

XMC-U150

SERVICE MANUAL

US Model
Canadian Model
AEP Model
E Model



SPECIFICATIONS

Built-in amplifier

Power amplifier section

Maximum power output 30 W × 4 (at 4 ohms)*
* Measured at 14.4 V
Rated outputs 30 watts per channel
Speaker impedance 4 – 8 Ω

Pre-amplifier section

Tone control Bass ±10 dB at 100 Hz
Treble ±10 dB at 10 kHz

Hideaway unit/Remote commander/

Display unit

Dimensions

Hideaway unit: Approx. 178 × 36 × 175 mm
(w/h/d)
Remote commander: Approx. 66 × 108 × 20 mm
(w/h/d)
Display unit: Approx. 120 × 37 × 18.5 mm
(w/h/d)

Mass

Hideaway unit: Approx. 1 kg
Remote commander: Approx. 55 g not incl. batteries
Display unit: Approx. 115 g

Supplied accessories

Mounting hardware (1)
R6 (size AA) batteries (2)
Connecting cords (1 set)

Design and specifications subject to change without notice.

COMPACT DISC CONTROL AMPLIFIER
SONY®

Maintenance

Fuse Replacement

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In this case, consult your nearest Sony dealer.

Warning

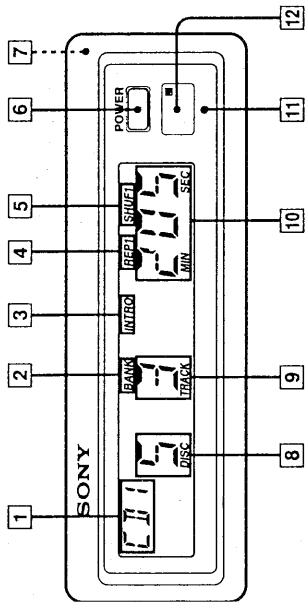
Use the specified amperage fuse.
Use of a higher amperage fuse may cause serious damage.

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Location and Function of Controls

Display Unit

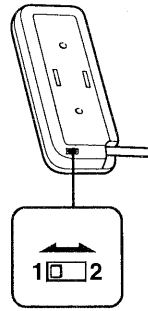


Refer to the pages in ● for details.

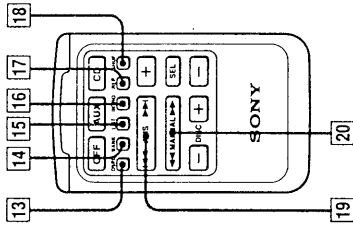
- 1 CD (CD changer number) indication ⑩
- 2 BANK (bank function) indication ⑮
- 3 INTRO (intro scan) indication ⑮
- 4 REP (repeat play) indication ⑫
- 5 SHUF (shuffle play) indication ⑫
- 6 POWER switch
Press to turn on and off the set.
- 7 Illumination color select switch (rear)
For changing the color of the display illumination (amber and green).
- 8 DISC (disc number) indication ⑩
- 9 TRACK (track number) indication ⑩
- 10 Elapsed playing time indication ⑩
- 11 Reset button
Press this button with a ball-point pen or a similar object when the operation buttons fail to function.
- 12 Infrared receptor for the remote commander

Changing the Color of Illumination

Use the illumination color select switch to choose the color of the illumination of the display window between green and amber to match the color of illumination of your car's instrument panel.



Remote Commander



- 13 DSPL (display change/time set) button ⑬
Each time the button is pressed during CD play, the display mode changes cyclically as follows:



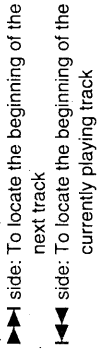
* It is necessary to put titles onto the discs in advance. See page 14 for details. If the title of a disc is not registered, "-----" will come on the display window and the set will enter the elapsed playing time display mode.

- 14 BANK (bank function) button ⑮
- 15 LIST (custom file mode select) button ⑮
- 16 INTRO (intro scan) button ⑮
- 17 REP (repeat play) button ⑫
- 18 SHUF (shuffle play) button ⑫

SECTION 1 GENERAL

This section is extracted from instruction manual.

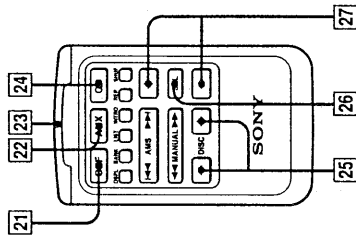
- 19 AMS (automatic music sensor) button
Press either side of the button once during CD play to search the beginning of a track (AMS function).



If you keep the button pressed, the beginnings of either the succeeding or the previous tracks will be located. However, if the beginning or the end of the disc is reached, you will not be able to go any further.

- 20 MANUAL (manual search) button
Press and hold either side of the button during CD play to search a desired point of a track.
 - ▲▲ side: To fast forward
 - ◄◄ side: To fast reverse
- The elapsed playing time of the track will be displayed on the display window during the manual search.

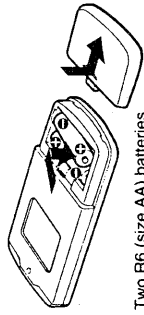
Location and Function of Controls



- 21 OFF button**
Press to turn off the set.
- 22 AUX (auxiliary mode) button**
- 23 Infrared emitter**
- 24 CD (CD play/CD changer select) button**
When two or more CD changers are connected, press this button to select a desired CD changer. Every time you press the button, the CD changer number on the display window will change.
- 25 - DISC + (disc select) buttons**
Press either the - or + button during CD play to search a desired disc quickly.
- button: To search the previous disc number
+ button: To search the succeeding disc number
You can search a desired disc by displaying the titles of the discs registered with the custom file function. See page 14 for details.
- 26 SEL (control mode select/character set) button**
Press to select the desired control mode: BAS (bass), TRE (treble), BAL (balance), FAD (fader) or VOL (volume)
- 27 (volume/bass/treble/balance/fader/character select) buttons**
These buttons normally function as the volume control. To adjust other modes, press or button within three seconds after selecting the desired control mode with the SEL button. The control mode automatically goes back to the volume control mode in three seconds.

Display window	Control mode	Press	Press
BAS	Bass control	For less bass	For more bass
TRE	Treble control	For less treble	For more treble
BAL	Balance control	To decrease the right-speakers' volume	To decrease the left-speakers' volume
FAD	Fader control	To decrease the rear-speakers' volume	To decrease the front-speakers' volume
VOL	Volume control	For less volume	For more volume

Installing the Batteries



Two R6 (size AA) batteries

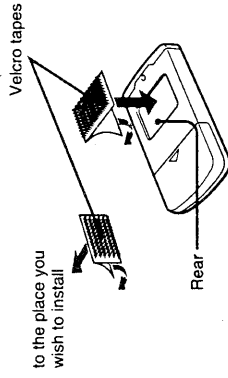
Battery life
When the batteries become weak, you will not be able to operate the set with the remote commander. Battery life is approx. six months although it depends on the way of use.

Notes on batteries

- To avoid damage from battery leakage and subsequent corrosion:
 - insert the batteries with the correct polarity
 - do not use an old battery with a new one, or different types of batteries together
 - remove the batteries when you do not use the set for a long period of time
 - do not charge the batteries.

If any battery leakage occurs, replace the batteries with new ones after cleaning the battery compartment.

Installing the Remote Commander



to the place you wish to install

Velcro tapes

Rear

Install the remote commander with velcro tapes in a desired place.

Notes

- Do not install or leave the remote commander in a location near any heat sources, or in a place subject to direct sunlight (especially on the dashboard in summer etc.).
- When you park the car in direct sunlight, detach the remote commander and place it in a location not subject to direct sunlight such as the glove-box.
- Before installing the remote commander, be sure to confirm whether you can remote control the set from the place you intend to install.
- Before attaching the velcro tapes, clean the surface.

Switches Requiring Initial Settings

POWER SELECT Switch

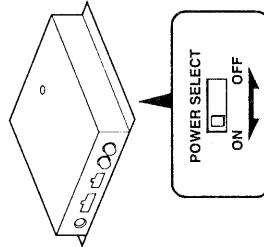
If your car's ignition key panel has the ACC (accessory) position

The POWER SELECT switch located on the bottom of the hideaway unit is factory-set to the ON position so that the display on the display window will come on when the ignition key of your car is turned.

If your car's ignition key panel has no ACC (accessory) position

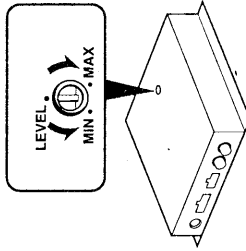
The original setting of the POWER SELECT switch may cause some car battery wear. To avoid this from happening, set the POWER SELECT switch to the OFF position*. When the ignition key is turned to the OFF position, the display on the display window will go off. Whenever you change the setting of the POWER SELECT switch, be sure to press the reset button on the display unit.

*When the POWER SELECT switch is set to the OFF position, you will not be able to start the CD play with the remote commander while the set is in the off mode, that is to say when there is no display on the display window. Therefore, press the POWER switch on the display unit before using the remote commander.

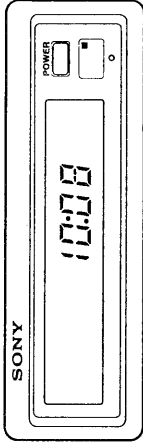


LEVEL (auxiliary input level adjust) Control

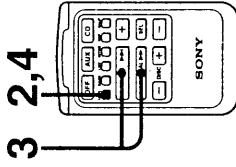
With this control, you can adjust the input level of the auxiliary source (speaker outputs of your car audio). After the connection has been completed, turn up the volume of your car audio until just before the sound becomes distorted. Then adjust the LEVEL control with a screw driver so that the volume level of the car audio becomes the same as that of the CD changer.



Setting the Clock



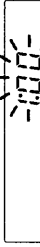
The clock has a 12-hour digital indication.



For example, set it to 10:08.

1 Turn the ignition key to the ON position.

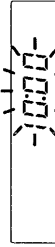
2 Press the DSPL button for more than two seconds.



The indication starts flashing.

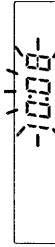
3 Press **AMS** to set the hour digits.

(to go back) (to go forward)



Press **MANUAL** to set the minute digits.

(to go back) (to go forward)



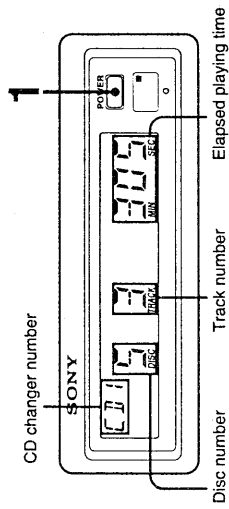
4 Press the DSPL button.



The clock is activated.

Note
When the POWER SELECT switch on the hideaway unit is set to the "OFF" position, the clock display will not come on the display window even if the ignition of your car is turned on. In such a case, press the POWER switch of the display unit and play a disc. Then press the DSPL button of the remote commander twice to have the clock display on the display window and follow steps 2 to 4.

Listening to the CD Play



1 Press the **POWER** switch on the display unit.



2 Press the **CD** button on the remote commander.

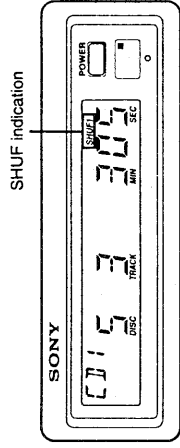


The CD play will start.

Stopping the CD play

Press either the **POWER** switch on the display unit or the **OFF** button on the remote commander.
To resume the CD play, press the **POWER** switch on the display unit or the **CD** button on the remote commander.

Playing in Various Modes



Playing the Discs Randomly — Shuffle Play Functions

Playing the tracks on the currently selected disc randomly — Disc shuffle

Press to get the "SHUF 1" indication during the CD play.

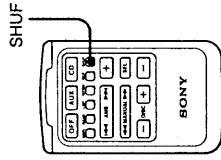
When all the tracks on a disc have been played, it will go on to the next disc.

Playing every track on every disc in the currently selected CD changer randomly — CD changer shuffle

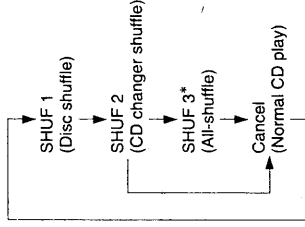
Press to get the "SHUF 2" indication during the CD play.

Playing every track on every disc in all CD changers connected randomly — All shuffle (when two or more CD changers are connected)

Press to get the "SHUF 3" indication during the CD play.

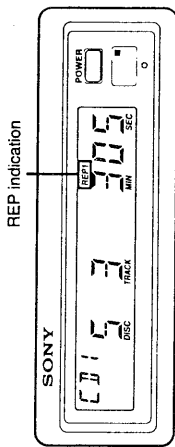


The function of the **SHUF** button changes cyclically as follows:




*All-shuffle play (SHUF 3) mode functions only when two or more changers are connected to the highway unit. When only one changer is connected, the "SHUF 3" indication will not be displayed. In this case, if you press the SHUF button again while the "SHUF 2" indication is being displayed, the shuffle play will be canceled.

Playing in Various Modes




Playing a Disc Repeatedly — Repeat Play Functions


Playing the currently selected track repeatedly — Track repeat

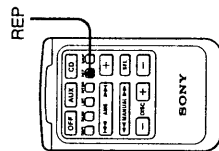
Press  to get the "REP 1" indication during the CD play. When the track is over, the CD play will be repeated from the beginning of that track.

Playing the currently selected disc repeatedly — Disc repeat

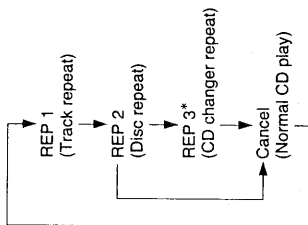
Press  to get the "REP 2" indication during the CD play. When the last track of the currently selected disc is over, the CD play will be repeated from the beginning of that disc.

Playing the discs in the currently selected CD changer repeatedly — CD changer repeat (when two or more CD changers are connected)

Press  to get the "REP 3" indication during the CD play. When the last disc of the currently selected CD changer is over, the CD play will be repeated from the first disc in the currently selected CD changer.

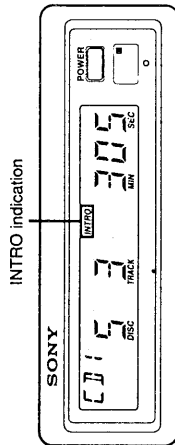
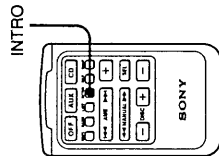


The function of the REP button changes cyclically as follows:




*CD changer repeat (REP 3) mode functions only when two or more changers are connected to the hideaway unit. When only one changer is connected, the "REP 3" indication will not be displayed. In this case, if you press the REP button again while the "REP 2" indication is being displayed, the repeat play will be canceled.

CD Changer Operation



Searching for a Desired Track by Listening to the First 10 Seconds of Each Track — Intro Scan Function

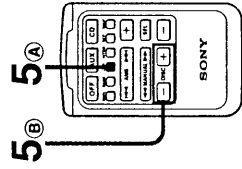
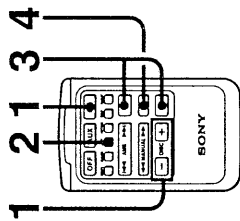
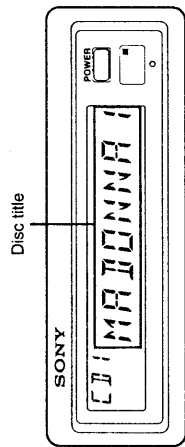
Press  during the CD play.

The first 10 seconds of all the tracks on the currently selected disc will be played in order. When the first 10 seconds of the last track on a disc is played, it will move on to the next disc. When the first 10 seconds of the last disc in the first CD changer has been played, the first disc in the next CD changer will be played (only when two or more CD changers are connected).

When you find the desired track

Press the INTRO button once more. The intro scan function will be canceled and you can continue to listen to the track.

Displaying the Title of Each Disc



Putting Your Personalized Titles onto the Discs

<p>1 Play the disc that you wish to title.</p> <p><input type="button" value="CD"/> <input type="button" value="-"/> DISC <input type="button" value="+"/> <input type="button" value="SEL"/></p>	<p>2 Press the LIST button for more than two seconds to enter the name edit mode.</p> <p><input type="button" value="LIST"/> <input type="text" value="CD1 MARIANNA"/></p> <p style="text-align: right;">Name edit mode</p>
<p>3 Press either the <input type="button" value="CD"/> or <input type="button" value="SEL"/> button to select the desired characters.</p> <p>Each time you press the <input type="button" value="CD"/> or <input type="button" value="SEL"/> button, characters will come on in the following order:</p> <p><input type="button" value="+"/> → <input type="button" value="→"/> → A → B → C → ... → X → Y → Z → 0 → 1 → 2 → 3 → ...</p> <p><input type="button" value="-"/> → <input type="button" value="←"/> → () → → / → * → → → + → 9 → ...</p> <p>If you keep the button pressed, the characters will change rapidly.</p>	<p><input type="text" value="CD1 MARIANNA"/></p>
<p>4 Press the SEL button after locating the desired character.</p> <p><input type="button" value="SEL"/> <input type="text" value="CD1 MARIANNA"/></p> <p>The flashing part will move to the next space on the right. Repeat steps 3 and 4 to enter the entire titles. Up to eight characters can be used per disc.</p>	<p><input type="text" value="CD1 MARIANNA"/></p>

You can put a title of your own choice onto a disc (one title per disc). The title can be displayed on the display window while the disc is being located and played. A maximum of eight characters can be used per title.

Notes

- If you press the SEL button when the eighth character (farthest right character) is flashing, the flashing part goes back to the first character (farthest left character).
- If you wish to put a blank space after a character, select " " (under-t-r).

5

A To reenters the CD play mode

Press the LIST button for more than two seconds.

B To continue to put titles onto the discs

DISC Press the - DISC + button only lightly.

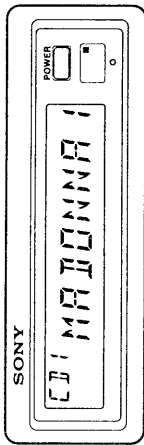
If you press the CD button, the next CD changer will be selected and the set will re-enter the normal CD play mode.

Changing a title

Play the disc whose title you wish to change and repeat steps 2 to 5.

When you change the title, the PLAY/SKIP settings of the bank function will not be erased at the same time.

Displaying the Title of Each Disc



Erasing a title

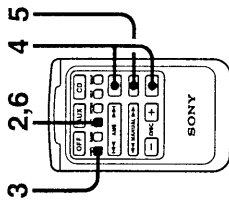
- 1 Select the CD changer and play any disc.
- 2 Press the LIST button for more than two seconds to enter the name edit mode.
- 3 Press the DSPL button for more than two seconds.
- 4 Press either the \square or \square button to select the title that you wish to erase.
- 5 Press the SEL button for more than two seconds.
Repeat step 4 and 5 if necessary.
- 6 Press the LIST button for more than two seconds.
Now the title and the PLAY/SKIP settings are erased.
The set returns to the normal CD play mode.

Displaying the title

Press the DSPL button.

Title display modes

While loading the discs, whatever the display mode the set is in, the indication on the display window automatically changes as follows:
The title of the disc (two seconds) → Disc and track number (two seconds) → Currently selected display mode (two seconds)



When you erase the title, the PLAY/SKIP settings of the bank function will be erased as well.

The alternative method to erase a title

You can erase a title by selecting eight " " (under-bars) as described in step 3 of "Putting Your Personalized Titles onto the Discs". (Page 14)

Custom file function

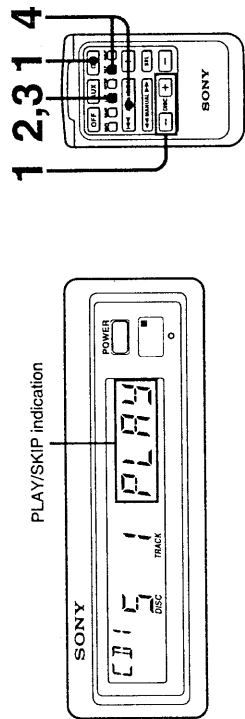
You can register the customized titles and the PLAY/SKIP settings on up to 110 discs* per CD changer (custom file function). These settings will be stored in the memory of the CD changer. Therefore, even if you take a custom-filled disc out of the CD changer, you can still use the same custom file function the next time you play that disc in the same CD changer. Furthermore, if your system has several CD changers connected, you can play that disc in another CD changer and still use the same custom file function, provided that the CD changers are inter-connected with the UNILINK cables.

*If you try to register more than 110 discs, the display unit will display the "FULL" indication and will not accept the command for custom-filing. In this case, you will have to erase the memory of other discs before you enter new ones.

Note

The registered titles of the discs may not come on the display window immediately while it is being loaded inside the CD changer.

Playing Selected Tracks on a Disc



Setting the PLAY and SKIP Modes on the Discs

1 Play the disc to which you wish to set these modes.



2 Press the LIST button for more than two seconds and put the titles onto the discs.



See page 14 for details about putting on a title. If the title has already been registered, go to step 3.

3 Press the LIST button lightly to enter the PLAY/SKIP edit mode.



4 Press the AMS button to select the track number you wish to skip and press the SEL button.



The indication changes from "PLAY" to "SKIP". If you wish to return to "PLAY", press the SEL button again.

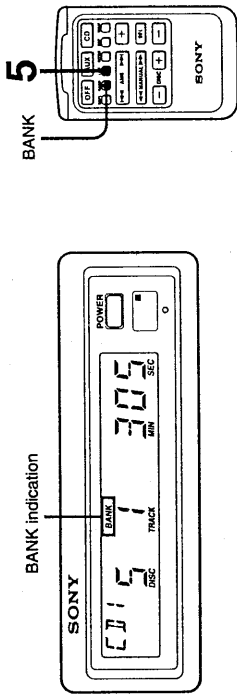
Repeat the operation in this step to set either the PLAY or SKIP mode on all the tracks.

You can listen to only the desired tracks by using this function.

Notes

- When the title is not registered, you cannot enter the PLAY/SKIP edit mode even if you press the LIST button.
- You can only set the SKIP mode onto up to 24 tracks. If a disc has more than 24 tracks, you will not be able to set the SKIP mode on the tracks after the 24th track.
- You cannot set the SKIP mode onto all of the track on a disc.

— Bank Function



5 Press the LIST button for more than two seconds.



The set re-enters the normal CD play mode.

Playing with the Bank Function



Each time the BANK button is pressed, the indication on the display window will change cyclically as follows:



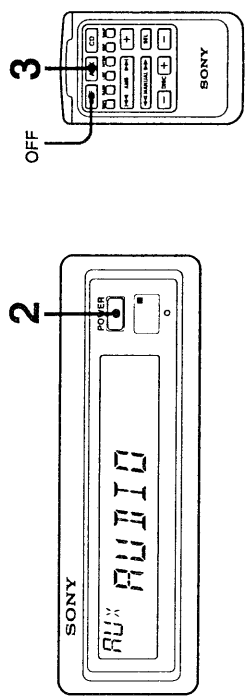
If the "BANK" indication is on the display window, only the tracks with the PLAY settings will be played.



If the "BANK" indication is flashing on the display window, only the tracks with the SKIP settings will be played.

Each time you press the BANK button, the display on the display window will change to "BANK ON", "BANK INV" or "BANK OFF" for a second before returning to the previous display.

Even when you play a disc with the PLAY/SKIP settings, if the "BANK" indication has not come on the display window, the disc will not be played according to the settings.

Listening to Your Existing Car Audio



- 1 Turn on your car audio.
- 2 Press the POWER switch on the display unit.

- 3 Press the AUX button on the remote commander.


If your car audio is equipped with the amp remote control function, just turn on your car audio.

Turning off the Set and the Existing Car Audio

- 1 Press the POWER switch on the display unit.
- 2 Press the OFF button on the remote commander.
- 3 Turn off your car audio.

If your car audio is equipped with the amp remote control function, when you turn off your car audio, the set and the existing car audio will be turned off automatically.

Installation

Precaution

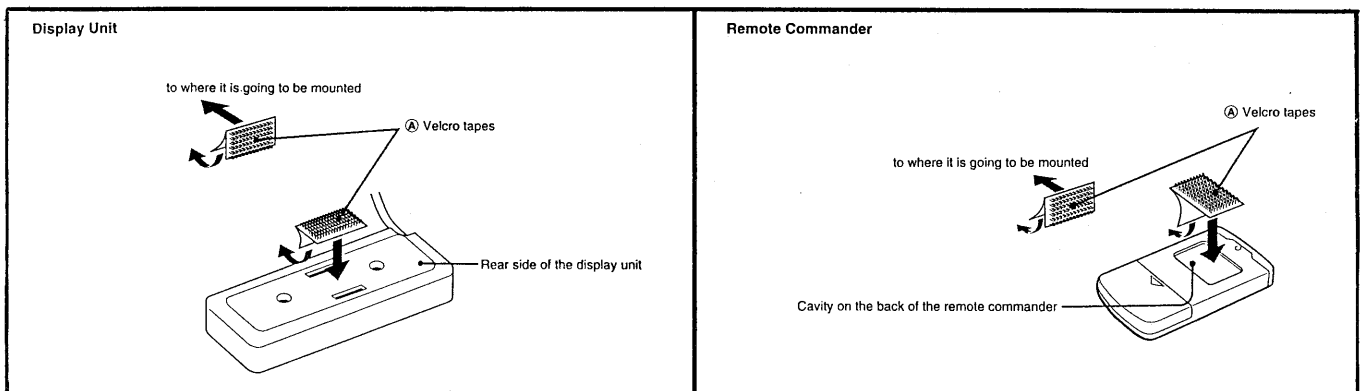
- Avoid installing the unit where:
- it would be subjected to high temperatures, such as from direct sunlight or hot air from the heater.
 - it would be exposed to rain or moisture.
 - it would be subjected to dust or dirt.

Remote Commander and Display Unit

- Avoid mounting them in the following locations where they may:
 - hinder normal driving conditions of the driver.
 - jeopardize the passengers.
 - be subjected to the hot air from the heater.
 - be subjected to direct sunlight.
- When installing the system, be sure to check that the whole system can be operated by the remote commander.

Installing the Display Unit and the Remote Commander

Use the supplied velcro tapes **(A)** and mount them to the location where it will not interfere with your driving.



Installing the Hideaway Unit

- Install the hideaway unit underneath the passenger seat etc..
- Be sure not to cover the hideaway unit with the floor carpet etc..
- If necessary, use the supplied screws **(B)**.

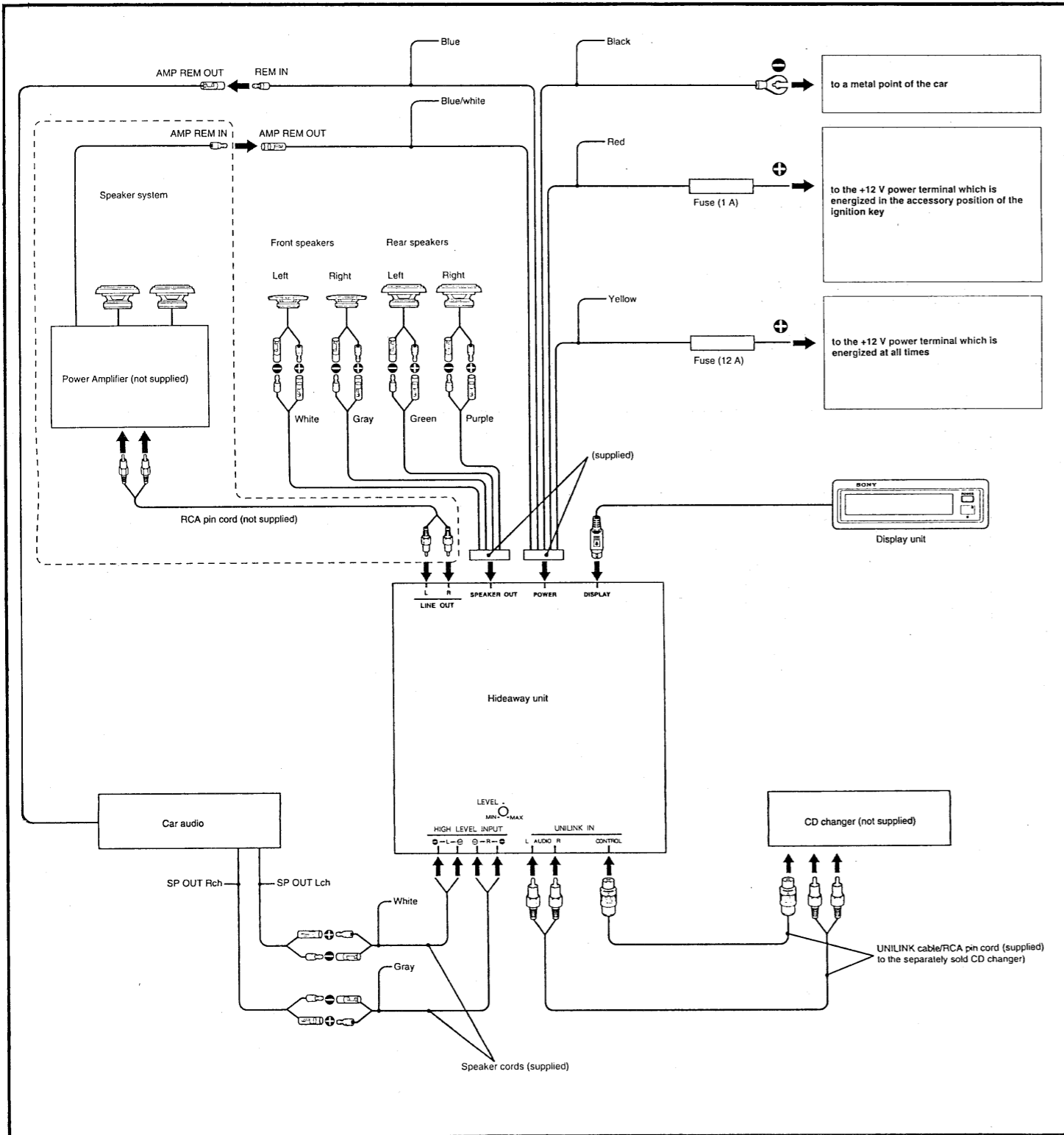
Connections

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Use speakers with an impedance of 4 to 8 ohms.

- Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the hideaway unit. Doing so may damage the active speakers. Therefore, be sure to connect the passive speakers to these terminals.

- Before making connections, disconnect the ground wire terminal of the car battery to avoid short circuits.

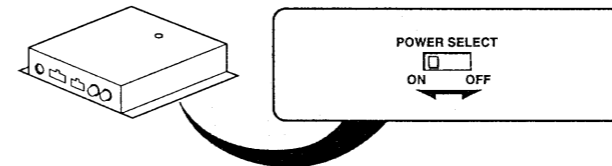


POWER SELECT Switch

If your car's ignition key panel has the ACC (accessory) position
The POWER SELECT switch located on the bottom of the hideaway unit is factory-set to the ON position so that the display on the display window will come on when the ignition key of your car is turned.

If your car's ignition key panel has no ACC (accessory) position
The original setting of the POWER SELECT switch may cause some car battery wear. To avoid this from happening, set the POWER SELECT switch to the OFF position*. When the ignition key is turned to the OFF position, the display on the display window will go off. Whenever you change the setting of the POWER SELECT switch, be sure to press the reset button on the display unit.

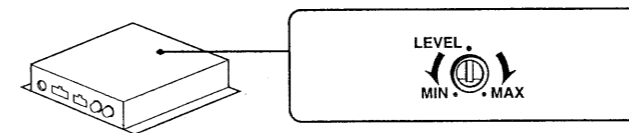
*When the POWER SELECT switch is set to the OFF position, you will not be able to start the CD play with the remote commander while the set is in the off mode, that is to say when there is no display on the display window. Therefore, press the POWER switch on the display unit before using the remote commander.



LEVEL (auxiliary input level adjust) Control

With this control, you can adjust the input level of the auxiliary source (speaker outputs of your car audio).

After the connection has been completed, turn up the volume of your car audio until just before the sound becomes distorted. Then adjust the LEVEL control with a screw driver so that the volume level of the car audio becomes the same as that of the CD changer.



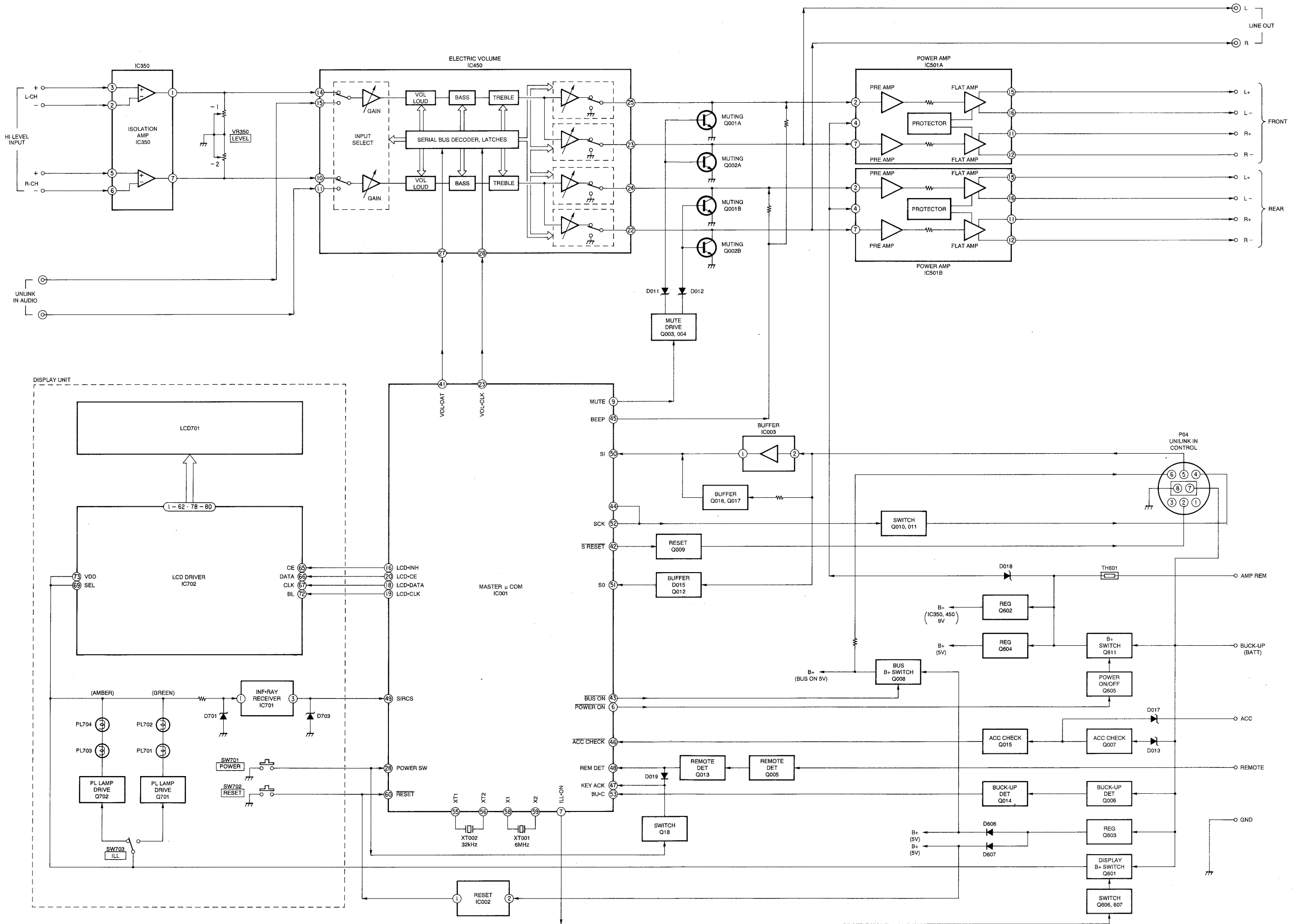
SECTION 2 EXPLANATION OF IC TERMINALS

IC001 μ PD75517GF-189-3B9

Terminal No.	Port name	Name of terminal	I/O	Active	Description
1	ANO	KEY0	I	—	A/D converter, KEY input terminal
2	AVref	Vref	I	—	A/D converter, standard voltage input terminal
3	VDD	VDD	—	—	Power source terminal (+5V)
4	VPP	VPP	—	—	Connected with VDD
5	P113	KEY ACT	O	Hi	KEY A/D port, active output terminal
6	P112	POWER ON	O	Hi	POWER ON output terminal
7	P111	ILL ON	O	Hi	Display LCD ON output terminal
8	P110	COLOR	O	—	This terminal is not used for this unit.
9	P103	MUTE	O	Hi	MUTE output terminal
10	P102	A MUTE	O	Hi	AUX MUTE output terminal. This terminal is not used for this unit.
11	P101	DOLBY	—	—	
12	P100	DOLBY C	—	—	
13	P93	REM ANT	—	—	This terminal is not used for this unit.
14	P92	PL	—	—	This terminal is not used for this unit.
15	P91	MD POW	—	—	This terminal is not used for this unit.
16	P90	LCD INH	O	Hi	Inhibit output terminal for display LCD driver
17	SI1/P83	—	—	—	
18	SOI/P82	LCD DATA	O	—	Data output terminal for display LCD driver
19	SCK/P81	LCD CLK	O	Low	Clock output terminal for display LCD driver
20	PPO/P80	LCD CE	O	Hi	Chip enable output terminal for display LCD driver
21	P73	VOL CE	O	—	Chip enable output terminal for electronic volume IC. This terminal is not used for this unit.
22	P72	PLL CE	O	—	Chip enable output terminal for tuner PLL IC. This terminal is not used for this unit.
23	P71	VOL CLK	O	Hi	Clock output for electronic volume IC
24	P70	NC	O	—	This terminal is not used for this unit.
25	P63	TV IN	I	Low	TV YES/NO (Low \rightarrow YES, Hi \rightarrow NO)
26	P62	TEST1	I	Low	Test mode input terminal (Low \rightarrow normal, Hi \rightarrow test mode)
27	P61	SER	I	Low	Service mode input terminal (Low \rightarrow normal, Hi \rightarrow service mode)
28	P60	IPWR SW	I	Low	Power switch input terminal
29	P53	—	—	—	Used for GND connection for this unit.
30	P52	—	—	—	Used for GND connection for this unit.
31	P51	—	—	—	Used for GND connection for this unit.
32	P50	—	—	—	Used for GND connection for this unit.
33	Vss	GND	—	—	Power source terminal (GND)
34	P43	—	—	—	Used for GND connection for this unit.
35	P42	—	—	—	Used for GND connection for this unit.
36	P41	—	—	—	Used for GND connection for this unit.
37	P40	—	—	—	Used for GND connection for this unit.
38	P33	NC	—	—	This terminal is not used for this unit.
39	P32	NC	—	—	This terminal is not used for this unit.
40	P31	NC	—	—	This terminal is not used for this unit.

Terminal No.	Port name	Name of terminal	I/O	Active	Description
41	P30	VOL DAT	O	Hi	Data output terminal for electronic volume IC
42	P23	$\overline{S\ RESET}$	O	Low	System reset output terminal
43	P22	$\overline{BUS\ ON}$	O	Low	Communication POWER ON output terminal or UNI-LINK
44	P21	CLK	O	Low	Clock output terminal for UNI-LINK
45	P20	BEEP	O	Hi	BEEP output terminal
46	P13/T10	$\overline{ACC\ CHK}$	I	Low	ACC check input terminal
47	P12/INT2	KEY ACK	I	Low	KEY active input terminal
48	P11/INT1	REM DET	I	Hi	AMP REMOTE detection terminal (Low → INACTIVE, Hi → ACTIVE)
49	P10/INT0	SIRCS	I	Hi	SIRCS remote commander input terminal
50	P03	SI	I	—	Serial input terminal for UNI-LINK
51	P02	SO	O	—	Serial output terminal for UNI-LINK
52	P01	SCK	O	Low	Serial clock output terminal for UNI-LINK
53	P00/INT4	BU CHK	I	Hi	Back-up check terminal
54	Vss	GND	—	—	Power source terminal (GND)
55	XT1	XT1	I	—	For sub-system clock oscillation. 32kHz
56	XT2	XT2	—	—	For sub-system clock oscillation. 32kHz
57	IC	IC	—	—	Vss level input terminal. (Connected with GND)
58	X1	X1	I	—	For main-system clock oscillation. 6MHz
59	X2	X2	I	—	For main-system clock oscillation. 6MHz
60	RESET	\overline{RESET}	I	—	System reset input terminal
61	P143	ITV2A	I	—	TV 2 BAND YES/NO (Low → YES, Hi → NO)
62	P142	IWAT	I	Low	Clock function YES /NO (Low → YES, Hi → NO)
63	P141	PRE AMP	I	—	Pre Amp. function YES/NO (Low → YES, Hi → NO)
64	P140	KEY CH	I	—	JOYSTICK REMOTE CONTROL/KEY YES/NO, input (Low → JOYSTICK, Hi → KEY). This terminal is not used for this unit.
65	P133	AMP SE	I	—	AMP REMOTE YES/NO, input (Low → NO, Hi → YES)
66	P132	$\overline{TEL\ MT}$	I	Low	TELEPHONE MUTE input
67	P131	NC	—	—	This terminal is not used for this unit.
68	P130	OMENO	I	Hi	MASK connect/disconnect input terminal. This is used for GND connection for this unit.
69	P123	NC	—	—	This terminal is not used for this unit.
70	P122	NC	—	—	This terminal is not used for this unit.
71	P121	SIG2	O	—	Audio select 2. This terminal is not used for this unit.
72	P120	SIG1	O	—	Audio select 1. This terminal is not used for this unit.
73	AVss	AVSS	—	—	A/D converter GND terminal
74	P153	NC	—	—	This terminal is not used for this unit.
75	P152	IPSEL	I	—	POWER select ON/OFF input terminal
76	P151	—	—	—	
77	P150	—	—	—	
78	AN3	—	—	—	
79	AN2	KEY2	I	—	A/D converter KEY input (JOYSTICK) terminal
80	AN1	KEY1	I	—	A/D converter KEY input terminal

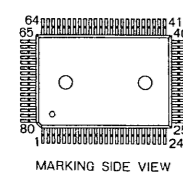
SECTION 3
BLOCK DIAGRAM



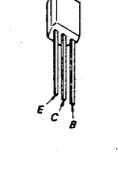
SECTION 4
DIAGRAMS

SEMICONDUCTOR LEAD LAYOUTS

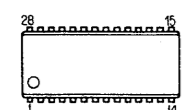
TC9240F
μ PD75517GF
-189-3B9



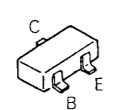
2SD1021
DTC314TS



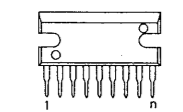
TDA7313D013TR



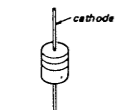
2SA1162
2SC1623-L5L6
DTA124EK
DTC124EK
DTC144EK



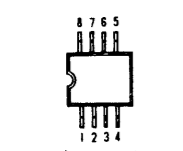
TA8210AH



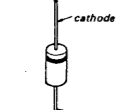
1SS119
RD11ES-B2
RD18ES-B2
RD5.1ES-B1
RD5.6ES-B2
RD6.2ES-B2



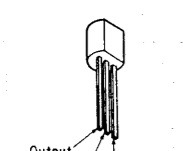
LA6393M
μ PC4558G2



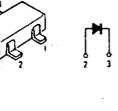
RD10ES-B2
RD4.3ES-B2



S-8054HN



1SS193
RD5.1M-B2
RD6.2M-B2
RD6.8M-B2



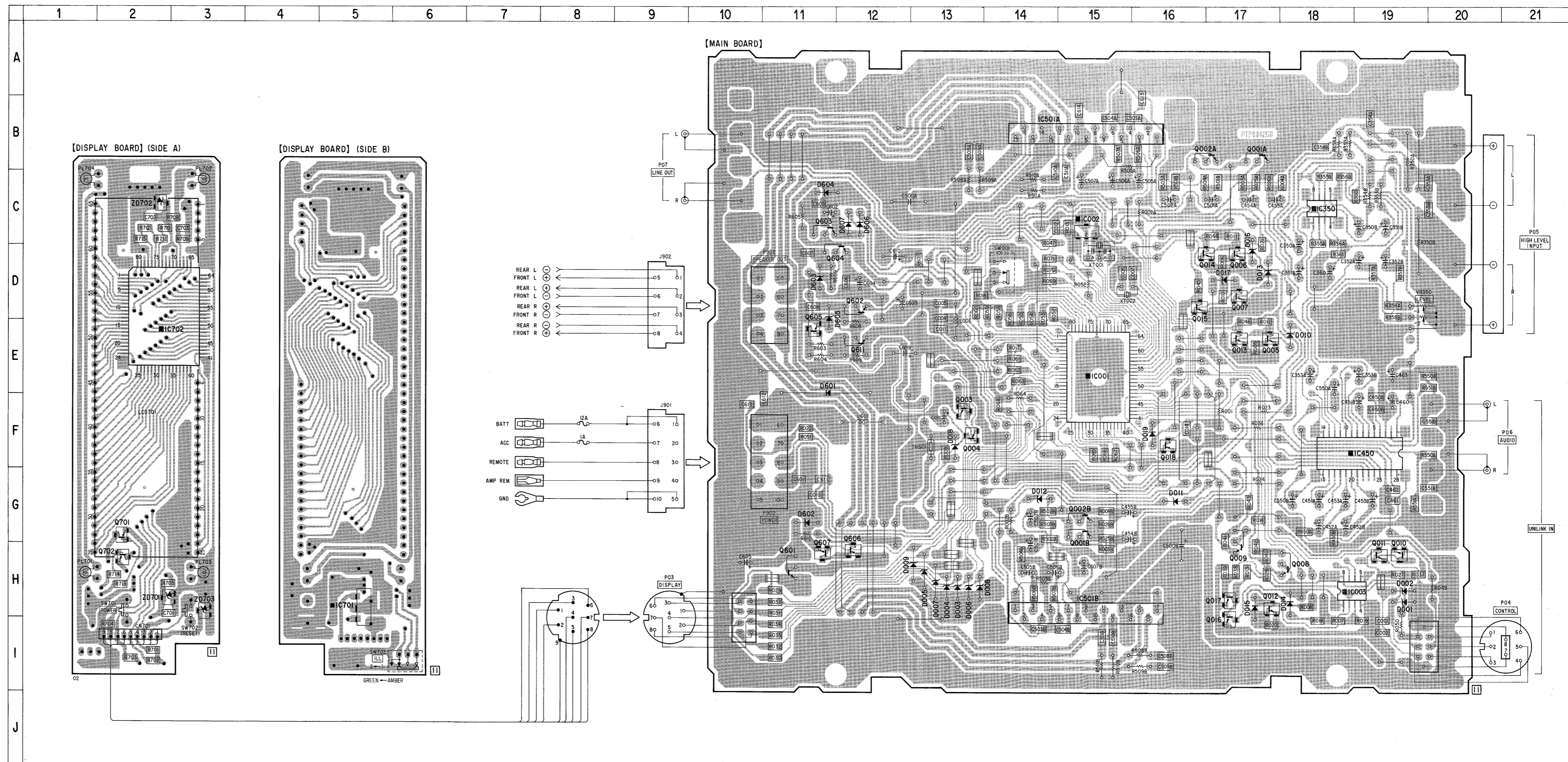
SEMICONDUCTOR LOCATION

Ref. No	Location	Ref. No.	Location
D001	H-19	IC501A	B-15
D002	H-19	IC501B	H-15
D003	H-13	IC701	H-5
D004	H-13	IC702	D-2
D005	H-13		
D006	H-13	Q003	F-13
D007	H-13	Q004	F-13
D008	H-13	Q005	E-17
D009	H-13	Q006	D-17
D010	E-18	Q007	D-17
D011	G-16	Q008	H-18
D012	G-14	Q009	G-17
D013	D-17	Q010	H-19
D014	H-18	Q011	H-19
D015	H-17	Q012	H-17
D016	D-17	Q013	E-17
D017	D-17	Q014	D-16
D018	F-13	Q015	D-16
D019	D-16	Q016	H-17
D601	E-11	Q017	H-17
D602	G-11	Q018	F-16
D603	D-11	Q601	H-11
D604	C-11	Q602	D-12
D605	D-11	Q603	C-11
D606	C-12	Q604	D-11
D607	C-12	Q605	E-11
D608	C-12	Q606	H-12
ZD701	H-2	Q607	H-11
ZD702	C-2	Q611	E-12
ZD703	H-3	Q701	G-2
IC001	E-15	Q702	H-2
IC002	C-15	Q001A	B-17
IC003	H-18	Q001B	G-15
IC350	C-18	Q002A	B-17
IC450	F-19	Q002B	G-15

Note:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- : Through hole.
- ▨ : Pattern on the side which is seen.
- : Chip components extracted from the rear side.

4-1. PRINTED WIRING BOARDS



SECTION 5 EXPLODED VIEWS

NOTE:

● -XX, -X mean standardized parts, so they may have some differences from the original one.

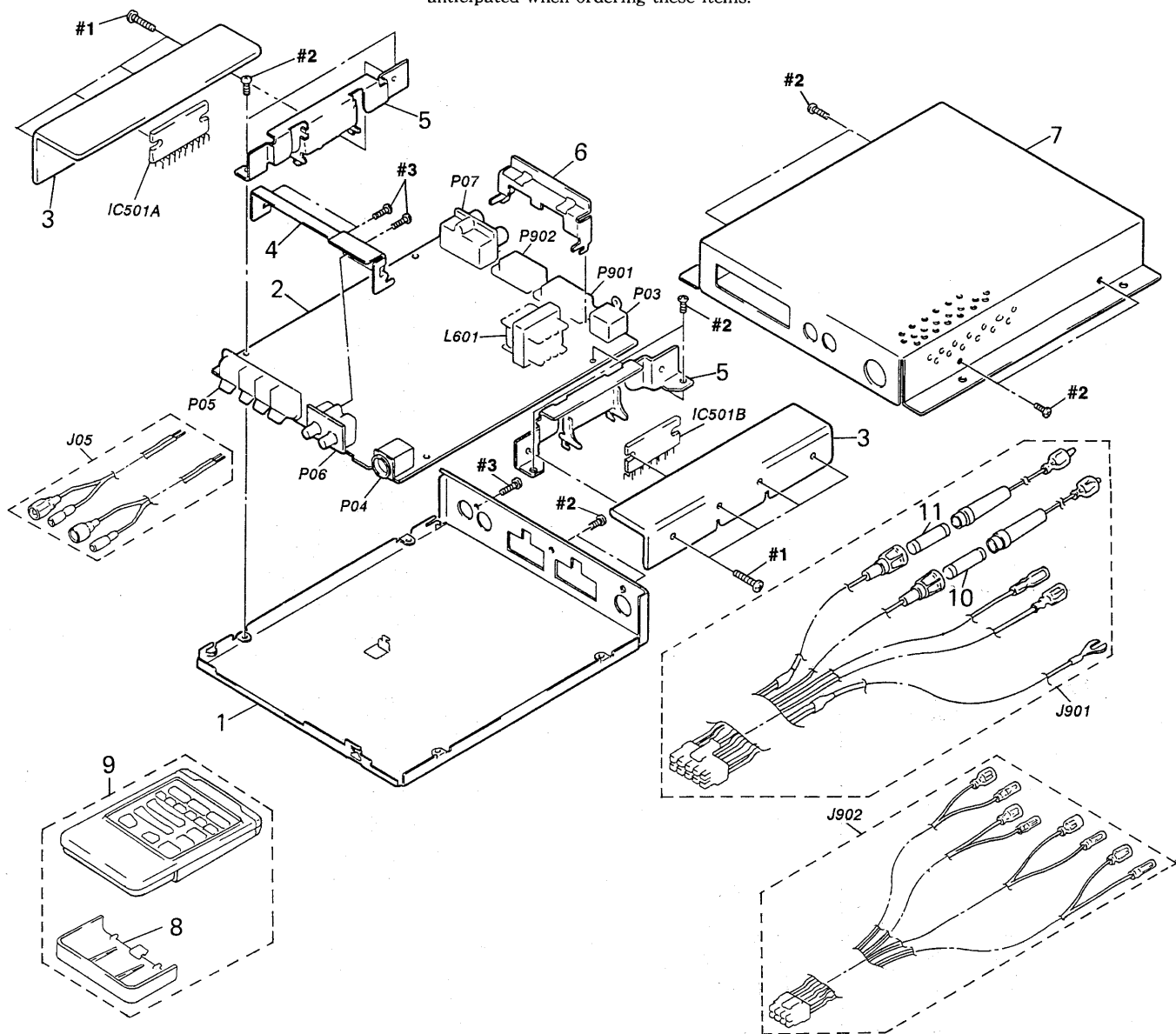
● The construction parts of an assembled part are indicated with a collation number in the remark column.

● Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

● The mechanical parts with no reference number in the exploded views are not supplied.

● Hardware (# mark) list is given in the last of this parts list.

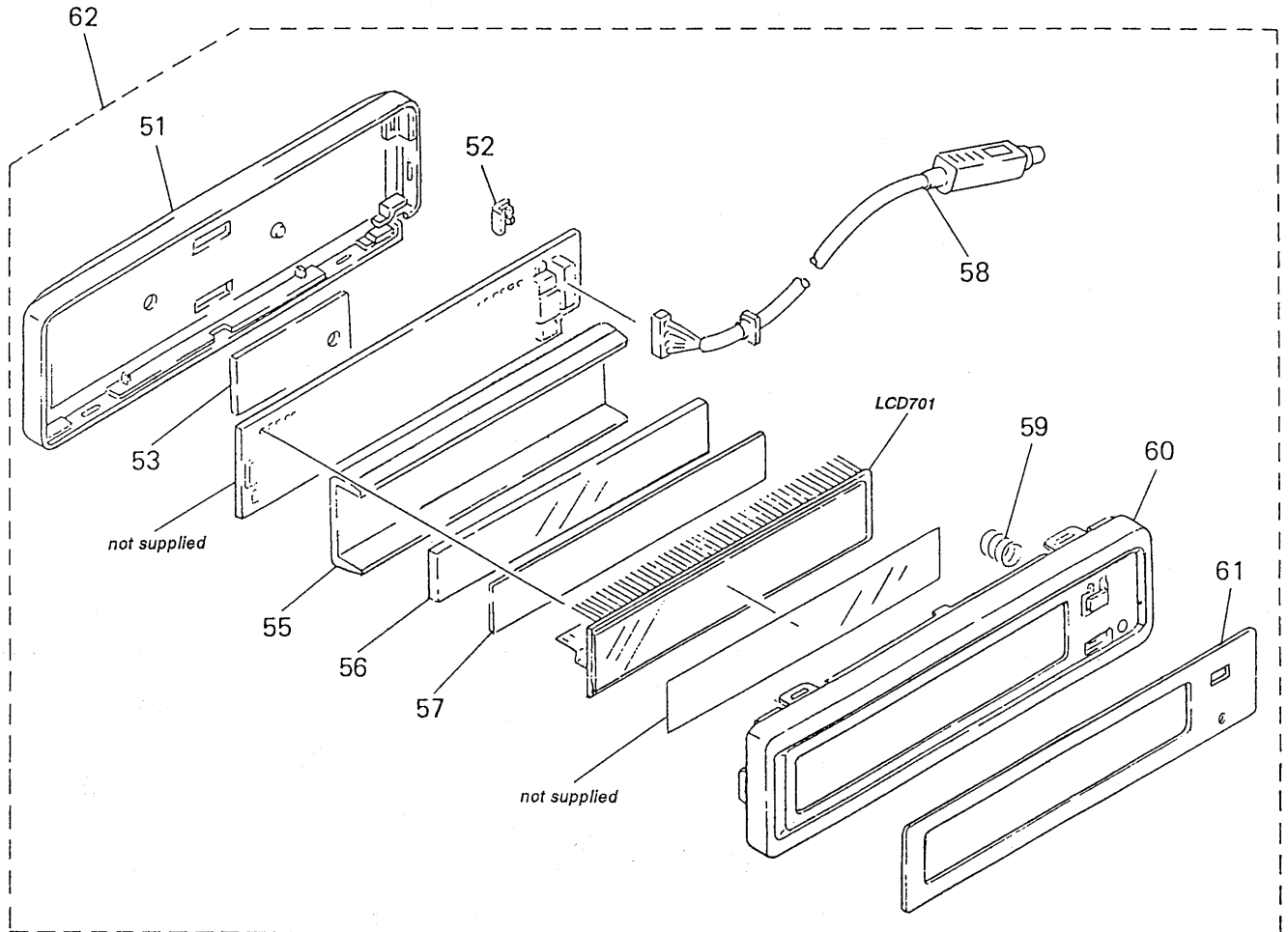
5-1. HIDEAWAY UNIT



Ref.No.	Part No.	Description	Remark
* 1	3-388-278-01	CHASSIS (B)	
* 2	A-3295-450-A	MAIN BOARD, COMPLETE	
* 3	3-388-279-01	HEAT SINK	
* 4	3-388-275-01	HOLDER (A)	
* 5	3-388-280-01	HOLDER (IC)	
* 6	3-388-276-01	HOLDER (B)	
* 7	3-388-277-01	CHASSIS (T)	
8	3-364-784-01	LID, BATTERY CASE	
9	1-466-952-11	REMOTE COMMANDER (XMC-U150)	
10	1-532-433-11	FUSE, GLASE TUBE (1A)	
11	1-532-678-11	FUSE, GLASE TUBE (12A)	
IC501A	8-759-039-68	IC TA8210AH	

Ref.No.	Part No.	Description	Remark
IC501B	8-759-039-68	IC TA8210AH	
J05	1-751-143-11	CORD, CONNECTION (SP)(HIGH LEVEL INPUT)	
J901	1-751-145-21	CORD (WITH CONNECTOR)(POWER)	
J902	1-751-144-11	CORD (WITH CONNECTOR) (SP)(SPEAKER OUT)	
L601	1-421-961-11	COIL, CHOKE 450uH	
P03	1-580-489-11	SOCKET, CONNECTOR 8P (DISPLAY)	
P04	1-580-907-11	PLUG, CONNECTOR (CONTROL)	
P05	1-537-238-11	TERMINAL BOARD (HIGH LEVEL INPUT)	
P06	1-580-281-11	JACK, PIN 2P (AUDIO)	
P07	1-580-281-21	JACK, PIN 2P (LINE OUT)	
P901	1-750-535-11	CONNECTOR 10P (POWER)	
P902	1-750-534-11	CONNECTOR 8P (SPEAKER OUT)	

5-2. DISPLAY UNIT



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-375-166-01	CASE (REAR)		58	1-590-279-11	CORD (WITH CONNECTOR)	
52	3-375-169-01	KNOB (ILLM)		59	3-375-170-01	SPRING, GROUND	
* 53	3-375-167-01	SHEET (INSULATING)		60	3-375-165-41	CASE (FRONT)	
* 55	3-367-571-01	HOLDER (LCD)		61	3-375-176-01	PLATE, TRANSPARENT	
* 56	3-375-168-01	PLATE (LCD), LIGHT GUIDE		* 62	A-3223-728-A	DISPLAY ASSY	
* 57	3-388-379-01	SHEET (DIFFUSION)		LCD701	1-809-286-11	DISPLAY PANEL, LIQUID CRYSTAL	

SECTION 6 ELECTRICAL PARTS LIST

DISPLAY

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

NOTE :

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

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

Ref.No.	Part No.	Description	Remark
		DISPLAY BOARD *****	
		< CAPACITOR >	
C701	1-163-038-11	CERAMIC CHIP 0.22uF	50V
C702	1-163-038-11	CERAMIC CHIP 0.22uF	50V
C703	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V
		< CONNECTOR >	
* CN701	1-566-764-11	PIN, CONNECTOR (PC BOARD) 9P	
		< IC >	
IC701	8-759-515-60	IC RS-20	
IC702	8-759-246-16	IC TC9240F	
		< LIQUID CRYSTAL DISPLAY >	
LCD701	1-809-286-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< PILOT LAMP >	
PL701	1-518-553-11	LAMP, PILOT (GREEN)	
PL702	1-518-553-11	LAMP, PILOT (GREEN)	
PL703	1-518-646-11	LAMP, PILOT (AMBER)	
PL704	1-518-646-11	LAMP, PILOT (AMBER)	
		< TRANSISTOR >	
Q701	8-729-904-66	TRANSISTOR DTD113EK	
Q702	8-729-904-66	TRANSISTOR DTD113EK	

Ref.No.	Part No.	Description	Remark
		< RESISTOR >	
R701	1-216-089-00	METAL CHIP 47K 5%	1/10W
R702	1-216-089-00	METAL CHIP 47K 5%	1/10W
R703	1-216-089-00	METAL CHIP 47K 5%	1/10W
R704	1-216-089-00	METAL CHIP 47K 5%	1/10W
R705	1-216-049-00	METAL CHIP 1K 5%	1/10W
R708	1-216-041-00	METAL CHIP 470 5%	1/10W
R709	1-216-097-00	METAL CHIP 100K 5%	1/10W
R710	1-216-049-00	METAL CHIP 1K 5%	1/10W
R711	1-216-049-00	METAL CHIP 1K 5%	1/10W
R712	1-216-049-00	METAL CHIP 1K 5%	1/10W
R713	1-216-049-00	METAL CHIP 1K 5%	1/10W
R714	1-216-049-00	METAL CHIP 1K 5%	1/10W
R715	1-216-037-00	METAL CHIP 330 5%	1/10W
		< SWITCH >	
SW701	1-572-648-11	SWITCH, TACT (POWER)	
SW702	1-572-648-11	SWITCH, TACT (RESET)	
SW703	1-570-675-11	SWITCH, SLIDE (ILL)	
		< DIODE >	
ZD701	8-719-105-82	DIODE RD5. 1M-B2	
ZD702	8-719-106-08	DIODE RD6. 2M-B2	
ZD703	8-719-106-17	DIODE RD6. 8M-B2	

MAIN

Ref.No.	Part No.	Description	Remark
*	A-3295-450-A	MAIN BOARD, COMPLETE *****	
*	3-388-275-01	HOLDER (A)	
*	3-388-276-01	HOLDER (B)	
*	3-388-279-01	HEAT SINK	
*	3-388-280-01	HOLDER (IC)	
	7-682-550-04	SCREW +P 3X12	
	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S	
		< CAPACITOR >	
C001	1-163-123-00	CERAMIC CHIP 180PF	5% 50V
C002	1-163-123-00	CERAMIC CHIP 180PF	5% 50V
C004	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C005	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C006	1-163-153-00	CERAMIC CHIP 6PF	0.5PF 50V
C007	1-163-153-00	CERAMIC CHIP 6PF	0.5PF 50V
C008	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C010	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C011	1-123-382-00	ELECT 3.3uF	20% 100V
C012	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C013	1-124-903-11	ELECT 1uF	20% 50V
C014	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C360	1-126-947-11	ELECT 47uF	20% 35V
C460	1-126-233-11	ELECT 22uF	20% 50V
C461	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C462	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C463	1-126-964-11	ELECT 10uF	20% 50V
C601	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C602	1-126-933-11	ELECT 100uF	20% 16V
C603	1-126-933-11	ELECT 100uF	20% 16V
C604	1-126-933-11	ELECT 100uF	20% 16V
C605	1-126-964-11	ELECT 10uF	20% 50V
C606	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C607	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C608	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C609	1-216-768-11	ELECT 2200uF	20% 16V
C610	1-125-701-11	CAP, DOUBLE LAYER	0.047F
C611	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C612	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C613	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C614	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C615	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C616	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C350A	1-124-903-11	ELECT 1uF	20% 50V
C350B	1-124-903-11	ELECT 1uF	20% 50V
C351A	1-124-903-11	ELECT 1uF	20% 50V
C351B	1-124-903-11	ELECT 1uF	20% 50V
C352A	1-126-964-11	ELECT 10uF	20% 50V

Ref.No.	Part No.	Description	Remark
C352B	1-126-964-11	ELECT 10uF	20% 50V
C353A	1-123-382-00	ELECT 3.3uF	20% 100V
C353B	1-123-382-00	ELECT 3.3uF	20% 100V
C354A	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C354B	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C355A	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C355B	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C450A	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C450B	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C451A	1-124-925-11	ELECT 2.2uF	20% 100V
C451B	1-124-925-11	ELECT 2.2uF	20% 100V
C452A	1-124-463-00	ELECT 0.1uF	20% 50V
C452B	1-124-463-00	ELECT 0.1uF	20% 50V
C453A	1-124-463-00	ELECT 0.1uF	20% 50V
C453B	1-124-463-00	ELECT 0.1uF	20% 50V
C454A	1-126-964-11	ELECT 10uF	20% 50V
C454B	1-126-964-11	ELECT 10uF	20% 50V
C455A	1-126-964-11	ELECT 10uF	20% 50V
C455B	1-126-964-11	ELECT 10uF	20% 50V
C500A	1-126-768-11	ELECT 2200uF	20% 16V
C500B	1-126-768-11	ELECT 2200uF	20% 16V
C501A	1-123-381-00	ELECT 2.2uF	20% 100V
C501B	1-123-381-00	ELECT 2.2uF	20% 100V
C502A	1-123-381-00	ELECT 2.2uF	20% 100V
C502B	1-123-381-00	ELECT 2.2uF	20% 100V
C503A	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C503B	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C504A	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C504B	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C505A	1-126-233-11	ELECT 22uF	20% 50V
C505B	1-126-233-11	ELECT 22uF	20% 50V
C506A	1-126-233-11	ELECT 22uF	20% 50V
C506B	1-126-233-11	ELECT 22uF	20% 50V
C507A	1-126-934-11	ELECT 220uF	20% 16V
C507B	1-126-934-11	ELECT 220uF	20% 16V
C508A	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C508B	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C509A	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C509B	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C510A	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C510B	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C511A	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C511B	1-163-077-00	CERAMIC CHIP 0.1uF	10% 25V
C550A	1-126-964-11	ELECT 10uF	20% 50V
C550B	1-126-964-11	ELECT 10uF	20% 50V
C551A	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C551B	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< DIODE >							
D001	8-719-109-93	DIODE RD6. 2ES-B2		JR011	1-216-296-00	METAL CHIP 0 5% 1/8W	
D002	8-719-109-93	DIODE RD6. 2ES-B2		JR012	1-216-296-00	METAL CHIP 0 5% 1/8W	
D003	8-719-109-93	DIODE RD6. 2ES-B2		JR013	1-216-296-00	METAL CHIP 0 5% 1/8W	
D004	8-719-109-93	DIODE RD6. 2ES-B2		JR014	1-216-296-00	METAL CHIP 0 5% 1/8W	
D005	8-719-109-93	DIODE RD6. 2ES-B2		JR015	1-216-296-00	METAL CHIP 0 5% 1/8W	
D006	8-719-109-93	DIODE RD6. 2ES-B2		JR016	1-216-296-00	METAL CHIP 0 5% 1/8W	
D007	8-719-109-93	DIODE RD6. 2ES-B2		JR017	1-216-296-00	METAL CHIP 0 5% 1/8W	
D008	8-719-109-93	DIODE RD6. 2ES-B2		JR018	1-216-296-00	METAL CHIP 0 5% 1/8W	
D009	8-719-109-93	DIODE RD6. 2ES-B2		JR019	1-216-296-00	METAL CHIP 0 5% 1/8W	
D010	8-719-109-93	DIODE RD6. 2ES-B2		JR020	1-216-296-00	METAL CHIP 0 5% 1/8W	
D011	8-719-109-75	DIODE RD4. 3ES-B2		JR021	1-216-296-00	METAL CHIP 0 5% 1/8W	
D012	8-719-109-75	DIODE RD4. 3ES-B2		< COIL >			
D013	8-719-110-49	DIODE RD18ES-B2		L001	1-410-513-11	INDUCTOR 22uH	
D014	8-719-911-19	DIODE 1SS119		L601	1-421-961-11	COIL, CHOKE 450uH	
D015	8-719-911-19	DIODE 1SS119		< CONNECTOR >			
D016	8-719-109-93	DIODE RD6. 2ES-B2		P03	1-580-489-11	SOCKET, CONNECTOR 8P (DISPLAY)	
D017	8-719-109-93	DIODE RD6. 2ES-B2		P04	1-580-907-11	PLUG, CONNECTOR (CONTROL)	
D018	8-719-109-84	DIODE RD5. 1ES-B1		P05	1-537-238-11	TERMINAL BOARD (HIGHT LEVEL INPUT)	
D019	8-719-911-19	DIODE 1SS119		P06	1-580-281-11	JACK, PIN 2P (AUDIO)	
D601	8-719-801-48	DIODE 1SS193		P07	1-580-281-21	JACK, PIN 2P (LINE OUT)	
D602	8-719-110-22	DIODE RD11ES-B2		P901	1-750-535-11	CONNECTOR 10P (POWER)	
D603	8-719-109-89	DIODE RD5. 6ES-B2		P902	1-750-534-11	CONNECTOR 8P (SPEAKER OUT)	
D604	8-719-109-94	DIODE RD6. 2ES-B3		< TRANSISTOR >			
D605	8-719-110-17	DIODE RD10ES-B2		Q003	8-729-901-00	TRANSISTOR DTC124EK	
D606	8-719-911-19	DIODE 1SS119		Q004	8-729-901-05	TRANSISTOR DTA124EK	
D607	8-719-911-19	DIODE 1SS119		Q005	8-729-901-01	TRANSISTOR DTC144EK	
< IC >				Q006	8-729-901-01	TRANSISTOR DTC144EK	
IC001	8-759-169-94	IC uPD75517GF-189-3B9		Q007	8-729-901-01	TRANSISTOR DTC144EK	
IC002	8-759-920-28	IC S-8054HN		Q008	8-729-119-76	TRANSISTOR 2SA1175-HFE	
IC003	8-759-821-33	IC LA6393M		Q009	8-729-119-76	TRANSISTOR 2SA1175-HFE	
IC350	8-759-100-96	IC uPC4558G2		Q010	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC450	8-759-169-92	IC TDA7313D013TR		Q011	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC501A	8-759-039-68	IC TA8210AH		Q012	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC501B	8-759-039-68	IC TA8210AH		Q013	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
< JUMPER RESISTOR >				Q014	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
JR001	1-216-295-00	METAL CHIP 0 5% 1/10W		Q015	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
JR002	1-216-296-00	METAL CHIP 0 5% 1/8W		Q016	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
JR003	1-216-296-00	METAL CHIP 0 5% 1/8W		Q017	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
JR004	1-216-296-00	METAL CHIP 0 5% 1/8W		Q018	8-729-901-05	TRANSISTOR DTA124EK	
JR005	1-216-296-00	METAL CHIP 0 5% 1/8W		Q601	8-729-423-99	TRANSISTOR 2SD2137-OP	
JR006	1-216-296-00	METAL CHIP 0 5% 1/8W		Q602	8-729-102-14	TRANSISTOR 2SD1021	
JR007	1-216-296-00	METAL CHIP 0 5% 1/8W		Q603	8-729-102-14	TRANSISTOR 2SD1021	
JR008	1-216-296-00	METAL CHIP 0 5% 1/8W		Q604	8-729-102-14	TRANSISTOR 2SD1021	
JR009	1-216-296-00	METAL CHIP 0 5% 1/8W		Q605	8-729-901-00	TRANSISTOR DTC124EK	
JR010	1-216-296-00	METAL CHIP 0 5% 1/8W		Q606	8-729-901-05	TRANSISTOR DTA124EK	

MAIN

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
Q607	8-729-901-01	TRANSISTOR	DTC144EK	R046	1-216-089-00	METAL CHIP	47K 5% 1/10W
Q611	8-729-016-83	TRANSISTOR	2SB1446	R047	1-216-089-00	METAL CHIP	47K 5% 1/10W
Q001A	8-729-905-55	TRANSISTOR	DTC314TS	R049	1-249-405-11	CARBON	100 5% 1/4W
Q001B	8-729-905-55	TRANSISTOR	DTC314TS	R050	1-249-405-11	CARBON	100 5% 1/4W
Q002A	8-729-905-55	TRANSISTOR	DTC314TS	R051	1-216-073-00	METAL CHIP	10K 5% 1/10W
Q002B	8-729-905-55	TRANSISTOR	DTC314TS	R052	1-216-097-00	METAL CHIP	100K 5% 1/10W
		< RESISTOR >		R053	1-216-097-00	METAL CHIP	100K 5% 1/10W
R001	1-247-895-00	CARBON	470K 5% 1/4W	R054	1-216-097-00	METAL CHIP	100K 5% 1/10W
R005	1-216-081-00	METAL CHIP	22K 5% 1/10W	R055	1-216-097-00	METAL CHIP	100K 5% 1/10W
R006	1-216-081-00	METAL CHIP	22K 5% 1/10W	R056	1-216-097-00	METAL CHIP	100K 5% 1/10W
R007	1-216-081-00	METAL CHIP	22K 5% 1/10W	R057	1-216-097-00	METAL CHIP	100K 5% 1/10W
R008	1-216-081-00	METAL CHIP	22K 5% 1/10W	R058	1-216-097-00	METAL CHIP	100K 5% 1/10W
R009	1-216-057-00	METAL CHIP	2.2K 5% 1/10W	R059	1-216-097-00	METAL CHIP	100K 5% 1/10W
R010	1-216-067-00	METAL CHIP	5.6K 5% 1/10W	R060	1-216-097-00	METAL CHIP	100K 5% 1/10W
R011	1-216-105-00	METAL CHIP	220K 5% 1/10W	R061	1-216-097-00	METAL CHIP	100K 5% 1/10W
R012	1-216-105-00	METAL CHIP	220K 5% 1/10W	R062	1-216-097-00	METAL CHIP	100K 5% 1/10W
R013	1-216-097-00	METAL CHIP	100K 5% 1/10W	R063	1-216-097-00	METAL CHIP	100K 5% 1/10W
R014	1-216-097-00	METAL CHIP	100K 5% 1/10W	R064	1-216-097-00	METAL CHIP	100K 5% 1/10W
R015	1-216-097-00	METAL CHIP	100K 5% 1/10W	R065	1-216-097-00	METAL CHIP	100K 5% 1/10W
R016	1-216-097-00	METAL CHIP	100K 5% 1/10W	R066	1-216-097-00	METAL CHIP	100K 5% 1/10W
R017	1-216-097-00	METAL CHIP	100K 5% 1/10W	R067	1-216-097-00	METAL CHIP	100K 5% 1/10W
R018	1-216-065-00	METAL CHIP	4.7K 5% 1/10W	R068	1-216-097-00	METAL CHIP	100K 5% 1/10W
R019	1-216-063-00	METAL CHIP	3.9K 5% 1/10W	R069	1-216-097-00	METAL CHIP	100K 5% 1/10W
R020	1-216-073-00	METAL CHIP	10K 5% 1/10W	R070	1-216-097-00	METAL CHIP	100K 5% 1/10W
R021	1-216-073-00	METAL CHIP	10K 5% 1/10W	R071	1-216-097-00	METAL CHIP	100K 5% 1/10W
R022	1-216-073-00	METAL CHIP	10K 5% 1/10W	R360	1-216-073-00	METAL CHIP	10K 5% 1/10W
R023	1-249-429-11	CARBON	10K 5% 1/4W	R361	1-216-073-00	METAL CHIP	10K 5% 1/10W
R024	1-249-429-11	CARBON	10K 5% 1/4W	R603	1-249-419-11	CARBON	1.5K 5% 1/4W
R027	1-216-049-00	METAL CHIP	1K 5% 1/10W	R604	1-249-419-11	CARBON	1.5K 5% 1/4W
R028	1-216-049-00	METAL CHIP	1K 5% 1/10W	R605	1-249-429-11	CARBON	10K 5% 1/4W
R029	1-216-049-00	METAL CHIP	1K 5% 1/10W	R606	1-249-429-11	CARBON	10K 5% 1/4W
R030	1-216-049-00	METAL CHIP	1K 5% 1/10W	R607	1-216-017-00	METAL CHIP	47 5% 1/10W
R031	1-216-049-00	METAL CHIP	1K 5% 1/10W	R608	1-249-418-11	CARBON	1.2K 5% 1/4W
R032	1-216-049-00	METAL CHIP	1K 5% 1/10W	R609	1-249-418-11	CARBON	1.2K 5% 1/4W
R033	1-216-049-00	METAL CHIP	1K 5% 1/10W	R610	1-249-413-11	CARBON	470 5% 1/4W
R034	1-216-049-00	METAL CHIP	1K 5% 1/10W	R002A	1-247-895-00	CARBON	470K 5% 1/4W
R035	1-216-049-00	METAL CHIP	1K 5% 1/10W	R002B	1-247-895-00	CARBON	470K 5% 1/4W
R036	1-249-429-11	CARBON	10K 5% 1/4W	R003A	1-216-049-00	METAL CHIP	1K 5% 1/10W
R037	1-216-089-00	METAL CHIP	47K 5% 1/10W	R003B	1-216-049-00	METAL CHIP	1K 5% 1/10W
R038	1-216-089-00	METAL CHIP	47K 5% 1/10W	R004A	1-216-049-00	METAL CHIP	1K 5% 1/10W
R039	1-216-089-00	METAL CHIP	47K 5% 1/10W	R004B	1-216-049-00	METAL CHIP	1K 5% 1/10W
R040	1-216-089-00	METAL CHIP	47K 5% 1/10W	R025A	1-216-073-00	METAL CHIP	10K 5% 1/10W
R041	1-216-089-00	METAL CHIP	47K 5% 1/10W	R025B	1-216-073-00	METAL CHIP	10K 5% 1/10W
R042	1-216-089-00	METAL CHIP	47K 5% 1/10W	R026A	1-216-073-00	METAL CHIP	10K 5% 1/10W
R043	1-216-089-00	METAL CHIP	47K 5% 1/10W	R026B	1-216-073-00	METAL CHIP	10K 5% 1/10W
R044	1-216-089-00	METAL CHIP	47K 5% 1/10W	R350A	1-214-846-00	METAL CHIP	180 1% 1/2W
R045	1-216-089-00	METAL CHIP	47K 5% 1/10W	R350B	1-214-846-00	METAL CHIP	180 1% 1/2W
				R353A	1-249-441-11	CARBON	100K 0.5% 1/4W
				R353B	1-249-441-11	CARBON	100K 0.5% 1/4W

Ref. No.	Part No.	Description	Remark
R354A	1-249-441-11	CARBON	100K 0.5% 1/4W
R354B	1-249-441-11	CARBON	100K 0.5% 1/4W
R355A	1-216-085-00	METAL CHIP	33K 5% 1/10W
R355B	1-216-085-00	METAL CHIP	33K 5% 1/10W
R356A	1-216-085-00	METAL CHIP	33K 5% 1/10W
R356B	1-216-085-00	METAL CHIP	33K 5% 1/10W
R357A	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R357B	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R358A	1-216-041-11	METAL CHIP	470 5% 1/10W
R358B	1-216-041-11	METAL CHIP	470 5% 1/10W
R450A	1-216-067-00	METAL CHIP	5.6K 5% 1/10W
R450B	1-216-067-00	METAL CHIP	5.6K 5% 1/10W
R501A	1-216-081-00	METAL CHIP	22K 5% 1/10W
R501B	1-216-081-00	METAL CHIP	22K 5% 1/10W
R502A	1-216-081-00	METAL CHIP	22K 5% 1/10W
R502B	1-216-230-00	METAL CHIP	22K 5% 1/8W
R503A	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R503B	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R504A	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R504B	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R505A	1-249-441-11	CARBON	100K 5% 1/4W
R505B	1-249-441-11	CARBON	100K 5% 1/4W
R506A	1-216-039-00	METAL CHIP	390 5% 1/10W
R506B	1-216-039-00	METAL CHIP	390 5% 1/10W
R507A	1-216-039-00	METAL CHIP	390 5% 1/10W
R507B	1-216-039-00	METAL CHIP	390 5% 1/10W
R508A	1-249-385-11	CARBON	2.2 5% 1/6W
R508B	1-249-385-11	CARBON	2.2 5% 1/6W
R509A	1-249-385-11	CARBON	2.2 5% 1/6W
R509B	1-249-385-11	CARBON	2.2 5% 1/6W
R510A	1-249-385-11	CARBON	2.2 5% 1/6W
R510B	1-249-385-11	CARBON	2.2 5% 1/6W
R511A	1-249-385-11	CARBON	2.2 5% 1/6W
R511B	1-249-385-11	CARBON	2.2 5% 1/6W
R550A	1-216-071-00	METAL CHIP	8.2K 5% 1/10W
R550B	1-216-077-00	METAL CHIP	15K 5% 1/10W
R551A	1-216-077-00	METAL CHIP	15K 5% 1/10W
R551B	1-216-071-00	METAL CHIP	8.2K 5% 1/10W
		< SWITCH >	
SW001	1-571-275-31	SWITCH, SLIDE (POWER SELECT)	
		< THERMISTOR >	
TH601	1-809-842-11	THERMISTOR PTH8L07AR2ROM1B553	
		< VARIABLE RESISTOR >	
VR350	1-223-383-11	RES, VAR 10K (LEVEL)	

Ref. No.	Part No.	Description	Remark
		< CRYSTAL >	
XT001	1-577-102-11	VIBRATOR, CERAMIC (6MHz)	
XT002	1-579-935-11	VIBRATOR, CRYSTAL (32kHz)	

		MISCELLANEOUS	

9	1-466-952-11	REMOTE COMMANDER (XMC-U150)	
10	1-532-433-11	FUSE, GLAS TUBE (1A)	
11	1-532-678-11	FUSE, GLAS TUBE (12A)	
J05	1-751-143-11	CORD, CONNECTION (SP) (HIGH LEVEL INPUT)	
J901	1-751-145-21	CORD (WITH CONNECTOR) (POWER)	
J902	1-751-144-11	CORD (WITH CONNECTOR) (SP) (SPEAKER OUT)	
IC501A	8-759-039-68	IC TA8210AH	
IC501B	8-759-039-68	IC TA8210AH	

		ACCESSORIES & PACKING MATERIALS	

3-378-208-01		HOLDER (DISPLAY) (US, Canadian)	
3-756-509-11		MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, ITALIAN) (AEP)	
3-756-509-21		MANUAL, INSTRUCTION (ENGLISH, FRENCH) (US, Canadian)	
3-756-509-41		MANUAL, INSTRUCTION (SPANISH, DUTCH, SWEDISH, PORTUGUESE) (AEP)	
3-756-509-51		MANUAL, INSTRUCTION (ENGLISH, SPANISH, CHINESE) (E)	
3-756-510-11		MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH, GERMAN, ITALIAN) (AEP)	
3-756-510-21		MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH) (US, Canadian)	
3-756-510-41		MANUAL, INSTRUCTION, INSTALL (SPANISH, DUTCH, SWEDISH, PORTUGUESE) (AEP)	
3-756-510-51		MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, CHINESE) (E)	

HARDWARE LIST			

#1	7-682-550-04	SCREW +P 3X12	
#2	7-682-547-09	SCREW +PTT 3X6 (S)	
#3	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S	

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
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MOUNTING HARDWARE

- * 501 3-365-669-01 TAPE (MALE)
- * 502 3-365-670-01 TAPE (FEMALE)
- 503 7-685-162-11 SCREW +P 4X14 TYPE2 NON-SLIT

