

PLE-1MP30-IN Mixer amplifier portable, 30W



- ► Bluetooth, USB, FM and TF card slot for audio streaming
- ► Variable ducking option
- ► Supports 12/24V battery power supply
- ▶ Low battery indication
- ▶ Phantom power supply support

The portable mixer amplifier is a professional public address unit with modern state-of-the-art features, which is built on class-D platform.

The amplifier is easy to use, taking the complexity away from the user and putting it where it belongs, inside the equipment. Providing a crisp call or clear music is as easy as turning on a radio.

Offering the essentials of public address in an affordable package.

System overview

The portable mixer amplifier is designed to meet the requirements of the people who are on the go. It has an inbuilt music player which can support audio streaming through Bluetooth or USB/TF card and also supports FM. An IR remote control is supplied with the unit to control the music source. The amplifier can be powered either with a 12/24V battery source or via a power adapter, which is supplied with the unit.

It is equipped with two microphone inputs, microphone input-2 comes with a phantom power supply option. It also has an AUX input option for connecting external audio sources.

It also supports ducking, by which the background music automatically fades away when there is a live announcement from any of the microphone inputs and is automatically restored after the announcement, avoiding the human/manual intervention of the operator. The ducking option is variable and it can be switched off based on the user requirements.

The processor in the amplifier monitors the speaker output line. In case there is a short circuit or overload in the speaker output line, the amplifier isolates the amplification circuit and enters into selfprotection mode and the user is informed with a fault indication.

The amplifier also monitors the battery status. If the connected battery output goes low, the amplifier will detect this and the user will be informed with a battery low indication: If the battery output goes below the threshold value, the amplifier will isolate the output and protect the battery from draining any further. The rear of the amplifier is equipped with a replaceable DC fuse for further protection.

Functions

Power

The mixer amplifier comes with 30 watt output power. This power is directly available on a low impedance connection for a 4 ohm speaker load. The amplifier has a ducking feature, which will suppress the background music whenever there is a live announcement from any of the microphone inputs and the ducking levels can be varied based on the requirements from 0 dB, -6 dB to -24 dB, and MUTE (off).

The mixer amplifier can be connected to a higher capacity of power amplifiers with the help of line output.

The amplifier is designed to suit application areas like retail outlets, small cafes/restaurants, election rallies, promotion campaigns, yoga centers and gyms, hence being the right choice for small and medium installations.

Inputs

The amplifier is equipped with two balanced microphone inputs. The microphone input-2 is supported with phantom power supply with ON/OFF selection switch.

Microphone input-1 is supported with 6.3mm TRS connector and microphone input-2 is supported with a combo connector.

Music source and AUX input

The unit has an inbuilt music source module and AUX input option.

The module streams audio from USB pen drive or from a TF card (supported capacity up to 32GB) or FM, the user can also stream the audio through Bluetooth.

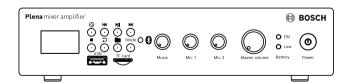
Amplifier status

When the amplifier is powered on, the power LED ring lights up in green and this indicates that the amplifier is in normal operating condition. If the LED ring changes to red, it indicates that the speaker output line is in short state or overloaded condition. Once the speaker output line is rectified, the amplifier resumes and the LED ring status will change to green.

If the amplifier is powered with a battery source, the battery ON indication LED will turn on. The amplifier also monitors the battery status. If the amplifier is powered with a battery source, the battery ON indication LED will turn on. If the battery voltage level goes low, a battery low indication LED will blink and the outputs will be reduced by 3 dB. If the battery voltage levels goes further low - below the threshold values, the amplifier shall mute the outputs to prevent the battery from draining further. This shall be indicated with the continuous glow of LED.

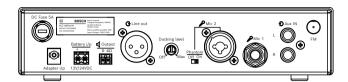
Controls and indicators

Front panel



- · Power on switch with LED Indication
- · Low battery LED indication
- · Battery input LED indication
- Master volume knob
- Volume knobs for microphone inputs
- Volume knob for Music input
- LCD panel, USB/TF ports, keyboard functions and IR remote sensor

Rear panel



- Two microphone Inputs
- Selectable switch for phantom power supply for mic-2
- · Pair of RCA connectors for AUX input
- Knob for varying the ducking option
- · Connector for FM antenna
- Connector for battery input
- · XLR connector for Line output
- · 4 Ohm loudspeaker output
- DC fuse holder

Regulatory information	
Safety*	acc. to IEC 62368-1
Resistance to shock, vibration, bump and transport*	acc. to IEC 60068-2-6
EMC emission*	acc. to EN 55032: 2015
EMC immunity*	acc. to EN 61000-4-3

* The product has been certified with the supplied adapter

Parts included

Quantity	Component
1	Mixer amplifier
1	Remote control with battery
1	Power adapter with cord
1	Battery connector
1	Speaker connector
1	FM Antenna with BNC connector
1	Installation and operation manual

Technical specifications

Electrical

Power supply

Adapter	$19 \text{ V} \pm 5\%$, $\geq 65 \text{ W}$ output, $230 \text{ V}/50 \text{ Hz}$ input
Battery	12 V ± 5%, ≥ 35 Ah 24 V ± 5% ≥ 35 Ah
Performance	
Frequency response	20 Hz to 20 kHz (+1/-3 dB @ -10 dB of rated output)
Distortion	<1% @ rated output power
Ducking range	0 dB, -6 dB to -24 dB (+1 dB/-3 dB), Mute
AUX input	
Connector	3.2 mm RCA mono jack
Input impedance	> 10 kΩ
Sensitivity	200 mV +1 dB / -3 dB
S/N	> 70 dB
Headroom	> 25 dB
Mic Input 1	
Connector	1/4" TRS stereo jack
Input impedance	> 1 kΩ
Sensitivity	1 mV +1 dB / -3 dB
CMRR	> 50 dB
S/N	> 60 dB
Headroom	> 25 dB
Mic Input 2	
Connector	1/4" XLR combo connector
Input impedance	> 1 kΩ
Sensitivity	1 mV +1 dB / -3 dB
CMRR	> 50 dB
S/N	> 60 dB
Headroom	> 25 dB
Phantom power supply	$15 \text{ V} \pm 10\%$ - open circuit voltage $9 \text{ V} \pm 10\%$ - with $2.2 \text{ k}\Omega$ load resistor

Loudspeaker output	
Connector	2 pin
Max. power	30 W for 19/24V 30 W (-1 dB) for 12V
Load resistance	4 Ohm
Output type	Balanced
Line output	
Connector	XLR type
Max. output voltage	1 V for 19/24V 0.89 V for 12V
Output type	Balanced
Indications on power but-	
Power on	LED ON (green color ring around the power button)
Fault*	LED blinking (red color ring around the power button) 5-second retry interval
Other indications	
Battery source ⁺	LED ON (yellow color)
Low battery**	When the battery is low, the speaker and line outputs will be reduced by 3 dB and the LED starts blinking (red color) when it reaches threshold-1. The LED will be continuously ON when it reaches threshold-2 and the outputs will be muted.
	Threshold details for battery of 12 V: Threshold 1 = $10.8 \text{ V} \pm 2\%$, Recovery voltage = 11.4 V Threshold 2 = $10 \text{ V} \pm 2\%$, Recovery voltage = 10.6 V
	Threshold details for battery of 24 V: Threshold 1 = 21.6 V \pm 2%, Recovery voltage = 22.8 V Threshold 2 = 20 V \pm 2%, Recovery voltage = 21.2 V

^{*} Fault may occur due to short circuit at speaker terminals or over temperature of power amplifier, which may occur due to overload. When the amplifier unit is powered with 12 V battery source, the outputs will be reduced by 1 dB.

^{**} Low battery threshold is at music power.

 $^{\scriptscriptstyle +}$ When the amplifier unit is powered with 12 V battery source, the outputs will be reduced by 1 dB.

Mechanical

Dimensions (H x W x D)	52 mm x 224 mm x 219 mm
Mounting	Bench / desktop placement
Color	Traffic black RAL 9017
Net weight	2 kg
Gross weight (in packed condition)	3 kg

Environmental

Operating temperature	-5 °C to +45 °C
Storage and transport temperature	-15 °C to +70 °C
Relative humidity	<95%

Ordering information

PLE-1MP30-IN Mixer amplifier portable, 30W

Mixer amplifier, portable, 30 W, 2 microphone inputs and 1 AUX input, inbuilt music source module with Bluetooth.

Order number PLE-1MP30-IN | F.01U.344.892

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