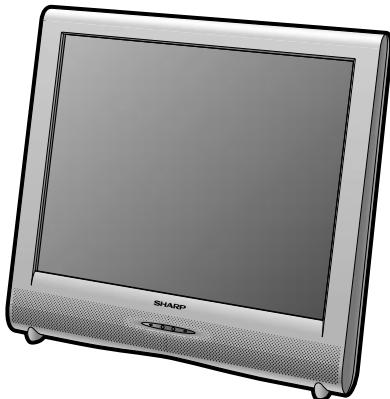


# SHARP SERVICE MANUAL

N46A3LC13AV6U



## LCD COLOR TELEVISION

MODEL **LC-13AV6U**

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

### CONTENTS

	Page
• IMPORTANT SERVICE SAFETY PRECAUTION .....	2
• SPECIFICATIONS .....	5
• OPERATION MANUAL .....	6
• DIMENSIONS .....	8
• REMOVING OF MAJOR PARTS .....	9
• ADJUSTING PROCEDURE OF EACH SECTION .....	13
• PUBLIC MODE SETTING PROCEDURE .....	24
• TROUBLE SHOOTING TABLE .....	29
• MAJOR IC INFORMATIONS .....	32
• BLOCK DIAGRAM .....	34
• OVERALL WIRING DIAGRAM .....	36
• DESCRIPTION OF SCHEMATIC DIAGRAM .....	38
• SCHEMATIC DIAGRAM	
■ R/C, LED Unit .....	39
■ SUB Unit .....	40
■ MAIN Unit .....	48
■ OPERATION Unit .....	58
• PRINTED WIRING BOARD ASSEMBLIES .....	59
• REPLACEMENT PARTS LIST .....	72
• PACKING OF THE SET .....	83

**SHARP CORPORATION**

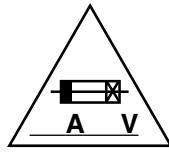
This document has been published to be used for  
after sales service only.  
The contents are subject to change without notice.

# IMPORTANT SERVICE SAFETY PRECAUTION

- Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:

## WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.



**CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE REPLACE ONLY WITH SAME TYPE F6700 (1.6A, 250V), F6702 (1.6A, 250V) AND F7701 (3.15A, 250V) FUSE.**

- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

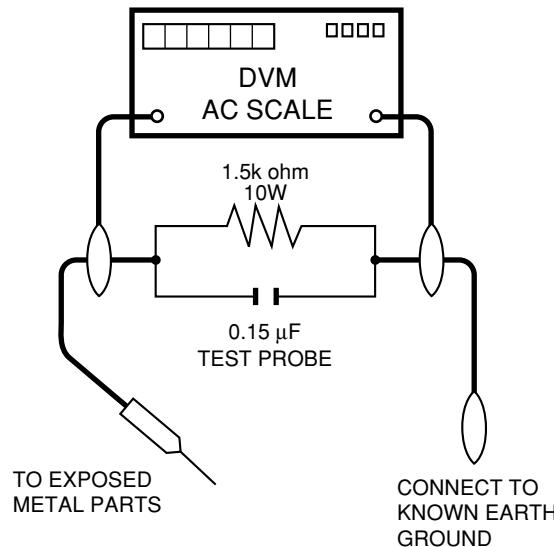
All checks must be repeated with the AC cord plug connection reversed. (If necessary, a nonpolarized adaptor plug must be used only for the purpose of completing these checks.)

Any reading of 0.75V peak (this corresponds to 0.5 mA. peak AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the monitor to the owner.

## BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

Before returning the receiver to the user, perform the following safety checks:

1. Inspect all lead dress to make certain that leads are not pinched, and check that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
  - Plug the AC cord directly into a 120 volt AC outlet.
  - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to an earth ground.



## SAFETY NOTICE

Many electrical and mechanical parts in LCD television have special safety-related characteristics.

These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "▲"

and shaded areas in the **Replacement Parts Lists** and **Schematic Diagrams**.

For continued protection, replacement parts must be identical to those used in the original circuit.

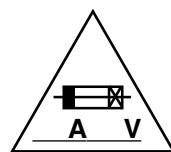
The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

# PRECAUTIONS A PRENDRE LORS DE LA REPARATION

- La réparation ne peut être effectuée que par un technicien spécialisé qui s'est parfaitement accoutumé à toute vérification de sécurité et aux conseils suivants.

## AVERTISSEMENT

1. Pour la sécurité continue, n'entreprendre aucune modification de tout circuit.
2. Débrancher l'alimentation CA avant la réparation.



**PRECAUTION: POUR LA PROTECTION CONTINUE CONTRE LES RISQUES D'INCENDIE, REMPLACER LE FUSIBLE PAR UN FUSIBLE DE MEME TYPE F6700 (1.6A, 250V), F6702 (1.6A, 250V) et F7701 (3.15A, 250V).**

## AVANT DE RENDRE LE RECEPTEUR A L'UTILISATEUR (Incendie et choc électrique)

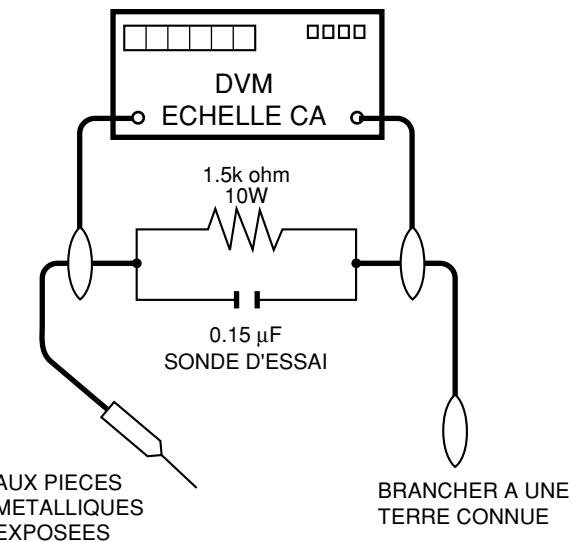
### Avant de rendre le récepteur à l'utilisateur, effectuer les vérifications suivantes.

1. Inspecter tous les faisceaux de câbles pour s'assurer que les fils ne soient pas pincés ou qu'un outil ne soit pas placé entre le châssis et les autres pièces métalliques du récepteur.
2. Inspecter tous les dispositifs de protection comme les boutons de commande non-métalliques, les isolants, le dos du coffret, les couvercles ou blindages de réglage et de compartiment, les réseaux de résistance-capacité, les isolateurs mécaniques, etc.
3. S'assurer qu'il n'y ait pas de danger d'électrocution en vérifiant la fuite de courant, de la façon suivante:
  - Enficher le cordon d'alimentation directement dans une prise de 120V CA.
  - A l'aide de deux fils à pinces, brancher une résistance de  $1.5k\Omega$  10 watts en parallèle avec un condensateur de  $0.15\mu F$  en série avec toutes les pièces métalliques exposées du coffret et une terre connue comme une

conduite électrique ou une prise de terre branchée à la terre.

- Utiliser un voltmètre CA d'une sensibilité d'au moins  $5000\Omega/V$  pour mesurer la chute de tension CA en travers de la résistance.
- Toucher avec la sonde d'essai les pièces métalliques exposées qui présentent une voie de retour au châssis (antenne, coffret métallique, tête des vis, arbres de commande et des boutons, écusson, etc.) et mesurer la chute de tension CA en travers de la résistance. Toutes les vérifications doivent être refaites après avoir inversé la fiche du cordon d'alimentation. (Si nécessaire, une prise d'adaptation non polarisée doit être utilisée dans le but de terminer ces vérifications.)

La tension de pointe mesurée ne doit pas dépasser  $0.75V$  (correspondante au courant CA de pointe de  $0.5mA$ ). Dans le cas contraire, il y a une possibilité de choc électrique qui doit être supprimée avant de rendre le récepteur au client.



## AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les téléviseurs de l'affichage à cristaux liquides présentent des caractéristiques spéciales relatives à la sécurité.

Ces caractéristiques ne sont souvent pas évidentes à vue. Le degré de protection ne peut pas être nécessairement augmenté en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.

Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les

pièces électriques qui présentent ces particularités sont identifiées par la marque "Δ" et hachurées dans la **liste des pièces de remplacement** et les **diagrammes schématiques**.

Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies ou autres accidents.

# Precautions for using lead-free solder

## 1 Employing lead-free solder

"All PWBs" of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.

Example:

**LFa**

**Sn-Ag-Cu**

Indicates lead-free solder of tin, silver and copper.

## 2 Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40°C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

## 3 Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40°C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required.

If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

Part No.	★	Description	Code
ZHNDAi123250E	J	φ0.3mm 250g(1roll)	BL
ZHNDAi126500E	J	φ0.6mm 500g(1roll)	BK
ZHNDAi12801KE	J	φ1.0mm 1kg(1roll)	BM

# SPECIFICATIONS

Items	Model	LC-13AV6U
LCD panel	13" Advanced Super View & BLACK TFT LCD	
Number of dots	921,600 dots VGA	
Video color systems	N358	
TV function	TV Standard (CCIR)	NTSC
	TV Tuning System	PLL 181 ch.
	STEREO	MTS+SAP
	CATV	125 ch.
Brightness	430 cd/m <sup>2</sup>	
Viewing angles	H: 170° V: 170°	
Audio amplifier	1.0 W × 2	
Speakers	1 <sup>1</sup> / <sub>5</sub> × 3 <sup>1</sup> / <sub>5</sub> in. (3 × 8.2 cm). 2pcs	
Terminals	INPUT1	COMPONENT-IN, AUDIO-IN
	INPUT2	VIDEO-IN, S-VIDEO-IN, AUDIO-IN
	AUDIO OUT	AUDIO-OUT
	Antenna	F-Type
	Headphone	Mini-jack for stereo (ø3.5 mm)
OSD language	English/Spanish/French	
Power supply	AC 120V, 60Hz	
Power consumption	48 W (0.8 W standby): AC 120V	
Weight	Display only	7.3 lbs./3.3 kg
	Display with stand	8.1 lbs./3.7 kg
Operating temperature	+32°F to +104°F (0°C to +40°C)	

■ As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

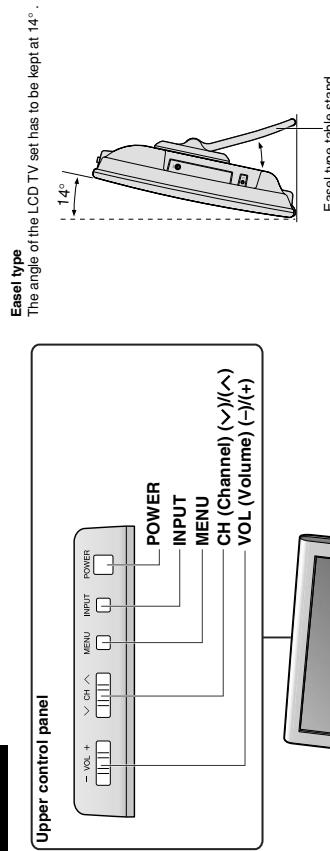
# OPERATION MANUAL

## Part Names of Main Unit

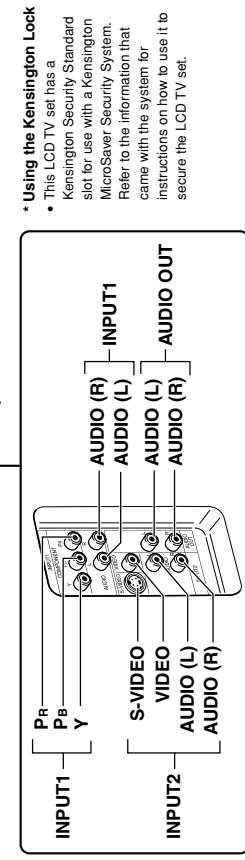
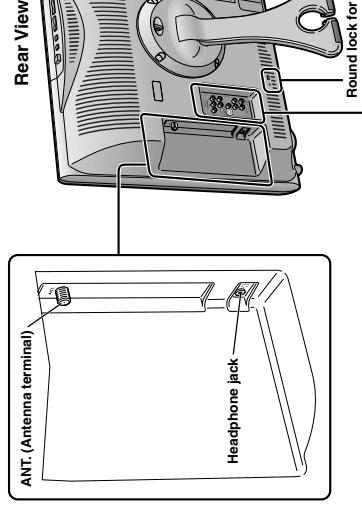
The examples used throughout this manual are based on the LC-13AV6U model.

### Terminals

#### ■ Table stand



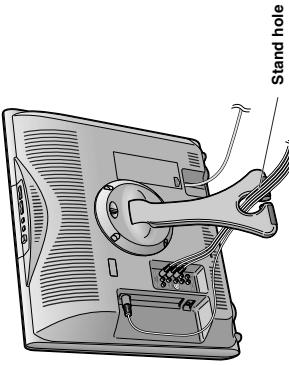
- Caution:**
- Be careful not to hurt your fingers with the stand.
  - Do not pick up the LCD TV set by its stand.
  - Securely unfold the easel type table stand until you hear a clicking sound.
  - Only use the easel type table stand after first unfolding until a clicking sound is heard to ensure that it is stable.



- \* Using the Kensington Lock**
- This LCD TV set has a Kensington Security Standard slot for use with a Kensington MicroSaver Security System. Refer to the information that came with the system for instructions on how to use it to secure the LCD TV set.

### How to Fix the Cables

Pull the cables connected to each terminal. Insert the cables into the stand hole and fix the cables.

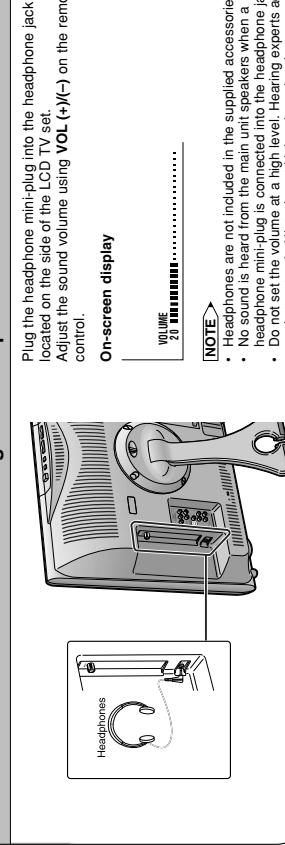


#### ⚠ Caution!

- Do not place any object under the table stand**  
Do not place any object under the table stand, as this could cause the LCD TV set to fall down, breaking the LCD panel as well as damaging the main unit.



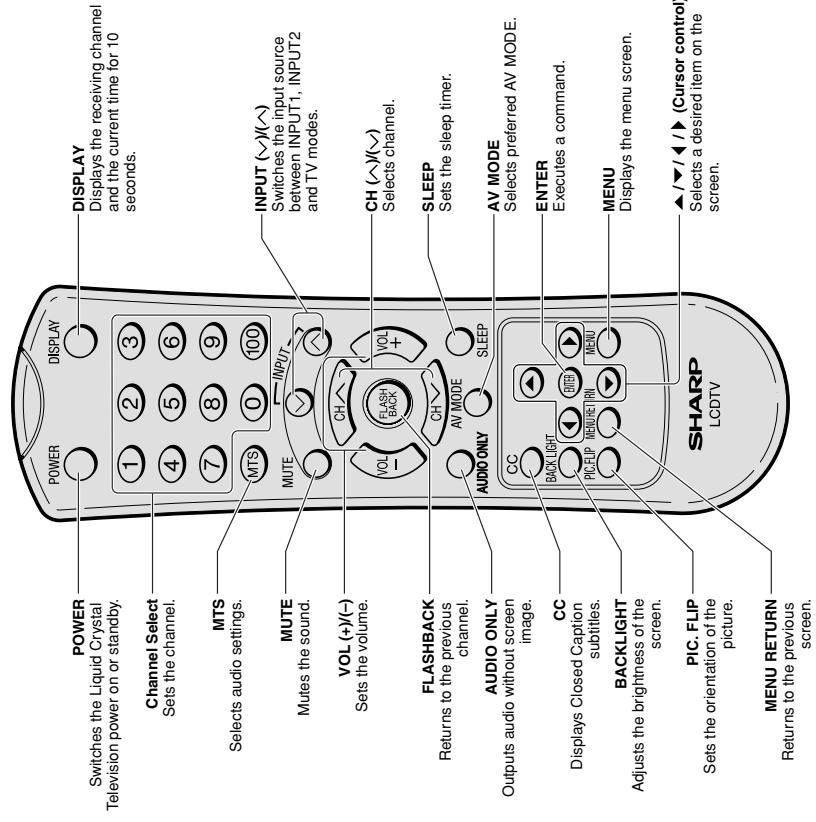
### Listening with Headphones



- [NOTE]**
- INPUT, CH (▽)(△), VOL (-)(+), and MENU on the main unit have the same functions as the same buttons on the remote control.
  - Fundamentally, this operation manual provides a description based on operation using the remote control.

- NOTE**
- Headphones are not included in the supplied accessories.
  - No sound is heard from the main unit speakers when a headphone mini-plug is connected into the headphone jack.
  - Do not set the volume at a high level. Hearing experts advise against extended listening at high volume levels.

## Part Names of Remote Control



## Preparation

### Installing Batteries in the Remote Control

Before using the LCD TV set for the first time, install the two "AAA" size batteries (supplied) in the remote control. When the batteries become depleted and the remote control fails to operate, replace the batteries with new "AAA" size batteries.

- 1 Open the battery cover.
- 2 Insert two "AAA" size batteries.
- 3 Close the battery cover.



- 1 Open the battery cover.
- 2 Insert two "AAA" size batteries.
- 3 Close the battery cover.

- 1 Open the battery cover.
- 2 Insert two "AAA" size batteries.
- 3 Close the battery cover.

### Precautions regarding batteries

Improper use of batteries can result in a leakage of chemicals and/or explosion. Be sure to follow the instructions below.

- Place batteries with their terminals corresponding to the (+) and (-) indications.
- Different types of batteries have different characteristics. Do not mix batteries of different types.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries and/or cause old batteries to leak chemicals.
- Remove batteries as soon as they are depleted. Chemicals that leak from batteries can cause a rash. If chemical leakage is found, wipe it off with a cloth.
- The batteries supplied with the LCD TV set may have a shorter operating time due to storage conditions.
- If the remote control is not to be used for an extended period of time, remove the batteries from the remote control.

### Using the Remote Control

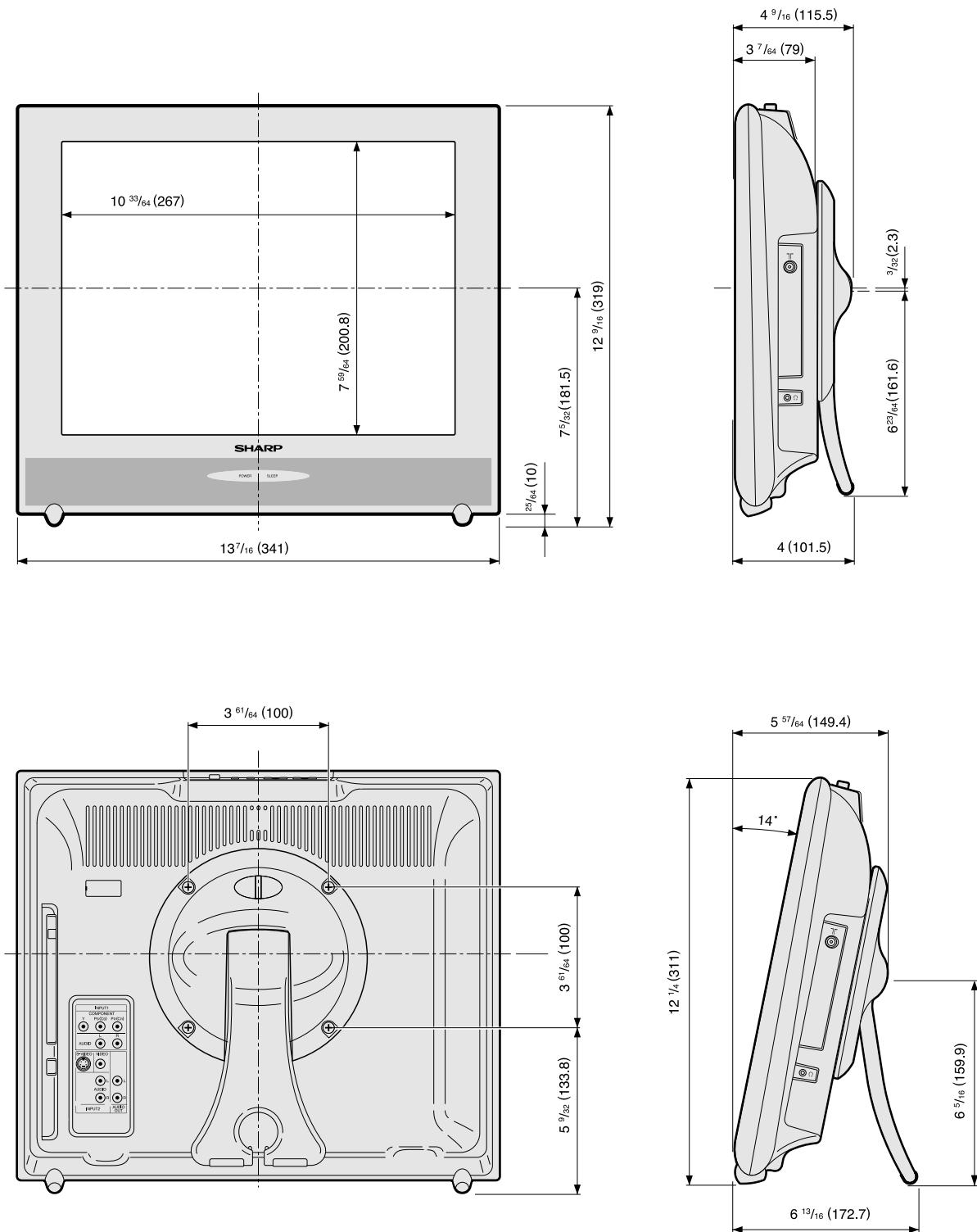
Use the remote control by pointing it towards the remote sensor window of the main unit. Objects between the remote control and sensor window may prevent proper operation.

#### Cautions regarding use of the remote control

- Do not apply shock to the remote control. In addition, do not expose the remote control to liquids, and do not place it in an area with high humidity.
- Do not install or place the remote control under direct sunlight. The heat may cause deformation of the unit.
- The remote control may not work properly if the remote sensor window is under direct sunlight or strong lighting. In such a case, change the angle of the lighting or main unit, or operate the remote control closer to the remote sensor window.

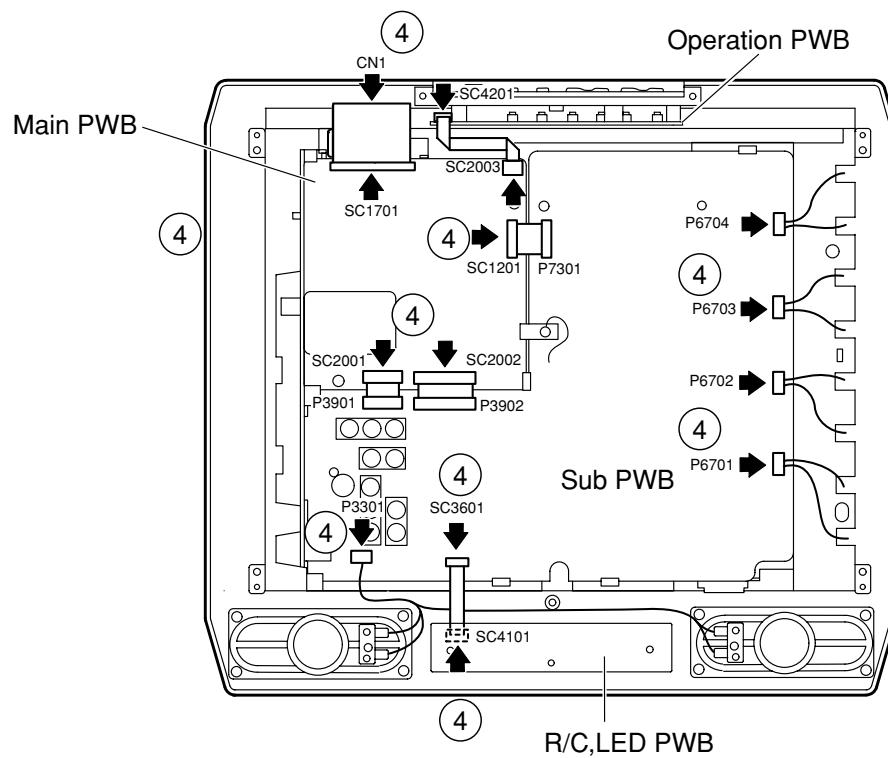
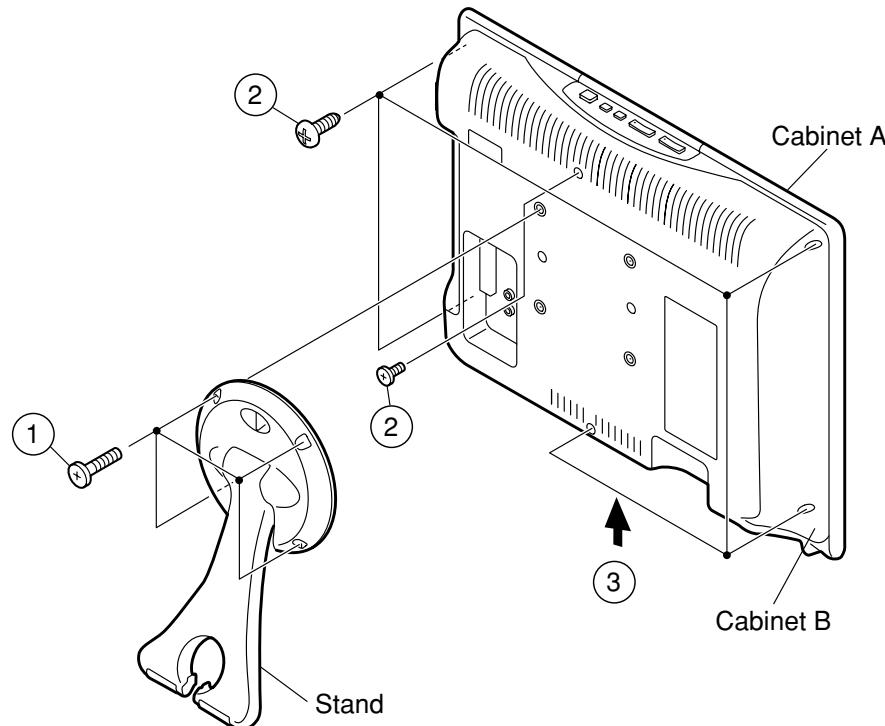
## DIMENSIONS

Unit: inch (mm)

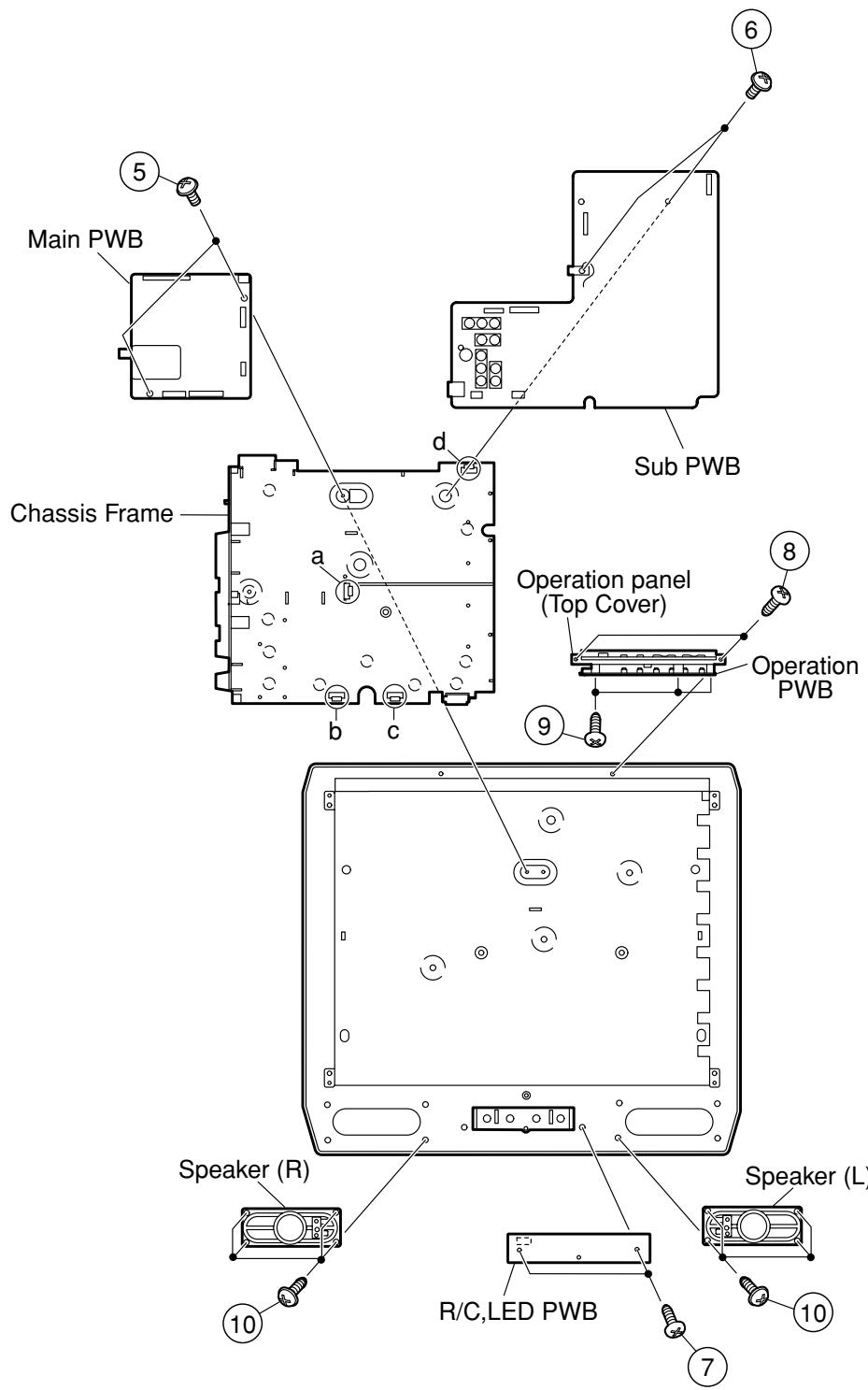


# REMOVING OF MAJOR PARTS

1. Remove the stand fixing screws (4 pcs.).
2. Remove the cabinet B fixing screws (6 pcs.).
3. Remove the cabinet B after opening from the direction of an arrow.
4. Detach the connector from each PWB.



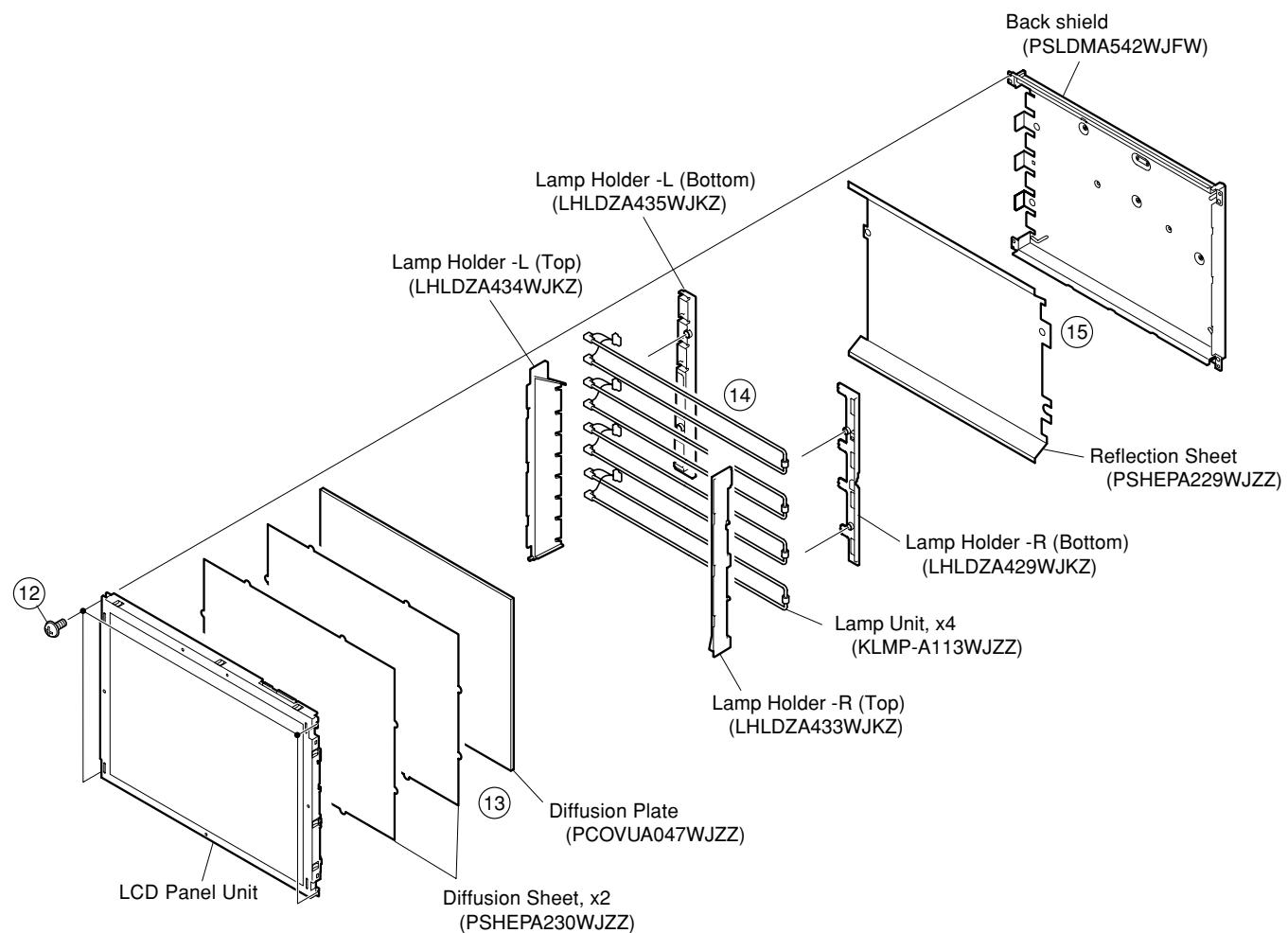
5. Remove the 2 lock screws from the main PWB and undo the hooks a. Detach the chassis frame, together with its terminals, from the main PWB.
6. Remove the 2 lock screws from the sub PWB and undo the hooks b, c and d. Detach the chassis frame together with its terminals, from the sub PWB.
7. Remove the 2 lock screws from the R/C, LED PWB and take out the R/C, LED PWB.
8. Remove the 2 lock screws from the operation panel (top cover), and detach the operation panel (top cover).
9. Remove the 3 lock screws from the operation PWB, and detach the operation PWB.
10. Remove the 4 lock screws each from the right and left speakers and take out both the speakers.



- Precautions in handling the LCD panels

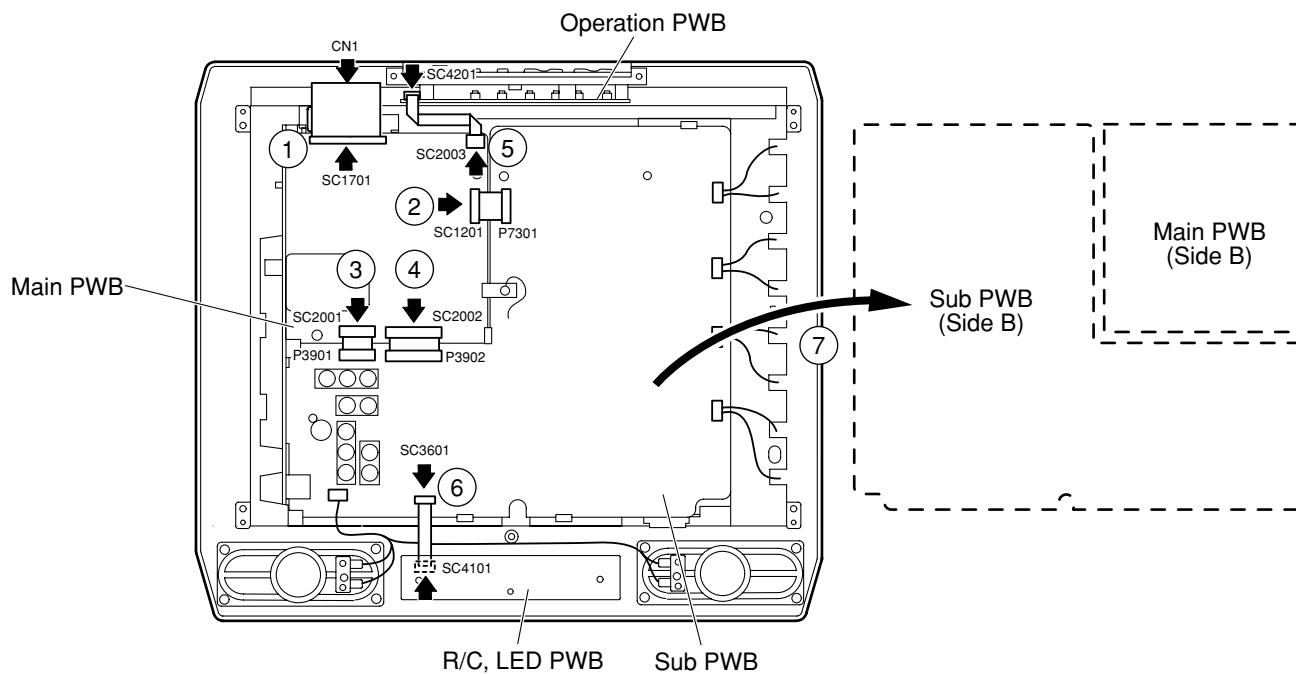
1. Work in a clean room (with humidities below 50%).
2. Be sure to wear an anti-static armband.
3. Handle the panels on an electro-conductive mat.
4. Be careful not to fall, shake and shock the panels.

12. Remove the 4 lock screws from the LCD panel and detach the LCD panel.
13. Remove the diffusion sheets and diffusion plate.
14. Detach the lamp holders -R (top), -L (top) and -R (bottom), -L (bottom) from the lamp unit.
15. Detach the reflection sheet from the back shield.



● Precautions at the time of the side-B(back) service of main and sub unit.

1. Remove the FPC for connection between Main unit (SC1701) and LCD panel (CN1), and connect the extended cable (QCNW-C458WJQZ) for service.
2. Remove only SC1201 side of the lead from between Main unit (SC1201) and Sub unit (P7301), and connect the extended cable (QCNW-C461WJQZ) for service.
3. Remove only SC2001 side of the lead from between Main unit (SC2001) and Sub unit (P3901), and connect the extended cable (QCNW-C461WJQZ) for service.
4. Remove only SC2002 side of the lead from between Main unit (SC2002) and Sub unit (P3902), and connect the extended cable (QCNW-D402WJQZ) for service.
5. Remove the FFC for connection between Main unit (SC2003) and Operation unit (SC4201), and connect the extended cable (QCNW-D444WJQZ) for service.
6. Remove the FFC for connection between Sub unit (SC3601) and R/C, LED unit (SC4101), and connect the extended cable (QCNW-D445WJQZ) for service.
7. Remove the PWB unit fixing screws (main unit: 2 pcs., sub unit: 2 pcs.)



Step	Part No.	Description
1	QCNW-C458WJQZ	Extension Cable 80-pin Main (SC1701)-LCD panel (CN1)
2	QCNW-C461WJQZ	Extension Cable 15-pin Main (SC1201)-Sub (P7301)
3	QCNW-C461WJQZ	Extension Cable 15-pin Main (SC2001)-Sub (P3901)
4	QCNW-D402WJQZ	Extension Cable 23-pin Main (SC2002)-Sub (P3902)
5	QCNW-D444WJQZ	Extension Cable 5-pin Operation (SC4201)-Main (SC2003)
6	QCNW-D445WJQZ	Extension Cable 8-pin R/C, LED (SC4101)-Sub (SC3601)

# ADJUSTING PROCEDURE OF EACH SECTION

The best adjustment is made before shipping. If any position deviation is found or after part replacement is performed, adjust as follows.

## 1. Preparations

- (1) Plug the AC power cord directly into a wall outlet.

### [1] Adjustment procedure

#### 1-1. Adjusting the checker

Turning on the power (initialization) → Making the model and size settings → Transferring the model-related data to the setting E2PROM (I2C)

#### 1-2. Adjusting the finish process

Final assembling → Turning on the power → Calling the adjustment process mode (bus connector) → Adjusting the common bias, TAMP, and white balance (cut-off and gain) settings

### [2] Calling the checker mode/adjustment process mode

#### 2-1. Calling the checker mode

- \* Keep KEY5 (pin (82) of microprocessor) at "L" and turn on the power.

KEY-4	KEY-5	Mode shift
H	H	Normal mode (Data is written and stored on EEP is brand-new.)
L	H	Shift to adjustment mode
H	L	Activated with the checker-oriented master ROM values (EEP still brand-new even after the checker mode)
L	L	The EEP gets initialized and the microprocessor's master values are written. (Process-adjusted settings not reprogrammed)

#### 2-2. Calling the adjustment process mode

There are three ways to call this mode.

- \* Turn on the power and press the "ADJUST PROCESS" key on the remote controller.
- \* Keep KEY4 (pin (81) of microprocessor) at "L" and turn on the power.
- \* For servicing: Hold down the INPUT key and VOL (-) key at once, and turn on the power switch.  
("K" appears at the top left of the screen to indicate the inspection process mode.)  
→ Press the CH (▽) key and VOL (-) key at once. (The adjustment process mode screen shows up.) \_ To quit, turn off the power. (Or turn off the power switch or turn off the remote controller.)

### [3] Key operation in the adjustment process

#### Basic operation

##### Selecting the receiving channels

- \* Using the CH (↖)/(↙) keys, turn up and down an actual receiving channel.  
Snap press: The channels are turned up and down one by one.  
Continuous press: The next receivable channel is searched.
- \* Various adjustments The items are adjusted one by one by selecting on the menu screen and using the cursor key and VOL (+)/(-) keys.
- \* With the CURSOR UP/DOWN keys, select an adjustment item.
- \* Using the menu key, the adjustment items are selected one after another.  
When the bottom item on a page is already selected and the menu key is pressed, the top item on the next page is selected.  
\* If any item on a page is selected and the preset key is pressed, the top item on the next page is selected.  
Page 1 → Page 2 → Page 3 → Page 9 → Page 1 ...
- \* If any item on a page is selected and the manual memory key is pressed, the top item on the same page is selected.
- \* Using the CURSOR LEFT/RIGHT keys and VOL (+)/(-) keys, turn up and down the setting of a selected item.  
Hierarchical shift  
\* When the ENTER key is pressed on any item other than I2C DATA on page 4, the setting page of the item shows up.  
\* To quit the setting page, press the front screen key.

## [4] Initialization

- 4-1. Ground pins (81) and (82) of IC2003 (microprocessor) and turn on the power.
- 4-2. Make sure the screen size is set at 13 inches.
- 4-3. Make sure the model number is "A630A".

(Adjustment Process Menu Page 1)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
0	1																										
1		►	M	O	D	E	L														A	6	3	0	A		
2			I	N	C	H		S	I	Z	E													1	3		
3			E	R	R	O	R	N	O	R	E	S	E	T											0		
4			P	U	B	L	I	C	M	O	D	E									O	F	F				
4			E	X	T		C	O	N	T	R	O	L								O	F	F				
6																											

## [5] Adjustment

## 5-1. Common bias adjustment

- 1) Feed a built-in signal.
- 2) Apply the specified instrument at the center of the screen.
- 3) Observe the instrument output on an oscilloscope.
- 4) Adjust the "COM BIAS" setting on Adjustment Process Page 2 so that the peak-to-peak of the wave be minimized.

## 5-2. TAMP adjustment

- 1) Receive the standard color bar signal.
- 2) See if the "Y" reading (maximum) on Adjustment Process Page 2 is within the range in the following table. If not, adjust the "NTSC TAMP" setting on the same page to have the "Y" reading (maximum) within this range.

Model	LC-13SH3U
Setting (NTSC)	155~158

## Reference

(Adjustment Process Menu Page 2)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
0	2																										
1		►	C	O	M		B	I	A	S										4	6	0					
2			T	A	M	P	L													1	5	5					
3			Y	D	A	T	A													1	5	8					
4			T	A	M	P	H													1	5	8					
5			N	T	S	C		T	A	M	P									9	0						
6																											

Y Data  
(White 75%)



### 5-3. White balance adjustment

#### 1) Adjustment procedure

Adjust the RGB CUTOFF2 setting for white 40% first and then the RGB-GAIN setting for white 80%.

##### (1) Adjusting the test signal

[Input signal] White 80% (191 gradations) for the left of screen, and white 40% (92 gradations) for the right.

[Specification] RGB CUTOFF2 and RGB-GAIN settings on Adjustment Process Page 3.

Adjustment spec. Inspection spec.

White 80%	x	0.271	0.004	0.01	Radius from the center
-----------	---	-------	-------	------	------------------------

	y	0.278	0.004	0.01	Radius from the center
--	---	-------	-------	------	------------------------

White 40%	x	0.258	0.002	0.01	Radius from the center
-----------	---	-------	-------	------	------------------------

	y	0.261	0.002	0.01	Radius from the center
--	---	-------	-------	------	------------------------

[Adjusting with the bus]

Cut-off (RGB CUTOFF2): Fix the G setting at "0". Vary the R and B settings accordingly. Adjustment range: ±40

Gain (RGB-GAIN): Reduce the two strong colors

Adjustment range: Down to -40

(Reading with Minolta CA-210)

### [6] Factory settings

#### 6-1. Making factory settings

Use the adjustment remote controller for the factory settings.

1) Hold down the remote controller's FACTORY SETTING key.

2) Several seconds later, "SETTING COMPLETE" appears at the center of the screen.

Now the settings are complete.



SETTING COMPLETE

## 6-2. Description of Factory Settings.

MENU	PICTURE	AV MODE	BACKLIGHT	Setting content/range		Initial Value	(AV1)	(AV2)	(COMPONENT1)
				STANDARD/DYNAMIC/DYNAMIC(FIXED)/MOVIE/GAME	BRIGHT/NORMAL/DARK/VARIABLE				
				1 (DARK) ~9 (NORMAL)-17 (BRIGHT)	17	17	17	7	9
			CONTRAST	0~60	30	45	60	25	30
			BRIGHTNESS	-30~30	0	0	0	0	0
			COLOR	-30~30	0	+5	+10	0	0
			TINT	-30~30	0	0	0	0	0
			SHARPNESS	-10~+10	0	0	0	0	0
		ADVANCED	COLOR TEMP.	USER/HIGH/MIDDLE/LOW	MIDDLE				
			RED	-30~+30	0				
			GREEN	-30~+30	0				
			BLUE	-30~+30	0				
			RESET	YES/NO	NO				
	AUDIO		RESET	YES/NO	NO				
		TREBLE		-10~+10	0				
		BASS		-10~+10	0				
		BALANCE		-10(L)+10(R)	0				
		RESET		YES/NO	NO				
	SETUP	CH-SETTING	EZ-SETUP	YES/NO	YES				
			LANGUAGE	ENGLISH/ESPAÑOL/FRANCAIS	ENGLISH				
			CH SETTING	ON/OFF	ON				
			START	YES/NO	YES				
			AIRCABLE	AIR/CABLE	AIR				
			CH SEARCH	-	-				
			CH MEMORY	-	-				
		MTS		STEREO/SAP/MONO	STEREO				
		AUDIO OUT		FAO/VAO	FAO				
	V-CHIP BLOCK	SECRET No.		4 digits input	Clear				
		MPAA	G	(NONE)/BLOCK	NONE				
			PG	(NONE)/BLOCK	NONE				
			PG-13	(NONE)/BLOCK	NONE				
			R	(NONE)/BLOCK	NONE				
			NC-17	(NONE)/BLOCK	NONE				
			X	(NONE)/BLOCK	NONE				
		TV GUIDELINES	TV-Y	(NONE)/BLOCK	NONE				
			TV-Y7	(NONE)/BLOCK	NONE				
			TV-G	(NONE)/BLOCK	NONE				
			TV-PG	(NONE)/BLOCK	NONE				
			TV-14	(NONE)/BLOCK	NONE				
			TV-MA	(NONE)/BLOCK	NONE				
		BLOCK	D	(BLANK)/BLOCK	BLANK	(UN BLOCK)	(UN BLOCK)	(UN BLOCK)	(UN BLOCK)
		CONTENT	L	(BLANK)/BLOCK	BLANK				
			S	(BLANK)/BLOCK	BLANK				
			V	(BLANK)/BLOCK	BLANK				
			FV	(BLANK)/BLOCK	BLANK				
		CAN.ENGLISH RATINGS	C	(NONE)/BLOCK	NONE				
			C8+	(NONE)/BLOCK	NONE				
			G	(NONE)/BLOCK	NONE				
			PG	(NONE)/BLOCK	NONE				
			14+	(NONE)/BLOCK	NONE				
			18+	(NONE)/BLOCK	NONE				
		CAN.FRENCH RATINGS	G	(NONE)/BLOCK	NONE				
			8 ans+	(NONE)/BLOCK	NONE				
			13 ans+	(NONE)/BLOCK	NONE				
			16 ans+	(NONE)/BLOCK	NONE				
			18 ans+	(NONE)/BLOCK	NONE				
		STATUS		ON/OFF	OFF				
		CLOSED CAPTION		OFF/CC1/CC2/T1/T2	OFF				
		LANGUAGE		ENGLISH/ESPAÑOL/FRANCAIS	ENGLISH				
	OPTION	VIEW MODE		4:3/16:9/ZOOM/STRETCH	4:3				
		AUDIO ONLY		ON/OFF	OFF				
		BLUE SCREEN		ON/OFF	OFF				
		SLEEP TIMER		OFF/30/60/90/120/150MIN	OFF(Clear)				
		NO SIGNAL OFF		ENABLE/DISABLE	DISABLE				
		NO OPERATION OFF		ENABLE/DISABLE	DISABLE				
		PICTURE FLIP		NORMAL/MIRROR/ROTATE/UPSIDEDOWN	NORMAL				

(Items other than MENU)

EZ SETUP	ON
LAST CHANNEL	2ch
LAST TV/INPUT	TV
FLASH BACK	2ch
SKIP DATA_CATV	ALL SKIP
SKIP DATA_AIR	ALL SKIP
VOLUME	20
LINE OUT LEVEL(VAO)	0
EDS CH (AUTO)	

## LIST OF THE ADJUSTMENT PROCESS MODE MENU

For calling the adjustment process mode and keying in this mode, refer back to "ADJUSTING PROCEDURE OF EACH SECTION".

### ADJUSTMENT PROCESS 1st LEVEL ITEM DEFAULT TABLE

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
----------	------	---------------	----------	---

#### BASIC SETTINGS

1	MODEL	A630A	MODEL NUMBER SELECT	NOT MODIFIABLE
	INCH SIZE	13	SCREEN SIZE SELECT (20-INCH AND 13/15-INCH SETTING NOT SWITCHABLE IN CASE OF DIFFERENT SYSTEMS)	USED FOR ADJUSTMENT PROCESS INITIALIZATION, NOT MODIFIABLE FOR OTHER CASES. DATA REWRITE AND READJUSTMENT REQUIRED WHEN INITIALIZED.
	ERROR NO RESET	0	LAMP ERROR COUNT AND RESET	SEE THE LAMP ERROR DETECTION.
	PUBLIC MODE	OFF	HOTEL MODE SETTING	NOT USED
	V-CHIP	1	VCHIP LINE MUTE SETTING	NOT USED
	EXT CONTROL	OFF	BUS, UART OPEN	NOT USED
	ROM AND GAIBU VERSION NUMBERS DISPLAYED AT THE BOTTOM.			

#### VIDEO ADJUSTMENT

2	COM BIAS	460	COMMON BIAS ADJUSTMENT	SEE THE ADJUSTMENT PROCEDURES.
	TAMP L	155	Y LOWER LIMIT SETTING AT TAMP ADJUSTMENT	NOT USED
	YDATA	—	DATA READ VALUE AT TAMP ADJUSTMENT	SEE THE ADJUSTMENT PROCEDURES.
	TAMP H	158	Y UPPER LIMIT SETTING AT TAMP ADJUSTMENT	NOT USED
	NTSC TAMP	90	TAMP ADJUSTMENT	SEE THE ADJUSTMENT PROCEDURES.
	PAL-M TAMP	92	TAMP ADJUSTMENT	SEE THE ADJUSTMENT PROCEDURES.
	PAL-N TAMP	92	TAMP ADJUSTMENT	SEE THE ADJUSTMENT PROCEDURES.

#### BACKGROUND ADJUSTMENT

3	R CUTOFF2	0	RED CUT-OFF ADJUSTMENT 2	SEE THE ADJUSTMENT PROCEDURES.
	G CUTOFF2	0	GREEN CUT-OFF ADJUSTMENT 2	SEE THE ADJUSTMENT PROCEDURES.
	B CUTOFF2	0	BLUE CUT-OFF ADJUSTMENT 2	SEE THE ADJUSTMENT PROCEDURES.
	R-GAIN	0	WHITE BALANCE ADJUSTMENT 2	SEE THE ADJUSTMENT PROCEDURES.
	G-GAIN	0	WHITE BALANCE ADJUSTMENT 2	SEE THE ADJUSTMENT PROCEDURES.
	B-GAIN	0	WHITE BALANCE ADJUSTMENT 2	SEE THE ADJUSTMENT PROCEDURES.
	RGB GAMMA	1.0	RGB γ COEFFICIENT SETTING	NOT USED

#### TABLE OF VARIOUS SETTINGS

9	I2C DATA	0	I <sup>2</sup> C BUS CONTROL IC DATA WRITE AND READ	NOT USED
	I2C DATA	WAIT	WRITE AND READ EXECUTED	NOT USED
	SOUND	—	SHIFT TO THE SOUND ADJUSTMENT PAGE	USE ENTER KEY TO GO TO THE SOUND ADJUSTMENT PAGE.
	DVP	—	SHIFT TO THE DVP ADJUSTMENT PAGE	USE ENTER KEY TO GO TO THE TC ADJUSTMENT PAGE.
	TUNER	—	SHIFT TO THE TUNER ADJUSTMENT PAGE	USE ENTER KEY TO GO TO THE TUNER ADJUSTMENT PAGE.
	OTHERS	—	SHIFT TO THE OTHER ADJUSTMENT PAGE	USE ENTER KEY TO GO TO THE OTHER ADJUSTMENT PAGE.

## AUDIO ADJUSTMENT PROCESS SPECIFICATIONS

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
----------	------	---------------	----------	---

#### AUDIO ADJUSTMENT

SOUND1	VOLUME	20	SOUND VOLUME	NOT USED
	MSP DATA	0	AUDIO IC MSP DATA WRITE AND READ	NOT USED
	MSP DATA	WAIT	WRITE AND READ EXECUTED	NOT USED
	CARRIER MUTE	ON	AUDIO OUTPUT SETTING WITHOUT TV SYNC	NOT USED
	IGR THR	12D	IGR THRESH LEVEL	NOT USED

#### AUDIO ADJUSTMENT

SOUND2	PRESCALE SCART	27	PRE-SCALE SETTING (EXTERNAL INPUT)	NOT USED
	PRESCALE FM/AM-M	31	PRE-SCALE SETTING (TV)	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
----------	------	---------------	----------	---

## AUDIO ADJUSTMENT

SOUND3	BAND1 MIN	TV	-0400	EQUALIZER SETTING (WITH TV INPUT)	Change to -700
		OTHER	-0400	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	Change to -700
	BAND1 CNT	TV	+0400	EQUALIZER SETTING (WITH TV INPUT)	Change to +100
		OTHER	+0400	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	Change to +100
	BAND1 MAX	TV	+1200	EQUALIZER SETTING (WITH TV INPUT)	Change to +900
		OTHER	+1200	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	Change to +900
	BAND2 MIN	TV	-0400	EQUALIZER SETTING (WITH TV INPUT)	Change to -200
		OTHER	-0400	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	Change to -200
	BAND2 CNT	TV	-0100	EQUALIZER SETTING (WITH TV INPUT)	Change to +100
		OTHER	-0100	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	Change to +100
	BAND2 MAX	TV	+0200	EQUALIZER SETTING (WITH TV INPUT)	Change to +400
		OTHER	+0200	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	Change to +400
	BAND3 MIN	TV	-0250	EQUALIZER SETTING (WITH TV INPUT)	Change to -150
		OTHER	-0250	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	Change to -150

## AUDIO ADJUSTMENT

SOUND4	BAND4 MIN	TV	+0150	EQUALIZER SETTING (WITH TV INPUT)	Change to -600
		OTHER	+0150	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	Change to -600
	BAND4 CNT	TV	+0450	EQUALIZER SETTING (WITH TV INPUT)	Change to -300
		OTHER	+0450	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	Change to -300
	BAND4 MAX	TV	+0750	EQUALIZER SETTING (WITH TV INPUT)	Change to 0
		OTHER	+0750	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	Change to 0
	BAND5 MIN	TV	-0525	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	-0525	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BAND5 CNT	TV	+0275	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	+0275	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BAND5 MAX	TV	+1075	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	+1075	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED

## VIDEO ADJUSTMENT PROCESS SPECIFICATIONS

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
----------	------	---------------	----------	---

## VIDEO ADJUSTMENT

DVP1	DVP DATA 0000 F0 -----(-)	—	DVP-RELATED GENERAL-PURPOSE VARIABLE SETTINGS	NOT USED
	DVP TEST PATTERN	0	TEST PATTERN SELECT	SEE THE ADJUSTMENT PROCESS MODE TEST PATTERNS.
	VCDOFFSET	15	VERTICAL COUNT-DOWN MINIMUM OSCILLATION CYCLE	NOT USED
	VCDWINDOW	30	VERTICAL COUNT-DOWN SYNC RANGE	NOT USED

## VIDEO ADJUSTMENT

DVP3	N358 TV CONTRAST	128	IMAGE SETTING (TV)	NOT USED
	N358 AV CONTRAST	128	IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV BRIGHT	128	BRIGHTNESS SETTING (TV)	Change to 118
	N358 AV BRIGHT	128	BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	Change to 118
	N358 TV COLOR	40	COLOR DENSITY SETTING (TV)	NOT USED
	N358 AV COLOR	40	COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV TINT	128	TINT SETTING (TV)	Change to 140
	N358 AV TINT	128	TINT SETTING (COMPOSITE, S VIDEO)	Change to 155
	N358 TV SHARP V	100	V PICTURE QUALITY SETTING (TV)	NOT USED
	N358 AV SHARP V	100	V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV SHARP H1	150	H PICTURE QUALITY SETTING 1 (TV)	NOT USED
	N358 AV SHARP H1	150	H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	N358 TV SHARP H2	130	H PICTURE QUALITY SETTING 2 (TV)	NOT USED
	N358 AV SHARP H2	150	H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
----------	------	---------------	----------	---

## VIDEO ADJUSTMENT

DVP4	N443 AV CONTRAST	128	IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV BRIGHT	128	BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV COLOR	37	COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV TINT	128	TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV SHARP V	100	V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV SHARP H1	150	H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	N443 AV SHARP H2	150	H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED

## VIDEO ADJUSTMENT

DVP5	PAL AV CONTRAST	128	IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV BRIGHT	128	BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV COLOR	37	COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV TINT	128	TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV SHARP V	100	V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV SHARP H1	150	H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL AV SHARP H2	150	H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED

## VIDEO ADJUSTMENT

DVP6	SECAM AV CONTRAST	128	IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV BRIGHT	128	BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV COLOR	37	COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV TINT	128	TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV SHARP V	100	V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV SHARP H1	150	H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV SHARP H2	150	H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED

## VIDEO ADJUSTMENT

DVP7	PAL60 AV CONT	128	IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV BRIGHT	128	BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV COLOR	37	COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV TINT	128	TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV SHARP V	100	V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV SHARP H1	150	H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV SHARP H2	150	H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED

## VIDEO ADJUSTMENT

DVP8	PAL-M TV CONTRAST	128	IMAGE SETTING (TV)	NOT USED
	PAL-M AV CONTRAST	128	IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV BRIGHT	128	BRIGHTNESS SETTING (TV)	NOT USED
	PAL-M AV BRIGHT	128	BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV COLOR	37	COLOR DENSITY SETTING (TV)	NOT USED
	PAL-M AV COLOR	37	COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV TINT	128	TINT SETTING (TV)	NOT USED
	PAL-M AV TINT	128	TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV SHARP V	100	V PICTURE QUALITY SETTING (TV)	NOT USED
	PAL-M AV SHARP V	100	V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV SHARP H1	150	H PICTURE QUALITY SETTING 1 (TV)	NOT USED
	PAL-M AV SHARP H1	150	H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV SHARP H2	130	H PICTURE QUALITY SETTING 2 (TV)	NOT USED
	PAL-M AV SHARP H2	150	H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
----------	------	---------------	----------	---

## VIDEO ADJUSTMENT

DVP9	PAL-N TV CONTRAST	128	IMAGE SETTING (TV)	NOT USED
	PAL-N AV CONTRAST	128	IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV BRIGHT	128	BRIGHTNESS SETTING (TV)	NOT USED
	PAL-N AV BRIGHT	128	BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV COLOR	37	COLOR DENSITY SETTING (TV)	NOT USED
	PAL-N AV COLOR	37	COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV TINT	128	TINT SETTING (TV)	NOT USED
	PAL-N AV TINT	128	TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV SHARP V	100	V PICTURE QUALITY SETTING (TV)	NOT USED
	PAL-N AV SHARP V	100	V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV SHARP H1	150	H PICTURE QUALITY SETTING 1 (TV)	NOT USED
	PAL-N AV SHARP H1	150	H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV SHARP H2	130	H PICTURE QUALITY SETTING 2 (TV)	NOT USED
	PAL-N AV SHARP H2	150	H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED

## VIDEO ADJUSTMENT

DVP10	525I CONT	133	IMAGE SETTING (Component)	NOT USED
	525I BRIGHT	128	BRIGHTNESS SETTING (Component)	Change to 118
	525I COLOR	52	COLOR DENSITY SETTING (Component)	Change to 60
	525I TINT	128	TINT SETTING (Component)	Change to 150
	525I SHARP V	100	V PICTURE QUALITY SETTING (Component)	NOT USED
	525I SHARP H1	150	H PICTURE QUALITY SETTING 1 (Component)	NOT USED
	525I SHARP H2	150	H PICTURE QUALITY SETTING 2 (Component)	NOT USED
	525P CONT	133	IMAGE SETTING (Component)	NOT USED
	525P BRIGHT	128	BRIGHTNESS SETTING (Component)	NOT USED
	525P COLOR	52	COLOR DENSITY SETTING (Component)	Change to 55
	525P TINT	128	TINT SETTING (Component)	Change to 145
	525P SHARP V	130	V PICTURE QUALITY SETTING (Component)	NOT USED
	525P SHARP H1	120	H PICTURE QUALITY SETTING 1 (Component)	NOT USED
	525P SHARP H2	120	H PICTURE QUALITY SETTING 2 (Component)	NOT USED

## VIDEO ADJUSTMENT

DVP11	625I CONT	133	IMAGE SETTING (Component)	NOT USED
	625I BRIGHT	128	BRIGHTNESS SETTING (Component)	NOT USED
	625I COLOR	52	COLOR DENSITY SETTING (Component)	NOT USED
	625I TINT	128	TINT SETTING (Component)	NOT USED
	625I SHARP V	100	V PICTURE QUALITY SETTING (Component)	NOT USED
	625I SHARP H1	150	H PICTURE QUALITY SETTING 1 (Component)	NOT USED
	625I SHARP H2	150	H PICTURE QUALITY SETTING 2 (Component)	NOT USED
	625P CONT	133	IMAGE SETTING (Component)	NOT USED
	625P BRIGHT	128	BRIGHTNESS SETTING (Component)	NOT USED
	625P COLOR	52	COLOR DENSITY SETTING (Component)	NOT USED
	625P TINT	128	TINT SETTING (Component)	NOT USED
	625I SHARP V	130	V PICTURE QUALITY SETTING (Component)	NOT USED
	625I SHARP H1	120	H PICTURE QUALITY SETTING 1 (Component)	NOT USED
	625I SHARP H2	120	H PICTURE QUALITY SETTING 2 (Component)	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
----------	------	---------------	----------	---

## VIDEO ADJUSTMENT

DVP12	1125I CONT	133	IMAGE SETTING (Component)	NOT USED
	1125I BRIGHT	128	BRIGHTNESS SETTING (Component)	NOT USED
	1125I COLOR	52	COLOR DENSITY SETTING (Component)	NOT USED
	1125I TINT	128	TINT SETTING (Component)	NOT USED
	1125I SHARP V	100	V PICTURE QUALITY SETTING (Component)	NOT USED
	1125I SHARP H1	100	H PICTURE QUALITY SETTING 1 (Component)	NOT USED
	1125I SHARP H2	100	H PICTURE QUALITY SETTING 2 (Component)	NOT USED
	750P CONT	133	IMAGE SETTING (Component)	NOT USED
	750P BRIGHT	128	BRIGHTNESS SETTING (Component)	NOT USED
	750P COLOR	52	COLOR DENSITY SETTING (Component)	NOT USED
	750P TINT	128	TINT SETTING (Component)	NOT USED
	750P SHARP V	100	V PICTURE QUALITY SETTING (Component)	NOT USED
	750P SHARP H1	100	H PICTURE QUALITY SETTING 1 (Component)	NOT USED
	750P SHARP H2	100	H PICTURE QUALITY SETTING 2 (Component)	NOT USED

## ADJUSTMENT PROCESS TUNER ITEM DEFAULT TABLE

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
----------	------	---------------	----------	---

## TUNER SETTINGS

TUNER1	AFT UP	1.80	AFT VOLTAGE REFERENCE LEVEL (ALL BANDS)	NOT USED
	AFT DOWN	1.20	AFT VOLTAGE REFERENCE LEVEL (ALL BANDS)	NOT USED
	L SYNC	150	SYNC JUDGMENT THRESHOLD (TV)	NOT USED
	H SYNC	162	SYNC JUDGMENT THRESHOLD (TV)	NOT USED
	L SYNC2	150	SYNC JUDGMENT THRESHOLD (FOR AFT)	NOT USED
	H SYNC2	162	SYNC JUDGMENT THRESHOLD (FOR AFT)	NOT USED
	AVSYNC	1	SYNC JUDGMENT THRESHOLD (EXTERNAL INPUT)	NOT USED
	COMPSYNC	3	SYNC JUDGMENT THRESHOLD (COLOR DIFFERENCE INPUT)	NOT USED
	EDS TEST	10	DURATION UNTIL JUDGMENT OF NO EDS TIME DATA (SECONDS)	NOT USED

## TUNER SETTINGS

TUNER2	AFT FARTIME	50	CHANNEL PRESET TIME ADJUSTMENT 1	NOT USED
	AFT NEARTIME	30	CHANNEL PRESET TIME ADJUSTMENT 2	NOT USED
	AFT NEARMTIME	10	CHANNEL PRESET TIME ADJUSTMENT 3	NOT USED
	AFT 1STEPTIME	10	CHANNEL PRESET TIME ADJUSTMENT 4	NOT USED
	AFT CSYNCTIME	50	CHANNEL PRESET TIME ADJUSTMENT 5	NOT USED
	SYNC ON	10	CHANNEL PRESET SYNC DETECT SENSE	NOT USED
	SYNC WIDTH	1	CHANNEL PRESET SYNC DETECT LEVEL	NOT USED

## OTHERS

OTHERS1	DAC DATA 00---	—	DAC-RELATED GENERAL-PURPOSE VARIABLE SETTINGS	NOT USED
	L ERROR WAIT	15s	LAMP ERROR DETECT WAIT TIME	NOT USED
	L ERROR H TIME	1.0s	LAMP ERROR DETECT TIME	NOT USED
	TV AUTO GAIN	OFF	AUTO GAIN SETTING FOR TV	NOT USED
	PWM FREQ	150	DIMMER FREQUENCY SETTING (IN HZ)	NOT USED
	PWM DUTY	0	DIMMER DUTY SETTING	NOT USED
	OPC THRESHOLD	24	INPUT LEVEL THRESHOLD FROM BRIGHTNESS SENSOR STOP MODE TO OPERATION MODE	NOT USED
	HOTEL POWERFIX	OFF	USED FOR FIXED HOTEL MODE POWER ON	NOT USED
	COMP SYSTEM	AUTO	COMPONENT SIGNAL SELECT IN ADJUSTMENT PROCESS	NOT USED
	REMOCON CODE DISPLAYED AT THE BOTTOM			

OTHERS2	3D Y/C	0	3D ON/OFF SETTING	NOT USED
	3DY/C DATA	0	3D YC DATA WRITE AND READ	NOT USED
	3DY/C DATA	WAIT	WRITE AND READ EXECUTED	NOT USED
	KIL	OFF	FORCED KILLER SETTING FOR SIGNAL WITHOUT COLOR BURST	NOT USED
	CLOSED CAPTION	15	CLOSED CAPTION THRESH LEVEL	NOT USED

## TEST PATTERN IN THE ADJUSTMENT PROCESS MODE

IC1202 (LCD controller) test pattern

### 1) Getting the test pattern displayed

Call the adjustment process mode, select "DVP" on page 4, and press the ENTER button. Next select "DVP TEST PATTERN" in line 2 on page 1. (The "DVP TEST PATTERN" turns yellow.) Now use the cursor RIGHT/LEFT keys to get the test pattern displayed.

To quit the test pattern, enter "0" in the "DVP TEST PATTERN" setting. The test pattern is kept onscreen even by pressing the RETURN UP/DOWN buttons. The test pattern display is cancelled when the power is turned off, and the usual display appears instead when the power is turned on again.

### 2) Test pattern displayed

The following test pattern appears onscreen.

- The DVP test pattern comes in 22 different types.

1 Black & white (Size:Minimum)



2 Black & white (Size:Small)



3 Black & white (Size:Medium)



4 Black & white (Size:Large)



5 Crosshatch (Spacing:Minimum)



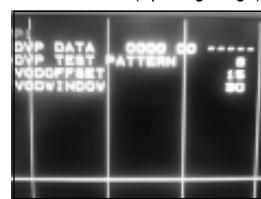
6 Crosshatch (Spacing:Small)



7 Crosshatch (Spacing:Medium)



8 Crosshatch (Spacing:Large)



9 Color bar (Spacing:Minimum)



10 Color bar (Spacing:Small)



11 Color bar (Spacing:Medium)



12 Color bar (Spacing:Large)



13 Lamp (Spacing:Small)



14 Lamp (Spacing:Medium)



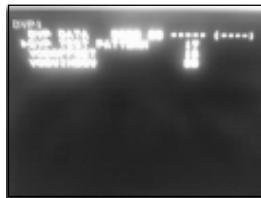
15 Vertical lamp (Spacing:Small)



16 Vertical lamp (Spacing:Medium)



17 Black-background pattern



18 White 100%



19 White 50%



20 Red-background pattern



21 Green-background pattern



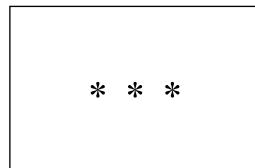
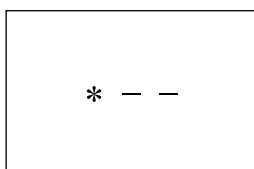
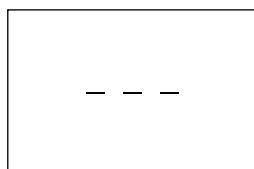
22 Blue-background pattern



# PUBLIC MODE SETTING PROCEDURE

## 1. How to start Public Mode

- There are the following two ways to get the public mode setup screen displayed.
  - ① In the adjustment process mode, turn on "PUBLIC MODE". Also press the "CH (↖)" and "VOL (+)" keys on the set at once and turn on the power.
  - ② 1) Press the "INPUT" and "VOL (+)" keys on the set at once and turn on the power.  
2) Get the password input screen displayed.



### Procedure

- The input starts with the leftmost digit.
- Use the numeric keys [1] thru [9] and [10/0] keys on the remote controller. The other keys are not acceptable.
- With a numeric-key input, "—" will change to "\*". The input position will move one digit to the right.
- With all the 3 digits entered, the password will be verified.

- 3) The 3-digit password is now verified.

The password [0] [2] [7] provides for the public mode screen. (This screen comes on with whatever adjustment process settings.)

With any other passwords, the screen changes to the normal mode.

## 2. How to exit Public Mode

There are the following ways to quit the public mode setup screen.

- Turn off "PUBLIC MODE" in the adjustment process mode. (☆) ← This way alone is not for quitting the setup screen, but for quitting the mode itself.

- Turn off the power with the "POWER" key. (★)
- Select "ENTER". (★)
- Move the cursor to "RESET" and press the "FLASHBACK" key. (Back to the normal mode screen)(☆)

★ ... "PUBLIC MODE" stays on in the adjustment process mode.

☆ ... The settings will be back to the factory ones.

## 3. Public Mode Setting Values

- With the factory settings made, the public mode settings get initialized. (The adjustment process remains intact.)

## 4. Public Mode Menu

The guidance is not displayed onscreen.

Setup procedure

- To move the cursor up and down, use the "cursor UP/DOWN" key (remote controller) and "CH (↖)/(↙)" key (remote controller and set).
- To change the settings, use the "cursor RIGHT/LEFT" key (remote controller) and "VOL (+)/(-)" key (remote controller and set).
- To save new settings, keep the cursor at "Enter" and use the "cursor RIGHT/LEFT" key (remote controller) and "VOL (+)/(-)" key (remote controller and set).

PUBLIC MODE	
MAXIMUM VOLUME	[ 60 ]
VOLUME FIXED	[ VARIABLE ]
VOLUME FIXED LEVEL	[ 20 ]
RC BUTTON	[ RESPOND ]
PANEL BUTTON	[ RESPOND ]
MENU BUTTON	[ RESPOND ]
ON SCREEN DISPLAY	[ YES ]
INPUT MODE START	[ NORMAL ]
INPUT MODE FIXED	[ VARIABLE ]
RESET	
ENTER	

## 5. On Setting Items

\* "EZ-SETUP" discussed below indicates "EZ-SETUP after the first power-on".

### (1) MAXIMUM VOLUME

Selection	Adjustment from 0 to 60 (no loop)
Default	60
Explanation	Sound volume can not be adjusted higher than the preset value.
Limit in Setting	<ul style="list-style-type: none"> <li>When the sound volume is set lower than 59, only figures are displayed and the sound volume bar is not displayed.</li> </ul>
Exception	<ul style="list-style-type: none"> <li>In the item "VOLUME" of adjustment process, the sound volume can be set freely irrespective of this setting.</li> </ul>
Remarks	<ul style="list-style-type: none"> <li>In line output (sound volume variable), the sound volume can be adjusted from -60 to 0 irrespective of pre-adjusted value.</li> <li>When the sound volume is set higher than the MAX setting by the adjusting process the sound volume control operation is prohibited for turn-up and the sound volume should be turned down to MAX in this state.</li> </ul>

### (2) VOLUME FIXED

Selection	Selection between "Variable" and "Fixed" (loop provided)
Default	Variable
Explanation	Sound volume is fixed and made invariable.
Limit in Setting	<ul style="list-style-type: none"> <li>The following keys become invalid:           <ul style="list-style-type: none"> <li>Sound volume Up/Down (VOL +/-) [for both remote control and the unit]</li> <li>Mute (MUTE)</li> </ul> </li> </ul>
Exception	<ul style="list-style-type: none"> <li>In the item "VOLUME" of adjustment process, the sound volume can be set freely irrespective of this setting.</li> </ul>
Remarks	<ul style="list-style-type: none"> <li>In "Variable" setting, the sound volume had been conventionally set at 1 but this operation has been abolished (and follows the last memory).</li> <li>In line output (sound volume variable), the sound volume can be adjusted from -60 to 0 irrespective of pre-adjusted value.</li> <li>As for sound volume fixing and sound volume MAX level, the sound volume fixing has priority.</li> <li>Once the sound volume has been changed by adjustment process, it should be set back to the sound volume preset by sound volume fixing level when the adjustment process ends.</li> </ul>

### (3) VOLUME FIXED LEVEL

Selection	Adjustment from 0 to 60 (no loop)
Default	20
Explanation	The sound volume to be fixed by "Volume fixed" is determined.
Limit in Setting	None
Exception	None
Remarks	<p>Setting is valid only when "Volume fixed" is selected for "fixed".</p> <p>This must be confirmed actually by changing also the sound volume in accordance with setting.</p>

### (4) R/C BUTTON

Selection	Selection between "Respond", "Limited" and "No respond" (loop provide)
Default	Respond
Explanation	Keys acceptable by remote control are limited or reception of keys can be prohibited.
Limit in Setting	<ul style="list-style-type: none"> <li>In "limited" setting, only power ON/OFF, sound volume ▲▼, tuning ▲▼ and BACKLIGHT (brightness sensor) are accepted.</li> <li>In "No respond" setting, all the keys (including the power key) are not accepted.</li> </ul>
Exception	<ul style="list-style-type: none"> <li>Adjustment process, factory setting, inspection process and public only keys are valid irrespective of setting.</li> <li>All the keys can be used in adjustment process, inspection mode and public menu irrespective of setting.</li> <li>All the keys can be used also in the initial EZ-Setup after power-ON irrespective of setting.</li> </ul>
Remarks	

## (5) PANEL BUTTON

Selection	Selection between "Respond" and "No respond" (loop provide)
Default	Respond
Explanation	All the operations by keys (except the power key) of the unit can be invalidated.
Limit in Setting	
Exception	<ul style="list-style-type: none"> <li>• Inspection mode and public menu mode can be started irrespective of setting.</li> <li>• All the keys can be used in adjustment process, inspection mode and public menu irrespective of setting.</li> <li>• In U.S.A model, all the keys can be used also in the initial EZ-Setup after power-ON irrespective of setting.</li> </ul>
Remarks	

## (6) MENU BUTTON

Selection	Selection between "Respond" and "No respond" (loop provide)
Default	Respond
Explanation	In "No respond" setting, the menu operation by the menu key of the remote control and the menu key of the unit are invalidated.
Limit in Setting	<ul style="list-style-type: none"> <li>• The following keys become invalid. All of the direct change keys to menu display</li> </ul>
Exception	<ul style="list-style-type: none"> <li>• Inspection mode and public menu mode can be started irrespective of setting.</li> <li>• All the keys can be used in adjustment process, inspection mode and public menu irrespective of setting.</li> <li>• All the keys can be used also in the initial EZ-Setup after power-ON irrespective of setting.</li> </ul>
Remarks	

## (7) ON SCREEN DISPLAY

Selection	Selection between "Yes" and "Limited" (loop provide)
Default	Yes
Explanation	The following OSD displays are made ineffective. Displays of menu group, channel call, sound volume bar and direct key call
Limit in Setting	<ul style="list-style-type: none"> <li>• Set time of the SLEEP TIMER is cleared.</li> <li>• Setting of the no-signal power-OFF (AUTO POWER OFF) is cleared to "OFF".</li> <li>• Setting of the no-operation power-OFF is cleared to "OFF".</li> <li>• Keys falling under any of the following items become invalid.           <ul style="list-style-type: none"> <li>① Appearance of screen changes and the sound changes.</li> <li>② Personal functions which are hard to restore.</li> </ul>           Ex.) Screen display, menu, OFF-timer, ON-timer, AV MODE, screen size switching, treble emphasis, AUDIO ONLY, sound changeover, LANGUAGE, CLOSED CAPTION         </li> </ul>
Others	<ul style="list-style-type: none"> <li>• Simple input switching is generated. Those which are restored soon after leaving as they are and may be requested for change by customer are not prohibited. Ex.) Brightness sensor (BACKLIGHT) and PIC. FLIP</li> </ul>
Exception	<ul style="list-style-type: none"> <li>• Such a caution which is displayed independently is displayed as it is. Non-responding signal caution, V-Chip caution and power-ON fixing caution</li> </ul>
Remarks	<ul style="list-style-type: none"> <li>• In "No" setting, the setting of "SOUND ONLY MODE" is changed to "OFF" and selecting operation is made prohibited.</li> <li>• When CC has already been ON, CLOSED CAPTION is displayed.</li> </ul>

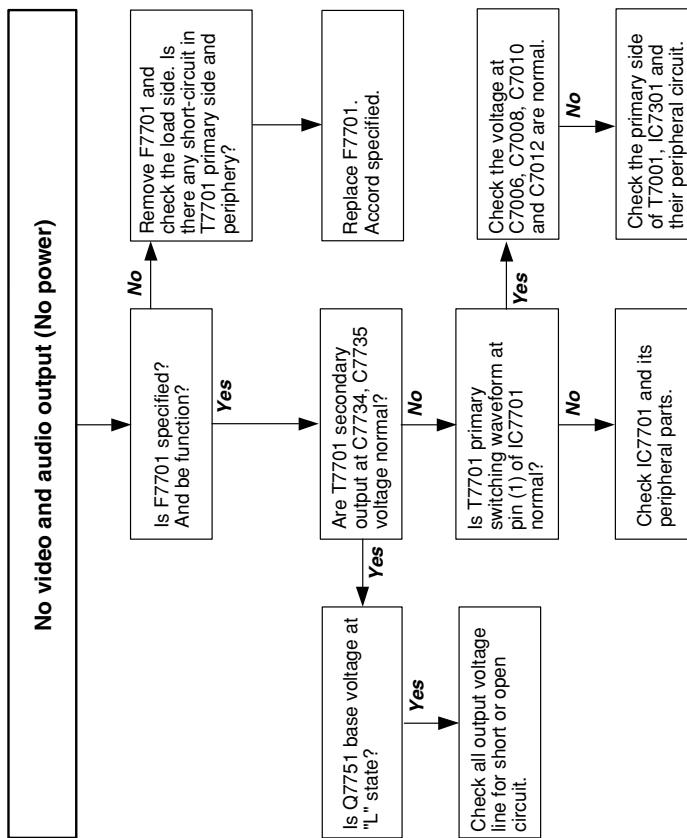
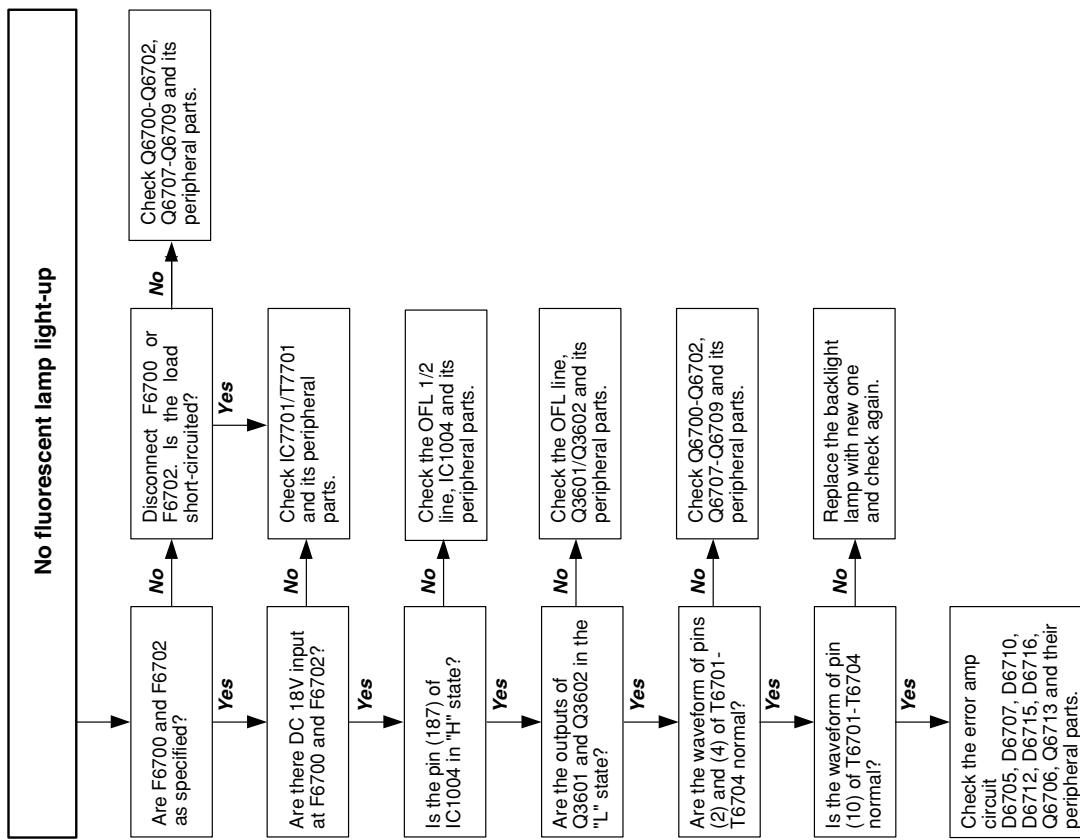
## (8) INPUT MODE START

Selection	Selection between "Normal" , "TV (CH*)" , "COMPONENT" , "AV1" and "AV2" (loop provide)
Default	Normal
Explanation	In power-ON, the input source to be started or channel can be set. (In standard mode, the operation follows the last memory.)
About options	<ul style="list-style-type: none"> <li>• All the input sources in the model are made selectable.</li> <li>• When the input/output switchable input source is selected and the input source is set to output, the setting of input/output switching is changed to input at the execution of hotel menu. In addition, the input/output switching by menu is prohibited.</li> <li>• In TV mode, the display of all channels is stopped and it is treated as an input source. At this time, the channel to be set follows the last memory and the content of the last memory is included in the notation by options. Ex.) TV (CH2), TV (CH4) etc.</li> <li>• The order of appearance of options in the hotel menu should agree with the order of toggles by input switching key.</li> </ul>
Limit in Setting	<ul style="list-style-type: none"> <li>• The display of channel setting menu and the channel setting operation are prohibited (except for MCL).</li> </ul>
Exception	
Remarks	<ul style="list-style-type: none"> <li>• In setting at "Normal", the setting of "Input mode fixed" is changed to "Variable" and selection should be prohibited.</li> </ul>

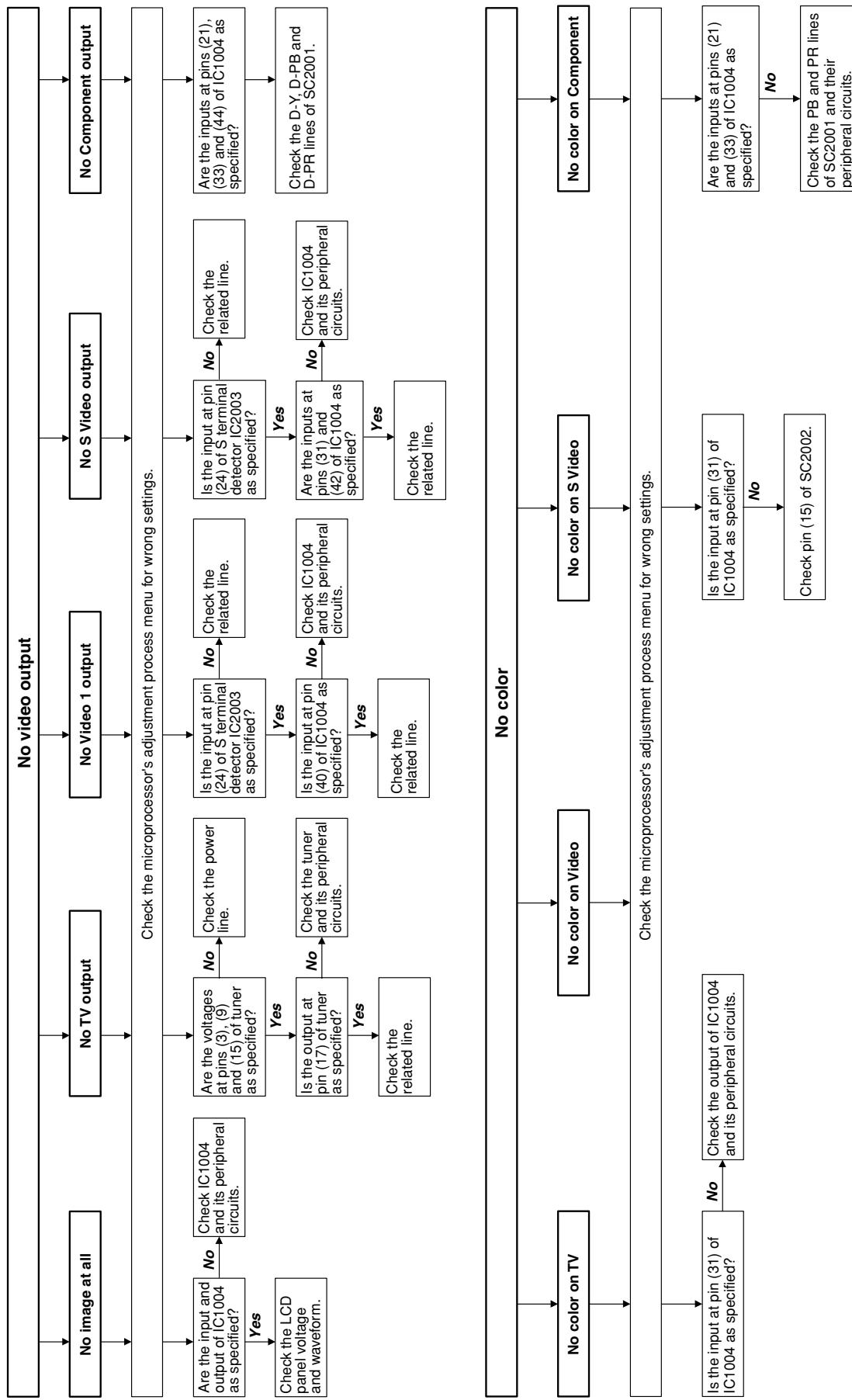
## (9) INPUT MODE FIXED

Selection	Selection between "Variable" and "Fixed" (loop provide)
Default	- (Variable)
Explanation	The input mode is fixed at the input source or the channel set at the "Input mode start" in 9 and other input sources and channels can be made non-selectable.
Limit in Setting	<ul style="list-style-type: none"> <li>• With the execution of public mode, the input source is forced to change to that set by "Input mode start" and the channel switching and input switching are prohibited thereafter.</li> <li>• The following keys are invalidated. CH ▲▼, direct tuning button, FLASHBACK, input *However, the keys (input switching and CH ▲▼ keys) of the unit for menu operation remain valid.</li> </ul>
Exception	None
Remarks	<ul style="list-style-type: none"> <li>• In the following case, setting is cancelled and mode is changed to "Variable". ①When the setting of "Input mode start" is set to "Standard (Normal)"</li> </ul>

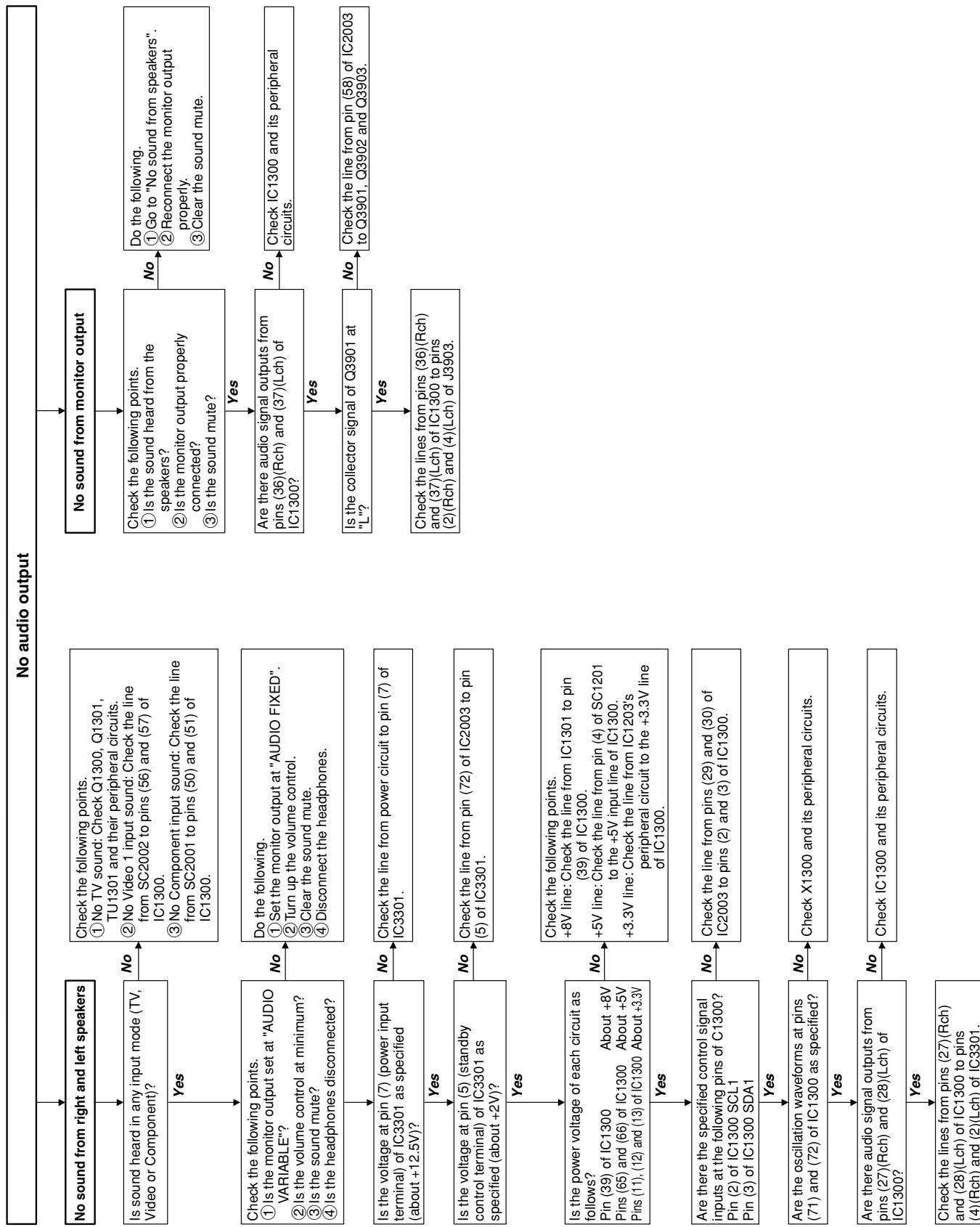
# TROUBLE SHOOTING TABLE



# TROUBLE SHOOTING TABLE (Continued)



## TROUBLE SHOOTING TABLE (Continued)



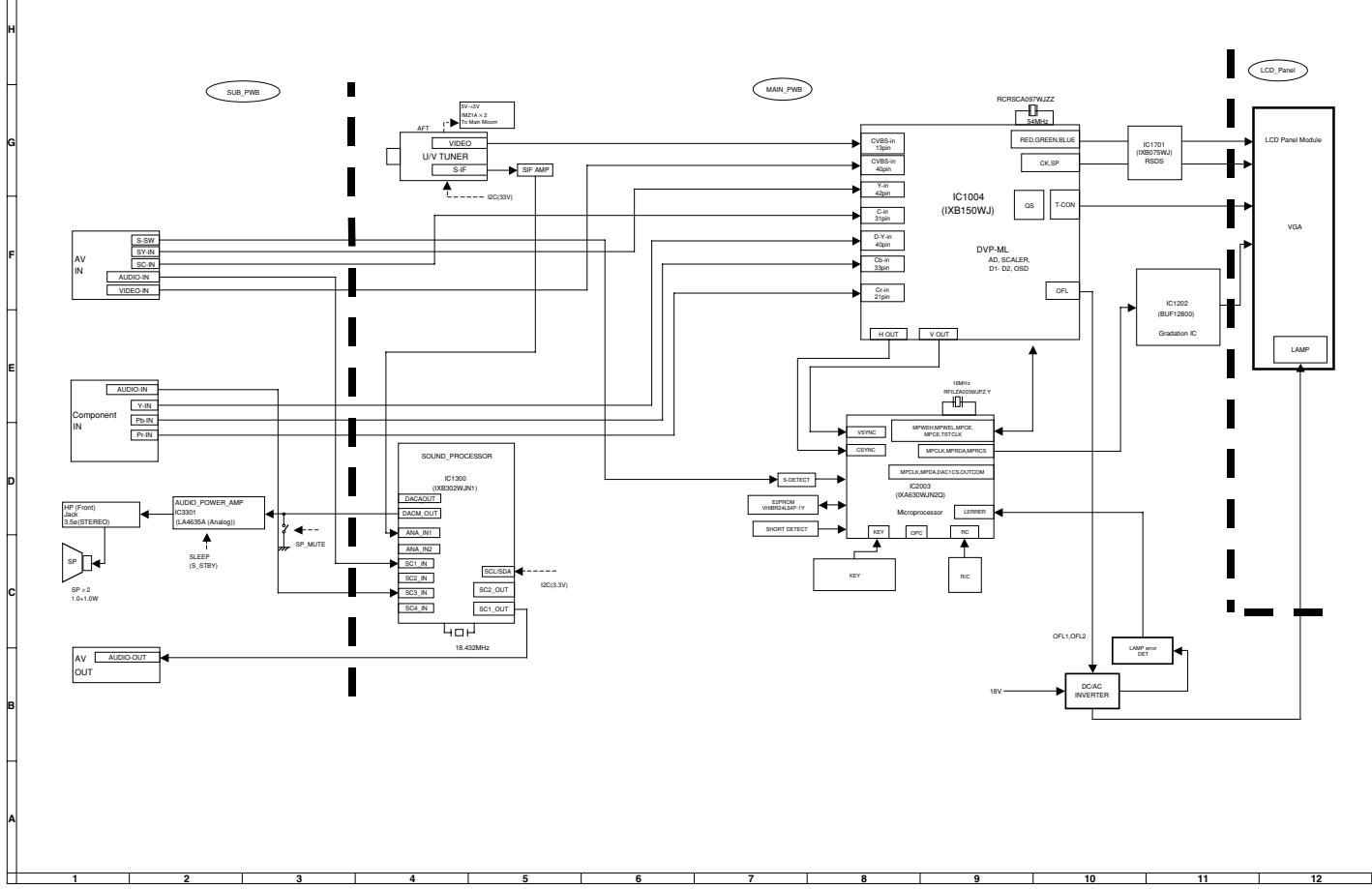
# MAJOR IC INFORMATIONS

IC2003 (IXA630WJ)

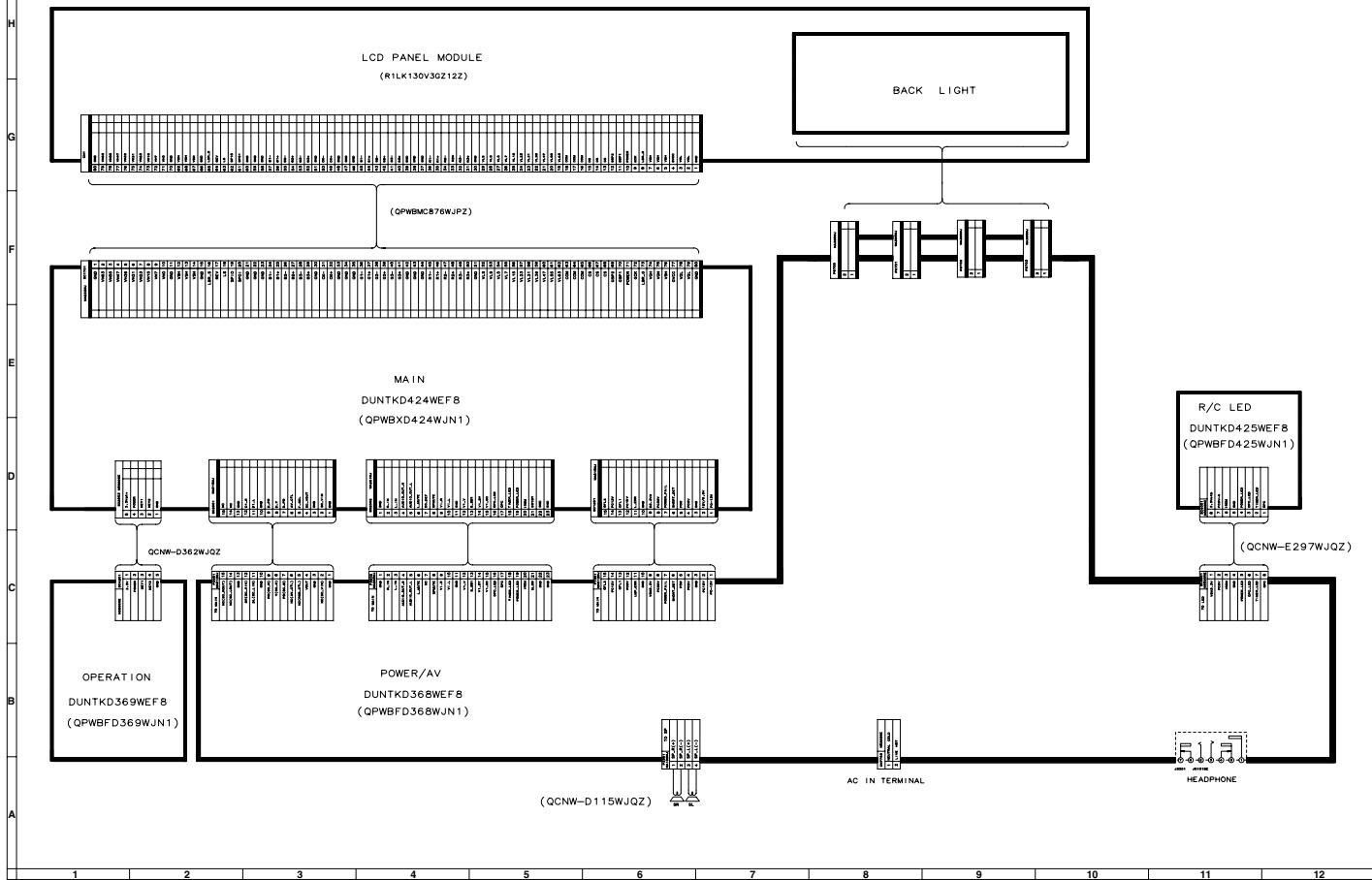
- Description of Pins

Pin No.	Pin Name	I/O	Pin Name	Function
1	P96	O		N.C
2	P95	O		N.C
3	P94	O		N.C
4	P93	O		N.C
5	P92	O		N.C
6	TB1in	I	CSYNC	Composite sync signal
7	TB0in	I	IREM1	Remote control signal
8	BYTE	I	BYTE	Connected to GND
9	CNVss	I	CNVss	Connected to GND (connected to Vcc1 for CNVSS at flash write)
10	Xc in	I		N.C
11	Xc out	O		N.C
12	RESET	I	RESET	Microprocessor reset at "L"
13	X out	O	X out	System clock output
14	Vss	I	Vss	GND
15	X in	I	X in	System clock input
16	Vcc1	I	Vcc1	VDD (+3.3V)
17	NMI	I	NMI	(Connected to Vcc1 for NMI at flash write)
18	P84	O		N.C
19	INT1	I	P SW in	Main power monitor
20	INT0	I	VSYNC	VSYNC signal input
21	P81	O		N.C
22	P82	O	AC_Ctrl	AC adaptor power consumption control
23	P77	O		N.C
24	P76	I	SSW	Connected to S terminal at "L"
25	P75	O		N.C
26	P74	O		N.C
27	P73	I/O	SDA2	Serial data line 2 for I2C bus 2 system
28	P72	I/O	SCL2	Serial clock line 2 for I2C bus 2 system (EEPROM)
29	P71	I/O	SCL1	Serial clock line 1 for I2C bus 2 system (others)
30	P70	I/O	SDA1	Serial data line 1 for I2C bus 2 system
31	P67	O	TxD	(TxD at flash write)
32	P66	O	RxD	(RxD at flash write)
33	P65	O	SCLK	(Clock input at flash write)
34	P64	O	BUSY	(Busy output at flash write)
35	TxD0	O	MPWEL	Data signal input for DVP 4-line serial (MPWEL)
36	RxD0	O	MPOE	Data output signal for DVP 4-line serial (MPOE)
37	CLK0	O	MPWEH	Clock for DVP 4-line serial (MPWEH)
38	P60	O	TST CLK	Clock output (Fluorescent lamp control)
39	P57	O	MAIN SW	LED power control
40	P56	O		N.C
41	P55	I	POW in(EPM)	DC/DC start detect (connected to Vss for EPM at flash write)
42	P54	I(O)	L_ERR	Fluorescent lamp error detect
43	P53	O		N.C
44	P52	O		N.C
45	P51	O	TIMER(RLED)	On timer LED control (power RLED control)
46	P50	I	MRDY(CE)	I2C bus open connection detect (connected to Vcc2 for CE at flash write)
47	P47	O	LED POW(GLED)	Power GLED control
48	P46	O		N.C
49	P45	O		N.C
50	P44	O	VSH OUT	Panel gate driver voltage control

Pin No.	Pin Name	I/O	Pin Name	Function
51	P43	O		N.C
52	P42	O		N.C
53	P41	O	SP_MUTE1	Main speaker mute
54	P40	O		N.C
55	P37	I	HP DET	Headphones detect
56	P36	O		N.C
57	P35	I	VSH_IN	Panel gate driver voltage confirm
58	P34	O	L MUTE	Line out audio mute
59	P33	O		N.C
60	P32	O	SRESET	Audio IC reset output
61	P31	O		N.C
62	Xcc2	I	Vcc2	Power input
63	P30	O	TCON_OUT_OTL	DVP control output control
64	Vss	I	Vss	GND
65	P27	O		N.C
66	P26	O	TV_SEL	AV selector switch
67	P25	O	BUS_SELECT_H(I <sup>2</sup> C)	DVP I2C/4-line communication system select (H: I2C control, L: Serial control)
68	P24	O	MPCE	DVP 4-line serial chip enable (MPCE)/DVP slave address select
69	P23	O		N.C
70	P22	O		N.C
71	P21	O	VGH	Panel power control
72	P20	O	POW out	DC/DC control output
73	P17	I	ADP POW	Adaptor ON/OFF input
74	P16	O		N.C
75	P15	O		N.C
76	P14	O		N.C
77	P13	O		N.C
78	P12	O		N.C
79	P11	O		N.C
80	P10	O	DDC_RESET	Video IC reset output (Renesas DVP, 3D YC)
81	P07	I	KEY4	Key input 4
82	P06	I	KEY5	Key input 5
83	P05	O	VLC	VLS control
84	P04	O		N.C
85	P03	O	MODEL	Model ID port
86	P02	I	SHORT_DET	Over-current protection detect
87	P01	I	INCH2	Screen size ID port 2
88	P00	I	INCH1	Screen size ID port 1
89	AN7	I	AFT	AFT voltage input
90	P106	O	AGC	AGC
91	AN5	I	KEY1	Key input 1
92	AN4	I	KEY2	Key input 2
93	P103	O		N.C
94	AN2	I	OPC_IN	OPC sensor level input
95				
96	AVss	I	AVss	Connected to GND
97	P100	O		N.C
98	VREF	I	VREF	Connected to +3.3V
99	AVcc	I	AVcc	Connected to +3.3V
100	P97	O		N.C

**BLOCK DIAGRAM**

## **OVERALL WIRING DIAGRAM**



# DESCRIPTION OF SCHEMATIC DIAGRAM

## VOLTAGE MEASUREMENT CONDITION:

1. The voltages at test points are measured on the stable supply voltage of AC 120V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

## INDICATION OF RESISTOR & CAPACITOR:

### RESISTOR

1. The unit of resistance “Ω” is omitted.  
(K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted.  
(K= ± 10%, F= ± 1%, D= ± 0.5%)
3. All resistors are 1/16W, unless otherwise noted.

### CAPACITOR

1. All capacitors are μF, unless otherwise noted.  
(P=pF=μμF).
2. All capacitors are 50V, unless otherwise noted.

### CAUTION:

This circuit diagram is original one, therefore there may be a slight difference from yours.

### SAFETY NOTES:

- 1.DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.**
- 2.SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.**

### IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH “⚠” ( [REDACTED] ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

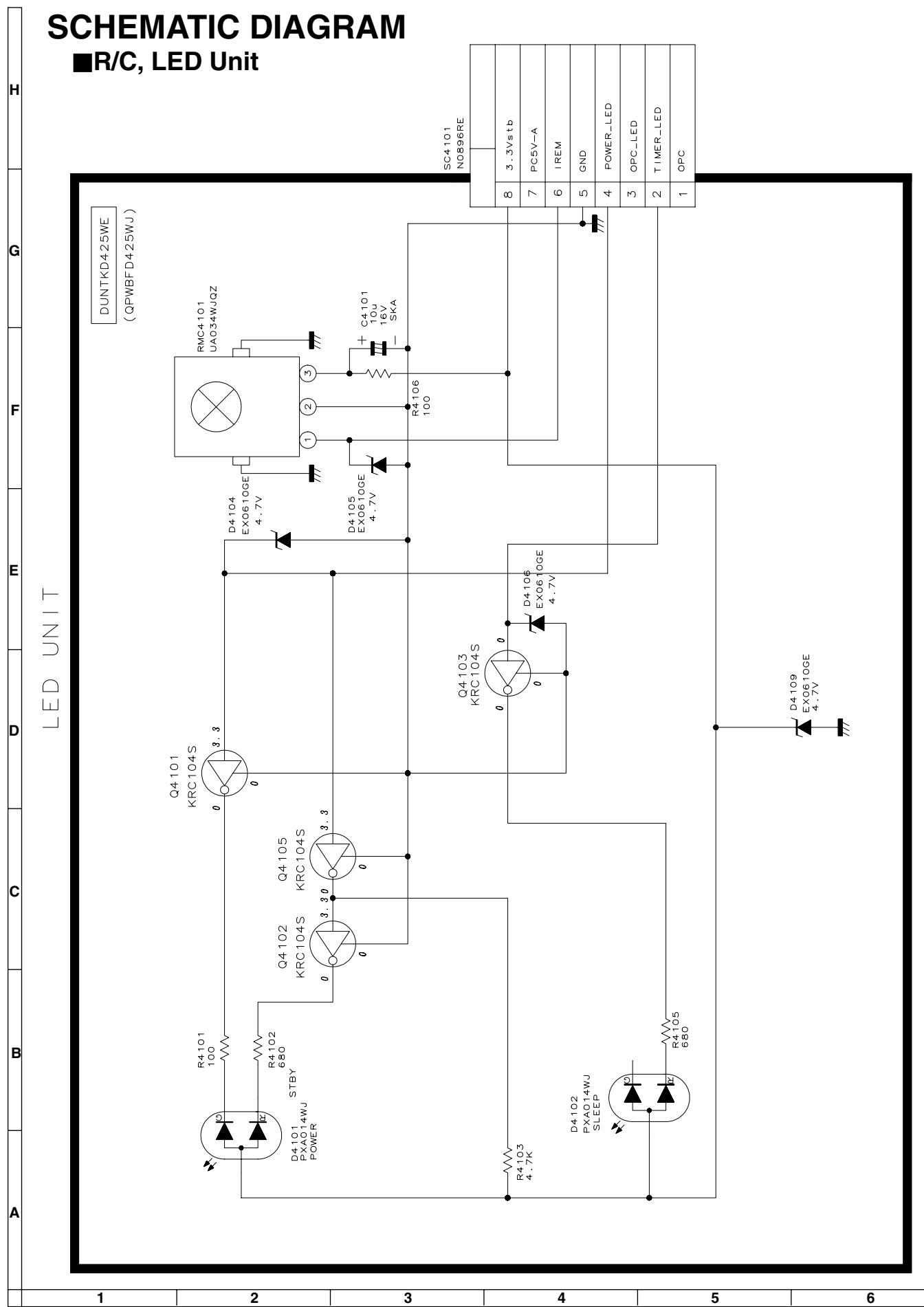
### AVIS DE SECURITE IMPORTANT:

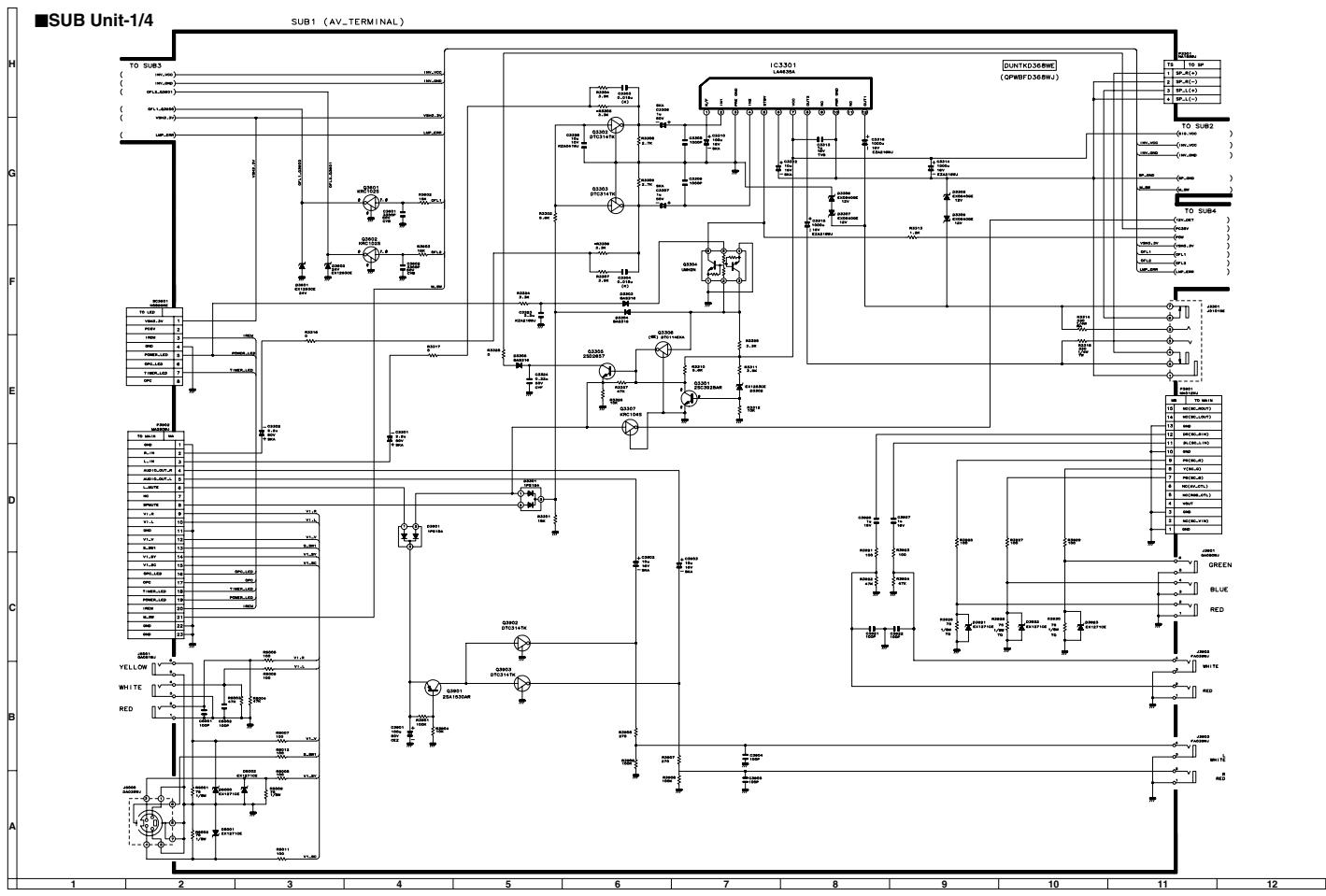
LES PIECES MARQUEES “⚠” ( [REDACTED] ) SONT IMPORTANTES POUR MAINTENIR LA SECURITE DE L'APPAREIL.

NE REMPLACER CES PIECES QUE PAR DES PIECES DONT LE NUMERO EST SPECIFIÉ POUR MAINTENIR LA SECURITE ET PROTEGER LE BON FONCTIONNEMENT DE L'APPAREIL.

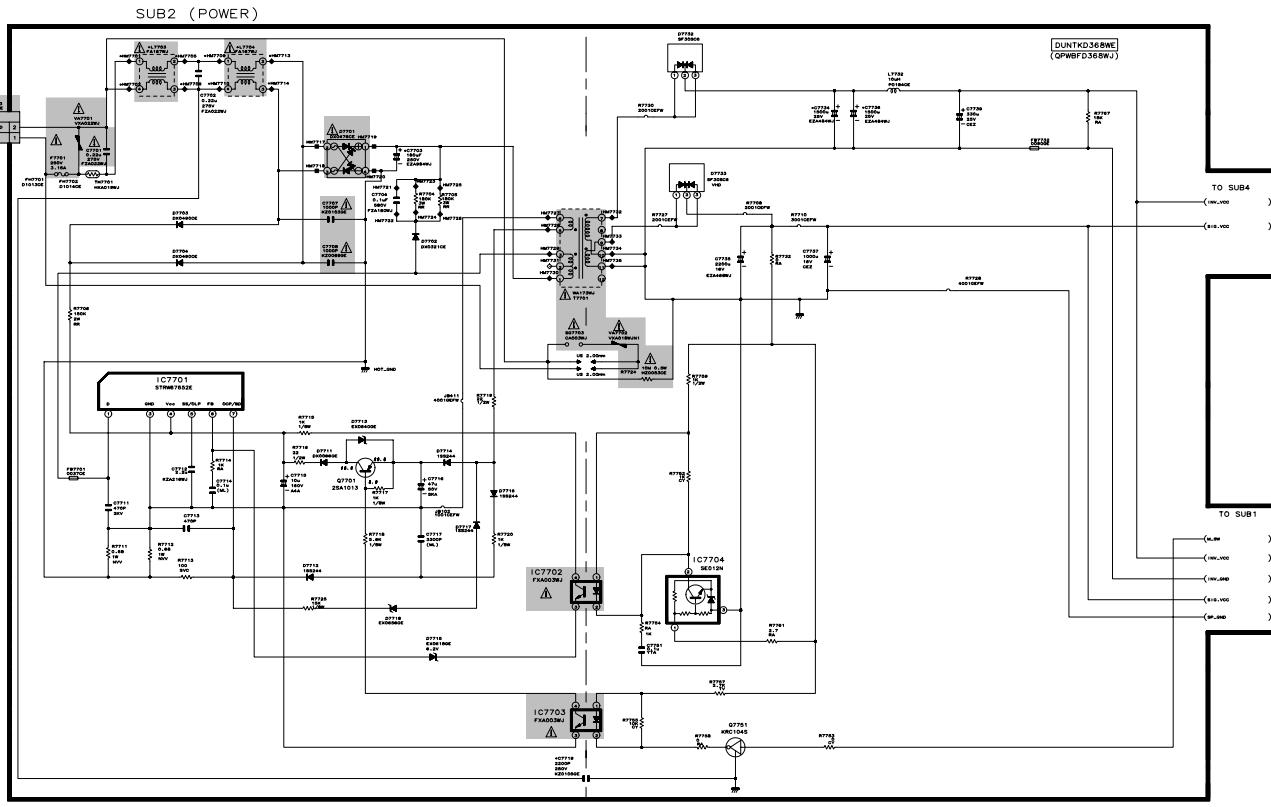
# SCHEMATIC DIAGRAM

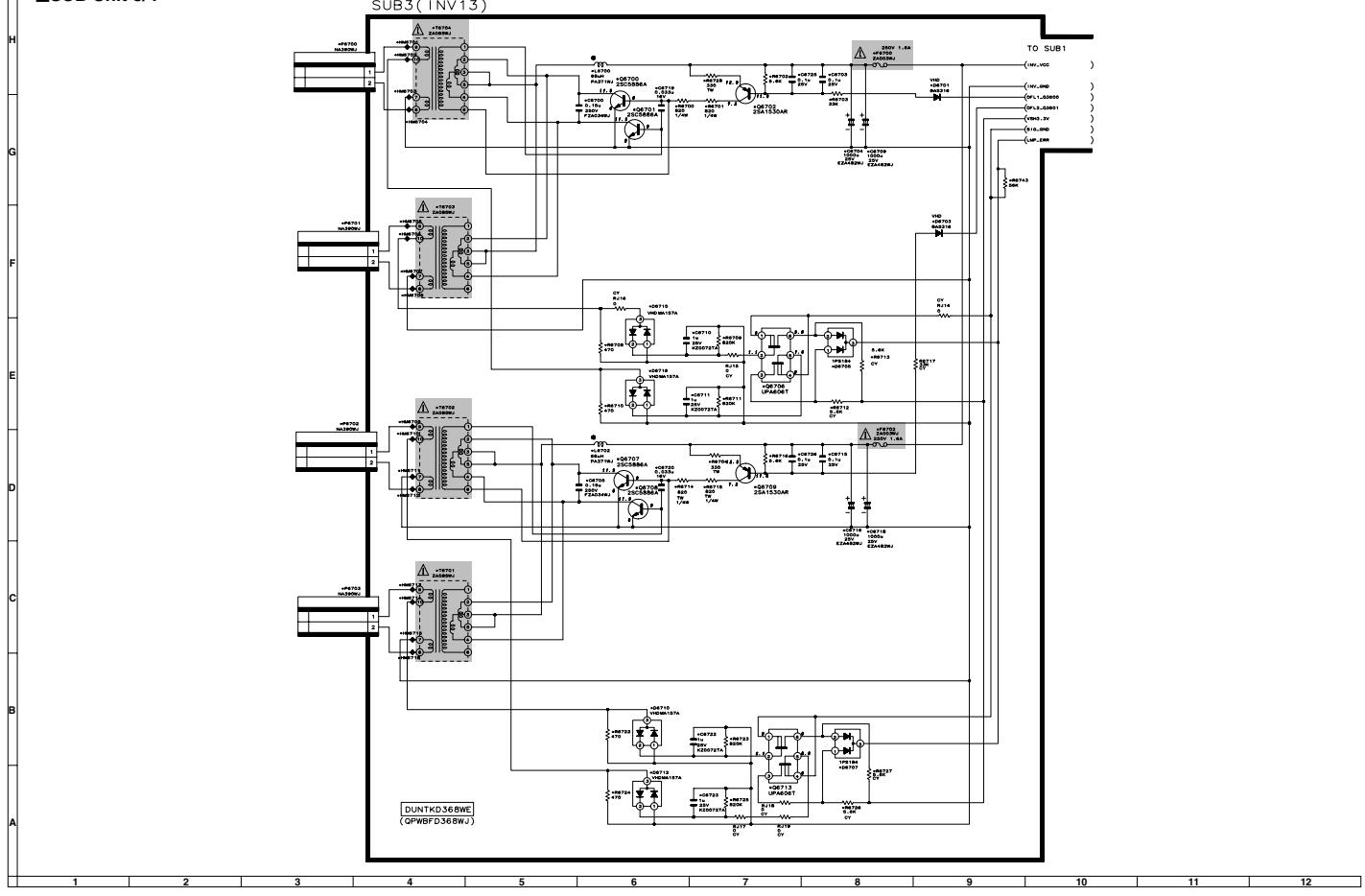
## ■R/C, LED Unit





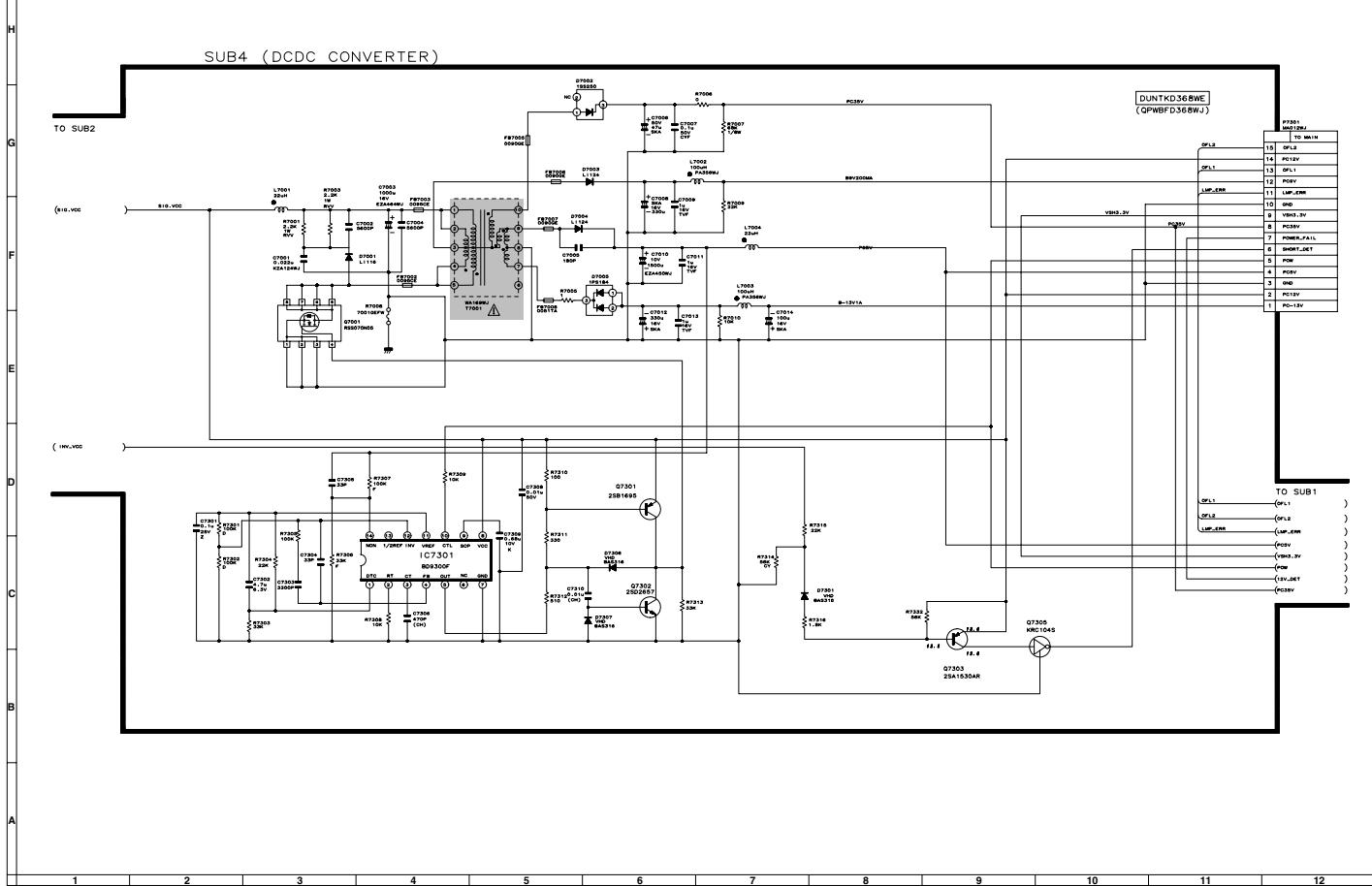
■SUB Unit-2/4



**■SUB Unit-3/4**

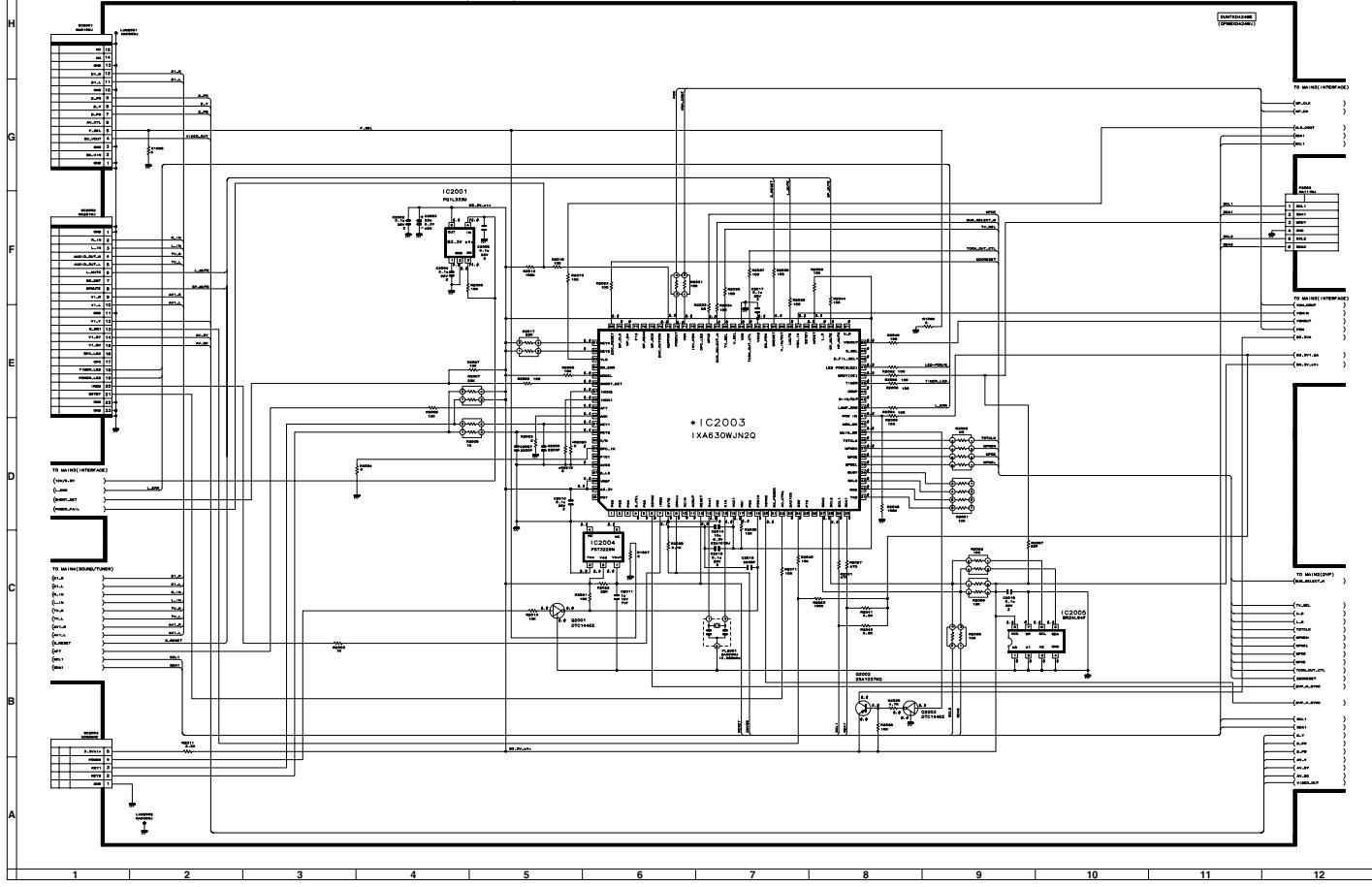
1	2	3	4	5	6	7	8	9	10	11	12
---	---	---	---	---	---	---	---	---	----	----	----

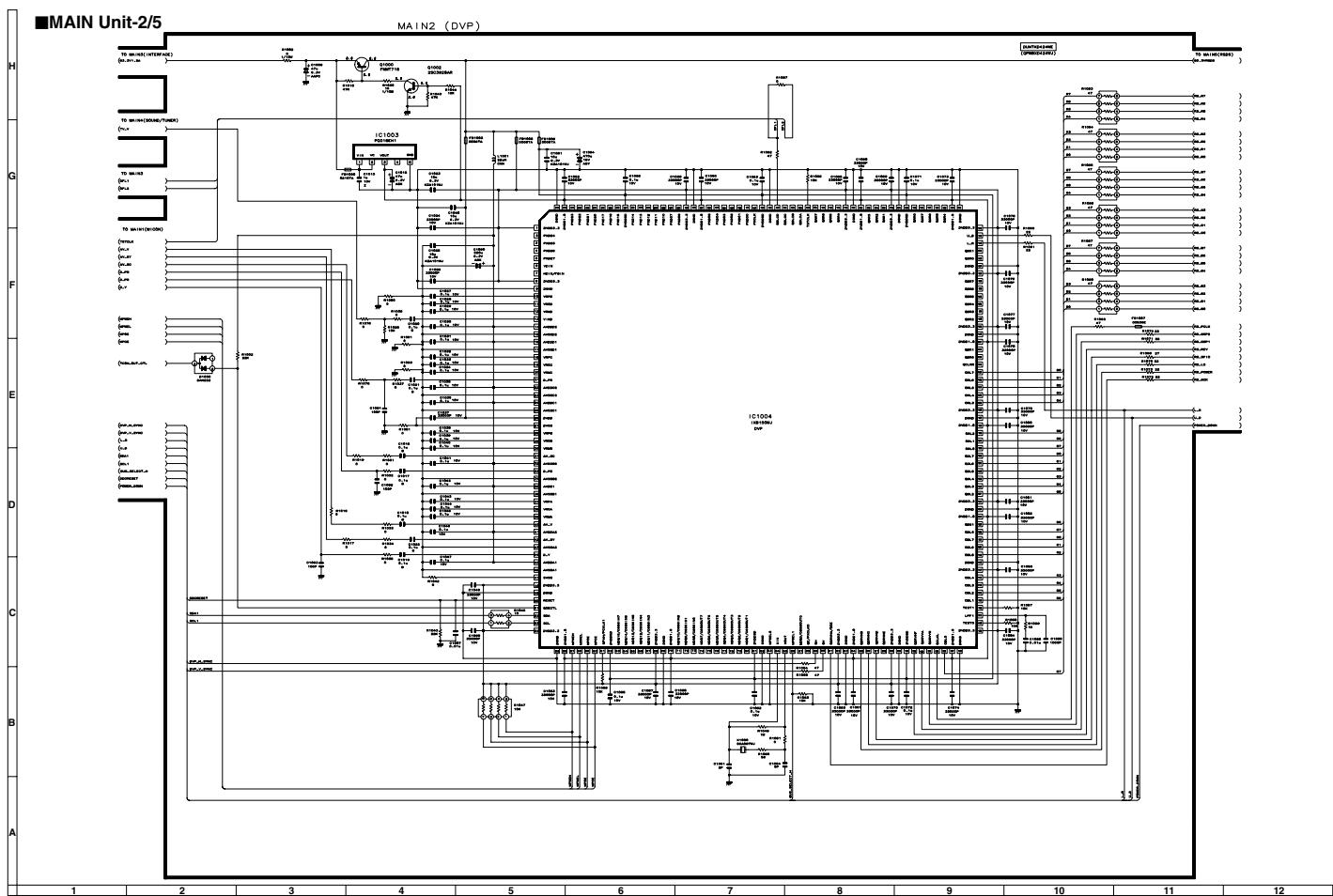
■SUB Unit-4/4



■MAIN Unit-1/5

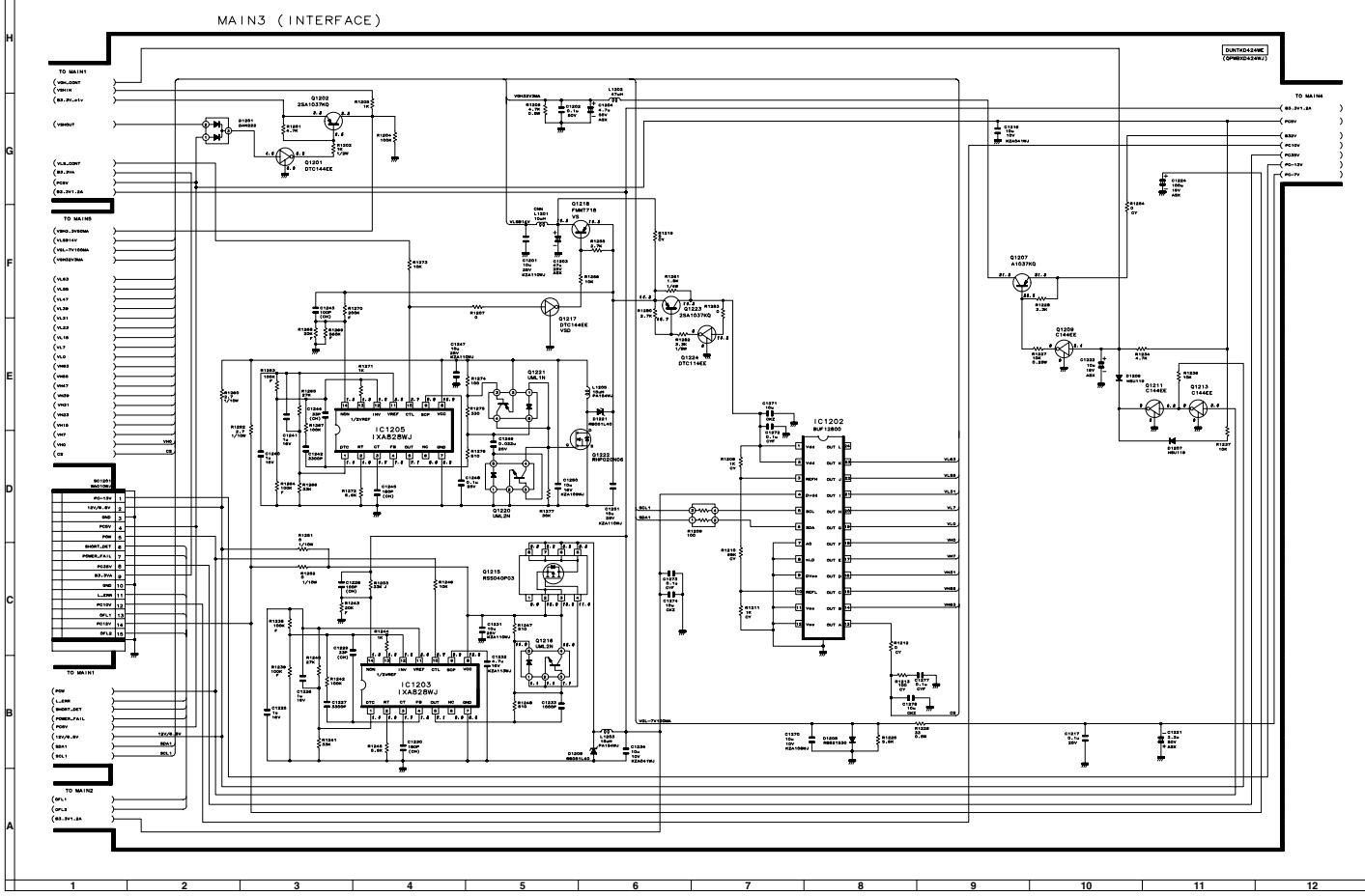
MAIN1 (MICON)





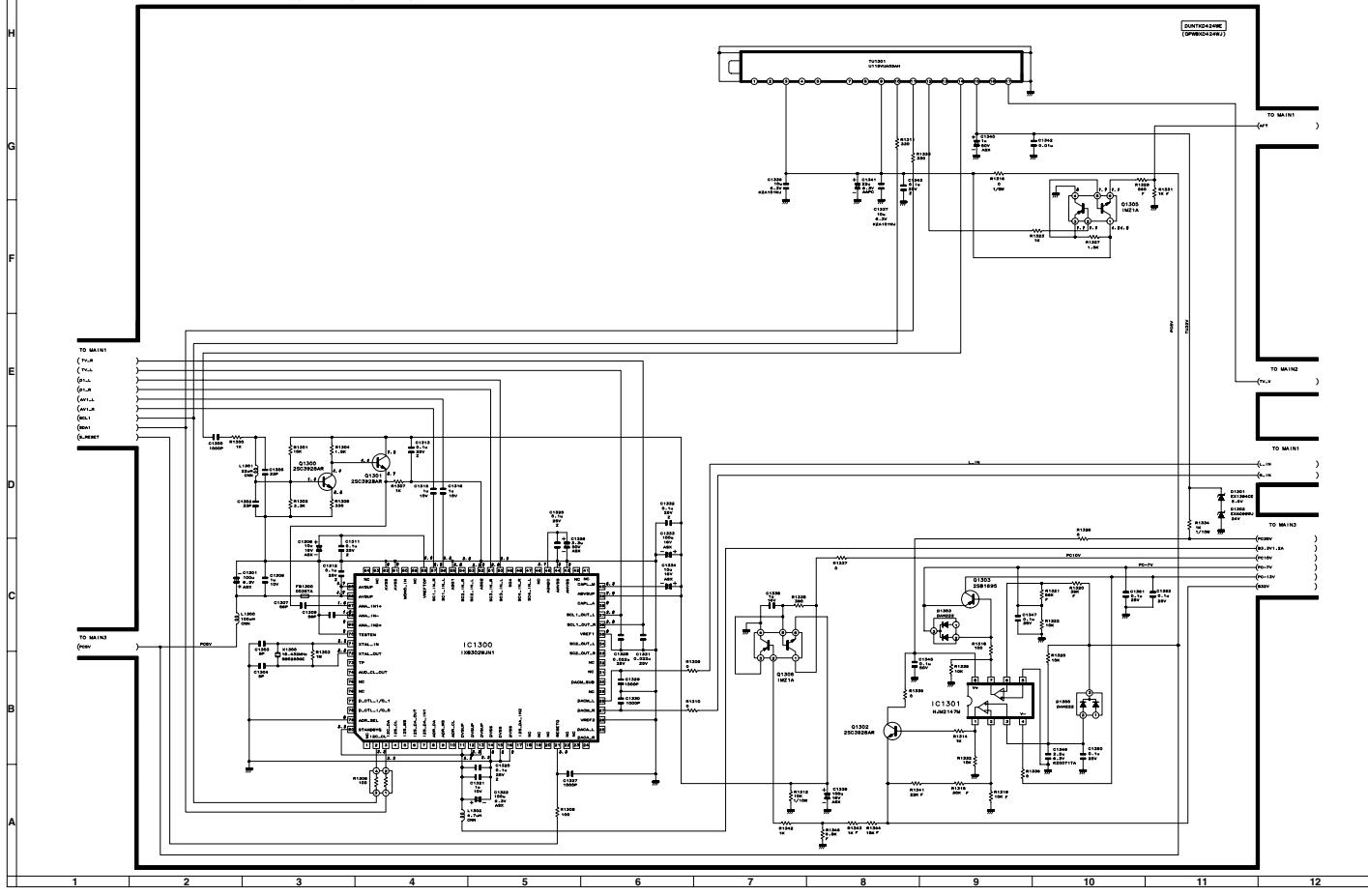
■MAIN Unit-3/5

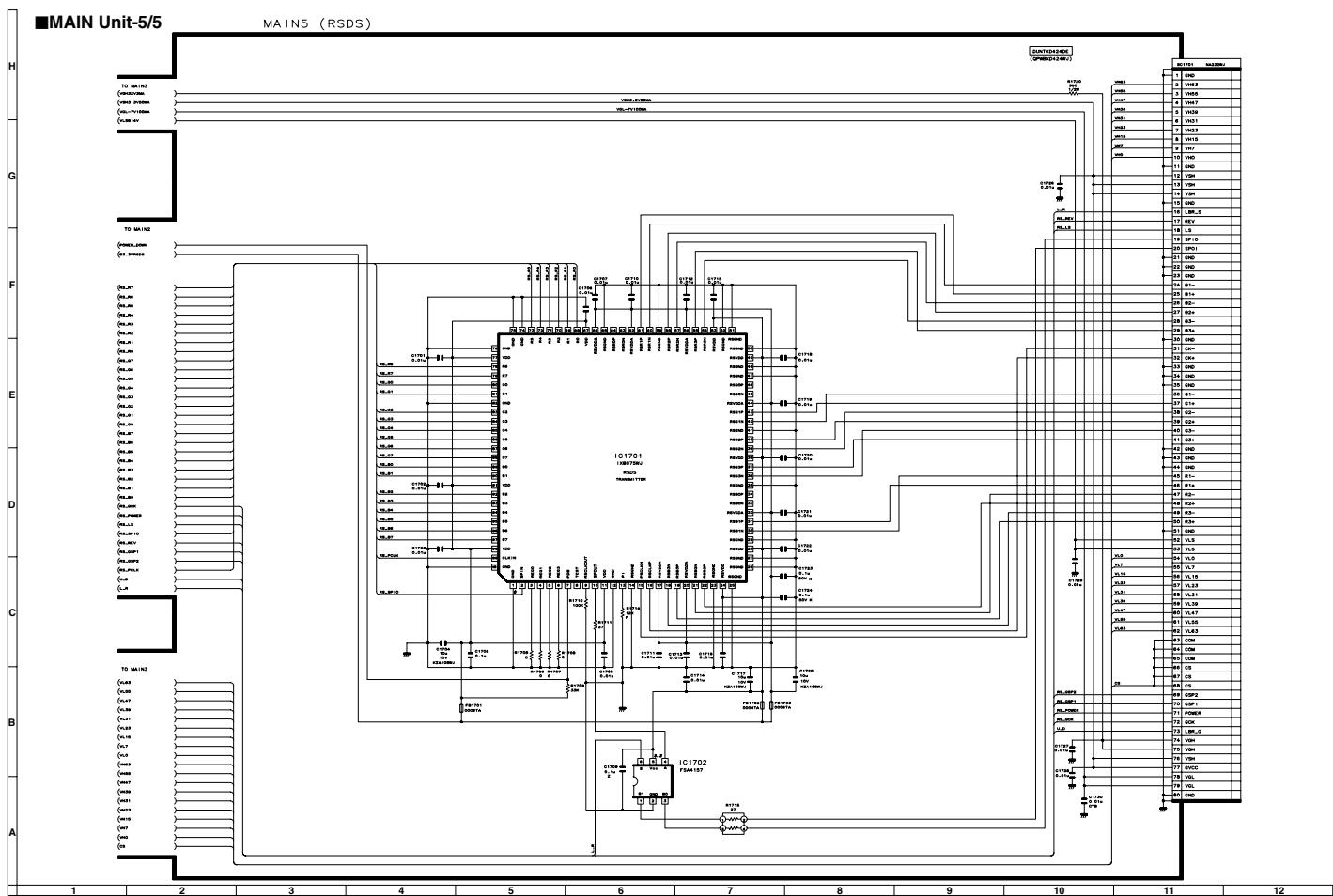
### MAIN3 (INTERFACE)



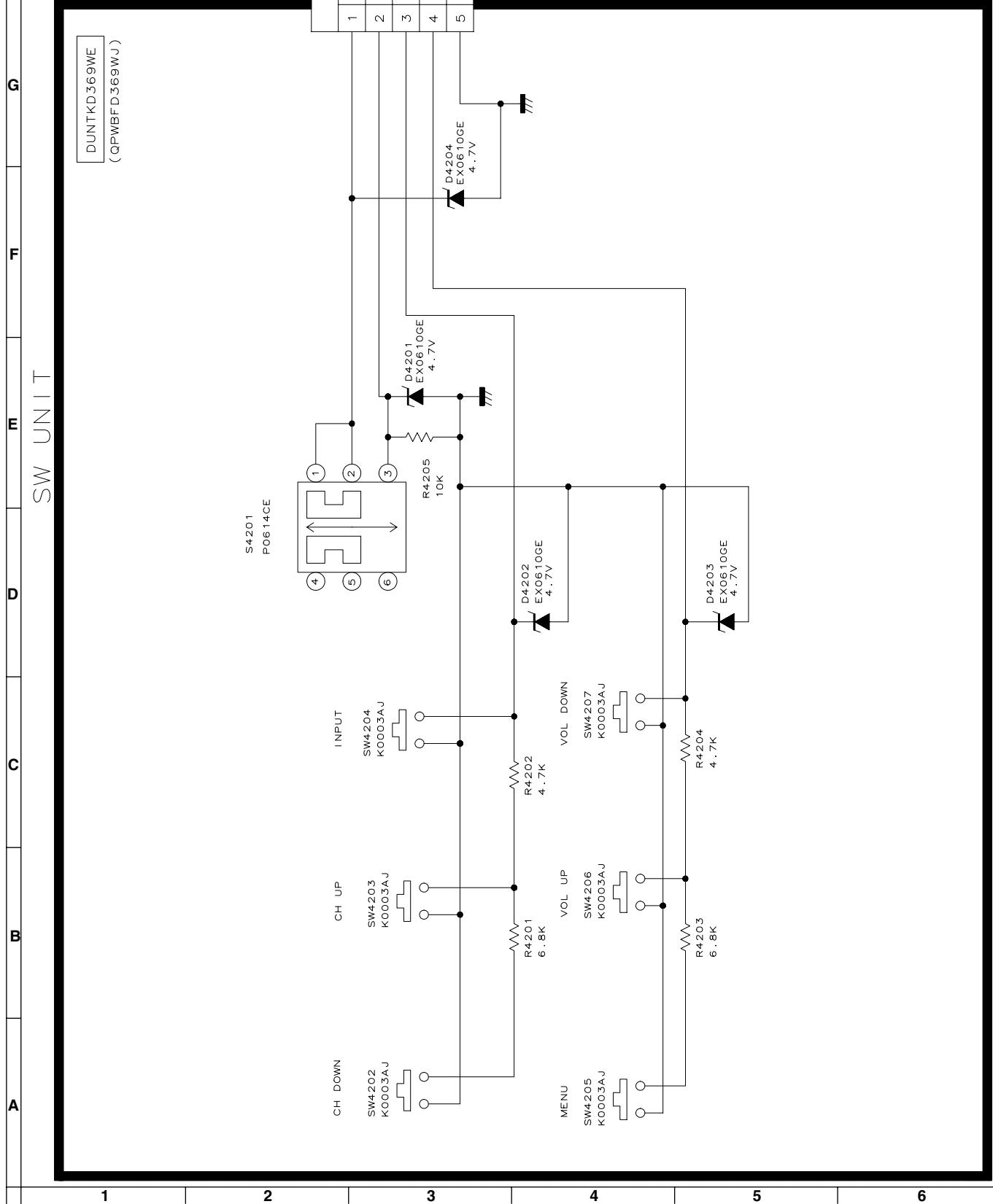
■MAIN Unit-4/5

MAIN4 (SOUND/TUNER)

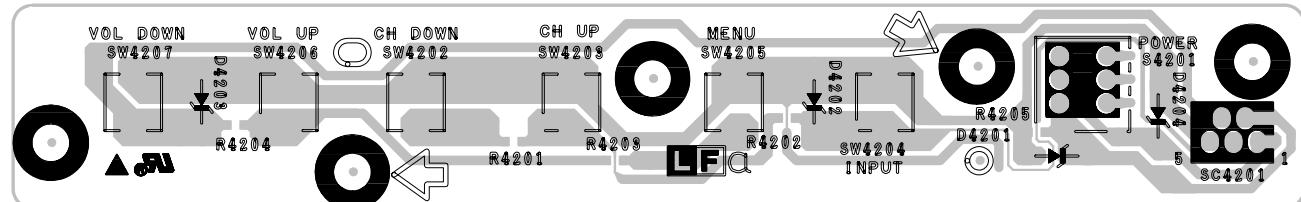




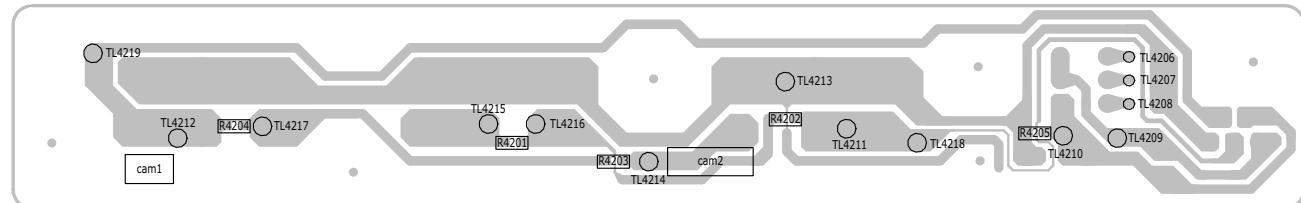
## ■OPERATION Unit



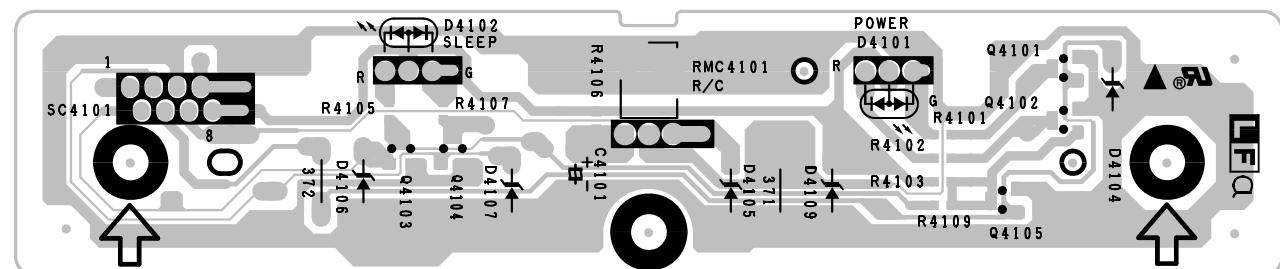
# PRINTED WIRING BOARD ASSEMBLIES



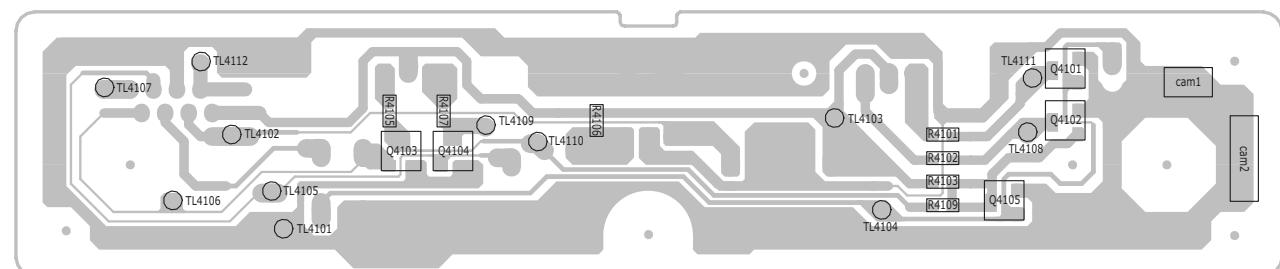
**OPERATION Unit (Wiring Side)**  
(QPWBFD369WJN1)



**OPERATION Unit (Chip Parts Side)**  
(QPWBFD369WJN1)

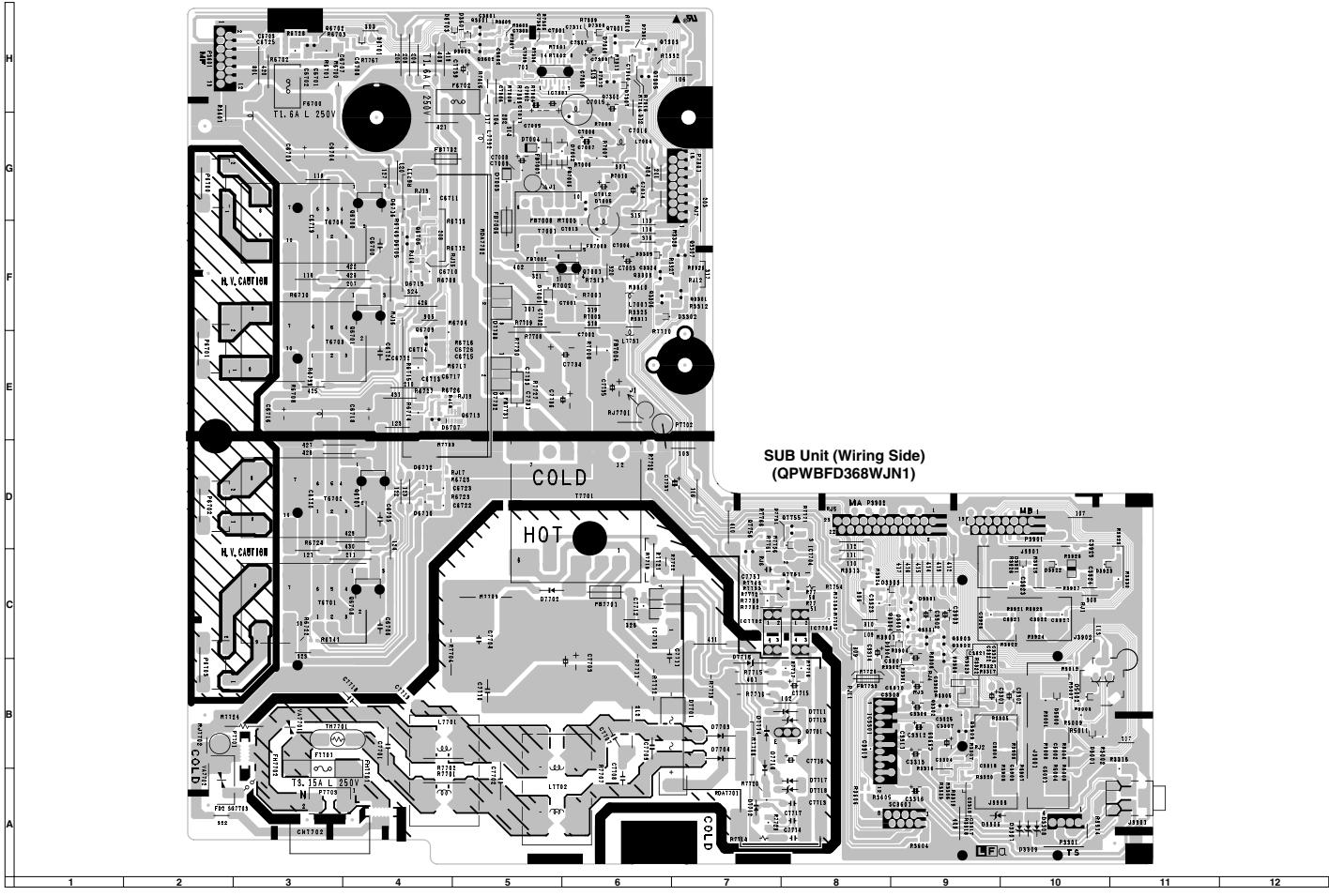


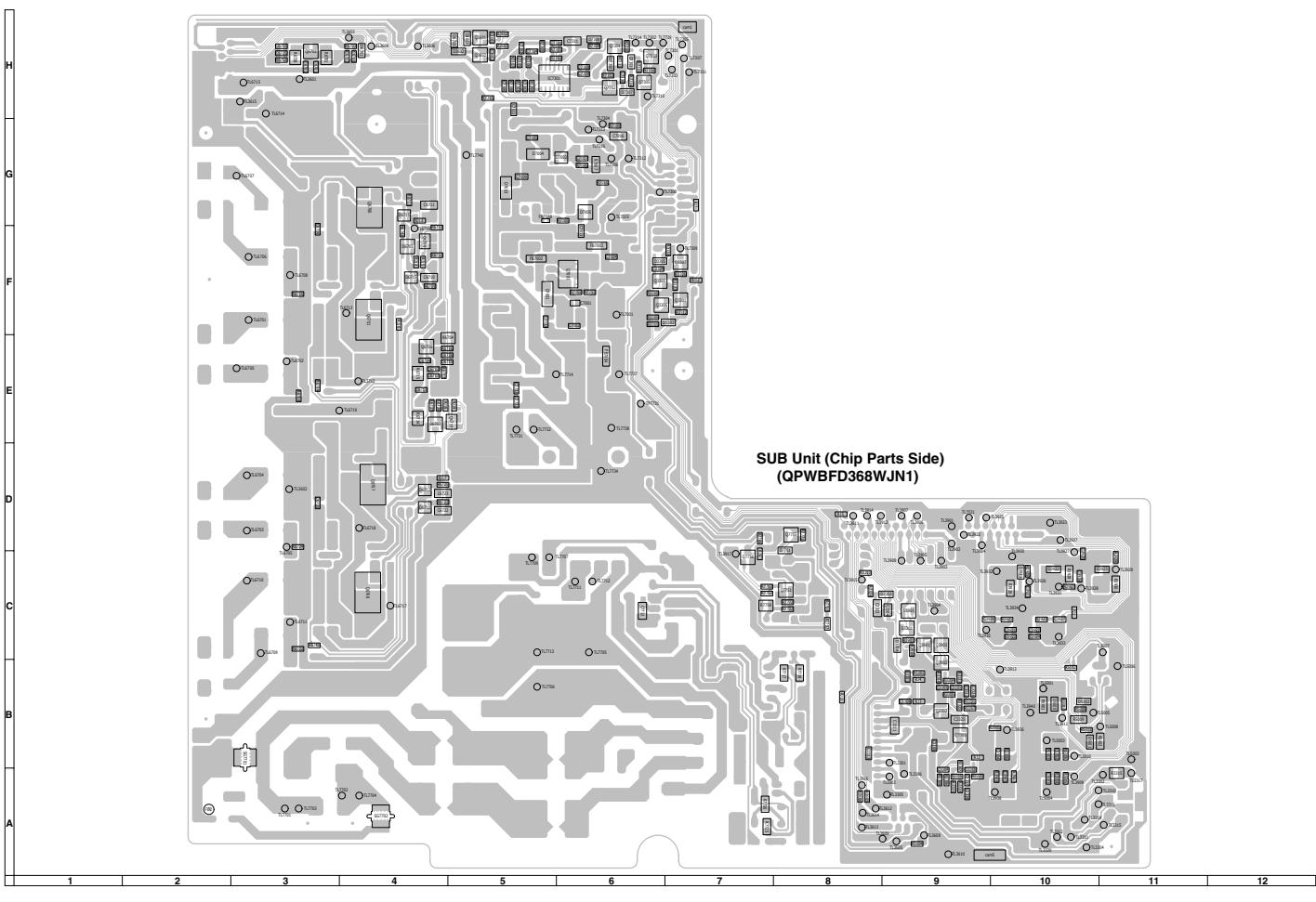
**R/C, LED Unit (Wiring Side)**  
(QPWBFD425WJN1)

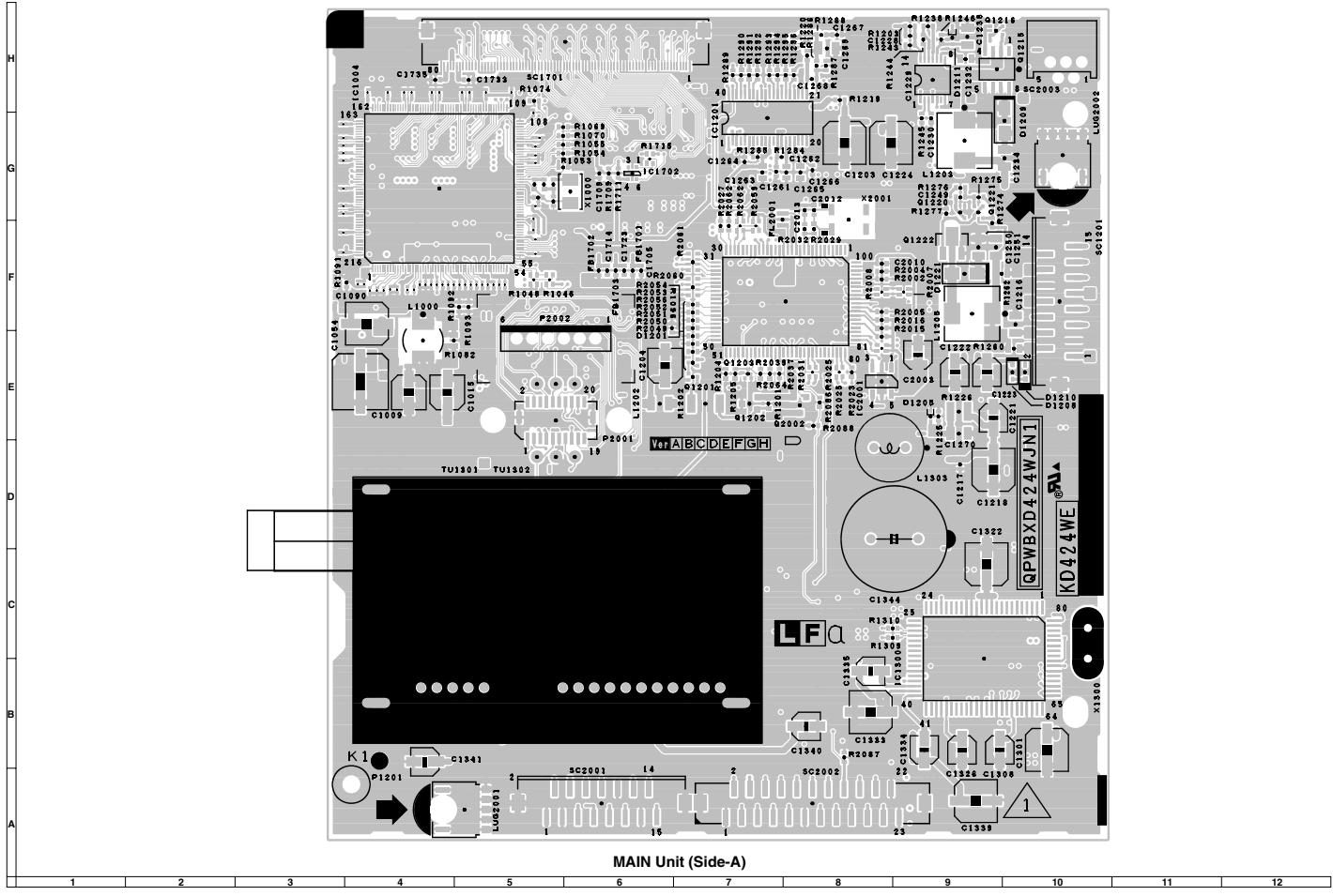


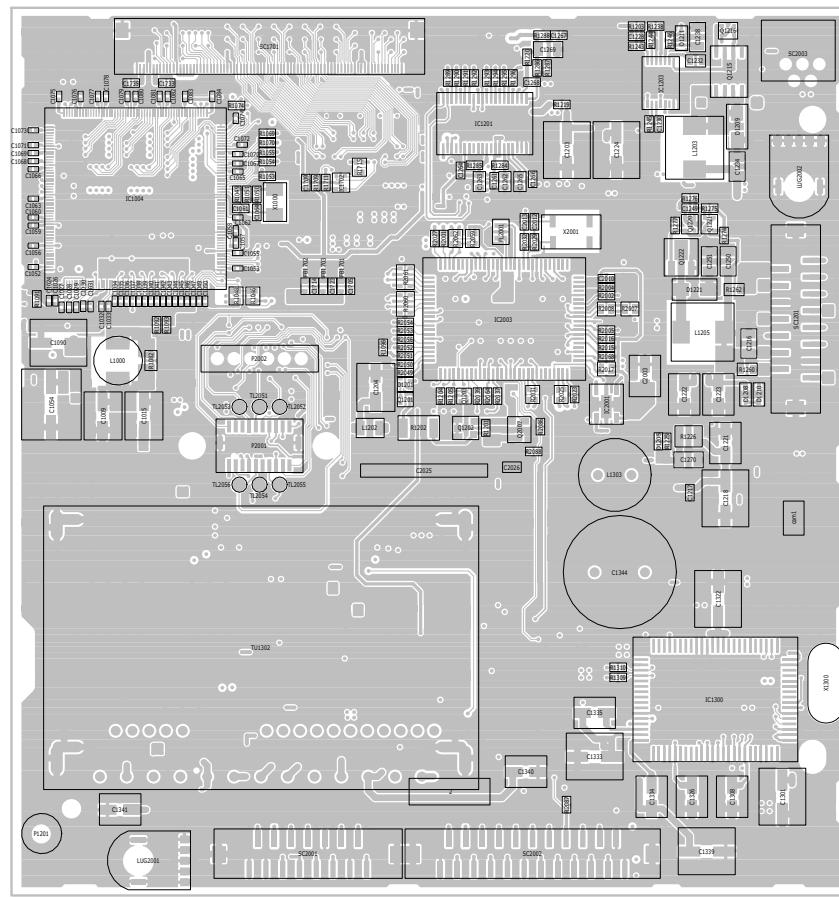
**R/C, LED Unit (Chip Parts Side)**  
(QPWBFD425WJN1)

1	2	3	4	5	6
---	---	---	---	---	---

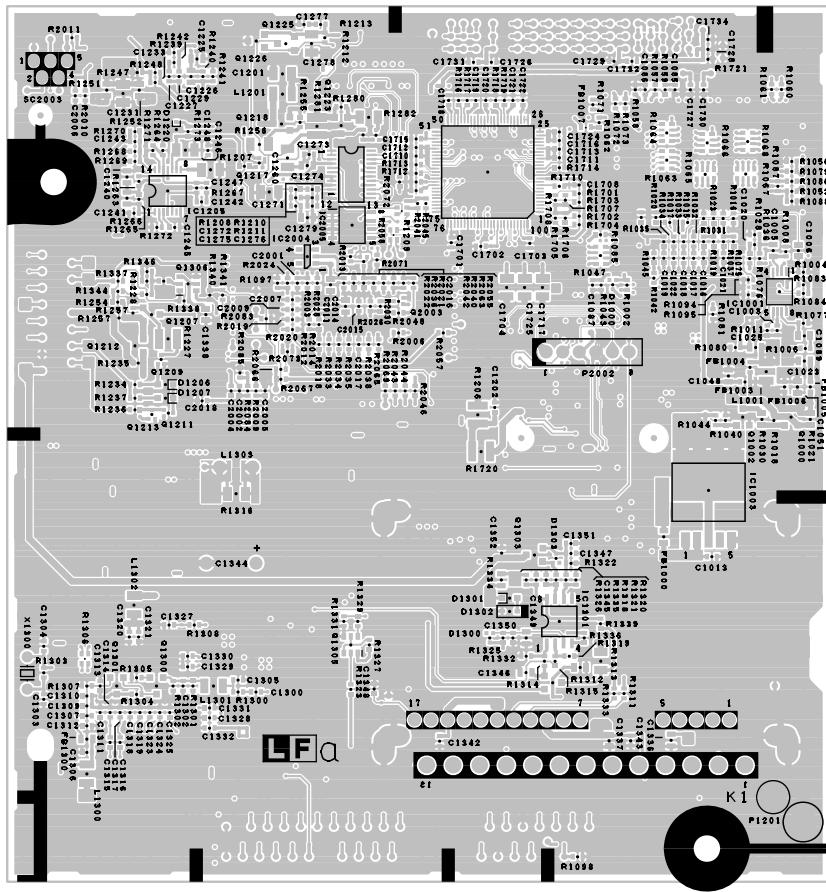






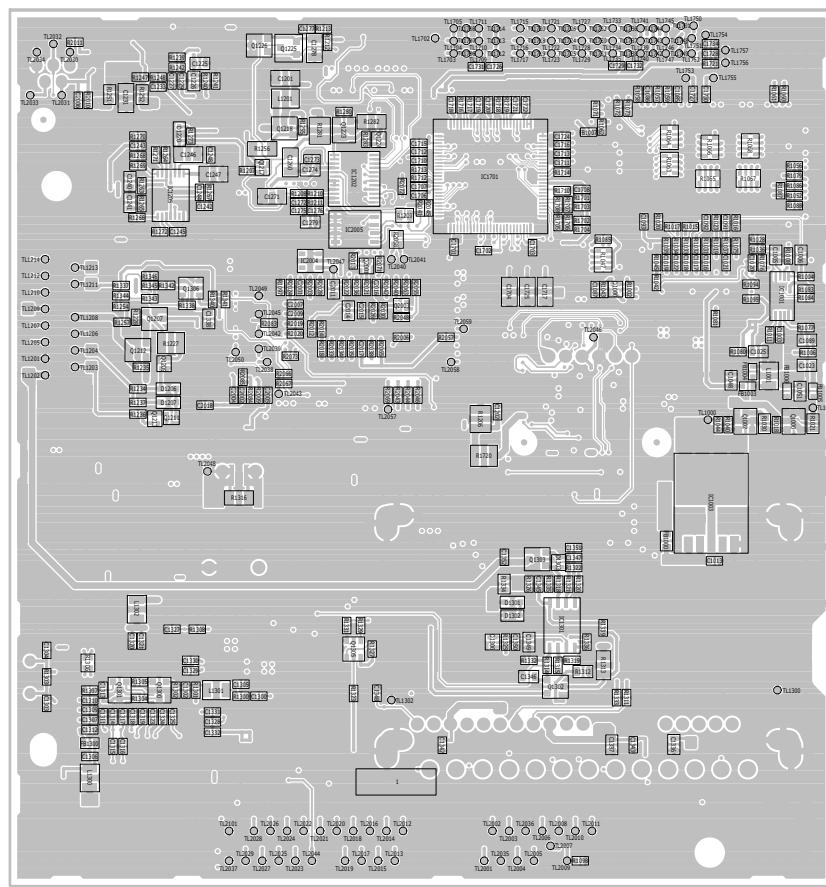


### **MAIN Unit (Chip Parts Side-A)**



MAIN Unit (Side-B)

1      |      2      |      3      |      4      |      5      |      6      |      7      |      8      |      9      |      10     |      11     |      12



MAIN Unit (Chip Parts Side-B)

1	2	3	4	5	6	7	8	9	10	11	12
---	---	---	---	---	---	---	---	---	----	----	----

# PARTS LIST

## PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual ; electrical components having such features are identified by  $\Delta$  and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does not have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

### "HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

- |                 |                |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO.    |
| 3. PART NO.     | 4. DESCRIPTION |

in **USA**: Contact your nearest SHARP Parts Distributor to order. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code
----------	----------	---	-------------	------

## PRINTED WIRING BOARD ASSEMBLYS (NOT REPLACEMENT ITEM)

DUNTKD368WEF8	-	SUB Unit	—
DUNTKD369WEF8	-	OPERATION Unit	—
DUNTKD424FMF8	-	MAIN Unit	—
DUNTKD425WEF8	-	R/C,LED Unit	—

## LCD PANEL

**NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.**

R1LK130V3GZ12Z J 13" LCD Panel Module Unit DA

# LISTE DES PIECES

## CHANGE DES PIECES

Les pièces de rechange qui présentent ces caractéristiques spéciales de sécurité sont identifiées dans ce manuel : les pièces électriques qui présentent ces particularités, sont repérées par la marque  $\Delta$  et sont hachurées dans les listes de pièces et dans les diagrammes schématiques.

La substitution d'une pièce de rechange par une autre qui ne présente pas les mêmes caractéristiques de sécurité que la pièce recommandée par l'usine et dans ce manuel de service, peut provoquer une électrocution, un incendie ou tout autre sinistre.

### "COMMENT COMMANDER LES PIECES DE RECHANGE"

Pour que votre commande soit rapidement et correctement remplie, veuillez fournir les renseignements suivants.

- |                     |                |
|---------------------|----------------|
| 1. NUMERO DU MODELE | 2. NO. DE REF  |
| 3. NO. DE PIECE     | 4. DESCRIPTION |

in **CANADA**: Contact SHARP Electronics of Canada Limited  
Phone (416) 890-2100

★ MARQUE: SECTION LIVRAISON DES PIÈCES DÉCHANGE

Ref. No.	Part No.	★	Description	Code
----------	----------	---	-------------	------

## DUNTKD368WEF8

### SUB Unit

#### INTEGRATED CIRCUITS

IC3301	VHiLA4635A+-1S	J LA4635A	AM
IC7301	VHiBD9300F+-1Y	J BD9300F-FE2	AG
IC7701	VHiSTRW67652E	J STR-W6765N	AL
$\Delta$ IC7702	RH-FXA003WJZZ	J PC123Y82	AD
$\Delta$ IC7703	RH-FXA003WJZZ	J PC123Y82	AD
IC7704	VHiSE012N/-1	J SE012N	AH

#### TRANSISTORS

Q3301	VS2SC3928AR-1Y	J 2SC3928AR	AB
Q3302	VSDTC314TK/-1Y	J DTC314TK	AC
Q3303	VSDTC314TK/-1Y	J DTC314TK	AC
Q3304	VSUMH2N++++-1Y	J UMH2N	AC
Q3305	VS2SD2657++-1Y	J 2SD2657	AC
Q3306	VSDTC114EKA-1Y	J DTC114EKA	AB
Q3307	VSKRC104S//1-Y	J KRC104S	AA
Q3601	VSKRC102S/-1Y	J KRC102S	AA
Q3602	VSKRC102S//1-Y	J KRC102S	AA
Q3901	VS2SA1530AR-1Y	J 2SA1530AR	AB
Q3902	VSDTC314TK-1Y	J DTC314TK	AC
Q3903	VSDTC314TK-1Y	J DTC314TK	AC
Q6700	VS2SC5886A+-1Y	J 2SC5886A	AD
Q6701	VS2SC5886A+-1Y	J 2SC5886A	AD
Q6702	VS2SA1530AR-1Y	J 2SA1530AR	AB
Q6706	VSUPA606T//1-Y	J UPA606T	AD
Q6707	VS2SC5886A+-1Y	J 2SC5886A	AD
Q6708	VS2SC5886A+-1Y	J 2SC5886A	AD
Q6709	VS2SA1530AR-1Y	J 2SA1530AR	AB
Q6713	VSUPA606T//1-Y	J UPA606T	AD
Q7001	VSRSS070N05-1Y	J RSS070N05	AF
Q7301	VS2SB1695++-1Y	J 2SB1695	AC
Q7302	VS2SD2657++-1Y	J 2SD2657	AC
Q7303	VS2SA1530AR-1Y	J 2SA1530AR	AB
Q7305	VSKRC104S/-1Y	J KRC104S	AA
Q7701	VS2SA1013//1E+	J 2SA1013	AD
Q7751	VSKRC104S/-1Y	J KRC104S	AA

#### DIODES

D3301	VHD1PS184++-1Y	J Diode	AB
D3302	RH-EX1253CEZZY	J Zener Diode	AB
D3303	VHDBAS316//1-Y	J Diode	AB
D3304	VHDBAS316//1-Y	J Diode	AB
D3305	VHDBAS316//1-Y	J Diode	AB

Ref. No.	Part No.	★	Description	Code
<b>DUNTKD368WEF8</b>				
<b>SUB Unit (Continued)</b>				
D3306	RH-EX0640GEZZY	J	Zener Diode, 12V	AA
D3307	RH-EX0640GEZZY	J	Zener Diode, 12V	AA
D3308	RH-EX0640GEZZY	J	Zener Diode, 12V	AA
D3309	RH-EX0640GEZZY	J	Zener Diode, 12V	AA
D3601	RH-EX1293CEZZY	J	Zener Diode, 24V	AB
D3602	RH-EX1293CEZZY	J	Zener Diode, 24V	AB
D3901	VHD1PS184++-1Y	J	Diode	AB
D3921	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D3922	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D3923	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D5000	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D5001	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D5002	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D6701	VHDBAS316//1Y	J	Diode	AB
D6703	VHDBAS316//1Y	J	Diode	AB
D6705	VHD1PS184++-1Y	J	Diode	AB
D6707	VHD1PS184++-1Y	J	Diode	AB
D6710	VHDM157A//1Y	J	Diode	AC
D6712	VHDM157A//1Y	J	Diode	AC
D6715	VHDM157A//1Y	J	Diode	AC
D6716	VHDM157A//1Y	J	Diode	AC
D7001	VHDL116+++-1Y	J	Diode	AC
D7002	VHD1SS250//1EY	J	Diode	AB
D7003	VHDL124+++-1Y	J	Diode	AC
D7004	VHDL124+++-1Y	J	Diode	AC
D7005	VHD1PS184++-1Y	J	Diode	AB
D7301	VHDBAS316//1Y	J	Diode	AB
D7306	VHDBAS316//1Y	J	Diode	AB
D7307	VHDBAS316//1Y	J	Diode	AB
△ D7701	RH-DX0476CEZZ	J	Diode	AG
D7702	RH-DX0321CEZZY	J	Diode	AC
D7703	RH-DX0490CEZZY	J	Diode	AC
D7704	RH-DX0490CEZZY	J	Diode	AC
D7711	RH-DX0066GEZZY	J	Diode	AC
D7712	VHD1SS244//1Y	J	Diode	AB
D7713	RH-EX0640GEZZY	J	Zener Diode, 12V	AA
D7714	VHD1SS244//1Y	J	Diode	AB
D7715	RH-EX0618GEZZY	J	Zener Diode, 6.2V	AB
D7716	VHD1SS244//1Y	J	Diode	AB
D7717	VHD1SS244//1Y	J	Diode	AB
D7718	RH-EX0656GEZZY	J	Zener Diode	AB
D7732	VHDSF30SC6+-1	J	Diode	AH
D7733	VHDSF30SC6+-1	J	Diode	AH
TH7701	RH-HXA019WJZZ	J	Thermistor	AE
△ VA7701	RH-VXA022WJZZ	J	Varistor	AD
△ VA7702	RH-VXA018WJN1	J	Varistor	AD
<b>COILS</b>				
L6700	RCiLPA371WJZZ	J	Coil	AC
L6702	RCiLPA371WJZZ	J	Coil	AC
L7001	RCiLPA476WJZZ+	J	Coil	AC
L7002	RCiLPA356WJZZ+	J	Coil	AC
L7003	RCiLPA356WJZZ+	J	Coil	AC
L7004	RCiLPA476WJZZ+	J	Coil	AC
△ L7703	RCiLFA167WJZZ	J	Coil	AE
△ L7704	RCiLFA167WJZZ	J	Coil	AE
L7732	RCiLP0184CEZZ+	J	Coil	AD
<b>TRANSFORMER</b>				
△ T6701	RTRNZA085WJZZ	J	Transformer	AL
△ T6702	RTRNZA085WJZZ	J	Transformer	AL
△ T6703	RTRNZA085WJZZ	J	Transformer	AL
△ T6704	RTRNZA085WJZZ	J	Transformer	AL
△ T7001	RTRNWA169WJZZ	J	Transformer	AG
△ T7701	RTRNWA173WJZZ	J	Transformer	AQ
<b>CAPACITORS</b>				
C3301	VCESKA1HM225M+	J	2.2 50V Electrolytic	AB
C3302	VCESKA1HM225M+	J	2.2 50V Electrolytic	AB
C3303	VCKYCY1HB153KY	J	0.015 50V Ceramic	AA
C3304	VCKYCY1HB153KY	J	0.015 50V Ceramic	AA

Ref. No.	Part No.	★	Description	Code
C3306	VCESKA1HM105M+	J	1 50V Electrolytic	AB
C3307	VCESKA1HM105M+	J	1 50V Electrolytic	AB
C3308	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C3309	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C3310	VCESKA1CM107M+	J	100 16V Electrolytic	AC
C3312	VCESKA1CM106M+	J	10 16V Electrolytic	AB
C3313	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C3314	RC-EZA216WJZZ	J	1000 16V Electrolytic	AD
C3315	RC-EZA216WJZZ	J	1000 16V Electrolytic	AD
C3316	RC-EZA216WJZZ	J	1000 16V Electrolytic	AD
C3323	RC-KZA216WJZZY	J	2.2 50V Ceramic	AC
C3324	VCKYCY1HF224ZY	J	0.22 50V Ceramic	AA
C3325	RC-KZA041WJZZY	J	10 10V Ceramic	AC
C3601	VCKYCY1HB332KY	J	3300p 50V Ceramic	AA
C3602	VCKYCY1HB332KY	J	3300p 50V Ceramic	AA
C3901	RC-EZA184WJZZ+	J	100 50V Electrolytic	AD
C3902	VCESKA1CM106M+	J	10 16V Electrolytic	AB
C3903	VCESKA1CM106M+	J	10 16V Electrolytic	AB
C3904	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C3905	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C3921	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C3922	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C3926	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C3927	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C5001	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C5002	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C6700	RC-FZA034WJZZ	J	0.15 250V Film	AE
C6703	VCKYCY1EB104KY	J	0.1 25V Ceramic	AB
C6704	RC-EZA482WJZZ	J	1000 25V Electrolytic	AD
C6705	RC-FZA034WJZZ	J	0.15 250V Film	AE
C6709	RC-EZA482WJZZ	J	1000 25V Electrolytic	AD
C6710	RC-KZ0072TAZZY	J	1 25V Ceramic	AC
C6711	RC-KZ0072TAZZY	J	1 25V Ceramic	AC
C6715	VCKYCY1EB104KY	J	0.1 25V Ceramic	AB
C6716	RC-EZA482WJZZ	J	1000 25V Electrolytic	AD
C6718	RC-EZA482WJZZ	J	1000 25V Electrolytic	AD
C6719	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
C6720	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
C6722	RC-KZ0072TAZZY	J	1 25V Ceramic	AC
C6723	RC-KZ0072TAZZY	J	1 25V Ceramic	AC
C6725	VCKYCY1EB104KY	J	0.1 25V Ceramic	AB
C6726	VCKYCY1EB104KY	J	0.1 25V Ceramic	AB
C7001	RC-KZA124WJZZY	J	0.022 50V Ceramic	AD
C7002	VCKYCY1HB562KY	J	5600p 50V Ceramic	AA
C7003	RC-EZA464WJZZ+	J	1000 16V Electrolytic	AD
C7004	VCKYCY1HB562KY	J	5600p 50V Ceramic	AA
C7005	VCCCCY1HH181JY	J	180p 50V Ceramic	AA
C7006	VCESKA1HM476M+	J	47 50V Electrolytic	AD
C7007	VCKYCY1HF104ZY	J	0.1 50V Ceramic	AA
C7008	VCESKA1CM337M+	J	330 16V Electrolytic	AD
C7009	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C7010	RC-EZA450WJZZ+	J	1500 10V Electrolytic	AD
C7011	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C7012	VCESKA1CM337M+	J	330 16V Electrolytic	AD
C7013	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C7014	VCESKA1CM107M+	J	100 16V Electrolytic	AC
C7301	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C7302	RC-KZA116WJZZY	J	4.7 6.3V Ceramic	AC
C7303	VCKYCY1HB332KY	J	3300p 50V Ceramic	AA
C7304	VCCCCY1HH330JY	J	33p 50V Ceramic	AA
C7305	VCCCCY1HH330JY	J	33p 50V Ceramic	AA
C7306	VCCCCY1HH471JY	J	470p 50V Ceramic	AA
C7308	VCKYCY1HB103KY	J	0.01 50V Ceramic	AA
C7309	VCKYCY1AB684KY	J	0.68 10V Ceramic	AB
C7310	VCKYCY1HB103KY	J	0.01 50V Ceramic	AA
△ C7701	RC-FZA022WJZZ	J	0.22 275V Film	AD
C7702	RC-FZA022WJZZ	J	0.22 275V Film	AD
C7703	RC-EZA984WJZZ	J	180 250V Electrolytic	AP
C7704	RC-FZA180WJZZ	J	0.1 580V Film	AD
△ C7707	RC-KZ0103GEZZ	J	1000p 250V Ceramic	AD
△ C7708	RC-KZ0089GEZZ	J	1000p 250V Ceramic	AC
C7711	RC-KZA271WJZZ	J	470p 2kV Ceramic	AC
C7712	RC-KZA216WJZZY	J	2.2 50V Ceramic	AC
C7713	VCKYP1HB471K+	J	470p 50V Ceramic	AA
C7714	VCQYTA1HM104J+	J	0.1 50V Mylar	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
<b>DUNTKD368WEF8</b> <b>SUB Unit (Continued)</b>									
C7715	VCEA4A2CN106M+	J 10	160V Electrolytic	AC	R5009	VRS-TQ2BD750JY	J 75	1/8W Metal Oxide	AA
C7716	VCESKA1HM476M+	J 47	50V Electrolytic	AD	R5011	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
C7717	VCQYTA1HM332J+	J 3300p	50V Mylar	AA	R5012	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
C7719	RC-KZ0105GEZZ	J 2200p	250V Ceramic	AD	R6700	VRD-RA2EE821JY	J 820	1/4W Carbon	AA
C7734	RC-EZA484WJZZ+	J 1500	25V Electrolytic	AE	R6701	VRS-TW2ED821JY	J 820	1/4W Metal Oxide	AB
C7735	RC-EZA468WJZZ+	J 2200	16V Electrolytic	AE	R6702	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA
C7736	RC-EZA484WJZZ+	J 1500	25V Electrolytic	AE	R6703	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
C7737	RC-EZA162WJZZ+	J 1000	16V Electrolytic	AD	R6704	VRS-TW2ED331JY	J 330	1/4W Metal Oxide	AB
C7739	RC-EZA476WJZZ+	J 350	25V Electrolytic	AC	R6708	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA
C7751	VCQYTA1HM104J+	J 0.1	50V Mylar	AB	R6709	VRS-CY1JF824JY	J 820k	1/16W Metal Oxide	AA
<b>RESISTORS</b>									
RJ2	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6710	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA
RJ4	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6711	VRS-CY1JF824JY	J 820k	1/16W Metal Oxide	AA
RJ6	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6712	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA
RJ7	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6713	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA
RJ12	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6714	VRS-TW2ED821JY	J 820	1/4W Metal Oxide	AB
RJ13	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6715	VRS-TW2ED821JY	J 820	1/4W Metal Oxide	AB
RJ14	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6716	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA
RJ15	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6717	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
RJ16	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6722	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA
RJ17	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6723	VRS-CY1JF824JY	J 820k	1/16W Metal Oxide	AA
RJ18	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6724	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA
RJ19	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R6725	VRS-CY1JF824JY	J 820k	1/16W Metal Oxide	AA
R3301	VRS-CY1JF153JY	J 15k	1/16W Metal Oxide	AA	R6726	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA
R3302	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA	R6727	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA
R3304	VRS-CY1JF392JY	J 3.9k	1/16W Metal Oxide	AA	R6728	VRS-TW2ED331JY	J 330	1/4W Metal Oxide	AB
R3305	VRS-CY1JF332JY	J 3.3k	1/16W Metal Oxide	AA	R6743	VRS-CY1JF563JY	J 56k	1/16W Metal Oxide	AA
R3306	VRS-CY1JF332JY	J 3.3k	1/16W Metal Oxide	AA	R7001	VRS-VV3AB222J	J 2.2k	1W Metal Oxide	AA
R3307	VRS-CY1JF392JY	J 3.9k	1/16W Metal Oxide	AA	R7003	VRS-VV3AB222J	J 2.2k	1W Metal Oxide	AA
R3308	VRS-CY1JF272JY	J 2.7k	1/16W Metal Oxide	AA	R7005	VRS-CY1JF1R0JY	J 1	1/16W Metal Oxide	AA
R3309	VRS-CY1JF272JY	J 2.7k	1/16W Metal Oxide	AA	R7006	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R3310	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA	R7007	VRS-TQ2BD683JY	J 68k	1/8W Metal Oxide	AA
R3311	VRS-CY1JF392JY	J 3.9k	1/16W Metal Oxide	AA	R7009	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R3312	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA	R7010	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R3313	VRS-CY1JF122JY	J 1.2k	1/16W Metal Oxide	AA	R7301	VRS-CY1JF104DY	J 100k	1/16W Metal Oxide	AA
R3314	VRD-RA2EE331JY	J 330	1/4W Carbon	AA	R7302	VRS-CY1JF104DY	J 100k	1/16W Metal Oxide	AA
R3315	VRS-TW2ED331JY	J 330	1/4W Metal Oxide	AB	R7303	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
R3316	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R7304	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R3317	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R7305	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA
R3324	VRS-CY1JF332JY	J 3.3k	1/16W Metal Oxide	AA	R7306	VRS-CY1JF333FY	J 33k	1/16W Metal Oxide	AA
R3325	VRS-CY1JF332JY	J 3.3k	1/16W Metal Oxide	AA	R7307	VRS-CY1JF104FY	J 100k	1/16W Metal Oxide	AA
R3326	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA	R7308	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R3327	VRS-CY1JF473JY	J 47k	1/16W Metal Oxide	AA	R7309	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R3328	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R7310	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R3602	VRS-CY1JF153JY	J 15k	1/16W Metal Oxide	AA	R7311	VRS-CY1JF331JY	J 330	1/16W Metal Oxide	AA
R3603	VRS-CY1JF153JY	J 15k	1/16W Metal Oxide	AA	R7312	VRS-CY1JF511JY	J 510	1/16W Metal Oxide	AA
R3901	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA	R7313	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
R3904	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA	R7314	VRS-CY1JF563JY	J 56k	1/16W Metal Oxide	AA
R3905	VRS-CY1JF271JY	J 270	1/16W Metal Oxide	AA	R7315	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R3906	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA	R7316	VRS-CY1JF182JY	J 1.8k	1/16W Metal Oxide	AA
R3907	VRS-CY1JF271JY	J 270	1/16W Metal Oxide	AA	R7332	VRS-CY1JF563JY	J 56k	1/16W Metal Oxide	AA
R3908	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA	R7704	RR-DZA033WJZZ	J 180k	3W Special	AD
R3921	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R7705	RR-DZA033WJZZ	J 180k	3W Special	AD
R3922	VRS-CY1JF473JY	J 47k	1/16W Metal Oxide	AA	R7706	RR-DZA036WJZZ	J 15k	2W Special	AC
R3923	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R7711	VRN-VV3ABR68J	J 0.68	1W Metal Film	AA
R3924	VRS-CY1JF473JY	J 47k	1/16W Metal Oxide	AA	R7712	VRN-VV3ABR68J	J 0.68	1W Metal Film	AA
R3925	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R7713	VRS-SV2HC101J	J 100	1/2W Metal Oxide	AA
R3926	VRS-TQ2BD750JY	J 75	1/8W Metal Oxide	AA	R7714	VRD-RA2BE102JY	J 1k	1/8W Carbon	AA
R3927	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R7715	VRD-RA2BE102JY	J 1k	1/8W Carbon	AA
R3928	VRS-TQ2BD750JY	J 75	1/8W Metal Oxide	AA	R7716	VRD-RM2HD220JY	J 22	1/2W Carbon	AA
R3929	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R7717	VRS-TQ2BD102JY	J 1k	1/8W Metal Oxide	AA
R3930	VRS-TQ2BD750JY	J 75	1/8W Metal Oxide	AA	R7718	VRS-TQ2BD562JY	J 5.6k	1/8W Metal Oxide	AA
R5001	VRS-TQ2BD750JY	J 75	1/8W Metal Oxide	AA	R7719	VRD-RM2HD220JY	J 22	1/2W Metal Oxide	AA
R5002	VRS-TQ2BD750JY	J 75	1/8W Metal Oxide	AA	R7720	VRS-TQ2BD102JY	J 1k	1/8W Metal Oxide	AA
R5003	VRS-CY1JF473JY	J 47k	1/16W Metal Oxide	AA	R7724	RR-HZ0053CEZZY	J 10M	1/2W Coat-insulated fixed anti-surge	AC
R5004	VRS-CY1JF473JY	J 47k	1/16W Metal Oxide	AA	R7725	VRS-TQ2BD153JY	J 15k	1/8W Metal Oxide	AA
R5005	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R7732	VRD-RA2BE000JY	J 0	1/8W Carbon	AA
R5006	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R7752	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R5007	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R7753	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R5008	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R7754	VRD-RA2BE102JY	J 1k	1/8W Carbon	AA
					R7755	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
					R7757	VRS-TV1JD272JY	J 2.7k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
<b>DUNTKD368WEF8</b>									
<b>SUB Unit (Continued)</b>									
R7758	VRD-RA2BE000JY	J 0	1/8W Carbon	AA	HM7728	LX-GZ3002PEZZ	J	Screw	AB
R7759	VRS-TW2HF102JY	J 1k	1/2W Metal Oxide	AA	HM7729	LX-GZ3002PEZZ	J	Screw	AB
R7761	VRD-RA2BE2R7JY	J 2.7	1/8W Carbon	AA	HM7730	LX-GZ3002PEZZ	J	Screw	AB
R7767	VRD-RA2EE153JY	J 15k	1/4W Carbon	AA	HM7731	LX-GZ3002PEZZ	J	Screw	AB
<b>MISCELLANEOUS PARTS</b>									
▲ F6700	QFS-ZA003WJZZ	J	Fuse, 1.6A/250V	AD	HM7732	LX-GZ3002PEZZ	J	Screw	AB
▲ F6702	QFS-ZA003WJZZ	J	Fuse, 1.6A/250V	AD	HM7733	LX-GZ3002PEZZ	J	Screw	AB
▲ F7701	QFS-C3225CEZZ	J	Fuse, 3.15A/250V	AC	HM7734	LX-GZ3002PEZZ	J	Screw	AB
FH7701	QFSHD1013CEZZ+	J	Fuse Holder	AC	HM7735	LX-GZ3002PEZZ	J	Screw	AB
FH7702	QFSHD1014CEZZ+	J	Fuse Holder	AC	SG7703	QSPGCA003WJZZ	J	Spark Gap	AH
FB7002	RBLN-0095CEZZY	J	Ferrite Bead	AD	PRDARA178WJFW	J	Heat Sink	AM	
FB7003	RBLN-0095CEZZY	J	Ferrite Bead	AD	PRDARA185WJFW	J	Heat Sink	AL	
FB7005	RBLN-0090GEZZY	J	Ferrite Bead	AB	QCNW-D459WJQZ	J	Connecting Cord	AC	
FB7006	RBLN-0090GEZZY	J	Ferrite Bead	AB	QCNW-D513WJPZ	J	Connecting Cord	AC	
FB7007	RBLN-0090GEZZY	J	Ferrite Bead	AB	QCNW-E225WJQZ	J	Connecting Cord	AE	
FB7008	RBLN-0051TAZZY	J	Ferrite Bead	AC	XBPS730P10JS0	J	Screw, x4	AA	
FB7701	RBLN-0037CEZZY	J	Ferrite Bead	AB					
FB7732	RBLN-0090GEZZY	J	Ferrite Bead	AB					
J3301	QJAKJ0101SEZZ	J	Headphone Jack	AE					
J3901	QJAKGA080WJZZ	J	Y/PB/PR (INPUT1)	AE					
J3902	QJAKFA039WJZZ	J	AUDIO(L/R) (INPUT1)	AD					
J3903	QJAKFA039WJZZ	J	AUDIO(L/R) (AUDIO OUT)	AD					
J5000	QSOCDA035WJZZ	J	S-VIDEO (INPUT2)	AD					
J5001	QJAKGA081WJZZ	J	VIDEO/AUDIO(L/R) (INPUT1)	AE					
P3301	QPLGNA185WJZZ	J	Plug, 4-pin	AB					
P3901	QCNCMA012WJZZ	J	Connector, 15-pin	AD					
P3902	QCNCMA250WJZZ	J	Connector, 23-pin	AE					
P6700	QPLGNA390WJZZ	J	Plug, 2-pin	AC					
P6701	QPLGNA390WJZZ	J	Plug, 2-pin	AC					
P6702	QPLGNA390WJZZ	J	Plug, 2-pin	AC					
P6703	QPLGNA390WJZZ	J	Plug, 2-pin	AC					
P7301	QCNCMA012WJZZ	J	Connector, 15-pin	AD					
▲ P7703	QPLGN0269GEZZ	J	Plug, 2-pin	AB					
SC3601	QSOCN0896REZZ	J	Socket, 8-pin	AC					
HM6701	LX-GZ3002PEZZ	J	Screw	AB					
HM6702	LX-GZ3002PEZZ	J	Screw	AB					
HM6703	LX-GZ3002PEZZ	J	Screw	AB					
HM6704	LX-GZ3002PEZZ	J	Screw	AB					
HM6705	LX-GZ3002PEZZ	J	Screw	AB					
HM6706	LX-GZ3002PEZZ	J	Screw	AB					
HM6707	LX-GZ3002PEZZ	J	Screw	AB					
HM6708	LX-GZ3002PEZZ	J	Screw	AB					
HM6709	LX-GZ3002PEZZ	J	Screw	AB					
HM6710	LX-GZ3002PEZZ	J	Screw	AB					
HM6711	LX-GZ3002PEZZ	J	Screw	AB					
HM6712	LX-GZ3002PEZZ	J	Screw	AB					
HM6713	LX-GZ3002PEZZ	J	Screw	AB					
HM6714	LX-GZ3002PEZZ	J	Screw	AB					
HM6715	LX-GZ3002PEZZ	J	Screw	AB					
HM6716	LX-GZ3002PEZZ	J	Screw	AB					
HM7701	LX-GZ3002PEZZ	J	Screw	AB					
HM7702	LX-GZ3002PEZZ	J	Screw	AB					
HM7705	LX-GZ3002PEZZ	J	Screw	AB					
HM7706	LX-GZ3002PEZZ	J	Screw	AB					
HM7709	LX-GZ3002PEZZ	J	Screw	AB					
HM7710	LX-GZ3002PEZZ	J	Screw	AB					
HM7713	LX-GZ3002PEZZ	J	Screw	AB					
HM7714	LX-GZ3002PEZZ	J	Screw	AB					
HM7717	LX-GZ3001PEZZ	J	Screw	AB					
HM7718	LX-GZ3001PEZZ	J	Screw	AB					
HM7719	LX-GZ3001PEZZ	J	Screw	AB					
HM7720	LX-GZ3001PEZZ	J	Screw	AB					
HM7721	LX-GZ3002PEZZ	J	Screw	AB					
HM7722	LX-GZ3002PEZZ	J	Screw	AB					
HM7723	LX-GZ3002PEZZ	J	Screw	AB					
HM7724	LX-GZ3002PEZZ	J	Screw	AB					
HM7725	LX-GZ3002PEZZ	J	Screw	AB					
HM7726	LX-GZ3002PEZZ	J	Screw	AB					
HM7727	LX-GZ3002PEZZ	J	Screw	AB					

Ref. No.	Part No.	★	Description	Code
----------	----------	---	-------------	------

## DUNTKD369WEF8 OPERATION Unit

### DIODES

D4201	RH-EX0610GEZZY	J	Zener Diode, 4.7V	AA
D4202	RH-EX0610GEZZY	J	Zener Diode, 4.7V	AA
D4203	RH-EX0610GEZZY	J	Zener Diode, 4.7V	AA
D4204	RH-EX0610GEZZY	J	Zener Diode, 4.7V	AA

### RESISTORS

R4201	VRS-CY1JF682JY	J	6.8k 1/16W Metal Oxide	AA
R4202	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R4203	VRS-CY1JF682JY	J	6.8k 1/16W Metal Oxide	AA
R4204	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R4205	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA

### SWITCHES

S4201	QSW-P0614CEZZ	J	POWER	AF
SW4202	QSW-K0003AJZZ+	J	CH (Channel) (↙)	AB
SW4203	QSW-K0003AJZZ+	J	CH (Channel) (↖)	AB
SW4204	QSW-K0003AJZZ+	J	INPUT	AB
SW4205	QSW-K0003AJZZ+	J	MENU	AB
SW4206	QSW-K0003AJZZ+	J	VOL (Volume) (+)	AB
SW4207	QSW-K0003AJZZ+	J	VOL (Volume) (-)	AB

### MISCELLANEOUS PARTS

SC4201	QSOCN0596REZZ	J	Socket, 5-pin	AB
--------	---------------	---	---------------	----

Ref. No.	Part No.	★	Description	Code
----------	----------	---	-------------	------

## DUNTKD424FMF8 MAIN Unit

### TUNER

*NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.*

TU1301	VTU115VUA05AH	J	Tuner	AZ
--------	---------------	---	-------	----

### INTEGRATED CIRCUITS

IC1003	VHiPQ018EH1-1Y	J	PQ018EH01ZPH	AF
IC1004	RH-iXB150WJZZQ	J	R8A66605A02FP	BG
IC1202	VHiBUF12800-1Y	J	BUF12800AIPWPR	AL
IC1203	RH-iXA828WJZZY	J	BD9300FV-FE2	AH
IC1205	RH-iXA828WJZZY	J	BD9300FV-FE2	AH
IC1300	RH-iXB302WJN1Q	J	MSP3445G-QA-S1	AT
IC1301	VHiNJM2147M-1Y	J	NJM2147M-TE1	AF
IC1701	RH-iXB075WJZZQ	J	LR38875	AX
IC1702	VHiFSA4157+-1Y	J	FSA4157P6X	AE
IC2001	VHiPQ1L333M-1Y	J	PQ1L333M2SP	AD
IC2003	RH-iXA630WJN2Q	J	M30622MWPM-273F	AZ
IC2004	VHiPST3229N1EY	J	PST3229	AD
IC2005	VHiBR24L64F-1Y	J	BR24L64F-WE2	AK

### TRANSISTORS

Q1000	VSFMMT718/-1Y	J	FMMT718	AE
Q1002	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q1201	VSDTC144EE/-1Y	J	DTC144EE	AA
Q1202	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q1207	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q1209	VSDTC144EE/-1Y	J	DTC144EE	AA
Q1211	VSDTC144EE/-1Y	J	DTC144EE	AA
Q1213	VSDTC144EE/-1Y	J	DTC144EE	AA
Q1215	VSRSS040P03-1Y	J	RSS040P03	AE
Q1216	VSUML2N++++-1Y	J	UML2N	AC
Q1217	VSDTC144EE/-1Y	J	DTC144EE	AA
Q1218	VSFMMT718/-1Y	J	FMMT718	AE
Q1220	VSUML2N++++-1Y	J	UML2N	AC
Q1221	VSUML1N++++-1Y	J	UML1N	AC
Q1222	VSRHP020N06-1Y	J	RHP020N06	AD
Q1223	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q1224	VSDTC114EE/-1Y	J	DTC114EE	AB
Q1300	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q1301	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q1302	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q1303	VS2SB1695++-1Y	J	2SB1695	AC
Q1305	VSiMZ1A///-1Y	J	IMZ1A	AC
Q1306	VSiMZ1A///-1Y	J	IMZ1A	AC
Q2001	VSDTC144EE/-1Y	J	DTC144EE	AA
Q2002	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q2003	VSDTC144EE/-1Y	J	DTC144EE	AA

### DIODES

D1000	VHDDAN222//1Y	J	Diode	AA
D1201	VHDDAN222//1Y	J	Diode	AA
D1205	VHDRB521S30-1Y	J	Diode	AC
D1206	VHDHSU119//1Y	J	Diode	AB
D1207	VHDHSU119//1Y	J	Diode	AB
D1209	VHDRB051L40-1Y	J	Diode	AD
D1221	VHDRB051L40-1Y	J	Diode	AD
D1300	VHDDAN222//1Y	J	Diode	AA
D1301	RH-EX1394CEZZY	J	Zener Diode, 5.6V	AB
D1302	RH-EXA099WJZZY	J	Zener Diode, 24V	AB
D1303	VHDDAN222//1Y	J	Diode	AA

### CRYSTALS

X1000	RCRSCA097WJZZY	J	Crystal	AG
X1300	RCRSB0250GEZZ	J	Crystal, 18.432MHz	AG

### FILTER AND COILS

FL2001	RFILZA003WJPZY	J	Filter, 16MHz	AD
L1001	VPCNN220J2R9NY	J	Peaking 22μH	AB
L1201	VPCNN100J1R6NY	J	Peaking 10μH	AB
L1202	VPCNN470J5R4NY	J	Peaking 47μH	AB

Ref. No.	Part No.	★	Description	Code
<b>DUNTKD424FMF8</b> <b>MAIN Unit (Continued)</b>				
L1203	RCILPA154WJZZY	J	Coil	AE
L1205	RCILPA154WJZZY	J	Coil	AE
L1300	VPCNN101J7R7NY	J	Peaking 100µH	AB
L1301	VPCNN220J2R9NY	J	Peaking 22µH	AB
L1302	VPCNN4R7J1R2NY	J	Peaking 4.7µH	AB
<b>CAPACITORS</b>				
C1009	VCAAPC0JJ476MY	J	47 6.3V Electrolytic	AE
C1013	VCKYCY1AF105ZY	J	1 10V Ceramic	AC
C1015	VCEASX0JN476MY	J	47 6.3V Electrolytic	AC
C1016	VCKYCY1HB104KY	J	0.1 50V Ceramic	AA
C1017	VCKYCY1HB104KY	J	0.1 50V Ceramic	AA
C1018	VCKYCY1HB104KY	J	0.1 50V Ceramic	AA
C1019	VCKYCY1HB104KY	J	0.1 50V Ceramic	AA
C1020	VCKYCY1HB104KY	J	0.1 50V Ceramic	AA
C1021	VCKYCY1HB104KY	J	0.1 50V Ceramic	AA
C1022	VCKYCY1HB104KY	J	0.1 50V Ceramic	AA
C1023	RC-KZA101WJZZY	J	10 6.3V Ceramic	AC
C1024	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1025	RC-KZA101WJZZY	J	10 6.3V Ceramic	AC
C1026	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1027	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1028	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1029	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1030	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1031	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1032	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1033	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1034	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1035	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1036	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1037	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1038	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1039	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1040	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1041	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1042	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1043	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1044	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1045	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1046	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1047	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1048	RC-KZA101WJZZY	J	10 6.3V Ceramic	AC
C1049	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1050	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1051	RC-KZA101WJZZY	J	10 6.3V Ceramic	AC
C1052	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1053	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1054	VCEASY1CN477MY	J	470 16V Electrolytic	AD
C1055	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1056	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1057	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1058	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1059	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1060	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1061	VCCCCY1HH5R0CY	J	5p 50V Ceramic	AA
C1062	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1063	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1064	VCCCCY1HH5R0CY	J	5p 50V Ceramic	AA
C1065	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1066	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1067	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1068	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1069	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1070	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1071	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1072	VCKYCY1AB104KY	J	0.1 10V Ceramic	AB
C1073	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1074	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1075	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1076	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB

Ref. No.	Part No.	★	Description	Code
C1077	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1078	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1079	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1080	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1081	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1082	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1083	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1084	VCKYCY1AB333KY	J	0.033 10V Ceramic	AB
C1085	VCKYCY1HB103KY	J	0.01 50V Ceramic	AA
C1086	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1087	VCKYCY1HB103KY	J	0.01 50V Ceramic	AA
C1089	VCEASX0JN227MY	J	220 6.3V Electrolytic	AC
C1091	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C1092	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C1093	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C1201	RC-KZA110WJZZY	J	10 25V Ceramic	AD
C1202	VCKYCY1HB104KY	J	0.1 50V Ceramic	AA
C1203	VCEASX1EN476MY	J	47 25V Electrolytic	AC
C1204	VCEASX1HN475MY	J	4.7 50V Electrolytic	AC
C1216	RC-KZA041WJZZY	J	10 10V Ceramic	AC
C1217	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1221	VCEASX1HN225MY	J	2.2 50V Electrolytic	AB
C1222	VCEASX1CN106MY	J	10 16V Electrolytic	AC
C1224	VCEASX1CN107MY	J	100 16V Electrolytic	AC
C1225	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C1226	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C1227	VCKYCY1HB332KY	J	3300p 50V Ceramic	AA
C1228	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C1229	VCCCCY1HH330JY	J	33p 50V Ceramic	AA
C1230	VCCCCY1HH181JY	J	180p 50V Ceramic	AA
C1231	RC-KZA110WJZZY	J	10 25V Ceramic	AD
C1232	RC-KZA113WJZZY	J	4.7 16V Ceramic	AB
C1233	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1234	RC-KZA041WJZZY	J	10 10V Ceramic	AC
C1240	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C1241	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C1242	VCKYCY1HB332KY	J	3300p 50V Ceramic	AA
C1243	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C1244	VCCCCY1HH330JY	J	33p 50V Ceramic	AA
C1245	VCCCCY1HH181JY	J	180p 50V Ceramic	AA
C1247	RC-KZA110WJZZY	J	10 25V Ceramic	AD
C1248	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1249	VCKYCY1EB223KY	J	0.022 25V Ceramic	AA
C1250	RC-KZA109WJZZY	J	10 16V Ceramic	AC
C1251	RC-KZA110WJZZY	J	10 25V Ceramic	AD
C1270	RC-KZA108WJZZY	J	10 10V Ceramic	AC
C1271	RC-KZA110WJZZY	J	10 25V Ceramic	AD
C1272	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1273	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1274	RC-KZA101WJZZY	J	10 6.3V Ceramic	AC
C1277	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1278	RC-KZA109WJZZY	J	10 16V Ceramic	AC
C1300	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1301	VCEASX0JN107MY	J	100 6.3V Electrolytic	AC
C1302	VCCCCY1HH330JY	J	33p 50V Ceramic	AA
C1303	VCCCCY1HH5R0CY	J	5p 50V Ceramic	AA
C1304	VCCCCY1HH5R0CY	J	5p 50V Ceramic	AA
C1305	VCCCCY1HH330JY	J	33p 50V Ceramic	AA
C1306	VCKYCY1AB105KY	J	1 10V Ceramic	AB
C1307	VCCCCY1HH560JY	J	56p 50V Ceramic	AB
C1308	VCEASX1CN106MY	J	10 16V Electrolytic	AC
C1309	VCCCCY1HH560JY	J	56p 50V Ceramic	AB
C1311	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1312	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1313	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1315	VCKYCY1AB105KY	J	1 10V Ceramic	AB
C1316	VCKYCY1AB105KY	J	1 10V Ceramic	AB
C1320	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1321	VCKYCY1AB105KY	J	1 10V Ceramic	AB
C1322	VCEASX0JN107MY	J	100 6.3V Electrolytic	AC
C1325	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1326	VCEASX1HN335MY	J	3.3 50V Electrolytic	AB
C1327	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1328	VCKYCY1EB223KY	J	0.022 25V Ceramic	AA
C1329	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code				
<b>DUNTKD424FMF8</b> <b>MAIN Unit (Continued)</b>													
C1330	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA	R1031	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1331	VCKYCY1EB223KY	J	0.022	25V	Ceramic	AA	R1032	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1332	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1033	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1333	VCEASX1CN107MY	J	100	16V	Electrolytic	AC	R1034	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1334	VCEASX1CN106MY	J	10	16V	Electrolytic	AC	R1035	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1336	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC	R1036	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1337	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC	R1037	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1338	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB	R1040	VRS-CY1JF473JY	J	47k	1/16W	Metal Oxide	AA
C1339	VCEASX1CN107MY	J	100	16V	Electrolytic	AC	R1042	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1340	VCEASX1HN105MY	J	1	50V	Electrolytic	AB	R1043	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
C1341	VCAACP0J1226MY	J	22	6.3V	Electrolytic	AE	R1044	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
C1342	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1046	VRS-CJ1JF100JY	J	10	1/16W	Metal Oxide	AA
C1343	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1047	VRS-CH1JF103JY	J	10k	1/16W	Metal Oxide	AA
C1345	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA	R1049	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
C1347	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1050	VRS-CY1JF560JY	J	56	1/16W	Metal Oxide	AA
C1349	RC-KZ0071TAZZY	J	2.2	6.3V	Ceramic	AD	R1051	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1350	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1052	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
C1351	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1053	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
C1352	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1054	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
C1701	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1055	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
C1702	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1056	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
C1703	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1057	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
C1704	RC-KZA108WJZZY	J	10	10V	Ceramic	AC	R1058	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
C1705	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1059	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
C1706	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1060	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
C1707	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1061	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
C1708	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1062	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
C1709	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1063	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
C1710	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1064	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
C1711	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1065	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
C1712	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1066	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
C1713	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1067	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
C1714	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1068	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
C1715	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1069	VRS-CY1JF270JY	J	27	1/16W	Metal Oxide	AA
C1716	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1070	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
C1717	RC-KZA108WJZZY	J	10	10V	Ceramic	AC	R1071	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
C1718	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1072	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
C1719	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1073	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
C1720	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1074	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
C1721	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1075	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1722	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1076	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1723	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA	R1080	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1724	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA	R1081	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1725	RC-KZA108WJZZY	J	10	10V	Ceramic	AC	R1082	VRS-TV1JD000JY	J	0	1/10W	Metal Oxide	AA
C1726	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1085	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
C1727	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1087	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1728	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1091	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1729	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1093	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C1730	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	R1096	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C2002	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1097	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C2003	VCEASX0JN226MY	J	22	6.3V	Electrolytic	AB	R1098	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C2004	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1201	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
C2005	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1202	VRS-TX2HF102JY	J	1k	1/2W	Metal Oxide	AB
C2007	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA	R1203	VRS-CY1JF333JY	J	33k	1/16W	Metal Oxide	AA
C2009	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA	R1204	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
C2010	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1205	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
C2011	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB	R1206	VRS-TW2HF472JY	J	4.7k	1/2W	Metal Oxide	AA
C2014	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC	R1207	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
C2015	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1208	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
C2016	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA	R1209	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
C2017	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1210	VRS-CY1JF683JY	J	68k	1/16W	Metal Oxide	AA
C2018	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	R1211	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
<b>RESISTORS</b>													
R1002	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA	R1212	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R1015	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA	R1213	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R1017	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA	R1219	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R1018	VRS-CY1JF473JY	J	47k	1/16W	Metal Oxide	AA	R1225	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R1019	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA	R1226	VRS-TW2HF330JY	J	33	1/2W	Metal Oxide	AA
R1028	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA	R1227	VRS-TW2ED103JY	J	10k	1/4W	Metal Oxide	AA
R1030	VRS-TV1JD102JY	J	1k	1/10W	Metal Oxide	AA	R1228	VRS-CY1JF332JY	J	3.3k	1/16W	Metal Oxide	AA
							R1234	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
							R1236	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
							R1237	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
							R1238	VRS-CY1JF104FY	J	100k	1/16W	Metal Oxide	AA
							R1239	VRS-CY1JF104FY	J	100k	1/16W	Metal Oxide	AA
							R1240	VRS-CY1JF273JY	J	27k	1/16W	Metal Oxide	AA

## **RESISTORS**

R1002	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R1015	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R1017	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R1018	VRS-CY1JF473JY	J	47k	1/16W	Metal Oxide	AA
R1019	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R1028	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R1030	VRS-TV1JD102JY	J	1k	1/10W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
<b>DUNTKD424FMF8</b>				
<b>MAIN Unit (Continued)</b>				
R1241	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
R1242	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA
R1243	VRS-CY1JF203FY	J 20k	1/16W Metal Oxide	AA
R1244	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1245	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA
R1246	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R1247	VRS-CY1JF511JY	J 510	1/16W Metal Oxide	AA
R1248	VRS-CY1JF511JY	J 510	1/16W Metal Oxide	AA
R1251	VRS-TV1JD000JY	J 0	1/10W Metal Oxide	AA
R1252	VRS-TV1JD000JY	J 0	1/10W Metal Oxide	AA
R1254	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1255	VRS-CY1JF272JY	J 2.7k	1/16W Metal Oxide	AA
R1256	VRS-TQ2BD103JY	J 10k	1/8W Metal Oxide	AA
R1260	VRS-TV1JD2R7JY	J 2.7	1/10W Metal Oxide	AA
R1262	VRS-TV1JD2R7JY	J 2.7	1/10W Metal Oxide	AA
R1263	VRS-CY1JF104FY	J 100k	1/16W Metal Oxide	AA
R1264	VRS-CY1JF104FY	J 100k	1/16W Metal Oxide	AA
R1265	VRS-CY1JF273JY	J 27k	1/16W Metal Oxide	AA
R1266	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
R1267	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA
R1268	VRS-CY1JF203FY	J 20k	1/16W Metal Oxide	AA
R1269	VRS-CY1JF564FY	J 560k	1/16W Metal Oxide	AA
R1270	VRS-CY1JF204FY	J 200k	1/16W Metal Oxide	AA
R1271	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1272	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA
R1273	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R1274	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R1275	VRS-CY1JF331JY	J 330	1/16W Metal Oxide	AA
R1276	VRS-CY1JF511JY	J 510	1/16W Metal Oxide	AA
R1277	VRS-CY1JF303JY	J 30k	1/16W Metal Oxide	AA
R1280	VRS-CY1JF272JY	J 2.7k	1/16W Metal Oxide	AA
R1281	VRS-TW2ED182JY	J 1.8k	1/4W Metal Oxide	AA
R1282	VRS-TQ2BD332JY	J 3.3k	1/8W Metal Oxide	AB
R1283	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1300	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1301	VRS-CY1JF153JY	J 15k	1/16W Metal Oxide	AA
R1302	VRS-CY1JF332JY	J 3.3k	1/16W Metal Oxide	AA
R1303	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA
R1304	VRS-CY1JF152JY	J 1.5k	1/16W Metal Oxide	AA
R1305	VRS-CY1JF331JY	J 330	1/16W Metal Oxide	AA
R1306	VRS-CJ1JF101JY	J 100	1/16W Metal Oxide	AA
R1307	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1308	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R1309	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1310	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1311	VRS-CY1JF331JY	J 330	1/16W Metal Oxide	AA
R1312	VRS-TV1JD103JY	J 10k	1/10W Metal Oxide	AA
R1314	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1315	VRS-CY1JF303FY	J 30k	1/16W Metal Oxide	AA
R1316	VRS-TQ2BD000JY	J 0	1/8W Metal Oxide	AA
R1318	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R1319	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R1320	VRS-CY1JF393FY	J 39k	1/16W Metal Oxide	AA
R1321	VRS-CY1JF563FY	J 56k	1/16W Metal Oxide	AA
R1322	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R1323	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1325	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R1326	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1327	VRS-CY1JF152JY	J 1.5k	1/16W Metal Oxide	AA
R1329	VRS-CY1JF561FY	J 560	1/16W Metal Oxide	AA
R1331	VRS-CY1JF102FY	J 1k	1/16W Metal Oxide	AA
R1332	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R1333	VRS-CY1JF331JY	J 330	1/16W Metal Oxide	AA
R1334	VRS-TV1JD102JY	J 1k	1/10W Metal Oxide	AA
R1335	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R1336	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1337	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1338	VRS-CY1JF391JY	J 390	1/16W Metal Oxide	AA
R1339	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1341	VRS-CY1JF223FY	J 22k	1/16W Metal Oxide	AA
R1342	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R1343	VRS-CY1JF102FY	J 1k	1/16W Metal Oxide	AA
R1344	VRS-CY1JF183FY	J 18k	1/16W Metal Oxide	AA
R1346	VRS-CY1JF682FY	J 6.8k	1/16W Metal Oxide	AA
R1705	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1706	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1707	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1708	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1709	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
R1710	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA
R1711	VRS-CY1JF270JY	J 27	1/16W Metal Oxide	AA
R1714	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
R1715	VRS-CJ1JF270JY	J 27	1/16W Metal Oxide	AA
R1720	VRS-TW2HF361JY	J 360	1/2W Metal Oxide	AA
R2001	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA
R2003	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R2004	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R2005	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2006	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2007	VRS-CJ1JF223JY	J 22k	1/16W Metal Oxide	AA
R2008	VRS-CJ1JF102JY	J 1k	1/16W Metal Oxide	AA
R2009	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2011	VRS-CY1JF222JY	J 2.2k	1/16W Metal Oxide	AA
R2012	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA
R2013	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2017	VRS-CJ1JF223JY	J 22k	1/16W Metal Oxide	AA
R2018	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2019	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R2020	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R2021	VRS-CY1JF153JY	J 15k	1/16W Metal Oxide	AA
R2022	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R2023	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2026	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2027	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA
R2028	VRS-CY1JF512JY	J 5.1k	1/16W Metal Oxide	AA
R2030	VRS-CY1JF472JY	J 4.7k	1/16W Metal Oxide	AA
R2031	VRS-CJ1JF101JY	J 100	1/16W Metal Oxide	AA
R2033	VRS-CY1JF680JY	J 68	1/16W Metal Oxide	AA
R2034	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2035	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2036	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2037	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2038	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2039	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2040	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2041	VRS-CY1JF682JY	J 6.8k	1/16W Metal Oxide	AA
R2044	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2045	VRS-CY1JF682JY	J 6.8k	1/16W Metal Oxide	AA
R2048	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA
R2049	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2052	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2054	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2055	VRS-CJ1JF101JY	J 100	1/16W Metal Oxide	AA
R2056	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2057	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R2058	VRS-CJ1JF101JY	J 100	1/16W Metal Oxide	AA
R2059	VRS-CJ1JF153JY	J 15k	1/16W Metal Oxide	AA
R2060	VRS-CH1JF680JY	J 68	1/16W Metal Oxide	AA
R2061	VRS-CH1JF101JY	J 100	1/16W Metal Oxide	AA
R2062	VRS-CJ1JF101JY	J 100	1/16W Metal Oxide	AA
R2063	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA
R2065	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2066	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2067	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2068	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2071	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2073	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2083	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA

**MISCELLANEOUS PARTS**

FB1000	RBLN-0210TAZZY	J	Ferrite Bead	AB
FB1003	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1005	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1006	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1007	RBLN-0083GEZZY	J	Ferrite Bead	AB
FB1300	RBLN-0035TAZZY	J	Ferrite Bead	AB

Ref. No.	Part No.	★	Description	Code
----------	----------	---	-------------	------

## DUNTKD424FMF8 MAIN Unit (Continued)

FB1701	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1702	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1703	RBLN-0006TAZZY	J	Ferrite Bead	AB
P2002	QPLGNA111WJZZ	J	Plug, 6-pin	AB
SC1201	QCNCWA010WJZZYJ	Connector, 15-pin	AE	
SC1701	QSOCNA222WJZZYJ	Socket, 80-pin	AH	
SC2001	QCNCWA010WJZZYJ	Connector, 15-pin	AE	
SC2002	QCNCWA251WJZZYJ	Connector, 23-pin	AH	
SC2003	QSOCN0596REZZ	Socket, 5-pin	AB	
LUG2001	QLUGHAG006WJZZY	J	Lug	AC
LUG2002	QLUGHAG006WJZZY	J	Lug	AC

## DUNTKD425WEF8 R/C, LED Unit

### TRANSISTORS

Q4101	VSKRC104S//1Y	J	KRC104S	AA
Q4102	VSKRC104S//1Y	J	KRC104S	AA
Q4103	VSKRC104S//1Y	J	KRC104S	AA
Q4105	VSKRC104S//1Y	J	KRC104S	AA

### DIODES

D4101	RH-PXA014WJZZ+	J	POWER Indicator	AD
D4102	RH-PXA014WJZZ+	J	SLEEP TIMER Indicator	AD
D4104	RH-EX0610GEZZY	J	Zener Diode, 4.7V	AA
D4105	RH-EX0610GEZZY	J	Zener Diode, 4.7V	AA
D4106	RH-EX0610GEZZY	J	Zener Diode, 4.7V	AA
D4109	RH-EX0610GEZZY	J	Zener Diode, 4.7V	AA

### CAPACITOR

C4101	VCESKA1CM106M+	J	10 16V Electrolytic	AB
-------	----------------	---	---------------------	----

### RESISTORS

R4101	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R4102	VRS-CY1JF681JY	J	680 1/16W Metal Oxide	AA
R4103	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R4105	VRS-CY1JF681JY	J	680 1/16W Metal Oxide	AA
R4106	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA

### MISCELLANEOUS PARTS

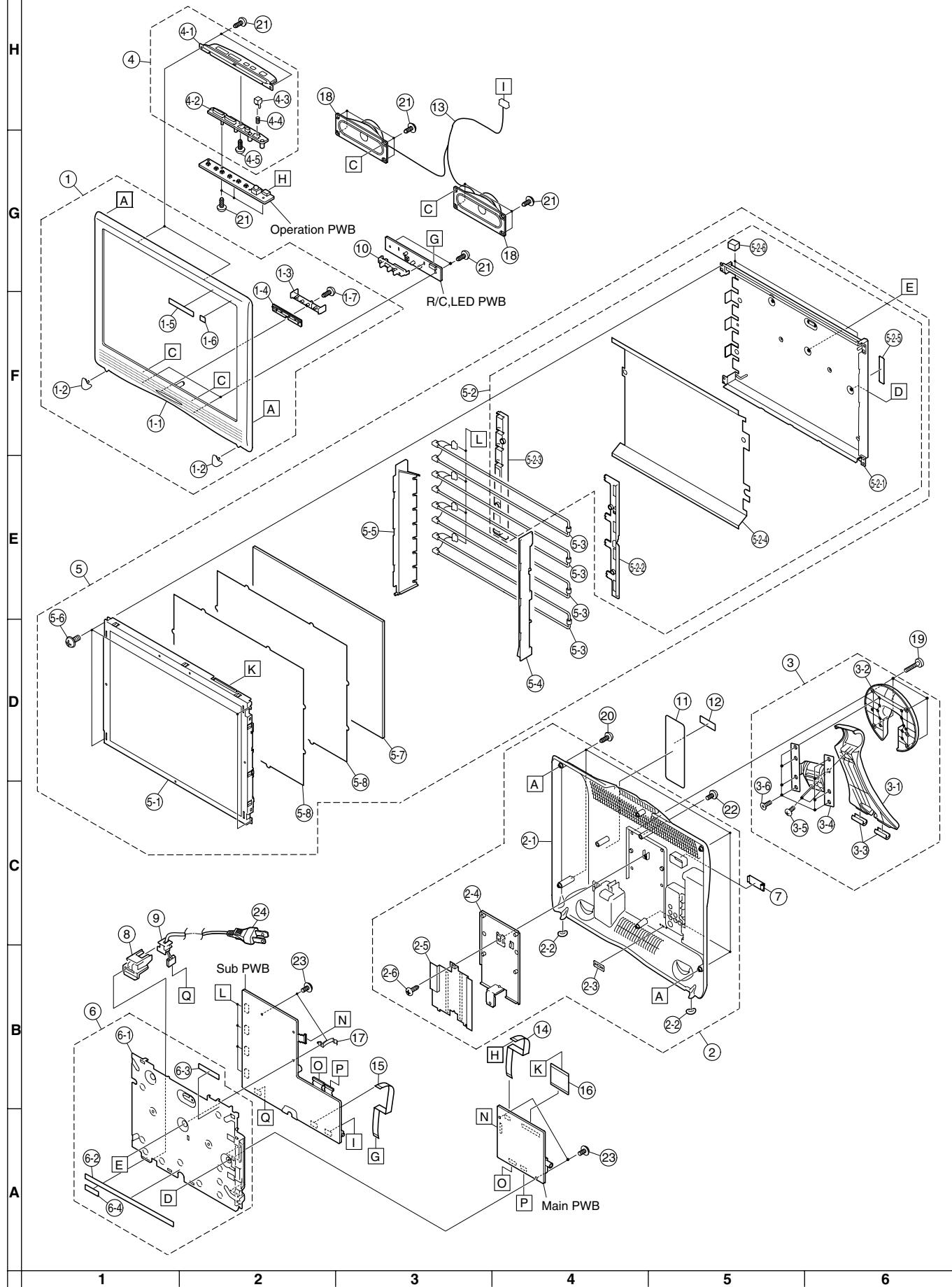
SC4101	QSOCN0896REZZ	J	Socket, 8-pin	AC
RMC4101	RRMCUA034WJQZ	J	Remote Sensor	AE
	LHLDZA642WJZZ	J	LED Holder	AE

Ref. No.	Part No.	★	Description	Code
----------	----------	---	-------------	------

## CABINET AND MECHANICAL PARTS

1	CCABA755WJ02	J	Cabinet A Ass'y	BA
1-1	<i>Not Available</i>	-	Cabinet A	—
1-2	HDECQA478WJSA	J	Leg Cover, x2	AC
1-3	HDECQA556WJSA	J	R/C,LED Cover	AE
1-4	HDECQA557WJKA	J	LED Cover	AF
1-5	TLABZA459WJZZ	J	"EnergyStar" Label	AD
1-6	TLABZA635WJZZ	J	"EnergyStar" Label	AC
1-7	XEBSN30P08000	J	Screw, x1	AA
2	CCABBA723WJ01	J	Cabinet B Ass'y	BE
2-1	<i>Not Available</i>	-	Cabinet B	—
2-2	GLEGGA042WJZZ	J	Rubber Leg, x2	AB
2-3	LANGFA085WJFW	J	Kensington Angle	AC
2-4	LANGTA159WJFW	J	Reinforcement Angle	AP
2-5	PZETKA172WJZZ	J	Insulating Sheet, x1	AM
2-6	XEBSN30P08000	J	Screw, x1	AA
3	CDAi-A225WJ02	J	Stand Ass'y	AY
3-1	GDAi-A225WJKA	J	Stand, Base	AN
3-2	GCOVAB023WJSA	J	Stand Cover	AN
3-3	GLEGGA041WJSA	J	Rubber Leg, x2	AE
3-4	MHNG-A130WJZZ	J	Tilt Hinge	AV
3-5	XEBS940P10000	J	Screw, x3	AB
3-6	XESSN40P10000	J	Screw, x8	AB
4	CCOVAB494WJ01	J	Top Cover Ass'y	AP
4-1	<i>Not Available</i>	-	Top Cover	—
4-2	JBTN-A353WJSA	J	Operation Button	AK
4-3	JBTN-A354WJSA	J	Power Button	AF
4-4	MSPRCA014WJFW	J	Spring, for Power Button	AB
4-5	XEBSN30P08000	J	Screw, x1	AA
5	R1LK130V3GZ1ZZ	J	13" LCD Panel Module Unit	DA
5-1	<i>Not Available</i>	-	13" LCD Panel Unit	—
5-2	<i>Not Available</i>	-	Back Shield Ass'y	—
5-2-1	PSLDMA542WJFW	J	Back Shield	AR
5-2-2	LHLDZA429WJKZ	J	Lamp Holder-R(Bottom)	AF
5-2-3	LHLDZA435WJKZ	J	Lamp Holder-L(Bottom)	AF
5-2-4	PSHEPA229WJZZ	J	Reflection Sheet	AK
5-2-5	TCAUZA031WJZZ	J	Caution Label	AB
5-2-6	PMLT-A149WJZZ	J	Light Shielding Spacer, x2	AB
△ 5-3	KLMP-A113WJ01	J	Lamp Unit, x4	AZ
5-4	LHLDZA433WJKZ	J	Lamp Holder-R(Top)	AH
5-5	LHLDZA434WJKZ	J	Lamp Holder-L(Top)	AH
5-6	LX-BZA084WJF7	J	Screw, x4	AA
5-7	PCOVUA047WJZZ	J	Diffusion Plate, x1	AT
5-8	PSHEPA230WJZZ	J	Diffusion Sheet, x2	AH
6	CCHSMA184WJ04	J	Chassis Frame Ass'y	AF
6-1	<i>Not Available</i>	-	Chassis Frame	—
6-2	PSPAHA552WJ00	J	Spacer, x1	AD
6-3	PSPAHA554WJ00	J	Spacer, x1	AB
6-4	PSPAHA556WJ00	J	Spacer, x1	AB
7	GCOVAA984WJKA	J	Bass-Cone Cover	AF
8	GCOVHA069WJKA	J	AC Holder	AE
9	LHLDKA005WJK0	J	AC Cord Holder	AD
10	LHLDZA642WJZZ	J	LED Holder	AE
11	TLABMC151WJSA	J	Model Label	AD
12	<i>Not Available</i>	-	Serial No. Label	—
13	QCNW-D115WJQZ	J	Connecting Cord	AH
14	QCNW-D362WJQZ	J	Connecting Cord	AD
15	QCNW-E297WJQZ	J	Connecting Cord	AF
16	QPWBMC876WJPZ	J	Connecting Cord	AR
17	QEARPAB132WJFW	J	Grounding Part	AD
18	VSP7530PB678B	J	Speaker, x2	AL
19	LX-BZ3442CEF9	J	Screw, x4	AB
20	XEBS930P14000	J	Screw, x5	AA
21	XEBSN30P08000	J	Screw, x15	AA

# CABINET AND MECHANICAL PARTS



Ref. No.	Part No.	★	Description	Code
<b>CABINET AND MECHANICAL PARTS (Continued)</b>				
22	XHBS830P10000	J	Screw, x1	AA
23	XHPS730P08WS0	J	Screw, x4	AA
△ 24	QACCDA048WJPZ	J	AC Cord	AM

## CABINET AND MECHANICAL PARTS (Continued)

Ref. No.	Part No.	★	Description	Code
<b>CABINET AND MECHANICAL PARTS (Continued)</b>				
22	XHBS830P10000	J	Screw, x1	AA
23	XHPS730P08WS0	J	Screw, x4	AA
△ 24	QACCDA048WJPZ	J	AC Cord	AM

## CABINET AND MECHANICAL PARTS (Continued)

Ref. No.	Part No.	★	Description	Code
<b>CABINET AND MECHANICAL PARTS (Continued)</b>				
22	XHBS830P10000	J	Screw, x1	AA
23	XHPS730P08WS0	J	Screw, x4	AA
△ 24	QACCDA048WJPZ	J	AC Cord	AM

Ref. No.	Part No.	★	Description	Code
<b>SUPPLIED ACCESSORIES</b>				
X1	RRMCGA457WJSA	J	Wireless Remote Control	AQ
X2	TCADEA141WJZZ	J	Registration Card	AC
X3	TINS-C351WJZZ	J	Operation Manual (English)	AE
X4	TINS-C362WJZZ	J	Operation Manual (French)	AE
X5	TINS-C363WJZZ	J	Operation Manual (Spanish)	AE
X6	Not Available		"AAA" size Battery, x2	—

## SUPPLIED ACCESSORIES

Ref. No.	Part No.	★	Description	Code
X1	RRMCGA457WJSA	J	Wireless Remote Control	AQ
X2	TCADEA141WJZZ	J	Registration Card	AC
X3	TINS-C351WJZZ	J	Operation Manual (English)	AE
X4	TINS-C362WJZZ	J	Operation Manual (French)	AE
X5	TINS-C363WJZZ	J	Operation Manual (Spanish)	AE
X6	Not Available		"AAA" size Battery, x2	—

Ref. No.	Part No.	★	Description	Code
<b>PACKING PARTS (NOT REPLACEMENT ITEM)</b>				
S1	SPAKCC558WJZZ	—	Packing Case	—
S2	SPAKPA615WJZZ	—	Wrapping Paper	—
S3	SPAKXA948WJZZ	—	Buffer Material	—
S4	SSAKA0001SEZZ	—	Polyethylene Bag	—
S5	TLABKA025WJZZ	—	Carton Label	—

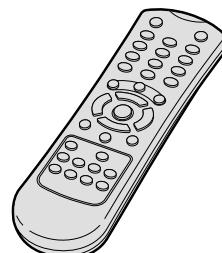
Ref. No.	Part No.	★	Description	Code
S1	SPAKCC558WJZZ	—	Packing Case	—
S2	SPAKPA615WJZZ	—	Wrapping Paper	—
S3	SPAKXA948WJZZ	—	Buffer Material	—
S4	SSAKA0001SEZZ	—	Polyethylene Bag	—
S5	TLABKA025WJZZ	—	Carton Label	—

Ref. No.	Part No.	★	Description	Code
<b>SERVICE JIGS (USE FOR SERVICING)</b>				
QCNW-C458WJQZ	J	Extension Cable, 80-pin	AM	
QCNW-C461WJQZ	J	Extension Cable, 15-pin, x2	CD	
QCNW-D402WJQZ	J	Extension Cable, 23-pin	CE	
QCNW-D444WJQZ	J	Extension Cable, 5-pin	AQ	
QCNW-D445WJQZ	J	Extension Cable, 8-pin	AQ	
JiGiNF-001	J	Interface Jig	CC	

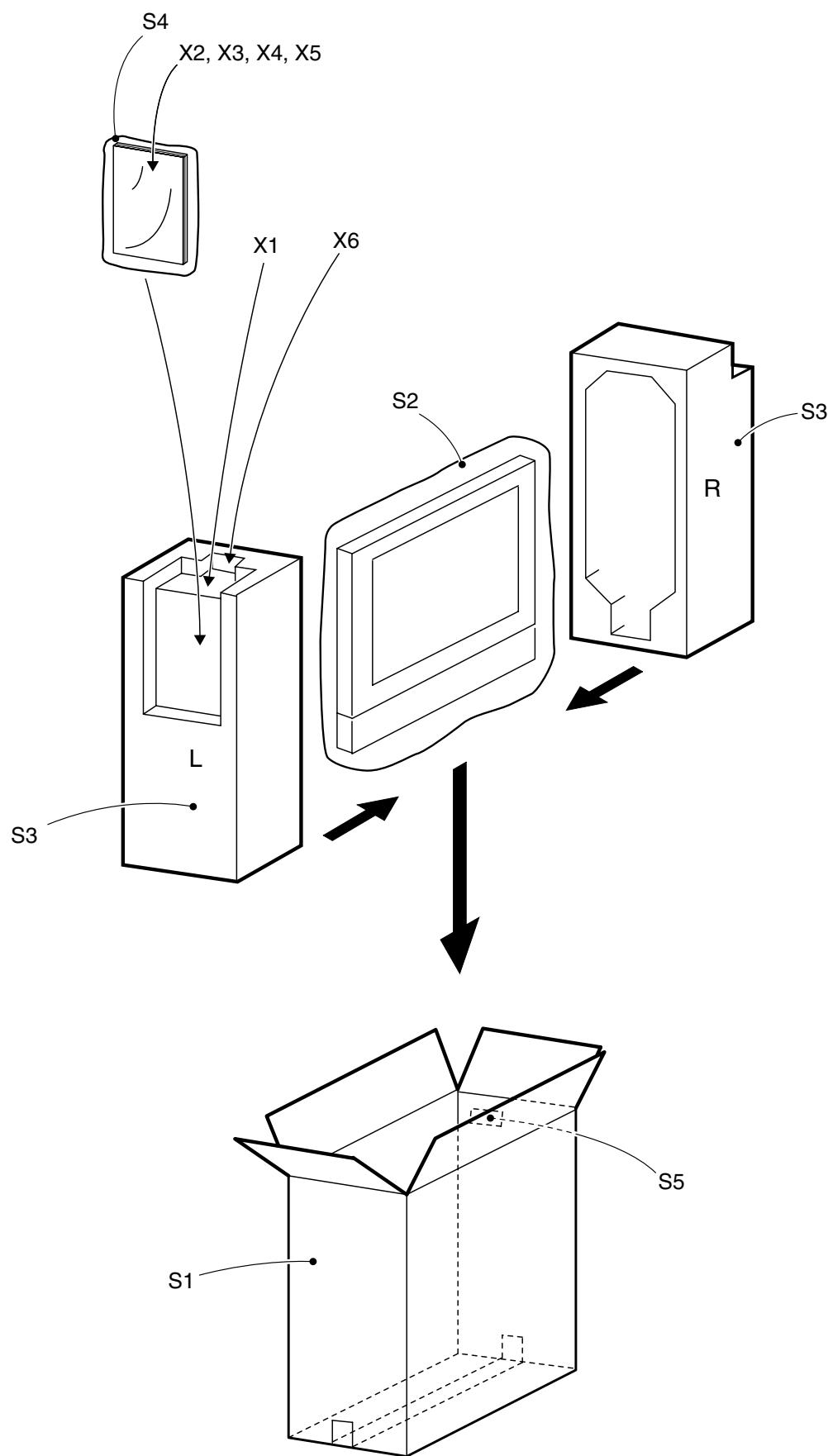
Ref. No.	Part No.	★	Description	Code
QCNW-C458WJQZ	J	Extension Cable, 80-pin	AM	
QCNW-C461WJQZ	J	Extension Cable, 15-pin, x2	CD	
QCNW-D402WJQZ	J	Extension Cable, 23-pin	CE	
QCNW-D444WJQZ	J	Extension Cable, 5-pin	AQ	
QCNW-D445WJQZ	J	Extension Cable, 8-pin	AQ	
JiGiNF-001	J	Interface Jig	CC	

## Supplied Accessories

Wireless remote control	"AAA" size batteries (x2)
X1	X6



## PACKING OF THE SET



# SHARP

**COPYRIGHT © 2006 BY SHARP CORPORATION  
ALL RIGHTS RESERVED.**

No part of this publication may be reproduced,  
stored in a retrieval system, or transmitted in  
any form or by any means, electronic, mechanical,  
photocopying, recording, or otherwise, without  
prior written permission of the publisher.

NE0003-S  
Apr. 2006 Printed in China

Design and Production Information
Design : NSEC
Production : NSEC

NSEC

SHARP CORPORATION  
RC Center, NSEC  
318 YaoXin Road  
Economic & Technical Development Zone  
Nanjing, China