YAMAHA

ZJ97840

MIXING CONSOLE

MG16XU / MG16

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 0.005 % @ +24 dBu (1 kHz), GAIN knob: Min	
Hum & Noise *1 (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		16 channels: Mono [MIC/LINE]: 8, Mono/Stereo [MIC/LINE]: 2, Stereo [LINE]: 2	
Output channels		STEREO OUT: 2, PHONES: 1, MONITOR OUT: 1, AUX SEND: 4, GROUP OUT: 4	
Bus		STEREO: 1, GROUP: 4, AUX: 4 (MG16XU: incl. FX)	
Input Channel Function	PAD	CH 1 – CH 8	26 dB
	HPF	CH 1 – CH 8, CH 9/10 (MIC), CH 11/12 (MIC)	80 Hz, 12 dB/oct
	COMP	CH 1 – CH 8	1 knob compressor (Gain/Threshold/Ratio) Threshold: +22 dBu to -8 dBu, Ratio: 1:1 to 4:1, Output level: 0 dB to 7 dB, Attack time: approx. 25 msec, Release time: approx. 300 msec
	EQ	CH 1 – CH 8	HIGH: Gain: +15 dB/-15 dB, Frequency: 10 kHz shelving MID: Gain: +15 dB/-15 dB, Frequency: 250 Hz to 5 kHz peaking LOW: Gain: +15 dB/-15 dB, Frequency: 100 Hz shelving
		CH 9/10 – CH 15/16	HIGH: Gain: +15 dB/-15 dB, Frequency: 10 kHz shelving MID: Gain: +15 dB/-15 dB, Frequency: 2.5 kHz peaking LOW: Gain: +15 dB/-15 dB, Frequency: 100 Hz shelving
	PEAK LED	CH 1 – CH 11/12	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 (MG16XU)	SPX Algorithm	24 programs, PARAMETER control: 1, FOOT SW: 1 (FX RTN CH on/off)	
USB Audio (MG16XU)	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		30 W	
Dimensions (W × H × D)		444 mm × 130 mm × 500 mm (17.5" × 5.1" × 19.7")	
Net Weight		MG16XU: 6.8 kg (15.0 lbs.), MG16: 6.6 kg (14.6 lbs.)	
Included Accessory		AC power cord, Rack mount kit, Cubase AI Download Information (MG16XU), Owner's Manual, Technical Specifications (this leaflet)	
Optional Accessory		Foot Switch: FC5 (MG16XU)	
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 26 dB	GAIN Trim Position	Actual Load Impedance	For Use With Nominal	Input level			Connector
					Sensitivity *1	Nominal	Max. before clip	
MIC/LINE 1 - 8	OFF	+64 dB	3 kΩ	50–600 Ω Mics/Lines	-80 dBu (0.077 mV)	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	Combo jack *2 (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 9/10, 11/12	—	+64 dB	3 kΩ	50–600 Ω 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)	+4 dBu (1.228 V)	
LINE 9/10, 11/12	—	+38 dB	10 kΩ	600 Ω Lines	-54 dBu (1.55 mV)	-34 dBu (15.46 mV)	-14 dBu (154.6 mV)	Phone jack *4 (Unbalanced)
		-6 dB			-10 dBu (245 mV)	+10 dBu (2.451 V)	+30 dBu (24.51 V)	
LINE 13/14, 15/16	—	—	10 kΩ	600 Ω Lines	-30 dBu (24.5 mV)	-10 dBu (245 mV)	+10 dBu (2.45 V)	Phone jack *4 RCA Pin (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

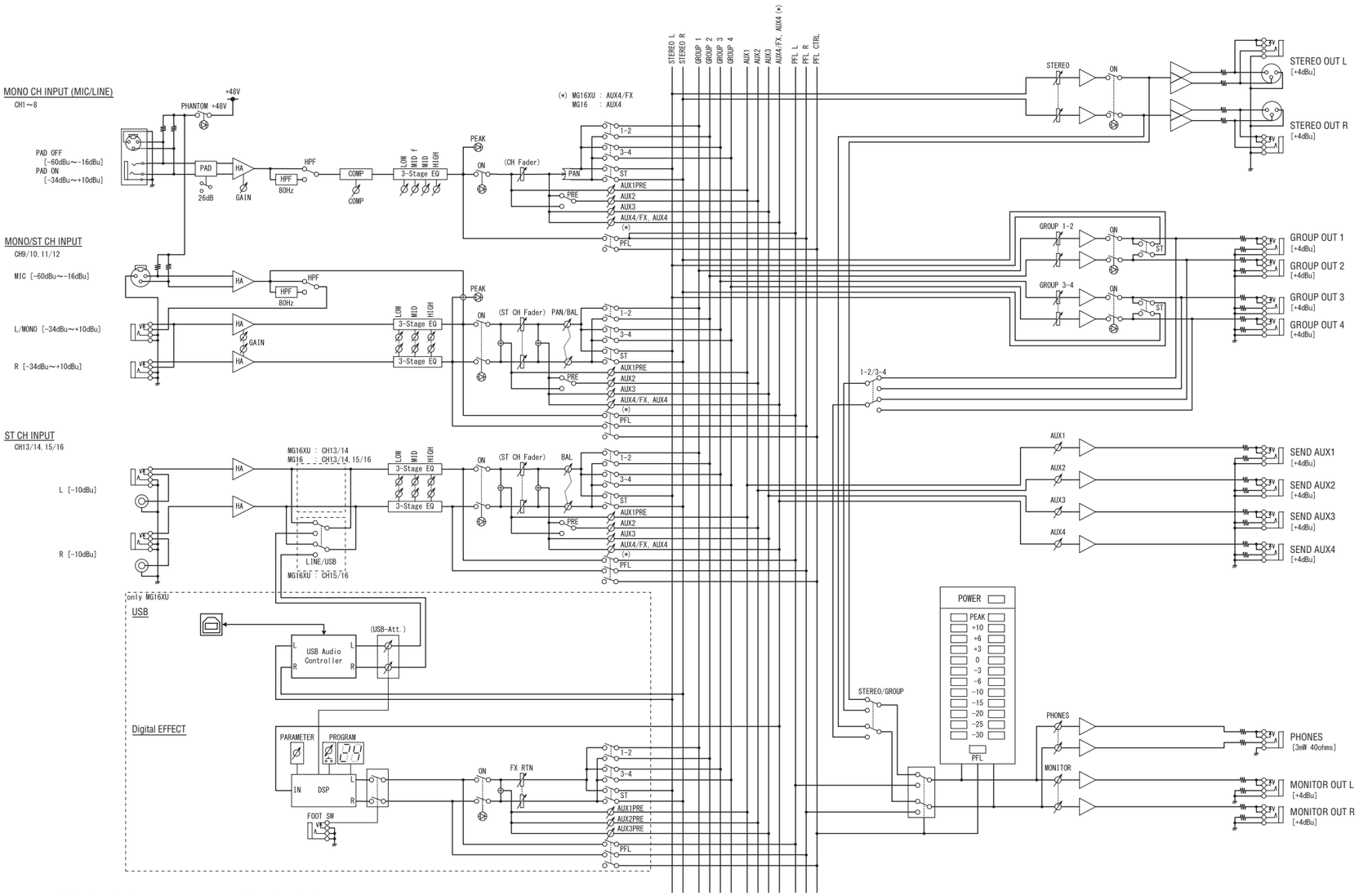
Output Terminals	Actual Source Impedance	For Use With Nominal	Output level		Connector
			Nominal	Max. before clip	
STEREO OUT [L, R]	75 Ω	600 Ω Lines	+4 dBu (1.228 V)	+24 dBu (12.28 V)	XLR-3-32 *3 Phone jack *5 (Balanced)
MONITOR OUT [L, R] GROUP OUT [1 - 4] AUX SEND [1 - 4]	150 Ω	10 kΩ Lines	+4 dBu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

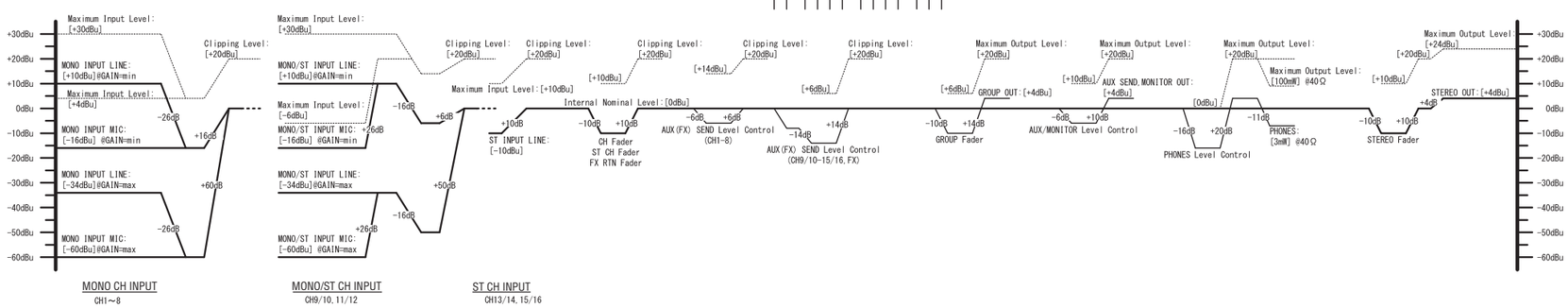
*3 1 = GND, 2 = HOT, 3 = COLD
*5 Tip = HOT, Ring = COLD, Sleeve = GND

Digital Input / Output Characteristics (MG16XU)

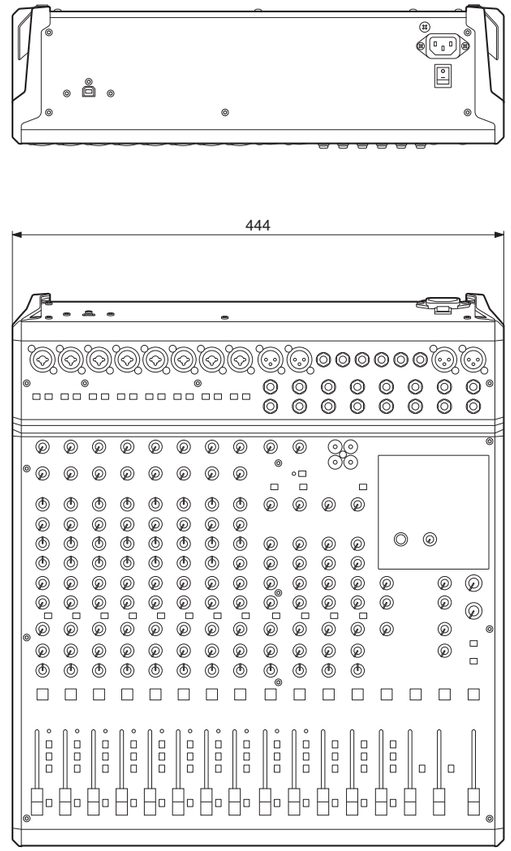
Terminals	Format	Data length	Fs	Connector
USB	USB Audio Class 2.0	16-bit/24-bit	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz	USB Standard-B

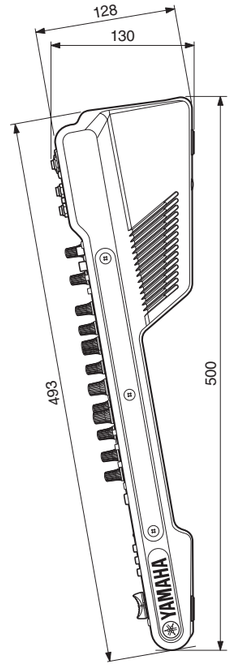
Block and Level Diagrams





Dimensions





Unit: mm

This illustration shows the MG16XU.

C.S.G., PA Development Division

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