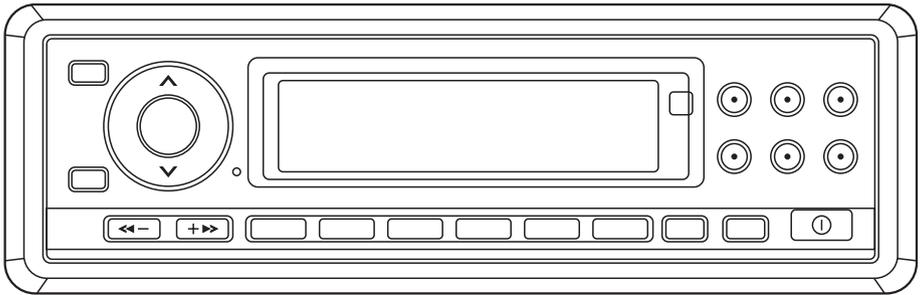


OWNER'S MANUAL

Mobile Audio System



- **PLL Synthesizer Stereo Radio**
- **Digital Compact Disc Player**
- **Automatically Memory Storing**
- **Preset Equalization**
- **Remote Control**
- **Electronic Detachable Panel**

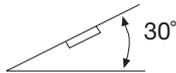
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INSTALLATION

Notes:

- Choose the mounting location where the unit will not interfere with the normal driving function of the driver.
- Before finally installing the unit, connect the wiring temporarily and make sure it is all connected up properly and the unit and the system work properly.
- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications of the vehicle.
- Install the unit where it does not get in the driver's way and cannot injure the passenger if there is a sudden stop, like an emergency stop.
- If installation angle exceeds 30° from horizontal, the unit might not give its optimum performance.



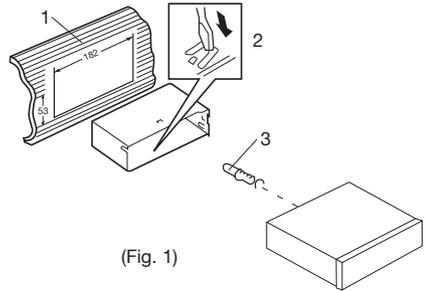
- Avoid installing the unit where it would be subject to high temperature, such as from direct sunlight, or from hot air, from the heater, or where it would be subject to dust, dirt or excessive vibration.

DIN FRONT/REAR-MOUNT

This unit can be properly installed either from "Front" (conventional DIN Front-mount) or "Rear" (DIN Rear-mount installation, utilizing threaded screw holes at the sides of the unit chassis). For details, refer to the following illustrated installation methods.

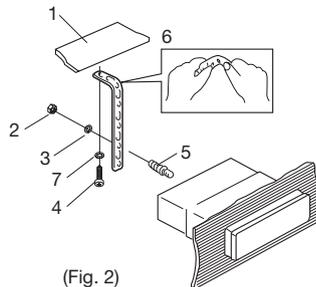
DIN FRONT-MOUNT (Method A)

Installing the unit



(Fig. 1)

1. Dashboard
2. Holder
After inserting the holder into the dashboard, select the appropriate tab according to the thickness of the dashboard material and bend them inwards to secure the holder in place.
3. Screw

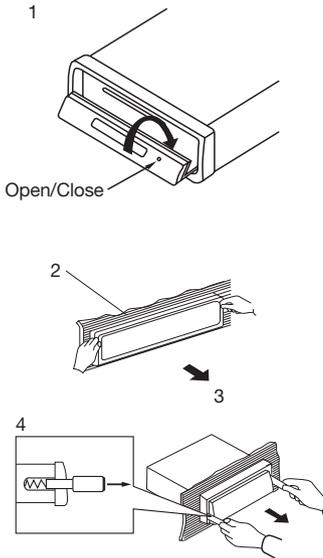


(Fig. 2)

1. Dashboard
2. Nut (5mm)
3. Spring washer
4. Screw (5 x 25mm)
5. Screw
6. Strap
Be sure to use the strap to secure the back of the unit in place. The strap can be bent by hand to the desired angle.
7. Plain washer

INSTALLATION

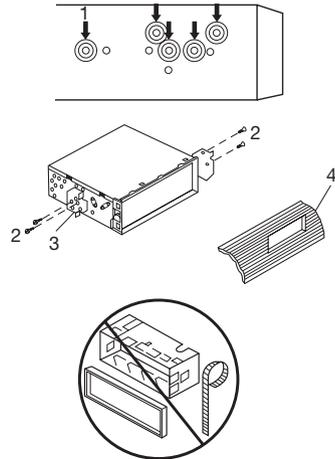
Removing the unit



1. Before removing the frame, press the OPEN/CLOSE button to slide down the front panel.
2. Frame
3. Insert fingers into the groove in the right side of the frame and pull out to remove the frame. (You can also remove the frame from the left side.)
4. Lever
After removing the frame, press the OPEN/CLOSE button again to slide up the front panel. Then insert the levers supplied with the unit into the grooves at both sides of the unit as shown in figure until they click. Pulling the levers makes it possible to remove the unit from the dashboard.

DIN REAR-MOUNT (Method B)

Installation using the screw holes on the sides of the unit.



Fastening the unit to the factory radio mounting bracket.

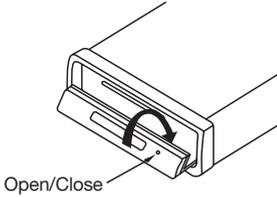
1. Select a position where the screw holes of the bracket and the screw holes of the main unit become aligned (are fitted), and tighten the screws at 2 places on each side. Use either truss screws (5 x 5mm), depending on the shape of the screw holes in the bracket.
2. Screw
3. Factory radio mounting bracket
4. Dashboard or Console

Note: The mounting box, outer trim ring, and half-sleeve are not used for method B installation.

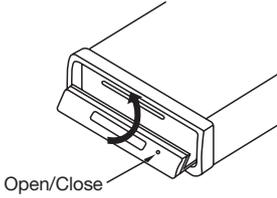
USING THE DETACHABLE FRONT PANEL

To Detach the Front Panel

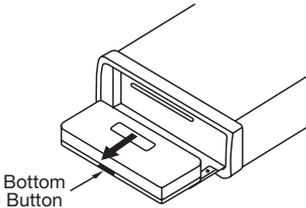
1. Press the OPEN/CLOSE button, the front panel will slide down.



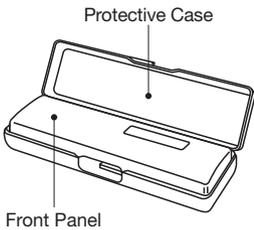
2. Press the OPEN/CLOSE button again, the front panel will slide up.



3. When the front panel slides down, press the bottom button of the front panel upward and pull it out from the panel bracket.

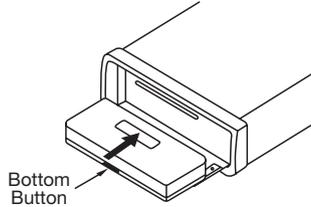


4. For safekeeping, store the front panel in the supplied protective case immediately after being removed.

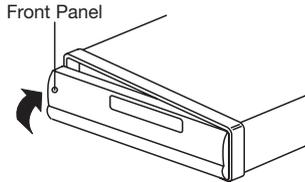


To Reinstall the Front Panel

1. When the panel bracket is in slide down position, insert the front panel into panel bracket and press OPEN/CLOSE button to slide up.

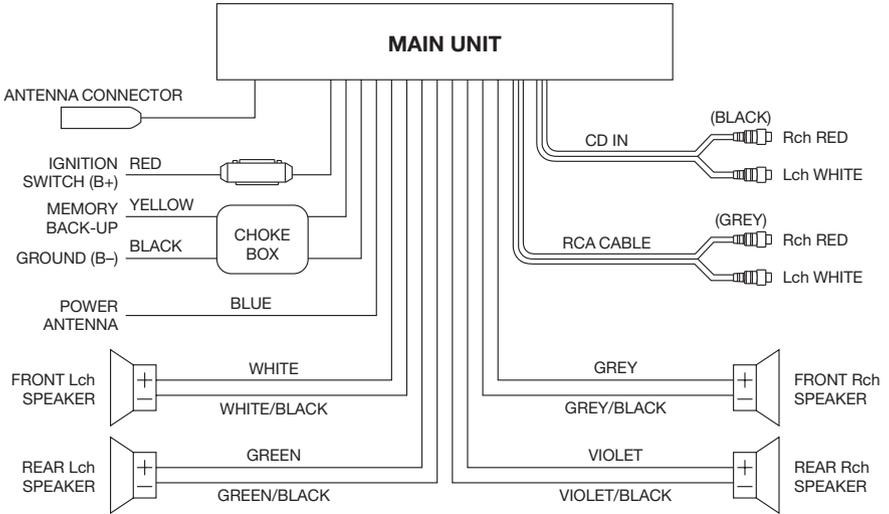


2. When the panel bracket is in slide up position, insert a side of the front panel to its proper position and push the other side into the panel bracket, a 'click' sound should be heard.

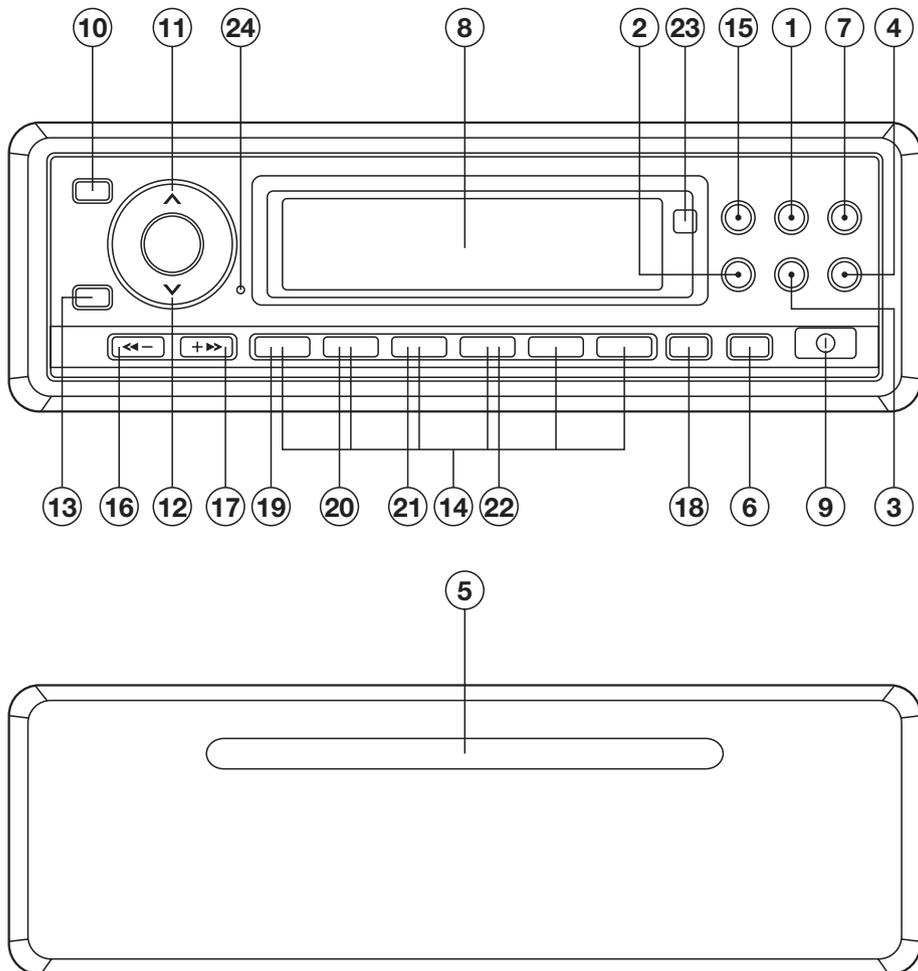


3. Note that if the front panel fails to lock in position properly, press control button may not function and LCD display may be missing some segments. Press the OPEN/CLOSE button and then reinstall the front panel again.

WIRING CONNECTION



OPERATION



GENERAL OPERATION

• ON/OFF

Switch on the unit by pressing any button (except **OPEN/CLOSE** button (7) and **EJECT** button (4)).

When system is on, press **POWER** button (9) to turn off the unit.

• FACEPLATE RELEASE

Press **OPEN/CLOSE** button (7) to slide down the front panel and you can

press it again to slide up the front panel into the main body or detach the removable faceplate.

• SOUND ADJUSTMENT

Press **SEL** button (10) shortly to select the desired adjustment mode.

The adjustment mode will change in the following order:



OPERATION

For Electrical Volume:

By pressing **AUDIO CONTROL** \wedge button (11) or **AUDIO CONTROL** \vee button (12), it is possible to adjust the desired sound quality.

For Digital Rotating Volume:

By rotating the knob (11 & 12) clockwise or counter-clockwise, it is possible to adjust the desired sound quality.

- **LOUDNESS**

Press **BND/LOU** button (13) to increase bass output and display will show **"LOUD"**. Press it again to release this function.

- **SET THE CLOCK**

Press and hold **DSP** button (15) until the clock is shown on the display and flashed.

Then press the **TUNE/SKIP/TRACK** \blacktriangleright button (17) to change hours or **TUNE/SKIP/TRACK** \blacktriangleleft button (16) to change minutes.

- **SELECT MODE**

Press **MOD** button (6) to choose desired listening mode. (e.g. radio mode to CD)

- **MUTE**

Press **MUT** button (2) to silence the receiver. Press it again to release the mode.

- **LIQUID CRYSTAL DISPLAY**

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

- **EQUALIZATION**

Press **EQ** button (1) to turn on equalization function and to select desired audio mode. There are four kinds of mode as below:

\blacktriangleright FLAT \blacktriangleright CLASSICS \blacktriangleright POP M \blacktriangleright ROCK M \blacktriangleright DSP OFF

- **REMOTE SENSOR**

Point the remote control handset to the remote sensor **RX** (23). Press the function keys on the handset to control the system.

- **RESET**

Reset button (24) is placed on the front panel and must be activated with either a ball point 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.

Note: If press **RESET** button (24), the unit can't work yet, please use a cotton swab soaked in isopropyl alcohol to clean the socket on the back of the front panel.

RADIO OPERATION

- **BAND SELECTION**

At tuner mode, press **BND/LOU** button (13) to select the desired band.

The reception band will change in the following order:

\blacktriangleright FM1 \blacktriangleright FM2 \blacktriangleright FM3 \blacktriangleright AM

- **STATION SELECTION**

Press **TUNE/SKIP/TRACK** \blacktriangleleft button (16) or **TUNE/SKIP/TRACK** \blacktriangleright button (17) shortly to activate automatic seek function. Press for several seconds until **"MANUAL"** appeared on the display, the manual tuning mode is selected. If both buttons have not pressed for several seconds, they will

OPERATION

retune to seek tuning mode and “**AUTO**” appeared on the display.

- **LOCAL/DISTANCE**

Press **LOC** button (3) shortly to select between local and distant stations. Local setting for reception of strong station, and a distant setting for reception of weaker stations.

- **AUTOMATICALLY MEMORY STORING & PROGRAM SCANNING**

- Automatic Memory Storing

Press **AMS** button (18) for several seconds, the radio searches from the current frequency and checks the signal strength until one cycle search is finished. And then 6 strongest stations are stored into the corresponding preset number button.

- Program Scanning

Press **AMS** button (18) shortly to scan preset station. When the field strength level is more than the threshold level of stop level, the radio is holding at that preset number for several seconds with releasing mute, then searches again.

- **STATION STORING**

Press any one of the preset buttons (14) (M1 to M6) to select a station which had been stored in the memory. Press this button for several seconds, current station is stored into the number button.

CD OPERATION

- **SELECT TRACKS**

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

Hold **TUNE/SKIP/TRACK** **◀◀** button (16) or **TUNE/SKIP/TRACK** **▶▶** button (17) to fast reverse or fast forward. CD play starts from when you release the button.

- **PAUSE PLAYING**

Press **PAU** button (19) to pause CD player. Press it again to resume play.

- **REPEAT THE SAME TRACK**

Press **RPT** button (21) to continuously repeat the same track. Press again to stop repeat.

- **PREVIEW ALL TRACKS**

Press **SCN** button (20) to play first several seconds of each track on the current disc. Press again to stop intro and listen to track.

- **PLAY ALL TRACKS**

DPress **SHF** button (22) to play all tracks on CD in random order. Press again to cancel the function.

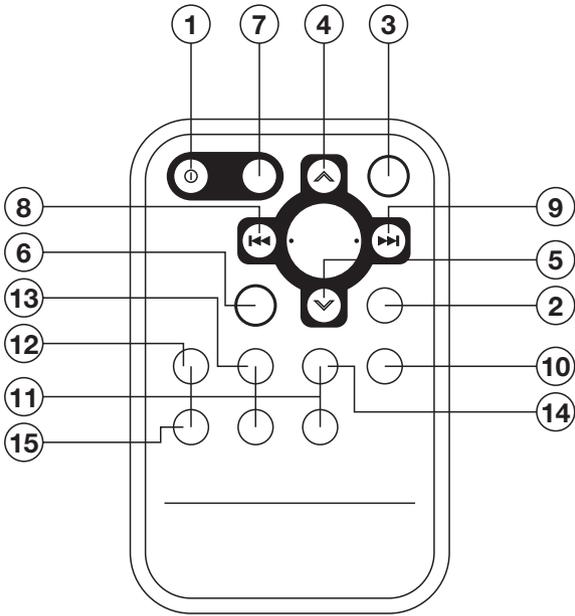
- **EJECT**

When the front panel is sliding down, press **EJECT** button (4) to stop CD playing and eject the disc from the disc slot (5).

NOTE ON CD-R/CD-RW DISCS

- On this unit, in addition to an audio CD, you can play your original CD-R or CD-RW that contain audio titles.
- However, depending on the conditions of the recording equipment or the CD-R/CD-RW disc itself, some CD-Rs or CD-RWs cannot be played on this unit.
- DO NOT stick paper or tape, etc. onto the label side or the recording side of any CD-R/CD-RW, as it may cause a malfunction.

REMOTE CONTROL HANDSET



FUNCTION KEYS & CONTROL

- | | |
|-----------------|---|
| 1. PWR | = Power ON/OFF Button |
| 2. DSP | = Display Button |
| 3. SEL | = Select Button |
| 4. VOL ▲ | = Volume Up Button |
| 5. VOL ▼ | = Volume Down Button |
| 6. BND | = Band Select Button |
| 7. MOD | = Mode Button |
| 8. TUNE/SEEK ◀◀ | = Tune/Seek Down Button |
| 9. TUNE/SEEK ▶▶ | = Tune/Seek Up Button |
| 10. AMS | = Automatic Storing & Program Scanning Button |
| 11. M1 - M6 | = Preset Buttons |
| 12. PAU | = Pause Button |
| 13. SCN | = Scanning Button |
| 14. RPT | = Repeat Button |
| 15. SHF | = Shuffle Button |

SPECIFICATION

GENERAL

Power Supply Requirements	: DC 12 Volts, Negative Ground
Chassis Dimensions	: 178 (W) x 180 (D) x 50 (H)
Tone Controls	
- Bass (at 100 Hz)	: ± 10 dB
- Treble (at 10 KHz)	: ± 10 dB
Maximum Output Power	: 4 x 50 Watts
Current Drain	: 5 Ampere (max.)

CD PLAYER

Signal to Noise Ratio	: More than 55 dB
Channel Separation	: More than 50 dB
Frequency Response	: 20 Hz - 20 KHz

RADIO

FM

Frequency Coverage	: 87.5 to 107.9 MHz
IF	: 10.71 MHz
Sensitivity (S/N = 30 dB)	: 3 μ V
Stereo Separation	: > 30 dB

AM

Frequency Coverage	: 530 to 1710 KHz
IF	: 10.71 MHz
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 car ignition switch is not on.	If the power supply is properly connected to the car 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 car 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 to 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.