

Service Manual

COMPACT
disc
DIGITAL AUDIO

MASH[®]
multi-stage noise shaping

※ • MASH is a trademark of NTT.

Portable CD Player

SL-S319C



Colour

(H) Gray Type

Areas

P U.S.A.

Please file and use this manual together with the service manual for Model No. SL-S220/S225/S221C, Order No. AD9702018C5.

- Notes:**
- This simplified service manual is provided to indicate the main differences between the original model No. SL-S220/S225/S221C (P) and the subsequent model No. SL-S319C(P).
In this service manual a comparison is drawn between the above-stated 3 models and the SL-S220(P).
 - Refer to the Schematic Diagram and Printed Circuit Board and Wiring connection Diagram and Packaging of this service manual.

CHANGES

Specifications (SL-S220/S225/S221C Service Manual of cover page.)

SL-S220 (P)

Playing time

Batteries used: Anti-shock OFF/ON

General

Power consumption (Anti-shock OFF/ON)



SL-S319C(P)

Playing time

Batteries used: Extra anti-shock OFF/ON

General

Power consumption (Extra anti-shock OFF/ON)

Location of Controls (SL-S220/S225/S221C Service Manual of page 3.)

SL-S220 (P)

ⓘ Anti-shock switch (ANTI-SHOCK)

This function minimizes sound interruption when vibrations are encountered by utilizing audio data that has been stored ahead of time (up to approximately 3 seconds' worth).



SL-S319C(P)

ⓘ Extra anti-shock switch (EXTRA ANTI-SHOCK)

This function minimizes sound interruption when vibrations are encountered by utilizing audio data that has been stored ahead of time (up to approximately 10 seconds' worth).

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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Change in Replacement Parts List (SL-S220/225/221C Service Manual of pages 34, 35, 37, 38.)

Notes: * Mentioned in this parts list is only those different from Model No. SL-S220(P). All other parts are the same as for SL-S220(P).

* Important safety notice:

Components identified by Δ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

* [M] indicates in Remarks columns parts that are supplied by MESA.

Ref No.	Change of Part No.		Part Name & Description	Remarks
	SL-S220(P)	➡ SL-S319C(P)		
INTEGRATED CIRCUIT(S)				
IC503	LH6456K2	MNV4400-T8T	IC	[M]
TRANSISTOR(S)				
Q81	_____	UN521MTX	TRANSISTOR	[M] Addition
Q506	2SD1819QRSTX	_____	TRANSISTOR	[M] Deletion
Q508	2SD1819QRSTX	_____	TRANSISTOR	[M] Deletion
Q601,602	2SD1328QRSTX	2SD1328TX	TRANSISTOR	[M]
Q701,702	2SD1328QRSTX	2SD1328TX	TRANSISTOR	[M]
DIODE(S)				
D81-83	_____	CL170YGCDT	L.E.D.	[M] Addition
D501	MA8047MTX	_____	DIODE	[M] Deletion
COIL(S)				
L502	RLQU331KT-W	_____	COIL	[M] Deletion
OSCILLATOR(S)				
LCD301	RSL5174-C	RSL5157-1L	LCD	[M]
SWITCH(ES)				
S301-306	EVQ21405R	EVQPTD05Q	SW	[M]
CONNECTOR(S) AND JACK(S)				
CN3	RJH5104	RJH5102-1	RECHARGEABLE BATT. TERMINAL	[M]
RESISTORS				
R81	_____	ERJ3GEYJ680V	1/16W 68	[M] Addition
R82	_____	EXBV4V680JV	1/32W 68	[M] Addition
R302	ERJ3GEYJ473V	EXBV4V473JV	1/32W 47K	[M]
R514	ERJ3GEYJ182V	_____	1/16W 1.8K	[M] Deletion
R603,604	MCR03PZHJ561	ERJ3GEYJ561V	1/16W 560	[M]
R609	ERJ3GEYJ332V	EXBV4V332JV	1/32W 3.3K	[M]
R610	ERJ3GEYJ332V	_____	1/16W 330	[M] Deletion
R731	ERJ3GEYJ331V	EXBV4V331JV	1/32W 330	[M]
R732	ERJ3GEYJ331V	_____	1/16W 330	[M] Deletion
R303	ERJ3GEYJ473V	_____	1/16W 47K	[M] Deletion
CHIP JUMPERS				
RJ502	_____	ERJ3GEYJ0R00V	CHIP JUMPER	[M] Addition
RJ506	ERJ3GEYJ0R00V	_____	CHIP JUMPER	[M] Deletion
CAPACITORS				
C28	RCE1AMT331IV	RCE0GMT561IV	6.3V 560U	[M]
C517	ECUVNC104ZFV	_____	16V 0.1U	[M] Deletion
CABINET AND CHASSIS				
6	RFKJLS220P-H	RFKJLS319CPH	BOTTOM CABINET ASS'Y	[M]
8	RYF0443-H	RYF0443K-H	CD COVER ASS'Y	[M]
9	RYKD718A-K	RYK0718D-K	INTERMEDIATE CABINET ASS'Y	[M]



Ref No.	Change of Part No.		Part Name & Description	Remarks
	SL-S220(P)	➡ SL-S319C(P)		
PACKING MATERIAL				
P1	RPN1043	RPN1067	COVER	[M]
P2	RPN1044	RPN1068	TRAY	[M]
P3	RPQ0680	RPQ0838	GROUND PAPER	[M]
ACCESSORIES				
A1	RQT3745-P	RQT4218-P	INST. MANUAL	[M] *1
		RQT3825-P	INST. MANUAL (CAR MOUNT KIT)	[M] Addition
A4	————	SH-CDC2PPY	CAR ADAPTOR	[M] ⚠ Addition
A4-1	————	XBAIC5NBAU	FUSE, 500mA (IN CAR ADAPTOR)	[M] ⚠ Addition
A5	————	SH-CDM10APYK	CAR STEREO CASSETTE ADAPTOR	[M] Addition

Notes: ● * 1: The servicenter list and the warranty card are included in the instruction manual.

■ Schematic Diagram (SL-S220 Service Manual of pages 24 ~ 28.)

(This schematic diagram may be modified at any time with the development of new technology.)

Notes:

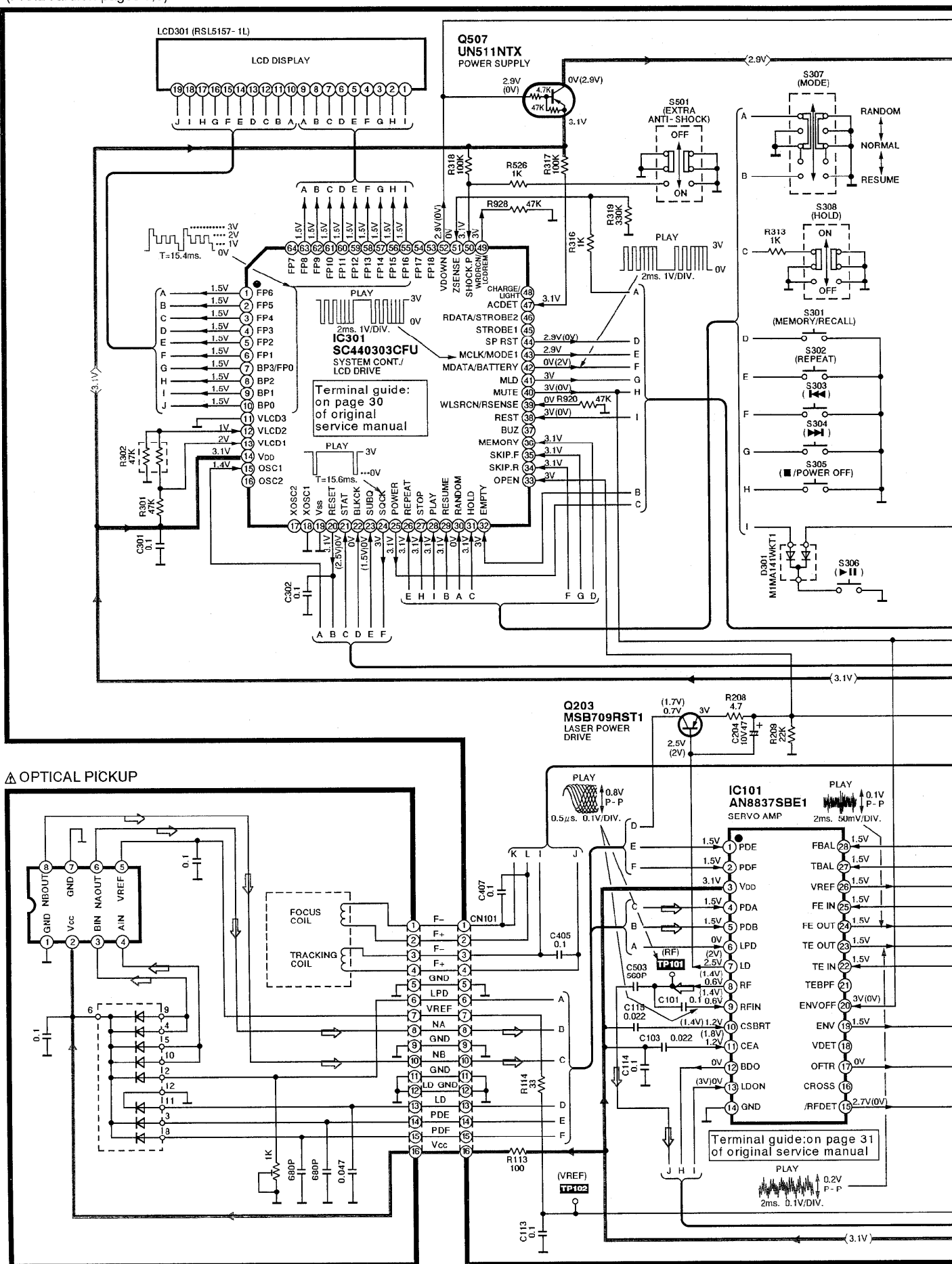
- **S201** : Laser ON/OFF switch in "OFF" position.
(It turns "ON" with disc holder closed.)
 - **S202** : Rest detector in "OFF" position.
(It turns "ON" when optical pickup comes to innermost periphery.)
 - **S301** : Memory/recall (MEMORY/RECALL) switch.
 - **S302** : Repeat (REPEAT) switch.
 - **S303** : Skip/search (▶▶, ◀◀) switches.
 S304 : [S303: GO BACK, S304: ADVANCE]
 - **S305** : Stop/operation off (■/POWER OFF) switch.
 - **S306** : Play/pause (▶ / ||) switch.
 - **S307** : Play mode selector (MODE) in "RANDOM" position.
(RANDOM ⇄ NORMAL ⇄ RESUME)
 - **S308** : Hold (HOLD) switch in "ON" position.
 - **S501** : Extra Anti-shock (EXTRA ANTI-SHOCK) switch in "OFF" position.
 - **S701** : XBS selector (XBS) in "OFF" position.
 - **VR11** : Power supply voltage adjustment.
 - **VR701-1, 2** : Headphones volume (VOLUME) control.
- The voltage value and waveforms are the reference voltage of this measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of GND terminal (DC IN Jack). Accordingly, there may arise some errors in the voltage values and waveforms depending upon the internal impedance of the tester or measuring unit.
- **Measurement conditions:**
 - * Set the HOLD and ANTI-SHOCK switches to ON.
 - * The parenthesized is the voltage for test disc (1 kHz, L + R, 0 dB) in play mode, and the other, for no disc in stop mode.
 - * AC adaptor is used for power supply.
 -  : Positive voltage lines.
 -  : Audio signal lines.
 - **Important safety notice:**
Components identified by △ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.

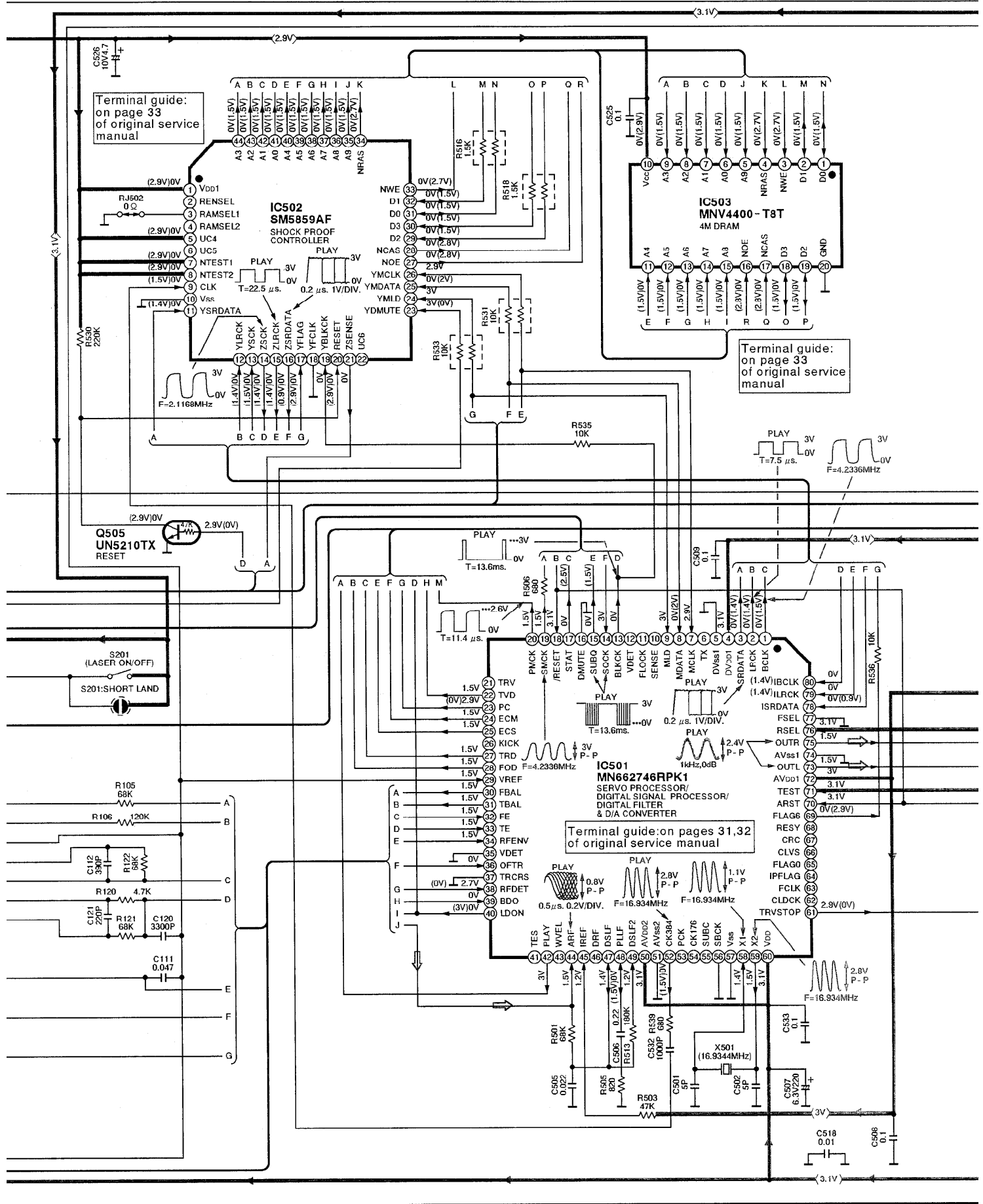
Caution!

- IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.
- Cover the parts boxes made of plastics with aluminum foil.
 - Ground the soldering iron.
 - Put a conductive mat on the work table.
 - Do not touch the pins of IC or LSI with fingers directly.

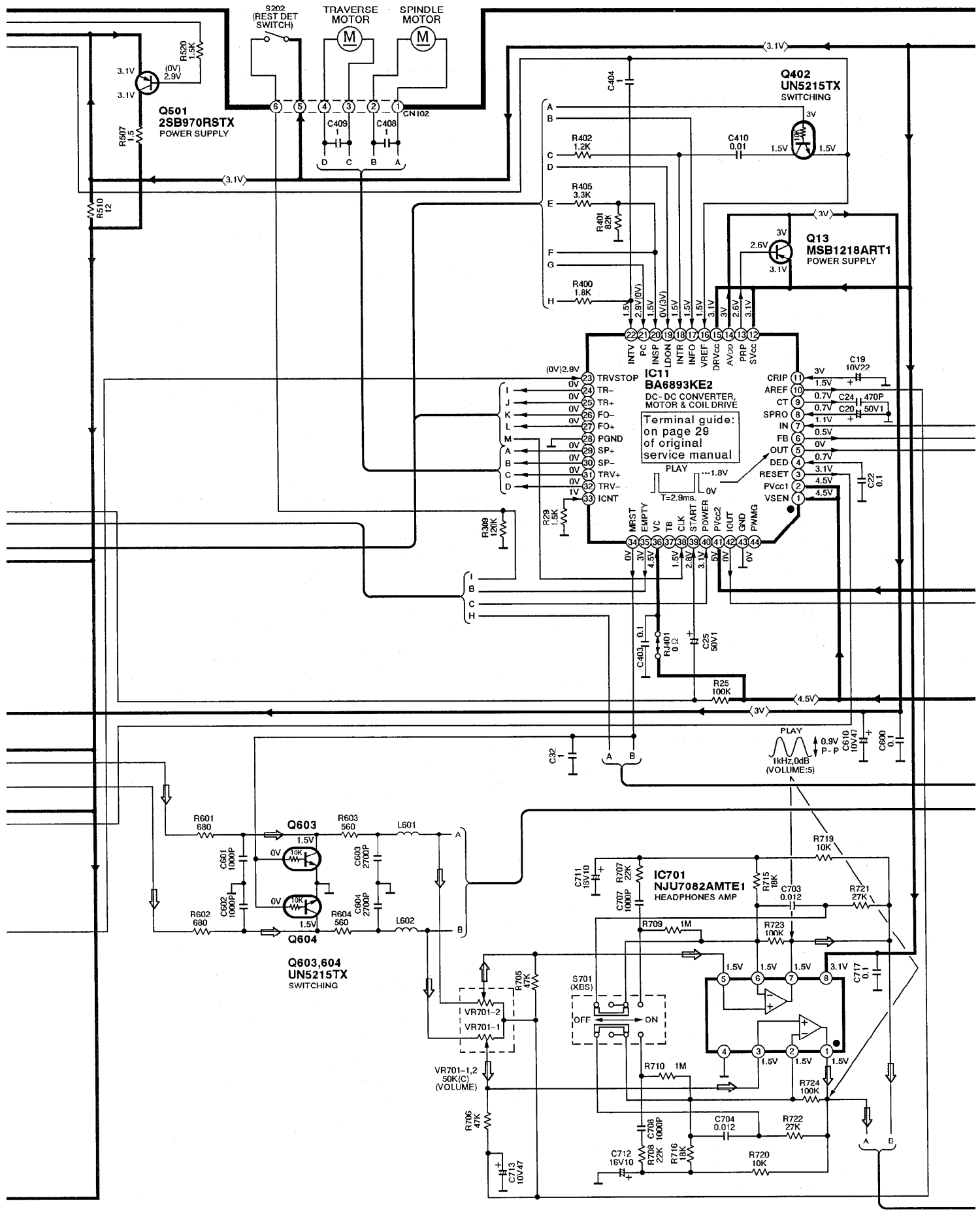
Note: ● ➞: Audio signal lines.

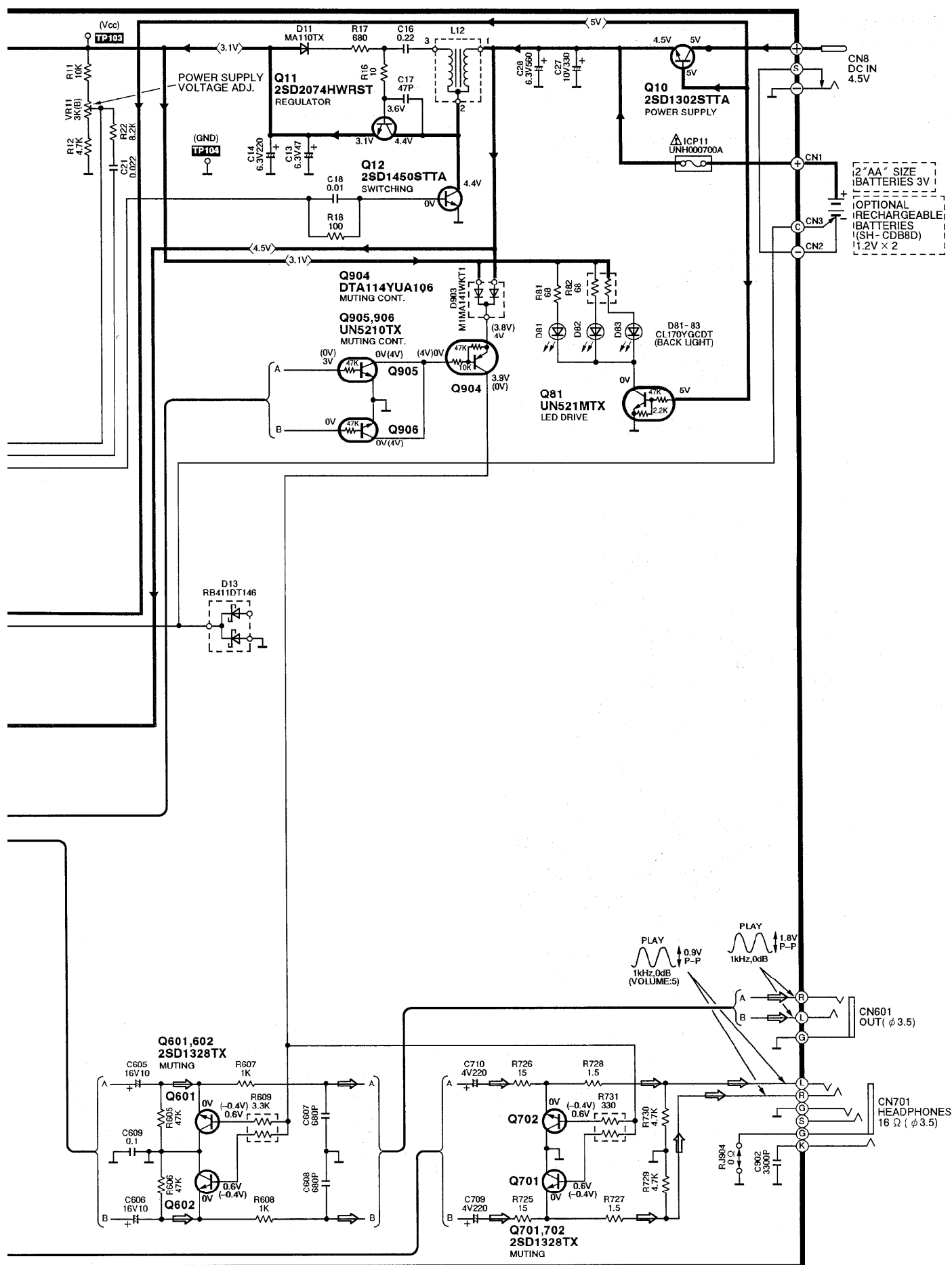
(P.C.Board: on pages 8,9)





Note: ● →: Audio signal lines.





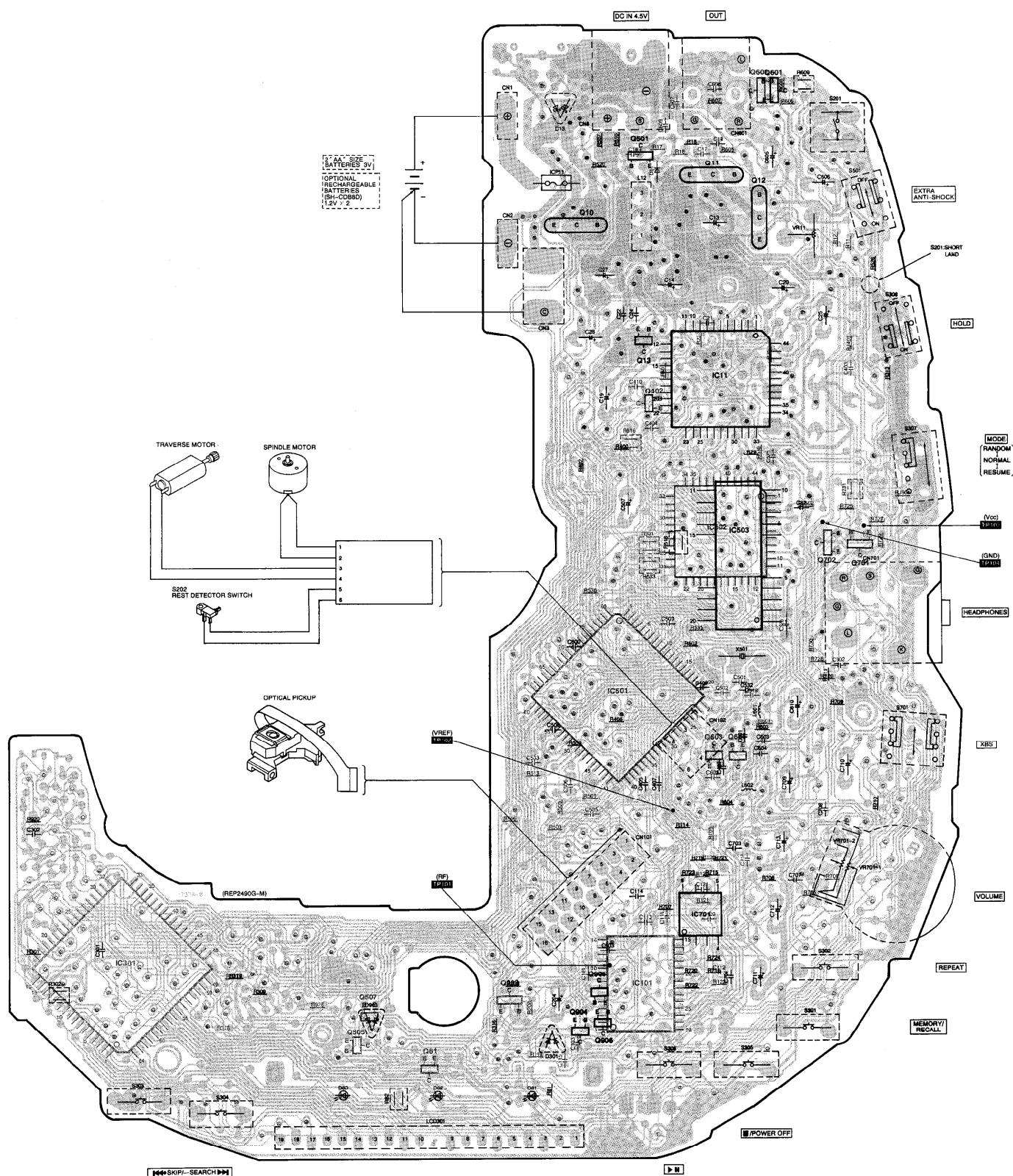
Printed Circuit Board and Wiring Connection Diagram

(SL-S220(P) Service Manual of pages 22,23.)

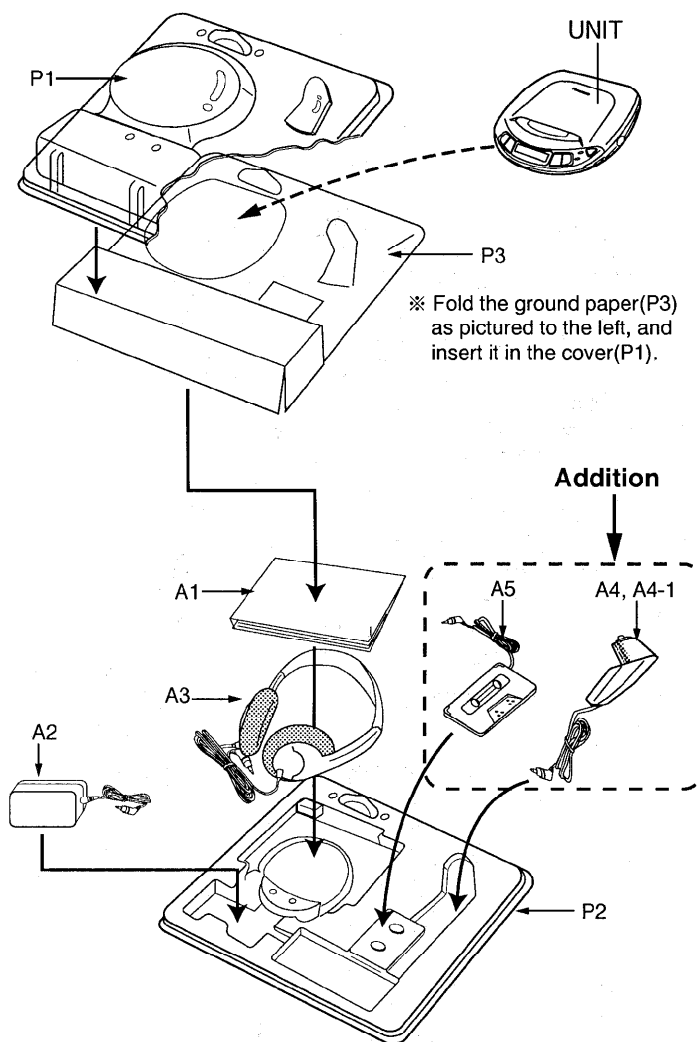
Notes:

- This printed circuit board diagram may be modified at any time with the development of new technology.
- In this printed circuit board diagram, the parts and foil patterns on the board facing toward you are printed in black. The opposite side is printed in blue.
- The “●” and “●” marks denote the connection points of double-faced foil patterns (through holes) on both sides of the printed circuit board.



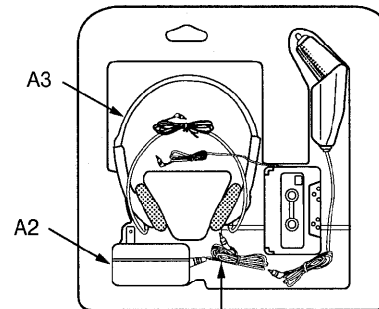


■ Packaging (SL-S220 Service Manual of pages 39.)



Tray ass'y

※ Trim up the stereo headphones cord as pictured to the below.



※ Put the AC adaptor cord here.

- ※ Remove the AC adaptor, stereo headphones bag, and insert it in the tray(P2).
- ※ Remove the Car stereo cassette adaptor bag and insert it in the tray(P2).
- ※ Put the instruction manual(A1) on the arm of stereo headphones(A3).