



## MIXING CONSOLE

# Technical Specifications

### **General Specifications**

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

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		+0.5 dB/-1.5 dB (20 Hz to 48 kHz @ Fs = 192 kHz), refer to the nominal output level @ 1 kHz, GAIN knob: Min, TO PC: DRY CH1-2G			
Total Harmonic Distortion *1 (THD+N) Input to MONITOR OUT		0.05% @ 0 dBu (20 Hz to 20 kHz), GAIN knob: Min 0.01% @ +4 dBu (1 kHz), GAIN knob: Min			
Hum&Noise *2 (20 Hz to 20 kHz)	Equivalent Input Noise	-128 dBu (Mono Input Channel, Rs: 150 Ω, GAIN knob: Max)			
	Residual Output Noise	-103 dBu (MONITOR OUT, MONITOR knob: Min)			
Crosstalk (1 kHz) *3		-80 dB			
Input Channels		Mono (MIC/LINE): 1 including HEADSET MIC (Plug-in Power) (CH1 MIC and HEADSET MIC cannot be used simultaneously.), Stereo (LINE) / Mono (GUITAR) :1, USB IN:1, AUX IN:1			
Output Channels		MONITOR OUT: 2, PHONES: 2 including HEADSET PHONES (PHONES and HEADSET PHONES cannot be used simultaneously.)			
Bus		Stereo: 1			
Input Channel Function (CH1)	PAD	26 dB			
	DSP	COMP/EQ, EFFECT (SPX Reverb)			
	PEAK LED	LED turns on when the signal reaches 3 dB below clipping level.			
Level Meter	USB Output Level	2x2 point LED meter [PEAK, SIG]			
USB Audio	2 IN / 2 OUT	USB Audio Class 2.0 compliant, Sampling Frequency: Max 192 kHz, Bit Depth: 24-bit			
Phantom Power Voltage		+48 V			
FOOT SW		EFFECT Mute on/off			
Power Requirements		DC 5 V, 500 mA			
Power Consumption		Max. 2.5 W			
Dimensions (WxHxD)		129 mm x 63 mm x 202 mm (5.1" x 2.5" x 8.0")			
Net Weight		0.8 kg (1.8 lbs)			
Included Accessory		USB Cable (1.5 m), CUBASE AI DOWNLOAD INFORMATION, Owner's Manual, Technical Specifications (this leaflet)			
Optional Accessory		Foot Switch: FC5, Mic Stand Adaptor: BMS-10A			
Operating Temperature		0 to +40°C			

<sup>\*1</sup> THD+N is measured with 22 kHz LPF.

The contents of this manual apply to the latest specifications as of the printing date. Since Yamaha makes continuous improvements to the product, this manual may not apply to the specifications of your particular product. To obtain the latest manual, access the Yamaha website then download the manual file. Since specifications, equipment or separately sold accessories may not be the same in every locale, please check with your Yamaha dealer.

### **Analog Input Characteristics**

0 dBu = 0.775 Vrms

	PAD 26 dB	GAIN Actual		For Use	Input Level			
Input Jack		Trim/SW Position	Load Impedance	with Nominal	Sensitivity *1	Nominal	Max. Before Clip	Connector
OFF MIC/LINE 1 HEADSET MIC ON	OEE	10	3 kΩ 1.5 kΩ*4	50–600 Ω Mics/Lines	-72 dBu (0.195 mV)	-60 dBu (0.775 mV)	-50 dBu (2.451 mV)	- Combo jack *2 (Balanced) - 3.5 mm Phone jack for HEADSET MIC (Plug-in-Power/ Unbalanced)
	OFF	0			-26 dBu (38.84 mV)	-14 dBu (154.6 mV)	-4 dBu (489.0 mV)	
	ON	10			-46 dBu (3.884 mV)	-34 dBu (15.46 mV)	-24 dBu (48.90 mV)	
		0			0 dBu (775.0 mV)	+12 dBu (3.085 V)	+22 dBu (9.757 V)	
GUITAR 2G		HIGH	- 1 ΜΩ -	-	-32 dBu (19.5 mV)	-20 dBu (77.5 mV)	-10 dBu (245.1 mV)	Phone jack *3 (Unbalanced)
	-	LOW			-12 dBu (194.7 mV)	0 dBu (775.0 mV)	+10 dBu (2.451 V)	
LINE 2/3	- LOW	HIGH	- 10 kΩ	600 Ω Lines	-20 dBu (77.5 mV)	-8 dBu (308.5 mV)	+2 dBu (973.7 mV)	Phone jack *3 (Unbalanced)
		LOW			-10 dBu (245.1 mV)	+2 dBu (975.7 mV)	+12 dBu (3.085 V)	
AUX	-	-	10 kΩ	600 Ω Lines	-14 dBu (154.6 mV)	-8 dBu (308.5 mV)	+2 dBu (975.7 mV)	Stereo mini jack

<sup>\*1</sup> Sensitivity is the lowest level that will produce an output of +0 dBu (0.775 V) or the nominal output level when the unit is set to maximum gain. (All level controls are at their maximum position.)

#### **Analog Output Characteristics**

0 dBu = 0.775 Vrms

0.1.17	Actual Source	5	Outpu			
Output Terminal	Impedance	For Use with Nominal	Nominal	Max. Before Clip	Connecter	
MONITOR OUT [L, R]	150 Ω	10 kΩ Lines	0 dBu (0.775 V)	+10 dBu (2.451 V)	Phone jack *5 (Impedance Balanced) RCA pin (Unbalanced)	
PHONES	120 Ω	40 Ω Phones	1.5 mW + 1.5 mW	6 mW + 6 mW	Stereo phone jack Stereo mini jack	

<sup>\*5</sup> Tip = HOT, Ring = COLD, Sleeve = GND

## **Digital Input / Output Characteristics**

Terminal	Format	Data Length	Sampling Frequency	Connector
USB	USB Audio Class 2.0/ Yamaha Steinberg USB Driver	24-bit	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz	USB Standard-B

<sup>\*2</sup> Noise is measured with A-weighting filter.

<sup>\*3</sup> Crosstalk is measured with 1 kHz band pass filter.

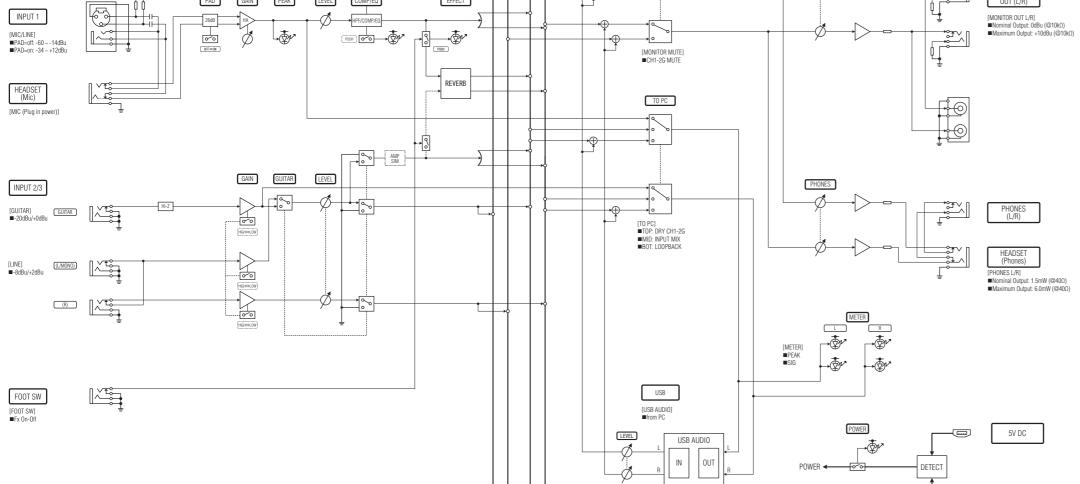
<sup>\*2 1&</sup>amp;Sleeve = GND, 2&Tip = HOT, 3&Ring = COLD

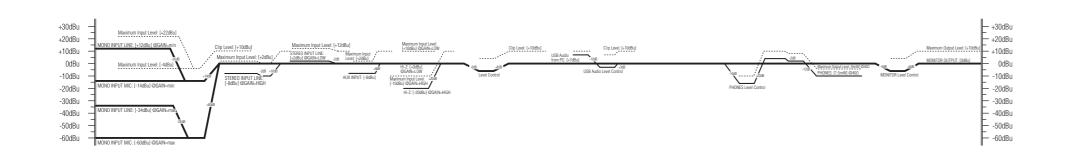
<sup>\*3</sup> Tip = Signal, Sleeve = GND

<sup>\*4</sup> For CH1, HEADSET MIC

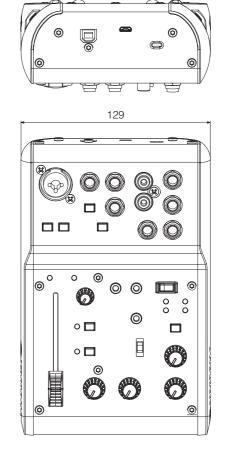
## **Block and Level Diagrams**

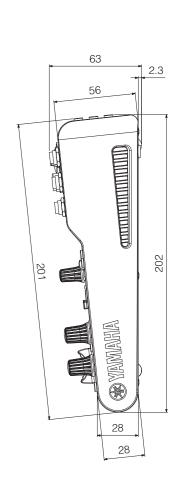
# PAD GAIN FEAK LEVEL COMPRED EFFECT MONITOR MUTE MONITOR MUTE MONITOR MON





#### **Dimensions**





Unit: mm

# **Jack and Plug List**

USB 2.0

Jacks and Plugs	Polarities	Balanced/ Unbalanced	Configurations
MIC/LINE	Pin 1: Ground Pin 2: Hot (+) Pin 3: Cold (-)	Balanced	XLR Jack
MIC/LINE* MONITOR OUT*	Tip: Hot (+) Ring: Cold (-) Sleeve: Ground	Balanced	TRS Phone Plug
HEADSET MIC	Tip: Signal Ring: - Sleeve: Ground	Unbalanced	Ring
PHONES AUX	Tip: L Ring: R Sleeve: Ground	-	Sleeve Tip
LINE 2/3 GUITAR	Tip: Signal Sleeve: Ground	Unbalanced	TS Phone Plug

 $<sup>^{\</sup>star}$  These jacks also can be connected with TS phone plugs. If you use TS phone plugs, the connection will be unbalanced.