

Overview

EMX5014C is a versatile powered mixer that combines a power amplifier with a mixing console in a single unit.



Rear Panel

Features

- Output power: 500W + 500W @4Ω[all versions]: 320 W + 320 W @8Ω[220-240v version]: 350 W + 350 W @8Ω[100v version]: 370 W + 370 W @8Ω[100v version]
- Input channels: 14 Line Inputs (8 mono, 4 stereo), 8 Mic Inputs with 48V phantom power, HPH per channel
- Output channels: 1 Speaker [A, B], 1 ST, 1 REC, 3 AUX sends (incl. 1 effect sends), 1 Phone, 1 Subwoofer, 6 Mono CH Insert
- Professional “1-knob compressors” on mono channels.
- Feedback Channel Locating (FCL) System to locate the channels in which feedback is occurring.
- Digital effects processors: 16 “SPX” effects
- Yamaha Speaker Processing: Speaker Processor and Preset for Yamaha passive speakers for optimizing performance

Specifications

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General Specifications

| | | |
|------------------------|------------------------------|--|
| OUTPUT POWER | 1 kHz THD+N < 0.5% | 500 W + 500 W (4 Ω) 320 W + 320 W (8 Ω/AC 220-240V model) 350 W + 350 W (8 Ω/AC 120V model) 370 W + 370 W (8 Ω/AC 100V model) |
| INPUT CHANNELS | LINE INPUT | 14 (6 MONO + 4 STEREO) |
| | MIC INPUT | 8 |
| | MONO INPUT (MIC/LINE) | 6 (CH1-6) |
| | MONO/STEREO INPUT (MIC/LINE) | 2 (CH7-10) |
| | STEREO INPUT (LINE) | 0 |
| OUTPUT CHANNELS | SPEAKERS | 1 |
| | STEREO OUT | [L, R] |
| | AUX SEND | 3 (incl. 1 Effect Send) |
| | PHONES OUT | 1 |
| | REC OUT | [L, R] |
| | SUBWOOFER OUT | 1 |
| | MONO CH INSERT OUT | 6 |
| USB AUDIO - USB IN/OUT | | No |
| PHANTOM POWER | | +48V |
| POWER REQUIREMENTS | | Japan: AC100V, 50Hz/60Hz North America: AC120V, 60Hz Other Area: AC220-240V, 50/60Hz |
| POWER SUPPLY TYPE | | Internal Universal Power Supply |
| POWER CONSUMPTION | | 500W |
| DIMENSIONS | W x D x H | 444mm x 493mm x 155mm (17.5" x 19.4" x 6.1") |
| NET WEIGHT | | 10.5kg (23.1lbs) |
| INCLUDED ACCESSORIES | | AC Power Code, Owner's manual |
| SOFTWARE APPLICATION | Steinberg CUBASE AI | No |
| | Steinberg CUBASIS LE | No |
| OPTIONAL ACCESSORIES | | RK-5014 Rackmount kit, FC5 Foot Switch |
| OPERATING TEMPERATURE | | 0 to 40°C |

Featured Functions

| | | |
|----------------------|--|-------------------|
| D-PRE MIC PREAMP | | No |
| FEEDBACK SURPPRESSOR | | Yes |
| 1-KNOB COMP | | Yes (on Mono CH) |
| SPX DIGITAL EFFECTS | | Yes (16 programs) |

Electrical Specifications

| | | |
|---------------------------|-------------------------|--|
| TOTAL HARMONIC DISTORTION | | Less than 0.3% (20Hz - 20kHz) @14dBu 600Ω |
| FREQUENCY RESPONSE | GAIN=Minimum, PAD=OFF | 0, +0, -3dB, 20Hz-20kHz, 0dB @1kHz |
| HUM & NOISE LEVEL | Equivalent input noise | -128 dBu (20Hz-20 kHz, Rs: 150Ω, Gain: Max, Input Pad=0dB, Input Sensitivity=60dB) |
| | Residual output noise | -98 dBu (20Hz-20 kHz, Rs: 150Ω, Gain: Max, Input Pad=0dB, Input Sensitivity=60dB) |
| CROSSTALK | @ 1kHz | Less than -68dB |
| PROTECTION CIRCUIT | Load protection | Power switch on/off mute, DC-fault (power supply shutdown/manual reset), Clip limiter (≥THD 1%; compression) |
| | Amplifier protection | Thermal (heatsink temp ≥90°C; output mute/auto reset), VI limiter (RL ≤2Ω) |
| | Power supply protection | Thermal (heatsink temp ≥100°C; power supply shutdown/manual reset) |
| INPUT CHANNEL FUNCTION | COMP | On each channel; One control adjusts the Gain, threshold and Ratio simultaneously |
| INPUT CHANNEL EQ | High | ±15dB (10kHz shelving) |
| | Mid | ±15dB (Mono 250Hz-5kHz peaking, Stereo 2.5kHz peaking) |
| | Low | ±15dB (100Hz shelving) |
| LED LEVEL METER | Pre Monitor Level | 2 x 12 points LED meter (PEAK, +5, +3, +1, 0, -1, -3, -5, -7, -10, -15, -20dB) |
| PEAK LED | | LED turns on when post EQ signal reaches 3dB below clipping level |

Specifications

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Analog Input Characteristics

| INPUT TERMINAL | PAD | GAIN | ACTUAL LOAD IMPEDANCE | FOR USE WITH NOMINAL | INPUT LEVEL | | | CONNECTOR |
|----------------------------|------|-------|-----------------------|-------------------------|-----------------------|-----------------------|----------------------|-----------------------------|
| | | | | | Sensitivity*1 | Nominal | Max. before Clip | |
| CH A 1-6 | 0dB | -60dB | 3k Ω | 50-600 Ω Mics | -80 dBu (0.078 mV) | -60 dBu (0.775 mV) | -40 dBu (7.75 mV) | XLR-3-31 type |
| | | -16dB | | | -36 dBu (12.3 mV) | -16 dBu (123 mV) | +4 dBu (1.23 V) | |
| | 26dB | -34dB | | | -54 dBu (1.55 mV) | -34 dBu (15.5 mV) | -14 dBu (155 mV) | |
| | | +10dB | | | -10 dBu (245 mV) | +10 dBu (2.45 V) | +30 dBu (24.5 V) | |
| CH B 1-6 | 0dB | -60dB | 10k Ω | 600 Ω Lines | -80 dBu (0.078 mV) | -60 dBu (0.775 mV) | -40 dBu (7.75 mV) | TRS phone jack |
| | | -16dB | | | -36 dBu (12.3 mV) | -16 dBu (123 mV) | +4 dBu (1.23 V) | |
| | 26dB | -34dB | | | -54 dBu (1.55 mV) | -34 dBu (15.5 mV) | -14 dBu (155 mV) | |
| | | +10dB | | | -10 dBu (245 mV) | +10 dBu (2.45 V) | +30 dBu (24.5 V) | |
| ST CH MIC 9/10 - 15/16 | | -60dB | 3k Ω | 50-600 Ω Mics | -80 dBu (0.078 mV) | -60 dBu (0.775 mV) | -40 dBu (7.75 mV) | XLR-3-31 type |
| | | -16dB | | | -36 dBu (12.3 mV) | -16 dBu (123 mV) | -10 dBu (245 mV) | |
| | | -34dB | 10k Ω | 600 Ω Lines | -54 dBu (1.55 mV) | -34 dBu (15.5 mV) | -14 dBu (155 mV) | Phone jack |
| | | +10dB | | | -10 dBu (245 mV) | +10 dBu (2.45 V) | +30 dBu (24.5 V) | |
| ST CH LINE 9/10 - 15/16 | | -34dB | 10k Ω | 600 Ω Lines | -54 dBu (1.55 mV) | -34 dBu (15.5 mV) | -14 dBu (155 mV) | Phone jack, RCA pin jack |
| | | +10dB | | | -10 dBu (245 mV) | +10 dBu (2.45 V) | +30 dBu (24.5 V) | |
| CH INSERT IN (1-8) | | | 10k Ω | 600 Ω Lines | -20 dBu (7.75 mV) | 0 dBu (0.775 V) | +20 dBu (7.75 V) | Phone jack |

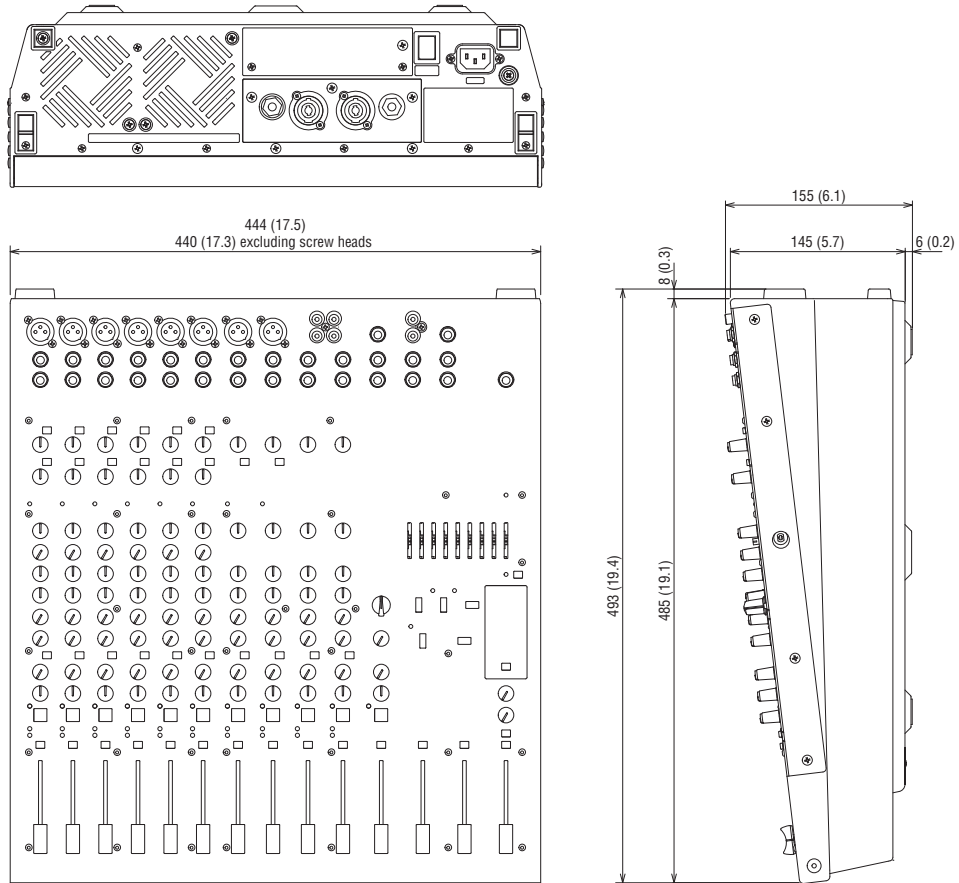
Analog Output Characteristics

| OUTPUT JACK | ACTUAL SOURCE IMPEDANCE | FOR USE WITH NOMINAL | OUTPUT LEVEL | | CONNECTOR |
|-----------------------|-------------------------|------------------------------|---------------------|---------------------|--------------------|
| | | | Nominal | Max. before Clip | |
| STEREO OUT [L, R] | 150 Ω | 600 Ω Lines | +4 dBu (1.228 V) | +20 dBu (7.75 V) | TRS phone jack |
| STEREO SUB OUT [L, R] | 150 Ω | 600 Ω Lines | +4 dBu (1.228 V) | +20 dBu (7.75 V) | TRS phone jack |
| AUX SEND [1 - 2] | 150 Ω | 600 Ω Lines | +4 dBu (1.228 V) | +20 dBu (7.75 V) | TRS phone jack |
| EFFECT SEND | 150 Ω | 600 Ω Lines | +4 dBu (1.228 V) | +20 dBu (7.75 V) | TRS phone jack |
| CH INSERT OUT [1 - 6] | 600 Ω | 10k Ω Lines | 0 dBu (0.775 V) | +20 dBu (7.75 V) | TRS phone jack |
| REC OUT [L, R] | 600 Ω | 10k Ω Lines | -10 dBu (245 mV) | +10 dBu (2.45 V) | RCA pin jack |
| PHONES [L, R] | 100 Ω | 8 Ω /4 Ω Lines | 1mW/3mW | 20mW/75mW | ST phone jack |
| SPEAKERS | 0.1 Ω | 4 Ω Speakers | 125W | 500W | speakON Phone jack |

(0 dBu = 0.775 Vrms / 0 dBV = 1.00 Vrms)

Dimensions

Unit: mm (inch)



Options

- Rack-mount Bracket RK5014
- Foot Switch FC5

Architectural and Engineering Specifications

The Yamaha EMX5014C Powered Mixer shall be a 14-channel console-style powered mixer integrating a high-performance mixer and power amplifier in one versatile unit that is suitable for a wide range of users and applications. The integral power amplifier shall have a power rating of 500W + 500W into 4-ohm loads (all versions), 320 W + 320 W into 8-ohm loads (220-240 volt version), 350 W + 350 W into 8-ohm loads (120 volt version), and 370 W + 370 W into 8-ohm loads (100 volt version). The EMX5014C shall have 14 Line Inputs (8 mono, 4 stereo). Up to eight microphone inputs shall be available, all with 48-volt phantom power. High-pass filters shall be provided on all channels. Speaker outputs A and B, a stereo output (L, R), a REC output (L, R), three auxiliary sends (including one effect send), a phones jack, a subwoofer output, and six mono channel insert outputs shall be provided. Yamaha's "1-Knob Compressor" shall be included for easy compression control. A Feedback Channel Locating (FCL) system shall be provided to automatically locate channels on which feedback is occurring. 16 digital "SPX" effects shall be provided, including reverb, echo, chorus, flanger, phaser, distortion, and others. Effect parameters shall be editable to allow broad effect customization. Yamaha speaker processing shall be included, with presets that provide optimum operation with Yamaha Concert Club series passive speakers. Dimensions shall be 465 (W) x 325 (D) x 308 (H) mm (18.3" x 12.8" x 12.1"). Weight shall be 9.5 kg (20.9 lb).

