



Detachable Front Panel Car Receiver OWNER'S MANUAL MODEL:TCC-8220

Take time to read this OWNER'S MANUAL thoroughly. Familiarity with installation and operating procedures will help you obtain the best performance from your CAR Receiver.

P/N:3828R-F014A

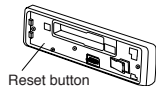
Installations

■ Precautions:

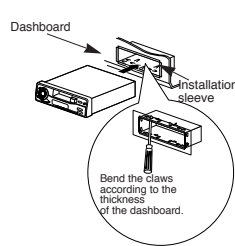
- ▶ Be careful not to touch the rear side panel of the unit when removing the unit from the installation sleeve, since it may be hot. On this side the cooling ribs are located.
- ▶ The unit is designed to operate only on 12 volt DC negative ground electrical system.
- ▶ When you replace the fuse, be sure to use a fuse of specified amperage for each wire as mentioned in chapter "Connections". Using a fuse of higher amperage may cause serious damage to the unit.

■ Reset Button

In the event of abnormal operation, press down on the RESET button, located behind the Front Panel, for 2 seconds or more, with a pencil tip (or other non-metallic object). Pressing the RESET button will erase all control settings.



■ Mounting the unit



Notes:

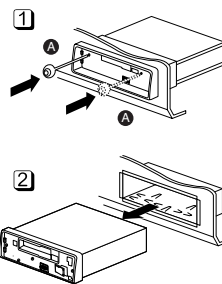
- ▶ Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- ▶ Consult with your nearest car audio dealer if installation requires the drilling of holes or other modifications of the vehicle.
- ▶ Do not use the front panel as a way of gripping the unit during installation and wiring. The front panel may come away and the unit may drop on the floor.

- ▶ Periodically wipe the contacts on the back of the front panel with a cotton swap moistened with alcohol.

■ When removing the unit from the installation sleeve

If you need to remove the unit from the installation sleeve, proceed as follows.

- 1 Remove the rear supporter from the unit.
- 2 Remove the front panel from the unit.
- 3 Insert the lever A into hole on one side of the unit, and pull the lever toward you. Do the same operation on the other side and pull out the unit from the installation sleeve.



Connections

■ Main connector

Connect the main connector to the female connector on the back of the unit.

■ Antenna Connection

Insert the plug of the car antenna cable into the jack at the rear of the unit.

■ Ground Connection(Black)

- ▶ Connect the ground lead (black) to a metal part of the vehicle and secure it using the screw provided on the vehicle for this purpose.
- ▶ If this connection is loose, or if the cord is connected to something other than a metal part of the car, noise or malfunction may result.

■ Power Supply Lead (Red)

Connect the red power supply wire to the 12V + terminal controlled by the car ignition switch.

■ Memory Back-up Lead (Yellow)

Connect the yellow memory power supply wire to a 12V + terminal that is always supplied with power regardless of the vehicle's ignition switch position. If this connection is made incorrectly or is not made at all, the unit will not work.

■ Line Out Jacks(Optional)

Connect to the Line-in RCA jacks of the power amplifier.

■ Power Antenna Lead/External Amplifier Remote Turn-on Lead

Your will find a separate lead, blue with a male terminal suitable to many automatic antenna. If an automatic car antenna is used, when connecting the lead, the antenna will be automatically extended when the main switch is turned on. This can also be used as a remote turn-on wire connection for amplifiers that have a remote sensing lead. Using this connection will allow simultaneous turning on/off of the radio and an external amplifier.

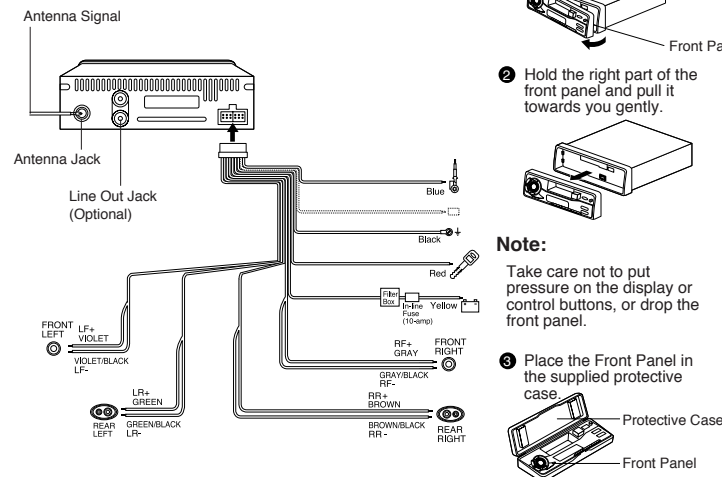
■ Precautions

- ▶ Do not bring the connecting cords near parts whose temperature will rise when the vehicle is driven.
- ▶ Secure the connectors securely so that they are locked into position. Improper connection can result in noise or hamper operation.

This car receiver is not designed to utilize the vehicle's chassis as the electrical return path from the speaker to the radio. Always use two conductor wire between each speaker and your stereo unit.

■ 4-Speakers connection

Use 4~8 Ohm impedance speakers. Refer to the following connections diagram.

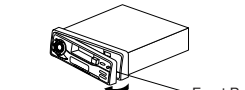


Detachable Front Panel

The front panel of this unit can be detached to prevent theft.

■ Detaching the Front Panel

- 1 Press the RELEASE button (A) to release the detachable front panel.



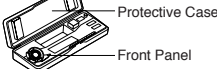
- 2 Hold the right part of the front panel and pull it towards you gently.



Note:

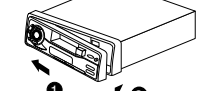
Take care not to put pressure on the display or control buttons, or drop the front panel.

- 3 Place the Front Panel in the supplied protective case.



■ Attaching the Front Panel

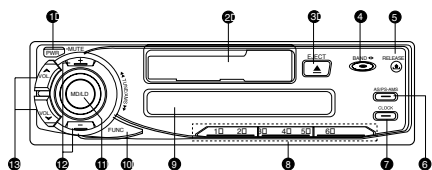
- ▶ Push the front panel against the main unit to reattach it.



Notes:

- ▶ When replacing the front panel, do not put pressure on the display or control buttons.
- ▶ The control buttons may not work properly if the front panel is not attached properly. If this occurs, gently press the front panel.
- ▶ Do not leave the front panel in any area exposed to high temperatures or direct sunlight.
- ▶ Do not drop the front panel or otherwise subject it to strong impact.
- ▶ Do not allow such volatile agents as benzine, thinner, or insecticides to come into contact with the surface of the front panel.
- ▶ Never try to disassemble the front panel.

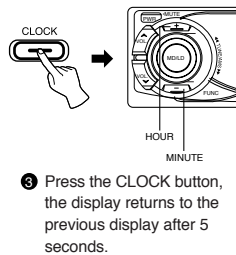
Location of Controls



- 1 POWER/MUTE Button
- 2 CASSETTE Door
- 3 EJECT (▲) Button
- 4 BAND, DIRECTION(◀▶) Button
- 5 RELEASE(⬇) Button
- 6 AS/PS, AMS ON/OFF Button
- 7 CLOCK Button
- 8 PRESET Button
- 9 LCD Display
- 10 FUNCTION(FUNC) Button
- 11 MODE/LOUD(MD/LD) Button
- 12 TUNE/AMS +/- Button (FF/REW, CLOCK Adjust)
- 13 CONTROL UP/DOWN Button

Setting the Clock Time

- 1 Press CLOCK button once momentarily to display the time.
- 2 Press the CLOCK button for more than 2 seconds, and clock indication will be displayed for 5 seconds. Adjust the clock within 5 seconds.
 - ▶ Pressing TUNE/AMS + button adjusts the hour.
 - ▶ Pressing TUNE/AMS - button adjusts the minute.



Sound Adjustment

■ Power ON and OFF

- ▶ Press POWER/MUTE button or any other button to turn the unit on.
- ▶ Press POWER/MUTE button for more than 2 seconds to turn it off.

Note:

Whenever you turn on the unit, it will operate at the volume level memorized.

■ Loudness Function

Press the MODE/LOUD(MD/LD) button for more than 2 seconds, activates the loudness circuit which boosts to compensate the human ear's lack of sensitivity to bass at low levels.

■ Mute Function

- ▶ POWER/MUTE button is operated as "muted" state on/off.
- ▶ The releasing mode mute state is when any button is pressed again.

■ MODE/LOUD(MD/LD) Button

Press the to change the control of volume, bass, treble, balance and fader.

■ CONTROL UP/DOWN Button(▲/▼)

- 1 After you have selected the proper mode by using the MODE/LOUD(MD/LD) button, control the desired function by pressing this buttons within 5 seconds. After you finish selecting modes, the unit returns to the initial mode.
- 2 Operating display in all modes: A numeric display is converted by pressing this buttons.

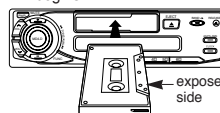
■ FUNCTION(FUNC) Button

This button serves to switch over between the audio sources at cassette operation(cassette ↔ radio)

Tape Playback

■ Basic Operation

- 1 Turn the power ON.
- 2 Insert a cassette tape with the exposed tape side to the right. If radio broadcast is being received, cassette playback automatically begins.



- 3 The tape direction can be reversed by pressing DIRECTION(◀▶) button.
- 4 The tape direction automatically reverses when the tape end has been reached.
- 5 To stop playback, press the EJECT (▲) button and remove the cassette tape.
- 6 Fast forwarding and rewinding the tape
 - * Fast forwarding tapes : Press the TUNE/AMS + button.
 - * Rewinding tapes : Press the TUNE/AMS - button.

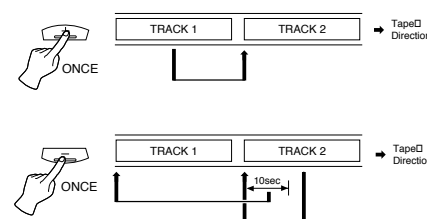
■ Switching between audio sources

Using the button FUNCTION(FUN). This button serves to switch over between cassette and radio operation even if the cassette remains inserted. If you switch over to radio operation the cassette tape is stopped.

■ Auto Music Search (AMS)

- ▶ Your car receiver has the ability (by searching track gaps) to quickly find the beginning of next tracks on a cassette. While the playing, press the AMS +/- button. The cassette deck will search for and play the next(before) track. During searching "AMS" will show in the display.

- ▶ Music search may not function properly for the following types of recordings. This is due to the recording and is not a malfunction of the unit.
 - There are noises in the spaces between tracks.



- A blank space is less than 4 seconds long.
- A track includes a long pause or continues at low volume for several seconds.

Radio Operation

■ Basic Operation

- 1 Turn the power ON.
- 2 For Radio source selection press the FUNCTION(FUNC) button shortly.
- 3 Press the BAND button to select the desired frequency band.
- 4 Select the desired stations.
 - ▶ **AUTO Tuning** Press the TUNE +/- buttons for more than 1 seconds.
 - ▶ **MANUAL Tuning** Press the TUNE +/- buttons repeatedly until the desired station appears.
- 5 Adjust the Volume and Tone using MODE/LOUD (MD/LD) and CONTROL UP/DOWN(▲/▼) button.

■ Memorizing Stations

24 stations [18FM, 6AM(MW)] can be preset using PRESET (1-6) buttons. Stations often listened to can be quickly recalled.

- 1 Select the desired band using the BAND button.
- 2 Tune in the desired station using the TUNE +/- buttons.
- 3 Press one of the PRESET(1-6) button for more than 2 seconds.

The station has now been stored at one of the preset buttons.

- 4 Repeat steps 2 and 3 for each of the remaining 5 PRESET buttons.

■ Auto Store (AS)

6 stations in the selected band can be stored automatically.

- 1 Turn the power ON.
- 2 Select the desired band of stations to be received.
- 3 Press the AS/PS button for more than 2 seconds, and then this function implements.
- 4 The selected band is automatically scanned and the 6 strongest stations are stored. Then the preset stations are displayed repeatedly.
- 5 Press the AS/PS button to stop scanning the preset stations.

■ Preset Scanning (PS)

- 1 Store a station for each one of PRESET (1-6) buttons.
- 3 When the AS/PS button is pressed, the preset stations are monitored in sequence for 5 seconds each. The station number is shown in the preset station indicator.
- 3 When the desired station is received, press the AS/PS button again to stop scanning.

Specifications

■ General

Output Power45 W x 4(Max.)
Power SourceDC 12-15 V
Speaker impedance4Ω x 4 or 8Ω x 4
Ground SystemNegative
Dimensions(WxHxD) ...188 x 58 x 166 mm(Without Front Panel)
Net Weight1.3 kg

■ Tape Player

Tape Drive SystemFull Auto Reverse
Tape Speed4.75 cm/sec.
Wow/Flutter0.2% (WRMS)
S/N Ratio50 dB
Frequency Response40-14,000 Hz

■ Tuner

FM
Frequency Range65.0-74.0 MHz, 87.5-108 MHz
S/N Ratio60 dB
Distortion (T.H.D. 0.5W)0.5%
Channel Separation30 dB

AM(MW)
Frequency Range522-1, 620 kHz
S/N Ratio50 dB
Distortion (T.H.D. 0.5W)0.5%

※ Note : The design and specifications are subject to change without notice in the course of product improvement.

"The working life of this product is 7 years since the date of purchase."