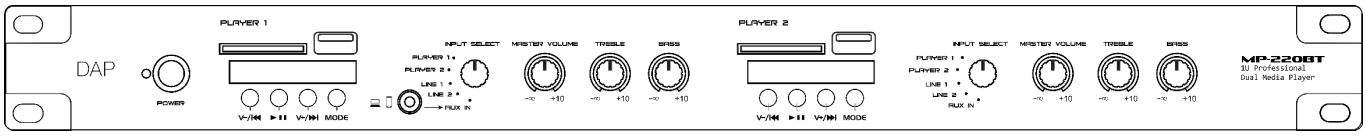
DAP

USER MANUAL



ENGLISH

MP-220BT V1

Product code: D1245

Preface

Thank you for purchasing this DAP product.

The purpose of this user manual is to provide instructions for the correct and safe use of this product.

Keep the user manual for future reference as it is an integral part of the product. The user manual shall be stored at an easily accessible location.

This user manual contains information concerning:

- Safety instructions
- Installation and operation of the device
- Intended and non-intended use of the device
- Maintenance procedures
- Troubleshooting
- Transport, storage and disposal of the device

Non-observance of the instructions in this user manual may result in serious injuries and damage of property.

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1. Introduction

1.1. Before Using the Product

Important
Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

After unpacking, check the contents of the box. If any parts are missing or damaged, contact your Highlite International dealer.

Your shipment includes:

- DAP MP-220BT
- Schuko to IEC power cable (1,3 m)
- Paging microphone holder
- Remote control
- User manual

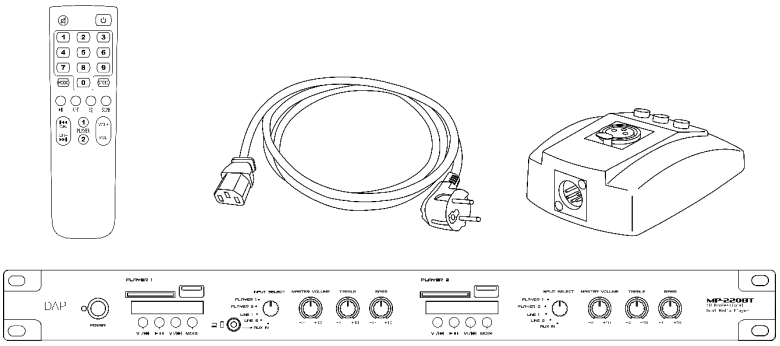


Fig. 01

1.2. Intended Use

This device is intended for professional use as a dual media player. It is suitable only for indoor installation. It is not suitable for households.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

1.3. Text Conventions

Throughout the user manual the following text conventions are used:

- Buttons: All buttons are in bold lettering, for example "Press the **UP/DOWN** buttons"
- References: References to chapters and parts of the device are in bold lettering, for example: "Refer to **2. Safety**", "press the **power switch (03)**"
- 0–255: Defines a range of values
- Notes: **Note:** (in bold lettering) is followed by useful information or tips

1.4. Symbols and Signal Words

Safety notes and warnings are indicated throughout the user manual by safety signs.

Always follow the instructions provided in this user manual.



DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING Indicates an imminently hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.



Attention Indicates important information for the correct operation and use of the product.



Important Read and observe the instructions in this document.



Electrical hazard



Provides important information about the disposal of this product.

1.5. Symbols on the Information Label

This product is provided with an information label. The information label is located on the bottom plate of the device.

The information label contains the following symbols:



This device falls under IEC protection class I.



This device shall not be treated as household waste.



Caution: Risk of electric shock. Disconnect input power before opening.
Warning: This appliance must be earthed.

2. Safety



Important
Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

2.1. Warnings and Safety Instructions



DANGER
Danger for children

For adult use only. The device must be installed beyond the reach of children.

- Do not leave various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach. Packaging material is a potential source of danger for children.



DANGER
Electric shock caused by short-circuit

This device falls under IEC protection class I.

- Make sure that the device is electrically connected to ground (earth). Connect the device only to a socket-outlet with ground (earth) connection.
- Do not cover the ground (earth) connection.
- Do not let the power cable come into contact with other cables. Handle the power cable and all connections with the mains with caution.
- Do not modify, bend, mechanically strain, put pressure on, pull or heat up the power cable.
- Make sure that the power cable is not crimped or damaged. Examine the power cable periodically for any defects.
- Do not immerse the device in water or other liquids. Do not install the device in a location where flooding may occur.
- Do not use the device during thunderstorms. Disconnect the device from the electrical power supply immediately.



WARNING
Electric shock caused by dangerous voltage inside

There are areas within the device where dangerous touch voltage may be present.

- Do not open the device or remove any covers.
- Do not operate the device if the covers are open.
- Disconnect the device from electrical power supply before service and maintenance, and when the device is not in use.



Attention
Power supply

- Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.
- Make sure that the cross-sectional area of the extension cords and power cables is sufficient for the required power consumption of the device.



Attention
General safety

- Do not shake the device. Avoid brute force when installing or operating the device.
- If the device is dropped or struck, disconnect the device from the electrical power supply immediately.
- If the device is exposed to extreme temperature variations (e.g. after transportation), do not switch it on immediately. Let the device reach room temperature before switching it on, otherwise it may be damaged by the formed condensation.
- If the device fails to work properly, discontinue the use immediately.



Attention
This device shall be used only for the purposes it is designed for.

This device is designed to be used as a dual media player. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

This device does not contain user-serviceable parts. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.



Attention
Do not expose the device to conditions that exceed the rated IP class conditions.

This device is IP20 rated. IP (Ingress Protection) 20 class provides protection against solid objects greater than 12 mm, such as fingers, and no protection against harmful ingress of water.

2.2. Requirements for the User

This product may be used by ordinary persons. Maintenance and installation may be carried by ordinary persons. Service shall be carried out only by instructed or skilled persons. Contact your Highlite International dealer for more information.

Instructed persons have been instructed and trained by a skilled person, or are supervised by a skilled person, for specific tasks and work activities associated with the service of this product, so that they can identify risks and take precautions to avoid them.

Skilled persons have training or experience, which enables them to recognize risks and to avoid hazards associated with the service of this product.

Ordinary persons are all persons other than instructed persons and skilled persons. Ordinary persons include not only users of the product but also any other persons that may have access to the device or who may be in the vicinity of the device.

3. Description of the Device

The MP-220BT is a dual media player. It can be installed in a standard 19-inch rack. It supports multiple media sources, such as FM radio, line-level input devices, USB/SD card and BT. The device can be operated manually or with the supplied IR remote control.

3.1. Front View

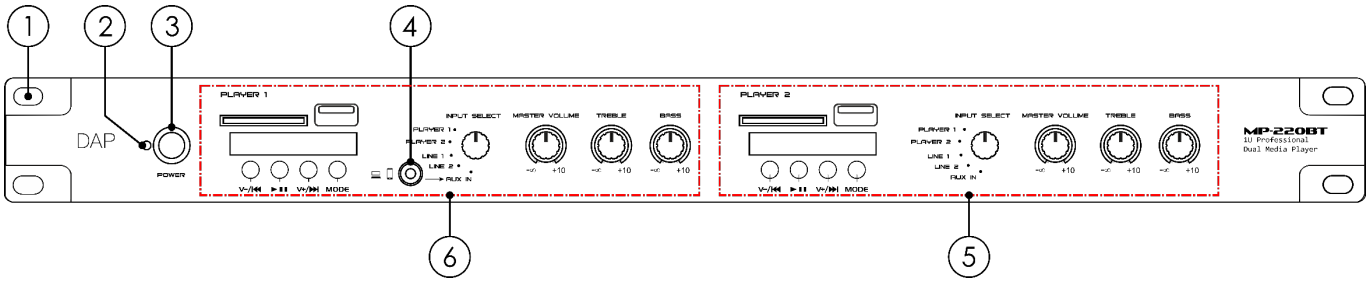


Fig. 02

01) 4 x mounting openings (for installation in a 19-inch rack)
02) Power LED indicator (Blue)
03) Power button
04) Balanced 3,5 mm TRS jack connector AUX IN
05) Media player 2 (see **3.3. Media Player** on page 9)
06) Media player 1 (see **3.3. Media Player** on page 9)

3.2. Back View

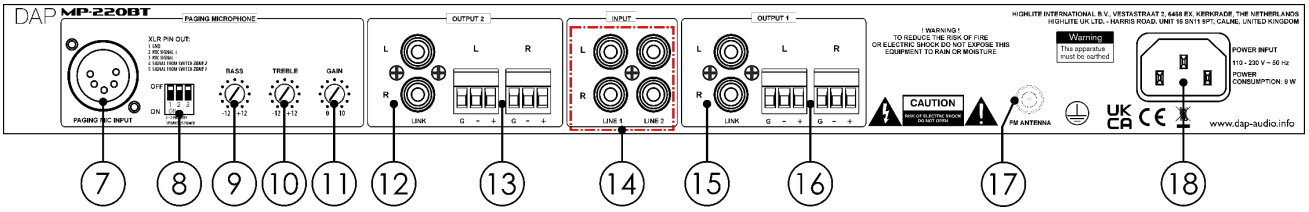


Fig. 03

07) 5-pin XLR paging microphone connector IN
08) DIP switches
09) Microphone bass level control
10) Microphone treble level control
11) Microphone gain level control
12) RCA analog line-level connectors OUT (Left/Right, output 2)
13) 3-pin Phoenix terminal line-level connectors OUT (Left/Right, output 2)
14) (Line 1–2) RCA analog line-level connectors IN (Left/Right)
15) RCA analog line-level connectors OUT (Left/Right, output 1)
16) 3-pin Phoenix terminal line-level connectors OUT (Left/Right, output 1)
17) FM antenna connector IN
18) IEC power connector IN

3.3. Media Player

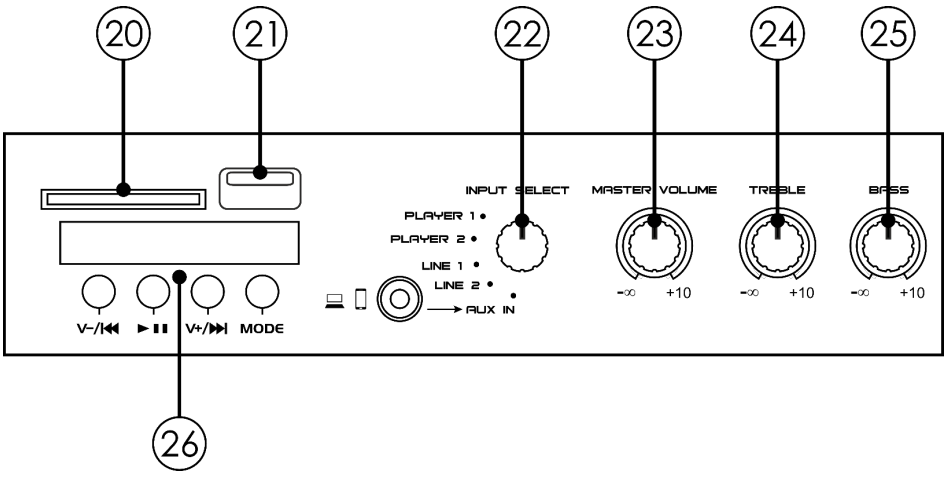


Fig. 04

19) SD card connector IN
20) USB-A connector IN
21) Input selector
22) Master volume control
23) Treble level control
24) Bass level control
25) LED display and control buttons

3.4. Product Specifications

Model:	MP-220BT
Electrical:	
Input voltage:	220–240 V AC, 50 Hz
Power consumption:	9 W
Playback:	
Supported audio files:	WAV, FLAC, MP3
USB flash drive:	USB-A, < 32 GB, FAT32-formatted
SD:	< 32 GB, FAT32-formatted
Outputs:	
Main outputs:	2
Inputs:	
Stereo inputs:	2
Auxiliary inputs:	1
Paging microphone inputs:	1
Audio Specifications:	
Frequency response:	20–20000 Hz
FM frequency:	87,5–108 MHz
FM antenna impedance:	75 Ω
BT:	4.2
BT range:	20 m
Physical:	
Dimensions:	483 x 130 x 44,5 mm (Wx D x H), 1 U
Weight:	1,8 kg

Operation and control:	
Control panel:	LED display and buttons
Connections:	
Power connections:	Schuko cable (1,3 m)
Stereo input connections:	RCA
Auxiliary input connections:	balanced 3,5 mm TRS jack
Main output connections:	RCA, Phoenix terminal connectors
Paging microphone input connections:	5-pin XLR
Construction:	
Housing:	Aluminum/metal
Color:	Black
IP rating:	IP20
Thermal:	
Minimum ambient temperature t_a:	0 °C
Maximum ambient temperature t_a:	40 °C

3.5. Optional Accessories

You can additionally purchase the following accessories:

Product code: D1385 (GCM-10 Gooseneck Condenser Mic)

3.6. Dimensions

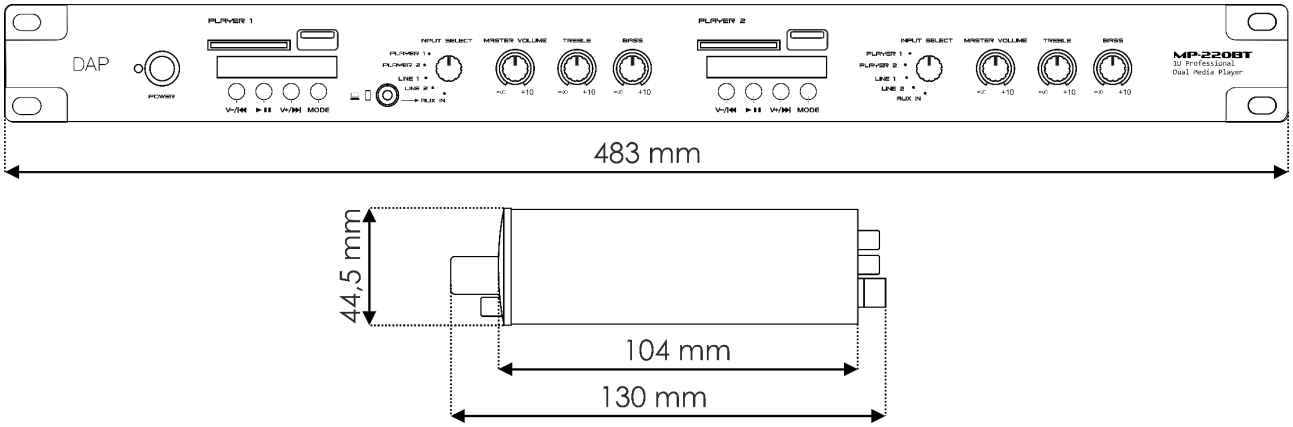


Fig. 05

4. Installation and Setup

4.1. Warnings and Precautions



Attention
Connect all data cables before supplying power.
Disconnect power supply before connecting or disconnecting data cables.

4.2. Safety Instructions for Installation



Attention
Make sure there is enough space for ventilation around the device.

Do not install near equipment that produces heat, for example amplifiers.

4.3. Installation Site Requirements

- The device must be installed only indoors.
- The device can be placed on a flat surface or mounted in a standard 19-inch rack.
- The maximum ambient temperature t_a = 40 °C must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C.

4.4. Rack Mounting

The device can be mounted in a standard 19-inch rack. The device requires 1 rack unit (U) of space, which is 44,5 mm high. Make sure that the rack is sufficiently secured to prevent it from becoming unstable or falling over.

To mount the device in a two-post rack, follow the steps below:

01) Insert 4 cage nuts in the openings on the rack posts where you want to mount the device.
02) Position the device in front of the rack posts so that the **4 x mounting openings (01)** on the flanges face the openings on the rack posts with cage nuts.
03) Using a screwdriver, mount the device to the rack posts with 4 screws.

Note: Make sure that the FM antenna points up.

4.5. Connecting to Power Supply



DANGER
Electric shock caused by short-circuit

The device accepts AC mains power at 220–240 V and 50 Hz. Do not supply power at any other voltage or frequency to the device.

The device is equipped with the **input voltage selector (17)** that can be used for selecting of the input voltage. Only skilled persons are allowed to operate the **input voltage selector (17)**. The selector is, by default, set to 230 V AC 50 Hz.

This device falls under IEC protection class I. Make sure that the device is always electrically connected to the ground (earth).

Before connecting the device to the socket-outlet:
- Make sure that the power supply matches the input voltage specified on the information label on the device.
- Make sure that the socket-outlet has ground (earth) connection.

Connect the device to the socket-outlet with the power plug.

4.6. Start-up

To connect and use the device, follow the steps below:

01) Make sure that the device is switched off. See **4.6.2. Switching On/Off** on page 13 for more information.
02) Connect the FM antenna to the **FM antenna connector IN (18)** and extend the antenna.
03) Connect the paging microphone. See **5.6. Paging Microphone** on page 21 for more information.

Note:

When using a paging microphone, activate phantom power and set signal priority. See **5.6.2. DIP Switches** on page 22 for more information.

04) Connect an amplifier and other devices. See **4.6.1. Setup Example** on page 13.
- To connect an amplifier, use the **RCA analog line-level connectors OUT (12/15)** or the **3-pin Phoenix terminal line-level connectors OUT (13/16)**.
- To connect a smartphone, MP3 player or a laptop, use the **balanced 3,5 mm TRS jack connector AUX IN (04)**. When this connector is in use, the radio will be muted.
- To connect a CD player or a tuner, use the **(Line 1–2) RCA analog line-level connectors IN (14)**.

05) Turn the **input selector (22)** to set the input source.
06) Insert a USB flash drive/SD card into the **SD card connector IN (20)** or the **USB-A connector IN (21)**.
07) Switch on the other devices (e.g. audio mixer, CD player).
08) Switch on the device. See **4.6.2. Switching On/Off** on page 13 for more information.
09) Switch on the amplifier.
10) Switch on the speakers.
11) Select functions. See **5.2. Functions** on pages 14–16 and **5.5. Remote Control** on pages 17–20 for more information.
12) Adjust the settings:
- Turn up the volume controls on the device and set the characteristics of the media player(s). See **5.3. Adjusting Bass/Treble/Volume** on page 17 for more information.
- Set the volume of the device. See **5.4. Setting Device Volume** on page 17 for more information.

4.6.1. Setup Example

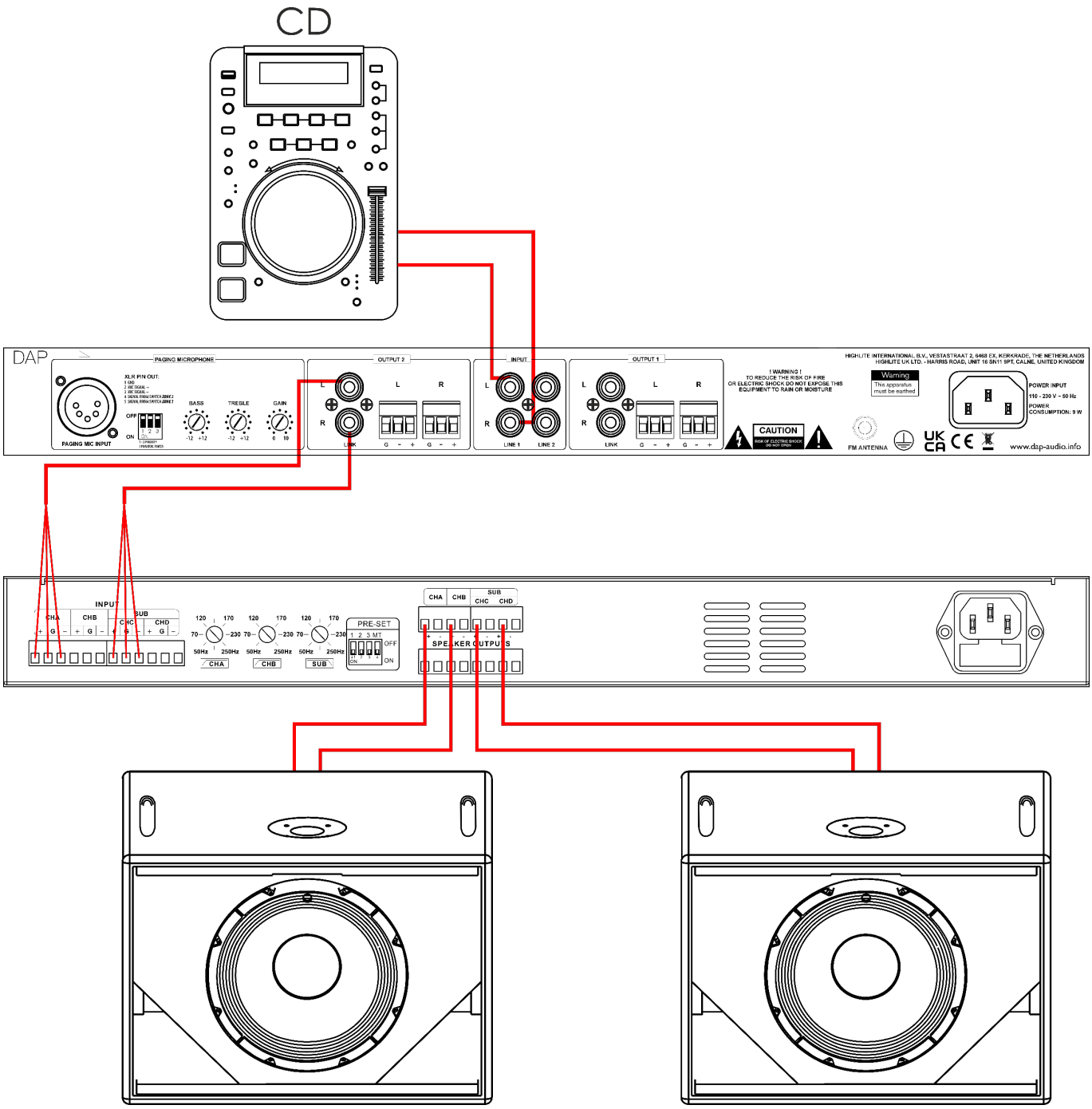


Fig. 06

4.6.2. Switching On/Off

The device has a power button.

- Press the **power button (03)** to switch on the device. If the **power LED indicator (Blue) (02)** is on, the device is powered.
- Release the **power button (03)** to switch off the device.

5. Operation

5.1. Safety Instructions for Operation

Attention
This device must be used only for the purposes it is designed for.

This device is intended for use as a professional dual media player. It is suitable only for indoor installation.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

Attention
Power supply

Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.

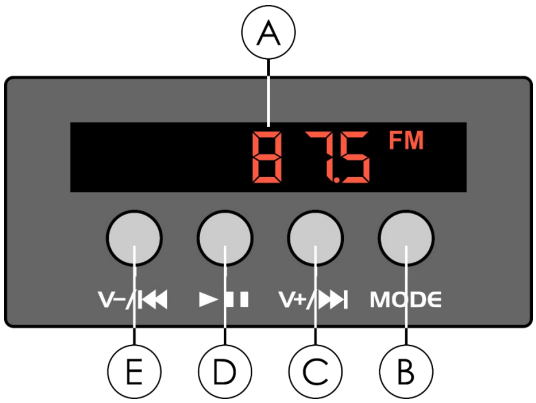
5.2. Functions

The device can be operated in the following functions:

- FM: See **5.2.1. FM Radio Mode**
- BT: See **5.2.2. BT Mode**
- USB: See **5.2.3. USB/SD Mode**
- Paging microphone

The device can be operated with the control panel or with an infrared (IR) remote control (see **5.5. Remote Control** on page 17).

There are 2 separate control panels for media player 1 and media player 2. Both control panels have the same layout and functions.



A) LED display
B) MODE button
C) VOLUME +/FORWARD button
D) PLAY/PAUSE button
E) VOLUME –/BACKWARD button

Fig. 07

- Use the **MODE** button to select functions.
- Use the **VOLUME +/FORWARD** button to scroll through the radio presets, to select music files or to increase the volume.
- Use the **PLAY/PAUSE** button to start auto scan or to unlink BT devices.
- Use the **VOLUME –/BACKWARD** button to scroll through the radio presets, to select music files or to decrease the volume.

5.2.1. FM Radio Mode

You can search for FM radio stations, select them and listen to them.

Press the **MODE button (B)** until the display shows:



5.2.1.1. Auto Scan

In this menu you can search for available FM radio stations.

Press the **PLAY/PAUSE button (D)** to start an auto scan. The device scans for all available FM radio stations and automatically saves them as presets.

5.2.1.2. Saving Presets

If the sound quality of an FM preset is not good enough, you can tune it manually and save changes.

To activate the preset saving mode, press and hold down for 5 seconds the **MODE button (B)** and **VOLUME +/FORWARD button (C)** or the **VOLUME –/BACKWARD button (E)**. The display will start blinking.

When the preset saving mode is active, press the **VOLUME +/FORWARD button (C)** and the **VOLUME –/BACKWARD button (E)** to tune the preset.

To save the preset:

01) Press and hold down for 3 seconds the **MODE button (B)** and **VOLUME +/FORWARD button (C)** or the **VOLUME –/BACKWARD button (E)**) until the display shows "P".
02) Press the **VOLUME +/FORWARD button (C)** and the **VOLUME –/BACKWARD button (E)** to select one of the 32 preset slots.
03) Press and hold down for 3 seconds the **MODE button (B)** and **VOLUME +/FORWARD button (C)** or the **VOLUME –/BACKWARD button (E)**. The display will stop blinking.

5.2.1.3. Selecting Presets

Press the **VOLUME +/FORWARD button (C)** and the **VOLUME –/BACKWARD button (E)** to select the saved FM presets. The device will activate the selected FM preset.

5.2.2. BT Mode

In this menu you can stream BT signals from your mobile devices (smartphones, tablets, notebooks, etc.).

Press the **MODE button (B)** until the display shows:



The display will be blinking continuously.

For this function to work, you need to pair your mobile device and the MP-220BT via BT.

Note:

BT can only be used as a means to receive wireless audio signals. It is not possible to pair the device with other devices via BT.

To use the device in the BT mode:

01) Start BT on your mobile device.
02) On your mobile device, scan for the available BT devices. The IDs of the MP-220BT are "DAP PLAYER 1" (for media player 1) and "DAP PLAYER 2" (for media player 2).
03) Pair your mobile device with the MP-220BT. The display of the connected media player will stop blinking.
04) On your mobile device search for and play any music/video file or visit streaming services. The MP-220BT will receive signals from your mobile device.
    - Press the **VOLUME +/FORWARD button (C)** and the **VOLUME –/BACKWARD button (E)** to manually select a music/video file.
    - Press the **PLAY/PAUSE button (D)** to play the currently selected music source. If you press the button again, playback will pause.

After use, press and hold down the **PLAY/PAUSE button (D)** for 4 seconds to unpair the media player from your mobile device. The display will start blinking again.

Note:

When your mobile device receives an incoming call, playback will stop automatically. When the conversation is finished, you need to resume playback manually.

5.2.3. USB/SD Mode

In this menu you can play music files from a USB flash drive or an SD card.

Insert an SD card into the **SD card connector IN (20)** or a USB flash drive into the **USB-A connector IN (21)**. The device will automatically read the WAV, FLAC or MP3 files.

Note:

The USB flash drive/SD card should be FAT32-formatted and its maximum capacity should not exceed 32 GB.

If the inserted USB flash drive (or SD card) are compatible, the device will automatically start playing the first music file. The display shows:



5.2.3.1. Playback

Use the **PLAY/PAUSE button (D)** to start or pause playback.

- Press the **PLAY/PAUSE button (D)** to play the currently selected file.
- Press the **PLAY/PAUSE button (D)** again to pause playback.

5.2.3.2. Select Previous/Next File

Use the **VOLUME +/FORWARD button (C)** and the **VOLUME –/BACKWARD button (E)** to select files backward/forward.

5.3. Adjusting Bass/Treble/Volume

Turn the **master volume control (23)** to the left/right to decrease/increase the master volume. The adjustment range is from –∞ to +10 dB.

Turn the **treble level control (24)** to the left/right to decrease/increase the treble level. The adjustment range is from –∞ to +10 dB.

Turn the **bass level control (25)** to the left/right to decrease/increase the bass level. The adjustment range is from –∞ to +10 dB.

5.4. Setting Device Volume

It is possible to set the volume of the device in all 3 functions.

Press and hold down the **VOLUME +/FORWARD button (C)** or the **VOLUME –/BACKWARD button (E)** to increase/decrease the volume. The display shows:



The adjustment range is 0–30, from low to high volume.

5.5. Remote Control

The device can be controlled with an IR remote control. The remote control is included in the delivery.

The supplied remote control is delivered without batteries. It accepts 2 x AAA 1,5 V (alkaline) batteries.

To install the batteries:

01) Press on the battery compartment cover and move it up to open (Fig. 08).
02) Insert 2 x AAA 1,5 V batteries into the battery housing (Fig. 09).
03) Close the battery compartment cover (Fig. 10).

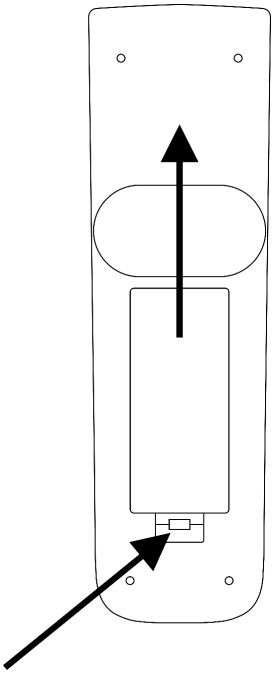


Fig. 08

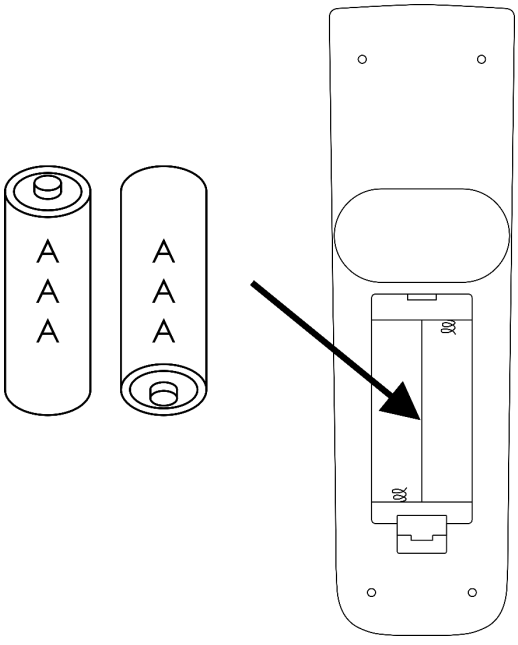


Fig. 09

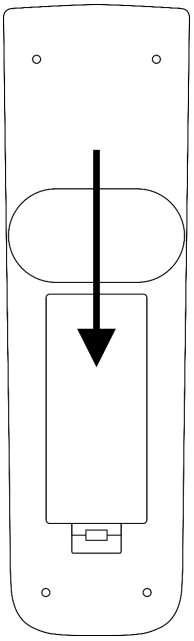


Fig. 10

Note:

Make sure that you install the batteries with correct polarity orientation.

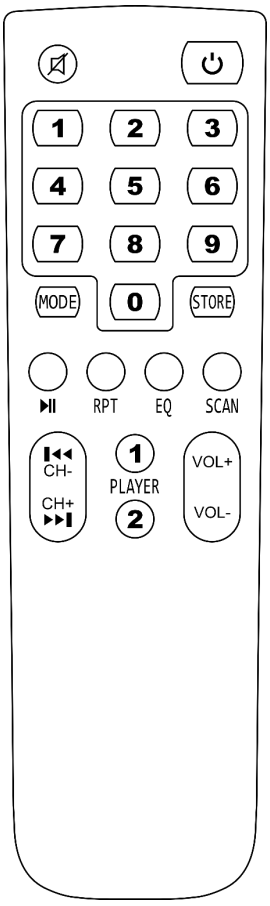


Fig. 11

Button	Description	Function
Mute	Mute	Switch mute on/off (all functions)
On/Off	On/Off	Switch the stand-by mode on/off
0 – 9		• Press to select presets (FM) • Press to select music files (USB/SD)
MODE	Toggle	Toggle functions
STORE	Store	Save FM presets
▶II	Play/Pause	Press to start/stop playback (BT, USB/SD)
RPT	Repeat	Press to set playback mode (USB/SD)
EQ	Equalizer	Press to set the equalizer (all functions)
SCAN	Scan	Press to start/stop auto scan (FM)
⏮ CH-	Preset/file –	• Press to select FM presets (FM) • Press to select music files (USB/SD)
CH+ ⏭	Preset/file +	
1 2		Press to select media player 1 or media player 2 before adjusting settings. **Note:** To prevent unintentional adjustment of settings of the incorrect media player, press the button of the correct media player before pressing the remaining buttons.
VOL-	Volume –	Decrease/increase the volume (all functions)
VOL+	Volume +	

5.5.1. FM Radio Mode

In this menu you can search for FM radio stations, select them and listen to them. The display shows:



5.5.1.1. Auto Scan

In this menu you can search for available FM radio stations.

Press the **SCAN button** to start an auto scan. The device scans for all available FM radio stations and automatically saves them as presets. The device can store up to 32 FM presets.

5.5.1.2. Saving Presets

If the sound quality of an FM preset is not good enough, you can tune it manually and save changes.

01) Press the **STORE button**.
02) Manually set the frequency in one of the following 2 ways:
    - Press the **0–9 buttons**.
      Example 1: To set the frequency of 105,2 MHz, insert "1052".
      Example 2: To set the frequency of 95,6 MHz, insert "0956".
    - Press the **PRESET/FILE – button** and the **PRESET/FILE + button** to manually tune the signal, in increments of 0,01 MHz.
03) Press the **STORE button** to confirm.
04) Select one of the 32 preset slots. You can do it in one of the 2 ways:
    - Press the **0–9 buttons**.
      Example: To select slot 25, insert "25".
    - Press the **PRESET/FILE – button** and the **PRESET/FILE + button** to manually select a slot.
05) Press the **STORE button** to save an FM preset.

5.5.1.3. Selecting Presets

Select one of the available FM presets. You can do it in one of the 2 ways:

- Press the **0–9 buttons**.
  Example: To select preset 18, insert "18".
- Press the **PRESET/FILE – button** and the **PRESET/FILE + button** to manually select a preset.

The device will activate the selected FM preset.

5.5.2. BT Mode

In this menu you can stream BT signals from your mobile devices (smartphones, tablets, notebooks, etc.). The display shows:



The display will be blinking continuously.

For this function to work, you need to pair your mobile device and the MP-220BT via BT. See **5.2.2. BT Mode** on page 15 for more information.

On your mobile device, search for and play any music/video file or visit streaming services.

- Press the **PRESET/FILE – button** and the **PRESET/FILE + button** to manually select a music/video file.
- Press the **PLAY/PAUSE button** to play the currently selected music source. If you press the button again, playback will pause.

Note:

Some mobile devices may be incompatible with the remote control. As a result, they may not (correctly) respond to the input from the remote control.

5.5.3. USB/SD Mode

In this menu you can play music files from a USB flash drive or an SD card.

Insert an SD card into the **SD card connector IN (20)** or a USB flash drive into the **USB-A connector IN (21)**. The device will automatically read the WAV, FLAC or MP3 files.

Note:

The USB flash drive/SD card should be FAT32-formatted and its maximum capacity should not exceed 32 GB.

When the inserted USB flash drive (or SD card) has the correct specifications and contains correct files, the device will automatically start playing the first music file. The display shows:



5.5.3.1. Playback

Use the **PLAY/PAUSE button** to start or pause playback.

- Press the **PLAY/PAUSE button** to play the currently selected file.
- Press the **PLAY/PAUSE button** again to pause playback.

5.5.3.2. Select Previous/Next File

Use the **PRESET/FILE – button** and the **PRESET/FILE + button** to select files backward/forward.

5.5.3.3. Playback Modes

You can decide how music files will be played.

Repeatedly press the **REPEAT button** to select one of the 2 playback modes.



The device plays only one file



The device plays all files

5.5.4. Setting Device Volume

It is possible to set the volume of the device in all 3 functions.

Press the **VOLUME + button** or the **VOLUME – button** to increase/decrease the volume. The display shows:



The adjustment range is 0–30, from low to high volume.

5.5.5. Setting the Equalizer

Select one of the available equalizer presets.

Repeatedly press the **EQUALIZER button** to select one of the 5 equalizer presets (1=Rock, 2=Pop, 3=Classical, 4=Jazz, 5=Country).

5.6. Paging Microphone

The device is delivered with a paging microphone holder. The paging microphone is not included and shall be purchased separately. See **3.5. Optional Accessories** on page 10.

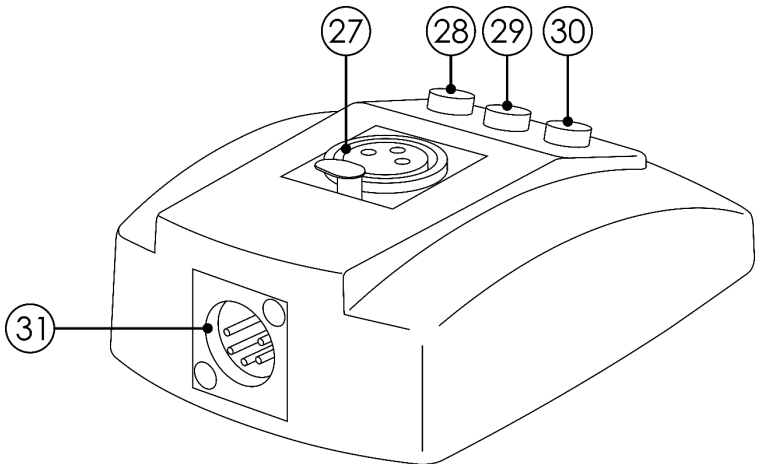


Fig. 12

27) 3-pin XLR paging microphone connector IN
28) ALL ZONES button
29) ZONE 2 button
30) ZONE 1 button
31) 5-pin XLR connector OUT

5.6.1. Installation of the Paging Microphone

To install a paging microphone, follow the steps below:

01) Connect the paging microphone to the **3-pin XLR paging microphone connector IN (27)** (Fig. 13).

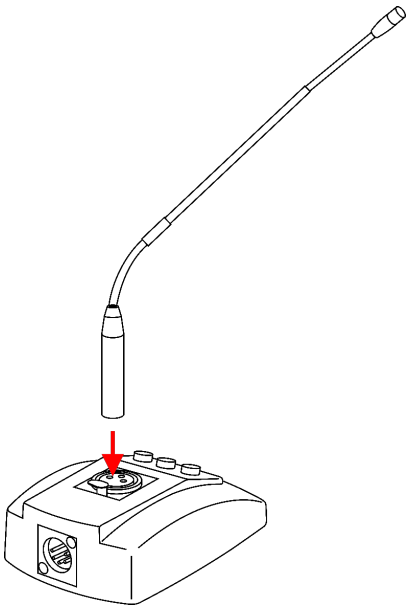


Fig. 13

02) Connect the **5-pin XLR connector OUT (31)** of the paging microphone holder to the **5-pin XLR paging microphone connector IN (07)** of the MP-220BT.

5.6.2. DIP Switches

Use the **DIP switches (08)** to set the signal priority and to activate phantom power.

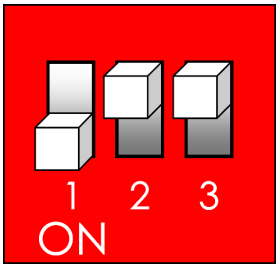


Fig. 14

5.6.2.1. Phantom Power

To be able to use the paging microphone, you need to activate phantom power.

Move the DIP switch 3 to ON position, to activate phantom power.

5.6.2.2. Signal Priority

If the input devices are connected to the **(Line 1–2) RCA analog line-level connectors IN (14)** and they are on, you can choose whether the music from the input devices will be muted or not, when you speak into the paging microphone.

- Move DIP switch 1 to set signal priority for line 1.
- Move DIP switch 2 to set signal priority for line 2.

When the DIP switch is set to ON position, the input device will be muted when you speak into the paging microphone. When the DIP switch is set to OFF position, the input device will not be muted.

5.6.3. Operation

The paging microphone holder has 3 buttons:

- ZONE 1: Signal from the paging microphone will be sent to zone 1.
- ZONE 2: Signal from the paging microphone will be sent to zone 2.
- ALL ZONES: Signal from the paging microphone will be sent to all zones.

Press and hold down one of the 3 buttons and speak into the microphone.

5.6.3.1. Adjusting Settings

Turn the **microphone bass level control (09)** to the left/right to decrease/increase the bass level. The adjustment range is from –12 dB to +12 dB.

Turn the **microphone treble level control (10)** to the left/right to decrease/increase the treble level. The adjustment range is from –12 dB to +12 dB.

Turn the **microphone gain control (11)** to the left/right to decrease/increase the gain level. The adjustment range is 0–10, from low to high.

6. Troubleshooting

This troubleshooting guide contains solutions to problems which can be carried out by an ordinary person. The device does not contain user-serviceable parts. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage. Refer servicing to instructed or skilled persons. Contact your Highlite International dealer in case the solution is not described in the table.

Problem	Probable cause(s)	Solution
The device does not function at all	No power to the device	• Check if power is switched on and cables are plugged in
	Internal fuse is blown	• Return the device to your DAP dealer
No sound	The volume is set to minimum	• Increase the volume
Some radio stations do not work	Stations are not broadcasting at this time of the day (time zone)	• Try again later
FM does not work	The signal is weak	• Extend the antenna • Check if there are electrical devices that cause interference
Playback stutters (buffering)	Bandwidth is too low or busy	• Test reception with another station
The device does not respond to the remote control	The remote control is outside the range of the sensor of the infrared port	• Walk closer to the device or change the angle at which you point the remote control to the device. See **5.5. Remote Control** on page 17.
	The batteries in the remote control are depleted	• Change the batteries of the remote control

7. Maintenance

7.1. Safety Instructions for Maintenance



DANGER
Electric shock caused by dangerous voltage inside

Disconnect power supply before servicing or cleaning.

7.2. Preventive Maintenance



Attention
Before use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- There are no deformations on housings, fixations and installation points.
- The power cables are not damaged and do not show any material fatigue.

7.2.1. Basic Cleaning Instructions

To clean the device, follow the steps below:

01) Disconnect the device from the electrical power supply.
02) Allow the device to cool down for 5 minutes.
03) Clean the device with a soft, lint-free cloth.

Attention

- Do not immerse the device in liquid.
- Do not use alcohol or solvents.

7.3. Corrective Maintenance

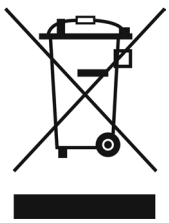
The device does not contain user-serviceable parts. Do not open the device and do not modify the device.

Refer repairs and servicing to instructed or skilled persons. Contact your Highlite International dealer for more information.

8. Deinstallation, Transportation and Storage

- Disconnect power supply before deinstallation.
- Use the original packaging to transport the device, if possible.
- Clean the device before storing. Follow the cleaning instructions in chapter **7.2.1. Basic Cleaning Instructions** on page 24.
- Store the device in the original packaging, if possible.

9. Disposal



Correct disposal of this product

Waste Electrical and Electronic Equipment

This symbol on the product, its packaging or documents indicates that the product shall not be treated as household waste. Dispose of this product by handing it to the respective collection point for recycling of electrical and electronic equipment. This is to avoid environmental damage or personal injury due to uncontrolled waste disposal. For more detailed information about recycling of this product contact the local authorities or the authorized dealer.

10. Approval

Hereby, Highlite International declares that the device MP-220BT, product code D1245, is in compliance with Directive 2014/53/EU (RED – Radio Equipment Directive).

The full text of the EU declaration of conformity is available at the respective product page on the website of Highlite International (www.highlite.com).

DAP

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