

## PLE-1ME240-3IN Mixer amplifier, 240W, USB/BT



- ▶ Inbuilt Bluetooth for audio streaming
- ▶ Supports audio playback from USB pen drive
- ▶ 4 microphone/line inputs, plus music source input
- ▶ Optional 2-tone chime generation for input 1
- ▶ Insert feature to use as a pre/power amplifier
- ▶ VU meter to indicate output level & limiter circuit for protection

This PLENA Economy mixer amplifier is a professional public address unit with modern state-of-the-art features.

It is easy to use, taking the complexity away from the user and putting it where it belongs, inside the equipment. Providing crisp and clear announcements and music is as easy as turning on a radio. Offering the essentials of public address in an affordable package.

### System overview

The mixer amplifier is equipped with an inbuilt music source, which can provide hours of uninterrupted music either through Bluetooth streaming or USB pen drive. It is supplied with an IR remote control for controlling the music source. The unit features four mic/line inputs, 1 BGM and operates in a single zone. To ensure optimum performance, there are no moving parts, such as hard drives that can fail or wear out. The unit has a limiter circuit and provides an audio insert feature to use as a pre/power amplifier. The VU meter gives an output level indication.

### Functions

#### Power

The mixer amplifier has an output power of 240 W. This power is directly available on 100 V constant voltage connections and on a low impedance connection for a 4-ohm load. Moreover, the amplifier has a separate 100 V call-only output channel for addressing areas where only priority announcements are required. The call-only output can also be used for 3-wire remote volume control override.

#### Inputs

All mic/line inputs can be switched between microphone level and line level sensitivity. The inputs are balanced, but can be used as unbalanced inputs. Phantom power can be switched-on to provide power to condenser microphones. Input channel 1 can take priority over all other microphone, AUX & music inputs:

- Input 1 can be activated by contact closure on the PTT (push to talk). A 2-tone chime can be configured to precede an announcement.

#### Music source and AUX input

The unit has an internal music source and AUX input option. The internal music source plays audio files from a USB pen drive (with a capacity of up to 32GB) or streamed through Bluetooth. The player will automatically search and play all playable audio tracks from the USB pen drive and has repeat/random/all modes. The following formats are supported: MP3 and WAV files with bit rates from 32 kbit/s.

#### Personalized settings

Another useful feature is to indicate preferred settings on the front panel by inserting colored pins at the preset levels of all knobs. One user can make use of silver pins to set the controls as per his convenience. A second user can make use of red pins to set the controls for his particular use.

#### Output status

An LED VU meter provides output indication. A headphone socket (6.3 mm), below the VU meter, provides the mixer output. For total reliability and

ease of use, a limiter is integrated into the output stage to restrict output if the user applies excess signal.

**Controls and indicators**

**Front panel**



- Power-ON switch with LED indication
- LCD display, USB port, UBS/BT keyboard functions with IR remote sensor
- Four volume knobs for microphone inputs
- Volume knob for AUX input
- Knob for treble level
- Knob for bass level
- Master volume knob
- LED VU meter for master output (LEDs for -18, -12, -6, -3, 0 dB)
- Headphone socket

**Back panel**



- Four inputs with DIP swiches
- AUX input
- Pair of RCA connectors for Insert feature
- 100 V and 4-ohm loudspeaker outputs
- A/c socket with fuse holder

**Regulatory information**

|                     |                                     |
|---------------------|-------------------------------------|
| Safety              | acc. to IEC 62368-1                 |
| Vibration and shock | acc. to IEC 60068                   |
| Transport           | as per IS7028                       |
| EMC emission        | acc. to CISPR 32                    |
| EMC immunity        | acc. to EN 55103-2: 2009 + A1: 2012 |

**Parts included**

| Quantity | Component                         |
|----------|-----------------------------------|
| 1        | Mixer amplifier                   |
| 1        | Power cord                        |
| 1        | Remote control for music source   |
| 1        | Installation and operation manual |

**Technical specifications**

**Electrical**

| <b>Mains power supply</b>       |  |
|---------------------------------|--|
| Voltage                         | 220-230V, AC, 50Hz / 240W (reduced power at lower mains) |
| Inrush current                  | 40 A   |
| <b>Performance</b>              |  |
| Frequency response              | 80 Hz to 18 kHz (+1/-3 dB @ -10 dB ref. rated output)    |
| Distortion                      | <1% @ rated output power, 1 kHz                          |
| Bass Control                    | Max. ± 8 dB  |
| Treble Control                  | Max. ± 8 dB  |
| <b>AUX input</b>                |  |
| Connector                       | Cinch, stereo converted to mono                          |
| Sensitivity                     | 200 mV to 300 mV   |
| Impedance                       | 22 kohm  |
| S/N (flat at max. volume)       | ≥70 dB   |
| Headroom                        | >25 dB   |
| <b>Insert 1 x</b>               |  |
| Connector                       | RCA Cinch  |
| Sensitivity                     | 1 V  |
| Impedance                       | >10 kohm   |
| <b>Loudspeaker Output 100 V</b> |  |
| Connector                       | Screw terminal, floating                                 |
| Max. / rated                    | 360 W / 240 W  |

|                                     |                          |
|-------------------------------------|--------------------------|
| <b>Loudspeaker output<br/>4 Ohm</b> |                          |
| Connector                           | Screw terminal, floating |
| Max. / rated                        | 31 V (240 W)             |

### Mechanical

|                        |   |
|------------------------|---|
| Dimensions (H x W x D) | 100 mm x 430 mm x 290 mm<br>(19" wide, 2U high) |
| Mounting               | Stand-alone, 19" rack                           |
| Color                  | Charcoal  |
| Weight                 | Approx. 10.5 kg                                 |

### Environmental

|                                   |                  |
|-----------------------------------|------------------|
| Operating temperature             | -5 °C to +45 °C  |
| Storage and transport temperature | -40 °C to +70 °C |
| Relative humidity                 | <95%             |

### Ordering information

**PLE-1ME240-3IN Mixer amplifier, 240W, USB/BT**  
Mixer amplifier, 240 W, 4 microphone/line inputs and 1 BGM input, USB/Bluetooth.  
Order number **PLE-1ME240-3IN | F.01U.377.180**

### Accessories

**PLN-1AIO090-IN All-in-one amplifier, 90W**  
Single zone amplifier with USB and SD card slot  
Order number **PLN-1AIO090-IN | F.01U.302.384**

**PLN-2AIO180-IN All-in-one amplifier, 2-zone, 180W**  
2-zone amplifier with USB and SD card slot  
Order number **PLN-2AIO180-IN | F.01U.302.385**

**PLN-2AIO360-IN All-in-one amplifier, 2-zone, 2x180W**  
Dual-channel, 2-zone amplifier with USB and SD card slot  
Order number **PLN-2AIO360-IN | F.01U.302.386**

**LBD1930/00 Power amplifier, 120W**  
Plena Booster Amplifier 120 W  
Order number **LBD1930/00 | F.01U.281.090**

**LBD1935/00 Power amplifier, 240W**  
Plena Booster Amplifier 240 W  
Order number **LBD1935/00 | F.01U.281.091**

**LBD1938/00 Power amplifier, 480W**  
Plena Booster Amplifier 480 W  
Order number **LBD1938/00 | F.01U.281.092**

### Represented by:

**Europe, Middle East, Africa:**  
Bosch Security Systems B.V.  
P.O. Box 80002  
5600 JB Eindhoven, The Netherlands  
[www.boschsecurity.com/xc/en/contact/](http://www.boschsecurity.com/xc/en/contact/)  
[www.boschsecurity.com](http://www.boschsecurity.com)

**Germany:**  
Bosch Sicherheitssysteme GmbH  
Robert-Bosch-Platz 1  
D-70839 Gerlingen  
[www.boschsecurity.com](http://www.boschsecurity.com)

**North America:**  
Bosch Security Systems, LLC  
130 Perinton Parkway  
Fairport, New York, 14450, USA  
[www.boschsecurity.com](http://www.boschsecurity.com)

**Asia-Pacific:**  
Robert Bosch (SEA) Pte Ltd, Security Systems  
11 Bishan Street 21  
Singapore 573943  
[www.boschsecurity.com/xc/en/contact/](http://www.boschsecurity.com/xc/en/contact/)  
[www.boschsecurity.com](http://www.boschsecurity.com)

### **LA2-UM60-D-IN Column loudspeaker 60W, metal, black**

Column loudspeaker 60W, metal enclosure, finished in black, supplied with a swivel wall mounting bracket.  
Order number **LA2-UM60-D-IN | F.01U.344.880**

### **LBD3902-D Cabinet loudspeaker 6W, black**

Cabinet loudspeaker 6 W, MDF enclosure, finished in black, with keyholes for wall mounting.  
Order number **LBD3902-D | F.01U.294.064**

### **LBD3904-D Cabinet loudspeaker 6W, corner, black**

Cabinet loudspeaker 6 W, MDF enclosure, finished in black, with two brackets for corner mounting.  
Order number **LBD3904-D | F.01U.294.066**

### **LBD3905-D Cabinet loudspeaker 12W (bi-dir), black**

Cabinet loudspeaker 12 W, bidirectional, MDF enclosure, finished in black, with keyholes for wall mounting.  
Order number **LBD3905-D | F.01U.294.067**

### **LCZ-UM06-IN Compact ceiling speaker, 6W, metal**

Compact ceiling speaker, 6W, metal  
Order number **LCZ-UM06-IN | F.01U.363.540**

### **LC3-UM06-IN Ceiling speaker, 6W, metal**

Ceiling speaker, 6W, metal  
Order number **LC3-UM06-IN | F.01U.374.692**

### **LCZ-UM20-IN Ceiling loudspeaker 20W, metal**

Ceiling loudspeaker 20 W, perforated metal grille, integral clips for easy installation  
Order number **LCZ-UM20-IN | F.01U.304.585**

### **LM1-VC12P-IN Volume control unit, 12W**

12 W Volume Control Unit  
Order number **LM1-VC12P-IN | F.01U.363.541**

### **LM1-VC36P-IN Volume control unit, 36W**

36 W Volume Control Unit  
Order number **LM1-VC36P-IN | F.01U.363.542**

### **LA2-UM30-D-IN Column loudspeaker 30W, metal, black**

Column loudspeaker 30 W, metal enclosure, finished in black, supplied with a swivel wall-mounting bracket.  
Order number **LA2-UM30-D-IN | F.01U.344.878**