Yamaha EMX312SC Powered Mixer



All-in-one for Easy Operation and Fast Setup
The EMX-series powered mixers integrate mixer, power amplifier, graphic EQ,
and digital effects into a compact, portable unit. No need for complex setup
and wiring — simply plug in and play! The entire system is optimized, so it's
easy to get great sound just about anywhere.

Superior Sound through Painstaking Design and Parts Selection Parts selection is crucial to achieving the best possible sound, and Yamaha spares no effort in selecting the best. The critical head amplifier circuit, for example, uses special low-noise chip resistors that are deposited on a thin film of nichrome for accurate, noise-free reproduction. Special care has also been taken in laying out the system's grounding as well as the circuitry in general to ensure that no unwanted noise or interference degrades the quality of the sound.

Intuitive, Functional Controls and Connectivity
The mixer section offers a total of 12 inputs in a very versatile
configuration: channels 1 through 4 are mono microphone or line inputs,
channels 5/6 and 7/8 can function either as mono microphone/line inputs or
stereo line inputs, and channels 9/10 and 11/12 are stereo line inputs.
Connectors are also provided for connection to external power amplifiers and
effect processors. Stereo channels 9/10 and 11/12 include phono jacks for
direct connection of CD players or other music playback devices, to which the
3-band channel equalizers can be applied as required. There are also two 7band graphic equalizers that can be used to match speaker and/or room

response for optimum sound.

Built-in SPX Effects

Yamaha's SPX effects are widely recognized as being some of the finest available for both recording and live sound. The EMX-series powered mixers feature an SPX effect processor built in, delivering extraordinary effect quality with 32-bit processing. 16 effect programs with adjustable parameters give you top-quality digital reverb, echo, delay, modulation, and distortion.

Maximum Output Power @ 0.5 $8 THD at 1 kHz 300 W/4 $\Omega;~190$ W/8 Ω

Frequency Response

-3, 0, 1 dB 20 Hz-20 kHz, ref to the nominal

output level @ 1 kHz

Total Harmonic Distortion Less than 0.5 % (THD+N) +14 dB @ 20 Hz, 1 kHz,

20 kHz, GAIN control: all nominal

Hum & Noise Equivalent Input Noise, -115 dBu, Rs = 150 Ω CH

1-4 MIC/LINE: MIC

Crosstalk -65 dB @ 1 kHz

Input Connectors CH 1-4: XLR and Phone; CH 5/6, 7/8: XLR and

Phone; CH 9/10, 11/12: XLR and Pin

CH EQ HIGH, MID, LOW

Phantom Power 15 V

Graphic Equalizer 7 Band (125, 250, 500, 1 k, 2 k, 4 k, 8 kHz):

Main (Stereo) and Monitor

Digital Effects

SPX Digital Multi Effector (24 bit AD/DA, 32 bit

Internal Processing): 16 Programs

Power Amp Mode Main L/R, Main (L+R)/Monitor

Foot Switch On/Off

Dimensions (W x D x H) 442 x 274 x 286 mm $(17-3/8" \times 10-3/4" \times 11-1/4")$

Weight 10 kg (22 lbs.)

Power Requirements 120 V 60 Hz

Power Consumption 400 W

Yamaha EMX312SC Powered Mixer Manual