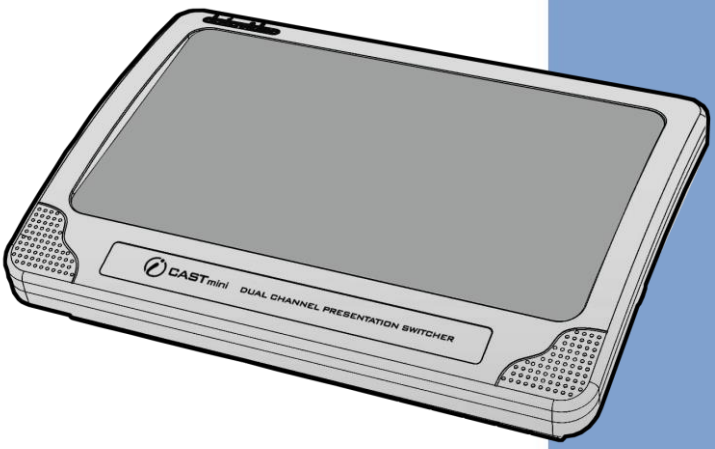
datavideo



4K DUAL CHANNEL PRESENTATION SWITCHER

iCAST MINI

Instruction Manual

www.datavideo.com

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Disclaimer of Product and Services

The information offered in this instruction manual is intended as a guide only. At all times, Datavideo Technologies will try to give correct, complete and suitable information. However, Datavideo Technologies cannot exclude that some information in this manual, from time to time, may not be correct or may be incomplete. This manual may contain typing errors, omissions or incorrect information. Datavideo Technologies always recommend that you double check the information in this document for accuracy before making any purchase decision or using the product. Datavideo Technologies is not responsible for any omissions or errors, or for any subsequent loss or damage caused by using the information contained within this manual. Further advice on the content of this manual or on the product can be obtained by contacting your local Datavideo Office or dealer.

FCC Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Warnings and Precautions

1. Read all of these warnings and save them for later reference.
2. Follow all warnings and instructions marked on this unit.
3. Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this unit in or near water.
5. Do not place this unit on an unstable cart, stand, or table. The unit may fall, causing serious damage.
6. Slots and openings on the cabinet top, back, and bottom are provided for ventilation. To ensure safe and reliable operation of this unit, and to protect it from overheating, do not block or cover these openings. Do not place this unit on a bed, sofa, rug, or similar surface, as the ventilation openings on the bottom of the cabinet will be blocked. This unit should never be placed near or over a heat register or radiator. This unit should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should only be operated from the type of power source indicated on the marking label of the AC adapter. If you are not sure of the type of power available, consult your Datavideo dealer or your local power company.
8. Do not allow anything to rest on the power cord. Do not locate this unit where the power cord will be walked on, rolled over, or otherwise stressed.
9. If an extension cord must be used with this unit, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord's rating.
10. Make sure that the total amperes of all the units that are plugged into a single wall outlet do not exceed 15 amperes.

11. Never push objects of any kind into this unit through the cabinet ventilation slots, as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock. Never spill liquid of any kind onto or into this unit.
12. Except as specifically explained elsewhere in this manual, do not attempt to service this product yourself. Opening or removing covers that are marked “Do Not Remove” may expose you to dangerous voltage points or other risks, and will void your warranty. Refer all service issues to qualified service personnel.
13. Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:

    a. When the power cord is damaged or frayed;
    b. When liquid has spilled into the unit;
    c. When the product has been exposed to rain or water;
    d. When the product does not operate normally under normal operating conditions. Adjust only those controls that are covered by the operating instructions in this manual; improper adjustment of other controls may result in damage to the unit and may often require extensive work by a qualified technician to restore the unit to normal operation;
    e. When the product has been dropped or the cabinet has been damaged;
    f. When the product exhibits a distinct change in performance, indicating a need for service.

Warranty

Standard Warranty

- Datavideo equipment is guaranteed against manufacturing defects for **one (1) year** from the date of purchase.
- A valid purchase invoice or other proof of purchase must be provided when requesting warranty service.
- The warranty period begins on the actual purchase date. If the purchase date cannot be verified, the warranty period will begin **thirty (30) days after shipment** from a Datavideo office.

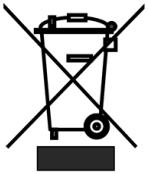
- Non-Datavideo branded products (products without the Datavideo logo) are covered by a **one-year warranty** from the date of purchase.
- Damage caused by accident, misuse, unauthorized repair, or exposure to sand, grit, or water is **not covered** under warranty.
- Virus or malware infections on computer systems are **not covered** under warranty.
- Any issues caused by unauthorized third-party software installations that are not required by Datavideo systems are **not covered** under warranty.
- All shipping, mailing, or transportation costs, including insurance, are the responsibility of the owner unless otherwise stated.
- **Teleprompter glass is not covered** under warranty.
- Accessories, including **headphones, cables, batteries, metal parts, housings, protective cases, cable reels, and consumable items**, are **not covered** under warranty.
- Warranty is valid only in the country or region of purchase.
- All other claims **not explicitly stated** are not covered.
- Your statutory rights remain unaffected.

Five Year Warranty



- Starting January 1, 2026, all Datavideo products that are successfully registered on the Datavideo official website are eligible for a **free four-year extended warranty**, in addition to the standard one-year warranty, for a total of **five years of coverage**.
- **Only registrations completed through the Datavideo official website qualify** for the five-year warranty. Registrations completed through local Datavideo offices, resellers, or authorized distributors **are not eligible**.
- Certain parts with limited service life — including **LCD panels, DVD drives, hard drives, solid-state drives, SD cards, USB thumb drives, lighting equipment, non-PCIe cards, and third-party PC components** — are covered by a **one-year warranty only** and are **not eligible** for the extended warranty.
- **Camera modules** are covered by a **three-year warranty from the date of purchase**.

Disposal



For EU Customers only - WEEE Marking

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



CE Marking is the symbol as shown on the left of this page. The letters "**CE**" are the abbreviation of French phrase "Conformité Européene" which literally means "European Conformity". The term initially used was "EC Mark" and it was officially replaced by "CE Marking" in the Directive 93/68/EEC in 1993. "CE Marking" is now used in all EU official documents.

Chapter 1 Product Overview

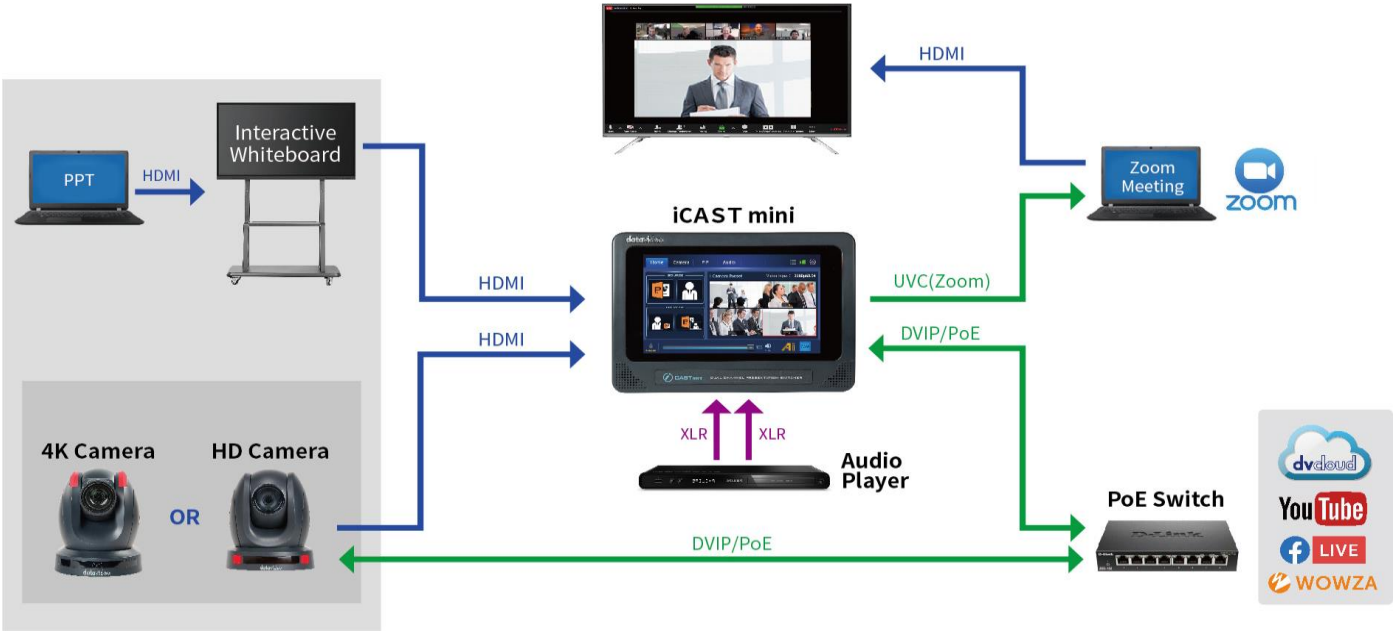
The Datavideo iCAST MINI is a versatile device designed to facilitate seamless video switching and control in various settings such as classrooms, lecture halls, houses of worship, and other environments. The iCAST MINI offers simple switching operations and with its touchscreen interface and robust features, the iCAST MINI will definitely provide professionals and beginners with a pleasant experience.

The iCAST MINI is an ideal solution for users looking for a compact yet powerful tool for video production.

Features

- **4K Video Input Support** up to 4K30/29.97/25 video formats
- Image capture for creating custom graphic key
- **Camera Auto-Tracking**
- **7" Touchscreen** for intuitive operation
- **Remote control** of camera options, including **pan, tilt, zoom, iris, focus, shutter,** and **white balance.**
- **Automatically detects** and **up/down scales** various **input resolutions** simultaneously
- Provides **2 HDMI 1.4 video inputs** and **1 HDMI 1.4 PGM output**
- A **UVC output interface** to connect to a laptop for Zoom or other remote teaching and conferencing applications.
- Equipped with an **RJ-45 Ethernet interface** with integrated **Power over Ethernet (PoE)** support
- **Audio Input and Output:** Features a **3-pin XLR/6.3 mm (1/4") TRS** combo socket for MIC or Line-IN audio input and a stereo RCA audio output.
- Supports **audio mixer** and **audio delay** functions.
- **Picture-in-Picture (PIP) Function:** Enables overlaying one video source within another.
- **DVIP Protocol Control** for advanced remote control.

System Diagram



Chapter 2 Connections and Controls

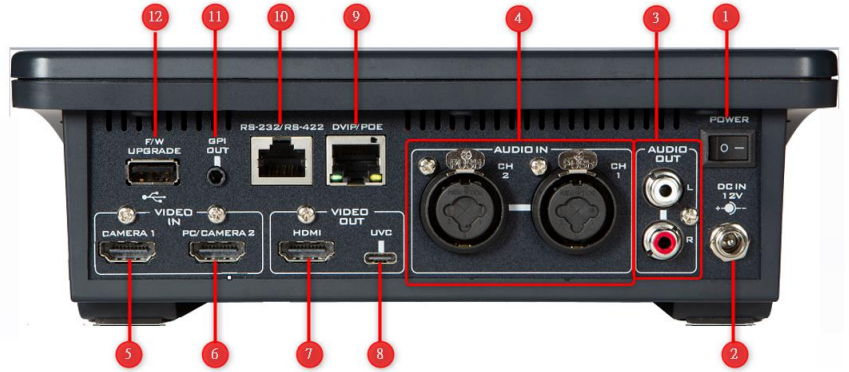
In this chapter, you will learn about the various connection ports on the iCAST MINI 4K Dual Channel Presentation Switcher.

2.1 Front View

The front view is an intuitive graphical user interface on a 7-inch touch panel.



2.2 Rear View



No.	Description
1	**POWER Switch** Turns ON/OFF the iCAST MINI 4K Dual Channel Presentation Switcher.
2	**DC IN 12V** DC in socket connects the supplied 12V PSU. The connection can be secured by screwing the outer fastening ring of the DC In plug to the socket.
3	**AUDIO OUT L/R** L and R ports are two RCA unbalanced audio output channels delivering a mixed or delayed audio output to a display device. For audio volume and delay adjustments, refer to **Section 4.6 Audio**.
4	**AUDIO IN** **CH1** and **CH2** are audio input interfaces, each designed as a combo type that supports both **3-pin XLR** and **6.3 mm (1/4") TRS** audio connections. The **3-pin XLR** connector is ideal for connecting external audio sources such as **mixers** and **audio processors**. The **6.3 mm (1/4") TRS** plug is designed for use with **dynamic microphones**. Please note that the iCAST MINI does not provide internal amplification. For **condenser microphones** or other devices requiring phantom power, you will need an external power source capable of providing at least **40 dB of pre-amplification** before connecting. For audio volume and delay adjustments, refer to **Section 4.6 Audio**.
5	**VIDEO IN – CAMERA 1** Connect a 4K or HD camera as a video source.

6	**VIDEO IN – PC/CAMERA 2** Connect a laptop or an interactive whiteboard to use the powerpoint slides as a video source. This port can also be used to connect a second camera.
7	**VIDEO OUT – HDMI** Connect an external large panel display for video monitoring. Refer to ***Section 4.2 Home*** for instructions on selecting the output video.
8	**VIDEO OUT – UVC** Connect the UVC port to your laptop or PC using a USB Type-C to USB Type-A adapter cable. When the PPT Switch is turned ON, it serves as a video source for video conferencing software such as Zoom. Refer to the ***PPT Switch*** section for a detailed explanation of this function.
9	**DVIP/POE** Connect the iCAST MINI to a PoE Ethernet switch using any standard Ethernet cable via the DVIP/POE port. The default connection mode is DHCP. For detailed instructions, refer to ***Chapter 3 Network Setup***. **Notes:** **1. Ensure the PoE Ethernet switch is powered by a 48V power supply.** **2. The iCAST MINI can be powered either via DC power or PoE. If both are supplied simultaneously, PoE will take priority.** **3. The iCAST MINI might experience a power failure or system crash if disconnected from the network unexpectedly.**
10	**RS-232/RS-422 Interface** Use an Ethernet cable to connect the RS-232/RS-422 interface to an external camera for control purposes. See **Chapter 5** for pinout information if you need to make a custom cable for the connection.

11	**GPI OUT (Under Development)** The GPI output can be used for basic external control operations. For example, the iCAST MINI can send pulse or level triggered signals to an external recorder, such as the HDR-80 or HDR-2, to enable/disable recording.
12	**F/W UPGRADE** To update the firmware, connect a USB flash drive containing the latest firmware file to the F/W Upgrade port. Refer to the **Firmware Update** section for further instructions. The USB port can also be used to connect the Datavideo RMC-2P 3-Channel Camera Controller using a USB Type-C to Type-A adapter cable to extend control over the camera connected to the iCAST MINI. Refer to the RMC-2P user manual for further instructions.

2.3 Left View

Connect a stereo headphone to the 3.5mm headphone jack to monitor the output audio.



Chapter 3 Network Setup

The iCAST MINI can be connected to the network via the DVIP port. The available connection modes are static IP and DHCP which will be described in the next two sections. By default, the iCAST MINI uses DHCP for network connectivity.

3.1 DHCP

Dynamic Host Configuration Protocol (DHCP) is a network management protocol used to automate the process of configuring devices on IP networks. Once configured to DHCP, the device will be assigned an IP address by a DHCP server upon connecting to the network.

If the iCAST MINI fails to get an IP address from a DHCP server within 30 seconds, it will use its fallback IP which is 192.168.100.1.

3.2 Static IP

When DHCP is disabled, you will be required to manually assign a static IP address to the iCAST MINI in order to be connected to the network. This can be done using the DVIP configuration tool. For detailed instructions, refer to the next section, **DVIP**.

3.3 DVIP

DVIP is an Ethernet-based protocol designed by Datavideo to connect a network of Datavideo devices. DVIP Configuration Tool is a special network configuration software tool designed for DVIP device search on the same network and configuring device network settings such as Hostname, DHCP mode, IP address, subnet mask, gateway IP, and primary and secondary DNS.

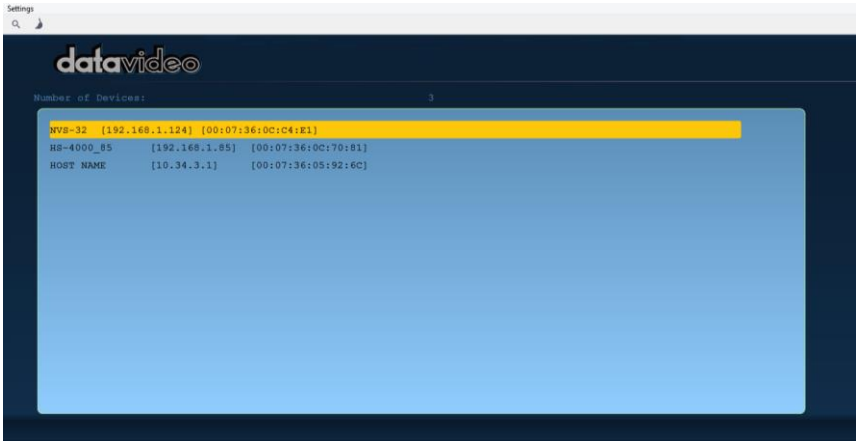
Download DVIP Configuration Tool from the iCAST MINI product page.

After you've installed the DVIP Network Configuration Tool, follow the steps outlined below to scan for online DVIP devices and configure their corresponding settings.

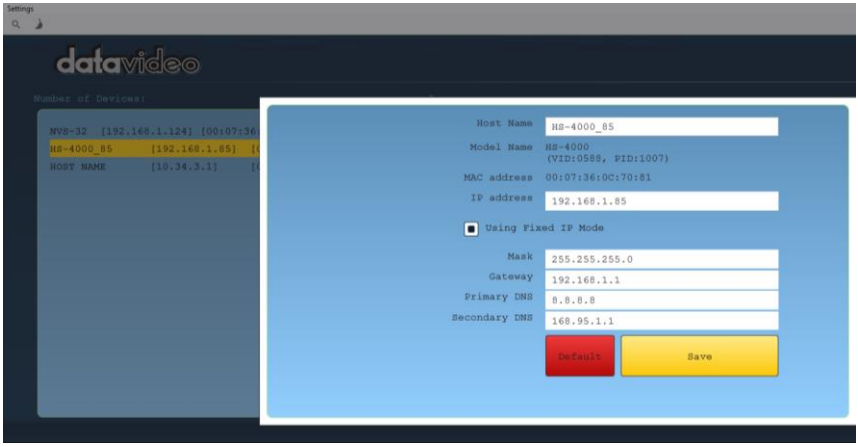
Step 1: Open the DVIP Network Configuration Tool then select your PC or laptop's network interface card from the drop-down menu as shown in the diagram below.



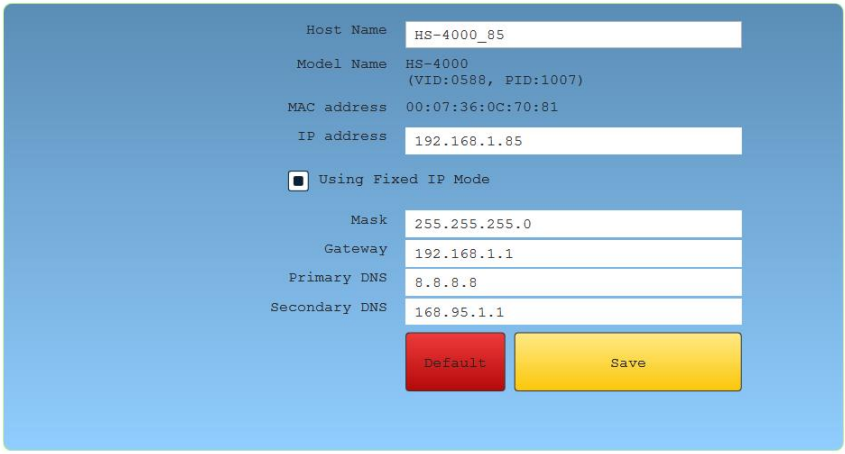
Step 2: The DVIP Network Configuration Tool interface is shown below and you should see a list of the connected devices.



Step 3: Click one of the connected device to show its information and network settings in the pop-up window shown in the diagram below.



Step 4: You are allowed to change the device name in the Host Name field and modify the device's network settings accordingly. Click the Save button to confirm the change. To reset, simply click the Default button.



Chapter 4 User Interface

Various functions of the user interface will be discussed in this chapter.



4.1 Tool Bar

The tool bar is located at the top right corner of the UI and has two icons, the **camera icon** and the **gear icon**.

Tap the **camera icon** to open the **Connect** page on which you will be allowed to configure the **DVIP**, **RS-422** and **RS-232** interfaces.

Tap the **gear icon** to open the **Setup** page to configure various settings such as UI language, output resolution, HDMI output format, network, etc.

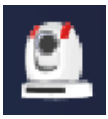
Connect

Tap the **camera icon** to open the **Connect** page as shown below.

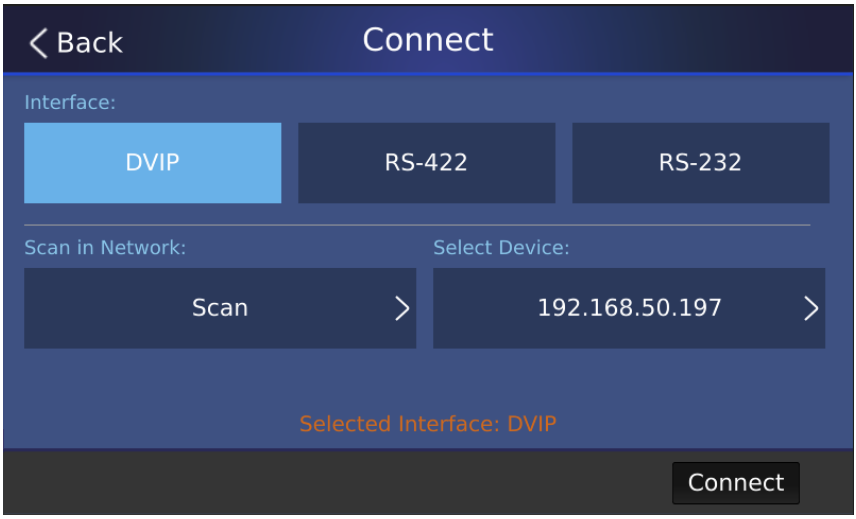
Please note that if no camera is connected, the icon will appear **greyed-out**. Once the camera is connected, the icon will change from **greyed-out** to **active**.



No Connection



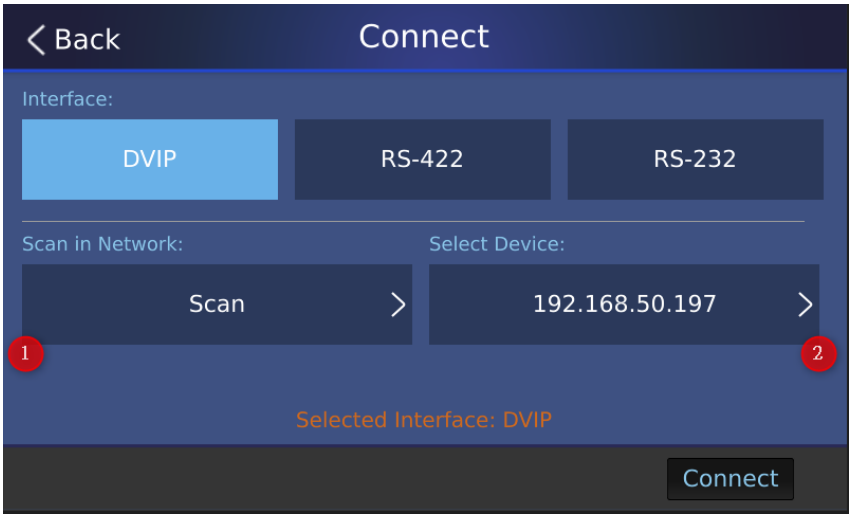
Active Connection



The iCAST MINI allows the user to use DVIP, RS-422 or RS-232 to control the connected camera. Each interface will be described fully in this section.

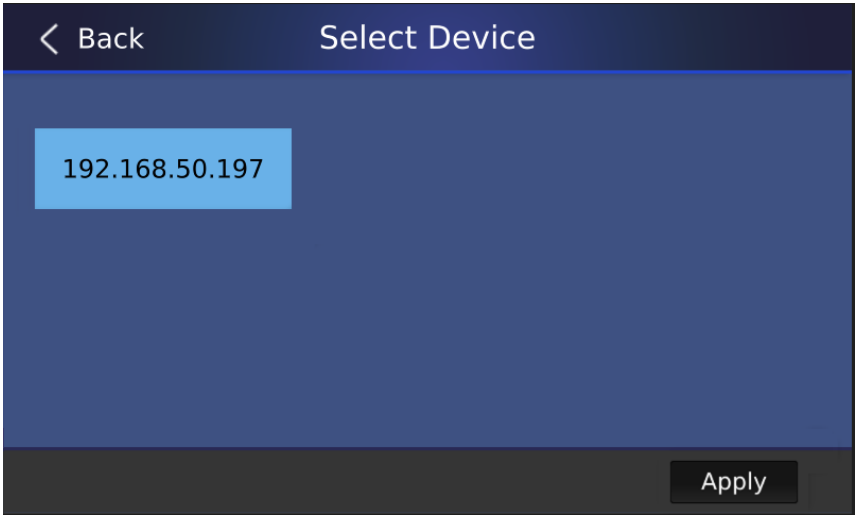
DVIP

On the **DVIP** connect page, (1) you can simply tap the "**Scan**" button to search for the cameras on the LAN that the iCAST MINI is connected to.



(2) After scanning, in the **Select Device** field, select the IP address of the camera that you would like to connect. Then click the **Apply** button to confirm

the selection and the **Connect** button to establish the connection. Please note that the iCAST MINI can only connect one camera at a time. For detailed instructions on the network setup, refer to **Chapter 3**.

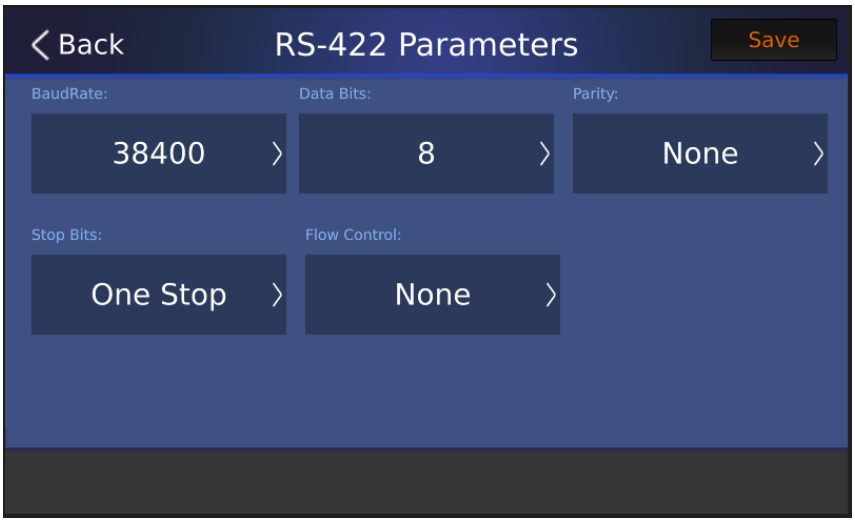


RS-422

The iCAST MINI supports camera control through RS-422 interfaces, enabling operation of the connected camera.Tap RS-422 to select the interface then tap **Settings** to configure the selected interface.



Configure the **baud rate**, **data bits**, **parity**, **stop bits** and **flow control** to use the RS-422 interface.



Baud Rate: This is the speed of data transmission, measured in bits per second (bps). The available rates are 9600, 19200, 38400, 57600 and 115200 bps.

Data Bits: Specifies the number of bits in a single data packet, typically set to 5, 6, 7 or 8.

Parity: A method of error checking that ensures data integrity during transmission. Options include none, even, or odd parity.

Stop Bits: Indicate the end of a data packet, providing a pause for the receiver to process the data. Common settings are 1 or 2 stop bits.

Flow Control: Manages the flow of data between devices to prevent data loss. Options include hardware (RTS/CTS), software (XON/XOFF), or none.

RS-232

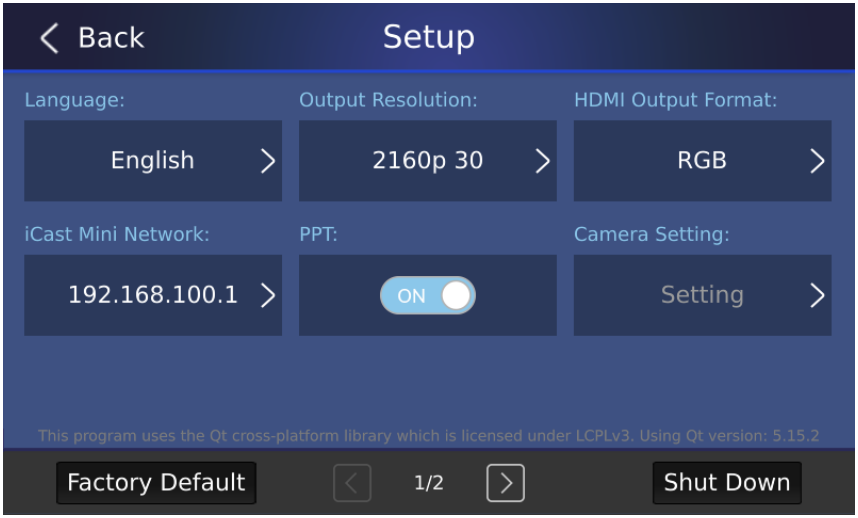
The iCAST MINI supports camera control through RS-232 interfaces, enabling operation of the connected camera. Tap RS-232 to select the interface then tap **Settings** to configure the selected interface. Since the RS-232 and RS-422 share the same settings, refer to the section on **RS-422** for details.



Setup



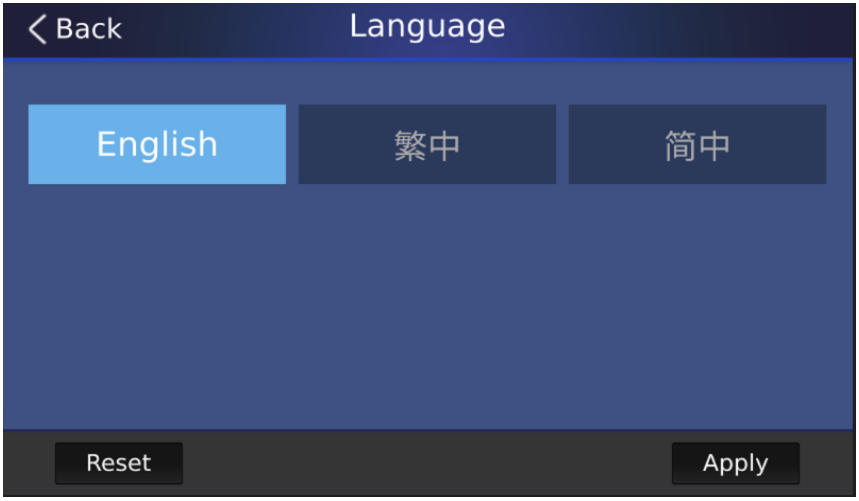
Tap the Gear icon to open the Setup page. See the diagrams below for items that you will be allowed to configure on the Setup page.





Language

Select English, Traditional Chinese or Simplified Chinese. Tap the **Apply** button to confirm. To reset to the default language, simply tap the **Reset** button. To return to the previous page, tap **Back**.



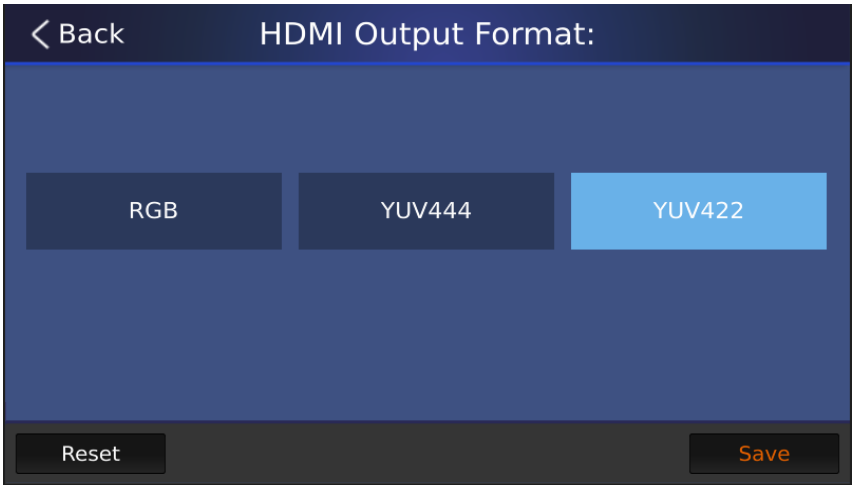
Output Resolution

Select a desired output resolution. Tap the **Apply** button to confirm. To reset to the default resolution, simply tap the **Reset** button. To return to the previous page, tap **Back**.



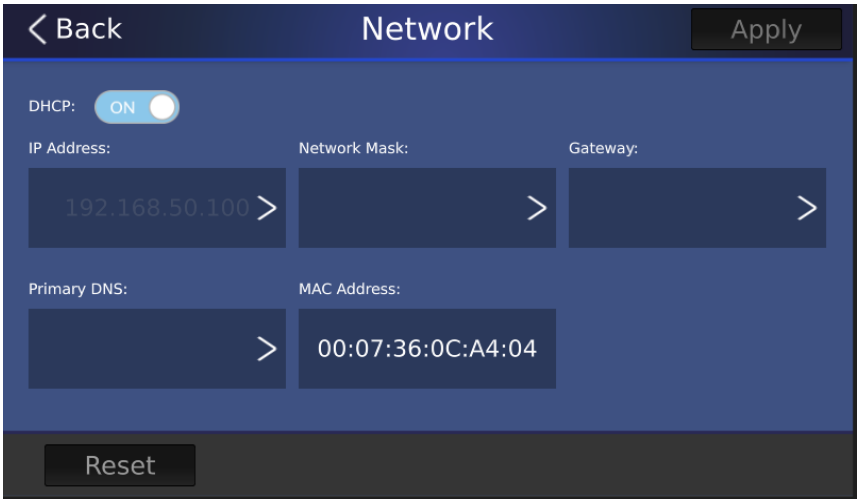
HDMI Output Format

The HDMI Output Format allows you to select a color space: RGB, YUV444 or YUV422. Tap **Save** to confirm the selected color space. Tap **Reset** to restore the factory default. Tap **Back** to return to the previous page.



Network

The iCAST MINI uses DHCP by default for network connetion. To use a static IP address, disable DHCP and manually enter the IP address, subnet mask, gateway IP address, and DNS server address. Note that the MAC address is hardcoded and cannot be modified.

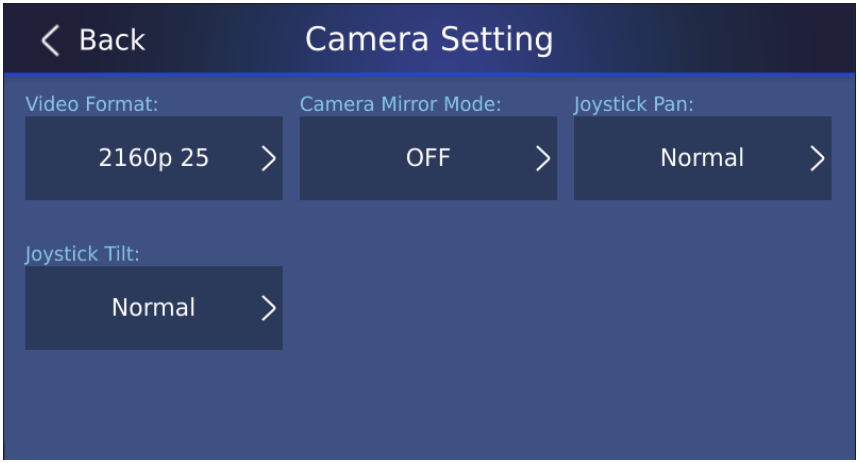


PPT Switch

Turning on the **PPT Switch** enables the UVC output port, which, when connected to a laptop/PC, will be recognized as a camera source by videoconferencing software such as Zoom. For information about selecting the video source for the UVC port on the UI, refer to ***Section 4.2 Home***.

Camera Settings

On the Camera Setting page, you will be allowed to access video format, mirror mode, and joystick pan and tilt directions.



Video Format

Select an output video resolution.



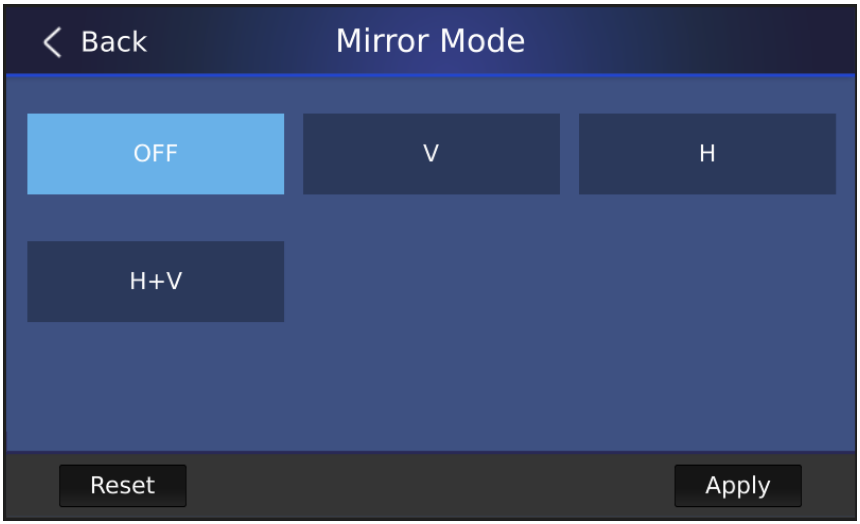
Mirror Mode

Select mirror mode.

V: Mirror the camera image vertically, flipping it top to bottom.

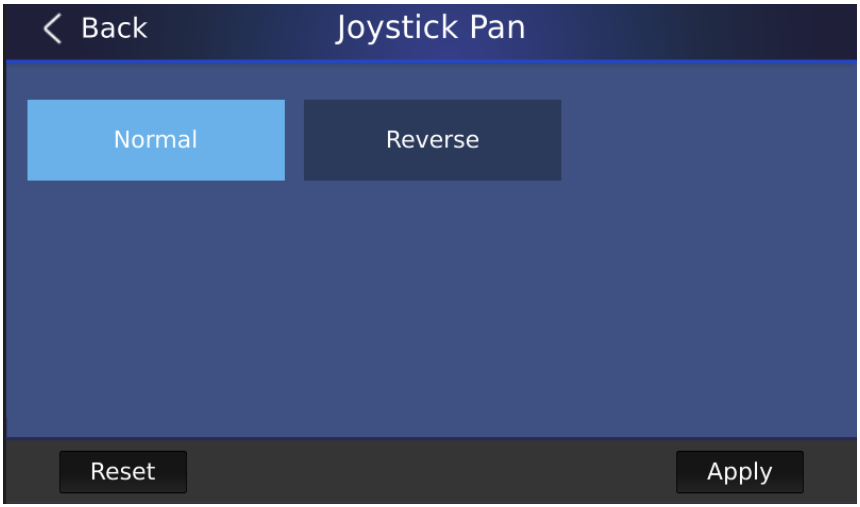
H: Mirro the camera image horizontally, flipping it left to right.

H+V: Mirror the camera image both horizontally and vertically.



Joystick Pan

The **Joystick Pan** sets the pan direction for the joystick.



Normal: In this mode, moving the joystick to the left will pan the camera left, and moving it to the right will pan the camera right.

Reverse: Reverses the standard direction, so moving the joystick to the left will pan the camera right, and moving it to the right will pan the camera left.

Joystick Tilt

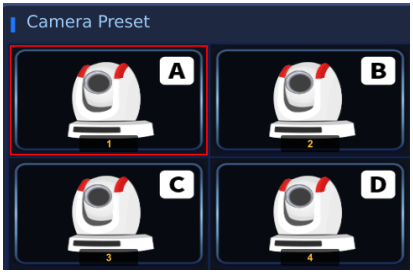
The **Joystick Tilt** sets the tilt direction for the joystick.



Normal: In this mode, moving the joystick up will tilt the camera up, and moving it down will tilt the camera down.

Reverse: Reverses the standard direction, so moving the joystick up will tilt the camera down, and moving it down will tilt the camera up.

Graphic Key



The **Graphic Key** allows you to select a thumbnail picture for the Camera Preset buttons.

Follow the steps below to set the thumbnail picture.

1. Tap the **Graphic Key** option.



2. On the **Position Image** page that opens, tap one of the **Edit** buttons.



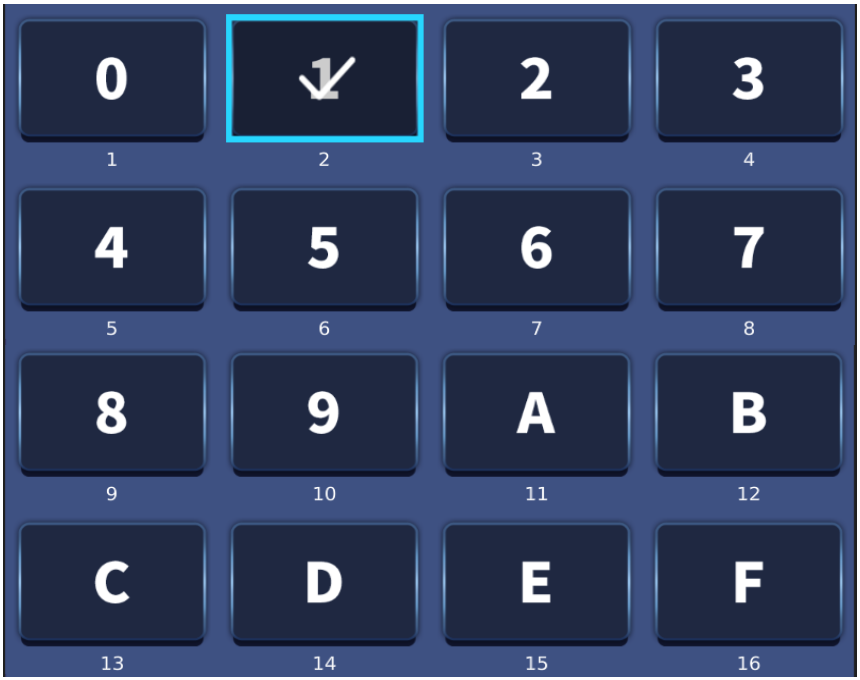
3. Tapping the **Edit** button should open the **Graphic Key Sets** page. There are 13 pages with a total of 102 graphic options. Tap the right and left arrow keys to move between pages.

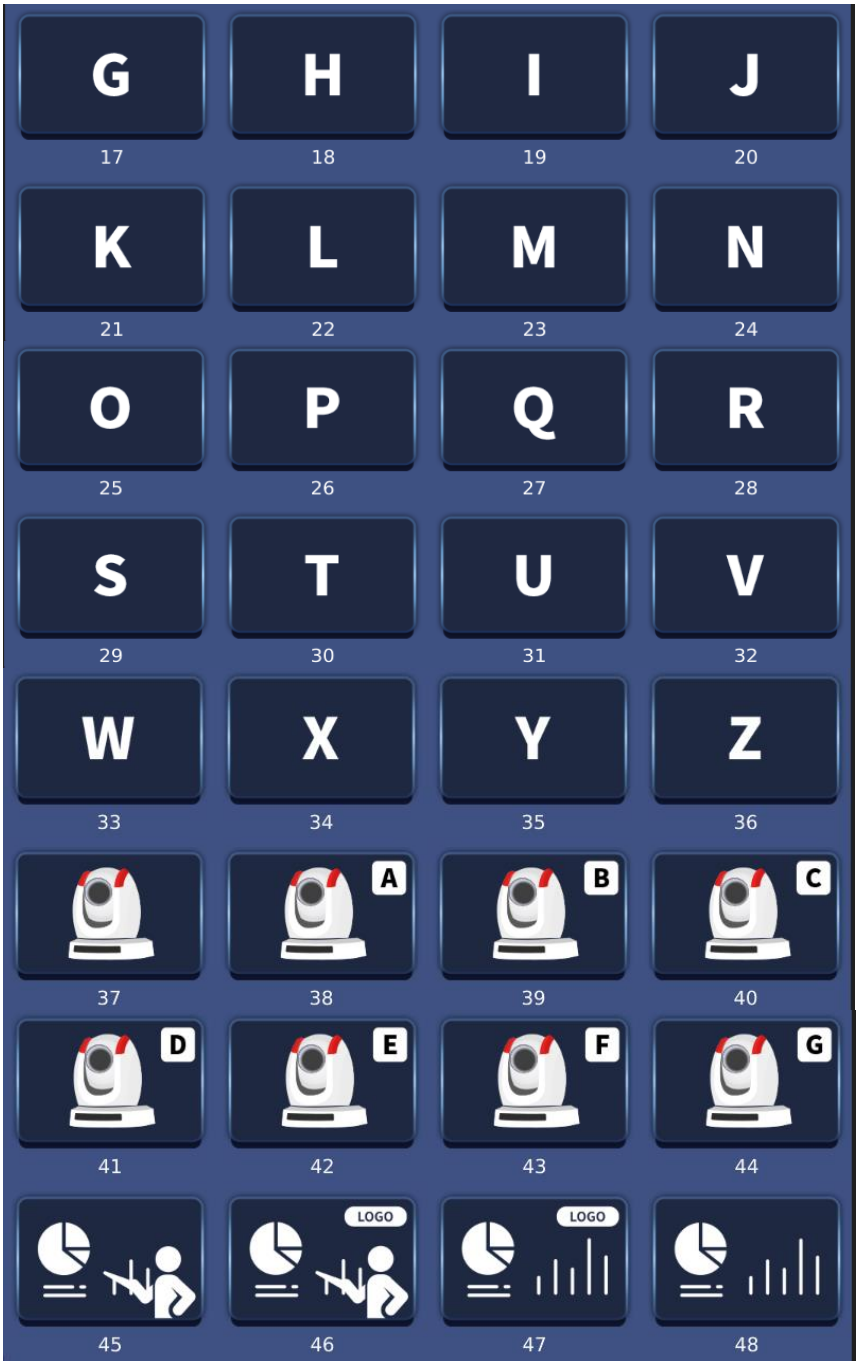


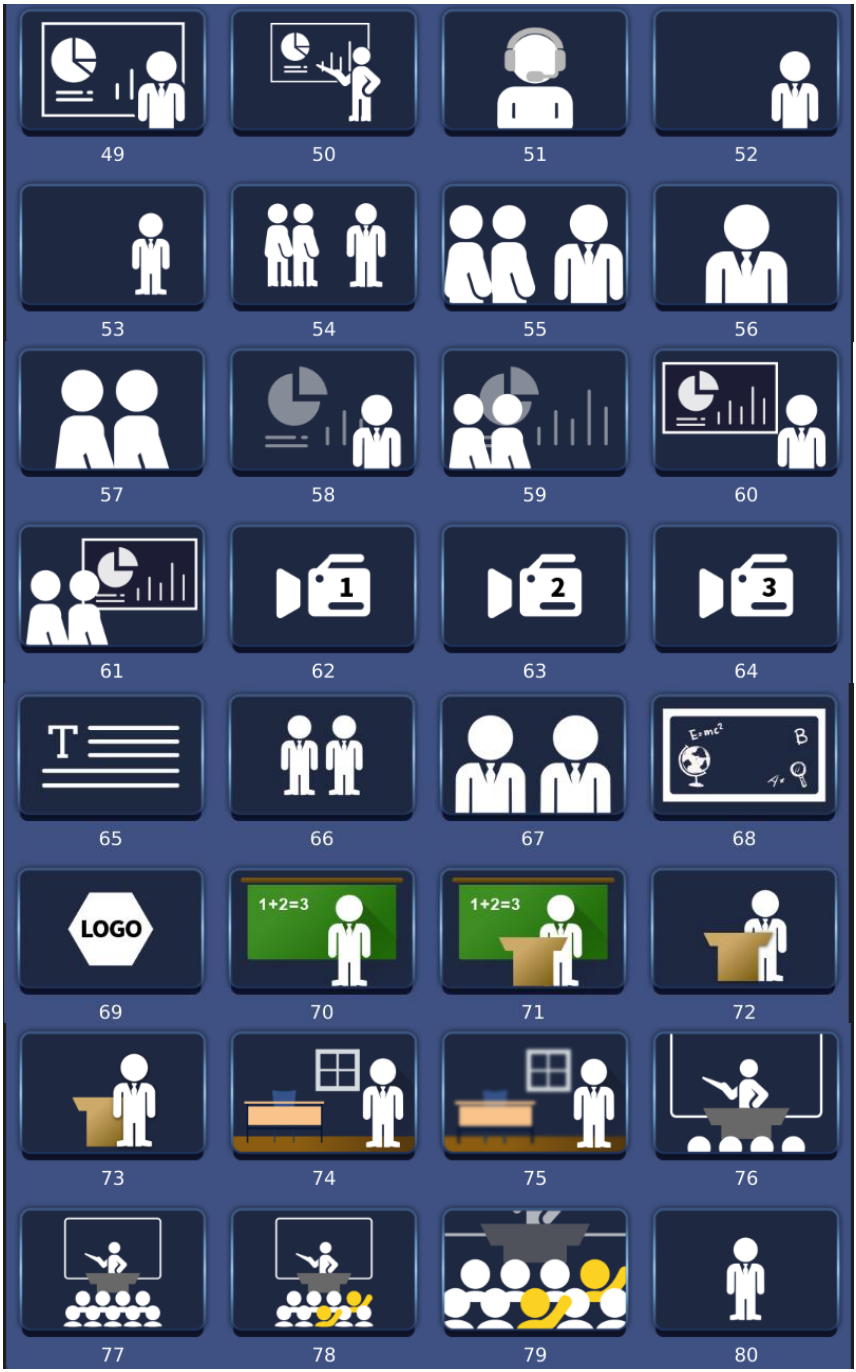
4. After you've selected the desired graphic, tap the **Apply** button to confirm the selection. Then, open the **Home** page and the new thumbnail picture should be applied to the selected preset button on the **Camera Preset** pane.

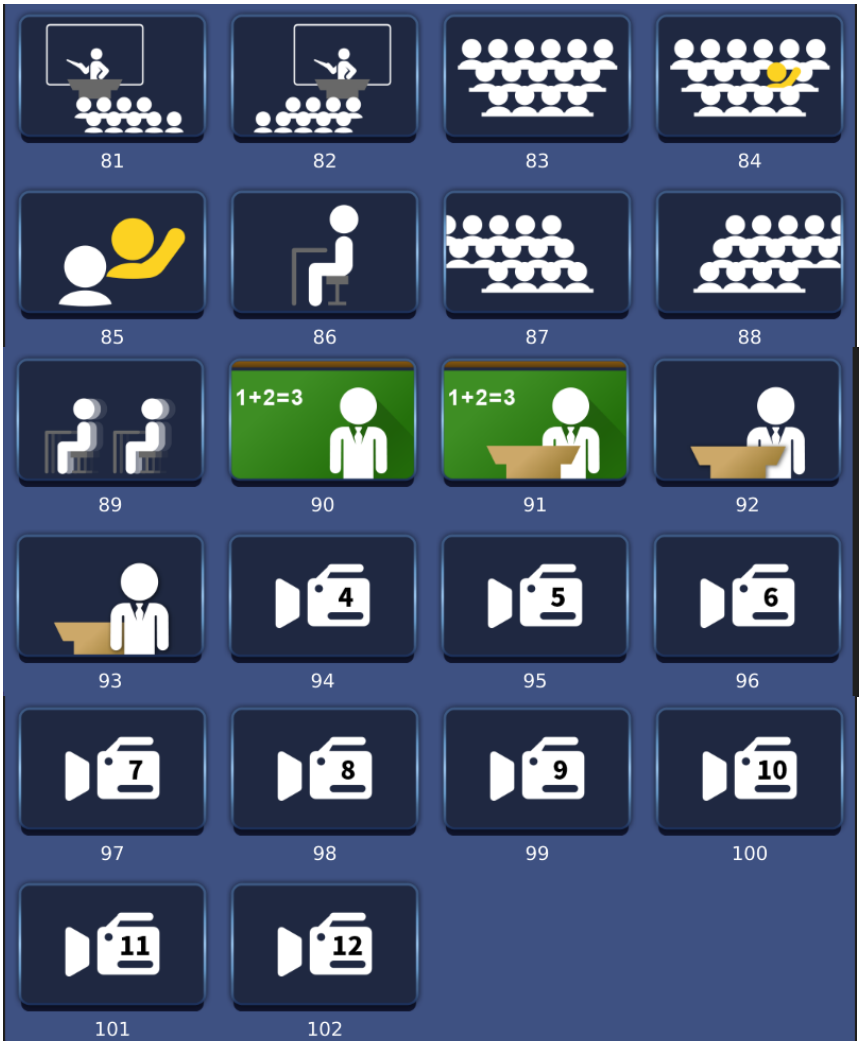


The available graphics are shown below:




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66
67
68
LOGO
1+2=3
1+2=3
69
70
71
72
73
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80



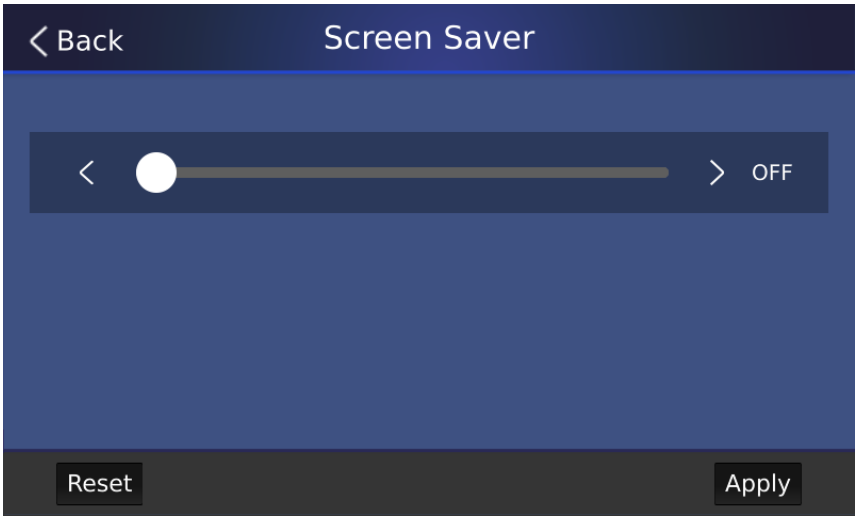
About

Tap About to view the mother board firmware version and control software version. Tap the Upgrade button to begin upgrading the device. Refer to ***Firmware Update*** for further instructions.



Screen Saver

The screen saver protects the iCAST MINI's screen. Tap "Screen Saver" to set the device's idle time before the screen saver activates. Setting the idle time to 0 disables the screen saver.



LCD Backlight

The LCD Backlight allows you to set the brightness of the touchscreen. Drag the slider to set the brightness. Tap **Apply** to confirm, **Reset** to restore the factory default and **Back** to return to the previous page.

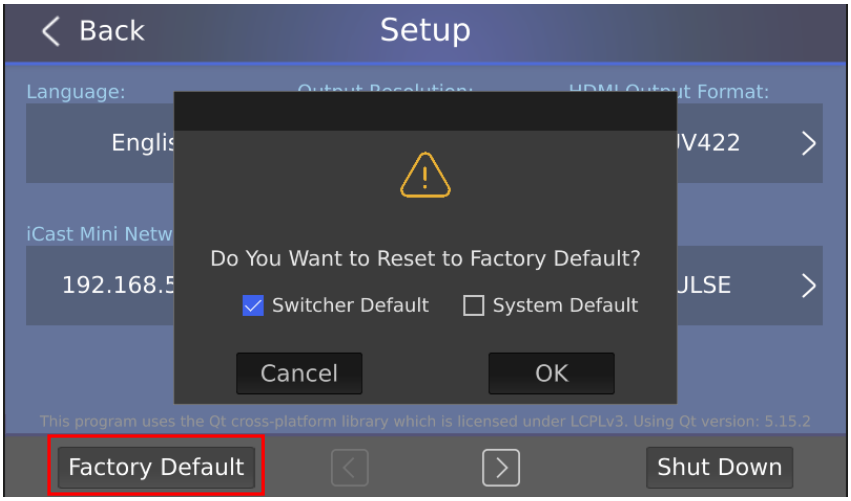


Factory Default

Tap the **Factory Default** button to restore the iCAST MINI to its factory default settings. There are two options:

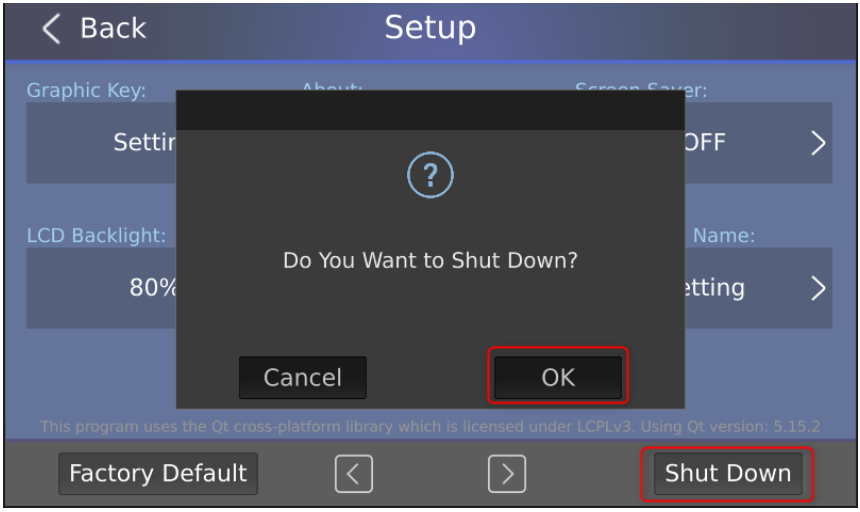
Switcher Default: Restores the default settings for the "Home," "PIP," and "Audio" pages.

System Default: Restores the default settings for the "Setup" page, but does not affect the "Language" and "Output Resolution" options.



Shut Down

Tap the **Shut Down** button to turn off the touchscreen first, then locate the power switch on the rear panel of the iCAST MINI and turn off the device.



4.2 Home

On the Home page, you will be allowed to select the video source and camera presets, adjust the input and output audio volumes, and access auto-tracking settings.



Video

Select the video source on the pane left to the Camera Preset. The selected video source should be displayed on the external monitor connected to the **HDMI** output port. You can select an individual video source or a PIP display of both.

Tap this button to select the video source connected to the PC/Camera 2 port.

Tap this button to select the video source connected to the Camera 1 port.



Tap the button to select the PIP display, with Camera 1 on the main screen and PC/Camera 2 on the sub screen.

Tap the button to select the PIP display, with PC/Camera 2 on the main screen and Camera 1 on the sub screen.

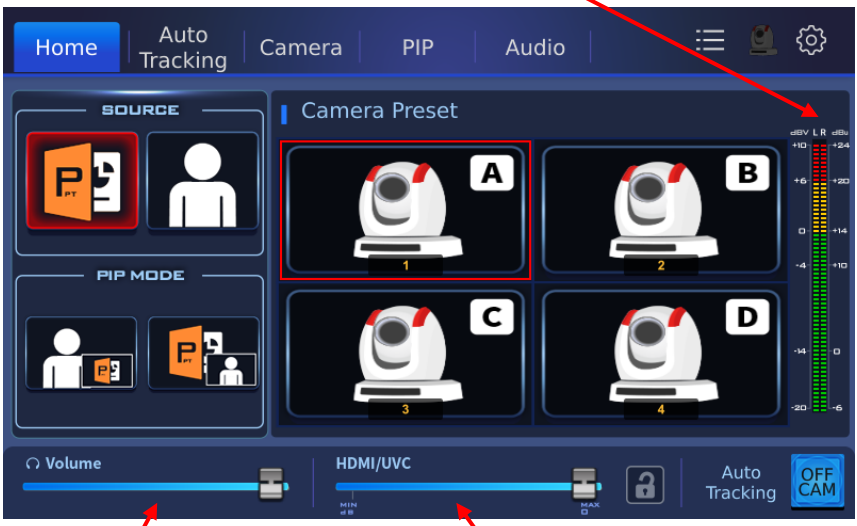
An example of the PIP display is shown below.



To use the **UVC** port, you will have to turn on the **PPT switch** first. Tap the gear icon on the toolbar at the top right corner of the UI then on the **Setup** page that opens, turn on the PPT switch.

Audio

The **Audio Level Meter** shows the audio level of HDMI and UVC ports.



The **Volume Slider** allows you to adjust the audio volume of the selected video source.

The **HDMI/UVC Slider** adjusts the audio volume for HDMI and UVC ports.

Tap the **Lock Button** to lock the HDMI/UVC slider.

Camera Presets

Camera presets contain specific camera settings, such as pan, tilt, zoom, focus, and exposure parameters. Tap one of the presets on the **Camera Preset** pane to apply these saved settings to the connected camera. You can also refer to the **Presets** section for in-depth instructions on configuring the camera presets.

Please note that you can also choose to show or hide the **Camera Preset** pane. Simply tap this button.



Camera Preset pane hidden



Camera Preset pane shown



Auto-Tracking

You can also access auto-tracking settings on Home. Tap the CAM button at the bottom right of the page to switch the Camera Preset pane to **Auto Tracking Settings** as shown in the diagram below. To switch back, simply tap the CAM button again.



Please note that the auto-tracking function only works with Datavideo's auto-tracking camera series.

Settings on the first page are described as follows:

You can select to track **full body**, **half body** or **close-up** of the presenter.

When there are multiple targets, you can use the **right** and **left** arrow keys to switch between them. Tap the **Select** button to confirm selection of the target.

Settings on the second page are described as follows:

Placement: You can keep the target to the left, in the center or to the right of the image while the camera tracks it.

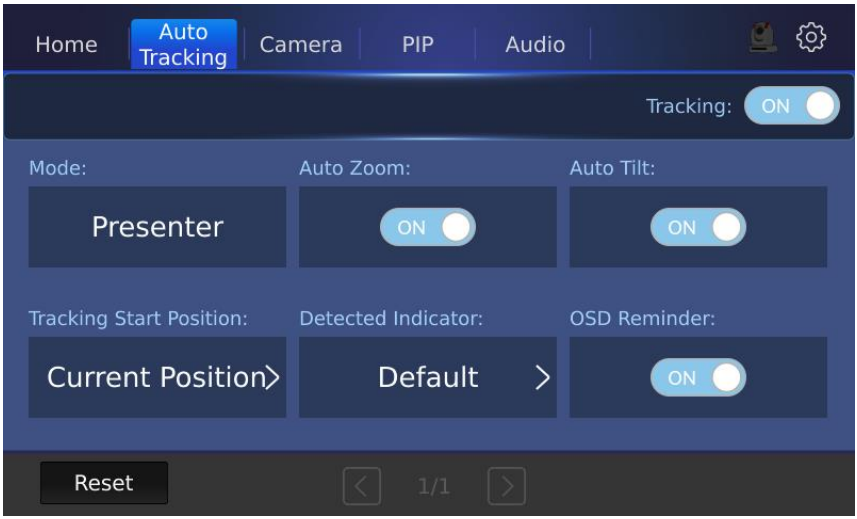
AT Speed: You can set the auto-tracking speed to **slow**, **medium (mid)** or **fast**.



4.3 Auto Tracking

Use this page to configure the camera's other auto-tracking settings.

At the top right of the page, use the Tracking switch to enable auto-tracking. Tap the Reset button at the bottom left of the page to restore the default auto-tracking settings.



Mode

Select the auto-tracking mode. The default is “Presenter”.

Auto Zoom

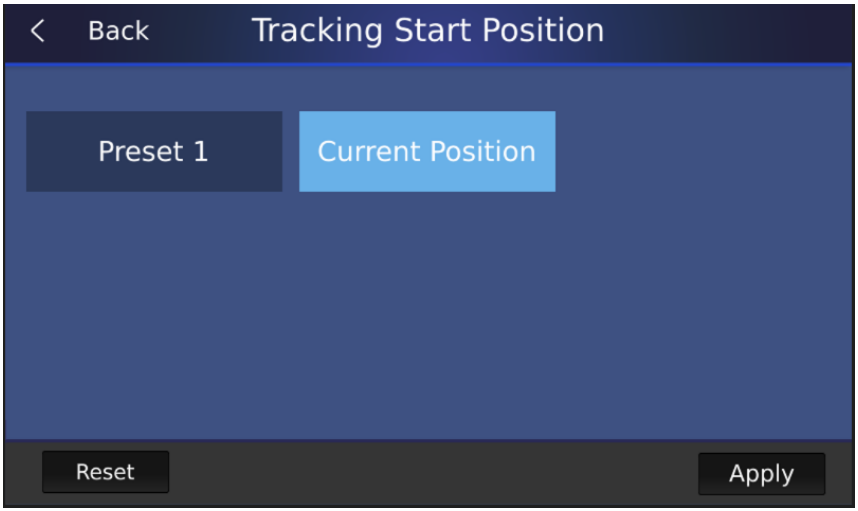
Tap the **AUTO ZOOM** switch to enable/disable the Auto Zoom function.

Auto Tilt

Tap the **AUTO TILT** switch to enable/disable the Auto Tilt function.

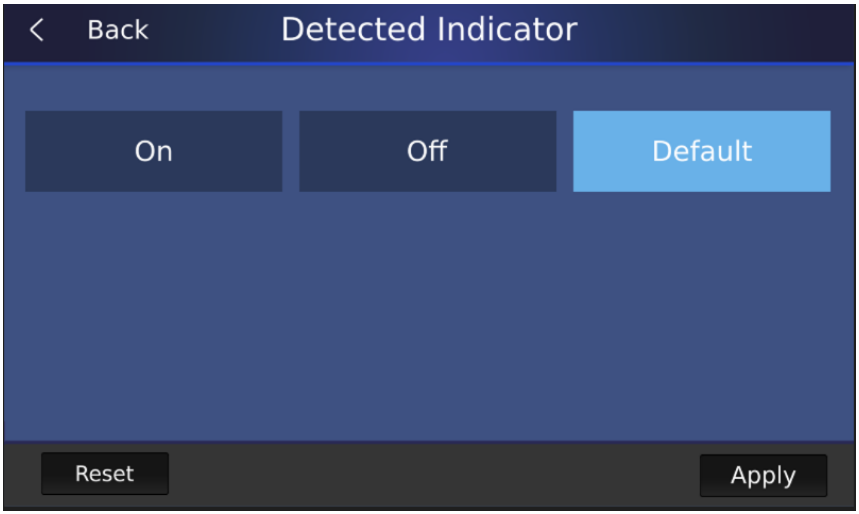
Tracking Start Position

Tap to select the start position. This is the initial position of the camera before tracking begins in the selected mode. You can choose either the position saved as preset 1 or the current camera position. Tap the "Apply" button to confirm your selection. To reset the start position, simply tap the "Reset" button.



Detected Indicator

In Presenter mode, when the detected indicator is enabled, the camera will automatically detect and track the presenter by panning, tilting, and zooming. The presenter's position within the frame will depend on the selected placement settings. Tap "Apply" to confirm the selection.



OSD Reminder

Tap the OSD Reminder switch to enable/disable the Auto-Tracking prompt on the external display.

4.4 Camera

The Camera page allows you to configure the camera's basic settings, save PTZ positions as presets and set up live streaming.



White Balance

Three modes are Auto, One Push and Manual, which are described as follows:

Auto: In the auto white balance mode, the camera to constantly read the tones in your scene and set the brightest part of your image as the white point.

One Push: One time auto white balance.

Manual: Tap to manually set the camera's white balance by adjusting the red and blue gain levels. Use the sliders and +/- buttons to make adjustments. Tap Back to return to the previous page.



SHUTTER

Tap the Shutter button to set the shutter speed. As shown in the diagram below, use the slider and +/- buttons to make adjustments. Tap Back to return to the previous page.



Focus

Auto: Tap to enable **Auto Focus**, allowing the camera to automatically set the focus on the center of the image.

Manual: Tap to enable manual focus. Tap + to focus on a far object and - to focus on a near object.

Iris

Auto: Tap to enable Auto mode.

Manual: Tap to enable manual mode. Tap + to increase the iris opening and - to decrease the iris opening.

Camera Control

Unlock Button: The joystick and the speed slider are locked by default. Tap the unlock button to access the camera control area.

Zoom IN/OUT: The zoom function adjusts the size of the image. Tap **Zoom IN** to zoom in on a subject from far away and **Zoom OUT** to zoom out.

PTZ Joystick: Use the joystick to pan and tilt the camera.

Speed Control Slider: The slider allows you to adjust the pan, tilt and zoom speeds. Slide up to increase the speed and down to decrease.

Presets

The Position panel displays four thumbnails, each representing a preset (1-4). Tap the desired preset thumbnail to quickly recall the saved camera configurations.

The **Store Button** activates the save function.

Follow the steps below to save your camera settings as presets.

1. **Adjust Camera Settings**: Pan, tilt, and zoom the camera to your desired position, and make sure focus, shutter speed, iris, and other settings are also configured.
2. **Enable Save Mode:** Tap the **Store** button to activate the save function. The button will turn green, and preset numbers will be highlighted with green backgrounds.



3. **Save Preset**: Tap one of the preset thumbnails (1–4) to store the current

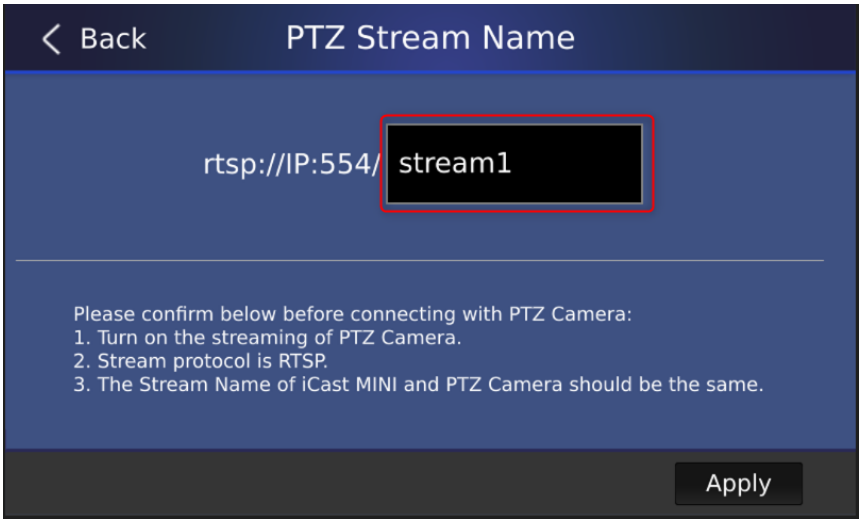
camera settings. The thumbnail will be updated with the camera's current image.



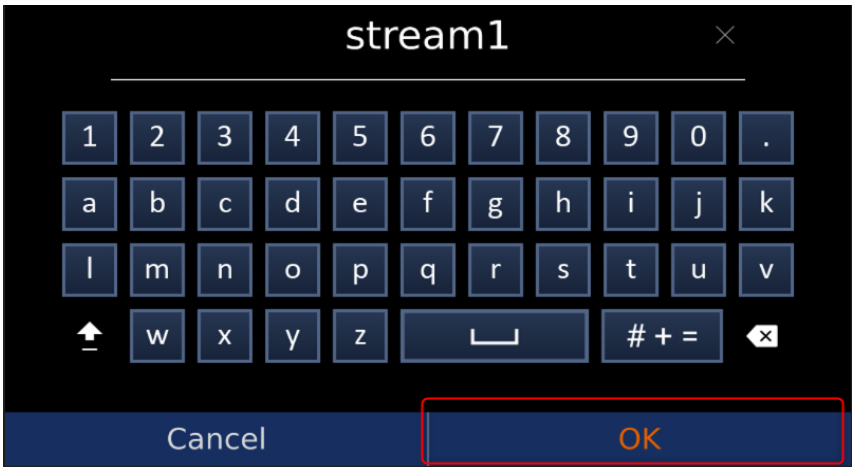
Live Streaming



The iCAST MINI allows you to transfer the camera video to the audience over a network or to the Internet with an easy-to-use RTSP link. Tap the the **Live Setup** button to enter a stream name for the link.



Tap the textbox to open an on-screen keyboard which allows you to key in a stream name.



Before entering the stream name, make sure the PTZ camera connected to the iCAST MINI is RTSP enabled. The stream name must match the one configured on the connected camera. Use the stream name provided by the camera to maintain consistency.

For Datavideo cameras:

PTC-280/PTC- 300/PTC-285/PTC-305 series: The default RTSP stream names for the main and sub encoders are **stream1** and **stream2**, respectively.

PTC-140/PTC- 145 series: The default RTSP stream names for the main and sub encoders are **live/av0** and **live/av1**, respectively.

4.5 PIP

Set the PIP sub-screen on this page.

On the PIP page, you will be able to view the relative position of the sub-screen on the main screen. Use the up, down, left and right arrow keys to move the sub-screen to the desired position.

Tap the + button to increase the size of the sub-screen, or tap the **–** button to decrease it.

Note: When both the input and output resolutions are set to 4K30, the maximum size of the sub-screen is limited to 80% of the main screen.



4.6 Audio

The Audio page allows you to select the audio source and channel type, set the audio delay and adjust the audio volumes.



Channel Type/Source

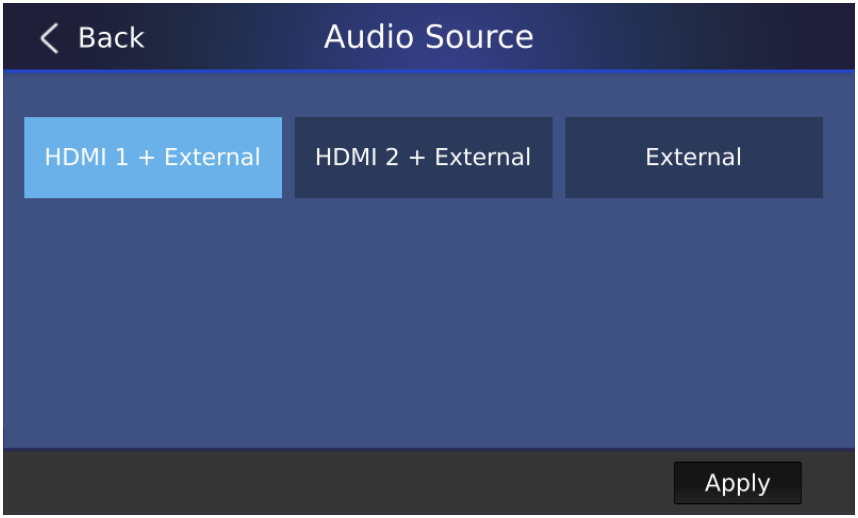
Tap the **Source** button to select the audio source. The options on the Audio Source page are described as follows:

HDMI 1 + External: Enables HDMI 1 and all external audio sources so the PC/CAM2 volume adjustment slider will be greyed out.

HDMI 2 + External: Enables HDMI 2 and all external audio sources so the CAM1 volume adjustment slider will be greyed out.

External: Enables all external audio sources so the CAM1 and PC/CAM2 volume adjustment slider will be greyed out.

After you've selected the audio source, tap the **Apply** button to confirm.





Tap the **Stereo** or **Mono** button to select the audio channel type.

When **Stereo** is selected, CH 1 and CH 2 are treated as two **separate and independent channels**, each carrying distinct audio signals. Therefore, CH 1 and CH 2 audio inputs are routed independently.

When mono is selected, CH 1 and CH 2 audio inputs are combined into a **single mixed audio signal** and routed internally**.**

Audio Delay

Right below the Channel Type buttons, you can set the audio delay by tapping the + and – buttons. Tap + to increase and – to decrease. Tap the Apply button to confirm.

Audio Volume

The audio volume adjustment sliders are described as follows:

CH 1 (MIC In): The slider controls the audio volume for Ch 1 which is a composite port supporting 3-pin XLR and 6.3 mm (1/4”) TRS audio connections. If the XLR connection is in use, the TRS connection will be disabled, and vice versa.

CH 2 (MIC In): The slider controls the audio volume for Ch 2 which is a composite port supporting 3-pin XLR and 6.3 mm (1/4”) TRS audio connections. If the XLR connection is in use, the TRS connection will be disabled, and vice versa.

CAM 1: The slider controls the audio volume for the CAM 1 HDMI input.

PC/CAM 2: The slider controls the audio volume for the PC/CAM 2 HDMI input.

RCA: The slider controls the audio volume for the RCA audio output.

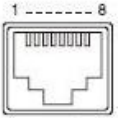
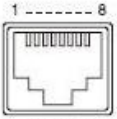
HDMI/UVC: The slider controls the audio volume for the HDMIC and UVC outputs.

Meter (Right): The meter next to the sliders shows the real-time audio levels in decibels (dB). It provides a visual representation of the master output signal strength (HDMI/UVC).

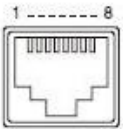
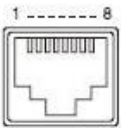
Chapter 5 RS-232/RS-422 Pinouts

You can connect the iCAST MINI to PTZ cameras using the RS-232 or RS-422 interfaces, enabling camera operation directly from the iCAST MINI. Use a custom-made Ethernet cable for the physical connection. Refer to the pinout details provided in this section.

The RS-422 pinouts are shown below:

iCAST MINI (RS-232/RS-422 Port)			GND	PTC Cameras (RS-422 Port)		
GND	1	White/Orange	———	White/Orange	1	GND
NC	2	Orange		Orange	2	NC
TX-	3	White/Green	——→	White/Green	3	RX-
RX-	4	Blue	←——	Blue	4	TX-
RX+	5	White/Blue	←——	White/Blue	5	TX+
TX+	6	Green	——→	Green	6	RX+
NC	7	White/Brown		White/Brown	7	NC
NC	8	Brown		Brown	8	NC
						

The RS-232 pinouts are shown below:

iCAST MINI (RS-232/RS-422 Port)			GND	PTC Cameras (RS-232 Port)		
GND	1	White/Orange	———	White/Orange	1	GND
NC	2	Orange		Orange	2	NC
TX	3	White/Green	↘	White/Green	3	NC
NC	4	Blue		Blue	4	NC
RX	5	White/Blue	←——	White/Blue	5	TXD
NC	6	Green	↘	Green	6	RXD
NC	7	White/Brown		White/Brown	7	NC
NC	8	Brown		Brown	8	NC
						

Chapter 6 Firmware Update

Datavideo usually releases new firmware containing new features or reported bug fixes from time to time. Customers can either download the firmware as they wish or contact their local dealer or reseller for assistance.

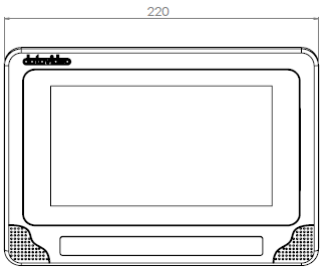
This section outlines the firmware upgrade process which should take ***approximately few minutes to complete***.

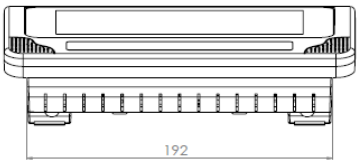
The existing settings should persist through the *firmware upgrade process, which should not be interrupted once started* as this could result in a non-responsive unit.

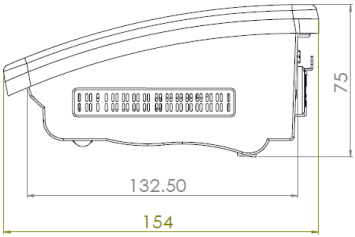
1. Download the latest firmware file, **icastmini_fwup_vx.x.x.x**, from the iCAST MINI product page https://www.datavideo.com/product/iCAST+MINI.
2. Unzip the downloaded firmware file.
3. Create a folder named **datavideo** and place the unzipped firmware file inside this folder.
4. Format a USB flash drive to **FAT32**, and copy the **datavideo** folder to the root directory of the USB drive.
5. Insert the USB flash drive into the **FW UPGRADE** port on the rear panel of the iCAST MINI.
6. Tap the gear icon at the top-right corner of the main screen to access the **Setup** menu. Navigate to the second page.
7. Go to **Setup > About**, then tap the **Upgrade** button to start the firmware update process.
8. Once the update is complete, a notification will confirm the successful update. Reboot the iCAST MINI.
9. After rebooting, go to **Setup > About** to verify the updated firmware version.

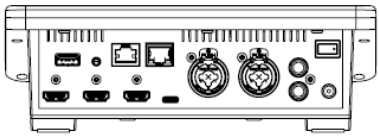
Chapter 7 Dimensions

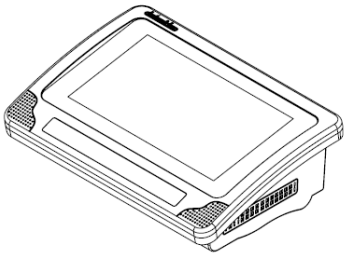
Unit: mm

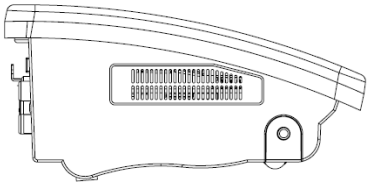












Chapter 8 Specifications

Model Name	iCAST Mini
Product Name	**4K Dual Channel Presentation Switcher**
Video Standard	4K & HD
Video Format	Input: 3840x2160p: 30/29.97/25/24/23.98 1080p: 60/59.94/50/30/29.97/25/24/23.98 1080i: 60/59.94/50, 720p: 60/59.94/50 525i59.94 NTSC, 625i50 PAL Output: HDMI 3840x2160p: 30/29.97/25 1080p: 60/59.94/50/30/29.97/25/24/23.98 UVC 3840x2160p: 30/29.97/25 1080p60/59.94/50/30/29.97/25
Video Processing	4K2K30 4:4:4, 8bit
Input Routable / Crosspoint	N/A
Video Input	2 x HDMI 1.4
Computer Graphic Interface	2 via HDMI
Video Output	1 x HDMI 1.4 1 x USB 3.0 Type C (UVC)
Down-converted Output	Yes
Analogue Audio Input	2 x 3 Pin XLR / 1/4” (6.3mm) Combo Socket
Analogue Audio Output	1 x Stereo RCA set (L/R) 1 x Stereo headphone
Digital Embedded Audio Support	Input 2 channels, Output 2 channels
Audio Delay Calibration	Up to 170ms
A+V Switching	Yes

Picture in Picture	1
Effects	Cut
Camera Control	DVIP/ RS-422/ RS-232
Built-in Audio Mixer	Yes
Firmware Update	by USB
Special Features	7" Touchscreen Display
Chassis	Unibody
Dimensions (LxWxH)	220 x 154 x 75 (mm)
Weight	1.1 kg
Power	DC 12V 18.7W
Operating Temp. Range	0~40 °C

Notes

Notes

Notes

Service & Support

It is our goal to make your products ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our web site www.datavideo.com for answers to common questions, support requests or contact your local office below.

Please visit our website for latest manual update.

https://www.datavideo.com/product/iCAST+MINI

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Ver:E4