

### Overview

MG12X is a versatile mixer suitable for a wide range of users and applications.





Rear Panel

### **Features**

- Input channels: 12 Line Inputs (4 mono, 4 stereo), 6 Mic Inputs with 48V phantom power and HPH per channel.
- Output channels: 2 ST, 1 MONITOR, 2 AUX sends, 2 GROUP, 1 PHONES.
- Bus: 1 ST, 2 GROUP, 2 AUX (incl.FX)
- Robust, impact-resistant, powder-coated metal chassis.
- Internal universal power supply for worry-free operation around the globe, even in unsteady voltage environment.
- Discrete class A "D-PRE" mic preamps with an inverted darlington circuit.
- Professional "1-knob compressors".
- Digital effects processors: 24 "SPX" effects



Specifications 1/2

### **General Specifications**

INPUT CHANNELS	LINE INPUT	12 (4 MONO + 4 STEREO)				
	MIC INPUT	6				
	MONO INPUT (MIC/LINE)	4 (CH1-4)				
	MONO/STEREO INPUT (MIC/LINE)	2 (CH5-8)				
	STEREO INPUT (LINE)	2				
OUTPUT CHANNELS	STEREO OUT	2				
	MONITOR OUT	1				
	AUX SEND	2				
	GROUP OUT	2				
	PHONES OUT	1				
BUS	STERE0	1				
	GROUP	2				
	AUX	2 (incl.FX)				
USB AUDIO - USB IN/OUT		No				
PHANTOM POWER		+48V				
POWER REQUIREMENTS		100-240V 50Hz/60Hz				
POWER SUPPLY TYPE		Internal Universal Power Supply				
POWER CONSUMPTION		22W				
DIMENSIONS	WxHxD	308mm x 118mm x 442mm (12.1" x 4.6" x 16.6")				
NET WEIGHT		4.2kg (9.3lbs)				
INCLUDED ACCESSORIES		AC Power Code, Owner's manual, Technical Specifications				
SOFTWARE APPLICATION	Steinberg CUBASE AI	No				
	Steinberg CUBASIS LE	No				
	MG REC/PLAY (WAV)	No				
OPTIONAL ACCESSORIES		RK-MG12 Rackmount Kit, FC5 Foot Switch				
OPERATING TEMPERATURE		0 to 40°C				

#### **Featured Functions**

D-PRE MIC PREAMP	Yes
1-KNOB COMP	Yes
SPX DIGITAL EFFECTS	Yes (24 programs. REV HALL1 / REV HALL 2 / REV ROOM 1 / REV ROOM 2 / REV STAGE 1 / REV STAGE 2 / REV PLATE /
	DRUM AMB / EARLY REF / GATE REV / SINGLE DLY / DELAY / VOCAL ECHO / KARAOKE / PHASER / FLANGER /
	CHORUS 1 / CHORUS 2 / SYMPHONIC / TREMOLO / AUTO WAH / RADIO VOICE / DISTORTION / PITCH CHANGE)

### **Electrical Specifications**

TOTAL HARMONIC	+14dBu (20Hz to 20kHz)	0.03%
DISTORTION	Gain knob: Min	
	+24dBu (1kHz)	0.005%
	Gain knob: Min	
FREQUENCY RESPONSE		+0.5/-1.5dB (20Hz - 48kHz), refer to the nominal output level @1kHz, GAIN knob: Min
HUM & NOISE LEVEL	Equivalent input noise	-128 dBu (20Hz–20 kHz, Rs: 150Ω, Gain knob: Max)
	Residual output noise	-102 dBu (STEREO OUT, STEREO master fader: Min)
CROSSTALK	@ 1kHz	-78dB
INPUT CHANNEL	PAD	26dB
FUNCTION	HPF	80Hz, 12dB/oct (Mono/Stereo: MIC only)
	COMP	1 knob compressor (Gain/Threshold/Ratio)
		Threshold: +22dBu to -8dBu, Ratio: 1:1 to 4:1
		Output level: 0dB to 7dB
		Attack time: approx. 25msec
		Release time: approx. 300msec
INPUT CHANNEL EQ	High	±15dB (10kHz shelving)
	Mid	±15dB (2.5kHz peaking)
	Low	±15dB (100Hz shelving)
LED LEVEL METER	Pre Monitor Level	2 x 12 points LED meter (PEAK, +10, +6, +3, 0, -3, -6, -10, -15, -20, -25, -30dB)
PEAK LED		LED turns on when post EQ signal reaches 3dB below clipping level



Specifications 2/2

#### **Analog Input Characteristics**

INPUT TERMINAL	PAD 26dB	GAIN TRIM POSITION	ACTUAL LOAD IMPEDANCE	FOR USE WITH NOMINAL	INPUT LEVEL			CONNECTOR
INFULTERIVINAL					Sensitivity*1	Nominal	Max. before clip	CONNECTOR
MIC/LINE 1 – 4	OFF	+64 dB	- 3kΩ	50-600Ω Mics/Lines	-80 dBu (0.077 mV)	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	Combo jack* <sup>2</sup> (Balanced)
		+20 dB			-36 dBu (12.3 mV)	-16 dBu (122.8 mV)	+4 dBu (1.228 V)	
	ON	+38 dB			-54 dBu (1.55 mV)	-34 dBu (15.46 mV)	-14 dBu (154.6 mV)	
		-6 dB			-10 dBu (245 mV)	+10 dBu (2.451 V)	+30 dBu (24.51 V)	
MIC 5/6 – 7/8	-	+64 dB	- 3kΩ	50-600Ω Mic	-80 dBu (0.077 mV)	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31*3 (Balanced)
		+20 dB			-36 dBu (12.3 mV)	-16 dBu (122.8 mV)	-6 dBu (388.2mV)	
LINE 5/6 – 7/8	-	+38 dB	- 10kΩ	600Ω Lines	-54 dBu (1.55 mV)	-34 dBu (15.46 mV)	-14 dBu (154.6 mV)	Phone jack*5 (Unbalanced)
		-6 dB			-10 dBu (245 mV)	+10 dBu (2.451 V)	+30 dBu (24.51 V)	
LINE 9/10	-	-	10kΩ	600Ω Lines	-30 dBu (24.5 mV)	-10 dBu (245 mV)	+10 dBu (2.45 V)	Phone jack*5 RCA Pin (Unbalanced)

### **Analog Output Characteristics**

OUTPUT TERMINALS	ACTUAL SOURCE	FOR USE WITH NOMINAL	OUTPUT LEVEL		CONNECTOR
OUTFUT TERIMINALS	IMPEDANCE		Nominal	Max. before clip	CONNECTOR
STEREO OUT [L, R]	75Ω	600Ω Lines	+4 dBu (1.228 V)	+24 dBu (12.28 V)	XLR-3-32*3 Phone jack*4 (Balanced)
MONITOR OUT [L, R], AUX SEND [1 - 4], GROUP OUT [1 - 4]	150Ω	10kΩ Lines	+4 dBu (1.228 V)	+20 dBu (7.750 V)	Phone jack*4 (Impedance Balanced)
PHONES	110Ω	40Ω Phones	3mW + 3mW	100mW + 100mW	Stereo phone jack

0dBu is referenced to 0.775Vrms.

<sup>\*1</sup> Sensitivity is the lowest level that will produce an output of +4dBu (1.228V) or the nominal output level when the unit is set to maximum gain. (All level controls are maximum position.)

<sup>\*2 1&</sup>amp;Sleeve = GND, 2&Tip = HOT, 3&Ring = COLD

<sup>\*3 1 =</sup> GND, 2 = HOT, 3 = COLD

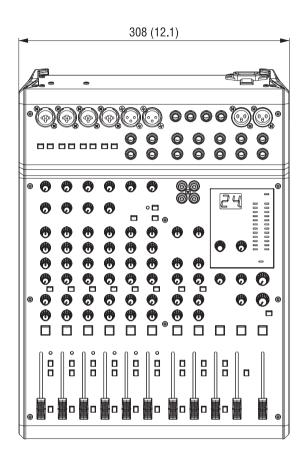
<sup>\*4</sup> Tip = HOT, Ring = COLD, Sleeve = GND

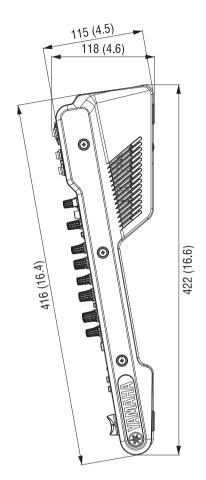
<sup>\*5</sup> Tip = Signal, Sleeve = GND



## **Dimensions**

Unit: mm (inch)





# **Options**

Rackmount KitFoot Switch

RK-MG12

FC5

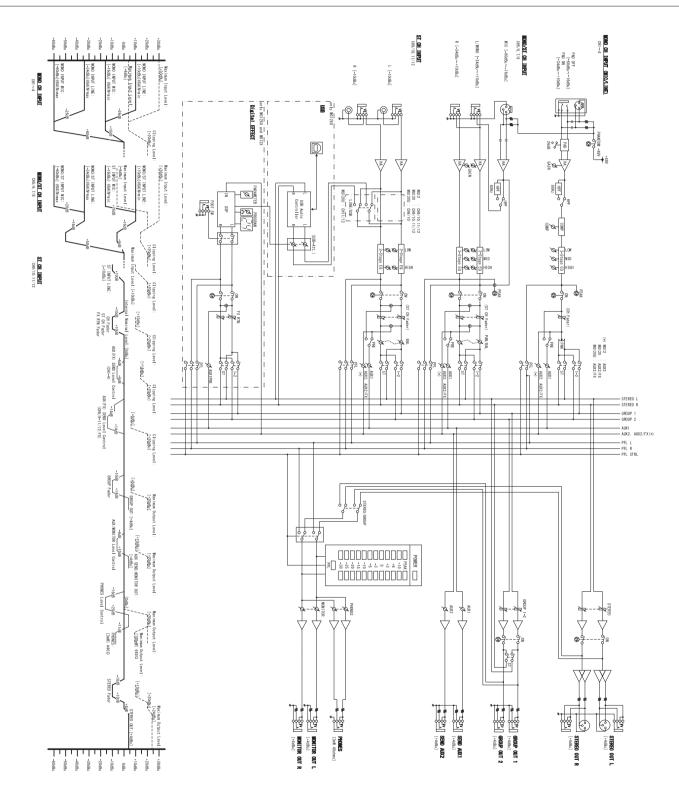


## **Architectural and Engineering Specifications**

The Yamaha MG12X Mixing Console shall be a versatile 12-channel mixer that is suitable for a wide range of users and applications. The MG12X shall have 12 line inputs (4 mono, 4 stereo) and 6 microphone inputs with 48-volt phantom power and a high-pass filter for each channel. Two stereo outputs, one monitor output, two auxiliary (effects) sends, two group sends, and one headphone output shall be provided. One stereo bus, two group buses, and two auxiliary (effects) buses shall be provided. The mixing console's microphone preamplifiers shall be discrete class-A "D-PRE" types for high sound quality. Yamaha's 1-knob compressors shall be included for easy compression control. A digital effects processor with 24 high-quality "SPX" effects shall be included to allow creative sound processing. The mixing console shall be robust and built into an impact-resistant powder-coated metal chassis. The mixing console shall have an internal universal power supply that is capable of powering the unit stably from AC mains voltages around the world. Dimensions shall be 308 (W) x 118 (H) x 422 (D) mm (12.1" x 4.6" x 16.6"). Weight shall be 4.2kg (9.3lbs).



# **Block & Level Diagram**



<sup>\*</sup>All information subject to change without notice.

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