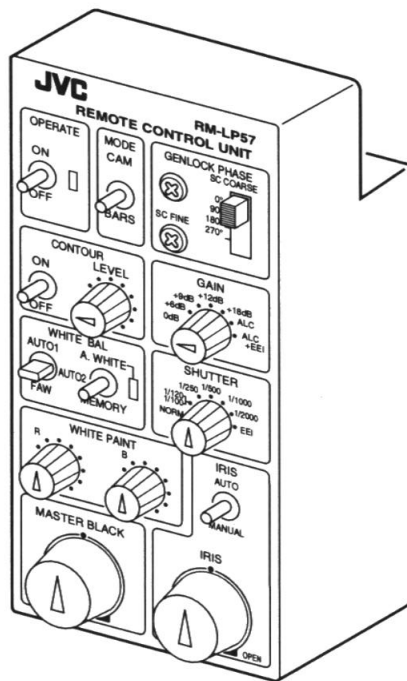


# JVC

## SERVICE MANUAL

REMOTE CONTROL UNIT

### RM-LP57



# JVC | Instructions

## REMOTE CONTROL UNIT **RM-LP57**

**BEDIENUNGSANLEITUNG:  
FERNBEDIENEINHEIT  
MANUEL D'INSTRUCTIONS:  
UNITE DE TELECOMMANDE**



### For Customer Use:

Enter below the Serial No. which is located on the rear of the body.  
Retain this information for future reference.

Model No. RM-LP57

Serial No. \_\_\_\_\_

**CAUTION**  
RISK OF ELECTRIC SHOCK.  
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of unisolatd "dangerous voltage" within the product's enclosure that may be sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within a equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Due to designmodifications, data given in this instruction book are subject to possible change without prior notice

### POWER SYSTEM

Connection of power supply.  
The RM-LP57 is designed for connection to the model KY-F55B, KY-F50 and KY-F32 Color Video Camera.  
Power is supplied from the video camera.

### WARNING:

**To PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.**

### AVERTISSEMENT:

**POUR EVITER LES RISQUES D'INCENDIE OU D'ELECTROCUTION, NE PAS EXPOSER L'APPAREIL A L'HUMIDITE OU A LA PLUIE.**

### Information for USA

This device complies with Part 15 of the FCC Rules. Changes or modifications not approved by the original manufacture could void the user's authority to operate the equipment.

### Information for CANADA

This digital apparatus does not exceed the Class B Limits for radio noise emissions from digital apparatus as set out in the interference causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

### Renseignnement pour CANADA

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Class B prescrites dans la norme sur le matériel brouilleur; "Appareils Numériques", NMB-003 édictée par le ministre des Communications.

Changes or modifications not approved by JVC could void the user's authority to operate the equipment.

**This instructions are given in three languages:**

- English : page 1 to 10
- German : page 11 to 20
- French : page 21 to 30

**bedienungsanleitung in drei Sprachen:**

- English : Seite 1 to 10
- Deutsch : Seite 11 to 20
- Französische : Seite 21 to 30

**Les explications techniques sont données en trois langues:**

- Anglais : page 1 à 10
- Allemand : page 11 à 20
- Français : page 21 à 30

Thank you for purchasing the JVC RM-LP57 Remote Control Unit.

To make the most of your new remote control, please read this booklet carefully and retain it for future reference.

• The RM-LP57 is a control unit designed for connection to the KY-F55B, KY-F50 and KY-F32 color video camera.

**CONTENTS**

	Page
FEATURES .....	2
PRECAUTIONS .....	3
CONNECTIONS .....	3
CONTROLS, CONNECTORS AND INDICATORS .....	4
OPERATIONS .....	7
USING AN MD LENS .....	7
ATTACHING THE RACK MOUNT BRACKETS .....	9
SPECIFICATIONS .....	10

**FEATURES**

- Operation of an MD lens is possible by connecting the RM-713MD lens remote control unit (optional).
- Rack mount bracket allows installation of the RM-LP57 in a rack.

**PRECAUTIONS**

■ **Safety precautions**

- Be sure that no inflammable materials, liquids, or metal objects are introduced into the RM-LP57. This may damage the internal circuitry and lead to failure.
- Never use the RM-LP57 if it has been modified or the cover has been removed.
- If the RM-LP57 behaves abnormally (emits strange sounds, odors, or smoke), cut off the power immediately and contact your nearest JVC-authorized service agent.

■ **Handling the unit**

● **Operating environment**

Do not use the unit in places subject to any of the following:

- vibrations,
- moisture,
- dust,
- smoke or gas.

● **Ambient temperature:**

Observe the ambient temperature range as described in the Specifications on page 10.

● **External care of the RM-LP57:**

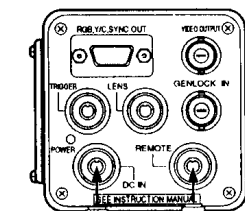
Gently wipe off dust with a soft dry cloth (such as flannel). If the unit is extremely dirty, dip a soft cloth into a detergent solution diluted with water, wring it thoroughly, then wipe the dirt off. Dry the unit with a dry cloth. Do not use a rag treated with chemicals or allow volatile liquids such as benzene, thinner, alcohol, etc., to come in contact with the RM-LP57. This may mar the finish or the damage the coating.

- Where there are strong electromagnetic waves or magnetism, for example near a radio or TV transmitter, transformer, motor, etc., the picture may contain noise and the colors may be incorrect.

**CONNECTIONS**

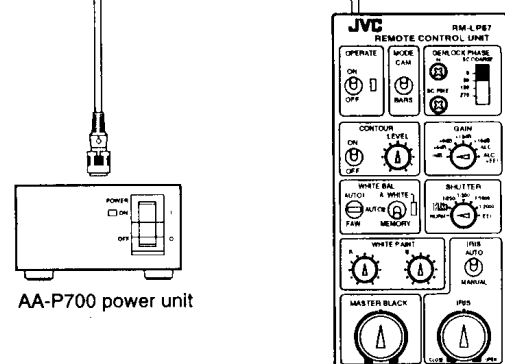
- Use a 5 meter cable to connect the RM-LP57 to the KY-F55B color video camera (sold separately). (You can also connect the RM-LP57 to the KY-F32 in the same way.) Whenever you are making a connection, be sure to turn off the power supply unit connected to the camera.

Rear connector of the KY-F55B

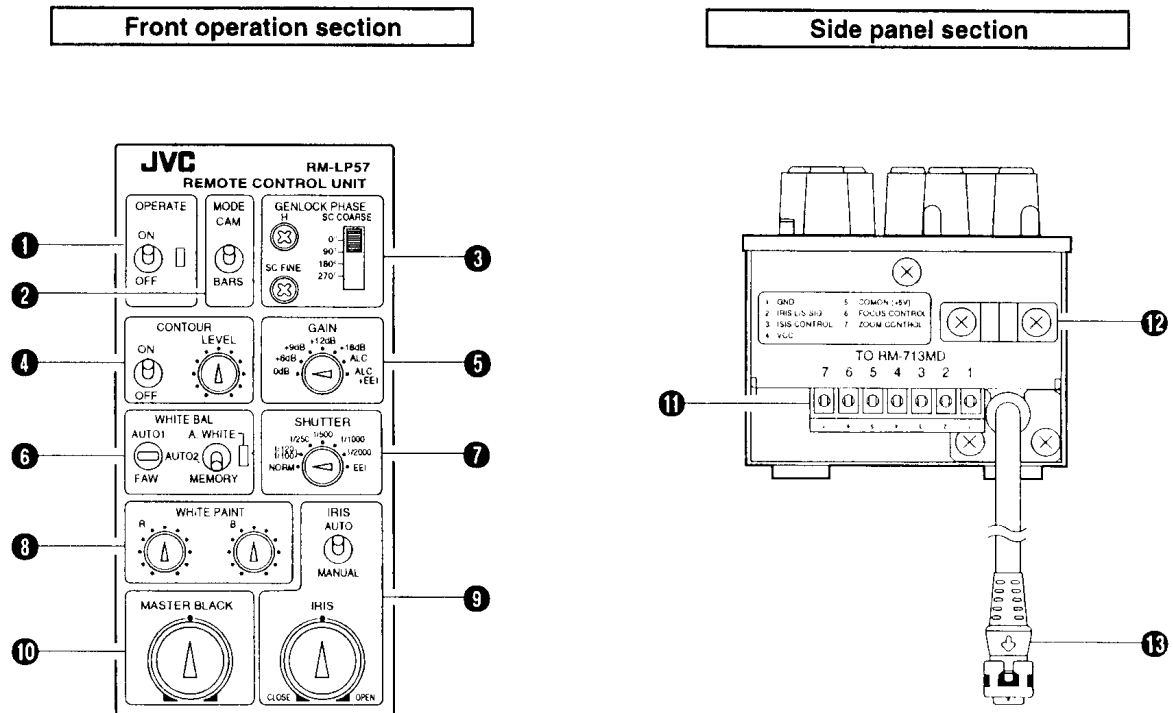


**Note:**  
When using the RM-LP57, be sure to set the camera's DATA switch to "CAM".

Connect to REMOTE connector



AA-P700 power unit



## MAIN FUNCTIONS

### 1 [OPERATE]

- ON** : Set to this position to control the camera with the RM-LP57.
- OFF** : Set to this position to disable the RM-LP57's camera control capability.

### 2 [MODE]

Camera signals and color bar signals can be switched with the mode switch.

**CAM** : The camera's video signals are output from the camera's video output connector.

**BARS** : Color bar signals are output from the camera's video output connector.

### 3 [GENLOCK PHASE]

Color phase adjustment (SC COARSE, SC FINE) and horizontal phase adjustment (H PHASE)) can be performed during genlocking.

The SC phase coarse adjustment allows coarse adjustment (0°, 90°, 180°, 270°) while the SC fine adjustment volume allows fine adjustment.

The horizontal phase adjustment volume allows the adjustment of the horizontal sync phase.

### 4 [CONTOUR]

Contour compensation can be set to ON/OFF with the CONTOUR switch.

**ON** : The contour compensation circuit is activated. The degree of compensation can be adjusted with the CONTOUR LEVEL control.

**OFF** : The contour compensation function is deactivated.

### 5 [GAIN]

Camera sensitivity can be set with the sensitivity switch. Seven settings are available ( 0 dB, +6 dB, +9 dB, +12 dB, +18 dB, ALC, ALC+EEI).

#### Note:

- When the sensitivity switch is set to ALC or ALC+EEI, the camera's Auto Iris mode is engaged regardless of the position of the iris mode switch.

### 6 [WHITE BAL]

The White Balance mode for the camera connected to RM-LP57 can be selected with the 3-position white balance mode switch.

**AUTO1** : Uses the settings registered for Auto White Balance 1.

**AUTO2** : Uses the settings registered for Auto White Balance 2.

**FAW** : The Full-time Auto Balance mode is engaged and white balance is automatically set to the optimum level.

#### Auto white balance function

When the white balance mode switch is set to AUTO1 or AUTO2, the camera's auto white circuit is activated every time A.WHITE is selected with the auto white balance switch. Operation is indicated with the auto white LED as shown below.

**LED light** : The auto white balance function is operating.

**LED goes out** : The auto white balance function has finished operating.

**LED blinking** : An error occurred during operation. (Blinking stops after several seconds.)

## CONTROLS, CONNECTORS AND INDICATORS

### 7 [SHUTTER]

The camera's Shutter mode can be set with the 7-position shutter mode switch. (NORMAL, 1/100 or 1/120, 1/250, 1/500, 1/1000, 1/2000, EEI)

**Note:**

- When the sensitivity switch is set to ALC+EEI, the Shutter mode is locked to EEI regardless of the shutter mode switch position.
- When the shutter mode switch is set to EEI, the camera's iris is set to auto iris regardless of the position of the iris mode switch.

### 8 [WHITE PAINT]

When the White Balance mode is set to AUTO1 or AUTO2, gain for the R or B channel's can be fine-adjusted with the white paint control.

- When the white paint controls are set to the center positions, the white balance condition obtained with the auto white balance function has priority.
- To activate the paint function after completion of auto white balance operation, set the white paint controls to positions other than center. If this is not necessary, leave the white paint controls at the center position.
- The previous settings of the white paint controls are stored in memory so you can obtain the same condition when the power is supplied again even if the control positions have been changed. When you turn the controls, the stored settings are canceled and the current settings become effective.

### 9 [IRIS]

Manual iris (MANUAL) or auto iris (AUTO) can be selected with the iris mode switch.

**AUTO** : The auto iris level can be adjusted with the iris control knob.

**Note:**

- When the LENS switch is set to MANU, the auto iris function does not operate even if the AUTO mode is selected.

**MANUAL** : The iris can be adjusted from CLOSE to OPEN with the iris control knob.

**Note:**

- The Auto Iris mode is automatically engaged whenever the sensitivity switch is set to ALC or ALC+EEI, or the shutter mode switch is set to EEI. Manual operation is not possible.
- The iris may not close completely with some lenses.

### 10 [MASTER BLACK]

The black level can be adjusted with the master black control.

- The standard position of the master black control is the center position.

6

### 11 [TO RM-713MD] 7-pin connector

Connect the RM-713MD remote control unit (optional).

### 12 [Cable holder]

Use to secure the cables connected to the RM-713MD.

### 13 [Cable] 5m

Connects the remote control unit to a camera.

## OPERATIONS

1. Connect RM-LP57 to the camera as described in "CONNECTIONS". (Page 3)
2. Turn the camera's power unit ON. (For camera operation, refer to the camera's instruction manual.)
3. Press the RM-LP57 OPERATE switch to ON.
4. The OPERATE LED blinks, then lights up, indicating that remote operation with the RM-LP57 is now possible.
  - After the power is switched on, initialization of the RM-LP57 takes about two seconds. Operation is not possible during this time.

## USING AN MD LENS

The optional RM-713MD lens remote control unit is required when using an MD lens.

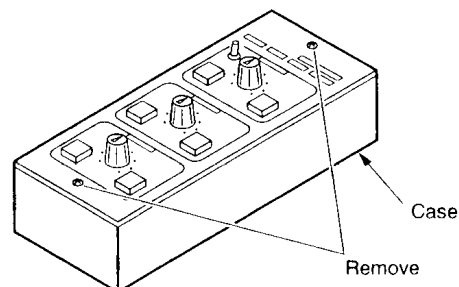
- Control of the focus, zoom and iris of an MD lens (HZ-610MD) is possible when the RM-713MD lens remote control unit is connected to the RM-LP57.

**Note:**

- The zoom and focus cannot be controlled if the lens is not an MD lens.
- When using a power unit other than the AA-P700 to power the camera when the RM-713MD, is connected, the power unit must supply 11.5 V to 13 V, 1 A or more.

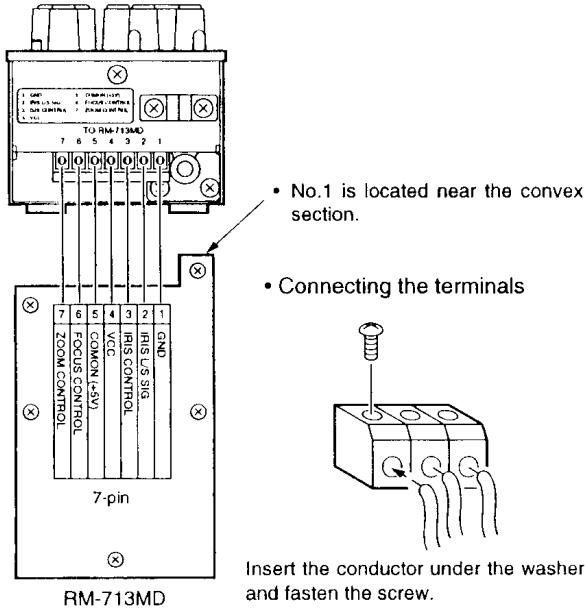
### Connection

1. Remove the two screws on the panel of the RM-713MD to remove the case from the control panel.
  - Remove the case of the RM-713MD.

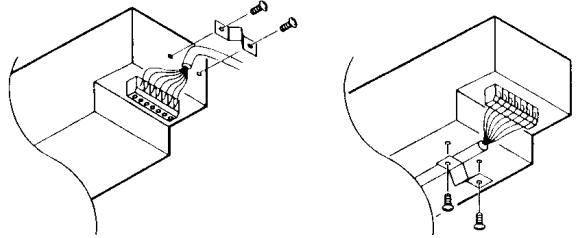


2. Connect the 7-pin connector of the RM-LP57 to the 7-pin connector in the RM-713MD by matching their pin numbers.
  - Pass the connection cables through the rubber bushes incorporated in the RM-713MD.

- Connect each pin to the pin with the matching number.



3. After all 7 pins are connected, replace the case on the RM-713MD control panel.
4. Secure the connection cables to the RM-LP57 with the cable holder.
  - There are two ways to secure the cables depending on how the unit will be used.



## Operation

1. Set the camera and the RM-LP57 so that the camera can be remote-controlled with the RM-LP57. (Refer to "OPERATIONS" on page 7.)
2. Select AUTO or MANUAL with the RM-713MD's iris switch.
3. When MANUAL is selected, the lens iris can be adjusted with the RM-713MD iris control button. (Iris control is not possible on the RM-LP57.)

8

Iris speed can be adjusted with the iris control speed adjustment knob.

### Note:

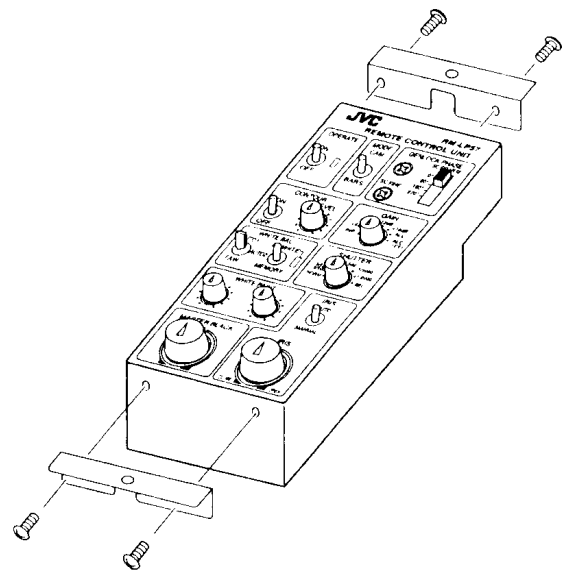
- When AUTO is selected, the lens's iris is controlled by the RM-LP57.
- The Auto Iris mode is automatically engaged whenever the sensitivity switch is set to ALC or ALC+EEI, or the shutter mode switch is set to EEI. Manual operation is not possible.
- If the RM-713MD iris switch is set to MANUAL after the Auto Iris mode has been engaged with the RM-LP57, the iris setting obtained by the auto iris function may change slightly.

4. Lens focus can be adjusted with the RM-713MD's focus control button. Focus speed can be adjusted with the focus control speed adjustment knob.
5. Lens zoom can be adjusted with the RM-713MD's zoom control button. Zoom speed can be adjusted with the zoom control speed adjustment knob.

- For details on RM-713MD operation, refer to the RM-713MD instruction manual. If the AA-P700 is used to power the camera, the connection cable between the RM-LP57 and the camera can be extended up to 50 meters. However, if the RM-713MD's speed control is set to SLOW, remote control may not be possible with the RM-713MD.

## ATTACHING THE RACK MOUNT BRACKETS

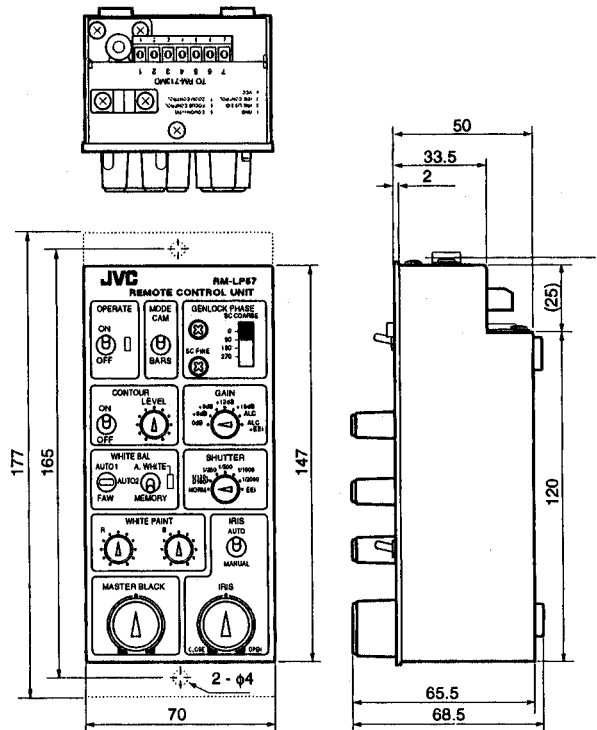
To install the RM-LP57 in a rack, attach the rack mount brackets.



# SPECIFICATIONS

- Power supply** : 9VDC (supplied from the connected camera)
- Current consumption** : 62mA
- Weight** : 770g
- Ambient temperature range** : -5°C to 40°C
- Accessories** : Rack mount bracket (SC46005: identical for left and right) x 2  
Rack mount bracket attachment screw (SSSP3006N) x 4

## ■ Dimensions (unit: mm):



• Design and specifications are subject to change without prior notice.

# JVC

VICTOR COMPANY OF JAPAN, LIMITED

# SECTION 1 DISASSEMBLY

## 1.1 REMOVAL OF KNOB

(1) Small knob

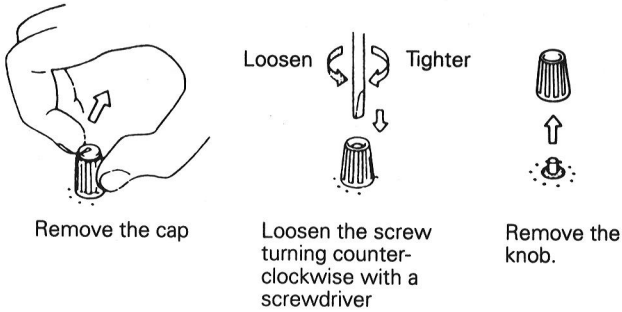


Fig.1-1

(2) Large knob

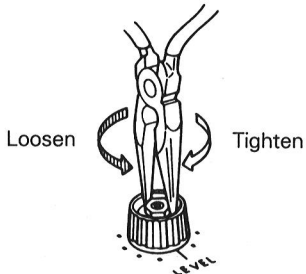


Fig.1-2

## 1.2 REMOVAL OF CIRCUIT BOARDS

### 1.2.1 Removal of top panel

(1) Remove two screws ①, then remove the top panel.

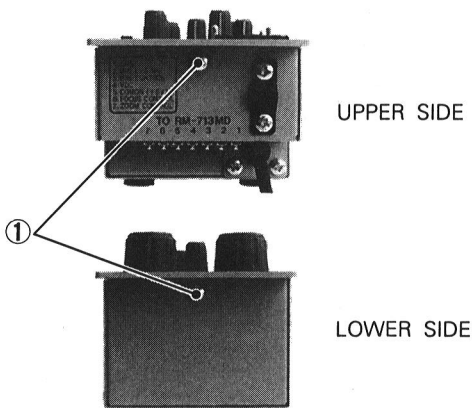


Fig.1-3

### 1.2.2 Removal of CT BOARD

(1) Remove three screws ②, connector ①, ② and ③, then remove CT BOARD from the top panel.

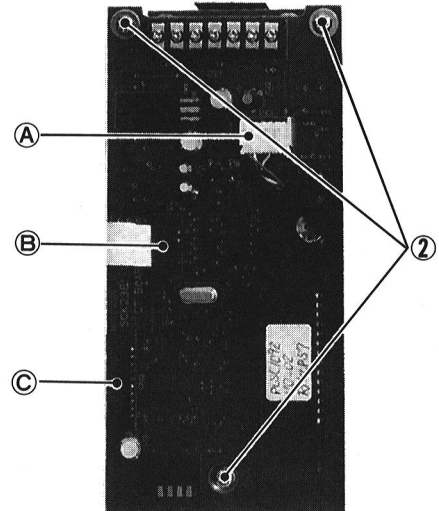


Fig.1-4

### 1.2.3 Removal of SW BOARD

(1) Remove the knobs on the top panel. (refer to 1.1)  
 (2) Remove five screws ③, then remove the SW BOARD.

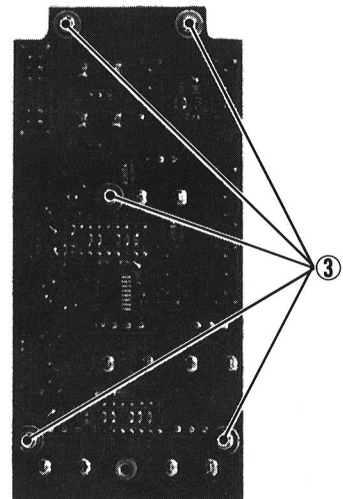


Fig.1-5

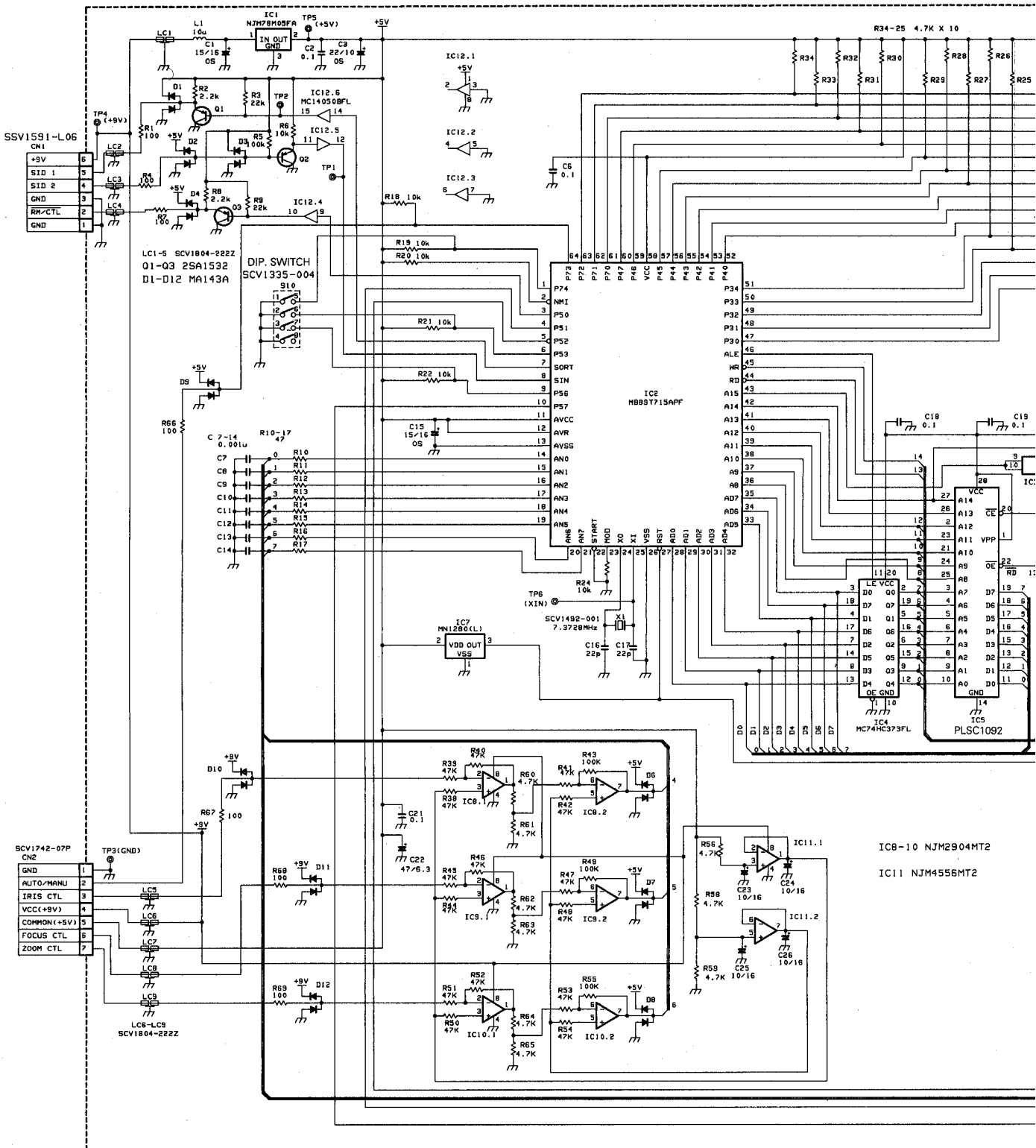
#### NOTE

The sheet is mounted between CT BOARD and SW BOARD. Do not forget this sheet mount, when CT BOARD and SW BOARD mount.





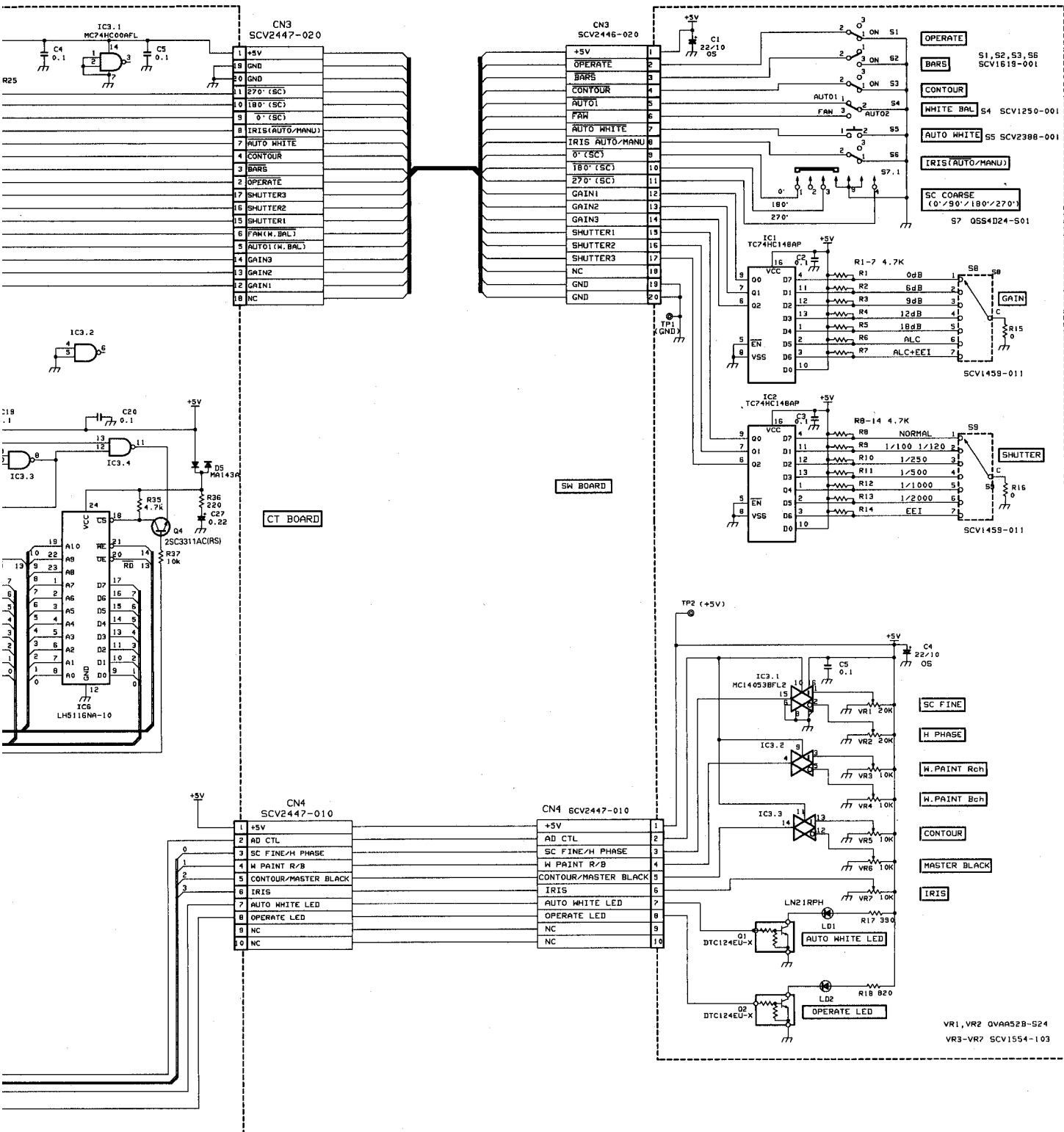
## 2.1 CIRCUIT DIAGRAMS 01/02



# ON 2 DIAGRAMS

S10 (Initial set : OFF)

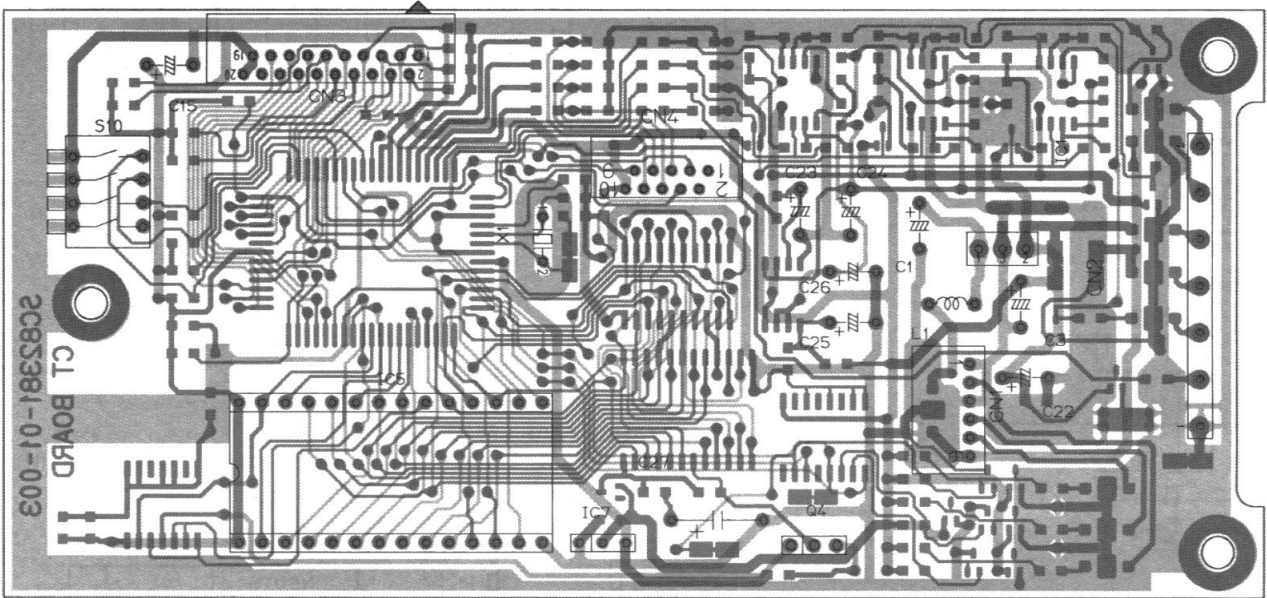
		ON	OFF
SW1	AUTO IRIS LEVEL	Auto iris level adjustment impossible	Auto iris level adjustment possible
SW2	ALC AUTO IRIS	No	Yes
SW3	Auto iris level from RM-713MD	Possible	Impossible
SW4	No connect		



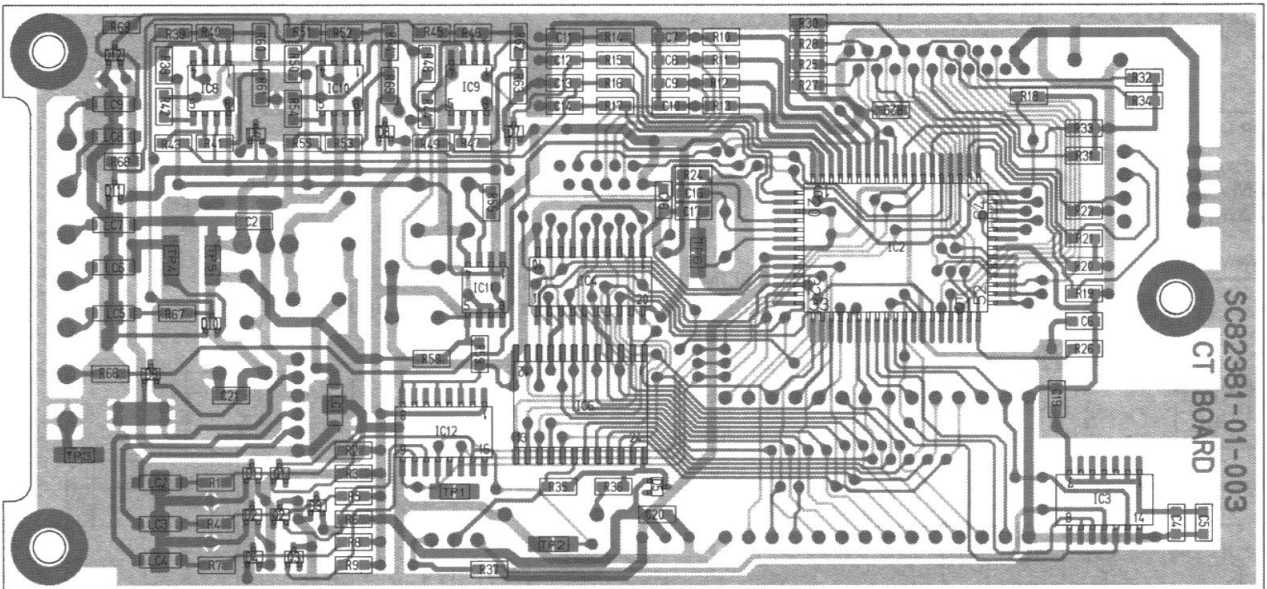
## 2.2 CIRCUIT BOARDS

### • CT BOARD

— A SIDE —



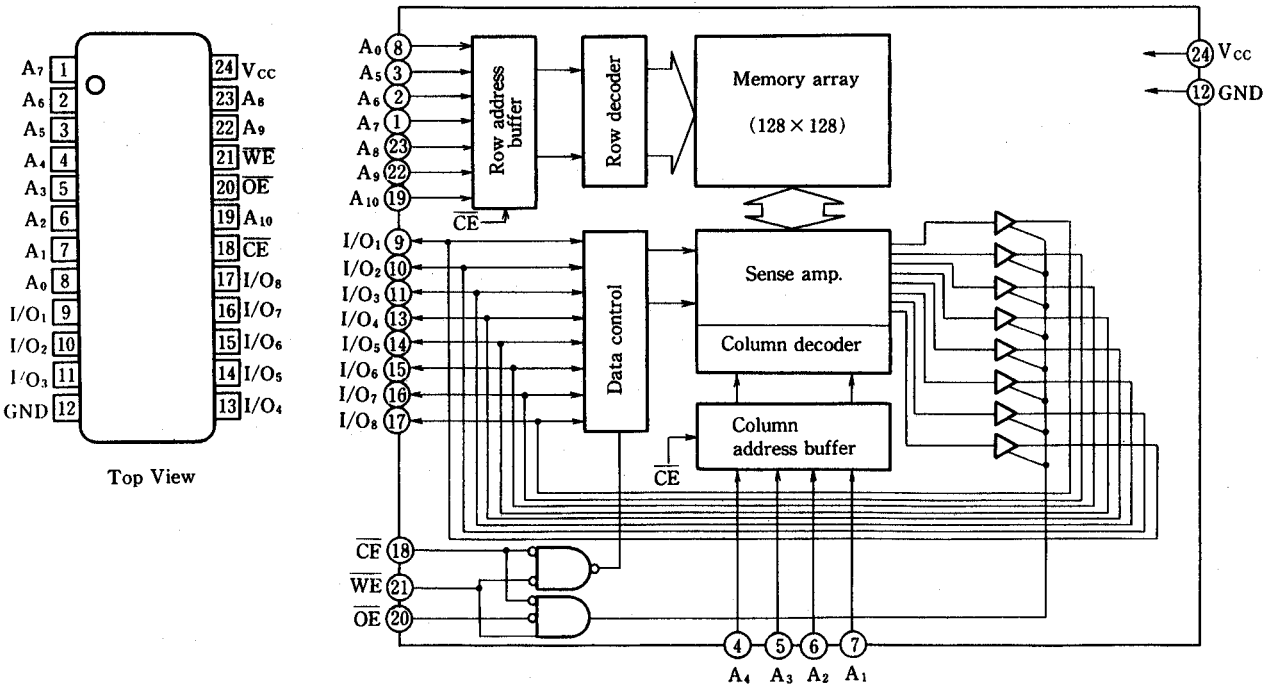
— B SIDE —



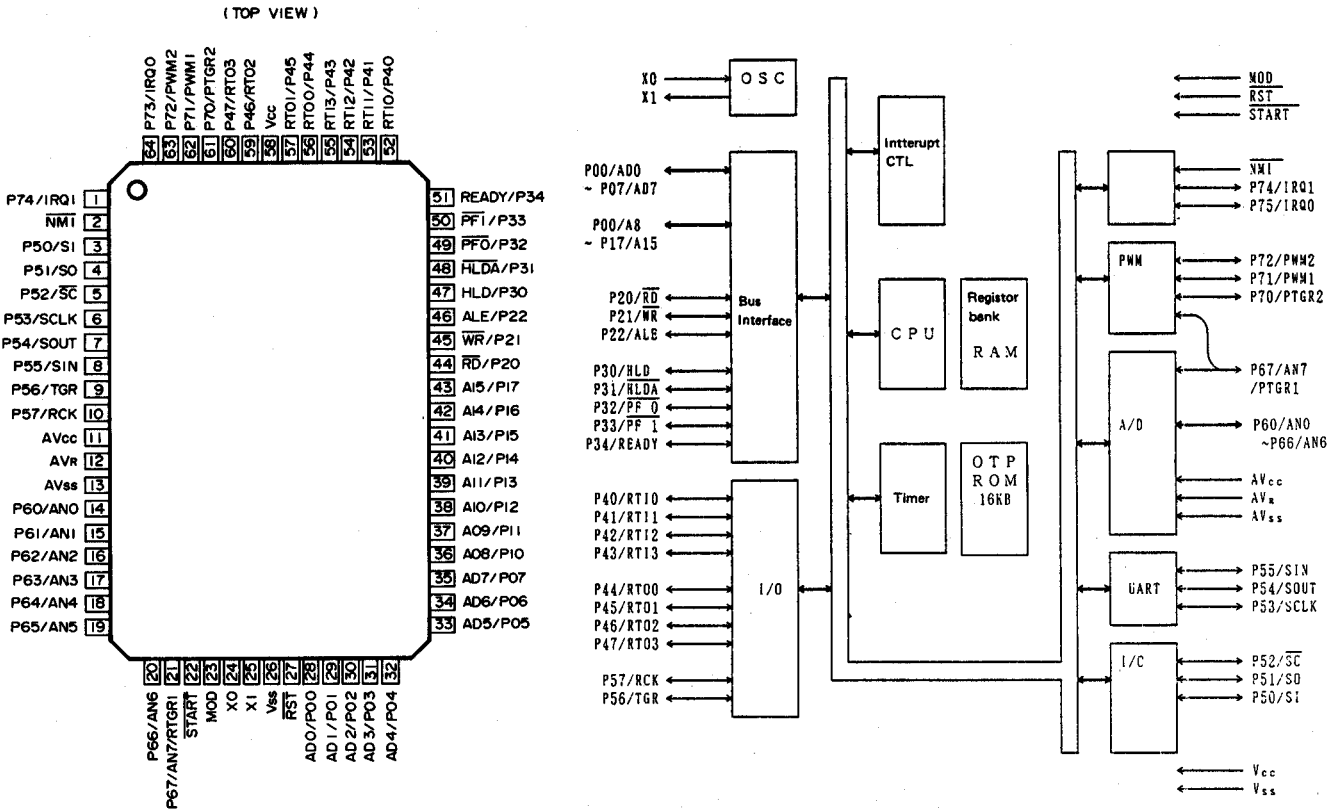


2.3 BLOCK DIAGRAMS OF IC's

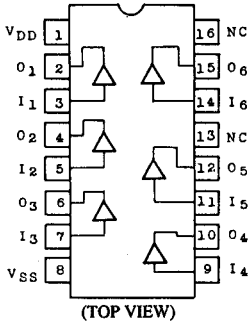
■ LH5116NA-10 [SHARP]  
(C-MOS 16K Static RAM)



■ MB89T715APF [FUJITSU]  
(8-Bit Micro Computer)

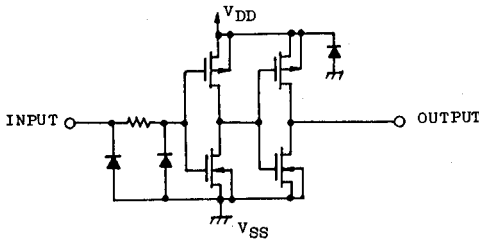


**MC14050BFL [MOTOROLA]**  
(Hex Non Inverting Buffer)

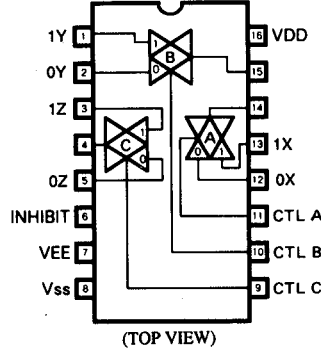


(TOP VIEW)

**BLOCK DIAGRAM**



**MC14053BF [MOTOROLA]**  
(Triple 2 Channel Analog Multiplexers/Demultiplexers)



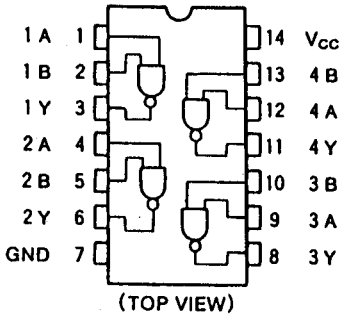
(TOP VIEW)

**TRUTH TABLE**

CONTROL INPUTS				"ON" CHANNEL
INHIBIT	C	B	A	4053BP 4053BF
L	L	L	L	0X, 0Y, 0Z
L	L	L	H	1X, 0Y, 0Z
L	L	H	L	0X, 1Y, 0Z
L	L	H	H	1X, 1Y, 0Z
L	H	L	L	0X, 0Y, 1Z
L	H	L	H	1X, 0Y, 1Z
L	H	H	L	0X, 1Y, 1Z
L	H	H	H	1X, 1Y, 1Z
H	*	*	*	NOTE

\* Don't Care.

**MC74HC00AF [MOTOROLA]**  
(Quad 2-Input NAND Gates)

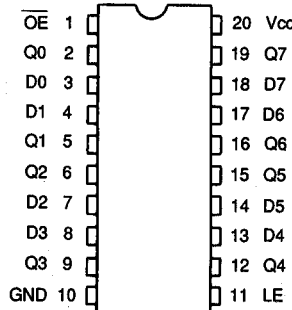


(TOP VIEW)

**TRUE Table**

A	B	Y
L	L	H
L	H	H
H	L	H
H	H	L

**MC74HC373AF [MOTOROLA]**  
(Octal D-Type Latch With NON-Inverted 3-State Output)

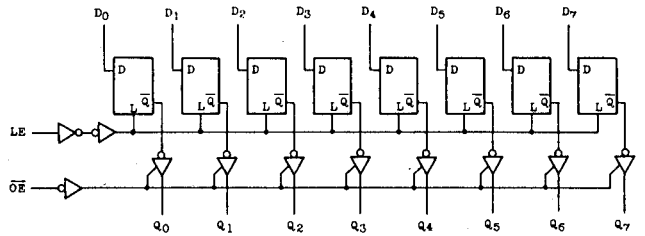


(Top View)

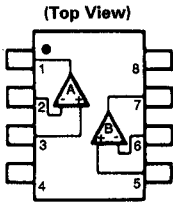
**TRUE Table**

INPUTS			OUTPUTS
OE	LE	D	
H	X	X	Z
L	L	X	Q <sub>n</sub>
L	H	L	L
L	H	H	H

X : Don't Care  
Z : Hi impedance  
Q<sub>n</sub> : Q output level before the LE become "L".



**NJM2904M [JRC]**  
(Dual Op.Amp.)

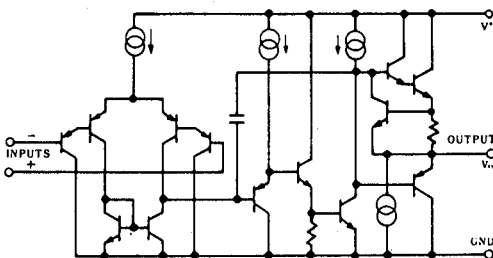


(Top View)

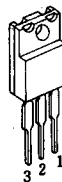
**Pin Assignment**

1. A OUTPUT
2. A-INPUT
3. A+INPUT
4. GND
5. B+INPUT
6. B-INPUT
7. B OUTPUT
8. V+

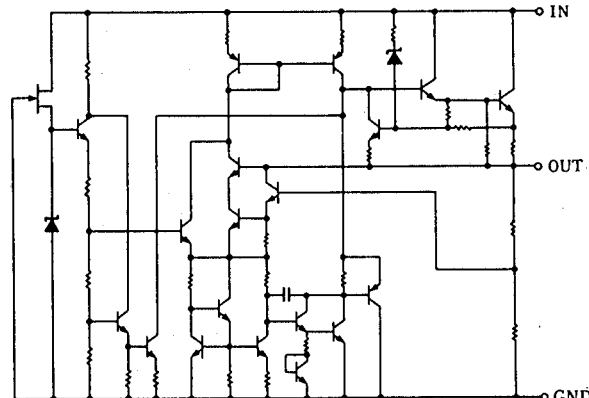
**Equivalent Circuit (2 circuits in a chip)**



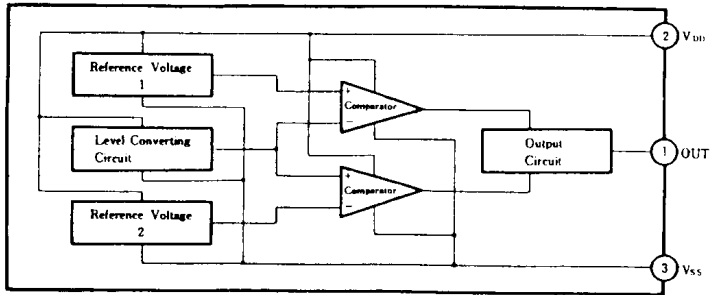
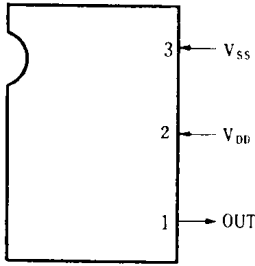
**NJM78M05FA [JRC]**  
(3-Terminal Positive Voltage Regulator (+5V))



1. OUT
2. GND
3. IN

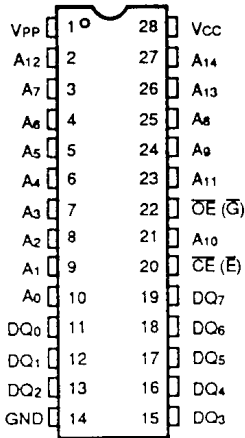


■ MN1280(L) [MATSUSHITA]  
(Voltage Detector)

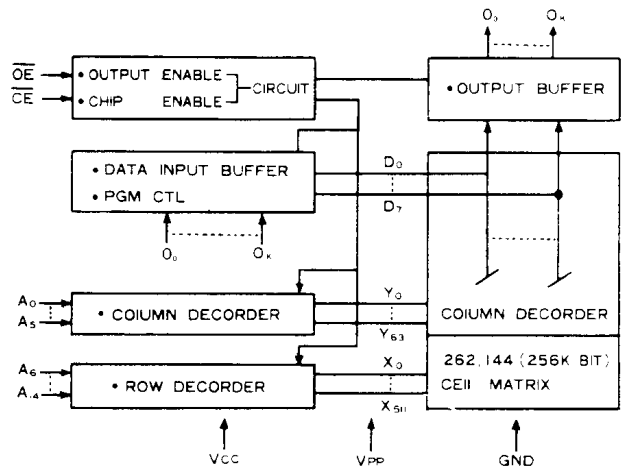


■ PLSC1092 [ADVANCED MICRO DEVICES]  
(32.768 X 8 Bit CMOS EPROM)

DIP

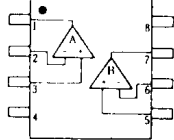


TERMINAL	NAME
A11~A14	ADDRESS INPUT
O <sub>0</sub> ~O <sub>8</sub>	DATA OUTPUT
CE	CHIP ENABLE
OE	OUTPUT ENABLE
VPP	PROGRAM BIAS
VCC	POWER SUPPLY
GND	GND

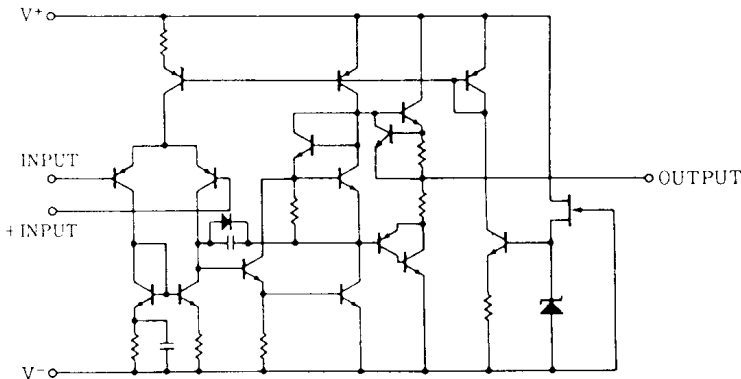


■ NJM4556AM [JRC]  
(Dual High Current Op.Amp)

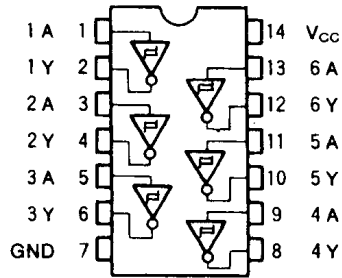
(Top View)



1. A OUTPUT
2. A-INPUT
3. A+INPUT
4. V<sub>-</sub>
5. B+INPUT
6. B-INPUT
7. B OUTPUT
8. V<sub>+</sub>



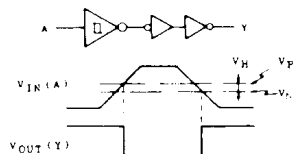
■ TC74HC148AP [TOSHIBA]  
(Hex Schmitt-Trigger Inverters)



(TOP VIEW)

TRUE Table

A	Y
L	H
H	L



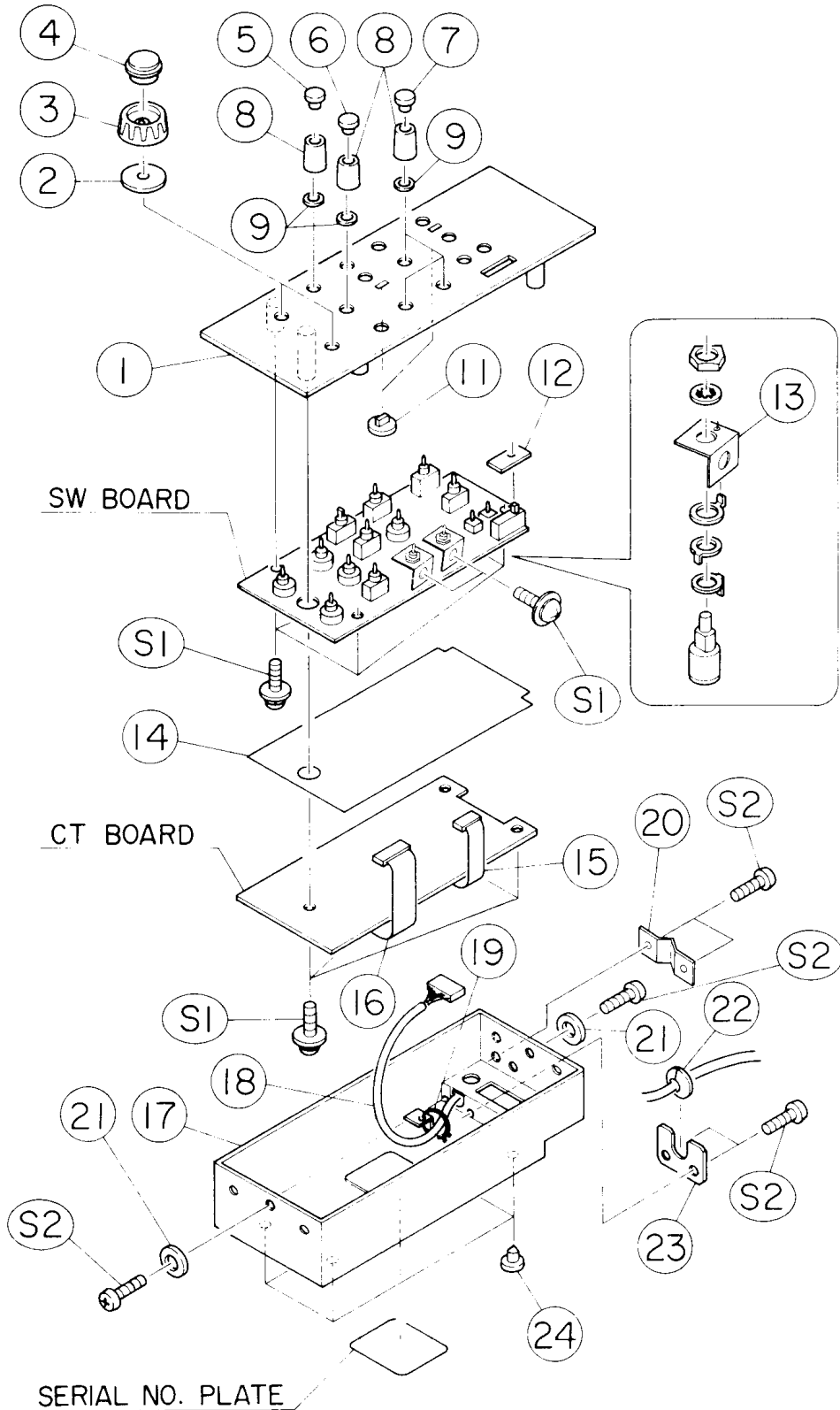
V<sub>CC</sub>=4.5 V V<sub>p</sub>=2.7 V typ.  
V<sub>N</sub>=1.6 V typ.





## SECTION 3 EXPLODED VIEW AND PARTS LIST

### 3.1 ASSEMBLY M1



**Note:** Accessories above are subject to change without notice.

■ ASSEMBLY LIST **M** **1**

● SAFETY PRECAUTION

Parts identified by the  $\triangle$  symbol are critical for safety.  
 Replace only with specified parts numbers.

● NOTE

Parts not denoted by parts numbers are not supplied by JVC.

**M** **1** **M** **M** **□** **□** **□** **□**

Symbol No.	Part No.	Part Name	Description
1	SC31825-01D	TOP PANEL	
2	SC40724-002	SPACER	
3	SC40686-021	KNOB	
4	SC40687-021	KNOB CAP	
5	SC40685-041	KNOB CAP	RED
6	SC40685-051	KNOB CAP	BLUE
7	SC40685-021	KNOB CAP	GRAY
8	SC40683-021	KNOB	
9	SC40724-001	SPACER	
11	SS44054	LENS	
12	SC45585-001	SPACER	
13	SC45603-001	SWITCH PLATE	
14	SC45600-001	SHEET	
15	SCV2098-1006K	FLAT CABLE A	
16	SCV1902-2006R	FLAT CABLE B	
17	SC31826-00B	CASE	
18	SCV2377-05A	DIN CABLE	5 m
19	QHX5092-001	WIRE CLAMP	
20	SC45629-001	CABLE HOLDER	
21	Q03093-115	WASHER	
22	SC42910-001	BUSHING	
23	SC45630-001	PLATE	
24	SM4641	PROTECTOR	
S1	DPSP3006Z	SCREW	M3×6
S2	SDSP3006R	SCREW	M3×6

## SECTION 4 ELECTRICAL PARTS LIST

### SAFETY PRECAUTION:

Parts identified by the  $\triangle$  symbol are critical for safety. Replace only with specified parts numbers.  
For maximum reliability and performance, all other replacement parts should be identical to those specified.

### NOTE:

- Parts not denoted by parts numbers are not supplied by JVC.
- Abbreviations in this list are as follows:

#### RESISTORS

In the "Description" column:

- All resistance values are in ohms ( $\Omega$ ).
- K expresses kilo-ohm (1 000 ohms,  $k\Omega$ ).
- M expresses mega-ohm ( $10^6$  ohms,  $M\Omega$ ).

In the "Parts Name" column:

- COMP. RESISTOR : Composition Resistor
- U.F. RESISTOR : Non-inflammable Resistor
- O.M.F. RESISTOR : Oxide Metalized Film Resistor
- FUSI. RESISTOR : Fusible Resistor
- M.P. RESISTOR : Metal Plate Resistor
- M.G. RESISTOR : Metal Graze Resistor
- M.F. RESISTOR : Metal Film Resistor
- W.W. RESISTOR : Wire Wound Resistor

#### CAPACITORS

In the "Description" column:

- All capacitance values are in microfarad ( $\mu F$ ) unless otherwise indicated.
- P expresses picofarad ( $10^{-12}$  farad, pF).

In the "Parts Name" column:

- TRIM. CAPACITOR : Trimmer Capacitor
- CER. CAPACITOR : Ceramic Capacitor
- E. CAPACITOR : Electrolytic Capacitor
- TAN. CAPACITOR : Tantalum Capacitor
- MPP CAPACITOR : Metalized Polypropylene Capacitor
- O.F. CAPACITOR : Oil Film Capacitor
- MPF CAPACITOR : Metalized Polyfilm Capacitor
- F.M. CAPACITOR : Film Mica Capacitor
- P.P. CAPACITOR : Polypropylene Capacitor
- P.S. CAPACITOR : Polystyrene Capacitor

4.1 CT BOARD ASSEMBLY LIST 01

SCK2381-01-00A

01

Symbol No.	Part No.	Part Name	Description
IC1	NJM78M05FA	I.C.(M)	JRC
IC2	MB89T715APF	I.C.(M)	FUJITSU
IC3	MC74HC00AF	I.C.(M)	MOTOROLA
IC4	MC74HC373AF	I.C.(M)	MOTOROLA
IC5	PLSC1092	I.C.(M)	M27C256B-12F1
SK5	SSV2294-028	I.C.SOCKET	28PIN for IC5
IC6	LH5116NA-10	I.C.(M)	SHARP
IC7	MN1280(L)	I.C.(M)	MATSUSHITA
IC8	NJM2904M	I.C.(M)	JRC
IC9	NJM2904M	I.C.(M)	JRC
IC10	NJM2904M	I.C.(M)	JRC
IC11	NJM4556AM	I.C.(M)	JRC
IC12	MC14050BFL	I.C.(M)	MOTOROLA
Q1	2SA1532(BC)	TRANSISTOR	MATSUSHITA
Q2	2SA1532(BC)	TRANSISTOR	MATSUSHITA
Q3	2SA1532(BC)	TRANSISTOR	MATSUSHITA
Q4	2SC3311A(IRS)	TRANSISTOR	MATSUSHITA
D1	MA143A	DIODE	MATSUSHITA
D2	MA143A	DIODE	MATSUSHITA
D3	MA143A	DIODE	MATSUSHITA
D4	MA143A	DIODE	MATSUSHITA
D5	MA143A	DIODE	MATSUSHITA
D6	MA143A	DIODE	MATSUSHITA
D7	MA143A	DIODE	MATSUSHITA
D8	MA143A	DIODE	MATSUSHITA
D9	MA143A	DIODE	MATSUSHITA
D10	MA143A	DIODE	MATSUSHITA
D11	MA143A	DIODE	MATSUSHITA
D12	MA143A	DIODE	MATSUSHITA
R1	NRSA02J-101	M.G.RESISTOR	100 1/10W
R2	NRSA02J-222	M.G.RESISTOR	2.2K 1/10W
R3	NRSA02J-223	M.G.RESISTOR	22K 1/10W
R4	NRSA02J-101	M.G.RESISTOR	100 1/10W
R5	NRSA02J-104	M.G.RESISTOR	100K 1/10W
R6	NRSA02J-103	M.G.RESISTOR	10K 1/10W
R7	NRSA02J-101	M.G.RESISTOR	100 1/10W
R8	NRSA02J-222	M.G.RESISTOR	2.2K 1/10W
R9	NRSA02J-223	M.G.RESISTOR	22K 1/10W
R10	NRSA02J-470	M.G.RESISTOR	47 1/10W
R11	NRSA02J-470	M.G.RESISTOR	47 1/10W
R12	NRSA02J-470	M.G.RESISTOR	47 1/10W
R13	NRSA02J-470	M.G.RESISTOR	47 1/10W
R14	NRSA02J-470	M.G.RESISTOR	47 1/10W
R15	NRSA02J-470	M.G.RESISTOR	47 1/10W
R16	NRSA02J-470	M.G.RESISTOR	47 1/10W
R17	NRSA02J-470	M.G.RESISTOR	47 1/10W
R18	NRSA02J-103	M.G.RESISTOR	10K 1/10W
R19	NRSA02J-103	M.G.RESISTOR	10K 1/10W
R20	NRSA02J-103	M.G.RESISTOR	10K 1/10W
R21	NRSA02J-103	M.G.RESISTOR	10K 1/10W
R22	NRSA02J-103	M.G.RESISTOR	10K 1/10W
R24	NRSA02J-103	M.G.RESISTOR	10K 1/10W

Symbol No.	Part No.	Part Name	Description
R25	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R26	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R27	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R28	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R29	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R30	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R31	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R32	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R33	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R34	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R35	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R36	NRSA02J-221	M.G.RESISTOR	220 1/10W
R37	NRSA02J-103	M.G.RESISTOR	10K 1/10W
R38	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R39	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R40	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R41	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R42	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R43	NRSA02J-104	M.G.RESISTOR	100K 1/10W
R44	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R45	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R46	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R47	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R48	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R49	NRSA02J-823	M.G.RESISTOR	82K 1/10W
R50	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R51	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R52	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R53	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R54	NRSA02J-473	M.G.RESISTOR	47K 1/10W
R55	NRSA02J-823	M.G.RESISTOR	82K 1/10W
R56	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R58	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R59	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R60	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R61	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R62	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R63	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R64	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R65	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R66	NRSA02J-101	M.G.RESISTOR	100 1/10W
R67	NRSA02J-101	M.G.RESISTOR	100 1/10W
R68	NRSA02J-101	M.G.RESISTOR	100 1/10W
R69	NRSA02J-101	M.G.RESISTOR	100 1/10W
C1	QEX41CM 156	E.CAPACITOR	15 16V
C2	NCF21EZ-104	CER.CAPACITOR	0.10 25V
C3	QEX41AK-226	E.CAPACITOR	22 10V
C4	NCF21EZ-104	CER.CAPACITOR	0.10 25V
C5	NCF21EZ-104	CER.CAPACITOR	0.10 25V
C6	NCF21EZ-104	CER.CAPACITOR	0.10 25V
C7	NCB21HK-102	CER.CAPACITOR	1000P 50V
C8	NCB21HK-102	CER.CAPACITOR	1000P 50V
C9	NCB21HK-102	CER.CAPACITOR	1000P 50V
C10	NCB21HK-102	CER.CAPACITOR	1000P 50V
C11	NCB21HK-102	CER.CAPACITOR	1000P 50V
C12	NCB21HK-102	CER.CAPACITOR	1000P 50V
C13	NCB21HK-102	CER.CAPACITOR	1000P 50V
C14	NCB21HK-102	CER.CAPACITOR	1000P 50V

4.2 SW BOARD ASSEMBLY LIST 02

SCK2381-02-00A

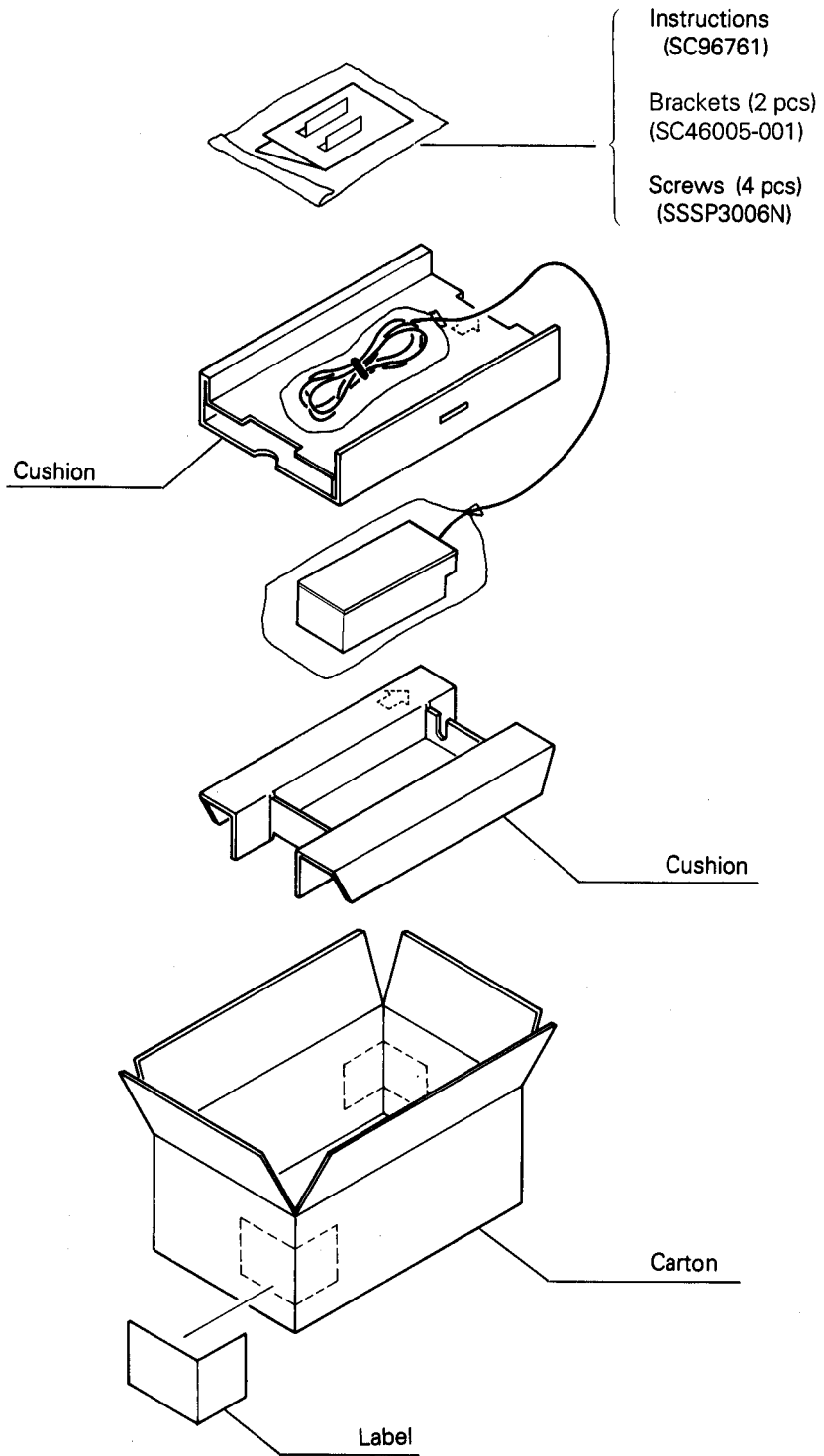
02□□□□□□□□

Symbol No.	Part No.	Part Name	Description
C15	QEX41CM-156	E.CAPACITOR	15 16V
C16	NCT03CH-220	CER.CAPACITOR	22P 50V
C17	NCT03CH-220	CER.CAPACITOR	22P 50V
C18	NCF21EZ-104	CER.CAPACITOR	0.10 25V
C19	NCF21EZ-104	CER.CAPACITOR	0.10 25V
C20	NCF21EZ-104	CER.CAPACITOR	0.10 25V
C21	NCF21EZ-104	CER.CAPACITOR	0.10 25V
C22	QER40JM-476	E.CAPACITOR	47 6.3V
C23	QER41CM-106	E.CAPACITOR	10 16V
C24	QER41CM-106	E.CAPACITOR	10 16V
C25	QER41CM-106	E.CAPACITOR	10 16V
C26	QER41CM-106	E.CAPACITOR	10 16V
C27	QEZ0171-224	E.CAPACITOR	0.22
L1	SMV2223	PEAKING COIL	10μH
LC1	SCV1804-222	EMI FILTER	
LC2	SCV1804-222	EMI FILTER	
LC3	SCV1804-222	EMI FILTER	
LC4	SCV1804-222	EMI FILTER	
LC5	SCV1804-222	EMI FILTER	
LC6	SCV1804-222	EMI FILTER	
LC7	SCV1804-222	EMI FILTER	
LC8	SCV1804-222	EMI FILTER	
LC9	SCV1804-222	EMI FILTER	
X1	SCV1492-001	CRYSTAL	17.3728MHZ
S10	SCV1335-004	DIP SWITCH	
CN1	SSV1591-L06	CONNECTOR	6PIN
CN2	SCV2506-07P	CONNECTOR	7PIN
CN3	SCV2447-020	CONNECTOR	20PIN
CN4	SCV2447-010	CONNECTOR	10PIN
TP1	SCV1880-001	TEST POINT	
TP2	SCV1880-001	TEST POINT	
TP3	SCV1880-001	TEST POINT	
TP4	SCV1880-001	TEST POINT	
TP5	SCV1880-001	TEST POINT	
TP6	SCV1880-001	TEST POINT	

Symbol No.	Part No.	Part Name	Description
IC1	TC74HC148AP	I.C.(M)	TOSHIBA
IC2	TC74HC148AP	I.C.(M)	TOSHIBA
IC3	MC14053BF	I.C.(M)	MOTOROLA
Q1	DTC124EU	TRANSISTOR	ROHM
Q2	DTC124EU	TRANSISTOR	ROHM
LD1	LN21RPH	LED	MATSUSHITA
LD2	LN31GPH	LED	MATSUSHITA
R1	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R2	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R3	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R4	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R5	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R6	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R7	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R8	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R9	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R10	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R11	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R12	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R13	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R14	NRSA02J-472	M.G.RESISTOR	4.7K 1/10W
R15	NRSA02J-0R0	M.G.RESISTOR	0 1/10W
R16	NRSA02J-0R0	M.G.RESISTOR	0 1/10W
R17	NRSA02J-391	M.G.RESISTOR	390 1/10W
R18	NRSA02J-821	M.G.RESISTOR	820 1/10W
VR1	QVAA52B-S24	V.RESISTOR	20K SC FINE
VR2	QVAA52B-S24	V.RESISTOR	20K PHASE
VR3	SCV1554-103	V.RESISTOR	10K W.PAINT Rch
VR4	SCV1554-103	V.RESISTOR	10K W.PAINT Bch
VR5	SCV1554-103	V.RESISTOR	10K CONTOUR
VR6	SCV1554-103	V.RESISTOR	10K MASTER BLK
VR7	SCV1554-103	V.RESISTOR	10K IRIS
C1	QEX41AK 226	E.CAPACITOR	22 10V
C2	NCF21EZ-104	CER.CAPACITOR	0.10 25V
C3	NCF21EZ-104	CER.CAPACITOR	0.10 25V
C4	QEX41AK 226	E.CAPACITOR	22 10V
C5	NCF21EZ-104	CER.CAPACITOR	0.10 25V
S1	SCV1619-001	TOGGLE SW	OPERATE
S2	SCV1619-001	TOGGLE SW	BARS
S3	SCV1619-001	TOGGLE SW	CONTOUR
S4	SCV1250-001	TOGGLE SWITCH	WHITE BALANCE
S5	SCV2388-001	SWITCH	AUTO WHITE
S6	SCV1619-001	TOGGLE SWITCH	IRIS AUTO/MANU
S7	QSS4D24-S01	SLIDE SWITCH	SC COARSE
S8	SCV1459-011	TOGGLE SWITCH	GAIN
S9	SCV1459-011	TOGGLE SWITCH	SHUTTER
CN5	SCV2446-020	CONNECTOR	20PIN
CN6	SCV2447-010	CONNECTOR	10PIN
TP1	SCV1880-001	TEST POINT	
TP2	SCV1880-001	TEST POINT	

# SECTION 5 REPACKING

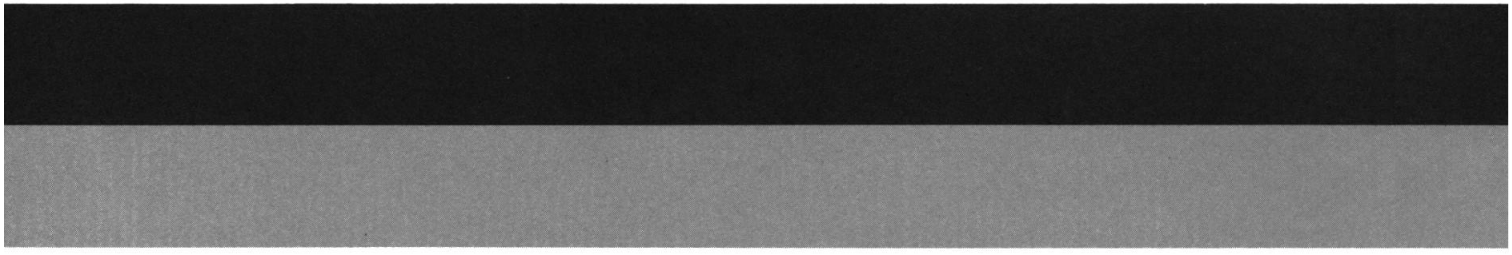
## 5.1 REPACKING



**Note:** Accessories above are subject to change without notice.







**JVC**

VICTOR COMPANY OF JAPAN, LIMITED