



VFN3480

MIXING CONSOLE

MG10XU MG10X MG10

# Technical Specifications

## General Specifications

0 dBu = 0.775 Vrms Output impedance of signal generator (Rs) = 150Ω

All level knobs are nominal if not specified.

|   |                               |  |   |
|---|-------------------------------|--|---|
| <b>Frequency Response</b>                     | <b>Input to STEREO OUT</b>    | +0.5 dB/-1.0 dB (20 Hz to 48 kHz), refer to the nominal output level @1 kHz, GAIN knob: Min                                  |   |
| <b>Total Harmonic Distortion (THD+N)</b>      | <b>Input to STEREO OUT</b>    | 0.02 % @ +14 dBu (20 Hz to 20 kHz), GAIN knob: Min<br>0.003 % @ +24 dBu (1 kHz), GAIN knob: Min                              |   |
| <b>Hum&amp;Noise *1 (20 Hz to 20 kHz)</b>     | <b>Equivalent Input Noise</b> | -128 dBu (Mono Input Channel, Rs: 150 Ω, GAIN knob: Max)   |   |
|   | <b>Residual Output Noise</b>  | -102 dBu (STEREO OUT, STEREO LEVEL knob: Min)  |   |
| <b>Crosstalk (1 kHz) *2</b>                   |                               | -83 dB   |   |
| <b>Input Channels</b>                         |                               | 10 channels: Mono [MIC/LINE]: 4, Stereo [LINE]: 3  |   |
| <b>Output Channels</b>                        |                               | STEREO OUT: 2, PHONES: 1, MONITOR OUT: 1, AUX (FX) SEND: 1   |   |
| <b>Bus</b>                                    |                               | Stereo: 1, AUX (FX): 1   |   |
| <b>Input Channel Function</b>                 | <b>PAD</b>                    | CH1 – CH4  | 26 dB   |
|   | <b>HPF</b>                    | CH1 – CH4  | 80 Hz, 12 dB/oct  |
|   | <b>COMP</b>                   | CH1 – CH2  | 1-knob compressor<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 |
|   | <b>EQ</b>                     | CH1 – CH9/10   | HIGH: Gain: +15 dB/-15 dB, Frequency: 10 kHz shelving   |
|   |                               | CH1 – CH4  | MID: Gain: +15 dB/-15 dB, Frequency: 2.5 kHz peaking  |
|   |                               | CH1 – CH9/10   | LOW: Gain: +15 dB/-15 dB, Frequency: 100 Hz shelving  |
| <b>PEAK LED</b>                               | CH1 – CH4                     | LED turns on when post EQ signal reaches 3 dB below clipping (+17 dBu)   |   |
| <b>Level Meter</b>                            | <b>Post STEREO LEVEL Knob</b> | 2x7 -segment LED meter [PEAK (+17), +10, +6, 0, -6, -10, -20 dB]   |   |
| <b>Internal Digital Effect (MG10XU/MG10X)</b> | <b>SPX Algorithm</b>          | 24 programs  |   |
| <b>USB Audio (MG10XU)</b>                     | <b>2 IN / 2 OUT</b>           | USB Audio Class 2.0 compliant<br>Sampling Frequency: Max 192 kHz, Bit Depth: 24-bit  |   |
| <b>Phantom Power Voltage</b>                  |                               | +48 V  |   |
| <b>Power Supply Adaptor</b>                   |                               | PA-10 (AC 38 VCT, 0.62A, Cable length = 3.6 m)<br>or equivalent recommended by Yamaha  |   |
| <b>Power Consumption</b>                      |                               | 22.9 W   |   |
| <b>Dimensions (WxHxD)</b>                     |                               | 244 mmx71 mmx294 mm (9.6" x 2.8" x 11.6")  |   |
| <b>Net Weight</b>                             |                               | MG10XU, MG10X: 2.1 kg (4.6 lbs.), MG10: 1.9 kg (4.1 lbs.)  |   |
| <b>Included Accessory</b>                     |                               | AC Adaptor, Cubase AI Download Information (MG10XU),<br>Owner's Manual, Precautions, Technical Specifications (this leaflet) |   |
| <b>Optional Accessory</b>                     |                               | Mic Stand Adaptor: BMS-10A   |   |
| <b>Operating Temperature</b>                  |                               | 0 to +40°C   |   |

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

## Analog Input Characteristics

| Input Jacks    | PAD 26 dB | GAIN Trim Position | Actual Load Impedance | For Use With Nominal | Input level        |                    |                    | Connector                             |
|----------------|-----------|--------------------|-----------------------|----------------------|--------------------|--------------------|--------------------|---------------------------------------|
|                |           |                    |                       |                      | Sensitivity *1     | Nominal            | Max. before clip   |                                       |
| MIC/LINE 1 – 4 | OFF       | +64 dB             | 3 kΩ                  | 50-600 Ω Mics/Lines  | -72 dBu (0.195 mV) | -60 dBu (0.775 mV) | -40 dBu (7.75 mV)  | Combo jack *2 (Balanced)              |
|                |           | +20 dB             |                       |                      | -28 dBu (30.9 mV)  | -16 dBu (122.8 mV) | +4 dBu (1.228 mV)  |                                       |
|                | ON        | +38 dB             |                       |                      | -46 dBu (3.884 mV) | -34 dBu (15.46 mV) | -14 dBu (154.6 mV) |                                       |
|                |           | -6 dB              |                       |                      | -2 dBu (615.6 mV)  | +10 dBu (2.451 V)  | +30 dBu (24.51 V)  |                                       |
| LINE 5/6, 7/8  | -         | -                  | 10 kΩ                 | 600 Ω Lines          | -22 dBu (61.56 mV) | -10 dBu (245.1 mV) | +10 dBu (2.451 V)  | Phone jack *3<br>RCA Pin (Unbalanced) |
| LINE 9/10      |           |                    |                       |                      |                    |                    |                    | Phone jack *3 (Unbalanced)            |

0 dBu is referenced to 0.775 Vrms.

\*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 knobs are maximum position).

\*2 1&amp;Sleeve = Ground, 2&amp;Tip = Hot, 3&amp;Ring = Cold

\*3 Tip = Signal, Sleeve = Ground

## Analog Output Characteristics

| Output Terminals                    | Actual Source 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 *1<br>Phone jack *2 (Balanced) |
| MONITOR OUT [L, R]<br>AUX (FX) SEND | 150 Ω                   | 10 kΩ Lines          | +4 dBu (1.228 V) | +20 dBu (7.750 V) | Phone jack *2 (Impedance Balanced)      |
| PHONES                              | 110 Ω                   | 40 Ω Lines           | 3 mW + 3 mW      | 100 mW + 100 mW   | Stereo phone jack                       |

0 dBu is referenced to 0.775 Vrms.

\*1 1 = Ground, 2 = Hot, 3 = Cold

\*2 Tip = Hot, Ring = Cold, Sleeve = Ground

## Digital Input / Output Characteristics

| Output Terminals | Format              | Data Length*1 | Fs  | Connector      |
|------------------|---------------------|---------------|---|----------------|
| USB              | USB Audio Class 2.0 | 16 / 24 bit   | 44.1 kHz, 48 kHz, 88.2 kHz,<br>96 kHz, 176.4 kHz, 192 kHz | USB Standard-B |

\*1 Data length depends on the particular audio format being used. USB Audio Class2.0: 16 / 24-bit, Yamaha Steinberg USB Driver: 24-bit

European Models

Inrush Current based on EN 55103-1:2009

1 A (on initial switch-on)

1 A (after a supply interruption of 5s)

Conforms to Environments: E1, E2, E3 and E4

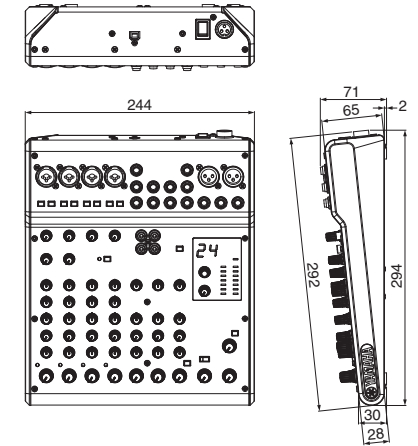
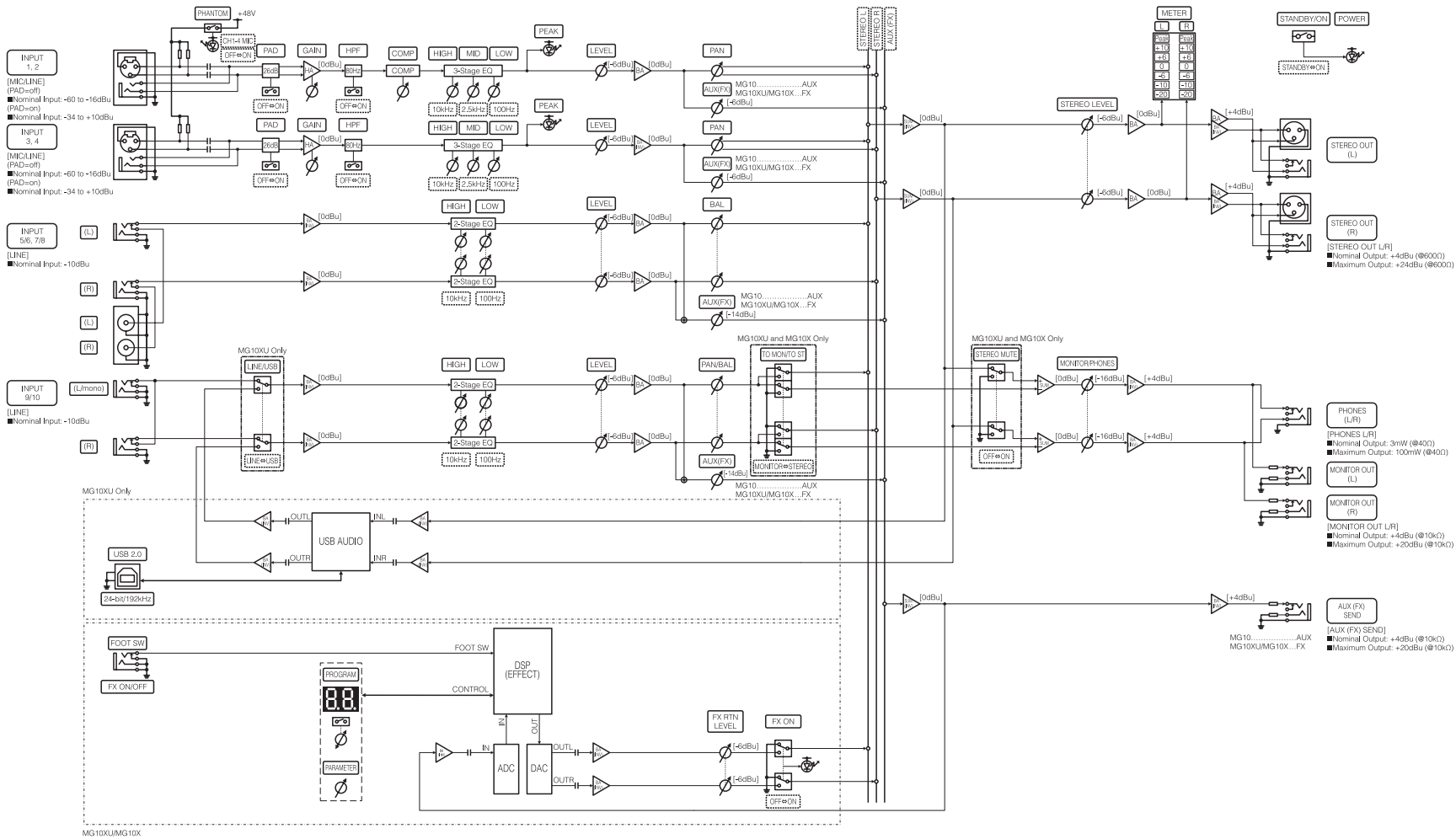
\* The contents of this manual apply to the latest specifications as of the publishing date. To obtain the latest manual, access the Yamaha website then download the manual file.

See reverse side for block/level diagrams and dimensions.

# Block and Level Diagrams

# Dimensions

Unit: mm



This illustration shows the MG10XU.

