

FCC STATEMENT

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

 **BLAUPUNKT**

CAR RADIO
COLOMBO ML 110 BT
BT | USB | Aux-IN | TUNER



Enjoy it.

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Operating Instructions

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If you suspect something is wrong, immediately switch power off. Immediately stop using it and call the store where you purchased it. Never try to repair the unit yourself because it is dangerous to do so.

General

Power supply:	12VDC (11V-16V), Test voltage 14.4V, negative ground
Maximum power output:	50W x 4 channels
Continuous power output:	20W x 4 channels (4 10% T.H.D.)
Suitable speaker impedance:	4-8ohm
Pre-Amp output voltage:	2.0V (Play mode: 1KHz, 0dB, 10K load)
Fuse:	15A
Dimensions (WxHxD):	188 x 58 x 98mm
Weight:	0.52kg
Aux-in level:	500mV

FM Stereo Radio

Frequency range:	87.5-108.0MHz
Usable sensitivity:	8dBμ
Frequency response:	30Hz-15KHz
Stereo separation:	30dB(1KHz)
Image response ratio:	50dB
IF response ratio:	70dB
Signal/noise ratio:	>55dB

AM(MW) Radio

Frequency range:	522-1629KHz
Usable sensitivity (S/N=20dB):	30dBμ

Components

Machine screws:	M5x6 mm 4
Trim plate:	1
Rubber cushion:	1
Mounting bolt:	1
Key:	2
Operating Instructions	1
Warranty card	1

Note:

Specifications and the design are subject to change without notice due to improvements.

Troubleshooting

If you suspect something is wrong, immediately switch off power. Immediately stop using it and call the store where you purchased it. Never try to repair the unit yourself because it is dangerous to do so.

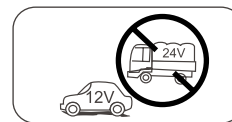
Problem	Possible cause	Solution
General		
The unit will not switch on.	Car ignition is not on. Cable is not properly connected. Fuse is burnt.	Turn your car key in the ignition. Check cable connection. Replace fuse with a new fuse of the same capacity.
No sound	Volume is set at minimum or the mute function is on.	Check the volume or turn the mute function off.
The unit or screen does not function normally.	The unit system is unstable.	Press the RESET button.
TUNER Mode		
Unable to receive stations	The antenna is not connected properly	Connect the antenna properly
Poor quality reception of radio station.	The antenna is not fully extended or it is broken.	Fully extend the antenna and if broken, replace it with a new one.
Preset stations are lost.	The battery cable is not properly connected.	Connect the constant +12V lead of the unit to the constant +12V of the vehicle.
USB mode		
Unable to insert USB device.	The USB device has been inserted the wrong way round.	Insert it the other way around.
The USB device cannot be read.	NTFS format is not supported.	Check that the USB file system is in FATs or FATs 32 format. Due to different formats, some models of USB storage devices or MP3 players may not work properly.

Safety Precautions

Thank you for buying Blaupunkt. Please read through these operating instructions to help you operate your system.

To provide a clear demonstration and an alternative for easy understanding of the operation of this unit, graphic illustration was used. However, this illustration is not necessary printed as the actual image found on the unit.

Only connect the unit to a +12V power supply with negative grounding.



Do not install this unit in a location that can impair safe for operation of the vehicle.



Never expose this unit, amplifier, and speakers to moisture or water to prevent electric sparks or fire.



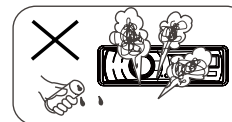
Please do not change the fuse in the unit without professional guidance, using an improper fuse may cause damage to this unit or even cause fire.



To ensure safe driving, please adjust the volume to a safe & comfortable level.

Please power off this unit and send it back to the after-sales service centre or the dealer/distributor you purchased from if the following symptom is found:

(a). Water or other material enters the unit



WMA & MP3 Compatibility

This model is capable to playback WMA & MP3 files.

About WMA

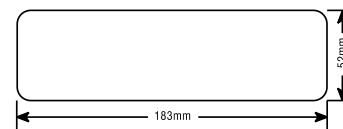
The unit can playback WMA data. Windows Media and the Windows logo are trade marks or registered trademarks of Microsoft Corporation in the United States and/or other countries. This unit may not operate correctly depending on the application used to encode WMA files.

About MP3

Supply of this product only conveys a license for private, non-commercial use and does not convey a license nor imply any right to use this product in any commercial (i.e. revenue-generating) realtime broadcasting (terrestrial, satellite, cable and/or any other media), broad-casting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent license for such use is required. For details, please visit <http://www.mp3licensing.com>.

Installation Opening

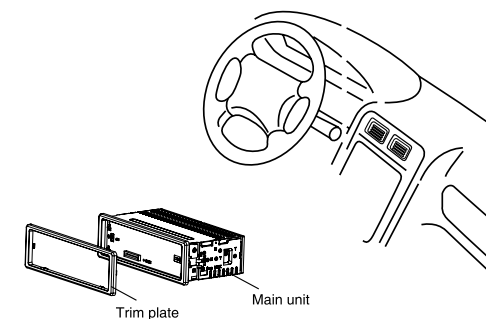
This unit can be installed in any dashboard having an opening as shown below. The dashboard should be 4.75mm - 5.56mm thick in order to be able to support the unit.



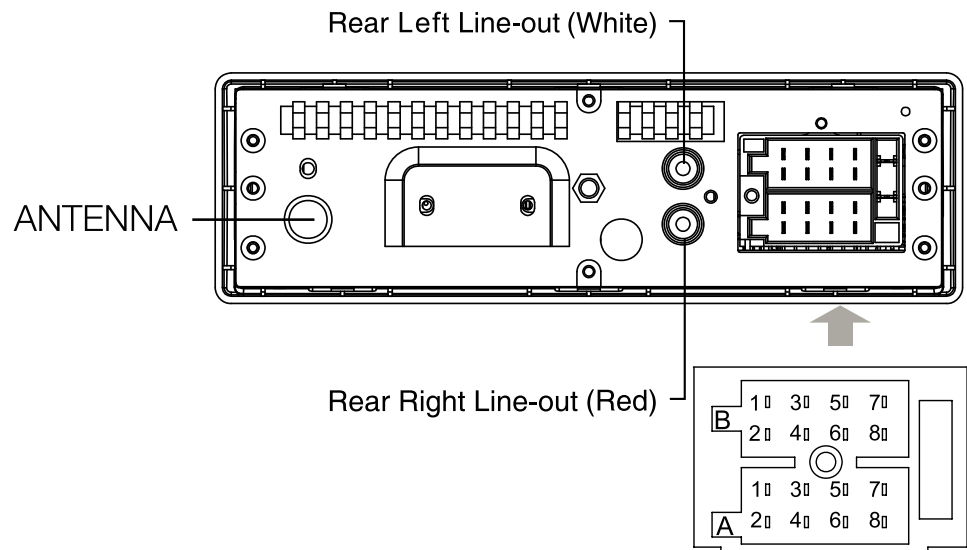
If the opening is too small, carefully cut or file as necessary until the sleeve easily slides into the opening. Do not force the sleeve into the opening or cause it to bend or bow. Check for sufficient space behind the dashboard for the unit chassis.

Installation Procedures

1. If relevant, remove any other audio system from the car.
2. Insert the mounting sleeve into the dashboard. Fix it firmly in place by folding down the metal tabs.
3. Perform the required electrical connections.
4. Then check that everything works before installing the main unit.
5. Install the car radio in the dashboard using the supplied screws (M5x6mm).
6. Attach the outer trim frame. If you are not sure how to install this unit correctly, contact a qualified technician.



Wiring Diagram



A Compartment	
No.	Pin Definition
A1	NC
A2	NC
A3	NC
A4	Battery +
A5	AMP Remote
A6	ILL
A7	ACC+
A8	Ground

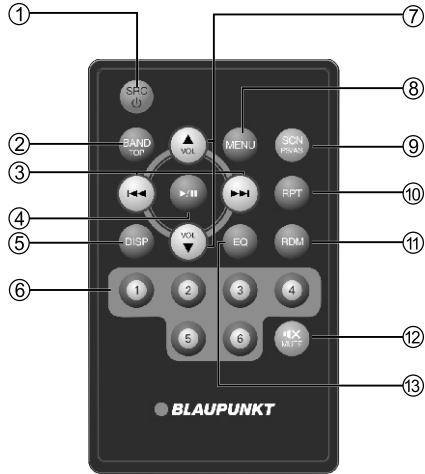
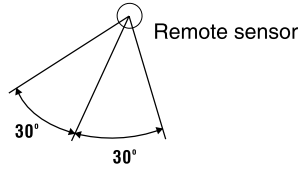
B Compartment	
No.	Pin Definition
B1	Rear Right(+)
B2	Rear Right(-)
B3	Front Right(+)
B4	Front Right(-)
B5	Front Left(+)
B6	Front Left(-)
B7	Rear Left(+)
B8	Rear Left(-)



- ① Power
Press [P] button to turn on the unit.
- ② Mute
- ③ EQ
- ④ Band switch (in Radio mode)
- ⑤ Release the front panel.
- ⑥ Display switch
• System setup (long press)
- ⑦ Scan play / Preset scan
• Auto memory store (long press)
- ⑧ Adjust volume level / Confirm (short press)
- ⑨ Button 1: Play/Pause/Top play (long press)/Preset station 1
Button 2: Scan play / Preset station 2.
Button 3: Repeat play / Preset station 3.
Button 4: Random play / Preset station 4.
Button 5: Previous folder / Preset station 5. /MP3 track -10 down (long press) / Call Accept
Button 6: Next folder / Preset station 6. /MP3 track +10 up (long press) / Call Reject
- ⑩ Aux-in jack
- ⑪ USB connector
- ⑫ Previous / next track
• Seek + / - (long press)
- ⑬ Toggle audio source

Remote control operating range

The remote control can operate within a distance of 3~5m of the radio. Point the top of remote control to the remote sensor when you operate it.



- ① Toggle the audio source
Power on / Power off (long press)
- ② Band switch: Select
FM1/FM2/FM3/MW1/MW2 band in RADIO
mode & **[]** key in BT mode.
- ③ Radio tune
Track seek
- ④ Play / Pause
- ⑤ Display switch
Press to enter menu mode. (long press)
- ⑥ Buttons
 - [1] Button: Preset station 1.
 - [2] Button: Preset station 2.
 - [3] Button: Preset station 3.
 - [4] Button: Preset station 4.
 - [5] Button: Preset station 5.
 - [6] Button: Preset station 6.

- ⑦ Volume up / down
- ⑧ Search function
- ⑨ Scan play / Preset scan
Auto memory store (long press)
- ⑩ Repeat play
- ⑪ Random play
- ⑫ Mute volume
- ⑬ EQ

Menu Function

Press and hold **[DISP]** button to enter system setup. Press **[◀▶]** or **[▶▶]** button to select options, rotate the knob to adjust.

TA (Traffic Announcement) ON/OFF mode

Rotate the knob to choose TA ON or OFF.

AF (Alternate Frequency) ON/OFF mode

Rotate the knob to choose AF ON or OFF.

REG (Regional) ON/OFF mode

Rotate the knob to choose REG ON or OFF.

DX/LO (RADIO mode)

Rotate the knob to choose radio local or distant at RADIO mode.

- **LO**: Only stations with strong signal can be received.
- **DX**: Stations with strong and weak signals can be received.

SCROLL ON/OFF

Rotate the knob to choose SCROLL ON or OFF.

For track information that is longer than the display panel:

When SCROLL is ON, the LCD will display ID3 TAG information in this sequence, e.g: TRACK- >FOLDER->FILE->ALBUM->TITLE->ARTIST->TRACK->...

When SCROLL is OFF, the LCD will display one ID3 TAG information, the default is TRACK, but user can adjust it to other ID3 TAG information by pressing **[DISP]** button.

12/24H

Rotate the knob to choose time format: 12 or 24 hour.

CLOCK

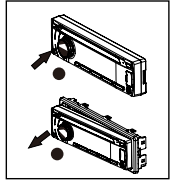
Press the volume knob to enter clock setting mode, rotate the knob to set clock, press **[◀▶]** or **[▶▶]** button to select hour or minute, press and hold the volume knob to confirm.

Anti-Theft System

This unit is equipped with a detachable panel. Removing this panel makes the radio totally inoperable.

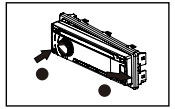
Remove the detachable panel

1. Press **[▲]** button.
2. Hold the part of the faceplate that is been released and pull the panel out.



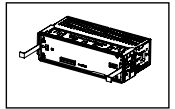
Install detachable panel

1. Fix right part of face plate in the panel slot of the unit.
2. Press down the left side of the face plate until it clicks into the panel slot.



Remove the unit

1. Switch off the power of the unit.
2. Remove the panel and the trim.
3. Insert both Removal Keys into the side slots on either side of the unit until they lock.
4. Pull out the unit.



Searching Folders/Files

1. Press the volume knob to enter the folder list search mode.
2. Turn volume the knob to select a file or folder, press the [EQ] button to return back the previous folder.
3. Press the volume knob to enter the search mode and then the list appears in the display.
4. Turn the volume knob to select a track or folder.
5. To select a track, press the volume knob to play.
To select a folder, press the volume knob to continue searching.
*While playing back MP3 /WMA files, this function is performed in the current folder.

Top function

The top function resets the player to the first track. Press and hold the [1] button (1 sec.) to play the first track (track No. 1).

* In case of MP3/WMA, the first track of the current folder will be played.

Other various play functions

Scan play

This function allows you to locate and play the first 10 seconds of all the tracks.
Press [2] button to initiate scan.

Repeat play

This function allows you to play the current track repeatedly or play a track currently being played in the MP3/WMA folder repeatedly.

Random play

This function allows you to listen to any track in no particular order within a folder.

General Operation

Power On/Off Button

Press the [MUTE] button to turn on the unit when the vehicle ignition switch is on. Press and hold the button to turn the unit off.

Adjust Volume level

Rotate the volume knob to adjust volume level. Rotate it clockwise to increase and anticlockwise to decrease the volume.

Audio Mute

Press the [MUTE] button to mute the volume from the system. "MUTE" will appear on the display panel and the volume will be muted. Press the [MUTE] button again, or rotate or press the knob to return the volume level to the setting in use before the Mute function was activated.

Mode Button (SRC)

Press the [SRC] button to change between Radio, USB (when USB is connected), or AUX.

Auxiliary Input

To access an auxiliary device:

1. Connect the portable audio player to the AUX port on the front panel.
2. Press the [SRC] button to select Aux-In mode.
Press SRC again to cancel Aux-In mode and go to the next source.

Display Selector (DISP)

Press the [DISP] button to display the clock time, the time will display at all times. Press [DISP] button again to return to previous mode.

Sound Setting

Press & hold the [EQ] button to enter sound effect setting mode. First press shows current EQ, then rotate the knob to changes preset EQ in this order:

OFF <-> POP <-> ROCK <-> CLASSIC <-> JAZZ <-> CUSTOM

Rotate the knob to change CUSTOM, and press the knob, then press [◀] or [▶] button to select and rotate the knob to select a value.

60HZ: (-6) - (+6) - Bass

200HZ: (-6) - (+6) - Mid Bass

700HZ: (-6) - (+6) - Low Mids

2.5KHZ: (-6) - (+6) - High Mids

15KHZ: (-6) - (+6) - Treble

Press and hold the [EQ] button to enter sound effect setting mode, then press [◀] or [▶] button to select USER preset including:

BALANCE -> FADER -> LOUD, rotate the knob to select a value.

BALANCE: LEFT 1-7->CENTRE->RIGHT 1-7

FADER: FRONT 1-7->CENTRE->REAR 1-7

LOUD: ON/OFF

Tuner Operation

Band

In radio mode, press the **[BAND]** button to choose between FM1, FM2, FM3 + MW1 + MW2.

Up Tuning

Press seek up **[▶▶]** button to tune stations upward step-by-step. The current frequency will be shown in digital format on the display panel.

Press and hold seek **[▶▶]** button to the next available station.

Down Tuning

Press seek down **[◀◀]** button to tune stations downward step-by-step.

Press and hold seek down **[◀◀]** button to the previous available station.

Auto Memory Store

Press the **[AS]** button to automatically select six stations & store them in the current band. New stations replace stations already stored in that band.

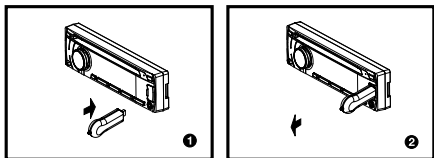
UBS / MP3 Playback

Loading USB device

Open the rubber flap, insert USB device into the slot & the unit will commence play back automatically, & the LCD will display USB.

Remove USB device

Push the SRC button & switch to non USB mode, then take off the USB device, close the rubber flap.



USB Notes

USB (flash memory type) MP3 music play

1. USB flash memory support
2. Fats 12 / Fats 16 / Fats 32 supported
3. File name: 32 byte/dir name: 32 byte/tag name: 32 byte
4. Tag (ID3 tag version 2.0): title/artist/album: 32 byte support

5. USB 1.1 support, USB 2.0 support (It does not support USB 2.0 speed).

Note:

Not all USB devices are compatible with the unit.

BLUETOOTH (BT) OPERATION

- **Pre-pair**
(i) Please ensure that the device you intend to pair with this unit supports BT function
(ii) Not all phones have the same signal strength while in BT mode. It is recommended to keep the BT device, within 3M of this radio for best result. Please remove any metal object between the unit and the BT device
- **Pairing**
Please access the BT pairing mode in the device you intend to pair with this unit "BP 110" should appear in the list of devices that are visible and ready to pair with your BT device/phone. Please select "BP 110" and proceed to input the password 0000, when prompted.
Upon completion this pairing exercise, the BT symbol should be displayed on the front display panel.
- **Answering /rejecting an incoming call**
When there is an incoming call, Press **[☎]** key to answer the call and **[⏏]** to reject the call
- **Hang up a call**
When finished, press **[⏏]** to hang up.
- **Outgoing call**
Press SRC button to switch to the "A2DP" mode, press the [5] button "DIAL NUM" display. Press the [VOLUME] knob to confirm selection. Rotate [VOLUME] knob to select a number, press the knob to confirm. Repeat the above until all numbers have been entered. (*Press the **[◀◀]** button to return the previous number.) Press the [5] button to dial. Press the [6] button to end call.
- **Transfer a call between mobile phone & unit**
During a call, press **[☎]** button to transfer the call between the phone and the unit.
- **Audio Streaming (A2DP)**
While in BT mode, user can playback music on a paired device via this unit's internal amplifier. All other functions like pause/play **[▶▶]** button or **[◀◀]** button are same as USB playback.

This unit can play back MP3/WMA files

Notes:

If you play a WMA file with active DRM (Digital Rights Management), there will be no audio output.

To disable DRM (Digital Rights Management)

When using Windows Media Player 9/10/11, click on Tool -> Options -> Copy music tab, then under Copy settings, unclick the Check box for Copy protect music. Then, reconstruct files.

Precautions when creating MP3/WMA file

Usable sampling rates and bit rates

1. MP3: Sampling rate 8 kHz-48 kHz, Bit rate 8 kbps-320 kbps /VBR
2. WMA: Bit rate 8 kbps-320 kbps

File extensions

1. Always add a file extension ".Mp3", ".WMA" to MP3, WMA file by using single byte letters. If you add a file extension other than specified or forget to add the file extension, the file cannot be played.
2. Files without MP3/WMA data will not play. The files will be played soundlessly if you attempt to play files without MP3/WMA data.
* When VBR files are played, the play time display may differ the play location.
* When MP3/WMA files are played, a little no sound part is caused between tunes.

Logical format (File system)

1. The folder name and file name can be displayed as the title during MP3/WMA play but the title must be within 32 single byte alphabetical letters and numerals (including an extension).
2. Do not affix a name to a file inside a folder having the same name.

Number of files or folders

1. Up to 999 files can be recognized per folder.
Up to 3000 files can be played.
2. Some noise may occur depending on the type of encoder software used while recording.

Pausing play

1. Press the **[1]** button on the front panel or the **[▶/|| TOP]** button on the remote control to pause play. "PAUSE" appears in the display.
2. Press the above button again to resume play.

Selecting a track

Track-up

1. Press the **[▶▶]** button to move to the beginning of the next track.
2. Each time you press the **[▶▶]** button, the track advances to the beginning of the next track.
3. For MP3/WMA tracks, press and hold the **[6]** button (1 sec.) to move ahead to +10 tracks.

Track-down

1. Press the **[◀◀]** button to move back to the beginning of the current track.
2. Press the **[◀◀]** button twice to move back to the beginning of the previous track.

Fast-forward/Fast-reverse

Fast-forward

1. Press and hold the **[▶▶]** button.

Fast-reverse

1. Press and hold the **[◀◀]** button.
* For MP3/WMA tracks, it takes some time until the start of search and between tracks. In addition, some delay may occur in the play time.

Folder select

This function allows you to select a folder containing MP3/WMA files and start playing from the first track in the folder.

1. Press **[5]** or **[6]** button.
Press **[5]** button to move to previous folder.
Press **[6]** button to move to next folder.
2. To select a track, press the **[◀◀]** or **[▶▶]** button.

Search Function

Press the **[EQ]**, then rotate the knob to choose FOLD sch or TRK sch.

Direct Song/File Access

1. Press the volume knob to enter track list search mode.
2. Turn the volume knob to select a digit.
3. Press the volume knob to confirm entry & the next digit will flash.
4. Turn the volume knob to select the next digit.
5. Repeat above steps to enter subsequent digits, if necessary.
NOTE: The unit will only allow the selection of digits that correspond with the number of files in the media you are searching.
6. Once the track number appears on the screen, press the volume knob to play the selected song / file.