

## **Overview**

A 3-channel live streaming mixer with USB audio interface.



## **Features**

- 60 mm faders for mic CH1
- +48 V phantom power on CH1 input for condenser mics or DI boxes
- Hi-Z input for guitars on CH2
- High resolution (24-bit, 192 kHz) 2-track audio recording and playback
- 4-pole mini input/output (TRRS) to support a wider range of streaming applications
- Flexible inputs and LOOPBACK function ideal for live streaming or recording
- Mute button for convenient live streaming
- Easy control and pro sound with Amp Simulator and 1-TOUCH COMP/EQ, REVERB
- AG Controller (Windows/Mac/iOS) for precise parameter control
- Windows/Mac support by USB-C connection
- iOS connectivity via Apple Camera Adapter (requires external USB power supply)
- Android supported by 4-pole mini input/output (TRRS)
- USB-C power input (5 V DC, 900 mA)
- Cubase Al. WaveLab Cast, Cubasis LE and Rec'n'Share are available



Specifications 1/2

#### **General Specifications**

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

Frequency Response Input (MIC) to MONITOR OUT +0.5 dB/-1.5 dB (20 Hz to 48 kHz @ Fs = 192 kHz), refer to the nominal output level @ 1 kHz, via USB IN/OUT GAIN knob: Min, STREAMING OUT: DRY CH1-2G Total Harmonic Distortion \*1 Input to MONITOR OUT 0.05 % @ 0 dBu (20 Hz to 20kHz), GAIN knob; Min (THD+N) 0.01 % @ +4 dBu (1kHz), GAIN knob; Min -128 dBu (Mono Input Channel, Rs: 150 Ω, GAIN knob: Max) Hum&Noise \*2 **Equivalent Input Noise** -103 dBu (MONITOR OUT, MONITOR knob: Min) (20 Hz to 20 kHz) Residual Output Noise 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.), AUX OUT: 1 Input Channel Function PAD 26 dB (CH1, CH2G) DSP CH1: COMP/EQ, REVERB, MUTE CH2G \*4: COMP/EQ, AMP SIM, 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 USB Audio Class 2.0 compliant, Sampling Frequency: Max 192 kHz, Bit Depth: 24-bit 2 IN / 2 OUT Phantom Power Voltage +48 V FOOT SW REVERB ON/OFF or MUTE ON/OFF DC 5V, 900 mA **Power Requirements Power Consumption** Max. 4.5 W Dimensions (W x H x D) 126 mm x 63 mm x 201 mm (5.0" x 2.5" x 7.9") Net Weight 0.8 kg (1.8 lbs.) USB2.0 cable (1.5m), Quick Guide, Safety Guide, WaveLab Cast Download Information, Cubase Al Download Information Included Accessory **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.

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

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

<sup>\*4</sup> No switch or knob on the front panel.



Specifications 2/2

### **Analog Input Characteristics**

0 dBu = 0.775 Vrms

Input Jacks	PAD	GAIN Trim/SW Position	Actual Load Impedance	For Use with Nominal	Input level			Connector
	26 dB				Sensitivity *1	Nominal	Max. before Clip	Connector
MIC/LINE 1 HEADSET MIC	OFF	10	3 kΩ 1.5 kΩ <sup>-4</sup>	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)
		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	-	HIGH	- 10 kΩ	600 Ω Lines	-20 dBu (77.50 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 INPUT	-	-	10 kΩ	600 Ω Lines	-14 dBu (154.6 mV)	-8 dBu (308.5 mV)	+2 dBu (975.7 mV)	3.5 mm Phone jack *5 (CTIA)

<sup>\*1</sup> Sensitivity is the lowest level that will produce an output of +0dBu (0.775V) 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

Output Terminals	Actual Source Impedance	For Use with Nominal	Outpu	Connector		
Output Terminais	Actual Source Impedance	FOI USE WILLI NOTHINA	Nominal	Max. before Clip	Connector	
MONITOR OUT [L, R]	150 Ω	10 kΩ Lines	0 dBu (0.775 V)	+10 dBu (2.451 V)	Phone jack *6 (Impedance Balanced) RCA pin (Unbalanced)	
PHONES	120 Ω	40 Ω Phones	1.5 mW + 1.5 mW	6 mW + 6 mW	Phone jack 3.5 mm Phone jack	
AUX OUT	150 Ω	1.5 kΩ Line	-30 dBu (24.51mV)	-20 dBu (77.50mV)	3.5 mm Phone jack *7 (CTIA)	

<sup>\*6</sup> Tip = HOT, Ring = COLD, Sleeve = GND

### **Digital Input / Output Characteristics**

Terminals	Format	Data Length	Fs	Connector
USB	USB Audio Class 2.0 / Yamaha Steinberg USB Driver	24-bit	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4kHz, 192 kHz	USB Type-C

<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

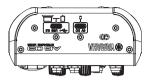
 $<sup>^*5</sup>$  Tip = Signal L, Ring1 = Signal R, Ring2 = GND, Sleeve = Output for Smartphone

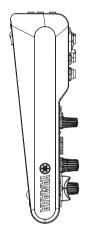
<sup>\*7</sup> Tip = Signal L, Ring1 = Signal R, Ring2 = GND, Sleeve = Output for Smartphone

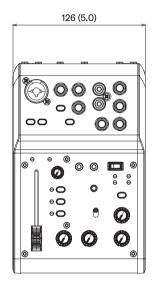


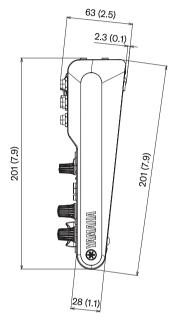
## **Dimensions**

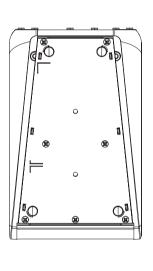
Unit: mm (inch)

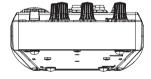












## **Option**

- Mic Stand Adaptor
- Foot Switch

BMS-10A FC5

## **Software**

- AG Controller
- Steinberg Cubase Al
- Steinberg WaveLab Cast
- Steinberg Cubasis LE
- Rec'n'Share

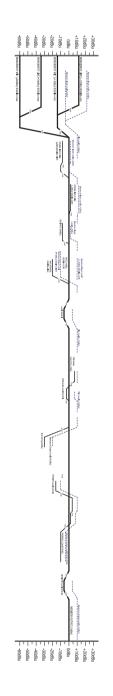


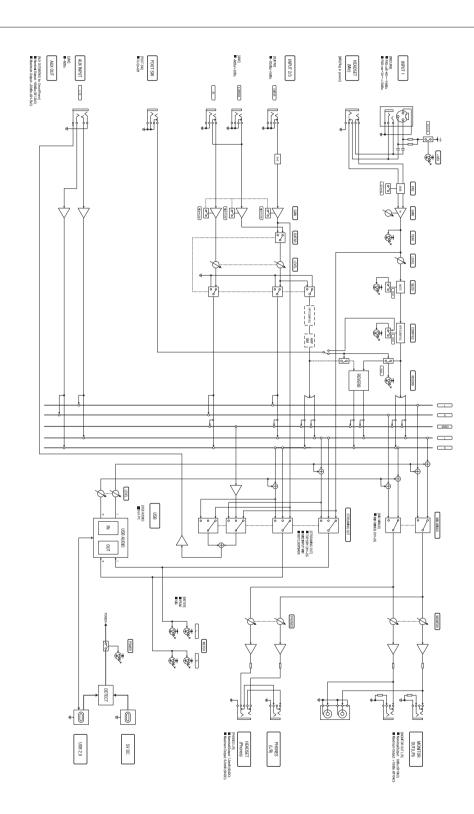
## **Architectural and Engineering Specifications**

The Yamaha AG03MK2 shall be a 3-channel Live Streaming Mixer with an integrated USB audio interface and built-in signal processing optimized for live streaming applications. The AG03MK2 shall have three inputs: 1 mono and 1 stereo. Mono signals shall be input via a combo connector that accepts line input or microphone input with switchable 48-volt phantom power, or a 3.5 mm stereo mini jack that accepts input from a plug-in powered headset microphone. Stereo line level signals shall be input via a pair of 6.3 mm phone jacks, one of which can be switched for Hi-Z mono guitar input. A 4-pole mini jack (TRRS) shall be provided for smartphone connection. Digital connectivity shall be provided via a bus-powered USB-C connector, and a second USB-C connector shall be provided for 5V DC power input when bus power is not available. Stereo digital audio output shall be delivered via the primary USB-C connector. Stereo monitor output shall be provided by a pair of 6.3 mm phone jacks, a pair of RCA connectors, a 6.3 mm stereo phone jack headphone output, and a 3.5 mm mini stereo jack headphone output. A mute button and STREAMING OUT selector and mix minus function shall be provided. The AG03MK2 microphone preamplifier shall be a discrete class-A "D-PRE" type for high sound quality. 1-touch compression/EQ, effects, and amp simulation shall be included for convenient signal processing. An AG Controller app for Windows/Mac and iOS devices shall be available, providing detailed controlled of internal AG03MK2 DSP functions. A loopback function shall be included to to allow simultaneous input, mixing, and output of digital audio for enhanced live recording and streaming flexibility. The AG03MK2 shall be equipped with a 24-bit/192-kHz USB digital audio interface for 2-track recording and playback. The AG03MK2 shall be powered via USB bus power from a Mac or Windows based personal computer, as well as a 5V DC adaptor. Dimensions shall be 126 (W) x 201 (D) x 63 (H) mm. Weight shall be 0.8 kg.



# **Block Diagrams**





\*All information subject to change without notice.

\*All trademarks and registered trademarks are property of their respective owners. Created in May, 2022

YAMAHA CORPORATION P.O.BOX 1, Hamamatsu Japan www.yamaha.com/proaudio/