



**MODEL:
iSDV-200CTR**

SDVoE Transmitter/Receiver, Semtech BlueRiver® AVP2000T, Dual 128Mx16 DDR3, 1GbE RJ-45, 10GbE RJ-45/SFP+, Audio, IR In/Out, Two HDMI 2.0, USB-HID, RS-232, RoHS Compliant

User Manual

Revision

Date	Version	Changes
August 2, 2022	1.00	Initial release

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Manual Conventions



WARNING

Warnings appear where overlooked details may cause damage to the equipment or result in personal injury. Warnings should be taken seriously.



CAUTION

Cautionary messages should be heeded to help reduce the chance of losing data or damaging the product.



NOTE

These messages inform the reader of essential but non-critical information. These messages should be read carefully as any directions or instructions contained therein can help avoid making mistakes.



HOT SURFACE

This symbol indicates a hot surface that should not be touched without taking care.

Table of Contents

1 INTRODUCTION.....	1
1.1 OVERVIEW.....	2
1.2 FEATURES.....	2
1.3 FRONT PANEL.....	3
1.3.1 LED Indicators.....	3
1.4 REAR PANEL	5
1.5 TECHNICAL SPECIFICATIONS	5
2 UNPACKING	7
2.1 UNPACKING.....	8
2.2 PACKING LIST	8
3 HARDWARE INSTALLATION.....	10
3.1 ANTI-STATIC PRECAUTIONS.....	11
3.2 INSTALLATION PRECAUTIONS	11
3.3 USB HID MODE SELECTION.....	12
3.4 EXTERNAL PERIPHERAL INTERFACE CONNECTION	13
3.4.1 HDMI Connectors.....	13
3.4.2 Infrared Connectors.....	14
3.4.3 LAN Connector – 1GbE.....	15
3.4.4 LAN Connector - 10GbE.....	16
3.4.4.1 10GbE SFP+	16
3.4.4.2 10GbE RJ-45.....	17
3.4.5 Power Connector	18
3.4.6 RS-232 Serial Port Connectors.....	18
3.5 POWER-ON PROCEDURE.....	19
3.6 RESET THE SYSTEM	19
3.7 CONFIGURATION EXAMPLES.....	20
3.7.1 Video Wall	20
3.7.2 Matrix.....	21
3.7.3 Multiview.....	21

4 SOFTWARE APPLICATION.....	22
4.1 INTRODUCTION.....	23
4.2 SOFTWARE INSTALLATION	23
4.2.1 Microsoft Windows 10/11.....	24
4.2.2 Ubuntu 18.04.....	27
4.2.3 QNAP QTS 5.0.....	28
4.3 MAIN MENU.....	29
4.4 OPERATION MODE.....	30
4.4.1 Transmitter List.....	31
4.4.2 Display Layout.....	32
4.4.3 Information	33
4.5 CONFIGURATION.....	34
4.5.1 Device Setup.....	35
4.5.2 Display.....	36
4.5.3 Device Summary	37
4.6 GLOBAL SETTING.....	38
4.7 LOG.....	38
4.8 HOW TO SETUP A VIDEO WALL	39
4.9 HOW TO SETUP MULTIVIEW	41
A REGULATORY COMPLIANCE	43
B SAFETY PRECAUTIONS	48
B.1 SAFETY PRECAUTIONS.....	49
B.1.1 General Safety Precautions.....	49
B.1.2 Product Disposal.....	50
B.2 MAINTENANCE AND CLEANING PRECAUTIONS	51
C HAZARDOUS MATERIALS DISCLOSURE	52
C.1 RoHS II DIRECTIVE (2015/863/EU)	53
C.2 CHINA RoHS.....	54

List of Figures

Figure 1-1: iSDV-200CTR Transceiver	2
Figure 1-2: Front Panel	3
Figure 1-3: Rear Panel.....	5
Figure 3-1: USB HID Mode Switch Location	12
Figure 3-2: HDMI Connector	13
Figure 3-3: RJ-45 Ethernet Connector.....	15
Figure 3-4: 10GbE SFP+ Connector.....	17
Figure 3-5: RJ-45 Ethernet Connector.....	17
Figure 3-6: Power Connector	18
Figure 3-7: Reset Button Location.....	20
Figure 4-1: Operation Mode.....	30
Figure 4-2: Configuration.....	34
Figure 4-3: Global Setting.....	38
Figure 4-4: Log.....	38

List of Tables

Table 1-1: LED Indicators	4
Table 1-2: Technical Specifications.....	6
Table 2-1: Package List.....	9
Table 3-1: USB HID Mode Selection.....	12
Table 3-2: HDMI Connector Pinouts	13
Table 3-3: IR Receiver Cable Pinouts	14
Table 3-4: IR Blaster Cable Pinouts	14
Table 3-5: LAN Connector Pinouts	15
Table 3-6: 10GbE SFP+ Pinouts	17
Table 3-7: LAN Connector Pinouts	17
Table 3-8: Power Connector Pinouts.....	18
Table 3-9: RS-232 Serial Port Pinouts	18

Chapter

1

Introduction

1.1 Overview



Figure 1-1: iSDV-200CTR Transceiver

The iSDV-200CTR is a 4K HDR SDVoE IP combo transceiver with a Semtech BlueRiver® AVP2000T AV processor and two on-board 128Mx16 DDR3 memory. With its 10GbE combo port design, the iSDV-200CTR allows streaming over copper cable or fiber cable in one single device to deliver zero-latency video and audio for live event, video wall or situation room.

The iSDV-200CTR includes one HDMI input and one HDMI output supporting 4K60 resolutions. Other slots and connectors include four USB-HID, one GbE port, two RS-232, one infrared output, one infrared input and two audio jacks (line-out and mic-in).

1.2 Features

The iSDV-200CTR has the following features

- Decoder hybrid and copper/fiber combo device
- Visualization hardware design for IP management
- Flexible software, iSDV Network Video Orchestrator, for TX/RX configuration and applications

iSDV-200CTR

1.3 Front Panel

The front panel of the iSDV-200CTR are shown in **Figure 1-2**.

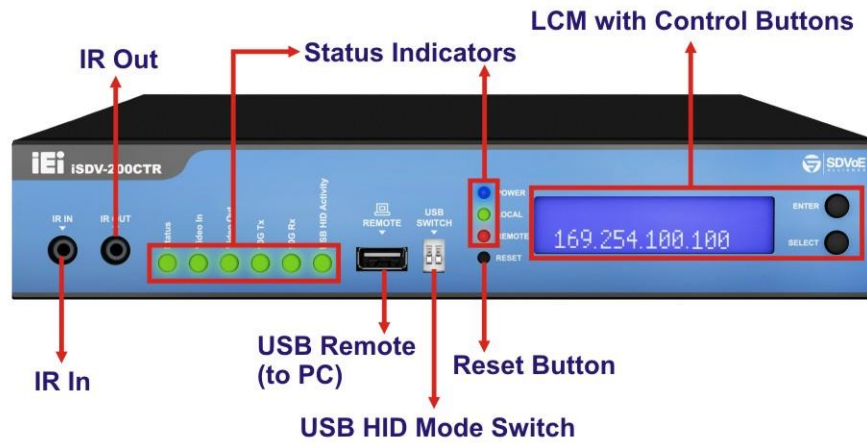


Figure 1-2: Front Panel

1.3.1 LED Indicators

The descriptions of each LED indicator on the front panel are listed below.

LED Indicator	Color	Description
Power	Blue	ON: Power on
Local	Green	ON: USB HID mode is set to “Local” for USB keyboard/mouse connection
Remote	Red	ON: USB HID mode is set to “Remote” for connecting host USB port.
Status	Green	System Status LED Steady on: Main application firmware is running. Slow blinking: Golden firmware is running. Fast blinking: Bootloader code is running.
Video In	Green	Video In Stable LED Valid HDMI video signal is present at the HDMI input interface.

Video Out	Green	<p>Video Out Stable</p> <p>Reflects status of HDMI signal received from a transmitter as transported over the 10GbE link to the receiver.</p>
10G Tx	Green	<p>10G Tx LED</p> <p>Indicates if Ethernet packets are transmitting.</p> <p>Off: No packets transmitting.</p> <p>Blinking: Packets are transmitting.</p>
10G Rx	Green	<p>10G Rx LED</p> <p>Indicates if Ethernet packets is received and if a valid signal is detected.</p> <p>Off: No packets received and Rx SERDES NOT linked.</p> <p>Blinking: Packets received and Rx SERDES linked.</p> <p>On: No packets transmitted but Rx SERDES linked.</p>
USB HID Activity	Green	<p>USB HID Activity</p> <p>Off: USB HID not enabled or not presently paired or paired with a device in OTG mode with no USB device connected (no active role selected).</p> <p>Flash twice followed by off for 1 second:</p> <p>Indicates authentication failed when two paired devices have encryption enabled.</p> <p>Blinking: USB HID paired but no Local or Remote USB device connected.</p> <p>On: USB HID paired plus both Local and Remote USB device connected.</p>

Table 1-1: LED Indicators

iSDV-200CTR

1.4 Rear Panel

The rear panel of the iSDV-200CTR are shown in Figure 1-3.

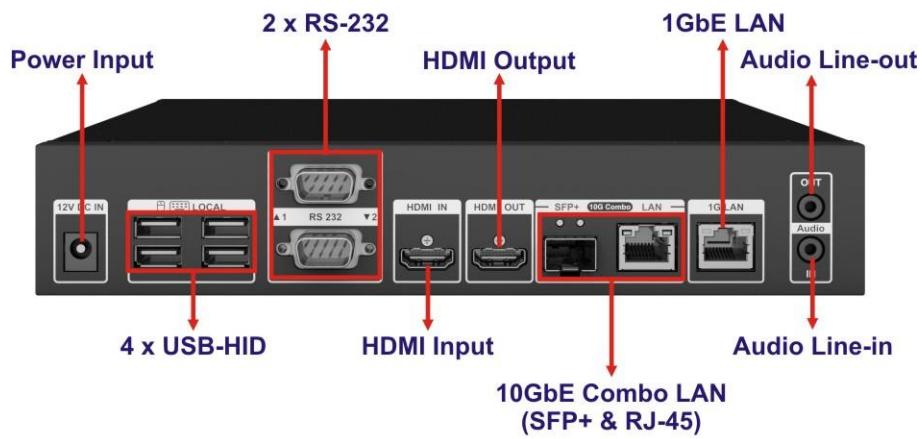


Figure 1-3: Rear Panel

1.5 Technical Specifications

The specifications for the iSDV-200CTR are listed below.

	iSDV-200CTR
AV Processor	BlueRiver® AVP2000T
Memory	2 x 128Mx16 DDR3 onboard
Video Interfaces	HDMI 2.0 supporting all resolutions up to 594MHz 4K60 RGB and 4:4:4 8-bit 4K60 4:2:2 10-bit for broadcast and medical applications 4K60 4:2:0 10-bit and 12-bit HDR
Control Button	Trigger & Tuning: 1 x Reset button 1 x USB switch
LCM	1 x Monochrome LCM (65 x 15 mm)

I/O Ports	1 x 1GbE LAN	1 x 3.5mm audio-in jack
	1 x 10GbE LAN	1 x 3.5mm audio-out jack
	1 x 10GbE SFP+	4 x USB-HID
	1 x IR in	2 x RS-232
	1 x IR out	9 x LED indicator
	1 x HDMI 2.0 in	1 x Reset button
	1 x HDMI 2.0 out	1 x USB switch
Application Mode	Transmitter / Receiver Extension / Switching / Video Wall / Multi Viewer / KVM supported	
Power Input	12 V DC In, 3.3A	
Operating Temperature	-20°C ~ 50°C without air flow -20°C ~ 60°C with air flow	
Operating Humidity	20% ~ 95%, non-condensing	
Dimensions (W x D x H)	238 mm x 166 mm x 44.5 mm	
Weight	1235 g	
Safety & EMC	CE, FCC, CCC	
Software	Free management software (iSDV Network Video Orchestrator) supported	
Software Compatible OS	Microsoft Windows 10 64-bit Microsoft Windows 11 64-bit Linux Ubuntu 18.04 LTS+ QNAP NAS QTS 5	

Table 1-2: Technical Specifications

Chapter

2

Unpacking

2.1 Unpacking

To unpack the system, follow the steps below:

- Step 1:** Use box cutters, a knife or a sharp pair of scissors that seals the top side of the external (second) box.
- Step 2:** Open the external (second) box.
- Step 3:** Use box cutters, a knife or a sharp pair of scissors that seals the top side of the internal (first) box.
- Step 4:** Lift the system out of the boxes.
- Step 5:** Remove both polystyrene ends, one from each side.
- Step 6:** Make sure all the components listed in the packing list are present.


2.2 Packing List



NOTE:

If any of the components listed in the checklist below are missing, do not proceed with the installation. Contact the IEI reseller or vendor the iSDV-200CTR was purchased from or contact an IEI sales representative directly by sending an email to sales@ieiworld.com.

The iSDV-200CTR is shipped with the following components:

Quantity	Item	Image
1	iSDV-200CTR	

iSDV-200CTR

1	Power adapter (40 W)	
1	Power cord	
1	USB cable (Type A to Type A)	
1	Screw pack	

Table 2-1: Package List

Chapter

3

Hardware Installation

iSDV-200CTR

3.1 Anti-static Precautions

**WARNING:**

Failure to take ESD precautions during installation may result in permanent damage to the iSDV-200CTR and severe injury to the user.

Electrostatic discharge (ESD) can cause serious damage to electronic components, including the iSDV-200CTR. Dry climates are especially susceptible to ESD. It is therefore critical that whenever the iSDV-200CTR or any other electrical component is handled, the following anti-static precautions are strictly adhered to.

- **Disconnect Power:** Power to the iSDV-200CTR must be disconnected during the installation process, or before any attempt is made to access the bottom panel. Electric shock and personal injury might occur if the iSDV-200CTR's chassis is opened while the power cord is still connected to an electrical outlet.
- **Grounding:** The iSDV-200CTR should be properly grounded. The voltage feeds must not be overloaded. Adjust the cabling and provide external overcharge protection per the electrical values indicated on the label attached to the back of the iSDV-200CTR.

3.2 Installation Precautions

During installation, be aware of the precautions below:

- **Read the user manual:** The user manual provides a complete description of the iSDV-200CTR, installation instructions and configuration options.
- **Air Circulation:** Make sure there is sufficient air circulation when installing the iSDV-200CTR. The iSDV-200CTR must not be obstructed by any objects. Leave at least 5 cm of clearance around the iSDV-200CTR to prevent overheating.
- **Qualified Personnel:** The iSDV-200CTR must be installed and operated only by trained and qualified personnel. Maintenance, upgrades, or repairs may

only be carried out by qualified personnel who are familiar with the associated dangers.

3.3 USB HID Mode Selection

The iSDV-200CTR has one USB remote port on the front panel and four USB-HID ports on the rear panel. The USB remote port is for connecting with PC; the USB-HID ports are for connecting USB devices such as keyboard and mouse.

The USB HID mode switch (Figure 3-1) on the front panel allows users to configure the mode of the USB ports as listed below.




USB Switch	Description
	USB mode set by software
	Enable the USB remote port (on front panel) for PC connection
	Enable four USB-HID ports (on rear panel) for keyboard/mouse connection

Table 3-1: USB HID Mode Selection



Figure 3-1: USB HID Mode Switch Location

3.4 External Peripheral Interface Connection

The following section describes each external peripheral interface connector in details.

3.4.1 HDMI Connectors

Use the HDMI input connector to connect with a video/graphic source device; use the HDMI output connector to connect with an output display. The HDMI connectors support up to 4K @ 60Hz.

Pin	Description	Pin	Description
1	HDMI_DATA2	2	GND
3	HDMI_DATA2#	4	HDMI_DATA1
5	GND	6	HDMI_DATA1#
7	HDMI_DATA0	8	GND
9	HDMI_DATA0#	10	HDMI_CLK
11	GND	12	HDMI_CLK#
13	N/C	14	N/C
15	HDMI_SCL	16	HDMI_SDA
17	GND	18	+5V
19	HDMI_HPD		

Table 3-2: HDMI Connector Pinouts

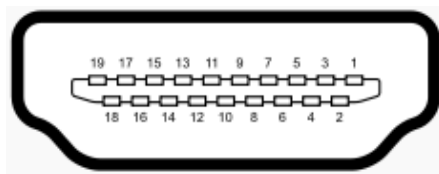


Figure 3-2: HDMI Connector

3.4.2 Infrared Connectors

The iSDV-200CTR has one IR-out connector and one IR-in connector, both in 3.5 mm jacks.

- IR In: for connecting an IR receiver
- IR Out: for connecting an IR blaster.


Pin	Description	IR Receiver Cable
1	Power	
2	Infrared signal	
3	Ground	

Table 3-3: IR Receiver Cable Pinouts


Pin	Description	IR Blaster Cable
1	Infrared signal	
2	Ground	

Table 3-4: IR Blaster Cable Pinouts



WARNING!

Incorrect installation of IR receiver or IR blaster may result in failure of the IR devices. Ensure all installed devices and cables are compatible with the specifications of the SDV-200CTR.

iSDV-200CTR

3.4.3 LAN Connector – 1GbE

The 1GbE connector allows connection to an Ethernet supporting device.

Pin	Description	Pin	Description
1	MDIA0+	5	MDIA2-
2	MDIA0-	6	MDIA1-
3	MDIA1+	7	MDIA3+
4	MDIA2+	8	MDIA3-

Table 3-5: LAN Connector Pinouts

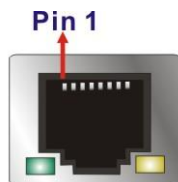


Figure 3-3: RJ-45 Ethernet Connector

3.4.4 LAN Connector - 10GbE

The iSDV-200CTR is equipped with two types of 10GbE connector – one SFP+ connector and one RJ-45 connector. Users can choose either one of the 10GbE connectors to connect the iSDV-200CTR with a 10GbE network switch.



NOTE:

The 10GbE network switch must have the following configurations to work with the iSDV-200CTR:

- IGMP version 2 supported
- IGMP version 2 snooping enabled
- Filter/Drop unregistered multicast traffic
- Disable unregistered multicast flooding

3.4.4.1 10GbE SFP+

The 10GbE SFP+ connector on the rear panel allows transfer rate of up to 10 gigabits per second. The pinouts of the 10GbE SFP+ connector are listed below.



NOTE:

The iSDV-200CTR does not include an SFP+ module. The user must insert a standard SFP+ module before use. Ensure the fiber type matches the SFP+ module used.

Pin	Description	Pin	Description
1	GND	11	GND
2	TX_FAULT	12	RD-
3	TX_DISABLE	13	RD+
4	SDA	14	GND
5	SCL	15	VCCR
6	MOD_ABS	16	VCCT

iSDV-200CTR

Pin	Description	Pin	Description
7	RS0	17	GND
8	RX_LOS	18	TD+
9	RS1	19	TD-
10	GND		

Table 3-6: 10GbE SFP+ Pinouts

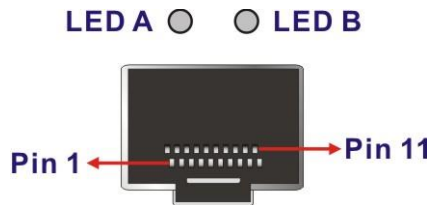


Figure 3-4: 10GbE SFP+ Connector

3.4.4.2 10GbE RJ-45

The 10GbE RJ-45 connector on the rear panel allows transfer rate of up to 10 gigabits per second. The pinouts of the 10GbE RJ-45 connector are listed below.

Pin	Description	Pin	Description
1	MDIA0+	5	MDIA2-
2	MDIA0-	6	MDIA1-
3	MDIA1+	7	MDIA3+
4	MDIA2+	8	MDIA3-

Table 3-7: LAN Connector Pinouts

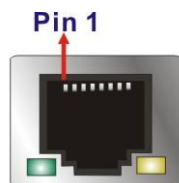


Figure 3-5: RJ-45 Ethernet Connector

3.4.5 Power Connector

The connector supports 12 V power adapters.

Pin	Description
1	12V
2	GND
3	GND

Table 3-8: Power Connector Pinouts



Figure 3-6: Power Connector

3.4.6 RS-232 Serial Port Connectors

The RS-232 serial port connectors allow connection to a serial device. The pinouts are detailed below.

Pin	Description	Pin	Description
1	DCD	6	DSR
2	RX	7	RTS
3	TX	8	CTS
4	DTR	9	RI
5	GND		

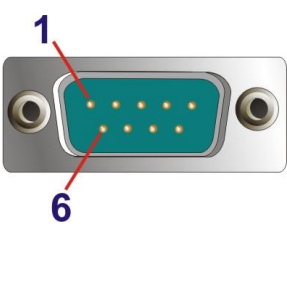


Table 3-9: RS-232 Serial Port Pinouts

iSDV-200CTR

3.5 Power-On Procedure



WARNING:

Make sure a power supply with the correct input voltage is being fed into the system. Incorrect voltages applied to the system may cause damage to the internal electronic components and may also cause injury to the user.

To power-on the iSDV-200CTR, please follow the steps below.

- Step 1:** Connect the power source to the power input jack on the rear panel.
- Step 2:** Once turned on, the power LED indicator on the front panel should turn on in blue.

3.6 Reset the System

The reset button enables user to reload factory firmware settings. The reset button location is shown in **Figure 3-7**.

To restore factory default settings, follow the steps below:

- Step 1:** Remove power from the iSDV-200CTR.
- Step 2:** Press and hold the reset button. While holding, plug power back into the iSDV-200CTR.
- Step 3:** The LEDs on the front panel will blink (except video) for about 5-10 seconds. When the LEDs stop blinking release the reset button.
- Step 4:** The iSDV-200CTR completes its boot-up process and restoring the factory default settings.

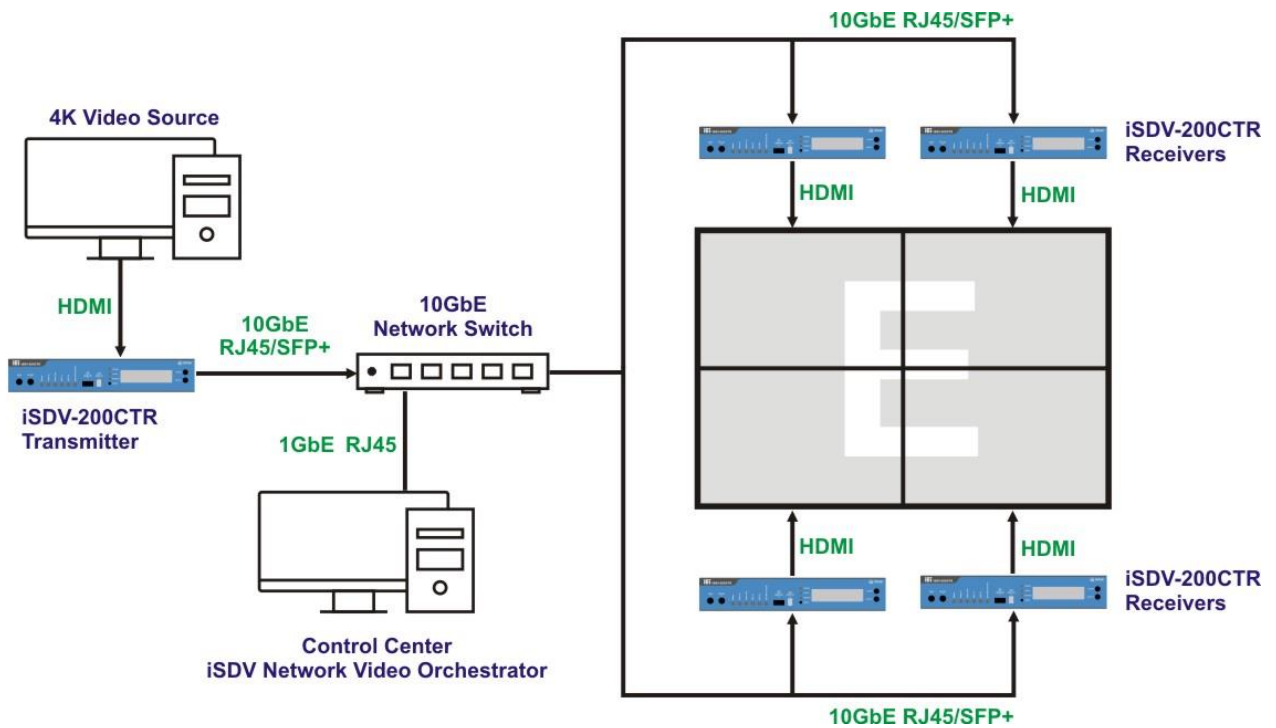


Figure 3-7: Reset Button Location

3.7 Configuration Examples

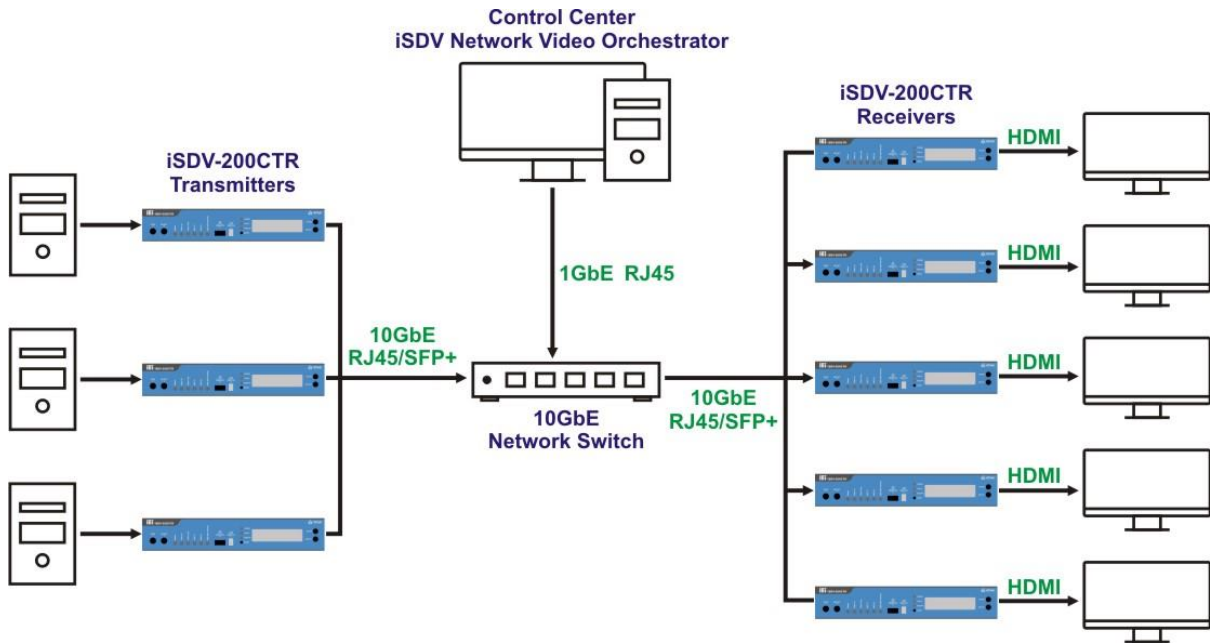
The following diagrams provide users some advanced configuration examples of the iSDV-200CTR, including video wall, matrix and multiview.

3.7.1 Video Wall

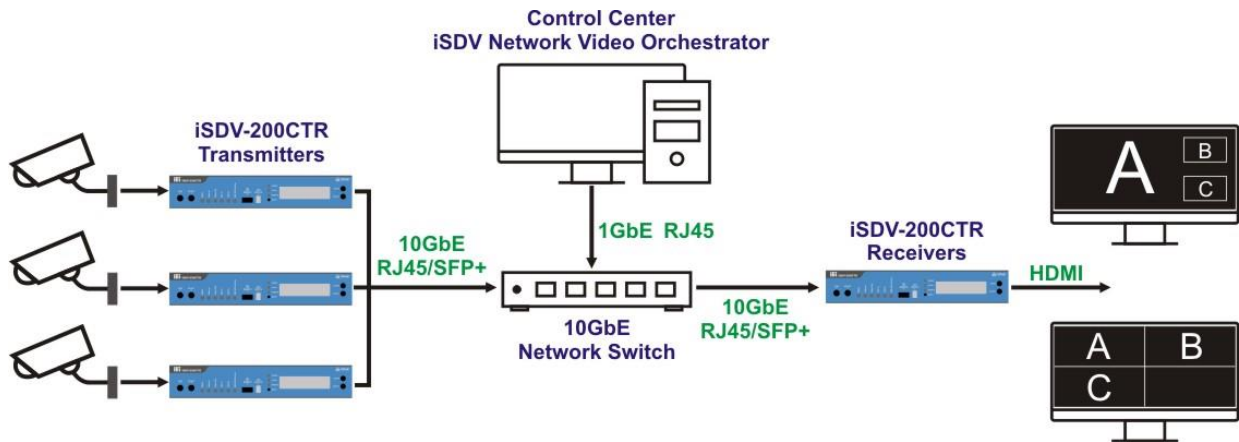


iSDV-200CTR

3.7.2 Matrix



3.7.3 Multiview



Chapter

4

Software Application

iSDV-200CTR

4.1 Introduction

The iSDV Network Video Orchestrator is a free software to manage all your iSDV devices from a central console. The free software can run in different platforms, and has intuitive user interface allowing you to setup Tx and Rx modes, quickly configure display array, and check the status of all devices in real-time.

4.2 Software Installation

IEI iSDV Network Video Orchestrator can be installed in a computer running the following operating systems:

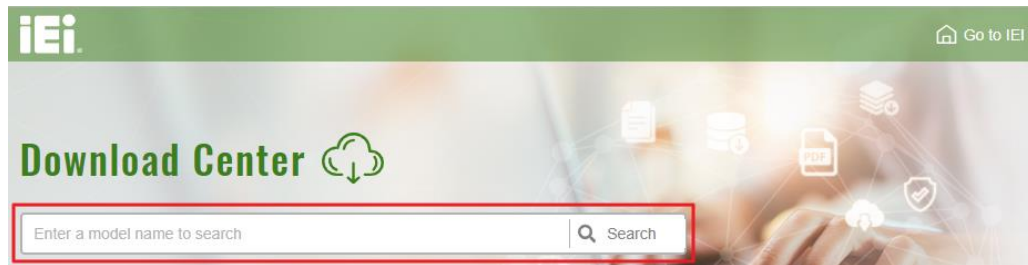
- Microsoft Windows 10 / Windows 11
- Ubuntu 18.04+
- QNAP QTS 5.0+

Follow the instructions described in the following sections to install iSDV Network Video Orchestrator according to the operating system.

4.2.1 Microsoft Windows 10/11

To install iSDV Network Video Orchestrator in a computer running Windows 10/11 OS, follow the steps below.

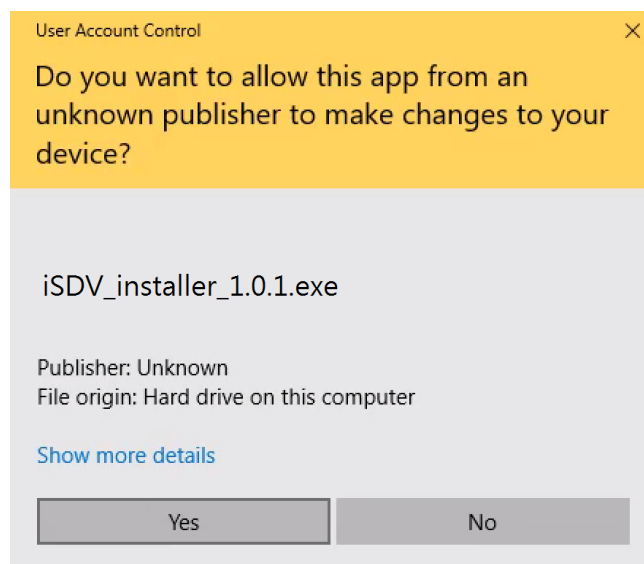
Step 1: Download the software from IEI Resource Download Center: Go to <https://download.ieiworld.com>. Type iSDV-200CTR and press **Enter**. Download and save the iSDV installer (for Windows) to the computer.



Step 2: Double click the iSDV installer to start the installation.

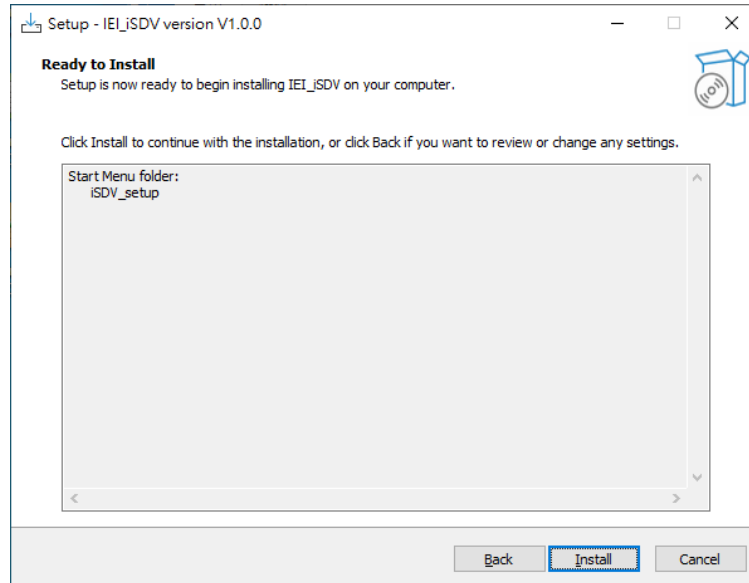


Step 3: When the User Account Control prompt appears, click **Yes**.

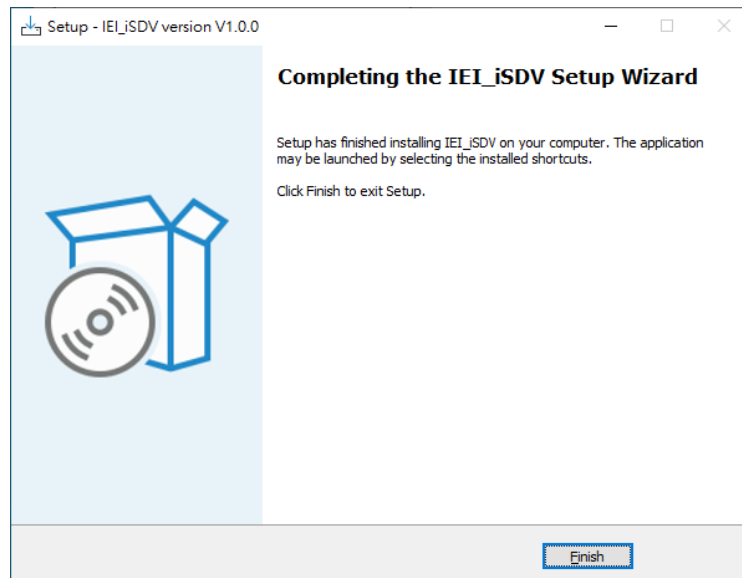


iSDV-200CTR

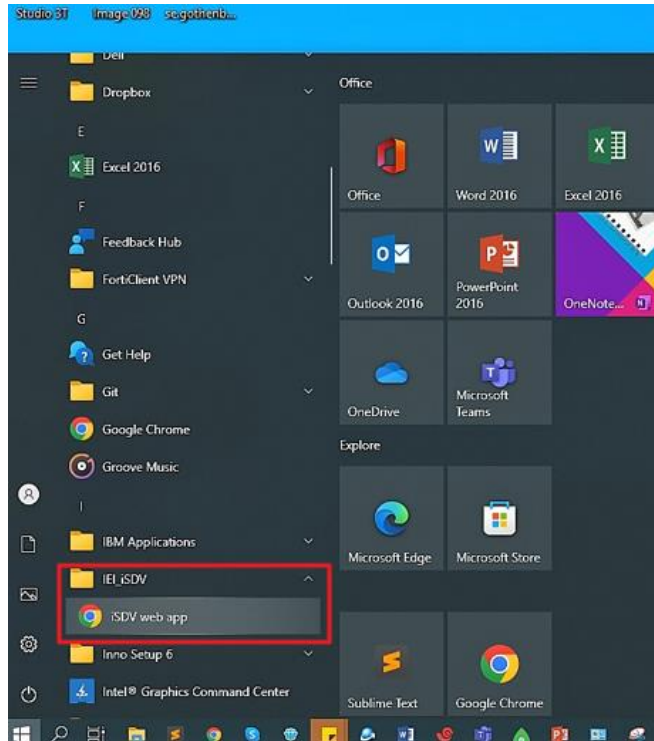
Step 4: The Ready to Install window appears. Click **Install** to start installing the software.



Step 5: After the installation process is complete, a confirmation screen appears. Click **Finish** to exit the program.



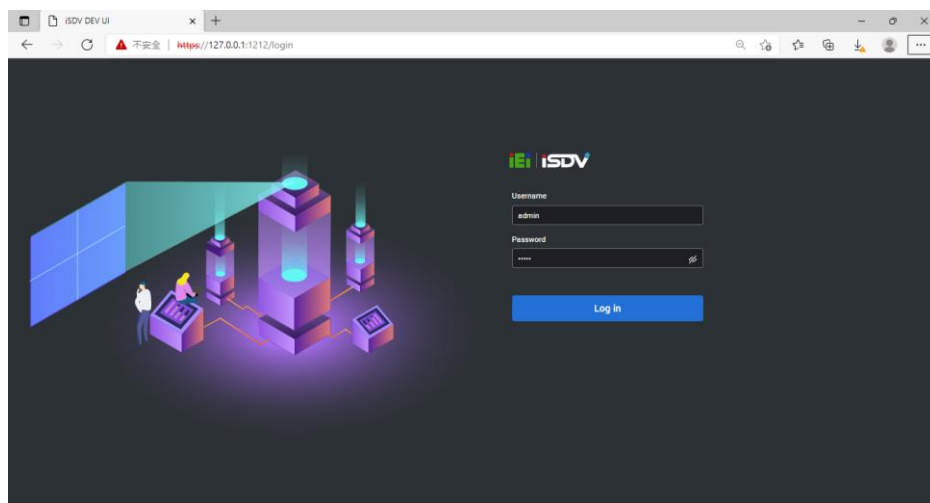
Step 6: Click the iSDV web app to start using iSDV Network Video Orchestrator.



Step 7: Log in the app. The default username and password are:

Username: admin

Password: admin

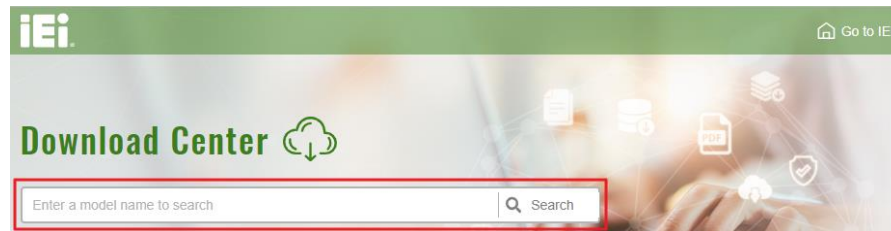


iSDV-200CTR

4.2.2 Ubuntu 18.04

To install iSDV Network Video Orchestrator in a computer running Ubuntu 18.04 OS, follow the steps below.

Step 1: Download the software from IEI Resource Download Center: Go to <https://download.ieiworld.com>. Type iSDV-200CTR and press **Enter**. Download and save the iSDV software (for Ubuntu) to the computer.



Step 2: Enter into Ubuntu 18.04 Desktop Version.

Step 3: Install tools to create an environment for iSDV Network Video Orchestrator.

```
sudo su
apt-get update
apt-get install net-tools docker.io docker-compose unzip
```

Step 4: Install iSDV Network Video Orchestrator. If you re-enter Ubuntu (instead of continuing the installation), enter the `sudo su` command.

```
unzip ieiDocker.zip
cd ieiDocker
bash setup.sh
```

Step 5: Open the iSDV webpage by using the URL: <https://localhost:1212>

Step 6: Log in the app. The default username and password are:

Username: admin

Password: admin

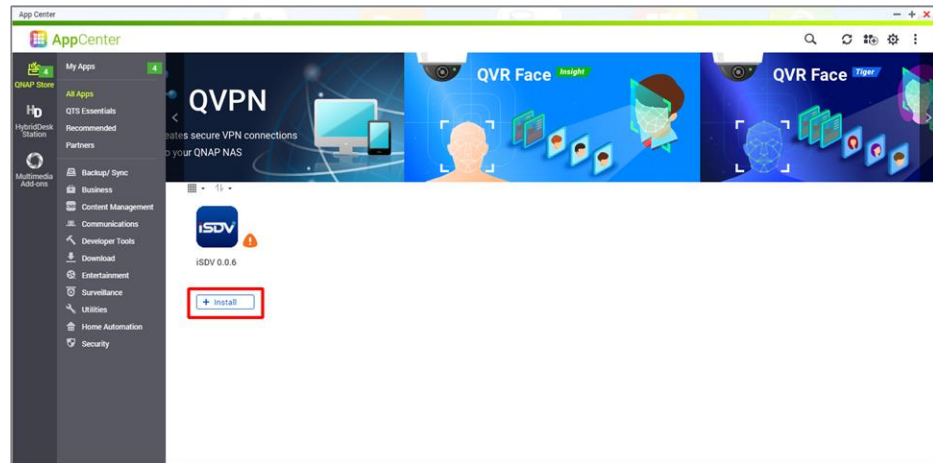
4.2.3 QNAP QTS 5.0

To install iSDV Network Video Orchestrator in a computer running QNAP QTS 5.0 OS, follow the steps below.

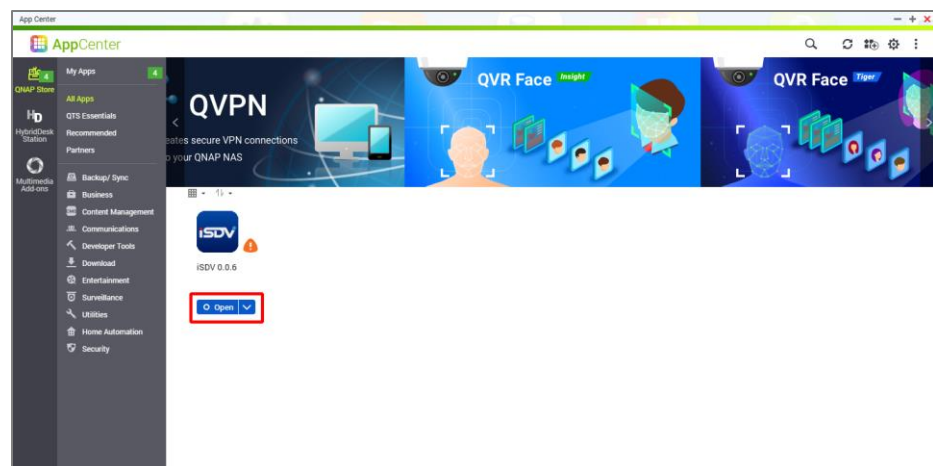
Step 1: Launch App Center in QNAP QTS 5.

Step 2: Search for “iSDV”.

Step 3: Click the **Install** button to install the iSDV application.



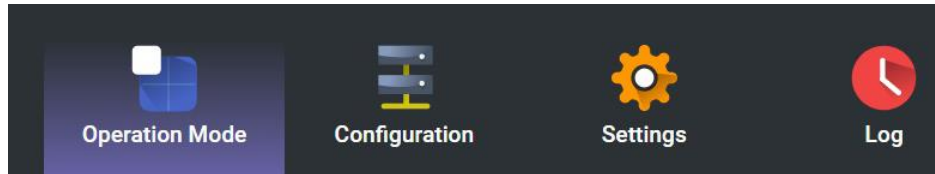
Step 4: Once installed, click the **Open** button to launch the app. Use the username and password of your QNAP QTS account to login.



iSDV-200CTR

4.3 Main Menu

The main menu located on the top the user interface contains four buttons to access the main function pages of the application.



The main function of each button is described in the following table.

Operation Mode	Deploy display setting to the iSDV-200CTR devices
Configuration	Setup device setting, group devices, and configure display array
Global Setting	Setup all device settings
Log	Log all iSDV software operation log

4.4 Operation Mode

In operation mode, users can setup the deployment of the connected transmitters and receivers, including point-to-point, video wall and multiview. The operation mode features are shown in **Figure 4-1**.

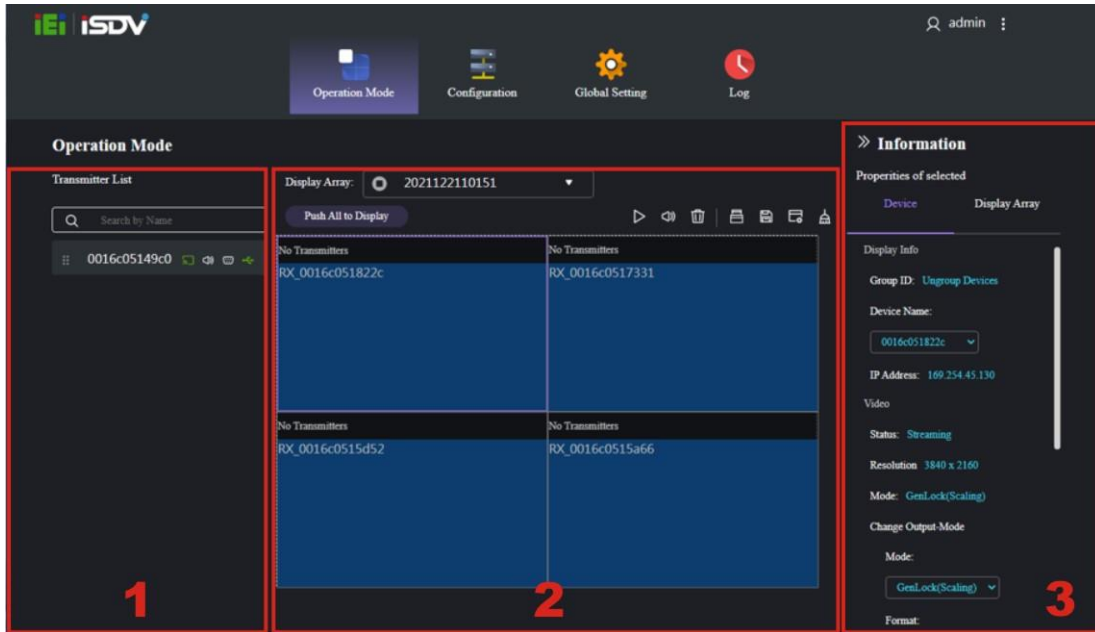


Figure 4-1: Operation Mode

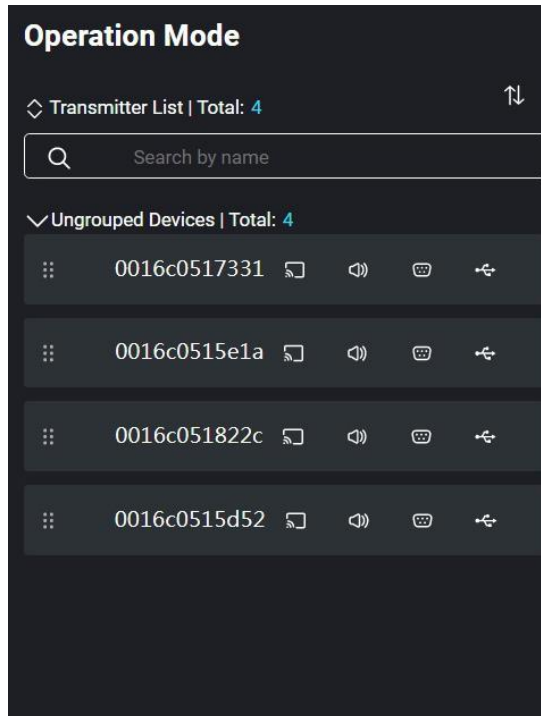
1	Transmitter List	Lists all of the iSDV-200CTR transmitters
2	Display Layout	Allows users to deploy transmitters
3	Information	Shows the information of the device and the display array.

iSDV-200CTR

4.4.1 Transmitter List

All of the iSDV-200CTR transmitters are shown in the transmitter list. The following setting can also be configured in the Transmitter List.

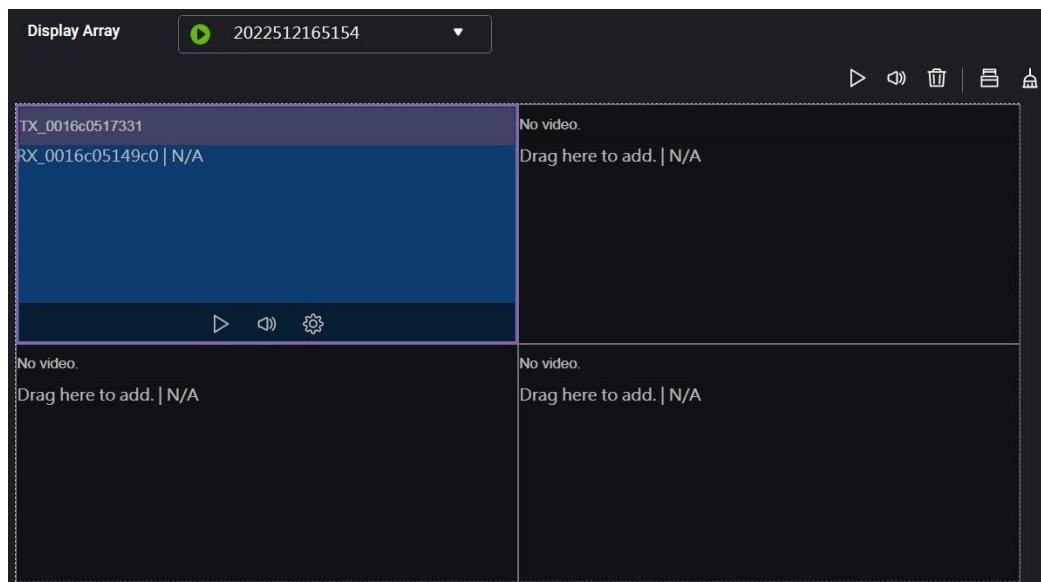
- Display on/off
- Audio on/off



4.4.2 Display Layout

Use this interface to deploy transmitters and receivers. You can drag one or multiple transmitters from the transmitter list onto the display layout to setup a video wall or multiview layout. IEI Network Video Orchestrator allows users to create various video wall matrix such as 2x2, 3x4 and 6x6. For multiview settings, it supports up to 32 sources from transmitters.

Click the Display Array drop-down menu to show the display list created by the user, and all display array lists.



iSDV-200CTR

4.4.3 Information

The Information section contains two sub-page - Device and Display Array. The Device page shows the information of the selected device; it also includes some options for users to configure the device. The Display Array page shows the information of the display array you are working on, and allows users to setup bezel compensation.

<p>» Information</p> <p>Properties of selected</p> <p>Device Display Array</p> <hr/> <p>Select device: <input type="text" value="0016c0515d52"/></p> <p>Display Info</p> <p>Group ID: Ungroup Devices</p> <p>Device name: <input type="text" value="0016c0515d52"/></p> <p>IP address: 10.10.80.164</p> <p>Video</p> <p>Status: Streaming</p> <p>Resolution: 3840 x 2160</p> <p>Mode: GenLock(Scaling)</p> <p>Change output mode</p> <p>Mode: GenLock(Scaling)</p> <p>Format: 4k@29.97Hz/30Hz</p> <p>Width: 3840</p> <p>Height: 2160</p> <p>FPS: 30</p> <p>Aspect ratio: Stretch</p> <p>IP address: 10.10.80.164</p> <p>Video</p> <p>Status: Streaming</p>	<p>Device page</p> <p>Select a device to configure the following settings:</p> <ul style="list-style-type: none"> ▪ Mode ▪ Format ▪ Width ▪ Height ▪ FPS ▪ Aspect Ratio <p>The following information is shown for reference:</p> <ul style="list-style-type: none"> ▪ Group Name ▪ Status ▪ Resolution
--	--

<p>Properties of selected</p> <p style="text-align: center;">Device Display Array</p> <hr/> <p>Display Info</p> <p>Array name: <input type="text" value="202261113934"/></p> <p>Columns: 2</p> <p>Rows: 2</p> <p>Device count: 5</p> <p>Resolution: 3840 x 2160</p> <p>FPS: 60</p> <p>Bezel Compensation</p> <p>Vertical: <input type="text" value="0"/></p> <p>Horizontal: <input type="text" value="0"/></p>	<p>Display Array page</p> <p>Use this page to configure the following settings:</p> <ul style="list-style-type: none"> ▪ Display Array Name ▪ Bezel Compensation <p>The following information is shown for reference:</p> <ul style="list-style-type: none"> ▪ Columns ▪ Rows ▪ Device Count ▪ Resolution ▪ FPS
--	---

4.5 Configuration

Three subpages are available in Configuration – Device Setup, Display and Device Summary. Users can setup devices/display, group the devices, configure HDMI mode and display device summary. Use the submenu located on the top to toggle between the subpages.

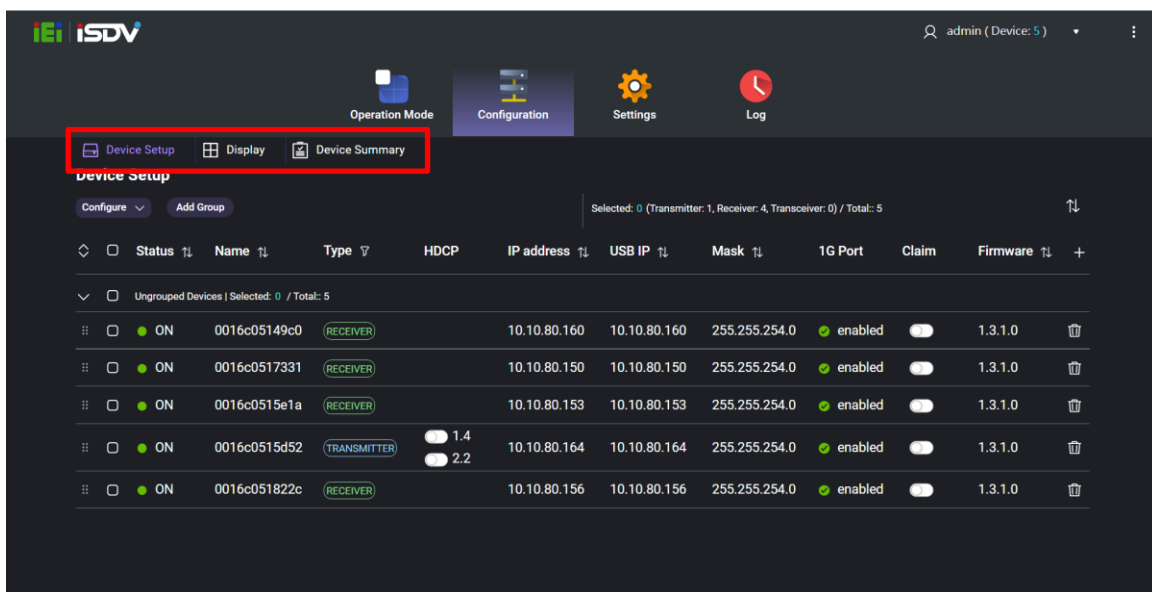


Figure 4-2: Configuration

iSDV-200CTR

4.5.1 Device Setup

Use the Device Setup page to configure the following settings:

- DHCP
- Claim
- Add/Delete/Change Group
- iSDV Firmware Update
- MCU Firmware Update
- RS-232 Setting
- HDMI Mode Setting
- Audio

The following information is shown in the Device Setup for reference:

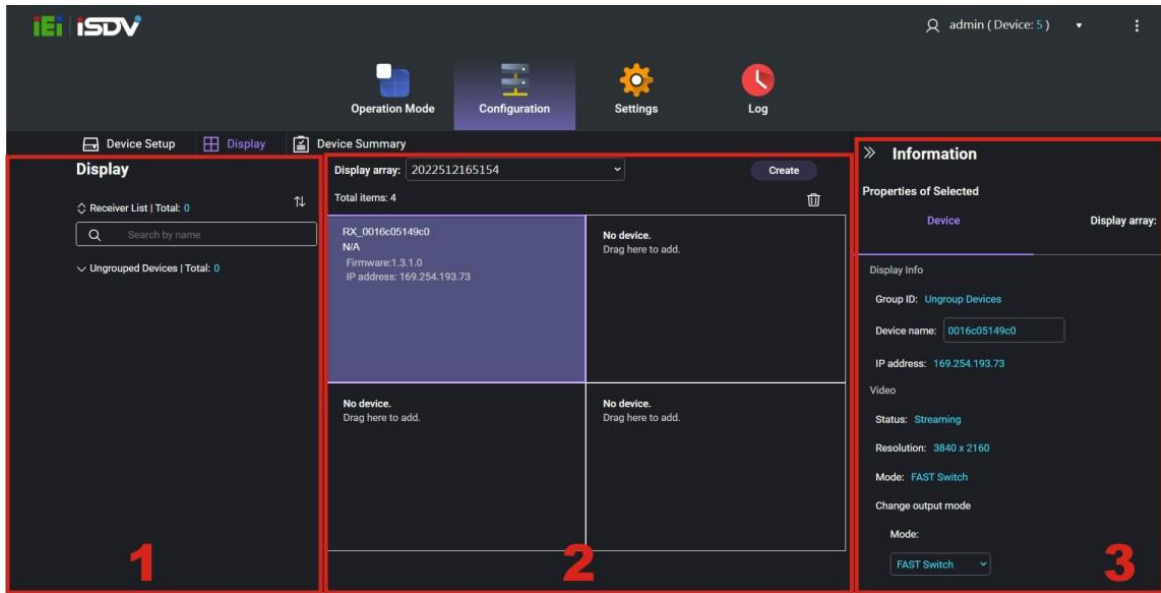
- Name
- Type
- HDCP
- IP Address
- MAC IP
- Mask
- 1G Port
- Firmware

The screenshot shows the 'Device Setup' page in a web browser. At the top, there are navigation tabs: 'Operation Mode', 'Configuration' (selected), 'Settings', and 'Log'. Below the tabs, there are sub-tabs: 'Device Setup', 'Display', and 'Device Summary'. The main content area is titled 'Device Setup' and includes a 'Configure' dropdown and an 'Add Group' button. A status bar indicates 'Selected: 0 (Transmitter: 1, Receiver: 4, Transceiver: 0) / Total: 5'. Below this is a table with the following data:

Status	Name	Type	HDCP	IP address	USB IP	Mask	1G Port	Claim	Firmware
ON	0016c05149c0	RECEIVER		10.10.80.160	10.10.80.160	255.255.254.0	enabled		1.3.1.0
ON	0016c0517331	RECEIVER		10.10.80.150	10.10.80.150	255.255.254.0	enabled		1.3.1.0
ON	0016c0515e1a	RECEIVER		10.10.80.153	10.10.80.153	255.255.254.0	enabled		1.3.1.0
ON	0016c0515d52	TRANSMITTER	1.4 2.2	10.10.80.164	10.10.80.164	255.255.254.0	enabled		1.3.1.0
ON	0016c051822c	RECEIVER		10.10.80.156	10.10.80.156	255.255.254.0	enabled		1.3.1.0

4.5.2 Display

In the Display page, users can setup the matrix size and deploy the connected receivers onto the matrix by drag-and-drop operation.



1	Receiver List	Lists all of the iSDV-200CTR receivers
2	Display Array	Allows users to create a new display array, deploy receivers or delete receiver device.
3	Information	Shows the information of the receiver. Options listed below are configurable: <ul style="list-style-type: none"> ▪ Device Name ▪ Mode ▪ Format ▪ Width ▪ Height ▪ FPS ▪ Aspect Ratio

iSDV-200CTR

4.5.3 Device Summary

The Device Summary page shows the information of all the connected iSDV devices, including:

- Status
- Temperature
- Name
- Type
- Claim
- Firmware
- IP Address
- Subnet Mask
- Gateway
- ID

The screenshot shows the iSDV web interface. At the top, there are navigation tabs for Operation Mode, Configuration, Settings, and Log. Below these, there are sub-tabs for Device Setup, Display, and Device Summary. The Device Summary tab is active, showing a table of 5 devices. The table has columns for Status, Temperature, Name, Type, Claim, Firmware, IP Address, Subnet Mask, Gateway, and ID. The devices are listed as follows:

Status	Temperature	Name	Type	Claim	Firmware	IP Address	Subnet Mask	Gateway	ID
ON	43 °C	0016c0517331	TRANSMITTER	Release	1.3.1.0	10.10.80.150	255.255.254.0	10.10.80.1	0016c0517331
ON	42 °C	0016c0515e1a	TRANSMITTER	Release	1.3.1.0	10.10.80.153	255.255.254.0	10.10.80.1	0016c0515e1a
ON	42 °C	0016c051822c	TRANSMITTER	Release	1.3.1.0	10.10.80.156	255.255.254.0	10.10.80.1	0016c051822c
ON	44 °C	0016c05149c0	RECEIVER	Release	1.3.1.0	10.10.80.160	255.255.254.0	10.10.80.1	0016c05149c0
ON	43 °C	0016c0515d52	TRANSMITTER	Release	1.3.1.0	10.10.80.164	255.255.254.0	10.10.80.1	0016c0515d52

4.6 Global Setting

The Global Setting page allows users to download device logs, reboot devices, and restore the devices to factory default.

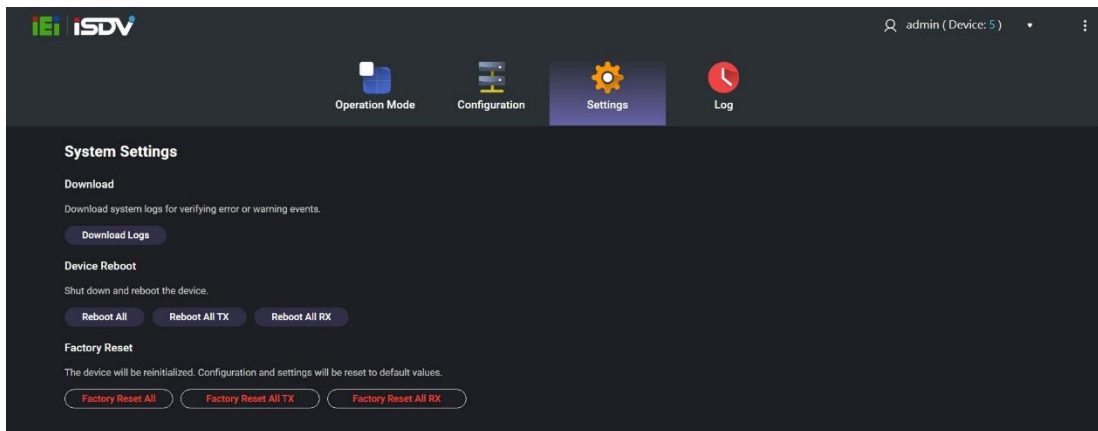


Figure 4-3: Global Setting

4.7 Log

The Log page displays device logs.

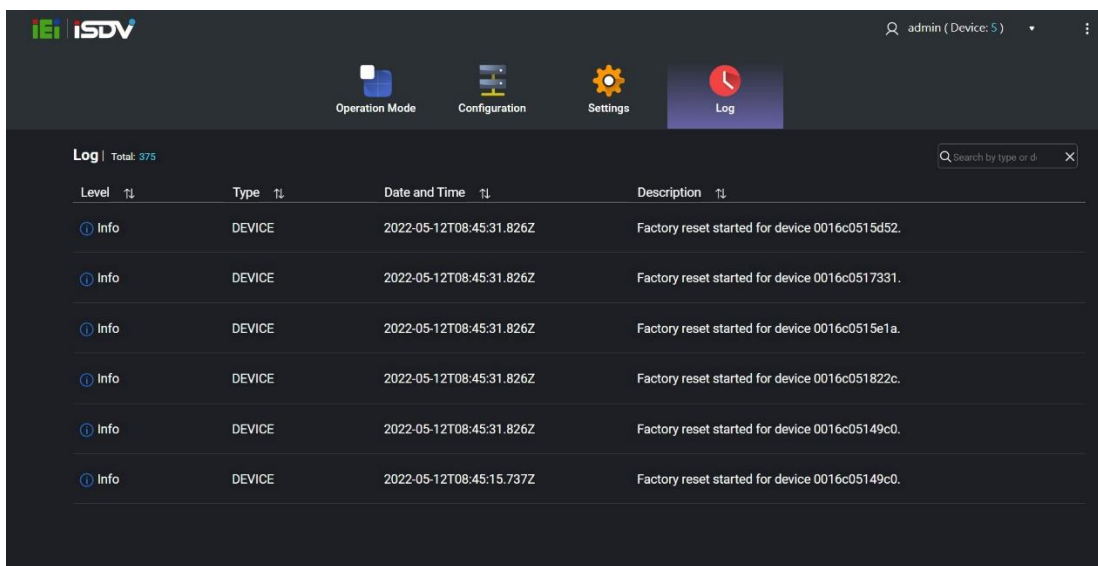


Figure 4-4: Log

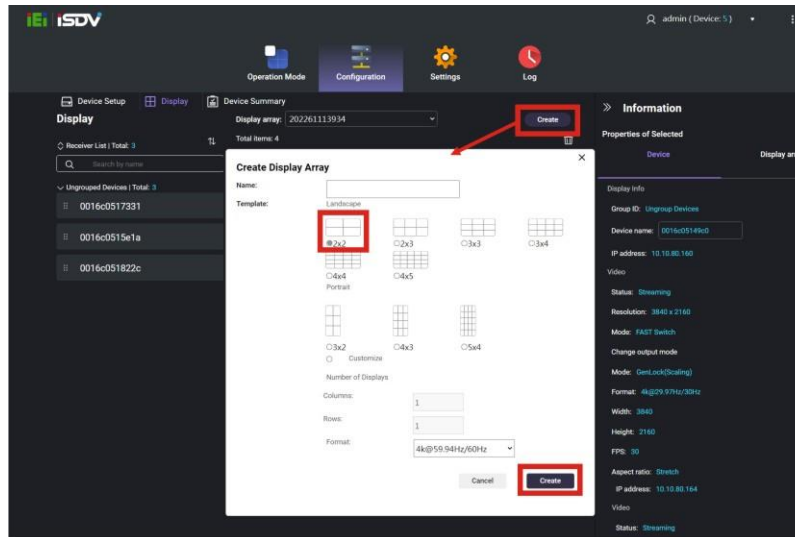
iSDV-200CTR

4.8 How to Setup a Video Wall

To setup a 2x2 video wall in IEI Network Video Orchestrator, follow the steps below.

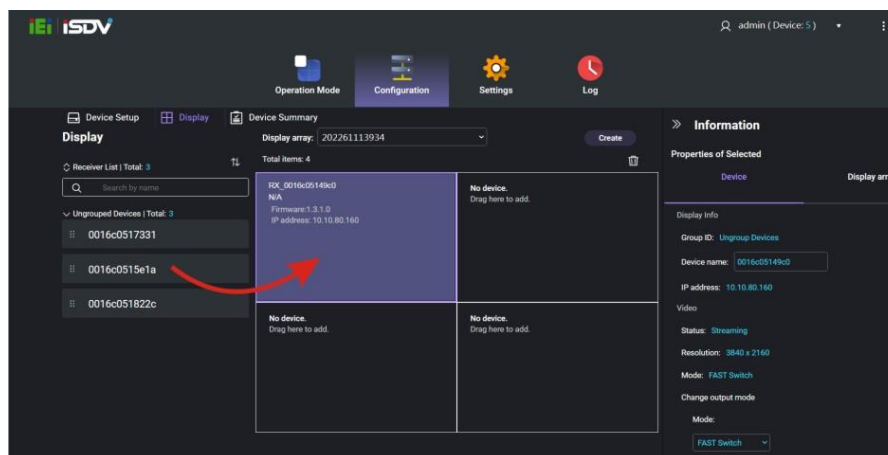
Step 1: Go to **Configuration** → **Display** page.

Step 2: Click the **Create** button to set up a 2x2 display array in the pop-up window.

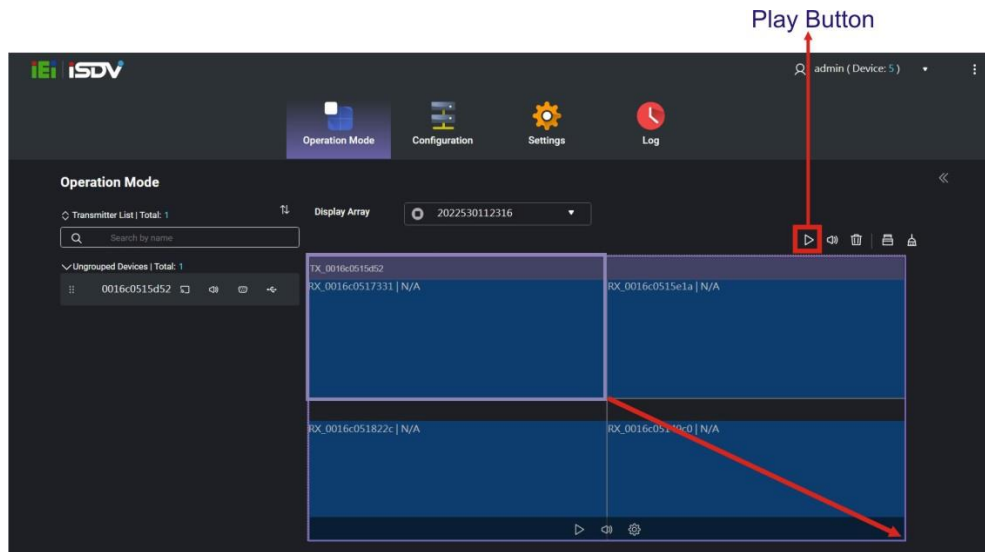


Step 3: Drag a receiver from the receiver list onto the desire position of the display array.

Step 4: Continue to drag the receiver one by one until all four blocks of the display array are assigned with different receivers.



- Step 5:** Go to **Operation Mode** page.
- Step 6:** Drag a transmitter from the transmitter list onto the display array.
- Step 7:** Drag the bottom right corner of the transmitter block to enlarge it, enabling the transmitter to cover all of the receiver blocks.
- Step 8:** Click the Play button to start displaying video wall.

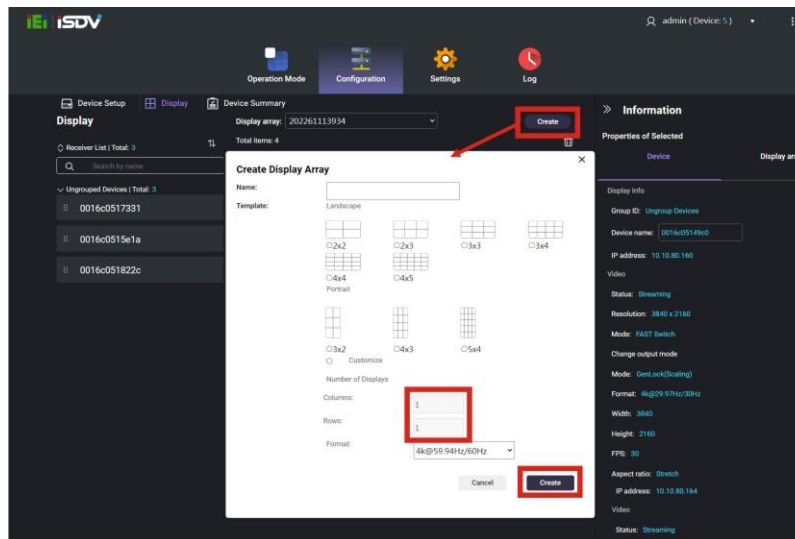


4.9 How to Setup Multiview

To setup multiview in IEI Network Video Orchestrator, follow the steps below.

Step 1: Go to **Configuration** → **Display** page.

Step 2: Click the **Create** button to set up a 1x1 display array in the pop-up window.



Step 3: Drag a receiver from the receiver list onto the display array.

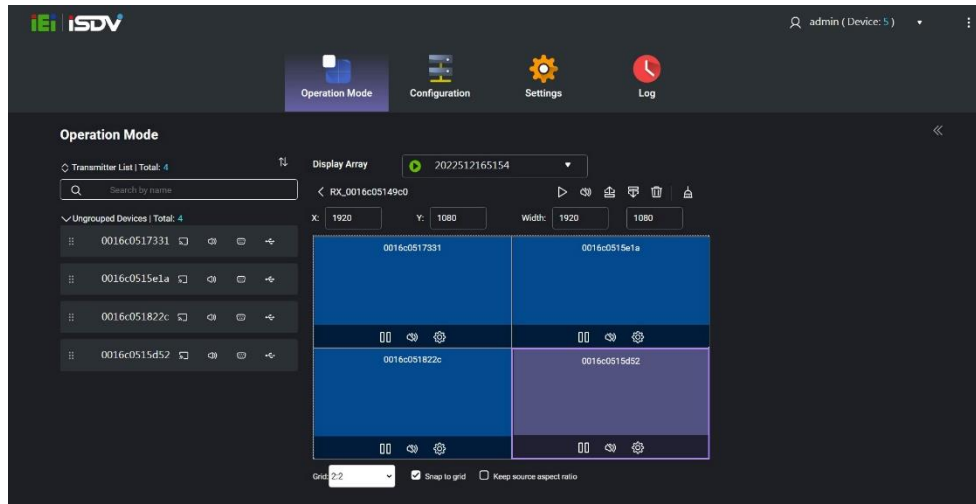
Step 4: Go to **Operation Mode** page.

Step 5: Click the Multiview button.



Step 6: Drag transmitters from the transmitter list onto the display array one by one. You can freely arrange the transmitter blocks to the desired positions.

Step 7: Click the Play button to start displaying multiview.



Appendix

A

Regulatory Compliance

DECLARATION OF CONFORMITY



This equipment is in conformity with the following EU directives:

- EMC Directive (2004/108/EC, 2014/30/EU)
- Low-Voltage Directive (2006/95/EC, 2014/35/EU)
- RoHS II Directive (2011/65/EU, 2015/863/EU)
- Ecodesign Directive 2009/125/EC

If the user modifies and/or install other devices in the equipment, the CE conformity declaration may no longer apply.

If this equipment has telecommunications functionality, it also complies with the requirements of the Radio Equipment Directive 2014/53/EU.

English

IEI Integration Corp declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

Български [Bulgarian]

IEI Integration Corp. декларира, че този оборудване е в съответствие със съществените изисквания и другите приложими правила на Директива 2014/53/EU.

Česky [Czech]

IEI Integration Corp tímto prohlašuje, že tento zařzení je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 2014/53/EU.

Dansk [Danish]

IEI Integration Corp erklærer herved, at følgende udstyr overholder de væsentlige krav og øvrige relevante krav i direktiv 2014/53/EU

Deutsch [German]

IEI Integration Corp, erklärt dieses Gerät entspricht den grundlegenden Anforderungen und den weiteren entsprechenden Vorgaben der Richtlinie 2014/53/EU.

Eesti [Estonian]

IEI Integration Corp deklareerib seadme seadme vastavust direktiivi 2014/53/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.

iSDV-200CTR

Español [Spanish]

IEI Integration Corp declara que el equipo cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 2014/53/EU.

Ελληνική [Greek]

IEI Integration Corp ΔΗΛΩΝΕΙ ΟΤΙ ΕΞΟΠΛΙΣΜΟΣ ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 2014/53/EU.

Français [French]

IEI Integration Corp déclare que l'appareil est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 2014/53/EU.

Italiano [Italian]

IEI Integration Corp dichiara che questo apparecchio è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 2014/53/EU.

Latviski [Latvian]

IEI Integration Corp deklarē, ka iekārta atbilst būtiskajām prasībām un citiem ar to saistītajiem noteikumiem Direktīvas 2014/53/EU.

Lietuvių [Lithuanian]

IEI Integration Corp deklaruoja, kad šis įranga atitinka esminius reikalavimus ir kitas 2014/53/EU Direktyvos nuostatas.

Nederlands [Dutch]

IEI Integration Corp dat het toestel toestel in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 2014/53/EU.

Malti [Maltese]

IEI Integration Corp jiddikjara li dan prodott jikkonforma mal-ftigijiet essenzjali u ma provvedimenti oħrajn rilevanti li hemm fid-Dirrettiva 2014/53/EU.

Magyar [Hungarian]

IEI Integration Corp nyilatkozom, hogy a berendezés megfelel a vonatkozó alapvető követelményeknek és az 2014/53/EU irányel^ő egyéb előírásainak.

Polski [Polish]

IEI Integration Corp oświadcza, że wyrobu jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 2014/53/EU.

Português [Portuguese]

IEI Integration Corp declara que este equipamen^{to} está conforme com os requisitos essenciais e outras disposiç^{ões} da Directiva 2014/53/EU.

Româna [Romanian]

IEI Integration Corp declară că acest echipament este în conformitate cu cerințele esențiale și cu celelalte prevederi relevante ale Directivei 2014/53/EU.

Slovensko [Slovenian]

IEI Integration Corp izjavlja, da je ta opreme v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 2014/53/EU.

Slovensky [Slovak]

IEI Integration Corp týmto vyhlasuje, že zariadenia spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 2014/53/EU.

Suomi [Finnish]

IEI Integration Corp vakuuttaa täten että laitteet on direktiivin 2014/53/EU oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Svenska [Swedish]

IEI Integration Corp förklarar att denna utrustningstyp står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 2014/53/EU.

FCC WARNING



This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Appendix

B

Safety Precautions

**WARNING:**

The precautions outlined in this chapter should be strictly followed. Failure to follow these precautions may result in permanent damage to the iSDV-200CTR.

B.1 Safety Precautions

Please follow the safety precautions outlined in the sections that follow:

B.1.1 General Safety Precautions

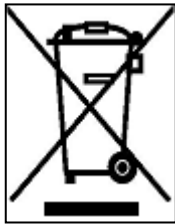
Please ensure the following safety precautions are adhered to at all times.

- **Follow the electrostatic precautions** outlined below whenever the device is opened.
- **Make sure the power is turned off and the power cord is disconnected** whenever the iSDV-200CTR is being installed, moved or modified.
- **To prevent the risk of electric shock, make sure power cord is unplugged from wall socket.** To fully disengage the power to the unit, please disconnect the power cord from the AC outlet. Refer servicing to qualified service personnel. The AC outlet shall be readily available and accessible.
- **Do not apply voltage levels that exceed the specified voltage range.** Doing so may cause fire and/or an electrical shock. Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your particular country.
- **Electric shocks can occur** if the iSDV-200CTR chassis is opened when it is running. To avoid risk of electric shock, this device must only be connected to a supply mains with protective earth.
- **If considerable amounts of dust, water, or fluids enter the device**, turn off the power supply immediately, unplug the power cord, and contact the iSDV-200CTR vendor.

- **DO NOT:**
 - Drop the device against a hard surface.
 - In a site where the ambient temperature exceeds the rated temperature

B.1.2 Product Disposal

- Outside the European Union – If you wish to dispose of used electrical and electronic products outside the European Union, please contact your local authority so as to comply with the correct disposal method.
- Within the European Union – The device that produces less waste and is easier to recycle is classified as electronic device in terms of the European Directive 2012/19/EU (WEEE), and must not be disposed of as domestic garbage.



EU-wide legislation, as implemented in each Member State, requires that waste electrical and electronic products carrying the mark (left) must be disposed of separately from normal household waste. This includes monitors and electrical accessories, such as signal cables or power cords. When you need to dispose of your display products, please follow the guidance of your local authority, or ask the shop where you purchased the product. The mark on electrical and electronic products only applies to the current European Union Member States.

Please follow the national guidelines for electrical and electronic product disposal.

iSDV-200CTR

B.2 Maintenance and Cleaning Precautions

When maintaining or cleaning the iSDV-200CTR, please follow the guidelines below.



WARNING:

- For safety reasons, turn-off the power and unplug the system before cleaning.
 - If you dropped any material or liquid such as water onto the iSDV-200CTR when cleaning, unplug the power cable immediately and contact your dealer or the nearest service center. Always make sure your hands are dry when unplugging the power cable.
-

Prior to cleaning any part or component of the iSDV-200CTR, please read the details below.

- Never spray or squirt liquids directly onto any other components.
- The interior of the device does not require cleaning. Keep fluids away from the device interior.
- Be cautious of any possible allergic reactions to solvents or chemicals used when cleaning the device.
- Avoid eating, drinking and smoking within vicinity of the device.

Appendix

C

Hazardous Materials Disclosure

iSDV-200CTR

C.1 RoHS II Directive (2015/863/EU)

The details provided in this appendix are to ensure that the product is compliant with the RoHS II Directive (2015/863/EU). The table below acknowledges the presences of small quantities of certain substances in the product, and is applicable to RoHS II Directive (2015/863/EU).

Please refer to the following table.

Part Name	Toxic or Hazardous Substances and Elements									
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (CR(VI))	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)	Bis(2-ethylhexyl) phthalate (DEHP)	Butyl benzyl phthalate (BBP)	Dibutyl phthalate (DBP)	Diisobutyl phthalate (DIBP)
Housing	O	O	O	O	O	O	O	O	O	O
Printed Circuit Board	O	O	O	O	O	O	O	O	O	O
Metal Fasteners	O	O	O	O	O	O	O	O	O	O
Cable Assembly	O	O	O	O	O	O	O	O	O	O
Fan Assembly	O	O	O	O	O	O	O	O	O	O
Power Supply Assemblies	O	O	O	O	O	O	O	O	O	O
Battery	O	O	O	O	O	O	O	O	O	O
<p>O: This toxic or hazardous substance is contained in all of the homogeneous materials for the part is below the limit requirement in Directive (EU) 2015/863.</p> <p>X: This toxic or hazardous substance is contained in at least one of the homogeneous materials for this part is above the limit requirement in Directive (EU) 2015/863.</p>										

C.2 China RoHS

此附件旨在确保本产品符合中国 RoHS 标准。以下表格标示此产品中某有毒物质的含量符合中国 RoHS 标准规定的限量要求。

本产品上会附有“环境友好使用期限”的标签，此期限是估算这些物质“不会有泄漏或突变”的年限。本产品可能包含有较短的环境友好使用期限的可替换元件，像是电池或灯管，这些元件将会单独标示出来。

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (CR(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
壳体	○	○	○	○	○	○
印刷电路板	○	○	○	○	○	○
金属螺帽	○	○	○	○	○	○
电缆组装	○	○	○	○	○	○
风扇组装	○	○	○	○	○	○
电力供应组装	○	○	○	○	○	○
电池	○	○	○	○	○	○

○: 表示该有毒有害物质在该部件所有物质材料中的含量均在 SJ/T11364-2014 與 GB/T26572-2011 标准规定的限量要求以下。

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11364-2014 與 GB/T26572-2011 标准规定的限量要求。