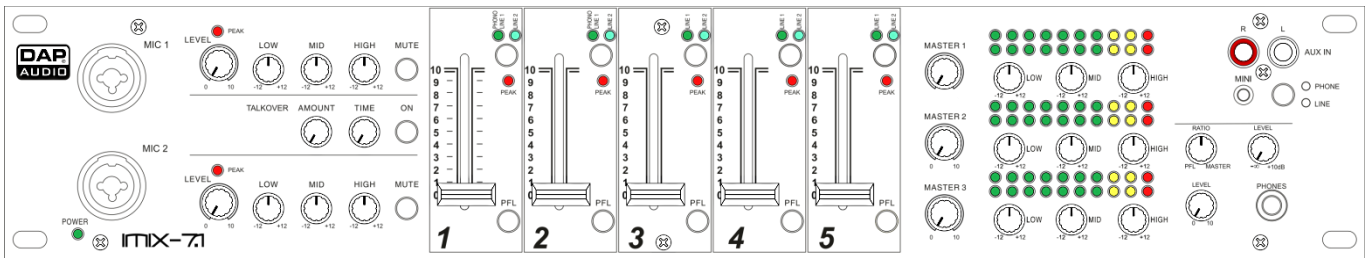




# MANUAL



ENGLISH

# IMIX 7.1

Ordercode: D2350

## Table of contents

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<b>Warning</b> .....	2
Unpacking Instructions.....	2
Safety Instructions .....	2
Operating Determinations .....	4
Connection with the mains.....	4
Return Procedure.....	4
Claims.....	4
<b>Description of the device</b> .....	5
Features .....	5
Overview .....	5
Front.....	5
Rear .....	6
Installation .....	6
<b>Functions</b> .....	7
<b>Set Up and Operation</b> .....	12
<b>Connection Cables</b> .....	12
<b>Maintenance</b> .....	12
<b>Troubleshooting</b> .....	13
<b>Product Specification</b> .....	13
<b>Block diagram</b> .....	14

## 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 IMIX-7.1
- Power adapter 2x18Vac 700mA
- User manual



**CAUTION!**  
**Keep this device away from rain and moisture!**



## 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 you 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 insert objects into air vents.
- Do not connect this system to a dimmerpack.
- Do not switch the system on and off in short intervals, as this would reduce the system's life.
- Do not open the device and do not modify the device.
- Do not drive the inputs with a signal level bigger, than required to drive the equipment to full output.
- Do not plug Mics into the console (or stagebox) while Phantom Power is on. Also mute the monitor / Pa system when turning Phantom Power on or off. Allow the system to adjust for a couple of seconds, before setting the input gains.
- Only use system indoor, 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 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.
- Make sure you don't use the wrong kind of cables or defective cables.
- Make sure that the signals into the mixer are balanced, otherwise hum could be created.
- Make sure you use DI boxes to balance unbalanced signals; All incoming signals should be clear.
- 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 system and the power-cord from time to time.
- Please turn off the power switch, when changing the power cord or signal cable, or select the input mode switch.
- 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.
- To emphasize a frequency range, you don't necessarily have to move its respective control upward; 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")
- 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!
- If system 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.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- For replacement use fuses of same type and rating only.
- WARRANTY: Till one year after date of purchase.

## 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 damage to people and 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	NUL
	YELLOW/GREEN	GREEN	GREEN	EARTH

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



### 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 [offersales@highlite.nl](mailto:offersales@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:**

- 1) Your name
- 2) Your address
- 3) Your phone number
- 4) 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

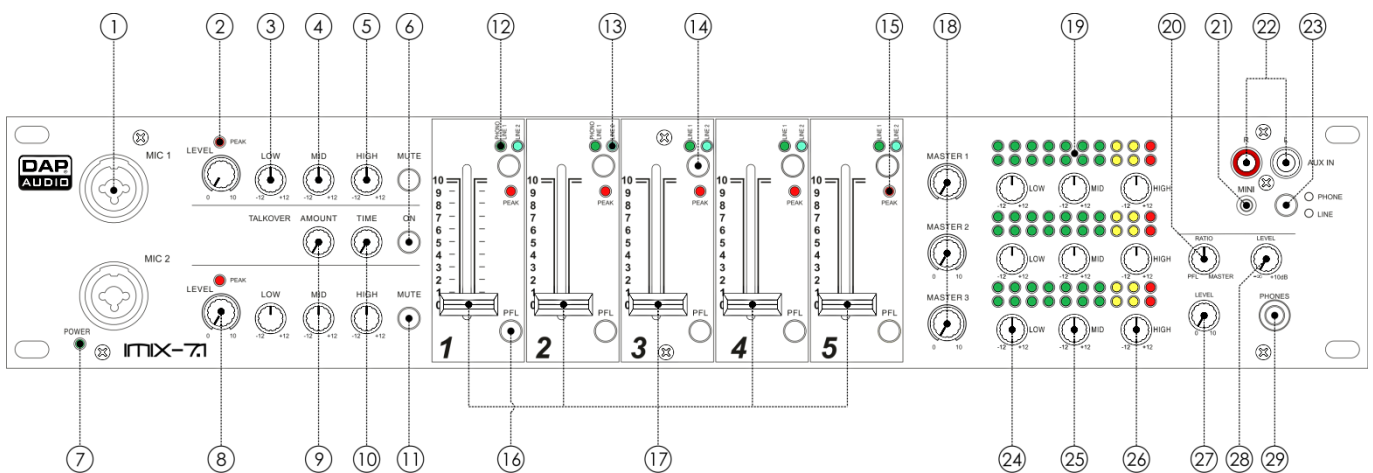
### Features

The IMIX-7.1 is a compact installation mixer for many kind of applications. It has a basic design which makes it easy to control. Gain settings are at the backside which prevents wrong use by non-technical users. The 3 balanced master outputs each with low, mid and high tone controls make it possible to set up different sound levels for 3 areas. At the front it has a direct input for 2 microphones, 1 Line source or a Phone/MP3 device with a dedicated impedance switch.

- Gain settings at backside
- Special front input for phone/mp3 devices
- 3 Balanced master outputs with tone control
- 2 Mic, 11 Line input

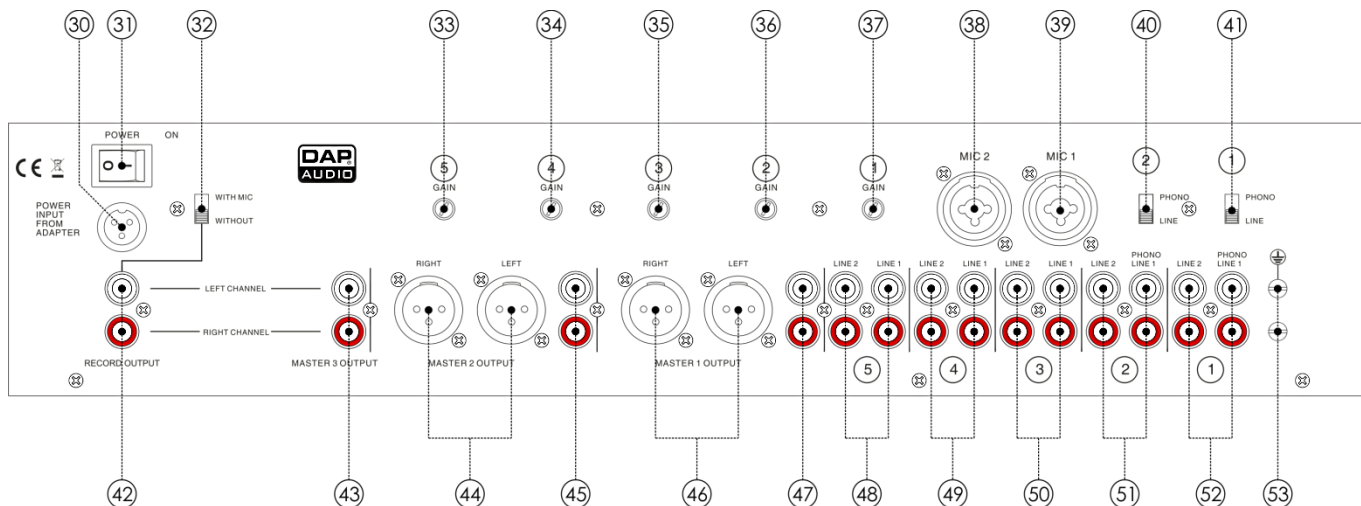
### Overview

#### Front



- |   |                                      |   |                                      |
|---|--------------------------------------|---|--------------------------------------|
| ① | Balanced input connector (mic 1/2)   | ⑬ | Line 2 LED (channel 1-5)             |
| ② | Peak LED (mic 1/2)                   | ⑭ | Input selection switch (channel 1-5) |
| ③ | Low control (mic 1/2)                | ⑮ | Peak LED (channel 1-5)               |
| ④ | Mid control (mic1/2)                 | ⑯ | PFL button (channel 1-5)             |
| ⑤ | High control (mic1/2)                | ⑰ | Channel fader (channel 1-5)          |
| ⑥ | Talkover on button                   | ⑱ | Master control (master 1-2)          |
| ⑦ | Power LED                            | ⑲ | VU-meter (master 1-3)                |
| ⑧ | Mic level control (mic 1/2)          | ⑳ | Ratio control                        |
| ⑨ | Talkover amount control              | ㉑ | Aux in unbalanced mini jack input    |
| ⑩ | Talkover time control                | ㉒ | Aux in unbalanced RCA input          |
| ⑪ | Mute button (mic 1/2)                | ㉓ | Phone/line button                    |
| ⑫ | Phono/ line 1 LED (channel 1-5)      | ㉔ | Low control (master 1-3)             |
| ⑬ | Line 2 LED (channel 1-5)             | ㉕ | Mid control (master 1-3)             |
| ⑭ | Input selection switch (channel 1-5) | ㉖ | High control (master 1-3)            |
| ⑮ | Peak LED (channel 1-5)               | ㉗ | Headphone level control              |
| ⑯ | PFL button (channel 1-5)             | ㉘ | Aux in level                         |
| ⑰ | Channel fader (channel 1-5)          | ㉙ | Headphone output                     |
| ⑱ | Master control (master 1-2)          |   |                                      |
| ⑲ | VU-meter (master 1-3)                |   |                                      |
| ⑳ | Ratio control                        |   |                                      |
| ㉑ | Aux in unbalanced mini jack input    |   |                                      |
| ㉒ | Aux in unbalanced RCA input          |   |                                      |
| ㉓ | Phone/line button                    |   |                                      |
| ㉔ | Low control (master 1-3)             |   |                                      |
| ㉕ | Mid control (master 1-3)             |   |                                      |
| ㉖ | High control (master 1-3)            |   |                                      |
| ㉗ | Headphone level control              |   |                                      |
| ㉘ | Aux in level                         |   |                                      |
| ㉙ | Headphone output                     |   |                                      |

Rear



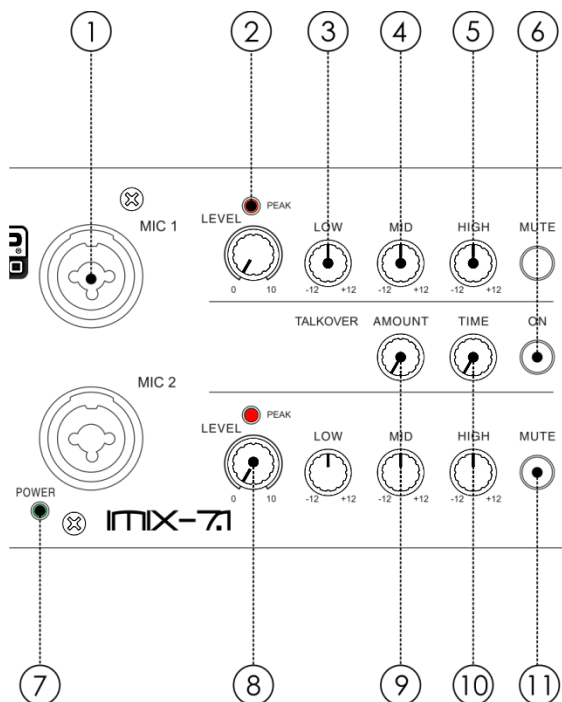
- ③① Power adapter connector
- ③② Power on/off switch
- ③③ With/without mic Switch
- ③④ Channel 5 gain control
- ③⑤ Channel 4 gain control
- ③⑥ Channel 3 gain control
- ③⑦ Channel 2 gain control
- ③⑧ Channel 1 gain control
- ③⑨ Mic 2 combo input connector
- ③⑩ Mic 1 combo input connector
- ④① Channel 2 line/phono switch
- ④② Channel 1 line/phono switch
- ④③ Record RCA unbalanced out connector
- ④④ Master 3 RCA unbalanced out connector
- ④⑤ Master 2 XLR balanced out connector
- ④⑥ Master 2 RCA unbalanced out connector
- ④⑦ Master 1 XLR balanced out connector
- ④⑧ Master 1 RCA unbalanced out connector
- ④⑨ Channel 5 line 1/line 2 input connectors
- ④⑩ Channel 4 line 1/line 2 input connectors
- ④⑪ Channel 3 line 1/line 2 input connectors
- ④⑫ Channel 2 phono/line input connectors
- ④⑬ Channel 1 phono/line input connectors
- ④⑭ GND screw

Installation

Remove all packing materials from the IMIX-7.1. 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.

## Functions



### 1. Mic input connector

Electronically balanced combo-type input for connecting low impedance microphones. The input has extremely low noise and low hum. When connecting a microphone make sure that the pin assignment is correct. Always make sure to read the manual of the microphone you want to connect. The XLR- input is not suitable for connecting an additional mixing console, FX-unit, etc. You have to use the **line (48-52)** inputs, when connecting this kind of equipment.

**Note: When connecting signal sources, please make sure the corresponding channel faders and the master faders are at their minimum settings. Otherwise unpleasant plug-in noise can occur.**

### 2. Peak LED

The Peak LED shows peak levels in a channel's incoming signal level. If the peak LED frequently blinks or constantly lights, the corresponding channel is likely to enter clipping and you have to reduce the input's amplification using the **level (8)** control. The peak LED lights at a level of 8 dB below clipping. Make sure that the peak LED lights only briefly during dynamic peaks.

### 3/4/5. Equalizer section (high/mid/low)

The microphone channel's equalizer section allows shaping of the incoming audio signal. All mono input channels are fitted with 3-band EQ. The high (5) and low (3) shelving controls have their frequencies fixed at 12KHz and 80Hz respectively. The mid (4) range control has a peaking response frequency at 1KHz. All 3 bands have up to 12dB cut and boost, with a centre detent for off. Turning an Equalizer control to the right amplifies the frequency range, turning to the left attenuates the signal. Minor changes to the Equalizer control usually produce the best results. Try to avoid excessive enhancement of the MID band.

### 6. Talkover on button

Use this switch to activate the talkover function.

### 7. Power LED

The green power LED lights when the Sessionmix is turned on. If after switching the device on, the LED does not light, make sure that the AC adapter is connected properly. If the LED still doesn't light up after everything is connected right, please contact your DAP audio dealer.

### 8. MIC level control (Mic 1/2)

Controls the volume of the corresponding microphone channel.

### 9. Talkover amount control

Use this control to set the amount of signal reduction for the line channels 1-5 when spoken in the Microphone. Use this control to set the amount of signal reduction for the line channels 1-5 when spoken in the microphone.

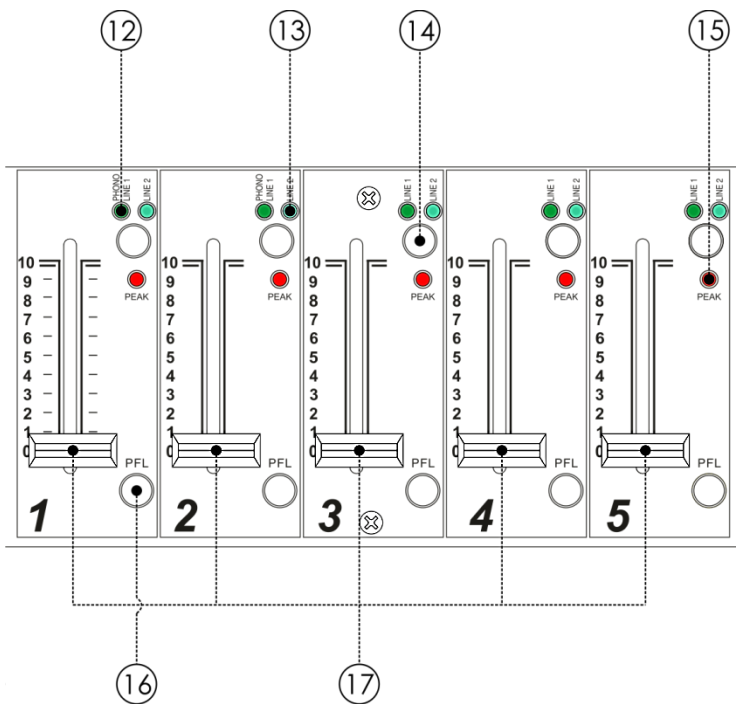
### 10. Talkover time control

This control allows you to set the time for returning to the normal volume level of the line channels 1-5 if you stop speaking in the microphone.

### 11. Mute button

Use this switch to mute the according Microphone channel.





**12. Phono-line 1 LED**

Indicates that the **phono-line 1** input is selected.

**13. Phono-line 2 LED**

Indicates that the line 2 input is selected.

**14. Input Selection button (Line 1/Line 2)**

With this button you can select between two sets of inputs per channel.

**15. Peak LED**

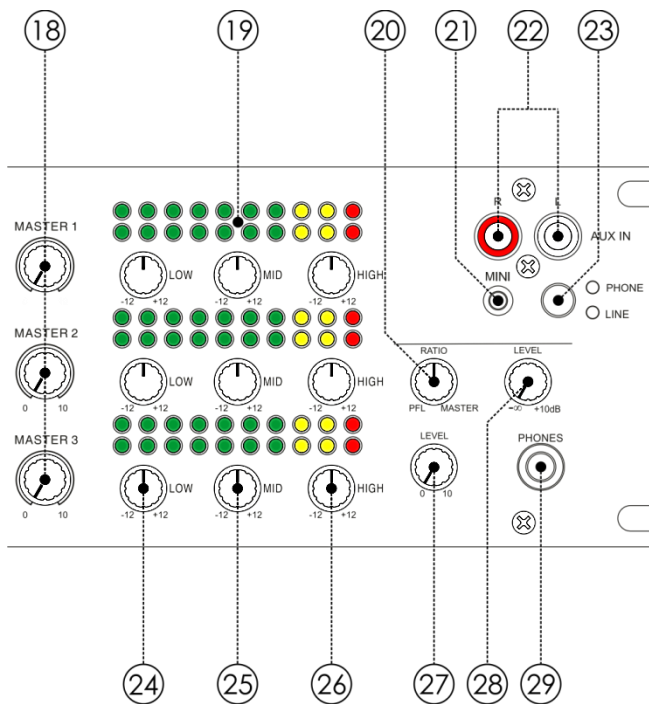
The peak LED shows signal peaks in a channel's incoming signal. If the red peak LED frequently blinks or constantly lights, the corresponding channel is likely to enter clipping and you have to reduce the input's amplification using the corresponding **gain (33-37)** control on the back. The peak LED lights at a level of 8 dB below clipping. Make sure that the peak LED lights only briefly during dynamic peaks.

**16. PFL button**

The PFL button (pre fade listening) is designed to route the channel input to the monitor section independent of the individual channel's volume fader setting. It is possible to assign more than one channel simultaneous to the PFL bus.

**17. Channel fader**

A logarithmic 50mm fader, which controls the volume of the corresponding channel. The overall volume is set with the master control.



### 18. Master control (master 1- 3)

You can adjust the output signal to the **Master Outputs (42, 43, 44, 45, 46, 47)** outputs.

### 19. Output Signal VU Meter (master 1, 2)

This meter is a multi-step LED. The accurate level indication allows you to monitor the output signal level at any time, and match with other devices.

### 20. Ratio control

Use this control to make a headphone mix between your PFL and your master signal.

### 21. Aux mini jack in connector

Unbalanced stereo mini jack aux input for connecting a line/phones level device. Use the **phone/line (23)** switch to set up this input for connecting either headphone or line level output devices.

### 22. Aux RCA in connectors

Unbalanced stereo RCA aux input for connecting a line/phones level device. Use the phone/line (23) button to set up this input for connecting either headphone or line level output devices.

### 23. Phone/line button

Use this button to configure both **aux (21,22)** inputs for either line level or phone level. When the input level is too low, press the line/phone level switch. When the light is on, the level of the input signal will be boosted. The phone level adjusts the input sensitivity into the correct level for MP3 players, smartphones or tablets. Now you can playback your MP3 devices directly without signal loss.

### 24/25/26. Equalizer section (master 1, 2, 3)

The master equalizer section allows shaping of the outgoing audio signal. All master channels are fitted with 3-band EQ. The **high (26)** and **low (24)** shelving controls have their frequencies fixed at 12KHz and 80Hz respectively. The **mid (25)** range control has a peaking response frequency at 1KHz. All 3 bands have up to 12dB cut and boost, with a centre detent for off. Turning the Equalizer to the right amplifies the frequency range, turning to the left attenuates the signal. Minor changes to the Equalizer control usually produce the best results. Try to avoid excessive enhancement of the mid band.

### 27. Headphones level control

This control allows you to adjust the headphones' volume.

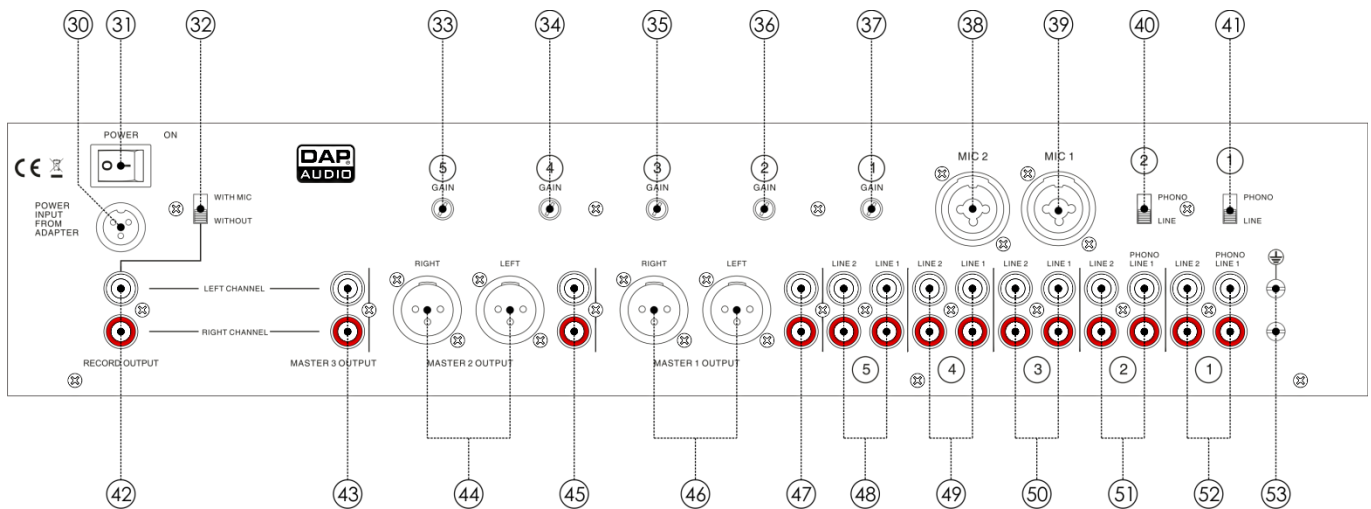
### 28. Line level control

This control allows you adjust the level of the aux (21,22) inputs in the master mix.

### 29. Headphone out connector

You can connect a pair of headphones with an impedance of 32 - 600 Ohm to the headphones connector. It is a 6,3mm/ 1/4" TRS socket, wired as Tip=left, Ring=right and sleeve = ground.

**Caution: Depending on the type of headphones connected to the Headphones jack, the IMIX-7.1 is capable of producing high output levels via the phones output. Therefore, make sure to turn the control all the way to the left (minimum setting) before connecting the headphones. Be aware of the fact that listening to loud sound pressure levels over a longer period of time leads to hearing damage!**



### 30. Power adapter connector

This is the remote AC power supply input socket for the IMIX-7.1. It is a special three core socket. Please use the supplied DAP audio adapter only.

### 31. Power on/off switch

Do not supply power before the whole system is set up and connected properly.

### 32. With/ without mic switch

Use this switch if you don't want your microphone signal(s) at the **rec outputs (42)**.

### 33. Channel 5 gain control

Channel 5 input level is determined by the gain control. With the gain control you can adjust the line input-sensitivity, while optimally matching the incoming signals to the mixer's internal operation level. The high gain of this mixer is ideal when dealing with very low input levels.

### 34. Channel 4 gain control

Channel 4 input level is determined by the gain control. With the gain control you can adjust the line input-sensitivity, while optimally matching the incoming signals to the mixer's internal operation level. The high gain of this mixer is ideal when dealing with very low input levels.

### 35. Channel 3 gain control

Channel 3 input level is determined by the gain control. With the gain control you can adjust the line input-sensitivity, while optimally matching the incoming signals to the mixer's internal operation level. The high gain of this mixer is ideal when dealing with very low input levels.

### 36. Channel 2 gain control

Channel 2 input level is determined by the gain control. With the gain control you can adjust the line input-sensitivity, while optimally matching the incoming signals to the mixer's internal operation level. The high gain of this mixer is ideal when dealing with very low input levels.

### 37. Channel 1 gain control

Channel 1 input level is determined by the gain control. With the gain control you can adjust the line input-sensitivity, while optimally matching the incoming signals to the mixer's internal operation level. The high gain of this mixer is ideal when dealing with very low input levels.

### 38. Mic 2 combo input connector

Depending on what's most suitable in a given situation, you can use the Combo input at the front or the rear. Both inputs are wired in parallel so you can even use them to link through.

### 39. Mic 1 combo input connector

Depending on what's most suitable in a given situation, you can use the Combo input at the front or the rear. Both inputs are wired in parallel so you can even use them to link through.

**40. Channel 2 line/phono switch**

Used to set the input level for the channel 2 **phono-line (51)** input for either phono or line level.

**41. Channel 1 line/phono switch**

Used to set the input level for the channel 1 **phono-line (52)** input for either phono or line level.

**42. Record RCA unbalanced out connectors**

Use these to connect a recording device.

**43. Master 3 RCA unbalanced out connectors**

Use these outputs to connect an amplifier with unbalanced inputs.

**44. Master 3 XLR balanced out connectors**

Use these outputs to connect an amplifier with balanced inputs.

**45. Master 2 RCA unbalanced out connectors**

Use these outputs to connect an amplifier with unbalanced inputs.

**46. Master 3 XLR balanced out connectors**

Use these outputs to connect an amplifier with balanced inputs.

**47. Master 1 RCA unbalanced out connectors**

Use these outputs to connect an amplifier with unbalanced inputs.

**48. Channel 5 RCA line input connectors**

Use to connect a line level device. You can select one of two the Line inputs with the corresponding **Line select (14)** button on the frontpanel.

**49. Channel 4 RCA line input connectors**

Use to connect a line level device. You can select one of two the Line inputs with the corresponding **Line select (14)** button on the frontpanel.

**50. Channel 3 RCA line input connectors**

Use to connect a line level device. You can select one of two the Line inputs with the corresponding **Line select (14)** button on the frontpanel.

**51. Channel 2 RCA line/phono-line Inputs**

Use the line input to connect a line level device. Depending on the position of the **phono/line (40)** switch, you can connect either a line level device or a turntable to the phono-line input.

**52. Channel 1 RCA line/phono-line Inputs**

Use the line input to connect a line level device. Depending on the position of the **phono/line (41)** switch, you can connect either a line level device or a turntable to the phono-line input.

**53. GND screw**

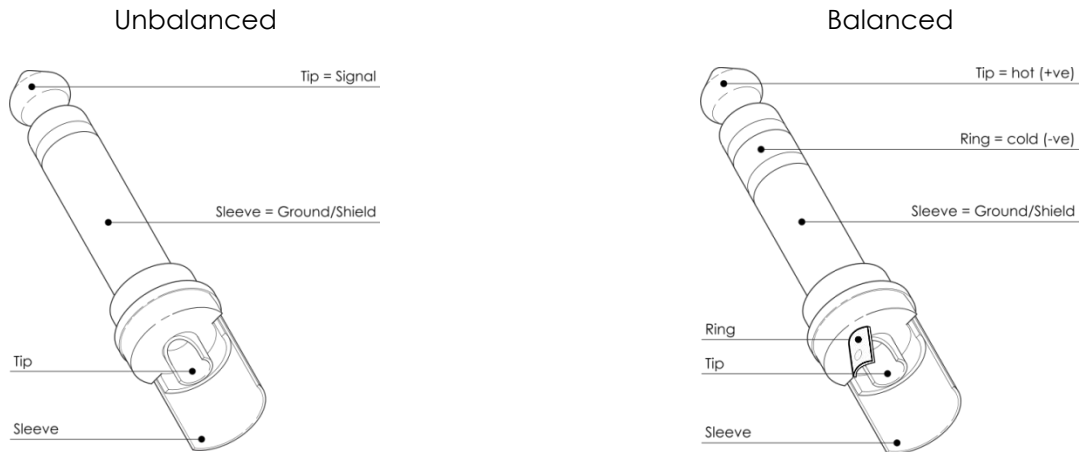
Use to connect the ground wire of your turntable.

## Set Up and Operation

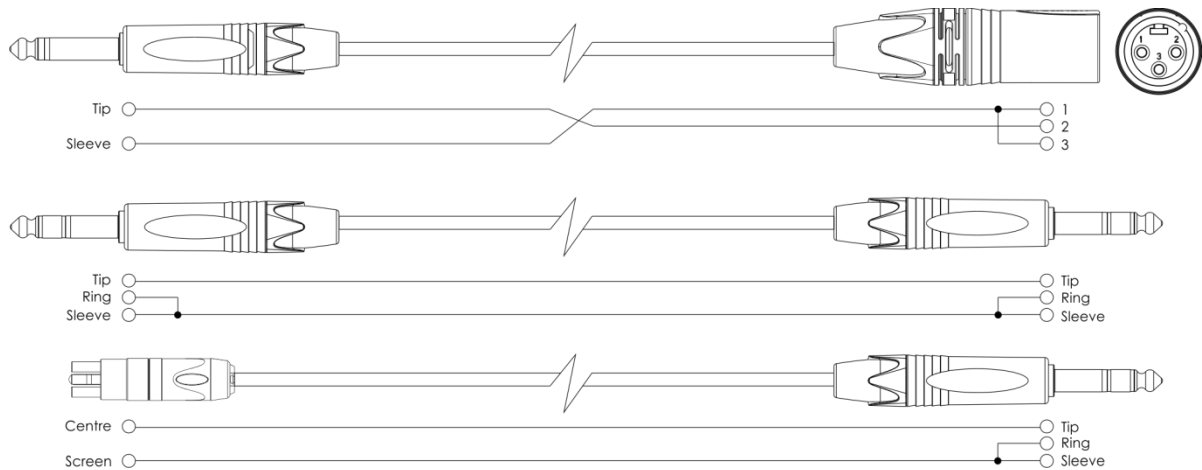
Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 115V specification product on 230V power, or vice versa.

## 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 IMIX-7.1 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

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### DAP Audio IMIX-7.1

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.

1. If the device does not operate properly, unplug the device.
2. Check power from the wall, all cables, connections, etc.
3. If all of the above appears to be O.K., plug the unit in again.
4. If nothing happens after 30 seconds, unplug the device.
5. Return the device to your DAP Audio dealer.

## Product Specification

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### Input channels

2 x Microphone, combo XLR/Jack  
11 x Line, RCA  
2 x Phono, RCA  
1 x Phone, 3,5mm jack

### Output channels

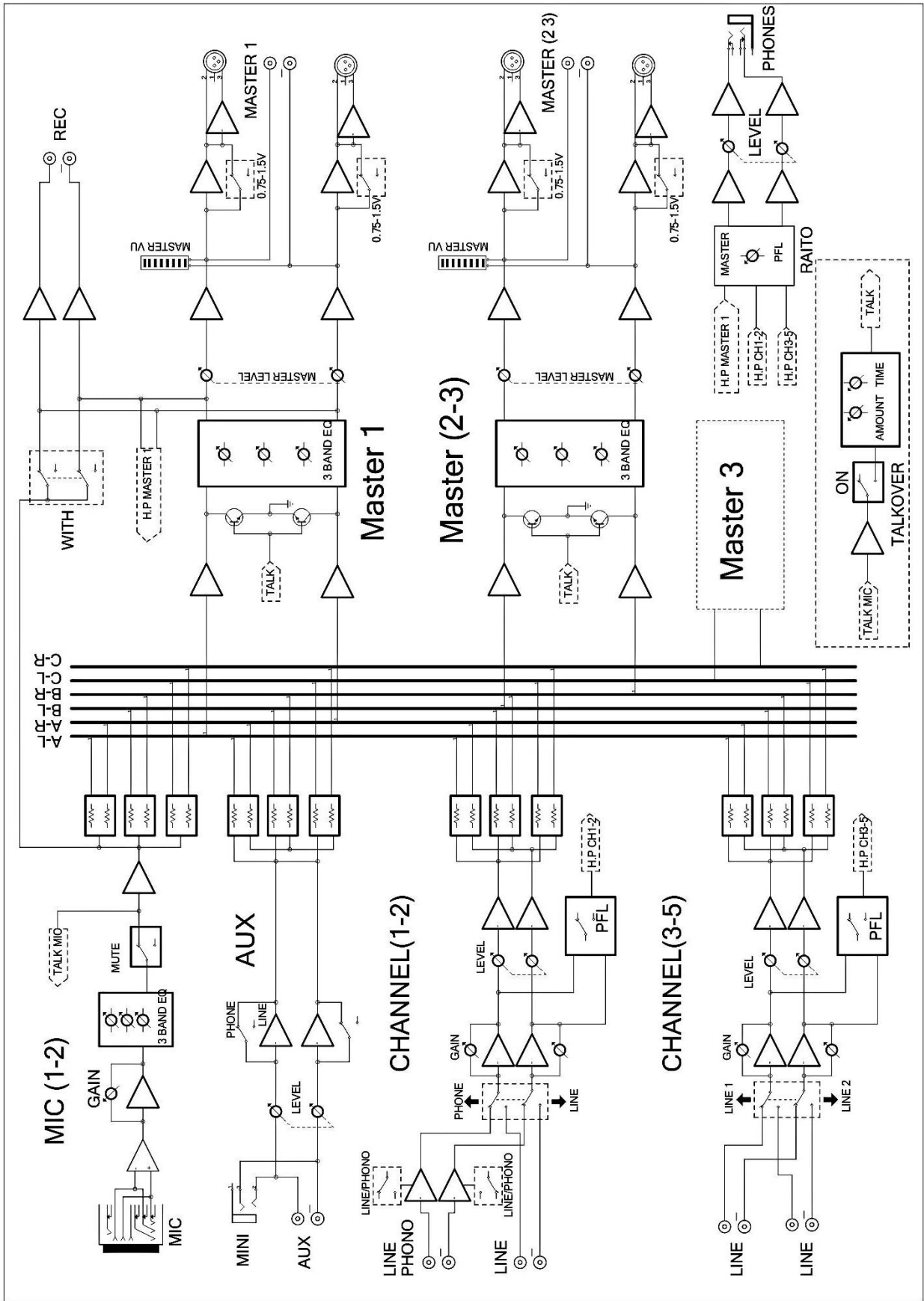
3 x Master Balanced, XLR  
1 x REC output, RCA  
1 x Headphones, 6.3mm Jack

### Other specifications

Master EQ:	80Hz, 1KHz, 12KHz, -12dB / +12dB
Mic EQ:	80Hz, 1KHz, 12KHz, -12dB / +12dB
Frequency response:	20Hz - 20Khz
T.H.D.:	<0.05%
Dimensions:	481 x 88 x 95 mm (LxHxD)
Power adapter:	2x 18 V~, 700 mA
Power consumption:	21 Watt
Size:	19", 2HE
Dimensions (W x H x D):	483 x 89 x 89 mm
Net weight:	3,4 kg

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

Block diagram





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