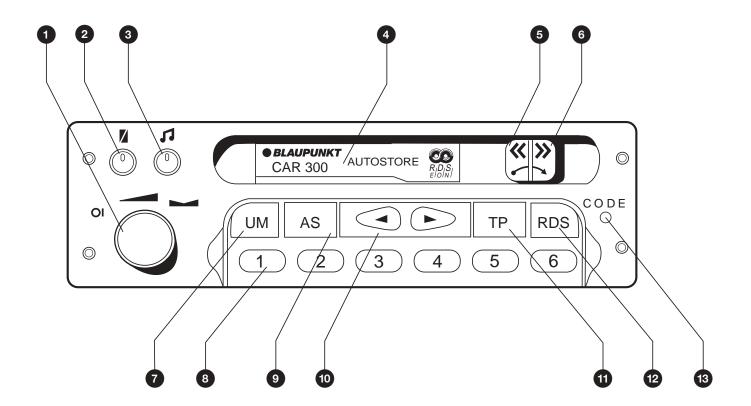
Radio CAR 300





Control elements

No. Symbol Meaning

1 O To switch on and off

✓ Volume control: Turn

Balance left/right: Pull and turn

2 Fader control (front/rear balance): Turn

Tone control (bass/treble):
Turn

4 Cassette loading slot

5 << Fast rewind

Fast forward

7 UM Waveband switching

8 [1]-[6] Preset buttons

AS Automatic seek tuning and storing

Seek tuning up

11 TP Traffic programme

2 RDS Radio Data System

13 CODE LED

Display system

The in-vehicle display (see owner's manual of your car) is also used for the external indication of the radio information.

In principle, the car can be fitted with one of two different display types:

8-digit display



10-digit display



The examples described in this user manual are based on the 8-digit display.

The information shown in the 10-digit display mainly corresponds to that of the 8-digit version with the exception of the waveband and the preset numbers of some radio functions.

Theft protection

Security coding

This car radio is equipped with a passive security system. A coded unit is useless to a thief. This is why you should code your unit (see page 22). The code number can be found in the Car Pass or Radio Pass. Do not keep the Car Pass or Radio Pass in the vehicle.

When the unit is switched off and the ignition key removed, the CODE LED (3) flashes to indicate that the set is equipped with security coding.

Switching on / off

Switch the unit on and off by pressing knob 1.

Ignition-on logic

If the set was switched on with knob ①, it will be turned off as soon as the ignition is switched off and the ignition key removed (with some vehicle models directly after ignition "OFF"). The set will then restart playback automatically after the ignition has been switched on again. If desired, you can also deactivate this ignition-on logic.

Deactivating the ignition-on logic:

- Switch on the ignition and turn off the radio.

- Press and hold down preset buttons 1 and 3 8 together.
- Switch on the unit, making sure you are still holding the buttons down until you hear a beep.

The display shows that the ignition-on logic has been deactivated:

IGHI UFF

Now the unit can only be switched on and off with knob 1.

To activate the ignition-on logic:

Proceed as described under "Deactivating the ignition-on logic".

The display will subsequently show that the ignition-on logic is active.

IGHI OH

After interrupting the power to the unit and re-connecting the set, the ignition-on logic will be active.

Ignition-off logic

The unit will automatically shut down one hour after the ignition was switched off.

The ignition-off logic will also remain active if the ignition-on logic has been deactivated.

Volume control

✓ Volume

Turn knob 1.

■ Balance

Volume impression between left and right <-> speakers.

Pull knob 1 and turn.

Fader control

Volume impression between front and rear <-> speakers.

Turn knob 2.

Press knob first to let it pop up.

Tone control

Bass/treble

Turn knob 3.

Press knob first to let it pop up.

Radio tuning

Selecting a station

Waveband selection:

UM button 7

U = Ultra-short wave (FM)

M = Medium wave (MW)

Press the UM button as many times until the desired waveband appears in the display ("U", " U_{AS} ", "M", " M_{AS} ").

On FM, when the radio is receiving a stereo station, signal $^{\bigcirc}$ will light up. The unit will automatically switch to mono if the received signal is not strong enough for stereo playback.

<u>Automatic tuning:</u> (not with RDS stations)

Press seek tuning button **10** ◀ or ▶ (radio will switch to mute).

- ◀ lower frequencies (all stations)
- higher frequencies (only powerful stations)

The system will automatically change the seek tuning sensitivity if no powerful station can be picked up.

Manual tuning:

(not with TP or RDS)

If you know the frequency of the station you wish to listen to, you may select it manually.

Rough tuning:

Hold down the seek tuning button ◀ or ▶ until the frequency of the desired station has almost been reached.

Fine tuning:

Press the seek tuning button ◀ or ▶ as many times until the exact station frequency appears in the display.



Radio Data System

RDS is a service offered by most FM radio stations in Europe, which makes finding and receiving the desired station much more easy.

Therefore, you should always switch on RDS!

RDS stations broadcast an inaudible, digital data telegram alongside their programmes. This signal carries a great deal of information which is decoded by the RDS radio automatically.

If RDS is switched on, the programme station name is displayed instead of the frequency.

Each RDS programme is broadcast on different frequencies. As you travel around, the car radio automatically checks the signal quality of the frequencies to be received and tunes into the best frequency of the RDS station that you are listening to. The programme station name in the display remains unchanged.

Switching on RDS

Use the UM button 7 to switch to FM; then activate RDS by pressing the RDS button 2. The display shows "RDS".



When RDS is switched on, seek tuning will only stop at RDS stations. The radio will automatically tune into the best frequency of the selected programme. While searching for the strongest reception signal, the radio may switch to mute briefly.

RDS seek tuning:

Press the seek tuning button 10 ◀ or ▶.

- Lower frequencies.
- ▶ Higher frequencies.

Switching off RDS

Press the RDS button 22. "RDS" will disappear from the display and the selected frequency will be displayed instead. In this case the radio will no longer automatically

tune in the frequency offering best reception of the programme.

Displaying the frequency of an RDS station

In order to read the broadcasting frequency of an RDS station from the display, press the UM button 7 until the frequency is displayed. The radio will return to the station name after approximately 5 seconds.

Regional programmes

Certain RDS radio programmes are split up at times into regional programmes offering local information. If you are listening to one programme and move to an area where another linked regional programme becomes stronger, the unit will switch to that programme. If you wish to continue listening to the first station, switch on the regional function:

Store the station on a preset button. Then press the preset button for approximately 5 seconds until "REG-ON" appears in the display.

To switch off the function:

Press the corresponding preset button for approximately 5 seconds until the display shows "REG-OFF".

When turning the unit on, the display will briefly show "REG-ON", if activated. "REG-OFF" will not be displayed.

Traffic Programmes

(TP = Traffic Programmes)

TP stations are FM RDS stations offering traffic information. If such a station is tuned in, "TP" will appear in the display.

Switching on TP

The unit will only receive TP stations.

Press the UM button 7 to select FM. Then press the TP button 11, "[TP]" will appear in the display. The display will show "[]" during the seek tuning process or if a TP station cannot be received.

When TP is active, traffic reports will interrupt tape operation.

TP can also be switched on during tape operation. In this case the programme name of the currently selected station will be shown in the display for 5 seconds.

If a station not providing traffic information was tuned in before or selected with a preset button, memory seek tuning will automatically start in order to tune into the strongest traffic programme station.

As long as the selected station remains tuned in, the system will not switch to automatic TP seek tuning even if the reception gets worse.

While TP is active, when pressing the AS button (a) (AS = automatic storing of stations, see page 20) until a beep is

released, the system will switch to a preset position with a traffic station as soon as the storing process has been completed.

If the TP function is switched on, seek tuning will remain active until at least one TP station has been found.

If TP is active or if it is switched on while listening to a tape, the set will automatically start searching for the strongest traffic programme station as soon as the reception area of the tuned in station is left.

Switching off TP

Press the TP button again. "[]" disappears from the display.

While a traffic message is being played, press the TP button twice to switch off the function.

When storing stations on the preset buttons, "TP on" or "TP off" will not be stored as well.

Traffic Announcement volume (TA)

The traffic announcement volume can be separately adjusted in addition to the normal playback volume.

Adjustment:

Press the TP button 11 for more than 3 seconds. The TA volume level will be displayed after the beep (e.g. TP-VOL-3).

TP-VUL-3

Use the seek tuning buttons ◀ or ► to adjust the desired announcement volume from -3 to +3.

Storing the TA volume:

Press the TP button for more than 3 seconds until you hear the beep.

If the button is not pressed within 10 seconds after having activated the TA volume, the set will return to normal operation without altering the setting.

Listening to traffic reports only

If you wish to listen to traffic reports only, switch on TP and turn knob 1 to its leftmost position.

Traffic messages will still be played at the preset volume (see "TA volume").

Interrupting a traffic message

If you wish to interrupt a traffic message (e.g. during tape operation), press the TP button briefly. The TP function will remain active.

RDS-EON

(Enhanced Other Networks)

Certain radio stations do not actually transmit traffic programmes themselves, but by using RDS-EON they offer the possibility to receive the traffic messages broadcast by another traffic programme station in the same radio network. For this purpose the unit evaluates the information of the RDS telegram with regard to alternative traffic programme stations.

With RDS-EON, stations not providing traffic information are treated by the unit like traffic programme stations. They can be recognised by the "EON" or "TP" symbol in the display.

Receiving traffic messages via RDS-EON

Press the TP button. The display shows "[TP]". If a message is received, the set will switch to a traffic programme station of the same RDS-EON network. During the message, the display will show the programme name of the traffic station.

After the message the unit will return to the original programme.

When TP is switched on, the RDS-EON function will also be active during tape operation.

Preset buttons

This car radio holds a total of 24 preset positions available:

6 x U (FM)

6 x M (MW)

6 x UAS (automatically stored FM stations)

6 x MAS (automatically stored MW stations)

Storing stations

Choose the desired waveband and tune in the station. Press and hold one of the preset buttons 3 until the radio resumes play.

During the storing process the display shows the currently memorised station.

Now the station is stored on this preset button. The chosen preset position 1...6 appears in the display.

When storing a station on a preset button, RDS "ON" or RDS "OFF" will be stored as well.

Automatic storing (AS)

Select the desired waveband (MW or FM). Then press the AS button ① until you hear the beep. Seek tuning starts and "AS" appears in the display.

After the seek tuning process the six most powerful stations of the current reception

area will be stored on the six preset buttons of the AS memory bank.

During automatic tuning RDS stations have priority and will be allocated to the first preset positions.

When leaving the reception area of the stored stations, press the AS button again in order to store new stations.

AS preset positions can also be allocated manually (see "Storing stations", page 20).

If TP is switched on before or during the auto-storing process, the unit will activate a preset position with a traffic station afterwards (not necessarily preset 1).

Recalling stored stations

Select the waveband ("U", "U_{AS}", "M", "M_{AS}"). Then press the desired preset button.

To recall the stations stored with AS, choose the desired waveband first ("U" or "M") and then press the AS button briefly.



Extra FM memory

In addition to the preset buttons the unit also sets up an extra FM memory in which all receivable FM stations are stored. You can use the seek tuning buttons to scroll this memory.

The extra FM memory is set up anew by manual or automatic storing (AS).

Scrolling the extra FM memory:

Switch on RDS. Briefly press one of the seek tuning buttons ◀ or ▶ •• The display shows the frequencies or programme names of the stations sorted according to broadcasting networks in the extra FM memory.

Updating the extra FM memory:

Press the RDS button for approximately 2 seconds until you hear the beep. The display briefly shows

MEMORY-U

The storing process takes approximately 30 seconds; the system will tune into the strongest station of the reception area afterwards.

The updating process does not overwrite the preset stations!

Alternatively:

Press the AS button until the beep is released.

Note that this procedure overwrites the stations stored on the AS memory positions of the preset buttons.

Tape operation

Tape playback

Insert the cassette into the slot 4 (with the open side facing to the right).

The unit will switch from radio to tape operation. The upper tape side will be played. The display shows:



Fast forward / fast rewind

Press the fast forward or fast rewind button:

- Fast rewind 5.
- >> Fast forward 6.

During fast winding, the set will switch to the radio programme tuned in last.

To stop fast forward/fast rewind operation, press the opposite fast winding button briefly.

Tape playback will be continued.

Interrupting tape playback

Press both fast winding buttons 5 and 6 slightly. The tape will remain in the cassette slot. The unit will switch from tape to radio operation.

Removing a tape

Press both fast winding buttons.
 The unit will switch from tape to radio operation and eject the tape.

Car phone

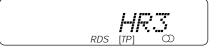
This car radio is prepared for connecting a car phone. In order to make use of the telephone functions, the phone must be connected to the car radio by an Opel dealer.

If a car phone is connected to the set, "MUTE" will appear in the display as soon as the phone is switched on or if a call is received. In this case, radio or tape operation will be interrupted.

Reception of traffic messages during handsfree operation:

Telephone muting has priority over traffic messages. However, you can still receive traffic reports if required.

For this, TP must be switched on ("[TP]" in the display).



As soon as a traffic message comes through, the display will show the programme name of the TP station instead of "MUTE".

Use the TP button 11 to switch between telephone muting and the received traffic report.

Security coding

Protect your car radio by switching on security coding. The coded unit is useless to a thief

The code number can be found in the Car Pass or Radio Pass.

To code the unit it is necessary that the ignition is switched on.

Each time the power to the car radio is interrupted - when it is removed from the vehicle for instance (theft), or if the battery is disconnected - it will be electronically blocked.

Only you can make the set operable again by entering the correct code number (see "Re-start", page 23).

To switch off security coding, for instance when selling the set, you can decode the car radio again (see "Decoding", page 23). Give the code number to the new owner. You can find the number in the Car Pass or Radio Pass. Do not keep the Car Pass or Radio Pass in the vehicle.

To ensure that the unit cannot be made operable by trial and error, it will be locked for certain periods of time after each unsuccessful decoding attempt.

The number of attempts remaining to restart the set is shown in the display.

During the waiting time the unit must remain switched on. After two unsuccessful attempts to enter the code, the system will lock for approximately 10 seconds; this time extends to 10 minutes following subsequent attempts. After the ninth false try the waiting time is 640 minutes.

After 10 unsuccessful attempts to enter the code, "SAFE" will be displayed and the unit must be returned to an Opel dealer for exchange, which has to be paid.

We therefore recommend you to contact an Opel dealer after the sixth unsuccessful attempt already, in order to re-start the set.

Coding

(switching security coding on)

- 1. Switch on the ignition.
- 2. Switch off the radio.
- Press the AS button and hold depressed while turning the radio on. You will hear an acknowledgement tone after three seconds. Then release the button. The display shows "CODE" and "----" after three seconds.
- 4. Enter the code number (to be found in the Car Pass or Radio Pass) using the preset buttons 1, 2, 3 and 4.

Example: The code number is 0365.

Preset buttons 8 Display
Press preset 1 once. 0 - - Press preset 2 four times. 0 3 - Press preset 3 seven times. 0 3 6 Press preset 4 six times. 0 3 6 5

To store the code with the AS button:
 Press button for approximately 3
 seconds until you hear the beep and the
 radio comes on again.

Coded?

(security coding switched on?)

When the ignition is switched on, the display of the coded set will show "CODE" each time the unit is turned on.

For extra security, when the unit is switched off and the ignition key removed, the CODE LED ³ flashes to indicate that the set is equipped with security coding.

Re-start following an interruption of the power supply

- 1. Switch on the ignition.
- 2. Switch off the unit.
- Press the AS button and hold depressed while turning the radio on. You will hear an acknowledgement tone after three seconds. Then release the button. The display shows "SAFE" and then "10 - -" after three seconds to indicate the number of attempts still permissible to enter the code.

 Enter the code number given in the Car Pass or Radio Pass using preset buttons 1, 2, 3 and 4 (see "Coding").

18 836

If you have entered a wrong code, overwrite the number, i.e. re-enter the code completely.

- To confirm the code number:
 If the correct code number appears in the display, press the AS button for approximately three seconds until the beep sounds and the radio resumes play.
- If you have entered and confirmed a wrong code number: The display shows "9 SAFE" and switches to "9 - - - -" after the waiting time has elapsed. Now you can enter the correct code.

After the re-start of the unit, the memory seek tuning function will be started.

Decoding

(switching security coding off)

Proceed as described under "Coding".

After the set has been decoded successfully, radio mute will be switched off.

Security coding is now switched off, i.e. it can be made operable again after an interruption of the power supply.

General notes

If the unit should fail to operate properly, contact an Opel dealer.

FM reception

Compared to your home audio equipment, FM reception in the car can be subject to interference - even with RDS stations - despite the high degree of technical maturity.

For more information on the physical causes of such interference please consult the owner's manual of your car.

Tape care

You should store your tapes in a cool place away from direct sunlight. To avoid possible problems, use only C60 or C90 tapes of well-known brands. When the tape is not in use, store it in the case provided by the tape manufacturer.

When the playback quality begins to deteriorate, clean the tape player with a head cleaning cassette (catalogue no. 17 82 504).

Power supply interruption

When changing the vehicle battery, the memorised values will be remained. The unit can be electronically locked thanks to the passive theft protection system (security coding). Re-start the set by entering the correct code number (see page 23). If you have lost the code number, please contact an Opel dealer, where your unit will be made operable again upon presentation of a proof of ownership. This service is subject to payment.

To protect the environment, this manual was printed on chlorine-free bleached paper.