RGBlink® | mini ULTRA

4K ULTRA HD

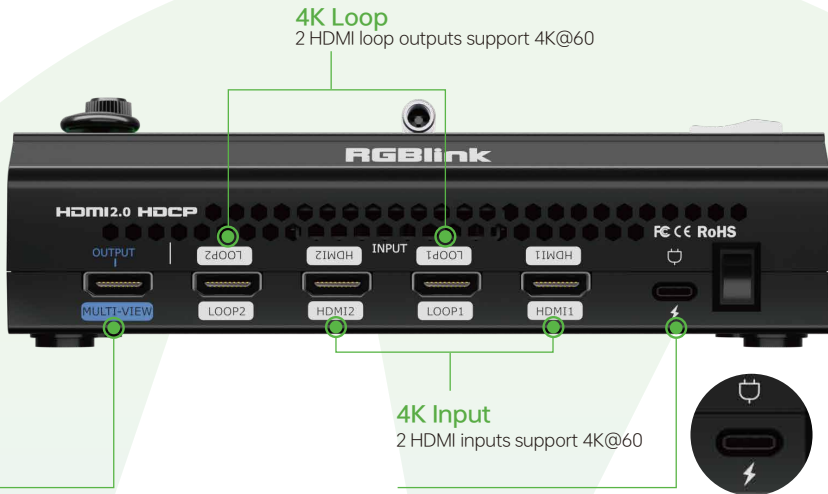# Elevating Content Creation to 4K Excellence

Introducing mini-ultra

Building on the legacy of the mini series, the mini-ultra marks a leap from FHD to UHD, empowering content creators to effortlessly transition into 4K production and elevate their work to new heights.

The mini-ultra's 4K journey begins with versatile input options, including 2 x HDMI 2.0 inputs, 1 x 4K NDI|HX3 input, 1 × 4K UVC or media input. Seamless content integration is achieved via USB drives or the TAO cloud, offering access to graphics and media assets. Creators can design and customize two live canvas windows, blending media and backgrounds into presets that can be seamlessly switched to Program Outputs.

The output capabilities are equally robust, featuring 2 x HDMI 2.0, 1 x NDI, RTMP(s) for live streaming, 1 x USB 3.X for capture, and 1 x USB 3.0 for recording.

For audio, the mini-ultra offers advanced onboard management with support for 4 digital embedded audio channels and 1 analog input. It includes a professional-grade equalizer, echo effects, fusion processing, and mixing tools for precise sound control. Outputs can be customized with features like AFV (Audio Follow Video) or mute.

The mini-ultra also excels in PTZ camera remote control, particularly with 4K UHD PTZ cameras. Whether capturing content via HDMI 2.0 or 4K NDI, the mini-ultra delivers unparalleled flexibility and performance for content creators looking to push their craft to the next level.

4K Loop
2 HDMI loop outputs support 4K@60

4K Input
2 HDMI inputs support 4K@60

Multi-View
HDMI supports simultaneous monitoring of multi-screen pre-monitoring windows 、 Main output window or select input independent output
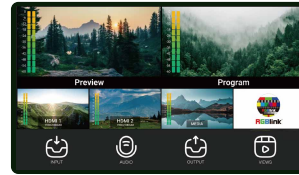
Power with Ease
Use standard USB-C cables and power supplies. Requiring only 40W, never be caught without a power supply again or use in disconnected applications.
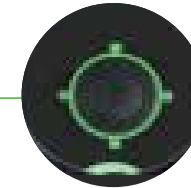
Elevating Content Creation to 4K Excellence

Toggle

Zoom cameras, adjust volume, move between presets, control right on the surface wherever and whenever you need it

Shortcuts

Access views and audio at the touch of a button

Touch Screen LCD

Display video sources right in front of you. Not only see the settings and features, interact naturally with context aware touch controls. mini-pro offers a host of feature enhancements.

Precision Joystick

Control cameras as well as navigation better than ever with tactile and familar console control.

Professional Controls

Integral T-bar provides familiar vision mixing style controls ideal for live events.

UVC Output

Supports YUY2, MJPEG, H.265 and other encoding formats, can be recognized as webCAM when connected to a computer, and can easily achieve live broadcast on platforms such as Youtube and Tik Tok

Switch signal key

Large signal selection button, you can switch signals freely.

HDMI PGM Output

Program output for local display matching the video being output to UVC/RTMP.

Insert & Extract Audio

Input Line or Mic level audio selectable to output. With support for audio delay. Output mixed autio from one or multiple inputs embedded and to the dedicated mini-jack.

4K Stream

Stream directly over RTMP(s)、4K NDI|HX3 to TAO Cloud TAO Cloud restreams to 30+ content or ecommercial platforms.

4K Recording/ Material Import

USB 3.0 4K recording, the maximum recording bit rate can reach 16Mbps, and the content materials including pictures and videos can be imported through the USB flash drive and API protocol as independent background layers.

Streaming

Utilize RTMP(s) to stream directly to multiple platforms at the same time, in addition to UVC streaming via laptops and other USB/UVC devices.

Display

Display local and live with the 4K HDMI output port – use for a preview or the live program output. mini-ultra is more than a streaming switcher, mini-ultra is also a live event switcher

4K Record

Capture the moment, record 4K video and audio directly from mini-ultra with any portable drive up to 2TB, nothing else is needed.

Control

Bring it all together with on board control for PTZ cameras directly within mini-ultra. Save attribute views of cameras for recall at the touch of a button.
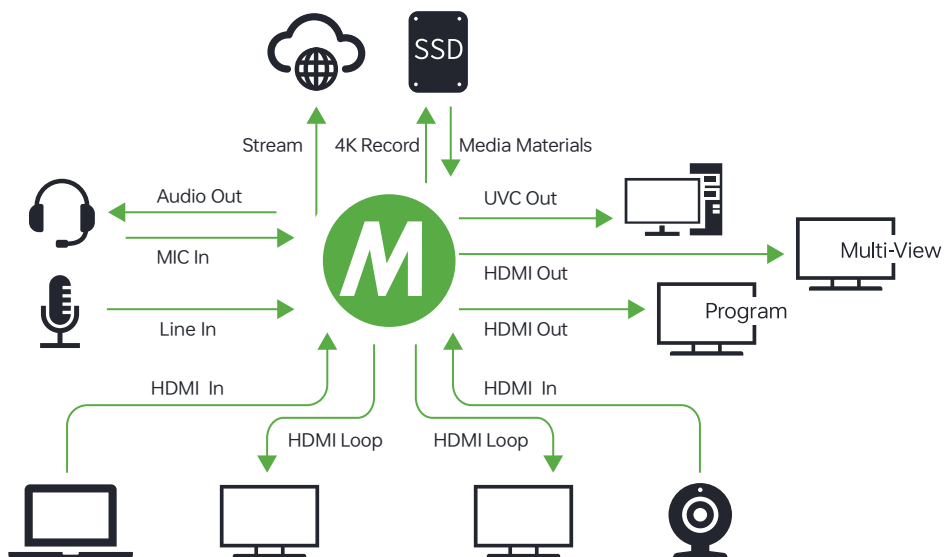
4K Preview

See all sources live immediately in the integral LCD display. Connect 4K video output and display a multi-view preview to always see the next preset before going live.

Mix

Transition and switch between live video program and preset. Recall saved preset views along with scaled video layers for the professional look of prepared broadcast or presentation.

	COMPACT	mini switcher, easy to carry
	JOYSTICK	pan, tilt, zoom, focus cameras from the switcher
HƎMI	**4K@60**	resolution support across four HDMI inputs
	TAO Cloud	APP by TAO Cloud
	PREVIEW	four window preview selectable to any output
	SCALE	true dual layer video scalable pixel-to-pixel
	TOUCH	modern intuitive controls
MIX	**MIX**	transition between video sources & presets with effect
((●))	**STREAM**	driver free connect mini-pro easily to any platform
	KEY	add transparency to a video to layer over a background
	BLEND	Set PIP blending effect
NDI∥HX3	**NDI**	4K streaming via network port, RTMP(s), 4K NDI∥HX3

RGBlink

HDMI2.0 HDCP

OUTPUT | LOOP2 | HDMI2 | INPUT | LOOP1 | HDMI1

FC C€ RoHS

MULTI-VIEW | LOOP2 | HDMI2 | LOOP1 | HDMI1

STREAM CONTROL | WEBCAM

AUDIO

LINE IN | RECORD | PROGRAM

Connections

Video Input	HDMI 4K/Loop	2×HDMI-A
	UVC (USB Cam)	1×USB-A (Record)
	Media	1×USB-A (Record)
	4K NDI | HX3	1×RJ45
Video Output	HDMI 4K (PVW)	1×HDMI-A
	HDMI 4K (PGM)	1×HDMI-A
	USB 4K (Record)	1×USB-A (Record)
	USB 4K (Stream)	1×USB-A (Webcam)
	RTMP(s)/NDI	1×RJ45 (LAN)
Audio Input	Embedded Audio Input	2×HDMI-A
	External Digital Input	1×USB-A
	External Analog Input	2×3.5mm mini-Jack
Audio Output	External Analog Ouput	1×3.5mm mini-Jack
Communication/ Stream/Upgrade	LAN	1×RJ45
Power	Power Supply	1×USB-C

Control

Remote 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	180.5 × 117.2 × 47.2 mm

Performance

Input Resolution	HDMI 2.0	
	SMPTE	1280 × 720p@50/59.94/60/100/119/88/120 | 1920 × 1080i@50/59.96/60 | 1920 × 1080p@23.98/24/25/30/50/60/100/120 | 3840 × 2160p@23.98/24/25/29/97/30/50/59.94/60 | 4096 × 2160p@23.98/24/25/29/97/30/50/59.94/60
	VESA	1024 × 768p@60/75/85 | 1280 × 800p@60 | 1280 × 1024p@60/75/85 | 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
	UVC	4K Support
Output Resolution	HDMI 2.0	1024 × 768@75/85 | 1280 × 800@60 | 1280 × 1024@ 60/75/85 | 1920 × 1080@23.98/24/25/29.97/30/50 | 3840 × 2160@24/25/30/50/60 | 4096 × 2160@30/50/60
	USB	4K Support
Video	Color space	Input: RGB 12bit | YcbCr 4:4:4 12bit | YcbCr 4:2:2 12bit Output: RGB-8bit
	Video delay	<3 frames
Audio	Audio format	PCM/2ch/24bit/48kHZ
	Sampling rate	48K
	Bit rate	24bit
Recording/Storage	Recording format	MP4 (Maximum bit rate 16Mbps)
	Disk format	FAT32 | exFAT
Standard	HDMI	2.0
	HDCP	2.2
	USB	3.0
	NDI	4K NDI HX3
Power	Compatability	USB Power Delivery (PD) 3.0
	Supported Cables	Certified USB PD Aware
	Input Voltage	12V/3.3A
	Maximum Power	40W

In the Box

mini-ultra	1
PD power adapter	1
USB 3.X data cable	1
USB-C cable	1
quick guide	1

Order Codes

230-0010-01-0	mini-ultra