

AV RECEIVER

RX-V371/HTR-3064

SERVICE MANUAL

When the following parts are replaced, the model name and the destination MUST be written to the back-up IC (EEPROM: IC222 on DIGITAL P.C.B.) to have proper operation. (See No. 22 SOFT SWITCH menu of the self-diagnostic function.)

- DIGITAL P.C.B.
- EEPROM: IC222 on DIGITAL P.C.B.

IMPORTANT NOTICE

This manual has been provided for the use of authorized YAMAHA Retailers and their service personnel.

It has been assumed that basic service procedures inherent to the industry, and more specifically YAMAHA Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components, and failure of the product to perform as specified. For these reasons, we advise all YAMAHA product owners that any service required should be performed by an authorized YAMAHA Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of YAMAHA are continually striving to improve YAMAHA products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

IMPORTANT: Turn the unit OFF during disassembly and part replacement. Recheck all work before you apply power to the unit.

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This Service Manual uses recycled paper.



■ TO SERVICE PERSONNEL

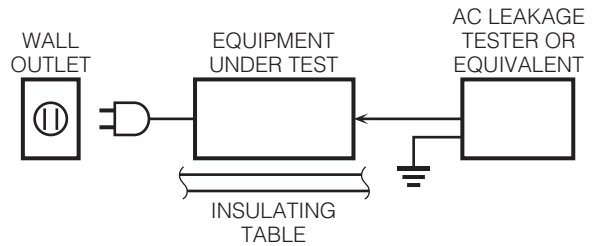
1. Critical Components Information

Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.

2. Leakage Current Measurement (For 120V Models Only)

When service has been completed, it is imperative to verify that all exposed conductive surfaces are properly insulated from supply circuits.

- Meter impedance should be equivalent to 1500 ohms shunted by 0.15 μ F.



- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.



For U model "CAUTION"

"F1501: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 6A, 125V FUSE."

For C model CAUTION

F1501: REPLACE WITH SAME TYPE 6A, 125V FUSE.

ATTENTION

F1501: UTILISER UN FUSIBLE DE RECHANGE DE MÊME TYPE DE 6A, 125V.

WARNING: CHEMICAL CONTENT NOTICE!

This product contains chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

About lead free solder

All of the P.C.B.s installed in this unit and solder joints are soldered using the lead free solder.

Among some types of lead free solder currently available, it is recommended to use one of the following types for the repair work.

- Sn + Ag + Cu (tin + silver + copper)
- Sn + Cu (tin + copper)
- Sn + Zn + Bi (tin + zinc + bismuth)

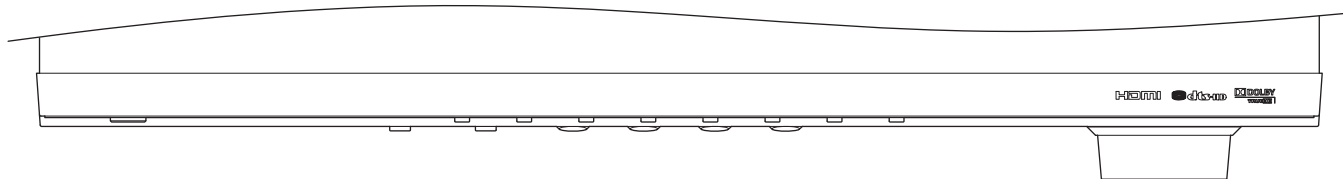
Caution:

As the melting point temperature of the lead free solder is about 30°C to 40°C (50°F to 70°F) higher than that of the lead solder, be sure to use a soldering iron suitable to each solder.

FRONT PANELS

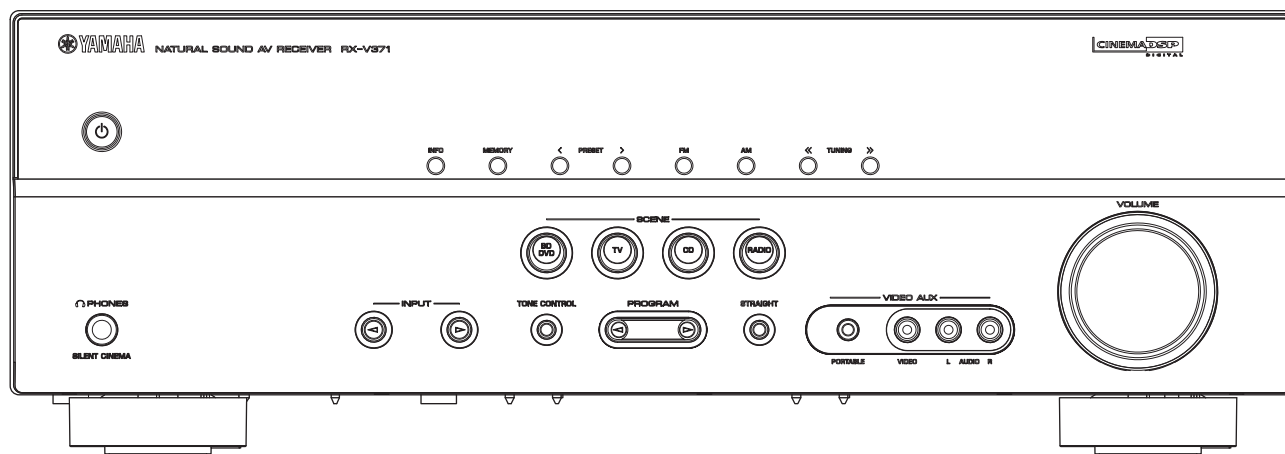
Top view

RX-V371 / HTR-3064

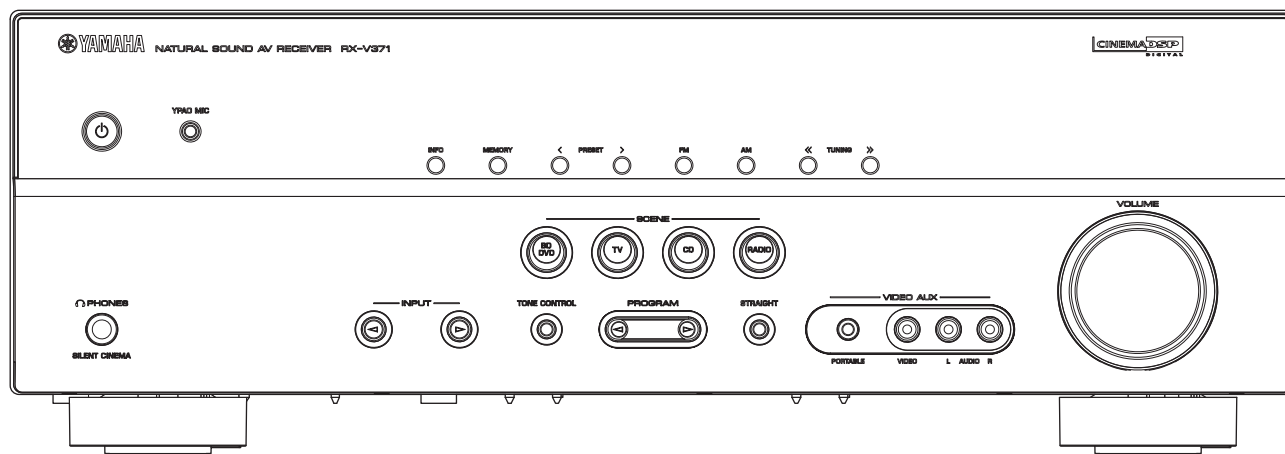


Front view

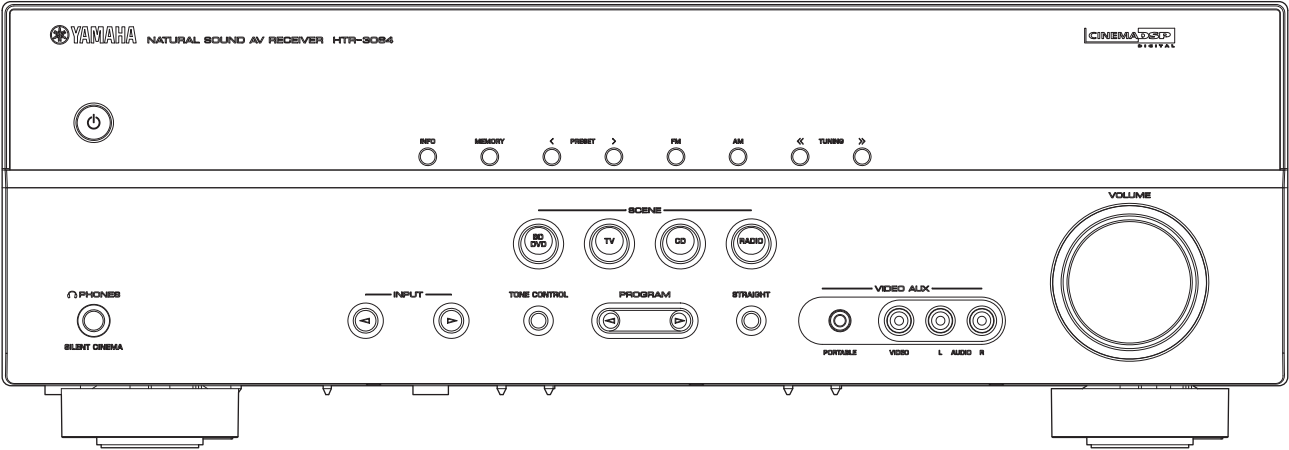
RX-V371 (U, C, T models)



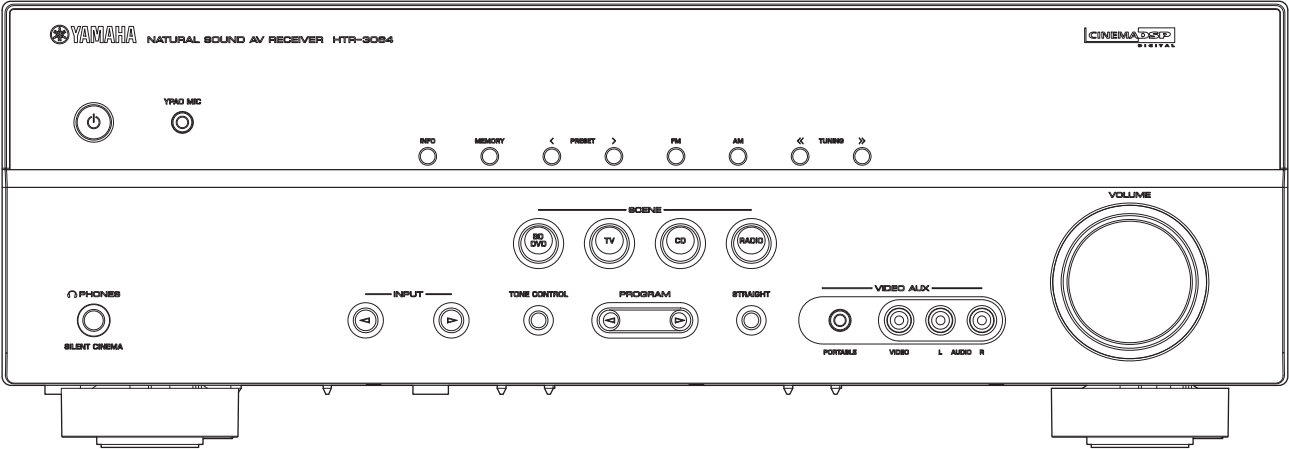
RX-V371 (R, K, A, B, G, F, L, S models)



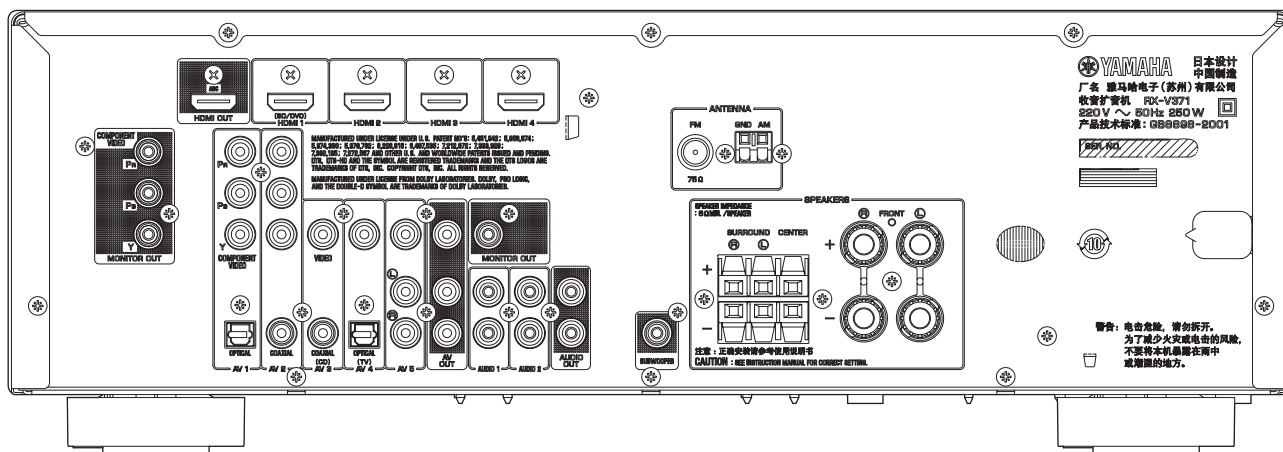
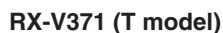
HTR-3064 (U, C, T models)



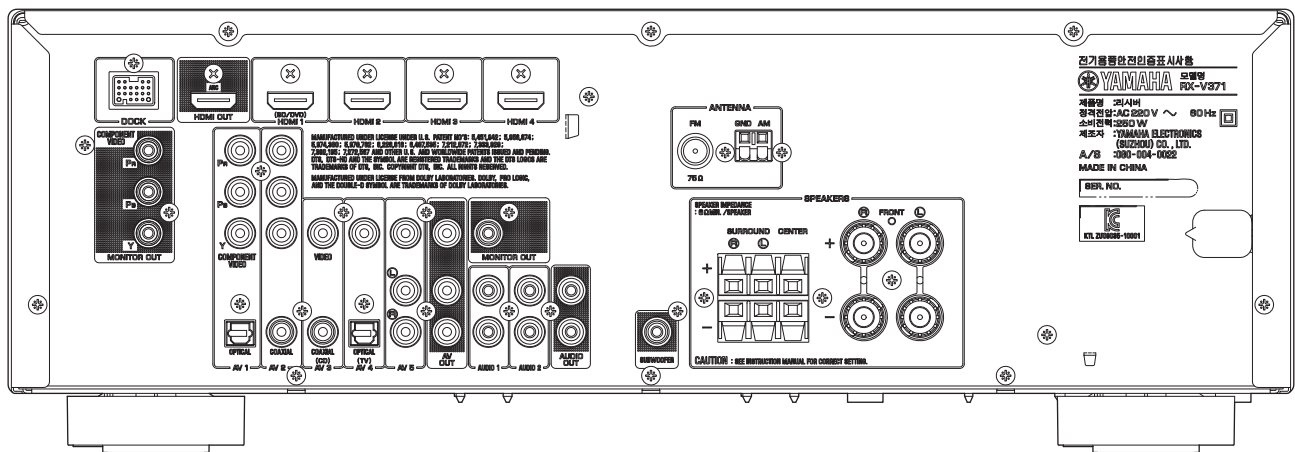
HTR-3064 (R, K, A, G, F, L, S models)



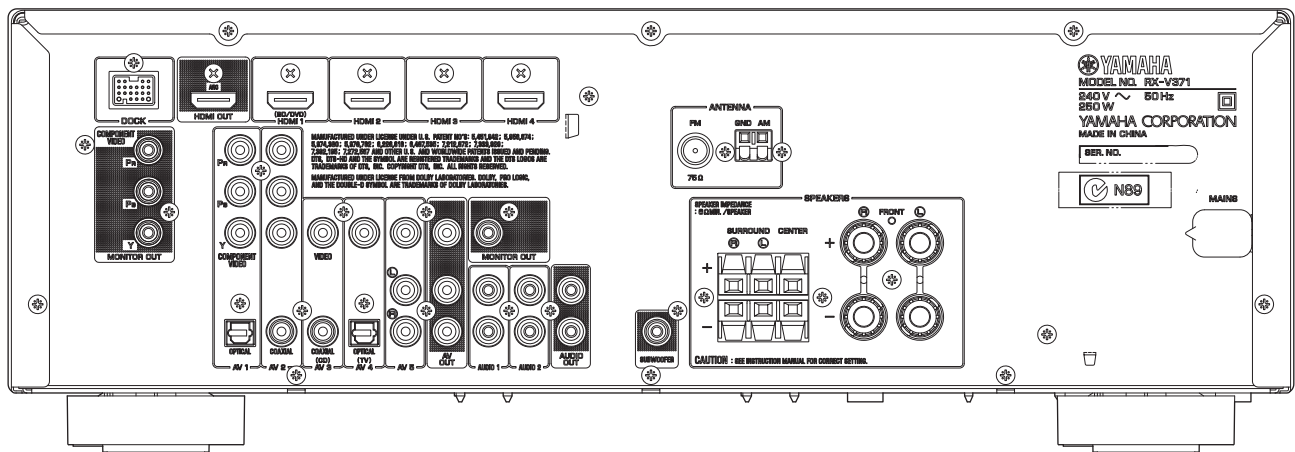
RX-V371 (U, C models)



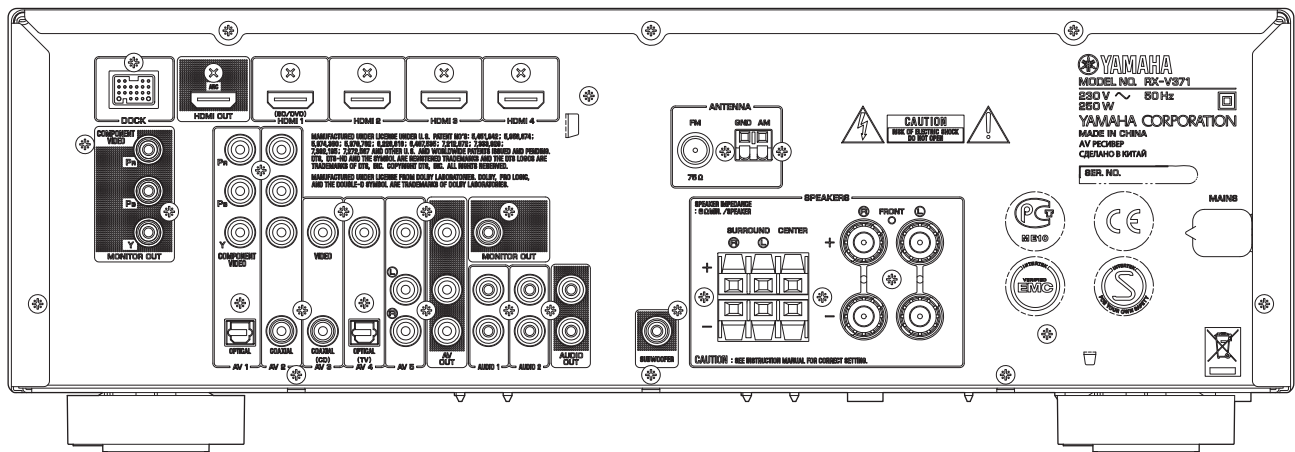
RX-V371 (K model)



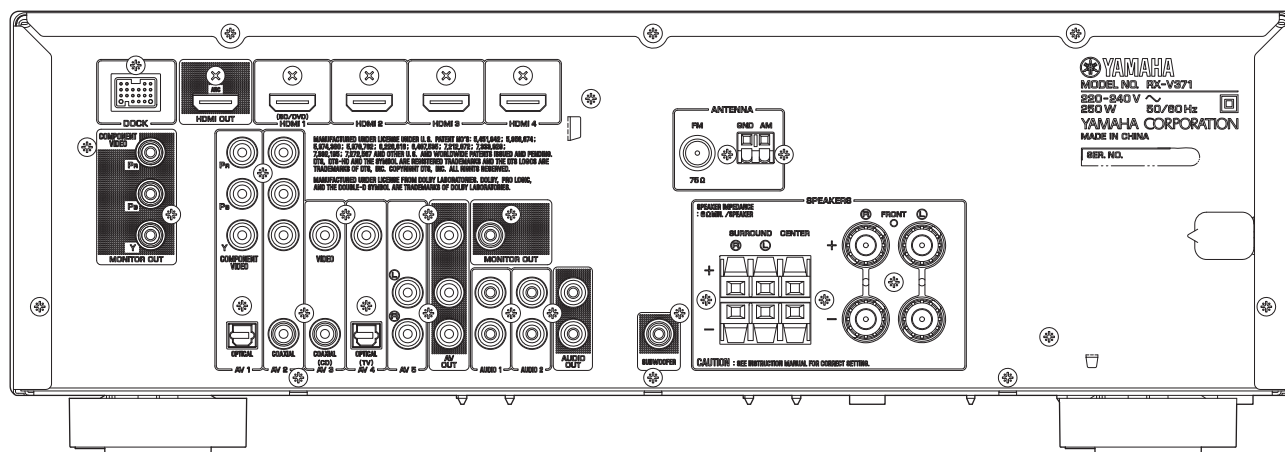
RX-V371 (A model)



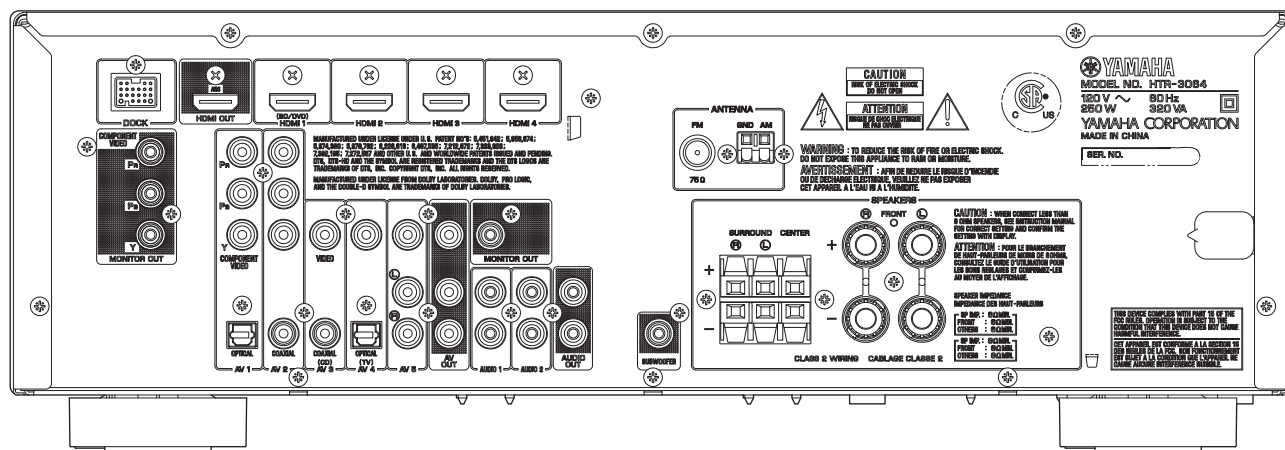
RX-V371 (B, G, F models)



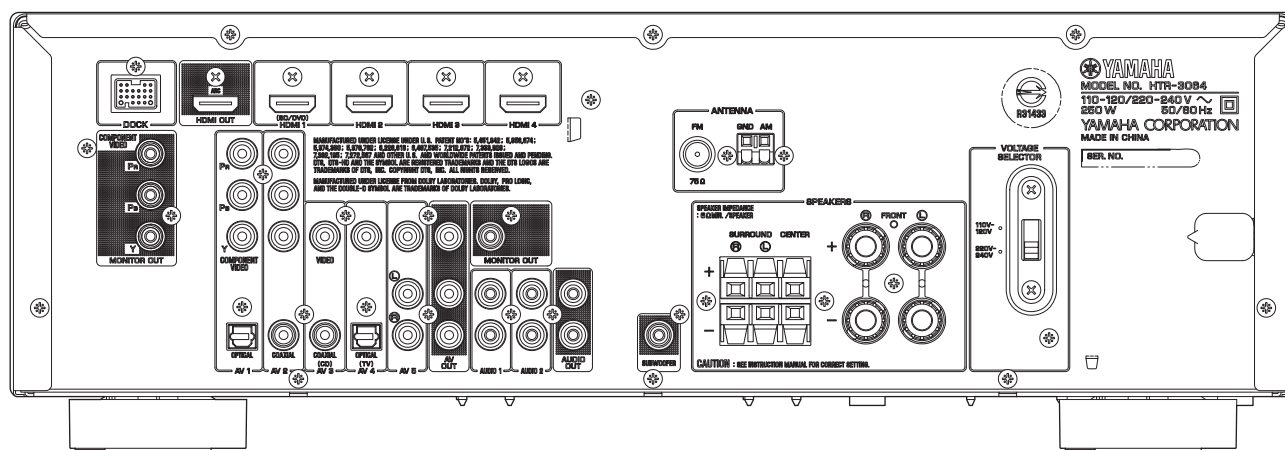
RX-V371 (L model)



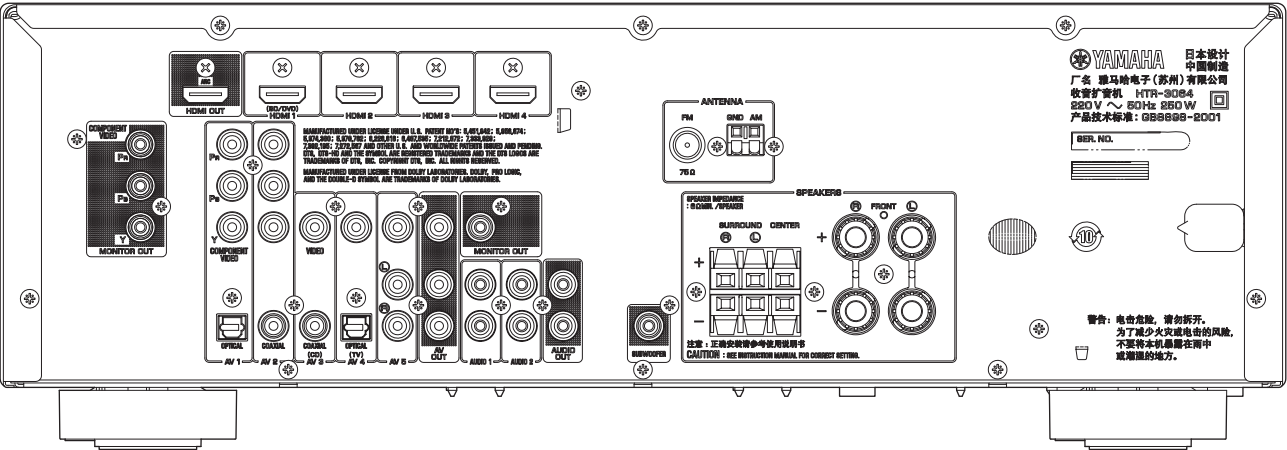
HTR-3064 (U, C models)



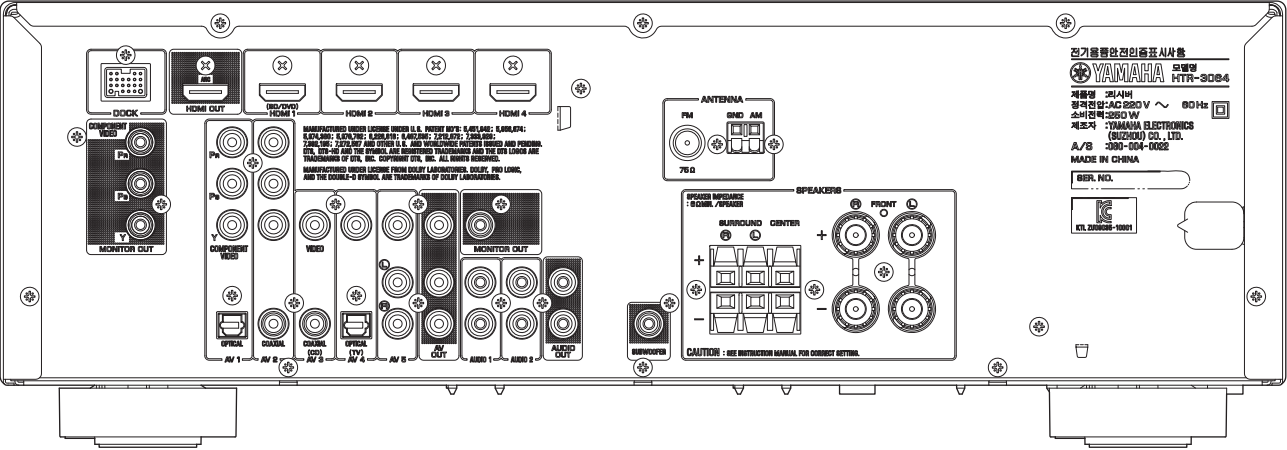
HTR-3064 (R, S models)



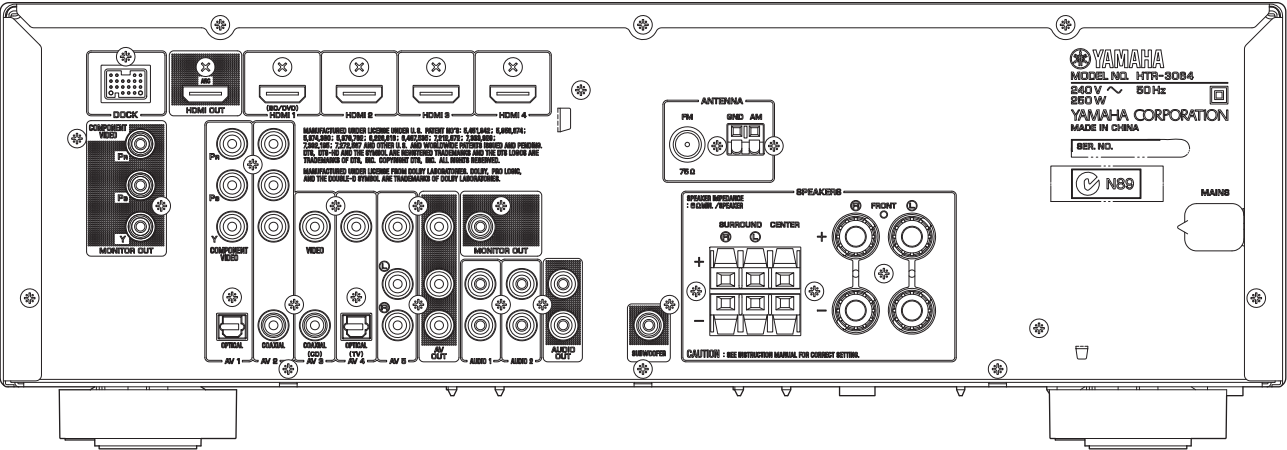
HTR-3064 (T model)



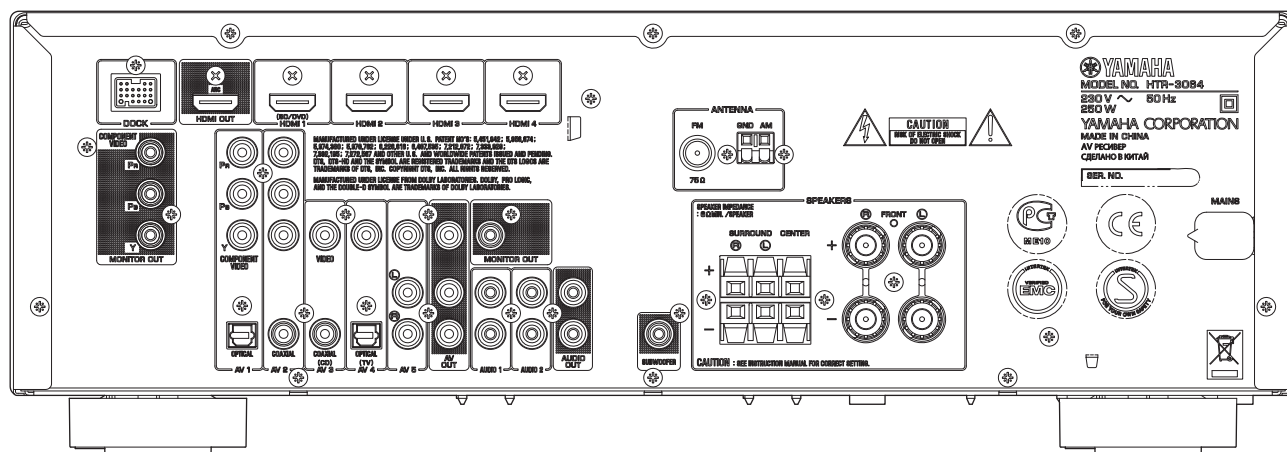
HTR-3064 (K model)



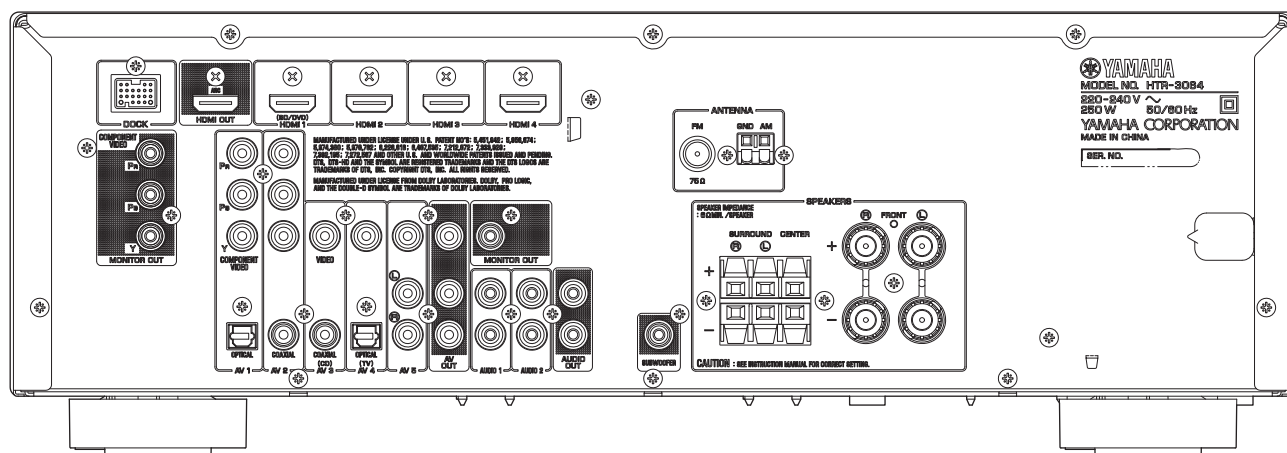
HTR-3064 (A model)



HTR-3064 (G, F models)



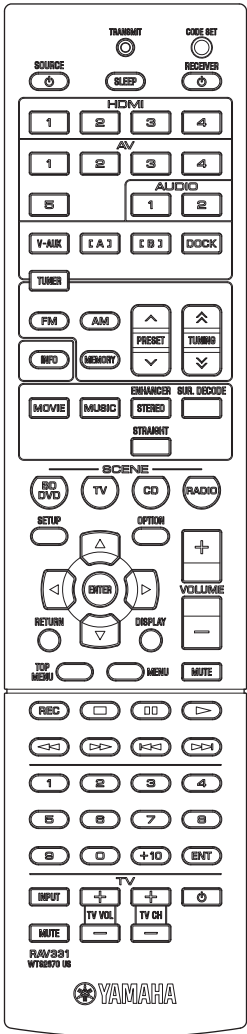
HTR-3064 (L model)



■ REMOTE CONTROL PANELS

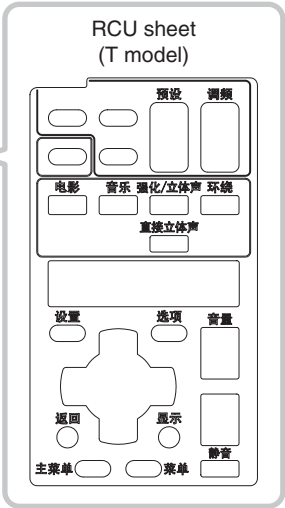
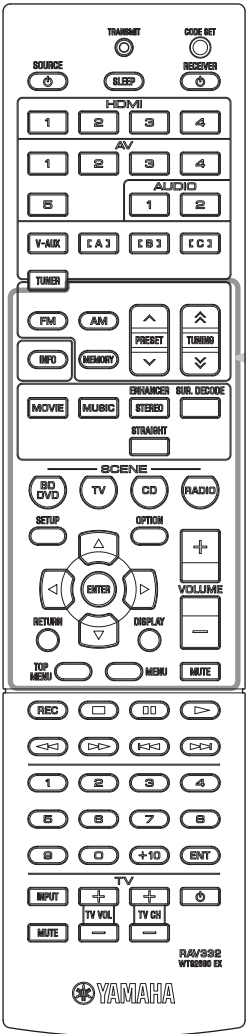
RAV331

(U, C, R, K, A, L, S models)



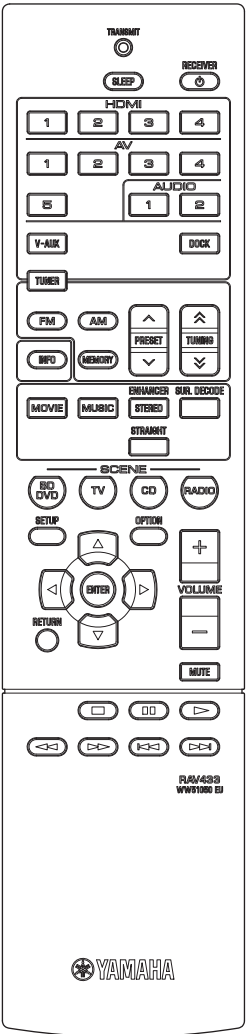
RAV332

(T model)



RAV433

(B, G, F models)



RX-V371/HTR-3064

SPECIFICATIONS

Audio Section

Rated Output Power (1 channel driven)

(1 kHz, 0.9 % THD)

U, C models (8 ohms)

FRONT L/R	100 W/ch
CENTER	100 W
SURROUND L/R	100 W/ch

R, T, K, A, B, G, F, L, S models (6 ohms)

FRONT L/R	100 W/ch
CENTER	100 W
SURROUND L/R	100 W/ch

Rated Output Power (2 channel driven)

(1 kHz, 0.9 % THD)

U, C models (8 ohms)

FRONT L/R	80 W + 80 W
CENTER	80 W
SURROUND L/R	80 W + 80 W

Maximum Effective Output Power (1 channel driven, JEITA)

(1 kHz, 10 % THD, 6 ohms)

R, T, K, L, S models

FRONT L/R	135 W/ch
CENTER	135 W
SURROUND L/R	135 W/ch

Dynamic Power Per Channel (IHF) (1 channel driven)

U, C models

8/6/4/2 ohms	110/130/160/180 W
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R, T, K, A, B, G, F, L, S models

6/4/2 ohms	105/130/150 W
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Dynamic Headroom

U, C models (8 ohms)	0.23 dB
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Input Sensitivity/Input Impedance

AV5, etc.	200 mV / 47 k-ohms
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Maximum Input Signal (1 kHz, 0.5 % THD, Effect on)

AV5, etc.	2.3 V
-----------	-------

Output Level/Output Impedance

AUDIO OUT (REC)	200 mV / 1.2 k-ohms
SUBWOOFER (2 ch STEREO and FRONT speaker: Small)	
	1 V / 1.2 k-ohms

Headphone Jack Rated Output/Impedance

AV5, etc. (1 kHz, 50 mV, 8 ohms)	100 mV / 470 ohms
----------------------------------	-------------------

Frequency Response (10 Hz to 100 kHz)

AV5, etc. to FRONT L/R	0 / -3.0 dB
------------------------	-------------

Total Harmonic Distortion (1 kHz, 50 W)

AV5, etc. (straight) to FRONT L/R speaker out

U, C models	
(8 ohms)	0.06 % or less
R, T, K, A, B, G, F, L, S models	
(6 ohms)	0.06 % or less

Signal to Noise Ratio (IHF-A Network)

AV5, etc. (STEREO) (Input shorted) to speaker out	
250 mV	98 dB or more

Residual Noise (IHF-A Network)

FRONT L/R speaker out	150 μ V or less
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Channel Separation

AV5, etc. (Input 5.1 k-ohms shorted, 1 kHz / 10 kHz)	
	60 dB or more / 45 dB or more

Volume Control

	MUTE / -80 dB to +16.5 dB / 0.5 dB step
--	---

Tone Control Characteristics

* FRONT L/R channel only

BASS

Boost/Cut	± 10 dB / 2 dB step / 50 Hz
Turnover frequency	350 Hz

TREBLE

Boost/Cut	± 10 dB / 2 dB step / 20 kHz
Turnover frequency	3.5 kHz

Filter Characteristics

FRONT, CENTER, SURROUND (H.P.F.)

.....fc=40/60/80/90/100/110/120/160/200 Hz, 12 dB/oct.

SUBWOOFER (L.P.F.)

.....fc=40/60/80/90/100/110/120/160/200 Hz, 24 dB/oct.

Video Section

Composite Video Signal Level

	1 Vp-p / 75 ohms
--	------------------

Component Signal Level

Y	1 Vp-p / 75 ohms
P _B /P _R	0.7 Vp-p / 75 ohms

Video Maximum Input Level (Video Conversion Off)

	1.5 Vp-p
--	----------

Signal to Noise Ratio (IHF)

	50 dB or more
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Monitor Out Frequency Response

Component video signal	5 Hz to 60 MHz, ± 3 dB
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FM Section

Tuning Range

U, C models	87.5 to 107.9 MHz
R, L, S models	87.5 to 108.0 / 87.50 to 108.00 MHz
T, K, A, B, G, F models	87.50 to 108.00 MHz

50 dB Quieting Sensitivity (IHF) (1 kHz, 100 % Mod.)

Mono	3 μ V (20.8 dBf)
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Signal to Noise Ratio (IHF)

Mono	74 dB
Stereo	69 dB

Harmonic Distortion (1 kHz)

Mono	0.3 %
Stereo	0.3 %

Antenna Input

	75 ohms unbalanced
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AM Section

Tuning Range

U, C models	530 to 1,710 kHz
R, L, S models	530 to 1,710 / 531 to 1,611 kHz
T, K, A, B, G, F models	531 to 1,611 kHz

Antenna Input

	Loop antenna
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■ General

Power Supply

U, C models	AC 120 V, 60 Hz
R, S model	AC 110-120/220-240 V, 50/60 Hz
T model	AC 220 V, 50 Hz
K model	AC 220 V, 60 Hz
A model	AC 240 V, 50 Hz
B, G, F models	AC 230 V, 50 Hz
L model	AC 220-240 V, 50/60 Hz

Power Consumption

U, C models	250 W / 320 VA
R, T, K, A, B, G, F, L, S models	250 W

Standby Power Consumption

U, C, T, K, A, B, G, F models	0.5 W or less
R, S model	1.0 W or less

Maximum Power Consumption

	440 W
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Dimensions (W x H x D)

	435 x 151 x 315 mm (17-1/8" x 6" x 12-3/8")
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Weight

	7.5 kg (16.5 lbs.)
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Finish

[RX-V371]	
T model	Gold color
U, C, R, T, K, A, B, G, F, L, S models	Black color
R, B, G, F, L, S models	Titanium color
G, F models	Silver color
[HTR-3064]	
T model	Gold color
U, C, R, T, K, A, G, F, L, S models	Black color
R, G models	Silver color

Accessories

Remote control	x 1
Batteries (R03, AAA, UM-4)	x 2
Indoor FM antenna (1.4 m)	x 1
AM loop antenna (1.0 m)	x 1
YPAO microphone (6.0 m) (R, K, A, B, G, F, L, S models)	x 1
VIDEO AUX input cover	x 1
RCU sheet (T model)	x 1

* Specifications are subject to change without notice.

U.....U.S.A. model	B.....British model
C.....Canadian model	G.....European model
R.....General model	F.....Russian model
T.....Chinese model	L.....Singapore model
K.....Korean model	S.....Brazilian model
A.....Australian model	



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Bluetooth™

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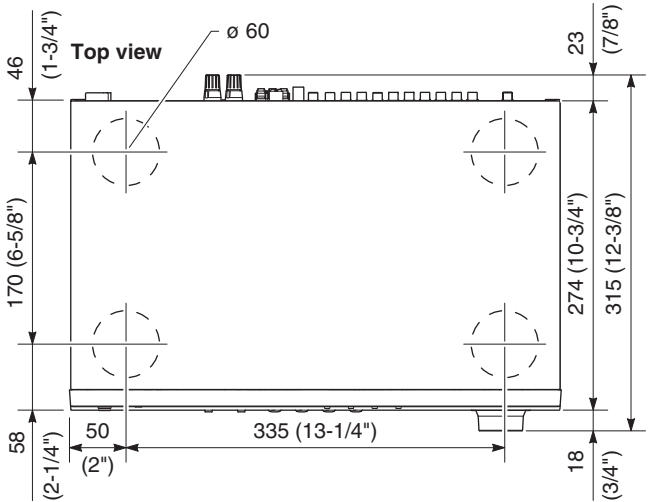
HDMI

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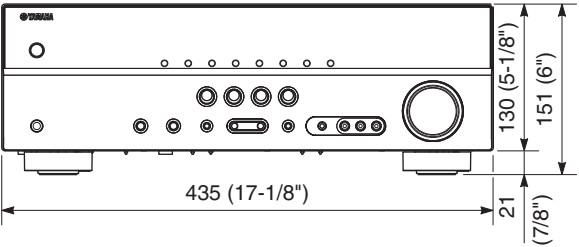
SILENT™ CINEMA

"SILENT CINEMA" is a trademark of Yamaha Corporation.

• DIMENSIONS



Front view



Unit: mm (inch)

- SELECT MENU

Sound field parameters

		Parameter											
		Decode Type	DSP Level: -6dB to +3dB	Center Level: 0 to 100%	Surround L Level: 0 to 100%	Surround R Level: 0 to 100%	Direct: Auto/Off	Effect Level: High/Low	Panorama: On/Off	Center Width: 0 to 7, [3]	Dimension: -3 to +3, [0]	Center Image: 0.0 to 1.0, [0.3]	Initialize
MOVIE	Standard	●											●
	Spectacle	●											●
	Sci-Fi	●											●
	Adventure	●											●
	Drama	●											●
	Mono Movie	●											●
	Sports	●											●
	Action Game	●											●
	Roleplaying Game	●											●
MUSIC	Hall in Munich	●											●
	Hall in Vienna	●											●
	Chamber	●											●
	Cellar Club	●											●
	The Roxy Theatre	●											●
	The Bottom Line	●											●
	Music Video	●											●
STEREO	2ch Stereo						●						●
	5ch Stereo		●	●	●								●
MUSIC ENHANCER	Straight Enhancer							●					●
	5ch Enhancer							●					●
SUR. DECODE	SUR. DECODE	● *1							△				●
STRAIGHT													

△ : Setting is possible only when Pro Logic II Music is selected using decode type.

*1 Decode Type

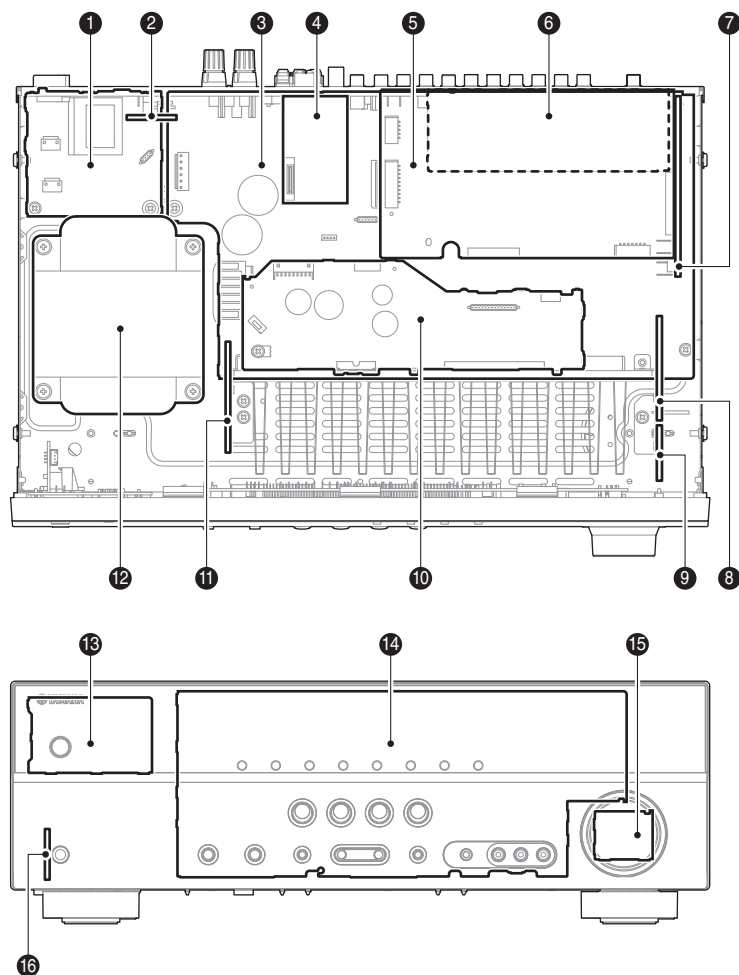
Decode Type	Dolby Pro Logic
	Dolby PL II Movie
	Dolby PL II Music
	Dolby PL II Game
	Neo:6 Cinema
	Neo:6 Music

• SET MENU TABLE

MAIN MENU	SUB-MENU	PARAMETER	VALUE [INITIAL VALUE]
1 Speaker Setup			
	1 Config	Subwoofer	[Yes] / None
		Front speaker	[Small] / Large
		Center speaker	None / [Small] / Large
		Surround speaker L/R	
		Crossover	40 / 60 / [80] / 90 / 100 / 110 / 120 / 160 / 200 Hz
		Subwoofer Phase	[NRM] / REV
		Extra Bass	On / [Off]
	2 Level	FL (Front speaker L)	-10.0 to +10.0 dB, [0 dB], 0.5 dB step
		FR (Front speaker R)	
		C (Center speaker)	-10.0 to +10.0 dB, [-1.0 dB], 0.5 dB step
		SL (Surround speaker L)	
		SR (Surround speaker R)	
		SWFR (Subwoofer)	-10.0 to +10.0 dB, [0 dB], 0.5 dB step
	3 Distance	Unit	U, C models: meters (m) / [feet (ft)] R, T, K, A, B, G, F, L, S models: [meters (m)] / feet (ft)
		Front L	0.30 to 24.00 m, [3.00 m], 0.1 m step
		Front R	1.0 to 80.0 ft, [10.0 ft], 0.5 ft step
		Center	0.30 to 24.00 m, [2.60 m], 0.1 m step
			1.0 to 80.0 ft, [8.5 ft], 0.5 ft step
		Sur. L	0.30 to 24.00 m, [2.40 m], 0.1 m step
		Sur. R	1.0 to 80.0 ft, [8.0 ft], 0.5 ft step
		SWFR	0.30 to 24.00 m, [3.00 m], 0.1 m step
			1.0 to 80.0 ft, [10.0 ft], 0.5 ft step
	4 Equalizer	EQ Type Select	[GEQ] / Off
		GEQ	* "GEQ" is available only when "EQ Type Select" is set to "GEQ".
		Front L 63 Hz	 0 dB
		Front R 160 Hz	 0 dB
		Center 400 Hz	 0 dB
		Sur. L 1 kHz	 0 dB
		Sur. R 2.5 kHz	 0 dB
		6.3 kHz	 0 dB
		16 kHz	 0 dB
			-6.0 to +6.0 dB, [0 dB], 0.5 dB step
	5 Test Tone		[Off] / On
2 Sound Setup			
	1 Lipsync	HDMI Auto	Off / [On]
		Auto	0 to 240 ms, 1 ms step
		Manual	0 to 240 ms, [0 ms], 1 ms step
	2 Adaptive DRC		On / [Off]
	3 D.Range		[Max], Min / Auto, Std
	4 Max Volume		-30.0 to +15.0 dB / +16.5 dB (Maximum volume), [+16.5 dB], 5.0 dB step
	5 Init. Volume		Off, Mute, -80 dB to +16.5 dB [Off], 0.5 dB step
	3 HDMI Setup		
	1 Control		[Off] / On
	2 TV Audio		AV1 / AV2 / AV3 / [AV4] / AV5 / AUDIO1 / AUDIO2
	3 ARC		Off / [On]
	4 Audio		[Amp] / TV / Amp+TV
4 Function Setup			
	1 Input Rename	Input is possible to 9 characters	
		Input possible Character type	
		Capital	: A to Z
		Small	: a to z
		Figure	: 0 to 9
	2 Auto Power Down	Symbols	: # * + , - etc.
		Space	
		U, C, R, T, K, A, L, S models: [Off] / 4 hours / 8 hours / 12 hours	
	3 Dimmer	B, G, F models: Off / 4 hours / [8 hours] / 12 hours	
		-4 to 0, [0]	

MAIN MENU		SUB-MENU	PARAMETER		VALUE [INITIAL VALUE]			
5 DSP Parameter								
	MOVIE	Standard	[2], [12]					
		Spectacle						
		Sci-Fi						
		Adventure						
		Drama						
		Mono Movie						
		Sports						
		Action Game						
	Roleplaying Game							
	MUSIC	Hall in Munich	[2], [12]					
		Hall in Vienna						
		Chamber						
		Cellar Club						
		The Roxy Theatre						
		The Bottom Line						
	Music Video							
	STEREO	2ch Stereo	[6], [12]					
		5ch Stereo	[3], [4], [5], [12]					
	MUSIC ENHANCER	Straight Enhancer	[7], [12]					
		5ch Enhancer	[7], [12]					
	SUR. DECODE	SUR. DECODE	[1], [8], [12]					
		STRAIGHT						
						[1]	Decode Type	Dolby Pro Logic, Dolby PL II Movie, Dolby PL II Music, Dolby PL II Game, Neo:6 Cinema, Neo:6 Music
						[2]	DSP Level	-6 to +3 dB, [0 dB]
						[3]	Center Level	
						[4]	Surround L Level	0 to 100 %, [100 %]
						[5]	Surround R Level	
						[6]	Direct	[Auto] / Off
						[7]	Effect Level	[High] / Low
			[8]	Panorama	[Off] / On			
			[9]	Center Width	0 to 7, [3]			
			[10]	Dimension	-3 to +3, [0]			
			[11]	Center Image	0.0 to 1.0, [0.3]			
			[12]	Initialize				
6 Memory Guard					[Off] / On			

INTERNAL VIEW



- 1 OPERATION (3) P.C.B.
- 2 MAIN (3) P.C.B. (R, S models)
- 3 MAIN (1) P.C.B.
- 4 AM/FM TUNER
- 5 DIGITAL P.C.B.
- 6 MAIN (2) P.C.B.
- 7 OPERATION (4) P.C.B.
- 8 MAIN (4) P.C.B.
- 9 OPERATION (9) P.C.B.
- 10 OPERATION (2) P.C.B.
- 11 OPERATION (8) P.C.B.
- 12 POWER TRANSFORMER
- 13 OPERATION (7) P.C.B.
- 14 OPERATION (1) P.C.B.
- 15 OPERATION (6) P.C.B.
- 16 OPERATION (5) P.C.B.

SERVICE PRECAUTIONS

Safety measures

- Some internal parts in this product contain high voltages and are dangerous.
Be sure to take safety measures during servicing, such as wearing insulating gloves.
- Note that the capacitors indicated below are dangerous even after the power is turned off because an electric charge remains and a high voltage continues to exist there.
Before starting any repair work, connect a discharging resistor (5 k-ohms/10 W) to the terminals of each capacitor indicated below to discharge electricity.
The time required for discharging is about 30 seconds per each.

C1317–1320 on OPERATION (2) P.C.B.

C46, C47 on MAIN (1) P.C.B.

For details, refer to "PRINTED CIRCUIT BOARDS".

■ DISASSEMBLY PROCEDURES

(Remove parts in the order as numbered.)

Disconnect the power cable from the AC outlet.

1. Removal of Top Cover

- Remove 5 screws (①) and 4 screws (②). (Fig. 1)
- Slide the top cover rearward to remove it. (Fig. 1)

2. Removal of Front Panel Unit

- Remove 7 screws (③). (Fig. 1)
- Remove CB166, CB193 and CB221. (Fig. 1)
- Unlock and remove CB136. (Fig. 1)
- Release hook, and remove the front panel unit. (Fig. 1)

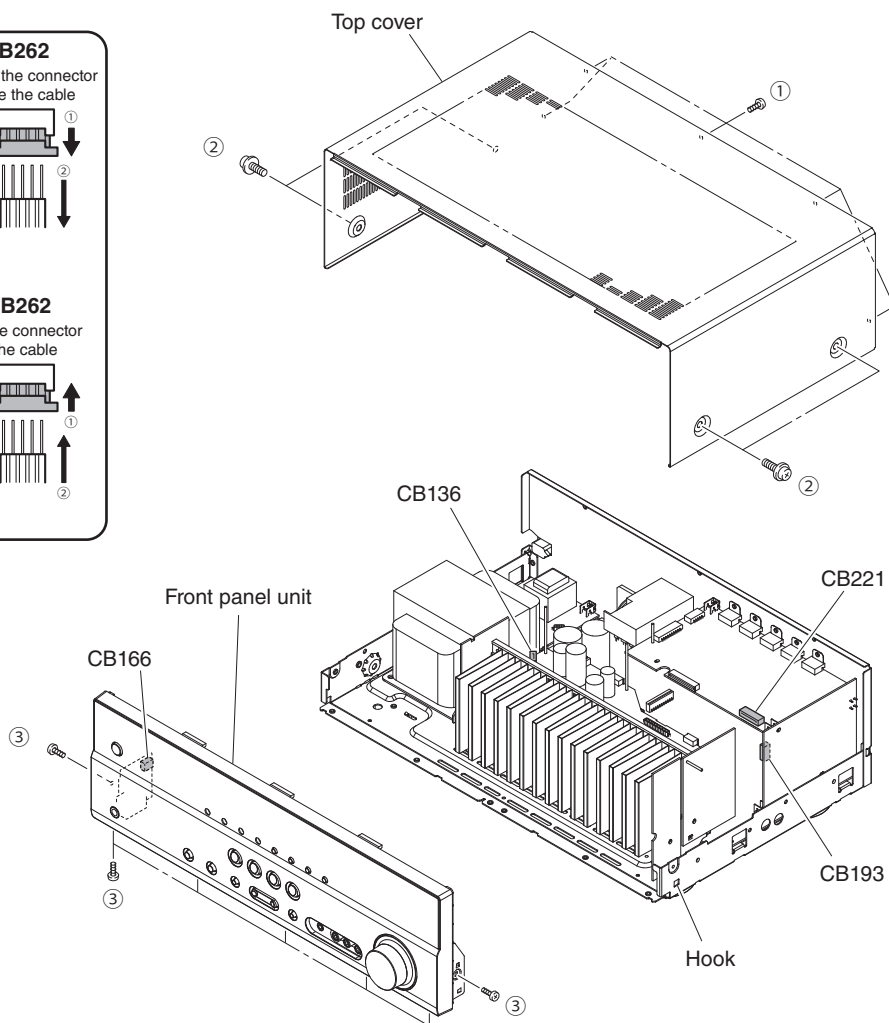
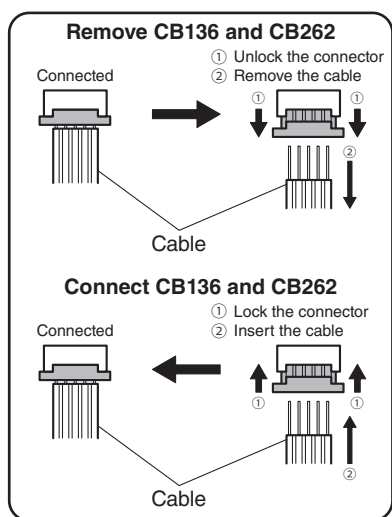


Fig. 1

3. Removal of DIGITAL P.C.B.

- Remove CB222 and CB223, unlock and remove CB262. (Fig. 2)
- Remove screw (4). (Fig. 2)
- Remove 2 screws (U, C, R, K, A, B, G, F, L, S models)/screw (T model) (5) and 5 screws (6). (Fig. 3)
- Remove the DIGITAL P.C.B. which is connected directly to the OPERATION (4) P.C.B. with board-to-board connectors. (Fig. 2)

4. Removal of OPERATION (4) P.C.B.

- Remove CB194. (Fig. 2)
- Remove screw (7) and screw (8). (Fig. 3)
- Remove the OPERATION (4) P.C.B. which is connected directly to the MAIN (1) P.C.B. with board-to-board connectors. (Fig. 2)

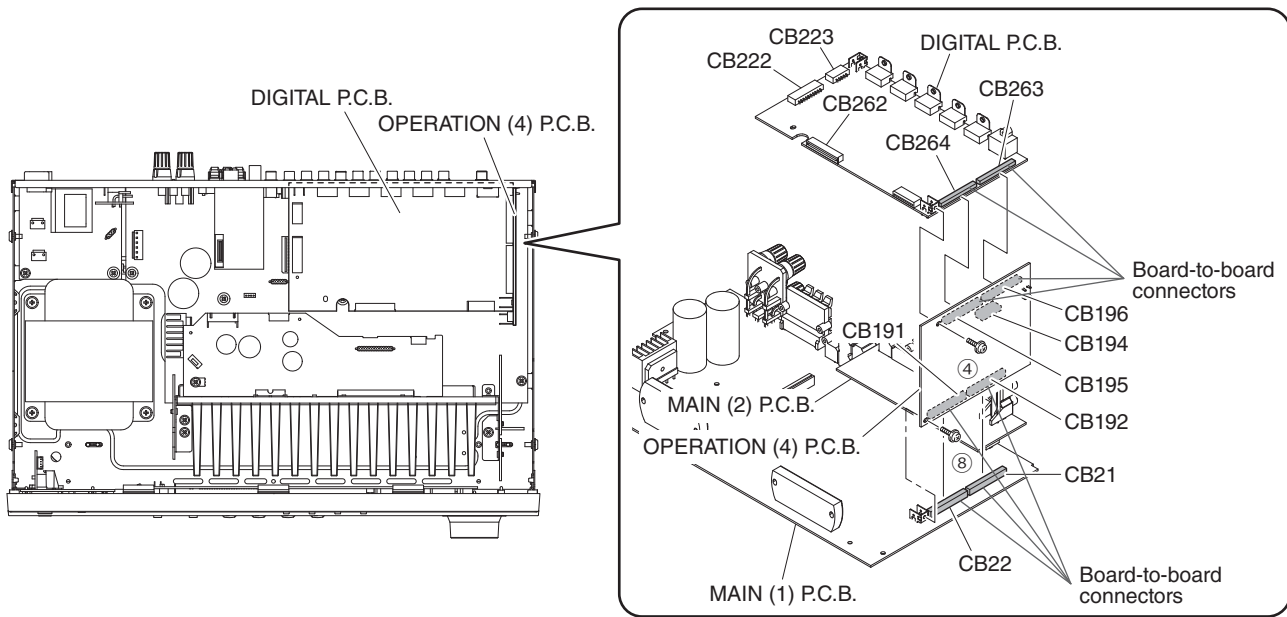


Fig. 2

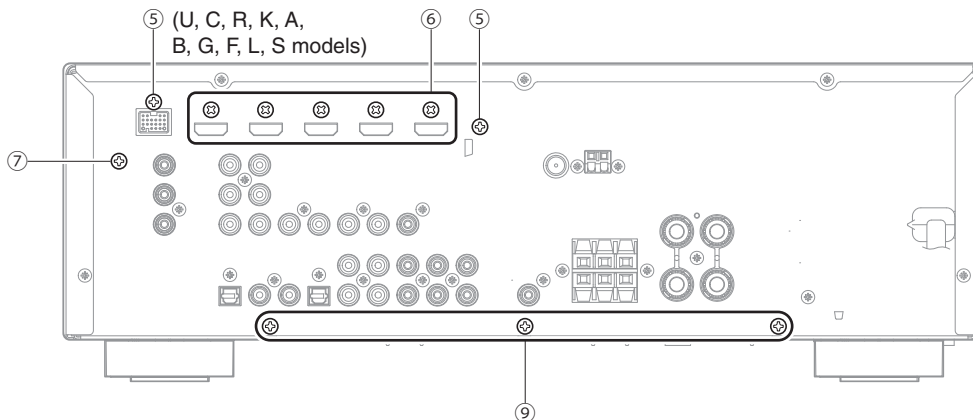


Fig. 3

When checking the DIGITAL P.C.B.

- Put the rubber sheet and cloth over this unit, and place the DIGITAL P.C.B. on them. (Fig. 4)
- Connect ST201 on DIGITAL P.C.B. to the chassis with a ground lead or the like. (Fig. 4)
- Reconnect all cables (connectors) that have been disconnected. Be sure to use the P.C.B. CHECKING JIG (Part No. WW483800) to connect between the following connectors.
CB263 on DIGITAL P.C.B. – CB196 on OPERATION (4) P.C.B.
CB264 on DIGITAL P.C.B. – CB195 on OPERATION (4) P.C.B.
- When connecting the flexible flat cable, be careful with polarity.

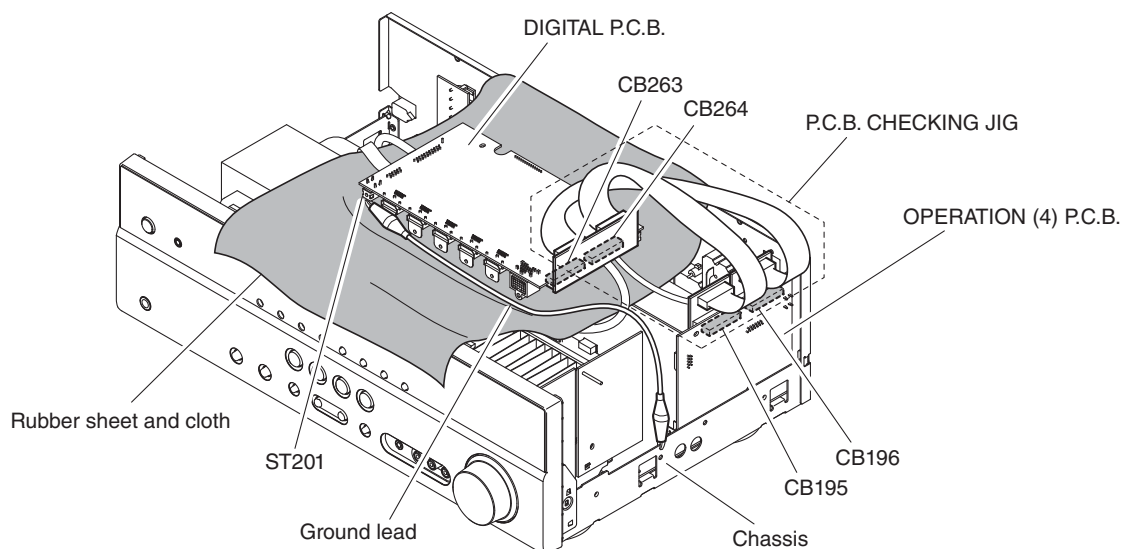


Fig. 4

When checking the MAIN (1) P.C.B.

- Remove the top cover. (Fig. 1)
- Remove 3 screws (9). (Fig. 3)
- Remove 5 screws (10) and 4 screws (11). (Fig. 5)
- Place the P.C.B.s (with rear panel) upright. (Fig. 6)
- Connect the heatsink, rear panel and MAIN (1) P.C.B. (G3) to the chassis with a ground lead or the like. (Fig. 6)

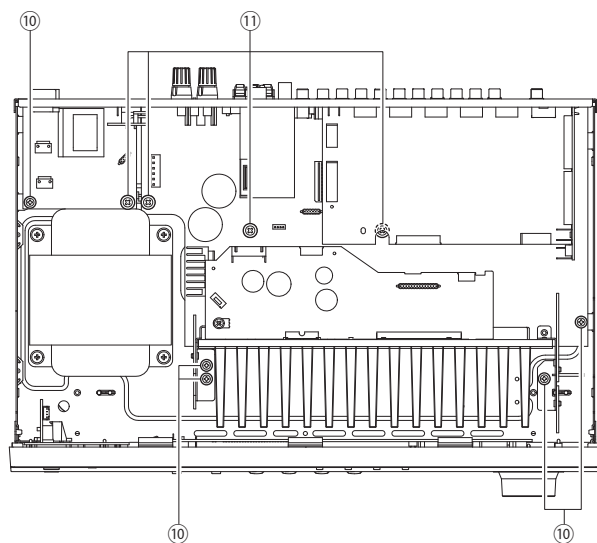


Fig. 5

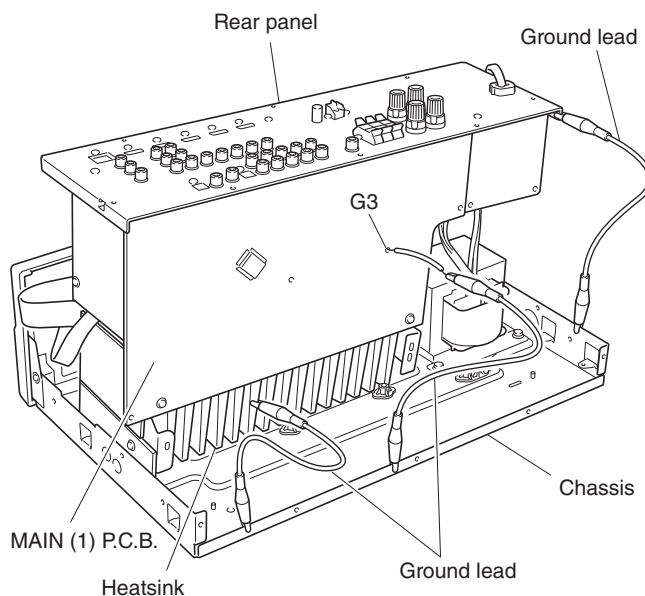


Fig. 6

■ UPDATING FIRMWARE

When the following parts are replaced, the firmware must be updated to the latest version.

DIGITAL P.C.B.

IC243 on DIGITAL P.C.B.

● Confirmation of firmware version and checksum

Before and after updating the firmware, check the firmware version and checksum by using the self-diagnostic function menu.

Start up the self-diagnostic function and select "25. ROM VER/SUM/PORT" menu.

Using the sub-menu, have the firmware version and checksum displayed, and note them down.

(See "SELF-DIAGNOSTIC FUNCTION")

* When the firmware version is different from written one after updating, perform the updating procedure again from the beginning.

● Initializing the back-up IC (EEPROM: IC222 on DIGITAL P.C.B.)

After updating the firmware, the back-up IC MUST be initialized by the following procedure to have proper memorization of the set up information (soundfield parameters, system memory and tuner presetting, etc.).

Start up the self-diagnostic function and select "24. FACTORY PRESET" menu. (See "SELF-DIAGNOSTIC FUNCTION")

Select "24. PRESET RSRV", press the "⏻" (Power) key to turn off the power once and turn on the power again. Then the back-up IC is initialized.

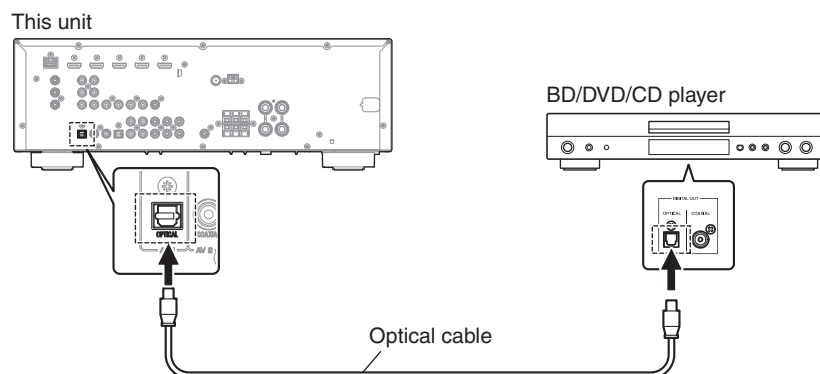
● Required Tools

- BD, DVD or CD player (with DIGITAL OUTPUT (OPTICAL or COAXIAL) jack)
- Optical cable (when OPTICAL jack is used)
- Digital audio pin cable (when COAXIAL jack is used)
- Firmware CD
 - * Download the latest firmware from the specified download source and create the firmware CD.

● Connection

Connect this unit and BD/DVD/CD player as shown below. (Fig. 1)

Example of connection between digital OPTICAL jacks



Example of connection between digital COAXIAL jacks

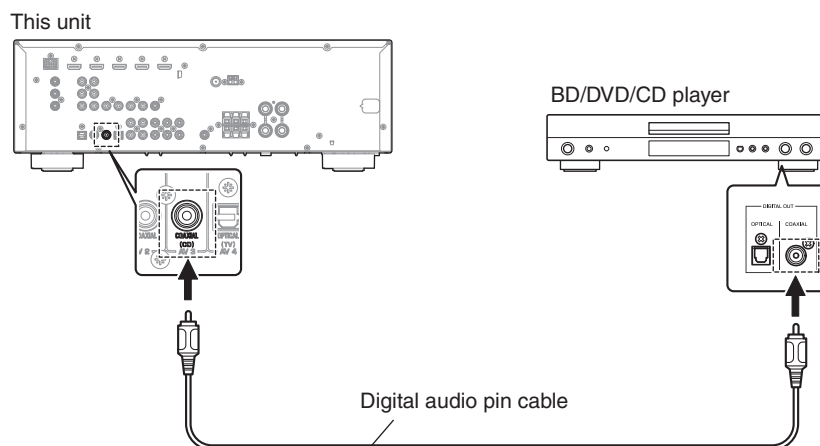


Fig. 1

● Operation Procedures

1. While pressing the "INFO" key, connect the power cable to the AC outlet. (Fig. 2)
The FIRMWARE UPDATE mode is activated and "CDDA Upgrader" is displayed. (Fig. 2)

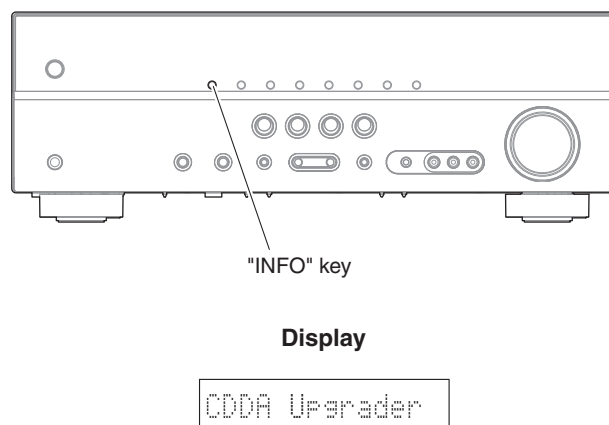


Fig. 2

2. Play the firmware CD on the BD/DVD/CD player. Writing of the firmware starts automatically. (Fig. 3)
3. When writing of the firmware is completed, "Update Success", "Please..." and "Power off!!" are displayed repeatedly. (Fig. 3)

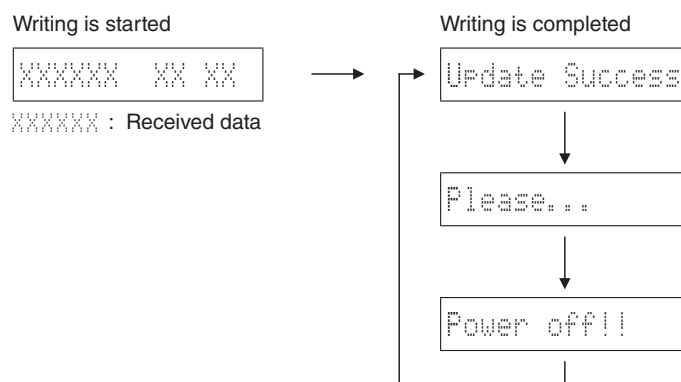


Fig. 3

* If the display remains unchanged for more than 10 seconds after starting the firmware CD play procedure, perform the firmware CD play procedure again from the beginning.

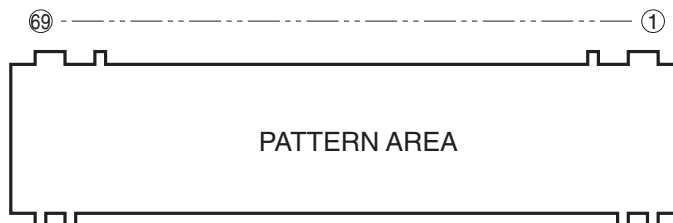
If "FILE CORRUPTED" is displayed after "Address:XXXXXX", make sure that the written data is not corrupted and perform Steps 1 to 7 of "Operation Procedures" again.

If "Upgrade Failed" is displayed, perform "operation procedures" again from the beginning.

4. Press the "⏻" (Power) key to turn off the power.
5. Eject the firmware CD from the BD/DVD/CD player.
6. Start up the self-diagnostic function and check that the firmware version and checksum are the same as written ones. (See "Confirmation of firmware version and checksum")

■ DISPLAY DATA

● V1001 : 18-MT-09GNK (OPERATION P.C.B.)



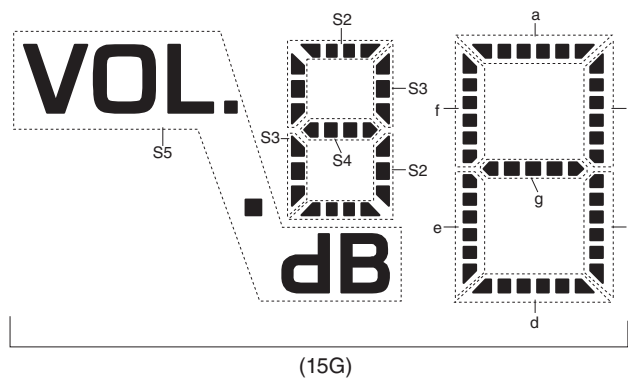
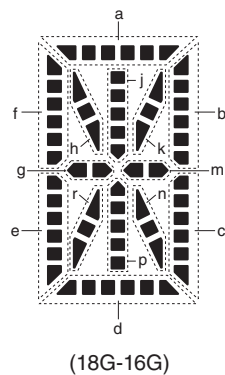
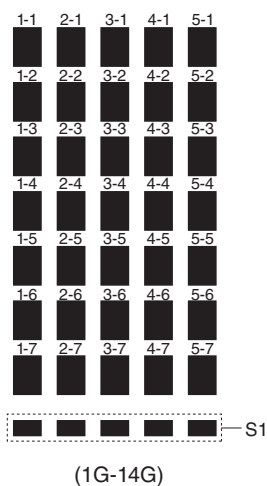
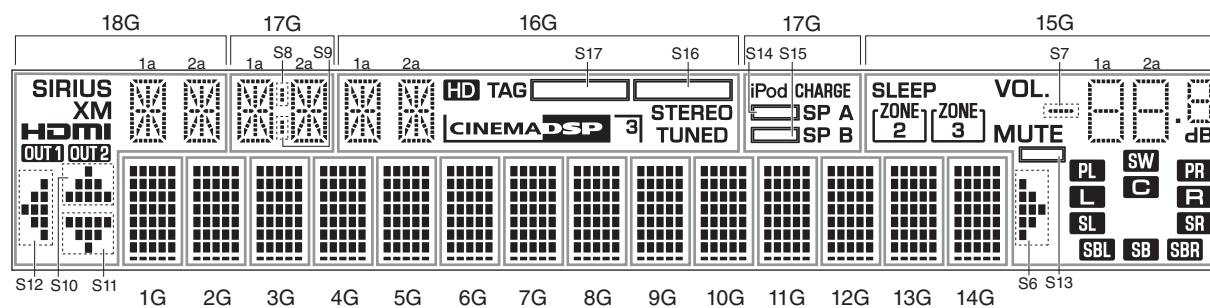
● PIN CONNECTION

Pin No.	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35
Connection	F2	NX	NP	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	P23	P24	P25	P26	P27	P28	P29	P30	P31

Pin No.	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Connection	P32	P33	P34	P35	P36	NX	NX	NX	NX	NX	NX	NX	18G	17G	16G	15G	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	NP	NX	F1

Note : 1) F1, F2 Filament pin 2) NP No pin 3) NX No extend pin 4) 1G-18G Grid pin

● GRID ASSIGNMENT



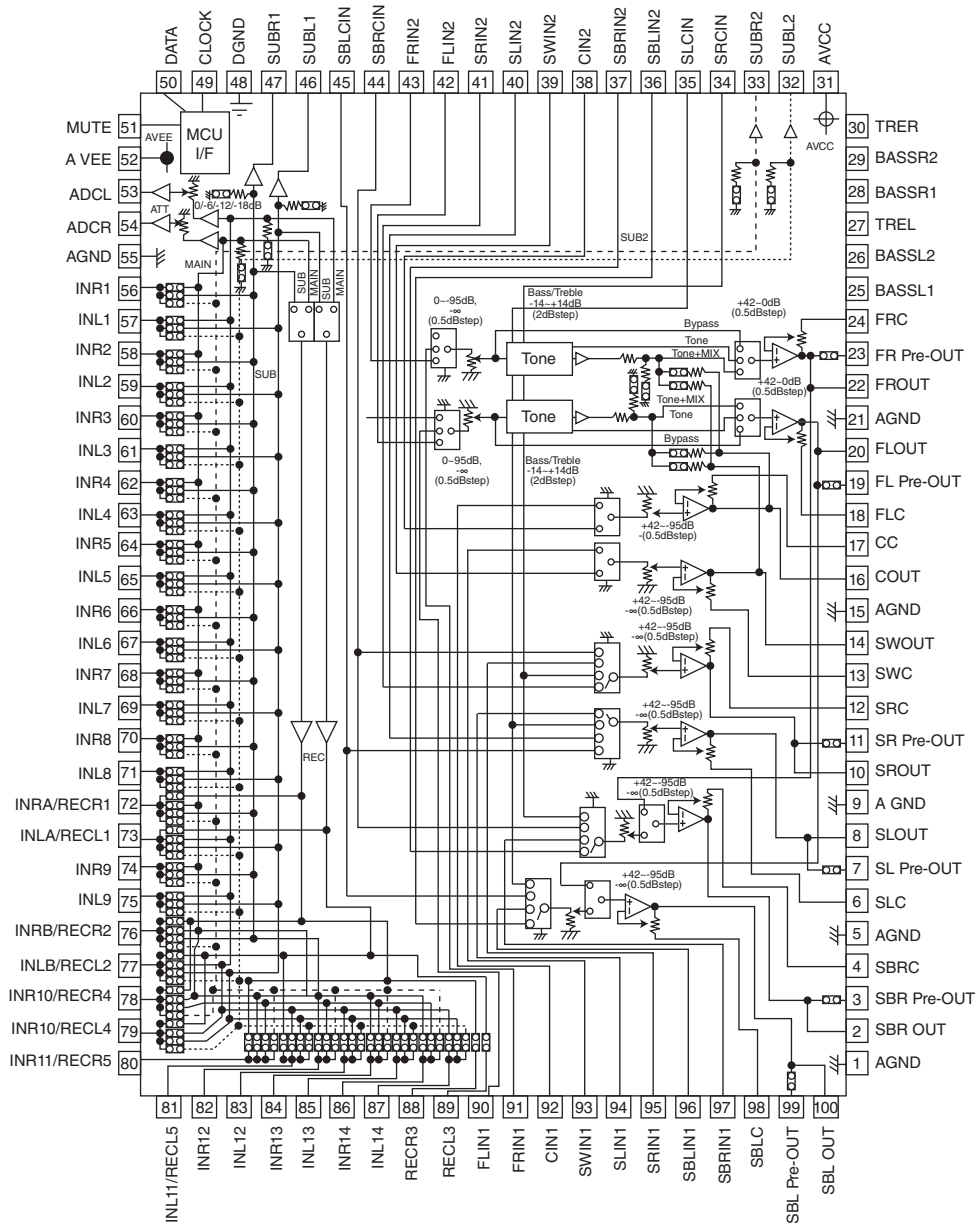
● ANODE CONNECTION

	18G	17G	16G	15G	1G-14G
P1	1a	1a	1a	S5	1-1
P2	1h	1h	1h	S7	2-1
P3	1j	1j	1j	1d	3-1
P4	1k	1k	1k	2d	4-1
P5	1b	1b	1b	S2	5-1
P6	1f	1f	1f	1e	1-2
P7	1m	1m	1m	2e	2-2
P8	1g	1g	1g	S3	3-2
P9	1c	1c	1c	1c	4-2
P10	1e	1e	1e	2c	5-2
P11	1r	1r	1r	S4	1-3
P12	1p	1p	1p	1g	2-3
P13	1n	1n	1n	2g	3-3
P14	1d	1d	1d	1f	4-3
P15	2a	2a	2a	2f	5-3
P16	2h	2h	2h	1b	1-4
P17	2j	2j	2j	2b	2-4
P18	2k	2k	2k	1a	3-4
P19	2b	2b	2b	2a	4-4
P20	2f	2f	2f	PL	5-4
P21	2m	2m	2m	SW	1-5
P22	2g	2g	2g	PR	2-5
P23	2c	2c	2c	L	3-5
P24	2e	2e	2e	C	4-5
P25	2r	2r	2r	R	5-5
P26	2p	2p	2p	SL	1-6
P27	2n	2n	2n	SR	2-6
P28	2d	2d	2d	SBL	3-6
P29	SIRIUS	S8	HD	SB	4-6
P30	XM	S9	TAG	SBR	5-6
P31	HDMI	iPod CHARGE	CINEMA DSP	S6	1-7
P32	OUT1	SP B	3	S13	2-7
P33	OUT2	S15	STEREO	MUTE	3-7
P34	S12	SP A	TUNED	ZONE 2	4-7
P35	S10	S14	S17	ZONE 3	5-7
P36	S11	—	S16	SLEEP	S1

■ IC DATA

IC21: R2A15220FP (MAIN P.C.B.)

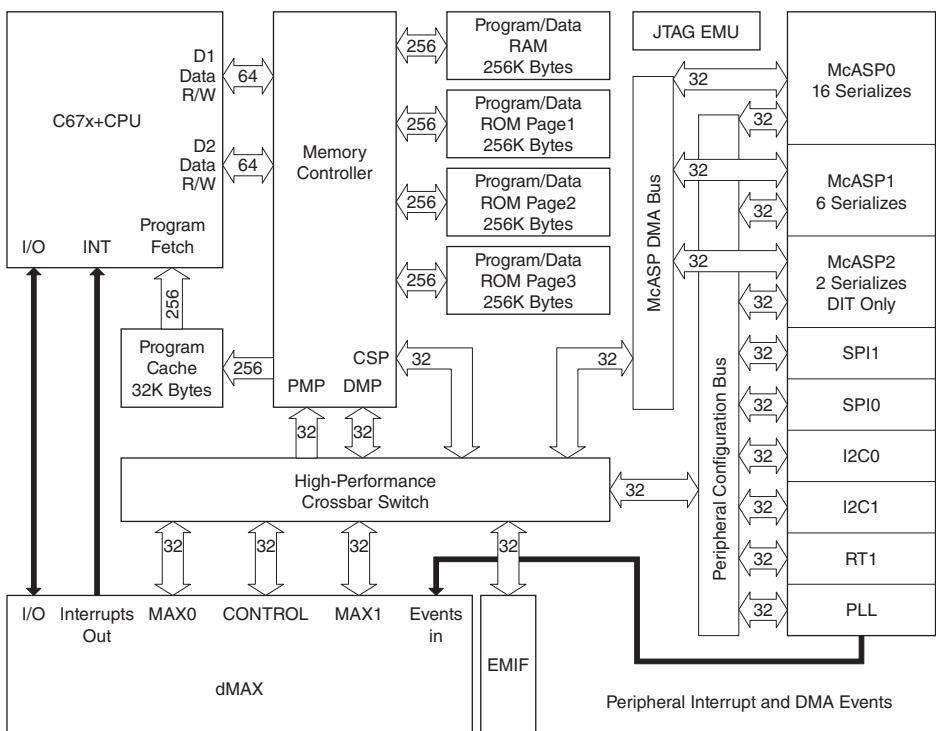
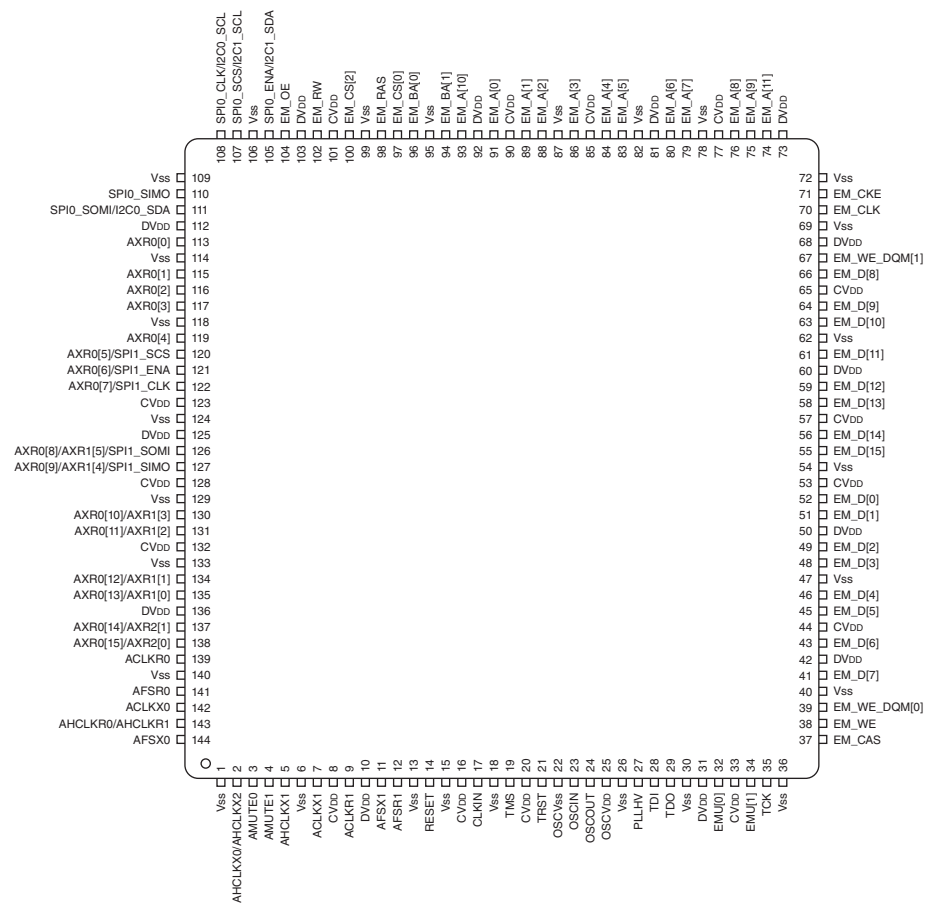
8-channel electronic volume with 11 input selector and tone control



Pin No.	Port Name	Function Name	Detail of Function
1	AGND	AE	Analog ground of internal circuit
2	SBROUT	VOSBL	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
3	SBR Pre-OUT	VOPSB	Pre-output pin of FL/FR/SL/SR/SBL/SBR channel
4	SBRC	AE	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
5	AGND	AE	Analog ground of internal circuit
6	SLC	VOPSR	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
7	SL Pre-OUT	VOSR	Pre-output pin of FL/FR/SL/SR/SBL/SBR channel
8	SLOUT	AE	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
9	AGND	AE	Analog ground of internal circuit
10	SROUT	VOSL	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
11	SR Pre-OUT	VOPSL	Pre-output pin of FL/FR/SL/SR/SBL/SBR channel
12	SRC	AE	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
13	SWC	AE	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
14	SWOUT	VOSW	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
15	AGND	AE	Analog ground of internal circuit
16	COUT	VOC	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
17	CC	AE	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
18	FLC	AE	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
19	FL Pre-OUT	VOPFR	Pre-output pin of FL/FR/SL/SR/SBL/SBR channel
20	FLOUT	VOFR	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
21	AGND	POE	Analog ground of internal circuit
22	FROUT	VOFL	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
23	FR Pre-OUT	VOPFL	Pre-output pin of FL/FR/SL/SR/SBL/SBR channel
24	FRC	AE	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
25	BASSL1	AE	Frequency characteristic setting pin of L/R channel tone control (Bass)
26	BASSL2	AE	Frequency characteristic setting pin of L/R channel tone control (Bass)
27	TREL	AE	Frequency characteristic setting pin of L/R channel tone control (Treble)
28	BASSR1	AE	Frequency characteristic setting pin of L/R channel tone control (Bass)
29	BASSR2	AE	Frequency characteristic setting pin of L/R channel tone control (Bass)
30	TREER	AE	Frequency characteristic setting pin of L/R channel tone control (Treble)
31	AVCC	VCC	Positive power supply to internal circuit
32	SUBL1	N.C.	Output pin for L/R channel SUB1/SUB2 output
33	SUBL2	N.C.	Output pin for L/R channel SUB1/SUB2 output
34	SRCIN	N.C.	3rd multi input pin for SBL/SBR/SL/SR channel volume that is able to swap SBR/SBL with SR/SL
35	SLCIN	N.C.	3rd multi input pin for SBL/SBR/SL/SR channel volume that is able to swap SBR/SBL with SR/SL
36	SBLIN2	8SBR	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
37	SBRIN2	8SBL	
38	CIN2	8C	
39	SWIN2	8SW	
40	SLIN2	8SR	
41	SRIN2	8SL	
42	FLIN2	8FR	
43	FRIN2	8FL	
44	SBRCIN	Z2L	3rd multi input pin for SBL/SBR/SL/SR channel volume that is able to swap SBR/SBL with SR/SL
45	SBLCIN	Z2R	3rd multi input pin for SBL/SBR/SL/SR channel volume that is able to swap SBR/SBL with SR/SL
46	SUBL1	Z2R	Output pin for L/R channel SUB1/SUB2 output
47	SUBR1	Z2L	Output pin for L/R channel SUB1/SUB2 output
48	DGND	MG	Digital ground of internal circuit
49	DATA	VOL_SCK	Input pin of control data
50	CLOCK	VOL_MOSI	Input pin of control clock

Pin No.	Port Name	Function Name	Detail of Function
51	MUTE	AE	Outside mute control pin
52	AVEE	—	Negative power supply to internal circuit
53	ADCL	ADR	Output pin for L/R channel ADC
54	ADCR	ADL	
55	AGND	AE	Analog ground of internal circuit
56	INR1	AU2L	Input pin of L/R channel (Input selector)
57	INL1	AU2R	
58	INR2	AU1L	
59	INL2	AU1R	
60	INR3	AV-6L	
61	INL3	AV-6R	
62	INR4	AV-5L	
63	INL4	AV-5R	
64	INR5	PHL	
65	INL5	PHR	
66	INR6	SRL	
67	INL6	SRR	
68	INR7	IPL	
69	INL7	IPR	
70	INR8	XML	
71	INL8	XMR	
72	INRA/RECR1	AV-OUT_L	Output pin for L/R channel (input selector)/Output pin for L/R channel REC output
73	INLA/RECL1	AV-OUT_R	
74	INR9	USBL	Input pin of L/R channel (Input selector)
75	INL9	USBR	
76	INRB/RECR2	AOL	Output pin for L/R channel (input selector)/Output pin for L/R channel REC output
77	INLB/RECL2	AOR	
78	INR10/RECR4	TUL	
79	INL10/RECL4	TUR	
80	INR11/RECR5	MIC	
81	INL11/RECL5	AE	
82	INR12	AUXL	Input pin of L/R channel (Input selector)
83	INL12	AUXR	
84	INR13	AE	
85	INL13	AE	
86	INR14	AE	
87	INL14	AE	
88	RECR3	N.C.	Output pin for L/R channel REC output
89	RECL3	N.C.	
90	FLIN1	DAFR	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
91	FRIN1	DAFL	
92	CIN1	DAC	
93	SWIN1	DASW	
94	SLIN1	DASR	
95	SEIN1	DASL	
96	SBLIN1	DASBR	
97	SBRIN1	DASBL	
98	SBLC	AE	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
99	SBL Pre-OUT	VOPSBR	Pre-output pin of FL/FR/SL/SR/SBL/SBR channel
100	SBL OUT	VOSBR	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel

IC241: D70YE101BRFP266 (DIGITAL P.C.B.)
Decoder/Post processor
* **No replacement part available.**

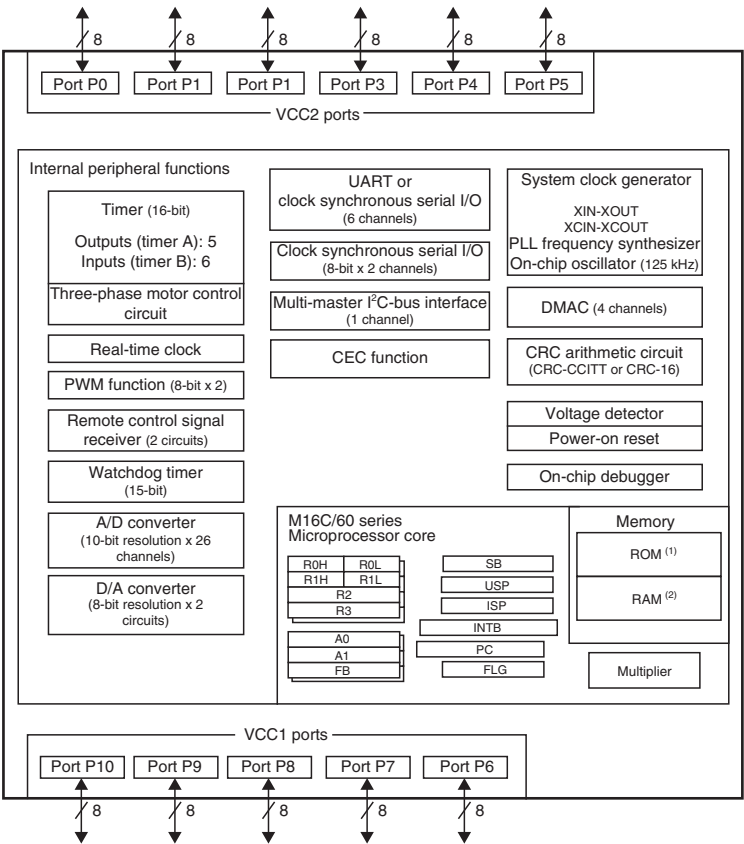


No.	Function Name (P.C.B.)	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	Detail of Function
1	VSS				
2	AHCLKX0/AHCLKX2	IO	–	Y	McASP0 and McASP2 transmit master clock
3	AMUTE0	IO	–	Y	McASP0 mute output
4	AMUTE1	IO	–	Y	McASP1 mute output
5	AHCLKX1	IO	–	Y	McASP1 transmit master clock
6	VSS				
7	ACLKX1	IO	–	Y	McASP1 transmit bit clock
8	CVDD				
9	ACLKR1	IO	–	Y	McASP1 receive bit clock
10	DVDD				
11	AFSX1	IO	–	Y	McASP1 transmit frame Sync (L/R clock)
12	AFSR1	IO	–	Y	McASP1 receive frame Sync (L/R clock)
13	VSS				
14	RESET	IO	–	N	Device reset pin
15	VSS				
16	CVDD				
17	CLKIN	IO	–	N	Alternate clock input (3.3-V LVCMOS input)
18	VSS				
19	TMS	IO	IPU	N	Test mode select
20	CVDD				
21	TRST	IO	IPU	N	Test reset
22	OSCVSS	PWR	–	N	Oscillator Vss tap point (for filter only)
23	OSCIN	IO	–	N	1.2-V oscillator input
24	NC	O	–	N	
25	OSCVDD	PWR	–	N	Oscillator 1.2-V Vpp tap point (for filter only)
26	VSS				
27	PLLHV	PWR	–	N	PLL 3.3-V supply input (requires external filter)
28	TDI	IO	IPU	N	Test data in
29	TDO	OZ	IPU	N	Test data out
30	VSS				
31	DVDD				
32	EMU[0]	IO	IPU	N	Emulation pin 0
33	CVDD				
34	EMU[1]	IO	IPU	N	Emulation pin 1
35	TCK	IO	IPU	N	Test clock
36	Ground(Vss)				
37	EM_CAS	O	–	N	SDRAM column address strobe
38	EM_WE	O	–	N	SDRAM write enable
39	EM_WE_DQM[0]	O	–	N	Write enable or byte enable for EM_D [7:0]
40	VSS				
41	EM_D[7]	IO	–	N	EMIF data bus [lower 16-bits]
42	DVDD				
43	EM_D[6]	IO	–	N	EMIF data bus [lower 16-bits]
44	CVDD				
45	EM_D[5]	IO	–	N	EMIF data bus [lower 16-bits]
46	EM_D[4]	IO	–	N	EMIF data bus [lower 16-bits]
47	VSS				
48	EM_D[3]	IO	–	N	EMIF data bus [lower 16-bits]
49	EM_D[2]	IO	–	N	EMIF data bus [lower 16-bits]
50	DVDD				

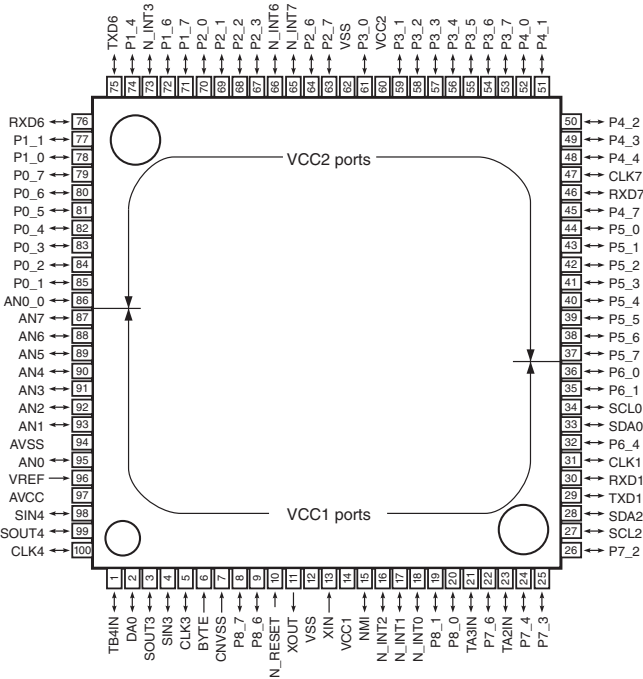
No.	Function Name (P.C.B.)	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	Detail of Function
51	EM_D[1]	IO	—	N	EMIF data bus [lower 16-bits]
52	EM_D[0]	IO	—	N	EMIF data bus [lower 16-bits]
53	CVDD				
54	VSS				
55	EM_D[15]	IO	—	N	EMIF data bus [lower 16-bits]
56	EM_D[14]	IO	—	N	EMIF data bus [lower 16-Bits]
57	CVDD				
58	EM_D[13]	IO	—	N	EMIF data bus [lower 16-Bits]
59	EM_D[12]	IO	—	N	EMIF data bus [lower 16-Bits]
60	DVDD				
61	EM_D[11]	IO	—	N	EMIF data bus [lower 16-Bits]
62	VSS				
63	EM_D[10]	IO	—	N	EMIF data bus [lower 16-Bits]
64	EM_D[9]	IO	—	N	EMIF data bus [lower 16-Bits]
65	CVDD				
66	EM_D[8]	IO	—	N	EMIF data bus [lower 16-bits]
67	EM_WE_DQM[1]	O	—	N	Write enable or byte enable for EM_D [15:8]
68	DVDD				
69	VSS				
70	EM_CLK	O	—	N	SDRAM clock
71	EM_CKE	O	—	N	SDRAM clock enable
72	VSS				
73	DVDD				
74	EM_A[11]	O	—	N	EMIF address bus
75	EM_A[9]	O	—	N	EMIF address bus
76	EM_A[8]	O	—	N	EMIF address bus
77	CVDD				
78	VSS				
79	EM_A[7]	O	—	N	EMIF address bus
80	EM_A[6]	O	—	N	EMIF address bus
81	DVDD				
82	VSS				
83	EM_A[5]	O	—	N	EMIF address bus
84	EM_A[4]	O	—	N	EMIF address bus
85	CVDD				
86	EM_A[3]	O	—	N	EMIF address bus
87	VSS				
88	EM_A[2]	O	—	N	EMIF address bus
89	EM_A[1]	O	—	N	EMIF address bus
90	CVDD				
91	EM_A[0]	O	—	N	EMIF address bus
92	DVDD				
93	EM_A[10]	O	—	N	EMIF address bus
94	EM_BA[1]	O	—	N	SDRAM bank address and asynchronous memory Low-Order address
95	VSS				
96	EM_BA[0]	O	—	N	SDRAM bank address and asynchronous memory Low-Order address
97	EM_CS[0]	O	—	N	SDRAM chip select
98	EM_RAS	O	—	N	SDRAM row address strobe
99	VSS				
100	EM_CS[2]	O	—	N	Asynchronous memory chip select

No.	Function Name (P.C.B.)	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	Detail of Function
101	CVDD				
102	NC	O	—	N	Asynchronous memory read/not write
103	DVDD				
104	EM_OE	O	—	N	SDRAM output enable
105	SPI0_ENA/I2C1_SDA	IO	—	Y	SPI0 enable (ready) or I2c1 serial data
106	VSS				
107	SPI0_ENA/I2C1_SCL	IO	—	Y	SPI0 enable (ready) or I2c1 serial clock
108	SPI0_CLK/I2C0_SCL	IO	—	Y	SPI0 serial clock or I2c0 serial clock
109	VSS				
110	SPI0_SIMO	IO	—	Y	SPI0 data pin slave in master out
111	SPI0_SOMI/I2C0_SDA	IO	—	Y	SPI0 data pin slave out master in or I2C0 serial data
112	DVDD				
113	AXR0[0]	IO	—	Y	McASP0 serial data 0
114	VSS				
115	AXR0[1]	IO	—	Y	McASP0 serial data 1
116	AXR0[2]	IO	—	Y	McASP0 serial data 2
117	AXR0[3]	IO	—	Y	McASP0 serial data 3
118	VSS				
119	AXR0[4]	IO	—	Y	McASP0 serial data 4
120	SPI1_SCS	IO	—	Y	McASP0 serial data 5 or SPI1 slave chip select
121	SPI1_ENA	IO	—	Y	McASP0 serial data 6 or SPI1 enable (ready)
122	SPI1_CLK	IO	—	Y	McASP0 serial data 7 or SPI1 serial clock
123	CVDD				
124	VSS				
125	DVDD				
126	/SPI1_SOMI	IO	—	Y	McASP0 serial data 8 or McASP1 serial data 5 or SPI1 data pin slave out master in
127	/SPI1_SIMO	IO	—	Y	McASP0 serial data 9 or McASP1 serial data 4 or SPI1 data pin slave in master out
128	CVDD				
129	VSS				
130	AXR0[10]	IO	—	Y	McASP0 serial data 10 or McASP1 serial data 3
131	AXR0[11]	IO	—	Y	McASP0 serial data 11 or McASP1 serial data 2
132	CVDD				
133	VSS				
134	AXR0[12]	IO	—	Y	McASP0 serial data 12 or McASP1 serial data 1
135	AXR0[13]	IO	—	Y	McASP0 serial data 13 or McASP1 serial data 0
136	DVDD				
137	AXR0[14]	IO	—	Y	McASP0 serial data 14 or McASP2 serial data 1
138	AXR0[15]	IO	—	Y	McASP0 serial data 15 or McASP2 serial data 0
139	ACLKR0	IO	—	Y	McASP0 receive bit clock
140	VSS				
141	AFSR0	IO	—	Y	McASP0 receive frame Sync (L/R clock)
142	ACLKX0	IO	—	Y	McASP0 transmit bit clock
143	AHCLKR0/AHCLKR1	IO	—	Y	McASP0 and McASP1 receive master clock
144	AFSX0	IO	—	Y	McASP0 transmit frame Sync (L/R clock)

IC221: R5F364AMNFB (DIGITAL P.C.B.)
Microprocessor



- Notes:
- 1. ROM size depends on MCU type.
 - 2. RAM size depends on MCU type.



- Notes:
- 1. N-channel open drain output.
 - 2. Check the position of pin 1 by referring to appendix 1, Package Dimensions.

Pin No.	Port Name	Function Name (P.C.B.)	Full on	Power off	MCU sleep	AC off	Detail of Function
1	TB4IN	RDS_RDY	TMR	O	O	O	RDS READY input / Open drain output (I _{max} =8 mZ) on LC72725 side
				Low Fix	Low Fix	Low Fix	
2	DA0	AMP_LMT	DA	O	O	O	Limiter control output
				Low Fix	Low Fix	Low Fix	
3	SOUT3	DSP_MOSI	SO	O	O	O	Synchronous data output for DSP, DIR, DAC
				Low Fix	Low Fix	Low Fix	
4	SIN3	DSP_MISO	SI	I-	I-	I-	Synchronous data input for DSP, DIR, DAC
5	CLK3	DSP_SCK	SO	O	O	O	Synchronous clock output for DSP, DIR, DAC
				Low Fix	Low Fix	Low Fix	
6	BYTE	BYTE	MCU	MCU	MCU	MCU	Data bus width change input When in single chip mode: L (16 bit)
7	CNVSS	E8A_CNVSS	MCU	MCU	MCU	MCU	Processor mode select Low: Single chip mode
8	P8_7	VOL_RB	I+	I+	I+	I+	Volume rotary encoder B
9	P8_6	VOL_RA	I+	I+	I+	I+	Volume rotary encoder A
10	N_RESET	N_CPU_RST	MCU	MCU	MCU	MCU	Reset input
11	XOUT	XOUT	MCU	MCU	MCU	MCU	Oscillation circuit output
12	VSS	DGND	MCU	MCU	MCU	MCU	Microprocessor GND
13	XIN	XIN	MCU	MCU	MCU	MCU	Oscillation circuit input
14	VCC1	+3.3M	MCU	MCU	MCU	MCU	Microprocessor power supply
15	NMI	HDM_CEC	I+	I+	I+	I+	HDMI CEC input
16	N_INT2	REM_IN	IRQ	IRQ	IRQ	I	Remote control pulse input
17	N_INT1	HDM_MUT	IRQ	I-	I-	I-	HDMI mute input H: Mute
			O				
18	N_INT0	HDM_INT	IRQ	I-	I-	I-	Interrupt input from HDMI Rx
19	P8_1	N_MIC_DET	I-	I-	I-	I-	MIC detection L: MIC available
20	P8_0	HTX_PON	O	O	O	O	HDMI Tx +5V power regulator control H: Regulator ON
			High Act	Low Fix	Low Fix	Low Fix	
21	TA3IN	N_DSP_INT	TMR	I+	O	I+	Interrupt input from DSP
					Low Fix		
22	P7_6	(no use)	O	O	O	O	
			Low Fix	Low Fix	Low Fix	Low Fix	
23	TA2IN	N_PDET	TMR	I+	I+	I+	AC power detection L: Power down
24	P7_4	(no use)	O	O	O	O	
			Low Fix	Low Fix	Low Fix	Low Fix	
25	P7_3	N_FLD_RST	O	O	O	O	FL driver reset
			Low Act	Low Fix	Low Fix	Low Fix	
26	P7_2	N_FLD_CS	O	O	O	O	FL driver chip select
			Low Act	Low Fix	Low Fix	Low Fix	
27	SCL2	HDM_SCL	SI	O	O	O	HDMI Rx/Tx I2C SCL output
				Low Fix	Low Fix	Low Fix	
28	SDA2	HDM_SDA	SO	O	O	O	HDMI Rx/Tx I2C SDA input/output
				Low Fix	Low Fix	Low Fix	
29	TXD1	E8A_TXD	SO	SO	I+	I+	
30	RXD1	E8A_RXD	SI	SI	I+	I+	
31	CLK1	E8A_SCLK	O	O	I+	I+	
32	P6_4	E8A_BUSY	I-	I-	I-	I-	
33	SDA0	TUN_SDA	SI	O	O	O	Synchronous data input/output for tuner I2C
			O	Low Fix	Low Fix	Low Fix	
34	SCL0	TUN_SCL	SO	O	O	O	Synchronous clock output for tuner I2C
				Low Fix	Low Fix	Low Fix	
35	P6_1	N_HRX_RST	O	O	O	O	HDMI Rx reset
			Low Act	Low Fix	Low Fix	Low Fix	
36	P6_0	N_HTX_RST	O	O	O	O	HDMI Tx reset
			Low Act	Low Fix	Low Fix	Low Fix	

Pin No.	Port Name	Function Name (P.C.B.)	Full on	Power off	MCU sleep	AC off	Detail of Function
37	P5_7	N_DIR_RST	O Low Act	O Low Fix	O Low Fix	O Low Fix	DIR reset
38	P5_6	N_DIR_CS	O Low Act	O Low Fix	O Low Fix	O Low Fix	DIR chip select
39	P5_5	N_E8A_EPM	I-	I-	I-	I-	
40	P5_4	DIR_WCK	I	I	O Low Fix	I	DIR_WCK input for CDDA writing
41	P5_3	DIR_SDO	I	I	O Low Fix	I	DIR_SDO input for CDDA writing
42	P5_2	N_ADC_PDN	O Low Act	O Low Fix	O Low Fix	O Low Fix	ADC power down
43	P5_1	N_DAC_CS	O Low Act	O Low Fix	O Low Fix	O Low Fix	DAC chip select
44	P5_0	N_E8A_CE	I+	I+	I+	I+	
45	P4_7	N_DSP_RDY	I+	I+	O Low Fix	I+	DSP ready input
46	RXD7	RDS_MISO	I-	I-	I-	I-	RDS data input
47	CLK7	RDS_SCK	O	O Low Fix	O Low Fix	O Low Fix	RDS clock output
48	P4_4	N_TUN_TUND	I+	I+	O Low Fix	I+	Tuner tuned input
49	P4_3	N_TUN_ST	I+	I+	O Low Fix	I+	Tuner stereo input
50	P4_2	DSP_FMT	O High Act	O Low Fix	O Low Fix	O Low Fix	DSP full mute output H: Mute
51	P4_1	N_DSP_CS	O Low Act	O Low Fix	O Low Fix	O Low Fix	DSP chip select
52	P4_0	N_DSP_RST	O High Act	O Low Fix	O Low Fix	O Low Fix	DSP reset
53	P3_7	N_E2R_CS	O Low Act	O Low Act	O Low Act	O Low Act	EEPROM chip select
54	P3_6	N_RDS_RST	O Low Act	O Low Fix	O Low Fix	O Low Fix	RDS reset
55	P3_5	R2A_MOSI	O	O Low Fix	O Low Fix	O Low Fix	Electronic vol patterning synchronous data output
56	P3_4	R2A_SCK	O	O Low Fix	O Low Fix	O Low Fix	Electronic vol patterning synchronous clock output
57	P3_3	I_PRT	I-	I-	I-	I-	Overcurrent protection detection
58	P3_2	SP_IMP	O	O Low Fix	O Low Fix	O Low Fix	Speaker impedance changing relay control / At 8 ohm: Low (Relay off, B voltage high) At 6 ohm and temperature rise: High (Relay ON, B voltage low)
59	P3_1	N_CNPT_PS	O Low Act	O Low Fix	O Low Fix	O Low Fix	Component video selector IC power save
60	VCC2	VCC2	MCU	MCU	MCU	MCU	Microprocessor power supply
61	P3_0	N_VO_MT	O Low Act	O Low Fix	O Low Fix	O Low Fix	Composite video selector mute
62	VSS	VSS	MCU	MCU	MCU	MCU	Microprocessor GND
63	P2_7	N_HP_DET	I+	O Low Fix	O Low Fix	O Low Fix	Headphone detection L: Headphone available
64	P2_6	IPD_APDT	I-	I-	I-	I-	iPod accessory power detection / Low while iPod booting (about 2 seconds). Execute identification when booting seems to have completed. Change to constant input to prevent pulling between high output of iPod and Low Fix of microprocessor output.
65	N_INT7	N_IPD_DET	IRQ	IRQ	IRQ	O Low Fix	iPod detection When inserting an iPod into the DOCK H to L

Pin No.	Port Name	Function Name (P.C.B.)	Full on	Power off	MCU sleep	AC off	Detail of Function
66	N_INT6	N_DIR_INT	IRQ	I	O	I	DIR interrupt input
					Low Fix		
67	P2_3	HPRY	O	O	O	O	Headphone relay control
			High Act	Low Fix	Low Fix	Low Fix	
68	P2_2	SPRY_S	O	O	O	O	Speaker relay control (Surround)
			High Act	Low Fix	Low Fix	Low Fix	H: Relay ON
69	P2_1	SPRY_C	O	O	O	O	Speaker relay control (Center)
			High Act	Low Fix	Low Fix	Low Fix	H: Relay ON
70	P2_0	SPRY_F	O	O	O	O	Speaker relay control (Front)
			High Act	Low Fix	Low Fix	Low Fix	H: Relay ON
71	P1_7	3D_PON	O	O	O	O	PCB DIGITAL +3.3D, +1.2D regulator control
			High Act	Low Fix	Low Fix	Low Fix	H: Regulator ON
72	P1_6	5D_PON	O	O	O	O	PCB DIGITAL +5D regulator control
			High Act	Low Fix	Low Fix	Low Fix	H: Regulator ON
73	N_INT3	PSW_DET	IRQ	IRQ	IRQ	I	Power system switch (Power, Scene) detection
74	P1_4	VSEL3	O	O	O	O	Video input select
				Low Fix	Low Fix	Low Fix	
75	TXD6	IPD_MOSI	SO	O	O	O	Synchronous data output for iPod
				Low Fix	Low Fix	Low Fix	
76	RXD6	IPD_MISO	SI	I+	I+	I+	Synchronous data input for iPod
77	P1_1	VSEL2	O	O	O	O	Video input select
				Low Fix	Low Fix	Low Fix	
78	P1_0	VSEL1	O	O	O	O	Video input select
				Low Fix	Low Fix	Low Fix	
79	P0_7	N_SB_MT	O	O	O	O	Mute control (Surround back)
			Low Act	Low Fix	Low Fix	Low Fix	* Spare to use for HD audio when necessary
80	P0_6	N_SW_MT	O	O	O	O	Mute control (Subwoofer)
			Low Act	Low Fix	Low Fix	Low Fix	
81	P0_5	N_S_MT	O	O	O	O	Mute control (Surround)
			Low Act	Low Fix	Low Fix	Low Fix	
82	P0_4	N_C_MT	O	O	O	O	Mute control (Center)
			Low Act	Low Fix	Low Fix	Low Fix	
83	P0_3	N_F_MT	O	O	O	O	Mute control (Front)
			Low Act	Low Fix	Low Fix	Low Fix	
84	P0_2	PWR_RY	O	O	O	O	Power relay control
			High Act	Low Fix	Low Fix	Low Fix	H: ON
85	P0_1	N_FCT	I	I	I	I	FCT detection
							H: Product mode L: FCT mode
86	AN0_0	(no use)	AD	I	I	I	
				AD standby	AD standby	AD standby	
87	AN7	DC_PRT	AD	I	I	I	Power AMP DC detection
				AD standby	AD standby	AD standby	
88	AN6	AMP_OLV	AD	I	I	I	Power AMP output level detection
				AD standby	AD standby	AD standby	
89	AN5	THM1_PRT	AD	I	I	I	Temperature detection 1
				AD standby	AD standby	AD standby	
90	AN4	THM2_PRT	AD	I	I	I	Temperature detection 2 (U, C models)
				AD standby	AD standby	AD standby	
91	AN3	KEY2	AD	I	I	I	KEY2 AD value taken in
				AD standby	AD standby	AD standby	
92	AN2	KEY1	AD	I	I	I	KEY1 AD value taken in
				AD standby	AD standby	AD standby	
93	AN1	PS_PRT	AD	I	I	I	PS protection detection
				AD standby	AD standby	AD standby	
94	AVSS	AVSS	MCU	MCU	MCU	MCU	Microprocessor GND

Pin No.	Port Name	Function Name (P.C.B.)	Full on	Power off	MCU sleep	AC off	Detail of Function
95	AN0	IPD_TYPE	AD	I	I	I	DOCK discriminate
				AD standby	AD standby	AD standby	
96	VREF	VREF	MCU	MCU	MCU	MCU	AD reference voltage
97	AVCC	AVCC	MCU	MCU	MCU	MCU	Microprocessor power supply
98	SIN4	E2R_MISO	SI	SI	O	SI	Synchronous data input for EEPROM
99	SOUT4	FLD_MOSI	SO	SO	O	SO	FL driver/Synchronous data output for EEPROM
					Low Fix		
100	CLK4	FLD_SCK	SO	SO	O	SO	FL driver/Synchronous clock output for EEPROM
					Low Fix		

Key detection for A/D port

Key input (A/D) pull-up resistance 10 k-ohms

Ohm	0	+ 1.0 k	+ 1.5 k	+ 1.8 k	+ 2.2 k	+ 3.3 k	+ 4.7 k	+ 8.2 k	+ 10.0 k
V	0 – 0.15	0.15 – 0.48	0.49 – 0.82	0.83 – 1.14	1.15 – 1.46	1.47 – 1.79	1.80 – 2.12	2.13 – 2.40	2.41 – 2.91
A/D value (3.3 V=255)	0 – 11	12 – 37	38 – 64	65 – 88	89 – 113	114 – 139	140 – 164	165 – 186	187 – 226
KEY1 (92 pin)	STRAIGHT	TUNING >>	TUNING <<	AM	FM	PRESET >	PRESET <	MEMORY	INFO

Ohm	0	+ 1.0 k	+ 1.0 k	+ 1.5 k	+ 1.5 k	+ 2.2 k	+ 3.3 k	+ 4.7 k	(22 k + 33 k)	22.0 k	33.0 k
V	0 – 0.15	0.15 – 0.42	0.43 – 0.70	0.71 – 0.97	0.98 – 1.24	1.25 – 1.53	1.54 – 1.84	1.84 – 2.10	2.11 – 2.33	2.34 – 2.54	2.54 – 2.71
A/D value (3.3 V=255)	0 – 11	12 – 32	33 – 54	55 – 75	76 – 96	97 – 119	120 – 142	143 – 163	164 – 181	182 – 197	198 – 209
KEY2 (91 pin)	SCENE RADIO	SCENE CD	SCENE TV	SCENE BD/DVD	PROGRAM >	PROGRAM <	INPUT >	INPUT <	–	⏻ (Power)	TONE CONTROL

BLOCK DIAGRAM

DIGITAL

• See page 77-80 → SCHEMATIC DIAGRAM

MAIN

• See page 83-85 → SCHEMATIC DIAGRAM

MAIN

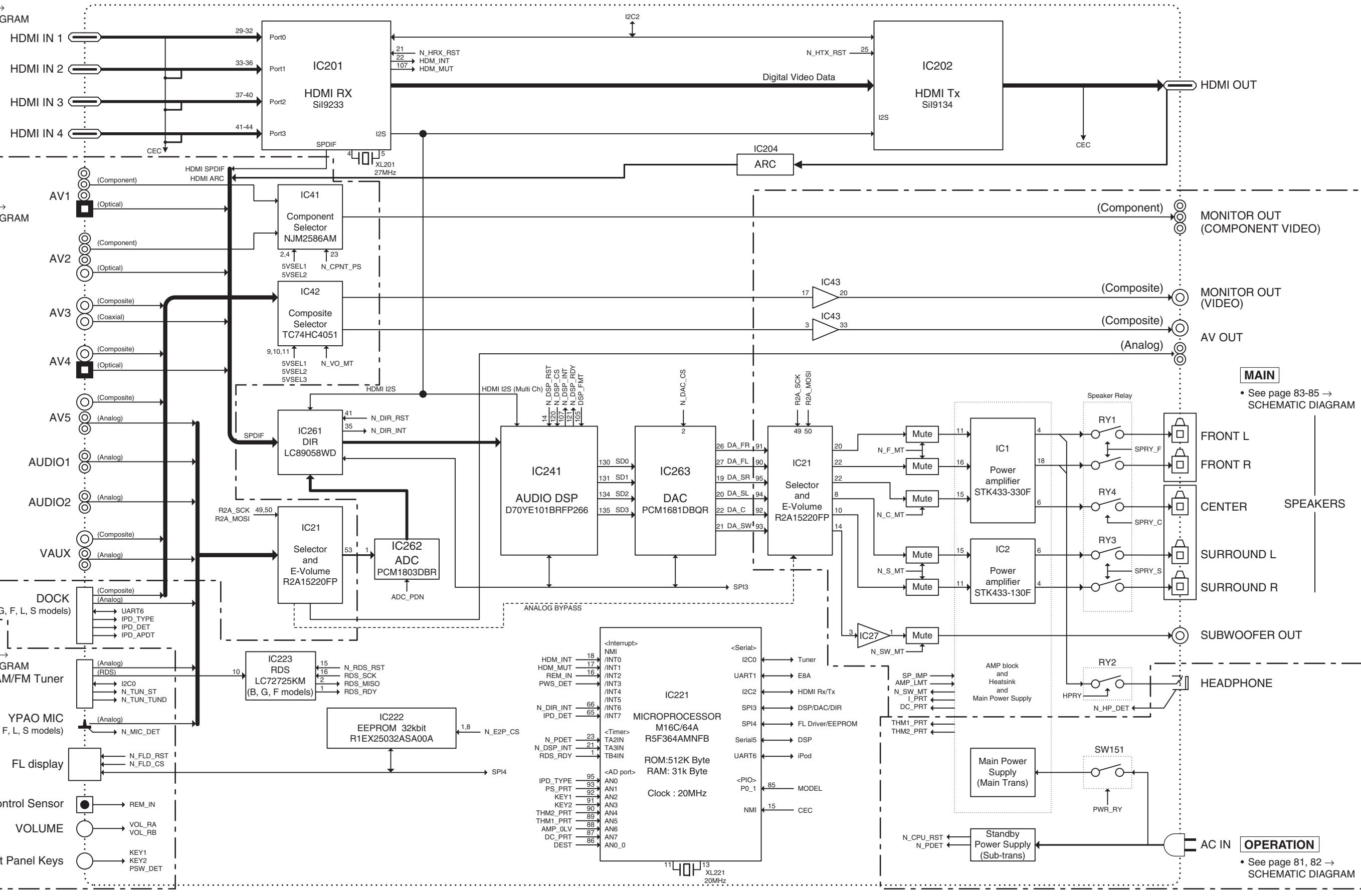
• See page 83-85 → SCHEMATIC DIAGRAM

OPERATION

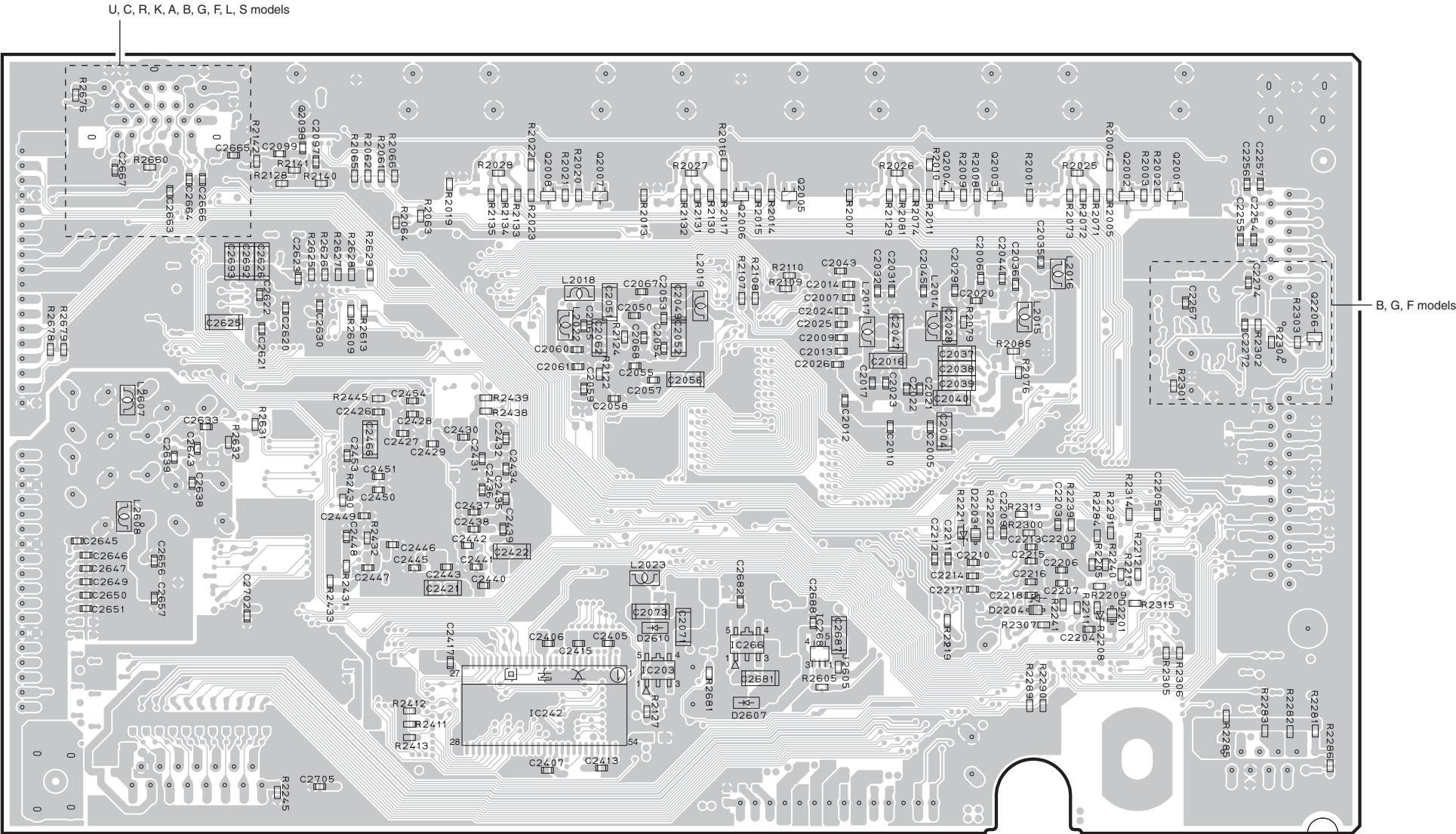
• See page 81, 82 → SCHEMATIC DIAGRAM

OPERATION

• See page 81, 82 → SCHEMATIC DIAGRAM



DIGITAL (Side B)

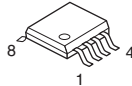
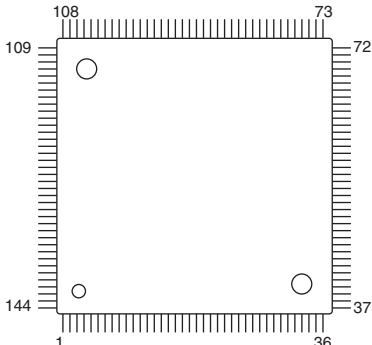
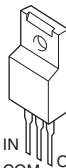
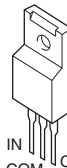
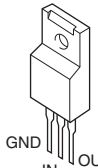
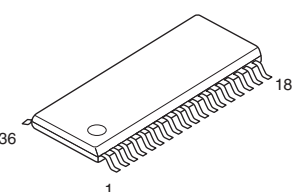
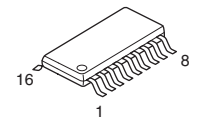
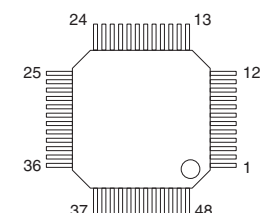
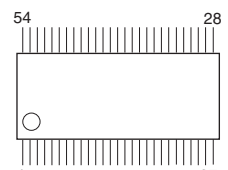
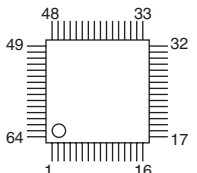
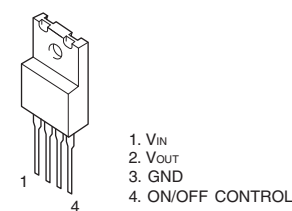
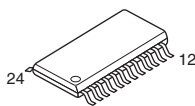
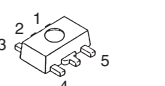
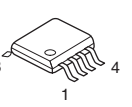
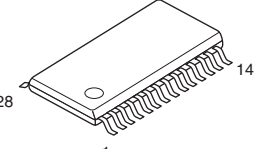
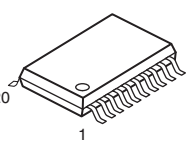
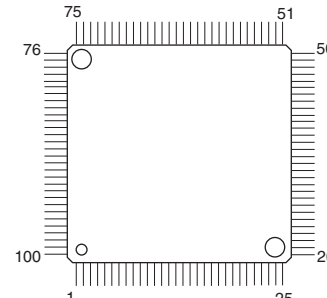
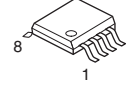
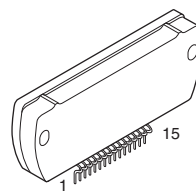
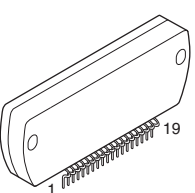
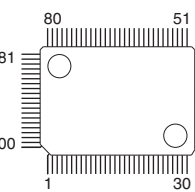
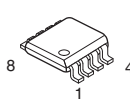
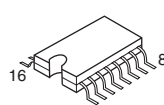
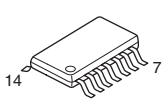


• Semiconductor Location

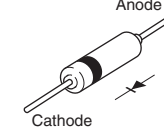
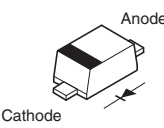
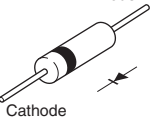
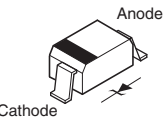
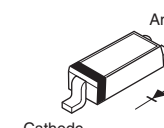
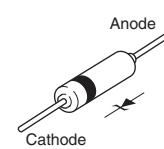
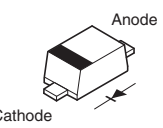
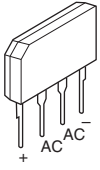
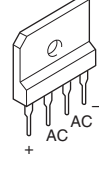
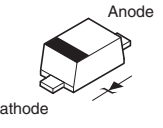
Ref no.	Location
D2201	G5
D2203	G5
D2204	G5
D2607	F6
D2610	E5
IC203	E5
IC242	E6
IC266	F5
IC268	F5
Q2001	G3
Q2002	G3
Q2003	G3
Q2004	F3
Q2005	F3
Q2006	F3
Q2007	E3
Q2008	E3
Q2206	H4

PIN CONNECTION DIAGRAMS

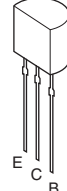
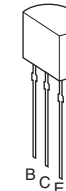
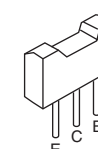
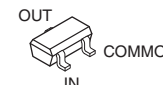
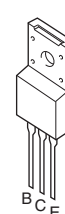
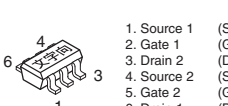
ICs

BD9325FJ 	D70YE101BRFP266 SII9233ACTU 	KIA7805API 	KIA7812API 	KIA7912PI 
LA73050-TLM-E 	LC72725KM-UY-TLM-E 	LC89058WD-E 	M12L64164A-5TG 	
M66003-0131FP-R 	MX29LV160DBTI-70G 	NJM2388F33 	NJM2586AM (TE2) 	
NJM2830U1-05 (TE1) NJM2884U1-18 (TE1) 	NJM2867F3-05 	NJM4565M (TE1) 	PCM1681PWPR 	PCM1803DBR 
R5F364AMNFB SII9134CTU 	R1EX25032ASA00A 	STK433-130F-E 	STK433-330F-E 	
R2A15220FP 	TC7WHU04FK 	TC74HC4051AFEL 	TC74VHCT08AFT TC74VHCU04FT 	

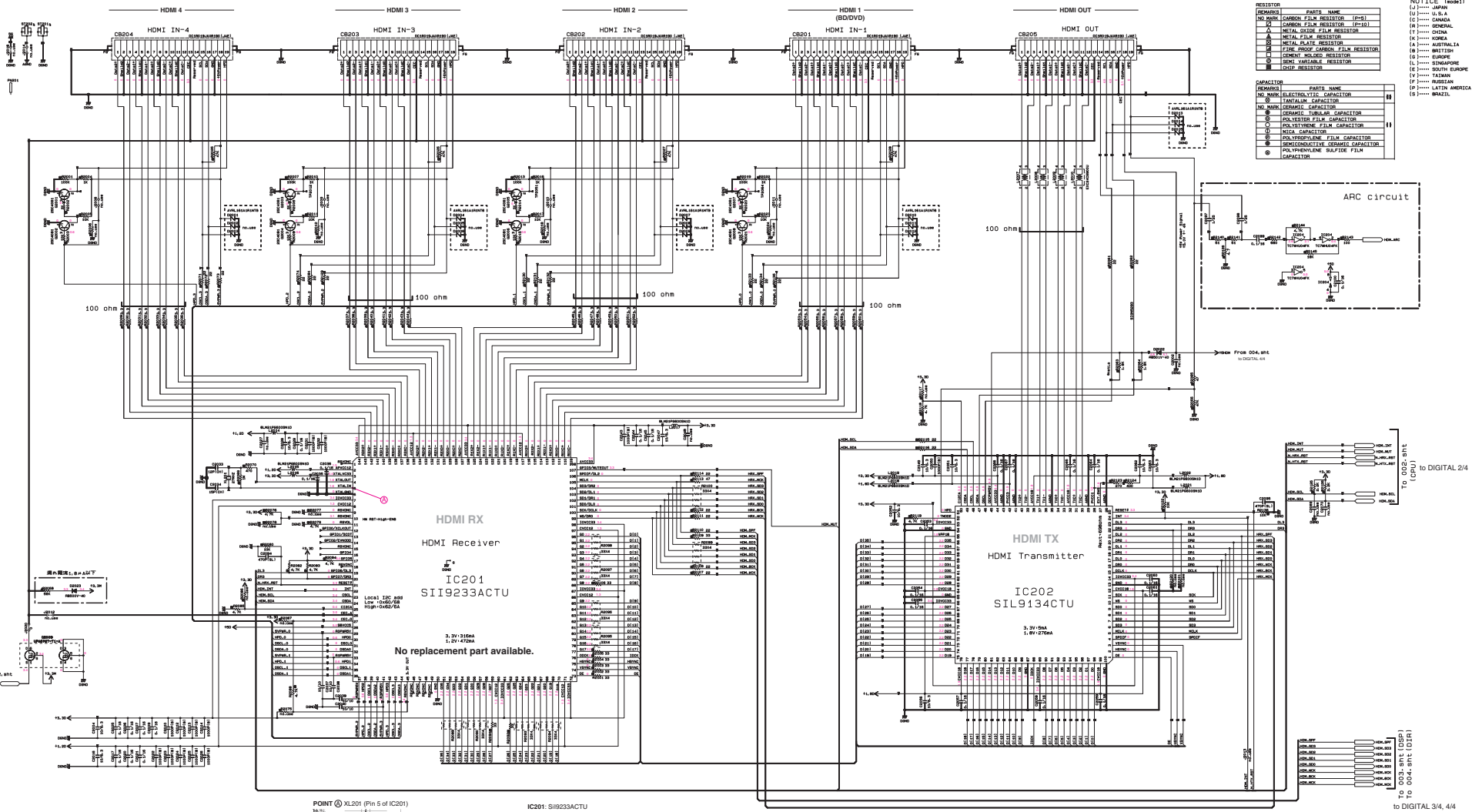
Diodes

1N4003S 1SS133 1SS176 1SS270A 	1SS355 	1T2 	HZU3.3B2 TRF-E HZU4.3B3 TRF-E 
KBP103G 1.0A 200V 	KDS160-RTK 	MTZJ4.7A MTZJ6.8C MTZJ10B MTZJ39D 	RB051LA-40 RB500V-40 RB501V-40 
RS203M-B-C-J80 	TS6P03G 6.0A 200V 	UDZS4.7B UDZ5.1B UDZS5.6B TE-17 5.6V UDZS9.1B 	

Transistors

2N5401C-AT/P 2SA1015-Y 	2N5551C-AT 	2SA1576A 	2SA1708 	2SC1815 Y 2SC1815 Y TP 	2SC4081 T106 
2SD2704 K 	KRA104S-RTK KRC102S-RTK KRC104S-RTK 	KRC102M-AT 	KTA1046-Y-U/P 	KTC3875S 	μPA672T-T1-A 

SCHEMATIC DIAGRAMS
DIGITAL 1/4

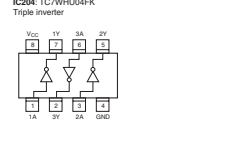
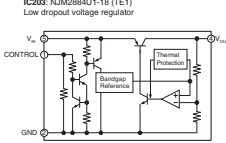
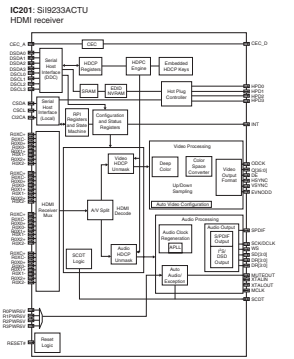
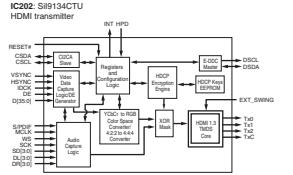
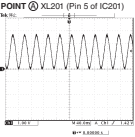


RESISTOR	PARTS NAME
NO MARK	CARBON FILM RESISTOR (FMS)
1	CARBON FILM RESISTOR (FMS)
2	METAL FILM RESISTOR
3	METAL FILM RESISTOR
4	FINE TROOP CARBON FILM RESISTOR
5	GENERAL PURPOSE CARBON FILM RESISTOR
6	CHIP RESISTOR

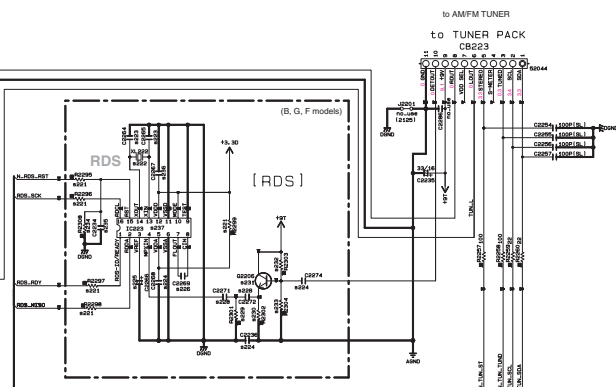
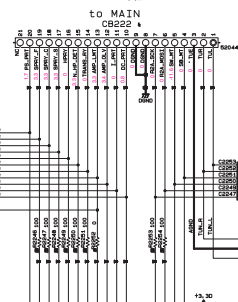
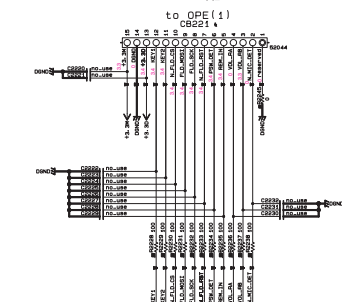
CAPACITOR	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
1	TANTALUM CAPACITOR
2	CERAMIC CAPACITOR
3	CERAMIC CAPACITOR
4	POLYESTER FILM CAPACITOR
5	POLYESTER FILM CAPACITOR
6	NICA CAPACITOR
7	POLYPROPYLENE FILM CAPACITOR
8	SEMICONDUCTOR CERAMIC CAPACITOR
9	POLYPROPYLENE DAPLE FILM CAPACITOR

NOTICE (Note1)

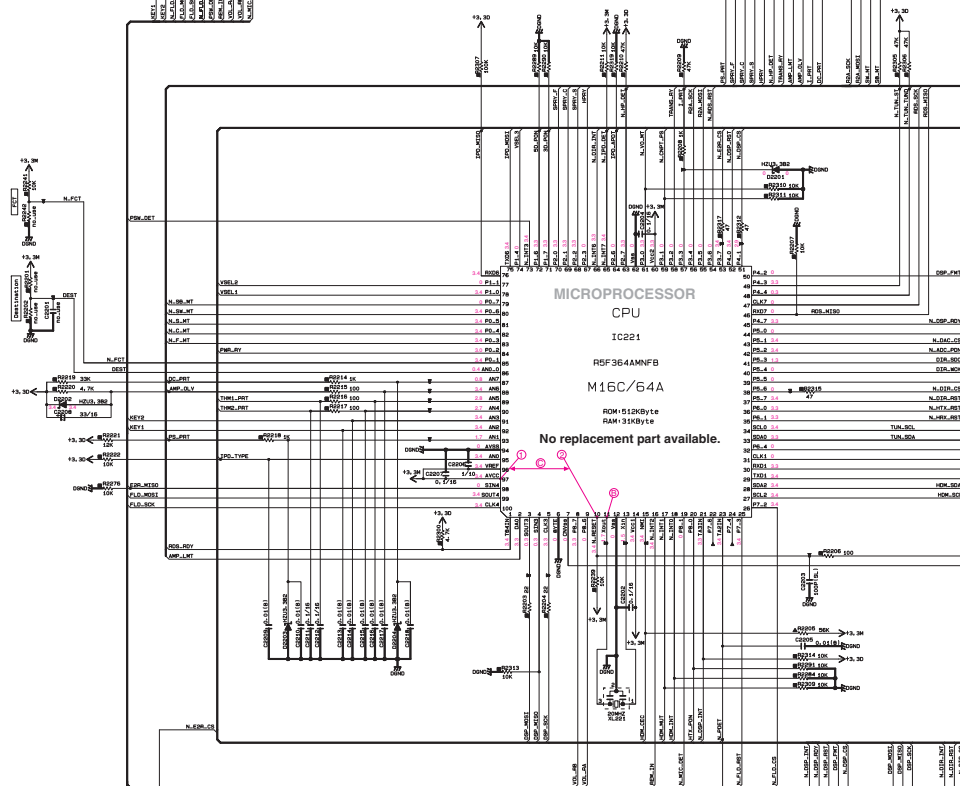
(J) JAPAN
(U) U.S.A.
(C) CANADA
(A) GENERAL
(7) CHINA
(K) KOREA
(A) AUSTRALIA
(S) SWITZERLAND
(E) EUROPE
(S) SOUTH EUROPE
(F) FINLAND
(P) RUSSIA
(L) LATIN AMERICA
(B) BRAZIL



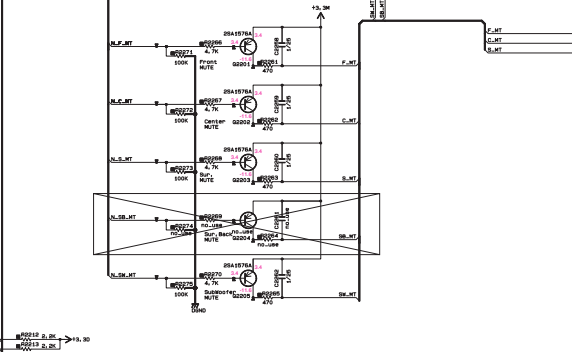
• All voltages are measured with a 10MΩV DC electronic voltmeter.
• Components having special characteristics are marked Δ, and must be replaced with parts having specifications equal to those originally installed.
• Schematic diagram is subject to change without notice.



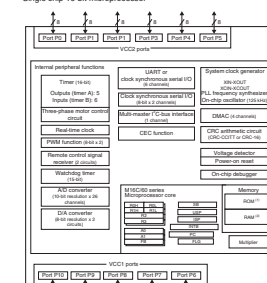
Destination Part List				
ATO	LOC	FORMAL	X	REF
W001	R0008 R0009 R0010 R0011	X	X	R00050 100
W002	AL000	X	X	W00040 4.130000
W003	C0004 C0005	X	X	W00017 27P (11)
W004	C0014 C0015	X	X	US00010 5.1 F (1)
W005	C0006	X	X	W00017 27P (11)
W006	C0009	X	X	US00006 5.1 F (1)
W007	C0012	X	X	US00009 3.00 F (1)
W008	C0017	X	X	US00009 3.00 F (1)
W009	R0001	X	X	R000024 200
W010	R0002	X	X	R000007 5.20
W011	R0006	X	X	R000007 SSC-401
W012	R0003	X	X	R000008 1000
W013	R0034	X	X	R000023 200
W014	R0038	X	X	US00010 1000 F (1)
W015	C0034	X	X	US00010 1000 F (1)
W016	C0007	X	X	US00010 1000 F (1)
W017	C0003	X	X	US00010 1000 F (1)



No replacement part available.

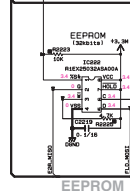
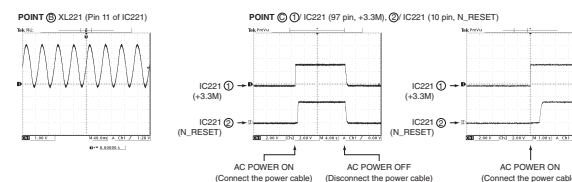


IC221: R5F364AMNFB
Single chip 16-bit microprocessor



Notes:

1. ROM size depends on MCU type
2. RAM size depends on MCU type

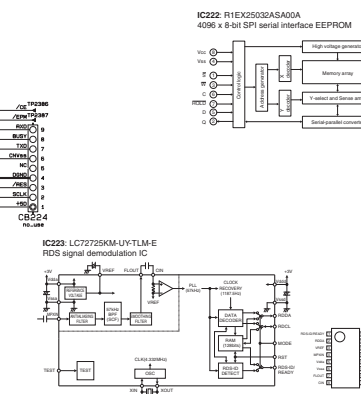
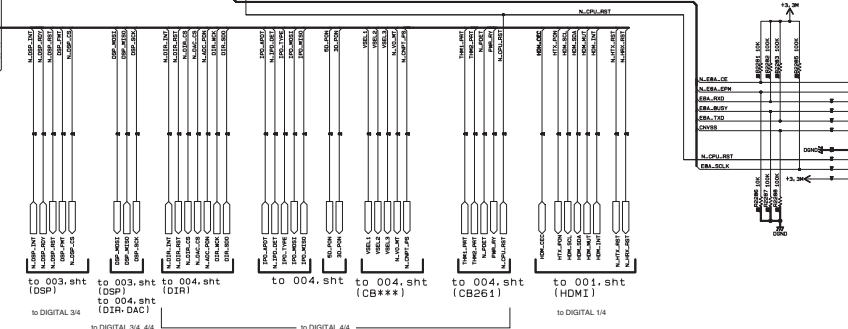


RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
	CARBON FILM RESISTOR (P=10)
	METAL OXIDE FILM RESISTOR
	METAL FILM RESISTOR
	METAL PLATE RESISTOR
	FIRE PROOF CARBON FILM RESISTOR
	CEMENT MOLDED RESISTOR
	SEMI VARIABLE RESISTOR
	GYRO RESISTOR

CAPACITOR	
REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
②	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
②	CERAMIC TUBULAR CAPACITOR
②	POLYESTER FILM CAPACITOR
①	POLYSTYRENE FILM CAPACITOR
①	MICA CAPACITOR
②	POLYPROPYLENE FILM CAPACITOR
②	SEMICONDUCTIVE CERAMIC CAPACITOR
③	POLYPHENYLENE SULFIDE FILM

NOTICE (model)

(J)..... JAPAN
(U)..... U. S. A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL



- ★ All voltages are measured with a 10M Ω /V DC electronic voltmeter.
- ★ Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.

DIGITAL 3/4

to DIGITAL 1/4

to DIGITAL 4/4

to DIGITAL 2/4

to DIGITAL 3/4

to DIGITAL 4/4

to DIGITAL 1/4

to DIGITAL 2/4

to DIGITAL 3/4

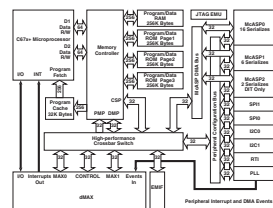
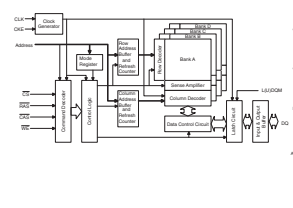
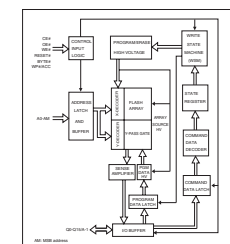
to DIGITAL 4/4

to DIGITAL 1/4

to DIGITAL 2/4

to DIGITAL 3/4

to DIGITAL 4/4

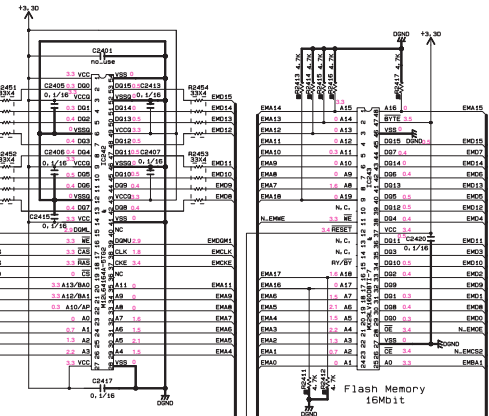
IC241: D70YE101BRFP266
Floating-point digital signal processorsIC242: M12L64164A-STG
1M x 16-bit x 4 banks synchronous DRAMIC243: MX29LV160DBT1-70G
16M-bit 3V supply flash memory

REMARKS	PARTS NAME
NO MARK CARBON FILM RESISTOR (P=5)	
NO MARK CARBON FILM RESISTOR (P=10)	
A METAL OXIDE FILM RESISTOR	
A METAL FILM RESISTOR	
A METAL PLATE RESISTOR	
A FINE FINE CARBON FILM RESISTOR	
A CEMENT MOLDED RESISTOR	
A SEMI-VARIABLE RESISTOR	
A CHIP RESISTOR	

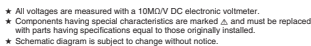
REMARKS	PARTS NAME
NO MARK ELECTROLYTIC CAPACITOR	
NO MARK CERAMIC CAPACITOR	
NO MARK CERAMIC CAPACITOR	
NO MARK CERAMIC CAPACITOR	
NO MARK CERAMIC CAPACITOR	
NO MARK CERAMIC CAPACITOR	
NO MARK CERAMIC CAPACITOR	
NO MARK CERAMIC CAPACITOR	
NO MARK CERAMIC CAPACITOR	
NO MARK CERAMIC CAPACITOR	

NOTICE (mode1)

(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
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(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
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(L)..... SINGAPORE
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(F)..... RUSSIA
(P)..... LATIN AMERICA
(S)..... BRAZIL



• All voltages are measured with a 10MΩ/V DC electronic voltmeter.
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• Schematic diagram is subject to change without notice.



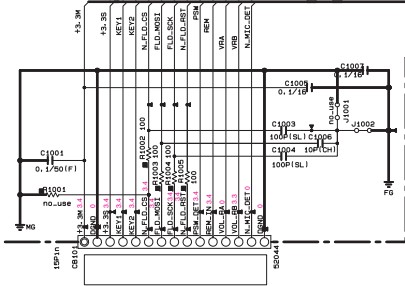
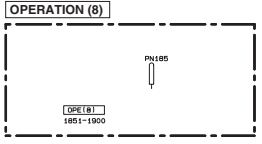
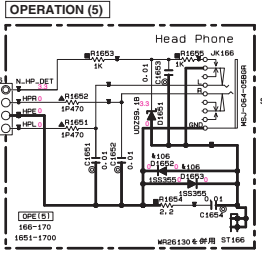
OPERATION 1/2

RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
□	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
■	GENERAL
■	FIRE PROOF CARBON FILM RESISTOR
■	CEMENT MOLDED RESISTOR
■	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR	
REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
□	TANTALUM CAPACITOR
○	CERAMIC CAPACITOR
⊙	CERAMIC TUBULAR CAPACITOR
⊖	POLYESTER FILM CAPACITOR
⊕	POLYSTYRENE FILM CAPACITOR
①	MICA CAPACITOR
②	POLYPROPYLENE FILM CAPACITOR
③	SEMICONDUCTIVE CERAMIC CAPACITOR
④	POLYPHENYLENE SULFIDE FILM CAPACITOR

NOTICE (model)

(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
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(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL



OPERATION (7)

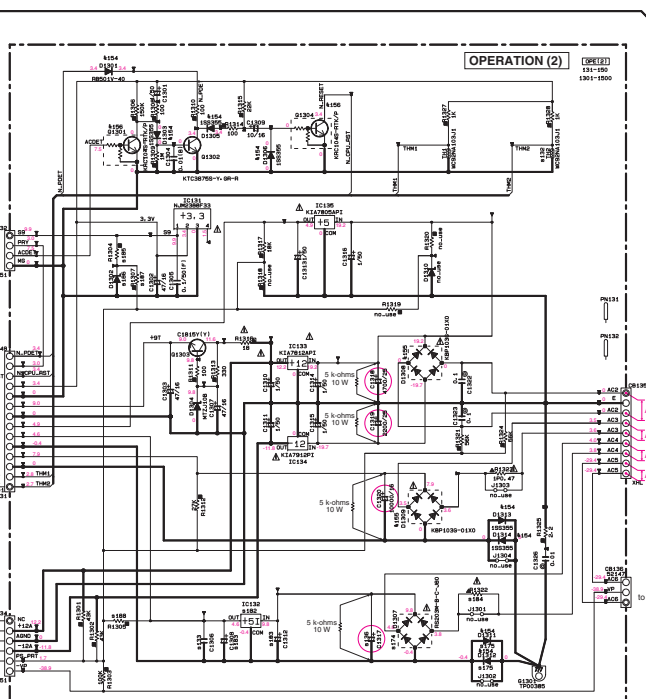
Key detection for A/D port

Key input (A/D) pull-up resistance 10 k-ohms

Ohm	0	+ 10 k	+ 1.5 k	+ 1.8 k	+ 2.2 k	+ 3.3 k	+ 4.7 k	+ 8.2 k	+ 10.0 k
V	0 - 0.15	0.15 - 0.48	0.49 - 0.82	0.83 - 1.14	1.15 - 1.46	1.47 - 1.79	1.80 - 2.12	2.13 - 2.40	2.41 - 2.91
A/D value (3.3V-255)	0 - 11	12 - 37	38 - 64	65 - 88	89 - 113	114 - 139	140 - 164	165 - 186	187 - 226
KEY1 (92 pin)	STRAIGHT	TUNING	TUNING	AM	FM	PRESET	PRESET	MEMORY	INFO

Ohm	0	+ 10 k	+ 1.0 k	+ 1.5 k	+ 1.5 k	+ 2.2 k	+ 3.3 k	+ 4.7 k	(22 k + 33 k)	22.0 k	23.4 - 2.54	2.54 - 2.71
V	0 - 0.15	0.15 - 0.42	0.43 - 0.70	0.71 - 0.97	0.98 - 1.24	1.25 - 1.53	1.54 - 1.84	1.84 - 2.10	2.11 - 2.33	2.34 - 2.54	2.54 - 2.71	
A/D value (3.3V-255)	0 - 11	12 - 32	33 - 54	55 - 75	76 - 96	97 - 119	120 - 142	143 - 163	164 - 181	182 - 197	198 - 209	
KEY2 (91 pin)	SCENE RADIO	SCENE CD	SCENE TV	SCENE RADIO	PROGRAM	PROGRAM	INPUT	INPUT	-	Ⓢ(Power)	Ⓢ(Power)	Ⓢ(Power)

• All voltages are measured with a 10MΩV DC electronic voltmeter.
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• Schematic diagram is subject to change without notice.



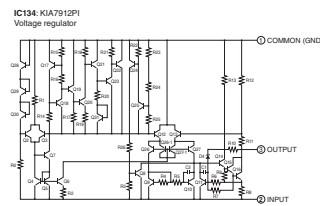
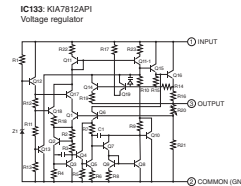
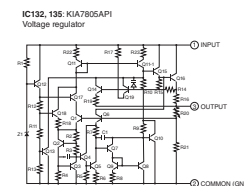
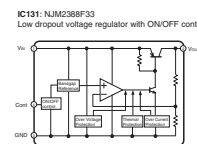
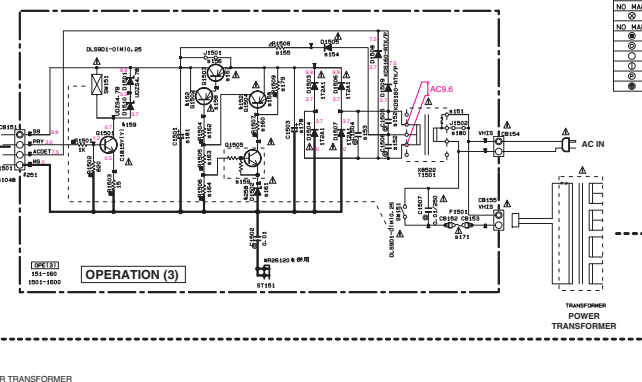
Destination Part List						
BOX	LOC	DESCRIPTION	RS	T	KMSPL	
X105	X105	X VMD000	VMD000	X	VMD000	VMD000
X106	X106	X VMD000	X VMD000	X	VMD000	VMD000
X157	X157	X A1706101	X A1706101	X	X	
X158	X158	X 1410101	X 1410101	X	X	
X159	X159	X 1410101	X 1410101	X	X	
X159	X159	X 1410101	X 1410101	X	X	
X160	X160	X 1410101	X 1410101	X	X	
X161	X161	X 1410101	X 1410101	X	X	
X162	X162	X 1410101	X 1410101	X	X	
X163	X163	X 1410101	X 1410101	X	X	
X164	X164	X 1410101	X 1410101	X	X	
X171	X171	X 1410101	X 1410101	X	X	
X174	X174	X 1410101	X 1410101	X	X	
X175	X175	X 1410101	X 1410101	X	X	
X176	X176	X 1410101	X 1410101	X	X	
X177	X177	X 1410101	X 1410101	X	X	
X178	X178	X 1410101	X 1410101	X	X	
X179	X179	X 1410101	X 1410101	X	X	
X180	X180	X 1410101	X 1410101	X	X	
X181	X181	X 1410101	X 1410101	X	X	
X182	X182	X 1410101	X 1410101	X	X	
X183	X183	X 1410101	X 1410101	X	X	
X184	X184	X 1410101	X 1410101	X	X	
X185	X185	X 1410101	X 1410101	X	X	
X186	X186	X 1410101	X 1410101	X	X	
X187	X187	X 1410101	X 1410101	X	X	
X188	X188	X 1410101	X 1410101	X	X	

CAPACITOR	
REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
⊙	CERAMIC TUBULAR CAPACITOR
⊗	POLYESTER FILM CAPACITOR
⊙	POLYSTYRENE FILM CAPACITOR
①	MICA CAPACITOR
⊙	POLYPROPYLENE FILM CAPACITOR
⊗	SEMICONDUCTIVE CERAMIC CAPACITOR

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NOTICE (model)
(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERIC.
(S)..... BRAZIL

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Notes)

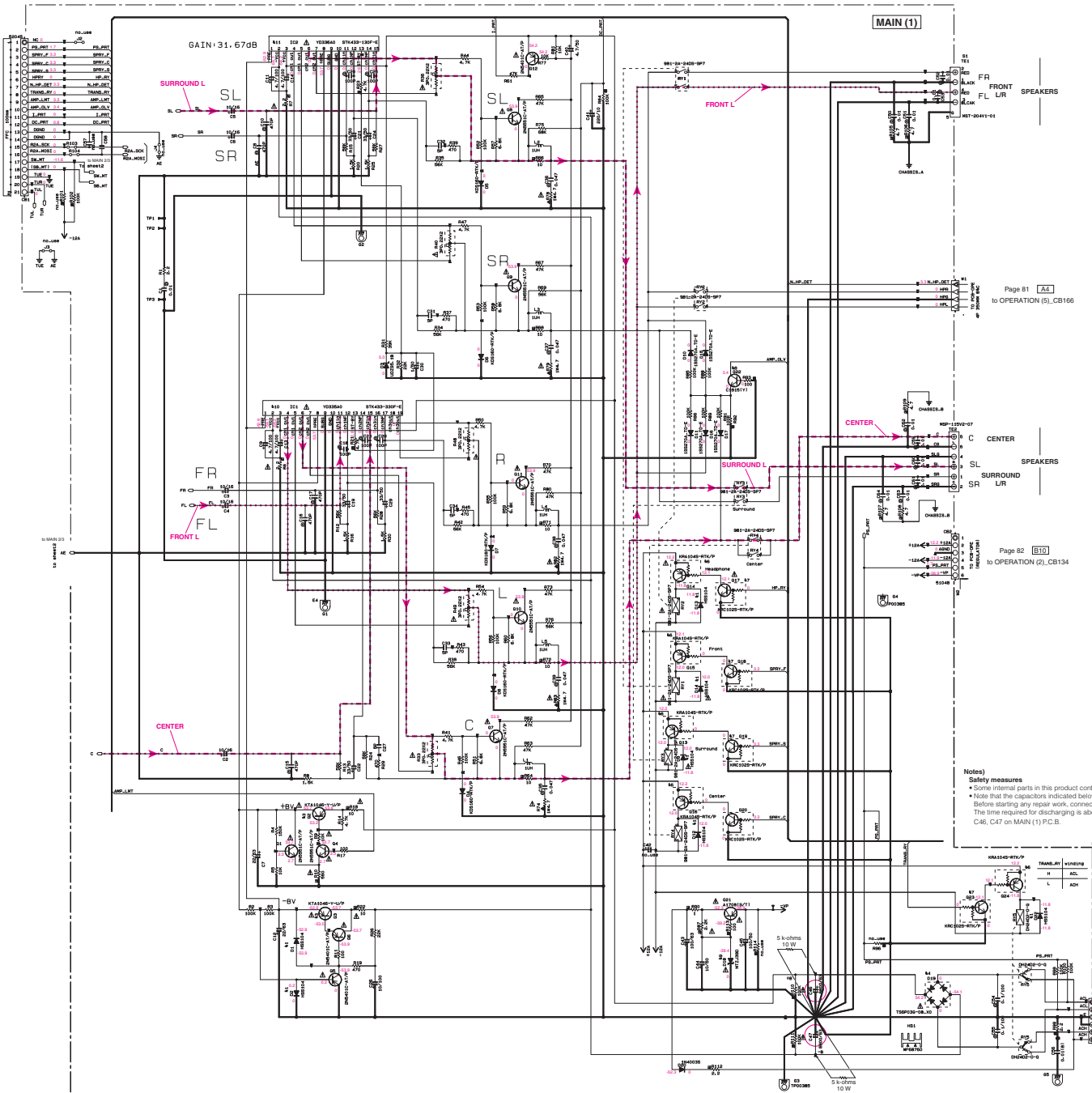
Safety measures

- Some internal parts in this product contain high voltages and are dangerous. Be sure to take safety measures during servicing, such as wearing insulating gloves.
- Note that the capacitors indicated below are dangerous even after the power is turned off because an electric charge remains and a high voltage continues to exist there. Be sure to discharge any residual work, cover a discharging resistor (5 k-ohms/10 W) to the terminals of each capacitor indicated below to discharge electricity. The time required for discharging is about 30 seconds per part.

C1317-1320 on OPERATION (2) P.C.B.

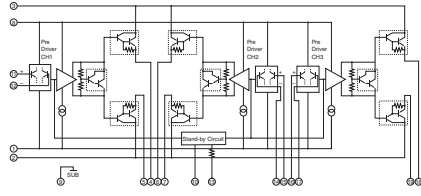
MAIN 1/3

Page 78 [F2]
to DIGITAL_CB222

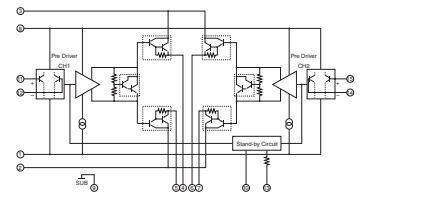


MAIN(1)
Location: TP1~TP200
Location: *1~*200
Location: **1~**20

IC1: STK433-130F-E
3-channel AF power amplifier, stand-by circuit built-in



IC2: STK433-130F-E
2-channel AF power amplifier, stand-by circuit built-in



REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (D=5)
□	CARBON FILM RESISTOR (D=10)
△	METAL OXIDE FILM RESISTOR
□	METAL FILM RESISTOR
△	METAL PLATE RESISTOR
□	FINE PROOF CARBON FILM RESISTOR
□	CONCENT. MOLED. RESISTOR
□	SEMI VARIABLE RESISTOR
□	CHIP RESISTOR

NOTICE (mode1)
(J) JAPAN
(U) U.S.A.
(C) CANADA
(E) GENERAL
(T) CHINA
(K) KOREA
(A) AUSTRALIA
(B) BRITISH
(G) EUROPE
(L) SINGAPORE
(S) SOUTH EUROPE
(V) TAIWAN
(P) RUSSIAN
(F) LATIN AMERICA
(S) BRAZIL

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
□	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
□	CERAMIC TUBULAR CAPACITOR
□	POLYESTER FILM CAPACITOR
□	POLYETHYLENE FILM CAPACITOR
□	STYL CAPACITOR
□	POLYPROPYLENE FILM CAPACITOR
□	SEMICONDUCTIVE CERAMIC CAPACITOR
□	POLYPHENYLENE SULFIDE FILM CAPACITOR

Notes
Safety measures
• Some internal parts in this product contain high voltages and are dangerous. Be sure to take safety measures during servicing, such as wearing insulating gloves.
• Note that the capacitors indicated below are dangerous even after the power is turned off because an electric charge remains and a high voltage continues to exist there.
Before starting any repair work, connect a discharging resistor (5 k-ohm/10 W) to the terminals of each capacitor indicated below to discharge electricity.
The time required for discharging is about 30 seconds per each.
C46, C47 on MAIN (1) P.C.B.

• All voltages are measured with a 10MΩV DC electronic voltmeter.
• Components having special characteristics are marked Δ, and must be replaced with parts having specifications equal to those originally installed.
• Schematic diagram is subject to change without notice.

MAIN 2/3

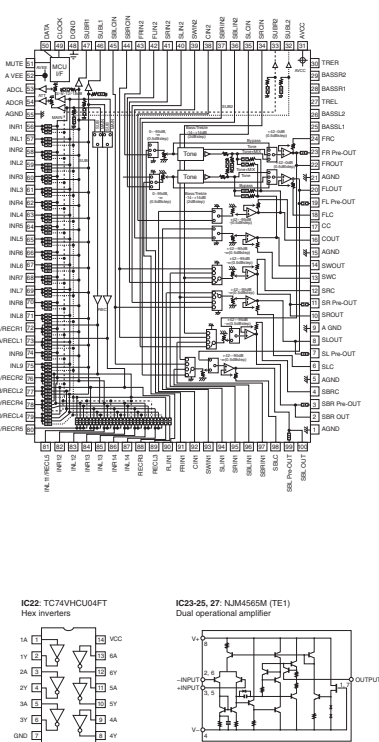
Page 82 [C4]
to OPERATION (4)_CB192

Page 82 [C2]
to OPERATION (4)_CB191

MAIN(1)

Location: TP200~
Location: *201~*400
Location: **21~**40

IC21: R2A15220FP
8-channel electronic volume with 11 input selector and tone control



IC22: TC74VHC04FT
Hex inverters

IC23-25: 271UM565M (TE1)
Dual operational amplifier

REMARKS	PARTS NAME
NO MARK CARBON FILM RESISTOR (P=5)	
CARBON FILM RESISTOR (P=10)	
METAL OXIDE FILM RESISTOR	
METAL FILM RESISTOR	
METAL PLATE RESISTOR	
FILM PROOF CARBON FILM RESISTOR	
CEMENT MOLDED RESISTOR	
SEMI VARIABLE RESISTOR	
GHP RESISTOR	

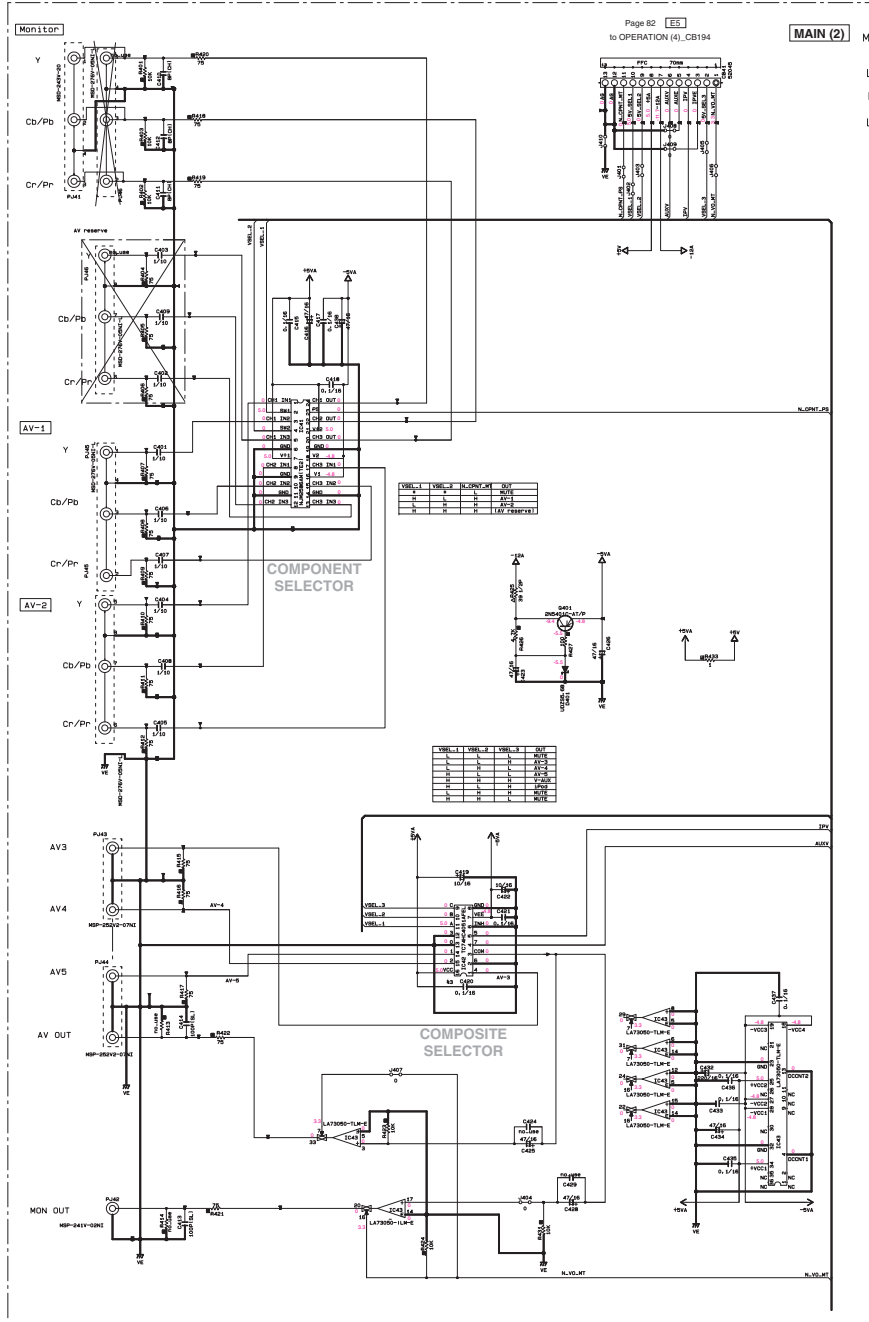
REMARKS	PARTS NAME
NO MARK ELECTROLYTIC CAPACITOR	
TANTALUM CAPACITOR	
NO MARK CERAMIC CAPACITOR	
CERAMIC TUBULAR CAPACITOR	
POLYESTER FILM CAPACITOR	
POLYSTYRENE FILM CAPACITOR	
MICA CAPACITOR	
POLYPROPYLENE FILM CAPACITOR	
SEMICONDUCTIVE CERAMIC CAPACITOR	
POLYPROPYLENE ELECTROLYTIC FILM CAPACITOR	

NOTICE (code1)
(J) JAPAN
(U) U.S.A
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(S) SOUTH EUROPE
(V) TAIWAN
(P) RUSSIAN
(B) LATIN AMERICA
(S) BRAZIL

• All voltages are measured with a 10MΩV DC electronic voltmeter.
• Components having special characteristics are marked Δ, and must be replaced with parts having specifications equal to those originally installed.
• Schematic diagram is subject to change without notice.

MAIN 3/3

MONITOR OUT
MONITOR OUT
COMPONENT VIDEO
AV 1
AV 2
AV 3
AV 4
AV 5
VIDEO
AV OUT
MONITOR OUT



MAIN (2)

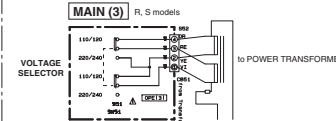
Location: TP400~
Location: *401~*500
Location: **40~**50

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (PMS)
①	CARBON FILM RESISTOR (P40)
②	METAL OXIDE FILM RESISTOR
③	METAL FILM RESISTOR
④	METAL PLATE RESISTOR
⑤	FINE POWER CARBON FILM RESISTOR
⑥	CEMENT MOLDED RESISTOR
⑦	WNT VARIABLE RESISTOR
⑧	CHIP RESISTOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
①	TANTALUM CAPACITOR
②	NO MARK CERAMIC CAPACITOR
③	CERAMIC TUBULAR CAPACITOR
④	POLYESTER FILM CAPACITOR
⑤	POLYSTYRENE FILM CAPACITOR
⑥	MICA CAPACITOR
⑦	POLYPROPYLENE FILM CAPACITOR
⑧	SEMICONDUCTIVE CERAMIC CAPACITOR
⑨	POLYETHYLENE SULFIDE FILM CAPACITOR

NOTICE (model)
(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
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(E)..... EUROPE
(L)..... SINGAPORE
(S)..... SOUTH EUROPE
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(F)..... RUSSIAN
(V)..... LATIN AMERICA
(S)..... BRAZIL

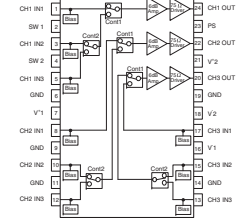
MAIN (3)
(DEST R Only)
Location: TP500~
Location: *501~
Location: **51~



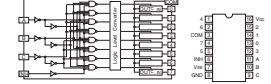
MAIN (4)

Destination Part List					
EXX	LOC	UCTA	RS	RBSFL	
S1	TE1	W05000 M0T-204V1-01	W05000 M0T-204V1-01	W05000 M0T-204V1-01	SP terminal type
B51	BW51	X	W05000 SL4	X	VOLTAGE switch
B52	CB51	X	Y027790 84P779-VH	X	

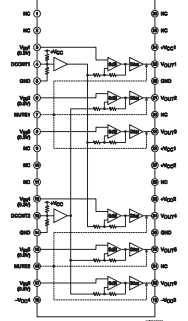
IC41: NJM2586AM (TE2)
Wide band 3-input 1-output 3-circuit video amplifier



IC42: TC74HC051AFEL
8-channel analog multiplexer/demultiplexer



IC43: LA73050-TLM-E
6-channel 75-ohm video driver



• All voltages are measured with a 10MΩ/V DC electronic voltmeter.
• Components having special characteristics are marked Δ, and must be replaced with parts having specifications equal to those originally installed.
• Schematic diagram is subject to change without notice.

■ REPLACEMENT PARTS LIST

● ELECTRICAL COMPONENT PARTS

WARNING

- Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.

ABBREVIATIONS IN THIS LIST ARE AS FOLLOWS:

C.A.EL.CHP	: CHIP ALUMI.ELECTROLYTIC CAP	JUMPER.TST	: JUMPER,TEST POINT
C.CE	: CERAMIC CAP	L.DTCT	: LIGHT DETECTING MODULE
C.CE.ARRAY	: CERAMIC CAP ARRAY	LED.CHP	: CHIP LED
C.CE.CHP	: CHIP CERAMIC CAP	LED.DSPLY	: LED DISPLAY
C.CE.M.CHP	: CHIP MULTILAYER CERAMIC CAP	LED.INFRD	: LED,INFRARED
C.CE.SAFTY	: RECOGNIZED CERAMIC CAP	PHOT.CPL	: PHOTO COUPLER
C.CE.TUBLR	: CERAMIC TUBULAR CAP	PHOT.INTR	: PHOTO INTERRUPTER
C.CE.SMI	: SEMI CONDUCTIVE CERAMIC CAP	PHOT.RFLCT	: PHOTO REFLECTOR
C.EL	: ELECTROLYTIC CAP	PHOT.TR	: PHOTO TRANSISTOR
C.EL.BP	: BIPOLAR ELECTROLYTIC CAP	PIN.TEST	: PIN,TEST POINT
C.EL.CHP	: CHIP ELECTROLYTIC CAP	R.ARRAY	: RESISTOR ARRAY
C.MICA	: MICA CAP	R.CAR.	: CARBON RESISTOR
C.ML.FLM	: MULTILAYER FILM CAP	R.CAR.CHP	: CHIP RESISTOR
C.MP	: METALLIZED POLYESTER FILM CAP	R.CAR.FP	: FLAME PROOF CARBON RESISTOR
C.MYLAR	: MYLAR FILM CAP	R.CEMENT	: CEMENT RESISTOR
C.MYLAR.ML	: MULTILAYER MYLAR FILM CAP	R.FUS	: FUSIBLE RESISTOR
C.NIOB.OXD	: NIOBIUM OXIDE CAP	R.MTL.CHP	: CHIP METAL FILM RESISTOR
C.PAPER	: PAPER CAPACITOR	R.MTL.FLM	: METAL FILM RESISTOR
C.PLS	: POLYSTYRENE FILM CAP	R.MTL.OXD	: METAL OXIDE FILM RESISTOR
C.POL	: POLYESTER FILM CAP	R.MTL.PLAT	: METAL PLATE RESISTOR
C.PP	: POLYPROPYLENE FILM CAP	RSNR.CE	: CERAMIC RESONATOR
C.PP.CHP	: CHIP POLYPROPYLENE FILM CAP	RSNR.CRYS	: CRYSTAL RESONATOR
C.TNTL	: TANTALIUM CAP	SCR.BND.HD	: BIND HEAD B-TIGHT SCREW
C.TNTL.CHP	: CHIP TANTALIUM CAP	SCR.TERM	: SCREW TERMINAL
C.TRIM	: TRIMMER CAP	SCR.TR	: SCREW,TRANSISTOR
CN	: CONNECTOR	SURG.PRTCT	: SURGE PROTECTOR
CN.BS.PIN	: CONNECTOR,BASE PIN	SUPRT.PCB	: P.C.B. SUPPORT
CN.CANNON	: CONNECTOR,CANNON	SW.LEVER	: LEVER SWITCH
CN.DIN	: CONNECTOR,DIN	SW.MICRO	: MICRO SWITCH
CN.FLAT	: CONNECTOR,FLAT CABLE	SW.LEAF	: LEAF SWITCH
CN.FFC	: CONNECTOR,FLEXIBLE FLAT CABLE	SW.PUSH	: PUSH SWITCH
CN.HDMI	: HDMI CONNECTOR	SW.RT	: ROTARY SWITCH
CN.PHOTO.R	: PHOTO FIBER SENSOR,RECEIVED	SW.RT.ENC	: ROTARY ENCODER
CN.PHOTO.T	: PHOTO FIBER SENSOR,TRANSMITTED	SW.RT.MTR	: ROTARY SWITCH WITH MOTOR
DIODE.ARRAY	: DIODE ARRAY	SW.SLIDE	: SLIDE SWITCH
DIODE.BRG	: DIODE BRIDGE	SW.TACT	: TACT SWITCH
DIODE.CHP	: CHIP DIODE	TERM.SP	: SPEAKER TERMINAL
DIODE.VAR	: VARACTOR DIODE	TERM.WRAP	: WRAPPING TERMINAL
DIODE.ZENR	: ZENER DIODE	THRMST.CHP	: CHIP THERMISTOR
DIODE.Z.CHP	: CHIP ZENER DIODE	TR	: TRANSISTOR
DIODE.SCHOTTKY	: SCHOTTKY BARRIER DIODE	TR.CHP	: CHIP TRANSISTOR
DIODE.PHOT	: PHOTO DIODE	TR.DGT	: DIGITAL TRANSISTOR
FER.BEAD	: FERRITE BEADS	TR.DGT.CHP	: CHIP DIGITAL TRANSISTOR
FER.CORE	: FERRITE CORE	TR.PAIR	: PAIR TRANSISTOR
FET.CHP	: CHIP FET	TRANS	: TRANSFORMER
FL.DSPLY	: FLUORESCENT DISPLAY	TRANS.PULS	: PULSE TRANSFORMER
FLTR.CE	: CERAMIC FILTER	TRANS.PWR	: POWER TRANSFORMER
FLTR.COMB	: COMB FILTER MODULE	VOLT.SELCT	: VOLTAGE SELECTOR
FLTR.LC.RF	: LC FILTER,EMI	VR	: ROTARY POTENTIOMETER
FUSE.CHP	: CHIP FUSE	VR.MTR	: POTENTIOMETER WITH MOTOR
GND.MTL	: GROUND PLATE	VR.SLIDE	: SLIDE POTENTIOMETER
GND.TERM	: GROUND TERMINAL	VR.SW	: POTENTIOMETER WITH SWITCH
JUMPER.CN	: JUMPER CONNECTOR	VR.TRIM	: TRIMMER POTENTIOMETER

DIGITAL

Ref No.	Part No.	Description	Markets
* WW703100	P. C. B.	DIGITAL	UCKRALS
* WW703200	P. C. B.	DIGITAL	T
* WW703300	P. C. B.	DIGITAL	BGF
* CB201-205	WW271700	CN. HDM I	19P SE
CB221	VM929900	CN. BS. PIN	15P
CB222	VQ045100	CN. BS. PIN	21P
CB223	VQ044500	CN. BS. PIN	11P
CB262	VK027300	CN. BS. PIN	14P
CB263-264	VQ962100	CN. BS. PIN	18P
C2004	WP882000	C. CE. CHP	10uF 6. 3V
C2005-2007	US135100	C. CE. CHP	0. 1uF 16V
C2009	US135100	C. CE. CHP	0. 1uF 16V
C2010	US063100	C. CE. CHP	1000pF 50V B
C2012-2014	US063100	C. CE. CHP	1000pF 50V B
C2016	WP882000	C. CE. CHP	10uF 6. 3V
C2017	US135100	C. CE. CHP	0. 1uF 16V
C2020-2021	US135100	C. CE. CHP	0. 1uF 16V
C2022-2026	US063100	C. CE. CHP	1000pF 50V B
C2028	WP882000	C. CE. CHP	10uF 6. 3V
C2029	US135100	C. CE. CHP	0. 1uF 16V
C2031-2032	US063100	C. CE. CHP	1000pF 50V B
C2033	US061120	C. CE. CHP	12pF 50V B
C2034	US061150	C. CE. CHP	15pF 50V B
C2035-2036	US135100	C. CE. CHP	0. 1uF 16V
C2037-2040	WD758300	C. CE. CHP	10uF 10V
C2043	US063100	C. CE. CHP	1000pF 50V B
C2044-2045	US135100	C. CE. CHP	0. 1uF 16V
C2047	WP882000	C. CE. CHP	10uF 6. 3V
C2049	WP882000	C. CE. CHP	10uF 6. 3V
C2050	US063100	C. CE. CHP	1000pF 50V B
C2051-2052	WP882000	C. CE. CHP	10uF 6. 3V
C2053-2055	US135100	C. CE. CHP	0. 1uF 16V
C2056	WP882000	C. CE. CHP	10uF 6. 3V
C2057-2061	US135100	C. CE. CHP	0. 1uF 16V
C2062-2063	WP882000	C. CE. CHP	10uF 6. 3V
C2064-2065	US135100	C. CE. CHP	0. 1uF 16V
C2067-2068	US135100	C. CE. CHP	0. 1uF 16V
C2071	WP882000	C. CE. CHP	10uF 6. 3V
C2073	WP882000	C. CE. CHP	10uF 6. 3V
C2094-2095	US062470	C. CE. CHP	470pF 50V B
C2097-2098	US046100	C. CE. CHP	1uF 25V
C2099	US035100	C. CE. CHP	0. 1uF 16V B
C2100	US135100	C. CE. CHP	0. 1uF 16V
C2202	US135100	C. CE. CHP	0. 1uF 16V
C2203	US062100	C. CE. CHP	100pF 50V B
C2204	US135100	C. CE. CHP	0. 1uF 16V
C2205	US064100	C. CE. CHP	0. 01uF 50V B
C2206	US126100	C. CE. CHP	1uF 10V
C2207	US135100	C. CE. CHP	0. 1uF 16V
C2208	UR837330	C. EL	33uF 16V
C2209-2210	US064100	C. CE. CHP	0. 01uF 50V B
C2211-2212	US135100	C. CE. CHP	0. 1uF 16V
C2213-2218	US064100	C. CE. CHP	0. 01uF 50V B
C2219	US135100	C. CE. CHP	0. 1uF 16V
C2234	US062100	C. CE. CHP	100pF 50V B BGF
C2235	UR837330	C. EL	33uF 16V
C2236	US135100	C. CE. CHP	0. 1uF 16V BGF

* New Parts

Ref No.	Part No.	Description	Markets
C2254-2257	US062100	C. CE. CHP	100pF 50V B
C2258-2260	US046100	C. CE. CHP	1uF 25V
C2262	US046100	C. CE. CHP	1uF 25V
C2264-2265	US061270	C. CE. CHP	27pF 50V B BGF
C2266	UR867100	C. EL	10uF 50V BGF
C2267	US126100	C. CE. CHP	1uF 10V BGF
C2268	US135100	C. CE. CHP	0. 1uF 16V BGF
C2269	US062560	C. CE. CHP	560pF 50V B BGF
C2271-2272	US062330	C. CE. CHP	330pF 50V B BGF
C2274	US135100	C. CE. CHP	0. 1uF 16V BGF
C2274	US135100	C. CE. CHP	0. 1uF 16V
C2405-2407	US135100	C. CE. CHP	0. 1uF 16V
C2413	US135100	C. CE. CHP	0. 1uF 16V
C2415	US135100	C. CE. CHP	0. 1uF 16V
C2417	US135100	C. CE. CHP	0. 1uF 16V
C2420	US135100	C. CE. CHP	0. 1uF 16V
C2421-2422	WP882000	C. CE. CHP	10uF 6. 3V
C2424	WP882000	C. CE. CHP	10uF 6. 3V
C2426-2432	US135100	C. CE. CHP	0. 1uF 16V
C2434-2443	US135100	C. CE. CHP	0. 1uF 16V
C2445-2451	US135100	C. CE. CHP	0. 1uF 16V
C2453	US135100	C. CE. CHP	0. 1uF 16V
C2454	US062100	C. CE. CHP	100pF 50V B
C2465	US135100	C. CE. CHP	0. 1uF 16V
C2466	WP882000	C. CE. CHP	10uF 6. 3V
C2601-2604	WP882000	C. CE. CHP	10uF 6. 3V
C2606	US062180	C. CE. CHP	180pF 50V B
C2607-2608	WK004400	C. CE. M. CHP	10uF 16V
C2611-2614	US135100	C. CE. CHP	0. 1uF 16V
C2615-2616	US063680	C. CE. CHP	6800pF 50V B
C2617	US035100	C. CE. CHP	0. 1uF 16V B
C2618	US044220	C. CE. CHP	0. 022uF 25V B
C2620-2623	US135100	C. CE. CHP	0. 1uF 16V
C2625-2626	WP882000	C. CE. CHP	10uF 6. 3V
C2627-2628	US061200	C. CE. CHP	20pF 50V B
C2630	US135100	C. CE. CHP	0. 1uF 16V
C2631	US062100	C. CE. CHP	100pF 50V B
C2632	UR867100	C. EL	10uF 50V
C2633	US135100	C. CE. CHP	0. 1uF 16V
C2635-2637	UR867100	C. EL	10uF 50V
C2638-2639	US135100	C. CE. CHP	0. 1uF 16V
C2640-2641	WJ603600	C. MYLAR	820pF 50V J
C2642	US064100	C. CE. CHP	0. 01uF 50V B
C2643	US135100	C. CE. CHP	0. 1uF 16V
C2644	US035100	C. CE. CHP	0. 1uF 16V B
C2645-2647	US062100	C. CE. CHP	100pF 50V B
C2648	UR867100	C. EL	10uF 50V
C2649-2651	US062100	C. CE. CHP	100pF 50V B
C2654	UR848100	C. EL	100uF 25V
C2655	UR867100	C. EL	10uF 50V
C2656-2658	US126100	C. CE. CHP	1uF 10V
C2659	US064100	C. CE. CHP	0. 01uF 50V B
C2660-2661	US062220	C. CE. CHP	220pF 50V B UCRKABGFLS
C2662-2663	US135100	C. CE. CHP	0. 1uF 16V UCRKABGFLS
C2664-2667	US062220	C. CE. CHP	220pF 50V B UCRKABGFLS
C2667	US062220	C. CE. CHP	220pF 50V B
C2681	WD758300	C. CE. CHP	10uF 10V

* New Parts

DIGITAL and OPERATION

Ref No.	Part No.	Description	Markets
C2682	US135100	C. CE. CHP 0. 1uF 16V	
C2683	UR837330	C. EL 33uF 16V	
C2684	US135100	C. CE. CHP 0. 1uF 16V	
C2687	WD758300	C. CE. CHP 10uF 10V	
C2688	US135100	C. CE. CHP 0. 1uF 16V	
C2692-2693	WP882000	C. CE. CHP 10uF 6. 3V	
C2701-2707	US135100	C. CE. CHP 0. 1uF 16V	
D2022	VV220700	DIODE. SCHOTTKY RB501V-40	
D2023	V2376600	DIODE. SCHOTTKY RB500V-40	
D2201-2204	WS692300	DIODE. ZENR HZU3. 3B2 TRF-E	
D2601-2602	WR452500	DIODE. SCHOTTKY RB051LA-40	
D2607	VT332900	DIODE 1SS355	
D2610	VT332900	DIODE 1SS355	
IC202	X8560A00	IC. HDMI. TX S119134CTU HDMI	
IC203	YC394A00	IC NJM2884U1-18 (TE1)	
IC204	X8385A00	IC TC7WHU04FK TE85L	
IC222	YC408A00	IC. EEPROM R1EX25032ASA00A	
IC223	X8235A00	IC LC72725KM	BGF
IC242	X9625B00	IC M12L64164A-5TG	
* IC243	YD300B00	IC. MEMORY MX29LV160DBT1-70G	(written)
IC261	YA399A00	IC LC89058WD-E	
IC262	X7357A00	IC PCM1803DBR	
IC263	X9870A00	IC PCM1681PWPR	
IC264-265	YC391A00	IC BD9325FJ	
IC266	YC604A00	IC NJM2830U1-05 (TE1)	
IC267	X3586B00	IC TC74VHCT08AFT EL. K	
IC268	X7741A00	IC NJM2867F3-05 (TE1)	
Q2001-2008	VQ986700	TR 2SC4081 T106	
Q2009	WE834500	FET UPA672T-T1-A	
Q2201-2203	VR936300	TR 2SA1576A T106	
Q2205	VR936300	TR 2SA1576A T106	
Q2206	VQ986700	TR 2SC4081 T106	
Q2206	VQ986700	TR 2SC4081 T106	BGF
XL201	WU058300	RSNR. CRYST 27MHz	
XL221	WF997400	RSNR. CE 20MHz	
XL222	WU058400	RSNR. CRYST 4. 332MHz	
XL222	WU058400	RSNR. CRYST 4. 332MHz	BGF
XL261	WJ625200	RSNR. CRYST 24. 576MHz	
* WU124500	P. C. B.	OPERATION	UC
* WW703400	P. C. B.	OPERATION	RS
* WU124800	P. C. B.	OPERATION	T
* WW703500	P. C. B.	OPERATION	KABGFL
CB101	VM929900	CN. BS. PIN 15P	
CB104	VQ047200	CN. BS. PIN 9P	
CB132	VK026300	CN. BS. PIN 4P	
CB134	VK026500	CN. BS. PIN 6P	
CB135	LB919090	CN. BS. PIN 9P	
CB136	VK024700	CN. BS. PIN 3P	
CB152-153	WN077700	FUSE. HOLDER CLIP PFC5000-0202F	
△ CB154-155	VG879900	CN. BS. PIN 2P	
CB166	VB858300	CN. BS. PIN 4P	
CB191-192	VQ962100	CN. BS. PIN 18P	
CB193	VQ044400	CN. BS. PIN 9P	
CB194	VM923600	CN. BS. PIN 13P	
CB195-196	VQ963900	CN. BS. PIN 18P	
C1001-1002	US065100	C. CE. CHP 0. 1uF 50V B	
C1003-1004	US062100	C. CE. CHP 100pF 50V B	
C1005	US135100	C. CE. CHP 0. 1uF 16V	
C1006	US061100	C. CE. CHP 10pF 50V B	
C1007	US135100	C. CE. CHP 0. 1uF 16V	
C1008	UM397100	C. EL 10uF 16V	
C1009-1011	US135100	C. CE. CHP 0. 1uF 16V	
C1013	UR268220	C. EL 220uF 50V	
C1014	UM388330	C. EL 330uF 6. 3V	
C1015	US135100	C. CE. CHP 0. 1uF 16V	
C1016	US061680	C. CE. CHP 68pF 50V B	
C1017	US065100	C. CE. CHP 0. 1uF 50V B	
C1018	US064100	C. CE. CHP 0. 01uF 50V B	
C1019-1020	US065100	C. CE. CHP 0. 1uF 50V B	
C1021-1022	US044220	C. CE. CHP 0. 022uF 25V B	
C1023	US064100	C. CE. CHP 0. 01uF 50V B	
C1024-1025	US044220	C. CE. CHP 0. 022uF 25V B	
C1026-1027	US135100	C. CE. CHP 0. 1uF 16V	
C1028-1029	US062220	C. CE. CHP 220pF 50V B	
C1301	UR866100	C. EL 1uF 50V	
C1302-1303	UR837470	C. EL 47uF 16V	
C1304	US064100	C. CE. CHP 0. 01uF 50V B	
C1305	US065100	C. CE. CHP 0. 1uF 50V B	
C1306	US135100	C. CE. CHP 0. 1uF 16V	UC
C1307	UR837470	C. EL 47uF 16V	
C1308	UR866100	C. EL 1uF 50V	UC
C1309	UR837100	C. EL 10uF 16V	
C1310-1311	UR866100	C. EL 1uF 50V	
C1312	UR866100	C. EL 1uF 50V	UC
C1313-1316	UR866100	C. EL 1uF 50V	
C1317	UR739470	C. EL 4700uF 16V	UC
C1318	UR749470	C. EL 4700uF 25V	
C1319	UR749220	C. EL 2200uF 25V	
C1320	UR73A100	C. EL 10000uF 16V	
C1322	VE326000	C. MYLAR 0. 1uF 50V	
C1322	VR168300	C. MYLAR 0. 1uF 50V	
C1323	VE326000	C. MYLAR 0. 1uF 50V	
C1323	VR168300	C. MYLAR 0. 1uF 50V	
C1326	WJ605000	C. MYLAR 0. 01uF 50V J	
* C1326	WV365900	C. MYLAR 0. 01uF 50V J	
C1451-1452	US063100	C. CE. CHP 1000pF 50V B	
C1501	UR759220	C. EL 2200uF 35V	RS
C1501	UR749220	C. EL 2200uF 25V	KABGFL
C1502	WJ605000	C. MYLAR 0. 01uF 50V J	
* C1502	WV365900	C. MYLAR 0. 01uF 50V J	
C1503	UR897100	C. EL 10uF 100V	RS
C1504	WJ605000	C. MYLAR 0. 01uF 50V J	UCT
* C1504	WV365900	C. MYLAR 0. 01uF 50V J	KABGFL
C1505-1506	WJ610200	C. MYLAR 0. 01uF 100V	RS
△ C1507	WQ939400	C. CE. SAFTY 0. 01uF 250V	
C1651	WJ605000	C. MYLAR 0. 01uF 50V J	
* C1651	WV365900	C. MYLAR 0. 01uF 50V J	
C1652	WJ605000	C. MYLAR 0. 01uF 50V J	
* C1652	WV365900	C. MYLAR 0. 01uF 50V J	
C1653	WJ605000	C. MYLAR 0. 01uF 50V J	
* C1653	WV365900	C. MYLAR 0. 01uF 50V J	

* New Parts

* New Parts

OPERATION and MAIN

Ref No.	Part No.	Description	Markets
C1654	WJ605000	C. MYLAR 0.01uF 50V J	
* C1654	WV365900	C. MYLAR 0.01uF 50V J	
C1701	US064100	C. CE. CHP 0.01uF 50V B	
C1702-1704	US063100	C. CE. CHP 1000pF 50V B	
C1705	UM397100	C. EL 10uF 16V	
C1706	UM397220	C. EL 22uF 25V	
C1707	US062100	C. CE. CHP 100pF 50V B	
C1708	UM387470	C. EL 47uF 16V	
C1709	US061330	C. CE. CHP 33pF 50V B	
C1710	UM397100	C. EL 10uF 16V	
C1711-1712	UM397220	C. EL 22uF 25V	
C1713-1714	US065100	C. CE. CHP 0.1uF 50V B	
D1001-1002	WS693300	D1ODE. ZENR HZU4. 3B3 TRF-E	
D1003-1006	VT332900	D1ODE 1SS355	
D1301	VV220700	D1ODE. SCHOTTKY RB501V-40	
D1302	VU171900	D1ODE. ZENR UDZS5. 1B 5. 1V	RTKABGLS
D1303	VT332900	D1ODE 1SS355	
D1304	VG439500	D1ODE. ZENR MTZJ10B 10V	
D1305-1306	VT332900	D1ODE 1SS355	
△ D1307	WH487300	D1ODE. BRG RS203M 2. 0A 200V	UC
△ D1308-1309	WA653100	D1ODE. BRG KBP103G 1A 200V	UC
D1311-1312	VT332900	D1ODE 1SS355	
D1313-1314	VT332900	D1ODE 1SS355	
D1501	VU171800	D1ODE. ZENR UDZS4. 7B 4. 7V	
△ D1502	VG437000	D1ODE. ZENR MTZJ4. 7A 4. 7V	RS
△ D1503-1504	VS997800	D1ODE 1T2	
△ D1505	VS997800	D1ODE 1T2	RS
△ D1506-1507	VS997800	D1ODE 1T2	
D1508-1509	WC398800	D1ODE KDS160-RTK	
D1510	VU171800	D1ODE. ZENR UDZS4. 7B 4. 7V	
D1651	VU172500	D1ODE. ZENR UDZS9. 1B	
D1652-1653	VT332900	D1ODE 1SS355	
D1701-1702	VT332900	D1ODE 1SS355	
D1703	VU171900	D1ODE. ZENR UDZS5. 1B 5. 1V	
△ F1501	WB221200	FUSE 6A 125V	UC
△ F1501	WM933100	FUSE T5A 250V	RS
△ F1501	VV071700	FUSE 3. 15A 250V	TKABGLF
IC101	X6386A00	IC M66003-0131FP	
IC102	X7378A00	IC NJM4565M (TE1)	
△ IC131	X6248A00	IC NJM2388F33	
IC132	X4928A00	IC KIA7805API 5V	UC
△ IC133	X4153A00	IC KIA7812API	
△ IC134	X4154A00	IC KIA7912PI	
△ IC135	X4928A00	IC KIA7805API 5V	
JK101	WJ117400	JACK. MINI YPA0 MIC	
JK166	V9408200	JACK. PHONE VIDEO AUX	
JK171	WJ117300	JACK. PHONE PHONES	
PJ101	WJ117500	JACK. PIN 3P	
Q1001-1008	WC529400	TR KTC3875S Y GR RTK	
Q1301	WC435100	TR. DGT KRC104S-RTK	
Q1302	WC529400	TR KTC3875S Y GR RTK	
Q1303	WJ173600	TR 2SC1815Y TP	
Q1304	WC435100	TR. DGT KRC104S-RTK	
△ Q1501	WJ173600	TR 2SC1815Y TP	
△ Q1502	iA101510	TR 2SA1015 Y	RS
△ Q1503	VP872600	TR 2SA1708 S, T	RS
△ Q1504	iA101510	TR 2SA1015 Y	RS

* New Parts

Ref No.	Part No.	Description	Markets
△ Q1505	WC529200	TR. DGT KRC102M-AT	RS
△ R1316	HV754180	R. CAR. FP 18Ω 1/4W	
△ R1322	WJ681600	R. MTL. FLM 0. 22Ω 1W	UC
△ R1323	WJ682000	R. MTL. FLM 0. 47Ω 1W J	
R1508	VC757900	R. MTL. OXD 47Ω 2W	RS
R1651-1652	WJ685600	R. MTL. FLM 470Ω 1W J	
SW101-114	WD483100	SW. TACT SKRGAADO10	
SW116-119	WD483100	SW. TACT SKRGAADO10	
SW145	V9597100	SW. RT. ENC EC12E2460802	
△ SW151	V9366900	RELAY DLS9D1-O (M) 0. 25W	
SW171	WD483100	SW. TACT SKRGAADO10	
△ T1501	X8521A00	TRANS. PWR	UC
△ T1501	X8522A00	TRANS. PWR	RS
△ T1501	X8523A00	TRANS. PWR	TKABGLF
TH1	WT698300	THERMISTOR WC92NA103J1	
TH2	WT698300	THERMISTOR WC92NA103J1	UC
U1001	WQ600700	L. DTCT SM3385VMH6	
V1001	WQ842100	FL. DSPLY 18-MT-09GNK	
	WA790900	FL. SPACER 4. 6x10x32	
*	WW712800	P. C. B. MAIN	UCTA
*	WW712900	P. C. B. MAIN	RS
*	WW713000	P. C. B. MAIN	KBGFL
CB1	VQ047600	CN. BS. PIN 21P	
CB3	LB932060	CN. BS. PIN 6P	
CB21-22	VQ963900	CN. BS. PIN 18P	
CB41	VM923600	CN. BS. PIN 13P	
CB51	V9377900	CN. BS. PIN 4P	RS
* C1	WV365900	C. MYLAR 0.01uF 50V J	
C2-6	UR837100	C. EL 10uF 16V	
C7	UR877220	C. EL 22uF 63V	
C8	WJ608500	C. MYLAR 470pF 100V	
C9	UR896470	C. EL 4. 7uF 100V	
C10	WJ608500	C. MYLAR 470pF 100V	
C11	UR896470	C. EL 4. 7uF 100V	
C12	UR877220	C. EL 22uF 63V	
C13-14	UR896470	C. EL 4. 7uF 100V	
C15-17	WJ608500	C. MYLAR 470pF 100V	
C18	WJ608100	C. MYLAR 100pF 100V	
C19	UR867330	C. EL 33uF 50V	
C20	WJ608100	C. MYLAR 100pF 100V	
C21-22	UR867330	C. EL 33uF 50V	
C23	WJ608100	C. MYLAR 100pF 100V	
C24	UR867330	C. EL 33uF 50V	
C25	WJ608100	C. MYLAR 100pF 100V	
C26	UR897100	C. EL 10uF 100V	
C27	FG650500	C. CE 5pF 50V	
C28	WJ608100	C. MYLAR 100pF 100V	
C29	UR867330	C. EL 33uF 50V	
C30	UR866100	C. EL 1uF 50V	
C31-34	FG650500	C. CE 5pF 50V	
* C35-39	WV366700	C. MYLAR 0. 047uF 50V J	
C40	UR866470	C. EL 4. 7uF 50V	
C41	UR828220	C. EL 220uF 10V	
C43	UR878100	C. EL 100uF 63V	

* New Parts

MAIN

Ref No.	Part No.	Description	Markets	Ref No.	Part No.	Description	Markets
C44	UR867100	C. EL	10uF 50V	C423	UR837470	C. EL	47uF 16V
C45	UR868100	C. EL	100uF 50V	C425-426	UR837470	C. EL	47uF 16V
C46-47	WE514200	C. EL	6800uF 63V	C428	UR837470	C. EL	47uF 16V
* C50-53	WV365900	C. MYLAR	0.01uF 50V J	C432	UR838220	C. EL	220uF 16V
C54-55	WJ611400	C. MYLAR	0.1uF 100V J	C433	US135100	C. CE. CHP	0.1uF 16V
C56	US064100	C. CE. CHP	0.01uF 50V B	C434	UR837470	C. EL	47uF 16V
* C59-64	WV365900	C. MYLAR	0.01uF 50V J	C435-437	US135100	C. CE. CHP	0.1uF 16V
C202	US064100	C. CE. CHP	0.01uF 50V B	C438	UR837470	C. EL	47uF 16V
C203-204	US135100	C. CE. CHP	0.1uF 16V	D1-2	VD631600	DIODE	1SS133, 176
C205-206	US061220	C. CE. CHP	22pF 50V B	D3	VU171900	DIODE. ZENR	UDZS5.1B 5.1V
C209-210	US062220	C. CE. CHP	220pF 50V B	D4-8	WC398800	DIODE	KDS160-RTK
C211-212	US061470	C. CE. CHP	47pF 50V B	△ D9	VD631600	DIODE	1SS133, 176
C213-216	US062220	C. CE. CHP	220pF 50V B	△ D10-11	VN008700	DIODE	1SS270A
C217	US135100	C. CE. CHP	0.1uF 16V	△ D12-14	VD631600	DIODE	1SS133, 176
C218	VR169200	C. MYLAR	0.47uF 50V	△ D15-17	VN008700	DIODE	1SS270A
C219	US135100	C. CE. CHP	0.1uF 16V	△ D18	VG444700	DIODE. ZENR	MTZ J 39D 39.0V TP
C222-223	US061470	C. CE. CHP	47pF 50V B	△ D19	WA653200	DIODE. BRG	TS6P03G 6A 200V
C224-227	UR837100	C. EL	10uF 16V	D20	WU201600	DIODE	1N4003S TP
C228	US135100	C. CE. CHP	0.1uF 16V	D22	VD631600	DIODE	1SS133, 176
C229	UR867470	C. EL	47uF 50V	D201-202	VG438400	DIODE. ZENR	MTZJ6.8C 6.8V
C230	US135100	C. CE. CHP	0.1uF 16V	D401	VU172000	DIODE. ZENR	UDZS5.6B 5.6V
C231-236	UR837100	C. EL	10uF 16V	△ * IC1	YD335A00	I.C. AMP	STK433-330F-E
C239-243	US062680	C. CE. CHP	680pF 50V B	△ * IC2	YD336A00	I.C. AMP	STK433-130F-E
* C244	WV366700	C. MYLAR	0.047uF 50V J	IC21	YA361A00	IC	R2A15220FP
C247-249	US062100	C. CE. CHP	100pF 50V B	IC22	XZ509A00	IC	TC74VHC04FT INVER
C251-252	US062100	C. CE. CHP	100pF 50V B	IC23-25	X7378A00	IC	NJM4565M (TE1)
* C253	WV365600	C. MYLAR	6800pF 50V J	IC27	X7378A00	IC	NJM4565M (TE1)
C255-258	UR837100	C. EL	10uF 16V	IC41	X7362A00	IC	NJM2586AM (TE2)
C261-262	UR837100	C. EL	10uF 16V	IC42	XY549A00	IC	TC74HC4051AFEL
C264	US135100	C. CE. CHP	0.1uF 16V	IC43	X6742A00	IC	LA73050-TLM-E
C265-266	VR169000	C. MYLAR	0.33uF 50V	PJ21	V7046700	JACK. PIN	4P MSP-244V1-01NI
C267	UR838100	C. EL	100uF 16V	PJ22	V7189700	JACK. PIN	1P
* C268-269	WV366500	C. MYLAR	0.033uF 50V J	PJ24	V9420700	JACK. PIN	2P MSP-252V1-30NI
C270	UR838100	C. EL	100uF 16V	PJ26	V7046800	JACK. PIN	6P MSP-246V1-01NI
C271	UR837330	C. EL	33uF 16V	PJ41	WH380800	JACK. PIN	3P JACK G, B, R
C272	UR838100	C. EL	100uF 16V	PJ42	V7189800	JACK. PIN	1P
* C274-275	WV366300	C. MYLAR	0.022uF 50V J	PJ43-44	V7190000	JACK. PIN	2P
C276-279	UR838100	C. EL	100uF 16V	PJ45	WG505100	JACK. PIN	6P
C280	UR867100	C. EL	10uF 50V	△ Q1	WC398400	TR	2N5551C-AT
C281-283	UR267100	C. EL	10uF 50V	△ Q2-3	WG538600	TR	KTA1046-Y-U/P
C284-285	UR867100	C. EL	10uF 50V	△ Q4	WC398400	TR	2N5551C-AT
C288-289	UR867470	C. EL	47uF 50V	△ Q5-6	WC397700	TR	2N5401C-AT
C290	US062100	C. CE. CHP	100pF 50V B	△ Q7-11	WC398400	TR	2N5551C-AT
C291-292	UR267470	C. EL	47uF 50V	△ Q12	WC397700	TR	2N5401C-AT
C293	UR267100	C. EL	10uF 50V	△ Q13-16	WC434900	TR. DGT	KRA104S-RTK
C294-299	US135100	C. CE. CHP	0.1uF 16V	△ Q17-20	WC435000	TR. DGT	KRC102S-RTK
C302-303	US135100	C. CE. CHP	0.1uF 16V	△ Q21	VP872600	TR	2SA1708 S, T
C401	WE773800	C. CE. M. CHP	1uF 10V B	Q22	iC181510	TR	2SC1815 Y
C404-408	WE773800	C. CE. M. CHP	1uF 10V B	Q23	WC435000	TR. DGT	KRC102S-RTK
C410-412	US060800	C. CE. CHP	8pF 50V B	Q24	WC434900	TR. DGT	KRA104S-RTK
C413-414	US062100	C. CE. CHP	100pF 50V B	Q201-205	WC883400	TR	2SD2704 K
C415	US135100	C. CE. CHP	0.1uF 16V	Q208-209	WC883400	TR	2SD2704 K
C416	UR837470	C. EL	47uF 16V	Q401	WC397700	TR	2N5401C-AT
C417-418	US135100	C. CE. CHP	0.1uF 16V	△ R6-7	HV753220	R. CAR. FP	2. 2Ω 1/4W
C419	UR837100	C. EL	10uF 16V	△ R10	HV755560	R. CAR. FP	560Ω 1/4W
C420-421	US135100	C. CE. CHP	0.1uF 16V	△ R18	HV754100	R. CAR. FP	10Ω 1/4W
C422	UR837100	C. EL	10uF 16V	△ R22	HV754100	R. CAR. FP	10Ω 1/4W

* New Parts

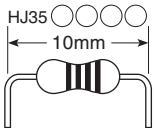
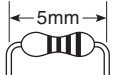
* New Parts

MAIN

Ref No.	Part No.	Description	Markets

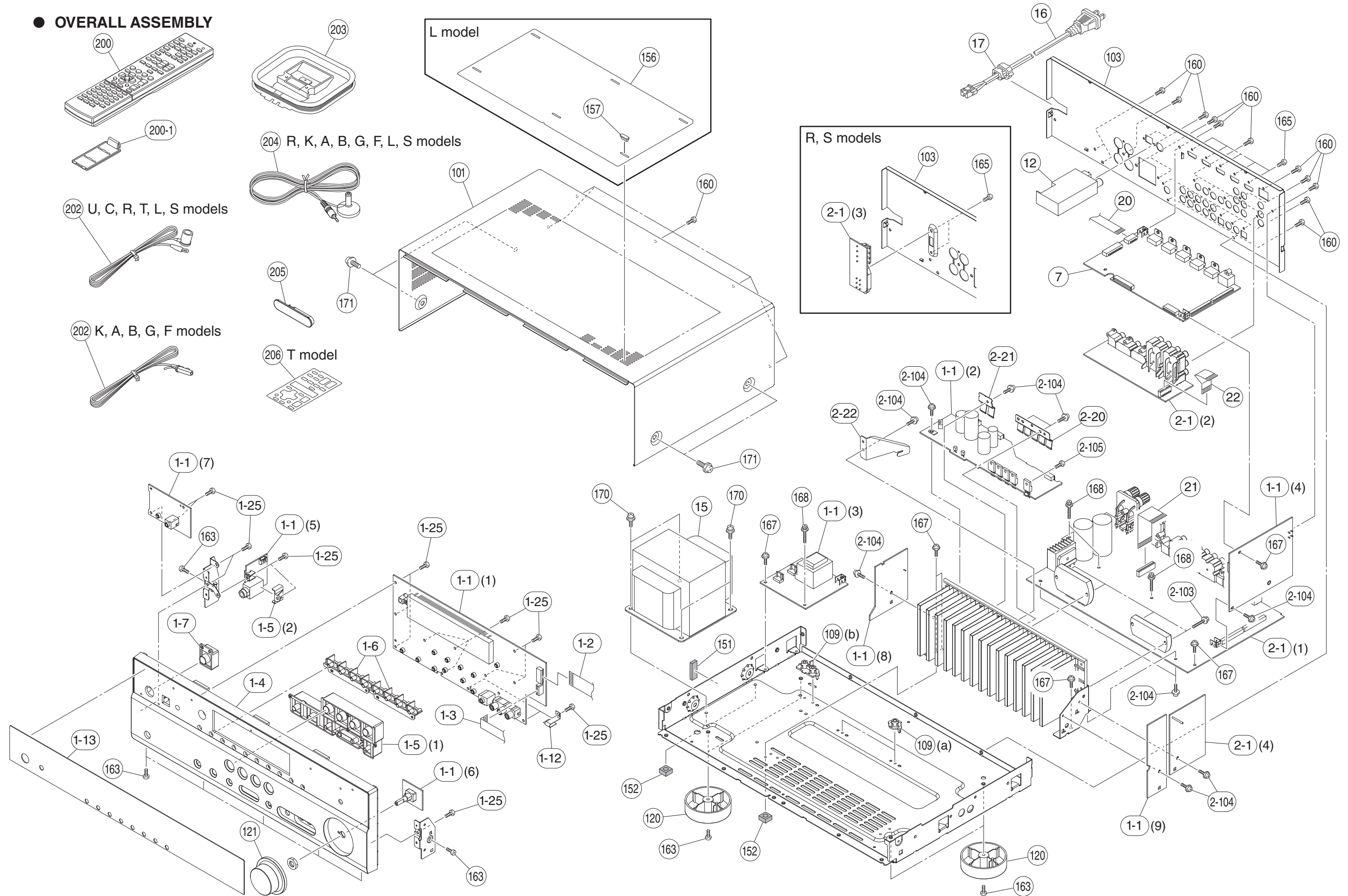
* New Parts

Carbon Resistors

Value	1/4W Type Part No.	1/6W Type Part No.	Value	1/4W Type Part No.	1/6W Type Part No.
1.0 Ω	HJ35 3100	HF85 3100	11 kΩ	HF45 7110	HF45 7110
1.8 Ω	HJ35 3180	※	12 kΩ	HJ35 7120	HF85 7120
2.2 Ω	HJ35 3220	HF85 3220	13 kΩ	HF45 7130	HF45 7130
3.3 Ω	HJ35 3330	HF85 3330	15 kΩ	HF45 7150	HF45 7150
4.7 Ω	HJ35 3470	HF85 3470	18 kΩ	HF45 7180	HF45 7180
5.6 Ω	HJ35 3560	HF85 3560	22 kΩ	HF45 7220	HF45 7220
10 Ω	HF45 4100	HF45 4100	24 kΩ	HF45 7240	HF45 7240
15 Ω	HJ35 4150	HF85 4150	27 kΩ	HJ35 7270	HF85 7270
22 Ω	HF45 4220	HF45 4220	30 kΩ	HF45 7300	HF45 7300
27 Ω	HJ35 4270	HF85 4270	33 kΩ	HF45 7330	HF45 7330
33 Ω	HF45 4330	HF45 4330	36 kΩ	HF45 7360	HF45 7360
39 Ω	HJ35 4470	HF85 4390	39 kΩ	HF45 7390	HF45 7390
47 Ω	HF45 4470	HF45 4470	47 kΩ	HF45 7470	HF45 7470
56 Ω	HF45 4560	HF45 4560	51 kΩ	HF45 7510	HF45 7510
68 Ω	HF45 4680	HF45 4680	56 kΩ	HF45 7560	HF45 7560
75 Ω	HF45 4750	HF45 4750	62 kΩ	HF45 7620	HF45 7620
82 Ω	HF45 4820	HF45 4820	68 kΩ	HF45 7680	HF45 7680
91 Ω	HF45 4910	HF45 4910	82 kΩ	HF45 7820	HF45 7820
100 Ω	HF45 5100	HF45 5100	91 kΩ	HF45 7910	HF45 7910
110 Ω	HJ35 5110	HF85 5110	100 kΩ	HF45 8100	HF45 8100
120 Ω	HF45 5120	HF45 5120	110 kΩ	HF45 8110	HF45 8110
150 Ω	HF45 5150	HF45 5150	120 kΩ	HF45 8120	HF45 8120
160 Ω	HJ35 5160	※	130 kΩ	HF45 8130	※
180 Ω	HF45 5180	HF45 5180	150 kΩ	HF45 8150	HF45 8150
200 Ω	HF45 5200	HF45 5200	180 kΩ	HF45 8180	HF45 8180
220 Ω	HF45 5220	HF45 5220	220 kΩ	HJ35 8220	HF85 8220
270 Ω	HF45 5270	HF45 5270	270 kΩ	HF45 8270	HF45 8270
330 Ω	HF45 5330	HF45 5330	300 kΩ	HF45 8300	HF45 8300
390 Ω	HF45 5390	HF45 5390	330 kΩ	HF45 8330	HF45 8330
430 Ω	HF45 5430	HF45 5430	390 kΩ	HJ35 8390	HF85 8390
470 Ω	HF45 5470	HF45 5470	470 kΩ	HF45 8470	HF45 8470
510 Ω	HF45 5510	HF45 5510	560 kΩ	HJ35 8560	HF85 8560
560 Ω	HF45 5560	HF45 5560	680 kΩ	HJ35 8680	HF85 8680
680 Ω	HF45 5680	HF45 5680	820 kΩ	HJ35 8820	HF85 8820
820 Ω	HF45 5820	HF45 5820	1.0 MΩ	HF45 9100	HF45 9100
910 Ω	HF45 5910	HF45 5910	1.2 MΩ	HJ35 9120	※
1.0 kΩ	HF45 6100	HF45 6100	1.5 MΩ	HJ35 9150	HF85 9150
1.2 kΩ	HF45 6120	HF45 6120	1.8 MΩ	HJ35 9180	HF85 9180
1.5 kΩ	HF45 6150	HF45 6150	2.2 MΩ	HJ35 9220	HF85 9220
1.8 kΩ	HF45 6180	HF45 6180	3.3 MΩ	HJ35 9330	HF85 9330
2.0 kΩ	HJ35 6200	HF85 6200	3.9 MΩ	HJ35 9390	※
2.2 kΩ	HF45 6220	HF45 6220	4.7 MΩ	HJ35 9470	HF85 9470
2.4 kΩ	HJ35 6240	HF85 6240			
2.7 kΩ	HF45 6270	HF45 6270			
3.0 kΩ	HF45 6300	HF45 6300		1/4W Type HJ35○○○○ ← 10mm →  1/4W Type HF45○○○○ 1/6W Type HF85○○○○ ← 5mm → 	
3.3 kΩ	HF45 6330	HF45 6330			
3.6 kΩ	HJ35 6360	HF85 6360			
3.9 kΩ	HF45 6390	HF45 6390			
4.7 kΩ	HF45 6470	HF45 6470			
5.1 kΩ	HF45 6510	HF45 6510			
5.6 kΩ	HF45 6560	HF45 6560			
6.8 kΩ	HF45 6680	HF45 6680			
8.2 kΩ	HF45 6820	HF45 6820			
9.1 kΩ	HF45 6910	HF45 6910			
10 kΩ	HF45 7100	HF45 7100			

※ : Not available

● OVERALL ASSEMBLY



	Ref No.	Part No.	Description	Remarks	Markets
	1-1	WU124500	P. C. B. ASSEMBLY	OPERATION	UC
*	1-1	WW703400	P. C. B. ASSEMBLY	OPERATION	RS
	1-1	WU124800	P. C. B. ASSEMBLY	OPERATION	T
*	1-1	WW703500	P. C. B. ASSEMBLY	OPERATION	KABGFL
	1-2	WR389500	FLEXIBLE FLAT CABLE	15P 180mm P=1.25	
	1-3	WR382900	FLEXIBLE FLAT CABLE	9P 180mm P=1.25	
*	1-4	WW673600	FRONT PANEL	GD	
*	1-4	WW673300	FRONT PANEL	BL	
*	1-4	WW674100	FRONT PANEL	TI	
*	1-4	WW673700	FRONT PANEL	V371SI	
*	1-4	WW674400	FRONT PANEL	3064SI	CR
*	1-4	WW673700	FRONT PANEL	3064SI	G
	1-5	WT829300	BUTTON	CASE	GD
	1-5	WT829100	BUTTON	CASE	BL
	1-5	WT829200	BUTTON	CASE	TI
	1-5	WT829400	BUTTON	CASE	SI
	1-6	WT829500	BUTTON	TUNER	
	1-7	WT829600	BUTTON	POWER	
*	1-12	WU200600	EARTH PLATE		
*	1-13	WW361000	WINDOW	V371	UCT
*	1-13	WW361100	WINDOW	3064	UCT
*	1-13	WW361200	WINDOW	V371	RKABGFLS
*	1-13	WW361300	WINDOW	3064	RKABGFLS
	1-25	WE774800	BIND HEAD P-TIGHT SCREW	3x8 MFZN2W3	
*	2-1	WW712800	P. C. B. ASSEMBLY	MAIN	UC
*	2-1	WW712900	P. C. B. ASSEMBLY	MAIN	RS
*	2-1	WW713000	P. C. B. ASSEMBLY	MAIN	
	2-20	WG451000	TR SUPPORT	5P	
	2-21	WT832200	TR SUPPORT	2P	
*	2-22	WW117500	P. C. B. SUPPORT		
	2-103	WE774600	IC SCREW	3x18 MFZN2W3	
	2-104	WFO02600	PW HEAD B-TIGHT SCREW	3x8 MFZN2W3	
	2-105	WE774300	BIND HEAD B-TIGHT SCREW	3x8 MFZN2W3	
*	7	WW703100	P. C. B. ASSEMBLY	DIGITAL	UCRKALS
*	7	WW703200	P. C. B. ASSEMBLY	DIGITAL	T
*	7	WW703300	P. C. B. ASSEMBLY	DIGITAL	BGF
	12	WQ756600	AM/FM TUNER	FAEH06-A	UCRTLS
	12	WQ756700	AM/FM TUNER	FAEH06-E	KABGF
△	15	YC395A00	POWER TRANSFORMER		UC
△ *	15	YD211A00	POWER TRANSFORMER		RS
△	15	YC397A00	POWER TRANSFORMER		T
△ *	15	YD212A00	POWER TRANSFORMER		K
△ *	15	YD213A00	POWER TRANSFORMER		AL
△ *	15	YD214A00	POWER TRANSFORMER		BGF
△	16	WB120500	POWER CABLE	2m	UC
△	16	WC992700	POWER CABLE	2m	R
△	16	WV836600	POWER CABLE	2m	T
△	16	WC753000	POWER CABLE	2m	K
△	16	WC743700	POWER CABLE	2m	A
△	16	WB212200	POWER CABLE	2m	B
△	16	WB212300	POWER CABLE	2m	GFL
△	16	WV583400	POWER CABLE	2m	S
	17	V2438700	CORD STOPPER	10P1	
	20	WR384800	FLEXIBLE FLAT CABLE	11P 120mm P=1.25	
	21	WR395700	FLEXIBLE FLAT CABLE	21P 100mm P=1.25	
	22	WR386600	FLEXIBLE FLAT CABLE	13P 70mm P=1.25	
	101	WT825100	TOP COVER		GD
	101	WT824900	TOP COVER		BL
	101	WT825000	TOP COVER		TI
	101	WT825200	TOP COVER		SI

* New Parts

	Ref No.	Part No.	Description	Remarks	Markets
*	103	WW596300	REAR PANEL	V371	UC
*	103	WW597200	REAR PANEL	3064	UC
*	103	WW596500	REAR PANEL	V371	RS
*	103	WW597400	REAR PANEL	3064	RS
*	103	WW596600	REAR PANEL	V371	T
*	103	WW597500	REAR PANEL	3064	T
*	103	WW596700	REAR PANEL	V371	K
*	103	WW597600	REAR PANEL	3064	K
*	103	WW596800	REAR PANEL	V371	A
*	103	WW597700	REAR PANEL	3064	A
*	103	WW596900	REAR PANEL	V371	BGF
*	103	WW597800	REAR PANEL	3064	GF
*	103	WW597000	REAR PANEL	V371	L
*	103	WW597900	REAR PANEL	3064	L
	109	WA796100	P. C. B. SUPPORT		
	120	WE622200	LEG	D60/H21 GD	GD
	120	WE622000	LEG	D60/H21 HS	BL, TI, SI
*	121	WW360800	KNOB	D52 VOLUME	GD
*	121	WW360600	KNOB	D52 VOLUME	BL
*	121	WW360700	KNOB	D52 VOLUME	TI
*	121	WW360900	KNOB	D52 VOLUME	SI
	151	WB408400	DAMPER	10x30 t=4	
	152	WP126800	DAMPER	SCREW MASK	
	156	WR306100	TOP SHEET		L
	157	WJ323900	TOP RIVET		L
	160	WE774100	BIND HEAD BONDING B-T. SCREW	3x8 MFZN2B3	
	163	WE774300	BIND HEAD B-TIGHT SCREW	3x8 MFZN2W3	
	165	WE877900	BIND HEAD S-TIGHT SCREW	3x6 MFZN2W3	
	167	WF002600	PW HEAD B-TIGHT SCREW	3x8 MFZN2W3	
	168	WE774600	IC SCREW	3x18 MFZN2W3	
	170	WE774700	BIND HEAD S-TIGHT SCREW	4x10 MFZN2W3	
	171	VDO69600	PW HEAD S-TIGHT SCREW	4x8-10 MFN133	GD, TI, SI
	171	VH313200	PW HEAD S-TIGHT SCREW	4x8-10 MFN13BL	BL
			ACCESSORIES		
	200	WT926700	REMOTE CONTROL	RAV331	000-213210010 UCRKALS
	200	WT926800	REMOTE CONTROL	RAV332	000-213210020 T
*	200	WW510500	REMOTE CONTROL	RAV433	000-213240010 BGF
	200-1	AAX82380	BATTERY COVER		CG-2209
	202	WV354900	INDOOR FM ANTENNA	1.4m 1pc	UCRTLS
	202	WV349600	INDOOR FM ANTENNA	1.4m 1pc	KABGF
	203	WB212600	AM LOOP ANTENNA	1.0m 1pc	
	204	WN649600	YPA0 MICROPHONE	6.0m 1pc	EM6022L-HN1700 RKABGFLS
	205	WT976200	VIDEO AUX INPUT FRONT COVER	1pc	GD
	205	WT976000	VIDEO AUX INPUT FRONT COVER	1pc	BL
	205	WT976100	VIDEO AUX INPUT FRONT COVER	1pc	TI
	205	WT976300	VIDEO AUX INPUT FRONT COVER	1pc	V371SI
	205	WU190200	VIDEO AUX INPUT FRONT COVER	1pc	3064SI
	205	WT976300	VIDEO AUX INPUT FRONT COVER	1pc	3064SI
	206	WU183100	RCU SHEET	1pc	
			BATTERY	R03, AAA, UM-4 2pcs	T
		WW483800	SERVICE TOOL P. C. B. CHECKING JIG	for RX-V367/RX-V371	

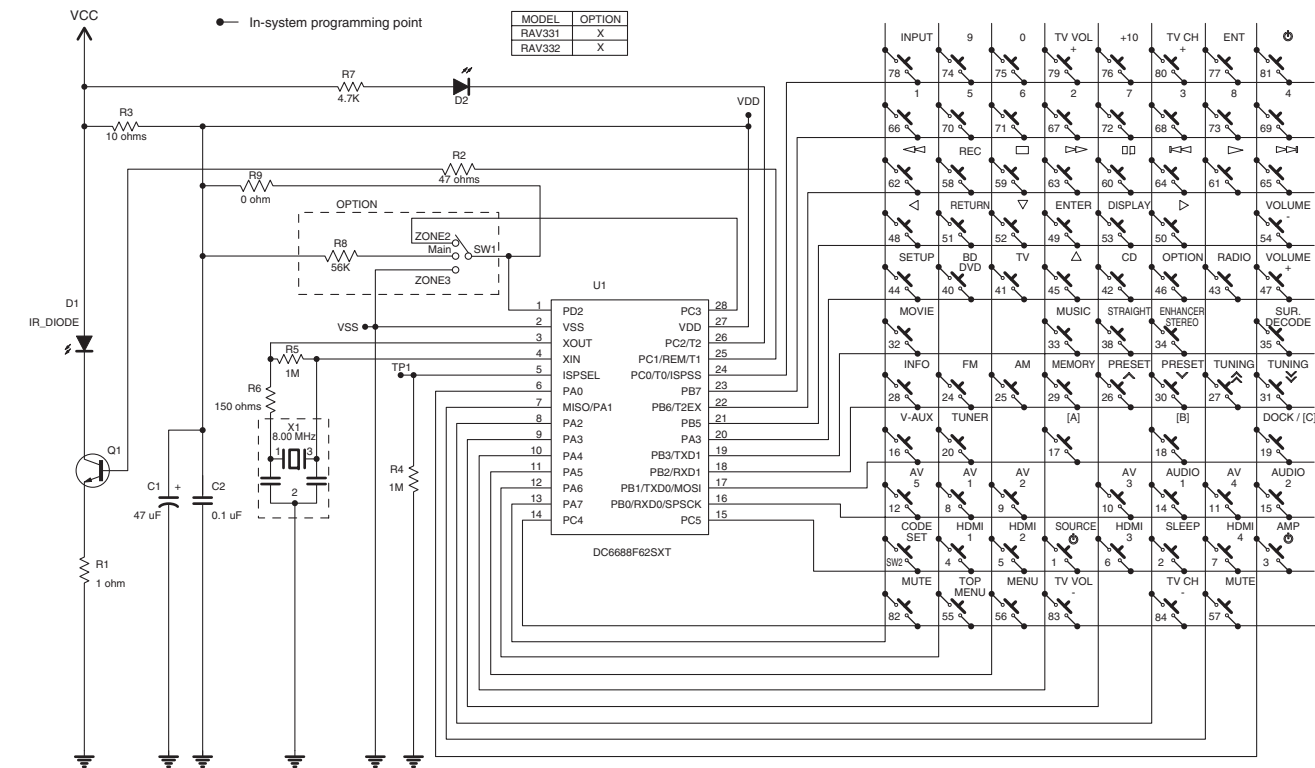
* New Parts

REMOTE CONTROL

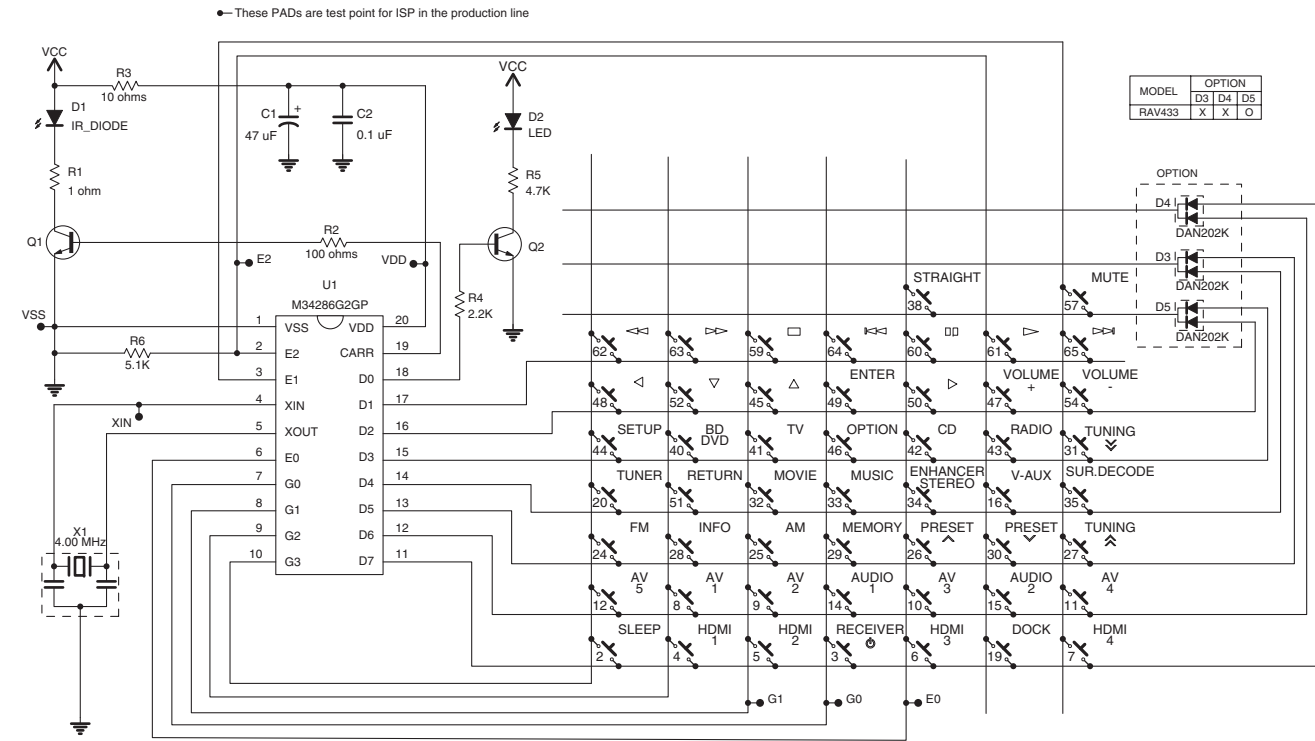
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SCHEMATIC DIAGRAMS

RAV331, RAV332



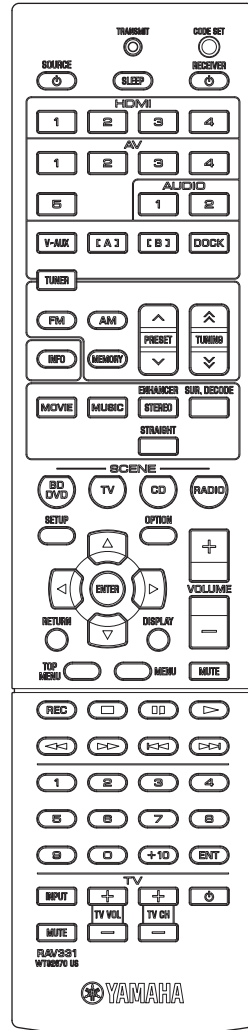
RAV433



PANELS

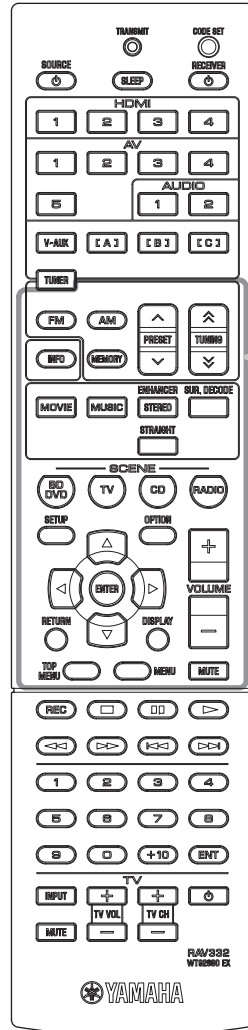
RAV331

(U, C, R, K, A, L, S models)



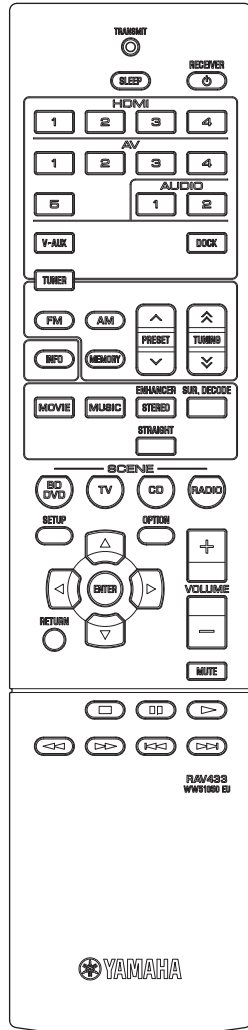
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(T model)

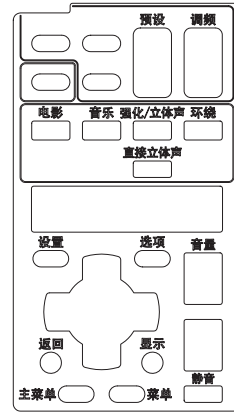


RAV433

(B, G, F models)

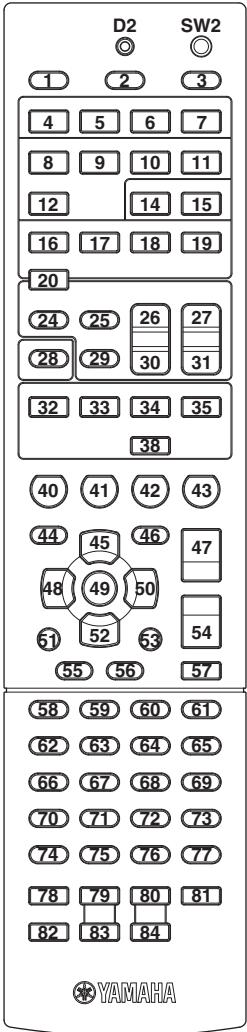


RCU sheet



KEY NO. LAYOUT

RAV331, RAV332



KEY CODE

RAV331, RAV332

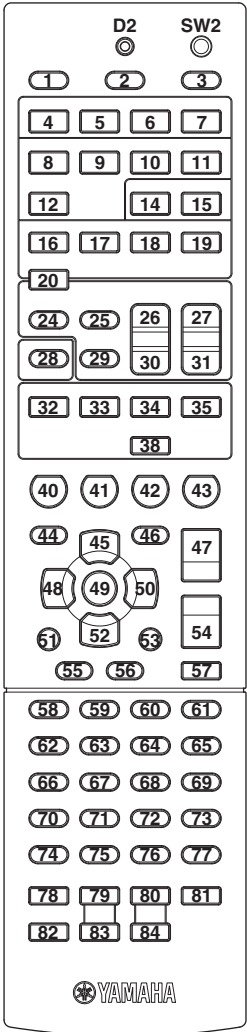
AMP MODE

GROUP	PRE SET	COM	Key No.	FUNCTION		ID1	ID2
				(U, C, R, K, A, L, S models)	(T model)	MAIN	MAIN
	–	–	SW1	MAIN/ZONE2/ZONE3		[MAIN]	[MAIN]
	–	–	LED1	TRANSMIT		–	–
	–	–	SW2	CODE SET		–	–
POWER	–	O	K2	SLEEP		7A-30	7A-30CE
	–	O	K3	RECEIVER 		7E-2A	7E-2AD4
INPUT 1	O	O	K4	HDMI-1 Default setting		7A-4738 * enter into HDMI-1 MODE	7A-4739
	O	O	K5	HDMI-2		7A-4A35 * enter into HDMI-2 MODE	7A-4A34
	O	O	K6	HDMI-3		7A-4D32 * enter into HDMI-3 MODE	7A-4D33
	O	O	K7	HDMI-4		7A-502F * enter into HDMI-4 MODE	7A-502E
	O	O	K8	AV-1		7A-532C * enter into AV-1 MODE	7A-532D
	O	O	K9	AV-2		7A-5629 * enter into AV-2 MODE	7A-5628
	O	O	K10	AV-3		7A-5926 * enter into AV-3 MODE	7A-5927
	O	O	K11	AV-4		7A-5C23 * enter into AV-4 MODE	7A-5C22
	O	O	K12	AV-5		7A-5F20 * enter into AV-5 MODE	7A-5F21
	O	O	K14	AUDIO-1		7A-651A * enter into AUDIO-1 MODE	7A-651B
	O	O	K15	AUDIO-2		7A-6817 * enter into AUDIO-2 MODE	7A-6816
	O	O	K16	V-AUX		7A-55 * enter into V-AUX MODE	7A-55AB
	O	O	K17	[A]		7A-14 * enter into PHONO MODE	7A-14EA
INPUT 2	–	O	K18	[B]		7F01-3F * enter into USB MODE	7F01-3FC1
	–	O	K19	DOCK (U, C, R, K, A, L, S models) [C] (T model)		7F01-4A * enter into DOCK MODE	7F01-4AB4
	–	O	K20	TUNER		7A-16 * enter into TUNER MODE	7A-16E8
RADIO	–	O	K24	FM		7F01-5827	7F01-5826
	–	O	K25	AM		7F01-552A	7F01-552B
	–	O	K26	PRESET 	预设	7F01-5B24	7F01-5B25
	–	O	K27	TUNING 	调频	7F01-611E	7F01-611F
	–	O	K28	INFO		7A-2758	7A-2759
	–	O	K29	MEMORY		7F01-6718	7F01-6719
	–	O	K30	PRESET 		7F01-5E21	7F01-5E20
	–	O	K31	TUNING 		7F01-641B	7F01-641A
DSP	–	O	K32	MOVIE	电影	7A-88	7A-8876
	–	O	K33	MUSIC	音乐	7A-89	7A-8977
	–	O	K34	ENHANCER/STEREO	强化/立体声	7A-94	7A-946A
	–	O	K35	SUR. DECODE	环绕	7A-8D	7A-8D73
	–	O	K38	STRAIGHT	直接立体声	7A-56	7A-56A8

GROUP	PRE SET	COM	Key No.	FUNCTION		ID1	ID2
				(U, C, R, K, A, L, S models)	(T model)	MAIN	MAIN
SCENE	–	O	K40	BD/DVD (SCENE)		7A-007F	7A-007E
	–	O	K41	TV (SCENE)		7A-037C	7A-037D
	–	O	K42	CD (SCENE)		7A-0679	7A-0678
	–	O	K43	RADIO (SCENE)		7A-0976	7A-0977
MENU	–	O	K44	SETUP	设置	7A-84 * enter into AMP MODE	7A-847A
	–	O	K46	OPTION	选项	7A-6B14 * enter into AMP MODE	7A-6B15
CURSOR	–	–	K45	△ (UP)		7A-9D	7A-9D63
	–	–	K48	◀ (LEFT)		7A-9F	7A-9F61
	–	–	K49	ENTER		7A-DE	7A-DE20
	–	–	K50	▷ (RIGHT)		7A-9E	7A-9E60
	–	–	K51	RETURN	返回	7A-AA	7A-AA54
	–	–	K52	▽ (DOWN)		7A-9C	7A-9C62
	–	–	K53	DISPLAY	显示	7F01-60	7F01-609E
VOLUME	–	O	K47	VOLUME (+)	音量	7A-1A	7A-1AE4
	–	O	K54	VOLUME (-)		7A-1B	7A-1BE5
	–	O	K57	MUTE	静音	7A-1C	7A-1CE2
SOURCE	–	–	K55	TOP MENU	主菜单	(SOURCE MODE 1/2)	
	–	–	K56	MENU	菜单	* enter into SOURCE MODE	
	–	–	K1	SOURCE 		* SOURCE MODE 1/2	
	–	–	K58	REC			
	–	–	K59	□ (STOP)			
	–	–	K60	⏸ (PAUSE)			
	–	–	K61	▶ (PLAY)			
	–	–	K62	◀◀ (REW)			
	–	–	K63	▶▶ (FF)			
	–	–	K64	⏮ (SKIP -)			
	–	–	K65	⏭ (SKIP +)			
10 key	–	–	K66	1		* SOURCE MODE 1/2	
	–	–	K67	2			
	–	–	K68	3			
	–	–	K69	4			
	–	–	K70	5			
	–	–	K71	6			
	–	–	K72	7			
	–	–	K73	8			
	–	–	K74	9			
	–	–	K75	0			
	–	–	K76	+10			
	–	–	K77	ENT			
TV	–	–	K78	TV INPUT		* TV MODE	
	–	–	K79	TV VOL (+)			
	–	–	K80	TV CH (+)			
	●	–	K81	TV 			
	–	–	K82	TV MUTE			
	–	–	K83	TV VOL (-)			
	–	–	K84	TV CH (-)			

RAV331, RAV332

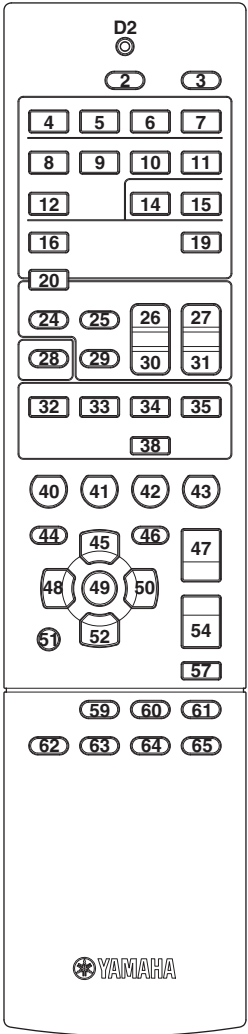
SOURCE MODE 2/2



				SOURCE MODE 1 (INPUT1)													SOURCE MODE 2 (INPUT2)						
				K4	K5	K6	K7	K8	K9	K10	K11	K12	K14	K15	K16	K17	K18		K19		K20		
				[HDMI-1]	[HDMI-2]	[HDMI-3]	[HDMI-4]	[AV-1]	[AV-2]	[AV-3]	[AV-4]	[AV-5]	[AUDIO-1]	[AUDIO-1]	[V-AUX]	[A]	[B]		[DOCK]		[TUNER]		
GROUP	Key No.	FUNCTION		ID1													ID1	ID2	ID1	ID2	ID1	ID2	
		(U, C, R, K, A, L, S models)	(T model)	[MAIN]																			
VOLUME	K47	VOLUME (+)	音量	* AMP MODE													* AMP MODE						
	K54	VOLUME (-)																					
	K57	MUTE	静音																				
SOURCE	K55	TOP MENU	主菜单	7C-B1	-	-	-	-	-	-	-	-	-	-	-	-	7F01-2D	7F01-2DD3	7F01-0D	7F01-0DF3	7A-AE	7A-AE50	
				* keep on SOURCE MODE													* keep on SOURCE MODE						
	K56	MENU	菜单	7C-CF													7F01-2F	7F01-2FD1	7F01-0F	7F01-0FF1	7A-AB	7A-AB55	
				* keep on SOURCE MODE													* keep on SOURCE MODE						
	K1	SOURCE 		7C-80						79-60							7F01-20	7F01-20DE	7F01-00	7F01-00FE	D1-1B	-	
	K58	REC		7C-8B	-	-	-	-	-	7A-4F	-	-	-	-	-	-	7F01-36	7F01-36C8	7F01-16	7F01-16E8	-	-	
	K59	 (STOP)		7C-85	-	-	-	-	-	7A-09	-	-	-	-	-	-	7F01-3D	7F01-3DC3	7F01-1D	7F01-1DE3	-	-	
	K60	 (PAUSE)		7C-83	-	-	-	-	-	7A-09	-	-	-	-	-	-	7F01-3A	7F01-3AC4	7F01-1A	7F01-1AE4	-	-	
	K61	 (PLAY)		7C-82	-	-	-	-	-	7A-08	-	-	-	-	-	-	7F01-3E	7F01-3EC0	7F01-1E	7F01-1EE0	-	-	
	K62	 (REW)		7C-86	-	-	-	-	-	7A-0D	-	-	-	-	-	-	7F01-37	7F01-37C9	7F01-17	7F01-17E9	-	-	
	K63	 (FF)		7C-87	-	-	-	-	-	7A-0C	-	-	-	-	-	-	7F01-38	7F01-38C6	7F01-18	7F01-18E6	7A-A5	7A-A55B	
	K64	 (SKIP -)		7C-B9	-	-	-	-	-	7A-0B	-	-	-	-	-	-	7F01-3B	7F01-3BC5	7F01-1B	7F01-1BE5	7A-A6	7A-A658	
	K65	 (SKIP +)		7C-BA	-	-	-	-	-	7A-0A	-	-	-	-	-	-	7F01-3C	7F01-3CC2	7F01-1C	7F01-1CE2	7A-A7	7A-A759	
	10 key	K66	1		7C-94	-	-	-	-	-	79-11	-	-	-	-	-	-	7F01-21	7F01-21DF	7F01-01	7F01-01FF	7A-E5	7A-E51B
		K67	2		7C-95	-	-	-	-	-	79-12	-	-	-	-	-	-	7F01-22	7F01-22DC	7F01-02	7F01-02FC	7A-E6	7A-E618
		K68	3		7C-96	-	-	-	-	-	79-13	-	-	-	-	-	-	7F01-23	7F01-23DD	7F01-03	7F01-03FD	7A-E7	7A-E719
		K69	4		7C-97	-	-	-	-	-	79-14	-	-	-	-	-	-	7F01-24	7F01-24DA	7F01-04	7F01-04FA	7A-E8	7A-E816
K70		5		7C-98	-	-	-	-	-	79-15	-	-	-	-	-	-	7F01-25	7F01-25DB	7F01-05	7F01-05FB	7A-E9	7A-E917	
K71		6		7C-99	-	-	-	-	-	79-16	-	-	-	-	-	-	7F01-26	7F01-26D8	7F01-06	7F01-06F8	7A-EA	7A-EA14	
K72		7		7C-9A	-	-	-	-	-	79-17	-	-	-	-	-	-	7F01-27	7F01-27D9	7F01-07	7F01-07F9	7A-EB	7A-EB15	
K73		8		7C-9B	-	-	-	-	-	79-18	-	-	-	-	-	-	7F01-28	7F01-28D6	7F01-08	7F01-08F6	7A-EC	7A-EC12	
K74		9		7C-9C	-	-	-	-	-	79-19	-	-	-	-	-	-	7F01-29	7F01-29D7	7F01-09	7F01-09F7	7A-B1	7A-B14F	
K75		0		7C-93	-	-	-	-	-	79-10	-	-	-	-	-	-	7F01-2A	7F01-2AD4	7F01-0A	7F01-0AF4	7A-B2	7A-B24C	
	K76	+10		7C-9D	-	-	-	-	-	79-1A	-	-	-	-	-	-	7F01-2B	7F01-2BD5	7F01-0B	7F01-0BF5	-	-	
	K77	ENT		7C-9E	-	-	-	-	-	79-0B	-	-	-	-	-	-	7F01-2C	7F01-2CD2	7F01-0C	7F01-0CF2	7A-B3	7A-B34D	
TV	K78	TV INPUT		* TV MODE													* TV MODE						
	K79	TV VOL (+)																					
	K80	TV CH (+)																					
	K81	TV 																					
	K82	TV MUTE																					
	K83	TV VOL (-)																					
	K84	TV CH (-)																					

KEY NO. LAYOUT

RAV433



KEY CODE

RAV433

Key No.	FUNCTION	CODE	
		ID1 (5019)	ID2 (5020)
		MAIN	MAIN
K2	SLEEP	7A-30	7A-30CE
K3	RECEIVER	7E-2A	7E-2AD4
K4	HDMI-1	7A-4738	7A-4739
K5	HDMI-2	7A-4A35	7A-4A34
K6	HDMI-3	7A-4D32	7A-4D33
K7	HDMI-4	7A-502F	7A-502E
K8	AV-1	7A-532C	7A-532D
K9	AV-2	7A-5629	7A-5628
K10	AV-3	7A-5926	7A-5927
K11	AV-4	7A-5C23	7A-5C22
K12	AV-5	7A-5F20	7A-5F21
K14	AUDIO-1	7A-651A	7A-651B
K15	AUDIO-2	7A-6817	7A-6816
K16	V-AUX	7A-55	7A-55AB
K19	DOCK	7F01-4A	7F01-4AB4
K20	TUNER	7A-16	7A-16E8
K24	FM	7F01-5827	7F01-5826
K25	AM	7F01-552A	7F01-552B
K26	PRESET	7F01-5B24	7F01-5B25
K27	TUNING	7F01-611E	7F01-611F
K28	INFO	7A-2758	7A-2759
K29	MEMORY	7F01-6718	7F01-6719
K30	PRESET	7F01-5E21	7F01-5E20
K31	TUNING	7F01-641B	7F01-641A
K32	MOVIE	7A-88	7A-8876
K33	MUSIC	7A-89	7A-8977
K34	ENHANCER/STEREO	7A-94	7A-946A
K35	SUR. DECODE	7A-8D	7A-8D73
K38	STRAIGHT	7A-56	7A-56A8
K40	BD/DVD (SCENE)	7A-007F	7A-007E
K41	TV (SCENE)	7A-037C	7A-037D
K42	CD (SCENE)	7A-0679	7A-0678
K43	RADIO (SCENE)	7A-0976	7A-0977
K44	SETUP	7A-84	7A-847A
K45	(UP)	7A-9D	7A-9D63
K46	OPTION	7A-6B14	7A-6B15
K47	VOLUME (+)	7A-1A	7A-1AE4
K48	(LEFT)	7A-9F	7A-9F61
K49	ENTER	7A-DE	7A-DE20
K50	(RIGHT)	7A-9E	7A-9E60
K51	RETURN	7A-AA	7A-AA54
K52	(DOWN)	7A-9C	7A-9C62
K54	VOLUME (-)	7A-1B	7A-1BE5
K57	MUTE	7A-1C	7A-1CE2
K59	(STOP)	7F01-1D	7F01-1DE3
K60	(PAUSE)	7F01-1A	7F01-1AE4
K61	(PLAY)	7F01-1E	7F01-1EE0
K62	(REW)	7F01-17	7F01-17E9
K63	(FF)	7F01-18	7F01-18E6
K64	(SKIP -)	7F01-1B	7F01-1BE5
K65	(SKIP +)	7F01-1C	7F01-1CE2
ID setting		K48 [(LEFT)] + K40 [SCENE BD/DVD] = ID1	K48 [(LEFT)] + K41 [SCENE TV] = ID2
ZONE setting		K50 + K40 = MAIN	K50 + K40 = MAIN

■ ADVANCED SETUP

U, C models

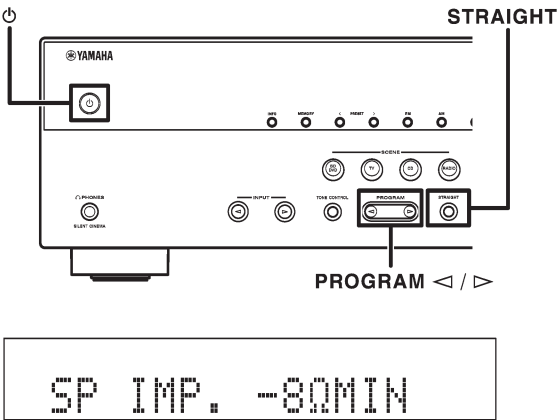
The Advanced Setup menu can be used for unit initialization and other useful extended functions. The Advanced Setup menu can be operated as follows.

Displaying/Setting the Advanced Setup menu

1 Set this unit to the standby mode.

2 Press **⏻** while pressing and holding **STRAIGHT** on the front panel.

Release the keys when “ADVANCED SETUP” is displayed on the front panel display.
After approximately 3 seconds, the top menu items are displayed.



3 Use **PROGRAM** to select the item to be set from the following items.

In the Advanced Setup menu, you can set the following settings.

SP IMP.	Sets the impedance of speakers.
REMOTE ID	Changes the remote control ID of a receiver.
INIT	Initializes various settings for this unit.

4 Press **STRAIGHT** a few times to select the value you wish to change.

5 Switch this unit to the standby mode, and then switch it on again.

The settings become effective and the unit is powered on. If initialization is selected, it will be performed when the unit is powered on again.

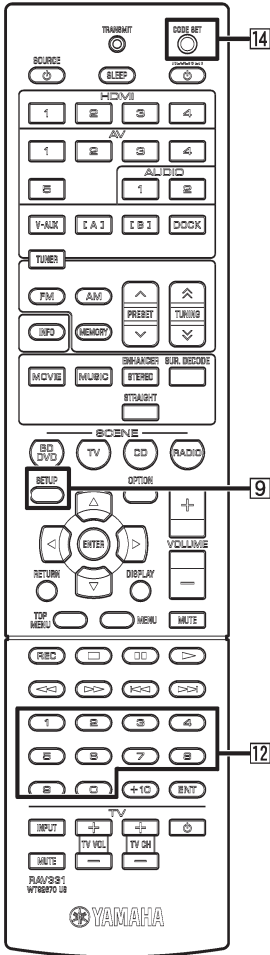
Setting the impedance of speakers



Changes the unit settings depending on the impedance of the speakers connected. **💡 1**

6Ω MIN	Select the impedance when 6Ω speakers are connected.
8Ω MIN (Default)	Select the impedance when speakers above 8Ω are connected.

💡 1 : For detailed procedures of speaker impedance settings, refer to “Changing speaker impedance”.



- 9 SETUP
- 12 Numeric keys
- 14 CODE SET

Avoiding crossing remote control signals when using multiple Yamaha receivers



The remote control of the unit can only receive signals from a receiver which has an identical ID (remote control ID). When using multiple Yamaha AV receivers, you can set each remote control with a unique remote control ID for its corresponding receiver.
On the contrary, if you are setting the same remote control ID for all receivers, you can use one remote control to operate 2 receivers.

ID1 (Default)	Receives the remote control signals set in ID1.
ID2	Receives the remote control signals set in ID2.

ID1 is set for both remote control and receiver by default. To avoid crossing remote control, change the remote control ID for both remote control and receiver.

Initializing various settings for this unit



Initializes various settings stored in this unit and sets it back to default.
Select the items to be initialized from the following.

DSP PARAM	Initializes all parameters for the sound field programs.
ALL	Resets this unit to default factory settings.
CANCEL (Default)	Does not initialize.

■ To change the remote control ID

Perform each of the following steps within 1 minute. Settings will be automatically stopped if more than 1 minute passes since the last operation. To reset, repeat from step 1.

1 Press **14**CODE SET on the remote control using a pointed object such as the tip of a ballpoint pen.

2 Press **9**SETUP on the remote control.

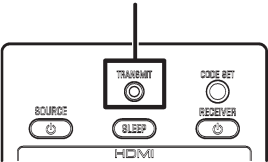
3 Enter the desired remote control ID code.

To switch to ID1:
Enter “5019” using **12**Numeric keys.

To switch to ID2:
Enter “5020” using **12**Numeric keys.

Once the remote control code is registered successfully the remote control will blink twice.

Registration successful: blinks twice
Registration failed: blinks 6 times



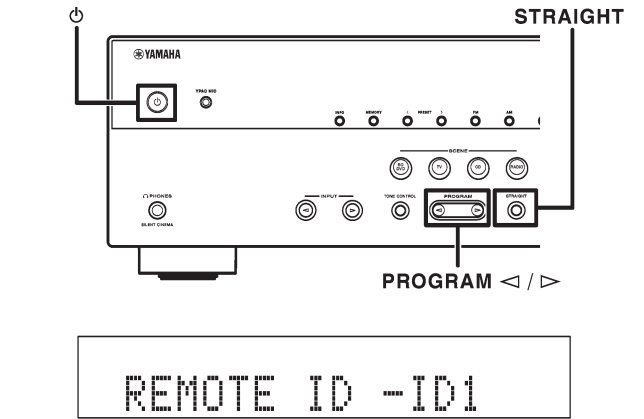
- If setup fails, repeat from step 1.
- Returns to ID1 after the remote control code is initialized.

R, T, K, A, B, G, F, L, S models

The Advanced Setup menu can be used for unit initialization and other useful extended functions.
The Advanced Setup menu can be operated as follows.

Displaying/Setting the Advanced Setup menu

- 1 Set this unit to the standby mode.
- 2 Press **⏻** while pressing and holding **STRAIGHT** on the front panel.
Release the keys when “ADVANCED SETUP” is displayed on the front panel display.
After approximately 3 seconds, the top menu items are displayed.



- 3 Use **PROGRAM** to select the item to be set from the following items.
In the Advanced Setup menu, you can set the following settings.

REMOTE ID	Changes the remote control ID of a receiver.
TU (R, K, A, L, S models)	Selects one of the following FM/AM frequency steps.
INIT	Initializes various settings for this unit.

- 4 Press **STRAIGHT** a few times to select the value you wish to change.
- 5 Switch this unit to the standby mode, and then switch it on again.
The settings become effective and the unit is powered on. If initialization is selected, it will be performed when the unit is powered on again.

Avoiding crossing remote control signals when using multiple Yamaha receivers



The remote control of the unit can only receive signals from a receiver which has an identical ID (remote control ID). When using multiple Yamaha AV receivers, you can set each remote control with a unique remote control ID for its corresponding receiver.
On the contrary, if you are setting the same remote control ID for all receivers, you can use one remote control to operate 2 receivers.

ID1 (Default)	Receives the remote control signals set in ID1.
ID2	Receives the remote control signals set in ID2.

ID1 is set for both remote control and receiver by default. To avoid crossing remote control, change the remote control ID for both remote control and receiver.
(R, T, K, A, L, S models)

Changing FM/AM frequency steps (R, K, A, L, S models)



You can select one of the following FM/AM frequency steps: **🔊1**

AM10/FM100	You can adjust the AM frequency by steps of 10kHz and FM by steps of 100kHz.
AM9/FM50 (Default)	You can adjust the AM frequency by steps of 9kHz and FM by steps of 50kHz.

🔊1 : For details on setting FM/AM frequency steps, refer to “FM/AM tuning”.

(R, T, K, A, L, S models)

■ To change the remote control ID
Perform each of the following steps within 1 minute. Settings will be automatically stopped if more than 1 minute passes since the last operation. To reset, repeat from step 1.

1 Press **14**CODE SET on the remote control using a pointed object such as the tip of a ballpoint pen.

2 Press **9**SETUP on the remote control.

3 Enter the desired remote control ID code.
To switch to ID1:
Enter “5019” using **12**Numeric keys.
To switch to ID2:
Enter “5020” using **12**Numeric keys.
Once the remote control code is registered successfully the remote control will blink twice.
Registration successful: blinks twice
Registration failed: blinks 6 times

- If setup fails, repeat from step 1.
- Returns to ID1 after the remote control code is initialized.

(B, G, F models)

■ To change the remote control ID

- To set to ID1
Press **9**Cursor < and “BD/DVD” under **7**SCENE for 3 seconds or longer.
- To set to ID2
Press **9**Cursor < and “TV” under **7**SCENE for 3 seconds or longer.

MEMO

RX-V371/HTR-3064



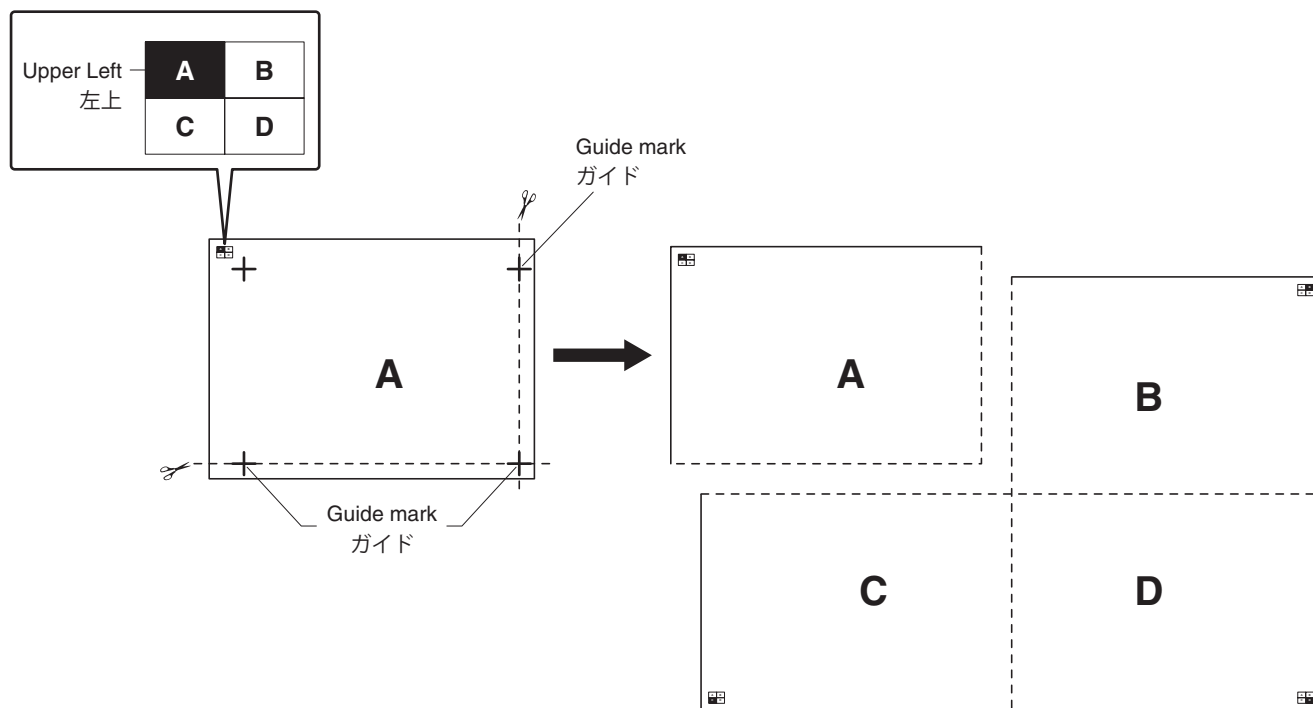
YAMAHA

AV RECEIVER RX-V371/HTR-3064

SCHEMATIC DIAGRAMS

Each schematic diagram is divided into equal pieces to enable printout by conventional printers.
Cut along the guide marks and put them together.
Overall location of each schematic diagram is described by the following symbol.

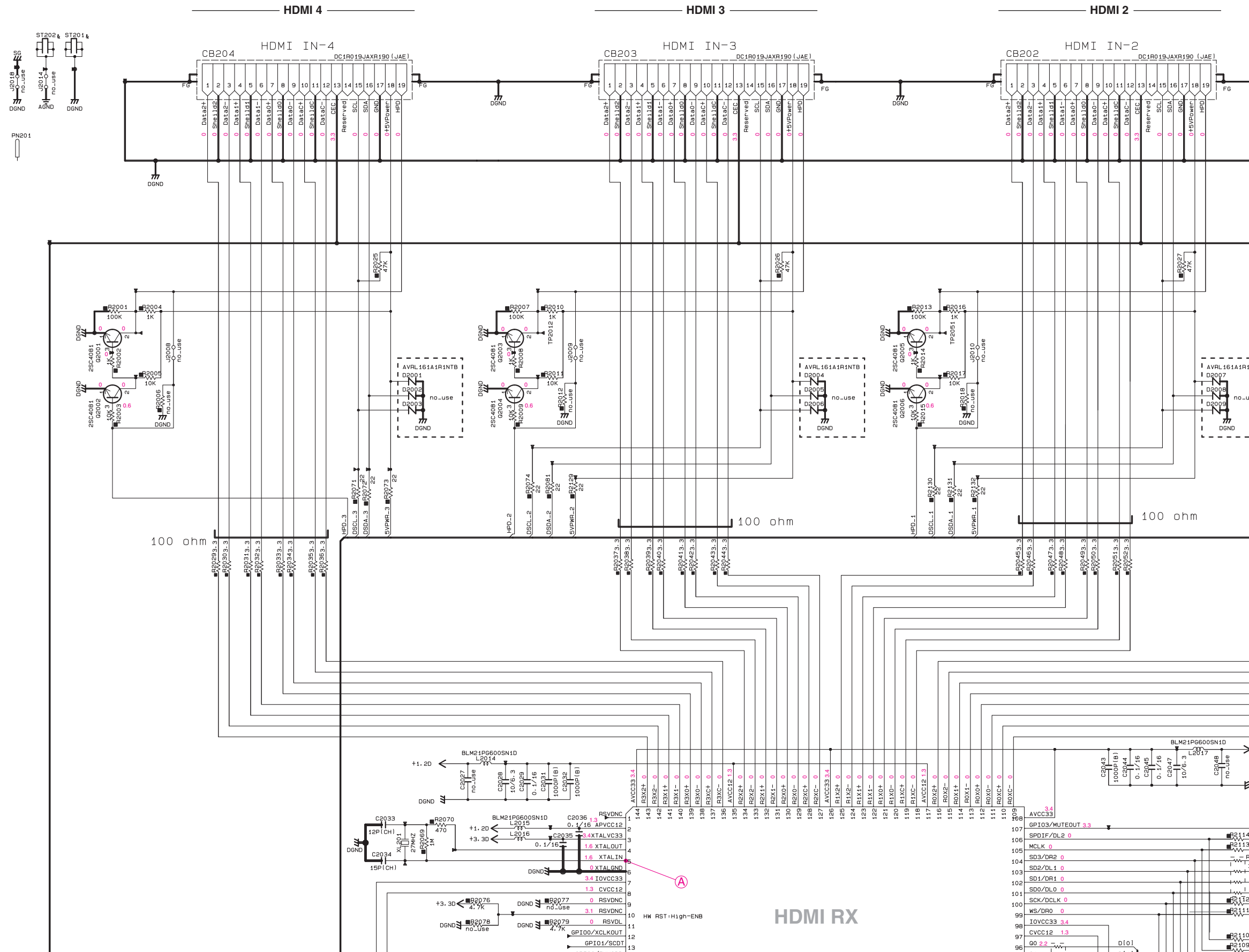
各回路図は、一般的に使用されているプリンタで印刷できる大きさに分割されています。
印刷した各回路図を、ガイドに沿って切って貼り合わせてください。
各回路図の貼り合わせ位置は以下の記号で表しています。

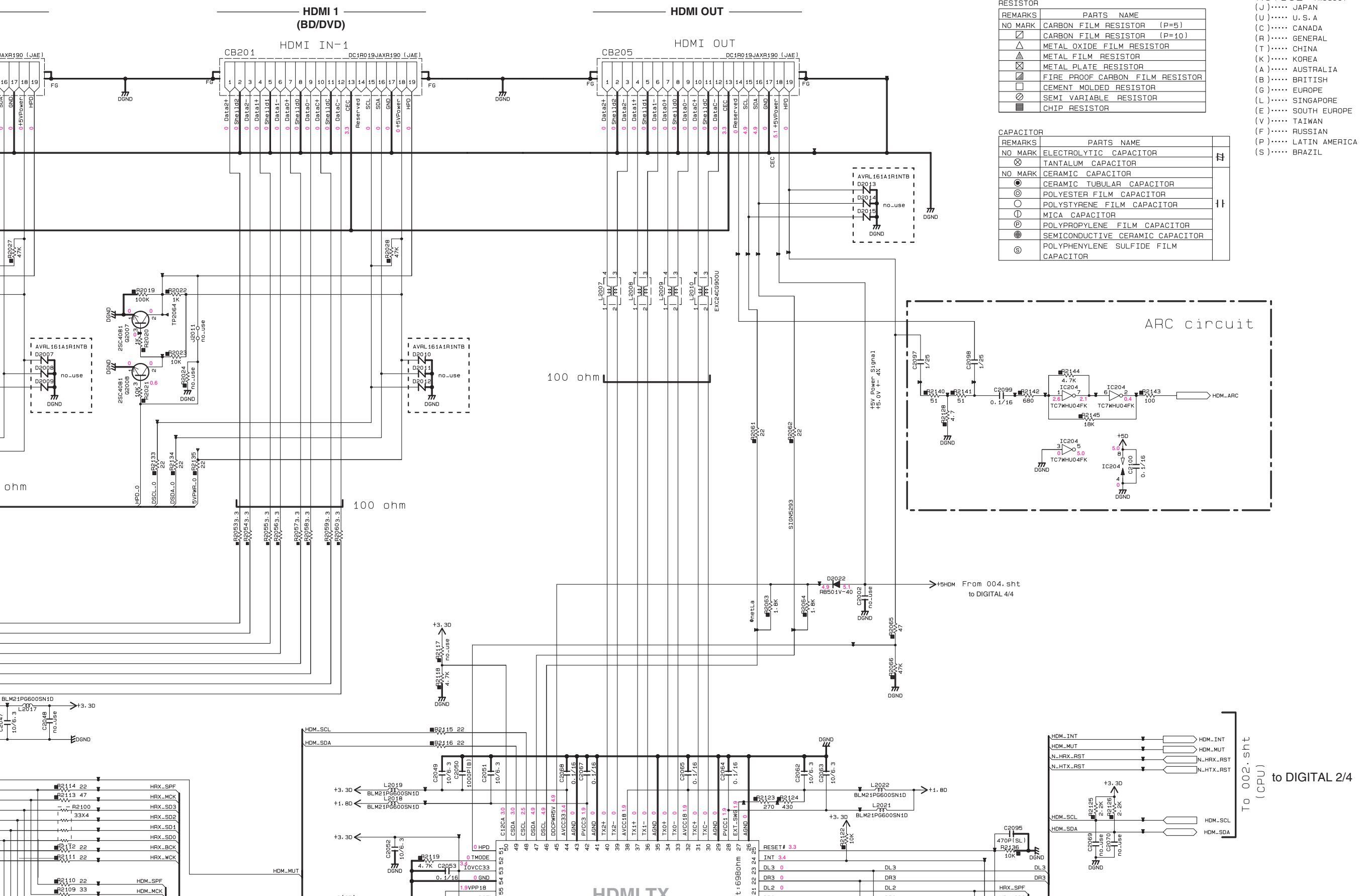


■ CONTENTS

SCHEMATIC DIAGRAMS

DIGITAL Board	77-80
OPERATION Board	81-82
MAIN Board	83-85





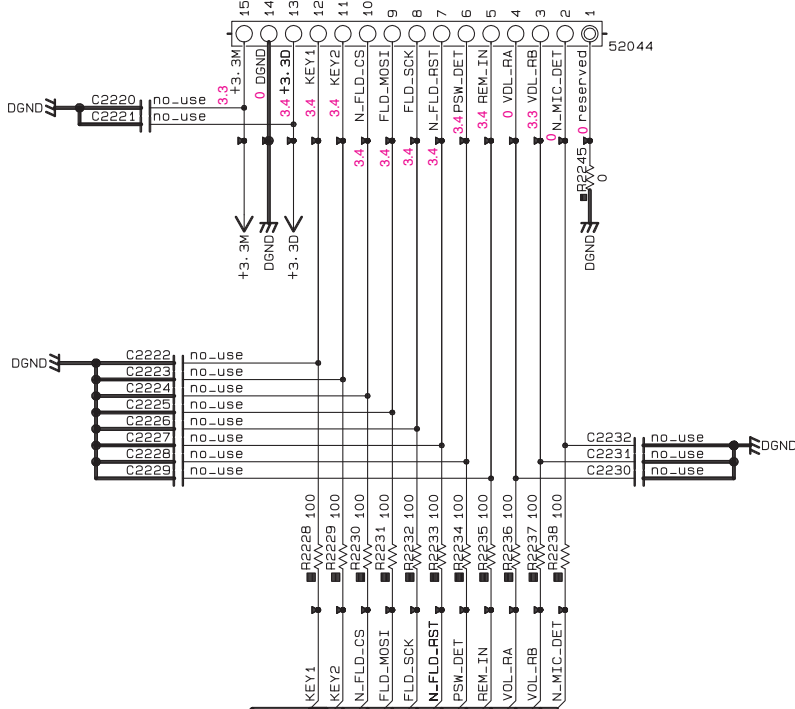
A	B
C	D

RX-V371/HTR-3064

DIGITAL 2/4

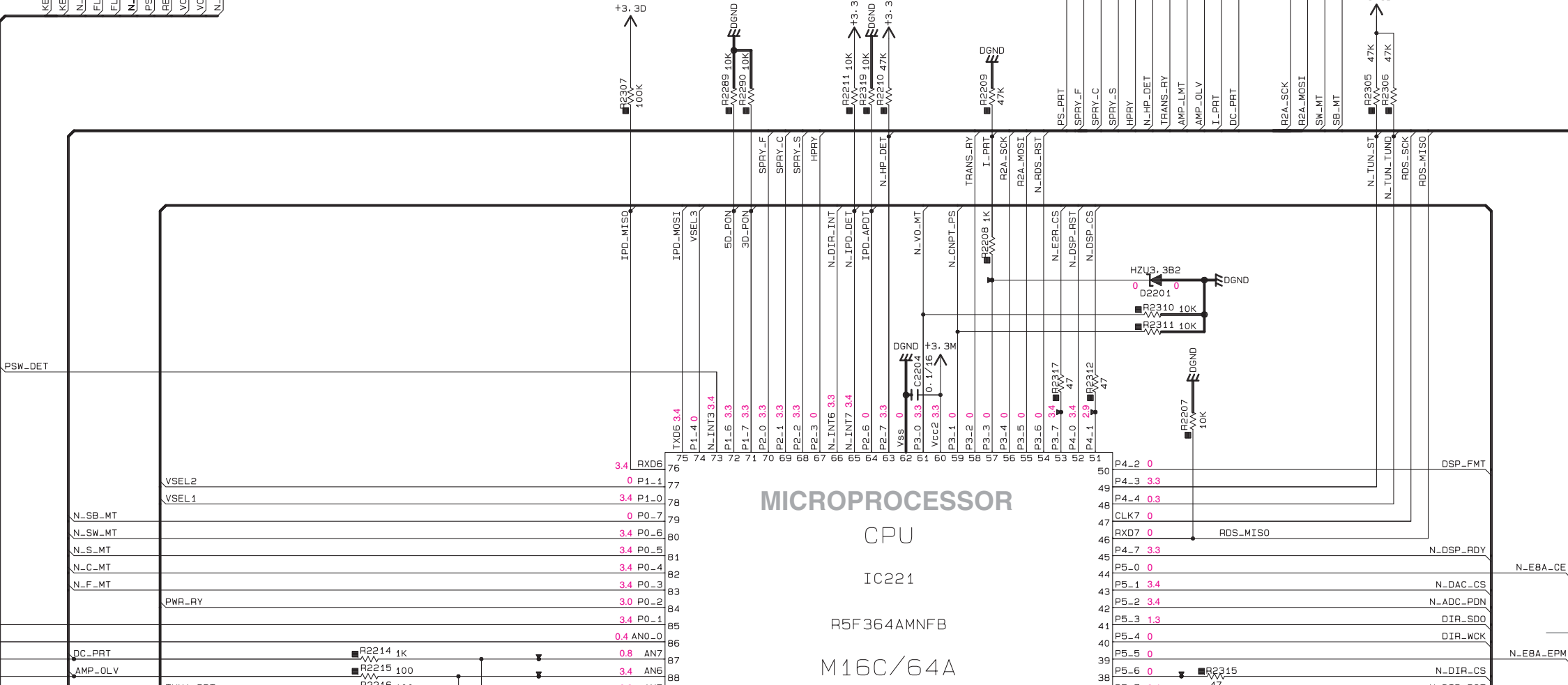
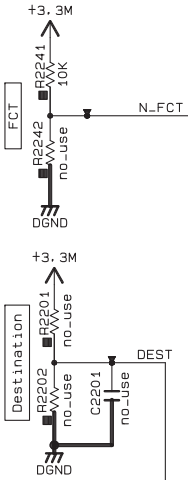
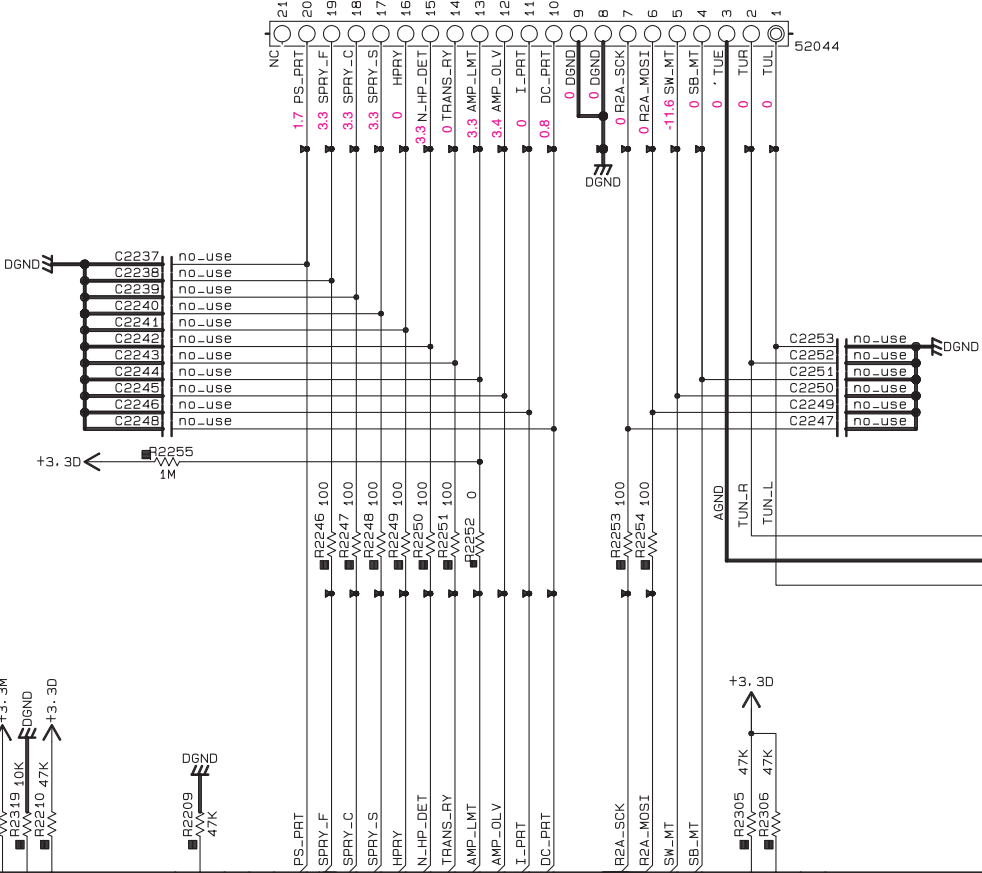
Page 81 C9
to OPERATION (1)_CB101

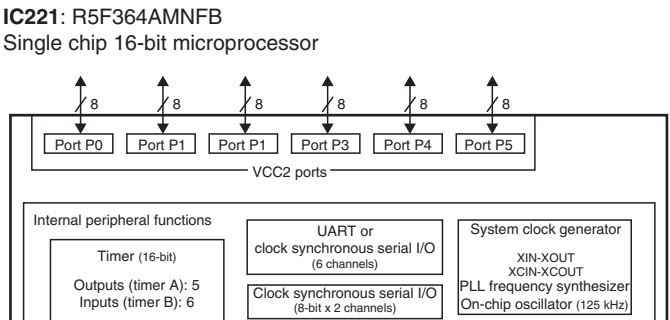
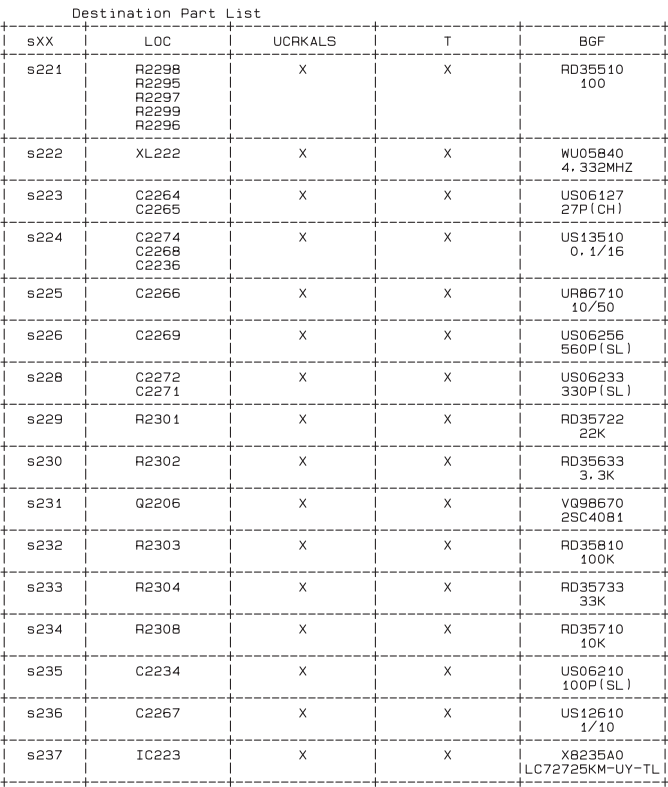
to_OPE(1)
CB221 &



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to MAIN (1)_CB1

to MAIN
CB222 &





6

7

8

9

10

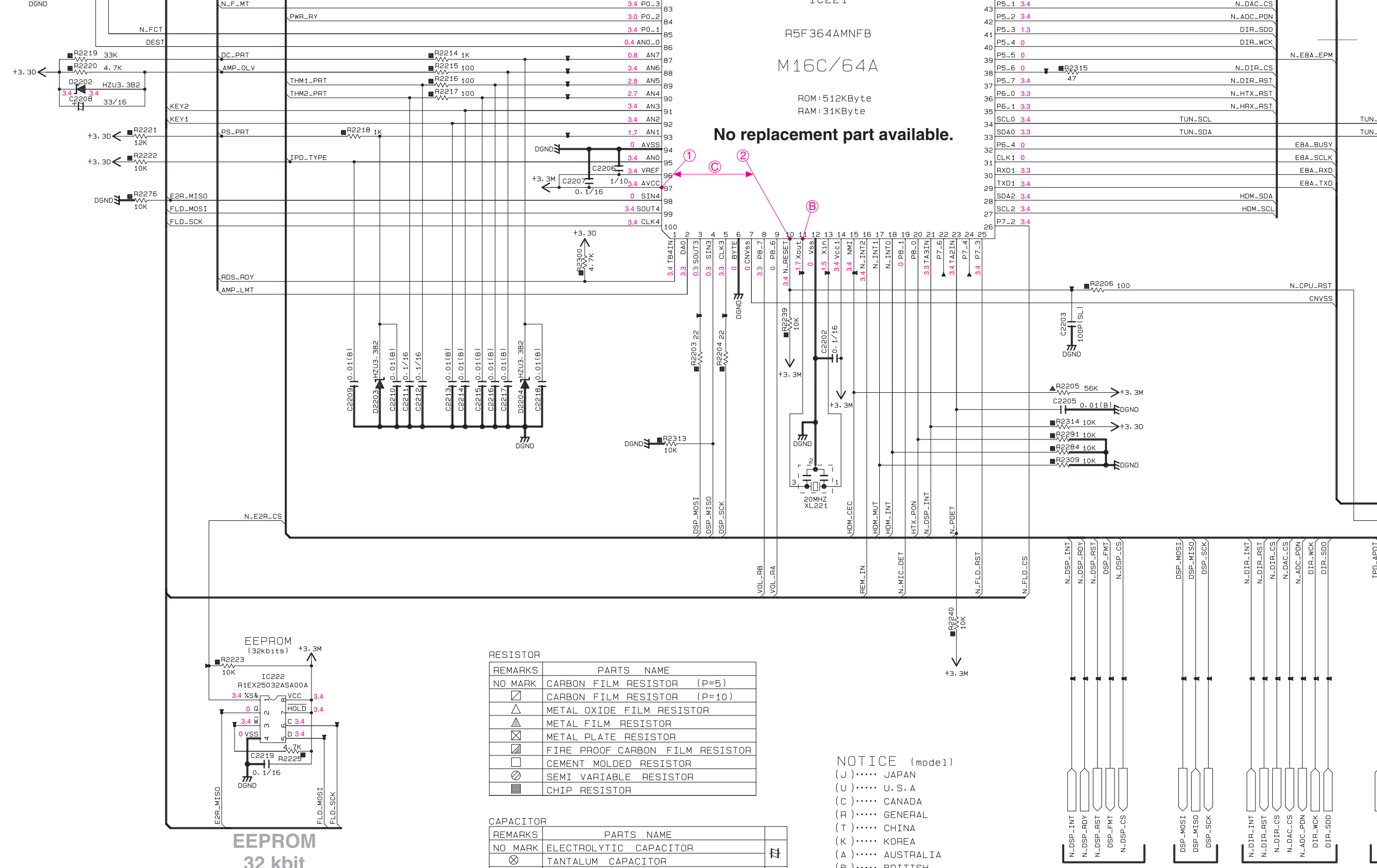
★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
★ Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
★ Schematic diagram is subject to change without notice.

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RX-V371/HTR-3064

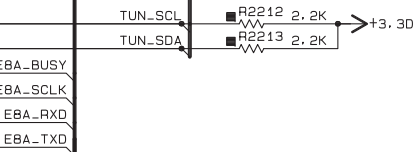
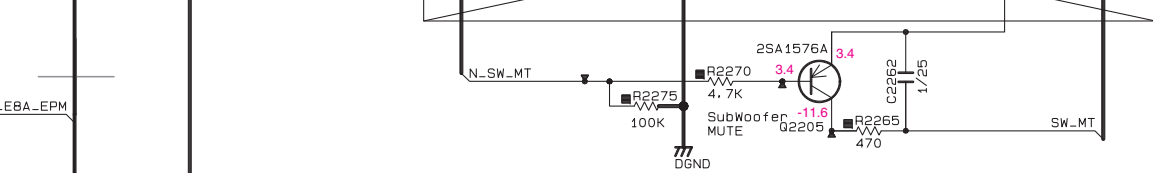
A	B
C	D

DIGITAL 2/4

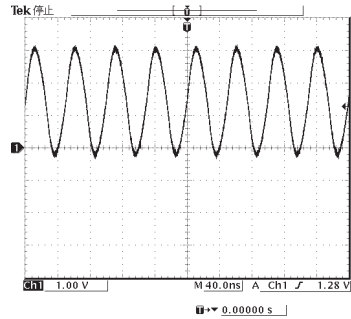


NOTICE (model)
(J)..... JAPAN
(U)..... U. S. A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL

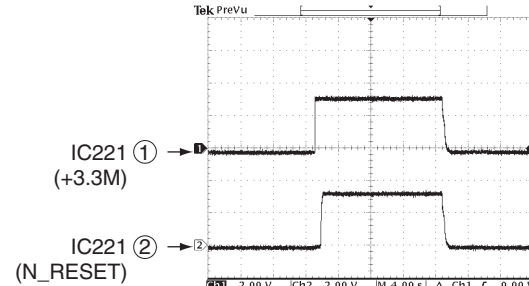
to 003.sht (DSP)
to 003.sht (DSP)
to 004.sht (DIR)
to 004.sht (DIR, DAC)
to DIGITAL 3/4
to DIGITAL 3/4, 4/4



POINT ② XL221 (Pin 11 of IC221)

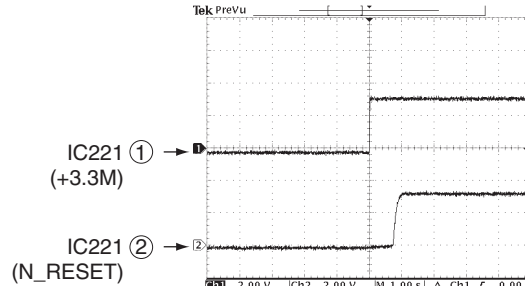


POINT ③ ①/ IC221 (97 pin, +3.3M), ②/ IC221 (10 pin, N_RESET)

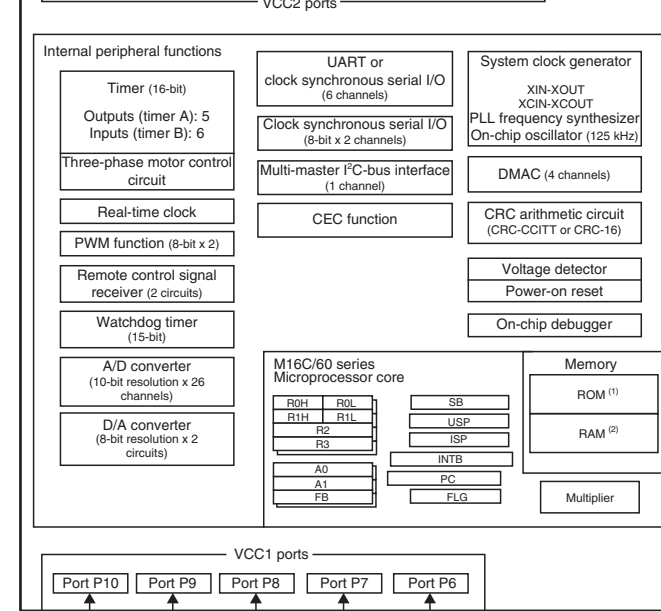
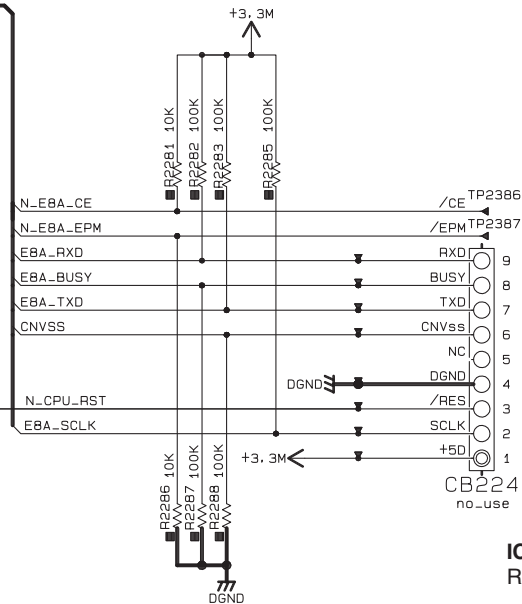
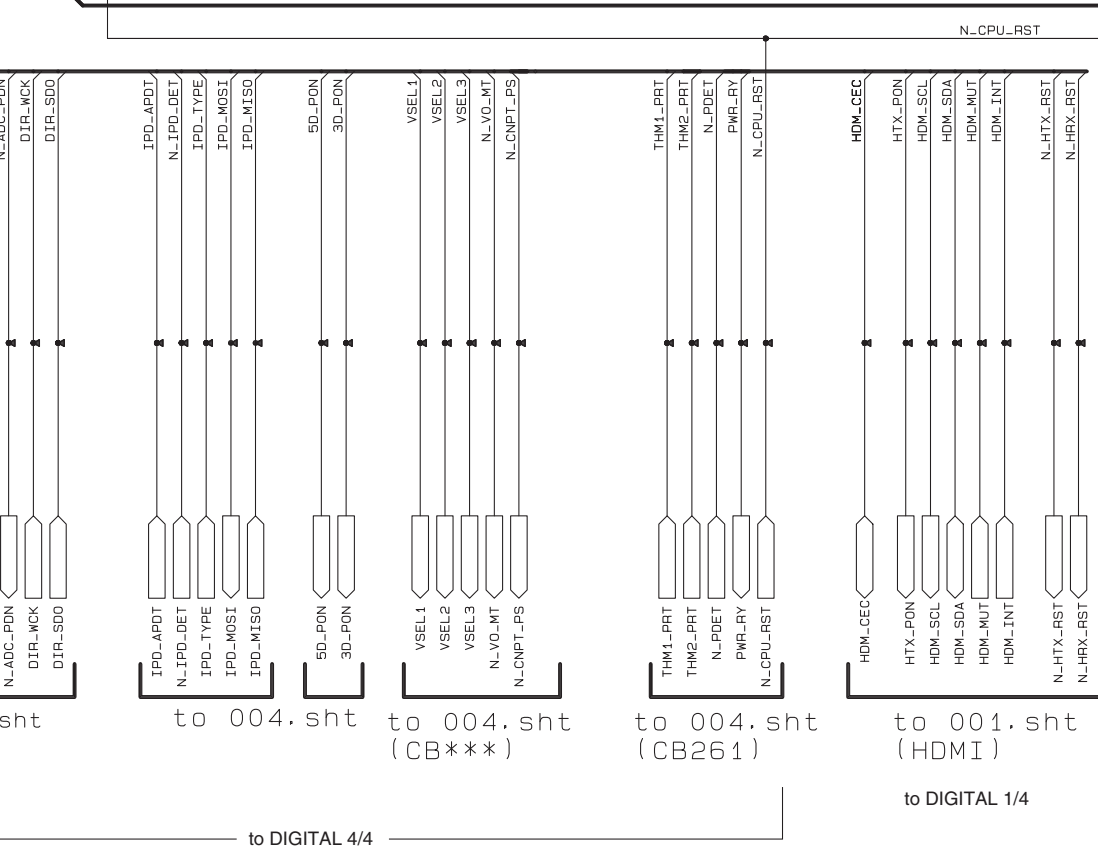


AC POWER ON
(Connect the power cable)

AC POWER OFF
(Disconnect the power cable)

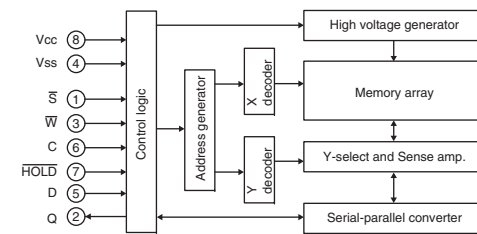


AC POWER ON
(Connect the power cable)

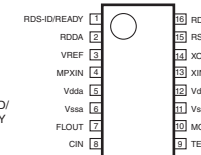
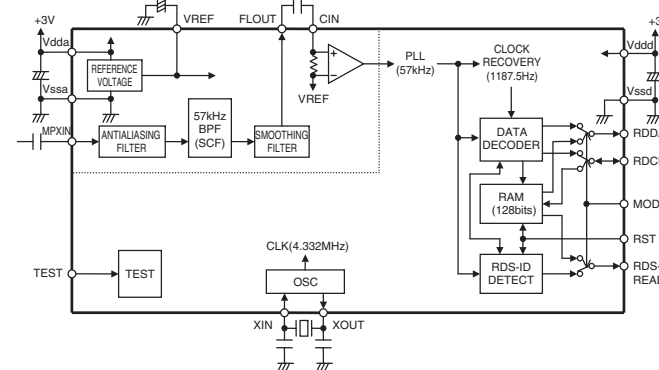


Notes:
1. ROM size depends on MCU type.
2. RAM size depends on MCU type.

IC222: R1EX25032ASA00A
4096 x 8-bit SPI serial interface EEPROM



IC223: LC72725KM-UY-TLM-E
RDS signal demodulation IC



A	B
C	D

DIGITAL 3/4



A

B

C

D

E

F

G

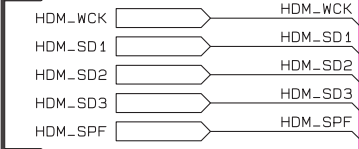
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DIGITAL 3/4

2

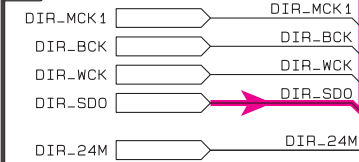
to DIGITAL 1/4

From 001.sht
(HDMI Rx)



to DIGITAL 4/4

From 004.sht
(DIR)



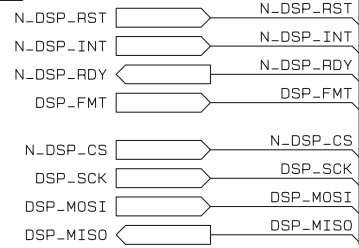
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4

5

to DIGITAL 2/4

From 002.sht
(CPU)



DIGITAL IN

FL/FR
C/SW

AUDIO DSP

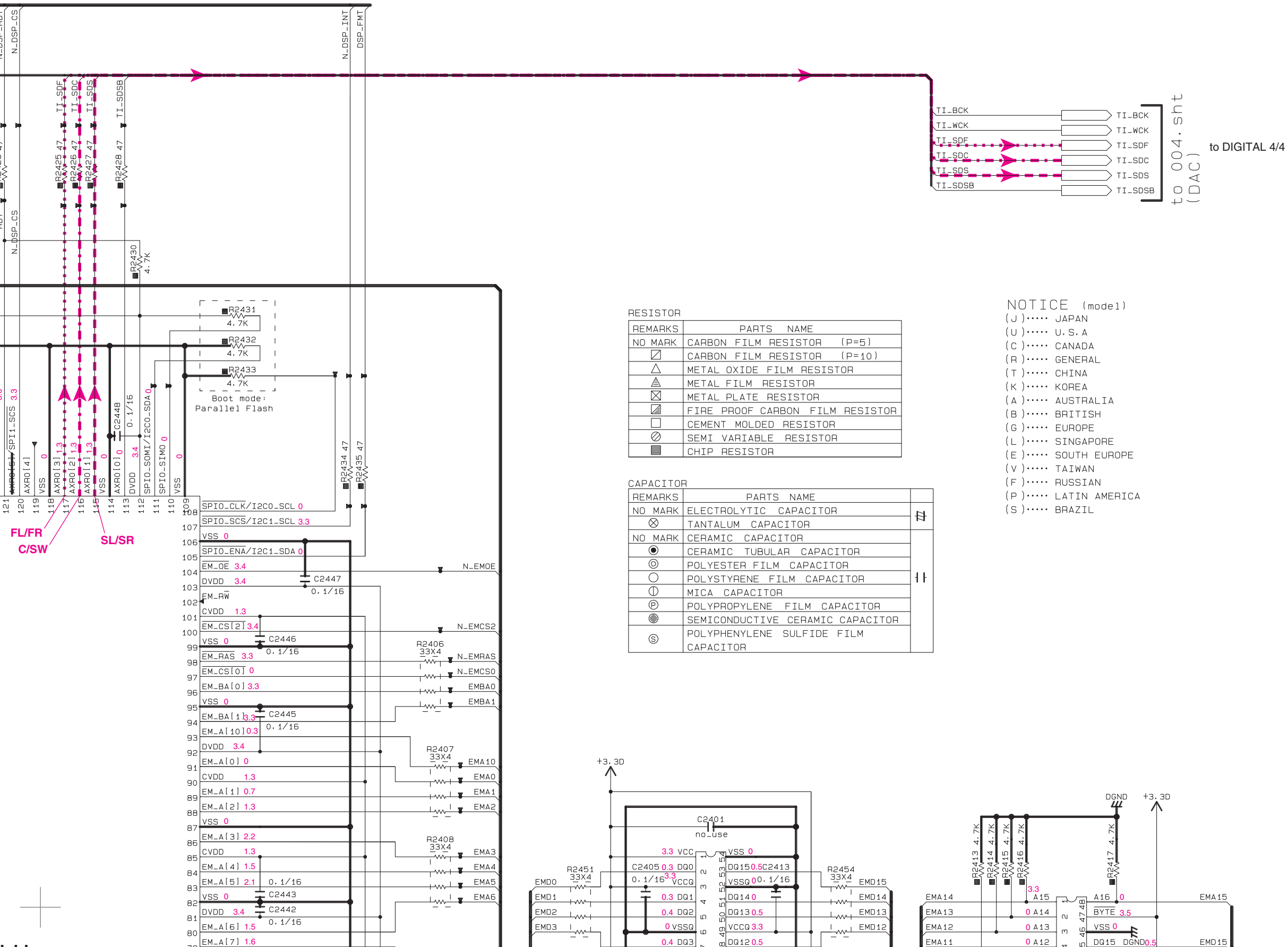
DSP

IC241

D70YE101BRFP266

+3.3V
L2403
BLM21PG600SN10





A	B
C	D

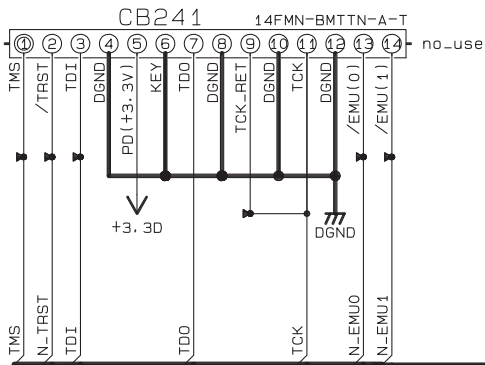
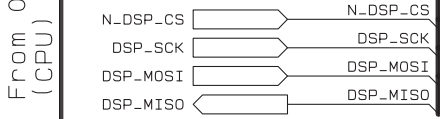
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7

8

9

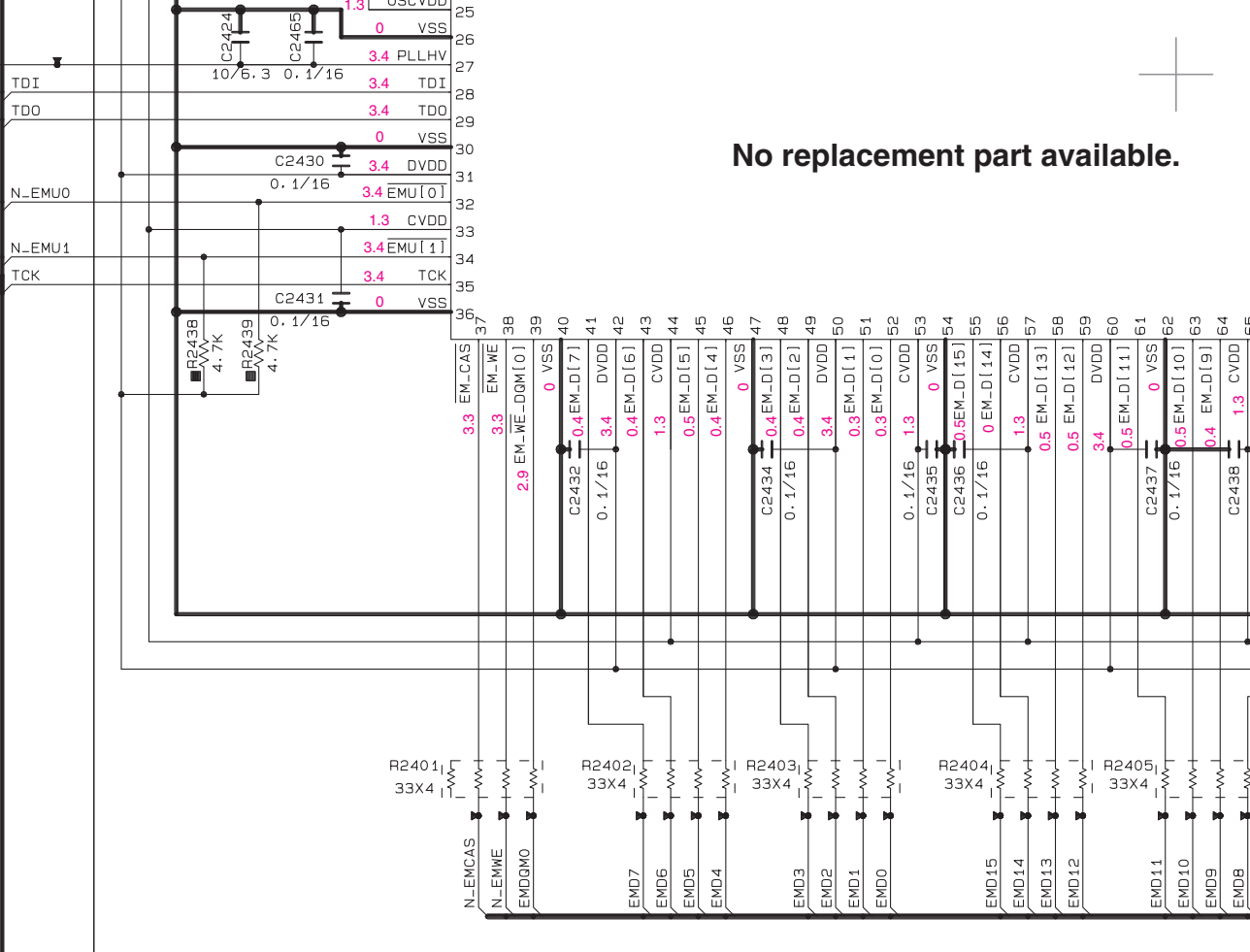
10



L2403

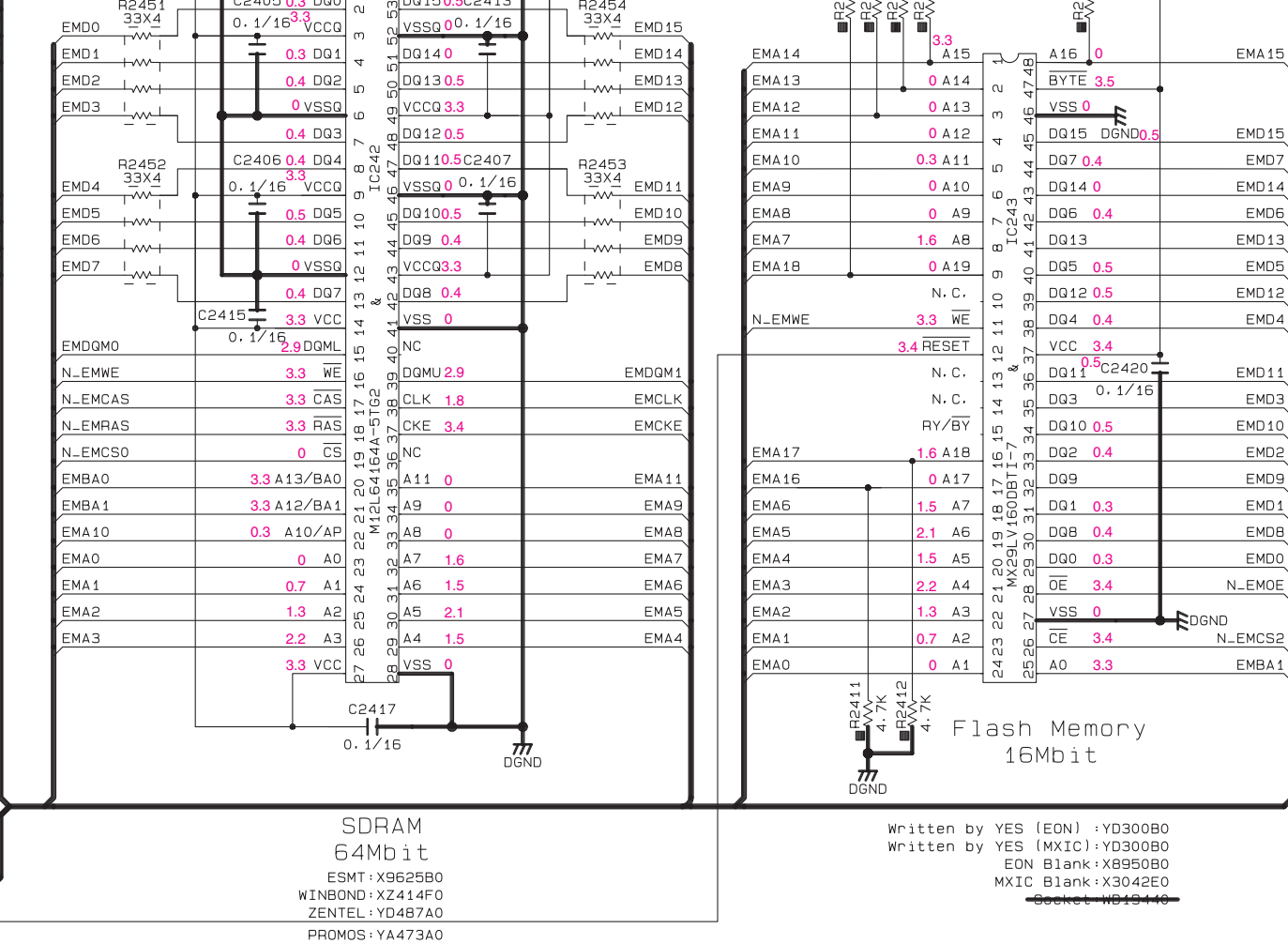
BLM21PG600SN1D

+3.3D

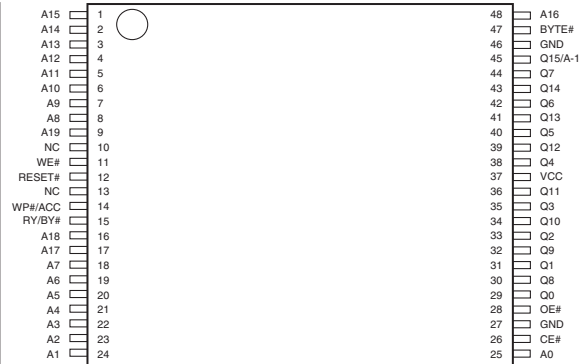
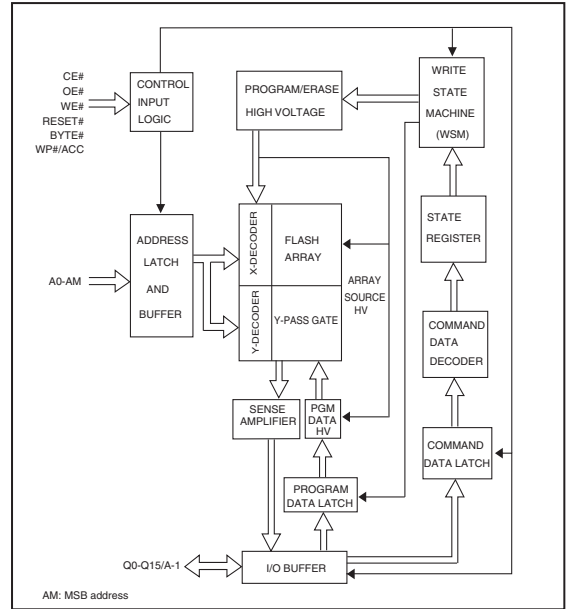


The PCB layout shows the front panel connector with various signal traces and components. The layout includes:

- Signal Traces:** Traces for EMD11, EMD10, EMD9, EMD8, EMDQM1, EMCLK, and EMCKE. The EMCKE trace is labeled with a value of 0.
- Decoupling Capacitors:** Several capacitors are placed along the traces, including C2437, C2438, C2439, C2440, C2441, C2442, C2443, C2444, C2445, C2446, C2447, C2448, C2449, C2450, C2451, C2452, C2453, C2454, C2455, C2456, C2457, C2458, C2459, C2460, C2461, C2462, C2463, C2464, C2465, C2466, C2467, C2468, C2469, C2470, C2471, C2472, C2473, C2474, C2475, C2476, C2477, C2478, C2479, C2480, C2481, C2482, C2483, C2484, C2485, C2486, C2487, C2488, C2489, C2490, C2491, C2492, C2493, C2494, C2495, C2496, C2497, C2498, C2499, C2500, C2501, C2502, C2503, C2504, C2505, C2506, C2507, C2508, C2509, C2510, C2511, C2512, C2513, C2514, C2515, C2516, C2517, C2518, C2519, C2520, C2521, C2522, C2523, C2524, C2525, C2526, C2527, C2528, C2529, C2530, C2531, C2532, C2533, C2534, C2535, C2536, C2537, C2538, C2539, C2540, C2541, C2542, C2543, C2544, C2545, C2546, C2547, C2548, C2549, C2550, C2551, C2552, C2553, C2554, C2555, C2556, C2557, C2558, C2559, C2560, C2561, C2562, C2563, C2564, C2565, C2566, C2567, C2568, C2569, C2570, C2571, C2572, C2573, C2574, C2575, C2576, C2577, C2578, C2579, C2580, C2581, C2582, C2583, C2584, C2585, C2586, C2587, C2588, C2589, C2590, C2591, C2592, C2593, C2594, C2595, C2596, C2597, C2598, C2599, C2600, C2601, C2602, C2603, C2604, C2605, C2606, C2607, C2608, C2609, C2610, C2611, C2612, C2613, C2614, C2615, C2616, C2617, C2618, C2619, C2620, C2621, C2622, C2623, C2624, C2625, C2626, C2627, C2628, C2629, C2630, C2631, C2632, C2633, C2634, C2635, C2636, C2637, C2638, C2639, C2640, C2641, C2642, C2643, C2644, C2645, C2646, C2647, C2648, C2649, C2650, C2651, C2652, C2653, C2654, C2655, C2656, C2657, C2658, C2659, C2660, C2661, C2662, C2663, C2664, C2665, C2666, C2667, C2668, C2669, C2670, C2671, C2672, C2673, C2674, C2675, C2676, C2677, C2678, C2679, C2680, C2681, C2682, C2683, C2684, C2685, C2686, C2687, C2688, C2689, C2690, C2691, C2692, C2693, C2694, C2695, C2696, C2697, C2698, C2699, C2700, C2701, C2702, C2703, C2704, C2705, C2706, C2707, C2708, C2709, C2710, C2711, C2712, C2713, C2714, C2715, C2716, C2717, C2718, C2719, C2720, C2721, C2722, C2723, C2724, C2725, C2726, C2727, C2728, C2729, C2730, C2731, C2732, C2733, C2734, C2735, C2736, C2737, C2738, C2739, C2740, C2741, C2742, C2743, C2744, C2745, C2746, C2747, C2748, C2749, C2750, C2751, C2752, C2753, C2754, C2755, C2756, C2757, C2758, C2759, C2760, C2761, C2762, C2763, C2764, C2765, C2766, C2767, C2768, C2769, C2770, C2771, C2772, C2773, C2774, C2775, C2776, C2777, C2778, C2779, C2780, C2781, C2782, C2783, C2784, C2785, C2786, C2787, C2788, C2789, C2790, C2791, C2792, C2793, C2794, C2795, C2796, C2797, C2798, C2799, C2800, C2801, C2802, C2803, C2804, C2805, C2806, C2807, C2808, C2809, C2810, C2811, C2812, C2813, C2814, C2815, C2816, C2817, C2818, C2819, C2820, C2821, C2822, C2823, C2824, C2825, C2826, C2827, C2828, C2829, C2830, C2831, C2832, C2833, C2834, C2835, C2836, C2837, C2838, C2839, C2840, C2841, C2842, C2843, C2844, C2845, C2846, C2847, C2848, C2849, C2850, C2851, C2852, C2853, C2854, C2855, C2856, C2857, C2858, C2859, C2860, C2861, C2862, C2863, C2864, C2865, C2866, C2867, C2868, C2869, C2870, C2871, C2872, C2873, C2874, C2875, C2876, C2877, C2878, C2879, C2880, C2881, C2882, C2883, C2884, C2885, C2886, C2887, C2888, C2889, C2890, C2891, C2892, C2893, C2894, C2895, C2896, C2897, C2898, C2899, C2900, C2901, C2902, C2903, C2904, C2905, C2906, C2907, C2908, C2909, C2910, C2911, C2912, C2913, C2914, C2915, C2916, C2917, C2918, C2919, C2920, C2921, C2922, C2923, C2924, C2925, C2926, C2927, C2928, C2929, C2930, C2931, C2932, C2933, C2934, C2935, C2936, C2937, C2938, C2939, C2940, C2941, C2942, C2943, C2944, C2945, C2946, C2947, C2948, C2949, C2950, C2951, C2952, C2953, C2954, C2955, C2956, C2957, C2958, C2959, C2960, C2961, C2962, C2963, C2964, C2965, C2966, C2967, C2968, C2969, C2970, C2971, C2972, C2973, C2974, C2975, C2976, C2977, C2978, C2979, C2980, C2981, C2982, C2983, C2984, C2985, C2986, C2987, C2988, C2989, C2990, C2991, C2992, C2993, C2994, C2995, C2996, C2997, C2998, C2999, C3000, C3001, C3002, C3003, C3004, C3005, C3006, C3007, C3008, C3009, C3010, C3011, C3012, C3013, C3014, C3015, C3016, C3017, C3018, C3019, C3020, C3021, C3022, C3023, C3024, C3025, C3026, C3027, C3028, C3029, C3030, C3031, C3032, C3033, C3034, C3035, C3036, C3037, C3038, C3039, C3040, C3041, C3042, C3043, C3044, C3045, C3046, C3047, C3048, C3049, C3050, C3051, C3052, C3053, C3054, C3055, C3056, C3057, C3058, C3059, C3060, C3061, C3062, C3063, C3064, C3065, C3066, C3067, C3068, C3069, C3070, C3071, C3072, C3073, C3074, C3075, C3076, C3077, C3078, C3079, C3080, C3081, C3082, C3083, C3084, C3085, C3086, C3087, C3088, C3089, C3090, C3091, C3092, C3093, C3094, C3095, C3096, C



IC243: MX29LV160DBTI-70G
16M-bit 3V supply flash memory



- ★ All voltages are measured with a 10M Ω /V DC electronic voltmeter.
- ★ Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.

A	B
C	D

A	B
C	D

RX-V371/HTR-3064

DIGITAL 4/4

1

2

3

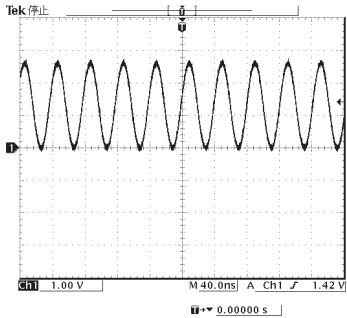
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5

From 002.sht
(CPU)
to DIGITAL 2/4

From 001.sht
(HDMI Rx)
to DIGITAL 1/4

POINT ① XL261 (Pin 29 of IC261)



From 003.sht
(DSP)
to DIGITAL 3/4

From 002.sht
(CPU)
to DIGITAL 2/4

DIGITAL IN

DOCK No re
to Dock

CB261 s261 LA

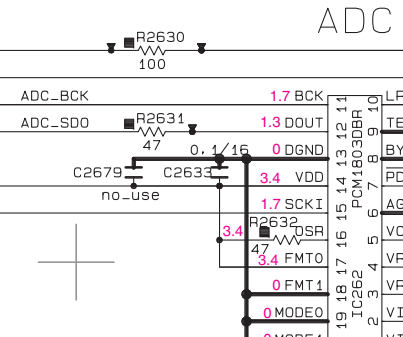
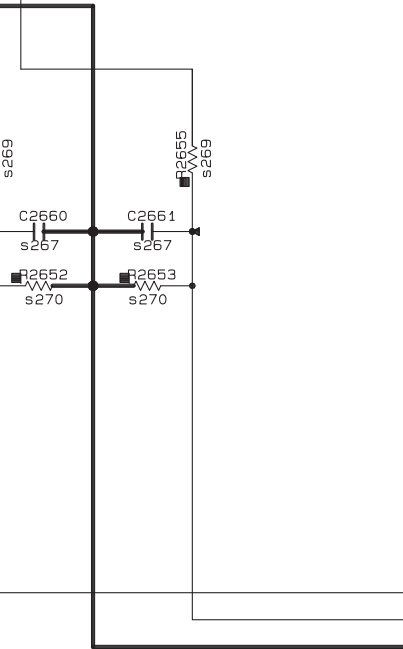
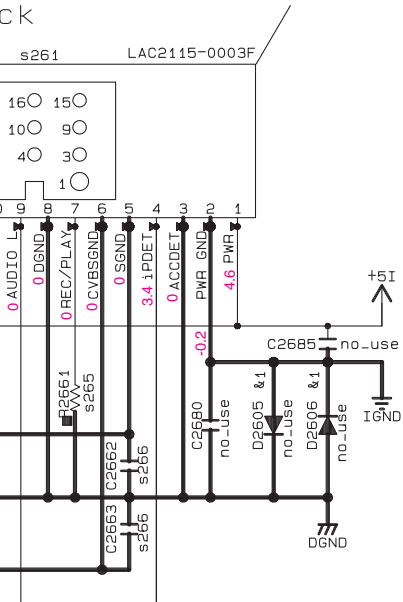
to 002.sht (CPU)
to DIGITAL 2/4

for DEMITUS

A	B
C	D

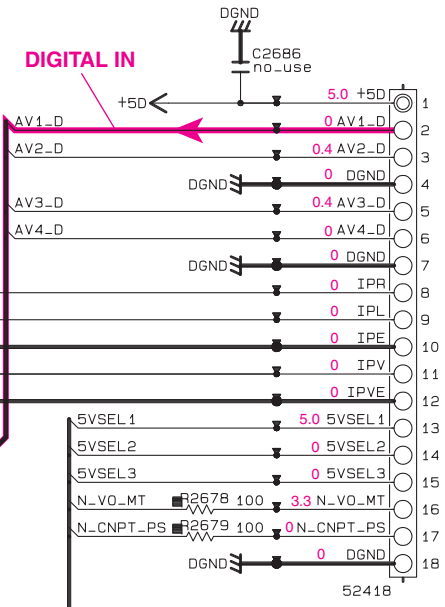
DIGITAL 4/4

No replacement part available.

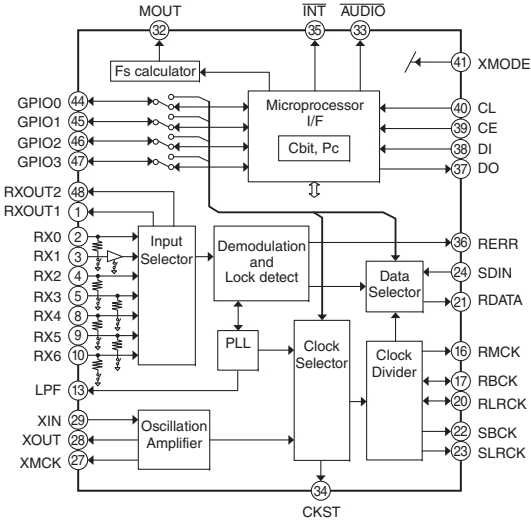


Destination Part List					
sXX	LOC	UCRKALS	T	BGF	
s261	CB261	WM45380 LAC2115-0003F	X	WM45380 LAC2115-0003F	
s262	R2659	RF45739 39K	X	RF45739 39K	
s263	R2660	RF45851 510K	X	RF45851 510K	
s264	R2656 R2658 R2657	RD35475 75	X	RD35475 75	
s265	R2661	RD35710 10K	X	RD35710 10K	
s266	C2663 C2662	US13510 0.1/16	X	US13510 0.1/16	
s267	C2667 C2666 C2665 C2664 C2661 C2660	US06222 220P(SL)	X	US06222 220P(SL)	
s268	R2647 R2648 R2649 R2650 R2651	RD35510 100	X	RD35510 100	
s269	R2655 R2654	RD35547 470	X	RD35547 470	
s270	R2653 R2652	RD35733 33K	X	RD35733 33K	
s271	R2676	RD35000 0	X	RD35000 0	

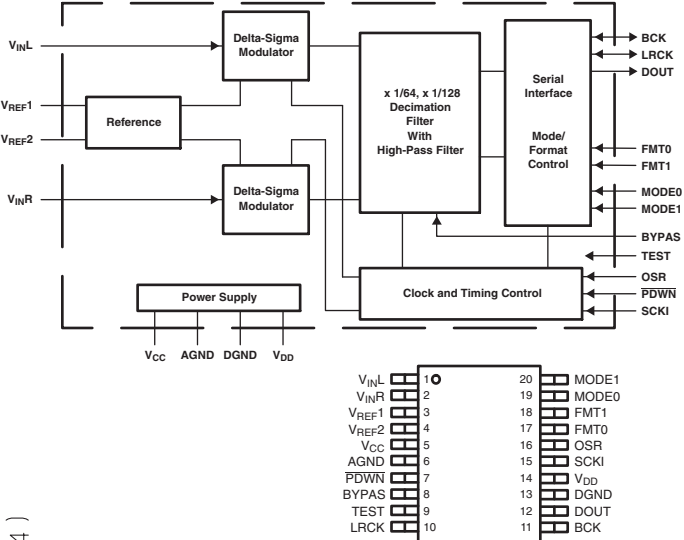
NOTICE (model)
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(U)..... U. S. A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL



IC261: LC89058WD-E
Digital audio interface receiver

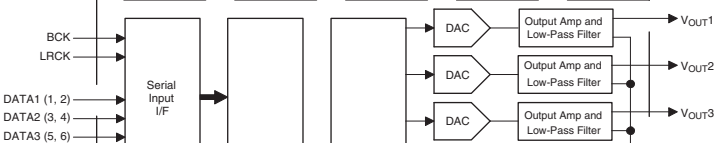


IC262: PCM1803DBR
Stereo A/D converter



Page 82 E4
to OPERATION (4)_CB196

IC263: PCM1681PWPR
Audio digital-to-analog converter

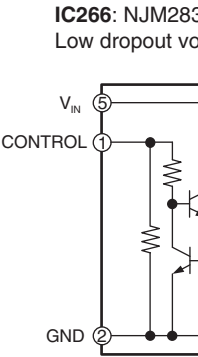
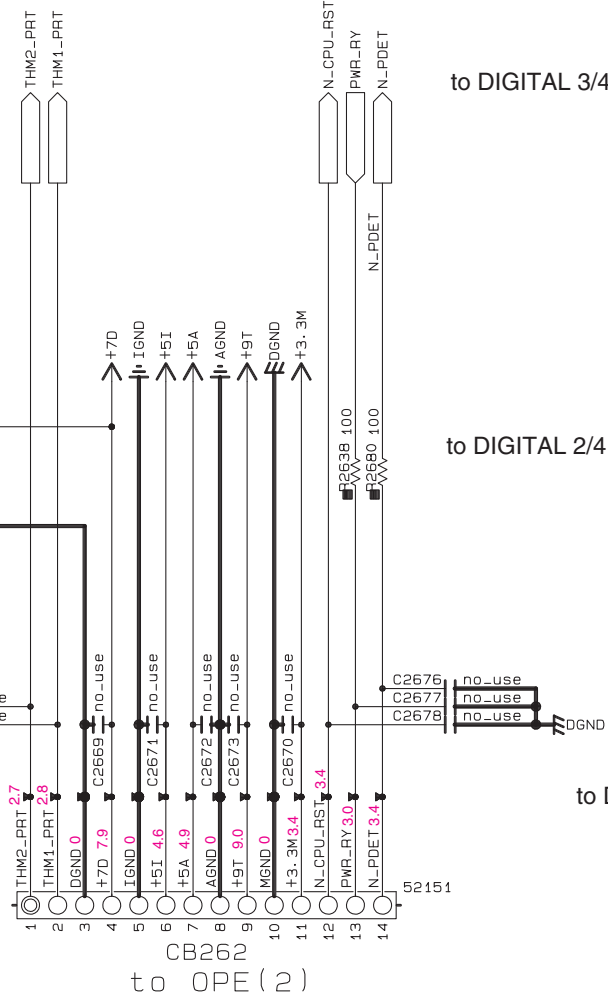
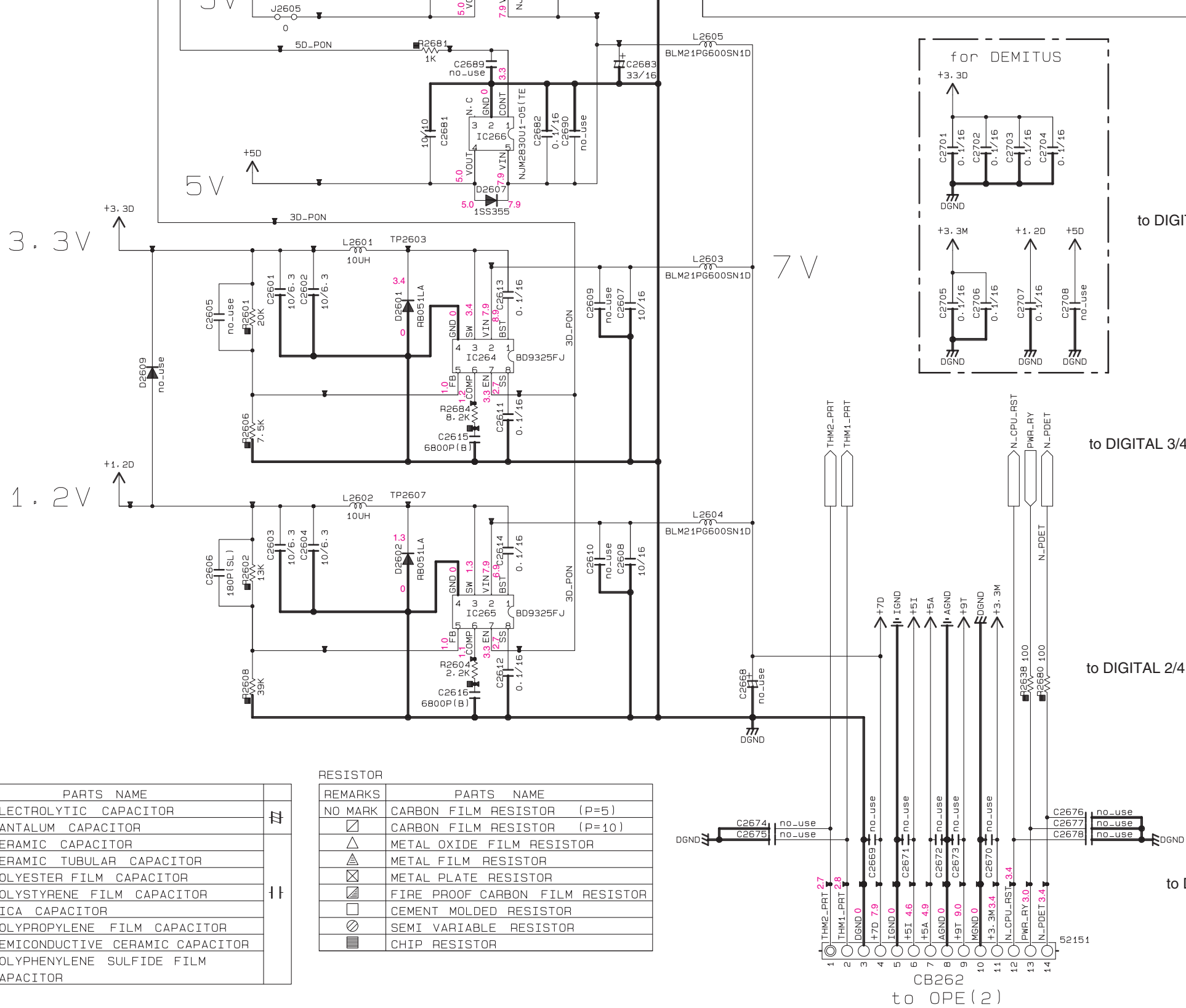


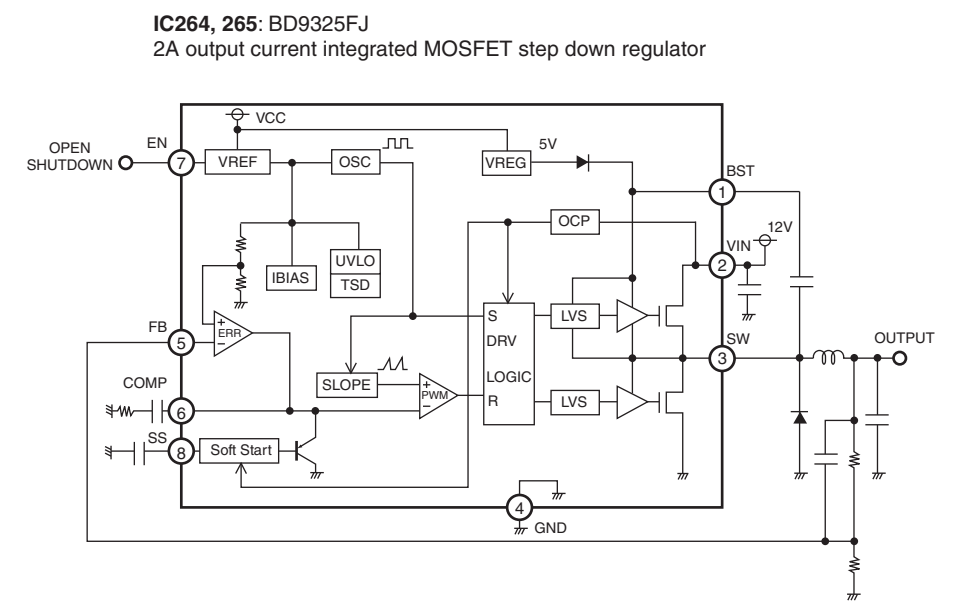
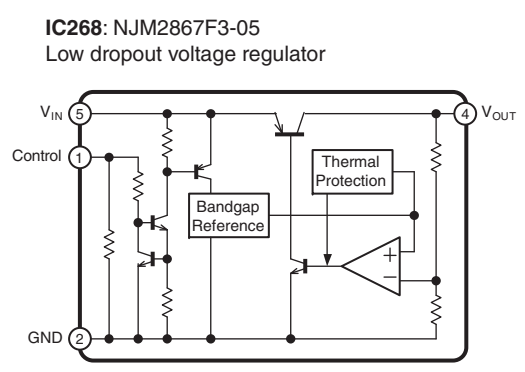
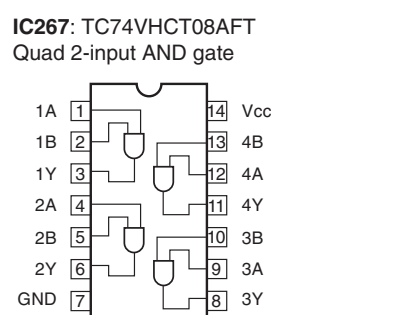
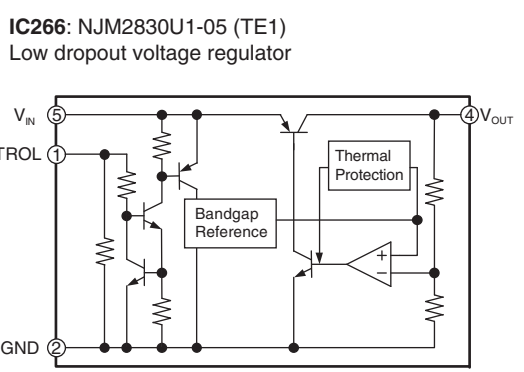
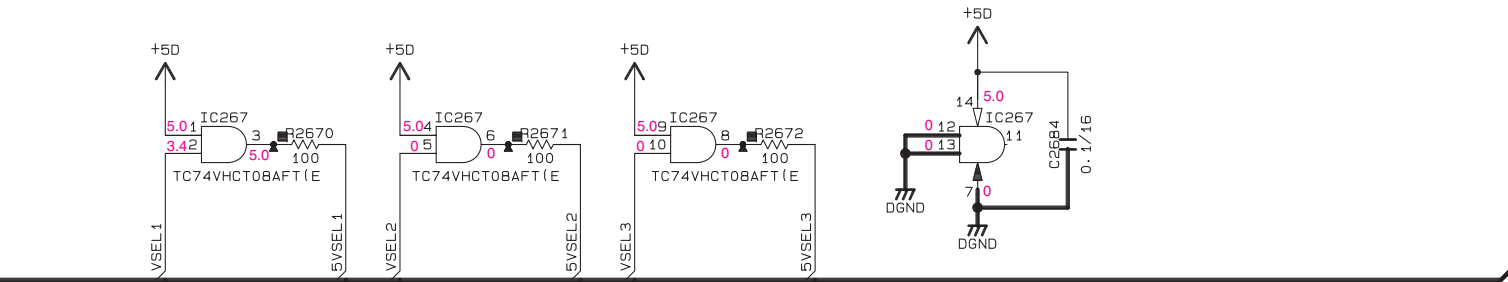
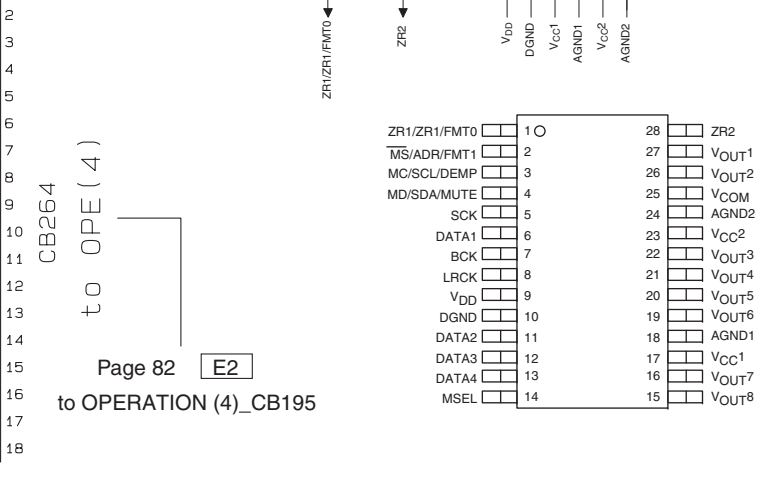
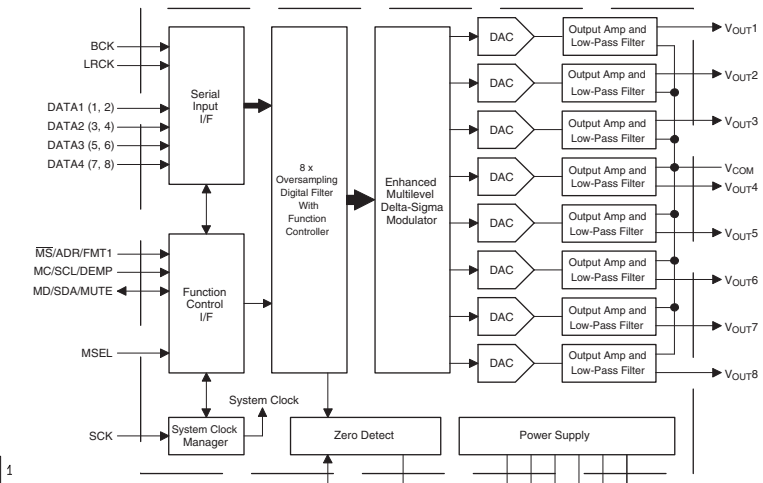
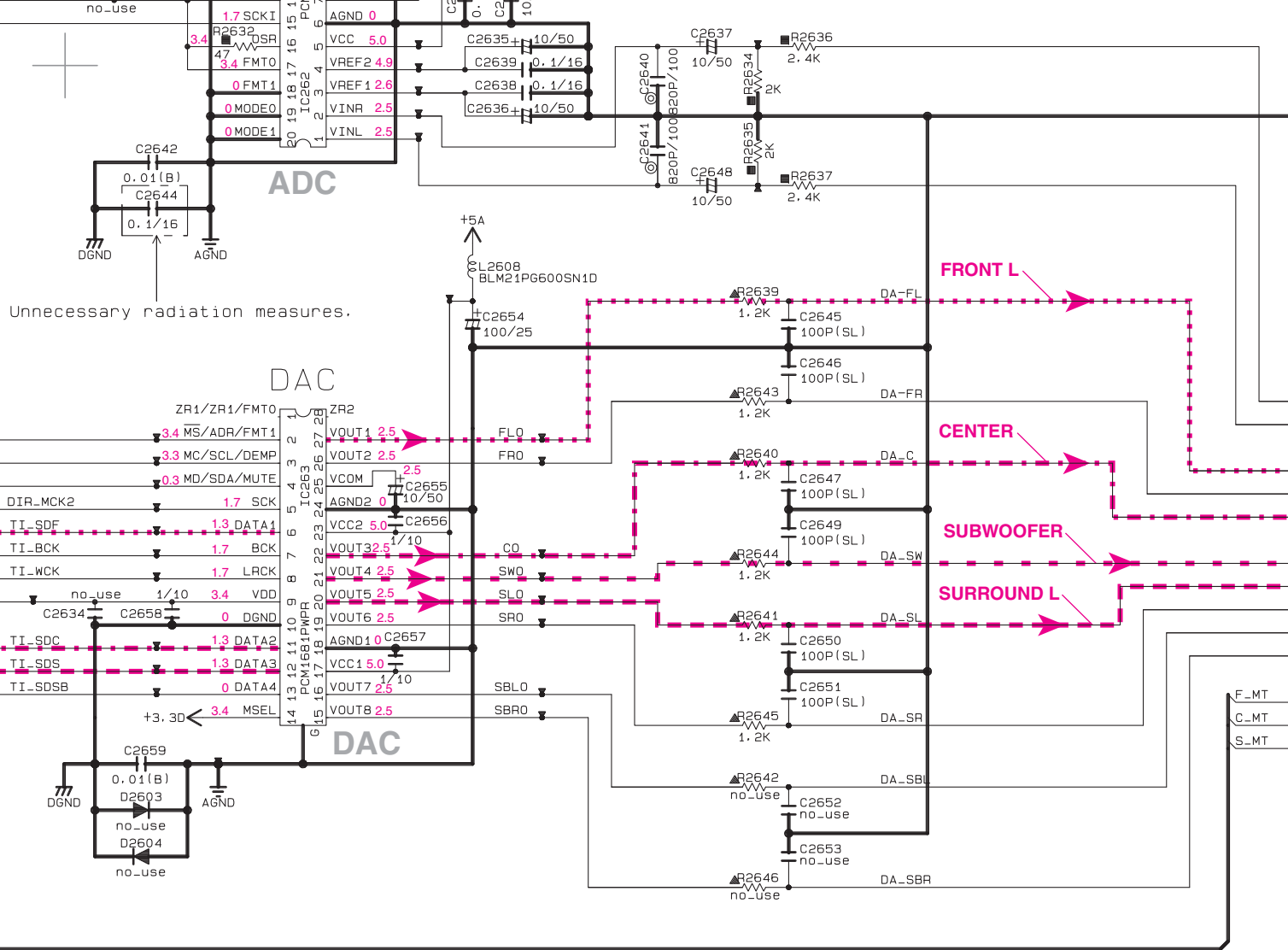
A	B
C	D

CAPACITOR		
REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	⌘
⊗	TANTALUM CAPACITOR	⌘
NO MARK	CERAMIC CAPACITOR	
●	CERAMIC TUBULAR CAPACITOR	⌘
◎	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
①	MICA CAPACITOR	
⊖	POLYPROPYLENE FILM CAPACITOR	
⊙	SEMICONDUCTIVE CERAMIC CAPACITOR	
Ⓢ	POLYPHENYLENE SULFIDE FILM CAPACITOR	

RESISTOR		
REMARKS	PARTS NAME	
NO MARK	CARBON FILM RESISTOR (P=5)	
□	CARBON FILM RESISTOR (P=10)	
△	METAL OXIDE FILM RESISTOR	
▲	METAL FILM RESISTOR	
⊠	METAL PLATE RESISTOR	
▨	FIRE PROOF CARBON FILM RESISTOR	
□	CEMENT MOLDED RESISTOR	
⊗	SEMI VARIABLE RESISTOR	
■	CHIP RESISTOR	

- ★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- ★ Components having special characteristics are marked △ and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.

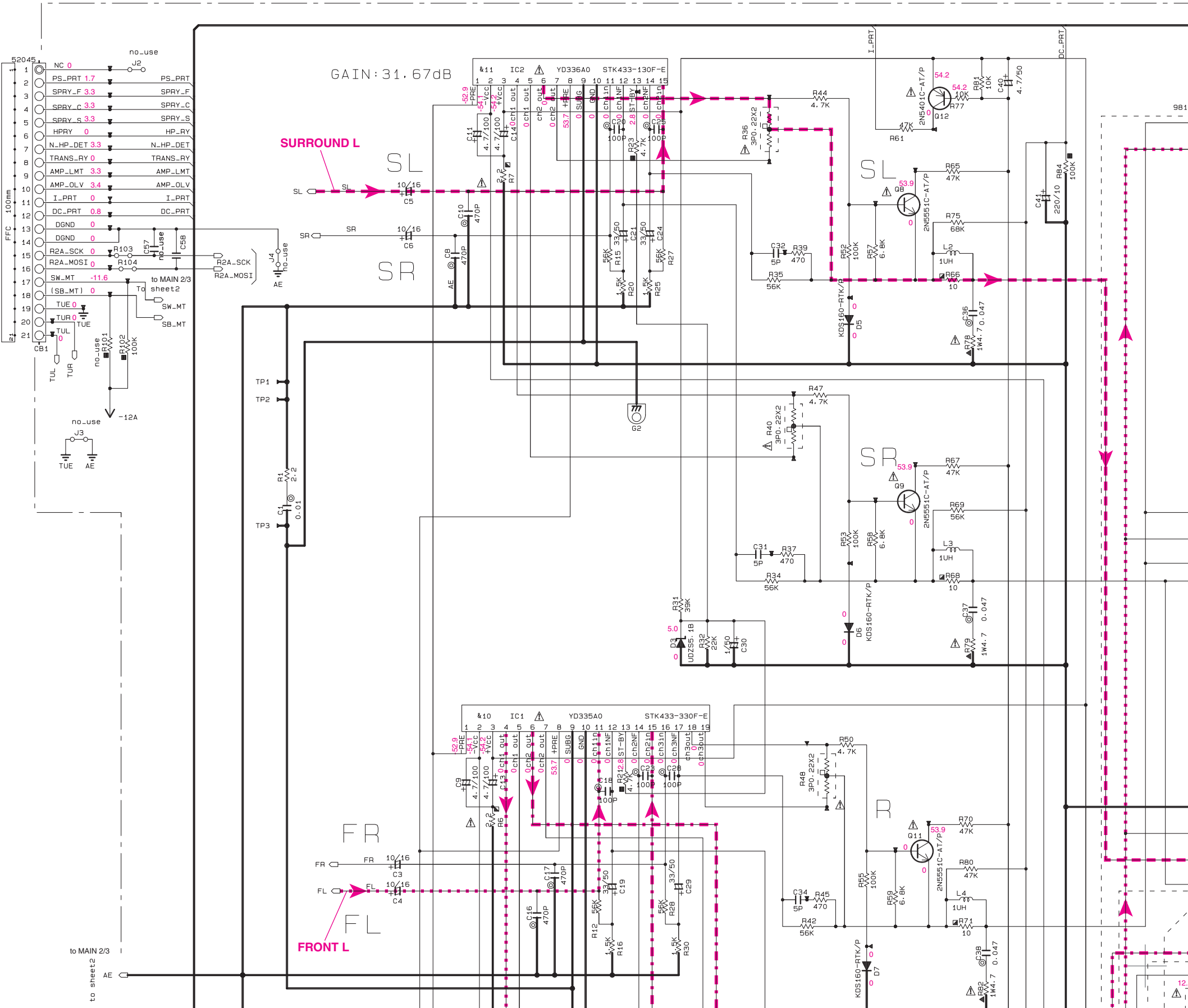


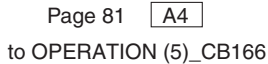


A	B
C	D

MAIN 1/3

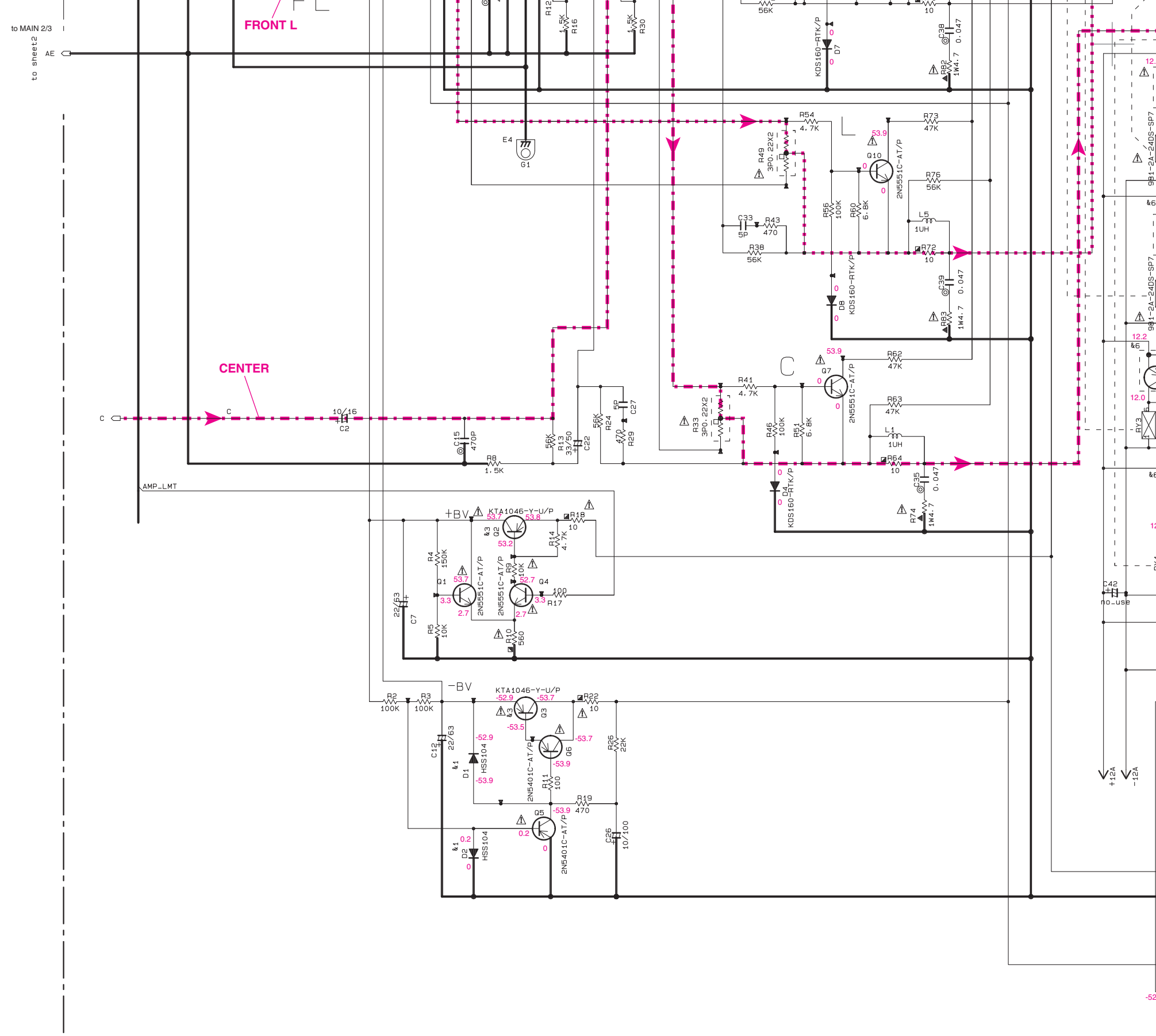
Page 78 F2
to DIGITAL_CB222

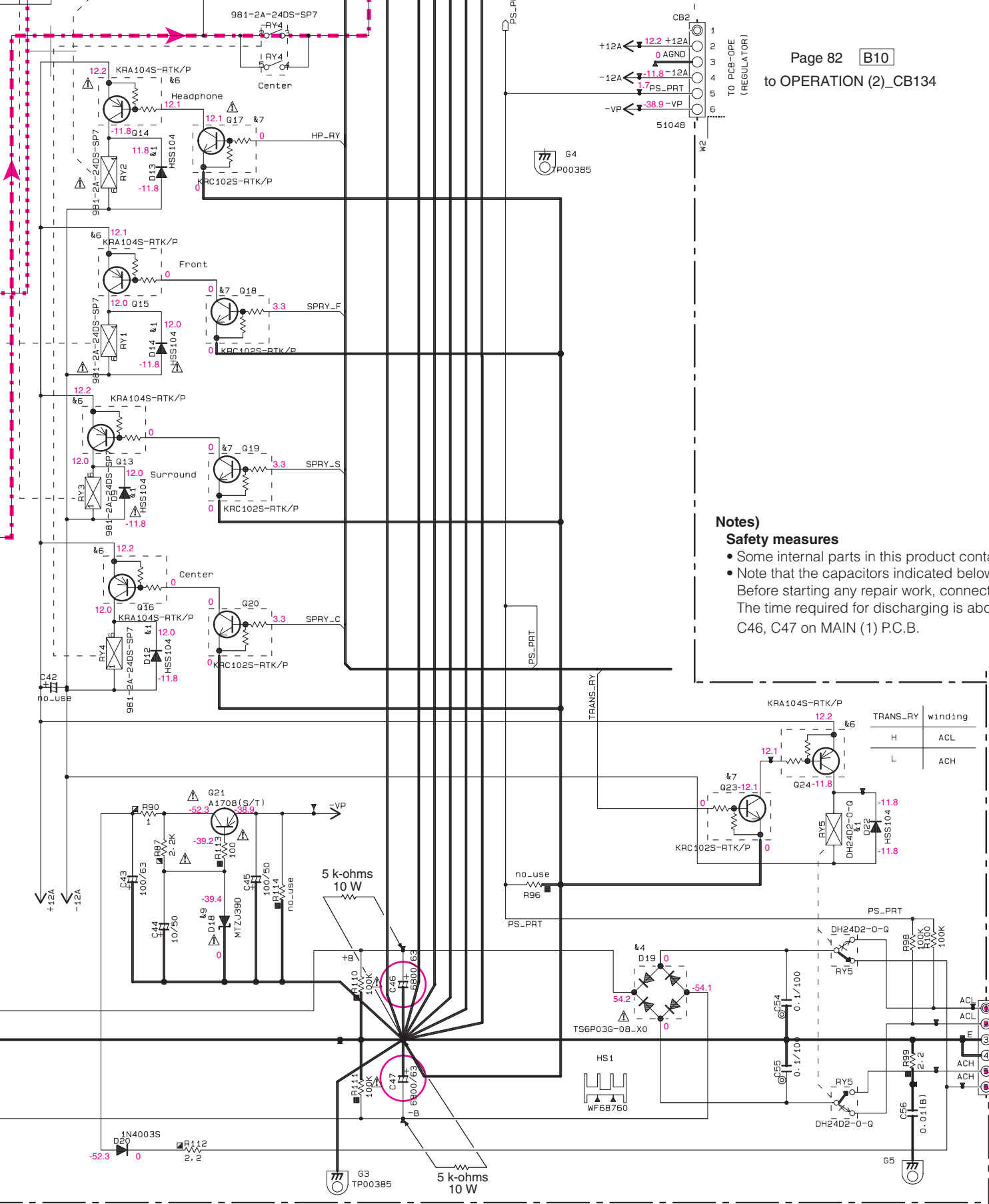


Page 82 B10
o OPERATION (2)_CB134

Location: **1~**20

RESISTOR	
REMARKS	PARTS NAME





Notes)

Safety measures

- Some internal parts in this product contain high voltages and are dangerous. Be sure to take safety measures during servicing, such as wearing insulating gloves.
- Note that the capacitors indicated below are dangerous even after the power is turned off because an electric charge remains and a high voltage continues to exist there. Before starting any repair work, connect a discharging resistor (5 k-ohms/10 W) to the terminals of each capacitor indicated below to discharge electricity. The time required for discharging is about 30 seconds per each. C46, C47 on MAIN (1) P.C.B.

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
□	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
▨	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊙	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	⌘
⊗	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	⌘
●	CERAMIC TUBULAR CAPACITOR	
⊙	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
⦶	MICA CAPACITOR	
⊕	POLYPROPYLENE FILM CAPACITOR	
⊗	SEMICONDUCTIVE CERAMIC CAPACITOR	
Ⓢ	POLYPHENYLENE SULFIDE FILM CAPACITOR	

NOTICE (model)

(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL

- ★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- ★ Components having special characteristics are marked △ and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.

A	B
C	D

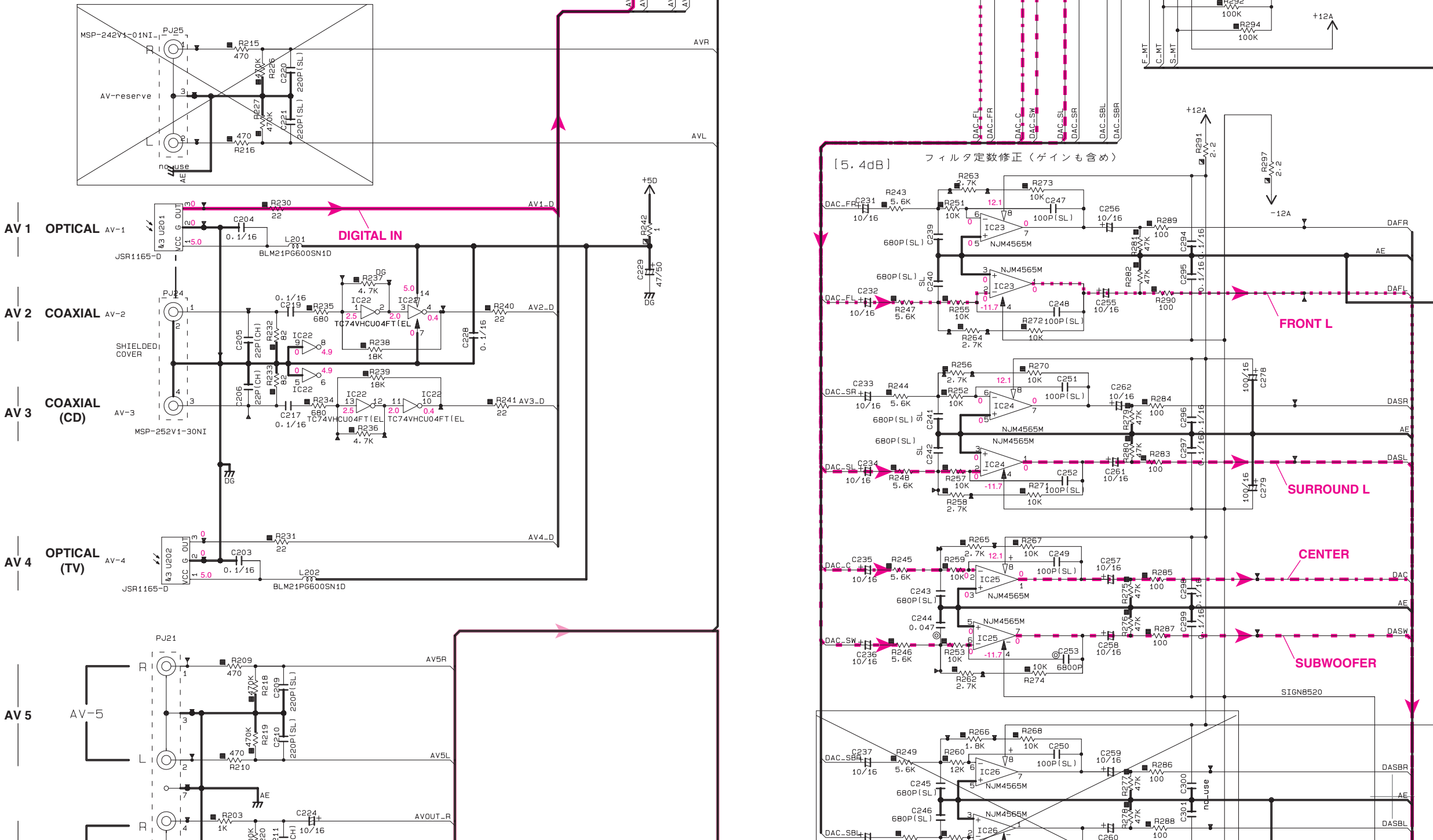
A	B
C	D

RX-V371/HTR-3064

MAIN 2/3

Page 82 C4
to OPERATION (4)_CB192

Page 82 C2
to OPERATION (4)_CB191



A	B
C	D

H

I

J

K

L

M

N

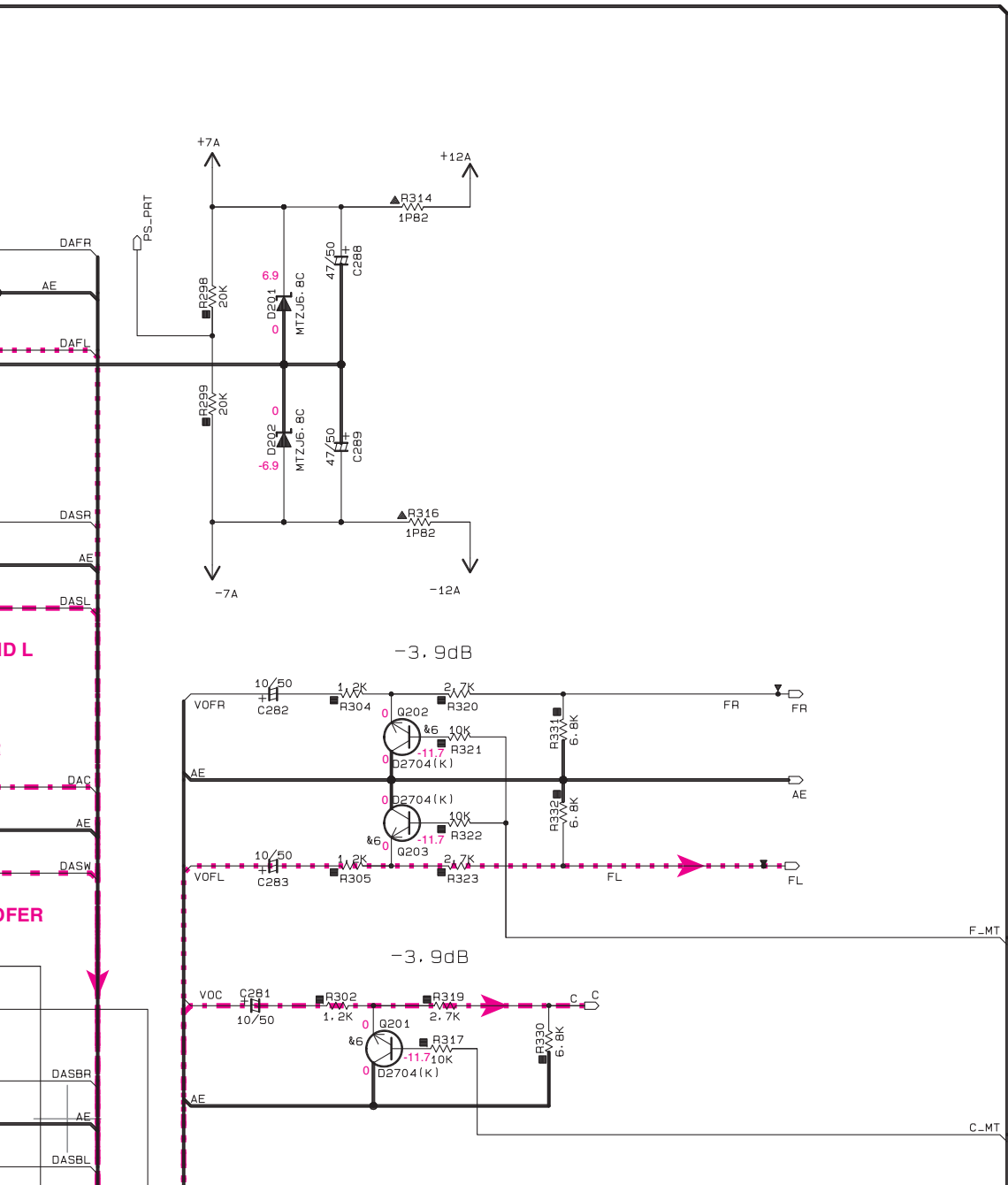
MAIN(1)

MAIN(1)

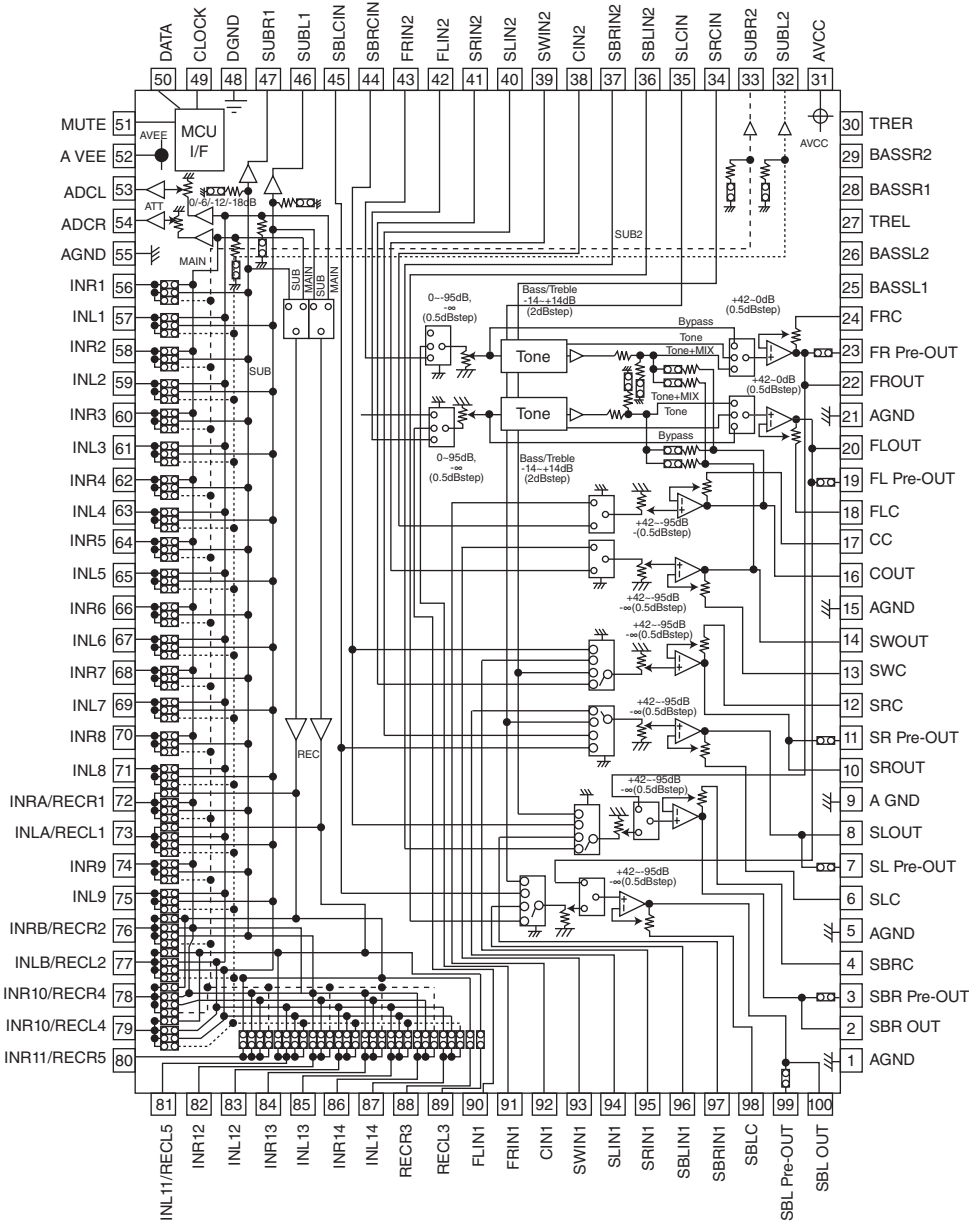
Location: TP200~

Location: *201~*400

Location: **21~**40

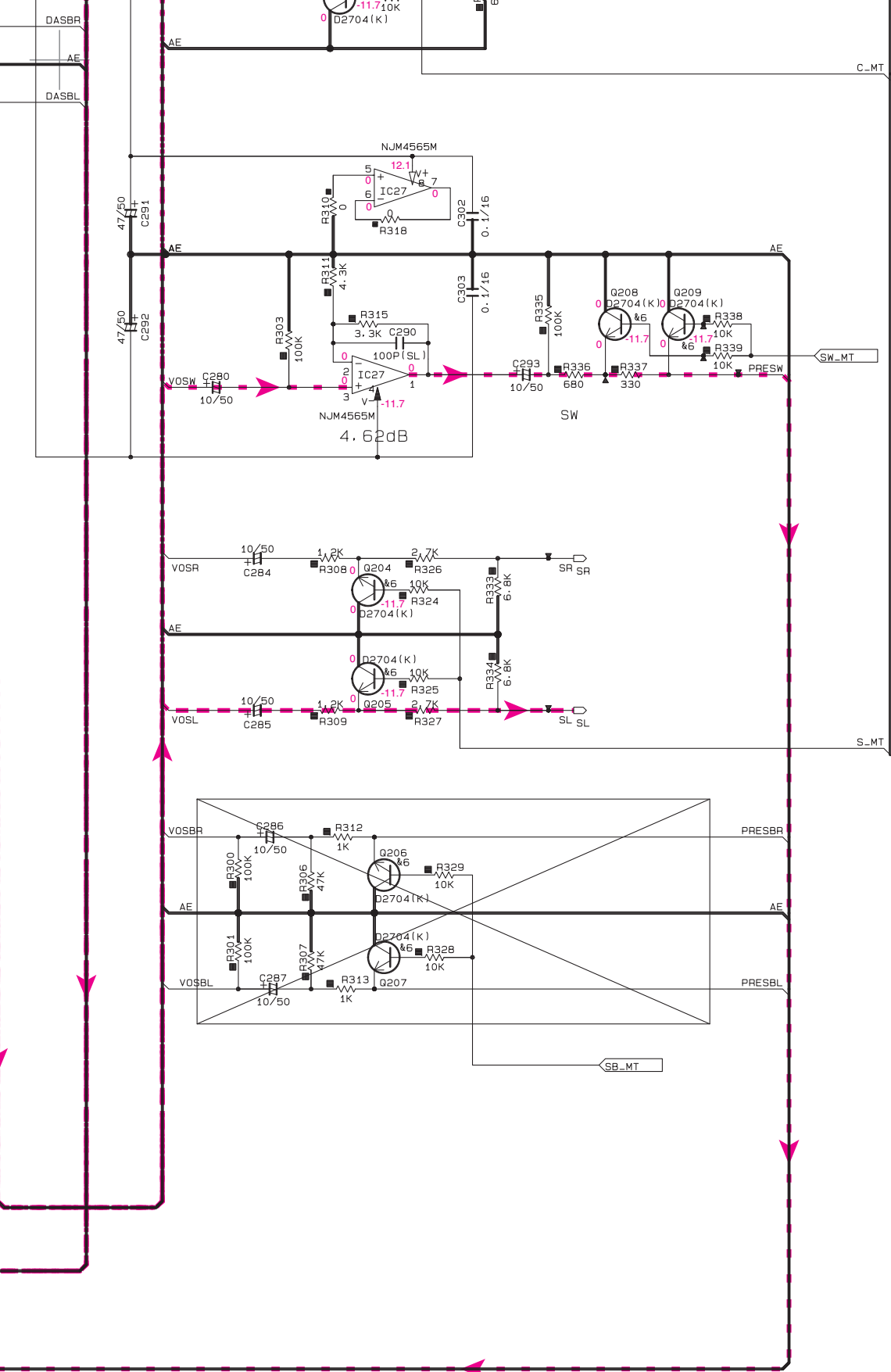


IC21: R2A15220FP
8-channel electronic volume with 11 input selector and tone control

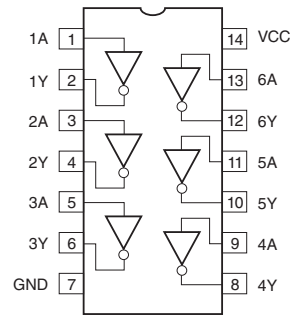


IC22: TC74VHC04FT
Hex inverters

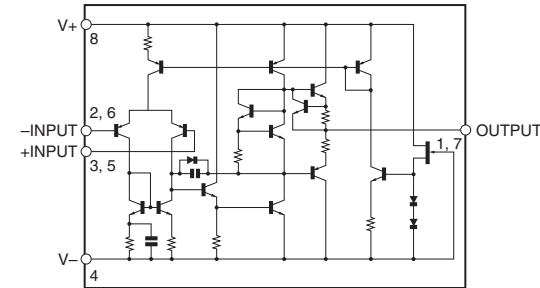
IC23-25, 27: NJM4565M (TE1)
Dual operational amplifier



IC22: TC74VHCU04FT
Hex inverters



IC23-25, 27: NJM4565M (TE1)
Dual operational amplifier



RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
□	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
▨	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊗	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	⌘
⊗	TANTALUM CAPACITOR	⌘
NO MARK	CERAMIC CAPACITOR	
●	CERAMIC TUBULAR CAPACITOR	
◎	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
①	MICA CAPACITOR	
⊙	POLYPROPYLENE FILM CAPACITOR	
⊗	SEMICONDUCTIVE CERAMIC CAPACITOR	
⊙	POLYPHENYLENE SULFIDE FILM CAPACITOR	

NOTICE (model)

(J)..... JAPAN
(U)..... U. S. A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL

- ★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- ★ Components having special characteristics are marked △ and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.

A	B
C	D

MAIN 3/3

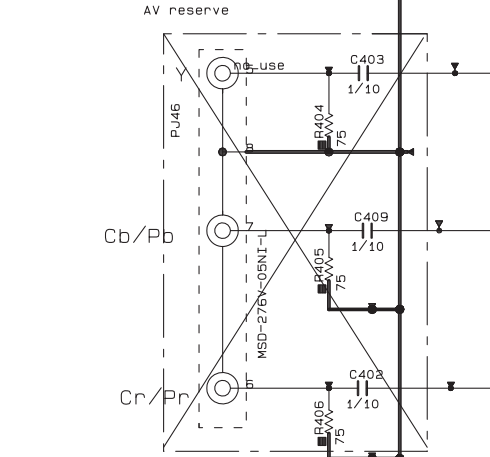
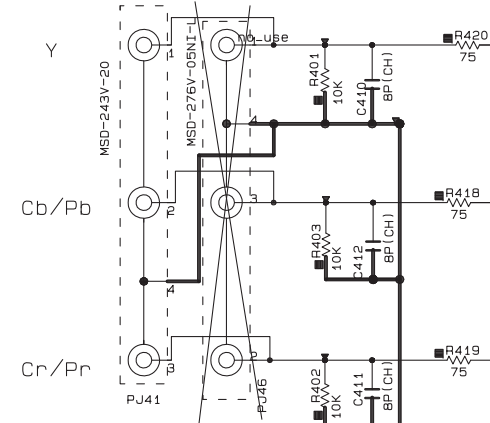
MONITOR
OUT

COMPONENT
VIDEO

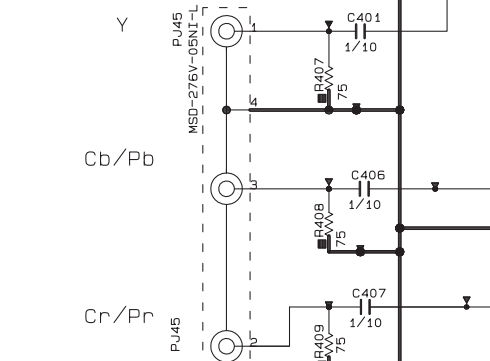
AV 1

AV 2

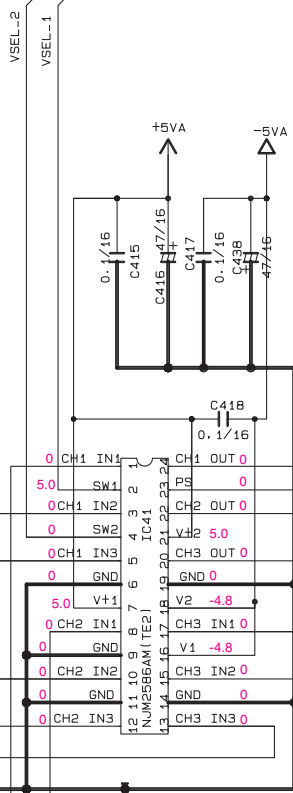
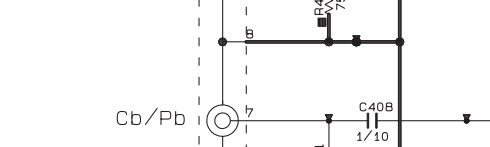
Monitor



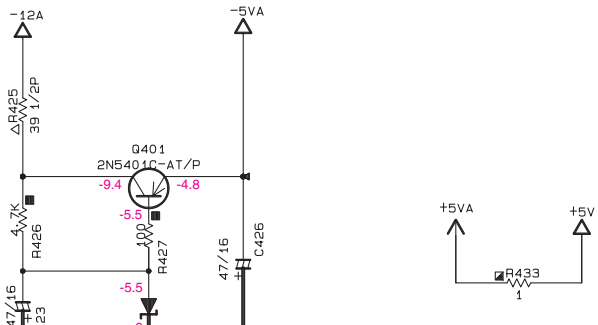
AV-1



AV-2



VSEL-1	VSEL-2	N_CPNT-MT	OUT
*	*	L	MUTE
H	L	H	AV-1
L	H	H	AV-2
H	H	H	(AV reserve)



A	B
C	D

RX-V371/HTR-3064

MAIN (2)

MAIN(2)

Location: TP400~

Location: *401~*500

Location: **40~**50

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
□	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
▨	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊗	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

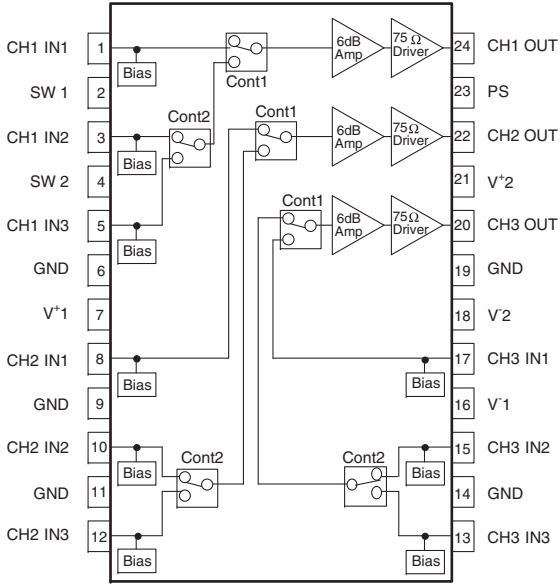
REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	⌘
⊗	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	⌘
●	CERAMIC TUBULAR CAPACITOR	
◎	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
①	MICA CAPACITOR	
②	POLYPROPYLENE FILM CAPACITOR	
●	SEMICONDUCTIVE CERAMIC CAPACITOR	
⑤	POLYPHENYLENE SULFIDE FILM CAPACITOR	

NOTICE (model)

(J)..... JAPAN
(U)..... U. S. A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL

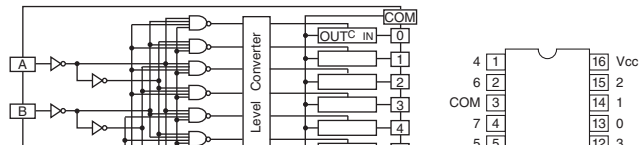
IC41: NJM2586AM (TE2)

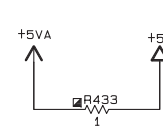
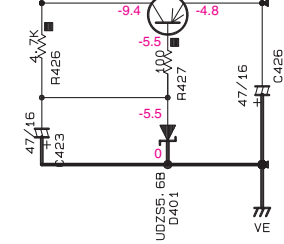
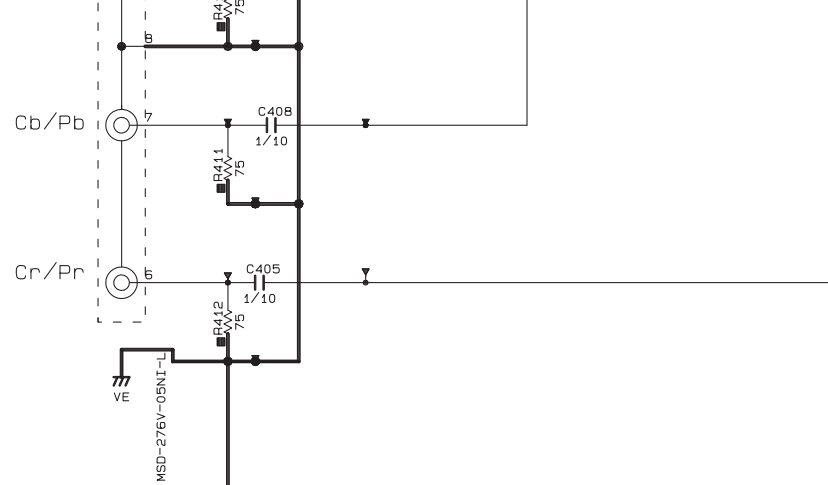
Wide band 3-input 1-output 3-circuit video amplifier



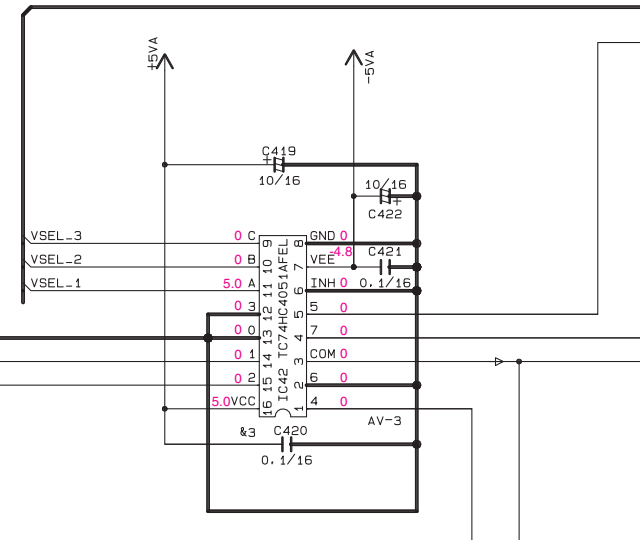
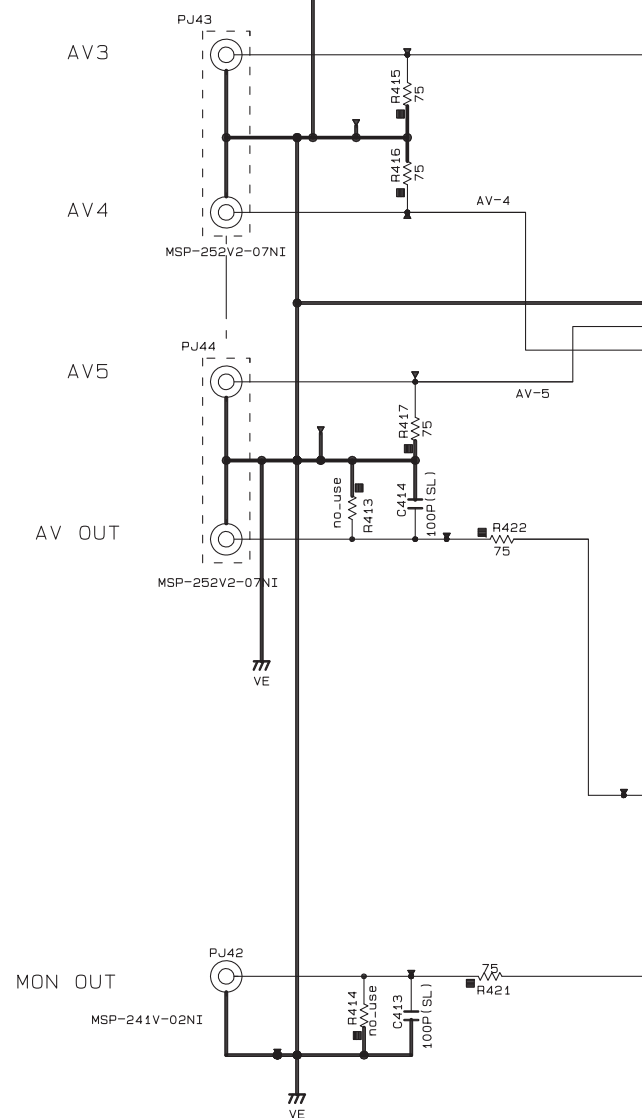
IC42: TC74HC4051AFEL

8-channel analog multiplexer/demultiplexer

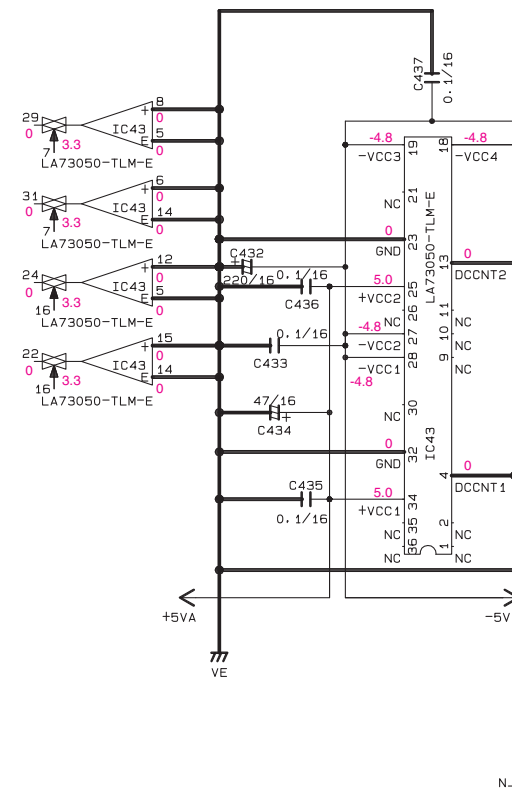
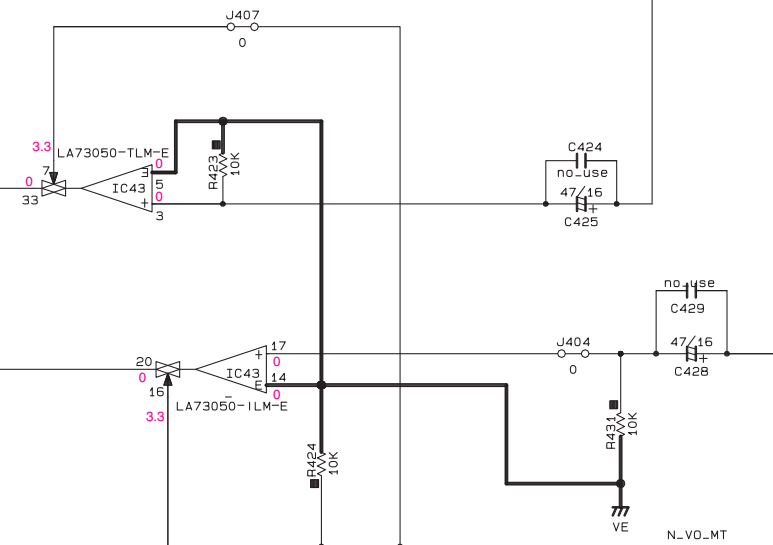


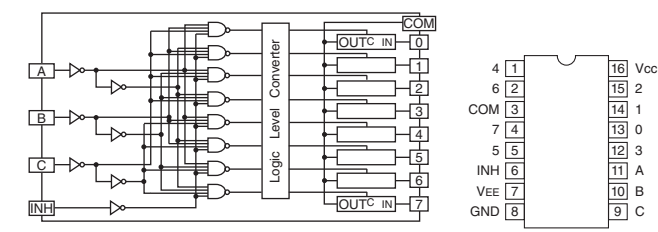
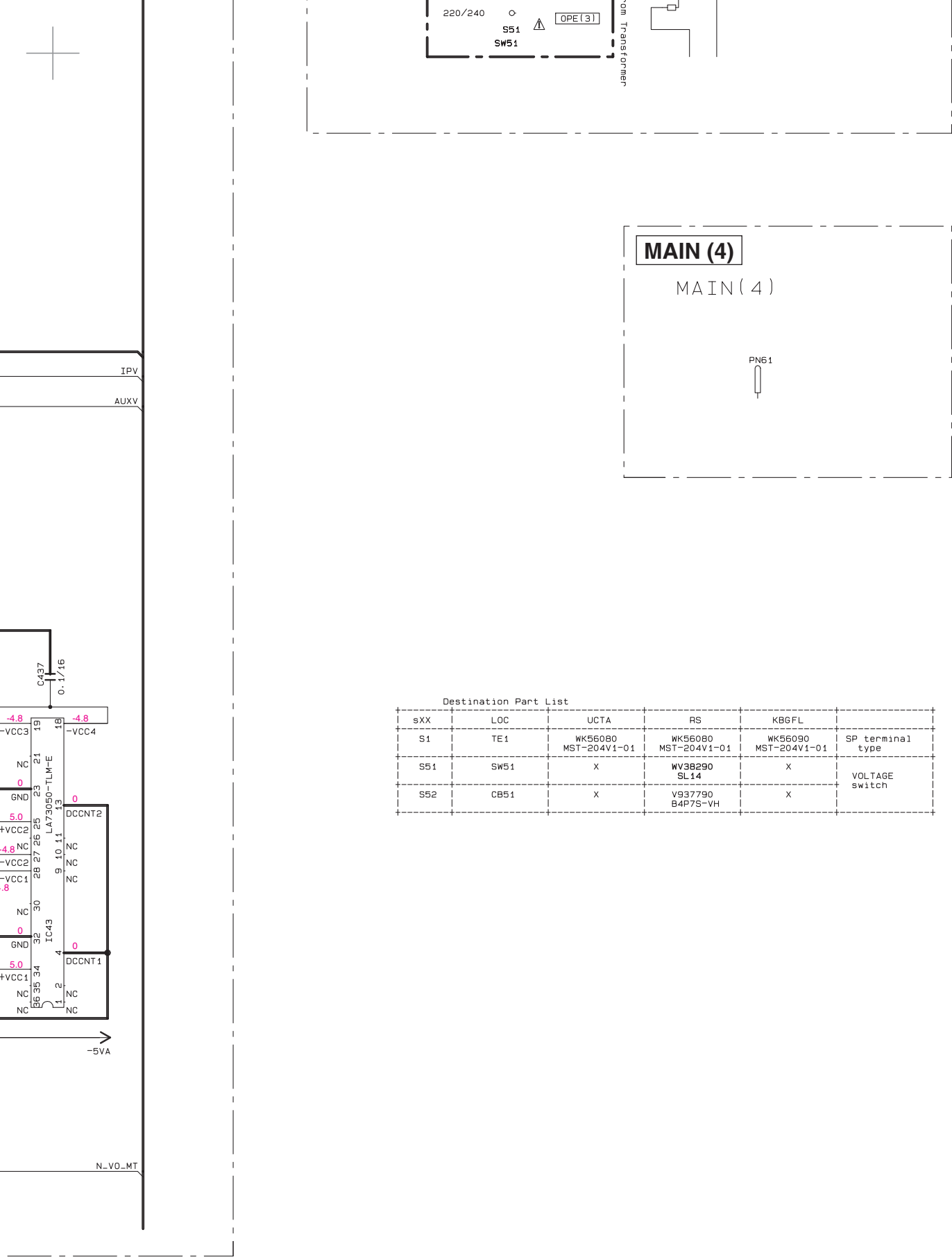


VSEL_1	VSEL_2	VSEL_3	OUT
L	L	L	MUTE
L	L	H	AV-3
L	H	L	AV-4
H	L	L	AV-5
H	H	H	V-AUX
H	L	H	iPod
L	H	H	MUTE
H	H	L	MUTE

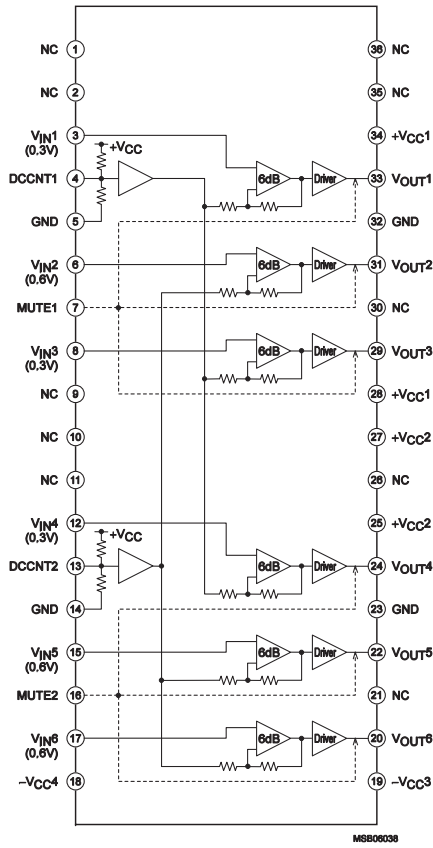


COMPOSITE SELECTOR





IC43: LA73050-TLM-E
6-channel 75-ohm video driver



- ★ All voltages are measured with a 10M Ω /V DC electronic voltmeter.
- ★ Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.

A	B
C	D

A	B
C	D

A

B

C

D

E

F

G

OPERATION 1/2

1

2

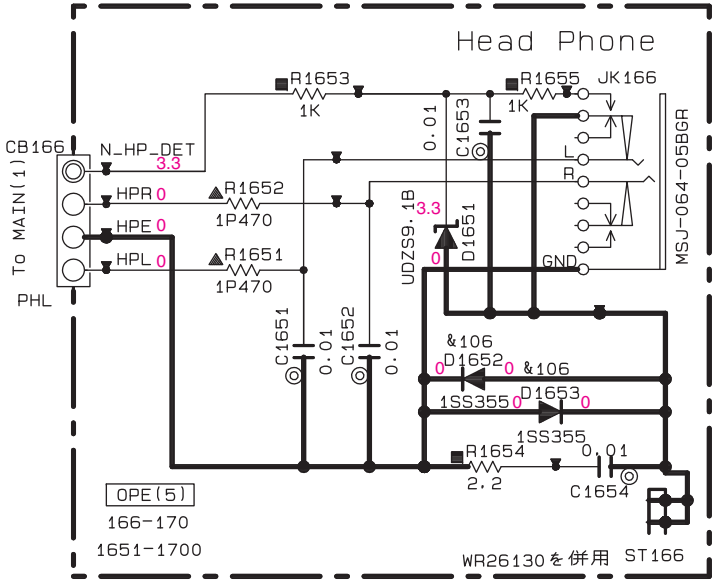
3

4

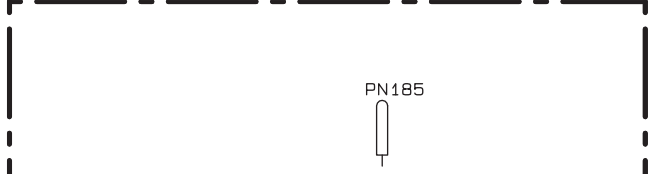
5

Page 83 J4 to MAIN (1)_W1

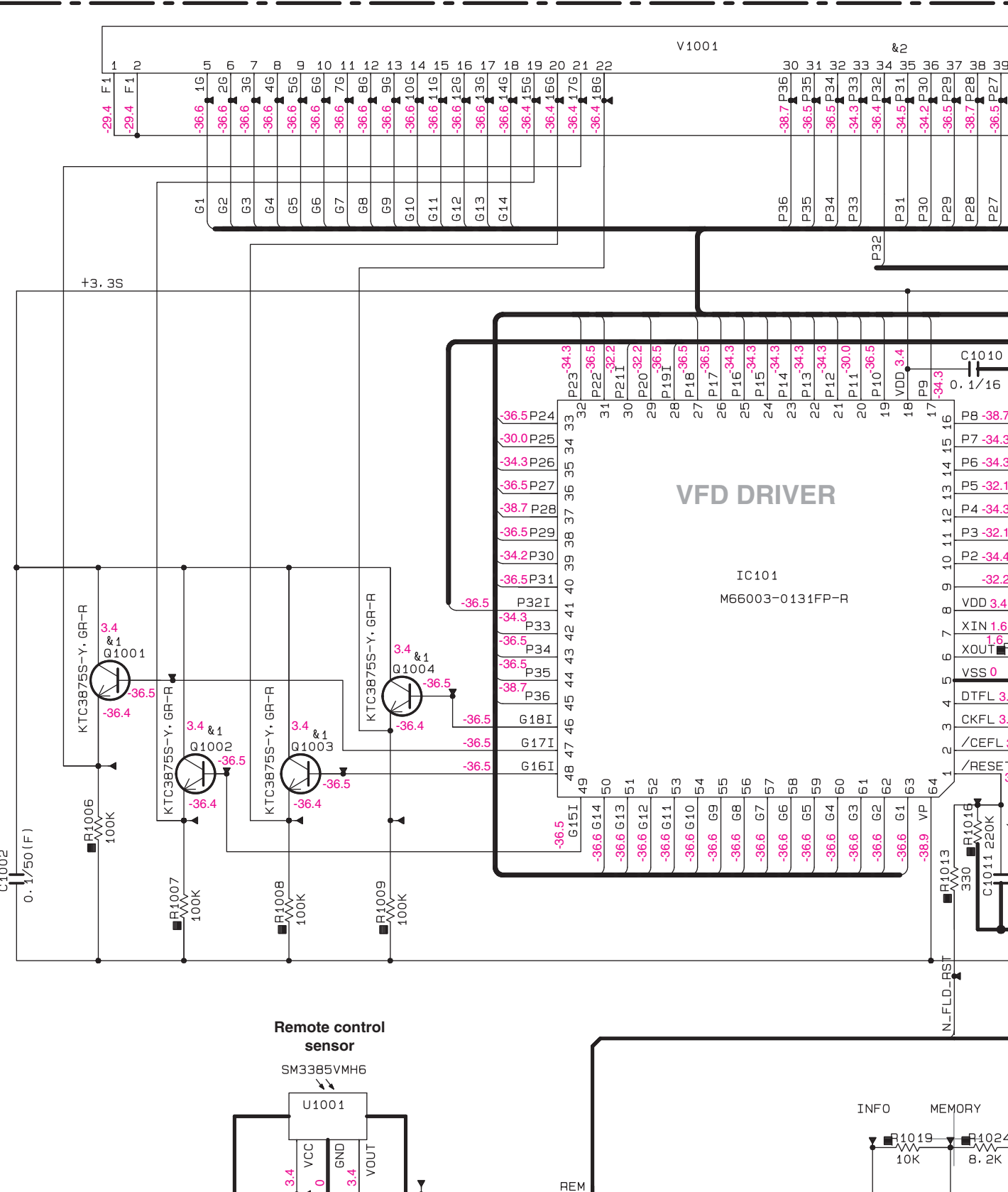
OPERATION (5)



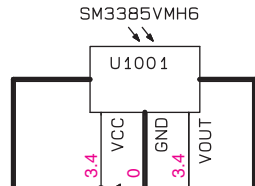
OPERATION (8)



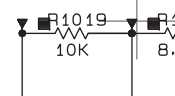
PHONES SILENT CINEMA



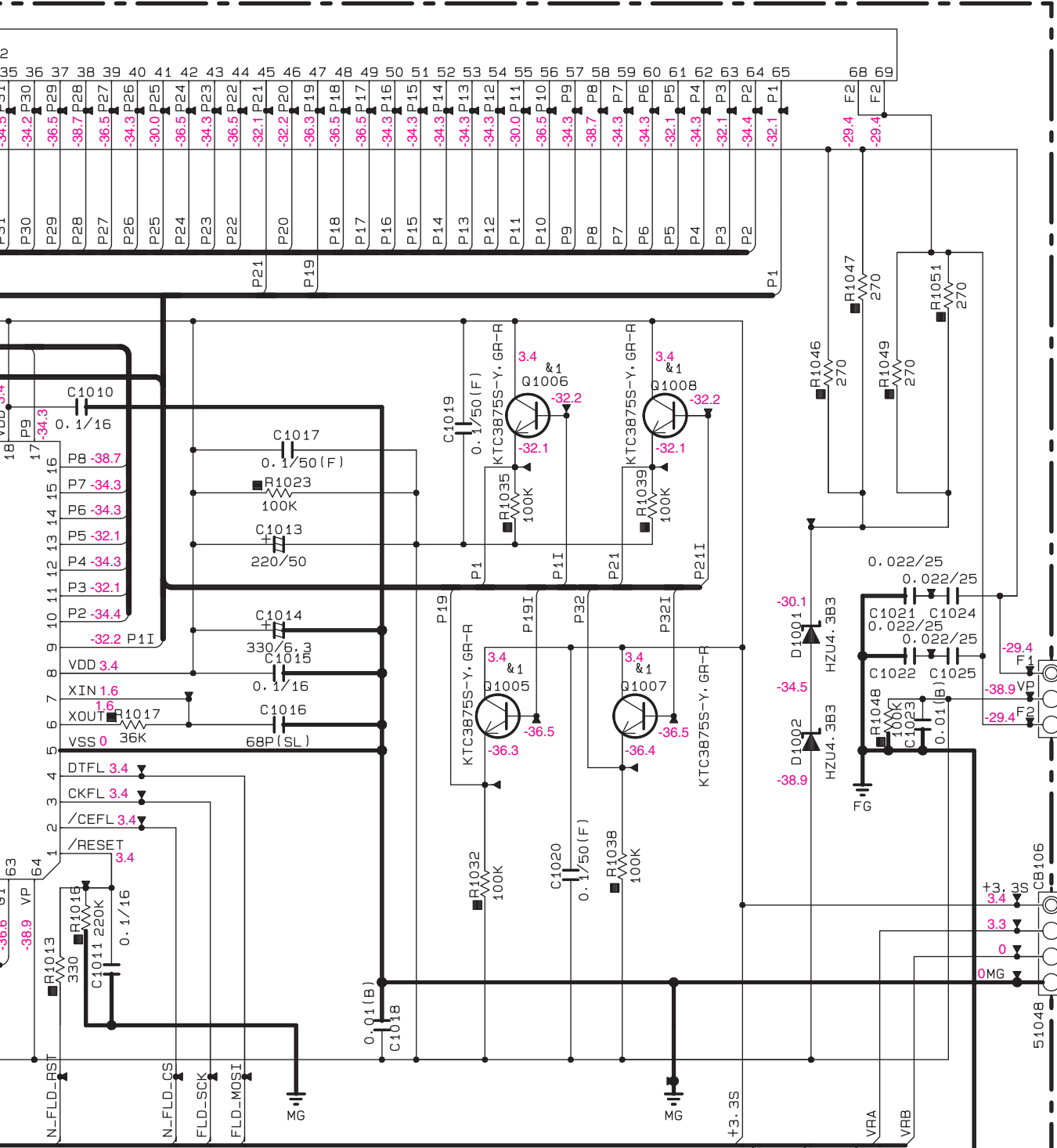
Remote control sensor



INFO MEMORY



A	B
C	D



RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
□	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
▨	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊗	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

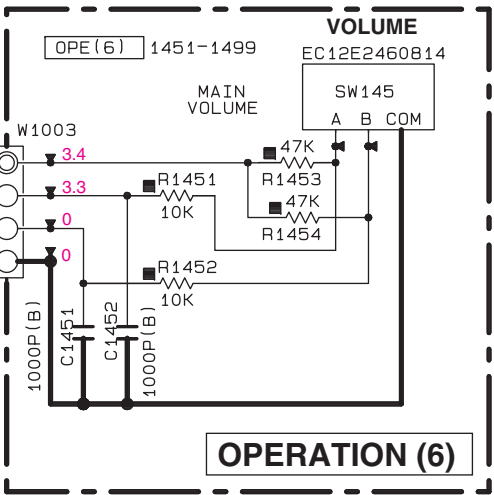
CAPACITOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
●	CERAMIC TUBULAR CAPACITOR
◎	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
⊖	MICA CAPACITOR
Ⓟ	POLYPROPYLENE FILM CAPACITOR
⊙	SEMICONDUCTIVE CERAMIC CAPACITOR
Ⓢ	POLYPHENYLENE SULFIDE FILM CAPACITOR

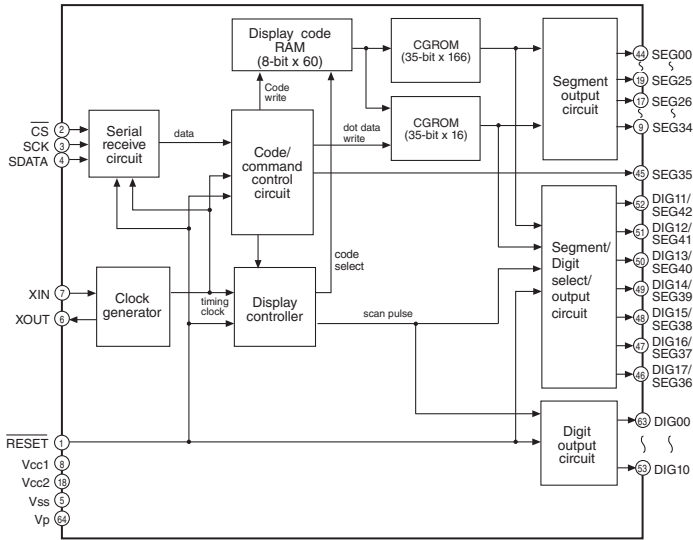
NOTICE (model)

(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL

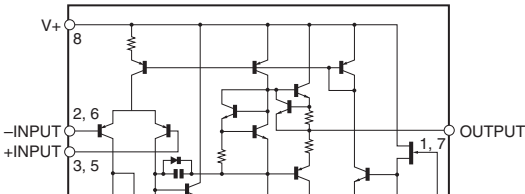
Page 82 F9
to OPERATION (2)_CB136

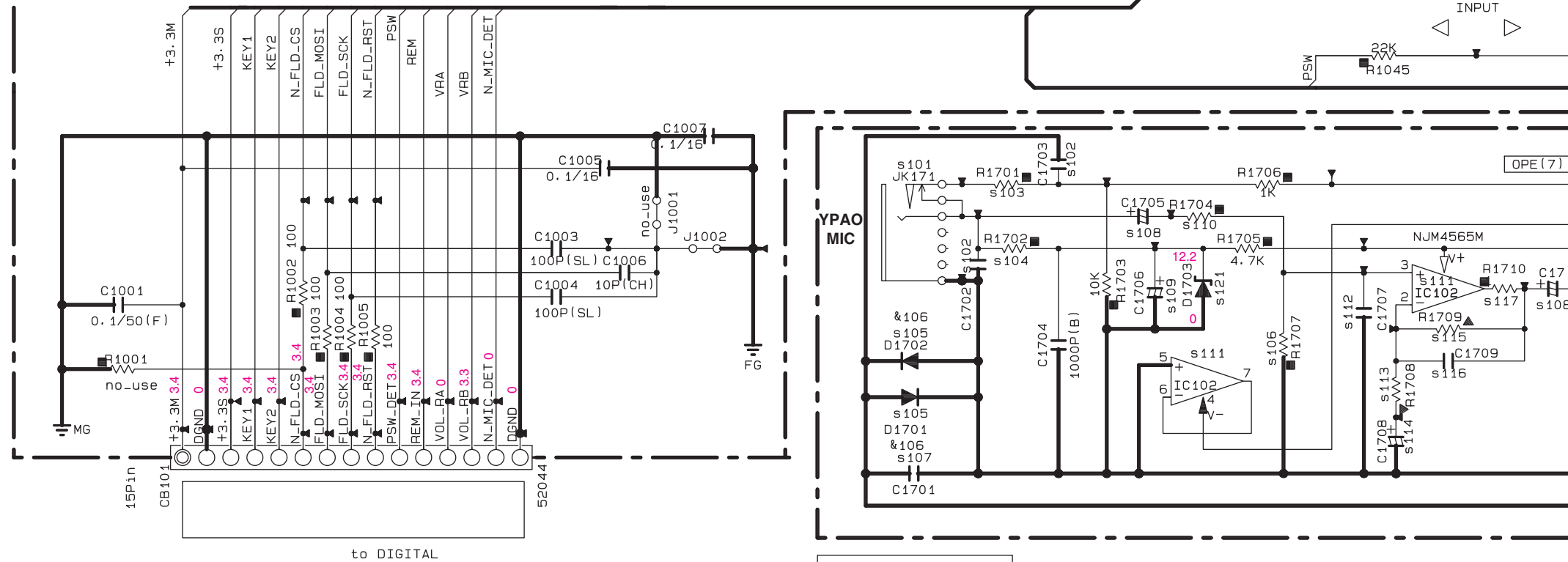
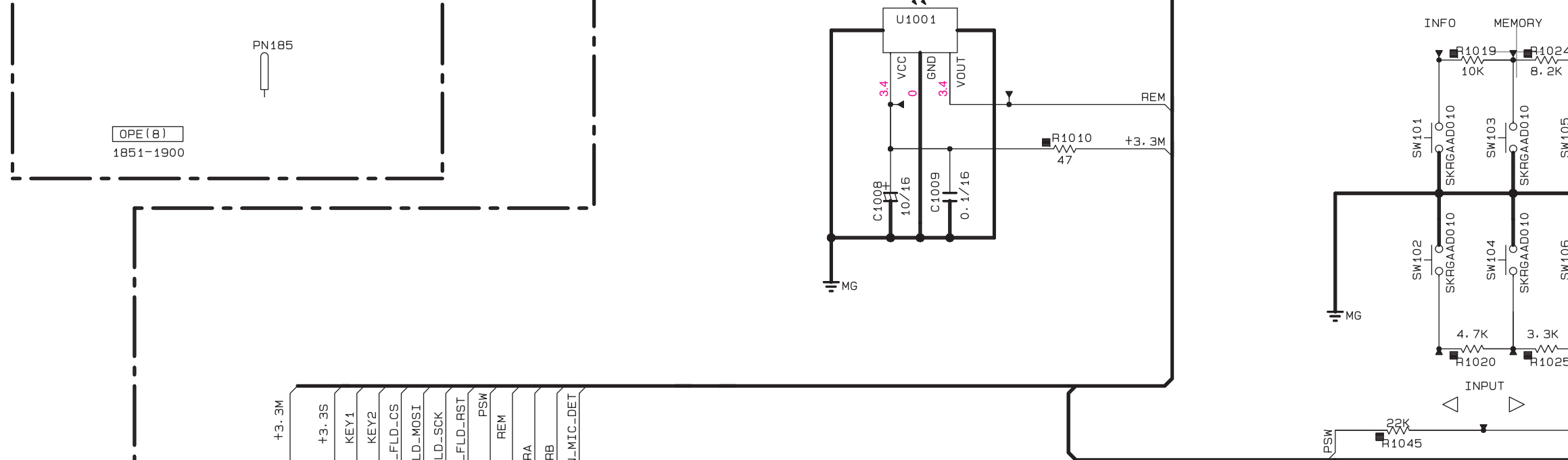


IC101: M66003-0131FP-R
18 digit 5 x 7 segment VFD controller/driver



IC102: NJM4565M (TE1)
Dual operational amplifier



Page 78 B2
to DIGITAL_CB221

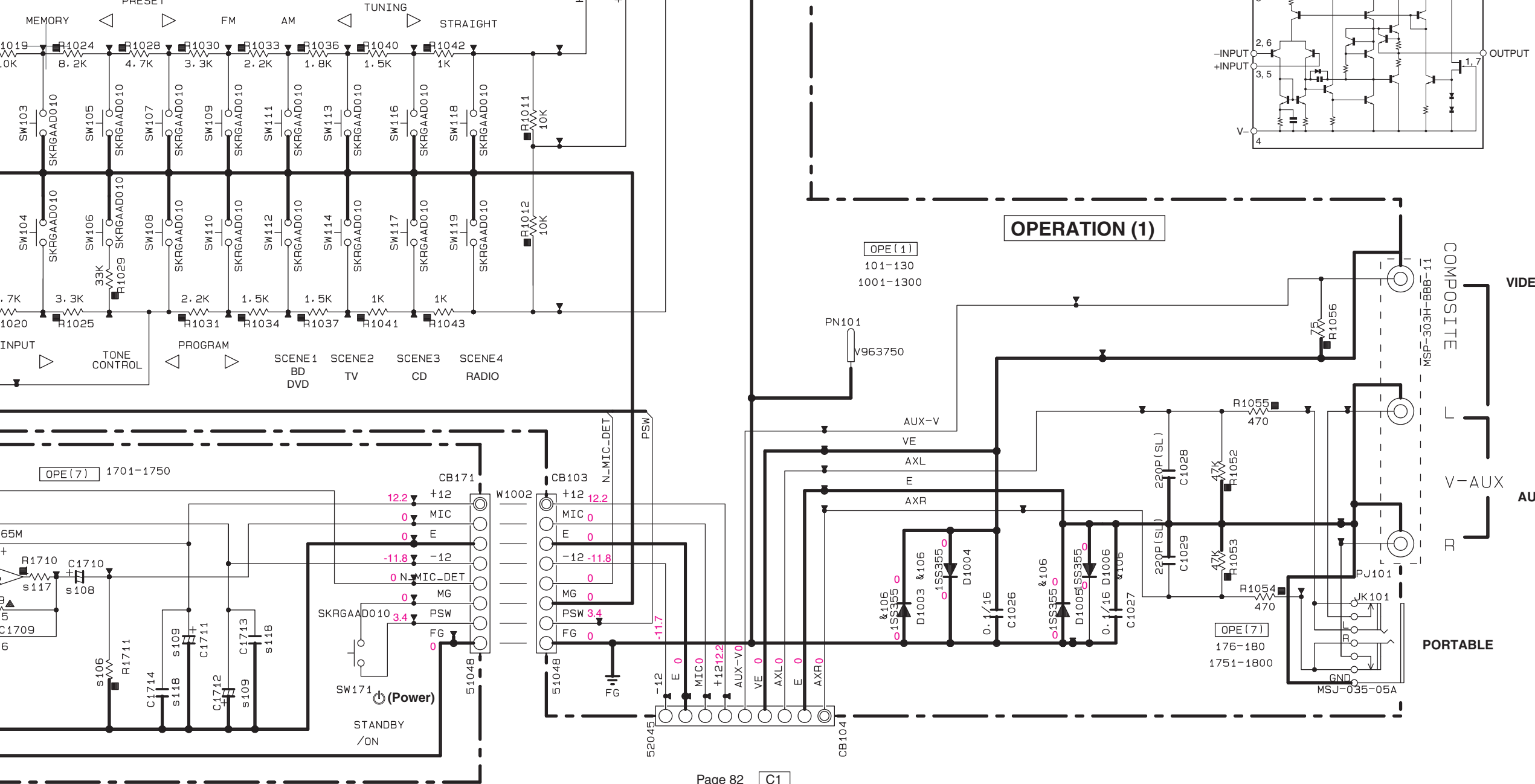
OPERATION (7)

Key detection for A/D port
Key input (A/D) pull-up resistance 10 k-ohms

Ohm	0	+ 1.0 k
V	0 – 0.15	0.15 – 0.48
A/D value (3.3V=255)	0 – 11	12 – 37
KEY1 (92 pin)	STRAIGHT	TUNING >>

Ohm	0	+ 1.0 k
V	0 – 0.15	0.15 – 0.42
A/D value (3.3V=255)	0 – 11	12 – 32
KEY2 (91 pin)	SCENE RADIO	SCENE CD

A	B
C	D



Page 82 C1
to OPERATION (4)_CB193

10 k-ohms

+ 1.0 k	+ 1.5 k	+ 1.8 k	+ 2.2 k	+ 3.3 k	+ 4.7 k	+ 8.2 k	+ 10.0 k
0.15 – 0.48	0.49 – 0.82	0.83 – 1.14	1.15 – 1.46	1.47 – 1.79	1.80 – 2.12	2.13 – 2.40	2.41 – 2.91
12 – 37	38 – 64	65 – 88	89 – 113	114 – 139	140 – 164	165 – 186	187 – 226
TUNING >>	TUNING <<	AM	FM	PRESET >	PRESET <	MEMORY	INFO

+ 1.0 k	+ 1.0 k	+ 1.5 k	+ 1.5 k	+ 2.2 k	+ 3.3 k	+ 4.7 k	(22 k + 33 k)	22.0 k	33.0 k
0.15 – 0.42	0.43 – 0.70	0.71 – 0.97	0.98 – 1.24	1.25 – 1.53	1.54 – 1.84	1.84 – 2.10	2.11 – 2.33	2.34 – 2.54	2.54 – 2.71
12 – 32	33 – 54	55 – 75	76 – 96	97 – 119	12 – 142	143 – 163	164 – 181	182 – 197	198 – 209
SCENE CD	SCENE TV	SCENE BD/DVD	PROGRAM >	PROGRAM <	INPUT >	INPUT <	–	⦿ (Power)	TONE CONTROL

- ★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- ★ Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.

A	B
C	D

OPERATION 2/2

Page 80 L5
to DIGITAL_CB263

オス
To DIGITAL

OPERATION (2)

OPE(2)
131-150
1301-1500

	Destination P
sXX	LOC
s101	JK171
s102	C1703 C1702
s103	R1701
s104	R1702
s105	D1702 D1701
s106	R1707 R1711
s107	C1701
s108	C1705 C1710
s109	C1711 C1712 C1706
s110	R1704
s111	IC102
s112	C1707
s113	R1708
s114	C1708
s115	R1709
s116	C1709
s117	R1710
s118	C1713 C1714
s121	D1703
s132	TH2
s133	C1306
s136	C1317
s151	T1501
s152	C1506 C1505
s153	C1504
s154	D1505

A	B
C	D

H	I	J	K	L	M	N
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Destination Part List					
X	LOC	UC	RS	T	KABGFL
01	JK171	X	WJ11730 MSJ-2200C-AG	X	WJ11730 MSJ-2200C-AG
02	C1703 C1702	X	US06310 1000P(B)	X	US06310 1000P(B)
03	R1701	X	RD35610 1K	X	RD35610 1K
04	R1702	X	RD35647 4.7K	X	RD35647 4.7K
05	D1702 D1701	X	VT33290 1SS355	X	VT33290 1SS355
06	R1707 R1711	X	RD35810 100K	X	RD35810 100K
07	C1701	X	US06410 0.01(B)	X	US06410 0.01(B)
08	C1705 C1710	X	UM39710 10/16	X	UM39710 10/16
09	C1711 C1712 C1706	X	UM39722 22/16	X	UM39722 22/16
10	R1704	X	RD35522 220	X	RD35522 220
11	IC102	X	X7378A0 NJM4565M	X	X7378A0 NJM4565M
12	C1707	X	US06210 100P(SL)	X	US06210 100P(SL)
13	R1708	X	RF35547 470	X	RF35547 470
14	C1708	X	UM38747 47/6.3	X	UM38747 47/6.3
15	R1709	X	RF35712 12K	X	RF35712 12K
16	C1709	X	US06133 33P(CH)	X	US06133 33P(CH)
17	R1710	X	RD35682 8.2K	X	RD35682 8.2K
18	C1713 C1714	X	US06510 0.1/50(F)	X	US06510 0.1/50(F)
21	D1703	X	VU17190 UDZ55.1B	X	VU17190 UDZ55.1B
32	TH2	WT69830 WC92NA103J1	X	X	X
33	C1306	US13510 0.1/16	X	X	X
36	C1317	UR73947 4700/16	X	X	X
51	T1501	X8521A0 X8521	X8522A0 X8522	X8523A0 X8523	X8523A0 X8523
52	C1506 C1505	X	WJ61020 0.01/100	X	X
53	C1504	WJ60500 0.01	X	WJ60500 0.01	WV36590 0.01
54	D1505	X	VS99780 1T2A1	X	X

Destination Part List					
sXX	LOC	UC	RS	T	KABGFL
s155	R1508	X	VC75790 2P47	X	X
s156	J1501	VN50000 .	X	VN50000 .	VN50000 .
s157	Q1503	X	VP87260 A1708(S/T)	X	X
s158	Q1502 Q1504	X	IA1015I A1015(Y)	X	X
s159	Q1505	X	WC52920 KRC102M-AT/P	X	X
s160	R1507	X	RD35747 47K	X	X
s161	D1502	X	VG43700 MTZJ4.7A	X	X
s162	R1504	X	RD35610 1K	X	X
s163	R1505	X	RD35722 22K	X	X
s164	R1506	X	RD35647 4.7K	X	X
s171	F1501	WB22120 6.00A125V	WM93310 TSD5.0A250V	VV07170 3.15A250V	VV07170 3.15A250V
s174	D1307	WH48730 RS203M-B-C-J80	X	X	X
s175	D1312 D1311	VT33290 1SS355	X	X	X
s178	C1503	X	UR89710 10/100	X	X
s179	R1509	X	RD35810 100K	X	X
s180	J1502	VN50000 .	X	VN50000 .	VN50000 .
s181	C1501	UR74922 2200/25	UR75922 2200/35	UR74922 2200/25	UR74922 2200/25
s182	IC132	X4928A0 KIA7805API	X	X	X
s183	C1312 C1308	UR86610 1/50	X	X	X
s184	R1322	WJ68160 1P0.22	X	X	X
s185	R1304	X	RD35610 1K	RD35610 1K	RD35610 1K
s186	D1302	X	VU17190 UDZ55.1B	VU17190 UDZ55.1B	VU17190 UDZ55.1B
s187	R1307	X	RD35718 18K	RD35718 18K	RD35718 18K
s188	R1305	RD35715 15K	X	X	X

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
☒	CARBON FILM RESISTOR (P=10)
☐	METAL OXIDE FILM RESISTOR
☐	METAL FILM RESISTOR
☒	METAL PLATE RESISTOR
☒	FIRE PROOF CARBON FILM RESISTOR
☐	CEMENT MOLDED RESISTOR
☒	SEMI VARIABLE RESISTOR
☐	CHIP RESISTOR

CAPACITOR

REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	77
☒	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	

NOTICE (model)

(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL

6

7

8

9

10

Page 80 E10
to DIGITAL_CB262

Page 83 J6
to MAIN (1)_CB2

to DSP

to MAIN

from SUB

OPERATION (2)

OPE (2)
131-150
1301-1500

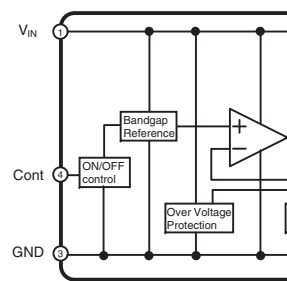
OPERATION (3)

OPE (3)
151-160
1501-1600

to POWER TRANSFORMER

Page 81 K4
to OPERATION (1)_CB102

IC131: NJM2388F33
Low dropout voltage regulator



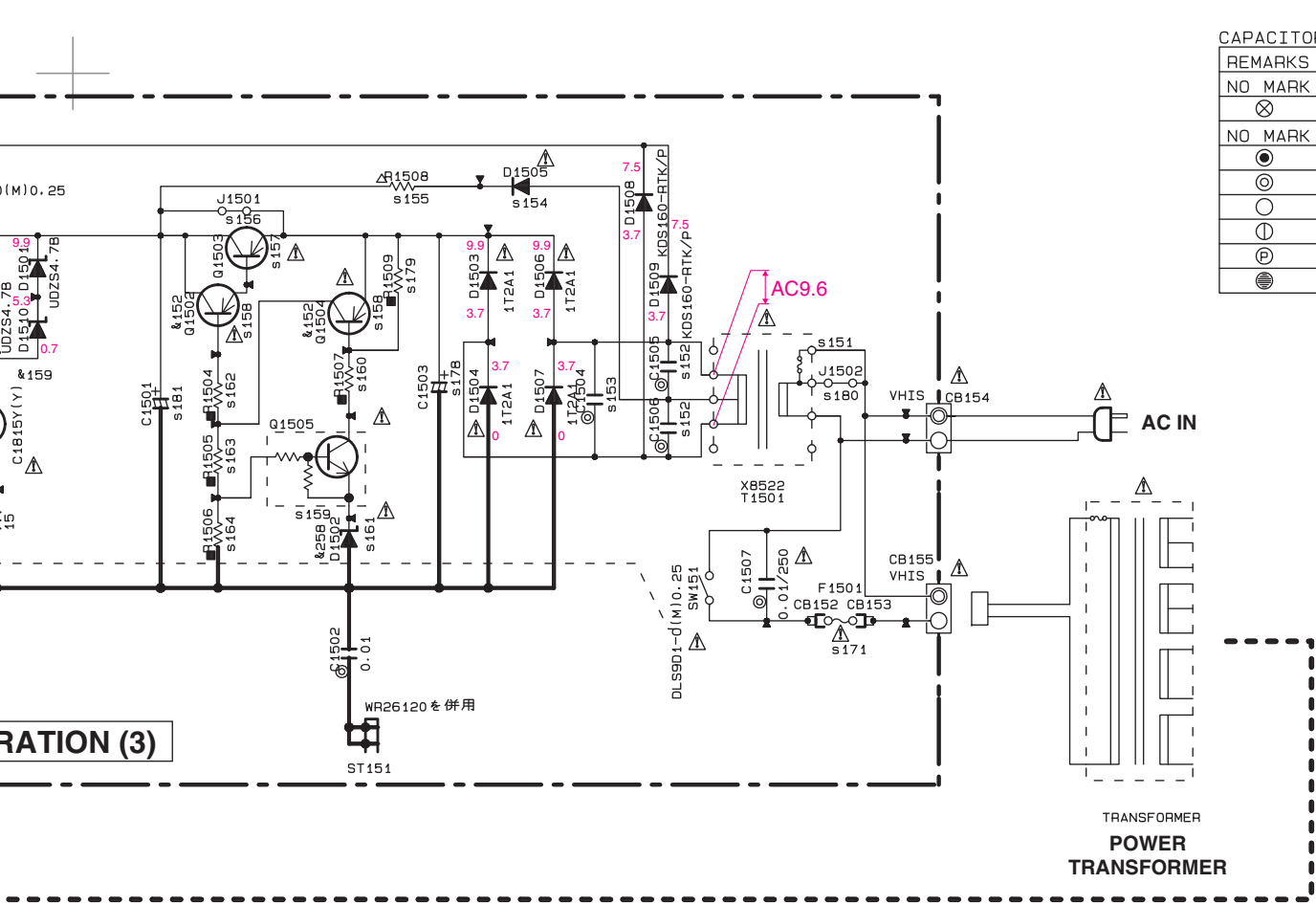
Notes)

Safety measures

- Some internal parts in this product contain high voltages and are dangerous. Be sure to take safety measures during servicing, such as wearing insulating gloves.
- Note that the capacitors indicated below are dangerous even after the power is turned off because an electric charge remains and a high voltage continues to exist there. Before starting any repair work, connect a discharging resistor (5 k-ohms/10 W) to the terminals of each capacitor indicated below to discharge electricity. The time required for discharging is about 30 seconds per each.
- C1317-1320 on OPERATION (2) P.C.B.

- All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
- Schematic diagram is subject to change without notice.

A	B
C	D

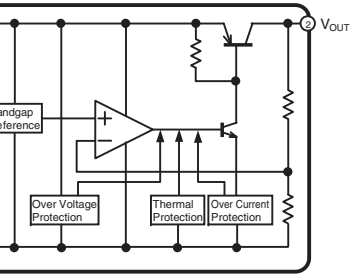


CAPACITOR		
REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	Π
$\otimes$	TANTALUM CAPACITOR	∇
NO MARK	CERAMIC CAPACITOR	Π
$\odot$	CERAMIC TUBULAR CAPACITOR	
$\odot$	POLYESTER FILM CAPACITOR	
$\bigcirc$	POLYSTYRENE FILM CAPACITOR	
$\textcircled{1}$	MICA CAPACITOR	
$\textcircled{P}$	POLYPROPYLENE FILM CAPACITOR	
$\textcircled{\bullet}$	SEMICONDUCTIVE CERAMIC CAPACITOR	

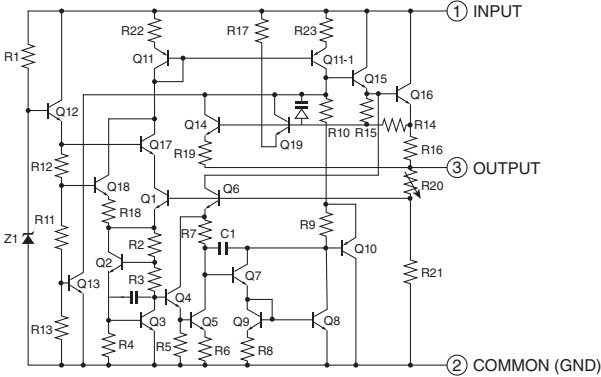
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL

OPERATION (3)

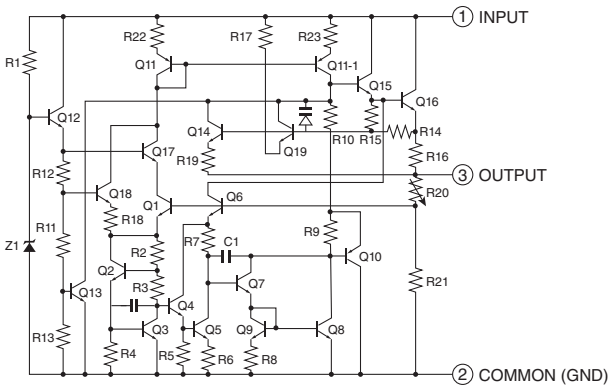
2388F33
voltage regulator with ON/OFF control



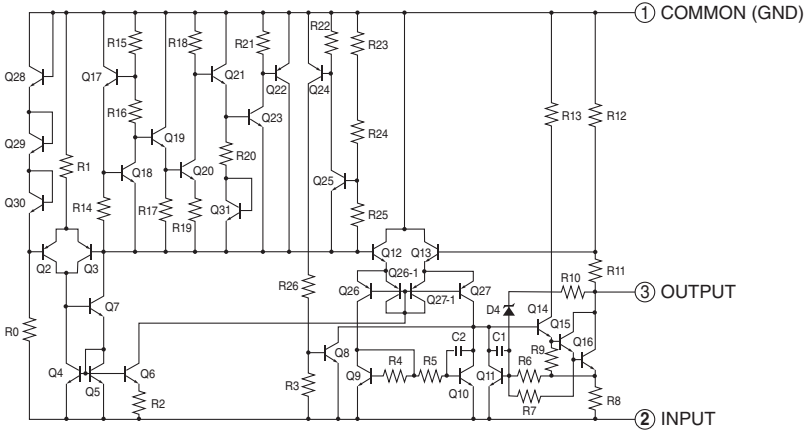
IC132, 135: KIA7805API
Voltage regulator



IC133: KIA7812API
Voltage regulator



IC134: KIA7912PI
Voltage regulator



g gloves.
es to exist there.
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RX-V371/HTR-3064

A	B
C	D

OPERATION 2/2