

Overview

MGP24X A is a hybrid mixer matching professional analog mixing engine with superior digital functions.



Features

- Input channels: 24 Line Inputs (16 mono, 4 stereo), 16 Mic Inputs with 48V phantom power and HPF per channel.
- Output channels: 1 ST out, 1 Mono out, 1 Monitor out, 6 AUX sends, 4 Group out, 1 Phones out, 2 Matrix out, 1 Stereo CH insert out, 24 Mono
- CH insert out.
- Buses: 1 Stereo bus, 4 Group buses, 6 AUX Sends (AUX5 and AUX6 are switchable to FX1 and FX2).
- Robust, impact-resistant, powder-coated metal chassis.
- Internal universal power supply for worry-free operation around the globe, even in unsteady voltage environment.
- Discrete class A “D-PRE” mic preamps with an inverted darlington circuit.
- “X-pressive EQ” based on Yamaha’s VCM (Virtual Circuit Modeling) technology.
- Professional “1-knob compressors” with LED indicators.
- Dual digital effects processors: advanced “REV-X” reverb and 16 “SPX” effects
- Stereo Hybrid Channel with DSP offers following unique functions:
 - + “Priority Ducker” allows a microphone to take priority over another sound source automatically.
 - + “Leveler” to adjust volume levels of different tracks automatically.
- USB device recording and playback. (WAV/MP3)
- Graphic EQ with selectable 9 flex-band or 14 fixed band mode.
- Multi-band compressor.

Specifications

1/2

Outline

Mixing capability	Mixing channels	24 Line Inputs (16 mono and 4 stereo)
	GROUP	4 GROUP Buses + ST Bus
	AUX	6 AUX Sends + 2 FX Sends
	MATRIX	1 Matrix out
	On-board processors	FX1: REV-X (8 PROGRAM, PARAMETER control)/ FX2: SPX (16 PROGRAM, PARAMETER control)
	Input channel functions	Compressor CH9 - 16, HPF (100 Hz 12 dB/oct), CH EQ (MONO) ± 15 dB (Max.): High 8 kHz shelving/ Mid 250 Hz - 5 kHz peaking (CH1 - 8, 13 - 16)/ Low 125 Hz shelving, CH EQ (STEREO) ± 15 dB (Max.): High 8 kHz shelving/ Mid 2.5 kHz peaking (CH9 - 12)/ Low 125 Hz shelving
I/O	Mic inputs	MIC: 16 (INPUTS HPF: 100 Hz 12 dB/oct)
	Phantom power	48 V phantom power per channel
	Line inputs	LINE: 16 mono + 4 stereo, CH INSERT: 16 RETURN: 1 stereo
	Digital I/O	USB Device

General Specifications

Total harmonic distortion		0.02% (20 Hz - 20 kHz @ +14 dBu)
Frequency response		+0.5/-1.0 dB 20 Hz - 20 kHz, refer to the nominal output level @ 1 kHz
Hum & noise level	Equivalent input noise	-128 dBu Equivalent Input Noise
	Residual output noise	-92 dBu Residual Output Noise
Crosstalk		-74 dB @ 1 kHz
Power requirements		100 - 240 V 50 Hz/60 Hz
Power consumption		86 W max
Dimensions	W	819 mm (32.2")
	H	169 mm (6.7")
	D	565 mm (22.2")
Net weight		15.5 kg (34.2 lb)

Specifications

2/2

Analog Input Specifications

Input Terminal			Actual Source Impedance	For Use With Nominal	Input Level			Connector
	PAD	GAIN			Sensitivity* ¹	Nominal	Max. before clip	
MONO CH INPUT 1 – 16	0	-60 dB	3 kΩ	50 - 600 Ω Mics	-80 dBu (0.078 mV)	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31 type ² Phone Jack ⁴
		-16 dB						
	26 dB	-34 dB		600 Ω Lines	-36 dBu (12.3 mV)	-16 dBu (123 mV)	+4 dBu (1.23 V)	Phone Jack ³
		+10 dB						
STEREO CH INPUT 17 – 24		-34 dB	10 kΩ	600 Ω Lines	-54 dBu (1.55 mV)	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack ⁴
		+10 dB						+30 dBu (24.5 V)
MONO CH INSERT INPUT 1 – 16			10 kΩ	600 Ω Lines	-20 dBu (77.5 mV)	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack ⁵
ST CH INSERT INPUT L, R			10 kΩ	600 Ω Lines	-20 dBu (77.5 mV)	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack ⁵
TALKBACK INPUT			10 kΩ	50-600 Ω Mics	-66 dBu (0.389 mV)	-50 dBu (2.45 mV)	-30 dBu (24.5 mV)	XLR-3-31 type ⁶

0 dBu is referenced to 0.775 Vrms. 0 dBV is referenced to 1 Vrms.

*¹ Sensitivity is the lowest level that will produce an output of +4 dBu (1.23 V), or the nominal output level when the unit is set to maximum level. (All faders and level controls are at maximum position.)

*² XLR-3-31 type connectors are balanced. (1 = GND, 2 = HOT, 3 = COLD)

*³ Phone Jacks are balanced. (Tip = HOT, Ring = COLD, Sleeve = GND)

*⁴ Phone Jacks are unbalanced.

*⁵ Phone Jacks are unbalanced. (Tip = Out, Ring = In, Sleeve = GND)

*⁶ XLR-3-31 type connectors is unbalanced.

Analog Output Specifications

Output Terminal	Actual Source Impedance	For Use With Nominal	Output Level		Connector
			Nominal	Max. before clip	
ST OUT [L, R]	75 Ω	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	XLR3-32 type* ¹ Phone Jack* ⁴
MONO OUT	75 Ω	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	XLR3-32 type* ¹
GROUP OUT (1 – 4)	150 Ω	10 k Ω Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack* ²
AUX SEND (1 – 6)	75 Ω	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	XLR3-32 type* ¹
MATRIX OUT (1, 2)	150 Ω	10 k Ω Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack* ²
MONO CH INSERT OUT (1 – 16)	75 Ω	10 k Ω Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack* ³
ST CH INSERT OUT [L, R]	75 Ω	10 k Ω Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack* ³
MONITOR OUT [L, R]	150 Ω	10 k Ω Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack* ²
PHONES OUT	150 Ω	40 Ω Phones	3 mW	75 mW	ST Phone Jack

0 dBu is referenced to 0.775 Vrms. 0 dBV is referenced to 1 Vrms.

*¹ XLR-3-32 type connectors are balanced. (1 = GND, 2 = HOT, 3 = COLD)

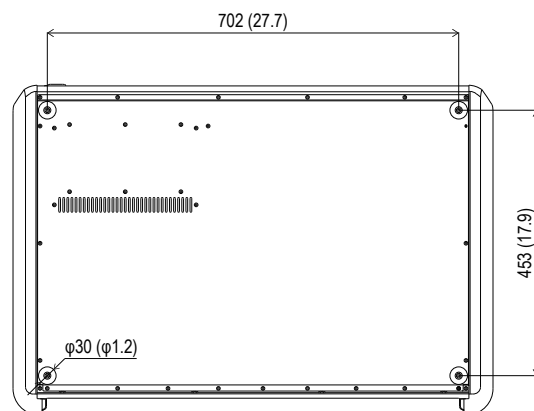
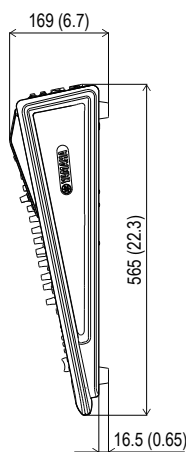
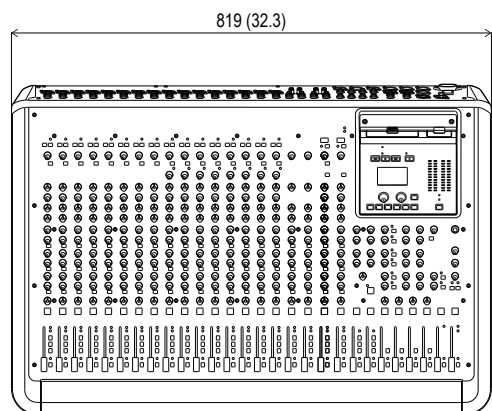
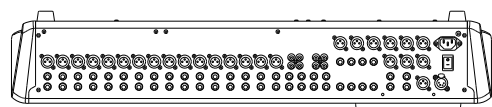
*² Phone Jacks are impedance balanced. (Tip = HOT, Ring = COLD, Sleeve = GND)

*³ Phone Jacks are unbalanced. (Tip = Out, Ring = In, Sleeve = GND)

*⁴ Phone Jacks are balanced. (Tip = HOT, Ring = COLD, Sleeve = GND)

Dimensions

Unit: mm (inch)



Architectural and Engineering Specifications

The Yamaha MGP24X A Mixing Console shall be a hybrid mixer that combines analog mixing with digital functionality. The MGP24X A shall have 24 line Inputs (16 mono and 4 stereo), and 16 microphone inputs with 48V phantom power and a high-pass filter for each. Output channels shall be 1 stereo output, 1 mono output, 1 stereo monitor output, 6 auxiliary sends, 4 group outputs, 2 matrix outputs and 1 phones output. Insert connectivity shall be provided for the stereo output channel and 16 mono input channels. Buses shall include 4 group buses, 6 auxiliary sends and a stereo bus.

The mixer's microphone preamplifiers shall be discrete class-A Yamaha "D-PRE" types for high sound quality. "X-pressive EQ" based on original Yamaha VCM (Virtual Circuit Modeling) technology shall be included for warm, musical equalization. Yamaha "1-Knob Compressors" with LED indicators shall provide high-quality compression for 8 input channels, that is also easy to use. The mixer shall be equipped with dual digital effects processors that include "REV-X" reverb and 16 "SPX" effects. Two Stereo Hybrid Channels with built-in digital signal processing shall provide the following functions: (a) "Priority Ducker" shall automatically reduce the level of background music when a speech or announcement begins, (b) "Leveler" shall maintain a constant level by automatically adjusting the volume of individual tracks.

A USB connection on the top panel shall allow WAV/MP3 recording and playback to and from a USB memory device. Graphic equalization with selectable 9-band Flex EQ and fixed 14-band modes, and a multi-band compressor shall be provided for the stereo bus.

The mixer shall be built into a durable impact-resistant, powder-coated metal chassis. An internal universal power supply shall provide stable, trouble free operation with AC power anywhere in the world. Dimensions shall be 819 (W) x 565 (D) x 169 (H) mm. Weight shall be 15.5 kg.

Created in June, 2026

YAMAHA CORPORATION
P.O.BOX 1, Hamamatsu Japan