

# EMX512SC, EMX312SC, EMX212S

## Powered Mixers



### EMX512SC



### EMX312SC



### EMX212S



Rear Panel



***High-performance mixer, power amplifier, graphic EQ, and digital effects integrated into compact, portable units.***

- 12 versatile inputs: 1 through 4 for mono microphone or line, 5/6 and 7/8 for mono microphone/line or stereo line input, and 9/10 and 11/12 for stereo line input.
- Advanced Yamaha one-knob compressor on mono EMX512SC and EMX312SC input channels.
- Yamaha FCL system makes locating and eliminating feedback easier than ever.
- 16 digital SPX effect programs with adjustable parameters.
- Footswitch connector for effect on/off control.
- Standby switch can be used to mute performer's inputs while the stereo inputs remain active for background music playback.
- High-quality, high power output with remarkably efficiency and low heat generation.
- Connectors for external power amplifiers and effect processors.
- Independent 7-band graphic equalizers for the stereo and monitor outputs.
- Yamaha Speaker Processing.
- Forced air keeps the system cool.
- Optional rack mount hardware.

#### OPTIONS

**RK512**  
Rack Mount Kit

**FC5**  
Foot Switch



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## GENERAL SPECIFICATIONS

Model	EMX512SC	EMX312SC	EMX212S
Maximum output power 4Ω	500W+500W	300W+300W	220W+220W
1kHz, THD+N ≤ 0.5%	8Ω / AC120V model	350W+350W	130W+130W
	8Ω / AC220-240V model	320W+320W	130W+130W
Total harmonic distortion	Less than 0.5%, +14dBu@ 20Hz-20kHz		
Frequency response	0, -3, +1dB, 20Hz-20kHz, 0dB@1kHz		
Equivalent input noise	20Hz-20kHz -115dBu		
Crosstalk @1kHz	-65dB		
Phantom voltage	+15V, CH1-4:INPUT B, CH5/6-11/12:MIC		
CH&ST CH equalizer ±15dB maximum	HIGH	10kHz (Shelving)	
	MID	2.5kHz (Peaking)	
	LOW	100Hz (Shelving)	
Effect	16 program, Parameter control FOOT SW (ON/OFF)		
Level meter	2x5 point LED level meter [MAIN(L,R)]		
	5 point LED level meter [MONITOR]		
FCL Sensitivity	Input signal level ≥ -75dBu: LED on CH1-4 MIC/LINE:MIC B Input, CH5/6-11/12 MIC Input		
Protection	Power Amplifier	POWER switch on/off mute DC-fault Thermal / heatsink temp ≥ 90degrees celsius VI limiter / RL ≤ 2Ω Clip limiter / THD ≥ 1%, Indicator x 2	
	Power supply	Thermal / heatsink temp ≥ 100degrees celsius	
Power consumption	550W	450W	350W
Dimensions (W x H x D)	442.5 x 284 x 264mm (17.4" x 11.2" x 10.4")		
Weight	8.0kg (17.6lbs)		

## INPUT SPECIFICATIONS

Input Terminal	MIC/LINE	Actual Load Impedance	For Use With Nominal	Input Level			Connector
				Sensitivity	Nominal	Max. Before Clip	
CH INPUT 1-4	XLR	2kΩ	50-600Ω Mics	-60dBu	-35dBu	-15dBu	XLR3-31 type
	LINE			-30dBu	-5dBu	+15dBu	
CH INPUT 5/6,7/8	Phone	6kΩ	600Ω Lines	-50dBu	-25dBu	-5dBu	TRS phone jack
	LINE			-20dBu	+5dBu	+25dBu	
CH INPUT 9/10,11/12	XLR	2kΩ	50-600Ω Mics	-60dBu	-35dBu	-15dBu	XLR3-31 type
	LINE			-20dBu	+5dBu	+25dBu	
CH INPUT 9/10,11/12	Phone	2kΩ	600Ω Lines	-60dBu	-35dBu	-15dBu	XLR3-31 type
	LINE			-20dBu	+5dBu	+25dBu	
CH INPUT 9/10,11/12	Pin	10kΩ	600Ω Lines	-20dBu	+5dBu	+25dBu	RCA pin jack
	LINE			-20dBu	+5dBu	+25dBu	

## OUTPUT SPECIFICATIONS

Output Terminal	Actual Source Impedance	For Use With Nominal	Output Level			Connector
			Model	Nominal	Max. before Clip	
SPEAKERS [A1,A2,B1,B2]	0.1Ω	4Ω Speakers	EMX512SC	125W	500W	[A1,B1]SPEAKON [A2,B2]Phone jack
			EMX312SC	75W	300W	
			EMX212S	50W	200W	
MAIN OUT[L,R]	600Ω	10kΩ Lines	-	+4dBu	+20dBu	Phone jack
EFFECT OUT	600Ω	10kΩ Lines	-	+4dBu	+20dBu	Phone jack
MONITOR OUT	600Ω	10kΩ Lines	-	+4dBu	+20dBu	Phone jack
REC OUT[L,R]	600Ω	10kΩ Lines	-	-10dBu	+10dBu	RCA pin jack

## DIMENSIONS

unit : mm

