RGBlink®

mini-mx SDI

10-channel Streaming Video Mixer

Quick Start

Notes:

mini-mx does not have SDI inputs, for any SDI input connection and operation, it is not available for mini-mx.

Need to go with model mini-mx SDI.

Content

Product Overview

Key Features

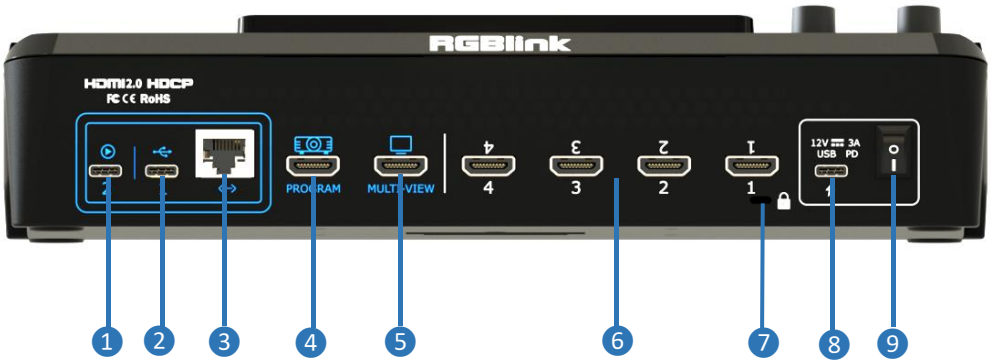
- Embedded 5.5-inch TFT and touchscreen
- 10 input connectors (4 x HDMI 2.0, 4 x 3G-SDI, 2K UVC, and 2K NDI)
- 6-CH customizable video inputs
- Maximum 8 channels for audio mixing
- Dynamic text overlay/scoreboard
- Configurable VFA (video follow audio)
- 2-CH independent HD HDMI
- 2K streaming and live via IP and UVC
- Streaming supports NDI | HX2
- Streaming and management via RGBlink TAO Cloud
- Manual real-time control of PTZ cameras, such as zoom in/out, rotation, and focus, via VISCA or NDI
- Third-party control and integration via free RGBlink Central Control Protocol

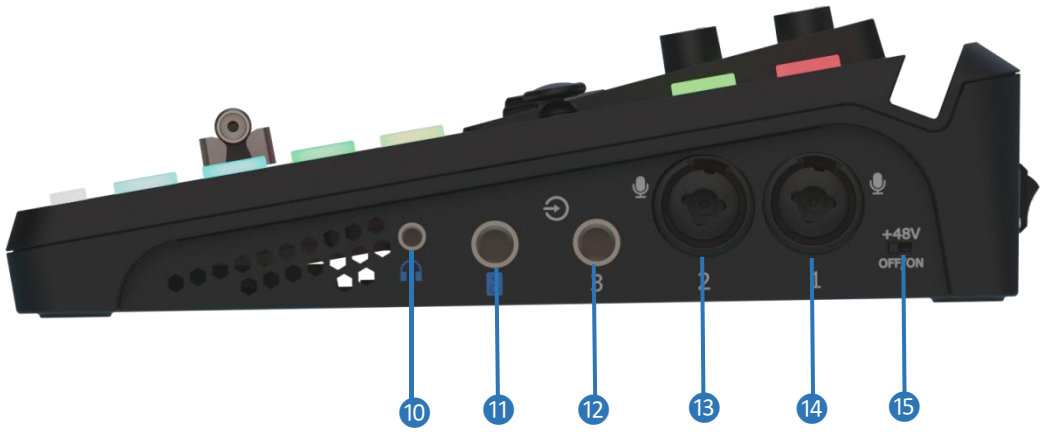
Front Panel

No.	Item	Description
1	**Audio Volume Control**	Embedded audio volume control for HDMI 1~4 inputs and SDI 1~4 inputs.
2	**Toggle**	• Size adjustment for Layer A and Layer B. • Zoom in/out for PTZ control.
3	**Layer Selection Buttons**	• Indicate Background, Layer A, Layer B, Logo, Overlay and Text. • No button lights for closed layer. • Single Click: Single click to add a layer to the PRE window. The button turns blue to indicate an enabled and selected state, which allows you to use Button 1~8 to select the corresponding layer signal or source. The Button lit green indicates an enabled but unselected state. Click the button lit blue again to close the enabled layer. • Long Press: 1) Long press the **Background** button to enter media management interface. 2) Long press Button **Layer A/Layer B/Logo/Overlay** to enter Layout Interface.
4	**Channel Fader**	Control audio volume level for MIC1, MIC2, Line-in, Bluetooth , and PROGRAM.

❺	**Audio monitoring and Mute Buttons**	• Audio Monitoring Button: Audio management for monitoring port. The button lit green allows users to monitor the audio from a channel ; no button light indicates that the monitoring function is off. • Mute Button: Mute the channel at the program port. When a channel is muted, the button will turn red; no button light to indicate the channel is on at the program port.
❻	**T-Bar**	Preview and Program views can be transitioned by pushing the T-bar.
❼	**Page Up**	Press to return to the previous operation interface or page.
❽	**Page Down**	Press to enter the next page.
❾	**Button 1~8**	• Button 1~8 correspond to 1~8 items in **MENU**. • Button 1~4: Used as HDMI / SDI input switch buttons if Layer A or B is selected or source selection buttons when selecting other layers. • Button 5~8: Used as source selection buttons when selecting layers except Layer A and Layer B. • No button light for no input. When there is an input signal, the button will turn white. When the signal is in preview, the button will turn green; when the signal is being edited, the button will turn blue.
❿	**5-Direction Joystick**	• Move up/down/left/right: Position adjustment for a layer; set pan, tilt, and zoom for PTZ camera. • Press: Press the joystick to enter full screen if Layer A or B is selected and press it once more to restore. Press the joystick to enter the PTZ control interface when under PTZ control.
⓫	**MENU**	• Single Click: In the main interface, click to enter **MENU**; in **MENU**, click to enter the main interface; in the interface except **MENU** and the main interface, click to return to the previous page. • Long Press: In the interface except the main interface, long press to enter the main interface; in the main interface, long press to lock buttons and touch screen, after which the **MENU** button will turn red; long press **MENU** button again to unlock.
⓬	**ON-AIR**	• Press to start or end the live streaming. • Check streaming status on LCD screen: The button turns red for successful streaming, blinks red for an unstable network and unlit for a finished streaming.
⓭	**5.5" HD Touch Screen**	For menu operation and multi-view window monitoring.

Interface Panel





No.	Item	Description
❶	**UVC**	Recognized as a USB webcam to connect computer or mobile phone for streaming or video conference.
❷	**USB-C**	• Insert an SSD or U disk for recording. • Insert a U disk to import audio, video, and graphic files. • Network sharing from Cell phone with a USB-C cable conenction and also Network sharing enable on cell phone.
❸	**Ethernet Port**	Achieve network connection and camera control connection for streaming, remote control, upgrade, and camera signal transmission.
❹	**PROGRAM Output**	Default to output real-time scene, and can be set as multiviewer or Test Pattern.
❺	**MULTI-VIEW Output**	Default as multiviewer output, and can be set as Program or HDMI 1~4 / SDI 1~4.
❻	**HDMI 1~4 Inputs**	4K resolution and downward compatible with all resolutions.
❼	**Locking Hole**	Use the T-lock to fix the device.
❽	**USB-C Power Port**	PD protocol, 12V 3.3A.
❾	**Power Switch**	Provide smartphone tethering when connecting to the standard USB-C cable.
❿	**Headphone Output**	3.5mm mini-jack for audio monitoring of each analog input and HDMI / SDI input.
⓫	**6.35mm TRS Jack**	Balanced TRS audio output.
⓬	**Line-in**	Balanced 6.35mm TRS jack to connect to PC, mobile phone, or audio console.
⓭	**MIC in 2**	XLR+TS input port to connect to microphone.
⓮	**MIC in 1**	• XLR+TS input port to connect to microphone. • 48V Phantom Power supported.
⓯	**+48V DIP Switch**	• 48V Phantom Power switch. • Default to OFF.
⓰	**SDI 1~4 Inputs**	• Four SDI input interfaces can be connected to HD cameras, computers, and other input sources. • Input resolution support HD and backward compatible. • Input supports 3G/HD/SD-SDI.

Notes:

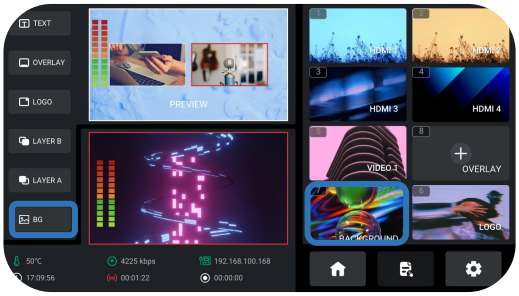
Except the condenser microphones that require phantom power, please turn off the phantom power switch when connecting other devices.

Using mini-mx SDI

Adding Background

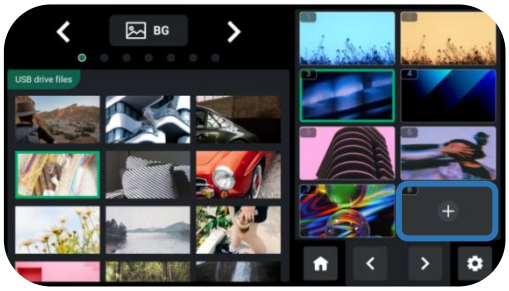
Inserting a U Disk

Insert a U disk into the USB port labeled number 1 to import background sources.



Entering the Background Interface

Tapping the BACKGROUND picture in the source selection area, long pressing the BACKGROUND icon in the Layer Selection Area, or pushing the BACKGROUND button on the Front Panel can quickly enter the Background Interface.



Importing and Adding Sources

Tap "+" to add sources to the source selection area. Long press the added source for deletion.

Notes: Sources should meet the following requirements:

1. Space and symbols are not allowed in the picture name.
2. jpg, png (32-bit depth), or bmp (24-bit depth); resolution within 1920x1080, subject to actual resolution.
3. Picture size should be consistent with the resolution.

Turning on Background

Tap **Background** on the front panel to add a Background to the PREVIEW window.
In the editing interface (multi-screen interface), push Button 7 to fast enter Background Management Interface for picture replacement.

Adding Layer A

Turning on Layer A

Press Layer A button on the front panel to enable and edit the layer.

Selecting Input Signal

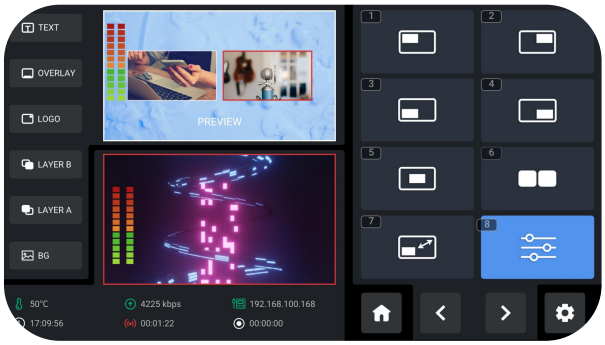
Press button 1~4 on the front panel to select the input.

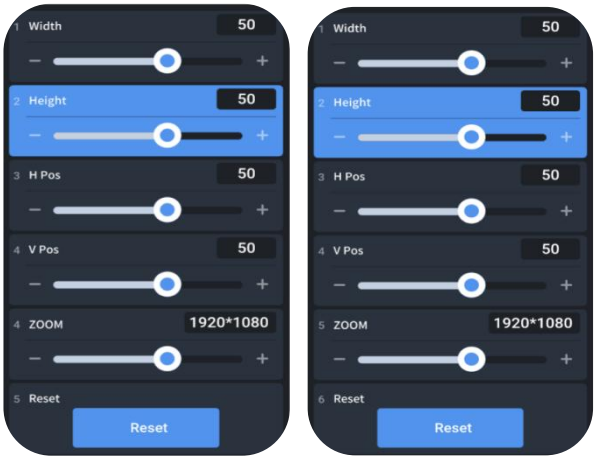
Adjusting Size and Position

When a layer is selected, use the toggle to scale or crop. Use the five-direction joystick to move the layer up/down/left/right. Press the joystick to fill the screen and press again to restore to the last size and position.

Selecting Layout

Long press Layer A/Layer B/Logo/Overlay Button, tap **LAYOUT** on the menu, or press button 2 to enter Layout Selection Interface.
Select the required layout for Layer A and display it on the background.





Layer Scaling and Cropping

Tap Option 8 to set more specific parameters.
Use the joystick to choose an item and then do settings by using the slide bar or toggle.

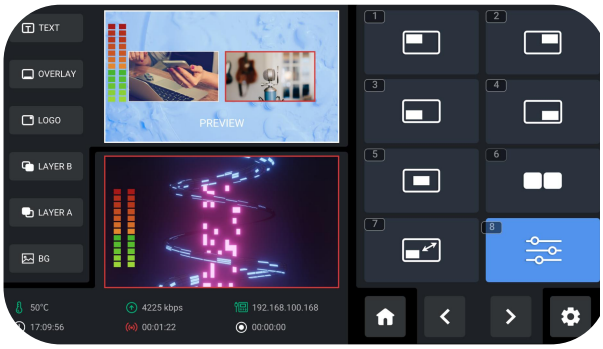
Adding Layer B

Turning on Layer B

Press Layer B button on the control panel to enable and edit the layer.

Selecting Layout & Setting Parameter

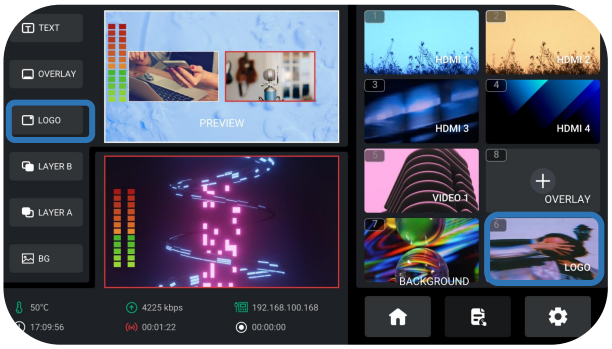
Operations such as layer selection, size and position adjustment, layer scaling, and cropping, please refer to Adding Layer A.



Adding Logo

Inserting a U Disk

Insert a U disk into the USB port labeled number 1 to import logo sources.



Entering Logo Interface

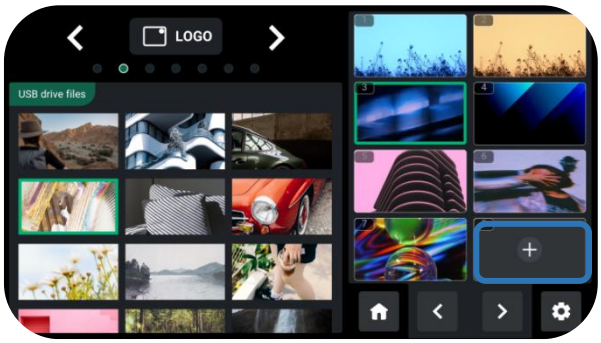
Tap the LOGO picture in the source selection area or long press the LOGO icon in the layer selection area can quickly enter the LOGO Interface.

Importing and Adding Sources

Tap "+" to add sources to the area on the right side, long press the added picture for deletion.

Notes:

1. Space and symbols are not allowed in the picture name.
2. Source format: png (32-bit depth) and resolution within 1920x1080, subject to the actual output resolution.

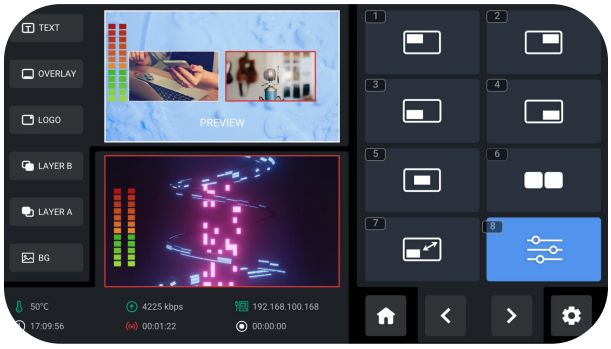


Enabling Logo

Press **Logo** button on the front panel to enable it.

Selecting Layout

Same as operations in Adding Layer A, choose the layout required in the layout interface.



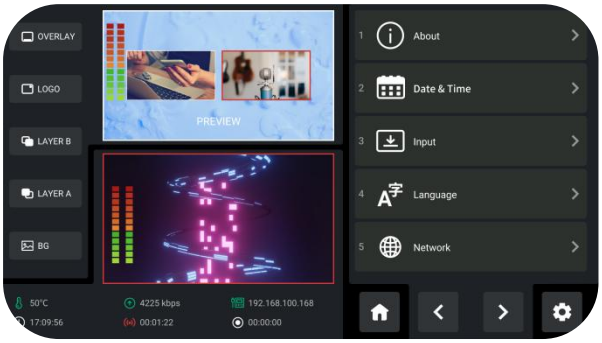
Adjusting Position

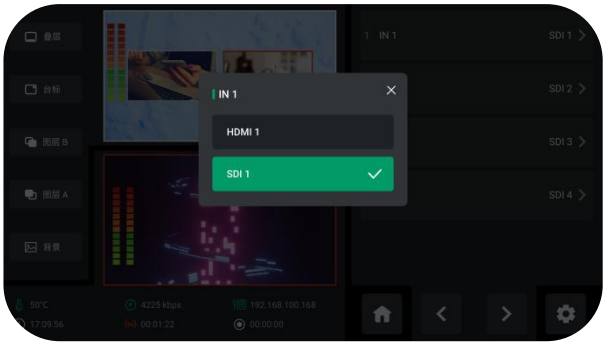
Use the joystick to quickly adjust the horizontal position and vertical position.

Input Setting

Entering Input Setting

Press “Input” to enter input sources setting.

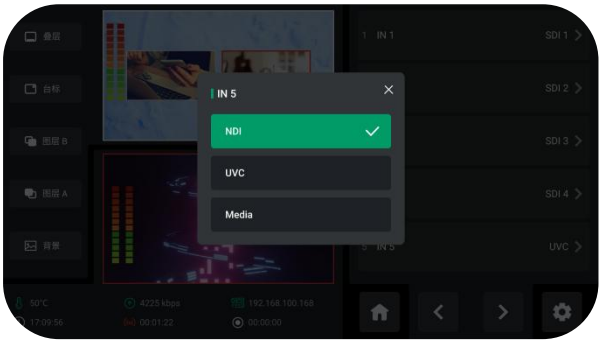


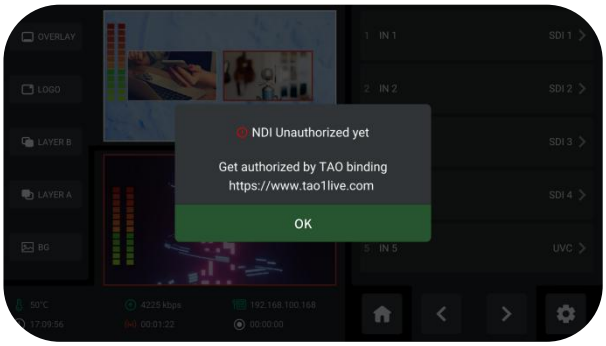


Select Input Sources

For IN1~IN4, each IN has a HDMI (HDMI IN1-IN4) and a SDI (SDI IN1-IN4) to select.

For IN5, there are NDI, UVC, and media to select.

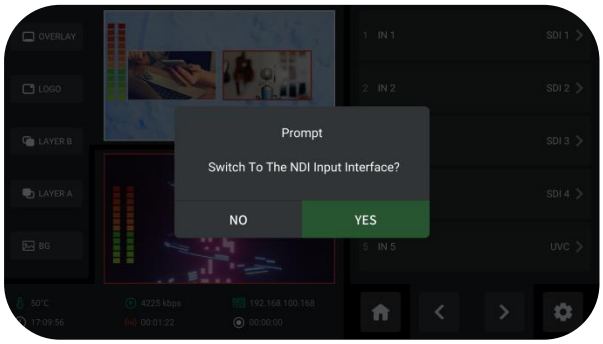


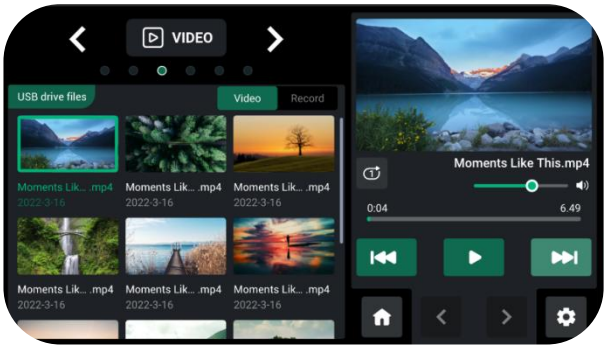


NDI

The NDI decorder is not available by default. If the NDI source is needed for IN5, users need to bind mini-mx SDI to TAO Cloud in advance. Note that this is a paid operation.

Tap “NDI” and a prompt interface will appear. Tap “Yes” and then you can select or add NDI sources.





Tap “Media” and a prompt interface will appear. Tap “Yes” and insert a U disk, then you can add media materials.

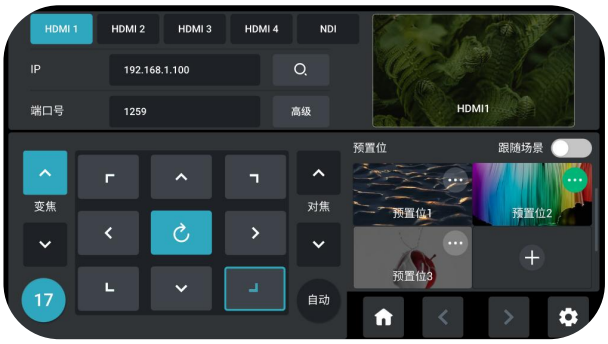
Controlling PTZ Cameras

Controlling PTZ

mini-mx SDI supports simultaneous control of up to four cameras and NDI PTZ.

Notes:

Please check if the port number of the controlled camera is set to 1259. If not, please enter the correct port number of the controlled camera in the box.



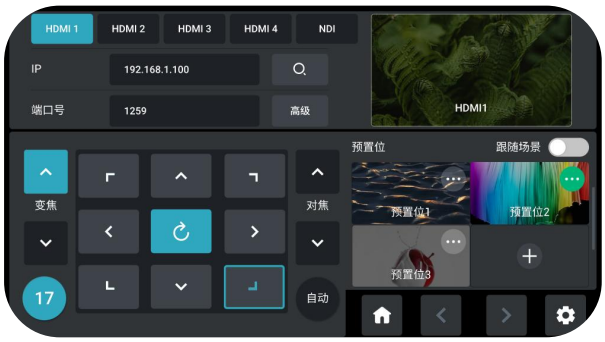
Setting IP Address Manually

The IP address of mini-mx SDI and camera controlled should be in the same LAN.

Enter the IP address of the camera in the following interface and then click "Enter" to save.

Adjusting Parameters

Adjust focus, position and speed to meet needs.

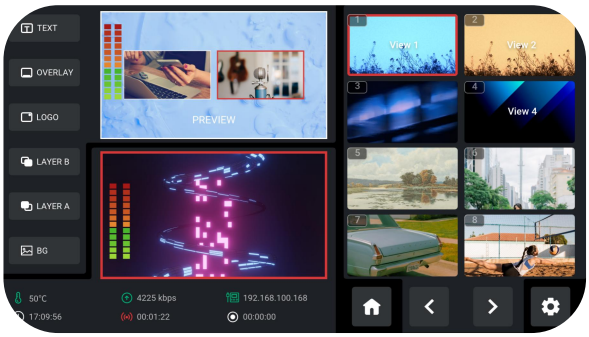


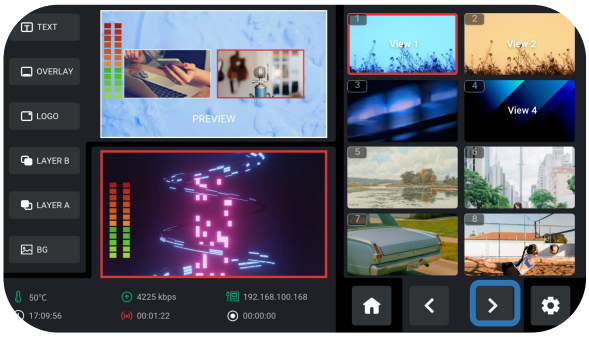
Saving Scenes

How to Enter Scene Interface

Press MENU Button to enter MENU, tap **SCENE,** or press button 4 to enter the interface.

You can also long press the PREVIEW window or click the PROGRAM window in the main interface to enter the scene interface for preset calling or saving.





Saving Scenes

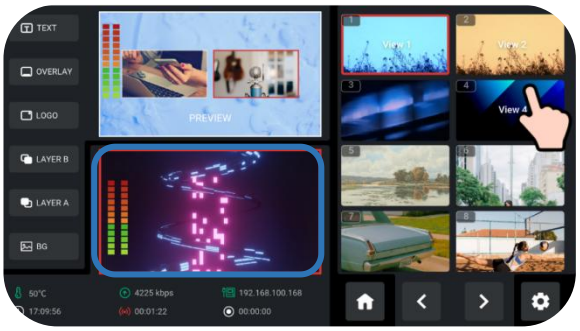
mini-mx SDI allows users to save 16 presets to the corresponding View 1~16. Click for page down.

Long press Preview Window in Editing Interface or Main Interface to choose whether to form a static picture of the current scene and save it or not. Long press a saved scene can delete it.

Loading and Switching Scenes

Loading Scenes

Click the scene needed and then double click the PROGRAM window for direct loading.



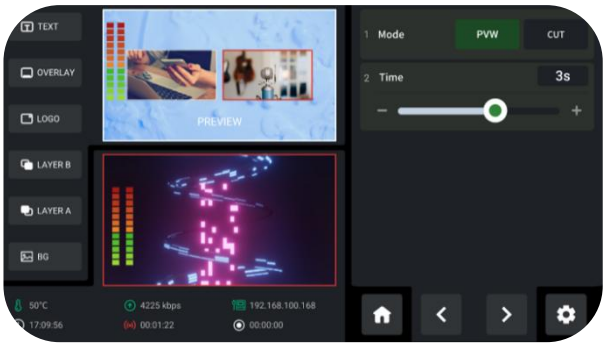
Selecting Switching Effect

17 transition effects are available.

Selecting Transition Mode

mini-mx SDI provides two transition modes, including T-Bar PRE Mode and CUT Mode.

Tap the **Setting** icon on Menu or button 8, then click ‘System’ > ‘Mode’.



Notes:

Only the CUT mode supports time setting.

T-Bar Mode

Preview and Program views can be transitioned by pushing T-bar.

CUT Mode

Press button 1~4 on the front panel to quickly fade in/out the signals. The button 1~4 correspond to the 4 HDMI / SDI inputs one-to-one.

Audio

Understanding the Audio Mixer

Default Configuration

Press MENU button to enter **MENU**, tap **AUDIO** in the menu or press button 6 to enter the audio setting interface.

mini-mx SDI has eight separate inputs for connecting various devices and audio sources: **three XLR/TRS jacks** for connecting microphones, computers, and audio consoles; **a Bluetooth channel** for connecting computers and mobile devices wirelessly; **four HDMI / SDI inputs** support embedded audio volume adjustment.

Using the Physical and Virtual Faders

mini-mx SDI features four physical faders and eight virtual faders.
The physical faders function like any other mixer: use the faders to adjust the level for channels.
The virtual fader position will be mirrored in real-time on the audio setting interface.

Using the Mute Buttons

The red button under each physical fader is a mute button, which can mute a channel on the output.
You can also access a mute button by entering the audio setting interface and then tapping the mute icon.
When a channel is muted, the button on the front panel and icon on the audio setting will turn red.

Using the Audio Monitoring Buttons

The green button under each physical fader is a “listen” button, which allows users to monitor the audio from a channel. Users can also access this feature by tapping the level meter on the audio setting interface and then the ear-shaped icon.
When the “listen” function is activated, the corresponding button on the front panel and the icon on the audio setting interface will turn green.

mini-mx SDI features AI mini identification once AI mini connects, both in the menu and TAO cloud.

Understanding the Audio Outputs

Default Configuration

mini-mx SDI comes with two separate outputs, including one headphone output and one program output.

Using the Physical and Virtual Faders

mini-mx SDI features two physical faders and two virtual faders for adjusting output volumes.

Perform the same operations as described before: use the sliders to adjust the volume for the output channels and the position of the virtual faders will be mirrored in real-time on the audio setting interface.

Using the Mute Buttons

The mute buttons under each physical fader are represented in two types: tap the right one to mute all channel on Program output port and Preview output port. You can also access a mute button by entering the audio setting interface and then tapping the mute icon.

When a channel is muted, the button on the front panel and icon on the audio setting will be illuminated red.

The left one is for simultaneous audio management of four HDMI / SDI signals on Program output port and Preview output port.

Tap the button on the left can mute the corresponding channel on Program output or Preview output.

AI mini Identification

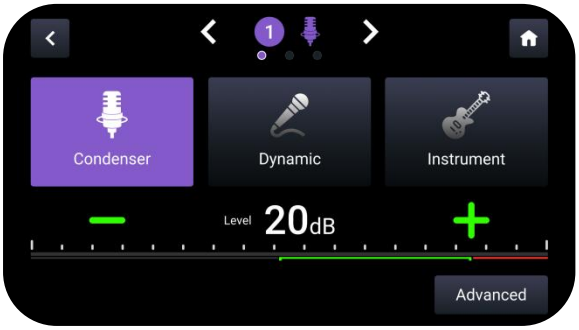
AI mini Indentification

mini-mx SDI features MIC1 and MIC2 by default and a MIC3 will be displayed when recognizing a camera signal. Attach the AI mini receiver to the device, the interface will display **AI mini**. If attaching other brand cameras, the inerface will display **MIC3**.

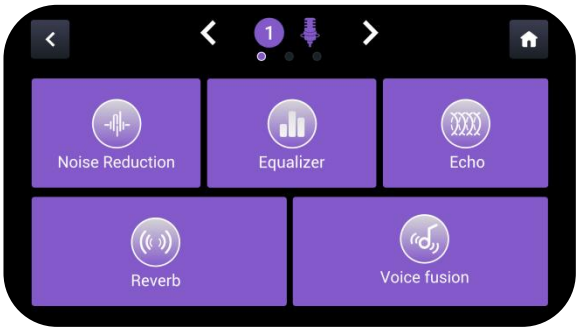
Advanced Functions

Advanced Functions

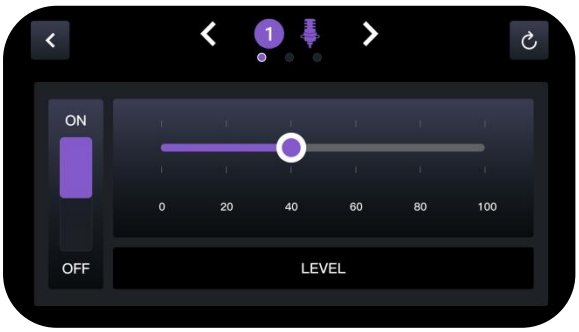
Press the former three icons on the audio setting interface to enter the microphone setting interface.



Select an input and tap **Advanced** to enter the advanced function selection interface.



MIC1 and MIC2 feature five advanced audio functions: noise reduction, equalizer, echo, reverberation and voice fusion. Press to activate a functon.



Noise reduction

Slide the bar to adjust the level of noise reduction. Tap the button on the top right to reset the parameters.

Equalizer

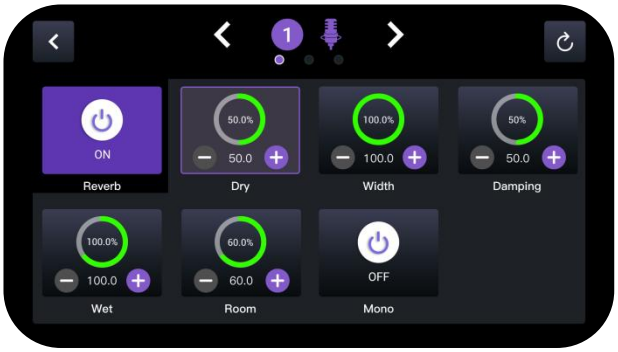
For equalizer, press "-" or "+" to adjust the bell and gain. Tap the button on the top right to reset the parameters.

Echo

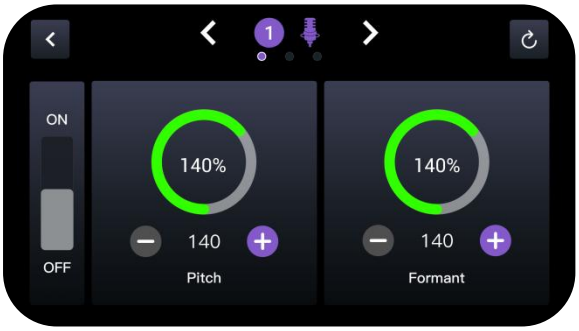
Definition: distinct repetition of sound

Press "-" or "+" to adjust the parameters. Tap the button on the top right to reset the parameters.

Reverberation



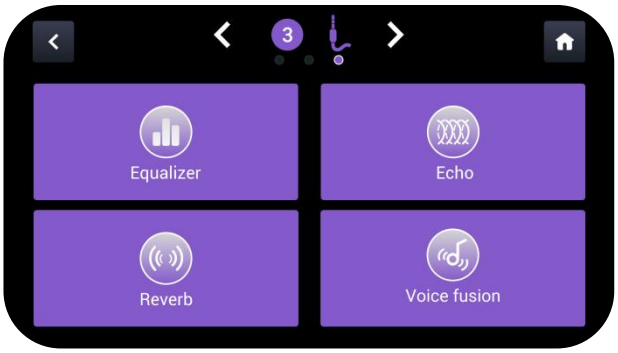
Definition: Blended, continuous sound
Press "-" or "+" to adjust the parameters. Tap the button on the top right to reset the parameters.



Fusion

Press "-" or "+" to adjust the parameters. Tap the button on the top right to reset the parameters.

MIC3 features four advanced audio functions: noise reduction, equalizer, reverberation and voice fusion. Press to activate a function. The parameter adjustments are the same as described above.



Streaming and Recording

Streaming

Connecting USB for Streaming

The USB port labeled number 2 is for video capture, which allows users to capture videos to computer and the captured video content can be streamed to Facebook, YouTube, Zoom, Twitter and other streaming media platforms via a third-party video media player software like OBS.

To perform live-streaming, users can proceed as follows:

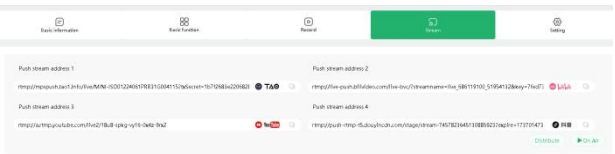
1. Log into Tao Cloud platform and bind the device to the TAO Cloud.
2. Fill in the basic information in any live platform you are ready to stream on, copy the streaming address and streaming key into the TAO Cloud, and tap "Distribute" on the interface.
3. Next, press "ON AIR" on the front panel to start the streaming.

Connecting LAN for Streaming

Use the LAN port, users can perform live streaming directly to the live platform via IP address.

Notes:

Choose the correct network mode when using the local network for streaming. (Tap the Setting icon on Menu or push Button 8, then 'Network' > 'Network Mode' > 'Cable')



Recording

Connecting a USB Storage Device

mini-mx SDI supports recording streaming media content to an external USB storage device, such as U disk or SSD through the USB port labeled number 1.

Notes:

1. Format the SSD or U-disk before recording.
2. Please remove the SSD or U-dick only after the recording is complete.

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