

EMX5016CF, EMX5014C

Powered Mixers



EMX5016CF



Rear Panel



EMX5014C



Rear Panel

Console-style powered mixers that can take your live sound to the next level.

- 14 inputs on the EMX5014C, up to 8 mics.
- 16 inputs on the EMX5016CF, up to 12 mics.
- Gain controls and 26-dB pad switches for optimum input level matching.
- Advanced one-knob compressor on mono input channels.
- 3-band EQ on all input channels with mid-frequency sweep on mono channels.
- Yamaha FCL system makes locating and eliminating feedback easier than ever. (EMX5014C)
- 16 digital SPX effect programs with adjustable parameters – dual processors on the EMX5016CF.
- EMX5016CF additionally features 9-band digital graphic EQ with presets and memory, advanced automated frequency response correction, automated feedback suppression, and a multi-band “Maximizer”.
- Comprehensive I/O with external AUX and EFFECT sends.
- Power amp mode selector allows two-channel power amplifier to be quickly configured for Main + Main, Mono + Aux 1, or Aux 1 + Aux 2 operation.
- Precise 12-segment stereo level meter.
- Yamaha Speaker Processing.
- Optional rack mount hardware.

OPTION

RK5014
Rack Mount Kit

FC5
Foot Switch



EMX5016CF, EMX5014C

GENERAL SPECIFICATIONS

	EMX5016CF	EMX5014C
Maximum output power	500W + 500W (4W), 370W + 370W (8W/ AC100V model) @1kHz, THD+N ≤ 0.5%	350W + 350W (8W/ AC120V model) 320W + 320W (8W/ AC220-240V model)
Total harmonic distortion*1	Less than 0.3% (20Hz to 20kHz) @14dBu 600Ω	
Frequency response GAIN=Minimum, PAD=OFF	0, +0, -3dB, 20Hz-20kHz, 0dB @1kHz	
Hum & noise level*2 (20Hz to 20kHz), Rs=150Ω, Input Gain=Max, Input Pad=0dB, Input Sensitivity=-60dB	-128dBu Equivalent Input Noise -98dBu Residual Output Noise	
Crosstalk (@1kHz)	Less than -68dB	
Phantom Power	+48V	
Channel Equalization	HIGH:±15dB (10kHz shelving) MID(MONO):±15dB (250Hz-5kHz peaking) MID(ST):±15dB (2.5kHz peaking) LOW:±15dB (100Hz shelving)	
Compressor (COMP)	On each channel; One control adjusts the Gain, threshold and Ratio simultaneously	
Channel peak indicator	LED turns on when post EQ signal reaches -3dB below clipping	
Channel signal indicator	LED turns on when post EQ signal reaches -10dB	
Feedback suppressor	AUTO/MANUAL mode	
FCL indicator	-	
LED level meter (ST, PFL/AFL)	2*12 points LED meter (PEAK,+5,+3,+1,0,-1,-3,-5,-7,-10,-15,-20 dB) PEAK lights if the signal comes within 3 dB of the clipping level.	
Frequency response correction system	Pink noise/Music playback measurement mode	
Maximizer	3-band compressor ON/OFF	
Digital graphic equalizer	9-band, ±12dB; Preset x3, User preset x3	
Analog graphic equalizer (ST OUT)	-	
Digital effect	16 programs, Parameter control, Foot switch (FC5:Option) for Effect ON/OFF	
Lamp	XLR-3-31 type, 12V DC between pins 2 and 3, 5W max.	
Power amplifier protection	POWER switch on/off mute DC-fault Thermal / heatsink temp ≥ 90 degrees celsius VI limiter / RL ≤ 2Ω Clip limiter / THD ≥ 1%, Indicator x 2	
Power requirements	AC100V, 50/60Hz AC120V, 60Hz AC220V, 60Hz AC230V, 50Hz	
Power supply protection	Thermal / heatsink temp ≥ 100 degrees celsius	
Cooling	Variable-speed fan (x 2)	
Power consumption	Japan: AC100V 50/60Hz, 500W North America: AC120V, 60Hz, 500W Other Areas: AC220-240V, 50/60Hz, 500W	
Dimensions (W x H x D)	444 x 155 x 493mm (17.5" x 6.1" x 19.4")	
Weight	11.0kg (24.3lbs)	

*1 Total harmonic distortion is measured with a 18dB/Oct filter @80kHz.

*2 Hum & noise level is measured with a 6dB/oct filter @12.7kHz; equivalent to 20kHz filter with infinite dB/Oct attenuation.

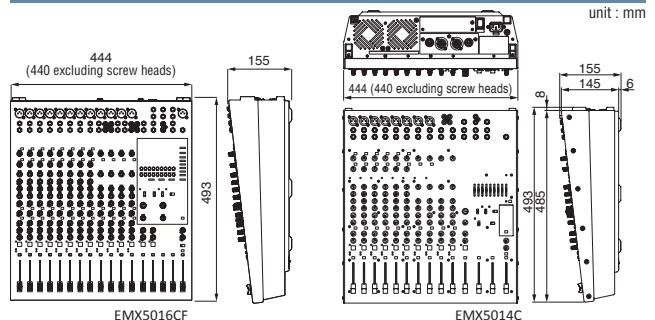
INPUT SPECIFICATIONS

Input Terminal	Pad	Gain	Actual Load Impedance	For Use With Nominal	Input Level			Connector
					Sensitivity	Nominal	Max. before Clip	
EMX5016CF								
CH INPUT A 1-8	0dB	-60dB -16dB	3kΩ	50-600Ω Mics	-80dBu	-60dBu	-40dBu	XLR-3-31 type*
	26dB	-34dB +10dB			-36dBu	-16dBu	+4dBu	
CH INPUT B 1-8	0dB	-60dB -16dB	10kΩ	600Ω Lines	-54dBu	-34dBu	-14dBu	TRS phone jack**
	26dB	-34dB +10dB			-10dBu	+10dBu	+30dBu	
ST CH MIC INPUT 9/10-15/16		-60dB -16dB	3kΩ	50-600Ω Mics	-80dBu	-60dBu	-40dBu	XLR-3-31 type*
ST CH LINE INPUT 9/10-15/16		-34dB	10kΩ	600Ω Lines	-54dBu	-34dBu	-14dBu	Phone jack**
		+10dB			-10dBu	+10dBu	+30dBu	
CH INSERT IN (1-8)		-	10kΩ	600Ω Lines	-20dBu	0dBu	+20dBu	Phone jack**
EMX5014C								
CH INPUT A 1-6	0dB	-60dB -16dB	3kΩ	50-600Ω Mics	-80dBu	-60dBu	-40dBu	XLR-3-31 type*
	26dB	-34dB +10dB			-36dBu	-16dBu	+4dBu	
CH INPUT B 1-6	0dB	-60dB -16dB	10kΩ	600Ω Lines	-54dBu	-34dBu	-14dBu	TRS phone jack**
	26dB	-34dB +10dB			-10dBu	+10dBu	+30dBu	
ST CH INPUT 7/8-9/10		-60dB -16dB	3kΩ	50-600Ω Mics	-80dBu	-60dBu	-40dBu	XLR-3-31 type*
		+10dB			-54dBu	-34dBu	-14dBu	
ST CH INPUT 11/12-13/14		-34dB	10kΩ	600Ω Lines	-54dBu	-34dBu	-14dBu	Phone jack**
		+10dB			-10dBu	+10dBu	+30dBu	
CH INSERT IN (1-6)		-	10kΩ	600Ω Lines	-20dBu	0dBu	+20dBu	Phone jack**

OUTPUT SPECIFICATIONS

Output Terminal	Actual Source Impedance	For Use With Nominal	Output Level		Connector
			Nominal	Max. before Clip	
EMX5016CF					
ST OUT [L,R]	150Ω	600Ω Lines	+4dBu	+20dBu	TRS Phone jack**
ST SUB OUT [L,R]	150Ω	600Ω Lines	+4dBu	+20dBu	TRS Phone jack**
AUX SEND 1,2	150Ω	600Ω Lines	+4dBu	+20dBu	TRS Phone jack**
EFFECT SEND 1,2	150Ω	600Ω Lines	+4dBu	+20dBu	TRS Phone jack**
CH INSERT OUT 1-8	600Ω	10kΩ Lines	0dBu	+20dBu	TRS Phone jack**
REC OUT [L,R]	600Ω	10kΩ Lines	-10dBV	+10dBV	RCA pin jack**
PHONES [L,R]	100Ω	40Ω	3mW	75mW	ST phone jack**
SPEAKERS	0.1Ω	4Ω Speakers	125W	500W	SPEAKON Phone jack**
EMX5014C					
ST OUT [L,R]	150Ω	600Ω Lines	+4dBu	+20dBu	TRS Phone jack**
ST SUB OUT [L,R]	150Ω	600Ω Lines	+4dBu	+20dBu	TRS Phone jack**
AUX SEND 1,2	150Ω	600Ω Lines	+4dBu	+20dBu	TRS Phone jack**
EFFECT SEND	150Ω	600Ω Lines	+4dBu	+20dBu	TRS Phone jack**
CH INSERT OUT 1-6	600Ω	10kΩ Lines	0dBu	+20dBu	TRS Phone jack**
REC OUT [L,R]	600Ω	10kΩ Lines	-10dBV	+10dBV	RCA pin jack**
PHONES [L,R]	100Ω	8Ω / 40Ω	1mW/3mW	20mW/75mW	ST phone jack**
SPEAKER OUT	0.1Ω	4Ω Speakers	125W	500W	SPEAKON Phone jack**

DIMENSIONS



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BLOCK & LEVEL DIAGRAM (EMX5014C)

