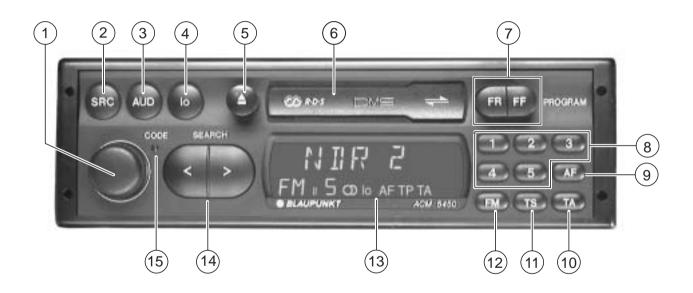


BLAUPUNKT

**Operating instructions** 



**ACM 5450** 



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For installation and connecting instructions please refer to the end of this manual.

#### **Short instructions**

1 On / Off:

Turn the knob.

On 🔿

Off €

To adjust the volume:

Turn the knob

2 SRC (Source)

To toggle between the connected audio sources, e.g. tape, radio, AUX or CD changer (optional).

3 AUD – audio To adjust the BASS TREBLE

**BAL**ANCE (left/right volume) **FAD**ER (front/rear volume).

#### To alter a setting:

Toggle the **AUD** button until the corresponding abbreviation and the adjusted value appear in the display.



Use the < > buttons to alter the selected setting. The adjusted value is indicated in the display.

The last setting will be stored automatically.

If the setting remains unchanged within 8 seconds, the display will switch back to the previous condition.

(4) lo

**lo** (local) - To alter the seek tuning sensitivity during radio operation.

If "lo" is displayed, the radio will only pick up strong, local stations (normal sensitivity).

If "lo" does not light up, the radio will also pick up weaker, distant stations (high sensitivity).

If the display shows "m", manual tuning is adjusted.

**To toggle the function:** Press **Io** briefly during radio operation.

#### Extra function:

To switch between stereo and mono: Hold down the button for approximately 2 seconds. With stereo playback, the stereo sign "O" will appear in the display.

(5) Cassette removal

Press ▲.

6 Cassette loading slot

Insert tape (side A or 1 up; the open side facing to the right).

Change of tape direction / Fast winding

To switch to the other side of the cassette tape:

Press both buttons simultaneously. The display shows "TR1-PLAY" or "TR2-PLAY".



Fast winding

FR: Fast rewind; stop by pressing FF. Fs: Fast forward; stop by pressing FR.

(8) 1, 2, 3, 4, 5 - preset buttons

You can store five stations on each FM memory bank (I, II and "T").

**To store a station:** Press button during radio operation and hold down until the radio resumes play after the muting and a beep sound is heard.

**To recall a station:** Select the memory bank with the **FM** button and press the corresponding preset button briefly.

#### Extra function:

**Coding:** Read chapter "Anti-theft protection" first.

Buttons 1, 2, 3, 4 - To enter the four-digit code.

Press each of the buttons as many times as required until the code number given in the car radio passport appears in the display.

#### (9) AF

(Alternative Frequency during RDS operation)

When "AF" lights up in the display, the radio will automatically search for a frequency offering better reception of the same RDS programme.

To switch AF on/off: Press **AF** briefly.

#### Extra functions:

**REG ON / REG OFF** - With REG ON the system will only switch to a better alternative frequency if it offers the same regional programme (see "REG - regional programme).

#### (10) TA (Traffic Announcement)

If "TA" is displayed, the system will play traffic programme stations only.

TA on/off: Press button.

#### (11) **TS** – Travelstore

To store and recall the five most powerful stations of the respective reception area automatically.

#### To store with Travelstore:

Press **TS** briefly. The seek tuning process starts; the stations found will be stored automatically.

**To recall a station stored with TS:** Toggle the **FM** button until the display shows "T". Then briefly press one of the preset buttons 1 to 5.

#### (12) FM

# To shift between the FM memory banks:

Toggle button until the desired bank is indicated in the display (I, II or "T").

#### (13) Display

#### Radio operation:



NDR2 - Station abbreviation or frequency

FM - Waveband

I, II, T - Memory bank (I, II, or Travelstore)

5 - Preset buttons (1 - 5)

Stereo

lo - Seek tuning sensitivity

AF - Alternative RDS frequency

TP - You are listening to a traffic

programme station.

TA - Priority for traffic programme stations

#### Tape operation:



TR I PLAY - Side 1 (or 2)
CASS << >> - Fast forward/rewind

# CD changer operation (optional):

[ ] [ -- ] ] FM | 5 @ | | | TA

CD 6 - Disc number T 3 - Title number

(14) < >

Station tuning – automatically, if "m" has disappeared from the display.

 manual, if "m" lights up in the display.

Toggle by pressing the lo button.

#### (15) Code LED

Flashes for additional theft protection when the ignition has been switched off.

## Important notes

#### **Precautions**

Before starting to use your new car radio, please read the information on "Traffic safety" and "Anti-theft protection" carefully.

#### **Traffic safety**

As the driver of a motor vehicle, it is your responsibility to pay attention to the traffic situation at all times. Never use your car radio in a way that could distract you.

Please keep in mind that you travel a distance of 14 m per second at a speed of only 50 km/h.

Should the traffic situation become particularly demanding, we advise you not to use the radio.

Always make sure that you are still able to hear any warning signals coming from outside of the vehicle, such as police or fire engine sirens, so that you can react accordingly.

Therefore, you should always select a moderate volume for playing your car radio while you are driving.

#### Installation/Connection

If you would like to install this equipment yourself or add any new components, please read the enclosed installation and connection instructions carefully first.

Do not ground the loudspeaker outputs! Use only the accessory and replacement parts approved by Blaupunkt.

## **Anti-theft protection**

#### Security code

This car radio is supplied with inactive code protection. In order to switch the security coding system on, proceed as described in the following.

If the coding system is active while the power supply to the system is interrupted (e.g. theft, disconnection of the car battery), the set will be electronically blocked. In such a case it can only be made operable again by entering the correct code number given in the car radio passport.

#### Entry of a wrong code number

It should not be possible for a thief to find out the correct code number by trial and error. This is why the set will be blocked for a certain period of time after a wrong code number has been entered. The display will then show "----".

After the first three unsuccessful attempts the system will lock for 10 seconds; after further attempts, the waiting time extends to one hour.

After 19 unsuccessful attempts the display will show "OFF". In this case you can no longer re-start the unit.

#### Notice:

Keep your car radio passport with the code number in a safe place in order to avoid "unauthorised access" to your car radio.

When the security code system is activated, the unique code must be entered each time the power to the unit was interrupted.

The radio will function again as soon as you have entered the correct code.

If you have lost your radio passport and forgotten the code number, your radio can only be made operable again by one of our authorised service workshops, which is subject to payment.

#### Switching on security coding

To activate the coding system:

- Turn off the radio.
- Press preset buttons 1 and 4 simultaneously and hold down.
- Turn on the radio.
   The display shows "CODE".
- Briefly press preset button 1; the display shows "0000".
- Enter the code number given in the Blaupunkt car radio passport.

**Example:** The code number is 2521.

- Press preset button **1** twice; the display shows "2000".

- Press preset button **2** five times; the display shows "2500".
- Press preset button **3** twice; the display shows "2520".
- Press preset button **4** once; the display shows "2521".
- To confirm the code number: Press the > button.

Now the security coding system is active. The display will briefly show "C" each time the set is turned on.

If the display shows "CODE ERR", you have entered a wrong code. Re-enter the correct code after the waiting time ("CODE" will appear in the display).

If you switch off the set while it is blocked, the waiting time will start anew as soon as the radio is turned on again.

#### Re-start following an interruption of the power supply (coding system is activated)

- Turn on the radio.
   The display shows "CODE".
- Enter the code number given in the Blaupunkt car radio passport and confirm (see example under "Switching on security coding").

The unit is now ready for use.

#### Switching off security coding

- Turn off the radio.
- Press preset buttons 1 and 4 simultaneously and hold down while
- switching the set on again.
   The display shows "CODE".
- Now enter the code number to be found in the car radio passport and confirm (see example under "Switching on security coding").

Security coding is now switched off.

#### **CODE LED**

To indicate that your unit is equipped with security coding, the LED flashes for extra security when the car is stationary.

## Radio operation with RDS (Radio Data System)

The Radio Data System offers you more convenience when listening to FM radio stations.

More and more radio stations have begun to broadcast RDS information alongside their programmes.

As soon as a programme has been identified, the station name including a regional identifier, if applicable, will appear in the display, for example, NDR1 NDS (regional programme in Lower Saxony, Germany).

When RDS is activated, the station buttons become programme buttons. You now know exactly which programme you have tuned into, making it easy to find the desired station quickly.

But RDS offers you further advantages:

#### AF - Alternative frequency

The AF (Alternative Frequency) function makes sure that the strongest frequency of the currently selected programme is always tuned in automatically.

This function is activated when "AF" appears in the display.

In order to switch this function on or off,

• press the **AF** button briefly.

The radio will switch to mute briefly while searching for the strongest reception signal.

If "SEARCH" appears in the display when switching on the radio or recalling one of the stored frequencies, the unit is automatically searching for an alternative frequency.

"SEARCH" will disappear from the display when the alternative frequency has been found or after the frequency band has been run through completely.

If the reception quality of the selected programme becomes too poor:

Tune into another station.

#### **REG - regional programme**

Certain radio programmes are split up at times into regional programmes offering local information. The 1st programme broadcast by NDR, for example, offers programmes with different contents in the northern states of Germany Schleswig-Holstein, Hamburg and Lower Saxony at certain times of the day.

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 programme,

 press the AF button for approximately 2 seconds.

"REG ON" appears in the display.

If you leave the service area of the regional programme tuned into, or if you would like to take advantage of the full RDS service, switch to "REG OFF".

 Press the AF button for approximately 2 seconds until "REG OFF" appears.

When active, "REG ON" will be briefly displayed each time the radio is switched on.

#### Selecting a station

With this car radio you can receive FM stations from 87.5 to 108 MHz.

Using the < > buttons there are two different ways to tune into a station:

#### Automatic tuning < >

Prerequisite: "AF" and "m" do not light up in the display, i.e. the Alternative Frequency function and manual tuning are switched off. Use the AF and Io buttons (lo, m, -, lo) to adjust the respective modes.

Press < >; the car radio will automatically search for the next station.

When keeping the < or the > button depressed, seek tuning will speed up in upwards or downwards direction.

#### Manual tuning <>

Prerequisite: "m" lights up in the display. Toggle the **Io** button until "m" is displayed.

 Press < >; the frequency will change in short intervals in upwards or downwards direction.

When holding the < or > button down, the frequency scan is speeded up.

# Selecting the seek tuning sensitivity

You can alter the automatic seek tuning sensitivity.

For this,

press the lo button briefly.

If "lo" is displayed, the radio will only pick up strong, local stations (low sensitivity). If "lo" does not light up, the radio will also pick

up weaker, distant stations (high sensitivity). Make sure that "m" is not indicated in the display.

# Switching from stereo to mono (FM)

If reception is poor, you may get better sound quality by switching to mono:

 Press the **Io** button until a beep sound is released and the stereo sign 
 disappears from the display. Each time the radio is switched on, stereo playback is activated (① is displayed).

The unit will automatically switch to mono if the received signal is not strong enough for stereo playback.

#### Changing the memory bank

You can shift between the memory banks I, II and T in order to store stations and recall them later.

The currently selected memory bank is indicated in the display.

 Toggle the FM button until the desired memory bank lights up in the display.

#### Storing stations

On FM, you can store five stations on the preset buttons **1** to **5** for each of the memory banks I. II and T.

- Select the memory bank with FM.
- Tune in a station either automatically or manually.
- Press the desired preset button until the radio resumes play after the muting and you hear the beep.

Now the station has been stored.

The activated preset button is indicated in the display.

# Automatically storing the strongest stations with Travelstore

You can automatically store the five most powerful FM stations of your current reception area sorted according to their signal strength.

This function is particularly convenient on longer trips.

· Press the **TS** button briefly.

The radio will search for the strongest FM stations and store them on the memory bank "T" (Travelstore). When this process has been completed, the radio will play the first station.

If desired, stations can also be stored manually on the Travelstore bank (see "Storing stations").

#### **Recalling stored stations**

You can recall any stored station at the touch of a button.

- Select the memory bank by toggling the FM button until the desired level appears in the display.
- Press the corresponding preset button briefly to recall the station.

# Receiving traffic programme stations with RDS-EON

Many FM broadcasters offer traffic messages for their service area at regular intervals. All traffic programme stations transmit a special carrier signal alongside their programmes, which is decoded by your car radio. If this signal is identified, "TP" will appear in the display (Traffic Programme).

In addition to these, there are also stations which 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. If you listen to one of these stations (e.g. NDR3), "TP" will appear in the display as soon as the priority for traffic programme stations has been activated, i.e. "TA" must be displayed.

If a traffic announcement is broadcast, the radio will automatically switch to the linked traffic programme station (in this case, NDR2) for the duration of the message and return to the original programme (NDR3) afterwards.

# Traffic announcement priority on/off

If the priority for traffic announcement programmes is activated, "TA" will light up in the display.

To switch the priority on or off:

Press the TA button.

When pressing **TA** while a message is being broadcast, this message will be interrupted. The unit will then switch back to the previous condition. The priority for other traffic messages remains active.

#### Warning beep

If you leave the reception area of the traffic programme station currently tuned into, you will hear a warning beep after approximately 30 seconds.

This alarm tone will also be released when pressing a preset button which has no traffic programme allocated to it.

#### Switching the warning beep off

- a) Tune into another station offering traffic information:
  - Press < > or
  - press a preset button which has a traffic programme station allocated to it.

#### Alternatively:

- b) Switch off the priority for traffic announcements:
  - Press TA.
     "TA" will disappear from the display.

#### **Automatic seek tuning start**

Prerequisite:

The priority for traffic announcements has been activated.

When leaving the reception area of the tuned in traffic programme station while listening to a tape or CD or after having turned down the volume completely, the system will automatically start searching for a new TA programme.

If no such station is found within approximately 30 seconds, tape or CD operation will be stopped and a warning beep will sound. To switch the warning beep off, proceed as described above.

# Adjusting the volume for traffic announcements and the warning beep

This volume was preset at the factory.

## Tape operation

#### Inserting a tape

- · Turn on the set.
- Insert a tape.

Insert the tape with side A or 1 showing up, the open side facing to the right.



 $\triangle$  = Press to eject the tape.

The tape will be played in the direction used last.

"TR1-PLAY" in the display means that track 1 or A is being played.

#### Removing a tape

Press ≜.
 The cassette will eject.

#### Fast Forward/Rewind

#### **Fast Forward**

Press FF.

At the end of a tape side, the mechanism changes directions automatically to play the other side.

#### **Stopping Fast Forward operation**

Press FR.

#### **Fast Rewind**

Press FR.

At the beginning of the tape, the mechanism will automatically start playback.

#### **Stopping Fast Rewind operation**

Press **FF**.

#### Fast winding

FR: Fast rewind; stop by pressing FF. Fs: Fast forward; stop by pressing FR.



# To switch to the other side of the cassette tape:

Press both buttons simultaneously. The display shows "TR1-PLAY" or "TR2-PLAY".

# Changing the tape direction

To change the tape direction during cassette playback,

• press FR and FF simultaneously.

At the end of a tape side, the mechanism changes directions automatically to play the other side (Autoreverse). The display shows "TR1-PLAY" for track (side) 1 or A or "TR2-PLAY" for track 2 or B.

#### Notice:

If there is too much tension on the tape during playback, the set may switch over by itself before having reached the end of the tape side. In this case check the condition of the cassette tape. Sometimes it helps to rewind it completely.

## CD changer control (optional)

You can operate the Blaupunkt CD changer CDC-A05 in combination with this car radio.

### Switching to changer operation

with SRC on the car radio

Make sure that a magazine is inserted. Press **SRC** to toggle between the available audio sources (radio - changer - tape). Press **SRC** as many times until the changer functions appear in the display.



**CD** = disc, **T** = TRACK (title).

#### Selecting a disc

To select a disc in upwards direction,

- press > for approximately 2 seconds.
- To select a disc in downwards direction,
- press < for approximately 2 seconds.

#### Selecting a title

To select a title in upwards direction,

press > briefly.

To repeat a title,

press < briefly once.

To select a title in downwards direction,

press < briefly as many times as necessary.</li>

#### Notice:

In may happen in isolated cases that the changer fails to function properly due to voltage drops (e.g. when starting the engine). In such a case, briefly switch the car radio off and on again.

The changer will then return to normal operation.

# **Appendix**

#### Mechanism/cassette tapes

To avoid possible problems, you should not use cassette tapes longer than 60 or 90 minutes (C60/C90). Store your tapes in a cool place away from dirt, dust and temperatures exceeding 50 ° Celsius. Allow very cold tapes to warm up before playing them in order to avoid uneven tape transport. After approximately 100 hours of use, dust particles collected on the playback head or roller may lead to tape run problems and sound distortions.

Use a head cleaning tape to remove normal dirt build-up. For tougher cases, use a cotton swab (Q-Tip) soaked with alcohol. Do not attempt to clean by inserting a hard object into the player!

#### **Specifications**

#### **Amplifier**

Output power: 4 x 6 W RMS power

acc. to DIN 45324/3.1

into 4  $\Omega$ 

or

4 x 8 W max. power acc. to DIN 45324/3.2

#### FM waveband

Sensitivity: 1,3 μV at 26 dB

signal-to-noise ratio

Frequency

response: 35 - 15 000 Hz

#### Tape player

Frequency

response: 40 - 14 000 Hz