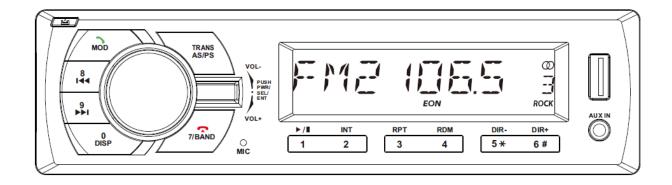
# OWNER'S MANUAL CAR RADIO



- PLL Synthesizer Stereo Radio
- Automatic Memory Storing
- Full Detachable Panel
- Preset Equalization
- USB Interface
- SD Interface
- Bluetooth function

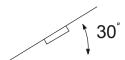
# **CONTENTS**

Installation	3
Take out screw before installation	3
DIN Front-Mount (Method A)	3
Installing the unit	3
Removing the unit	4
DIN Rear-Mount (Method B)	4
Using the detachable front panel	6
Wiring Connection	7
Operation	8
Location of keys	
Switching on/off the unit	9
Faceplate release	9
Sound adjustment	9
Display information	9
Liquid crystal display	9
Auxiliary input	9
Reset function	9
Radio operation	9
Switching to radio mode	9
Selecting the frequency band	9
Selecting station	9
Automatic memory storing&	
program scanning	10
Station storing	
USB play operation	
Selecting tracks in single step	10
Selecting directory up/down	10
Pausing playing	10
Previewing all tracks	10
Repeating the same track	10
Playing all tracks in random	
SD operation	
Bluetooth operation	
Specification	
Trouble shooting	14

# 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 angel exceeds 30° from horizontal, the unit might not give its optimum performance.



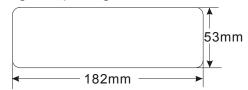
 Avoid installing the unit where it would be subject to high temperature, such as from direct sunlight, or from hot air, from the heater, or where it would be subject to dust, dirt or excessive vibration.

# **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) Installation Opening

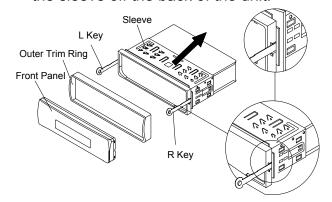
This unit can be installed in any dashboard having an opening as shown below:



# Installing the unit

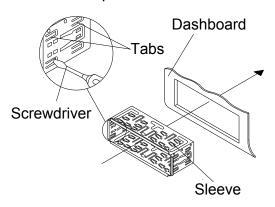
Be sure you test all connections first, and then follow these steps to install the unit.

- 1. Make sure the ignition is turned off, and then disconnect the cable from the vehicle battery's negative (-) terminal.
- 2. Disconnect the wire harness and the antenna.
- Press the release button on the front panel and remove the control panel (see the steps of "removing the front panel").
- 4. Lift the top of the outer trim ring then pull it out to remove it.
- 5. The two supplied keys release tabs inside the unit's sleeve so you can remove it. Insert the keys as far as they will go (with the notches facing up) into the appropriate slots at the middle left and right sides of the unit. Then slide the sleeve off the back of the unit.



# **INSTALLATION**

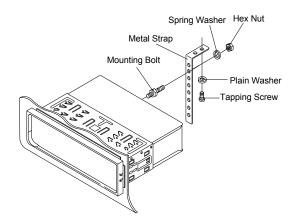
6. Mount the sleeve by inserting the sleeve into the opening of the dashboard and bend open the tabs located around the sleeve with a screwdriver. Not all tabs will be able to make contact, so examine which ones will be most effective. Bending open the appropriate tabs behind the dashboard to secure the sleeve in place.



- 7. Reconnect the wire harness and the antenna and be careful not to pinch any wires or cables.
- 8. Slide the unit into the sleeve until it locks into place.
- 9. To further secure the unit, use the supplied metal strap to secure the back of the unit in place. Use the supplied hardware (Hex Nut (M5mm) and Spring Washer) to attach one end of the strap to the mounting bolt on the back of the unit. If necessary, bend the metal strap to fit your vehicle's mounting area. Then use the supplied hardware (Tapping Screw (5x25mm) and Plain Washer) to attach the other end of metal strap to a solid metal part of the vehicle under the dashboard. This strap also helps ensure proper electrical grounding of the unit.

Note to install the short threading terminal of the mounting bolt to the back

of the unit and the other long threading terminal to the dashboard.



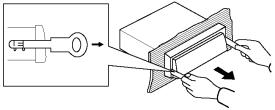
10. Reconnect the cable to the vehicle battery's negative (-) terminal. Then replace the outer trim ring and install the unit's front panel (see the steps of "installing the front panel").

# Removing the unit

- 1. Make sure the ignition is turned off, then disconnect the cable from the vehicle battery's negative (-) terminal.
- 2. Remove the metal strap attached the back of the unit (if attached).
- 3. Press the release button to remove the front panel.

Lift the top of the outer trim ring then pull it out to remove it.

4. Insert both of the supplied keys into the slots at the middle left and right sides of the unit, then pull the unit out of the dashboard.



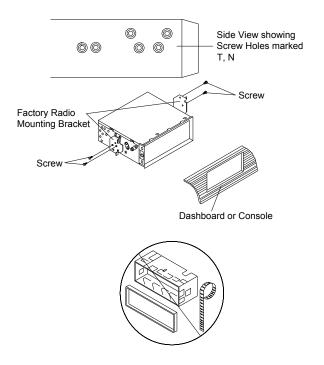
# DIN REAR-MOUNT (Method B)

If your vehicle is a Nissan, Toyota, follow these mounting instructions.

Use the screw holes marked T (Toyota), N (Nissan) located on both sides of the unit to

# **INSTALLATION**

asten the unit to the factory radio mounting brackets supplied with your vehicle.



To fasten the unit to the factory radio mounting brackets.

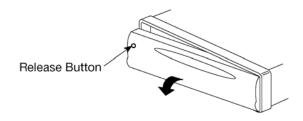
Align the screw holes on the bracket with the screw holes on the unit, and then tighten the screws (5x5mm) on each side.

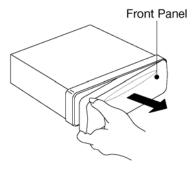
Note: the outer trim ring, sleeve and the metal strap are not used for method B installation.

# **USING THE DETACHABLE FRONT PANEL**

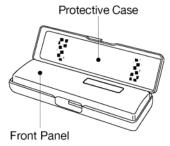
#### REMOVING THE FRONT PANEL

 Press the release button (△) on the front panel and pull off the front panel.



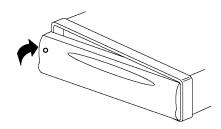


2. Keep front panel into the case.



### **INSTALLING THE FRONT PANEL**

To install the front panel, insert the panel into the housing and make sure the panel is properly installed. Otherwise, abnormality occurs on the display or some keys will not function properly.

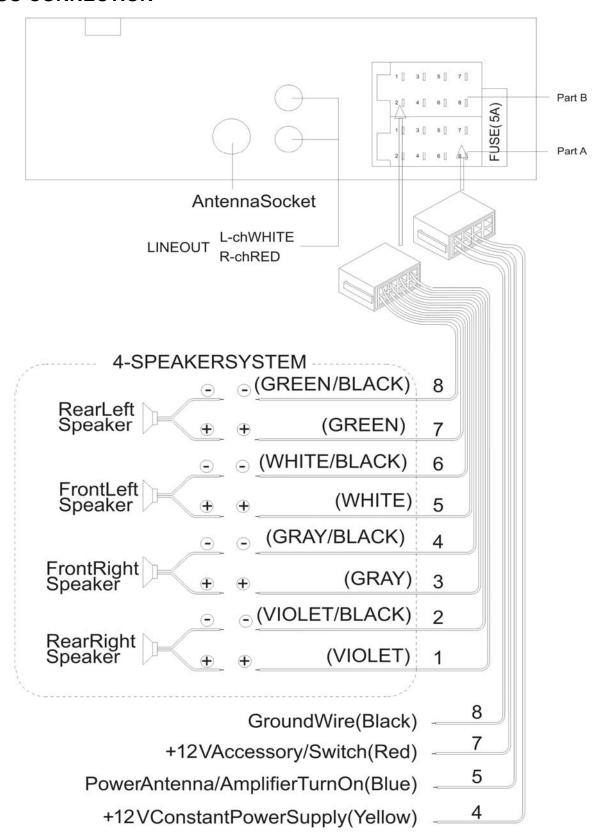


## Precautions when handling

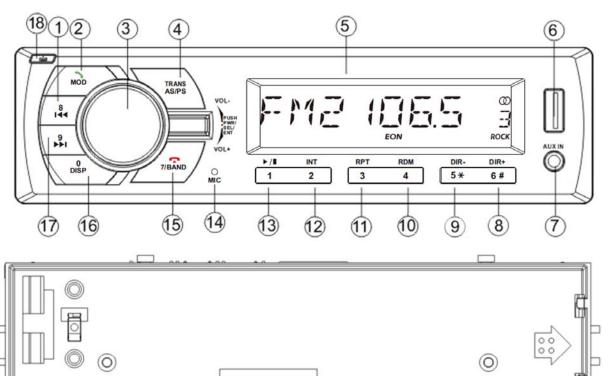
- 1. Do not drop the front panel.
- 2. Do not put pressure on the display or control buttons when removing or installing the front panel.
- 3. Do not touch the contacts on the front panel or on the main unit body. It may result in poor electrical contact.
- 4. If any dirt or foreign substances adhered on the contacts, they can be removed with a clean and dry cloth.
- 5. Do not expose the front panel to high temperatures or direct sunlight in anywhere.
- **6.** Keep away any volatile agents (e.g. benzene, thinner, or insecticides) from touching the surface of the front panel
- 7. Do not attempt to disassemble the front panel.

# WIRING CONNECTION

# ISO CONNECTION



# **LOCATION OF KEYS**



- 19 20
- 3. SEL/ENT/VOL/PWR
- 4. TANKS/AS/PS
- 5. LCD

RESET

- 6. USB interface
- 7.AUX IN
- 8.6# DIR+
- 9.5\* DIR-
- 10.4 RDM
- 11.3 RPT

- 12.2 INT
- 13.1 **№**
- 14.MIC
- 15. 7/ /BAND
- 16.0/DISP
- 17. 9/▶▶
- 18. (release button)
- 19.Reset button
- 20.SD interface

### SWITCHING ON/OFF THE UNIT

Press **PWR** button (3) to turn on the unit. When the unit is on. Press and hold for 2 seconds to turn off the unit.

#### **FACEPLATE RELEASE**

Press release button (18) to detach the removable faceplate.

#### **SOUND ADJUSTMENT**

Press **SEL** button (3) shortly to select the desired adjustment mode. The adjustment mode will be changed in the following order:

→BAS-TRE-BAL-FAD-LOUD-EQ-DX-STEREO-VOL

BAS: bass TRE: treble BAL: balance FAD: fader

LOUD: loudness EQ: equalization DX: distance LOC: local

VOL: volume

By rotating the audio knob (3) clockwise or counter-clockwise, it is possible to adjust the desired sound quality.

Press and hold SEL for 2 seconds. You can choose the area between USA and EUROPE by rotating the knob 4.

# **DISPLAY INFORMATION**

Press **DISP** button (16) to show the time.

#### LIQUID CRYSTAL DISPLAY

Exhibit current frequency and activated functions on the display .

# **USB INTERFACE**

On the front panel of the unit, there is an USB interface (6). You can connect an USB driver through this interface (6).

The unit can be connected to a portable audio player through the **AUX IN** jack (7).

#### **RESET FUNCTION**

**RESET** button (19) 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.

Note: if press **RESET** button (19), the unit can't work yet, please use a cotton swab soaked in isopropyl alcohol to clean the socket on the front panel.

# **RADIO OPERATION**

### SWITCHING TO RADIO MODE

Press **MODE** button (2) 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 button (15)
 shortly to select the desired band.
 The reception band will change in the
 following order:

 $\rightarrow$ FM1 $\rightarrow$  FM2 $\rightarrow$  FM3 $\rightarrow$  AM1(MW1) $\rightarrow$ AM2(MW2)

#### SELECTING STATION

Press 9/▶▶ button (17) or 8/▶ button (1) shortly to activate automatic seek function. Press for several seconds until "MANUAL" appears on the display, the manual tuning mode is selected. If both buttons have not been pressed for

### **AUXILIARY INPUT**

several seconds, they will return to seek tuning mode and "AUTO" appears on the display.

# AUTOMATIC MEMORY STORING & PROGRAM SCANNING

- Automatic memory storing
  Press **AS/PS** button (4) 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 AS/PS button (4) shortly to scan preset station. The radio is holding at that preset number for several seconds with release mute, then searches again.

#### STATION STORING

To receive a station, Press one of the preset button(1~6) for 2 seconds. The current station is stored into the number button.

#### **USB PLAY OPERATION**

On the front panel of the unit, there is an USB interface (6). You can connect an USB driver through this interface (6). When you connect an USB driver through the interface, the unit will search the MP3 files or WMA files in the USB driver and start to play MP3 or WMA files automatically. If in other mode, you can also press **MODE** button (2) to select USB mode.

It supports the MP3/WMA file in the device. The operation please refer to the following instruction.

### **SELECTING SONGS IN SINGLE STEP**

Press 9/►► button (17) or 8/►< button (1) to move to the following song or the previous song. Track number shows on display.

#### SELECTING DIRECTORY UP/DOWN

Press **5 DIR**-button (9) or **6 DIR+** button (8) to select previous directory or next directory.

### **PAUSING PLAYING**

Press 1 **III** button (13) to pause playing. Press it again to resume playing.

# **PREVIEWING ALL FILES**

Press **2 INT** button (12) to **INTRO** each file. Press again to stop intro and start to play.

# **REPEATING PLAYING**

Press **3 RPT** button (11) to continuously repeat the same file. Press it again to repeat all files.

#### **PLAYING IN RANDOM ORDER**

Shortly press **4 RDM** button (10) to play all files in random order. Press it again to cancel the function.

### SD OPERATION

There is a SD interface (20) on the front panel of the unit.

When you insert a SD card in the SD interface, the unit will search the MP3 files or WMA files in the card and start to play automatically. The operation is the same with the USB play operation described above.

If in other mode, you can also press **MODE** button (2) to select SD mode.

#### **CAUTION:**

When there are important files in the USB Device or SD card, do not connect it to the main unit to play, because any wrong operation may cause files loss. And our company assumes no responsibility for this.

# **BLUETOOTH OPERATION**

# PRE-PAIR FOR BLUETOOTH OPERATION

(i) When use Bluetooth, please make sure the mobile phone supports

Bluetooth function.

(ii) For the different kind of mobile phone, Bluetooth emissive power has some difference. To get the best conversation quality, it is commended that the distance between the mobile phone and the unit is within 3m. And please don't put any metal object or any obstacle between the path of the mobile phone and the unit.

#### PAIRING

- 1) On the mobile phone, select the Bluetooth set up. (Please refer to the instruction manual of your 1) mobile phone on how to operate Bluetooth.)
- 2) "CAR KIT" should appear in the list on your mobile phone, please select "CAR KIT" and then input password "0000". If it needs a password.
- 3) When successful paired, the BT mark will be displayed on LCD.
- Answering / rejecting an incoming call

When there is a phone is coming in.

Press key to answer the call. Press

key to reject the call.

## Hang up a call

When finished a conversation press

key to hang up this call.

# Checking phone book / received / dialed / missed call (for Android and lphone mobile)

Press MOD key it will show "PHONE" on the display. Short press **TRANS** button (4) it will show the items as below:

PHONE---RECEIVED---DIALED---MIS SED

In each item you can use 9/>> button (17) or 8/ <a href="#">W</a> button (1) to check corresponding number. In the first time your mobile will receive a message that the unit will visit your mobile through Bluetooth. You have to agree and press "YES" to confirm.

(Note: It is necessary the phone number is in the phone not in the SIM card).

### Call out

# Making an outgoing call by inputting the phone number manually.

Press MOD key it will show "PHONE" on the display. Press and hold key the LCD will become BLANK. Then you can enter one number and press ENT knob (3) key to confirm the dialing. (Note: If you inputted wrong numbers. You can press the **TRANS** key to cancel wrong numbers.)

# 2) Redialing the last call

Press MOD key it will show "PHONE" on the display. Press and hold key the LCD will become BLANK. In this moment press and hold key will redial the last phone number.

 Making an outgoing call from the phone book / received / dialed / missed call (for Android and Iphone mobile)

Please reference the item "Checking phone book / received / dialed / missed call" (left side) then select a phone number. Press and hold help key to dial.

**Note:** If there are 2 pcs of SIM card in your mobile phone. When you dial out a call from the front panel of the unit. The call will not be able to dial out because your mobile phone will ask you which SIM card will be

used to dial out. You have to confirm use SIM1 or SIM2 card then the call will be dialed out.

# Transfer the call between mobile phone and unit

During the talking mode, you can press **TRAN** button (4) to transfer the phone call between the mobile phone and the unit.

# Bluetooth audio (A2DP function)

Press MOD button (2) it will show "PHONE" on the display. Then turn on the music player of your mobile phone and playing a song. The sound will come out from the speaker of the unit. Press | key of the front panel of the unit to pause/play the song. Press 9/ button (17) or 8/ button (1) to select next/previous song.

# **SPECIFICATION**

# **GENERAL**

Power Supply Requirements : DC 12 Volts, Negative Ground

Chassis Dimensions : 178 (W) x 97 (D) x 50 (H)

**Tone Controls** 

- Bass (at 100 Hz) :  $\pm$ 10 dB - Treble (at 10 kHz) :  $\pm$ 10 dB

Maximum Output Power

- Version V : 4x15watts

**Current Drain** 

Version V : 5Ampere(max.)

## **RADIO**

FΜ

Frequency Coverage 87.5 to 108 MHz.

F 10.7 MHz

Sensitivity (S/N=30dB)  $4 \mu V$ Stereo Separation >25dB

AM(MW)

Frequency Coverage 522 to 1710KHz

IF 450 kHz

Sensitivity (S/N=20dB) 36 dBuV

# **TROUBLE SHOOTING**

Before going through the checklist, check wiring connection. If any of the problems persist after checklist 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 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.
No sound.	Volume is in minimum	Adjust volume to a desired level.
	Wiring is not properly connected.	Check wiring connection.
The operation keys do not work.	The built-in microcomputer is not operating properly due to noise.	Press the reset button.
The radio does not Work. The radio	The antenna cable is not connected.	Insert the antenna cable firmly.
station automatic selection does not work.	The signals are too weak.	Select a station manually.

# Federal Communications Commission (FCC) Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device. pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- •Reorient or relocate the receiving antenna.
- •Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- •Consult the dealer or an experienced radio/TV technician for help.

**Warning:** Changes or modifications made to this device not expressly approved by Eastern Partner Ltd may void the FCC authorization to operate this device.

**Note:** The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.