

## Overview

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MG12 is a versatile mixer suitable for a wide range of users and applications.



Rear Panel

## Features

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- 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
- 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” with LED indicators.

## Specifications

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### 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                    | STEREO                       | 1   |
|                        | GROUP                        | 2   |
|                        | AUX                          | 2   |
| USB AUDIO - USB IN/OUT |                              | No  |
| PHANTOM POWER          |                              | +48V  |
| POWER REQUIREMENTS     |                              | 100-240V 50Hz/60Hz                                      |
| POWER SUPPLY TYPE      |                              | Internal Universal Power Supply                         |
| POWER CONSUMPTION      |                              | 30W   |
| DIMENSIONS             | W x D x H                    | 308mm x 442mm x 118mm (12.1" x 16.6" x 4.6")            |
| NET WEIGHT             |                              | 4.0kg (8.8lbs)  |
| 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                                   |
| OPERATING TEMPERATURE  |                              | 0 to 40°C   |

### Featured Functions

|                     |     |
|---------------------|-----|
| D-PRE MIC PREAMP    | Yes |
| 1-KNOB COMP         | Yes |
| SPX DIGITAL EFFECTS | No  |

### Electrical Specifications

|                           |                        |   |
|---------------------------|------------------------|---|
| TOTAL HARMONIC DISTORTION | +14dBu (20Hz to 20kHz) | 0.03%   |
|                           | 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 FUNCTION    | PAD                    | 26dB  |
|                           | HPH                    | 80Hz, 12dB/oct (Mono/Stereo: MIC only)  |
|                           | COMP                   | 1 knob compressor (Gain/Threshold/Ratio)<br>Threshold: +22dBu to -8dBu, Ratio: 1:1 to 4:1<br>Output level: 0dB to 7dB<br>Attack time: approx. 25msec<br>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

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### Analog Input Characteristics

| INPUT TERMINAL       | PAD 26dB | GAIN TRIM POSITION | ACTUAL LOAD IMPEDANCE | FOR USE WITH NOMINAL          | INPUT LEVEL           |                       |                       | CONNECTOR                               |
|----------------------|----------|--------------------|-----------------------|-------------------------------|-----------------------|-----------------------|-----------------------|---|
|                      |          |                    |                       |                               | Sensitivity*1         | Nominal               | Max. before clip      |   |
| MIC/LINE<br>1 - 4    | OFF      | +64 dB             | 3k $\Omega$           | 50-600 $\Omega$<br>Mics/Lines | -80 dBu<br>(0.077 mV) | -60 dBu<br>(0.775 mV) | -40 dBu<br>(7.75 mV)  | Combo jack*2<br>(Balanced)              |
|                      |          | +20 dB             |                       |                               | -36 dBu<br>(12.3 mV)  | -16 dBu<br>(122.8 mV) | +4 dBu<br>(1.228 V)   |   |
|                      | ON       | +38 dB             |                       |                               | -54 dBu<br>(1.55 mV)  | -34 dBu<br>(15.46 mV) | -14 dBu<br>(154.6 mV) |   |
|                      |          | -6 dB              |                       |                               | -10 dBu<br>(245 mV)   | +10 dBu<br>(2.451 V)  | +30 dBu<br>(24.51 V)  |   |
| MIC<br>5/6 - 7/8     | -        | +64 dB             | 3k $\Omega$           | 50-600 $\Omega$<br>Mic        | -80 dBu<br>(0.077 mV) | -60 dBu<br>(0.775 mV) | -40 dBu<br>(7.75 mV)  | XLR-3-31*3<br>(Balanced)                |
|                      |          | +20 dB             |                       |                               | -36 dBu<br>(12.3 mV)  | -16 dBu<br>(122.8 mV) | -6 dBu<br>(388.2mV)   |   |
| LINE<br>5/6 - 7/8    | -        | +38 dB             | 10k $\Omega$          | 600 $\Omega$<br>Lines         | -54 dBu<br>(1.55 mV)  | -34 dBu<br>(15.46 mV) | -14 dBu<br>(154.6 mV) | Phone jack*5<br>(Unbalanced)            |
|                      |          | -6 dB              |                       |                               | -10 dBu<br>(245 mV)   | +10 dBu<br>(2.451 V)  | +30 dBu<br>(24.51 V)  |   |
| LINE<br>9/10 - 11/12 | -        | -                  | 10k $\Omega$          | 600 $\Omega$<br>Lines         | -30 dBu<br>(24.5 mV)  | -10 dBu<br>(245 mV)   | +10 dBu<br>(2.45 V)   | Phone jack*5<br>RCA Pin<br>(Unbalanced) |

### Analog Output Characteristics

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

0dBu is referenced to 0.775Vrms.

\*1 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.)

\*2 1&Sleeve = GND, 2&Tip = HOT, 3&Ring = COLD

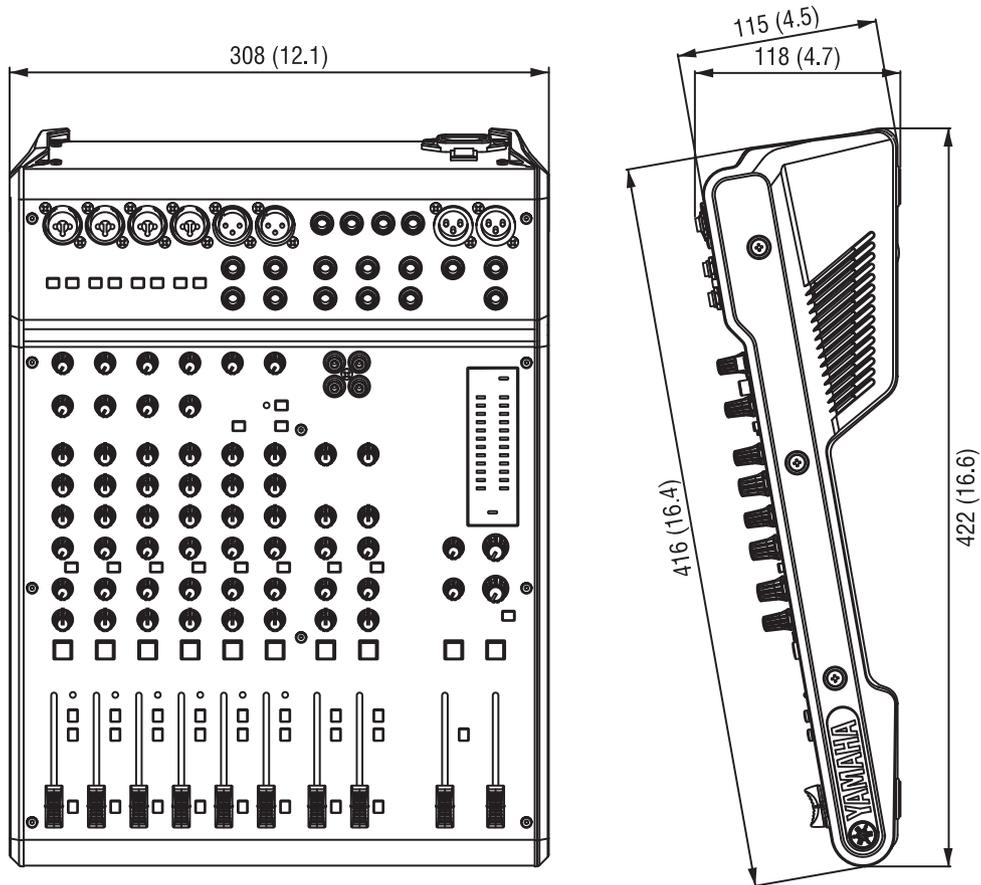
\*3 1 = GND, 2 = HOT, 3 = COLD

\*4 Tip = HOT, Ring = COLD, Sleeve = GND

\*5 Tip = Signal, Sleeve = GND

## Dimensions

Unit: mm (inch)



## Options

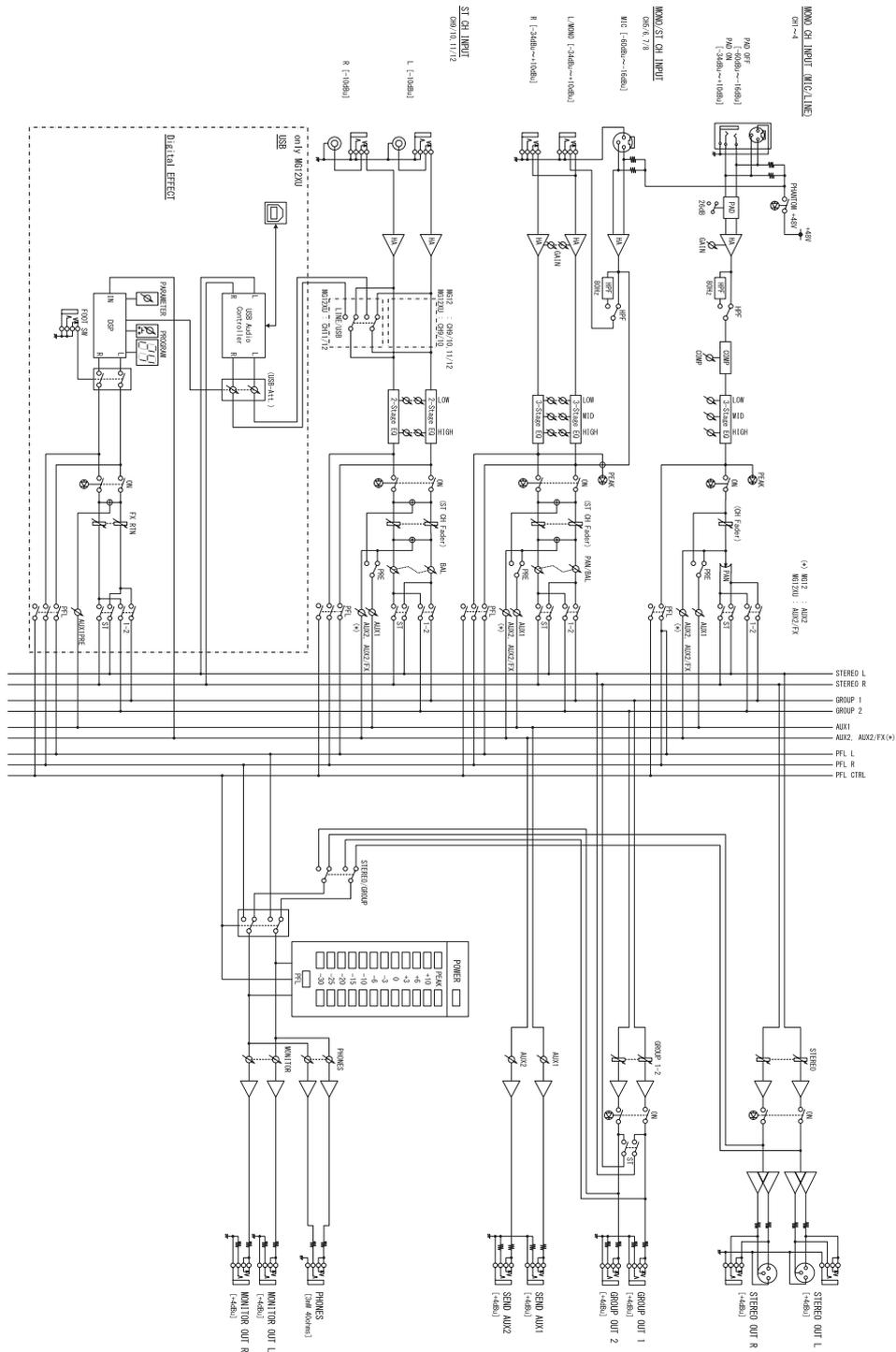
- Rackmount Kit      RK-MG12

## Architectural and Engineering Specifications

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The Yamaha MG12 Mixing Console shall be a versatile 12-channel mixer that is suitable for a wide range of users and applications. The MG12 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 sends, two group sends, and one headphone output shall be provided. One stereo bus, two group buses, and two auxiliary 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 with LED indicators shall be included for easy compression control. 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 422 (D) x 118 (H) mm (9.6" x 11.6" x 2.8"). Weight shall be 4.0 kg (8.8lbs).

# Block Diagrams



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