

# HDMI over IP PoE Seamless Tranceiver, 4K60

# User Manual 500861



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# **1. Safety Precautions**

To ensure the best performance from the product, please read all instructions carefully before using the device. Save this manual for future reference.

- Follow basic safety precautions to reduce the risk of fire, electrical shock, and injury.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burns.
- Do not open or remove the housing of the device as you may be exposed to dangerous voltage or other hazards.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture and do not install this product near water. Keep the product away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on the housing, unplug the module immediately.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Using supplies or parts not meeting the product specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- Install the device in a place with adequate ventilation to avoid damage caused by overheating.
- Unplug the power when left unused for a long period of time.
- Information on disposal of devices: do not burn or mix with general household waste, please treat them as normal electrical waste.

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# 2. Introduction

The HDMI over IP PoE Seamless Transceiver, 4K/60 (model: 500861) allows HDMI source equipment to be extended locally up to 330ft (100m) at up to 4K @ 60Hz resolution via Cat5e/6 cable and is compatible with the MuxLab 500860 Transceivers to support point-topoint, point-to-multipoint and multipoint-to-multipoint configurations, Video Wall and Multiview capabilities in a low bandwidth expandable and cost effective manner, without the need to install dedicated cabling systems. The exceptionally low bandwidth requirements of this device combination allows for streaming audio/video content over a local network, over WiFi, and over the Internet for distributed installations spread throughout the globe. The Transceiver accepts a 4K video @ 60Hz and streams the content to an H.264/H.265 Receiver to be displayed on a 4K monitor. The device supports PoE (PD) and may be powered by a PoE (PSE) Ethernet Switch.

# 3. Features

- Supports up to 4K @ 60Hz video streams
- H.264/265 video codec, excellent for LAN and Internet transmission
- High image quality and ~80ms latency
- Supports seamless switching
- This unit is a Transceiver and can be used as a Transmitter, as a Receiver, or as both simultaneously
- Supports Video Wall
- Supports Multiview with up to 16-windows per screen
- Supports image rotation, scrolling text, banner, etc.
- RS232, RS485, USB, Relay, IR and I/O for remote control of end devices
- PoE powered, via PoE (PSE) Ethernet Switch
- Managed via MuxLab KVM & AV Management Tool software or via Muximus Network Controller (500813).

# 4. Package Contents

- One (1) HDMI over IP PoE Seamless Transceiver, 4K60
- One (1) Infrared Emitter with terminal block 6POS
- One (1) Infrared Sensor with terminal block 6POS
- Two (2) Wall Mount Brackets with four (4) Screw
- One (1) User manual (available via download)

**Notes:** Confirm that the product and accessories are all included. If not, please contact the supplier from which you purchased the unit.

# **5. Specifications**

| Technical                               |  |
|---|--|
| Environment                             | HDMI 2.0   |
| Devices                                 | Blu-Ray, Set Top Boxes, projectors, monitors, TVs, PCs, supporting HDMI.   |
| Signal Protocol/Standard                | HDMI 2.0 and HDCP 2.2  |
| Video Resolution                        | Up to 4K/60 in and out   |
| Audio                                   | 3.5mm Line in/out, or HDMI audio   |
| Latency                                 | 80 ~ 120ms   |
| Network Bandwidth                       | Up to 12Mbps   |
| Protocols                               | Supports Multicast, RTSP, RTMP   |
| Compression                             | Supports H.264/265   |
| Front Panel                             |  |
|   | Power: Power indicator   |
| Indiantara                              | Sys: System indicator  |
| marcators                               | Link: LAN cable connection indicator   |
|   | HD: HDMI signal status   |
| OLED Screen                             | Showing the Model, ID, IP, status  |
| Rear Panel                              |  |
| Video                                   | 2 x HDMI Type-A  |
|   | 1 x RS232 phoenix connector  |
| Control Borto                           | 1 x RS485 phoenix connector  |
| Control Ports                           | 1 x Relay phoenix connector  |
|   | 1 x I/O phoenix connector (Programmable as IR input/output or voltage sensor)  |
| Audio                                   | 1 x 3.5mm IN   |
| Addio                                   | 1 x 3.5mm OUT  |
| LAN                                     | 1 x RJ45 (PoE)   |
|   | I x SFP Cage<br>5 x LISB B parts for Kouhaard Mouse BC hast Touch  |
| Bower                                   | $3 \times 0.05$ botts for Reyboard, Mouse, i C flost, fouch  |
| Fower                                   |  |
| General                                 |  |
| Control                                 | Muximus Network Controller   |
| Control                                 | Srd Party Control by ICP/ UDP  |
|   | <ul> <li>Windows PC software, Android/IOS APP</li> <li>This device supports Ref. (RD) an external network supply is not included. It is</li> </ul> |
| Power Source                            | intended to be powered via a Ref (PSE) Ethernet Switch If required an entional   |
| Fower Source                            | niterided to be powered via a FOE (FSE) Ethemet Switch. If required, all optional power supply (500988) may be purchased separately.               |
| Power Consumption                       | <10W   |
| · • • • • • • • • • • • • • • • • • • • | Operating: 0° to 40°C Storage: -20° to 85°C  |
| Temperature                             | Humidity: Up to 90% non-condensing   |
| Dimensions                              | LxWxH (191mm x 100mm x 25mm)   |
| Weight                                  | 1.27lbs (0.54kg)   |
| Compliance                              | Regulatory: FCC, CE, RoHS Flammability: 94V0   |
| Warranty                                | 2 years  |
| Order Information                       | 500861 HDMI over IP PoE Seamless Transceiver, 4K60 (UPC: 627699008614)   |
| Accessories                             |  |
| (These items are sold                   | 500900 UNIV. PSU IZVDC/Z.UA LOCK US/UK/EU  |
| separately)                             | SUUYZS 14 FOIL RACKMOUNT ITANSCEIVER UNASSIS 3.3U  |

# 6. Panels

# 6.1 Front Panel



| 1/2/3/4 (Indicators) | PWR: power indicator<br>SYS: System indicator<br>LINK: LAN cable connection indicator<br>HDMI: HDMI signal status |
|----------------------|---|
| 5 (OLED Screen)      | OLED Screen Showing the Model, ID, IP, status   |
| 6 (USB 3.0 Port)     | Port to connect USB memory  |
| 7 (USB 2.0 Port)     | Port to connect the keyboard.   |
| 8 (USB 2.0 Port)     | Port to connect the mouse.  |

# 6.2 Rear Panel



| 12VDC 1.5A Power Supply                       |
|---|
| Press and hold for 5 seconds to factory reset |
| Port to connect Touchscreen                   |
| Port to connect to the host                   |
| Fiber port                                    |
| RJ45 LAN port with standard POE               |
| 3.5mm port for audio embedded in              |
| 3.5mm port for audio de-embedded out          |
| HDMI output port                              |
| HDMI input port                               |
| 1 x RS485(BGA) phoenix connector              |
| 1 x RS232(RGT) phoenix connector              |
| 1 x Relay(+ -) phoenix connector              |
| 1 x Infrared (IR1, IR0) phoenix connector     |
|   |

# 7. Installation

- 1. Identify the connectors on the Transceiver as indicated by the product silkscreen, see the above front and rear product views for further details.
- 2. To install the Transceiver:
  - 2a. Connect the 500861 Transceiver to the HDMI video source with an HDMI compliant cable.
- 3. If the configuration is a point-to-multipoint or multipoint-to-multipoint:
  - 3a. You will need to use an Ethernet Switch with Gigabit ports. In addition IGMP Protocol support is required for the multipoint-to-multipoint case.

Verify that the Ethernet Switch is configured correctly, that the IGMP Protocol is enabled for multipoint-to-multipoint applications.

See the operating manual for more information about configuring the Ethernet Switch. 3b. Connect all 500861 Transceivers to the Ethernet Switch.

- 3c. Use the MuxLab KVM & AV Management Tool software to configure each Transceiver.
- 4. Powering the Transceivers via an external power supply is only necessary where PoE (PSE) is unavailable. If PoE is unavailable, connect a 12VDC power supply to each Transceiver and to an AC power outlet. If power is present, the blue power LED on each Transceiver will illuminate.

#### Note: Power 'ON' the HDMI Transceivers only after all connections have been made.

- 5. Power 'ON' the HDMI equipment and verify the image quality.
- 6. This unit supports a Factory Reset function, if ever required. Note however that and saved unit configuration data will be lost. To perform a Factory Reset, press and hold the reset button located on the back between 6 to 10 seconds.

# 8. Using MuxLab KVM & AV Management Tool Software

This section describes the basic workflow for configuring, managing and controlling the 500861 Transceiver.

The typical workflow consists of the following steps:

- 1. Download MuxLab KVM & AV Management Tool software from MuxLab website.
- 2. Login to MuxLab KVM & AV Management Tool software
- 3. Make all necessary settings on the Transceivers as required by your setup, including configuring device IP addresses, setting streaming and output resolutions, naming devices, defining which devices will function as Inputs and Outputs, creating video walls, creating users with their respective permissions, among many others.
- 4. Control the system from the User Control Interface.

#### 8.1 Download MuxLab KVM & AV Management Tool Software

The User can download the KVM & AV Management software free of charge directly from the MuxLab website from the following link: https://muxlab.com

#### 8.2 Login to MuxLab KVM & AV Management Tool software

After downloading the MuxLab KVM & AV Management Tool software, double-click the Muxlab.exe file to run the software.

On the home page we need to log in, to do this we must enter the username, password and IP address of the computer where we are running the software. Please note that by default the username is **admin** and the password is **123456**. (Figure 1)



Figure 1

Once log in, the software gives us the option to configure or control the Transceivers. (Figure 2)



Figure 2

#### **8.3 Configuring the Transceivers**

By clicking on the gear icon that appears in the upper right corner, the program will open a new page where we can make all the necessary settings to the Transceivers.

On this new page we can see 10 main tabs (Device, Input, Output, Site, IPC, User, Data, Status, System and Logs). (Figure 3)





#### 8.3.1 Device tab

After clicking on the Device tab we can see four main sections. Figure 4





A In this section, the User will find all the information about each transceiver. Here you can see the device name, IP address, MAC address, device model, and hardware and firmware versions. Please note that it's not possible to edit the information in this section.

In this section, the User can adjust the settings of each transceiver such as output resolution, encoding type, output resolution, streaming type, image rotation, among others. After selecting a device, the User can configure the corresponding settings for the device. Figure 5

| / | <b>Device Basic Information</b> |                                   |  |
|---|---------------------------------|-----------------------------------|--|
|   | Device Model:                   | 500861                            |  |
|   | Device Name                     | PC RIGHT                          |  |
|   | Software Info:                  | [2.2.0.27][1.0.5][20250214101014] |  |
|   | Hardware Info:                  | GB1010U-GK400MD-70G               |  |
|   | DHCP                            | Disable                           |  |
|   | IP:                             | 192.168.168.78                    |  |
|   | Subnet Mask:                    | 255.255.255.0                     |  |
|   | Gateway:                        | 192.168.168.1                     |  |
|   | MAC:                            | 92:BB:03:C8:A7:FF                 |  |
|   | Status:                         | Online                            |  |
|   | Device Model:                   | input,output                      |  |
|   | Other Info                      |                                   |  |
|   | Stream Manager IP               | 169.254.1.200                     |  |
|   | Maximum Forwards                |                                   |  |
|   | Forwarding Level                | 8                                 |  |
|   | Stream Version                  | v1.0.1.0                          |  |
|   | Extra                           |                                   |  |
|   | Temperature Protection          | Disable                           |  |
|   | Max Temperature                 | 80                                |  |
|   | Temperature Time                | 60                                |  |
|   | Number of Restarts              |                                   |  |
| > | Running Time                    | 17:58:47                          |  |
| / | Output Property                 |                                   |  |
|   | Resolution                      | 3840x2160P30                      |  |
|   | Interface Mode:                 | HDMI                              |  |
|   | Color Space                     | YUV                               |  |
|   | Color Limit                     | 0-255                             |  |
|   | Background Color                | #0000#                            |  |
|   | Output Coor                     |                                   |  |

| Edge                 |               |    |
|----------------------|---------------|----|
| Left                 |               |    |
| Тор                  |               |    |
| Right                |               |    |
| Bottom               |               |    |
| Edge Status          | Disable       |    |
| Output Image         |               |    |
| Lightness:           |               | 45 |
| Contrast:            |               | 50 |
| Hue:                 |               | 50 |
| Saturation:          |               | 50 |
| Restore Default      | Set Default   |    |
| Audio Output Setting |               |    |
| Audio Output         | HDMI          |    |
| Decode Settings      |               |    |
| Default Video Stream | Udp Multicast |    |
| Win Num              |               |    |
| Rotate               |               |    |
| Rotate               |               |    |
| Peripheral           |               |    |
| IR Follows           | Enable        |    |
| 232 Follows          | Disable       |    |
| 485 Follows          | Disable       |    |
| Input Property       |               |    |
| Resolution           | 3840x2160     |    |
| FPS                  | 30 hz         |    |

| Encoding Attribute  |                |   |
|---------------------|----------------|---|
| Follow HDMI         | Off            |   |
| Channel:            | Primary Stream |   |
| Encoding Type:      | H265           |   |
| Encoding Level:     | main           |   |
| Bitrate Setting:    | cbr            |   |
| Resolution          | 1920x1080      |   |
| FPS                 |                |   |
| GOP:                |                |   |
| Bitrate:            | 4000 kbps      |   |
| Param Setting       | Apply          |   |
| Restore Default     | Set Default    |   |
| Encoding Border     |                |   |
| Encoding Border     | Disable        |   |
| Border Width        |                |   |
| Border Color        | #000000        |   |
| Packet Control      |                |   |
| Packet interval     |                |   |
| Audio Input Setting |                |   |
| Audio Input         | HDMI           | - |

Figure 5

C In this section, the user can assign a name to the device, an ID that must be unique for each device, and assign an IP address. Figure 6

| User-defined           |                    |       |    |  |     |  |    |  |  |  |  |  |  |
|------------------------|--------------------|-------|----|--|-----|--|----|--|--|--|--|--|--|
| Device Name            | PL                 | YER ' |    |  |     |  |    |  |  |  |  |  |  |
|                        | Apply              |       |    |  |     |  |    |  |  |  |  |  |  |
| Batch Modification     |                    |       |    |  |     |  |    |  |  |  |  |  |  |
| Start Device ID        |                    |       |    |  |     |  |    |  |  |  |  |  |  |
| Key Lock • Lock Unlock |                    |       |    |  |     |  |    |  |  |  |  |  |  |
| Mac 🗌                  | Mac • Fixed Random |       |    |  |     |  |    |  |  |  |  |  |  |
| Network Setting        | IS                 |       |    |  |     |  |    |  |  |  |  |  |  |
| Start IP               | 192                | . 1   | 68 |  | 168 |  | 71 |  |  |  |  |  |  |
| End IP                 | 192                | . 1   | 68 |  | 168 |  | 71 |  |  |  |  |  |  |
| Subnet Mask            | 255                |       |    |  | 255 |  |    |  |  |  |  |  |  |
| Gateway                | 192                |       | 68 |  | 168 |  |    |  |  |  |  |  |  |
| Server IP              | 192                |       | 68 |  | 168 |  |    |  |  |  |  |  |  |
|                        |                    | Apply |    |  |     |  |    |  |  |  |  |  |  |

Figure 6

D In this section there are 13 more options that the user can use to configure the transceivers, these options are: Search, Add Device, Reboot, Device Reset, Peripheral Setting, IR Setting, Scheduled Tasks, OSD Setting, EDID Setting, RTMP Setting, Streaming Setting and Other Settings.

**Search**: Clicking this option will cause the software to search for all transceivers connected to the network and display a list of the devices found. During the search, a rotating icon will appear; once complete, it will disappear. Figure 7

| <b>al</b> 597 | um Configu    | ration    |             | /           |                |               |                                       |                |             |              |  | 7 X                               |
|---------------|---------------|-----------|-------------|-------------|----------------|---------------|---------------------------------------|----------------|-------------|--------------|--|-----------------------------------|
|               |               | ~         |             | Mpd         | 58             | PC Us         | r Data                                | Saka           | System      | Lopa         |  | Select Local NO 192 168 168 163 - |
|               |               | ABLOW     | ce Uppa     | de Rel      |                |               | Setting Schedule                      |                |             |              |  |                                   |
|               | Other Setting | 24        |             |             |                |               |                                       |                |             |              |  |                                   |
|               |               |           |             |             |                |               |                                       |                | Device Info |              | User-deficed   |                                   |
|               | I NO.         | Device ID | Device Type | Device Name | P Abar         | Subret Mask   | Cateway                               | Ma             |             |              | Device Name  |                                   |
|               |               |           | Encoder)    | PC RIGHT    | 192.158.158.78 | 255,255,255,0 | 192.168.168.1                         | 92:68:03:C8:47 |             |              |  | Addy                              |
|               |               |           | Encoder     | PORT        | 192 108 108 73 | 200,200,200,9 | 192 108 108 1                         | 22 20 47 46 31 |             | Transceiver  | S Detailed to the  |                                   |
|               |               |           | Encoder1    | PLATER 2    | 192 168 168 72 | 255 255 255 9 | 192.168.168.1                         | SED7.CAFED     |             | found on th  |  |                                   |
|               |               |           | Encoder     | PLAYER 4    |                |               |                                       | 7020587078     |             | Touria on th | C Distance of  |                                   |
|               |               |           |             |             |                |               |                                       |                |             | network      | Evelope  | 0.000.0.0000                      |
|               |               |           |             | PLAYER 0    | 192.168.168.70 | 255,255,255,0 | 192.168.168.1                         | 00.5220.55.00  |             |              |  |                                   |
|               |               |           | Encoder     | PLAYER 1    | 192.168.168.71 | 255,255,255,0 | 192.168.168.1                         | FD.AB.1E.7C.6F |             |              |  | O File O Random                   |
|               |               |           |             |             | *              | Icon          | indicating the search is in progress. | at             |             |              | Interface Safety<br>Start P<br>End P<br>Evolution Start<br>Contraver<br>Sarver P |                                   |
|               |               |           |             |             |                |               | Fullsore                              |                |             |              |  |                                   |

Figure 7

Add Device: By clicking this option, the User will be able to add a Transceiver manually by entering the IP address of the device. Figure 8

| ff System | n Config   | untion.   |         |              | /                                  |                            |                       |                |             |      |   | 2 ×                             |
|-----------|------------|-----------|---------|--------------|------------------------------------|----------------------------|-----------------------|----------------|-------------|------|---|---------------------------------|
|           |            | i qui     |         |              | 54                                 | PO Use                     | r Data                | Saka           | System      | Loga |   | Select Local NC 182,158,158,153 |
|           | earch      | Add Devic | e Upgra | de Rebo      | ot De                              | Ace Reset                  | Setting Schedule      | ed Tasks       |             |      |   |                                 |
| 0         | her Sellin | gs.       |         |              |                                    |                            |                       |                |             |      |   |                                 |
|           |            |           |         |              |                                    |                            |                       |                | levice into |      | User defined  |                                 |
| - 48      |            |           |         |              |                                    |                            |                       |                |             |      | Device Name   |                                 |
|           |            |           |         |              |                                    |                            |                       | 92.00.03.C8.47 |             |      |   | Apply                           |
|           |            |           | Encoder | PLAYER 3     | 192.168.168.73                     | 255,255,255,0              | 192.168.168.1         | C4.AD-56 C8.5t |             |      |   |                                 |
|           |            |           | Encoder | PLAYER 2     | 192 168 168 72                     | 255,255,255,0              | 192.168.168.1         | SEDTCAFED      |             |      | - Bach Hoddicator   |                                 |
|           |            |           | Encoder | PLACES S     | 102 108 108 75                     | 255 255 255 0              | 102 108 108 1         | 1000567076     |             |      | Etart Device IC   |                                 |
|           |            |           | Encoder | PLATER 1     | 192 168 168 71                     | 255,255,255,0              | 💶 Add Devices         |                | 7 X         |      |   |                                 |
|           |            |           |         |              |                                    | 255 255 255 0              |                       |                |             |      | Key Link  | C Lick C Unick                  |
|           |            |           |         |              |                                    |                            |                       |                |             |      | Mac   | Fiel      Random                |
|           |            |           |         | Entei<br>the | r the IP ad<br>device yo<br>to add | ddress of<br>yu want<br>I. | Darling P<br>Ending P |                |             |      | ■ Linkens Salar<br>Start P<br>Cod P<br>Solare Start<br>Galleway<br>Server P | 91                              |
| _         |            |           |         |              | _                                  |                            |                       | m Quit         |             |      |   |                                 |

Figure 8

**Upgrade**: Clicking the "Update" option will allow the User to update the Transceiver's firmware version. Check the MuxLab website to see if an updated firmware version is available for the Transceiver model you are using. To update the firmware on the previously selected Transceivers, a) select the .bin file you downloaded from the MuxLab website and b) click the button to start the process. Figure 9

| System Configure | ition                    |              |                          | /                      |                    |         |        |              |      |              |                  |                          |          |      | - ? — × |
|------------------|--------------------------|--------------|--------------------------|------------------------|--------------------|---------|--------|--------------|------|--------------|------------------|--------------------------|----------|------|---------|
|                  | input                    | Output       | /                        | PC                     | User               | Data    | Status | System       | Logs |              |                  | O Select L               | ocal NIC |      |         |
|                  | Add Device               | Upgrade      |                          |                        | Peripheral Setting | a R Set |        | duled Tasks  |      | a b          |                  |                          |          |      |         |
|                  | EDID Setting             | RTMP Setting |                          |                        | lings              |         |        |              |      | ÷ Ę          |                  |                          |          |      |         |
|                  |                          | Fermage      | e upgrade                |                        |                    |         |        |              |      |              | × User-defined   |                          |          |      |         |
| AI No.           | Device ID Devic          | Top Make s   | ure the box is always or | tine during the upgrad | process!           |         |        |              |      | 1            | Device Nar       | 900                      | ER2      |      |         |
|                  | 78 Encoder<br>73 Encoder | 1            |                          |                        |                    |         |        |              |      | Open Upgrade |                  |                          | poly     |      |         |
| <b>a</b> 3       | 72 Encoder               | 1            |                          |                        | -                  |         |        |              | 214  |              | Batch Nodificati |                          |          |      |         |
|                  |                          | 1            | 192 148 148 72           | G810104                | ~~                 |         |        |              |      | <i></i>      | Start Device     | 10 72                    |          |      |         |
|                  | 75 Encode                | 1_2          | 192.168.168.74           | 6810100                |                    |         |        |              |      |              |                  |                          |          |      |         |
|                  | 71 Encoder<br>70 Encoder | 3            |                          |                        |                    |         |        |              |      |              | Key Lock         | <ul> <li>Lock</li> </ul> | · Unice  |      |         |
|                  | 77 Encoder               | 1            |                          |                        |                    |         |        |              |      |              | Mac              | · Fee                    | t 🛛 Ran  | iom. |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              | Network Se       | Bings                    |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              | Start IP         |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              | ENDP             |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              | Subnet Wask      |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              | Gateway          |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              | Server P         | 192                      | 158      | 358  |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              |                  |                          | pply     |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        | Right        |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        | Bottom       |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        | Edge Status  |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        | Output Image |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              |                  |                          |          |      |         |
|                  |                          |              |                          |                        |                    |         |        |              |      |              |                  |                          |          |      |         |

Figure 9

**Reboot**: Clicking this option will allow the User to reboot the Transceivers. After selecting the Transceivers and clicking the "Reboot" option, a pop-up window will appear asking the User to confirm whether they wish to continue with the reboot process. Please note that the reboot process will take approximately 4 minutes. Figure 10

| f System | Configue | ation.      |          |          |                  | 1              |                  |                          |                                |                                  |                             |                           |         |       | 1 |
|----------|----------|-------------|----------|----------|------------------|----------------|------------------|--------------------------|--------------------------------|----------------------------------|-----------------------------|---------------------------|---------|-------|---|
| C+       | vice     | No.         | •        | ana -    | -                | те Uнг         | Data             | 2564                     | System                         | Lops                             |                             | Detection                 | UI NC   |       |   |
|          | arch     | Add Devic   | e Uppre  | Re Rebi  | out Device F     | lesel Perpher  | al Setting IPL S | etting Sch               | eduled Tasks                   |                                  |                             |                           |         |       |   |
|          | Detting  | EDIO Setter | ng RTMP  | Detting  | Dreaming Detling | Other Settings |                  |                          |                                |                                  |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Device Info                    |                                  | User-defined                |                           |         |       |   |
| AB       |          |             |          |          |                  |                |                  | 5                        | <b>Device Basic Infomation</b> |                                  | Device Name                 | PLAN                      | R2      |       |   |
|          |          |             | Encoder  | PLATER 3 | 192.168.168.73   | 255.255.255.0  | 192.108.108.1    | C4AD 66 C8 51            | Device Model:                  | 500861                           |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  | 92/88/03/CEA7            | Device Name                    | PLAYER 2                         |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Software Info                  | [2:2:0:27[1:0:5][20250214101014] | Batch Wodfication           |                           |         |       |   |
|          |          |             | Encoder  | PLATER 2 | 192,168,168,72   |                | 192,168,168,1    | SEDTCAFED                | Hardware Info                  | GB1010U-GKR00MD-70G              | Start Device ID             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | -                              | 011401                           |                             |                           |         |       |   |
|          |          |             | Encoder) | PLACES   | 192.198.198.75   |                |                  | 02:0F AB 10:E7           |                                | 192 108 108 72                   | <ul> <li>Keylash</li> </ul> | · Lock                    | - Links |       |   |
|          |          |             |          | PLACED   | 192.198.198.70   | 255,255,255,0  | 192.168.168.1    | 01722075.00              | SUDNER MALIK                   | 200,200,200,0                    |                             |                           |         |       |   |
|          |          |             |          | PLATER 1 | 192.958.958.71   | 255,255,255,0  | 192.168.168.1    | FEARIE70.6F              | Galenay.                       | 102 108 108 1                    | Med                         | <ul> <li>Field</li> </ul> | - Han   | 9 M I |   |
|          |          |             |          |          |                  |                |                  |                          |                                | Colore Colore Colore             |                             |                           |         |       |   |
|          |          |             |          |          |                  |                | 1 Prompt         |                          | ×                              | ined ordered                     | Network Setting             | 16                        |         |       |   |
|          |          |             |          |          |                  |                | A MARAN RA I     | the real desires need to | to be instantiant              |                                  | StattP                      |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          |                                | 100 254 1 200                    | ENTE                        |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Aug. 10. 10                    |                                  |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | THE NO                         |                                  | Subnet Mask                 | 255                       | 255     | 255   |   |
|          |          |             |          |          |                  |                |                  |                          |                                |                                  | Gateway                     |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          |                                |                                  |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Temperature Protection         | Disable                          | Server P                    |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Non Terrescolure               | -                                |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          |                                |                                  |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Temperature Time               | ••                               |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Number of Restarts             |                                  |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Running Time                   |                                  |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Output Property                |                                  |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Resolution                     | 1920x1040P60                     |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Interface Wode:                |                                  |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Color Space                    |                                  |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          |                                |                                  |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          | Background Color               | #0000#                           |                             |                           |         |       |   |
| _        |          |             |          |          | _                |                |                  |                          |                                |                                  |                             |                           |         |       |   |
|          |          |             |          |          |                  |                |                  |                          |                                |                                  |                             |                           |         |       |   |

Figure 10

**Device Reset**: Clicking this option will allow the User to reset the device. After selecting the Transceivers and clicking the "Device Reset" option, a pop-up window will appear asking the user to confirm whether they wish to continue with the process. Please note that resetting the device will erase all user settings except for the IP address. The reset process will take approximately 4 minutes. Figure 11

| 🗐 System | Configur | ation     |                   |             |                    |                              | 1                      |                     |                            |                                 |                                     |                           |                          |     | 1 X |
|----------|----------|-----------|-------------------|-------------|--------------------|------------------------------|------------------------|---------------------|----------------------------|---------------------------------|-------------------------------------|---------------------------|--------------------------|-----|-----|
| 0        | vice     | Head      | 0.494             |             |                    |                              | Owa                    | 5864                | System                     | Leas                            |                                     | SelectLo                  | sel NPC                  |     |     |
|          | arch     | ABUDENIC  | e Upprade         |             | Device Reset       | Pergheral Detling            | R Setting              | 504                 | iduled Tasks               |                                 |                                     |                           |                          |     |     |
| 050      | fating   | EDIO 5484 | na RTMP Setting   | Desarries   | a Setting Other Se | Bings                        |                        |                     |                            |                                 |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Device HPs                 |                                 | User-defined                        |                           |                          |     |     |
|          |          | Device ID | Device Type       | Device Name | P M0               | Submet Mask                  | Gateway                |                     | Device Basic Information   |                                 | Device Name                         | PLAT                      | R2                       |     |     |
|          | 1        | 73        | Encoder   Decoder | PLAYER 3    | 192,168,168,73     | 255 255 255 0                | 192 108 108 1          | CARE                | Device Wodel               | 500861                          |                                     |                           |                          |     |     |
|          |          |           | Encoder   Decoder | PC RIGHT    | 192 168 168 78     | 255 255 255 0                | 192 168 168 1          | \$2.00              |                            | PLAYER 2                        |                                     |                           |                          |     |     |
|          |          |           | Encoder   Decoder |             | 192,168,168,77     |                              | 192 168 168 1          | 22.20               | Software Info:             | [2.2.0.27]1.0.5[20250214101014] | Butch Weddication                   |                           |                          |     |     |
|          |          |           | Encoder   Decoder |             | 192 108 108 72     |                              | 192 108 108 1          | 36:01               | Hardware Info:             | G81010U-GK400MD-70G             | Stat Device ID                      |                           |                          |     |     |
|          |          |           |                   |             | 192,168,168,74     |                              |                        | 79.69               |                            | Disable                         | and officer of                      |                           |                          |     |     |
|          |          |           |                   |             | 192.168.168.75     |                              | 192 108 108 1          | 02.06               |                            | 192,168,168,72                  | -                                   |                           |                          |     |     |
|          |          |           |                   |             | 182.168.168.71     |                              |                        | FO.AD               | Subnet Mask:               | 255 255 255 0                   | Ray Cock                            | <ul> <li>Loos</li> </ul>  | United                   |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Caleway:                   | 192,168,168,1                   | MAC                                 | <ul> <li>Field</li> </ul> | <ul> <li>Rang</li> </ul> |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | MAC:                       | 3ED7.CAFED6A2                   |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    | f Prompt                     |                        |                     | ×                          | Othe                            | <ul> <li>Network Setting</li> </ul> |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     |                            | input, subput                   | Start IP                            |                           |                          |     |     |
|          |          |           |                   |             |                    | <ol> <li>Al steri</li> </ol> | configurations will be | i sel la default, i | to you want to reset node? |                                 |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     |                            | 102241200                       | UNIP                                |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Yes No                     |                                 | Subnet Mask                         |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     |                            |                                 | Orthogram                           |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Entra Article              |                                 | C B R W B                           | 110                       | 108                      | 108 |     |
|          |          |           |                   |             |                    |                              |                        |                     | Concession designed on     |                                 | Sever P                             |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | resperant mondon           | Coase                           |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Max Temperature            | 40                              |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Temperature Time           |                                 |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Number of Restarts         |                                 |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Running Time               |                                 |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Output Property            |                                 |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     |                            | 182041080550                    |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Interface Mode:            |                                 |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Color Space                |                                 |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | ColorLimit                 |                                 |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Background Color           | #1010#                          |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     |                            |                                 |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     | Copul of an                |                                 |                                     |                           |                          |     |     |
|          |          |           |                   |             |                    |                              |                        |                     |                            |                                 |                                     |                           |                          |     |     |

Figure 11

**Peripheral Setting**: Clicking this option will open a new window where the User can learn and test IR codes. To learn or test an IR command, a) click Add; b) enter a name for the IR command; c) if the user already has the command in hexadecimal format, they can copy it to the designated space; otherwise, d) click Save. Figure 12



Figure 12

To learn or test IR commands, a) select a command name; b) select the IP address of the Transceiver you will use to learn or send the IR command; c) click **Learn** to learn an IR command, or click **Test** to send the command. Figure 13



Figure 13

Scheduled Tasks: Clicking this option allows the User to schedule the reboot of one or more Transceivers on a specific day and time. After selecting the desired Transceivers and clicking the "Scheduled Tasks" option, a pop-up window will appear with a list of the IP addresses of the selected Transceivers. Since it is possible to schedule the Transceivers to reboot at different times or schedule all Transceivers to reboot at once, a) select the transceivers you want to reboot simultaneously and b) click "Add". Figure 14



Figure 14

After clicking Add, a new pop-up window will appear in which the User must, a) enter a name for the schedule, b) select the day or days on which the schedule will run, c) enter the time at which the schedule will run, d) enable the schedule and e) click Save. Figure 15

| f System Configu | ration    |                 |          |                    |                |                             | /      | 7 ×                              |
|------------------|-----------|-----------------|----------|--------------------|----------------|-----------------------------|--------|----------------------------------|
| Device           | Ped       | Over 1          | 54 20    | User               | Data Status    | - 2000                      |        | Delect Local NPC 192 168 168 163 |
| Search           |           | Upgrade         |          | Peripheral Setting | R Setting Sche | Avled Tasks                 |        |                                  |
| OSD Setting      | EDO Selle | Scheduled Tasks |          |                    |                | ~                           |        | 7 ×                              |
|                  |           | Deutoe          |          |                    | Add            | Update                      | Delete |                                  |
| A8 86.           | Device ID | Al              |          |                    |                | Nama                        | Bela   | K2                               |
|                  | 78        | 192 168 168 72  |          |                    |                |                             |        | ~                                |
|                  | 77        |                 |          |                    |                |                             |        |                                  |
|                  | 72 24     |                 | 💷 Dialog |                    |                |                             | 7 ×    |                                  |
| • •              | 25        |                 | Name     | a — 🕨              |                |                             |        | Unice                            |
|                  | 79        |                 | Sot      |                    | 0              |                             | 4      | - Random                         |
|                  |           |                 |          |                    | Monday         | <ul> <li>Tuesday</li> </ul> |        |                                  |
|                  |           |                 | Week     | b — ►              | Wednesday      | Thursday                    |        |                                  |
|                  |           |                 |          |                    | Feday          | Saturday                    |        | 168 . 168 . 72                   |
|                  |           |                 | Time     | C — ►              | 0              | : : 0                       |        | 958 . 958 . 74                   |
|                  |           |                 | Enable   | d                  | Disable        |                             |        | 255 . 255 . 0                    |
|                  |           |                 |          |                    |                |                             |        |                                  |
|                  |           |                 |          |                    |                |                             |        |                                  |
|                  |           |                 |          |                    |                |                             |        | *                                |
|                  |           |                 |          |                    |                |                             |        |                                  |
|                  |           |                 |          |                    |                |                             |        |                                  |
|                  |           |                 | PLat     |                    |                |                             |        |                                  |
|                  |           |                 |          |                    |                |                             |        |                                  |
|                  |           |                 |          |                    |                |                             |        |                                  |
|                  |           |                 |          |                    |                |                             |        |                                  |
|                  |           |                 |          |                    |                |                             |        |                                  |
|                  |           |                 |          | e                  | 544            |                             |        |                                  |
|                  |           |                 |          |                    |                |                             |        |                                  |
|                  |           |                 |          |                    |                |                             |        |                                  |

Figure 15

**OSD Setting**: Clicking this option will allow the User to add OSD text to each video source. After selecting the Transceiver to which they wish to add OSD text and clicking the "OSD Setting" option, a pop-up window will appear where the user must a) enter the OSD text, b) indicate the position where you want it to be displayed, c) select the font, d) select the font size, e) select the font color, f) select the background color, and g) click On to display the OSD text. Figure 16

| System Configure | ation          |                      |                |                        |                      | _                            | _               |  | _             |       |                             |                 |   | 7 ) |
|------------------|----------------|----------------------|----------------|------------------------|----------------------|------------------------------|-----------------|--|---------------|-------|-----------------------------|-----------------|---|-----|
|                  | input          | Const.               |                |                        |                      | Data                         | Salar           |  | Logo          |       |                             | Select Local NC |   |     |
| Search           | - Cence        | Upgrade              | Reboot         | Device Reset           | Peripheral Set       | ing its                      | etting Sche     | Med Tasks                                |               |       |                             |                 |   |     |
| OSD Setting      | EDID Setting   |                      | Dreaming Sells | ing Other Set          |                      |                              |                 |  |               |       |                             |                 |   |     |
|                  |                |                      |                |                        |                      |                              |                 | evice Info                               |               |       | User-defined                |                 |   |     |
| AI 86.           | Device ID      | Device Type Device N | ane PAS        | dv Se                  | beet Mask            | Coleway                      |                 | bevice Basic Informatio<br>Service Model | 500451        |       | Device Name                 | PLATERO         |   |     |
| 2                | 73 EF<br>76 EF | koder]               | 192,168,168,7  | 3 255,255<br>8 255,255 | 255.0 TI<br>255.0 TI | 82.168.168.1<br>82.168.168.1 | 92 88 93 C8 A7  | Sevice Name                              | PLATER D      |       |                             |                 |   |     |
| • •              | 77             | Cod Setting          |                |                        |                      |                              |                 | a de constato                            |               | 7 × 1 | Batch Wodfication           |                 |   |     |
|                  | 72             |                      |                |                        |                      |                              |                 |  |               |       | Start Device ID             |                 |   |     |
|                  |                | 162 115 X 0          |                | FLATER                 |                      |                              |                 |  |               |       | <ul> <li>Novi en</li> </ul> | • 1 m = 1 m     |   |     |
| 7                |                |                      | 1              |                        |                      |                              |                 |  |               |       | - Net Cook                  | - Cool - Cool   | - |     |
| • •              |                |                      | 100115         | 15804 X 20             | 614                  | Ģ                            | Position T 23   |  | 42140         |       |                             | - 1997 - 19     |   |     |
|                  |                |                      | A cost         |                        |                      |                              |                 |  |               |       | Network Setting             |                 |   |     |
|                  |                | -                    | <b>B</b> LASS  | KE (JØ4                |                      |                              | Indution Song   |  |               |       | 5641 P                      |                 |   |     |
|                  |                |                      | 1 × 1          | 200                    |                      |                              | colo Fortheight |  |               | -200  | End P                       |                 |   |     |
|                  |                |                      |                | 111                    |                      |                              |                 |  |               |       | Subnet Wask                 |                 |   |     |
|                  |                | e                    |                | stor                   |                      |                              |                 |  |               |       | Gateway                     |                 |   |     |
|                  |                | F                    |                | ackground Color        |                      |                              |                 |  |               |       | Sever P                     |                 |   |     |
|                  |                |                      |                |                        |                      |                              |                 |  |               |       |                             |                 |   |     |
|                  |                |                      |                | achground Transparer   | e Status             |                              | Background Or   | 4097                                     |               |       |                             |                 |   |     |
|                  |                |                      |                |                        |                      |                              |                 |  |               |       |                             |                 |   |     |
|                  |                |                      | g —            | ¢n.                    |                      |                              |                 |  |               |       |                             |                 |   |     |
|                  |                |                      |                |                        |                      |                              |                 | instantion.                              | 1920, 1080240 | _     |                             |                 |   |     |
|                  |                |                      |                |                        |                      |                              |                 | nterface Mode:                           |               |       |                             |                 |   |     |
|                  |                |                      |                |                        |                      |                              |                 | Luior Space                              |               |       |                             |                 |   |     |
|                  |                |                      |                |                        |                      |                              |                 |  |               |       |                             |                 |   |     |
|                  |                |                      |                |                        |                      |                              |                 | lackground Color                         |               | 0008  |                             |                 |   |     |
|                  |                |                      |                |                        |                      |                              |                 | Sulput Cear                              |               |       |                             |                 |   |     |
|                  |                |                      |                |                        |                      |                              | 1 Out           |  |               |       |                             |                 |   |     |
|                  |                |                      |                |                        |                      |                              |                 |  |               |       |                             |                 |   |     |

Figure 16

**EDID Setting**: Clicking this option will allow the user to load a custom EDID. After selecting the transceiver to which they wish to load the EDID and clicking the "EDID Configuration" option, a pop-up window will appear where the user must a) click Open File to select the corresponding EDID file and b) click Apply to load the EDID. Figure 17



Figure 17

**RTMP Setting**: Clicking this option will allow the User to add an RTMP stream and select whether to enable or disable it. After selecting the Transceiver to which they wish to add an RTMP stream and clicking the "RTMP Settings" option, a pop-up window will appear where the User must a) assign a number to the stream, b) enable or disable the stream, c) enter the video source address, d) enter the RTMP address, e) click "Apply" to apply the changes, and f) click "Exit" if they wish to delete the stream. Figure 18



Figure 18

Streaming Setting: Clicking this option will allow the User to configure a streaming server. After selecting the Transceiver for which they wish to configure a streaming server and clicking the "Streaming Setting" option, a pop-up window will appear where the User must a) enter the server's IP address, b) select the level, c) enter the forwarding number, d) select the internal packet, and e) click "Apply" to apply the changes. Figure 19

|     | Input     |             | Niput       | 544               | ~             | ser Data          | Status         | System                       | Logs                 |                    | Selectu                   | ical NIC                  |     |  |
|-----|-----------|-------------|-------------|-------------------|---------------|-------------------|----------------|------------------------------|----------------------|--------------------|---------------------------|---------------------------|-----|--|
|     |           |             |             | boot Device       | Set Per       | ipheral Setting R |                |                              |                      |                    |                           |                           |     |  |
|     |           | Q RTM       | P Setting   | Streaming Setting |               |                   |                |                              |                      |                    |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                | Device Info                  |                      | User-defined       |                           |                           |     |  |
| No. | Device ID | Device Type | Device Name | IP Addr           | Subnet Mas    | k Gateway         |                | Device Basic Informatic      |                      | Device Name        | PC R                      | içht                      |     |  |
|     |           | Encoder     | PC RIGHT    | 192,168,168,78    | 255,255,255,0 | 192,168,168,1     | 92.88.03.C8.47 | Device Model:                | 500861               |                    |                           | oply .                    |     |  |
|     |           |             |             | 192.168.168.77    | 255,255,255,0 | 192.168.168.1     |                | Device Name<br>Software Info | PC ROHT              |                    |                           |                           |     |  |
|     |           | Encoder     | PLAYER 3    | 192.168.168.73    | 255,255,255,0 | 192.168.168.1     | C4AD 56 C8 58  | Hardware Info                | GB101013-GK400ND-70G | Batch Modification |                           |                           |     |  |
|     | 72        | Encoder     | PUNTER 2    | 192 108 168 72    | 200 200 200 0 | 192 108 108 1     | SE D7 CAFED    | DHOP                         | Disable              | Start Device ID    | 78                        |                           |     |  |
|     |           | Encoder     | PLAYERA     | 192 108 108 75    | 200,200,200,0 | 192 108 108 1     | 705058505078   |                              | 192.168.168.78       |                    |                           |                           |     |  |
|     |           | Encoder I   | PLAYERO     | 102 168 168 75    | 245 245 245 0 | 102 168 168 1     | 8052285580     | Subnet Mask:                 |                      | Key Lock           |                           | <ul> <li>Unior</li> </ul> |     |  |
|     |           | Encoder     | PLAYER 1    | 192 168 168 71    | 255 255 255 0 | 192 168 168 1     | F0 A9 1E 7C 6F | Gateway:                     |                      | Mac                | <ul> <li>Fired</li> </ul> | Ran                       | 5om |  |
|     |           |             |             |                   |               |                   |                | MAC:                         | 9288.03.C8A7.FF      |                    |                           |                           |     |  |
|     |           |             |             | I Stream          | Server a      |                   |                | 7                            | ×                    | Network Settin     |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                |                              | put, output          | Start IP           |                           |                           |     |  |
|     |           |             |             | Stream            | Manager IP    | 169               |                |                              | 10 Mil 1 Mil         | 6-44               | -                         |                           |     |  |
|     |           |             |             |                   |               |                   |                |                              |                      | Eng P              | 192                       | 100                       | 108 |  |
|     |           |             |             | Cover             | 100           |                   |                |                              |                      | Subnet Mask        |                           |                           |     |  |
|     |           |             |             | E forwa           | iding Number  |                   |                |                              | 10.10                | Gateway            |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                |                              |                      |                    |                           |                           |     |  |
|     |           |             |             | Packe             | C             | <b></b>           |                |                              | isable .             | CONTRACTOR OF      | 194                       | 100                       |     |  |
|     |           |             |             |                   |               |                   |                |                              | 0                    |                    | 1                         | işiy                      |     |  |
|     |           |             |             |                   |               | -                 |                | Temperature Turne            | 10                   |                    |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                | Number of Sectors            |                      |                    |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                | Running Time                 | 424525               |                    |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                | Output Property              |                      |                    |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                | Resolution                   | 1920+1080P60         |                    |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                | Infections Martin            | LOUI                 |                    |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                | 10000                        |                      |                    |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                | Color Space                  |                      |                    |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                |                              |                      |                    |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                | Background Color             | #0000#               |                    |                           |                           |     |  |
|     |           |             |             |                   |               |                   |                | Contractions.                |                      |                    |                           |                           |     |  |

Figure 19

# 8.3.2 Input tab

After clicking on the Input tab we can see two main sections. Figure 20



Figure 20

- A In this section there are 3 options that the user can use to define which Transceivers will be used as signal inputs, these options are: Search, Add device and Input Cropping.
- Search: Clicking this option will allow the User to scan the network to see a list of all connected Transceivers. To select the Transceivers to be used as signal inputs, the user must a) select the desired Transceivers from the list and, b) click "Add". After clicking "Add", the selected Transceivers will appear on the right. Figure 21



Figure 21

Add Device: By clicking this option, the User will be able to add a Transceiver manually. To add a transceiver manually, click on Add Device. After clicking, a pop-up window will appear where the user must a) enter the IP address of the Transceiver they wish to add b) click "OK". Figure 22



Figure 22

**Input Cropping**: Clicking this option will allow the User to crop a video source. After selecting the Transceiver they wish to crop and clicking the "Input Cropping" option, a popup window will appear where the user must a) Enter the number of pixels you want to crop at the top, bottom, left, and right, b) click "Apply". Figure 23

| 1 30 | tem Conf                        | guation                                      |   |                |   | /                            |   |        |   |  |        |                   |                    |  | 1 X |
|------|---------------------------------|--|---|----------------|---|------------------------------|---|--------|---|--|--------|-------------------|--------------------|--|-----|
|      | Device                          |  | Input   | Output         |   | #c                           | User  | Data   | Status  | System   | Ligi   |                   |                    | <ul> <li>Select Local NIC</li> </ul>   |     |
|      | Search                          |  | Add Device  | Input Cropping |   |                              |   |        |   | Create Group   | Delete | Move Up           | Move Down          |  |     |
| A    | No.                             | 10   |   | 7.658          | Device Na   | 14                           | Input Res   | hution |   | Property   | Mode   | Relative Property | Add Polling Source | Graphics Splicing  |     |
|      | 1<br>3<br>4<br>5<br>6<br>7<br>8 | 78<br>78<br>77<br>72<br>74<br>75<br>79<br>71 | 1923 144 144 144 74<br>1922 144 144 75<br>1922 144 144 75<br>1925 145 145<br>1925 145<br>1925 145 145<br>1925 145<br>1955 1455 1455 1455 1455 1455 1455 1455 |                | С. Конт<br>Р. (1973)<br>Р. (1973)<br>Р. (1974)<br>Р. (197 | The<br>Baser<br>Left<br>Rote | Madorilo<br>Madorilo<br>Tuonies<br>Madorilo<br>Madorilo<br>Madorilo<br>Madorilo<br>Madorilo<br>Madorilo | Acciv  | Orep<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | Financia Cine<br>■ Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceeding<br>Proceedin | 7 ×    |                   | a                  | 1992 - 1994 - 1994<br>1992 - 1994 - 1994<br>1992 - 1994 - 1994 - 1994 - 1994<br>1992 - 1994 - 1994 - 1994 - 1994<br>1992 - 1994 - 1 |     |
|      |                                 |  |   |                |   |                              |   |        |   | but  |        |                   |                    |  |     |
|      |                                 |  |   |                |   |                              |   |        |   |  |        |                   |                    |  |     |

Figure 23

**B** In this section there are 10 options that the User can use to manage the Transceivers selected as inputs, these options are: Create Group, Delete, Move Up, Move Down, Rename, Property, and Mode.

Create Group: By clicking this option will allow the User to create Transceiver groups. To do so, a) click "Create Group," b) select the Transceivers you want to add to the group from the list on the left, and c) click "Add". Figure 24



Figure 24

**Delete**: Clicking this option allows the User to delete one or more Transceivers selected as input. To do this, a) select the Transceiver(s) you wish to delete, b) click "Delete," and c) confirm the deletion. Figure 25



Figure 25

- **Move Up**: Clicking this option will allow the User to move a selected Transceiver one place up in the Input Transceivers list.
- **Move Down**: Clicking this option will allow the User to move a selected Transceiver one place down in the Input Transceivers list.
- **Rename**: Clicking this option will allow the User to rename a selected Transceiver in the Input Transceivers list.
- **Property**: Clicking this option will open a pop-up window where the User can view all the information for the selected Transceiver. This includes the name, IP address, primary and secondary stream resolution, RSTP address, Multicast address, and more. Figure 26

| New         Very       Nove       New       New <td< th=""><th><b>1</b> 3y</th><th>ten Confi</th><th>puration</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>? X</th></td<>  | <b>1</b> 3y | ten Confi | puration |                |                |          |                       |                         |                   |                    |              |        |     |                   | ? X |
|--|-------------|-----------|----------|----------------|----------------|----------|-----------------------|-------------------------|-------------------|--------------------|--------------|--------|-----|-------------------|-----|
| Total       Allow:       Partial   |             | Device    |          | input          | Output         | 584      | PC                    | User                    | Data              | Status             | System       | Logi   |     | 0 Select Local NC |     |
| No.       O       Point       Defense       Def  |             |           |          |                | Input Cropping |          |                       |                         |                   |                    | Create Group | Delete |     |                   |     |
| 1       7       1       12       14       14       14       16  | ٨           | No.       | 10       |                | IP Addr        | De       | vice Name             | Input Resc              | Aution            |                    |              |        |     |                   |     |
| 2       7       102.144.48/7       PC.00017       3440.219         3       7 <td< td=""><th></th><td></td><td></td><td></td><td></td><td></td><td></td><td>840x2160</td><td></td><td>-</td><td>Source Group</td><td></td><th></th><th></th><td></td></td<>   |             |           |          |                |                |          |                       | 840x2160                |                   | -                  | Source Group |        |     |                   |     |
| 3       7       102 Mark 107       102 Mark 107       102 Mark 107       102 Mark 107         5       7       102 Mark 107       102 Mark 107       102 Mark 107       102 Mark 107         5       7       102 Mark 107       102 Mark 107       102 Mark 107       102 Mark 107         7       7       7       102 Mark 107       102 Mark 107       102 Mark 107         7       7       7       102 Mark 107       102 Mark 107       102 Mark 107         7       7       102 Mark 107       102 Mark 107       102 Mark 107         7       7       102 Mark 107       102 Mark 107       102 Mark 107         7       7       102 Mark 107       102 Mark 107       102 Mark 107         7       7       102 Mark 107       102 Mark 107       102 Mark 107         8       9       102 Mark 107       102 Mark 107       102 Mark 107         9       102 Mark 107       102 Mark 107       102 Mark 107       102 Mark 107         102 Mark 107       102 Mark 107       102 Mark 107       102 Mark 107       102 Mark 107         102 Mark 108       102 Mark 107       102 Mark 107 Mark 107       102 Mark 107       102 Mark 107         102 Mark 107       102 Mark 107 Mark 107 <th></th> <td></td> <td></td> <td></td> <td></td> <td>PC RIGHT</td> <td></td> <td>840x2160</td> <td></td> <td></td> <td></td> <td></td> <th></th> <th></th> <td></td>   |             |           |          |                |                | PC RIGHT |                       | 840x2160                |                   |                    |              |        |     |                   |     |
| 4       72       102 48 4842       102 48 48   |             |           |          | 192.168.168.77 |                |          |                       | 92041080                |                   |                    | 🗖 💭 PC Ri    |        |     |                   |     |
| 1       5       7  |             |           |          |                |                | PLAYER 2 |                       | 840x2160                |                   |                    | PLATE        | R3     |     |                   |     |
| • 7        |             |           |          | 192.168.168.74 |                | PLAYER 4 |                       | 840(2160                |                   |                    | PLATE        | R2     |     |                   |     |
| 7     7 </td <th></th> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>840x2160</td> <td></td> <td></td> <td>O PUNE</td> <td>R5</td> <th></th> <th>192,168,168,75</th> <td></td>   |             |           |          |                |                |          |                       | 840x2160                |                   |                    | O PUNE       | R5     |     | 192,168,168,75    |     |
| 1       2       162.194.194.27       9.402.19       9.402.19       10.21.194.194.27       122.145.183.77         1       2       162.194.194.27       10.21.194.194.27       122.145.183.77       122.145.183.77         1       1       10.21.194.194.27       10.21.194.194.27       122.145.183.77       122.145.183.77         1       1       10.21.194.194.27       10.21.194.194.27       122.145.183.77       122.145.183.77         1       1       10.21.194.194.27       10.21.194.194.27       10.21.194.194.27       122.145.183.77         1       1       10.21.194.194.27       10.21.194.194.27       123.145.183.77       122.145.183.77         1       1       10.21.194.194.27       123.145.183.77       123.145.183.77       123.145.183.77         1       1       121.114.183.77       123.145.183.77       123.145.183.77       123.145.183.77         1       1       121.114.183.77       123.145.183.77       123.145.183.77       123.145.183.77         1       1       121.145.183.77       123.145.183.77       123.145.183.77       123.145.183.77         1       1       121.145.183.77       123.145.183.77       123.145.183.77       123.145.183.77         1       1       121.145.183.77       123.14   |             |           |          |                |                |          |                       | 640x2160                |                   |                    | e o rom      | R4     |     | 192,158,158,74    |     |
| Image: Control of the state of the                        |             |           |          |                |                | PLATERO  |                       | 840x2160                |                   |                    | - Croup_1    |        |     |                   |     |
| Image: Control of the source of the sourc                  |             |           |          |                |                |          | _                     |                         |                   |                    | U U POR      | NU     |     | 192.108.108.70    |     |
| Nume         PL/LT I         Nume           P         10.148.137         10.148.137           Wink         10.06         10.06           FF         6         50.00 arm flog         10.06           Bold Barn Holgt         72         10.148.1437         10.06           Multi Barn Mich         10.108.1437         10.06 arm flog         10.06           Bold Barn Holgt         72         10.148.1437         10.06 arm flog           Bold Barn Holgt         72         10.018.100.000         10.018.100.000           Statistic Statistit Statist Statistic Statistic Statistatistic Statistic Statistat   |             |           |          |                |                |          | Source Property       |                         |                   |                    |              |        | 7 × | 192 108 108 77    |     |
| #         10 14 18 37           Wolk         100           Hugh         100           Soldmann Multi         120           Mathemanic         120  |             |           |          |                |                |          | Name                  |                         | PLATER 4          |                    |              |        |     |                   |     |
| With 100           Hungt 100           Hungt 100           Fill Hungt 100           Boltsam Hungt 200           Boltsam Hungt 200 <td< td=""><th></th><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>192.168.168</td><td></td><td></td><td></td><th></th><th></th><td></td></td<>  |             |           |          |                |                |          |                       |                         | 192.168.168       |                    |              |        |     |                   |     |
| Huget         100           Fit         0           Fit         100           Soldsam Multi         120  |             |           |          |                |                |          | Width                 |                         |                   |                    |              |        |     |                   |     |
| FF         0           Boltsam Horgit         139           Boltsam Horgit         72           Main Braun Mich         129 Hord Michael dottaam           Schlara NG,         120 Hard Ale Schlananel           Mith Tam Link Josef         mark 122 Hard Ale Schlananel           Mith Tam Link Josef         mark 122 Hard Ale Schlananel           Mith Tam Link Josef         mark 122 Hard Ale Schlananel           Mith Tam Link Josef         mark 122 Hard Ale Schlananel           Mith Tam Link Josef         mark 122 Hard Ale Schlananel           Mith Tam Link Josef         mark 122 Hard Ale Schlananel           Mith Tam Link Josef         mark 122 Hard Ale Schlananel           Mith Tam Link Josef         mark 122 Hard Ale Schlananel           Mith Tam Link Josef         122 Hard A  |             |           |          |                |                |          | Height                |                         |                   |                    |              |        |     |                   |     |
| Bulkara Walk         128           Software Walk         128           Software Walk         120           Software Walk         120 </td <th></th> <td></td> <th></th> <th></th> <td></td>  |             |           |          |                |                |          |                       |                         |                   |                    |              |        |     |                   |     |
| Definition         70           Num Brauch Height         70           Num Brauch         102 104 104 745000annend/obtasennit           Coldman UD,         102 104 104 745000annend/obtasennit           Kitt Thum Abbitsis         margin 200 104 745000annend/obtasennit           Thum Channend/obtases of the sub-obtasenan 200 201 104 742000         Margin 200 104 742000  |             |           |          |                |                |          | SubStream Width       |                         | 1280              |                    |              |        |     |                   |     |
| Mail Starten (Mail         102 114 114 21 27000 Automit diverganition           Mail Starten (Mail         102 114 114 21 27000 Automit diverganition           Mail Starten (Mail         102 114 114 21 27000 Automit diverganition           Mail Starten (Mail         102 114 114 21 27000 Automit diverganition           Mail Starten (Mail         102 114 114 21 27000 Automit diverganition           Mail Starten (Mail Automit Autom   |             |           |          |                |                |          | SubStream Height      |                         | 729               |                    |              |        |     |                   |     |
| Martine         10, 10, 10, 10, 10, 10, 10, 10, 10, 10,  |             |           |          |                |                |          | Main Stream URL       |                         | 192 168 168       | 74.9705/0hannel+0/ | steams o     |        |     |                   |     |
| B177 Proteo Address     maj P172 V14 V14 V14 V16 V1600000       B178 Proteo Address     222 021 V12 V14 V14 V16 V16000000       Dia multical address of the privation     222 021 V12 V10 V14 V16 V16000000       Dia multical address of the privation     222 021 V12 V10 V16 V16 V16000000       Private View Multical address of the private View     222 021 V12 V10 V16 V16 V16 V1600000       Private View multical address of the multical address of the private View     222 021 V12 V10 V16 V16 V16 V16 V16 V10 V16 V16 V16 V16 V10 V16   |             |           |          |                |                |          | DUDDITIAN UNL         |                         | 192,108,108       | 1487485549800      | STTATION 1   |        |     |                   |     |
| BTP Proves 65013         no 9/10/12/01/14/14/15/050007           Dia malandi abasis dha privanyi beam         221/20/14/14/16/05000           Dia malandi abasis dha privanyi beam         221/20/14/14/16/05000           Dia malandi abasis dha privanyi beam         221/20/14/14/16/05000           Dia malandi abasis dha privanyi beam         221/20/14/14/10/00  |             |           |          |                |                |          | PITP sub address      |                         | dia 1192 16       | 1487485546501      |              |        |     |                   |     |
| The multical dates of the solution 202 03 182 A 1900<br>The multical dates of the solution 202 03 182 A 1900<br>Forward the multical dates of the must beam 222 03 182 A 1900<br>Forward the multical dates of the solution 222 03 182 A 2000<br>Forward the multical dates of the solution 222 03 182 A 2000<br>Forward the multical dates of the solution 222 03 182 A 2000<br>Forward the multical dates of the solution 222 03 182 A 2000<br>Forward the multical dates of the solution 222 03 182 A 2000<br>Forward the multical dates of the solution 222 03 182 A 2000<br>Forward the multical dates of the solution 222 03 182 A 2000<br>Forward the multical dates of the solution 222 03 182 A 2000<br>Forward the multical dates of the solution 222 03 182 A 2000<br>Forward the multical dates of the solution 222 03 182 A 2000  |             |           |          |                |                |          | RSTP preview addres   |                         | dsp.(192.16)      | 1687485540502      |              |        |     |                   |     |
| The multical ideas of the sub-strain 2023 01 187 2000 Forward the multical ideas of the sub-strain 2023 01 183 7 2000 Forward  |             |           |          |                |                |          | The multicast address | of the primary stream   | 239 230 168       | 74:1000            |              |        |     |                   |     |
| Ferrer The multical address of The nucleater 222 203 1437 4300 Ferrer The multical address of The nucleater 222 203 1437 42000 Ferrer The multical address of The nucleater 222 203 1437 42000 Ferrer The multical address of The nucleater address of |             |           |          |                |                |          | The multicast address | of the sub-stream       | 239,240,168       | 74,2000            |              |        |     |                   |     |
| Forward the multicast edites of the sub-blotterum 228 203 1487 4 2000  |             |           |          |                |                |          | Forward the multicast | address of the main sh  | eam 238,250,168   |                    |              |        |     |                   |     |
| Falcons Out  |             |           |          |                |                |          | Forward the multicast | address of the sub-bits | tream 238.250.168 | 74:2000            |              |        |     |                   |     |
| Fritone Out  |             |           |          |                |                |          |                       |                         |                   |                    |              |        |     |                   |     |
| Falcone Out  |             |           |          |                |                |          |                       |                         |                   |                    |              |        |     |                   |     |
| Fritone Out  |             |           |          |                |                |          |                       |                         |                   |                    |              |        |     |                   |     |
| Falcone Out  |             |           |          |                |                |          |                       |                         |                   |                    |              |        |     |                   |     |
| Falsone Out  |             |           |          |                |                |          |                       |                         |                   |                    |              |        |     |                   |     |
| Felicien Out   |             |           |          |                |                |          |                       |                         |                   |                    |              |        |     |                   |     |
| Fritone Out  |             |           |          |                |                |          |                       |                         |                   |                    |              |        |     |                   |     |
| Futuren Out  |             |           |          |                |                |          |                       |                         |                   |                    |              |        |     |                   |     |
|  |             |           |          |                |                |          |                       |                         |                   |                    |              |        |     |                   |     |
|  |             |           |          |                |                |          |                       |                         |                   |                    |              |        |     |                   |     |

Figure 26

**Mode**: Clicking this option will allow the User to change the Transceiver signal mode to Direct Connection or Forwarding mode.

## 8.3.3 Output tab

After clicking on the Output tab we can see two main sections. Figure 27

| Image         Image <th< th=""><th>🗐 Syste</th><th>n Configu</th><th>ration</th><th></th><th></th><th>_</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>1 X</th></th<>   | 🗐 Syste | n Configu | ration |                |             | _             |          |     |         |           |    |                |          |                        | 1 X    |
|--|---------|-----------|--------|----------------|-------------|---------------|----------|-----|---------|-----------|----|----------------|----------|------------------------|--------|
| initial control       form  |         | euice     | -      | eat Output     | -           | IPO User      | Data     |     |         | System    |    | Loga           |          | Selectural NC 192198.9 | (8.163 |
| Output       β       δ       0 </td <td></td> <td>Search</td> <td>~</td> <td>od Device</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Delete</td> <td></td> <td></td> <td></td> <th></th> <td></td>  |         | Search    | ~      | od Device      |             |               |          |     |         | Delete    |    |                |          |                        |        |
| No         Co         PAD         Description         Object           1         1         1         10         1000000000000000000000000000000000000  | Output  | Nodes     |        |                |             |               |          |     | ALC: NO | out Nodes |    |                |          |                        |        |
| 1        | - 44    | No        | 0      | PAss           | Device Name | Output Re     | solution |     | - 48    | No.       | 0  |                | Name     | Output Resolution      |        |
| 1       7)       1021481427       PLARS       1021480409         2       7)       1021481427       PLARS       1021480409         4       72       1021481427       PLARS       1021480409         5       71       1021481427       PLARS       1021480409         6       75       1021481427       PLARS       1020180609         6       75       71       1021481427       PLARS       1020180609         6       71       1021481427       PLARS       1020180609         6       71       1021481427       PLARS       1020180609         7       71       1021481427       PLARS       1020180609   |         | 1         | 78     | 192,168,168,78 | PC RIGHT    | 1820x1080@60  |          |     |         | 1         | 79 | 192 108 108 70 | PLAYER 0 | 1820x1080@60           |        |
| • 3       77       1021484877       PC/LDT       10201486869         • 4       72       1021484827       PC/RDT       10201486869         • 5       74       1021484827       PC/RDT       10201486869         • 7       70       1021484827       PC/RDT       10201386869         • 7       70       1021484827       PC/RDT       10201386869         • 7       70       1021481827       PC/RDT       10201386869         • 8       7       70       1021481827       PC/RDT       10201386869         • 8       7       70       1021481827       PC/RDT       10201386869         • 8       7       70       1021481827       PC/RDT       10201386969 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>1920x1080@60</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><th>1820x1080g60</th><td></td></td<>  |         |           |        |                |             | 1920x1080@60  |          |     |         |           |    |                |          | 1820x1080g60           |        |
| •     •     72     10211638427     Puetra 2     10201686890       •     •     •     73     1021163827     Puetra 3     1020169690       •     •     •     73     1021163827     Puetra 4     1020169690       •     •     73     1021163827     Puetra 5     1020169690       •     •     74     1021163827     Puetra 5     1020169690       •     •     •     •     •     •     •       •     •     • <t< td=""><td></td><td></td><td></td><td></td><td></td><td>1920x10404860</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><th>1920+1980@60</th><td></td></t<>  |         |           |        |                |             | 1920x10404860 |          |     |         |           |    |                |          | 1920+1980@60           |        |
| • • • • • • • • • • • • • • • • • • •  |         |           |        |                | PLAYER 2    | 1920+10804860 |          |     |         |           |    |                | PLATER 3 | 1920x1080@60           |        |
| • • 75     152 148 148 75     Puetice 5     1520 148 148 75     1520 148 148 75     Puetice 5     1520 148 148 75     Puetice 5     1520 148 148 75     Puetice 5     1520 148 148 75     1520 148 148 75 <td< td=""><td>-</td><td></td><td></td><td>192.158.158.74</td><td>PLATER 4</td><td>1920+1040-060</td><td></td><td></td><td></td><td></td><td></td><td>192.168.168.74</td><td>PLOTER 4</td><th>1920x1080@60</th><td></td></td<> | -       |           |        | 192.158.158.74 | PLATER 4    | 1920+1040-060 |          |     |         |           |    | 192.168.168.74 | PLOTER 4 | 1920x1080@60           |        |
| 7       70       192 148 148 70       Puetrice 8       19201148 068 00         8       71       192 148 148 71       Puetrice 8       19201148 068 00         8       71       192 148 148 71       Puetrice 8       19201148 068 00         8       71       192 148 148 71       Puetrice 8       19201148 068 00         8       71       192 148 148 71       Puetrice 8       19201148 068 00         8       71       192 148 148 71       Puetrice 8       19201148 068 00         8       71       192 148 148 73       Puetrice 8       19201148 068 00         8       71       192 148 148 73       Puetrice 8       19201148 068 00         8       71       192 148 148 73       Puetrice 8       19201148 068 00         8       71       192 148 148 73       Puetrice 8       19201148 068 00         8       71       192 148 148 73       Puetrice 8       19201148 00         9       7       71       192 148 148 17       19201148 00         9       7       71       192 148 148 17       Puetrice 8         9       7       71       192 148 148 17       Puetrice 8         9       7       71       192 148 148 17       1920  |         |           |        | 182.168.168.75 | PURIER 5    | 1920x1080@60  |          |     |         |           |    | 192,168,168,75 | PLATER 5 | 1920x1080@60           |        |
|  |         |           |        | 192.158.158.70 | PLAYER D    | 1920x1040@60  |          |     |         |           |    | 192.168.168.77 | PCLEFT   | 1920x1080g50           |        |
|  |         |           |        | 102.108.108.71 | PORDK1      | 1920410908260 |          |     |         |           |    | 19210610678    | PCRORE   | 1020x1080g900          |        |
|  |         |           |        |                |             |               |          | Add |         |           |    |                |          |                        |        |
|  |         |           |        |                |             |               | Fulso    | 185 |         |           |    |                |          |                        |        |

Figure 27

- A In this section there are 2 options that the user can use to define which Transceivers will be used as signal outputs, these options are: Search and Add device.
- Search: Clicking this option will allow the User to scan the network to see a list of all connected Transceivers. To select the Transceivers to be used as signal outputs, the user must a) select the desired Transceivers from the list and, b) click "Add". After clicking "Add", the selected Transceivers will appear on the right. Figure 28

| st System | Configura  | tion   |   | /  |   |   |                   |      |     |          |         |                      |               |  |  | 7 X |
|-----------|--|--|---|--|---|---|-------------------|------|-----|----------|---------|----------------------|---------------|--|--|-----|
| De        |  |  | $\langle$   | Output   |   | R   | User              | Data | 544 | •        | System  |                      | Logo          |  | Select Local NC  |     |
| 5         | arch   |  |   |  |   |   |                   |      |     |          |         |                      |               |  |  |     |
| Overvite  | 015  |  |   |  |   |   |                   |      |     | All Over | ANodes  |                      |               |  |  |     |
| All       | 86.  |  |   | IP AND   | Device Name   | · · · · · · · · · · · · · · · · · · ·   | Output Resolution |      |     | All      | No.     | 0                    |               | Name   | Output Resolut   | 64  |
|           | 1<br>2<br>3<br>4<br>5<br>5<br>4<br>5<br>5<br>6<br>6<br>6<br>7<br>6 | 78<br>73<br>77<br>72<br>74<br>75<br>78<br>79<br>71 | 982 M<br>982 M<br>982 M<br>982 M<br>982 M<br>982 M<br>982 M | 44, 1144, 79<br>44, 5142, 77<br>44, 5142, 72<br>44, 5142, 72<br>44, 5142, 73<br>44, 5142, 75<br>44, 5142, 75<br>44, 5142, 71 | C (1907)<br>R (1977)<br>R ( | 1001-1000<br>1001-1000<br>1001-1000<br>1001-1000<br>1001-1000<br>1001-1000<br>1001-1000 |                   | •    |     |          | 1 2 3 4 | 71<br>72<br>77<br>78 | 92 564 869.75 | nunta 1<br>nunta 2<br>nunta 2<br>nunta 1<br>nunta 2<br>nunta | 100-100gd6<br>100-100gd6<br>100-100gd6<br>100-100gd6<br>100-100gd6 |     |
|           |  |  |   |  |   |   |                   |      |     |          |         |                      |               |  |  |     |

Figure 28

Add Device: By clicking this option, the User will be able to add a Transceiver manually. To add a transceiver manually, click on Add Device. After clicking, a pop-up window will appear where the user must a) enter the IP address of the Transceiver they wish to add b) click "OK". Figure 29

| <b>a</b> 1 5 |        |      | ation  |                |             |             |                  |                            |        |        |        |    |                |          | 7 ×                               |
|--------------|--------|------|--------|----------------|-------------|-------------|------------------|----------------------------|--------|--------|--------|----|----------------|----------|-----------------------------------|
|              | Devi   |      | input  |                |             | PC          | User             | Data                       | Salus  |        | System |    | Logs           |          | O Select Local NG 192,168,168,163 |
|              |        | irch | Add De |                |             |             |                  |                            |        |        | iete   |    |                |          |                                   |
| 04           | eur Ne |      |        |                |             |             |                  |                            |        | Output | Nodes  |    |                |          |                                   |
| ۳            |        |      |        |                |             |             |                  |                            |        |        |        | _  | -              |          |                                   |
|              | ~      | NO.  | Ð      | P7-602         | Device Name |             | Output Resolutio | ~ ~ ~                      |        | ~      | NO.    | 10 |                | Name     | Culput Resolution                 |
|              |        |      |        | 192.168.168.73 | PLATER 3    | 1920x1080@4 | 50               |                            |        |        |        |    | 192.168.168.70 | PLATER 0 | 1920x1080@60                      |
|              |        |      |        | 192.168.168.78 | PCRIGHT     | 1920x1080@4 | 50               |                            |        |        |        |    | 192.168.168.71 | PLAYER 1 | 1920x1080@60                      |
|              |        |      |        | 192,168,168,74 | PLATER 4    | 1920x1080@4 | 10               |                            |        |        |        |    | 192.168.168.72 | PLAYER 2 | 1920x1080@60                      |
|              |        |      |        | 192.168.168.72 | PLATER 2    | 1920x1080@4 |                  |                            |        |        | 4      |    | 192.168.168.73 | PLATER 3 | 1920x1080@60                      |
|              |        |      |        | 192.168.168.77 | PCLEFT      | 1920x1080@4 |                  |                            |        |        |        |    | 192,168,168,74 | PLATER 4 | 1920+1080@60                      |
|              |        |      |        | 192.168.168.70 | PLAYER 0    | 1920x1080@4 |                  |                            |        |        |        |    | 192.168.168.75 | PLAYER 5 | 1920x1080@60                      |
|              |        |      |        | 192.168.168.75 | PLATER 5    | 1920x1060@4 |                  |                            |        |        |        |    | 192.168.168.77 | POLIEFT  | 1920+1080@60                      |
|              |        |      |        | 192.168.168.71 | PLAYER 1    | 1920x1080@4 |                  |                            |        |        | •      |    | 192,168,168,78 | PC RIGHT | 1920x1080@60                      |
|              |        |      |        |                |             |             |                  | taning P<br>Ending P<br>OK | Cancel |        |        |    |                |          |                                   |
|              |        |      |        |                |             |             |                  | Fulscreen                  | 0      | ut     |        |    |                |          |                                   |
|              |        |      |        |                |             |             |                  |                            |        |        |        |    |                |          |                                   |

Figure 29

B In this section there is one option that the User can use to mange the Transceivers selected as outputs, this option is: Delete.

**Delate**: Clicking this option allows the User to delete one or more Transceivers selected as output. To do this, a) select the Transceiver(s) you wish to delete, b) click "Delete," and c) confirm the deletion. Figure 30

| <b>31</b> Sys | en Config | unition |         |               |             |              |           |     |                   |        |    |                |          | 7 X                               |
|---------------|-----------|---------|---------|---------------|-------------|--------------|-----------|-----|-------------------|--------|----|----------------|----------|-----------------------------------|
|               | Device    |         | Next    | Output        | 54          | PC UN        | e eva     | 544 |                   | System |    | Logs           |          | Delect Local NG 192 198 198 193 - |
|               | Search    |         | ANDeres |               |             |              |           |     | Deli              | ~ -    |    | — Б            |          |                                   |
| Over          | Inches    |         |         |               |             |              |           |     | ONNEN             | 10.045 |    |                |          |                                   |
|               | 1 140     |         | 0       | IP A52        | Device Name | Overal       | headdon - |     | All               | 80.    | 10 | P              | Katte    | Output Resolution                 |
|               | 1         | 73      |         | 92.168.168.73 | PLATER 3    | 1920x1080@40 |           |     | 8 1               | 21     | 9  | 192 168 168 70 | PLAYERS  | 1820+1080(840                     |
|               |           |         |         |               |             | 1920+1080@60 |           |     | 2                 |        |    |                |          | 1820+1080@60                      |
|               |           |         |         | 92 168 168 74 |             | 1920+1080@40 |           |     |                   |        |    | 192 168 168 72 | PLATER 2 | 1920-1080-010                     |
|               |           |         |         |               |             | 1920+1080@10 |           |     | - 4               |        |    |                |          | 1820+1080@60                      |
|               |           |         |         |               |             | 1920x1080@10 |           |     | 5                 |        |    |                |          | 1920+1080@60                      |
|               |           |         |         |               |             | 1920x1080@10 |           |     | 6                 |        |    |                |          | 1820+1080@40                      |
|               |           |         |         |               |             | 1920x1080@10 |           |     | 7                 |        |    |                |          | 1820+1080@60                      |
|               |           |         |         |               |             | 1920x1080@40 |           |     |                   |        |    |                |          | 1820+1080@40                      |
|               |           |         |         |               |             |              |           |     | X<br>No. 17<br>No |        |    |                |          |                                   |
|               |           |         |         |               |             |              |           |     |                   |        |    |                |          |                                   |

Figure 30

#### 8.3.4 Site tab

After clicking on the Side tab we can see two main sections. Figure 31



Figure 31

A In this section there are three options that the user can use to create and configure video walls and matrix, these options are: Walls, Matrix and Delete.

Walls: Clicking this option will allow the User to create and configure video walls. After clicking Walls a pop-up window will appear where the user must a) enter a name for the video wall, b) enter an ID, remember that this number must be unique for each video wall, c) select the Transceiver type; the Transceiver type for the 500860 is G1001U and for the 500861 is GB1010U, d) enter the number of rows the video wall will have, e) enter the number of columns the video wall will have, f) select the screen resolution, g) enable Free Mode option if they want to customize multiple views, h) enable Overlay Mode option if they want to use PIP and POP, and i) click Create. Figure 32



Figure 32

After clicking **Create** a new pop-up window will appear where the user must, by drag and drop, assign the Transceivers to their corresponding screens. Figure 33



Figure 33

After assigning the transceivers to the displays, close the windows to save the changes.

**Note**: If you want to have the multi-view option on a single display, you must create a one-row by one-column video wall.

Matrix: Clicking on this option will allow the User to create and configure the matrix. After clicking on Matrix, a pop-up window will appear where the user must a) enter an ID, remember that this number must be unique for each matrix, b) enter a name for the matrix, c) enter the number of rows the matrix will have, d) enter the number of columns the matrix will have, e) select whether to send audio and video or just video, f) select the video transmission mode, g) activate or deactivate audio mixing and h) click on **Create**. Figure 34



Figure 34

After clicking "Create," the user must select the Transceivers that will be part of the new matrix. To do so, click "Bind Node." After clicking, a pop-up window will appear where the user must: a) select the Transceivers and b) click "Add". Close the windows to save the changes. Figure 35

| II Matris            |          |         |                |        |                   |       |                |           |               |                |        |                   | ? × |
|----------------------|----------|---------|----------------|--------|-------------------|-------|----------------|-----------|---------------|----------------|--------|-------------------|-----|
|                      | all lind | Node    |                |        |                   |       |                |           |               |                |        | 7 X               |     |
| Matrix               | Output   | iode    |                |        |                   |       |                | Mubrix No | arrie: Matrix | x              |        |                   |     |
|                      | All      | Ð       | IP Addr        | Status | Output Resolution | g     |                | All       | Ð             | IP Addr        | Status | Output Resolution |     |
|                      |          | 70      | 192.168.168.70 |        | 1920+1080@60      | Bound |                |           | 70            | 192.158.158.70 |        | 1920+1080@60      |     |
|                      |          |         |                |        | 1920x1080@60      |       |                |           |               |                |        | 1820+1080@60      |     |
|                      |          |         |                |        | 1920x1080@60      |       |                |           |               |                |        | 1920+1080@60      |     |
|                      |          |         |                | Online | 1920x1080@60      | Bound |                | •         |               |                |        | 182011080@60      |     |
|                      | •        | 14      |                |        | 1920+1080@60      |       |                |           |               |                |        |                   |     |
|                      | •        |         |                |        | 1820+1080@60      |       |                |           |               |                |        |                   |     |
|                      | •        |         |                |        | 1820+1080@60      |       |                |           |               |                |        |                   |     |
|                      | •        |         |                |        | 1920x1080@60      |       |                |           |               |                |        |                   |     |
|                      |          |         |                |        |                   |       | Delete         |           |               |                |        |                   |     |
|                      |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
|                      |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
|                      |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
|                      |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
|                      |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
|                      |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
| N                    |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
|                      |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
|                      |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
| <u>\</u>             | -        | -       |                |        |                   |       |                |           |               |                |        |                   |     |
| Delete Update        | Bin      | id Node | Background     |        |                   |       |                |           |               |                |        |                   |     |
| 0                    |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
| Name                 |          |         |                |        |                   |       | Matrix         |           |               |                |        |                   |     |
| Row                  |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
| Cel                  |          |         |                |        |                   |       |                |           |               |                |        |                   |     |
| Audio and Video Mode |          |         |                |        |                   |       | Both Video And | Audio     |               |                |        |                   |     |
| Video Stream Mode    |          |         |                |        |                   |       | Udp Multicast  |           |               |                |        |                   |     |
| Audo Mix             |          |         |                |        |                   |       | Disable        |           |               |                |        |                   | *   |
|                      |          |         |                |        |                   |       |                |           |               |                |        |                   |     |

Figure 35

Delate: Clicking this option allows the User to delete one or more Walls or Matrix. To do this, a) select the Walls or Matrix you wish to delete, b) click "Delete," and c) confirm the deletion. Figure 36



Figure 36

B In this section there are 3 option that the User can use to mange the Walls and Matrix, these option are: Create Group, Site and Delete.

**Create Group**: By clicking this option will allow the User to create Walls or Matrix groups. To do so, a) click "Create Group," b) select the Walls or Matrix you want to add to the group from the list on the left, and c) click "Add". Figure 37



Figure 37

Site: Clicking on this option will bring up a pop-up window where the User can see the created groups and the Transceivers belonging to each group. Figure 38

| System Configuration |               |               |           |                    |        | 7 ×                              |
|----------------------|---------------|---------------|-----------|--------------------|--------|----------------------------------|
| Device               | Input Output  | 584 PC        | User Data | Status System Logs |        | Select Local NIC 192 168 168 163 |
|                      | Matrix Delete |               |           | Create Group Site  | Delete |                                  |
| Screen List          |               |               |           | - M Group          |        |                                  |
|                      |               | E Dialog      |           |                    | 1 ×    | 0                                |
| AI IO                | Name          | List of Pisca |           | 5.8a               |        | 20                               |
| -                    | Matrix        |               | Manue     | Source and Group   |        | #10:1)                           |
| • 1                  | video Wall    | A Comp 1      | Nerve     | - Source Group     |        |                                  |
|                      |               | 2 Group_1     |           |                    |        |                                  |
|                      |               | 2 01100_2     |           | PLATER 3           |        |                                  |
|                      |               |               |           | PCLEFT             |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           | PLATER 5           |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               |           |                    |        |                                  |
|                      |               |               | Puisuten  | 400                |        |                                  |

Figure 38

Delate: Clicking this option allows the User to delete one or more groups To do this, a) select the group(s) you wish to delete, b) click "Delete," and c) confirm the deletion. Figure 39



Figure 39

#### 8.3.5 IPC tab

In this section the User can add video sources compatible with H.264/H.265 that are connected to the network such as IP cameras or any device that uses the RTSP protocol. After clicking on the IPC tab we can see two main sections. Figure 40



Figure 40

A In this section there are seven options that the User can use to add RTSP video sources, these options are: Search, Clear, Delete, Password, Auth, RTSP/RTMP and Import.

Search: Clicking this option will allow the User to scan the network to see a list of all connected RTSP video sources. To select the RTSP video sources to be used as signal inputs, the user must a) select the desired RTSP video source from the list and, b) click "Add". After clicking "Add", the selected RTSP video source will appear on the right. Figure 41





**Clear**: Clicking this option will allow the User to clear the RTSP video sources list.

- Delete: Clicking this option allows the User to delete one or more RTSP video sources To do this, a) select the group(s) you wish to delete, b) click "Delete," and c) confirm the deletion. Figure 41
- **Password**: Clicking this option will allow the user to enter the username and password for any RTSP video source if required.
- Auth: Clicking this option will allow the user to authenticate the device's RTSP address. This is recommended every time IP cameras are added. If authentication is unsuccessful, you will need to enter the RTSP streaming address manually.
- Add RTSP/RTMP: Clicking this option will allow the User to manually add an RTSP video source. To add a video source manually, click "Add RTSP/RTMP." After clicking, a popup window will appear where the user must a) enter the RTSP address of the primary stream, b) enter the RTSP address of the secondary stream, c) click **Fetch** to authenticate the connection, and d) click **Save**. Figure 42

| 1 System Configuration                         |  |                   |  |                   |     |  | 7 ×             |
|--|--|-------------------|--|-------------------|-----|--|-----------------|
| Device Heat Output                             | Sile PC User                                   | Data Stat         | ka System  | Logs              |     | Select Local NC                                    | 192 168 168 163 |
| Search Clear Dolear Password                   |  |                   | Add Group  | Delete Move Up    |     | Rename   |                 |
| Add RTSP/RTMP Import                           |  |                   | Property   | Node Add Poling S |     |  |                 |
| Al No. P Usemane Password<br>1 122.108.108.191 | Address Name                                   | Asin stream       | <ul> <li>Source Group</li> <li>PC RIGHT</li> <li>PLAYER 3</li> </ul> |                   |     |  |                 |
| 2 192 198 198 17<br>3 192 198 198 59           |  | 040               | POLIEFT  |                   |     |  |                 |
|  |  |                   | PUNERS     PUNERS  |                   |     | 192.108.108.74<br>192.108.108.75<br>192.108.108.71 |                 |
|  |  |                   | DUMERO   |                   |     |  |                 |
|  | III AAA KESA/KEMA                              |                   |  |                   | 7 × |  |                 |
| 뭐 ►  | Primary Steam RTSP Abbess Rep. F192 198 198 19 | 15541             |  | Connection        | TOP |  |                 |
| 😐 — <b>&gt;</b>                                | Sub Steam RTSP Address                         | 42                |  | Connection        | TOP |  |                 |
|  | Device id d349836d3dc3cc70cHe171504964651      |                   |  |                   |     |  |                 |
|  | P.452 192 198 198 191                          |                   |  |                   |     |  |                 |
|  | INden 1920 Compl                               | ieled.            |  |                   |     |  |                 |
|  | Height 1080                                    |                   |  |                   |     |  |                 |
|  | C  | Fetch Save        |  |                   |     |  |                 |
|  |  | <b>▲</b><br> <br> |  |                   |     |  |                 |
|  |  | Fulscreen         | Out  |                   |     |  |                 |

Figure 42

After you have added the RTSP video source, you can add it to the video source list.

In this section there are 8 options that the User can use to mange the inputs video sources, these options are: Add Group, Delete, Move Up, Move Down, Rename, Property, Mode, and Add Polling. These options are the same as those in Section 7.3.2 B; see that section for details on how each option works.

# 8.3.6 User tab

In this section, the user can create, edit, and delete user accounts. There are two types of user accounts: the administrator account, which has access to the system configuration and control interface, and regular user accounts, which only have access to the control interface. After clicking on the User tab we can see two main sections. Figure 43



Figure 43

A In this section there are three options that the User can use to manage user accounts, these options are: Add User, Delete User and Modify User.

Add User: Clicking this option will allow the user to add a user account. After clicking Add User, a pop-up window will appear where they must a) enter a username, b) enter a password for this account, and c) click **OK**. Figure 44





- **Delete User**: Clicking this option will allow the User to delete a user account. After selecting the account and clicking **Delete User**, a pop-up window will appear where the user must confirm that they want to delete the account by clicking **Yes**.
- Modify User: Clicking this option will allow the User to edit an account. After selecting the account and making changes, click Modify User to save the changes.

In this section, there are two options that the User can use to allow user accounts to access video sources, video walls, and televisions, these options are: Source and Group and Sites.

**Source and Group**: Here the User, after selecting a user account, can select from the list which video sources that user account will have access to.

Sites: Here the User, after selecting a user account, can select from the list which TV's, matrix and video walls that user account will have access to.

#### 8.3.7 Data tab

In this section, the User can upload the data/configuration made from the Windows version of MuxLab KVM & AV Management Tool to different Android or iOS control devices. After clicking on the Data tab we can see two main sections. Figure 45



Figure 45

A In this section, the User can open or close the server so that other control devices can send data to it; it must remain open for data downloads. To open or close the server, the User must a) verify that the Local IP address matches the IP address of the computer running MuxLab KVM & AV Management Tool and b) click "Open/Close Service". Figure 46

| System Configuration      |            |       |           |                          |             |                      |                   | · · · |
|---------------------------|------------|-------|-----------|--------------------------|-------------|----------------------|-------------------|-------|
| Device Induit             | Ovevi Sile | PC .  | User Data | Datus Dysk               | em Loga     |                      | SelectLocal NC 18 |       |
| Download Management       |            |       |           | Opical Management        |             |                      |                   |       |
| Local IP: 192.168.168.163 | <b>–</b> a |       |           | Remote P.                |             |                      |                   |       |
| Transmission Information  |            |       |           | Transmission Information |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           | Open Serv  | ice 🚽 | — b       |                          | Upload Data | Upload Configuration | Upload Image      |       |
|                           |            |       |           |                          |             |                      |                   |       |
|                           |            |       |           |                          |             |                      |                   |       |

Figure 46

In this section, the User can upload data or configurations created from the current control aevice to other control devices. The other device must also be in the open server state. To upload data or configurations to another device, the User must: a) Enter the IP address of the device to which you want to upload data/configuration, b) click Upload Data to load the data, c) click Upload Configuration to load configuration, and d) click Upload Image to load images. Figure 47



Figure 47

#### 8.3.8 Status tab

This is a display section where the User can check/view the operating status of the transceivers. Clicking on the Status tab displays eleven important pieces of information about the Transceivers: ID, IP Address, Name, Type, Status, Stream Protocol, Number of Restarts, Amount of Data Transmitted, Amount of Data Received, Percentage of CPU Used, and Amount of Memory Used. Figure 48

| 5ystem | Configuration  |          |        |        |                 |                    |             | •           |        | 7 ×                               |
|--------|----------------|----------|--------|--------|-----------------|--------------------|-------------|-------------|--------|-----------------------------------|
| Des    | ice Input      | Oviput   | 504    | PC     | Jaer Data       | Status             | System Logs |             |        |                                   |
| _      |                |          |        |        |                 |                    |             |             | •      | select Local NIC 192,168,168,163  |
| 10     | P              | Name     | 7,94   | Status | Stream Protocol | Number of Restarts | Transmit    | Receive     | CPU    | Memory                            |
| 70     | 192.168.168.70 | PLATER 0 | Output |        |                 |                    |             | 4.20 Mbps   |        | total: 458.40 MB, used: 99.27 MB  |
|        | 192.168.168.71 | PLATER 1 | Output |        |                 |                    |             |             |        | total: 458.40 MB, used: 94.67 MB  |
| 72     | 192.168.168.72 | PLATER 2 | Output |        |                 |                    | 2.00 Kbps   | 424.00 Kbps | 28.53% | total: 458.40 MB, used:88.75 MB   |
| 73     | 192.168.168.73 | PLATER 3 |        |        |                 |                    |             |             |        | total: 458.40 MB, used:83.94 MB   |
|        | 192.168.168.74 | PLATER 4 | Output |        |                 |                    |             |             |        | total:458.40 MB, used:81.83 MB    |
|        | 192.168.168.75 |          |        |        |                 |                    |             |             |        | total:458.40 MB, used:82.44 MB    |
|        |                |          |        |        |                 |                    |             |             |        | total:458.40 MB, used:91.36 MB    |
|        |                |          |        |        |                 |                    |             |             |        | total: 458.40 MB, used 92.15 MB   |
|        |                |          |        |        | Udp Multicast   |                    |             |             |        | total:458.40 MB, used:92.11 MB    |
|        |                |          |        |        | Udp Multicast   |                    |             |             |        | 10tal: 458.40 MB, used:83.13 MB   |
|        |                |          |        |        | Udp Multicast   |                    |             |             |        | total: 458.40 MB, used 92.13 MB   |
|        |                |          |        |        | Udp Multicast   |                    |             |             |        | total: 458.40 MB, used:89.03 MB   |
|        |                |          |        |        | Udp Multicast   |                    |             |             |        | total: 458.40 MB, used:82.35 MB   |
|        |                |          |        |        | Udp Multicast   |                    |             |             |        | 10fal: 458 40 MB, used 82.62 MB   |
|        |                |          |        |        | Udp Multicast   |                    |             |             |        | total: 458.40 MB, used: 95.20 MB  |
|        |                |          |        |        | Udp Multicast   |                    |             | 4.36 Mbps   |        | total: 458, 40 MB, used: 99,80 MB |
|        |                |          |        |        |                 |                    |             |             |        |                                   |
|        |                |          |        |        | Fulscree        |                    |             |             |        |                                   |

Figure 48

#### 8.3.9 System tab

This section allows the user to save data and configurations made on the transceivers to the transceiver of their choice. This operation is required every time a configuration is modified in the system. It is also possible to restore saved data and configurations from the transceiver on which they were saved. To save or recover data and settings, the User must a) enter the IP address of the Transceiver in which we are going to save or recover the data and settings, b) enable the **Force Sync Data** option, c) click on **Deliver Data** or **Get the Data** as the case may be, d) click on **Yes** to confirm the operation, and e) click on **Save**. Figure 49

| System Configurat  | 6on        |     |                                       |           |                         |                       |                          | -             |     |           |                              | 1 1 |
|--|------------|-----|---------------------------------------|-----------|-------------------------|-----------------------|--------------------------|---------------|-----|-----------|------------------------------|-----|
| Device   | Head       | Ngu | - 54 - PC                             | User      | Data                    | Status                | System                   | Logs          |     |           | O Select Local NIC 182,168.1 |     |
| System Setting   |            |     |                                       |           |                         | Manager Der           | angs.                    |               |     |           |                              |     |
|  |            |     |                                       |           |                         |                       |                          |               |     |           |                              |     |
| Default Fontsize   |            |     |                                       |           |                         | Manager IP            |                          |               |     |           |                              |     |
| Preview Mode:  |            |     | Source                                | 😸 Window  | 🐱 Scene                 |                       |                          |               |     |           |                              |     |
| Multi-vians  |            |     |                                       |           |                         | Farce Sync C          | afa                      |               |     | O Disable | <ul> <li>Enable</li> </ul>   |     |
| Multicast Search   | Mode       |     |                                       |           |                         |                       |                          |               |     |           |                              |     |
| Search Wode  |            |     | • ALL                                 | Multicast | Orsedunt                |                       |                          |               |     | <b></b>   |                              | b   |
| Current Streamin   | g Mode     |     | <ul> <li>Primary Stream</li> </ul>    | 0.54      | Ostram                  |                       |                          |               |     | T         |                              |     |
| Scene Call Mode<br>Well Mode Doole   |            |     | <ul> <li>Fast</li> <li>Mon</li> </ul> | - Pi      | ndre                    |                       |                          |               |     |           |                              |     |
| Enter The Control  | i Page     |     | <ul> <li>Celast</li> </ul>            | 0.74      | st                      |                       |                          |               |     |           |                              |     |
| Steaming Mode  |            |     |                                       | 0.54      | at from scratch         |                       |                          |               |     |           |                              |     |
| Double click the   | 300m level |     | <ul> <li>Celaut</li> </ul>            |           | evel .                  |                       |                          |               |     |           |                              |     |
| Double-Click Bell  | soom mode  |     | <ul> <li>Adsorption</li> </ul>        |           | 234                     |                       |                          |               |     |           |                              |     |
| Concerning of the second secon |            |     |                                       |           |                         |                       |                          |               |     |           |                              |     |
| POWER Memory   |            |     | Q Trait Internet                      |           |                         |                       |                          |               |     |           |                              |     |
| Process Process  |            |     | 5444                                  |           |                         |                       |                          |               |     |           |                              |     |
|  |            |     |                                       |           |                         |                       |                          |               |     |           |                              |     |
|  |            |     |                                       | <b>1</b>  | unul.                   |                       |                          | ×             |     |           |                              |     |
|  |            |     |                                       |           | Are you sure the mana   | pement IP is correct? | It will send the configu | ration to the |     |           |                              |     |
|  |            |     |                                       | •         | management node         |                       |                          |               |     |           |                              |     |
|  |            |     |                                       |           |                         |                       |                          | Yes No        |     |           |                              |     |
|  |            |     |                                       |           |                         |                       |                          | X             |     |           |                              |     |
|  |            |     |                                       |           |                         |                       |                          |               | ` d |           |                              |     |
|  |            |     |                                       |           |                         |                       |                          |               |     |           |                              |     |
|  |            |     |                                       |           |                         |                       |                          |               |     |           |                              |     |
|  |            |     |                                       |           | Configure Delivery Rest |                       |                          | -             | — e |           |                              |     |
|  |            |     |                                       |           |                         |                       |                          |               |     |           |                              |     |

Figure 49

#### 8.3.10 Logs tap

This is a section where the user can view the operation logs sent by the system. Figure 50



Figure 50

#### 8.4 Control the Transceivers

By clicking the Enter icon that appears in the center of the screen, the program will open a control user interface where we can control the Transceivers. Figure 51





After clicking the Enter button, you'll access the user control interface, which consists of seven main sections. These sections are: TV's/Video Walls, Video Sources, Scenes, Source Options, Control Video Source Display, Audio, and Camera Control. Figure 52



A In this section the User will be able to select a TV, Matrix or video wall, previously created in the Site tab of the configuration interface, to send it any content available in the video sources. Figure 53



Figure 53

In this section, previews of the available video sources will be displayed. The User can select the desired video source preview and drag and drop it onto the desired TV, matrix, or video wall. Figure 54



Figure 54

C This section displays the layouts for each preset. To access a preset, the User simply clicks on the corresponding layout. Figure 55



Figure 55

- D In this section there are five different options that the user can use to manage video sources.
  - a) **Overlay**: This option allows you to create multiple views with PIP and POP.
  - b) **Replace**: This option allows you to replace video sources in full screen.
  - c) **KVM**: This option allows you to control the source using KVM.
  - d) Background: This option allows you to change the background.
  - e) **OSD**: This option allows you to change the OSD scrolling text.

E In this section there are 10 different options that the user can use to control the display of the video source.

- a) Full: This option will display the canvas as a single screen even if it is a video wall.
- b) 2x2: This option will divide the canvas into a 2x2 matrix.
- c) Single: This option will divide the canvas according to the number of screens on the video wall.
- d) All Grid: This option allows the User to divide the canvas with a custom grid.
- e) Set Window: This option allows the user to resize a window to a custom size and place it in a specific location on the screen.
- f) Push All: This option allows the User to send the same content to all displays and video walls in the system.
- g) Clear Matrix: This option allows the User to clean the canvas.
- h) To Bottom: This option allows the User to place a window at the bottom of a layout that contains POP.
- i) Custom: This option allows the User to create custom layouts
- j) Absorb: This option allows the User to send content in full screen.

F This option allows the user to control the volume of the video sources

#### G This option allows the user to control the PTZ cameras in the system.



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