TArt

# Color Television Users Guide

For Model: AV-30W476





Illustration of AV-30W476 and RM-C1258G

### **Important Note:**

In the spaces below, enter the model and serial number of your television (located at the rear of the television cabinet). Staple your sales receipt or invoice to the inside cover of this guide. Keep this user's guide in a convenient place for future reference. Keep the carton and original packaging for future use.

Model	Number:		

**Serial Number:** 

LCT1784-001A-A 1204JGI-II-IM

# **Important Safety Precautions**



# **CAUTION**

RISK OF ELECTRICAL 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 uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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

**WARNING:** 

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS TV SET TO RAIN OR MOISTURE.

CAUTION:

TO INSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS UNIT.

- 1. Operate only from the power source specified on the unit.
- 2. Avoid damaging the AC plug and power cord.
- 3. Avoid Improper installation and never position the unit where good ventilation is unattainable.
- 4. Do not allow objects or liquid into the cabinet openings.
- 5. In the event of trouble, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.

Changes or modifications not approved by JVC could void the warranty.

- When you don't use this TV set for a long period of time, be sure to disconnect both the power plug from the AC outlet and antenna for your safety.
- To prevent electric shock do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

#### IMPORTANT RECYCLING INFORMATION

This product utilizes both a Cathode Ray Tube (CRT) and other components that contain lead. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information, please contact your local authorities, or the Electronic Industries Alliance: <a href="http://www.eiae.org">http://www.eiae.org</a>



 As an "ENERGY STAR®" partner, JVC has determined that this product or product model meets the "ENERGY STAR®" guidelines for energy efficiency.

## **Important Safeguards**

#### **CAUTION:**

#### Please read and retain for your safety.

Electrical energy can perform many useful functions. This TV set has been engineered and manufactured to assure your personal safety. But improper use can result in potential electrical shock or fire hazards. In order not to defeat the safeguards incorporated in this TV set, observe the following basic rules for its installation, use and servicing. Also follow all warnings and instructions marked on your TV set.

#### INSTALLATION

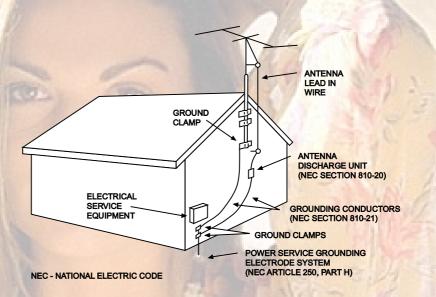
1 Your TV set is equipped with a polarized AC line plug (one blade of the plug is wider than the other). This safety feature allows the plug to fit into the power outlet only one way. Should you be unable to insert the plug fully into the outlet, try reversing the plug. Should it still fail to fit, contact your electrician.

(POLARIZED-TYPE)



- 2 Operate the TV set only from a power source as indicated on the TV set or refer to the operating instructions for this information. If you are not sure of the type of power supply to your home, consult your TV set dealer or local power company. For battery operation, refer to the operating instructions.
- 3 Overloaded AC outlets and extension cords are dangerous, and so are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your service technician for replacement.
- 4 Do not allow anything to rest on or roll over the power cord, and do not place the TV set where power cord is subject to traffic or abuse. This may result in a shock or fire hazard.
- 5 Do not use this TV set near water for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near swimming pool, etc.
- 6 If an outside antenna is connected to the TV set, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection requirements for the grounding electrode.

7 An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.



### **EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE**

8 TV sets are provided with ventilation openings in the cabinet to allow heat generated during operation to be released.

#### Therefore:

- Never block the bottom ventilation slots of a portable TV set by placing it on a bed, sofa, rug, etc.
- Never place a TV set in a "built-in" enclosure unless proper ventilation is provided.
- Never cover the openings with a cloth or other material.
- Never place the TV set near or over a radiator or heat register.
- 9 To avoid personal injury:
  - Do not place a TV set on a sloping shelf unless properly secured.
  - Use only a cart or stand recommended by the TV set manufacturer.
  - Do not try to roll a cart with small casters across thresholds or deep pile carpets.
  - Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.

### Use

- 10 Caution children about dropping or pushing objects into the TV set through cabinet openings. Some internal parts carry hazardous voltages and contact can result in a fire or electrical shock.
- 11 Unplug the TV set from the wall outlet before cleaning. Do not use liquid or an aerosol cleaner.
- 12 Never add accessories to a TV set that has not been designed for this purpose. Such additions may result in a hazard.



### PORTABLE CART WARNING (Symbol provided by RETAC)

- 13 For added protection of the TV set during a lightning storm or when the TV set is to be left unattended for an extended period of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to product due to lightning storms or power line surges.
- 14 A TV set and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the TV set and cart combination to overturn.

## **Service**

- 15 Unplug this TV set from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - A. When the power cord or plug is damaged or frayed.
  - B. If liquid has been spilled into the TV set.
  - C. If the TV set has been exposed to rain or water.
  - D. If the TV set does not operate normally by following the operating instructions. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the TV set to normal operation.
  - E. If the TV set has been dropped or damaged in any way.
  - F. When the TV set exhibits a distinct change in performance this indicates a need for service.
- 16 Do not attempt to service this TV set yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 17 When replacement parts are required, have the service technician verify in writing that the replacement parts he uses have the same safety characteristics as the original parts. Use of manufacturer's specified replacement parts can prevent fire, shock, or other hazards.
- 18 Upon completion of any service or repairs to this TV set, please ask the service technician to perform the safety check described in the manufacturer's service literature.
- 19 When a TV set reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the TV set.
- 20 Note to CATV system installer.
  - This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

# Table of Contents

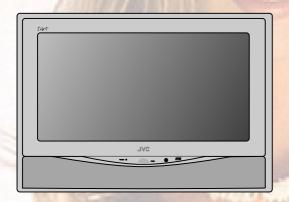
Quick Setup	. 7
Unpacking your TV	. 8
TV Remote Control	. 9
Getting Started	10
Connecting Your Devices	. 10
Connecting Your Devices Interactive Plug In Menu	. 15
LIGHT AND DEED DOUGHT DE	
Remote Programming	18
Setting CATV, VCR and DVD Codes	. 18
CATV or Satellite Codes	. 18
VCR Codes	. 19
DVD Codes	. 20
Search Codes	. 21
Onscreen Menus	22
Using the Guide	23
Initial Setup	24
Auto Tuner Setup	
Channel Summary	. 24
V-Chip	. 25
Set Lock Code	
Tilt Correction	
Language	
Front Panel Lock	
Auto Shut Off	
XDS ID	. 33
Video Input Label	34
Distance Adiaset	25
•	35
Picture Settings	
Adjust Picture Settings	35 36
Noise Muting	. 36
VSM	36
Sound Adjust	37
Sound Settings	. 37
Adjust Sound Settings	
MTS (Multi-channel Sound)	. 37
SUIAIT SOUND	3/

Clock Timers	38
Set Clock	38
On/Off Timer	39
World Clock	40
THE STATE OF THE S	- 15
Button Functions	41
Power	41
Number Buttons	41
100+ Button	41
Channel +/	41
Volume +/	41
Muting	41
Menu	41
Exit	41
Return +	42
Input	42
Display	43
Sleep Timer	43
Sound	44
C.C	44
Video Status	45
TheaterPro D6500K	45
Aspect	46
TV/CATV Slide Switch	47
VCR/DVD Slide Switch	47
VCR Buttons	47
DVD Buttons	47
Appendices	48
Troubleshooting	48
Specifications	49
Warranty	50
Authorized Service Centers	51
	•

# **Unpacking Your TV**

Thank you for your purchase of a JVC Color Television. Before you begin setting up your new television, please check to make sure you have all of the following items. In addition to this guide, your television box should include:

#### 1 Television



#### 1 Remote Control



# Two AA Batteries



Note: Your television and/or remote control may differ from the examples illustrated here.

Once you have unpacked your television, the next step is to connect it to your antenna/ cable or satellite system and to connect the audio/video devices you want to use with your television. To make these connections you will use plugs like the ones illustrated below.

### **Coaxial Cables**





Used to connect an external antenna or cable TV system to your TV.

### S-Video Cable





Used to make video connections with S-Video VCRs, Camcorders and DVD players.

# Component Cables Composite Cables Audio Cables



Used to connect audio/ video devices like VCRs, DVD players, stereo amplifiers, game consoles, etc.

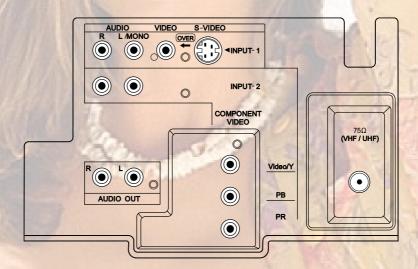
We recommend that before you start using your new television, you read your entire User's Guide so you can learn about your new television's many great features. If you're anxious to start using your television right away, a quick setup guide follows on the next few pages.

# **TV Model**

**NOTE:** Before you connect your television to another device, please refer to the proper diagrams for your specific TV and remote. These will help assist you in understanding how to connect your television to another device, as well as use the remote to set up your television.

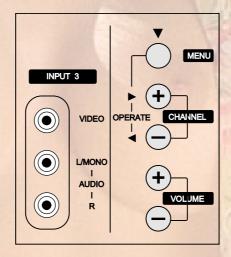
# Rear Panel Diagram

MODEL: AV-30W476



# Side Panel Diagram

MODEL: AV-30W476

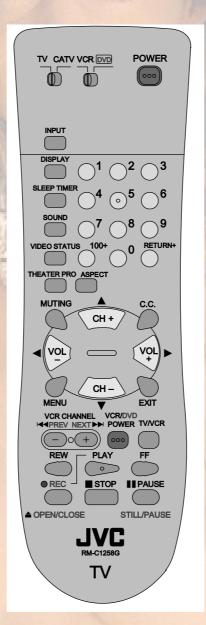


# Front Panel Diagram



MODEL: AV-30W476

# **TV Remote Control**



RM-C1258G

MODEL: AV-30W476

• For information on remote control buttons, see pages 41 - 47.

# **Getting Started**

### **Getting Started**

These quick setup pages will provide you, in three easy steps, with the basic information you need to begin using your new television right away.

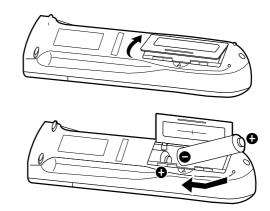
If you have questions, or for more detailed information on any of these steps, please consult other sections of this manual.

# Step 1 – The Remote Control

Before you can operate your remote control, you first need to install the batteries (included).

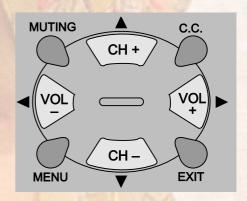
Lift and pull the latch on the back of the remote control to open. Insert two batteries (included) carefully noting the "+" and "-" markings, placing the "-" end in the unit first. Snap the cover back into place.

When you change the batteries, try to complete the task within three minutes. If you take longer than three minutes, the remote control codes for your VCR, DVD, and/or cable box/satellite receiver may have to be reset. See pages 18 - 20.



# **Key Feature Buttons**

The four key feature buttons at the center of the remote can be used for basic operation of the television. The top and bottom buttons will scan forward and back through the available channels. To move rapidly through the channels using JVC's **Hyperscan** feature, press and hold CH+ or CH—. The channels will zip by at a rate of five channels per second. The right and left buttons will turn the volume up or down. These buttons are also marked with four arrows and are used with JVC's onscreen menu system. To use the onscreen menus, press the Menu button.



# **Basic Operation**

Turn the television on and off by pressing the Power button at the top right corner of the remote. If this is the first time you are turning on the TV, the interactive plug-in menu appears.

- Make sure the TV/CATV switch is set to TV. Move the switch to CATV only if you need to operate a cable box.
- Slide the VCR/DVD selector switch to VCR to control a VCR. Slide to DVD to control a DVD player. Please see pages 18 to 20 for instructions on programming your remote control to operate a cable box, VCR or DVD player.

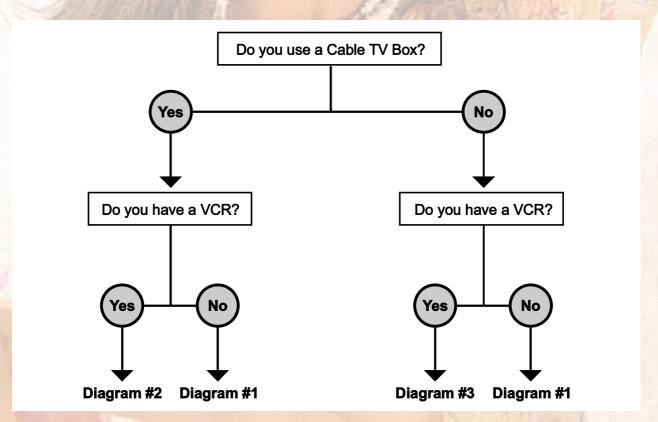


# Step 2 - Connecting Your Devices

Please follow the flow chart below to determine which connection setup is right for you. Then, refer to the appropriate diagrams to connect your television to other devices that you may have. After you are finished connecting your devices, plug the power cord into the nearest power outlet and turn on the TV.

A VCR is not necessary for operation of the television. If you follow these diagrams and the television does not work properly, contact your local cable operator.

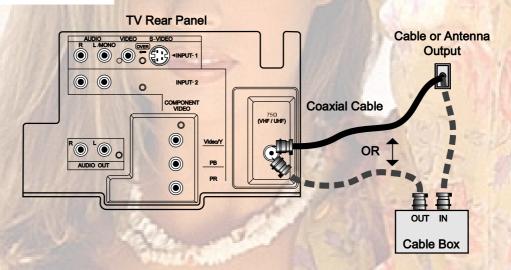
- To connect a DVD player, see **Diagram #3**. A DVD player is optional.
- If you have a satellite television system, please refer to the satellite TV manual.



# **Connections**

## Diagram #1

Illustration of AV-30W476

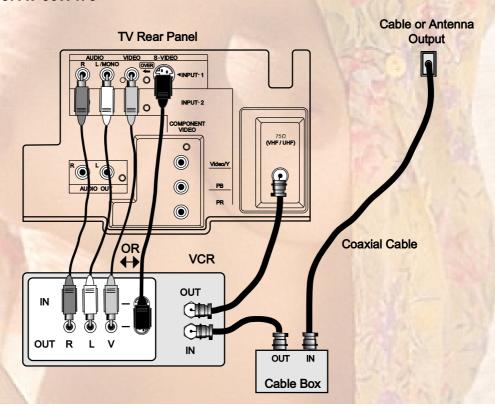


#### Note:

 If you do not have a cable box, connect the cable wire from the wall outlet into the back of the TV.

## Diagram #2

Illustration of AV-30W476



#### Notes:

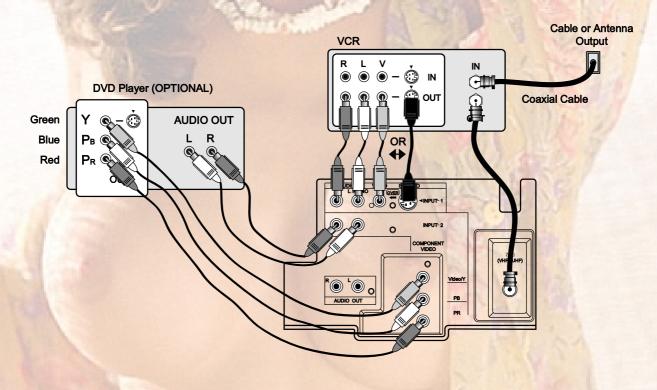
- If your VCR is a mono sound unit, it will have only one audio out jack. Connect it to the TV's LEFT AUDIO INPUT.
- Use the S-Video connection if possible for superior picture quality.
- Your VCR must be turned on to view premium cable channels.

# **Connections**

### Notes:

- Green, blue and red are the most common colors for DVD cables. Some models may vary colors. Please consult the user's manual for your DVD player for more information.
- Be careful not to confuse the red DVD cable with the red audio cable. It is best to complete
  one set of connections (DVD or audio output) before starting the other to avoid accidentally
  switching the cables.
- If you use INPUT 2 (Component-In), for a DVD connection, you must select
   "V2-COMPONENT" by pressing the INPUT button, for proper display of the DVD signal.
- Progressive DVD players (players with an output scan of 31.5 KHz) will not work properly with this television. Set your DVD player's output to "interlaced", or non-progressive mode.

# Diagram #3 Illustration of AV-30W476

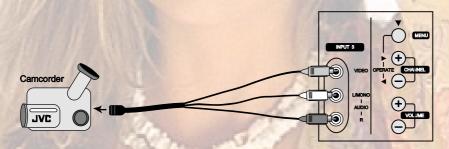


# **Connections**

# Connecting to a Camcorder

You may connect a camcorder, game console or other equipment to your television by using the side input jacks (Input 3). You can also connect these using the television's rear input jacks, using the same instructions.

#### Illustration of AV-30W476

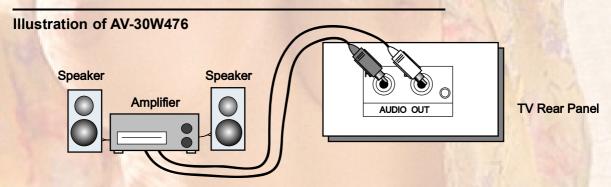


- 1) Connect a yellow composite cable from the camcorder VIDEO OUT, into the VIDEO IN on the side of the TV.
- 2) Connect a white composite cable from the camcorder LEFT AUDIO OUT, into the LEFT AUDIO IN on the side of the TV.
- 3) Connect a red composite cable from the camcorder RIGHT AUDIO OUT, into the RIGHT AUDIO IN on the side of the TV.

#### Note:

 If your camcorder is a mono sound model it will have only one AUDIO OUT. Connect it to the LEFT AUDIO IN.

# Connecting to an External Amplifier



- 1) Connect a white composite cable from the LEFT AUDIO OUTPUT on the back of the TV to the LEFT AUDIO INPUT on the amplifier.
- 2) Connect a red composite cable from the RIGHT AUDIO OUTPUT on the back of the TV to the RIGHT AUDIO INPUT on the amplifier.

#### Notes:

- Refer to your amplifier's manual for more information.
- You can use AUDIO OUTPUT for your home theater system.

# **Step 3 – The Interactive Plug In Menu**

When you turn your television on for the first time the interactive plug-in menu will appear. The plug-in menu helps you to get your TV ready to use by letting you set your preferences for:

- The language in which you want the onscreen menus to appear.
- Setting the TV's clock to the correct time so your timer functions will work properly. You can choose "AUTO" or "MANUAL" for setting the clock.
- The auto tuner setup of which channels you wish to receive.

We recommend you complete the interactive plug-in items before you start using your television.

# Language

After the "JVC INTERACTIVE PLUG IN MENU" has been displayed, the TV automatically switches to the LANGUAGE settings. You can choose to view your onscreen menus in three languages: English, French (Français) or Spanish (Español).



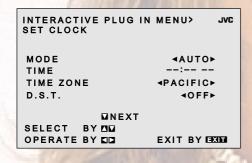
▼ To choose a language: (English, Français or Español)

▼ To NEXT (To set clock)

(To be continued...)

## **Auto Clock Set**

Before you use any of your TV's timer functions, you must first set the clock. You may precisely set your clock using the XDS time signal broadcast by most public broadcasting stations. If you do not have this in your area, you will have to set the clock manually. See manual clock set below. To set the clock using the XDS signal:



**▼** To choose AUTO

▼ To TIME ZONE

To select your time zone: (Atlantic, Eastern, Central, Mountain, Pacific, Alaska or Hawaii)

▼ To move to D.S.T. (Daylight Savings Time)

**◆►** To turn D.S.T. ON or OFF

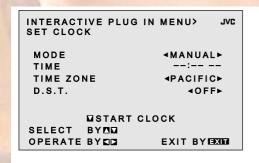
▼ To NEXT (To Auto Tuner Setup)

#### Notes:

- D.S.T. can be used only for US and Canada when it is set to ON in the SET CLOCK menu.
- Only when the MODE set to AUTO, the Daylight Savings Time feature automatically adjusts
  your TV's clock for Daylight Savings. The clock will move forward one hour at 2:00 am on
  the first Sunday in April. The clock will move back one hour at 2:00 am on the last Sunday in
  October.
- You will have to reset the clock after a power interruption. You must set the clock before operating any timer functions.

# Manual Clock Set

To set your clock manually (without using the XDS signal), choose MANUAL. If you choose AUTO, see auto clock set above.



To choose MANUAL

▼ To TIME

◆ To set the hour

▼ To minute

To set the minute

To START CLOCK

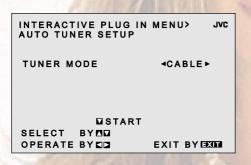
#### Note:

You will have to reset the clock after a power interruption. You must set the clock before
operating any timer functions.

(To be continued...)

# **Auto Tuner Setup**

In auto tuner setup, the TV automatically scans through all available channels, memorizing the active ones and skipping over blank ones or channels with weak signals. This means when you scan (using the Channel +/- buttons) you will receive only clear, active channels.







To choose CABLE or AIR (or SKIP when you skip Auto Tuner Setup)

To START



Programming will take approximately 1 to 2 minutes.

When the setup is finished, THANK YOU!! SETUP IS NOW COMPLETE is displayed. Your quick setup is now complete. You can now begin watching your television, or you can continue on in this guide for more information on programming your remote control, or using the JVC onscreen menu system to customize your television viewing experience.

#### Notes:

- Noise muting will not work during Auto Tuner Setup.
- Skip appears only for interactive plug-in menu.
- The interactive plug-in menu setting does not appear if your TV has been turned on before.
   In this case, use the initial setup menu to perform these settings. See pages 32, 38 and 24.

Cable Box and Satellite Users: After your auto tuner setup is complete, you may, (depending on the type of hookup), have only 1 channel, usually 3 or 4 in the auto tuner memory. This is normal.



The Quick Setup is complete

# Setting the CATV, VCR and DVD Codes

You can program your remote to operate your cable box, satellite receiver, VCR or DVD player by using the instructions and codes listed below. If the equipment does not respond to any of the codes listed below or to the code search function, use the remote control supplied by the manufacturer.

## **Cable Box or Satellite Codes**

The remote control is programmed with cable box and satellite codes for power on/off, channel up/down, and 10 key operation.

- 1) Find the cable box or satellite brand from the list of codes shown below.
- 2) Slide the 2-way selector switch to "CATV".
- 3) Press and hold down the DISPLAY button, then enter the first code number listed with the 10 key pad.
- 4) Release the DISPLAY button, and confirm the operation of the cable box/satellite receiver.
- If your cable or satellite box does not respond to the first code, try the others listed. If it does not respond to any code, try the search codes function, on page 21.

Cable Box	CODES	Cable Box	CODES	Digital	CODES
ABC	024	Puser	032	Satellite	30220
Archer	032, 025	RCA	061, 070	Systems	
Cableview	051, 032	Realistic	032	Echostar	100, 113, 114,
Citizen	022, 051	Regal	058, 064, 040,		115
Curtis	058, 059	rtogai	041, 042, 045,	Express VU	100, 113
Diamond	024, 032, 025		068	G.E.	106
Eagle	029	Regency	034	G.I.	108
Eastern	034	Rembrandt	037, 032, 051,	Gradiente	112
GC Brand	032, 051	Comouna	038	Hitachi	104. 111
Gemini	022, 043	Samsung	051		•
General Instrument		Scientific Atlanta	057, 058, 059	HNS (Hughes)	104
Contra morament	026, 027, 020,	SLMark	051, 047	Panasonic	105
	021, 022, 057,	Sprucer	051, 056	Philips	102, 103
Hamlin	023 040, 041, 042,	Stargate	032, 051	Primestar	108
I I I I I I I I I I I I I I I I I I I	045, 058, 064	Telecaption	067	Proscan	106, 109, 110
Hitachi	049, 024	Teleview	047, 051	RCA	106, 109, 110
Jerrold	065, 024, 025, 026, 027, 020,	Texscan	044	Sony	107
	026, 027, 020, 021, 022, 057,	Tocom	035, 036, 066	Star Choice	104, 108
	023	Toshiba	050	Toshiba	101
Macom	049, 050, 051, 054	Unika	032, 025	Uniden	102, 103
Magnavox	033	Universal	022, 032		
Memorex	030	Videoway	052		
Movietime	032, 051	Viewstar	029, 030		
Oak	039, 037, 048	Zenith	063, 046		
Panasonic	055, 056, 060, 071, 073	Zenith/Drake Satellite	046		
Paragon	063				
Philips	028, 029, 030, 052, 053, 031, 069				
Pioneer	047, 062				
Pulsar	051, 032				

## **VCR Codes**

The remote control is programmed with VCR codes for power on/off, play, stop, fast-forward, rewind, pause, record, channel up/down operation.

- 1) Find the VCR brand from the list of codes shown below.
- 2) Slide the first 2-way selector switch to "TV" and the other 2-way selector switch to "VCR".
- 3) Press and hold down the DISPLAY button, then enter the first code number listed with the 10 key pad.
- 4) Release the Display button, and confirm the operation of the VCR.
- If your VCR does not respond to the first code, try the others listed. If it does not respond to any of the codes, try the search codes function on page 21.
- After you program your remote, some VCR buttons may not work properly. If so, use the VCR's remote.
- To record, hold down the REC button on the remote and press PLAY.

VCRs	CODES	VCRs	CODES	VCRs	CODES
Admiral	035	Marantz	003, 004, 005	Samsung	037, 060, 062,
Aiwa	027, 032, 095	Marta	064		033, 089
Akai	029, 072, 073,	Memorex	024, 067	Samtron	089
THE RESIDENCE	074	MGA	038, 040, 047,	Sansui	003, 026, 020,
Audio Dynamic			048, 041, 042	0	052
Bell & Howell	063, 071	Minolta	058, 045, 093	Sanyo	063, 067, 091, 071
Broksonic	020, 026, 094	Mitsubishi	038, 040, 047,	Scott	059, 060, 062,
Canon	023, 025		048, 041, 042, 078, 090	00011	067, 038, 040,
CCE	043	Multitech	047, 027, 062	ALL NO	047, 048, 026,
Citizen	064			11 11 11	020
Craig	063, 029, 064	NEC	003, 004, 005,	Sears	063, 064, 065,
Curtis Mathes	045, 024, 027,	Olympic	024, 023	JE-	066, 058, 000, 001
	093	Optimus	028, 021, 035,	Shintom	075
Daewoo	043, 059, 024, 092	- pairide	064	Sharp	035, 036, 080,
DBX	003, 004, 005	Orion	026, 020	Ondip	088
Dimensia	045, 093	Panasonic	023, 024, 021,	Signature 2000	027, 035
Emerson	043, 026, 077.		022	Singer	075
Emerson	061, 025, 042,	Penney	024, 058, 045,	Sony	028, 029, 030,
	020, 076		063, 003, 004,	11.5	053, 054, 055
Fisher	063, 066, 067,	Pentax	005, 093	SV 2000	027
	065, 071, 091	Peniax	093	Sylvania	031, 023, 024,
Funai	027, 026, 020,	Philco	031, 024, 027,		027
	000	1111100	023, 026, 020,	Symphonic	027, 081
G.E.	033, 045, 024		043	Tashiro	064
Go Video	037, 051, 049,	Philips	031, 023, 024,	Tatung	003, 004, 005
	050, 089		086	Teac	003, 004, 027,
Goldstar	064	Pioneer	023		005
Gradiente	083, 084, 081,	Proscan	045, 058, 023,	Technics	021, 022, 023,
	000, 001		024, 031, 046, 059, 060, 033,	<b>-</b>	024
Hitachi	023, 045, 058,		087, 093	Teknika	024, 027, 070
	027, 081, 093	Quasar	021, 022, 023,	Toshiba	059, 046, 079
Instant Replay	024, 023		024	Vector Research	005
Jensen	003	Radio Shack	033, 024, 063,	Wards	035, 036, 067, 044, 064
JVC	000, 001, 002,		036, 067, 040,	Yamaha	063, 003, 004,
	003, 004, 005	DCA	027	ramana	005, 003, 004,
Kenwood	003, 004, 064,	RCA	023, 045, 058,	Zenith	044, 082, 064,
	005		046, 059, 060,		094
LXI	027, 064, 058,		083, 084, 085,	5.1	
	065, 066, 063,		087, 093	1	-07
	067	Realistic	024, 063, 036,	100000000000000000000000000000000000000	State of the state
Magnavox	031, 023, 024,		067, 040, 027	2	
	086		3-3-3-1-1		10000

# **DVD Codes**

The remote control is programmed with DVD codes for power on/off, play, stop, fast-forward, rewind, previous/next chapter, tray open/close, and still/pause operation.

- 1) Find the DVD player brand from the list of codes shown below.
- 2) Slide the first 2-way selector switch to "TV" and the other 2-way selector switch to "DVD".
- 3) Press and hold down the DISPLAY button, then enter the first code number listed with the 10 key pad.
- 4) Release the DISPLAY button, and confirm the operation of the DVD player.
- If your DVD player does not respond to the first code, try the others listed. If it does not respond to any of the codes, try the search codes function on page 21.
- After you program your remote, some DVD buttons may not work properly. If so, use the DVD player's remote.

DVD Player	CODES	DVD Player	CODES
Aiwa	043	RCA	021, 026
Apex	040	Sampo	034
Denon	020, 037	Samsung	030
Hitachi	030, 031	Sharp	028
JVC	000	Silvania	038
Kenwood	035	Sony	024, 045, 046,
Konka	039	Y	047
Mitsubishi	025	Technics	020
Onkyo	041	Toshiba	023
Oritron	044	Vialta	050
Panasonic	020	Wave	042
Philips	023, 036	Yamaha	020
Pioneer	022	Zenith	027, 032
Raite	033		

## **Search Codes**

#### Cable/Satellite Search Codes Function

- 1) Slide the first 2-Way Mode Selector switch to CATV.
- 2) Press and hold down the Power button, then press the Return+ button for more than three seconds.
- 3) Release the Return+ button, then release the Power button.
- 4) Press the Power button on the remote, and see if the cable or satellite box responds.
- 5) If there was a response, press Return+. The codes are now set. If there was no response, repeat Step 4. If you repeat Step 4 a total of 52 times without a response, use the remote control that came with your equipment.
- 6) Press Return+ to exit.

### **VCR/DVD Search Codes Function**

- 1) Slide the first 2-way selector switch to "TV" and the other 2-way selector switch to "VCR" or "DVD".
- 2) Press and hold down the VCR or DVD Power button, then press the Return+ button for more than three seconds.
- 3) Release the Return+ button, then release the VCR or DVD Power button.
- 4) Press the VCR or DVD Power button, and see if the VCR or DVD responds.
- 5) If there was a response, press Return+. The codes are now set. If there was no response, repeat Step 4. If you repeat Step 4 a total of 80 times for the VCR (30 times for the DVD player), and there is no response, use the remote control that came with your equipment.
- 6) Press Return+ to exit.

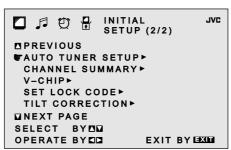
# **Onscreen Menus**

## **Using the Guide**

Certain symbols are used throughout this guide to help you learn about the features of your new television. The ones you will see most frequently are:

- ▲▼ Up and Down arrows mean press the C<sub>H</sub>+ or C<sub>H</sub>— buttons. Pressing the C<sub>H</sub>+ or C<sub>H</sub>— buttons let you:
  - Move vertically in a main menu screen
  - Move through a submenu screen
  - Move to the next letter, number, or other choice in a submenu
  - Back up to correct an error
  - Scan through TV channels (when not in a menu screen)
- Left and right arrows mean press the Volume+ or Volume- buttons to move left or right to:
  - · Select a highlighted menu item
  - · Select an item in a submenu
  - Select numbers in certain menu options
  - Turn the volume up or down (when not in a menu screen)
- The "press button" icon means you should press the button named on your remote control. (Button names appear in SMALL CAPITAL LETTERS.)
- The "helping hand" icon points to the highlighted or selected item in a menu.

To bring up the onscreen menu, press the Menu button on the remote control. The item that appears in yellow is the one currently selected. If you press the Menu button again, the onscreen display will skip to the next menu screen. If you use the Menu button on the TV's side panel instead of the remote, an additional menu screen showing input, video status mode and aspect mode will appear. The "interactive plug-in menu" will appear the first time the TV is plugged in.



#### Notes:

- Menus shown in this book are illustrations, not exact replications of the television's onscreen displays.
- If you do not press any buttons for a few seconds, the onscreen menu will automatically shut off.

# Onscreen Menus

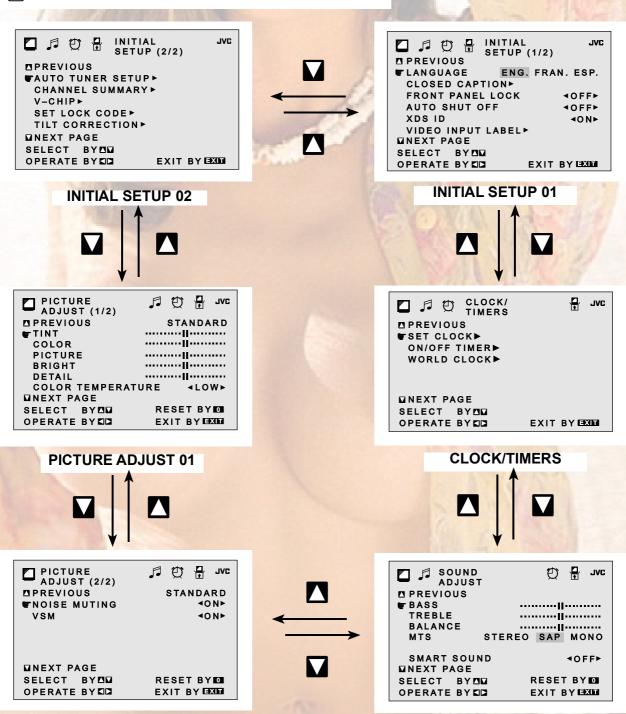
# The Onscreen Menu System

Your television comes with JVC's onscreen menu system. The onscreen menus let you make adjustments to your television's operation simply and quickly. Examples of the Onscreen Menus are shown below. Detailed explanations on using each menu follow later in this guide. For information about the interactive plug-in Menu, see pages 15 - 17.



Press the MENU button

**PICTURE ADJUST 02** 



**SOUND ADJUST** 

### **Auto Tuner Setup**

The auto tuner setup function is described on page 17 as the interactive plug-in menu. If you need to run the auto tuner setup again, follow the steps below.

4

Press the MENU button

▲▼ To

To AUTO TUNER SETUP

◆ To operate

▼ To choose CABLE or AIR

▼ To move to START

▼ To start Auto Tuner Setup

INITIAL SETUP>
AUTO TUNER SETUP

TUNER MODE 

START

SELECT BY MA

OPERATE BY MA

EXIT BY EXID

Programming will take approximately 1 to 2 minutes. The auto tuner is finished when the message **PROGRAMMING OVER!** appears onscreen.

# **Channel Summary**

Channel summary allows you to customize the line-up of channels received by your TV. You can add or delete channels from the line-up or prevent any unauthorized viewers from watching any or all 181 channels.



Press the Menu button

**▲▼** To CHANNEL SUMMARY

◆ To operate

The Channel summary screen will now be displayed with the channels set to scan marked with an " $\sqrt{}$ ". You can delete channels from the scan by removing the " $\sqrt{}$ ". If any channels were missed during auto tuner setup and you wish to add them, you may by placing an " $\sqrt{}$ " next to the channel number.

**▲▼** To the SCAN column

▼ To include or delete from scan

▲▼ To the ID column

▼ To add channel label

▼ To insert letter

To next letter

▼ To move to FINISH when label is complete

◆ To memorize the label

Press the Exit button when finished

You can block access to a channel by activating the channel lock.

Press the Menu button

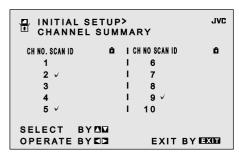
**▲▼** To CHANNEL SUMMARY

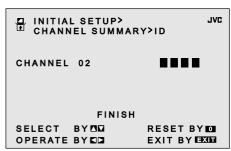
◆ To operate

▲▼ To the Lock Column ( 1 )

Press the Zero button to lock or unlock that channel

Press the Exit button when finished





## **Channel Guard Message**

When a viewer attempts to watch a guarded channel, the following message appears:

To watch a channel that you have locked, enter the Lock Code using the 10 key pad. If the wrong code is entered, the message "INVALID LOCK CODE!" will flash on the screen.

The channel cannot be accessed until the correct code is entered

THIS CHANNEL IS LOCKED BY CHANNEL GUARD. PLEASE ENTER LOCK CODE BY 10 KEY PAD TO UNLOCK IT.

NO. - - - -

#### Notes:

- Once a channel has been unlocked, it will remain unlocked until the television is turned off.
- See also "Set Lock Code", page 31.

### V-Chip

Your TV is equipped with V-Chip technology which enables you to block channels or content that you feel to be inappropriate for children, based on US and Canada rating guidelines. V-Chip has no effect on video signals from a DVD discs, VCR tapes or Camcorder connection.

Note: Some programs, and movies are broadcast without a ratings signal. Even if you set up V-CHIP ratings limits, these programs will not be blocked. See page 26 for information on how to block unrated programs.

Note (for Canadian viewers): The V-Chip function is based on specifications designed for the United States and therefore may not work properly in Canada.

You can customize the V-Chip settings of your television to match your personal tastes. The V-Chip menu below is the starting point for your V-Chip settings

You can use US V-Chip settings (for programming broadcast from the United States), Canadian V-Chip settings (for programming broadcast from Canada), and movie ratings. You may use any or all of the settings (US V-Chip, Canada V-Chip, Movie ratings). Descriptions for setting each of the three V-Chip formats appear in the next six pages along with descriptions of the rating categories.

To access the rating categories:



Press the Menu button



To V-CHIP



To operate (Lock icon will appear)



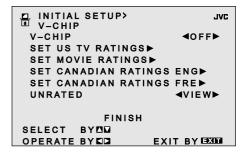
Press Zero to access the V-Chip menu



To turn V-Chip ON or OFF (V-Chip must be turned ON for rating settings to operate)



To move to SET US TV RATINGS, SET MOVIE RATINGS, or SET CANADIAN RATINGS (see following pages for descriptions of each item)



### **Unrated Programs**

Unrated programming refers to any programming which does not contain a rating signal. Programming on television stations which do not broadcast rating signals will be placed in the "Unrated Programming" category.

Examples of Unrated programs:

- Emergency Bulletins
- News
- Public Service Announcements
- Sports
- · Some Commercials
- Locally Originated Programming
- Political Programs
- · Religious Programs
- Weather

#### Note:

 TV programs or movies that do not have rating signals will be blocked if the unrated category is set to BLOCK.

### **Directions to Block Unrated Programs**

You can block programs that are not rated.



Press the MENU button



To V-CHIP



To operate (The lock icon appears)



Press Zero to access V-Chip setup options



To UNRATED



To VIEW or BLOCK



Press Exit when done



## **US V-Chip Ratings**

### **U.S. PARENTAL RATING SYSTEMS**

Programs with the following ratings are appropriate for children.

### ☐ TV Y is Appropriate for All Children

Programs are created for very young viewers and should be suitable for all ages, including children ages 2 - 6.

#### ☐ TV Y7 is for Older Children

Most parents would find such programs suitable for children 7 and above. These programs may contain some mild fantasy violence or comedic violence, which children should be able to discern from reality.

### Programs with the following ratings are designed for the entire audience.

#### ☐ TV G stands for General Audience

Most parents would find these programs suitable for all age groups. They contain little or no violence, no strong language, and little or no sexual dialog or situations.

### ☐ TV PG Parental Guidance Suggested

May contain some, but not much, strong language, limited violence, and some suggestive sexual dialog or situations. It is recommended that parents watch these programs first, or with their children.

### ☐ TV 14 Parents Strongly Cautioned

Programs contain some material that may be unsuitable for children under the age of 14 including possible intense violence, sexual situations, strong coarse language, or intensely suggestive dialog. Parents are cautioned against unattended viewing by children under 14.

### □ TV MA Mature Audiences Only

These programs are specifically for adults and may be unsuitable for anyone under 17 years of age. TV MA programs may have extensive V, S, L, or D.

#### **Viewing Guidelines**

In addition to the ratings categories explained above, information on specific kinds of content are also supplied with the V-Chip rating. These types of content may also be blocked. The content types are:

- V/FV is for VIOLENCE/FANTASY VIOLENCE
- · S stands for SEXUAL CONTENT
- L stands for strong LANGUAGE
- · D stands for suggestive DIALOG

# **Setting US V-Chip Ratings**

Press the MENU button

To V-CHIP

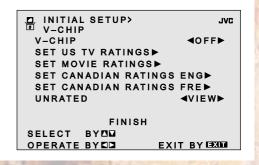
To operate (lock icon appears)

Press Zero to access the V-Chip menu

To turn V-Chip ON or OFF

To move to SET US TV RATINGS

To operate



## **Directions to set US V-Chip Ratings**

Line up the cursor in the column (TV PG, TV G, etc.) with the content row (V/FV, S, etc.) and press the ▲ or ▼ to move the cursor to the correct location. Press ◀ or ▶ to turn the locking feature on or off. An item is locked if the 🔒 icon appears instead of a "—".

For example. To block viewing of all TV 14 shows, move the cursor to the top row of that column and add a lock icon. Once you've put a lock on the top row, everything in that column is automatically locked.

To the TV 14 Column

To turn on the lock

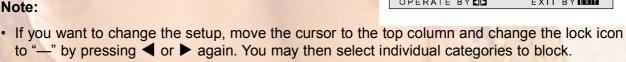
To FINISH

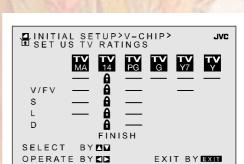
To save settings and exit



Press the EXIT button when finished







# **Movies Ratings**

#### □ NR – Not Rated

This is a film which has no rating. In many cases these films were imported from countries which do not use the MPAA ratings system. Other NR films may be from amateur producers who didn't intend to have their film widely released.

NR (Not Rated) Programming may contain all types of programming including children's programming, foreign programs, or adult material.

#### □ G – General Audience

In the opinion of the review board, these films contain nothing in the way of sexual content, violence, or language that would be unsuitable for audiences of any age.

#### □ PG - Parental Guidance

Parental Guidance means the movie may contain some contents such as mild violence, some brief nudity, and strong language. The contents are not deemed intense.

### ☐ PG-13 – Parents Strongly Cautioned

Parents with children under 13 are cautioned that the content of movies with this rating may include more explicit sexual, language, and violence content than movies rated PG.

#### ☐ R - Restricted

These films contain material that is explicit in nature and is not recommended for unsupervised children under the age of 17.

#### ☐ NC-17 – No One Under 17

These movies contain content which most parents would feel is too adult for their children to view. Content can consist of strong language, nudity, violence, and suggestive or explicit subject matter.

### ☐ X – No One under 18

Inappropriate material for anyone under 18.

# **Directions to set Movie (MPAA) Ratings**



Press the MENU button



To V-CHIP



To operate (Lock icon appears)



Press Zero to access V-Chip setup options



To SET MOVIE RATINGS

To enter movies menu

#### For example:

To block viewing of X and NC-17 rated from shows:

To the X Column AV

To turn on the lock

To the NC-17 Column

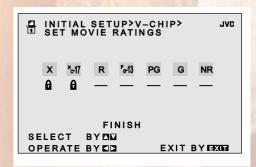
To turn on the lock

To FINISH

To save settings and exit



Press the Exit button when finished



### **Canadian V-Chip Ratings**

### □ E – Exempt

Exempt programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.

### ☐ C – Programming Intended for Children

Violence Guidelines: There will be no realistic scenes of violence. Depictions of aggressive behavior will be infrequent and limited to portrayals that are clearly imaginary, comedic or unrealistic in nature.

### ☐ C8+ - Programming Intended for Children 8 and Over

Violence Guidelines: Any realistic depictions of violence will be infrequent, discreet, of low intensity and will show the consequences of the acts. There will be no offensive language, nudity or sexual content.

### ☐ G – General Audience

Programming will contain little violence and will be sensitive to themes which could affect younger children.

### □ PG - Parental Guidance

Programming intended for a general audience, but which may not be suitable for younger children. Parents may consider some content not appropriate for children aged 8-13.

#### ☐ 14+ – 14 Years and Older

Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens. Programming may contain mature themes and scenes of intense violence.

#### ☐ 18+ – Adult

Material intended for mature audiences only.

# **Directions to set Canadian V-Chip Ratings**

(h

Press the Menu button

AV

To V-CHIP

**4**>

To operate (lock icon appears)



Press Zero to access V-Chip setup options

To SET CANADIAN RATINGS ENG (for English)

4

To enter ratings menu

#### For example:

To block viewing of programming rated 14+ and 18+:

To the 18+ Column

**◆**▶

To turn on the lock

AV

To the 14+ Column

**4** 

To turn on the lock

 $\mathbf{A}\mathbf{V}$ 

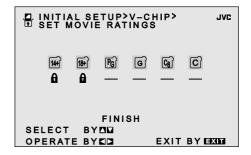
To FINISH

4>

To save settings and exit

ᢉᢇ

Press the Exit button when finished



#### Note:

• For instructions on "SET CANADIAN RATINGS FRE (in French)", please see page 30 in the French side of this user's guide.

## **Set Lock Code**

Channel guard and V-Chip settings are protected by a four-digit lock code. Your TV comes preset with a lock code of "0000". You may change the code to any four-digit number you wish. To change the lock code, follow the steps below.



Press the MENU button



To SET LOCK CODE



To operate (lock icon appears)



Press Zero to access the lock code

The first digit will be highlighted

**()** 

To select the number



To move to the next digit

Continue to follow these directions for all four numbers



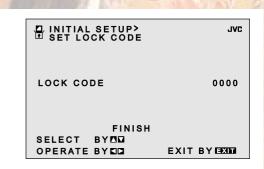
To FINISH



To save settings and exit (your lock code is now set)



Press the Exit button when finished



When a viewer attempts to watch a blocked channel, this message appears:

THIS PROGRAMMING EXCEEDS YOUR RATING LIMITS. PLEASE ENTER LOCK CODE BY 10 KEY PAD TO UNLOCK IT. NO. - - - -

The channel will remain blocked until the correct lock code is entered (see above for information on setting your lock code).

#### Notes:

- After a power interruption you must reset the lock code.
- Write your lock code number down and keep it hidden from potential viewers.
- If you forget the lock code, a new code may be set using the steps listed above.

## **Tilt Correction**

This adjusts the pictures so that it looks even on the screen and not lopsided.



Press the Menu button



To TILT CORRECTION



To enter

ď,

To adjust TILT CORRECTION.



# Language

The language function is described on page 15 as the interactive plug-in menu. If you need to choose the language again, follow the steps below.



Press the Menu button



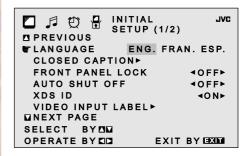
To LANGUAGE



To choose a language: ENG. (English), FRAN. (French) or ESP. (Spanish)



Press the Exit button when finished



# **Closed Caption**

Many broadcasts now include an onscreen display of dialog called closed captions. Some broadcasts may also include displays of additional information in text form. Your television can access and display this information using the closed caption feature. To activate the closed caption feature, follow the steps below.



Press the MENU button



To CLOSED CAPTION



To operate



To select CAPTION or TEXT

To save settings and exit

**4**>

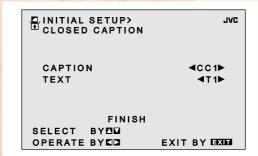
To select a caption (CC1 to CC4) or text channel (T1 to T4)

X

To accept that selection and move to FINISH

**\** 

Press the Exit button when finished



#### Notes:

- Closed caption subtitles are usually found on closed caption channel CC1. Some programs
  may include additional text information which is usually found on text channel T1. The other
  channels are available for future use.
- Closed captioning may not work correctly if the signal being received is weak or if you are playing a video tape.
- Most broadcasts containing closed captioning will display a notice at the start of the program.
- To select the mode, press the C.C. button. See page 44.

### **Front Panel Lock**

This allows you to lock the keys on the side of the TV, so that a child may not accidentally change your viewing preferences.



Press the Menu button



To FRONT PANEL LOCK



To turn ON or OFF



Press the Exit button when finished

You can turn off this feature in the following ways:

- Unplug the power cord, and plug it back in. Do this if your batteries die, or you lose your remote control.
- · Use the remote control.
- Press the Menu button on the side of the TV for more than 3 seconds. In this case, the OSD for FRONT PANEL LOCK will appear.

#### Note:

 To turn ON/OFF the TV, press the power button on the front of the TV for more than 3 seconds. This feature will remain ON.

### **Auto Shut Off**

This function automatically shuts off your TV when there is no signal from the channel the TV is on.



Press the Menu button



To AUTO SHUT OFF



To turn ON or OFF



Press the Exit button when finished

 If the channel that you have on does not receive a signal for more than one minute, the blinking text "NOT RECEIVING A SIGNAL AUTO SHUT OFF IN 9 MIN." appears on the screen, and starts the countdown. If no signal is being received within 10 minutes, the TV shuts itself off.

### **XDS ID**

XDS ID Display provides a channel's call letters, the network's name, and even a program name. The XDS ID information is provided by the broadcaster.



Press the Menu button



To XDS ID



To turn ON or OFF



Press the Exit button when finished

# Video Input Label

This function is used to label video input connections for the onscreen displays.

(m)

Press the MENU button

**To VIDEO INPUT LABEL** 

**◄▶** To operate

To select the desired video input

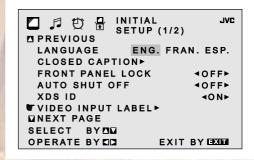
To select the desired preset input label (see chart below)

**▲▼** To FINISH

▼ To save settings and exit

P

Press the Exit button when finished



INITIAL SETUP>	JVC
VIDEO-1	∢ VCR ►
VIDEO-2	dVD ►
V2-COMPONENT	SAT ►
VIDEO-3	<b>∢</b> GAME►
FINISH	
SELECT BY D	
OPERATE BY ♥□	EXIT BY EXID

Preset Labels	Select when
VCR	You have a VCR connected to the video input
DVD	You have a DVD connected to the video input
DVHS	You have a Digital VCR connected to the video input
STB	You have a Set-top Box connected to the video input
SAT	You have a Satellite Receiver connected to the video input
AMP	You have an Amplifier connected to the video input
GAME	You have a Video Game connected to the video input
CAM	You have a Video Camera connected to the video input
DISC	You have a Video Disc player connected to the video input

# Picture Adjust

### **Picture Settings**

These settings allow you to change and adjust the way the picture appears on your television.

#### TINT

Tint allows you to adjust the levels of red and green in your TV picture.

#### COLOR

The color function lets you make all the colors in the TV picture appear either more vivid or subtle.

#### **PICTURE**

Picture allows you to adjust the levels of black and white on the TV screen, giving you a darker or brighter picture overall.

#### **BRIGHT**

You can adjust the overall brightness of the TV picture with the Bright control.

#### **DETAIL**

The Detail feature adjusts the level of fine detail displayed in the picture.

## **Adjust the Picture Settings**



Press the Menu button



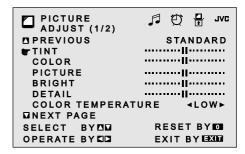
◆ To enter

▼ To adjust the setting

▲▼ To move to the next setting

(m

Press the Exit button when finished



#### Note:

If you press the 0 button, you can reset the setting to the factory default setting.

# **Picture Adjust**

## **Color Temperature**

You can decide how strong or dull the colors appear on the TV screen.



Press the Menu button

To COLOR TEMPERATURE

4>

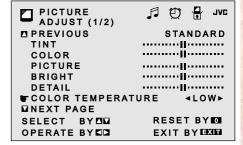
To enter

**4**>

To set LOW or HIGH

ᠹᡢ

Press the Exit button when finished



Note: If you press the 0 button, you can reset the setting to the factory default setting.

## **Noise Muting**

This feature inserts a blank blue screen over channels which are not broadcasting or are too weak to be received clearly.



Press the Menu button

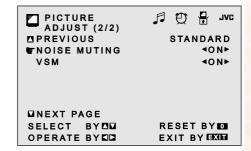
To NOISE MUTING



To turn noise muting ON or OFF



Press the Exit button when finished



#### Note:

Noise muting will not work during auto tuner setup or when you operate channel summary.

# (VSM) Velocity Scan Modulation

Velocity scan modulation circuitry varies the electron beam's horizontal scanning speed to help accentuate the differences in picture brightness to sharpen the edges of images.



Press the Menu button



To VSM



To enter

**4** 

To turn VSM ON or OFF

PICTURE
ADJUST (2/2)
PREVIOUS
NOISE MUTING

VVSM

VNEXT PAGE
SELECT BY VN
OPERATE BY VN
EXIT BY EXIT

**Note:** If you press the 0 button, you can reset the setting to the factory default setting.

# **Sound Adjust**

#### **Sound Settings**

These settings allow you to change and adjust the sound on your television.

**BASS** – You can increase or decrease the level of low-frequency sound in the TV's audio with the bass adjustment.

**TREBLE** – Use treble to adjust the level of high-frequency sound in your TV's audio.

**BALANCE** – Adjust the level of sound between the TV's left and right speakers with the balance setting.

#### **Adjust the Sound Settings**



Press the MENU button



To BASS, TREBLE or BALANCE



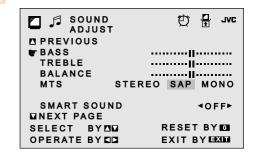
To adjust the setting



To move to the next setting



Press the Exit button when finished



#### Note:

· If you press the 0 button, you can reset the setting to the factory default setting.

#### MTS (Multi-Channel Television Sound)

MTS technology allows several audio signals to be broadcast at once, giving you a choice in what you wish to hear with a TV program. In addition to mono or stereo sound, an MTS broadcast may also include a second audio program (SAP).



Press the MENU button



To MTS



Select the mode

(The ON AIR arrow tells you if a broadcast is in stereo and/or contains an SAP).



Press the Exit button when finished

#### Notes:

- Keep the TV in stereo mode to get the best sound quality. The sound will work in stereo
  mode even if a certain broadcast is in mono sound only.
- Choose the mono setting to reduce excessive noise on a certain channel or broadcast.
- Selecting SAP will allow you to hear an alternative soundtrack, if one is available.

#### **Smart Sound**

Decreases high sound levels, giving a regulated sound level.



Press the Menu button



To SMART SOUND



To turn ON or OFF



Press the Exit button when finished

# **Clock/Timers**

#### **Set Clock**

The set clock function is described on page 16 as the interactive plug-in menu. You can choose to set the clock automatically, or manually. If you need to set the clock again, follow the steps below.



Press the Menu button

To SET CLOCK

4

To operate

When you set the clock automatically, choose AUTO by pressing the ◀ or ▶ arrows.

**▲▼** To TIME ZONE

◆ To select your time zone

**▲▼** To D.S.T. (daylight savings time)

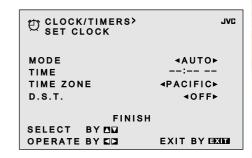
◆ To turn D.S.T. ON or OFF

▼ To FINISH

◆ To save settings



Press the Exit button when finished



When you set the clock manually, choose MANUAL by pressing the ◀ or ▶ arrows.

**▲▼** To move to the hour

■ To set the hour

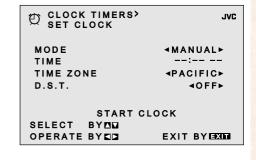
▲▼ To move to minutes

◆ To set the minutes

▼ To START CLOCK

▼ To operate

THANK YOU!!



#### Notes:

- D.S.T. can be used only for US and Canada when it is set to ON in the SET CLOCK menu.
- Only when the MODE set to AUTO, the Daylight Savings Time feature automatically adjusts your TV's clock for Daylight Savings. The clock will move forward one hour at 2:00 am on the first Sunday in April. The clock will move back one hour at 2:00 am on the last Sunday in October.
- You will have to reset the clock after a power interruption. You must set the clock before operating any timer functions.

## **Clock/Timers**

#### **On/Off Timer**

The on/off timer lets you program your television to turn itself on or off. You can use it as an alarm to wake up, to help you remember important programs, or as a decoy when you're not home.



Press the MENU button



To ON/OFF TIMER



To operate (begins with ON TIME)

**4**>

To set the hour (AM/PM) you want the TV to turn on

 $\blacksquare$ 

To move to minutes

4>

To set the minutes

•

To accept ON TIME and move to OFF TIME (the time the TV will turn off). Set the OFF TIME the same way as ON TIME

¥.

To accept OFF TIME and move to CHANNEL

**4** 

To select channel

 $\blacksquare$ 

To ON VOLUME

4

To set the volume level

 $\blacksquare$ 

To move to MODE

46

Choose ONCE or EVERYDAY

To ON/OFF TIMER

4

Choose YES to accept the timer setting, choose NO if you don't wish to accept

To FINISH

41

To save settings



Press the Exit button when finished

#### Notes:

- The on/off time cannot be set to locked or guarded channels.
- In order for the on/off timer to work, the clock must be set.
- After a power interruption, the timer settings must be reset.
- If you turn on your TV set before the on time, when the TV reaches the on time that you set, the "SWITCHING TO ON TIMER" will appear. This means that the TV is going to change to your on/off timer setting.

# **Clock/Timers**

#### **World Clock**

The world clock feature provides time differences for some of the major cities around the world in real time.



Press the Menu button



To WORLD CLOCK



To operate



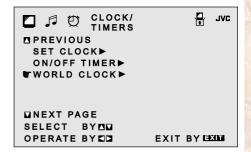
To next page



Press the Exit button when finished

#### Note:

- For the proper performace of the function, the XDS information must be provided by the broadcaster.
- D.S.T. can be used only for US and Canada when it is set to ON in the SET CLOCK menu.



CLOCK TIMERS>	JAC
AMERICAS-1	PAGE 1
NEW YORK	:
CHICAGO	:
DENVER	:
LOS ANGELES	:
HONOLULU	:
RIO DE JANEIRO	:
OPERATE BY ■□	EXIT BY EXID





CLOCK TIMERS>	JVC
ASIA/PACIFIC	PAGE 4
токуо	:
BEIJING	:
SINGAPORE	:
BANGKOK	:
NEW DELHI	:
SYDNEY	:
OPERATE BY ■□	EXIT BY EXID

#### **Power**

Turns the TV on or off.



Press the Power button

#### **Number Buttons - 10Key Pad**

Use the number buttons on the remote control to move directly to a specific channel. For example, to move to channel 7:



0 (Zero)



7 (Seven)

#### 100+ Button

Use the 100+ button to directly access channels above channel 99. For example, to move to channel 124, press 100+, 2 (Two), 4 (Four).

#### Channel +/-

Use these buttons to move up or down all the available channels your TV is able to recieve.

#### Volume +/-

Use these buttons to raise or lower the TV's volume level.

#### Muting

The Muting button instantly turns the volume down completely when you press it. Press Muting and the volume level will instantly go to zero. To restore the volume to its previous level, press Muting again.

#### Menu

The Menu button allows you to access JVC's onscreen menu system. Press Menu to activate the onscreen menu system.

See individual topics like "Sound Adjust" for specific information on using menus.

#### Exit

Use this button to enter or exit the TV's onscreen menus.

#### Return +

The RETURN+ button has two functions:

Return - Returns to the channel viewed just before the channel currently onscreen.

Return+ - Lets you program a specific channel to return to while scanning through the channels using the CH+ and CH– buttons.



RETURN+ and hold for three seconds

## RETURN CHANNEL PROGRAMMED!

The channel currently active has been programmed as your return+ channel. Now scan through the channels using the Channel+/– buttons.



RETURN+

You will return to your programmed channel.

- To cancel your Return+ channel, press and hold the Return+ button for three seconds. The message "RETURN CHANNEL CANCELLED!" will appear.
- Return+ works only with the CH+/- buttons. Pressing any number key will cancel Return+.

#### Input

Selects the signal input source for the television: TV (for Antenna or Cable) or Video-1, 2, or V2-Component or Video-3 for video devices like VCR's, DVD players, or camcorders.



Press the INPUT button

$$\rightarrow$$
 TV  $\longrightarrow$  VIDEO-1  $\longrightarrow$  VIDEO-2  $\longrightarrow$  V2-COMPONENT  $\longrightarrow$  VIDEO-3  $\longrightarrow$ 

#### Note:

You can also access the input menu screen by using the Menu button on the side of the TV instead of the remote control. It appears between INITIAL SETUP and PICTURE ADJUST screen. Choose the INPUT by pressing Menu ▼ on the side panel and select TV or VIDEO INPUT by using the Channel +/- buttons ( ◀ OPERATE ▶ ).

#### **Display**

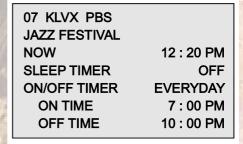
The display screen shows the current status of timers, inputs, and XDS ID.

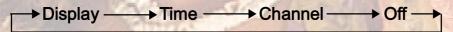


Press the DISPLAY button

The screen to the right shows the following information:

- The current channel or AV input (Channel 07)
- The current time (12:20 pm)
- Sleep timer status/minutes remaining (The Sleep Timer is off)
- On/off timer status (Set to turn on everyday at 7:00 PM, off at 10:00 PM)
- Each Press of the DISPLAY button changes the display mode





Display - Full screen shown above

Time - Shows the current time only

Channel - Shows the current channel

Off - Turns display off

#### Notes:

- You may also turn off the display at any step by pressing Menu.
- If the clock, sleep timer or on/off timer are not set, the display screen will show:
   "CLOCK NOT SET", "SLEEP TIMER OFF", and "ON/OFF TIMER OFF" respectively.

#### **Sleep Timer**

The Sleep Timer can turn the TV off for you after you fall asleep. Program it to work in intervals of 15 minutes, for a total time of up to 180 minutes.



Press the SLEEP TIMER button

→ 0 15 30 45 60 75 90 105 120 135 150 165 180 →

#### **Sleep Timer Message**

20 seconds before the automatic shutoff, this message will appear:

GOOD NIGHT!!
PUSH SLEEP TIMER BUTTON
TO EXTEND

You then have 20 seconds to press the sleep timer button to delay the shut off for another 15 minutes.

#### Sound

The Sound button give you a choice of two sound effects.

**Hyper Surround** - Creates a deep, three-dimensional sound effect by channeling the audio through the TV's front-firing speakers.

**BBE** - BBE High Definition Sound restores clarity and presence for better speech intelligibility and musical realism.



Press the Sound button



To select HYPER SURROUND or BBE



To choose the setting



Press the Exit when finished

SOUND EFFECT

∢OFF► ∢ON►

FHYPER SURROUND BBE

SELECT BY DO OPERATE BY DO

EXIT BY EXE

**Note:** Manufactured under license from BBE Sound, Inc. Licensed by BBE Sound, Inc. under USP4638258, 5510752 and 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc.

#### C.C. (Closed Caption)

Use the C.C. (Closed Caption) button to select the mode of closed caption.



Press the C.C. button



- Smart Caption will appear when you press the Muting button, only on channels where the broadcast contains closed captioning.
- See page 32 when you set the caption/text mode.

#### **Video Status**

The VIDEO STATUS button gives you a choice of four TV picture display settings, including a display of your own preferences.

STANDARD - Resets the picture display to the factory settings.

**DYNAMIC** - Heightens contrast.

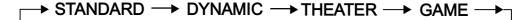
THEATER - Gives a rich, film-like look to video when viewing in a dimly lit room.

GAME - Used for when you are playing video games connected to your TV.



Press the Video Status button

By every press of the video status button, you change the mode.



 You can also access the FRONT PANEL CONTROL screen by using the Menu button on the side of the TV instead of the remote control. It appears between INITIAL SETUP and PICTURE ADJUST screen, and it has INPUT, VIDEO STATUS and ASPECT menus. Choose VIDEO STATUS by pressing Menu ▼ on the side panel and choose a mode by using the CHANNEL +/- buttons ( ◀ OPERATE ▶ ).

#### TheaterPro D6500K

The TheaterPro D6500K color temperature technology function makes sure that the video you watch is set to the standard color temperature. This will adjust the picture quality to what the video film editors intended it to be.



Press the THEATER PRO button

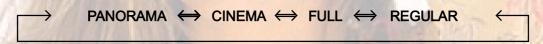
#### **Aspect**

This feature will help you adjust the picture you are watching to give you the best possible picture quality.



Press the Aspect button

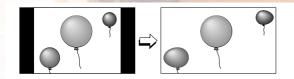
• By pressing the ASPECT button, you can change the size.



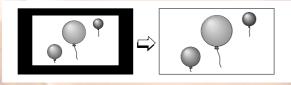
When you change the aspect ratios, it is different from their broadcast or recorded program.

#### **Aspect Ratios**

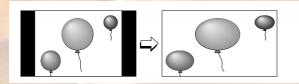
**PANORAMA** - With this ratio a normal 4:3 aspect picture is stretched to fit the dimensions of the 16:9 aspect screen.



**CINEMA** - This ratio "zooms in" on the center part of a 4:3 aspect picture, blowing it up to fill the 16:9 screen.



**FULL** - This is the ratio to use when watching 16:9 broadcasts.



**REGULAR** - The regular ratio is used when you want to watch a 4:3 broadcast or recorded program without modifying the original picture to fit the dimensions of your 16:9 screen. The 4:3 picture will fill the screen from top to bottom, while black bars will appear to fill up the remaining space along the picture's sides. The 4:3 picture will be centered within the boundaries of the 16:9 screen.



#### Note:

 You can also access the FRONT PANEL CONTROL screen by using the Menu button on the side of the TV instead of the remote control. It appears between INITIAL SETUP and PICTURE ADJUST screen, and it has INPUT, VIDEO STATUS and ASPECT menus. Choose ASPECT by pressing Menu ▼ on the side panel and choose a mode by using the CHANNEL +/- buttons ( ◀ OPERATE ▶ ).

#### **TV/CATV Slide Switch**

Use either the television's own tuner or a cable box to select channels. Set this switch to **TV** to operate the television's built-in tuner. Move the switch to **CATV** to operate a cable box.

#### Note:

See page 18 for information on programming your remote for cable box operation.

#### **VCR/DVD Slide Switch**

You can control a VCR or DVD player with the buttons on the lower part of the remote control. Move the slide switch to **VCR** or **DVD** to operate.

#### Notes:

- The remote is preset with the code 000 to control JVC-brand VCR's. For any other manufacturer's brand VCR, please see the code chart and instructions on page 19.
- The remote is preset with the code 000 to control JVC-brand DVD players. For any other manufacturer's brand DVD player, please see the code chart and instructions on page 20.

#### **VCR Buttons**

You can use this remote control to operate the basic functions of your VCR. These functions include: play, record, rewind, fast-forward, stop, pause, channel scan, TV/VCR, power on, and power off.

Move the selector switch to VCR to operate.

 The remote is preset with the code 000 to control JVC-brand VCR's. For any other manufacturer's brand VCR, please see the code chart and instructions on page 19.

#### **DVD Buttons**

You can also use this remote control to operate the basic functions of your DVD player. These functions include: play, rewind, fast-forward, stop, still/pause, previous/next, tray open/close, power on, and power off.

Move the selector switch to **DVD** to operate.

• The remote is preset with the code 000 to control JVC-brand DVD players. For any other manufacturer's brand DVD player, please see the code chart and instructions on page 20.

# Troubleshooting

PROBLEMS	CHECK	
There is no power	See if the power cord became unplugged.     Check for a blown fuse or circuit breaker or a power outage.	
There is no picture or sound  • The antenna could be disconnected. • The input mode could be set improperly. See page 42. • The tuner (Auto Tuner Setup) could be set improperly. See page 24. • The TV station may be having difficulties. Check to see if other stations are work		
Remote control is not operating properly or at all	<ul> <li>Check to see that the batteries are still working and properly installed.</li> <li>Make sure the remote has a clear sight path to the TV.</li> <li>Check that the TV/CATV switch is in the proper position.</li> <li>You may be too far from the TV. You must be within 23 feet (7 meters).</li> </ul>	
You cannot select a certain channel	Make sure the channels have been programmed. See "Channel Summary", page 24.     Check to see if the channel is locked. See "Channel Summary - Lock" page 25.	
The power turns off by itself	Make sure the set did not become unplugged.     Perhaps the On/Off Timer is set. See page 39.     Check to see if the Sleep Timer was set. See page 43.	
The clock is wrong	The power was interrupted and the clock was not reset. See page 38.	
The On Timer is blinking	There is a problem with the TV. Unplug the set and call for service.	
The color quality is poor	Tint and Color may be improperly adjusted. See page 35. The Video Status mode may be turned to the wrong setting. See page 45.	
There are lines across the picture	There could be interference from another electrical appliance, such as a computer, another TV or VCR. Move any such appliances further away from the TV.	
The picture is spotted	There could be interference from a high-wattage appliance, like a hairdryer or vacuum, operating nearby. Move the antenna away from the appliance or change to a coaxial cable connection which is less prone to interference.	
There are double pictures (ghosts)	A building or passing airplane can reflect the original signal and produce a second, slightly delayed one. Adjust your antenna position.	
Picture is snowy (image noise)	Your antenna may be damaged, disconnected or turned. Check the antenna connection. If the antenna is damaged, replace it.	
Screen is 80% black	The Closed Caption Text mode is on. Turn it off in the Closed Caption Menu, page 32.	
Stereo or bilingual programs can't be heard	Make sure the MTS settings are correct. See "MTS" on page 37.	
There is no picture being displayed for INPUT-2	Check your AV Cables to make sure they are connected tightly and properly. In case you are connecting using component cables to V2, make sure you select "V2-COMPONENT" by pressing the INPUT button. See page 13 and 42. In case you are connecting using composite cables to V2, make sure you select "VIDEO-2" by pressing the INPUT button. See page 13 and 42.	
O mark appears	The O mark will appear if you press the ASPECT button under these conditions:  • While noise muting is on over channels which are not broadcasting or are too weak to be received.  • When a channel is locked by CHANNEL GUARD.	
Static electricity	It is normal to feel static electricity if you brush or touch the screen.	
You hear occasional crackling sounds	It is normal for the TV to make crackling sounds when first turned on or off. Unless the sound or picture become abnormal, this is fine.	

# Specifications

MODEL	AV-30W476
Reception Format	NTSC, BTSC System (Multi-Channel Sound)
Reception Range	VHF 2 to 13, UHF 14 to 69 Sub Mid, Mid, Super, Hyper and Ultra bands (181 channel frequency synthesizer system)
Power Source	AC 120V, 60Hz
Power Consumption	140W
Screen Size	30 inch / 95 cm measured diagonally full square
Audio Output	9W + 9W
Speakers	2 1/2 x 5 inch / 6.5 x 13 cm oval x 2
Antenna Terminal	75 ohms (VHF/UHF) (F-type connector)
External Input Jacks	Video: 1 Vp-p, 75 ohms Audio: 500mVrms (-4dBs) high impediance
S-Video Input Jack	Y: 1Vp-p positive, 75 ohms (negative sync provided) C: 0.286 Vp-p (burst signal), 75 ohms
Component Input Jacks	Y: 1Vp-p positive, 75 ohms (negative sync provided) PB/PR: 0.7 Vp-p, 75 ohms
Audio Output Jacks (FIX)	FIX; 500 mVrms (-4dBs) Low impedance (400 Hz when modulated 100%)
Dimensions (In) WxHxD (cm)	33 1/8 x 23 1/2 x 21 7/8 83.8 x 59.6 x 55.4
Weight (lbs / kg)	115.1 / 52.2
Accessories	Remote control unit x 1 / AA batteries x 2

Specifications subject to change without notice.

#### LIMITED WARRANTY

DISPLAY 1-90

For Canadian model televisions, see separate sheets for Canadian Warranty information.

JVC COMPANY OF AMERICA (JVC) warrants this product and all parts thereof, except as set forth below ONLY TO THE ORIGINAL RETAIL PURCHASER to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from the date of original purchase for the period shown below. ("The Warranty Period") PICTURE TUBE is covered for Two(2)years.

> Parts Labor 1 YEAR 90 DAYS

THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY (50) UNITED STATES, THE DISTRICT OF COLUMBIA AND IN THE COMMONWEALTH OF PUERTO RICO. WHAT WE WILL DO:

If this product is found to be defective within the warranty period, JVC will repair or replace defective parts with new or rebuilt equivalents at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during normal business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of the Warranty Period. All products may be brought to a JVC authorized service center on a carry-in basis. Color televisions with a screen size of 27" or greater qualify for in-home service. In such cases, a technician will come to your home and either repair the TV there or remove and return it if it cannot be repaired in your home.

#### WHAT YOU MUST DO FOR WARRANTY SERVICE:

#### Please do not return your product to the retailer

Instead, return your product to the JVC authorized service center nearest you. If shipping the product to the service center, please be sure to package it carefully, preferably in the original packaging, and include a brief description of the problem(s). Please call 1-800-252-5722 to locate the nearest JVC authorized service center. Service locations can also be obtained from our website <a href="http://www.jvc.com">http://www.jvc.com</a>. If your product qualifies for in-home service, the service representative will require clear access to the product.

If you have any questions concerning your JVC Product, please contact our Customer Care Center at 800-252-5722

#### WHAT IS NOT COVERED:

This limited warranty provided by JVC does not cover:

- 1. Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by JVC to render such service, or if affixed to any attachment not provided with the products, or if the model or serial number has been altered, tampered with, defaced or removed;
- 2. Initial installation, installation and removal from cabinets or mounting systems.
- Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;

- Damage that occurs in shipment, due to act of God, and cosmetic damage;
  Signal reception problems and failures due to line power surge;
  User Removal Memory Devices/ Video Pick-up Tubes/CCD Image Sensors are covered for 90 days from the date of purchase;
- 8. Batteries (except that Rechargeable Batteries are covered for 90 days from the date of purchase);
- Products used for commercial purposes, including, but not limited to rental.
   Loss of data resultant from malfunction of hard drive or other data storage device.

There are no express warranties except as listed above.

THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN.

JVC SHALL NOT BE LIABLE FOR ANY LOSS OF USE OF THE PRODUCT, INCONVIENCE, OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTAL (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE

Some states do not allow the exclusion of incidental or consequential damages or limitations on how long an implied warranty lasts, so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

> JVC COMPANY OF AMERICA **DIVISION OF JVC AMERICAS CORP**

1700 Valley Road Wayne, NJ 07470

http://www.jvc.com

REFURBISHED PRODUCTS CARRY A SEPARATE WARRANTY, THIS WARRANTY DOES NOT APPLY. FOR DETAIL OF REFURBISHED PRODUCT WARRANTY, PLEASE REFER TO THE REFURBISHED PRODUCT WARRANTY INFORMATION PACKAGED WITH EACH REFURBISHED PRODUCT.

For customer use:		
Enter below the Model No. and Serial No. which is located either on the rear, bottom or side of the cabinet.		
Retain this information for future reference	e.	
Model No. :	Serial No. :	
Purchase date :	Name of dealer :	

### TO OUR VALUED CUSTOMER

THANK YOU FOR PURCHASING THIS JVC PRODUCT.
WE WANT TO HELP YOU ACHIEVE A PERFECT EXPERIENCE.

NEED HELP ON HOW TO HOOK UP?
NEED ASSISTANCE ON HOW TO OPERATE?
NEED TO LOCATE A JVC SERVICE CENTER?
LIKE TO PURCHASE ACCESSORIES?

# JVC IS HERE TO HELP! TOLL FREE: 1(800)252-5722 http://www.jvc.com

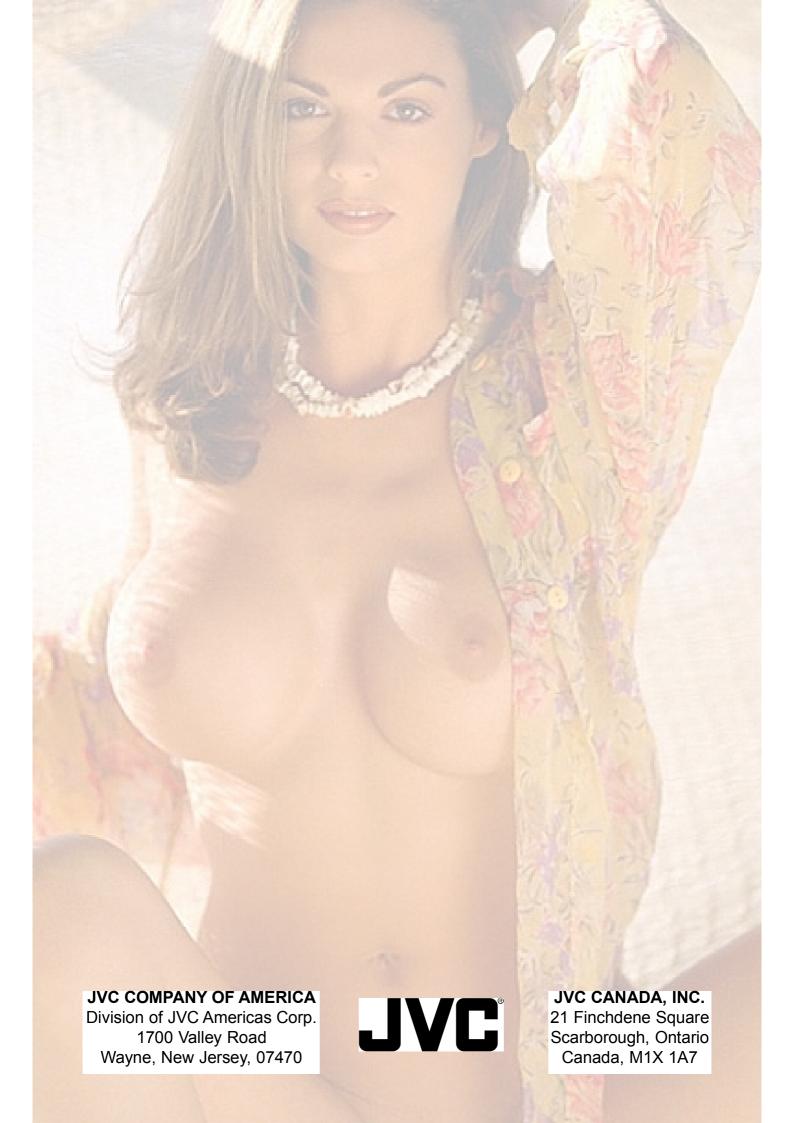
Remember to retain your Bill of Sale for Warranty Service.

Do not attempt to service the product yourself

#### Caution

To prevent electrical shock, do not open the cabinet. There are no user serviceable parts inside.

Please refer to qualified service personnel for repairs.



# JVC

# SERVICE MANUAL

**COLOR TELEVISION** 

AV-30W476/s

BASIC CHASSIS

GW2





#### **TABLE OF CONTENTS**

1	PRECAUTION	1-3
2	SPECIFIC SERVICE INSTRUCTIONS	1-4
3	DISASSEMBLY	1-5
4	ADJUSTMENT	1-11
5	TPOURI ESHOOTING	1-24

#### **SPECIFICATION**

Dimensions (W x H x D)	Item	ıs	Contents
TV RF System	Dimensions (W x H x D)		83.8 cm × 59.6 cm × 55.4 cm (33-1/8" × 23-1/2" × 21-7/8")
Color System   STSC   Multi Channel Sound   Sound System   BTSC (Multi Channel Sound   Sound System   BTSC (Multi Channel Sound   Sound   System   Closed caption (T1-T4 / CC1-CC4)	Mass		52.2 kg (115.1 lbs)
Sound System   BTSC (Multi Channel Sound)	TV RF System		CCIR (M)
Teletext System	Color System		NTSC
TV Receiving Channels and Frequency  VHF ligh (7ch - 13ch: 174 MHz - 216 MHz (7ch - 13ch: 174 MHz - 216 MHz (7ch - 13ch: 174 MHz - 216 MHz (7ch - 69ch: 470 MHz - 806 MHz - 806 MHz (7ch - 69ch: 470 MHz - 806 MHz - 806 MHz (7ch - 69ch: 470 MHz - 806 MHz - 806 MHz - 806 MHz (7ch - 806 MHz - 806	Sound System		BTSC (Multi Channel Sound)
And Frequency	Teletext System	7/40	Closed caption (T1-T4 / CC1-CC4)
Reception of channel A-5 ("95" of the TV set's on-screen CABLE channel) in recommended for your TV set.]   Intermediate Frequency	TV Receiving Channels And Frequency VHF low UHF		07ch - 13ch: 174 MHz - 216 MHz 14ch - 69ch: 470 MHz - 806 MHz 54MHz - 804 MHz Low Band: 02 - 06 High Band: 07 - 13 Mid Band: 14 - 22 Super Band: 23 - 36 Hyper Band: 37 - 64 Ultra Band: 65 - 94, 100 - 135
Sound   F   41.25 MHz   (4.5 MHz)	TV / CATV Total Channe	165	[Reception of channel A-5 ("95" of the TV set's on-screen CABLE channel) is
Power Input $ AC120 \text{ V}, 60 \text{ Hz}  $ Power Consumption $ 140 \text{ W}  $ Picture Tube (Visible size) $ 76 \text{ cm } (30") \text{ Measured diagonally (H: } 67.4 \text{ cm} \times \text{ V: } 38.4 \text{ cm})  $			
Power Consumption140 WPicture Tube (Visible size)76 cm (30") Measured diagonally (H: 67.4 cm x V: 38.4 cm)High Voltage31.34 kV ±1.3 kV [at Zero beam current]Speaker6.5 cm x 13 cm (2-1/2" x 5"), Oval type x 2Audio Power Output9W + 9WAntenna Terminal (VHF / UHF)F-type connector, 75 $\Omega$ unbalancedVideo / Audio input [INPUT-1/2/3]Component Video [INPUT-2]RCA pin jack x 3 Y : 1 V(p-p), 75 $\Omega$ , negative sync Pb/Pr : 0.7V(p-p), 75 $\Omega$ S-video [INPUT-1]S-video Mini DIN 4-pin x 1 Y : 1 V(p-p), 75 $\Omega$ , negative sync C : 0.286 V(p-p)(burst signal), 75 $\Omega$ Video 1 V(p-p), 75 $\Omega$ , negative sync, RCA pin jack x 3 Audio Output (Fix)Video (100 m) (rms)(-4dBs), high impedance, RCA pin jack x 6	Color Sub Carrier	15 4 K 200	3.58 MHz
Picture Tube (Visible size) 76 cm (30") Measured diagonally (H: 67.4 cm $\times$ V: 38.4 cm)  High Voltage 31.34 kV $\pm$ 1.3 kV [at Zero beam current]  Speaker 6.5 cm $\times$ 13 cm (2-1/2" $\times$ 5"), Oval type $\times$ 2  Audio Power Output 9W + 9W  Antenna Terminal (VHF / UHF) F-type connector, 75 $\Omega$ unbalanced  Video / Audio input [INPUT-1] Component Video [INPUT-2] Y: 1 V(p-p), 75 $\Omega$ , negative sync Pb/Pr: 0.7V(p-p), 75 $\Omega$ Mini DIN 4-pin $\times$ 1 V: 1 V(p-p), 75 $\Omega$ Mini DIN 4-pin $\times$ 1 V: 1 V(p-p), 75 $\Omega$ , negative sync C: 0.286 V(p-p)(burst signal), 75 $\Omega$ 1 V(p-p), 75 $\Omega$ , negative sync, RCA pin jack $\times$ 3 500 mV(rms)(-4dBs), high impedance, RCA pin jack $\times$ 6 500 mV(rms)(-4dBs), low Impedance, (400kHz when modulated 100%), RCA pin jack $\times$ 2	Power Input	27 12 14 13	AC120 V, 60 Hz
High Voltage $31.34 \text{ kV} \pm 1.3 \text{ kV [at Zero beam current]}$ Speaker $6.5 \text{ cm} \times 13 \text{ cm } (2\text{-}1/2" \times 5"), \text{ Oval type} \times 2$ Audio Power Output $9W + 9W$ Antenna Terminal (VHF / UHF) $F\text{-type connector, } 75 \Omega \text{ unbalanced}$ Video / Audio input $[INPUT-1/2/3] \qquad Component \text{ Video} \qquad [INPUT-2] \qquad RCA \text{ pin jack} \times 3 \qquad Y : 1 \text{ V(p-p), } 75 \Omega, \text{ negative sync}$ $Pb/Pr : 0.7\text{V(p-p), } 75 \Omega$ Minin DIN 4-pin $\times$ 1 $Y : 1 \text{ V(p-p), } 75 \Omega, \text{ negative sync}$ $C : 0.286 \text{ V(p-p)(burst signal), } 75 \Omega$ Video $Audio Output (Fix)$ Video $Audio Output (Fix)$ Soo mV(rms)(-4dBs), low Impedance, (400kHz when modulated 100%), RCA pin jack $\times$ 2	Power Consumption	y 200	140 W
Speaker 6.5 cm $\times$ 13 cm (2-1/2" $\times$ 5"), Oval type $\times$ 2  Audio Power Output 9W + 9W  Antenna Terminal (VHF / UHF) F-type connector, 75 $\Omega$ unbalanced  Video / Audio input [INPUT-1/2/3] Component Video [INPUT-2] F-type connector, 75 $\Omega$ unbalanced  RCA pin jack $\times$ 3  Y: 1 V(p-p), 75 $\Omega$ , negative sync Pb/Pr: 0.7V(p-p), 75 $\Omega$ Mini DIN 4-pin $\times$ 1  Y: 1 V(p-p), 75 $\Omega$ , negative sync C: 0.286 V(p-p)(burst signal), 75 $\Omega$ Video Audio Video Audio 500 mV(rms)(-4dBs), high impedance, RCA pin jack $\times$ 3  Audio Output (Fix) 500 mV(rms)(-4dBs), low Impedance, (400kHz when modulated 100%), RCA pin jack $\times$ 2	Picture Tube (Visible size	(*)	76 cm (30") Measured diagonally (H: 67.4 cm × V: 38.4 cm)
Audio Power Output $ 9W + 9W $ Antenna Terminal (VHF / UHF) $ F-type \ connector, 75 \ \Omega \ unbalanced $ $ Video \ / \ Audio \ input \\ [INPUT-1/2/3] \qquad Component \ Video \\ [INPUT-2] \qquad Y: 1 \ V(p-p), 75 \ \Omega, \ negative \ sync \\ Pb/Pr: 0.7V(p-p), 75 \ \Omega \\ Mini \ DIN \ 4-pin \times 1 \\ Y: 1 \ V(p-p), 75 \ \Omega, \ negative \ sync \\ C: 0.286 \ V(p-p)(burst \ signal), 75 \ \Omega \\ Video \\ Audio \ Output \ (Fix) \qquad Video \\ Audio \ Output \ (Fix) \qquad 500 \ mV(rms)(-4dBs), \ low \ Impedance, \ (400kHz \ when \ modulated \ 100\%), \ RCA \ pin \ jack \times 2$	High Voltage		31.34 kV ±1.3 kV [at Zero beam current]
Antenna Terminal (VHF / UHF) F-type connector, $75~\Omega$ unbalanced Video / Audio input [INPUT-1/2/3] Component Video [INPUT-2] Y: 1 V(p-p), $75~\Omega$ , negative sync Pb/Pr: $0.7V(p-p)$ , $75~\Omega$ Mini DIN 4-pin $\times$ 1 Y: 1 V(p-p), $75~\Omega$ Mini DIN 4-pin $\times$ 1 Y: 1 V(p-p), $75~\Omega$ , negative sync C: $0.286~V(p-p)$ (burst signal), $75~\Omega$ 1 V(p-p), $75~\Omega$ , negative sync, RCA pin jack $\times$ 3 Yideo Audio Output (Fix) $0.00000000000000000000000000000000000$	Speaker		6.5 cm × 13 cm (2-1/2" × 5"), Oval type × 2
Video / Audio input [INPUT-1/2/3]	Audio Power Output		9W + 9W
[INPUT-1/2/3]	Antenna Terminal (VHF /	UHF)	F-type connector, 75 Ω unbalanced
		[INPUT-2] S-video [INPUT-1] Video	Y: 1 V(p-p), 75 $\Omega$ , negative sync Pb/Pr: 0.7V(p-p), 75 $\Omega$ Mini DIN 4-pin × 1 Y: 1 V(p-p), 75 $\Omega$ , negative sync C: 0.286 V(p-p)(burst signal), 75 $\Omega$ 1 V(p-p), 75 $\Omega$ , negative sync, RCA pin jack × 3
Remote Control Unit RM-C1258G (AA/R6/UM-3 battery × 2)	Audio Output (Fix)		500 mV(rms)(-4dBs), low Impedance, (400kHz when modulated 100%), RCA pin jack × 2
	Remote Control Unit		RM-C1258G (AA/R6/UM-3 battery × 2)

Design & specifications are subject to change without notice.

# SECTION 1 PRECAUTION

#### 1.1 SAFETY PRECAUTIONS

- (1) The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
- (4) Use isolation transformer when hot chassis.

The chassis and any sub-chassis contained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.

- (5) Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.

  Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE: (⊥) side GND, the ISOLATED (NEUTRAL): (⅓) side GND and EARTH: (⅙) side GND.

  Don't short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND and never measure the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND at the same time with a measuring apparatus (oscilloscope etc.). If above note will not be kept, a fuse or any parts will be broken.
- (6) If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See B1 POWER SUPPLY check).
- (7) The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
- (8) Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a  $10 \mathrm{k}\Omega$  2W resistor to the anode button.
- (9) When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

#### (10) Isolation Check (Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

#### a) Dielectric Strength Test

The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.

(.... Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.) This method of test requires a test equipment not generally found in the service trade.

#### b) Leakage Current Check

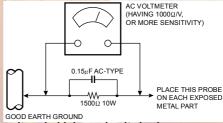
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

#### **Alternate Check Method**

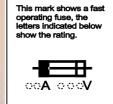
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having  $1000\Omega$  per volt or more sensitivity in the following manner. Connect a  $1500\Omega$  10W resistor paralleled by a  $0.15\mu$ F AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).

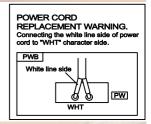
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



#### (11) High voltage hold down circuit check.

After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly. See item "How to check the high voltage hold down circuit".





# SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

#### 2.1 FEATURES

#### **SMART CAPTION**

Smart caption will appear when you press the MUTING button, only on channels where the broadcast contains CLOSED CAPTION information.

#### **SMART SOUND**

Decreases high sound levels, giving a regulated sound level.

#### VIDEO STATUS

Expression of a favorite screen can be chosen by the VIDEO STATUS function.

 $[STANDARD \leftrightarrow DYNAMIC \leftrightarrow THEATER \leftrightarrow GAME]$ 

#### **COMPONENT INPUT**

Since the component signal input terminal is equipped, it reappears direct without deteriorating the signal from DVD.

#### V-CHIP

Since the V-CHIP is built in, it can choose, view and listen to a healthy program.

#### **RETURN PLUS**

You program a specific channel to return to while scanning through the channels using the CH+ and CH - keys.

#### VIDEO INPUT LABEL

This function is used to label video input connections for the onscreen displays.

#### **WORLD CLOCK**

The world clock feature provides time differences for some of the major cities around the world in real time.

#### BBF

High definition audio adds natural, clear and extraordinary sound quality to any program.

#### AHG

Adds a more spacious surround sound. Music gives basic effect and Movie for more effect.

#### 2.2 TECHNICAL INFORMATION

#### 2.2.1 MAIN MI-COM (CPU) PIN FUNCTION

Pin No.	Pin name	I/O	Function	Pin No.	Pin name	I/O	Function
1	MTS_ADJ	1	Not used	29	YC_GND		GND
2	AFT1		AFT voltage for tuner (Tuning frequency control)	30	V1 IN		Not used
3	KEY		Key scan for front control [No signal : H]	31	ABCL		Current for automatic beam (brightness)/contrast limit
4	uP DVss	-	GND	32	MONITOR OUT	0	Not used
5	Reset		CPU reset [Reset : L]	33	BLACK_DET	-	Black level detection filter
6	8MHz OUT	0	CPU system clock : 8MHz oscillation	34	SVM OUT	0	Y signal for scan velocity modulation
7	8MHz IN	1	CPU system clock : 8MHz oscillation	35	APL_FIL	-	Average picture level filter
8	TEST	-	GND	36	APC_FIL	-	Automatic phase control filter
9	uP DVDD	1	5V	37	fsc OUT	0	Color sub carrier (3.58MHz) for 3-line digital comb filter [IC5201]
10	AGC MUTE	0	AGC muting for tuner (when channel select) [Muting : H]	38	YC_Vcc	ı	5V (for video process circuit)
	uP VVSS	-	GND	39	R_OUT	0	R signal for CRT output
12	TV_HGND	-	GND	40	G_OUT	0	G signal for CRT output
	FBP SCP	1	Flyback pulse (H. pulse)	41	B OUT	0	B signal for CRT output
14	HOUT	0	H. drive (oscillation)	42	RGB Vcc	1	9V (for RGB process circuit)
15	H Vcc	1	9V (for H. oscillation start)	43	IK IN	1	Not used
16	HAFC_1	-	H. AFC filter	44	TV_DGND	-	GND
17	Vsaw	-	V. saw filter	45	uP_AGND	-	GND
18	VOUT	0	V. drive	46	uP_AVdd	-	5V
19	EW_OUT	0	Parabola waveform (for sidepin correction)	47	MAIN_POWER	0	Power on/off switching control [Powen on : L]
20	X-RAY	1	X-ray detection (for protection) [Detection : H]	48	PANORAMA	Τ	Aspect size control [PANORAMA : L]
21	Ys	1	Not used	49	SDA0	I/O	Data for Inter IC control bus (for various devices)
22	Cb_IN	1	Cb (external) signal	50	SCL0	0	Clock for Inter IC control bus (for various devices)
23	Y_IN	1	Y (external) signal	51	SDA1	I/O	Data for Inter IC control bus (for main memory)
24	Cr_IN	ı	Cr (external) signal	52	A_MUTING	0	Audio muting [Muting : H]
25	TV_DVcc	9	3.3V	53	SCL1	0	Clock for Inter IC control bus (for main memory)
26	V3IN/CIN	T	Chroma signal (for YC separation output)	54	LED	0	POWER / ON TIMER LED Indication [lighting : L]
27	EHT_IN	T	Not used	55	REMOCON	1	Remote control sensor input [No input : H]
28	V2_IN/Y_IN	1	Y signal (for YC separation output)	56	ASP_ABL	1	Not used

# SECTION 3 DISASSEMBLY

#### 3.1 DISASSEMBLY PROCEDURE

#### 3.1.1 REMOVING THE REAR COVER

- (1) Disconnect the power plug.
- (2) Remove the 10 screws [A].
- (3) Withdraw the REAR COVER backward.

#### 3.1.2 REMOVING THE AV TERMINAL BOARD

- · Remove the REAR COVER.
  - (1) Remove the 4 screws [B].
  - (2) Withdraw the AV TERMINAL BOARD toward you.

#### 3.1.3 REMOVING THE CHASSIS

- · Remove the REAR COVER.
- Remove the AV TERMINAL BOARD.
  - (1) Slightly raise the both sides of CHASSIS by hand.
  - (2) Remove the 2 claws under the both side of the CHASSIS from the front cabinet.
  - (3) Withdraw the CHASSIS backward.
    (If necessary, remove the wire clamp, connectors etc.)

#### 3.1.4 REMOVING THE SPEAKER

- Remove the REAR COVER.
  - (1) Remove the 2 screws [C] and remove the SPEAKER.
  - (2) Follow the same steps when removing the other hand SPEAKER

#### 3.1.5 REMOVING THE FRONT CONTROL PWB

- Remove the REAR COVER.
  - (1) Remove the 2 screws [D]
- (2) Withdraw the FRONT CONTROL PWB toward you.
- \*If necessary, remove the wire clamp, connector etc.

#### 3.1.6 REMOVING THE SIDE CONTROL PWB

- Remove the REAR COVER.
  - (1) Remove the 1 screw [E] and remove the CONTROL BASE.
  - (2) Remove the 3 screws [F] and remove the SIDE CONTROL PWB.
- \*If necessary, remove the wire clamp, connector etc.

#### 3.1.7 CHECKING THE CHASSIS

To check the PW Board from back side.

- (1) Pull out the CHASSIS (refer to REMOVING THE CHASSIS).
- (2) Erect the CHASSIS vertically with the rear side facing up so that you can easily check the back side of the PW board.

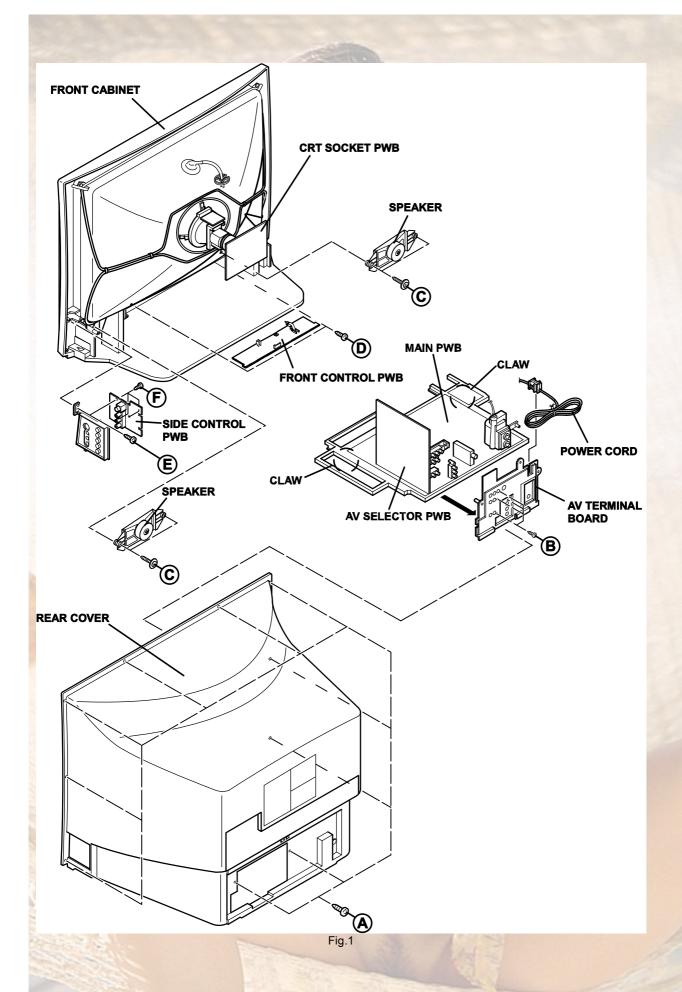
#### CAUTION

- When erecting the CHASSIS, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PWB.

#### 3.1.8 WIRE CLAMPING AND CABLE TYING

- (1) Be sure to clamp the wire.
- (2) Never remove the cable tie used for tying the wires together.

  Should it be inadvertently removed, be sure to tie the wires with a new cable tie.



#### 3.1.9 REMOVING THE CRT

#### NOTE:

- Replacement of the CRT should be performed by 2 or more persons.
- After removing the REAR COVER, CHASSIS etc.,
- (1) Putting the CRT change table on soft cloth, the CRT change table should also be covered with such soft cloth (shown in Fig. 3).
- (2) While keeping the surface of CRT down, mount the TV set on the CRT change table balanced will as shown in Fig. 3.
- (3) Remove 4 screws marked by arrows with a box type screwdriver as shown in Fig. 4.

#### NOTE:

Since the cabinet will drop when screws have been removed, be sure to support the cabinet with hands.

(4) After 4 screws have been removed, put the cabinet slowly on cloth (At this time, be carefully so as not to damage the front

surface of the cabinet) shown in Fig. 5.

#### NOTE:

- The CRT should be assembled according to the opposite sequence of its dismounting steps.
- The CRT change table should preferably be smaller that the CRT surface, and its height be about 35cm.

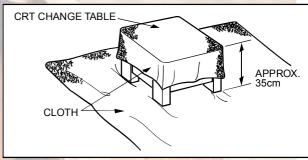


Fig.3

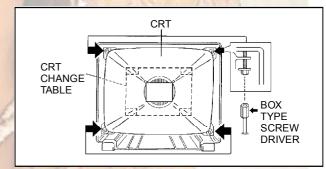
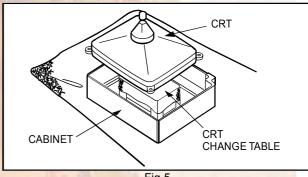


Fig.4



#### Fig.5

#### COATING OF SILICON GREASE FOR ELECTRICAL INSULATION ON THE CRT ANODE CAP SECTION.

Subsequent to replacement of the CRT and HV transformer or repair of the anode cap, etc. by dismounting them, be sure to coat silicon grease for electrical insulation as shown in Fig.6. Wipe around the anode button with clean and dry cloth. (Fig.6) Coat silicon grease on the section around the anode button. At this time, take care so that any silicon greases dose not sticks to the anode button. (Fig.7)

#### Silicon grease product No. KS - 650N

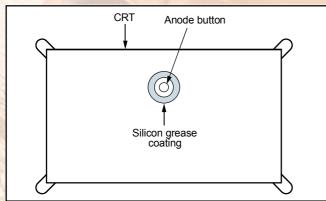


Fig.6

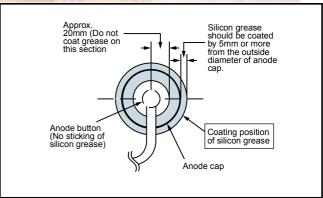


Fig.7

#### 3.2 MEMORY IC REPLACEMENT

- · This model uses the memory IC.
- This memory IC stores data for proper operation of the video and drive circuits.
- When replacing, be sure to use an IC containing this (initial value) data.

#### 3.2.1 MEMORY IC REPLACEMENT PROCEDURE

#### 1. Power off

Switch off the power and disconnect the power plug.

#### 2. Replace the memory IC

Be sure to use a memory IC written with the initial setting data.

#### 3. Power on

Connect the power cord to the wall outlet and switch on the power.

#### 4. Receiving channel setting

Refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the receive channels (Channels Preset) as described.

#### 5. User settings

Check the user setting items according to the "FACTORY SETTING ITEM" table.

Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.

#### 6. SERVICE MODE setting

Verify what to set in the SERVICE MODE, and set whatever is necessary(Fig.1).

Refer to the SERVICE ADJUSTMENT for setting.

#### 3.2.2 SERVICE MODE SETTING ITEMS

SERVICE MENU

1.V/C(S) 3.SOUND(A) 2. DEF(D) 4. OTHERS(F)

5.3L Y/C(LYC) 7.LOW LIGHT 9.VCO

8. HIGH LIGHT

11.I2C BUS

12. SYSTEM(SYS)

SELECT BY ▲ ▼
OPERATE BY ■

EXIT BY EXIT

Fig.1

Fig.1			
Setting items	Settings	Item No.	
1. V/C(S) (Video setting)	Adjust	S01~S48	
2. DEF(D) (Deflection setting)	Adjust	D01~D33	
3. SOUND(A) (Audio setting)	Adjust	A01~A08	
4. OTHERS [Do not adjust] (Factory setting)	Fixed	F01~F18	
5. 3L Y/C(LYC) [Do not adjust] (Y/C separate setting)	Fixed	LYC01~LYC12	
7. LOW LIGHT (White balance setting)	Adjust		
8. HIGH LIGHT (White balance setting)	Adjust	_	
9. VCO (VCO setting)	Adjust		
11. I2C BUS [Do not adjust] (I <sup>2</sup> C BUS setting)	Fixed		
12.SYSTEM (SYS) (System constant setting)	Fixed	SYS01~SYS26	

#### 3.2.3 SETTINGS OF FACTORY SHIPMENT

#### 3.2.3.1 BUTTON OPERATION

Setting item	Setting position
POWER	Off
CHANNEL	CH-02
VOLUME	10

#### 3.2.3.2 REMOTE CONTROL DIRECT OPERATION

Setting item		Setting position	
INPUT	E	TV	
CHANNEL	1	CH-02	
VOLUME		10	
MUTING	200	OFF	
DISPLAY		OFF	
SLEEP TIMER		OFF	
THEATER PRO	of the state of	OFF	
VIDEO STATUS		DYNAMIC	
ASPECT		REGULAR	
SOUND	A.H.S	OFF	
SOUND	BBE	ON	

#### 3.2.3.3 REMOTE CONTROL MENU OPERATION

#### (1) PICTURE ADJUST

Setting item	Setting position
TINT	0
COLOR	0
PICTURE	+8
BRIGHT	0
DETAIL	+8
COLOR TEMPERATURE	HIGH
NOISE MUTING	ON
VSM	ON

#### (2) SOUND ADJUST

Setting item	Setting position						
BASS	Center						
TREBLE	Center						
BALANCE	Center						
MTS	STEREO						
SMART SOUND	OFF						

#### (3) CLOCK / TIMERS

Setting item	Setting position
SET CLOCK	OFF
ON / OFF TIMER	OFF

#### (4) INITIAL SETUP

Setting item	Setting position
LANGUAGE	ENG.
CLOSED CAPTION	OFF (CC1 / T1)
FRONT PANEL LOCK	OFF
AUTO SHUT OFF	OFF
XDS ID	ON
VIDEO INPUT LEVEL	ON
AUTO TUNER SETUP	CABLE
V-CHIP	OFF
TILT CORRECTION	Center

#### 3.3 REPLACEMENT OF CHIP COMPONENT

#### 3.3.1 CAUTIONS

- (1) Avoid heating for more than 3 seconds.
- (2) Do not rub the electrodes and the resist parts of the pattern.
- (3) When removing a chip part, melt the solder adequately.
- (4) Do not reuse a chip part after removing it.

#### 3.3.2 SOLDERING IRON

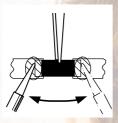
- (1) Use a high insulation soldering iron with a thin pointed end of it.
- (2) A 30w soldering iron is recommended for easily removing parts.

#### 3.3.3 REPLACEMENT STEPS

#### 1. How to remove Chip parts

#### [Resistors, capacitors, etc.]

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



(2) Shift with the tweezers and remove the chip part.



#### [Transistors, diodes, variable resistors, etc.]

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.



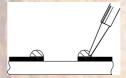
#### NOTE:

After removing the part, remove remaining solder from the pattern.

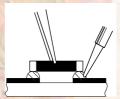
#### 2. How to install Chip parts

#### [Resistors, capacitors, etc.]

(1) Apply solder to the pattern as indicated in the figure.

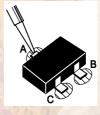


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.



#### [Transistors, diodes, variable resistors, etc.]

- (1) Apply solder to the pattern as indicated in the figure.
- (2) Grasp the chip part with tweezers and place it on the solder.
- (3) First solder lead A as indicated in the figure.



(4) Then solder leads B and C.



# SECTION 4 ADJUSTMENT

#### 4.1 ADJUSTMENT PREPARATION

- (1) There are 2 ways of adjusting this TV: One is with the REMOTE CONTROL UNIT and the other is the conventional method using adjustment parts and components.
- (2) The adjustment using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.
- (3) Make sure that connection is correctly made AC to AC power source.
- (4) Turn on the power of the TV and measuring instruments for warming up for at least 30 minutes before starting adjustments.
- (5) If the receive or input signal is not specified, use the most appropriate signal for adjustment.
- (6) Never touch the parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.

#### 4.2 PRESET SETTING BEFORE ADJUSTMENTS

Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT.

	_
Item	Preset value
VIDEO STATUS	STANDARD
PICTURE adjustment	All 00
COLOR TEMPERATURE	LOW
VSM	OFF
SOUND adjustment	All 00
MTS	STEREO
BBE	OFF
A.H.S	OFF
ASPECT	FULL

#### 4.3 MEASURING INSTRUMENT AND FIXTURES

- DC voltmeter (or digital voltmeter)
- Oscilloscope
- Signal generator (Pattern generator) [NTSC]
- TV audio multiplex signal generator
- · Remote control unit

#### 4.4 ADJUSTMENT ITEMS

#### **CHECK ITEM**

- B1 VOLTAGE check
- HIGH VOLTAGE HOLD DOWN check

#### FOCUS

FOCUS adjustment

#### ■DEFLECTION CIRCUIT

- V. SIZE / V. POSITION adjustment
- H. POSITION / H. SIZE / SIDE PIN adjustment

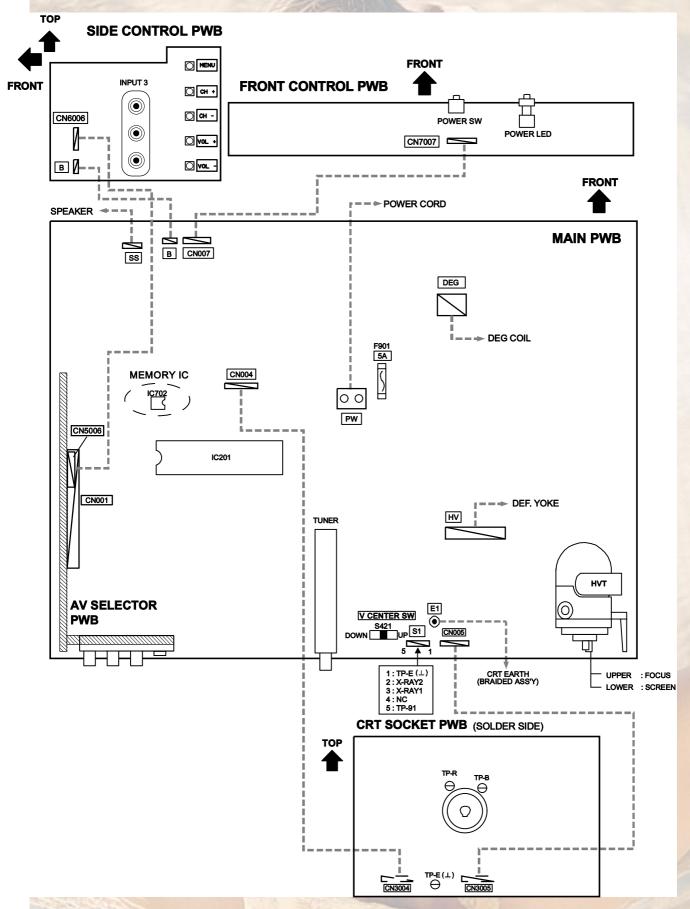
#### **■VIDEO CIRCUIT**

- WHITE BALANCE (LOW LIGHT) adjustment
- WHITE BALANCE (HIGH LIGHT) adjustment
- SUB BRIGHT adjustment
- SUB CONTRAST adjustment

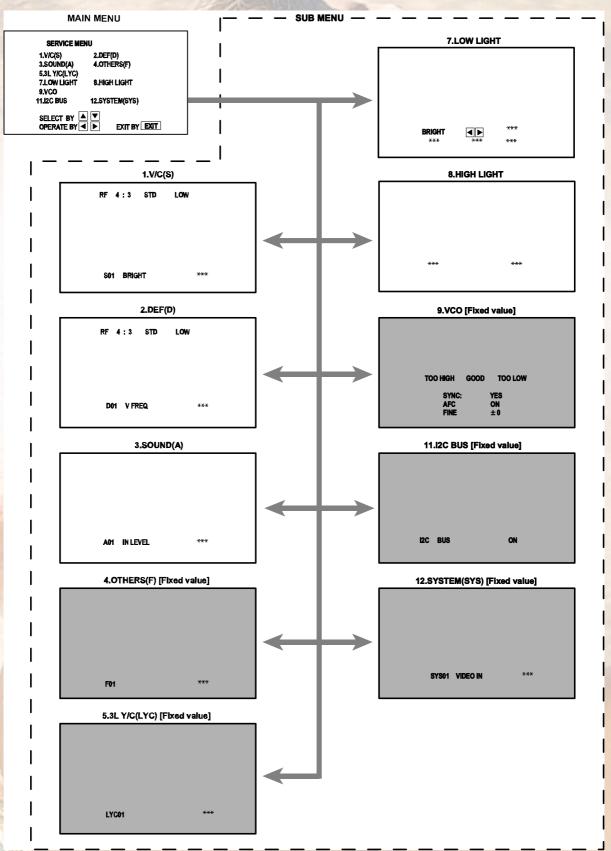
#### **MTS CIRCUIT**

- MTS INPUT LEVEL adjustment
- MTS SEPARATION adjustment

#### 4.5 ADJUSTMENT LOCATIONS



#### 4.6 BASIC OPERATION OF SERVICE MODE



#### 4.6.1 TOOL OF SERVICE MODE OPERATION

Operate the SERVICE MODE with the REMOTE CONTROL UNIT.

#### 4.6.2 SERVICE MODE ITEMS

In general, basic setting (adjustments) items or verifications are performed in the SERVICE MODE.

1. V/C (S)	This sets the setting values of the VIDEO circuit.
2. DEF (D)	This sets the setting values of the DEFLECTION circuit.
3. SOUND (A)	This sets the setting values of the AUDIO circuit.
4. OTHERS (F)	This sets the setting values of the factory settings. [Do not adjust]
6. 3L Y/C(LYC)	This sets the setting values of the 3 line YC separation control circuit. [Do not adjust]
7. LOW LIGHT	This sets the setting values of the WHITE BALANCE (LOW LIGHT) control circuit.
8. HIGH LIGHT	This sets the setting values of the WHITE BALANCE (HIGH LIGHT) control circuit.
9. VCO	This sets the setting values of the VCO control circuit. [Do not adjust]
11. I2C BUS	This sets the setting values of the I <sup>2</sup> C BUS control circuit. [Do not adjust]
12. SYSTEM(SYS)	This sets the setting values of the system control circuit. [Do not adjust]

#### 4.6.3 HOW TO ENTER THE SERVICE MODE

- (1) Set to 0 minutes using the [SLEEP TIMER] key.
- (2) Press the [VIDEO STATUS] key and [DISPLAY] key simultaneously while "0 MIN" is displayed, then enter the SERVICE MODE.

#### NOTE:

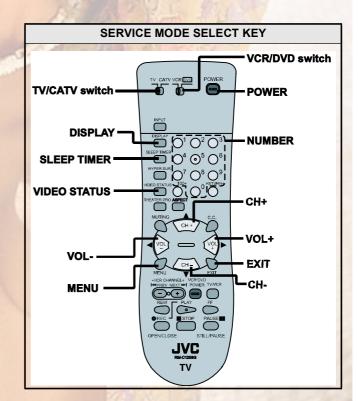
Before entering the SERVICE MODE, confirm that the setting of TV / CATV switch of the REMOTE CONTROL UNIT is at the "TV" side and the setting of VCR / DVD switch is at the "VCR" side. If the switches have not been properly set, you cannot enter the SERVICE MODE.

#### 4.6.4 HOW TO STORE OF SETTING VALUE

The setting value will be stored automatically when release the REMOTE CONTROL UNIT keys

#### 4.6.5 HOW TO EXIT THE SERVICE MODE

Press the [EXIT] key to exit the SERVICE MODE.



#### 4.6.6 SERVICE MODE SETTING

#### 1. V/C, 2. DEF

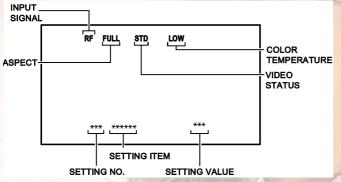
• Press [CH+] / [CH-] key

For scrolling up/down the adjustment item.

Press [VOL+] / [VOL-] key
 For scrolling up/down the data values.

#### NOTE:

The setting value will be stored automatically when release the REMOTE CONTROL UNIT keys.



#### (1) INPUT SIGANL

RF: Antenna input

COMP : External (Component) input EXT : External (S / Composite) input

#### (2) ASPECT

FULL : FULL screen mode

REGU : REGULAR screen mode

CINE : CINEMA screen mode

PANO : PANORAMA screen mode

#### (3) VIDEO STATUS

STD: STANDARD
THEA: THEATER

#### (4) COLOR TEMPERATURE

HIGH: White balance high mode
LOW: White balance low mode

#### 3. SOUND (A)

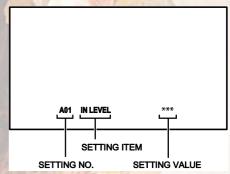
Press [CH+] / [CH-] key

For scrolling up/down the adjustment item.

Press [VOL+] / [VOL-] key
 For scrolling up/down the data values.

#### NOTE:

The setting value will be stored automatically when release the REMOTE CONTROL UNIT keys.

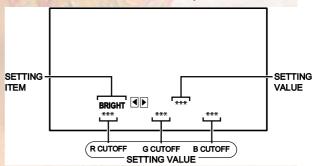


#### 7. LOW LIGHT

The setting for the WHITE BALANCE (LOW LIGHT) control circuit.

#### NOTE:

The setting value will be stored automatically when release the REMOTE CONTROL UNIT keys.

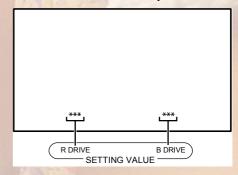


#### 8. HIGH LIGHT

The setting for the WHITE BALANCE (HIGH LIGHT) control circuit.

#### NOTE:

The setting value will be stored automatically when release the REMOTE CONTROL UNIT keys.



#### 4.7 INITIAL SETTING VALUE OF SERVICE MODE

- (1) Adjustment of the SERVICE MODE is made on the basis of the initial setting values; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.
- (2) Do not change the initial setting values of the setting items NOT LISTED IN ADJUSTMENT PROCEDURE.
- (3) ---: This mark described in each table shows "Cannot adjust it."

#### 4.7.1 [1.V/C(S)]

13	1700		- 1494	Initial setting value  RF							
No.	Setting	Variable	- 1000								
NO.	item	range	WARRIED TO	STAN	DARD		100	THEA	TER		
			REGULAR	PANORAMA	CINEMA	FULL	REGULAR	PANORAMA	CINEMA	FULL	
S01	BRIGHT	0 to 127	64	110-	-	+	ALC HE		一次		
S02	PICTURE	0 to 127	55	101- 4	N.L.	<del>47</del> /3/1	W -		8=10		
S03	COLOR	0 to 127	45		<u></u>				19-3		
S04	TINT	0 to 127	56	100-2			A in	<u></u> ///			
S05	DETAIL	0 to 63	35	A ( ( )			-	2//2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
S06	BRIGHT+-	-32 to +32	///	±0	±0	±0	+3	10 100	1 No.		
S07	PICT+-	-32 to +32	100 <u>4-</u> 71	+5	+5	+5	-7		- N		
S08	COLOR+-	-32 to +32		+1	+1	+1	-3		<del>-</del>		
S09	TINT+-	-32 to +32	1/-	±0	±0	±0	-3	(G-1)	17/		
S10	DETAIL+-	-32 to +32	M				±0	174	1		

- 5	Cotting	Variable	Initial set	ting value		
No.	Setting item	range	EXTERNAL (S / COMPOSITE)	EXTERNAL (COMPONENT)		
S01	BRIGHT	0 to 127		-		
S0 <mark>2</mark>	S02 PICTURE			-		
S0 <mark>3</mark>	03 COLOR 0 to 127			42		
S04	TINT	0 to 127		77		
S05	DETAIL	0 to 63	40	40		
S0 <mark>6</mark>	BRIGHT+-	-32 to +32	+4	-2		
S0 <mark>7</mark>	PICT+-	-32 to +32	+3	+2		
S08	COLOR+-	-32 to +32	-3			
S0 <mark>9</mark>	TINT+-	-32 to +32	+5			
S1 <mark>0</mark>	DETAIL+-	-32 to +32				

1			Initial setting value							
No.	Setting	Variable	RF / EXTERNAL (S / COMPOSITE)				EXTERNAL (COMPONENT)			
NO.	item	range	STAN	DARD	THE	ATER	STANDARD		THEATER	
1			LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
S11	R CUT OFF	0 to 255	30		784		8 = N	7-		
S12	G CUT OFF	0 to 255	30				(Alexander	10-1	<u></u>	
S13	B CUT OFF	0 to 255	30				(1) <u>m</u>	0		
S14	R DRIVE	0 to 127	64				22-10			<u></u>
S15	B DRIVE	0 to 127	64				( C			
S16	R CUT +-	-128 to +127		±0	±0	±0	±0			
S17	G CUT +-	-128 to +127		±0	±0	±0	±0			
S18	B CUT +-	-128 to +127		±0	±0	±0	±0			
S19	R DRV +-	-128 to +127	18	+5	+13	+7	±0			
S20	B DRV +-	-128 to +127		+6	-25	-9	±0			

			Initial setting value								
Ma	Setting	Variable	RF / E	RF / EXTERNAL (S / COMPOSITE)				EXTERNAL (COMPONENT)			
No. item	range	STAN	STANDARD		THEATER		STANDARD		THEATER		
			LOW	HIGH	LOW	HIGH	LOW HIG	HIGH	LOW	HIGH	
S21	NTSC MAT	0 to 3	3	3	1	1	2	2	1	1	
S22	BLACK ST	0 to 3	3		2	A A	W \\	87 - N			
S23	DC REST	0 to 1	1		1	714	W 8	11-2			
S24	DCRSW	0 to 1	1		1	P (-17)	1.37 S. 19	1/2/200	M /	-	

No	No. Setting item	Variable range			
NO.			RF	EXTERNAL (S / COMPOSITE)	EXTERNAL (COMPONENT)
S25	ASSY SHRP	0 to 7	4	4	4
S26	BPF FO	0 to 1	0	0	216
S27	KILR OFF	0 to 1	0	0	1568 /
S28	KILR SEN	0 to 1	1	1	

		Apple & Shipping	A SHEET WAS A SHEE
No.	Setting item	Variable range	Initial setting value
S29	RGB MUTE	0 to 1	0
S30	BLUE B	0 to 1	0
S31	VIDEO SW	0 to 3	3
S32	CMP ABCL	0 to 1	0
S33	OSD ABL	0 to 1	0
S34	OSD CONT	0 to 63	3
S35	SUB CONT	0 to 15	3
S36	ABL GAIN	0 to 3	0
S37	ABL PNT	0 to 3	3
S38	Y GAMMA	0 to 3	1
S39	Y MUTE	0 to 1	0
S40	SVM GAIN	0 to 3	3
S41	SVM PH	0 to 3	2
S42	WPL	0 to 1	0
S43	COL GMM	0 to 1	0
S44	V1 GAIN	0 to 7	4
S46	VMOFF DE	-128 to +127	+3
S47	APC CLK	0 to 1	1
S48	PIP ADJ	0 to 15	8

#### 4.7.2 [2. DEF (D)]

	Setting item	Variable	Initial setting value							
No.			RF				EXTERNAL			
	item	range	FULL	CINEMA	PANORAMA	REGULAR	FULL	CINEMA	PANORAMA	REGULAR
D01	V FREQ	0 to 3	0	0	0	0	3	3	3	3
D02	AFC GAIN	0 to 3	0	0	0	0	2	2	2	2
D03	H POSI	0 to 31	23	Million Control	-4/_		23	· · · · · · · · · · · · · · · · · · ·	1 -	
D04	H POSI+-	-128 to +127		±0	±0	±0	( ) A	±0	±0	±0
D05	V PHASE	0 to 7	3			//	3	A	(400)	
D06	V PH+-	-128 to +127	/// <del></del>	±0	±0	±0	The state of the s	±0	±0	±0
D07	V SIZE	0 to 127	37	1811 - K	-		37	- N	1-1	
D08	V SIZE+-	-128 to +127		+13	+6	-1//	W - 1	+13	+7	-1
D09	V CENTER	0 to 63	32	4/1/1		-400	32	_ = 1		
D10	V CENT+-	-128 to +127	M 11	±0	±0	±0	- (0	±0	±0	±0
D11	V S CORR	0 to 15	6			120	6	7-46		
D12	V S CO+-	-128 to +127	1/1-1	±0	±0	±0	(A) A	±0	±0	±0
D13	V LIN	0 to 15	11		5	TO ALL	11	7025 E	2,	
D14	V LIN+-	-128 to +127	1	±0	±0	±0	100-12	±0	±0	±0
D15	H SIZE	0 to 63	30	D	144		30	174	17	
D16	H SIZE+-	-128 to +127	1/2/	±0	-75	+21	304/02	±0	-7	+20
D17	WVMT TOP	0 to 3	0	0		150	0	0	/	
D18	WVMT BTM	0 to 3	0	0		-	0	0		
D19	EWCR TOP	0 to 31	17				16	207		
D20	EWCR T+-	-128 to +127		±0	+1	±0	100-10	±0	+1	±0
D21	EWCR BTM	0 to 31	16				16	D)/		
D22	EWCR B+-	-128 to +127		±0	±0	±0	(S.C.)	±0	±0	±0
D23	EW PARA	0 to 63	194				18	S()4		
D24	EW PARA+-	-128 to +127		+6	+3	-2	M(=)4	+6	+3	-1
D2 <mark>5</mark>	V EHT	0 to 7	0				0			
D26	V EHT+-	-128 to +127		±0	±0	±0		±0	±0	±0
D27	H EHT	0 to 7	0				0	Y		
D28	H EHT+-	-128 to +127		±0	±0	±0	10-1	±0	±0	±0
D29	TRAPEZ	0 to 63	330				330	1002		
D30	TRAPEZ+-	-128 to +127	7	±0	±0	±0	W 447	±0	±0	±0
D31	V AGC	0 to 1	0	0	0	0	0	0	0	0
D32	BLANK SW	0 to 1	0	0	-	0	0	0		0
D33	VRMP BI	0 to 1	0	0	0	0	0	0	0	0

#### 4.7.3 [3. SOUND(A)]

No.	Setting item	Variable range	Initial setting value
A01	IN LEVEL	0 to 15	9
A02	LOW SEP	0 to 63	39
A03	HI SEP	0 to 63	38
A04	SAPC	0 to 1	0
A05	BBE BASS	-128 to +127	+6
A06	BBE TRE	-128 to +127	-2
A07	AHS MVE	-128 to +127	±0
A08	AHS MSC	-128 to +127	±0

#### 4.7.4 [4. OTHERS(F)] [Do not adjust : All fixed]

No.	Setting item	Variable range	Initial setting value	
F01	OSD POSI	0 to 255	42	
F02	OSD FREQ	0 to 255	90	
F03	CCD POSI	0 to 255	45	
F04	CCD FREQ	0 to 255	91	
F05	CCD CONT	0 to 63	4	
F06	PUR WBCK	0 to 1	0	
F07	PUR CONT	0 to 63	2	
F08	CCD PCHK	0 to 1	1	
F09	VMOFF	0 to 1	0	
F10	VNR CHK	0 to 255	3	
F11	VCSN TM	0 to 255	5	
F12	VM DAT A	-128 to +127	+8	
F13	VM DAT B	-128 to +127	-8	
F14	VM DAT C	-128 to +127	-20	
F15	VM DAT D	-128 to +127	-32	
F16	VM DAT E	0 to 1	1	
F17	XDSID TM	0 to 255	15	
F18	FM TRAP	0 to 1	0	

#### 4.7.5 [5. 3L Y/C(LYC)] [Do not adjust : All fixed]

	No.	Setting item	Variable range	Initial setting value
	LYC01	MODE	0 to 7	4
	LYC02	VENH	0 to 7	1
	LYC03	PDSOFF	0 to 1	0
	LYC04	СВ	0 to 1	0
è	LYC05	VNLR	0 to 15	2
	LYC06	GSEL0	0 to 1	0
	LYC07	GSEL1	0 to 1	1
	LYC08	COR	0 to 3	0
	LYC09	TRAP	0 to 1	1
	LYC10	CHTRAP	0 to 1	0
	LYC11	CBPF	0 to 1	0
	LYC12	ENHOFF	0 to 1	0

#### 4.7.6 [12. SYSTEM(SYS)] [Do not adjust : All fixed]

A Section	Setting	aujust . Ali lixeuj	
No.	item	Variable range	Initial setting value
SYS01	VIDEO IN	0 to 4	3
SYS02	VSM	0 to 1	1
SYS03	CLR TEMP	0 to 1	1
SYS04	THEATER	0 to 1	1
SYS05	THEA PRO	0 to 1	1
SYS06	GAME MD	0 to 1	0
SYS07	AHS	0 to 1	0
SYS08	HYPER SR	0 to 1	1
SYS09	BBE	0 to 1	1
SYS10	S SOUND	0 to 1	1
SYS11	16:9 MD	0 to 3	0
SYS12	S CCD	0 to 1	1
SYS13	ID DISP	0 to 1	1
SYS14	CH LAB	0 to 1	1
SYS15	V LAB	0 to 1	1
SYS16	W CLOCK	0 to 1	1
SYS17	PIM	0 to 1	1
SYS18	PURITY	0 to 1	0
SYS19	VOL MUTE	0 to 1	1
SYS20	VCHIP	0 to 1	1
SYS21	VCHIP CA	0 to 1	1
SYS22	CCD	0 to 1	1
SYS23	HYPSCAN	0 to 1	1
SYS24	JVC LOGO	0 to 1	1
SYS25	ASPECT	0 to 1	1
SYS26	TILT	0 to 1	1

#### 4.8 ADJUSTMENT PROCEDURE

#### 4.8.1 CHECK ITEM

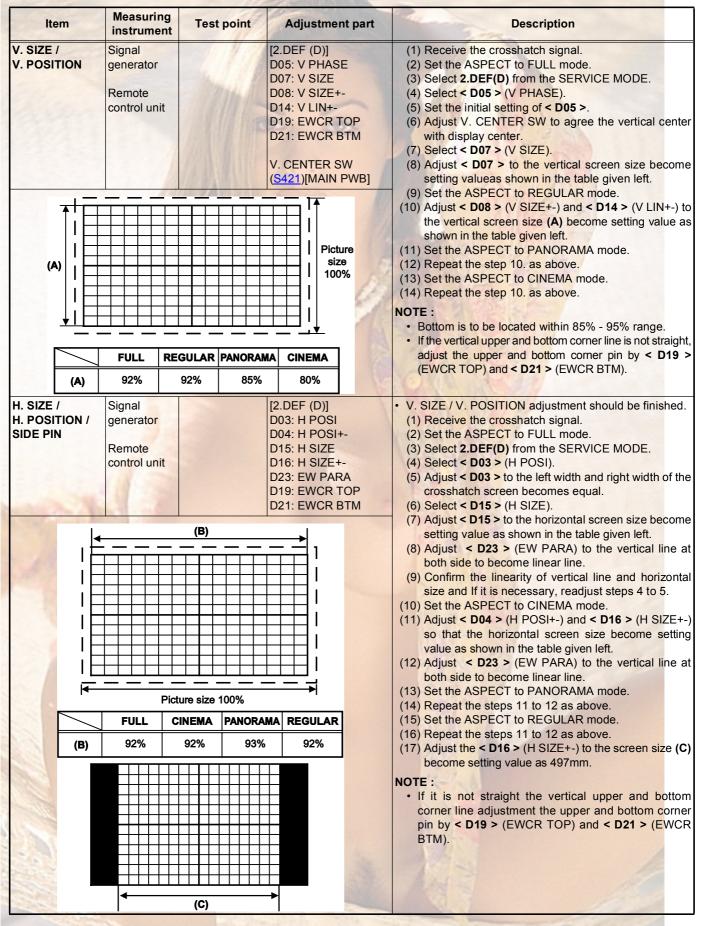
Item	Measuring instrument	Test point	Adjustment part	Description
B1 VOLTAGE	DC voltmeter	S1 Connector 1-pin : TP-E 5-pin : TP-91B [MAIN PWB]	16 =	<ul> <li>(1) Receive the black and white signal. (color off)</li> <li>(2) Connect the DC voltmeter to the 1-pin and 5-pin of \$1 connector.</li> <li>(3) Confirm that the voltage is DC134.5V±2V.</li> </ul>
HIGH VOLTAGE   Resistor   S1   2-r   3-r   [M/s]	S1 connector 2-pin : X-RAY2 3-pin : X-RAY1 [MAIN PWB]		After repairing the high voltage hold down circuit. This circuit shall be checked to operate correctly.  (1) Turn the power switch to on.  (2) Refer to the figure, connect the resistor between 2-pin and 3-pin of <b>S1 connector</b> .  (3) Make sure that the screen picture disappeares.  (4) Disconnect the power plug.  (5) Remove the resistor.	
22kΩ±1/4W    HEATEF			HEATER	<ul> <li>(6) Again connect the power plug.</li> <li>(7) Turn the power switch to on.</li> <li>(8) Make sure that the normal picture is displayed on screen.</li> </ul>

#### 4.8.2 FOCUS

Item	Measuring instrument	Test point	Adjustment part	Description
FOCUS	Signal generator		FOCUS VR [In HVT]	<ul> <li>(1) Receive the crosshatch signal.</li> <li>(2) While watching at the screen, adjust FOCUS VR to the vertical and horizontal lines will be thinnest and sharpest center horizontal line.</li> <li>(3) Make sure that the picture is in focus even when the screen gets darkened.</li> </ul>



### 4.8.3 DEFLECTION CIRCUIT



### 4.8.4 VIDEO CIRCUIT

	Item	Measuring instrument	Test point	Adjustment part	Description			
	REMO H.LINE ON  R CUTOFF	instrument Signal generator Remote control unit  TE CONTROL  H.LINE OFF 2 G CUTOFF A E		[1.V/C (S)] S01: BRIGHT S11: R CUTOFF S12: G CUTOFF S13: B CUTOFF  [7.LOW LIGHT] SCREEN VR [in HVT]	(1) Receive the black and white signal ( color off ). (2) Select the 1.V/C (S) from the SERVICE MODE. (3) Confirm the initial setting value of < S11 > ( CUTOFF), < S12 > (G CUTOFF), < S13 > ( CUTOFF) and < S01 > (BRIGHT).  (4) Return to the main menu in SERVICE MODE. (5) Select the 7.LOW LIGHT from the SERVICE MODI. (6) Display a single horizontal line by pressing the [ key. (7) Turn the SCREEN VR all the way to the left. (8) Turn the SCREEN VR gradually to the right from the left until either one of the red, blue or green color appears faintly. (9) Adjust the two colors which did not appear until the single horizontal line that is displayed become white using the [4] to [9] keys. (10) Turn the SCREEN VR until the single horizontal line is displayed faintly. (11) Press the [2] key to cancel the single horizontal line mode. (12) Return to the main menu in SERVICE MODE. (13) Select the 1.V/C (S) from the SERVICE MODE.			
					<ul> <li>(14) Adjust the BRIGHT level to become the black component shines white slightly by &lt; \$01 &gt;.</li> <li>(15) Confirm that whether the color ingredient of R, G, or B is visible to the black component, which shines white slightly.</li> <li>(16) When the color ingredient can be seen, two colors other than a visible color are adjusted, and it is made to look white.</li> <li>(17) Return the value of &lt; \$01 &gt; to initial setting value.</li> <li>• The [3] (EXIT) key is the cancel key for the WHITE BALANCE.</li> </ul>			
	E ANCE H LIGHT)	Signal generator  Remote control unit		[1.V/C (S)] S14: R DRIVE S15: B DRIVE [8.HIGH LIHGT]	<ul> <li>(1) Receive the black and white signal (color off).</li> <li>(2) Select the 1.V/C (S) from the SERVICE MODE.</li> <li>(3) Set the initial setting value of &lt; S14 &gt; (R DRIVE) and &lt; S15 &gt; (B DRIVE).</li> <li>(4) Return to the main menu in SERVICE MODE.</li> </ul>			
	REMO	TE CONTROL	UNIT		(5) Select the <b>8.HIGH LIGHT</b> from the SERVICE MODE.			
	① R DRIVE ▲ ④ R DRIVE ▼ ⑦	(5)	EXIT  ③ B DRIVE   ⑥ B DRIVE   ⑨		<ul> <li>(6) Adjust the screen until it becomes white using the [4], [6], [7] and [9] keys.</li> <li>The [3] (EXIT) key is the cancel key for the WHITE BALANCE.</li> </ul>			
щ	E E				5965			

Item	Measuring instrument	Test point	Adjustment part	Description
SUB BRIGHT	Remote control unit		[1.V/C (S)] S01: BRIGHT	<ul> <li>(1) Receive any broadcast.</li> <li>(2) Select the 1.V/C (S) from the SERVICE MODE.</li> <li>(3) Select &lt; S01 &gt; (BRIGHT).</li> <li>(4) Set the initial setting value of &lt; S01 &gt;.</li> <li>(5) If the brightness is not the best with the initial setting value, make fine adjustment of &lt; S01 &gt; until you get the optimum brightness.</li> </ul>
SUB CONTRAST	Remote control unit		[1.V/C (S)] S02: PICTURE	<ul> <li>(1) Receive any broadcast.</li> <li>(2) Select the 1.V/C (S) from the SERVICE MODE.</li> <li>(3) Select &lt; S02 &gt; (PICTURE).</li> <li>(4) Set the initial setting value of &lt; S02 &gt;.</li> <li>(5) If the contrast is not the best with the initial setting value, make fine adjustment of &lt; S02 &gt; until you get the optimum contrast.</li> </ul>

### 4.8.5 MTS CIRCUIT

Itei	m	Measuring instrument	Test point	Adjustment <sub>I</sub>	part	Description
MTS INPUT LEVEL		Remote control unit		[3.SOUND (A)] A01: IN LEVEL		<ul> <li>(1) Receive any broadcast.</li> <li>(2) Select the 3.SOUND (A) from the SERVICE MODE.</li> <li>(3) Select &lt; A01 &gt; (IN LEVEL).</li> <li>(4) Set the intial setting value of &lt; A01 &gt;.</li> </ul>
MTS SEPARA	TION			[3.SOUND (A)] A02: LOW SEP. A03: HI SEP.		<ol> <li>Input a stereo L signal (300Hz) from a TV audio multiplex signal generator to the antenna terminal.</li> <li>Connect an oscilloscope to R OUT pin of the AUDIO OUT, and display one cycle portion of the 300Hz signal.</li> <li>Select the 3.SOUND (A) from the SERVICE MODE.</li> <li>Select &lt; A02 &gt; (LOW SEP.).</li> </ol>
L-Channel signal waveform		al waveform	R-Channel crosstalk portion  Minimum			<ul> <li>(5) Set the initial setting value of &lt; A02 &gt;.</li> <li>(6) Adjust &lt; A02 &gt; so that the stroke element of the 300Hz signal will become minimum.</li> <li>(7) Change the connection of the oscilloscope to L OUT pin of the AUDIO OUT, and enlarge the voltage axis.</li> <li>(8) Change the signal to 3kHz, and similarly adjust &lt; A03 &gt; (HI SEP.).</li> </ul>













# SCHEMATIC DIAGRAMS

**COLOR TELEVISION** 

AV-30W476/s

CD-ROM No.SML200503

**BASIC CHASSIS** 

GW2





## AV-30W476/s

# STANDARD CIRCUIT DIAGRAM

### ■ NOTE ON USING CIRCUIT DIAGRAMS

### 1.SAFETY

The components identified by the \( \triangle \) symbol and shading are critical for safety. For continued safety replace safety ciritical components only with manufactures recommended parts.

### 2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal

: Colour bar signal

(2) Setting positions of each knob/button and variable resistor

: Original setting position when shipped

(3)Internal resistance of tester

: DC 20kΩ/V

(4)Oscilloscope sweeping time

: H ⇒ 20µs / div

W. T.

⇒ 5ms / div

: V

: Othters  $\Rightarrow$  Sweeping time is

specified

(5)Voltage values

: All DC voltage values

\* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

### 3.INDICATION OF PARTS SYMBOL [EXAMPLE]

● In the PW board : R1209 → R209

# 4.INDICATIONS ON THE CIRCUIT DIAGRAM (1)Resistors

Resistance value

No unit :  $[\Omega]$  K :  $[k\Omega]$  M :  $[M\Omega]$ 

Rated allowable power

No indication : 1/16 [W]
Others : As specified

Type

No indication : Carbon resistor

OMR : Oxide metal film resistor
MFR : Metal film resistor
MPR : Metal plate resistor
UNFR : Uninflammable resistor
FR : Fusible resistor

\* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

### (2)Capacitors

Capacitance value

1 or higher : [pF] less than 1 : [µF]

Withstand voltage

No indication : DC50[V]

Others : DC withstand voltage [V]
AC indicated : AC withstand voltage [V]

\* Electrolytic Capacitors

47/50[Example]: Capacitance value [µF]/withstand voltage[V]

Type

No indication : Ceramic capacitor

MM : Metalized mylar capacitor
PP : Polypropylene capacitor

MPP : Metalized polypropylene capacitor

MF : Metalized film capacitor
TF : Thin film capacitor
BP : Bipolar electrolytic capacitor
TAN : Tantalum capacitor

(3)Coils

No unit : [µH]

Others : As specified

(4)Power Supply

:B1 :B2 (12V)

\* Respective voltage values are indicated

### (5)Test point

0

: Test point

: Only test point display

: Wrapping or soldering

(6)Connecting method



### (7)Ground symbol

### **5.NOTE FOR REPAIRING SERVICE**

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE: (\(\preceq\)) side GND and the ISOLATED(NEUTRAL): (\(\preceq\)) side GND. Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus ( oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time.

If the above precaution is not respected, a fuse or any parts will be broken.

Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

### NOTE

♦ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.

When ordering parts, please use the numbers that appear in the Parts List.

# CONTENTS

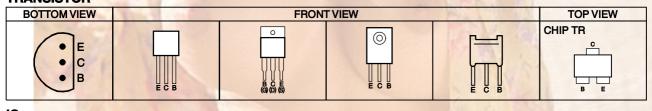
SEMICONDUCTOR SHAPES	2-2
BLOCK DIAGRAM	2-3
CIRCUIT DIAGRAMS	2-5
MAIN PWB CIRCUIT DIAGRAM	All the second s
FRONT CONTROL PWB CIRCUIT DIAGRAM	2-5
CRT SOCKET PWB CIRCUIT DIAGRAM	2-9
AV SELECTOR PWB CIRCUIT DIAGRAM	2-11
SIDE CONTROL PWB CIRCUIT DIAGRAM	2-11
PATTERN DIAGRAMS	2-13
MAIN PWB PATTERN	2-13
FRONT CONTROL PWB PATTERN	
CRT SOCKET PWB PATTERN	2-15
AV SELECTOR PWB PATTERN	2-15
SIDE CONTROL PWB PATTERN	2-17

### **USING P.W. BOARD**

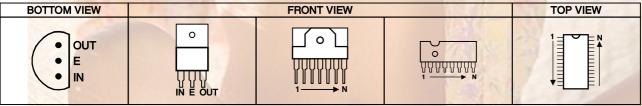
PWB ASS'Y name	PWB ASS'Y No.
MAIN P.W. BOARD	SGW-1011A-M2
CRT SOCKET P.W. BOARD	SGW-3011A-M2
AV SELECTOR P.W. BOARD	SGW-5011A-M2
SIDE CONTROL P.W. BOARD	SGW-6011A-M2
FRONT CONTROL P.W. BOARD	SGW-7011A-M2

### **SEMICONDUCTOR SHAPES**

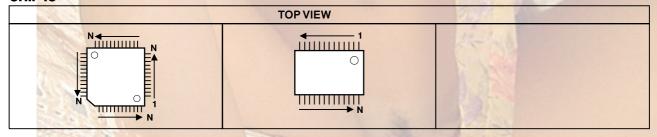
### **TRANSISTOR**



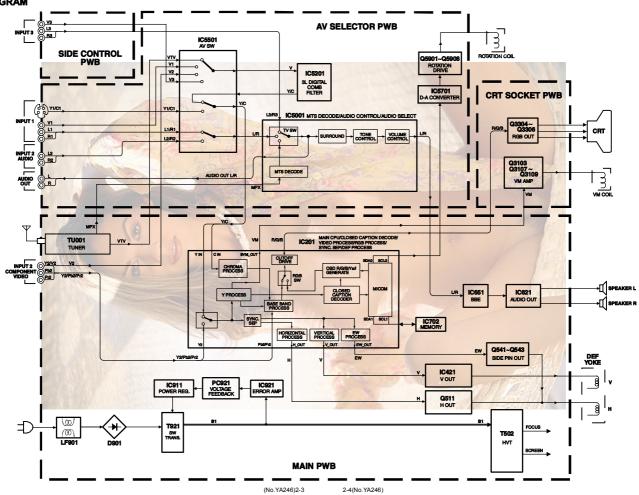
### IC

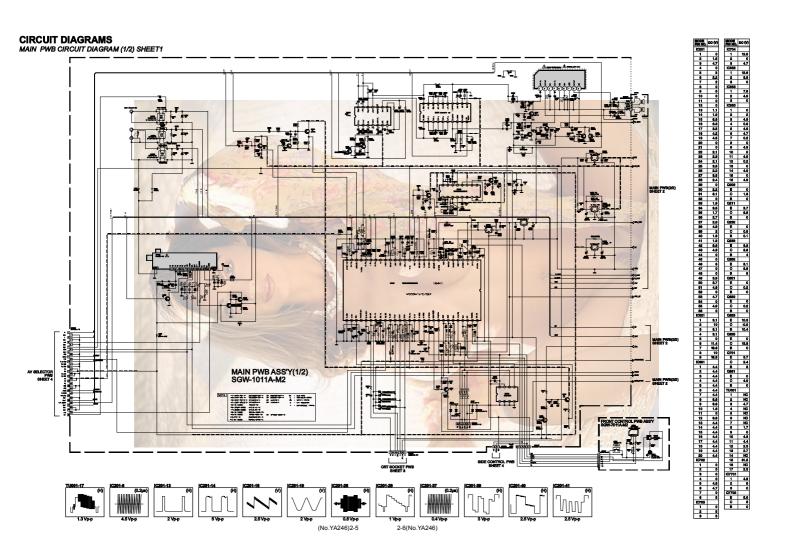


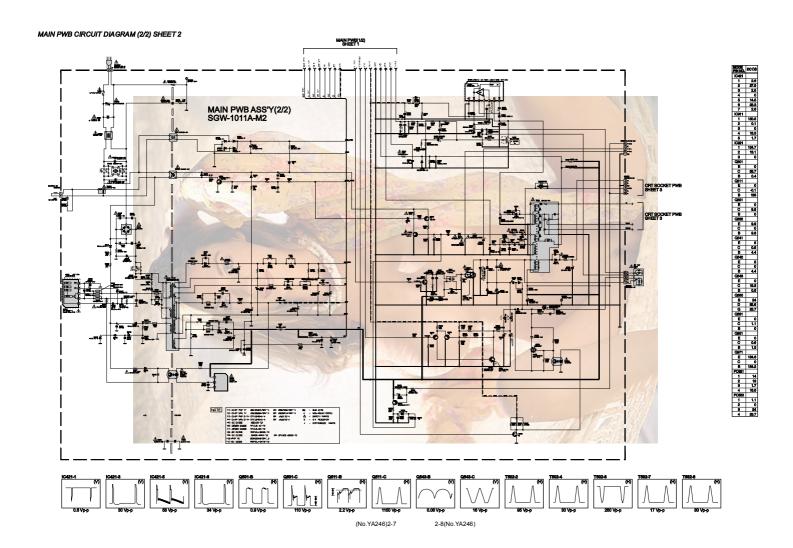
### CHIP IC



### **BLOCK DIAGRAM**





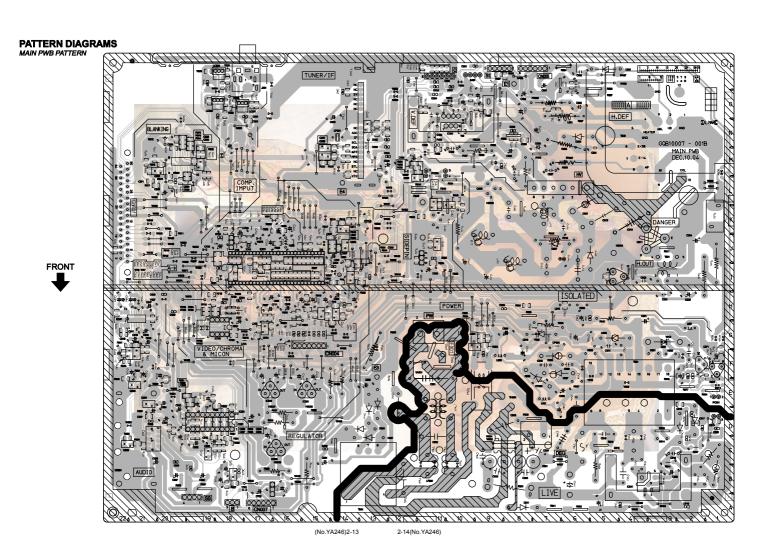


# CRT SOCKET PWB GRCUIT DMGRAM SHEET 3 CRT SOCKET PWB ASSY SOW-3011AMZ CRT SOCKET PWB ASSY SOW-301A

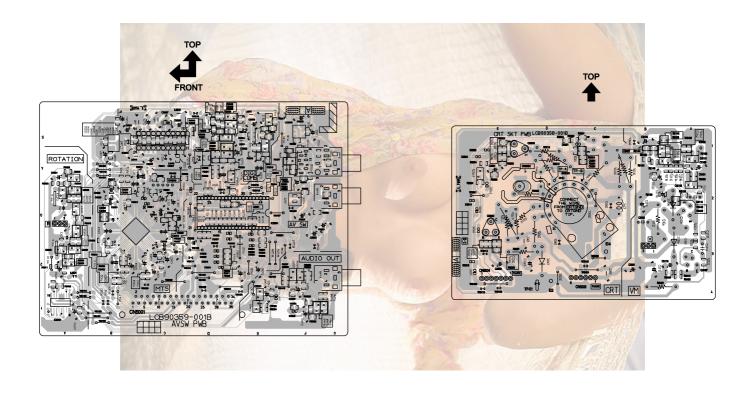
# AV SELECTOR AND SIDE CONTROL PWB CRCUIT DAGRAM SHEET 4 AN SELECTOR AND SIDE CONTROL PWB ASSYY SIDE C

(No.YA246)2-11

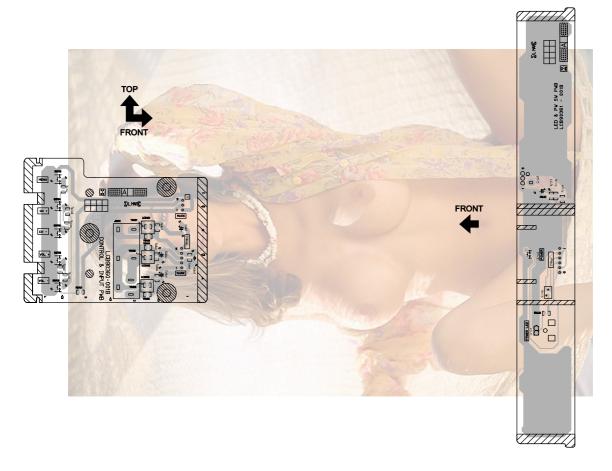
2-12(No.YA246)



AV SELECTOR PWB PATTERN CRT SOCKET PWB PATTERN



### FRONT CONTROL PWB PATTERN



(No.YA246)2-17

2-18(No.YA246)





# **PARTS LIST**

### **CAUTION**

- The parts identified by the  $\triangle$  symbol are important for the safety. Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

### ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

	RESISTORS	111111111111111111111111111111111111111	CAPACITORS
CR	Carbon Resistor	C CAP.	Ceramic Capacitor
FR	Fusible Resistor	E CAP.	Electrolytic Capacitor
PR	Plate Resistor	M CAP.	Mylar Capacitor
VR	Variable Resistor	CH CAP.	Chip Capacitor
HV R	High Voltage Resistor	HV CAP.	High Voltage Capacitor
MF R	Metal Film Resistor	MF CAP.	Metalized Film Capacitor
MG R	Metal Glazed Resistor	MM CAP.	Metalized Mylar Capacitor
MP R	Metal Plate Resistor	MP CAP.	Metalized Polystyrol Capacitor
OM R	Metal Oxide Film Resistor	PP CAP.	Polypropylene Capacitor
CMF R	Coating Metal Film Resistor	PS CAP.	Polystyrol Capacitor
UNF R	Non-Flammable Resistor	TF CAP.	Thin Film Capacitor
CH V R	Chip Variable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH MG R	Chip Metal Glazed Resistor	TAN. CAP.	Tantalum Capacitor
COMP. R	Composition Resistor	CH C CAP.	Chip Ceramic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
126		CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
A 7 1-		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
427		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

RESISTORS										
F		G	J	К	M	N	R	Н	Z	Р
±1%	6	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

# CONTENTS

USING P.W. BOARD & REMOTE CONTROL UNIT	3-2
EXPLODED VIEW PARTS LIST -1	
EXPLODED VIEW -1	
EXPLODED VIEW PARTS LIST -2	
EXPLODED VIEW -2	
	Wat 1
PRINTED WIRING BOARD PARTS LIST	3-6
MAIN P.W. BOARD ASS'Y (SGW-1011A-M2)	
CRT SOCKET P.W. BOARD ASS'Y (SGW-3011A-M2)	3-8
AV SELECTOR P.W. BOARD ASS'Y (SGW-5011A-M2)	
SIDE CONTROL P.W. BOARD ASS'Y (SGW-6011A-M2)	3-10
FRONT CONTROL P.W. BOARD ASS'Y (SGW-7011A-M2)	
REMOTE CONTROL UNIT PARTS LIST (RM-C1258G-1H)	3-11
PACKING	3-11
PACKING PARTS LIST	

# **USING P.W. BOARD & REMOTE CONTROL UNIT**

P.W.B ASS'Y name	P.W.B ASS'Y number
MAIN P.W.B	SGW-1011A-M2
CRT SOCKET P.W.B	SGW-3011A-M2
AV SELECTOR P.W.B	SGW-5011A-M2
SIDE CONTROL P.W.B	SGW-6011A-M2
FRONT CONTROL P.W.B	SGW-7011A-M2
REMOTE CONTROL UNIT	RM-C1258G-1H

# **EXPLODED VIEW PARTS LIST -1** ⚠ Ref.No. Part No. Part Name Description Local GQ30062-001A-A CM48006-010-C REMOCON LENS JVC MARK 2pcs in 1set ⚠ 100 101 102 GQ10075-003B-A GQ30061-001A-A GQ30063-001A-A FRONT CABINET ASSY POWER KNOB SPRING Inc.No.101-102 **EXPLODED VIEW -1** ⚠ (100)

(102)

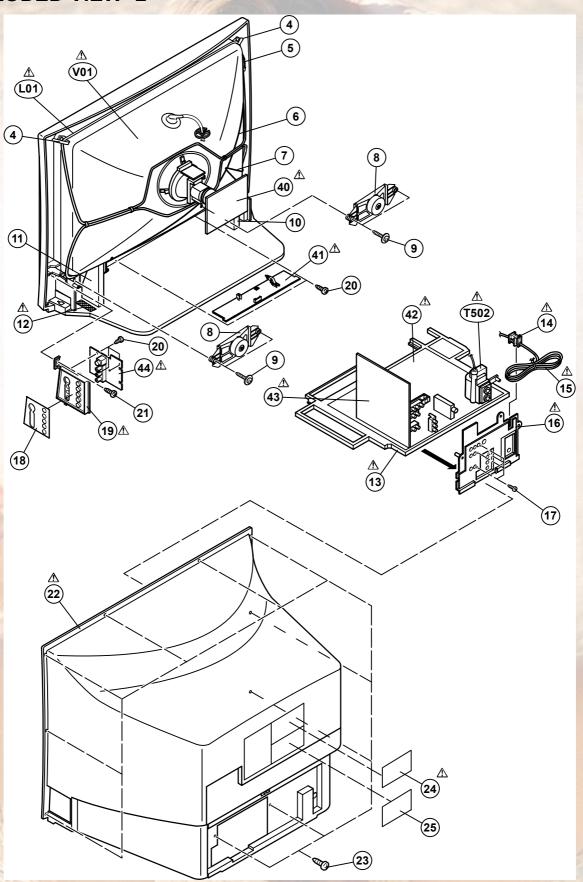
(No.YA246)3-3

# **EXPLODED VIEW PARTS LIST -2**

⚠	Ref.No.	Part No.	Part Name	Description	Local
<u></u>	V01	W76QEN693X002	PICTURE TUBE(ITC)	Inc.DEF YOKE/PC MAGNET/WEDGE	
$\Lambda$	L01 T502	QQW0191-001 QQH0121-001	DEG COIL FB TRANSF		
	4	LC30628-002A	DEG CLAMP	(x4)	
	5	A48457-4-S	SPRING		
	6	WJY0008-003A	E-BRAIDED ASSY	A STATE OF THE PARTY OF THE PAR	
	7	WJY0013-002A	E-BRAIDED ASSY	0004/0000/-0)	
	8 9	QAS0276-001 LC41029-002A-A	SPEAKER TAPPING SCREW	SP01/SP02(x2) (x4)	
	10	GQ20009-002A-A	CRT SUPPORT(L)	(X <del>4</del> )	
	11	GQ20009-001A-A	CRT SUPPORT(R)		
⚠	12	GQ30034-001B-A	WARNING LABÈL		
<u>^</u>	13	LC10883-001D-A	CHASSIS BASE	No. 1 To the second sec	
<u>∧</u> ∧ ∧	14	LC20106-001D-A	POWER CORD CLAMP	Om DI ACK	
<u> </u>	15 16	QMPD390-200-JS LC20899-006A-A	POWER CORD(US/CA) TERMINAL BOARD	2m BLACK	No.
	17	QYSBSB3010Z	TAP SCREW	M3 x 10mm(x4)	
	18	GQ20008-002A-A	OPERATION SHEET		
$\Delta$	19 20	GQ20007-001B-A	CONTROL BASE		
	20	QYSBSBG3010Z	TAP SCREW	M3 x 10mm(x5)	
$\triangle$	21 22	QYSBSFG4016Z GQ10074-002A-A	TAP SCREW REAR COVER	M4 x 16mm	
2:3	23	QYSBSFG4016Z	TAP SCREW	M4 x 16mm(x10)	
$\triangle$	24	GQ30032-001A-A	RATING LABEL	MTX Tollim(XTO)	
	25	LC32912-001A-A	BBE LABEL		
$\Lambda$	40	SGW-3011A-M2	CRT SOCKET PWB		
<b>△ △ △ △ △</b>	41	SGW-7011A-M2	FRONT CONTROL PWB		
<b>♠</b>	42	SGW-1011A-M2	MAIN PWB		
<u>/\</u>	43 44	SGW-5011A-M2 SGW-6011A-M2	AV SELECTOR PWB SIDE CONTROL PWB		
2:3	77	00 W-00 1 IA-WZ	SIDE SONTROL FWB		



# **EXPLODED VIEW -2**



# PRINTED WIRING BOARD PARTS LIST

MAIN P	.W. BOARD AS	S'Y (SGW-1011A	A-M2)	⚠Ref No.	Part No.	Part Name	Description Local
⚠Ref No.	Part No.	Part Name	Description Local	D952	1SS133-T2	SI DIODE	
IC201	TM8812CSDNG5JB4	IC	Marie I All	D953 D954	1SS133-T2 1N4002G-T2	SI DIODE SI DIODE	
IC421	LA78041	IC		D955	1N4002G-T2	SI DIODE	
IC621 IC651	TFA9843J/N1 NJM2150AD	IC IC		D956 D957	1N4002G-T2 1N4002G-T2	SI DIODE SI DIODE	
IC702	AT24C08-30W475	IC	(SERVICE)	D937	MTZJ15C-T2	Z DIODE	
IC703 IC704	S-80840CNY-G-T AN78L05-T	IC IC		D973	1SS133-T2	SI DIODE	
IC852	L7809CP	IC		C001	NDC31HJ-100X	C CAPACITOR	10pF 50V J
IC853 IC860	L7805CP TC74HC4538AF-X	IC IC		C002 C202	QETN0JM-477Z QETN1HM-105Z	E CAPACITOR E CAPACITOR	470uF 6.3V M 1uF 50V M
<b>∆</b> IC911	STR-G9626-F3	IC		C203	NCB31HK-152X	C CAPACITOR	1500pF 50V K
<b>∆</b> IC921	SE135N	IC		C211 C212	QENC1CM-106Z NDC31HJ-100X	BP E CAPACITOR C CAPACITOR	10uF 16V M 10pF 50V J
Q003	UN2212-X	DIGI TRANSISTOR		C221 C222	QETN1HM-106Z	E CAPACITOR C CAPACITOR	10uF 50V M
Q211 Q232	2SC3928A/QR/-X 2SC3928A/QR/-X	TRANSISTOR TRANSISTOR		C222 C223	NCF31AZ-105X NCB31HK-103X	C CAPACITOR C CAPACITOR	1uF 10V Z 0.01uF 50V K
Q233	2SC3928A/QR/-X	TRANSISTOR		C233	NDC31HJ-680X	C CAPACITOR	68pF 50V J
Q352 Q501	2SC3928A/QR/-X 2SC4212/Z1/	TRANSISTOR TRANSISTOR		C237 C241	NCB31HK-103X NCB31HK-103X	C CAPACITOR C CAPACITOR	0.01uF 50V K 0.01uF 50V K
<b>∆</b> Q511	2SD2645-YD	POW TRANSISTOR	H. OUT	C242	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M
<u>↑</u> Q531 Q532	2SC2785/JH/-T 2SA1530A/QR/-X	TRANSISTOR TRANSISTOR		C243 C244	QETN0JM-227Z NCB31HK-103X	E CAPACITOR C CAPACITOR	220uF 6.3V M 0.01uF 50V K
Q541	2SA1530A/QR/-X	TRANSISTOR		C281	QFVF1HJ-474Z	C CAPACITOR MF CAPACITOR	0.47uF 50V J
Q542 Q543	2SA1530A/QR/-X 2SD1267A/QP/	TRANSISTOR POW TRANSISTOR		C282 C283	QETN1CM-107Z NCB31HK-103X	E CAPACITOR C CAPACITOR	100uF 16V M 0.01uF 50V K
Q560	2SK3567	POWER MOS FET		C284	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M
Q561 Q621	2SC3928A/QR/-X 2SD601A/QR/-X	TRANSISTOR TRANSISTOR		C285 C286	NCB31HK-103X QETN1HM-474Z	C CAPACITOR E CAPACITOR	0.01uF 50V K 0.47uF 50V M
Q622	2SD601A/QR/-X	TRANSISTOR		C287	QETN1CM-107Z	E CAPACITOR	100uF 16V M
Q623 Q625	2SA1530A/QR/-X 2SD601A/QR/-X	TRANSISTOR TRANSISTOR		C288 C302	NCB31HK-103X NCB31EK-104X	C CAPACITOR C CAPACITOR	0.01uF 50V K 0.1uF 25V K
Q701	2SA1530A/QR/-X	TRANSISTOR		C352	QETN1EM-476Z	E CAPACITOR	47uF 25V M
Q861 Q951	2SC3928A/QR/-X 2SD1383K/AB/-X	TRANSISTOR SI TRANSISTOR		C354 C360	NCB31HK-103X NCB31HK-103X	C CAPACITOR C CAPACITOR	0.01uF 50V K 0.01uF 50V K
Q971	2SA1208/ST/Z1-T	TRANSISTOR		C391	QETN1CM-107Z	E CAPACITOR	100uF 16V M
D308	MTZJ4.3A-T2	Z DIODE		C392 C422	NCB31HK-103X QFN32AK-102Z	C CAPACITOR M CAPACITOR	0.01uF 50V K 1000pF 100V K
D309	MTZJ5.1B-T2	Z DIODE		C424	QETN1VM-107Z	E CAPACITOR	100uF 35V M
D310 D352	MTZJ4.3A-T2 MTZJ9.1C-T2	Z DIODE Z DIODE		C425 C427	QETN1VM-477Z QETN1HM-225Z	E CAPACITOR E CAPACITOR	470uF 35V M 2.2uF 50V M
D353	1SS133-T2	SIDIODE		C428	QETM1EM-228	E CAPACITOR	2200uF 25V M
D354 D421	MTZJ3.3A-T2 1N4003-T2	Z DIODE SI DIODE		C431 C433	QFLC2AK-563Z QETN1EM-476Z	M CAPACITOR E CAPACITOR	0.056uF 100V K 47uF 25V M
D422 D501	MTZJ75-T2 RH3G-F1	Z DIODE SI DIODE		C435 C440	NCB31HK-183X	C CAPACITOR	0.018uF 50V K
D502	RU3AM-LFC4	SI DIODE		C501	QCS32HJ-100Z QCB32HK-151Z	C CAPACITOR C CAPACITOR	10pF 500V J 150pF 500V K
D521 D523	RH1S-T3 RGP10J-04TS-T3	SI DIODE SI DIODE		C502 C503	QCB32HK-331Z QEHR2CM-105Z	C CAPACITOR E CAPACITOR	330pF 500V K 1uF 160V M
D525	1SS81-T5	SI DIODE		C504	QEZ0203-107	E CAPACITOR	100uF 160V M
D526 D527	1SS81-T5 1SR124-400A-T2	SI DIODE SI DIODE		C507 △C510	QEZ0195-475Z QFZ0200-382	BP E CAPACITOR MPP CAPACITOR	4.7uF 50V M 3800pF 1.5kV H
D529	MTZJ9.1C-T2	Z DIODE		<b>△</b> C513	QFZ0196-153	MPP CAPACITOR	0.015uF 1.5kV H
<b>⚠</b> D531 D535	MA4068N/Z1/-T2 1SS133-T2	Z DIODE SI DIODE		C514 C515	QFP32JJ-183 QFZ0197-514	PP CAPACITOR MPP CAPACITOR	0.018uF 630V J 0.51uF 250V J
D601	MTZJ9.1C-T2	Z DIODE		C516	QCB32HK-561Z	C CAPACITOR	560pF 500V K
D602 D603	MTZJ9.1C-T2 MTZJ9.1C-T2	Z DIODE Z DIODE		C521 C523	QETN2EM-106Z QEHR1VM-108Z	E CAPACITOR E CAPACITOR	10uF 250V M 1000uF 35V M
D621	1SS133-T2	SI DIODE		C525	QETN1VM-107Z	E CAPACITOR	100uF 35V M
D623 D626	1SS133-T2 1SS133-T2	SI DIODE SI DIODE		C526 C527	QFV21HJ-824Z QFLC2AJ-103Z	MF CAPACITOR M CAPACITOR	0.82uF 50V J 0.01uF 100V J
D705	1SS133-T2	SI DIODE		C533	QETN1HM-106Z	E CAPACITOR	10uF 50V M
D706 D707	MTZJ5.6B-T2 MTZJ5.6B-T2	Z DIODE Z DIODE		C560 C601	QFZ0197-304 NCB31CK-224X	MPP CAPACITOR C CAPACITOR	0.3uF 250V J 0.22uF 16V K
D708	MTZJ5.6B-T2 MTZJ5.6B-T2	Z DIODE		C602	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
D709 D860	1SS133-T2	Z DIODE SI DIODE		C603 C604	NCB31CK-104X QETN1HM-106Z	C CAPACITOR E CAPACITOR	0.1uF 16V K 10uF 50V M
<b>∆</b> D901	GSIB460	BRIDGE DIODE		C621	QETN1HM-106Z	E CAPACITOR	10uF 50V M
D910 D911	MA700A-T2 RGP10J-04TS-T3	SB DIODE SI DIODE		C622 C624	QETN1HM-106Z QETN1HM-475Z	E CAPACITOR E CAPACITOR	10uF 50V M 4.7uF 50V M
D912 D913	RGP10J-04TS-T3	SI DIODE		C626	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M
D914	1SS133-T2 1SS133-T2	SI DIODE SI DIODE		C627 C628	NCF21CZ-105X QETN1HM-226Z	C CAPACITOR E CAPACITOR	1uF 16V Z 22uF 50V M
D915 D917	SARS01-T2 MTZJ30A-T2	SI DIODE Z DIODE		C629	NCF21CZ-105X	C CAPACITOR	1uF 16V Z
D918	MTZJ30A-12 MTZJ5.1C-T2	Z DIODE		C630 C632	QETN1EM-227Z QETN1EM-477Z	E CAPACITOR E CAPACITOR	220uF 25V M 470uF 25V M
D920	1SS133-T2	SI DIODE		C633	QETN1EM-227Z	E CAPACITOR	220uF 25V M
D931 D933	RU4AM-LFT2 RU3YX-LFC4	SI DIODE SI DIODE		C634 C635	QETN1HM-106Z QETN1HM-105Z	E CAPACITOR E CAPACITOR	10uF 50V M 1uF 50V M
D935	RU3YX-LFC4	SI DIODE		C637	QETN1EM-108Z	E CAPACITOR	1000uF 25V M
D937 D941	RU3YX-LFC4 MTZJ33A-T2	SI DIODE Z DIODE		C638 C651	QETN1EM-108Z NCF31AZ-105X	E CAPACITOR C CAPACITOR	1000uF 25V M 1uF 10V Z
D945	MTZJ9.1B-T2	Z DIODE		C652	NCF31AZ-105X	C CAPACITOR	1uF 10V Z

⚠Ref No.	Part No.	Part Name	Description Local		Part No.	Part Name	Description Local
C655	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	R293	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J
C656 C657	NCB31HK-153X NCB31HK-473X	C CAPACITOR C CAPACITOR	0.015uF 50V K 0.047uF 50V K	R296 R297	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J
C658	NCB31HK-473X	C CAPACITOR	0.047uF 50V K	R298	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C659 C660	QETN1HM-106Z QETN1EM-476Z	E CAPACITOR E CAPACITOR	10uF 50V M 47uF 25V M	R301 R302	NRSA63J-222X NRSA63J-222X	MG RESISTOR MG RESISTOR	2.2kΩ 1/16W J 2.2kΩ 1/16W J
C661 C662	NCB31HK-103X	C CAPACITOR	0.01uF 50V K 10uF 50V M	R303 R304	NRSA63J-222X NRSA63J-101X	MG RESISTOR	2.2kΩ 1/16W J 100Ω 1/16W J
C700	QETN1HM-106Z NCB31HK-102X	E CAPACITOR C CAPACITOR	1000pF 50V K	R305	NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J
C701 C702	QETN1HM-106Z QETN1HM-106Z	E CAPACITOR E CAPACITOR	10uF 50V M 10uF 50V M	R306 R318	NRSA63J-101X NRSA63J-472X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 4.7kΩ 1/16W J
C703	QETN1HM-106Z	E CAPACITOR	10uF 50V M	R319	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
C704 C705	QETN1CM-107Z NCB31HK-103X	E CAPACITOR C CAPACITOR	100uF 16V M 0.01uF 50V K	R354 R355	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
C708	NDC31HJ-220X	C CAPACITOR	22pF 50V J	R356	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
C709 C711	NDC31HJ-220X QETN1CM-107Z	C CAPACITOR E CAPACITOR	22pF 50V J 100uF 16V M	R359 R421	NRSA63J-103X NRSA63J-822X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 8.2kΩ 1/16W J
C712 C728	NCB31HK-103X	C CAPACITOR C CAPACITOR	0.01uF 50V K 0.01uF 50V K	R423 R424	NRSA63J-393X	MG RESISTOR MG RESISTOR	39kΩ 1/16W J
C807	NCB31HK-103X QETN1AM-477Z	E CAPACITOR	470uF 10V M	R426	NRSA63J-393X NRSA63J-183X	MG RESISTOR	39kΩ 1/16W J 18kΩ 1/16W J
C815 C853	NCB31HK-103X QETN1EM-227Z	C CAPACITOR E CAPACITOR	0.01uF 50V K 220uF 25V M	R427 R428	QRT029J-1R2 QRE121J-120Y	MF RESISTOR C RESISTOR	1.2 <u>Ω</u> 2W J 12Ω 1/2W J
C854	QETN1CM-227Z	E CAPACITOR	220uF 16V M	R429	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J
C856 C857	QETN1CM-227Z QETN0JM-477Z	E CAPACITOR E CAPACITOR	220uF 16V M 470uF 6.3V M	R431 R432	NRSA63J-152X NRSA63J-101X	MG RESISTOR MG RESISTOR	1.5kΩ 1/16W J 100Ω 1/16W J
C861	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R433	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J
C862 C863	NDC31HJ-331X NDC31HJ-331X	C CAPACITOR C CAPACITOR	330pF 50V J 330pF 50V J	R434 R435	QRL029J-221 QRE121J-102Y	OMF RESISTOR C RESISTOR	220Ω 2W J 1kΩ 1/2W J
C864 ⚠C901	NCB31HK-221X QFZ9072-104	C CAPACITOR MM CAPACITOR	220pF 50V K 0.1uF AC250V K	R441 R501	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
△C902	QFZ9072-473	MM CAPACITOR	0.047uF AC250V K	R502	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
⚠C903 ⚠C905	QFZ9072-104 QCZ9054-102	MM CAPACITOR C CAPACITOR	0.1uF AC250V K 1000pF AC250V Z	R503 R504	QRE121J-103Y QRL039J-152	C RESISTOR OMF RESISTOR	10kΩ 1/2W J 1.5kΩ 3W J
C907	QEZ0644-567	E CAPACITOR	560uF 200V K	R505	QRL039J-152	OMF RESISTOR	1.5kΩ 3W J
<b>∆</b> C908 C912	QCZ9054-102 QCZ0340-222	C CAPACITOR C CAPACITOR	1000pF AC250V Z 2200pF 2kV K	R511 R512	QRE121J-220Y QRE121J-681Y	C RESISTOR C RESISTOR	22Ω 1/2W J 680Ω 1/2W J
C913	QFLC1HJ-471Z	M CAPACITOR	470pF 50V J	R516	QRZ0221-2R0	OMF RESISTOR	2Ω 7W K
C914 C916	QETN1HM-107Z NDC31HJ-331X	E CAPACITOR C CAPACITOR	100uF 50V M 330pF 50V J	R524 R526	NRSA63J-563X QRE121J-272Y	MG RESISTOR C RESISTOR	56kΩ 1/16W J 2.7kΩ 1/2W J
C917 C918	NCB31HK-182X NCB31HK-104X	C CAPACITOR C CAPACITOR	1800pF 50V K 0.1uF 50V K	R527 R528	QRE121J-154Y QRE121J-154Y	C RESISTOR C RESISTOR	150kΩ 1/2W J
C919	QFP32GJ-103	PP CAPACITOR	0.01uF 400V J	R529	NRSA63J-331X	MG RESISTOR	150kΩ 1/2W J 330Ω 1/16W J
C931 C932	QEZ0203-227 QETN1EM-108Z	E CAPACITOR E CAPACITOR	220uF 160V M 1000uF 25V M	⚠R531 ⚠R532	QRZ0230-391X NRSA63J-273X	UNF C RESISTOR MG RESISTOR	390Ω 1/4W J 27kΩ 1/16W J
C933	QETN1EM-108Z	E CAPACITOR	1000uF 25V M	R533	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
C934 C935	NDC31HJ-221X QETN1VM-108Z	C CAPACITOR E CAPACITOR	220pF 50V J 1000uF 35V M	R534 <u></u> ↑R535	NRSA63J-123X NRVA02D-222X	MG RESISTOR CMF RESISTOR	12kΩ 1/16W J 2.2kΩ 1/10W D
C937	QCZ0340-102	C CAPACITOR	1000pF 2kV K	R536	QRE121J-470Y	C RESISTOR	47Ω 1/2W J
C938 C939	QETN1EM-477Z QCB32HK-152Z	E CAPACITOR C CAPACITOR	470uF 25V M 1500pF 500V K	<b>△</b> R537 R538	NRVA02D-752X NRSA63J-333X	CMF RESISTOR MG RESISTOR	7.5kΩ 1/10W D 33kΩ 1/16W J
C941 C942	QCB32HK-102Z QEHR1HM-105Z	C CAPACITOR	1000pF 500V K	R543 R544	QRE121J-122Y QRE121J-472Y	C RESISTOR C RESISTOR	1.2kΩ 1/2W J
C942	QETN1CM-108Z	E CAPACITOR E CAPACITOR	1uF 50V M 1000uF 16V M	R545	QRE121J-123Y	C RESISTOR	4.7kΩ 1/2W J 12kΩ 1/2W J
C951 C952	QETN1EM-477Z QETN1CM-227Z	E CAPACITOR E CAPACITOR	470uF 25V M 220uF 16V M	R546 R547	NRSA63J-331X NRSA63J-104X	MG RESISTOR MG RESISTOR	330Ω 1/16W J 100kΩ 1/16W J
C971	QETN1CM-107Z	E CAPACITOR	100uF 16V M	R548	QRE121J-152Y	C RESISTOR	1.5kΩ 1/2W J
C972 ⚠C997	QETN1EM-476Z QCZ9079-102	E CAPACITOR C CAPACITOR	47uF 25V M 1000pF AC250V M	R553 ▲R554	QRL039J-100 QRK129J-1R0	OMF RESISTOR UNF C RESISTOR	10Ω 3W J 1Ω 1/2W J
<b>∆</b> C998	QCZ9074-103	C CAPACITOR	0.01uF AC250V M	R555	QRT029J-2R2	MF RESISTOR	2.2Ω 2W J
<b>∆</b> C999	QCZ9074-103	C CAPACITOR	0.01uF AC250V M	R560 R561	QRE121J-124Y QRE121J-562Y	C RESISTOR C RESISTOR	120kΩ 1/2W J 5.6kΩ 1/2W J
R001	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R562	NRSA63J-222X NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R002 R003	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	R563 R601	NRSA63J-750X	MG RESISTOR MG RESISTOR	2.2kΩ 1/16W J 75Ω 1/16W J
R004 R008	NRSA63J-0R0X NRSA63J-101X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 100Ω 1/16W J	R602 R603	NRSA63J-750X NRSA63J-750X	MG RESISTOR MG RESISTOR	75Ω 1/16W J 75Ω 1/16W J
R010	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R621	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
R201 R212	NRSA63J-223X NRSA63J-272X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 2.7kΩ 1/16W J	R623 R624	NRSA63J-102X NRSA63J-123X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 12kΩ 1/16W J
R215	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	R626	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R216 R217	NRSA63J-562X NRSA63J-102X	MG RESISTOR MG RESISTOR	5.6kΩ 1/16W J 1kΩ 1/16W J	R627 R628	NRSA63J-102X NRSA63J-103X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 10kΩ 1/16W J
R227 R231	NRSA63J-104X NRSA63J-182X	MG RESISTOR MG RESISTOR	100kΩ 1/16W J 1.8kΩ 1/16W J	R630 R631	NRSA63J-472X NRSA63J-103X	MG RESISTOR MG RESISTOR	4.7kΩ 1/16W J 10kΩ 1/16W J
R237	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	R649	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R238 R241	NRSA63J-473X NRSA63J-332X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 3.3kΩ 1/16W J	R651 R652	NRSA63J-223X NRSA63J-223X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 22kΩ 1/16W J
R243	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	R653	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
R281 R282	NRSA63J-182X NRSA63J-392X	MG RESISTOR MG RESISTOR	1.8kΩ 1/16W J 3.9kΩ 1/16W J	R654 R656	NRSA63J-223X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 0Ω 1/16W J
R283	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	R658	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R286 R287	NRSA63J-472X NRSA63J-101X	MG RESISTOR MG RESISTOR	4.7kΩ 1/16W J 100Ω 1/16W J	R659 R700	NRSA63J-103X NRSA63J-102X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 1kΩ 1/16W J
R288	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	R701	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R289 R290	NRSA63J-154X NRSA02J-561X	MG RESISTOR MG RESISTOR	150kΩ 1/16W J 560Ω 1/10W J	R702 R704	NRSA63J-102X NRSA63J-472X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 4.7kΩ 1/16W J
R292	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	R705	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J

R706 NRSA63J-472X MG RESISTOR 4.7kΩ 1/16W J CN0E3 CE41507-001P LV CONNECTOR R707 NRSA63J-103X MG RESISTOR 10kΩ 1/16W J CN0HV QGZ5004C1-06 CONNECTOR R708 NRSA63J-101X MG RESISTOR 100Ω 1/16W J ΔCP936 ICP-N70-T IC PROTECTOR R709 NRSA63J-101X MG RESISTOR 100Ω 1/16W J ΔF901 QMF51N1-5R0-J5 FUSE 5A AC	
R708 NRSA63J-101X MG RESISTOR 100Ω 1/16W J ΔCP936 ICP-N70-T IC PROTECTOR	(4.0)
R709 NRSA63J-101X MG RESISTOR 100Ω 1/16W J ΔF901 QMF51N1-5R0-J5 FUSE 5A AC	(1-6) 2.5A
	125V
R718 NRSA63J-101X MG RESISTOR 100 $\Omega$ 1/16W J $\Delta$ FR525 QRZ9017-4R7 FUSI RESISTOR 4.7 $\Omega$ 1/R721 NRSA63J-102X MG RESISTOR 1k $\Omega$ 1/16W J J601 QNN0349-002 PIN JACK COMPON	
R729 NRSA63J-223X MG RESISTOR 22kΩ1/16W J K401 QQR0621-002Z FERRITE BEADS	
R731 NRSA63J-101X MG RESISTOR $100\Omega$ 1/16W J K912 QQR0582-001Z FERRITE BEADS R732 NRSA63J-101X MG RESISTOR $100\Omega$ 1/16W J K916 QQR0582-001Z FERRITE BEADS	
R733 NRSA63J-472X MG RESISTOR 4.7kΩ1/16W J K917 QQR0582-001Z FERRITE BEADS	
R734 NRSA63J-472X MG RESISTOR $4.7 \mathrm{k}\Omega$ 1/16W J K918 QQR0582-001Z FERRITE BEADS R739 NRSA63J-272X MG RESISTOR $2.7 \mathrm{k}\Omega$ 1/16W J K920 QQR1139-001 FERRITE BEADS	
R740 NRSA63J-103X MG RESISTOR 10kΩ 1/16W J K931 QQR0582-001Z FERRITE BEADS	
R764 NRSA63J-221X MG RESISTOR 220Ω 1/16W J K932 QQR0582-001Z FERRITE BEADS	
R765 NRSA63J-221X MG RESISTOR 220 $\Omega$ 1/16W J K933 QQR0582-001Z FERRITE BEADS R766 NRSA63J-221X MG RESISTOR 220 $\Omega$ 1/16W J K935 QQR0582-001Z FERRITE BEADS	
R767 NRSA63J-221X MG RESISTOR 220Ω 1/16W J K937 QQR0582-001Z FERRITE BEADS	
R769 NRSA63J-682X MG RESISTOR 6.8k $\Omega$ 1/16W J LC601 QQR1199-001 EMI FILTER R772 NRSA63J-103X MG RESISTOR 10k $\Omega$ 1/16W J LC602 QQR1199-001 EMI FILTER	
R811 NRSA63J-101X MG RESISTOR 100Ω 1/16W J LC603 QQR1199-001 EMI FILTER	
R816 NRSA63J-101X MG RESISTOR 100Ω 1/16W J Δ\LF901 QQR0527-003 LINE FILTER R827 NRSA63J-102X MG RESISTOR 1kΩ 1/16W J LF902 QQR0527-003 LINE FILTER	
R839 NRSA63J-225X MG RESISTOR 2.2MΩ 1/16W J ΔPC560 PC123Y22 PHOTO COUPLER	
R855 QRL029J-820 OMF RESISTOR 82Ω 2W J ΔPC921 PC123Y22 PHOTO COUPLER R857 QRL029J-820 OMF RESISTOR 82Ω 2W J ΔPY951 QSK0085-001 RELAY	
R860 NRSA63J-223X MG RESISTOR 22kΩ 1/16W J S421 QSL4A13-C02 LEVER SWITCH V.CEN	
R861 NRSA63J-0R0X MG RESISTOR 0Ω 1/16W J ΔTH901 QAD0132-3R0 P THERMISTOR R862 NRSA63J-223X MG RESISTOR 22kΩ 1/16W J ΔTU001 QAU0352-002 TUNER	$3\Omega$
R864 NRSA63J-224X MG RESISTOR 220kΩ 1/16W J ΔVA901 ERZV10V621CS ZNR	
R865 NRSA63J-683X MG RESISTOR 68kΩ 1/16W J X701 QAX0767-001Z CRYSTAL 8 R866 NRSA63J-472X MG RESISTOR 4.7kΩ 1/16W J	BMHz
R867 NRSA63J-223X MG RESISTOR 22kΩ 1/16W J	
R869 NRSA63J-472X MG RESISTOR 4.7kΩ 1/16W J R870 NRSA63J-222X MG RESISTOR 2.2kΩ 1/16W J CRT SOCKET P.W. BOARD ASS'Y (SGW-3011A	M2)
R871 NRSA63J-101X MG RESISTOR $100\Omega 1/16W J$	
R872 QVP0087-203Z TRIM RESISTOR 20kΩ 0.3W N ΔRef No. Part No. Part Name Descr R873 NRSA63J-154X MG RESISTOR 150kΩ 1/16W J	iption Local
R901 QRF074K-1R2 UNF WW RESISTOR 1.2Ω 7W K	
R909 QRG01GJ-470 OMF RESISTOR 47Ω 1W J Q3103 2SC3928A/QR/-X TRANSISTOR R911 QRE121J-223Y C RESISTOR 22kΩ 1/2W J Q3107 2SA2005/DE/ POW TRANSISTOR	
R912 QRT029J-R18 MF RESISTOR 0.18Ω 2W J Q3108 2SC5511/DE/ POW TRANSISTOR	
ΔR914 QRK126J-681X UNF C RESISTOR 680Ω 1/2W J Q3304 2SC4544-LB POW TRANSISTOR	
R915 QRK129J-6R8 UNF C RESISTOR 6.8Ω 1/2W J Q3305 2SC4544-LB POW TRANSISTOR	
R918 QRE121J-222Y C RESISTOR 2.2kΩ 1/2W J	
R919 QRE121J-684Y C RESISTOR 680kΩ 1/2W J D3105 RH1S-T3 SI DIODE R924 QRE121J-222Y C RESISTOR 2.2kΩ 1/2W J D3106 RH1S-T3 SI DIODE	
R930 QRE121J-223Y C RESISTOR 22kΩ 1/2W J D3331 1SS133-T2 SI DIODE	
R933 QRX01GJ-1R0 MF RESISTOR 1 $\Omega$ 1W J R940 QRE121J-181Y C RESISTOR 180 $\Omega$ 1/2W J C3101 QETN1HM-106Z E CAPACITOR 10uF 5	0\/ M
R941 QRL029J-183 OMF RESISTOR 18kΩ 2W J C3113 QETN2CM-106Z E CAPACITOR 10uF 16	0V M
R950 NRSA63J-0R0X MG RESISTOR $0\Omega$ 1/16W J C3114 QCB32HK-472Z C CAPACITOR 4700pF 50 R951 NRSA63J-473X MG RESISTOR 47k $\Omega$ 1/16W J C3115 QCB32HK-472Z C CAPACITOR 4700pF 50	
R952 NRSA63J-102X MG RESISTOR 1kΩ 1/16W J C3117 QETN2CM-106Z E CAPACITOR 10uF 16	0V M
R953 QRE121J-820Y C RESISTOR 82 $\Omega$ 1/2W J C3118 QETNOJM-107Z E CAPACITOR 100uF 6. R972 NRVA02D-102X CMF RESISTOR 1k $\Omega$ 1/10W D C3119 QETN1AM-107Z E CAPACITOR 100uF 1	
R973 NRVA02D-332X CMF RESISTOR 3.3k $\Omega$ 1/10W D C3120 QETN1AM-337Z E CAPACITOR 330uF 1	0V M
R975 QRE121J-223Y C RESISTOR 22kΩ 1/2W J C3121 QCS32HJ-151Z C CAPACITOR 150pF 50 R977 QRE121J-473Y C RESISTOR 47kΩ 1/2W J C3127 NDC31HJ-471X C CAPACITOR 470pF 50 R977 QRE121J-473Y C RESISTOR 47kΩ 1/2W J C3127 NDC31HJ-471X C CAPACITOR 470pF 50 R977 QRE121J-473Y C RESISTOR 47kΩ 1/2W J C3127 NDC31HJ-471X C CAPACITOR 470pF 50 R977 QRE121J-473Y C RESISTOR 47kΩ 1/2W J C3127 NDC31HJ-471X C CAPACITOR 470pF 50 R977 QRE121J-473Y C RESISTOR 47kΩ 1/2W J C3127 NDC31HJ-471X C CAPACITOR 470pF 50 R977 QRE121J-473Y C RESISTOR 47kΩ 1/2W J C3127 NDC31HJ-471X C CAPACITOR 470pF 50 R977 QRE121J-473Y C RESISTOR 47kΩ 1/2W J C3127 NDC31HJ-471X C CAPACITOR 470pF 50 R977 QRE121J-473Y C RESISTOR 47kΩ 1/2W J C3127 NDC31HJ-471X C CAPACITOR 470pF 50 R977 QRE121J-473Y C RESISTOR 47kΩ 1/2W J C3127 NDC31HJ-471X C CAPACITOR 470pF 50 R977 QRE121J-473Y C RESISTOR 47kΩ 1/2W J C3127 NDC31HJ-471X C CAPACITOR 470pF 50 R977 QRE121J-473Y C RESISTOR 47kΩ 1/2W J C3127 NDC31HJ-471X C CAPACITOR 470pF 50 R977 QRE121J-471X Q	
R978 NRSA63J-333X MG RESISTOR 33kΩ 1/16W J C3301 NDC31HJ-561X C CAPACITOR 560°P (	50V J
ΔR998 QRZ9041-275 C RESISTOR 2.7MΩ 1/2W K C3302 NDC31HJ-391X C CAPACITOR 390pF R999 QRE121J-121Y C RESISTOR 120Ω 1/2W J C3303 NDC31HJ-561X C CAPACITOR 560pF R999 QRE121J-121Y C RESISTOR 120Ω 1/2W J C3303 NDC31HJ-561X C CAPACITOR 560pF R999 QRE121J-121Y C RESISTOR 120Ω 1/2W J C3303 NDC31HJ-561X C CAPACITOR 560pF R999 QRE121J-121Y C RESISTOR 120Ω 1/2W J C3303 NDC31HJ-561X C CAPACITOR 560pF R999 QRE121J-121Y C RESISTOR 120Ω 1/2W J C3303 NDC31HJ-561X C CAPACITOR 560pF R999 QRE121J-121Y C RESISTOR 120Ω 1/2W J C3303 NDC31HJ-561X C CAPACITOR 560pF R999 QRE121J-121Y C RESISTOR 120Ω 1/2W J C3303 NDC31HJ-561X C CAPACITOR 560pF R999 QRE121J-121Y C RESISTOR 120Ω 1/2W J C3303 NDC31HJ-561X C CAPACITOR 560pF R999 QRE121J-121Y C RESISTOR 120Ω 1/2W J C3303 NDC31HJ-561X C CAPACITOR 560pF R999 QRE121J-121Y C RESISTOR 120Ω 1/2W J C3303 NDC31HJ-561X C CAPACITOR 560pF R999 QRE121J-121Y C RESISTOR 120Ω 1/2W J C3303 NDC31HJ-561X C CAPACITOR 120Ω 1/2W J C320X D C320X	
C3323 QETN1CM-107Z E CAPACITOR 100uF 1	6V M
L001         QQL244K-220Z         PEAKING COIL         22uH K         C3331         NDC31HJ-181X         C CAPACITOR         180pF (           L232         QQL244K-560Z         PEAKING COIL         56uH K         C3332         NDC31HJ-181X         C CAPACITOR         180pF (	
L241 QQL244K-220Z PEAKING COIL 22uH K C3333 NDC31HJ-181X C CAPACITOR 180pF (	50V J
L391 QQL244K-220Z PEAKING COIL 22uH K C3363 QCZ0121-102 C CAPACITOR 1000pF 3 L511 QQR1027-005 LINEARITY COIL	KV Z
L512 QQLZ036-222 COIL 2.2mH J R3115 NRSA63J-470X MG RESISTOR $47\Omega$ 1/1 L513 QQLZ036-222 COIL 2.2mH J R3116 NRSA63J-470X MG RESISTOR $47\Omega$ 1/1	
L521 QQLZ026-540 COIL 54uH Å $ m j7\%$ R3122 QRT029J-R15 MF RESISTOR 0.15 $ m \Omega$	
L701 QQL244K-220Z PEAKING COIL 22uH K R3123 NRSA63J-122X MG RESISTOR 1.2k $\Omega$ 1/1 L702 QQL244K-220Z PEAKING COIL 22uH K R3124 NRSA63J-820X MG RESISTOR 82 $\Omega$ 1/1	
L703 QQL244K-220Z PEAKING COIL 22 $\mu$ H K R3125 NRSA63J-100X MG RESISTOR 10 $\Omega$ 1/1	
L704 QQL244K-220Z PEAKING COIL 22uH K R3126 NRSA63J-563X MG RESISTOR 56kΩ 1/1 L705 QQL244K-220Z PEAKING COIL 22uH K R3127 NRSA63J-563X MG RESISTOR 56kΩ 1/1	
L931 QQL26AK-470Z CHOKE COIL 47uH K R3128 NRSA63J-122X MG RESISTOR 1.2kΩ 1/1	6W J
L933 QQL26AK-470Z CHOKE COIL 47uH K R3129 NRSA63J-100X MG RESISTOR 10 $\Omega$ 1/1 L937 QQL26AK-470Z CHOKE COIL 47uH K R3130 NRSA63J-820X MG RESISTOR 82 $\Omega$ 1/1	
L940 QQR0582-001Z FERRITE BEADS R3131 NRSA63J-331X MG RESISTOR 330Ω 1/1	6W J
T501 QQR1414-001 DRIVE TRANSF R3132 QRL029J-391 OMF RESISTOR 390Ω ΔΤ921 QQS0152-001 SW TRANSF R3134 NRSA63J-101X MG RESISTOR 100Ω 1/1	
ΔT951 QQT0355-001 POWER TRANSF R3136 NRSA63J-392X MG RESISTOR 3.9kΩ 1/1	6W J
R3139 NRSA63J-331X MG RESISTOR 330Ω 1/1 CN001 QGB1505J1-35 CONNECTOR B-B (1-35) R3142 NRSA63J-123X MG RESISTOR 12kΩ 1/1	
CN0E1 CE41507-001P LV CONNECTOR R3143 NRSA63J-122X MG RESISTOR 1.2kΩ 1/1	
3-8(No.YA246)	

September   Page   Pa	⚠Ref No.	Part No.	Part Name	Description Local	⚠Ref No.	Part No.	Part Name	Description Loca
R6149	R3145	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J				
R332 MSRASL-191X MG RESISTOR 1501.1799.1 C000 MSB. MSB. MSB. MSB. MSB. MSB. MSB. MSB.	R3148	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J				
R834	R3302	NRSA63J-151X			C5003			
R335   NRS-R33-151X	R3303	NRSA63J-151X	MG RESISTOR MG RESISTOR			QETN1HM-105Z QETN1HM-475Z		
R3337   R34631-170X	R3305	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	C5006	QETN1HM-106Z	E CAPACITOR	10uF 50V M
R339   R346A3_477X	R3307	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	C5008	QETN1CM-107Z	E CAPACITOR	100uF 16V M
R3311   GRUGS-H-83	R3309	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	C5010	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M
R3312   QRL023-143								
R3314 ORLOS-1-223 OMF RESISTOR 224.2 W								0.047uF 50V K
R3323 GR20107-1022 C RESISTOR 141.12W K C5010 GR25H-14M-1752 B PE CAPACITOR 4.74F-50 M M R25107 GR25H-14M-1752	R3314	QRL029J-223	OMF RESISTOR	22kΩ 2W J	C5015	QETN1HM-106Z	E CAPACITOR	10uF 50V M
R3327 QEZ/107-102Z C RESISTOR 1841/19W J C5020 NCBSHR4-22X C CAPACITOR QUESTION AT A CAPACITOR R3331 NRSA63-122X MRSA63-122X MRSA63-122X MRSA63-122X MRSA63-122X MRSA63-122X MRSA63-122X MRSA63-122X MRSA63-122X MRSA63-122X MRSA63-12X CAPACITOR R333 NRSA63-12X MRSA63-12X CAPACITOR R333 NRSA63-132X MRSA63-12X CAPACITOR R332 NRSA63-131X MRSA63-12X CAPACITOR R332 NRSA63-13X CAPACITOR	R3325	QRZ0107-102Z	C RESISTOR	1kΩ 1/2W K	C5017	QENC1HM-475Z	BP E CAPACITOR	4.7uF 50V M
R3333 NRSA631-22X MG RESISTOR 1862 116W1 C5022 NCBS164-104X CAPACITOR 0.1.E-25 K R3334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R3334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-24 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-24 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-104W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-104W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-104W1 C5023	R3327	QRZ0107-102Z	C RESISTOR	1kΩ 1/2W K	C5019	NCB31HK-223X	C CAPACITOR	0.022uF 50V K
R3333 NRSA631-22X MG RESISTOR 1862 116W1 C5022 NCBS164-104X CAPACITOR 0.1.E-25 K R3334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R3334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-32 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-24 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-24 MG RESISTOR 300.1 116W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-104W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-104W1 C5023 NCBS164-104X CAPACITOR 0.1.E-25 K R334 NRSA631-104W1 C5023	R3331 R3332				C5021			
R3355 NRSA63J-391X MG RESISTOR 39021116WJ C5024 QENCH-M-4722 BF E CAPACITOR 4.7 LF 50 M L 1304 COL244K-4702 PEAKING COIL 54.0 LF 20 M C5025 NCBS 196K-104X C APACITOR 3.3 LF 50 M M C 1502 N C 1	R3333	NRSA63J-222X					C CAPACITOR	
L394 QDL2244-702 PEANING COIL 470H K C5028 QETNH-M-3932 E CAPACTOR 3.3 JE 50V M CAPACITOR COIL 58/JH 477% C5027 NCB3HH-1030X C CAPACITOR 0.01 JE 50V M CAPACITOR COIL 58/JH 477% C5027 NCB3HH-1030X C CAPACITOR 0.01 JE 50V M CAPACITOR COIL 59V K CAPACITOR 0.01 JE 50V M CAPACITOR COIL 59V K CAPACITOR 0.01 JE 50V M CAPACI					C5024	QENC1HM-475Z	BP E CAPACITOR	4.7uF 50V M
CN3004					C5026	QETN1HM-335Z	E CAPACITOR	3.3uF 50V M
CN9005 WJA0029-002A CN9062 QUB130-46A6AS SIN TWIST WIRE CS031 GERTHI-MI-1052 CAPACITOR CN9064 QUB130-46A6AS SIN TWIST WIRE CS031 GERTHI-MI-1052 CS041 GERTHI-MI-1052 CS041 GERTHI-MI-1052 CS041 QUB130-46A6AS SIN TWIST WIRE CS031 QERTHI-MI-1052 CS041 QUB130-46A6AS SIN TWIST WIRE CS041 QUB130-46A6AS CC04ACITOR QUB130-46A6AS CC04ACITOR QUB130-46A6AS QUB130-46A6AS QUB130-46A6AS CC04ACITOR QUB130-46A6AS QUB1300-46A6AS QUB1300-46A6				54uH A}/%	C5028	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
CASSIDED	CN3004 CN3005							
X3104   OQRITII-40012   FERRITE BEADS   C\$204   NCB3.1HK-103X   C CAPACITOR   C 1-29 M	CN30E2	QUB130-46A6AS	SIN TWIST WIRE		C5031	QETN1HM-106Z	E CAPACITOR	10uF 50V M
AV SELECTOR P.W. BOARD ASS'Y (SGW-5011A-M2)	K3104	QQR1114-001Z	FERRITE BEADS		C5204	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
AV SELECTOR P.W. BOARD ASS'Y (SGW-5011A-M2)  AVSELECTOR P.W. BOARD ASS'Y (SGW-5011A-M2)  ADRIAN DESCRIPTION OF PART NO. Part Name Description Local CS226 NDC31HL-H31X C CAPACITOR 180pF 50V J MC31HL-H31X C CAPACITOR 180pF 50V J MC31HL-H31X C CAPACITOR 0.07 F50V M CAPACITOR 100pF 50V J MC31HL-H31X C CAPACITOR 0.07 F50V M CAPACITOR 100pF 50V J MC31HL-H31X C CAPACITOR 0.07 F50V M CAPACITOR 100pF 50V J MC31HL-H31X C CAPACITOR 0.07 F50V M CAPACITOR 100pF 50V J MC31HL-H31X C CAPACITOR 100pF 50V J MC31HL-H31X C CAPACITOR 0.01 F50V K MC321 TC5001A89AP IC C C3225 NC831HK-103X C CAPACITOR 0.01 F50V K MC3225 NC831HK-103X C CAPACITOR 0.01 F50V K NC8225 NC831HK-103X C CAPACITOR 0.01 F50V K NC8225 NC8231HK-103X C CAPACITOR 0.01					C5206	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
AV SELECTOR P.W. BOARD ASS'Y (SGW-5011A-M2)  ARef No. Part No. Part Name Description Local C5226 NOB31HK-181X C CAPACITOR 0.47tif 590 M No.31HK-181X C CAPACITOR 0.47tif 590 M No.31HK-181X C CAPACITOR 0.101tif 590 M No.31HK-181X C CAPACITOR 0.101t					C5212			
Aref No.   Part No.   Part Name   Description Local   CS226   No.   No.   CS241   CS241   CS241   CS251   CS252   CS2526   CS252   CS2526   CS252   CS2526   CS2526   CS2526   CS2526   CS252   CS2526	AV SEI	ECTOP DW	BOADD ASSIV	(SGW 5011 A M2)				
C5231   CETNI CM-1072   CAPACITOR   100uF 16V M					C5215	QETN1HM-474Z	E CAPACITOR	0.47uF 50V M
C5201	<u></u>	Fait No.	r ait ivaille	Description Local	C5231	QETN1CM-107Z	E CAPACITOR	100uF 16V M
C5501					C5232 C5233	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
C5701   CXA1875AM-X   C					C5235			
G5002   25A1530A/GR/X	IC5701	CXA1875AM-X	IC		C5236			
ACC					C5238 C5239	QETN1CM-107Z	E CAPACITOR	100uF 16V M
C6251   2SC3928A/QRI-X   TRANSISTOR   C5243   C6TN1CM-107Z   CAPACITOR   100uF 16V M   C5253   2SA1530A/QRI-X   TRANSISTOR   C5243   NCB31HK-103X   C CAPACITOR   0.01uF 50V K   C3263   2SA1530A/QRI-X   TRANSISTOR   C5246   NDC31HJ-181X   C CAPACITOR   0.01uF 50V K   C3261   2SA1530A/QRI-X   TRANSISTOR   C5247   NCB31HK-103X   C CAPACITOR   0.01uF 50V K   C3263   2SA1530A/QRI-X   TRANSISTOR   C5251   CETN1EM-4762   C CAPACITOR   0.01uF 50V K   C5263   2SA1530A/QRI-X   TRANSISTOR   C5252   CETN1EM-4762   C CAPACITOR   0.01uF 50V K   C5263   2SA1530A/QRI-X   TRANSISTOR   C5253   NCB31HK-103X   C CAPACITOR   0.01uF 50V K   C5384   DTC323TK-X   DIGI TRANSISTOR   C5253   NCB31HK-103X   C CAPACITOR   0.01uF 50V K   C5385   DTC323TK-X   DIGI TRANSISTOR   C5253   NCB31HK-103X   C CAPACITOR   47pF 50V J   C5385   DTC323TK-X   DIGI TRANSISTOR   C5253   NCB31HK-103X   C CAPACITOR   47pF 50V J   C5386   DTC323TK-X   DIGI TRANSISTOR   C5253   NCB31HK-106X   C CAPACITOR   47pF 50V J   C5387   DTC323TK-X   DIGI TRANSISTOR   C5253   NCB31HK-106X   C CAPACITOR   47pF 50V J   C5381   DTC323TK-X   DIGI TRANSISTOR   C5380   CETN1HM-106Z   C CAPACITOR   47pF 50V J   C5391   C	Q5211	2SC3928A/QR/-X	TRANSISTOR		C5240	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
C5253   28A1530A/QR/-X   TRANSISTOR   C5246   NDC31HJ-181X   C CAPACITOR   180pF 50V J   C5261   28A1530A/QR/-X   TRANSISTOR   C5247   NCB31HK-103X   C CAPACITOR   O.101F 50V K   G262   28C3928A/QR/-X   TRANSISTOR   C5251   QETN1EM-476Z   E CAPACITOR   O.101F 50V K   G2563   28A1530A/QR/-X   TRANSISTOR   C5252   NCB31HK-103X   C CAPACITOR   O.101F 50V K   G2583   DTC323TK-X   DIGI TRANSISTOR   C5253   NDC31HJ-820X   C CAPACITOR   47pF 50V J   G5385   DTC323TK-X   DIGI TRANSISTOR   C5255   NDC31HJ-470X   C CAPACITOR   47pF 50V J   G5386   DTC323TK-X   DIGI TRANSISTOR   C5255   NDC31HJ-470X   C CAPACITOR   47pF 50V J   G5387   DTC323TK-X   DIGI TRANSISTOR   C5253   NDC31HJ-470X   C CAPACITOR   47pF 50V J   G5387   DTC323TK-X   DIGI TRANSISTOR   C5263   NDC31HJ-470X   C CAPACITOR   47pF 50V J   G5387   DTC323TK-X   DIGI TRANSISTOR   C5263   NDC31HJ-470X   C CAPACITOR   47pF 50V J   G5387   DTC323TK-X   DIGI TRANSISTOR   C5381   QETN1HM-106Z   E CAPACITOR   10uF 50V M   G5901   28A1530A/QR/-X   TRANSISTOR   C5391   QETN1HM-474Z   E CAPACITOR   0.47uF 50V M   G5901   28A1530A/QR/-X   TRANSISTOR   C5392   QETN1HM-474Z   E CAPACITOR   0.47uF 50V M   G5902   28C3928A/QR/-X   TRANSISTOR   C5501   QETN1HM-255Z   CAPACITOR   2.2uF 50V M   G5904   28C3928A/QR/-X   TRANSISTOR   C5502   QETN1HM-106Z   E CAPACITOR   2.2uF 50V M   G5904   28C3928A/QR/-X   TRANSISTOR   C5504   QETN1HM-106Z   E CAPACITOR   10uF 50V M   G5906   28C3928A/QR/-X   TRANSISTOR   C5504   QETN1HM-106Z   E CAPACITOR   10uF 50V M   G5907   28C3928A/QR/-X   TRANSISTOR   C5504   QETN1HM-106Z   E CAPACITOR   10uF 50V M   G5907   28C3928A/QR/-X   TRANSISTOR   C5504   QETN1HM-106Z   E CAPACITOR   10uF 50V M   G5907   28C3928A/QR/-X   TRANSISTOR   C5504   QETN1HM-106Z   E CAPACITOR   10uF 50V M   G5907   28C3928A/QR/-X   TRANSISTOR   C5504   QETN1HM-106Z   E CAPACITOR   10uF 50V M   G5908   28C3928A/QR/-X   TRANSISTOR   C5504   QETN1HM-106Z   E CAPACITOR   10uF 50V M   G5908   MC631HK-103X   C CAPACITOR   2.2uF 50V M   G5908   MC631HK-103X   C CAPACITOR   2.2	Q5251	2SC3928A/QR/-X	TRANSISTOR		C5242	QETN1CM-107Z	E CAPACITOR	100uF 16V M
O5261   28A1530A/QR/X   TRANSISTOR   C5247   NCB31HK-103X   C CAPACITOR   O.10								
Q5263         2SA1530A/QR/-X         TRANSISTOR         C5252         NCB31HK-103X         C CAPACITOR         0.10 f 50V k           Q5384         DTC323TK-X         DIGI TRANSISTOR         C5255         NDC31HJ-470X         C CAPACITOR         47p F 50V J           Q5386         DTC323TK-X         DIGI TRANSISTOR         C5263         NDC31HJ-470X         C CAPACITOR         47p F 50V J           Q5387         DTC323TK-X         DIGI TRANSISTOR         C5380         QETN1HM-106Z         E CAPACITOR         47p F 50V J           Q5501         2SA1530A/QRI-X         DIGI TRANSISTOR         C5380         QETN1HM-474Z         E CAPACITOR         0.47u F 50V M           Q5902         2SC3928A/QRI-X         TRANSISTOR         C5392         QETN1HM-474Z         E CAPACITOR         0.47u F 50V M           Q5902         2SC3928A/QRI-X         TRANSISTOR         C5501         QETN1HM-225Z         E CAPACITOR         2.2u F 50V M           Q5903         2SA1530A/QRI-X         TRANSISTOR         C5502         QETN1HM-106Z         E CAPACITOR         10u F 50V M           Q5904         2SC3928A/QRI-X         TRANSISTOR         C5503         QETN1HM-106Z         E CAPACITOR         10u F 50V M           Q5906         2SC3928A/QRI-X         TRANSISTOR         C5504 <td>Q5261</td> <td>2SA1530A/QR/-X</td> <td>TRANSISTOR</td> <td></td> <td>C5247</td> <td></td> <td></td> <td></td>	Q5261	2SA1530A/QR/-X	TRANSISTOR		C5247			
C5285   DTC323TK-X   DIGI TRANSISTOR   C5263   NDC31HJ-470X   C CAPACITOR   47pF 50V J	Q5263	2SA1530A/QR/-X	TRANSISTOR		C5252	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
OF STATE   Company   Com	Q5385	DTC323TK-X	DIGI TRANSISTOR		C5255	NDC31HJ-470X	C CAPACITOR	47pF 50V J
Q5901   2SA1530A/QR/-X   TRANSISTOR   C5392   QETN1HM-474Z   E CAPACITOR   0.47uF 50V M   Q5902   2SC3928A/QR/-X   TRANSISTOR   C5501   QETN1HM-225Z   E CAPACITOR   2.2uF 50V M   Q5903   2SA1530A/QR/-X   TRANSISTOR   C5502   QETN1HM-225Z   E CAPACITOR   2.2uF 50V M   Q5904   2SC3928A/QR/-X   TRANSISTOR   C5503   QETN1HM-106Z   E CAPACITOR   10uF 50V M   Q5905   2SC3928A/QR/-X   TRANSISTOR   C5504   QETN1HM-106Z   E CAPACITOR   10uF 50V M   Q5905   2SC3928A/QR/-X   TRANSISTOR   C5504   QETN1HM-106Z   E CAPACITOR   10uF 50V M   Q5907   2SC3928A/QR/-X   TRANSISTOR   C5509   NCB31HK-103X   C CAPACITOR   10uF 50V M   Q5907   2SC3928A/QR/-X   TRANSISTOR   C5509   NCB31HK-103X   C CAPACITOR   0.01uF 50V K   Q5908   2SC3928A/QR/-X   TRANSISTOR   C5509   NCB31HK-103X   C CAPACITOR   0.01uF 50V K   Q5908   2SC3928A/QR/-X   TRANSISTOR   C5500   QETN1HM-225Z   E CAPACITOR   2.2uF 50V M   D5501   MTZJ9.1C-T2   Z DIODE   C5531   NCB31HK-103X   C CAPACITOR   0.01uF 50V K   D5502   MTZJ9.1C-T2   Z DIODE   C5533   NCB31HK-103X   C CAPACITOR   0.01uF 50V K   D5502   MTZJ9.1C-T2   Z DIODE   C5533   NCB31HK-103X   C CAPACITOR   0.01uF 50V K   D5504   MTZJ9.1C-T2   Z DIODE   C5546   NCB31HK-222X   C CAPACITOR   2200F 50V K   D5504   MTZJ9.1C-T2   Z DIODE   C5547   NCB31HK-222X   C CAPACITOR   2200F 50V K   D5505   MTZJ9.1C-T2   Z DIODE   C5547   NCB31HK-222X   C CAPACITOR   2200F 50V K   D5505   MTZJ9.1C-T2   Z DIODE   C5504   NCB31HK-104X   C CAPACITOR   2200F 50V K   D5507   MTZJ9.1C-T2   Z DIODE   C5509   NCB31HK-104X   C CAPACITOR   0.1uF 50V K   D5509   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K   D5509   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K   D5500   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K   D5501   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K   D5500   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K   D5501   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1u	Q5387	DTC323TK-X	DIGI TRANSISTOR		C5380	QETN1HM-106Z	E CAPACITOR	10uF 50V M
Q5902         2SC3928A/QR/-X         TRANSISTOR         C5501         QETN1HM-225Z         E CAPACITOR         2.2uF 50V M           Q5904         2SC3928A/QR/-X         TRANSISTOR         C5503         QETN1HM-225Z         E CAPACITOR         2.2uF 50V M           Q5904         2SC3928A/QR/-X         TRANSISTOR         C5503         QETN1HM-106Z         E CAPACITOR         10uF 50V M           Q5905         2SC3928A/QR/-X         TRANSISTOR         C5504         QETN1HM-106Z         E CAPACITOR         10uF 50V M           Q5906         2SC3928A/QR/-X         TRANSISTOR         C5508         QETN1HM-106Z         E CAPACITOR         10uF 50V M           Q5907         2SC3928A/QR/-X         TRANSISTOR         C5509         NCB31HK-103X         C CAPACITOR         0.01uF 50V M           Q5908         2SC3928A/QR/-X         TRANSISTOR         C5520         QETN1HM-225Z         E CAPACITOR         0.01uF 50V M           Q5908         2SC3928A/QR/-X         TRANSISTOR         C5520         QETN1HM-105Z         E CAPACITOR         0.01uF 50V M           Q5908         2SC3928A/QR/-X         TRANSISTOR         C5520         QETN1HM-225Z         E CAPACITOR         0.01uF 50V M           Q5908         2SC3928A/QR/-X         TRANSISTOR         C5520 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
Q5904   2SC3928A/QR/-X   TRANSISTOR   C5503   QETN1HM-106Z   E CAPACITOR   10uF 50V M Q5905   2SC3928A/QR/-X   TRANSISTOR   C5504   QETN1HM-106Z   E CAPACITOR   10uF 50V M Q5906   2SC3928A/QR/-X   TRANSISTOR   C5508   QETN1HM-106Z   E CAPACITOR   10uF 50V M Q5907   2SC3928A/QR/-X   TRANSISTOR   C5509   NCB31HK-103X   C CAPACITOR   0.01uF 50V K Q5908   2SC3928A/QR/-X   TRANSISTOR   C5509   NCB31HK-103X   C CAPACITOR   0.2uF 50V M C5521   QETN1HM-225Z   E CAPACITOR   2.2uF 50V M C5521   QETN1HM-225Z   E CAPACITOR   0.01uF 50V K D5392   MTZJ9.1C-T2   Z DIODE   C5531   NCB31HK-103X   C CAPACITOR   0.01uF 50V K D5501   MTZJ9.1C-T2   Z DIODE   C5532   QETN1HM-476Z   E CAPACITOR   0.01uF 50V K D5502   MTZJ9.1C-T2   Z DIODE   C5533   NCB31HK-103X   C CAPACITOR   0.01uF 50V K D5504   MTZJ9.1C-T2   Z DIODE   C5534   QENC1CM-106Z   BP E CAPACITOR   0.01uF 16V M D5504   MTZJ9.1C-T2   Z DIODE   C5546   NCB31HK-222X   C CAPACITOR   2200pF 50V K D5504   MTZJ9.1C-T2   Z DIODE   C5547   NCB31HK-222X   C CAPACITOR   2200pF 50V K D5505   MTZJ9.1C-T2   Z DIODE   C5547   NCB31HK-222X   C CAPACITOR   2200pF 50V K D5507   MTZJ9.1C-T2   Z DIODE   C5547   NCB31HK-104X   C CAPACITOR   0.1uF 50V M D5507   MTZJ9.1C-T2   Z DIODE   C5703   QETN1HM-106Z   E CAPACITOR   0.1uF 50V K D5509   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K D5509   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K D5509   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K D5509   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K D5500   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K D5500   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K D5500   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K D5500   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K D5500   MTZJ9.1C-T2   Z DIODE   C5500   NCB31HK-104X   C CAPACITOR   0.1uF 50V K D5500   MTZJ9.1C-T2   Z DIODE   C5500   NCB3	Q5902							
Q5906   28C3928A/QR/-X   TRANSISTOR   C5508   QETN1HM-106Z   E CAPACITOR   10uF 50V M Q5907   28C3928A/QR/-X   TRANSISTOR   C5509   NCB31HK-103X   C CAPACITOR   2.2uF 50V M C5908   28C3928A/QR/-X   TRANSISTOR   C5520   QETN1HM-225Z   E CAPACITOR   2.2uF 50V M C5521   QETN1HM-225Z   E CAPACITOR   2.2uF 50V M C5532   QETN1HM-103X   C CAPACITOR   0.01uF 50V K C5531   MTZJ9.1C-T2   Z DIODE   C5533   NCB31HK-103X   C CAPACITOR   47uF 25V M C5502   MTZJ9.1C-T2   Z DIODE   C5533   NCB31HK-103X   C CAPACITOR   0.01uF 50V K C5502   MTZJ9.1C-T2   Z DIODE   C5534   QENC1CM-106Z   BP E CAPACITOR   10uF 16V M C5503   MTZJ9.1C-T2   Z DIODE   C5546   NCB31HK-22X   C CAPACITOR   2200pF 50V K C5505   MTZJ9.1C-T2   Z DIODE   C5503   QETN1HM-106Z   E CAPACITOR   2200pF 50V K C5505   MTZJ9.1C-T2   Z DIODE   C5703   QETN1HM-106Z   E CAPACITOR   2200pF 50V K C5507   MTZJ9.1C-T2   Z DIODE   C5703   QETN1HM-106Z   E CAPACITOR   0.1uF 50V K C5509   MTZJ9.1C-T2   Z DIODE   C5704   NCB31HK-104X   C CAPACITOR   0.1uF 50V K C5509   MTZJ9.1C-T2   Z DIODE   C5902   NCB31HK-104X   C CAPACITOR   0.1uF 50V K C5509   MTZJ9.1C-T2   Z DIODE   C5902   NCB31HK-104X   C CAPACITOR   0.1uF 50V K C5509   MTZJ9.1C-T2   Z DIODE   C5902   NCB31HK-104X   C CAPACITOR   0.1uF 50V K C5509   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   0.1uF 50V K C5500   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   0.1uF 50V K C5500   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   0.1uF 50V K C5500   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   0.1uF 50V K C5500   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   0.1uF 50V K C5500   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   0.1uF 50V K C5500   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   0.1uF 50V K C5500   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   0.1uF 5	Q5904	2SC3928A/QR/-X	TRANSISTOR		C5503	QETN1HM-106Z	E CAPACITOR	10uF 50V M
D5908   2SC3928A/QR/-X   TRANSISTOR   C5520   QETN1HM-225Z   E CAPACITOR   2.2uF 50V M   C5521   QETN1HM-225Z   E CAPACITOR   2.2uF 50V M   C5521   QETN1HM-225Z   E CAPACITOR   2.2uF 50V M   C5531   NCB31HK-103X   C CAPACITOR   0.01uF 50V K   C5532   QETN1HM-476Z   E CAPACITOR   0.01uF 50V K   C5532   QETN1EM-476Z   E CAPACITOR   0.01uF 50V K   C5504   MTZJ9.1C-T2   Z DIODE   C5546   NCB31HK-222X   C CAPACITOR   2200pF 50V K   C5504   MTZJ9.1C-T2   Z DIODE   C5703   QETN1HM-106Z   E CAPACITOR   2200pF 50V K   C5507   MTZJ9.1C-T2   Z DIODE   C5704   NCB31HK-104X   C CAPACITOR   0.1uF 50V K   C5509   MTZJ9.1C-T2   Z DIODE   C5901   NCB31HK-104X   C CAPACITOR   0.1uF 50V K   C5509   MTZJ9.1C-T2   Z DIODE   C5902   NCB31HK-104X   C CAPACITOR   0.1uF 50V K   C5509   MTZJ9.1C-T2   Z DIODE   C5902   NCB31HK-104X   C CAPACITOR   0.1uF 50V K   C5500   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   0.1uF 50V K   C5501   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   0.1uF 50V K   C5500   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   100uF 16V M   C5500   MTZJ9.1C-T2   Z DIODE   C5903   QETN1CM-107Z   E CAPACITOR   100uF 16V M   C5500   C5903   QETN1C	Q5906	2SC3928A/QR/-X	TRANSISTOR		C5508	QETN1HM-106Z	E CAPACITOR	10uF 50V M
D5391         MTZJ9.1C-T2         Z DIODE         C5531         NCB31HK-103X         C CAPACITOR         0.01uF 50V K           D5392         MTZJ9.1C-T2         Z DIODE         C5532         QETN1EM-476Z         E CAPACITOR         47uF 25V M           D5501         MTZJ9.1C-T2         Z DIODE         C5533         NCB31HK-103X         C CAPACITOR         0.01uF 50V K           D5502         MTZJ9.1C-T2         Z DIODE         C5534         QENC1CM-106Z         BP E CAPACITOR         10uF 16V M           D5503         MTZJ9.1C-T2         Z DIODE         C5546         NCB31HK-222X         C CAPACITOR         2200pF 50V K           D5504         MTZJ9.1C-T2         Z DIODE         C5703         QETN1HM-106Z         E CAPACITOR         2200pF 50V K           D5505         MTZJ9.1C-T2         Z DIODE         C5703         QETN1HM-106Z         E CAPACITOR         2200pF 50V K           D5507         MTZJ9.1C-T2         Z DIODE         C5704         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5509         MTZJ9.1C-T2         Z DIODE         C5902         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5510         MTZJ9.1C-T2         Z DIODE         C5902         NCB31HK-104X         C CAPACITOR					C5520	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M
D5392         MTZJ9.1C-T2         Z DIODE         C5532         QETN1EM-476Z         E CAPACITOR         47uF 25V M           D5501         MTZJ9.1C-T2         Z DIODE         C5533         NCB31HK-103X         C CAPACITOR         0.01uF 50V M           D5502         MTZJ9.1C-T2         Z DIODE         C5534         QENC1CM-106Z         BP E CAPACITOR         10uF 16V M           D5503         MTZJ9.1C-T2         Z DIODE         C5546         NCB31HK-222X         C CAPACITOR         2200pF 50V K           D5504         MTZJ9.1C-T2         Z DIODE         C5547         NCB31HK-222X         C CAPACITOR         2200pF 50V K           D5505         MTZJ9.1C-T2         Z DIODE         C5703         QETN1HM-106Z         E CAPACITOR         10uF 50V M           D5507         MTZJ9.1C-T2         Z DIODE         C5704         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5509         MTZJ9.1C-T2         Z DIODE         C5901         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5510         MTZJ9.1C-T2         Z DIODE         C5902         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5510         MTZJ9.1C-T2         Z DIODE         C5903         QETN1CM-107Z         E CAPACITOR <t< td=""><td>D5391</td><td>MTZJ9.1C-T2</td><td>Z DIODE</td><td></td><td></td><td></td><td></td><td></td></t<>	D5391	MTZJ9.1C-T2	Z DIODE					
D5502         MTZJ9.1C-T2         Z DIODE         C5534         QENC1CM-106Z         BP E CAPACITOR         10uF 16V M           D5503         MTZJ9.1C-T2         Z DIODE         C5546         NCB31HK-222X         C CAPACITOR         2200pF 50V K           D5504         MTZJ9.1C-T2         Z DIODE         C5547         NCB31HK-222X         C CAPACITOR         2200pF 50V K           D5505         MTZJ9.1C-T2         Z DIODE         C5703         QETN1HM-106Z         E CAPACITOR         10uF 50V M           D5507         MTZJ9.1C-T2         Z DIODE         C5704         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5509         MTZJ9.1C-T2         Z DIODE         C5901         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5510         MTZJ9.1C-T2         Z DIODE         C5902         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5510         MTZJ9.1C-T2         Z DIODE         C5903         QETN1CM-107Z         E CAPACITOR         100uF 16V M	D5392	MTZJ9.1C-T2	Z DIODE		C5532	QETN1EM-476Z	E CAPACITOR	47uF 25V M
D5504         MTZJ9.1C-T2         Z DIODE         C5547         NCB31HK-222X         C CAPACITOR         2200pF 50V K           D5505         MTZJ9.1C-T2         Z DIODE         C5703         QETM1HM-106Z         E CAPACITOR         10uF 50V M           D5507         MTZJ9.1C-T2         Z DIODE         C5704         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5508         MTZJ9.1C-T2         Z DIODE         C5901         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5509         MTZJ9.1C-T2         Z DIODE         C5902         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5510         MTZJ9.1C-T2         Z DIODE         C5903         QETN1CM-107Z         E CAPACITOR         100uF 16V M	D5502	MTZJ9.1C-T2	Z DIODE		C5534	QENC1CM-106Z	BP E CAPACITOR	10uF 16V M
D5507         MTZJ9.1C-T2         Z DIODE         C5704         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5508         MTZJ9.1C-T2         Z DIODE         C5901         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5509         MTZJ9.1C-T2         Z DIODE         C5902         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5510         MTZJ9.1C-T2         Z DIODE         C5903         QETN1CM-107Z         E CAPACITOR         100uF 16V M	D5504	MTZJ9.1C-T2	Z DIODE		C5547	NCB31HK-222X	C CAPACITOR	2200pF 50V K
D5508         MTZJ9.1C-T2         Z DIODE         C5901         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5509         MTZJ9.1C-T2         Z DIODE         C5902         NCB31HK-104X         C CAPACITOR         0.1uF 50V K           D5510         MTZJ9.1C-T2         Z DIODE         C5903         QETN1CM-107Z         E CAPACITOR         100uF 16V M								
D5510 MTZJ9.1C-T2 Z DIODE C5903 QETN1CM-107Z E CAPACITOR 100uF 16V M	D5508	MTZJ9.1C-T2	Z DIODE		C5901	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
DOUT IN 1203.10-12 Z DIODE CONTROLL TO THE TOTAL	D5510	MTZJ9.1C-T2	Z DIODE		C5903	QETN1CM-107Z	E CAPACITOR	100uF 16V M
	D3311	WITZ00.10-12	Z DIODL		00004	QCTITIONI-101Z	2 0/11 /1011 011	10001 100 101

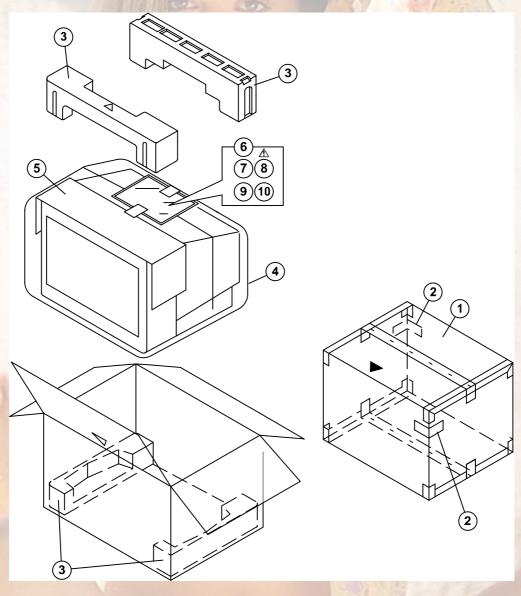
(No.YA246)3-9

⚠Ref No.	Part No.	Part Name	Description Local	⚠Ref No.	Part No.	Part Name	Description Local
R5001	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	R5559 R5560	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R5001	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	R5561	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R5003 R5004	NRSA63J-223X NRSA63J-103X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 10kΩ 1/16W J	R5701 R5702	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J
R5005	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J	R5702 R5901	NRSA63J-101X NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R5007 R5008	NRSA63J-332X	MG RESISTOR MG RESISTOR	3.3kΩ 1/16W J	R5902	NRSA63J-680X NRSA63J-562X	MG RESISTOR MG RESISTOR	68Ω 1/16W J
R5006	NRSA63J-332X NRSA63J-333X	MG RESISTOR	3.3kΩ 1/16W J 33kΩ 1/16W J	R5903 R5904	NRSA63J-680X	MG RESISTOR	5.6kΩ 1/16W J 68Ω 1/16W J
R5010	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J 100Ω 1/16W J	R5906	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
R5011 R5012	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	R5907 R5908	NRSA63J-682X NRSA63J-471X	MG RESISTOR MG RESISTOR	6.8kΩ 1/16W J 470Ω 1/16W J
R5013	NRSA63J-101X	MG RESISTOR	100Ω 1/ <mark>16W J</mark>	R5909	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
R5014 R5015	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	R5910 R5911	NRSA63J-223X NRSA63J-471X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 470Ω 1/16W J
R5016	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R5913	QRE121J-220Y	MG RESISTOR C RESISTOR	22Ω 1/2W J
R5017 R5031	NRSA63J-105X NRSA63J-101X	MG RESISTOR MG RESISTOR	1MΩ 1/16W J 100Ω 1/16W J	R5914	QRE121J-220Y	C RESISTOR	22Ω 1/2W J
R5032	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	L5202	QQL244K-150Z	PEAKING COIL	15uH K
R5033 R5034	NRSA63J-272X NRSA63J-272X	MG RESISTOR MG RESISTOR	2.7kΩ 1/16W J 2.7kΩ 1/16W J	L5211 L5241	QQL244K-4R7Z QQL244K-4R7Z	PEAKING COIL PEAKING COIL	4.7uH K 4.7uH K
R5210	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	L5243	QQL244K-4R7Z	PEAKING COIL	4.7uH K
R5211 R5212	NRSA63J-332X NRSA63J-103X	MG RESISTOR MG RESISTOR	3.3kΩ 1/16W J	L5244 L5261	QQL244K-4R7Z QQL244K-150Z	PEAKING COIL PEAKING COIL	4.7uH K 15uH K
R5212	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J 1kΩ 1/16W J	L3201	QQL244K-150Z	PEAKING COIL	15un K
R5214	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	CN5001	QGB1505K1-35	CONNECTOR	B-B (1-35)
R5215 R5216	NRSA63J-152X NRSA63J-182X	MG RESISTOR MG RESISTOR	1.5kΩ 1/16W J 1.8kΩ 1/16W J	J5501 J5502	QNZ0454-001 QNN0348-001	AV JACK PIN JACK	S/V/L/R IN V/L/R IN
R5217	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	J5503	QNN0348-001	PIN JACK	L/R OUT
R5240 R5241	NRSA63J-0R0X NRSA63J-821X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 820Ω 1/16W J	1			
R5242	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J				
R5243 R5251	NRSA63J-101X NRSA63J-471X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 470Ω 1/16W J	SIDE C	ONTROL P.W.	BOARD ASS'Y	(SGW-6011A-M2)
R5253	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	⚠Ref No.	Part No.	Part Name	Description Local
R5254 R5255	NRSA63J-102X NRSA63J-681X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 680Ω 1/16W J		Des Profesion		
R5258	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	C6401	QETN1HM-106Z	E CAPACITOR	10uF 50V M
R5259 R5261	NRSA63J-222X NRSA63J-101X	MG RESISTOR MG RESISTOR	2.2kΩ 1/16W J 100Ω 1/16W J	C6402 C6403	QETN1HM-225Z QETN1HM-225Z	E CAPACITOR E CAPACITOR	2.2uF 50V M 2.2uF 50V M
R5262	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	C0403	QETIVITIVI-2252	ECAPACITOR	2.2UF 3UV IVI
R5263 R5265	NRSA63J-471X NRSA63J-102X	MG RESISTOR	470Ω 1/16W J	R6401	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
R5269	NRSA63J-681X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 680Ω 1/16W J	R6402 R6403	NRSA63J-224X NRSA63J-224X	MG RESISTOR MG RESISTOR	220kΩ 1/16W J 220kΩ 1/16W J
R5270	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R6702	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R5384 R5385	NRSA63J-223X NRSA63J-223X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 22kΩ 1/16W J	R6703 R6704	NRSA63J-102X NRSA63J-152X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 1.5kΩ 1/16W J
R5386	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	R6705	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J
R5387 R5391	NRSA63J-223X NRSA63J-221X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 220Ω 1/16W J	R6706	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R5392	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	CN6006	QJB003-056430	SIN ID C-B WIRE	
R5393 R5394	NRSA63J-823X NRSA63J-823X	MG RESISTOR MG RESISTOR	82kΩ 1/16W J 82kΩ 1/16W J	CN600B J6401	QJB003-034633 PIN JACK	SIN ID C-B WIRE PIN JACK	V/L/R IN
R5395	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	LC6401	QQR1459-001	EMI F. COIL	Vicini
R5396 R5501	NRSA63J-221X NRSA63J-101X	MG RESISTOR MG RESISTOR	220Ω 1/16W J 100Ω 1/16W J	LC6402 LC6403	QQR1459-001 QQR1459-001	EMI F. COIL EMI F. COIL	
R5502	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	S6702	QSW0619-003Z	TACT SWITCH	MENU
R5503	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	S6703 S6704	QSW0619-003Z QSW0619-003Z	TACT SWITCH TACT SWITCH	CH- CH+
R5504 R5505	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	S6705	QSW0619-003Z	TACT SWITCH	VOL-
R5507 R5508	NRSA63J-103X NRSA63J-153X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 15kΩ 1/16W J	S6706	QSW0619-003Z	TACT SWITCH	VOL+
R5509	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J				
R5510 R5511	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J				
R5512	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J			W. BOARD ASS	Ύ
R5513	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	(SGW-7	011A-M2)		
R5514 R5515	NRSA63J-103X NRSA63J-103X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 10kΩ 1/16W J	⚠Ref No.	Part No.	Part Name	Description Local
R5516	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	100	216		
R5517 R5519	NRSA63J-103X NRSA63J-750X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 75Ω 1/16W J	IC7701	GP1UM281QK	IR DETECT UNIT	38kHz
R5520	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J				
R5521 R5522	NRSA63J-750X NRSA63J-224X	MG RESISTOR MG RESISTOR	75Ω 1/16W J 220kΩ 1/16W J	Q7702	UN2112-X	DIGI TRANSISTOR	
R5523	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	D7701	LG22440	LED	POWER
R5524 R5526	NRSA63J-103X NRSA63J-103X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 10kΩ 1/16W J	C7701	QETN1EM-476Z	E CAPACITOR	47uF 25V M
R5532	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J				
R5533	NRSA63J-224X NRSA63J-101X	MG RESISTOR MG RESISTOR	220kΩ 1/16W J 100Ω 1/16W J	R7708 R7709	NRSA63J-152X NRSA63J-561X	MG RESISTOR MG RESISTOR	1.5kΩ 1/16W J 560Ω 1/16W J
R5541 R5542	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7710	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R5543 R5544	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R7711	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R5545	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	CN7007	QJB003-064426	SIN ID C-B WIRE	
R5546 R5558	NRSA63J-103X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 0Ω 1/16W J	S7701	QSW0847-001	TACT SWITCH	POWER

# REMOTE CONTROL UNIT PARTS LIST (RM-C1258G-1H)

⚠ Ref.No.	Part No.	Part Name	Description	Local	
	UR77EC0603B	BATTERY COVER		/	

## **PACKING**



# **PACKING PARTS LIST**

⚠ Ref.No.	Part No.	Part Name	Description	Local
1 2 3 4 5 6 7 <b>A</b> 8	GQ10009-032A-A CM36616-001-A GQ10076-001B-A CP30056-A04-A CP30055-A02-A QPA02503505 RM-C1258G-1H LCT1784-001A-A	PACKING CASE CORNER LABEL CUSHION ASSY POLY BAG TOP COVER POLY BAG REMOCON INST BOOK BATTERY	2pcs in 1set 4pcs in 1set 25cm x 35cm R6P/AA(x2)	
10	BT-51034-2Q	REGIST. CARD		