AV RECEIVER
RX-V667/HTR-6063/ RX-A700
SERVICE MANUAL

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.

■ CONTENTS

TO SERVICE PERSONNEL 2
FRONT PANELS 3–4
REAR PANELS 5–8
REMOTE CONTROL PANELS 9
SPECIFICATIONS 10–14
INTERNAL VIEW 15
SERVICE PRECAUTIONS 15
DISASSEMBLY PROCEDURES 16–18
UPDATING FIRMWARE 19–21
SELF-DIAGNOSTIC FUNCTION 22–55
CONFIRMATION OF IDLING CURRENT OF AMP UNIT 56
DISPLAY DATA 57–58
IC DATA 59–75
PIN CONNECTION DIAGRAMS 76–78
BLOCK DIAGRAMS 79–83
PRINTED CIRCUIT BOARDS 84–105
SCHEMATIC DIAGRAMS 107–120
REPLACEMENT PARTS LIST 121–135
REMOTE CONTROL 136–138
ADVANCED SETUP 139–144

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This Service Manual uses recycled paper.

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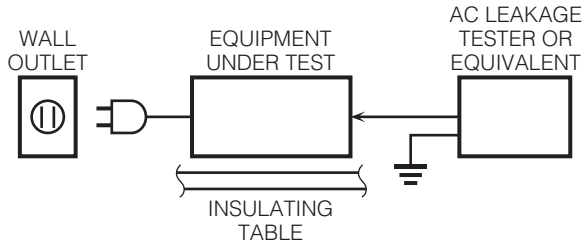
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YAMAHA
YAMAHA CORPORATION
P.O.Box 1, Hamamatsu, Japan
'10.06

■ TO SERVICE PERSONNEL

1. Critical Components Information
   Components having special characteristics are marked ⚠ 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 µF.



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



For U model

"CAUTION"

"F3701: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 8A, 125V FUSE."

For C model

CAUTION

F3701: REPLACE WITH SAME TYPE 8A, 125V FUSE.

ATTENTION

F3701: UTILISER UN FUSIBLE DE RECHANGE DE MÉME TYPE DE 8A, 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)

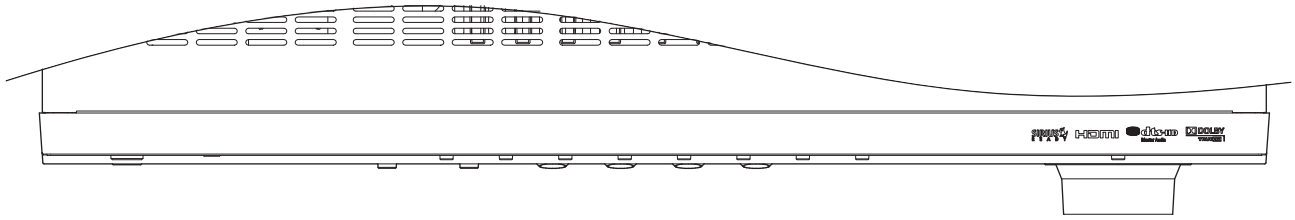
Caution:

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.

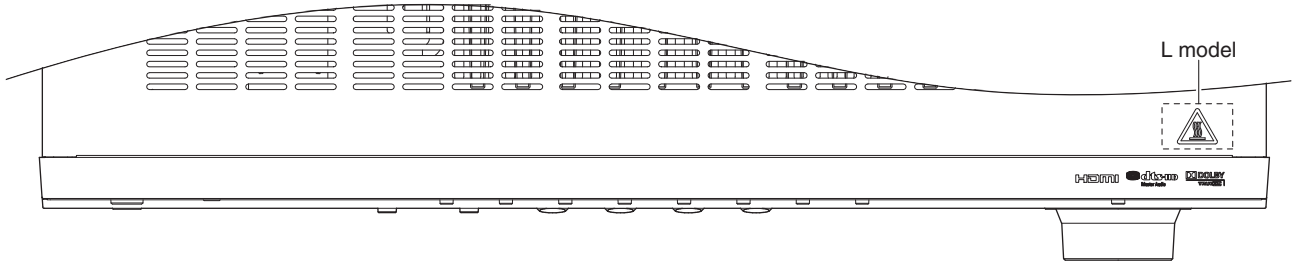
■ FRONT PANELS

Top view

U model

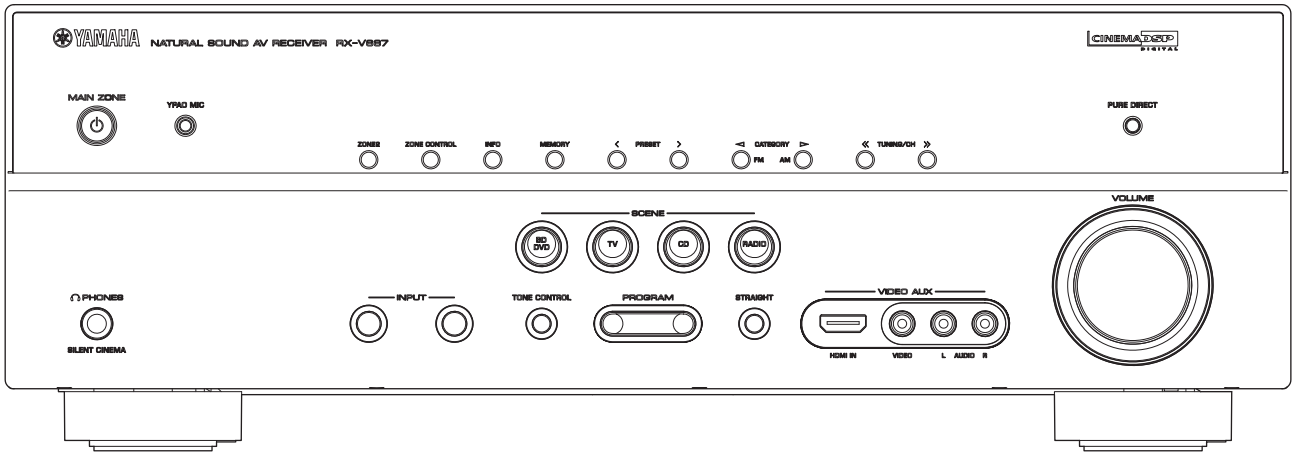


C, R, T, K, A, B, G, F, L models

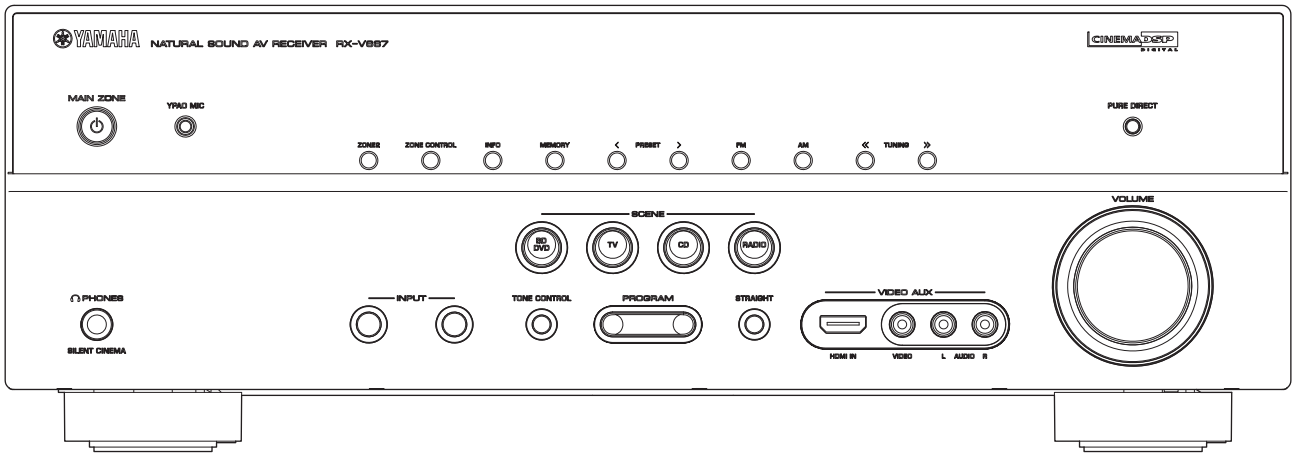


Front view

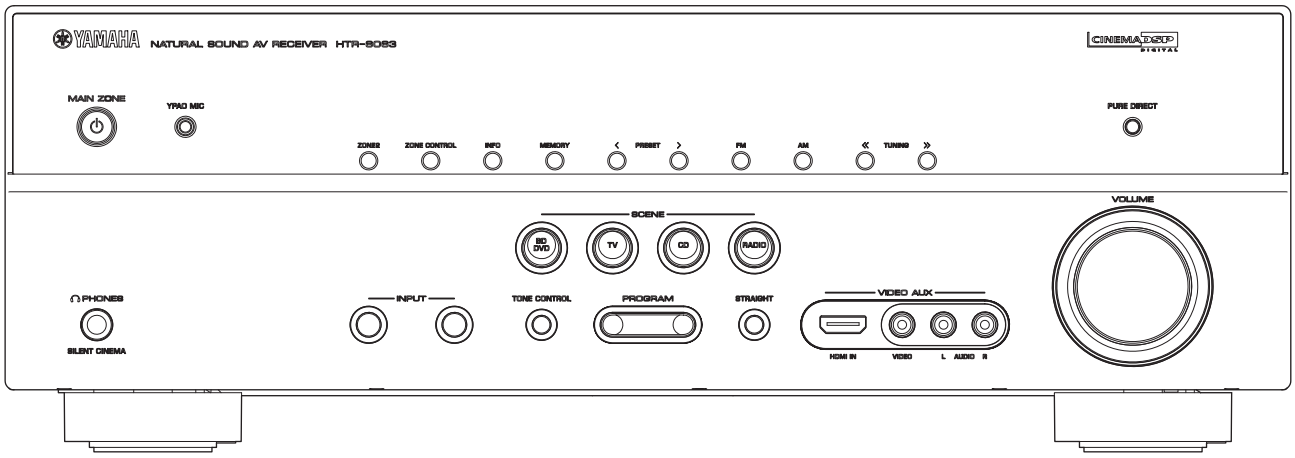
RX-V667 (U model)



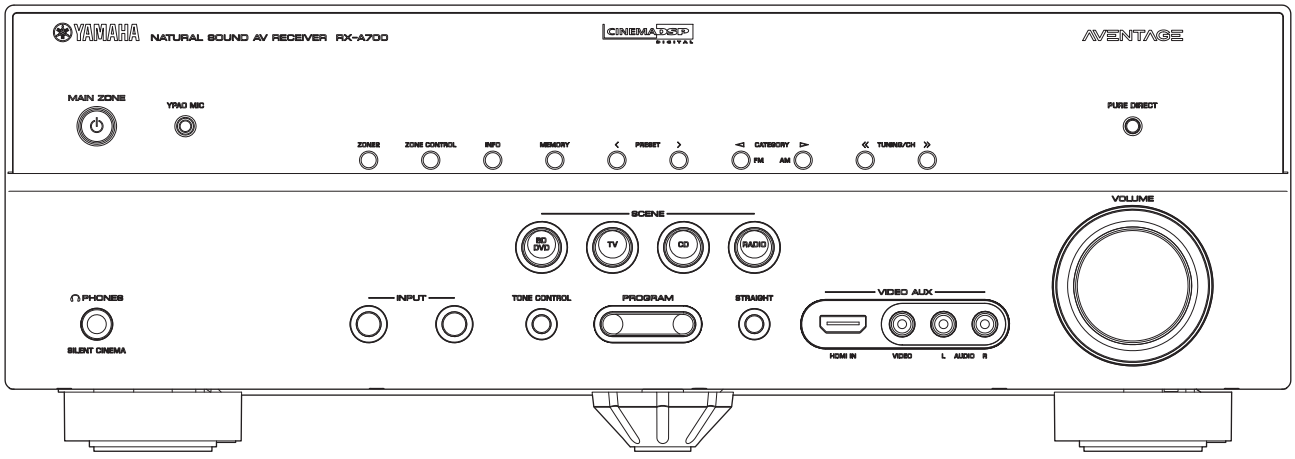
RX-V667 (C, R, T, K, A, B, G, F, L models)



HTR-6063 (C, A models)

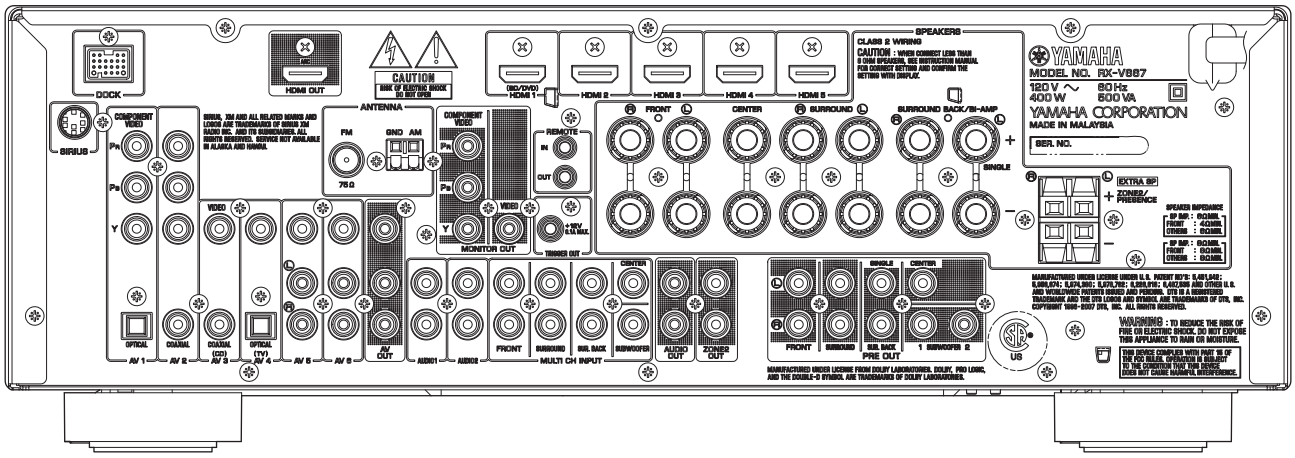


RX-A700 (U model)

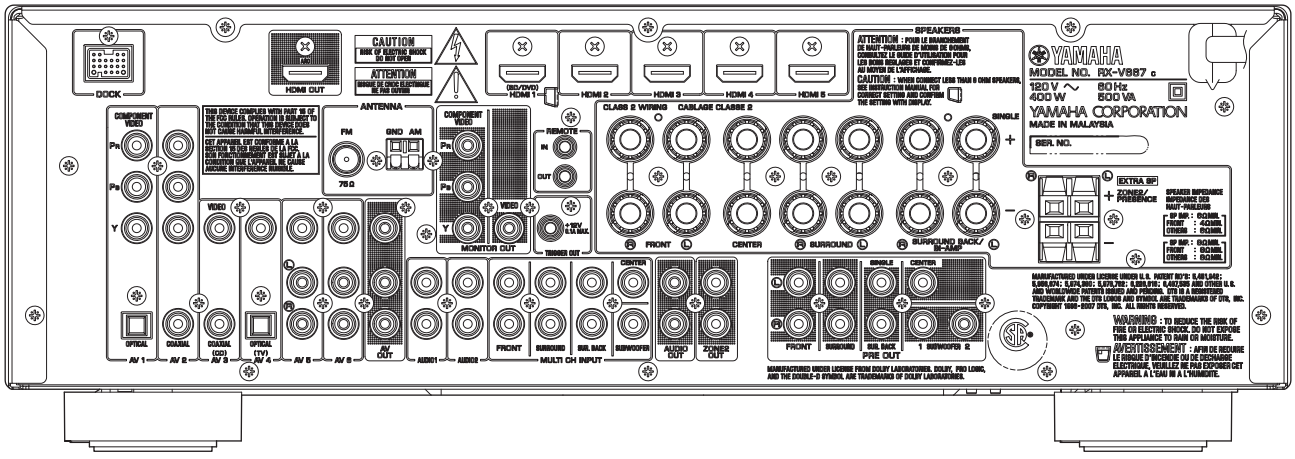


■ REAR PANELS

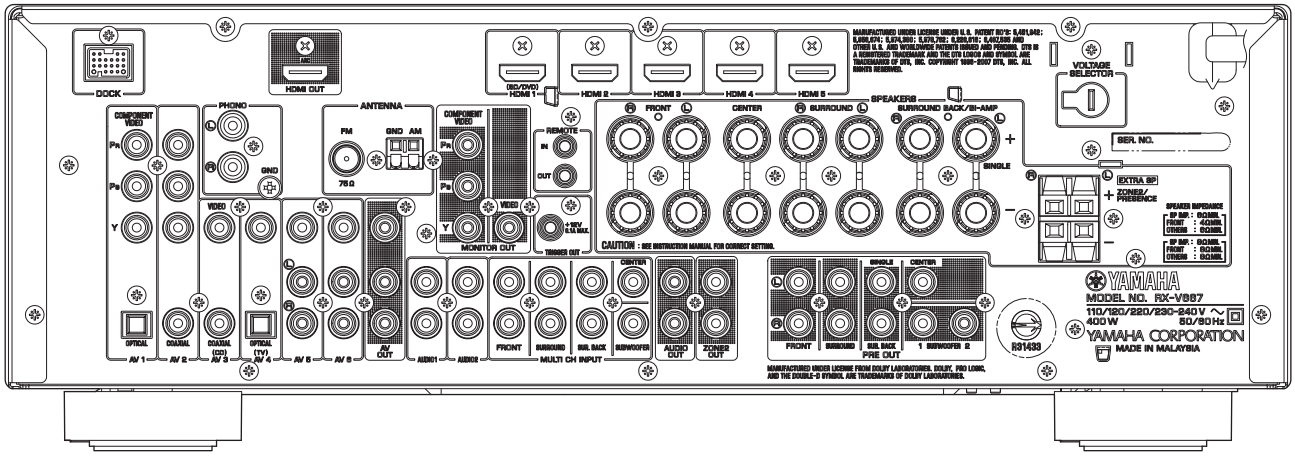
RX-V667 (U model)



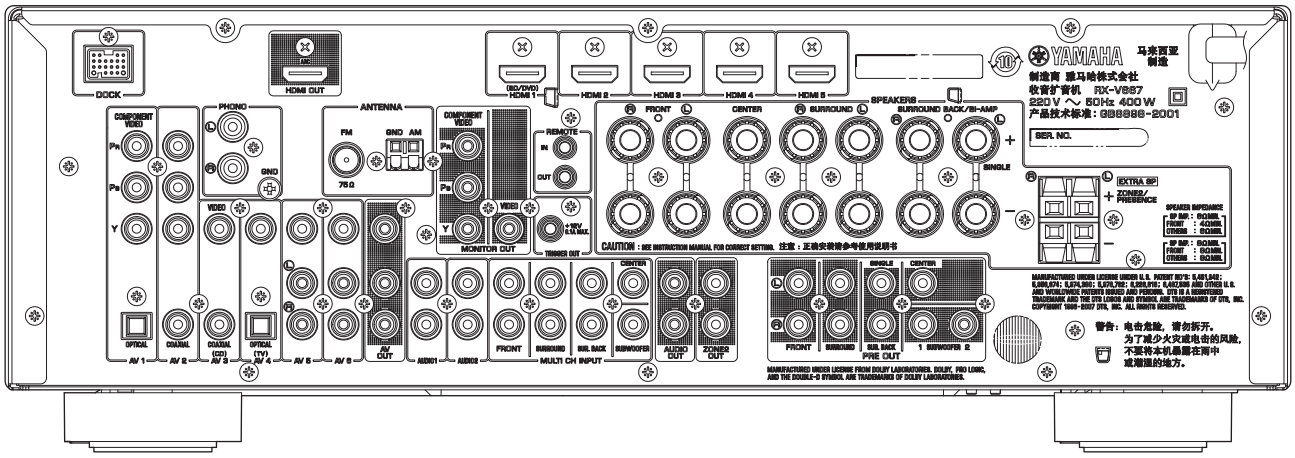
RX-V667 (C model)



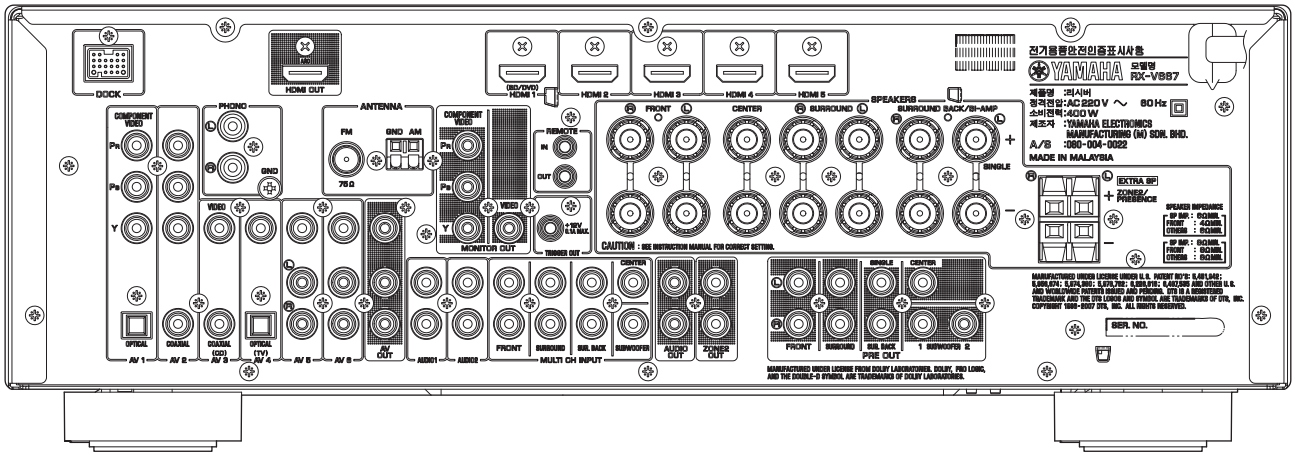
RX-V667 (R model)



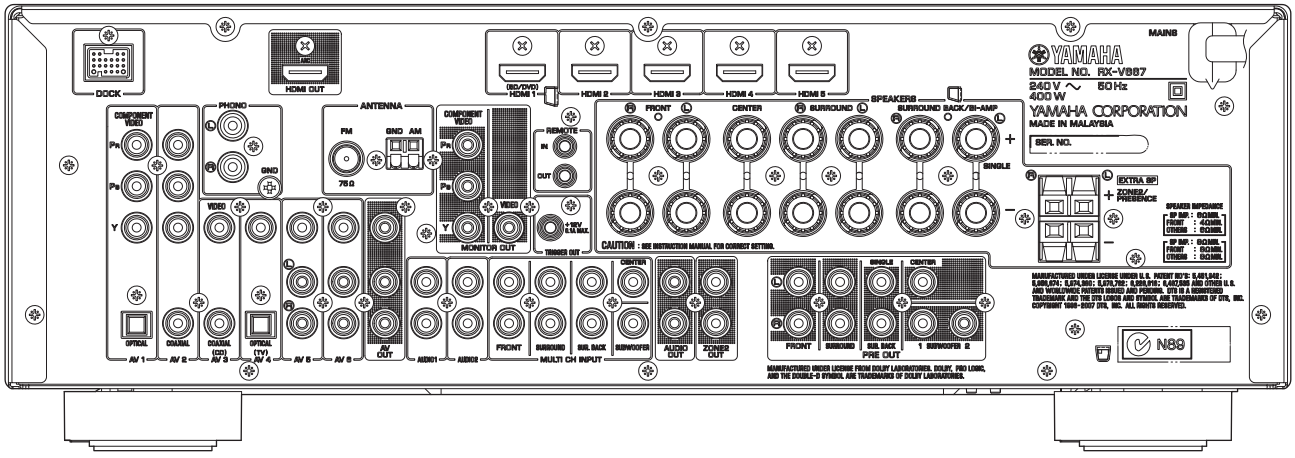
RX-V667 (T model)



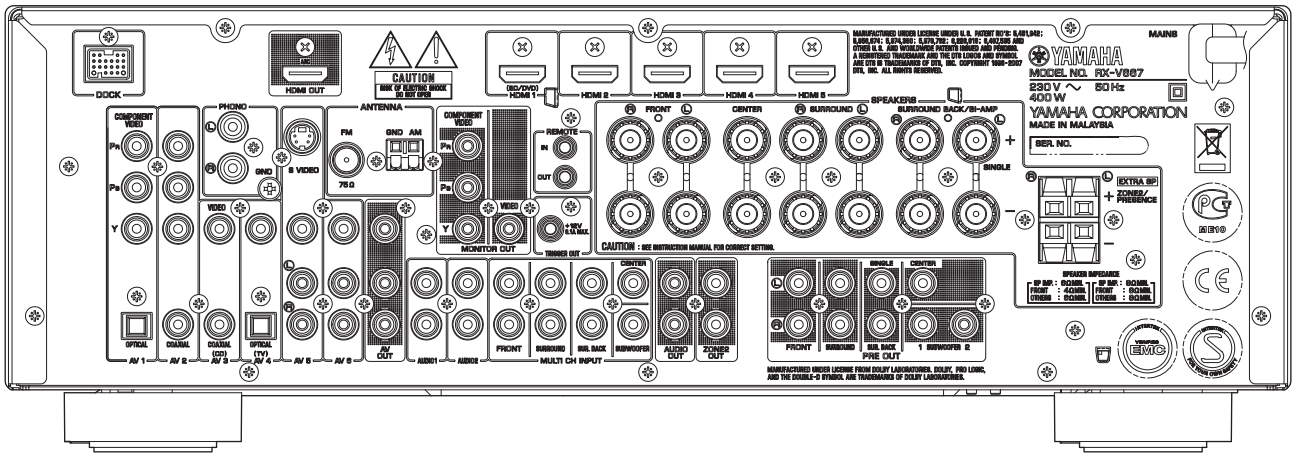
RX-V667 (K model)



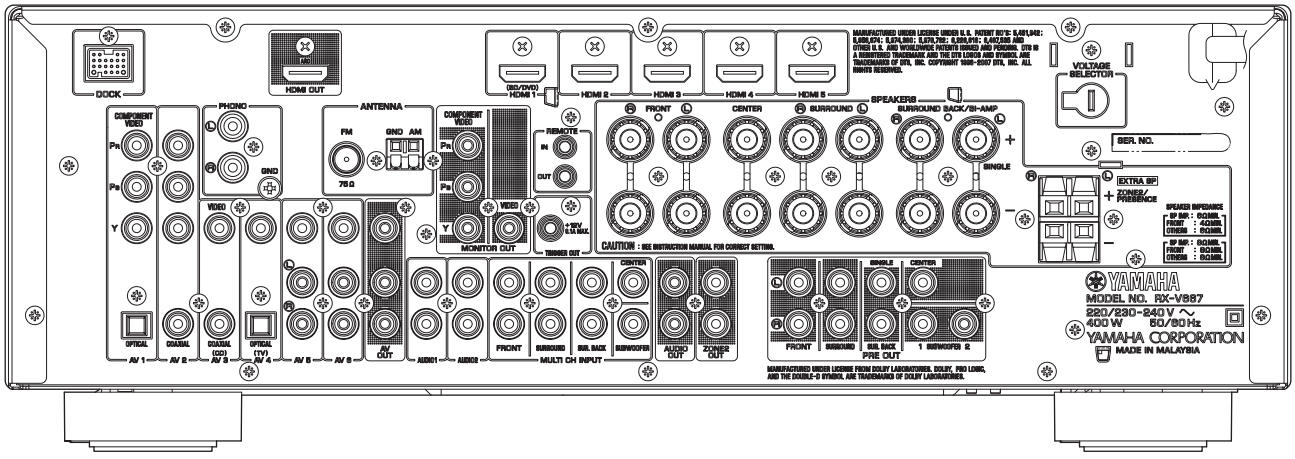
RX-V667 (A model)



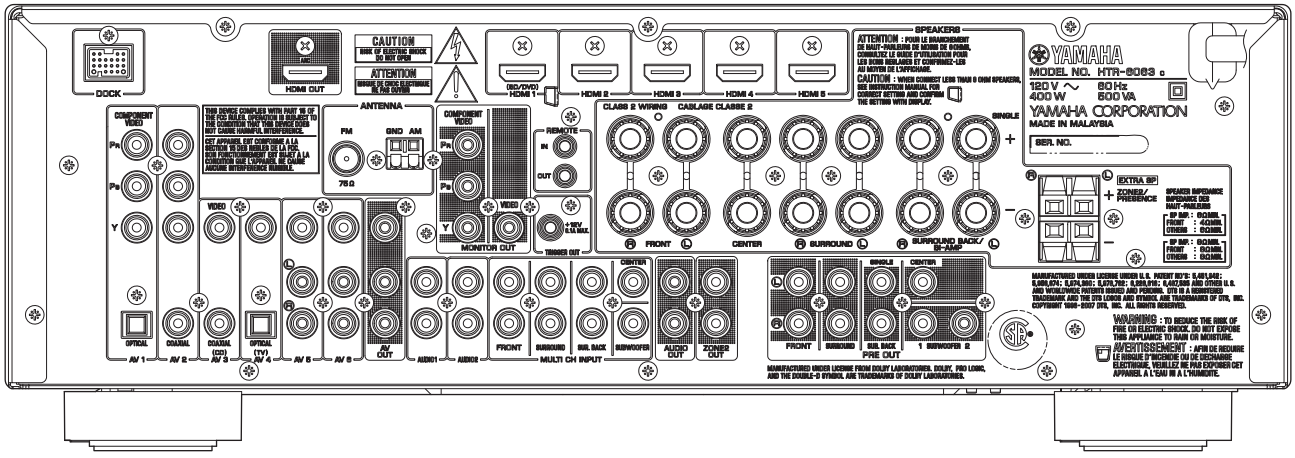
RX-V667 (B, G, F models)



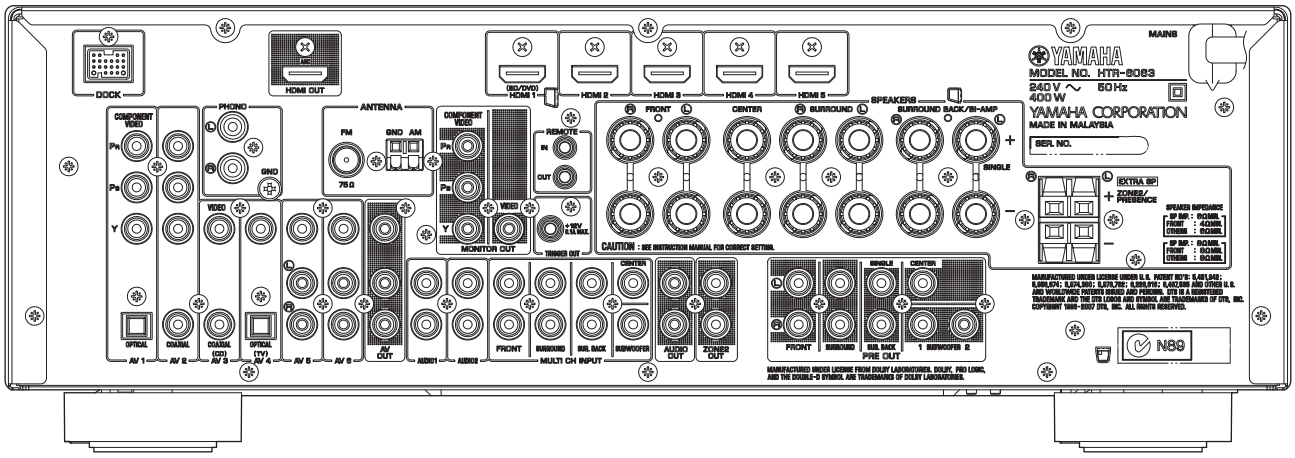
RX-V667 (L model)



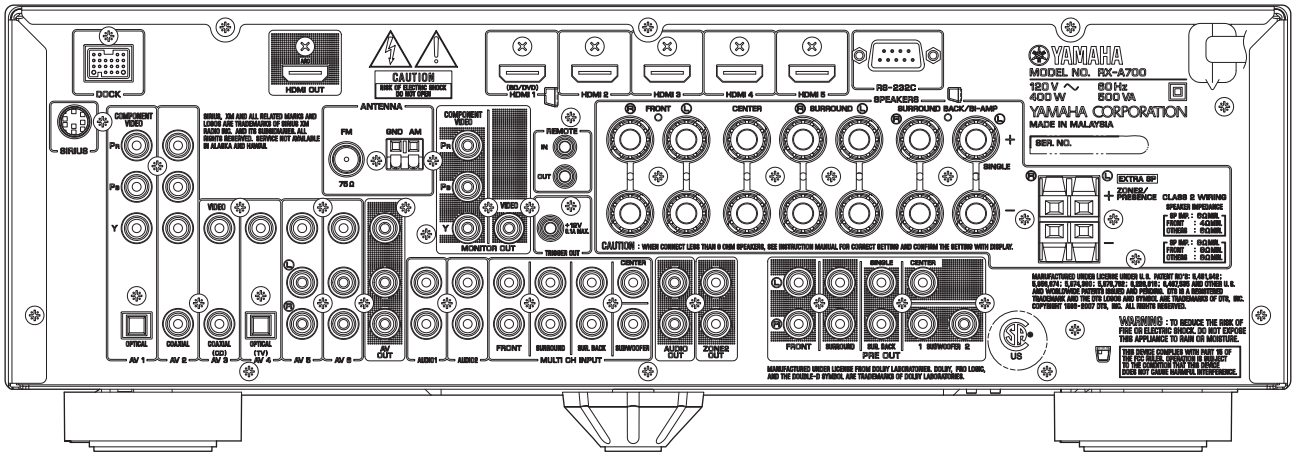
HTR-6063 (C model)



HTR-6063 (A model)

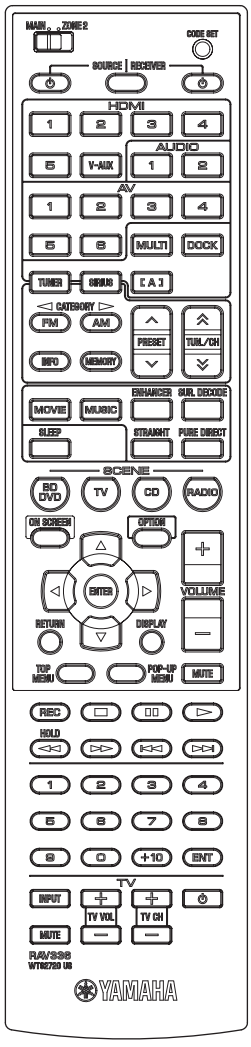


RX-A700 (U model)

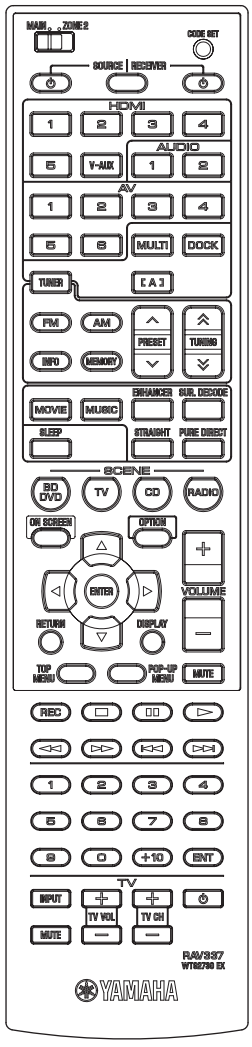


■ REMOTE CONTROL PANELS

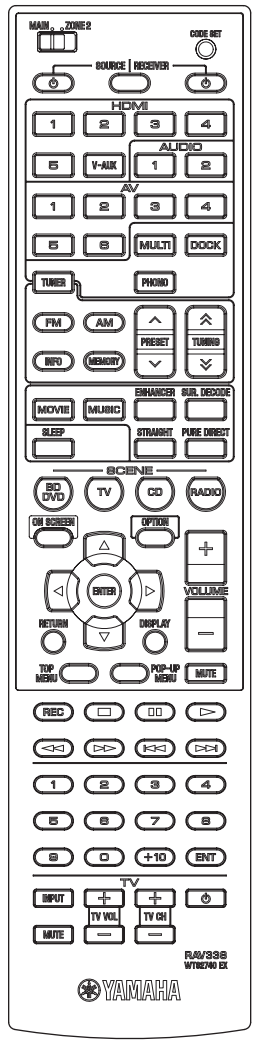
RAV336
(U model)



RAV337
(C model)



RAV338
(R, T, K, A, B, G, F, L models)



■ SPECIFICATIONS

■ Audio Section

Minimum RMS Output Power (Power Amp. Section)

[RX-V667/RX-A700]
(20 Hz to 20 kHz, 0.08 % THD, 8 ohms)
- FRONT L/R ..... 90 W + 90 W
- CENTER ..... 90 W
- SURROUND L/R ..... 90 W + 90 W
- SURROUND BACK L/R ..... 90 W + 90 W

[HTR-6063]
(1 kHz, 0.7 % THD, 8 ohms)
- FRONT L/R ..... 105 W + 105 W
- CENTER ..... 105 W
- SURROUND L/R ..... 105 W + 105 W
- SURROUND BACK L/R ..... 105 W + 105 W

Maximum Power (JEITA) (1 kHz, 10 % THD, 8 ohms)
[R, T, K, L models]
- FRONT L/R ..... 130 W + 130 W
- CENTER ..... 130 W
- SURROUND L/R ..... 130 W + 130 W
- SURROUND BACK L/R ..... 130 W + 130 W

Max. Power Per Channel (1 kHz, 0.7 % THD, 4 ohms)
[B, G, F, L models]
- FRONT L/R ..... 140 W + 140 W
- CENTER ..... 140 W
- SURROUND L/R ..... 140 W + 140 W
- SURROUND BACK L/R ..... 140 W + 140 W

IEC Power (1 kHz, 0.08 % THD, 8 ohms) [B, G, F, L models]
- FRONT L/R ..... 100 W + 100 W

Dynamic Power Per Channel (IHF) (FRONT L/R drive)
- (8 / 6 / 4 / 2 ohms) ..... 125 / 160 / 190 / 230 W

Dynamic Headroom [U, C models]
- (8 ohms) ..... 1.43 dB

Damping Factor
(20 Hz to 20 kHz, 8 ohms, SPEAKER-A)
- FRONT L/R ..... 100 or more

Input Sensitivity/Input Impedance
(1 kHz, 100 W/8 ohms)
- PHONO (MM) ..... 3.5 mV / 47 k-ohms
- AV5, etc. ..... 200 mV / 47 k-ohms
- MULTI CH INPUT
  FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, SUBWOOFER
  ..... 200 mV / 47 k-ohms

Maximum Input Signal (1 kHz)
- PHONO (MM) (0.1 % THD) ..... 60 mV or more
- AV5, etc. (Effect ON) (0.5 % THD) ..... 2.3 V or more

Output Level/Output Impedance
- REC OUT ..... 200 mV / 1.2 k-ohms
- PRE OUT ..... 1 V / 1.2 k-ohms
- SUBWOOFER (2 ch stereo and FRONT SP: small)
  ..... 1 V / 1.2 k-ohms
- ZONE2 OUT ..... 200 mV / 1.2 k-ohms

Headphone Jack Rated Output/Impedance
- AV5, etc. (1 kHz, 50 mV, 8 ohms) ..... 100 mV / 560 ohms

Frequency Response (10 Hz to 100 kHz)
- AV5, etc. to FRONT L/R ..... 0 / -3.0 dB

RIAA Equalization Deviation
[R, T, K, A, B, G, F, L models]
- PHONO (MM) ..... 0 ±0.5 dB

Total Harmonic Distortion
- PHONO (MM) to REC OUT (20 Hz to 20 kHz, 1 V)
  ..... 0.02 % or less
- AV5 etc. (PURE DIRECT) to FRONT SP OUT
  (20 Hz to 20 kHz, 50 W, 8 ohms)
  ..... 0.06 % or less

Signal to Noise Ratio (IHF-A Network)
- PHONO (MM) (Input shorted) to REC OUT
  5 mV ..... 81 dB or more
- AV5, etc. (PURE DIRECT) (Input shorted) to SP OUT
  250 mV ..... 100 dB or more

Residual Noise (IHF-A Network)
- FRONT L/R SP OUT ..... 150 µV or less

Channel Separation (1 kHz / 10 kHz)
- PHONO (Input shorted)
  ..... 60 dB or more / 55 dB or more
- AV5, etc. (Input 5.1 k-ohms shorted)
  ..... 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
- BASS
  - Boost/Cut ..... ±6 dB / 0.5 dB step / 50 Hz
  - Turnover frequency ..... 350 Hz
- TREBLE
  - Boost/Cut ..... ±6 dB / 0.5 dB step / 20 kHz
  - Turnover frequency ..... 3.5 kHz

Filter Characteristics
- FRONT, CENTER, SURROUND, SURROUND BACK small (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

Video Signal Type [Monitor out] (Wall paper)
- U, C, R, K models ..... NTSC
- T, A, B, G, F, L models ..... PAL

Video Signal Type (Video conversion)
- ..... NTSC/PAL

Composite Video Signal Level
- ..... 1 Vp-p / 75 ohms

S-Video Signal Level [B, G, F models]
- Y ..... 1 Vp-p / 75 ohms
- C ..... 0.286 Vp-p / 75 ohms

Component Video Signal Level
- Y ..... 1 Vp-p / 75 ohms
- P_B/P_R ..... 0.7 Vp-p / 75 ohms

Video Maximum Input Level (VIDEO CONV. OFF)
- ..... 1.5 Vp-p or more

Signal to Noise Ratio
- ..... 50 dB or more

Monitor Out Frequency Response (VIDEO CONV. OFF)
- Component video signal level ..... 5 Hz to 60 MHz, -3 dB

■ FM Section

Tuning Range
- U, C models ..... 87.5 to 107.9 MHz
- R, L 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 µV (20.8 dBf)

Signal to Noise Ratio (IHF)
- Mono ..... 74 dB
- Stereo ..... 70 dB

Harmonic Distortion (1 kHz)
- Mono ..... 0.3 %
- Stereo ..... 0.3 %

Antenna Input
- ..... 75 ohms unbalanced

■ AM Section

Tuning Range

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

Antenna

..... Loop antenna

■ General

Power Supply

U, C models ..... AC 120 V, 60 Hz
R model ..... AC 110/120/220/230–240 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 220/230–240 V, 50/60 Hz

Power Consumption

U, C models ..... 400 W / 500 VA
R, T, K, A, B, G, F, L models ..... 400 W

Standby Power Consumption (reference data)

HDMI control: OFF / Standby through: OFF ..... 0.2 W or less
HDMI control: ON / Standby through: ON ..... 2.7 W or less

Maximum Power Consumption [R, L models]

..... 590 W

Dimensions (W x H x D)

..... 435 x 151 x 364 mm (17-1/8" x 6" x 14-3/8")

Weight ..... 11.0 kg (24.3 lbs.)

Finish

[RX-V667]
T model ..... Gold color
U, C, R, T, K, A, B, G, F, L models ..... Black color
R, K, G, F, L models ..... Titanium color

[HTR-6063]
C, A models ..... Black color

[RX-A700]
U model ..... Black 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) ..... x 1
VIDEO AUX input cover ..... x 1

* **Specifications are subject to change without notice.**

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

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SILENT CINEMA

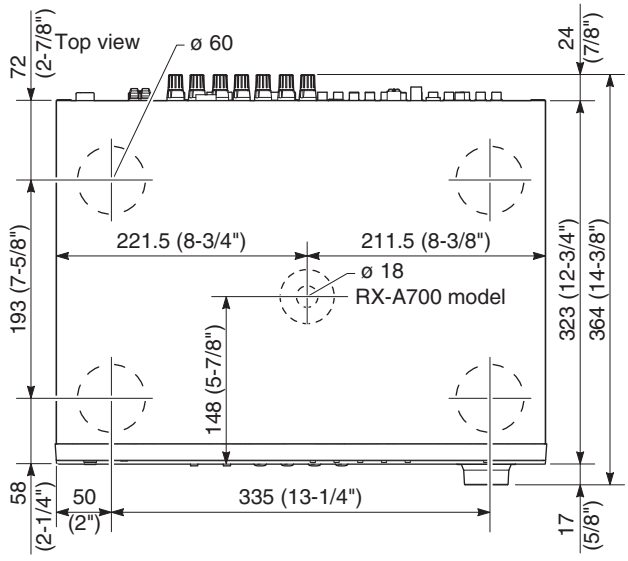
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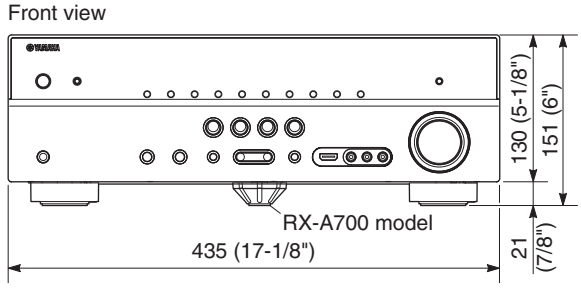
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• DIMENSIONS

Unit: mm (inch)





- **SELECT MENU**

Sound field parameters

Category	Program	Decode Type (*1)	DSP Level: -6 to +3 dB, [0]	Initial Delay: 1 to 99 ms	Room Size: 0.1 to 2.0	Liveness: 0 to 10	Surround Initial Delay: 1 to 49 ms	Surround Room Size: 0.1 to 2.0	Surround Liveness: 0 to 10	Center Level: 0 to 100 %, [100 %]	Surround L Level: 0 to 100 %, [100 %]	Surround R Level: 0 to 100 %, [100 %]	Surround Back Initial Delay: 1 to 49 ms	Surround Back Room Size: 0.1 to 2.0	Surround Back Liveness: 0 to 10	Surround Back L Level: 0 to 100 %, [7.1CH: 35 %, 6.1CH: 50 %]	Surround Back R Level: 0 to 100 %, [7.1CH: 35 %, 6.1CH: 50 %]	Front Presence L Level: 0 to 100 % [100 %]	Front Presence R Level: 0 to 100 % [100 %]	Reverb Time: 1.0 to 5.0 s	Reverb Delay: 0 to 250 ms	Reverb Level: 0 to 100 %	Direct: Auto / Off, [Auto]	Reset
MOVIE	Standard	●	●				●	●	●				●	●	●									●
	Spectacle	●	●	●	●		●	●					●	●										●
	Sci-Fi	●	●	●	●		●	●					●	●										●
	Adventure	●	●	●	●		●	●					●	●										●
	Drama	●	●	●	●		●	●					●	●										●
	Mono Movie		●	●	●	●														●	●	●		●
	Sports		●	●	●		●	●					●	●										●
	Action Game		●	●	●		●	●					●	●										●
	Roleplaying Game		●	●	●		●	●					●	●										●
	Music Video		●	●	●		●	●					●	●										●
MUSIC	Hall in Munich		●	●	●	●																		●
	Hall in Vienna		●	●	●	●																		●
	Chamber		●	●		●														●	●	●		●
	Cellar Club		●	●	●	●																		●
	The Roxy Theatre		●	●	●	●														●	●	●		●
	The Bottom Line		●	●	●	●																		●
	2ch Stereo																						●	●
	7ch Stereo									●	●	●				●	●	●	●					●
ENHANCER	Enhancer On																							
	Enhancer Off																							
SUR. DECODE	Surround Decoder	●																						●
STRAIGHT																								

***1** Surround Decoder

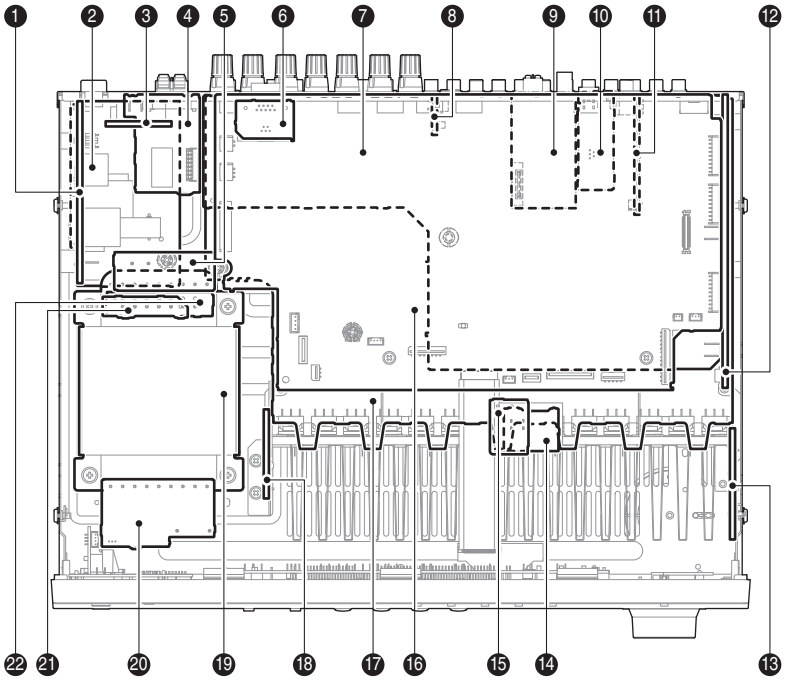
Decode Type	Pro Logic
	PL IIx Movie / PL II Movie
	PL IIx Music / PL II Music
	PL IIx Game / PL II Game
	Neo:6 Cinema
	Neo:6 Music

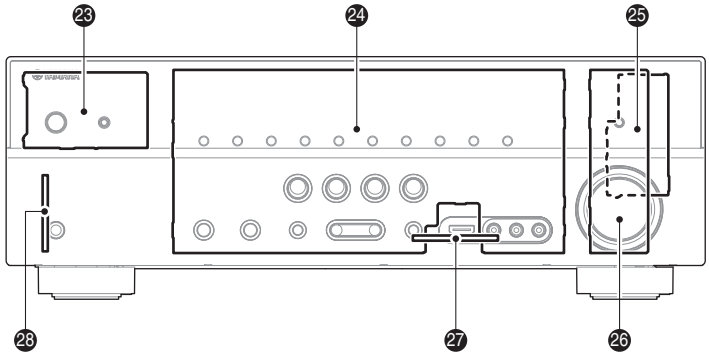
• SET MENU TABLE

MAIN MENU	SUB-MENU		PARAMETER		VALUE [INITIAL VALUE]
Speaker Setup	Auto	Measure			Optimizes the speaker configuration automatically using YPAO.
	Manual	Power Amp Assign			[7ch Normal] / 7ch +1ZONE / 5ch BI-AMP
		Configuration	Front Speaker		Large / [Small] * When “Subwoofer” is set to “None”, “Front speaker” is disabled.
			Center Speaker		Large / [Small] / None
			Surround Speaker L/R		Large / [Small] / None
			Surround Back Speaker L/R		Large x1 / Large x2 / Small x1 / [Small x2] / None
			Front Presence		[Use] / None
			Subwoofer		[Use] / None
			Phase		[Normal] / Reverse
			Extra Bass		[Off] / On
			Bass Cross Over		40 / 60 / [80] / 90 / 100 / 110 / 120 / 160 / 200 Hz
		Distance			Meter / [Feet]
			Front L		0.30 to 24.00 m, [3.00 m], 0.05 m step 1.0 to 80.0 ft, [10.0 ft], 0.2 ft step
			Front R		
			Center		
			Surround L		
			Surround R		
			Surround Back L		
			Surround Back R		
			Front Presence L		
			Front Presence R		
			Subwoofer		
		Level	Front L		-10.0 to +10.0 dB, [0.0 dB], 0.5 dB step
			Front R		
			Center		
			Surround L		
			Surround R		
			Surround Back L		
			Surround Back R		
			Front Presence L		
			Front Presence R		
			Subwoofer		
		Parametric EQ	PEQ Select		Manual / Flat / Front / Natural / [Through]
		PEQ Data Copy			Flat > Manual / Front > Manual / Natural > Manual
			Front L	Band / Gain	▶ Band: #1 to #7 ▲ Gain: -20.0 to +6.0 dB, [0.0 dB], 0.5 dB step
			Front R		
			Center	Freq. / Gain	▶ Frequency: 31.3 Hz to 16.0 kHz, [62.5 Hz] ▲ Gain: -20.0 to +6.0 dB, [0.0 dB], 0.5 dB step
			Surround L		
			Surround R	Q / Gain	▶ Q: 0.500 to 10.080, [1.000] ▲ Gain: -20.0 to +6.0 dB, [0.0 dB], 0.5 dB step
			Surround Back L		
			Surround Back R	Reset	Yes / No * Select “ENTER”
			Front Presence L		
			Front Presence R		
			Subwoofer		
		Test Tone			[Off] / On
Sound Setup	Lipsync	Mode			Manual / [Auto]
		Delay			0 to 250 ms, [0 ms], 1 ms step
	Dynamic Range				[MAX] / STD / MIN/AUTO
	Max. Volume				-30.0 to +16.5 dB (Maximum volume), [+16.5 dB], 5.0 dB step
	Initial Volume				[Off] / Mute, -80 to +16.5 dB, 0.5 dB step
	Adaptive DSP Level				[On] / Off
Video Setup	Analog to Analog Conversion				Off / [On]
	Processing				[Off] / On
		Resolution			[Auto] / 480p / 720p / 1080i / 1080p / Through * Select “ENTER”
		Aspect			[Through] / 16:9 Normal

MAIN MENU	SUB-MENU	PARAMETER		VALUE [INITIAL VALUE]
HDMI Setup	HDMI Control			[Off] / On
	ARC (Audio Return Channel)			Off / [On]
	TV Audio Input	TV		AV1 / AV2 / AV3 / [AV4] / AV5 / AV6 / AUDIO1 / AUDIO2
	Audio Output	Amp		[On] / Off
		OUT		On / [Off]
	Standby Through			[Off] / On * When HDMI Control is set to "On", "Standby Through" is disabled.
Multi Zone Setup	Zone2 Set	Max. Volume		-30.0 to +16.5 dB (Maximum volume), [+16.5 dB], 5.0 dB step
		Initial Volume		[Off] / Mute, -80 to +16.5 dB, 0.5 dB step
	Party Mode Set	Target: Zone2		Disable / [Enable]
Function Setup	Auto Power Down	Timer		4hours / 8hours / 12hours / [Off]
	Display Set	Front Panel Display	Dimmer	-4 to 0
			Scroll	
		Wall Paper		Picture / Gray
	Trigger Output	Trigger Mode		[Power] / Source / Manual
		Target Zone		Main / Zone2 / [All] * When "Trigger Mode" is set to "Power", "Target Zone" is disabled.
		Target Source	HDMI1	Low / [High] * When "Trigger Mode" is set to "Source", "Target Source" is disabled.
			HDMI2	
			HDMI3	
			HDMI4	
			HDMI5	
			AV1	
			AV2	
			AV3	
			AV4	
			AV5	
			AV6	
			VIDEO AUX	
			TUNER	
			Sirius Satellite Radio	
			AUDIO1	
			AUDIO2	
			DOCK	
			MULTI CH	
		Manual		Low / [High] * When "Trigger Mode" is set to "Manual", "Manual" is disabled.
	Memory Guard			[Off] / On
Language Setup				English (English), 日本語 (Japanese), Français (Franch), Deutsch (German), Español (Spanish), Русский (Russian)

■ INTERNAL VIEW





❶ VIDEO (2) P.C.B.
❷ VIDEO (3) P.C.B.
❸ MAIN (3) P.C.B. (R, L models)
❹ OPERATION (8) P.C.B.
❺ MAIN (2) P.C.B.
❻ DIGITAL (3) P.C.B. (RX-A700)
❼ VIDEO (1) P.C.B.
❽ VIDEO (4) P.C.B.
❾ AM/FM TUNER
❿ VIDEO (9) P.C.B. (B, G, F models)
⓫ OPERATION (9) P.C.B.
(R, T, K, A, B, G, F, L models)
⓬ OPERATION (2) P.C.B.
⓭ OPERATION (6) P.C.B.
⓮ OPERATION (7) P.C.B. (C model)
⓯ MAIN (5) P.C.B.
(U, R, T, K, A, B, G, F, L models)
⓰ DIGITAL (1) P.C.B.
⓱ MAIN (1) P.C.B.
⓲ MAIN (6) P.C.B.
⓳ POWER TRANSFORMER
⓴ VIDEO (6) P.C.B.
㉑ VIDEO (7) P.C.B.
(U, C, T, K, B, G, F models)
㉒ MAIN (4) P.C.B. (R, L models)
㉓ OPERATION (4) P.C.B.
㉔ OPERATION (1) P.C.B.
㉕ OPERATION (10) P.C.B.
㉖ OPERATION (5) P.C.B.
㉗ DIGITAL (2) P.C.B.
㉘ OPERATION (3) 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 positions 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, perform discharge by connecting a discharge resistor (5k-ohms/10W) between terminals at following positions.
  The time required for discharging is about 30 seconds.
  C3703 on VIDEO (2) P.C.B.
  Refer to “PRINTED CIRCUIT BOARDS: VIDEO (2) P.C.B.”.

■ DISASSEMBLY PROCEDURES

(Remove parts in the order as numbered.)
Disconnect the power cable from the AC outlet.

1. Removal of Top Cover

a. Remove 4 screws (①) and 5 screws (②). (Fig. 1)
b. Lift the rear of the top cover to remove it.

2. Removal of Front Panel Unit

a. Remove 7 screws (③), and remove W4401. (Fig. 1)
b. Remove CB8, CB458, CB472 and CB914. (Fig. 1)
c. Unlock and remove CB333. (Fig. 1)
d. Release 2 hooks, and remove the front panel unit. (Fig. 1)

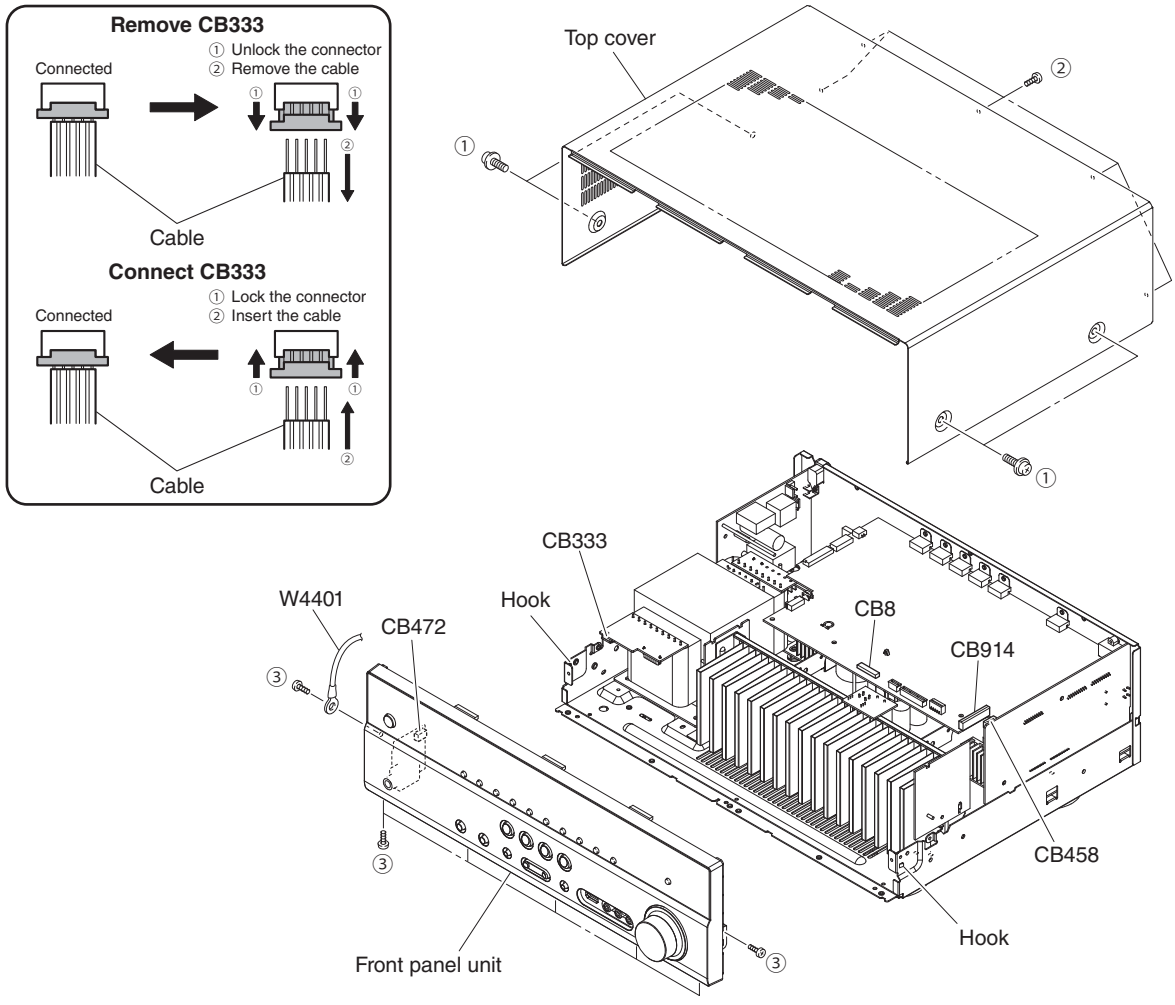


Fig. 1

3. Removal of DIGITAL (3) P.C.B. (RX-A700 model only)

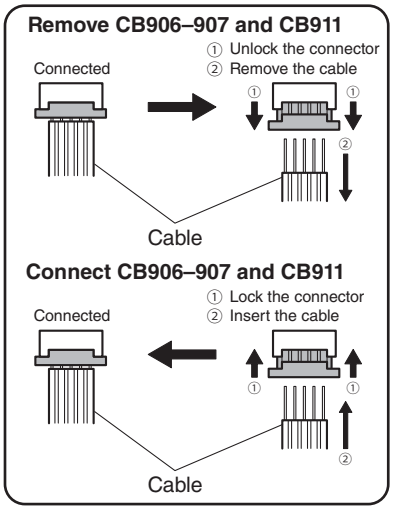
a. Remove 2 jack screws (④). (Fig. 3)
b. Remove CB901 and remove the DIGITAL (3) P.C.B. (Fig. 2)

4. Removal of DIGITAL (1) P.C.B.

a. Remove screw (⑤) and 6 screws (⑥). (Fig. 3)
b. Remove 3 screws. (⑦). (Fig. 2)
c. Remove CB34, CB73, CB904, CB913 and CB31 (B, G, F models). (Fig. 2)
d. Unlock and remove CB906-907 and CB911. (Fig. 2)
e. Remove the DIGITAL P.C.B. which is connected directly to the OPERATION (2) P.C.B. with board-to-board connectors. (Fig. 2)

5. Removal of AMP Unit

a. Remove screw (⑧), 2 screws (⑨) and 4 screws (⑩). (Fig. 2)
b. Remove 3 screws (⑪). (Fig. 3)
c. Remove the amp unit. (Fig. 2)



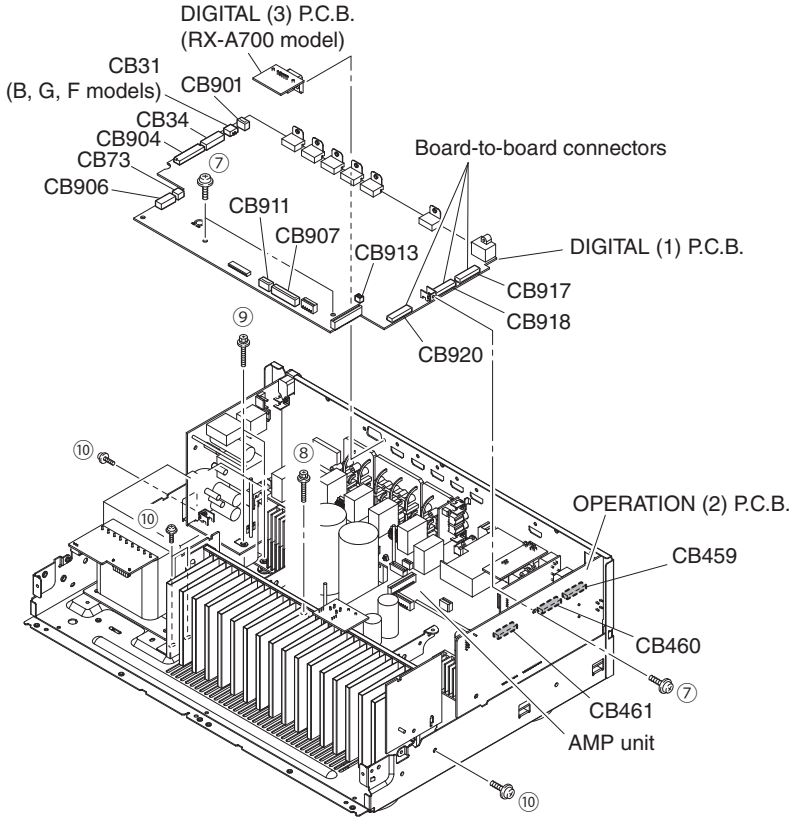


Fig. 2

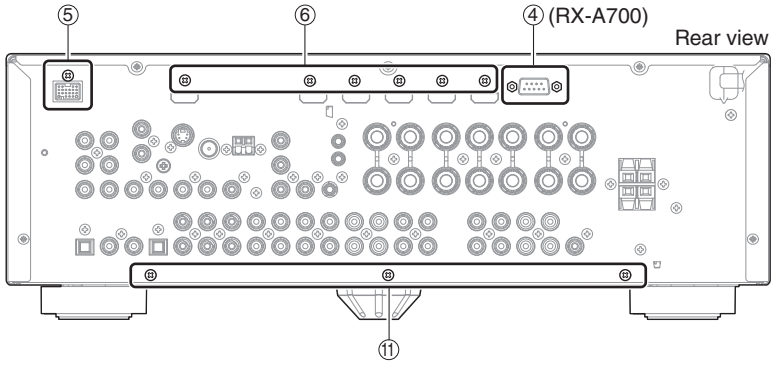


Fig. 3

When checking the P.C.B.s:

- Follow the procedure below to place the P.C.B.s (with rear panel) upright. (Fig. 5)
  a. Remove the top cover. (Fig. 1)
  b. Cut out a part of the DIGITAL (1) P.C.B. as shown in the figure below in order that screw (⑧) can be removed. (Fig. 4)
  c. Remove screw (⑧), 2 screws (⑨) and 5 screws (⑩). (Fig. 2)
  d. Remove 3 screws (⑩). (Fig. 3)
- Connect the ground points of the heatsink, rear panel and MAIN (1) P.C.B. (G101) to the chassis with a ground lead or the like. (Fig. 5)
- When connecting the flexible flat cable, be careful with polarity.
- Reconnect all cables (connectors) that have been disconnected.

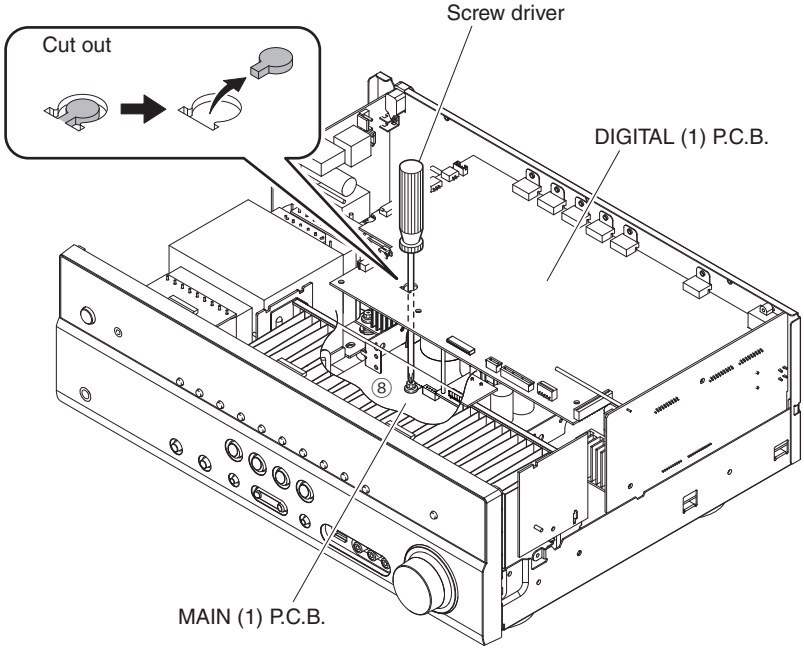


Fig. 4

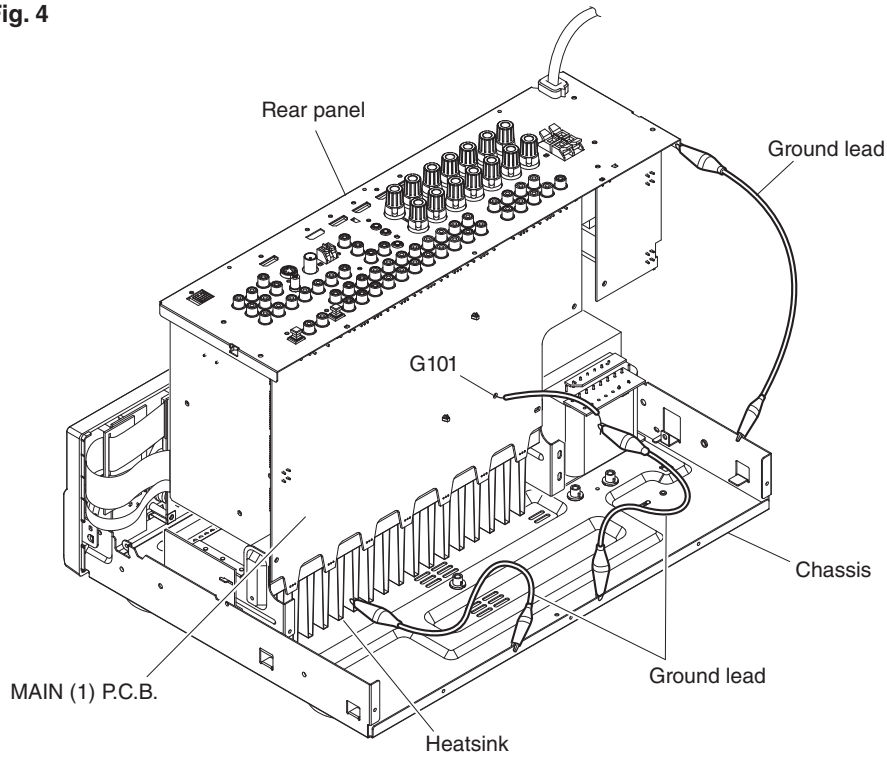


Fig. 5

■ UPDATING FIRMWARE

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

DIGITAL P.C.B.

IC951 (TI (DSP) flash ROM) of 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 “S4. ROM VER/SUM” 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: IC903 of the 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 “S3. FACTORY PRESET” menu. (See “SELF-DIAGNOSTIC FUNCTION”)

Select “PRESET RSRV”, press the “MAIN ZONE ⏻”(power) key of this unit to turn off the power once and turn on the power again. Then the back-up IC is initialized.

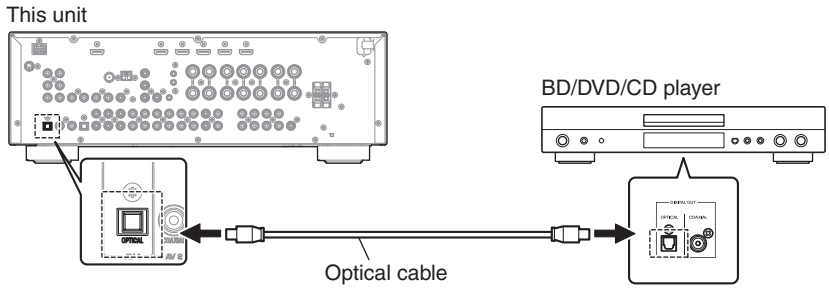
● Required Tools

- 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 OPTICAL jack



Example of COAXIAL jack

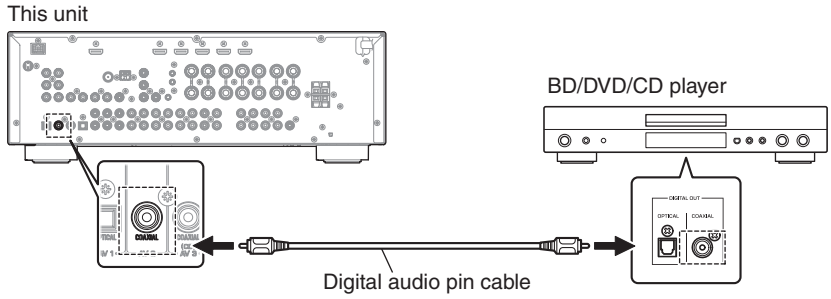
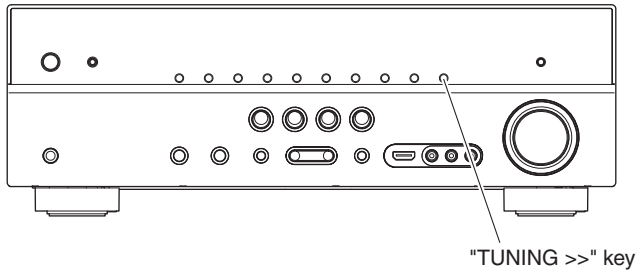


Fig. 1

● Operation Procedures

1. While pressing the “TUNING >>” key of this unit, connect the power cable of this unit to the AC outlet. (Fig. 2)
   The FIRMWARE UPDATE mode is activated and “CDDA Upgrader” is displayed. (Fig. 2)



Display

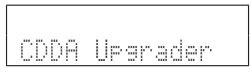


Fig. 2

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)

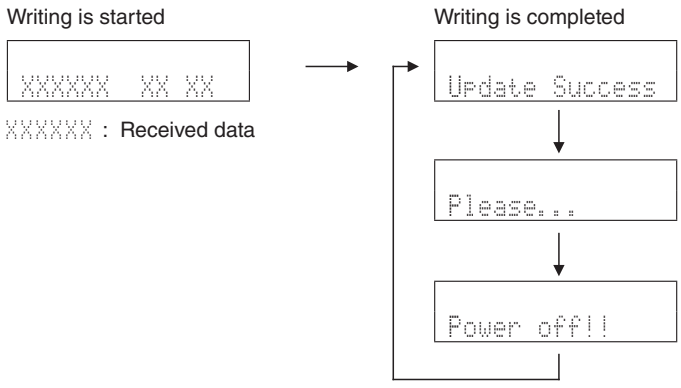


Fig. 3

* 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 3 of “Operation Procedures” again.

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

4. Press the “MAIN ZONE ⏻” (power) key of this unit 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”)

■ SELF-DIAGNOSTIC FUNCTION

This unit has self-diagnostic functions that are intended for inspection, measurement and location of faulty point.

There are 25 main menu items, each of which has sub-menu items.

Listed in the table below are main menu items and sub-menu items.

Note that not all menu items listed will apply to the models covered in this service manual.

No.	Main menu	No.	Sub-menu	
A: Audio system				
A1	DSP AUDIO	1	DSP MARGIN	
		2	DSP NON MARGIN	
		3	INVALID ITEM	(Not for service)
		4	INVALID ITEM	(Not for service)
A2	DIRECT AUDIO	1	ANALOG DIRECT	
A3	HDMI AUDIO	1	HDMI AUTO	
		2	INVALID ITEM	(Not for service)
		3	ARC1	
		4	INVALID ITEM	(Not for service)
A4	SPEAKERS SET	1	BI-AMP	
		2	ZONE/TONE=MAX	
		3	ZONE/TONE=MIN	
		4	INVALID ITEM	(Not for service)
		5	INVALID ITEM	(Not for service)
		6	D-PARTY MODE	
		7	FULL MUTE	
		8	INVALID ITEM	(Not for service)
		9	INVALID ITEM	(Not for service)
A5	MULTI CHANNEL INPUT	1	8 CHANNEL INPUT 8 ohms	
		2	8 CHANNEL INPUT 6 ohms	
A6	MIC CHECK	1	MIC ROUTE CHECK	
A7	MANUAL TEST	1	TEST ALL	
		2	TEST FRONT L	
		3	TEST CENTER	
		4	TEST FRONT R	
		5	TEST SURROUND R	
		6	TEST SURROUND BACK R	
		7	TEST SURROUND BACK L	
		8	TEST SURROUND L	
		9	TEST FRONT PRESENCE L	
		10	TEST FRONT PRESENCE R	
		11	INVALID ITEM	(Not for service)
		12	INVALID ITEM	(Not for service)
		13	TEST LFE 1	
		14	INVALID ITEM	(Not for service)
D: Display system				
D1	FL CHECK	1	FL CHECK	
		2	ALL SEGMENT OFF	
		3	ALL SEGMENT ON	
		4	CHECK PATTERN	

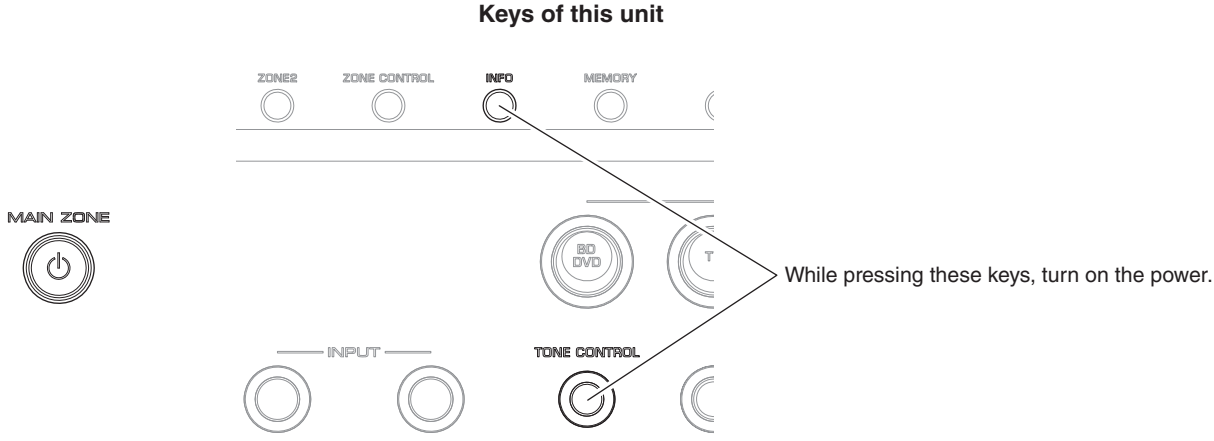
No.	Main menu	No.	Sub-menu
Z: Zone system			
Z1	ZONE TEST	1	AV1
		2	AV2
		3	AV3
		4	AV4
		5	AV5
		6	AV6
		7	AUDIO1
		8	AUDIO2
		9	V-AUX
		10	PHONO
R: Radio and satellite broadcasting system			
R1	SIRIUS (U model)	1	SIRIUS
		2	SR
		3	SSP
		4	MAC
		5	ADP
		6	PRDID
		7	SEQID
U: Universal system			
U1	DOCK	1	DOCK
U2	INVALID ITEM (Not for service)		
U3	INVALID ITEM (Not for service)		
N: Network system			
N1	INVALID ITEM (Not for service)		
C: Communication system			
C1	DIGITAL P.C.B. CHECK	1	ALL
		2	BUS FLASH ROM
		3	BUS FPGA
		4	I2C
		5	FPGA RAM
		6	BUS DIR
		7	BUS DSP1
		8	EEPROM
		9	RS-232C LOOPBACK TEST (RX-A700 model)
		10	INVALID ITEM (Not for service)
C2	HDMI INFO	1	HMN
		2	HID
V: Video system			
V1	ANALOG VIDEO CHECK	1	ANALOG BYPASS
		2	DIGITAL BYPASS
		3	ZONE BYPASS
		4	MUTE CHECK
		5	TEST PATTERN
		6	VIDEO IN

No.	Main menu	No.	Sub-menu	
V2	DIGITAL VIDEO CHECK	1	LOOPBACK TEST1	
		2	LOOPBACK TEST2	
		3	LOOPBACK TEST3	
		4	HDMI REPEAT	
		5	DIGITAL CVBS	
		6	DIGITAL Y/C	
		7	DIGITAL COMPONENT	
		8	DIGITAL COMPONENT SC	
		9	GUI-VIDEO OUT	
P: Power and protection system				
P1	SYSTEM MONITOR	1	DC	
		2	PS1/PS2	
		3	TM	
		4	OUTPUT LEVEL	
		5	LIMITER CONTROL	
		6	L3	(Not for service)
		7	KEY1/KEY2	
P2	PROTECTION HISTORY	1	HISTORY 1	
		2	HISTORY 2	
		3	HISTORY 3	
		4	HISTORY 4	
S: System and version system				
S1	FIRMWARE UPDATE	1	F/W UPDATE	(Not for service)
S2	SET INFORMATION	1	MODEL	
		2	DESTINATION	
		3	INVALID ITEM	(Not for service)
S3	FACTORY PRESET	1	PRESET INH/RSRV	
S4	ROM VERSION/CHECKSUM	1	SYSTEM VERSION	
		2	MICROPROCESSOR VERSION	
		3	MICROPROCESSOR CHECKSUM	
		4	FLASH ROM VERSION	
		5	FLASH ROM CHECKSUM	
		6	VNP2 VERSION	(Not for service)
		7	VNP2 CHECKSUM	(Not for service)
		8	DSP1 VERSION	
		9	DSP1 CHECKSUM	
		10	INVALID ITEM	(Not for service)
		11	INVALID ITEM	(Not for service)
		12	GUI VERSION	
		13	FPGA GUI VERSION	
		14	FPGA IP VERSION	
		15	SIRIUS VERSION	
		16	INVALID ITEM	(Not for service)
		17	HD RADIO VERSION	(Not for service)
S5	INVALID ITEM (Not for service)			

● Starting Self-Diagnostic Function

While pressing the “TONE CONTROL” and “INFO” keys of this unit as shown in the figure below, press the “MAIN ZONE ⏻ ”(power) key of this unit to turn on the power.

The self-diagnostic function mode is activated.



● Starting Self-Diagnostic Function in the protection cancel mode

If the protection function works and causes hindrance to trouble shoot, cancel the protection function as described below, and it will be possible to enter the self-diagnostic function mode.

(The protection functions other than the excess current detect function will be disabled.)

While pressing the “TONE CONTROL” and “INFO” keys as shown in the figure above, press the “MAIN ZONE ⏻” (power) key to turn on the power and keep pressing those 2 keys for 3 seconds or longer.

The self-diagnostic function mode is activated with the protection functions disabled.

In this mode, the “SLEEP” segment of the FL display of this unit flashes to indicate that the mode is self-diagnostic function mode with the protection functions disabled.

CAUTION!
Using this product with the protection function disabled may cause further damage to this unit. Use special care for this point when using this mode.

● Canceling Self-Diagnostic Function

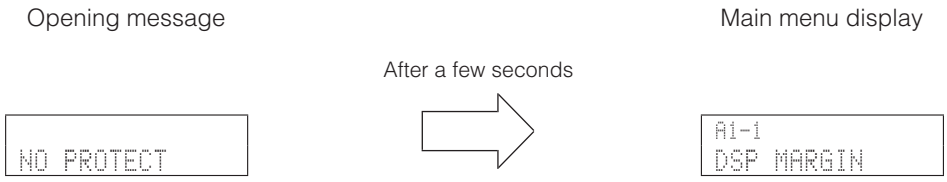
1. Before canceling self-diagnostic function, execute setting for FACTORY PRESET of main menu No. S3. (Memory initialization inhibited or Memory initialized).
   * In order to keep the user memory preserved, be sure to select PRESET INHIBIT (Memory initialization inhibited).
2. Press the “MAIN ZONE ⏻” (power) key of this unit to turn off the power.

● Display provided when Self-Diagnostic Function started

The display is as described below depending on the situation the last time the power to this unit is turned off.

1. When the power is turned off by usual operation:

The FL display of this unit displays "NO PROTECT" then the main menu (sub-menu "A1-1. DSP MARGIN" of main menu No. A1 DSP AUDIO) a few seconds later.



2. When the protection function worked to turn off the power:

The FL display of this unit displays the data of protection function which worked at that time then the main menu (sub-menu "A1-1. DSP MARGIN" of main menu No. A1 DSP AUDIO) a few seconds later.

Note: At that time if you reactivate the self-diagnostic function after turning off the power once by pressing the "MAIN ZONE ⏻" (power) key, "NO PROTECT" will be displayed because that situation is equal to "1. When the power is turned off by usual operation:" described above.

However the protection function history is stored in a back-up IC with a backup. For details, refer to main menu P2 PROTECTION HISTORY."

2-1. When there is a history of protection function due to excess current.



Cause: An excessive current flowed through the power amplifier.
Supplementary information: As current of the power amplifier is detected, the abnormal channel can be identified by checking the current detect transistor.

Turning on the power without correcting the abnormality will cause the protection function to work immediately and the power supply will instantly be shut off.

Notes)

- **Applying the power to this unit without correcting the abnormality can be dangerous and cause additional circuit damage. To avoid this, if "I PROTECT" protection function works 1 time, the power will not turn on even when the "MAIN ZONE ⏻" (power) key is pressed. In order to turn on the power again, start up the self-diagnostic function.**
- **The output transistors in each amplifier channel should be checked for damage before applying power to this unit.**
- **Amplifier current should be monitored by measuring DC voltage across the emitter resistors for each channel.**

2-2. When the protection function worked due to abnormal DC output.



Cause: DC output of the power amplifier is abnormal.
Supplementary information: The protection function worked due to a DC voltage appearing at the speaker terminal. A cause could be a defect in the amplifier.

Turning on the power without correcting the abnormality will cause the protection function to work in 3 seconds and the power supply will be shut off.

2-3. When the protection function worked due to abnormal voltage in the power supply section.



Cause: The voltage in the power supply section is abnormal.
Supplementary information: The protection function worked due to a defect or overload in the power supply.

Turning on the power without correcting the abnormality will cause the protection function to work in 1 seconds and the power supply will be shut off.

Notes)

- **Applying the power to this unit without correcting the abnormality can be dangerous and cause additional circuit damage. To avoid this, if "PS" and "DC" protection function works 3 times consecutively, the power will not turn on even when the "MAIN ZONE ⏻" (power) key is pressed. In order to turn on the power again, start up the self-diagnostic function.**
- **The output transistors in each amplifier channel should be checked for damage before applying power to this unit.**
- **Amplifier current should be monitored by measuring DC voltage across the emitter resistors for each channel.**

2-4. When the protection function worked due to excessive heatsink temperature.



Cause: The temperature of the heatsink is excessive.
Supplementary information: The protection function worked due to the temperature limit being exceeded. Causes could be poor ventilation or a defect related to the thermal sensor.

Turning on the power without correcting the abnormality will cause the protection function to work in 1 seconds and the power supply will be shut off.

● **History of protection function**

When the protection function has worked, its history is stored in memory with a backup.

Even if no abnormality is noted while servicing the unit, an abnormality which has occurred previously can be defined as long as the backup data has been stored.

For details, refer to main menu P2 PROTECTION HISTORY.

● Operation procedure of Main menu and Sub-menu

There are 25 main menu items, each of having sub-menu items.

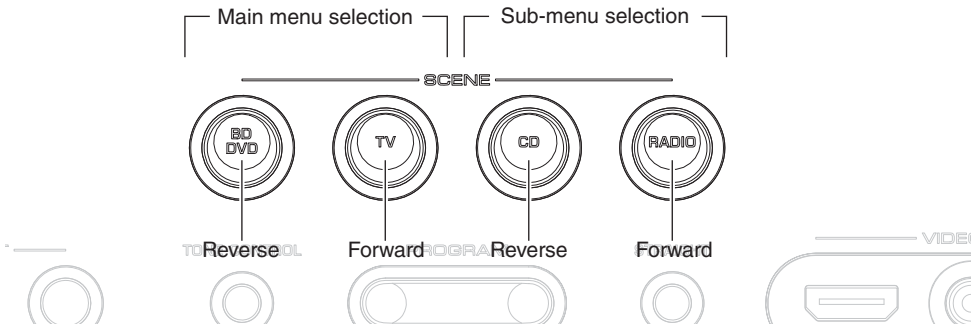
Main menu selection

Select the menu using “SCENE TV” (forward) and “SCENE BD/DVD” (reverse) keys.

Sub-menu selection

Select the sub-menu using “SCENE RADIO” (forward) and “SCENE CD” (reverse) keys.

Keys of this unit



● Functions in Self-Diagnostic Function mode

In addition to the self-diagnostic function menu items, functions as listed below are available.

- Power ON/OFF
- Master volume
- Muting
- Input selection

* Functions related to the tuner and the set menu are not available.

● Initial settings used to start Self-Diagnostic Function

The following initial settings are used when starting self-diagnostic function.
When self-diagnostic function is canceled, these settings are restored to those before starting self-diagnostic function.

- Master volume: -20 dB / Zone volume: +2.5dB
- Input: HDMI1 / Zone: AUDIO1
- Main menu: A1-1. DSP MARGIN
- Speaker setting: LARGE, Bass out to SWFR (All channels)
- HDMI Control: Off
- Zone: On

● Details of Self-Diagnostic Function menu

A1. DSP AUDIO

This menu is used to check audio signal route via DSP.

A1-1. DSP MARGIN

The audio signal is output including the head margin via DSP.

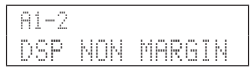
Head margin
Front L/R, Center, Surround L/R, Surround Back L/R Presence L/R: +12 dB
Subwoofer: +18 dB

* When input source is stereo, signal is assigned as below.
Front L: Front L, Center, Surround L, Surround Back L, Presence L
Front R: Front R, Surround R, Surround Back R, Presence R
Front L +10 dB: Subwoofer



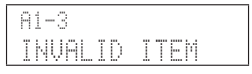
A1-2. DSP NON MARGIN

The audio signal is output without including the head margin via DSP.
Front L/R / Center / Surround L/R / Surround Back L/R: 0 dB
Subwoofer: -10 dB



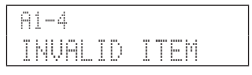
A1-3. INVALID ITEM

Not for service.



A1-4. INVALID ITEM

Not for service.



A2. DIRECT AUDIO

This menu is used to check audio signal route of PURE DIRECT.

A2-1. ANALOG DIRECT

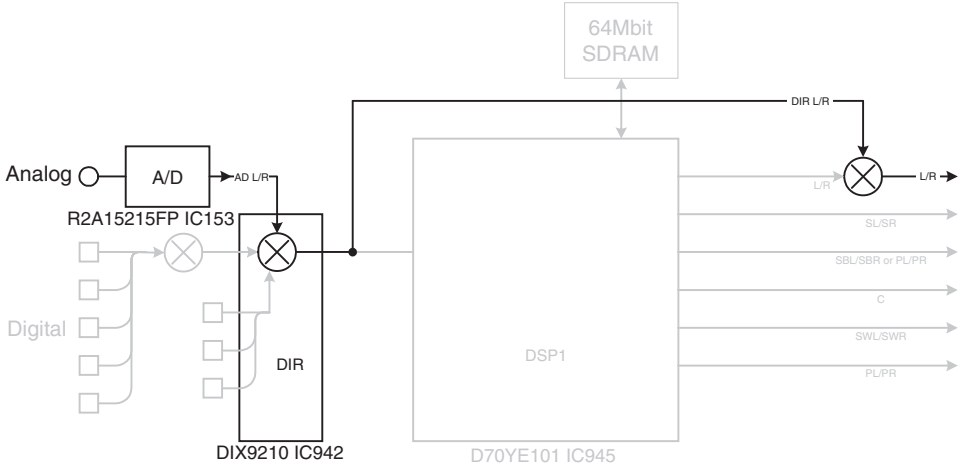
The analog input audio signal is output to FRONT L/R in PURE DIRECT mode.



INPUT: AV5 ANALOG
SPEAKER OUT: 1 kHz, SUBWOOFER OUTPUT: 50 Hz

Input level	Volume	SPEAKERS OUTPUT					SUBWOOFER OUTPUT
		FRONT	CENTER	SURROUND	SURROUND BACK	PRESENCE/ ZONE2	
Both ch, -20 dBm	+6.5 dB	+13.0 dBm	- ∞	- ∞	- ∞	- ∞	- ∞

DSP BYPASS
(ANALOG)

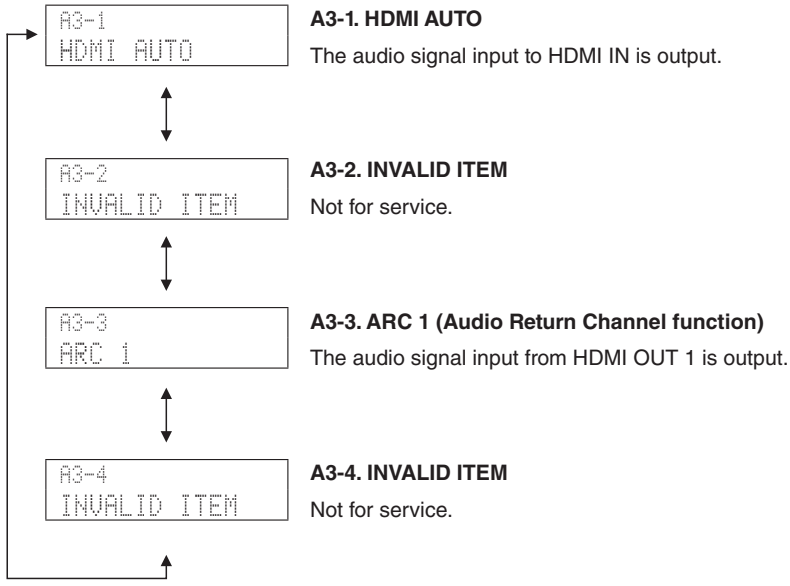


(Shaded items not used in this mode)

A3. HDMI AUDIO

This menu is used to check the route of audio signal input to HDMI IN/OUT.

* Before check using sub-menu A3-3, be sure to connect a TV monitor equipped with Audio Return Channel function to this unit.



A3-1. HDMI AUTO

The audio signal input to HDMI IN is output.

A3-2. INVALID ITEM

Not for service.

A3-3. ARC 1 (Audio Return Channel function)

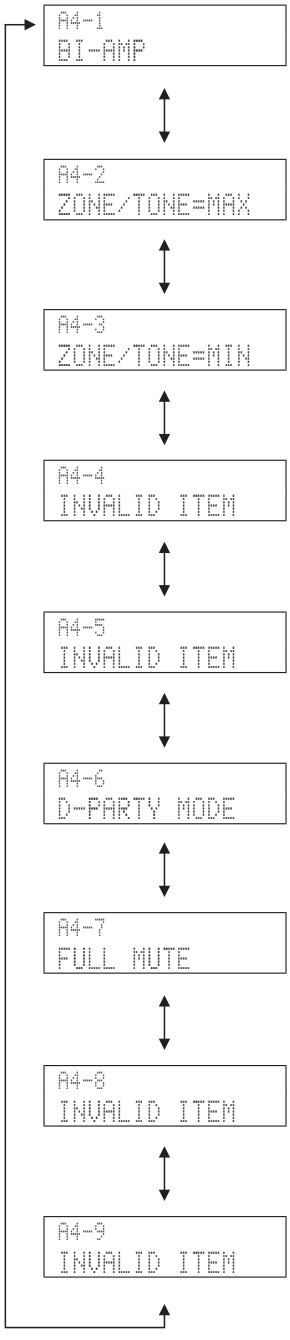
The audio signal input from HDMI OUT 1 is output.

A3-4. INVALID ITEM

Not for service.

A4. SPEAKERS SET

This menu is used to check the speaker output.



A4-1. BI-AMP

The FRONT L/R signal is distributed and output to SURROUND BACK/BI-AMP L/R terminal.

A4-2. ZONE/TONE=MAX

The audio signal is output with the tone control “BASS +10 dB”, “TREBLE +10 dB”.

A4-3. ZONE/TONE=MIN

The audio signal is output with the tone control “BASS -10 dB”, “TREBLE -10 dB”.

A4-4. INVALID ITEM

Not for service.

A4-5. INVALID ITEM

Not for service.

A4-6. D-PARTY MODE

The FRONT L/R signal is distributed and output to ZONE2 L/R terminal.

ZONE2 volume: -3.5 dB

A4-7. FULL MUTE

The audio signals are muted at all channels.

A4-8. INVALID ITEM

Not for service.

A4-9. INVALID ITEM

Not for service.

INPUT: AV5 ANALOG
SPEAKER OUT: 1 kHz, SUBWOOFER OUTPUT: 50 Hz

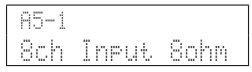
Sub-memu	Input level	Volume	SPEAKERS OUTPUT					SUB-WOOFER OUTPUT
			FRONT	CENTER	SURROUND	SURROUND BACK	PRESENCE/ ZONE2	
BI-AMP	Both ch, -20 dBm	+6.5 dB	+13.0 dBm	+13.0 dBm	+13.0 dBm	+13.0 dBm	- ∞	-6.5 dBm
ZONE/TONE=MAX	Both ch, -20 dBm	+6.5 dB	+13.0 dBm	+13.0 dBm	+13.0 dBm	- ∞	+13.0 dBm	-6.5 dBm
ZONE/TONE=MIN	Both ch, -20 dBm	+6.5 dB	+13.0 dBm	+13.0 dBm	+13.0 dBm	- ∞	+13.0 dBm	-6.5 dBm
INVALID ITEM (Not for service)	Both ch, -20 dBm	+6.5 dB	–	–	–	–	–	–
INVALID ITEM (Not for service)	Both ch, -20 dBm	+6.5 dB	–	–	–	–	–	–
D-PARTY MODE	Both ch, -20 dBm	+6.5 dB	+13.0 dBm	+13.0 dBm	+13.0 dBm	- ∞	+13.0 dBm	-6.5 dBm
FULL MUTE	Both ch, -20 dBm	+6.5 dB	- ∞	- ∞	- ∞	- ∞	- ∞	- ∞
INVALID ITEM (Not for service)	Both ch, -20 dBm	+6.5 dB	–	–	–	–	–	–
INVALID ITEM (Not for service)	Both ch, -20 dBm	+6.5 dB	–	–	–	–	–	–

A5. MULTI CHANNEL INPUT

This menu is used to check the route of audio signal input to MULTI CHANNEL INPUT.

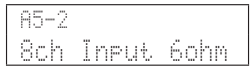
A5-1. 8 CHANNEL INPUT 8 ohms

The audio signal input to MULTI CHANNEL INPUT is output with the speaker impedance “8 ohms” setting.



A5-2. 8 CHANNEL INPUT 6 ohms

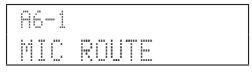
The audio signal input to MULTI CHANNEL INPUT is output with the speaker impedance “6 ohms” setting.



A6. MIC CHECK

A6-1. MIC ROUTE CHECK

The signals input through the YPAO microphone are output to only FRONT L channel via A/D-D/A.

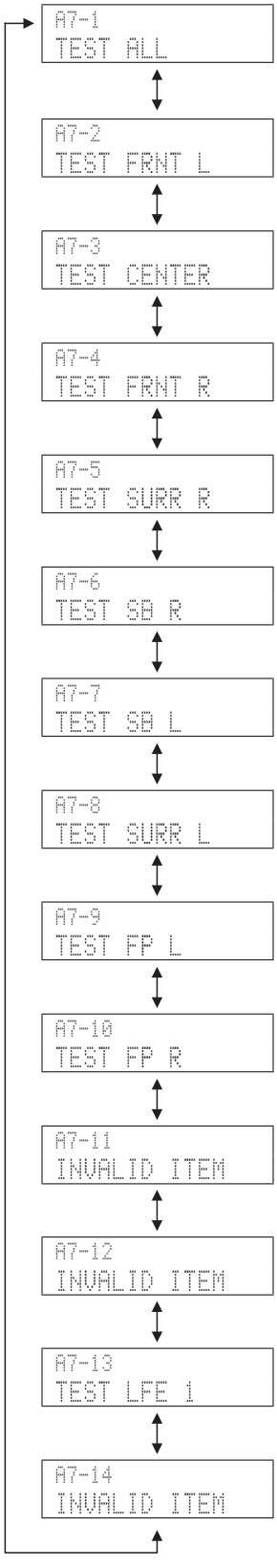


A7. MANUAL TEST

The built-in noise generator of DSP outputs the test noise or test tone through the channels specified by using the sub-menu.

The noise frequency for LFE is 30 to 80 Hz. Other than that, the noise frequency is 500 to 2 kHz.

The tone frequency for LFE is 50 Hz sine wave. Other than that, the tone frequency is 1kHz sine wave.



A7-1. TEST ALL

The test noise is output from all channels.

A7-2. TEST FRONT L

The test tone is output from FRONT L channel.

A7-3. TEST CENTER

The test tone is output from CENTER channel.

A7-4. TEST FRONT R

The test tone is output from FRONT R channel.

A7-5. TEST SURROUND R

The test tone is output from SURROUND R channel.

A7-6. TEST SURROUND BACK R

The test tone is output from SURROUND BACK R channel.

A7-7. TEST SURROUND BACK L

The test tone is output from SURROUND BACK L channel.

A7-8. TEST SURROUND L

The test tone is output from SURROUND L channel.

A7-9. TEST FRONT PRESENCE L

The test tone is output from FRONT PRESENCE L channel.

A7-10. TEST FRONT PRESENCE R

The test tone is output from FRONT PRESENCE R channel.

A7-11. INVALID ITEM

Not for service.

A7-12. INVALID ITEM

Not for service.

A7-13. TEST LFE 1

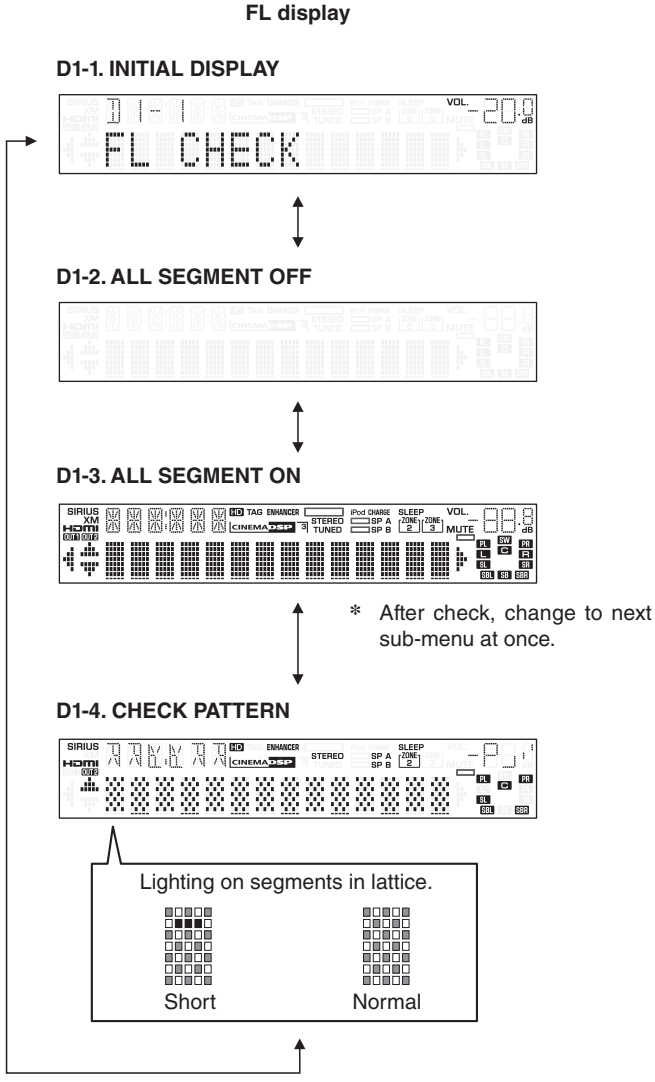
The test tone is output from LFE 1 (SUBWOOFER 1) channel.

A7-14. INVALID ITEM

Not for service.

D1. FL CHECK

This menu is used to check the FL display.



Segment conditions of the FL driver and the FL tube are checked by turning ON and OFF all segments.

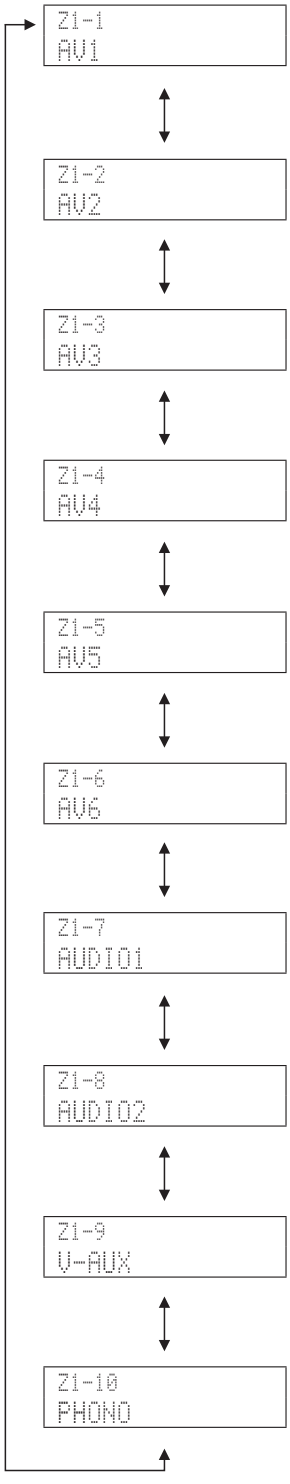
Next, the operation of the FL driver is checked by using the dimmer control.

Then a short between segments next to each other is checked by turning ON and OFF all segments alternately (in lattice).

(In the above example, the segments in the second row from the top are shorted.)

Z1. ZONE TEST

This menu is used to check audio signal route to ZONE 2 OUT.



Z1-1. AV1
The audio signal input to AV 1 is output to ZONE 2 OUT.

Z1-2. AV2
The audio signal input to AV 2 is output to ZONE 2 OUT.

Z1-3. AV3
The audio signal input to AV 3 is output to ZONE 2 OUT.

Z1-4. AV4
The audio signal input to AV 4 is output to ZONE 2 OUT.

Z1-5. AV5
The audio signal input to AV 5 is output to ZONE 2 OUT.

Z1-6. AV6
The audio signal input to AV 6 is output to ZONE 2 OUT.

Z1-7. AUDIO 1
The audio signal input to AUDIO 1 is output to ZONE 2 OUT.

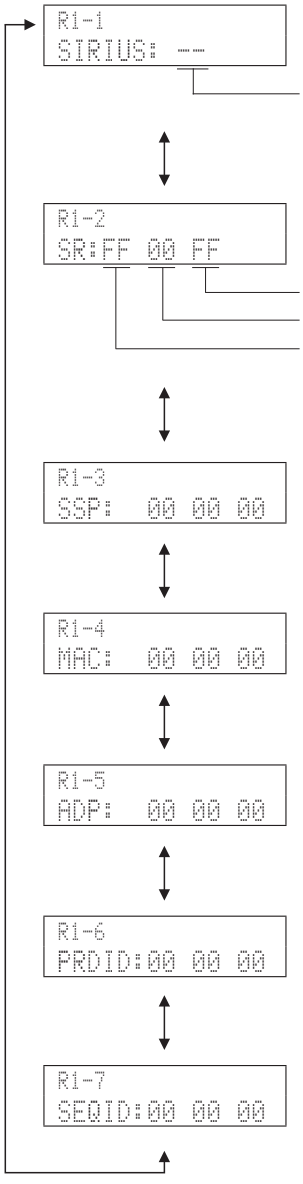
Z1-8. AUDIO 2
The audio signal input to AUDIO 2 is output to ZONE 2 OUT.

Z1-9. V-AUX
The audio signal input to VIDEO AUX is output to ZONE 2 OUT.

Z1-10. PHONO (R, T, K, A, B, G, F, L models)
The audio signal input to PHONO is output to ZONE 2 OUT.

R1. SIRIUS (U model)

The SIRIUS information are displayed.



R1-1. SIRIUS

Connection of the SIRIUS antenna module is checked.

OK : Normal
NG : Abnormal
- - : No connected

R1-2. SR

The connection information of the SIRIUS antenna module is displayed.

The result of antenna diagnostic mode (status)
Antenna error history (SSP Error Codes)
Antenna generation (gen_ID)

R1-3. SSP

The SIRIUS version #0 (SSP) is displayed.

R1-4. MAC

The SIRIUS version #1 (MAC) is displayed.

R1-5. ADP

The SIRIUS version #2 (ADP) is displayed.

R1-6. PRDID

The PRD ID (Product ID) is displayed.

R1-7. SEQID

The SEQ ID (Sequence ID) is displayed.

U1. DOCK

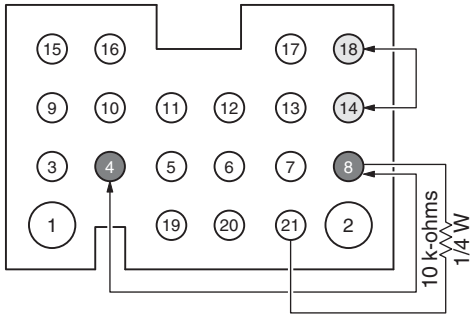
This menu is used to check the DOCK connector without the iPod itself.

With the power to this unit turned off, short between pins No. 14 (TX) and No. 18 (RX), between pins No. 4 (iPDET) and No. 8 (DGND). Also, connect a 10 k-ohms, 1/4 W resistor between pins NO. 21 (DKID) and No. 8 (DGND). (Make sure that the power is turned off when shorting pins.)

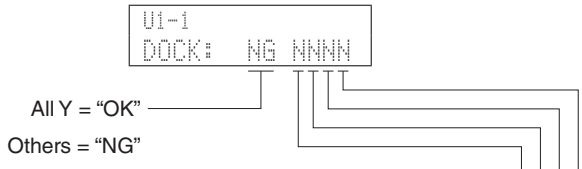
Start up the self-diagnostic function and select this menu.

The check result is displayed according to the following display specifications.

Note) Be sure to return the shorted pins to their original condition after executing this test.



DOCK CONNECTOR



Check item	Result		Display
UART loop back test	OK		Y
	NG		N
DOCK_AP (iPod accessory power) detection	–	High = YES	Y
		Low = No	N
DOCK_PON (iPod installation to DOCK) detection	IC904 pin No. 9	Low = installed	Y
		High = not installed	N
DOCK_N_DET (DOCK ID) detection	IC908 pin No. 34	10 k-ohms, 1/4 W pull down	Y
		Other	N

U2. INVALID ITEM

Not for service.



U3. INVALID ITEM

Not for service.



N1. INVALID ITEM

Not for service.



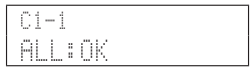
C1. DIGITAL P.C.B. CHECK

This menu is used to check the communication and bus line connection between devices on the DIGITAL P.C.B..

C1-1. ALL

The synthetic judgment result of sub-menu C1-2. to C1-9 is displayed.

OK : No error detected
NG : An error is detected



C1-2. BUS FLASH ROM

Reading/writing FLASH ROM (IC951) are checked.

OK : No error detected
NG : An error is detected



C1-3. BUS FPGA

Communication and bus line connection between microprocessor (IC908) and FPGA (IC64) are checked.

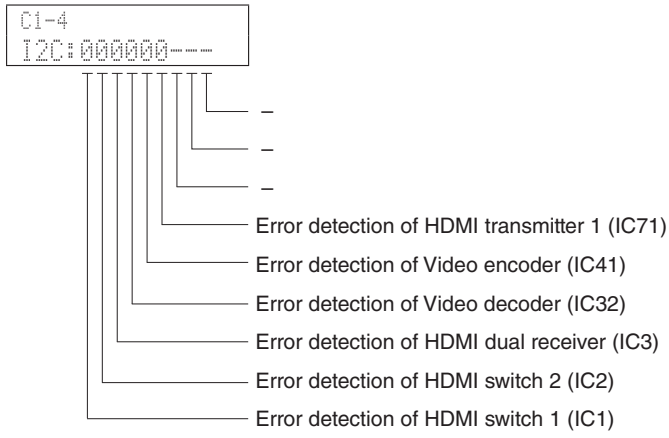
OK : No error detected
NG : An error is detected



C1-4. I2C

The I2C (Inter integrated route) bus line connection is checked.

0 : No error detected
1 : An error is detected



C1-5. FPGA RAM

Reading/writing SDRAM (IC62) are checked.

OK : No error detected
NG : An error is detected



C1-6. BUS DIR

Communication and bus line connection between microprocessor (IC908) and DIR (IC42) are checked.

OK : No error detected
NG : An error is detected



C1-7. BUS DSP1

Communication and bus line connection between microprocessor (IC908) and DSP1 (IC945) are checked.

OK : No error detected
NG : An error is detected



C1-8. EEPROM

The Read check of EEPROM (IC903) are executed.

OK : No error detected
NG : An error is detected

```
C1-8
EEPROM:OK
```

C1-9. RS-232C LOOPBACK TEST (RX-A700 model)

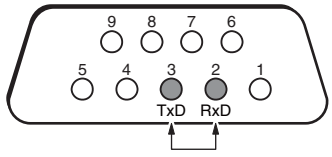
Transmission of the RS-232C terminal is checked. “OK” appears when the data is transmitted properly and “NG” when it is not.

With the power to this unit turned off, short between pins No. 2 (RxD) and No. 3 (TxD) of the RS232C terminal. (Be sure to turn off the power when shorting the pins.)

Start up the self-diagnostic function and select this menu.

```
C1-9
232C DATA:OK
```

RS-232C terminal



C1-10. INVALID ITEM

Not for service.

```
C1-10
INVALID ITEM
```

C2. HDMI INFORMATION

This menu is used to display information about HDMI.

C2-1. HDMI model name

The model name of this unit written in HDMI module is displayed.

RX-V667
HTR-6063
RX-A700

```
C2-1
HMN:RX-V667
```

C2-2. HDMI product ID

The product ID of this unit written in HDMI module is displayed.

RX-V667 : 314B
HTR-6063 : 314C
RX-A700 : 3155

```
C2-2
HID:314B
```

V1. ANALOG VIDEO CHECK

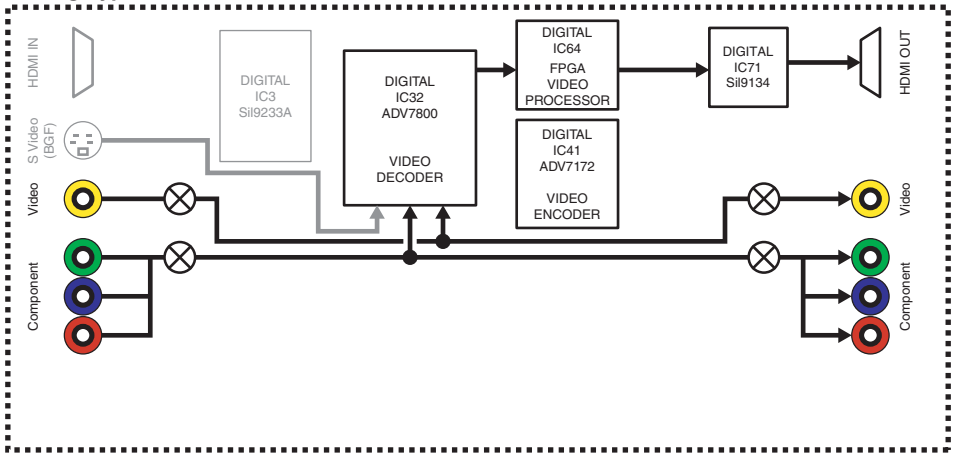
This menu is used to check the analog video signal route.

V1-1. ANALOG BYPASS

The video signal is converted and output as shown below.



Analog bypass

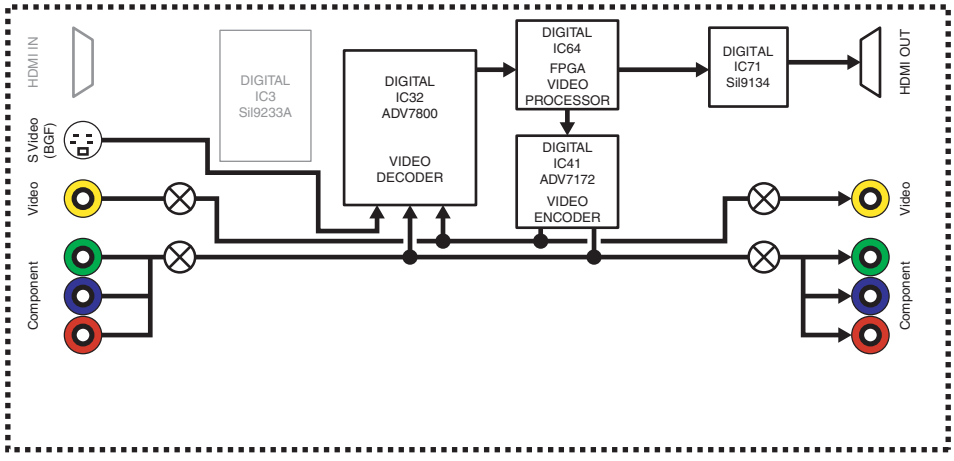


V1-2. DIGITAL BYPASS

The video signal is converted and output as shown below.



Analog bypass



V1-3. ZONE BYPASS

Not for service.

```
V1-3
ZONE BYPASS
```

V1-4. MUTE CHECK

The video signal is muted.

MUTE signals “VID_N_MMT” (8 pin), “CPNT_N_VMT” (12 pin) and “VID_N_RMT” (17 pin) are output from the IC of the VIDEO P.C.B..

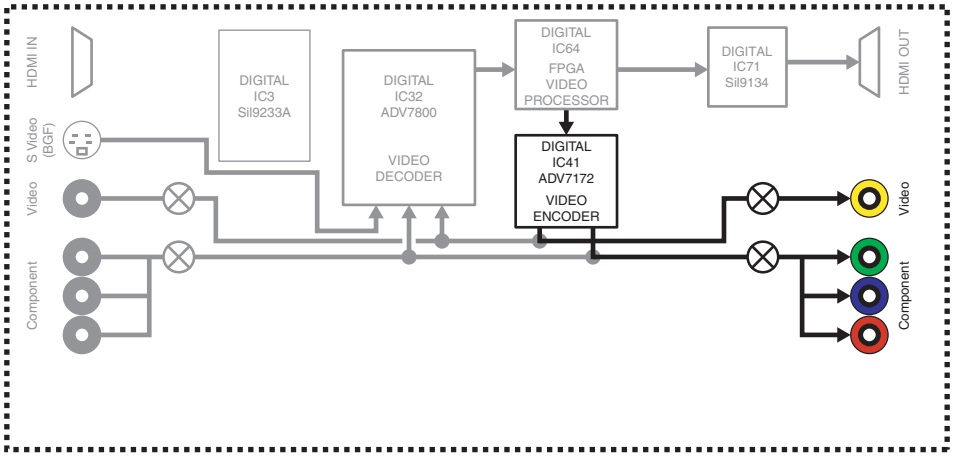
```
V1-4
MUTE CHECK
```

V1-5. TEST PATTERN

The test pattern is output from video encoder (IC41 of the DIGITAL P.C.B.).

```
V1-5
TEST PATTERN
```

Analog bypass



Test pattern



V1-6. VIDEO INFORMATION

The information of input analog video signals is displayed.

```
V1-6
VID IN:------
```

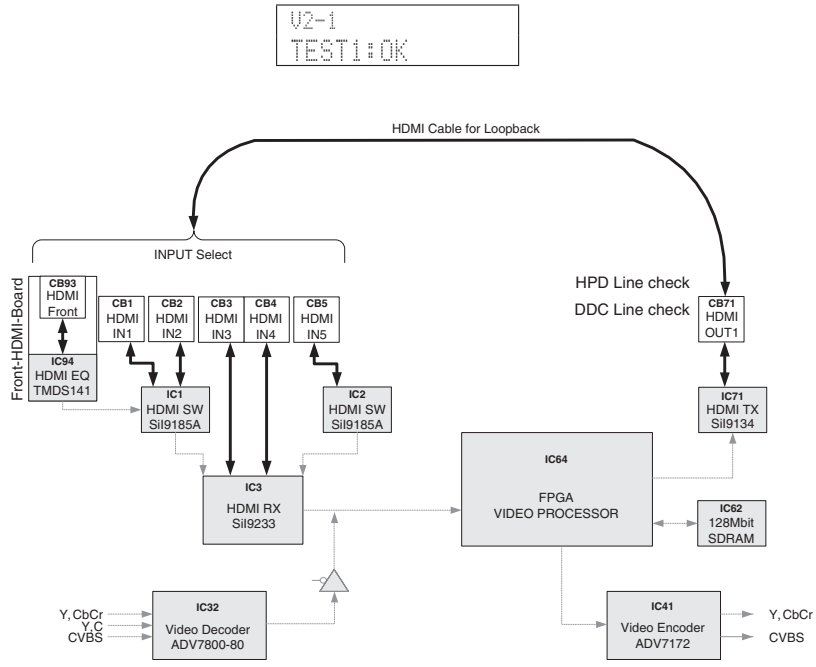
V2. DIGITAL VIDEO CHECK

This menu is used to check the digital video signal route.

Before checks using sub-menu V2-1 and V2-2, connect between HDMI OUT and HDMI IN terminals of this unit with an HDMI cable in advance.

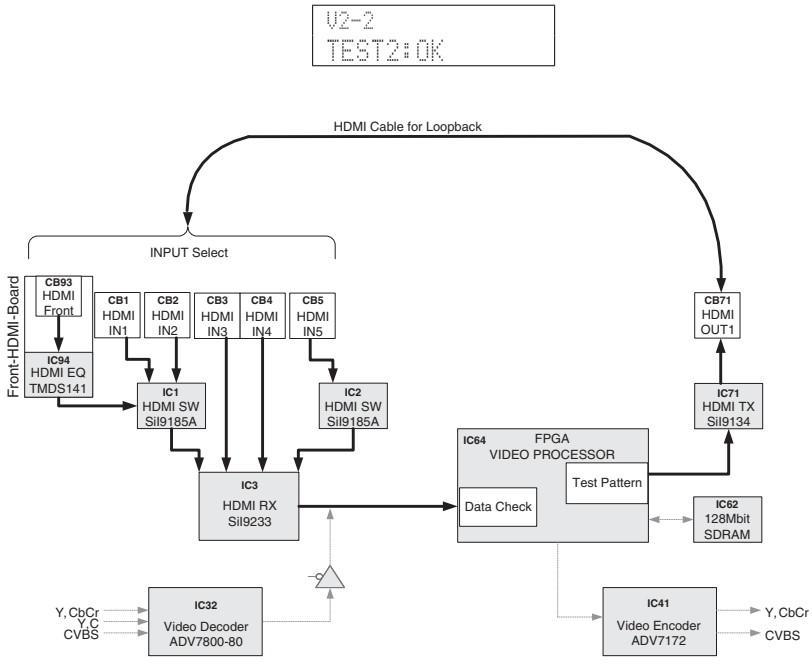
V2-1. LOOPBACK TEST 1

The video signal route as shown below is checked automatically and result (OK or NG) is displayed.



V2-2. LOOPBACK TEST 2

The video signal route as shown below is checked automatically and result (OK or NG) is displayed.



V2-3. LOOPBACK TEST 3

Not for service.

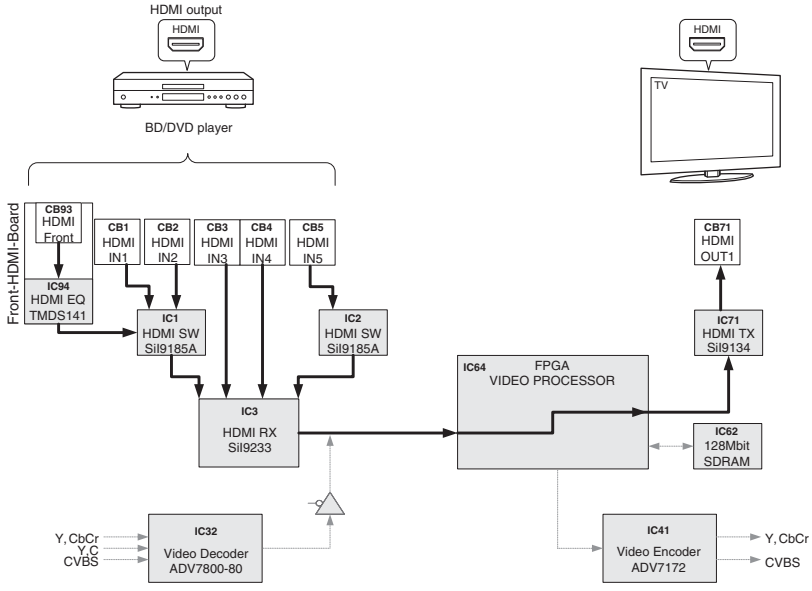


V2-4. HDMI REPEAT

* Before check using sub-menu V2-4, disconnect the HDMI cable connected between HDMI OUT and HDMI IN terminals of this unit.

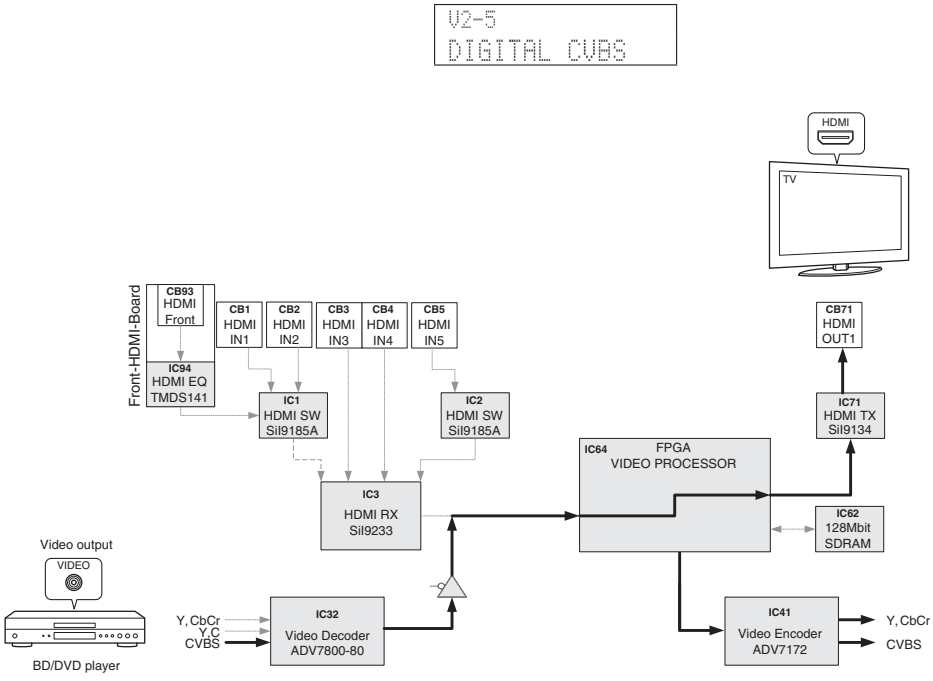
The video/audio signals input to HDMI IN terminal are output to HDMI OUT terminal.





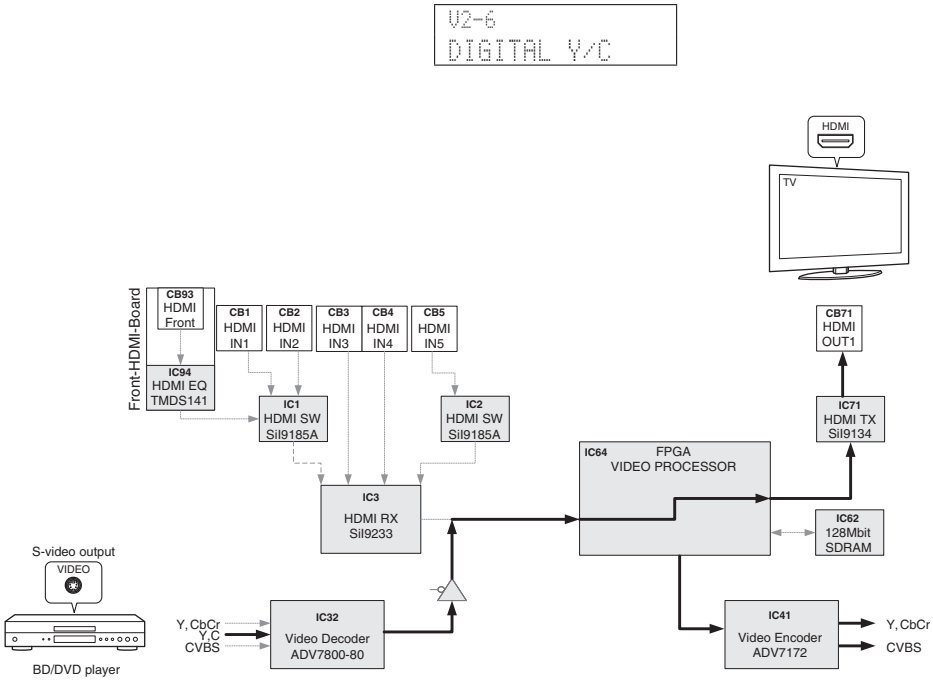
V2-5. DIGITAL CVBS

The video (CVBS) signal is converted and output as shown below.



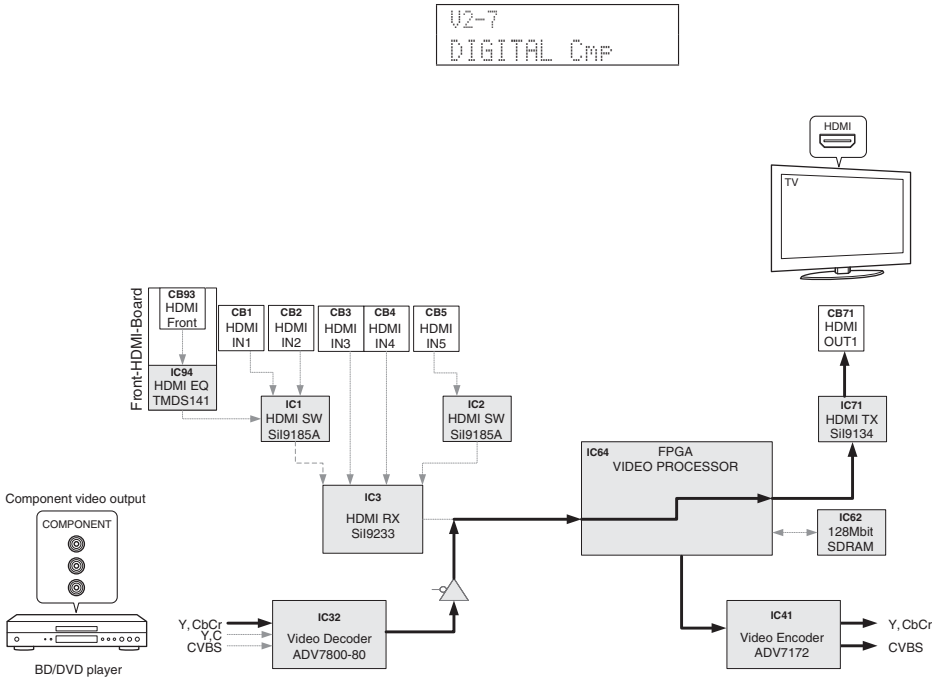
V2-6. DIGITAL Y/C (B, G, F models)

The s-video (Y, C) signal is converted and output as shown below.



V2-7. DIGITAL COMPONENT

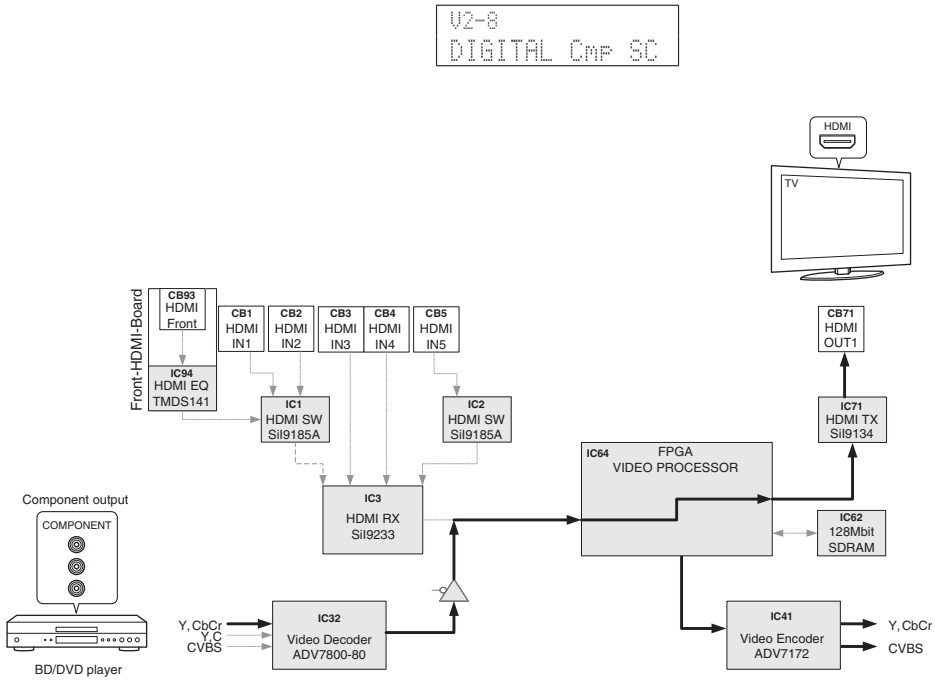
The component video (Y, Cb, Cr) signal is converted and output as shown below.



V2-8. DIGITAL COMPONENT SC

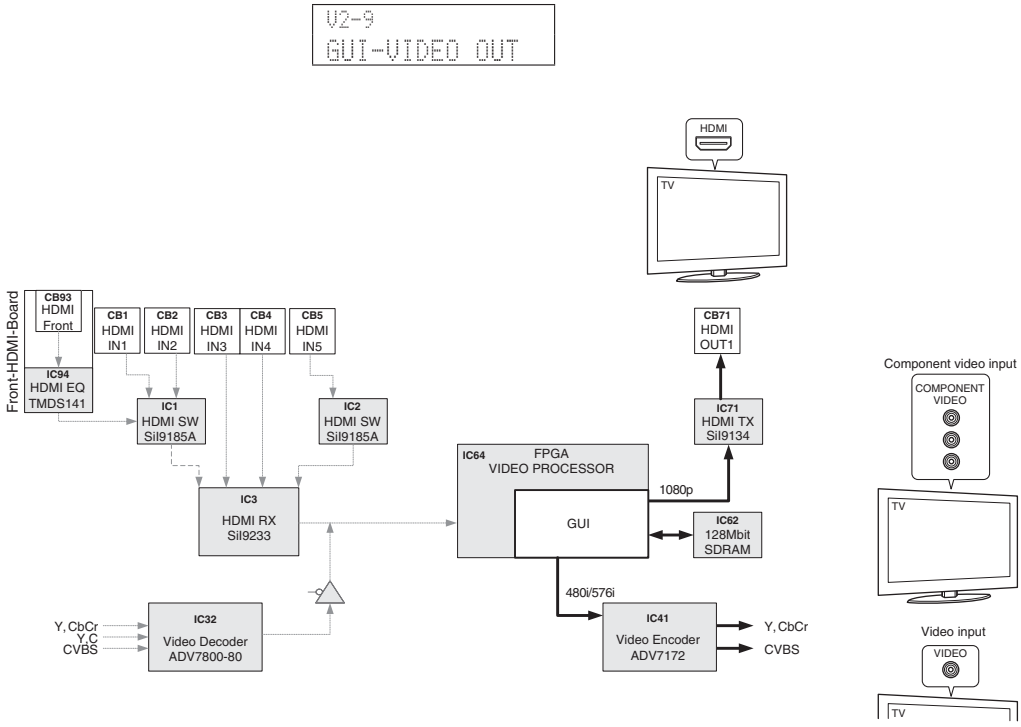
The component video (Y, Cb, Cr) signal is converted and output as shown below.

HDMI video output up-scaling: 480i/p, 576i/p => 1080p



V2-9. GUI-VIDEO OUT

The GUI from FPGA (IC64 of the DIGITAL P.C.B.) is output.



P1. SYSTEM MONITOR

This menu is used to display the A/D conversion value of the microprocessor which detects panel keys of this unit and protection functions by using the sub-menu.

When “P1-7. KEY1/KEY2” sub-menu is selected, keys become non-operable due to detection of the values of all keys.

However, it is possible to advance to the next sub-menu by pressing the “SCENE RADIO” (forward) or “SCENE CD” (reverse) key of the remote control.

* Numeric values in the figure are given as reference only.

P1-1. DC

DC: Power amplifier DC (DC voltage) output is detected.

The voltage at 1 pin (DC_PRT) of IC902 is displayed.
Normal value: 32 to 74 (Reference voltage: 3.3 V=255)

* If DC becomes out of the normal value range, the protection function works to turn off the power.



P1-2. PS1/PS2

Power supply voltage protection detection
The voltage at 2 pin (PS1_PRT)/1 pin (PS2_PRT) of IC902 are displayed.

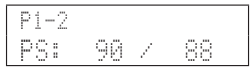
Voltage detects:

PS1: ACBH, ACBL, AC_12, AC-5, ±12, ±7, +3.3D, +1.8D
PS2: +5I and -5V

Normal value

PS1: 38 to 141
PS2: 34 to 138 (Normal), 120 to 224 (PURE DIRECT mode)
(Reference voltage: 3.3 V=255)

* If PS1 or PS2 becomes out of the normal value range, the protection function works to turn off the power.

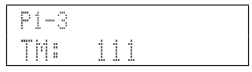


P1-3. TM

TM: Temperature of the heatsink is detected.

The voltage at 2 pin (TMH1) of IC902 is displayed.
Normal value: 42 to 255 (U, R, T, K, A, B, G, F, L models)
116 to 255 (C model)
(Reference voltage: 3.3 V=255)

* If TM becomes out of the normal value range, the protection function works to turn off the power.



P1-4. OUTPUT LEVEL

Output level of speaker output is detected.

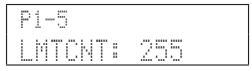
The voltage at 4 pin (AMP_OLV) of IC901 is displayed.
(Reference voltage: 3.3 V=255)



P1-5. LIMITER CONTROL

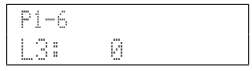
Power limitter control is detected.

The voltage at 4 pin (AMP_OLV) of IC901 is displayed.
(Reference voltage: 3.3 V=255)



P1-6. L3 (J model)

Not for service.



P1-7. KEY1/KEY2

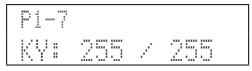
Panel key of this unit is detected.

When the A/D conversion value of the panel key becomes out of the specified range, normal operation will not be available.

In that case, check the constant of voltage dividing resistor, solder condition, etc. Refer to table.

* When “P1-7. KEY1/KEY2” sub-menu is selected, keys become non-operable due to detection of the values of all keys. However, it is possible to advance to the next sub-menu by pressing the “SCENE RADIO” (forward) or “SCENE CD” (reverse) key of the remote control.

(Reference voltage: 3.3 V=255)



Display	KY1
0 – 11	RADIO (SCENE4)
12 – 32	CD (SCENE3)
33 – 54	TV (SCENE2)
55 – 75	BD/DVD (SCENE1)
76 – 96	ZONE2 CONTROL
97 – 119	ZONE2 ON/OFF
120 – 142	INPUT >
143 – 163	IMPUT <
182 – 197	MAIN ZONE ⏻ (power)
198 – 209	TONE CONTROL
255	Key off

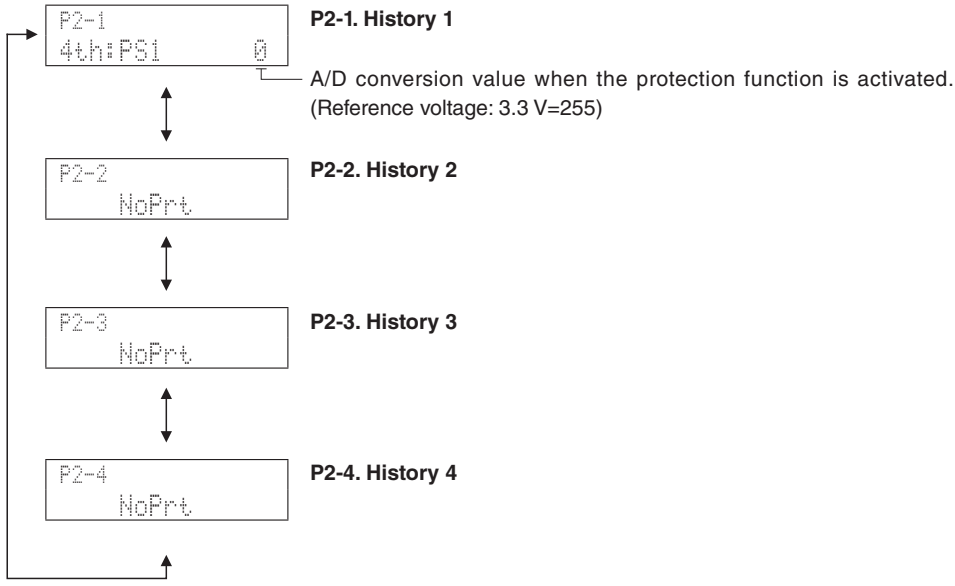
Display	KY2
0 – 11	–
12 – 32	TUNING >>
33 – 54	TUNING <<
55 – 77	AM
78 – 99	FM
100 – 121	PRESET >
122 – 144	PRESET <
145 – 166	MEMORY
167 – 186	INFO
187 – 205	STRAIGHT
206 – 226	PROGRAM >
227 – 246	PROGRAM <
255	Key off

P2. PROTECTION HISTORY

This menu is used to display the history of protection function.

All history of protection function will be erased by pressing the “STRAIGHT” key.

* Numeric values in the figure are given as reference only.



P2-1. History 1

A/D conversion value when the protection function is activated.
(Reference voltage: 3.3 V=255)

P2-2. History 2

P2-3. History 3

P2-4. History 4

S1. F/W UPDATE

Not for service.

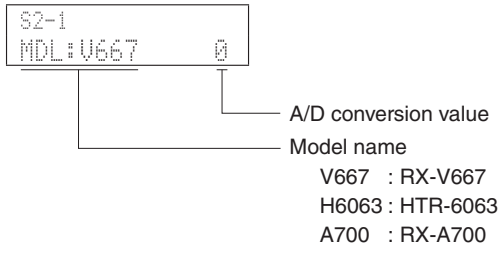


S2. SET INFORMATION

The model name and destination values are displayed.

S2-1. MODEL

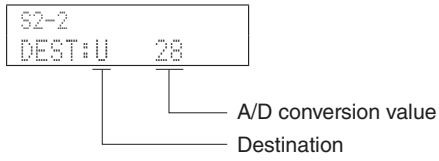
The model name of this unit is displayed.



Model name	RX-V667	RX-A700	HTR-6063
A/D conversion value (3.3 V=255)	0–10	11–33	34–54

S2-2. DESTINATION

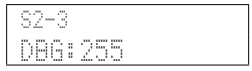
The destination of this unit is displayed.



Destination	U	C	R	T	K	A	B, G, F	L
A/D conversion value (3.3 V=255)	13–40	41–67	68–92	93–115	116–140	141–182	183–221	222–244

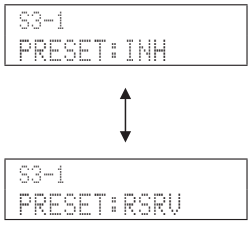
S2-3. DEBAG

Not for service.



S3. FACTORY PRESET

This menu is used to reserve/inhibit initialization of the back-up IC (EEPROM: IC903 of the DIGITAL P.C.B.).



S3-1. PRESET INHIBIT (Initialization inhibited)

Initialization of the back-up IC is not executed. Select this sub-menu to protect the values set by the user.

S3-2. PRESET RESERVED (Initialization reserved)

Initialization of the back-up IC is reserved. (Actual initialization is executed the next time the power is turned on.) To reset to the original factory settings or to reset the backup IC, select this sub-menu and press the "MAIN ZONE ⏻"(power) key to turn off the power. Any protection history also will be initialized at the same time.

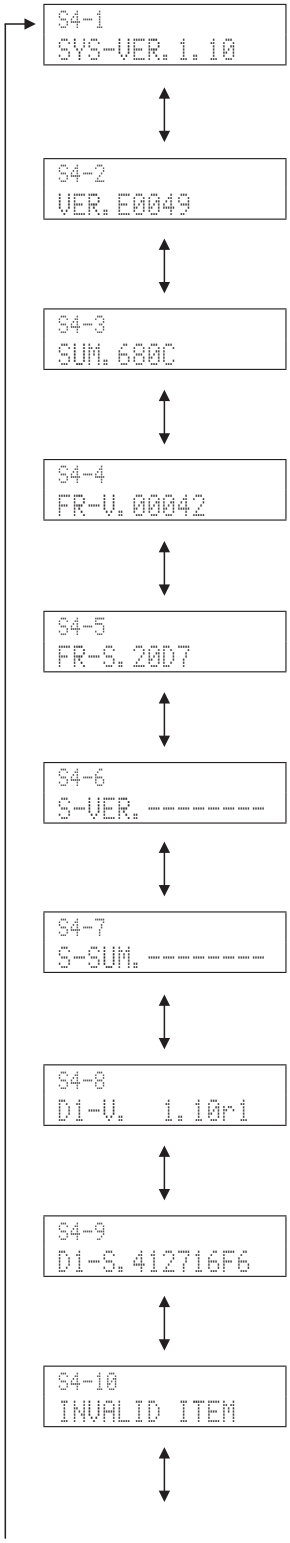
CAUTION: Before setting to the PRESET RESERVED, write down the existing preset memory content of the tuner. (This is because setting to the PRESET RESERVED will cause the user memory content to be erased.)

S4. ROM VERSION/CHECKSUM

The firmware version and checksum values are displayed.

The checksum is obtained by adding the data at every 8-bit and expressing the result as a 4-figure hexadecimal notation.

* Numeric values in the figure are given as reference only.



S4-1. SYSTEM VERSION

The firmware version of this unit is displayed.

S4-2. MICROPROCESSOR VERSION

The firmware version of MICROPROCESSOR (IC908 DIGITAL P.C.B.) is displayed.

S4-3. MICROPROCESSOR CHECKSUM

The checksum value of MICROPROCESSOR (IC908 DIGITAL P.C.B.) is displayed.

S4-4. FLASH ROM VERSION

The firmware version of FLASH ROM (IC951 DIGITAL P.C.B.) is displayed.

S4-5. FLASH ROM CHECKSUM

The checksum value of FLASH ROM (IC951 DIGITAL P.C.B.) is displayed.

S4-6. VNP2 VERSION

Not for service.

S4-7. VNP2 CHECKSUM

Not for service.

S4-8. DSP1 VERSION

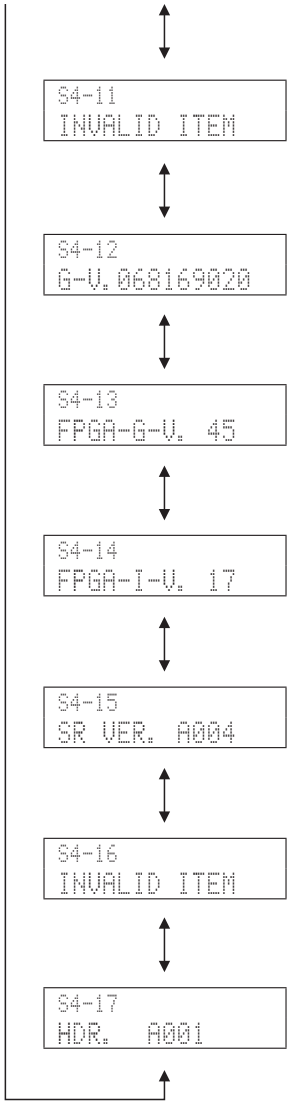
The firmware version of DSP1 (IC945 DIGITAL P.C.B.) is displayed.

S4-9. DSP1 CHECKSUM

The checksum value of DSP1 (IC945 DIGITAL P.C.B.) is displayed.

S4-10. INVALID ITEM

Not for service.



S4-11. INVALID ITEM

Not for service.

S4-12. GUI VERSION

The firmware version of GUI data is displayed.

S4-13. FPGA GUI VERSION

The firmware version of GUI section in FPGA (IC64 DIGITAL P.C.B.) is displayed.

S4-14. FPGA IP VERSION

The firmware version of video processor section in FPGA (IC64 DIGITAL P.C.B.) is displayed.

S4-15. SIRIUS VERSION (U model)

The firmware version of SIRIUS is displayed.

S4-16. INVALID ITEM

Not for service.

S4-17. HD RADIO VERSION (U model)

Not for service.

S5. INVALID ITEM

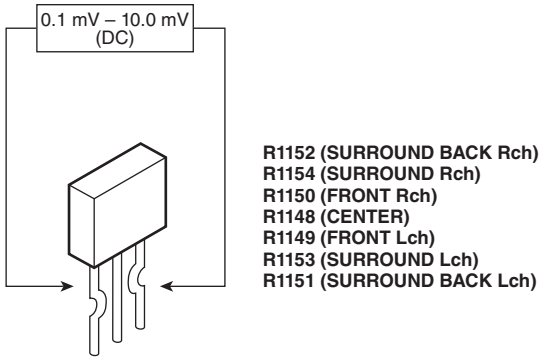
Not for service.

■ CONFIRMATION OF IDLING CURRENT OF AMP UNIT

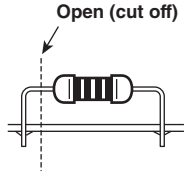
- Right after power is turned on, confirm that the voltage across the terminals of R1152 (SURROUND BACK Rch), R1154 (SURROUND Rch), R1150 (FRONT Rch), R1148 (CENTER), R1149 (FRONT Lch), R1153 (SURROUND Lch), R1151 (SURROUND BACK Lch) are between 0.1 mV and 10.0 mV.
- If it exceeds 10.0 mV, open (cut off) R1090 (SURROUND BACK Rch), R1092 (SURROUND Rch), R1088 (FRONT Rch), R1086 (CENTER), R1087 (FRONT Lch), R1091 (SURROUND Lch), R1089 (SURROUND BACK Lch) and reconfirm the voltage.

  Attention
  If the measured voltage exceeds 10.0 mV after an amplifier repair, first check for a defective component before cutting the bias resistor.

- Confirm that the voltage is 0.2 mV to 15.0 mV after 60 minutes.

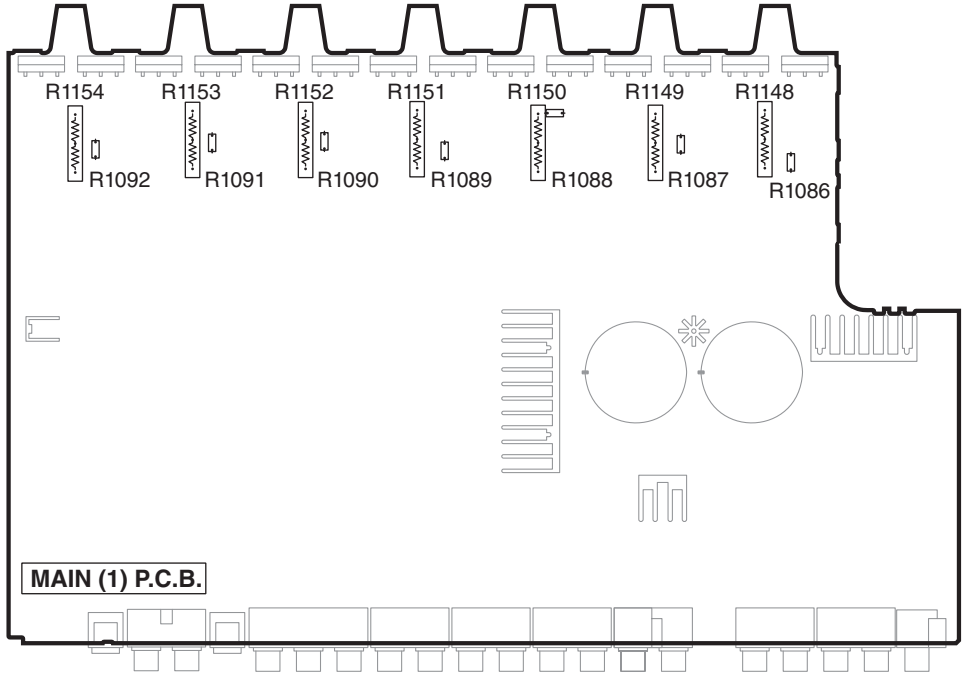


R1152 (SURROUND BACK Rch)
R1154 (SURROUND Rch)
R1150 (FRONT Rch)
R1148 (CENTER)
R1149 (FRONT Lch)
R1153 (SURROUND Lch)
R1151 (SURROUND BACK Lch)



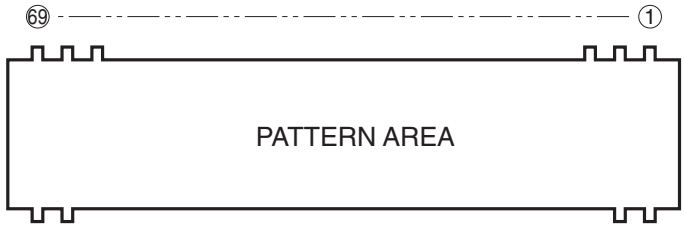
R1090 (SURROUND BACK Rch)
R1092 (SURROUND Rch)
R1088 (FRONT Rch)
R1086 (CENTER)
R1087 (FRONT Lch)
R1091 (SURROUND Lch)
R1089 (SURROUND BACK Lch)

Front side



■ DISPLAY DATA

● V4001 : HNA-18MM02T (OPERATION P.C.B.)



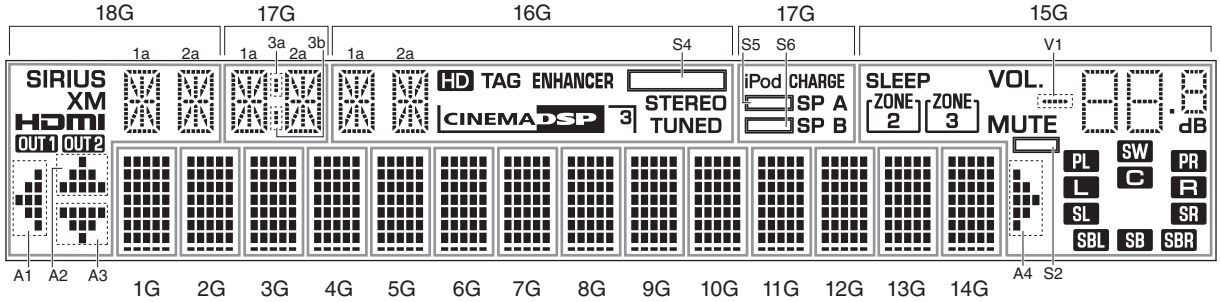
● PIN CONNECTION

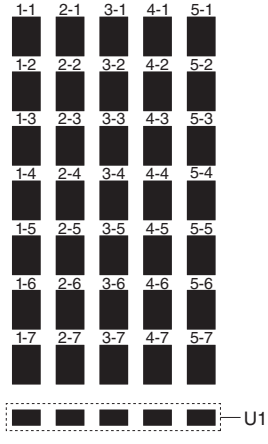
Pin No.	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35
Connection	F2	F2	NP	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	P23	P24	P25	P26	P27	P28	P29	P30	P31

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	F1	F1

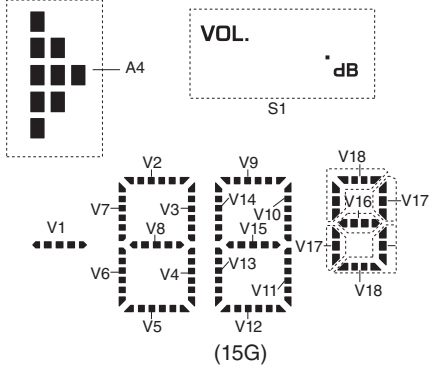
Note : 1) Fn ..... Filament pin 2) nG ..... Grid pin 3) Pn ..... Anode pin 4) NP ..... No pin 5) NX ..... No extended pin

● GRID ASSIGNMENT

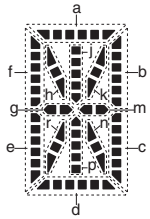




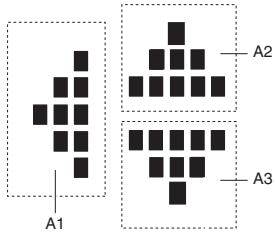
(1G-14G)



(15G)



(16G-18G)



(18G)

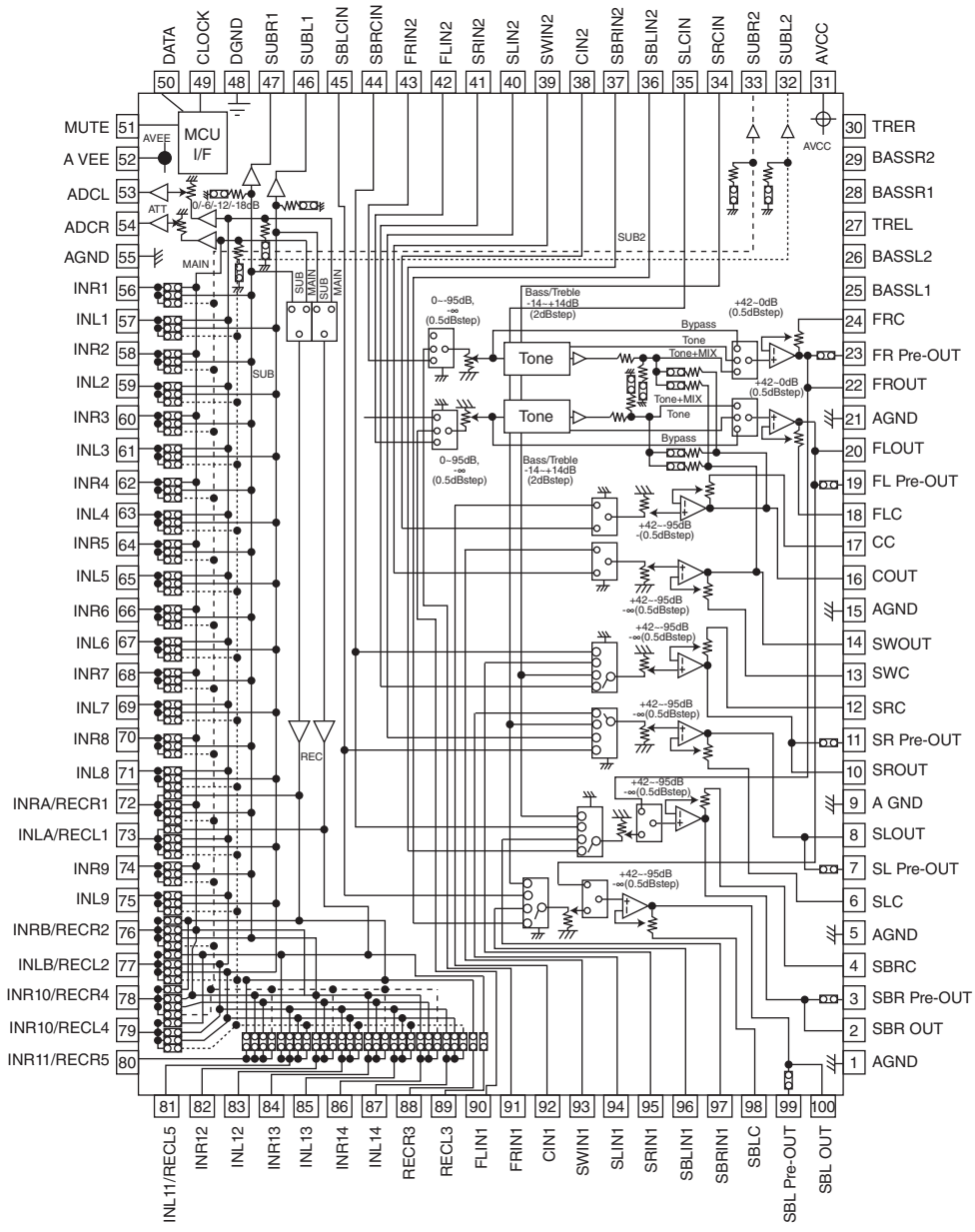
● ANODE CONNECTION

	18G	17G	16G	15G	14G-1G
P1	1a	1a	1a	S1	1-1
P2	1h	1h	1h	V1	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	3a	HD	SB	4-6
P30	XM	3b	TAG	SBR	5-6
P31	HDMI	iPod CHARGE	CINEMA DSP	S6	1-7
P32	OUT1	SP B	3	S13	2-7
P33	OUT2	S6	STEREO	MUTE	3-7
P34	A1	SP A	TUNED	ZONE 2	4-7
P35	A2	S5	ENHANCER	ZONE 3	5-7
P36	A3	–	S4	SLEEP	U1

■ IC DATA

IC153: R2A15220FP (MAIN P.C.B.)

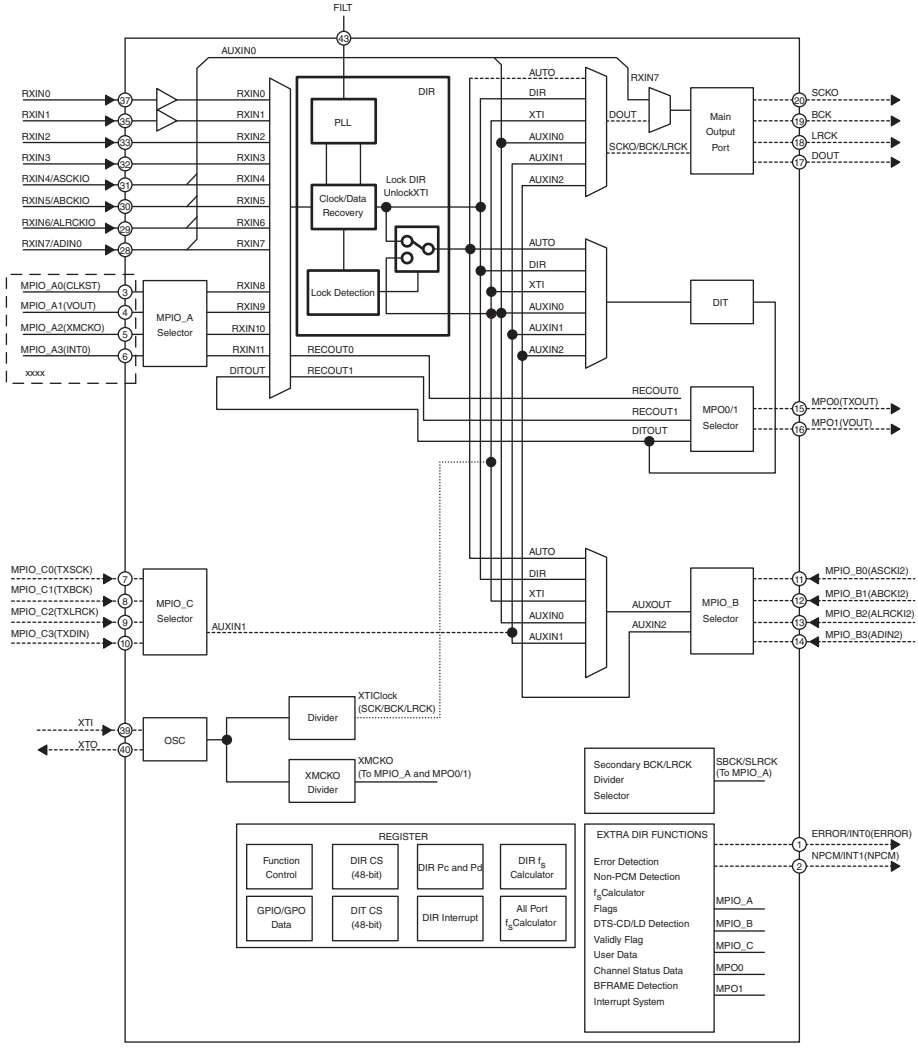
8-channel electronic volume with 11 input selector and tone control

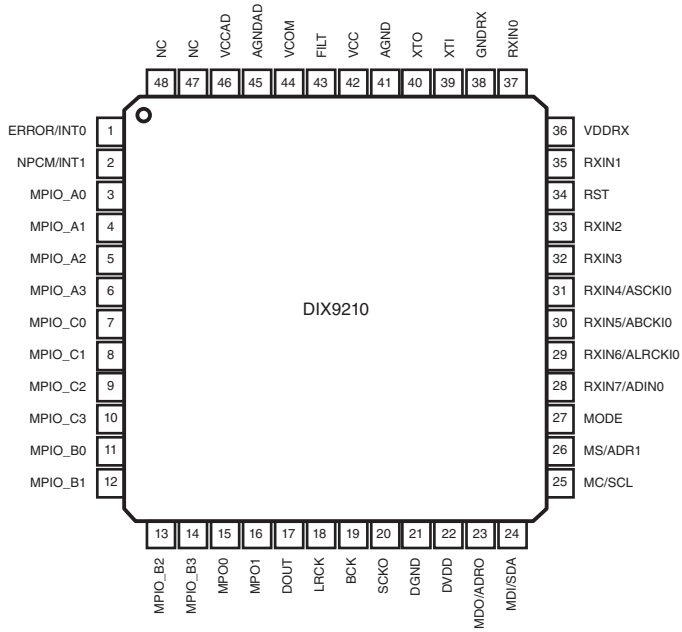


Pin No.	Port name	Function Name	Detail of Function
1	AGND	AE	Analog ground of internal circuit
2	SBROUT	VOSBL	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
3	SBR Pre-OUT	VOPSBL	Pre-output pin of FL/FR/SL/SR/SBL/SBR channel
4	SBRC	AE	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR 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	TRER	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	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
38	CIN2	8C	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
39	SWIN2	8SW	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
40	SLIN2	8SR	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
41	SRIN2	8SL	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
42	FLIN2	8FR	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
43	FRIN2	8FL	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
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
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	Output pin for L/R channel ADC
55	AGND	AE	Analog ground of internal circuit
56	INR1	AU2L	Input pin of L/R channel (Input selector)
57	INL1	AU2R	Input pin of L/R channel (Input selector)

Pin No.	Port name	Function Name	Detail of Function
58	INR2	AU1L	Input pin of L/R channel (Input selector)
59	INL2	AU1R	Input pin of L/R channel (Input selector)
60	INR3	AV-6L	Input pin of L/R channel (Input selector)
61	INL3	AV-6R	Input pin of L/R channel (Input selector)
62	INR4	AV-5L	Input pin of L/R channel (Input selector)
63	INL4	AV-5R	Input pin of L/R channel (Input selector)
64	INR5	PHL	Input pin of L/R channel (Input selector)
65	INL5	PHR	Input pin of L/R channel (Input selector)
66	INR6	SRL	Input pin of L/R channel (Input selector)
67	INL6	SRR	Input pin of L/R channel (Input selector)
68	INR7	IPL	Input pin of L/R channel (Input selector)
69	INL7	IPR	Input pin of L/R channel (Input selector)
70	INR8	XML	Input pin of L/R channel (Input selector)
71	INL8	XMR	Input pin of L/R channel (Input selector)
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	Output pin for L/R channel (input selector)/Output pin for L/R channel REC output
74	INR9	USBL	Input pin of L/R channel (Input selector)
75	INL9	USBR	Input pin of L/R channel (Input selector)
76	INRB/RECR2	AOL	Output pin for L/R channel (input selector)/Output pin for L/R channel REC output
77	INLB/RECL2	AOR	Output pin for L/R channel (input selector)/Output pin for L/R channel REC output
78	INR10/RECR4	TUL	Output pin for L/R channel (input selector)/Output pin for L/R channel REC output
79	INL10/RECL4	TUR	Output pin for L/R channel (input selector)/Output pin for L/R channel REC output
80	INR11/RECR5	MIC	Output pin for L/R channel (input selector)/Output pin for L/R channel REC output
81	INL11/RECL5	AE	Output pin for L/R channel (input selector)/Output pin for L/R channel REC output
82	INR12	AUXL	Input pin of L/R channel (Input selector)
83	INL12	AUXR	Input pin of L/R channel (Input selector)
84	INR13	AE	Input pin of L/R channel (Input selector)
85	INL13	AE	Input pin of L/R channel (Input selector)
86	INR14	AE	Input pin of L/R channel (Input selector)
87	INL14	AE	Input pin of L/R channel (Input selector)
88	RECR3	N.C.	Output pin for L/R channel REC output
89	RECL3	N.C.	Output pin for L/R channel REC output
90	FLIN1	DAFR	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
91	FRIN1	DAFL	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
92	CIN1	DAC	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
93	SWIN1	DASW	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
94	SLIN1	DASR	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
95	SEIN1	DASL	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
96	SBLIN1	DASBR	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
97	SBRIN1	DASBL	Multi input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
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

IC942: DIX9210PTR (DIGITAL P.C.B.)
216 kHz digital audio interface transceiver

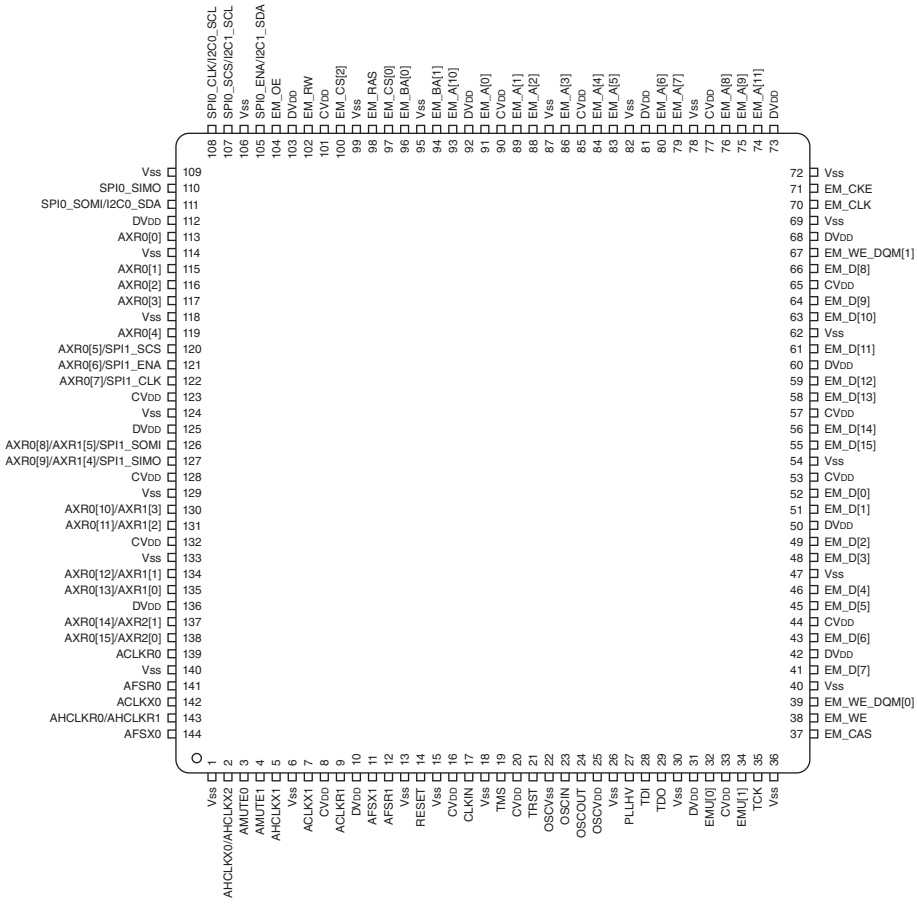


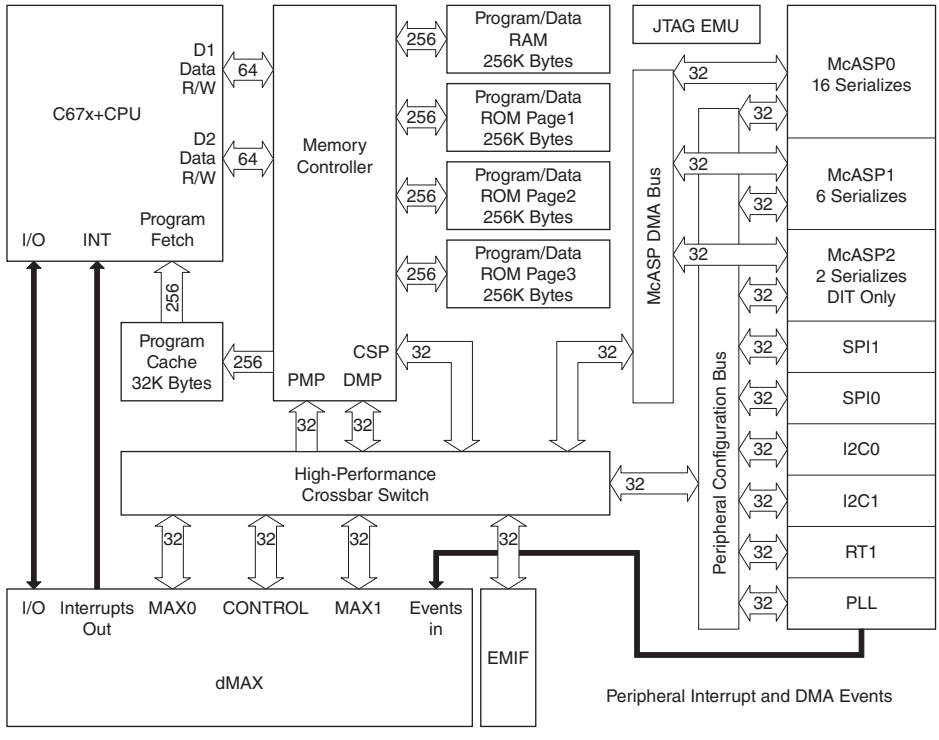


Pin No.	Port Name	I/O	Detail of Function
1	ERROR/INT0	O	DIR Error detection output/Interrupt0 output
2	NPCM/INT1	O	DIR Non-PCM detection output/Interrupt1output
3	MPIO_A0	I/O	Multipurpose I/O, Group A (1)
4	MPIO_A1	I/O	Multipurpose I/O, Group A (1)
5	MPIO_A2	I/O	Multipurpose I/O, Group A (1)
6	MPIO_A3	I/O	Multipurpose I/O, Group A (1)
7	MPIO_C0	I/O	Multipurpose I/O, Group C (1)
8	MPIO_C1	I/O	Multipurpose I/O, Group C (1)
9	MPIO_C2	I/O	Multipurpose I/O, Group C (1)
10	MPIO_C3	I/O	Multipurpose I/O, Group C (1)
11	MPIO_B0	I/O	Multipurpose I/O, Group B (1)
12	MPIO_B1	I/O	Multipurpose I/O, Group B (1)
13	MPIO_B2	I/O	Multipurpose I/O, Group B (1)
14	MPIO_B3	I/O	Multipurpose I/O, Group B (1)
15	MPO0	O	Multipurpose output 0
16	MPO1		
17	DOUT		
18	LRCK		
19	BCK		
20	SCKO		
21	DGND		
22	DVDD		
23	MDO/ADRO		
24	MDI/SDA		
25	MC/SCL		
26	MS/ADR1		
27	MODE		
28	RXIN7/ADIN0		
29	RXIN6/ALRCKI0		
30	RXIN5/ABCKI0		
31	RXIN4/ASCKI0		
32	RXIN3		
33	RXIN2		
34	RST		
35	RXIN1		
36	VDDRX		
37	RXIN0		
38	GNDRX		
39	XTI		
40	XTO		
41	AGND		
42	VCC		
43	FILT		
44	VCOM		
45	AGNDAD		
46	VCCAD		
47	NC		
48	NC		

IC945: D70YE101BRFP266 (DIGITAL P.C.B.)
Decoder/Post processor

*** No replacement part available.**





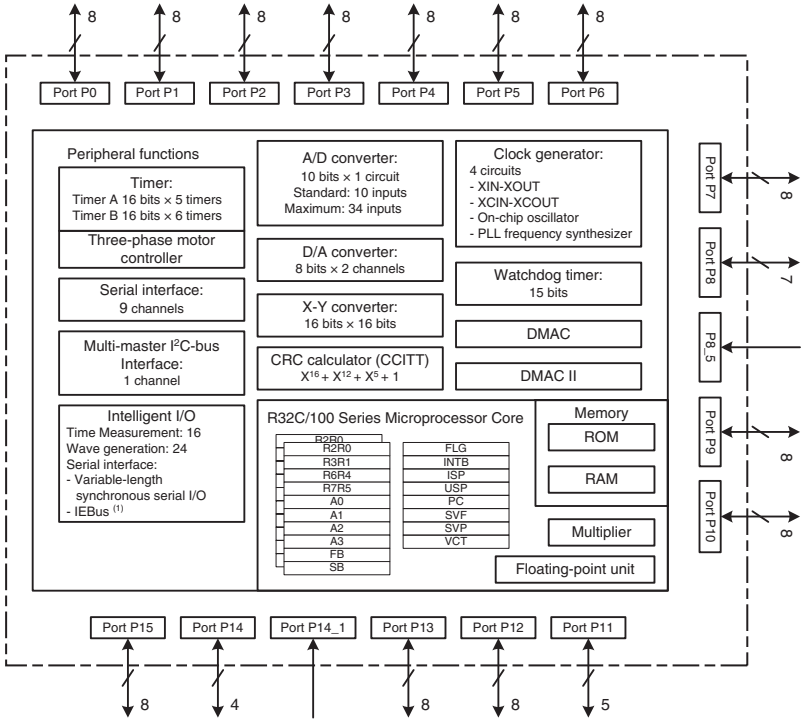
No.	Function Name (P.C.B.)	TYPE(1)	PULL(2)	GPIO(3)	Detail of Function
1	VSS				
2	AHCLKX0/AHCLKX2	IO	–	Y	McASP0 and McASP2 transmit master clock
3	AMUTE0	IO	–	Y	McASP0 mute output
4	AMUTE1	IO	–	Y	McASP1 mute output
5	AHCLKX1	IO	–	Y	McASP1 transmit master clock
6	VSS				
7	ACLKX1	IO	–	Y	McASP1 transmit 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

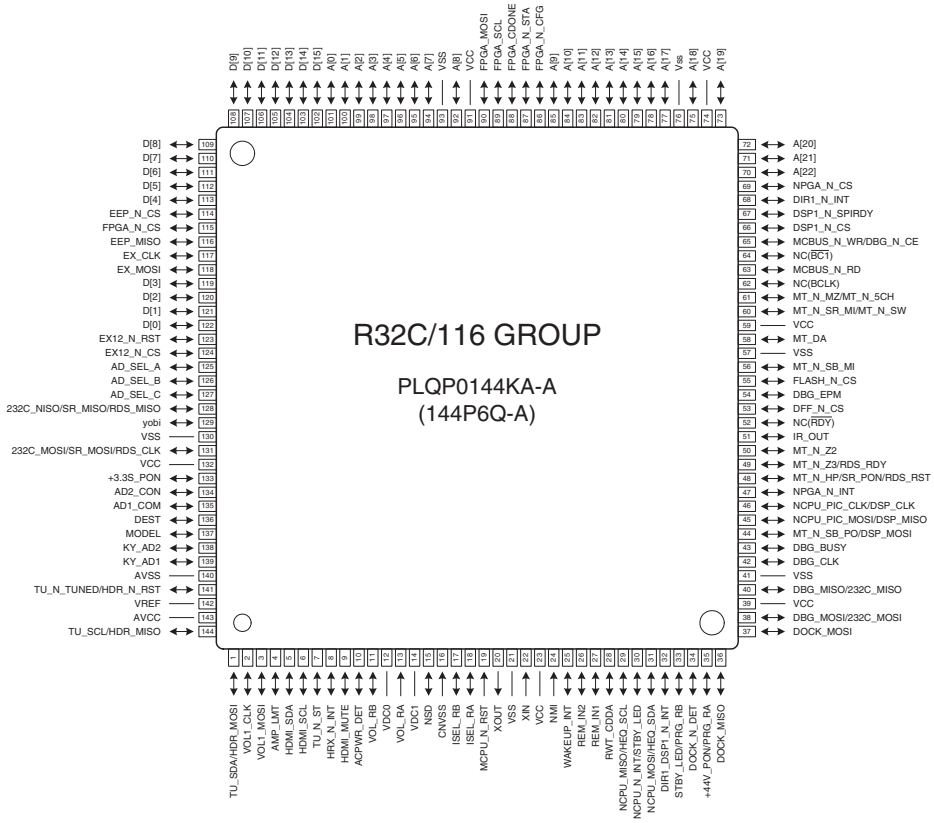
No.	Function Name (P.C.B.)	TYPE(1)	PULL(2)	GPIO(3)	Detail of Function
101	CVDD				
102	NC	O	–	N	Asynchronous memory read/not write
103	DVDD				
104	EM_OE	O	–	N	SDRAM output enable
105	SPI0_ENA/I2C1_SDA	IO	–	Y	SPI0 enable (ready) or I2c1 serial data
106	VSS				
107	SPI0_ENA/I2C1_SCL	IO	–	Y	SPI0 enable (ready) or I2c1 serial clock
108	SPI0_CLK/I2C0_SCL	IO	–	Y	SPI0 serial clock or I2c0 serial clock
109	VSS				
110	SPIO_SIMO	IO	–	Y	SPI0 data pin slave in master out
111	SPIO_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)

IC908: R5F64169DFD (DIGITAL P.C.B.)
Microprocessor

* **No replacement part available.**



Note:
1. IEBus is a trademark of NEC Electronics Corporation.



Notes:
1. Pin names in brackets [ ] represent a functional signal as a whole and should not be considered as two separate pins.
2. The position of pin number 1 varies by product. Refer to the index mark in attached "Package Dimensions".

Pin No.	Port Name	Use Port	Function Name	Terminal Processing	Related Power Supply	OFF		ON		Detail of Function
						I/O	Logic	I/O	Logic	
1	SRXD4/SDA4/ TXD4/ANEX1/ P9_6	SDA4	TU_SDA	3.3kPU	PRY	O	Low	I/O	Data	Tuner I2C data
2	CLK4/ANEX0/ P9_5	P9_5	VOL1_CLK		PRY	O	Low	O	Clock	Volume/ZoneTone/Selector-1 communication clock
3	SS4/RTS4/ CTS4/TB4IN/ DA1/P9_4	P9_4	VOL_MOSI		PRY	O	Low	O	Data	Volume/ZoneTone/Selector-1 and 2 communication data
4	SS3/RTS3/ CTS3/TB3IN/ DA0/P9_3	DA0	AMP_LMT		PRY	I	---	O	D/A	Limiter control
5	IEOUT/ISTXD2/ OUTC2_0/ SRXD3/SDA3/ TXD3/TB2IN/ P9_2	SDA3	HDMI_SDA	V encoder suction prevention	HDMI_PON	O	Low	I/O	Data	HDMI and AVIDEO 400k I2C data
6	IEIN/ISRXD2/ STXD3/SCL3/ RXD3/TB1IN/ P9_1	SCL3	HDMI_SCL	V encoder suction prevention	HDMI_PON	O	Low	O	Clock	HDMI and AVIDEO 400k I2C clock
7	CLK3/TB0IN/ P9_0	P9_0	TU_N_ST	47kPU	PRY	O	Low	I	L act	Tuner Stereo detection
8	INT8/P14_6	INT8	HRX_N_ INT		HDMI_PON	O	Low	I	L act	HDMI RX interrupt
9	INT7/P14_5	INT7	HDMI_ MUTE		HDMI_PON	O	Low	I	H act	HDMI mute
10	INT6/P14_4	INT6	ACPWR_ DET		AC	O	Low	I	L act	AC power detect
11	P14_3	P14_3	VOL_RB		DSP_PON	I	---	I		Volume B
12	VDC0	VDC0	VDC0							---
13	P14_1	P14_1	VOL_RA		DSP_PON	I	---	I		Volume A (Port only for input)
14	VDC1	VDC1	VDC1							---
15	NSD	NSD	NSD	4.7kPU						Debugger
16	CNVSS	CNVSS	DBG_ CNVSS	68kPD						---
17	XCIN/P8_7	P8_7	ISEL_RB		DSP_PON	I	---	I		Input selector B
18	XCOUT/P8_6	P8_6	ISEL_RA		DSP_PON	I	---	I		Input selector A
19	RESET	RESET	MCPU_N_ RST	10kPU						---
20	XOUT	XOUT	XOUT							---
21	VSS	VSS	VSS							---
22	XIN	XIN	XIN							---
23	VCC	VCC	VCC							---
24	NMI/P8_5	NMI	NMI	1kPU						---
25	INT2/P8_4	INT2	WAKEUP_ INT	Odd/even number detection circuit	AC	O	Low	I	Both edges	Power switches, MISO interrupt of 232C and DOCK (Sleep state restored)
26	INT1/P8_3	P8_3	-		AC	O	Low	O	Low	Unassigned
27	INT0/P8_2	INT0	REM_IN1	100kPU	AC	O	Low	I	L act	Remote control pulse input 1 (5V tolerant)
28	UD0B/UD1B/ IIO1_5/RTS5/ CTS5/SS5/U/ TA4IN/P8_1	P8_1	RWT_ CDDA		DSP_PON	O	Low	O	H act	CDDA Rewrite path selection
29	UD0A/UD1A/ RXD5/SCL5/ STXD5/U/ TA4OUT/P8_0	SCL5	HEQ_SCL	3.3kPU	HDMI_PON	O	Low	O	Clock	HDMI switcher 100k I2C clock
30	UD0B/UD1B/ IIO1_4/CLK5/ TA3IN/P7_7	P7_7	STBY_LED		AC	O	Low	O	H act	Standby LED control
31	UD0A/UD1A/ IIO1_3/RTS8/ CTS8/TXD5/ SDA5/SRXD5/ TA3OUT/P7_6	SDA5	HEQ_SDA	3.3kPU	HDMI_PON	O	Low	I/O	Data	HDMI switcher 100k I2C data

Pin No.	Port Name	Use Port	Function Name	Terminal Processing	Related Power Supply					Detail of Function
						OFF		ON		
						I/O	Logic	I/O	Logic	
32	IIO1_2/RXD8/W/ TA2IN/P7_5	TA2IN	DIR1_ DSP1_N_ INT	10kPU	DSP_PON	O	Low	I	L act	DIR1/DSP1 interrupt
33	IIO1_1/CLK8/W/ TA2OUT/P7_4	P7_4	PRG_RB		DSP_PON	I	---	I		---
34	IIO1_0/TXD8/ SS2/RTS2/ CTS2/V/TA1IN/ P7_3	TA1IN	DOCK_N_ DET		AC	O	Low	I	L act	iPod Detect
35	CLK2/V/ TA1OUT/P7_2	P7_2	PRG_RA		DSP_PON	I	---	I		---
36	MSCL/IEIN/ ISRXD2/ OUTC2_2/ IIO1_7/STXD2/ SCL2/RXD2/ TA0IN/TB5IN/ P7_1	RXD2	DOCK_ MISO	Suction prevention when AC is turned off	DOCK_ PON	O	Low	I	Data	DOCK reception data
37	TA0OUT/ TXD2/SDA2/ SRXD2/IIO1_6/ OUTC2_0/ ISTXD2/IEOUT/ MSDA/P7_0	TXD2	DOCK_ MOSI		DOCK_ PON	O	Low	O	Data	DOCK transmission data
38	TXD1/SDA1/ SRXD1/P6_7	TXD1	DBG_MOSI	100kPU	AC	O	Low	O	Data	Debug/E8a
39	VCC	VCC	VCC							---
40	RXD1/SCL1/ STXD1/P6_6	RXD1	DBG_MISO	100kPU	AC	O	Low	I	Data	Debug/E8a
41	VSS	VSS	VSS							---
42	CLK1/P6_5	CLK1	DBG_CLK	100kPU	AC	O	Low	I	Clock	E8a
43	CTS1/RTS1/ SS1/OUTC2_1/ ISCLK2/P6_4	P6_4	DBG_BUSY		AC	O	Low	O		E8a
44	TXD0/SDA0/ SRXD0/P6_3	TXD0	DSP_MOSI		DSP_PON	O	Low	O	Data	DSP transmission data
45	TB2IN/RXD0/ SCL0/STXD0/ P6_2	RXD0	DSP_MISO		DSP_PON	I	---	I	Data	DSP reception data
46	TB1IN/CLK0/ P6_1	CLK0	DSP_CLK		DSP_PON	O	Low	O	Clk	DSP communication clock
47	TB0IN/CTS0/ RTS0/SS0/P6_0	P6_0	–		AC	O	Low	O	Low	Unassigned
48	D31/OUTC2_7/ P13_7	P13_7	SR_PON		DSP_PON	O	Low	O	H act	SIRIUS power supply control (U model)
		P13_7	RDS_RST		PRY	O	Low	O	H act	RDS reset (B, G, F models)
49	D30/OUTC2_1/ ISCLK2/P13_6	P13_6	RDS_ READY	10kPU	PRY	O	Low	I	H act	RDS ready (B, G, F models)
50	D29/OUTC2_2/ ISRXD2/IEIN/ P13_5	P13_5	MT_N_Z2	100kPD	+3.3S_PON	O	Low	O	L act	Mute Zone2 (LINE out)
51	D28/OUTC2_0/ ISTXD2/IEOUT/ P13_4	ISTXD2	IR_OUT		AC	O	Low	O	Data	Remote control code output
52	RDY/CS3/CTS7/ RTS7/P5_7	RDY	NC(RDY)		HDMI_PON	O	Low	B	Bus	External bus
53	ALE/CS2/RXD7/ P5_6	CS2	DFF_N_CS		HDMI_PON	O	Low	B	Bus	External bus
54	HOLD/CLK7/ P5_5	P5_5	DBG_EPM	22kPU and 3.3kPD	AC	I	---	I		E8a
55	HLDA/CS1/ TXD7/P5_4	CS1	FLASH_N_ CS		HDMI_PON	O	Low	B	Bus	External bus
56	D27/OUTC2_3/ P13_3	P13_3	MT_N_SB	100kPD	+3.3S_PON	O	Low	O	L act	Mute SB/BA/Z2/FP (Preout/Main amplifier input)
57	VSS	VSS	VSS							---
58	D26/OUTC2_6/ P13_2	P13_2	MT_DA		DSP_PON	O	Low	O	H act	Mute Digital Audio

Pin No.	Port Name	Use Port	Function Name	Terminal Processing	Related Power Supply					Detail of Function
						OFF		ON		
						I/O	Logic	I/O	Logic	
59	VCC	VCC	VCC							---
60	D25/OUTC2_5/ P13_1	P13_1	MT_N_SW	100kPD	+3.3S_PON	O	Low	O	L act	Mute Subwoofer (Preout)
61	D24/OUTC2_4/ P13_0	P13_0	MT_N_5CH	100kPD	+3.3S_PON	O	Low	O	L act	Mute 5ch (L,C,R,SRL,SRR Preout/Main amp Input)
62	CLKOUT/BCLK/ R5_3	BCLK	NC(BCLK)		HDMI_PON	O	Low	B	Bus	Used by external bus
63	RD/P5_2	RD	MCBUS_N_ RD		HDMI_PON	O	Low	B	Bus	External bus
64	WR1/BC1/P5_1	BC1	NC(BC1)		HDMI_PON	O	Low	B	Bus	Used by external bus
65	WR0/WR/P5_0	WR	MCBUS_N_ WR		HDMI_PON	I	---	B	Bus	External bus
66	D23/P12_7	P12_7	DSP1_N_ CS		DSP_PON	O	Low	O	L act	DSP1 chip select
67	D22/P12_6	P12_6	DSP1_N_ SPIRDY		DSP_PON	O	Low	I	L act	DSP1 SPI ready
68	D21/P12_5	P12_5	DIR1_N_ INT		DSP_PON	O	Low	I	L DIR	For discrimination of DIR1/DSP1 interrupt
69	CS0/A23/TXD6/ SDA6/SRXD6/ P4_7	P11_3	–		AC	O	Low	O	Low	Unassigned
70	CS1/A22/RXD6/ SCL6/STXD6/ P4_6	A22	A[22]		HDMI_PON	O	Low	B	Bus	External bus
71	CS2/A21/CLK6/ P4_5	A21	A[21]		HDMI_PON	O	Low	B	Bus	External bus
72	CS3/A20/CTS6/ RTS6/SS6/P4_4	A20	A[20]		HDMI_PON	O	Low	B	Bus	External bus
73	A19/TXD3/ SDA3/SRXD3/ OUTC2_0/ ISTXD2/IEOUT/ P4_3	A19	A[19]		HDMI_PON	O	Low	B	Bus	External bus
74	VCC	VCC	VCC							---
75	A18/RXD3/ SCL3/STXD3/ ISRXD2/IEIN/ P4_2	A18	A[18]		HDMI_PON	O	Low	B	Bus	External bus
76	VSS	VSS	VSS							---
77	A17/CLK3/P4_1	A17	A[17]		HDMI_PON	O	Low	B	Bus	External bus
78	A16/CTS3/RTS3/ SS3/P4_0	A16	A[16]		HDMI_PON	O	Low	B	Bus	External bus
79	A15/[A15/D15]/ TA4IN/U/P3_7	A15	A[15]		HDMI_PON	O	Low	B	Bus	External bus
80	A14/[A14/D14]/ TA4OUT/U/P3_6	A14	A[14]		HDMI_PON	O	Low	B	Bus	External bus
81	A13/[A13/D13]/ TA2IN/W/P3_5	A13	A[13]		HDMI_PON	O	Low	B	Bus	External bus
82	A12/[A12/D12]/ TA2OUT/W/P3_4	A12	A[12]		HDMI_PON	O	Low	B	Bus	External bus
83	A11/[A11/D11]/ TA1IN/V/P3_3	A11	A[11]		HDMI_PON	O	Low	B	Bus	External bus
84	A10/[A10/D10]/ TA1OUT/V/P3_2	A10	A[10]		HDMI_PON	O	Low	B	Bus	External bus
85	A9/[A9/D9]/ TA3OUT/UD0B/ UD1B/P3_1	A9	A[9]		HDMI_PON	O	Low	B	Bus	External bus
86	D20/P12_4	P12_4	FPGA_N_ CFG	10kPU	HDMI_PON	O	Low	O	L act	FPGA nCONF
87	D19/CTS6/ RTS6/SS6/ P12_3	P12_3	FPGA_N_ STA	10kPU	HDMI_PON	I	---	I	L act	FPGA nSTATUS
88	D18/RXD6/ SCL6/STXD6/ P12_2	P12_2	FPGA_ CDONE	10kPU	HDMI_PON	I	---	I	H act	FPGA CONF DONE

Pin No.	Port Name	Use Port	Function Name	Terminal Processing	Related Power Supply	OFF		ON		Detail of Function
						I/O	Logic	I/O	Logic	
89	D17/CLK6/ P12_1	CLK6	FPGA_SCL		HDMI_PON	O	Low	O	Clk	FPGA clock (at Boot)
90	D16/TXD6/ SDA6/SRXD6/ P12_0	TXD6	FPGA_ MOSI		HDMI_PON	O	Low	O	Data	FPGA transmission data (at Boot)
91	VCC	VCC	VCC							---
92	A8/[A8/D8]/ TA0OUT/UD0A/ UD1A/P3_0	A8	A[8]		HDMI_PON	O	Low	B	Bus	External bus
93	VSS	VSS	VSS							---
94	A7/[A7/D7]/ AN2_7/P2_7	A7	A[7]		HDMI_PON	O	Low	B	Bus	External bus
95	A6/[A6/D6]/ AN2_6/P2_6	A6	A[6]		HDMI_PON	O	Low	B	Bus	External bus
96	A5/[A5/D5]/ AN2_5/P2_5	A5	A[5]		HDMI_PON	O	Low	B	Bus	External bus
97	A4/[A4/D4]/ AN2_4/P2_4	A4	A[4]		HDMI_PON	O	Low	B	Bus	External bus
98	A3/[A3/D3]/ AN2_3/P2_3	A3	A[3]		HDMI_PON	O	Low	B	Bus	External bus
99	A2/[A2/D2]/ AN2_2/P2_2	A2	A[2]		HDMI_PON	O	Low	B	Bus	External bus
100	A1/[A1/D1]/BC2/ [BC2/D1]/AN2_1/ P2_1	A1	A[1]		HDMI_PON	O	Low	B	Bus	External bus
101	A0/[A0/D0]/BC0/ [BC0/D0]/AN2_0/ P2_0	A0	A[0]		HDMI_PON	O	Low	B	Bus	External bus
102	D15/INT5/ IIO0_7/IIO1_7/ P1_7	D15	D[15]	100kPD	HDMI_PON	I	---	B	Bus	External bus
103	D14/INT4/ IIO0_6/IIO1_6/ P1_6	D14	D[14]	100kPD	HDMI_PON	I	---	B	Bus	External bus
104	D13/INT3/ IIO0_5/IIO1_5/ P1_5	D13	D[13]	100kPD	HDMI_PON	I	---	B	Bus	External bus
105	D12/IIO0_4/ IIO1_4/P1_4	D12	D[12]	100kPD	HDMI_PON	I	---	B	Bus	External bus
106	D11/IIO0_3/ IIO1_3/P1_3	D11	D[11]	100kPD	HDMI_PON	I	---	B	Bus	External bus
107	D10/IIO0_2/ IIO1_2/P1_2	D10	D[10]	100kPD	HDMI_PON	I	---	B	Bus	External bus
108	D9/IIO0_1/ IIO1_1/P1_1	D9	D[9]	100kPD	HDMI_PON	I	---	B	Bus	External bus
109	IIO0_0/IIO1_0/ D8/P1_0	D8	D[8]	100kPD	HDMI_PON	I	---	B	Bus	External bus
110	AN0_7/D7/P0_7	D7	D[7]	100kPD	HDMI_PON	I	---	B	Bus	External bus
111	AN0_6/D6/P0_6	D6	D[6]	100kPD	HDMI_PON	I	---	B	Bus	External bus
112	AN0_5/D5/P0_5	D5	D[5]	100kPD	HDMI_PON	I	---	B	Bus	External bus
113	AN0_4/D4/P0_4	D4	D[4]	100kPD	HDMI_PON	I	---	B	Bus	External bus
114	WR3/BC3/P11_4	P11_4	EEP_N_CS	10kPU	AC	O	Low	O	L act	EEPROM chip select
115	IIO1_3/RTS8/ CTS8/WR2/CS3/ P11_3	CS3	FPGA_N_ CS		HDMI_PON	O	Low	B	Bus	External bus
116	IIO1_2/RXD8/ CS2/P11_2	RXD8	EEP_MISO		AC	O	Low	I	Data	FL/Expansion IO/EEPROM reception data
117	IIO1_1/CLK8/ CS1/P11_1	CLK8	EX_CLK	FL/expansion, suction prevention	AC	O	Low	O	Clk	FL/Expansion IO/EEPROM communication clock
118	IIO1_0/TXD8/ CS0/P11_0	TXD8	EX_MOSI	FL/expansion, suction prevention	AC	O	Low	O	Data	FL/Expansion IO/EEPROM transmission data
119	AN0_3/D3/P0_3	D3	D[3]	100kPD	HDMI_PON	I	---	B	Bus	External bus
120	AN0_2/D2/P0_2	D2	D[2]	100kPD	HDMI_PON	I	---	B	Bus	External bus
121	AN0_1/D1/P0_1	D1	D[1]	100kPD	HDMI_PON	I	---	B	Bus	External bus

Pin No.	Port Name	Use Port	Function Name	Terminal Processing	Related Power Supply					Detail of Function
						OFF		ON		
						I/O	Logic	I/O	Logic	
122	AN0_0/D0/P0_0	D0	D[0]	100kPD	HDMI_PON	I	---	B	Bus	External bus
123	IIO0_7/RTS6/ CTS6/SS6/ AN15_7/P15_7	P15_7	EX12_N_ RST		HDMI_PON	O	Low	O	L act	Expansion IO 1/2 reset
124	IIO0_6/CLK6/ AN15_6/P15_6	P15_6	EX12_N_ CS		HDMI_PON	O	Low	O	L act	Expansion IO 1/2 chip select
125	IIO0_5/RXD6/ SCL6/STXD6/ AN15_5/P15_5	P15_5	AD_SEL_A		+3.3S_PON	O	Low	O		AD select A
126	IIO0_4/TXD6/ SDA6/SRXD6/ AN15_4/P15_4	P15_4	AD_SEL_B		+3.3S_PON	O	Low	O		AD select B
127	IIO0_3/RTS7/ CTS7/AN15_3/ P15_3	P15_3	AD_SEL_C		+3.3S_PON	O	Low	O		AD select C
128	IIO0_2/RXD7/ AN15_2/P15_2	RXD7	SR_MISO	3.3V level shift	DSP_PON	O	Low	I	Data	SIRIUS reception data (U model)
		P15_2	RDS_MISO		PRY	O	Low	I	Data	RDS data (B, G, F models)
129	IIO0_1/CLK7/ AN15_1/P15_1	P15_1	VIDI2C_ON	10KPD	HDMI_PON	O	Low	O	H act	I2C line switch to Video device
130	VSS	VSS	VSS							---
131	IIO0_0/TXD7/	TXD7	SR_MOSI	5V level shift	DSP_PON	O	Low	O	Data	SIRIUS transmission data (U model)
	AN15_0/P15_0	P15_0	RDS_CLK		PRY	O	Low	O	Clock	RDS clock (B, G, F models)
132	VCC	VCC	VCC							---
133	KI3/AN_7/P10_7	P10_7	+3.3S_PON		AC	O	Low	O	H act	+3.3S power on
134	KI2/AN_6/P10_6	AN_6	AD2_COM		+3.3S_PON	O	Low	I	A/D	AD selector 2 COM input
135	KI1/AN_5/P10_5	AN_5	AD1_COM		+3.3S_PON	O	Low	I	A/D	AD selector 1 COM input
136	KI0/AN_4/P10_4	AN_4	DEST		AC	O	Low	I	A/D	Destination discrimination
137	AN_3/P10_3	AN_3	MODEL		AC	O	Low	I	A/D	Model discriminate
138	AN_2/P10_2	AN_2	KY_AD2		AC	O	Low	I	A/D	Key 2
139	AN_1/P10_1	AN_1	KY_AD1		AC	O	Low	I	A/D	Key 1
140	AVSS	AVSS	AVSS							---
141	AN_0/P10_0	P10_0	TU_N_TND	47kPU	+3.3S_PON	O	Low	I	L act	Tuner tuned
142	VREF	VREF	VREF							---
143	AVCC	AVCC	AVCC							---
144	STXD4/SCL4/ RXD4/ADTRG/ P9_7	SCL4	TU_SCL	3.3kPU	PRY	O	Low	O	Data	Tuner I2C clock

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

Ohm	0	+ 1.0 k	+ 1.0 k	+ 1.5 k	+ 1.5 k	+ 2.2 k	+ 3.3 k	+ 4.7 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	1.85 – 2.22	2.23 – 2.62	2.63 – 3.04
A/D conversion value (3.3V=255)	0 – 11	12 – 32	33 – 54	55 – 75	76 – 96	97 – 119	120 – 142	143 – 163	182 – 197	198 – 209
KEY1 (139 pin)	RADIO (SCENE4)	CD (SCENE3)	TV (SCENE2)	BD/DVD (SCENE1)	ZONE2 CONTROL	ZONE2 ON/OFF	INPUT >	INPUT <	MAIN ZONE ⏻ (power)	TONE CONTROL

Ohm	0	+ 1.0 k	+ 1.0 k	+ 1.5 k	+ 1.8 k	+ 2.2 k	+ 3.3 k	+ 4.7 k	+ 6.8 k	+ 10.0 k	+ 22.0 k	+ 68.0 k
V	0 – 0.15	0.16 – 0.42	0.43 – 0.70	0.71 – 0.99	1.00 – 1.27	1.28 – 1.56	1.57 – 1.86	1.87 – 2.14	2.15 – 2.39	2.40 – 2.65	2.66 – 2.91	2.92 – 3.17
A/D conversion value (3.3V=255)	0 – 11	12 – 32	33 – 54	55 – 77	78 – 99	100 – 121	122 – 144	145 – 166	167 – 186	187 – 205	206 – 226	227 – 246
KEY2 (138 pin)	–	TUNING >>	TUNING <<	AM	FM	PRESET >	PRESET <	MEMORY	INFO	STRAIGHT	PROGRAM >	PROGRAM <

Destination detection for AD port
Pull-up resistance 10 k-ohms

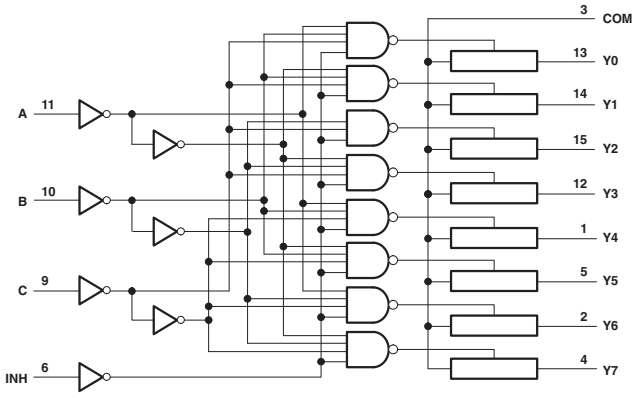
R3809 (VIDEO P.C.B.)	1.2 k	2.7 k	4.7 k	6.8 k	10.0 k	15.0 k	47.0 k	100.0 k
V	0.17 – 0.51	0.52 – 0.87	0.88 – 1.92	1.93 – 1.49	1.50 – 1.81	1.82 – 2.35	2.36 – 2.86	2.87 – 3.15
A/D conversion value (3.3V=255)	13 – 40	41 – 67	68 – 92	93 – 115	116 – 140	141 – 182	183 – 221	222 – 244
Destination	U	C	R	T	K	A	B, G, F	L

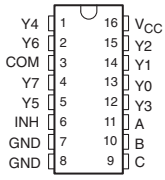
Model detection for A/D port
Model input (A/D) pull-up resistance 10 k-ohms

R4200 (OPERATION P.C.B.)	0	1.0 k	2.2 k
V	0 – 0.13	0.14 – 0.43	0.44 – 0.70
A/D conversion value (3.3V=255)	0 – 10	11 – 33	34 – 54
Model name	RX-V667	RX-A700	HTR-6063

• Microprocessor extended port

IC901, 902: SN74LV4051APWR (DIGITAL P.C.B.)
8-channel analog multiplexers/demultiplexers





INPUTS				ON CHANNEL
INH	C	B	A	
L	L	L	L	Y0
L	L	L	H	Y1
L	L	H	L	Y2
L	L	H	H	Y3
L	H	L	L	Y4
L	H	L	H	Y5
L	H	H	L	Y6
L	H	H	H	Y7
H	X	X	X	None

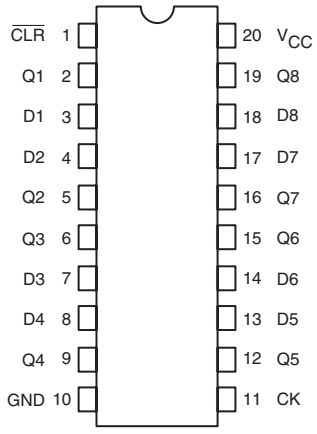
Pin No.	Port Name	Function Name	Terminal Processing	I/O	Related Power Supply					Detail of Function
						OFF		ON		
						I/O	Logic	I/O	Logic	
AD selector 1 (AD1_COM signal is input into AN_5 of R32C)										
1	Y4	PS2_PRT		I	+3.3S_PON	I	---	I	A/D	Power supply protection 2
2	Y6	PS1_PRT		I	+3.3S_PON	I	---	I	A/D	Power supply protection 1
4	Y7	AMP_OLV		I	PRY	I	---	I	A/D	Amplifier output level detection
5	Y5	I_PRT		I	PRY	I	---	I	H act	Current protection
12	Y3	L3_DET		I	VID_PON	I	---	I	A/D	D terminal L3 detection
13	Y0	SV_DET		I	VID_PON	I	---	I	H act	S-video detect
14	Y1	HP_N_DET		I	DSP_PON	I	---	I	L act	Headphone detection
15	Y2	–		I	+3.3S_PON	I	---	I	---	Spare
AD selector 2 (AD2_COM signal is input into AN_6 of R32C)										
1	Y4	DC_PRT		I	PRY	I	---	I	A/D	DC protection
2	Y6	THM1		I	+3.3S_PON	I	---	I	A/D	Temperature detection 1
4	Y7	THM2		I	+3.3S_PON	I	---	I	A/D	Temperature detection 2
5	Y5	MIC_N_ DET		I	DSP_PON	I	---	I	L act	Microphone detection
12	Y3	DOCK_AP	AC OFF時 吸込防止	I	+3.3S_PON	I	---	I	L act	iPod accessory power
13	Y0	DOCK_ID		I	+3.3S_PON	I	---	I	A/D	DOCK ID detection
14	Y1	KY_AD3		I	+3.3S_PON	I	---	I	A/D	Key 3
15	Y2	MODE	10kPU	I	+3.3S_PON	I	---	I	A/D	For special mode discriminate

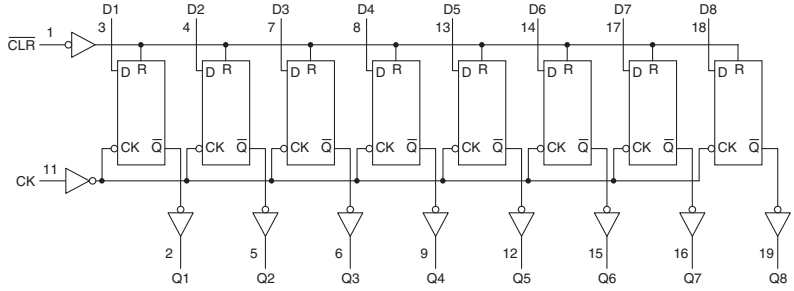
DOCK detection for AD port
Pull-up resistance 10 k-ohms

DOCK type	Bluetooth (YBA-10)	Wireless iPod (YID-W10)	iPod		No connected
			(YDS-11/12(B*))	(YDS-12(A*))	
A/D conversion value (3.3V=255)	5-25	85-100	120-140	150-170	255

* Mode switch setting of the YDS-12

IC904, 905: TC74VHC273FT (DIGITAL P.C.B.)
Octal D-type flip-flop with clear





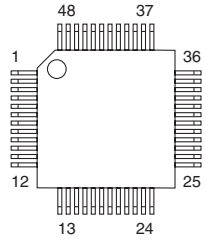
Inputs			Output	Function
$\overline{CLR}$	D	CK	Q	
L	X	X	L	Clear
H	L	↑	L	–
H	H	↑	H	–
H	X	↓	Q_n	No Change

Pin No.	Port Name	Use Port	Function Name	Terminal Processing	Related power supply	OFF		ON		Detail of Function
						I/O	Logic	I/O	Logic	
D-FF(1)										
2	D0	Q1	SPRY_5CH		PRY	O	Low	O	H act	SP relay 5CH (L, C, R, SRL, SRR)
5	D1	Q2	SPRY_ SB&BA		PRY	O	Low	O	H act	SP relay Surround Back and Bi-Amp
6	D2	Q3	SPRY_ Z2&FP		PRY	O	Low	O	H act	SP relay Zone2 and Front Presence
9	D3	Q4	HPRY		PRY	O	Low	O	H act	HP relay
12	D4	Q5	SP_IMP		PRY	O	Low	O	H 6Ω	SP impedance change (± B voltage change)
15	D5	Q6	PRY		PRY	O	Low	O	H act	Power relay
16	D6	Q7	DIR1_N_ RST		DSP_PON	O	Low	O	L act	DIR1 reset
19	D7	Q8	DSP1_N_ RST		DSP_PON	O	Low	O	L act	DSP1 reset
D-FF(2)										
2	D8	Q1	DIR1_N_ CS		DSP_PON	O	Low	O	L act	DIR1 chip select
5	D9	Q2	DAC1_N_ CS		DSP_PON	O	Low	O	L act	DAC chip select
6	D10	Q3	ADC_N_ RST		DSP_PON	O	Low	O	L act	ADC reset (power down)
9	D11	Q4	DOCK_ PON		DOCK_ PON	O	Low	O	H act	DOCK power supply
12	D12	Q5	FL_N_RST		DSP_PON	O	Low	O	L act	FLD reset
15	D13	Q6	FL_N_CS		DSP_PON	O	Low	O	L act	FLD chip select
16	D14	Q7	UAW_PON		UAW_PON	O	Low	O	H act	UAW power supply
19	D15	Q8	PD_LED		PRY	O	Low	O	H act	Pure Direct LED

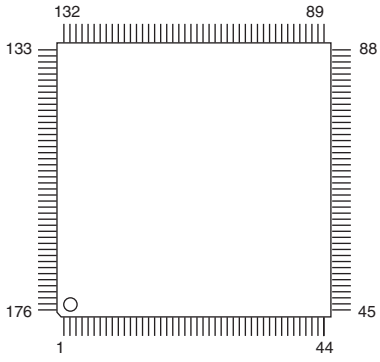
■ PIN CONNECTION DIAGRAMS

• ICs

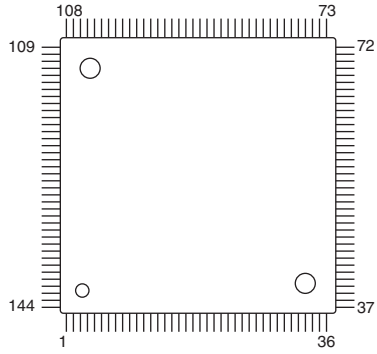
ADV7172KST
DIX9210PTR



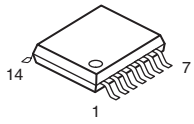
ADV7800BSTZ-80



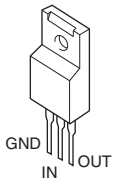
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R5F64169DFD
Sil9233ACTU



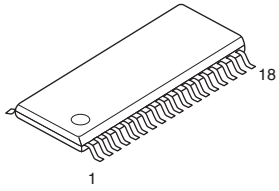
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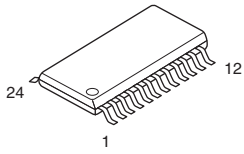
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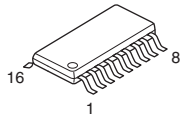
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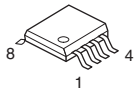
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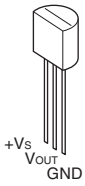
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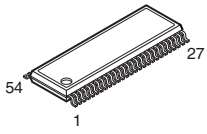
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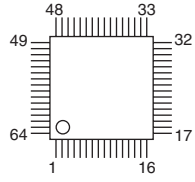
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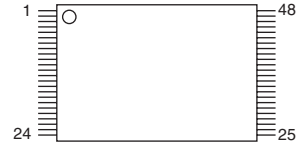
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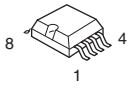
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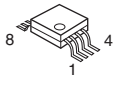
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MX29LV640EBTI-70G



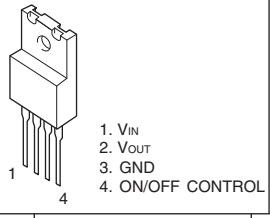
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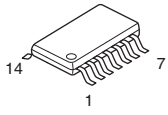
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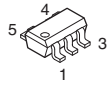
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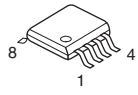
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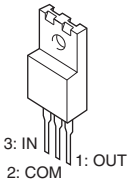
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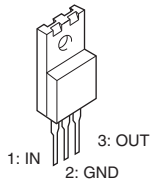
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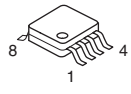
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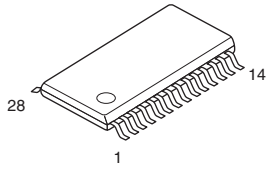
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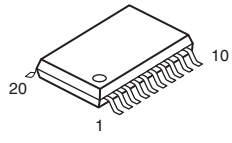
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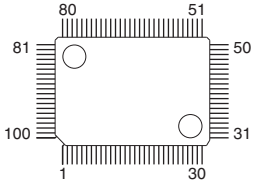
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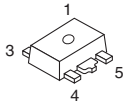
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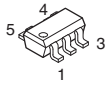
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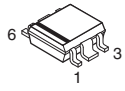
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R1172H501D-T1-F



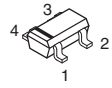
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R1172S331B-E2-F

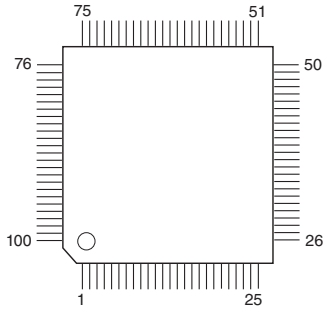


RP130Q121D-TR-F
RP130Q181D-TR-F
RP130Q331D-TR-F
RP130Q501D-TR-F

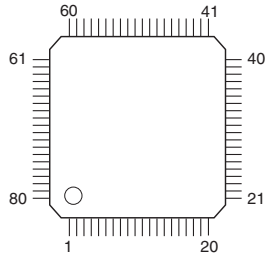


• ICs

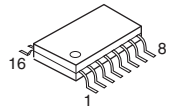
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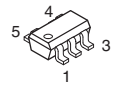
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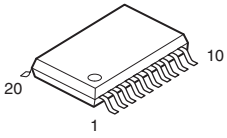
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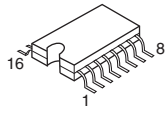
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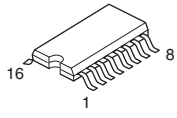
SN74LVC245APWR



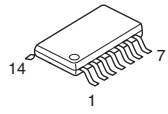
TC74HC4051AFEL



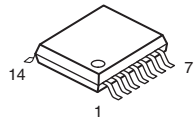
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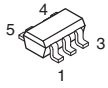
TC74VHC08FT
TC74VHCT08AFT
TC74VHCU04FT



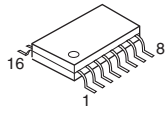
TC74VHC86FT (EL)
TC74VHC126FT



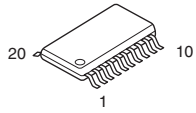
TC7SH08FU
TC7SH32FU
TC7SH125FU



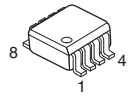
TC74VHC157FT



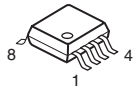
TC74VHC273FT (EL,K)



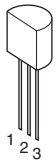
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TK15420MTL-G

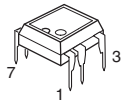


TL431ACLPR

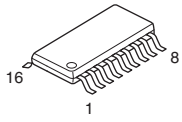


1: CATHODE
2: ANODE
3: REF

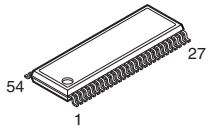
TOP254PN



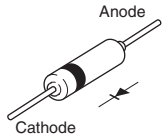
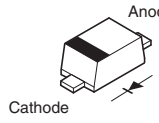
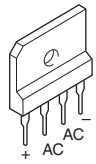
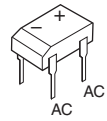
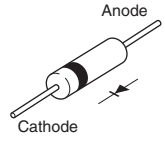
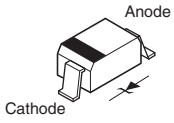
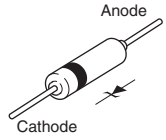
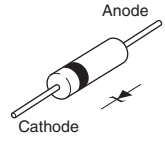
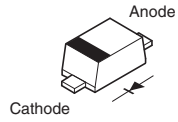
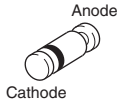
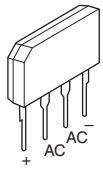
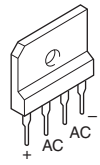
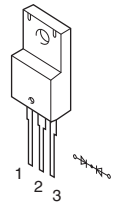
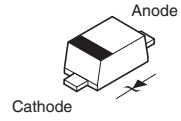
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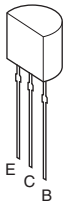
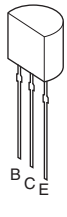
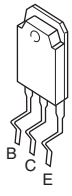
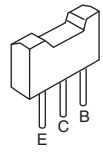
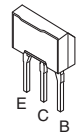
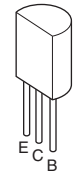
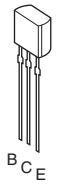
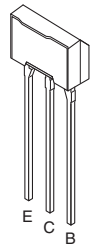
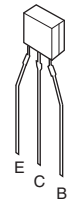
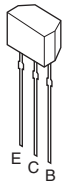
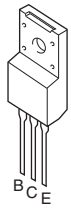
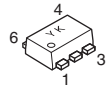
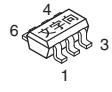
V54C365164VEI6



• Diodes

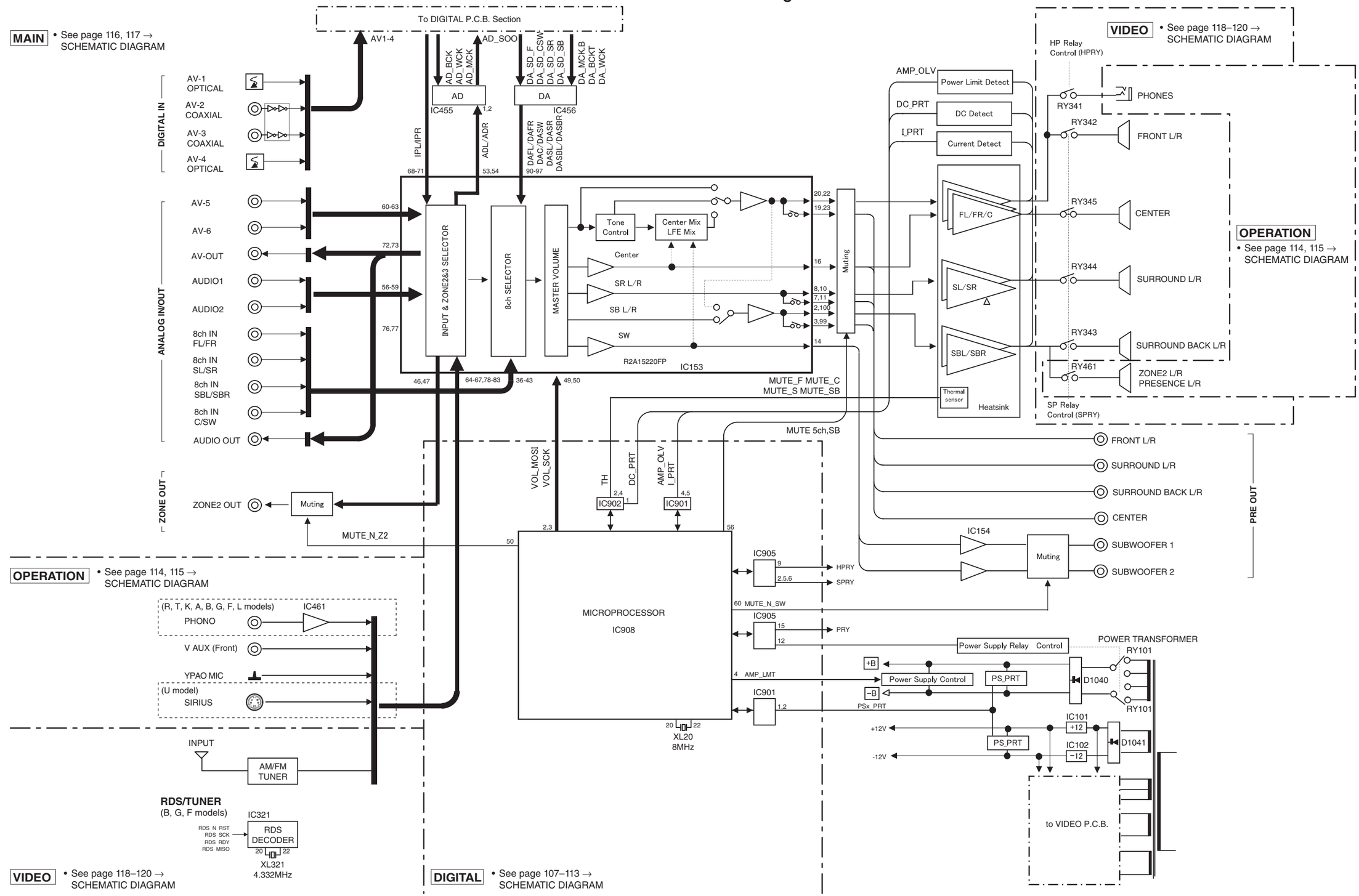
1N4003S 1SS133 1SS176 	1SS355 	D6SBN20 	DB105 	HT18G 
HZU4.3B3 TRF-E 	MTZJ2.4B MTZJ10B MTZJ3.3B MTZJ13B MTZJ5.1B MTZJ22C MTZJ5.1C MTZJ39D MTZJ6.8C 	P6KE200ARL 	RB501V-40 	
RLZ7.5B 7.5V 	RS203M-B-C-J80 	RS603M-B-C-J80 	SG10SC4M 	UDZS5.1B 5.1V UDZS12B 12V 

• Transistors

2N5401C-AT/P 2SA1015-Y 	2N5551C-AT 	2SA1576A 	2SA1695 O,P,Y 2SC4468 O,P,Y 	2SA1708 	2SA1770S/T-AN 	2SA949 2SC1815 Y 2SC2229 
2SC1740S 	2SC3906K 	2SC4081 T106 	2SC4614S/T-AN 	2SC5938A 	2SD2705S TP 	DTA114EKA DTA143EKA DTA144EKA DTC114EKA DTC144EKA  1: GND 2: IN 3: OUT
KRA102M-AT/P KRC102M-AT 	KTA1046-Y-U/P KTA1837-U/P 	KTA1504S KTA1517S KTC3875S 	MCH6336-TL-E  1. Drain 2. Drain 3. Gate 4. Source 5. Drain 6. Drain		μPA672T-T1-A  1. Source 1 (S1) 2. Gate 1 (G1) 3. Drain 2 (D2) 4. Source 2 (S2) 5. Gate 2 (G2) 6. Drain 1 (D1)	

■ BLOCK DIAGRAMS

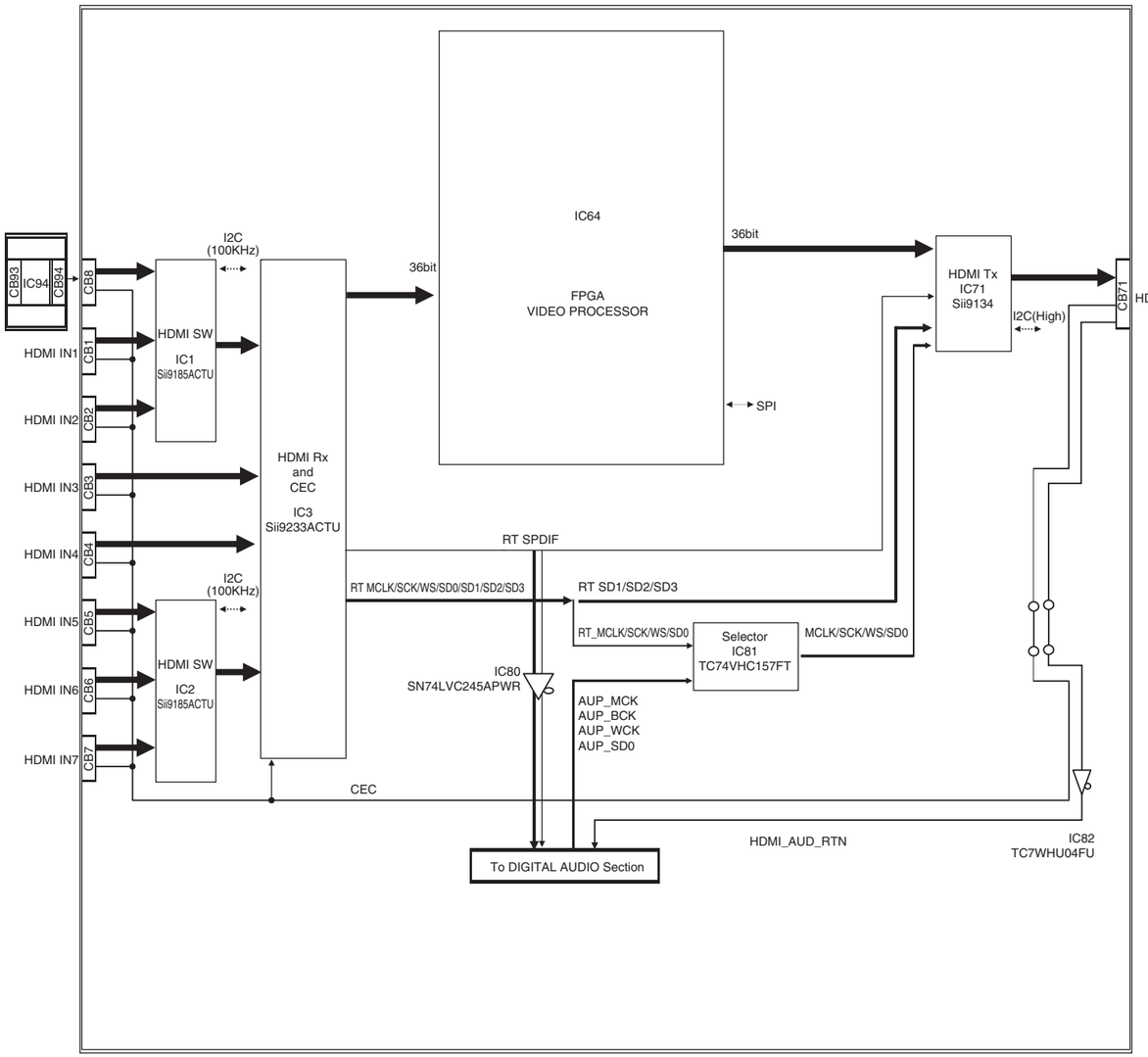
ANALOG AUDIO Section Block Diagram



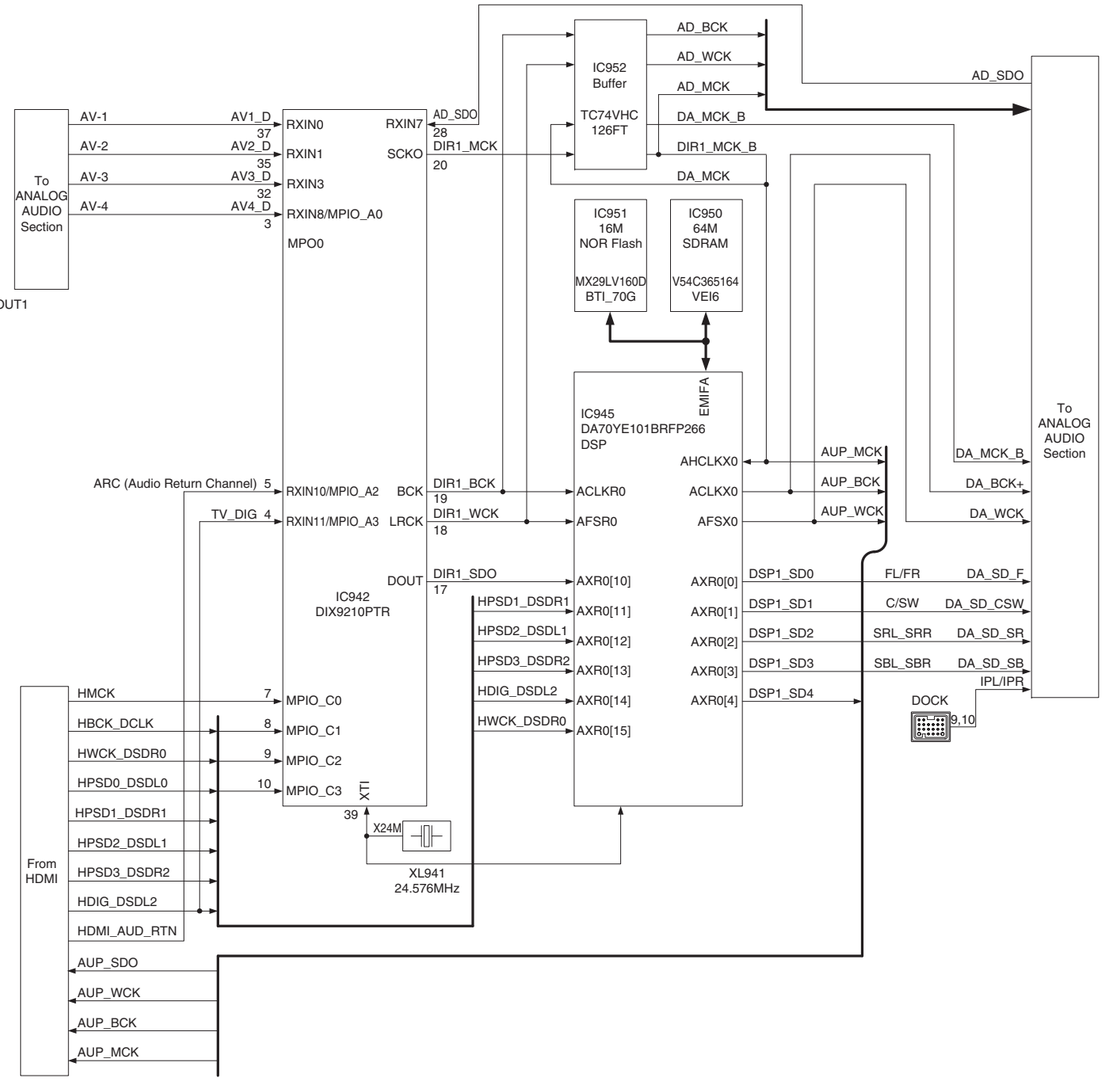
DIGITAL P.C.B. Section Block Diagram

DIGITAL • See page 107–113 → SCHEMATIC DIAGRAM

HDMI Section



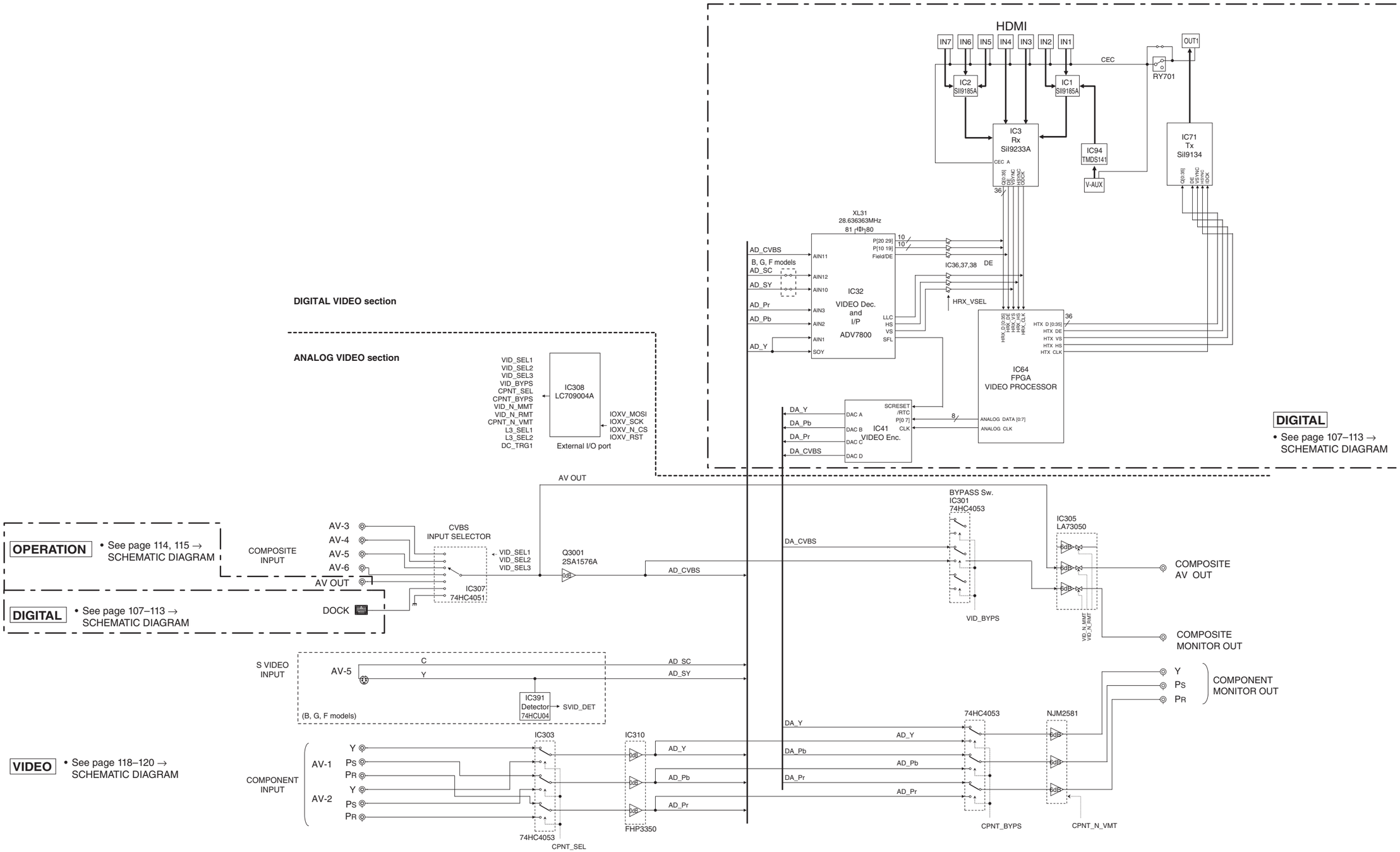
DIGITAL AUDIO Section



VIDEO Section Block Diagram

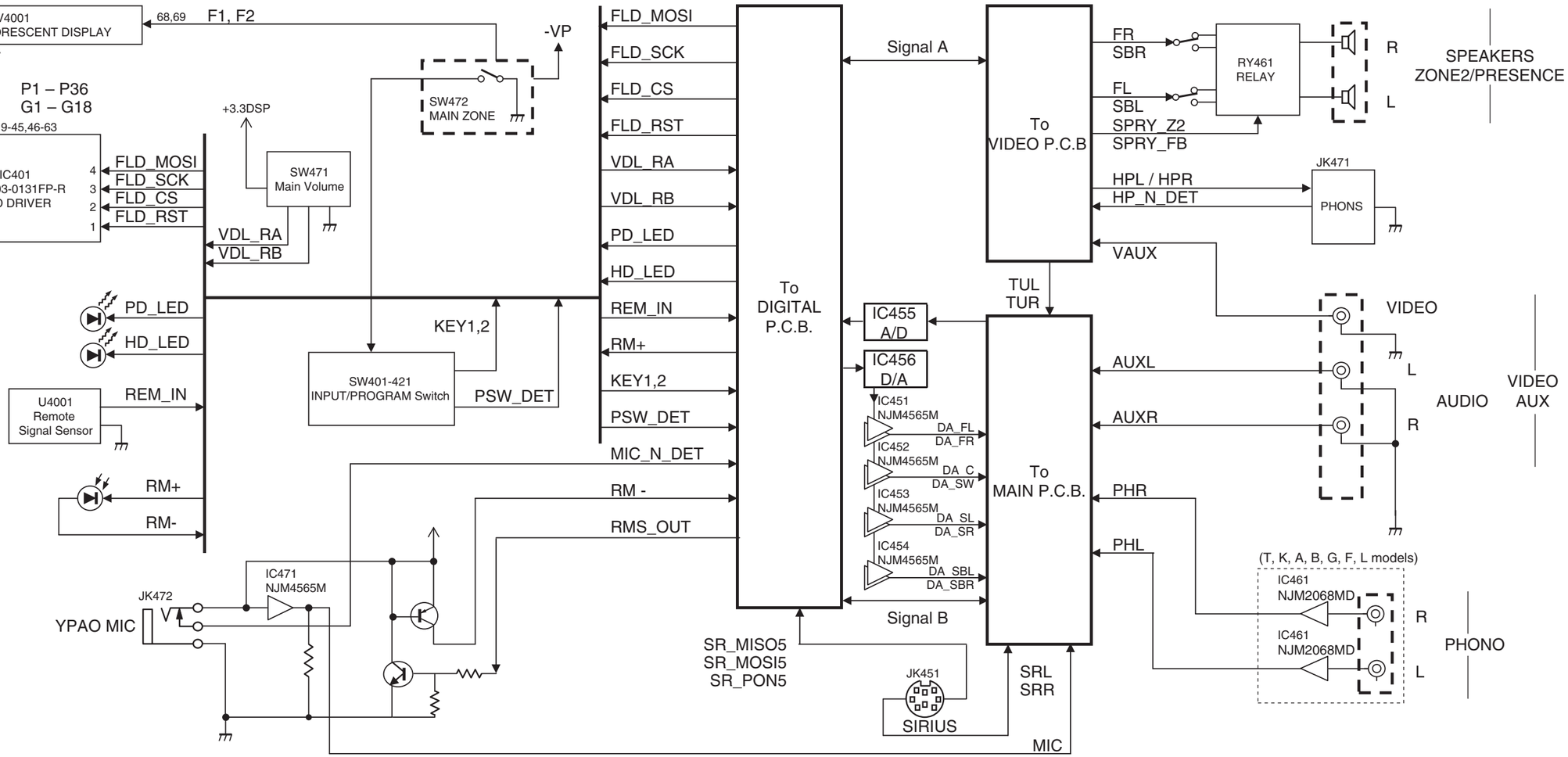
DIGITAL VIDEO section

ANALOG VIDEO section



OPERATION P.C.B. Section Block Diagram

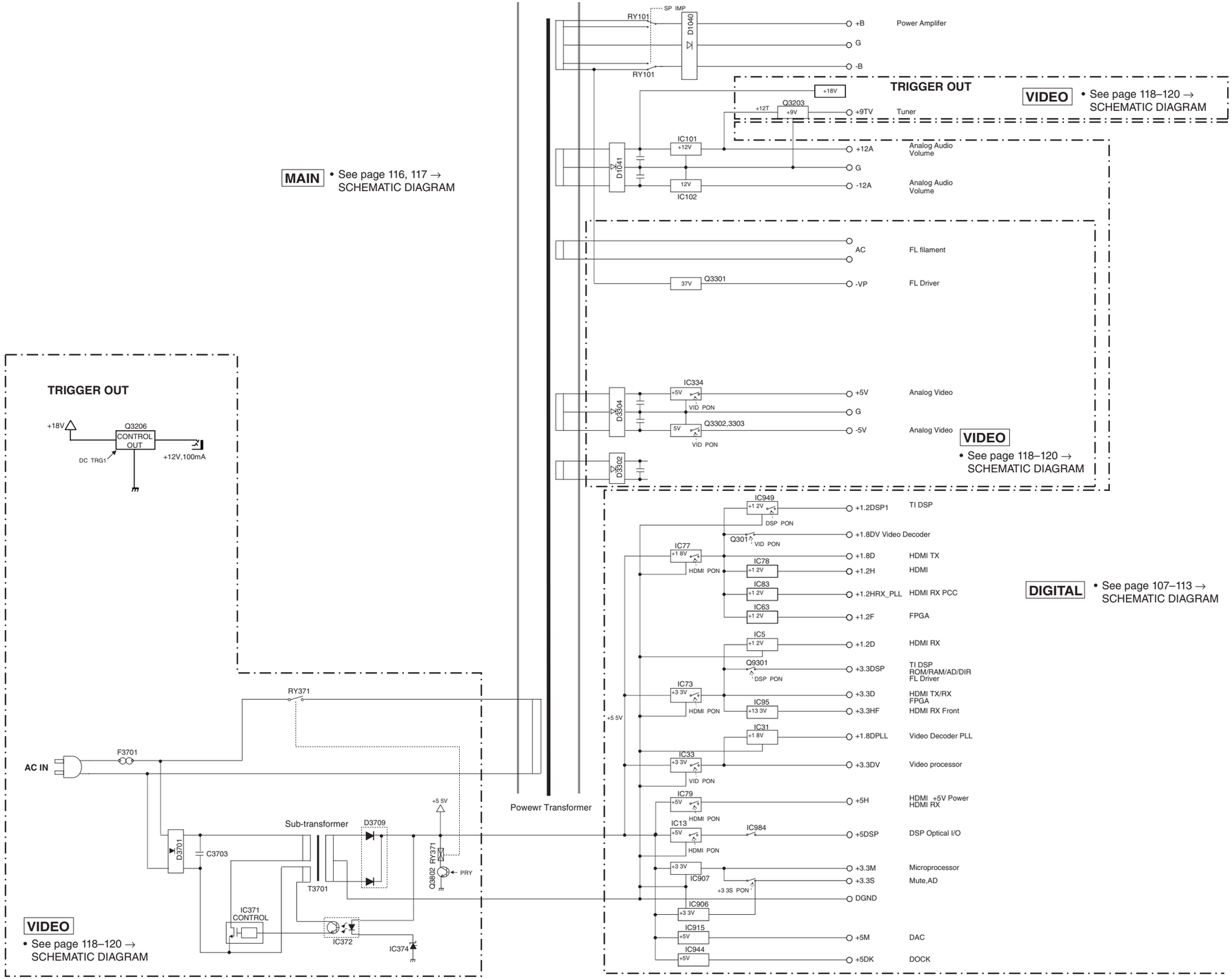
OPERATION • See page 114, 115 → SCHEMATIC DIAGRAM



Signal A
- L3_DET
- CPNT_DET
- IOXV_N_RST
- IOXV_N_CS
- IOXV_SCK
- IOXV_MOSI
- OSD_N_CS
- VID_PON
- PS2_PRT
- IPD_PON
- XM_PON
- IPV

Signal B
- AV1_D – AV4_D
- IPL /IPR
- MUTE_F
- MUTE_5CH

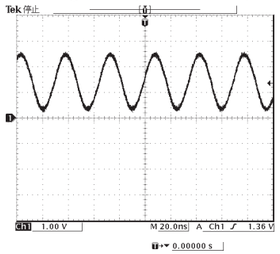
Power Supply Section Block Diagram



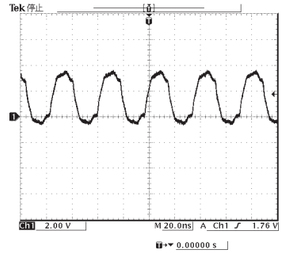
■ PRINTED CIRCUIT BOARDS

DIGITAL (1) P.C.B. (Side A)

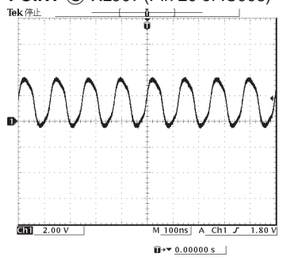
POINT Ⓐ XL31 (Pin 81 of IC32)



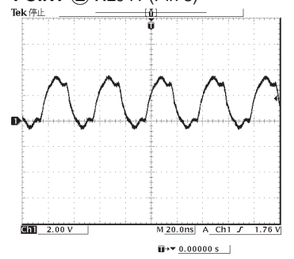
POINT Ⓑ XL61 (Pin 3)

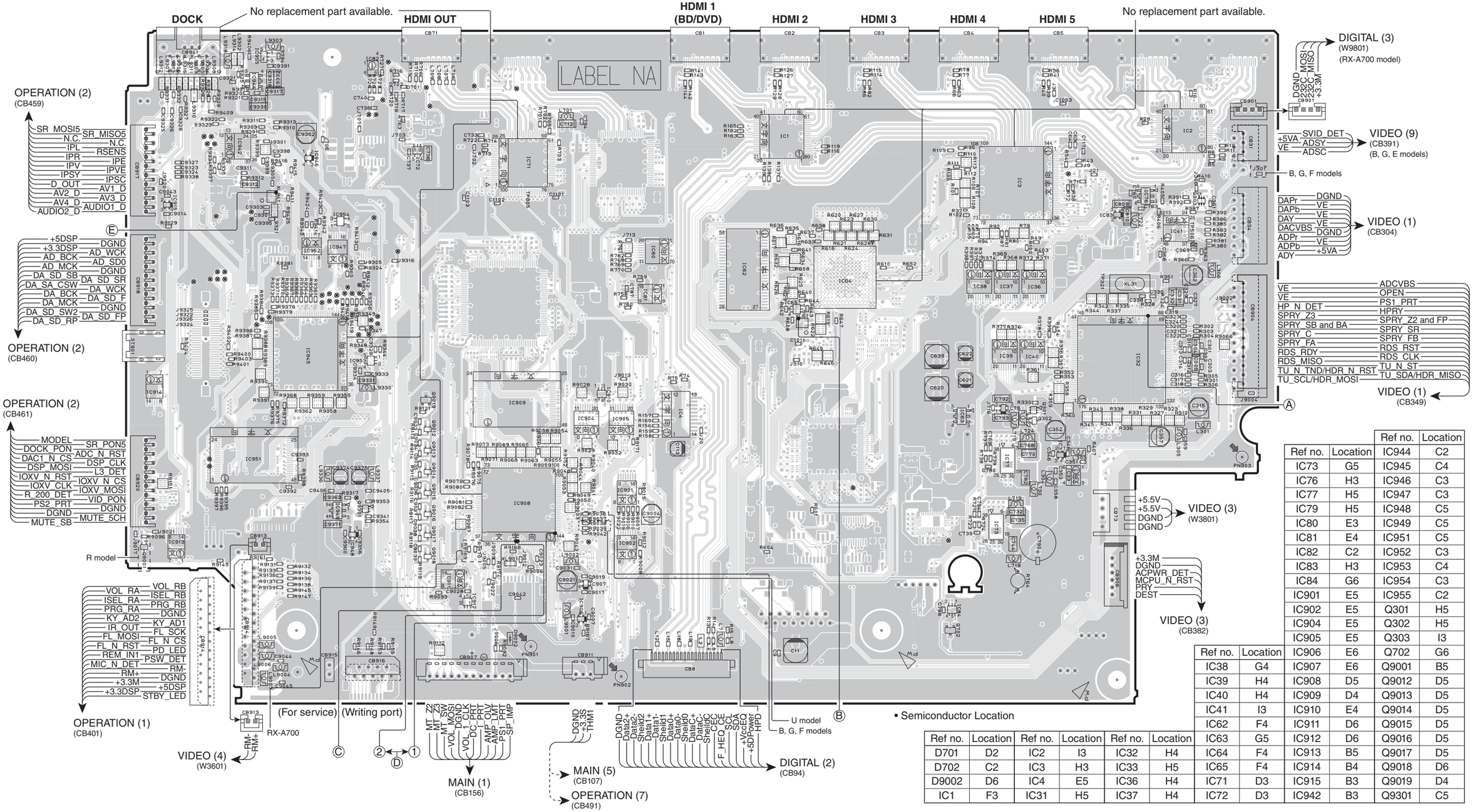


POINT Ⓒ XL901 (Pin 20 of IC908)



POINT Ⓔ XL941 (Pin 3)





• Semiconductor Location

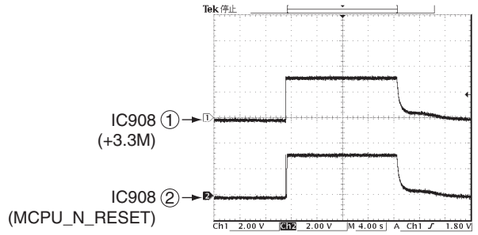
Ref no.	Location	Ref no.	Location	Ref no.	Location
D701	D2	IC2	I3	IC32	H4
D702	C2	IC3	H3	IC33	H5
D9002	D6	IC4	E5	IC36	H4
IC1	F3	IC31	H5	IC37	H4

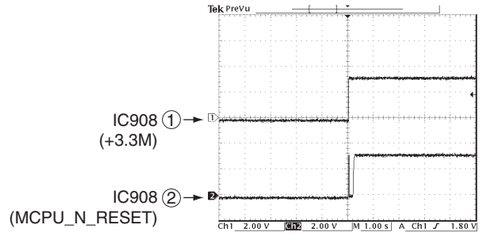
Ref no.	Location	Ref no.	Location
IC38	G4	IC907	E6
IC39	H4	IC908	D5
IC40	H4	IC909	D4
IC41	I3	IC910	E4
IC62	F4	IC911	D6
IC63	G5	IC912	D6
IC64	F4	IC913	B5
IC65	F4	IC914	B4
IC71	D3	IC915	B3
IC72	D3	IC942	B3

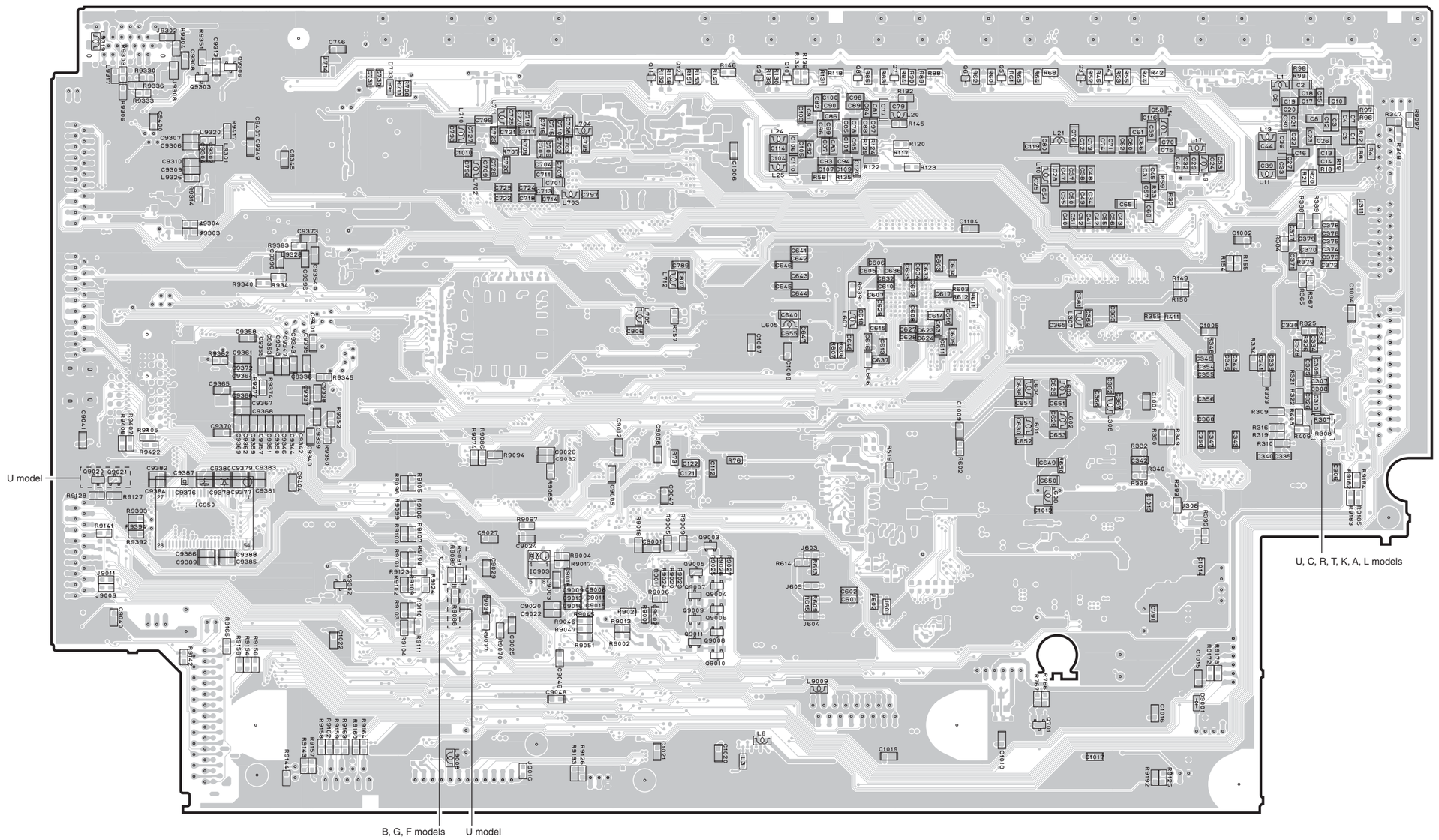
Ref no.	Location	Ref no.	Location
IC73	G5	IC944	C2
IC76	H3	IC945	C4
IC77	H5	IC946	C3
IC79	H5	IC947	C3
IC80	E3	IC948	C5
IC81	E4	IC949	C5
IC82	C2	IC951	C5
IC83	H3	IC952	C3
IC84	G6	IC953	C4
IC901	E5	IC954	C3
IC902	E5	IC955	C2
IC904	E5	Q301	H5
IC905	E5	Q302	H5
IC906	E6	Q303	I3
IC907	E6	Q702	G6
IC908	D5	Q9001	B5
IC909	D4	Q9012	D5
IC910	E4	Q9013	D5
IC911	D6	Q9014	D5
IC912	D6	Q9015	D5
IC913	B5	Q9016	D5
IC914	B4	Q9017	D5
IC915	B3	Q9018	D6
IC942	B3	Q9019	D4
IC944	C2	Q9301	C5

DIGITAL (1) P.C.B. (Side B)

POINT Ⓓ ①/ IC908 (142 pin, +3.3M), 2 / IC908 (⑲ pin, MCPU_N_RESET)



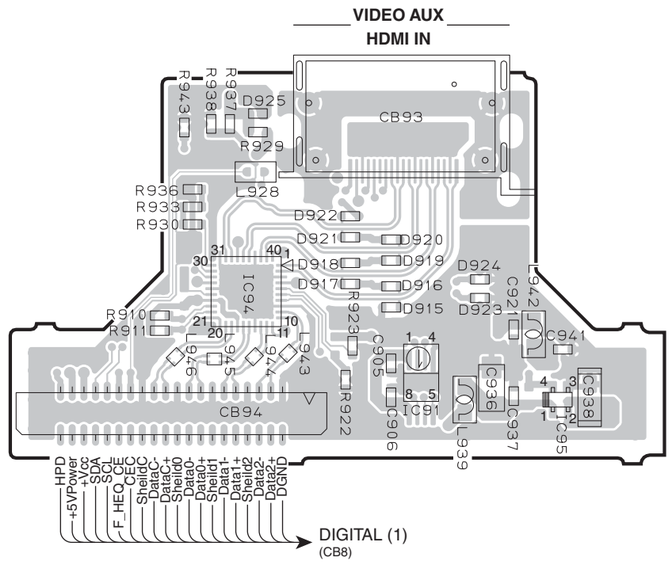




• Semiconductor Location

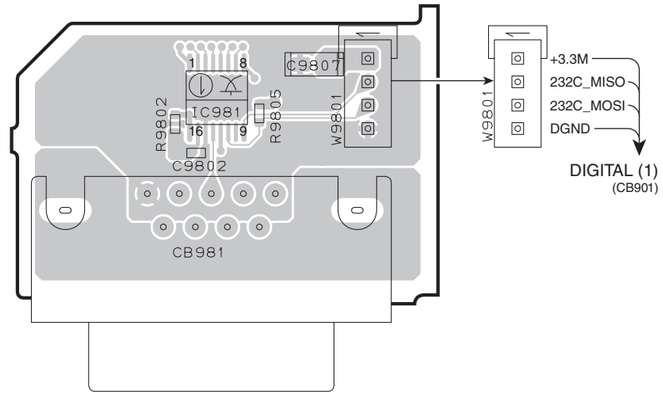
Ref no.	Location
D703	C2
D9001	H6
IC903	D5
IC950	B5
Q3	G2
Q4	G2
Q5	G2
Q6	F2
Q7	F2
Q8	F2
Q9	E2
Q10	E2
Q11	E2
Q12	E2
Q701	G6
Q9003	E5
Q9004	E5
Q9005	E5
Q9006	E5
Q9007	E5
Q9008	E5
Q9009	E5
Q9010	E6
Q9011	E6
Q9020	A5
Q9021	B5
Q9302	C5
Q9303	B2
Q9306	B2

DIGITAL (2) P.C.B. (Side A)



DIGITAL (3) P.C.B. (Side A)

RX-A700 model

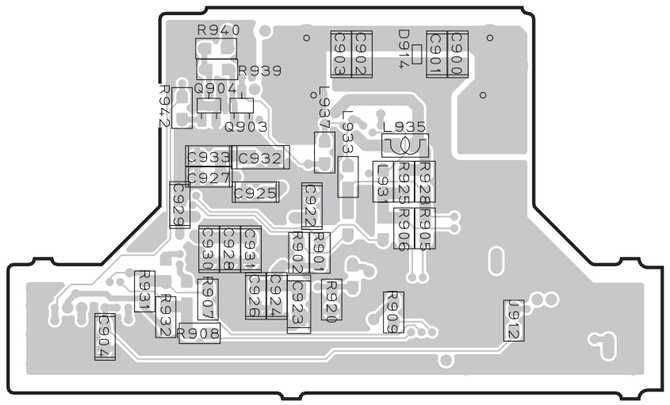


RS-232C

• Semiconductor Location

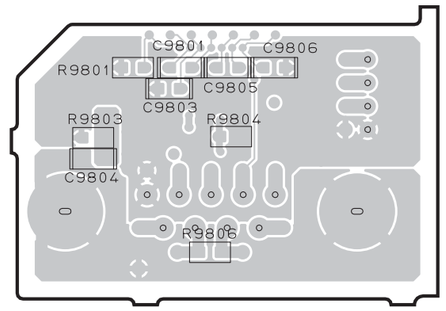
Ref no.	Location
D915	D4
D916	D4
D917	C4
D918	C4
D919	D4
D920	D4
D921	C4
D922	C4
D923	D4
D924	D4
D925	C3
IC91	D4
IC94	C4
IC95	D4
IC981	H3

DIGITAL (2) P.C.B. (Side B)



DIGITAL (3) P.C.B. (Side B)

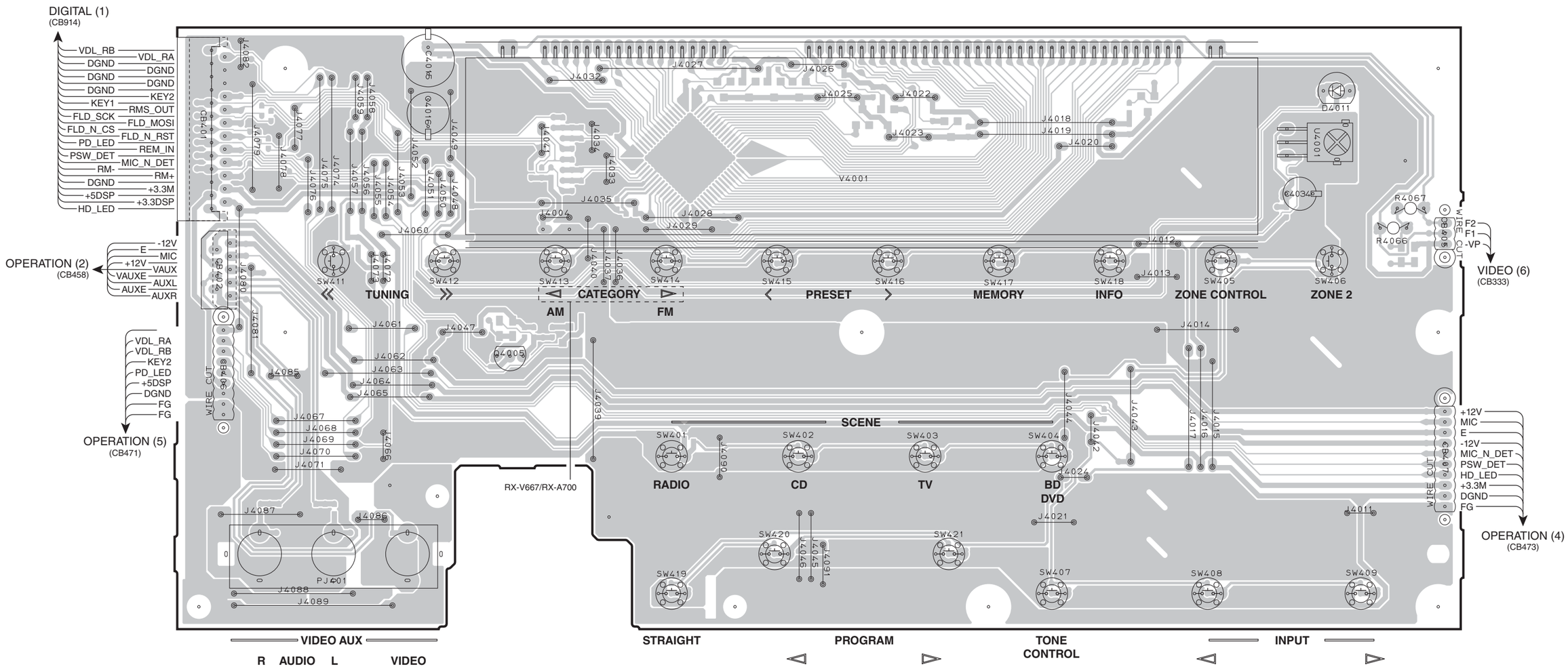
RX-A700 model



• Semiconductor Location

Ref no.	Location
D914	D3
Q903	C3
Q904	C3

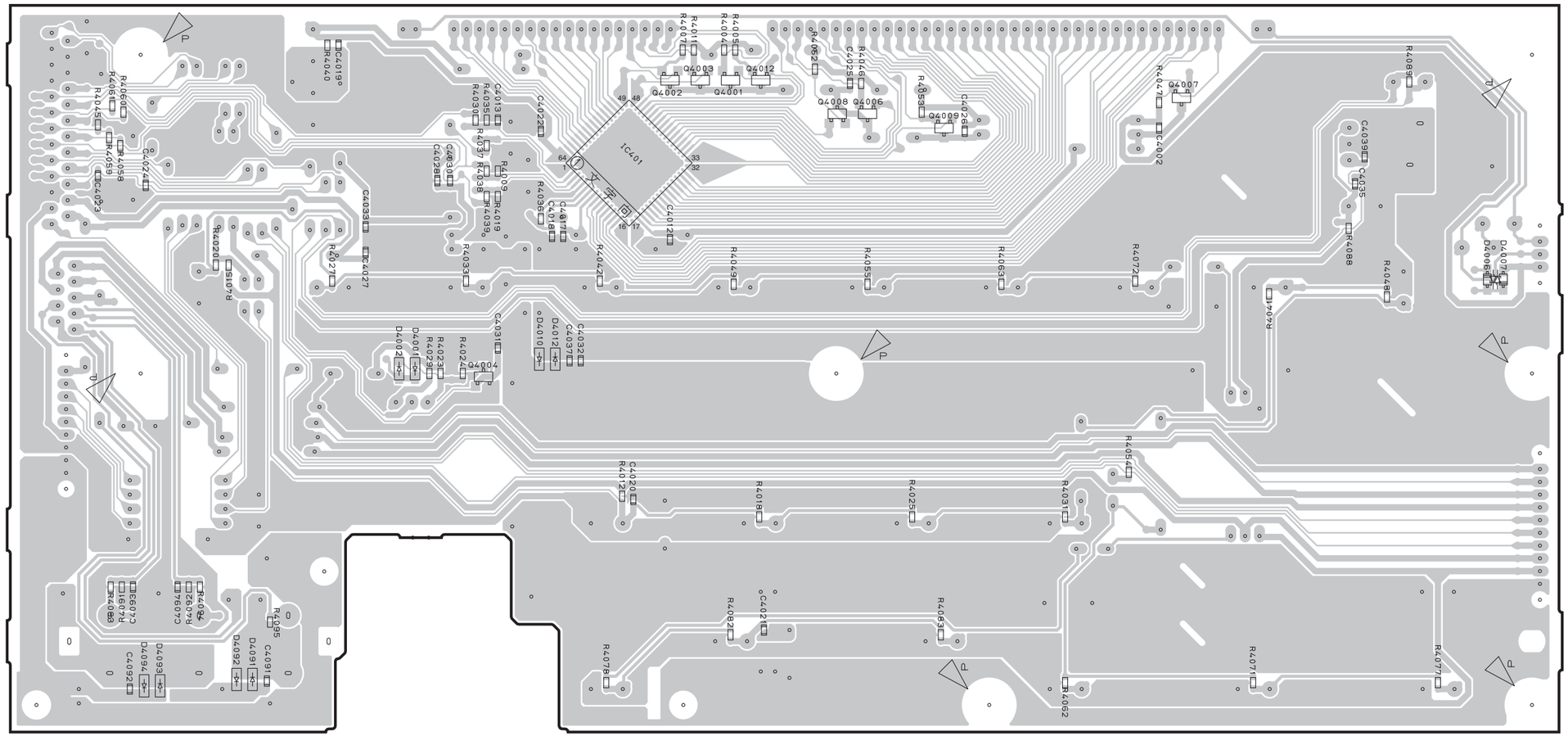
OPERATION (1) P.C.B. (Side A)



• Semiconductor Location

Ref no.	Location
D4011	I3
Q4005	D4

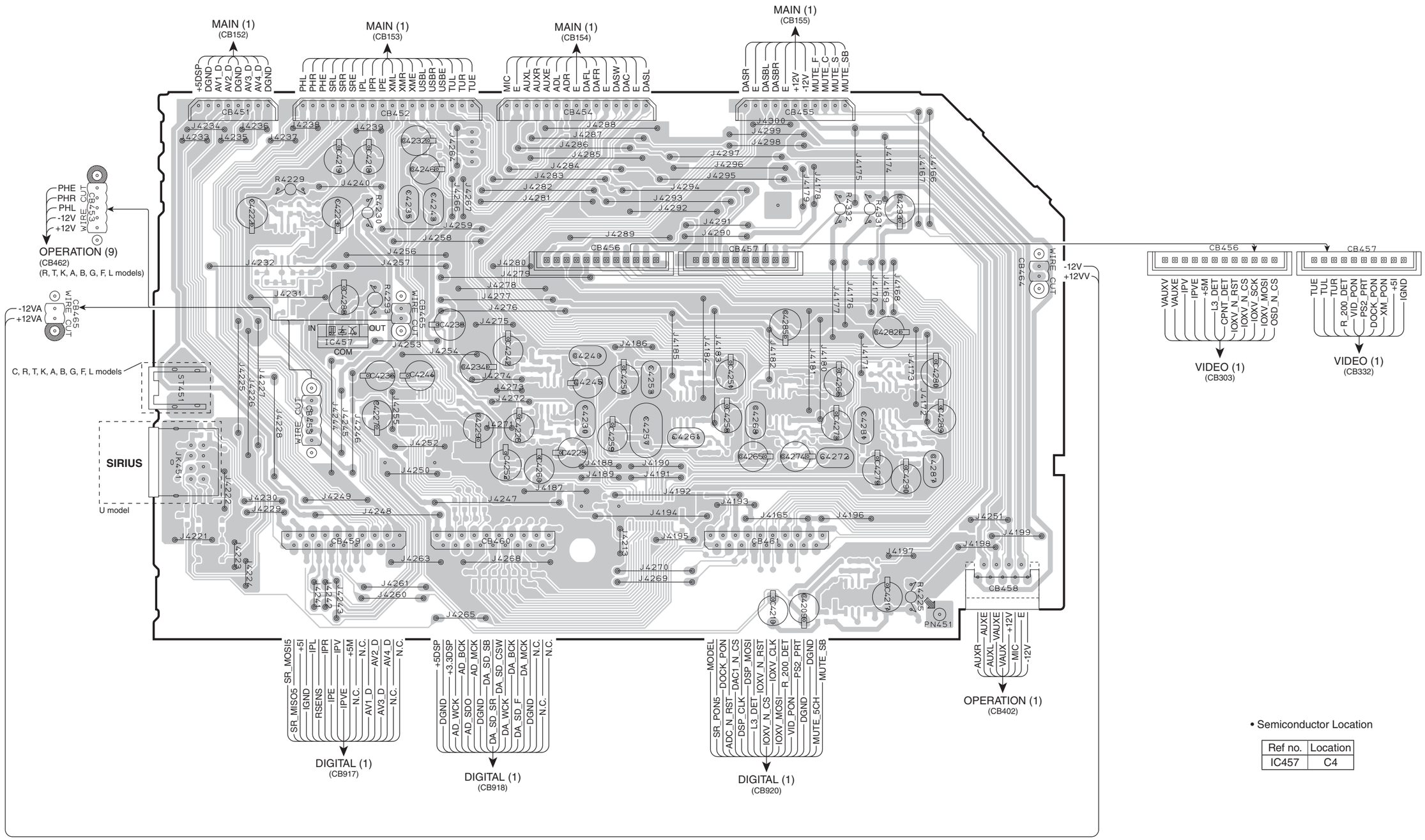
OPERATION (1) P.C.B. (Side B)



• Semiconductor Location

Ref no.	Location	Ref no.	Location	Ref no.	Location
D4001	D4	D4092	C6	Q4004	D4
D4002	D4	D4093	B6	Q4006	F3
D4006	I4	D4094	B6	Q4007	H3
D4007	I4	IC401	E3	Q4008	F3
D4010	D4	Q4001	E3	Q4009	F3
D4012	D4	Q4002	E3	Q4012	E3
D4091	C6	Q4003	E3		

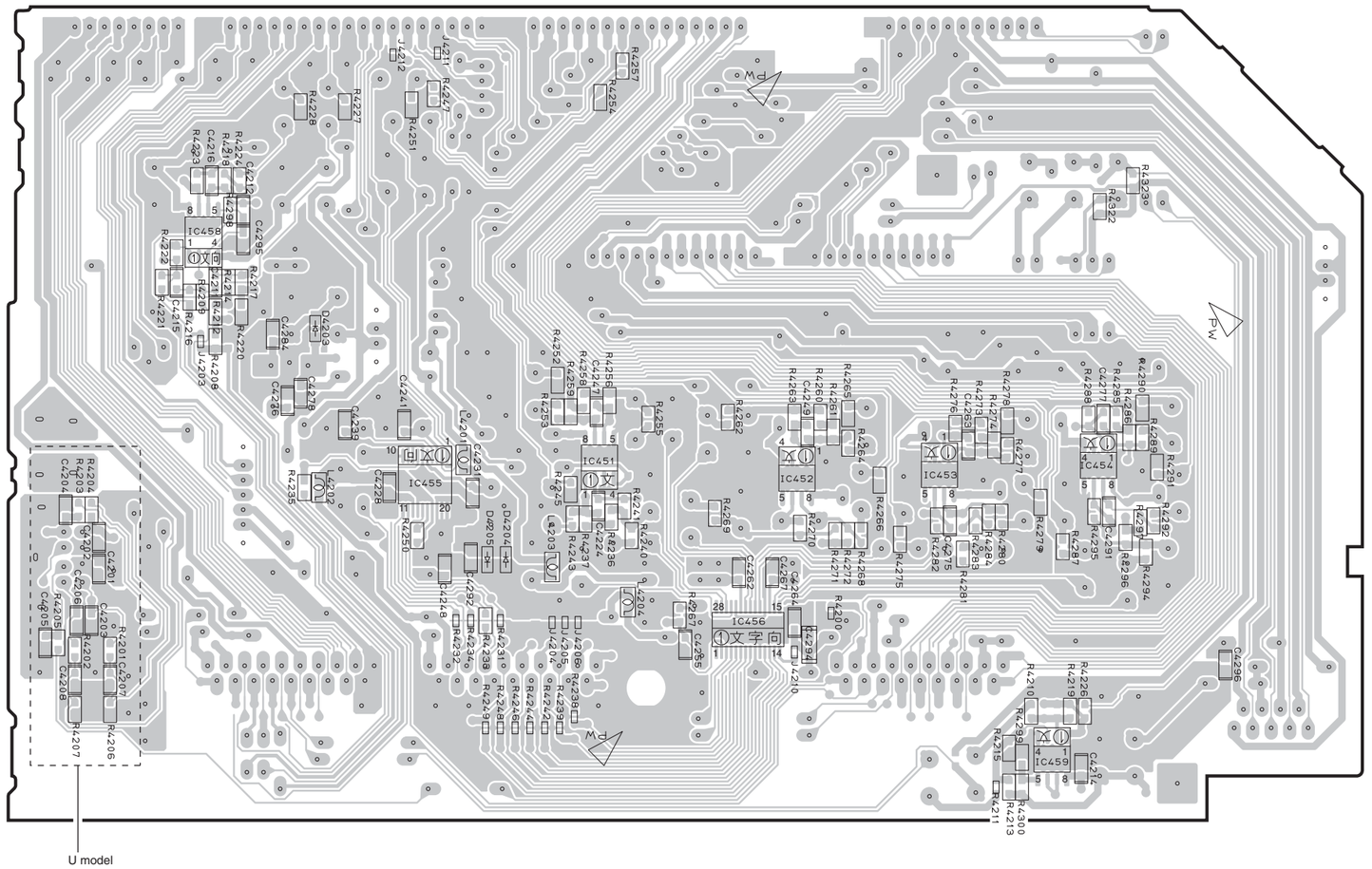
OPERATION (2) P.C.B. (Side A)



• Semiconductor Location

Ref no.	Location
IC457	C4

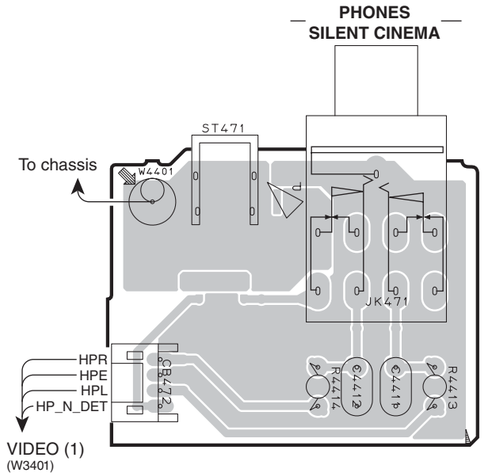
OPERATION (2) P.C.B. (Side B)



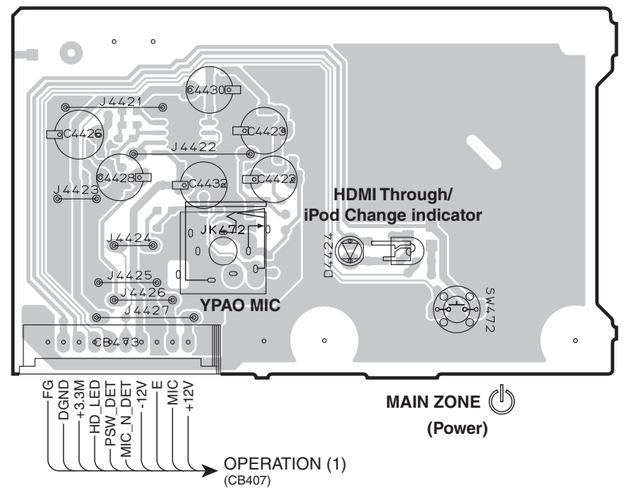
• Semiconductor Location

Ref no.	Location
D4203	D4
D4204	D5
D4205	D5
IC451	E4
IC452	F4
IC453	F4
IC454	G4
IC455	D4
IC456	E5
IC458	C3
IC459	G6

OPERATION (3) P.C.B. (Side A)



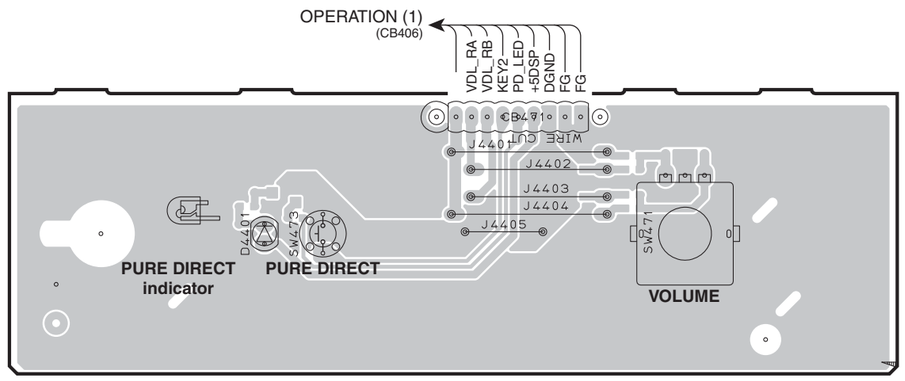
OPERATION (4) P.C.B. (Side A)



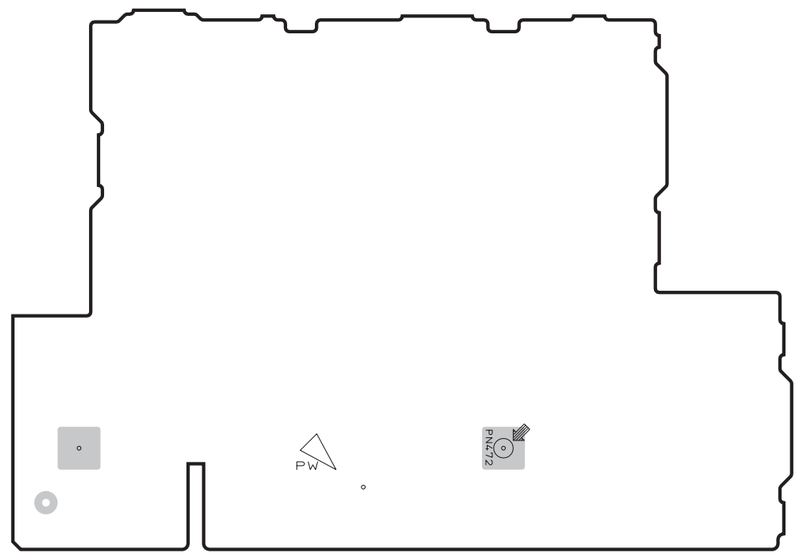
• Semiconductor Location

Ref no.	Location
D4401	C6
D4424	H3

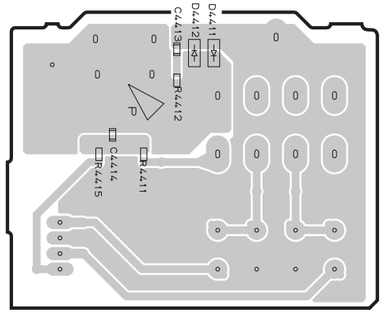
OPERATION (5) P.C.B. (Side A)



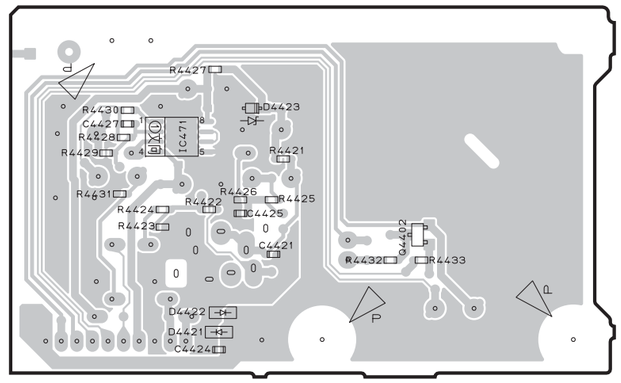
OPERATION (6) P.C.B. (Side A)



OPERATION (3) P.C.B. (Side B)



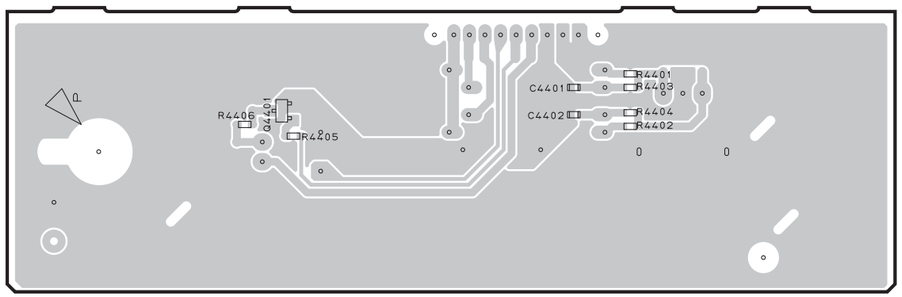
OPERATION (4) P.C.B. (Side B)



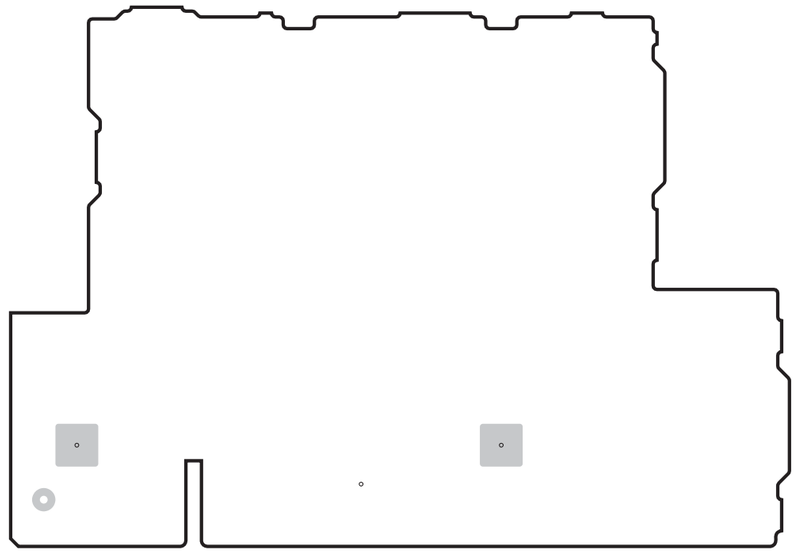
• Semiconductor Location

Ref no.	Location
D4411	C2
D4412	C2
D4421	H3
D4422	H3
D4423	H2
IC471	G2
Q4401	C6
Q4402	H3

OPERATION (5) P.C.B. (Side B)

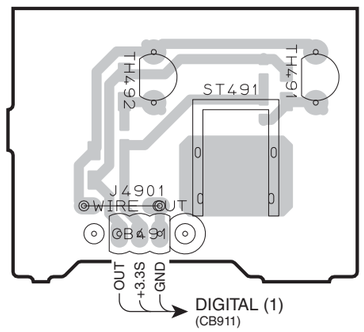


OPERATION (6) P.C.B. (Side B)

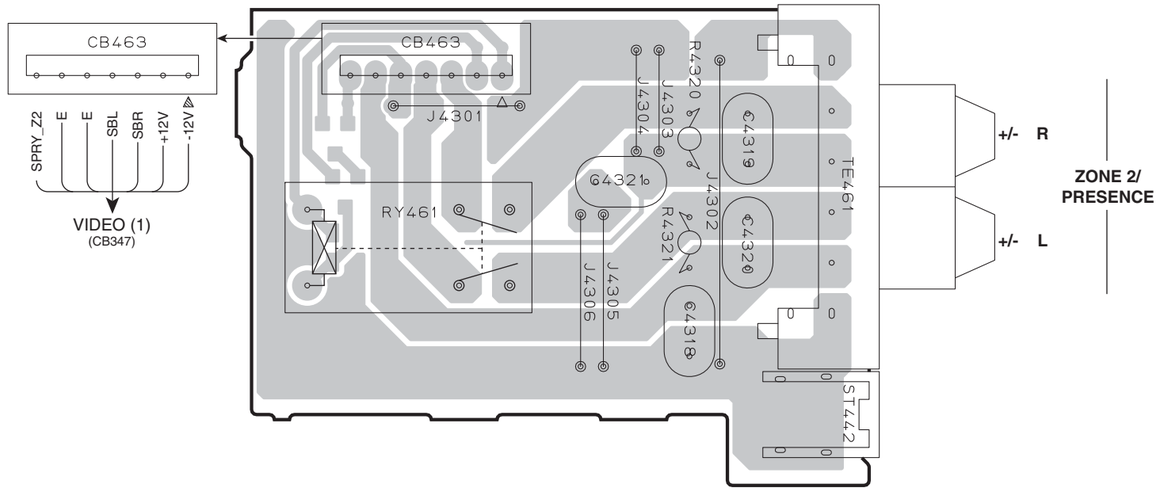


OPERATION (7) P.C.B. (Side A)

C model

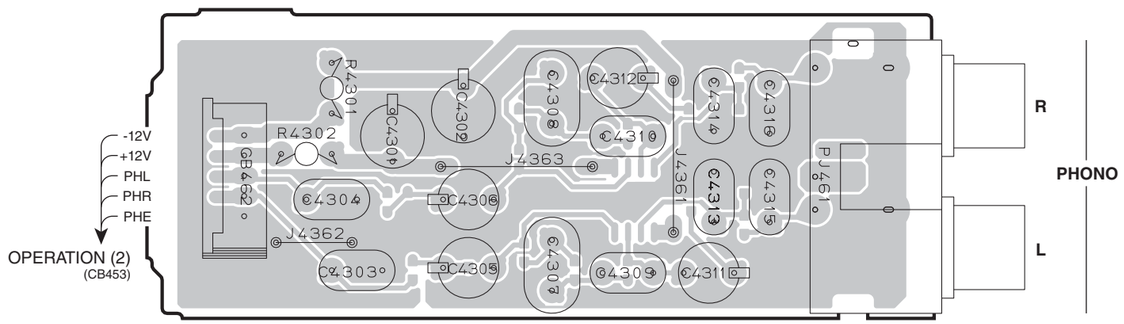


OPERATION (8) P.C.B. (Side A)

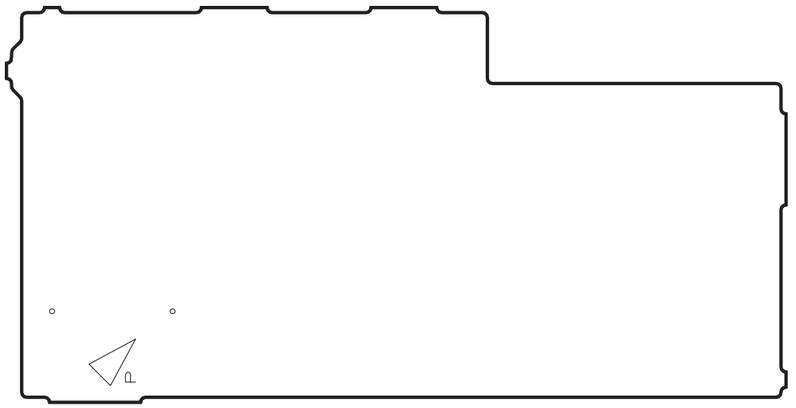


OPERATION (9) P.C.B. (Side A)

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

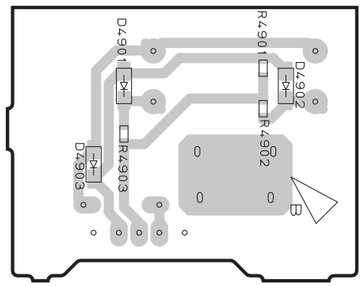


OPERATION (10) P.C.B. (Side A)

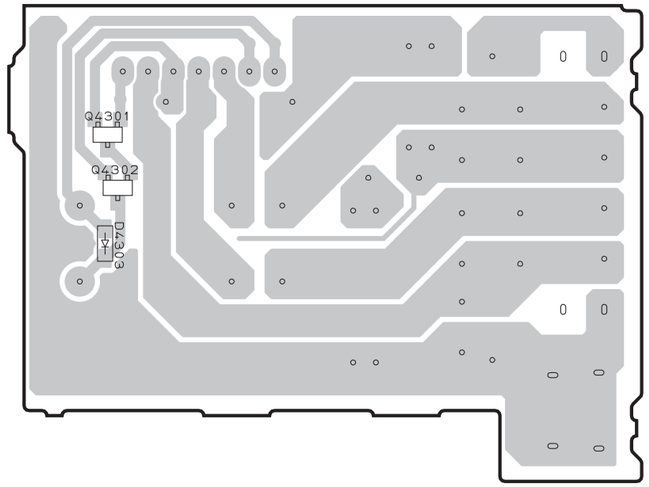


OPERATION (7) P.C.B. (Side B)

C model



OPERATION (8) P.C.B. (Side B)

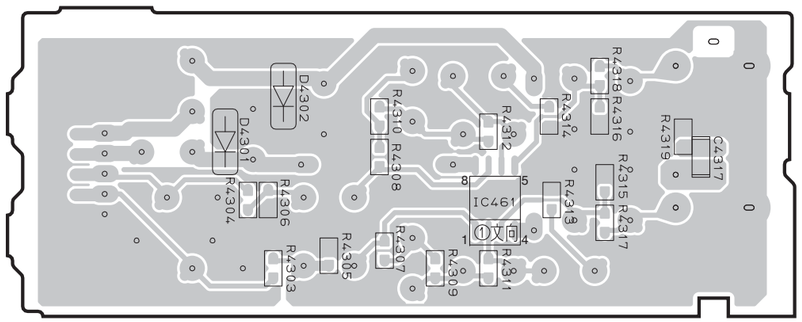


• Semiconductor Location

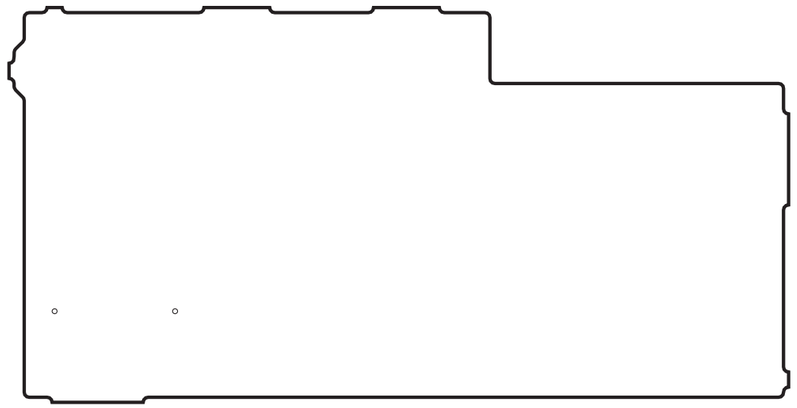
Ref no.	Location
D4301	C6
D4302	C6
D4303	G3
D4901	B2
D4902	C2
D4903	B3
IC461	D6
Q4301	G2
Q4302	G3

OPERATION (9) P.C.B. (Side B)

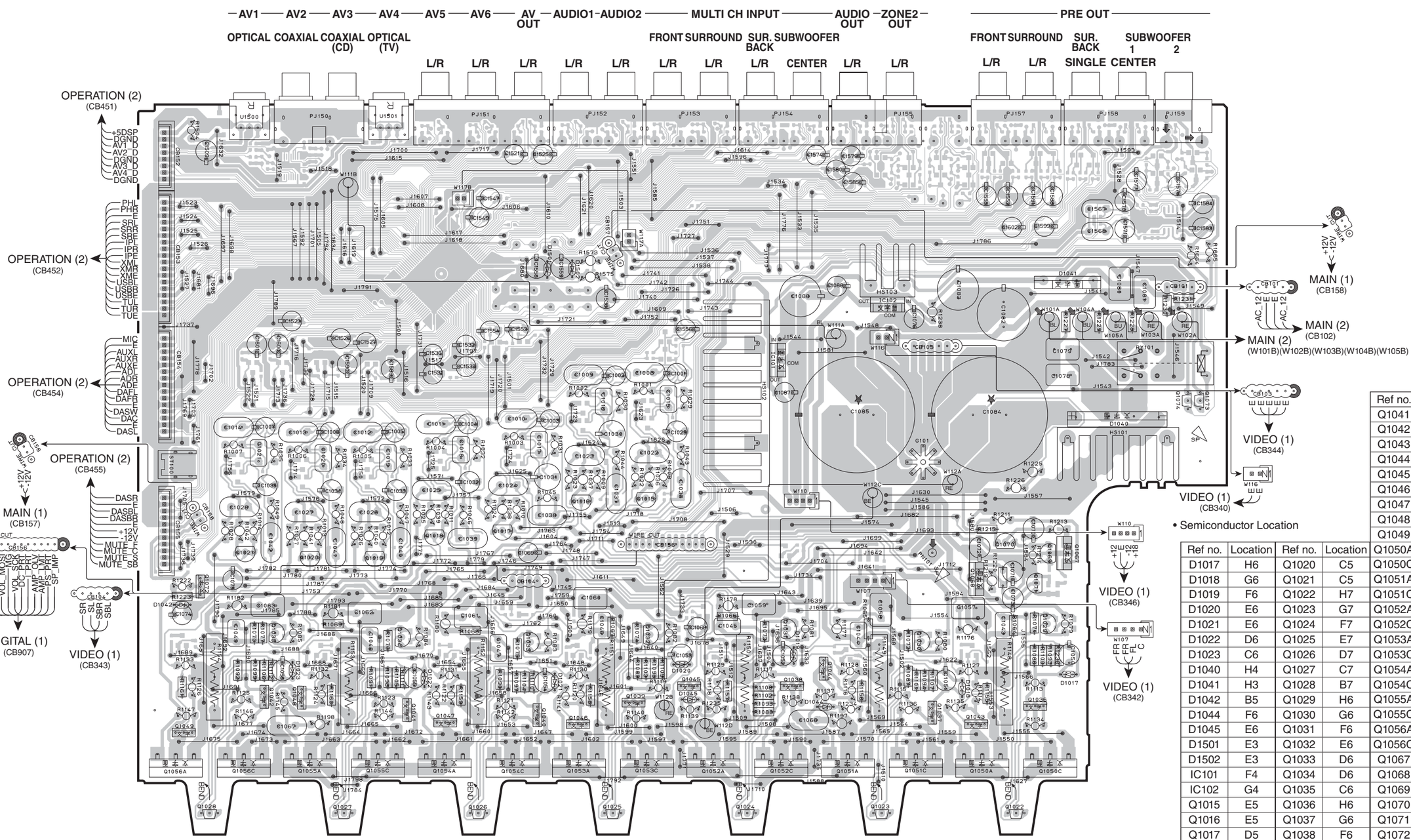
R, T, K, A, B, G, F, L models



OPERATION (10) P.C.B. (Side A)



MAIN (1) P.C.B. (Side A)



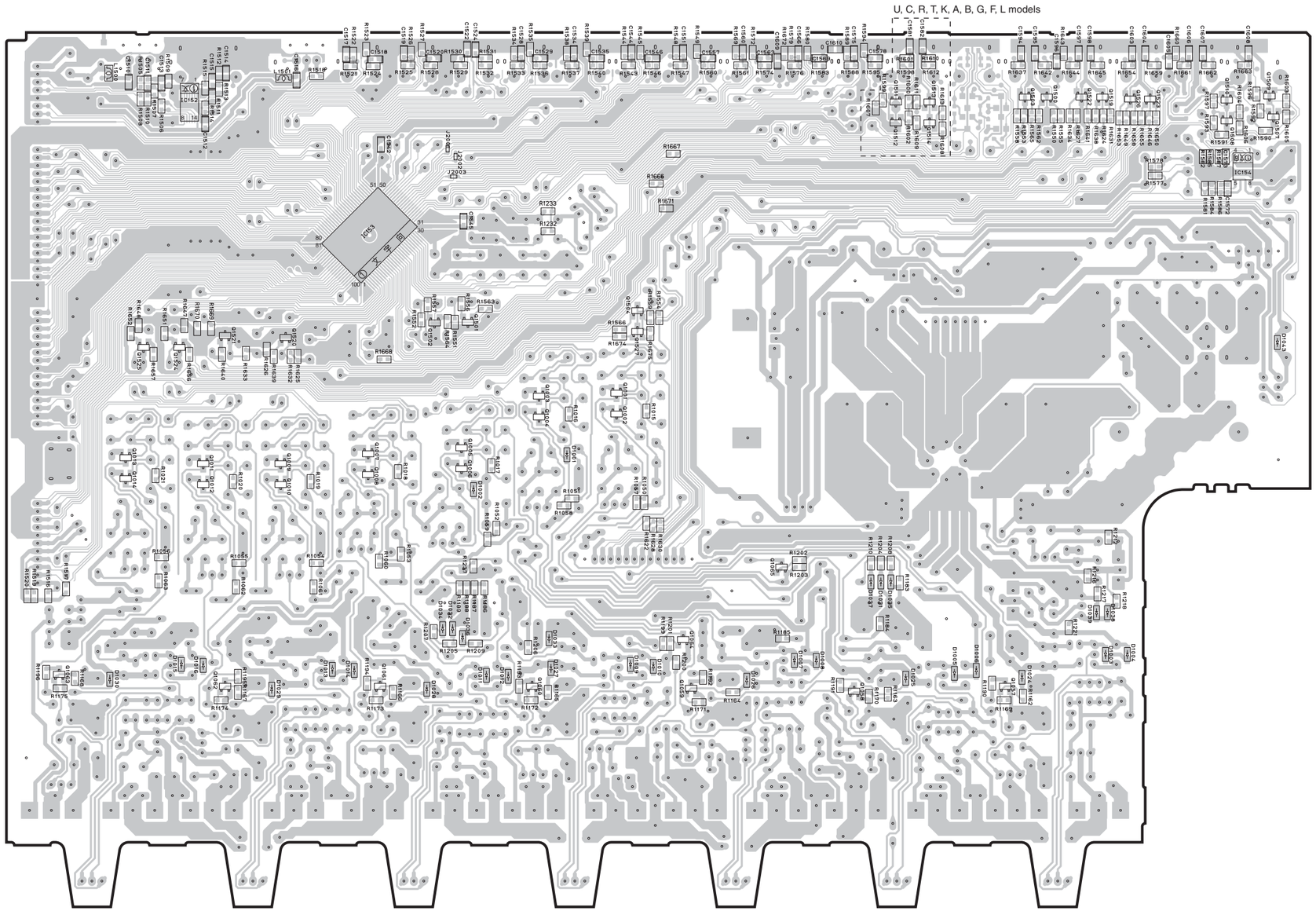
Ref no.	Location
Q1041	D6
Q1042	C6
Q1043	G6
Q1044	F6
Q1045	F6
Q1046	E6
Q1047	D6
Q1048	C6
Q1049	B6

• Semiconductor Location

Ref no.	Location	Ref no.	Location
D1017	H6	Q1020	C5
D1018	G6	Q1021	C5
D1019	F6	Q1022	H7
D1020	E6	Q1023	G7
D1021	E6	Q1024	F7
D1022	D6	Q1025	E7
D1023	C6	Q1026	D7
D1040	H4	Q1027	C7
D1041	H3	Q1028	B7
D1042	B5	Q1029	H6
D1044	F6	Q1030	G6
D1045	E6	Q1031	F6
D1501	E3	Q1032	E6
D1502	E3	Q1033	D6
IC101	F4	Q1034	D6
IC102	G4	Q1035	C6
Q1015	E5	Q1036	H6
Q1016	E5	Q1037	G6
Q1017	D5	Q1038	F6
Q1018	D5	Q1039	E6
Q1019	C5	Q1040	E6

Ref no.	Location	Ref no.	Location
Q1050A	G6		
Q1050C	H6		
Q1051A	F6		
Q1051C	G6		
Q1052A	F6		
Q1052C	F6		
Q1053A	E6		
Q1053C	E6		
Q1054A	D6		
Q1054C	D6		
Q1055A	C6		
Q1055C	D6		
Q1056A	B6		
Q1056C	C6		
Q1067	H5		
Q1068	G5		
Q1069	H5		
Q1070	H5		
Q1071	H5		
Q1072	B5		
Q1073	I4		
Q1074	I4		

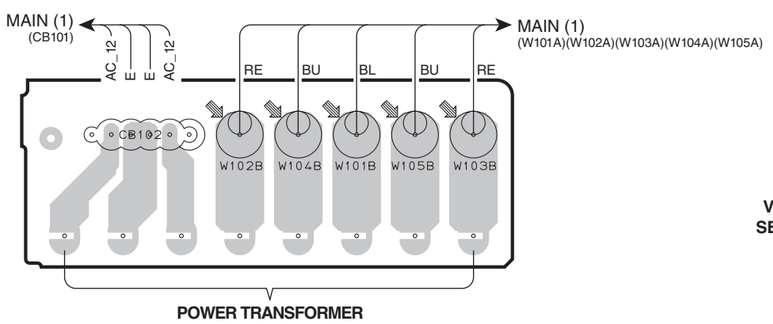
MAIN (1) P.C.B. (Side B)



• Semiconductor Location

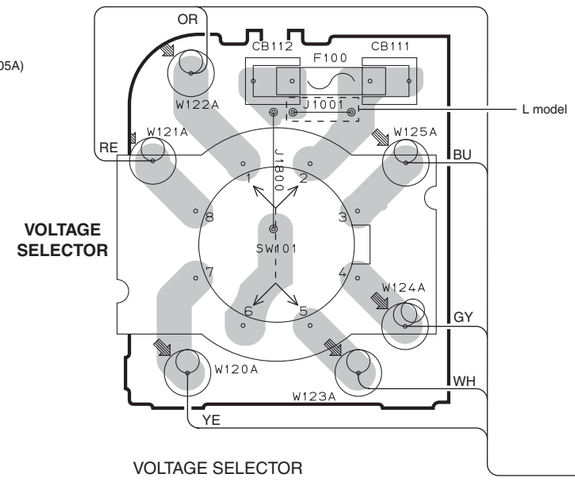
Ref no.	Location	Ref no.	Location
D1001	E4	Q1006	D5
D1002	D5	Q1007	D4
D1003	H6	Q1008	D5
D1004	H6	Q1009	C5
D1005	G6	Q1010	C5
D1006	G6	Q1011	C5
D1007	F6	Q1012	C5
D1008	F6	Q1013	B5
D1009	E6	Q1014	B5
D1010	E6	Q1057	G6
D1011	D6	Q1058	F6
D1012	E6	Q1059	E6
D1013	D6	Q1060	E6
D1014	D6	Q1061	D6
D1015	C6	Q1062	C6
D1016	C6	Q1063	B6
D1024	G6	Q1064	E5
D1025	G6	Q1065	F5
D1026	F6	Q1500	G3
D1027	E6	Q1501	D4
D1028	D6	Q1502	D4
D1029	C6	Q1503	G3
D1030	B6	Q1504	E4
D1031	G5	Q1507	I3
D1032	D5	Q1508	H3
D1033	E5	Q1509	I3
D1034	D5	Q1510	H3
D1035	G5	Q1511	G3
D1036	D5	Q1512	G3
D1037	F5	Q1513	G3
D1038	H5	Q1514	G3
D1039	H5	Q1519	H3
D1043	I4	Q1520	C4
IC152	C3	Q1521	C4
IC153	D3	Q1522	H3
IC154	H3	Q1523	H3
Q1001	E4	Q1524	C4
Q1002	E4	Q1525	C4
Q1003	E4	Q1526	H3
Q1004	E4	Q1527	E4
Q1005	D4		

MAIN (2) P.C.B. (Side A)



MAIN (3) P.C.B. (Side A)

R, L models

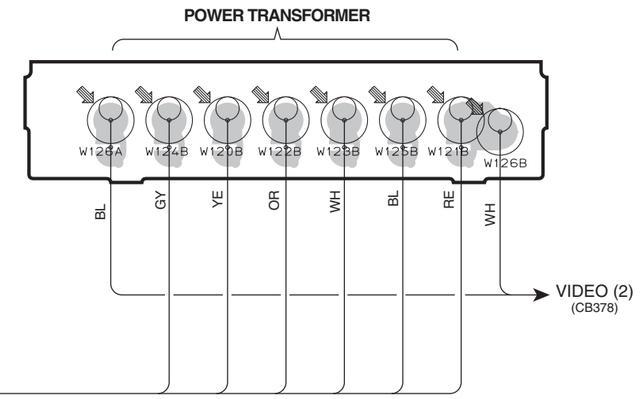


VOLTAGE SELECTOR

230-240V	1-2/5-6	R, L models
220V	2-3/6-7	R, L models
110V	3-4/7-8	R model
120V	4-5/8-1	R model

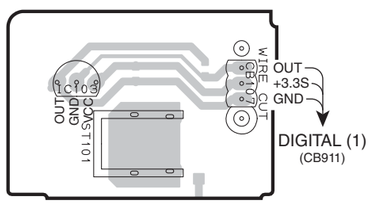
MAIN (4) P.C.B. (Side A)

R, L models



MAIN (5) P.C.B. (Side A)

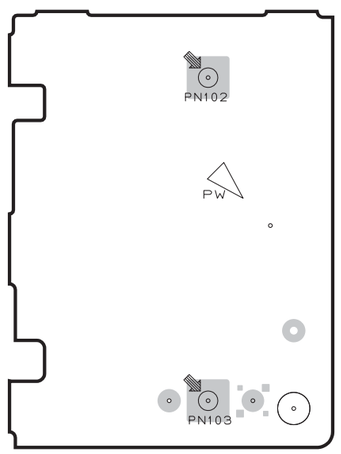
U, R, T, K, A, B, G, F, L models



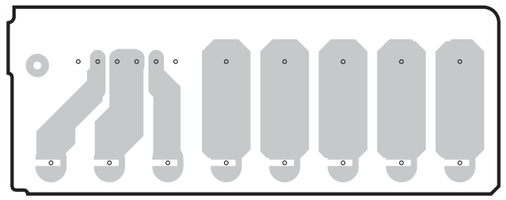
• Semiconductor Location

Ref no.	Location
IC103	B5

MAIN (6) P.C.B. (Side A)

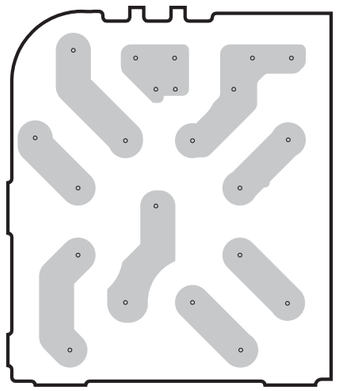


MAIN (2) P.C.B. (Side B)



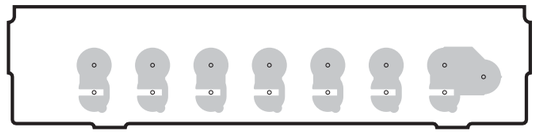
MAIN (3) P.C.B. (Side B)

R, L models



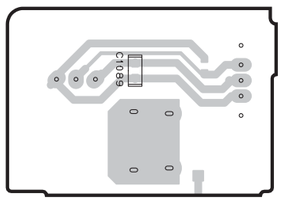
MAIN (4) P.C.B. (Side B)

R, L models

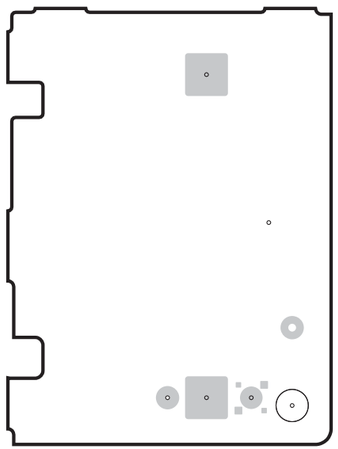


MAIN (5) P.C.B. (Side B)

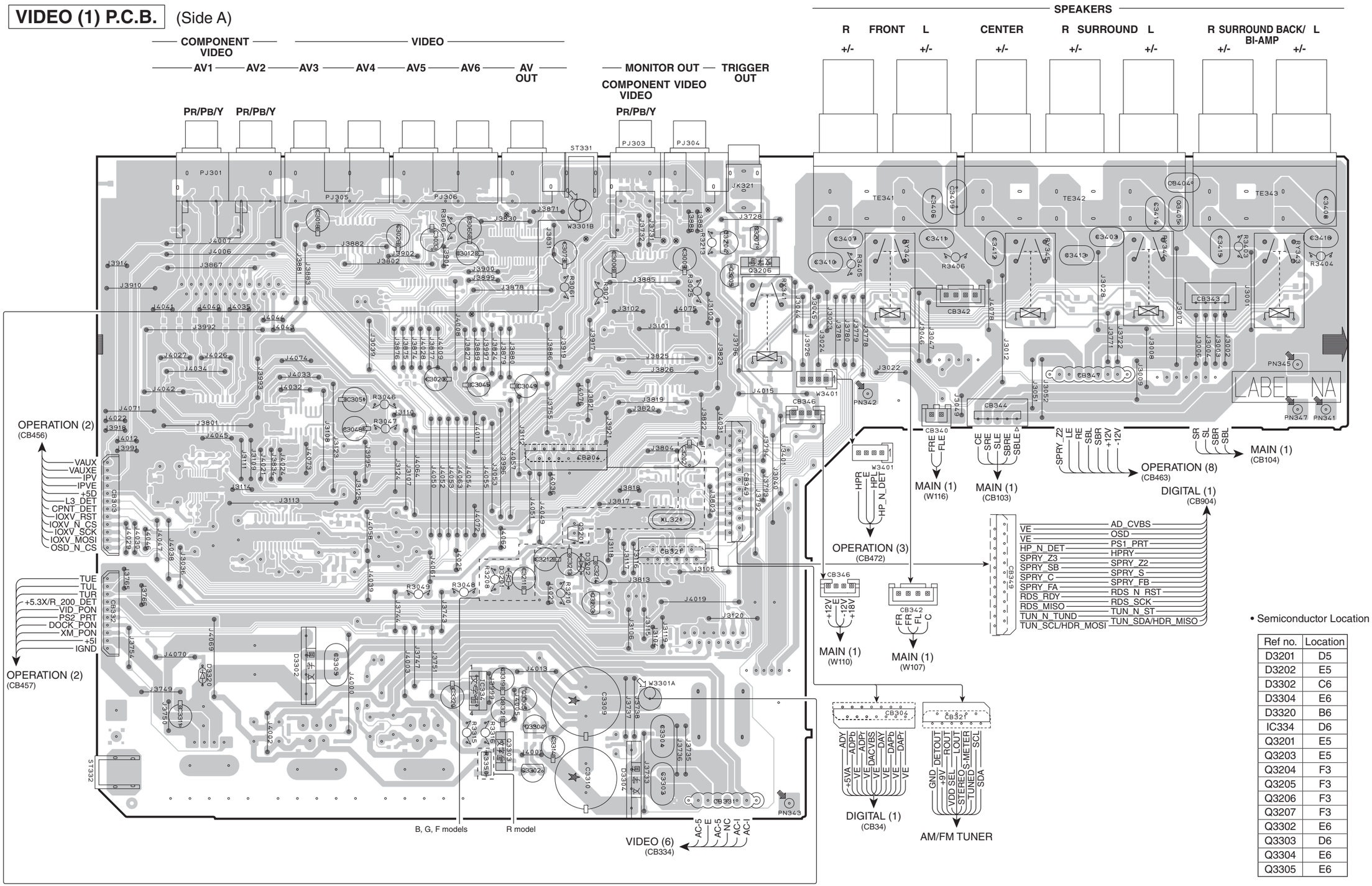
U, R, T, K, A, B, G, F, L models



MAIN (6) P.C.B. (Side B)



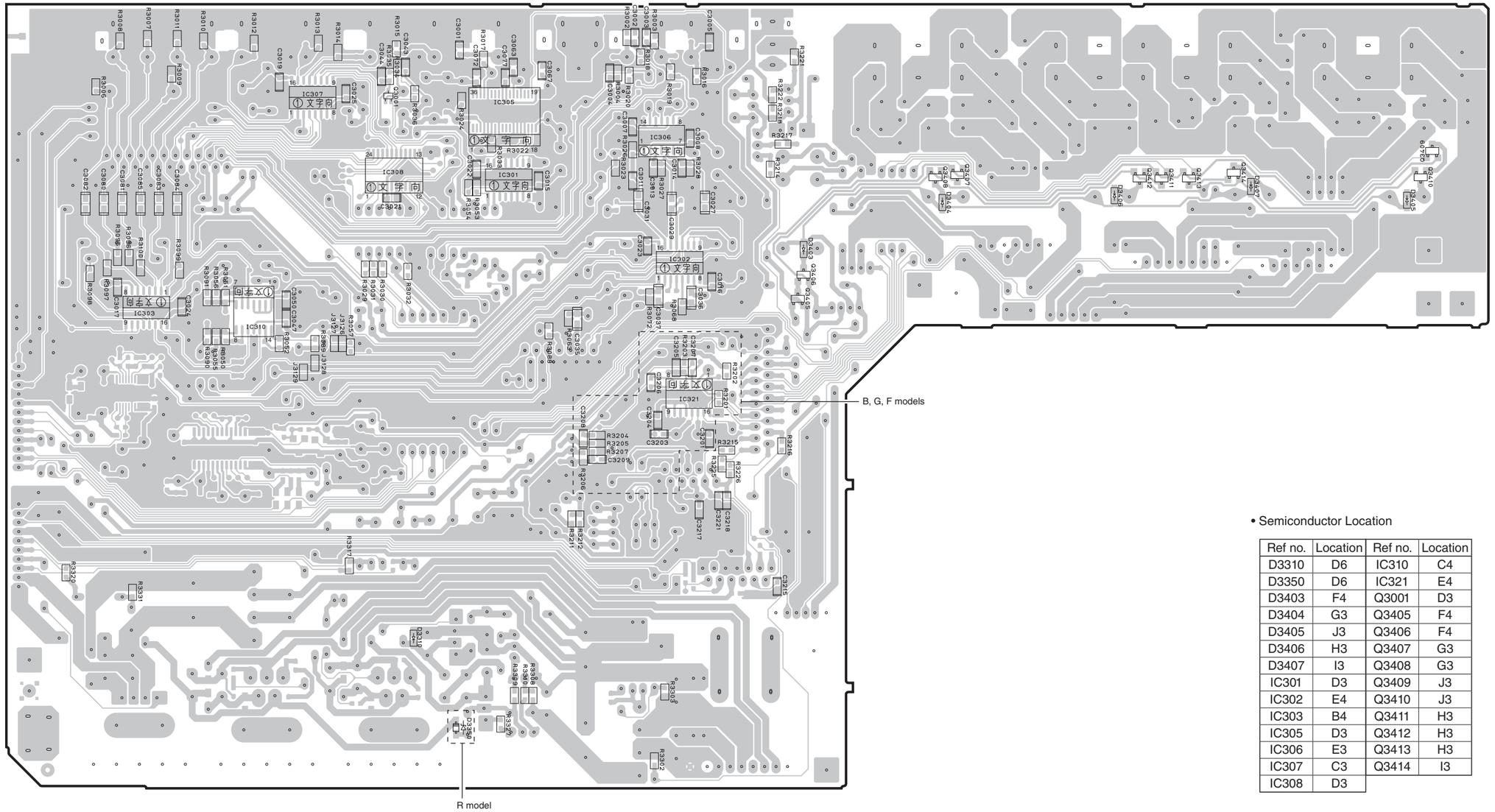
VIDEO (1) P.C.B. (Side A)



• Semiconductor Location

Ref no.	Location
D3201	D5
D3202	E5
D3302	C6
D3304	E6
D3320	B6
IC334	D6
Q3201	E5
Q3203	E5
Q3204	F3
Q3205	F3
Q3206	F3
Q3207	F3
Q3302	E6
Q3303	D6
Q3304	E6
Q3305	E6

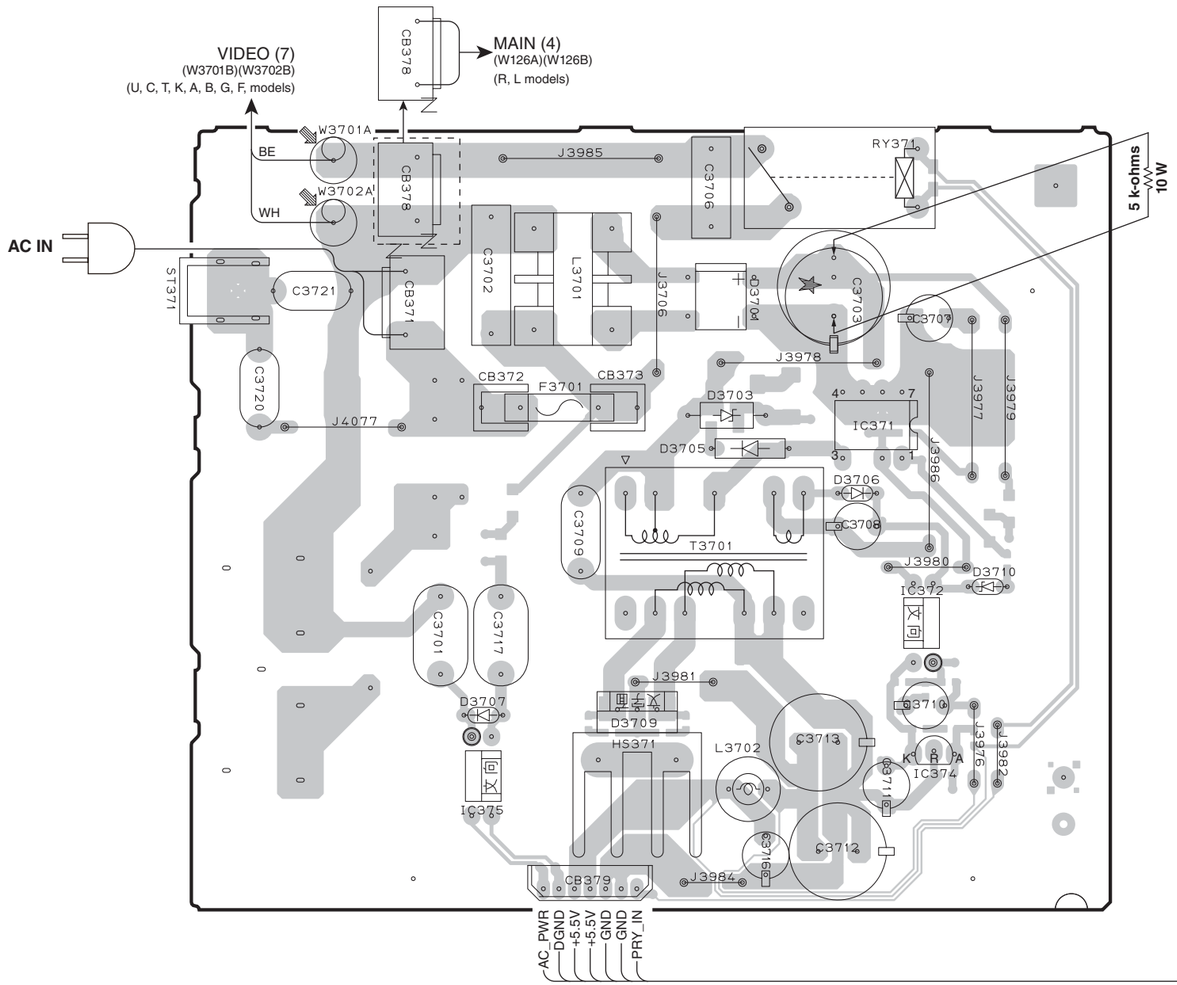
VIDEO (1) P.C.B. (Side B)



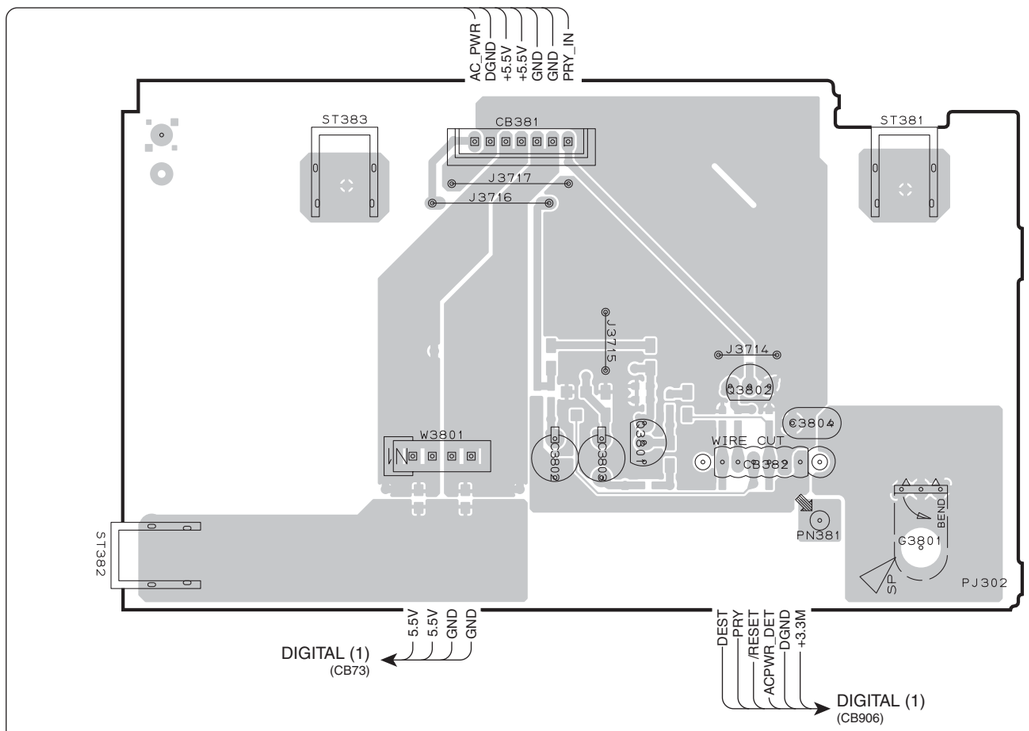
• Semiconductor Location

Ref no.	Location	Ref no.	Location
D3310	D6	IC310	C4
D3350	D6	IC321	E4
D3403	F4	Q3001	D3
D3404	G3	Q3405	F4
D3405	J3	Q3406	F4
D3406	H3	Q3407	G3
D3407	I3	Q3408	G3
IC301	D3	Q3409	J3
IC302	E4	Q3410	J3
IC303	B4	Q3411	H3
IC305	D3	Q3412	H3
IC306	E3	Q3413	H3
IC307	C3	Q3414	I3
IC308	D3		

VIDEO (2) P.C.B. (Side A)



VIDEO (3) P.C.B. (Side A)



Notes)

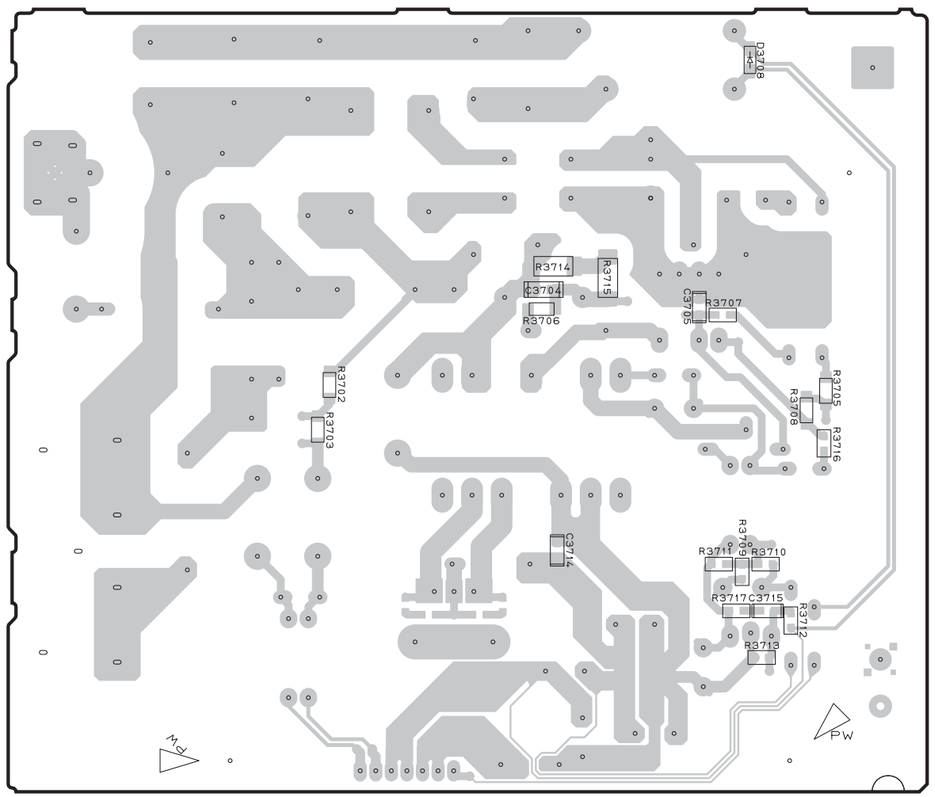
Safety measures

- 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 positions 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, perform discharge by connecting a discharge resistor (5k-ohms/10W) between terminals at following positions. The time required for discharging is about 30 seconds.
  C3703 on VIDEO (2) P.C.B.

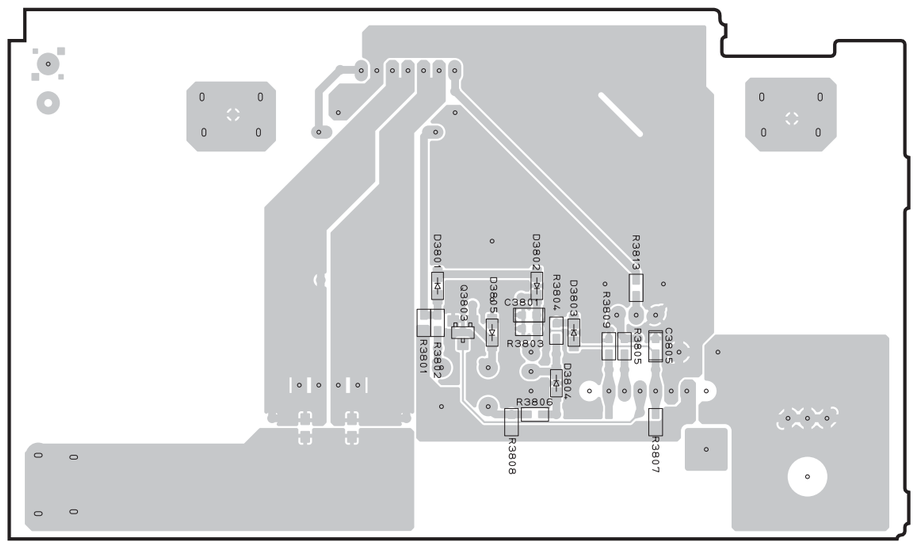
• Semiconductor Location

Ref no.	Location	Ref no.	Location
D3701	D3	IC371	E4
D3703	D4	IC372	E5
D3705	D4	IC374	E5
D3706	D4	IC375	C5
D3707	C5	Q3801	I5
D3709	D5	Q3802	I4
D3710	E4		

VIDEO (2) P.C.B. (Side B)



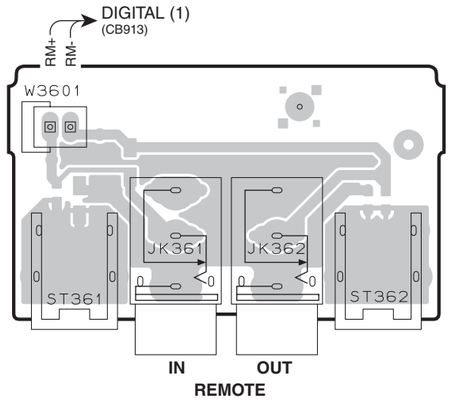
VIDEO (3) P.C.B. (Side B)



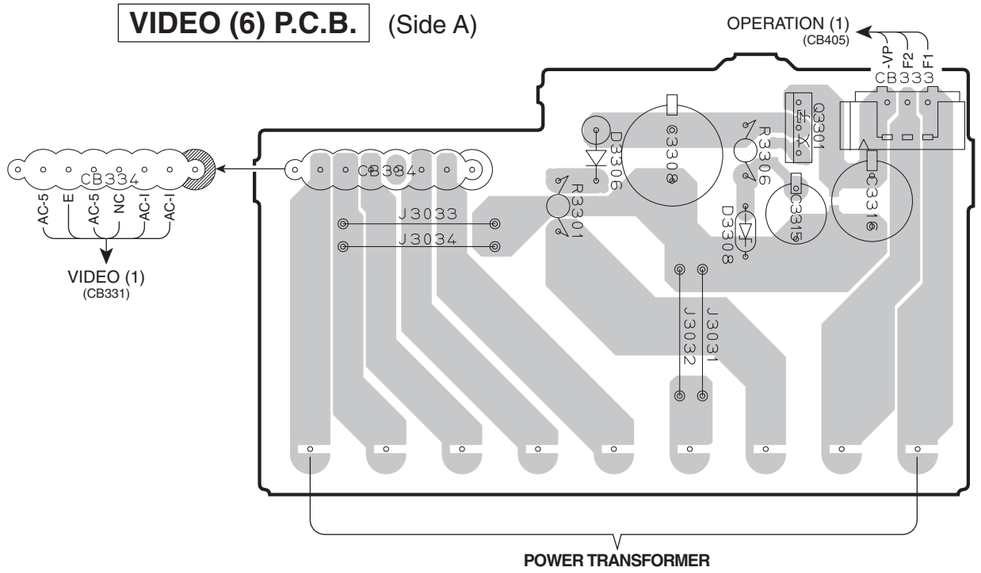
• Semiconductor Location

Ref no.	Location
D3708	E3
D3801	H4
D3802	I4
D3803	I4
D3804	I5
D3805	H4
Q3803	H4

VIDEO (4) P.C.B. (Side A)

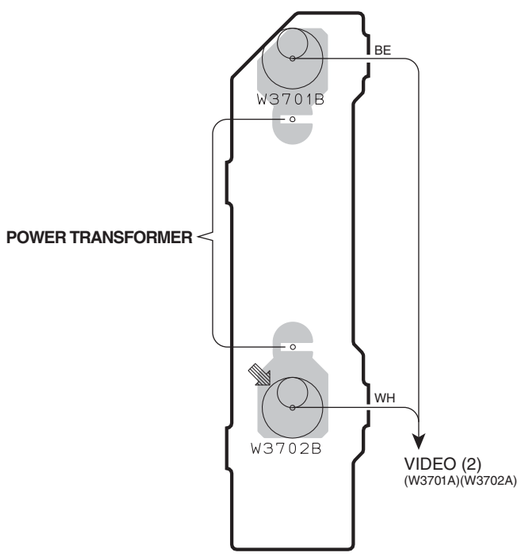


VIDEO (6) P.C.B. (Side A)



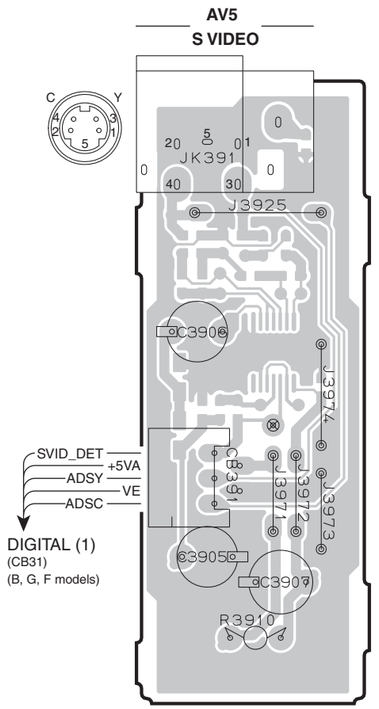
VIDEO (7) P.C.B. (Side A)

U, C, T, K, A, B, G, F models



VIDEO (9) P.C.B. (Side A)

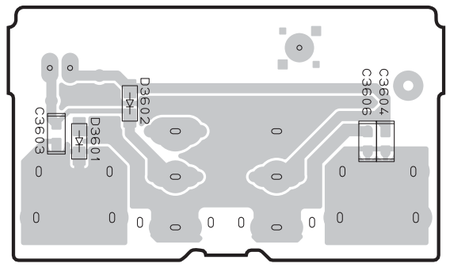
B, G, F models



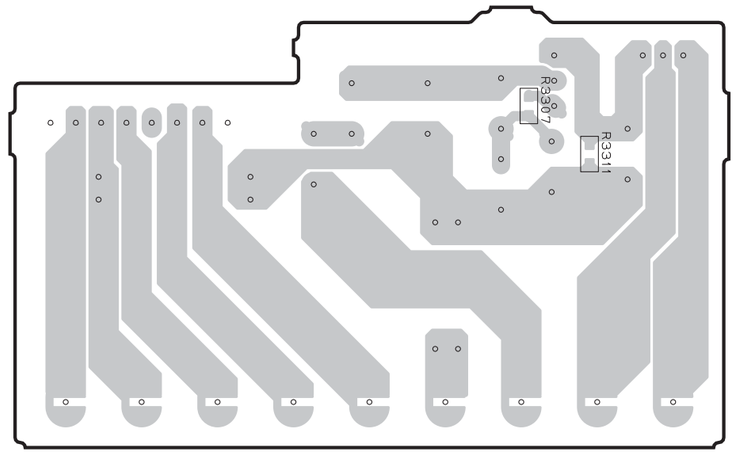
• Semiconductor Location

Ref no.	Location
D3306	H2
D3308	I2
Q3301	I2

VIDEO (4) P.C.B. (Side B)

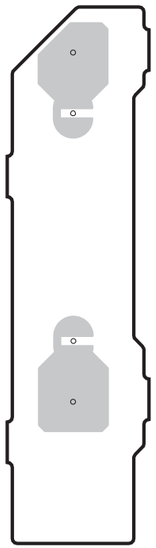


VIDEO (6) P.C.B. (Side B)



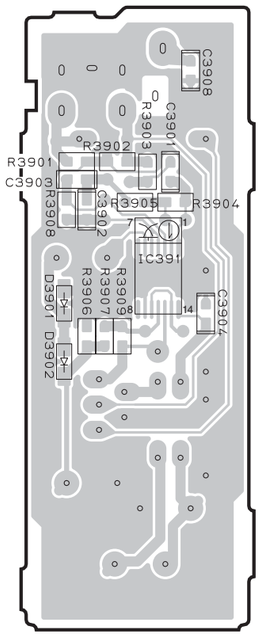
VIDEO (7) P.C.B. (Side B)

U, C, T, K, A, B, G, F models



VIDEO (9) P.C.B. (Side B)

B, G, F models



• Semiconductor Location

Ref no.	Location
D3601	C2
D3602	C2
D3901	G6
D3902	G6
IC391	G6

MEMO

MEMO

■ SCHEMATIC DIAGRAMS
DIGITAL 1/7

Page 111 C10
to DIGITAL (2)_CB94

HDMI IN-7 (Except 667 767) JAE VAGE : WU16740
HDMI IN-6
HDMI IN-5
HDMI IN-4
HDMI IN-3
HDMI IN-2
HDMI IN-1 (BD/DVD)
HDMI IN-Front

CEC

105 ohm

HDMI SW
IC2
SII9185ACTU
SlaveAddr=0xD4: 0xE4
3.3V:57mA
1.8V:320mA

HDMI SW
IC1
SII9185ACTU
SlaveAddr=0xD0: 0xE0
3.3V:57mA
1.8V:320mA

No replacement part available.

HDMI Rx
HDMI Receiver
SII9233ACTU
IC3
GPIO使用領域
GPO/XCL:SCR_TEST
GPI/SCD:SCDT
GPI2/EVN:EVNODD
GPI3/WTD:HTDUT
GPIO4 :DDR2_TYPE
GPIO5 :HD_LED
GPI6/DL3:SHT1_PON
GPI7/DR3:SHT2_PON
Y19080
3.3V:315mA
1.2V:472mA
Local I2C add
Low :0x60/68
High:0x62/6A

No replacement part available.

To 002.sht (VDEC/ENC)
To DIGITAL 2/7

To 005.sht (HDMI_Tx)
To DIGITAL 4/7

To 007.sht (u-com)
To DIGITAL 6/7

To 002.sht (VDEC/ENC)
To DIGITAL 2/7

To 003.sht (SCALER)

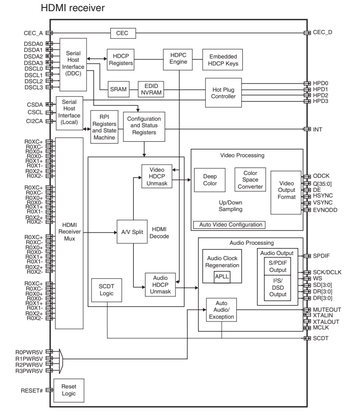
To 004.sht (FPGA)
To DIGITAL 3/7

V765以下:007.sht(u-com)
V1065以上:008.sht(NPGA)
To DIGITAL 6/7

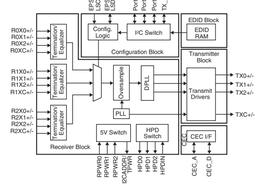
F_HEG_CE

I2C Debug用

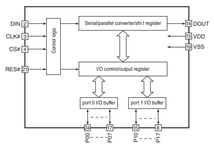
IC3: SII9233ACTU
HDMI receiver



IC1, 2: SII9185ACTU
HDMI switch



IC4: LC709004A-TLM-E
I/O-expander for microcontroller



DIGITAL 1:HDMI Rx

IC/CB/XL :1-300
OHTER :1-300

DIGITAL (1)

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

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

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★ Schematic diagram is subject to change without notice.

DIGITAL 2/7

Page 120 C3
to VIDEO (9)_CB391
(B, G, F models)

Page 118 K9
to VIDEO (1)_CB304

VIDEO DECODER and I/P

Video Decoder

IC32

ADV7800BSTZ-80

I/O MAP Addr = 42h/43h
SDP MAP Addr = 82h/83h
CP MAP Addr = 62h/63h
VDP MAP Addr = 22h/23h

Pin 120(ALSB) = High

3.3V : 105mA
1.8V : 418mA

VIDEO ENCODER

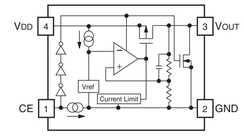
IC41

ADV7172KSTZ

VIDEO ENCODER
I2C Addr = 0xh/7xh
3.3V : 65mA

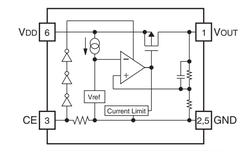
POINT Ⓐ XL31 (Pin 81 of IC32)

IC31: RP130Q181D-TR-F
Voltage regulator



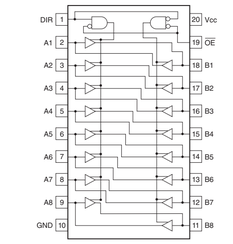
Pin No.	Symbol	Description
1	CE	Chip Enable ("H" Active)
2	GND	Ground Pin
3	VOUT	Output Pin
4	VDD	Input Pin

IC33: R1172S331B-E2-F
CMOS-based positive-voltage regulator IC

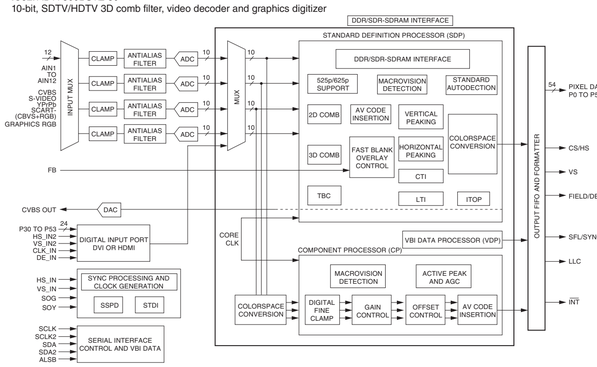


Pin No.	Symbol	Description
1	VOUT	Output Pin of Voltage Regulator
2, 5	GND	Ground Pin
3	CE	Chip Enable Pin
4	NC	No Connection
6	VDD	Input Pin

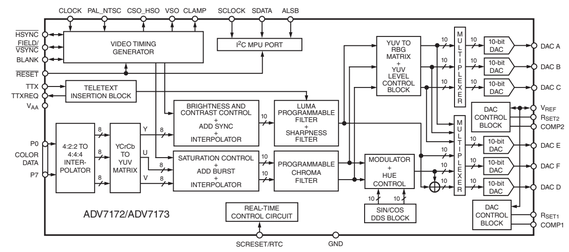
IC36-40: SN74LVC245APWR
Octal bus transceivers with 3-state outputs

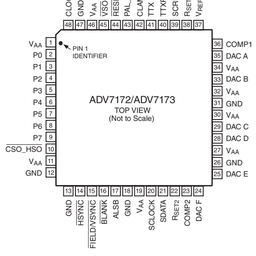


IC32: ADV7800BSTZ-80
10-bit, SDTV/HDTV 3D comb filter, video decoder and graphics digitizer



IC41: ADV7172KSTZ
Digital PAL/NTSC video encoder





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	‖

NOTICE (model)
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(G)····· EUROPE
(L)····· SINGAPORE
(E)····· SOUTH EUROPE
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★ Schematic diagram is subject to change without notice.

DIGITAL (1)

DIGITAL2:VDEC/VENC

IC/CB/XL:31~
OHTER :301~

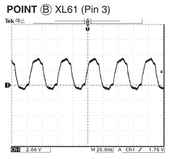
DIGITAL 3/7

No replacement part available.

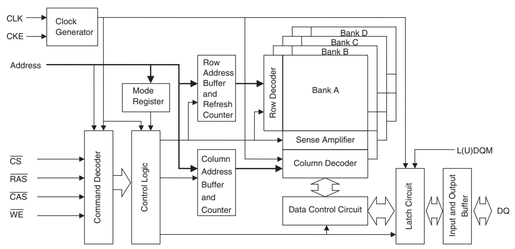
No replacement part available.

No replacement part available.

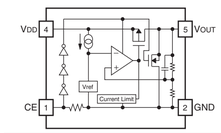
POINT Ⓑ XL61 (Pin 3)



IC62: M12L128168A-5TG2T
2 M x 16-bit x 4 banks synchronous DRAM

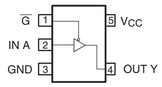


IC63: R1172H121D-T1-F
CMOS-based positive-voltage regulator IC



Pin No.	Symbol	Description
1	CE	Chip Enable Pin
2	GND	Ground Pin
3	NC	No Connection
4	VDD	Input Pin
5	VOUT	Output Pin of Voltage Regulator

IC65: TC7SH125FU
Bus buffer



DIGITAL (1)

DIGITAL4:FPGA

IC/CB/XL:61-
OHTER :601-

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	

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(U)····· U.S.A
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(E)····· SOUTH EUROPE
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DIGITAL 4/7

HDMI OUT

HDMI OUT1 JAE

V767-3067 only

HDMI OUT2 JAE

Differential impedance: 105 ohm

HDMI Tx

No replacement part available.

IC71 SIL9134CTU

HDMI Transmitter

3.3V-5mA 1.8V-276mA

SlaveAddr(LOW)=0x72. 0x7A

IC75

HDMI Transmitter

3.3V-5mA 1.8V-276mA

SlaveAddr(HIGH)=0x76. 0x7E

SELECTOR

BUFFER

IC73, IC77 667-767 :EN5327QI YC268A0 1067-3067:EN5337QI YC234A0

IC/CB/XL:71- OHTER :701- TP :801-

DIGITAL5:HDMI Tx

DIGITAL (1)

To 001.sht (HDMI RX)
To DIGITAL 1/7

To 009.sht (DSP)
To DIGITAL 7/7

To 007.sht (u-com)
To DIGITAL 6/7

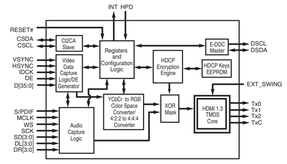
V1065以上:008.sht (NPGA)

To 004.sht (FPGA)
To DIGITAL 3/7

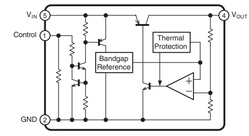
to NET(1)

To Sub TR
Page 120 I8
to VIDEO (3)_W3801

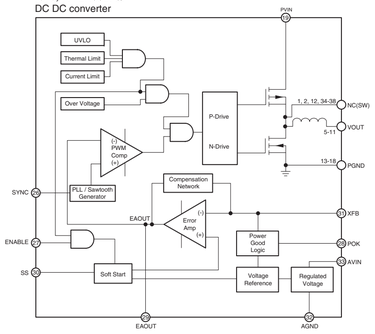
IC71: SiI9134CTU
HDMI transmitter



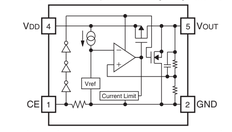
IC72: NJM2867F3-05 (TE1)
Low dropout voltage regulator



IC73, 77: EN5327QI
DC DC converter

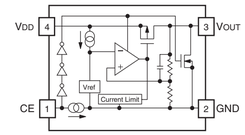


IC76: R1172H121D-T1-F
CMOS-based positive-voltage regulator IC



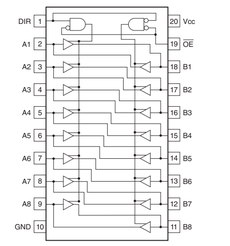
Pin No.	Symbol	Description
1	CE	Chip Enable Pin
2	GND	Ground Pin
3	NC	No Connection
4	VDD	Input Pin
5	VOUT	Output Pin of Voltage Regulator

IC79: RP130Q501D-TR-F
Voltage regulator

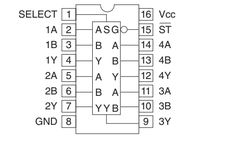


Pin No.	Symbol	Description
1	CE	Chip Enable ("H" Active)
2	GND	Ground Pin
3	VOUT	Output Pin
4	VDD	Input Pin

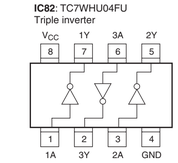
IC80: SN74LVC245APWR
Octal bus transceivers with 3-state outputs



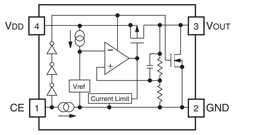
IC81: TC74VHC157FT
Quad 2-channel multiplexer



IC82: TC7WHU04FU
Triple inverter

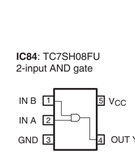


IC83: RP130Q121D-TR-F
Voltage regulator



Pin No.	Symbol	Description
1	CE	Chip Enable ("H" Active)
2	GND	Ground Pin
3	VOUT	Output Pin
4	VDD	Input Pin

IC84: TC7SH08FU
2-input AND gate



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

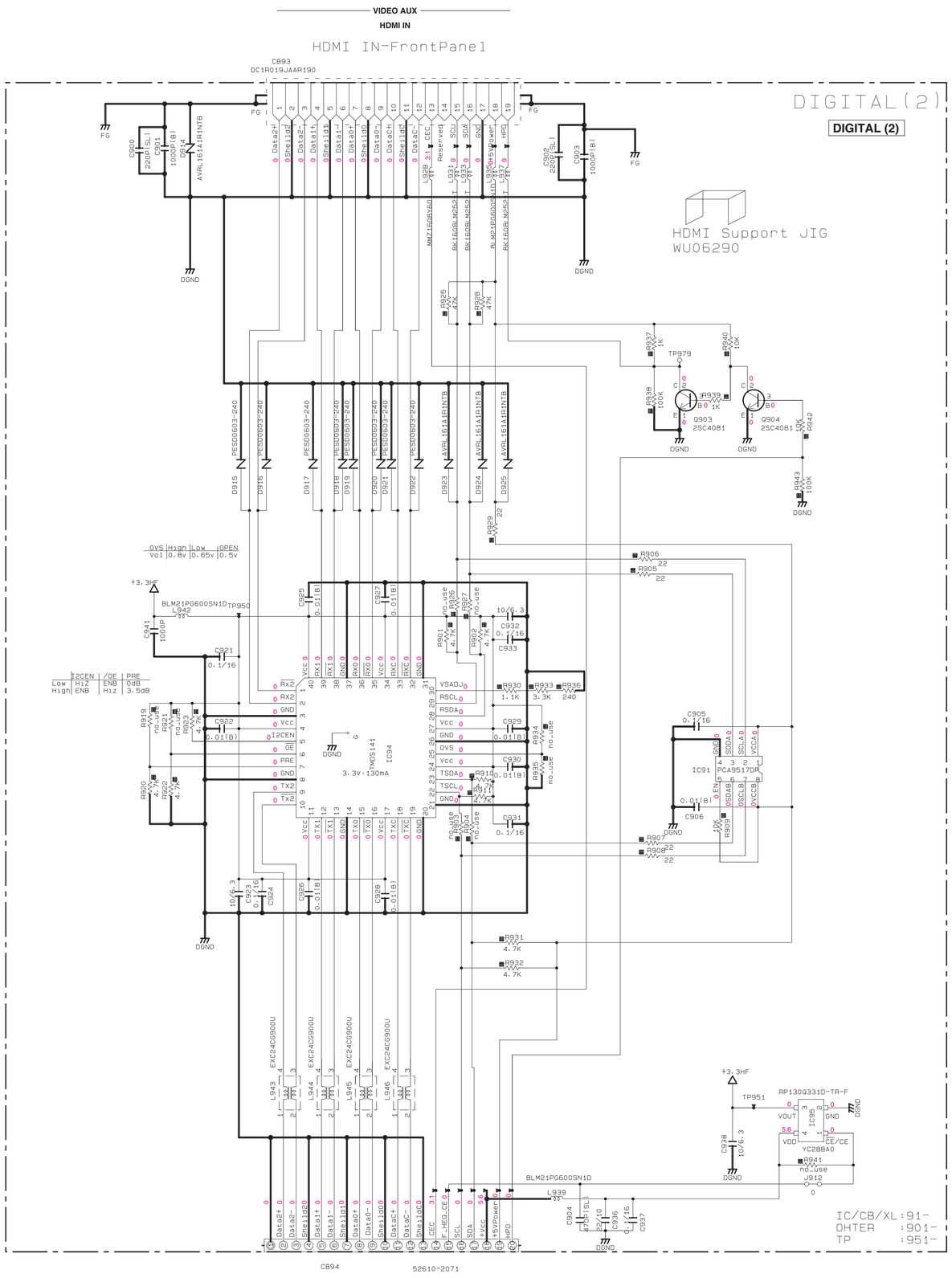
CAPACITOR

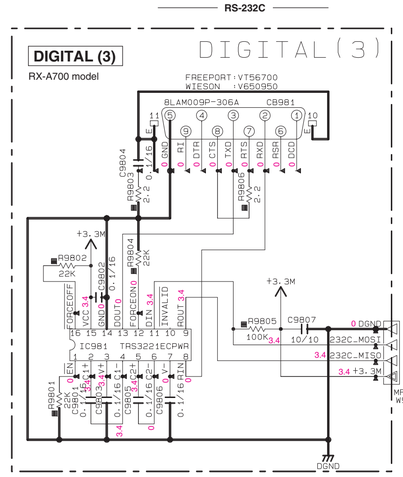
REMARKS	PARTS NAME
⊗	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
◉	CERAMIC TUBULAR CAPACITOR
◎	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
ⓘ	MICA CAPACITOR
ⓟ	POLYPROPYLENE FILM CAPACITOR
◉	SEMICONDUCTIVE CERAMIC CAPACITOR

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

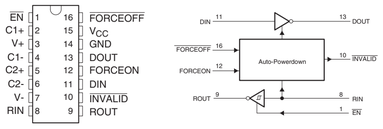
★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
★ Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.
★ Schematic diagram is subject to change without notice.

DIGITAL 5/7





IC981: TRS3221ECPWR
3 V to 5.5 V single channel RS-232 line driver/receiver with ±15 kV IEC ESD protection



Destination Part List

sXX	LOC	U	CTKAL	R	BGF
s1	CB31	X	X	X	VQ04410 52044
s2	J301	X	X	X	RD35000 0
s3	R308 R307	RD35000 0	RD35000 0	RD35000 0	X
s11	Q9001	X	X	VR93630 2SA1576A	X
s12	Q9020	VV65520 DTA143EKA	X	X	X
s13	Q9021	VV65570 DTC144EKA	X	X	X
s14	R9037 R9036	RD35510 100	X	X	X
s15	R9039 R9038	X	X	X	RD35510 100
s22	R9088	RD35510 100	X	X	X
s23	R9091 R9089	X	X	X	RD35510 100

RESISTOR

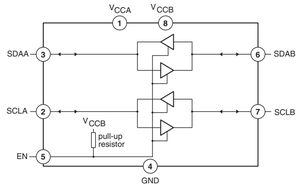
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
⊠	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
⊠	METAL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

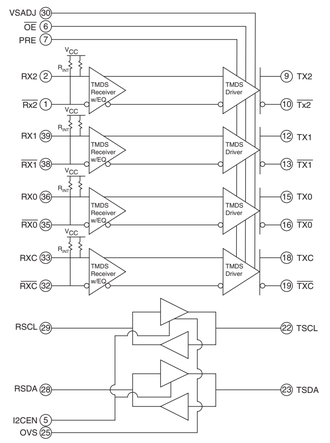
REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
◇	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
◉	CERAMIC TUBULAR CAPACITOR
◎	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
ⓘ	MICA CAPACITOR
ⓟ	POLYPROPYLENE FILM CAPACITOR
◉	SEMICONDUCTIVE CERAMIC CAPACITOR

NOTICE (model)
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(U)····· U.S.A
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(L)····· SINGAPORE
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(V)····· TAIWAN
(F)····· RUSSIAN
(P)····· LATIN AMERICA

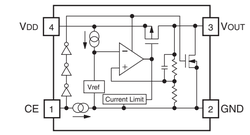
IC91: PCA9517DP
Level translating I²C-bus repeater



IC94: TMDS141RHAR
HDMI switch



IC95: RP130Q331D-TR-F
Voltage regulator



Pin No.	Symbol	Description
1	CE	Chip Enable ("H" Active)
2	GND	Ground Pin
3	VOUT	Output Pin
4	VDD	Input Pin

DIGITAL6:Front HDMI&232C

★ 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.

DIGITAL 6/7

To DIGITAL 1/7 to 001.sht (HDMI Rx)
To DIGITAL 2/7 to 002.sht (VDEC/VENC)
To DIGITAL 4/7 to 005.sht (HDMI Tx)
To DIGITAL 3/7 to FLASH/FPGA/NPGA
To DIGITAL 3/7 to 004.sht (FPGA)
To DIGITAL 7/7 to 009.sht (DSP1)
To DIGITAL 7/7 to 009.sht (DSP1)
to 008.sht (NPGA)
Page 111 J3
to DIGITAL (3)_W9801 (RX-A700 model)
to I2C

MICROPROCESSOR

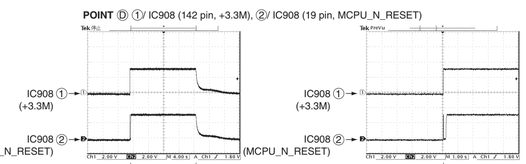
IC908
YC573AQ
R5F64169DFD

Written by YEM
667- 767 :YC573
1067-3067 :YC575
Blank
1024kByte :YC163A0 R5F64169DFD

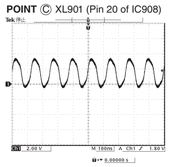
No replacement part available.

to VIDEO
Page 119 G8
to VIDEO (1)_CB349
to Vx067 FUNC
TEST
to ACDC
Page 120 I9
to VIDEO (4)_CB382
to MAIN
Page 117 K7
to MAIN (1)_CB156
to THM2 to THM1
Page 116 J7
to MAIN (5)_CB107

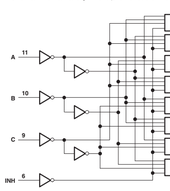
POINT Ⓓ ①/ IC908 (142 pin, +3.3M), ②/ IC908 (19 pin, MCPU_N_RESET)



POINT Ⓒ XL901 (Pin 20 of IC908)

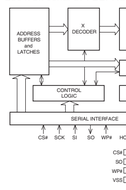


IC901, 902: SN74LV4051APWR
8-channel analog multiplexers/demultiplexers

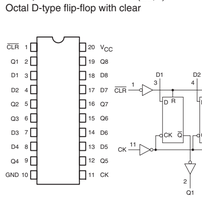


INPUTS				ON CHANNEL
INH	C	B	A	
L	L	L	L	Y0
L	L	L	H	Y1
L	L	H	L	Y2
L	L	H	H	Y3
L	H	L	L	Y4
L	H	L	H	Y5
L	H	H	L	Y6
L	H	H	H	Y7
H	X	X	X	None

IC903: LE25LB2562M-TLM-E
256 k-bit serial SPI EEPROM



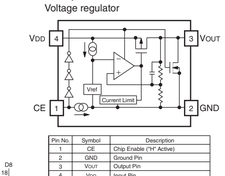
IC904, 905: TC74VHC273FT (EL,K)
Octal D-type flip-flop with clear



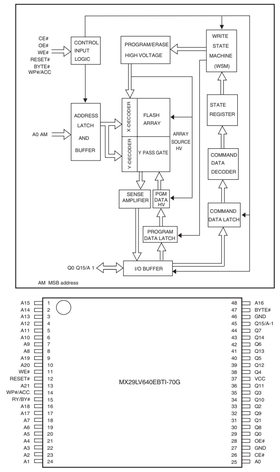
Inputs			Output	Function
CLR	D	CK	Q	
L	X	X	L	Clear
H	L	↑	L	–
H	H	↑	H	–
H	X	L	Q_0	No Change

Pin No.	Symbol	Description
1	CE	Chip Enable ("H" Active)
2	GND	Ground Pin
3	VOUT	Output Pin
4	VDD	Input Pin

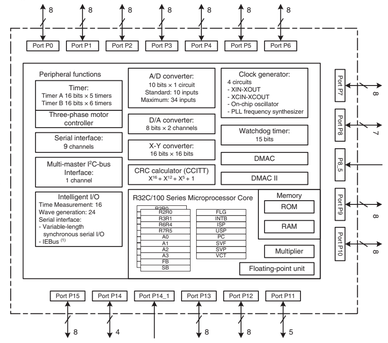
IC906, 907: RP130Q331D-TR-F
Voltage regulator



IC909: MX29LV640EBTI-70G
64 M-bit single voltage 3 V only flash memory



IC908: R5F64169DFD
Single chip 32-bit microprocessor



Note: 1. IEBus is a trademark of NEC Electronics Corporation.

DIGITAL (1) DIGITAL7:Main CPU

Page 115 C3
to OPERATION (2)_CB459
Page 115 E3
to OPERATION (2)_CB460
Page 115 H3
to OPERATION (2)_CB461
Page 114 H9
to OPERATION (1)_CB401
Writing port
to Programmer
to FPGA
to DAC
to 009.sht(DSP)
to 008.sht(NPGA)
to VIDEO
to OPE(1)

DIGITAL IN
ANALOG IN
SURROUND BACK L
SURROUND L
CENTER/SUBWOOFER
FRONT L

(For service)

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

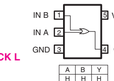
RESISTOR

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
	SCMTCONDUCTTVC CCPAMTC CAPACITOP

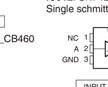
IC910: TC7SH32FU
2-input OR gate



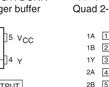
IC911: TC74VHC86FT (EL)
Quad exclusive OR gate



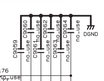
IC912: SN74LVC1G17DCKR
Single schmitt-trigger buffer



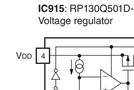
IC913: TC74VHCT08AFT
Quad 2-input AND gate



IC914: TC74VHC08FT
Quad 2-input AND gate



IC915: RP130Q501D-TR-F
Voltage regulator



Pin No.	Symbol	Description
1	CE	Chip Enable ("H" Active)
2	GND	Ground Pin
3	VOUT	Output Pin
4	VDD	Input Pin

DIGITAL 7/7

IC942: DIX9210PTR
216-kHz digital audio interface transceiver

IC951: MX29LV160DBTI-70G
16M-bit 3V supply flash memory

IC945: D70YE101BRFP266
Floating-point digital signal processors

IC944: R1172H501D-T1-F
Voltage regulator

IC946: RP130Q331D-TR-F
Voltage regulator

IC947: TC74VHC157FT
Quad 2-channel multiplexer

IC948: RP130Q501D-TR-F
Voltage regulator

IC949: R1172H121D-T1-F
CMOS-based positive-voltage regulator IC

IC955: R1172N501D-TR-F
Voltage regulator

IC953-954: TC7SH08FU
2-input AND gate

IC952: TC74VHC126FT
Quad bus buffer

IC950: V54C365164VEI6
64 Mb SDRAM

POINT Ⓔ XL941 (Pin 3)

No replacement part available.

No replacement part available.

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	

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(P)····· LATIN AMERICA

Pin No.	Symbol	Description
1	CE	Chip Enable Pin ("H" Active)
2	GND	Ground Pin
3	NC	No Connection
4	VDD	Input Pin
5	VOUT	Output Pin

Pin No.	Symbol	Description
1	CE	Chip Enable ("H" Active)
2	GND	Ground Pin
3	VOUT	Output Pin
4	VDD	Input Pin

Pin No.	Symbol	Description
1	CE	Chip Enable ("H" Active)
2	GND	Ground Pin
3	NC	No Connection
4	VDD	Input Pin
5	VOUT	Output Pin of Voltage Regulator

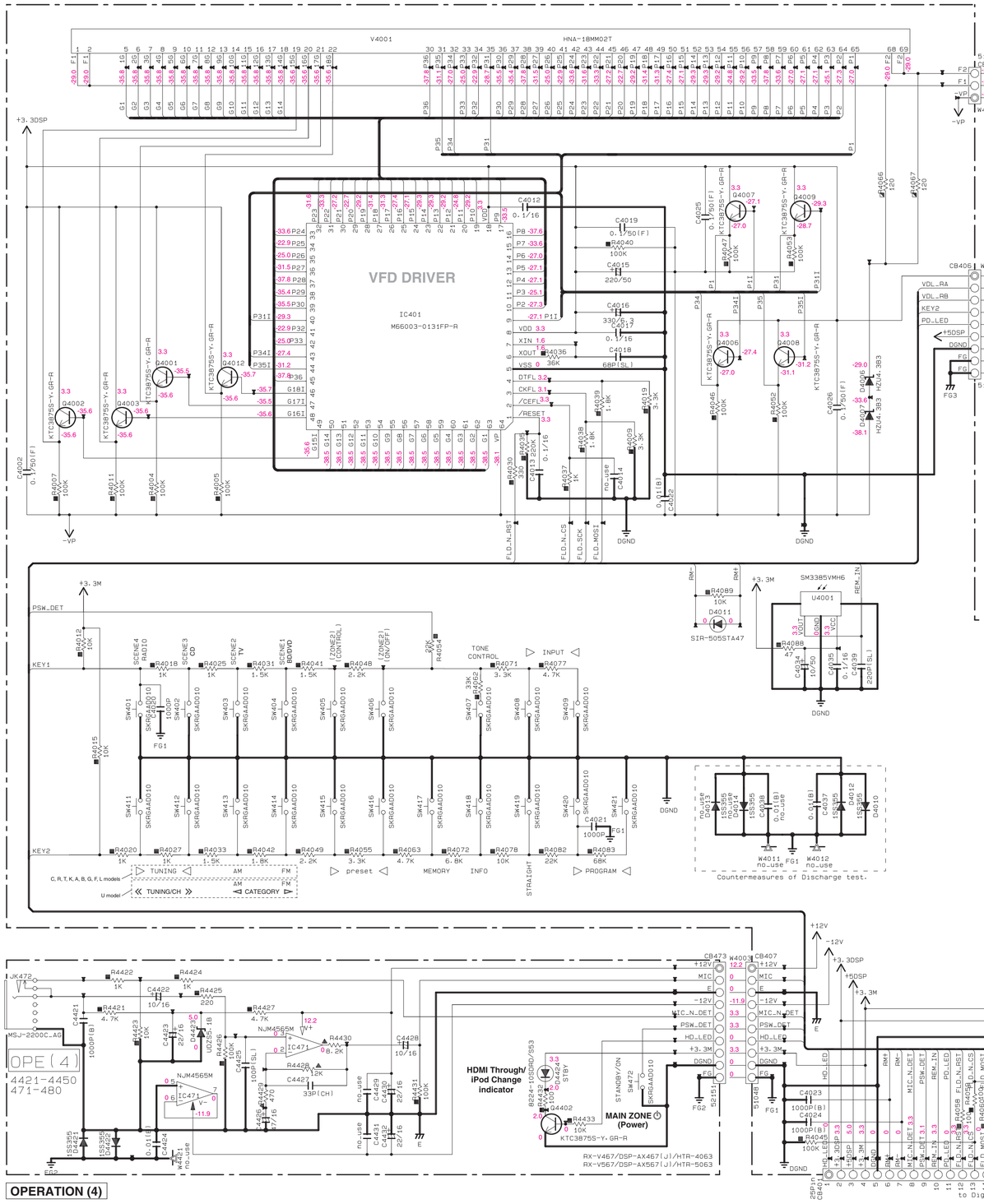
Pin No.	Symbol	Description
1	VOUT	Output Pin
2	GND	Ground Pin
3	VDD	Input Pin
4	NC	No Connection
5	CE	Chip Enable Pin ("H" Active)

inputs		outputs
G	A	Y
L	X	Z
H	L	L
H	H	H

★ 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.

DIGITAL (1) DIGITAL9:DIR1&DSP1

OPERATION 1/2



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

Ohm	0	+ 1.0 k	+ 1.0 k	+ 1.5 k	+ 1.5 k	+ 2.2 k	+ 3.3 k	+ 4.7 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	1.85 – 2.22	2.23 – 2.62	2.63 – 3.04
A/D conversion value (3.3V=255)	0 – 11	12 – 32	33 – 54	55 – 75	76 – 96	97 – 119	120 – 142	143 – 163	182 – 197	198 – 209
KEY1 (139 pin)	RADIO (SCENE4)	CD (SCENE3)	TV (SCENE2)	BD/DVD (SCENE1)	ZONE2 CONTROL	ZONE2 ON/OFF	INPUT >	INPUT <	MAIN ZONE ⏻ (power)	TONE CONTROL

Ohm	0	+ 1.0 k	+ 1.0 k	+ 1.5 k	+ 1.8 k	+ 2.2 k	+ 3.3 k	+ 4.7 k	+ 6.8 k	+ 10.0 k	+ 22.0 k	+ 68.0 k
V	0 – 0.15	0.16 – 0.42	0.43 – 0.70	0.71 – 0.99	1.00 – 1.27	1.28 – 1.56	1.57 – 1.86	1.87 – 2.14	2.15 – 2.39	2.40 – 2.65	2.66 – 2.91	2.92 – 3.17
A/D conversion value (3.3V=255)	0 – 11	12 – 32	33 – 54	55 – 77	78 – 99	100 – 121	122 – 144	145 – 166	167 – 186	187 – 205	206 – 226	227 – 246
KEY2 (138 pin)	–	TUNING >>	TUNING <<	AM	FM	PRESET >	PRESET <	MEMORY	INFO	STRAIGHT	PROGRAM >	PROGRAM <

★ 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.

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	

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

OPERATION 2/2

OPERATION (9) R, T, K, A, B, G, F, L models

OPE(9)

PHONO

Page 115 J8
to OPERATION (2)_CB453

OPERATION (7) C model

OPE(7)

PHONO

Page 112 J9
to DIGITAL (1)_CB911

OPERATION (8)

OPE(8)
4301-4400
461-470

SURROUND BACK L

ZONE2 L/R / PRESENCE L/R SPEAKERS

Page 119 D4
to VIDEO (1)_CB347

Page 112 L2
to DIGITAL (1)_CB917

Page 112 L3
to DIGITAL (1)_CB918

Page 112 L5
to DIGITAL (1)_CB920

OPE(2)
4201-4300
451-460

SIRIUS

U仕向 only

SURROUND L

FRONT L

CENTER

SUB WOOFER

SURROUND BACK L

DIGITAL IN

ANALOG IN

OPERATION (2)

Page 114 J9
to OPERATION (1)_CB402

Page 115 A2
to OPERATION (9)_CB462
(R, T, K, A, B, G, F, L models)

Page 117 A3
to MAIN (1)_CB152

Page 117 C5
to MAIN (1)_CB153

to MAIN

Page 117 C6
to MAIN (1)_CB154

Page 117 C7
to MAIN (1)_CB155

Page 118 K6
to VIDEO (1)_CB303

Page 119 L6
to VIDEO (1)_CB332

to VIDEO

R4200	
RX-V667	0
RX-A700	1.0K
HTR6063	2.2K
RX-V767	3.9K
RX-A800	5.6K
HTR7063	8.2K
RX-V867	12K

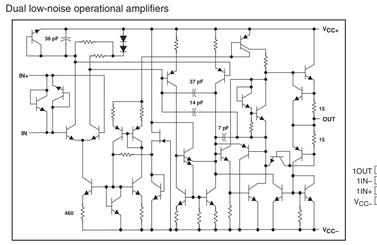
Destination Part List

		RX-V667/RX-A700	RX-V667	
sXX	LOC	U	C	RTK48GFL
s420	C4202 - C4208	US06222 220P(SL)	X	X
s421	C4201	US06310 1000P(B)	X	X
s422	R4205	RD35410 10	X	X
s423	R4204 R4203	RD35433 33	X	X
s424	R4202 R4201	RD35547 470	X	X
s425	JK451	VV26950 MD-S8130-90	X	X
s426	R4206 R4207	RD35810 100K	X	X
s427	ST451	X	V404050	V404050
s428	R4302 R4301	X	X	HV75547 470
s429	D4301 D4302	X	X	VV65930 RL27.58
s430	C4301 C4302	X	X	UR26747 47/50
s431	C4304 C4303	X	X	WJ60370 1000P
s432	R4305 - R4306 R4315 - R4316	X	X	RD35747 47K
s433	C4305 C4306	X	X	UR26710 10/50
s434	R4308 R4307	X	X	RD35510 100
s435	R4309 R4310	X	X	RF35810 100K
s436	C4308 C4307	X	X	WJ60560 0.033
s437	IC461	X	X	X35054D NJM2068MD-TE2
s438	R4312 R4311	X	X	RF35682 8.2K
s439	C4309 C4310	X	X	WJ60490 9100P
s440	C4311 C4312	X	X	UR21822 220/6.3
s441	R4314 R4313	X	X	RF35518 180
s442	C4313 C4314	X	X	WJ60310 220P
s443	R4318 R4317	X	X	RD35447 2.2K
s444	R4319	X	X	RD35322 2.2
s445	C4317	X	X	US06410 0.01(B)
s446	PJ461	X	X	WD59960 MSP-252V2-06NI
s447	W4301	X	X	MF00514 -
s450	C4315 C4316	X	X	WJ60310 220P
s451	R4304 R4303	X	X	RD35547 470
s452	CB462	X	X	VK02640 -
s453	CB453	X	X	VI87830 -
s456	ST491	X	WA24620 -	X
s457	TH492 TH491	X	WT69830 WC92NA103J1	X
s458	D4901 D4902 D4903	X	VI33290 1SS355	X
s459	R4902 R4903	X	RD35610 1K	X
s460	R4901	X	RD35710 10K	X
s461	CB491	X	VI87810 51048	X
s462	W4901	X	MF80316 -	X

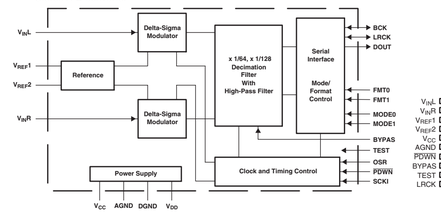
Destination Part List

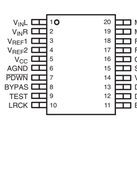
		HTR-6063	
sXX	LOC	C	A
s420	C4202 - C4208	X	X
s421	C4201	X	X
s422	R4205	X	X
s423	R4204 R4203	X	X
s424	R4202 R4201	X	X
s425	JK451	X	X
s426	R4206 R4207	X	X
s427	ST451	V404050	V404050
s428	R4302 R4301	X	HV75547 470
s429	D4301 D4302	X	VV65930 RL27.58
s430	C4301 C4302	X	UR26747 47/16
s431	C4304 C4303	X	WJ60370 1000P
s432	R4305 - R4306 R4315 - R4316	X	RD35747 47K
s433	C4305 C4306	X	UR26710 10/50
s434	R4308 R4307	X	RD35510 100
s435	R4309 R4310	X	RF35810 100K
s436	C4308 C4307	X	WJ60560 0.033
s437	IC461	X	X35054D NJM2068MD-TE2
s438	R4312 R4311	X	RF35682 8.2K
s439	C4309 C4310	X	WJ60490 9100P
s440	C4311 C4312	X	UR21822 220/6.3
s441	R4314 R4313	X	RF35518 180
s442	C4313 C4314	X	WJ60310 220P
s443	R4318 R4317	X	RD35622 2.2K
s444	R4319	X	RD35322 2.2
s445	C4317	X	US06410 0.01(B)
s446	PJ461	X	WD59960 MSP-252V2-06NI
s447	W4301	X	MF00514 -
s452	CB462	X	VK02640 -
s453	CB453	X	VI87830 -
s450	C4315 C4316	X	WJ60310 220P
s451	R4304 R4303	X	RD35547 470
s456	ST491	WA24620 -	X
s457	TH492 TH491	WT69830 WC92NA103J1	X
s458	D4901 D4902 D4903	VI33290 1SS355	X
s459	R4902 R4903	RD35610 1K	X
s460	R4901	RD35710 10K	X
s461	CB491	VI87810 51048	X
s462	W4901	MF80316 -	X

IC451-454: NE5532DR
Dual low-noise operational amplifiers

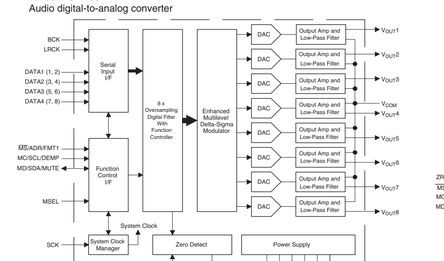


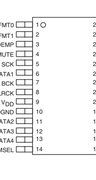
IC455: PCM1803DBR
Stereo A/D converter





IC456: PCM1681PWPR
Audio digital-to-analog converter





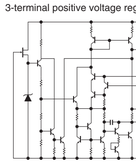
RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
⊿	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
⚠	METAL FILM RESISTOR
⊿	METAL PLATE RESISTOR
⊠	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

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

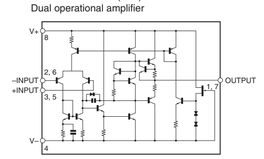
NOTICE (model)
(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA

★ 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.

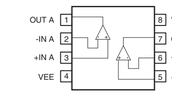
IC457: NJM78M05FA
3-terminal positive voltage regulator



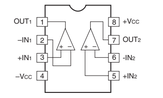
IC458: NJM4565M (TE1)
Dual operational amplifier



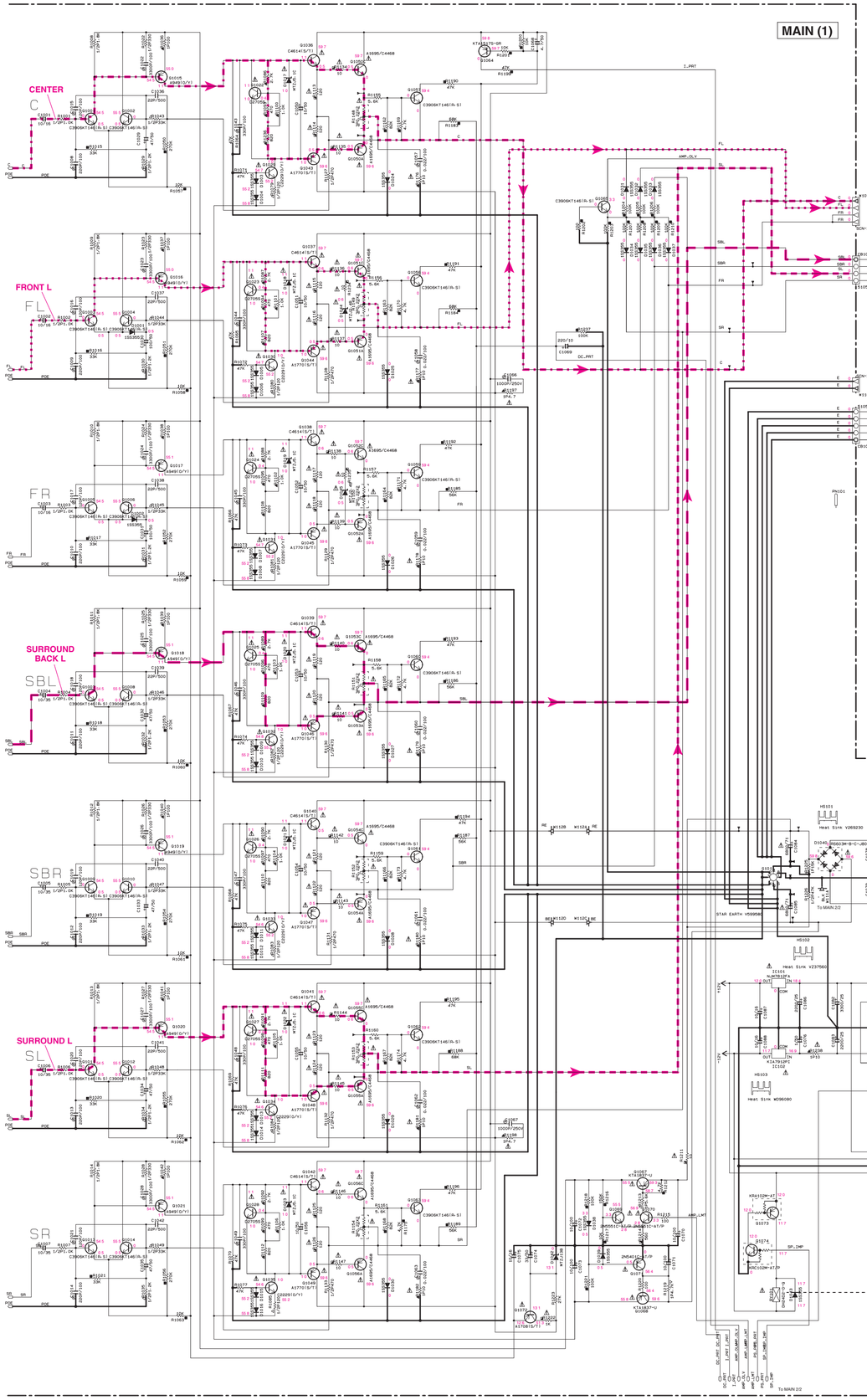
IC459: TK15420MTL-G
High-speed 2 ch general-purpose amplifier



IC461: NJM2068MD-TE2
Dual operational amplifier



MAIN 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
	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	

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
(P)..... RUSSIAN
(P)..... LATIN AMERICA

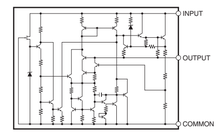
Destination Part List

xxx	LOC	UC	R	TK80F	L
s1	SW101	X	WS49370 RS140246	X	WD07370 RS142254
s2	CB111 CB112	X	WK07770 RFC5000-0202F	X	X
s3	F100	X	KBD0078 TSAL250V	X	X
s4	J3001	X	X	X	VN50000
s5	W1226 W1254	X	WH04025	X	WH04025
s6	W1216 W1214	X	WH02025	X	WH02025
s7	W1224 W1228	X	WH03025	X	WH03025
s8	W1236 W1234	X	WH09025	X	WH09025
s9	W1244 W1248	X	WH08030	X	WH08030
s10	W1258 W1254	X	WH06025	X	WH06025
s11	W1256 W1258	X	WA76540 VH-S258T	X	WA76540 VH-S258T

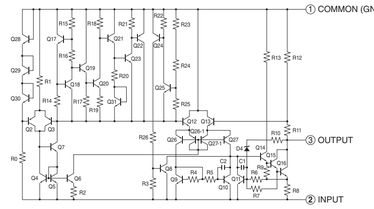
VOLTAGE SELECTOR

230-240V	1-2/5-6	R, L models
220V	2-3/6-7	R, L models
110V	3-4/7-8	R model
120V	4-5/8-1	R model

IC101: NJM7812FA
Voltage regulator



IC102: KIA7912PI
Voltage regulator



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★ Schematic diagram is subject to change without notice.

MAIN 2/2

AV 1 OPTICAL · AV 2 COAXIAL · AV 3 COAXIAL (CD) · AV 4 OPTICAL (TV) · AV 5 · AV 6 · AV OUT · AUDIO1 · AUDIO2 · MULTI CH INPUT FRONT · SURROUND · SUR.BACK · SUBWOOFER · CENTER · AUDIO OUT · ZONE2 OUT · PRE OUT FRONT · SURROUND · SUR.BACK · SUBWOOFER 1 · CENTER · SUBWOOFER 2

DIGITAL IN

ANALOG IN

SURROUND L · SURROUND BACK L · SUB WOOFER · CENTER · FRONT L

Page 115 B9 to OPERATION (2)_CB451

Page 115 D9 to OPERATION (2)_CB452

Page 115 E9 to OPERATION (2)_CB454

Page 115 F9 to OPERATION (2)_CB455

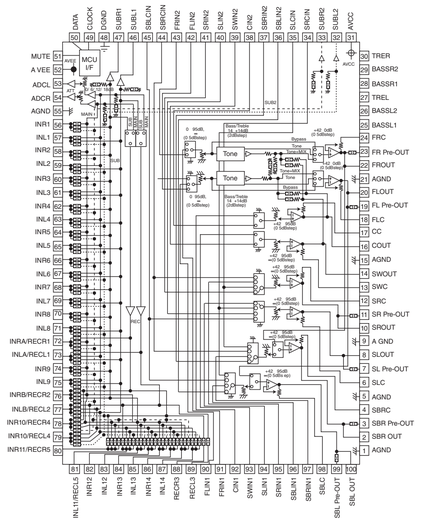
Page 117 H4 to MAIN (1)_CB157

Page 117 C7 to MAIN (1)_CB158

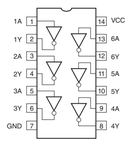
Page 112 I9 to DIGITAL (1)_CB907

MAIN (1)

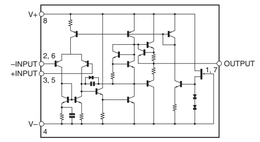
IC153: R2A15220FP
8-channel electronic volume with 11 input selector and tone control



IC152: TC74VHCU04FT
Hex inverters



IC154: NJM4565M (TE1)
Dual operational amplifier



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

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	

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

VIDEO 1/3

COMPONENT VIDEO
AV 1 AV1 Cr/Pr Cb/Pb Y
AV 2 AV2 Cr/Pr Cb/Pb Y
AV 3 AV3
AV 4 AV4
VIDEO
AV 5 AV5
AV 6 AV6
AV OUT AV OUT
MONITOR OUT
COMPONENT VIDEO
Monitor Cb/Pb Cr/Pr Y
MON OUT VIDEO

COMPONENT INPUT SELECTOR
VIDEO INPUT SELECTOR
OUTPUT SELECTOR
OUTPUT AMP
EXTERNAL I/O PORT
OSD
COMPONENT DETECTOR
no_use

COMP_SEL	OUT
L	AV-1
H	AV-2

VID.SEL3	VID.SEL2	VID.SEL1	OUT
L	L	L	MUTE
L	L	H	AV-4
L	H	L	AV-5
L	H	H	AV-6
H	L	L	AV-3
H	L	H	LTOD
H	H	L	MUTE
H	H	H	V-AUX

CBYPASS	OUT
L	CONV
H	BYPASS

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

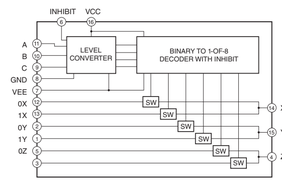
RESISTOR

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

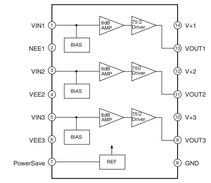
REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	‖
	TANTALUM CAPACITOR	‖
NO MARK	CERAMIC CAPACITOR	‖
	CERAMIC TUBULAR CAPACITOR	‖
	POLYESTER FILM CAPACITOR	‖
	POLYSTYRENE FILM CAPACITOR	‖
	MICA CAPACITOR	‖
	POLYPROPYLENE FILM CAPACITOR	‖
	SEMICONDUCTIVE CERAMIC CAPACITOR	‖

IC301-303: TC74HC4053AF
Analog multiplexer/demultiplexer

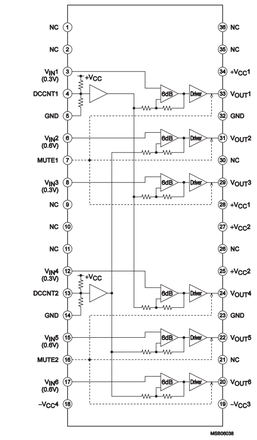


INPUT STATES				"ON" CHANNEL (S)
INHIBIT	C	B	A	
0	0	0	0	0X, 0Y, 0Z
0	0	0	1	1X, 0Y, 0Z
0	0	1	0	0X, 1Y, 0Z
0	0	1	1	1X, 1Y, 0Z
0	1	0	0	0X, 0Y, 1Z
0	1	0	1	1X, 0Y, 1Z
0	1	1	0	0X, 1Y, 1Z
0	1	1	1	1X, 1Y, 1Z
1	X	X	X	NONE

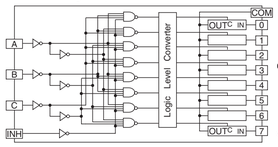
IC306: NJM2581M
Video amplifier



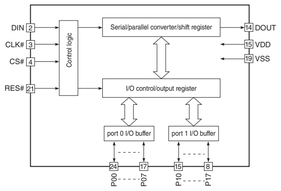
IC305: LA73050-TLM-E
6-channel 75-ohm video driver



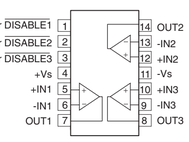
IC307: TC74HC4051AFEL
8-channel analog multiplexer/demultiplexer



IC308: LC709004A-TLM-E
I/O-expander for microcontroller



IC310: FHP3350IM14X
Triple voltage feedback amplifier



Page 115 H9
to OPERATION (2)_CB456

Page 108 H2
to DIGITAL (1)_CB34

To Digital

VIDEO(1)

CVBS COMPONENT SEL
301~319
3001~3199

VIDEO (1)

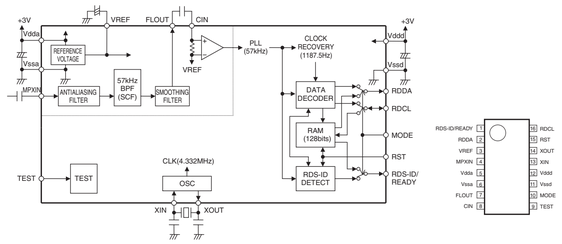
★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
★ Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.
★ Schematic diagram is subject to change without notice.

VIDEO 2/3

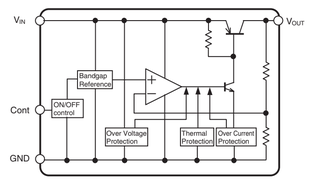
Destination Part List

sXX	LOC	U	C	R	T	K	A	BGF	L
s201	IC321	X	X	X	X	X	X	XB235A0 LC72725KM-UY-TLE	X
s202	XL321	X	X	X	X	X	X	V273110 4.332MHZ	X
s203	C3201 C3203	X	X	X	X	X	X	US06127 27P(CH)	X
s204	C3205 C3209 C3204	X	X	X	X	X	X	US13510 0.5/16	X
s205	R3203 R3201	X	X	X	X	X	X	RD35510 100	X
s206	C3202	X	X	X	X	X	X	UR23710 10/16	X
s207	C3206	X	X	X	X	X	X	US06256 560P(SL)	X
s208	R3202	X	X	X	X	X	X	RD35651 5.1K	X
s209	C3207 C3208	X	X	X	X	X	X	US06233 330P(SL)	X
s210	R3204	X	X	X	X	X	X	RD35722 22K	X
s211	R3205	X	X	X	X	X	X	RD35633 3.3K	X
s212	Q3201	X	X	X	X	X	X	IC17402 C1740S1A/S1	X
s213	R3206	X	X	X	X	X	X	RD35810 100K	X
s214	R3207	X	X	X	X	X	X	RD35733 33K	X
s215	R3208	X	X	X	X	X	X	HY75568 680	X
s216	Q3201	X	X	X	X	X	X	V643610 MTJU3.36	X
s217	C3211	X	X	X	X	X	X	UR23747 47/16	X
s281	TE342	WK56100 MST-207Y1-01	WK56100 MST-207Y1-01	WK56100 MST-207Y1-01	WK56100 MST-207Y1-01	WK56110 MST-207Y1-01	WK56100 MST-207Y1-01	WK56110 MST-207Y1-01	WK56110 MST-207Y1-01
s282	TE341 TE343	WK56080 MST-204V1-01	WK56080 MST-204V1-01	WK56080 MST-204V1-01	WK56080 MST-204V1-01	WK56090 MST-204V1-01	WK56080 MST-204V1-01	WK56090 MST-204V1-01	WK56090 MST-204V1-01
s292	R3350	X	X	HF45622 2.2K	X	X	X	X	X
s293	D3350	X	X	VU17280 UDZS12B	X	X	X	X	X

IC321: LC72725KM-UY-TLM-E
RDS signal demodulation IC



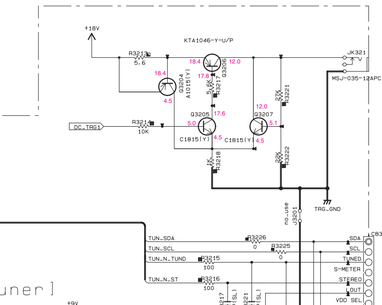
IC334: NJM2388F05
Low dropout voltage regulator with ON/OFF control

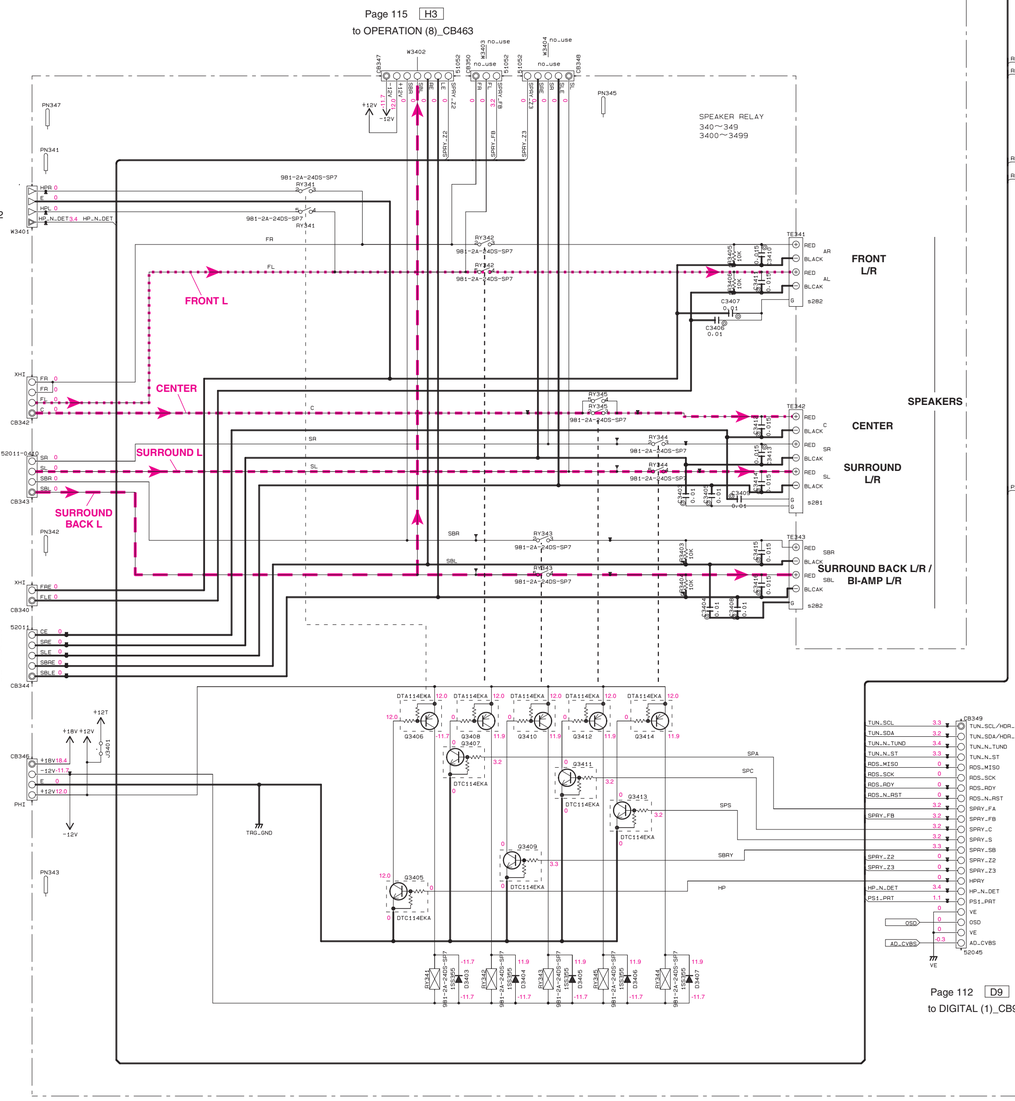


RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
☑	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
⚠	METAL FILM RESISTOR
☒	METAL PLATE RESISTOR
▣	FIRE PROOF CARBON FILM RESISTOR
□	CEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

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

NOTICE (model)
(J)····· JAPAN
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(C)····· CANADA
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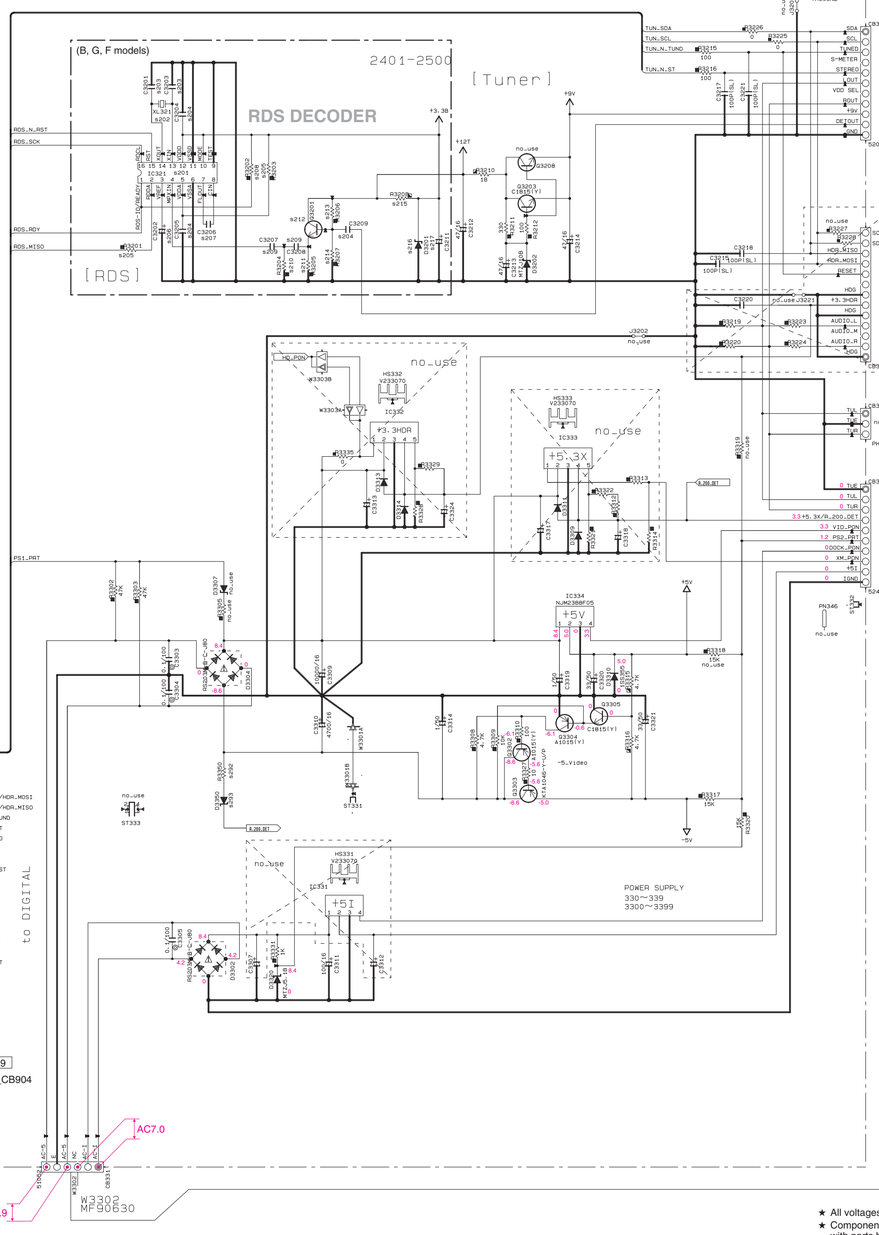




TRIGER & TUNER
320~329
3200~3299

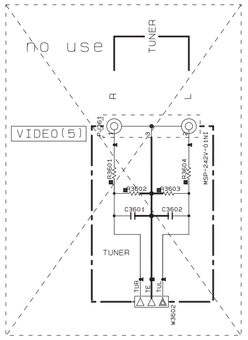
VIDEO (1)

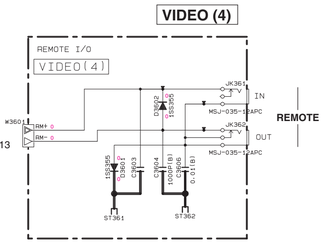
VIDEO(1)



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

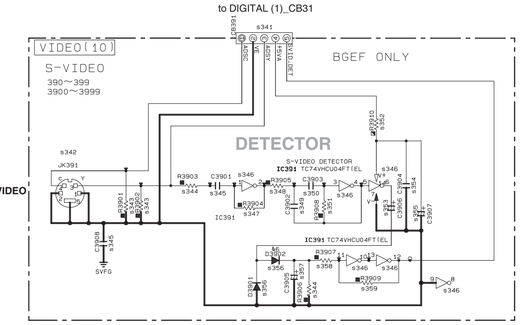
VIDEO 3/3

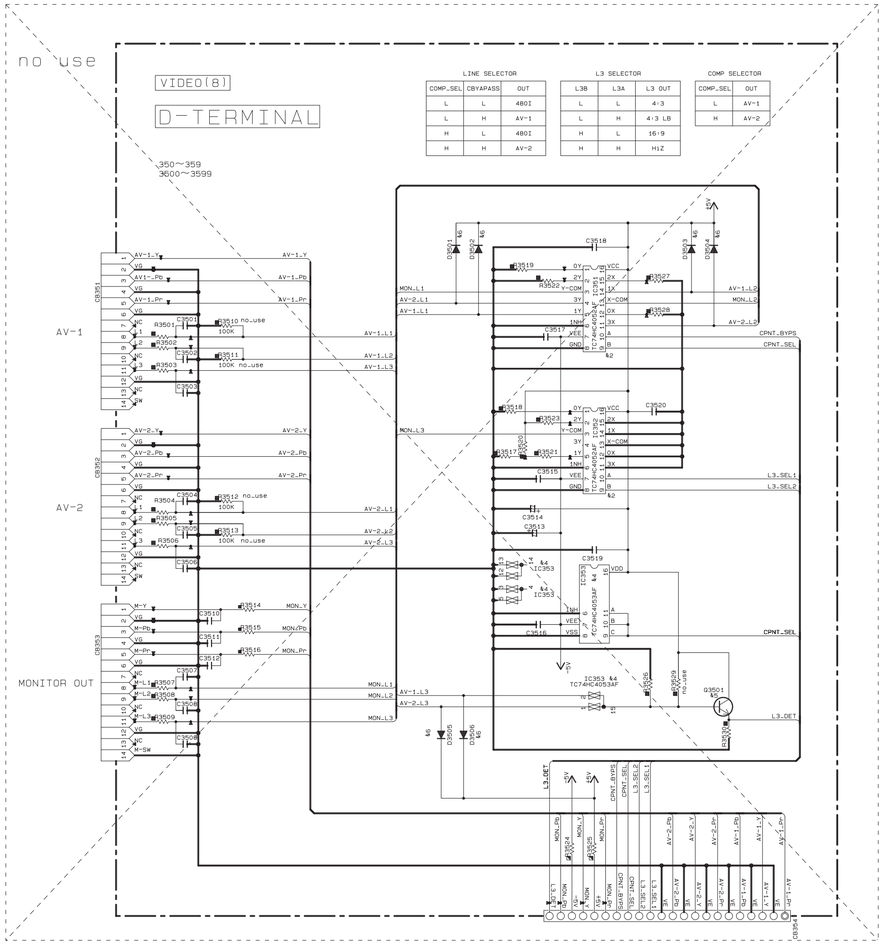




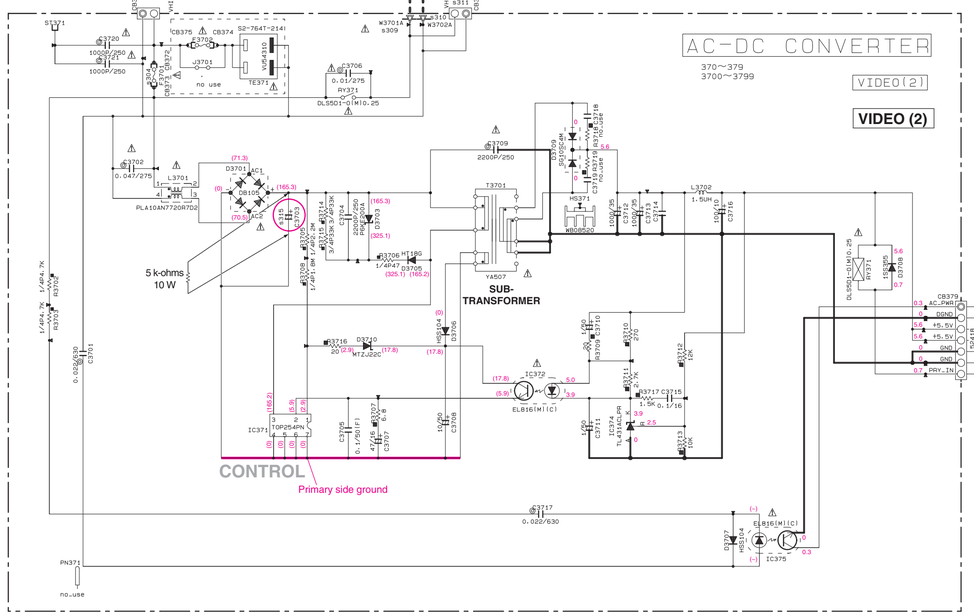
Page 112 J8
to DIGITAL (1)_CB913

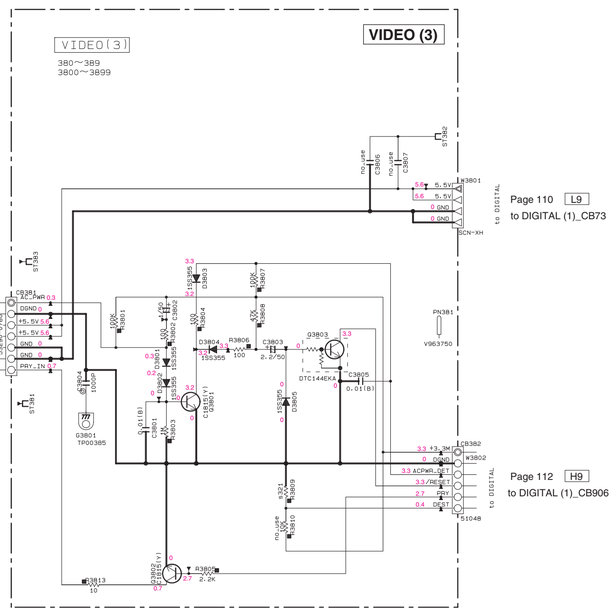
Page 108 E1
to DIGITAL (1)_CB31





Page 116 J6
to MAIN (4)_W126A, W126B
(R, L models)





Page 110 L9
to DIGITAL (1)_CB73

Page 112 H9
to DIGITAL (1)_CB906

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 positions 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, perform discharge by connecting a discharge resistor (5k-ohms/10W) between terminals at following positions. The time required for discharging is about 30 seconds.
  C3703 on VIDEO (2) P.C.B.

Destination Part List

sXX	LOC	U	C	A	T	K	A	BGF	G
s304	F3701	W32110 B.00A125V	W32110 B.00A125V	W87686 T6.3AL250V	WW93310 T5.0AL250V	WW93310 T5.0AL250V	WW93310 T5.0AL250V	WW93310 T5.0AL250V	WW93310 T5.0AL250V
s309	W3701B W3701A	MH06620 -	MH06620 -	X	MH06620 -	MH06620 -	MH06620 -	MH06620 -	X -
s310	W3702B W3702A	MH09620 -	MH09620 -	X	MH09620 -	MH09620 -	MH09620 -	MH09620 -	X -
s311	CB378	X	X	VG87990 VH15	X	X	X	X	VG87990 VH15
s315	C3703	WR08200 100/220	WR08200 100/220	WR08310 100/400	WQ85250 68/400	WQ85250 68/400	WQ85250 68/400	WQ85250 68/400	WQ85250 68/400
s321	R3809	RD35612 1.2K	RD35627 2.7K	RD35647 4.7K	RD35668 6.8K	RD35710 10K	RD35715 15K	RD35747 47K	RD35810 100K
s341	CB391	X	X	X	X	X	X	VQ04410 52044	X
s342	JK391	X	X	X	X	X	X	VE93100 YKF51-5506V	X
s343	R3901 R3902	X	X	X	X	X	X	RD35475 75	X
s344	R3903 R3906	X	X	X	X	X	X	RD35710 10K	X
s345	C3901 C3908	X	X	X	X	X	X	US06410 0.01(B)	X
s346	IC391	X	X	X	X	X	X	X250940 TC74VHCU04FT(EL)	X
s347	R3904	X	X	X	X	X	X	RD35747 47K	X
s348	R3905	X	X	X	X	X	X	RD35647 4.7K	X
s349	C3902	X	X	X	X	X	X	US06212 120P(SL)	X
s350	C3903	X	X	X	X	X	X	US06222 220P(SL)	X
s351	R3908	X	X	X	X	X	X	RD35847 470K	X
s352	R3910	X	X	X	X	X	X	HV75322 2.2	X
s353	C3906	X	X	X	X	X	X	UR83710 10/16	X
s354	C3904	X	X	X	X	X	X	US13510 0.1/16	X
s355	C3907	X	X	X	X	X	X	UR81B47 470/6.3	X
s356	D3902 D3901	X	X	X	X	X	X	YT33290 1SS355	X
s357	C3905	X	X	X	X	X	X	UR83747 47/16	X
s358	R3907	X	X	X	X	X	X	RD35715 15K	X
s359	R3909	X	X	X	X	X	X	RD35868 680K	X

RESISTOR

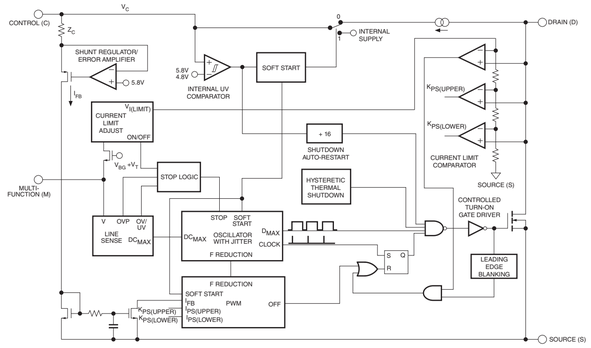
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◪	FIRE PROOF CARBON FILM RESISTOR
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■	CHIP RESISTOR

CAPACITOR

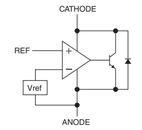
REMARKS	PARTS NAME
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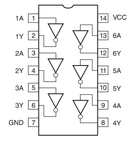
IC371: TOP254PN
TOPswitch-HX



IC374: TL431ACLPR
Adjustable precision shunt regulators



IC391: TC74VHCU04FT
Hex inverters



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★ Schematic diagram is subject to change without notice.

■ REPLACEMENT PARTS LIST

• ELECTRICAL COMPONENT PARTS

WARNING

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

P.C.B. DIGITAL

	Ref No.	Part No.	Description			Markets
*		WU432000	P. C. B.	DIGITAL		U(V667)
*		WU933100	P. C. B.	DIGITAL		U(A700)
*		WU432100	P. C. B.	DIGITAL		CTKAL
*		WU432200	P. C. B.	DIGITAL		R
*		WU432300	P. C. B.	DIGITAL		BGF
*	CB1-5	WU167400	CN. HDMI	HDMI 19P SE		
*	CB8	WD295600	CN. BS. PIN	20P SE		
	CB31	VQ044100	CN. BS. PIN	5P		BGF
	CB34	VF982200	CN. BS. PIN	14P		
*	CB71	WU167400	CN. HDMI	HDMI 19P SE		
	CB73	LB919040	CN. BS. PIN	4P		
	CB901	VB390000	CN. BS. PIN	4P		(A700)
*	CB93	WU167400	CN. HDMI	HDMI 19P SE		
	CB94	VY939800	CN. BS. PIN	20P TE		
	CB904	VQ045200	CN. BS. PIN	22P		
	CB906	VK026500	CN. BS. PIN	6P		
	CB907	VK025600	CN. BS. PIN	12P		
	CB911	VK024700	CN. BS. PIN	3P		
	CB913	VB389800	CN. BS. PIN	2P		
	CB914	VP082900	CN. BS. PIN	25P		
	CB915	VG518300	PIN. BASE	2P RF TE		
	CB916	VQ047200	CN. BS. PIN	9P		
	CB917-918	V9356900	CN. JE	19P SE		
	CB920	V9356900	CN. JE	19P SE		
*	CB981	WT567000	SOCKET. RS-232C	RS-232C 8LAM009P-306A		(A700)
	C1	US135100	C. CE. CHP	0. 1uF	16V	
	C2	WG888300	C. CE. M. CHP	10uF	6. 3V	
	C3-5	US064100	C. CE. CHP	0. 01uF	50V B	
	C6	US063100	C. CE. CHP	1000pF	50V B	
	C7-9	US135100	C. CE. CHP	0. 1uF	16V	
	C10	US064100	C. CE. CHP	0. 01uF	50V B	
	C11	UF438100	C. EL. CHP	100uF	16V	
	C12-13	US064100	C. CE. CHP	0. 01uF	50V B	
	C14	US135100	C. CE. CHP	0. 1uF	16V	
	C15-17	US064100	C. CE. CHP	0. 01uF	50V B	
	C18-19	US135100	C. CE. CHP	0. 1uF	16V	
	C20-23	US064100	C. CE. CHP	0. 01uF	50V B	
	C24-27	US135100	C. CE. CHP	0. 1uF	16V	
	C28-29	WG888300	C. CE. M. CHP	10uF	6. 3V	
	C30-32	US135100	C. CE. CHP	0. 1uF	16V	
	C33	WG888300	C. CE. M. CHP	10uF	6. 3V	
	C34-35	US135100	C. CE. CHP	0. 1uF	16V	
	C36	WG888300	C. CE. M. CHP	10uF	6. 3V	
	C37-38	US135100	C. CE. CHP	0. 1uF	16V	
	C39	US063100	C. CE. CHP	1000pF	50V B	
	C40-43	US135100	C. CE. CHP	0. 1uF	16V	
	C44	US063100	C. CE. CHP	1000pF	50V B	
	C45-52	US064100	C. CE. CHP	0. 01uF	50V B	
	C53-54	US063100	C. CE. CHP	1000pF	50V B	
	C55-56	US064100	C. CE. CHP	0. 01uF	50V B	
	C57	US062470	C. CE. CHP	470pF	50V B	
	C58	US135100	C. CE. CHP	0. 1uF	16V	
	C59	WG888300	C. CE. M. CHP	10uF	6. 3V	
	C60-61	US135100	C. CE. CHP	0. 1uF	16V	
	C62	US063100	C. CE. CHP	1000pF	50V B	
	C63-64	US135100	C. CE. CHP	0. 1uF	16V	
	C65	WD758300	C. CE. CHP	10uF	10V	

✻ New Parts

	Ref No.	Part No.	Description			Markets
	C66	US063100	C. CE. CHP	1000pF	50V B	
	C68	WD758300	C. CE. CHP	10uF	10V	
	C70-72	US063100	C. CE. CHP	1000pF	50V B	
	C73-75	US135100	C. CE. CHP	0. 1uF	16V	
	C76-77	WG888300	C. CE. M. CHP	10uF	6. 3V	
	C78	US135100	C. CE. CHP	0. 1uF	16V	
	C79	US063100	C. CE. CHP	1000pF	50V B	
	C80-83	US135100	C. CE. CHP	0. 1uF	16V	
	C84-96	US064100	C. CE. CHP	0. 01uF	50V B	
	C97-101	US135100	C. CE. CHP	0. 1uF	16V	
	C103	US135100	C. CE. CHP	0. 1uF	16V	
	C104	US063100	C. CE. CHP	1000pF	50V B	
	C105	US135100	C. CE. CHP	0. 1uF	16V	
	C106	WG888300	C. CE. M. CHP	10uF	6. 3V	
	C107	US135100	C. CE. CHP	0. 1uF	16V	
	C109	US135100	C. CE. CHP	0. 1uF	16V	
	C110	WG888300	C. CE. M. CHP	10uF	6. 3V	
	C112	US135100	C. CE. CHP	0. 1uF	16V	
	C113	UF417220	C. EL. CHP	22uF	6. 3V	
	C114	US063100	C. CE. CHP	1000pF	50V B	
	C116-117	US063100	C. CE. CHP	1000pF	50V B	
	C119	US063100	C. CE. CHP	1000pF	50V B	
	C120	US062470	C. CE. CHP	470pF	50V B	
	C121-122	US062100	C. CE. CHP	100pF	50V B	
	C301-303	US135100	C. CE. CHP	0. 1uF	16V	
	C304-305	WD758300	C. CE. CHP	10uF	10V	
	C306	US063100	C. CE. CHP	1000pF	50V B	
	C307-308	US135100	C. CE. CHP	0. 1uF	16V	
	C309-310	WD758300	C. CE. CHP	10uF	10V	
	C311-312	US135100	C. CE. CHP	0. 1uF	16V	
	C313-314	US064100	C. CE. CHP	0. 01uF	50V B	
	C315	UF037220	C. EL. CHP	22uF	16V	
	C316-318	US135100	C. CE. CHP	0. 1uF	16V	
	C319	US034390	C. CE. CHP	0. 039uF	16V B	
	C320-322	US135100	C. CE. CHP	0. 1uF	16V	
	C323-324	US063100	C. CE. CHP	1000pF	50V B	
	C325-326	US135100	C. CE. CHP	0. 1uF	16V	
	C327	US064100	C. CE. CHP	0. 01uF	50V B	
	C328	US135100	C. CE. CHP	0. 1uF	16V	
	C329	US064100	C. CE. CHP	0. 01uF	50V B	
	C330	US135100	C. CE. CHP	0. 1uF	16V	
	C331	VZ243400	C. CE. CHP	0. 33uF	16V	
	C332	VZ281900	C. CE. CHP	0. 47uF	16V K	
	C333	US034820	C. CE. CHP	0. 082uF	16V K	
	C334	US064100	C. CE. CHP	0. 01uF	50V B	
	C335	US135100	C. CE. CHP	0. 1uF	16V	
	C336	US061100	C. CE. CHP	10pF	50V B	
	C338	US060800	C. CE. CHP	8pF	50V B	
	C339-341	US135100	C. CE. CHP	0. 1uF	16V	
	C342	US064100	C. CE. CHP	0. 01uF	50V B	
	C343-345	US135100	C. CE. CHP	0. 1uF	16V	
	C346	US046100	C. CE. CHP	1uF	25V	
	C347	US135100	C. CE. CHP	0. 1uF	16V	
	C348	US046100	C. CE. CHP	1uF	25V	
	C349-350	US135100	C. CE. CHP	0. 1uF	16V	
	C351	WG251600	C. CE. CHP	4. 7uF	6. 3V	
*	C352	WP092800	C. EL. CHP	22uF	16V	

✻ New Parts

P.C.B. DIGITAL

Ref No.	Part No.	Description			Markets
C353	WG251600	C. CE. CHP	4. 7uF	6. 3V	
C354-356	US135100	C. CE. CHP	0. 1uF	16V	
* C357	WP092800	C. EL. CHP	22uF	16V	
C358-359	US063100	C. CE. CHP	1000pF	50V B	
C360	US135100	C. CE. CHP	0. 1uF	16V	
C361	US063100	C. CE. CHP	1000pF	50V B	
C362	UF037220	C. EL. CHP	22uF	16V	
C363-367	US135100	C. CE. CHP	0. 1uF	16V	
C368	US062100	C. CE. CHP	100pF	50V B	
C369	US135100	C. CE. CHP	0. 1uF	16V	
C370-371	US064100	C. CE. CHP	0. 01uF	50V B	
C372	US135100	C. CE. CHP	0. 1uF	16V	
C373-377	US064100	C. CE. CHP	0. 01uF	50V B	
C378	US135100	C. CE. CHP	0. 1uF	16V	
C379	US064100	C. CE. CHP	0. 01uF	50V B	
C381-382	US063100	C. CE. CHP	1000pF	50V B	
C601-615	US135100	C. CE. CHP	0. 1uF	16V	
C616	US163100	C. CE. CHP	1000pF	50V	
C617	US135100	C. CE. CHP	0. 1uF	16V	
C618	US163100	C. CE. CHP	1000pF	50V	
C619	US135100	C. CE. CHP	0. 1uF	16V	
C620	UF438100	C. EL. CHP	100uF	16V	
C621-622	UF417220	C. EL. CHP	22uF	6. 3V	
C623-624	US135100	C. CE. CHP	0. 1uF	16V	
C625-626	US063100	C. CE. CHP	1000pF	50V B	
C627-629	US135100	C. CE. CHP	0. 1uF	16V	
C630	WG888300	C. CE. M. CHP	10uF	6. 3V	
C631-637	US135100	C. CE. CHP	0. 1uF	16V	
C638	WG888300	C. CE. M. CHP	10uF	6. 3V	
C639	UF438100	C. EL. CHP	100uF	16V	
C640	WG888300	C. CE. M. CHP	10uF	6. 3V	
C641-648	US135100	C. CE. CHP	0. 1uF	16V	
C649-650	WG888300	C. CE. M. CHP	10uF	6. 3V	
C651-655	US163100	C. CE. CHP	1000pF	50V	
C701	WD758300	C. CE. CHP	10uF	10V	
C702	US064100	C. CE. CHP	0. 01uF	50V B	
C703	US135100	C. CE. CHP	0. 1uF	16V	
C704	US064100	C. CE. CHP	0. 01uF	50V B	
C705	US135100	C. CE. CHP	0. 1uF	16V	
C706-707	US064100	C. CE. CHP	0. 01uF	50V B	
C708-709	WD758300	C. CE. CHP	10uF	10V	
C710-711	US135100	C. CE. CHP	0. 1uF	16V	
C712	WD758300	C. CE. CHP	10uF	10V	
C713	US135100	C. CE. CHP	0. 1uF	16V	
C714-718	US064100	C. CE. CHP	0. 01uF	50V B	
C719	US135100	C. CE. CHP	0. 1uF	16V	
C720-722	US064100	C. CE. CHP	0. 01uF	50V B	
C723-724	US135100	C. CE. CHP	0. 1uF	16V	
C725	WD758300	C. CE. CHP	10uF	10V	
C726	US064100	C. CE. CHP	0. 01uF	50V B	
C727	WD758300	C. CE. CHP	10uF	10V	
C728	US064100	C. CE. CHP	0. 01uF	50V B	
C729	US135100	C. CE. CHP	0. 1uF	16V	
C730-731	US046100	C. CE. CHP	1uF	25V	
C732	WP882000	C. CE. CHP	10uF	6. 3V	
C733	US062470	C. CE. CHP	470pF	50V B	
C734	US061270	C. CE. CHP	27pF	50V B	

* New Parts

Ref No.	Part No.	Description			Markets
C735	WD758200	C. CE. CHP	47uF	6. 3V	
C736	WQ614300	C. CE. CHP	22uF	10VE	
C737	US135100	C. CE. CHP	0. 1uF	16V	
C738	US061220	C. CE. CHP	22pF	50V B	
* C739	US034270	C. CE. CHP	0. 027uF	16V	
C740	US135100	C. CE. CHP	0. 1uF	16V	
C744	WQ614300	C. CE. CHP	22uF	10VE	
C746	US046100	C. CE. CHP	1uF	25V	
C760	WG251600	C. CE. CHP	4. 7uF	6. 3V	
C763	WG251600	C. CE. CHP	4. 7uF	6. 3V	
C768	WP882000	C. CE. CHP	10uF	6. 3V	
C769	US061270	C. CE. CHP	27pF	50V B	
C770	WD758200	C. CE. CHP	47uF	6. 3V	
* C780	US034270	C. CE. CHP	0. 027uF	16V	
C782	WQ614300	C. CE. CHP	22uF	10VE	
C787-789	US135100	C. CE. CHP	0. 1uF	16V	
C790	WH772100	C. EL	1000uF	10V	
C791	US135100	C. CE. CHP	0. 1uF	16V	
C792	WG888300	C. CE. M. CHP	10uF	6. 3V	
C793	WD758300	C. CE. CHP	10uF	10V	
C794-799	US063100	C. CE. CHP	1000pF	50V B	
C806-807	US063100	C. CE. CHP	1000pF	50V B	
C809	WG888300	C. CE. M. CHP	10uF	6. 3V	
C810	WD758300	C. CE. CHP	10uF	10V	
C900	US062220	C. CE. CHP	220pF	50V B	
C901	US063100	C. CE. CHP	1000pF	50V B	
C902	US062220	C. CE. CHP	220pF	50V B	
C903	US063100	C. CE. CHP	1000pF	50V B	
C904	US062470	C. CE. CHP	470pF	50V B	
C905	US135100	C. CE. CHP	0. 1uF	16V	
C906	US064100	C. CE. CHP	0. 01uF	50V B	
C921	US135100	C. CE. CHP	0. 1uF	16V	
C922	US064100	C. CE. CHP	0. 01uF	50V B	
C923	WG888300	C. CE. M. CHP	10uF	6. 3V	
C924	US135100	C. CE. CHP	0. 1uF	16V	
C925-930	US064100	C. CE. CHP	0. 01uF	50V B	
C931	US135100	C. CE. CHP	0. 1uF	16V	
C932	WG888300	C. CE. M. CHP	10uF	6. 3V	
C933	US135100	C. CE. CHP	0. 1uF	16V	
C936	WQ614300	C. CE. CHP	22uF	10VE	
C937	US135100	C. CE. CHP	0. 1uF	16V	
C938	WG888300	C. CE. M. CHP	10uF	6. 3V	
C941	US163100	C. CE. CHP	1000pF	50V	
C1001-1022	US135100	C. CE. CHP	0. 1uF	16V	
C1101-1104	US135100	C. CE. CHP	0. 1uF	16V	
C9001-9003	US135100	C. CE. CHP	0. 1uF	16V	
C9004	UF027330	C. EL. CHP	33uF	10V	
C9005-9006	US135100	C. CE. CHP	0. 1uF	16V	
C9007	US046100	C. CE. CHP	1uF	25V	
C9008-9009	US063100	C. CE. CHP	1000pF	50V B	
C9010	WG251600	C. CE. CHP	4. 7uF	6. 3V	
C9011	US063100	C. CE. CHP	1000pF	50V B	
C9012	US135100	C. CE. CHP	0. 1uF	16V	
C9013	US063100	C. CE. CHP	1000pF	50V B	
C9014	US046100	C. CE. CHP	1uF	25V	
C9015-9016	US063100	C. CE. CHP	1000pF	50V B	
C9017	US046100	C. CE. CHP	1uF	25V	

* New Parts

P.C.B. DIGITAL

Ref No.	Part No.	Description			Markets
C9018	US135100	C. CE. CHP	0. 1uF	16V	
C9019	WG251600	C. CE. CHP	4. 7uF	6. 3V	
C9020	US135100	C. CE. CHP	0. 1uF	16V	
C9021	UF417470	C. EL. CHP	47uF	6. 3V	
C9022	US135100	C. CE. CHP	0. 1uF	16V	
C9023	WG251600	C. CE. CHP	4. 7uF	6. 3V	
C9024-9030	US135100	C. CE. CHP	0. 1uF	16V	
C9031	US063100	C. CE. CHP	1000pF	50V B	
C9032	US135100	C. CE. CHP	0. 1uF	16V	
C9033-9039	US046100	C. CE. CHP	1uF	25V	
C9040-9041	US135100	C. CE. CHP	0. 1uF	16V	
C9042	US063100	C. CE. CHP	1000pF	50V B	
C9043	US046100	C. CE. CHP	1uF	25V	
C9044-9045	US063100	C. CE. CHP	1000pF	50V B	
C9046	US062100	C. CE. CHP	100pF	50V B	
C9047	US063100	C. CE. CHP	1000pF	50V B	
C9048	US062100	C. CE. CHP	100pF	50V B	
C9301-9302	US126100	C. CE. CHP	1uF	10V	
C9303-9304	US064100	C. CE. CHP	0. 01uF	50V B	
C9306	US126100	C. CE. CHP	1uF	10V	
C9307	US064100	C. CE. CHP	0. 01uF	50V B	
C9308	US135100	C. CE. CHP	0. 1uF	16V	
C9309	US126100	C. CE. CHP	1uF	10V	
C9310	US064100	C. CE. CHP	0. 01uF	50V B	
C9311	US063470	C. CE. CHP	4700pF	50V B	
C9312	UB214680	C. CE. CHP	0. 068uF	25V	
C9313	US035100	C. CE. CHP	0. 1uF	16V B	
C9315	WD758300	C. CE. CHP	10uF	10V	
C9317-9318	WD758300	C. CE. CHP	10uF	10V	
C9321	US062220	C. CE. CHP	220pF	50V B	
C9323-9324	US062220	C. CE. CHP	220pF	50V B	
C9325-9326	US062560	C. CE. CHP	560pF	50V B	
C9327-9328	US062220	C. CE. CHP	220pF	50V B	
C9329	US062100	C. CE. CHP	100pF	50V B	
C9330	WD758300	C. CE. CHP	10uF	10V	
C9331	WG888300	C. CE. M. CHP	10uF	6. 3V	
C9332	WD758300	C. CE. CHP	10uF	10V	
C9333	US126100	C. CE. CHP	1uF	10V	
C9334-9340	US135100	C. CE. CHP	0. 1uF	16V	
C9341	US064100	C. CE. CHP	0. 01uF	50V B	
C9342-9344	US135100	C. CE. CHP	0. 1uF	16V	
C9345	US046100	C. CE. CHP	1uF	25V	
C9346-9348	US135100	C. CE. CHP	0. 1uF	16V	
C9349	US046100	C. CE. CHP	1uF	25V	
C9350-9351	US135100	C. CE. CHP	0. 1uF	16V	
C9352	UF417470	C. EL. CHP	47uF	6. 3V	
C9353-9355	US135100	C. CE. CHP	0. 1uF	16V	
C9356	US046100	C. CE. CHP	1uF	25V	
C9357	US135100	C. CE. CHP	0. 1uF	16V	
C9358	US062680	C. CE. CHP	680pF	50V B	
C9359	US135100	C. CE. CHP	0. 1uF	16V	
C9360	US046100	C. CE. CHP	1uF	25V	
C9361-9362	US135100	C. CE. CHP	0. 1uF	16V	
C9363	WG888300	C. CE. M. CHP	10uF	6. 3V	
C9364-9370	US135100	C. CE. CHP	0. 1uF	16V	
C9371	WG888300	C. CE. M. CHP	10uF	6. 3V	
C9372-9373	US135100	C. CE. CHP	0. 1uF	16V	

✻ New Parts

Ref No.	Part No.	Description			Markets
C9374-9375	UF417220	C. EL. CHP	22uF	6. 3V	
C9376-9378	US135100	C. CE. CHP	0. 1uF	16V	
C9379-9381	US063100	C. CE. CHP	1000pF	50V B	
C9382-9383	US135100	C. CE. CHP	0. 1uF	16V	
C9384-9387	US063100	C. CE. CHP	1000pF	50V B	
C9388-9390	US135100	C. CE. CHP	0. 1uF	16V	
C9391	US046100	C. CE. CHP	1uF	25V	
C9392-9393	US135100	C. CE. CHP	0. 1uF	16V	
C9394	US046100	C. CE. CHP	1uF	25V	
C9395-9396	US063100	C. CE. CHP	1000pF	50V B	
C9398-9401	US062100	C. CE. CHP	100pF	50V B	
C9404	US135100	C. CE. CHP	0. 1uF	16V	
C9405-9407	US063100	C. CE. CHP	1000pF	50V B	
C9801-9806	US135100	C. CE. CHP	0. 1uF	16V	(A700)
C9807	WD758300	C. CE. CHP	10uF	10V	(A700)
D701-702	WE674800	DIODE	AVRL161A1R1NTB		
D703	VV220700	DIODE. SCHOTTKY	RB501V-40		
D914	WE674800	DIODE	AVRL161A1R1NTB		
D915-922	WP385600	PESD	PESD0603-240		
D923-925	WE674800	DIODE	AVRL161A1R1NTB		
D9001	VT332900	DIODE	1SS355		
D9002	VV220700	DIODE. SCHOTTKY	RB501V-40		
IC4	X7779A00	IC	LC709004A-TLM-E		
✻ IC31	YC287A00	IC	RP130Q181D-TR-F		
IC32	X9393A00	IC	ADV7800BSTZ-80		
IC33	X8897A00	IC	R1172S331B-E2-F		
IC36-40	XZ287A00	IC	SN74LVC245APWR		
IC41	X6671A00	IC	ADV7172KSTZ		
✻ IC62	X9745B00	IC. MEMORY	M12L128168A-5TG2T		
IC63	X9292A00	IC	R1172H121D-T1-F		
IC65	X8378A00	IC	TC7SH125FU(TE85L, F		
IC72	X7741A00	IC	NJM2867F3-05(TE1)		
IC76	X9292A00	IC	R1172H121D-T1-F		
✻ IC79	YC289A00	IC	RP130Q501D-TR		
IC80	XZ287A00	IC	SN74LVC245APWR		
IC81	X0199B00	IC	TC74VHC157FT(EL, K)		
IC82	X4063A00	IC	TC7WHU04FU		
✻ IC83	YC286A00	IC	RP130Q121D-TR-F		
IC84	XR680A00	IC	TC7SH08FU(TE85L, JF		
IC91	X8368A00	IC	PCA9517DP		
✻ IC94	YC218A00	IC	TMDS141 HDMI SW.		
✻ IC95	YC288A00	IC	RP130Q331D-TR-F		
IC901-902	X5875A00	IC	SN74LV4051APWR		
IC903	YA739A00	IC. MEMORY	LE25LB2562M-TLM-E		
IC904-905	X7942B00	IC	TC74VHC273FT(EL, K)		
✻ IC906-907	YC288A00	IC	RP130Q331D-TR-F		
✻ IC909	YC577D00	IC. MEMORY	MX29LV640EBTI-70G		(written)
IC910	XW633A00	IC	TC7SH32FU		
IC911	XZ493A00	IC	TC74VHC86FT(EL) EX		
IC912	X4453A00	IC	SN74LVC1G17DCKR		
IC913	X3586B00	IC	TC74VHCT08AFT EL, K		
IC914	XV891B00	IC	TC74VHC08FT(EL, K)		
✻ IC915	YC289A00	IC	RP130Q501D-TR		
✻ IC942	YC214A00	IC	DIX9210PT(R)		
IC944	YA255A00	IC	R1172H501D-T1-F		
✻ IC946	YC288A00	IC	RP130Q331D-TR-F		
IC947	X0199B00	IC	TC74VHC157FT(EL, K)		

✻ New Parts

P.C.B. DIGITAL and P.C.B. OPERATION

	Ref No.	Part No.	Description		Markets
*	IC948	YC289A00	IC	RP130Q501D-TR	
	IC949	X9292A00	IC	R1172H121D-T1-F	
	IC950	YA473A00	IC. MEMORY	V54C365164VE16	
*	IC951	YC576D00	IC. MEMORY	MX29LV160DBTI-70G	(written)
	IC952	X2891B00	IC	TC74VHC126FT(EL,K)	
	IC953-954	XR680A00	IC	TC7SH08FU(TE85L,JF	
*	IC955	YC291A00	IC	R1172N501D-TR-F	
*	IC981	YC321A00	IC	TRS3221ECPWR	(A700)
	PN901-903	WS488500	STYLE. PIN	L=90 #18	
	Q3-12	VQ986700	TR	2SC4081 T106	
	Q301	WQ381000	FET	MCH6336-TL-E	
	Q302	VR936300	TR	2SA1576A T106	
	Q303	WE834500	FET	UPA672T-T1-A	
	Q701	VV655300	TR. DGT	DTA144EKA	
	Q702	VV655700	TR. DGT	DTC144EKA	
	Q903-904	VQ986700	TR	2SC4081 T106	
	Q9001	VR936300	TR	2SA1576A T106	R
	Q9003	WC529500	TR	KTA1504S Y GR RTK	
	Q9004	WC529400	TR	KTC3875S Y GR RTK	
	Q9005	WC529500	TR	KTA1504S Y GR RTK	
	Q9006	WC529400	TR	KTC3875S Y GR RTK	
	Q9007	WC529500	TR	KTA1504S Y GR RTK	
	Q9008	WC529400	TR	KTC3875S Y GR RTK	
	Q9009	WC529500	TR	KTA1504S Y GR RTK	
	Q9010	WC529400	TR	KTC3875S Y GR RTK	
	Q9011	WC529500	TR	KTA1504S Y GR RTK	
	Q9012-9018	VR936300	TR	2SA1576A T106	
	Q9019	WC529400	TR	KTC3875S Y GR RTK	
	Q9020	VV655200	TR. DGT	DTA143EKA	U
	Q9021	VV655700	TR. DGT	DTC144EKA	U
	Q9301	WQ381000	FET	MCH6336-TL-E	
	Q9302	VV655300	TR. DGT	DTA144EKA	
	Q9303	VV655400	TR. DGT	DTC114EKA	
	Q9306	VV655300	TR. DGT	DTA144EKA	
	R764	WB784700	R. MTL. FLM	6.8Ω 1W	
	ST901	V4040500	SCR. TERM	M3	
	XL31	VZ772700	RSNR. CRYS	28.63636MHz	
	XL61	WK841200	RESONATOR	27MHz DSO321SRAB	
	XL901	WA782500	RSNR. CE	8MHz	
	XL941	WH714200	RESONATOR	24.576MHz DSO321SR	
*		WU427500	P. C. B.	OPERATION	U(V667)
*		WU933400	P. C. B.	OPERATION	U(A700)
*		WU427600	P. C. B.	OPERATION	C(V667)
*		WU428000	P. C. B.	OPERATION	C(6063)
*		WU427700	P. C. B.	OPERATION	RTKABGFL(V667)
*		WU428100	P. C. B.	OPERATION	A(6063)
	CB401	VQ045400	CN. BS. PIN	25P	
	CB402	VQ047200	CN. BS. PIN	9P	
	CB451	VQ961100	CN. BS. PIN	8P	
	CB452	VQ962100	CN. BS. PIN	18P	
	CB454	VQ961800	CN. BS. PIN	15P	
	CB455	VQ961400	CN. BS. PIN	11P	
	CB456	VQ963300	CN. BS. PIN	12P	
	CB457	VQ963100	CN. BS. PIN	10P	

* New Parts

Ref No.	Part No.	Description		Markets
CB458	VQ044400	CN. BS. PIN	9P	
CB459-461	V9357000	CN	19P TE	
CB463	VQ585700	CN. JUMPER	7P	
CB472	VB858300	CN. BS. PIN	4P	
CB473	VK026900	CN	10P	
C4002	US065100	C. CE. CHP	0.1uF 50V B	
C4012-4013	US135100	C. CE. CHP	0.1uF 16V	
C4015	UR268220	C. EL	220uF 50V	
C4016	UM388330	C. EL	330uF 6.3V	
C4017	US135100	C. CE. CHP	0.1uF 16V	
C4018	US061680	C. CE. CHP	68pF 50V B	
C4019	US065100	C. CE. CHP	0.1uF 50V B	
C4020-4021	US163100	C. CE. CHP	1000pF 50V	
C4022	US064100	C. CE. CHP	0.01uF 50V B	
C4023-4024	US063100	C. CE. CHP	1000pF 50V B	
C4025-4026	US065100	C. CE. CHP	0.1uF 50V B	
C4027	US135100	C. CE. CHP	0.1uF 16V	
C4028	US062100	C. CE. CHP	100pF 50V B	
C4030	US062100	C. CE. CHP	100pF 50V B	
C4031	US062470	C. CE. CHP	470pF 50V B	
C4032-4033	US135100	C. CE. CHP	0.1uF 16V	
C4034	UM417100	C. EL	10uF 50V	
C4035	US135100	C. CE. CHP	0.1uF 16V	
C4037	US064100	C. CE. CHP	0.01uF 50V B	
C4039	US062220	C. CE. CHP	220pF 50V B	
C4091-4092	US135100	C. CE. CHP	0.1uF 16V	
C4093-4094	US062220	C. CE. CHP	220pF 50V B	
C4201	US063100	C. CE. CHP	1000pF 50V B	U
C4202-4208	US062220	C. CE. CHP	220pF 50V B	U
C4209-4210	UR267100	C. EL	10uF 50V	
C4211-4212	US062100	C. CE. CHP	100pF 50V B	
C4214	US135100	C. CE. CHP	0.1uF 16V	
C4215-4216	US062100	C. CE. CHP	100pF 50V B	
C4217	UR067100	C. EL	10uF 50V	
C4218-4219	UR267100	C. EL	10uF 50V	
C4222-4223	UR067470	C. EL	47uF 50V	
C4224	US062100	C. CE. CHP	100pF 50V B	
C4225	UR067100	C. EL	10uF 50V	
C4226	WK041800	C. EL	10uF 16V	
C4227	UR067100	C. EL	10uF 50V	
C4228	US135100	C. CE. CHP	0.1uF 16V	
C4229	WK041800	C. EL	10uF 16V	
C4230	WJ603500	C. MYLAR	680pF 50V	
C4231	US135100	C. CE. CHP	0.1uF 16V	
C4232	UR067100	C. EL	10uF 50V	
C4234	WK041800	C. EL	10uF 16V	
C4235	WJ603600	C. MYLAR	820pF 50V J	
C4236	UR067100	C. EL	10uF 50V	
C4238	WK041800	C. EL	10uF 16V	
C4239	US135100	C. CE. CHP	0.1uF 16V	
C4240	WJ603500	C. MYLAR	680pF 50V	
C4241	US135100	C. CE. CHP	0.1uF 16V	
C4242	WK041800	C. EL	10uF 16V	
C4243	WJ603600	C. MYLAR	820pF 50V J	
C4244-4246	UR067100	C. EL	10uF 50V	
C4247	US062100	C. CE. CHP	100pF 50V B	
C4248	US064100	C. CE. CHP	0.01uF 50V B	

* New Parts

P.C.B. OPERATION

	Ref No.	Part No.	Description			Markets
	C4249	US062100	C. CE. CHP	100pF	50V B	
	C4250	UR067100	C. EL	10uF	50V	
	C4251	WK041800	C. EL	10uF	16V	
*	C4252	WV894900	C. EL	10uF	71V	
	C4253	WJ603500	C. MYLAR	680pF	50V	
	C4255	US062100	C. CE. CHP	100pF	50V B	
	C4257	WJ605800	C. MYLAR	0. 047uF	50V J	
	C4258	UR267100	C. EL	10uF	50V	
	C4259-4260	UR067100	C. EL	10uF	50V	
	C4261	WJ604700	C. MYLAR	6800pF	50V	
	C4262	US126100	C. CE. CHP	1uF	10V	
	C4263	US062100	C. CE. CHP	100pF	50V B	
	C4264	US126100	C. CE. CHP	1uF	10V	
	C4265	UR067100	C. EL	10uF	50V	
	C4266	UR237100	C. EL	10uF	16V	
	C4267	US126100	C. CE. CHP	1uF	10V	
	C4268	WJ603500	C. MYLAR	680pF	50V	
	C4272	WJ603500	C. MYLAR	680pF	50V	
	C4273	UR237100	C. EL	10uF	16V	
	C4274	UR067100	C. EL	10uF	50V	
	C4275	US062100	C. CE. CHP	100pF	50V B	
	C4276	US063100	C. CE. CHP	1000pF	50V B	
	C4277	US062100	C. CE. CHP	100pF	50V B	
	C4278	US135100	C. CE. CHP	0. 1uF	16V	
	C4279	UR067100	C. EL	10uF	50V	
	C4280	UR237100	C. EL	10uF	16V	
	C4281	WJ603500	C. MYLAR	680pF	50V	
	C4282	UR067470	C. EL	47uF	50V	
	C4284	US135100	C. CE. CHP	0. 1uF	16V	
	C4285	UR067470	C. EL	47uF	50V	
	C4287	WJ603500	C. MYLAR	680pF	50V	
	C4288	WK041800	C. EL	10uF	16V	
	C4289	UR237100	C. EL	10uF	16V	
	C4290	UR067100	C. EL	10uF	50V	
	C4291	US062100	C. CE. CHP	100pF	50V B	
	C4292	US064100	C. CE. CHP	0. 01uF	50V B	
	C4293	UR267100	C. EL	10uF	50V	
	C4294	WD758300	C. CE. CHP	10uF	10V	
	C4295	US062100	C. CE. CHP	100pF	50V B	
	C4296	US135100	C. CE. CHP	0. 1uF	16V	
	C4301-4302	UR237470	C. EL	47uF	16V	RTKABGFL
	C4303-4304	WJ603700	C. MYLAR	1000pF	50V	RTKABGFL
	C4305-4306	UR267100	C. EL	10uF	50V	RTKABGFL
	C4307-4310	WJ605600	C. MYLAR	0. 033uF	50V	RTKABGFL
	C4311-4312	UR218220	C. EL	220uF	6. 3V	RTKABGFL
	C4313-4316	WJ603100	C. MYLAR	220pF	50V	RTKABGFL
	C4317	US064100	C. CE. CHP	0. 01uF	50V B	RTKABGFL
	C4318-4321	WJ605000	C. MYLAR	0. 01uF	50V J	
	C4401-4402	US063100	C. CE. CHP	1000pF	50V B	
	C4411-4412	WJ604300	C. MYLAR	3300pF	50V	
	C4413	US064100	C. CE. CHP	0. 01uF	50V B	
	C4414	US063100	C. CE. CHP	1000pF	50V B	
	C4421	US063100	C. CE. CHP	1000pF	50V B	
	C4422	UM397100	C. EL	10uF	16V	
*	C4423	WV360900	C. EL	22uF	16V	
	C4424	US064100	C. CE. CHP	0. 01uF	50V B	
	C4425	US062100	C. CE. CHP	100pF	50V B	

✻ New Parts

	Ref No.	Part No.	Description			Markets
	C4426	UM397470	C. EL	47uF	16V	
	C4427	US061330	C. CE. CHP	33pF	50V B	
	C4428	UM397100	C. EL	10uF	16V	
*	C4430	WV360900	C. EL	22uF	16V	
*	C4432	WV360900	C. EL	22uF	16V	
	D4001-4002	VT332900	DIODE	1SS355		
	D4006-4007	WS693300	DIODE. ZENR	HZU4. 3B3 TRF-E		
	D4010	VT332900	DIODE	1SS355		
	D4011	V2598200	LED	SIR-505ST		
	D4012	VT332900	DIODE	1SS355		
	D4091-4094	VT332900	DIODE	1SS355		
	D4203-4205	VT332900	DIODE	1SS355		
	D4301-4302	VV659300	DIODE. ZENR	RLZ7. 5B 7. 5V		RTKABGFL
	D4303	VT332900	DIODE	1SS355		
	D4401	WG760400	LED	SELK6E10C BLUE		
	D4411-4412	VT332900	DIODE	1SS355		
	D4421-4422	VT332900	DIODE	1SS355		
	D4423	VU171900	DIODE. ZENR	UDZS5. 1B 5. 1V		
	D4424	WR095700	LED	8224-10SDRD/S530A3		
	D4901-4903	VT332900	DIODE	1SS355		C
	IC401	X6386A00	IC	M66003-0131FP		
	IC451-454	X5482A00	IC	NE5532DR OP AMP		
	IC455	X7357A00	IC	PCM1803DBR		
*	IC456	X9870A00	IC	PCM1681PWPR		
	IC457	XJ604A00	IC	NJM78M05FA		
	IC458	X7378A00	IC	NJM4565M(TE1)		
	IC459	XW939A00	IC	TK15420M VIDEO AMP		
	IC471	X7378A00	IC	NJM4565M(TE1)		
	JK451	VV269500	CN	8P DIN		U
	JK471	V9408200	JACK. PHONE	MSJ-064-05B GR		
	JK472	WJ117300	JACK. PHONE	PHONES		
	PJ401	WJ117500	JACK. PIN	3P		
	Q4001-4003	WC529400	TR	KTC3875S Y GR RTK		
	Q4004	VV655400	TR. DGT	DTC114EKA		
	Q4005	WC397700	TR	2N5401C-AT		
	Q4006-4009	WC529400	TR	KTC3875S Y GR RTK		
	Q4012	WC529400	TR	KTC3875S Y GR RTK		
	Q4301	VV655400	TR. DGT	DTC114EKA		
	Q4302	VV655000	TR. DGT	DTA114EKA		
	Q4401-4402	WC529400	TR	KTC3875S Y GR RTK		
	R4066-4067	HV755120	R. CAR. FP	120Ω	1/4W	
	R4200	RD350000	R. CHP	0Ω	1/16W J	(V667)
	R4200	RD356220	R. CHP	2. 2KΩ	1/16W J	(6063)
	R4200	RD356100	R. CHP	1KΩ	1/16W J	(A700)
	R4225	HV753220	R. CAR. FP	2. 2Ω	1/4W	
	R4229-4230	HV753220	R. CAR. FP	2. 2Ω	1/4W	
	R4293	WQ072300	R. MTL. OXD	2. 2Ω	1W	
	R4301-4302	HV755470	R. CAR. FP	470Ω	1/4W	RTKABGFL
	R4320-4321	HV757100	R. CAR. FP	10KΩ	1/4W	
	R4331-4332	HV753220	R. CAR. FP	2. 2Ω	1/4W	
	R4413-4414	V8071400	R. MTL. FLM	560Ω	1W	
	RY461	WJ122400	RELAY	981-2A-24DS-SP7		
	ST442	V4040500	SCR. TERM	M3		
	ST451	V4040500	SCR. TERM	M3		CRTKABGFL
	ST471	WA246200	SCR. TERM	3. 5		
	ST491	WA246200	SCR. TERM	3. 5		C
	SW401-409	WD483100	SW. TACT	SKRGAAD010		

✻ New Parts

P.C.B. OPERATION and P.C.B. MAIN

	Ref No.	Part No.	Description			Markets
	SW411-421	WD483100	SW. TACT	SKRGAAD010		
	SW471	V9597100	SW. RT. ENC	EC12E2460802		
	SW472-473	WD483100	SW. TACT	SKRGAAD010		
	TE461	WB213900	TERM. SP	MSP-113V2-03 PUSH		
*	TH491-492	WT698300	THERMISTOR	WC92NA103J1		C
	U4001	WQ600700	L. DTCT	SM3385VMH6		
*	V4001	WU238100	FL. DSPLY	HNA-18MM02T		
		V6007100	SPACER. FL	4. 6/10/32		
		WR432000	P. C. B.	MAIN		UTKABGF (V667, 6063)
		WR432200	P. C. B.	MAIN		U (A700)
		WR432400	P. C. B.	MAIN		C (V667, 6063)
		WR432100	P. C. B.	MAIN		R (V667)
		WR432300	P. C. B.	MAIN		L (V667)
	CB111-112	WN077700	CLIP. FUSE	CLIP PFC5000-0202F		R
	CB152	VQ962900	CN. BS. PIN	8P		
	CB153	VQ963900	CN. BS. PIN	18P		
	CB154	VQ963600	CN. BS. PIN	15P		
	CB155	VQ963200	CN. BS. PIN	11P		
	C1001-1003	WK041800	C. EL	10uF	16V	
	C1004-1007	UR257100	C. EL	10uF	35V	
	C1008	WN164200	C. PP	220pF	100V	(V667, 6063)
	C1008	WE100900	C. PP	220pF	630V K	(A700)
	C1009	WN164200	C. PP	220pF	100V	(V667, 6063)
	C1009	WE100900	C. PP	220pF	630V K	(A700)
	C1010	WN164200	C. PP	220pF	100V	(V667, 6063)
	C1010	WE100900	C. PP	220pF	630V K	(A700)
	C1011-1014	WN164200	C. PP	220pF	100V	
	C1015	WQ107500	C. PP	120pF	100V	(V667, 6063)
	C1015	WE100600	C. PP	120pF	630V K	(A700)
	C1016	WQ107500	C. PP	120pF	100V	(V667, 6063)
	C1016	WE100600	C. PP	120pF	630V K	(A700)
	C1017	WQ107500	C. PP	120pF	100V	(V667, 6063)
	C1017	WE100600	C. PP	120pF	630V K	(A700)
	C1018-1021	WQ107500	C. PP	120pF	100V	
	C1022	WN164900	C. PP	3300pF	100V	(V667, 6063)
	C1022	WE102300	C. PP	3300pF	100V J	(A700)
	C1023	WN164900	C. PP	3300pF	100V	(V667, 6063)
	C1023	WE102300	C. PP	3300pF	100V J	(A700)
	C1024	WN164900	C. PP	3300pF	100V	(V667, 6063)
	C1024	WE102300	C. PP	3300pF	100V J	(A700)
	C1025-1028	WN164900	C. PP	3300pF	100V	
	C1029	UR067470	C. EL	47uF	50V	
	C1030-1031	UR068100	C. EL	100uF	50V	
	C1032-1035	UR067470	C. EL	47uF	50V	
	C1036	WQ627600	C. CE	22pF	500V	(V667, 6063)
	C1036	WE100200	C. PP	22pF	630V K	(A700)
	C1037	WQ627600	C. CE	22pF	500V	(V667, 6063)
	C1037	WE100200	C. PP	22pF	630V K	(A700)
	C1038	WQ627600	C. CE	22pF	500V	(V667, 6063)
	C1038	WE100200	C. PP	22pF	630V K	(A700)
	C1039	WQ627600	C. CE	22pF	500V	URTKABGFL
	C1040-1042	WQ627600	C. CE	22pF	500V	
	C1043-1049	WN164300	C. PP	330pF	100V	
	C1050	UR067100	C. EL	10uF	50V	(V667, 6063)

✻ New Parts

	Ref No.	Part No.	Description			Markets
	C1050	UR397100	C. EL	10uF	100V	(A700)
	C1051	UR067100	C. EL	10uF	50V	(V667, 6063)
	C1051	UR397100	C. EL	10uF	100V	(A700)
	C1052	UR067100	C. EL	10uF	50V	(V667, 6063)
	C1052	UR397100	C. EL	10uF	100V	(A700)
	C1053-1056	UR067100	C. EL	10uF	50V	
	C1057-1063	WN165500	C. PP	0. 022uF	100V	
	C1066-1067	WN156000	C. PP	1000pF	250V	
	C1068	UR866470	C. EL	4. 7uF	50V	
	C1069	UR838100	C. EL	100uF	16V	URTKABGFL
	C1069	UR828220	C. EL	220uF	10V	C
	C1070-1073	UR297100	C. EL	10uF	100V	
	C1074	UR267330	C. EL	33uF	50V	
	C1075	WK041800	C. EL	10uF	16V	
	C1076	UR266100	C. EL	1uF	50V	
	C1078	WJ611400	C. MYLAR	0. 1uF	100V J	(V667, 6063)
	C1078	WP421000	C. PP	0. 047uF	100V	(A700)
	C1079	WJ611400	C. MYLAR	0. 1uF	100V J	(V667, 6063)
	C1079	WP421000	C. PP	0. 047uF	100V	(A700)
	C1080-1081	WN165500	C. PP	0. 022uF	100V	
	C1082	UR049330	C. EL	3300uF	25V	
	C1083	UR049220	C. EL	2200uF	25V	
⚠	C1084-1085	WN331300	C. EL	6800uF	71V	
	C1086	UR049220	C. EL	2200uF	25V	
*	C1087-1088	WV914600	C. EL	10uF	71V	
	C1089	US135100	C. CE. CHP	0. 1uF	16V	URTKABGFL
	C1509	UR067470	C. EL	47uF	50V	
	C1510-1512	US135100	C. CE. CHP	0. 1uF	16V	
	C1513-1514	US061220	C. CE. CHP	22pF	50V B	
	C1515-1516	US135100	C. CE. CHP	0. 1uF	16V	
	C1517-1520	US062220	C. CE. CHP	220pF	50V B	
	C1521	UR267100	C. EL	10uF	50V	
	C1522	US061470	C. CE. CHP	47pF	50V B	
	C1523	UR238100	C. EL	100uF	16V	
	C1524	US061470	C. CE. CHP	47pF	50V B	
	C1525	UR267100	C. EL	10uF	50V	
	C1526-1527	UR238100	C. EL	100uF	16V	
	C1528-1529	US062220	C. CE. CHP	220pF	50V B	
	C1530	UR238100	C. EL	100uF	16V	
	C1531	UR267330	C. EL	33uF	50V	
	C1532-1533	UR238100	C. EL	100uF	16V	
	C1534-1535	US062220	C. CE. CHP	220pF	50V B	
	C1536	UR238100	C. EL	100uF	16V	
	C1537	WJ605600	C. MYLAR	0. 033uF	50V	URTKABGFL
	C1538	VR169000	C. MYLAR	0. 33uF	50V	URTKABGFL
	C1539	WJ604800	C. MYLAR	8200pF	50V	URTKABGFL
	C1540	WJ605600	C. MYLAR	0. 033uF	50V	URTKABGFL
	C1541	VR169000	C. MYLAR	0. 33uF	50V	URTKABGFL
	C1542	US135100	C. CE. CHP	0. 1uF	16V	
	C1543	WJ604800	C. MYLAR	8200pF	50V	URTKABGFL
	C1544	US062220	C. CE. CHP	220pF	50V B	
	C1545	US135100	C. CE. CHP	0. 1uF	16V	
	C1546	US062220	C. CE. CHP	220pF	50V B	
	C1547	UR267100	C. EL	10uF	50V	
	C1549	UR267100	C. EL	10uF	50V	
	C1551	US062220	C. CE. CHP	220pF	50V B	
	C1552	UR267100	C. EL	10uF	50V	

✻ New Parts

P.C.B. MAIN

Ref No.	Part No.	Description		Markets
C1553-1554	UR266220	C. EL	2. 2uF 50V	
C1555-1556	UR267100	C. EL	10uF 50V	
C1557	US062220	C. CE. CHP	220pF 50V B	
C1558-1559	UR267470	C. EL	47uF 50V	
C1560	US062220	C. CE. CHP	220pF 50V B	
C1563	US062220	C. CE. CHP	220pF 50V B	
C1566	US062220	C. CE. CHP	220pF 50V B	
C1567-1568	VR169200	C. MYLAR	0. 47uF 50V	
C1569	US062220	C. CE. CHP	220pF 50V B	
C1570-1571	UR267100	C. EL	10uF 50V	
C1572-1573	US062100	C. CE. CHP	100pF 50V B	
C1574	UR267100	C. EL	10uF 50V	
C1575	US061470	C. CE. CHP	47pF 50V B	
C1576-1577	UR267100	C. EL	10uF 50V	
C1578	US061470	C. CE. CHP	47pF 50V B	
C1579	UR267100	C. EL	10uF 50V	
C1580	UR267100	C. EL	10uF 50V	URTKABGFL
C1580	UR837100	C. EL	10uF 16V	C
C1581-1582	US061470	C. CE. CHP	47pF 50V B	
C1583-1584	UR267470	C. EL	47uF 50V	
C1585	UR267100	C. EL	10uF 50V	URTKABGFL
C1585	UR837100	C. EL	10uF 16V	C
C1588-1591	UR267100	C. EL	10uF 50V	
C1594-1595	US062470	C. CE. CHP	470pF 50V B	
C1596	US064100	C. CE. CHP	0. 01uF 50V B	
C1597-1598	US062470	C. CE. CHP	470pF 50V B	
C1599-1602	UR267100	C. EL	10uF 50V	
C1603-1604	US062470	C. CE. CHP	470pF 50V B	
C1605	US064100	C. CE. CHP	0. 01uF 50V B	
C1606	US044220	C. CE. CHP	0. 022uF 25V B	
C1607	US062470	C. CE. CHP	470pF 50V B	
C1608	US044220	C. CE. CHP	0. 022uF 25V B	
C1609-1612	US064100	C. CE. CHP	0. 01uF 50V B	
D1001-1016	VT332900	DIODE	1SS355	
⚠ D1017-1023	VG437500	DIODE. ZENR	MTZJ5. 1C 5. 1V	
D1024-1039	VT332900	DIODE	1SS355	
⚠ D1040	WB212700	DIODE. BRG	RS603M 6A 200V	(V667, 6063)
⚠ D1040	WK611100	DIODE. BRG	D6SBN20 6A 200V	(A700)
⚠ D1041	WH487300	DIODE. BRG	RS203M 2. 0A 200V	
D1042	VG440500	DIODE. ZENR	MTZJ13B 13V	
D1043	VT332900	DIODE	1SS355	
⚠ D1044-1045	VG435500	DIODE. ZENR	MTZJ2. 4B 2. 4V	
D1501-1502	VG438400	DIODE. ZENR	MTZJ6. 8C 6. 8V	
F100	KB000780	FUSE	T5A 250V	R
G101	V5995800	PLATE. GND		
⚠ IC101	XJ608A00	IC	NJM7812FA	
⚠ IC102	X4154A00	IC	KIA7912PI	
IC103	YA381A00	IC	LM19CIZ/LF THERMAL	URTKABGFL
IC152	XZ509A00	IC	TC74VHCU04FT INVER	
IC153	YA361A00	IC	R2A15220FP	
IC154	X7378A00	IC	NJM4565M(TE1)	
PJ150	V9420700	JACK. PIN	2P MSP-252V1-30NI	
PJ151	V7046800	JACK. PIN	6P MSP-246V1-01NI	
PJ152-153	V7046700	JACK. PIN	4P MSP-244V1-01NI	
PJ154	WG674900	JACK. PIN	4P	
PJ155	V7046700	JACK. PIN	4P MSP-244V1-01NI	
PJ157	V7046700	JACK. PIN	4P MSP-244V1-01NI	

✻ New Parts

Ref No.	Part No.	Description		Markets
PJ158	WG674900	JACK. PIN	4P	
PJ159	V7189700	JACK. PIN	1P	
Q1001-1014	WF549900	TR	2SC3906K T146 R, S	
Q1015-1021	V3966800	TR	2SA949 O, Y	
⚠ Q1022-1028	WT676000	TR	2SD2705S	
⚠ Q1029-1035	VR325600	TR	2SC2229 O, Y	
⚠ Q1036-1042	V4096100	TR	2SC4614 S, T	
⚠ Q1043-1049	V4096000	TR	2SA1770 S, T	
⚠ Q1050-1056	VR355900	TR. PAIR	A1695/C4468 OPY	(IX630850, IX630860)
Q1057-1063	WF549900	TR	2SC3906K T146 R, S	
Q1064	WH372100	TR	KTA1517S GR TP	
Q1065	WF549900	TR	2SC3906K T146 R, S	
⚠ Q1067-1068	WC292600	TR	KTA1837-U	
⚠ Q1069-1070	WC398400	TR	2N5551C-AT	
⚠ Q1071	WC397700	TR	2N5401C-AT	
⚠ Q1072	VP872600	TR	2SA1708 S, T	
Q1073	WC398500	TR. DGT	KRA102M-AT	
Q1074	WC529200	TR. DGT	KRC102M-AT	
Q1500-1504	WC756200	TR	2SC5938A A, B	
Q1507-1514	WC756200	TR	2SC5938A A, B	
Q1519-1527	WC756200	TR	2SC5938A A, B	
R1001-1007	HF356100	R. CAR	1KΩ 1/2W	
R1008-1014	HF356180	R. CAR	1. 8KΩ 1/2W	
R1022-1028	HF355330	R. CAR	330Ω 1/2W	
R1029-1035	HL006120	R. MTL. OXD	1. 2KΩ 1/2W	
R1036-1042	V8070900	R. MTL. FLM	100Ω 1W	
R1043-1049	HL007330	R. MTL. OXD	33KΩ 1/2W	
R1079-1085	HL005120	R. MTL. OXD	120Ω 1/2W	
R1086-1092	WG727400	R. MTL. FLM	2. 7KΩ 1/4W	
R1093-1099	WG725600	R. MTL. FLM	470Ω 1/4W	
R1100-1106	WG726400	R. MTL. FLM	1KΩ 1/4W	
R1107-1112	WG726200	R. MTL. FLM	820Ω 1/4W	
⚠ R1113-1126	HV755120	R. CAR. FP	120Ω 1/4W	
R1127-1133	HF355470	R. CAR	470Ω 1/2W	
⚠ R1134-1147	HV754100	R. CAR. FP	10Ω 1/4W	
⚠ R1148-1154	WP839400	R. CEMENT	0. 22+0. 22 3W	
⚠ R1176-1182	V8070300	R. MTL. FLM	10Ω 1W	
⚠ R1197-1198	V8070200	R. MTL. FLM	4. 7Ω 1W	
⚠ R1211	HV754100	R. CAR. FP	10Ω 1/4W	
R1213	V8072100	R. MTL. OXD	5. 6KΩ 1W	
R1214	HV755560	R. CAR. FP	560Ω 1/4W	
R1219	V8072000	R. MTL. OXD	4. 7KΩ 1W	
⚠ R1222	HV756100	R. CAR. FP	1KΩ 1/4W	
R1225	VP941900	R. MTL. OXD	15KΩ 1W	
R1226	HF357470	R. CAR	47KΩ 1/2W	
⚠ R1234-1235	HV754100	R. CAR. FP	10Ω 1/4W	
R1236	WG726200	R. MTL. FLM	820Ω 1/4W	
⚠ R1238	V8070300	R. MTL. FLM	10Ω 1W	
R1504	HV753100	R. CAR. FP	1Ω 1/4W	
R1573	WA621400	R. MTL. OXD	82Ω 1W	(V667, 6063)
R1573	WQ835800	R. MTL. OXD	100Ω 1W	(A700)
R1575	WA621400	R. MTL. OXD	82Ω 1W	(V667, 6063)
R1575	WQ835800	R. MTL. OXD	100Ω 1W	(A700)
R1664-1665	HV755100	R. CAR. FP	100Ω 1/4W	
⚠ RY101	WE648700	RELAY	DC DH24D2-0-Q	
ST100	V4040500	SCR. TERM	M3	
ST101	WA246200	SCR. TERM	3. 5	URTKABGFL

✻ New Parts

P.C.B. MAIN and P.C.B. VIDEO

	Ref No.	Part No.	Description			Markets
	SW101	WB493700	VOLT. SELCT	110-240V R8140246		R
	SW101	WD073700	VOLT. SELCT	220-240V R8140254		L
	U1500-1501	WH169900	CN. PHOTO. R	1P GP1FAV51RKOF		
		WE774200	SCR. BND. HD	3x10 MFZN2W3		
*		WU429400	P. C. B.	VIDEO		U
*		WU429500	P. C. B.	VIDEO		C
*		WU429600	P. C. B.	VIDEO		R
*		WU429700	P. C. B.	VIDEO		T
*		WU429800	P. C. B.	VIDEO		K
*		WU429900	P. C. B.	VIDEO		A
*		WU430000	P. C. B.	VIDEO		BGF
*		WU430100	P. C. B.	VIDEO		L
	CB303	VQ961500	CN. BS. PIN	12P		
	CB304	VN394900	CN. BS. PIN	14P		
	CB321	VM859500	CN. BS. PIN	11P		
	CB332	VQ961300	CN. BS. PIN	10P		
	CB333	VK024700	CN. BS. PIN	3P		
	CB340	LB918020	CN. BS. PIN	2P		
	CB342	LB918040	CN. BS. PIN	4P		
	CB343	VZ130900	CN. JUMPER	4P		
	CB344	VQ585500	CN. JUMPER	5P		
	CB346	VB390000	CN. BS. PIN	4P		
	CB349	VQ047700	CN. BS. PIN	22P		
	CB371	VG879900	CN. BS. PIN	2P		
	CB372-373	WN103000	CLIP. FUSE	TP00351-31		
	CB378	VG879900	CN. BS. PIN	2P		RL
	CB379	VQ961000	CN. BS. PIN	7P		
	CB381	VQ962800	CN. BS. PIN	7P		
	CB391	VQ044100	CN. BS. PIN	5P		BGF
	C3001	US062100	C. CE. CHP	100pF 50V B		
	C3002-3004	US060800	C. CE. CHP	8pF 50V B		
	C3005	US062100	C. CE. CHP	100pF 50V B		
	C3006	UR237470	C. EL	47uF 16V		
	C3007-3008	US135100	C. CE. CHP	0. 1uF 16V		
	C3009	UR237470	C. EL	47uF 16V		
	C3011	US060300	C. CE. CHP	3pF 50V B		
	C3012	UR837470	C. EL	47uF 16V		
	C3013-3014	US060300	C. CE. CHP	3pF 50V B		
	C3015-3017	US135100	C. CE. CHP	0. 1uF 16V		
	C3018	UR267100	C. EL	10uF 50V		
	C3019	US135100	C. CE. CHP	0. 1uF 16V		
	C3020	UR267100	C. EL	10uF 50V		
	C3021-3025	US135100	C. CE. CHP	0. 1uF 16V		
	C3026	UR267100	C. EL	10uF 50V		
	C3027	WD758300	C. CE. CHP	10uF 10V		
	C3029	WD758300	C. CE. CHP	10uF 10V		
	C3031	WD758300	C. CE. CHP	10uF 10V		
	C3033	UR837470	C. EL	47uF 16V		
	C3035-3037	WD758300	C. CE. CHP	10uF 10V		
	C3043-3044	US135100	C. CE. CHP	0. 1uF 16V		
	C3045	UR837470	C. EL	47uF 16V		
	C3047	US135100	C. CE. CHP	0. 1uF 16V		
	C3048	UR238220	C. EL	220uF 16V		
	C3049	UR837470	C. EL	47uF 16V		

✻ New Parts

	Ref No.	Part No.	Description			Markets
	C3050	US135100	C. CE. CHP	0. 1uF 16V		
	C3051	UR238220	C. EL	220uF 16V		
	C3063	US135100	C. CE. CHP	0. 1uF 16V		
	C3065	UR237470	C. EL	47uF 16V		
	C3067	US135100	C. CE. CHP	0. 1uF 16V		
	C3072	US135100	C. CE. CHP	0. 1uF 16V		
	C3073	UR238220	C. EL	220uF 16V		
	C3077	US135100	C. CE. CHP	0. 1uF 16V		
	C3080-3085	WD758300	C. CE. CHP	10uF 10V		
	C3201	US061270	C. CE. CHP	27pF 50V B		BGF
	C3202	UR237100	C. EL	10uF 16V		BGF
	C3203	US061270	C. CE. CHP	27pF 50V B		BGF
	C3204-3205	US135100	C. CE. CHP	0. 1uF 16V		BGF
	C3206	US062560	C. CE. CHP	560pF 50V B		BGF
	C3207-3208	US062330	C. CE. CHP	330pF 50V B		BGF
	C3209	US135100	C. CE. CHP	0. 1uF 16V		BGF
	C3211	UR237470	C. EL	47uF 16V		BGF
	C3212-3214	UR237470	C. EL	47uF 16V		
	C3215	US062100	C. CE. CHP	100pF 50V B		
	C3217-3218	US062100	C. CE. CHP	100pF 50V B		
	C3221	US062100	C. CE. CHP	100pF 50V B		
	C3303-3305	WJ611400	C. MYLAR	0. 1uF 100V J		
	C3308	UR278100	C. EL	100uF 63V		
	C3309	WG601900	C. EL	10000uF 16V		
	C3310	WG601700	C. EL	4700uF 16V		
	C3311	UR238100	C. EL	100uF 16V		
	C3314	UR266100	C. EL	1uF 50V		
	C3315	UR267100	C. EL	10uF 50V		
	C3316	UR268100	C. EL	100uF 50V		
	C3319	UR266100	C. EL	1uF 50V		
	C3320-3321	UR267330	C. EL	33uF 50V		
	C3403-3409	WJ605000	C. MYLAR	0. 01uF 50V J		
	C3410-3416	WJ605200	C. MYLAR	0. 015uF 50V		
	C3603-3604	US063100	C. CE. CHP	1000pF 50V B		
	C3606	US064100	C. CE. CHP	0. 01uF 50V B		
	C3701	WQ852400	C. POL. MTL	0. 022uF 630V		
⚠	C3702	WK005000	C. CE. SAFTY	0. 047uF 275V		
	C3703	WR082000	C. EL	100uF 220V		UC
	C3703	WR082100	C. EL	100uF 400V		R
	C3703	WQ852500	C. EL	68uF 400V		TKABGFL
	C3704	WR182800	C. CE. CHP	2200pF 250V		
	C3705	US065100	C. CE. CHP	0. 1uF 50V B		
⚠	C3706	V6185300	C. CE. SAFTY	0. 01uF 275V		
	C3707	UR837470	C. EL	47uF 16V		
	C3708	UR867100	C. EL	10uF 50V		
⚠	C3709	WQ902200	C. CE. SAFTY	2200pF 250V		
	C3710-3711	UR866100	C. EL	1uF 50V		
	C3712-3713	WH777900	C. EL	1000uF 35V		
	C3714	US046100	C. CE. CHP	1uF 25V		
	C3715	US135100	C. CE. CHP	0. 1uF 16V		
	C3716	WH771300	C. EL	100uF 10V		
	C3717	WQ852400	C. POL. MTL	0. 022uF 630V		
⚠	C3720-3721	WQ902300	C. CE. SAFTY	1000pF 250V		
	C3801	US064100	C. CE. CHP	0. 01uF 50V B		
	C3802	V7887800	C. EL	1uF 50V		
	C3803	WJ335500	C. EL	2. 2uF 50V		
	C3804	WJ603700	C. MYLAR	1000pF 50V		

✻ New Parts

P.C.B. VIDEO

	Ref No.	Part No.	Description		Markets
	C3805	US064100	C. CE. CHP	0. 01uF 50V B	
	C3901	US064100	C. CE. CHP	0. 01uF 50V B	BGF
	C3902	US062120	C. CE. CHP	120pF 50V B	BGF
	C3903	US062220	C. CE. CHP	220pF 50V B	BGF
	C3904	US135100	C. CE. CHP	0. 1uF 16V	BGF
	C3905	UR837470	C. EL	47uF 16V	BGF
	C3906	UR837100	C. EL	10uF 16V	BGF
	C3907	UR818470	C. EL	470uF 6. 3V	BGF
	C3908	US064100	C. CE. CHP	0. 01uF 50V B	BGF
	D3201	VG436100	DIODE. ZENR	MTZJ3. 3B 3. 3V	BGF
	D3202	VG439500	DIODE. ZENR	MTZJ10B 10V	
⚠	D3302	WH487300	DIODE. BRG	RS203M 2. 0A 200V	
⚠	D3304	WH487300	DIODE. BRG	RS203M 2. 0A 200V	
	D3306	WU201600	DIODE	1N4003S TP	
	D3308	VG444700	DIODE. ZENR	MTZ J 39D 39. 0V TP	
	D3310	VT332900	DIODE	1SS355	
	D3320	VG437400	DIODE. ZENR	MTZJ5. 1B 5. 1V	
	D3350	VU172800	DIODE. ZENR	UDZS12B 12V	R
	D3403-3407	VT332900	DIODE	1SS355	
	D3601-3602	VT332900	DIODE	1SS355	
⚠	D3701	WH471700	DIODE. BRG	DB105 1A 600V	
	D3703	WN672400	DIODE. ZENR	P6KE200A 200V	
	D3705	WQ647500	DIODE	HT18G	
	D3706-3707	VD631600	DIODE	1SS133, 176	
	D3708	VT332900	DIODE	1SS355	
	D3709	WR007000	DIODE. SCHOTTKY	10A 40V SG10SC4M	
	D3710	VG442200	DIODE. ZENR	MTZJ22C 22V	
	D3801-3805	VT332900	DIODE	1SS355	
	D3901-3902	VT332900	DIODE	1SS355	BGF
⚠	F3701	WQ211100	FUSE	8A 125V	UC
⚠	F3701	WB760600	FUSE	T6. 3A 250V	R
⚠	F3701	WM933100	FUSE	T5A 250V	TKABGFL
	IC301-303	XY879A00	IC	TC74HC4053AF(EL)	
	IC305	X6742A00	IC	LA73050-TLM-E	
	IC306	X2904A00	IC	NJM2581M VIDEO AMP	
	IC307	XY549A00	IC	TC74HC4051AFEL	
	IC308	X7779A00	IC	LC709004A-TLM-E	
	IC310	X8875A00	IC	FHP3350IM14X	
	IC321	X8235A00	IC	LC72725KM	BGF
	IC334	X6143A00	IC	NJM2388F05 5. 0V	
	IC371	YA565A00	IC	TOP254PN SW	
⚠	IC372	WQ867100	PHOT. CPL	EL816(M)(C)	
	IC374	YA276A00	IC	TL431AC 2. 5-36V	
⚠	IC375	WQ867100	PHOT. CPL	EL816(M)(C)	
	IC391	XZ509A00	IC	TC74VHCU04FT INVER	BGF
	JK321	V9435700	JACK. MNI	MSJ-035-12APC	
	JK361-362	V9435700	JACK. MNI	MSJ-035-12APC	
	JK391	V6931000	CN. DIN	1P YKF51-5506	BGF
	PJ301	WG505100	JACK. PIN	6P	
	PJ302	V7189800	JACK. PIN	1P	
	PJ303	WH381400	JACK. PIN	3P JACK G, B, R	
	PJ304	V7189800	JACK. PIN	1P	
	PJ305-306	V7190000	JACK. PIN	2P	
	Q3001	VR936300	TR	2SA1576A T106	
	Q3201	iC174020	TR	2SC1740S QRS	BGF
	Q3203	iC18151O	TR	2SC1815 Y	
	Q3204	iA10151O	TR	2SA1015 Y	

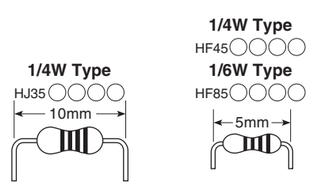
✻ New Parts

	Ref No.	Part No.	Description		Markets
	Q3205	iC18151O	TR	2SC1815 Y	
	Q3206	WG538600	TR	KTA1046-Y-U/P	
	Q3207	iC18151O	TR	2SC1815 Y	
⚠	Q3301	VP872600	TR	2SA1708 S, T	
	Q3302	iA10151O	TR	2SA1015 Y	
	Q3303	WG538600	TR	KTA1046-Y-U/P	
	Q3304	iA10151O	TR	2SA1015 Y	
	Q3305	iC18151O	TR	2SC1815 Y	
	Q3405	VV655400	TR. DGT	DTC114EKA	
	Q3406	VV655000	TR. DGT	DTA114EKA	
	Q3407	VV655400	TR. DGT	DTC114EKA	
	Q3408	VV655000	TR. DGT	DTA114EKA	
	Q3409	VV655400	TR. DGT	DTC114EKA	
	Q3410	VV655000	TR. DGT	DTA114EKA	
	Q3411	VV655400	TR. DGT	DTC114EKA	
	Q3412	VV655000	TR. DGT	DTA114EKA	
	Q3413	VV655400	TR. DGT	DTC114EKA	
	Q3414	VV655000	TR. DGT	DTA114EKA	
	Q3801-3802	iC18151O	TR	2SC1815 Y	
	Q3803	VV655700	TR. DGT	DTC144EKA	
	R3021	HV753100	R. CAR. FP	1Ω 1/4W	
	R3025	HV753100	R. CAR. FP	1Ω 1/4W	
	R3046-3049	HV753100	R. CAR. FP	1Ω 1/4W	
	R3060-3061	HV753100	R. CAR. FP	1Ω 1/4W	
	R3208	HV755680	R. CAR. FP	680Ω 1/4W	BGF
	R3210	HV754180	R. CAR. FP	18Ω 1/4W	
	R3213	HV753560	R. CAR. FP	5. 6Ω 1/4W	
⚠	R3301	HV753220	R. CAR. FP	2. 2Ω 1/4W	
	R3306	HV756100	R. CAR. FP	1KΩ 1/4W	
	R3315-3316	HV756470	R. CAR. FP	4. 7KΩ 1/4W	
	R3403-3406	HV757100	R. CAR. FP	10KΩ 1/4W	
	R3910	HV753220	R. CAR. FP	2. 2Ω 1/4W	BGF
	RY341-345	WJ122400	RELAY	981-2A-24DS-SP7	
⚠	RY371	WQ804100	RELAY	DC DLS5D1-O(M)0. 25	
	ST331-332	V4040500	SCR. TERM	M3	
	ST361-362	V4040500	SCR. TERM	M3	
	ST371	V4040500	SCR. TERM	M3	
	ST381-383	V4040500	SCR. TERM	M3	
⚠	T3701	YA507B00	TRANS. PWR		
	TE341	WK560800	TERM. SP	4P MST-204V1-01 NC	UCRTA
	TE341	WK560900	TERM. SP	4P MST-204V1-01 WC	KBGFL
	TE342	WK561000	TERM. SP	6P MST-207V1-01 NC	UCRTA
	TE342	WK561100	TERM. SP	6P MST-207V1-01 WC	KBGFL
	TE343	WK560800	TERM. SP	4P MST-204V1-01 NC	UCRTA
	TE343	WK560900	TERM. SP	4P MST-204V1-01 WC	KBGFL
	XL321	V2731100	RSNR. CRYS	4. 332M HC-49/U	BGF
		WE774200	SCR. BND. HD	3x10 MFZN2W3	

✻ New Parts

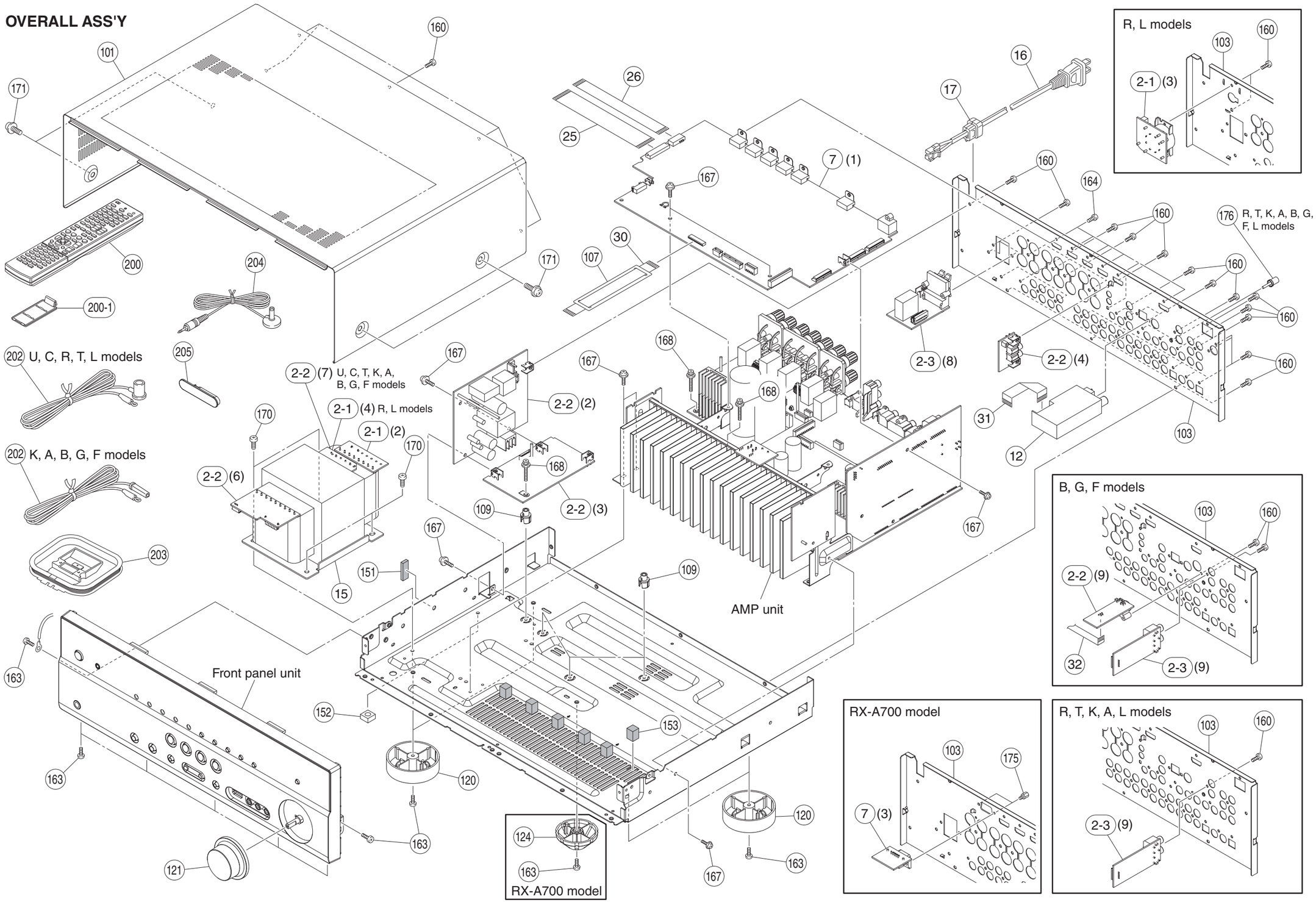
Carbon Resistors

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			
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 ASS'Y



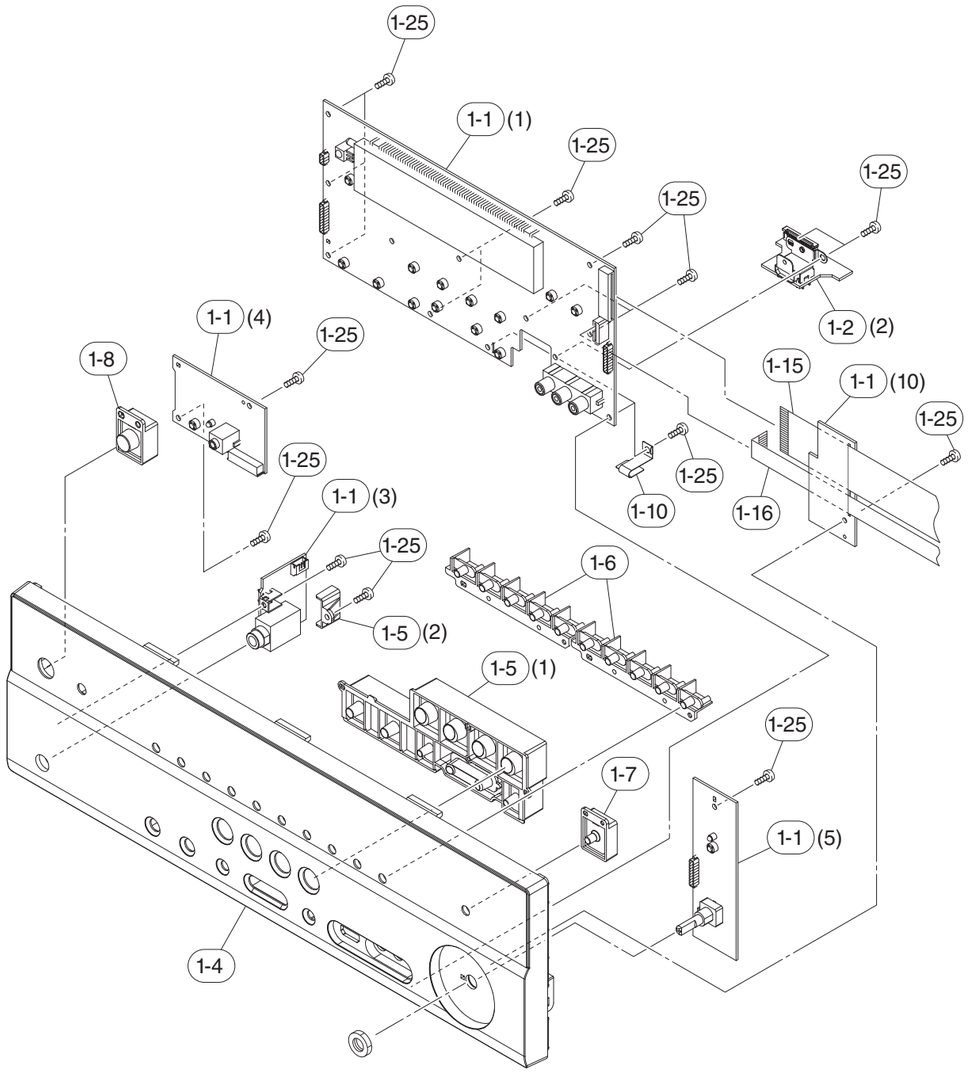
	Ref No.	Part No.	Description		Remarks	Markets
	2-1	WR432000	P.C.B. ASS'Y	MAIN	V667, 6063	UTKABGF
	2-1	WR432200	P.C.B. ASS'Y	MAIN	A700	U
	2-1	WR432400	P.C.B. ASS'Y	MAIN		C
	2-1	WR432100	P.C.B. ASS'Y	MAIN		R
	2-1	WR432300	P.C.B. ASS'Y	MAIN		L
*	2-2	WU429400	P.C.B. ASS'Y	VIDEO		U
*	2-2	WU429500	P.C.B. ASS'Y	VIDEO		C
*	2-2	WU429600	P.C.B. ASS'Y	VIDEO		R
*	2-2	WU429700	P.C.B. ASS'Y	VIDEO		T
*	2-2	WU429800	P.C.B. ASS'Y	VIDEO		K
*	2-2	WU429900	P.C.B. ASS'Y	VIDEO		A
*	2-2	WU430000	P.C.B. ASS'Y	VIDEO		BGF
*	2-2	WU430100	P.C.B. ASS'Y	VIDEO		L
*	2-3	WU427500	P.C.B. ASS'Y	OPERATION	V667	U
*	2-3	WU933400	P.C.B. ASS'Y	OPERATION	A700	U
*	2-3	WU427600	P.C.B. ASS'Y	OPERATION	V667	C
*	2-3	WU428000	P.C.B. ASS'Y	OPERATION	6063	C
*	2-3	WU427700	P.C.B. ASS'Y	OPERATION	V667	RTKABGFL
*	2-3	WU428100	P.C.B. ASS'Y	OPERATION	6063	A
*	7	WU432000	P.C.B. ASS'Y	DIGITAL	V667	U
*	7	WU933100	P.C.B. ASS'Y	DIGITAL	A700	U
*	7	WU432100	P.C.B. ASS'Y	DIGITAL		CTKAL
*	7	WU432200	P.C.B. ASS'Y	DIGITAL		R
*	7	WU432300	P.C.B. ASS'Y	DIGITAL		BGF
	12	WQ756600	AM/FM TUNER	FAEH06-A		UCRTL
	12	WQ756700	AM/FM TUNER	FAEH06-E		KABGF
⚠	15	YA684A00	POWER TRANSFORMER			UC
⚠	15	YA685A00	POWER TRANSFORMER			RL
⚠	15	YA686A00	POWER TRANSFORMER			TK
⚠	15	YA687A00	POWER TRANSFORMER			A
⚠	15	YA688A00	POWER TRANSFORMER			BGF
⚠	16	WR336800	POWER CABLE	2m		UC
⚠	16	WC992700	POWER CABLE	2m		R
⚠	16	WB120600	POWER CABLE	2m		T
⚠	16	WC753000	POWER CABLE	2m		K
⚠	16	WC743700	POWER CABLE	2m		A
⚠	16	WB212200	POWER CABLE	2m		B
⚠	16	WR336900	POWER CABLE	2m		GFL
	17	V2438700	CORD STOPPER	10P1		
*	25	WU250200	FLEXIBLE FLAT CABLE	22P 250mm P=1.25		
*	26	WU250100	FLEXIBLE FLAT CABLE	14P 300mm P=1.25		
*	30	WV083200	FLEXIBLE FLAT CABLE	20P 190mm P=1.0		
	31	WR284900	FLEXIBLE FLAT CABLE	11P 100mm P=1.25		
*	32	WU249700	FLEXIBLE FLAT CABLE	5P 300mm P=1.25		BGF
*	101	WT980000	TOP COVER		GD	
*	101	WT979800	TOP COVER		BL	
*	101	WT979900	TOP COVER		TI	
*	103	WU012300	REAR PANEL		V667	U
*	103	WU633600	REAR PANEL		A700	U
*	103	WU012400	REAR PANEL		V667	C
*	103	WU013300	REAR PANEL		6063	C
*	103	WU012600	REAR PANEL		V667	R
*	103	WU012700	REAR PANEL		V667	T
*	103	WU012800	REAR PANEL		V667	K
*	103	WU012900	REAR PANEL		V667	A
*	103	WU013500	REAR PANEL		6063	A
*	103	WU013000	REAR PANEL		V667	BGF
*	103	WU013100	REAR PANEL		V667	L
	107	WR946700	BARRIER FFC			
	109	WQ664500	SUPPORT H8			

* New Parts

	Ref No.	Part No.	Description		Remarks	Markets
	120	V0042500	LEG	D60xH21 GD	GD	
	120	VS025000	LEG	D60xH21 HS	V667BL, 6063BL, TI	
	120	WQ379900	LEG	D60xH21	A700BL	
*	121	WT824300	KNOB	D52	GD	
*	121	WT824100	KNOB	D52	V667BL, 6063BL	
*	121	WV033600	KNOB	D52	A700BL	
*	121	WT824200	KNOB	D52	TI	
*	124	WV139700	CENTER LEG	D48	A700	
	151	WB870100	DAMPER	30x10x4		
	152	WC879000	DAMPER	SCREW MASK		
	153	WR377400	DAMPER	14x10x10		
	160	WE774100	BIND HEAD BONDING B-T. SCREW	3x8 MFZN2B3		
	163	WE774300	BIND HEAD B-TIGHT SCREW	3x8 MFZN2W3		
	164	WE877900	BIND HEAD S-TIGHT SCREW	3x6 MFZN2W3		
	167	WF002600	PW HEAD B-TIGHT SCREW	3x8 MFZN2W3		
	168	WE774600	SCREW IC	3x18 MFZN2W3		
	170	WU048900	BIND HEAD S-TIGHT SCREW	4x10 MFZN2W3		
	171	VD069600	PW HEAD S-TIGHT SCREW	4x8-10 MFNI33	GD, TI	
	171	VH313200	PW HEAD S-TIGHT SCREW	4x8-10 MFNI3BL	BL	
	175	V6509600	JACK SCREW	SS6-A47511848	A700	
	176	AA627310	GROUND TERMINAL			RTKABGFL
			ACCESSORIES			
*	200	WT927200	REMOTE CONTROL	RAV336	000-213220010	U
*	200	WT927300	REMOTE CONTROL	RAV337	000-213220020	C
*	200	WT927400	REMOTE CONTROL	RAV338	000-213220030	RTKABGFL
	200-1	AAX82380	BATTERY COVER		CG-2209	
	202	V6267000	INDOOR FM ANTENNA	1.4m 1pc		UCRTL
	202	VQ147100	INDOOR FM ANTENNA	1.4m 1pc		KABGF
	203	VR248500	AM LOOP ANTENNA	1.0m 1pc		
	204	WN649600	YPAO MICROPHONE	6.0m 1pc	EM6022L-HN1700	
*	205	WU187800	VIDEO AUX INPUT COVER	1pc	GD	
*	205	WU187600	VIDEO AUX INPUT COVER	1pc	BL	
*	205	WU187700	VIDEO AUX INPUT COVER	1pc	TI	
			BATTERY	R03, AAA, UM-4 2pcs		

* New Parts

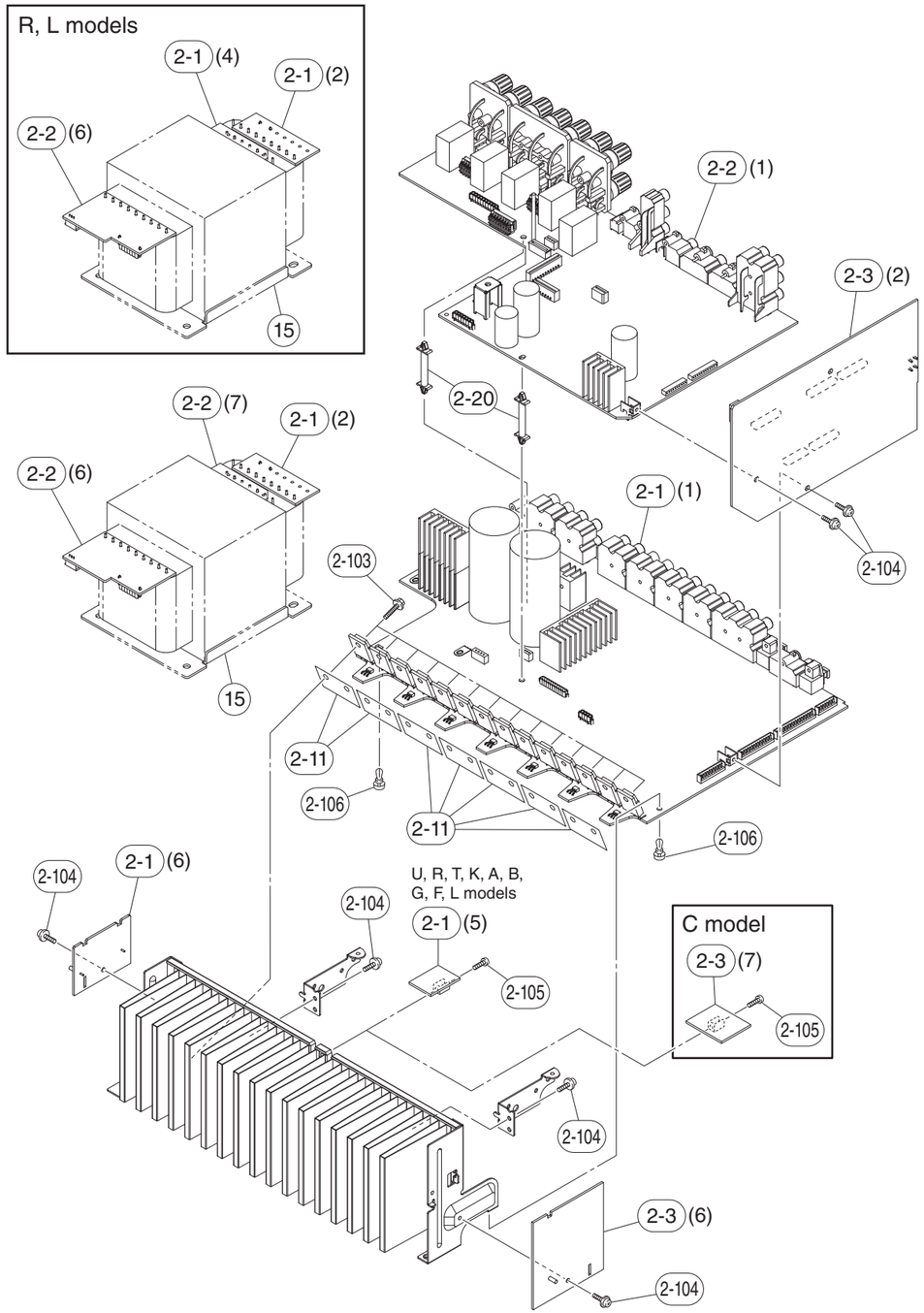
• FRONT PANEL UNIT



	Ref No.	Part No.	Description		Remarks	Markets
*	1-1	WU427500	P.C.B. ASS'Y	OPERATION	V667	U
*	1-1	WU933400	P.C.B. ASS'Y	OPERATION	A700	U
*	1-1	WU427600	P.C.B. ASS'Y	OPERATION	V667	C
*	1-1	WU428000	P.C.B. ASS'Y	OPERATION	6063	C
*	1-1	WU427700	P.C.B. ASS'Y	OPERATION	V667	RTKABGFL
*	1-1	WU428100	P.C.B. ASS'Y	OPERATION	6063	A
*	1-2	WU432000	P.C.B. ASS'Y	DIGITAL	V667	U
*	1-2	WU933100	P.C.B. ASS'Y	DIGITAL	A700	U
*	1-2	WU432100	P.C.B. ASS'Y	DIGITAL		CTKAL
*	1-2	WU432200	P.C.B. ASS'Y	DIGITAL		R
*	1-2	WU432300	P.C.B. ASS'Y	DIGITAL		BGF
*	1-4	WU826900	FRONT PANEL SUB ASS'Y	with WINDOW	V667GD	
*	1-4	WU826600	FRONT PANEL SUB ASS'Y	with WINDOW	V667BL	U
*	1-4	WU827000	FRONT PANEL SUB ASS'Y	with WINDOW	6063BL	U
*	1-4	WV501000	FRONT PANEL SUB ASS'Y	with WINDOW	A700BL	U
*	1-4	WU826700	FRONT PANEL SUB ASS'Y	with WINDOW	V667BL	CRTKABGFL
*	1-4	WU827100	FRONT PANEL SUB ASS'Y	with WINDOW	6063BL	CA
*	1-4	WU826800	FRONT PANEL SUB ASS'Y	with WINDOW	6063TI	
*	1-5	WT822500	BUTTON CASE		GD	
*	1-5	WT822300	BUTTON CASE		BL	
*	1-5	WT822400	BUTTON CASE		TI	
*	1-6	WT823900	BUTTON	TUNER		
*	1-7	WT871300	BUTTON	PURE DIRECT		
*	1-8	WT843800	BUTTON POWER			
*	1-10	WT846200	EARTH PLATE			
	1-15	WR482100	FLEXIBLE FLAT CABLE	25P 250mm P=1.25		
	1-16	WR482000	FLEXIBLE FLAT CABLE	9P 300mm P=1.25		
	1-25	WE774800	BIND HEAD P-TIGHT SCREW	3x8 MFZN2W3		

* New Parts

• AMP UNIT



	Ref No.	Part No.	Description		Remarks	Markets
	2-1	WR432000	P.C.B. ASS'Y	MAIN	V667, 6063	UTKABGF
	2-1	WR432200	P.C.B. ASS'Y	MAIN	A700	U
	2-1	WR432400	P.C.B. ASS'Y	MAIN		C
	2-1	WR432100	P.C.B. ASS'Y	MAIN		R
	2-1	WR432300	P.C.B. ASS'Y	MAIN		L
*	2-2	WU429400	P.C.B. ASS'Y	VIDEO		U
*	2-2	WU429500	P.C.B. ASS'Y	VIDEO		C
*	2-2	WU429600	P.C.B. ASS'Y	VIDEO		R
*	2-2	WU429700	P.C.B. ASS'Y	VIDEO		T
*	2-2	WU429800	P.C.B. ASS'Y	VIDEO		K
*	2-2	WU429900	P.C.B. ASS'Y	VIDEO		A
*	2-2	WU430000	P.C.B. ASS'Y	VIDEO		BGF
*	2-2	WU430100	P.C.B. ASS'Y	VIDEO		L
*	2-3	WU427500	P.C.B. ASS'Y	OPERATION	V667	U
*	2-3	WU933400	P.C.B. ASS'Y	OPERATION	A700	U
*	2-3	WU427600	P.C.B. ASS'Y	OPERATION	V667	C
*	2-3	WU428000	P.C.B. ASS'Y	OPERATION	6063	C
*	2-3	WU427700	P.C.B. ASS'Y	OPERATION	V667	RTKABGFL
*	2-3	WU428100	P.C.B. ASS'Y	OPERATION	6063	A
	2-11	WQ753200	MICA SHEET	TB-1021		
	2-20	WS000800	SPACER SUPPORT	LCA4-29M PIN		
	2-103	WM220800	HEXAGONAL HEAD B-TIGHT SCREW	3x15 SP MFZN2W3		
	2-104	WF002600	PW HEAD B-TIGHT SCREW	3x8 MFZN2W3		
	2-105	WE774300	BIND HEAD B-TIGHT SCREW	3x8 MFZN2W3		
	2-106	VQ368600	PUSH RIVET	P3555-B		
⚠	15	YA684A00	POWER TRANSFORMER			UC
⚠	15	YA685A00	POWER TRANSFORMER			RL
⚠	15	YA686A00	POWER TRANSFORMER			TK
⚠	15	YA687A00	POWER TRANSFORMER			A
⚠	15	YA688A00	POWER TRANSFORMER			BGF

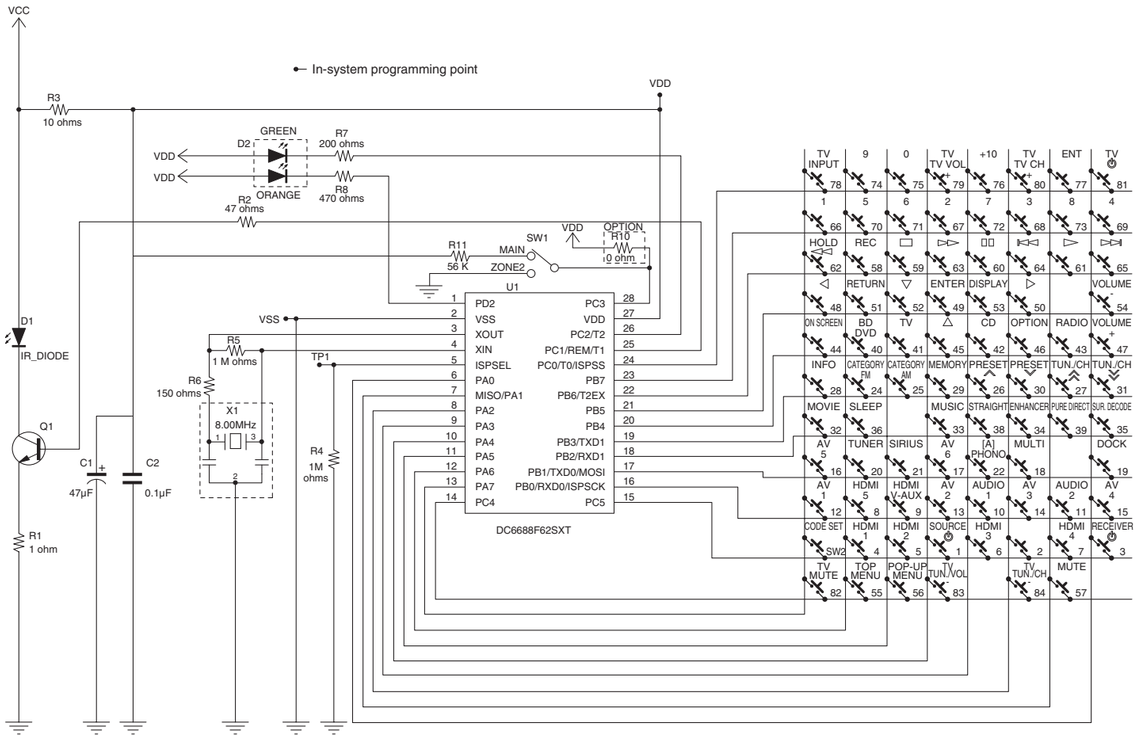
* New Parts

■ REMOTE CONTROL

● RAV336: U model / RAV337: C model / RAV338: R, T, K, A, B, G, F, L models

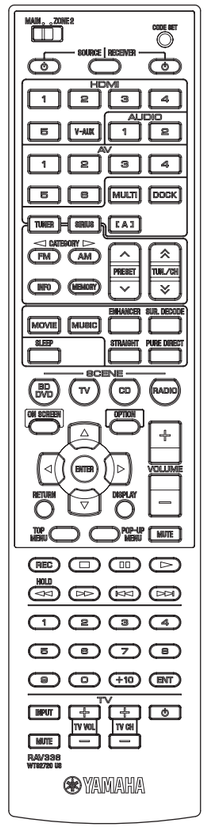
SCHEMATIC DIAGRAM

RAV336/RAV337/RAV338

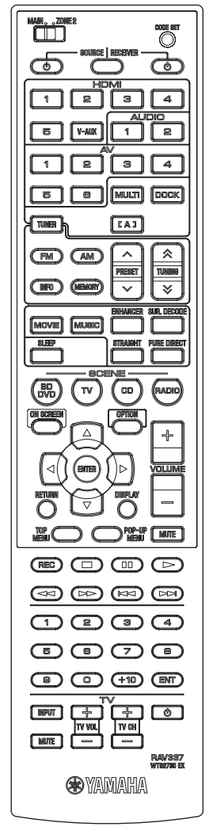


PANELS

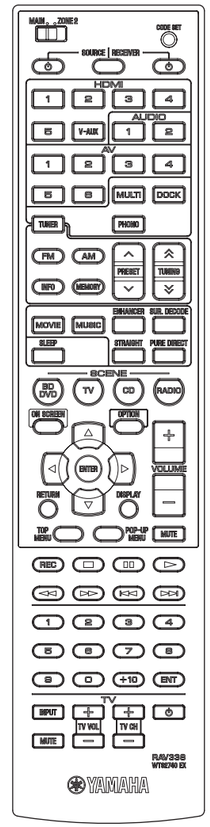
RAV336
(U model)



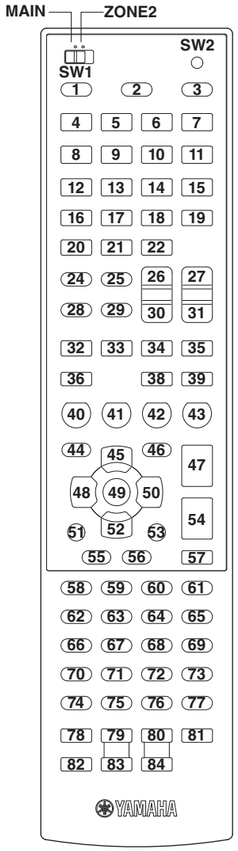
RAV337
(C model)



RAV338
(R, T, K, A, B, G, F, L models)



KEY NO. LAYOUT



KEY CODE

	Key No.	FUNCTION	ID-1		ID-2	
			MAIN	ZONE2	MAIN	ZONE2
	SW1	MAIN/ZONE2	[MAIN]	[ZONE2]	[MAIN]	[ZONE2]
	LED1	–	–	–	–	–
	SW2	CODE SET	–	–	–	–
	K2	SOURCE/RECEIVER	* select RCU mode "SOURCE" or "RECEIVER"			
RECEIVER (mode fixed)	K3	⏻ (RECEIVER)	7E-2A	7A-453A	7E-2AD4	7A-453B
	K4	HDMI-1	7A-4738	7A-4837	7A-4739	7A-4836
	K5	HDMI-2	7A-4A35	7A-4B34	7A-4A34	7A-4B35
	K6	HDMI-3	7A-4D32	7A-4E31	7A-4D33	7A-4E30
	K7	HDMI-4	7A-502F	7A-512E	7A-502E	7A-512F
	K8	HDMI-5	7A-700F	7A-710E	7A-700E	7A-710F
	K9	V-AUX	7A-730C	7A-740B	7A-730D	7A-740A
	K10	AUDIO-1	7A-651A	7A-6619	7A-651B	7A-6618
	K11	AUDIO-2	7A-6817	7A-6916	7A-6816	7A-6917
	K12	AV-1	7A-532C	7A-542B	7A-532D	7A-542A
	K13	AV-2	7A-5629	7A-5728	7A-5628	7A-5729
	K14	AV-3	7A-5926	7A-5A25	7A-5927	7A-5A24
	K15	AV-4	7A-5C23	7A-5D22	7A-5C22	7A-5D23
	K16	AV-5	7A-5F20	7A-601F	7A-5F21	7A-601E
	K17	AV-6	7A-621D	7A-631C	7A-621C	7A-631D
	K18	MULTI	7A-87	–	7A-8779	–
	K19	DOCK	7F01-4A	7F01-4B	7F01-4AB4	7F01-4BB5
	K20	TUNER	7A-16	7A-D2	7A-16E8	7A-D22C
	K21	SIRIUS (RAV336)	7A-39	7A-3A	7A-39C7	7A-3AC4
	K22	[A] (RAV336, 337) / PHONO (RAV338)	7A-14	7A-D0	7A-14EA	7A-D02E
	K36	SLEEP	7A-30	7A-31	7A-30CE	7A-31CF
	K24	FM/CATEGORY (-) (RAV336) / FM (RAV337, 338)	7F01-5827	7F01-5926	7F01-5826	7F01-5927
	K25	AM/CATEGORY (+) (RAV336) / AM (RAV337, 338)	7F01-552A	7F01-5629	7F01-552B	7F01-5628
	K26	PRESET ∧	7F01-5B24	7F01-5C23	7F01-5B25	7F01-5C22
	K27	TUNING/CH ⩓ (RAV336) / TUNING ⩓ (RAV337, 338)	7F01-611E	7F01-621D	7F01-611F	7F01-621C
	K28	INFO	7A-2758	7A-2857	7A-2759	7A-2856
	K29	MEMORY	7F01-6718	7F01-6817	7F01-6719	7F01-6816
	K30	PRESET ∨	7F01-5E21	7F01-5F20	7F01-5E20	7F01-5F21
	K31	TUNING/CH ⩔ (RAV336) / TUNING ⩔ (RAV337, 338)	7F01-641B	7F01-651A	7F01-641A	7F01-651B
	K32	MOVIE	7A-88	–	7A-8876	–
	K33	MUSIC	7A-89	–	7A-8977	–
	K34	ENHANCER	7A-94	–	7A-946A	–
	K35	SUR. DECODE	7A-8D	–	7A-8D73	–
	K38	STRAIGHT	7A-56	–	7A-56A8	–
	K39	PURE DIRECT	7A-DD	–	7A-DD23	–
	K40	BD/DVD (SCENE)	7A-007F	7A-017E	7A-007E	7A-017F
	K41	TV (SCENE)	7A-037C	7A-047B	7A-037D	7A-047A
	K42	CD (SCENE)	7A-0679	7A-0778	7A-0678	7A-0779
	K43	RADIO (SCENE)	7A-0976	7A-0A75	7A-0977	7A-0A74
	K44	ON SCREEN	7A-84	–	7A-847A	–
	K46	OPTION	7A-6B14	–	7A-6B15	–
	K47	VOLUME (+)	7A-1A	7A-DA	7A-1AE4	7A-DA24
	K54	VOLUME (-)	7A-1B	7A-DB	7A-1BE5	7A-DB25
	K57	MUTE	7A-1C	7A-DC	7A-1CE2	7A-DC22

	Key No.	FUNCTION	ID-1		ID-2	
			MAIN	ZONE2	MAIN	ZONE2
SOURCE/RCVR	K45	▲ (UP)	7A-9D	7A-2B54	7A-9D63	7A-2B55
	K48	◀ (LEFT)	7A-9F	7A-2D52	7A-9F61	7A-2D53
	K49	ENTER	7A-DE	7A-2F50	7A-DE20	7A-2F51
	K50	▶ (RIGHT)	7A-9E	7A-2E51	7A-9E60	7A-2E50
	K51	RETURN	7A-AA	7A-3C43	7A-AA54	7A-3C42
	K52	▼ (DOWN)	7A-9C	7A-2C53	7A-9C62	7A-2C52
	K53	DISPLAY	7F01-60	7F01-80	7F01-609E	7F01-807E
	K58	REC	7F01-66	7F01-86	7F01-6698	7F01-8678
	K59	■ (STOP)	7F01-69	7F01-89	7F01-6997	7F01-8977
	K60	▮▮ (PAUSE)	7F01-67	7F01-87	7F01-6799	7F01-8779
	K61	► (PLAY)	7F01-68	7F01-88	7F01-6896	7F01-8876
	K62	◄◄ REW / HOLD (RAV336) / ◄◄ REW (RAV337, 338)	7F01-6A	7F01-8A	7F01-6A94	7F01-8A74
	K63	►► (FF)	7F01-6B	7F01-8B	7F01-6B95	7F01-8B75
	K64	⏮ (SKIP -)	7F01-6C	7F01-8C	7F01-6C92	7F01-8C72
	K65	⏭ (SKIP +)	7F01-6D	7F01-8D	7F01-6D93	7F01-8D73
	K66	1	7F01-51	7F01-71	7F01-51AF	7F01-718F
	K67	2	7F01-52	7F01-72	7F01-52AC	7F01-728C
	K68	3	7F01-53	7F01-73	7F01-53AD	7F01-738D
	K69	4	7F01-54	7F01-74	7F01-54AA	7F01-748A
	K70	5	7F01-55	7F01-75	7F01-55AB	7F01-758B
	K71	6	7F01-56	7F01-76	7F01-56A8	7F01-7688
	K72	7	7F01-57	7F01-77	7F01-57A9	7F01-7789
	K73	8	7F01-58	7F01-78	7F01-58A6	7F01-7886
	K74	9	7F01-59	7F01-79	7F01-59A7	7F01-7987
	K75	0	7F01-5A	7F01-7A	7F01-5AA4	7F01-7A84
	K76	+10	7F01-5B	7F01-7B	7F01-5BA5	7F01-7B85
	K77	ENT	7F01-5C	7F01-7C	7F01-5CA2	7F01-7C82
SOURCE (mode fixed)	K1	⏻ (SOURCE)	SOURCE			
	K55	TOP MENU	SOURCE * switch RCU to "SOURCE" mode			
	K56	POP-UP MENU	SOURCE * switch RCU to "SOURCE" mode			
	K78	TV INPUT	SOURCE (TV)			
	K79	TV VOL (+)				
	K80	TV CH (+)				
	K81	TV ⏻				
	K82	TV MUTE				
	K83	TV VOL (-)				
	K84	TV CH (-)				

* K81: able to preset the code (only from TV library) in K78/K79/K80/K81/K82/K83/K84.

FUNCTION CODE

	BD			DVD					DVR		LD		CD			CD-R		MD			
	Brand	Yamaha-1	Yamaha-2	Brand	Yamaha-1	Yamaha-2	Yamaha-3	T	Brand	Yamaha	Brand	Yamaha	Brand	Yamaha-1	Yamaha-2	Brand	Yamaha	Brand	Yamaha-1	Yamaha-2	Yamaha-3
Key	Preset Number	2064	****	Preset Number	2082	2081	2083	2218	Preset Number	2089	Preset Number	2080	Preset Number	5095	5082	Preset Number	5083	Preset Number	5080	5081	5086
No.	Function	Code	Code	Function	Code	Code	Code	Code	Function	Code	Function	Code	Function	Code	Code	Function	Code	Function	Code	Code	Code
K45	UP	7C-B4	7C-B44A	UP	7C-B4	2002 B0 00 85 35	004.088	45B5 80	MENU UP	048.088	–	–	–	–	–	–	–	–	–	–	–
K48	LEFT	7C-B5	7C-B54B	LEFT	7C-B5	2002 B0 00 87 37	004.090	45B5 51	MENU LEFT	048.090	–	–	–	–	–	–	–	–	–	–	–
K49	ENTER	7C-B8	7C-B846	ENTER	7C-B8	2002 B0 00 82 32	004.092	45B5 21	MENU ENTER	048.092	–	–	–	–	–	–	–	–	–	–	–
K50	RIGHT	7C-B6	7C-B648	RIGHT	7C-B6	2002 B0 00 88 38	004.091	45B5 4D	MENU RIGHT	048.091	–	–	–	–	–	–	–	–	–	–	–
K51	RETURN	7C-B7	7C-B749	RETURN	7C-B7	2002 B0 00 81 31	004.131	45B5 22	RETURN	048.131	–	–	–	–	–	–	–	–	–	–	–
K52	DOWN	7C-B3	7C-B34D	DOWN	7C-B3	2002 B0 00 86 36	004.089	45B5 81	MENU DOWN	048.089	–	–	–	–	–	–	–	–	–	–	–
K53	DISPLAY	7C-A6	7C-A658	DISPLAY	7C-A6	2002 B0 00 92 22	004.015	45B5 26	DISPLAY	048.015	DISPLAY	7C-13	DISPLAY	79-0A	79-0A	DISPLAY	7F-9E	DISPLAY	79-A5	79-A5	180F
K1	⏻ (SOURCE)	7C-80	7C-807E	⏻ (SOURCE)	7C-80	2002 B0 00 3D 8D	004.012	45B5 12	⏻ (SOURCE)	048.012	⏻ (SOURCE)	–	⏻ (SOURCE)	79-60	79-60	⏻ (SOURCE)	7F-80	⏻ (SOURCE)	–	79-B5	150F
K55	TOP MENU	7C-B1	7C-B14F	TOP MENU	7C-B1	2002 B0 00 9B 2B	004.113	45B5 DE	TITLE	048.200	–	–	–	–	–	–	–	–	–	–	–
K56	POP-UP MENU	7C-CF	7C-CF31	MENU	7C-B2	2002 B0 00 80 30	004.084	45B5 84	MENU	048.084	–	–	–	–	–	–	–	–	–	–	–
K58	DISC SKIP	7C-8B	7C-8B75	DISC SKIP	7C-8B	–	004.127	??	REC	048.055	–	–	DISC SKIP	7A-4F	79-4F	REC	–	REC	79-AF	79-B1	2D0F
K59	STOP	7C-85	7C-857B	STOP	7C-85	2002 B0 00 00 B0	004.049	45B5 14	STOP	048.049	STOP	7C-5B	STOP	7A-09	79-56	STOP	7F-84	STOP	79-AA	79-AA	280F
K60	PAUSE	7C-83	7C-837D	PAUSE	7C-83	2002 B0 00 06 B6	004.048	45B5 00	PAUSE	048.048	PAUSE	7C-5A	PAUSE	7A-09	79-55	PAUSE	7F-83	PAUSE	79-A9	79-A9	290F
K61	PLAY	7C-82	7C-827C	PLAY	7C-82	2002 B0 00 0A BA	004.044	45B5 15	PLAY	048.044	PLAY	7C-05	PLAY	7A-08	79-02	PLAY	7F-82	PLAY	79-A8	79-A8	2A0F
K62	REW	7C-86	7C-8678	REW	7C-86	2002 B0 00 04 B4	004.041	45B5 19	REW	048.041	REW	7C-06	REW	7A-0D	79-05	REW	7F-88	REW	79-AC	79-AC	2B0F
K63	FF	7C-87	7C-8779	FF	7C-87	2002 B0 00 05 B5	004.040	45B5 13	FF	048.040	FF	7C-07	FF	7A-0C	79-06	FF	7F-89	FF	79-AD	79-AD	2C0F
K64	SKIP (-)	7C-B9	7C-B947	SKIP (-)	7C-B9	2002 B0 00 49 F9	004.033	45B5 23	SKIP (-)	048.033	CHAP/SKIP (-)	7C-02	SKIP (-)	7A-0B	79-04	SKIP (-)	7F-86	SKIP (-)	79-AB	79-AB	200F
K65	SKIP (+)	7C-BA	7C-BA44	SKIP (+)	7C-BA	2002 B0 00 4A FA	004.032	45B5 24	SKIP (+)	048.032	CHAP/SKIP (+)	7C-03	SKIP (+)	7A-0A	79-07	SKIP (+)	7F-87	SKIP (+)	79-AE	79-AE	210F
K66	1	7C-94	7C-946A	1	7C-94	2002 B0 00 10 A0	004.001	45B5 01	1	048.001	1	7C-17	1	79-11	79-11	1	7F-91	1	79-85	79-B7	000F
K67	2	7C-95	7C-956B	2	7C-95	2002 B0 00 11 A1	004.002	45B5 02	2	048.002	2	7C-18	2	79-12	79-12	2	7F-92	2	79-86	79-B8	010F
K68	3	7C-96	7C-9668	3	7C-96	2002 B0 00 12 A2	004.003	45B5 03	3	048.003	3	7C-19	3	79-13	79-13	3	7F-93	3	79-87	79-B9	020F
K69	4	7C-97	7C-9769	4	7C-97	2002 B0 00 13 A3	004.004	45B5 04	4	048.004	4	7C-1A	4	79-14	79-14	4	7F-94	4	79-88	79-BA	030F
K70	5	7C-98	7C-9866	5	7C-98	2002 B0 00 14 A4	004.005	45B5 05	5	048.005	5	7C-1B	5	79-15	79-15	5	7F-95	5	79-89	79-BB	040F
K71	6	7C-99	7C-9967	6	7C-99	2002 B0 00 15 A5	004.006	45B5 06	6	048.006	6	7C-1C	6	79-16	79-16	6	7F-96	6	79-8A	79-BC	050F
K72	7	7C-9A	7C-9A64	7	7C-9A	2002 B0 00 16 A6	004.007	45B5 07	7	048.007	7	7C-1D	7	79-17	79-17	7	7F-97	7	79-8B	79-BD	060F
K73	8	7C-9B	7C-9B65	8	7C-9B	2002 B0 00 17 A7	004.008	45B5 08	8	048.008	8	7C-1E	8	79-18	79-18	8	7F-98	8	79-8C	79-BE	070F
K74	9	7C-9C	7C-9C62	9	7C-9C	2002 B0 00 18 A8	004.009	45B5 09	9	048.009	9	7C-1F	9	79-19	79-19	9	7F-99	9	79-8D	79-BF	080F
K75	0	7C-93	7C-936D	0	7C-93	2002 B0 00 19 A9	004.000	45B5 0A	0	048.000	0	7C-16	0/10	79-10	79-10	0	7F-90	0	79-8E	79-C0	090F
K76	+10	7C-9D	7C-9D63	+10	7C-9D	2002 B0 00 89 39	004.120	45B5 25	+10	–	+10	7C-5D	+10	79-1A	79-1A	+10	7F-9A	+10	79-8F	79-8F	0A0F
K77	TITLE/INDEX	7C-9E	7C-9E60	TITLE/INDEX	7C-9E	–	–	45B5 20	TITLE/INDEX	–	CHAP/TIME	7C-15	INDEX	79-0B	79-0B	INDEX	7F-8A	INDEX	–	–	–
K78	TV- INPUT	(TV INPUT)		TV- INPUT	(TV INPUT)				TV- INPUT	(TV INPUT)	TV- INPUT	(TV INPUT)	TV- INPUT	(TV INPUT)		TV- INPUT	(TV INPUT)	TV- INPUT	(TV INPUT)		
K79	TV- VOL (+)	(TV VOL +)		TV- VOL (+)	(TV VOL +)				TV- VOL (+)	(TV VOL +)	TV- VOL (+)	(TV VOL +)	TV- VOL (+)	(TV VOL +)		TV- VOL (+)	(TV VOL +)	TV- VOL (+)	(TV VOL +)		
K80	TV- CH (+)	(TV CH +)		TV- CH (+)	(TV CH +)				TV- CH (+)	(TV CH +)	TV- CH (+)	(TV CH +)	TV- CH (+)	(TV CH +)		TV- CH (+)	(TV CH +)	TV- CH (+)	(TV CH +)		
K81	TV- ⏻	(TV- ⏻)		TV- ⏻	(TV- ⏻)				TV- ⏻	(TV- ⏻)	TV- ⏻	(TV- ⏻)	TV- ⏻	(TV- ⏻)		TV- ⏻	(TV- ⏻)	TV- ⏻	(TV- ⏻)		
K82	TV- MUTE	(TV MUTE)		TV- MUTE	(TV MUTE)				TV- MUTE	(TV MUTE)	TV- MUTE	(TV MUTE)	TV- MUTE	(TV MUTE)		TV- MUTE	(TV MUTE)	TV- MUTE	(TV MUTE)		
K83	TV- VOL (-)	(TV VOL -)		TV- VOL (-)	(TV VOL -)				TV- VOL (-)	(TV VOL -)	TV- VOL (-)	(TV VOL -)	TV- VOL (-)	(TV VOL -)		TV- VOL (-)	(TV VOL -)	TV- VOL (-)	(TV VOL -)		
K84	TV- CH (-)	(TV CH -)		TV- CH (-)	(TV CH -)				TV- CH (-)	(TV CH -)	TV- CH (-)	(TV CH -)	TV- CH (-)	(TV CH -)		TV- CH (-)	(TV CH -)	TV- CH (-)	(TV CH -)		

	TUNER																		TAPE			TV					
	Brand	Yamaha-2	Yamaha-3	Yamaha-4	Yamaha-5	Yamaha-6	Yamaha-7	Yamaha-14	Yamaha-11	Yamaha-12	Brand	Yamaha-8	Yamaha-15	Yamaha-13	Yamaha-16	Brand	Yamaha-9	Yamaha-10	Brand	Yamaha-1	Yamaha-2	Brand	Yamaha-1	Yamaha-2	Yamaha-3	Yamaha-4	Yamaha-5
key	Preset Number	5092	5085	5090	5091	5088	5089	5068	5093	5066	Preset Number	5094	5079	5071	5076	Preset Number	5067	5064	Preset Number	5087	5084	Preset Number	0082	0083	0080	0081	0086
No.	Function	Code	Code	Code	Code	Code	Code	Code	Code	Code	Function	Code	Code	Code	Code	Function	Code	Code	Function	Code	Code	Function	Code	Code	Code	Code	Code
K45	PRESET (+)	7A-10	7A-10	7D-F5	7A-6A	7D-31	7F01-0E	7F01-0EF0	7A-6A94	7A-10EE	UP	7F01-2E	7F01-2E	7F01-2ED0	7F01-2ED0	UP	7F01-E1	7F01-E11F	–	–	–	MENU UP	D1CC	D16C	5070	01 111 0 01 0EE 1	F082
K48	A-E/CAT. (-)	–	7A-AC	7D-BB	7A-6E	7D-35	7F01-10	7F01-10EE	7A-6E90	7A-AC52	LEFT	7F01-30	7F01-30	7F01-30CE	7F01-30CE	LEFT	7F01-E2	7F01-E21C	–	–	–	MENU LEFT	D1CE	D16E	5073	01 115 0 01 0EA 1	F080
K49	ENTER	–	7A-AD	7D-BC	7A-6F	7D-36	7F01-11	7F01-11EF	7A-6F91	7A-AD53	ENTER	7F01-31	7F01-31	7F01-31CF	7F01-31CF	ENTER	7F01-E3	7F01-E31D	–	–	–	MENU ENTER	D1D0	D170	5033	01 15F 0 01 0A0 1	F087
K50	A-E/CAT. (+)	D1-0D	7A-12	7D-F7	7A-6C	7D-33	7F01-12	7F01-12EC	7A-6C92	7A-12EC	RIGHT	7F01-32	7F01-32	7F01-32CC	7F01-32CC	RIGHT	7F01-E4	7F01-E41A	–	–	–	MENU RIGHT	D1CF	D16F	5072	01 114 0 01 0EB 1	F081
K51	MEMORY	–	7A-AF	7D-BE	7A-71	7D-38	7F01-13	7F01-13ED	7A-718F	7A-AF51	RETURN	7F01-33	7F01-33	7F01-33CD	7F01-33CD	MEMORY	7F01-DF	7F01-DF21	–	–	–	RETURN	D1D5	D175	500A	01 12F 0 01 0D0 1	–
K52	PRESET (-)	7A-11	7A-11	7D-F6	7A-6B	7D-32	7F01-14	7F01-14EA	7A-6B95	7A-11EF	DOWN	7F01-34	7F01-34	7F01-34CA	7F01-34CA	DOWN	7F01-E5	7F01-E51B	–	–	–	MENU DOWN	D1CD	D16D	5071	01 112 0 01 0ED 1	F083
K53	DISPLAY	–	7A-B0	7D-BF	7A-72	7D-39	7F01-15	7F01-15EB	7A-728C	7A-B04E	DISPLAY	7F01-35	7F01-35	7F01-35CB	7F01-35CB	DISPLAY	7F01-E0	7F01-E01E	–	–	–	DISPLAY	–	–	5010	01 11B 0 01 0E4 1	–
K1	⏻ (SOURCE)	D1-1B	D1-1B	–	–	–	7F01-00	7F01-00FE	–	–	⏻ (SOURCE)	7F01-20	7F01-20	7F01-20DE	7F01-20DE	⏻ (SOURCE)	7F01-D0	7F01-D02E	–	–	–	⏻ (SOURCE)	–	–	–	–	–
K55	BAND	–	7A-AE	7D-BD	7A-70	7D-37	7F01-0D	7F01-0DF3	7A-708E	7A-AE50	TITLE	7F01-2D	7F01-2D	7F01-2DD3	7F01-2DD3	TITLE	7F01-DD	7F01-DD23	–	–	–	TITLE	–	–	–	–	–
K56	SRCH MODE	–	7A-AB	7D-BA	7A-6D	7D-34	7F01-0F	7F01-0FF1	7A-6D93	7A-AB55	MENU	7F01-2F	7F01-2F	7F01-2FD1	7F01-2FD1	SRCH MODE	7F01-DE	7F01-DE20	–	–	–	MENU	D1D3	D173	5053	01 120 0 01 0DF 1	F086
K58	–	–	–	–	–	–	7F01-16	7F01-16E8	–	–	PC/MCX	7F01-36	7F01-36	7F01-36C8	7F01-36C8	REC	7F01-E6	7F01-E618	REC	7A-04	7F-04	REC	–	–	–	–	–
K59	–	–	–	–	–	–	7F01-1D	7F01-1DE3	–	–	STOP	7F01-3D	7F01-3D	7F01-3DC3	7F01-3DC3	STOP	7F01-E9	7F01-E917	STOP	7A-03	7F-03	STOP	–	–	–	–	–
K60	–	–	–	–	–	–	7F01-1A	7F01-1AE4	–	–	PAUSE	7F01-3A	7F01-3A	7F01-3AC4	7F01-3AC4	PAUSE	7F01-E7	7F01-E719	PAUSE	–	–	PAUSE	–	–	–	–	–
K61	–	–	–	–	–	–	7F01-1E	7F01-1EE0	–	–	PLAY	7F01-3E	7F01-3E	7F01-3EC0	7F01-3EC0	PLAY	7F01-E8	7F01-E816	PLAY	7A-00	7F-00	PLAY	–	–	–	–	–
K62	FREQ	7A-A4	–	7D-23	–	–	7F01-17	7F01-17E9	–	–	NET RADIO	7F01-37	7F01-37	7F01-37C9	7F01-37C9	REW	7F01-EA	7F01-EA14	REW	7A-01	7F-01	REW	–	–	–	–	–
K63	EON	7A-A5	7A-A5	7D-24	7A-3E	–	7F01-18	7F01-18E6	7A-3EC0	7A-A55B	USB	7F01-38	7F01-38	7F01-38C6	7F01-38C6	FF	7F01-EB	7F01-EB15	FF	7A-02	7F-02	FF	–	–	–	–	–
K64	PTY MODE	7A-A6	7A-A6	7D-25	7A-3F	–	7F01-1B	7F01-1BE5	7A-3FC1	7A-A658	SKIP (-)	7F01-3B	7F01-3B	7F01-3BC5	7F01-3BC5	SKIP (-)	7F01-EC	7F01-EC12	DIR A	7A-07	7F-07	SKIP (-)	–	–	–	–	–
K65	PTY START	7A-A7	7A-A7	7D-26	7A-EF	–	7F01-1C	7F01-1CE2	7A-EF11	7A-A759	SKIP (+)	7F01-3C	7F01-3C	7F01-3CC2	7F01-3CC2	SKIP (+)	7F01-ED	7F01-ED13	DIR B	7A-40	7F-08	SKIP (+)	–	–	–	–	–
K66	P1	D1-0E	7A-E5	7D-F8	7A-61	7D-A1	7F01-01	7F01-01FF	7A-619F	7A-E51B	P1	7F01-21	7F01-542B	7F01-21DF	7F01-542A	1	7F01-D1	7F01-D12F	–	–	–	1	D1E1	D181	500D	01 101 0 01 0FE 1	F0E4
K67	P2	D1-0F	7A-E6	7D-F9	7A-62	7D-A2	7F01-02	7F01-02FC	7A-629C	7A-E618	P2	7F01-22	7F01-532C	7F01-22DC	7F01-532D	2	7F01-D2	7F01-D22C	–	–	–	2	D1E2	D182	500E	01 102 0 01 0FD 1	F0E5
K68	P3	D1-10	7A-E7	7D-FA	7A-63	7D-A3	7F01-03	7F01-03FD	7A-639D	7A-E719	P3	7F01-23	7F01-522D	7F01-23DD	7F01-522C	3	7F01-D3	7F01-D32D	–	–	–	3	D1E3	D183	500F	01 103 0 01 0FC 1	F0E6
K69	P4	D1-11	7A-E8	7D-FB	7A-64	7D-A4	7F01-04	7F01-04FA	7A-649A	7A-E816	P4	7F01-24	7F01-4837	7F01-24DA	7F01-4836	4	7F01-D4	7F01-D42A	–	–	–	4	D1E4	D184	501C	01 104 0 01 0FB 1	–
K70	P5	D1-12	7A-E9	7D-FC	7A-65	7D-A5	7F01-05	7F01-05FB	7A-659B	7A-E917	P5	7F01-25	–	7F01-25DB	–	5	7F01-D5	7F01-D52B	–	–	–	5	D1E5	D185	501D	01 105 0 01 0FA 1	–
K71	P6	D1-13	7A-EA	7D-FD	7A-66	7D-A6	7F01-06	7F01-06F8	7A-6698	7A-EA14	P6	7F01-26	–	7F01-26D8	–	6	7F01-D6	7F01-D628	–	–	–	6	D1E6	D186	501E	01 106 0 01 0F9 1	–
K72	P7	D1-14	7A-EB	7D-FE	7A-67	7D-A7	7F01-07	7F01-07F9	7A-6799	7A-EB15	P7	7F01-27	–	7F01-27D9	–	7	7F01-D7	7F01-D729	–	–	–	7	–	–	501F	01 107 0 01 0F8 1	–
K73	P8	D1-15	7A-EC	7D-FF	7A-68	7D-A8	7F01-08	7F01-08F6	7A-6896	7A-EC12	P8	7F01-28	–	7F01-28D6	–	8	7F01-D8	7F01-D826	–	–	–	8	–	–	5004	01 108 0 01 0F7 1	–
K74	P9	–	7A-B1	7D-60	7A-69	7D-A9	7F01-09	7F01-09F7	7A-6997	7A-B14F	P9	7F01-29	–	7F01-29D7	–	9	7F01-D9	7F01-D927	–	–	–	9	–	–	5005	01 109 0 01 0F6 1	–
K75	P0	–	7A-B2	7D-61	7A-60	7D-A0	7F01-0A	7F01-0AF4	7A-609E	7A-B24C	P10	7F01-2A	–	7F01-2AD4	–	10	7F01-DA	7F01-DA24	–	–	–	0/10	–	–	500C	01 10A 0 01 0F5 1	–
K76	–	–	–	–	–	–	7F01-0B	7F01-0BF5	–	–	–	7F01-2B	–	7F01-2BD5	–	11	7F01-DB	7F01-DB25	–	–	–	_ /_ _ ,11	–	–	5006	01 135 0 01 0CA 1	–
K77	P. ENTER	–	7A-B3	7D-62	7A-BF	7D-3F	7F01-0C	7F01-0CF2	7A-BF41	7A-B34D	P. ENTER	7F01-2C	–	7F01-2CD2	–	12	7F01-DC	7F01-DC22	–	–	–	enter/12	–	–	5006	01 10C 0 01 0F3 1	–
K78	TV- INPUT	(TV INPUT)									TV- INPUT	(TV INPUT)				TV- INPUT	(TV INPUT)		TV- INPUT	(TV INPUT)		TV- INPUT	D1D6	D176	5009	01 113 0 01 0EC 1	–
K79	TV- VOL (+)	(TV VOL +)									TV- VOL (+)	(TV VOL +)				TV- VOL (+)	(TV VOL +)		TV- VOL (+)	(TV VOL +)		TV- VOL (+)	–	–	5012	01 114 0 01 0EB 1	–
K80	TV- CH (+)	(TV CH +)									TV- CH (+)	(TV CH +)				TV- CH (+)	(TV CH +)		TV- CH (+)	(TV CH +)		TV- CH (+)	–	–	5019	01 111 0 01 0EE 1	–
K81	TV- ⏻	(TV- ⏻)									TV- ⏻	(TV- ⏻)				TV- ⏻	(TV- ⏻)		TV- ⏻	(TV- ⏻)		TV- ⏻	D1C2	D162	5017	01 116 0 01 0E9 1	F041
K82	TV- MUTE	(TV MUTE)									TV- MUTE	(TV MUTE)				TV- MUTE	(TV MUTE)		TV- MUTE	(TV MUTE)		TV- MUTE	–	–	500B	01 117 0 01 0E8 1	–
K83	TV- VOL (-)	(TV VOL -)									TV- VOL (-)	(TV VOL -)				TV- VOL (-)	(TV VOL -)		TV- VOL (-)	(TV VOL -)		TV- VOL (-)	–	–	5015	01 115 0 01 0EA 1	–
K84	TV- CH (-)	(TV CH -)									TV- CH (-)	(TV CH -)				TV- CH (-)	(TV CH -)		TV- CH (-)	(TV CH -)		TV- CH (-)	–	–	5018	01 112 0 01 0ED 1	–

■ ADVANCED SETUP

- **U model**

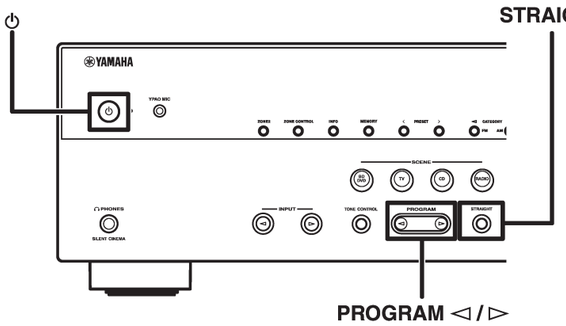
The Advanced Setup menu can be used for unit initialization and other useful extended functions. The Advanced Setup menu can be operated as follows.

Displaying/Setting the Advanced Setup menu

1 Switch this unit to the standby mode.

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

Release STRAIGHT when “ADVANCED SETUP” is displayed on the front panel display.
After approximately a few 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.

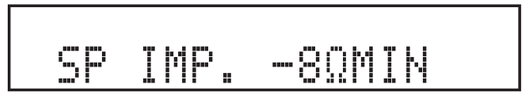
SP IMP.	Sets the impedance of speakers.
REMOTE ID	Changes the remote control ID of a receiver.
SR PIN	Resets the parental lock code for the SIRIUS Satellite Radio tuner.
TV FORMAT	Specifies the TV’s color encoding format.
MON.CHK	Removes the up-scaling limitation on HDMI video output.
INIT	Initializes various settings for this unit.

4 Press STRAIGHT repeatedly to select the value you want 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.

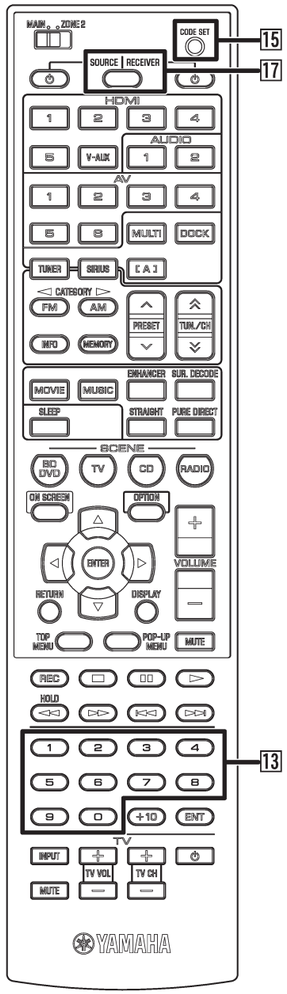
Setting the impedance of speakers



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

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

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



13 **Numeric keys**
15 **CODE SET**
17 **SOURCE/RECEIVER**

Avoiding crossing remote control signals when using multiple Yamaha receivers

```
REMOTE ID -ID1
```

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.

Resetting the SIRIUS Satellite Radio™ parental lock code

```
SR PIN -CANCEL
```

Reset the SIRIUS Satellite Radio parental lock code to the factory default setting.

RESET	Resets the code to the factory default setting.
CANCEL **(Default)**	Cancels resetting of the parental lock code.

■ 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 15CODE SET on the remote control using a pointed object such as the tip of a ballpoint pen.

2 Press 17SOURCE/RECEIVER on the remote control.

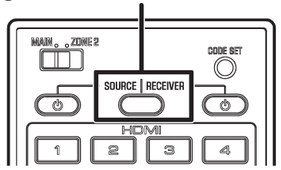
3 Enter the desired remote control ID code.

To switch to ID1:
Enter “5019” using 13**Numeric keys**.

To switch to ID2:
Enter “5020” using 13**Numeric keys**.

Once the remote control code is registered successfully 17**SOURCE/RECEIVER** 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 .

Changing TV format



Change the color encoding format to PAL or NTSC (default), to match the format used by the TV connected via the HDMI OUT or VIDEO (MONITOR OUT) jack.

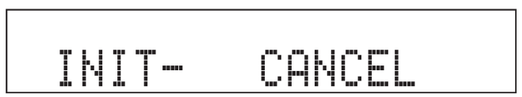
Removing HDMI video output up-scaling limits



Removes the up-scaling limitation on video resolution when this unit and a TV are connected via HDMI jacks.
If a resolution supported by the monitor cannot be detected when configuring the up-scaling settings, this setting will remove the output limitation.

YES **(Default)**	Video output signals of a resolution not supported by the TV will not be transmitted.
SKIP	This unit ignores the TV's support capability and transmits input video signals to the TV.

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 programs.
VIDEO	Resets video conversion settings (resolution/aspect ratio) in the Setup menu.
ALL	Resets this unit to default factory settings.
CANCEL **(Default)**	Does not initialize.

- **C, R, T, K, A, B, G, f, L models**

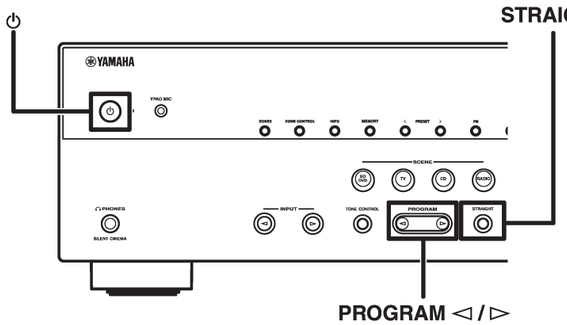
The Advanced Setup menu can be used for unit initialization and other useful extended functions. The Advanced Setup menu can be operated as follows.

Displaying/Setting the Advanced Setup menu

1 Switch this unit to the standby mode.

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

Release STRAIGHT when “ADVANCED SETUP” is displayed on the front panel display.
After approximately a few 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.

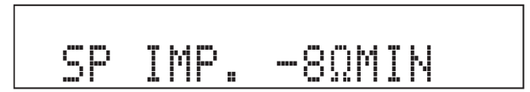
SP IMP.	Sets the impedance of speakers.
REMOTE ID	Changes the remote control ID of a receiver.
TV FORMAT	Specifies the TV’s color encoding format.
MON.CHK	Removes the up-scaling limitation on HDMI video output.
TU 💡**1**	Selects one of the following FM/AM frequency steps.
INIT	Initializes various settings for this unit.

4 Press STRAIGHT repeatedly to select the value you want 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.

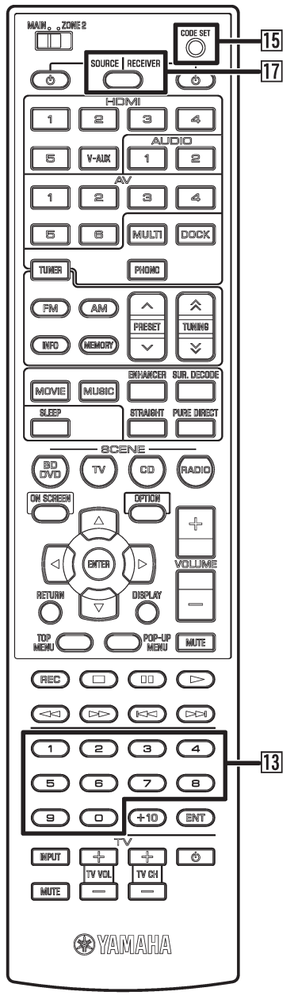
Setting the impedance of speakers



Changes the unit settings depending on the impedance of the speakers connected. 💡**2**

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

💡**1 :** Asia and General models only.
💡**2 :** For detailed procedures of speaker impedance settings, refer to “Changing speaker impedance”.



13 **Numeric keys**
15 **CODE SET**
17 **SOURCE/RECEIVER**

Avoiding crossing remote control signals when using multiple Yamaha receivers

```
REMOTE ID -ID1
```

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.

■ 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 15CODE SET on the remote control using a pointed object such as the tip of a ballpoint pen.

2 Press 17SOURCE/RECEIVER on the remote control.

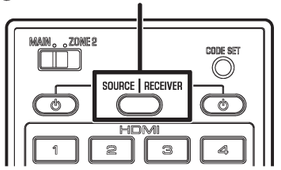
3 Enter the desired remote control ID code.

To switch to ID1:
Enter “5019” using 13**Numeric keys**.

To switch to ID2:
Enter “5020” using 13**Numeric keys**.

Once the remote control code is registered successfully 17**SOURCE/RECEIVER** 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.

Changing TV format

```
TV FORMAT-NTSC
```

Change the color encoding format of OSD to PAL or NTSC (default), to match the format used by the TV connected via the HDMI OUT or VIDEO (MONITOR OUT) jack.

Removing HDMI video output up-scaling limits

```
MON.CHK -  YES
```

Removes the up-scaling limitation on video resolution when this unit and a TV are connected via HDMI jacks. If a resolution supported by the monitor cannot be detected when configuring the up-scaling settings, this setting will remove the output limitation.

YES **(Default)**	Video output signals of a resolution not supported by the TV will not be transmitted.
SKIP	This unit ignores the TV’s support capability and transmits input video signals to the TV.

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

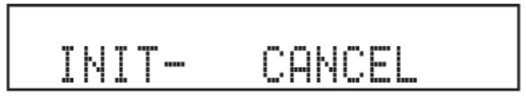


You can select one of the following FM/AM frequency steps: ☛1

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".

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 programs.
VIDEO	Resets video conversion settings (resolution/aspect ratio) in the Setup menu.
ALL	Resets this unit to default factory settings.
CANCEL **(Default)**	Does not initialize.

RX-V667/HTR-6063/ RX-A700

YAMAHA