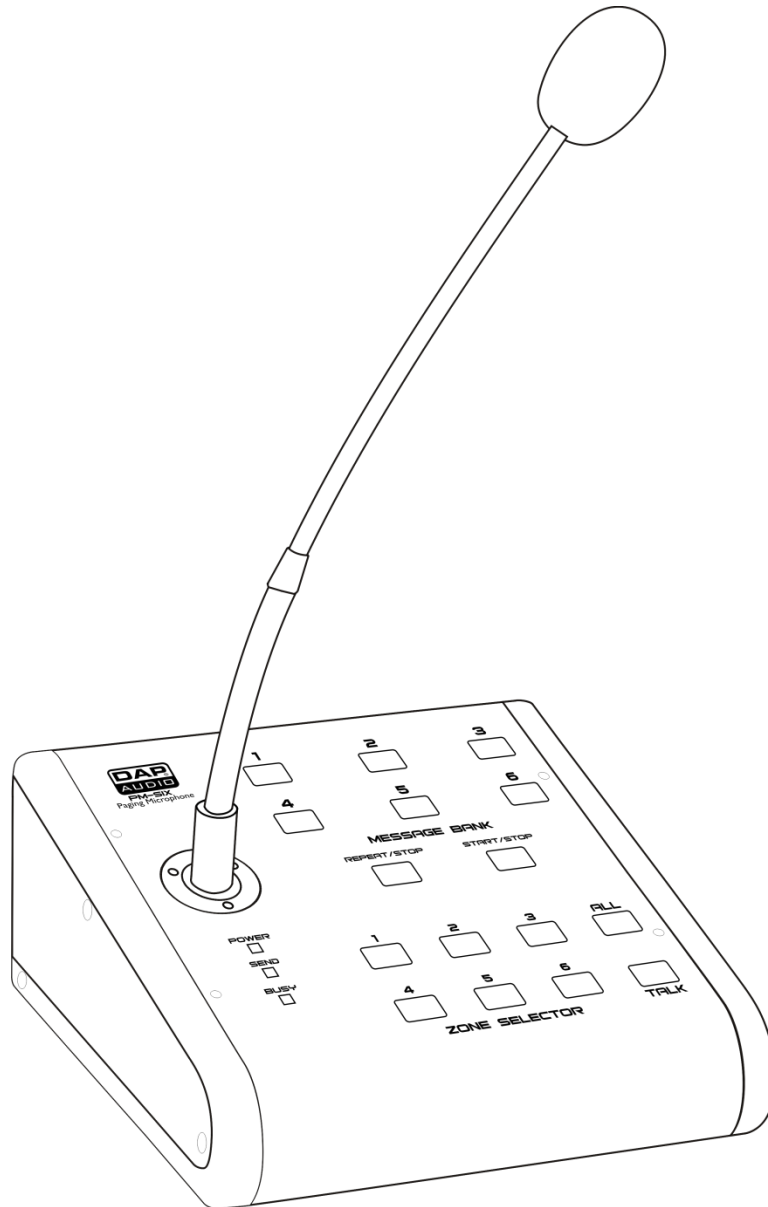




# MANUAL



ENGLISH

## PM-Six

## V1

Ordercode: D6182

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## Warning



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

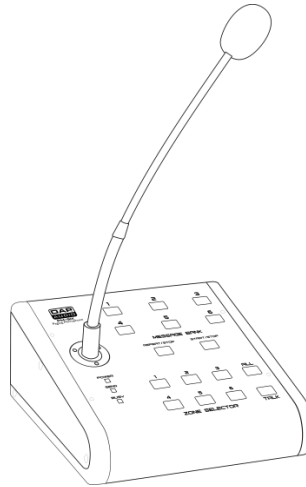


### Unpacking Instructions

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 device must be returned to the factory, it is important that the device is returned in the original factory box and packing.

### Your shipment includes:

- DAP Audio PM-Six
- User manual



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



### 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 the 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 device.

- Never remove warning or informative labels from the unit.
- Never leave any cables lying around.
- Do not open the device and do not modify the device.
- Do not connect this device to a dimmerpack.
- Do not switch the system on and off in short intervals, as this would reduce the system's life.
- Only use device indoors, avoid contact with water or other liquids.
- Avoid flames and do not put close to flammable liquids or gases.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
- Make sure you do not use the wrong kind of cables or defective cables.
- Make sure that the power cord is never crimped or damaged. Check the system and the power cord from time to time.
- If system is dropped or struck, disconnect the 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.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

**Operating Determinations**


- This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.
- The maximum ambient temperature  $t_a = 40^\circ\text{C}$  must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of  $40^\circ\text{C}$ .
- If this device 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, crash, etc.

*You endanger your own safety and the safety of others!*

**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	PHASE
N	BLUE	BLACK	SILVER	NEUTRAL
	YELLOW/GREEN	GREEN	GREEN	PROTECTIVE GROUND

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

*Improper installation can cause serious damage to people and 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 [aftersales@highlite.nl](mailto:aftersales@highlite.nl) 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 shortcomings 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

The DAP Audio PM-Six is a desktop paging microphone, designed especially for the ZPA-6240TU (**D6180**) amplifier. It is possible to choose all or any of the 6 zones for broadcasting messages. The device is equipped with a push-to-talk button with a LED indicator, and all operating buttons for using the digital message player of the ZPA-6240TU. It is also possible to adjust the microphone's sensitivity. The PM-Six has extra auxiliary input for connecting external audio sources. AES digital audio transmission of the PM-Six ensures the best quality over longer distance cables.

### Features

- Microphone unit: condenser
- Frequency response: 22 Hz – 23 KHz
- Sensitivity: 29 dB @ 1 KHz
- Audio output: 230 mV
- Connections: 2 x RJ45, 1 x RCA Aux IN
- Dimensions (base): 160 x 190 x 55 mm (LxWxH)
- Dimensions (microphone): 20 x 445 mm (WxH)
- Weight: 1 kg

### Optional accessories

**D6180** – ZPA-6240TU, 6-zone 100V amplifier

### Frontside

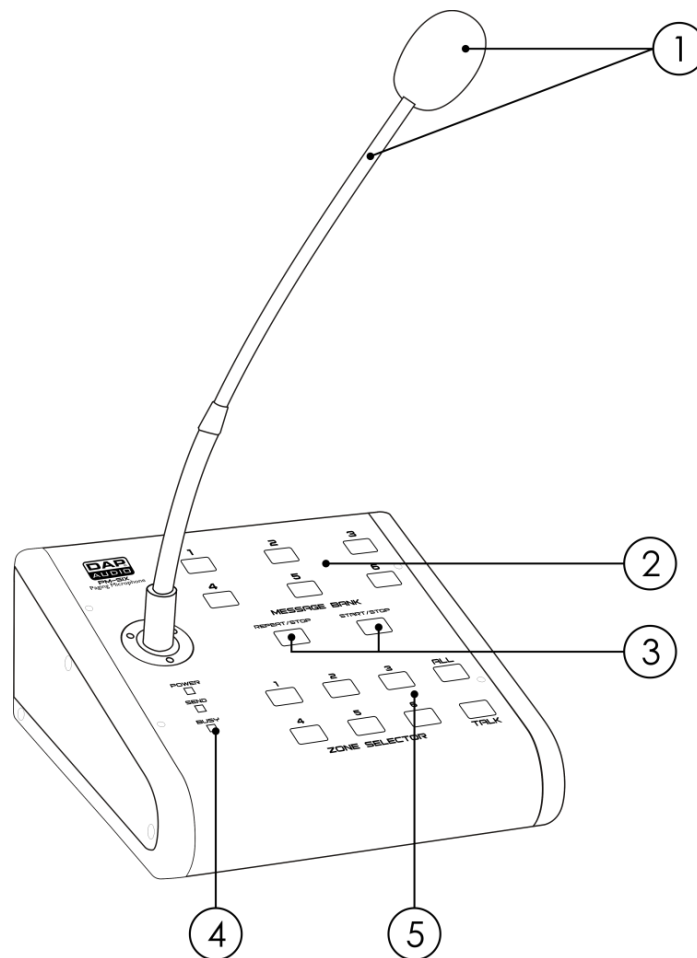


Fig. 01

#### ① Goose neck + microphone head

Adjust the height of microphone head and the distance between your mouth and the microphone. The distance should not be bigger than 30 cm. Otherwise, sound transmission may be affected.

② **Message bank**

Press one of the 1-6 buttons to recall the desired preset message.

③ **Repeat/Stop + Start/Stop buttons**

Press one of the buttons to play the chosen message.

REPEAT/STOP: Press the button to play the chosen message. The message will be repeated until the button is pressed again.

START/STOP: Press the button to play the chosen message. The message will be played once. Press the button again to stop playback.

④ **LED indicators**

POWER: Power indicator

SEND: The indicator lights up when communication data is available.

BUSY: The indicator blinks when the line is busy. The TALK and MESSAGE BANK buttons will not work.

⑤ **Zone selection buttons + TALK button**

Press one of the zone buttons 1-6 to choose the desired zone. Press the ALL button to activate all 6 zones, at maximum volume level.

If you use a single PM-Six, and Chime mode is active, press the TALK button, wait until the chime sound passes, and then talk. When Chime mode is inactive, always press this button to talk.

If you use multiple devices and DIP switch # 2 is set to PRIORITY position, press the TALK button to talk. If DIP switch # 2 is set to SLAVE position and the BUSY LED indicator blinks, it means that the line is busy and you need to wait until the LED indicator stops blinking.

**Backside**

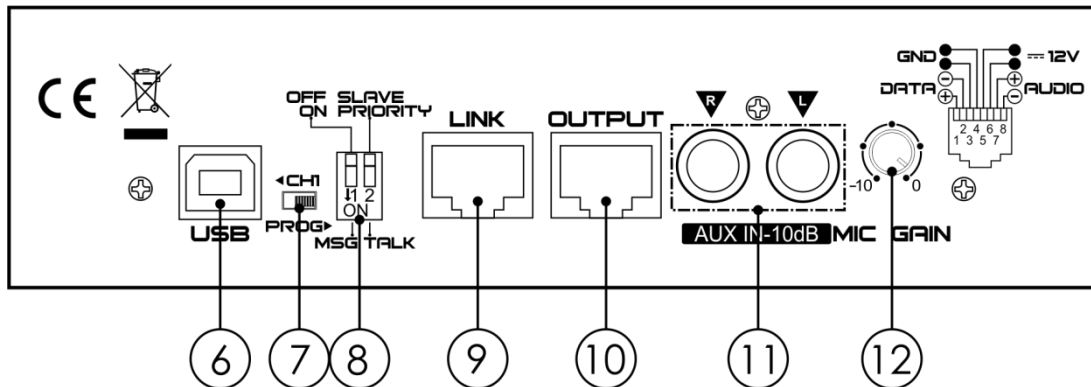


Fig. 02

⑥ **USB connector B**

Connect your PC to the device, in order to update the software or the chime sound.

⑦ **Chime/Program switch**

Insert a USB flash drive, containing updates. Set the selector to the section which you would like to update.

Set the selector to CHI, if you want to update the chime sound.

Set the selector to PROG, if you want to update the software and audio priority setting.

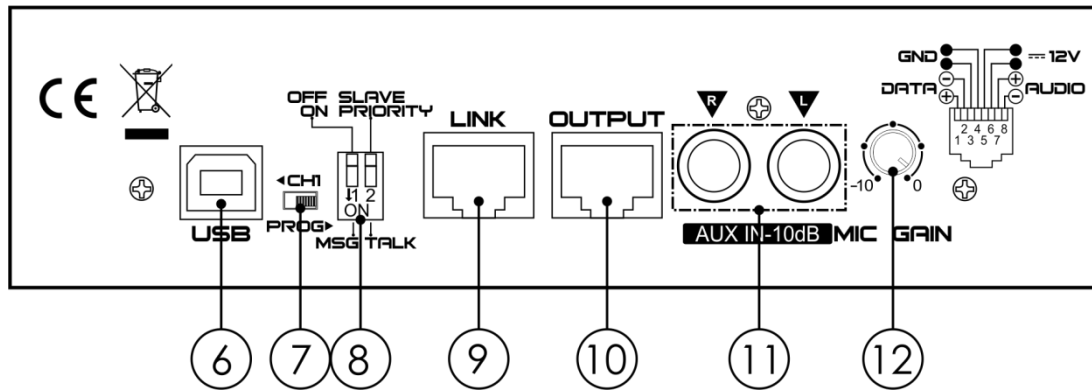


Fig. 03

- ⑧ **Function DIP switches**  
Set DIP switch # 1 to ON/OFF position, to activate/deactivate digital messages.
- If you connect multiple devices, and DIP switch # 2 is set to PRIORITY position, you have priority to speak. If DIP switch # 2 is set to SLAVE position, you need to wait until the BUSY LED indicator stops blinking.
- ⑨ **Microphone RJ45 – LINK**  
Use this connector to connect two or more devices. Connect the OUTPUT connector on the master device to the LINK connector on the slave device, etc.
- ⑩ **Microphone RJ45 – OUT**  
Use this connector to connect the PM-Six to another PM's LINK connector or to the input connector on the ZPA-6240TU.
- ⑪ **RCA Aux – IN**  
External audio input. Transmits the MIC signal and the mixed voice to the host.
- ⑫ **Microphone sensitivity control**  
Turn the control to set the microphone's sensitivity.

## Installation

Remove all packing materials from the PM-Six. Check if 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.**



## Set Up and Operation

### Paging Function

- 01) Press one of the **zone buttons 1-6 (05)** or the ALL button to select the desired zone(s), at maximum volume level. If you use multiple amplifiers, the ALL button will not function.
- 02) Press the TALK button and start talking. Once you have finished, press the TALK button again, to stop.
- 03) If you press the TALK button and do not say anything for 15 seconds, the device will deactivate.
- 04) In Paging mode, the Aux IN and the microphone sensitivity control will be transmitted to the selected zone(s).

### Message Bank

- 01) Press one of the **message buttons (02)** to select the desired message.
- 02) Press one of the **zone buttons 1-6 (05)** or the ALL button to select the desired zone(s), at maximum volume level. If you use multiple amplifiers, the ALL button will not function.
- 03) Press the **Repeat/Stop button** (continuous playback) **or Start/Stop button** (single playback) to activate/deactivate playback.

### Updating Chime

- 01) Set the **switch (07)** to CHI position.
- 02) Connect your PC to the PM-Six, by means of a USB cable.
- 03) You will now see a new removable disk in Computer section of your PC.
- 04) Enter the removable disk and overwrite **Chime.mp3** file with the new one.

## Connecting the PM-Six to the ZPA-6240TU 100V Amplifier

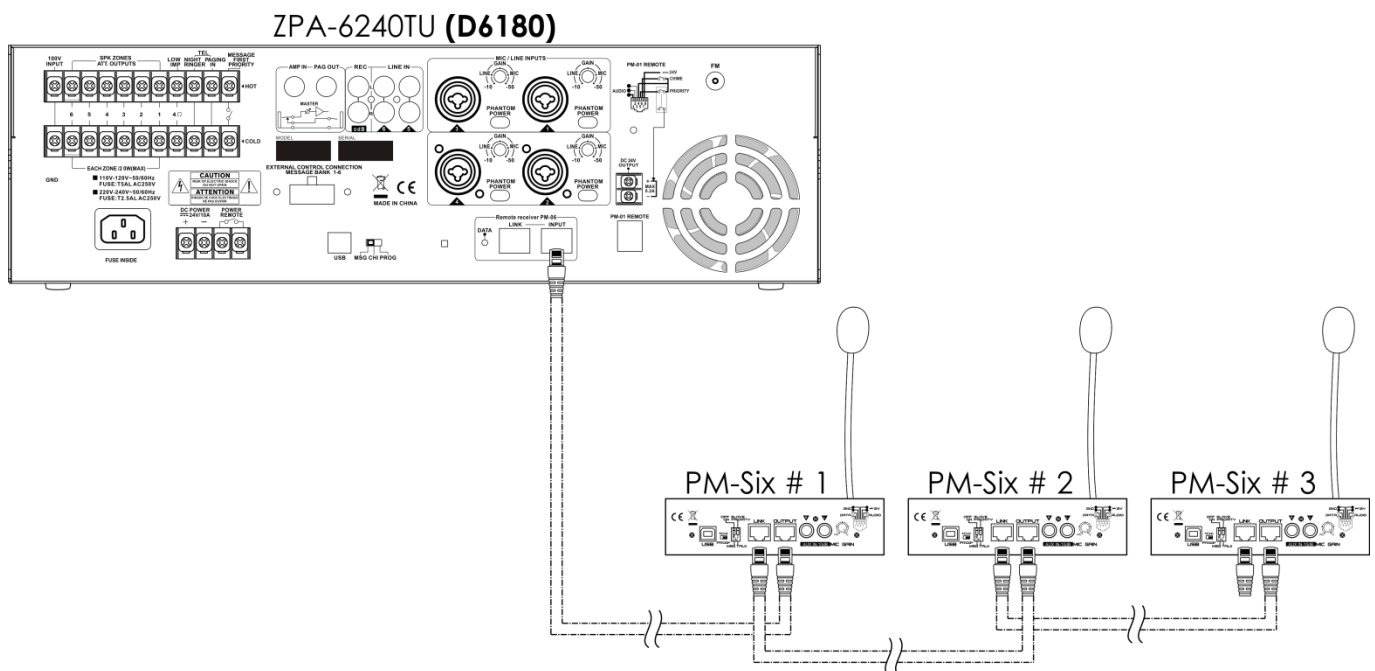


Fig. 04

## Data Cabling

To link fixtures together, you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable, please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

### DAP Audio PC Interface Cables

- CAT-5 cable 7,6 mm Matte blue PVC. **Ordercode** FL55150 (1,5 m), FL553 (3 m), FL556 (6 m), FL5510 (10 m), FL5515 (15 m), FL5520 (20 m).
- CAT-6 cable (recommended for best data transfer). **Ordercode** FL563 (3 m), FL566 (6 m), FL5610 (10 m), FL5615 (15 m), FL5640 (40 m).

## How to make a data cable

A standard ETHERNET cable can be used to replace the data cable required to transmit the data for the PM-01.

**Please follow the instructions below in order to create an extra Net Cable.**

Take a standard net cable (CAT-5/ 5E /6) and connect it to the RJ45 connector, as shown in the picture below (fig. 05). The wires should now be colored as follows:

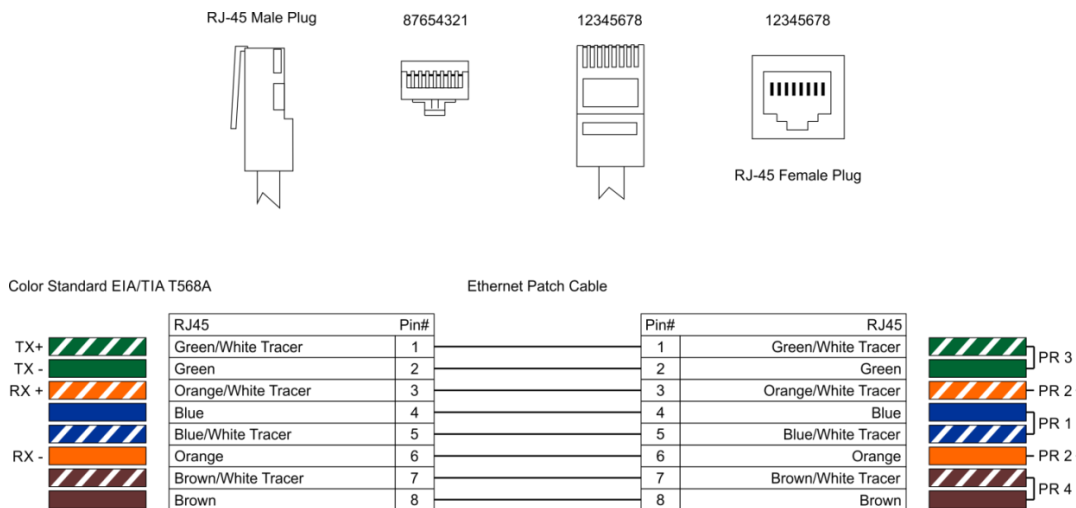


Fig. 05

## Maintenance

The DAP Audio PM-Six 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.

## Troubleshooting

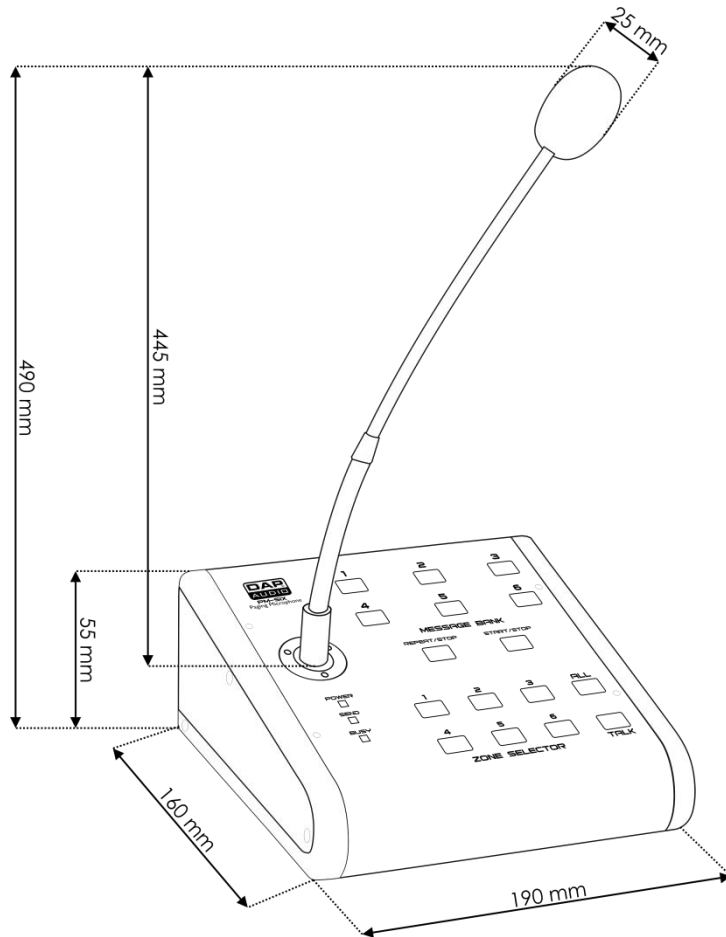
DAP Audio PM-Six

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

- 01) If the device does not operate properly, unplug the device.
- 02) Check power from the wall, all cables, connections, etc.
- 03) If all of the above appears to be O.K., plug the unit in again.
- 04) If nothing happens after 30 seconds, unplug the device.
- 05) Return the device to your DAP Audio dealer.

## Product Specifications

Model:	DAP Audio PM-Six
Dimensions (base):	160 x 190 x 55 mm (LxWxH)
Dimensions (microphone):	20 x 445 mm (WxH)
Weight:	1 kg
<b>Operating and Programming:</b>	
Signal link:	RJ45 IN
Signal output:	RJ45 OUT
Auxiliary input:	RCA IN
<b>Electro-mechanical effects:</b>	
Microphone unit:	condenser
Frequency response:	22 Hz – 23 KHz
Sensitivity:	29 dB @ 1 KHz
Audio output:	230 mV
Max. ambient temperature $t_a$ :	40°C
Max. housing temperature $t_b$ :	80°C



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



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