

# PM 502



This innovative product comes in a very modern and user-friendly design. It combines finest analogue input circuitry and operating surface with the advantages of its digital master and amplifier section making for a new dimension of flexibility in its class. The acoustical performance meets all the expectations that you have come to expect on a quality product from Dynacord. Its feature package includes: 5 MIC/LINE input channels with compressor/limiter and talk-over function, 3 Stereo Inputs including Jack, RCA and USB connectors, onboard player for MP3 or WAV audio files, high quality effects section with 32 editable presets, 3 Master outputs with 7-band EQ each and flexible signal routing options, delay line for Master-B (150 msec/50 m), headphones control, LPN speaker processing, class-D 2 x 450 W RMS / 2 x 600 W / 4 Ω program power, micro-controlled power supply (100–240 V), Direct Drive option for 100 V speaker lines, comprehensive protection package, live and install connectivity, optional rack mount kit.

The PM 502 is an extremely versatile tool for a multitude of live and installation applications. It will be the ideal choice for entertainers, DJs and small bands looking for a compact and light-weight solution for live applications or rehearsal venues. The digital USB interface also allows for basic recording and the onboard MP3-Player on the front, makes background music during breaks, a smooth and easy transition.

- Powered Mixer with 5 Mic/Line and 3 Stereo channels
- 2 x 450 W RMS at 4 Ω
- 32 editable HQ effect presets
- Onboard MP3 audio player
- 100V Direct Drive option

The input structure of the PM 502, along with the entire feature package and connectivity, positions this mixer at the heart of many installations ranging from bistros, small clubs, lounges, boutiques, hotel bars and lobbies to churches, mosques and a wide range of similar applications.

## Parts included

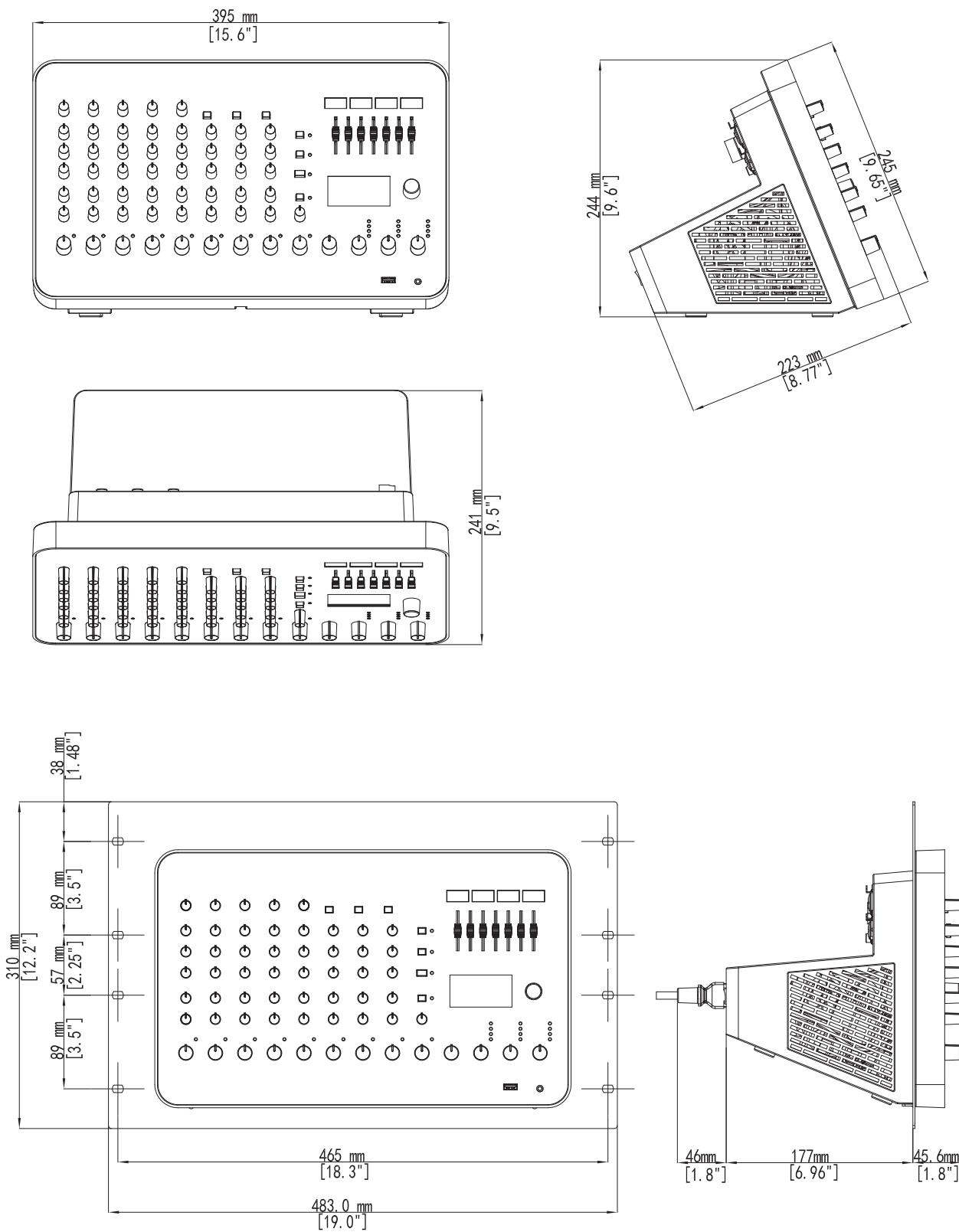
| Quantity | Component                     |
|----------|-------------------------------|
| 1        | PM 502                        |
| 1        | Power cord                    |
| 1        | User manual                   |
| 1        | Important safety instructions |

## Technical specifications

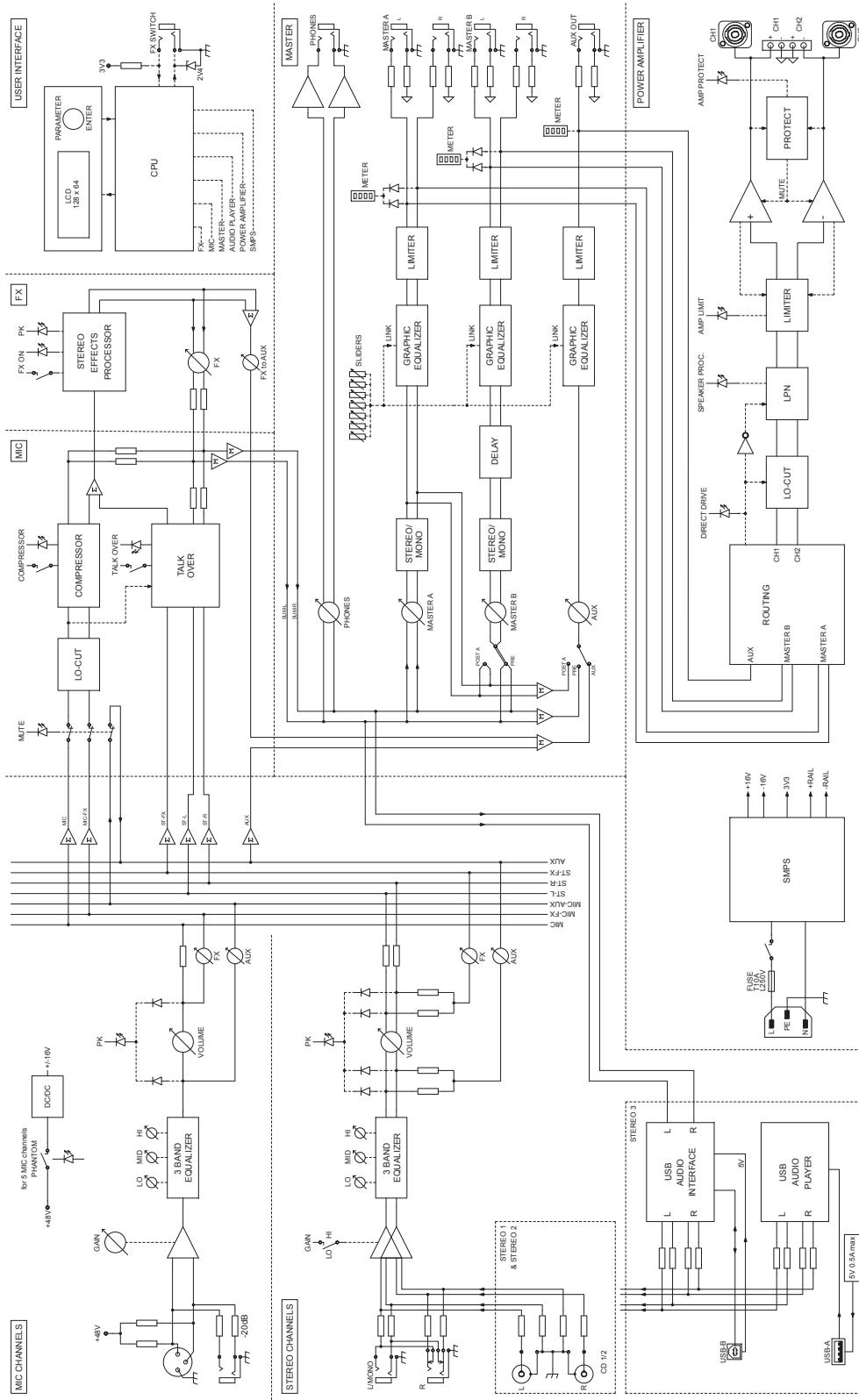
|  |                      |
|--|----------------------|
| Channels (mono + stereo)   | 5 + 3                |
| Microphone inputs  | 5 x XLR/Jack socket  |
| Auxiliaries (FX, AUX)  | 1 Post, 1 Pre        |
| Max. single channel output power, dynamic headroom, IHF-A                                |                      |
| • into 4 Ω   | 640 W                |
| • into 8 Ω   | 350 W                |
| Max. dual channel output power, dynamic headroom, IHF-A                                  |                      |
| • into 4 Ω   | 2 x 600 W            |
| • into 8 Ω   | 2 x 340 W            |
| Max. single channel output power, continuous, 1 kHz, THD = 1%                            |                      |
| • into 4 Ω   | 500 W                |
| • into 8 Ω   | 280 W                |
| Max. midband output power, 1 kHz, THD = 1%, dual channel                                 |                      |
| • into 4 Ω   | 2 x 450 W            |
| • into 8 Ω   | 2 x 270 W            |
| Rated output power, 20-20000 Hz, THD < 0.5%, one channel loaded                          |                      |
| • into 4 Ω   | 400 W                |
| • into 8 Ω   | 240 W                |
| Max. output power, Direct Drive mode (bridge configuration), continuous, 1 kHz, THD = 1% |                      |
| • into 12 Ω  | 680 W                |
| Max. output voltage, power amplifier, 1 kHz, no load                                     |                      |
| • Dual channel mode  | 52 V <sub>rms</sub>  |
| • Direct Drive mode  | 100 V <sub>rms</sub> |
| THD, at 1 kHz, MBW = 22 kHz  |                      |
| • MIC input to master A L/R outputs, +10 dBu, typical                                    | < 0.015%             |
| • MIC input to speaker output  | < 0.15%              |
| DIM 30, MIC input to speaker output, 3.15 kHz, 15 kHz                                    | < 0.05%              |
| IMD-SMPTE, MIC input to speaker outputs, 60 Hz, 7 kHz                                    | < 0.15%              |
| Frequency response, -3 dB, ref. 1 kHz  |                      |
| • Any input to any Mixer output  | 15-22000 Hz          |
| • Any input to Speaker output  | 20-22000 Hz          |
| Crosstalk, 1 kHz   |                      |
| • Amplifier Ch1/Ch2  | < -85 dB             |

|   |   |
|---|---|
| • Channel to channel  | < -78 dB                                    |
| Microphone mute switch attenuation                                      | > 100 dB                                    |
| Channel VOL and FX/AUX send attenuation                                 | > 85 dB                                     |
| CMRR, MIC input, 1 kHz  | > 80 dB                                     |
| Input sensitivity, all level controls in max. position                  |   |
| • MIC   | -65 dBu (435 µV)                            |
| • LINE (mono)   | -45 dBu (4.35 mV)                           |
| • LINE (stereo)   | HI: -27 dBu (34.6 mV), LO: -11 dBu (218 mV) |
| • CD (stereo)   | -27 dBu (34.6 mV)                           |
| Max. level, mixing desk, input VOL down, output VOL up                  |   |
| • MIC inputs, GAIN at min. position                                     | +11 dBu                                     |
| • Mono line inputs, GAIN at min. position                               | +30 dBu                                     |
| • Stereo line inputs  | +26 dBu                                     |
| • PHONES output   | +21 dBu                                     |
| • MASTER A, B, AUX outputs  | +11 dBu                                     |
| Input impedances  |   |
| • MIC   | 2 kΩ  |
| • CD  | 10 kΩ                                       |
| • All other inputs  | > 15 kΩ                                     |
| Output impedances   |   |
| • PHONES  | 47 Ω  |
| • All other outputs (impedance balanced)                                | 150 Ω                                       |
| Equivalent input noise, MIC preamp, A-weighted, max. gain, 150 Ω        | -129 dBu                                    |
| Noise, channel inputs to MASTER A L/R outputs, MBW = 22 kHz, A-weighted |   |
| • MASTER VOLUME down  | -99 dBu                                     |
| • MASTER VOLUME center, all channel volume down                         | -90 dBu                                     |
| • MASTER VOLUME center, all channel volume center                       | -85 dBu                                     |
| Signal-to-noise ratio, power amplifier, A-weighted, 450 W, 4 Ω          | 104 dB                                      |
| Output stage topology, amplifier  | Class D                                     |
| Equalization  |   |

|  |   |   |   |
|--|---|---|---|
| • Low shelving filter  | $\pm 15$ dB / 60 Hz   | AC power input  | 100–240 V AC, 50–60 Hz  |
| • Mid peak filter  | $\pm 12$ dB / 2.4 kHz   | Power consumption, at 1/8 maximum output power, 4 Ω   | 180 W   |
| • High shelving filter                                       | $\pm 15$ dB / 12 kHz  | Safety class  | I   |
| Master EQ 7-band (63, 160, 400, 1k, 2.5k, 6k, 12k Hz)        | $\pm 10$ dB / Q = 1.5   | Operating temperature   | 5° to 40° C (40° to 105° F)                                   |
| Filter   |   | Product dimensions (Width x Height x Depth)   | 395 x 244 x 241 mm<br>Rack-mount: 483 x 223 x 310.3 mm (7 HU) |
| • Low-cut filter, microphone processing (switchable)         | 80 Hz, 18 dB/oct. or 150 Hz, 12 dB/oct.   | Net weight  | 4.9 kg  |
| • Low-cut filter, amplifier (engaged in Direct Drive mode)   | 50 Hz or 70 Hz, 18 dB/oct.  | Shipping weight   | 6.4 kg  |
| • Speaker processing   | LPN, switchable   | * Device in rated condition: MIC GAIN 15 dB, STEREO GAIN LO, all channel and master controls in center position, 100 V Direct Drive mode: Off, LPN HIGH, amplifier load 8 ohms, dual channel, mains voltage 230 V/50 Hz or 120 V/60 Hz, unless otherwise specified. |   |
| Delay MASTER B, selectable                                   | 0–145 ms (0–50 m)   |   |   |
| Effects  |   |   |   |
| • Type   | Stereo 24/48-bit multi effects processor  |   |   |
| • Effect presets   | 32 factory presets, user editable   |   |   |
| • Remote control   | Footswitch  |   |   |
| Display  | 128 x 64 pixels, LCD  |   |   |
| Audio player (USB at front panel)                            |   |   |   |
| • Switching mode power supply ( $\mu$ C controlled)          | FAT 32  |   |   |
| • Supported audio file formats                               | MP3, WAV  |   |   |
| • Interface  | USB2.0, female type A   |   |   |
| • USB power supply, max. rated current (short circuit proof) | 5 V, 500 mA   |   |   |
| Digital audio interface (USB at rear panel)                  |   |   |   |
| • Channels   | 2 in, 2 out   |   |   |
| • AD/DA conversion   | 16-bit, delta-sigma   |   |   |
| • Sampling rate  | 32/44.1/48 kHz  |   |   |
| • PC interface   | USB2.0, female type B   |   |   |
| Protection   |   |   |   |
| • MASTER A, B, AUX outputs                                   | Adjustable peak limiters, -10 – +11 dBu   |   |   |
| • Amplifier  | Audio limiters, high temperature, DC, HF, short circuit, peak current limiters, turn-on delay, back EMF |   |   |
| • Switching mode power supply ( $\mu$ C controlled)          | Inrush current limiters, mains over/undervoltage, mains over current, high temperature                  |   |   |
| Cooling  | Continuous speed controlled fan   |   |   |
| Phantom power, switchable                                    | 48 V DC   |   |   |

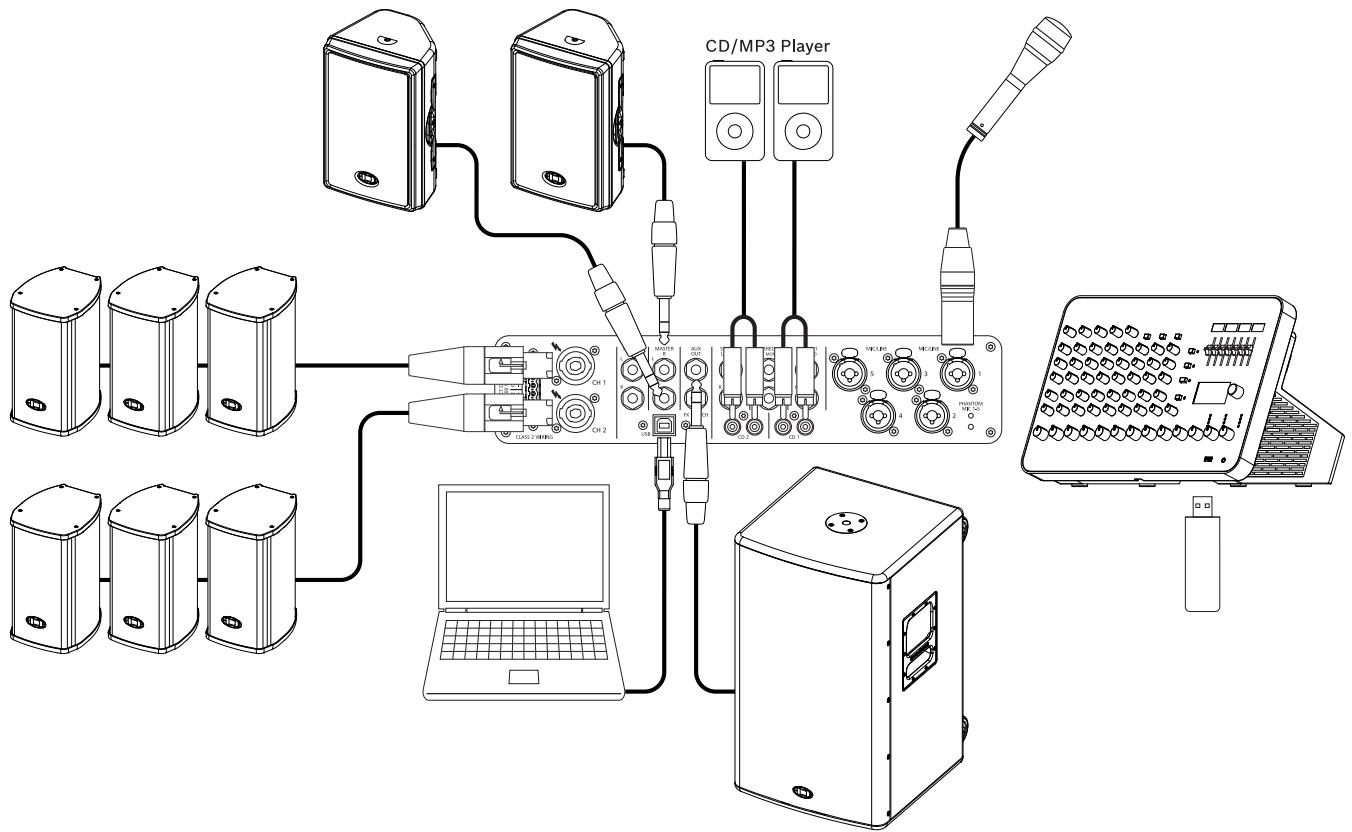


Dimensions



Circuit diagram

## Installation/configuration notes



*Setup example*

## Ordering information

### PM 502 (100-240V)

Powered Mixer with 5 Mic/Line and 3 Stereo-Channels, 2 x 450W RMS/4 Ohms, 32 editable HQ-effects presets, onboard audio player, USB interface, 3 masters, 3 x 7band EQ, 100V direct drive option, live and install connectivity.

Order number **F.01U.297.641**

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### PM 502 (CN)

Powered Mixer with 5 Mic/Line and 3 Stereo-Channels, 2 x 450W RMS/4 Ohms, 32 editable HQ-effects presets, onboard audio player, USB interface, 3 masters, 3 x 7band EQ, 100V direct drive option, live and install connectivity.

Order number **F.01U.297.642**

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### PM 502 (240 V)

Powered Mixer with 5 Mic/Line and 3 Stereo-Channels, 2 x 450W RMS/4 Ohms, 32 editable HQ-effects presets, onboard audio player, USB interface, 3 masters, 3 x 7band EQ, 100V direct drive option, live and install connectivity.

Order number **F.01U.297.643**

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### RMK 502

Rackmount kit for PM 502

Order number **F.01U.290.510**