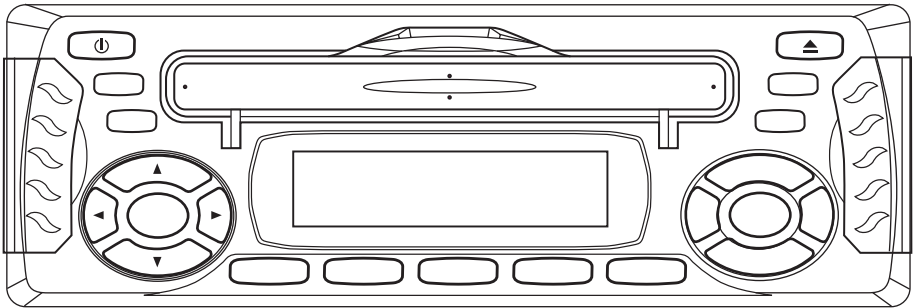


## OWNER'S MANUAL

### Shipboard Audio System

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- **PLL Synthesizer Stereo Radio**
- **Digital Compact Disc Player**
- **Automatically Memory Storing**
- **Direct Track Access**
- **Program CD Tracks**
- **Electronic Shockproof (ESP) Function**

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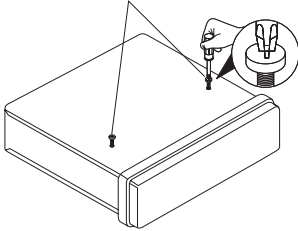
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# INSTALLATION

## TAKE OUT SCREW BEFORE INSTALL

Before install the unit, please remove the two screws.

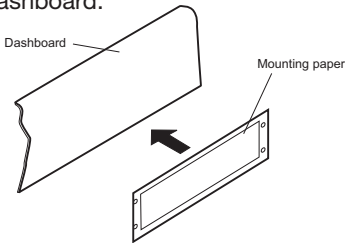
Take out screw before install.



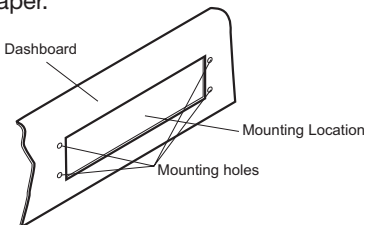
**NOTE:** This unit is installed on the ship, so you should use two pieces of plastic film (30mmX20mm) supplied with the unit to seal the two holes after remove the screws. And this will be waterproof.

## INSTALL THE UNIT

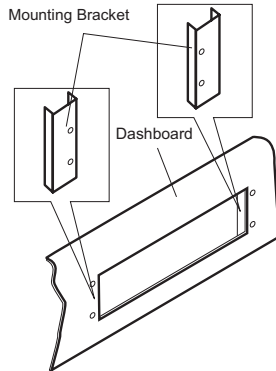
1. According to the mounting paper supplied with the unit, determine the mounting location in the dashboard, and then stick the paper to the dashboard.



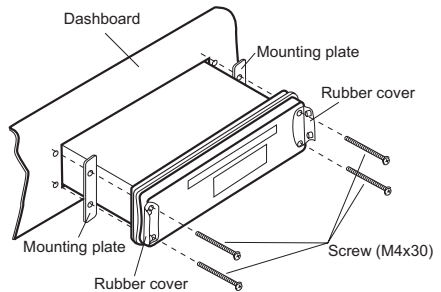
2. Then cut and remove the part of the dashboard in a rectangle shape the same as the hatching area on the mounting paper. And then drill four mounting holes ( $\phi 5$ ) in the exact position also according to the mounting paper.



3. Use the glue paper to stick the two mounting bracket to the back of the dashboard. The screw holes of the brackets must respectively aim at the mounting holes in order to fix the unit to the dashboard.

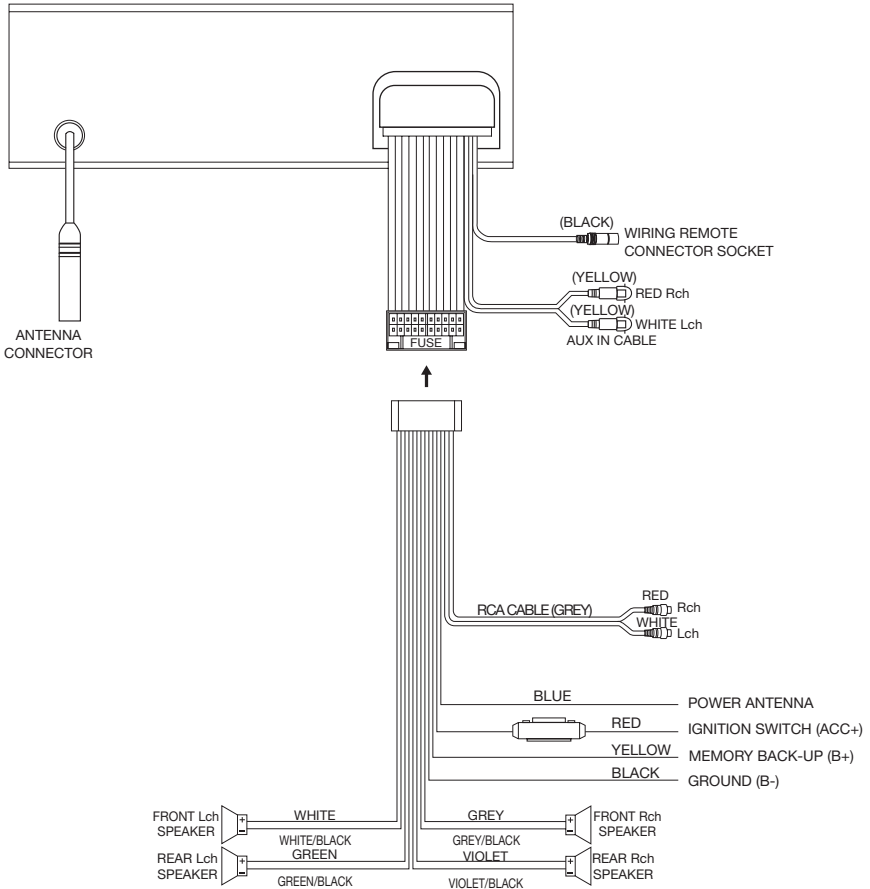


4. Open the two pieces of rubber cover on the unit to display the four screw holes, and then use four screws (M4X30) to mount the unit to the dashboard with the mounting plate between the dashboard and the unit.



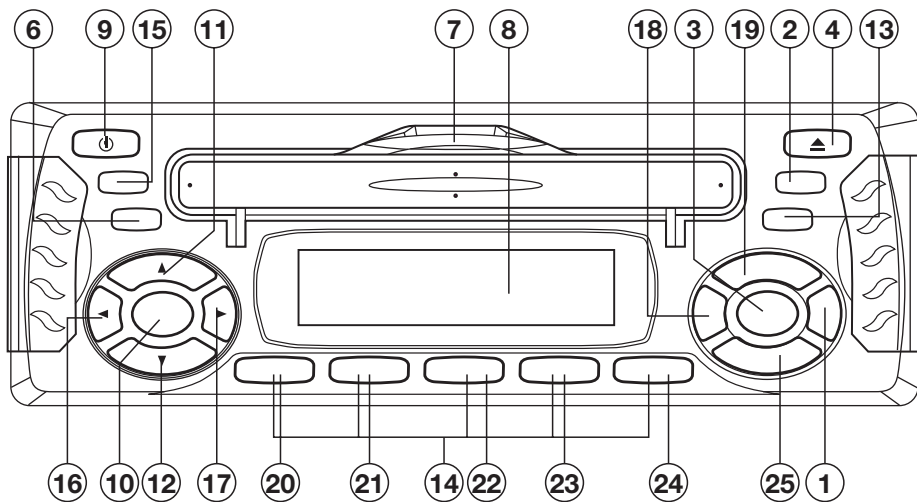
**Note:** If you don't install the unit according to the installation instructions above, the main unit may be not up to the IPX5 waterproof standard.

# WIRING CONNECTION

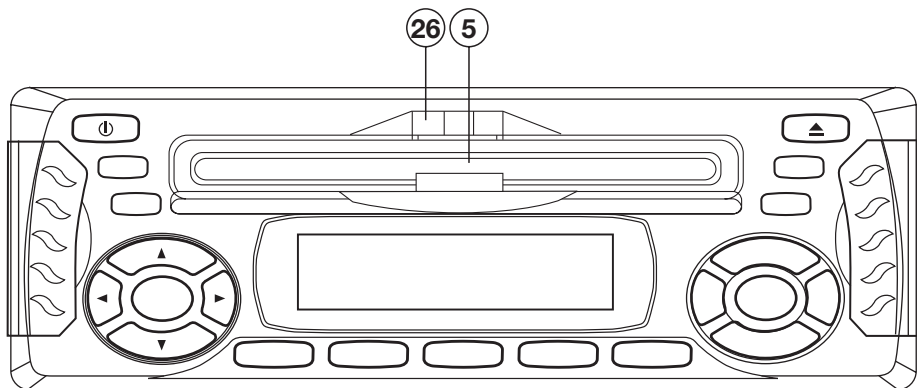


## OPERATION

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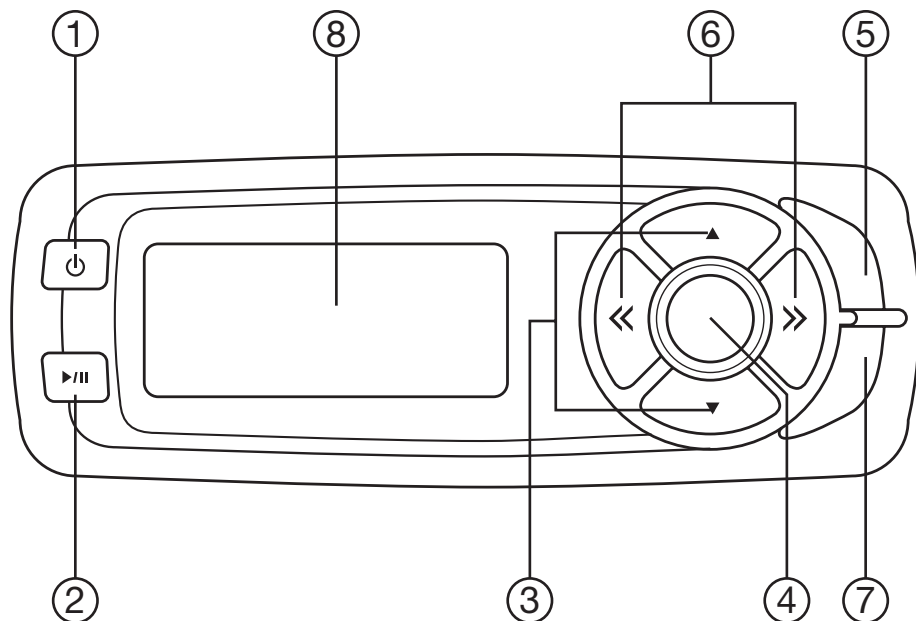
When pull open the disc cover:



# OPERATION

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## CONTROL & FUNCTIONS KEYS




This unit is a marine rated wired remote control made using a modified controller or similar layout. It is capable of operation specified functions on the marine AM/FM/CD receiver and the marine AM/FM/Cassette receiver. The body, buttons, controls and display need to be UV and water-resistant. It includes an LCD and an illumination circuit. The flat body should be watertight and the circuit board clear coated.

### 1 Power button

Press the  button (1) shortly to turn on/off the head unit.

Press  button (1) for more than 3 seconds, the button is operated to initial volume control button. When system power turns on, the volume is set to initial volume level.

### 2 MUTE button

In RADIO/AUX IN mode, press **MUTE**  button (2) to activate mute function and "MUTE" will appear on the display. Press the button once again to release mute function and return the volume to the last position before it was muted.

In CD (or CASSETTE) mode, press  **MUTE** button (2) to pause CD (or CASSETTE) player. Press it again to resume play.

### 3 VOLUME +/- buttons

Press **VOL**  /  buttons (3) to increase/decrease volume level.

# OPERATION

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## 4 **MODE SELECTION button**

Press the **MODE** button (4) to step sequentially through the following sources: e.g. radio mode to CD mode (or cassette mode) to AUX in mode.

## 5 **BAND SELECTION button**

FOR WEATHER BAND VERSION ONLY:

Press the **BAND** button (5) to step sequentially through the following bands: FM1, FM2, AM, WX.

## 6 **TRACK/SEARCH/TUNE buttons**

### • STATION SELECTION (FOR RADIO OPERATION)

Press **»/«** buttons (6) shortly to activate automatic seek function. Press for more than 3 seconds until "**MAN**" appears on the display, the manual tuning mode is selected. If both buttons have not pressed for several seconds, they will return to seek tuning mode and "**AUTO**" appears on the display.

### • STATION SELECTION (FOR WEATHER BAND OPERATION)

Press **»/«** buttons (6) shortly to select channel forward or backward. The range of selecting forward or backward is CH1~CH7 Channels.

### • CASSETTE REWIND/FORWARD (FOR CASSETTE OPERATION)

Press **»/«** buttons (6) to activate the cassette fast forward or rewind.

### • SELECT TRACKS (FOR CD OPERATION)

Press the **»/«** buttons (6) shortly to move to the following track or the previous track.

Press the **»/«** buttons (6) for more than 3 seconds to activate fast forward or rewind of the disc. Disc play starts from when you release the button.

## 7 **SCAN button**

### • SCAN (FOR RADIO OPERATION)

Press **SHIFT/SCAN** button (7) to scan through strong stations in the current band. Radio pauses for five seconds at each strong station. At each time the frequency is flashing on the display. Press **SHIFT/SCAN** button (7) again to listen to current station.

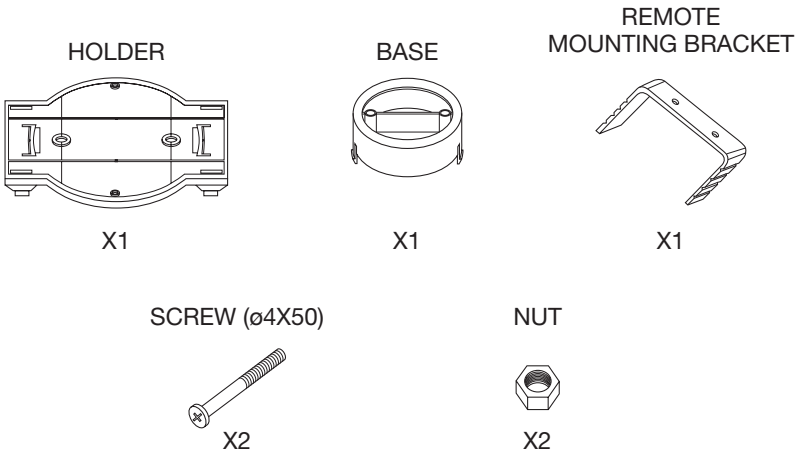
## 8 **Liquid Crystal Display**

Exhibit the number, the current disc and the current track, and other activated functions on the display (8).

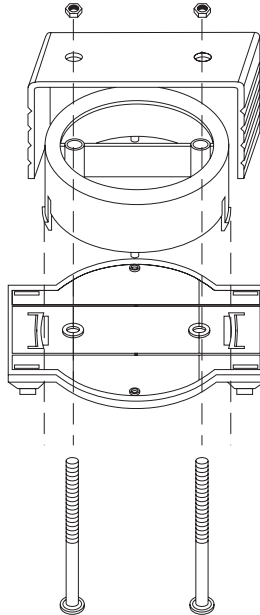
# OPERATION

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## INSTALLATION HARDWARE



### INSTALLATION DIAGRAM

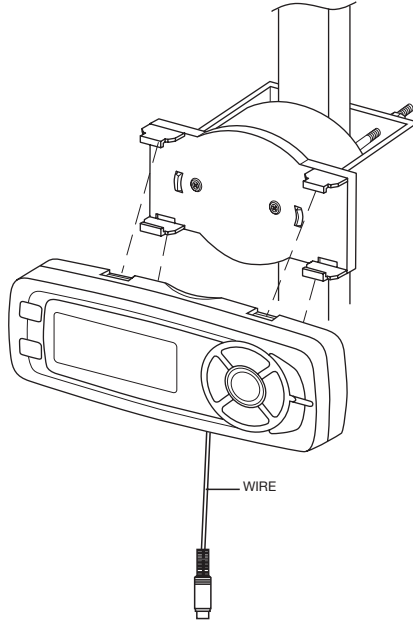


1. First insert the hooks on the base into the slots of the holder to install the base to the holder.
2. Select the proper object, then place the remote mounting bracket on the base and let the object go through the base and the mounting bracket.

## OPERATION

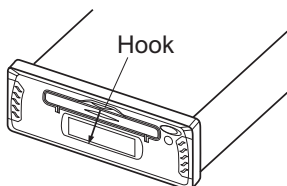
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3. Align the screw holes on the holder with the screw holes on the base and the screw holes on the bracket, then use the two screws ( $\varnothing 4 \times 50$ ) and nuts to fix the bracket, the base and holder to the proper location.
4. Last install the remote control to the holder. See below, align the four hooks on the holder with the four slots on the remote control.

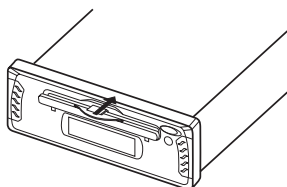


# OPERATION

- **SWITCHING ON/OFF THE UNIT**  
Switch on the unit by pressing any button (except **▲ EJECT (4)**). When system is on, press **POWER** button (9) to turn off the unit. When system power turns on, the system is returned to previous mode.
- **DISPLAY THE DISC SLOT**  
Press the hook (7) of the plastic disc cover then poke it at a slight downward force to let the cover open, then you can see the disc slot (5).



When you want to close the disc cover, push the hook into proper location at a horizontal force.



- **SOUND ADJUSTMENT**  
Press **SEL/MENU** button (10) shortly to change audio mode through volume, bass, treble, balance, and fader modes. Press **VOLUME ▲** button (11) or **VOLUME ▼** button (12) to adjust the selected mode. When the currently displayed function has not been adjusted for several seconds, the mode shall return to volume position and display will return to normal radio, CD display.



## Volume

Press **SEL/MENU** button (10) one time. Adjust volume level by **VOLUME ▲** button (11) or **VOLUME ▼** button (12).

## Notes:

The unit is initially set to volume mode.

## Bass

Press **SEL/MENU** button (10) two times.

Adjust bass level by **VOLUME ▲** button (11) or **VOLUME ▼** button (12).

## Treble

Press **SEL/MENU** button (10) three times. Adjust treble level by **VOLUME ▲** button (11) or **VOLUME ▼** button (12).

## Balance

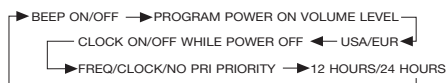
Press **SEL/MENU** button (10) four times. Adjust sound balance between left and right speakers by **VOLUME ▲** button (11) or **VOLUME ▼** button (12).

## Fader

Press **SEL/MENU** button (10) five times. Adjust sound balance between front and rear speakers by **VOLUME ▲** button (11) or **VOLUME ▼** button (12).

## MENU SELECTION FUNCTION

Hold press **SEL/MENU** (10) for several seconds to enter menu select function, then step short press **SEL/MENU** (10) to select different set mode and separately to press **VOLUME ▲** button (11) or **VOLUME ▼** button (12) to select your requisite as following order.



For detailed operations, please see below:

## BEEP ON/OFF

Hold press **SEL/MENU** button (10) for several seconds, when BEEP ON/OFF appears, press **VOLUME ▲** button (11) or **VOLUME ▼** button (12) to select BEEP on or BEEP OFF. When beep on, the beep is generated when every button is pressed. When beep off, the beep is disabled when press any button.

## Program power on volume level

Hold press **SEL/MENU** button (10) for several seconds, when BEEP ON/OFF appears, press **SEL/MENU** button (10) shortly one time to select "program power on volume level" mode. And then you can press **VOLUME ▲** button (11) or **VOLUME ▼** button (12) to select the level when the unit turns on.

## USA/EUR

Hold press **SEL/MENU** button (10) for several seconds, when BEEP ON/BEEP OFF appears, press **SEL/MENU** button (10) shortly two times to select "USA/EUR" mode. And then you can press **VOLUME**

# OPERATION

▲ button (11) or **VOLUME ▼** button (12) to select USA or European radio frequency spacing.

- USA radio spacing is 200k for FM and 10k for AM. This is the default frequency spacing.
- European radio spacing is 50k for FM and 9k for AM.

## **CLOCK ON/OFF while power off**

Hold press **SEL/MENU** button (10) for several seconds, when BEEP ON/OFF appears, press **SEL/MENU** button (10) shortly three times to select "clock on/off while power off" mode. And then you can press **VOLUME ▲** button (11) or **VOLUME ▼** button (12) to select if the clock is to be displayed while power off.

## **FREQ/CLOCK/NO PRI priority**

Hold press **SEL/MENU** button (10) for several seconds, when BEEP ON/OFF appears, press **SEL/MENU** button (10) shortly four times to select "FREQ/CLOCK/NO PRI priority" mode. And then you can press **VOLUME ▲** button (11) or **VOLUME ▼** button (12) to select frequency priority or clock priority or no priority.

- When select Frequency Priority:  
The frequency will appear on the unit all the while. Pressing **DSP** button (1) while in Frequency Priority will temporarily display clock and then returns to frequency display.
- When select Clock Priority:  
The clock will appear on the unit all the while. Pressing **DSP** button (1) while in Clock Priority will temporarily display selected station frequency (in RADIO mode) or track number (in CD mode) and then returns to clock display.
- When select No Priority:  
When the frequency appears on the unit, pressing **DSP** button (1) will display clock and it will not return to frequency display until **DSP** button (1) pressed again. When the clock appears on the unit, pressing **DSP** button (1) will display frequency information.

## **12hours/24hours**

Hold press **SEL/MENU** button (10) for several seconds, when BEEP ON/OFF appears, press **SEL/MENU** button (10) shortly five times to select "12hours/24hours" mode. And then you can press **VOLUME ▲** button (11) or

**VOLUME ▼** button (12) to set 24 hours mode or 12 hours mode.

- When the currently displayed function has not been adjusted for several seconds, it will exit menu set mode.
- When you have set **CLOCK ON** during power off state, LCD backlight will be turn on together.

## **DISPLAY INFORMATION**

When pressed quickly, the **DSP** button (1) changes the display as follows.

- In AM/FM mode:  
-> Frequency ->CLOCK ->
- In CD mode:  
-> CD ->CLOCK ->

Each display time is 5 seconds, the display will return to the first position after 5 seconds.

## **SET THE CLOCK**

Press the **DISP** button (1) shortly until the clock is shown on the LCD display. Then hold down **DISP** button (1) until the clock flashes. Then press the **TUNE ►** button (17) clockwise to change hours or rotate the **TUNE ◀** button (16) to change minutes.

## **MUTE**

In radio/AUX IN mode, press **►/II /MUTE** button (3) to mute audio level. Press the button again to release mute function.

## **EQUALIZATION**

Press **EQ** button (19) to turn on equalization function and to select desired audio mode. There are five kinds of mode as below:

► DSP OFF ► FLAT ► POP ► JAZZ ► CLASSIC ► ROCK ◀

## **LOUDNESS**

Press **LOUD (DIM)** button (15) shortly to reinforce the bass output and display will show "LOUD". Press it again to release this function.

## **MODE SELECTION**

Press **MODE** button (6) to sequence through primary operating modes in the following order: radio > CD.

If playback media (CD) is not loaded into mechanism, CD mode will be skipped.

## **LIQUID CRYSTAL DISPLAY**

Exhibit current frequency and activated functions on the display (8).

## **ILLUMINATION**

Press **LOUD (DIM)** button (15) for more than 2 seconds to adjust the brightness

# OPERATION

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of the LCD display backlight.

## RESET FUNCTION

When you pull out the plastic panel covering the CD opening, you will see the reset button (26) is placed above the disc slot (5). It must be activated with either a ballpoint pen or thin metal object. The reset button is to be activated for the following reasons:

- Initial installation of the unit when all wiring is completed.
- All the function buttons do not operate.
- Error symbol on the display.

## RECOVERING INITIAL VALUE

In radio (AM/FM/WB) mode, press **MODE** button (6) for more than three seconds, the display will appear "EEP INIT", and all settings recover factory value.

## ESP FUNCTION

If the unit has the electronic shockproof function, it can be shockproof about several tens of seconds.

## RADIO OPERATION

### • SWITCHING TO RADIO MODE

Press **MODE** button (6) shortly to select radio mode, the radio mode appears in the display together with the memory band and frequency.

### • SELECTING THE FREQUENCY BAND

At radio mode, press **BAND/ENTER** button (18) shortly to select the desired band.

The reception band will change in the following order:

►FM1►FM2►FM3►AM1►AM2

### • STATION SELECTION

Press **TUNE** ◀ button (16) or **TUNE** ▶ button (17) shortly to activate automatic seek function. Press for more than 3 seconds until "**MANUAL**" appears on the display, the manual tuning mode is selected. If both buttons have not been pressed for several seconds, they will return to seek tuning mode and "**AUTO**" appears on the display.

FOR WEATHER BAND OPERATION:

Press **TUNE** ◀ button (16) or **TUNE** ▶ button (17) shortly to choose channel backward or forward. And the range of selecting backward or forward is CH1~CH7. And you can also press M1~M7 buttons (20~26) shortly to

select CH1~CH7 directly.

### • AUTOMATICALLY MEMORY STORING & PRESET SCAN

-Automatic memory storing  
Press **AS/PS** button (2) for several seconds, the radio searches from the current frequency and checks the signal strength until one cycle search is finished. And then 10 strongest stations are stored into the corresponding preset number button.  
-Preset Scan  
Press **AS/PS** button (2) shortly to scan all station presets saved in memory.

### • STATION STORING

The preset buttons (14) can be used to store 10 stations in each band (FM 1, FM 2, FM 3 and AM1, AM2) for convenient access to your favorite stations.

- Programming stations
  1. Select the desired band, then tune in the station you want to store in memory.
  2. Press and hold one of the preset buttons (14) for more than 2 seconds until the corresponding preset button number appears. Repeat steps 1. and 2. to program additional stations.
- Quick tuning  
Select the desired band, then press one of the ten preset buttons (14).

### • SCAN

Press **SHIFT/SCAN** button (13) to set function to scan mode, which scanning to higher frequency station with receivable signal and keep on each station for several seconds.

# OPERATION

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## CD OPERATION

### • SWITCHING TO CD MODE

If there is no CD inserted in the driver: Gently insert the CD with the printed side uppermost into the CD compartment until you feel some resistance. The CD will be drawn into the driver automatically. CD playback begins.

If a CD is already inserted in the driver: Keep pressing **MODE** button (6) shortly until the CD mode display appears.

### • EJECTING A DISC

When pull out the plastic panel and display the disc slot (5), the disc in the slot will eject automatically.

If insert a disc into the slot to play with the plastic panel open, press **▲** button (4) to eject the disc.

When the plastic panel is open, long press **▲** button (4), the unit will eject for some seconds automatically to detect if there are some small scrip or other objects in the disc slot and eject them out.

### • PAUSE PLAYING

Press **▶/||/MUTE** button (3) to pause CD player. Press it again to resume play.

### • SELECTING TRACKS

Press **TUNE◀** button (16) or **TUNE▶** button (17) to move to the previous track or the following track. Track number shows on display.

Hold press **TUNE◀** button (16) or **TUNE▶** button (17) to fast reverse or fast forward. When release the button, the disc will start play from the current position.

### • DIRECT TRACK ACCESS

Pressing number buttons 0~9(14) (i.e. 19~28) can activate DIRECT TRACK ACCESS according to your need. For example, press button (19), and "T-01" will be flashing on the display. Then press button (20), "T-12" will appear and track 12 will be selected to play. If you don't press any button when "T-01" is flashing. After several seconds, "T-01" doesn't flash and track 1 is selected to play. If you select a track number that doesn't belong to the current disc, "NO TR" will appear on the display.

### • REPEAT THE SAME TRACK

Hold press **RPT** button (22) for several seconds to continuously repeat the same track. Press it for several seconds again to stop repeat.

### • PLAYING ALL TRACKS IN RANDOM

Hold press **SHF** button (23) for several seconds to play all tracks on CD in random order. Hold press again to cancel the function.

### • PREVIEW ALL TRACKS

Hold press **SCN** button (24) for several seconds to play first several seconds of each track on the current disc. Hold press again to stop intro and listen to track.

### • PROGRAM CD TRACKS

Use Program function to select up to 32 tracks to play in any order. Program works by allowing you to select a track number for each spot in the playing sequence. A CD must be inserted and in CD playing mode to use Program.

- How to program CD tracks

1. Press **MEM** button (20) for several seconds to enter Program mode, then "PGM" stars flashing and "P-01" icon appear on the display.
2. Press **◀** button (16) or **▶** button (17) to choose track number. For example, select track 6, then press **MEM** button (20) shortly to memorize it and "P-02" will appear on the display. So track 6 will be played first. Thus, you can also press **▶/◀** buttons (17) and (16) to choose track number 10 and press **MEM** button shortly, then "P-03" will appear. So track 10 will be secondly played. Repeat these operations, and you can program CD tracks to your need. If you completed program setting, press **PGM** button (21) for several seconds to play CD in programmed order.

Note: Using Program function can only select up to 32 tracks to play in any order. When you have selected 32 tracks to be programmed. "FULL" will appear on the display.

- When the CD is played in programmed order by pressing **PGM** button (21) for several seconds, pressing it again

# OPERATION

for several seconds will exit PGM mode.

- When the disc is playing in programmed order, pressing **MEM** button (20) for several seconds will cancel the all programmed content and “CLR” appears on the display.
- If you don't press **MEM** button (20) to carry out program setting, then press **PGM** button (21) for several seconds, “NO-P” will appear.

## • TRACK/TIME DISPLAY

Press **AS/PS (ELAPSE)** button (2) to show running time/remain time of track.

## MP3 OPERATION

### • SELECT SONGS

#### □ SINGLE STEP SELECTION:

Press **TUNE** ◀ button (16) or **TUNE** ▶ button (17) to reverse or advance the previous song in single step.

#### □ DIRECT TRACK ACCESS

Pressing number buttons 0~9 (14) can activate DIRECT TRACK ACCESS according to your need. For example, press “1” button, “T1\*” appears and “\*” is flashing on the display and waiting for second number to be input. Then press “2” button in several seconds, “T12\*” will appear and “\*” is flashing and waiting for third number to be input. Then press “3” button in several seconds, “T123” will appear and track 123 will be selected to play. If you don't press any button when “\*” is flashing, after several seconds, “T12” appears on the display and track 12 will be played directly. If you select a track number that doesn't belong to the current disc, “NO FILE” will appear on the display. For MP3 discs, the track selection range is up to “254”.

#### □ SELECT BY SCAN/MP3 BUTTON:

“Searching track directly” =>  
“Searching Directory or File Name”=>  
searching from root by **VOLUME** ▲/▼ buttons (11&12) =>searching from current directory by **VOLUME** ▲/▼ buttons (11&12).

### 1. SEARCHING TRACK DIRECTLY

Press the **MP3** button (13) one time to enter into “Searching track directly” mode. Set desired track by **VOLUME** ▲/▼ buttons (11&12),

and then press **BAND/ENTER** button (18) shortly.

You can also press number buttons 0~9 (14) can activate DIRECT TRACK ACCESS to select your desired track.

#### Note:

The unit searches the track after few seconds, even if the **BAND/ENTER** button (18) is not pressed.

## 2. SEARCHING DIRECTORY OR FILE NAME

Press the **MP3** button (13) two times. It enters into “Searching Directory or File Name” mode. The unit searches files and directories by name which is entered by the user with the **VOLUME** ▲/▼ buttons (11&12).

- Use **VOLUME** ▲/▼ buttons (11&12) to select the characters A to Z, blank, 0 to 9, -, +.

- Press **SEL/MENU** button (10) to confirm entry of each characters.

- Press **BAND/ENTER** button (18) to start the title search.

In case the selected title is a directory name, display will show (‘ ’), then

- Use **VOLUME** ▲/▼ buttons (11&12) to list all songs under this directory and select the title.

- Press **BAND/ENTER** button (18) to confirm and start the play.

- Repeat the above steps if the newly selected title is again a directory.

Note: In this mode, you can also press the corresponding buttons listed on the Table 1 below to input the your desired character to select the files or directories.

Key Assigned in Searching mode (Table 1)

## OPERATION

Normal	In MP3 searching
SCAN	MP3 Searching Mode Select
BAND	ENTER
M1	A, B, C, 1
M2	D, E, F, 2
M3	G, H, I, 3
M4	J, K, L, 4
M5	M, N, O, 5
M6	P, Q, R, 6
M7	S, T, U, 7
M8	V, W, X, 8
M9	Y, Z, SPACE, 9
M0	_, -, +, 0
SELECT	Character shift
VOL UP/DOWN	CHARACTER SELECT (A, B-Z, SPACE, 0-9, _, -, +)
AS/PS	Backspace

### 3. SEARCHING FROM ROOT DIRECTORY

Press the **MP3** button (13) three times, the unit searches file or directory from root directory by **VOLUME ▲/▼** buttons (11&12). (D-DIR icon turns on if the name is a directory). Display will list all available directories and songs. Select the desired directory/songs by using **VOLUME ▲/▼** buttons (11&12) and **BAND/ENTER** button (18) to confirm.

If the selected title is a song, it starts to play.

If the selected title is a directory name, display will show ( ' '), then

- Use **VOLUME ▲/▼** buttons (11&12) to list all songs under this directory and select the title.
- Press **BAND/ENTER** button (18) to confirm and start the play.
- Repeat the above steps if the newly selected title is again a directory.

### 4. SEARCHING FROM CURRENT DIRECTORY

Press the **MP3** button (13) four times, the unit searches file or directory from current directory by **VOLUME ▲/▼** buttons (11&12). (D-DIR icon turns on if the name

is directory). The current directory name is displayed for a second and the currently playing file name is displayed. The user can select the directory or file in the directory by **VOLUME ▲/▼** buttons (11&12). The selected file can be played by pressing **BAND/ENTER** button (18).

- **PAUSE**  
Press **▶/II/MUTE** button (3) to pause MP3 player. Press it again to resume play.
- **REPEAT THE SAME SONG**  
Press and hold **RPT** button (22) for several seconds to continuously repeat the same song. Press and hold it again for several seconds to cancel repeat function.
- **PLAY SONGS IN RANDOM ORDER**  
During MP3 operation, press and hold **SHF** button (23) for several seconds to play songs in random order. Press and hold it again for several seconds to cancel the function.
- **SCAN**  
The scan function enables you to listen to the first few seconds of the song. Press and hold **SCN** button (24) for several seconds to activate/deactivate scan function.
- **DISPLAY INFORMATION**  
Press **DSP** button (1) to show the following information, such as the clock, the ID3 TAG (if available: song title, directory name, artist name, other contents...) and other information.

# OPERATION

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## Note:

### A. Notes on discs:

1. Attempting to use non-standard shape discs (e.g. square, star, heart) may damage the unit. Be sure to use round shape CD discs only for this unit.
2. Do not stick paper or tape, etc, onto the label side or the recording side of any discs, as it may cause a malfunction.
3. Dirt, dust, scratches and warping discs will cause misoperation.

### B. Notes on CD-Rs (recordable CDs)/ CD-RWs (rewritable CDs):

1. Be sure to use discs with following marks only for the unit to play:



2. The unit cannot play a CD-R and CD-RW that is not finalized. (Please refer to the manual of your CD-R/CD-RW recorder or CD-R/CD-RW software for more information on finalization process).
  3. Depending on the recording status, conditions of the disc and the equipment used for the recording, some CD-Rs/CD-RWs may not be played on this unit. (see \*1)
- \* 1: To have more reliable play back, please see following recommendations:
- a: Use CD-RWs with speed 1x to 4x and write with speed 1x to 2x.
  - b: Use CD-Rs with speed 1x to 8x and write with speed 1x to 2x.
  - c: Do not play a CD-RW which has been written for more than 5 times.

# SPECIFICATION

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## GENERAL

Power Supply Requirements	: DC 12 Volts, Negative Ground
Chassis Dimensions	: 178 (W) x 178 (D) x 50 (H) mm
Tone Controls	
- Bass (at 100 Hz)	: $\pm 10$ dB
- Treble (at 10 KHz)	: $\pm 10$ dB
Maximum Output Power	: 4 x 50 Watts
Current Drain	: 15 Ampere (max.)

## CD PLAYER

Signal to Noise Ratio	: More than 60 dB
Channel Separation	: More than 50 dB
Frequency Response	: 40 Hz - 18 KHz

## RADIO

### FM

Frequency Coverage	: 87.5 to 107.9 MHz
IF	: 10.7 MHz
Sensitivity (S/N = 30 dB)	: 3 $\mu$ V
Stereo Separation	: > 30 dB

### AM

Frequency Coverage	: 530 to 1720 KHz
IF	: 450 KHz
Sensitivity (S/N = 20 dB)	: 32 dBu

# TROUBLE SHOOTING

Before going through the check list, check wiring connection. If any of the problems persist after check list has been made, consult your nearest service dealer.

Symptom	Cause	Solution
No power.	The ignition switch is not on.	If the power supply is connected to the accessory circuits, but the engine is not moving, switch the ignition key to "ACC".
	The fuse is blown.	Replace the fuse.
Disc cannot be loaded or ejected.	Presence of CD disc inside the player.	Remove the disc in the player, then put a new one.
	Inserting the disc in reverse direction.	Insert the compact disc with the label facing upward.
	Compact disc is extremely dirty or defective disc.	Clean the disc or try to play a new one.
	Temperature inside the ship is too high.	Cool off or until the ambient temperature return to normal.
	Condensation.	Leave the player off for an hour or so, then try again.
No sound.	Volume is in minimum.	Adjust volume to a desired level.
	Wiring is not properly connected.	Check wiring connection.
Sound skips.	The installation angle is more than 30 degrees.	Adjust the installation angle less than 30 degrees.
	The disc is extremely dirty or defective disc.	Clean the compact disc, then try to play a new one.
The operation keys do not work.	The built-in microcomputer is not operating properly due to noise.	Press the RESET button. Front panel is not properly fixed into its place.
The radio does not work. The radio station automatic selection does not work.	The antenna cable is not connected.	Insert the antenna cable firmly.
	The signals are too weak.	Select a station manually.