

# MDR-NC22

## SERVICE MANUAL

Ver. 1.2 2007.02

US Model  
Canadian Model  
AEP Model  
E Model  
Tourist Model



### SPECIFICATIONS

#### General

Type	dynamic, closed
Driver units	13.5 mm, dome type (CCAW adopted)
Power handling capacity	50 mW
Impedance	20 $\Omega$ at 1 kHz (when the power is on) 8.5 $\Omega$ at 1 kHz (when the power is off)
Sensitivity	102 dB/mW (when the power is on) 100 dB/mW (when the power is off)
Frequency response	8 – 22,000 Hz
Frequency range of active noise attenuation	50 – 1,500 Hz more than 12 dB at 200 Hz
Cord	1.5 m (59 1/8 in) OFC litz cord, neck-chain (including battery box)
Plug	Gold-plated L type stereo mini plug
Power source	DC 1.5 V, 1 $\times$ R03 (size AAA) battery
Mass	Approx. 39 g (1.4 oz) including battery box, cord, and battery

#### Supplied accessories

Sony R03 (size AAA) battery (1) (US, Tourist models)  
Earbuds (S  $\times$  2, M  $\times$  2, L  $\times$  2)  
Carrying pouch (1)  
Plug adaptor for in-flight use\* (single/dual) (1)  
Operating Instructions (1)

\* May not be compatible with some in-flight music services.

Design and specifications are subject to change without notice.

#### Note on chip component replacement

- Never reuse a disconnected chip component
- Notice that the minus side of a tantalum capacitor may be damaged by heat

#### UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

#### **LF**: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.  
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.  
Soldering irons using a temperature regulator should be set to about 350 °C.  
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity  
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder  
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

#### NOTES ON REPLACEMENT OF CSP (CHIP SIZE PACKAGE) IC

Replacement of IC2 used in this set requires a special tool.

## NOISE CANCELING HEADPHONES

# SECTION 1 GENERAL

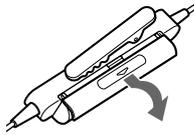
This section is extracted from instruction manual.

## Features

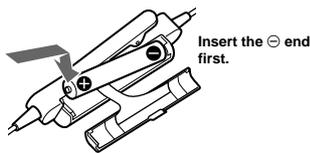
- Noise canceling headphones reduce ambient noise, and provide a quieter environment to enhance audio entertainment. Ambient sound is reduced by synthesizing with a sound in opposite phase produced by the noise canceling circuit.
- Ultra compact headphones fits comfortably in the ears and closed type headphone structure delivers deep bass sound.
- 3 sizes soft silicon rubber earbuds are used for stable and comfortable fit in the ears.
- Operates as passive headphones when noise canceling circuit is not activated.
- Built-in monitor function to hear surrounding sound without taking off the headphones.
- Plug adaptor is supplied to connect directly to stereo or dual jack of in-flight music services.

## Installing a battery

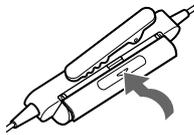
- 1 Open the lid on the rear of the battery box.



- 2 Insert one R03 (size AAA) battery, matching the + and - on the battery to the + and - in the battery compartment.

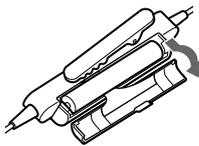


- 3 Close the lid.



### Removing the battery

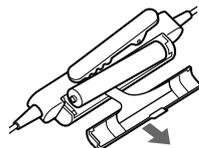
- 1 Open the lid.



- 2 Pull the lid lightly in the direction of the arrow.

#### Note

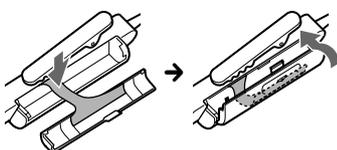
The battery may jump out when the lid is pulled. Pull the lid while placing a finger on the battery.



- 3 Close the lid.

#### Note

Store the ribbon in the battery compartment to prevent it being pinched by the lid.



### Battery life

Battery	Approx. hours*1
Sony alkaline battery LR03/AM-4 (N)	50 hours*2
Sony battery R03/UM-4 (NU)	22 hours*2

\*1 1 kHz, 1 mW + 1 mW input

\*2 Time stated above may vary, depending on the temperature or conditions of use.

### When to replace the battery

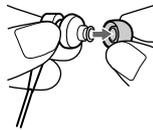
Replace the battery with a new one when the POWER indicator dims.

#### Note (US, Tourist models)

Because the supplied battery was included in the package from the time of manufacture (as a convenience to the user), it is possible that the battery life may be somewhat depleted by the time of purchase. The actual life of the supplied battery may be shorter than the standard time described in this manual when using a fresh battery.

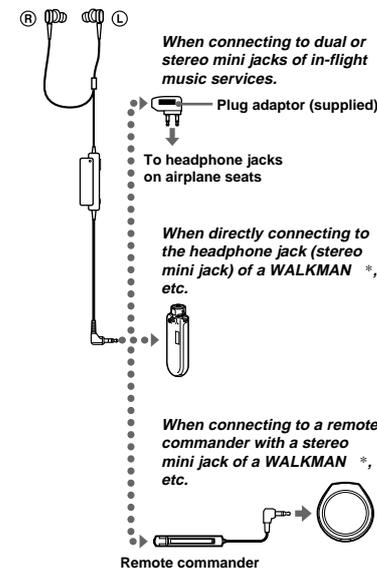
## Selecting the earbuds

The M size earbuds are attached to the headphones before shipment. If you feel the M size earbuds do not suit your ears, replace them with the supplied S or L size earbuds.



## Listening to music

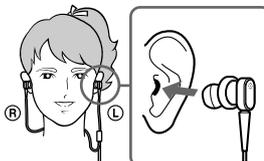
- 1 Connect the headphones to the AV equipment.



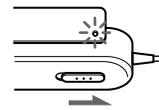
- 2 Wear the headphones marked ® in your right ear and the one marked ⊕ in your left ear. Push the earbud into your ear carefully so that the earbud fits the hole of your ear snugly.

#### Note

Unless the earbuds correctly fit your ears, noise canceling will not function. Adjust the earbuds position to sit on your ear comfortably, and push them into the inside of your ears so that they fit your ears snugly.



- 3 Turn on the power of the headphones. The power indicator lights in red. The power switch is located on the battery box. When power is turned on, ambient noise is reduced, and you can listen to music more clearly at a lower volume.



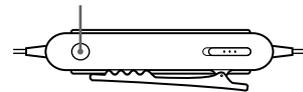
- 4 Turn on the power of the AV equipment.

\* "WALKMAN" and "WALKMAN" logo are registered trademarks of Sony Corporation.

### To hear ambient sound for safety

When the power switch is set to on, noise canceling can be deactivated while the MONITOR button is pressed so that you can hear ambient sound.

#### MONITOR button

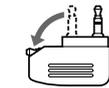


### Notes on using on the airplane

- The supplied plug adaptor can be connected to the dual or stereo mini jacks of in-flight music services.



dual jacks



stereo mini jacks

- Do not use the headphones when use of electronic equipment is prohibited or when use of personal headphones for in-flight music services is prohibited.

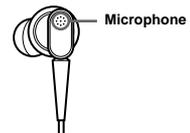
If you have any questions or problems concerning the system that are not covered in this manual, please consult the nearest Sony dealer.

### After listening to music

Turn off the power of the headphones.

#### Notes

- The noise canceling function is only effective for noise in the low frequency band. Although noise is reduced, it is not canceled completely.
- Do not cover the microphone of the headphones with your hands. The noise canceling function may not work properly.

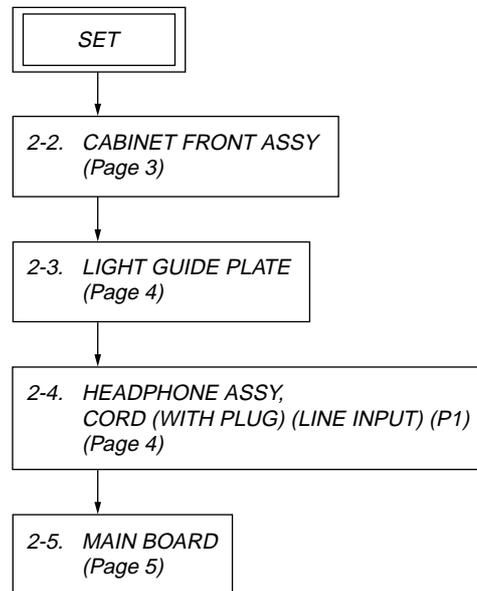


- The noise canceling function may not work properly unless the headphones are put on firmly.
- You can use the headphones even without turning on the power. In this case, the noise canceling function is not active, and the headphones operate as passive headphones.
- After you turn on the power of the headphones, you may hear a slight hiss. This is the operating sound of the noise canceling function, not a malfunction.
- In a quiet place, or depending on certain noises, you may feel that the noise canceling function is not effective, or that noise is accentuated. In this case, turn off the power of the headphones.
- Interference noise can occur from nearby cellular phones. Should this occur, locate the headphones further away from the cellular phone(s).

## SECTION 2 DISASSEMBLY

- This set can be disassembled in the order shown below.

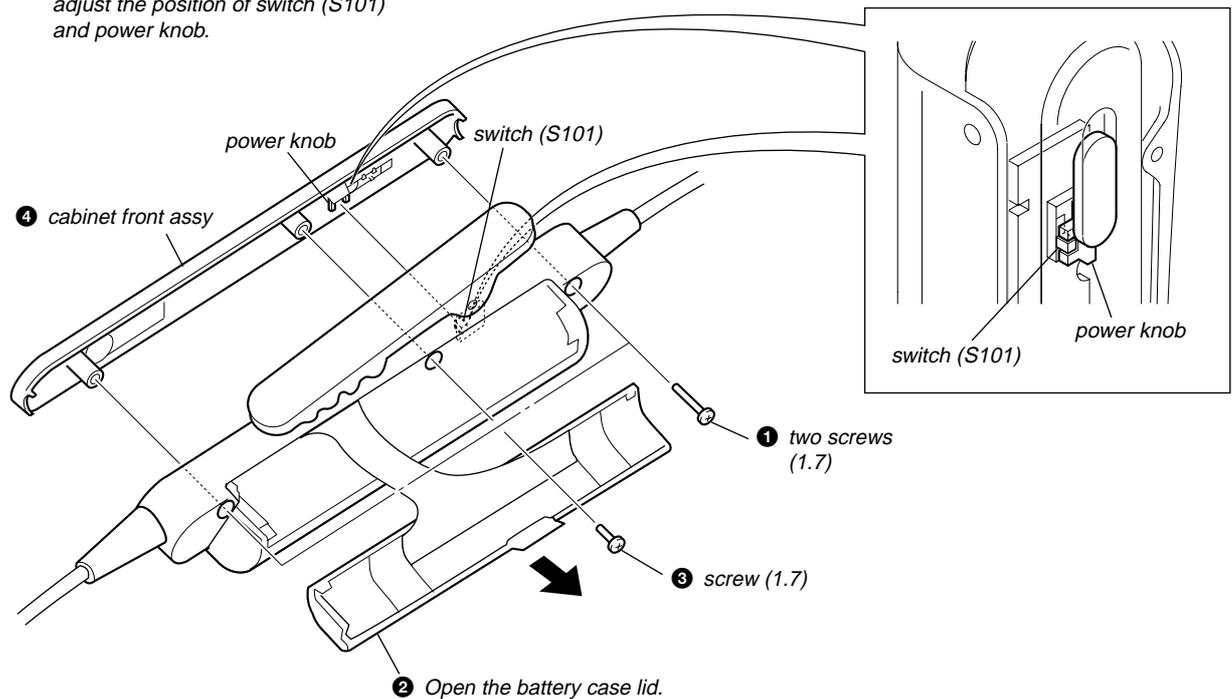
### 2-1. DISASSEMBLY FLOW



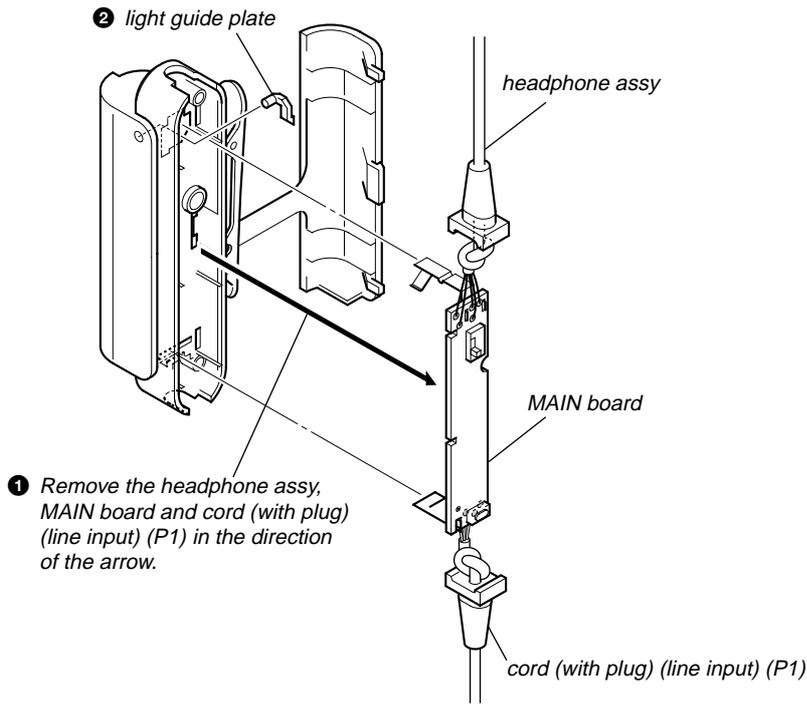
**Note:** Follow the disassembly procedure in the numerical order given.

### 2-2. CABINET FRONT ASSY

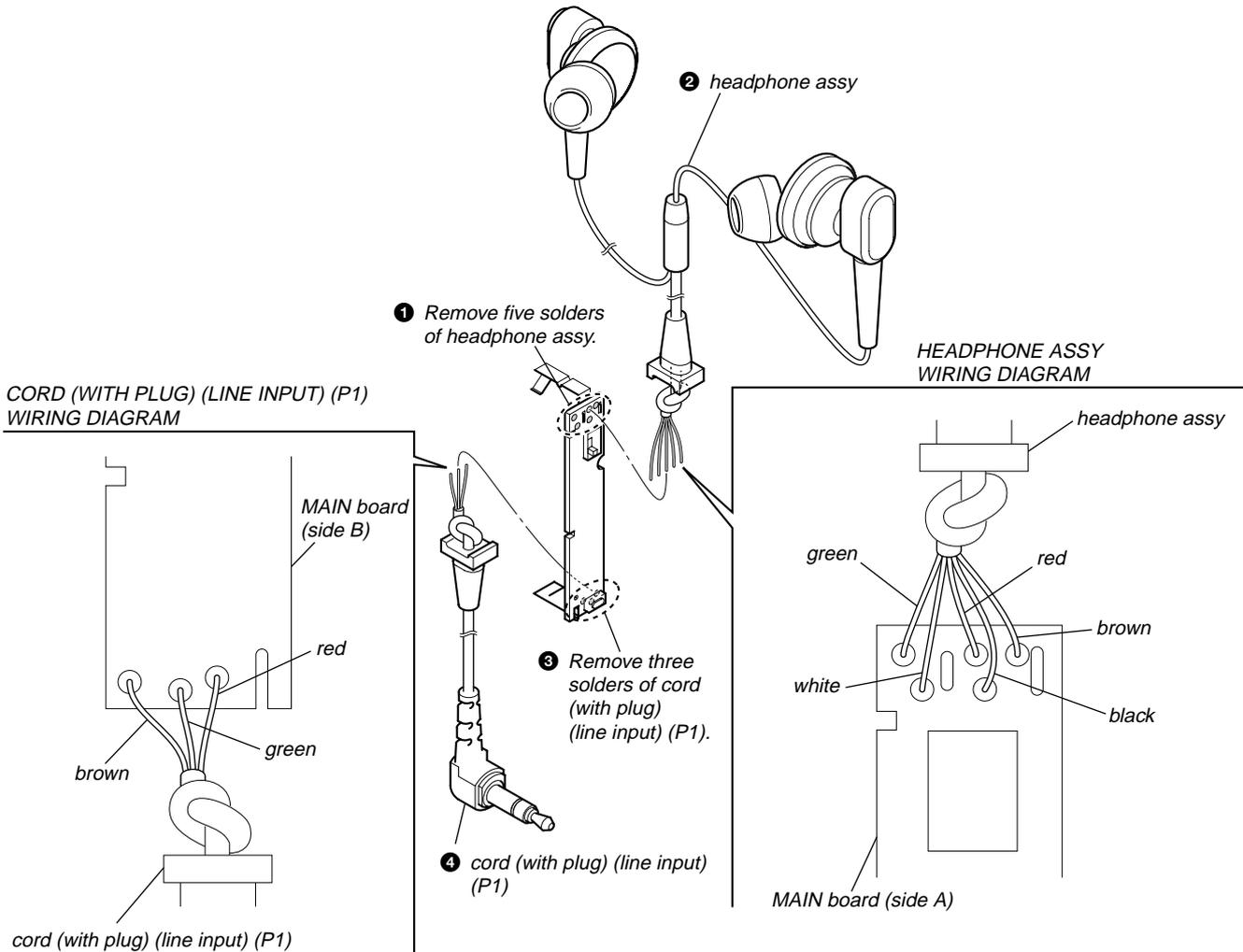
**Note:** On installation of cabinet front assy, adjust the position of switch (S101) and power knob.



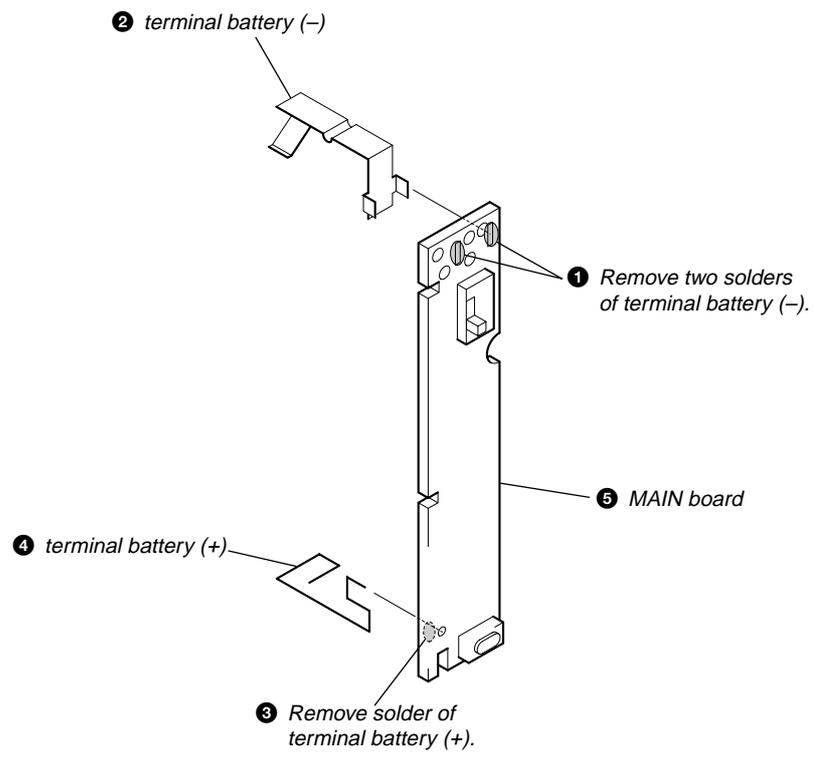
2-3. LIGHT GUIDE PLATE



2-4. HEADPHONE ASSY, CORD (WITH PLUG) (LINE INPUT) (P1)



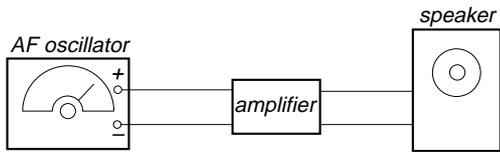
## 2-5. MAIN BOARD



## SECTION 3 ELECTRICAL ADJUSTMENT

### NOISE CANCEL VOLUME ADJUSTMENT

**Connection:**



**Procedure:**

1. Generate a sine wave of specific frequency (200 Hz) from a AF oscillator, and output it from a speaker placed at the forward position.
2. Wear this headphones on the ear, and turn on the **POWER** switch.
3. With this headphones worn, adjust the RV1 (L-ch) and RV51 (R-ch) so that the volume from the speaker becomes lowest aurally.

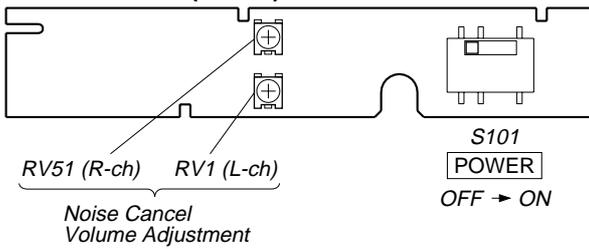
**Note:**

When the headphones are not covered with the ear pieces completely, the adjustment may not be performed correctly.

Make sure that the ear pieces cover the headphone completely.

**Adjustment Location:**

**- MAIN BOARD (Side A) -**



## SECTION 4 DIAGRAMS

### • Note for Printed Wiring Board and Schematic Diagram

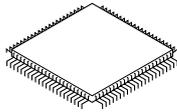
#### Note on Printed Wiring Board:

- — : parts extracted from the component side.
- : parts extracted from the conductor side.
- : Pattern from the side which enables seeing.  
(The other layers' patterns are not indicated.)

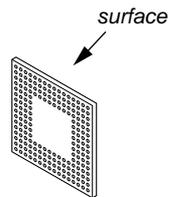
#### Caution:

Pattern face side: Parts on the pattern face side seen from the pattern face are indicated.  
(Side B)  
Parts face side: Parts on the parts face side seen from the parts face are indicated.  
(Side A)

#### • Lead Layouts



Lead layout of conventional IC



CSP (chip size package)

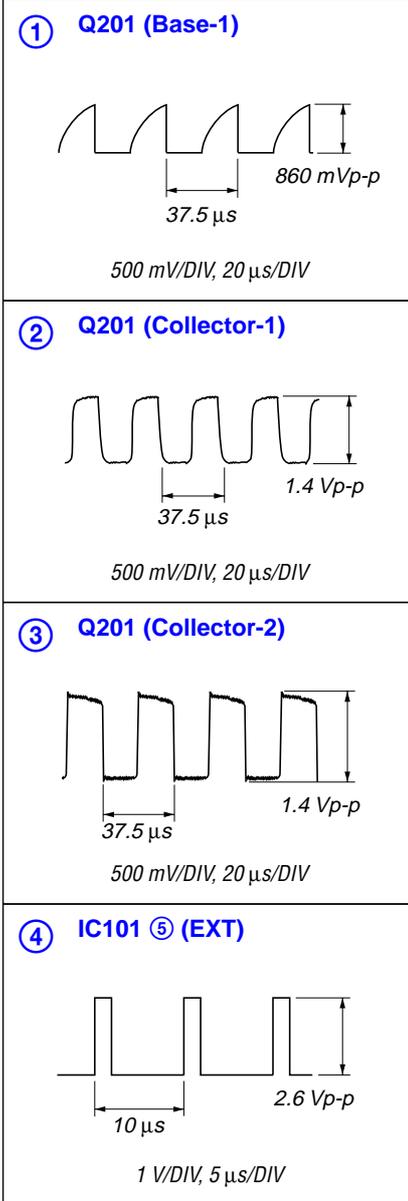
#### Note on Schematic Diagram:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{ W}$  or less unless otherwise specified.
- : panel designation.
- : B+ Line.
- : adjustment for repair.
- Power voltage is dc 1.5 V and fed with regulated dc power supply from battery terminal.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.  
no mark : POWER ON
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ). 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.
  - ⇒ : LINE INPUT (POWER ON)
  - ⇒ : LINE INPUT (POWER OFF)

\* Replacement of IC201 used in this set requires a special tool.

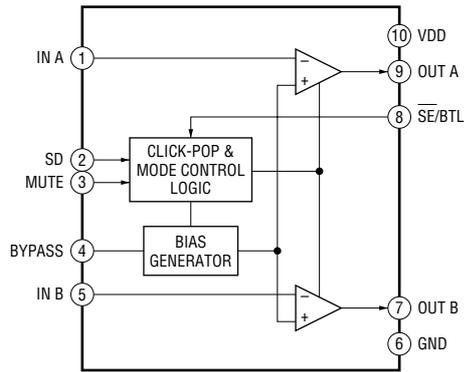
- The voltage and waveform of CSP (chip size package) cannot be measured, because its lead layout is different from that of conventional IC.

## • Waveforms

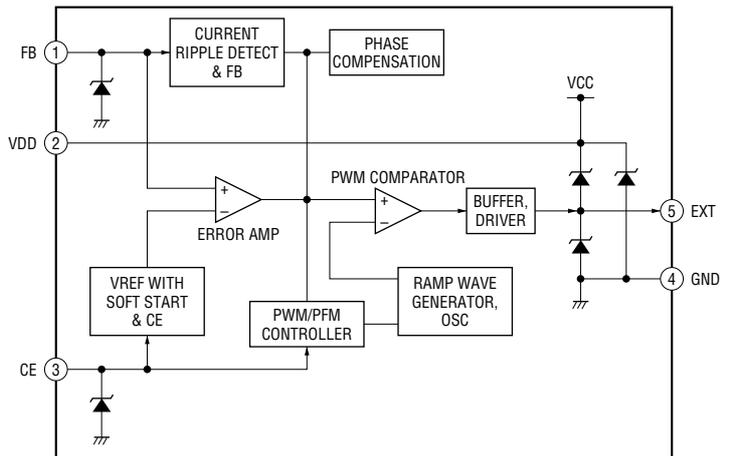


## • IC Block Diagrams

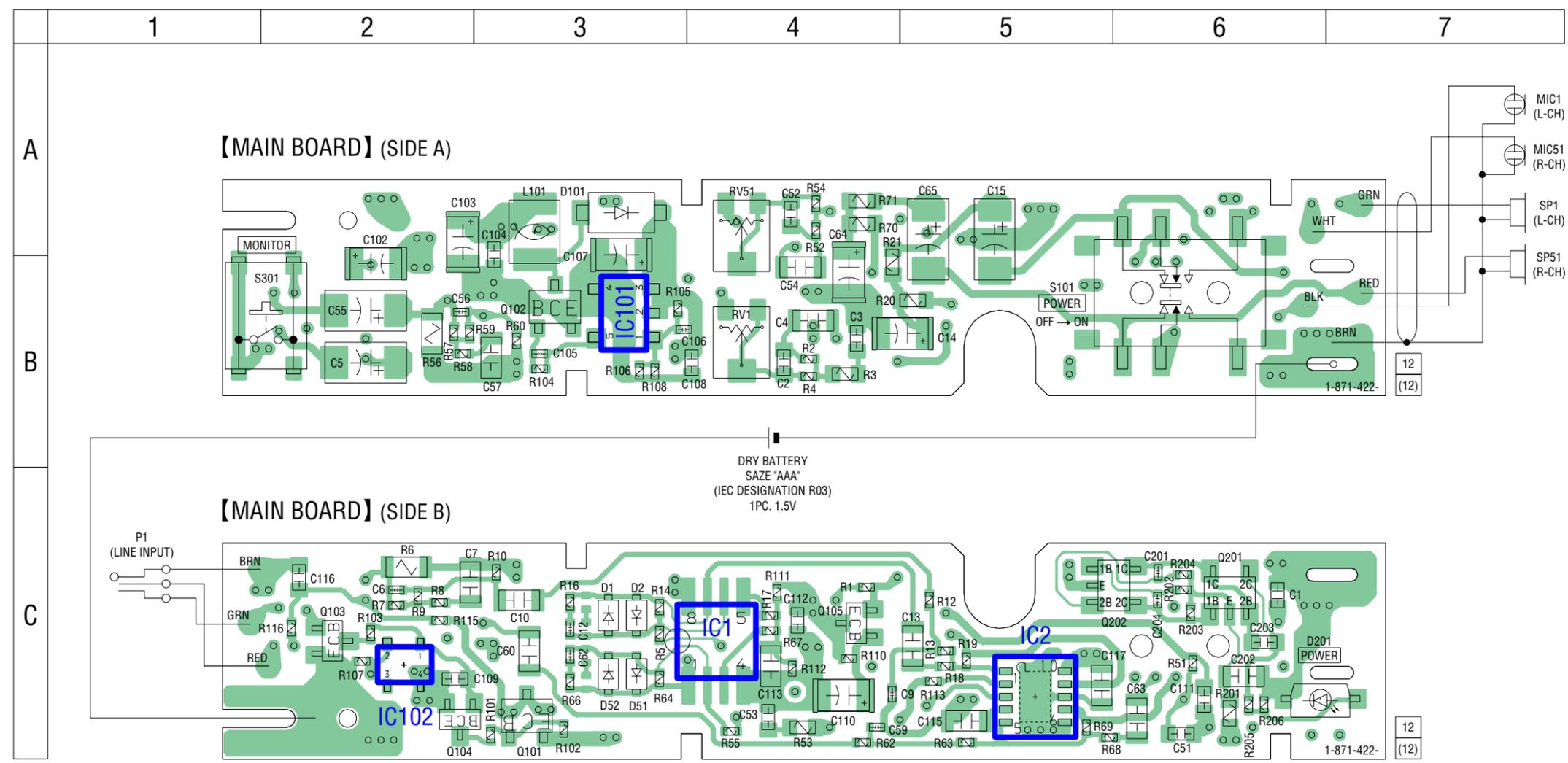
**IC2 LM4916LDX/NOPB**



**IC101 XC9105D091MR**



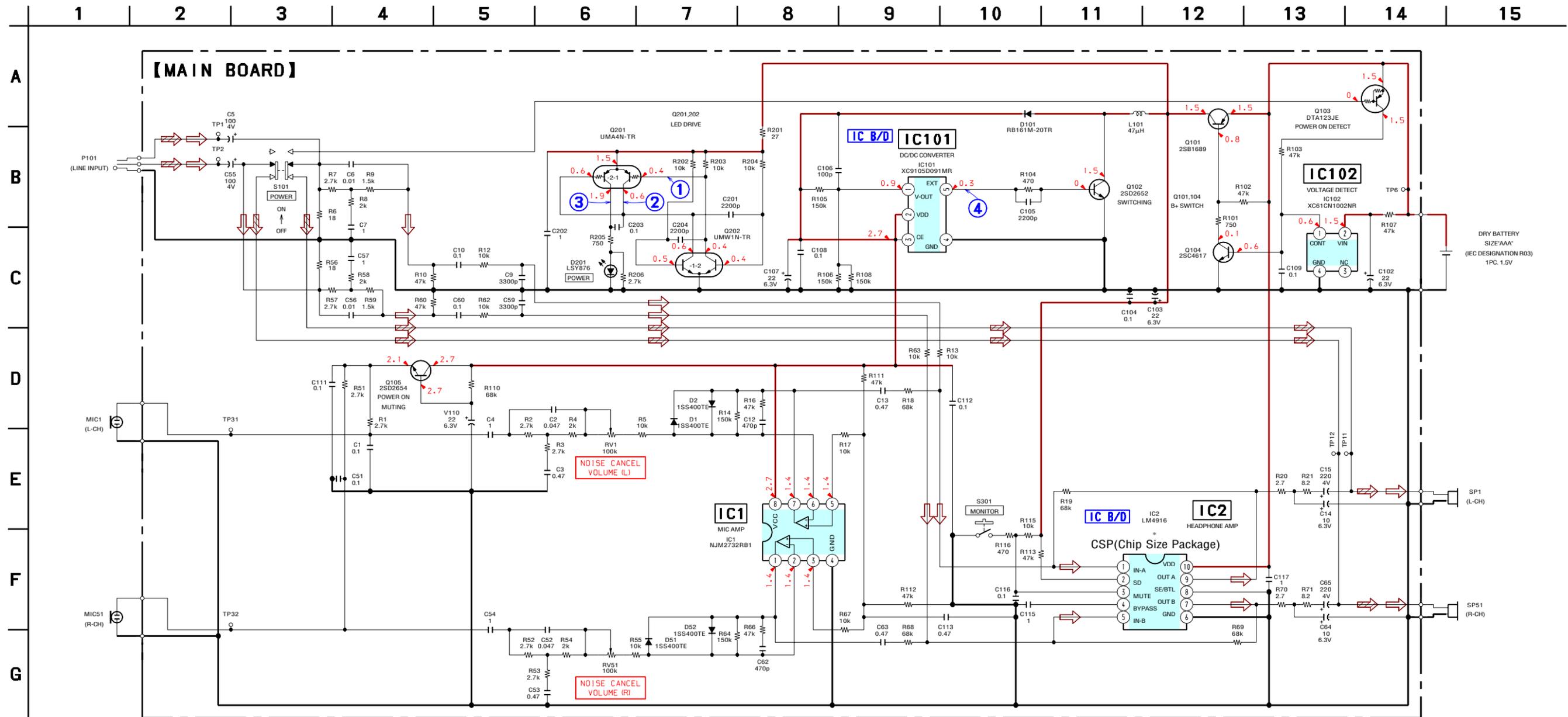
4-1. PRINTED WIRING BOARD



• Semiconductor Location

Ref. No.	Location
D1	C-3
D2	C-3
D51	C-3
D52	C-3
D101	A-3
D201	C-6
IC1	C-4
IC2	C-5
IC101	B-3
IC102	C-2
Q101	C-3
Q102	B-3
Q103	C-2
Q104	C-2
Q105	C-4
Q201	C-6
Q202	C-6

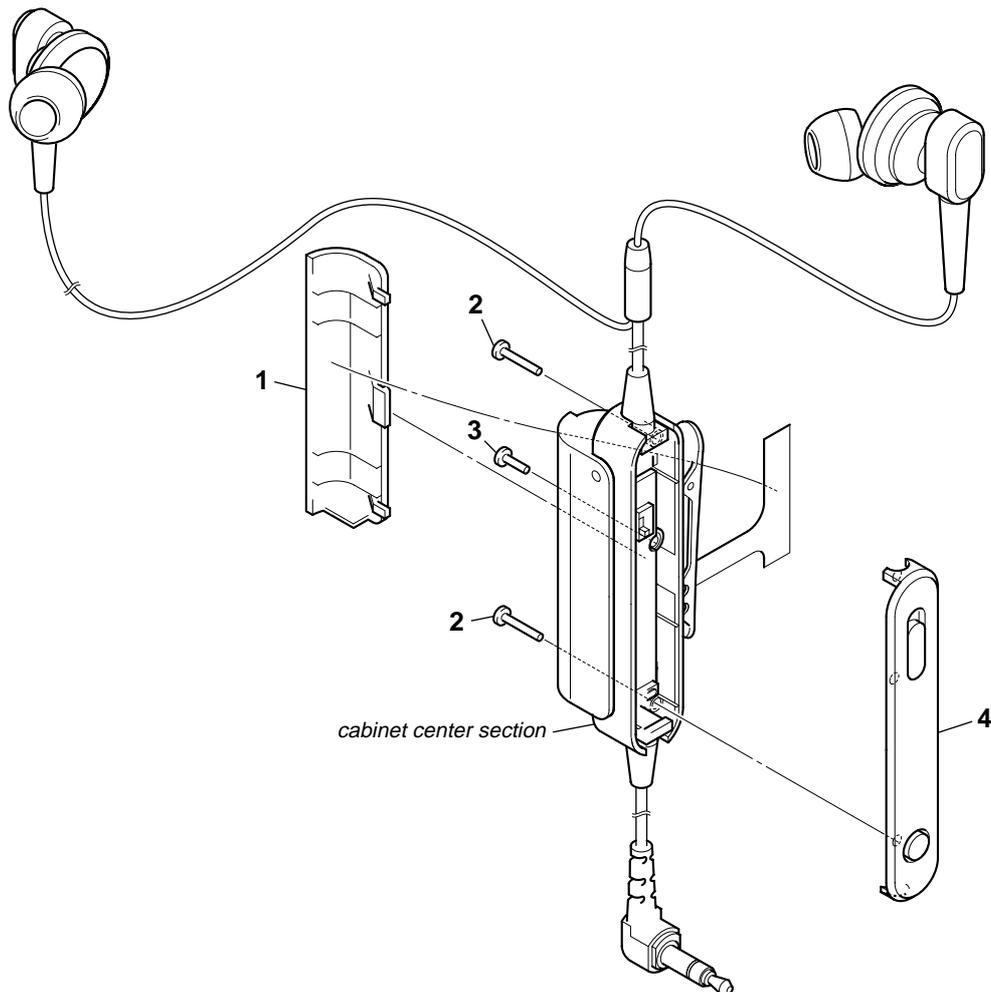
4-2. SCHEMATIC DIAGRAM BOARD • See page 6 for Waveforms. • See page 6 for IC Block Diagrams.



## SECTION 5 EXPLODED VIEWS

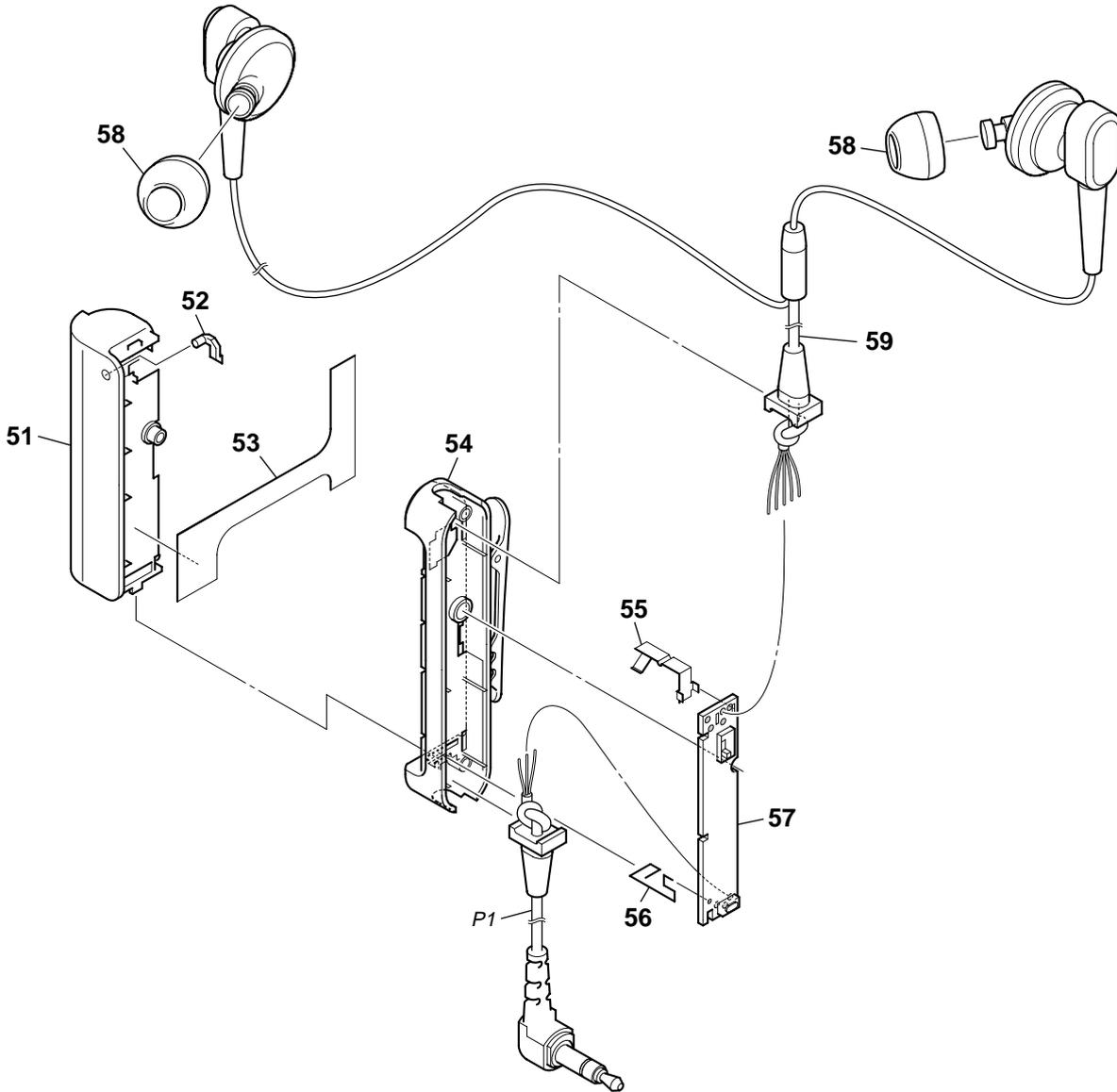
**NOTE:**

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- 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.
- Accessories are given in the last of the electrical parts list.

**5-1. CABINET FRONT SECTION**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	2-695-980-01	LID, BATTERY CASE (BLACK)		4	X-2176-230-1	CABINET FRONT ASSY (for BLACK)	
1	2-695-980-11	LID, BATTERY CASE (WHITE)		4	X-2176-231-1	CABINET FRONT ASSY (for WHITE)	
1	2-695-980-21	LID, BATTERY CASE (PINK)		4	X-2176-232-1	CABINET FRONT ASSY (for PINK)	
2	3-254-139-01	SCREW (1.7)					
3	3-252-825-11	SCREW (1.7)					

5-2. CABINET CENTER SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	2-695-979-02	CABINET, BATTERY (BLACK)		56	2-695-985-01	TERMINAL BATTERY (+)	
51	2-695-979-12	CABINET, BATTERY (WHITE)		57	A-1215-440-A	MAIN BOARD, COMPLETE	
51	2-695-979-22	CABINET, BATTERY (PINK)		58	4-220-438-21	PIECE (M), EAR (M size) (for BLACK)	
52	2-695-983-01	PLATE, LIGHT GUIDE		58	4-220-438-31	PIECE (M), EAR (M size) (for PINK, WHITE)	
53	2-896-229-01	SHEET, BATTERY (for BLACK)		59	X-2176-211-1	HEADPHONE ASSY (for BLACK)	
53	2-896-229-11	SHEET, BATTERY (for PINK, WHITE)		59	X-2176-212-1	HEADPHONE ASSY (for WHITE)	
54	X-2149-617-1	CABINET CENTER SUB ASSY (for BLACK)		59	X-2176-213-1	HEADPHONE ASSY (for PINK)	
54	X-2149-796-1	CABINET CENTER SUB ASSY (for WHITE)		P1	1-833-189-13	CORD (WITH PLUG) (LINE INPUT) (BLACK)	
54	X-2149-798-1	CABINET CENTER SUB ASSY (for PINK)		P1	1-833-189-23	CORD (WITH PLUG) (LINE INPUT) (WHITE)	
55	2-695-986-01	TERMINAL BATTERY (-)		P1	1-833-189-33	CORD (WITH PLUG) (LINE INPUT) (PINK)	

## SECTION 6 ELECTRICAL PARTS LIST

MAIN

**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 and -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,  $\mu$ :  $\mu$ , for example:  
uA... :  $\mu$ A...      uPA... :  $\mu$ PA...  
uPB... :  $\mu$ PB...    uPC... :  $\mu$ PC...  
uPD... :  $\mu$ PD...
- CAPACITORS  
uF:  $\mu$ F
- COILS  
uH:  $\mu$ H

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	A-1215-440-A	MAIN BOARD, COMPLETE *****					
		< CAPACITOR >					
C1	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V	C117	1-100-352-11	CERAMIC CHIP	1uF 20% 16V
C2	1-119-923-11	CERAMIC CHIP	0.047uF 10% 10V	C201	1-128-628-11	CERAMIC CHIP	0.0022uF 10% 6.3V
C3	1-112-324-91	CERAMIC CHIP	0.47uF 20% 10V	C202	1-100-352-11	CERAMIC CHIP	1uF 20% 16V
C4	1-100-352-11	CERAMIC CHIP	1uF 20% 16V	C203	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V
C5	1-100-661-11	TANTALUM CHIP	100uF 20% 4V	C204	1-128-628-11	CERAMIC CHIP	0.0022uF 10% 6.3V
						< DIODE >	
C6	1-128-632-11	CERAMIC CHIP	0.01uF 10% 6.3V	D1	8-719-069-28	DIODE 1SS400TE-61	
C7	1-100-352-11	CERAMIC CHIP	1uF 20% 16V	D2	8-719-069-28	DIODE 1SS400TE-61	
C9	1-128-629-91	CERAMIC CHIP	0.0033uF 10% 6.3V	D51	8-719-069-28	DIODE 1SS400TE-61	
C10	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	D52	8-719-069-28	DIODE 1SS400TE-61	
C12	1-128-625-11	CERAMIC CHIP	470PF 10% 16V	D101	6-500-220-01	DIODE RB161M-20TR	
				D201	6-501-636-01	LED LSY876-Q2S1-1 (POWER)	
C13	1-125-891-11	CERAMIC CHIP	0.47uF 10% 10V			< IC >	
C14	1-117-919-11	TANTALUM CHIP	10uF 20% 6.3V	IC1	6-706-906-01	IC NJM2732RB1 (TE2)	
C15	1-114-169-21	TANTALUM CHIP	220uF 20% 4V	@ IC2	6-707-110-01	IC LM4916LDX/NOPB	
C51	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V	IC101	6-701-734-01	IC XC9105D091MR	
C52	1-119-923-11	CERAMIC CHIP	0.047uF 10% 10V	IC102	8-759-690-96	IC XC61CN1002NR	
						< COIL >	
C53	1-112-324-91	CERAMIC CHIP	0.47uF 20% 10V	L101	1-400-787-21	INDUCTOR	47uH
C54	1-100-352-11	CERAMIC CHIP	1uF 20% 16V			< TRANSISTOR >	
C55	1-100-661-11	TANTALUM CHIP	100uF 20% 4V	Q101	6-550-044-01	TRANSISTOR	2SB1689-T106
C56	1-128-632-11	CERAMIC CHIP	0.01uF 10% 6.3V	Q102	6-550-364-01	TRANSISTOR	2SD2652T106
C57	1-100-352-11	CERAMIC CHIP	1uF 20% 16V	Q103	8-729-928-54	TRANSISTOR	DTA123JE
				Q104	8-729-928-00	TRANSISTOR	2SC4617TL-R
C59	1-128-629-91	CERAMIC CHIP	0.0033uF 10% 6.3V	Q105	6-551-411-01	TRANSISTOR	2SD2654TLV
C60	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	Q201	8-729-055-39	TRANSISTOR	UMA4N-TR
C62	1-128-625-11	CERAMIC CHIP	470PF 10% 16V	Q202	8-729-050-11	TRANSISTOR	UMW1NTR
C63	1-125-891-11	CERAMIC CHIP	0.47uF 10% 10V			< RESISTOR >	
C64	1-117-919-11	TANTALUM CHIP	10uF 20% 6.3V	R1	1-240-700-91	METAL CHIP	2.7K 5% 1/20W
				R2	1-240-700-91	METAL CHIP	2.7K 5% 1/20W
C65	1-114-169-21	TANTALUM CHIP	220uF 20% 4V	R3	1-218-958-11	RES-CHIP	2.7K 5% 1/16W
C102	1-100-786-91	TANTALUM CHIP	22uF 20% 6.3V	R4	1-240-791-91	METAL CHIP	2K 0.5% 1/20W
C103	1-100-786-91	TANTALUM CHIP	22uF 20% 6.3V	R5	1-240-707-91	METAL CHIP	10K 5% 1/20W
C104	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V				
C105	1-128-628-11	CERAMIC CHIP	0.0022uF 10% 6.3V	R6	1-216-800-11	METAL CHIP	18 5% 1/10W
				R7	1-240-700-91	METAL CHIP	2.7K 5% 1/20W
C106	1-128-617-11	CERAMIC CHIP	100PF 5% 25V	R8	1-240-791-91	METAL CHIP	2K 0.5% 1/20W
C107	1-100-786-91	TANTALUM CHIP	22uF 20% 6.3V	R9	1-240-697-91	METAL CHIP	1.5K 5% 1/20W
C108	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V				
C109	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V				
C110	1-100-786-91	TANTALUM CHIP	22uF 20% 6.3V				
C111	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V				
C112	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V				
C113	1-125-891-11	CERAMIC CHIP	0.47uF 10% 10V				
C115	1-100-352-11	CERAMIC CHIP	1uF 20% 16V				
C116	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V				

@ Replacement of IC2 used in this set requires a special tool.

# MDR-NC22

Ver. 1.2

**MAIN**

Ref. No.	Part No.	Description	Remark
R10	1-240-714-91	METAL CHIP 47K 5%	1/20W
R12	1-240-707-91	METAL CHIP 10K 5%	1/20W
R13	1-240-707-91	METAL CHIP 10K 5%	1/20W
R14	1-240-720-91	METAL CHIP 150K 5%	1/20W
R16	1-240-714-91	METAL CHIP 47K 5%	1/20W
R17	1-240-707-91	METAL CHIP 10K 5%	1/20W
R18	1-240-716-91	METAL CHIP 68K 5%	1/20W
R19	1-240-716-91	METAL CHIP 68K 5%	1/20W
R20	1-242-946-81	RES-CHIP 2.7 5%	1/16W
R21	1-245-265-11	METAL CHIP 8.2 5%	1/16W
R51	1-240-700-91	METAL CHIP 2.7K 5%	1/20W
R52	1-240-700-91	METAL CHIP 2.7K 5%	1/20W
R53	1-218-958-11	RES-CHIP 2.7K 5%	1/16W
R54	1-240-791-91	METAL CHIP 2K 0.5%	1/20W
R55	1-240-707-91	METAL CHIP 10K 5%	1/20W
R56	1-216-800-11	METAL CHIP 18 5%	1/10W
R57	1-240-700-91	METAL CHIP 2.7K 5%	1/20W
R58	1-240-791-91	METAL CHIP 2K 0.5%	1/20W
R59	1-240-697-91	METAL CHIP 1.5K 5%	1/20W
R60	1-240-714-91	METAL CHIP 47K 5%	1/20W
R62	1-240-707-91	METAL CHIP 10K 5%	1/20W
R63	1-240-707-91	METAL CHIP 10K 5%	1/20W
R64	1-240-720-91	METAL CHIP 150K 5%	1/20W
R66	1-240-714-91	METAL CHIP 47K 5%	1/20W
R67	1-240-707-91	METAL CHIP 10K 5%	1/20W
R68	1-240-716-91	METAL CHIP 68K 5%	1/20W
R69	1-240-716-91	METAL CHIP 68K 5%	1/20W
R70	1-242-946-81	RES-CHIP 2.7 5%	1/16W
R71	1-245-265-11	METAL CHIP 8.2 5%	1/16W
R101	1-240-781-91	METAL CHIP 750 0.5%	1/20W
R102	1-240-714-91	METAL CHIP 47K 5%	1/20W
R103	1-240-714-91	METAL CHIP 47K 5%	1/20W
R104	1-240-691-91	METAL CHIP 470 5%	1/20W
R105	1-240-720-91	METAL CHIP 150K 5%	1/20W
R106	1-240-720-91	METAL CHIP 150K 5%	1/20W
R107	1-240-714-91	METAL CHIP 47K 5%	1/20W
R108	1-240-720-91	METAL CHIP 150K 5%	1/20W
R110	1-240-716-91	METAL CHIP 68K 5%	1/20W
R111	1-240-714-91	METAL CHIP 47K 5%	1/20W
R112	1-240-714-91	METAL CHIP 47K 5%	1/20W
R113	1-240-714-91	METAL CHIP 47K 5%	1/20W
R115	1-240-707-91	METAL CHIP 10K 5%	1/20W
R116	1-240-691-91	METAL CHIP 470 5%	1/20W
R201	1-218-934-11	RES-CHIP 27 5%	1/16W
R202	1-240-707-91	METAL CHIP 10K 5%	1/20W
R203	1-240-707-91	METAL CHIP 10K 5%	1/20W
R204	1-240-707-91	METAL CHIP 10K 5%	1/20W
R205	1-240-781-91	METAL CHIP 750 0.5%	1/20W
R206	1-240-700-91	METAL CHIP 2.7K 5%	1/20W

Ref. No.	Part No.	Description	Remark
		< VARIABLE RESISTOR >	
RV1	1-227-413-21	RES, ADJ, CERMET	100K
RV51	1-227-413-21	RES, ADJ, CERMET	100K
		< SWITCH >	
S101	1-771-337-21	SWITCH, SLIDE (POWER)	
S301	1-786-700-11	SWITCH, TACTILE (MONITOR)	
*****			
		MISCELLANEOUS	
		*****	
59	X-2176-211-1	HEADPHONE ASSY (for BLACK)	
59	X-2176-212-1	HEADPHONE ASSY (for WHITE)	
59	X-2176-213-1	HEADPHONE ASSY (for PINK)	
P1	1-833-189-13	CORD (WITH PLUG) (LINE INPUT) (BLACK)	
P1	1-833-189-23	CORD (WITH PLUG) (LINE INPUT) (WHITE)	
P1	1-833-189-33	CORD (WITH PLUG) (LINE INPUT) (PINK)	
*****			
		ACCESSORIES	
		*****	
	1-477-125-21	ADAPTOR, PLUG (DUAL) (for in-flight use (single/dual))	
	2-888-749-13	MANUAL, INSTRUCTION (JAPANESE, ENGLISH) (Tourist)	
	2-888-749-21	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH) (Canadian, AEP, E)	
	2-888-749-31	MANUAL, INSTRUCTION (TRADITIONAL CHINESE, SIMPLIFIED CHINESE, KOREAN) (E)	
	2-888-749-42	MANUAL, INSTRUCTION (GERMAN, ITALIAN, PORTUGUESE, RUSSIAN) (AEP)	
	2-888-749-51	MANUAL, INSTRUCTION (POLISH, CZECH, HUNGARIAN, SLOVAKIAN) (AEP)	
	2-888-749-62	MANUAL, INSTRUCTION (ENGLISH, SPANISH) (US)	
	2-890-205-01	POUCH, CARRYING	
	3-046-415-21	PIECE (L), EAR (L size) (for BLACK)	
	3-046-415-31	PIECE (L), EAR (L size) (for PINK, WHITE)	
	4-220-438-21	PIECE (M), EAR (M size) (for BLACK)	
	4-220-438-31	PIECE (M), EAR (M size) (for PINK, WHITE)	
	4-220-439-21	PIECE (S), EAR (S size) (for BLACK)	
	4-220-439-31	PIECE (S), EAR (S size) (for PINK, WHITE)	

MEMO

