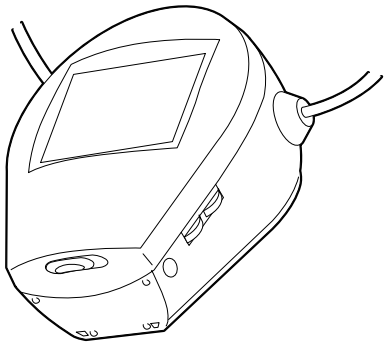
SERVICE MANUAL

MODEL	COMMANDER	DEST.	CHASSIS NO.
FDL-PT22		US	
FDL-PT22/JE		JE	

MODEL	COMMANDER	DEST.	CHASSIS NO.



MICROFILM

∗ Please file according to model size. ....☐

2.2

LCD COLOR TV

SONY®

SPECIFICATIONS

TV standerd	American TV standerd
Channel converage	
	VHF : 2-13
	UHF : 14-69
Antenna	VHF/UHF strap antenna
Display format	
	Transmission type TN liquid crystal panel
Drive format	Passive matrix
Picture	2.2 inches measured diagonally
Output	Headphones : minijack
	Impedance 8 - 45 ohms
Power requirements	4.5 V DC
Power consumption	Approx : 2.9W
Speaker	Ø28 mm (1 1/8 in.), 0.1 W
Temperature range	32 ˚F - 104 ˚F (0 ˚C - 40 ˚C)
Dimensions	Approx. 91x109x64mm (w/h/d)
	(3 5/8 x 4 3/8 x 2 5/8 in.) excl.
	Projecting parts and controls
Strap length	Approx. 1,300 mm (51 1/4 in.)
Mass	Approx. 230 g (8.1 oz), excl. batteries

Design and specifications are subject to change without notice.

Optional accessories
AC power adaptor AC-E45HG / External antenna cord EAC-39 /EAC-110/Size AA (LR6) alkaline battery

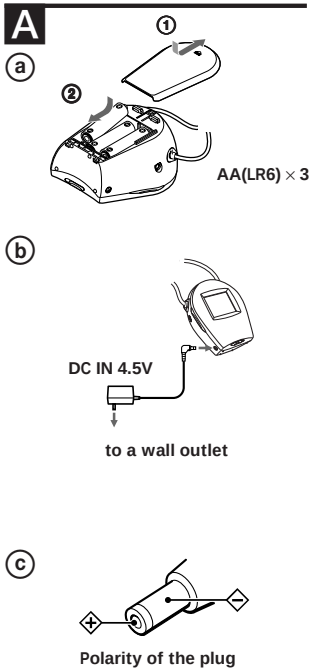
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

SECTION1
GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remein as in the manual.



Power Sources (see fig. A)

Alkaline Batteries

Use Sony LR6 alkaline batteries (not supplied).

1 Push and slide the battery cover open.
2 Insert three batteries. Be sure to insert the (–) polarity of each battery first as illustrated.

Battery Life: With continuous use, Sony LR6 alkaline batteries will last about 3.0 hours.

Battery Type	Size	Battery Life
LR6	AA	Approx. 3.0 hours

Note

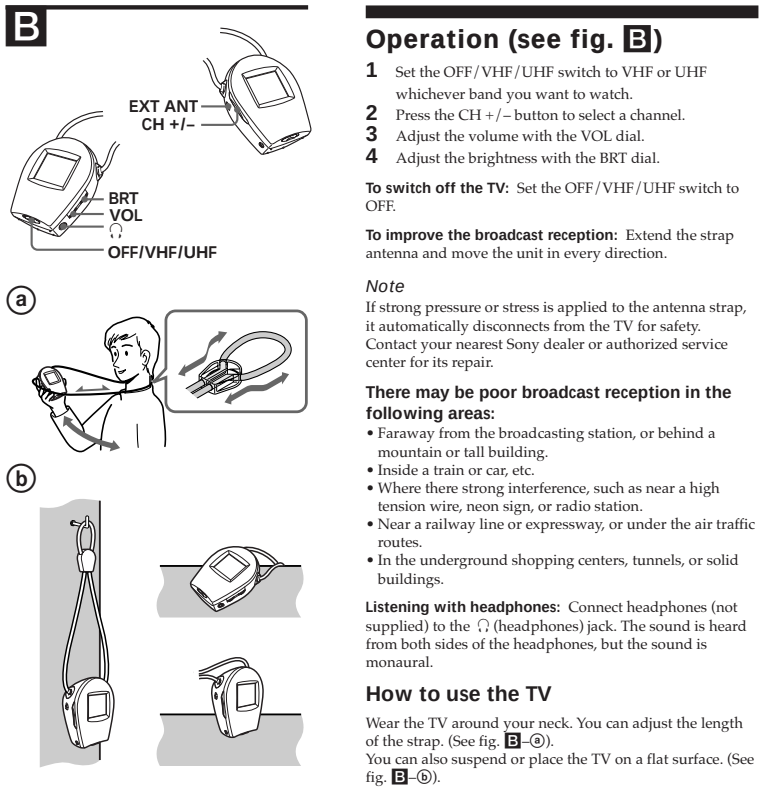
When the picture becomes dim or the tuning does not lock onto a channel, replace all the batteries with new ones.

House Current

See fig. A–ⓑ.

Note

Use only the recommended AC power adaptor, AC-E45HG (not supplied). (For the polarity of the plug, see fig. A–ⓒ).



Operation (see fig. B)

1 Set the OFF/VHF/UHF switch to VHF or UHF whichever band you want to watch.
2 Press the CH +/– button to select a channel.
3 Adjust the volume with the VOL dial.
4 Adjust the brightness with the BRT dial.

To switch off the TV: Set the OFF/VHF/UHF switch to OFF.

To improve the broadcast reception: Extend the strap antenna and move the unit in every direction.

Note

If strong pressure or stress is applied to the antenna strap, it automatically disconnects from the TV for safety. Contact your nearest Sony dealer or authorized service center for its repair.

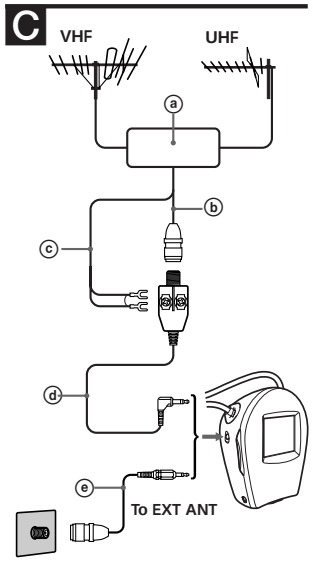
There may be poor broadcast reception in the following areas:

- Faraway from the broadcasting station, or behind a mountain or tall building.
- Inside a train or car, etc.
- Where there strong interference, such as near a high tension wire, neon sign, or radio station.
- Near a railway line or expressway, or under the air traffic routes.
- In the underground shopping centers, tunnels, or solid buildings.

Listening with headphones: Connect headphones (not supplied) to the ∩ (headphones) jack. The sound is heard from both sides of the headphones, but the sound is monaural.

How to use the TV

Wear the TV around your neck. You can adjust the length of the strap. (See fig. B–ⓐ).
You can also suspend or place the TV on a flat surface. (See fig. B–ⓑ).



ⓐ **Mixer**
ⓑ **75Ω coaxial cable**
ⓒ **Feeder**
ⓓ **EAC-39 antenna cable (not supplied)**
ⓔ **EAC-110 antenna cable (not supplied)**

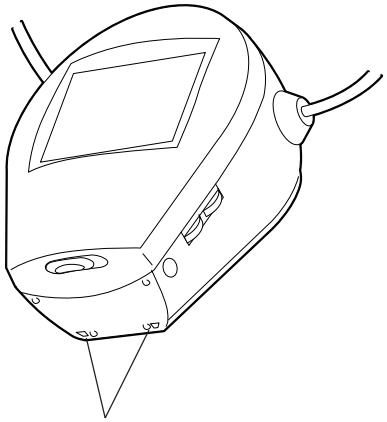
External Antenna Connection (see fig. C)

Connect an antenna cord EAC-39 (not supplied) or EAC-110 (not supplied) to the TV. This will improve the TV's reception.

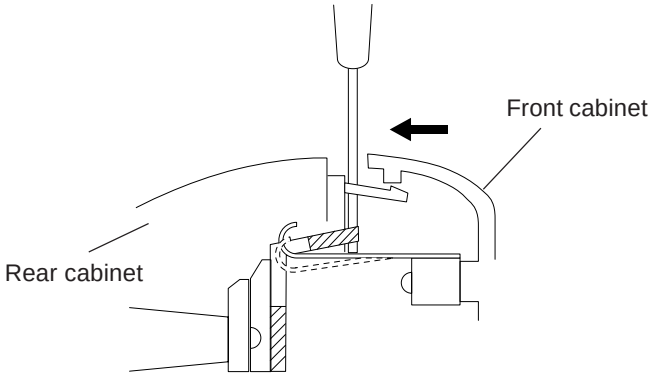
SECTION 2
DISASSEMBLY

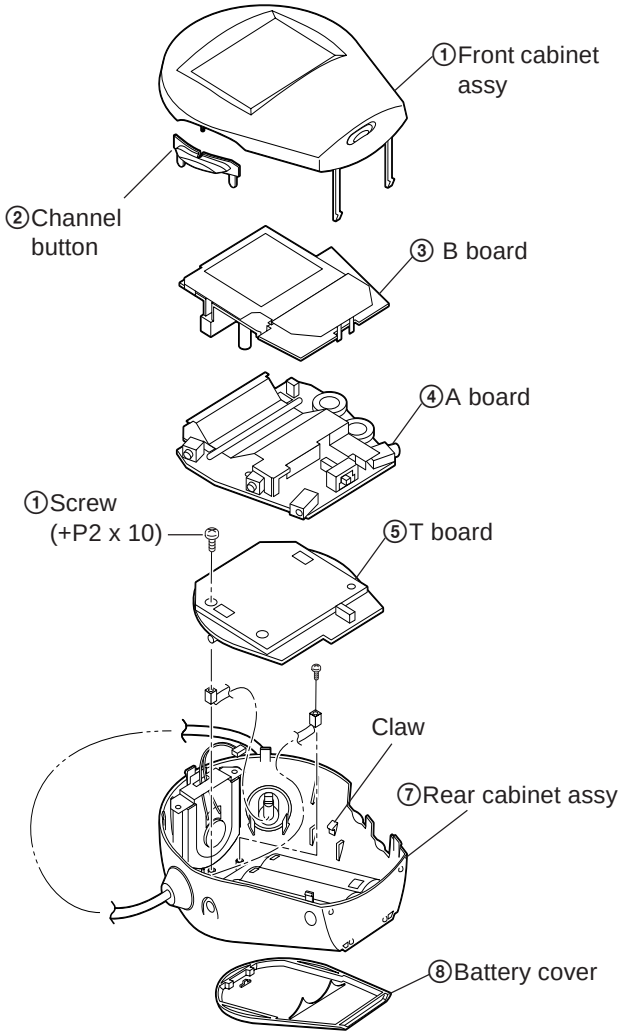
2-1. CABINET REMOVAL

1. Remove battery cover ⑧.
2. Push the two hooks in the lower section of the rear cabinet with a pint and the like to undo them.

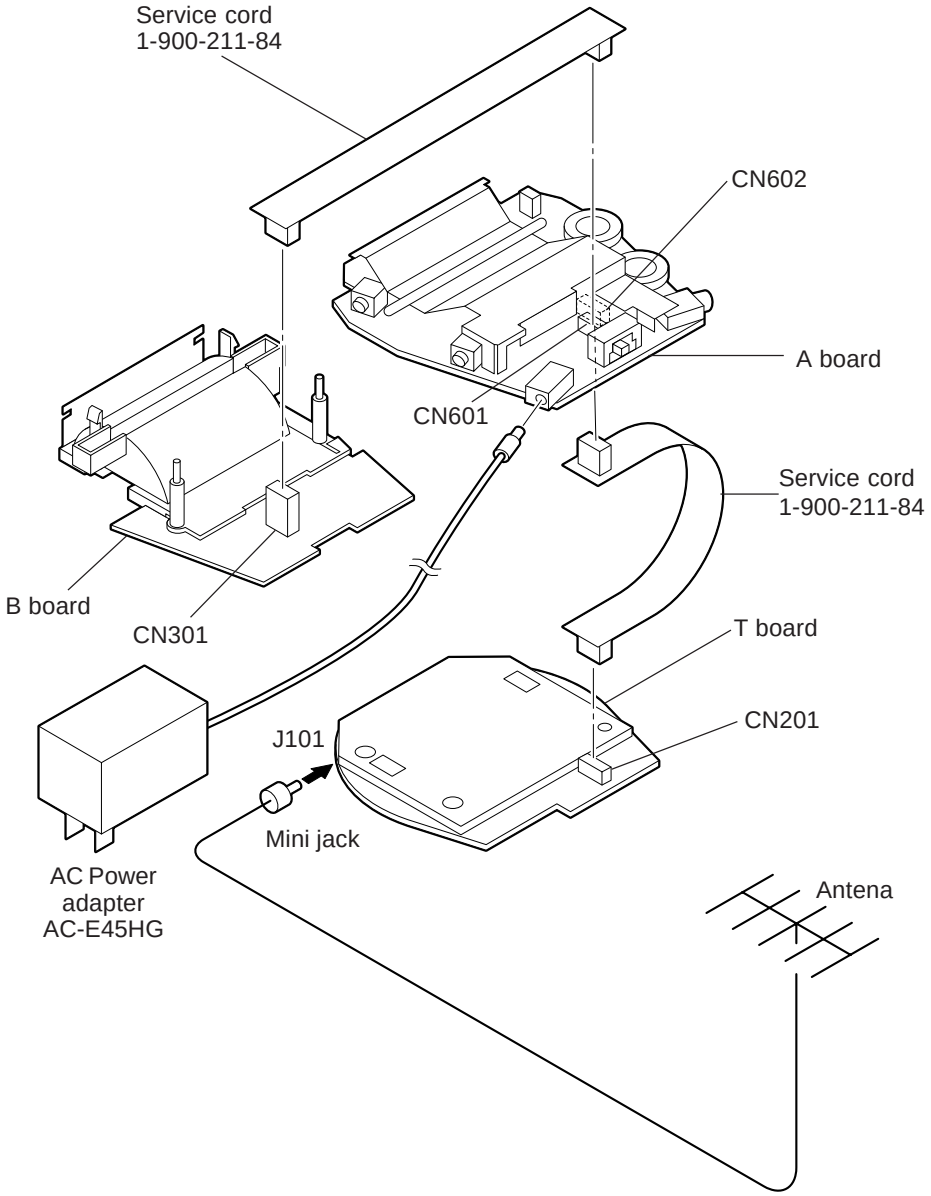


3. While pressing the rear cabinet, undo hooks on the periphery.
4. Insert a pin into the upper side of the cabinet, and while pushing the hook, tilt the pin to the rear cabinet side.
5. Remove the channel button ②.
6. Remove the speaker cord from the connector.
7. Remove B board ③ and A board ④.
8. Remove one screw ⑥ (+P x 10) from T board ⑤.
9. Remove T board ⑤ from the hooks (one each on both side) on the rear cabinet.





2-2. SERVICE POSITION



SECTION 3
CIRCUIT ADJUSTMENT

3-1. A BOARD ADJUSTMENT

+4.5V ADJUSTMENT

Measure the voltage between JL32 (4.5V) and JL33 (GND) with a digital voltmeter, and adjust RV601 so that the voltage will be as follows:

<Specification>
4.45 ± 0.05VDC
S601: UHF position

CONFIRMATION OF +30V

Measure the voltage between JL29 (30V) and JL33 (GND) with a digital voltmeter, and adjust RV601 so that the voltage will be as follows:

<Specification>
30.5 ± 1.5VDC

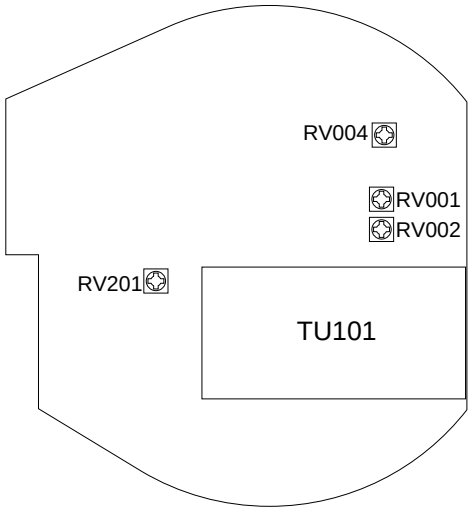
CONFIRMATION OF AUDIO OUTPUT

(1) Input 1kHz voice, 100% modulation from sound generator.
(2) Make RV501 MAX.
(3) Connect the probes of an oscilloscope to JL23 (SP) and JL15 (SP GND).
(4) Check the waveform on the oscilloscope, and make sure that it is within the standard.

<Specification>
1.5 - 2.8Vp-p

3-2. T BOARD ADJUSTMENT

- T BOARD - (COMPONENT SIDE)



ROUGH ADJUSTMENT OF VIF.AFT

(1) Preparation
Set S601 in the VHF position.
Make JL18 (RF) signal-less
Insert 1kΩ between JL77 (4.5V) and JL28 (RF AGC).
Input a sweep signal to the section between JL26 (IF) and JL27 (IF GND).

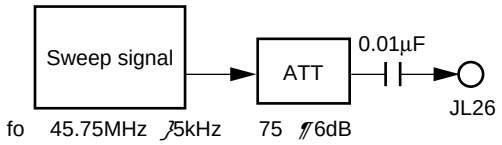


Fig.3-1

Note: The sweep signal level should be -30 ± 5dBm at JL26. The distance between the ATT output and JL26 should be as short as possible.

(2) Insert the output between JL72 (VIDEO) and JL71 (A.GND) to an oscilloscope, and apply external voltage (MGC) to JL51 so that the waveform shown in Fig.3-2 will appear (the minimum section should not clip). Adjust T202 so that the position of 45.75MHz will be the lowest.

Note: This portion should be approx. 1.0Vp-p when external voltage is applied to JL51 (MGC).
The external voltage applied to JL51 (MGC) should not exceed 4.3VDC.

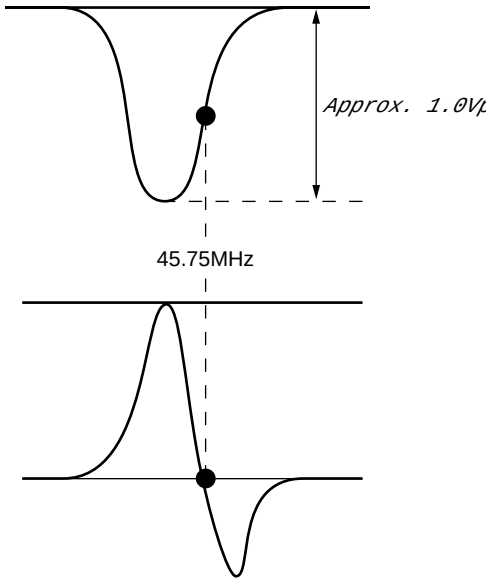


Fig.3-2

(3) Remove the external voltage (MGC) from JL51.
(4) Connect the output between JL31 (AFT) and JL30 (D.GND) to an oscilloscope, and roughly adjust T201 so that the position of 45.75MHz will be a zero cross.
(5) Remove 1kΩ from the section between JL77 (4.5V) and JL28 (RF AGC).

AFT ADJUSTMENT

(1) Insert 1kΩ between JL77 (4.5V) and JL28 (RF AGC).

Note: Because of drifting due to aging, adjustment should be made at the end of the process.

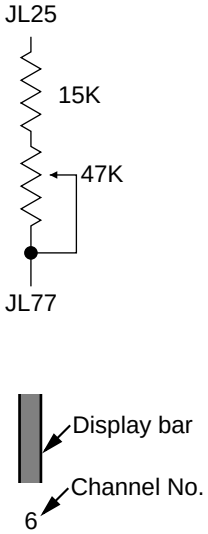
(2) Switch the sweep signal to CW.
fo = 45.75MHz ± 5kHz
Input the above signal to the section between JL26 (IF) and JL27 (IF GND), and finely adjust T201 so that the level between JL31 (AFT) and JL30 (D.GND) will be 2.2 ± 0.4VDC.
(3) Remove 1kΩ from the section between JL77 (4.5V) and JL28 (RF AGC).

RF.AGC ADJUSTMENT

(1) Input the VHF color bar signal from the test signal generator.
(2) Adjust RV201 to optimum position so that there is no snow noise on the screen.

CHANNEL DISPLAY POSITION ADJUSTMENT

(1) Set S601 in the VHF position.
Insert resistors (47kΩ + 15kΩ) between JL25 and JL77 (4.5V line), and short circuit JL21 and JL30 (D.GND).
(2) Receive 2ch, and adjust the channel display position with RV002.
(3) Receive 13ch, and adjust the display bar with RV004.
(4) Carry out tracking, because (2) and (3) interfere with each other.
(5) Receive 6 and 7ch, and check that the display bar conforms to the standard.
(6) Set S601 in the UHF position.
(7) Receive 14ch and adjust the display position with RV001.
(8) Receive 40ch and 69ch, and check that the display bar conforms to the standard.
(9) Remove resistors from JL25 and JL77, and open the short circuit between JL21 and JL30

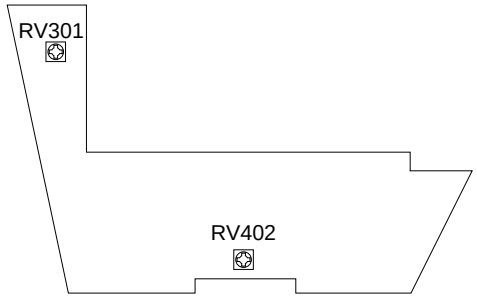


*Channel No. and display ber are to be in line.

Fig.3-3

3-3. B BOARD ADJUSTMENT

- B BOARD - (COMPONENT SIDE)



GRADATION ADJUSTMENT

(1) Input a 10-step staircase signal from the test signal generator.
(2) Connect an oscilloscope probe between JL83 (G) and JL67 (D. GND) and observe the waveform.
(3) The contrast should change when RV402 is turned.
(4) Connect the oscilloscope prove between JL84 (AUTO CB) and JL67 (D. GND), and observe the waveform. Adjust RV402 so that voltage A is 2.2±0.2V
(5) Check that the waveform between JL84 and JL67 is as shown in Fig.3-4.
(6) Check to see that the phases C and D are within the range specified (↔).

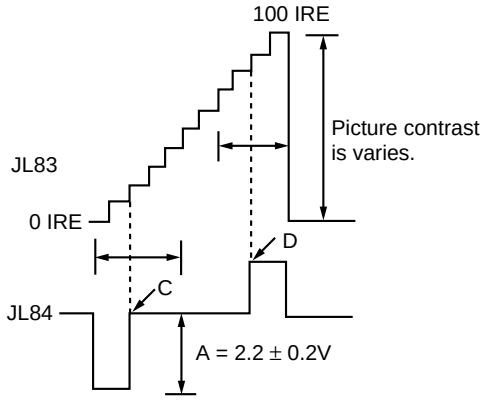


Fig.3-4

HUE ADJUSTMENT

(1) Receive a color bar.
(2) Insert an oscilloscope between JL81 (B) and JL67 (D.GND).
(3) Arrange RV301 as shown in Fig.3-5.

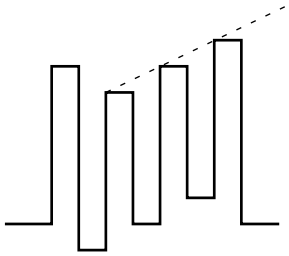
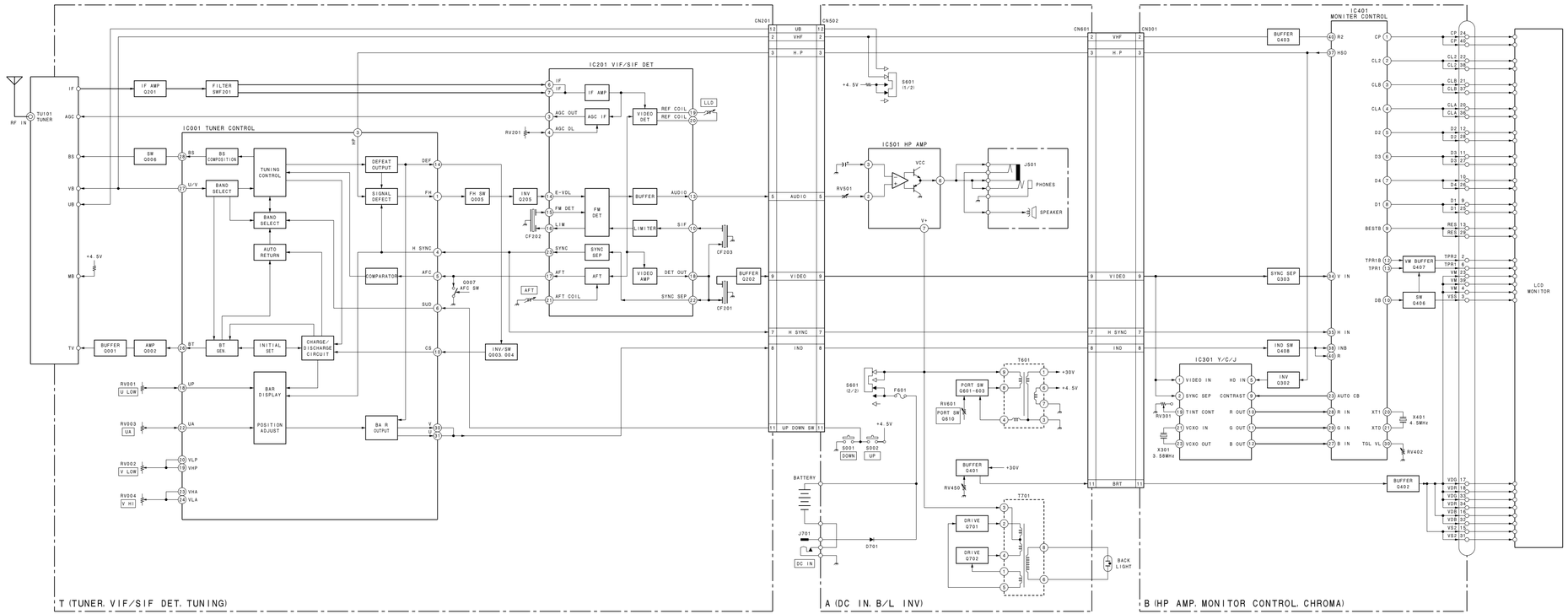


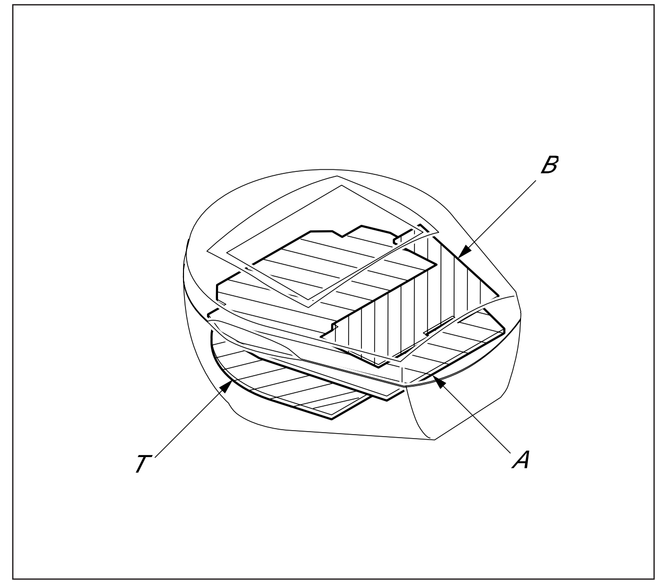
Fig.3-5

SECTION 4
DIAGRAMS

4-1. BLOCK DIAGRAM



4-2. CIRCUIT BOARDS LOCATION



4-3. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note:

- All capacitors are in µF unless otherwise noted. pF : µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All electrolytics are in 50V unless otherwise specified.
- All resistors are in ohms.
  kΩ=1000Ω, MΩ=1000kΩ
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

Pitch : 5mm
Rating electrical power : 1/4 W (CHIP : 1/10W)

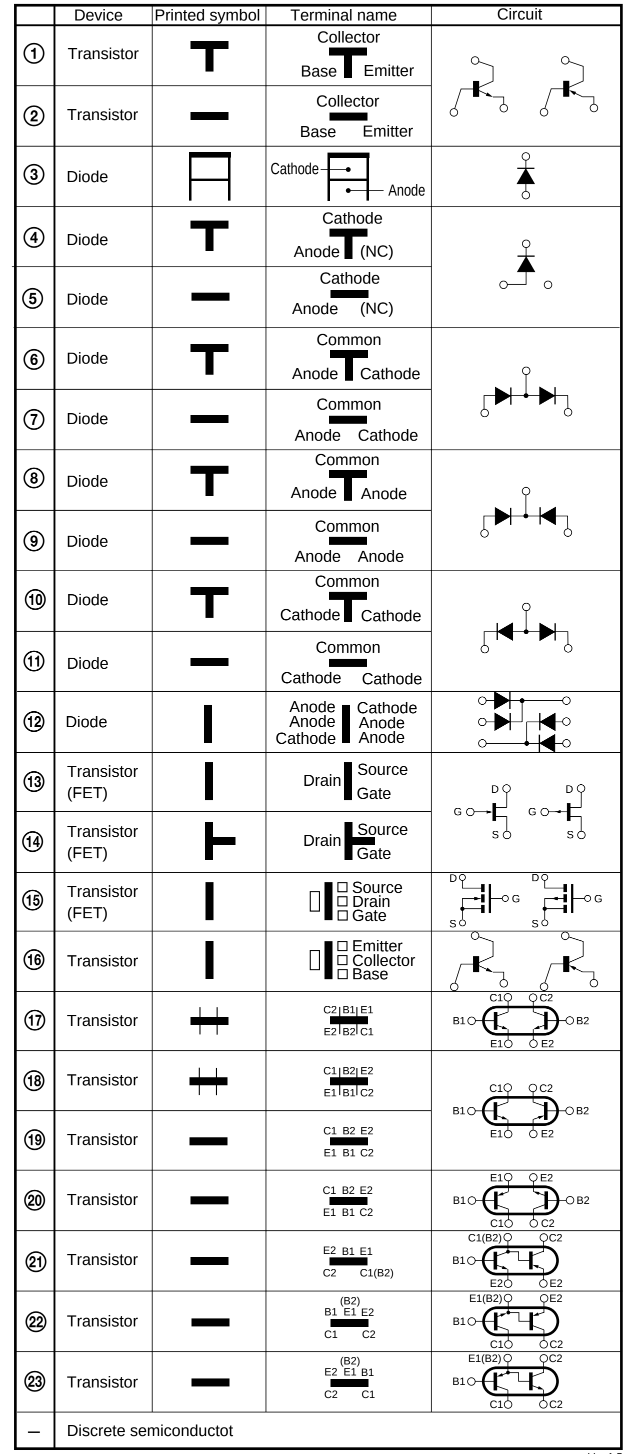
- △ : internal component.
- ▭ : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- As to the voltage volue shown by the semiconductors on the Shematic Diagram, see the another list
- Readings are taken with a color-bar signal input.
- Readings are taken with a 10MΩ digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
  ∗ : Measurement impossibillity.
- V : B+line.
- ⇨ : signal path.
- Circled numbers are waveform references.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Terminal name of semiconductors in silk screen printed circuit ( )



(Chip semiconductors that are not actually used are included.)

T BOARD IC VOLTAGE LIST

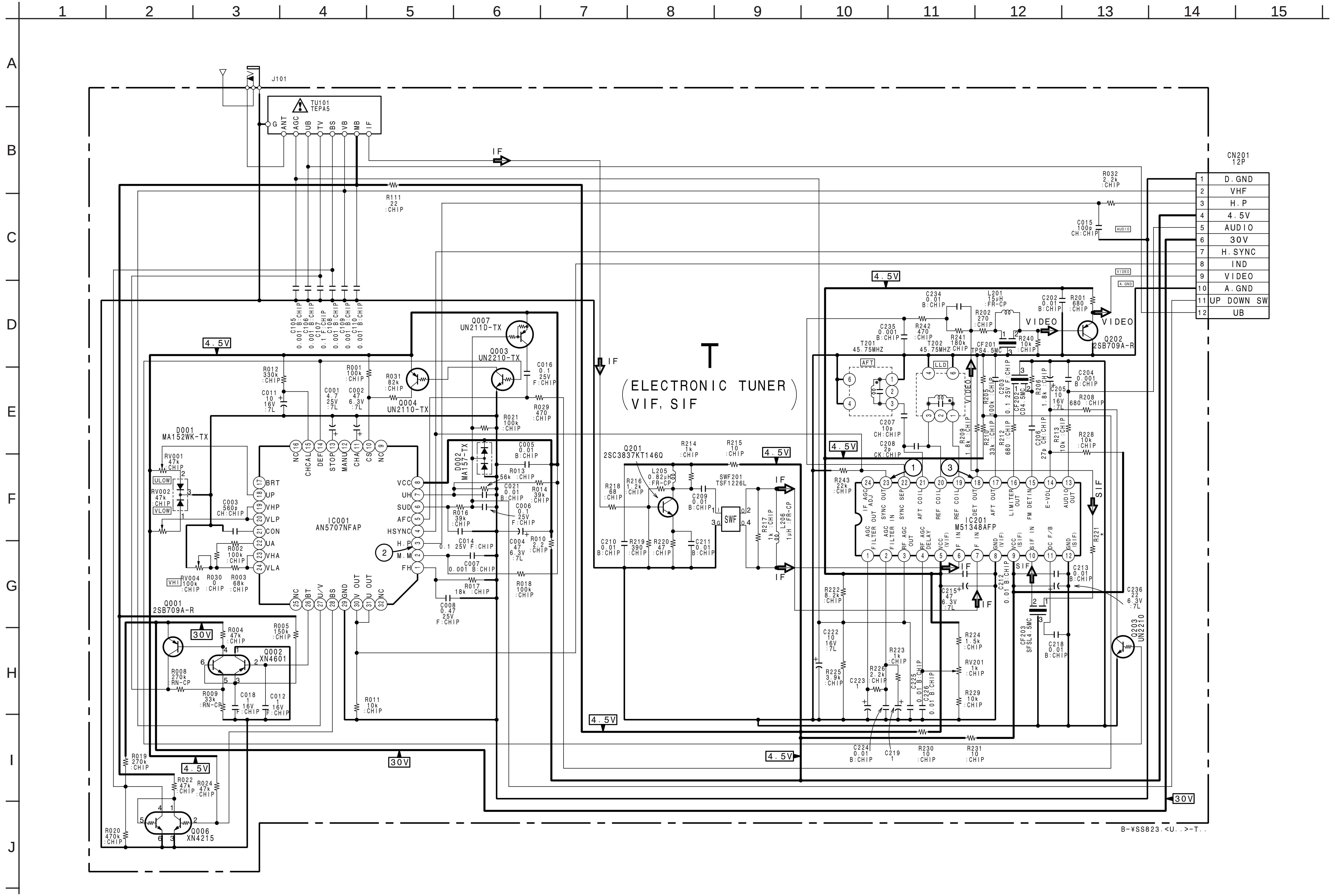
	Pin	Volt		Pin	Volt		Pin	Volt
IC001	1	2.7		20	2.2		7	3.4
	2	0		21	2.9		8	GND
	3	0.3		22	0.8		9	4.3
	4	0.5		23	2.1		10	1.6
	5	2.5		24	2.1		11	1.6
	6	2.5		25	-		12	GND
	7	2.5		26	1.7		13	1.8
	8	4.3		27	3.8		14	3.5
	9	-		28	0		15	2.1
	10	0.7		29	GND		16	1.5
	11	2.5		30	0		17	2.4
	12	0		31	0		18	2.0
	13	0.3		32	0		19	1.9
	14	0.0	IC201	1	3.4		20	1.9
	15	3.7		2	3.4		21	3.4
	16	-		3	1.6		22	3.4
	17	-		4	3.3		23	0.4
	18	0		5	4.2		24	1.7
	19	2.2		6	3.4			

All voltage are in V.
- : Not used

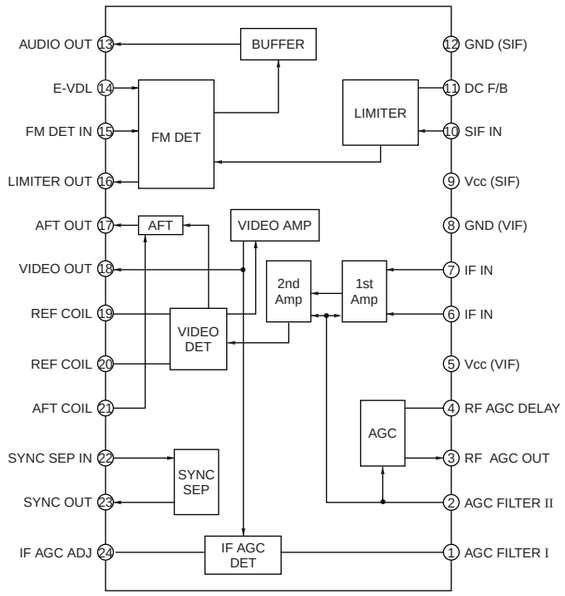
T BOARD TRANSISTOR VOLTAGE LIST

	B	C	E			
Q003	0	3.7	GND			
Q004	3.7	0.7	4.3			
Q007	2.6	0.5	4.3			
Q201	1.0	4.2	0.3			
Q202	1.9	GND	2.6			
Q203	0	3.5	GND			
	1	2	3	4	5	6
Q002	0	1.7	2.2	29.5	1.7	2.2
Q006	1.2	1.2	GND	0	0	GND

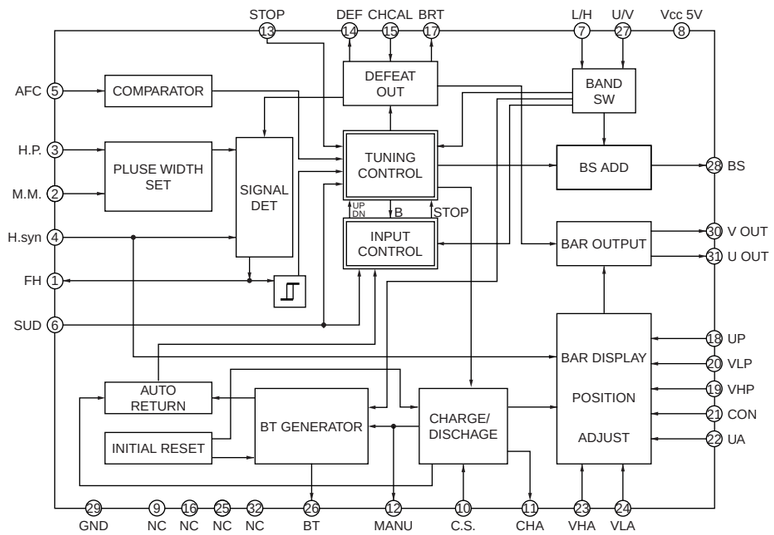
All voltage are in V.



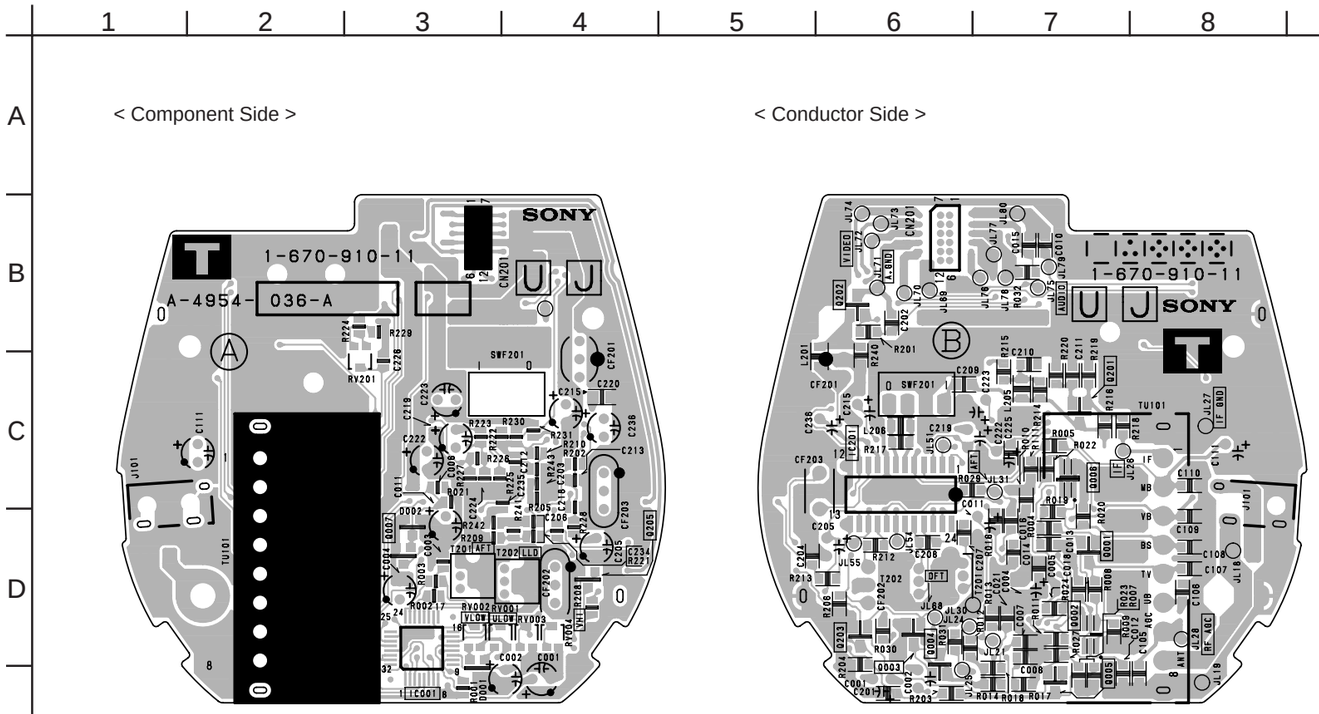
T BOARD : IC201 M51348AFP



T BOARD : IC001 AN5707NFAP



– T BOARD –



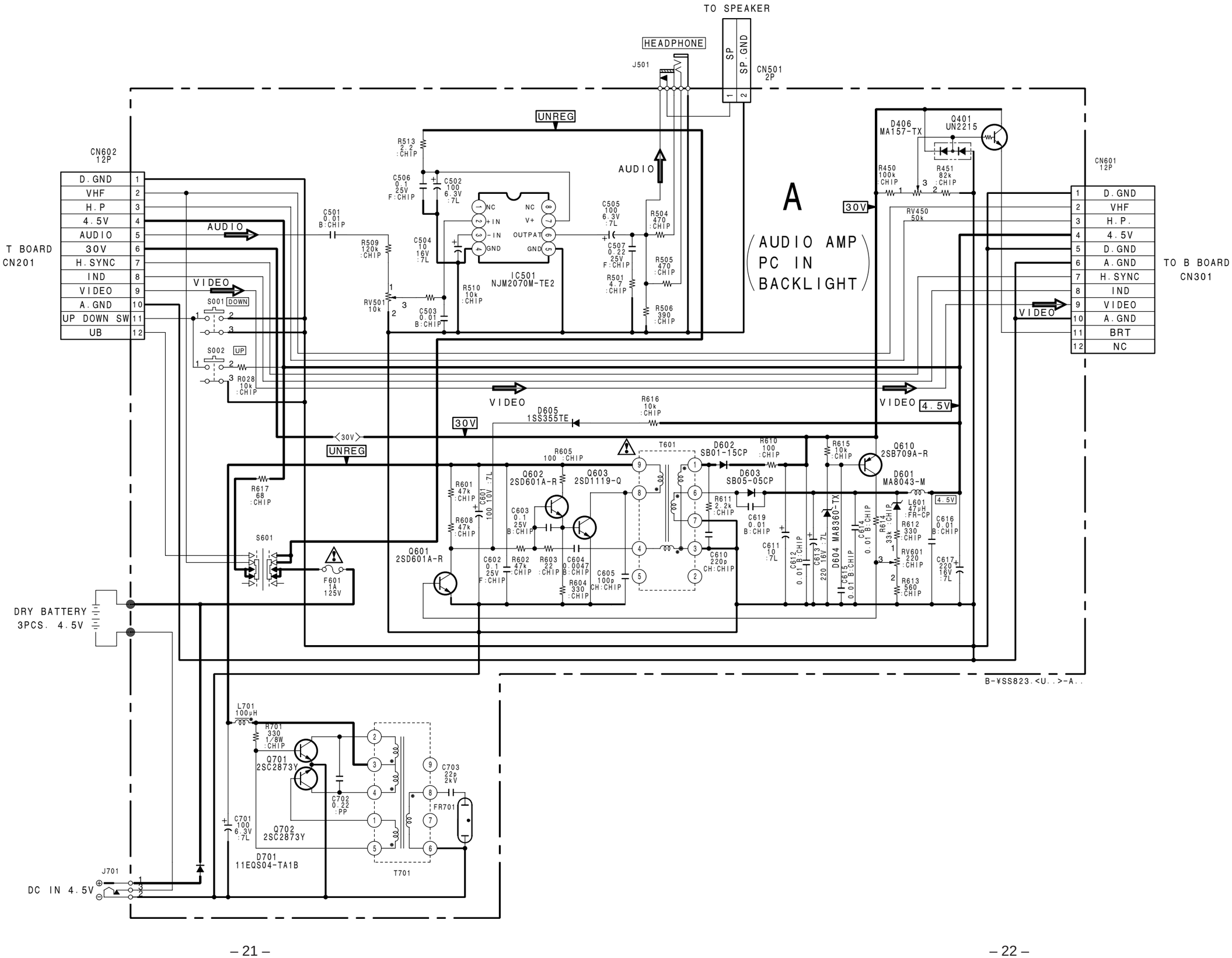
T BOARD

DIODE		*
D001	E-3	⑨
D002	D-3	⑦
IC		
IC001	E-3	
IC201	C-6	
TRANSISTOR		*
Q001	D-7	①
Q002	D-7	⑱
Q003	D-6	①
Q004	E-6	①
Q006	C-7	⑰
Q007	D-3	①
Q201	C-7	①
Q202	B-6	①
Q203	D-6	①
VARIABLE RESISTOR		
RV001	D-3	
RV002	D-3	
RV004	D-4	
RV201	C-3	

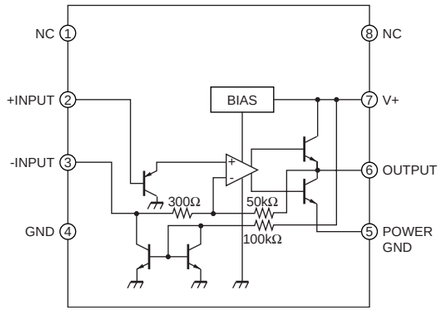
NOTE:
- ■■■ : Pattern from the side which enables seeing.
- ■■■ : Pattern of the rear side.

• T BOARD WAVEFORMS

①	②	③
3.4Vp-p (H)	3.7Vp-p (H)	0.9Vp-p (H)


TO SPEAKER
HEADPHONE
J501
SP
SP.GND
CN501
2P
UNREG
AUDIO
CN602
12P
D.GND 1
VHF 2
H.P 3
4.5V 4
AUDIO 5
30V 6
H.SYNC 7
IND 8
VIDEO 9
A.GND 10
UP DOWN SW 11
UB 12
TO T BOARD
CN201
C501
0.01
B:CHIP
R509
120k
:CHIP
VIDEO
S001 DOWN
S002 UP
R028
10k
:CHIP
R513
2.2
:CHIP
C506
0.1
25V
F:CHIP
C502
100
6.3V
:7L
C504
10
16V
:7L
C503
0.01
B:CHIP
RV501
10k
IC501
NJM2070M-TE2
NC
+IN
-IN
GND
NC
V+
OUTPAT
GND
R510
10k
:CHIP
C505
100
6.3V
:7L
C507
0.22
25V
F:CHIP
R501
4.7
:CHIP
R504
470
:CHIP
R505
470
:CHIP
R506
390
:CHIP
A
AUDIO AMP
PC IN
BACKLIGHT
D406
MA157-TX
Q401
UN2215
R450
100k
:CHIP
R451
82k
:CHIP
30V
RV450
50k
CN601
12P
D.GND 1
VHF 2
H.P. 3
4.5V 4
D.GND 5
A.GND 6
H.SYNC 7
IND 8
VIDEO 9
A.GND 10
BRT 11
NC 12
TO B BOARD
CN301
VIDEO
4.5V
D605
1SS355TE
R616
10k
:CHIP
30V
UNREG
R605
100
:CHIP
T601
D602
SB01-15CP
R610
100
:CHIP
R615
10k
:CHIP
Q610
2SB709A-R
Q602
2SD601A-R
Q603
2SD1119-Q
D603
SB05-05CP
D601
MA8043-M
R601
47k
:CHIP
C601
100
10V
:7L
R608
47k
:CHIP
C603
0.1
25V
B:CHIP
R611
2.2k
:CHIP
C619
0.01
B:CHIP
L601
47μH
:FR-CP
R612
330
:CHIP
C616
0.01
B:CHIP
R617
68
:CHIP
S601
F601
1A
125V
Q601
2SD601A-R
C602
0.1
25V
F:CHIP
R602
47k
:CHIP
R603
22
:CHIP
C604
0.0047
B:CHIP
R604
330
:CHIP
C605
100p
CH:CHIP
C610
220p
CH:CHIP
C611
10
:7L
C612
0.01
B:CHIP
C613
220
16V
:7L
D604 MA8360-TX
C614
0.01
B:CHIP
C615
0.01
B:CHIP
R614
33k
:CHIP
RV601
220
:CHIP
R613
560
:CHIP
C617
220
16V
:7L
DRY BATTERY
3PCS. 4.5V
L701
100μH
R701
330
1/8W
:CHIP
Q701
2SC2873Y
C702
0.22
:PP
C701
100
6.3V
:7L
Q702
2SC2873Y
D701
11EQS04-TA1B
C703
22p
2kV
FR701
T701
J701
DC IN 4.5V
B-¥SS823.<U..>-A..

A BOARD : IC501 NJM2070M



A BOARD IC VOLTAGE LIST

	Pin	Volt
IC501	1	-
	2	0
	3	0.6
	4	GND
	5	GND
	6	1.3
	7	3.4
	8	-

All voltage are in V.
- : Not used

A BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q401	13.9	30.5	13.4
Q601	0.5	1.2	GND
Q602	0.7	3.1	0.2
Q603	0.2	3.0	GND
Q610	30.7	0.5	30.7
Q701	0	3.0	GND
Q702	0	3.0	GND

All voltage are in V.

A BOARD

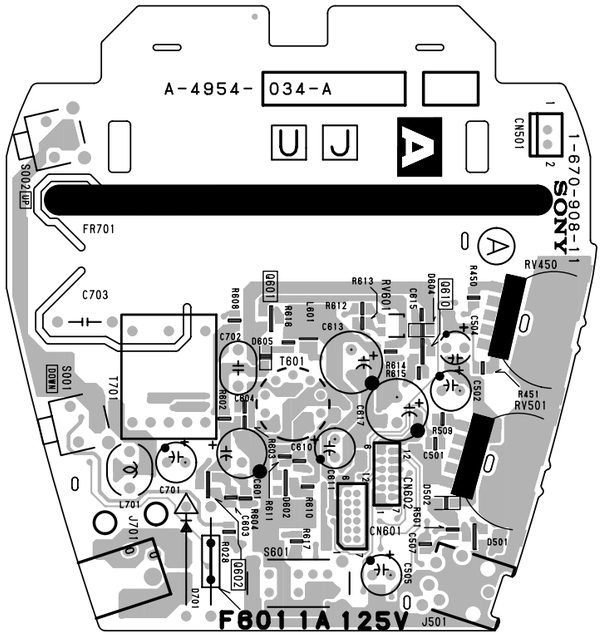
DIODE		*
D406	G-5	⑥
D601	G-4	③
D602	D-4	⑤
D603	G-4	④
D604	C-5	③
D605	C-4	③
D701	D-3	–
IC		
IC501	G-5	
TRANSISTOR		*
Q401	G-5	①
Q601	C-4	②
Q602	D-4	②
Q603	F-4	②
Q610	C-5	②
Q701	G-3	②
Q702	G-3	②
VARIABLE RESISTOR		
RV450	C-6	
RV501	D-5	
RV601	C-5	

A [AUDIO AMP, PC IN, BACK LIGHT]

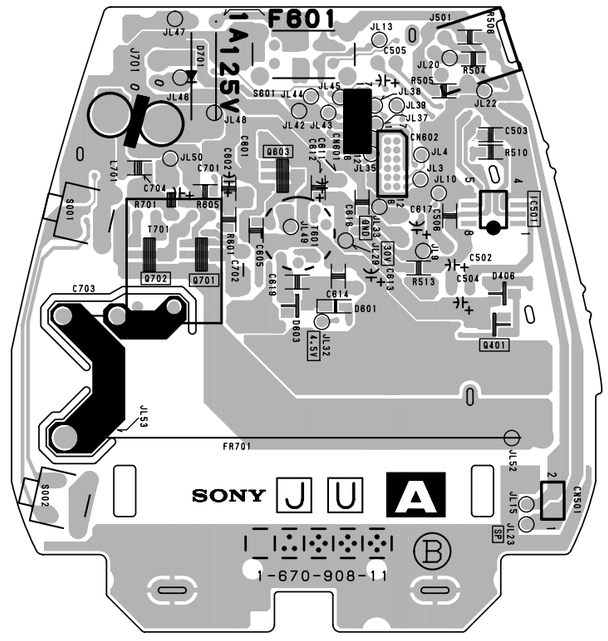
NOTE:
- ■: Pattern from the side which enables seeing.
- ■: Pattern of the rear side.

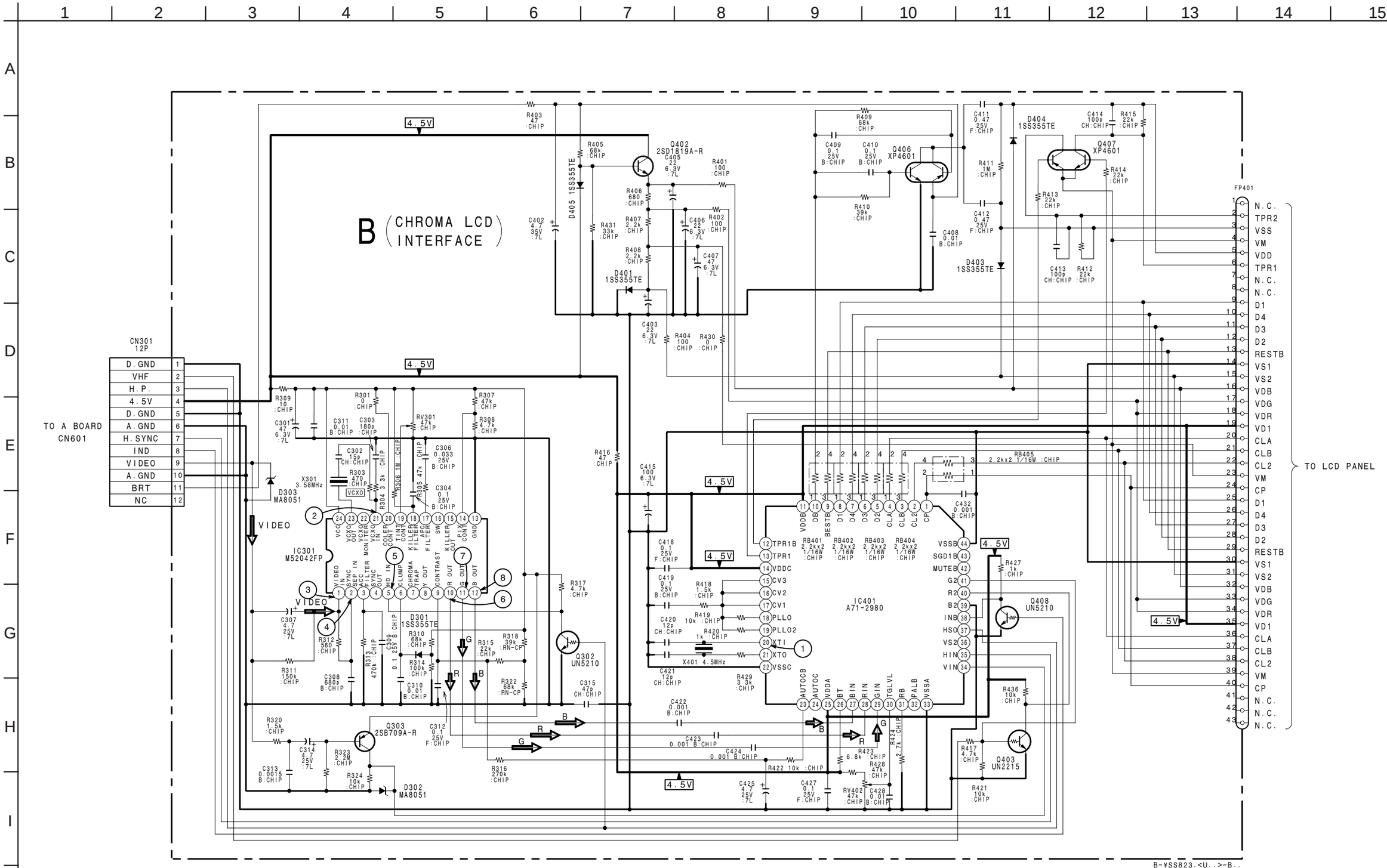
– A BOARD –

< Component Side >



< Conductor Side >




B (CHROMA LCD INTERFACE)
CN301
12P
D.GND 1
VHF 2
H.P. 3
4.5V 4
D.GND 5
A.GND 6
H.SYNC 7
IND 8
VIDEO 9
A.GND 10
BRT 11
NC 12
TO A BOARD
CN601
4.5V
VIDEO
IC301
M52042FP
IC401
A71-2980
Q402
2SD1819A-R
Q406
XP4601
Q407
XP4601
Q408
UN5210
Q302
UN5210
Q303
2SB709A-R
Q403
UN2215
D401
1SS355TE
D403
1SS355TE
D404
1SS355TE
D405
1SS355TE
D303
MA8051
D302
MA8051
X301
3.58MHz
X401
4.5MHz
FP401
N.C.
TPR2
VSS
VM
VDD
TPR1
N.C.
N.C.
D1
D4
D3
D2
RESTB
VS1
VS2
VDB
VDG
VDR
VD1
CLA
CLB
CL2
VM
CP
D1
D4
D3
D2
RESTB
VS1
VS2
VDB
VDG
VDR
VD1
CLA
CLB
CL2
VM
CP
N.C.
N.C.
N.C.
TO LCD PANEL
B-¥SS823.<U..>-B..

B BOARD IC VOLTAGE LIST

	Pin	Volt		Pin	Volt		Pin	Volt
IC301	1	3.0		24	4.2		23	3.4
	2	3.1	IC401	1	1.3		24	-
	3	0.6		2	0		25	3.8
	4	-		3	0.8		26	3.3
	5	3.5		4	0.8		27	0.9
	6	2.5		5	2.7		28	0.9
	7	-		6	2.7		29	0.9
	8	-		7	2.8		30	0.8
	9	2.8		8	2.8		31	0.3
	10	3.0		9	3.3		32	3.8
	11	2.9		10	1.9		33	GND
	12	3.1		11	3.9		34	1.8
	13	GND		12	3.9		35	1.1
	14	0.3		13	0		36	0
	15	-		14	3.9		37	0.3
	16	-		15	1.7		38	3.6
	17	1.5		16	1.7		39	GND
	18	3.7		17	1.7		40	0
	19	1.6		18	1.7		41	2.1
	20	2.0		19	1.7		42	0
	21	3.4		20	2.0		43	3.5
	22	-		21	2.0		44	GND
	23	2.0		22	GND			

All voltage are in V.
- : Not used

B BOARD

DIODE		✻
D301	B-2	③
D302	B-2	③
D303	F-2	③
D401	C-3	③
D403	F-4	③
D404	F-4	③
D405	B-3	③
IC		
IC301	C-3	
IC401	C-4	
TRANSISTOR ✻		
Q302	C-3	②
Q303	B-2	②
Q402	B-3	②
Q403	C-3	②
Q406	C-5	⑳
Q407	B-5	⑳
Q408	C-3	②
VARIABLE RESISTOR		
RV301	B-2	
RV402	C-4	

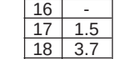
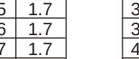
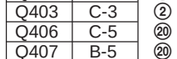
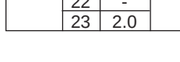
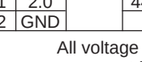
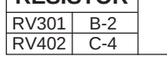
B BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q302	0.3	3.5	GND
Q303	3.6	1.8	4.1
Q402	3.9	4.4	3.2
Q403	2.1	0	GND
Q408	0	3.8	GND

	1	2	3	4	5	6
Q406	GND	-0.7	6.5	12.4	13.3	6.5
Q407	1.8	0	6.5	1.8	1.8	13.3

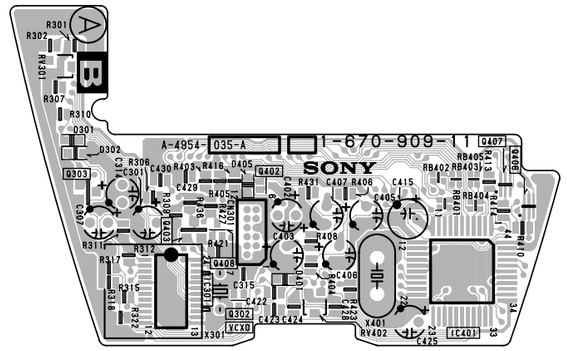
All voltage are in V.
- : Not used

• B BOARD WAVEFORMS

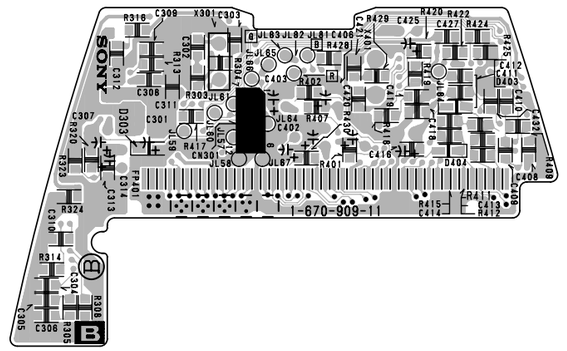
①  2.0Vp-p (4.5MHz)	②  1.1Vp-p (4.43MHz)	③  1.0Vp-p (H)	④  0.7Vp-p (H)
⑤  4.1Vp-p (H)	⑥  1.4Vp-p (H)	⑦  1.4Vp-p (H)	⑧  1.4Vp-p (H)

– B BOARD –

< Component Side >



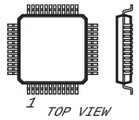
< Conductor Side >



NOTE:
- ■■■ : Pattern from the side which enables seeing.
- ■■■ : Pattern of the rear side.

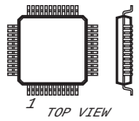
4-4. SEMICONDUCTORS

A71-2980



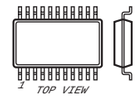
44 pin QFP

AN5707NFAP



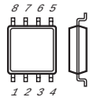
32 pin QFP

M51348AFP
M52045FP



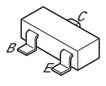
24 pin SOP

NJM2070M

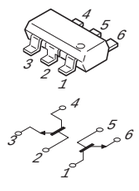


8 pin SOP

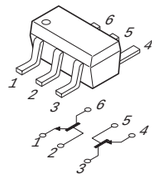
UN2110
UN211D
UN2210
UN5210
2SB709A
2SC3837KQ
2SD601A



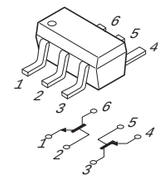
XN4215



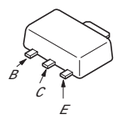
XN4601



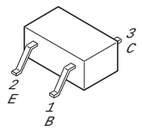
XP4601



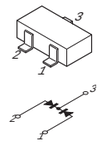
2SD1119-Q



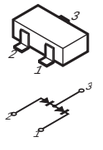
2SD1819A



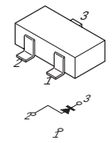
MA152WK



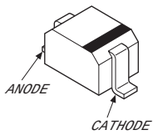
MA157
1SS226



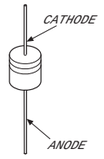
SB-01-15CP
SB05-05CP



MA8043
MA8240
MA8360



11EQS04



SECTION 5
EXPLODED VIEWS

NOTE:

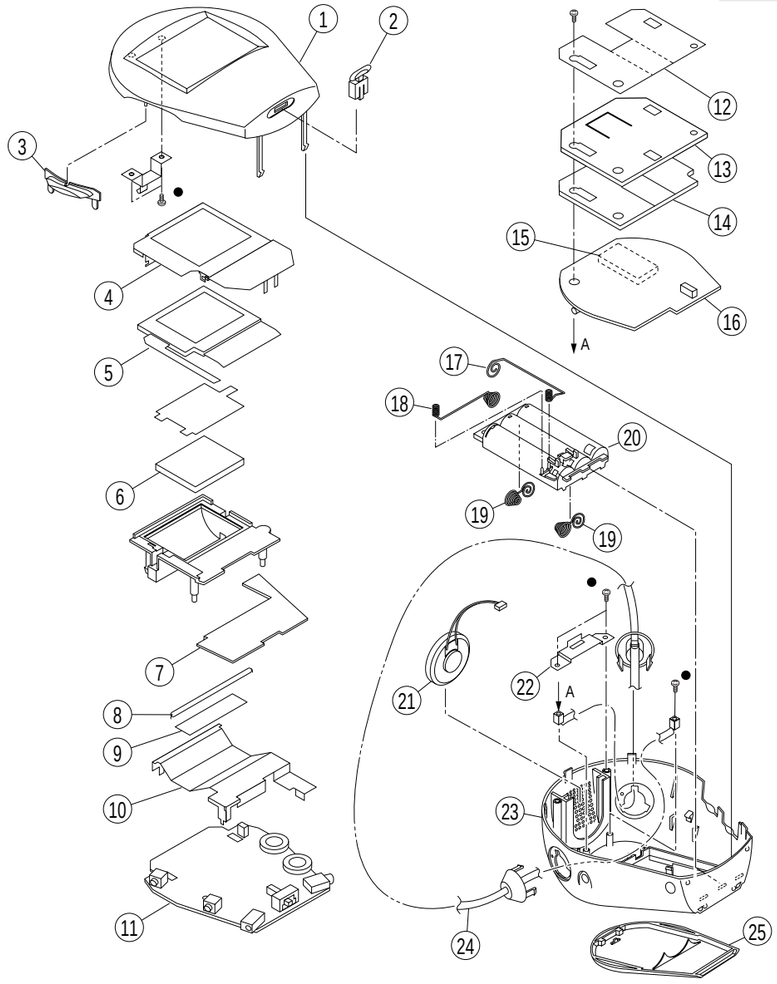
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

5-1. CHASSIS

● : 7-685-104-19 +P2 X6



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	4-561-075-01	CABINET, FRONT	
2	4-561-076-01	SWITCH, POWER	
3	4-561-093-01	BUTTON, CHANNEL	
4	4-561-090-01	SHIELD, PANEL	
5	1-803-293-11	PANEL, LCD (NTSC)	
6	* 4-048-325-01	ILLUMINATOR	
7	* A-4954-035-A	B BOARD, COMPLETE	
8	1-517-702-11	LIGHT, BACK	
9	4-561-087-01	SHEET, REFLECTION	
10	4-561-086-01	SHIELD, BACK LIGHT	
11	* A-4954-034-A	A BOARD, COMPLETE	
12	4-561-096-01	INSULATING SHEET	
13	4-561-091-01	SHIELD, TU	
14	4-561-097-01	INSULATING SHEET (2)	
15	⚠ 1-693-219-11	TUNER UNIT (TEPA5)	
16	* A-4954-036-A	T BOARD, COMPLETE	
17	4-561-081-01	SPRING (C), BATTERY	
18	4-561-080-01	SPRING (B), BATTERY	
19	4-561-079-01	SPRING (A), BATTERY	
20	4-561-078-01	CASE, BATTERY	
21	1-504-847-11	SPEAKER (2.8CM)	
22	4-561-130-01	PLATE, LOCK	
23	4-561-077-01	CABINET, REAR	
24	1-754-025-11	ANTENNA, STRAP	
25	4-561-092-01	COVER, BATTERY	

SECTION 6
ELECTRICAL PARTS LIST

A

NOTE:

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

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

- CAPACITORS
  PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-4954-034-A	A BOARD, COMPLETE			
		**********			
	1-517-702-11	LIGHT, BACK			
	4-561-086-01	SHIELD, BACK LIGHT			
	4-561-087-01	SHEET, REFLECTION			
		<CAPACITOR>			
C501	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C502	1-126-382-11	ELECT	100MF	20%	6.3V
C503	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C504	1-126-791-11	ELECT	10MF	20%	16V
C505	1-126-382-11	ELECT	100MF	20%	6.3V
C506	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C507	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C601	1-126-382-11	ELECT	100MF	20%	10V
C602	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C603	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C604	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C605	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C610	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C611	1-126-795-11	ELECT	10MF	20%	50V
C612	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C613	1-128-499-11	ELECT	220MF	20%	16V
C614	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C615	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C616	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C617	1-128-499-11	ELECT	220MF	20%	16V
C619	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C701	1-126-382-11	ELECT	100MF	20%	6.3V
C702	1-136-169-00	FILM	0.22MF	5%	50V
C703	1-109-879-11	CERAMIC	22PF	5%	2KV
		<CONNECTOR>			
CN501	* 1-568-951-11	PIN, CONNECTOR 2P			
CN601	* 1-770-605-11	CONNECTOR, BOARD TO BOARD 12P			
CN602	* 1-770-605-11	CONNECTOR, BOARD TO BOARD 12P			
		<DIODE>			
D406	8-719-800-76	DIODE 1SS226			
D601	8-719-421-82	DIODE MA8043-M			
D602	8-719-989-93	DIODE SB01-15CP			
D603	8-719-938-75	DIODE SB05-05CP			
D604	8-719-018-15	DIODE MA8360			
D605	8-719-988-62	DIODE 1SS355			
D701	8-719-210-21	DIODE 11EQS04			
		<FUSE>			
F601	⚠ 1-533-631-31	FUSE, MICRO			

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<IC>			
IC501	8-759-046-84	IC NJM2070M			
		<JACK>			
J501	1-563-282-11	JACK, SMALL TYPE			
J701	1-568-907-21	JACK,DC(POLARITY UNIFIED TYPE)			
		<COIL>			
L601	1-412-031-11	INDUCTOR CHIP 47UH			
L701	1-408-615-31	INDUCTOR 100UH			
		<TRANSISTOR>			
Q401	8-729-902-99	TRANSISTOR DTC114TK			
Q601	8-729-422-29	TRANSISTOR 2SD601A-S			
Q602	8-729-422-29	TRANSISTOR 2SD601A-S			
Q603	8-729-421-15	TRANSISTOR 2SD1119-Q			
Q610	8-729-422-37	TRANSISTOR 2SB709A-R			
Q701	8-729-807-51	TRANSISTOR 2SD1623-S			
Q702	8-729-807-51	TRANSISTOR 2SD1623-S			
		<RESISTOR>			
R028	1-216-073-00	RES,CHIP	10K	5%	1/10W
R450	1-216-097-91	RES,CHIP	100K	5%	1/10W
R451	1-216-095-00	RES,CHIP	82K	5%	1/10W
R501	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R504	1-216-041-00	RES,CHIP	470	5%	1/10W
R505	1-216-041-00	RES,CHIP	470	5%	1/10W
R506	1-216-039-00	RES,CHIP	390	5%	1/10W
R509	1-216-099-00	RES,CHIP	120K	5%	1/10W
R510	1-216-073-00	RES,CHIP	10K	5%	1/10W
R513	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R601	1-216-089-91	RES,CHIP	47K	5%	1/10W
R602	1-216-089-91	RES,CHIP	47K	5%	1/10W
R603	1-216-009-00	RES,CHIP	22	5%	1/10W
R604	1-216-037-00	RES,CHIP	330	5%	1/10W
R605	1-216-025-91	RES,CHIP	100	5%	1/10W
R608	1-216-089-91	RES,CHIP	47K	5%	1/10W
R610	1-216-025-91	RES,CHIP	100	5%	1/10W
R611	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R612	1-216-037-00	RES,CHIP	330	5%	1/10W
R613	1-216-043-91	RES,CHIP	560	5%	1/10W
R614	1-216-085-00	RES,CHIP	33K	5%	1/10W
R615	1-216-073-00	RES,CHIP	10K	5%	1/10W
R616	1-216-073-00	RES,CHIP	10K	5%	1/10W
R617	1-216-021-00	RES,CHIP	68	5%	1/10W
R701	1-216-186-00	RES,CHIP	330	5%	1/8W
		<VARIABLE RESISTOR>			
RV450	1-223-901-21	RES, VAR 50K			

A B

REF. NO.	PART NO.	DESCRIPTION	REMARK
RV501	1-223-900-21	RES, VAR 10K	
RV601	1-223-581-11	RES, ADJ, CARBON 220	
		<SWITCH>	
S001	1-571-532-21	SWITCH, TACTIL	
S002	1-571-532-21	SWITCH, TACTIL	
S601	1-762-368-11	SWITCH, SLIDE	
		<TRANSFORMER>	
T601	1-431-580-11	TRANSFORMER, DC-DC CONVERTER	
T701	1-427-918-11	TRANSFORMER, CONVERTER	

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* A-4954-035-A B BOARD, COMPLETE
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<CAPACITOR>

C301	1-126-513-11	ELECT	47MF	20%	6.3V
C302	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C303	1-163-257-11	CERAMIC CHIP	180PF	5%	50V
C304	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C306	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C307	1-126-794-11	ELECT	4.7MF	20%	25V
C308	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C309	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C310	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C311	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C312	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C313	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C314	1-126-794-11	ELECT	4.7MF	20%	25V
C315	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C402	1-115-866-11	ELECT	4.7MF	20%	35V
C403	1-126-514-11	ELECT	22MF	20%	6.3V
C405	1-126-514-11	ELECT	22MF	20%	6.3V
C406	1-126-514-11	ELECT	22MF	20%	6.3V
C407	1-126-513-11	ELECT	47MF	20%	6.3V
C408	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C409	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C410	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C411	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C412	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C413	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C414	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C415	1-126-382-11	ELECT	100MF	20%	6.3V
C418	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C419	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C420	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C421	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C422	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C423	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C424	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C425	1-126-794-11	ELECT	4.7MF	20%	25V
C427	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C428	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C432	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V

<CONNECTOR>

CN301	* 1-779-896-11	CONNECTOR, BOARD TO BOARD 12P	

<DIODE>

D301	8-719-988-62	DIODE 1SS355	
D302	8-719-422-37	DIODE MA8051	
D303	8-719-422-37	DIODE MA8051	
D401	8-719-988-62	DIODE 1SS355	
D403	8-719-988-62	DIODE 1SS355	
D404	8-719-988-62	DIODE 1SS355	
D405	8-719-988-62	DIODE 1SS355	

<IC>

IC301	8-759-332-41	IC M52042FP	
IC401	8-759-368-68	IC A71-2980	

<TRANSISTOR>

Q302	8-729-420-44	TRANSISTOR UN5210	
Q303	8-729-422-37	TRANSISTOR 2SB709A-R	
Q402	8-729-402-32	TRANSISTOR 2SD1819A-R	
Q403	8-729-902-99	TRANSISTOR DTC114TK	
Q406	8-729-427-74	TRANSISTOR XP4601	
Q407	8-729-427-74	TRANSISTOR XP4601	
Q408	8-729-420-44	TRANSISTOR UN5210	

<RESISTOR>

R301	1-216-295-91	SHORT	0		
R303	1-216-041-00	RES,CHIP	470	5%	1/10W
R304	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R305	1-216-089-91	RES,CHIP	47K	5%	1/10W
R306	1-216-121-91	RES,CHIP	1M	5%	1/10W
R307	1-216-089-91	RES,CHIP	47K	5%	1/10W
R308	1-216-073-00	RES,CHIP	10K	5%	1/10W
R309	1-216-001-00	RES,CHIP	10	5%	1/10W
R310	1-216-093-00	RES,CHIP	68K	5%	1/10W
R311	1-216-101-00	RES,CHIP	150K	5%	1/10W
R312	1-216-043-91	RES,CHIP	560	5%	1/10W
R313	1-216-113-00	RES,CHIP	470K	5%	1/10W
R314	1-216-097-91	RES,CHIP	100K	5%	1/10W
R315	1-216-081-00	RES,CHIP	22K	5%	1/10W
R316	1-216-107-00	RES,CHIP	270K	5%	1/10W
R317	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R318	1-216-689-11	METAL CHIP	39K	0.50%	1/10W
R320	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R322	1-216-695-11	METAL CHIP	68K	0.50%	1/10W
R323	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R324	1-216-073-00	RES,CHIP	10K	5%	1/10W
R401	1-216-025-91	RES,CHIP	100	5%	1/10W
R402	1-216-025-91	RES,CHIP	100	5%	1/10W
R403	1-216-017-91	RES,CHIP	47	5%	1/10W
R404	1-216-025-91	RES,CHIP	100	5%	1/10W
R405	1-216-093-00	RES,CHIP	68K	5%	1/10W
R406	1-216-045-00	RES,CHIP	680	5%	1/10W
R407	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R408	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R409	1-216-093-00	RES,CHIP	68K	5%	1/10W
R410	1-216-689-11	RES,CHIP	39K	5%	1/10W
R411	1-216-121-91	RES,CHIP	1M	5%	1/10W
R412	1-216-081-00	RES,CHIP	22K	5%	1/10W
R413	1-216-081-00	RES,CHIP	22K	5%	1/10W
R414	1-216-081-00	RES,CHIP	22K	5%	1/10W
R415	1-216-081-00	RES,CHIP	22K	5%	1/10W
R416	1-216-017-91	RES,CHIP	47	5%	1/10W
R417	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R418	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R419	1-216-073-00	RES,CHIP	10K	5%	1/10W
R420	1-216-049-91	RES,CHIP	1K	5%	1/10W
R421	1-216-073-00	RES,CHIP	10K	5%	1/10W
R422	1-216-073-00	RES,CHIP	10K	5%	1/10W
R423	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R424	1-216-059-00	RES,CHIP	2.7K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R427	1-216-049-91	RES,CHIP	1K	5%	1/10W
R428	1-216-089-91	RES,CHIP	47K	5%	1/10W
R429	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R430	1-216-295-91	SHORT	0		
R431	1-216-085-00	RES,CHIP	33K	5%	1/10W
R436	1-216-073-00	RES,CHIP	10K	5%	1/10W
		<RESISTOR BLOCK>			
RB401	1-236-416-11	NETWORK, RES 2.2K			
RB402	1-236-416-11	NETWORK, RES 2.2K			
RB403	1-236-416-11	NETWORK, RES 2.2K			
RB404	1-236-416-11	NETWORK, RES 2.2K			
RB405	1-236-416-11	NETWORK, RES 2.2K			
		<VARIABLE RESISTOR>			
RV301	1-223-588-11	RES, ADJ, CARBON 47K			
RV402	1-223-588-11	RES, ADJ, CARBON 47K			
		<CRYSTAL>			
X301	1-567-505-11	OSCILLATOR, CRYSTAL			
X401	1-760-601-21	VIBRATOR, CRYSTAL			

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* A-4954-036-A T BOARD, COMPLETE
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	4-561-091-01	SHIELD, TU			
	4-561-096-01	INSULATING SHEET			
	4-561-097-01	INSULATING SHEET (2)			
		<CAPACITOR>			
C001	1-126-794-11	ELECT	4.7MF	20%	25V
C002	1-126-513-11	ELECT	47MF	20%	6.3V
C003	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C004	1-126-513-11	ELECT	47MF	20%	6.3V
C005	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C006	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C007	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C008	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C011	1-126-791-11	ELECT	10MF	20%	16V
C012	1-164-346-11	CERAMIC CHIP	1MF		16V
C014	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C015	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C016	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C018	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C021	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C105	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C106	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C107	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C108	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C109	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C110	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C202	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C203	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C204	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C205	1-126-791-11	ELECT	10MF	20%	16V
C206	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C207	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C208	1-163-085-00	CERAMIC CHIP	2PF	0.25PF	50V
C209	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C210	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C211	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C212	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C213	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C215	1-126-513-11	ELECT	47MF	20%	6.3V
C218	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C219	1-115-870-11	ELECT	0.47MF	20%	50V
C222	1-126-791-11	ELECT	10MF	20%	16V
C223	1-115-871-11	ELECT	1MF	20%	50V
C224	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C225	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C226	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C234	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C235	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C236	1-126-514-11	ELECT	22MF	20%	6.3V
		<FILTER>			
CF201	1-409-332-00	CERAMIC TRAP			
CF202	1-760-642-11	DISCRIMINATOR, CERAMIC			
CF203	1-577-559-21	FILTER, CERAMIC			
		<CONNECTOR>			
CN201	1-785-361-11	CONNECTOR, BOARD TO BOARD			
		<DIODE>			
D001	8-719-801-78	DIODE 1SS184			
D002	8-719-800-76	DIODE 1SS226			
		<IC>			
IC001	8-759-332-43	IC AN5707NFAP			
IC201	8-759-176-91	IC M51348AFP			
		<JACK>			
J101	1-568-027-11	JACK, SMALL TYPE			
		<COIL>			
L201	1-412-953-11	INDUCTOR 15UH			
L205	1-412-938-11	INDUCTOR 0.82UH			
		<TRANSISTOR>			
Q001	8-729-422-37	TRANSISTOR 2SB709A-R			
Q002	8-729-402-84	TRANSISTOR XN4601			
Q003	8-729-424-76	TRANSISTOR UN2210			
Q004	8-729-424-38	TRANSISTOR UN2110			
Q006	8-729-422-54	TRANSISTOR XN4215			
Q007	8-729-424-45	TRANSISTOR UN211D-TX			
Q201	8-729-031-37	TRANSISTOR 2SC3837KQ			
Q202	8-729-422-37	TRANSISTOR 2SB709A-R			
Q203	8-729-424-76	TRANSISTOR UN2210			
		<RESISTOR>			
R001	1-216-097-91	RES,CHIP	100K	5%	1/10W
R002	1-216-097-91	RES,CHIP	100K	5%	1/10W
R003	1-216-093-00	RES,CHIP	68K	5%	1/10W
R004	1-216-089-91	RES,CHIP	47K	5%	1/10W
R005	1-216-101-00	RES,CHIP	150K	5%	1/10W
R008	1-218-762-11	METAL CHIP	270K	0.50%	1/10W
R009	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R010	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R011	1-216-073-00	RES,CHIP	10K	5%	1/10W
R012	1-216-109-00	RES,CHIP	330K	5%	1/10W
R013	1-216-091-00	RES,CHIP	56K	5%	1/10W
R014	1-216-689-11	RES,CHIP	39K	5%	1/10W
R016	1-216-689-11	RES,CHIP	39K	5%	1/10W
R017	1-216-079-00	RES,CHIP	18K	5%	1/10W

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R018	1-216-097-91	RES,CHIP	100K	5%	1/10W
R019	1-216-107-00	RES,CHIP	270K	5%	1/10W
R020	1-216-113-00	RES,CHIP	470K	5%	1/10W
R021	1-216-097-91	RES,CHIP	100K	5%	1/10W
R022	1-216-089-91	RES,CHIP	47K	5%	1/10W
R024	1-216-089-91	RES,CHIP	47K	5%	1/10W
R029	1-216-041-00	RES,CHIP	470	5%	1/10W
R030	1-216-295-91	SHORT	0		
R031	1-216-095-00	RES,CHIP	82K	5%	1/10W
R032	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R111	1-216-009-00	RES,CHIP	22	5%	1/10W
R201	1-216-045-00	RES,CHIP	680	5%	1/10W
R202	1-216-035-00	RES,CHIP	270	5%	1/10W
R205	1-216-097-91	RES,CHIP	100K	5%	1/10W
R206	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R208	1-216-045-00	RES,CHIP	680	5%	1/10W
R209	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R210	1-216-085-00	RES,CHIP	33K	5%	1/10W
R212	1-216-045-00	RES,CHIP	680	5%	1/10W
R213	1-216-073-00	RES,CHIP	10K	5%	1/10W
R214	1-216-049-91	RES,CHIP	1K	5%	1/10W
R215	1-216-001-00	RES,CHIP	10	5%	1/10W
R216	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R217	1-216-049-91	RES,CHIP	1K	5%	1/10W
R218	1-216-021-00	RES,CHIP	68	5%	1/10W
R219	1-216-039-00	RES,CHIP	390	5%	1/10W
R220	1-216-017-91	RES,CHIP	47	5%	1/10W
R221	1-216-049-91	RES,CHIP	1K	5%	1/10W
R222	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R223	1-216-049-91	RES,CHIP	1K	5%	1/10W
R224	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R225	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R226	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R228	1-216-073-00	RES,CHIP	10K	5%	1/10W
R229	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R230	1-216-001-00	RES,CHIP	10	5%	1/10W
R231	1-216-001-00	RES,CHIP	10	5%	1/10W
R240	1-216-073-00	RES,CHIP	10K	5%	1/10W
R241	1-216-103-00	RES,CHIP	180K	5%	1/10W
R242	1-216-041-00	RES,CHIP	470	5%	1/10W
R243	1-216-081-00	RES,CHIP	22K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<VARIABLE RESISTOR>	
RV001	1-223-588-11	RES, ADJ, CARBON 47K	
RV002	1-223-588-11	RES, ADJ, CARBON 47K	
RV004	1-223-589-11	RES, ADJ, CARBON 100K	
RV201	1-223-583-11	RES, ADJ, CARBON 1K	
		<FILTER>	
SWF201	1-767-766-12	FILTER, SAW	
		<TRANSFORMER>	
T201	1-411-278-11	COIL	
T202	1-411-278-11	COIL	
		<TUNER>	
TU101	⚠1-693-219-11	TUNER UNIT (TEPA5)	
**********		**********	
		MISCELLANEOUS **********	
	1-504-847-11	SPEAKER (2.8CM)	
	1-754-025-11	ANTENNA, STRAP	
	1-803-293-11	PANNEL, LCD (NTSC)	
**********		**********	
		ACCESSORIES AND PACKING MATERIALS **********	
	3-864-858-01	MANUAL, INSTRUCTION	

9-965-228-01

Sony Ichinomiya Corporation
Quality Assurance Division

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