

# 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.

### OPTIONS

**RK5014**  
Rack Mount Kit

**FC5**  
Foot Switch



# EMX5016CF, EMX5014C

## GENERAL SPECIFICATIONS

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

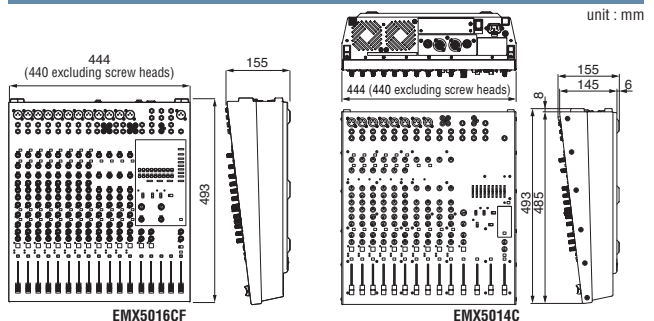
## INPUT SPECIFICATIONS

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

## OUTPUT SPECIFICATIONS

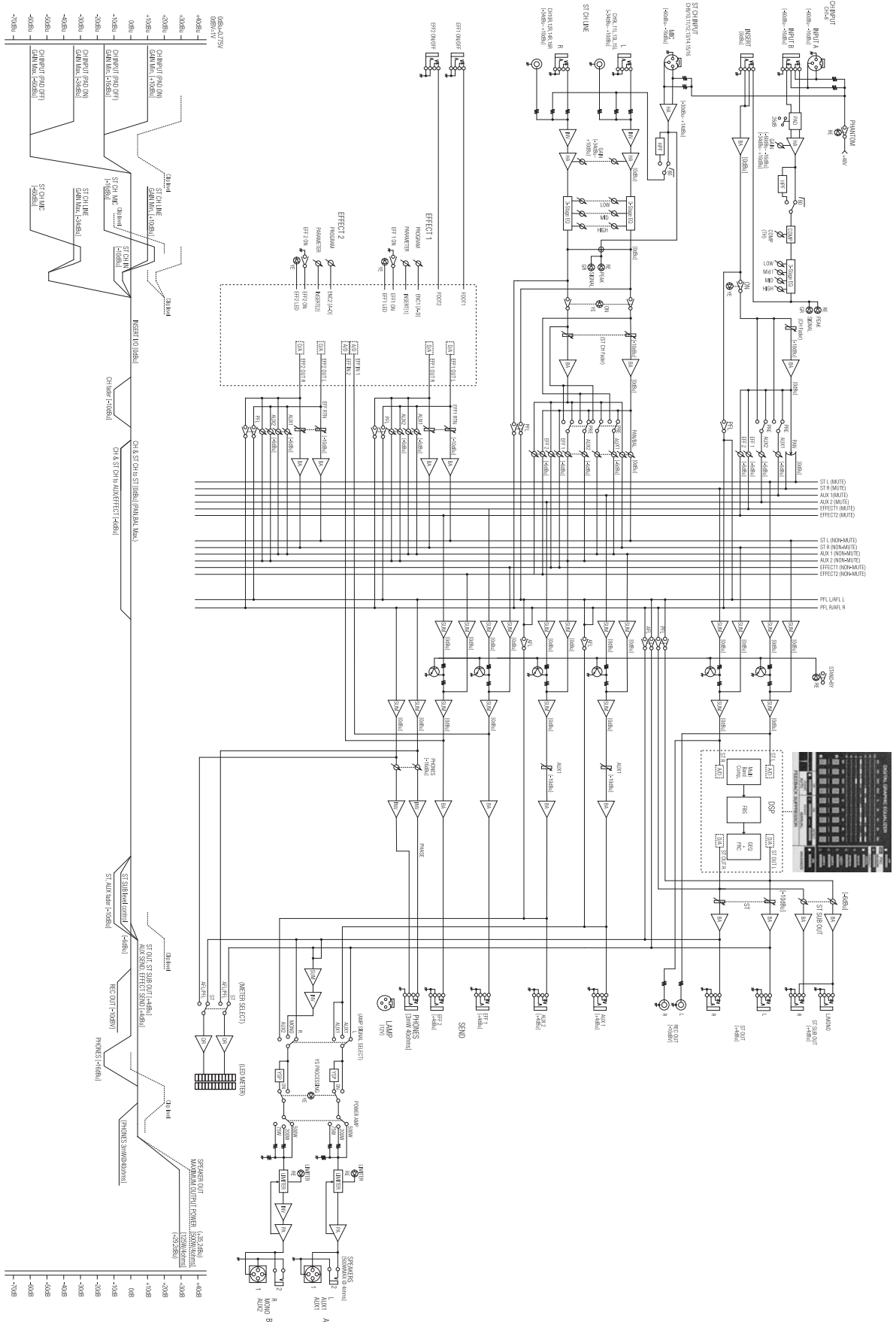
Output Terminal	Actual Source Impedance	For Use With Nominal	Output Level		Connector
			Nominal	Max. before Clip	
<b>EMX5016CF</b>					
ST OUT [L,R]	150 $\Omega$	600 $\Omega$ Lines	+4dBu	+20dBu	TRS Phone jack**
ST SUB OUT [L,R]	150 $\Omega$	600 $\Omega$ Lines	+4dBu	+20dBu	TRS Phone jack**
AUX SEND 1,2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

## DIMENSIONS



# EMX5016CF, EMX5014C

## BLOCK & LEVEL DIAGRAM (EMX5016CF)



# EMX5016CF, EMX5014C

## BLOCK & LEVEL DIAGRAM (EMX5014C)

