4K ULTRA HD

RGBlink®

mini max

Elevating Content Creation to 4K Excellence

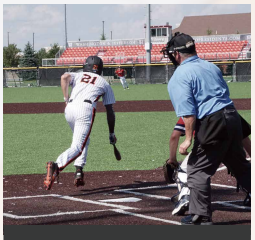


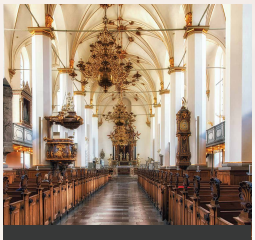
The mini-max 4K All-in-One Video Switcher builds on the legacy of the mini-series with powerful 4K performance. It enhances the mini-edge design by adding two 12G-SDI inputs—all in a compact unit that supports 4K60 output, recording, and streaming simultaneously. A responsive 5.5-inch touchscreen provides multi-view monitoring and menu access, while physical buttons offer tactile control for flexible operation.

With two HDMI 2.0 and two 12G-SDI inputs, together with support for UVC and NDI® sources, the mini-max connects effortlessly to a broad range of devices. Dual HDMI outputs support multi-view or test patterns, and the USB 3.0 port doubles as a UVC webcam for streaming. With support for TAO Cloud and a Web App, it also enables remote control and multi-platform broadcasting.

Despite its compact form, the mini-max doesn't compromise on professional functionality. It includes dynamic output control, audio noise reduction, and PTZ camera control—making it a powerful solution for both live production and remote workflows.


Education


Sport


Worship


Event


Conference



key feature

2 HDMI Inputs/ 2 HDMI Outputs
Up to 4K60 inputs and 4K60 output

2 12G-SDI Inputs
Up to 2*4K60 with Built-in Scaler

2 USB-C
4K Record/4K Capture

NDI | HX2
Compatible HX, up to 4K60
Capture & stream

5.5 Inch Display
touch screen display

Real 4K Streaming
RTMP (Publish)/RTMPS

Multi-channel synchronous recording

It can realize up to 4 channels of 2K inputs recording and pure screen of all inputs obtained.Will be saved for easy editing

Support 4 channels 2K60 recording/2 channels 4K30 recording/1 channels 4K60 recording

*Implemented after subsequent upgrades



Preview on Demand

Preview and configure interactively from the touch screen display, selecting live and insert video sources. Monitor on a HDMI display with a dedicated PVW multi-view output provided.



Multiple video input interfaces

The mini-max features six video inputs, compatible with a variety of professional sources such as cameras and laptops. IN1~IN4 can be selected from four HDMI ports, two 12G-SDI ports, and IN5 supports NDI®, IP, and UVC).

Notably, the mini-max supports streaming directly via Ethernet or functioning as a webcam over the USB-C port, allowing easy integration with third-party software like OBS for capture and broadcasting. These versatile connectivity options make the mini-max compatible with a wide range of devices, meeting the demands of various live streaming and broadcasting scenarios.

CH 1	HDMI 1	HDMI 2
CH 2	HDMI 3	HDMI 4
CH 3	12G-SDI 1	
CH 4	12G-SDI 2	
CH 5/6	NDI/ IP	UVC/MP(media player)

Output mode allocation

Mini-max's HDMI 1 output port is fixed at 1080P output resolution, the default is multi-screen pre-monitoring output, and it can be selected as AUX auxiliary output (automatically scaled to 1080p); HDMI2 output supports up to 4K output resolution, the default is PGM main output; UVC output, RTMP and NDI video stream output the picture and HDMI 2 output are always the same.

PROGRAM	HDMI 2 OUT (4K) UVC OUT (4K) IP STREAM OU(4K) NDI OUT (4K)
	USB-C RECORD
MULTI-VIEW	HDMI OUT 1 (2K) BUILT-IN MONITOR

Take Full Control

Integrated PTZ Camera Control

Forget about having multiple separate control panels for video and camera control. mini-max brings it all together, supporting industry standard VISCA or NDI protocol for PTZ control directly from the mixer. Control up to four separate cameras with pan, tilt, zoom and focus.





Precise Fingertip Control

Integrated joystick provides tactile control for each PTZ camera. Together with the toggle on the front panel, they can control the pan, tilt, zoom and focus of the PTZ camera. Joystick and toggle are additionally dynamically assigned to settings including scale, position and crop for enhanced usability when a layer being controlled.



Professional broadcast 12G-SDI input

Longer transmission distance and more professional broadcast SDI camera input.

*12G-SDI supports up to 60 meters, RGBlink laboratory test data.

Pro Color Rendering and Layers

One-Click Chroma Key

Enable presenters to be in virtual studios and environments with Chroma Key.
Select from standard key colours and enable Chroma Key directly on mini-max without the need for an app. Refine colour selection and tolerances from the touch screen to optimise.

* The device supports keying green and blue colors and the web-side supports keying colors in total.

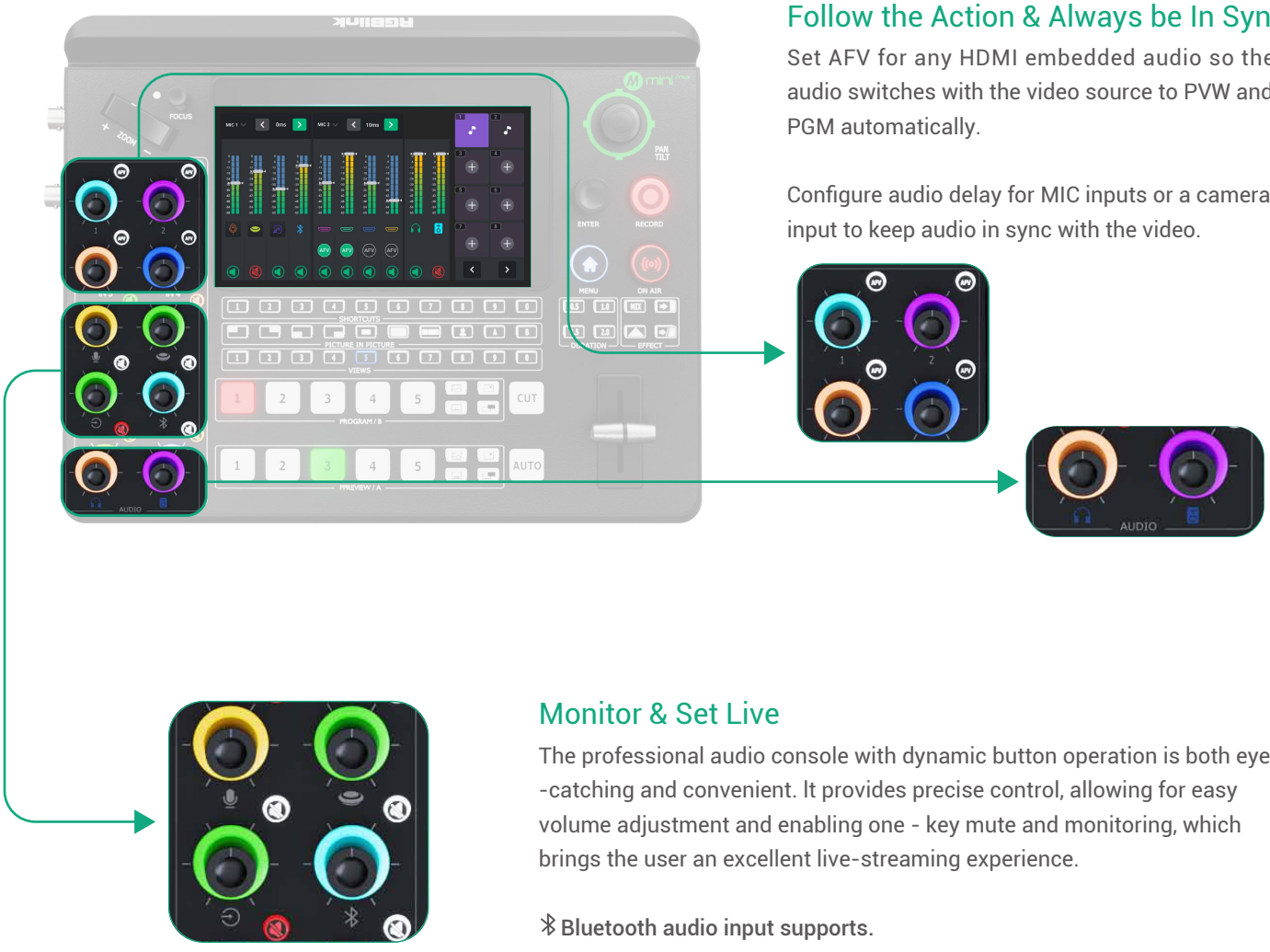


Pro Level Audio

Capture Every Sound

With two separate insert audio ports, mini-max has got external balanced mic and line level audio covered. All two ports accept TRS ¼in jacks, with MIC supporting direct XLR connection too. What's more there is 48V phantom power directly from mini-max available too on MIC, negating the need for a separate DI, and instantly making studio mics native connections as they should be.





Follow the Action & Always be In Sync

Set AFV for any HDMI embedded audio so the audio switches with the video source to PVW and PGM automatically.

Configure audio delay for MIC inputs or a camera input to keep audio in sync with the video.

Monitor & Set Live

The professional audio console with dynamic button operation is both eye -catching and convenient. It provides precise control, allowing for easy volume adjustment and enabling one - key mute and monitoring, which brings the user an excellent live-streaming experience.

Bluetooth audio input supports.

Pro Level Video

Sophisticated Multi-Layer Presentation

Assemble visuals with multiple layers of video and graphics. mini-max offers 2 full video layers plus background image, two graphic overlays from the media pool as well.



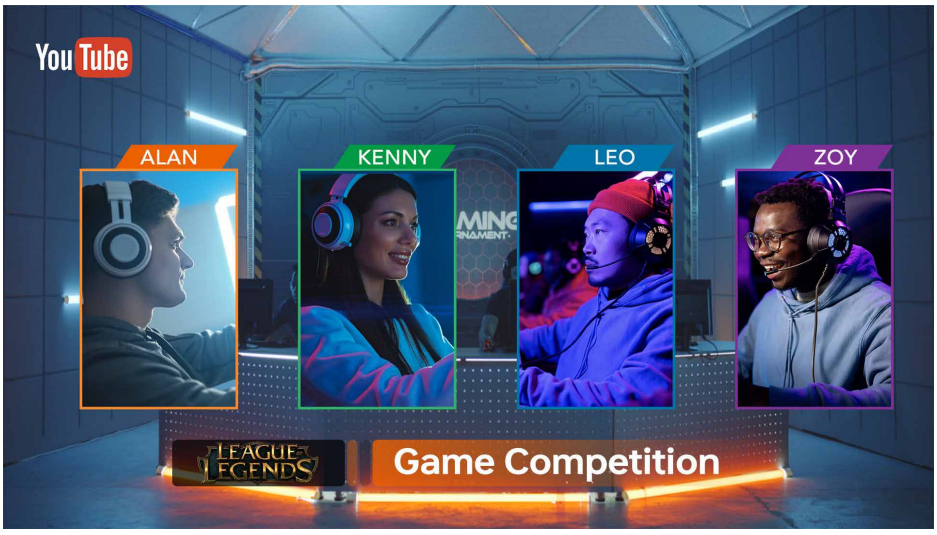


Dynamically Scalable

Each of the two assignable video layers maybe scaled, positioned and cropped with these placed over the background.

Multiple Layer Sophistication

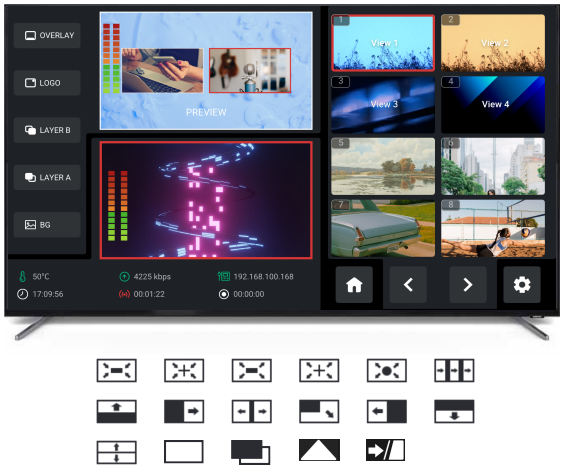
Besides dual video sources, also add media pool graphic overlays for lower -thirds and branding logos, and switch seamlessly between graphic elements.



Intuitively Interactive Operation

Select any source or preset with control panel thumbnails and iconography that makes mini-max a natural an intuitive way to present and stream.





Transition Like a Pro

mini-max includes multiple DVE transition effects from preset to program, adding sophistication and effect.

Leverage the Power of Presets

mini-max supports saving and quick recall of 10 preset scenes, including graphics, audio, and even the parameters of the PTZ position and focus enabling smooth transitions between scenes.





Go Remote

mini-max web app companion apps for laptop and mobile allow remote use from the mini-max and the video connections.
Fully integrated with the RGBlink TAO cloud control streams remote too with TAO cloud.

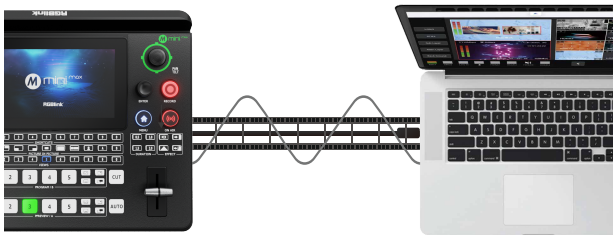
Pro Streaming

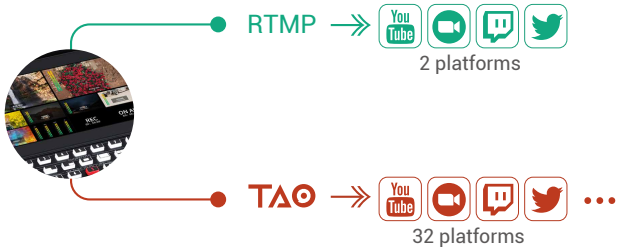
Enhanced Streaming

Capture & Share

Connect mini-max to a laptop for instant recognition as a webcam to enable capture for apps such as OBS and more of others.

Share your presentation on Teams, Zoom™ or any collaboration platform.





RTMP(s)

Stream up to four multiple platforms simultaneously directly over IP without a laptop. And with TAO cloud integrated directly into mini-max, cloud-stream up to 32 platforms or connections at the same time.

Recording

The USB 3.0 recording output interface can be directly connected to a hard drive with a maximum capacity of 2T.

It can simultaneously record while streaming, and the recording of 32Mbps high-definition video can last 100 hours.

Audio and video can be imported and used simply by inserting a USB disk.



Specification

Connections

Input	IN 1 HDMI 1/2	HDMI 2.0	2 × HDMI-A
	IN 2 HDMI 3/4	HDMI 2.0	2 × HDMI-A
	IN 3&IN 4	12G SDI	2 × BNC
	IN 5&IN 6	UVC (H.264)	1 × USB-C（4K USB WEBCAM）
		NDI（Decode）	1 × RJ45(LAN)
		*When UVC is enabled, the other channel is restricted to NDI only. When NDI is enabled, the other channel can be configured as either UVC or NDI.	
Output			
		HDMI 1.3 (Multiview)	1 × HDMI-A
		HDMI 2.0 (Program)	1 × HDMI-A
		USB (4K Record)	1 × USB-C
		USB (4K Capture)	1 × USB-C
		NDI	1 × NDI
Audio			
		MIC IN 1	1 × 6.35mm XLR + TS Jack (48V Phantom Power)
		MIC IN 2	1 × 6.35mm XLR + TS Jack
		LINE IN	1 × 6.35mm TRS Jack
		OUT	1 × 6.35mm TRS Jack
Communication/ Stream/Upgrade			1 × 3.5mm mini-Jack
		LAN	1 × RJ45
Power			
		Power Supply	1 × USB-C

Control

Remove Control	TAO Cloud、webAPP
Firmware Update	TAO Cloud

Operational Environment

Temperature	0° to 60° C
Humidity	10-85% RH

Physical Specifications

Weight	Device	0.60 kg
	Packaged	1.38 kg
Dimensions	Device	291×222.6×71.3mm (11.4×8.8×2.8in)
	Packaged	332×238.5×109mm (13.1×9.4×4.3in)

In the Box

mini-max	1
PD power adapter	1
USB-C data cable	1
quick guide	1
Stands	2

Order Codes

230-0012-01-0	mini-max

[1] Recommended but not limited to 2TB.
[2] Simultaneously streaming on multiple platforms depends on the network.

Performance

Input Resolutions *Select Standard Resolution or Custom Resolution	HDMI 2.0 SMPTE 720p@50/60 | 1080p@30/50/60 | 2160p@30/50/60 VESA 1024×768p@60 | 1280×720p@60 | 1280×768p@60 | 1280×800p@60 | 1280×1024p@60 | 1360×768p@60 | 1366×768p@60 | 1440×900p@60 | 1600×1200p60 | 1680×1050p@60 | 1920 × 1080p@60 | 1920 × 1200p@60 | 3840 × 2160p@60 | 4096 × 2160p@60 12G-SDI 2160p@30/50/60 | 1080p@30/50/60 1080i@50/59.94/60 | 720p@50/59.94/60
Output Resolutions	HDMI 1.3 1080p@60 HDMI/USB (Webcam) 1080p@30/50/60 | 2160p@30/50/60
Supported Standards	HDMI 2.0 | HDCP 2.2 SDI (12G/3G/HD/SD) SMPTE ST 2082-1|SMPTE ST 2081|SMPTE ST 424/292/259 USB 3.0 NDI | HX2
Color Space	RGB 8bit | YCbCr 4:4:4 8bit | YCbCr 4:2:2 8bit
Video Latency	<4 frames
Audio Format	PCM/2ch/24bit/48kHZ
Sampling Rate	48 KHz
Bitrate	24bit
Record Formats	MP4 (up to 32Mbps)
Disk Formats	FAT32 | exFAT
USB Power Delivery	UVC-C
Supported Cables	Certified USB PD Aware
Input Power	Type-C 15V/3A
Maximum Power Consumption	45W

Compare mini models



mini-max

Elevating Content Creation to 4K Excellence

4K input/output/recording/streaming with 12G-SDI interface
Suitable for professional-grade scenarios
(such as HD events and large-scale live events)



mini-mx SDI

10 Channel All-in-One Switcher

Audio noise reduction, equalizer, and VFA support are suitable for scenarios requiring high sound quality
(such as interview programs and online courses)



mini-edge SDI

10 Channel All-in-One Switcher

4 HDMI + 4 SDI inputs support simultaneous streaming on 4 platforms.Suitable for medium-sized events
(such as corporate press conferences and church live broadcasts)

IN	4 × HDMI 2.0（HDMI-A）、2 × 12G SDI（BNC） **NDI	HX2 Decoding、2 × 6.35mm XLR + TS Jack** **HDMI：4096×2160p@60** **SDI：3840×2160p@60**	4 × HDMI 2.0（HDMI-A）、4 × 3G-SDI（BNC） NDI	HX2 Decoding、**2 × 6.35mm XLR + TS Jack** HDMI：4096×2160p@60 SDI：1920×1080p@60	4 × HDMI 2.0（HDMI-A）、4 × 3G-SDI（BNC） NDI	HX2 Decoding、1 × 6.35mm XLR + TS Jack HDMI：4096×2160p@60 SDI：1920×1080p@60
OUT	**1 × HDMI 2.0（Multiview）**、1 × HDMI 1.3（Multiview） **1 × USB-C（4K Record）、1 × USB-C（4K Capture）** **NDI	HX2 Encoding** **HDMI/USB：3840×2160p@60**	2 × HDMI 2K（HDMI-A） 1 × USB-C（Record）、1 × USB-C（Stream） NDI	HX2 Encoding HDMI/USB：1920×1080p@60	2 × HDMI 2K（HDMI-A） 1 × USB-C（Record）、1 × USB-C（Stream） NDI	HX2 Encoding HDMI/USB：1920×1080p@60
Stream	**NDI HX2 streaming, simultaneous streaming on 4 platforms, TAO cloud control**	NDI HX2 streaming, simultaneous streaming on 4 platforms, TAO cloud control	NDI HX2 streaming, simultaneous streaming on 4 platforms, TAO cloud control



mini-ISO

Mini Multi-Interface Switcher

HDMI and SDI inputs are suitable for scenarios requiring traditional cameras
(such as small- to medium-sized performances and offline events)



mini-pro

Portable professional streaming switcher

4K input and dual-platform streaming,
ideal for mobile live streaming
(outdoor events, small-scale educational settings)



mini

Entry-level optional function switcher

Suitable for budget-constrained scenarios requiring flexible functionality (such as small meetings and personal creations).
It can meet basic live streaming and recording needs

IN	4 × HDMI 2.0（HDMI-A）、**4 × SDI（BNC）** **1 × UVC（USB-A）、NDI	HX2 Decoding** HDMI：3840×2160p@60；**SDI：1920×1080p@60**	4 × HDMI 2.0（HDMI-A） 2 × 3.5mm mini-Jack HDMI：3840×2160p@60	4 × HDMI 2.0（HDMI-A） 1 × 3.5mm mini-Jack HDMI：3840×2160p@60
OUT	2 × HDMI 1.3（HDMI-A）、NDI	HX2 Encoding 1 × USB 2.0（Record）、1 × USB 3.0（Stream） HDMI/USB：1920×1080p@60	2 × HDMI 1.3（HDMI-A） 1 × USB 2.0（Record）、1 × USB 3.0（Stream） HDMI/USB：1920×1080p@60	2 × HDMI 1.3（HDMI-A） 1 × USB 2.0（Record）、1 × USB 3.0（Stream） HDMI/USB：1920×1080p@60
Stream	RTMP (S) 2 platform streaming, USB webcam streaming	RTMP (S) 2 platform streaming, USB webcam streaming	UVC streaming CAT5 streaming