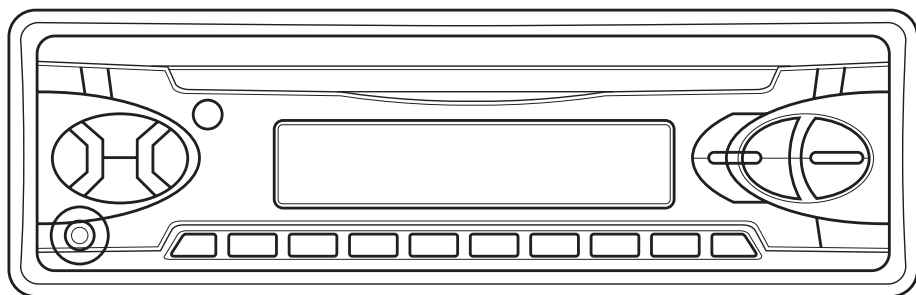


Goodmans

INSTRUCTION MANUAL



Model GCE 2815PLL
In Car Radio
Compact Disc Player



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Accessories	3
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MULTIPATH DISTORTION / MUTING

Please note: An integrally mounted screen aerial may give rise to increased multipath distortion or spurious muting of the audio output. This is normal and to be expected. The use of an externally mounted rod aerial may reduce or possibly eliminate such problems.

Most screen aerials require a 12 volt supply to operate correctly. Please check that this has been connected to the +12 volt antenna wire of your radio. If you are in any doubt of this connection please contact the vehicle dealer or Goodmans installation helpline.

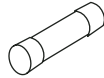
IMPORTANT: Do not forget to remove the transit screws on top of the unit, before removing the fixing cage and installing the unit. Failure to do so will result in the CD not playing.



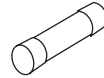
ACCESSORIES

Please retain the carton and packing materials, as this is the best protection for the unit should it be necessary to return it for servicing.

- (1) 1 x 0.5 Amp fuse (spare fuse for + 12 volt supply wire of the unit).
- 1 x 15 Amp fuse (spare for memory).



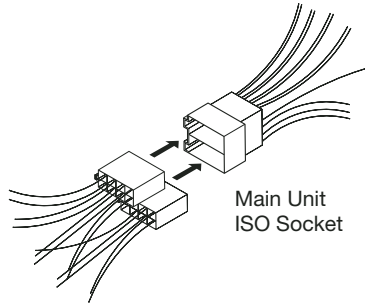
15A Fuse



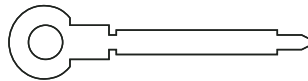
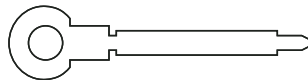
0.5A Fuse

- (2) 2 x ISO Plug Connector

For use when ISO plugs are not used on your vehicle



- (3) 2 x Release key



PLEASE READ THIS BEFORE CONNECTING THE PLAYER TO THE VEHICLE

IMPORTANT NOTES

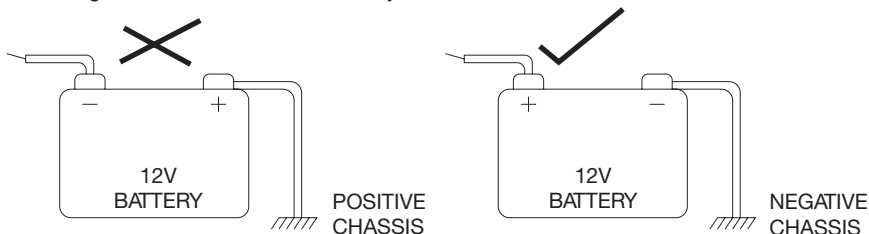
Prior to final installation carry out a sound check. If high distortion or intermittent sound is experienced it is possible that the wiring to the car's electric is poor, or that the battery needs recharging.

If the battery and its charging circuit are OK, then rewire the red fused wire of the player directly to the positive terminal (+) of the car battery. Car accessory shops stock the connector blocks and the 10 Amp cable which may be necessary for extending the fuse wire connection.

EARTHING : Make sure that the black wire on the wiring harness is connected to a good earthing point on the car. If the chassis of the car is used as an earthing point, make sure that the paint is scraped clean from the metal work before attaching the wire to it. It is preferable to connect the black earthing wire directly to the negative terminal (-) of the car battery.

WARNING: POLARITY.....

This model is only suitable for use in vehicles which have a negative earth system. e.g.: The negative terminal of the car battery is connected to the chassis.



Connecting The Speakers And Power Cables

Before you wire your system, disconnect your vehicle battery's positive (+) cable. This helps prevent damage in case of a short. When you complete the wiring, reconnect the battery cable and test your car stereo.

Note: Check with your vehicles handbook or dealer before disconnecting the vehicle battery in case the alarm or other electronics in your vehicle require special attention.

When connecting your car stereo's black ground wire, be sure to connect the wire to a metal part of your vehicle or preferably to the negative (-) terminal of the car battery.

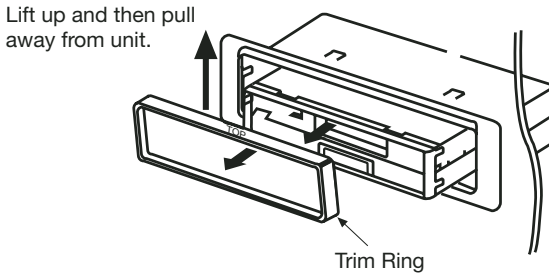
PRECAUTIONS AND MAINTENANCE

- This unit is designed for negative ground 12V DC operation only. The equipment can be used safely, if the negative terminal of the battery is connected to the vehicle metal work.
- Do not use speakers of impedance less than 4 ohms; and do not allow the speaker wires to be shorted together when the unit is switched on. Otherwise it may overload or burn out the power amplifier stage.
- If the car interior is extremely hot, as after being parked in the sun, do not use the player until the car has been driven for a while to cool off the interior.

REMOVING AND ATTACHING THE TRIM RING

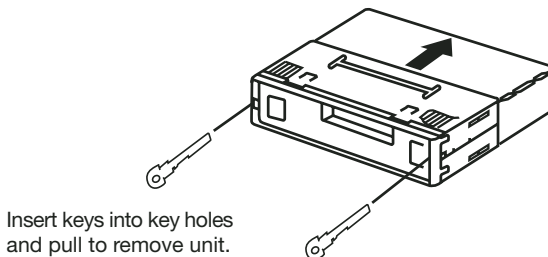
This model can be fitted to DIN E or ISO style dashboard slots. The clip on trim ring is prefitted to the front of the unit for this purpose.

- It will be necessary to remove the trim ring:
 - a. To allow the radio to be fitted to an ISO style dashboard slot.
 - b. To gain access to the keyhole slots for removal of the unit from the car slot/fixing cage.
- To remove the trim ring first remove the front panel from the radio (press the open button and remove the front panel).
- Using your fingers lift the trim ring at its top centre and pull the ring towards you/away from the main unit.
- The trim ring can only be fitted to the main unit one way only. Simply position the trim ring over the front of the main unit and push fit the trim ring on to the unit.



REMOVING THE PLAYER FROM THE DASHBOARD/FIXING BRACKET

- Remove the front panel from the main unit.
- Lift off the trim ring and remove from the main unit.
- Insert the supplied release keys into the key slots located on the left and right sides of the unit. Ensure that the keys are fully pressed into the slots.
- Pull on both of the release keys to remove the unit from the fixing bracket/car slot.



DETACHING AND ATTACHING THE FRONT PANEL

The front panel of this unit can be detached in order to prevent the unit from being stolen.

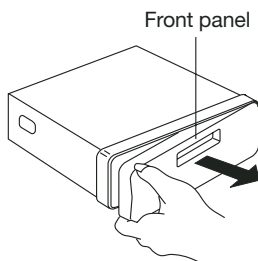
DETACHING THE FRONT PANEL

Press the RELEASE button and detach the panel by pulling it towards you as illustrated.

Warning! The front panel will become hot in use.

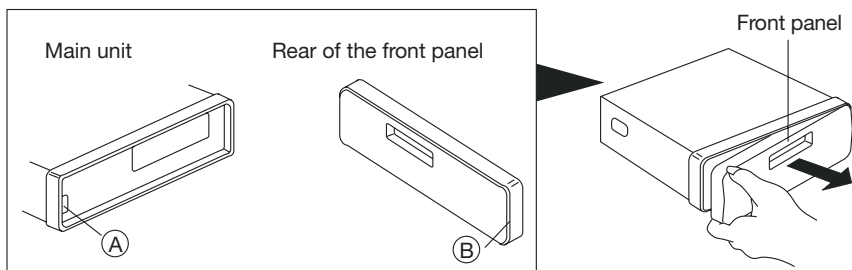
Note:

Be sure not to drop the panel when detaching it from the unit.



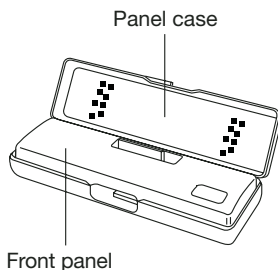
ATTACHING THE FRONT PANEL

Apply the right hand side of the front panel to the unit by attaching the part B of the front panel to the part A of the unit as illustrated and push until it clicks.



Notes:

- Make sure that the front panel is the right way up when attaching it to the unit as it cannot be attached upside down.
- Do not press the front panel hard against the unit when attaching it. It can be easily attached by pressing it lightly against the unit.
- Do not press hard or put excessive pressure to the control buttons of the front panel when attaching it to the unit.



FRONT PANEL PRECAUTIONS

Note that if the front panel fails to lock in position properly, the control buttons may not function and the LCD display may have missing segments. Push the open button and then re-install the front panel again.

1. Do not drop the front panel.
2. Do not put pressure on the display or control buttons when detaching or re-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 adhere to 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.
6. Keep 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.

INSTALLATION/PRECAUTIONS

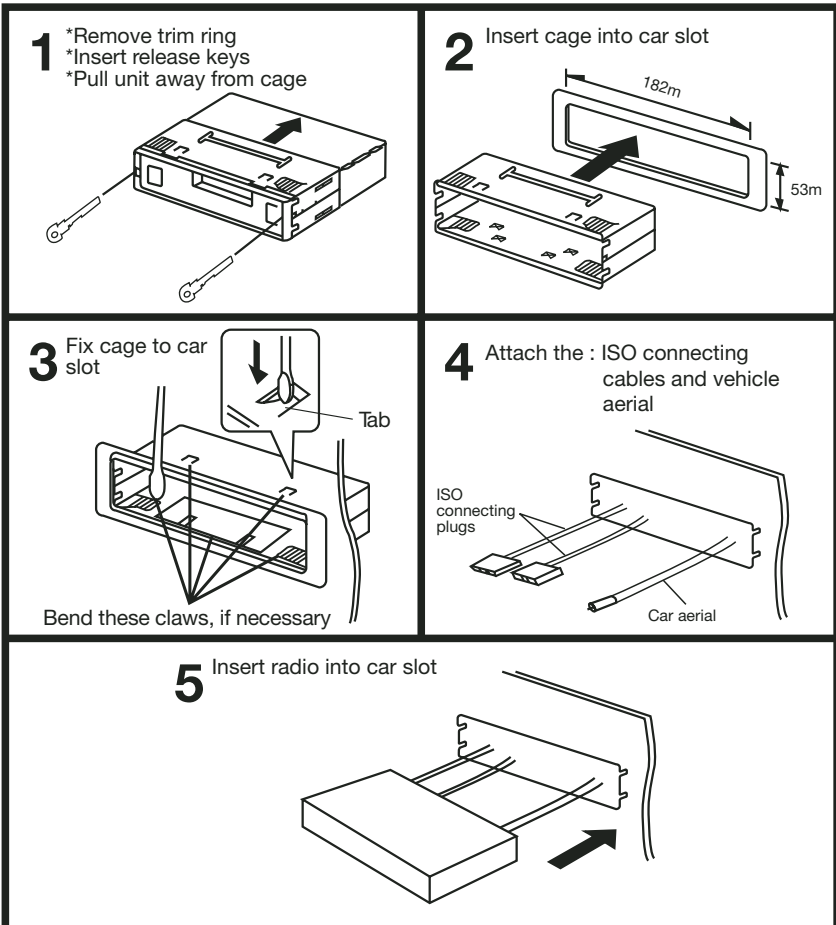
- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the vehicle.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a a safe and secure installation.
- Be sure to remove the front panel before installing the unit.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

MOUNTING EXAMPLE

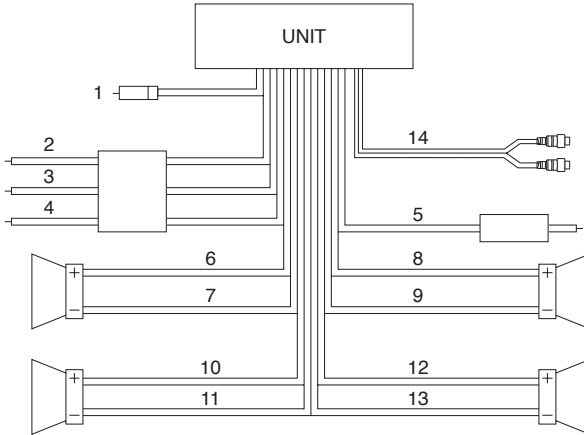
Installation in the dashboard



Note:

Keep the release keys in a safe place as you may need them in future to remove the unit from the car.

WIRING IDENTIFICATION



REAR VIEW OF PLAYER

- | | |
|--|---|
| 1) AERIAL INPUT SOCKET | 8) FRONT RIGHT POSITIVE: WHITE |
| 2) BATTERY: RED +12 VOLT IGNITION | 9) FRONT RIGHT NEGATIVE: WHITE WITH BLACK STRIPE |
| 3) GROUND: BLACK - | 10) REAR LEFT POSITIVE: BROWN |
| 4) MEMORY: ORANGE PERMANENT +12 VOLT | 11) REAR LEFT NEGATIVE: BROWN WITH BLACK STRIPE |
| 5) AUTO AERIAL: ORANGE/WHITE | 12) REAR RIGHT POSITIVE: YELLOW |
| 6) FRONT LEFT POSITIVE: GREY | 13) REAR RIGHT NEGATIVE: YELLOW WITH BLACK STRIPE |
| 7) FRONT LEFT NEGATIVE: GREY WITH BLACK STRIPE | 14) RCA LINEOUT |

RECOMMENDED MINIMUM LOUDSPEAKER POWER RATINGS

Front loudspeakers power ratings 2 X 40 Watts maximum

Rear loudspeakers power ratings 2 X 40 Watts maximum

TWO SPEAKER WIRING

If you intend to use only two speakers with this radio select either front or rear wiring

INSTALLATION NOTES

(APPLICABLE TO BOTH 2 AND 4 SPEAKER CONNECTION)

To prevent possible damage to the power amplifier inside this unit, please ensure:

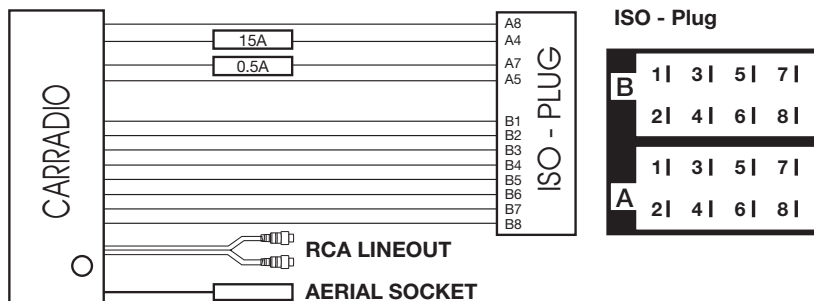
- 1) The vehicle chassis is not used as a loudspeaker earth (-ve return).
- 2) Front and Rear loudspeaker connecting wires are not joined together.
- 3) Any wires not used when completing a two speaker installation are fully insulated.
- 4) The memory wire (Orange) is connected to a permanent +12V supply.
- 5) The power wire (Red) is connected via the ignition switch of the vehicle.

Note: Before turning the unit ON for the first time after installation please ensure the RESET button is pressed to reset the microprocessor.

IMPORTANT NOTE

If after directly connecting the unit via the vehicles ISO connector plugs it does not appear to work (fails to power up) disconnect the orange lead bullet connector and reconnect to the twin bullet connector socket on the red wire. Try the unit again it should power up and can be used normally. Note this phenomenon is most frequent in Volkswagen/Audi vehicles.

ISO PLUG CONNECTIONS



Block A: This plug is used for power supply connections only.

Block B: This plug is used for connecting the loudspeakers.

- If your vehicle is not fitted with an ISO type connector, use the supplied ISO plug connectors to adapt your vehicle wiring. Make sure any connections are properly made and insulated to prevent a short circuit from occurring.
- ISO Connector pin A6 (Car Light Illumination) is not used on this player.

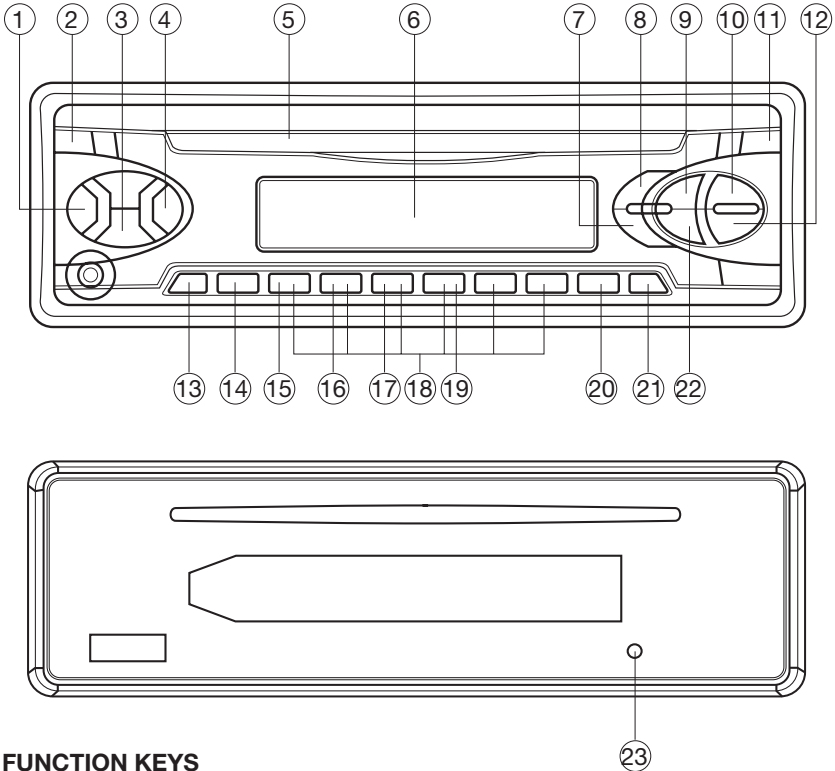
ISO-PLUG A

ISO	Function	Colour
A4	+12 Volt memory	Orange
A5	+ 12 Volt Auto. Antenna	Orange/White
A7	+12 Volt Power	Red
A8	Earth (Ground)	Black
A6	Car light (Illumination)	---

ISO-PLUG B

ISO	Function	Colour
B1	Speaker right rear +	Yellow
B2	Speaker right rear -	Yellow with black stripe
B3	Speaker right front +	White
B4	Speaker right front -	White with black stripe
B5	Speaker left front +	Grey
B6	Speaker left front -	Grey with black stripe
B7	Speaker left rear +	Brown
B8	Speaker left rear -	Brown with black stripe

LOCATION OF CONTROLS AND FUNCTIONS



FUNCTION KEYS

- | | |
|-------------------------------------|--------------------------|
| 1. EQ Button | 13. Band/Loud Button |
| 2. Front Panel Release Button | 14. AS/PS Button |
| 3. Volume +/- Buttons | 15. Disc Pause Button |
| 4. Select Button | 16. Disc Scan Button |
| 5. CD Slot | 17. Disc Repeat Button |
| 6. LCD Display | 18. Radio Preset Buttons |
| 7. PTY Button | 19. Disc Shuffle Button |
| 8. AF Button | 20. Mode Button |
| 9. DSP Button | 21. Power Button |
| 10. Tune UP/Skip Forward Button | 22. TA Button |
| 11. CD Eject Button | 23. Reset Button |
| 12. Tune Down/Skip Backwards Button | |

OPERATION

SWITCHING ON/OFF THE UNIT

Switch on the unit by pressing any button (except the release button (2)). To turn the unit off, press the power button (21)

FRONT PANEL

Press the release button (2) to detach the removable front panel.

SOUND ADJUSTMENT

Press the **SEL** button (4) briefly to enter the Audio Menu. The audio settings can be accessed in the following order:



To adjust the settings, press the VOL +/- button (3).

Press and hold the **SEL** button (4) to enter the Advanced Menu. To move through the various options in this menu, press the SEL button.

The advanced settings can be accessed in the following order:



TA SEEK OR TA ALARM

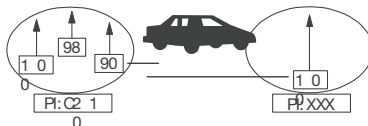
To determine what action the radio will take if a newly tuned station does not receive TP information.

- TA SEEK mode: The radio retunes to a different station which contains TP information.
- TA ALARM mode: The radio does not retune, but an audible "beep" sound is heard.

PI SOUND or PI MUTE

If you are travelling on the fringe area of two transmitters, you may receive conflicting AF information. When the vehicle is crossing the area where two stations with the same AF but different PI codes can be received at

the same time, the tuner may become unstable. In this circumstance, 2 modes can be selected:



- PI SOUND mode:
The different PI sounds will be heard.
- PI MUTE mode:
In the same circumstance, the radio will be muted.
- RETUNE L or RETUNE S mode:
To determine the initial time of automatic TA search or PI search.
- RETUNE L mode:
90 seconds.
- RETUNE S mode:
30 seconds.

MASK DPI or MASK ALL mode :

"PI" is referred to "Different PI with same AF".

During AF search, PI stations and non-RDS stations with a strong signal will be masked.

In the latter case, non-RDS stations may cause interference, resulting in the real AF being masked.

- MASK PI mode:
Unit will mask only the AF which has different PI.
- MASK ALL mode:
Unit will mask both PI and non-RDS stations with a strong signal.

LOUDNESS

Press and hold the BND/LOU button (13) to increase the bass output. Press and hold the same button to return to normal output.

OPERATION

DISPLAY

Press the DSP button (9) to view Clock, Programme Type (PTY) and frequency of the current radio station.

EQUALIZATION

Press the EQ button (1) to select the following preset equalizer settings:

▶ FLAT → CLASSICS → POP M → ROCK M → DSP OFF ◀

LCD DISPLAY (6)

The LCD panel displays the frequency, time and activated functions.

RESET FUNCTION

In case of abnormal operation, use a pencil tip or other non-metallic object to press the Reset button (23) located behind the front panel.

The Reset button should be activated in the following circumstances:

- Initial installation of the unit, when all wiring is completed.
- If the control buttons do not operate
- An error symbol is shown in the display.

RADIO OPERATION

- Press the **Mode** button (20) to select the Tuner mode.

- **SELECTING THE FREQUENCY BAND**

Press the **BND** button (13) to select either FM or MW wavebands.

The frequency bands will change in the following order:

▶ FM1 → FM2 → FM3 → MW ◀

- **SELECTING STATION**

Press the ▶▶ button (10) or the ◀◀ button (12) to activate the auto-search mode. The radio will tune up or down to the next available station and remain on that frequency.

Press and hold either of these buttons to switch to Manual search mode.

This allows fine tuning of the radio frequency. Briefly press the buttons to make small adjustments, or press and hold to search quickly through the waveband.

- **AUTO MEMORY STORE/PRESET SCAN (AS/PS)**

- Press and hold the **AS/PS** button (14) to enter Auto store mode. The radio will automatically store 6 stations into the 6 preset memories of the current band.

- Preset Scan:

Briefly press the **AS/PS** (14) button to scan all preset stations stored in the current band.

- **STATION STORING**

You can store and recall 6 preset radio stations in each of the 4 wavebands using the numbered buttons 1-6 (18)

To store a station:

- Select band (if required)
- Select a desired station using the >> or << buttons
- Hold the desired preset button, the preset number is shown in the display.

To Recall a station:

- Select band (if required)
- briefly press a desired preset button to recall the stored station.

- **RDS (RADIO DATA SYSTEM) OPERATION**

- Briefly press the AF/REG button (8) to enter AF switching mode.

When AF switching mode is selected, the radio will check the signal strength of the AF constantly.

When the AF/REG button is pressed and held for 2 seconds, Regional mode will be selected.

NOTE: To check whether an alternative frequency is a real alternative for the current station, the radio compares PI codes (Programme Identity)

- Regional Mode ON:

OPERATION

The PI codes must be identical. REGON will show in the display for a few seconds.

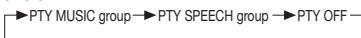
- **Regional Mode Off:**

The Regional identification code in the PI code is ignored. REG OFF will show in the display for a few seconds. Some broadcasting stations may change their programme from normal broadcasting to regional broadcasting for a certain period. When Regional Mode is Off, the region identification in the PI code is ignored; the radio may switch to a local variant of the current programme.

When Regional Mode is On, the radio will only switch to a programme carrying the exact same PI code.

- **PTY Button**

When the PTY button (7) is pressed, the PTY will toggle in the following order:



The distribution of PTY codes is shown in the table below:

Button Number	MUSIC group	SPEECH group
1	POP , ROCK	NEWS, AFFAIRS, INFO
2	EASY , LIGHT	SPORT, EDUCATE, DRAMA
3	CLASSICS,	CULTURE, SCIENCE, VARIED
4	JAZZ, COUNTRY	WEATHER, FINANCE, CHILDREN
5	NATION, OLDIES	SOCIAL, RELIGION, PHONE IN
6	FOLK	TRAVEL, LEISURE, DOCUMENT

When PTY code is selected, the radio will search the band for the station that matches the PTY code.

- **TA (Traffic Announcement)**

Briefly press the TA button (22) to activate TA mode. Press again to switch TA mode off.

The following will happen if TA mode is selected and a traffic announcement is transmitted:

- If the unit is in CD mode, it will switch to tuner mode temporarily.
- If the volume is set to a low level, it

will be raised to a preset level.

- TP will show in the display when the unit is tuned to a station that is capable of broadcasting traffic information. When pressed for more than 2 seconds, EON TA LOCAL/EON TA DISTANCE mode is activated. TA reception can be adjusted to receive local and long distance announcements.

OVERVIEW OF THE RDS FUNCTION

Radio Data System (RDS) is a broadcasting service that allows FM stations to send additional digital information along with the regular radio program signal. Your car stereo offers you a variety of services. Here are just a few:

- **PI (Program identification)**
It is a code that identifies RDS stations; it is unique for each station.
- **PS (Program Service Name)**
The name of the current station.
- **AF (Alternative Frequencies List)**
The list(s) of Alternative Frequencies give information on the various transmitters broadcasting the same program in the same or adjacent reception area. If the main frequency should get worse, the radio will tune automatically to the strongest Alternative frequency.
- **TP (Traffic Program)**
If the tuned program broadcasts traffic announcements, the TP indicator will turn on.
- **TA (Traffic Announcement)**
When an actual traffic bulletin is on air, the TA indicator will also turn on.
- **PTY (Program Type Codes)**
This code is used to designate the current program material being broadcast. With this feature, you can search the programs that match the selected program type, which is chosen from a specific list of types.



OPERATION

- EON (Enhanced Other Networks information)

It is a supplementary service enabling the radio to obtain information not only from the current station but also from other networks.

Notes

RDS may not work properly if the signal strength is weak or if the station you are tuned to is not transmitting RDS data.

- **PLAYING ALL TRACKS IN A RANDOM ORDER**

Press **SHF** button (19) to play all tracks on the CD in a random order. Press again to resume normal playback.

- **EJECTING A DISC**

Press the **▲** button (11) to stop & eject the CD. Playback will stop and the disc will automatically be ejected through the CD slot.

CD OPERATION

- **LOADING & PLAYING A CD**

Gently insert a CD into the Disc Slot (5) with the label side upper-most.

The CD will be automatically loaded into the unit and playback will start. If a CD is already loaded, press the Mode button (20) to enter CD mode.

- **SELECTING TRACKS**

Press **◀◀** button (12) or **▶▶** button (10) to skip forwards or backwards through the tracks on the CD.

Press and hold **◀◀** button (12) or **▶▶** button (10) to fast reverse or fast forward through the currently playing track. CD playback will resume when the buttons are released.

- **PAUSING PLAYING**

Press the **PAU** button (15) to pause the current track. Press it again to resume play back.

- **PREVIEWING ALL TRACKS**

Press **SCN** button (16) to play the first 10 seconds of each track on the current disc. Press the SCN button again to resume normal playback.

- **REPEATING THE SAME TRACK**

Press **RPT** button (17) to continuously repeat the same track. Press it again to resume normal playback.

Care and Maintenance

Cleaning the unit

Wipe with a soft cloth. If the unit is very dirty, dampen the cloth with a weak solution of neutral detergent and water, and then wipe clean. Dry thoroughly with a clean dry cloth.

Cleaning CDs

Use a soft cloth to wipe off any finger prints and dust from the disc surface. Wipe in a straight line from the centre to the outside of the disc. Small dust particles and light stains will not affect reproduction quality.

- Never use chemicals such as record sprays, anti static sprays, benzene or thinners to clean your CDs.
- To reduce the risk of scratches, always put CDs back in their cases after use.
- Do not expose CDs to direct sunlight, high humidity or high temperatures for long periods.
- Do not stick paper or write anything on either side of the CD.
- Do not use CDs that have a sticky residue on either surface. Do not use special shaped CDs. Only use circular shaped CDs.

Reset

The only time you should need to press the reset buttons is:

- After completing the installation of the unit.
- If any function buttons do not operate.
- When an error symbol is displayed.

Use a ball point pen or a thin non-metallic object to press the RESET button.

TROUBLE SHOOTING

Before going through the check list, check wiring connection.

No power.	<ol style="list-style-type: none"> 1. The car ignition is not on 2. The fuse is blown 	<ol style="list-style-type: none"> 1. Turn on the ignition. 2. Replace the fuse
Disc cannot be loaded or ejected	<ol style="list-style-type: none"> 1. A CD is already inside the player 2. Disc has been inserted upside down 3. CD is dirty or damaged 4. Temperature in the car is too high. 5. There is condensation on the lens 	<ol style="list-style-type: none"> 1. Remove the CD and insert a new one 2. Insert the CD with the label side facing upwards. 3. Clean the CD or try to play a different CD 4. Wait until the temperature inside the car lowers before trying again. 5. Turn the CD player off for about an hour and try again.
No sound.	<ol style="list-style-type: none"> 1. Volume is set to minimum 2. Wiring is not properly connected 	<ol style="list-style-type: none"> 1. Increase the volume 2. Check the wiring
Sound skips.	<ol style="list-style-type: none"> 1. The unit has been installed at an angle greater then 30 degrees 2. CD is dirty or damaged 	<ol style="list-style-type: none"> 1. Install the unit at an angle lower then 30 degrees. 2. Clean the CD or try to play a different CD
The operation keys do not work	<ol style="list-style-type: none"> 1. The built in microcomputer is not operating properly due to electrical noise. 	<ol style="list-style-type: none"> 1. Press the RESET button
The radio does not work.	<ol style="list-style-type: none"> 1. The antenna cable is not connected 	<ol style="list-style-type: none"> 1. Insert the antenna cable firmly
The Radio will not tune to a station	<ol style="list-style-type: none"> 1. The signals are too weak 	<ol style="list-style-type: none"> 1. Make sure the antenna is fully extended

Replacing the fuses

There are fuses fitted to the RED (Ignition) and Yellow (memory) wires on the wiring harness of this unit.

Should either fuse fail in service, always replace with the correct type and value.

Note that to change either fuse, you will need to release the unit from the mounting sleeve. Please keep the release keys supplied in safe place should replacing a fuse be necessary.

SPECIFICATION

GENERAL

Power Supply Requirements : DC 12 Volts, Negative Earth
Chassis Dimensions : 178 (W) x 160 (D) x 50 (H)
Tone Controls
- Bass (at 100 Hz) : ± 10 dB
- Treble (at 10 KHz) : ± 10 dB
Maximum Output Power : 4 x 40 Watts

CD PLAYER

Signal to Noise Ratio : More than 55 dB
Channel Separation : More than 45 dB
Frequency Response : 40 Hz - 18 KHz

RADIO

FM

Frequency Coverage : 87.5 to 108 MHz
IF : 10.7 MHz
Sensitivity (S/N = 30 dB) : 4 μ V
Stereo Separation : > 25 dB

MW

Frequency Coverage : 522 to 1620 KHz
IF : 450 KHz
Sensitivity (S/N = 20 dB) : 36 dBu

