Model No.

WST-PIP006 | HDMI 4K60Hz HDR 1G AV over IP -Transmitter

WST-PIP007 | HDMI 4K60Hz HDR 1G AV over IP -Receiver

WST-PIP008 | HDMI 4K60Hz HDR 1G AV over IP Master Controller

Safety Instruction

Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
請勿將本設備暴露於雨水，濕氣，滴水或濺水之下，且不得在其上方放置裝有液體的物體，例如花瓶。

Clean this apparatus only with dry cloth.
僅用乾布清潔本設備

Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated.
請勿將本機安裝或放置在書架，內置櫃子或其他密閉空間中。請確保設備通風良好。

Unplug this apparatus during lightning storms or when unused for long periods of time.
在雷雨天或是長時間不使用時，請拔下本設備電源。

To prevent risk of electric shock or fire hazard due to overheating, do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.
為避免因過熱而導致電擊或火災的危險，請勿用報紙，桌布，窗簾和類似物品阻塞設備的通風口。

Protect the power cord from being walked on or pinched particularly at plugs.
防止踩踏或擠壓電源線，尤其是插頭。

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
請勿將其安裝在任何熱源附近，例如散熱器，蓄熱器，火爐或其他產生熱量的設備（包括放大器）

Only use attachments / accessories specified by the manufacturer.
僅使用製造商指定的附件/配件。

Do not place sources of naked flames, such as lighted candles, on the unit.
請勿在設備上放置明火，例如點燃的蠟燭。

Refer all servicing to qualified service personnel.
請將所有修繕交與專業的服務人員。

Introduction

The WST-PIP006_8 series offers a full HDMI 2.0 AV over IP solution. This series comes loaded with a number of advanced features such as the flexibility of Ethernet or Fiber as a transport method. It perfectly extends Video, Audio, USB and IR/RS-232 access to remote multimedia players, and computers with impeccable 4K UHD video quality and ultra-low latency over a Gigabit LAN.

Advanced functions of this system include Group Switching, Video-wall Configuration, Mouse Roaming, and Console Collaboration. They all bring high flexibility and convenience to make your system a versatile one.

Unique to this receiver is the real-time video sources of the transmitter units, which can be previewed intuitively via On Screen Display (OSD) and controlled by keyboard/mouse, WebGUI, IP Master Controller, and Telnet.

Key Features

- 4K@60 1Gbps AV over IP transmitter in Unicast or Multicast mode.
- Supports multi-channel audio passthrough including DTS:X & Dolby Atmos
- IP interface: RJ45 / SFP
- Supports comprehensive USB over IP functionality (USB flash drive, keyboard and mouse) and seamless collaboration across multiple windows
- Supports PoE (IEEE 802.3af).
- Supports IP to IR/ RS-232, converting IP signals into IR and RS-232 commands for device control.
- Controlled via hotkeys, WebGUI, IP Master Controller, and Telnet
- OSD-based source selection allows each receiver to connect to authorized transmitters for flexible AV management.
- Supports use of external control center (IP Master Controller) to provide expanded functionality.
- Automatically embedded analog Line In streaming output, can be independently routed to any receiver
- Sends audio directly via Mic-In to analog Line-Out on current routed transmitter
- Three user role types: Administrator, Super User, and Simple User.
- Fast Switching capability ensures smooth operation and timely responsiveness

Package Content

WST-PIP006 : Transmitter x 1 | 12V/3A Multi-Country Power Adapter x 1 | 3-pin Terminal Blocker x 1 | IR Emitter cable x 1 | IR Receiver cable x 1 | Bracket x 2

WST-PIP007 : Receiver x 1 | 12V/3A Multi-Country Power Adapter x 1 | 3-pin Terminal Blocker x 1 | IR Emitter cable x 1 | IR Receiver cable x 1 | Bracket x 2

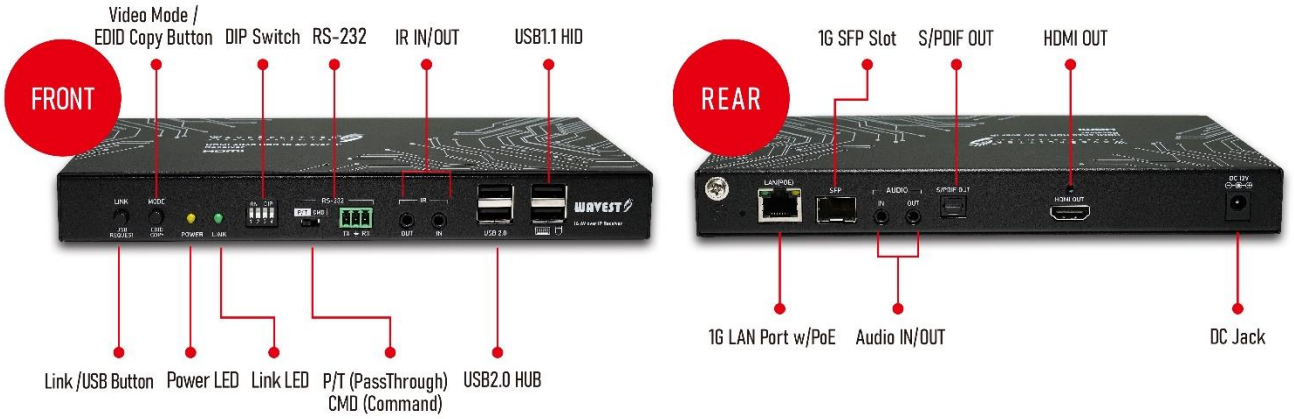
WST-PIP008 : Controller x 1 | 12V/3A Multi-Country Power Adapter x 1 | Bracket x 2

Panel Description

WST-PIP006 | TRANSMITTER

FRONT	DESCRIPTION
Link Button	1. Press it briefly to disconnect/connect this transmitter from its paired receiver 2. Power off the TX unit first. While holding down the LINK button, plug in the power jack. The POWER LED Indicator will stay solid and then start flashing, followed by both the POWER and LINK LED Indicators flashing together. Keep holding the LINK button until the POWER LED Indicator turns solid again. Then release the LINK button to restore factory settings. Finally, unplug the power jack and re-insert it again to use the TX unit
Video Mode Button	Press & hold it to cycle through the TX Anti-Dithering： Mode 1 ▸ Mode 2 ▸ OFF
Power LED (Orange)	Lights when the TX unit is powered on.
Link LED (Green)	Lights when the connection between transmitter and receiver is active.
DIP Switch	Reserved
P/T(Passthrough) CMD(Command)	P/T： The host PC sends RS-232 commands to the Serial Device through connected TX and RX units. CMD： The host PC sends RS-232 commands to the connected TX unit for parameter setup.
RS-232 Phoenix Connector	Connect to a host PC through an RS-232 cable.
IR Output	Connect to an IR transmitter to control devices located at the TX Unit site.
IR Input	Connect to an IR Receiver to receive IR signals at the TX Unit site.

REAR	DESCRIPTION
1G LAN Port w/ PoE	This LAN Port can be connected to a PoE (Power over Ethernet) Gigabit Switch to power the transmitter unit when the power adapter is not connected to it.
SFP Fiber Socket	Connect to a SFP Optical Module to connect the TX unit to the AV NETWORK.
Audio Input	Connect to the audio output of a host PC.
Audio Output	Connect to the microphone input of a host PC.
USB Connector	Connect to USB-B to a host PC.
HDMI Video Input	HDMI Source Input
HDMI Video Output	HDMI Local Output
DC Jack	DC 12V/3A Power Adapter



FRONT	DESCRIPTION
Link / USB Button	1. Press it briefly to disconnect/connect this receiver from its paired transmitter. 2. Press & hold it to prioritize the USB device access to the connected PC host in Matrix Operation Mode. 3. Power off the RX unit first. While holding down the LINK button, plug in the power jack. The POWER LED Indicator will stay solid and then start flashing, followed by both the POWER and LINK LED Indicators flashing together. Keep holding the LINK button until the POWER LED Indicator turns solid again. Then release the LINK button to restore factory settings. Finally, unplug the power jack and re-insert it again to use the RX unit.
Video Mode / EDID Copy Button	1. Press & hold it to cycle through the TX Anti-Dithering：Mode 1 ▸ Mode 2 ▸ OFF 2. Power off the RX unit first. While holding down the VIDEO MODE button, plug in the power jack. The POWER LED Indicator will stay solid, then start flashing and finally turn solid again. After releasing the VIDEO MODE button, the RX unit will read the EDID data from the connected monitor and notify its linked TX unit, requesting the PC connected to the TX unit to output a video signal that complies with the EDID data.
Power LED (Orange)	Lights when the RX unit is powered on.
Link LED (Green)	Lights when the connection between transmitter and receiver is active.
DIP Switch	Reserved
P/T(Passthrough) CMD(Command)	P/T： The host PC sends RS-232 commands to the Serial Device through connected TX and RX units. CMD： The host PC sends RS-232 commands to the connected RX unit for parameter setup.
RS-232 Phoenix Connector	Connect to a host PC through an RS-232 cable.
IR Output	Connect to an IR transmitter to control devices located at the RX Unit site.
IR Input	Connect to an IR Receiver to receive IR signals at the RX Unit site.
USB2.0 HUB	Connect to USB 2.0 peripherals.
USB1.1 HID	Connect to a USB keyboard and mouse.

REAR	DESCRIPTION
1G LAN Port w/ PoE	This LAN Port can be connected to a PoE (Power over Ethernet) Gigabit Switch to power the transmitter unit when the power adapter is not connected to it.
SFP Fiber Socket	Connect to a SFP Optical Module to connect the RX unit to the AV NETWORK.
Audio Input	Connect to a microphone.
Audio Output	Connect to a set of speakers/headphones.
S/PDIF Output	Connect to a digital audio device through a TOSLINK optical cable.
HDMI Video Output	HDMI Video output
DC Jack	DC 12V/3A Power Adapter

FRONT	DESCRIPTION
IR Receiver	Controlled by the optional IR Remote Control to act as the TRIGGER Inputs of the Controller
SLAVE LED (Orange)	ON： SLAVE LED Indicator (Orange) OFF：No Replication Mode Controller or Replication Mode MASTER Controller.
Power LED (Green)	OFF：Power Adapter is not plugged or the Controller is shut down. Constantly ON：Controller is ready without Replication Mode. Flashing：Controller is ready with Replication Mode.

REAR	DESCRIPTION
CONTROL LAN Port	Connect to an RJ-45 Network Port of a first Gigabit Switch. Use the PC web browser to access the Web-based Management Interface AVoIP Manager of the WST-PIP008.
USB1.1 HID	Connect to a set of keyboard and mouse to access WST-PIP008.
HDMI Monitor Port	Connect to an HDMI monitor to access the Control page of WST-PIP008.
AV LAN Port w/PoE	Connect to an RJ-45 Network Port of a second Gigabit Switch. The AV LAN Port can be connected to a PoE (Power over Ethernet) Gigabit switch to power the controller unit WST-PIP008 when the power adapter is not connected
TRIGGER Input	8 External Inputs to trigger the GPIO Macros set by the WST-PIP008.
RS-232 Port	Serial control for the controller unit
CONTROL Port	Reserved.
IR EXT. Port	Connect to an IR receiver cable.
DC Jack	DC 12V/3A Power Adapter

System Requirements

An active network connection from a 1G IP switch for control ofcompatible AV over IP devices.

Installation

1. Please make sure that all the devices included in the installation are shut down
2. Connect, as required, to WST-PIP006 (TX) to the sources by HDMI cable and connect a standard RJ45 Cat.6 or above Ethernet cable to "1G " LAN port of Transmitter to the RJ45 ports of 1G IP Switch.

3. Connect, as required, to WST-PIP007 (RX) to the monitors or TVs by HDMI and connect a standard RJ45 Cat.6 or above Ethernet cable to "1G" Lan port of Receiver to the RJ45 ports of 1G IP Switch.
4. Connect AV Lan Port of WST-PIP008 to the same 1G IP Switch via a standard RJ45 Cable.

   Note : If you are connecting the units to a Gigabit PoE (IEEE 802.3at compliant) switch can skip using the supplied PSU.

   Connect the HDMI Port of WST-PIP008 to any Monitor, press and release its power switch to turn on the WST-PIP008. After 30 seconds, the green Power LED will light up indicating the WST-PIP008 is ready.
5. Plug the USB keyboard and Mouse to the USB ports of WST-PIP008, you can process the system setting.

Operation & Setting

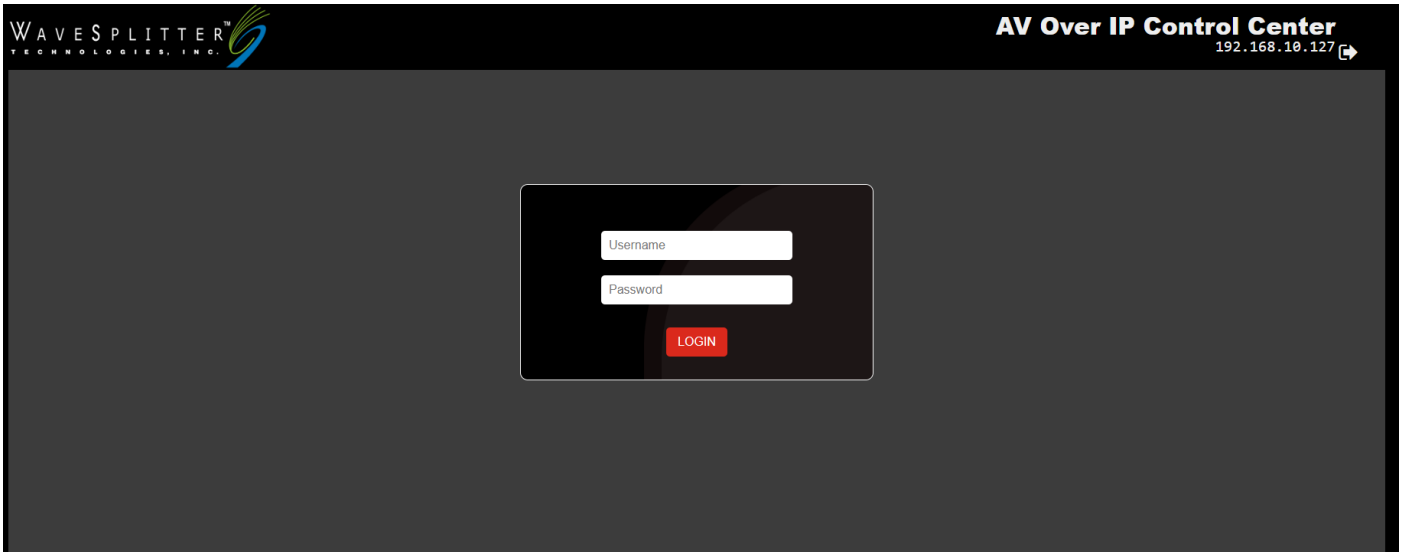
◆ Web GUI Operation

After connecting to the control webpage' s IP address in any web browser, enter the corresponding username and password, then click "Login" to sign in.

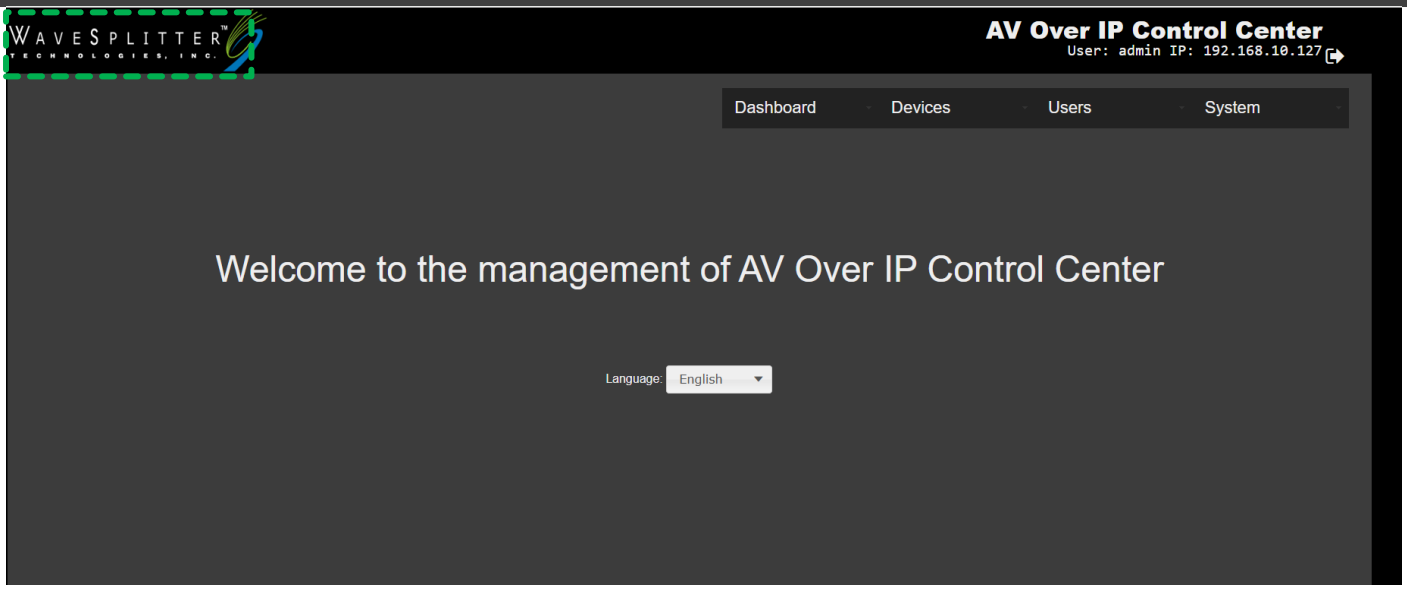
Factory Default IP : 192.168.1.200

Default User name : admin

Default Password : adminpass



Successfully logging into the control center interface, the user can select a preferred interface language (Traditional Chinese / English) from the language drop-down menu. The default interface language is English. The user can click on the WAVESPLITTER logo in the upper-left corner of any page at any time to change the interface language, as shown below.



The Main Menus vary by different logged-in user roles.

Administrator：Dashboard、Devices、Users、System

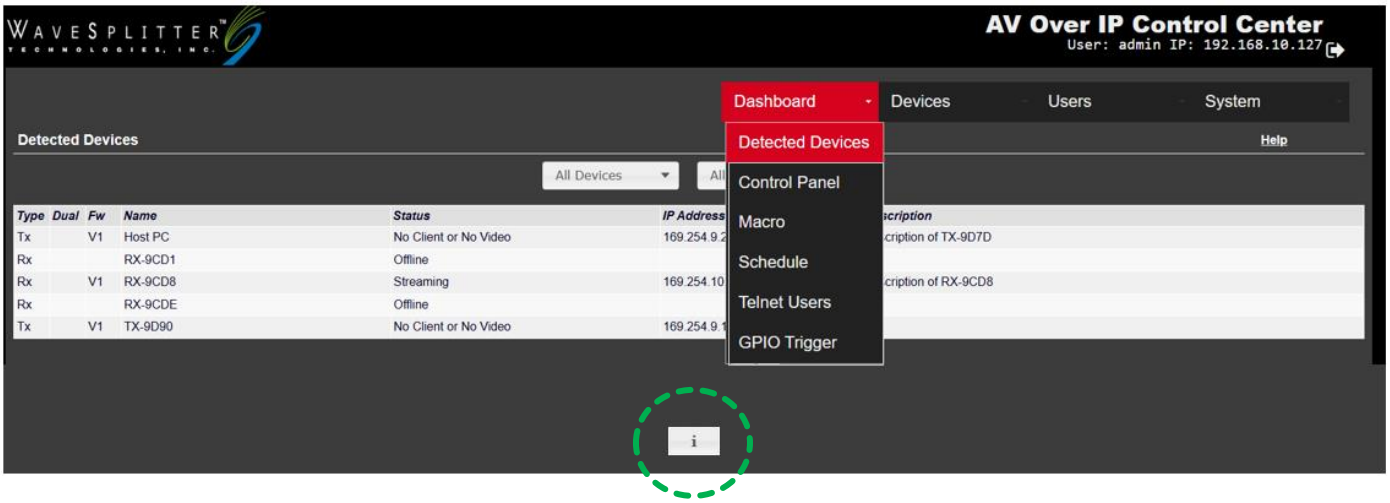
Super User：:Dashboard、Devices、System

Simple User：Dashboard

■ Dashboard

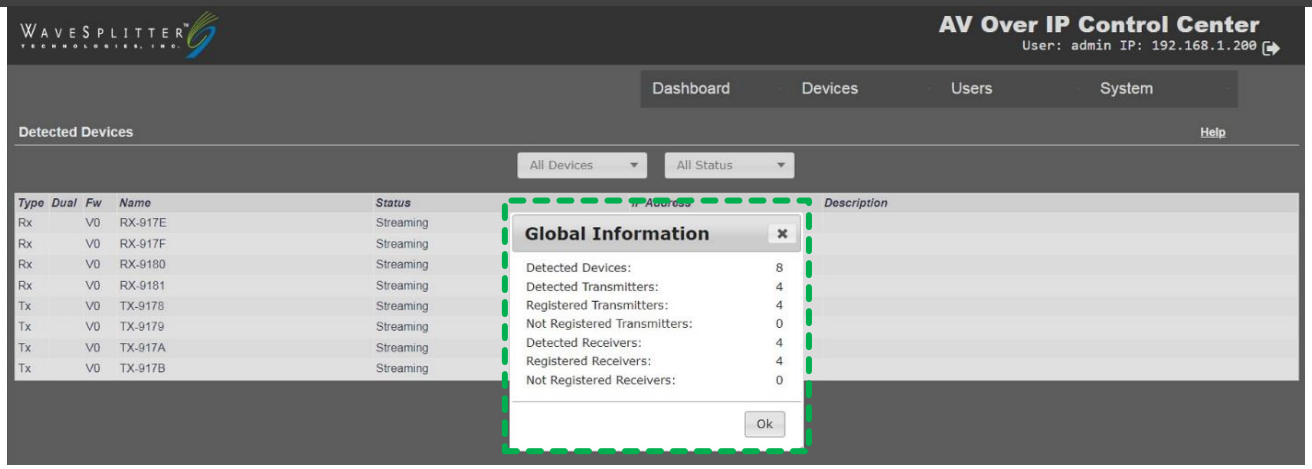
-Detected Devices-

The Detected Devices page lists all AV over IP extender devices (receiver units and transmitter units) that the WST-PIP008 can manage over the AV NETWORK.



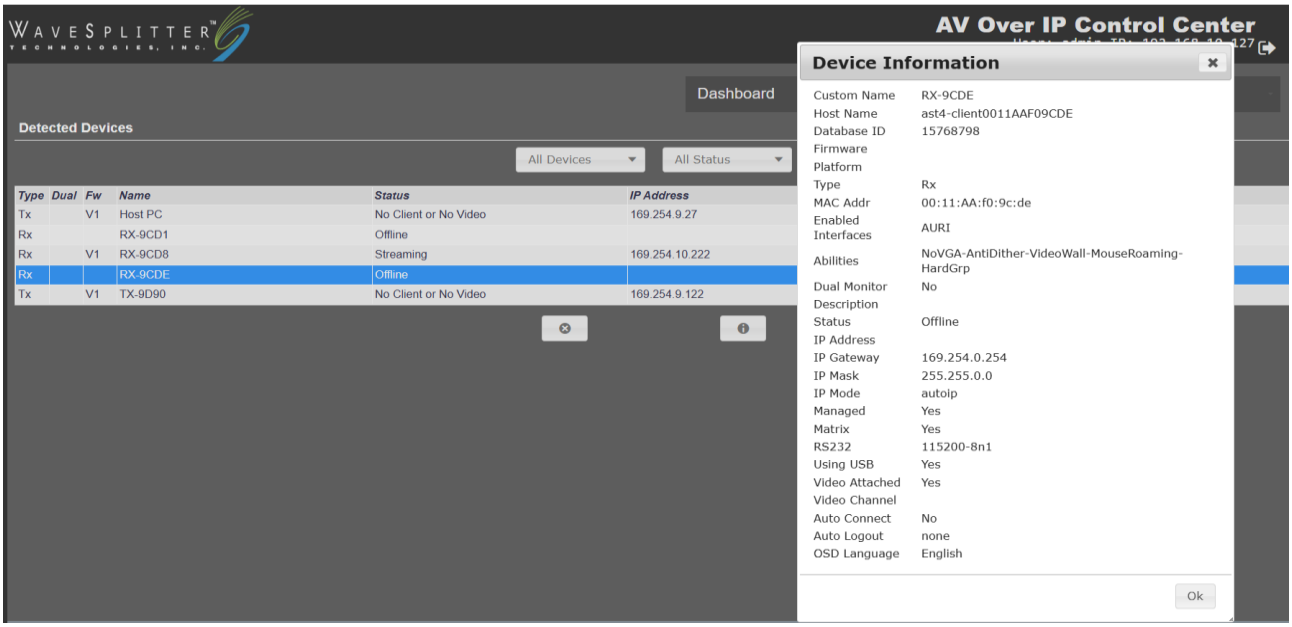
1. Get Global Information of all devices:

   Click the 「Global Information i button」to get global information of all devices.



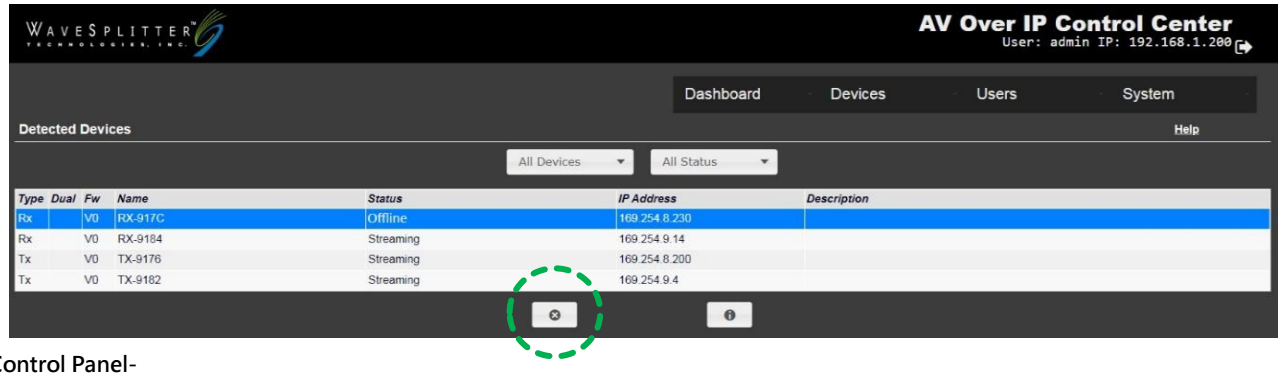
2. Get Device Information of a Specific Device

Select the device from the list and click the 「Device Information 」button to get a specific device information.



3. Cancel managing a device when it has been removed from the AV NETWORK

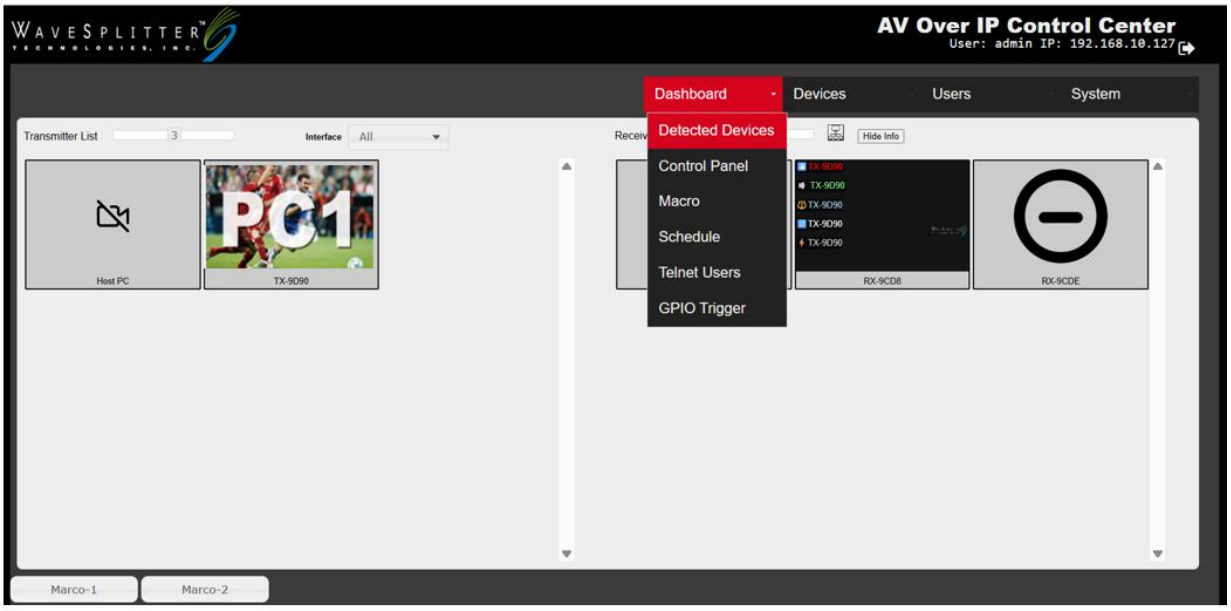
To remove the specific device from the list, select the device and click the 「Delete 」button.



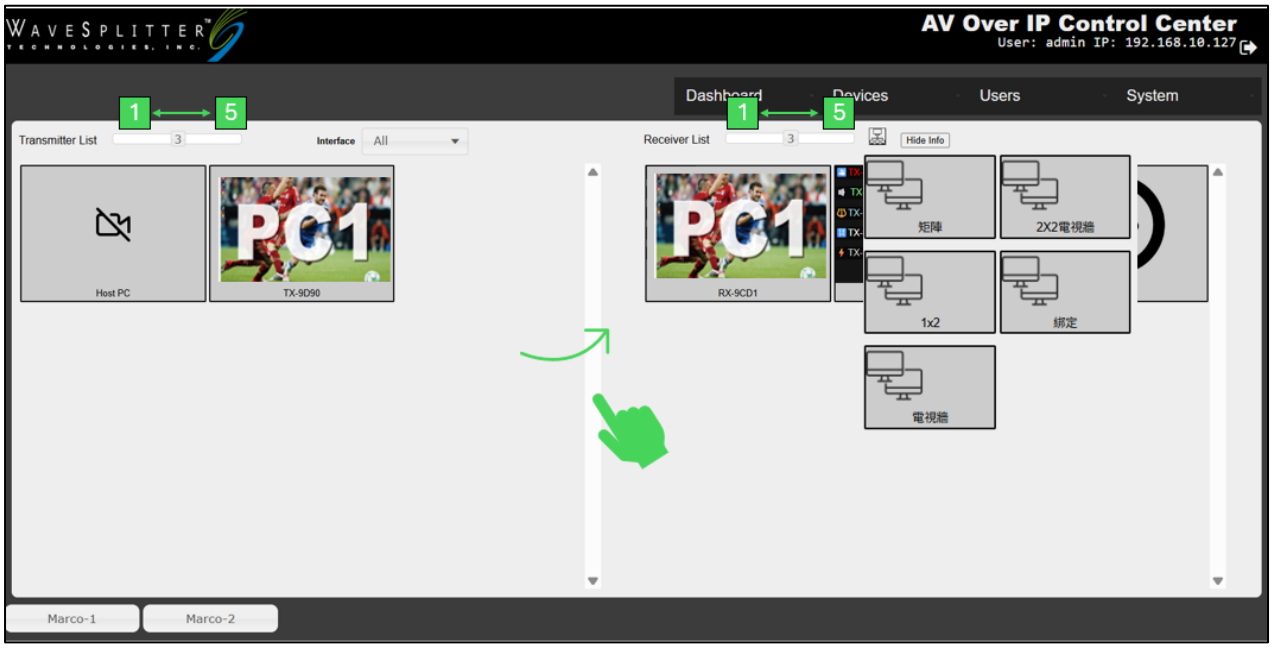
-Control Panel-

You can drag-and-drop control over the video routing between all detected transmitters and receivers. Each TX and RX will display a small preview thumbnail showing the currently playing audio and video signal.

If the input source or image cannot be displayed for any reason, an icon indicating the status will be shown.

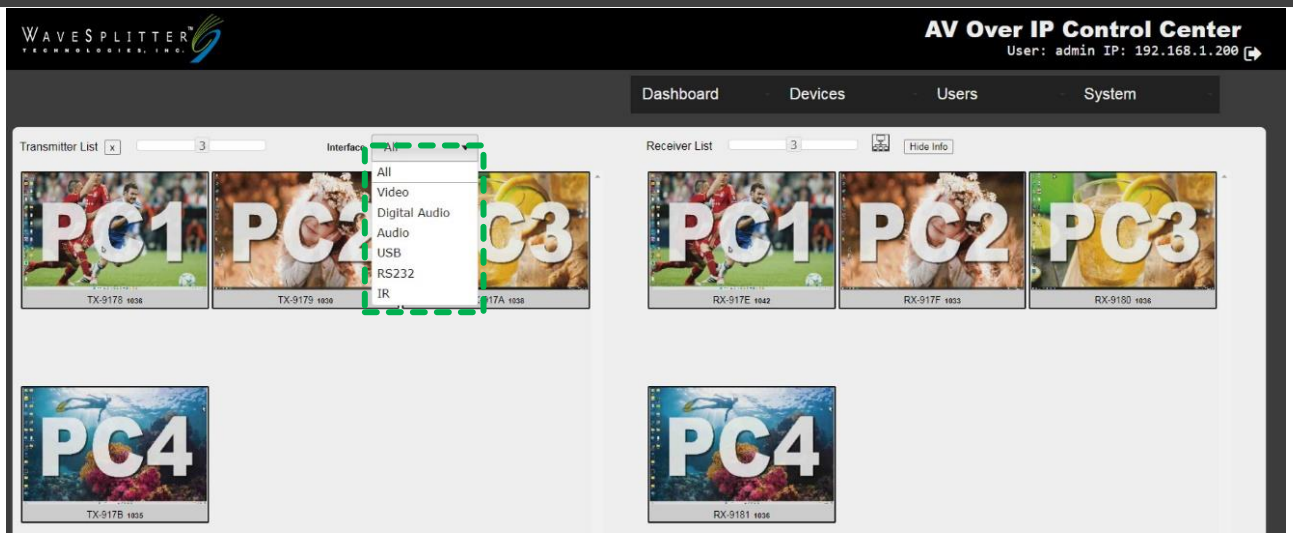


- Transmitter List & Receiver List：You can use the slider to adjust the number and size of TX/RX preview thumbnails, from 1 to 5 (the larger the number, the smaller the preview).
- Layout button：You can see the preset Layout for RX.
- Operation：To drag-and-drop the previews directly.



- Transmitter (Left Side)

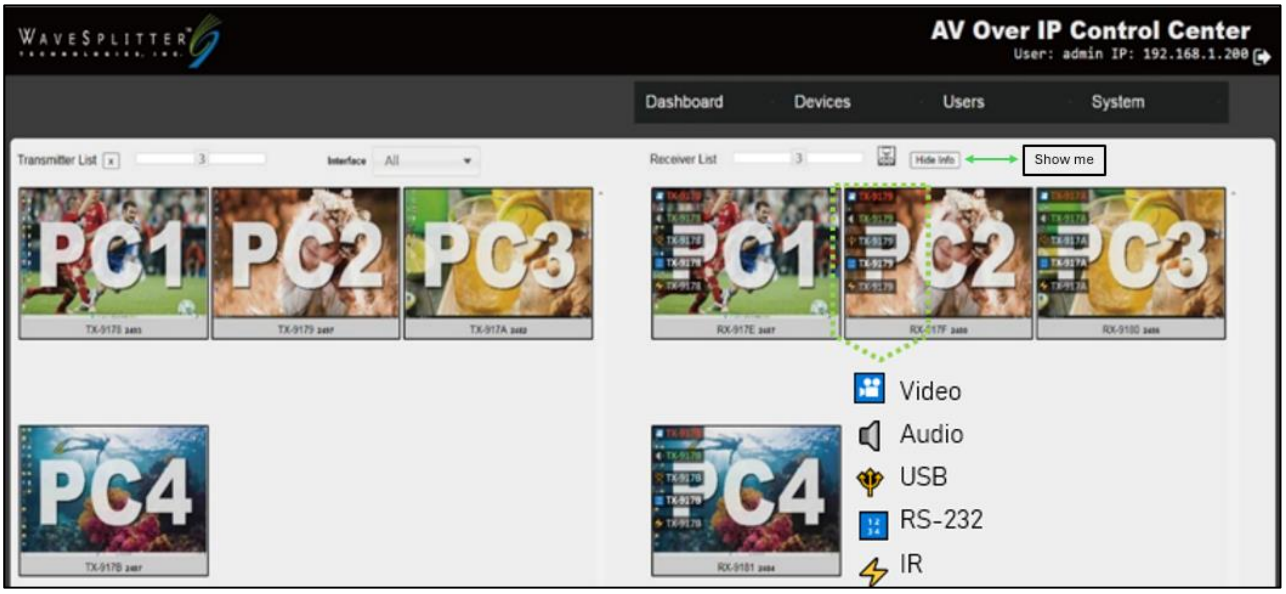
The drop-down 「Interface」e list includes All, Video, Digital Audio, Audio, USB, RS232, and IR. Users can also switch to specific signals. The factory default is 「All」.



- Receiver (Right Side)

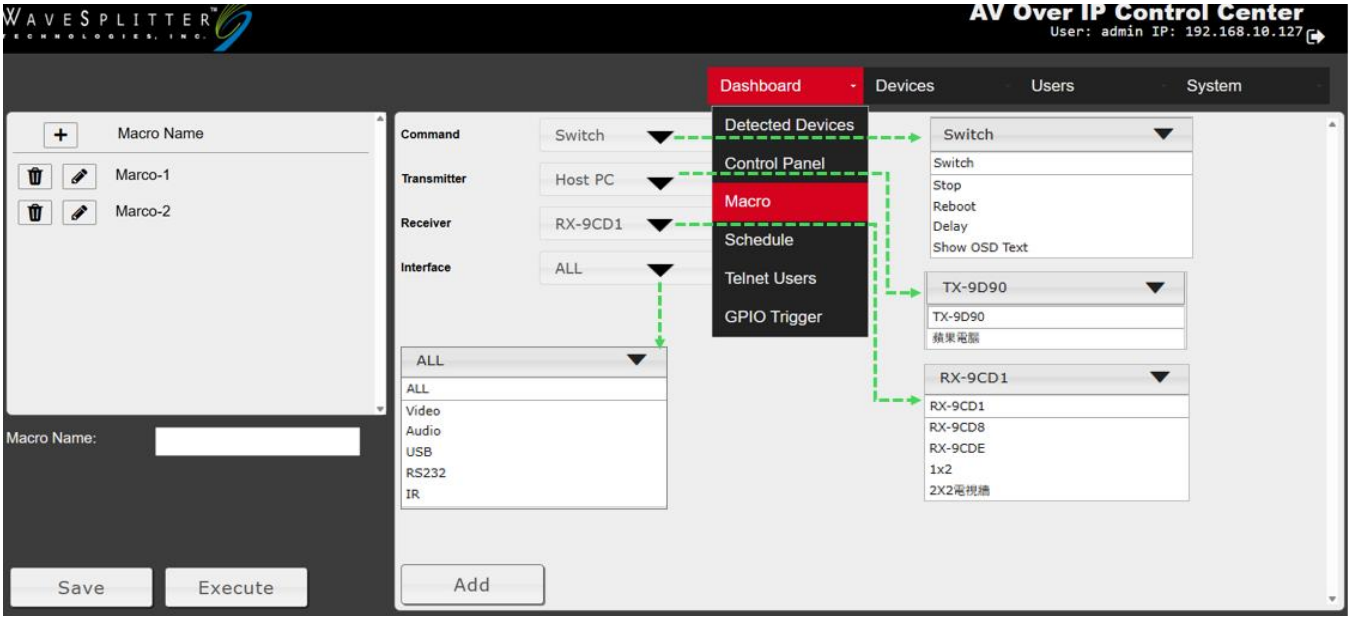
In the Receiver List on the right-hand side, click the Hide Info button, and it will toggle hiding the Interface Information of the above TX-to-RX switching operation referred in the previous section, Conversely, click Show Info button to show them.

The displayed icons represent signals as follows: Video | Audio | USB | RS232 | IR.



-Marco-

The Marco page allows users to arrange a series of unit operations. The Command drop-down list is including in Switch、Stop、Reboot、Delay、Show OSD Text.



To Create a new Marco：

Step 1. Select the operation to be performed, the corresponding TX/RX, and the interface port.

Step 2. Click the 「Add」 button.

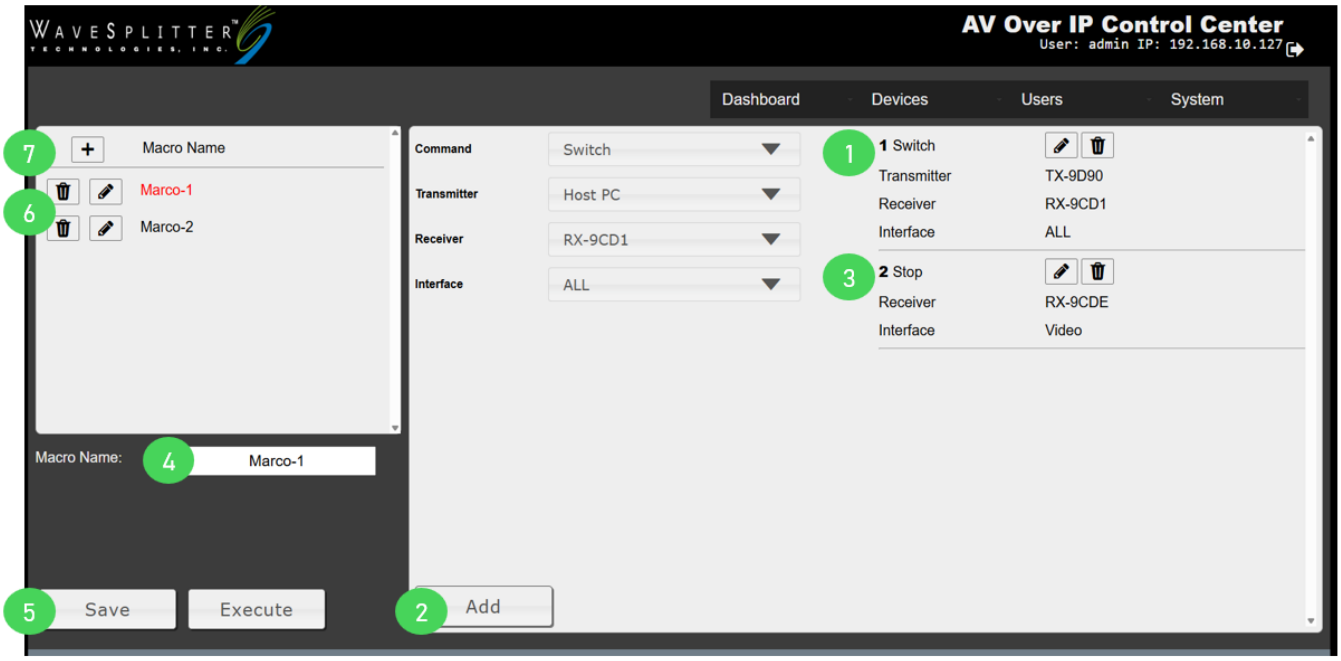
Step 3. If the same Macro needs to execute one or more additional actions and commands, repeat Steps 1 & 2.

Step 4. Enter the Macro name.

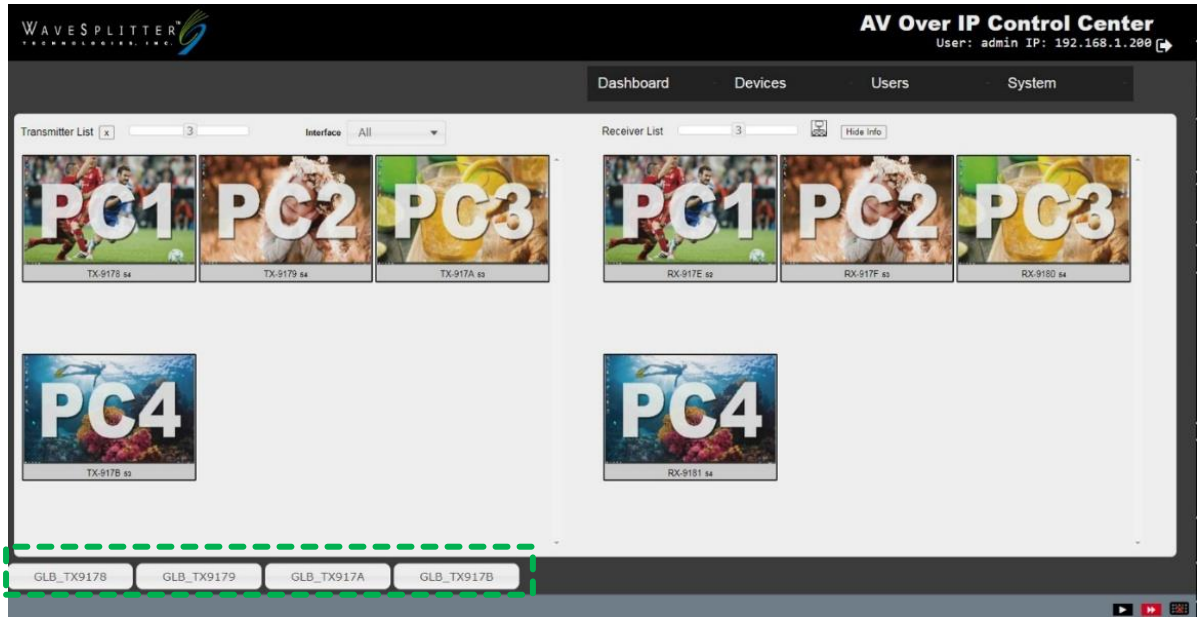
Step 5. Click the 「Save」 button or the 「Execute」button to verify that the Macro functions correctly.

Step 6. To edit the content, click the 「Edit 」button, or to delete the Macro, click the 「Delete 」button.

Step 7. To add another Macro, click「 」button.



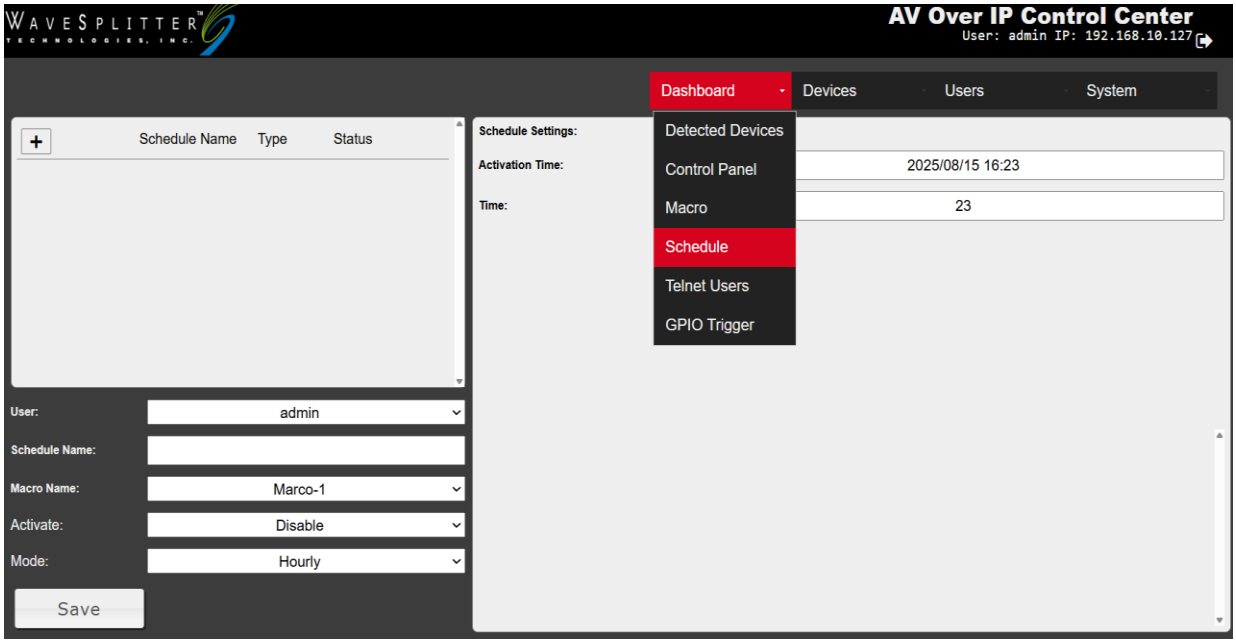
NOTE：The created Marco list will be shown will be displayed at the bottom of the 「Control Panel 」page for easy one-click operation.



-Schedule-

The Schedule page allows users to execute any selected Macro at specified intervals that have been previously set.

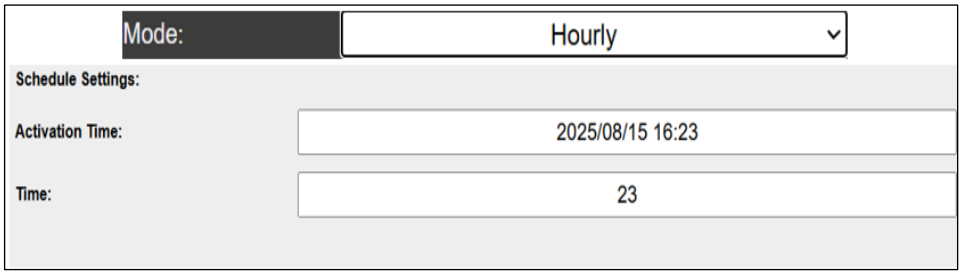
- User ： Only in Administrator, the drop-down list becomes available to manage/execute other users' schedule items.
- Schedule Name：Specify a Scheule Name.
- Marco Name ：Select a Marco to be executed in this schedule item.
- Activate：Enable / Disable
- Mode：Hourly / Daily / Weekly / Once



- Time Mode

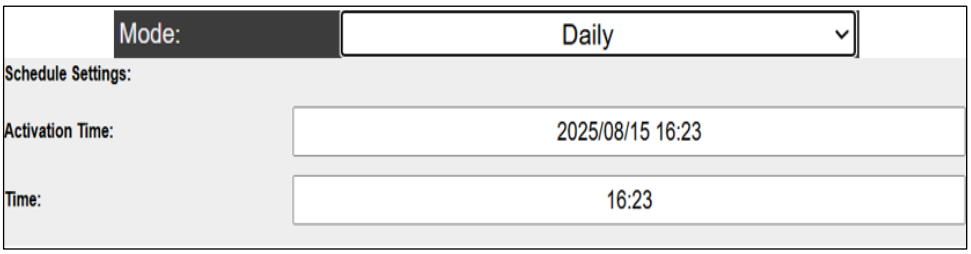
Hourly

From the enabled time, execute the Macro at the minute of every hour and in this loop.



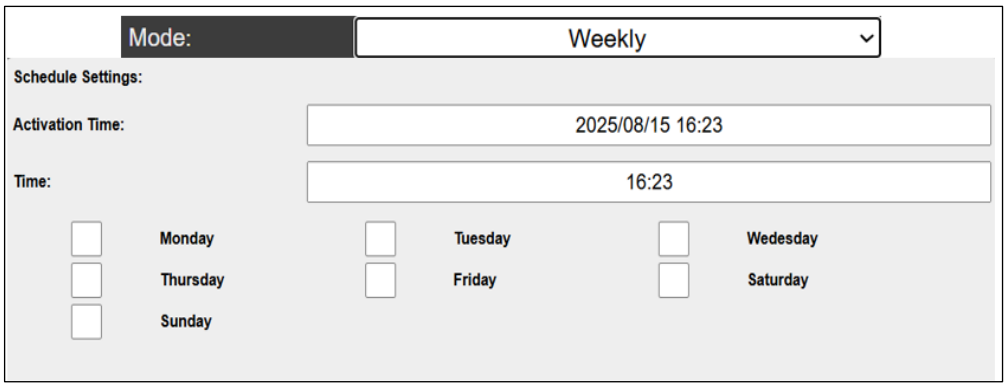
Daily

From the enabled time, execute the Macro at specified time of every day and in this loop.



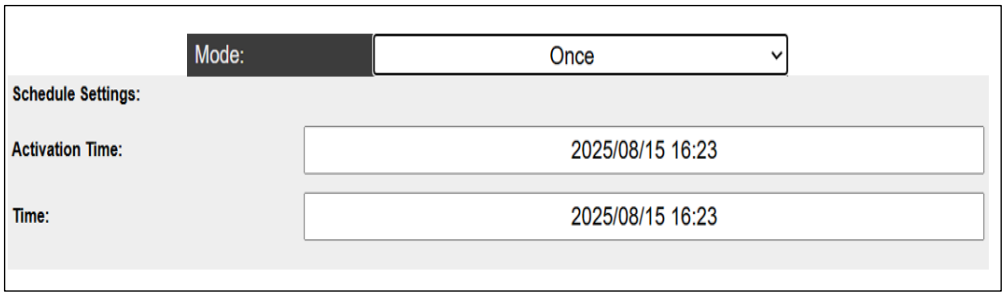
Weekly

From the enabled time, execute the Macro at specified day and time of every week and in this loop.



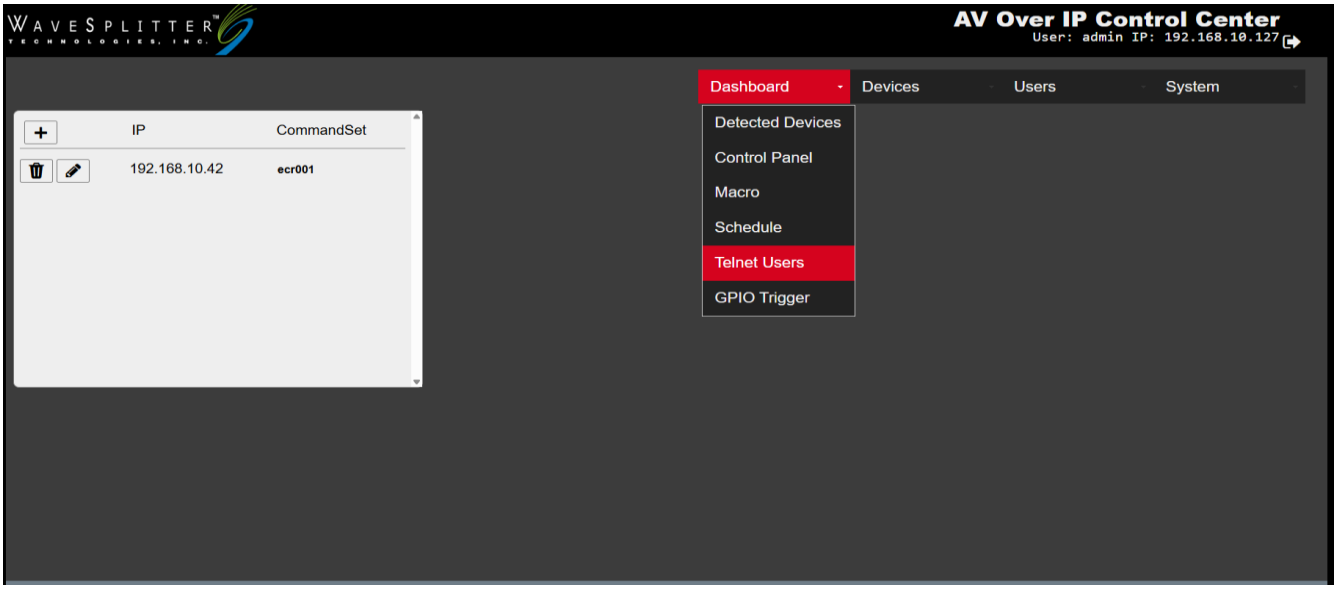
Once

Execute the macro once at the specified time.



- Telnet Users-

The Telnet page allows third-party environmental control systems to connect to the WST-PIP008 via IP within the same network domain in order to execute further control commands.



Step 1. Click the 「Add +」 button

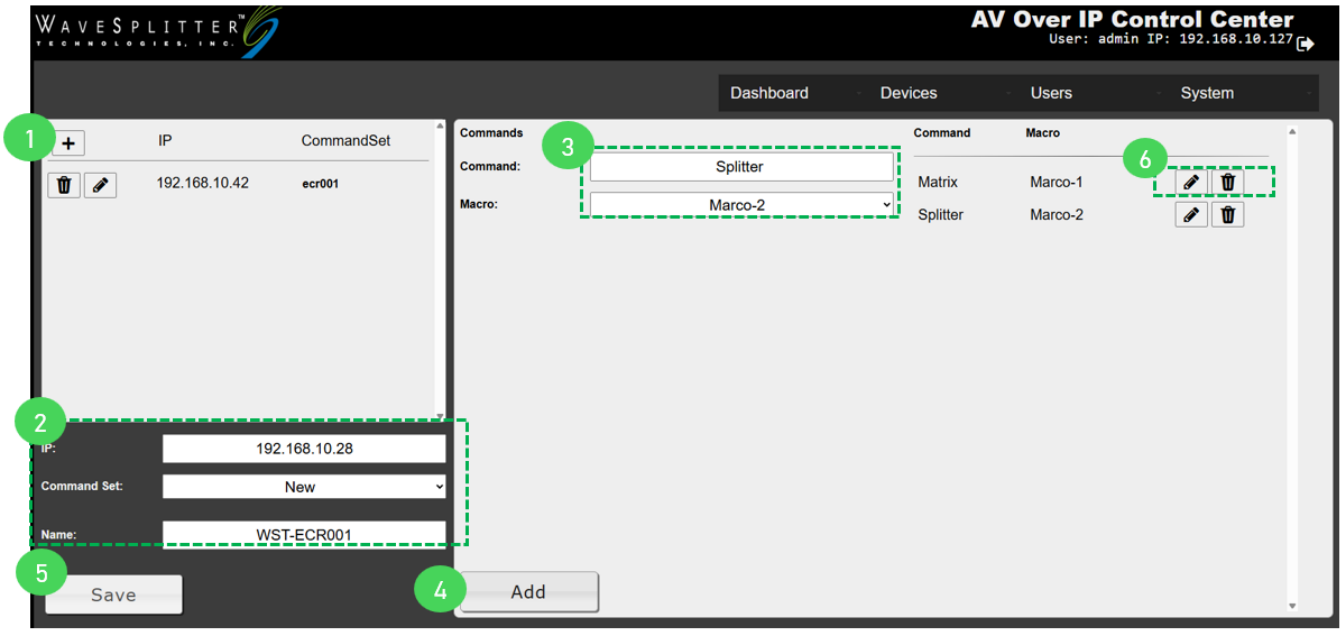
Step 2. Enter the default environmental control IP and edit the name.

Step 3. On the right panel, assign a name for the command and map it to the corresponding macro.

Step 4. If additional macros and commands are required, click 「Add」 again and repeat Step 3.

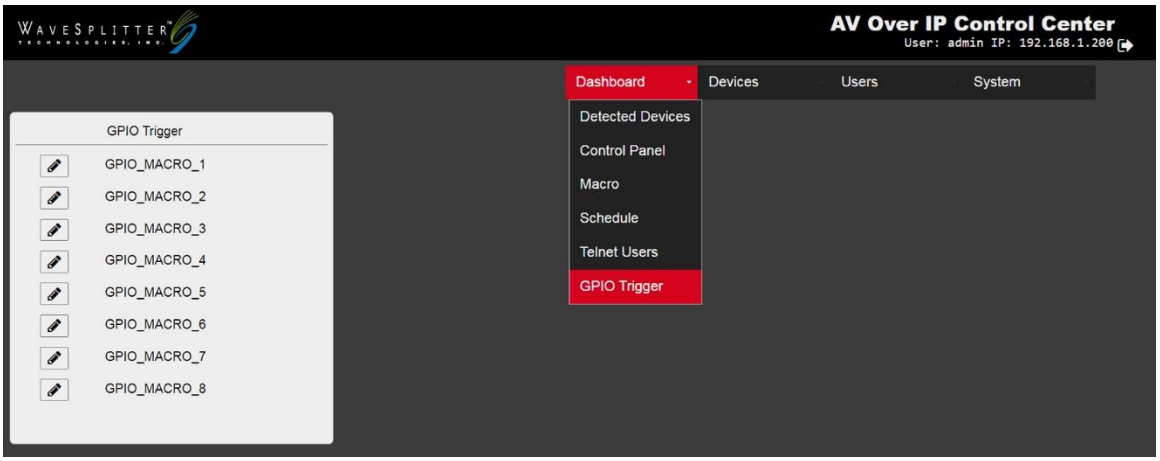
Step 5. Click 「Save」 to complete the setup.

Step6. To modify the configuration, click the 「Edit」 button; to remove a macro, click the 「Delete」 button.



-GPIO Trigger-

The GPIO Trigger page allows users to configure which Macro operation will be executed when the WST-PIP008 external phoenix connector TRIGGER IN receives a high-level (e.g., 5V) trigger signal from any of its 8 input terminals.



Step1. Click the 「Edit 」 button

Step2. Select the Commead、Transmitter、Receiver、Interface

Step3.Click the 「Add」 button.

Step 4. Click the 「Save」 button or the 「Execute」button to verify that the Macro functions correctly.

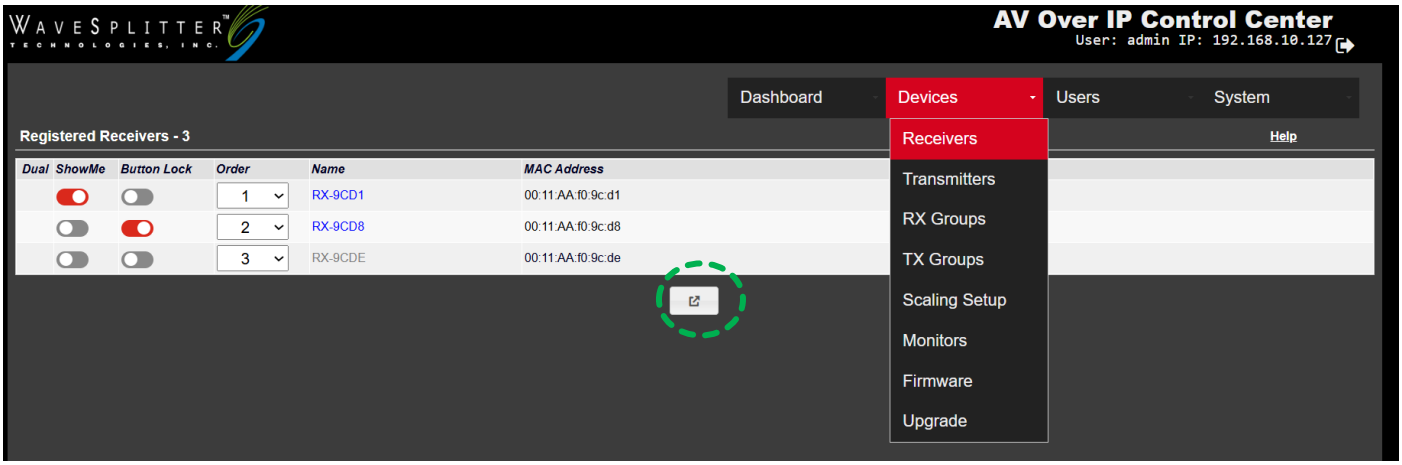
■ Devices

-Receivers-

The Receivers page list shows WST-PIP007 receivers in an AV NETWORK that the controller WST-PIP008 is also connected . Each row corresponds to a receiver, displaying its Name, MAC Address, and Description.

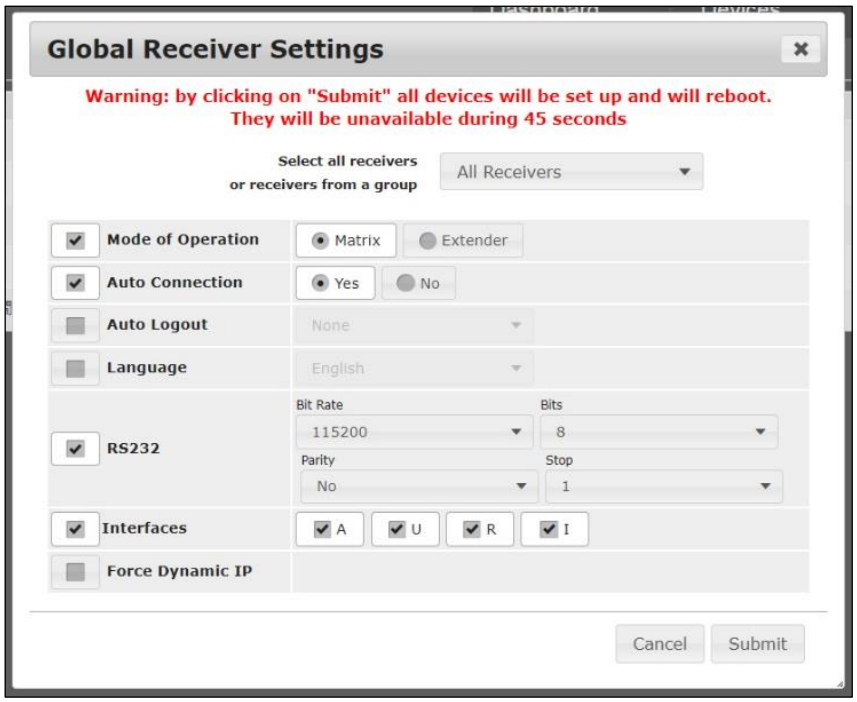
- Registered Receiver-Quantity
- Show Me：When enabled, the Power & Link LEDs on the selected RX unit will blink simultaneously, helping to locate the corresponding RX unit.

- Button Lock：When enabled, all buttons on the panel of the selected RX unit will be locked and become non-functional.
- Order：The drop-down menu allows you to select the arrangement order of the RX unit.



1. Global Action：

When no receiver is selected the 「Global Actions」 button will be available. Click it to open 「Global Receiver Settings」 window to set up all listed receivers simultaneously.



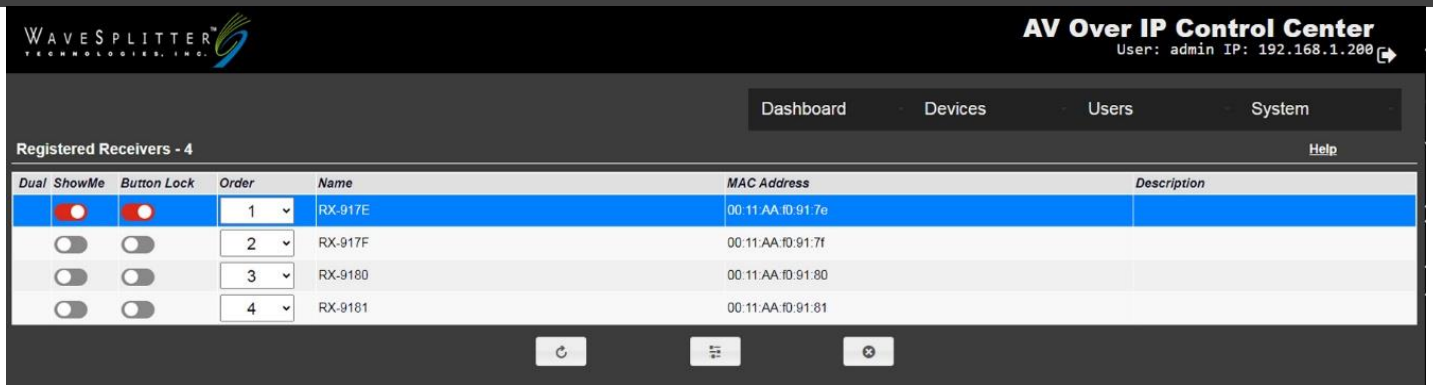
2. Set up a Single Receiver

Select a specific receiver.

-Reboot Receiver

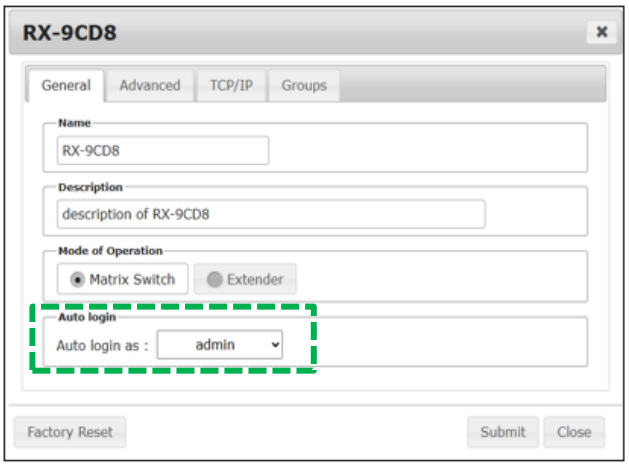
-Unregistered Receiver

-Set up Receiver

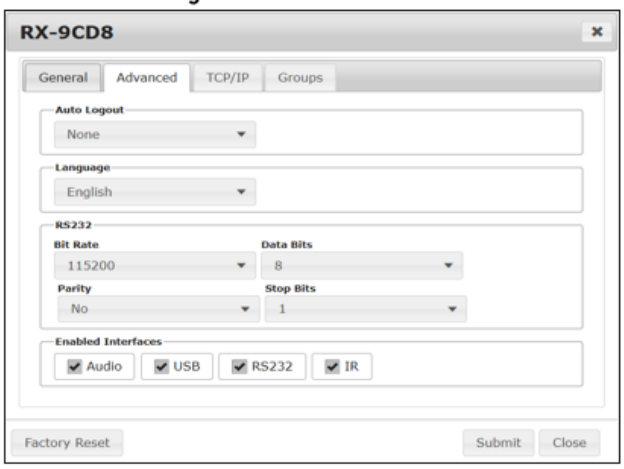


- Set up Receiver Windows

General Setting

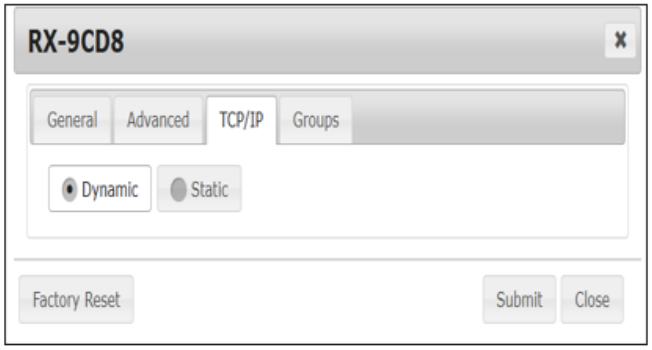


Advanced Setting

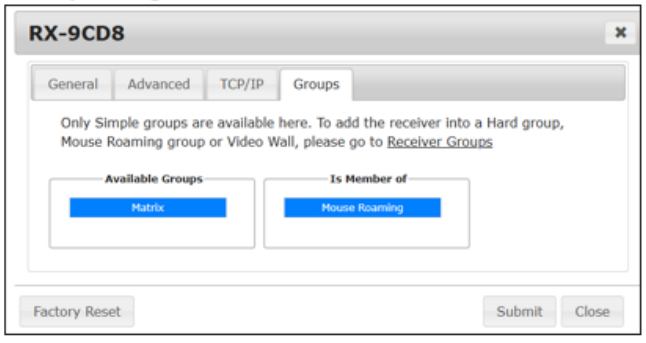


Auto Login as ：option enables the configured RX unit to automatically log in its OSD menu with the assigned user account.

TCP/IP Setting



Group Setting

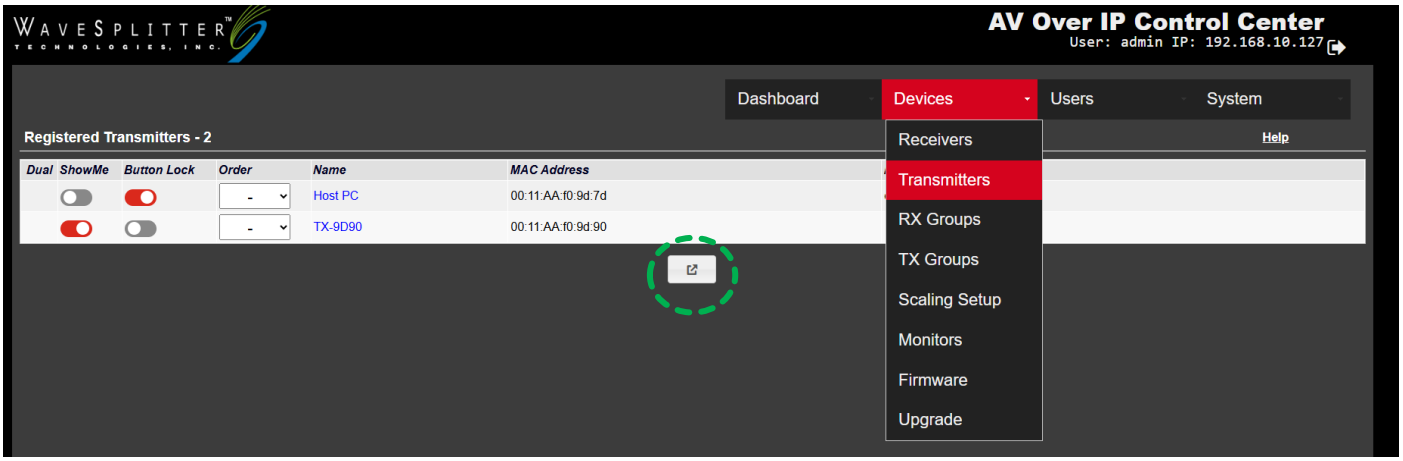


-Transmitters-

The Transmitters page list shows WST-PIP006 transmitter in an AV NETWORK that the controller WST-PIP008 is also connected . Each row corresponds to a transmitter, displaying its Name, MAC Address, and Description.

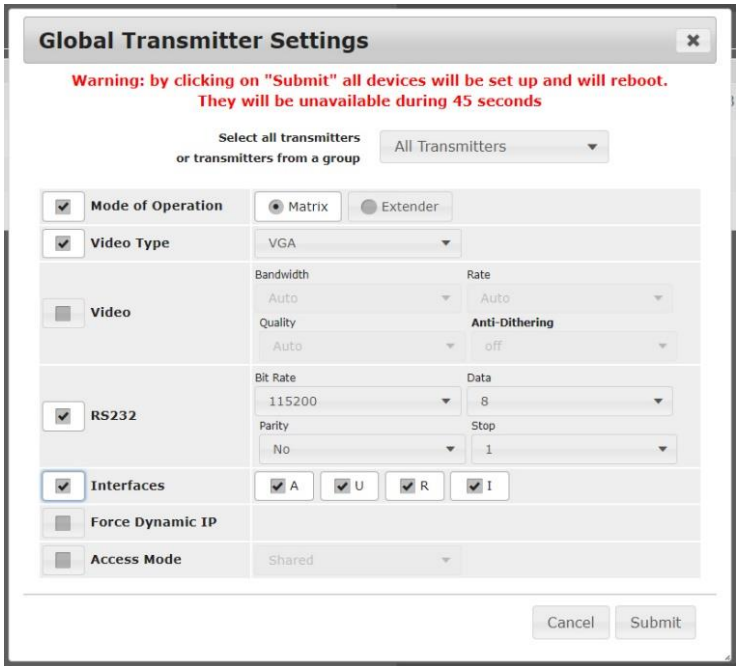
- Registered Transmitter-Quantity
- Show Me：When enabled, the Power & Link LEDs on the selected TX unit will blink simultaneously, helping to locate the corresponding TX unit.
- Button Lock：When enabled, all buttons on the panel of the selected TX unit will be locked and become non-functional.

- Order：The drop-down menu allows you to select the arrangement order of the TX unit.



1. . Global Action

When no transmitter is selected the Global Actions button will be available. Click it to open 「Global Transmitter Settings」 window to set up all listed transmitters simultaneously.



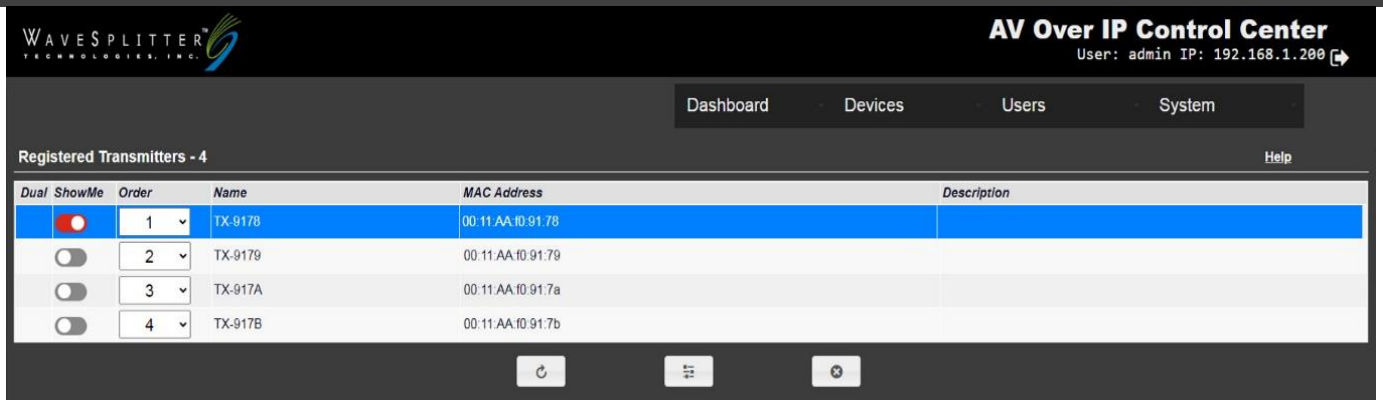
2. Set up a Single Transmitter

Select a specific Transmitter.

-Reboot Transmitter

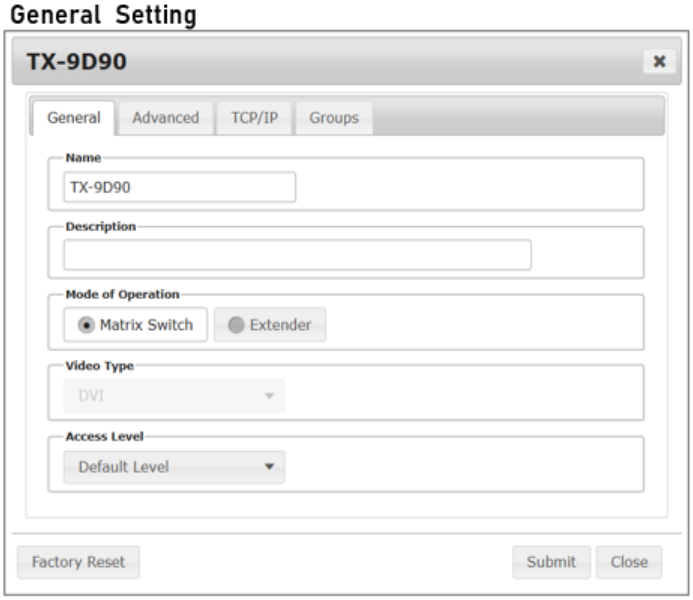
-Unregistered Transmitter

-Set up Transmitter

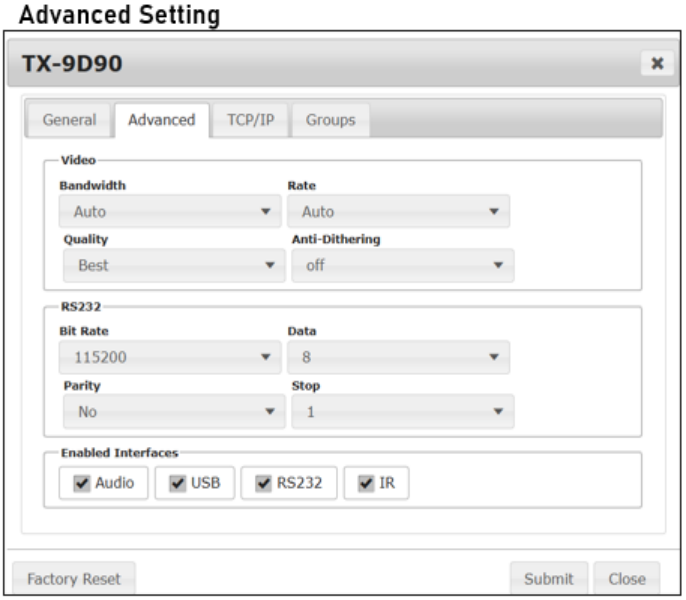


- Set up Transmitter windows

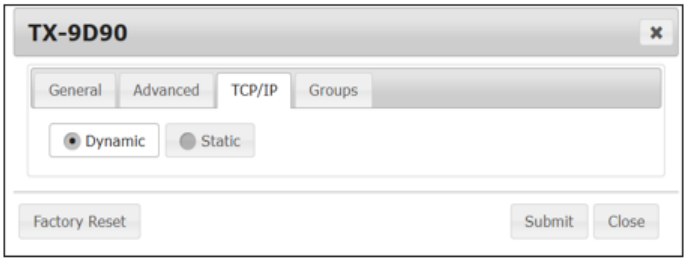
General Setting



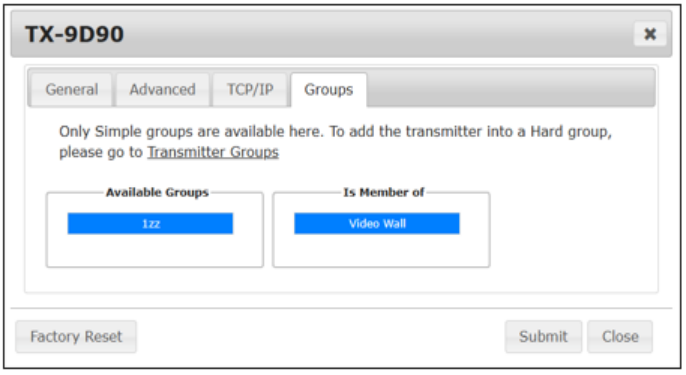
Advanced Setting



TCP/IP Setting



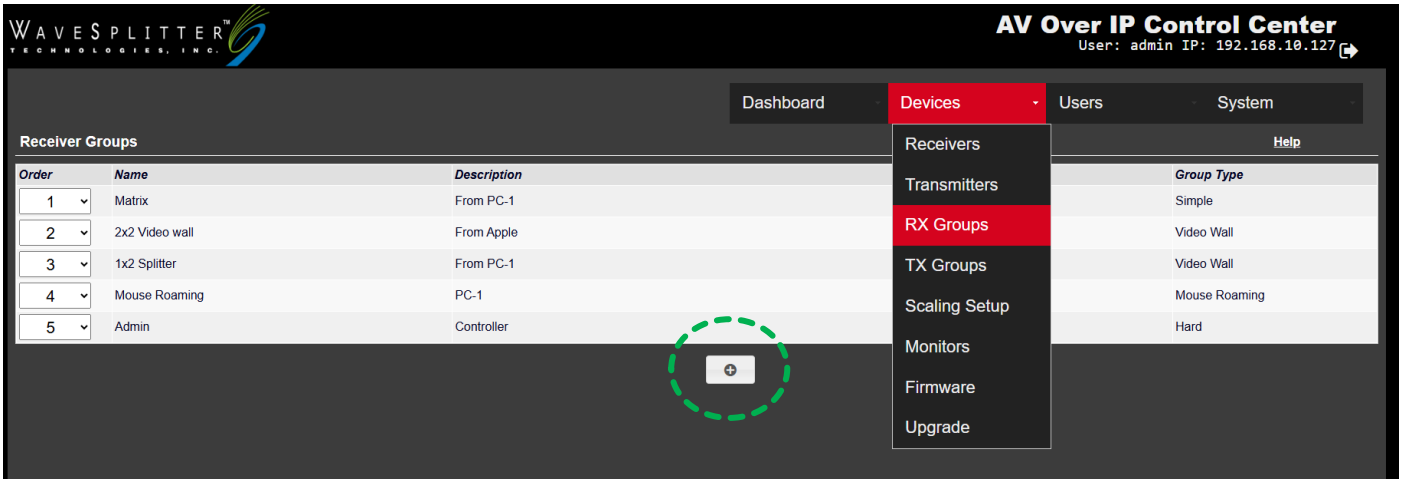
Group Setting



-RX Groups-

The RX Groups page lists all Receiver Groups. Each row corresponds to a Receiver Group showing its Name, Description, and Group Type.

- Order：The drop-down menu allows you to select the arrangement order of the group.

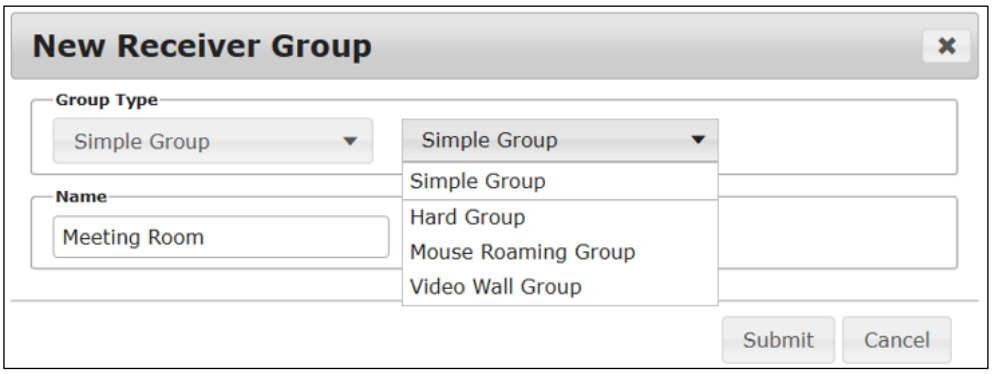


- Create a new Receiver Group

Step 1. Click「 ⊕ 」button to open「New Receiver Group」window.

Step 2. Select「Group Type」，including Simple Group、Hard Group、Mouse Roaming、Video Wall

Step3. Edit 「Name」

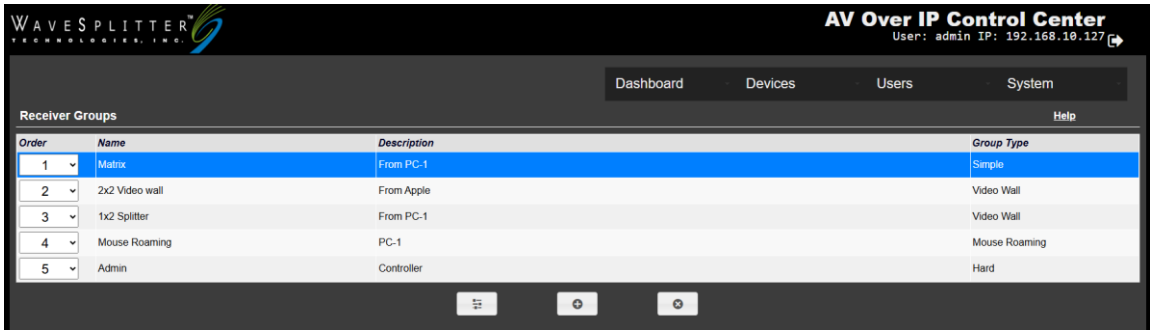


2. Set up the specific Receiver Group

-New Group ⊕

-Delete Group ⊗

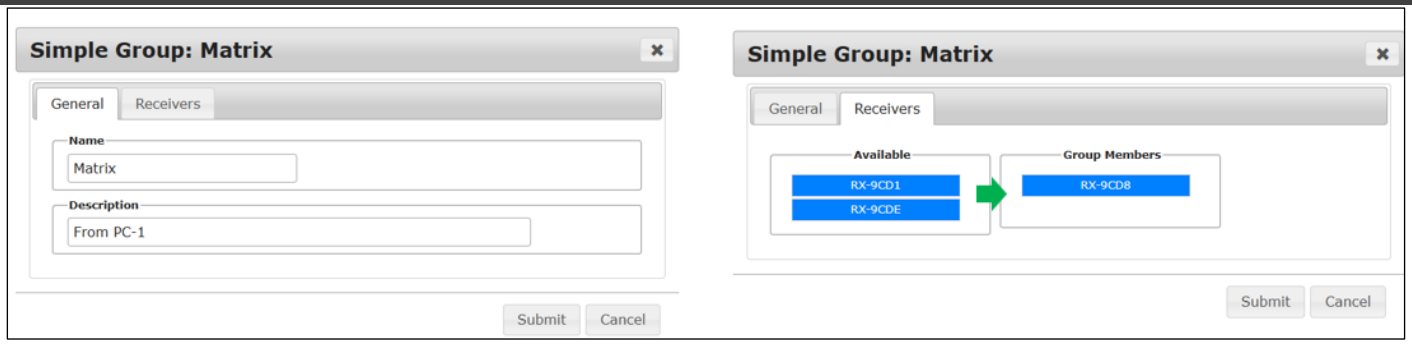
-Edit Group ⚙



▸ Receiver Group Configuration Menu

Group Type：Simple Group

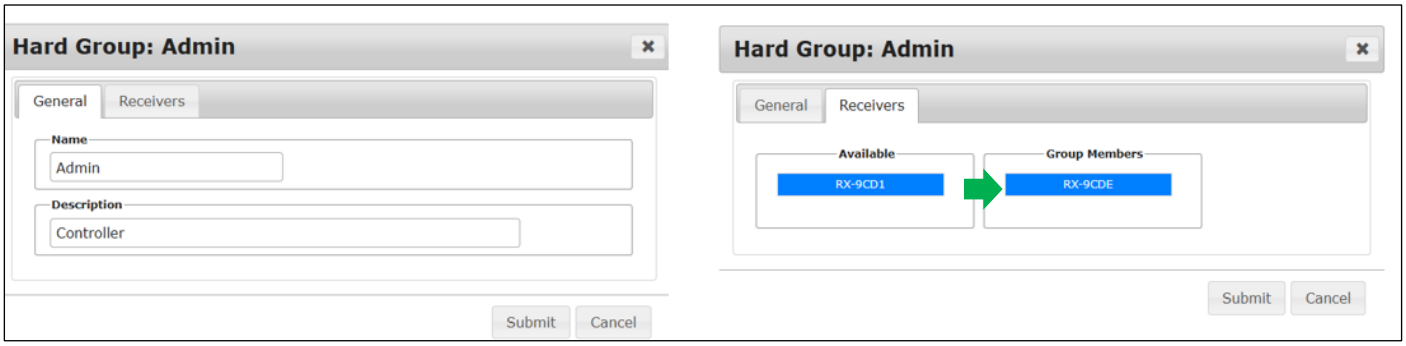
Bind multiple receivers into a Simple Group. The system can have multiple Simple Groups, and a single receiver can belong to different Simple Groups as a member.



Group Type：Hard Group

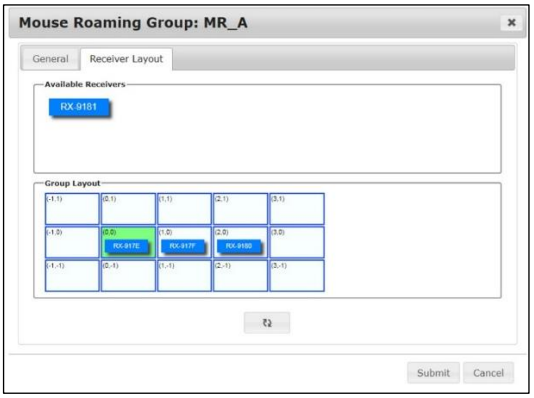
Bind multiple receivers into a Hard Group. The system can have multiple Hard Groups, and a single receiver can belong to only one Hard Group as its member.

NOTE: In the Hard Group setting, the system will only display available RX units that haven' t been assigned yet. Unlike in the Simple Group setting, any RX unit can be assigned to different RX groups.

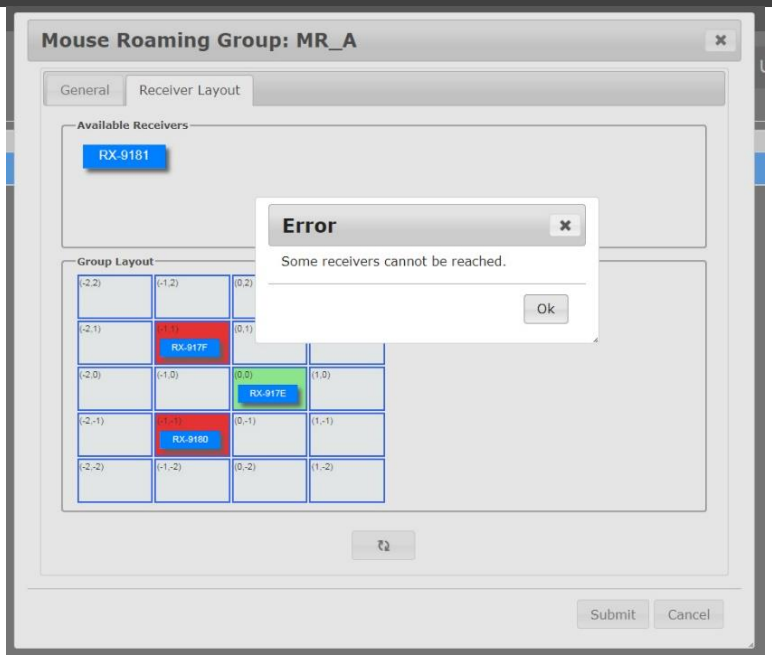


Group Type：Mouse Roaming Group

You can use a single set of mouse and keyboard attached to the master unit of a mouse roaming RX group, allowing the mouse cursor to move freely across all viewable screen areas of all RX units performing the mouse roaming task. With this function, a user can control multiple PCs/players that are connected to those receivers via transmitters. The maximum mouse roaming area setting is 16 (H) x 16 (V), totaling 256 monitors.



NOTE: As shown below, system will not allow a group layout with any isolated RX unit arrangement (not adjacent to any other RX units) for mouse roaming task.



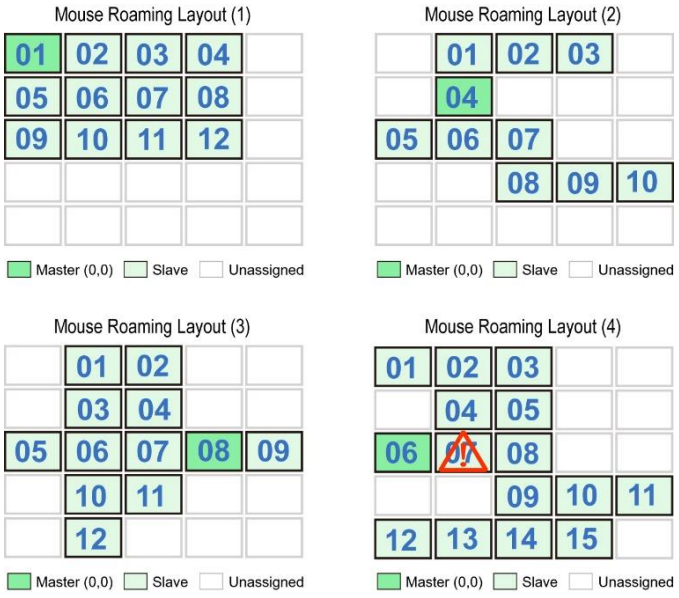
NOTE：Cursor Hopping Function of Mouse Roaming

When all receivers (RX) participating in the 「Mouse Roaming」 function are operating normally, the user can freely move the mouse cursor across all visible screen areas of the receivers.

If any receiver or its connected transmitter (TX) malfunctions or goes offline, the mouse cannot move out of the affected receiver' s screen area once it enters it, resulting in a loss of mouse control.

In such cases, use one of the following two methods to immediately move the mouse to the screen area of another normally functioning receiver and restore control:

1. Hotkey Operation： Press the Right Ctrl key twice → enter the two-digit number corresponding to the target receiver.
2. Number Mapping:：Follow the screen arrangement, numbered from left to right and top to bottom (see diagram below).

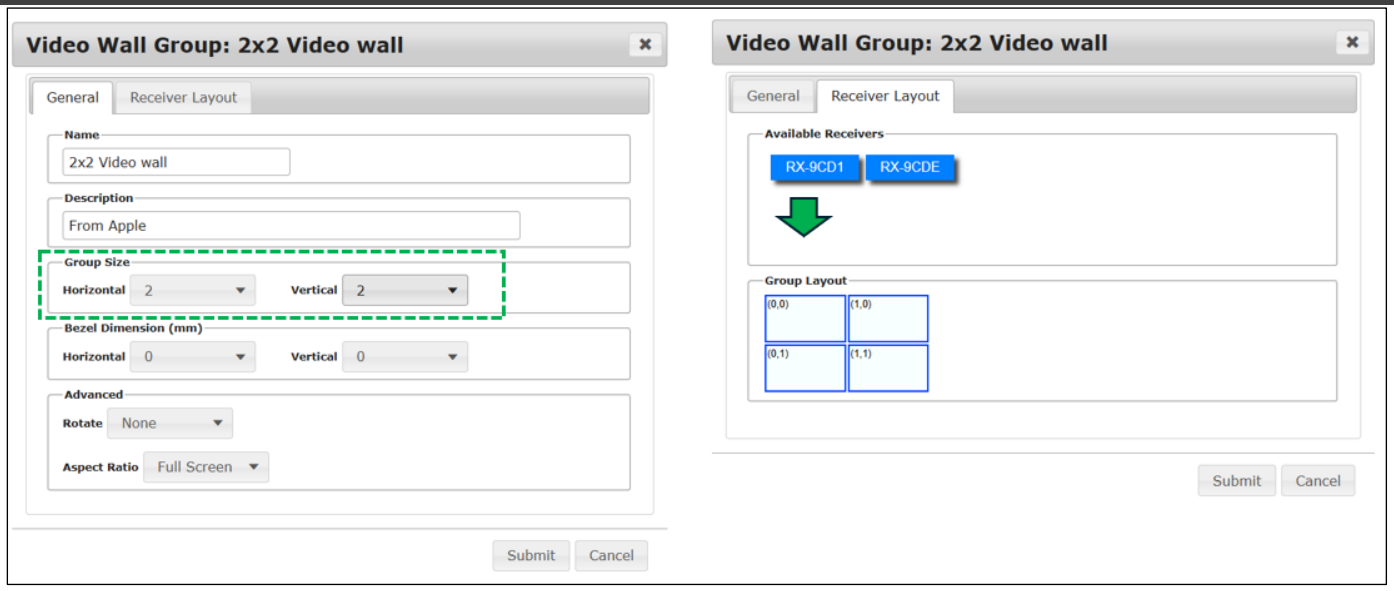


Group Type：Video Wall Group

This function enables the collective display of any single transmitter video source across the monitors attached to the video wall task receivers.

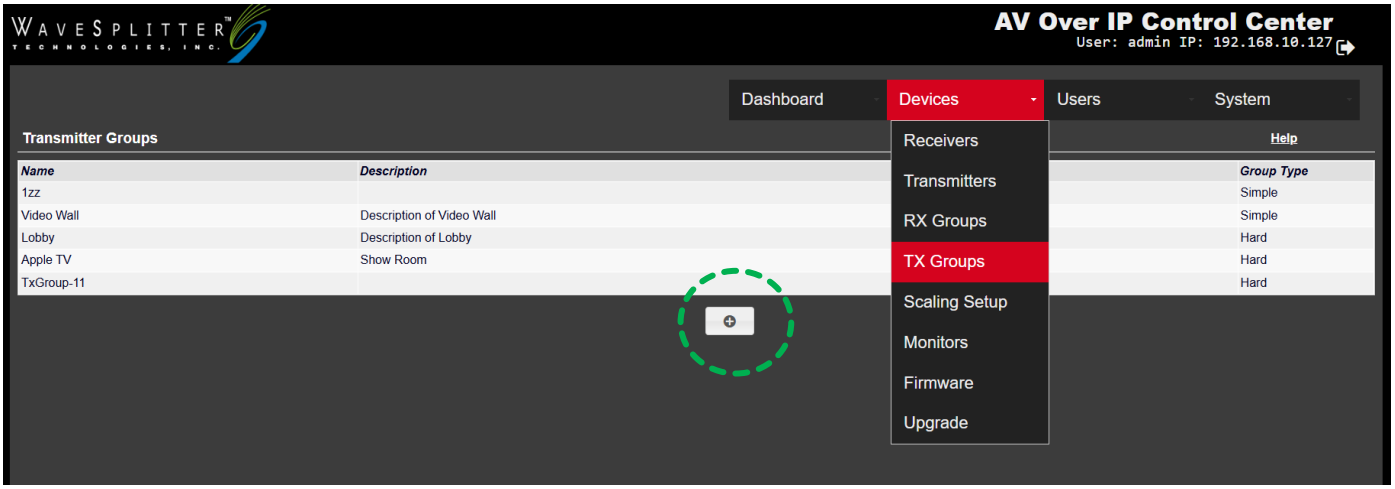
The maximum size setting of the video wall is 8 (horizontal) x 8 (vertical), totaling 64 monitors.

To set up the Video Wall layout at Group Size.



-TX Groups-

The TX Groups page lists all Transmitter Groups. Each row corresponds to a Transmitter Group showing its Name, Description, and Group Type.



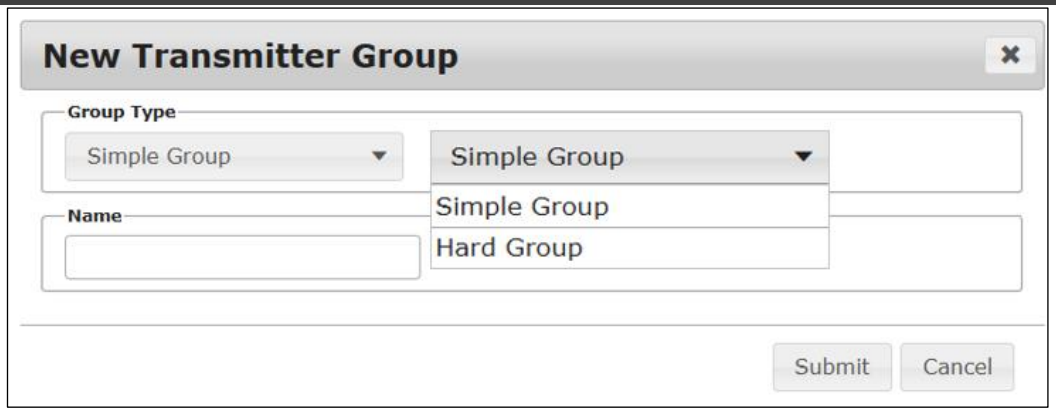
1. Create a new Transmitter Group

Step 1. Click「 ⊕ 」button to open「New Receiver Group」window.

Step 2. Select「Group Type」，including Simple Group、Hard Group.

Step3. Edit 「Name」

NOTE: In the Hard Group setting, the system will only display available TX units that haven’ t been assigned yet. Unlike in the Simple Group setting, any TX unit can be assigned to different TX groups.

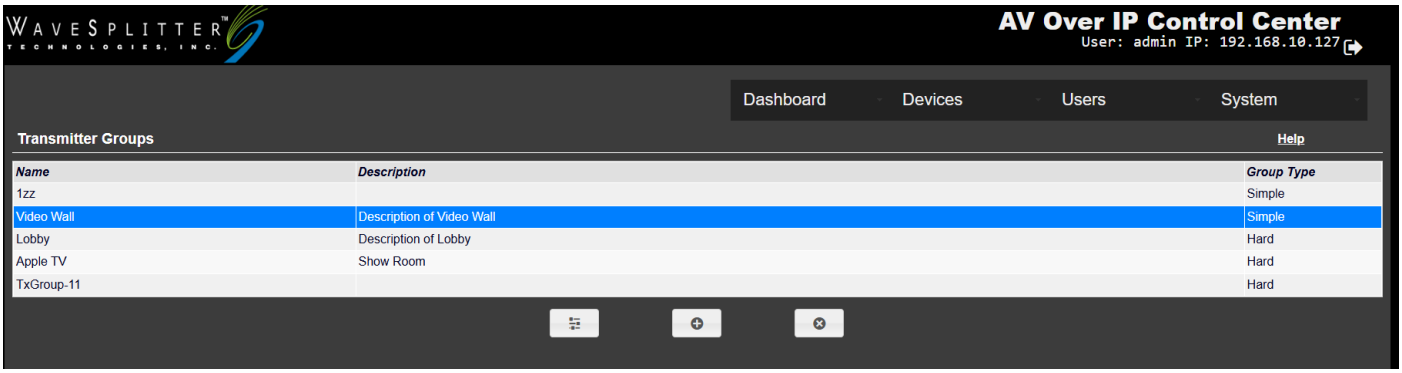


2. Set up the specific Transmitter Group

-New Group

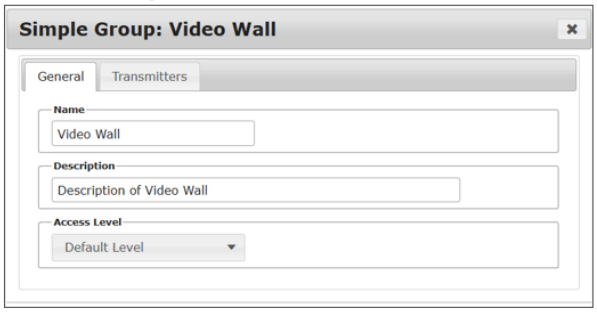
-Delete Group

-Edit Group

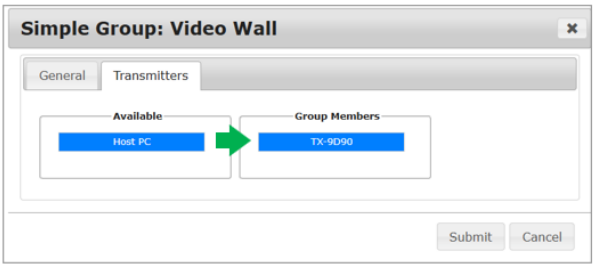


Group Type：Simple Group & Hard Group

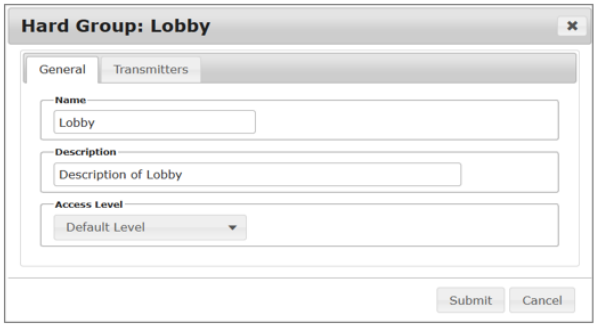
General Setting



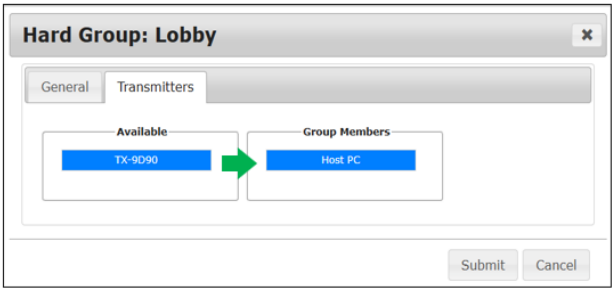
Select Transmitters



General Setting



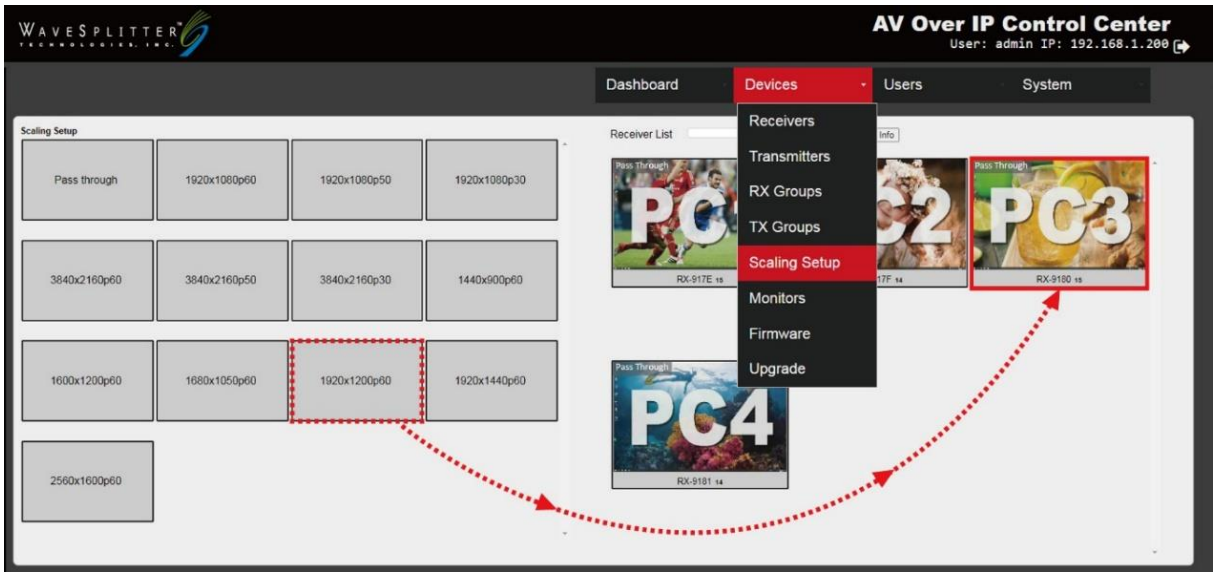
Select Transmitters



-Scaling Setup-

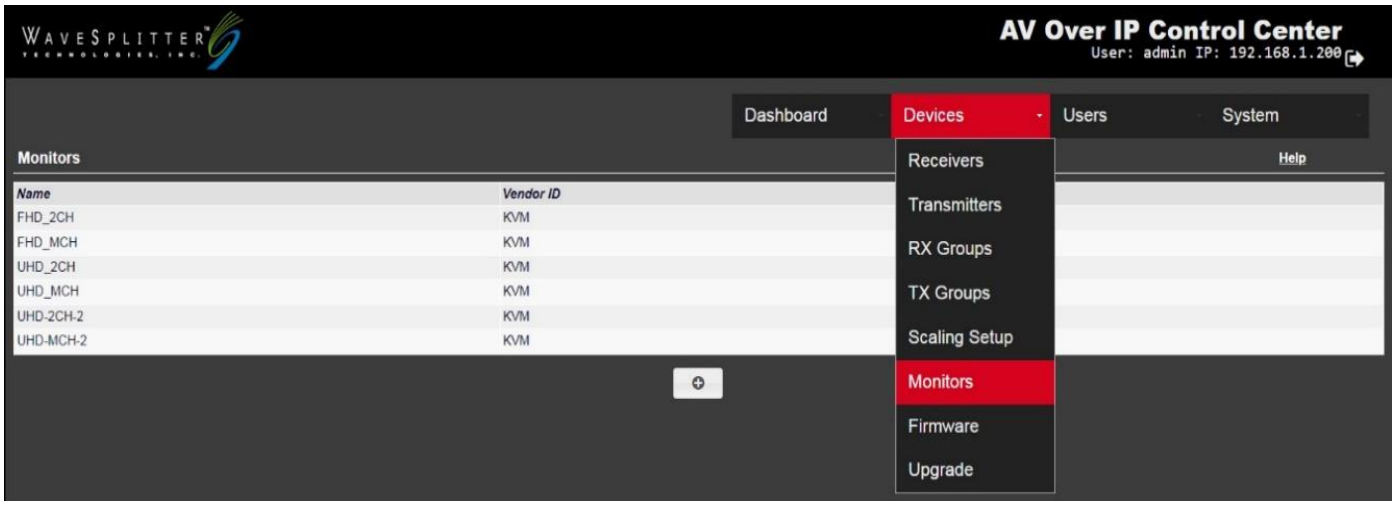
The Scaling Setup page lists several general display resolutions that can be applied to the monitors connected to the detected RX units.

To configure, drag a Scaling Parameter Block from the left-hand side and drop it onto a specified RX Preview Block on the right-hand side.



-Monitors-

The Monitors page lists several built-in and user-uploaded monitor EDID information. Each row corresponds to an EDID file showing its Name, Vender ID, and Model. User can read the EDID information from the monitors attached to the receivers and send the EDID information to the transmitters, allowing them to provide proper monitor emulations.



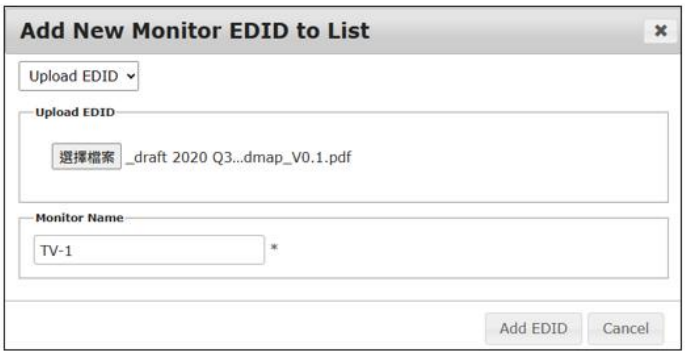
1. Add New EDID

Step 1. Click「 ⊕ 」button to open「Add New Monitor EDID to List」window.

Step 2. Select EDID source Drop-down menu，including

- From Receiver
- Upload EDID

Step3. Edit 「Name」of EDID



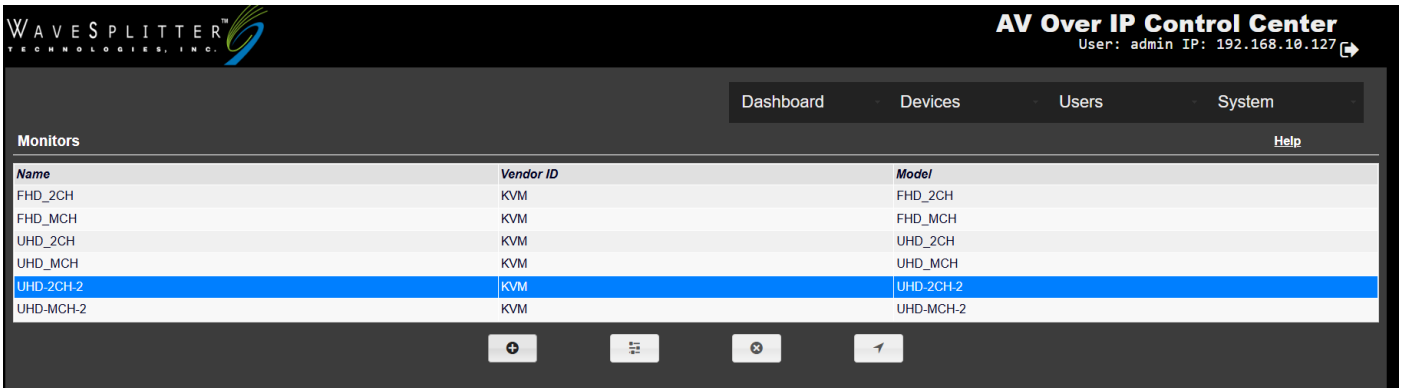
2. Set up a specific Monitor

-Add New Monitor to List

-Rename Selected Monitor

-Delete Selected Monitor

-Put Selected Monitor to Transmitter

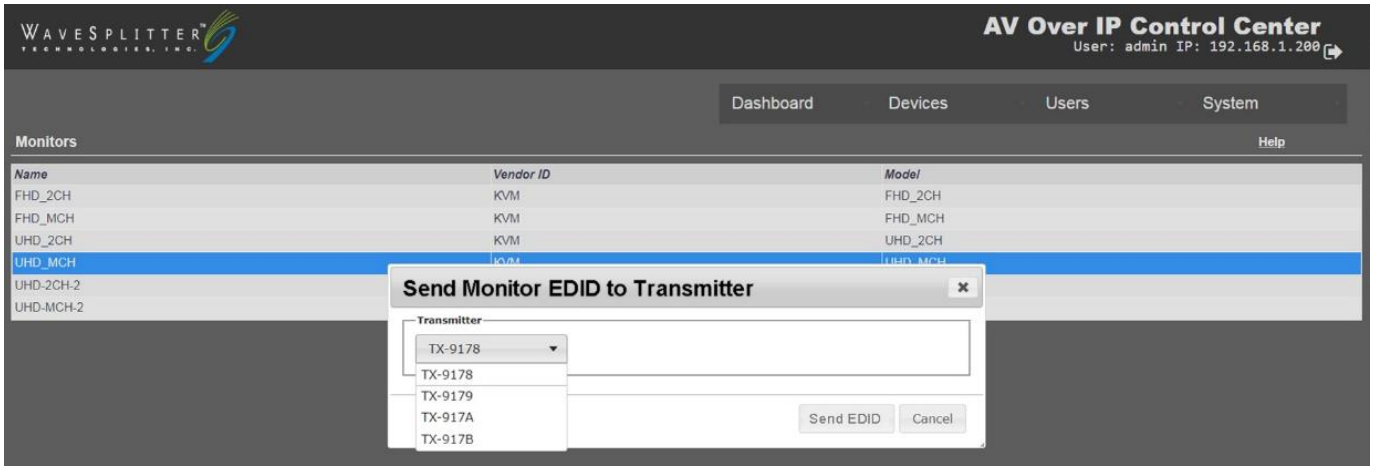


- Send Existing Monitor EDID to a Transmitter

Step 1. Select the specific EDID from the list

Step 2.「Put Selected Monitor to Transmitter」button and open the 「Send Monitor EDID to Transmitter」

Step3. Select the Transmitter from the drop-down menu.



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-Firmware-

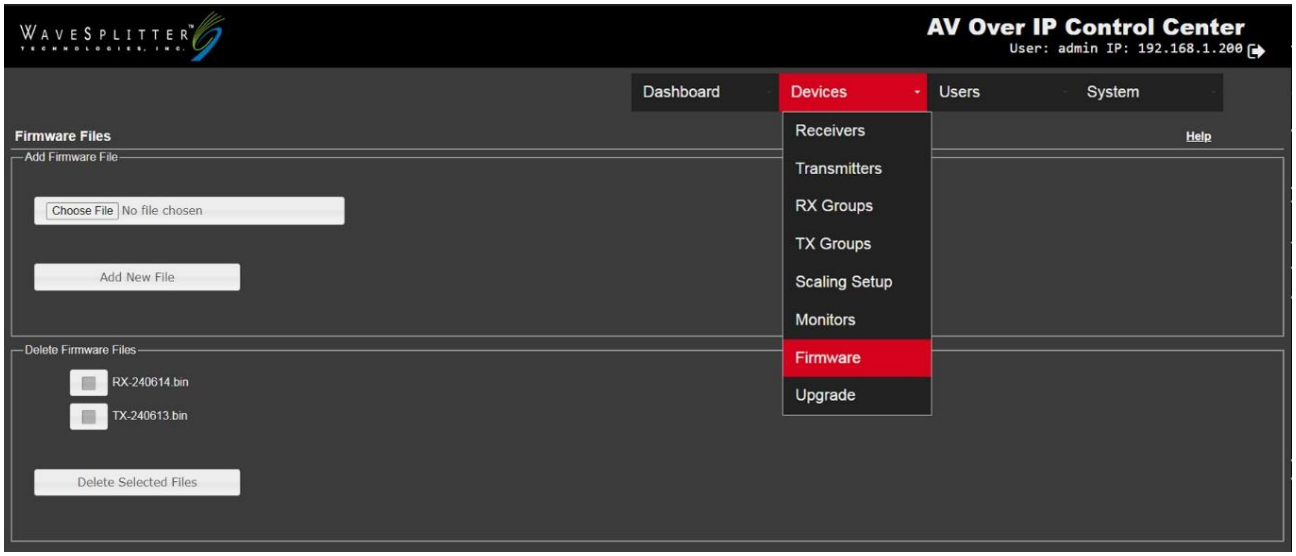
The Firmware page allows user to add or delete the firmware files for TX/RX units already managed by the WST-PIP008 controller. These *.bin firmware files stored here can be used for later upgrade procedures.

- Add Firmware File

  1. Click「Choose File」 and upload your file.
  2. Click「Add New File 」to add it to the database of WST-PIP008.

- Delete Firmware File

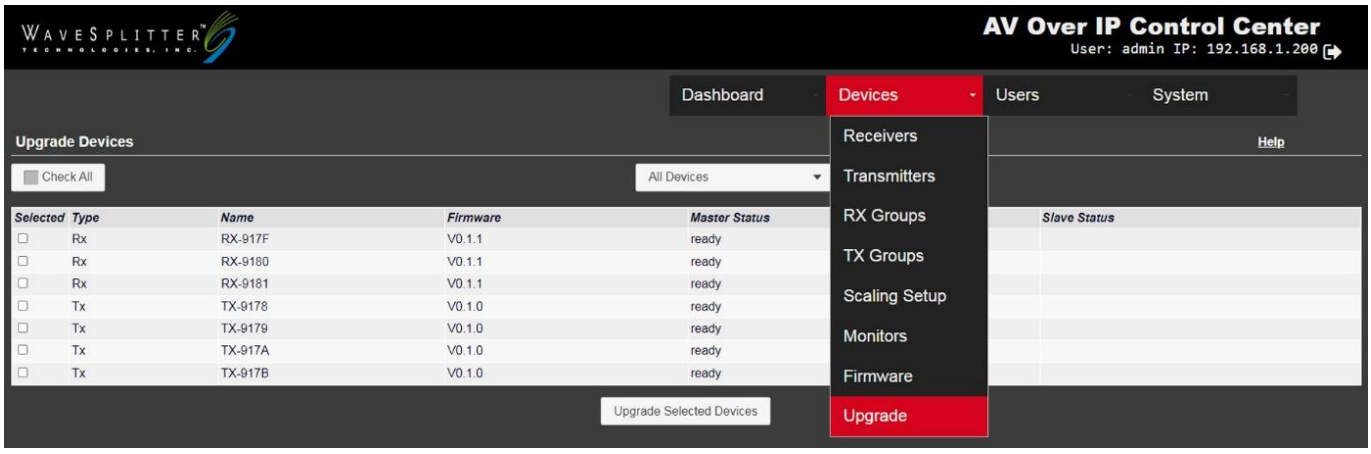
  1. Select the firmware files
  2. Click the 「Delete Selected Files」 button to remove the chosen files.



-Upgrade-

The Upgrade page allows user to upgrade the firmware of Transmitters and Receivers. It displays information of all managed devices, including type, name, firmware version, upgrade (master/slave) status.

After selecting the specific devices or all devices, click the「 Upgrade Selected Devices 」button to start the upgrade process.



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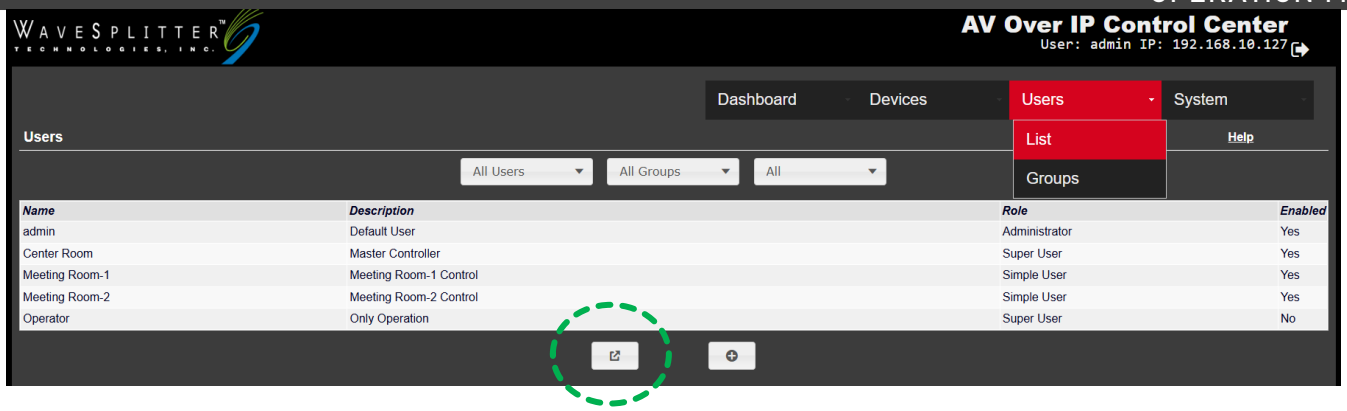
■ User

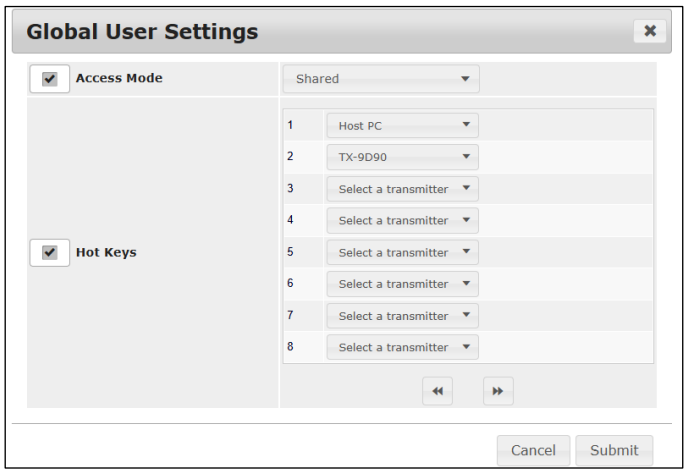
-List-

The List page displays a user list in the WST-PIP008 database. Each row shows the Name、 Description、 Role、 Enabled properties.



1. Global Actions：

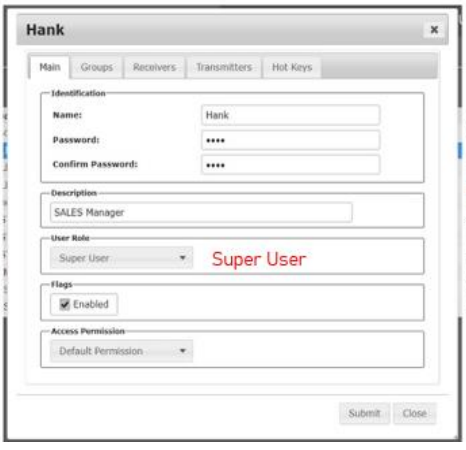
To set up all users for the same configuration. To Click 「Global Actions 」button and open 「Global User Settings」 window to set up all listed users simultaneously.



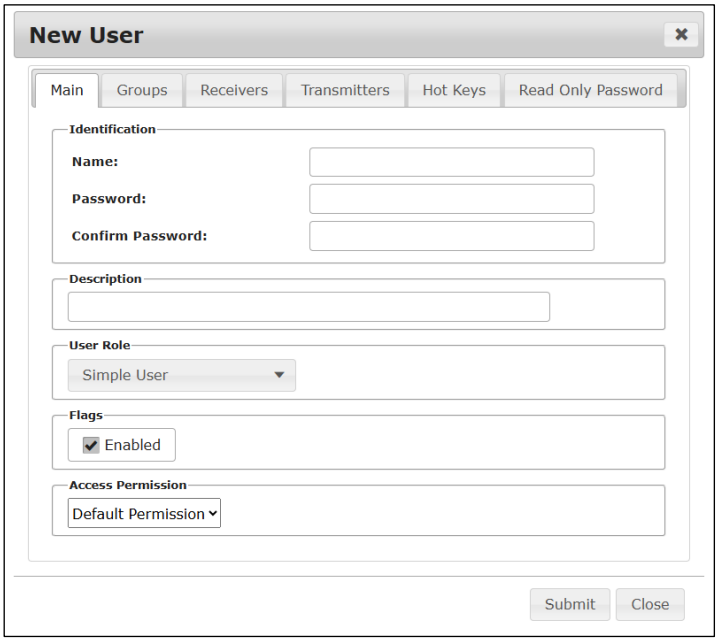
- Add New User ：

Step 1. Click 「New User 」button and open the 「New User」 configuration window. The functional tabs in the configuration window vary depending on the User Role:

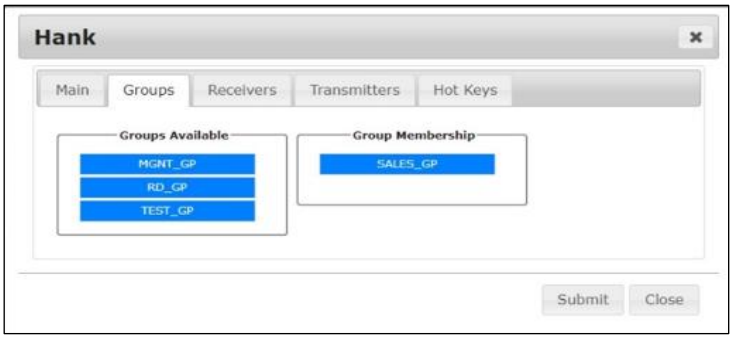
- Administrator ：Main / Groups /Hot Keys
- Super User ：Main / Groups / Receivers / Transmitters / Hot Keys
- Simple User ：Main / Groups/ Receivers/ Transmitters/ Hot Keys / Read Only Password



Step2. Main：Using a 「Simple User 」as an example, fill in the main options with Identification、Description、 User Role,、Flags (Enable/Disable)、 Access Permissions.



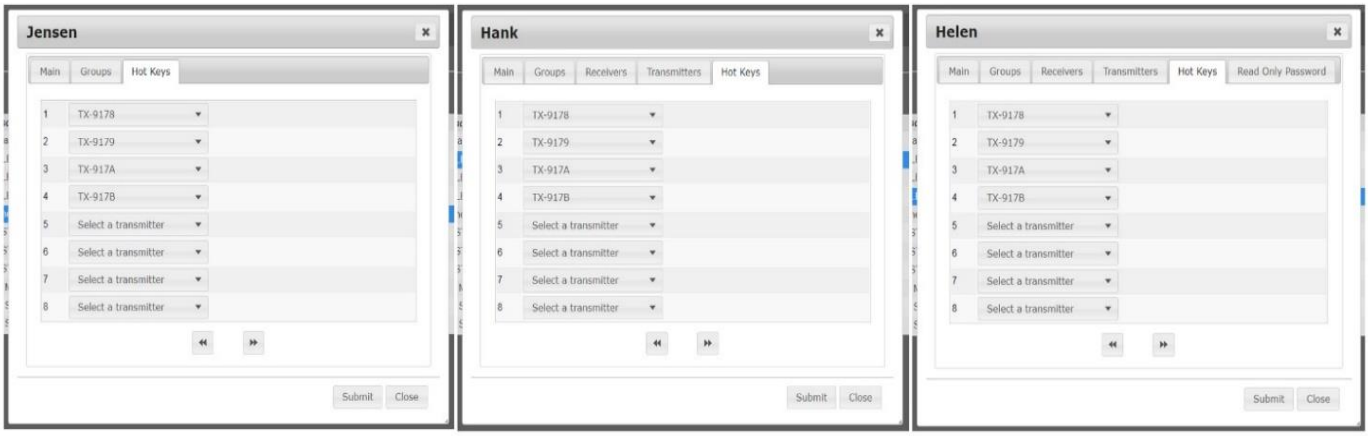
Step3. Group：Assign each user to their belonging User Group.



Sep4. Receivers & Transmitters：Assign Receivers/RX groups by drag-and-drop operation in the Receivers tab and assign Transmitters/TX groups by drag-and-drop operation in the Transmitters tab.

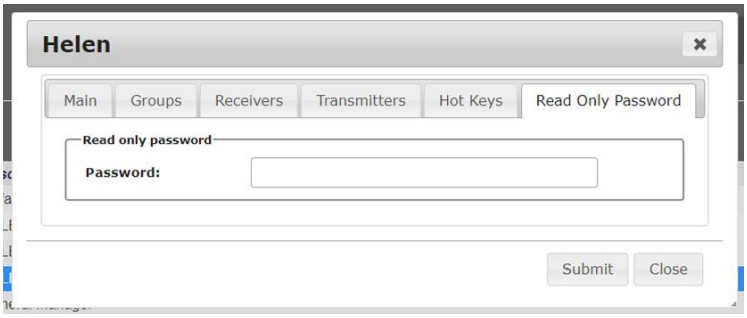
NOTE： Since users with the Administrator role can access all receivers, RX groups, transmitters, TX groups, the Receivers/Transmitters tabs are not required in the configuration window for the Administrator-role users.

Step5. Hotkey ：The transmitter hotkeys set here can be used to perform TX source switching after a user (Administrator/Super User/Simple User) has logged into the receiver’ s OSD menu.

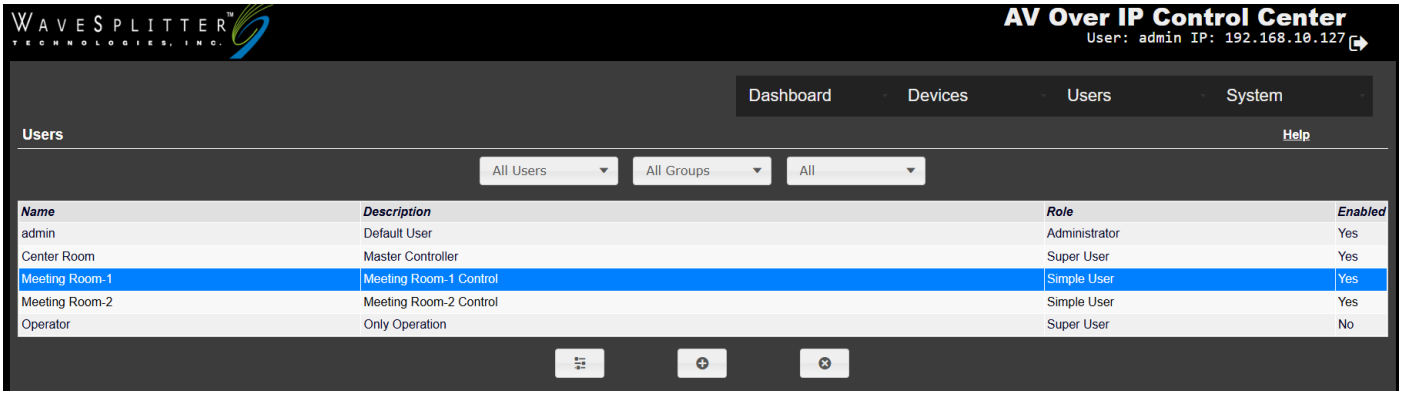


Step6. Read Only Password：Each simple user account also has a Read Only Password tab. When a user with the Simple-user Role account uses this Read Only Password to login the AVoIP Manager, he can only execute the existing Macros that were previously set by the Simple-user role account in the Dashboard Control Panel page.

NOTE：For this Read Only Password, please set it to a value different from the regular password used for logging into the simple-user account.

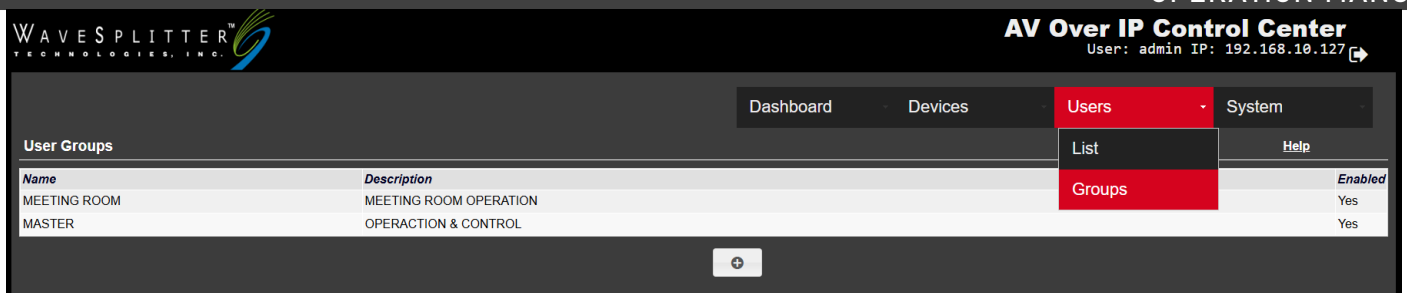


Step7. After completing the「New User」setup, the User will be listed in the Users list. To re-edit or delete, select the specified user and click the 「Edit User」button or the 「Delete User」 button.



-Group-

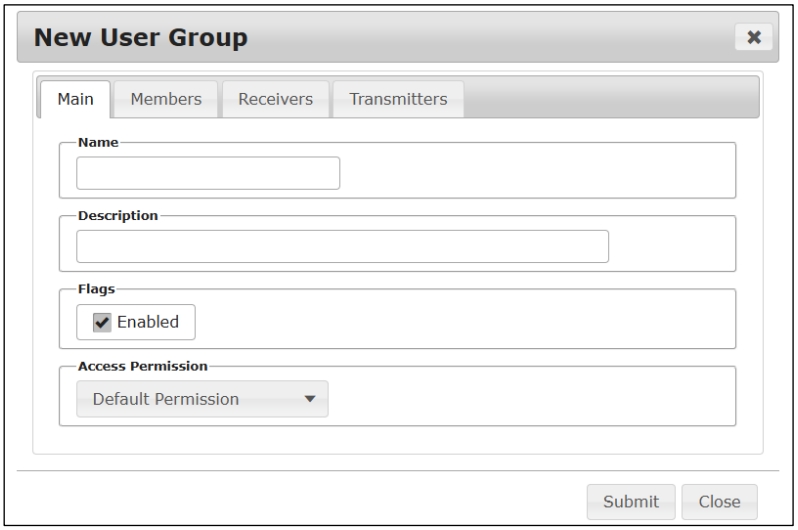
This Group page lists the user groups in the WST-PIP008 database. User Groups are sets of users with the same device access rights. Each row displays Name, Description, and the Enabled Property.



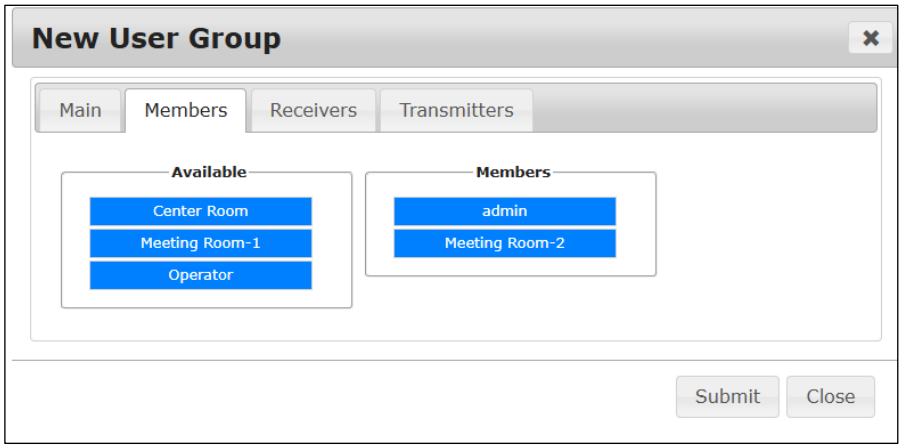
Add New User Groups：

Step 1. Click 「New Group ⊕」button and open the 「New User Group」 configuration window. The functional tabs in the configuration window vary depending on the User Role:

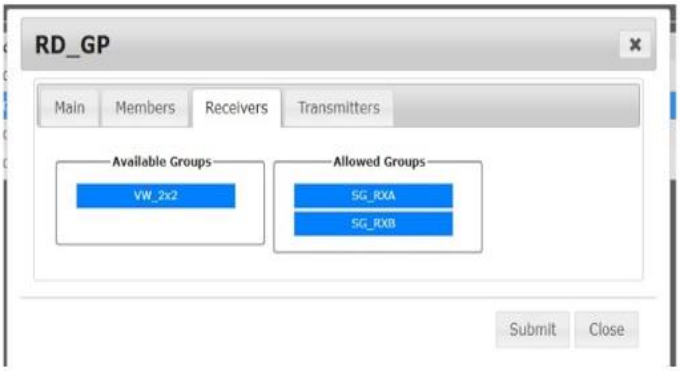
Step2. Main：Fill in the main options with Name、Description、Flags (Enable/Disable)、 Access Permissions.

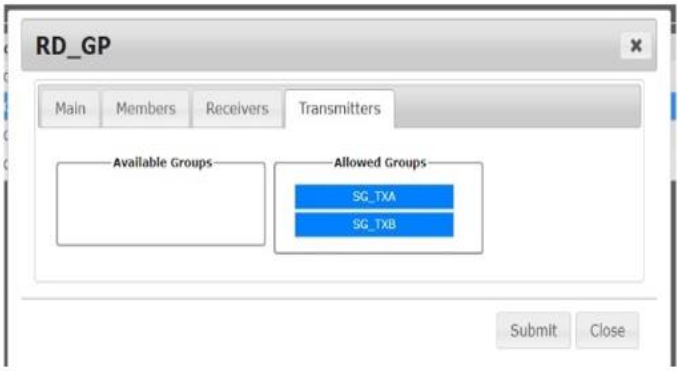


Step3. Member ：To Select the assigned users from Available column into the Members list.

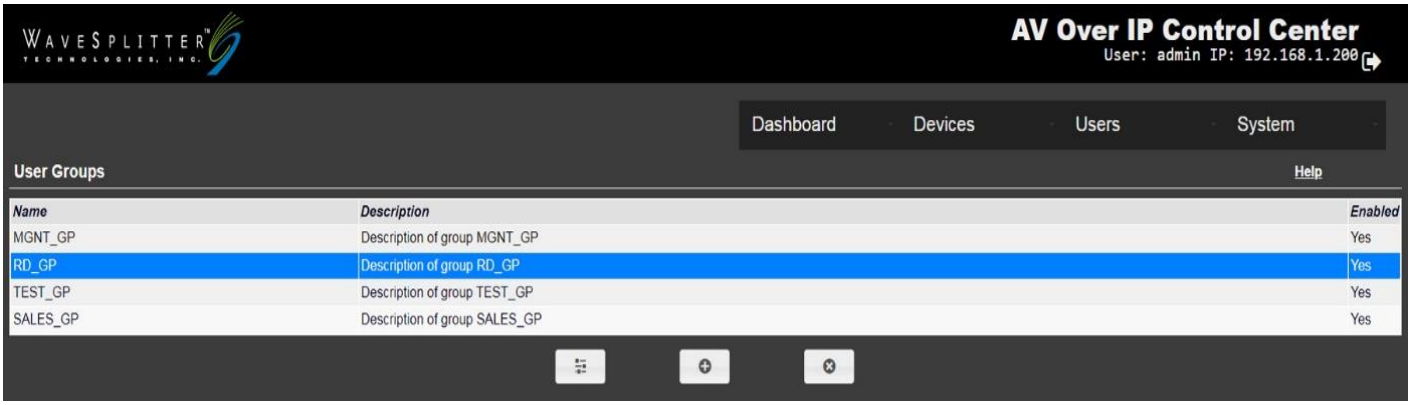


Step4. Receivers & Transmitters：To Select the Available Group into the Allowed Groups.





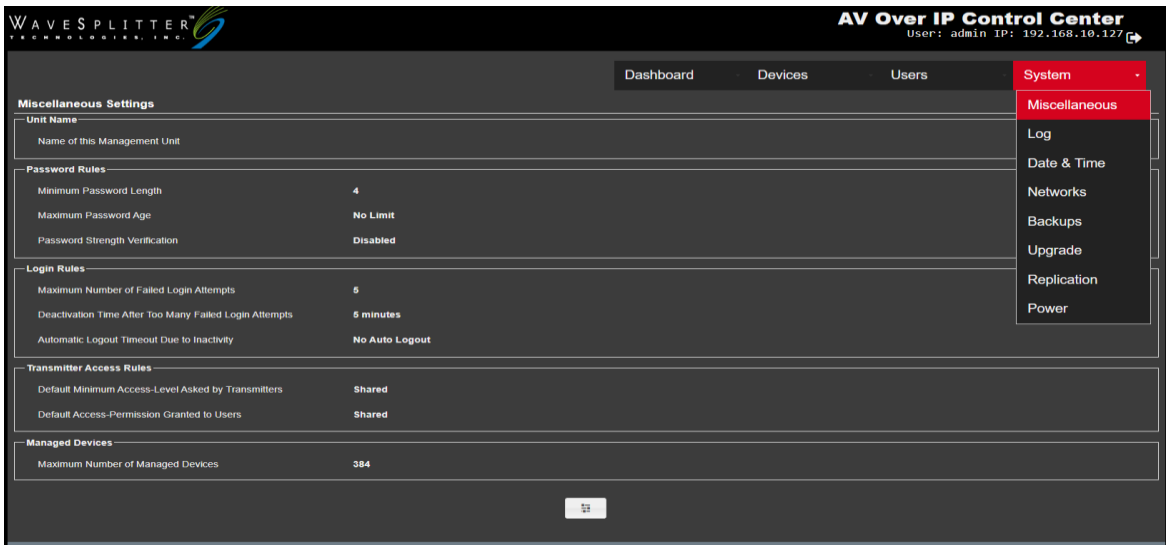
Setp5. After completing the「New Group」setup, the user will be listed in the User Groups list. To re-edit or delete, select the specified user and click the 「Edit Group」button or the 「Delete Group」 button.



■ System

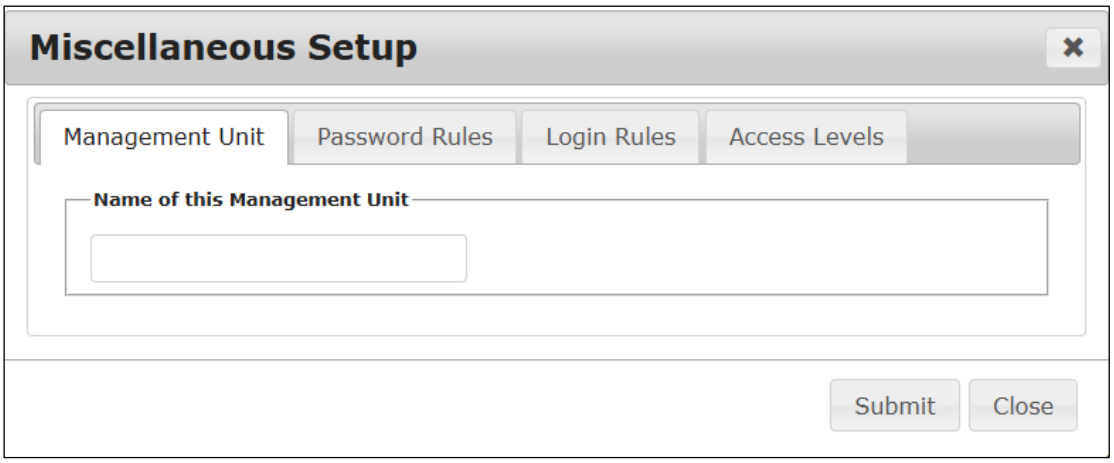
-Miscellaneous-

To click on the「 Configure」 button to open the Miscellaneous Setup window.



- Management Unit

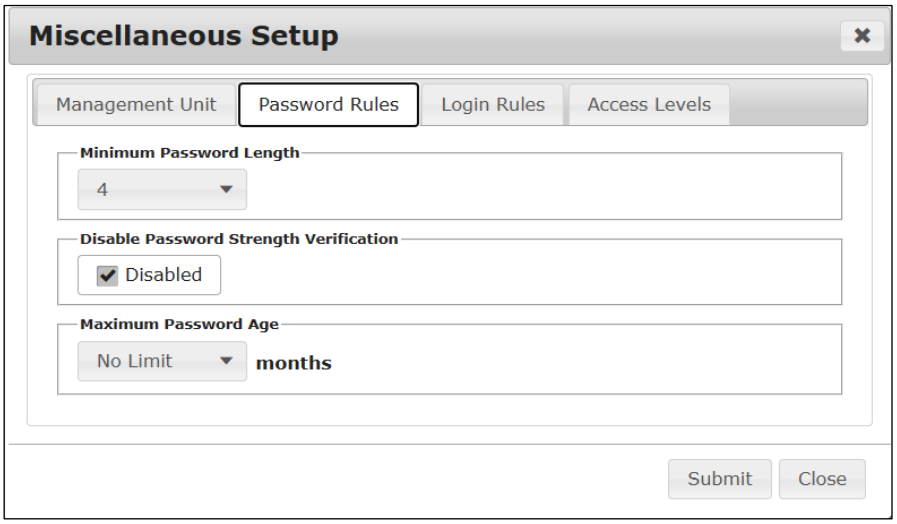
Enter the name of the WST-PIP008 controller. This information is important, especially when a second WST-PIP008 controller is deployed in the same AV NETWORK for failover redundancy.



- Password Rules

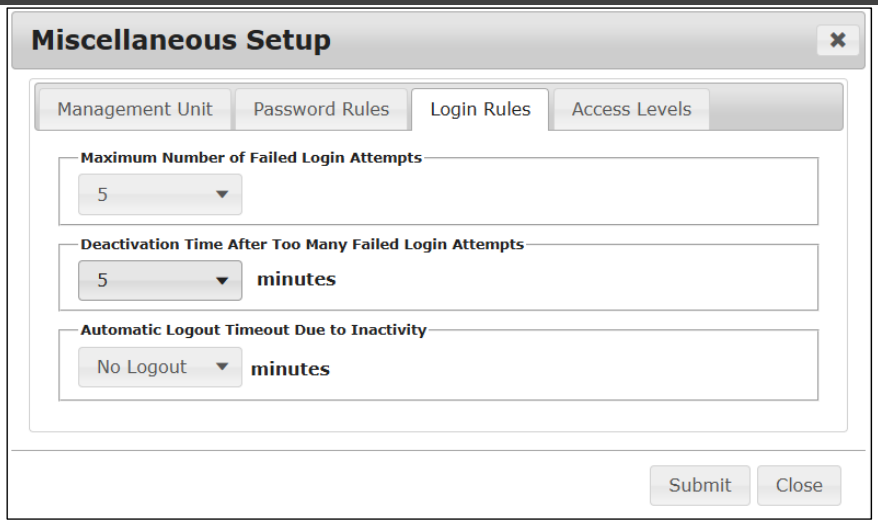
- Minimum Password Length : 4/8/12/16
- Disable Password Strength Verification : Disable/enable
- Maximum Password Age : No limit/1/2/3/4/6/9/12/18/24 months

NOTE : When the password strength verification box is unchecked, you must set your password to include at least one uppercase letter, one lowercase letter, one number, and one special character.



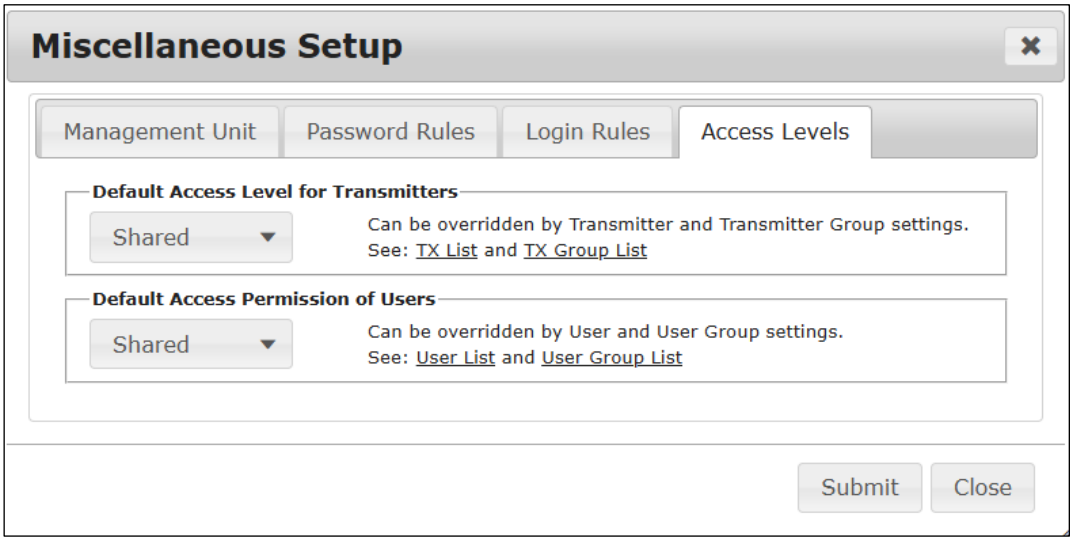
- Login Rules

- Maximum Number of Failed Login Attempts : No limit/5/10/20
- Deactivation Time After Too Many Failed Login Attempts : 5/10/20/30/60 minutes
- Automatic Logout Timeout Due to inactivity : No logout/5/10/15/20/30 minutes



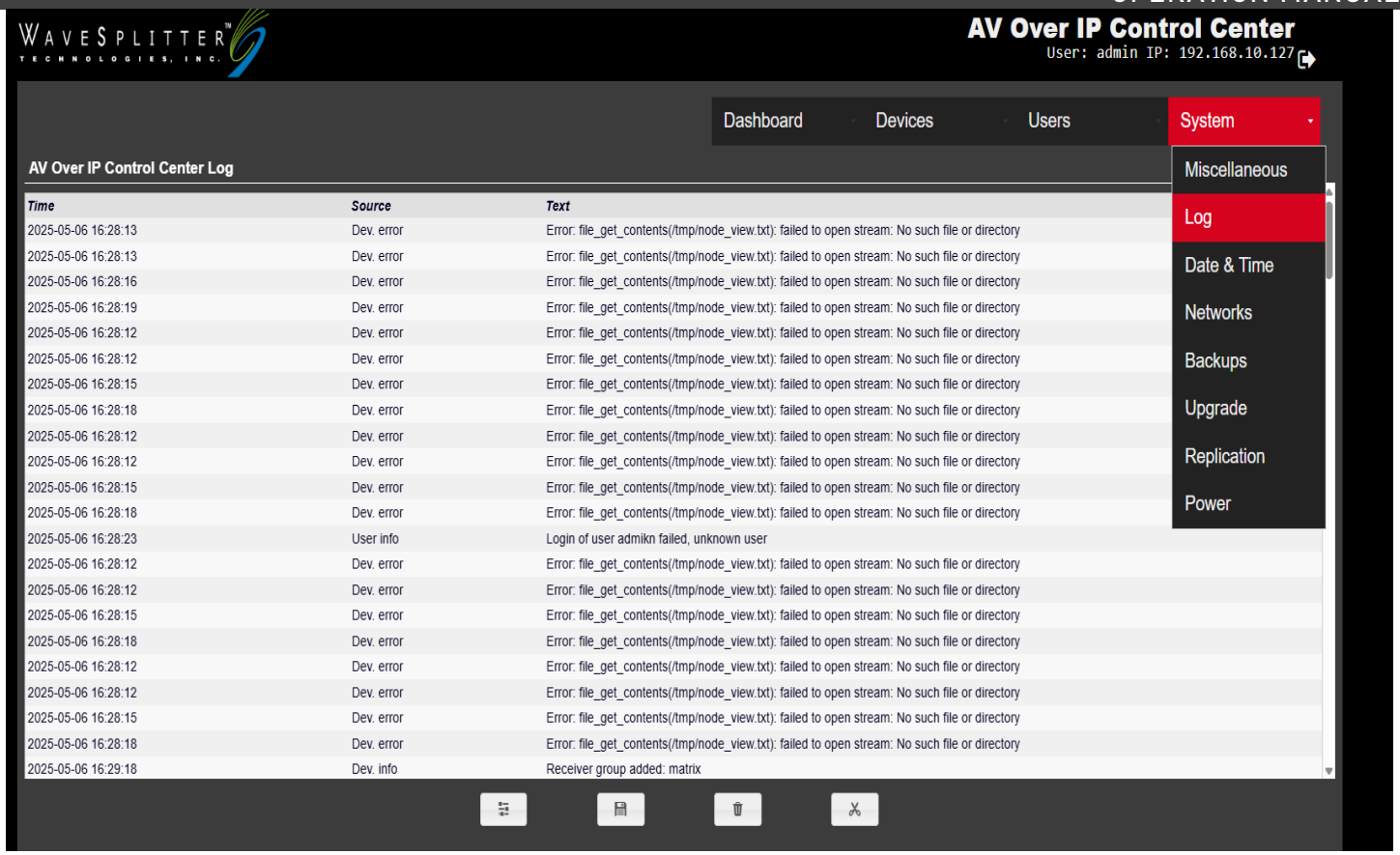
- Access Levels
  Default Access Level for Transmitters & Default Access Permission of users.4 options as below.

- View-Only： When connecting to a specific TX unit with this access level, the RX unit user can only view the video from this TX unit, without keyboard and mouse (K/M) access.
- Shared: When connecting to a specific TX unit with this access level, the RX unit user has the same keyboard, video, and mouse (K/V/M) access as other RX unit users accessing this TX unit.
- Exclusive-Control：When connecting to a specific TX unit with this access level, the RX unit user has exclusive K/V/M access. Other RX unit users can only connect to this TX unit with View-Only access, without K/M access.
- Exclusive：When connecting to a specific TX unit with this access level, the RX unit user has exclusive K/V/M access, and this TX unit will become invisible to other RX unit users in their TX lists.

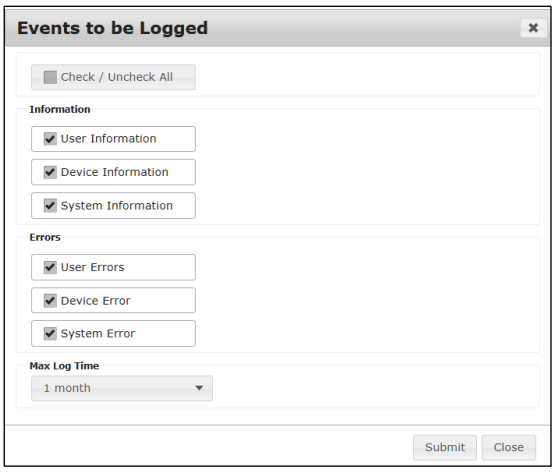


-Log-

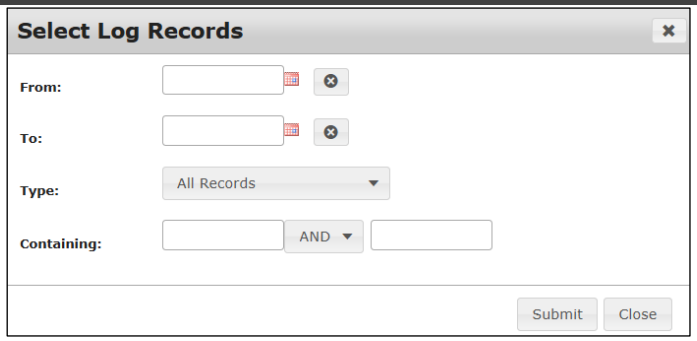
The Log page records events of the WST-PIP008 controller including Information and Errors of User, Device, and System. It also records each login attempt, even for unsuccessful ones.



- Recording Options : To enter the configuration window.

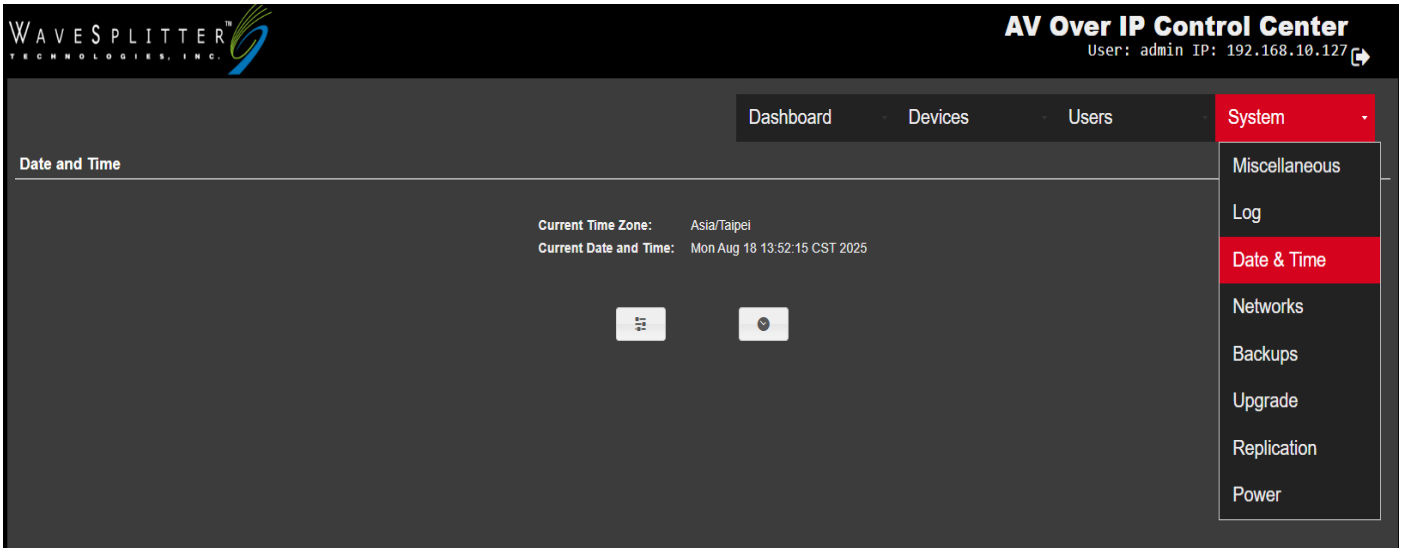


- Save to File : To save the current Log data to avcc-log.txt.gz file
- Clear Records : To delete the log record
- Display Filter : To only display the log information of interest.



-Date & Time-

The Date & Tim is used to set up the WST-PIP008 clock.



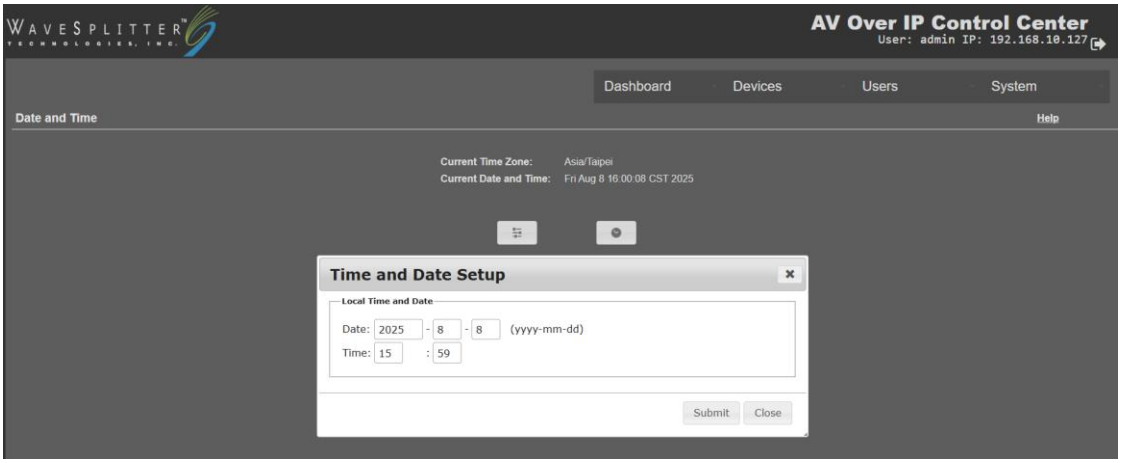
To set up the Clock ：Clicking the Configure button to set up the Date & Time.

- Time Zone ：

  To select the zone and city.

- Local Date and Time：Check the Use Internet Time box ：The clock can be synchronized by Internet NTP servers.

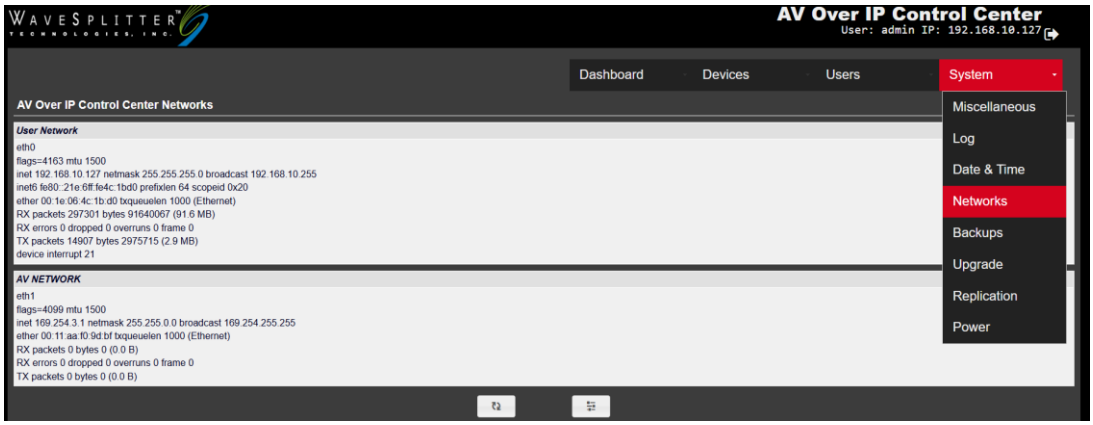
Uncheck the Use Internet Time box：There will be the available Set Date and Time button .User can set up the specific date and time.



-Networks-

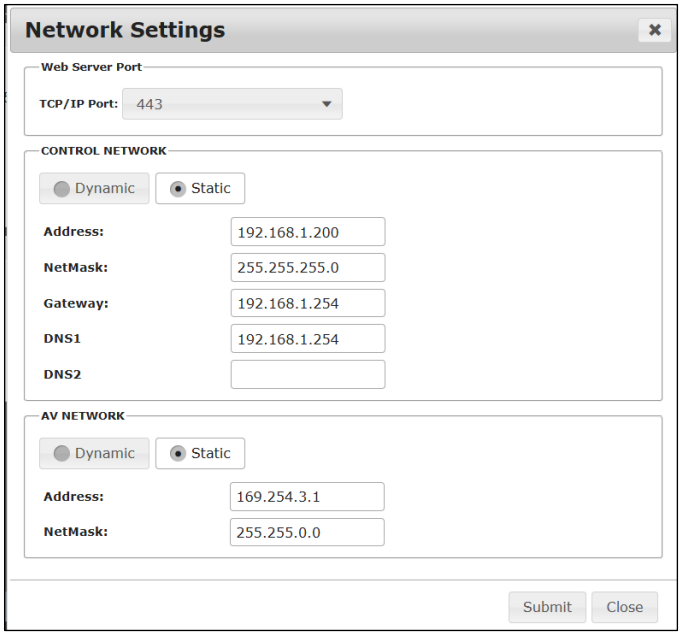
The Networks page displays the current statuses of two WST-PIP008 network interfaces.

- Refresh button : To refresh the information.
- Configure button : To configure the two network interfaces.



- Network Settings

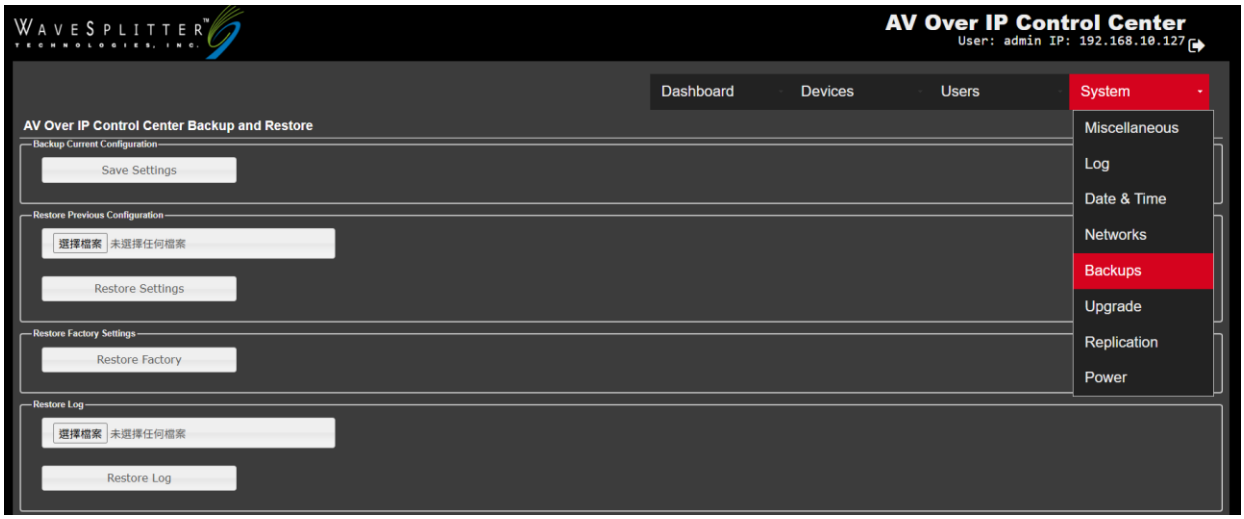
To set up the Dynamic or Static IP for「 CONTROL NETWORK」 OR 「AV NETWORK.」



-Backups-

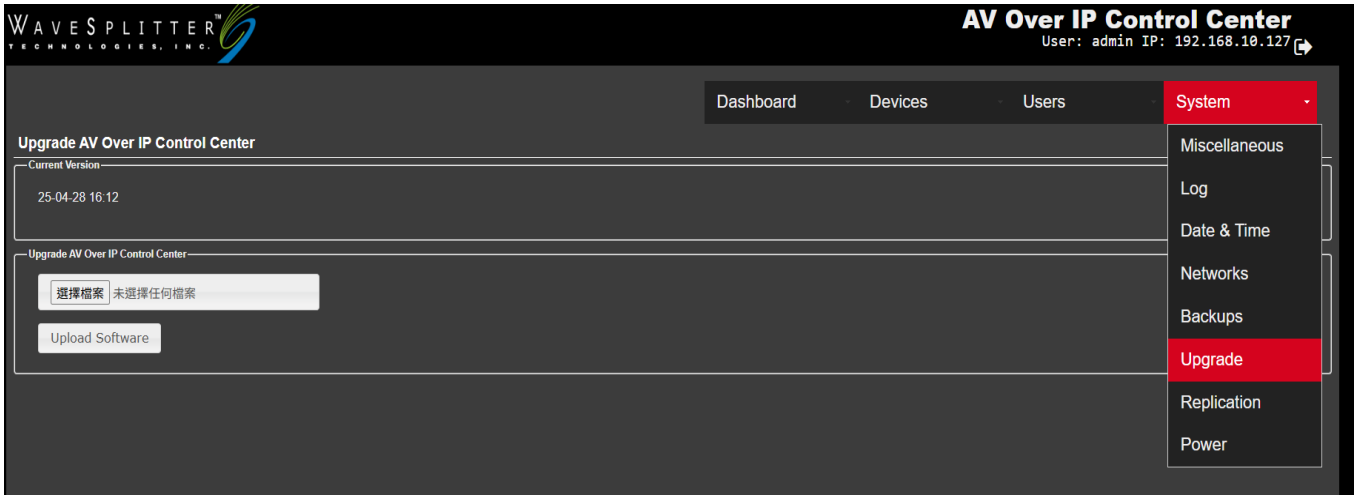
The Backups page allows you to back up and restore the contents of the WST-PIP008 database for enhanced portability and usability. It is always recommended to back up your configuration to the computer after making any change. With the backup files saved on your computer, you can restore them to another WST-PIP008 unit with identical settings, effectively creating a redundant backup server

- Backup Current Configuration：To save the current settings
- Restore Previous Configuration：To select the latest backup file, then click the Restore Settings button to restore it to the new WST-PIP008 unit.
- Restore Factory Settings：Restore original factory settings
- Restore Log：To select the specific Log and restore it.



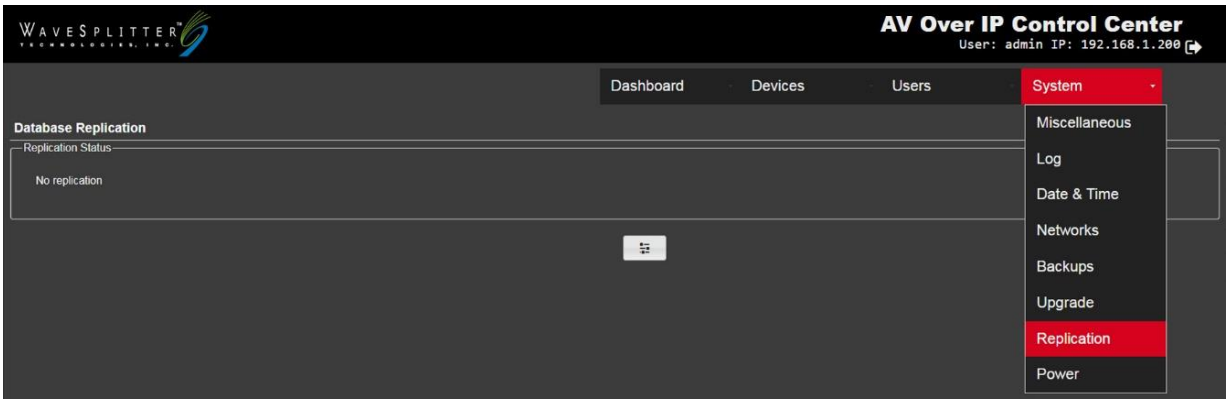
-Upgrade-

The Upgrade page shows the current version of WST-PIP008 software and allows you to upgrade it. To select an applicable backup file, and then click the Upload Software button. If any exception occurs during the upgrade process, go to System Backups and restore the WST-PIP008 unit to factory default settings. Then, repeat the upgrade process.

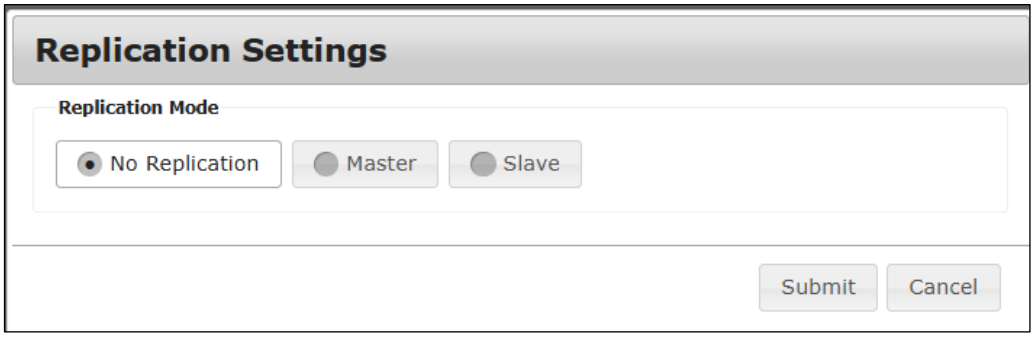


-Replication-

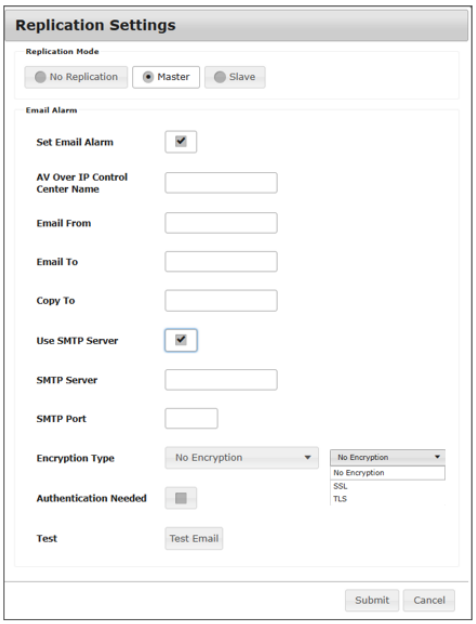
The Replication page is used to set up the WST-PIP008 controller to operate in Master mode or Slave>mode to support Failover Redundant Backup operation. After setting is selected in the Replication Mode window, the administrator can proceed with manual database replication or automatic failover management.

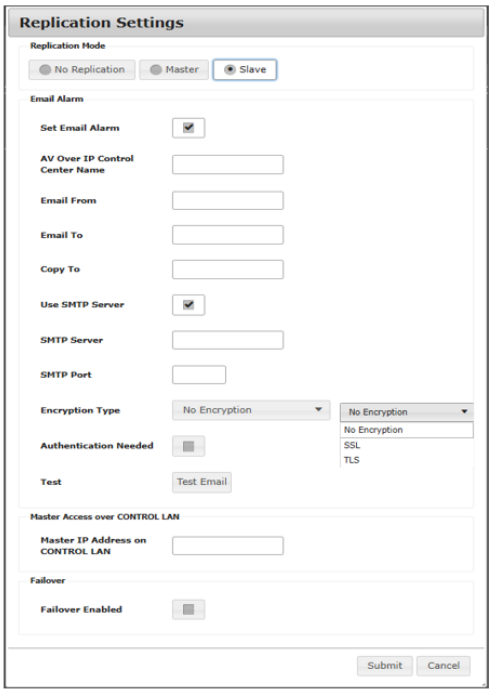


- No Replication : Default setting



- Master &Slave :



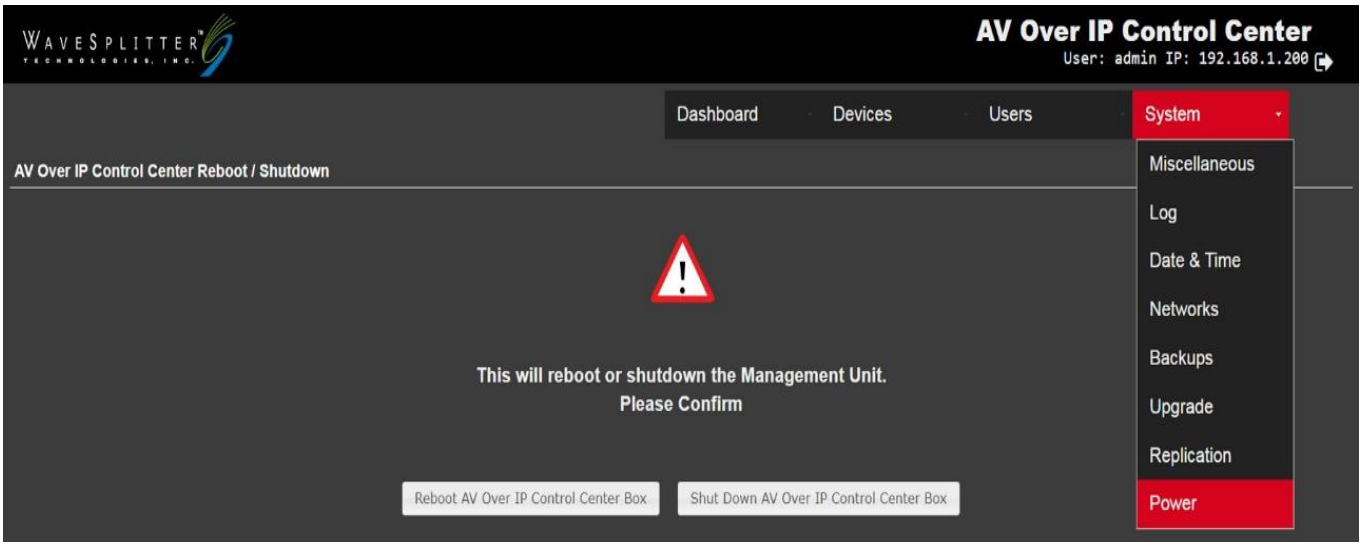


-Power-

The Power page is used to reboot or shut down the WST-PIP008 controller.

- Reboot AV Over IP Control Center Box>

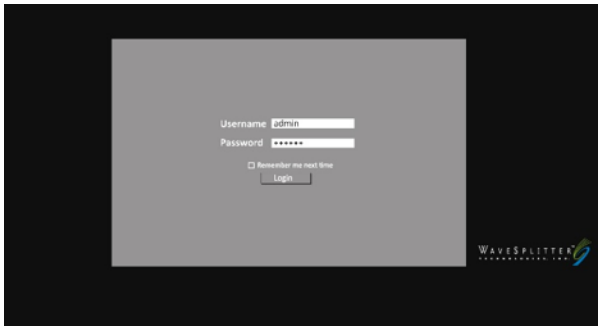
- Shut Down AV Over IP Control Center Box



◆ OSD Operation

To open RX OSD menu by hotkey, to press hotkey Left ctrl + Lef ctrl · This will bring up the OSD menu's login pag. enter the user's credential to access the receiver's OSD menu.

-Login



-OSD Main Menu & Operation

1. Transmitter Preview

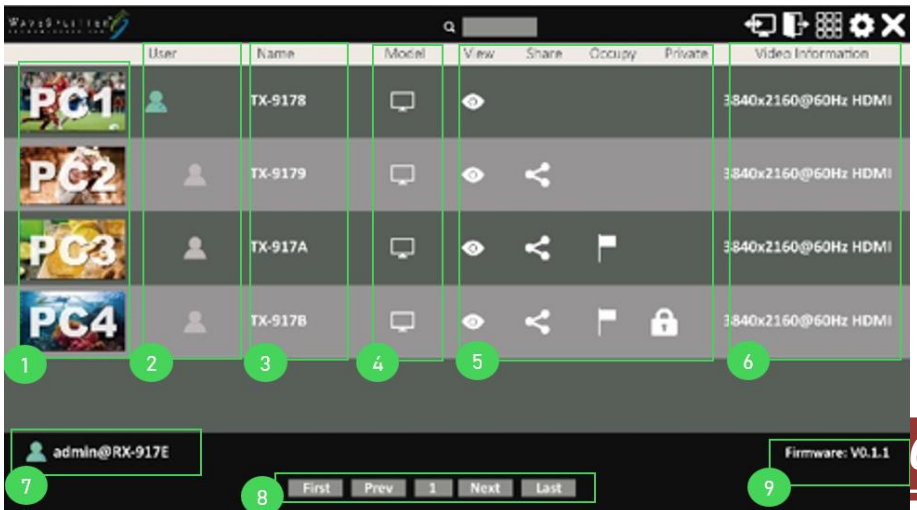
Displays video thumbnails of all corresponding TX units.

► Double-click any thumbnail to connect the selected TX to the currently operating RX.

2. User Icon

- Green user：Current operating RX unit
- Gary User：Other RX units.

3. Name



►Double-click any TX name to connect the selected

TX to the currently operating RX

4. Model

- White： Normal Operation
- Black & Red X：Power Supply or Link Failure
- Black：Video Lost

5. Access levels | 操作權限

- View
- Share
- Occupy
- Private

►Double-click any icon to connect the selected TX to the currently operating RX according to the specified level.

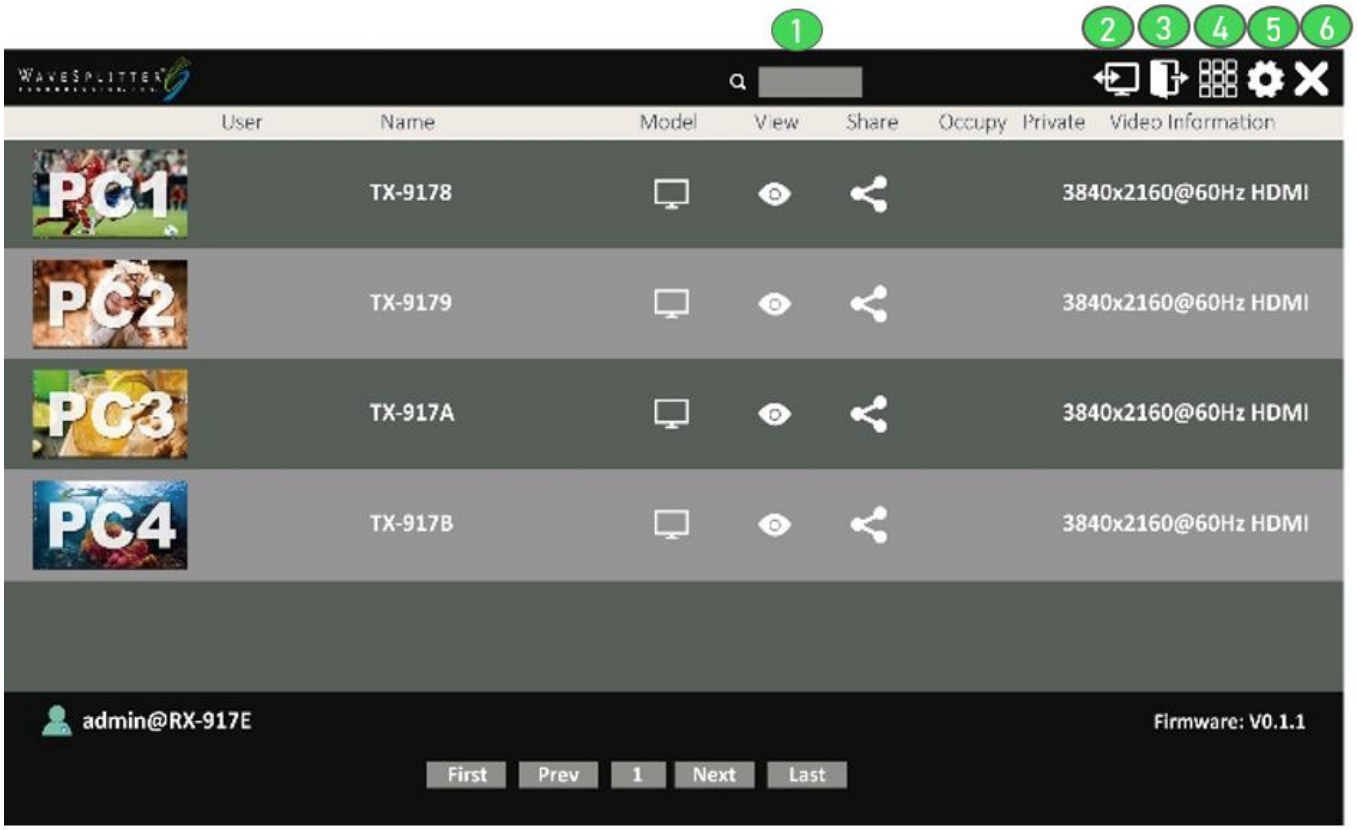
6. Video Information：The current RX resolution.

7. Account：The name of the logged-in user account and this operating RX unit

8. Page Button：Users can click these navigation buttons to go through the TX list page-by-page.

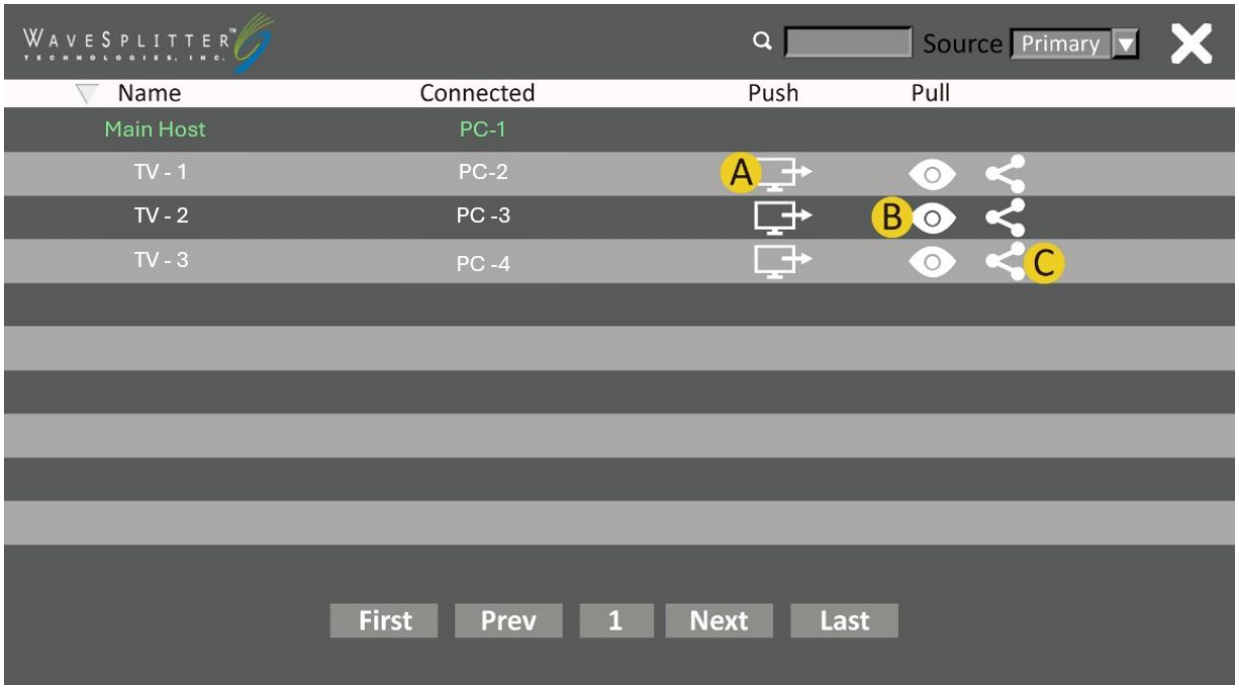
9. The firmware version information.

-OSD Advanced Operation



1. Find a specific TX unit quickly by entering its name in this column.

2. Click to open the Console Collaboration page



Ⓐ PUSH

Step 1. Double-click the icon in the row of the specific RX unit ·

Step 2. The console of the RX unit will display a request window PUSH operation.

Step 3. The Main screen has been pushed to the specific RX successfully.

Ⓑ PULL

Step 1. Double-click the icon in the row of the specific RX & TX unit,

Step 2. The content will be pulled to the Main screen.

NOET：The main screen can only view the content of the specific RX & TX unit without controlling the keyboard and mouse.

Ⓒ PULL

Step 1. Double-click the icon in the row of the specific RX & TX unit,

Step 2. The content will be pulled to the Main screen.

NOTE：The main screen can fully access the specific RX & TX.

3. Log out the OSD menu
4. Click button to open a preview page showing all video thumbnails of all connected TX units

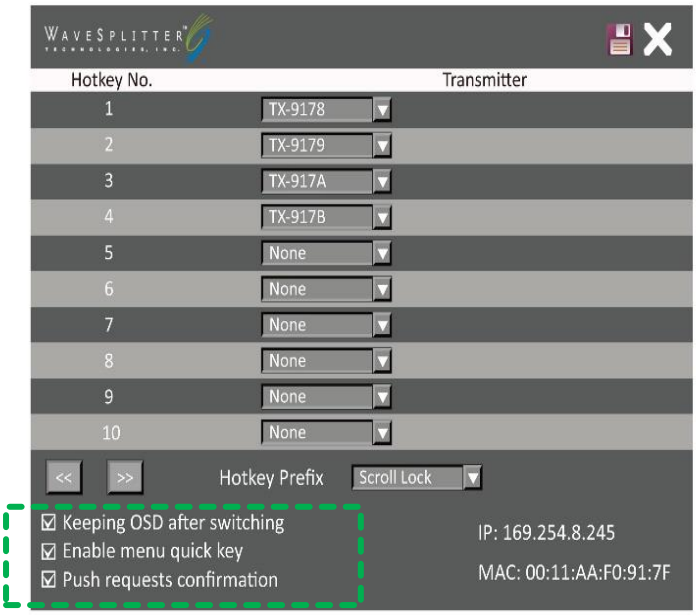
5. Click to review the transmitter switching hotkeys that the administrator has set in the WST-PIP008.

✓ Keep OSD after switching： Allow users to decide whether to keep or close the OSD menu after switching TX resources.

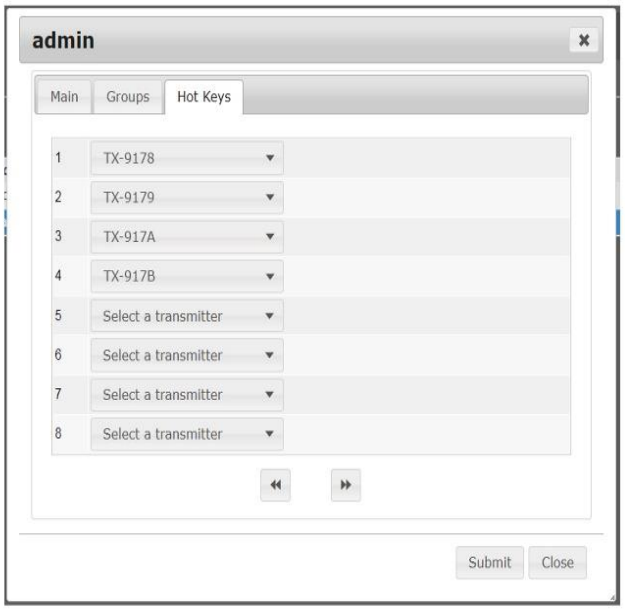
✓ Enable menu quick key： Allow users to enable or disable the OSD menu quick-launch key Left Ctrl + Left Ctrl .

✓ Push requests confirmation：Allow users to decide if the RX console receiving the TX-resource PUSH request needs to confirm before switching to the incoming TX resource.

RX Unit OSD Transmitter Hotkey List



AVoIP Manager User>List>admin>Hotkeys



◆ Hotkey Operation

Function Name	Description	Default Hotkey Combination	Customizable Prefix Keys	Default Hotkey Combination
Transmitter Switching Hotkey	Switches the currently operated RX to a specified TX	ScrLk + ScrLk + 數字鍵	Num Lock、Caps Lock、Left Alt、Right Alt	Default Hotkey Combination
Cursor Hopping Hotkey	Instantly moves the mouse cursor to another active RX screen area for control recovery or efficiency	Right Ctrl +Right Ctrl +兩位數編號	無	Default Hotkey Combination
OSD Menu Hotkey	Opens the OSD menu on the RX	ScrLk + ScrLk + 空白鍵	Num Lock、Caps Lock、Left Alt、Right Alt	Default Hotkey Combination
EDID Transmission	Sends the RX screen’ s EDID to the TX	ScrLk + ScrLk + M 鍵	無	Default Hotkey Combination

◆ Telnet & RS-232 Command Operation

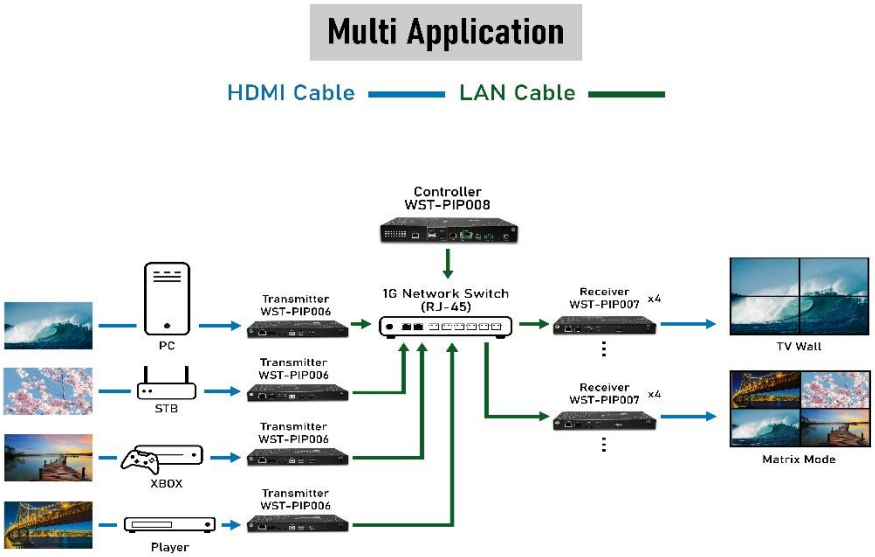
- Telnet Serial Port：10032

- Default Telnet port for RS-232 : 20022

Please download the command list from Website.

Connection Diagram

Applications



Specifications

Model No	WST-PIP006	WST-PIP007
VIDEO INPUT	HDMI Type-A (Female) x 1	1G Lan Port (RJ-45) x 1 SFP Slot (Module not including) x 1

VIDEO OUTPUT	Local：HDMI Type-A (Female) x 1 1G Lan Port (RJ-45) x 1 SFP Slot (Module not including) x 1	HDMI Type-A (Female) x 1
AUDIO	Analog Audio In Jack (3.5mm) x 1 Analog Audio Out Jack (3.5mm) x 1	Analog Audio In Jack (3.5mm) x 1 Analog Audio Out Jack (3.5mm) x 1 S/PDIF Port x 1
Control I/O	IR IN Jack (3.5mm) x 1 / IR OUT Jack (3.5mm) x 1 RS-232 (3-pin Terminal Block) x 1 Host：USB Type-B (Female)x 1	IR IN (3.5mm) x 1 / IR OUT (3.5mm) x 1 RS-232 (3-pin Terminal Block) x 1 USB2.0 Type-A HUB x 2 USB1.1 Type-A HID x 2
Transmission		
HDMI Compliant	HDMI 2.0 (DVI 1.0)	HDMI 2.0 (DVI 1.0)
HDCP Compliant	2.x	2.x
Max. Input	HDMI：4096x2160@60Hz (YUV 4:4:4, YUV 4:2:2, RGB)	HDMI：4096x2160@60Hz (YUV 4:4:4, YUV 4:2:2, RGB)
Max. Output	HDMI：4096x2160@60Hz (YUV 4:4:4, YUV 4:2:2, RGB)	HDMI：4096x2160@60Hz (YUV 4:4:4, YUV 4:2:2, RGB)
IR Frequency	30-50 kHz	30-50 kHz
Baud Rate	115200 kHz	115200 kHz
Power		
Power supply	DC 12V /3.0A	DC 12V /3.0A
Max. Power Consumption	8.4W	8.5W
Environment		
Operating Temperature	0 ~ 40°C	0 ~ 40°C
Storage Temperature	- 20 ~ 60°C	- 20 ~ 60°C
Product Structure		
Main Material	Iron	Iron
Size W x D x H	221.0 x 105.3 x 26.0 mm	221.0 x 105.3 x 26.0 mm
Weight	641.0 g	643.0 g
Country of Origin	Taiwan	Taiwan
Certification		
Safety & Emission	CE / FCC / RoHS / REACH	CE / FCC / RoHS / REACH

Model No.	WST-PIP008
Outputs	HDMI Type-A (Female) x 1

Control I/O	Ethernet (RJ-45) x 2 Device Network / User Network IR Extender 3.5mm Jack x 1 RS-232 (3-pin terminal block) x 1 Trigger (10-pin terminal block) x 1 Control (5-pin terminal block) x 1 [Reserved] USB2.0 Type-A (for keyboard & mouse) x 2
Transmission	
HDMI Compliant	HDMI 2.0 (DVI 1.0)
HDCP Compliant	2.x
Max. Output	HDMI：3840x2160@60Hz
IR Frequency	38 kHz
Baud Rate	115200 kHz
Power	
Power supply	DC 12V 3.0A
Max. Power Consumption	2.5W
Environment	
Operating Temperature	0 ~ 40°C
Storage Temperature	- 20 ~ 60°C
Product Structure	
Main Material	Iron
Size W x D x H	300.0 x 164.0 x 44.0 mm
Weight	1367g
Country of Origin	Taiwan
Certification	
Safety & Emission	CE / FCC / RoHS / REACH