

# Service Manual



**COMPACT**  
**disc**  
**DIGITAL AUDIO**

**MASH**<sup>\*</sup>  
multi-stage noise shaping

※ • MASH is a trademark of NTT.

Portable CD Player  
**SL-S332C**

**Colour** (S)...Silver Type

**Area**

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-S332C (P).  
In this service manual a comparison is drawn between the above -stated 3 models and the SL-S221C (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-S221C (P)

##### Playing time

**Batteries used:** Anti-shock OFF/ON  
Panasonic Alkaline dry cell batteries(LR6, 2pcs.) : Approx. 10h/8.5h

##### General

**Power consumption** (Anti-shock OFF/ON)



#### SL-S332C (P)

##### Playing time

**Batteries used:** Extra anti-shock OFF/ON  
Panasonic Alkaline dry cell batteries(LR6, 2pcs.) : Approx. 9.5h/8.5h

##### General

**Power consumption** (Extra anti-shock OFF/ON)

#### ⚠ 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.

**Panasonic**<sup>®</sup>

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## Location of Controls (SL-S220/S225/S221C Service Manual of page 2.)

SL-S221C (P)

SL-S332C (P)

Ⓚ XBS selector (XBS)

Ⓢ Anti-shock switch (ANTI-SHOCK)

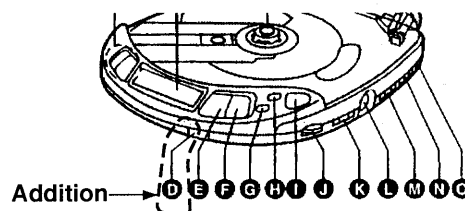
This function minimizes sound interruption when vibrations are encountered by utilizing audio data that has been stored ahead of time (up to approximately 3 seconds' worth).

Ⓚ LIVE/XBS selector (LIVE, XBS, OFF)

Ⓢ Remote sensor (SENSOR) **← Addition**

Ⓢ 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).



## Change in Replacement Parts List

(SL-S220/S225/S221C Service Manual of pages 34, 35, 37, 38.)

**Notes:** • Mentioned in this parts list is only those different from Model No. SL-S221C (P).

All other parts are the same as for SL-S221C (P).

• Important safety notice:

Components identified by  $\Delta$  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-S221C (P)	➡ SL-S332C (P)		
INTEGRATED CIRCUIT(S)				
IC503	LH6456K2	MNV4400-T8T	IC	[M]
TRANSISTOR(S)				
Q19	—	UN5213TX	TRANSISTOR	[M] Addition
Q20	—	DTA114YUA106	TRANSISTOR	[M] Addition
Q21	—	UN521MTX	TRANSISTOR	[M] Addition
Q22	—	UN5213TX	TRANSISTOR	[M] Addition
Q81	UN521MTX	—	—	[M] Deletion
Q306	—	UN521NTX	TRANSISTOR	[M] Addition
Q507	UN511NTX	—	—	[M] Deletion
COMPONENT COMBINATION(S)				
Z501	—	RCDRS-52	REMOTE SENSOR	[M] Addition
SWITCH(ES)				
S701	RSS2B028-A	RSS3B018-A	SW	[M]
RESISTOR(S)				
R541	—	ERJ3GEYJ470V	1/16W, 47Ω	[M] Addition
R542	—	ERJ3GEYJ102V	1/16W, 1KΩ	[M] Addition
R543	—	ERJ3GEYJ334V	1/16W, 330KΩ	[M] Addition
R745	—	ERJ3GEYJ822V	1/16W, 8.2KΩ	[M] Addition
CHIP JUMPER(S)				
RJ502	—	ERJ3GEY0R00V	CHIP JUMPER	[M] Addition
RJ504	—	ERJ3GEY0R00V	CHIP JUMPER	[M] Addition
RJ505	—	ERJ6GEY0R00Z	CHIP JUMPER	[M] Addition
RJ506	ERJ3GEY0R00V	—	—	[M] Deletion

Ref. No.	Change of Part No.		Part Name & Description	Remarks
	SL-S221C (P)	SL-S332C (P)		
CAPACITOR(S)				
C15	—	RCST1AY475RE	10V, 4.7μF	[M] Addition
C528	—	RCST1AY475RE	10V, 4.7μF	[M] Addition
C529	—	ECUZNC104ZFV	16V, 0.1μF	[M] Addition
C725	—	ECUVNC105ZFN	16V, 1μF	[M] Addition
CABINET AND CHASSIS				
6	RFKJLS221CPH	RFKJLS332CPS	BOTTOM CABINET ASS'Y	[M]
8	RYF0443J-H	RYF0443F-S	CD COVER ASS'Y	[M]
9	RYK0718A-K	RYK0718E-K	INTERMEDIATE CABINET ASS'Y	[M]
12	—	RKW0500-K	FILTER	[M] Addition
PACKING MATERIAL				
P1	RPN1067	—	—	[M] Deletion
P2	RPN1068	—	—	[M] Deletion
P3	RPQ0684	—	—	[M] Deletion
P8	—	RPQ0677	SPACER	[M] Addition
P9	—	RPK0898	PACKING CASE	[M] Addition
P10	—	RPF0111	PROTECTION BAG (UNIT)	[M] Addition
ACCESSORIES				
A1	RQT4055-P	RQT3825-P	INST. MANUAL(CAR MOUNT KIT)	[M] <IA>
A5	SH-CDM8B	SH-CDM8ASY-K	CAR STEREO CASSETTE ADAPTOR	[M]
A11	—	RAK-SL927WH	WIRELESS REMOTE CONTROLLER	[M] Addition
A11-1	—	RFKMLS332CPS	BATTERY CASE FOR W.R.C.	[M] Addition
A12	—	RMF0255	MAGIC TAPE	[M]Addition

Note: ● The "< IA > : English " marks in Remarks indicate language of instruction manual.

## ■ Schematic Diagram (SL-S220/S225/S221C 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/power off (■ / POWER OFF) switch.
- **S306**: Play/pause (▶ / ||) switch.
- **S307**: Play mode selector (MODE) in "RANDOM" position.  
(RANDOM ↔ NORMAL ↔ RESUME)
- **S308**: Hold (HOLD) switch in "OFF" position.
- **S501**: Extra Anti-shock (EXTRA ANTI-SHOCK) switch in "OFF" position.
- **S701**: LIVE/XBS selector (LIVE, XBS, OFF) 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:

- \* AC adaptor is used for power supply.
- \* Set the HOLD and EXTRA 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.

-  : Positive voltage lines.

-  : Audio signal lines.

### Important safety notice:

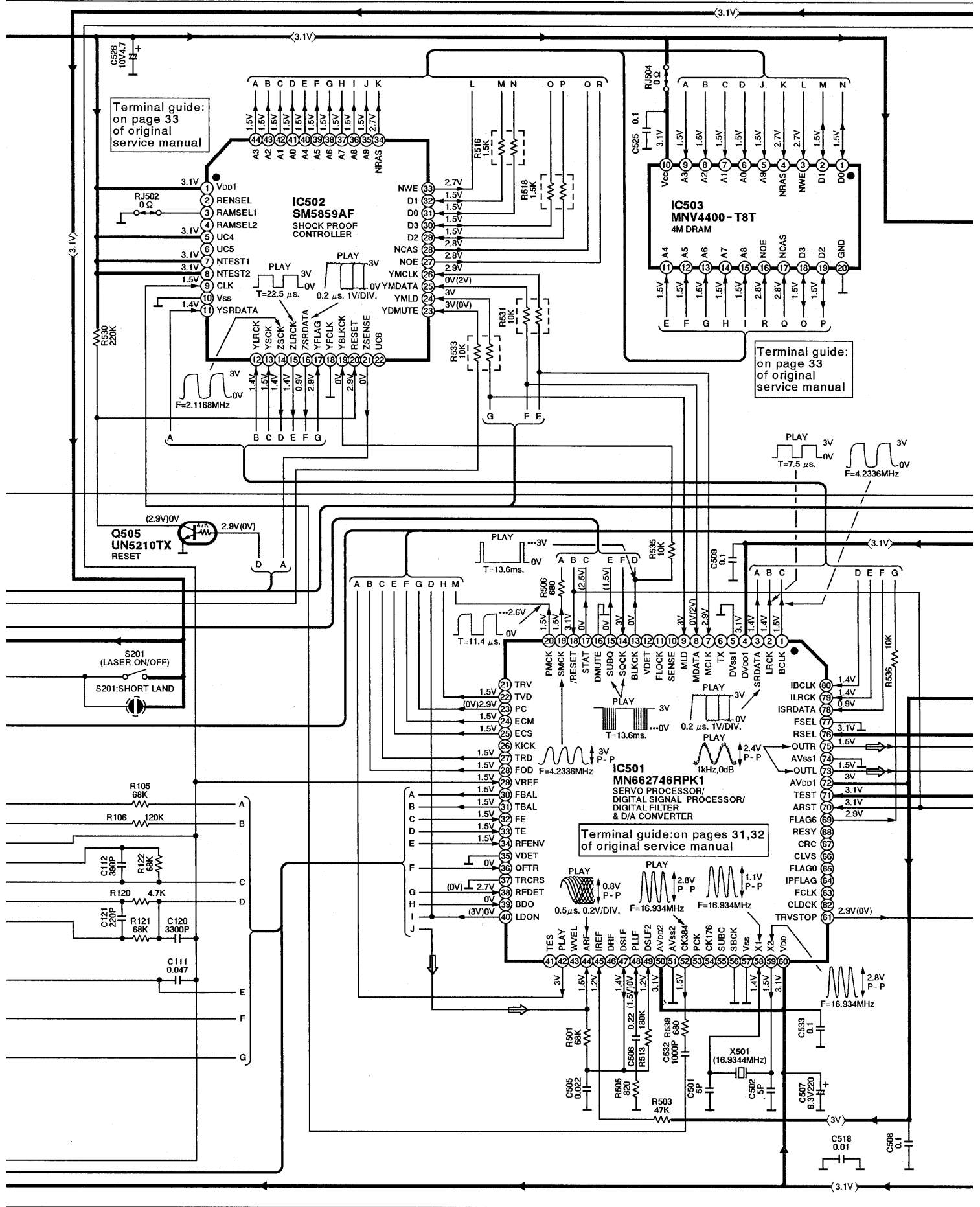
Components identified by Δ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacture's specified 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.

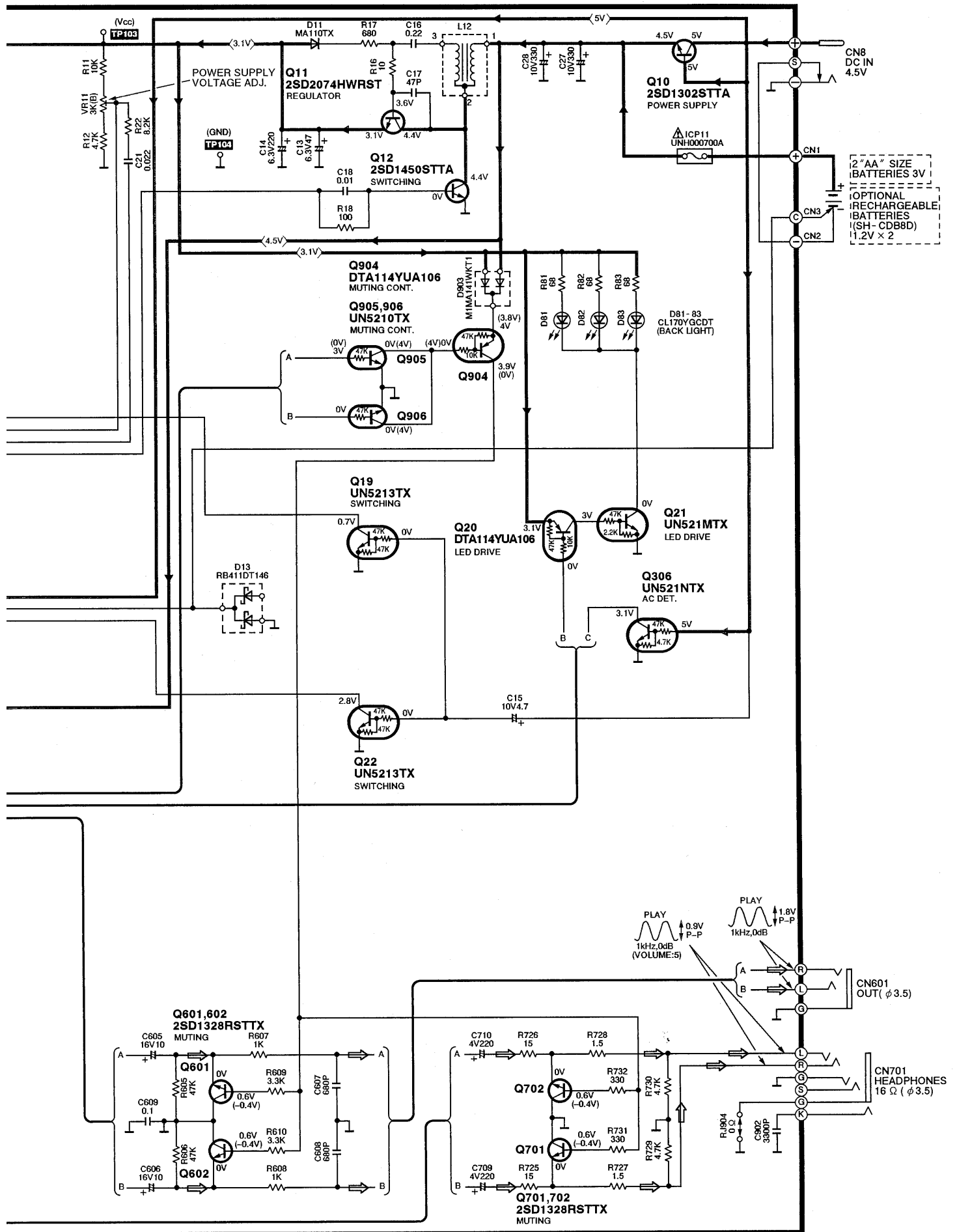


**Note:** ● ➞ : Audio signal lines.





Note: ● → : Audio signal lines.

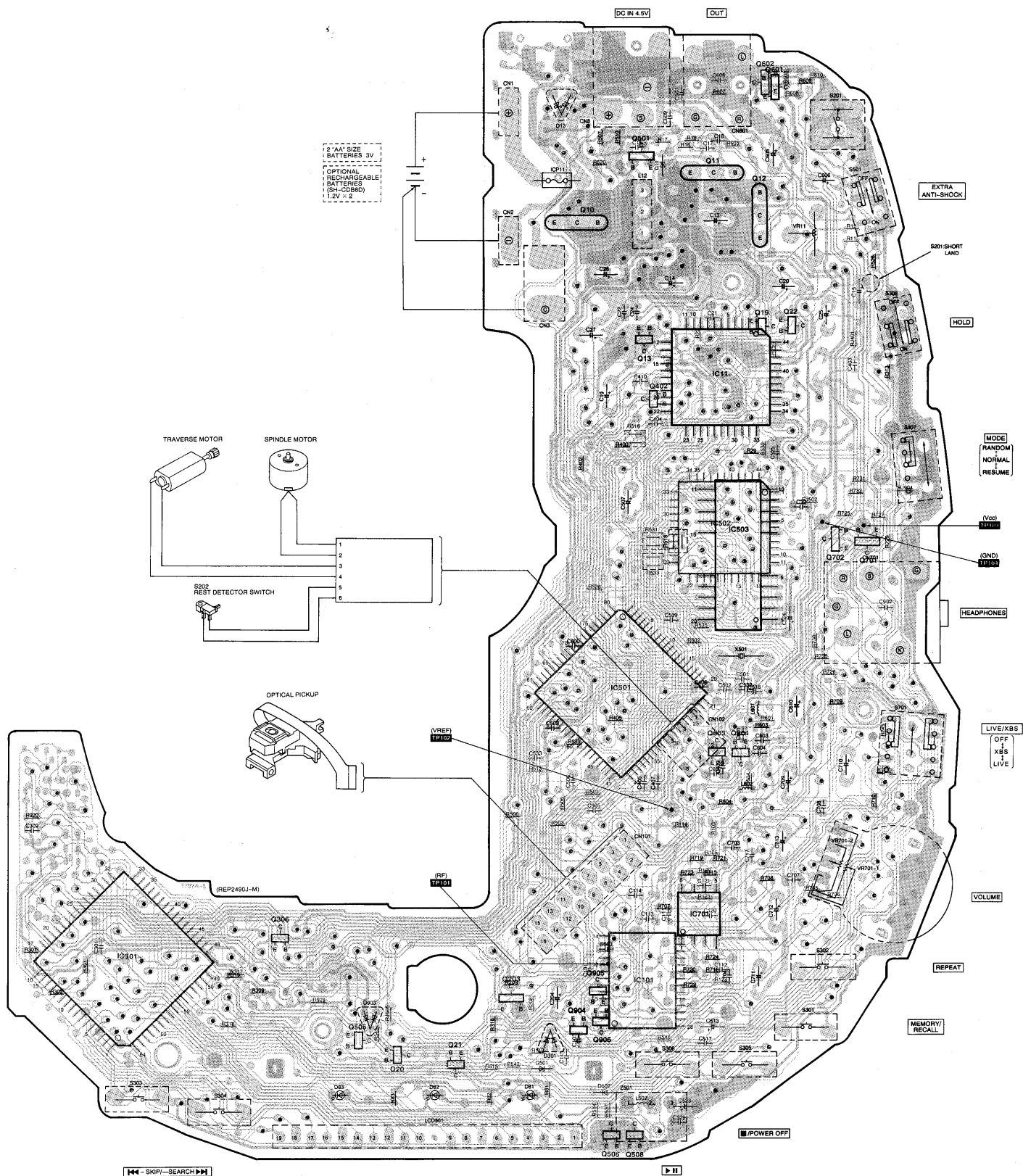


# Printed Circuit Board and Wiring Connection Diagram

(SL-S220/S225/S221C 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.



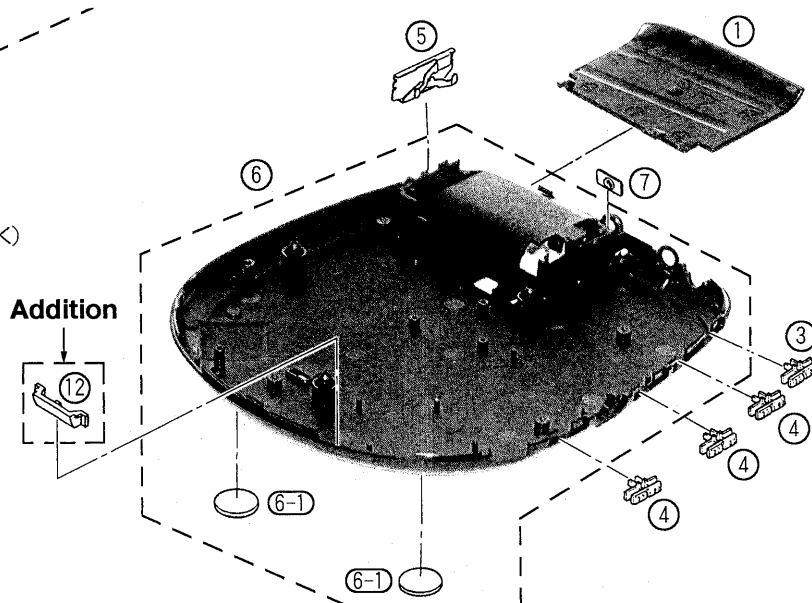




## ■ Cabinet Parts Location (SL-S220/S225/S221C Service Manual of page 36.)

※ Please ordering assembly parts (RYK0718E-K) when changing **A** parts.

Note : The pictures show model SL-S220.



## ■ Packaging (SL-S220/S225/S221C Service Manual of pages 38~40.)

