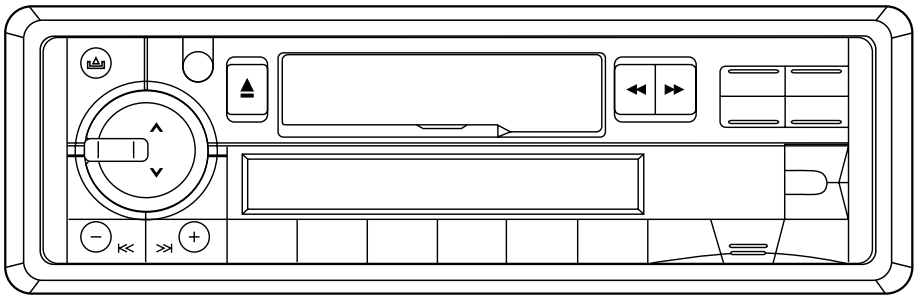
Goodmans

INSTRUCTION MANUAL



Model GCE 751PLL
In Car Radio with
Tape Cassette Player

e 1
022442

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MULTIPATH DISTORTION / MUTING

Please note: An integrally mounted screen aerial may give rise to increase 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.

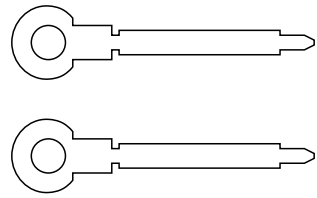
Most screen aerials require a 12 volt supply to operate correctly. Please check that this has been connected the +12 volt antenna wire of your radio. If you are in any doubt of this connection please contact the vehicle dealer or Goodmans installation helpline.

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 tape not playing.

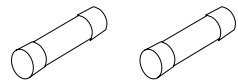
ACCESSORIES

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) 2 x Release key



(2) 1 x 15 Amp fuse
1 x 0.5 Amp fuse



15A Fuse 0.5A Fuse

PLEASE READ THIS BEFORE CONNECTING THE PLAYER TO THE VEHICLE

IMPORTANT NOTES

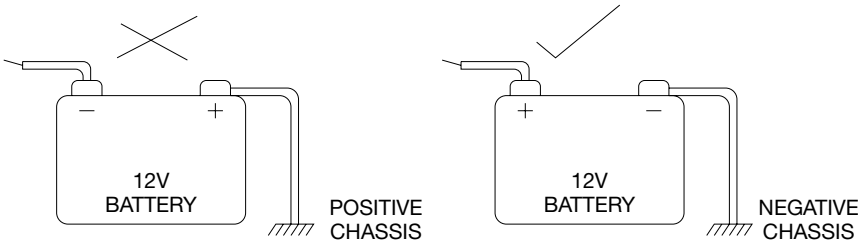
Prior to final installation carry out a sound check. If high distortion or intermittent sound is experienced it is possible that the wiring to the car's electrics is poor, or that the battery needs recharging.

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 15 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 radio /alarm or other electronics in your vehicle requires 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.
- Take care of your tape cassette to preserve the quality of the recordings. Do not allow them to be exposed to direct sunlight. Store them in a place protected from dirt and dust and avoid handling with greasy or oily hands. Also, keep away from magnets, and motors of the permanent magnet type.
- It is not advisable to use cassette tapes longer than C-90 (45 minutes per side) in automobile players, since the tape is too thin and lends to become easily entangled. Always remove the cassette from your tape player as soon as play is finished.
- The cassette head and pinch roller assay should be cleaned every 6 MONTHS depending on use.
  This should be done with a good quality head cleaning tape.
- A loosely wound cassette tape may get damaged, prior to using such tape, tighten it in a manner as indicated by Fig. 1. A carelessly wound cassette tape will cause unnecessary pressure on the tape resulting in the cassette springing out while the tape is running. For prevention, rewind the tape by fast forwarding or rewinding.

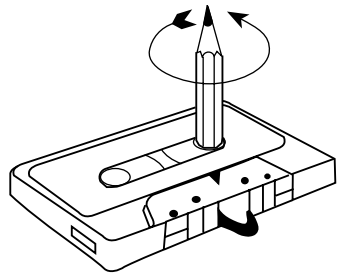


Fig. 1

Caution Vauxhall owners:

Vauxhall do not follow normal ISO wiring convention which will cause Goodmans radios' to lose the radio preset memories each time the ignition switch is turned off. To prevent such occurrences swap over the Red ignition and Orange Memory wires in the bullet connectors attached to the wiring harness of the car radio.

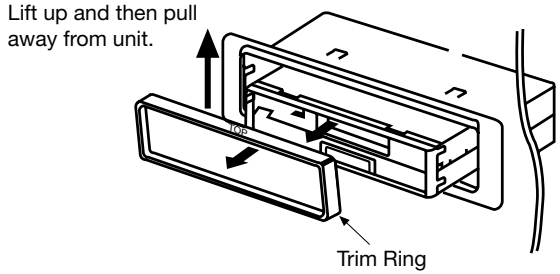
REMOVING AND ATTACHING THE TRIM RING

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:

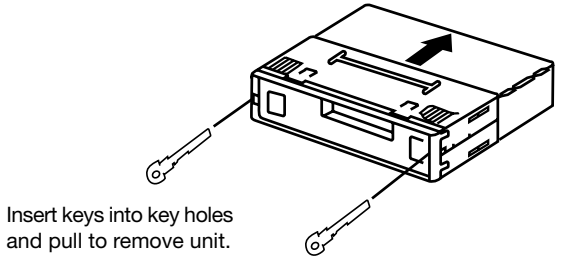
a. To allow the radio to be fitted to an ISO style dashboard slot.
b. To gain access to the keyhole slots for removal of the unit from the car slot/fixing cage.

- 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. A removable label with TOP printed on it is placed on the top of the ring to indicate the correct placement of the ring. 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.

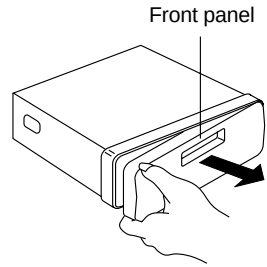


DETACHING AND ATTACHING THE FRONT PANEL

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.

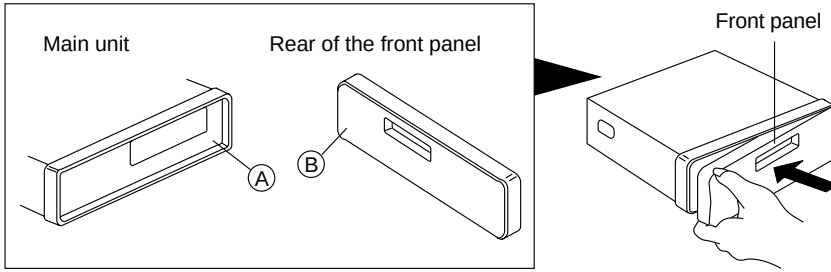


Warning! The front panel may become hot in use.

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

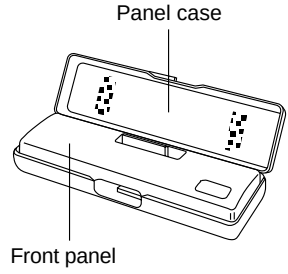
ATTACHING THE FRONT PANEL

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.



Note: When the detachable panel is removed the red anti theft LED will flash.

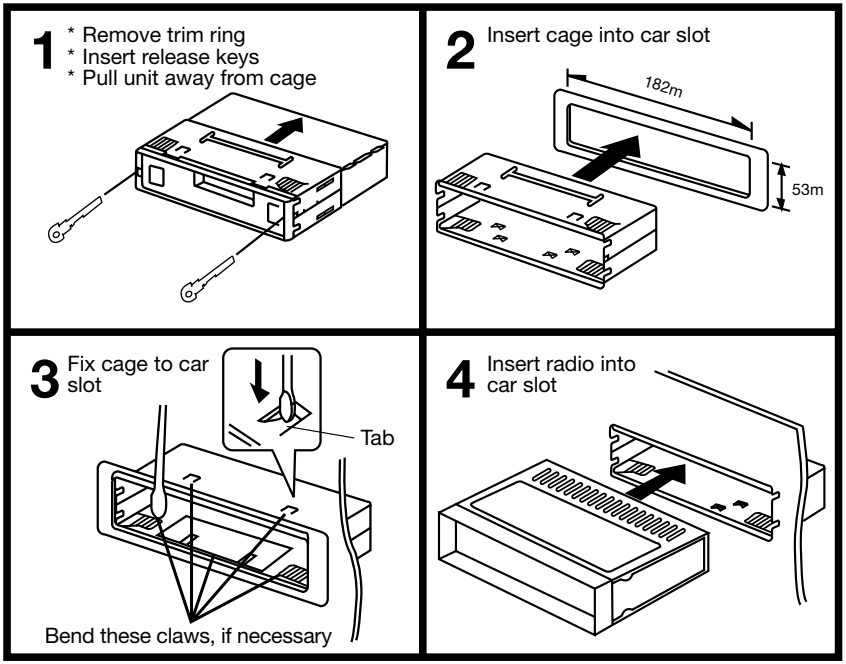
INSTALLATION/PRECAUTIONS

- 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 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°.

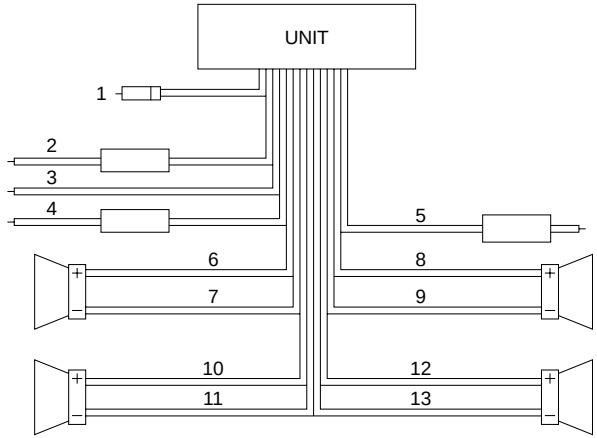
MOUNTING EXAMPLE

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

RECOMMENDED MINIMUM LOUDSPEAKER POWER RATINGS

Front loudspeakers power ratings 2 x 30 Watts RMS (2 x 60 Watts Music)
Rear loudspeakers power ratings 2 x 30 Watts RMS (2 x 60 Watts Music)

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)

This radio contains two separate power amplifiers, to prevent possible damage to these amplifiers please ensure:

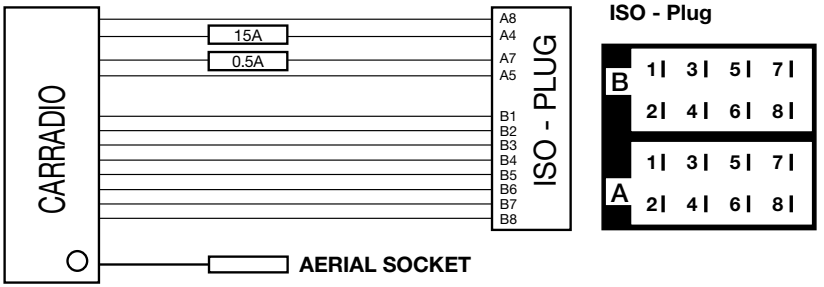
1) The vehicle chassis is not used as a loudspeaker earth (–ve return).
2) Front and Rear loudspeaker connecting wires are not joined together.
3) Any wires not used when completing a two speaker installation are fully insulated.
4) The memory wire (Orange) is connected to a permanent +12V supply.
5) 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 connector but just bare wire, then simply connect the supplied ISO plug to bare wire connector A and B to the radio's ISO socket and connect the bare wire ends to the vehicles loudspeakers according to the wiring codes as shown below. Make sure all connections and any unused wires are insulated to prevent shorting.
- 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

Recommended Minimum Loudspeaker Power Ratings

Front and Rear Loudspeakers power ratings 4 x 30 Watts RMS.

Two Speaker Wiring

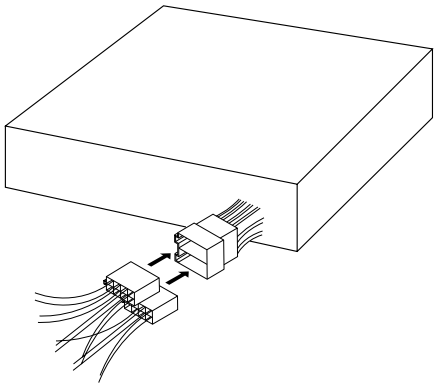
If you intend to use only two speakers with this radio select either front or rear wiring in accordance with the power handling of the speakers fitted to you vehicle, when installing connect as per the instructions given on page 11 - 12.

Installation Notes (Applicable to both 2 and 4 speaker connection)

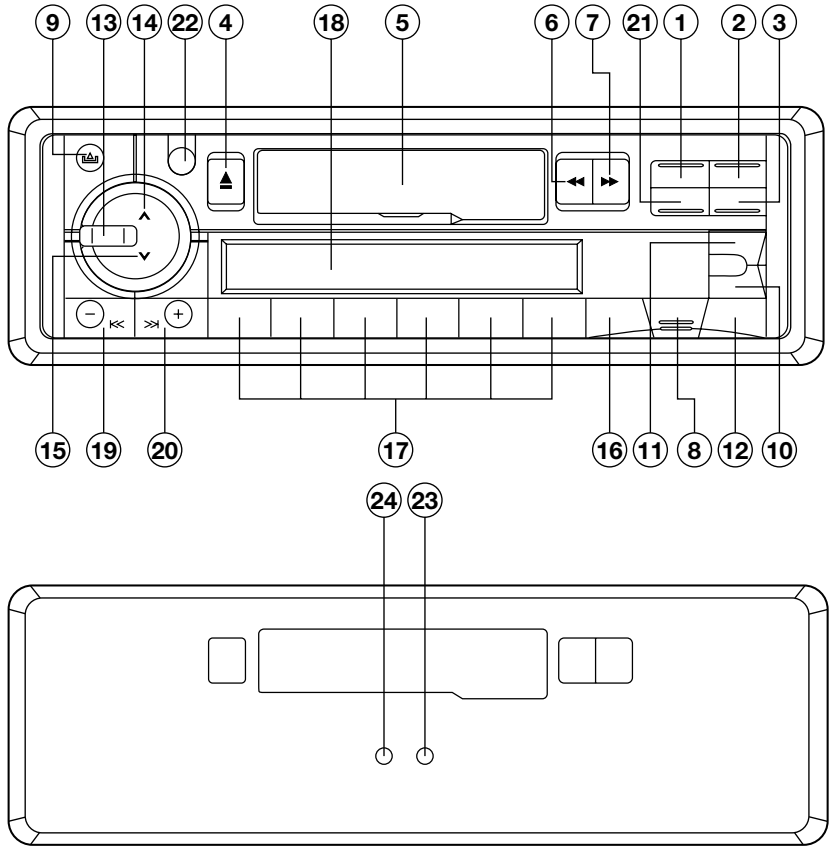
This radio contains two separate power amplifiers, to prevent possible damage to these amplifiers please ensure:

i) The vehicle chassis is not used as a loudspeaker earth (-ve) return.
ii) Front and Rear loudspeaker connection wires are not joined together.
iii) Any wires not used when completing a two speaker installation are fully insulated.
iv) The memory wire (orange) is connected to a permanent +12V supply.
v) The power wire (Red) is connected via the ignition switch of the vehicle.

If bare wires are to be used, insert the 2 x supplied
ISO plugs into the ISO socket of the car radio.
The plugs are handed and will only fit one way.
Connect the bare wires ends in accordance with the instructions given on page 10.



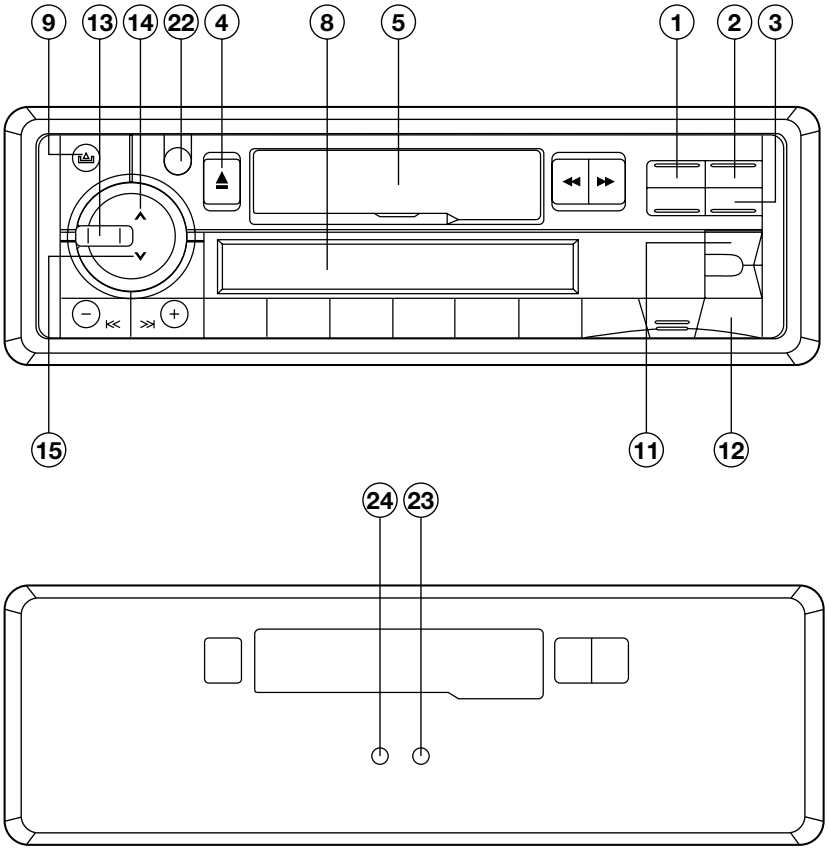
IDENTIFICATION OF CONTROLS AND FUNCTIONS



FUNCTION KEYS

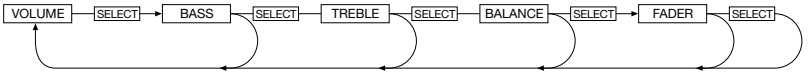
1. Mono/Stereo Button (MONO)
2. Local/Distance Button (LOC)
3. Scan button (SCN)
4. Eject Button (⏏)
5. Cassette Slot
6. Rewind Button (◁◁)
7. Fast Forward Button (▷▷)
8. Mode Button (MOD)
9. Release Button (REL)
10. Mute button (MUT)
11. Display Button (DSP)
12. Power Button (PWR)
13. Select Button (SEL)
14. Volume Up Button (VOL ⩓)
15. Volume Down Button (VOL ⩔)
16. Band/Loudness Button (BAND/LOUD)
17. Preset Buttons
18. Display
19. Tune/Seek Up Button (⏮)
20. Tune/Seek Down Button (⏭)
21. Auto Memory Store/Preset Scan Button (AMS)
22. Equalization Button (EQ)
23. Flashing LED
24. Reset Button (RESET)

CONTROLS



1. **Power button (PWR) (12)**
   Press to turn power to the player ON or OFF.

2. **Select button (SEL) (13) / VOL UP (14) / DOWN (15)**
   The Volume, Bass, Treble, Balance and Fader functions are electronic and are selected for adjustment by this button. The function defaults to the volume setting which can be increased/decreased by pressing the VOL Up (14)/Down button (15).
   To adjust the Bass, Treble, Balance or Fader functions press the SEL button (13) repeatedly unit the desired function shows in the display. Press the VOL Up (15)/Down button (14) to adjust the desired function. The display will show the amount by which the function has been altered.
   If no adjustments have been made within 4 seconds of pressing the SEL button (13), the player will assume the correct setting has been made and will automatically return to normal/Volume setting.



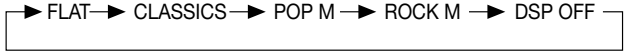
3. LOUDNESS
To increase bass output, press and hold (BND/LOU) (16) button for more than 2 seconds, until the Display shows “LOUD ON”.

4. Faceplate Release
Press REL (9) button. Front panel will pop open. Remove panel and store in protective case.

5. Clock Set
Press the DSP button (15) to show the clock in the display. To set the clock press and hold the DSP button (15) whilst the clock is showing until the clock starts flashing. To adjust the hour repeatedly press the TUNE >>| button (20). To adjust the minutes press the TUNE |<< button (19). Press the DSP button (15) again to set the clock.

6. LCD Display
Displays current radio frequency and activated functions on the display (18).

7. Preset EQ
Repeatedly press the EQ button (22) to cycle through the available preset EQ modes as follows. (Please note if the bass and treble settings are adjusted in the SEL menu the preset EQ mode will automatically be set to DSP OFF).



8. Flashing Led
This LED (23) will flash when the front panel is removed.

9. Reset
RESET button (24) must be pressed with either a ball point pen or thin metal object.
RESET button (24) is to be activated for the following reasons:
- Initial installation of the unit when all wiring is completed.
- Any of the function buttons do not operate.
- Error symbol on the display.

If RESET button (24) is pressed and the unit still is not functioning, please use a cotton swab soaked in isopropyl alcohol to clean the socket on the back of the front panel.

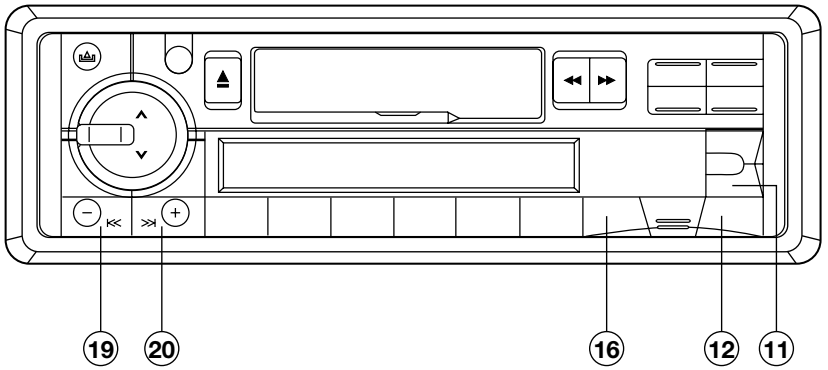
10. Mono/Stereo
If there are large amounts of noise (hiss) when listening to a station in stereo press this button to change to mono, which may improve the reception. To return to stereo reception press the MONO button again.

11. Scan
Press the SCN button (3) to scan through the wave band for available stations.

12. Local/Distance
Press LOC button (2) shortly to select between local and distant stations.
Local setting for reception of strong station, and a distant setting for reception of weaker stations. This setting is used during AUTO SEEK operation.

Radio reception

AUTOMATIC TUNING (SEEK)

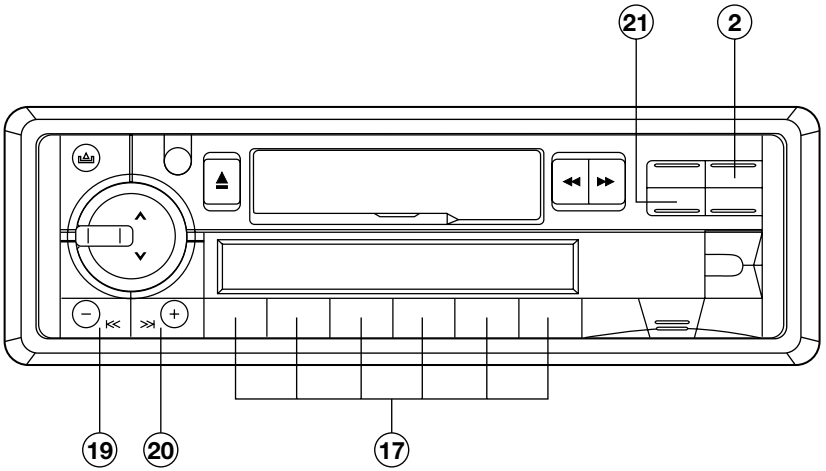


1. Press the PWR button (12) to turn on the unit.
2. Press BND/LOU (FM/MW/LW) (16) to select the desired band, FM1, FM2, FM3, MW or LW
3. Briefly press TUNE/SEEK UP (⋘) (19) or TUNE/SEEK DOWN (⋙) (20)
   The unit will automatically seek a station up or down the waveband and stop when a station is found. (please note in noisy reception areas the auto tuning may stop frequently and not at actual stations).

MANUAL TUNING

1. Press the PWR button (12) to turn on the unit.
2. Press BND/LOU (16) to select the desired band, FM1, FM2, FM3, MW or LW.
3. Use Tune/Seek Up (⋘) (19) or Tune/Seek Down (⋙) (20) for more than 2 seconds until “Manual” is shown in the display. Repeatedly press Tune/Seek Up (⋘) (19) or Down button (⋙) (20) to tune to your desired station.

MEMORY PRESET TUNING



AMS Function (Auto Memory Store)

The AMS function is used to automatically store the 6 strongest available station to the band chosen. To use this please use the following instructions:

1 Select FM1, FM2, FM3.
2 Press and hold the AMS button (21) for more than 2 seconds.
3 The 6 strongest available stations will be stored automatically. These can then be accessed using the memory preset buttons 1-6 (17).

Notes:

a. The complete band will be scanned and as each strongest station is received it will automatically be placed in the preset 1-6 memory locations.
b. Any stations that were entered into the memory before the AMS operation commenced will be erased or repositioned after AMS operation has been completed.
c. If there is less than 6 different stations in your area then the AMS will not memorize any stations into the remaining preset memory locations.
d. The AMS function will not operate on the MW or LW bands.

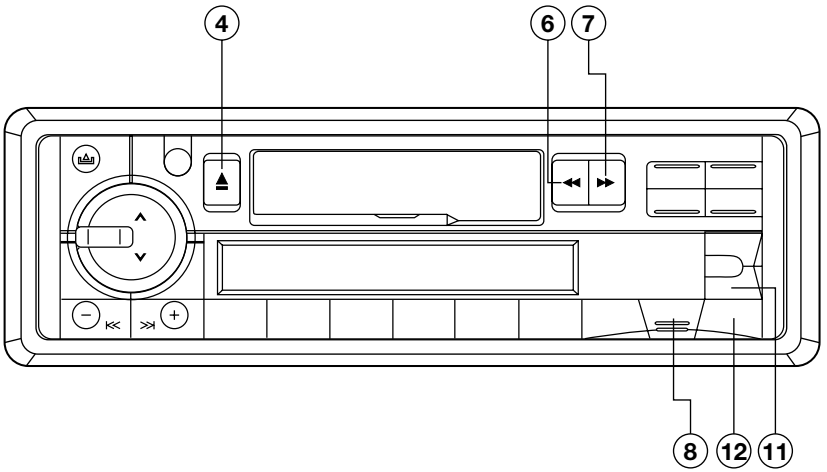
Manual Preset Memory

1. Press BND/LOU button (16) to select band required FM1, FM2, FM3, MW or LW.
2. Tune to the desired radio station, using the tuning instructions given on page 15.
3. Press and hold the desired preset memory button 1-6 (17) until the number is displayed next to the station name or frequency display.

To Hear a Preset Station

Select desired band and press the appropriate preset button 1-6 (17) into which the station has previously been stored.

USING THE TAPE DECK



1. Press the PWR button (12) to turn on the unit.
2. Insert a prerecorded cassette tape into the tape aperture with the exposed tape facing to the right. Tape playback will start automatically.
3. To advance or rewind the tape push either (◄◄) (►►) TAPE FUNCTION keys (6) (7) until they lock, to release gently press the opposite key. To change the tape play direction press both TAPE FUNCTION keys simultaneously. The display will show the direction of play.

   Note: When the tape reaches the end during playback it automatically switches direction and continues to play the other side of the cassette.
4. Adjust the volume, bass, treble to the desired levels.
5. To end tape play press the MOD button (8) radio operation will now commence. Press the EJECT button (4) to remove the tape.

AERIALS AND AERIAL FITTING

The normal standard telescopic aerial is designed to be used fully extended. If any segments are damaged or missing this will result in a deterioration of the radio reception. If is important to keep the aerial clean which will prevent corrosion and subsequent high resistance occurring within the segments which will lead to noisy or poor reception.

NOTE: Special aerial cleaning fluid is available from most garages and car radio specialists.

The wiring harness is supplied with a wire for use with an electrically powered aerial. Each time the radio cassette player is turned on +12 Volts appears on this wire. This wire must only be connected to the +12 Volt input terminal of the relay supplied with an electric aerial (refer to the instructions supplied with the aerial). When the aerial has been fitted correctly it will automatically extend when the power control of the radio cassette player is turned on, and will retract when turned off. This type of aerial is excellent against vandalism if you are prone to forgetting to retract your manual type aerial.

When fitting an aerial always try to sight the aerial as far away from the engine electrics as possible, this will ensure that any ignition interference is kept to a minimum. Always make sure that the aerial is secured to a paint/underseal/rust free surface.

RADIO RECEPTION

FM BAND: FM (Frequency Modulated) transmissions are far superior in sound quality than AM transmissions (MW, LW), but it is important to realise that the FM signal is strictly line of sight reception. The signal from an FM transmitter may be received under normal weather conditions and flat terrain up to 30 miles away (the horizon).

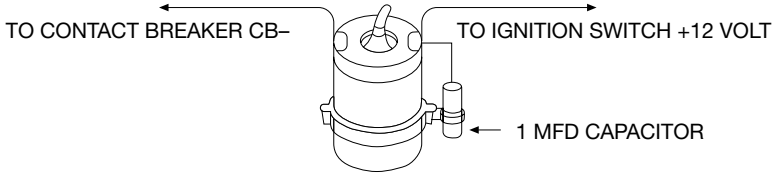
The signal can be affected by many factors such as car ignition, tall buildings, metal objects such as cranes or gasometers, hills, trees, wet weather, hot weather etc. In general, an increasing amount of noise and interference will be picked up by the radio the further away it is from the transmitter. When driving through built up areas or along a motorway, the FM reception may be patchy, this is due to the signal being momentarily blocked or reduced by an object and then reappearing when the object has been passed, this is heard as a shushing noise and is unfortunately unavoidable.

AM BAND: AM (amplitude modulated) in addition to the FM band, the receiver is capable of receiving Medium Wave (MW) and Long Wave (LW) bands. These signals may be received over very long distances because the transmitting signal will bend around the curvature of the earth. These transmissions are affected by similar factors to the FM band, but in addition to this the reception will alter as night falls. The ionised layer in the upper atmosphere changes at night and allows more distant signals to be reflected back down to the earth. Subsequently more stations will appear on the waveband and this may cause tuning difficulties or co-channel interference (where 2 or more stations occupy the same frequency on the waveband). If the interference is severe, retuning to an alternate frequency (BBC often use more than 1 frequency) or selecting and tuning into a different waveband may be necessary.

RADIO INTERFERENCE

In the event that your player suffers from interference from your vehicles ignition or charging system, please read carefully the guidance given below. It should be noted that in the majority of cases, interference is mostly caused by a missing or defective device or the ignition HT leads are worn or are of poor quality.

SUPPRESSING THE IGNITION COIL



The ignition circuit consists of the coil, distributor, spark plug leads, and spark plugs, all of these components pass very high voltage and unless they are screened or suppressed will cause electrical interference to the radio. This can occur in any of the following ways:

a. Travel along the +12 Volt supply cable to the radio or
b. As a radio frequency which is received by the car aerial and processed as a signal or
c. By both points a and b shown above.

Before replacing or adding any suppression devices or filters, check carefully that the car aerial and screened lead are not damaged and that the radio cassette player is properly earthed and tuned to the correct frequency. As radio interference can be caused by many factors, locating the exact cause of the problem can often be very difficult, and trouble shooting is usually best left to a professional car radio installer, or to the main agent of your vehicle.

If you decide to try and cure the problem yourself, the large array of suppression kits/devices currently available from high street motor factors or your vehicles main agent may be confusing you. Each type of device is designed to filter out electrical interference at specific frequencies it is unfortunately trial and error, if one device works and another does not, therefore you may have to try several different types of filters before you have any success. Instructions on fitting the filters etc. are usually supplied with the kits.

Another source of interference is the alternator or dynamo, this can cause a whining noise relative to the engine speed. The alternator/dynamo should be fitted with a 2.2 MFD capacitor which should be connected between the +B lead (usually the thickest lead) and the car chassis or body of the alternator.

TROUBLE SHOOTING GUIDE

Poor sound quality from tape	• Poor recording, try another tape • Poor quality tape, try another tape. • Dirty playback head, run a good quality tape cleaner through the player. • Worn or damaged head, refer to dealer for service
Interference on radio	• Poor atmospheric conditions. Try again later in the day. • Vehicle suppression devices worn, missing or faulty. • Aerial/lead broken or damaged. • SWITCH OFF the AF mode.
Distorted audio	• Check loudspeaker wiring. This product contains a biamp, it is vitally important not to connect the front loudspeaker earth return wire to the rear speaker earth return wire. • Do not use the vehicles fader control as this will not be compatible with this player. • Faulty loudspeaker. • Distortion at high volume levels may be normal as the amplifier has reached maximum power output. However if extension wires have been used to connect to the vehicle battery these may be too thin/poor quality or be poorly connected. Use cables of 15 Amp or more. • Reduce the bass effect or switch off the loudness mode. • Vehicle battery and or charging circuit may be faulty.

SPECIFICATIONS

LW SECTION

Frequency Range	:	144 - 288 KHz
Intermediate Frequency	:	450 KHz
Usable Sensitivity (20 dB S/N)	:	38 dB

MW SECTION

Frequency Range	:	522 - 1620 KHz
Intermediate Frequency	:	450 KHz
Usable Sensitivity (20 dB S/N)	:	32 dB

FM SECTION

Frequency Range	:	87.5 - 108 MHz
Intermediate Frequency	:	10.7 MHz
Usable Sensitivity (30 dB S/N)	:	5 μV
Image Rejection	:	> 45 dB
Stereo Separation	:	> 25 dB

TAPE SECTION

Tape Speed	:	4.76 cm/sec.
Fast Forward Time	:	180 seconds (C-60 type)
Wow & Flutter	:	< 0.35 % WRMS
Cross Talk	:	> 40 dB
Channel Separation	:	> 35 dB
Frequency Response	:	50 to 10,000 Hz
Tone Controls		
- Bass (at 100 Hz)	:	± 10 dB
- Treble (at 10 KHz)	:	± 10 dB

GENERAL

Power Supply Voltage	:	12 volts DC
Polarity	:	Negative ground only
Maximum Output Power	:	4 x 20 Watts RMS (4 x 40 Watts Music)
Load Impedance	:	15 ampere (max.)
Dimensions Chassis	:	178 (W) x 50 (H) x 165 (D) mm 7 (W) x 2 (H) x 6.5 (D) inch