



# VXU-SC

Soft Codec Video Conferencing System

## Reference Guide



### Product Contents

- 1x VXU-SCT(Transmitter)
- 2x Mounting Ears for Transmitter
- 4x Mounting Screws for Transmitter
- 4x Plastic Cushions for Transmitter
- 1x 3-Pin to 2-Pin Optocoupled IR Adapter Cable
- 1x Power Adaptor (12VDC 2A)
- 2x Phoenix Connectors
- 1x Reference Guide
- 1x VXU-SCR(Receiver)
- 2x Mounting Ears for Receiver
- 4x Mounting Screws for Receiver
- 4x Plastic Cushions for Receiver
- 1x Power Adaptor (12VDC 2A)
- 5x Phoenix Connectors

### Safety Suggestions

**Read and Follow Instructions.** Read all safety and operating instructions before operating the unit.  
**Retain Instructions.** Keep the safety and operating instructions for future reference.  
**Heed Warnings.** Adhere to all warnings on the unit and in the operating instructions.  
**Heat.** Keep the unit away from heat sources such as radiators, heat registers, stoves, etc., including amplifiers that produce heat.  
**Power Sources.** Connect the unit only to a power supply of the type described in the operating instructions, or as marked on the unit.  
**Power Cord Protection.** Route power supply cords so that they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to the cord plugs at power receptacles and at the point at which they exit from the unit.  
**Water and Moisture.** Do not use the unit near water—for example, near a sink, in a wet basement, near a swimming pool, near an open window, etc.  
**Object and Liquid Entry.** Do not allow objects to fall or liquids to be spilled into the enclosure through openings.  
**Servicing.** Do not attempt any service beyond that described in the operating instructions. Refer all other service needs to qualified service personnel.  
**Damage Requiring Service.** The unit should be serviced by qualified service personnel when:

- The power supply cord or the plug has been damaged.
- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit does not appear to operate normally or exhibits a marked change in performance.
- The unit has been dropped or the enclosure has been damaged.

### Cleaning

To clean this product, lightly dampen a lint-free cloth with plain water or a mild detergent and wipe the outer surfaces.

NOTE: Do not use harsh chemicals as damage to the unit may occur.

### Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.  
 This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.  
 If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

### Industry Canada Compliance Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:  
 1. This device may not cause harmful interference.  
 2. This device must accept any interference received including interference that may cause undesired operation.  
 Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes:  
 1. Ce dispositif ne peut causer des interférences nuisibles.  
 2. Cet appareil doit accepter toute interférence reçue y compris des interférences qui peuvent provoquer un fonctionnement indésirable.



### DECLARATION OF CONFORMITY (DOC)

The Declaration of Conformity for this product can be found on the RTI website at: [www.rticorp.com/declaration](http://www.rticorp.com/declaration)

### Contacting RTI

For news about the latest updates, new product information, and new accessories, please visit our web site at: [www.rticorp.com](http://www.rticorp.com)

For general information, you can contact RTI at:  
**Remote Technologies Incorporated**  
**5775 12th Ave. E Suite 180**  
**Shakopee, MN 55379**  
**Tel. (952) 253-3100**  
**Fax (952) 253-3131**  
**info@rticorp.com**

### Service & Support

If you are encountering any problems or have a question about your RTI product, please contact RTI Technical Support for assistance (see the Contacting RTI section of this guide for contact details).

RTI provides technical support by telephone or e-mail. For the highest quality service, please have the following information ready:

- Your Name
- Company Name
- Telephone Number
- E-mail Address
- Product model and serial number (if applicable)

If you are having a problem with hardware, please note the equipment in your system, a description of the problem, and any troubleshooting you have already tried.

**\*Please do not return products to RTI without return authorization.\***

### Limited Warranty

RTI warrants new products for a period of three (3) years (excluding consumables such as rechargeable batteries which are warrantied for one (1) year) from the date of purchase by the original purchaser (end user) directly from RTI / Pro Control (herein referred to as "RTI"), or an authorized RTI dealer.  
 Warranty claims may be initiated by an authorized RTI dealer using the original dated sales receipt or other proof of warranty coverage. In the absence of the receipt of purchase from the original dealer, RTI will provide warranty coverage extension of six (6) months from the date code of the product. Note: RTI warranty is limited to the provisions set forth in this policy and does not preclude any other warranties offered by third parties who are solely responsible for those other warranties.

Except as specified below, this warranty covers defects in product material and workmanship. The following are not covered by the warranty:

- Product purchased via unauthorized sellers or internet sites will not be serviced-regardless of purchase date.
- Damages caused by accident, misuse, abuse, neglect or acts of God.
- Cosmetic damage, including, but not limited to, scratches, dents and normal wear and tear.
- Failure to follow instructions contained in the Product Installation Guide.
- Damages due to products used in an application or environment other than that for which it was intended, improper installation procedures or adverse environmental factors such as incorrect line voltages, improper wiring, or insufficient ventilation.
- Repair or attempted repair by anyone other than RTI and Pro Control or authorized service partners.
- Failure to perform recommended periodic maintenance.
- Causes other than product defects, including lack of skill, competence or experience of user.
- Damage due to shipment of this product (claims must be made to the carrier).
- Altered unit or altered serial number: defaced, modified or removed.

RTI is also not liable for:

- Damages caused by its products or for failure of its products to perform, including any labor costs, lost profits, lost savings, incidental damages, or consequential damages.
- Damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation, commercial loss, any claim made by a third party or made on behalf of a third party.
- Loss of, or damage to, data, computer systems or computer programs.

RTI's liability for any defective product is limited to repair or replacement of the product, at the sole discretion of RTI.  
 In cases where the warranty policy conflicts with local laws, the local laws will be adopted.

### VXU-SC Soft Codec Video Conferencing System

The VXU-SC Soft Codec Video Conferencing System is the perfect solution for simple, cost-effective media sharing and collaboration in classrooms and meeting spaces. The transmitter and receiver pair, provide AV switching, video and USB extension, allowing multiple users to easily interact with software-based conferencing solutions such as Microsoft Skype®, Cisco WebEx® and Citrix GoToMeeting®.

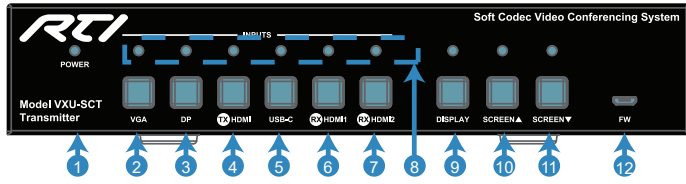
The VXU-SC transmitter is equipped with HDMI, Display Port, VGA and USB-C inputs, enabling a wide range of devices to share video content. Built-in USB inputs allow shared mouse and keyboard control from connected devices including PCs, laptops, and interactive displays. The kit also extends USB, allowing inexpensive USB webcams and microphones to be utilized. To eliminate cable clutter, all audio, video, data, control, USB, and Ethernet transmission between the VXU-SC transmitter and receiver is carried over a single HDBaseT link up to 328 feet (100 meters).

#### The VXU-SC provides superior quality and reliability as well as these features:

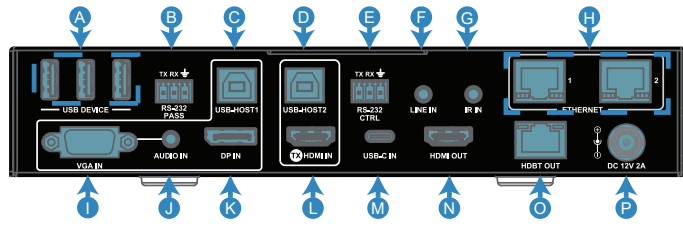
- HDMI 2.0 with 4k@60Hz (Chroma sub-sampling 4:2:0 8-bit only) and HDCP 2.2 compliance.
- VGA input supports video up to 1920x1200@60Hz.
- Provides switching between a variety of video formats including USB-C to simplify media sharing.
- Built-in USB hubs enable easy connection of devices including keyboards, microphone, speakers, cameras and whiteboards.
- Automatically detects active inputs when sources are connected or if there is a change in power status.
- Sources connected via USB-B may be controlled by external USB devices plugged into transmitter and receiver.
- LAN connection to either receiver or transmitter enable Ethernet accessibility for users.
- Allows connected displays to be controlled via CEC commands or front panel buttons.
- Relays can be triggered to control devices such as the raising and lowering of a projector screen.
- Support for RS-232 and IR pass through from both the receiver and transmitter.
- De-embedded audio out on VXU-SCR receiver.
- Controllable via front panel buttons, RS-232, IP and web GUI.

# VXU-SC Soft Codec Video Conferencing System

## VXU-SCT FRONT AND REAR PANEL DESCRIPTION

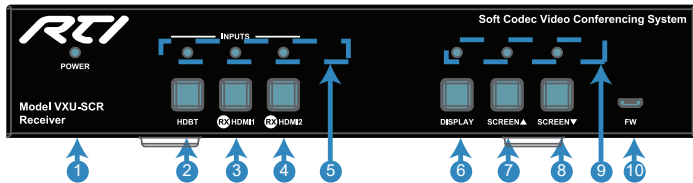


| Name                         | Function  |
|------------------------------|---|
| 1 Power LED Indicator        | Turns red when powered on.  |
| 2 VGA Input Selection        | Selects VGA source as input.  |
| 3 DP Input Selection         | Selects Display Port source as input.   |
| 4 TX HDMI Input Selection    | Selects TX HDMI source as input.  |
| 5 USB-C Input Selection      | Selects USB-C source as input.  |
| 6 RX HDMI1 Input Selection   | Selects RX HDMI1 source as input.   |
| 7 RX HDMI2 Input Selection   | Selects RX HDMI2 source as input.   |
| 8 Input Selection Indicators | <ul style="list-style-type: none"> <li>LED Blue —The source input is selected.</li> <li>Off—The source input is not selected.</li> </ul>                            |
| 9 Display Control            | Display control button: <ul style="list-style-type: none"> <li>Short press—set all the displays on.</li> <li>Hold press for 3s—set all the displays off.</li> </ul> |
| 10 Screen ▲ Button           | Press to raise the projector screen.<br>NOTE: Requires cabling from screen to Relay contacts on VXU-SCR (see VXU-SCR ports F-G)                                     |
| 11 Screen ▼ Button           | Press to lower the projector screen.<br>NOTE: Requires cabling from screen to Relay contacts on VXU-SCR (see VXU-SCR ports F-G)                                     |
| 12 FW                        | Micro-USB port for firmware upgrades.   |

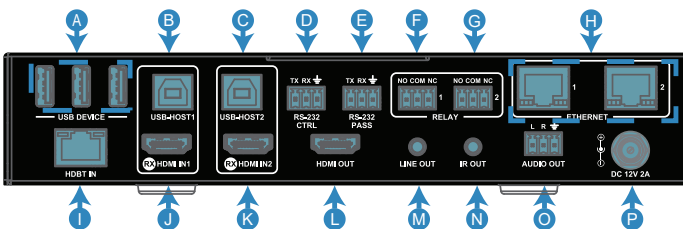


| Name                  | Function  |
|-----------------------|---|
| A USB Device          | Connect to USB devices  |
| B RS-232 Pass Through | Connect to a control system or RS-232 controllable device.  |
| C USB Host 1          | Connect to a PC USB Port - When the VGA IN or DP IN source is selected, the USB devices (3 devices on VXU-SCT and 3 devices on VXU-SCR) will be connected to the host PC. |
| D USB Host 2          | Connect to a PC USB Port - When the HDMI source is selected, the USB devices (3 devices on VXU-SCT and 3 devices on VXU-SCR) will be connected to the host PC.            |
| E RS-232 Control      | Connect to a control system for control of the VXU-SC   |
| F Line In             | Connect to an audio source such as a microphone.  |
| G IR In               | Stereo jack for connection to a control system.<br>NOTE: When using RTI control processor, requires Mono>Stereo IR adapter cable, with stereo plug plugged into VXU-SCT.  |
| H Ethernet 1 & 2      | Connect Ethernet network to either receiver or transmitter. Unused Ethernet ports provide LAN access to external devices.   |
| I VGA In              | Connect to VGA source device.   |
| J Audio In            | Connect to an audio source, same as the VGA source.   |
| K DP In               | Connect to Display Port source device.  |
| L TX HDMI IN          | Connect to HDMI source device.  |
| M USB-C In            | Connect to USB-C source device.   |
| N HDMI Out            | Connect to display using HDMI cable.  |
| O HDBT Out            | Connect to VXU-SCR receiver using Cat cable.  |
| P DC 12V 2A           | Power port to connect the 12VDC power adapter.  |

## VXU-SCR FRONT AND REAR PANEL DESCRIPTION

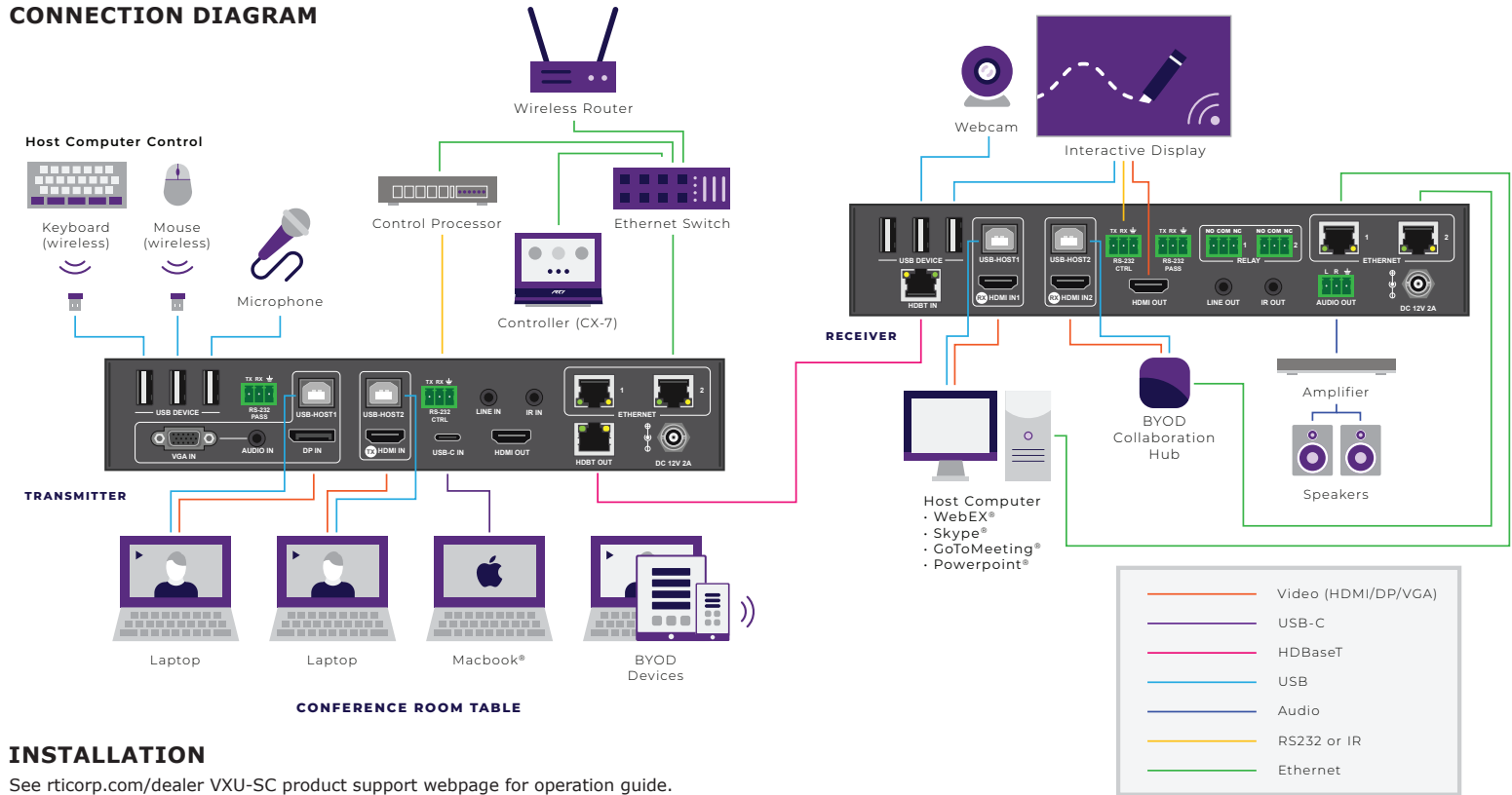


| Name                         | Function  |
|------------------------------|---|
| 1 Power LED Indicator        | Turns red when powered on.  |
| 2 HDBT Input Selection       | Select HDBT source (Activated sources on TX) as input.  |
| 3 RX HDMI1 Input Selection   | Select RX HDMI1 source as input.  |
| 4 RX HDMI2 Input Selection   | Select RX HDMI2 source as input.  |
| 5 Input Selection Indicators | <ul style="list-style-type: none"> <li>LED Blue — The source input is selected.</li> <li>Off—The source input is not selected.</li> </ul>                           |
| 6 Display Control            | Display control button: <ul style="list-style-type: none"> <li>Short press—set all the displays on.</li> <li>Hold press for 3s—set all the displays off.</li> </ul> |
| 7 Screen ▲ Button            | Press to raise the projector screen.<br>NOTE: Requires cabling from screen to Relay contacts on VXU-SCR (see VXU-SCR ports F-G).                                    |
| 8 Screen ▼ Button            | Press to lower the projector screen.<br>NOTE: Requires cabling from screen to Relay contacts on VXU-SCR (see VXU-SCR ports F-G).                                    |
| 9 Selection Indicators       | LED lights when button pressed.   |
| 10 FW                        | Micro-USB port for firmware upgrades.   |



| Name                  | Function   |
|-----------------------|--|
| A USB Device          | Connect to USB devices   |
| B USB Host 1          | Connect to a PC USB Port - When the RX HDMI IN 1 source is selected, the USB devices (3 devices on VXU-SCT and 3 devices on VXU-SCR) will be connected to the host PC. |
| C USB Host 2          | Connect to a PC USB Port - When the RX HDMI IN 2 source is selected, the USB devices (3 devices on VXU-SCT and 3 devices on VXU-SCR) will be connected to the host PC. |
| D RS-232 Control      | Connect to a control system for control of the VXU-SC.   |
| E RS-232 Pass Through | Connect to a control system or RS-232 controllable device.   |
| F Relay 1             | Connect to a relay controllable device such as a projector screen PINS: NO=Normally Open, COM=Ground, NC=Normally Closed.  |
| G Relay 2             | Connect to a relay controllable device such as a projector screen PINS: NO=Normally Open, COM=Ground, NC=Normally Closed.  |
| H Ethernet 1 & 2      | Connect Ethernet network to either receiver or transmitter. Unused Ethernet ports provide LAN access to external devices.  |
| I HDBT In             | Connect to the VXU-SCT via Cat cable.  |
| J RX HDMI IN 1        | Connect to HDMI source device. Use RX HDMI1 button to select.  |
| K RX HDMI IN 2        | Connect to HDMI source device. Use RX HDMI2 button to select.  |
| L HDMI Out            | Connect to display via HDMI cable.   |
| M Line Out            | Stereo jack for connection to an audio system or headphones.   |
| N IR Out              | Stereo jack for connection to IR emitter for control of external device. NOTE: Must use IR emitter with stereo pinout.   |
| O Audio Out           | Connect to an audio system with phoenix connector.   |
| P DC 12V 2A           | Power port to connect the 12VDC power adapter.   |

## CONNECTION DIAGRAM



CONFERENCE ROOM TABLE

## INSTALLATION

See [rticorp.com/dealer](http://rticorp.com/dealer) VXU-SC product support webpage for operation guide.

### CONNECTIONS

- Connect HDMI/VGA/DP/USB-C source devices to input ports of the VXU-SCT Transmitter (TX) and VXU-SCR Receiver (RX) units.
   
**NOTE:** The VXU-SC allows users to connect a BYOD wireless system to the HDMI IN as a source. Connect the BYOD system HDMI output to the VXU-SC HDMI IN port.
- Connect display devices such as a TV or projector to the HDMI OUT ports of the VXU-SCT or VXU-SCR.
- Wire a Cat 5e/6/6a/7 cable with an RJ45 connector using 568B standard termination from the HDBT OUT port of VXU-SCT to the HDBT IN port of the VXU-SCR.
- Connect a computer to the USB HOST port using a USB cable.
- Connect USB devices (keyboard, mouse, camera etc) to the USB DEVICE ports of VXU-SCT and VXU-SCR units.
- Connect an audio system such as an amplifier to the AUDIO OUT phoenix connector on the VXU-SCR unit.
- Connect a speaker or headphone to LINE OUT on VXU-SCR.
- Connect a microphone (MIC) to the LINE IN port on the VXU-SCT unit.
- Connect to the RS-232 output of a control system to the RS-232 CTRL port.
- Control of external devices: Cable the RTI control system IR output to the IR IN port of the VXU-SCT unit using an (mono>stereo) IR adapter cable, with the mono plug connected to the RTI processor and the stereo plug connected to the VXU-SCT. Plug an IR emitter with stereo plug into the IR OUT port of the VXU-SCR unit for control of an external device. Cable control processor and external device to RS-232 PASS terminals on VXU-SC units.
- Connect the ETHERNET port to Ethernet network for access to web interface and IP control via a two-way driver (available via [rticorp.com/dealer](http://rticorp.com/dealer)). NOTE: Connect Ethernet network to either port on VXU-SC receiver or transmitter. Unused Ethernet ports provide LAN accessibility to external devices.
- Connect power to the VXU-SCT and VXU-SCR.

### USB CONTROL

USB devices plugged into the VXU-SCT and VXU-SCR units will share keyboard and mouse control with the PC plugged into the USB HOST port in the same grouping (indicated with a white box). Selecting the PC as an input source will activate the USB sharing. In addition, selecting the USB-C input provides both video and shared control without a separate USB cable. *Example:* Connect a mouse and keyboard to the VXU-SCT "USB DEVICE" ports and connect a laptop to the "USB-HOST2 and Tx HDMI IN" ports. Selecting the "Tx HDMI IN" source will display video from the laptop and control will be shared between the laptop and the separate mouse and keyboard.

### WEB INTERFACE

The VXU-SC offers users a web interface for changing settings and controlling the system. See [rticorp.com/dealer](http://rticorp.com/dealer) VXU-SC operation guide for more details.

Default IP address is 192.168.1.121

Default password: admin

Web interface contains three submenus:

- Status**
  - Verify status of switch, displays on/off, and projector screen.
- Config**
  - Auto Switch** - Enable or disable the Auto Switch function in this column. Auto Switch set to ON by default.
   
When the auto switch is ON:
    - If more than one input has an active signal, the priority order is: VGA > DP > TX HDMI IN > USB-C > RX HDMI1 > RX HDMI2.
    - New input source top priority: When there is a new input source during operation, the video output is set to this source.
    - Pull out or power restore: Units will switch to last selected port, if the port has no active input signal, then switch to the highest priority.
    - Manual switch is also available when auto switch is ON
    - When the auto switch is OFF: Users switch the source manually.
  - Input HDCP** - Enable/disable the HDCP of TX HDMI, USB-C, RX HDMI 1, RX HDMI 2 ports.
  - EDID** - Set the input EDID to satisfy the requirements. Click "Apply" to take effect.
  - Display** - Control the displays.
  - Relay Controller** - Set the relay mode, latch or momentary.
- Setting**
  - Generic Setting** - Set the key lock on/off.
  - Automatic Logout** - Set the auto logout on/off.
  - Network** - Modify the network settings (Static or DHCP).
  - Password** - Modify the login password.
  - Firmware Upgrade** - Update the ARM of VXU-SC.
  - System** - Set the VXU-SC to factory default or reboot the VXU-SC.
  - Firmware Version** - Scan the firmware version.