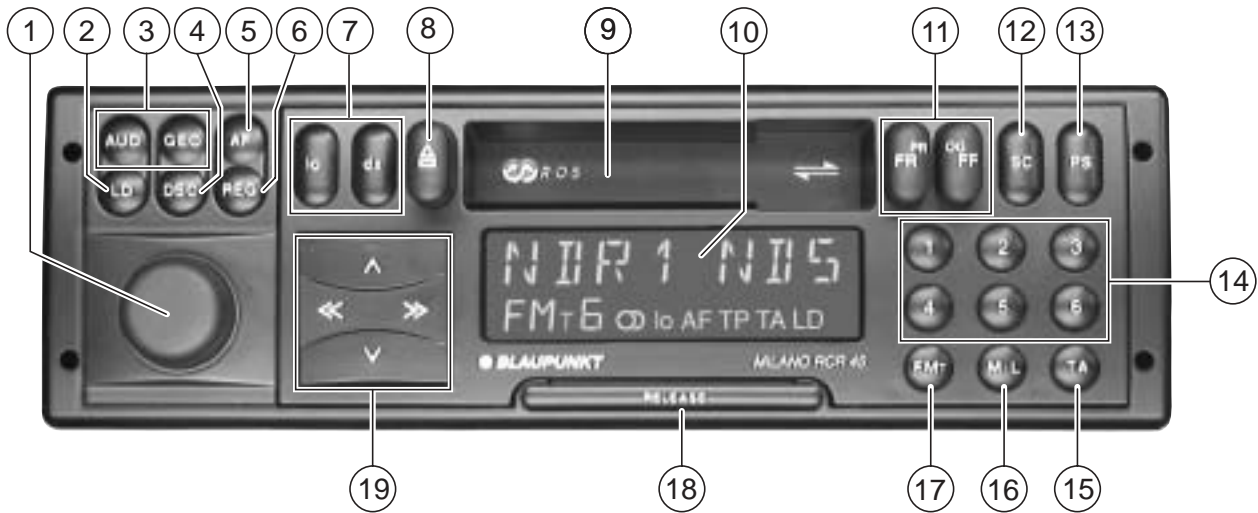


Radio / Cassette

Milano RCR 45

Operating instructions





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Short instructions

- ① On ↻ Off ↻
Volume ↻



This unit can also be switched on and off with the Release Panel ⑱.

Also, when being connected correctly, you may turn the radio on and off via the ignition of your car.

Use one of the following possibilities to continue operating the set when the ignition is switched off:

- Switch on/off with knob ①.
- Remove/re-install the release panel.
- Press **AUD** ③.

When turning on the unit with the release panel or by pressing the **AUD** button, the system will start to play with the volume adjusted last.

When operating the unit with the ignition being switched off, the system will automatically shut down after one hour in order to avoid that the battery goes flat.

- ② **LD**

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

To switch the Loudness on/off:

Press **LD**.

For more information, read chapter “DSC programming”.

- ③ **AUD/GEO**

AUD –

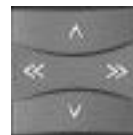
To adjust the treble and bass frequencies with the rocker switch.



- ^ 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.

To finish the setting: Press **AUD** or **GEO**.


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

④ **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.

⑤ **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.

⑥ **REG**
REG ON / REG OFF
With REG ON the system will only switch to a better alternative frequency if the latter belongs to a linked station offering the same regional programme (see “REG - regional programme”).
To switch REG on or off: Press **REG** until “REG ON” or “REG OFF” appears in the display (BEEP tone).

⑦ **lo/dx**
To 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** briefly.
For more information, see chapter “DSC programming”.


⑧ **Cassette removal**
Press .

⑨ **Cassette loading slot**
Insert tape (side A or 1 up; the open side facing to the right).

⑩ **Display**
Radio operation:



NDR1 NDS - Station abbreviation or frequency

FM	- Waveband
T	- Memory bank (I, II, T)
5	- Preset button (1 - 6)
	- Stereo
lo	- Seek tuning sensitivity
AF	- Alternative RDS frequency
TP	- Traffic programme identifier
TA	- Priority for traffic programme stations
LD	- Loudness

Tape operation:

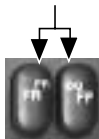


TR1--PLAY - Side 1 (or 2)

11 PROG button/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.
FF : Fast forward; stop by pressing FR.

12 SC

Radio operation

Scan (sampling all stations to be received): Press **SC** briefly.

13 PS

Preset Scan (sampling all stations stored on the preset buttons): Press **PS** briefly.

14 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 waveband and on FM also the desired memory bank (press **FMT** button as many times as required). Then 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 stands in the display.

15 TA (priority for traffic announcements)

If “TA” is displayed, the system will play traffic stations only.

TA on/off: Press button.

16 M•L

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

17 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**.

18 RELEASE / CODE-LED

Release panel - detachable face.

For extra anti-theft protection, you should take the detachable face with you when leaving your car.

To remove it:

Press **RELEASE**.

To re-install the panel: Insert on the left side first with the cassette slot facing up and then press on the right until the panel locks in.

Code LED

May flash for additional theft protection when the car radio is switched off, provided this feature has been adjusted correspondingly via DSC (see DSC CODE-LED).

19 Rocker switch Seek tuning



▲ Up

▼ Down

<< / >> Up/down in short intervals
("AF" must be switched off)

<< / >> To scroll through the broadcasting
network when "AF" is activated
(e.g. NDR1 ... NDR4).

Extra functions:

In the DSC mode:

Select and programme
DSC functions.

Coding:

Enter code and confirm
with ▲.

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.

Anti-theft protection

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.

Do not connect the loudspeaker outputs to ground!

Use only the accessory and replacement parts approved by Blaupunkt.

Release panel

This unit is equipped with a release panel (detachable face).

You can remove the control face at the push of a button.

For extra anti-theft protection, we recommend you to take the detachable face with you when leaving your car.

Re-inserting the release panel is child's play. The set will be ready for use immediately; you will find all the previous settings re-adjusted.

Detaching the release panel

- Press **RELEASE**.

The unit will be switched off automatically. The control panel will be released in order for you to detach it.

Store it in a safe place, excluding possible damages.



Fitting the release panel

- Insert the panel on the left side first with the cassette slot facing up and then
- press on the right until it locks in.

The unit is now ready for use with the settings adjusted before removing the panel.

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 "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.

After 20 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).

Switching on security coding

To activate the coding system:

- Turn off the radio.
- Press preset buttons **1** and **4** simultaneously and hold down while switching the set on again.

The display briefly shows "CODE" and the unit will switch on.

- Release preset buttons **1** and **4**.

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

Re-start following an interruption of the power supply

(coding system is activated)

- 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 upper part of the rocker switch \wedge .

If you have entered the correct code, the unit will now be 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.

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 "Re-start ...").

Security coding is now switched off.

Optical indication for extra security

To indicate that your unit is equipped with security coding, you may let an LED installed in the non-detachable part of the front panel flash for extra security when the car is stationary.

For this, the following requirements must be fulfilled:

Radio operation with RDS (Radio Data System)

Permanent 12 V supply and the + ignition lead must be connected correctly (as illustrated in the installations instructions).

„LED 1“ must be adjusted in the DSC mode. 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. 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 bad:

- 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 **REG** button.
“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 **REG** button briefly.

When active, "REG ON" 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 \wedge/\vee

- Press \wedge/\vee ; the car radio will automatically search for the next station.

When keeping the upper or lower part \wedge/\vee of the rocker switch depressed, seek tuning will speed up in upwards or downwards direction.

Automatic tuning



\wedge Up

\vee Down

\ll / \gg Up/down in short intervals ("AF" must be switched off)

\ll / \gg To scroll through the broadcasting network when "AF" is activated (e.g. NDR1 ... NDR4).

Manual tuning $\ll \gg$

(prerequisite: **AF** is switched off!)

- Press $\ll \gg$; 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.

Scrolling through the broadcasting network (only FM)

You can use the $\ll \gg$ buttons to tune in stations of your reception area.

If several programmes of one broadcasting network can be received, you can scroll through them in forwards direction pressing

\gg , or backwards using the \ll button, e.g. NDR 1, 2, 3, 4, N-JOY (North German broadcaster).

For this it is necessary that the stations have been received at least once and that "AF" has been activated before (lights up in the display).

For this purpose, you may start Travelstore seek operation:

- Press **FMT** for 2 seconds; the system starts to run through the frequency band.

If "AF" does not light up,

- press **AF**.

With this, the requirements for selecting stations with $\ll \gg$ are fulfilled.

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

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

On MW/LW, you can store six stations each.

- Select the waveband with **FMT** or **M•L** and on FM also the desired memory bank (with **FMT**).
- Tune in a station with the rocker switch (either automatically or manually).
- Press the desired preset button until the radio resumes play after the muting (takes approximately 2 seconds, confirmed by 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 more than 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 waveband by pressing **FMT** or **M•L**. On FM, also choose the corresponding memory bank by pressing the **FMT** button as many times until the desired bank appears in the display.
- Press the corresponding preset button briefly to recall the station.

Scanning stored stations with Preset Scan

You can have all of the stored stations played briefly on all wavebands.

On FM, you can scan the stations of the Travelstore memory bank or of the two other storage levels.

- Select the waveband.
- On FM, choose Travelstore or another memory bank using the **FMT** button.

To start Preset Scan:

- Press **PS**.

The stations will be played for approximately 8 seconds each.

The positions blinking in the display show you the memory bank and preset position of the currently scanned station.

To select a station currently being scanned and switch off Preset Scan:

- Press **PS** briefly.

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** briefly.
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** briefly.

If no station is selected, the scan function will be automatically switched off after the frequency band has been run through completely. The unit will tune in the station listened to before starting the scan.

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**.

On top of this, the sensitivity levels can be adjusted separately for lo and dx (see chapter “DSC programming”).

Switching from stereo to mono (FM)

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

- Press the **lo** button for approximately 2 seconds.

With mono playback, the stereo sign  will disappear from the display.

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.

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 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, 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 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, tape 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.

You can alter the value using the DSC function (see "DSC programming, TA").

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.




 = 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

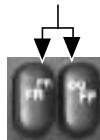
- Press **FR**.
At the beginning of the tape, the mechanism will automatically start playback.

Stopping Fast Rewind operation

- Press **FF**.

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.
FF : Fast forward; stop by pressing FR.

PROG selector

(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.

DSC programming

DSC (**D**irect **S**oftware **C**ontrol) allows you to customise certain programmable, basic settings to suit your personal needs and preferences and then store them.

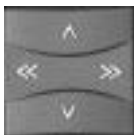
The basic settings for this audio equipment were made at the factory. In the following you can find an overview of these settings, so that you can always reset to these if desired.

If you wish to alter any of the programming,

- press **DSC**.

The display will show you the adjusted condition.

Use the rocker switch to select and adjust the functions described in the following.



- ▲ / ▼ Select function
- << Adjust value –
- >> Adjust value +

TA VOL

To adjust the traffic announcement volume from between 1 to 9. The message will then come through at this volume. (1 = low)

BEEP

Confirmation tone for all functions which require a button to be pressed for more than 2 seconds.

The volume can be adjusted from between 0 to 9. (0 = off)

Each alteration of this value is confirmed by a beep tone of the corresponding volume.

LED (code)

You can adjust the LED ⁽¹⁸⁾ to flash for extra anti-theft protection.

LED 1 - LED always flashes when the unit has been switched off via the ignition.

LED 0 - No flashing.

LOUD

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

LOUD 1 - Low boost

LOUD 6 - Max. boost

RM

(Radio Monitor)

With RM-ON, the unit will automatically switch to the tuner whenever the cassette is fast winding.

RM-OFF - The function is switched off.

LOCAL

(lo)

To adjust the seek tuning sensitivity for local reception.

LOCAL 1 - high sensitivity

LOCAL 3 - low sensitivity

DIS

(dx)

To adjust the seek tuning sensitivity for distant reception.

DIS. 1- high sensitivity

DIS. 3- low sensitivity

To quit the DSC programming mode and store the adjustment:

- Press **DSC**.

If the setting remains unchanged within 8 seconds, the system will automatically store the last adjustment. The display will switch back to the previous condition.

Appendix

Overview of the DSC factory settings

TA VOL	: 4
BEEP	: 3
LED (Code)	: 1
LOUD	: 4
RM	: OFF
LOCAL	: 1
DIS	: 1

Care notes

Release panel

To ensure that the unit functions properly it is important that the contacts between the release panel and the head unit are free from any foreign particles.

If necessary, clean the contacts using a cotton swab soaked with alcohol.

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

Tuner

Wavebands

FM	:	87.5 – 108 MHz
MW	:	531 – 1602 kHz
LW	:	153 – 279 kHz

FM sensitivity: 1.0 μ V at 26 dB signal-to-noise ratio

FM frequency response: 35 - 16 000 Hz

Tape player

Frequency response: 35 - 16 000 Hz

Subject to modifications!

Blaupunkt-Werke GmbH
Bosch Gruppe

K7/VKD 8 622 400 494

