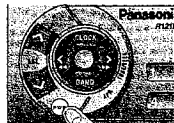
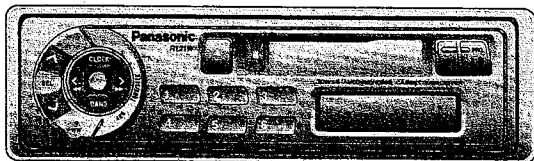


Power and Sound Controls



Power

If the car is not already running, Turn the key in the ignition until the accessory indicator lights. Press PWR to switch on the power.



Volume

Press "VOL ^" or "VOL v" to increase or decrease volume.

00L — Volume Level
0 to 39



Volume

Press "VOL ^" or "VOL v" to increase or decrease volume.

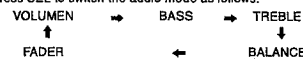
00L — Volume Level
0 to 39

• Press "VOL ^" or "VOL v" for more than 0.5 second to change numeric levels on the display rapidly.



Changing Audio Modes.

Press SEL to switch the audio mode as follows.



Bass and Treble

Press SEL to select the BASS (TREBLE) mode. Press "VOL ^" or "VOL v" to increase or decrease the bass/treble response.

0AS — Bass mode
-12 to 12

0RE — Treble mode
-12 to 12



Balance

Press SEL to select the BALANCE mode. Press "VOL ^" or "VOL v" to shift the sound volume to the right or left speakers.

0AL — Balance mode
or L 1 to 15

0AL — Balance center

Fader

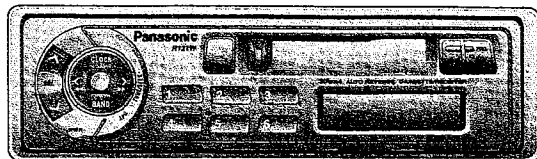
Press SEL to select the FADER mode. Press "VOL ^" or "VOL v" to shift the sound volume to the front or rear speakers.

0Ad — Fader mode
or R 1 to 15

0Ad — Fader Center

Note: when an audio mode (BAS/TRE/BAL/FAD) is selected but no operation is made within 5 seconds (2 seconds at VOL mode), the display will return to the normal operation mode. In such a case, press SEL again to select the control mode.

Radio Basics



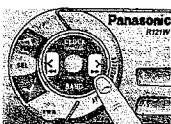
Selecting a Band

Press BAND to select the band as follows.

FM1 → FM2 → FM3 → AM

*"ST" Indicator lights if the station is broadcasting in stereo.

102.7 FM2



Manual Tuning

Press "< TUNE" or "TUNE >" to move to a higher or lower frequency.



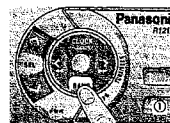
Seek Tuning

Press and hold "< TUNE" or "TUNE >" for more than 0.5 second, then release. The radio automatically stops on the next station.

Preset Station Setting

Up to 24 stations can be preset in the station memory as follows:

FM1	FM2	FM3	AM
6 stations	6 stations	6 stations	6 stations



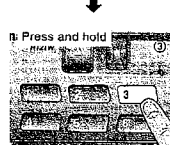
Manual Station Preset

- Press BAND to select a desired band.
- Use manual or seek tuning to find a station that you want to program into memory.
- Press and hold one of the station selector buttons 1 through 6 until the display blinks. The memory is now set for that button on the band you have selected.

Repeat the process to set other stations for the FM1 to AM bands.

102.7 — BUTTON NUMBER

Note: You can change the memory setting by repeating the above procedure.



Tuning in a Preset Station

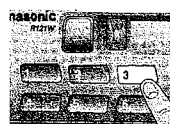
Press any of the buttons 1 through 6 to tune in the station preset by the above steps ① to ③.



Auto Preset Memory

Select a band and press and hold BAND (APM) for more than 2 seconds.

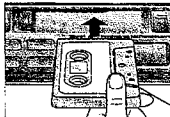
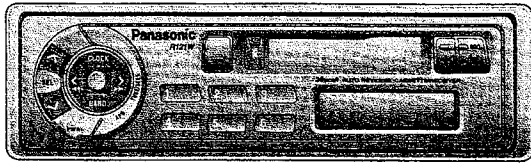
- The 6 strongest available stations will be automatically set in memory on preset buttons 1 through 6.
- Once set, the preset stations are sequentially scanned for 5 seconds.



- Press the appropriate preset button for the station you want to hear.

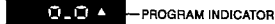
CAUTION: For safety reasons, do not attempt to program while driving.

Cassette Tape Player Basics



Loading a Cassette

Gently insert the cassette with the exposed tape facing to the right until the mechanism captures it, and playback starts.



EXPOSED TAPE

Rewind and Fast Forward

- When the program indicator (▲)light, press ◀◀ to rewind or press ▶▶ to fast forward the tape.
- When the program indicator (▼)light, press ◀◀ to fast forward or press ▶▶ to rewind the tape.



To stop rewind or fast forward, gently press to button that is not in use. The tape will resume playing from that position.

Changing Sides

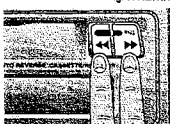
Firmly press ◀◀ (REW) and ▶▶ (FF) at the same time to switch to the program on the other side of the tape. The display changes to indicate which program is playing.



TOP SIDE PLAYING

BOTTOM SIDE PLAYING

▲ light: REWIND
▼ light: FAST FORWARD
▲ light: FAST FORWARD
▼ light: REWIND



PRESS BOTH

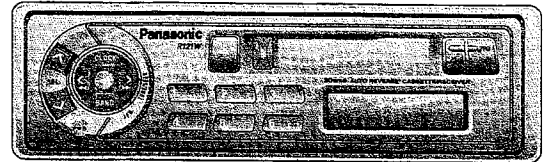
Stopping and Ejecting the Tape

Once inserted into the unit, your tape will play continuously until you eject it. If you press and engage ▲ (EJECT), the unit clears the tape and returns to radio operation. When you shut off the car engine, the tape will stop but not eject.

Note: Always remove the cassette when you are done using the cassette player. This will prolong the life of your tape.

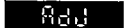
CAUTION: TO maintain your cassette player in top condition, avoid using tapes that are longer than 90 minutes (C-90).

Clock Basics (The clock system is 12-hours.)



Initial Time Setting

- Press CLOCK, "AdJ" is displayed.



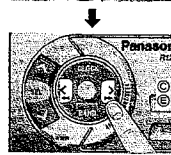
- Press and hold CLOCK again for more than 2 seconds. "12" blinks indicating the time setting mode is activated.



- To set hours, press "< TUNE" or "TUNE >".



- Press CLOCK again for minute setting.



- To set minutes, press "< TUNE" or "TUNE >". Hold "<" or ">" to change numbers rapidly.



- When you have set the time, press CLOCK.

Resetting the Time

When you want to reset the time, press and hold CLOCK for more than 2 seconds to activate the time setting mode. Then, repeat step ② to ④ above.

Selecting the Clock Display

Press CLOCK for clock display. Press CLOCK once again, the current audio display mode resumes.

Installation

Preparation

- Before installation check the radio operation with antenna and speakers.
- Disconnect the cable from the negative (-) battery terminal (see caution below).
- Unit should be installed in a horizontal position with the front end up at a convenient angle, but not more than 30°.

Caution:

For installation to cars with trip or navigational computers, all electronic memory settings previously registered in the computer will be lost when the battery terminal is disconnected. For this type of car, battery could not be disconnected. Therefore, extra care should be taken to prevent short circuiting.

In-dash Installation

Installation Opening

In-dash installation can be done if the car's dashboard has an opening for this unit as shown in Fig. 1. The car's dashboard should have a thickness of 4.5mm-6mm in order to make the installation of the unit.

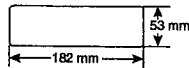


Fig.1

Installation Precautions

This equipment, if possible, should be installed by a professional installer.

In case of difficulty, please consult your nearest authorized Panasonic Service Center.

- This system is to be used only in a 12-volt, DC battery system (car) with negative ground.
- Follow the electrical connection on Installation Guide. Failure to do so may result in damage to the unit.
- Connect the power lead after other connections are made.
- Be sure to connect the YELLOW lead to the positive terminal (+) of the battery or fuse block (BAT) terminal.
- Insulate all exposed wires to prevent short circuiting.
- Secure all loose wires after installing the unit.
- Please carefully read the operating and installation instructions of the respective equipment before connecting it to this unit.

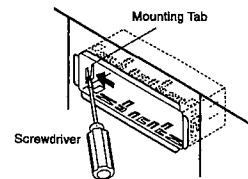
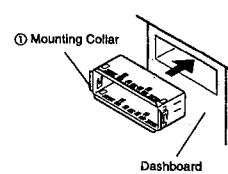
Supplied Hardwares

No.	Name	Diagram	Qty.	No.	Item	Diagram	Qty.
①	Mounting Collar		1	⑤	Mounting Bolt(5mmφ)		1
②	Hex Nut (5mmφ)		1	⑥	Power Connector		1
③	Rear Support Strap		1	⑦	Dismounting Plate		1
④	Tapping Screw (5mmφT16mm)		1				

Installation Procedures

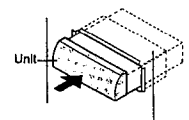
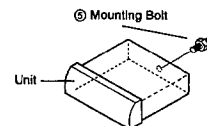
1. Secure the Mounting Collar ①

Insert Mounting Collar ① into the Car's dashboard, and bend mounting tabs out with a screwdriver.



2. Secure the rear of the unit.

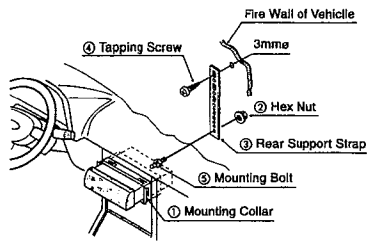
- Check the electrical connection by referring to this operating instructions.
- Connect the mounting Bolt ⑤, using a suitable wrench.
- Insert the unit into Mounting Collar ① and push it in until "click" is heard.



- Secure the rear of the unit to the car by either of the two recommended methods.

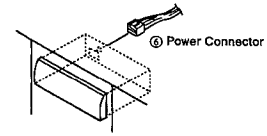
■ Using the Rear Support Strap ③

Affix one end of the Rear Support Strap ③ to the rear of the unit, and the other end to the Fire Wall of Vehicle, or some other metallic area.



Installation continued

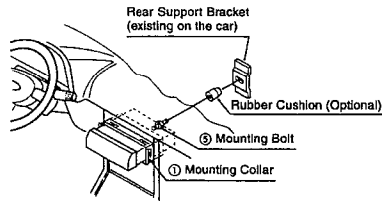
3. Plug the Power Connector ⑥.



4. After installation, reconnect the negative (-) battery terminal.

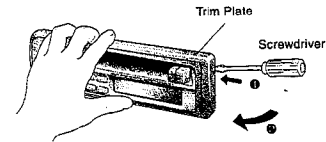
■ Using the Rubber Cushion (Optional)

(If there is an existing Rear Support Bracket on the Fire Wall of Car.)
Cover Mounting Bolt on the rear of the unit with Rubber Cushion (Optional), and mount it into the existing Rear Support Bracket.

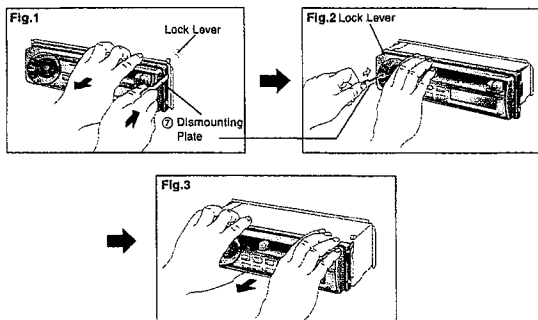


To Remove the Unit

a) Remove the trim plate with a screwdriver as show in the figure.



b) Pull out the unit while pushing two lock lever using Dismounting Plate ⑦ as follows. (Fig. 1,2)
c) Remove the unit pulling with both hands. (Fig. 3)



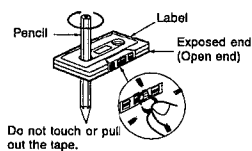
Note: Do not lose the dismounting Plate. It will be needed to remove the unit from the unit from the car's dashboard.

□ Troubleshooting Tips

PROBLEM	POSSIBLE CAUSE	PROBABLE SOLUTION
Unit won't turn on.	Dead vehicle battery. Ignition not on.	Charge vehicle battery. Turn Ignition to On or Accessory.
	Bad power line connection. Fuse burned out.	Check connections. Replace fuse.
Radio has static.	Antenna not hooked up. Close to high power lines.	Hook up antenna. Move away from high power lines.
Radio memory buttons don't work.	Not holding buttons down long enough.	Press and hold buttons for more than 2 seconds.
Tape sound quality is poor.	Heads are dirty. Poor quality tape.	Clean heads. (Ask a service representative for advice.) Use better quality tape.
Tape Won't change programs.	Not pressing ►► (FF) and ◀◀ (REW) buttons at the same time.	Peress ►► (FF) and ◀◀ (REW) buttons at the same time.

□ Notes on Cassette Tapes

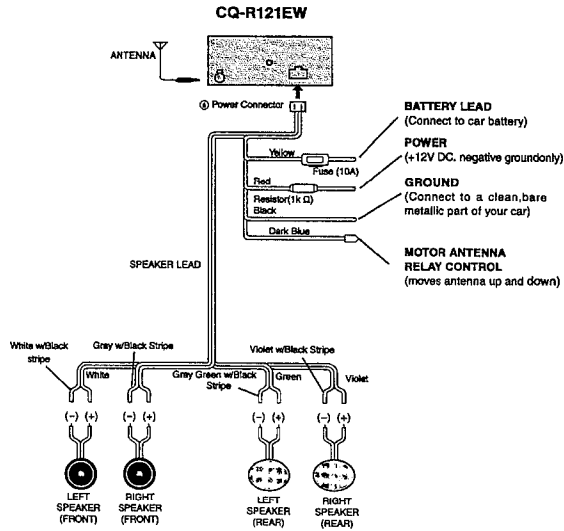
Tape Slack:
Use a pencil or similar object to take up the slack as shown. If a loose tape is used, this may result in the tape becoming tangled in the rotating parts of the unit.



Electrical Connection

Caution:

- To prevent damage to the unit, be sure to follow the connection diagram below.
- Remove the covering of the leads about 5mm long from their end before connecting.
- Do not insert the power connector into the unit until the wiring is completed.
- Be sure to insulate any exposed wires from a possible short circuit from the car chassis. Bundle all cables and keep cable terminals free from touching any metal parts.

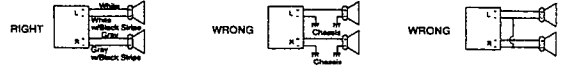


Speaker Connections

CAUTION:

- Use ungrounded speakers only.
- The speakers to be used with this unit should be able to handle more than the 30 W of audio power. Use of speakers with small input ratings can cause damage to the speakers.
- The speaker impedance should be 4-8 ohms. If the impedance is too large or too small, it affects the output and may cause damage to the speakers or this unit.
- Do not use 3-wire type speaker system having a common earth lead. Never connect the speaker cord to the body of the car. This unit uses the BTCL circuit, so each speaker should be connected separately using parallel vinyl insulated cords.
- Follow the connection diagram below carefully. Failure to do so may cause damage to both unit and speakers.

• Unit will be damaged if speakers (Front, Rear) are not connected properly.



• Do not connect more than one speaker to one set of speaker leads.

