

**ENGLISH** 

PSS-110 MKIII

**V3** 

Ordercode: D2611

## Table of contents

Warning	
Safety Instructions	
Operating Determinations	
Connection with the mains	
Return Procedure	
Claims	
Description of the device	
Back	
Тор	
Microphone	
MICTOPHONE	
Installation	12
Microphone	
Inserting/Replacing Batteries	
Charging the Microphone Batteries	12
Adjusting Input Gain	
BP-10 Beltpack for PSS-110 (D2620, not included)	13
Inserting/Replacing Batteries	13
Adjusting Input Gain	14
Setup and Operation	12
Connection	
Built-in Battery Operation	
Microphone Operation	
BP-10 Beltpack for PSS-110 Operation	
Frequency Range	
Tips for Achieving Maximum Performance	
USB Player Operation	
Selecting Tracks	
Starting/Stopping Playback	
Adjusting Volume	
Playback Modes	
Recording	
Connection Examples	
PSS-110 MKIII + Microphone	21
PSS-110 MKIII + BP-10 Beltpack for PSS-110 (D2620)	22
Connection Cables	23
Maintenance	24
Replacing the Fuse	
Troubleshooting	72
No Sound	
Approval	25
Product Specifications	26
·	
Dimensions	28



## Warning



# For your own safety, please read this user manual carefully before your initial start-up!

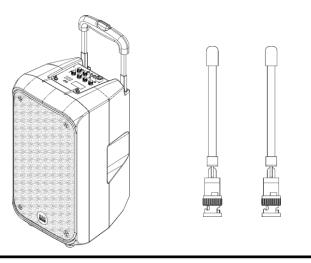


## **Unpacking Instructions**

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

## Your shipment includes:

- DAP Audio PSS-110 MKIII
- 2 x antenna
- 1 x microphone
- IEC power cable (1,5 m)
- User manual





#### **CAUTION!**

Keep this device away from rain and moisture! Unplug mains lead before opening the housing!



0

### **Safety Instructions**

Every person involved with the installation, operation and maintenance of this system has to:

- be qualified
- follow the instructions of this manual



CAUTION! Be careful with your operations.

With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!



Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the system.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the system are not subject to warranty.

This system contains no user-serviceable parts. Refer servicing to qualified technicians only.



#### **IMPORTANT:**

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

- Never let the power cord come into contact with other cables! Handle the power cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never leave any cables lying around.
- Do not connect this system to a dimmer pack.
- Do not open the device and do not modify the device.
- Only use device indoors, avoid contact with water or other liquids.
- Always disconnect power from the mains, when system is not used. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
- Always operate the unit with the AC ground wire connected to the electrical system ground.
- Avoid flames and do not put close to flammable liquids or gases.
- Avoid ground loops! Always be sure to connect the power amps and the mixing console to the same electrical circuit to ensure the same phase!
- The best way (even if not always feasible) to avoid ground loops is to connect the electric ground of all the equipment to a single central point ("star" system). In this case, the central point can be the mixer.
- Avoid installing your equipment very near radio or TV sets, mobile phones, etc., as these can cause RF (radio frequency) interference.
- Before changing your grounds around, always turn your amplifiers down.
- Before connecting or disconnecting the power cord, make sure that the power switch is in the OFF position.
- Before switching on or off make sure the sound system's amplifiers are off or turned down: this will avoid signal peaks, which are annoying and sometimes dangerous (particularly for speaker enclosures).
- Do not connect (parallel or series) an amplifier output with any other amplifier output.
- Do not drive the inputs with a signal level higher than required to drive the equipment to full output.
- Do not run the output of any amplifier channel, back into another channel's input.
- Do not switch the system on and off in short intervals, as this would reduce the system's life.
- Extreme frequency boosts in connection with a high input signal level may lead to overdriving your equipment. Should this occur, it is necessary to reduce the input signal level by using the INPUT control.
- If device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the system has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your system. Leave the system switched off until it has reached room temperature.
- If your DAP Audio device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your DAP Audio dealer for service.
- In system setup, the amplifier's output power must be set 50%-100% higher than the loaded loudspeakers' rated power.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power cord is never crimped or damaged. Check the device and the power cord from time to time.
- Make sure that the signals into the mixer are balanced, otherwise hum could be created.
- Make sure that there is sufficient room on all sides of the system for air circulation.
- Make sure you do not use the wrong kind of cables or defective cables.
- Make sure you use DI boxes to balance unbalanced signals; All incoming signals should be clear
- Please turn off the power switch, when changing the power cord or signal cable, or select the input mode switch.
- Prevent distortion! Make sure that all components connected to the PSS have sufficient power rating.
   Otherwise distortion will be generated because the components are operated at their limits.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- Sometimes, when you want to send one signal to more than one amplifier, you should use a signal distributor.



### PSS-110 MKIII

- To avoid or solve hum and buzzing troubles, try different combinations of lifting grounds on units that are supplied with ground lift switches or make sure all chassis are connected to earth ground, either through the AC power cord ground or by the front panel rack mount screws.
- To emphasize a frequency range, you do not necessarily need to move its respective sliding control upwards; try lowering surrounding frequency ranges instead. This way, you avoid causing the next piece of equipment in your sound path to overdrive. You also preserve valuable dynamic reserve ("headroom").
- For replacement use fuses of same type and rating only.
- WARRANTY: Till one year after date of purchase.

This device contains a built-in rechargeable lithium-ion battery. The battery is not replaceable. The battery may explode or cause burns if it is crushed, disassembled or exposed to fire or high temperatures.

- Do not open the device and do not attempt to remove the built-in battery.
- Do not disassemble the battery.
- Do not crush or puncture the battery.
- Do not short-circuit the battery.
- Do not expose the battery to water or other liquids.
- Keep the battery away from fire and heat.

## **Operating Determinations**

This system is not designed for permanent operation. Consistent operation breaks will ensure that the system will serve you for a long time without defects.

If this system is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.

Any other operation may lead to dangers like short-circuit, burns, electric shock, etc.

You endanger your own safety and the safety of others!

Improper installation can cause serious injuries to people and/or damage of property!

#### Connection with the mains

Connect the device to the mains with the power-plug.

Always pay attention, that the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	FASE
N	BLUE	BLACK	SILVER	NULL
	YELLOW/GREEN	GREEN	GREEN	EARTH

Make sure that the device is always connected properly to the earth!

Improper installation can cause serious injuries to people and/or damage of property!





## **Return Procedure**



Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail <a href="mailto:aftersales@highlite.com">aftersales@highlite.com</a> and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

## Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

- 01) Your name
- 02) Your address
- 03) Your phone number
- 04) A brief description of the symptoms

#### Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.



## Description of the device

#### **Features**

The DAP Audio PSS-110 MKIII is the successor of the PSS series. It is a portable PA system powered by a battery. The built-in battery charger has an overload protection, a circuit and a battery level indicator. The device is equipped with a USB player, a wireless microphone, a 4-channel audio mixer for the microphone and line signals. The device is suitable for such purposes as: fair events, theme parks, sport events, outdoor church services, street musicians, product presentations.

#### **Outputs**

- Main outputs: 1
- Main output connector: TRS balanced 6,3 mm
- Low driver power: 135 WHigh driver power: 65 W
- RMS output power amplifier: 200 W

#### Inputs

- Mono inputs: 1
- Mono input connector: 3-pin XLR, TRS balanced 6,3 mm
- Auxiliary inputs: 1
- Auxiliary input connector: RCA, TRS balanced 3,5 mm

#### Playback

- Supported audio files: MP3
- Media input/output: USB-A
- USB type: 2.0

#### **Audio Specifications**

- THD level: < 0,1%
- Signal-to-noise ratio mic: > 70 dB
- Signal-to-noise ratio line: > 75 dB
- Amp technology: Class D/Class H
- Speaker system: Battery operated
- Speaker sensitivity (1 W/1 m):94 dB
- Maximum SPL at 1 m: 117 dB
- Frequency response: 65–20000 Hz
- Frequency response (-6dB): 65–20000 Hz
- Crossover frequency High: 5000 Hz
- Woofer diameter: 10"
- Woofer voice coil: 1,5"
- Woofer magnet type: Ferrite
- Compression driver: 1" (diameter), 1" (voice coil)
- Compression driver magnet type: Ferrite
- Dispersion angle (HxV): 90° x 45°

#### **Sound Editing**

- Main graphic equalizer: 2 bands
- Main output equalizer range: 10 dB
- Main output fixed frequencies: 100, 10000 Hz

#### **Wireless Specifications**

- Wireless microphone frequency: 615–638 MHz
- RF power: 10 mW
- RF bandwidth: 22 MHz



## PSS-110 MKIII

#### **Battery**

Battery type: AA (microphone), Lithium-ion (speaker)

Battery voltage: 25,9 V

Capacity: 2,2 Ah

Runtime @Full (speaker): 3 h

• Charging time: 5 h

#### **Control and Programming**

Display: LCD

#### **Electrical Specifications and Connections**

Power supply: 220–240 V AC, 50-60 Hz

SMPS: Yes

Power consumption: 40 W

Fuse: T1AL/250V

Power connector IN: IEC C13 female

#### **Mechanical Specifications**

IP rating: IP20Material: ABS

Colour: Black

• Speaker adapter diameter: 35 mm

Speaker grill material: Steel

• Castors: 2

Castor size: 40 mm

Castor type: Fixed without brake

• Retractable handle: Yes

Dimensions: 300 x 290 x 910 mm (LxWxH)

• Weight: 13 kg

#### **Optional Accessories**

<u>D2620</u> – BP-10 Beltpack for PSS-110 <u>98040</u> – Duracell industrial AA battery

## Overview

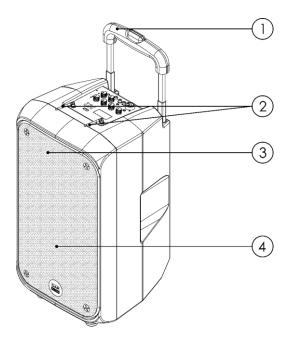


Fig. 01



02) Antenna

03) Tweeter

04) Woofer



## Back

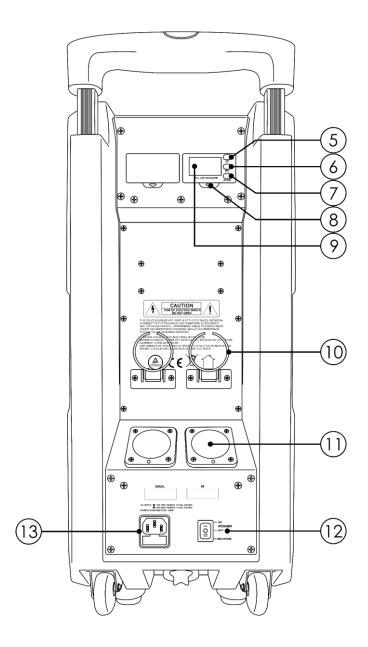


Fig. 02

- 05) UP button
- 06) SET button
- 07) DOWN button
- 08) Module eject button
- 09) LCD receiver display
- 10) Microphone clamp
- 11) Microphone holder + LED microphone battery status indicator
- 12) Power switch ON/OFF
  - ON: Power on
  - OFF: Power off
  - RECHARGE: Use this option in order to recharge the internal battery or the microphone batteries.
- 13) 220-240V IEC power connector IN + Fuse T1 AL/250V



## Top

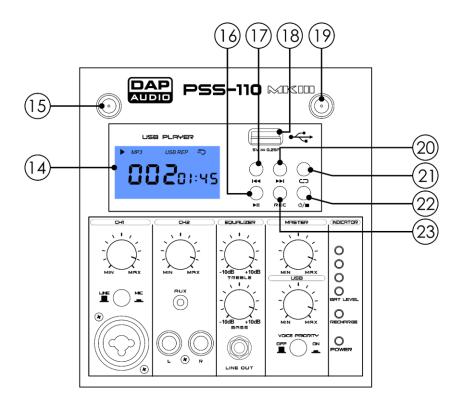


Fig. 03

- 14) LCD display
- 15) Antenna connector
- 16) Play/Pause button
- 17) Previous track button
  - Press the button to skip to a previous track.

Press and hold down the button to decrease the volume.

- 18) USB A connector IN
  - Connect a USB flash drive containing music files (mp3).
- 19) Antenna connector
- 20) Next track button
  - Press the button to skip to a next track.

Press and hold down the button to increase the volume.

- 21) Repeat button
- 22) Power/Stop button
  - Press the button once in order to stop playback.

Press and hold down the button for 2 seconds in order to switch the USB player ON/OFF.

23) Record button



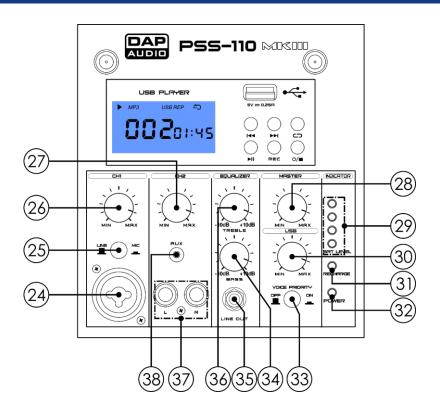


Fig. 04

- 24) Microphone XLR/jack combo IN (CH1)
  - This combined jack can be used for connecting a mono signal source, for example an XLR microphone. You can also use the  $\frac{1}{4}$  jack connector to connect line-level signal sources.
- 25) CH1 Line/Mic button
  - Select the input source for channel 1 (Line/Mic).
- 26) CH1 volume control
  - Turn the control to set the volume of CH1.
- 27) CH2 volume control
  - Turn the control to set the volume of CH2.
- 28) Master volume control
  - Turn the control to set the master volume.
- 29) LED battery level indicator
- 30) USB volume control
  - Turn the control to set the USB player volume.
- 31) LED recharge indicator
  - While recharging, the indicator will light red. When the battery is fully charged, it will light green.
- 32) LED power indicator
- 33) Voice priority button
  - When the button is in ON position: the microphone signal will have the highest priority. Upon receiving a microphone signal, AUX and MP3 signals will be muted (ducking).
  - When the button is in OFF position: the microphone signal will have the same output level as AUX and MP3. All those signals will be output simultaneously.
- 34) Bass control
- 35) 6,3 mm jack connector Line OUT
  - Connect to the line input of a mixer. If you use the PSS together with DAP Splash active speakers, use a mono-to-mono jack cable.
- 36) Treble control
- 37) CH2 RCA unbalanced AUX IN Connect line signal.
- 38) 3,5 mm jack connector AUX IN (CH2)
  - Connect an auxiliary device, for example a smartphone.



## Microphone

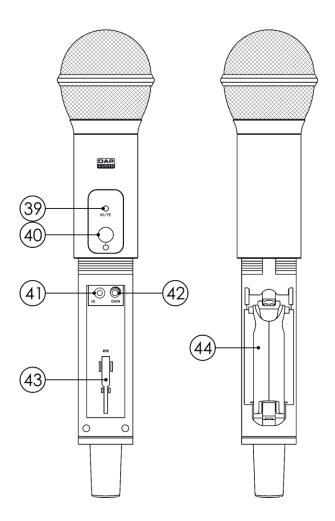


Fig. 05

- 39) LED status indicator
  - Green: Normal operation
  - Red: Mute
  - Red (flashing): Low battery
- 40) Power/Mute switch

Press and hold down the button for 3 seconds to turn the microphone on/off. Press the button to mute/unmute the microphone.

- 41) IR sensor
- 42) Input gain control
- 43) Plastic screwdriver
- 44) 2 x AA battery housing



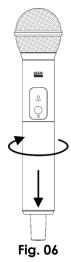
## Installation

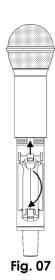
Remove all packing materials from the PSS-110 MKIII. Check that all foam and plastic padding is removed. Connect all cables.

Always disconnect from electric mains power supply before cleaning or servicing. Damages caused by non-observance are not subject to warranty.

## Microphone

#### **Inserting/Replacing Batteries**





- 01) Turn the battery cover clockwise, in order to loosen it. Remove the battery cover (Fig. 06).
- 02) Pull upwards on the holding pin and, at the same time, pull the battery holder down, in order to gain access to the battery housing (Fig. 07).
- 03) Insert 2 AA (LR 6) batteries into the battery housing, paying attention to the polarity markings (+/-).
- 04) Close the battery housing and put the battery cover back.
- 05) Turn the battery cover counterclockwise to tighten it.

#### **Charging the Microphone Batteries**

## Charge only RECHARGEABLE AA batteries!



Recharging non-rechargeable batteries may cause fire, damage to the device and/or injuries.

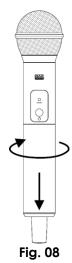


NEVER place the microphone(s) in the microphone holder if you use non-rechargeable batteries.

- 01) Make sure that the **power switch (12)** is in OFF position and plug one end of the included IEC to Schuko power cable into the **IEC input connector (13)**. Plug the other end into an appropriate power supply.
- 02) Place the wireless microphone in the microphone holder (11).
- 03) Set the **power switch (12)** to RECHARGE position.
- 04) Observe the LED microphone battery status indicator located on the **microphone holder (11)**. While recharging, the indicator will light red. When the batteries are fully charged, it will light green.
- 05) Set the **power switch (12)** to OFF position and unplug the IEC to Schuko power cable.



### **Adjusting Input Gain**

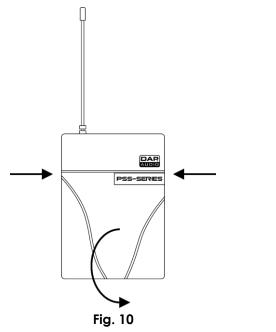


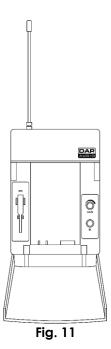


- 01) Turn the battery cover clockwise, in order to loosen it. Remove the battery cover (Fig. 08).
- 02) Use the included plastic screwdriver (43) to set the microphone's input sensitivity (Fig. 09).
- 03) Close the battery housing and put the battery cover back.
- 04) Turn the battery cover counterclockwise to tighten it.

## BP-10 Beltpack for PSS-110 (D2620, not included)

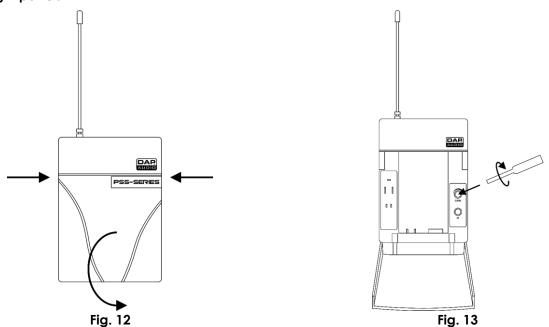
## **Inserting/Replacing Batteries**





- 01) Press on the sides of the beltpack and open the battery cover (Fig. 10) to gain access to the battery housing (Fig. 11).
- 02) Insert 2 AA (LR 6) batteries into the battery housing, paying attention to the polarity markings (+/-).
- 03) Close the battery cover.

#### **Adjusting Input Gain**



- 01) Press on the sides of the beltpack and open the battery cover (Fig. 12) to gain access to the battery housing (Fig. 13).
- 02) Use the included plastic screwdriver to set the beltpack's input sensitivity (Fig. 13).
- 03) Close the battery cover.

## **Setup and Operation**

Follow the directions below, as they pertain to your preferred operation mode. **Before using the device, check the regulations regarding the frequency allocation in your country or region.** Before plugging the device in, always make sure that the power supply matches the product specification voltage. The power supply is printed on the back of the speaker. Do not attempt to operate a 110 V specification product on 230 V power, or vice versa.

#### Connection

- 01) Set the **power switch (12)** to OFF position, in order to turn the PSS off.
- 02) Connect the PSS to the other devices which you plan to use.

CAUTION: Make sure that the power is off, when connecting the cables.

### **Built-in Battery Operation**

When the battery level indicator (29) lights red, the battery is almost flat and needs to be recharged.

- 01) Make sure that the **power switch (12)** is in OFF position and plug one end of the included IEC to Schuko power cable into the **IEC input connector (13)**. Plug the other end into an appropriate power supply.
- 02) Set the power switch (12) to RECHARGE position.
- 03) Observe the **recharge indicator (31)**. While recharging, the indicator will light red. When the battery is fully charged, it will light green.
- 04) Unplug the IEC to Schuko power cable. If the battery is fully charged, the PSS can run on battery power for approximately 3 hours, depending on the volume level.

#### Note:

The battery in the PSS should not be fully depleted. Charge it when it is low, but do not let it drain fully. On the other hand, constant top-off charging of a battery is never good.

Any charging adds heat which degrades a battery. Storage in a cool place slows the aging process of lithium-ion. Manufacturers recommend storage temperatures of 15 °C.

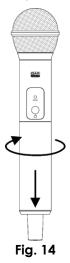


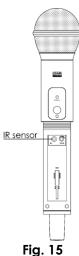
## **Microphone Operation**

- 01) Set the **power switch (12)** to ON position, to turn the PSS on.
- 02) Press and hold down the **power/mute switch (40)** for 3 seconds to turn the microphone on. The **LED status indicator (39)** will light green.
- 03) Press the **UP/DOWN buttons (05/07)** to choose one of the 100 channels (see page 19 for the frequency range chart). Alternatively, press and hold down the **UP button (05)** for 6 seconds, for quick channel search. The **display (09)** will show:

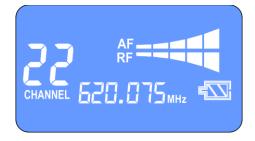


- 04) Press and hold down the **UP button (05)** for 3 seconds. The currently chosen channel's number will start blinking.
- 05) Remove the battery cover (Fig. 14). Otherwise it will not be possible to pair the devices.
- 06) Place the microphone's **IR sensor (41)** close to the **display (09)** to pair the speaker with the microphone (Fig. 15).

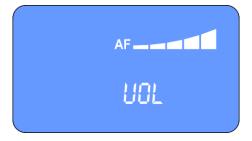




Once the microphone has been paired, the display (09) will show:



- 07) Put the battery cover back and turn it counterclockwise to tighten it.
- 08) Press the **SET button (06)**. The display will show:



15



## PSS-110 MKIII

- 09) Press the **UP/DOWN buttons (05/07)** in order to set the volume. The adjustment range is from OFF to loud.
- 10) Press the **SET button (06)** again. The display will show:



11) In order to eliminate the risk of interference, press the **UP/DOWN buttons (05/07)** to set the squelch. The adjustment range is from low to high threshold. The higher the threshold, the more unwanted signals will be phased out. If it does not solve the problem, set the microphone and the PSS to a different channel.

#### Note:

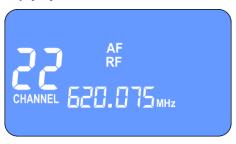
If the squelch threshold is set too high, the transmission range will be reduced. Therefore, always set the squelch to the lowest possible setting.

- 12) Press the **SET button (06)** again.
- 13) Speak into the microphone.
- 14) In order to choose another channel, repeat steps 3-13.
- 15) After the performance, press and hold down the **power/mute switch (40)** for 6 seconds to turn the microphone off.

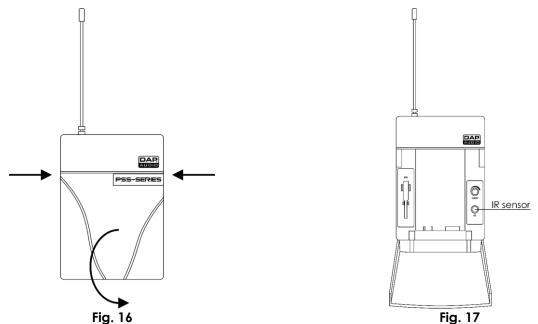


## **BP-10 Beltpack for PSS-110 Operation**

- 01) Set the power switch (12) to ON position, to turn the PSS on.
- 02) Press and hold down the power/mute switch on the beltpack for 3 seconds to turn the beltpack on. The LED status indicator will light green.
- 03) Press the **UP/DOWN buttons (05/07)** to choose one of the 100 channels (see page 19 for the frequency range chart). Alternatively, press and hold down the **UP button (05)** for 6 seconds, for quick channel search. The **display (09)** will show:



- 04) Press and hold down the **UP button (05)** for 3 seconds. The currently chosen channel's number will start blinking.
- 05) Press on the sides of the beltpack and open the battery cover (Fig. 16). Otherwise it will not be possible to pair the devices.
- 06) Place the beltpack's IR sensor close to the **display (09)** to pair the speaker with the beltpack (Fig. 17).



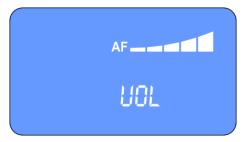
Once the beltpack has been paired, the display (09) will show:



07) Close the battery cover.



08) Press the **SET button (06)**. The display will show:



- 09) Press the **UP/DOWN buttons (05/07)** in order to set the volume. The adjustment range is from OFF to loud.
- 10) Press the **SET button (06)** again. The display will show:



11) In order to eliminate the risk of interference, press the **UP/DOWN buttons (05/07)** to set the squelch. The adjustment range is from low to high threshold. The higher the threshold, the more unwanted signals will be phased out. If it does not solve the problem, set the beltpack and the PSS to a different channel.

#### Note:

If the squelch threshold is set too high, the transmission range will be reduced. Therefore, always set the squelch to the lowest possible setting.

- 12) Press the **SET button (06)** again.
- 13) Connect the headset to the beltpack.
- 14) Put the headset on your head.
- 15) Speak into the headset's microphone.
- 16) In order to choose another channel, repeat steps 3-15.
- 17) After the performance, press and hold down the power/mute switch on the beltpack for 6 seconds to turn the beltpack off.



#### Frequency Range

<b>00</b> – 615,125MHz	<b>25</b> – 620,750MHz	<b>50</b> – 626,375MHz	<b>75</b> – 632,000MHz
<b>01</b> – 615,350MHz	<b>26</b> – 620,975MHz	<b>51</b> – 626,600MHz	<b>76</b> – 632,225MHz
<b>02</b> – 615,575MHz	<b>27</b> – 621,200MHz	<b>52</b> – 626,825MHz	<b>77</b> – 632,450MHz
<b>03</b> – 615,800MHz	<b>28</b> – 621,425MHz	<b>53</b> – 627,050MHz	<b>78</b> – 632,675MHz
<b>04</b> – 616,025MHz	<b>29</b> – 621,650MHz	<b>54</b> – 627,275MHz	<b>79</b> – 632,900MHz
<b>05</b> – 616,250MHz	<b>30</b> – 621,875MHz	<b>55</b> – 627,000MHz	<b>80</b> – 633,125MHz
<b>06</b> – 616,475MHz	<b>31</b> – 622,100MHz	<b>56</b> – 627,725MHz	<b>81</b> – 633,350MHz
<b>07</b> – 616,700MHz	<b>32</b> – 622,325MHz	<b>57</b> – 627,950MHz	<b>82</b> – 633,575MHz
<b>08</b> – 616,925MHz	<b>33</b> – 622,550MHz	<b>58</b> – 628,175MHz	<b>83</b> – 633,800MHz
<b>09</b> – 617,150MHz	<b>34</b> – 622,775MHz	<b>59</b> – 628,400MHz	<b>84</b> – 634,025MHz
<b>10</b> – 617,375MHz	<b>35</b> – 623,000MHz	<b>60</b> – 628,625MHz	<b>85</b> – 634,250MHz
<b>11</b> – 617,600MHz	<b>36</b> – 623,225MHz	<b>61</b> – 628,850MHz	<b>86</b> – 634,475MHz
<b>12</b> – 617,825MHz	<b>37</b> – 623,450MHz	<b>62</b> – 629,075MHz	<b>87</b> – 634,700MHz
<b>13</b> – 618,050MHz	<b>38</b> – 623,675MHz	<b>63</b> – 629,300MHz	<b>88</b> – 634,925MHz
<b>14</b> – 618,275MHz	<b>39</b> – 623,900MHz	<b>64</b> – 629,525MHz	<b>89</b> – 635,150MHz
<b>15</b> – 618,500MHz	<b>40</b> – 624,125MHz	<b>65</b> – 629,750MHz	<b>90</b> – 635,375MHz
<b>16</b> – 618,725MHz	<b>41</b> – 624,350MHz	<b>66</b> – 629,975MHz	<b>91</b> – 635,600MHz
<b>17</b> – 618,950MHz	<b>42</b> – 624,575MHz	<b>67</b> – 630,200MHz	<b>92</b> – 635,825MHz
<b>18</b> – 619,175MHz	<b>43</b> – 624,800MHz	<b>68</b> – 630,425MHz	<b>93</b> – 636,050MHz
<b>19</b> – 619,400MHz	<b>44</b> – 625,025MHz	<b>69</b> – 630,650MHz	<b>94</b> – 636,275MHz
<b>20</b> – 619,625MHz	<b>45</b> – 625,250MHz	<b>70</b> – 630,875MHz	<b>95</b> – 636,500MHz
<b>21</b> – 619,850MHz	<b>46</b> – 625,475MHz	<b>71</b> – 631,100MHz	<b>96</b> – 636,725MHz
<b>22</b> – 620,075MHz	<b>47</b> – 625,700MHz	<b>72</b> – 631,325MHz	<b>97</b> – 636,950MHz
<b>23</b> – 620,300MHz	<b>48</b> – 625,925MHz	<b>73</b> – 631,550MHz	<b>98</b> – 637,175MHz
<b>24</b> – 620,525MHz	<b>49</b> – 626,150MHz	<b>74</b> – 631,775MHz	<b>99</b> – 637,400MHz

It is possible that the PSS-110 MKIII will not function properly within certain frequencies. It may be caused by the presence of other digital equipment producing interference.



Try testing all the available frequency presets until you find the one which functions properly.



## Tips for Achieving Maximum Performance

- Make sure you can always see the receiver antenna from the transmitter position.
- Keep the distance between the PSS antennas and the microphone as short as possible.
- Point the PSS antennas away from each other, at a 45° angle from vertical position.
- Avoid placing the antennas in the vicinity of metal surfaces and obstructions.
- Recharge the battery as soon as you receive a low-battery alarm.
- Perform a walk-through before performance or presentation. If dead spots are found, adjust the location of the PSS. If dead spots remain, mark and avoid them.



## **USB Player Operation**

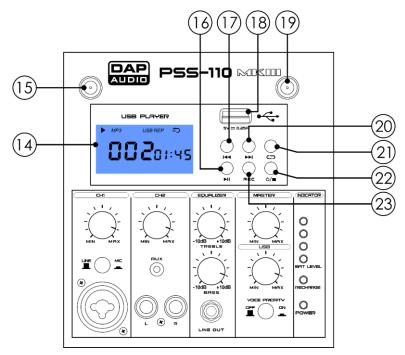


Fig. 18

- 01) Press and hold down the power/stop button (22) for 2 seconds in order to turn the USB player on.
- 02) Insert a USB flash drive into the USB slot (18).
- 03) The device will now search for the supported music files (mp3).

#### **Selecting Tracks**

- 01) Press the I◄◄ (17) button to skip to a previous track.
- 02) Press the **>> (20) button** to skip to a next track.
- 03) Playback will begin automatically, once a new track has been selected.

#### Starting/Stopping Playback

- 01) Press the **II** (16) button to start playback.
- 02) Press the **II** (16) button again to pause playback.
- 03) Press the **II** (16) button again to resume playback.
- 04) Press the ७/ **(22) button** to stop playback.

#### **Adjusting Volume**

- 01) Press and hold down the I<< (17) button to decrease the volume.
- 02) Press and hold down the **>>1 (20) button** to increase the volume.
- 03) The adjustment range is between 0-15, from OFF to loud.

#### **Playback Modes**

- 01) Repeatedly press the  $\Box$  button to select the desired playback mode.
- 02) There are 4 playback modes:

REP 1 Repeats a single track several times

**REP** ALL Repeats all tracks

A Plays all tracks once, in random order (Shuffle)

No symbol Plays all tracks once, in the order of appearance (Normal)

#### Recording

- 01) Press the **Record (23) button** to enter recording.
- 02) Press the **Record (23) button** again to start recording.
- 03) Speak into the microphone.
- 04) Press the ७/ **(22) button** to stop recording.
- 05) The recorded files will be saved on the inserted USB flash drive.



## **Connection Examples**

## PSS-110 MKIII + Microphone

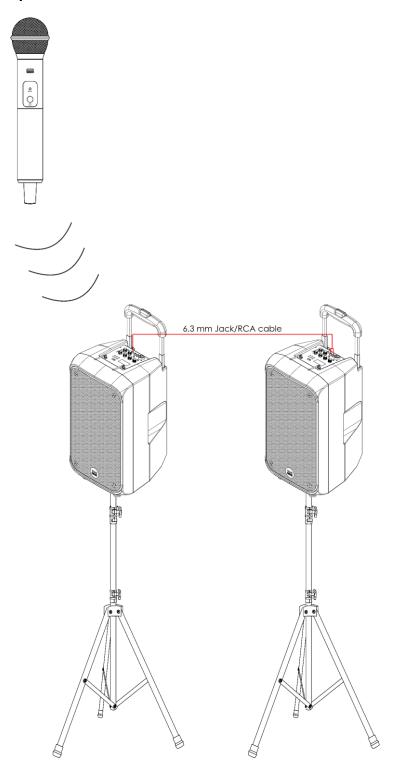


Fig. 19



## PSS-110 MKIII + BP-10 Beltpack for PSS-110 (D2620)

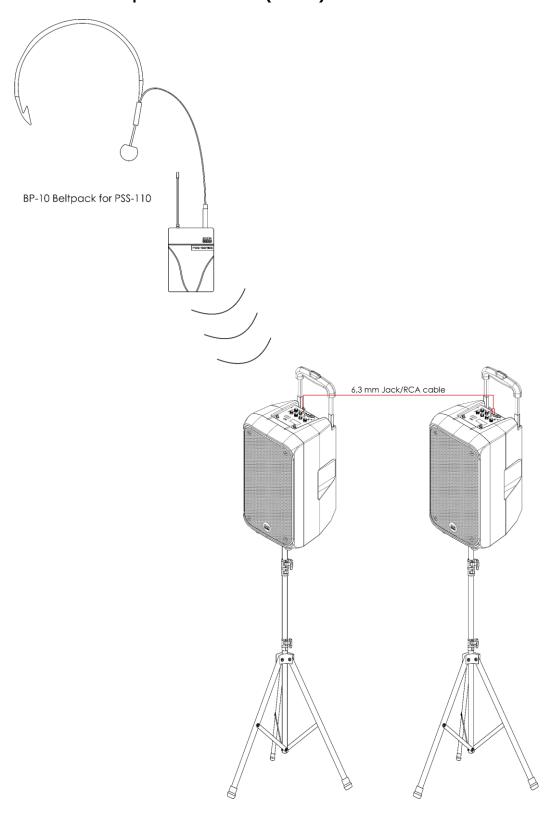


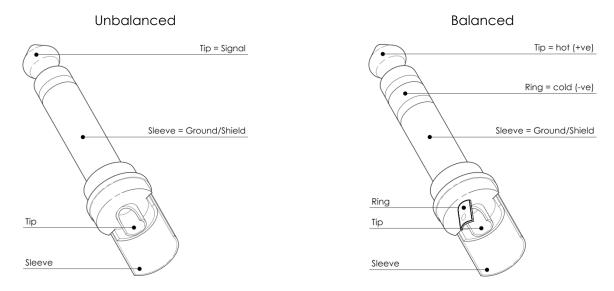
Fig. 20



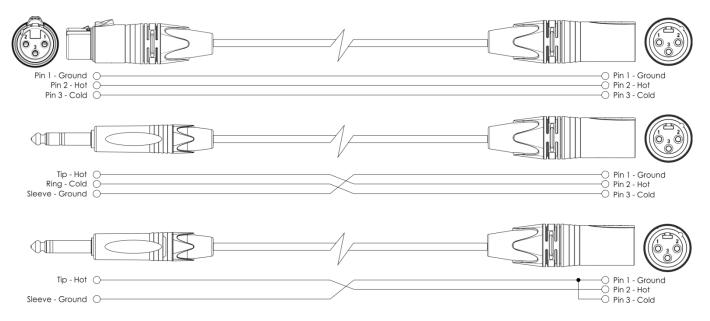
## **Connection Cables**

Take care of your cables, always holding them by the connectors and avoiding knots and twists when coiling them: This gives the advantage of increasing their life and reliability.

Periodically check your cables. A great number of problems (faulty contacts, ground hum, discharges, etc.) are caused entirely by using unsuitable or faulty cables.



For these applications the unit provides 1/4" TRS and XLR connectors to easily interface with most professional audio devices. Follow the configuration examples below for your particular connection.



## Maintenance

The DAP Audio PSS-110 MKIII requires almost no maintenance.

However, you should keep the unit clean.

Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Do not use alcohol or solvents.

Keep connections clean. Disconnect electric power, and then wipe the audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

## Replacing the Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below.

- 01) Unplug the unit from electric power source.
- 02) Insert a screwdriver into the slot in the fuse cover. Gently pry up the fuse cover. The fuse will come out.
- 03) Remove the used fuse. If brown or unclear, it is burned out.
- 04) Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

## **Troubleshooting**

#### No Sound

Always check if all the cables and cords are connected. Always turn off power to the area before checking the wires, to prevent electric shock.

If everything works properly and there is still no sound, revisit the manufacturer's instructions to make sure they were followed during installation. If everything was installed correctly and there is still no sound, you may want to consider bringing in a professional to take a look at your speaker.

Problem	Solution
	Turn the microphone/beltpack on. Make sure the batteries are inserted properly. If the batteries are inserted properly, replace with a new set of batteries.
No sound	Turn up the <b>volume controls (28/30)</b> on the speaker. Make sure the output connections between speaker and external equipment are in order.
	Confirm that the microphone/beltpack and speaker are paired. Move the microphone/beltpack closer to the speaker.
Bursts of noise or other audible signals present	Adjust the squelch. Identify potential sources of interference (other RF-sources) and turn them off.
Momentary loss of sound as microphone/beltpack is moved around performing area.	Reposition speaker and perform a walk-through test again. If audible drop-outs persist, mark the dead spots and avoid them during performance.

If the speaker does not operate properly, refer servicing to a technician.

Suspect three potential problem areas as: the battery, the speaker, the fuse.

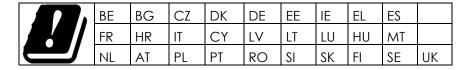
- 01) The battery. Check if the battery is charged. If it is not, it needs to be recharged. See page 14 for built-in battery operation.
- 02) The speaker. Return the PSS to your DAP Audio dealer.
- 03) The fuse. Replace the fuse. See page 24 for replacing the fuse.
- 04) If all appears to be O.K., turn the unit on again.
- 05) If you are unable to determine the cause of the problem, do not open the PSS, as this may damage the unit and the warranty will become void.
- 06) Return the device to your DAP Audio dealer.



## **Approval**

The DAP PSS-110 MKIII is a Class 2 wireless audio device (Commission Decision 2000/299/EC).

Frequency: 615-638 MHz



## **Exclusion of liability**

The frequency ranges available for wireless microphones differ per country and region. Consult the respective national and/or regional authorities as licensing or specific restrictions may apply for the use of the device. We do not take any responsibility in case the device cannot operate or be used in your country/region or if it requires additional licensing. Before using the device, check the allowed frequencies in your country or region.

Be aware that in some countries you are allowed to partly use the frequency range of the device. Consult your local authorities for the latest information and regulations.

Spectrum authorities in the EU countries:

Belgian Institute for Postal Services and Belaium www.bipt.be

Communications

Bulgaria Communications Regulation Commission www.crc.bg Czech Telecommunication Office Czech Republic www.ctu.cz Denmark Danish Energy Agency www.ens.dk

Germany Die Bundesnetzagentur www.bundesnetzagentur.de

Estonia **Technical Regulatory Authority** www.tja.ee Ireland Commission for Communications Regulation www.comreg.ie Hellenic Telecommunications and Post Commission Greece www.eett.gr

Spain Secretaría de Estado para el Avance Digital www.mineco.gob.es

Agence Nationale des Fréquences France www.anfr.fr Regulatory Authority for Network Industries Croatia www.hakom.hr Italy Istituto Superiore delle Comunicazioni e delle www.isticom.it

Tecnologie dell'Informazione

Cyprus Department of Electronic Communications www.mcw.gov.cy Latvia Electronic Communications Office www.vases.lv Lithuania Communications Regulatory Authority www.rrt.lt Institut Luxembourgeois de Régulation Luxembourg www.ilr.lu National Communications Authority Hungary www.nmhh.hu Malta Malta Communications Authority www.mca.org.mt

**Netherlands** Agentschap Telecom www.agentschaptelecom.nl

**Austria** Rundfunk und Telekom Regulierungs-GmbH www.rtr.at Office of Electronic Communications Poland www.uke.gov.pl Portugal Autoridade Nacional de Comunicações www.anacom.pt Romania National Authority for Management and Regulation www.ancom.org.ro

in Communications

Slovenia Agency for Communication Networks and Services www.akos-rs.si Regulatory Authority for Electronic Communications Slovakia www.teleoff.gov.sk

and Postal Services

**Finland** Finnish Transport and Communications Agency www.traficom.fi Post and Telecom Authority Sweden www.pts.se

**United Kingdom** Office of Communications www.ofcom.org.uk



## PSS-110 MKIII

Spectrum authorities in the EFTA countries:

IcelandPost and Telecom Administrationwww.pfs.isLiechtensteinAmt für Kommunikationwww.llv.li

Norway Norwegian Communications Authority www.nkom.no

Switzerland Federal Office of Communications www.bakom.admin.ch

Spectrum authorities in the EU candidate countries:

Montenegro Agency for Electronic Communications and Postal www.ekip.me

Services

Republic of North Agency for Electronic Communications www.aek.mk

Macedonia Agency for Electronic Comm

Albania Electronic and Postal Communications Authority www.akep.al Serbia Regulatory Agency for Electronic Communications www.ratel.rs

and Postal Services

Turkey Information and Communications Technologies www.btk.gov.tr

Authority

## **Product Specifications**

Outputs	
Main outputs:	1
Main output connector:	TRS balanced 6,3 mm
Low driver power:	135 W
High driver power:	65 W
RMS output power amplifier:	200 W
Inputs	
Mono inputs:	1
Mono input connector:	3-pin XLR, TRS balanced 6,3 mm
Auxiliary inputs:	1
Auxiliary input connector:	RCA, TRS balanced 3,5 mm
Playback	
Supported audio files:	MP3
Media input/output:	USB-A
USB type:	2.0
Audio Specifications	
THD level:	< 0,1%
Signal-to-noise ratio mic:	> 70 dB
Signal-to-noise ratio line:	> 75 dB
Amp technology:	Class D/Class H
Speaker system:	Battery operated
Speaker sensitivity (1 W/1 m):	94 dB
Maximum SPL at 1 m:	117 dB
Frequency response:	65–20000 Hz
Frequency response (-6dB):	65–20000 Hz
Crossover frequency high:	5000 Hz
Woofer diameter:	10"
Woofer voice coil:	1,5"
Woofer magnet type:	Ferrite
Compression driver:	1" (diameter), 1" (voice coil)
Compression driver magnet type:	Ferrite
Dispersion angle (HxV):	90° x 45°



## PSS-110 MKIII

Sound Editing	
Main graphic equalizer:	2 bands
Main output equalizer range:	10 dB
Main output fixed frequencies:	100, 10000 Hz
Wireless Specifications	
Wireless microphone frequency:	615–638 MHz
RF power:	10 mW
RF bandwidth:	22 MHz
Battery	
Battery type:	AA (microphone), Lithium-ion (speaker)
Battery voltage:	25,9 V
Capacity:	2,2 Ah
Runtime @Full (speaker):	3 h
Charging time:	5 h
Control and Programming	
Display:	LCD
Electrical Specifications and Connect	ions
Power supply:	220–240 V AC, 50-60 Hz
SMPS:	Yes
Power consumption:	40 W
Fuse:	T1AL/250V
Power connector IN:	IEC C13 female
Mechanical Specifications	
IP Rating:	IP20
Material:	ABS
Colour:	Black
Speaker adapter diameter:	35 mm
Speaker grill material:	Steel
Castors:	2
Castor size:	40 mm
Castor type:	Fixed without brake
Retractable handle:	Yes
Dimensions:	300 x 290 x 910 mm (LxWxH)
Weight:	13 kg

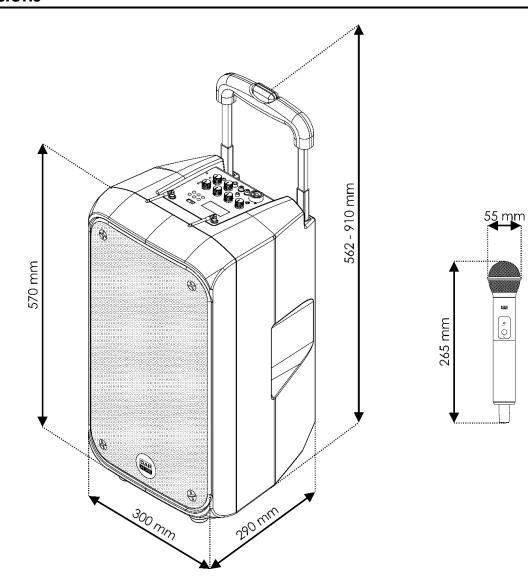
Design and product specifications are subject to change without prior notice.



Website: <a href="www.Dap-audio.info">www.Dap-audio.info</a> Email: <a href="mailto:service@highlite.com">service@highlite.com</a>



## Dimensions





Ordercode: D2611



Ordercode: D2611



