



## *In-Car Entertainment*

---

*Geluidsinstallatie in  
voertuig*

*Equipement de sonorisation  
automobile*

*Stereoanlage*

*Antenna dell'autoradio*





---

This booklet contains information for tuning and operating the compact disc and radio, digital audio system.

---

## In-Car Entertainment

---

### Contents

<b>CD and RADIO DIGITAL AUDIO</b>		<b>ADDITIONAL INFORMATION</b>	
Sound controls .....	2	Radio reception .....	19
Operating modes .....	4	Care of CD player and discs .....	20
Radio controls .....	6	Security code .....	22
Compact disc player controls .....	8		
Radio tuning - Automatic .....	12		
Auto-store .....	12		
Radio tuning - Manual .....	13		
Radio pre-set buttons .....	14		
Radio data system .....	15		
Traffic information .....	17		

---



As part of Rover Car's environmental policy, this publication is printed on paper made from chlorine free pulp.

# CD and Radio Digital Audio



ICE0119A

## SOUND CONTROLS

### 1. On/off and volume control

Press to switch on and off (display illuminates when on), and rotate to adjust the volume.

### 2. Tone Control - bass, treble, fader and balance control



**Bass:** Press the tone control button once (centre button), then press or hold down the '+' button to increase the bass response or the '-' button to decrease the bass response. The display shown below is for bass at a midpoint setting (similar displays will be evident for all other tone control settings).



**Treble:** Press the tone control twice (centre button), then press the '+' button to increase the treble response or the '-' button to decrease the treble response.

**Fader:** Press the tone control three times (centre button), then press the '+' or '-' button to adjust the balance between front and rear speakers.

**Balance:** Press the tone control four times (centre button), then press the '+' or '-' button to adjust the balance between left and right speakers.

# CD and Radio Digital Audio

---

**Speed volume:** Pressing the tone control five times (centre button) will invoke a speed volume display, adjustment of this setting will not have any effect to the tone control or unit performance.

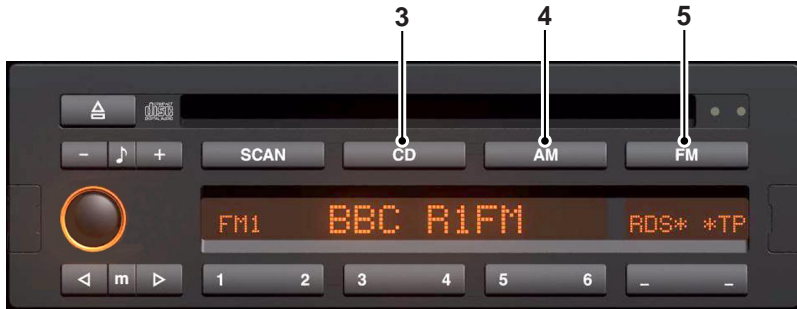
*NOTE: Each tone control setting will be memorised and normal operation will be resumed if no further adjustments to tone control are received within a five second period. Reselection of the centre tone control button within the five second period will invoke the next tone control display and enable adjustment of that function.*

**Tone linear:** Pressing the centre tone control button for longer than 2 seconds will automatically set all tone control settings to their midpoint levels. The display will show:



The 'Tone linear' display will time out after five seconds.

# CD and Radio Digital Audio



ICE0123A

## OPERATING MODES

### 3. CD mode selector

Press to change over to CD from radio operation.

If CD play was active the last time the radio was switched off and there is still a CD in the CD compartment, the CD will automatically be selected for play the next time the radio is switched on. If a disc is inserted in the unit 'CD' will be shown at the far right of the display screen irrespective of whether CD or Radio mode is currently selected.

*NOTE: A CD has to be correctly inserted into the CD slot for CD operation to take place. Trying to select CD when there is no disc in place will result in 'NO DISC' being shown on the display screen.*

### 4. AM waveband mode selector

Press to select medium wave (MW) or long wave (LW) frequencies. Pressing the AM selector button while already in AM mode will switch between MW and LW or vice versa.

'MW' or 'LW' will be shown in the display screen dependent on the frequency range currently selected.

If AM was selected the last time the radio was switched off, it will be automatically re-selected the next time the radio is switched on.

Up to 6 station frequencies can be memorised for both MW and LW (see 'Radio tuning').

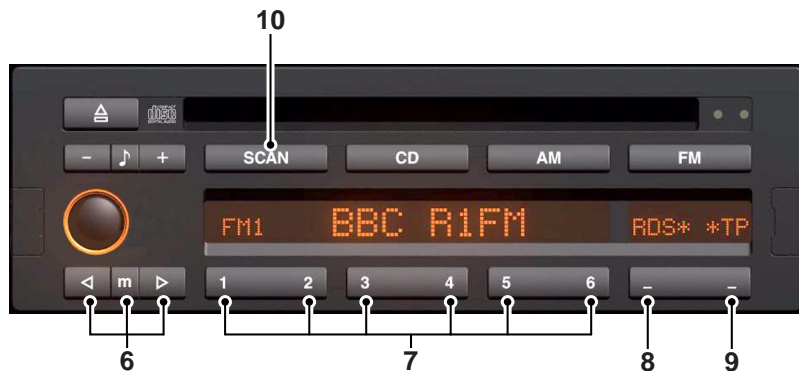
## **5. FM waveband mode selector**

Press to select FM frequencies (FM1, FM2 and FMA). Each time the FM selector button is pressed, the radio switches between the FM1, FM2 and FMA ranges. Up to 18 FM station frequencies can be memorised, six each for FM1, FM2 and FMA (see 'Radio tuning').

'**FM1**' '**FM2**' or '**FMA**' will be shown in the left corner of the display screen dependent on the frequency range currently selected.

If FM was selected the last time the radio was switched off, it will be automatically re-selected on the same frequency range and station the next time the radio is switched on.

# CD and Radio Digital Audio



ICE0124A

## RADIO CONTROLS

### 6. Tuning buttons



Press either the left or right button for automatic search tuning (up or down the frequency range). Press the centre 'm' button to convert to manual tuning, then use the left and right search keys to change the frequency up or down by a predetermined amount.

### 7. Radio pre-set buttons (1 - 6)

Used to store and select up to 18 radio stations on FM and six each on MW and LW. (See 'Radio tuning').

### 8. Radio Data System (RDS) button

Press the left hand side of the switch to turn the RDS function on or off. If a station transmitting RDS information is received, the display shows the station name after the RDS signals have been evaluated. When RDS is switched on an asterisk is displayed after the RDS legend in the display screen. (see 'RDS' information).

*NOTE: This feature is only available when FM wavebands are selected.*

## 9. Traffic programme (TP) button

Press the right hand side of the switch to turn the TP function on or off. When TP is switched on an asterisk is displayed before the TP legend in the display screen (see 'Traffic programme' information).

*NOTE: This feature is only available when FM wavebands or CD play is selected.*

## 10. SCAN button

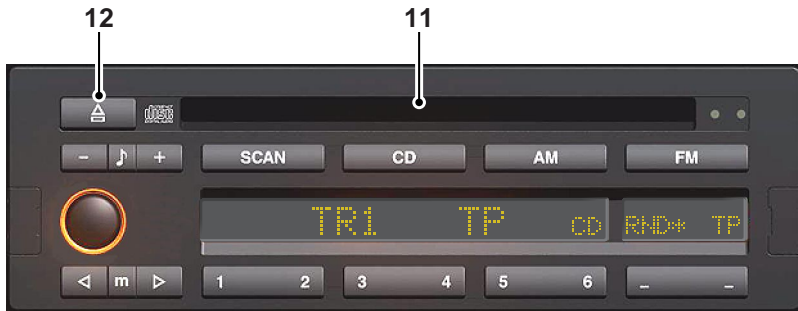
Press to switch the SCAN search on or off.

The SCAN search allows you to briefly play all receivable stations in the waveband currently selected. Each station signal is held for approximately 8 seconds before the frequency is automatically tuned up to the next receivable frequency. To continue listening to a particular station which the scan search detects, press the scan button again within the eight seconds.

When the scan search is complete, radio play will resume at the station where scan was selected.



# CD and Radio Digital Audio



ICE0125A

## COMPACT DISC PLAYER CONTROLS

### 11. CD compartment

Push the CD into the CD compartment with the label side uppermost. If the radio is already switched on the CD will start to play and 'CD' mode will be indicated on the display screen. The display also shows the track number that is currently playing (e.g. 'TR 1').

*NOTE: If a CD is damaged or has been inserted in the CD compartment upside down, 'CD ERROR' will be indicated on the display screen.*

If the radio is not switched on and there is no CD currently loaded in the CD compartment, inserting a CD into the CD compartment will cause it to be loaded, but play will not commence until the unit is switched on.

*NOTE: If the starter switch is in the off position, the CD will not load.*

If a CD is already loaded but radio mode is operational, pressing the 'CD' button (3) will switch to CD play.

*NOTE: If there is no CD loaded, 'NO DISC' will be indicated on the display screen.*

# CD and Radio Digital Audio

---

If the player is switched off while a CD is playing, switching the player back on will cause the CD to resume playing at the last track and position that was selected when the player was switched off.

If the player is switched to radio mode while a CD is playing, pressing the 'CD' button (3) will cause the CD to resume playing at the last track and position that was selected when radio mode was selected.

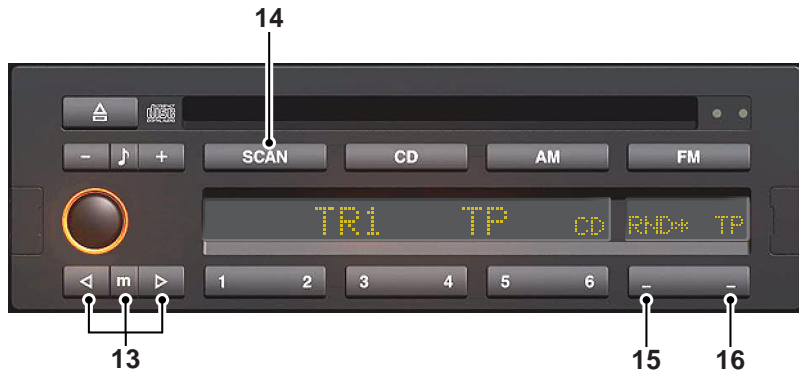
At the end of each disc, playback automatically continues with the first track of the disc.

## **12. CD eject button**

Push the button fully in to eject the CD halfway out of the CD compartment. Remove the CD.

*NOTE: If the CD is not removed from the compartment within 6 seconds of the CD being ejected, the player will automatically reload the CD.*

# CD and Radio Digital Audio



ICE0126A

## 13. Track selection and fast forward/reverse buttons



Briefly press the 'up' or 'down' button to either advance to the next track, or return to the start of the current track.

Press either button repeatedly to move forward or back through several tracks at a time.

To fast forward or reverse through a track that is currently playing, press the central 'm' button (manual), then press the up or down button to fast forward or reverse through the track.

## 14. Scan mode button (SCAN)

Press the 'SCAN' button, the first 10 seconds of each track of the CD is played. The display shows the number of the track presently being scanned (e.g. 'TR 1'). Stop the scan mode by pressing the scan button once more to continue play at that track. At the end of the CD, scan will return to track 1 and continue scanning until a track is selected.

# CD and Radio Digital Audio

---

## 15. Random play button (RND)

Press the RND button, each track is played in random order. The display shows the number of the track being played (e.g. 'TR 1'). Random selection continues until the function is switched off by pressing the RND button a second time.



With RND operational, the track selection buttons can still be operated. To advance to the next track press the right button, to return to the start of the current track or go to a previous track use the left button.



## 16. Traffic programme (TP) button

Press the right hand side of the switch to turn the TP function on or off. When TP is on, an asterisk is shown before the TP legend in the display (see 'Traffic programme' information). When a traffic programme is detected, CD play will be suspended for the duration of the traffic announcement. At the end of the broadcast CD play will be resumed.

# CD and Radio Digital Audio

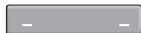
## RADIO TUNING - AUTOMATIC

Select the required waveband (FM1, FM2, FMA, MW or LW - See 'OPERATING MODES').



Press either the left or right tuning button (6). The radio automatically searches through the frequency range (either up or down depending on which button is pressed) looking for stations of acceptable strength. The search then stops unless you elect to continue by pressing the tuning button again.

When a station is detected, the frequency of the current station selected is shown on the display unless RDS is selected while tuning one of the FM wavebands, in which case the name of the RDS station will be displayed during reception.



To turn on RDS press the left side of the switch below the RDS display. When RDS is turned on, an asterisk will appear next to RDS in the display.

## AUTO-STORE

Auto-store enables rapid tuning and storage of the six strongest FM radio signals in a single operation. This facility is useful if you are in an unfamiliar area and have little knowledge of local transmitter frequencies.

## Programming auto-store

Press and hold the FM selection button (5 - see 'OPERATING MODES'). The radio automatically switches to the FMA memory range, the sound mutes and the display shows 'AUTOSTORE':



Auto-store scans the waveband to find the six strongest frequencies and then stores them on the FMA waveband's pre-set buttons (7) in order of signal strength. Each time a station is stored the display shows the frequency and relevant pre-set number.



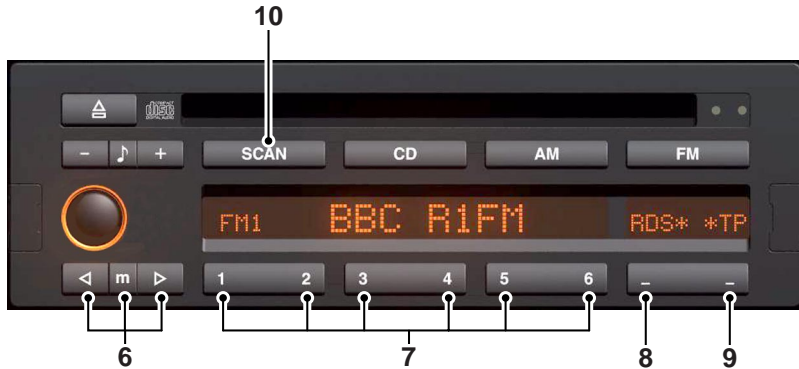
When the auto-store operation is complete, all 'auto-store' frequencies remain stored on the pre-sets until the process is repeated.

*NOTE: Auto-store overwrites any stations already stored on the FMA pre-set buttons.*

## Operating auto-store

To tune to one of the auto-store frequencies, select 'FMA', then press the pre-set button (7) of your choice. The frequency or radio station name and pre-set number appears in the display, depending on whether RDS is active.

# CD and Radio Digital Audio



ICE0124A

## RADIO TUNING - MANUAL

Use manual tuning when you know the frequency of the radio station, or for selecting stations that are too weak to be found by automatic tuning.

Select the required waveband (FM1, FM2, FMA, MW or LW - See 'OPERATING MODES').



To select manual tuning, press the central 'm' tuning button (6); 'MAN' is shown in the display window. Then, briefly press either the left or right tuning button (6), the frequency changes (up or down) in steps of 0.1 MHz for FM, 9 kHz for MW and 1 kHz for LW.

## Fast manual tuning

Select manual tuning by pressing the central 'm' tuning button (6); 'MAN' will be shown in the display. Then, keeping either the left or right tuning button (6) depressed, the waveband is scanned rapidly (up or down) until the button is released.

Automatic tuning returns if:

- The tuning buttons are not used for approximately 8 seconds.
- The radio is switched off and on again.
- One of the waveband selector or pre-set buttons is pressed.

# CD and Radio Digital Audio

---

## RADIO PRE-SET BUTTONS

The six pre-set buttons (7) can be used to manually store up to eighteen FM stations (six each on FM1, FM2 and FMA) and six each on MW and LW. The pre-sets are programmed as follows:

### Programming the pre-sets

- Select the required waveband (FM1, FM2, FMA, MW or LW).
- Tune to the desired frequency using either automatic or manual tuning and wait until the desired frequency or the station name (FM waveband with RDS active only) appears in the display.
- Press and hold one of the pre-set buttons until the station is heard again after a brief interruption (approximately 2 seconds). The frequency is now stored at that preset button on that waveband. The display shows the pre-set number, together with the waveband and frequency of the station you have tuned (or the name of the station if tuning an FM station with RDS active).

## Operation of the pre-sets

Once the pre-set buttons have been programmed, select the desired waveband and then press the pre-set button of your choice.

*NOTE: Once the pre-sets have been programmed, they will be retained by the unit until they are re-programmed - even if the battery is disconnected.*



FM1 1 BBC R1 T

# CD and Radio Digital Audio

---

## RADIO DATA SYSTEM (RDS)

Your radio is equipped with RDS (Radio Data System). RDS operates on the FM waveband only. The system enables the radio to receive the programme service name (the set display shows the radio station name instead of the frequency).

To turn on RDS, press the left side of the switch below the RDS display.



### Receiving RDS stations

The radio is in RDS mode whenever the FM waveband is selected with RDS active. If a station transmitting RDS information is received, the display shows the station name, after the RDS signals have been evaluated. When RDS is on, an asterisk is shown after the RDS legend in the display screen.

The set constantly scans all alternative frequencies on which that station can be received, and automatically switches to the strongest signal it can find. This is useful on long journeys when the vehicle may travel through several different transmitter areas which serve the same radio station.

The RDS data can only be picked up if reception conditions are good. If reception is poor or if there is considerable interference, it may take some time for the station name to appear in the display.

If the display shows 'SEARCH', this indicates that the vehicle is outside the reception area for that station. The set searches for the last tuned station, or frequency.



# CD and Radio Digital Audio

---

## Local radio stations

Reception of most local radio stations is intentionally limited to a comparatively small area around the transmitter.

If the radio locates a regional programme and you would like to remain tuned to it (limiting the RDS function), hold the left button below the RDS display for longer than two seconds.



RDS\* TP



'REG ON' is shown in the main display for approximately 2 seconds:



FMA REG ON CD

Once the limit of the reception range is reached, it is unlikely that the RDS facility on your radio will be able to locate an alternative frequency for the local radio station being received.

If the signal is weak, but no alternative frequencies are available or you would like to return the full RDS function, hold the left button below the RDS display for longer than two seconds.

'REG OFF' is shown in the main display for approximately 2 seconds:



FMA REG OFF CD

*NOTE: If the regional function is deactivated, 'REG OFF' appears briefly in the display each time the radio is switched on.*

# CD and Radio Digital Audio

---

## TRAFFIC INFORMATION

On the FM waveband, the radio is able to identify stations that broadcast traffic information on the RDS network.

The 'TP' (traffic programme) indicator illuminates in the display when the radio is tuned to an FM station that broadcasts traffic information and the function is switched on.



A 'T' indicator illuminates in the main display when the traffic programme is not switched on, but the selected transmitter does broadcast traffic reports.



Four short beeps are sounded if you leave the reception range for the currently selected station. A search then automatically takes place to find an alternative station with traffic reports. The display flashes 'SEARCH' while the radio tunes to another 'TP' station.



When a station is selected that does not transmit traffic reports while 'TP' is active, four short beeps are sounded, the radio mutes and a search to find a station transmitting traffic reports is automatically conducted. The station which does not transmit traffic reports can be re-selected by turning off the 'TP' function and re-selecting the pre-set button.

A warning signal is issued if no suitable RDS transmitter has been found.

### Selecting traffic programme

Select the FM waveband and press the right hand side of the switch beneath the traffic programme (TP) display to turn the function on. When TP is on, an asterisk is displayed before the TP legend in the display.

If the radio is already tuned to a station that broadcasts traffic information, the 'TP' indicator in the main display also illuminates. Traffic information automatically broadcasts as and when it occurs (provided you are listening to compact discs or the FM wavebands!).

If the radio is NOT already tuned to a station that broadcasts traffic information, the radio issues four short beeps, then mutes and searches for a station that does. The display will flash 'SEARCH' during the re-tuning process.

*NOTE: When the traffic programme mode is active, automatic tuning only searches for radio stations that broadcast traffic information.*

# CD and Radio Digital Audio

---

In remote areas, it may be impossible to locate a 'TP' station. However, the radio continues searching for one (interrupted by warning beeps). If this occurs, you are advised to switch off the 'TP' mode.

When 'traffic programme' is on (TP indicator illuminated, preceded by an asterisk), occasional and very brief muting may occur, while the radio searches for traffic information broadcasts. For this reason, it is recommended that the traffic programme mode is switched off when not required. It is also recommended that the traffic programme mode is switched off when storing stations on the pre-sets or operating auto-store.

## TP selection

When the TP function is active, traffic programmes are automatically selected in the following order:

- *If a programme broadcasting traffic reports is received, its traffic reports are used.*
- *If the programme you are tuned to does not broadcast traffic reports but other stations on the FM waveband you are tuned to does, their traffic reports are used.*

## Switching off traffic programme

To switch off the traffic programme mode, press the right hand side of the switch beneath the traffic programme (TP) display to turn the function off. When TP is switched off, the TP legend in the display is NOT preceded by an asterisk.



## Adjusting the volume of traffic reports

Turn the volume knob (1) during traffic reports until the desired volume is obtained. This volume stays the same for radio traffic reports during radio and CD operation.

## Traffic information during CD play

When the radio is in the traffic programme mode CD play is interrupted by traffic information broadcasts as and when they occur. 'TP' is indicated on the main display after the CD track number:



During traffic announcements, the display still indicates the CD track number.

CD play is resumed at the end of the traffic report.

# Radio Reception

**Distortion, interference and lack of signal clarity, are often attributed to a fault in the radio - this is rarely the case!**

Problems of this kind are usually caused by phenomena such as atmospheric conditions, signal strength, hilly terrain, tall buildings, bridges and even electrical interference from power lines.

**Please remember:** A car radio receives signals while the vehicle is in motion (unlike a domestic set!) - constantly changing direction and moving away from, or nearer to the transmitter whilst negotiating terrain with widely differing reception characteristics. Some interference is to be expected!

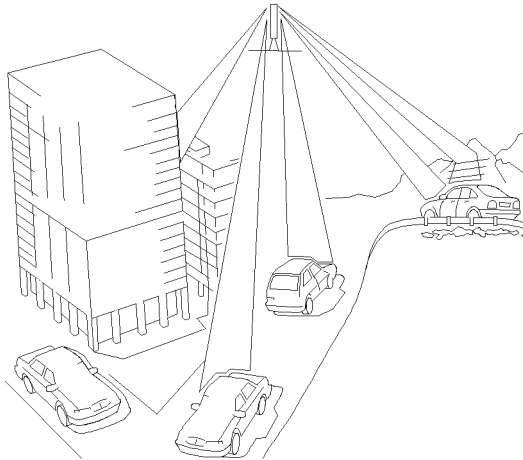
FM transmitters can only broadcast over a limited range and good, clear signals will only be received in the immediate area of the transmitter. When travelling, it may be necessary to re-tune the radio from time to time, to offset the effects of moving from one transmitter area to

another. While the RDS capability of automatic retuning to the strongest FM signal eases this problem, some manual retuning may still be needed (especially for local stations) in areas of weak reception.

The broadcast range for good stereo reception (usually within a 50 to 65 km radius of the transmitter) is noticeably less than it is for mono.

FM Signals (like light waves) travel in a straight line, so large obstacles, such as tall buildings, can shield the car from the signal causing distortion or loss of reception (known as dead spots).

Distortion can also occur if FM signals received directly from the transmitter mix with signals which have been reflected by obstructions such as mountains, hills and tall buildings (this is known as multi-path distortion).



ICE0052

# Care of CD Player & Discs

---

## Operating temperatures

Operate the CD player only at temperatures between 0° C (32° F) and +60° C (140° F), otherwise they may malfunction.

Even when switched off, the unit should not be exposed to temperatures beyond -25° C (77° F) and +85° C (185° F).

If the CD player detects that the operating temperature is too high, play will be suspended and a 'HIGH TEMP' warning message will be displayed. When the temperature drops to normal levels, replay will continue automatically.

## Atmospheric humidity

A high level of humidity inside the device may cause the laser beam focusing lens to fog over and prevent the CD from being played.

## CD usage

IMPORTANT

- Use standard 12cm CDs only.
- DO NOT use irregularly shaped or damaged CDs - these may damage the compact disc changer.
- 8cm CD singles must NOT be used, even if a CD adaptor is fitted.

## CD player operation and warning displays:

- 'CD' is displayed when there is a CD in the internal CD drive.
- 'NO DISC' is displayed if CD operation is selected when there is no CD currently in the CD drive.
- 'CD ERROR' is displayed if an error has occurred during scanning of the CD. This could occur if the CD is damaged or has been inserted in the CD drive upside down.

## Precautions when using laser equipment

### WARNING!

*Do not remove the cover from the CD player housing. Never use the CD player if the cover is damaged, this could expose the user to radiation from the invisible laser beam, which could cause serious eye injuries.*

Repairs or maintenance of the CD player must only be carried out by qualified service engineers.

# Care of CD Player & Discs

---

## CARING FOR COMPACT DISCS

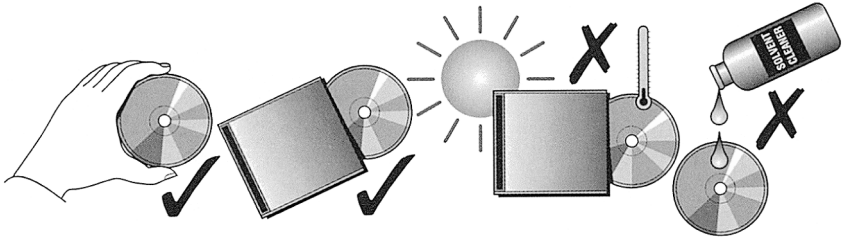
Dirt, dust, condensation and heat can damage discs. Always observe the following precautions:

**NEVER** touch the horizontal playing surface (the unlabelled side) of a disc. Handle discs by holding the outer edges, or the edge of the central hole and the outer edge, between finger and thumb.

**ALWAYS** return discs to their boxes after use (dirt detracts from the sound quality).

**NEVER** leave the disc or the box exposed to excessive heat or direct sunlight!

**NEVER** use a solvent or abrasive cleaner! Dust or dirt should be removed from the playing surface by wiping with a clean, dry, lint-free cloth. Always wipe in a straight line from the centre to the edge of the disc!



ICE 0022

# Security Code

---

## SECURITY CODE INFORMATION

To reduce the risk of theft, this radio/CD player is programmed with a four digit security code. Once activated, this code prevents the unit from functioning if it is removed from the vehicle.

When the vehicle ignition is switched off, an LED in the radio flashes to indicate that theft protection is enabled.

The unit is also protected by a time delay penalty system to prevent the correct security code from being found by trial and error; after the third incorrect input attempt, the code input procedure is disabled for one hour.

*NOTE: Do not switch off the radio during this waiting time. The display will show 'CODE WAIT'.*



FMA CODE WAIT

On delivery of the vehicle you were supplied with a Security Information card. This card contains a record of the four digit security code, the model number and the unit's unique serial number. The serial number is also shown on the unit and, in the event of theft, would confirm proof of ownership.

It is VERY IMPORTANT that you keep a safe record of the security code and heed the following advice:

- *NEVER keep a record of the security code in the vehicle.*
- *If you lose your code number, contact the nearest dealer, who will be able to obtain this information for you.*

# Security Code

---

## ENTERING THE SECURITY CODE

If the code has not been entered, or power to the set has been interrupted, the code MUST be entered before the set will operate. Enter the code as follows:



- Switch on the radio ('CODE \_\_\_ \_' appears in the display). Press pre-set button 1 several times until the first digit of the code appears in the display.
- Press pre-set button 2 several times until the second digit of the code appears in the display.
- Press pre-set button 3 several times until the third digit of the code appears in the display.
- Press pre-set button 4 several times until the fourth digit of the code appears in the display. The display now shows the full four digit code.
- To confirm the security code press and hold the right tuning button for a brief period.



If the correct code has been selected, the radio will operate.

If an incorrect code is entered three consecutive times, the first time delay period of one hour commences. During the delay period, 'CODE WAIT' appears in the display - DO NOT switch off. At the end of the delay period, 'CODE \_\_\_ \_' reappears in the display and the correct code can be entered.

If power supply to the radio is interrupted (e.g. if the battery is disconnected), the code number will have to be re-entered.