NO. SELECT ERROR
47	PROGRAM INPUT ERROR

When you press [FF] or [REV] key without a disc, automatic adjustment values of MN662720 will be indicated. (figures are indicated by HEX).

FG	Focus gain constant (Mantissa) part
FEXP	Focus gain Exponential part
FBAL	Focus balance constant
FOFS	Focus off-set constant
TG	Tracking gain constant (Mantissa) part
TEXP	Tracking gain constant Exponential part
TBAL	Tracking balance constant
TOFS	Tracking off-set constant

When you press the [D. MODE] key, except the play-back, the status of the auto-adjustment MN662720 should be indicated. (See the indications as below).
The status of the completion/ incompletion will be indicated by the light-up/ light-off of the vertical indicators.

AJ	_ _ _ _	(auto-adjustment incompletion)
AJ	_ _ _ J	(TR OFFSET completion)
AJ	_ _ _ u	(FO OFFSET completion)
AJ	_ _ J u	(FO Coarse GAIN completion)
AJ	_ _ u u	(TR Coarse GAIN completion)
AJ	_ J u u	(TR BALANCE completion)
AJ	_ u u u	(FO BALANCE completion)
AJ	J u u u	(FO Fine GAIN completion)
AJ	u u u u	(TR Fine Gain completion)

Note : TR: Tracking, FO: Focus

4. Indications

* FL and LED indications can be all lighted up while pressing the [STAND BY] key in conditions of Power-On (except the Stand by mode).

5. As for other functions, there are no difference from usual performances.

7. ALIGNMENT PROCEDURES

- Set to T.R point ME mode of the service program.

7-1. FM Alignment Procedures

(Band switch at "FM" position and MODE switch at "MONO" position)

- **FM RF Alignment**

Step	Signal Source Connection	Input Frequency	Indicator Connection	Set tuned to	Adjust
1	FM signal generator to FM antenna terminal. Adjust the RF signal output so that slight noise occurs at the upper and lower sides of the output waveform.	98.0 MHz	AC VTVM to L-or R-channel Tape out (JV02)	98.0 MHz (P5)	Front end (A101) IFT for maximum output and minimum distortion.
2	FM signal generator 500 μV outpu to FM antenna terminal (75-ohm).	98.0 MHz	Distortion meter to L-or R-channel Tape out	98.0 MHz (P5)	L105 core for minimum distortion.

- **FM IF Alignment**

(Band switch at "FM" position and MODE switch at "AUTO STEREO" position)

Step	Signal Source Connection	Input Frequency	Indicator Connection	Set tuned to	Adjust
1	FM signal generator 500 μV outpu modulated by MPX signal generator to FM antenna terminal (75-ohm).	Stereo L-channel (1.000 Hz)	VTVM to L-channel Tape out	98.0 MHz (P5)	Front end (A101) IFT for minimum distortion.
2	Modulation level: IHF 67.5 kHz +9% pilot dev. DIN 40 kHz +8% pilot dev.	Stereo R-channel (1.000 Hz)	VTVM to R-channel Tape out		

- **Muting Level Alignment**

(Band switch at "FM" position and MODE switch at "AUTO STEREO" position)

Step	Signal Source Connection	Input Frequency	Indicator Connection	Set tuned to	Adjust
1	FM signal generator 12.5 μV output to FM antenna terminal (75-ohm).	98.0 MHz	AC VTVM to L-or R-channel Tape out	98.0 MHz (P5)	R114 to a point at which output appears.

- **Multiplex Alignment**

(Band switch at "FM" position and MODE switch at "AUTO STEREO" position)

Step	Signal Source Connection	Input Frequency	Indicator Connection	Set tuned to	Adjust
1	FM signal generator 500 μV output modulated by MPX signal generator to FM antenna terminal (75-ohm). Modulation level: IHF 67.5 kHz +9% pilot dev. DIN 40 kHz +8% pilot dev.	Stereo L-channel (1.000Hz)	VTVM to R-channel Tape out (JS01)	98.0 MHz (P5)	R119 so that channel separation is identical between both channels.
2		Stereo R-channel (1.000Hz)	VTVM to L-channel Tape out (JS01)		
3	Repeat steps 1 and 2				

- **RDS 57 kHZ BPF Alignment [Europe only]**

Step	Signal Source Connection	Input Frequency	Indicator Connection	Set tuned to	Adjust
1	FM signal generator 500 μV output modulated by MPX signal generator to FM antenna terminal (75-ohm). Modulation level: RDS signal 1 kHz dev.	98.0 MHz	AC VM and Oscilloscope between JR01 T.P. (PS06)	98.0 MHz (P5)	RR06 for maximum output. (PS06)

7-2. AM (MW) / LW Alignment Procedures

(Band switch at "MW" or "AM" position)

- **AM IF Alignment**

Step	Signal Source Connection	Input Frequency	Indicator Connection	Set tuned to	Adjust
1	Sweep generator to aM antenna terminal.	450 kHz	AC VTVM to L-or R-channel Tape out (JS01)	——	L104 for maximum and symmetrical waveform.

- **AM (MW) RF Alignment**

Step	Signal Source Connection	Input Frequency	Indicator Connection	Set tuned to	Adjust
1	AM signal generator to AM loop antena in a test loop.	603 kHz (Europe, Japan) 600 kHz (USA)	VTVM to L-or R-channel Tape out (JS01)	603 kHz 600 kHz (P7)	L101 for maximum output.
2		1404 kHz (Europe, Japan) 1400 kHz (USA)		1404 kHz 1400 kHz (P9)	C101 for maximum output.
3	Repeat steps 1 and 2 until sensitivity is maximized.				

- **AM Auto Stop Alignment (Band switch at "MW" or "AM" position)**

Step	Signal Source Connection	Input Frequency	Indicator Connection	Set tuned to	Adjust
1	RF generator to AM loop antena in a test loop. (500 µF / m)	999 kHz (Europe, Japan) 1000 kHz (USA)	—	999 kHz (P8) 1000 kHz (P8)	R103 so that the "TUNED" on the display tube lights.

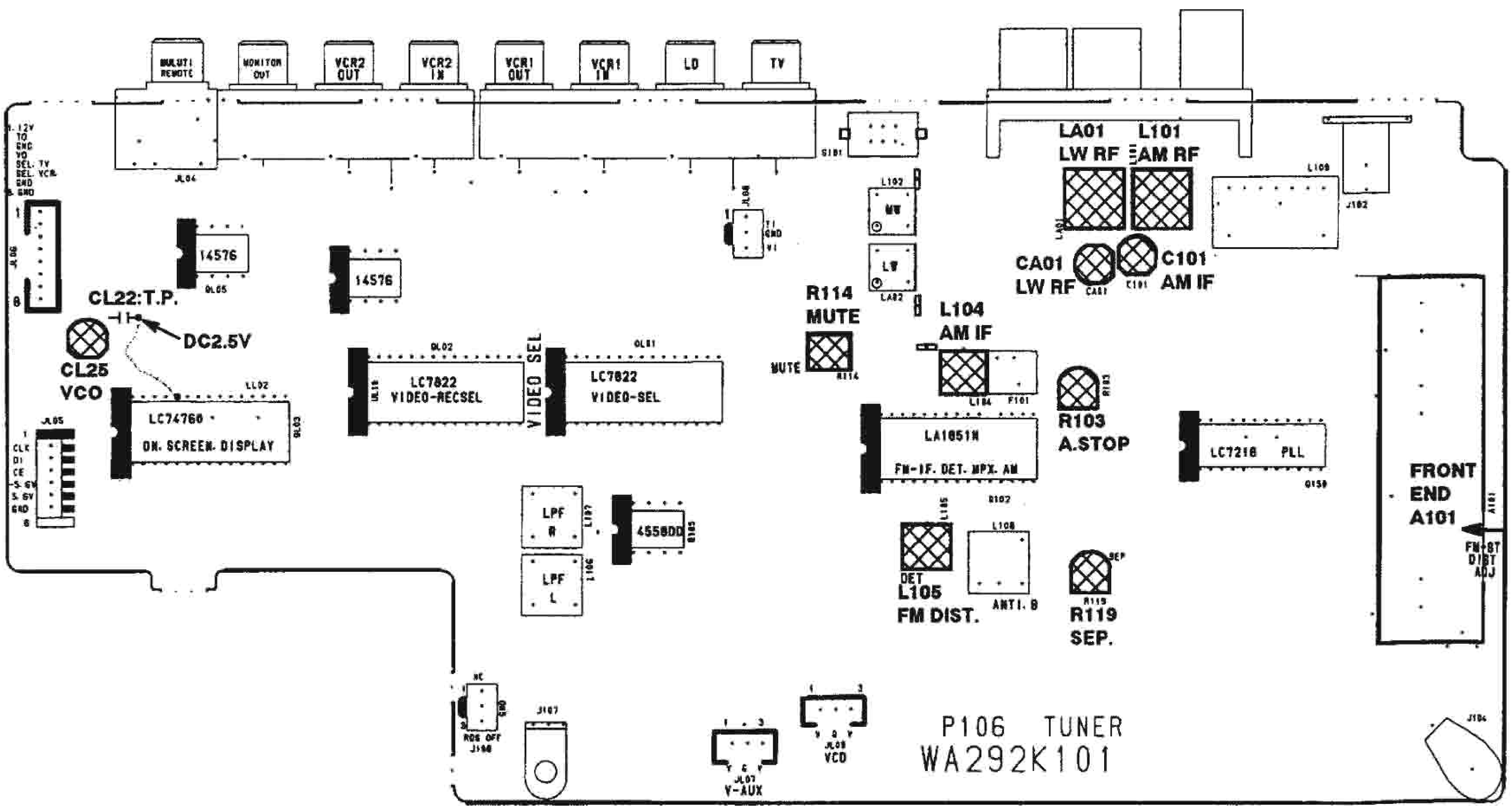
- **LW RF Alignment [Europe only]**

Step	Signal Source Connection	Input Frequency	Indicator Connection	Set tuned to	Adjust
1	AM signal generator to AM loop antena in a test loop.	171 kHz	VTVM to L-or R-channel Tape out (JS01)	171 kHz (P10)	LA01 for maximum output.
2		270 kHz		270 kHz (P12)	CA01 for maximum output.
3	Repeat steps 1 and 2 until ensitivity is maximized.				

7-3. OSD (On screen display) Alignment [EC500 only]

1. Select the input to "TV" mode.
2. Input the video signal to line input as "TV".
3. Connect the digital volt meter to the pin No.26 of QL03 (LC74760) and GND.
4. Adjust the trimming capacitor "CL25" to 2.5V on the volt meter at "DC" volt range.

7-4. Alignment Point



8. MICROPROCESSOR AND IC DATA

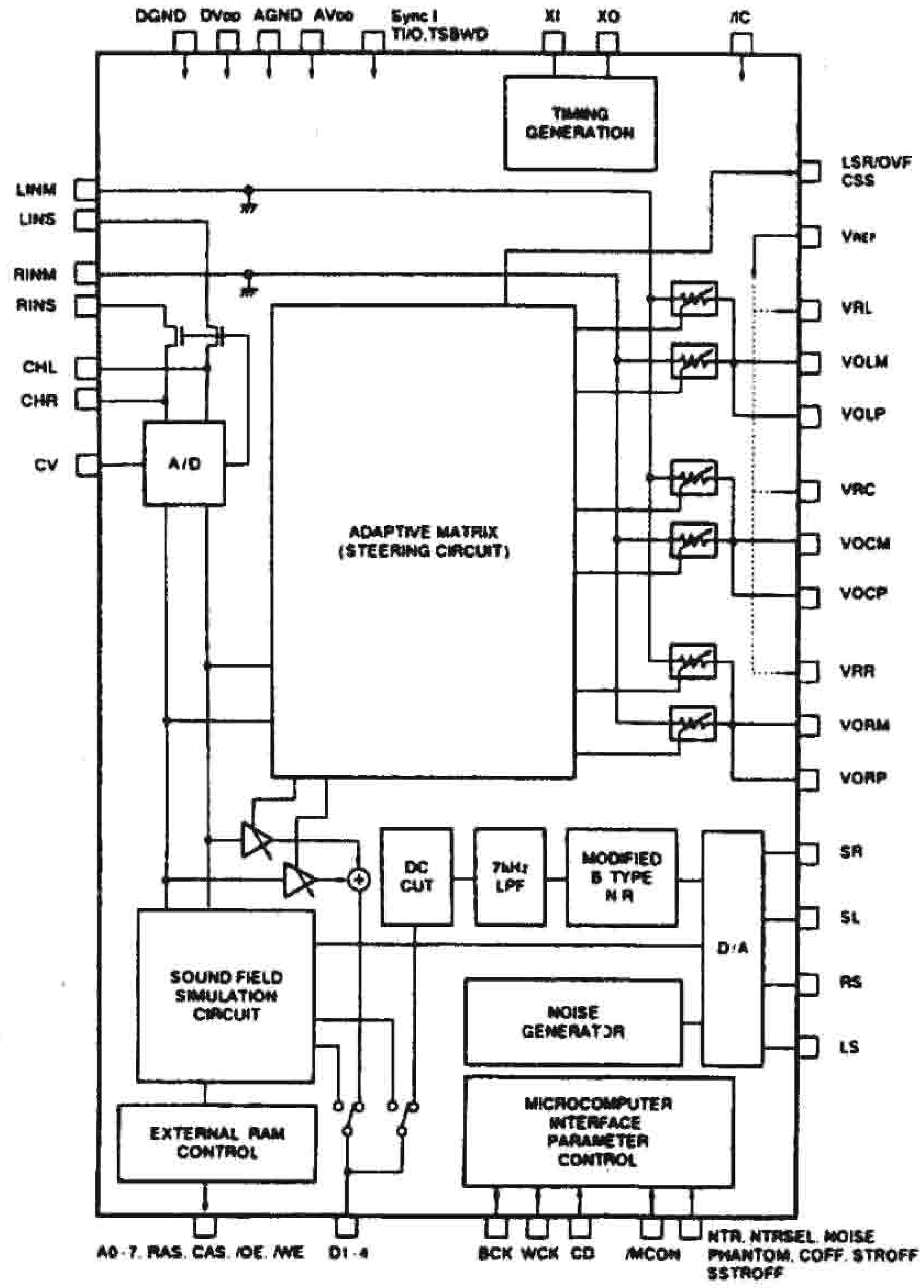
QU51 : MN186003 MICROPROCESSOR

PIN NO.	PORT NAME	I/O	ACT	FUNCTION	PIN NO.	PORT NAME	I/O	ACT	FUNCTION
1	EXI				51	SUBQ	I	–	MN662720 SUBQ BUS DATA
2	CLK	O	–	SANYO IC BUS CLOCK	52	BLK CK	I	L	MN662720 SUBQ BUS BLOCK SYNC
3	DATA	O	–	SANYO IC BUS DATA	53	SLEDGE	I	L	CDM12.1 SLEDGE SW
4	MOT. VOL. UP	O	H	MAIN MOTOR VOLUME CONTROL UP	54	POWER DOWN	I	L	POWER DOWN
5	MOT. VOL. DN	O	H	MAIN MOTOR VOLUME CONTROL DOWN	55	XI			GND
6	STB	O	–	MULTI ROOM VOLUME CONTROL STB	56	XO			N.C
7	CLK	O	–	MULTI ROOM VOLUME CONTROL CLOCK	57	VSS			GND
8	DATA	O	–	MULTI ROOM VOLUME CONTROL DATA.	58	OSCI			OSC 20.0 MHz
9	VSS			GND	59	OSC2			OSC 20.0 MHz
10	A15	O		ADDRESS OUT	60	RESET			RESET
11	A14	O		ADDRESS OUT	61	CE	O	H	TIMER IC BUS CE
12	A13	O		ADDRESS OUT	62	I/O	O	–	TIMER IC BUS I/O
13	A12	O		ADDRESS OUT	63	CLK	O	–	TIMER IC BUS CLOCK
14	A11	O		ADDRESS OUT	64	DATA	I/O	–	TIMER IC BUS DATA
15	A10	O		ADDRESS OUT	65	STB	O	–	SURROUND VOLUME STB
16	A9	O		ADDRESS OUT	66	STB	O	–	CENTER VOLUME STB
17	A8	O		ADDRESS OUT	67	CLK	O	–	SURROUND/CENTER VOLUME
18	A7	O		ADDRESS OUT	68	DATA	O	–	SURROUND/CENTER VOLUME
19	A6	O		ADDRESS OUT	69	VDD			+5V
20	A5	O		ADDRESS OUT	70	AVDD			+5V
21	A4	O		ADDRESS OUT	71	VREF+			+5V
22	A3	O		ADDRESS OUT	72	SENSE	I	–	MN662720 SENSE
23	A2	O		ADDRESS OUT	73	STAT	I	–	MN662720 STAT
24	A1	O		ADDRESS OUT	74	FLOCK	I	L	MN662720 FLOCK
25	A0	O		ADDRESS OUT	75	TLOCK	I	L	MN662720 TLOCK
26	D7	I/O	–	DATA IN/OUT	76	SYNC DET.	I	H	SYNC DELECT SIGNAL OF EXTERNAL VIDEO
27	D6	I/O	–	DATA IN/OUT	77	D5	I		
28	D5	I/O	–	DATA IN/OUT	78	D6	I	H	LA1851 21PIN
29	D4	I/O	–	DATA IN/OUT	79	D0	I	–	LC7218 SERIAL DATA IUPUT
30	D3	I/O	–	DATA IN/OUT	80	VREF			GND
31	D2	I/O	–	DATA IN/OUT	81	AVSS			GND
32	D1	I/O	–	DATA IN/OUT	82	VSS			GND
33	D0	I/O	–	DATA IN/OUT	83	RC IN	I	L	RC-5 INPUT
34	VDD			+5V	84	RC OUT	O	H	RC-5 OUTPUT
35	RE			READ ENABLE	85	MULTI	I	L	MULTI RC-5 INPUT
36	WE			WRITE ENABLE	86	AUTO RESET	O	H	TUNER AUTO PRESET MEMORY
37	PSEN			PROGRAM STORE ENABLE	87	MUTE	O	L	FUNCTION MUTE OUTPUT
38	MULTI ON	O	L	MULTI ROOM OUTPUT RELAY ON/OFF	88	STAND-BY	O	H	POWER STANDBY CONTROL SIGNAL
39	MULTI MUTE	O	H	MULTI OUTPUT MUTE	89	RDS START	I	L	RDS DATA START SIGNAL
40	MULTI CONT.	O	L	MULTI REMOTE DC LEVEL CONTROL SIGNAL	90	OSD CE	O	L	OSD IC CE
41	P36	I/O	–	N.C	91	SCLK	O	–	FL/OSD IC BUS CLOCK
42	P37	I/O	–	N.C	92	DATA	O	–	FL/OSD IC BUS DATA
43	P40	I/O	–	N.C	93	LOAD	O	–	FL/OSD IC BUS LOAD
44	RSTN	O	L	SM5872 RESET	94	RDS CLK	I	–	RSD IC BUS CLOCK
45	RST	O	L	MN662720 RESET	95	WCK	O	–	DSP IC BUS WORD CLOCK
46	MUTE I	O	H	SM5872 MUTE	96	RDS DATA	I	–	RDS IC BUS DATA
47	M DATA		O	– MN662720 BUS DATA	97	VDD			+5V
48	M CLK	O	–	MN662720 BUS CLOCK	98	BCK	O	–	DSP IC BUS BIT CLOCK
49	MLD	O	–	MN662720 BUS LOAD	99	CD	O	–	DSP IC BUS DATA
50	SQCK	O	–	MN662720 SUBQ BUS CLOCK	100	CE	O	L	SANYO IC BUS CE

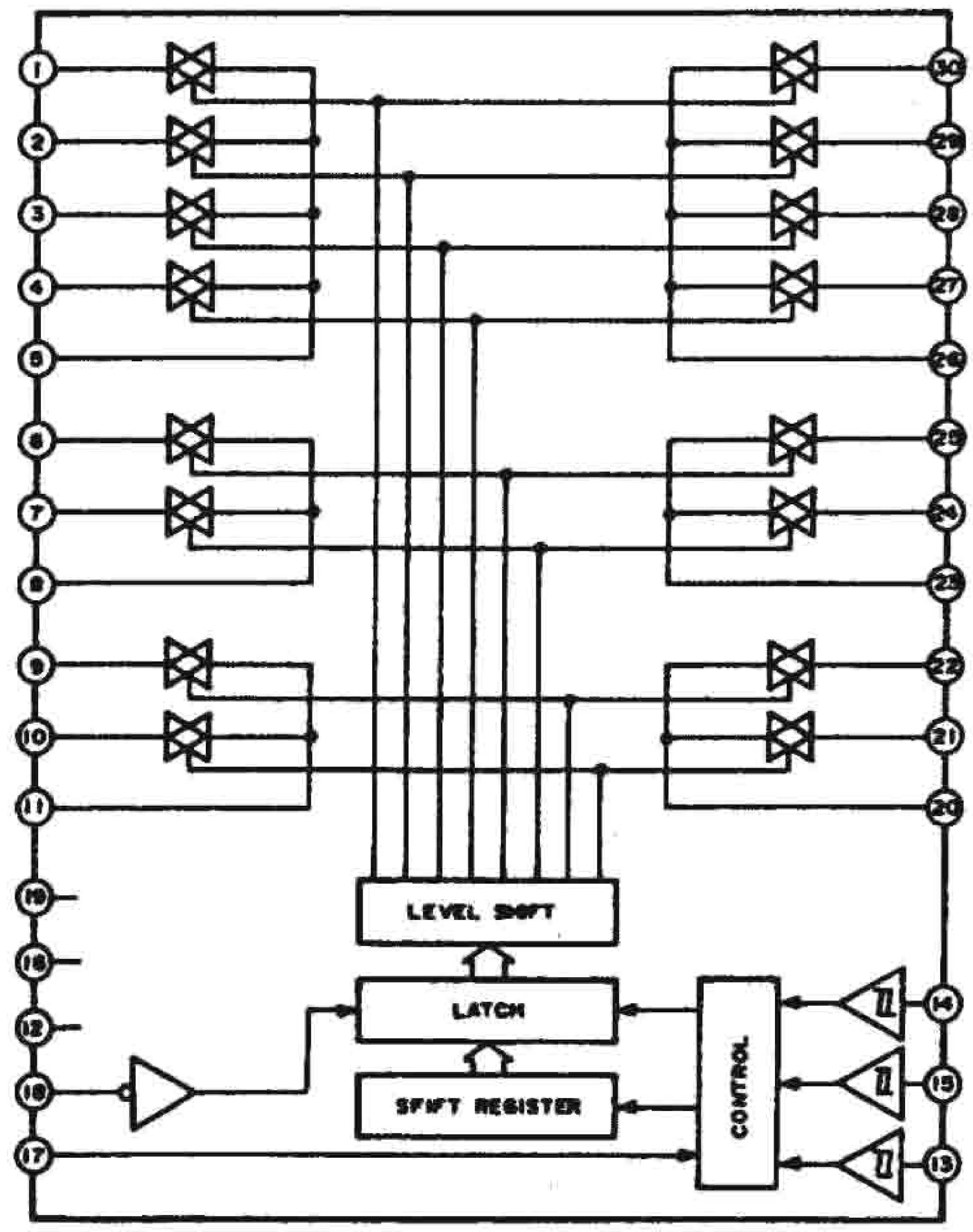
QU52 : CXD1095Q EXPANDER

PIN NO.	PORT NAME	I/O	ACT	FUNCTION	PIN NO.	PORT NAME	I/O	ACT	FUNCTION
1	N.C	–			33	N.C	–		
2	N.C	–			34	N.C	–		
3	SURROUND	O	L	SURROUND SW	35	D3	I/O		DATA IN/OUT
4	CENTER WIDE	O	H	CENTER MODE : WIDE	36	D4	I/O		DATA IN/OUT
5	CENTER MUTE	O	L	CENTER OUTPUT MUTE	37	D5	I/O		DATA IN/OUT
6	SURROUND MUTE	O	L	SURROUND OUTPUT MUTE	38	D6	I/O		DATA IN/OUT
7	STEREO	O	H	DSP MODE : STEREO	39	D7	I/O		DATA IN/OUT
8	DSP MUTE	O	L	SURR. MODULE FUNCTION MUTE	40	$\overline{\text{CLR}}$	I		RESET
9	PB7	O		N.C	41	$\overline{\text{ODEN}}$	I		OUTPUT DISABLE
10	Vss	–		GND	42	Vss	–		GND
11	KEY OUT 0	O	L	KEY MATRIX OUT 0	43	$\overline{\text{WR}}$	I		WRITE ENABLE
12	KEY OUT 1	O	L	KEY MATRIX OUT 1	44	$\overline{\text{RD}}$	I		READ ENABLE
13	KEY OUT 2	O	L	KEY MATRIX OUT 2	45	$\overline{\text{CS}}$	I		CHIP SELECT
14	KEY OUT 3	O	L	KEY MATRIX OUT 3	46	A0	I		ADDRESS IN
15	KEY OUT 4	O	L	KEY MATRIX OUT 4	47	A1	I		ADDRESS IN
16	PC5	O	–	N.C	48	A2	I		ADDRESS IN
17	PC6	O	–	N.C	49	TRAY MOTOR IN	O	H	TRAY MOTOR CONTROL IN
18	CD	O	L	MUTE CONTROL SIGNAL AT SELECTED CD FUNCTION	50	TRAY MOTOR OUT	O	H	TRAY MOTOR CONTROL OUT
19	N.C	–			51	N.C	–		
20	KEY IN 0	I	L	KEY MATRIX INPUT 0	52	DOOR MOTOR IN	O	H	DOOR MOTOR CONTROL IN
21	KEY IN 1	I	L	KEY MATRIX INPUT 1	53	DOOR MOTOR OUT	O	H	DOOR MOTOR CONTROL OUT
22	KEY IN 2	I	L	KEY MATRIX INPUT 2	54	TRAY IN SW	I	L	TRAY IN SW
23	KEY IN 3	I	L	KEY MATRIX INPUT 3	55	TRAY OUT SW	I	L	TRAY OUT SW
24	KEY IN 4	I	L	KEY MATRIX INPUT 4	56	DOOR IN SW	I	L	DOOR IN SW
25	Vss	–		GND	57	Vss	–		GND
26	VDD	–		+5V	58	VDD	–		+5V
27	KEY IN 5	I	L	KEY MATRIX INPUT 5	59	DOOR OUT SW	I	L	DOOR OUT SW
28	KEY IN 6	I	L	KEY MATRIX INPUT 6	60	MODEL SW 0	I	–	MODEL SELECT SW 0 (MODEL/VERSION)
29	KEY IN 7	I	L	KEY MATRIX INPUT 7	61	MODEL SW 1	I	–	MODEL SELECT SW 1 (MODEL/VERSION)
30	D0	I/O		DATA IN/OUT	62	MODEL SW 2	I	–	MODEL SELECT SW 2 (MODEL/VERSION)
31	D1	I/O		DATA IN/OUT	63	MODEL SW 3	I	–	MODEL SELECT SW 3 (MODEL/VERSION)
32	D2	I/O		DATA IN/OUT	64	TEST TONE	O	H	TEST TONE SW

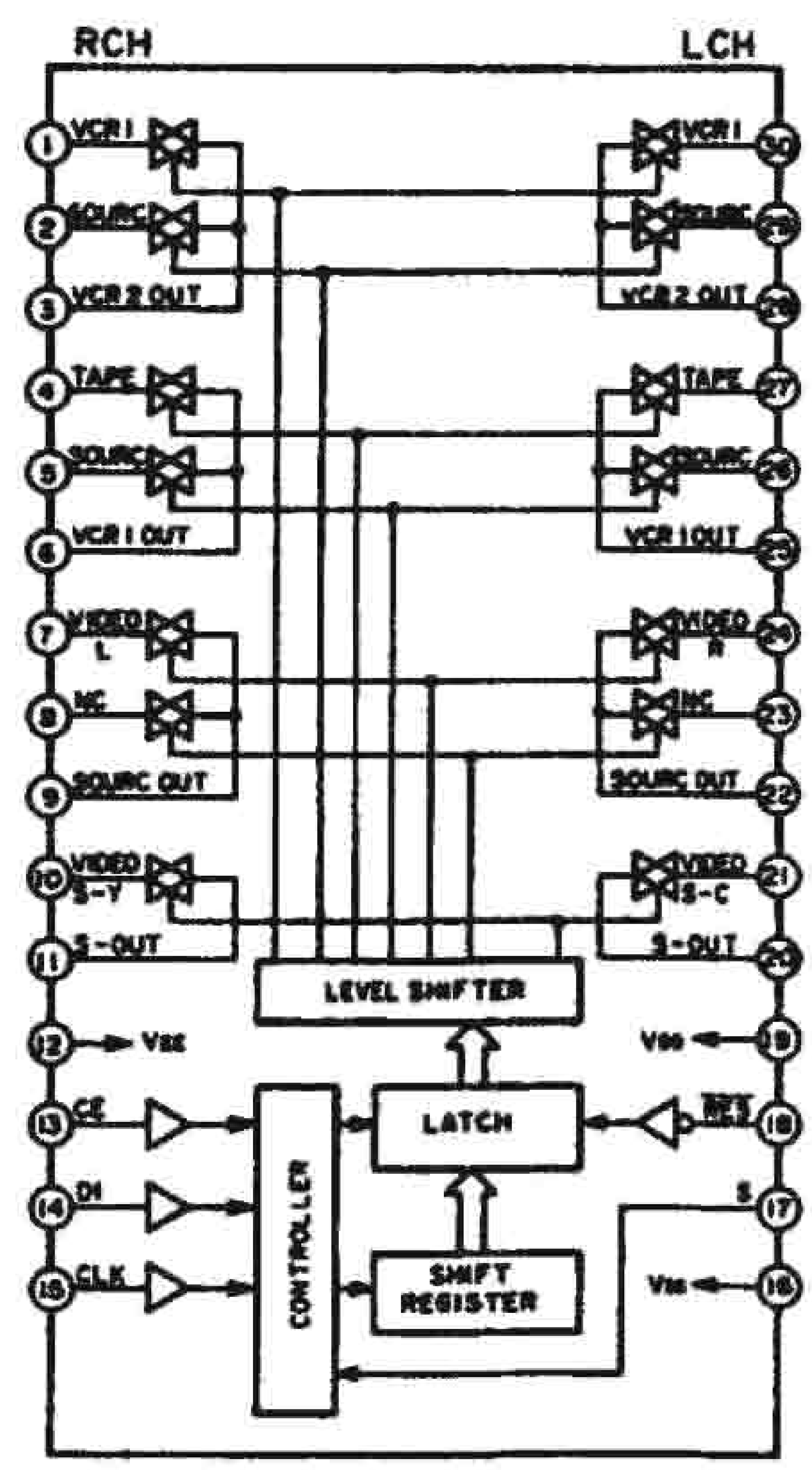
Q601 : YM7306C



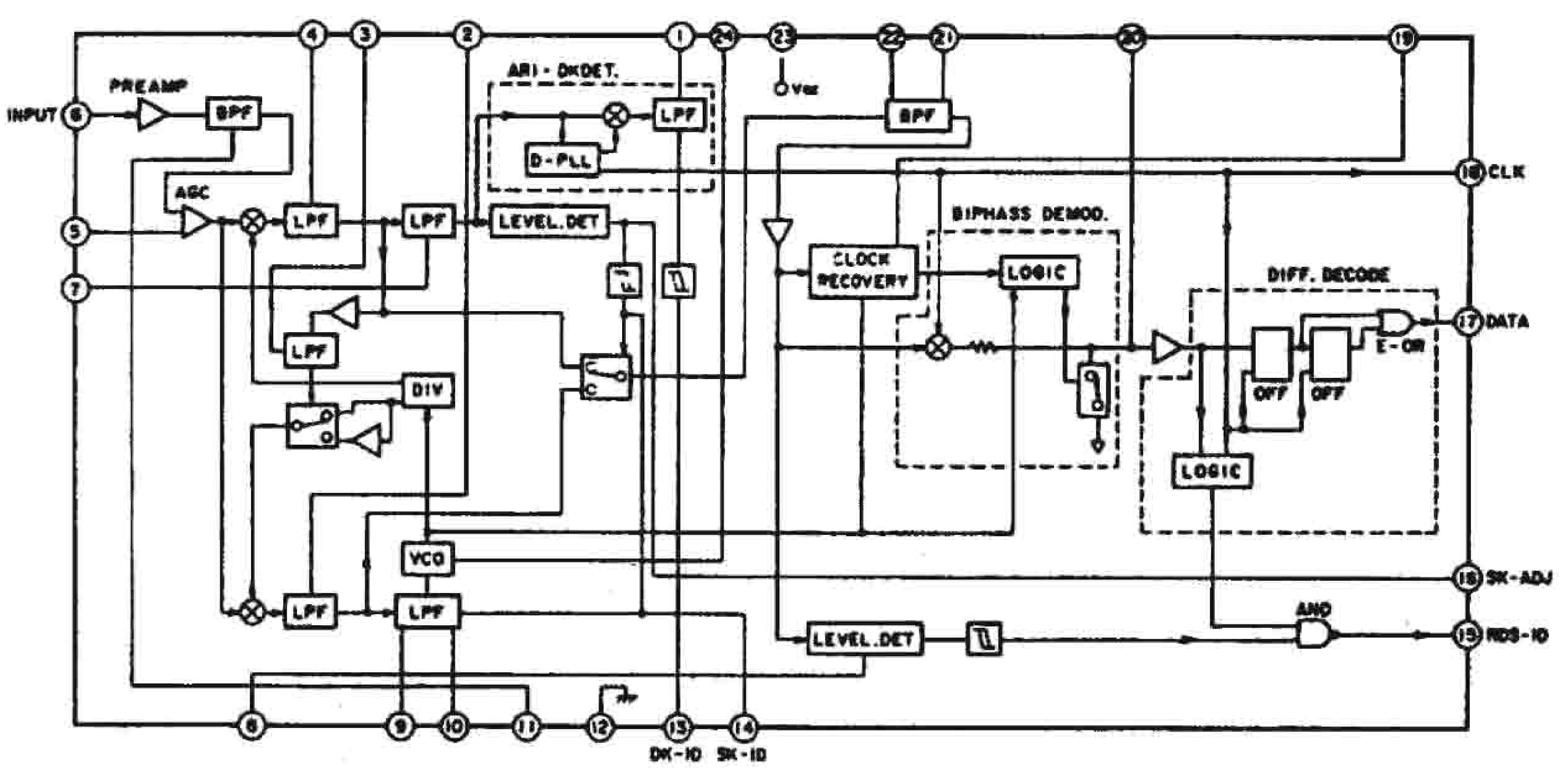
QS01, QS02, QS07 : LC7821



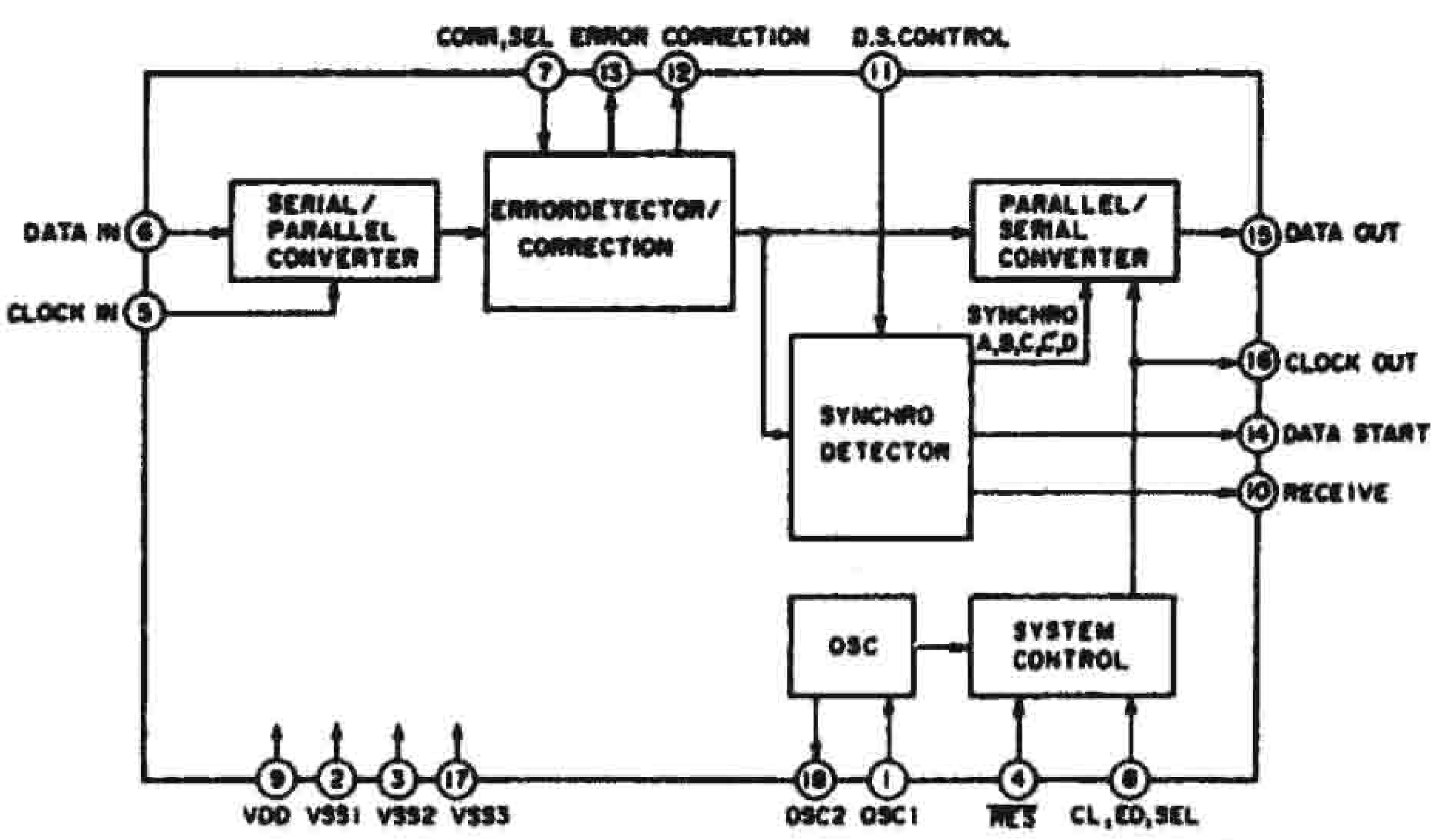
QS07 : LC7823



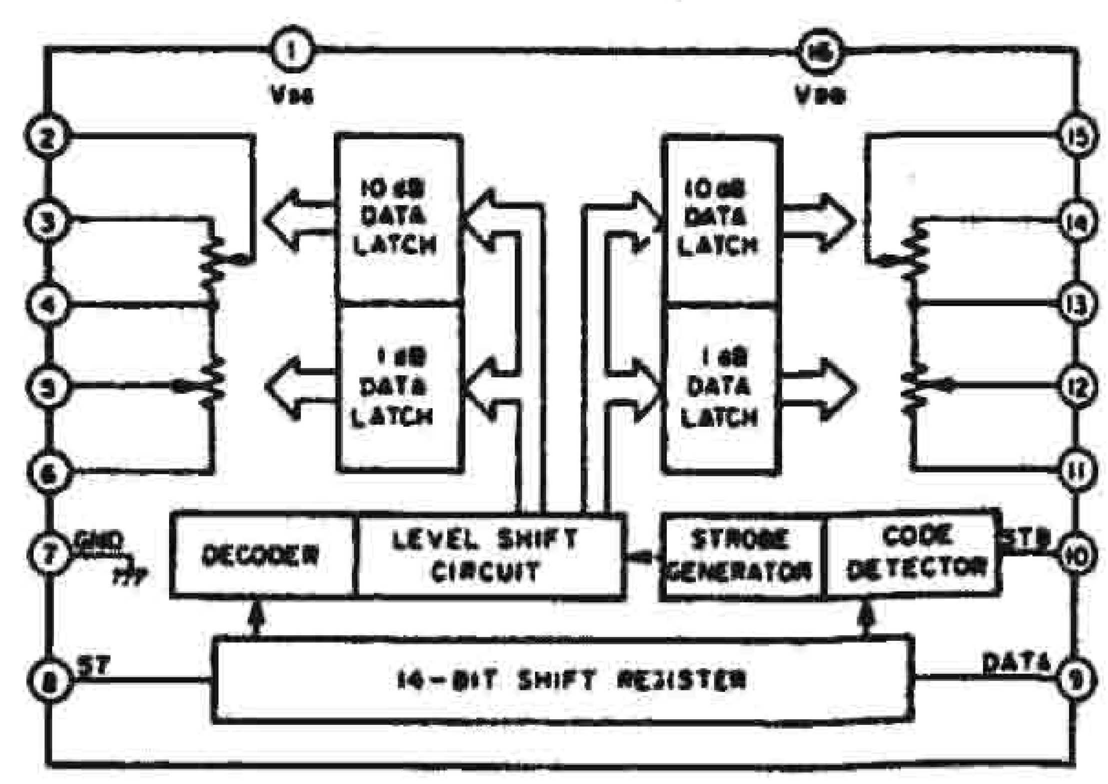
QR01 : LA2232



QR02 : LC7073



QG03, QG06 : TC9213P



9. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTOR

R＊＊＊ : (1) GD05 x x x 140, Carbon film fixed resistor, ±5% 1/4W

R＊＊＊ : (2) GD05 x x x 160, Carbon film fixed resistor, ±5% 1/6W

① ———— Resistance value

Examples ;

① Resistance value

0.1 Ω......001	10 Ω.......100	1 kΩ.......102	100 kΩ.......104
0.5 Ω......005	18 Ω.......180	2.7 kΩ.......272	680 kΩ.......684
1 Ω......010	100 Ω.......101	10 kΩ.......103	1 MΩ.......105
6.8 Ω......068	390 Ω.......391	22 kΩ.......223	4.7 MΩ.......475

(Note) Please distinguish 1/4W from 1/6W by the shape of parts used actually.

C＊＊＊ : CERAMIC CAP.

(1) DD1x x x x 370, Ceramic capacitor
Disc type
Temp. coeff. P350 ~ N1000, 50V

① ②

② Capacity value
① Tolerance

Examples ;

① Tolerance (Capacity deviation)

± 0.25pF 0
± 0.5pF 1
± 5% 5

＊Tolerance of COMMON PARTS handled here are as follows :

0.5pF ~ 5pF .... ±0.25pF
6pF ~ 10pF .... ±0.5pF
12pF ~ 560pF .... ±5%

② Capacity value

0.5 pF 005	3 pF 030	100 pF 101
1 pF 010	10 pF 100	220 pF 221
1.5 pF 015	47 pF 470	560 pF 561

C＊＊＊ : CERAMIC CAP.

(1) DK16 x x x 300, High dielectric constant ceramic capacitor
Disc type
Temp. chara. 2B4, 50V

① ———— Capacity value

Examples ;

① Capacity value

100 pF 101	1000 pF 102	10000 pF 103
470 pF 471	2200 pF 222	

C＊＊＊ : ELECTROLY CAP. (⏚), FILM CAP. (⏚)

(1) EA x x x x x x 10, Electrolytic capacitor
One-way lead type, Tolerance ± 20%

① ②

② Working voltage
① Capacity value

Examples ;

① Capacity value

0.1 μF 104	4.7 μF 475	100 μF 107
0.33 μF 334	10 μF 106	330 μF 337
1 μF 105	22 μF 226	1100 μF 118
		2200 μF 228

② Working voltage

6.3 V 006	25 V 025
10 V 010	35 V 035
16 V 016	50 V 050

(2) DF15 x x x 350 ⟶ Plastic film capacitor
DF15 x x x 310 One-way type, Mylar ± 5% 50V
DF16 x x x 310 ⟶ Plastic film capacitor
One-way type, Mylar ± 10% 50V

① ———— Capacity value

Examples ;

① Capacity value

0.001 μF (1000pF) 102	0.1 μF 104
0.0018 μF 182	0.56 μF 564
0.01 μF 103	1 μF 105
0.015 μF 153	

NOTE : 1) The above CODES (R＊＊＊, R＊＊＊, C＊＊＊, C＊＊＊ and C＊＊＊) are omitted on the schematic diagram in some case.

2) On the occasion, be confirmed common parts on the parts list.

3) Refer to "Common Parts List" for the other common parts (**R105, DD4, DK4**).

NOTE ON SAFETY FOR FUSIBLE RESISTOR :

The suppliers and their type numbers of fusible resistors aer as follows :

1. KOA Corporation

Part No.		Type No.	Description
NH05 x x x 140	⟶	RF25S x x x x Ω J	(± 5% 1/4W)
NH05 x x x 120	⟶	RF50S x x x x Ω J	(± 5% 1/2W)
NH85 x x x 110	⟶	RF73B2A x x x x Ω J	(± 5% 1/10W)
NH85 x x x 140	⟶	RF73B2E x x x x Ω J	(± 5% 1/4W)

＊ Resistance value — Resistance value (0.1 - 10kΩ)

2. Matsushita Electronic Components Co., Ltd

Part No.		Type No.	Description
NF05 x x x 140 / RF05 x x x 140	⟶	ERD-2FCJ x x x	(± 5% 1/4W)
NF02 x x x 140 / RF02 x x x 140	⟶	ERD-2FCG x x x	(± 2% 1/4W)

＊ Resistance value — ＊ Resistance value

Examples :

＊ Resistance value

0.1 Ω........001	10 Ω........100	1 kΩ........102	100 kΩ........104
0.5 Ω........005	18 Ω........180	2.7 kΩ........272	680 kΩ........684
1 Ω........010	100 Ω........101	10 kΩ........103	1 MΩ........105
6.8 Ω........068	390 Ω........391	22 kΩ........223	4.7 MΩ........475

ABBREVIATION AND MARKS

1	ANT.	: ANTENNA	2	BATT.	: BATTERY
3	CAP.	: CAPACITOR	4	CER.	: CERAMIC
5	CONN.	: CONNECTING	6	DIG.	: DIGITAL
7	HP	: HEADPHONE	8	MIC.	: MICROPHONE
9	μ-PRO	: MICROPROCESSOR	10	REC.	: RECORDING
11	RES.	: RESISTOR	12	SPK	: SPEAKER
13	SW	: SWITCH	14	TRANSF.	: TRANSFORMER
15	TRIM.	: TRIMMING	16	TRS.	: TRANSISTOR
17	VAR.	: VARIABLE	18	X'TAL	: CRYSTAL
19			20		
21			22		
23			24		
25			26		
27			28		
29			30		

NOTE ON SAFETY :

Symbol ⚠ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol ⚠ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

安全上の注意：

⚠ がついている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用して下さい。

[VERS.:VERSION, U:U.S.A, F:Japan, K:Far East, /XX:Europe]

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
			PD16-CD UNIT CIRCUIT BOARD	
			PD16-CAPACITORS	
CD01		4822 124 10772	TANTL. 100 µF 6.3V CHIP	EY10700620
CD02		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
CD03		4822 122 33741	CER. 10 PF ± 0.5 PF CHIP	DD91100300
CD04		4822 122 33741	CER. 10 PF ± 0.5 PF CHIP	DD91100300
CD05		4822 126 11567	CER. 0.022 µF ± 10% 16V CHIP	DK96223200
CD06		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
CD07		4822 124 10772	TANTL. 100 µF 6.3V CHIP	EY10700620
CD09		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
CD10		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
CD11		4822 124 10772	TANTL. 100 µF 6.3V CHIP	EY10700620
CD12		4822 124 10772	TANTL. 100 µF 6.3V CHIP	EY10700620
CD13 ~ CD16		4822 122 33751	CER. 120 PF ± 5% CHIP	DD95121300
CD17		4822 126 11687	CER. 0.1 µ +80%-20% CHIP	DK98104200
CD51 ~ CD54		4822 122 33751	CER. 120 PF ± 5% CHIP	DD95121300
CD55		4822 123 30411	MICA 1000 PF ± 5% 50V CHIP	DF95102040
CD56		4822 123 30411	MICA 1000 PF ± 5% 50V CHIP	DF95102040
CD57		4822 122 33744	CER. 100 PF ± 5% CHIP	DD95101300
CD58		4822 122 33744	CER. 100 PF ± 5% CHIP	DD95101300
CD59		4822 124 23056	ELECT 47 µF 16V	EJ47601610
CD60		4822 124 23056	ELECT 47 µF 16V	EJ47601610
CD61		4822 124 11074	TANTL 10 µF 16V CHIP	EY10601620
CD62		4822 126 11687	CER. 0.1 µF +80%-20% CHIP	DK98104200
CM01		4822 126 11566	CER. 2200 PF ± 10% CHIP	DK96222300
CM02		4822 126 12495	CER. 1500 PF ± 10% CHIP	DK96152300
CM03		4822 126 11567	CER. 0.022 µF ± 10% 16V CHIP	DK96223200
CM05		4822 126 13394	CER. 0.018 µF ± 10% 25V CHIP	DK96183200
CM06		4822 124 23056	ELECT 47 µF 16V	EJ47601610
CM07		4822 124 23056	ELECT 47 µF 16V	EJ47601610
CM08		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
CM09		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
CM10		4822 126 11567	CER. 0.022 µF ± 10% 16V CHIP	DK96223200
CM11		4822 126 11567	CER. 0.022 µF ± 10% 16V CHIP	DK96223200
CM12			MICA 0.1 µF ± 5% 16V CHIP	DF95104060
CM13		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
C501		4822 126 11702	CER. 680 PF ± 10% CHIP	DK96681300
C502		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
C503			CER. 8200 PF ± 20% CHIP	DK96822200
C504			CER. 0.33 µF ± 10% 16V CHIP	DK56334200
C505			CER. 0.33 µF ± 10% 16V CHIP	DK56334200
C506		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
C507		4822 124 10772	TANTL. 100 µF 6.3V CHIP	EY10700620
C508		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
C509		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
C510		4822 124 10772	TANTL. 100 µF 6.3V CHIP	EY10700620
C511		4822 122 33777	CER. 47 PF ± 5% CHIP	DD95470300
C512		5322 126 11583	CER. 0.01µF ± 20% CHIP	DK96103200
C701			CER. 18 PF ± 5% CHIP	DD95180300
C702		4822 126 11678	CER. 1 µF +80%-20% CHIP	DK58105200
C703		4822 126 11678	CER. 1 µF +80%-20% CHIP	DK58105200
C704		4822 122 33744	CER. 100 PF ± 5% CHIP	DD95101300
C705		4822 125 60204	CER. 0.027 µF ± 10% 16V CHIP	DK96273200
C706		4822 126 11702	CER. 680 PF ± 10% CHIP	DK96681300
C707		4822 126 11566	CER. 2200 PF ± 10% CHIP	DK96222300
C708		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
C709		4822 124 10772	TANTL. 100 µF 6.3V CHIP	EY10700620
C710		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
C711		4822 124 10772	TANTL. 100 µF 6.3V CHIP	EY10700620
C712		4822 126 13396	CER. 0.047 µF ± 10% CHIP	DK96473200
C713		4822 126 11685	CER. 0.0047 µF ± 10% CHIP	DK96472300
C714		5322 126 11583	CER. 0.01 µF ± 10% CHIP	DK96103200
C715		5322 126 11583	CER. 0.01 µF ± 10% CHIP	DK96103200
C716		4822 125 60204	CER. 0.027 µF ± 10% 16V CHIP	DK96273200
C717		4822 126 13395	CER. 390 PF ± 10% CHIP	DK96391300
C718		4822 126 13267	CER. 330 PF ± 10% CHIP	DK96331300
C719		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
C720		4822 124 11074	TANTL. 10 µF 16V CHIP	EY10601620
C721		4822 126 11687	CER. 1 µF +80%-20% CHIP	DK98104200
C722		4822 124 10772	TANTL. 100 µF 6.3V CHIP	EY10700620

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
C723		4822 122 33785	CER. 68 PF ± 5% CHIP	DD95680300
			PD16-RESISTORS	
RD01		4822 051 30103	CHIP 10KΩ ± 5% 1/16W	NN05103610
RD02		4822 051 30221	CHIP 220Ω ± 5% 1/16W	NN05221610
RD03		4822 051 30105	CHIP 1MΩ ± 5% 1/16W	NN05105610
RD04		4822 116 82487	CHIP 0Ω ± 5% 1/16W	NN05000610
RD05 ~ RD12		4822 051 30103	CHIP 10KΩ ± 5% 1/16W	NN05103610
RD13		4822 051 30471	CHIP 470Ω ± 5% 1/16W	NN05471610
RD14		4822 051 30471	CHIP 470Ω ± 5% 1/16W	NN05471610
RD51 ~ RD54		4822 051 30273	CHIP 27KΩ ± 5% 1/16W	NN05273610
RD55		4822 051 30103	CHIP 10KΩ ± 5% 1/16W	NN05103610
RD56		4822 051 30103	CHIP 10KΩ ± 5% 1/16W	NN05103610
RD57		4822 116 83212	CHIP 18KΩ ± 5% 1/16W	NN05183610
RD58		4822 116 83212	CHIP 18KΩ ± 5% 1/16W	NN05183610
RD59		4822 051 30223	CHIP 22KΩ ± 5% 1/16W	NN05223610
RD60		4822 051 30223	CHIP 22KΩ ± 5% 1/16W	NN05223610
RD61		4822 051 30103	CHIP 10KΩ ± 5% 1/16W	NN05103610
RD62		4822 051 30103	CHIP 10KΩ ± 5% 1/16W	NN05103610
RM01		4822 051 30103	CHIP 10KΩ ± 5% 1/16W	NN05103610
RM02		4822 051 30103	CHIP 10KΩ ± 5% 1/16W	NN05103610
RM03		4822 051 30474	CHIP 470KΩ ± 5% 1/16W	NN05474610
RM04		4822 051 30153	CHIP 15KΩ ± 5% 1/16W	NN05153610
RM05		4822 116 83212	CHIP 18KΩ ± 5% 1/16W	NN05183610
RM06		4822 116 83219	CHIP 820Ω ± 5% 1/16W	NN05821610
RM07		4822 051 30392	CHIP 3.9KΩ ± 5% 1/16W	NN05392610
RM08		4822 116 83216	CHIP 56KΩ ± 5% 1/16W	NN05563610
RM09		4822 116 83212	CHIP 18KΩ ± 5% 1/16W	NN05183610
RM10		4822 051 30223	CHIP 22KΩ ± 5% 1/16W	NN05223610
RM11		4822 051 30683	CHIP 68KΩ ± 5% 1/16W	NN05683610
RM12		4822 051 30101	CHIP 100Ω ± 5% 1/16W	NN05101610
RM13		4822 051 30229	CHIP 22Ω ± 5% 1/16W	NN05220610
RM14		4822 051 30101	CHIP 100Ω ± 5% 1/16W	NN05101610
RM17		4822 051 30229	CHIP 22Ω ± 5% 1/16W	NN05220610
R501		4822 116 83222	CHIP 82KΩ ± 5% 1/16W	NN05823610
R502		4822 051 30154	CHIP 150KΩ ± 5% 1/16W	NN05154610
R504			CHIP 1.2MΩ ± 5% 1/16W	NN05125610
R505		4822 051 30684	CHIP 680Ω ± 5% 1/16W	NN05681610
R506		4822 051 30684	CHIP 680Ω ± 5% 1/16W	NN05681610
R507		4822 051 30101	CHIP 100Ω ± 5% 1/16W	NN05101610
R509		4822 051 30334	CHIP 330KΩ ± 5% 1/16W	NN05334610
R510		4822 116 83214	CHIP 39KΩ ± 5% 1/16W	NN05393610
R512		4822 051 30102	CHIP 1KΩ ± 5% 1/16W	NN05102610
R551		4822 051 30221	CHIP 220Ω ± 5% 1/16W	NN05221610
R552		4822 051 30221	CHIP 220Ω ± 5% 1/16W	NN05221610
R553		4822 051 30221	CHIP 220Ω ± 5% 1/16W	NN05221610
R701		4822 051 30392	CHIP 3.9KΩ ± 5% 1/16W	NN05392610
R702		4822 051 30392	CHIP 3.9KΩ ± 5% 1/16W	NN05392610
R703		4822 051 30102	CHIP 1KΩ ± 5% 1/16W	NN05102610
R704		4822 116 83214	CHIP 39KΩ ± 5% 1/16W	NN05393610
R705		4822 051 30154	CHIP 150KΩ ± 5% 1/16W	NN05154610
R706		4822 116 83222	CHIP 82KΩ ± 5% 1/16W	NN05823610
R707		4822 051 30224	CHIP 220KΩ ± 5% 1/16W	NN05224610
R708		4822 051 30334	CHIP 330KΩ ± 5% 1/16W	NN05334610
R709		4822 051 30334	CHIP 330KΩ ± 5% 1/16W	NN05334610
R710		4822 051 30103	CHIP 10KΩ ± 5% 1/16W	NN05103610
R711		4822 051 30223	CHIP 22KΩ ± 5% 1/16W	NN05223610
R712		4822 051 30684	CHIP 680Ω ± 5% 1/16W	NN05681610
R713		4822 051 30472	CHIP 4.7KΩ ± 5% 1/16W	NN05472610
R714		4822 051 30103	CHIP 10KΩ ± 5% 1/16W	NN05103610
R715		4822 051 30103	CHIP 10KΩ ± 5% 1/16W	NN05103610
R716		4822 111 90967	FUSE 4.7Ω ± 5% 1/4W	NF05047140
R718		4822 116 82487	CHIP 0Ω ± 5% 1/16W	NN05000610
R719		4822 051 30151	CHIP 150Ω ± 5% 1/16W	NN05151610
R720		4822 051 30151	CHIP 150Ω ± 5% 1/16W	NN05151610
			PD16-SEMICONDUCTORS	
QD01		4822 209 32762	IC, SM5872BS	HC10010350
QD02		4822 209 71373	IC, NJM78L05A	HC38105090
QD51		4822 209 83357	IC, NJM4560M(Y)	HC10029090
QD52		4822 209 83357	IC, NJM4560M(Y)	HC10029090

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[VERS. :VERSION, U:U.S.A, F:Japan, K:Far East, /XX:Europe]

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
QM01		4822 209 33816	IC, 4CH DRIVER A N8389SR	HC10149020
Q501		4822 209 90242	IC, RB DSP MN662720	HC10154020
Q701		4822 209 33815	IC, HEAD AMP AN8805SB	HC10148020
Q702		4822 130 61541	TRS. 2SC4116 CHIP	HX341162B0
Q703		4822 130 63609	TRS. 2SA1588(Y) CHIP	HX115881A0
			PD16-MISCELLANEOUS	
JM01			PLUG, S6B-XH FOR CDM12	YP06006290
J501			JACK, 17P	YJ07009190
J701			JACK, 12P	YJ07007950
LD01		4822 158 60655	FERRITE CORE BLM31A02	FC90030070
LD02		4822 158 60655	FERRITE CORE BLM31A02	FC90030070
XD01		4822 242 81999	X'TAL 16.9344MHZ	JX16001350
			PE06-TONE/AUX CIRCUIT BOARD	
			PE06-CAPACITORS	
CE03			ELECT 22 µF 16V	EJ22601610
CE04			ELECT 22 µF 16V	EJ22601610
CE07		4822 124 23054	ELECT 0.47 µF 50V	EJ47405010
CE08		4822 124 23054	ELECT 0.47 µF 50V	EJ47405010
CE09			ELECT 47 µF 6.3V	EJ47600610
CE10			ELECT 47 µF 6.3V	EJ47600610
CE13		4822 124 41604	ELECT 0.1 µF 50V	EJ10405010
CE14		4822 124 41604	ELECT 0.1 µF 50V	EJ10405010
CE15			ELECT 22 µF 16V	EJ22601610
CE16			ELECT 22 µF 16V	EJ22601610
CE23			ELECT 47 µF 16V	EJ47601610
CE24			ELECT 47 µF 16V	EJ47601610
CE51	EC500		ELECT 22 µF 16V	EJ22601610
CE54	EC500		ELECT 22 µF 16V	EJ22601610
CE55	EC500	4822 122 40617	CER. 0.1 µF +80%-20%	DD38104010
CE71	EC500		ELECT 47 µF 16V	EJ47601610
CE72	EC500		ELECT 47 µF 16V	EJ47601610
CW01			ELECT 47 µF 6.3V	EJ47600610
CW02			ELECT 47 µF 6.3V	EJ47600610
CW05			CER. 0.1 µF +80%-20% 50V	DD38104010
C951	EC500		ELECT 22 µF 16V	EJ22601610
C952	EC500		ELECT 22 µF 16V	EJ22601610
C957	EC500		ELECT 10 µF 25V	EJ10602510
C958	EC500		ELECT 10 µF 25V	EJ10602510
			PE06-CAPACITORS (COMMON)	
C***			HIGH DIELECTRIC CONSTANT CERAMIC CAPAITOR DISC TYPE TEMP. CHARA. 2B4, 50V: CE01, CE02, CE21, CE22, C953~C956	
C***			PLASTIC FILM CAPACITOR ONE-WAY TYPE, MYLAR ± 5% 50V: CE05, CE06, CE11, CE12	
			PE06-RESISTORS	
RE19		4822 100 90109	VAR. BASS 10K (C) X2	RM01030970
RE20		4822 100 90109	VAR. TREBLE 10K (C) X2	RM01030970
RE23		4822 101 30877	VAR. BALANCE VR. 100K (W)	RK01040720
			PE06-RESISTORS (COMMON)	
R***			CARBON FILM FIXED RESISTOR, ± 5% 1/6W: RE01~RE18, RE21, RE22, RE31, RE32 RW01~RW06,	
	EC500		RE51, RE52, RE54, RE55, RE61~RE64 R951~R960	
			PE06-SEMICONDUCTORS	
QE01		4822 209 73064	IC, NJM2068DD	HC10053090
QE51	EC500	4822 209 73064	IC, NJM2068DD	HC10053090
QE61	EC500	4822 209 83631	IC, NJM4558DD	HC10008090
QW01		4822 209 61187	IC, BA15218	HC10089210
Q901	EC500	4822 209 73064	IC, NJM2068DD	HC10053090

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
			PE06-MISCELLANEOUS	
JE61	/02/05		TERMINAL, RCA 3P	YT02030330
JE62	U		TERMINAL, S-VIDEO GLD [EC500]	YT02010900
			PG06-E-VOL CIRCUIT BOARD *[EC500 ONLY]*	
			PG06-CAPACITORS	
CG01 ~ CG11	EC500		ELECT 10 µF 16V	EJ10601610
CG14	EC500		ELECT 10 µF 16V	EJ10601610
CG15	EC500	4822 124 90354	ELECT 100 µF 16V	0A10701620
CG16	EC500	4822 124 90354	ELECT 100 µF 16V	0A10701620
			PG06-RESISTORS (COMMON)	
R***	EC500		CARBON FILM FIXED RESISTOR, ± 5% 1/6W: RG09~RG22, RG26~RG32, RG37, RG38	
			PG06-SEMICONDUCTORS	
QG02	EC500	4822 209 70044	IC, NJM2058D	HC10031090
QG03	EC500	4822 209 31575	IC, TC9213P	HC10304050
QG06	EC500	4822 209 31575	IC, TC9213P	HC10304050
QG07	EC500	4822 209 83631	IC, NJM4558DD	HC10008090
QG09	EC500	4822 130 43818	TRS. 2SC2878 (A OR BRANK)	HT328782A0
QG10	EC500	4822 130 43818	TRS. 2SC2878 (A OR BRANK)	HT328782A0
			PG16-MOTOR-VOLUME CIRCUIT BOARD *[EC500 ONLY]*	
			PG16-CAPACITOR (COMMON)	
C***	EC500		PLASTIC FILM CAPACITOR ONE-WAY TYPE, MYLAR ± 5% 50V: CG51	
			PG16-RESISTOR	
RG51	EC500		VAR. 100K (A) X5 MOTOR VR	RY01040330
			PG56-MOTOR-VOLUME CIRCUIT BOARD *[AC500 ONLY]*	
			PG56-CAPACITOR (COMMON)	
C***	AC500		PLASTIC FILM CAPACITOR ONE-WAY TYPE, MYLAR ± 5% 50V: CG52	
			PG56-RESISTOR	
RG52	AC500	4822 101 30878	VAR. 100K (A) X2 MOTOR VR	RY01040340
			PS06-DOLBY/U-CON CIRCUIT BOARD	
			PS06-CAPACITORS	
CC01	EC500		CER. 0.1 µF +80%-20%	DD38104010
CC02	EC500		ELECT 10 µF 16V	EJ10601610
CC04	EC500		ELECT 4.7 µF 25V	EJ47502510
CC05	EC500		ELECT 22 µF 16V	EJ22601610
CC06	EC500		ELECT 22 µF 16V	EJ22601610
CC07 ~ CC11	EC500		ELECT 10 µF 16V	EJ10601610
CR01	/02/05		ELECT 100 µF 10V	EJ10701010
CR02	/02/05		ELECT 10 µF 16V	EJ10601610
CR05	/02/05		CER. 0.01 µF +80%-20%	DK18103310
CR06	/02/05		CER. 0.01 µF +80%-20%	DK18103310
CR07	/02/05		ELECT 10 µF 16V	EJ10601610
CR08	/02/05		ELECT 10 µF 16V	EJ10601610
CR09	/02/05		ELECT 4.7 µF 25V	EJ47502510
CR10	/02/05		ELECT 10 µF 16V	EJ10601610
CR15	/02/05		ELECT 0.1 µF 50V	EJ10405010
CS01 ~ CS06			ELECT 22 µF 16V	EJ22601610
CS07			ELECT 10 µF 16V	EJ10601610

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
CS08			ELECT 10 µF 16V	EJ10601610
CS13			ELECT 22 µF 50V	EJ22601610
CS14			ELECT 22 µF 50V	EJ22601610
CS15		4822 124 90354	ELECT 100 µF 16V	0A10701620
CS16		4822 124 90354	ELECT 100 µF 16V	0A10701620
CS17				
~			ELECT 10 µF 16V	EJ10601610
CS24				
CS25		4822 124 90354	ELECT 100 µF 16V	0A10701620
CS26		4822 124 90354	ELECT 100 µF 16V	0A10701620
CS39				
~			ELECT 10 µF 16V	EJ10601610
CS42				
CS44			CER. 0.1 µF +80%-20%	DD38104010
CS45	EC500		CER. 0.1 µF +80%-20%	DD38104010
CS46	EC500		CER. 0.1 µF +80%-20%	DD38104010
CS92			CER. 0.1 µF 50V	DD38104010
CS93			CER. 0.01 µF +80%-20%	DK18103310
CS94			CER. 47 PF ±5%	DD15470300
CU13			ELECT 2.2 µF 50V	EJ22505010
CU51			CER. 0.01 µF +80%-20%	DK18103310
CU52			CER. 0.01 µF +80%-20%	DK18103310
CU53			ELECT 220 µF 6.3V	EJ22700610
CU54			BIG ELECT 0.022F 5.5V	EX22300530
CU55		4822 124 80238	BIG ELECT 0.22F 5.5V	EX22400520
CU56			CER. 0.01 µF +80%-20%	DK18103310
CU57			ELECT 220 µF 6.3V	EJ22700610
CU58			CER. 0.01 µF +80%-20%	DK18103310
CU59			ELECT 220 µF 6.3V	EJ22700610
CU61			ELECT 100 µF 6.3V	EJ10700610
CU62			ELECT 10 µF 16V	EJ10601610
CU63			CER. 0.01 µF +80%-20%	DK18103310
CU67			CER. 0.01 µF +80%-20%	DK18103310
CU68			CER. 33 PF ±5%	DD15330300
CU69			CER. 0.022 µF +80%-20%	DK18223310
C401	AC500		ELECT 4.7 µF 50V	EJ47505010
C402	AC500		ELECT 4.7 µF 50V	EJ47505010
C405	AC500		ELECT 100 µF 6.3V	EJ10700610
C406	AC500		ELECT 100 µF 6.3V	EJ10700610
C411	AC500/02/05		ELECT 1 µF 50V	EJ10505010
C411	AC500,K,KS,U		ELECT 10 µF 16V	EJ10601610
C412	AC500/02/05		ELECT 1 µF 50V	EJ10505010
C412	AC500,K,KS,U		ELECT 10 µF 16V	EJ10601610
C413	AC500		ELECT 47 µF 16V	EJ47601610
C414	AC500		ELECT 47 µF 16V	EJ47601610
C415	AC500		CER. 0.1 µF +80-20%	DD38104010
C605	EC500		ELECT 10 µF 16V	EJ10601610
C606	EC500		ELECT 10 µF 16V	EJ10601610
C619	EC500		ELECT 10 µF 16V	EJ10601610
C620	EC500		ELECT 10 µF 16V	EJ10601610
C627	EC500		ELECT 10 µF 16V	EJ10601610
C628	EC500		ELECT 10 µF 16V	EJ10601610
C629	EC500		CER. 68 PF ±5%	DD15680300
C630	EC500		CER. 68 PF ±5%	DD15680300
C631	EC500		CER. 68 PF ±5%	DD15680300
C632				
~	EC500		ELECT 10 µF 16V	EJ10601610
C634				
C635	EC500		ELECT 10 µF 16V	EJ10601610
C640				
~	EC500		ELECT 10 µF 16V	EJ10601610
C642				
C643	EC500		CER. 0.1 µF 0V	DD38104010
C644	EC500		CER. 0.1 µF 50V	DD38104010
C645	EC500		ELECT 4.7 µF 25V	EJ47502510
C646	EC500		CER. 0.1 µF +80%-20%	DD38104010
C647	EC500		ELECT 22 µF 16V	EJ22601610
C651	EC500		ELECT 22 µF 16V	EJ22601610
C652	EC500		CER. 0.1 µF +80%-20%50V	DD38104010
C653				
~	EC500		ELECT 10 µF 16V	EJ10601610
C656				
C657	EC500		ELECT 220 µF 6.3V	EJ22700610
C658	EC500	4822 124 22694	ELECT 1000 µF 6.3V	0A10800620

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
C659				
~	EC500	4822 124 90354	ELECT 100 µF 16V	0A10701620
C662				
C690	EC500	4822 124 90354	ELECT 100 µF 16V	0A10701620
C691	EC500	4822 124 22277	ELECT 470 µF 16V	0A47701620
C692	EC500		ELECT 22 µF 16V	EJ22601610
			PS06-CAPACITORS (COMMON)	
C***			HIGH DIELECTRIC CONSTANT CERAMIC CAPAITOR DISC TYPE TEMP. CHARA. 2B4, 50V: CR03,CR04, CS51, CS52, CU60, CU65, CZ01~CZ06, CZ13~16	
	AC500		C403, C404, C595	
	EC500		CZ12, C603, C604, C609, C610, C615, C616, C621~C624, C637~C639	
C***			PLASTIC FILM CAPACITOR ONE-WAY TYPE, MYLAR ± 5% 50V: CR11~CR14, CS91	
	AC500		C407~C410	
	EC500		C607, C608, C611~C614, C617, C618, C625, C626, C636	
			PS06-RESISTORS	
GU51		4822 111 91395	COMPO. RNAH-TYPE10KΩX8 P=1.78	BW05103160
RR06	/02/05	4822 100 11373	TRIM. RDS ADJ. 4.7KΩ (B) ± 30%	RA04720780
RU33				
~		4822 051 30101	CHIP 100Ω ±5% 1/6W	NN05101610
RU35				
RU36				
~	EC500	4822 051 30101	CHIP 100Ω ±5% 1/6W	NN05101610
RU39				
RU41				
~	EC500	4822 051 30101	CHIP 100Ω ±5% 1/6W	NN05101610
RU43				
RU75	EC500	4822 051 30101	CHIP 100Ω ±5% 1/6W	NN05101610
RU76		4822 051 30101	CHIP 100Ω ±5% 1/6W	NN05101610
RU77	EC500	4822 051 30101	CHIP 100Ω ±5% 1/6W	NN05101610
⚠R415	AC500	4822 116 83929	220Ω ±5% 1/4W	GG05221140
⚠R416	AC500	4822 116 83929	220Ω ±5% 1/4W	GG05221140
⚠R640	EC500	4822 050 21211	120Ω ±5% 1/4W	GG05121140
⚠R668	EC500	4822 050 22209	22Ω ±5% 1/4W	GG05220140
			PS06-RESISTORS (COMMON)	
R***			CARBON FILM FIXED RESISTOR, ±5% 1/6W: RG01, RG03~RG08, RR01~RR05, RR07~RR13, RS01~RS12, RS25~RS32, RS36, RS39, RS40, RS49~RS51, RS53~RS56, RS57, RS58, RS61, RS62, RS65~RS84, RS91~RS93 RU20~RU31, RU40, RU51~RU59, RU62~RU64, RU66~RU74	
	AC500		RS33, RS34, RS45, RS46, RS63, RS64, RU61	
	EC500		RC01~RC12, RC14, RC16~RC21, RG23, RG24, RG39, RS13~RS24, RS37, RS38, RS41~RS44, RS47, RS48, RS85~RS89, RU65, R601~R665, R667, R671, R672	
			PS06-SEMICONDUCTORS	
DC01	EC500	4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
DC02	EC500	4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
DC03	EC500	4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
DR01	/02/05	4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
DR02	/02/05	4822 130 32362	DIODE, 1SS176.MA165.1SS253 30V 0.1A	
DS01		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
DS02		4822 130 32362	DIODE, 1SS176.MA165.1SS253 30V 0.1A	HD20002000

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
⚠DU51		4822 130 80839	DIODE, S5688G VRM=400V IO=1A	HD20029050
DU52 ∫ DU54		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
⚠DU55 ∫ ⚠DU60		4822 130 80839	DIODE, S5688G VRM=400V IO=1A	HD20029050
DU61	EC500	4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
DU62	EC500	4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
DU63 ∫ DU66		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
DU67	EC500	4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
D601 ∫ D610	EC500	4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
QC01	EC500	4822 209 83679	IC, DUAL OP-AMP NJM2904	HC10030090
QC02	EC500	4822 209 90243	IC, NJM074D	HC10159090
QC04	EC500	4822 209 60491	IC, M51132L	HC10166200
QC05	EC500	4822 130 63378	F.E.T., 2SK117D	HF201171C0
QC06	EC500	4822 130 42594	DIG. TRS. TDTC144ES	BA20012210
QC07	EC500	4822 209 83631	IC, NJM4558DD	HC10008090
QG01		4822 209 62784	IC, ANALOGUE SW TC9215P	HC10262050
QG09	AC500	4822 130 43818	TRS. 2SC2878	HT328782A0
QG10	AC500	4822 130 43818	TRS. 2SC2878	HT328782A0
QG11		4822 130 43818	TRS. 2SC2878 (A OR BRANK)	HT328782A0
QG12		4822 130 43818	TRS. 2SC2878 (A OR BRANK)	HT328782A0
QG13		4822 130 43818	TRS. 2SC2878 (A OR BRANK)	HT328782A0
QR01	/02/05	4822 209 32706	IC, RDS DEMODULATOR LA2232	HC10315030
QR02	/02/05	4822 209 33818	IC, RDS ERROR CORRECTION LC7073	HC10333030
QR03	/02/05	4822 130 42298	TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S	HT30001000
QS01		4822 209 72748	IC, LC78211	HC10308030
QS02		4822 209 72748	IC, LC78211	HC10308030
QS03 ∫ QS05		4822 209 83631	IC, NJM4558D-D	HC10008090
QS06		4822 209 70044	IC, QUAD OP.AMP NJM2058D	HC10031090
QS07		4822 209 72748	IC, LC78211	HC10308030
QS08	EC500	4822 209 73731	IC, LC7823	HC10247030
QS09		4822 209 83631	IC, NJM4558DD	HC10008090
QS11 ∫ QS13	EC500	4822 209 83631	IC, NJM4558DD	HC10008090
QS15		4822 130 43818	TRS. 2SC2878 (A OR BRANK)	HT328782A0
QS16		4822 130 43818	TRS. 2SC2878 (A OR BRANK)	HT328782A0
QS17		4822 209 31575	IC, TC9213P	HC10304050
QS18		4822 209 83631	IC, NJM4558DD	HC10008090
QS19		4822 209 83631	IC, NJM4558DD	HC10008090
QU15		4822 130 60588	DIG. TRS. DTC114ES	BA20010210
QU16		4822 130 42298	TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S	HT30001000
QU17		4822 130 60766	DIG. TRS. DTA114ES	BA10007210
QU19		4822 130 60588	DIG. TRS. DTC114ES	BA20010210
QU20		4822 130 60766	DIG. TRS. DTA114ES	BA10007210
QU21		4822 130 42298	TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S	HT30001000
QU22		4822 130 60766	DIG. TRS. DTA114ES	BA10007210
QU23	EC500	4822 130 60766	DIG. TRS. DTA114ES	BA10007210
QU24	EC500	4822 130 60766	DIG. TRS. DTA114ES	BA10007210
QU25 ∫ QU29		4822 130 61189	DIG. TRS. DTC114TS	BA20017210
QU30		4822 130 61417	TRS. 2SB1240 (Q OR R)	HT212402A0
QU31	EC500	4822 130 60766	DIG. TRS. DTA114ES	BA10007210
QU32		4822 130 60766	DIG. TRS. DTA114ES	BA10007210
QU33		4822 130 61189	DIG. TRS. DTC114TS	BA20017210
QU51		4822 209 90241	IC, MN1860003	HC10153020
QU52		4822 209 63741	IC, CXD1095Q	HC10020250
QU53			M27C512-12F1 EPROM 292K2 Note: In case the version label indicated on the IC QU53 is "292K0" or "292K1", replace it with "292K2" version. Concerning the parts number of "292K2", please see the Parts List.	HJ292KX030

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
QU54		4822 209 33818	IC, RAM LC3664BL-85	HC10337030
QU55		4822 209 90239	IC, NJM6355F	HC10149090
QU56		4822 209 73287	IC, DOOR MOTOR DRIVE LB1630	HC10235030
QU57		4822 209 73287	IC, TRAY MOTOR DRIVE LB1630	HC10235030
QU58		4822 209 12422	IC, 74HC00	HC700000D0
QU59		4822 209 73287	IC, LB1630	HC10235030
Q401	AC500	4822 209 73064	IC, NJM2068DD	HC10053090
Q601	EC500	4822 209 32549	IC, DOLBY PRO LOGIC YM7306C	HC10005640
Q602	EC500	4822 209 70044	IC, NJM2058D	HC10031090
Q603	EC500	4822 209 70044	IC, NJM2058D	HC10031090
Q604	EC500	4822 209 70044	IC, QUAD OP.AMP NJM2058D	HC10031090
Q605	EC500	4822 209 70044	IC, QUAD OP.AMP NJM2058D	HC10031090
⚠Q609	EC500	4822 209 71373	IC, NJM78L05A	HC38105090
⚠Q610	EC500	4822 209 31631	IC, NJM7805FA +5V	HC38905090
Q611	EC500	4822 209 83631	IC, NJM4558DD	HC10008090
Q612 ∫ Q614	EC500	4822 209 62784	IC, ANALOGUE SW TC9215P	HC10262050
Q624	EC500	4822 209 32444	IC, 64KX4 BIT DRAM	HC10053000
			PS06-MISCELLANEOUS	
JS01 ∫ JS03	EC500	4822 290 61244	TERMINAL, 6P W/R AU RCA	YT02060490
JS04	EC500	4822 290 61244	TERMINAL, 6P W/R AU RCA	YT02060490
JS05		4822 290 61243	TERMINAL, 4P RCA PIN JACK	YT02041100
JS07	AC500	4822 290 61216	TERMINAL, 2P W/R AU RCA	YT02020950
JS13	AC500	4822 290 81638	TERMINAL, 1P BLK AU RCA	YT02010790
JS91	EC500	4822 290 81638	TERMINAL, 1P AU RCA	YT02010790
JU52		4822 265 41495	JACK, 17P CARD	YJ07008820
JU54		4822 265 51389	JACK, 19P CARD	YJ07008840
JU57		4822 265 41498	JACK, 12P CARD	YJ07009680
J401	AC500	4822 290 61216	TERMINAL, 2P W/R AU RCA	YT02020950
LS01		4822 280 20501	RELAY, MR62-24SR 24V	LY20240440
LS91		4822 142 60388	PULSE, TRANSF. DIG. OUT	TP41042010
LU01		4822 242 73843	EMI. DSS306-91-F-2238	FM12223010
LU02		4822 242 73843	EMI. DSS306-91-F-223Z	FM12223010
L601	EC500	4822 153 70065	L.C. FILTER, L.P.F. 13.3K HZ	FF30013010
L602	EC500	4822 153 70065	L.C. FILTER, L.P.F. 13.3K HZ	FF30013010
XR01	/02/05	4822 242 81608	CER.VIB. CSB456F33 456KHZ	FQ04563040
XR02	/02/05	4822 242 72527	CER.VIB. CERALOCK CST4.00MGW	FQ04004030
XU51		4822 242 81998	CER.VIB. CERALOCK 20MHZ	FQ02005020
XU52		4822 242 72236	X'TAL 32.768KHZ	X0001001T2
X601	EC500	4822 242 81536	CER.VIB. 8.46MHZ	FQ08464010
			PS56-FRONT TACT CIRCUIT BOARD	
			PS56-CAPACITOR	
CU01			ELECT 100 μF 6.3V	EJ10700610
			PS56-RESISTORS (COMMON)	
R***			CARBON FILM FIXED RESISTOR, ± 5% 1/6W: RU01–RU03,	
			PS56-SEMICONDUCTORS	
DU01		4822 130 80326	L.E.D. LT3D8B RED 30	HI10062320
DU02		4822 130 80326	L.E.D. LT3D8B RED 30	HI10062320
			PS56-MISCELLANEOUS	
JU01		4822 265 51391	JACK, 19P FFC CONECTOR	YJ07009210
SU01		4822 276 20508	PUSH SW	SP01011280
SU02		4822 276 20508	PUSH SW	SP01011280
SU03	EC500	4822 276 20508	PUSH SW	SP01011280

[VERS. :VERSION, U:U.S.A, F:Japan, K:Far East, /XX:Europe]

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
SU04 ~ SU09		4822 276 20508	PUSH SW	SP01011280
SU10	EC500	4822 276 20508	PUSH SW	SP01011280
SU11	EC500	4822 276 20508	PUSH SW	SP01011280
SU18 ~ SU30		4822 276 13296	PUSH SW	SP01011880
SU31		4822 276 20508	PUSH SW	SP01011280
SU32		4822 276 20508	PUSH SW	SP01011280
			PS66-PHOTO CIRCUIT BOARD	
			PS66-SEMICONDUCTOR	
QU01		4822 130 83887	PHOTO UNIT PM-674CBR-S	HW10002210
			PS76-CD TACT CIRCUIT BOARD	
			PS76-MISCELLANEOUS	
SU13		4822 276 20508	PUSH SW	SP01010970
SU14		4822 276 20508	PUSH SW	SP01010970
SU15		4822 276 13296	PUSH SW	SP01011880
SU16		4822 276 13296	PUSH SW	SP01011880
SU17		4822 276 20508	PUSH SW	SP01011280
			PT56-SCART CIRCUIT BOARD ***[EC500 /02/05 VERSION]***	
			PT56-CAPACITORS	
CT01	/02/05		CER. 0.01 μF +80%-20%	DK18103310
CT02	/02/05		CER. 0.01 μF +80%-20%	DK18103310
CT11	/02/05		CER. 0.01 μF +80%-20%	DK18103310
CT12	/02/05		CER. 0.01 μF +80%-20%	DK18103310
CT21	/02/05	4822 124 41544	ELECT 470 μF 6.3V	0A47700620
			PT56-RESISTORS (COMMON)	
R***	/02/05		CARBON FILM FIXED RESISTOR, ± 5% 1/6W: RT01~RT06, RT11~RT14, RT21, RT22	
			PT56-SEMICONDUCTORS	
DT01 ~ DT03	/02/05	4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
QT01 ~ QT04	/02/05	4822 130 42594	DIG. TRS. DTC144ES/UN4213	BA20002000
QT05	/02/05	4822 130 42715	TRS. 2SA608SP, 2SA1048, 2SA1309, 2SA933S	HT10001000
			PT56-MISCELLANEOUS	
JT01	/02/05	4822 267 60404	TERMINAL, 21P SCART CONECTOR	YT02210050
JT02	/02/05	4822 267 60404	TERMINAL, 21P SCART CONECTOR	YT02210050
			PU86-FTD CIRCUIT BOARD	
			PU86-RESISTOR	
RU80		4822 116 83216	CHIP 56KΩ ± 5% 1/16W	NN05563610
			PU86-SEMICONDUCTOR	
QU80		4822 209 90244	IC, μPD16311GC-AB6	HC10283060
			PU86-MISCELLANEOUS	
JU81		4822 265 41497	JACK, 12P CARD	YJ07009540
VU80		4822 130 91475	DISPLAY UNIT, FTD FIP12CM8R	HQ31207060
			PV56-S-VIDEO CIRCUIT BOARD ***[EC500 U, K, KS VERSION]***	
			PV56-CAPACITORS	
CV51 ~ CV55	U, K, KS		ELECT 10 μF 16V	EJ10601610
CV57	U, K, KS		ELECT 220 μF 6.3V	EJ22700610
CV58	U, K, KS		ELECT 220 μF 6.3V	EJ22700610
CV59	U, K, KS		CER. 0.01 μF +80%-20%	DK18103310

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
CV60	U, K, KS		CER. 0.01 μF +80%-20%	DK18103310
CV62	U, K, KS		CER. 0.01 μF +80%-20%	DK18103310
CV63	U, K, KS		ELECT 10 μF 16V	EJ10601610
CV64	U, K, KS		ELECT 4.7 μF 50V	EJ47505010
CV67	U, K, KS		ELECT 10 μF 16V	EJ10601610
CV68	U, K, KS		CER. 0.01 μF +80%-20%	DK18103310
CV69	U, K, KS		ELECT 10 μF 16V	EJ10601610
			PV56-RESISTORS (COMMON)	
R***			CARBON FILM FIXED RESISTOR, ± 5% 1/6W: RV51~RV84	
			PV56-SEMICONDUCTORS	
QV51			IC, FUNCTION LC7822AF	HC10241030
QV52 ~ QV54			IC, MC 14576	HC10046170
QV55			IC, FUNCTION LC7822AF	HC10241030
			PV56-MISCELLANEOUS	
JV51	EC500	4822 290 61176	TERMINAL, 2PAIR S-TYPE	YT02021150
JV52	EC500	4822 290 61176	TERMINAL, 2PAIR S-TYPE	YT02021150
JV53	EC500	4822 290 61177	TERMINAL, 3PAIR S-VIDEO	YT02030290
			PW56-HEAD PHONE CIRCUIT BOARD	
			PW56-CAPACITOR	
CW03			CER. 0.1 μF +80%-20%	DD38104010
			PW56-CAPACITORS (COMMON)	
C***			HIGH DIELECTRIC CONSTANT CERAMIC CAPAITOR DISC TYPE TEMP. CHARA. 2B4, 50V: CW51,CW52	
			PW56-CAPACITORS (COMMON)	
C***			PLASTIC FILM CAPACITOR ONE-WAY TYPE, MYLAR ± 5% 50V: CW51,CW52	
			PW56-SEMICONDUCTOR	
DW51		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
			PW56-MISCELLANEOUS	
JW51	BLACK	4822 267 31894	JACK, PHONE BLK	YJ01004010
JW51	GOLD	4822 267 31895	JACK, PHONE WHT	YJ01004020
LW51		4822 280 20501	RELAY, MR62-24SR 24V	LY20240440
			P106-TUNER/VIDEO SEL./OSD CIRCUIT BOARD	
			P106-CAPACITORS	
CA01	/02/05	4822 125 60185	TRIM. 20 PF	CT12000200
CA02	/02/05		CER. 0.022 μF +80%-20%	DK18223310
CA02	K, KS, U		CER. 0.01 μF +80%-20%	DK18103310
CA03	/02/05		CER. 0.022 μF +80%-20%	DK18223310
CA04	/02/05		CER. 68 PF ± 5%	DD15680300
CA06	/02/05		CER. 0.01 μF +80%-20%	DK18103310
CA07	/02/05		CER. 33 PF ± 5%	DD15330300
CL01	EC500		ELECT 22 μF 10V	EJ22601010
CL02	EC500		ELECT 10 μF 16V	EJ10601610
CL03	EC500		ELECT 22 μF 10V	EJ22601010
CL04	EC500		ELECT 10 μF 16V	EJ10601610
CL05	EC500		ELECT 22 μF 10V	EJ22601010
CL06	EC500		ELECT 10 μF 16V	EJ10601610
CL09	EC500		ELECT 22 μF 10V	EJ22601010
CL10	EC500		ELECT 10 μF 16V	EJ10601610
CL13	EC500	4822 124 41544	ELECT 470 μF 6.3V	0A47700620
CL14	EC500		ELECT 220 μF 6V	0A22700620
CL17	EC500		ELECT 47 μF 6.3V	EJ47600610
CL18	EC500		ELECT 1 μF 50V	EJ10505010
CL19	EC500		CER. 56 PF ± 5%	DD15560300
CL20	EC500		ELECT 1 μF 50V	EJ10505010
CL24	EC500		CER. 47 PF ± 5%	DD15470300

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
CL25	EC500		TRIM. 20 PF ±0.5 PF	CT12000200
CL26	EC500		ELECT 22 µF 10V	EJ22601010
CL27	EC500		CER. 0.01 µF +80%-20%	DK18103310
CL28	EC500		ELECT 0.47 µF 50V	EJ47405010
CL29	/02/05,K,KS		CER. 22 PF ±5% [EC500]	DD15220300
CL30	/02/05,K,KS		CER. 22 PF ±5% [EC500]	DD15220300
CL31	EC500		CER. 22 PF ±5%	DD15220300
CL32	EC500		CER. 22 PF ±5%	DD15220300
CL33	EC500		ELECT 22 µF 10V	EJ22601010
CL34	EC500		ELECT 10 µF 16V	EJ10601610
CL35	EC500		ELECT 22 µF 10V	EJ22601010
CL36	EC500		ELECT 1 µF 50V	EJ10505010
CL39	EC500		ELECT 4.7 µF 50V	EJ47505010
CL40 ~ CL43	EC500		ELECT 47 µF 6.3V	EJ47600610
C101		4822 125 60185	TRIM. 20 PF	CT12000200
C102	K, KS, U		CER. 0.022 µF +80%-20%	DK18223310
C103			CER. 15 PF ±5%	DD15150300
C104			FILM 390 PF ±5% 50V	DF15391550
C105			CER. 47 PF ±5%	DD15470300
C107			ELECT 4.7 µF 25V	EJ47502510
C108			ELECT 10 µF 16V	EJ10601610
C112			CER. 0.01 µF +80%-20%	DK18103310
C114			CER. 0.022 µF +80%-20%	DK18223310
C116		4822 124 90364	ELECT 220 µF 16V	0A22701620
C117			ELECT 4.7 µF 25V	EJ47502510
C119			CER. 0.022 µF +80%-20%	DK18223310
C120			ELECT 10 µF 16V	EJ10601610
C121			ELECT 1 µF 50V	EJ10505010
C122			ELECT 1 µF 50V	EJ10505010
C123			ELECT 0.47 µF 50V	EJ47405010
C124			ELECT 0.1 µF 50V	EJ10405010
C125			FILM 0.01 µF ±5% 50V	DF15103550
C126			FILM 0.01 µF ±5% 50V	DF15103550
C127			ELECT 4.7 µF 25V	EJ47502510
C128			ELECT 4.7 µF 25V	EJ47502510
C131			ELECT 47 µF 16V	EJ47601610
C133	/02/05	4822 124 90352	ELECT 10 µF 16V	0A10601620
C133			ELECT 4.7 µF 25V	EJ47502510
C134	/02/05	4822 124 90352	ELECT 10 µF 16V	0A10601620
C134			ELECT 4.7 µF 25V	EJ47502510
C135	/02/05	4822 124 90352	ELECT 10 µF 16V	0A10601620
C135			ELECT 10 µF 16V	EJ10601610
C136	/02/05	4822 124 90352	ELECT 10 µF 16V	0A10601620
C136			ELECT 10 µF 16V	EJ10601610
C137			CER. 0.022 µF +80%-20%	DK18223310
C139			ELECT 22 µF 16V	EJ22601610
C140		4822 124 90354	ELECT 100 µF 16V	0A10701620
C150			CER. 47 PF ±5%	DD15470300
C151			CER. 47 PF ±5%	DD15470300
C153			ELECT 10 µF 16V	EJ10601610
C154			CER. 0.01 µF +80%-20%	DK18103310
C157			ELECT 1 µF 50V	EJ10505010
C159			ELECT 10 µF 16V	EJ10601610
C160	K, KS, U		CER. 0.01 µF +80%-20%	DK18103310
C163			ELECT 10 µF 16V	EJ10601610
C181	/02/05		CER. 0.01 µF +80%-20%	DK18103310
C185	/02/05		CER. 0.022 µF +80%-20%	DK18223310
			P106-CAPACITORS (COMMON)	
C***			HIGH DIELECTRIC CONSTANT CERAMIC CAPAITOR DISC TYPE TEMP. CHARA. 2B4, 50V: CA05, CL46, CL47, C110, C132, C138, C155, C156, C161	
	AC500		C141	
C***			PLASTIC FILM CAPACITOR ONE-WAY TYPE, MYLAR ±5% 50V: C102, C109, C158, C125, C126, C129, C130	
	EC500		CL22, CL23	
			P106-RESISTORS	
R103		4822 100 11351	TRIM. AM-STOP 10KΩ	RA01030780
R106		4822 050 21501	150Ω ±5% 1/4W	GG05151140

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
R112		4822 050 21501	150Ω ±5% 1/4W	GG05151140
R114	/02/05	4822 100 11351	TRIM. MUTE 10KΩ	RA01030780
R114	K, KS, U		TRIM. MUTE 22KΩ	RA02230780
R119		4822 100 20681	TRIM. SEP. 2.2KΩ	RA02220780
⚠R141	U		10KΩ ±5% 1/2W	GG05103120
⚠R142		4822 050 21003	10KΩ ±5% 1/2W	GG05103120
			P106-RESISTORS (COMMON)	
R***			CARBON FILM FIXED RESISTOR, ±5% 1/6W: RA01~RA06, R101, R102, R104, R107~R111, R113, R115~R118, R120~R123, R126~R139, R143, R150~R163, R166, R167, R169~R171, R181	
	EC500		RL01~RL16, RL18~RL20, RL22~RL29, RL31, RL34~RL43, R164	
	AC500		RL46	
			P106-SEMICONDUCTORS	
DA01	/02/05	4822 125 50416	VARICAP SVC342-K	HD40009030
DA02	/02/05	4822 130 33697	DIODE, 1SS135	HD20017210
DA03	/02/05	4822 130 33697	DIODE, 1SS135	HD20017210
DL01	EC500	4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
DL42	EC500/02/05	4822 130 80316	ZENER DIODE, 3.6V 04AZ3.6, MTZJ3.6A, RD3.6ES	HD30361000
D101		4822 125 50416	VARICAP SVC342-K	HD40009030
D102		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
D103		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
D104		4822 130 80317	ZENER DIODE, 5.1V 04AZ5.1, MZJ5.1B, RD5.1ES	HD30511000
D105			DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
D115		4822 130 80273	ZENER DIODE, 8.2V 04AZ8.2,MTZJ8.2C,RD8.2JB2,RD8.2ES	HD30821000
QA01	/02/05	4822 130 61892	TRS. 2SD2144	HT421442A0
QA02	/02/05	4822 130 42298	TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S	HT30001000
QA03	/02/05	4822 130 42298	TRS. 2SC536SP, 2SC2458, SC3311, 2SC1740S	HT30001000
QA04	/02/05	4822 130 60766	DIG. TRS. DTA114ES	BA10007210
QA05	/02/05	4822 130 60766	DIG. TRS. DTA114ES	BA10007210
QL01	EC500	4822 209 73321	IC, SEL. SW LC7822, LC78212	HC10309030
QL02	EC500	4822 209 73321	IC, LC7822, LC78212	HC10309030
QL03	EC500	4822 209 12668	IC, O.S.D LC74760	HC10328030
QL04	EC500	4822 209 32513	IC, MC 14576	HC10046170
QL05	EC500	4822 209 32513	IC, MC 14576	HC10046170
QL06	EC500	4822 130 60766	DIG. TRS. DTA114ES	BA10007210
QL07	EC500	4822 130 60766	DIG. TRS. DTA114ES	BA10007210
QL08	EC500	4822 130 42298	TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S	HT30001000
Q101		4822 130 62294	TRS. 2SC1809S (P)	HT318091P0
Q102		4822 209 31001	IC, LA1851A	HC10288030
Q104		4822 130 42715	TRS. 2SA608SP, 2SA1048, 2SA1309, 2SA933S	HT10001000
Q105		4822 209 83631	IC, NJM4558DD	HC10008090
Q106		4822 130 60766	DIG. TRS. DTA114ES	BA10007210
Q107		4822 130 60766	DIG. TRS. DTA114ES	BA10007210
Q108		4822 130 60588	DIG. TRS. DTC114ES	BA20010210
Q109		4822 126 90006	VARISTOR, POSISTOR PTH59F04BH222TS	HP00016230
Q110	U		DIG. TRS. DTA114ES	BA10007210
Q111		4822 130 60588	DIG. TRS. DTC114ES	BA20010210
Q112	/02/05	4822 130 42298	TRS. SC536SP, 2SC2458, 2SC3311, 2SC1740S	HT30001000
Q150		4822 209 30178	IC, PLL LC7218	HC10221030
Q151		4822 130 42121	F.E.T., 2SK30	HF200300B0
Q152		4822 130 42298	TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S	HT30001000
			P106-MISCELLANEOUS	
A101	/02/05,K,KS	4822 210 10567	V.H.F.TUNER, FM FRONTEND FE417-G02	AV01202230
A101	U		V.H.F.TUNER, FM FRONT END FE340-A03	AV01202240
F101		4822 242 81262	CER.FILTER SFP450 F	FF10045390

[VERS.:VERSION, U:U.S.A, F:Japan, K:Far East, /XX:Europe]

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
F102	/02/05,K, KS	4822 242 70665	CER.FILTER SFE10.7MS3-A	FF11070620
F102	U		CER.FILTER SFF10.7MA8-A	FF11070610
F103		4822 242 70665	CER.FILTER SFE10.7MS3-A	FF11070620
JL01	EC500	4822 290 61178	TERMINAL, RCA 4P YL AU	YT02041020
JL02	EC500	4822 265 30865	TERMINAL, RCA 3P	YT02030130
JL04		4822 290 61241	TERMINAL, RCA 1P BLUE AU	YT02010960
J101	U		TERMINAL,FM AM	YT01030080
J101	/02/05,K, KS	4822 290 81632	TERMINAL, FM AM	YT03030020
J102	U		TERMINAL, F CONNECTOR CATV	YT01010180
LA01	/02/05	4822 157 52714	ANT COIL	LA10295160
LA02	/02/05	4822 157 70781	OSC COIL	LO70013020
LL02	EC500	4822 157 62909	CHOKE COIL 22µH	LC12233800
LL03	EC500	4822 157 63312	CHOKE COIL 5.6µH	LC15623800
L101		4822 157 63084	ANT COIL	LA10295170
L102		4822 157 70779	OSC COIL	LO70013010
L103		4822 157 53589	CHOKE COIL	LC23960710
L104		4822 148 81095	I.F.T., AM IF COIL	LI70033510
L105		4822 157 63904	I.F.T., FM DET.COIL	LI70376010
L106		4822 157 70021	M.P.X.COIL, FM L.P.F	LS10293010
L107		4822 157 70021	M.P.X.COIL, FM L.P.F	LS10293010
L108	/02/05		M.P.X.COIL, FM ANTI-BERDY	LS10295030
L109	U		RELAY UM1-12W-K	LY10120230
S101	K	4822 277 21712	SLIDE SW, SCAN STEP	SS02021470
XL01	EC500	4822 242 80288	X'TAL 14.31818MHZ	JX14001260
XL02	EC500		X'TAL 17.73447MHZ	JX17001100
X101	AC500	4822 242 81248	CER.VIB. CSB456F15 456KHZ	FQ04563020
X101	EC500	4822 242 81608	CER.VIB. CSB456F33 456KHZ	FQ04563040
X150		4822 242 72333	X'TAL AD0618CTB 7.2MHZ	JX07001260
			P116-TUNER SUB CIRCUIT BOARD	
			P116-RESISTORS (COMMON)	
R***			CARBON FILM FIXED RESISTOR, ± 5% 1/6W:	
	EC500		RL41~RL43	
			P806-POWER SUPPLY CIRCUIT BOARD	
			P806-CAPACITORS	
C801	AC500	4822 124 22239	ELECT 3300 µF 25V	0A33802520
C801	EC500	4822 124 81133	ELECT 4700 µF 25V	0A47802520
C802		4822 124 22239	ELECT 3300 µF 25V	0A33802520
C803		4822 124 41539	ELECT 47 µF 16V	0A47601620
C804		4822 124 41539	ELECT 47 µF 16V	0A47601620
C805		4822 124 41534	ELECT 10 µF 25V	0A10602520
C806	EC500	4822 124 41534	ELECT 10 µF 25V	0A10602520
C807	AC500	4822 124 90388	ELECT 3300 µF 16V	0A33801620
C807	EC500	4822 124 80582	ELECT 4700 µF 16V	0A47801620
C808	AC500	4822 124 80552	ELECT 330 µF 16V	0A33701620
C808	EC500	4822 124 90388	ELECT 3300 µF 16V	0A33801620
C809		4822 124 41539	ELECT 47 µF 16V	0A47601620
C810		4822 124 41539	ELECT 47 µF 16V	0A47601620
C811	EC500	4822 124 41539	ELECT 47 µF 16V	0A47601620
C812		4822 124 80582	ELECT 4700 µF 16V	0A47801620
C813		4822 124 41543	ELECT 1 µF 50V	0A10505020
C814		4822 124 41539	ELECT 47 µF 16V	0A47601620
C815		4822 124 90358	ELECT 22 µF 16V	0A22601620
C816		4822 124 90355	ELECT 100 µF 50V	0A10705020
C817		4822 124 41543	ELECT 1 µF 50V	0A10505020
C818		4822 124 22273	ELECT 0.47 µF 50V	0A47405020
C819 ~ C821		4822 124 90355	ELECT 100 µF 50V	0A10705020
C822		4822 124 22571	ELECT 10 µF 50V	0A10605020
C823		4822 124 22571	ELECT 10 µF 50V	0A10605020
C825 ~ C828			CER. 0.01 µF +80%-20%	DK18103310
C829	EC500		CER. 0.01 µF +80%-20%	DK18103310

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
C830		4822 124 41539	ELECT 47 µF 16V	0A47601620
C831			CER. 0.01 µF +80%-20%	DK18103310
C832		4822 124 41539	ELECT 47 µF 16V	0A47601620
C833			CER. 0.01 µF +80%-20%	DK18103310
C834			CER. 0.01 µF +80%-20%	DK18103310
C835		4822 124 41538	ELECT 220 µF 35V	0A22703520
C836		4822 124 41539	ELECT 47 µF 16V	0A47601620
⚠C851			CER. 4700 PF ± 20%	DK17472840
⚠C851			CER. 0.01 µF ± 20%	DK17103840
⚠C852			CER. 4700 PF ± 20%	DK17472840
⚠C852			CER. 0.01 µF ± 20%	DK17103840
C901	EC500	4822 124 90354	ELECT 100 µF 16V	0A10701620
C902	EC500	4822 124 90354	ELECT 100 µF 16V	0A10701620
C903	EC500	4822 124 22571	ELECT 10 µF 50V	0A10605020
C904	EC500	4822 124 22571	ELECT 10 µF 50V	0A10605020
C905	EC500	4822 124 41539	ELECT 47 µF 16V	0A47601620
C906	EC500	4822 124 41539	ELECT 47 µF 16V	0A47601620
C907	EC500	4822 124 22571	ELECT 10 µF 50V	0A10605020
C910	EC500		CER. 2200 PF ± 20%	DA17222110
C911	EC500	4822 124 90354	ELECT 100 µF 16V	0A10701620
C912	EC500	4822 124 41539	ELECT 47 µF 16V	0A47601620
C917	EC500		CER. 2200 PF ± 20%	DA17222110
C921	AC500		CER. 0.1 µF +80%-20%	DD38104010
C922	EC500		CER. 0.1 µF +80%-20%	DD38104010
C924	EC500		CER. 0.1 µF +80%-20%	DD38104010
C931			CER. 2200 PF ± 20%	DA17222110
C932			CER. 2200 PF ± 20%	DA17222110
C933 ~ C938	EC500		CER. 2200 PF ± 20%	DA17222110
			P806-RESISTORS	
⚠R824		4822 050 21022	1KΩ ± 5% 1/4W	GG05102140
⚠R829		4822 115 90166	FUSE 10Ω ± 2% 1/4W	NF02100140
⚠R831		4822 116 60307	FUSE 1Ω ± 5% 1/4W	NH05010140
⚠R851	U		2.2MΩ ± 10% 1/2W	RC10225820
R932	EC500	4822 101 30876	VAR, 100K (B) ± 20% SUB WOOFER VR.	RK01040670
⚠R943		4822 116 60307	FUSE 1Ω ± 5% 1/4W	NH05010140
			P806-RESISTORS (COMMON)	
R***			CARBON FILM FIXED RESISTOR, ± 5% 1/6W: R801, R803, R805~R823, R825~R828	
	EC500		R802, R804, R901, R907~R916, R919~R931, R933~R940, R942	
			P806-SEMICONDUCTORS	
⚠D801		4822 130 33057	DIODE, S2VB-20	HE20011290
⚠D802 ~ ⚠D809		4822 130 80839	DIODE,S5688G VRM=400V IO=1A	HD20029050
D810		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
D811 ~ D814		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
D815		4822 130 80316	ZENER DIODE, 3.6V 04AZ3.6, MTZJ3.6A, RD3.6ES	HD30361000
D816 ~ D818		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
⚠D819		4822 130 80839	DIODE, S5688G VRM=400V IO=1A	HD20029050
⚠D820		4822 130 80839	DIODE, S5688G VRM=400V IO=1A	HD20029050
D821		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
D822		4822 130 81729	ZENER DIODE, MTZJ33D	HD33301000
D823		4822 130 80318	ZENER DIODE, 6.8V 04AZ6.8,MTZJ6.8C,RD6.8ES,RD6.2JB2	HD30681000
D824		4822 130 80318	ZENER DIODE, 6.8V 04AZ6.8,MTZJ6.8C,MTZJ6.2B,RD6.8ES,	HD30681000
D825	EC500	4822 130 80318	ZENER DIODE, 6.8V	HD30681000
D826		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
D827		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
⚠D828		4822 130 80839	DIODE, S5688G VRM=400V IO=1A	HD20029050
D830		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000

POS. NO.	VERS. MODEL	PART NO. (For EUROPE)	DESCRIPTION	PART NO. (For U/K/F)
D831		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
▲D832		4822 130 80839	DIODE, S5688G VRM=400V I0=1A	HD20029050
▲D833		4822 130 80839	DIODE, S5688G VRM=400V I0=1A	HD20029050
D901		4822 130 32362	DIODE, 1SS176,MA165,1SS254 30V 0.1A	HD20002000
▲Q801	AC500	4822 209 83317	IC, NJM7815FA	HC38915090
▲Q801	EC500	4822 209 33819	IC, UPC24M15HF	HC36515060
▲Q802		4822 209 31864	IC, NJM7915FA	HC39915090
Q803		4822 130 42298	TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S	HT30001000
Q804	EC500	4822 130 42715	TRS. 2SA608SP, 2SA1048, 2SA1309, 2SA933S	HT10001000
▲Q805		4822 130 62549	TRS. 2SD1762 E OR F	HT417622B0
▲Q806	EC500	4822 130 62548	TRS. 2SB1185 E OR F	HT211852B0
▲Q807		4822 130 62549	TRS. 2SD1762 E OR F	HT417622B0
▲Q808		4822 209 70385	IC, REGURATOR 78MR05	HC10205030
Q809		4822 209 73951	IC, RESET (4.2V) LOW PST523D	HC10010550
Q810		4822 130 61441	TRS. 2SD1862 Q OR R	HT418622A0
Q811		4822 130 42715	TRS. 2SA608SP, 2SA1048, 2SA1309, 2SA933S	HT10001000
Q812		4822 130 42298	TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S	HT30001000
Q813		4822 130 42298	TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S	HT30001000
Q814		4822 130 42715	TRS. 2SA608SP, 2SA1048, 2SA1309, 2SA933S	HT10001000
Q815		4822 130 61441	TRS. 2SD1862 Q OR R	HT418622A0
▲Q816		4822 130 61176	TRS. 2SB1357 D OR E 50V 1.8W	HT213572A0
▲Q817		4822 209 62941	IC, NJM78M08FA	HC38508090
▲Q818		4822 209 71038	IC, NJM78L15A	HC38115090
Q901	EC500	4822 209 70044	IC, NJM2058D	HC10031090
Q902	EC500	4822 209 70044	IC, NJM2058D	HC10031090
			P806-MISCELLANEOUS	
▲F801	/02/05, K, KS	4822 070 38001	FUSE 800MA 250V BS LISTED	FS10080850
▲F801	U		FUSE 1.6A 125V UL,CSA,MITI FBM	FS10160360
▲F802	/02/05, K, KS	4822 070 38001	FUSE 800MA 250V BS LISTED	FS10080850
▲F802	U		FUSE 1.6A 125V UL,CSA,MITI FBM	FS10160360
▲F803	/02/05, K, KS	4822 070 38001	FUSE 800MA 250V BS LISTED	FS10080850
▲F803	U		FUSE 1.6A 125V UL,CSA,MITI FBM	FS10160360
▲F804	/02/05, K, KS	4822 070 38001	FUSE 800MA 250V BS LISTED	FS10080850
▲F804	U		FUSE 1.6A 125V UL,CSA,MITI FBM	FS10160360
▲J851	/02/05, KS	4822 267 31194	JACK, AC OUTLET 1P	YJ04001640
▲J851	K,U		JACK, AC OUTLET 2P	YJ04002040
▲L801		4822 280 70354	RELAY VB 24MBU-510-UL3	LY20240310
L851		4822 280 20517	RELAY VS 24MB	LY10240190
L852		4822 157 70419	LINE FILTER LF-4D-102	FN01020020
L901		4822 280 20501	RELAY MR62-24SR 24V	LY20240440
L902 ~ L904	EC500	4822 280 20501	RELAY MR62-24SR 24V	LY20240440
			P816-POWER TRANSFORMER CIRCUIT BOARD	
			P816-MISCELLANEOUS	
▲L001	U		POWER TRANSF. I60-U 120V	TS16031020
▲L001	/02/05, KS	4822 146 21808	POWER TRANSF. 230/240V	TS16031010
▲L001	K		POWER TRANSF. EI60-K 110/220V	TS16031030
			P826-VOLTAGE SELECTOR CIRCUIT BOARD ***[K VERSION]***	
			P826-MISCELLANEOUS	
▲S851	K	4822 277 21763	SLIDE SW, VOL SEL. SDKGA4	SS02021240