

Plena BGM Source



Security Systems

en | Installation and Operating Manual
LBB 1961

BOSCH

Important safeguards

- 1 Read instructions - All the safety instructions for use should be read before the system is operated.
- 2 Retain instructions - The safety instructions and instructions for use should be retained for future reference.
- 3 Heed warnings - All warnings on the unit and in the operating instructions should be adhered to.
- 4 Follow instructions - All operating instructions and instructions for use should be followed.
- 5 Cleaning - Unplug system units from the mains outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 6 Attachments - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- 7 Water and Moisture - Do not use this unit near water, for example near a bathtub, washbowl, kitchen sink, or laundry basket, in a wet basement, near a swimming pool, in an unprotected outdoor installation or any area which is classified as a wet location.
- 8 Accessories - Do not place this unit on an unstable stand, tripod, bracket or mount. This unit may fall, causing serious injury to a person and serious damage to the unit. Use only a stand, tripod, bracket or mount recommended by the manufacturer, or sold with the product. Any mounting of the unit should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- 9 Ventilation - Openings in the enclosure, if any, are provided for ventilation and to ensure reliable operation of the unit and to protect it from overheating. These openings must not be blocked or covered. The unit should not be placed in a built-in installation unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 10 Power sources - Units should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply you plan to use, consult your appliance dealer or local power company. For units intended to operate from battery power, or other sources, refer to the "Installation and User Instructions".
- 11 Grounding or polarisation - This unit may be equipped with a polarised alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarised plug. Alternatively, this unit may be equipped with a 3-wire grounding type plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
- 12 Power-Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
- 13 Overloading - Do not overload outlets and extension cords as this can result in a risk of fire or electrical shock.
- 14 Object and Liquid Entry - Never push objects of any kind into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the unit.
- 15 Servicing - Do not attempt to service this unit yourself as opening or removing covers may expose to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 16 Damage Requiring Service - Unplug the unit from the outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power-supply cord or plug is damaged.
 - If liquid has been spilled, or objects have fallen into the unit.
 - If the unit has been exposed to rain or water.
 - If the unit does not operate normally by following the instructions for use. Adjust only those controls that are covered by the instructions for use, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the units to their normal operation.
 - If the unit has been dropped or the unit has been damaged.
 - When the unit exhibits a distinct change in performance; this indicates a need for service.
- 17 Replacement Parts - When replacement parts are required be sure the service technician has used replacement parts specified by the manufacturer or parts which have the same characteristics as the original part. Unauthorised substitutions may result in fire, electric shock or other hazards.
- 18 Safety Check - Upon completion of any service or repairs to the units, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.
- 19 Lightning - For added protection of the units during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the unit due to lightning and power-line surges.

About this manual

This manual provides all the information required to install and operate the unit.

Conventions

**Warning**

Follow these instructions to prevent personal injury.

**Caution**

Follow these instructions to prevent damage to the equipment.

**Note**

Read these instructions for tips and other useful information.

Safety precautions

**Warning**

Do not open the unit when it is connected to the mains. The unit contains non-insulated parts, which can cause electric shock.

**Caution**

There are no user-serviceable parts inside the unit. Service must be done by qualified personnel.

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1 About the equipment

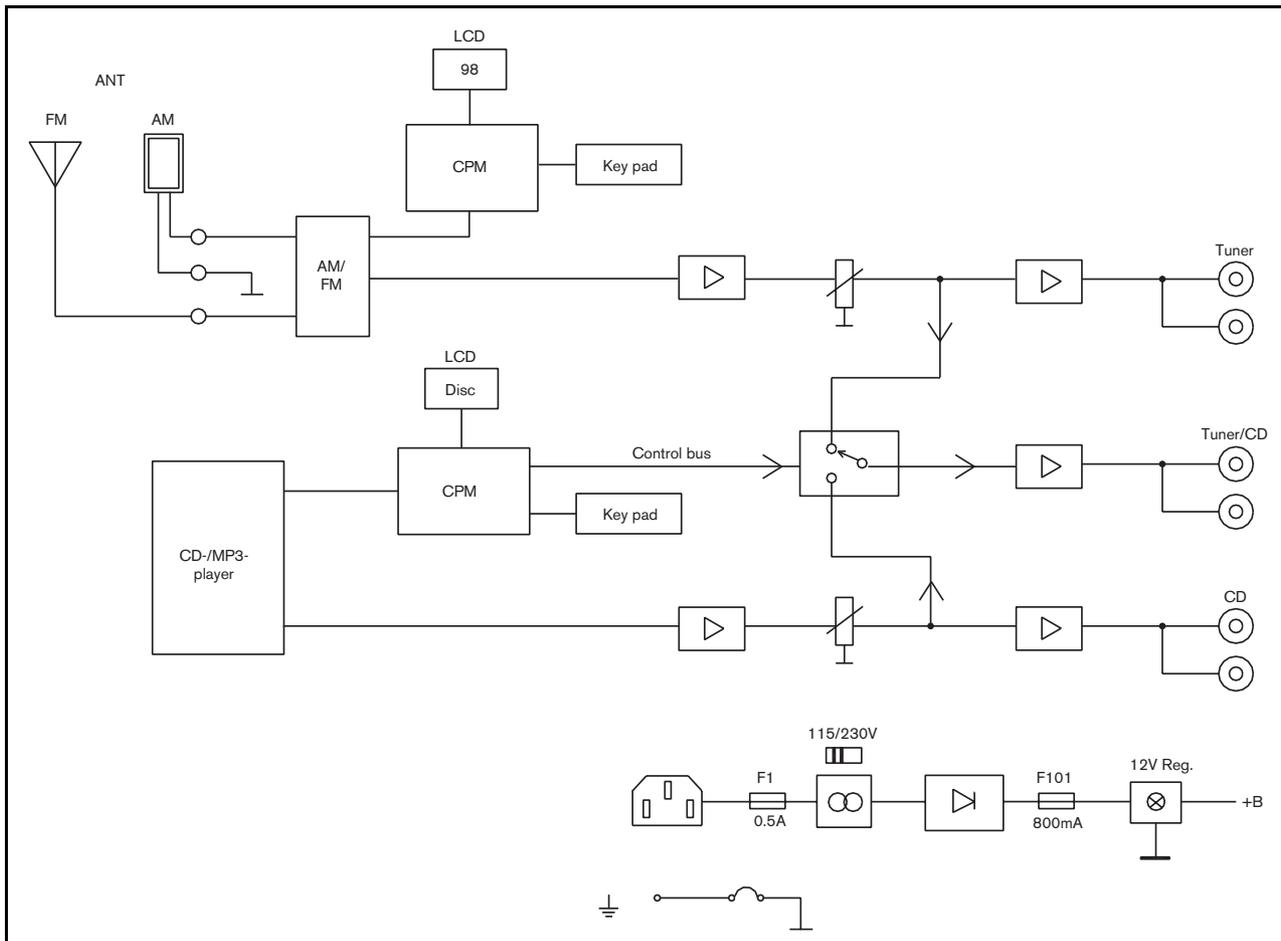


Figure 1.1

The Plena BGM Source unit can be used to add background music to a Plena system. It has a CD-player that can play normal audio-CD's as well as MP3-encoded CD's and a digitally controlled AM/FM-tuner for accurate capture of radio stations. Simultaneous operation of the CD-player and the tuner is possible to allow for two-channel music distribution. The unit has separate outputs for the CD-player and the tuner and also a combined output for connection to a system without music selector. This output provides the tuner signal as long as the CD-player is not playing. All outputs are mono.

1.1 Controls (front)

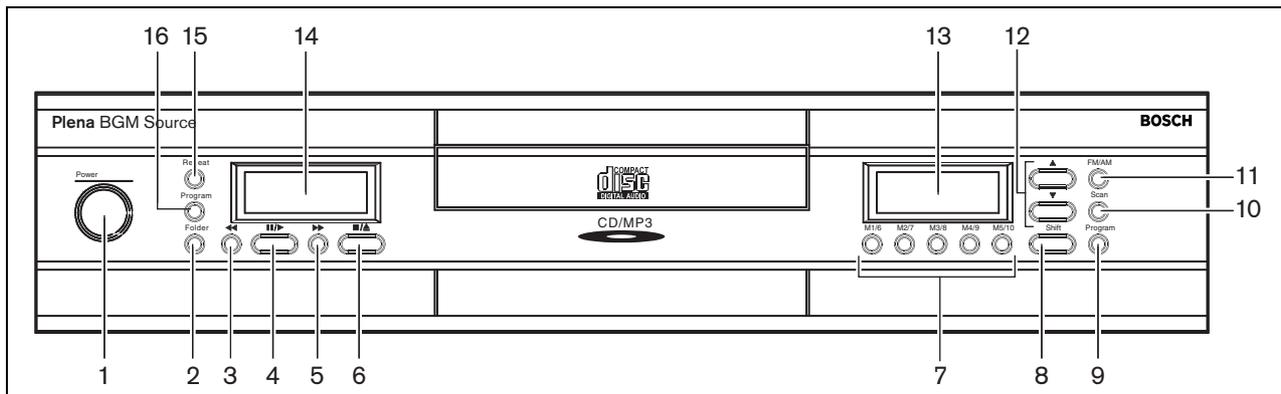


Figure 1.2

- | | |
|--|---------------------------------------|
| 1 Power on/off | 9 Tuner program key |
| 2 CD MP3 folder selection key | 10 Tuner scan key |
| 3 CD previous key | 11 Tuner FM/AM selection key |
| 4 CD pause/play key | 12 Tuner frequency up/down keys |
| 5 CD next key | 13 Tuner display |
| 6 CD stop/eject key | 14 CD display |
| 7 Tuner memory keys 1-5 and 6-10 | 15 CD repeat key |
| 8 Tuner shift key to select memory 1-5 or 6-10 | 16 CD program key for track selection |

1.2 Controls & connections (rear)

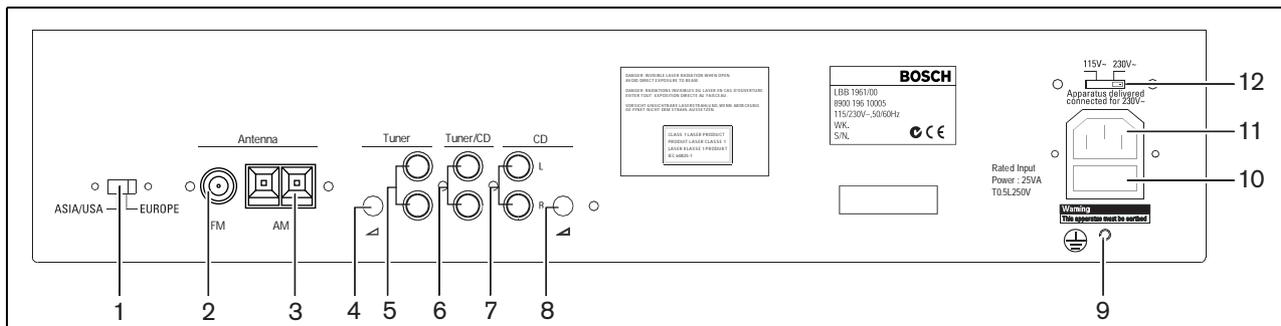


Figure 1.3

- | | |
|---|----------------------------|
| 1 Region selection (ASIA/USA or EUROPE) | 7 CD output (mono) |
| 2 FM antenna input | 8 CD output level |
| 3 AM antenna input | 9 Earth connection screw |
| 4 Tuner output level | 10 Mains fuse |
| 5 Tuner output (mono) | 11 Mains connection |
| 6 Tuner or CD output (mono) | 12 Mains voltage selection |

2 Installation in rack

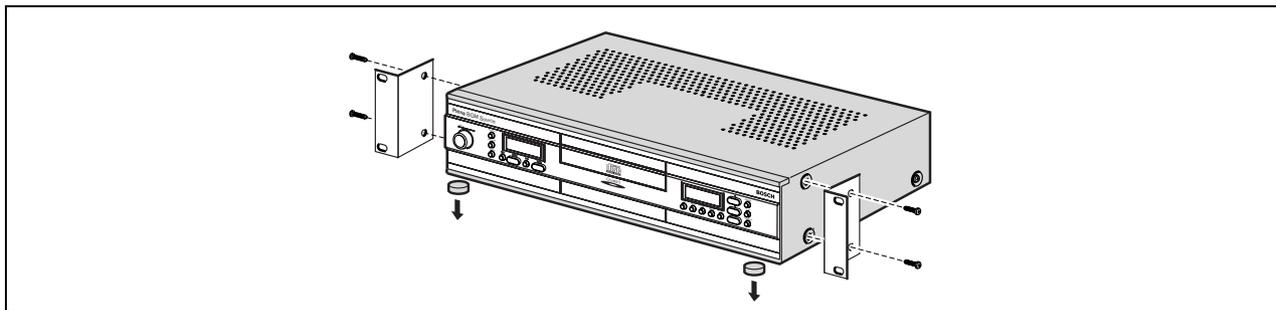


Figure 2.1

Carefully peel off the protective plastic film on both displays. Do not use sharp or pointed objects in order to avoid scratches. Use your fingernails instead.

The BGM Source is delivered for tabletop use, but you can mount it in a 19" rack. If you mount the unit in a rack, you must:

- use the mounting brackets delivered with the unit.
- remove the 4 feet from the bottom of the unit. (Without the feet the unit is 2U high.)

3 External settings and connections

3.1 Connect antennas

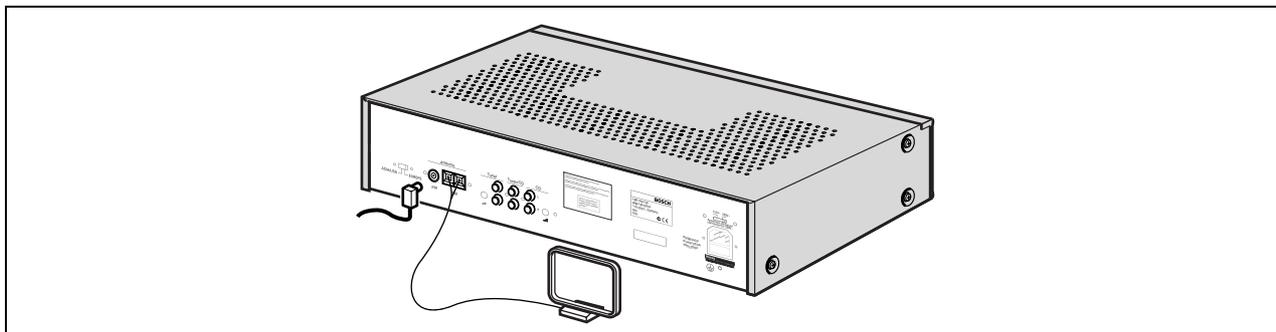


Figure 3.1

The FM input must be connected to an antenna or cable network with a COAX cable of 75 Ohm. A connector for the FM input is provided with the unit. The AM input can be connected to the loop-antenna delivered with the unit.

3.2 Connect to an amplifier

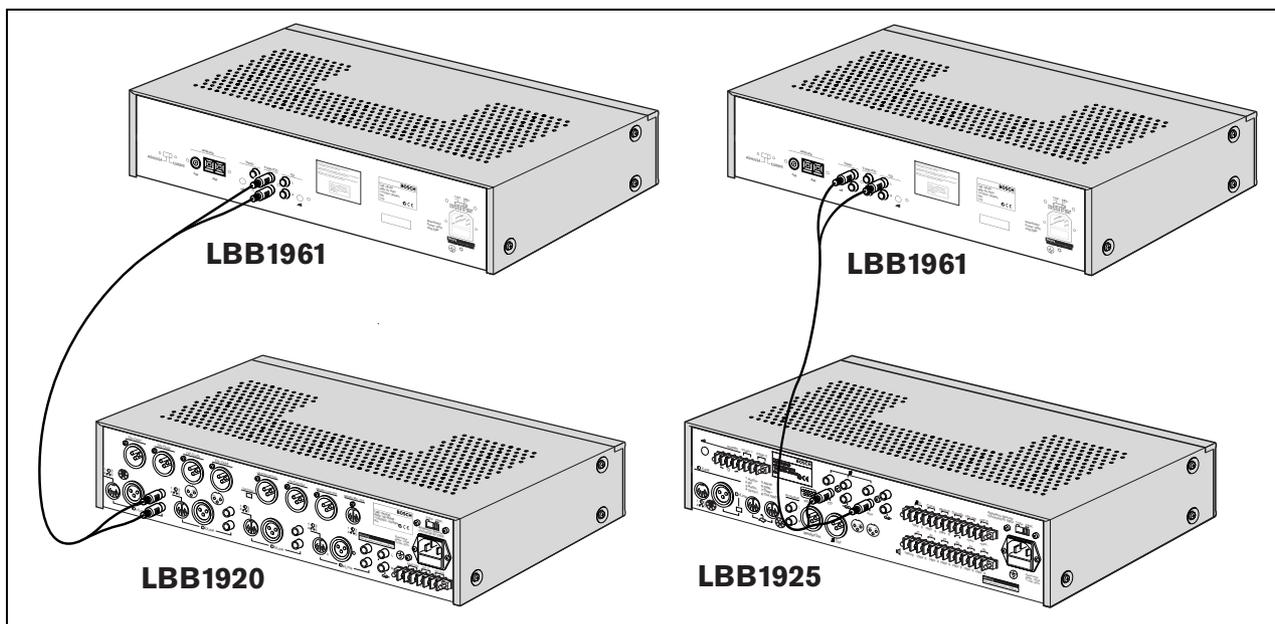


Figure 3.2

The outputs of the BGM source unit can be connected to a Plena Pre-amplifier or Mixer Amplifier. A stereo cinch/cinch-cable is packed with the unit. As the BGM source unit and the Plena amplifiers are mono, this single cable can be used to connect both the CD-player and the tuner together to the amplifier, using only one connection of the stereo pair. The combined CD-player/tuner output can be used for amplifiers without music source selector, e.g. the Plena Universal Pre-amplifier LBB1920.

4 Operation

4.1 Operation of tuner

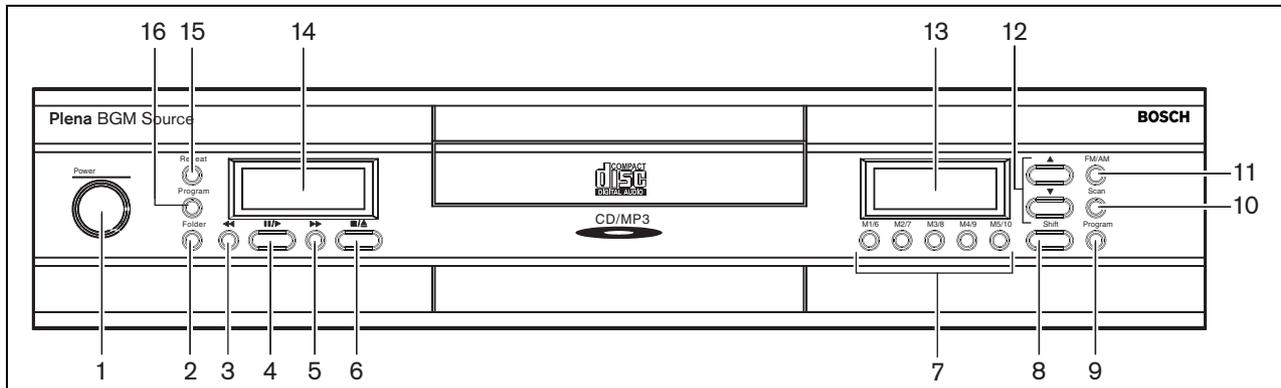


Figure 4.1

4.1.1 Station selection

- Use the tuner FM/AM selection key (11) to choose between FM and AM reception.
- Use the tuner frequency up/down keys (12) to step up or down in frequency. Prolonged pressing makes the tuner search for the next station.

4.1.2 Programming

- Save the selected radio station as a preset by pressing the tuner program key (9).
- Press the tuner memory keys M1/6 to M5/10 (7) for memory position 1 to 5, **or**
- Press the tuner program key (9), the tuner shift key (8) and the tuner memory keys M1/6 to M5/10 (7) for memory position 6 to 10. The tuner display (13) shows 'MEMORY' during this process. Both for AM and FM, 10 presets are available.

Saved presets are selected by pressing the tuner memory keys M1/6 to M5/10 (7) or by pressing the tuner shift key (8) followed by M1/6 to M5/10. For easy selection, pressing the tuner scan key (10) monitors the presets by selecting all 10 presets sequentially for 5 seconds.

4.2 Operation of CD-player

4.2.1 Track selection



Note

After inserting a new CD, the CD-player detects the type of CD and shows it on the CD display (14): 'CD' for an audio-CD or 'MP3' for a disc containing MP3-files. Note that loading of MP3-CD's may take longer, depending on the number of tracks and subdirectories, as an internal table of contents is made. The MP3-files in the root directory and in the subdirectories are all put in separate folders for easy track selection. The folder number is indicated on the display, followed by the track number and the time.

For track selection on audio-CD's proceed as follows:

- Use the CD previous key (3) and/or the CD next key (5) to select the track. Prolonged pressing results in fast reverse or fast forward.
- Use the CD pause/play key (4) to pause or to play (resume playing).
- Use the CD stop/eject key (6) to stop playing (press once) and/or to eject the CD (press twice).

For track selection on MP3-CD's first select the folder that contains the track. Proceed as follows:

- Press the CD MP3 folder selection key (2)
- Press the CD previous key (3) and/or the CD next key (5).
The display shows 'FOLDER' during this process. Pressing the CD MP3 folder selection key once more resumes the track selection mode in the selected folder.

By repeatedly pressing the CD repeat key (15) you select the following modes:

- Playing all tracks (MP3: in all folders) and stop.
- Repeating the current track. The display shows '1'.
- Repeating all MP3-tracks within the current folder. The display shows '▷'.
- Repeating all tracks (MP3: in all folders). The display shows '◁▷'.
- Random playing of tracks (MP3: in all folders). The display shows 'RANDOM'.

If a MP3-CD is stopped and loaded again, the player will resume playing where it was stopped. In this way it is avoided that only the first part of a very long MP3-CD is played over and over again each day. If, however, an audio-CD is stopped and loaded again, it just starts with track 1.

4.2.2 Programming

To program a playlist selection:

- Press the CD program key (16).
- Select a track by pressing the CD previous key (3) and/or the CD next key (5). In the case of a MP3-CD folder selection is possible, as described above.
- Press the CD repeat key (15) to store the first track and step to the next track of the playlist, open for selection.
- Repeat this process until the playlist is finished.
- Finally press the CD pause/play key (4) to start playback of the playlist.

4.3 Creation of MP3 CD-R's

You can make your own MP3 CD-R's (CD-ROM's) on a normal PC with a CD-burner. Numerous programs for this purpose are available as freeware or shareware. Some websites to download from are: www.mp3.com, www.download.com, www.shareware.com and www.zdnet.com.

Search there, or in a general search program as www.google.com, for 'CD-ripper'. You can collect your MP3-files in different subdirectories or folders on your PC and transfer these files to the CD-R. Always use the file name extension *.mp3*. Constant MP3-bit rates (CBR) of 32 – 320 kbps are supported, as well as variable bit rate (VBR) files.



Note

As the reflectivity of a CD-RW (CD-Rewritable) is far below that of a CD and a CD-R, playback of CD-RW's is not guaranteed. On the CD-R the ISO-9660 file system should be used. Do not use the UDF file system.

5 Technical data

5.1 Electrical

Mains voltage	230/115 Vac, ($\pm 15\%$, 50/60 Hz)
Max mains power consumption	25 VA

5.2 Tuner

Tuning range

FM	87.5 - 108 MHz (EUROPE, 50 kHz) 87.5 - 108 MHz (ASIA/AMERICA, 100 kHz)
AM	531 - 1602 kHz (EUROPE, 9 kHz) 530 - 1610 kHz (ASIA/AMERICA, 10 kHz)

Sensitivity

FM	2 μ V (26 dB S/N)
AM	30 μ V (20 dB S/N)

Performance

Frequency response	30 Hz - 15 kHz (+1/-3 dB, FM)
Distortion	<1%
S/N	>63 dB (1 mV, FM)

5.3 CD-player

Audio CD

Frequency response	20 Hz - 20 kHz (+1/-3 dB)
Distortion	<0.1%
S/N	>80 dB

MP3 CD/CD-R/CD-RW

Supported bit rates	CBR 32 kbps - 320 kbps and VBR, mono and stereo
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General

Data buffer (shock protection)	8 MByte
Lifetime	>10.000 CD play cycles
Memory for track selection	999 tracks (MP 3), 99 tracks (audio-CD)

5.4 Outputs

Tuner output (Cinch, 2x mono)

Nominal level	200 mV
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CD player output (Cinch, 2x mono)

Nominal level	500 mV
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Mixed output (Cinch, 2x mono)

Nominal level	200 mV
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5.5 Environmental conditions

Operating temperature range	+5 to +55 °C
Storage temperature range	-25 to +55 °C
Relative humidity	<95%

5.6 General

EMC emission

acc. to EN 55103-1

EMC immunity

acc. to EN 55103-2

Safety

acc. to EN 60065

Dimensions

100 x 430 x 270 mm (19" wide, 2U high)

Weight

approx. 4.6 kg

For more information visit
www.boschsecuritysystems.com

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