

TA-DL100

SERVICE MANUAL

*US Model
Canadian Model*



SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8 ohm loads both channels driven, from 20 – 20,000 Hz; rated 40 watts per channel minimum RMS power, with no more than 0.1% total harmonic distortion from 250 milliwatts to rated output.

Converter section

D/A converter sampling
frequency
D/A conversion

44.1 kHz
8 fs 16 bit

General

Power output

40 W + 40 W
(8 ohms 20 Hz – 20 kHz)

Total harmonic distortion

Less than 0.08%

Residual noise

Less than –50 dBs

Tone controls

(8 ohms, network A)
Bass: ± 8 dB (100 Hz)
Treble: ± 8 dB (10 kHz)

Sensitivity (TV/AUX)

150 mV

Impedance (TV/AUX)

50 kilohms

Power requirements

120 V AC, 60 Hz

Power consumption

105 watts

Dimensions

430 × 110 × 265 mm
(17 × 4 3/8 × 10 1/2 in.)

Weight

5.2 kg (11 lb 8 oz)

Supplied Accessories

F-type connector (2)

Mini DIN cable (male/male) (1) (5 m/16 ft. 3 in.)

Accessories Not Supplied

Intelligent remote commander RM-P1

Wireless remote control receiver RMR-3030K

Mini-DIN 6-pin cable (male/male) RK-MD3035 (5 m),
RK-MD3030 (10 m)

Connector wall unit (coax/coax) PC-3030
(DIN/DIN)

Design and specifications subject to change without notice.

DIGITAL LINK™ DECODER AMPLIFIER
SONY®



SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

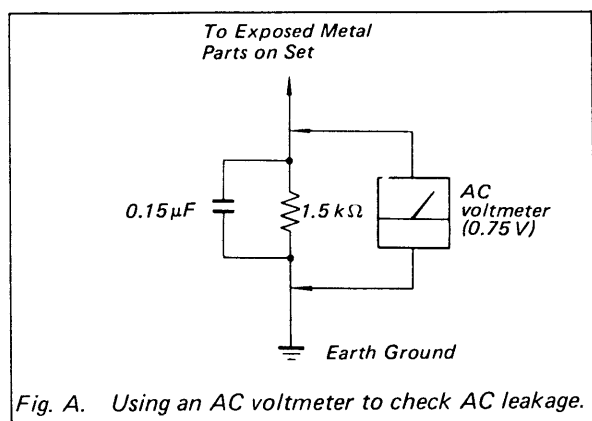


Fig. A. Using an AC voltmeter to check AC leakage.

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SECTION 1
GENERAL

This section is extracted from instruction manual.

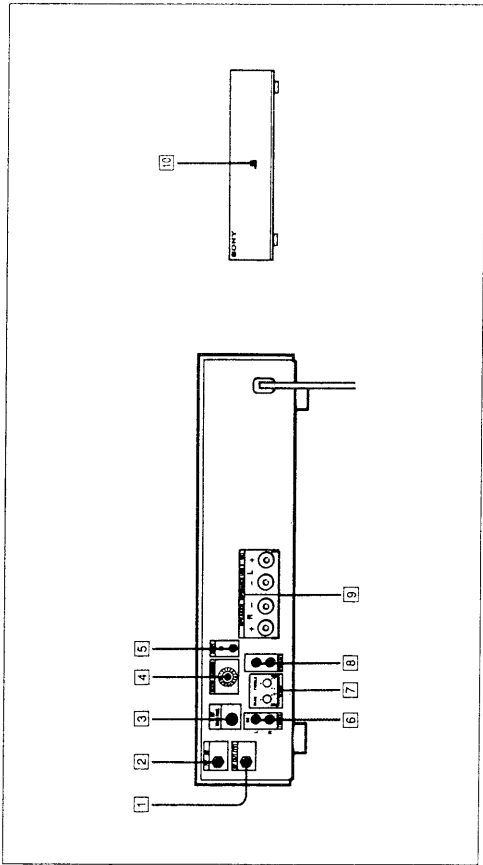
Optional Connection

Parts Identification

Digital Link™ Decoder Amplifier, TA-DL100

TA-DL100, rear panel

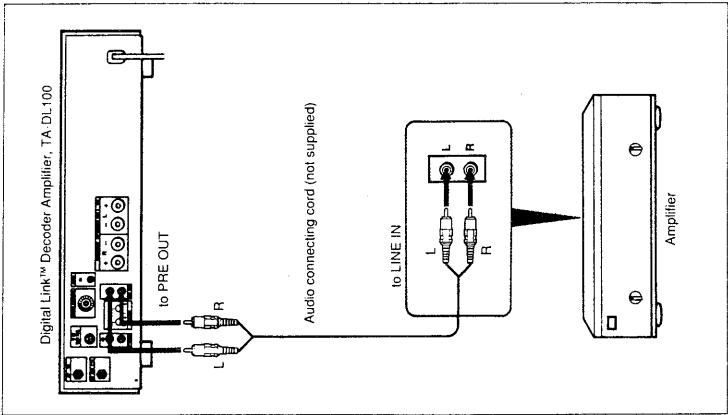
TA-DL100, front panel



- [1] **RF OUT (TV) jack**
To connect with the television set
- [2] **RF IN jack**
To connect with the signal combiner
- [3] **TO DST TOUCH PANEL jack**
To connect with the Digital Link™ Touch Panel
- [4] **ROOM NUMBER identification switch**
To allocate an identification number to each digital link room
- [5] **RMR IN jack**
To connect with the wireless remote control receiver
- [6] **TV/AUX IN jacks**
To connect with the television set or audio equipment such as a CD player or a tape deck
- [7] **TONE control dials**
To control the bass and treble level
- [8] **PRE OUT jacks**
To connect with another amplifier
- [9] **SPEAKER jacks**
To connect with speakers
- [10] **Power indicator**
Lights when power is supplied to the unit.

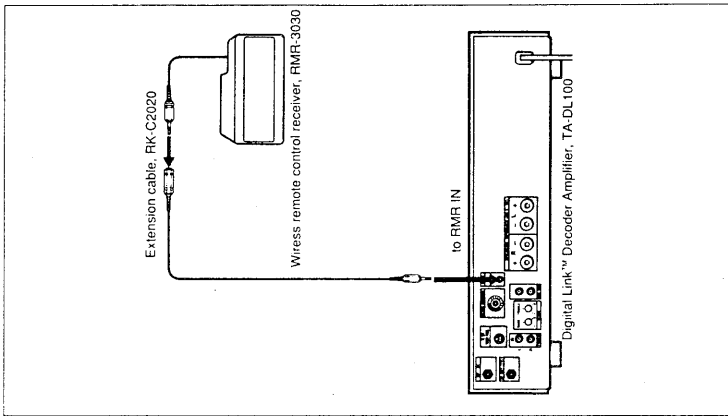
To Connect with Another Amplifier

You can connect this amplifier with another power amplifier to supply more power or signal processing. The diagram below shows how to connect another amplifier.



To Connect with a Wireless Remote Control Receiver

By connecting this digital link room kit with a wireless remote control receiver (RMR-3030K, not supplied), you can operate the system with a remote commander even if you have installed the digital link touch panel out of sight or in such a way as to be hidden from view. The diagram below shows how to connect the remote control receiver with the amplifier.



Overview of the Digital Signal Transfer™ (DST) System

Understanding the Digital Signal Transfer™ (DST) System

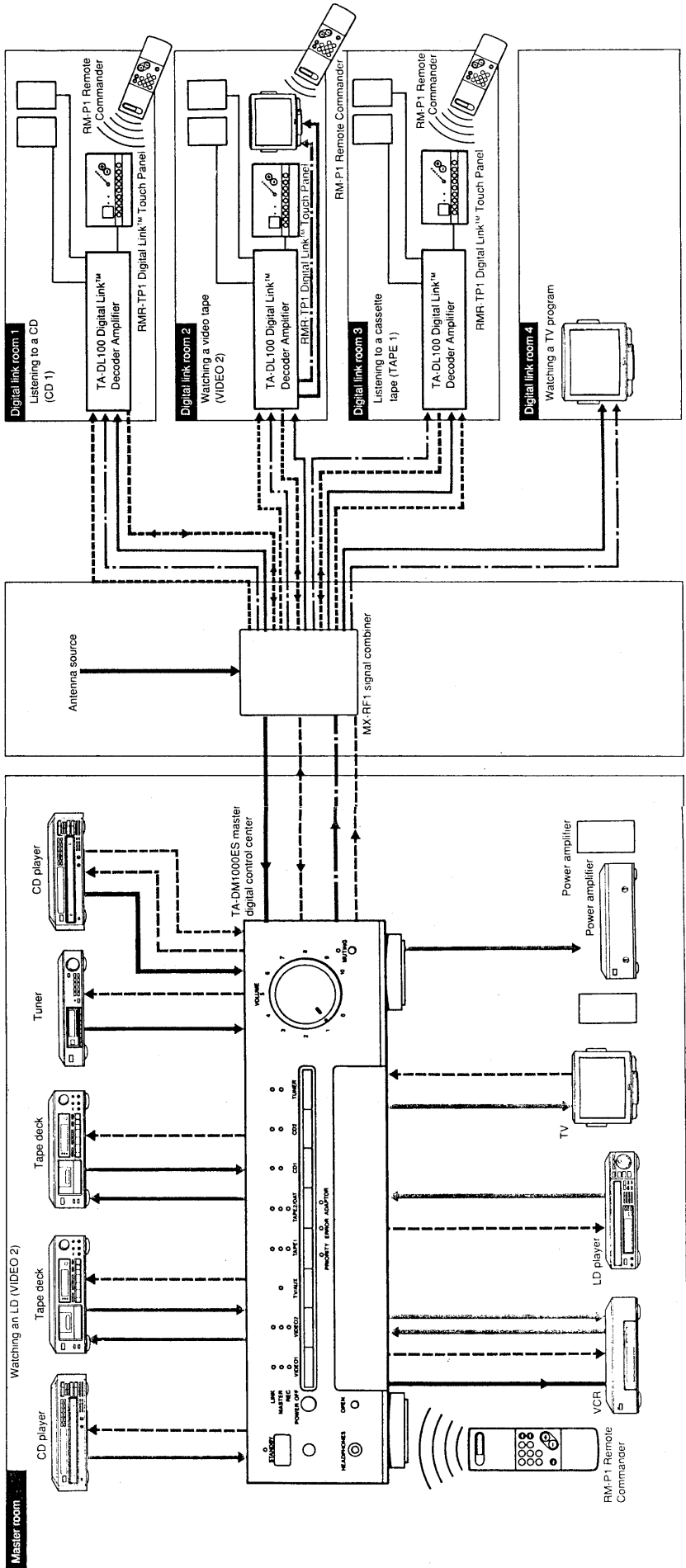
The DST transmits up to 3 digital audio signals, 1 analog audio video signal and remote control signals through a 75-ohm coaxial cable. This system consists of the following equipment:

- Master digital control center: transmits audio, video and remote control signals.
- Digital Link™ Decoder Amplifier: decodes audio and remote control signals transmitted from the master digital control center and transmits a remote control signal.

Transmitting audio signals digitally assures high quality sound, without experiencing the type of degradation, distortion or signal loss associated with conventional hardware systems.

The following configuration shows the signal transmission in the DST system.

75-ohm coaxial cable is a common shielded antenna wire and used as medium carrier.



SECTION 2

MICROCOMPUTER SPECIFICATIONS

IC701 M50951-112SP

Pin No.	Pin Name	I/O	Description
1	SEL	O	[H] : AUX, TV INPUT SELECT [L] : DAC OUTPUT SIGNAL SELECT
2	ATT20	O	[H] : 20dB MUTE [L] : MUTE CANCEL
3	TXD	O	Outputting the serial signal to RMR-TP1.
4	RXD	I	Inputting the serial signal from RMR-TP1.
5	TOPT	I	SERIAL DATA write REQ signal sent to CXD2902.
6	SIRCS	I	Input the SIRCS signal.
7	CLK2	O	Outputting the data transfer CLK for writing in the CXD2902.
8	SOUT2	O	Outputting the serial data writing in the CXD2902.
9	P. D.	I	Pull Down
10	RES	I	Inputting the power ramp up signal. [H] : AC ON [L] : AC OFF
11	CLK1	O	Outputting the CLK for writing from CXD2902.
12	P. D.	I	Pull Down
13	SIN1	I	Inputting the serial data from CXD2902.
14	ERR	I	Inputting the ERR signal from CXD2902.
15	PSW	I	Pull Up, Inputting the power SW. (Not used)
16	GFS	I	When set for "H" for more than 20msec continuously, muting is set. When switched to "L", muting is canceled.
17	EMPH	I	Input the emphasis.
18	REQ	I	Inputting the 1-byte data transfer REQ to CXD2902 is input.
19	TOPR	I	Inputting the serial data read REQ from CXD2902.
20	CNVss	I	GND
21	RESET	I	Input the MICON RESET. [L] : REST [H] : CANCEL
22	Xin	I	Input the SYSTEM CLOCK (8MHz)
23	Xout	O	Output the SYSTEM CLOCK.
24	Xcin	I	Pull Down
25	Xcout	⊙	Not connect
26	Vss	I	GND
27	ϕ	⊙	TIMING OUTPUT (Not used)
28	ROOM3	I	Inputting the room number.
29	ROOM2	I	Inputting the room number.
30	ROOM1	I	Inputting the room number.
31	ROOM0	I	Inputting the room number.
32	Vp	I	GND
33	MUTE	O	MUTING SIGANL. [H] : ON [L] : OFF
34	XLT	O	Serial set signal.
35	CLK	O	Serial set signal.
36	DATA	O	Serial set signal.

Pin No.	Pin Name	I/O	Description
37	NC	⓪	Not used.
38	LATCH	O	Serial set signal.
39	SHIFT	O	Serial set signal.
40	ATT	O	Serial set signal.
41	NC	O	Not used.
42	SLED	O	Outputting the SIRCS received LED display.
43	NC	⓪	Not used.
44	NC	⓪	Not used.
45	XRST	O	Signal processor IC, RESET output. [H] : RESET CANCEL [L] : RESET
46	CE	O	Serial set signal.
47	CLKV	O	Serial set signal.
48	DT	O	Serial set signal.
49	PSK2	O	Channel select signal.
50	PSK1	O	Channel select signal.
51	RY	O	Power relay ON/OFF. [H] : ON [L] : OFF
52	Vcc	I	+5V Input

IC702 CXD-2902

Pin No.	Pin Name	I/O	Description
1	TDMI	I	Must be connected with the TDMG output (2 pin). This terminal sets SDAT output (64 bits) to "active" only at each room no. timing.
2	TDMG	O	Switches to "L" (active) for 1/16 of 100msec, only at the timing assigned to each room no.
3	EDAT	I	Switches to "active" only when SP (37 pin) is set for "L". As this terminal is not in use during normal operation, it should be fixed to "L" or "H". When NR is input to this terminal with SP (37 pin) set for "H", the NR is bi-phase modulated. (Input timing must be synchronized with clocks for BCK1 (10 pin) and BCK2 (7 pin).)
4	B1DT	O	Not used.
5	SYS1	O	R1 output of the read counter for the RAM. This terminal is not normally used. (But used for monitor.)
6	PBK2	O	2BCK output among clocks reproduced from the bi-phased data which is input from BIPH (60 pin). This terminal is not normally used. (But used for monitor.)
7	BCK2	I	Must be connected with PBK2 (6 pin) for the reproduction clock for creating the W pulse for the RAM.
8	SYCO	O	Outputs the sync pattern for bi-phase remodulation, But the sync is not used as it is output.
9	PBCK	O	Outputs reproduction clock BCK which was remodulated from the data input from BIPH (60 pin).
10	BCK1	I	Normally, this is connected with PBCK (9 pin). Generates the basic CLK for data read and write.  Phase relationship between the data and BCK.
11	BCK0	O	4BCK which is 4-times the reproduction CLK is remodulated with bi-phase, 40,96kHz. Normally not in use.
12	BCK3	O	1/16×1/2 of 10,48576MHz of master. 32BCK=327,68kHz. Normally not is use.
13	WIN	I	Used for inputting W pulse for the built-in RAM. Switches to the input enable state only when SP (37 pin) is set for "H". This should be set for either "L" or "H" during normal use.
14	T1	I	Set for "L" during normal use. This enables to skip the division ratio of the master by 1/16 unit. This is mainly used for LSI test.
15	T2		
16	GND		
17	MTST	I	Set for "L" during normal use. When this is switched to "L", the RAM (1×1k×2) can be used as (4×256×2). This is mainly use for LSI test.
18	XI	I	Crystal oscillation pin. Normally oscillates at 10,48576MHz, 1MΩ, 22PF×2.
19	XO	O	
20	S102	O	Indicates the SYNC position for the top 4 bits of a 1024 bit unit. Normally used for CRC PR. Same as above. (Both E/D is normally connected with SYNC (21 pin). 1024×1.
21	SYNC	I	Indicates the top of 1024×1 block. Normally connects with 20 pin (S102).

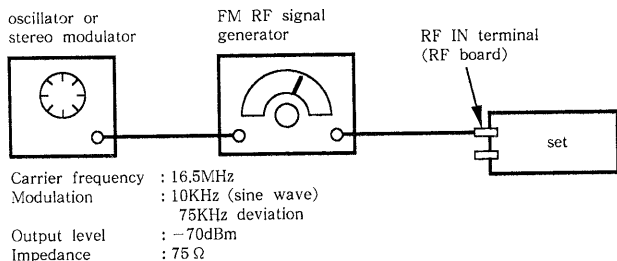
Pin No.	Pin Name	I/O	Description
22	CRC1	O	Outputs clocks which latch errors in the 64×16 blockes, Normally connects with ERCK (25 pin).
23	ERCK	I	ERCK(23 pin)accept input independently from external devices only when SP(37 pin) is set for "H". This terminal is connected with CRC1 during normal use.
24	CLR9	O	
25	CL11		
26	D0RA	I	Connect to the select SW (HEX) of the corresponding room no. Normally pulled up with 100kΩ. The input is inverted and then decoded, 26 pin is assigned for the LSB side.
27	D1RB		
28	D2RC		
29	RD		
30	ED	I	Set for "L" during encoding and set to "H" during decoding. (mode switching.)
31	LOAD	I	Test terminal, Fixed to "H" during normal use.
32	Vcc		Power terminal (+5V).
33	EX	I	Expansion terminal and fixed to "L" during normal operation.
34	MS1	I	Expansion terminal and fixed to "L" during normal operation.
35	CWEE	O	Monitor terminal for testing. Open during normal operation.
36	SDIN	I	Test terminal, Fixed to "L" during normal operation.
37	SP	I	Test terminal, Fixed to "L" during normal operation.
38	ABSL	O	Monitor terminal for testing. Open during normal operation. Outputs 100Hz signal.
39	RESET	I	Input the RESET signal for reading the built-in RAM. Normally this terminal is connected with 40 pin.
40	CLERW	O	Output one-cycle signal for writing the built-in RAM. Normally this terminal is connected with 39 pin. Can be used as timing signal for reception microprocessor.
41	CLERE	O	Must be "open" as it is not in use for normal operation.
42	CLR	I	Must be connected with a 43 pin connector during normal use.
43	SYC1	O	Outputs SYNC. Normally connects with 42 pin connector.
44	ERR	O	Error detection of the reception data. Switches to "H" when an error is detected. This is normally connected with the microprocessor.
45	MRCK	I	
46	D	I	Input for the built-in CRC checker. It is normally connected with 47 pin.
47	DOUT	O	Output for the built-in RAM. It is normally a 46 pin connection. Transmits the output to the reception microprocessor.
48	GND	I	GND terminal.
49	SLOE	O	Normally not in use, must be "open".
50	DIN	I	Input 4 bit data for the PBDT which has been released from bi-phase sent from RF. (Input for the built-in RAM terminal)
51	PBDT	O	Used to remodulate and output the bi-phase data.
52	CWEO	O	Normally not in use and set for "open".
53	SUBS	O	Normally not in use and set for "open".
54	REQ	O	Outputs the signal which indicates separation of 8 bytes to the transmission microprocessor. It is connected with the microprocessor.
55	SLO	O	Normally not in use and set for "open".

Pin No.	Pin Name	I/O	Description
56	CK16	I	Outputs 64 clocks to enable the microprocessor to transmit the data. Must be connected with the microprocessor.
57	DT16	I	Must be connected with the transmission microprocessor so that the microprocessor transmits 64 bit data.
58	SOUT	O	Normally not in use and must be set for "open". (This terminal enables to serial monitor of the data input from DT16.)
59	TOP	O	Outputs the 100Hz signal which informs the transmission microprocessor of the top of the data. Must be connected with the microprocessor.
60	BIPH	I	Input terminal which receives the bi-phase signal sent from the RF amp.
61	BIDT	O	Normally not in use. Must be set for "open".
62	SDAT	O	Outputs NR2 which is the data input to DT16 from the transmission microprocessor, then added with CRC.
63	INIT	I	Initializing terminal for testing. Normally it is fixed for "H".
64	Vcc		Power terminal. (+5V)

SECTION 3 ELECTRICAL ADJUSTMENTS

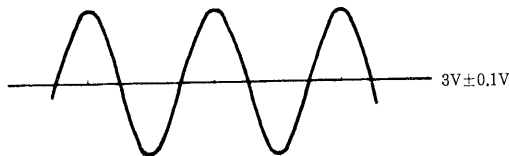
[1] ADJUSTMENT OF REMOTE CONTROL RECEPTION WAVE DETECTION

Setting :

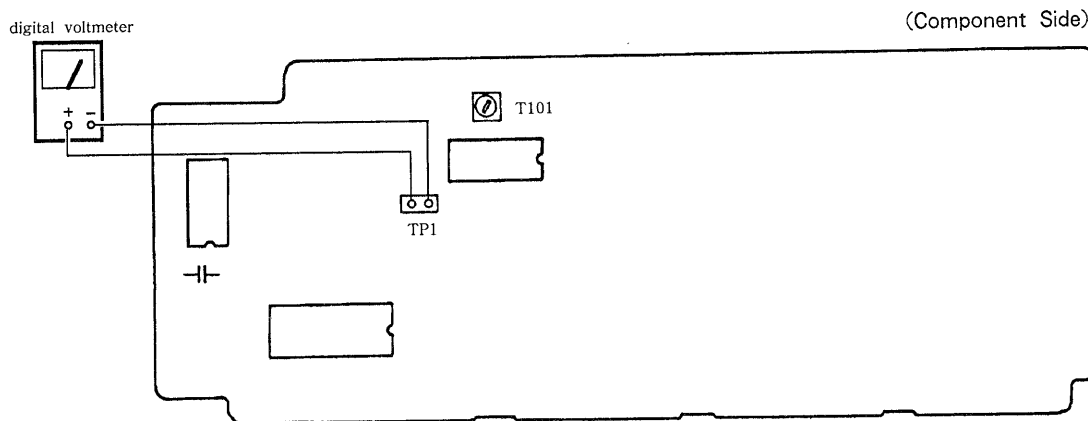


Procedure :

1. Turn the power switch ON (insert the power cord in an AC outlet).
2. Connect the digital voltmeter to TP1.
3. Adjust T101 so that the digital voltmeter reading is $3V \pm 0.1V$.
4. Connect the oscilloscope to TP1 and confirm that there are no waveform abnormalities.



Adjustment Location : RF board



[2] ADJUSTMENT OF CHANNEL SWITCHING CONTROL VOLTAGE

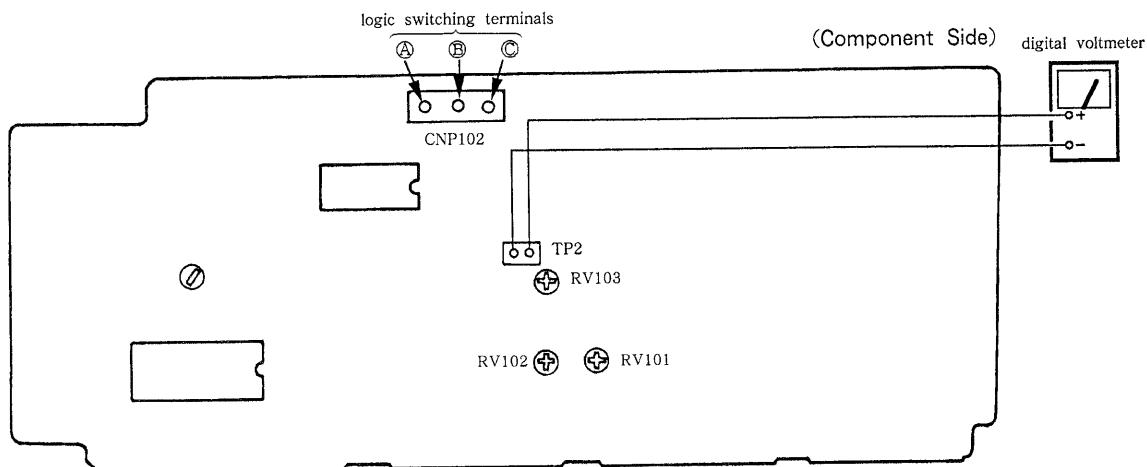
Procedure :

1. Remove the CNP102 connector for switching of P1, P2 logic.
2. Connect the touch panel RMR-TP1 to the set, press the function switch TV/AUX and turn the power ON.
3. Connect the digital voltmeter to TP2.
4. Adjust VR101, RV102 and RV103 so that the logic of terminals P1 and P2 of CNP102 and the voltage display on the digital voltmeter are as shown in the table below.

P1	P2	CNP102 (Adjust point)	Adjustment part	digital voltmeter
L	H	Ⓐ - Ⓒ, Ⓑ - Ⓒ open short	RV103	$2.4V \pm 0.1V$
H	L	Ⓐ - Ⓒ, Ⓑ - Ⓒ short open	RV102	$5.5V \pm 0.1V$
H	H	Ⓐ - Ⓒ, Ⓑ - Ⓒ short short	RV102	$10.0V \pm 0.1V$

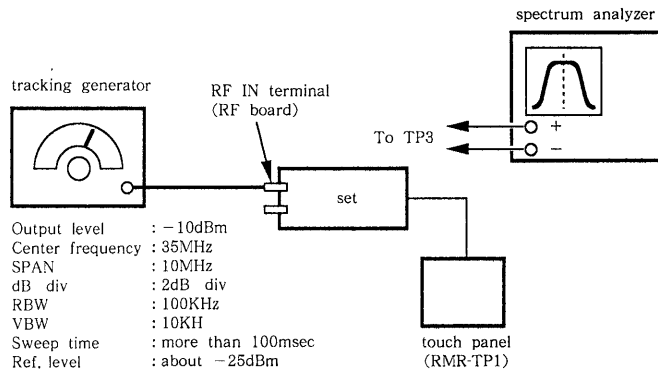
L=0V, H=5V

Adjustment Location : RF board



[3] ADJUSTMENT OF PCM TUNER

Setting :



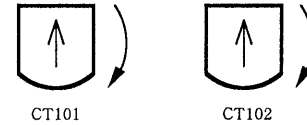
Procedure :

1. Press the function switch TV/AUX on the touch panel (RMR-TP1).
2. Connect the spectrum analyzer to TP3.
3. Use the spectrum analyzer to observe the waveforms at that timer for the logic states of terminal P1 and P2 of CNP102. Adjust L103, L104 and CT101, CT102 to obtain the values shown below.

P1	P2	CNP102 (Adjust point)	Adjustment part	fc (MHz)
L	H	A - C, B - C open short	L103, L104	32.0MHz
H	L	A - C, B - C short open	—	35.0MHz
H	H	A - C, B - C short short	CT101, CT102	38.0MHz

L=0V, H=5V

- (i) First turn CT101 and CT102 clockwise 180 degrees.



- (ii) Adjust to (P1 : L, P2 : H) and turn alternately a little at a time until the center of the waveform crests is 32MHz and the top of the crest is as flat as possible (See Figure 1-1).
- (iii) Adjust to (P1 : H, P2 : H) and turn alternately a little at a time until the center of the waveforms is 38MHz and the top of the crest is as flat as possible (See Figure 1-2).
- (iv) Alternately carry out the adjustments in (ii) and (iii) three or four times.
- (v) Adjust to (P1 : H, P2 : L) and check that the center of the waveform is 35MHz (See Figure 1-3).

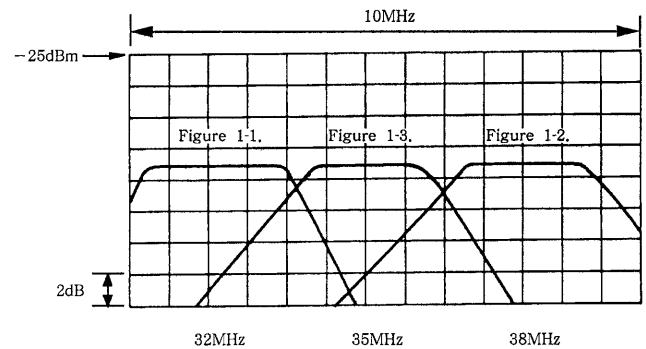
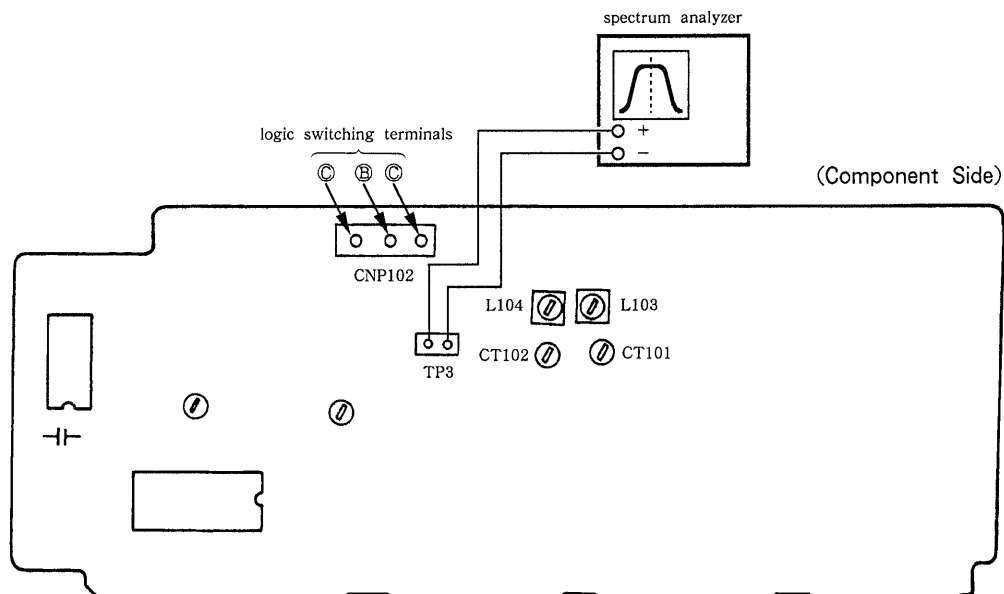


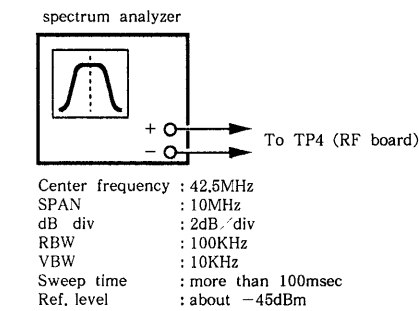
Figure 1.

Adjustment Location : RF Board

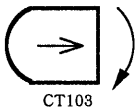


[4] ADJUSTMENT OF PCM TUNER OSC

Setting :



(i) First turn CT103 90 degrees clockwise,



- (ii) Adjust to (P1 : L, P2 : H) and adjust L105 so that it equals $39.5\text{MHz} \pm 100\text{KHz}$.
- (iii) Adjust to (P1 : H, P2 : H) and adjust CT103 so that it equals $45.5\text{MHz} \pm 100\text{KHz}$.
- (iv) Alternately carry out the adjustments in (ii) and (iii) three or four times.
- (V) Adjust to (P1 : H, P2 : L) and confirm that the oscillation frequency is $42.5\text{MHz} \pm 200\text{KHz}$.

Procedure :

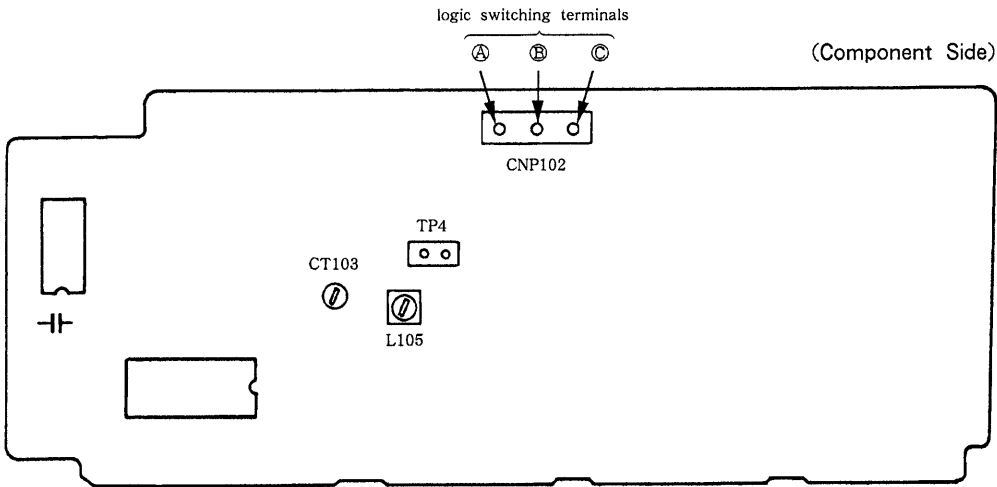
- 1. Connect the spectrum analyzer to TP4.
- 2. Adjust so that the waveforms at that time for the logic states of terminal P1 and P2 of CNP102 are as shown in the table below.

P1	P2	CNP102 (Adjust point)	Adjustment part	f osc (MHz)
L	H	A - C, B - C open short	L105	$39.5 \pm 100\text{KHz}$
H	L	A - C, B - C short open	—	$42.5 \pm 200\text{KHz}$
H	H	A - C, B - C short short	CT103	$45.5 \pm 100\text{KHz}$

L=0V, H=5V

- 3. Re-insert the CNP102 connector.

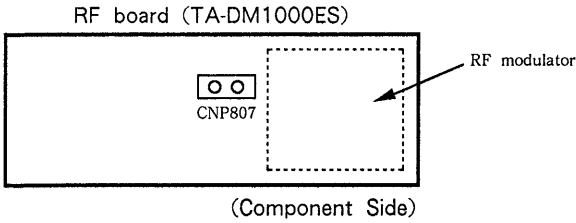
Adjustment Location : RF Board



[5] ADJUSTMENT OF PHASE SHIFT KEYING VCO

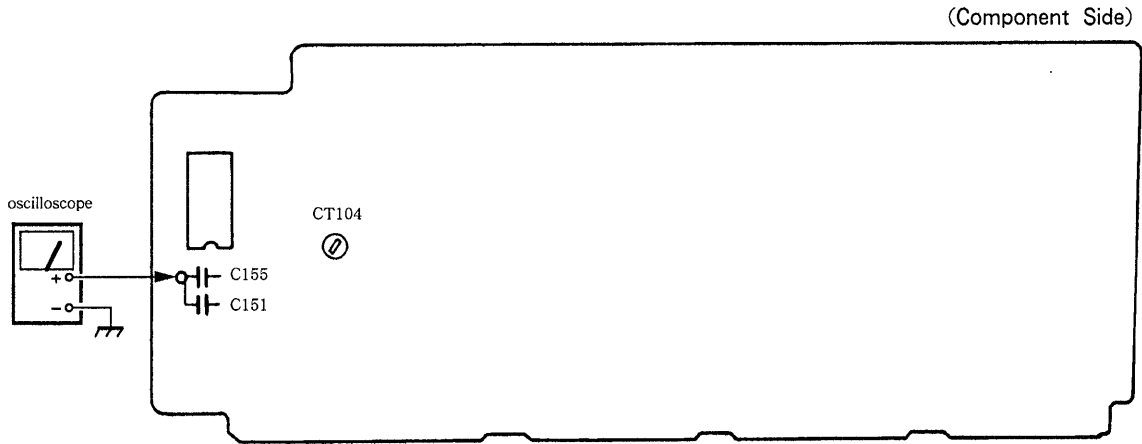
(Cautions)

- 1. Before setting, be sure to remove the CNP807 (2P) connector from the RF board of the TA-DM1000ES and connect it to the RF attenuator. Connecting to the RF attenuator without first removing the CNP807 could cause burn damage to the attenuator.



- 2. The TA-DL100 and TA-DM1000ES have different power sources. Also, the TA-DM1000ES power source can be turned ON and OFF at the source.
- 3. When at all possible, use a coaxial cable of 2 meters or less.

Adjustment Location : RF Board



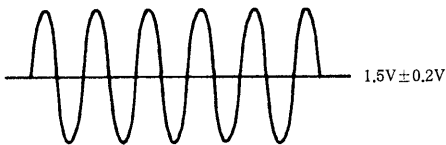
[6] DECODER PLL ADJUSTMENT

Adjustment Location : DECODER board

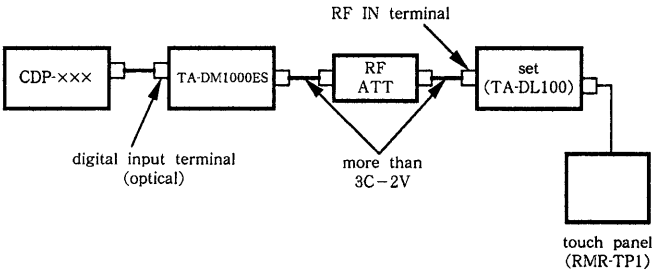
Setting : see [5]

Procedure :

- 1. Connect the oscilloscope to TP201 (being sure to set the probe to $\times 10$).
- 2. Observe the oscilloscope waveforms and adjust L202 so that the center of the waveforms of the oscillation frequency is 1.5V.

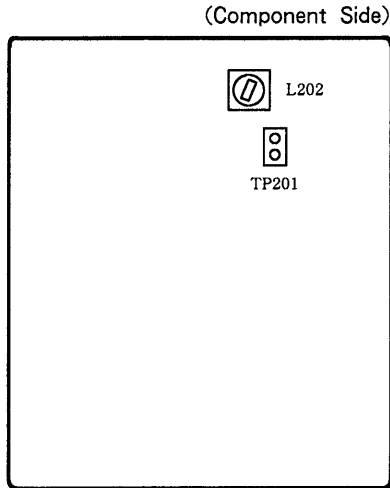


Setting :



Procedure :

- 1. Press the function switch CD1 on the touch panel (RMR-TP1).
- 2. Connect the oscilloscope to the C151 and C155 connections and check the eye pattern.
- 3. Attenuate the RF attenuator 1dB at a time from -30dB to about -40dB and adjust CT104 so that the eye pattern can be seen even with weak input.

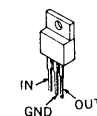


MEMO

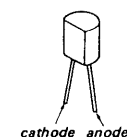
SECTION 4 DIAGRAMS

4-1. SEMICONDUCTOR LEAD LAYOUTS

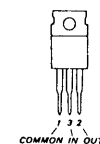
M5F7812L
M5F7808L



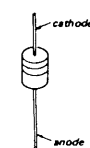
FC52M-5



M5F7912
M5F7905L



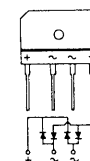
HZS6A3L
UZL-6M2
1SS120
11ES2



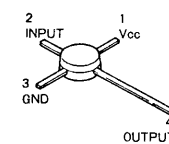
L78MR05



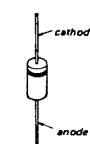
RBA-402



μ PC1651G



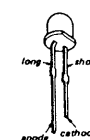
1S1585
10E2



DTA114ES
DTC114ES
2SC2458-YGR
2SC3622A-LK



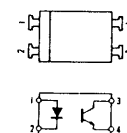
SEL2210S-D



2SC1845-EA



TLP521-1-GR

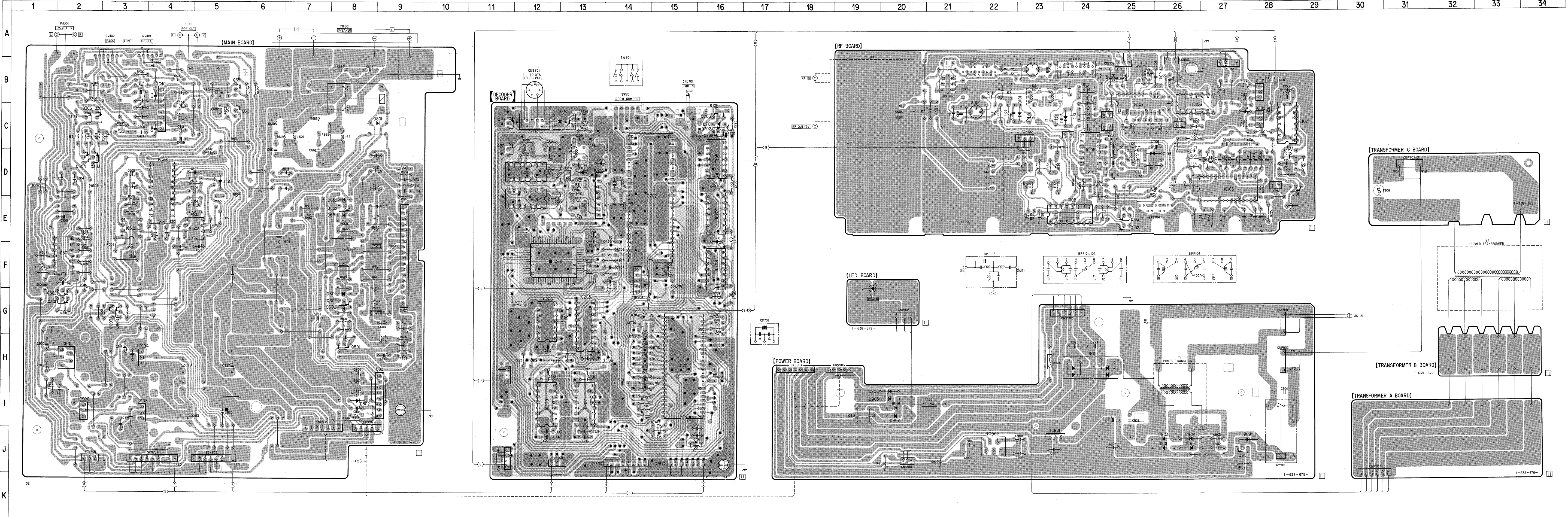


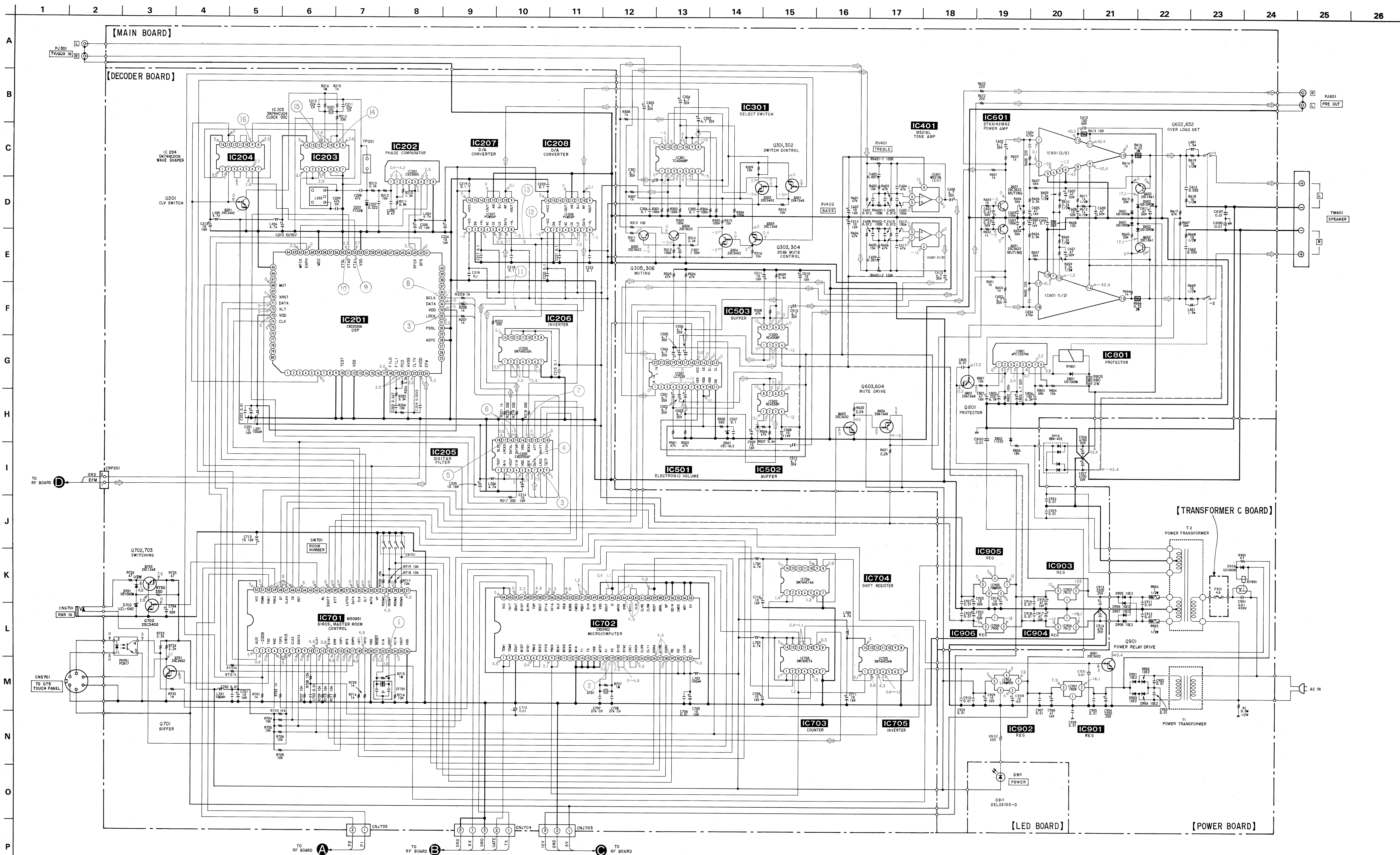
• SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D101	C-23	IC501	D-4
D102	C-24	IC502	E-3
D103	D-25	IC503	E-5
D201	D-13	IC601	F-9
D501	D-5	IC701	H-15
D601	G-8	IC702	D-14
D602	G-8	IC703	F-16
D651	E-8	IC704	E-16
D652	E-8	IC705	D-16
D701	C-16	IC801	I-9
D702	C-16	IC901	J-23
D801	C-9	IC902	J-22
D802	I-8	IC903	I-3
D901	J-26	IC904	H-3
D902	J-26	IC905	H-2
D903	J-26	IC906	I-2
D904	J-26		
D905	I-20	Q101	D-29
D906	I-20	Q102	E-25
D907	I-20	Q103	E-25
		Q201	C-11
		Q301	G-2
D908	I-20		
D909	J-28	Q302	G-2
D910	H-24	Q303	D-2
D911	F-19	Q304	D-2
		Q305	C-2
		Q306	C-2
IC101	B-23		
IC102	C-25	Q601	C-5
IC103	C-26	Q602	G-8
IC104	C-22	Q603	G-3
IC105	D-24	Q604	G-3
		Q651	B-5
IC106	D-27		
IC107	C-28		
IC108	E-24	Q652	E-8
IC109	C-28	Q701	C-11
IC110	B-28	Q702	C-16
		Q703	C-16
IC201	F-12	Q801	H-8
IC202	D-13	Q901	J-27
IC203	D-12		
IC204	E-12		
IC205	G-13		
IC206	G-12		
IC207	I-13		
IC208	I-12		
IC301	F-2		
IC401	C-4		

Note :

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : parts mounted on the conductor side.
- ▨ : Pattern on the side which is seen.
- ▩ : Pattern of the rear side.





Note:

- All capacitors are in μF unless otherwise noted. pF: μF 50V or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}W$ or less unless otherwise specified.
- % : indicates tolerance.
- Δ : internal component.
- $\square$: nonflammable resistor.
- $\square$: fusible resistor.

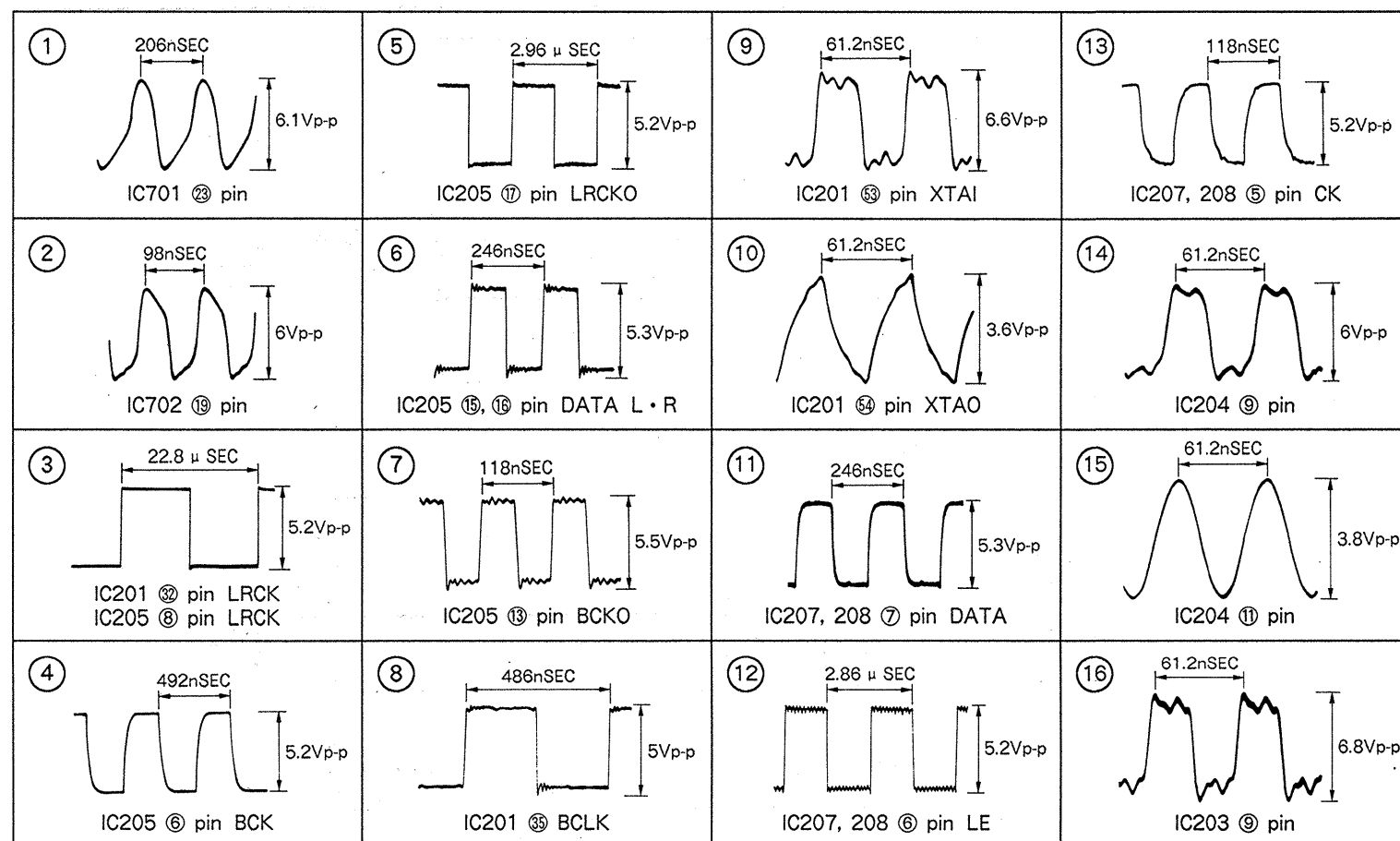
Note:

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

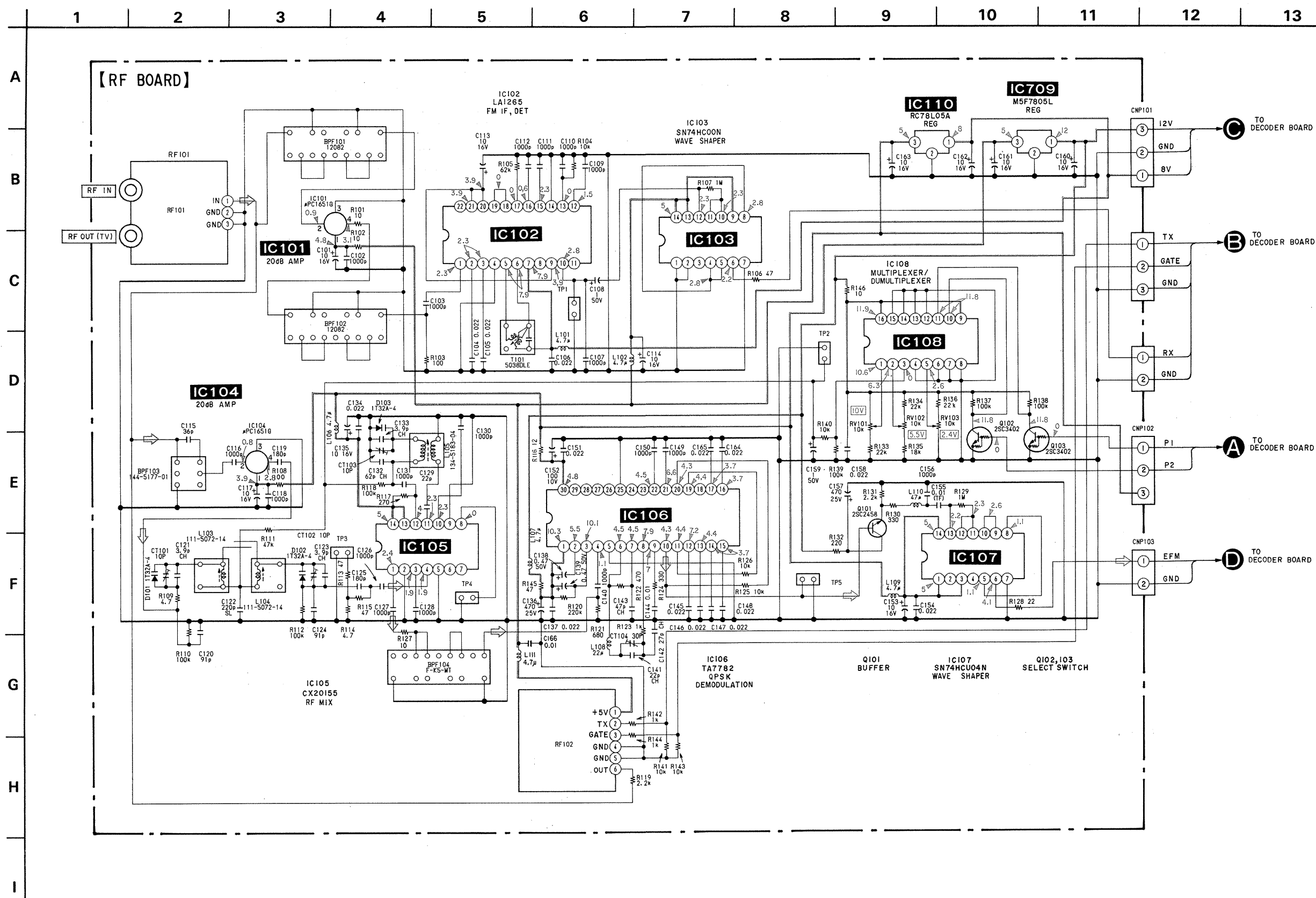
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- $\square$: B+ Line
- $\square$: B- Line
- $\square$: adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- Waveforms are taken with a VOM (input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- $\Rightarrow$: TV/AUX

4.4. WAVEFORMS

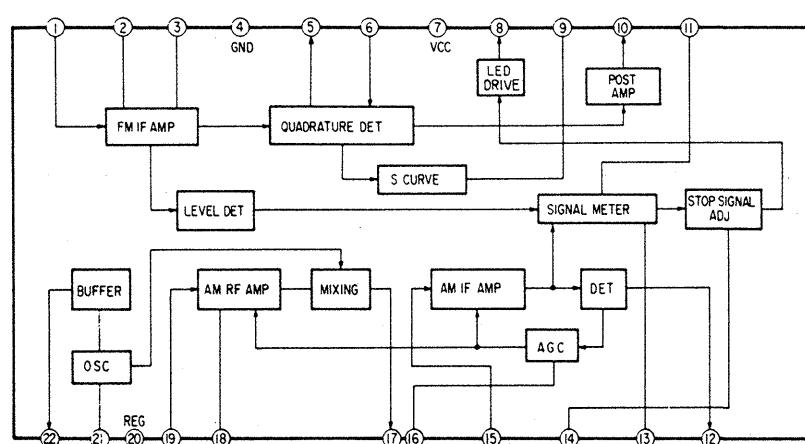


4.5. SCHEMATIC DIAGRAM — RF BOARD —

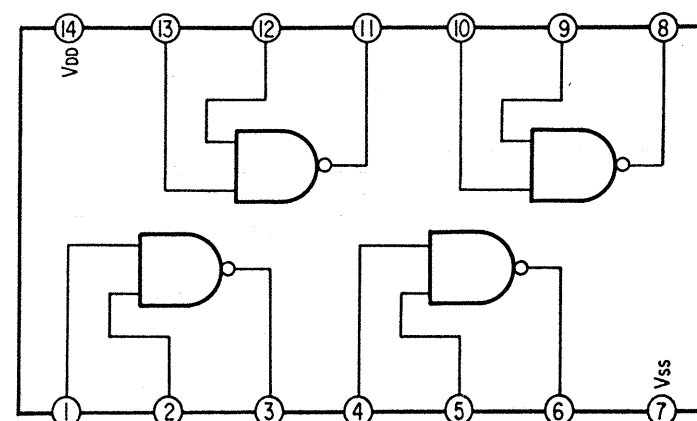


4-6. IC BLOCK DIAGRAMS

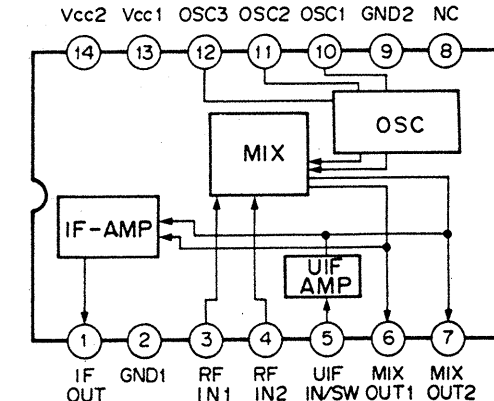
IC102 LA1265



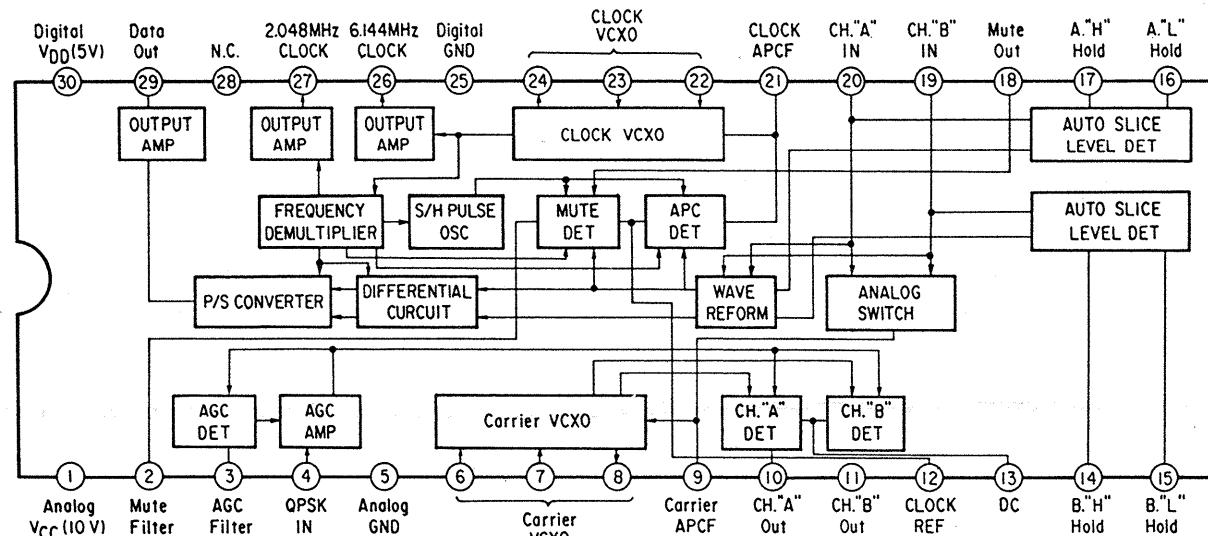
IC103 TC74HC00P



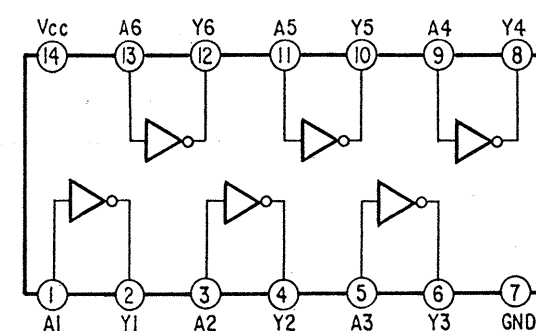
IC105 CXA1125P



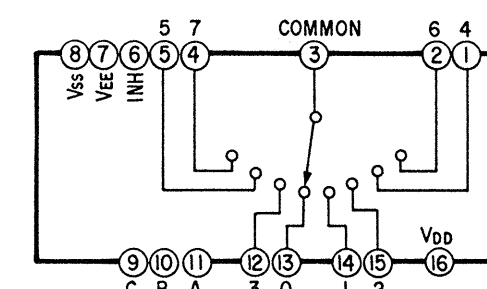
IC106 TA7782N



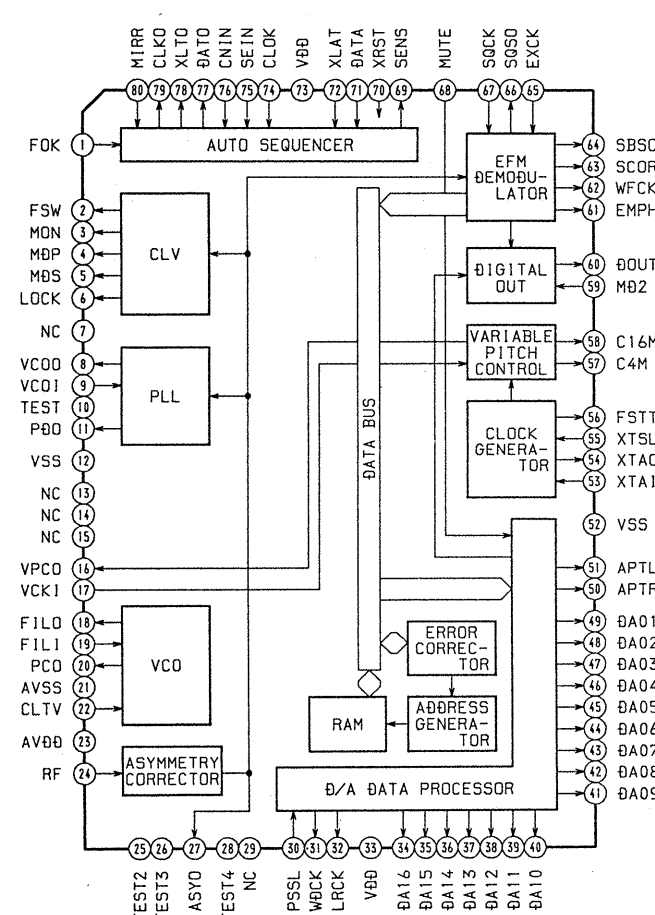
IC107 SN74HCU04N
IC705 SN74HC04N



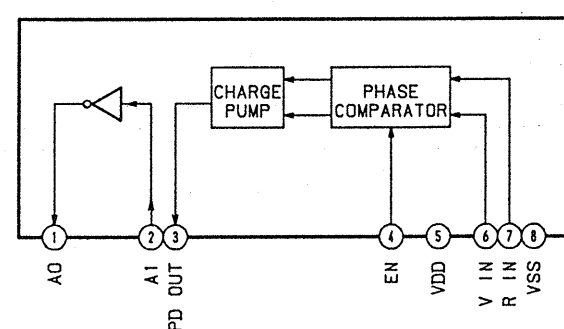
IC108 TC4051BPHB



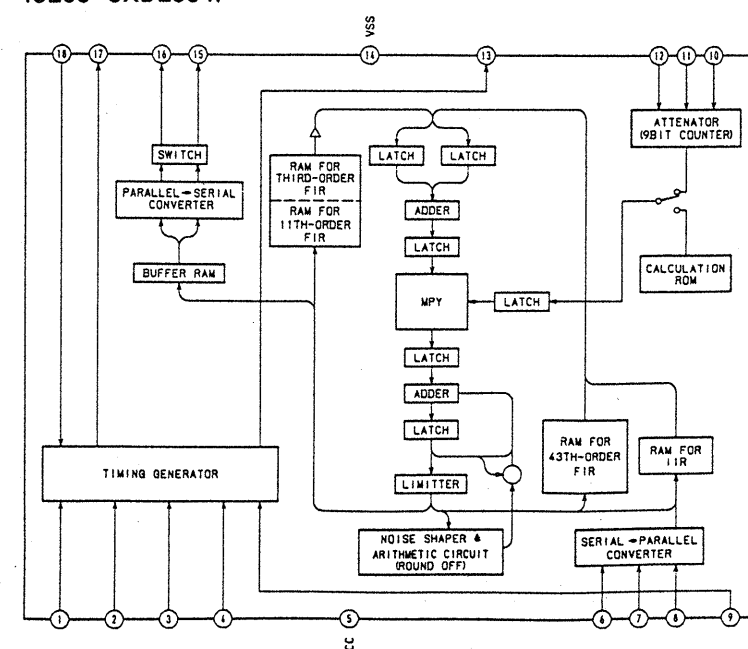
IC201 CXD2500Q



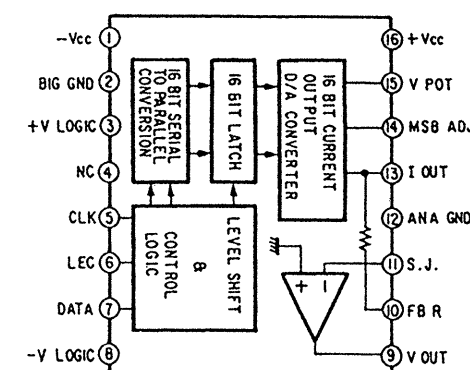
IC202 CX23065



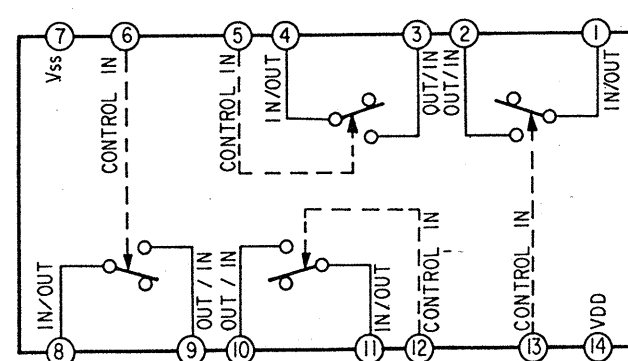
IC205 CXD2554P



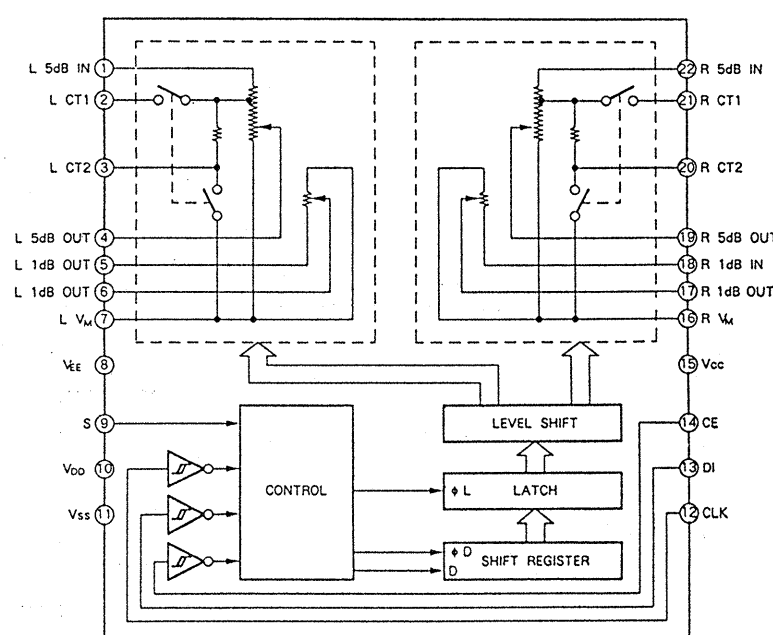
IC207, 208 PCM56P-S



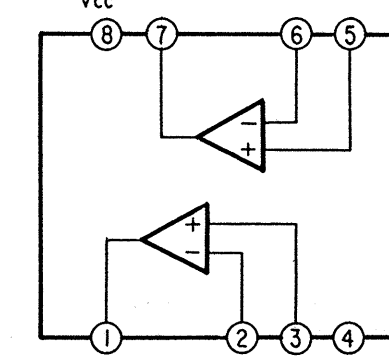
IC301 MC14066BCP



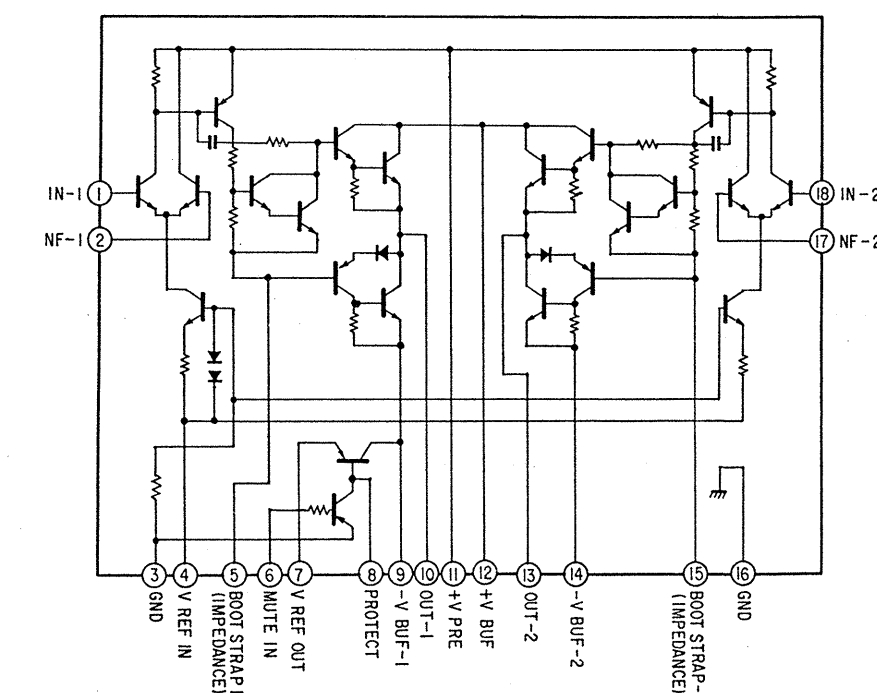
IC501 LC7535



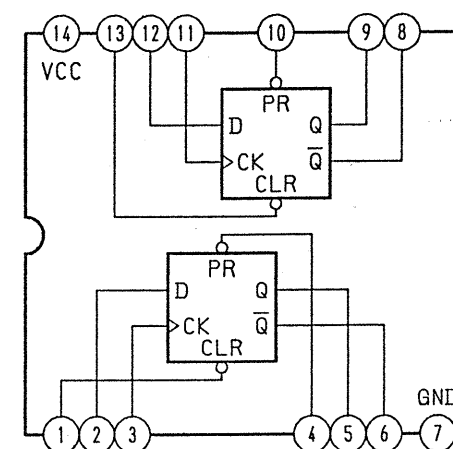
IC502, 503 RC4558P



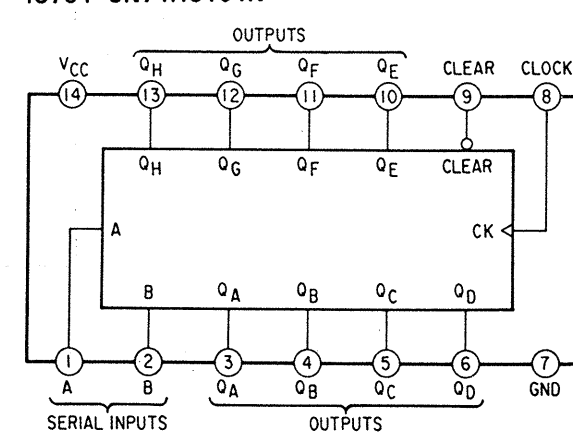
IC601 STK4142MK2



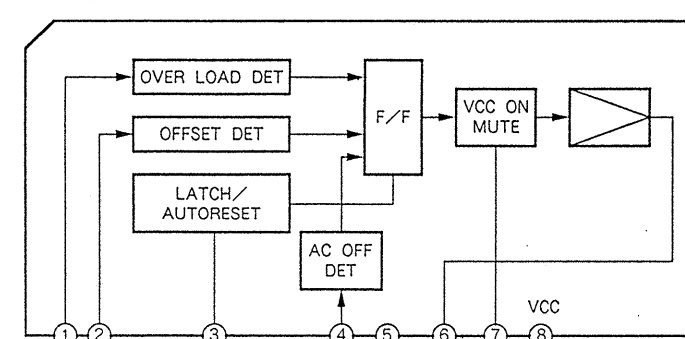
IC703 SN74HC74N



IC704 SN74HC164N



IC801 μ PC1237HA



SECTION 5 EXPLODED VIEW

NOTE:

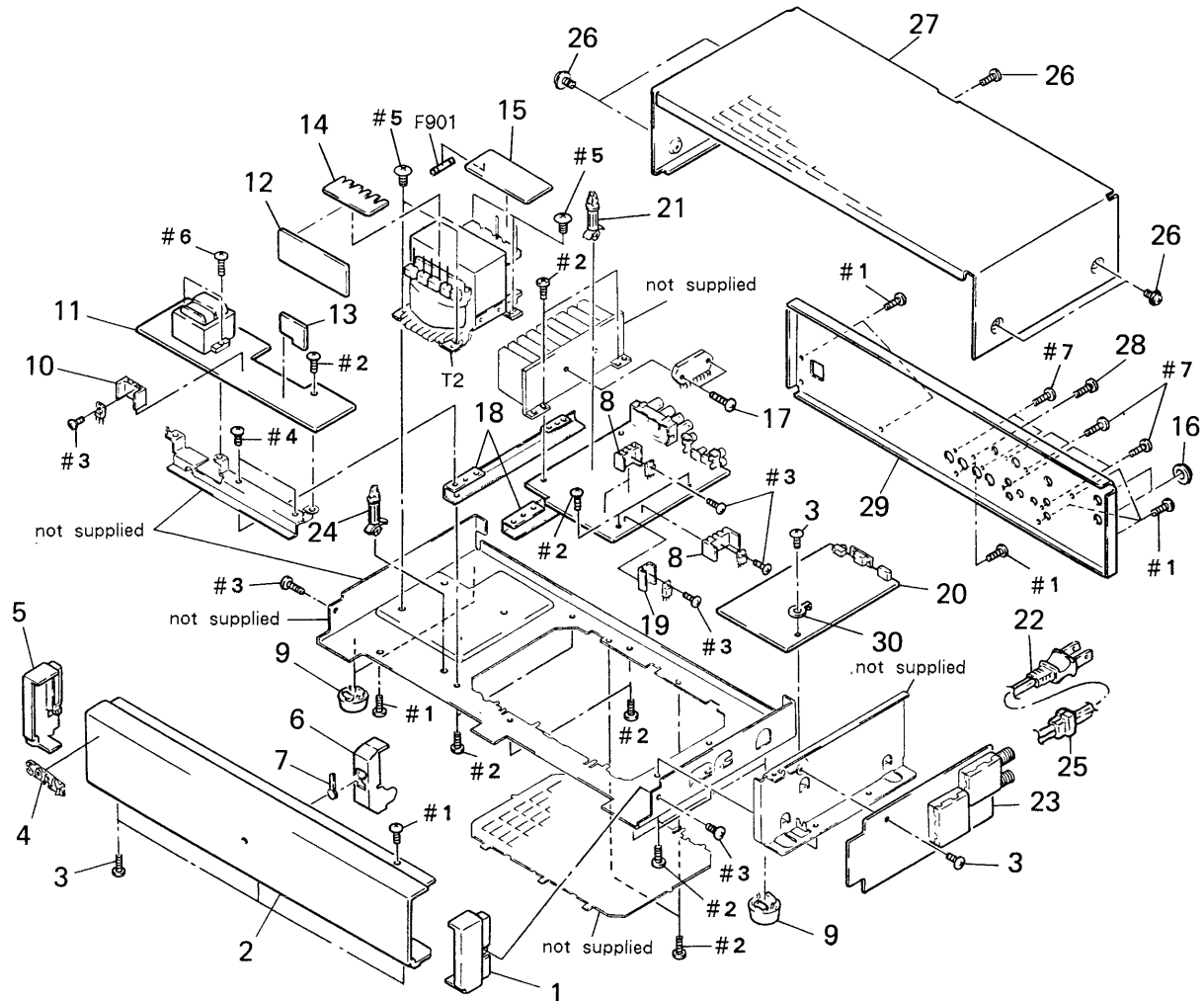
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Color indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE)....(RED)

↑ ↑
Parts color Cabinet's color

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (#mark) list is given in the last of this parts list.

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



Ref. No.	Part No.	Description	Remark
1	4-943-549-01	PANEL (R), SIDE	
2	4-943-548-01	PANEL, FRONT	
3	3-703-685-21	SCREW (+BV 3X8)	
4	4-908-848-01	EMBLEM, SONY	
5	4-943-550-01	PANEL (L), SIDE	
6	* 4-943-554-01	PAENL, SUB	
7	4-943-376-01	WINDOW (A)	
8	* A-4341-442-A	MAIN BOARD, COMPLETE	
9	4-930-848-01	FOOT	
10	* 4-363-146-21	HEAT SINK, V. OUT	
11	* 1-638-675-11	POWER BOARD	
12	* 1-638-678-11	TRANSFORMER C BOARD	
13	* 1-638-679-11	LED BOARD	
14	* 1-638-677-11	TRANSFORMER B BOARD	
15	* 1-638-676-11	TRANSFORMER A BOARD	
16	3-682-691-00	NUT, WASHER HEXAGON	

Ref. No.	Part No.	Description	Remark
17	4-928-635-11	SCREW, +BV (2.6X16) TAPPING	
18	* 4-921-314-01	BRACKET (P)	
19	* 3-309-144-21	HEAT SINK	
20	* A-4341-447-A	DECODER BOARD, COMPLETE	
21	* 4-924-098-81	HOLDER, PC BOARD	
22	 1-575-975-11	CORD, POWER	
23	* A-4341-444-A	RF BOARD, COMPLETE	
24	* 3-703-353-08	SUPPORTER, PC BOARD	
25	* 3-703-244-00	BUSHING (2104), CORD	
26	3-704-366-01	SCREW (CASE) (M3X8)	
27	* 4-943-546-11	CASE	
28	7-621-849-00	SCREW, TAPPING	
29	* 4-943-547-01	PAENL, BACK	
30	4-870-539-00	PLATE, GROUND	
F901	 1-532-746-11	FUSE, GLASS TUBE	
T2	 1-450-321-11	TRANSFORMER, POWER	

DECODER

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA....: μ A...., uPA....: μ PA....
uPB....: μ PB...., uPC....: μ PC....
uPD....: μ PD....
- CAPACITORS
uF: μ F
- COILS
uH: μ H

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	* A-4341-447-A	DECODER BOARD, COMPLETE					

	4-870-539-00	PLATE, GROUND					
		< CAPACITOR >					
C201	1-126-157-11	ELECT	10uF 20% 16V	C701	1-126-157-11	ELECT	10uF 20% 16V
C202	1-161-379-00	CERAMIC	0.01uF 20% 25V	C702	1-161-379-00	CERAMIC	0.01uF 20% 25V
C203	1-130-491-00	MYLAR	0.047uF 5% 50V	C703	1-161-379-00	CERAMIC	0.01uF 20% 25V
C204	1-130-473-00	MYLAR	0.0015uF 5% 50V	C704	1-126-301-11	ELECT	1uF 20% 50V
C205	1-126-157-11	ELECT	10uF 20% 16V	C705	1-126-157-11	ELECT	10uF 20% 16V
C206	1-136-173-00	FILM	0.47uF 5% 50V	C706	1-161-379-00	CERAMIC	0.01uF 20% 25V
C207	1-136-157-00	MYLAR	0.022uF 10% 50V	C707	1-164-056-11	CERAMIC	27PF 5% 50V
C208	1-164-035-11	CERAMIC	47PF 5% 50V	C708	1-164-056-11	CERAMIC	27PF 5% 50V
C209	1-164-035-11	CERAMIC	47PF 5% 50V	C709	1-126-157-11	ELECT	10uF 20% 16V
C210	1-126-157-11	ELECT	10uF 20% 16V	C710	1-126-157-11	ELECT	10uF 20% 16V
C211	1-164-027-11	CERAMIC	22PF 5% 50V	C711	1-126-157-11	ELECT	10uF 20% 16V
C212	1-164-027-11	CERAMIC	22PF 5% 50V	C712	1-161-379-00	CERAMIC	0.01uF 20% 25V
C213	1-126-157-11	ELECT	10uF 20% 16V	C713	1-126-157-11	ELECT	10uF 20% 16V
C214	1-126-157-11	ELECT	10uF 20% 16V			< CERAMIC >	
C215	1-164-159-11	CERAMIC	0.1uF 50V	CF701	1-579-233-11	VIBRATOR, CERAMIC	
C216	1-164-159-11	CERAMIC	0.1uF 50V			< CONNECTOR >	
C217	1-164-159-11	CERAMIC	0.1uF 50V	CNJ701	1-580-456-11	JACK (SMALL TYPE) (RMR IN)	
C218	1-164-159-11	CERAMIC	0.1uF 50V	CNP201 *	1-564-505-11	PLUG, CONNECTOR 2P	
C219	1-164-159-11	CERAMIC	0.1uF 50V	CNP701 *	1-564-510-11	PLUG, CONNECTOR 7P	
C220	1-164-159-11	CERAMIC	0.1uF 50V	CNP702 *	1-564-511-11	PLUG, CONNECTOR 8P	
C221	1-164-159-11	CERAMIC	0.1uF 50V	CNP703 *	1-564-506-11	PLUG, CONNECTOR 3P	
C222	1-164-159-11	CERAMIC	0.1uF 50V	CNP704 *	1-564-508-11	PLUG, CONNECTOR 5P (TO DTS TOUCH PANEL)	
C223	1-164-159-11	CERAMIC	0.1uF 50V	CNS701	1-580-725-11	CONNECTOR, DIN (SMALL) 6P	
C224	1-126-157-11	ELECT	10uF 20% 16V			< DIODE >	
C225	1-126-157-11	ELECT	10uF 20% 16V	D201	8-719-907-19	DIODE FC52M-5	
				D701	8-719-912-20	DIODE 1SS120	
				D702	8-719-000-60	DIODE UZL-6M2	

DECODER

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< IC >					
IC201	8-752-335-15	IC CXD2500Q		R214	1-249-411-11	CARBON 330	5% 1/4W
IC202	8-752-306-51	IC CX23065A		R215	1-249-417-11	CARBON 1K	5% 1/4W
IC203	8-759-917-18	IC SN74HCU04N		R216	1-247-903-00	CARBON 1M	5% 1/4W
IC204	8-759-916-12	IC SN74HC00N		R217	1-249-411-11	CARBON 330	5% 1/4W
IC205	8-752-337-09	IC CXD2554P		R218	1-249-411-11	CARBON 330	5% 1/4W
IC206	8-759-917-18	IC SN74HCU04N		R219	1-249-411-11	CARBON 330	5% 1/4W
IC207	8-759-998-22	IC PCM56P		R220	1-249-411-11	CARBON 330	5% 1/4W
IC208	8-759-998-22	IC PCM56P		R221	1-249-417-11	CARBON 1K	5% 1/4W
IC701	8-759-636-26	IC M50951-112SP		R222	1-249-411-11	CARBON 330	5% 1/4W
IC702	8-759-510-05	IC CXD2902S		R701	1-249-417-11	CARBON 1K	5% 1/4W
IC703	8-759-916-29	IC SN74HC74N		R702	1-249-417-11	CARBON 1K	5% 1/4W
IC704	8-759-921-22	IC SN74HC164N		R703	1-249-429-11	CARBON 10K	5% 1/4W
IC705	8-759-916-14	IC SN74HC04N		R704	1-249-429-11	CARBON 10K	5% 1/4W
		< COIL >		R705	1-249-429-11	CARBON 10K	5% 1/4W
L201	1-408-421-00	INDUCTOR 100uH		R706	1-249-429-11	CARBON 10K	5% 1/4W
L202	1-460-099-11	COIL		R707	1-249-429-11	CARBON 10K	5% 1/4W
L203	1-410-324-11	INDUCTOR 4.7uH		R708	1-249-429-11	CARBON 10K	5% 1/4W
L204	1-410-324-11	INDUCTOR 4.7uH		R709	1-249-429-11	CARBON 10K	5% 1/4W
L205	1-410-324-11	INDUCTOR 4.7uH		R710	1-249-429-11	CARBON 10K	5% 1/4W
L206	1-410-324-11	INDUCTOR 4.7uH		R711	1-249-429-11	CARBON 10K	5% 1/4W
L701	1-408-421-00	INDUCTOR 100uH		R712	1-249-417-11	CARBON 1K	5% 1/4W
L702	1-408-421-00	INDUCTOR 100uH		R713	1-249-417-11	CARBON 1K	5% 1/4W
L703	1-410-324-11	INDUCTOR 4.7uH		R714	1-249-417-11	CARBON 1K	5% 1/4W
L704	1-410-324-11	INDUCTOR 4.7uH		R715	1-247-903-00	CARBON 1M	5% 1/4W
L705	1-410-324-11	INDUCTOR 4.7uH		R716	1-249-429-11	CARBON 10K	5% 1/4W
		< PHOTO INTERRUPTER >		R717	1-249-429-11	CARBON 10K	5% 1/4W
PH701	8-719-802-04	DIODE TLP521-1-GR		R718	1-249-429-11	CARBON 10K	5% 1/4W
		< TRANSISTOR >		R719	1-249-429-11	CARBON 10K	5% 1/4W
Q201	8-729-900-80	TRANSISTOR DTC114ES		R720	1-249-429-11	CARBON 10K	5% 1/4W
Q701	8-729-900-80	TRANSISTOR DTC114ES		R722	1-249-417-11	CARBON 1K	5% 1/4W
Q702	8-729-900-80	TRANSISTOR DTC114ES		R723	1-249-421-11	CARBON 2.2K	5% 1/4W
Q703	8-729-900-61	TRANSISTOR DTA114ES		R724	1-249-421-11	CARBON 2.2K	5% 1/4W
		< RESISTOR >		R725	1-249-401-11	CARBON 47	5% 1/4W
R204	1-249-423-11	CARBON 3.3K	5% 1/4W	R726	1-260-083-81	CARBON 47	5% 1/2W
R205	1-249-423-11	CARBON 3.3K	5% 1/4W	R727	1-247-903-00	CARBON 1M	5% 1/4W
R206	1-249-429-11	CARBON 10K	5% 1/4W	R728	1-249-429-11	CARBON 10K	5% 1/4W
R207	1-249-417-11	CARBON 1K	5% 1/4W	R729	1-249-417-11	CARBON 1K	5% 1/4W
R208	1-249-417-11	CARBON 1K	5% 1/4W	R730	1-249-411-11	CARBON 330	5% 1/4W
R209	1-249-417-11	CARBON 1K	5% 1/4W			< SWITCH >	
R210	1-249-419-11	CARBON 1.5K	5% 1/4W	SW701	1-572-681-11	SWITCH, DIGITAL (SMALL TYPE)	(ROOM NUMBER)
R211	1-249-427-11	CARBON 6.8K	5% 1/4W			< CONNECTOR >	
R212	1-249-429-11	CARBON 10K	5% 1/4W	TP201	* 1-564-505-11	PLUG, CONNECTOR 2P	
R213	1-249-421-11	CARBON 2.2K	5% 1/4W				

DECODER

MAIN

Ref. No.	Part No.	Description	Remark
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< CRYSTAL >

X201	1-567-908-11	VIBRATOR, CRYSTAL	
X701	1-579-177-11	VIBRATOR, CRYSTAL	

* A-4341-442-A MAIN BOARD, COMPLETE

* 3-309-144-21 HEAT SINK
* 4-363-146-21 HEAT SINK, V. OUT
4-870-539-00 PLATE, GROUND

< CAPACITOR >

C301	1-126-163-11	ELECT	4.7uF	20%	50V
C302	1-126-163-11	ELECT	4.7uF	20%	50V
C303	1-126-163-11	ELECT	4.7uF	20%	50V
C304	1-126-163-11	ELECT	4.7uF	20%	50V
C305	1-164-159-11	CERAMIC	0.1uF		50V
C306	1-164-159-11	CERAMIC	0.1uF		50V
C307	1-126-301-11	ELECT	1uF	20%	50V
C401	1-130-484-00	MYLAR	0.012uF	5%	50V
C402	1-130-473-00	MYLAR	0.0015uF	5%	50V
C403	1-130-484-00	MYLAR	0.012uF	5%	50V
C404	1-162-215-31	CERAMIC	47PF	5%	50V
C405	1-162-282-31	CERAMIC	100PF	10%	50V
C406	1-126-163-11	ELECT	4.7uF	20%	50V
C407	1-126-157-11	ELECT	10uF	20%	16V
C408	1-130-484-00	MYLAR	0.012uF	5%	50V
C409	1-130-473-00	MYLAR	0.0015uF	5%	50V
C410	1-130-484-00	MYLAR	0.012uF	5%	50V
C411	1-162-215-31	CERAMIC	47PF	5%	50V
C412	1-162-282-31	CERAMIC	100PF	10%	50V
C413	1-126-163-11	ELECT	4.7uF	20%	50V
C414	1-126-157-11	ELECT	10uF	20%	16V
C501	1-126-163-11	ELECT	4.7uF	20%	50V
C502	1-126-163-11	ELECT	4.7uF	20%	50V
C503	1-126-163-11	ELECT	4.7uF	20%	50V
C504	1-126-163-11	ELECT	4.7uF	20%	50V
C505	1-126-163-11	ELECT	4.7uF	20%	50V
C506	1-126-163-11	ELECT	4.7uF	20%	50V
C507	1-164-159-11	CERAMIC	0.1uF		50V
C508	1-126-157-11	ELECT	10uF	20%	16V
C509	1-126-157-11	ELECT	10uF	20%	16V
C510	1-126-157-11	ELECT	10uF	20%	16V
C511	1-126-157-11	ELECT	10uF	20%	16V
C512	1-126-163-11	ELECT	4.7uF	20%	50V
C513	1-126-163-11	ELECT	4.7uF	20%	50V
C601	1-124-902-00	ELECT	0.47uF	20%	50V

Ref. No.	Part No.	Description	Remark
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C602	1-126-163-11	ELECT	4.7uF 20% 50V
C603	1-162-282-31	CERAMIC	100PF 10% 50V
C604	1-162-290-31	CERAMIC	470PF 10% 50V
C605	1-124-477-11	ELECT	47uF 20% 25V
C606	1-130-495-00	MYLAR	0.1uF 5% 50V

C607	1-124-910-11	ELECT	47uF 20% 50V
C608	1-124-907-11	ELECT	10uF 20% 50V
C609	1-124-910-11	ELECT	47uF 20% 50V
C610	1-124-122-11	ELECT	100uF 20% 50V
C611	1-124-910-11	ELECT	47uF 20% 50V

C612	1-130-489-00	MYLAR	0.033uF 5% 50V
C651	1-124-902-00	ELECT	0.47uF 20% 50V
C652	1-126-163-11	ELECT	4.7uF 20% 50V
C653	1-162-282-31	CERAMIC	100PF 10% 50V
C654	1-162-290-31	CERAMIC	470PF 10% 50V

C655	1-124-477-11	ELECT	47uF 20% 25V
C657	1-124-910-11	ELECT	47uF 20% 50V
C662	1-130-489-00	MYLAR	0.033uF 5% 50V
C697	1-164-095-11	CERAMIC	0.01uF 10% 16V
C698	1-164-095-11	CERAMIC	0.01uF 10% 16V

C699	1-101-006-00	CERAMIC	0.047uF 50V
C801	1-124-477-11	ELECT	47uF 20% 25V
C802	1-126-176-11	ELECT	220uF 20% 10V
C803	1-124-927-11	ELECT	4.7uF 20% 100V
C804	1-124-443-00	ELECT	100uF 20% 10V

C805	1-161-379-00	CERAMIC	0.01uF 20% 25V
C913	1-124-563-11	ELECT	2200uF 20% 25V
C914	1-124-480-11	ELECT	470uF 20% 25V
C915	1-124-477-11	ELECT	47uF 20% 25V
C916	1-161-379-00	CERAMIC	0.01uF 20% 25V

C917	1-124-477-11	ELECT	47uF 20% 25V
C918	1-161-379-00	CERAMIC	0.01uF 20% 25V
C919	1-124-907-11	ELECT	10uF 20% 50V
C920	1-124-907-11	ELECT	10uF 20% 50V
C921	1-161-379-00	CERAMIC	0.01uF 20% 25V

C922	1-124-907-11	ELECT	10uF 20% 50V
C923	1-161-379-00	CERAMIC	0.01uF 20% 25V
C926	1-128-232-11	ELECT	4700uF 20% 50V
C927	1-128-232-11	ELECT	4700uF 20% 50V
C930	1-161-379-00	CERAMIC	0.01uF 20% 25V

< CONNECTOR >

CNP906 * 1-565-367-11 PIN, CONNECTOR (PC BOARD) 5P
CNP907 * 1-565-366-11 PIN, CONNECTOR (PC BOARD) 7P

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< DIODE >				< RESISTOR >			
D501	8-719-933-35	DIODE HZS6A3L		R301	1-249-441-11	CARBON 100K 5% 1/4W	
D601	8-719-815-85	DIODE 1S1585		R302	1-249-441-11	CARBON 100K 5% 1/4W	
D602	8-719-815-85	DIODE 1S1585		R303	1-249-441-11	CARBON 100K 5% 1/4W	
D651	8-719-815-85	DIODE 1S1585		R304	1-249-441-11	CARBON 100K 5% 1/4W	
D652	8-719-815-85	DIODE 1S1585		R305	1-249-441-11	CARBON 100K 5% 1/4W	
D801	8-719-912-20	DIODE 1SS120		R306	1-249-441-11	CARBON 100K 5% 1/4W	
D802	8-719-200-82	DIODE 11ES2		R307	1-249-417-11	CARBON 1K 5% 1/4W	
< IC >				R308	1-249-417-11	CARBON 1K 5% 1/4W	
IC301	8-759-000-49	IC MC14066BCP		R309	1-249-429-11	CARBON 10K 5% 1/4W	
IC401	8-759-634-50	IC M5218AL		R310	1-249-429-11	CARBON 10K 5% 1/4W	
IC501	8-759-820-11	IC LC7535		R311	1-249-405-11	CARBON 100 5% 1/4W	
IC502	8-759-945-58	IC RC4558P		R312	1-249-405-11	CARBON 100 5% 1/4W	
IC503	8-759-945-58	IC RC4558P		R313	1-249-441-11	CARBON 100K 5% 1/4W	
IC601	8-749-900-24	IC STK4162MK2		R314	1-249-421-11	CARBON 2.2K 5% 1/4W	
IC801	8-759-111-68	IC uPC1237HA		R315	1-249-429-11	CARBON 10K 5% 1/4W	
IC903	8-759-604-33	IC M5F7812L		R316	1-249-429-11	CARBON 10K 5% 1/4W	
IC904	8-759-604-51	IC M5F7912L		R401	1-249-437-11	CARBON 47K 5% 1/4W	
IC905	8-759-820-84	IC L78MR05		R402	1-249-431-11	CARBON 15K 5% 1/4W	
IC906	8-759-604-47	IC M5F7905L		R403	1-249-437-11	CARBON 47K 5% 1/4W	
< COIL >				R404	1-249-437-11	CARBON 47K 5% 1/4W	
L601	* 1-420-872-00	COIL, AIR CORE		R405	1-249-431-11	CARBON 15K 5% 1/4W	
L651	* 1-420-872-00	COIL, AIR CORE		R406	1-249-437-11	CARBON 47K 5% 1/4W	
< JACK >				R501	1-249-437-11	CARBON 47K 5% 1/4W	
PJ301	1-565-352-21	JACK, PIN 2P (TV/AUX IN)		R502	1-249-437-11	CARBON 47K 5% 1/4W	
PJ601	1-565-352-21	JACK, PIN 2P (PRE OUT)		R503	1-249-437-11	CARBON 47K 5% 1/4W	
< TRANSISTOR >				R504	1-249-437-11	CARBON 47K 5% 1/4W	
Q301	8-729-900-61	TRANSISTOR DTA114ES		R505	1-249-414-11	CARBON 560 5% 1/4W	
Q302	8-729-900-80	TRANSISTOR DTC114ES		R506	1-249-437-11	CARBON 47K 5% 1/4W	
Q303	8-729-900-61	TRANSISTOR DTA114ES		R507	1-249-426-11	CARBON 5.6K 5% 1/4W	
Q304	8-729-900-80	TRANSISTOR DTC114ES		R508	1-249-437-11	CARBON 47K 5% 1/4W	
Q305	8-729-141-26	TRANSISTOR 2SC3622A-LK		R509	1-249-426-11	CARBON 5.6K 5% 1/4W	
Q306	8-729-141-26	TRANSISTOR 2SC3622A-LK		R601	1-249-417-11	CARBON 1K 5% 1/4W	
Q601	8-729-184-53	TRANSISTOR 2SC1845-EA		R602	1-249-417-11	CARBON 1K 5% 1/4W	
Q602	8-729-184-53	TRANSISTOR 2SC1845-EA		R603	1-249-417-11	CARBON 1K 5% 1/4W	
Q603	8-729-900-80	TRANSISTOR DTC114ES		R604	1-249-438-11	CARBON 56K 5% 1/4W	
Q604	8-729-900-61	TRANSISTOR DTA114ES		R605	1-249-409-11	CARBON 220 5% 1/4W	
Q651	8-729-141-26	TRANSISTOR 2SC3622A-LK		R606	1-249-423-11	CARBON 3.3K 5% 1/4W	
Q652	8-729-184-53	TRANSISTOR 2SC1845-EA		R607	1-249-438-11	CARBON 56K 5% 1/4W	
Q801	8-729-900-61	TRANSISTOR DTA114ES		R608	1-247-700-11	CARBON 100 5% 1/4W	
				R609	1-247-756-11	CARBON 2.2K 5% 1/2W	
				R610	1-247-756-11	CARBON 2.2K 5% 1/2W	
				R611	1-247-752-11	CARBON 1K 5% 1/2W	
				R612	1-247-752-11	CARBON 1K 5% 1/2W	
				R613	1-247-700-11	CARBON 100 5% 1/4W	
				R614	1-249-417-11	CARBON 1K 5% 1/4W	

MAIN

POWER

RF

TRANSFORMER A

TRANSFORMER B

TRANSFORMER C

LED

Ref. No.	Part No.	Description	Remark
R615	1-249-435-11	CARBON 33K 5%	1/4W
R616	1-217-151-00	RES, METAL PLATE 0.22	
R617	1-249-437-11	CARBON 47K 5%	1/4W
R618	1-247-727-11	CARBON 10 5%	1/2W
R619	1-247-727-11	CARBON 10 5%	1/2W
R620	1-249-421-11	CARBON 2.2K 5%	1/4W
R621	1-249-421-11	CARBON 2.2K 5%	1/4W
R622	1-249-409-11	CARBON 220 5%	1/4W
R651	1-249-417-11	CARBON 1K 5%	1/4W
R652	1-249-417-11	CARBON 1K 5%	1/4W
R653	1-249-417-11	CARBON 1K 5%	1/4W
R654	1-249-438-11	CARBON 56K 5%	1/4W
R655	1-249-409-11	CARBON 220 5%	1/4W
R656	1-249-423-11	CARBON 3.3K 5%	1/4W
R657	1-249-438-11	CARBON 56K 5%	1/4W
R659	1-247-756-11	CARBON 2.2K 5%	1/2W
R660	1-247-756-11	CARBON 2.2K 5%	1/2W
R664	1-249-417-11	CARBON 1K 5%	1/4W
R665	1-249-435-11	CARBON 33K 5%	1/4W
R666	1-217-151-00	RES, METAL PLATE 0.22	
R667	1-249-438-11	CARBON 56K 5%	1/4W
R668	1-247-727-11	CARBON 10 5%	1/2W
R669	1-247-727-11	CARBON 10 5%	1/2W
R672	1-249-409-11	CARBON 220 5%	1/4W
R801	1-249-429-11	CARBON 10K 5%	1/4W
R802	1-249-441-11	CARBON 100K 5%	1/4W
R803	1-249-439-11	CARBON 68K 5%	1/4W
R804	1-249-429-11	CARBON 10K 5%	1/4W
R805	1-215-891-11	METAL OXIDE 680 5%	2W F
R806	1-249-432-11	CARBON 18K 5%	1/4W

< VARIABLE RESISTOR >

RV401	1-241-357-11	RES, VAR, CARBON 100K/100K (TREBLE)
RV402	1-241-357-11	RES, VAR, CARBON 100K/100K (BASS)

< RELAY >

RY801	1-515-501-00	RELAY
TM601	1-537-314-21	TERMINAL BOARD (SP) (SPEAKER)

1-638-675-11 POWER BOARD

A-4341-444-A RF BOARD, COMPLETE
1-638-676-11 TRANSFORMER A BOARD
1-638-677-11 TRANSFORMER B BOARD
1-638-678-11 TRANSFORMER C BOARD
1-638-679-11 LED BOARD

Ref. No.	Part No.	Description	Remark
	1-533-225-11	HOLDER, FUSE	
	1-533-225-11	HOLDER, FUSE	
	* 4-363-146-21	HEAT SINK, V. OUT	
	4-870-539-00	PLATE, GROUND	
<ENCAPSULATED COMPONENT>			
BPF101	1-236-993-11	ENCAPSULATED COMPONENT (BPF)	
BPF102	1-236-993-11	ENCAPSULATED COMPONENT (BPF)	
BPF103	1-424-475-11	COIL (FILTER)	
BPF104	1-236-994-11	ENCAPSULATED COMPONENT (BPF)	
< CAPACITOR >			
C101	1-126-157-11	ELECT 10uF 20%	16V
C102	1-162-294-31	CERAMIC 0.001uF 10%	50V
C103	1-162-294-31	CERAMIC 0.001uF 10%	50V
C104	1-161-494-00	CERAMIC 0.022uF 25V	
C105	1-161-494-00	CERAMIC 0.022uF 25V	
C106	1-161-494-00	CERAMIC 0.022uF 25V	
C107	1-162-294-31	CERAMIC 0.001uF 10%	50V
C108	1-126-301-11	ELECT 1uF 20%	50V
C109	1-162-294-31	CERAMIC 0.001uF 10%	50V
C110	1-162-294-31	CERAMIC 0.001uF 10%	50V
C111	1-162-294-31	CERAMIC 0.001uF 10%	50V
C112	1-162-294-31	CERAMIC 0.001uF 10%	50V
C113	1-126-157-11	ELECT 10uF 20%	16V
C114	1-126-157-11	ELECT 10uF 20%	16V
C115	1-164-032-11	CERAMIC 36PF 5%	50V
C116	1-162-294-31	CERAMIC 0.001uF 10%	50V
C117	1-126-157-11	ELECT 10uF 20%	16V
C118	1-162-294-31	CERAMIC 0.001uF 10%	50V
C119	1-162-285-31	CERAMIC 180PF 10%	50V
C120	1-162-281-31	CERAMIC 91PF 10%	50V
C121	1-162-194-31	CERAMIC 3.9PF 10%	50V
C122	1-164-077-11	CERAMIC 220PF 10%	50V
C123	1-162-194-31	CERAMIC 3.9PF 10%	50V
C124	1-162-281-31	CERAMIC 91PF 10%	50V
C125	1-162-285-31	CERAMIC 180PF 10%	50V
C126	1-162-294-31	CERAMIC 0.001uF 10%	50V
C127	1-162-294-31	CERAMIC 0.001uF 10%	50V
C128	1-162-294-31	CERAMIC 0.001uF 10%	50V
C129	1-162-207-31	CERAMIC 22PF 5%	50V
C130	1-162-294-31	CERAMIC 0.001uF 10%	50V
C131	1-162-294-31	CERAMIC 0.001uF 10%	50V
C132	1-101-886-00	CERAMIC 62PF 5%	50V
C133	1-162-194-31	CERAMIC 3.9PF 10%	50V
C134	1-161-494-00	CERAMIC 0.022uF 25V	
C135	1-126-157-11	ELECT 10uF 20%	16V
C136	1-124-480-11	ELECT 470uF 20%	25V
C137	1-161-494-00	CERAMIC 0.022uF 25V	
C138	1-124-465-00	ELECT 0.47uF 20%	50V
C139	1-124-465-00	ELECT 0.47uF 20%	50V

POWER

RF

TRANSFORMER A

TRANSFORMER B

TRANSFORMER C

LED

Ref. No.	Part No.	Description	Remark		
C140	1-162-294-31	CERAMIC	0.001uF	10%	50V
C141	1-164-027-11	CERAMIC	22PF	5%	50V
C142	1-164-056-11	CERAMIC	27PF	5%	50V
C143	1-164-035-11	CERAMIC	47PF	5%	50V
C144	1-161-379-00	CERAMIC	0.01uF	20%	25V
C145	1-161-494-00	CERAMIC	0.022uF		25V
C146	1-161-494-00	CERAMIC	0.022uF		25V
C147	1-161-494-00	CERAMIC	0.022uF		25V
C148	1-161-494-00	CERAMIC	0.022uF		25V
C149	1-162-294-31	CERAMIC	0.001uF	10%	50V
C150	1-162-294-31	CERAMIC	0.001uF	10%	50V
C151	1-161-494-00	CERAMIC	0.022uF		25V
C152	1-124-443-00	ELECT	100uF	20%	10V
C153	1-126-157-11	ELECT	10uF	20%	16V
C154	1-161-494-00	CERAMIC	0.022uF		25V
C155	1-130-483-00	MYLAR	0.01uF	5%	50V
C156	1-162-294-31	CERAMIC	0.001uF	10%	50V
C157	1-124-480-11	ELECT	470uF	20%	25V
C158	1-161-494-00	CERAMIC	0.022uF		25V
C159	1-126-301-11	ELECT	1uF	20%	50V
C160	1-126-157-11	ELECT	10uF	20%	16V
C161	1-126-157-11	ELECT	10uF	20%	16V
C162	1-126-157-11	ELECT	10uF	20%	16V
C163	1-126-157-11	ELECT	10uF	20%	16V
C164	1-161-494-00	CERAMIC	0.022uF		25V
C165	1-161-494-00	CERAMIC	0.022uF		25V
C166	1-161-379-00	CERAMIC	0.01uF	20%	25V
C901	▲ 1-161-744-00	CERAMIC	0.01uF		400V
C902	1-130-483-00	MYLAR	0.01uF	5%	50V
C903	1-130-483-00	MYLAR	0.01uF	5%	50V
C904	1-124-563-11	ELECT	2200uF	20%	25V
C905	1-130-483-00	MYLAR	0.01uF	5%	50V
C906	1-124-477-11	ELECT	47uF	20%	25V
C907	1-164-095-11	CERAMIC	0.01uF	10%	16V
C908	1-126-157-11	ELECT	10uF	20%	16V
C909	1-126-157-11	ELECT	10uF	20%	16V
C910	1-164-095-11	CERAMIC	0.01uF	10%	16V
C911	1-130-483-00	MYLAR	0.01uF	5%	50V
C912	1-130-483-00	MYLAR	0.01uF	5%	50V
C924	1-130-483-00	MYLAR	0.01uF	5%	50V
C925	1-130-483-00	MYLAR	0.01uF	5%	50V
C928	1-164-095-11	CERAMIC	0.01uF	10%	16V
C929	1-164-095-11	CERAMIC	0.01uF	10%	16V
C931	1-161-379-00	CERAMIC	0.01uF	20%	25V

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
CNP101 *	1-564-506-11	PLUG, CONNECTOR 3P	
CNP102 *	1-564-506-11	PLUG, CONNECTOR 3P	
CNP901 *	1-564-321-00	PIN, CONNECTOR 2P	
CNP902 *	1-564-321-00	PIN, CONNECTOR 2P	
CNP903A*	1-564-321-00	PIN, CONNECTOR 2P	
CNP903B*	1-569-501-11	PIN, CONNECTOR 6P	
CNP904 *	1-569-499-11	PIN, CONNECTOR 3P	
CNS901	1-569-490-11	SOCKET, CONNECTOR 3P	
CNS902	1-569-492-11	SOCKET, CONNECTOR 6P	
CNS904 *	1-561-651-00	SOCKET, CONNECTOR 7P	
		< TRIMMER >	
CT101	1-141-298-11	CAP, TRIMMER	
CT102	1-141-298-11	CAP, TRIMMER	
CT103	1-141-298-11	CAP, TRIMMER	
CT104	1-141-298-11	CAP, TRIMMER	
		< DIODE >	
D101	8-719-949-57	DIODE 1T32-4	
D102	8-719-949-57	DIODE 1T32-4	
D103	8-719-949-57	DIODE 1T32-4	
D901	8-719-200-02	DIODE 10E2	
D902	8-719-200-02	DIODE 10E2	
D903	8-719-200-02	DIODE 10E2	
D904	8-719-200-02	DIODE 10E2	
D905	8-719-200-02	DIODE 10E2	
D906	8-719-200-02	DIODE 10E2	
D907	8-719-200-02	DIODE 10E2	
D908	8-719-200-02	DIODE 10E2	
D909	8-719-912-20	DIODE 1SS120	
D910	8-719-312-09	DIODE RBA-402	
D911	8-719-301-39	LED SEL2210S-D (POWER)	
		< IC >	
IC101	8-759-107-67	IC uPC1651G	
IC102	8-759-801-81	IC LA1265	
IC103	8-759-916-12	IC SN74HC00N	
IC104	8-759-107-67	IC uPC1651G	
IC105	8-752-031-84	IC CXA1125P	
IC106	8-759-209-50	IC TA7782N	
IC107	8-759-917-18	IC SN74HC04N	
IC108	8-759-208-06	IC TC4051BPHB	
IC109	8-759-604-29	IC M5F7805L	
IC110	8-759-982-21	IC RC78L05A	
IC901	8-759-604-30	IC M5F7808L	
IC902	8-759-820-84	IC L78MR05	

Note:

The components identified by mark ▲ or dotted line with mark ▲ are critical for safety. Replace only with part number specified.

Note:

Les composants identifiés par une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

POWER

RF

TRANSFORMER A

TRANSFORMER B

TRANSFORMER C

LED

Ref. No.	Part No.	Description	Remark
< COIL >			
L101	1-410-324-11	INDUCTOR 4.7uH	
L102	1-410-324-11	INDUCTOR 4.7uH	
L103	1-460-115-11	COIL (WITH CORE)	
L104	1-460-115-11	COIL (WITH CORE)	
L105	1-460-116-11	COIL (WITH CORE)	
L106	1-410-324-11	INDUCTOR 4.7uH	
L107	1-410-324-11	INDUCTOR 4.7uH	
L108	1-410-513-11	INDUCTOR 22uH	
L109	1-410-324-11	INDUCTOR 4.7uH	
L110	1-410-517-11	INDUCTOR 47uH	
L111	1-410-324-11	INDUCTOR 4.7uH	
< TRANSISTOR >			
Q101	8-729-230-45	TRANSISTOR 2SC2458-VGR	
Q102	8-729-900-80	TRANSISTOR DTC114ES	
Q103	8-729-900-80	TRANSISTOR DTC114ES	
Q901	8-729-900-80	TRANSISTOR DTC114ES	
< RESISTOR >			
R1	1-202-725-00	SOLID 3.3M 10% 1/2W	
R101	1-249-393-11	CARBON 10 5% 1/4W	
R102	1-249-393-11	CARBON 10 5% 1/4W	
R103	1-249-405-11	CARBON 100 5% 1/4W	
R104	1-249-429-11	CARBON 10K 5% 1/4W	
R105	1-247-874-11	CARBON 62K 5% 1/4W	
R106	1-249-401-11	CARBON 47 5% 1/4W	
R107	1-247-903-00	CARBON 1M 5% 1/4W	
R108	1-249-405-11	CARBON 100 5% 1/4W	
R109	1-249-389-11	CARBON 4.7 5% 1/4W	
R110	1-249-441-11	CARBON 100K 5% 1/4W	
R111	1-249-437-11	CARBON 47K 5% 1/4W	
R112	1-249-441-11	CARBON 100K 5% 1/4W	
R113	1-249-401-11	CARBON 47 5% 1/4W	
R114	1-249-389-11	CARBON 4.7 5% 1/4W	
R115	1-249-401-11	CARBON 47 5% 1/4W	
R116	1-249-394-11	CARBON 12 5% 1/6W	
R117	1-249-410-11	CARBON 270 5% 1/4W	
R118	1-249-441-11	CARBON 100K 5% 1/4W	
R119	1-249-421-11	CARBON 2.2K 5% 1/4W	
R120	1-247-887-00	CARBON 220K 5% 1/4W	
R121	1-249-415-11	CARBON 680 5% 1/4W	
R122	1-249-413-11	CARBON 470 5% 1/4W	
R123	1-249-417-11	CARBON 1K 5% 1/4W	
R124	1-249-411-11	CARBON 330 5% 1/4W	
R125	1-249-429-11	CARBON 10K 5% 1/4W	
R126	1-249-429-11	CARBON 10K 5% 1/4W	
R127	1-249-393-11	CARBON 10 5% 1/4W	
R128	1-249-397-11	CARBON 22 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R129	1-247-903-00	CARBON 1M 5% 1/4W	
R130	1-249-411-11	CARBON 330 5% 1/4W	
R131	1-249-421-11	CARBON 2.2K 5% 1/4W	
R132	1-249-409-11	CARBON 220 5% 1/4W	
R133	1-249-433-11	CARBON 22K 5% 1/4W	
R134	1-249-433-11	CARBON 22K 5% 1/4W	
R135	1-249-432-11	CARBON 18K 5% 1/4W	
R136	1-249-433-11	CARBON 22K 5% 1/4W	
R137	1-249-441-11	CARBON 100K 5% 1/4W	
R138	1-249-441-11	CARBON 100K 5% 1/4W	
R139	1-249-441-11	CARBON 100K 5% 1/4W	
R140	1-249-429-11	CARBON 10K 5% 1/4W	
R141	1-249-429-11	CARBON 10K 5% 1/4W	
R142	1-249-417-11	CARBON 1K 5% 1/4W	
R143	1-249-429-11	CARBON 10K 5% 1/4W	
R144	1-249-417-11	CARBON 1K 5% 1/4W	
R145	1-249-401-11	CARBON 47 5% 1/4W	
R146	1-249-393-11	CARBON 10 5% 1/4W	
R901	1-249-401-11	CARBON 47 5% 1/4W	
R902	1-249-411-11	CARBON 330 5% 1/4W	
R903	△ 1-212-934-00	FUSIBLE 1 5% 1/2W F	
R904	△ 1-212-934-00	FUSIBLE 1 5% 1/2W F	
< ENCAPSULATED COMPONENT >			
RF101	1-236-997-11	ENCAPSULATED COMPONENT	
RF102	1-236-995-11	ENCAPSULATED COMPONENT	
< VARIABLE RESISTOR >			
RV101	1-238-016-11	RES. ADJ. CARBON 10K (CONTROL VOLTAGE)	
RV102	1-238-016-11	RES. ADJ. CARBON 10K (CONTROL VOLTAGE)	
RV103	1-238-016-11	RES. ADJ. CARBON 10K (CONTROL VOLTAGE)	
< RELAY >			
RY901	1-515-701-11	RELAY	
< TRANSFORMER >			
T1	△ 1-450-320-11	TRANSFORMER, POWER	
T101	1-404-948-11	TRANSFORMER, DISCRIMINATOR	
< CONNECTOR >			
TP1	* 1-564-505-11	PLUG, CONNECTOR 2P	
TP2	* 1-564-505-11	PLUG, CONNECTOR 2P	
TP3	* 1-564-505-11	PLUG, CONNECTOR 2P	
TP4	* 1-564-505-11	PLUG, CONNECTOR 2P	
TP5	* 1-564-505-11	PLUG, CONNECTOR 2P	

Note:

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Note:

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
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		MISCELLANEOUS	

22 ⚠ 1-575-975-11 CORD, POWER
F901 ⚠ 1-532-746-11 FUSE, GLASS TUBE
T2 ⚠ 1-450-321-11 TRANSFORMER, POWER

ACCESSORY & PACKING MATERIAL

* 3-704-343-01 SHEET (STANDARD), PROTECTION
* 4-943-055-01 CUSHION

HARDWARE LIST

# 1	7-682-547-09	SCREW +BVTT 3X6	(S)
# 2	7-682-548-04	SCREW +BVTT 3X8	(S)
# 3	7-685-646-79	SCREW +BVTP 3X8	TYPE2 N-S
# 4	7-685-870-01	SCREW +BVTT 3X5	(S)
# 5	7-682-560-04	SCREW +BVTT 4X6	(S)
# 6	7-682-550-04	SCREW +BVTT 3X12	(S)
# 7	7-685-647-79	SCREW +BVTP 3X10	TYPE2 N-S

Note:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Note:

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

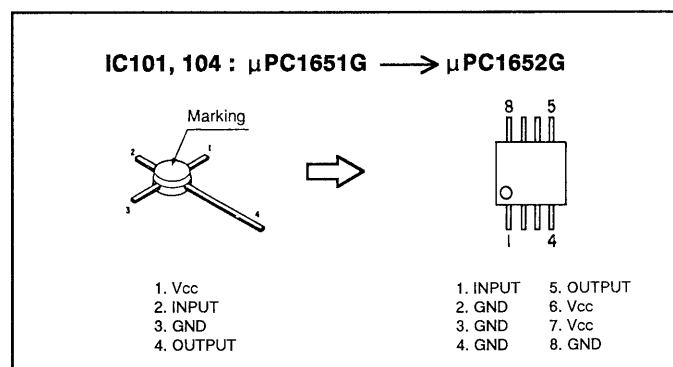
TA-DL100

SONY[®] SERVICE MANUAL

US Model
Canadian Model

SUPPLEMENT-1

File this Supplement with the Service Manual.



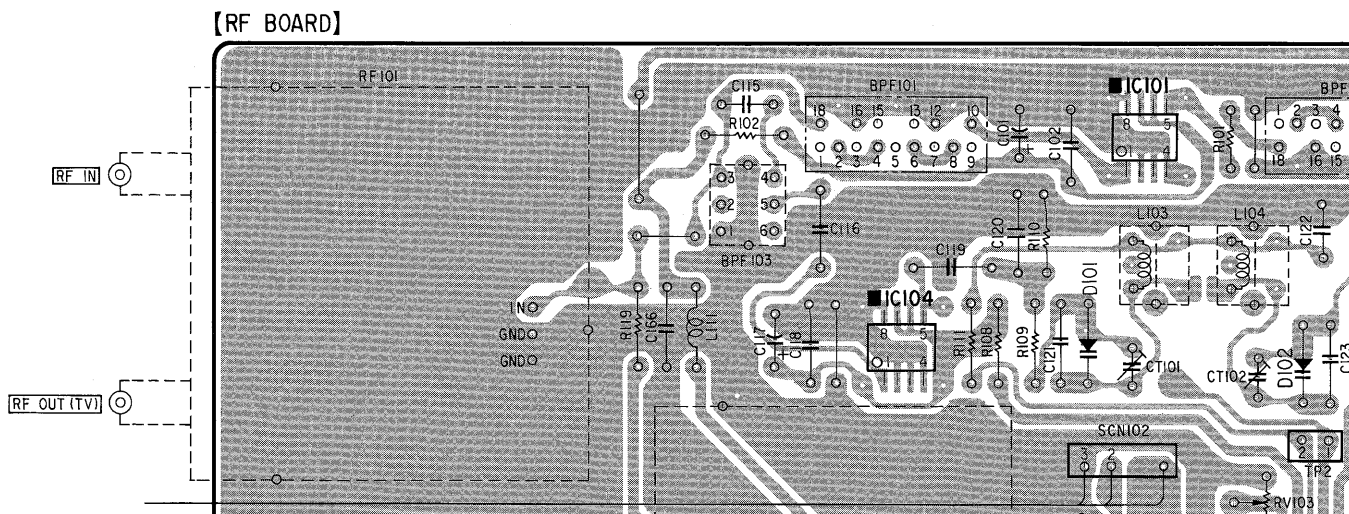
● CHANGED PARTS LIST (Service Manual See page 35)

Ref. No.	Parts No.	Description	Remark
IC101	8-759-154-38	IC μ PC1652G	
IC104	8-759-154-38	IC μ PC1652G	

● PRINTED WIRING BOARDS (Service Manual See page 19)

● SCHEMATIC DIAGRAM (Service Manual See page 25)

● PRINTED WIRING BOARDS (Service Manual See page 19)



● SCHEMATIC DIAGRAM (Service Manual See page 25)

