

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

1/2

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

2/2

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)	
		10k Ω	-34dB	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)	
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

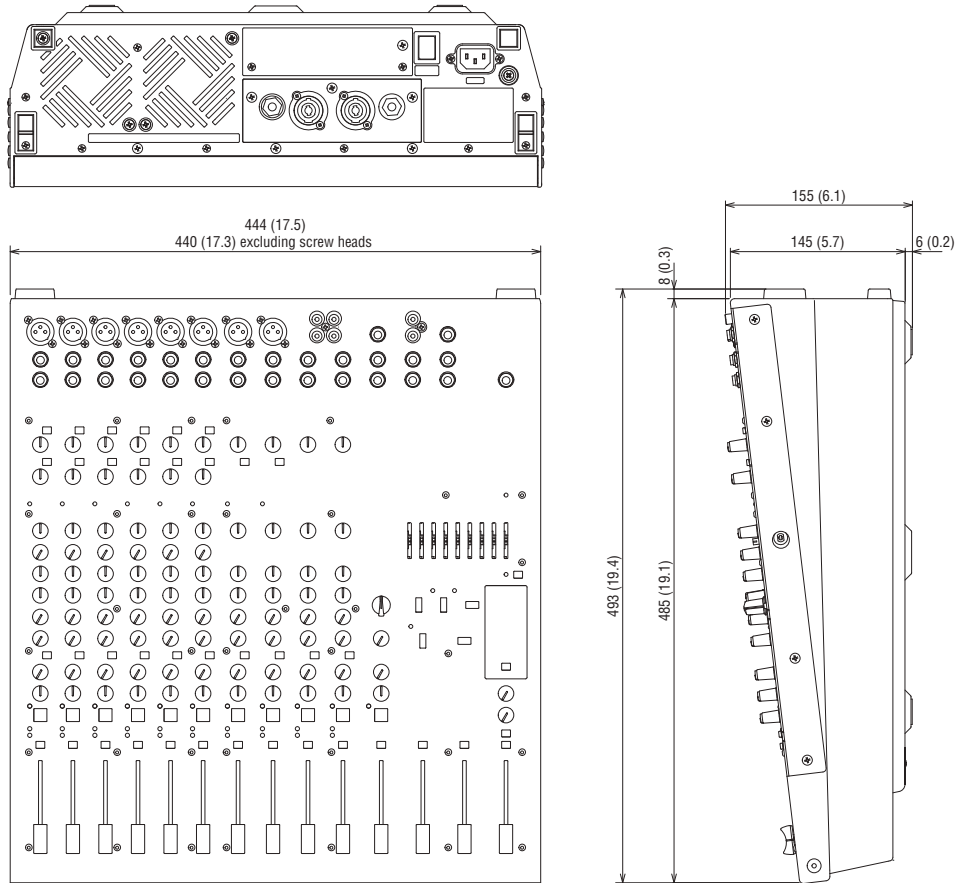
Analog Output Characteristics

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)

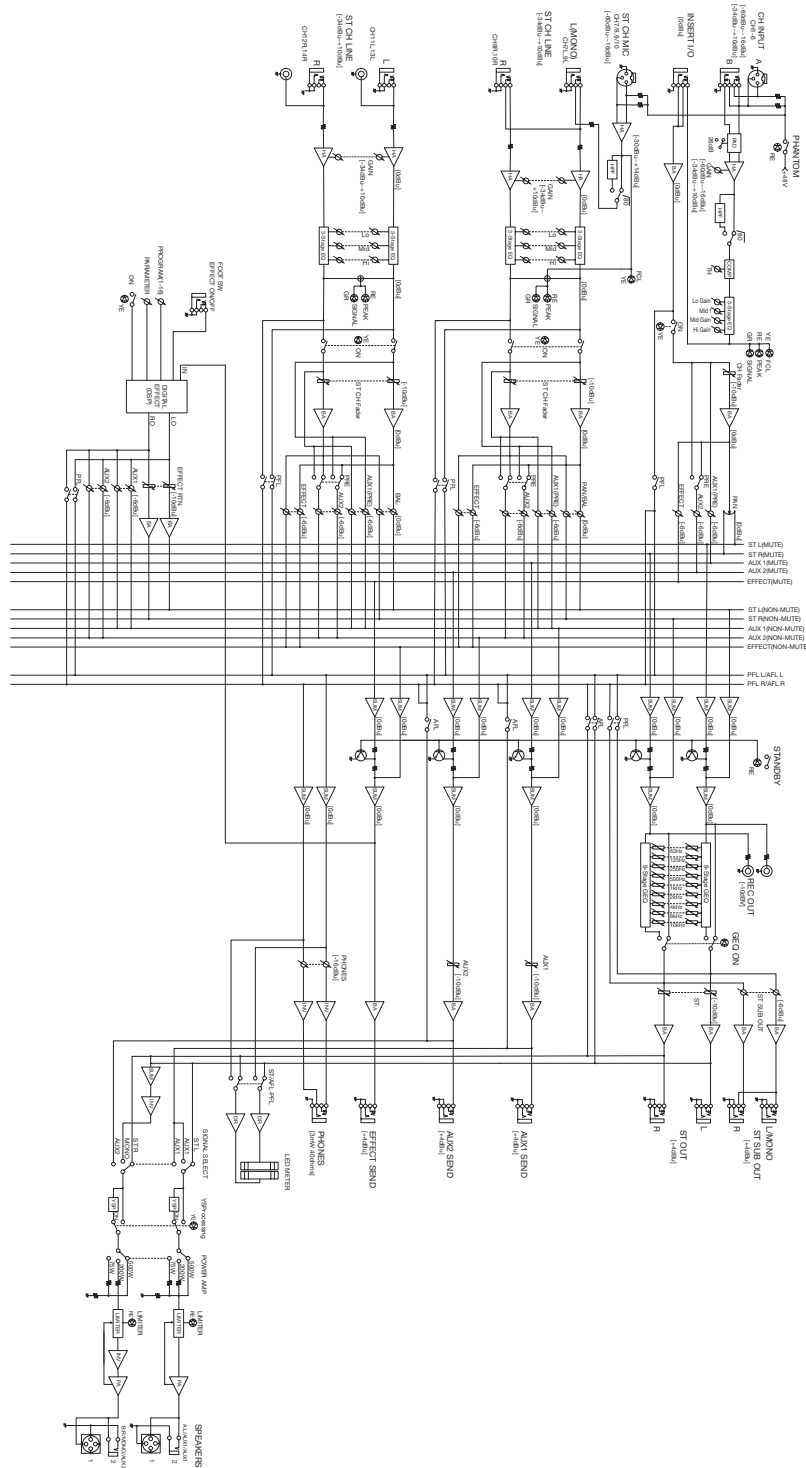


Options

- 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).

Block Diagrams


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 Created in March, 2017