RAIIAO

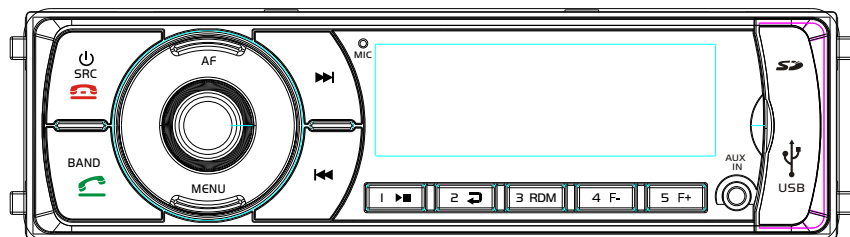## ◀◀ INSTRUCTION MANUAL ▶▶

MP3/WMA/USB PLAYER WITH FM/AM RECEIVER

PLEASE READ THIS MANUAL BEFORE USING THE EQUIPMENT.

PRECAUTION   SPECIFICATION

CONTENTS

PRECAUTIONS

- Use only in a 12-volt DC negative-ground electrical system.
- Be sure to connect the colour coded leads according to the diagram.
  Incorrect connections may cause the unit to malfunction or damage the vehicles, electrical system.
- Be sure to connect the speaker (-) leads to the speaker (-) terminal.
  Never connect the left and right channel speaker cables each other or to the vehicle body.
- Make sure all the connections are completely correct before turning on your unit.
- Using a fuse with a higher amperage rating may cause serious damage to the unit.
- DO NOT attempt to disassemble the unit.
  Laser beams from the optical pick up are dangerous to the eyes.
- Do NOT block vents or radiator panels. Doing so many cause heat to build up inside and may result in fire.
- Make sure those pins or other foreign objects do not get inside the unit; they may cause malfunctions, or create safety hazards such as electrical shock or laser beam exposure.
- Keep the volume at a level at which you can hear outside warning sounds (horns sirens, etc.).
- Stop the vehicle before carrying out any operation that could interfere with your driving.
- Do NOT work in extremely high or low temperature. Be sure the temperature inside the vehicle is between +60℃ and -10℃ before turning on your unit.

GENERAL

Power Supply Requirements	DC 12 Volts, Negative Ground
Chassis Dimensions	178x 92x 50 mm
Maximum Output Power	4 x 40W
Safety fuse	15 Ampere (max.)

FM STEREO RADIO

Frequency Coverage	87.5 to 105.0 Mhz
IF	10.7 Mhz
Sensitivity(S/N=30dB)	< 10dBu
Stereo Separation	≥25 dB

AM STEREO RADIO

Frequency Coverage	522 to 1620 kHz
IF	450 kHz
Sensitivity(S/N=20dB)	35 dBu

WB STEREO RADIO

Frequency Coverage	162.4 to 162.5 Mhz
IF	450 kHz
Sensitivity(S/N=20dB)	35 dBu

USB SD CARD

Sensitivity(S/N=30dB)	> 60 dB
Stereo Separation	> 55 dB
Max loaded current	500 mA

ACCESSORIES

Mounting Bracket(Half Sleeve)	1
Trim plate	1
Mounting Screw M5	1
Rubber	1
Release key	2
User manual	1
Wire connector	1

Note: Due to continuous product improvement, specifications and design are subject to change without prior notice.
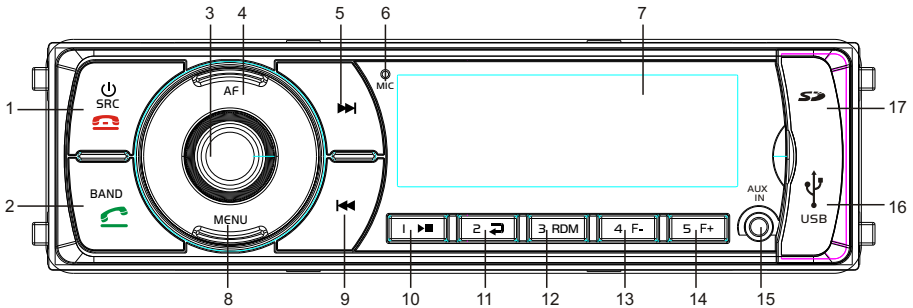
1. SRC ⏻ ☎

Press this button to switch on the unit, press and hold this button to turn off the unit. .

When the system is on, press this button to switch the modes available.

In bluetooth mode, press the button to hang up or reject a coming call.

2. BAND / ☎

Press to switch between the radio bands available.

In bluetooth mode, press this button to dial up a call or receive an incoming call.

In bluetooth mode, press and hold this button to link up the device and the unit.

3. VOL

Rotating: Rotate to adjust the volume level.

Press once:

Press and rotate to select the functions provided.

Following functions can be accessed by press the volume control knob; in the order specified :

VOL→ BAL→FAD→BASS →TRE→ SUBW OFF

Rotate the volume control to change the setting of these functions.

The Bass and Treble selections are active only in EQ OFF mode.

4. AF

Press the button to turn on or off the AF function. Press and hold this button to display the current time.

5/9. >>| / |<<

In radio mode, press the keys to search for a station manually, press and hold to search for a station automatically.

In playback mode, press these keys to select the track you want to play. Press and hold to active fast forward or fast rewind search .

6. MIC

7. LCD display

8. MENU

Press the button to enter system setup.

Please refer to page 4 for details.

10. 1/▶■

In playback mode

press once: to pause playing,

press and hold: to stop playing.

In radio mode

press once: to select the preset station,

press and hold: to store the current station.

11. 2/⮐

In playback mode, press the button to select the repeat modes: RPT ONE, RPT DIR, RPT ALL and RPT OFF.

In radio mode

press once: to select the preset station,

press and hold: to store the current station.

12. 3/RDM

In playback mode, press the button to play in random order.

In radio mode

press once: to select the preset station,

press and hold: to store the current station.

13. **5/F-**

To go to first song of previous folder(when an MP3/ WMA is being played).

In radio mode, press to select the preset station.

Press and hold to store the current station.

14. **6/F+**

Press to go to the first song of the next folder (when an Mp3 / WMA is being played).

In radio mode, press to select the preset station.

Press and hold to store the current station.

15**. AUX IN**

Insert audio cord, press MODE button on the unit to AUX mode.

16**. USB insert slot**

Insert USB device, it will play the files of USB automatically.

17. **SD Card slot**

Insert SD card, it will play the files of SD card automatically.

Note: Once the SD cards could not eject after pressing, just take it out manually.

General operation

Bluetooth-enabled variant of this radio (BT models) has additional answer ☎ (=accept call) and hang up ☎ (= end/reject call) silkscreen printed on the front panel buttons.

There is an internal microphone on the front panel.

An optional external microphone may be fitted in which case the internal microphone is disabled.

Press and hold Answer ☎ button activates last-number-redial.

Pairing

To use Bluetooth handsfree function, a mobile phone would need to be connected by pairing.

The mobile phone must also have Bluetooth capability.

To pair the mobile phone with the radio, ensure that the radio is turned on. On the mobile phone, search for available Bluetooth device. Pair to the device using passcode**1234**.

The phone should report to the user pairing has been successful.

Once paired, many mobile phones are capable of automatically reconnecting the Bluetooth link so subsequent pairing is not necessary on these phones.

A2DP and AVRCP

Bluetooth devices that have A2DP functionality can stream music into the radio. In addition, if the device has AVRCP, functions like next track and previous track can be controlled from the radio.

SYSTEM MENU OPERATION

Menu
On this radio, the 4-level-deep software menu is accessible using the menu button. When accessed, the LCD displays available menu items. The Reset C confirm entry is to restore default settings.
*Short press* menu to call up menus. Once in the menu, use the following buttons to navigate:
- menu = EXIT, ESCAPE, MOVE UP ONE LEVEL (to move right to left in the menu tree below)
- Turn rotary knob = PREVIOUS ITEM/NEXT ITEM
  (to scroll items <up and down> in the menu tree below)
- Centre button = SELECT ITEM, CONFIRM, MOVE DOWN INTO SUB-LEVEL
  (move right to left in the menu tree below)
- *Press and hold* menu to exit all.
  Alternative button is made available by software mapping and is always available:
- right to left >>|
- left to right |<<
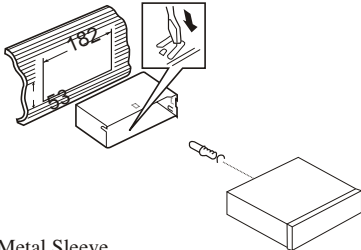Refer the following **Software menu tree** for the structure of this software menu.
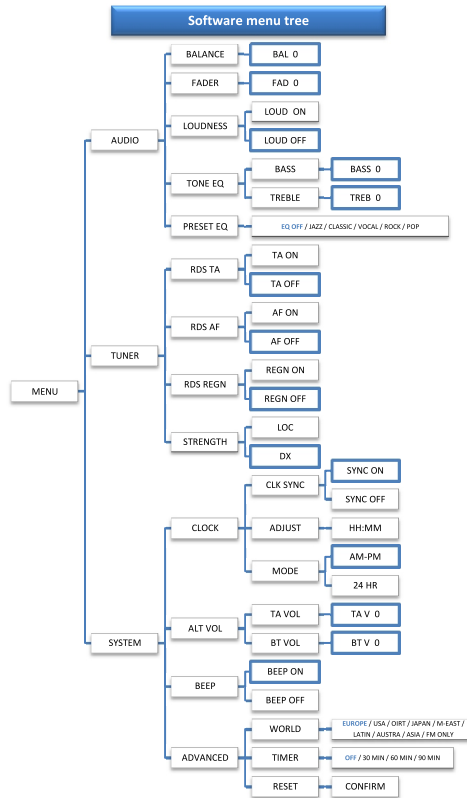
Highlighted items = factory default = reset values

INSTALLATION

INSTALLATION PROCEDURES

First complete the electrical connections,and then check them for correctness.
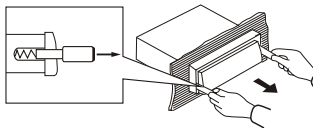
INSTALLATION OF THE UNIT

1. Metal Sleeve
   Install the metal sleeve in the dashboard. For optimal performance of the player, the metal sleeve should be positioned horizontally (between 10 and +30). Fix metal sleeve into place by pressing the metal tags outwards using screwdriver.
2. Front Mounting
   Slide the radio into the metal sleeve until the springs at either side of the radio snap into the openings of the sleeve.
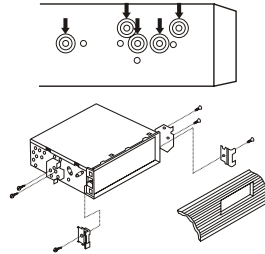

3. Removing Radio
   Insert the levers supplied with the unit into the grooves at both sides of the unit they lock. Pull the levers toward you makes it possible to remove the unit from the dashboard.

REAR-MOUNT

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

Remove the outer rim around the front panel and the side springs.
Select a position where the screw holes of the mounting bracket and the screw holes of the radio become aligned and tighten the screws at 2 places on each side.

REMOVE AND INSTALL THE FRONT PANEL

1. Press the release button and pull-off the front panel. Keep front panel into the case.
2. To install the front panel, insert the panel into the housing, slide in to the right hand side and push in till locked.
3. Make sure the panel is properly installed. Otherwise, abnormalities occurs on the display or some keys will not function properly.

CABLE CONNECTION

A1	NC	B1	REAR RIGHT SPEAKER+
A2	TEL-MUTE	B2	REAR RIGHT SPEAKER-
A3	NC	B3	FRONT RIGHT SPEAKER+
A4	(+)BATTERY	B4	FRONT RIGHT SPEAKER-
A5	ANTENNA POWER+	B5	FRONT LEFT SPEAKER+
A6	ILL	B6	FRONT LEFT SPEAKER-
A7	IGNITION KEY	B7	REAR LEFT SPEAKER+
A8	GROUND	B8	REAR LEFT SPEAKER-
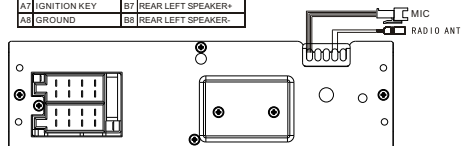
Note: A wrong connection can be easily detected by our technical service for a repair request under the warranty. Your warranty can be rejected in that case.

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 is not on.	If the power supply is properly connected to the car accessory terminal, 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. Due to telephone mute.	Check wiring connect. Ensure your phone MUTE is on.
Sound skips.	The music format may be not correct.	Check if the music format is MP3/WMA.
The operation key do not work.	The built-in micro compute is not operated properly due to noise.	Front panel is not properly fixed into its place. Contacts between front and main unit are dirty. Clean contacts with a cotton bud soaked in isopropyl alcohol.
The radio does not receive the radio station automatic selection does not work.	The antenna cable is not work or connected.	Insert the antenna cable firmly.
	The Signals are too weak.	Select a station manually.

MAINTENANCE

1. Keep the product dry. If it does get wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.

2. Keep the product away from dust and dirt, which can cause premature wear of part.

3. Handle the product gently and carefully dropping it can damage circuit boards and cases, and can cause the product to work improperly.

4. Wipe the product with a dampened cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the product.

5. Use and store the product only in normal temperature environment.

High temperature can shorten the life of electronic devices and distort or melt plastic parts.

FCC warning statement

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum 20 cm between the radiator and your body. This transmitter must not be collocated or operating in conjunction with any other antenna or transmitter unless authorized to do so by the FCC.

Changes or modifications not expressly approved by the party responsible for compliance. could void the user's authority to operate the equipment.