RGBlink®

TAO 1mini-HN

2K Streaming Node

Quick Start

Content

Product Overview

Key Features

● Small and compact, easy to carry

● Serve as either NDI video encoder or NDI decoder

● Support multiple formats, including RTMP/RTMPS/RTSP/SRT/FULL NDI/NDI | HX3/NDI |

HX2/ NDI | HX

● Stream to at least 4 platforms at the same time

● Low latency of end-to-end transmission

● Intuitive touch control, higher color and image quality

● Power from USB-C or PoE network

● Dual ¼in mounts

Front Panel

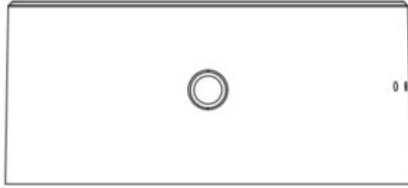|		
① Touch Screen	2.1-inch touch screen for real-time monitoring of signals and menu operations.	
② Tally Lamp	Work indicators show device status.	
③ ¼in Mounts	For mounting.	

Interface Panel

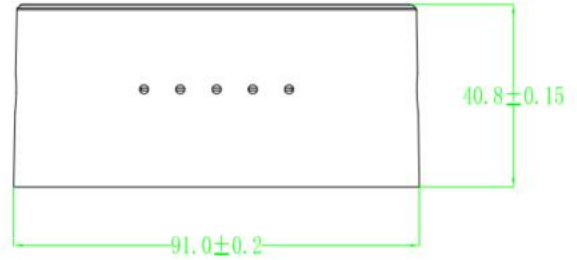|		
❶ USB-C	Connect to the power supply, support PD protocol.	
❷ HDMI	Connect to external monitor for real-time monitoring of inputs and outputs.	
❸ USB-C	For receiving video signal from your phone or others. Connect to USB camera for UVC capture. Support 5V/1A reverse power supply.	
❹ HDMI	For receiving video signal.	
❺ 3.5mm Audio Socket	For analog audio input and audio output monitoring.	
❻ USB3.0	Connect to hard disk for recording, and storage up to 2T.	
❼ LAN	Gigabit network port with PoE.	

Dimension

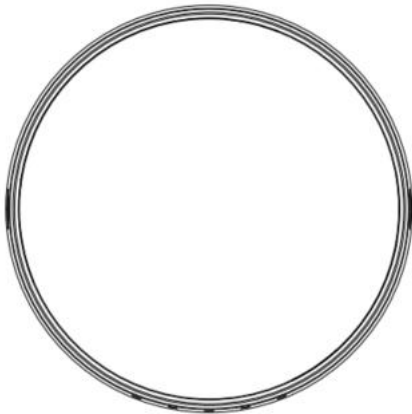Following is the dimension of TAO 1mini-HN for your reference:
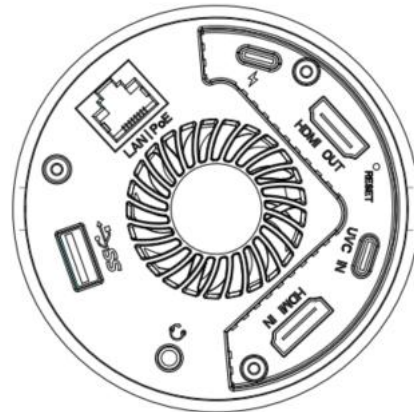
91mm(diameter)x40.8mm(height).

Bottom View

Right View

Front View

Rear View

Main Interface

① Output Area	• Three functions：RTMP Push、NDI Encoding and Video Recording. • Tap icon to trigger function
② Settings	• Tap to enter Settings Menu. • Eight functions：Home、Input、Output、Internet、Bluetooth、Fan Speed、Brightness and About.
③ Input Area	• Five functions：HDMI & UVC input Signal Selection、USB Player、RTMP Pull and NDI Decoding. • Tap yellow arrows to choose function；Tap icon to trigger function.
④ ON AIR	Tap icon to start streaming; long-press to enter configuration interface.

Getting Started

Connect Input Signal

Connecting Signal Source

Connect the HDMI/UVC signal source to the HDMI/UVC input port of TAO 1mini-HN through a cable. And connect the HDMI output port to the display via an HDMI cable.

Plug in Power

Connecting Power Supply

Connect your TAO 1mini-HN with the packaged USB-C power link cable and standard power adapter.
TAO 1mini-HN also supports power from PoE network.

Powering TAO 1mini-HN

Connect the power and video input source correctly, power on the device, and the 2.1 inch screen will show TAO 1mini logo and then come into the main menu.

⚠️ **Warning：**

1. Choose functions through tapping and set parameters through long-pressing.
2. In **Settings**, tap **Arrow Icon** to choose different functions.
3. NDI encoding mode and decoding mode cannot work simultaneously.

Connect Network

Connecting Network

Connect one end of the network cable to LAN port of TAO 1mini-HN and the other to the switch.
You can also connect directly to the network port of your computer.

Network Configuration

TAO 1mini-HN and your computer configuration must be in the same LAN. There are two ways to configure a network.

Dynamic IP Setting

Step 1: Ensure the switch has access to the network.
Step 2: Connect TAO 1mini-HN and the computer to the same switch and in the same LAN.
Step 3: Turn on DHCP of TAO 1mini-HN, no configuration is needed for your computer.

Static IP Setting

Step 1: Click Network icon in Settings for TAO 1mini-HN network configuration. Turn off DHCP and manually configure IP address, net mask and gateway. The default IP address is 192.168.5.100.

Step 2: Turn off the computer's network and then configure TAO 1mini-HN and computer to the same LAN. Please set the IP address of the computer network port to 192.168.5.*.

Step 3: Please click the buttons on the computer as follows: "Network and Internet Settings" > "Network and Sharing Center" > "Ethernet" > "Internet Protocol Version 4" > "Use the IP address below", then manually enter the IP address with 192.168.5.*.

NDI Encoding & Decoding

NDI Encoding

Application Diagram

Refer to the diagram for application of NDI encoding.

Selecting Input Signal

Tap yellow arrows to select HDMI or UVC as input signal according to actual input, and make sure the input image can be displayed successfully on the screen of TAO 1mini-HN.

Configuring Parameters

Tap NDI Encoding icon in Output Area to turn on NDI Encoding and long press the icon to choose encoding format (NDI|HX by default), set resolution, bitrate and check channel name.

Download NDI Tools

Download: https://www.newtek.com/ndi/tools/#

Open NewTek Studio Monitor software and then click the icon in the upper left corner to display the list of device names discovered.
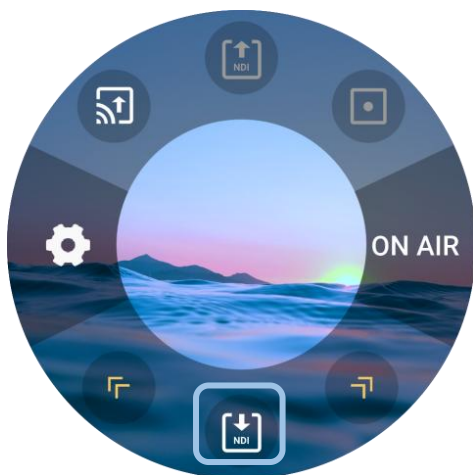
Select device to connect, and pull the current video stream of TAO 1mini-HN.

After successful pull of video stream, you can click blank area of device interface to check NDI resolutions.

NDI Decoding

Application Diagram

Refer to the following diagram for application of NDI decoding.

Selecting NDI Sources

Configure network of other device (Support NDI decoding) and TAO 1mini-HN to the same LAN.

Tap yellow arrows to select NDI Decoding icon. Long press the icon to enter the NDI decoding interface.

Click **Search** to find the NDI sources in the same LAN.

Find the NDI source to be decoded by swiping the screen and then click ✓ to decode and output.

⚠ **Warning**：

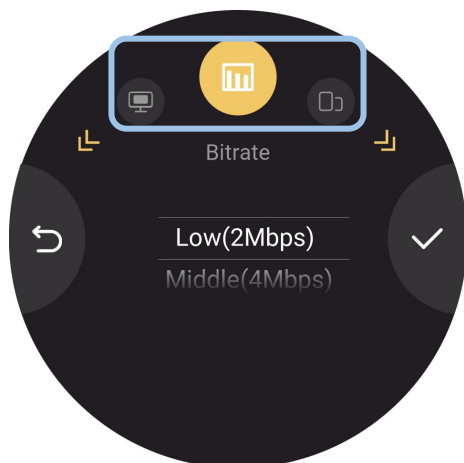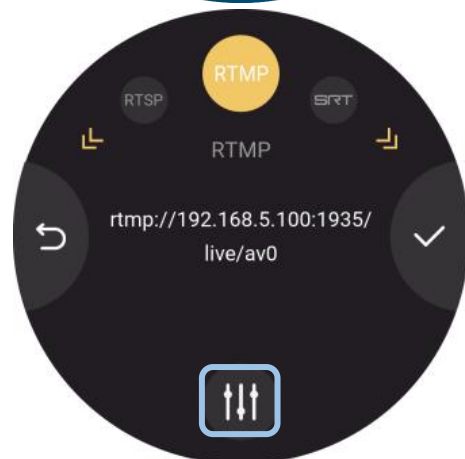NDI encoding mode and decoding mode cannot work simultaneously.

RTMP Push

RTMP Push

Tap RTMP Push icon in Output Area.

The interface will display the RTSP/RTMP/SRT stream address of TAO 1mini-HN. Check RTSP/RTMP/SRT stream address by clicking ✅.

Users can modify IP address of TAO 1mini-HN in Network Settings and then the RTMP/RTSP/SRT stream address will be modified synchronously.

Configuring Parameters

Click Edit Icon at the bottom to set the Resolution, Bitrate and Display Mode.
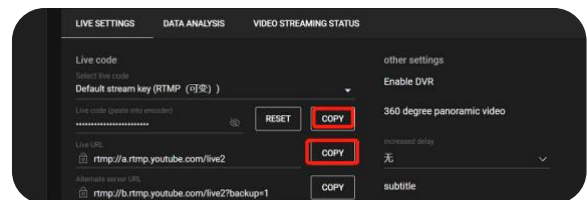
YouTube Stream

Operate RTMP Push via USB disk
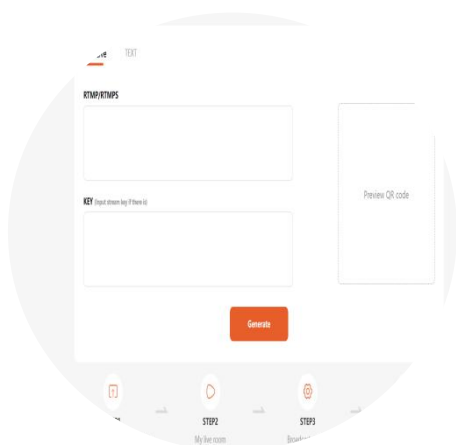
Operating RTMP Push via USB disk

Step 1: Make sure the device is connected and the network is set up.

Step 2: Open YouTube Studio on your computer to Copy Stream URL and Stream Key.

Step 3: Create a new TXT file first, and paste the Streaming URL and Streaming Key (**the format must be: rtmp//:YOUR STREAM URL/YOUR STREAM KEY**), and save the TXT file to USB as rtmp.ini.(Newline is required to add multiple streaming addresses) and connect the USB disk to TAO 1mini-HN's USB port.

Operate RTMP Push via TAO APP
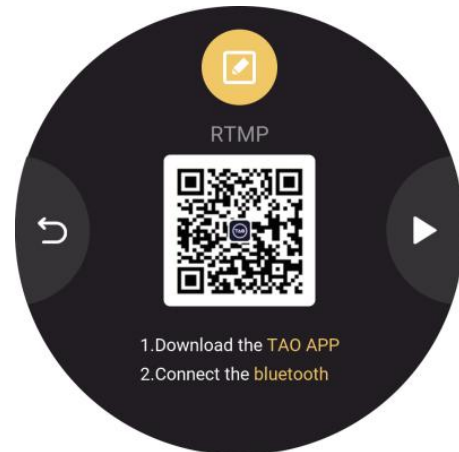

Copying Stream Address & Key

Create QR code:
https://live.tao1.info/stream_code/index.html

Copy stream address and stream key to the above address to create the QR code. The created QR code will be displayed in the right.
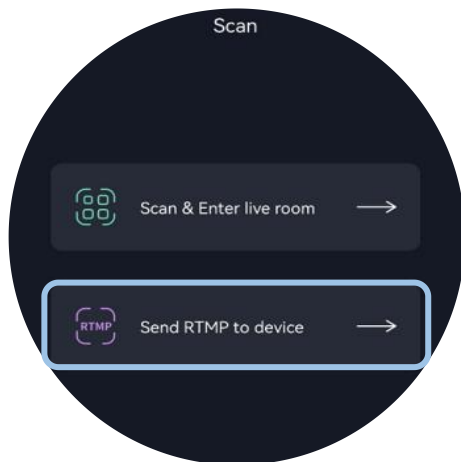
Downloading TAO APP

Use your mobile phone to scan the QR code to download TAO APP.
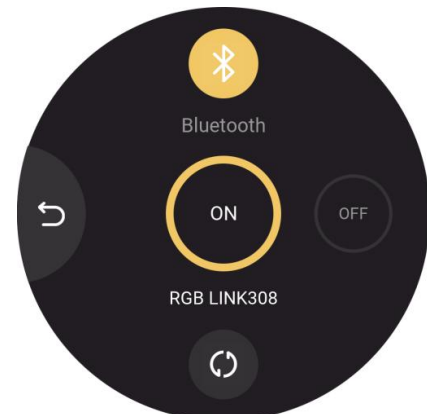
Sending RTMP Stream Address

Click TAO APP Icon to enter the homepage.
Click Scan Icon in the homepage and then click Send RTMP to Device.

Turning on Bluetooth

Click Bluetooth icon in Settings.

Choose to turn on or off Bluetooth by swiping the screen left and right.

Pairing TAO 1mini-HN with TAO APP

Turn on Bluetooth of TAO APP. Then TAO 1mini-HN will be recognized.
Click connect to pair TAO 1mini-HN with TAO APP.

Scanning the QR Code

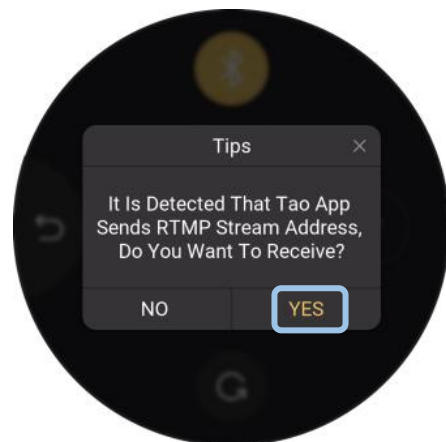After successful paring, click Device Name > Scan Icon > Scan QR code.

Sending RTMP Stream Address

The RTMP address will be shown in the box, then click Send RTMP.

Receiving RTMP Stream Address

TAO 1mini-HN will pop up a message, click YES to receive.
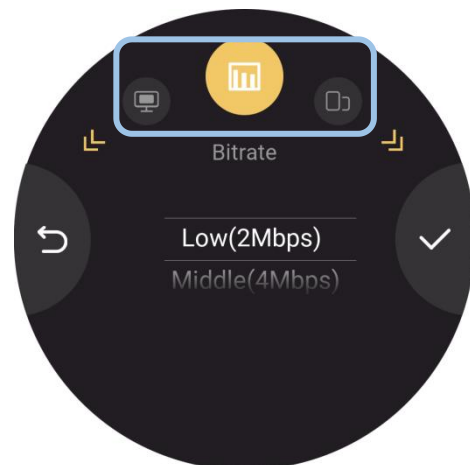
On Air

Selecting the Platform

Choose the platform you need. The saved platforms are displayed at the top of the interface, and the newly added platforms are displayed at the bottom. The green circle indicates the platform been chosen.

Long press the icon to check stream address and click **Edit** in the middle for deletion of platform.

Configuring Parameters

Users can also set Resolution, Bitrate and Display Mode by clicking   shown as below.

ON AIR

Finally, click **ON AIR** in the main interface to stream. (Support up to 4 live streaming platforms at the same time)

Checking Status

Click the blank area of the home page. The left area is the Status Display Area, which displays the status of the TAO 1mini-HN.

No network input	No U disk	Bluetooth not connected
With network input	U disk inserted	Bluetooth connected

⚠️ **Warning**:

◯--Streaming, ◯--Available but Failed in Streaming.
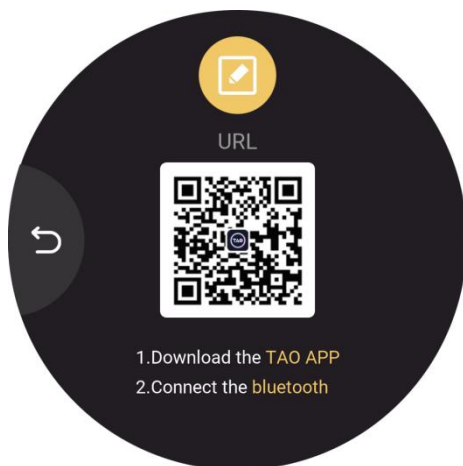
RTMP Pull

RTMP Pull

Tap yellow arrows to select RTMP Pull icon. Long press the icon to enter the following interface.

Downloading TAO APP

Click the icon for TAO APP installation.

Turn on Bluetooth in Settings to pair TAO 1mini-HN with your mobile phone so as to import RTMP stream address via TAO APP.

Recording

Inserting a U Disk

Insert a U disk to TAO 1mini-HN USB port and TAO 1mini-HN can work as a recorder.
The storage of U disk is up to 2T.

Configuring Parameters

Press and hold USB Recording icon to enter parameter configuration interface.

Users can set resolution, bitrate and check disk info in Settings.

⚠️ **Warning：**

During video synchronization, do not unplug the USB flash disk.

Contact us

Warranty

All products are designed and tested to the highest quality standard and backed by 1 year parts and labor warranty. Warranties are effective upon delivery date to customer and are non-transferable. RGBlink warranties are only valid to the original purchase/owner. Warranty related repairs include parts and labor, but do not include faults resulting from user negligence, special modification, lighting strikes, abuse(drop/crush), and/or other unusual damages.

The customer shall pay shipping charges when unit is returned for repair.

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