



ZJ73180

MIXING CONSOLE

# MG12XU / MG12

## Technical Specifications

### General Specifications

0 dBu = 0.775 Vrms, Output impedance of signal generator (Rs) = 150 Ω  
All level controls are nominal if not specified.

|                                     |                        |                                                                                                                 |                                                                                                                                                                                             |
|-------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency Response                  | Input to STEREO OUT    | +0.5 dB/-1.5 dB (20 Hz to 48 kHz) , refer to the nominal output level @ 1 kHz, GAIN knob: Min                   |                                                                                                                                                                                             |
| Total Harmonic Distortion (THD+N)   | Input to STEREO OUT    | 0.03 % @ +14 dBu (20 Hz to 20 kHz), GAIN knob: Min<br>0.005 % @ +24 dBu (1 kHz), GAIN knob: Min                 |                                                                                                                                                                                             |
| Hum & Noise *1<br>(20 Hz to 20 kHz) | Equivalent Input Noise | -128 dBu (Mono Input Channel, Rs: 150 Ω, GAIN knob: Max)                                                        |                                                                                                                                                                                             |
|                                     | Residual Output Noise  | -102 dBu (STEREO OUT, STEREO master fader: Min)                                                                 |                                                                                                                                                                                             |
| Crosstalk(1 kHz) *2                 |                        | -78 dB                                                                                                          |                                                                                                                                                                                             |
| Input Channels                      |                        | 12 channels: Mono [MIC/LINE]: 4, Mono/Stereo [MIC/LINE]: 2, Stereo [LINE]: 2                                    |                                                                                                                                                                                             |
| Output Channels                     |                        | STEREO OUT: 2, PHONES: 1, MONITOR OUT: 1, AUX SEND: 2, GROUP OUT: 2                                             |                                                                                                                                                                                             |
| Bus                                 |                        | STEREO : 1, GROUP: 2, AUX: 2 (MG12XU: incl. FX)                                                                 |                                                                                                                                                                                             |
| Input Channel Function              | PAD                    | CH 1 – CH 4                                                                                                     | 26 dB                                                                                                                                                                                       |
|                                     | HPF                    | CH 1 – CH 4,<br>CH 5/6 (MIC),<br>CH 7/8 (MIC)                                                                   | 80 Hz, 12 dB/oct                                                                                                                                                                            |
|                                     | COMP                   | CH 1 – CH 4                                                                                                     | 1 knob compressor (Gain/Threshold/Ratio)<br>Threshold: +22 dBu to -8 dBu, Ratio: 1:1 to 4:1,<br>Output level: 0 dB to 7 dB, Attack time: approx. 25 msec,<br>Release time: approx. 300 msec |
|                                     | EQ                     | CH 1 – CH 7/8                                                                                                   | HIGH: Gain: +15 dB/-15 dB, Frequency: 10 kHz shelving<br>MID: Gain: +15 dB/-15 dB, Frequency: 2.5 kHz peaking<br>LOW: Gain: +15 dB/-15 dB, Frequency: 100 Hz shelving                       |
|                                     |                        | CH 9/10,<br>CH 11/12                                                                                            | HIGH: Gain: +15 dB/-15 dB, Frequency: 10 kHz shelving<br>LOW: Gain: +15 dB/-15 dB, Frequency: 100 Hz shelving                                                                               |
|                                     | PEAK LED               | CH 1 – CH 7/8                                                                                                   | LED turns on when post EQ signal reaches 3 dB below clipping level                                                                                                                          |
| Level Meter                         | Pre Monitor LEVEL      | 2 × 12 -segment LED meter [PEAK, +10, +6, +3, 0, -3, -6, -10, -15, -20, -25, -30 dB]                            |                                                                                                                                                                                             |
| Built-in Effect (MG12XU)            | SPX Algorithm          | 24 programs, PARAMETER control: 1, FOOT SW: 1 (FX RTN CH on/off)                                                |                                                                                                                                                                                             |
| USB Audio (MG12XU)                  | 2 IN / 2 OUT           | USB Audio Class 2.0 compliant, Sampling Frequency: Max 192 kHz, Bit Depth: 24-bit                               |                                                                                                                                                                                             |
| Phantom Power Voltage               |                        | +48 V                                                                                                           |                                                                                                                                                                                             |
| Power Requirements                  |                        | AC 100-240 V, 50 Hz/60 Hz                                                                                       |                                                                                                                                                                                             |
| Power Consumption                   |                        | 22 W                                                                                                            |                                                                                                                                                                                             |
| Dimensions (W × H × D)              |                        | 308 mm × 118 mm × 422 mm (12.1" × 4.6" × 16.6")                                                                 |                                                                                                                                                                                             |
| Net Weight                          |                        | MG12XU: 4.2 kg (9.3 lbs.), MG12: 4.0 kg (8.8 lbs.)                                                              |                                                                                                                                                                                             |
| Included Accessory                  |                        | AC Power Cord, Cubase AI Download Information (MG12XU), Owner's Manual, Technical Specifications (this leaflet) |                                                                                                                                                                                             |
| Optional Accessory                  |                        | Rack-mount Kit: RK-MG12, Foot Switch: FC5 (MG12XU)                                                              |                                                                                                                                                                                             |
| Operating Temperature               |                        | 0 to +40 °C                                                                                                     |                                                                                                                                                                                             |

\*1 Noise is measured with A-weighting filter.  
\*2 Crosstalk is measured with 1 kHz band pass filter.

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### Analog Input Characteristics

0 dBu = 0.775 Vrms

| Input Jacks         | PAD<br>26 dB | GAIN Trim<br>Position | Actual Load<br>Impedance | For Use with<br>Nominal | Input Level           |                       |                       | Connector                                |
|---------------------|--------------|-----------------------|--------------------------|-------------------------|-----------------------|-----------------------|-----------------------|------------------------------------------|
|                     |              |                       |                          |                         | Sensitivity *1        | Nominal               | Max. Before Clip      |                                          |
| MIC/LINE<br>1 - 4   | OFF          | +64 dB                | 3 kΩ                     | 50–600 Ω<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                | 3 kΩ                     | 50–600 Ω<br>Mics        | -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) | +4 dBu<br>(1.228 V)   |                                          |
| LINE<br>5/6, 7/8    | —            | +38 dB                | 10 kΩ                    | 600 Ω Lines             | -54 dBu<br>(1.55 mV)  | -34 dBu<br>(15.46 mV) | -14 dBu<br>(154.6 mV) | Phone jack *4<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 | —            | —                     | 10 kΩ                    | 600 Ω Lines             | -30 dBu<br>(24.5 mV)  | -10 dBu<br>(245 mV)   | +10 dBu<br>(2.45 V)   | Phone jack *4<br>RCA Pin<br>(Unbalanced) |

\*1 Sensitivity is the lowest level that will produce an output of +4 dBu (1.228 V) or the nominal output level when the unit is set to maximum gain.  
(All level controls are at their maximum position.)  
\*2 1&Sleeve = GND, 2&Tip = HOT, 3&Ring = COLD  
\*3 1 = GND, 2 = HOT, 3 = COLD  
\*4 Tip = Signal, Sleeve = GND

### Analog Output Characteristics

0 dBu = 0.775 Vrms

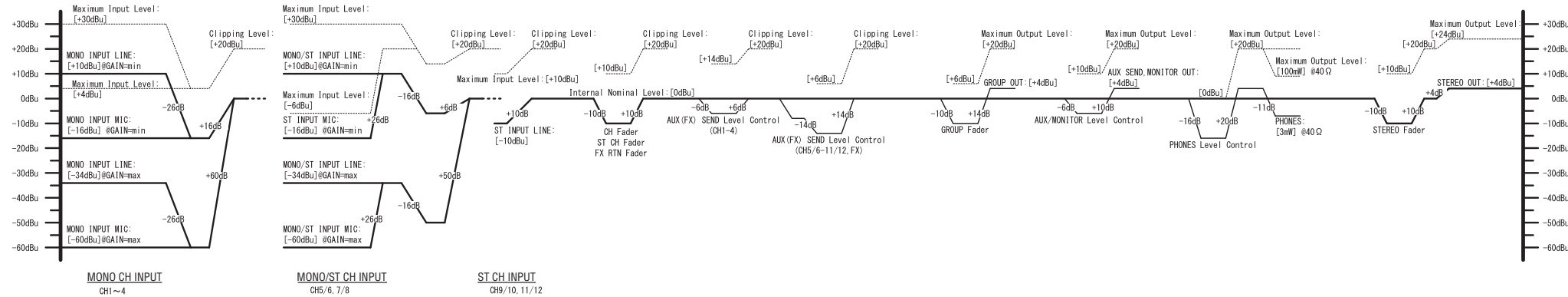
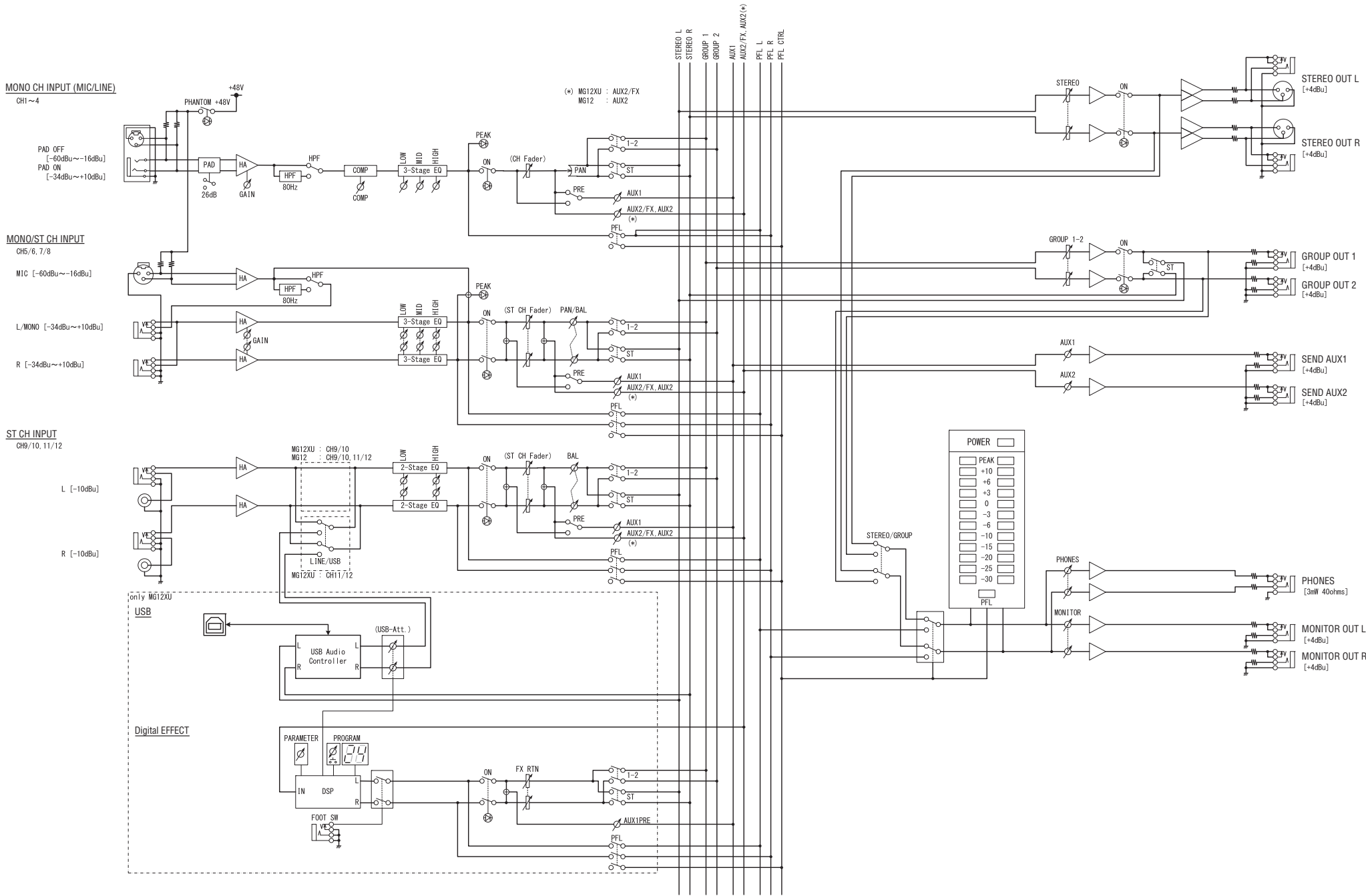
| Output Terminals                                          | Actual Source<br>Impedance | For Use with Nominal | Output Level     |                   | Connector                                  |
|-----------------------------------------------------------|----------------------------|----------------------|------------------|-------------------|--------------------------------------------|
|                                                           |                            |                      | Nominal          | Max. Before Clip  |                                            |
| STEREO OUT [L, R]                                         | 75 Ω                       | 600 Ω Lines          | +4 dBu (1.228 V) | +24 dBu (12.28 V) | XLR-3-32 *3<br>Phone jack *5<br>(Balanced) |
| MONITOR OUT [L, R]<br>GROUP OUT [1, 2]<br>AUX SEND [1, 2] | 150 Ω                      | 10 kΩ Lines          | +4 dBu (1.228 V) | +20 dBu (7.750 V) | Phone jack *5<br>(Impedance Balanced)      |
| PHONES                                                    | 110 Ω                      | 40 Ω Phones          | 3 mW + 3 mW      | 100 mW + 100 mW   | Stereo phone jack                          |

\*3 1 = GND, 2 = HOT, 3 = COLD  
\*5 Tip = HOT, Ring = COLD, Sleeve = GND

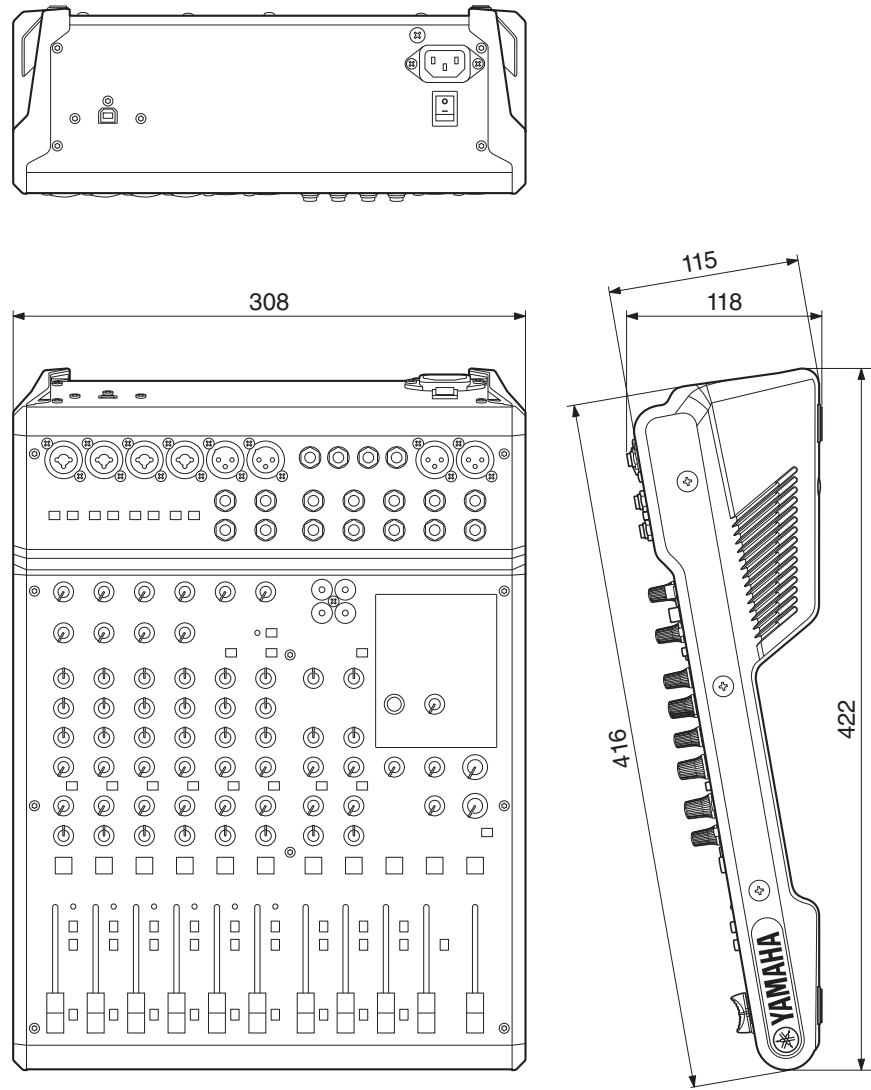
### Digital Input / Output Characteristics (MG12XU)

| Terminals | Format              | Data Length   | Fs                                                     | Connector      |
|-----------|---------------------|---------------|--------------------------------------------------------|----------------|
| USB       | USB Audio Class 2.0 | 16-bit/24-bit | 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz | USB Standard-B |

Block and Level Diagrams



Dimensions



Unit: mm  
This illustration shows the MG12XU.