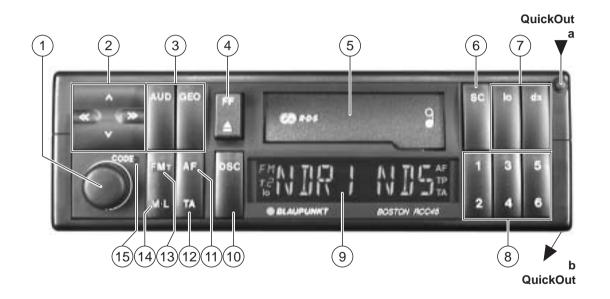
Radio / Cassette

# Boston RCC 45

**Operating instructions** 







### **Contents**

Short instructions	15
Important notes	17
Precautions	17 17
Anti-theft coding	18
Switching on anti-theft coding	18
power supply  Entry of a wrong code number  Optical indication for extra security	18

Radio operation with RDS19
AF - Alternative frequency 19
REG - regional programme 19
Selecting a waveband 20
Automatic tuning 20
Manual tuning 20
Selecting the seek tuning sensitivity 20
Switching from stereo to mono 20
Changing the memory bank 20
Storing stations
Automatically storing the strongest
stations with Travelstore21
Recalling stored stations 21
Scanning stations with Radio-Scan 21
Receiving traffic programme stations with RDS-EON22
Traffic announcement priority on/off 22
Warning beep
Switching the warning beep off 22
Automatic seek tuning start
Adjusting the volume for traffic
announcements and the warning beep . 22
Tape operation 23
Inserting a tape23
Tape care

DSC programming	23
Overview of the DSC factory settings	
Appendix	24
Specifications	24

#### **Short instructions**

#### 



If "CODE" appears in the display, read chapter "Anti-theft coding" first.

#### 2 Rocker switch

#### Seek tuning



- **∧** Up
- V Down
- Own in short intervals
- >> Up in short intervals

#### Extra functions:

#### In the DSC mode:

Select and programme DSC functions.

**Coding:** Enter code and con-

firm with >>.

#### 3 AUD/GEO

#### AUD -

To adjust the treble and bass frequencies with the rocker switch.



- ∧ Treble +
- V Treble -
- << Bass -
- >> Bass +

#### GEO -

To adjust the balance (left/right) and fader (front/rear) with the rocker switch.



- ▲ Fader front
- V Fader rear
- < Balance left
- >> Balance right

To alter a setting,

 press AUD or GEO and then change the value with the rocker switch. 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) FF ▲

FF - Fast Forward

To start/stop: Press button slightly.

▲ – Push button firmly to eject the tape.

#### (5) Cassette loading slot

Insert tape (empty reel first; the open side facing to the right).

#### 6 SC (Scan)

You can briefly scan all of the stations in your reception range.

To switch the scan function on and off: Press button.

#### 7) lo / dx

To change the seek tuning sensitivity. Press **Io** to adjust the tuner to normal seek tuning sensitivity; press **dx** to switch to high sensitivity.

#### (8) 1, 2, 3, 4, 5, 6 - preset buttons

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

To store a station: Press button during radio operation and hold down until the radio resumes play.

To recall a station: Select the desired memory bank (press FMT button as many times as required) and then press the corresponding preset button briefly.

#### Extra function:

Coding: Read chapter "Anti-theft coding" first.

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

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

#### Display

Radio operation:



AF = Alternative RDS frequency

FΜ Waveband

= Seek tuning sensitivity

lo NDR1 NDS = Station abbreviation or fre-

auencv

TΑ = Priority for traffic programme

stations

ΤP = Traffic programme identifier Т

= Memory bank (I, II or T)

= Preset button (1 - 6) 2

#### Cassette operation:

When playing a tape, the display shows "TAPE".

(10) **DSC** (Direct Software Control)

Use the DSC function to customise certain programmable, basic settings to suit your personal needs and preferences. See chapter "DSC programming" for more information.

(11) AF - Alternative frequency during radio operation with RDS

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 function:

REG ON / REG OFF - With REG ON the system will only switch to an alternative frequency if the latter belongs to a linked station offering the same regional programme (see "REG - regional programme).

(12) **TA** (priority for traffic announcements) If "TA" is displayed, the system will play traffic stations only.

TA on/off: Press button.

(13) **FMT -** FM, Travelstore

To switch between the FM memory banks I, II and "T" (Travelstore).

#### To switch over:

Press FMT as many times until the desired bank is indicated in the display. To store the six most powerful stations automatically with Travelstore:

Store: Press FMT; seek tuning starts.

# Recall: Press FMT as many times until

the display shows "T". Then briefly press one of the preset buttons 1, 2, 3, 4. 5. or 6.

#### (14) M•L

To select the MW or LW waveband Press button as many times until the desired band is adjusted.

#### (15) Code LED

May flash for additional theft protection when the car radio is switched off (see DSC CODE-LED).

### Important notes

#### **Precautions**

Before starting to use your new car radio, please read the information on "Traffic safety" and "Anti-theft coding" 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. Always select a moderate volume for playing your car radio while you are driving.

#### QuickOut

This car radio is optionally available with or without the QuickOut release bracket. With the QuickOut handle you can easily pull the unit out of the installation compartment in order to take your Blaupunkt with you when vou leave your car. The preset stations will remain stored even for a longer period of time

To remove the set,

press knob ("a") and pull the radio out with handle ("b").

To re-install the unit.

insert the radio until it stops and move the handle back to the front panel.

If the security coding system is switched off, the set will be ready for use immediately. If the security coding system is active, proceed as described under "Re-start following an interruption of the power supply" each time the set is re-inserted.

#### Installation/Connection

Your new car radio is equipped with security coding. To switch the anti-theft protection on or off it is necessary that the set is connected to permanent 12 V supply.

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

Do not connect the loudspeaker outputs to ground!

Use only the accessory and replacement parts approved by Blaupunkt.

### **Anti-theft coding**

This car radio is supplied with inactive code protection. In order to switch the anti-theft 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.

### Switching on anti-theft coding

Precondition:

The set must be connected to permanent 12 V supply.

To activate the coding system:

- · Turn off the radio.
- Press preset buttons 1 and 4 simultaneously, hold down and
- turn the set on again.
   The display shows "CODE".
- Briefly press preset button 1; the display shows "0000".
- Enter the code number given in the 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 rocker button >>.

Now the security coding system is active. After having turned on the set, the display will briefly show a "C" before "REG ON" or "REG OFF".

### Switching off anti-theft coding

- Turn off the radio.
- Press preset buttons 1 and 4 simultaneously, hold down and
- turn 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 antitheft coding".

Security coding is now switched off. When switching on the unit, the "C" before "REG" will not be displayed.

# Re-start following an interruption of the power supply

(coding system is activated)

- Turn on the radio.
   The display shows "CODE".
- Now enter the code number of the Blaupunkt car radio passport and confirm: See example under "Switching on anti-theft coding".

The unit is ready for use.

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.

### 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 if a wrong code number has been entered. The display will then show "CODE ERR".

After the first three unsuccessful attempts, the system will lock for 8 seconds; after further attempts, the waiting time extends to one hour.

# Radio operation with RDS (Radio Data System)

After 19 unsuccessful attempts, the display will show "SERVICE". 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 (subject to payment).

# Optical indication for extra security

When the car is stationary you may let an LED flash for extra security to indicate that your unit is equipped with security coding. This feature can be turned on and off using DSC.

Read "DSC programming - CODE-LED".

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.

While searching for the strongest reception signal, the radio may switch to mute briefly. In this case, "SEARCH" will appear in the display.

#### **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 station.

 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.

"REG ON" or "REG OFF" will be briefly displayed each time the radio is switched on.

#### Selecting a waveband

With this car radio you can select between the following wavebands:

FM 87.5 - 108 MHz MW 531 - 1602 kHz LW 153 - 279 kHz

Select the desired waveband by pressing the FMT or M•L button.

To switch between MW and LW:

Press M•L.

#### Automatic tuning ∧/∨

Press A/V; the car radio will automatically search for the next station.

When keeping the  $\land$  or the  $\lor$  button depressed, seek tuning will speed up in upwards or downwards direction.



- Λ Up
- ▼ Down
- << Down in short intervals
- >> Up in short intervals

#### Manual tuning << >>

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

When holding the right or left part of the rocker switch pressed down, the frequency scan is speeded up.

# Selecting the seek tuning sensitivity

You can alter the automatic seek tuning sensitivity.

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). To switch over.

Press lo or dx.

### Switching from stereo to mono

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

 Press the **lo** button for approximately 2 seconds until you hear a beep.

Each time the radio is switched on, stereo playback is activated.

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

#### Changing the memory bank (FM)

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.

Press the FMT button as many times until the desired memory bank lights up in the display.

#### Storing stations

You can store six FM stations on the preset buttons 1 to 6 for each of the memory banks I. II and T.

- · Select the memory bank.
- Tune in a station with the rocker switch (either automatically or manually).
- Press the desired preset button until you hear a beep.

Now the station has been stored.

The activated preset button is indicated in the display.

#### Notice:

Should you tune in a station which has already been stored before, the corresponding preset button and the memory bank will briefly flash in the display if you have selected another memory bank.

# Automatically storing the strongest stations with Travelstore

You can automatically store the six 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 FMT button for approximately 2 seconds.

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 desired memory bank by pressing FMT repeatedly until the desired level is indicated in the display.
- Press the corresponding preset button briefly to recall the station.

# Scanning stations with Radio-Scan

Beginning with the station currently tuned in, you can scan the waveband. The radio will play each station for 8 seconds.

#### To start the scan:

Press SC.

The scanned frequency or the station name will start flashing in the display. During the actual scanning process "SCAN" will be displayed.

#### To select a station currently being scanned and switch off the scan function:

Press SC.

# 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, such as NDR3, 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, "TP" will appear in the display provided 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, the priority will be cancelled only for this announcement. 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 the rocker switch or
  - 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 (tape operation)

When leaving the reception area of the tuned in traffic programme station while listening to a tape, the system will automatically start searching for a new TA programme. If no such station is found within approximately 30 seconds, 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. You can alter the value using the DSC function (see "DSC programming, TA VOL").

### Tape operation

#### Inserting a tape

- Turn on the set.
- Insert a tape.

**Insert the tape** with the empty reel first, the open side facing to the right.



FF = **Fast Forward**To start/stop: Press button slightly.

■ = To eject the tape.
 Press button firmly.

When listening to a cassette, the display shows "TAPE".

At the end of the tape side, the radio will come on automatically.

#### Tape care

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, tape run problems and sound distortions caused by dust particles adhering to the rubber roller and the audio head may be produced.

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!

### **DSC** programming

DSC (Direct Software Control) allows you to customise certain programmable, basic settings to suit your personal needs and preferences and then store them.

The basic settings for this audio equipment were made at the factory. In the following you can find an overview of these settings, so that you can always reset to these if desired.

If you wish to alter any of the programming,

• press DSC.

Use the rocker switch to select and adjust the functions described in the following. The display shows you the adjusted condition.



\ / \ Select function

Adjust value –

>> Adjust value +

### **TA VOL** Use this function to adjust the

traffic announcement and warning beep volume from

between 1 to 9.

The messages and the alarm tone will then be output at this

volume.

#### LED

You can adjust the LED (15) to flash for extra anti-theft protection.

LED +1 - The diode will flash when the unit is switched off.

LED 0 - The diode is deactivated.

#### **LOUD**

Loudness - When listening at a low level, the Loudness function will create a more natural sound by boosting the low frequency range.

LOUD +1 - No boost / off LOUD 0 - Max. boost

To quit the DSC programming mode and store the adjustment:

Press DSC.

# Overview of the DSC factory settings

TA VOL : 5 LED : +1 LOUD : +1

# **Appendix**

#### **Specifications**

#### Amplifier

Output power: 4 x 6 watts RMS power

acc. to DIN 45324/3.1

into 4  $\Omega$ 

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

FM waveband:

Sensitivity:  $1.0 \,\mu\text{V}$  at 26 dB signal-to-

noise ratio

Frequency

response: 35 - 15 000 Hz

Tape player:

Frequency

response: 40 - 14 000 Hz

Subject to modifications!