

datavideo



4K DUAL CHANNEL
PRESENTATION SWITCHER

iCAST MINI

Instruction Manual

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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 are guaranteed against any manufacturing defects for one year from the date of purchase.
- The original purchase invoice or other documentary evidence should be supplied at the time of any request for repair under warranty.

- The product warranty period begins on the purchase date. If the purchase date is unknown, the product warranty period begins on the thirtieth day after shipment from a Datavideo office.
- All non-Datavideo manufactured products (product without Datavideo logo) have only one year warranty from the date of purchase.
- Damage caused by accident, misuse, unauthorized repairs, sand, grit or water is not covered under warranty.
- Viruses and malware infections on the computer systems are not covered under warranty.
- Any errors that are caused by unauthorized third-party software installations, which are not required by our computer systems, are not covered under warranty.
- All mail or transportation costs including insurance are at the expense of the owner.
- All other claims of any nature are not covered.
- All accessories including headphones, cables, and batteries are not covered under warranty.
- Warranty only valid in the country or region of purchase.
- Your statutory rights are not affected.

Three Year Warranty

- All Datavideo products purchased after July 1st, 2017 are qualified for a free two years extension to the standard warranty, providing the product is registered with Datavideo within 30 days of purchase.
- Certain parts with limited lifetime expectancy such as LCD panels, DVD drives, Hard Drive, Solid State Drive, SD Card, USB Thumb Drive, Lighting, Camera module, PCIe Card are covered for 1 year.
- The three-year warranty must be registered on Datavideo's official website or with your local Datavideo office or one of its authorized distributors within 30 days 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.

Chapter 1 Product Overview

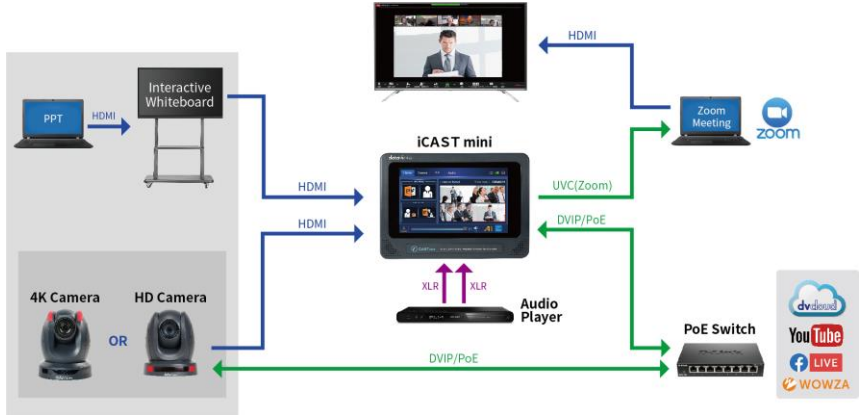
Datavideo iCast Mini allows you to switch up to two 4K30 video inputs. Moreover, it provides Picture-in-Picture function. This touchscreen-operated device is suitable for classrooms, lecture halls, houses of worship, or any other situation that requires simple switching operations.

With UVC output, it is easy to connect a laptop and use Zoom for remote teaching or conferences.

1.1 Features

- Supports up to 4K30/29.97/25 video formats
- Provides 7" Touch screen for easy operating and monitoring
- Captures camera position picture to be Graphic Key
- Offers remote controlling of camera options such as pan, tilt, zoom, iris, focus, shutter, and white balance
- Provides Automatic Detection function with up/down scaling for various input resolutions simultaneously
- Provides 2 HDMI 1.4 Video Input + 1 HDMI 1.4 PGM Output Interfaces
- Provides UVC output Interface which is compatible with various operating systems
- Provides RJ-45 Ethernet Interface with integrated PoE
- The Audio XLR (6.3mm) Combo Socket can be MIC input or Line audio input
- Stereo RCA audio output x 1
- Supports Audio Mixer and Audio delay functions.
- Provides Picture-in-Picture (PIP) function.
- Can be controlled by the DVIP Protocol.

Chapter 2 System Diagram




Chapter 3 Connections

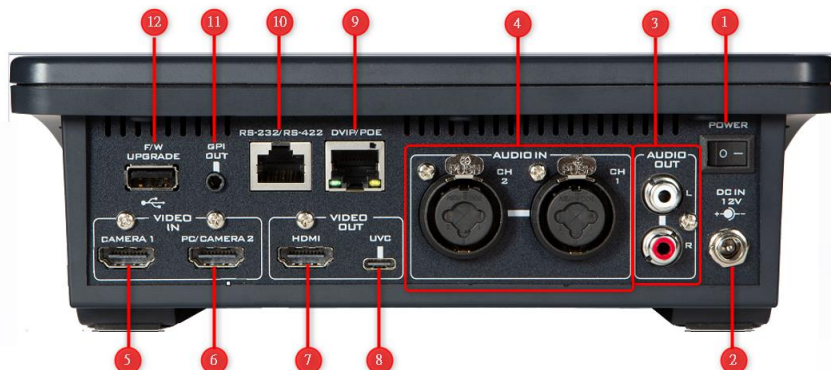
This section will show you the way for connecting the iCAST MINI 4K Dual Channel Presentation Switcher. For details, please refer to the following paragraphs.

3.1 Front View



Interface	Description
	<p>Touch Panel Display This is the touch panel display for the iCAST MINI 4K Dual Channel Presentation Switcher.</p>

3.2 Rear View



No.	Description
1	<p>POWER Switch</p> <p>This is the power switch of the iCAST MINI 4K Dual Channel Presentation Switcher.</p>
2	<p>DCIN 12V Power Interface</p> <p>Please connect the DCIN 12V power adapter in the package to the DC power interface. The connection can be secured by screwing the outer fastening ring of the DC In plug to the socket.</p>
3	<p>AUDIO OUT L/R</p> <p>L and R ports are two RCA unbalanced audio output channels delivering a mixed or delayed audio output to a display device.</p>
4	<p>AUDIO IN</p> <p>CH1 and CH2 are XLR audio input interfaces for providing 2 Channel 3 pin XLR/1/4" (6.3mm) combo audio input interfaces for you. The 3 pin XLR allows you to connect to an external audio device (Line in). For the 6.3 mm, it allows you to connect to a microphone with the 6.3mm plug (Mic in). Note: It only supports dynamic 6.3mm microphone and requires 40dB amplification (iCAST MINI does not provide power).</p>

5	<p>VIDEO IN-CAMERA 1</p> <p>This interface allows you to connect a 4K or an HD camera to be the video input source.</p>
6	<p>VIDEO IN-PC/CAMERA 2</p> <p>This interface allows you to connect a laptop or an interactive whiteboard to use the powerpoint slides as the video input source. Moreover, you can connect another camera to this interface to be the second video input source.</p>
7	<p>VIDEO OUT-HDMI</p> <p>This interface allows you to connect to an external large panel display for monitoring. When the HDCP video is not shown on the iCAST MINI screen, the iCAST MINI will not output the HDCP video.</p>
8	<p>VIDEO OUT-UVC</p> <p>This interface allows you to connect the iCAST MINI to your laptop or PC by a USB type C to USB type A adapter cable for adopting the image which is shot by the camera to be the image source of the conference software such as Zoom to fulfill the online-teaching or live-conferencing applications.</p>
9	<p>DVIP/POE</p> <p>This interface allows you to connect from this interface to an RJ-45 Ethernet interface of another POE Switch by an RJ-45 Ethernet cable only. After that, you can use an RJ-45 Ethernet cable to connect from the RJ-45 Ethernet interface of the POE Switch to Datavideo POE supported PTZ camera such as the PTC-285. And then you can use the iCAST MINI to control the camera remotely and to supply power for your camera by the POE function.</p>

10	<p>RS-232/RS-422</p> <p>The RS-232/RS-422 interface allows you to connect to an external RS-232/RS-422 device. Please use an Ethernet cable to connect to an external RS-232/RS-422 controller.</p>
11	<p>GPI OUT</p> <p>This port is not available and this function can be activated by the software update in the future.</p>
12	<p>F/W UPGRADE</p> <p>This interface is the USB port which is used for the firmware update. Users can save the latest firmware into a USB flash drive and then insert into this interface for updating the firmware.</p>

3.3 Left View



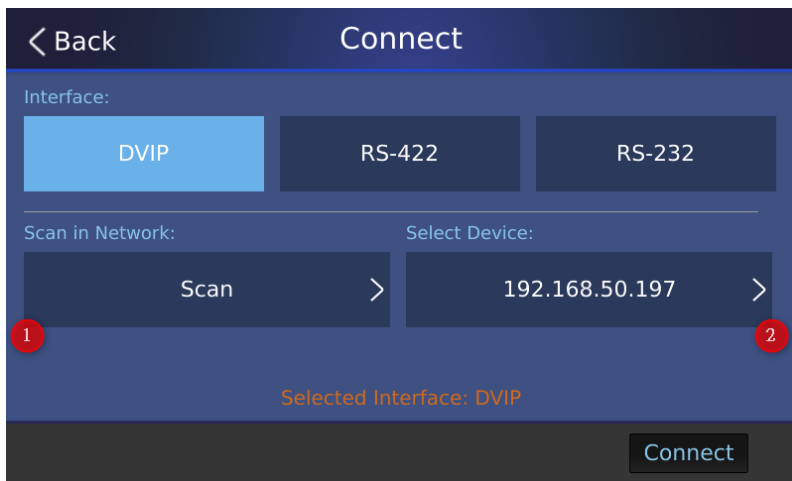
No.	Description
1	3.5mm headphone monitoring interface This is the 3.5mm headphone monitoring interace for you to monitor the audio externally.

Chapter 4 How to Connect the iCAST MINI and Your Camera

Datavideo iCAST MINI 4K Dual Channl Presentation Switcher is a small-sized 4K touch panel switcher which is designed by Datavideo for the remote teaching or conferencing applications. The iCAST MINI built-in app allows you to control the “CAMERA”, “PIP” and “Audio” related settings remotely.

4.1 Connect Interface Introduction-DVIP

The “Connect” interface of the Datavideo iCAST MINI allows you to connect your camera by the DVIP, RS-422 or RS-232 protocol. After the iCAST MINI is turned on, please tap the camera icon which is located at the top-right corner of the screen within the “Home” interface to enter the “Connect” interface. The “Connect” interface for the DVIP protocol is shown in the following diagram.



1. Scan in Network: When your camera is connected according to the DVIP protocol, you can tap this button to search the connected camera.

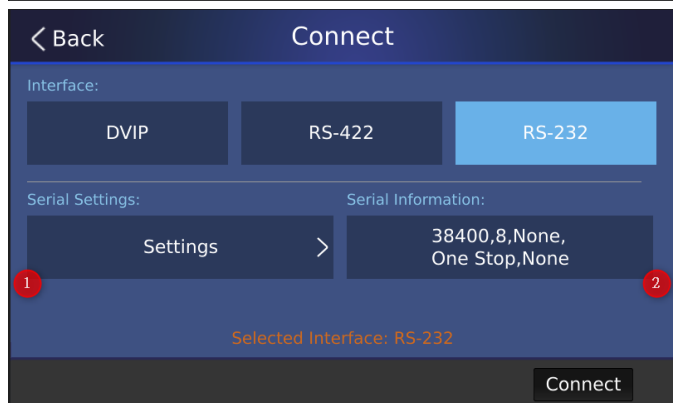
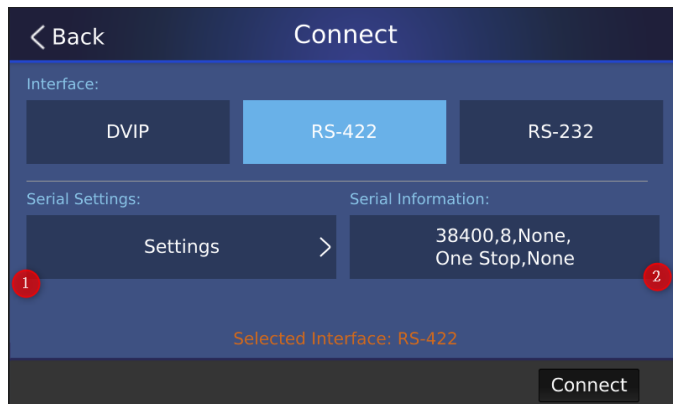
2. Select Device: When the connected camera is found, its IP address will be shown in this column.

4.2 Connection Interface Introduction-RS-422 & RS-232

You can also use the RS-422 or RS-232 protocol to connect your iCAST MINI to your camera. After the iCAST MINI is turned on, please tap the camera icon

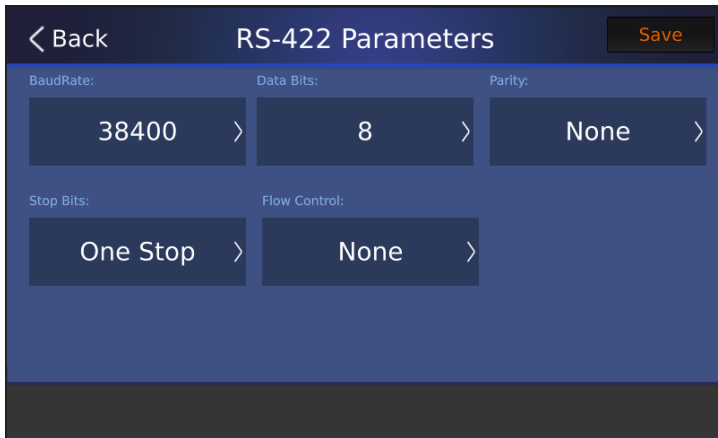


which is located at the top-right corner of the “Home” interface to enter the “Connect” interface. The interface of the RS-232 and RS-422 protocols are shown in the following diagrams.

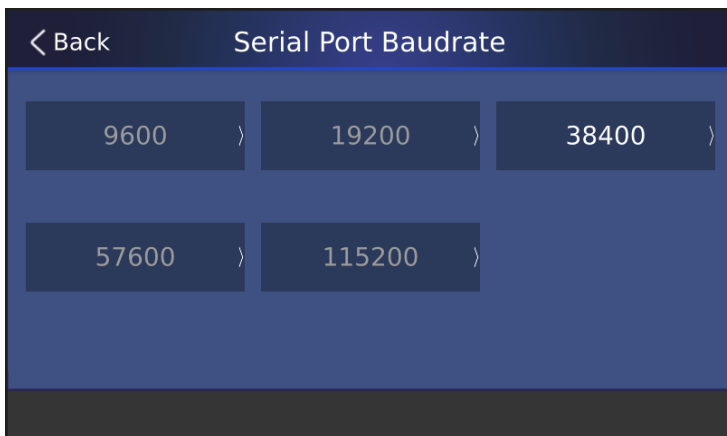


Due to that the contents for the “Serial Settings” and “Serial Information” options for the RS-422 and RS-232 are the same. So, this chapter will take the RS-422 as an example.

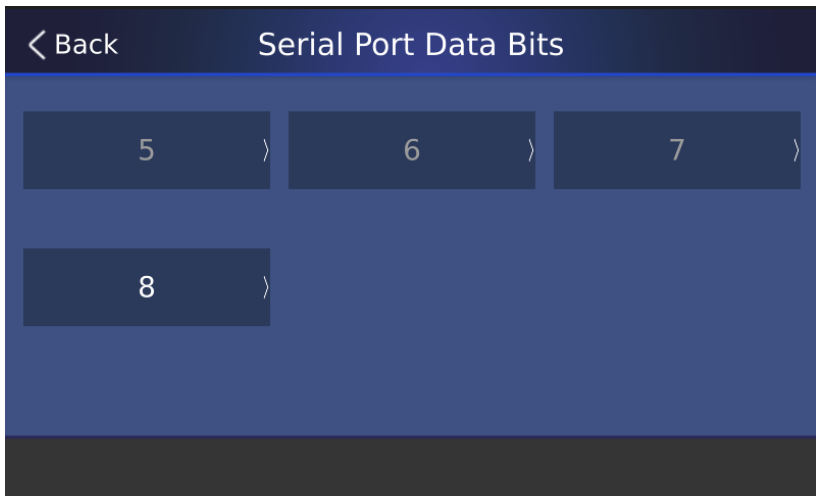
1. Settings: Please tap this option to enter the “RS-422 Parameters” interface to set the parameters for several options including “BaudRate”, “Data Bits”, “Parity”, “Stop Bits” and “Flow Control”.



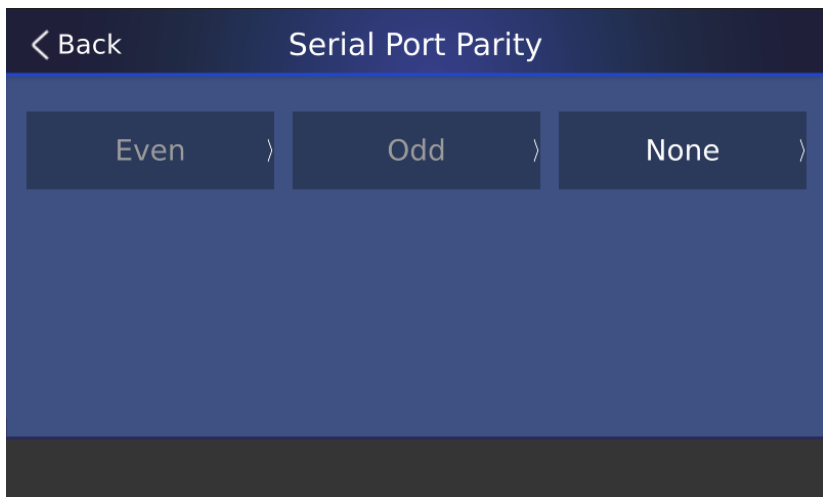
- Baudrate: Baudrate is the number of bits transmitted per second. There are several options including 9600, 19200, 38400, 57600 and 115200 for you to select.



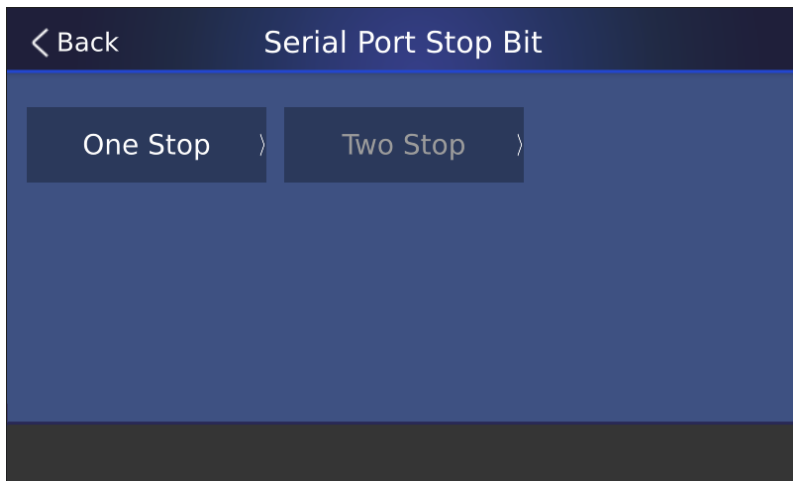
- Data Bits: Data Bits is the actual data bits in data transferred operation. There are several options including 5, 6, 7 and 8 for you to select.



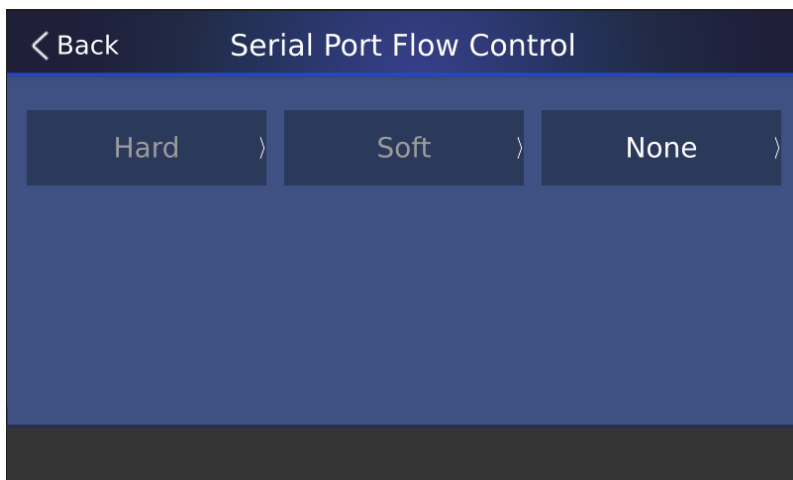
- Parity: Parity is the easy way for checking serial communication errors. There are three options including Even, Odd and None for you to select.



- Stop Bits: The stop bit is a signal sent at the end of a single packet communication. There are two options including “One Stop” and “Two Stop” for you to select.

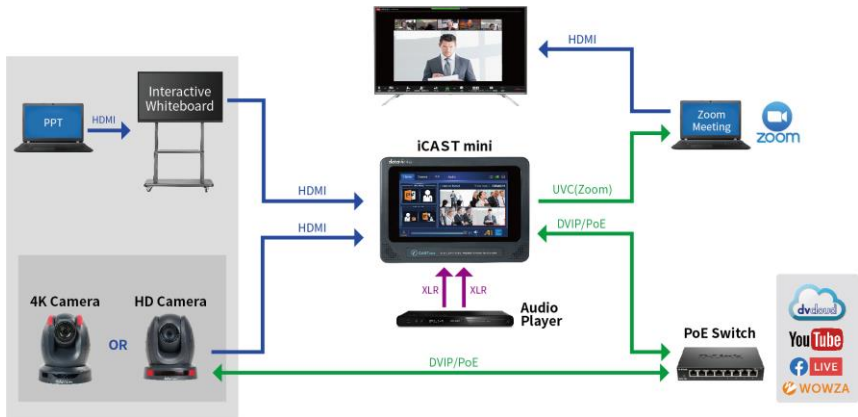


- Flow Control: One side of the connection uses hardware or software to tell the other side when to start or stop transmitting data. There are three options such as Hard, Soft and None for you to select.



4.3 Connection-By DVIP Protocol

Before using the iCAST MINI, please connect your iCAST MINI according to the diagram below.



The DHCP mode is the factory default for Datavideo iCAST MINI and camera series. After the connection is done, please make sure that your iCAST MINI and camera are set within the same LAN for controlling your PTZ camera by the iCAST MINI.

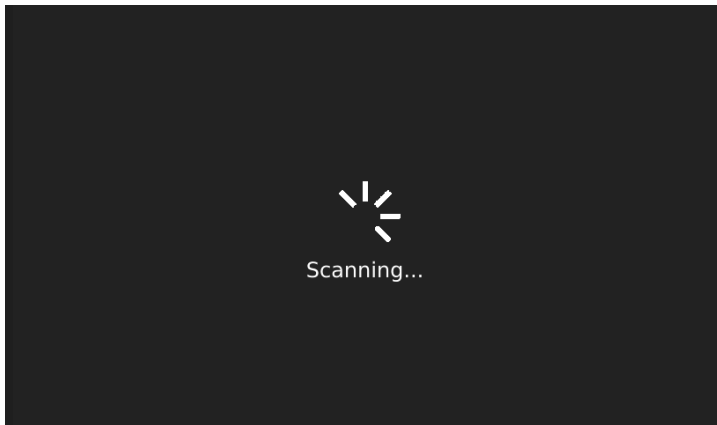
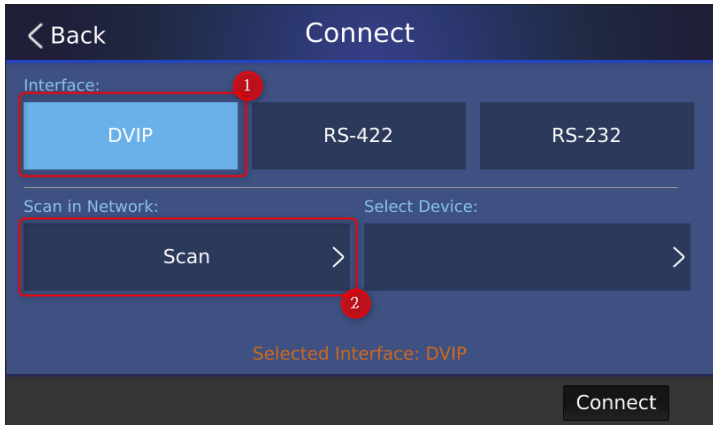
After the connection is done according to the diagram above, the first thing is to press the power switch on the rear panel of the iCAST MINI to turn on its power. After that, you can see the initial screen which is shown in the following diagram. Please connect your iCAST MINI and camera according to the steps below.



1. After the iCAST MINI turns on, the main interface of the iCAST MINI App which is shown in the following diagram will be shown. Please tap the camera icon which is shown at the top-right corner of the screen.



2. After that, you will enter the “Connect” page which is shown in the following diagram. Please tap “Connect>Interface>DVIP”. After that, please tap “Scan” in “Network>Scan”, and then you iCAST MINI will scan the connected camera which is set in the same LAN automatically.



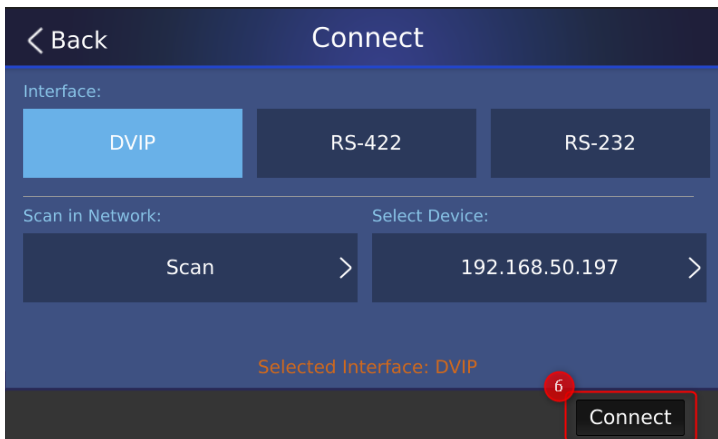
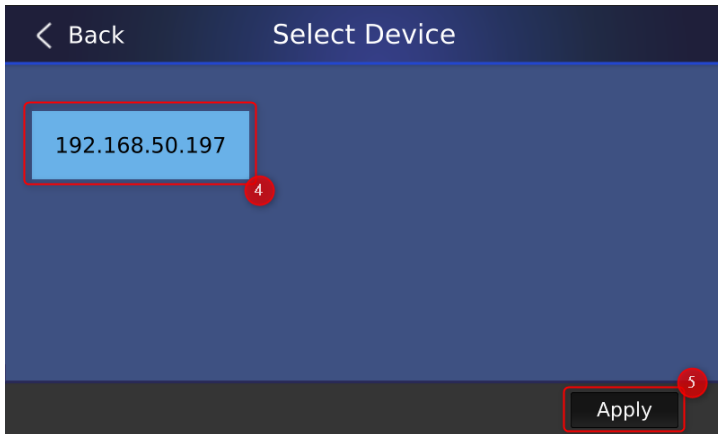
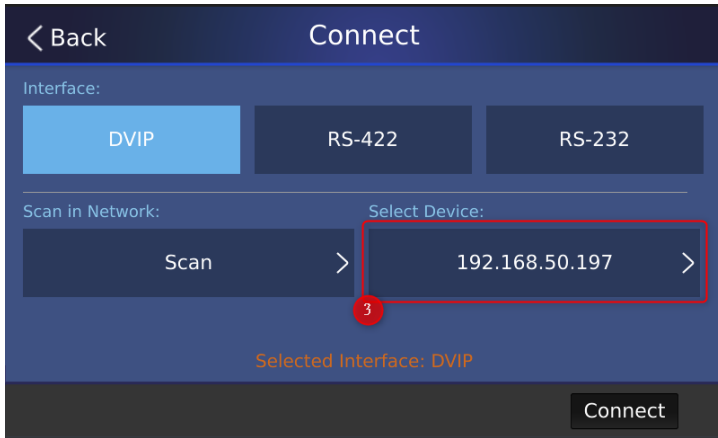
3. After the connected camera is found, the camera IP address will be shown on "Select Device" option. Please tap the "Select Device" option, and then select the IP address of the device that you want to connect. After that, tap the "Connect" button to finish the connection. You can use the camera icon which is located at the top-right corner of the "Home" tab to tell whether it is successfully connected or not.

Connected



Unconnected

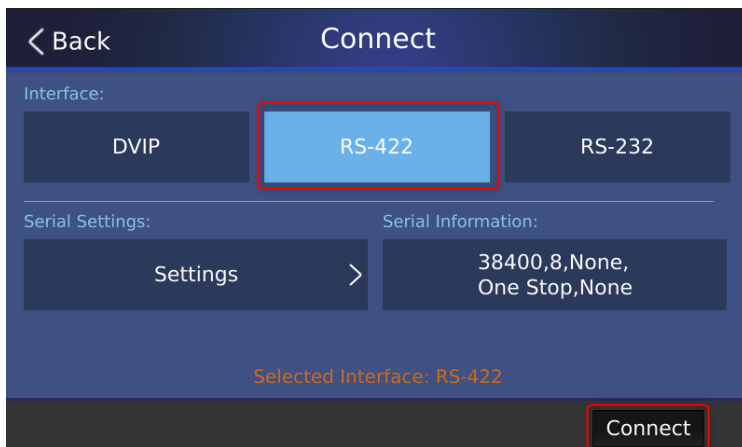




4.4 Connection-By RS-422/RS-232 Protocol

If you want to connect your iCAST MINI and camera by the RS-422 or RS-232 protocol, please refer to the steps below. This chapter will take the RS-422 protocol as an example.

1. Please use an RJ-45 Ethernet cable to connect from the “RS-232/RS-422” interface which is located on the rear panel of the iCAST MINI to the RS-422 interface which is located on the rear panel of your camera directly.
2. Please tap the camera icon which is located at the top-right corner of iCAST MINI’s “Home” interface to enter the “Connect” interface. After that, please select the RS-422 option. Finally, please press the “Connect” button to finish the connection.



Chapter 5 iCAST MINI App Main Interface Introduction

5.1 Home



1. Source(PowerPoint Slide Mode): Please tap this button to show the PowerPoint slide image of your laptop or PC to a external monitor. If the input video source is a camera, it will show the real-time image which is shot by the camera to the external monitor.

2. Source(Presenter Mode): Please tap this button to show the real-time image which is shot by the connected camera to the external monitor.

3. PIP Mode (Front-PowerPoint Slide/Rear-Presenter): Please tap this button to show the two video input sources which are connected to the iCAST MINI as the "Front-PowerPoint Slide/Rear-Presenter" PIP mode to the external monitor.



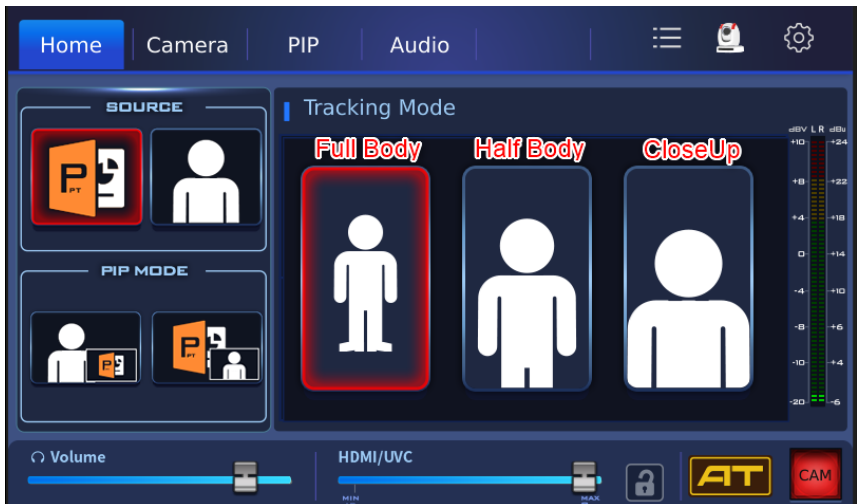
4. PIP Mode (Front-Presenter/Rear-PowerPoint Slide): Please tap this button to show the two video input sources which are connected to the iCAST MINI as the "Front-Presenter/Rear-PowerPoint Slide" PIP mode to the external monitor.



5. Camera Preset 1/2/3/4: If the Camera Preset positions are set in advance, the thumbnails of the "CAMERA>POSITION1/2/3/4" will be shown in this area which are shown in the following diagram.



6. CAM Button: This is the button for turning on or turning off the Auto-Tracking function. When the “CAM” button is shown in blue and the connected camera is a Datavideo Auto-Tracking supported PTZ camera, if you press the “CAM” button and the “CAM” button is shown in red, it means that the Auto-Tracking function of the camera is turned on. At this time, the “Camera Preset” area will switch to the “Tracking Mode” which is shown in the following diagram. The buttons from the left to the right side represent “Full Body”, “Half Body” and “CloseUp” sequentially.



If the “CAM” button is pressed when it is shown in red, the “CAM” button will become blue. At this time, the Auto-Tracking function will be turned off and the screen will switch to “Camera Preset” again.

7. Volume: This slider allows you to adjust the volume for monitoring

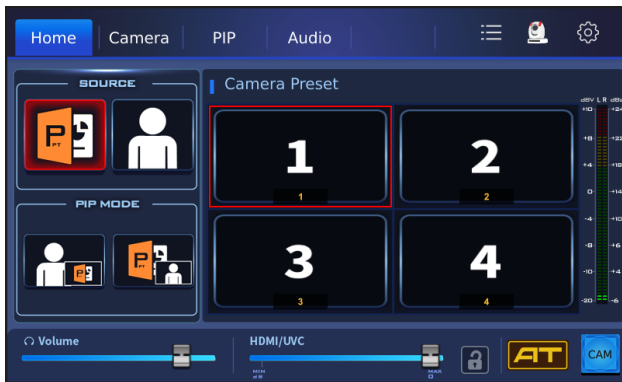
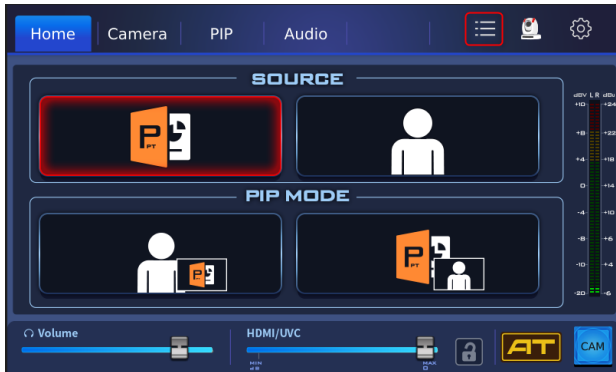
8. HDMI/UVC: This is the volume adjustment slider for the main output


9. Button for locking main output volume: Once this lock icon is pressed, the volume for the main output will be locked and can not be adjusted.

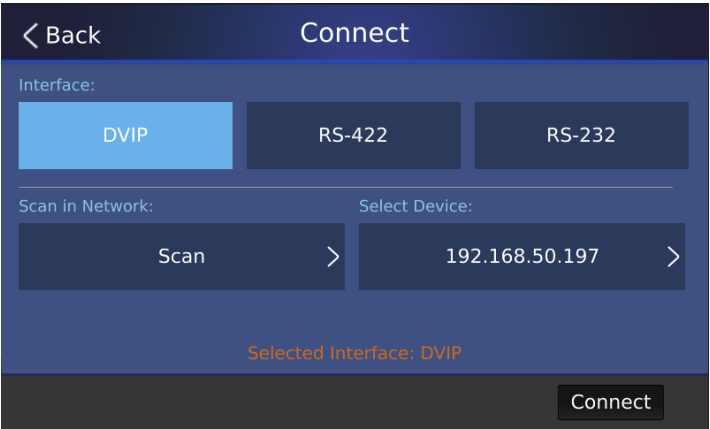
10. Volume Meter: This is the range of the volume meter for the main output and it can be adjusted by the “Audio>HDMI/UVC”.

11. Button for switching the “Home” Layout: When the “Home” page’s “Source” and “PIP” are shown in vertical mode, you can press this button to show them in the horizontal mode. Moreover, it can hide the “Camera Preset” area. If the “Home” page is shown in horizontal mode, press this button once to switch to the vertical mode.





12. Connection icon: Please press this camera icon  to enter the “Connect” page which is shown in the following diagram. If the DVIP protocol is selected, you can press the “Scan in Network” button to search the camera which is set within the same LAN as the iCAST MINI. The “Select Device” option allows you to select the IP address of the camera that you want to connect. If the RS-422 or RS-232 option is selected, you can press the “Settings” key to set the related parameters. You can see this “Connection” icon on “Home/Camera/PIP/Audio” pages.



5.2 Camera



1. White Balance-Auto: Please press this button to apply the Auto White Balance settings.

2. White Balance-One Push: Please press this button to apply the One-Push White Balance settings.

3. White Balance-Manual: Please press this button to turn on the Manual White Balance function. You can press the “R GAIN/B GAIN” adjustment slider or the “+/-” buttons which are shown in the following diagram to increase or decrease the R GAIN or B GAIN value. Please press the “Back” button to go back to the previous page.



4. SHUTTER: Please press this button to increase or decrease the shutter speed by pressing the “Shutter” adjustment slider or “+/-” buttons which are shown in the following diagram. Please press the “Back” button to go back to the previous page.



5. Focus-Auto: Please press this button to apply the Auto Focus settings.

6. Focus-Manual: Please press this button to apply the Manual Focus settings. When this button is pressed, you can use the “+/-” buttons next to the “Manual” button to adjust the Focus manually.

7 & 8. +/- buttons: You can use these buttons to increase or decrease the Focus value manually.

9. IRIS-Auto: Please press this button to apply the Auto IRIS settings.

10. IRIS-Manual: Please press this button to apply the Manual IRIS Settings. When this button is pressed, you can use the “+/-” buttons next to the “Manual” button to adjust the IRIS value manually.

11 & 12: +/- buttons: You can use these buttons to increase or decrease the IRIS value manually.

13. Zoom In: Please press this button for zooming in the camera lenses.

14. Zoom Out: Please press this button for zooming out the camera lenses.

15. Lock/Unlock: This is the switching button for locking or unlocking. Once it is locked, the “CAMERA Control” area can not be used.

16. Speed Control Slider: This slider allows you to control the speed for zooming in and zooming out when the “Zoom In” or “Zoom OUT” button is pressed. Moreover, it also allows you to control the speed of the joystick in the “CAMERA CONTROL” area. Please slide the slider to the up side to increase the speed and slide the slider to the down side to decrease the speed.

17. PTZ Control Joystick: This joystick allows you to control the direction of the connected PTZ camera.


18. Position 1-4: You can see the thumbnails of the Presets 1-4 from this area.

19. Store Button: Once the parameters for your desired preset position is adjusted, you can press this button to activate the preset position 1-4 to save your desired preset positions.

5.2.1. How to save the Position 1-4 Preset Positions

Please follow the steps below to save the Position 1-4 preset positions. Note: Due to that the iCAST MINI’s Graphic Key function is achieved by the RTSP stream function of the PTZ camera. So, you can use the Graphic Key function only when the DVIP protocol is selected to be the connection setting.

1. Please adjust your desired preset position and parameter settings in advance.

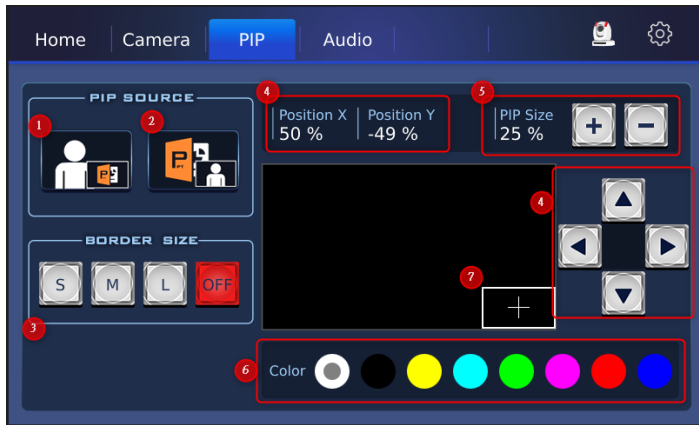
2. Please tap the “STORE” button , and then you can see the Position 1-4 area is shown in the following diagram.



3. Take the Position 1 as an example, once the Position 1 is pressed, the iCAST MINI will save the current image which is shot by the camera as the Preset Position 1. Moreover, it will use the current image which is shot by the camera to be the thumbnail of the Position 1 Preset.



5.3 PIP



1. PIP Source (Front-PowerPoint Slide/Rear-Presenter): Please press this button to show the two input video sources of the iCAST MINI by the “Front-PowerPoint Slide/Rear-Presenter” PIP mode to the external monitor.
2. PIP Source (Front-Presenter/Rear- PowerPoint Slide): Please press this button to show the two input video sources of the iCAST MINI by the “Front-Presenter/Rear-PowerPoint Slide” PIP mode to the external monitor.
3. Border Size: There are four buttons including “S”, “M”, “L” and “OFF” in this area for you to adjust the sub-screen border thickness of the PIP sub-screen. If the “OFF” button is pressed, the border size function will be turned off.
4. Sub-Screen Border Position Adjustment Button and X-axis/Y-axis Position Display: You can use the up, down, left and right arrow buttons to adjust the position of the PIP sub-screen among the screen of the external monitor. Moreover, you can use the percentage of the X-axis/Y-axis to know the relative position of the sub-screen border among the whole screen.
5. PIP Sub-Screen Size +/- Button: These two buttons are buttons for enlarging/shrinking the PIP sub-screen. Once the “+” button is pressed, the screen will be enlarged, if the “-” button is pressed, the screen will be shrunked.
Note: When the resolutions of the Input 2 and Output 1 are 4K30, the

maximum sub-screen size of the PIP Mode can reach only the 80% of the main screen.

6. Color: This area provides many colors for you to select as the border color of the PIP sub-screen. Please tap your desired color to change the border color.

7. The Schematic diagram of the sub-screen size and position: This schematic diagram for showing the PIP sub-screen border among the whole screen allows you to know the PIP sub-screen size and relative position among the whole screen (the black area).

5.4 Audio



1. Channel Type: Please press the “Mono” button to set the audio channel type as “Mono”. And then please press the “STEREO” button to set the audio channel as “STEREO”.

2. Audio Delay(ms): You can press the “+” & “-” buttons to increase or decrease the audio delay. After the setting is done, please press the “Apply” button to apply it.

3. CH1: You can use this slider to adjust the input audio volume of the CH1 XLR.

4. CH2: You can use this slider to adjust the input audio volume of the CH2 XLR.

5. CAM1: You can use this slider to adjust the input audio volume of the CAM1.

6. PC/CAM2: You can use this slider to adjust the input audio volume of the PC/CAM2.

7. Slider for adjusting the monitoring volume: You can use this slider to adjust the monitoring volume.

8. RCA: You can use this slider to adjust the output volume of the RCA.

9. HDMI/UVC: You can use this slider to adjust the master output volume.

10. Volume Meter: This is the range for the master output volume meter and you can adjust it by the “HDMI/UVC” adjusting slider.

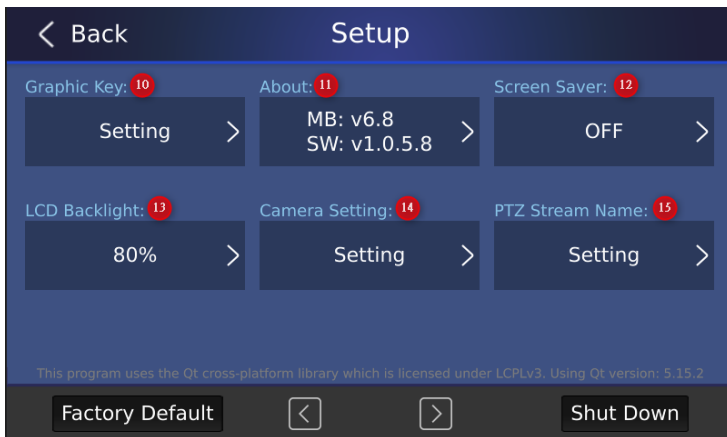
5.4.1 The Corresponding Relationship between Rear Panel’s XLR Audio Interface and App UI’s Channel Type

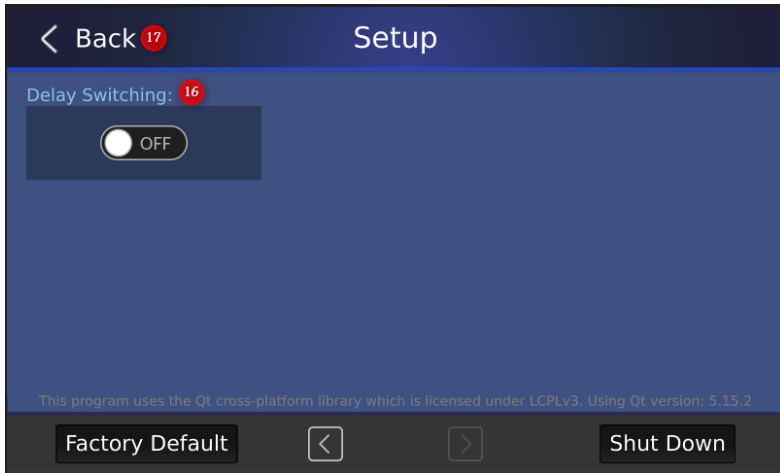
For the corresponding relationship between the iCAST MINI rear panel’s XLR Audio in interface and the App’s UI Channel Type, please refer to the table below.

	CH 1 & CH 2 are connected	Only CH1 is Connected	Only CH2 is Connected
Stereo	CH1 will output the CH1 audio	CH1 will output the CH1 audio	No audio will be output from the CH1
	CH2 will output the CH2 audio	No audio will be output from the CH2	CH2 will output the CH2 audio
Mono	CH1 will output the CH1+CH2 audio	CH1 will output the CH1 audio	CH1 will output the CH2 audio
	CH2 will output the CH1+CH2 audio.	CH2 will output the CH1 audio	CH2 will output the CH2 audio.

5.5 Setup

Please tap the gear icon which is located at the top-right corner of the “Home/Camera/PIP/Audio” pages. There are three pages for the “Setup” interface.





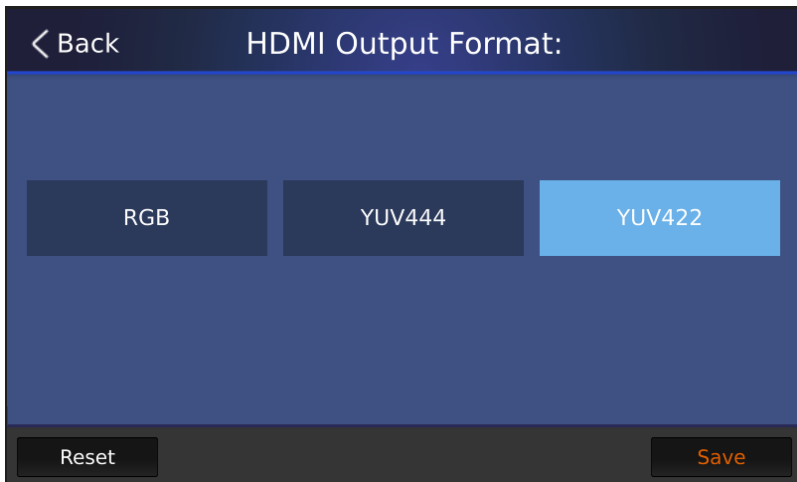
1. Language: Please tap this option to select your desired language from English, Traditional Chinese and Simplified Chinese, and then please press the “Apply” button. Once the “Reset” button is pressed, it will resume to factory default. If you press the “Back” button, it will go back to the previous page.



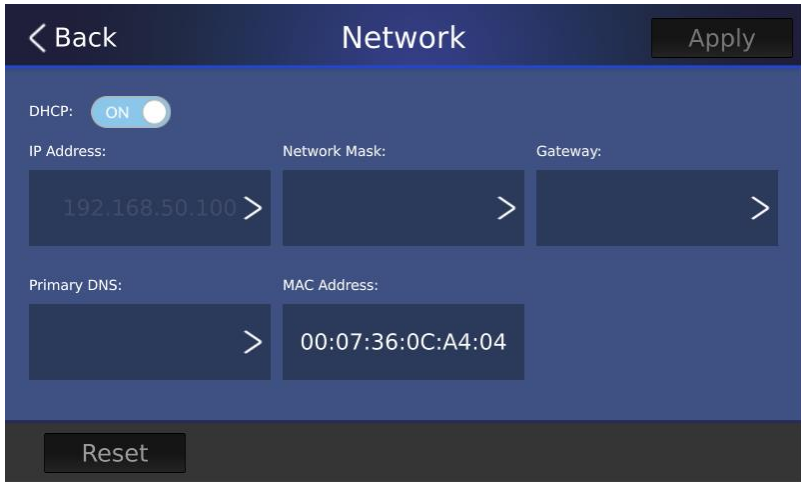
2. Output Resolution: Please tap this option to select your desired output resolution, and then please tap the “Apply” button to confirm your selection. If the “Reset” button is pressed, it will resume to its factory default. If the “Back” button is pressed, it will go back to the previous page.



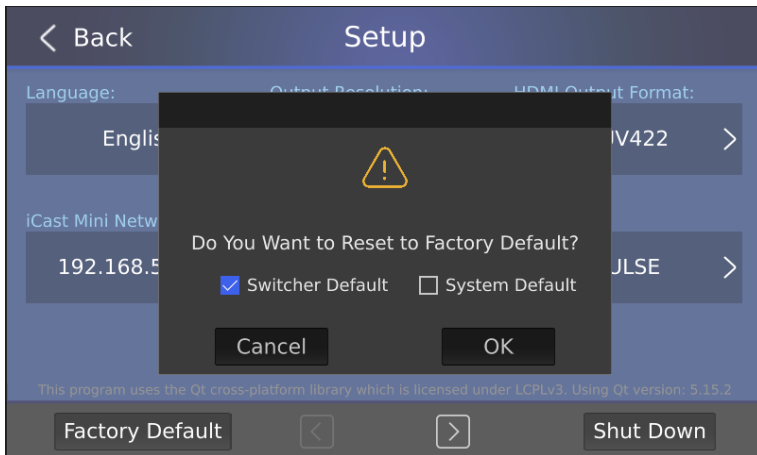
3. HDMI Output Format: Please press this option to select your desired HDMI output format and then press the “Save” button to confirm your selection. If the “Reset” button is pressed, it will resume to its factory default. If you press the “Back” button, it will go back to the previous page.



4. Network: The factory default for the iCAST MINI is DHCP ON and it is no need for users to change the network related parameters. If your iCAST MINI is set as DHCP OFF, you can press this button to change the network related parameters manually.

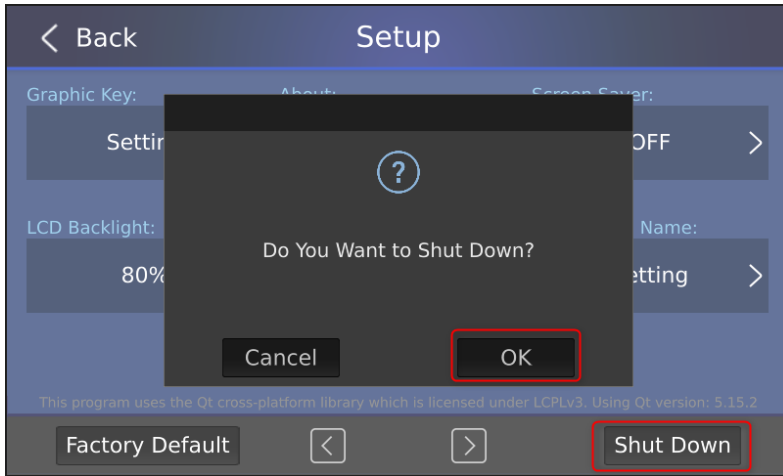


5. GPI: The GPI output can be used for basic external control operation. This is the GPI ON/OFF toggle switch. **Note: Currently, this function is not available.**
6. GPI Mode: The Pulse or Level trigger signal can be used for the iCAST MINI to trigger the function for starting or stopping the video recording. **Note: Currently, This function is not available.**
7. Factory Default: Please press this button to resume your iCAST MINI to its factory default. There are two options for you to select including “Switcher Default” or “System Default”. If the “Switcher Default” is checked, it will resume the related default settings for “Home”, “PIP” and “Audio” interfaces. If the “System Default” is checked, it will resume the related factory default settings for the “Setup” page. However, it will not reset the “Language” and “Output Resolution” options.



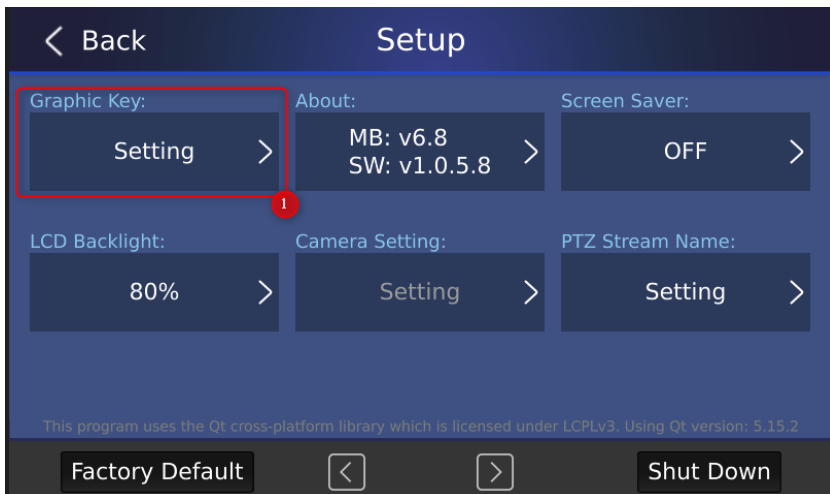
8. Left Arrow Button: Please tap this button to go to the next page of the “Setup” interface.

9. Shut Down: When this button is pressed, the screen of the iCAST MINI will be turned off in advance in order to protect the main unit. Please press the power button which is located on the rear panel of the iCAST MINI to turn off the power of the iCAST MINI.

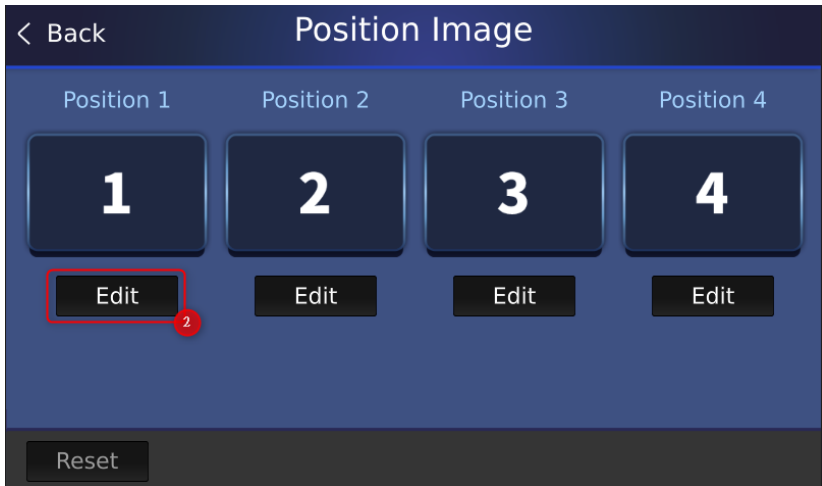


10. Graphic Key: This option allows you to set the Graphic Key. Originally, the 4 preset positions in “CAMERA>Position 1/2/3/4” will capture the image which is shot by the camera to be the thumbnail of the four preset positions in the “Home” interface. However, you can select your desired image in the “Graphic Key” option to replace the original thumbnail. Please follow the steps below for setting the “Graphic Key” thumbnail.

- Please tap the “Graphic Key” option.

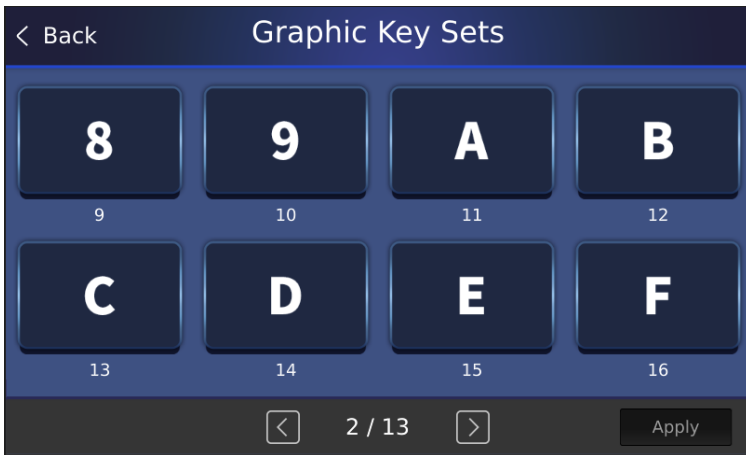


- After that, you will enter the “Position Image” interface. We will take “Position 1” as an example, Please press the “Edit” button below the “Position 1”.





- After that, you will enter the “Graphic Key Sets” interface. Please use the right-arrow button which is located on the bottom of the page to go to other pages. There are 13 pages with a total of 102 graphics which are shown in the following pages for you to select.













< Back Graphic Key Sets

W	X	Y	Z
33	34	35	36
			
37	38	39	40









< 5 / 13 > Apply

< Back Graphic Key Sets

			
41	42	43	44
			
45	46	47	48


< 6 / 13 > Apply

< Back Graphic Key Sets

			
49	50	51	52
			
53	54	55	56

< 7 / 13 > Apply

< Back Graphic Key Sets




57 58 59 60

61 62 63 64

< 8 / 13 > Apply

This panel displays eight graphic key sets. Set 57 shows two people. Set 58 shows a pie chart and a person. Set 59 shows two people and a bar chart. Set 60 shows a person pointing at a screen with a pie chart and bar chart. Set 61 shows two people and a screen with a pie chart and bar chart. Set 62 shows a video camera with the number 1. Set 63 shows a video camera with the number 2. Set 64 shows a video camera with the number 3.

< Back Graphic Key Sets



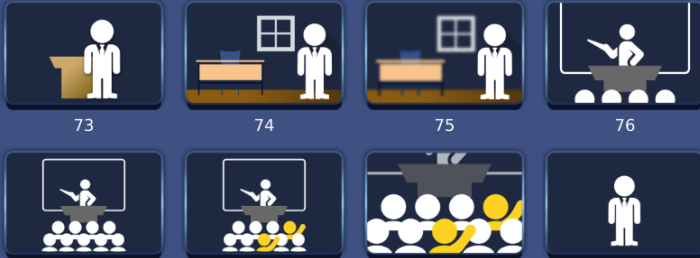
65 66 67 68

69 70 71 72

< 9 / 13 > Apply

This panel displays eight graphic key sets. Set 65 shows a large letter T and horizontal lines. Set 66 shows two people. Set 67 shows two people in suits. Set 68 shows a chalkboard with the equation $E=mc^2$, a globe, and a magnifying glass. Set 69 shows a hexagon with the word LOGO. Set 70 shows a person standing next to a green screen with the equation $1+2=3$. Set 71 shows a person standing behind a podium next to a green screen with the equation $1+2=3$. Set 72 shows a person standing behind a podium.

< Back Graphic Key Sets

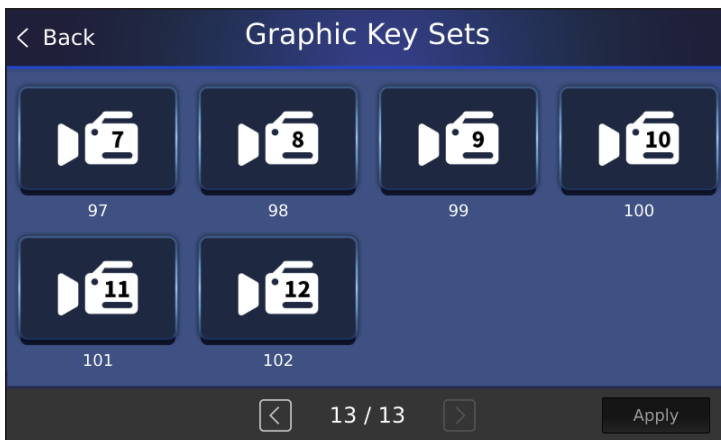
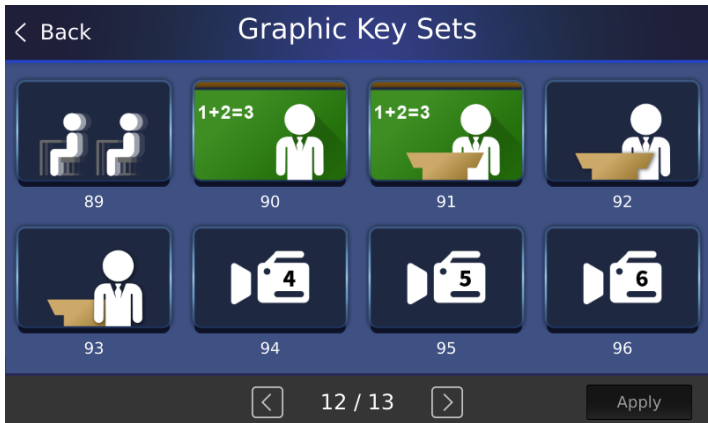
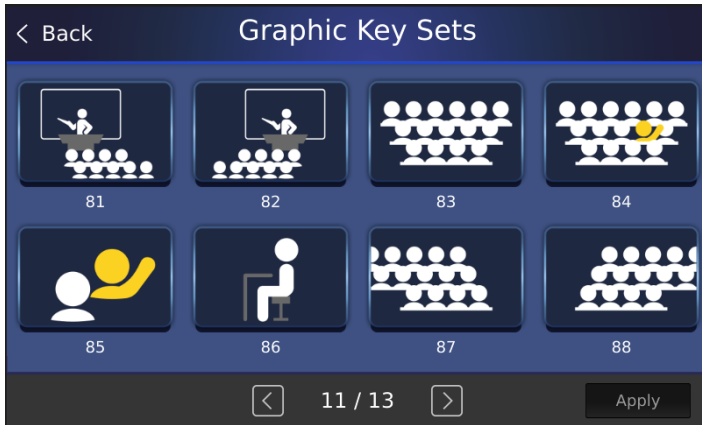


73 74 75 76

77 78 79 80

< 10 / 13 > Apply

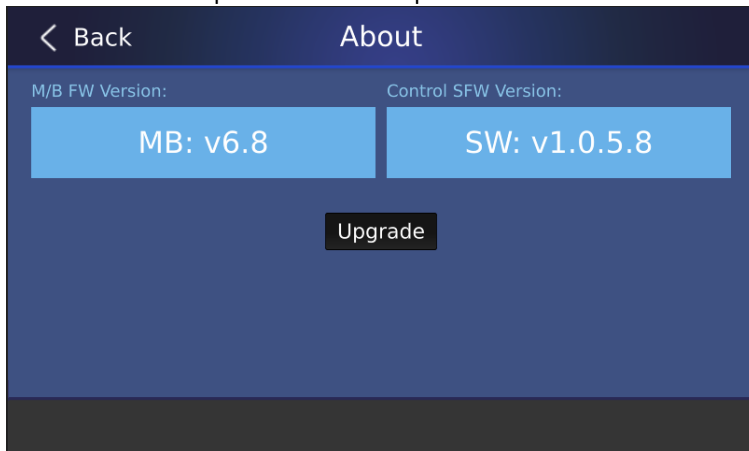
This panel displays eight graphic key sets. Set 73 shows a person at a podium. Set 74 shows a person at a desk with a window. Set 75 shows a person at a desk with a window. Set 76 shows a person pointing at a screen with an audience. Set 77 shows a person pointing at a screen with an audience. Set 78 shows a person pointing at a screen with an audience. Set 79 shows a person pointing at a screen with an audience. Set 80 shows a person.



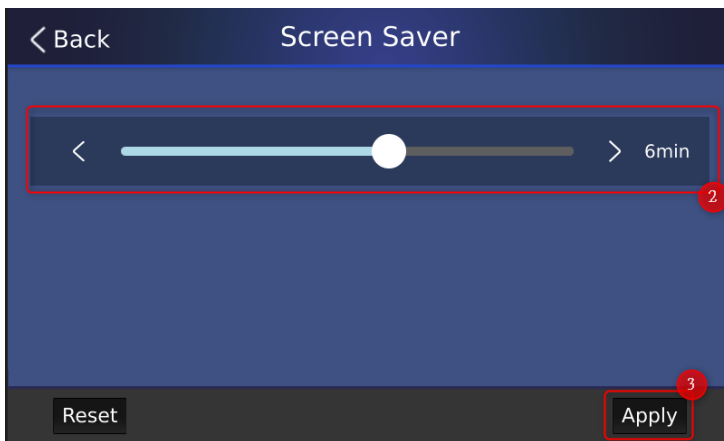
- When you see the graphics that you want to apply it as a Graphic Key, please press the “Apply” button and then the Graphic Key is set successfully. At this time, you can see the Graphic Key that is selected by you from the “Home” interface.



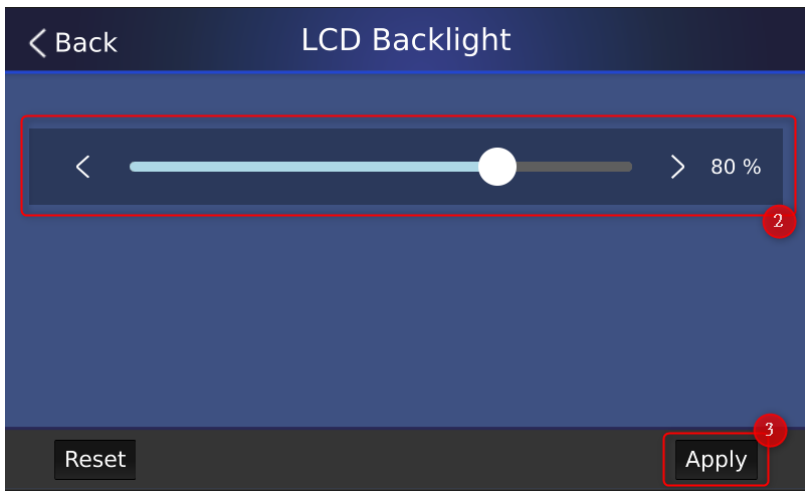
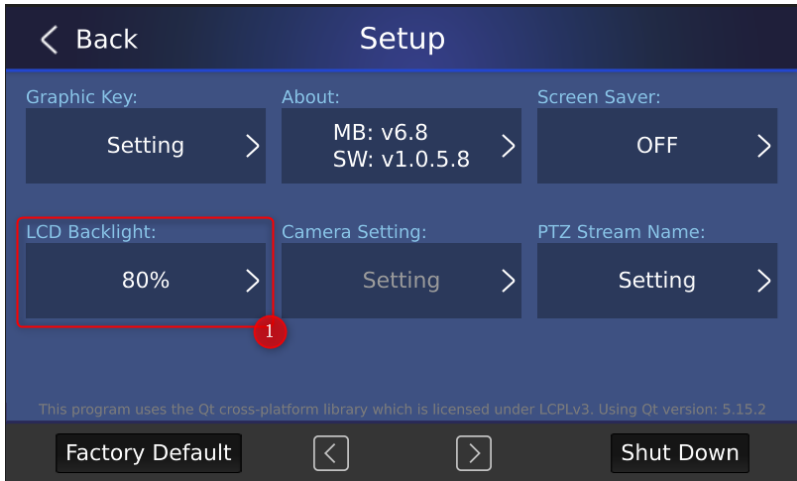
11. About: Please press this button and you can see current Motherboard version and software version. Moreover, you can press the “Upgrade” button for updating the firmware. About the firmware update procedure, please refer to the “Firmware Update” related chapters.



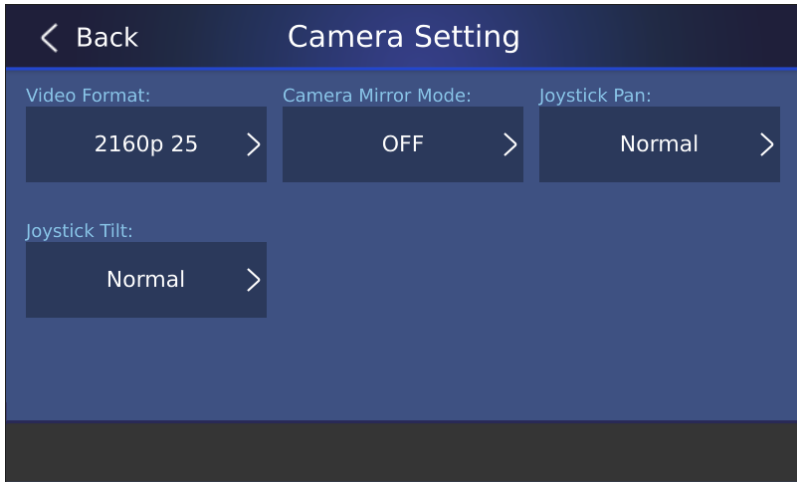
12. Screen Saver: In order to protect the screen of the iCAST MINI, this “Screen Saver” option allows you to set the wait time for activating iCAST MINI’s screen saver. You can press the “Screen Saver” option, and then use the slider to set your desired wait time for the screen saver. Once the wait time is set, please press the “Apply” button, and then it is set successfully. If the wait time is set as 0 minute, the screen saver will be turned off. Once the iCAST MINI’s screen is not touched during the set wait time, and then the screen saver will be activated. Please press the “Reset” button to resume to its factory default.



13. LCD Backlight: This “LCD Backlight” option allows you to set the brightness of the iCAST MINI LCD Monitor. You can press the “LCD Backlight” option, and then use the slider to set your desired LCD Monitor brightness percentage. Once it is set, please press the “Apply” button to finish the setting. Once the “Reset” button is pressed, it will resume to its factory default.

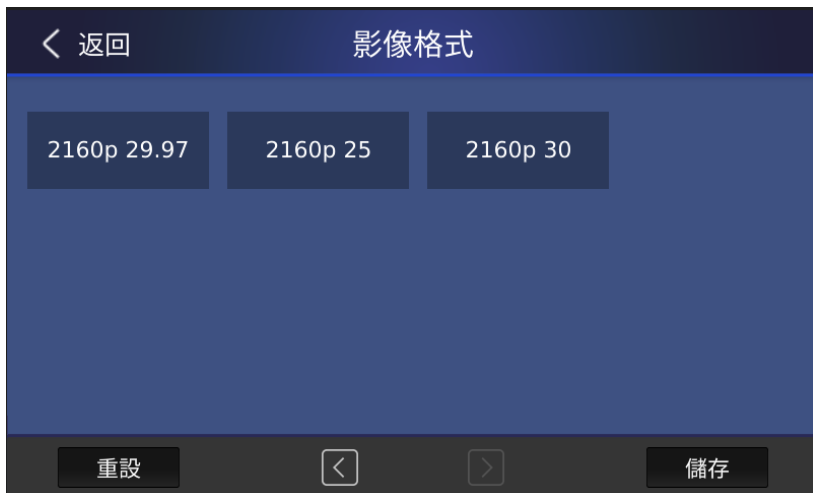


14. Camera Setting: Please tap this option to enter the “Camera Setting” interface. The “Camera Setting” option allows you to set several options including “Video Format”, “Camera Mirror Mode”, “Joystick Pan” and “Joystick Tilt”. For setting every parameter in the “Camera Setting” interface, you need to tap your desired option and then press the “Apply” button to finish the setting. The “Camera Setting” interface is shown in the following diagram.



- Video Format: This option allows you to set your desired output video resolution.

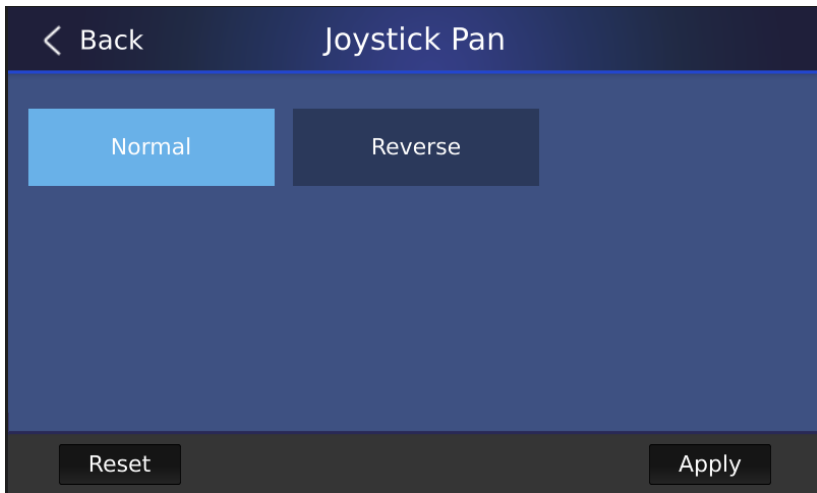




- Mirror Mode: This option allows you to select the camera output image to be “Vertical”, “Horizontal” or “Horizontal+Vertical”.



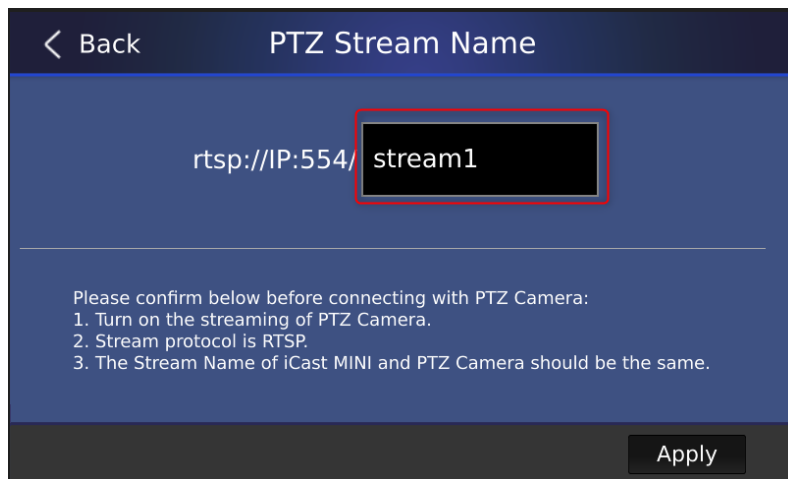
- Joystick Pan: This option allows you to set whether the camera lens moving direction is normal or reverse when the joystick is moving to the left side or right side.



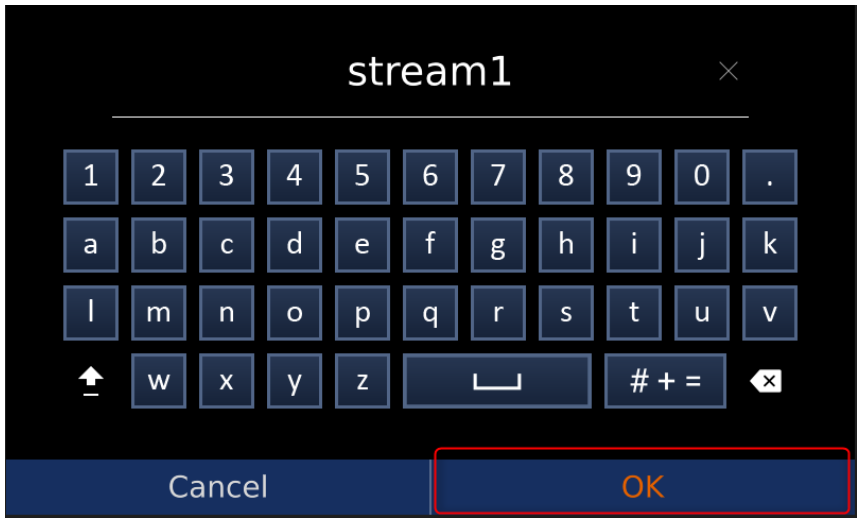
- Joystick Tilt: This option allows you to set whether the camera lens moving direction is normal or reverse when the joystick is moving to the up side or down side.



15. PTZ Stream Name: This option allows you to fill out the RTSP streaming name of the PTZ camera which is connected to the iCAST MINI. Due to that the “Graphic Key” function of the iCAST MINI is realized by the RTSP streaming of the PTZ camera. So, the streaming name of the PTZ camera must be consistent with the streaming name of the iCAST MINI.



Note: If you connect Datavideo PTC-280, PTC-300, PTC-285 or PTC-305 series camera to your iCAST MINI, the default streaming name for the main stream is “stream1”, and the default stream name for the sub-stream is “stream 2”. Moreover, those stream names can not be modified by users. If you connect Datavideo PTC-140 or PTC-145 series camera to your iCAST MINI, the default stream name for the main stream is “live/av0” and the default stream name for the sub-stream is “live/av1”. Moreover, those stream names can be modified by users. What you need to do is to tap the “Stream Name” column, and then you can modify your desired stream name from the keypad which is shown in the following diagram. After the modification is done, please press the “OK” button.



16. Delay Switching: This is the delay switching On/Off switch. If this option switches to “ON”, when you press the presaved 4 “Camera Preset” images to recall the presaved camera lens positions, the monitor which is connected to iCAST MINI’s Video OUT output interface will skip the image of the camera movement and it will show the preset position directly. If this option switches to “OFF”, the connected output device will show the process of the camera movement from the original position to the preset position.

Chapter 6 Firmware Update

Please follow the steps below for updating the firmware of the iCAST MINI 4K Dual Channel Presentation Switcher.

1. Please download the latest software update file “icastmini_fwup_vx.x.x.x” from Datavideo official website’s iCAST MINI product page <https://www.datavideo.com/product/iCAST+MINI> .

2, Please unzip the downloaded firmware.

3. Please create a file folder which the folder name is “datavideo”. After that, please place the unzipped firmware file into this datavideo file folder.

4. Please prepare a formatted USB flash drive with the file format of FAT32. After that, please place the datavideo file folder into the root directory of your USB flash drive.

5. Please insert the USB flash drive into the “FW UPGRADE” interface which is located on the rear panel of the iCAST MINI.

6. Please tap the gear icon which is located at the top-right corner of the main screen to enter the “Setup” interface. After that, please go to the second page of the “Setup” interface.

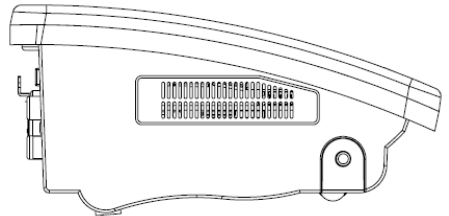
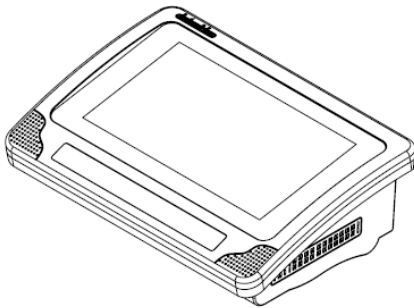
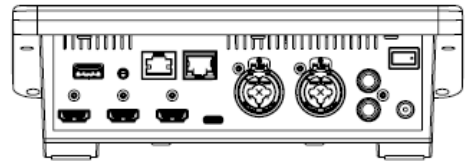
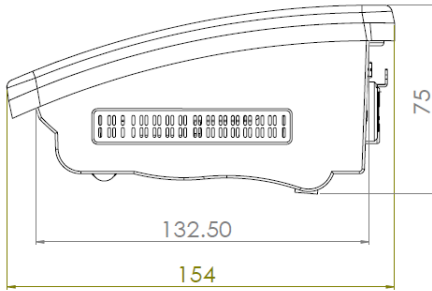
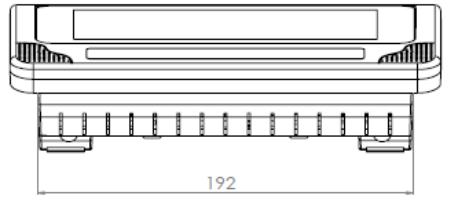
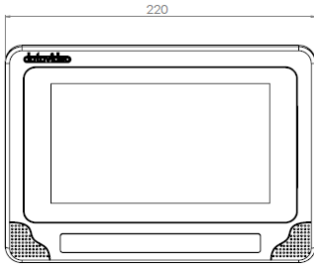
7. Please go to “Setup>About”, and then please press the “Upgrade” button, the firmware update procedure will be started automatically.

8. After the firmware update is done, there is a reminder to show you that the firmware is updated successfully, please reboot the iCAST MINI.

9. Please go to “Setup>About” to confirm 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 720p60/59.94/50
Video Processing	4K2K30 4:4:4, 8bit
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

Dimension (LxWxH)	220 x 154 x 75 (mm)
Weight	1.1 kg
Power	DC 12V 18.7W
Operating Temp. Range	0~40 °C

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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