IOT-1002-AD

Smart Controller for HDMI over IP series

User Manual

rev: 190123
Made in Taiwan

Safety and Notice

The **IOT-1002-AD** **Smart Controller for HDMI over IP series** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **IOT-1002-AD** should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

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INTRODUCTION

SPECIFICATIONS

The **IOT-1002-AD** **Smart Controller for HDMI over IP series** provides central management and real time monitoring over the IP based EX-57EM/EX-57EM-W transmitters and receivers. With high expandability, a single IOT-1002-AD can serve up to 1024 transmitters and unlimited receivers at once. An intuitive web-based GUI enables users to drag and drop any source to any display, build video wall, create custom OSD, and schedule the operation for video and power. Plus, IOT-1002-AD provides continuous system monitoring, self-recovery along with real-time event notifications and alerts. Via cooperate network connection, users can remotely access and activate the system from mobile devices.

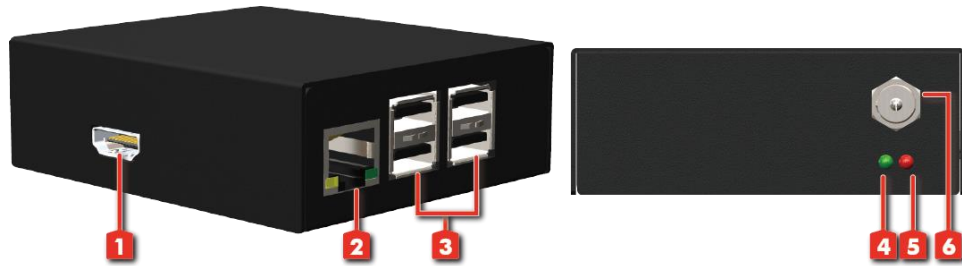| Model Name		IOT-1002-AD
Technical		
Role of usage		Smart Controller
Input		1x RJ-45
Output		1x HDMI
HDMI connector		Type A [19-pin female]
RJ-45 connector		WE/SS 8P8C
Mechanical		
Housing		Metal enclosure
Dimensions [L x W x H]	Model	90 x 78 x 29mm
	Package	198 x 137 x 74mm
	Carton	420 x 400 x 300mm
Weight	Model	222g
	Package	493g
Fixedness		Rack-mount with ears
Power supply		5V DC
Power consumption		3.5 Watts [max]
Operation temperature		0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidity		20~90% RH [no condensation]

FEATURES

- Control center of the IP-based Transmitter and Receiver (EX-57EM/EX-57EM-W)
- Monitors all devices in one central system
- Cost effective solution for IoT
- Intuitive and powerful user interface
- Includes Web interface and mobile support
- Easy installation with auto-detection of transmitter and receiver units in the network.
- Drag-and-drop easy matrix switching
- Easy to create multiple video walls
- Schedule time for audio/video mapping, cycle-play and mute/resume
- Allows to create custom OSD
- Watch-dog with self-recovery
- Assigns the video sources for each display with account/password submit
- Supports video wall function

PACKAGE CONTENTS

- 1x IOT-1002-AD
- 1x Rack-mounting ear set
- 1x User Manual
- 1x DC 5V power supply

1. **Output:** HDMI output, it displays the information of controller

2. **RJ-45:** Ethernet control port

3. **USB:** Reserved

4. **Activity LED indicator:** When the storage device is being used, the light will blink

5. **Power LED indicator:** When unit connect a power supply unit, the light will shine

6. **+5V DC:** +5V DC power jack

CONNECTION DIAGRAM

HDMI
CAT5/5e/6
IR
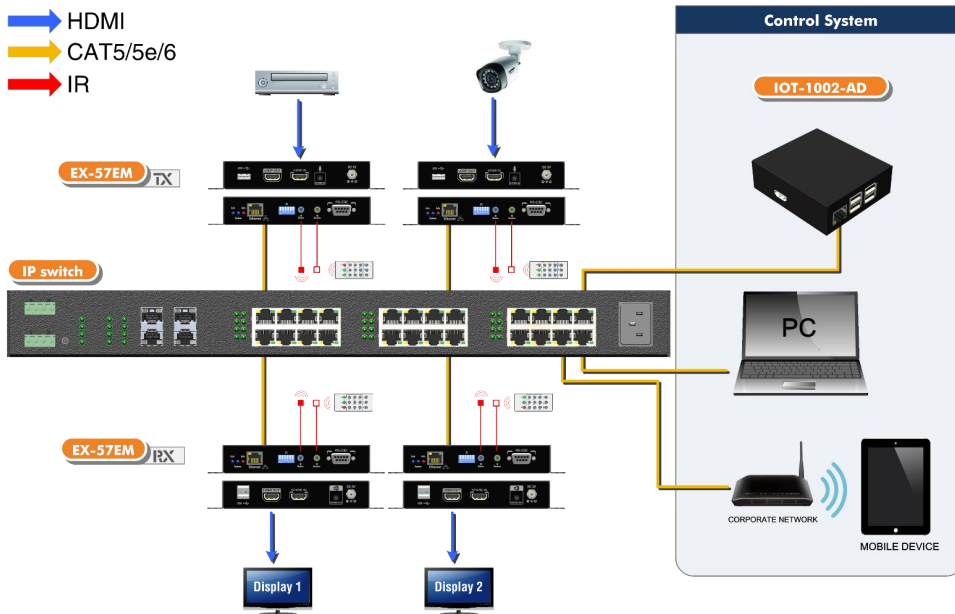
Installation Setup

➢ Connect a Laptop/PC, IOT-1002-AD into the Gigabit IP Switch/ Router/ Hub
   * Ensure your Gigabit IP Switch/Router/Hub enables DHCP Server

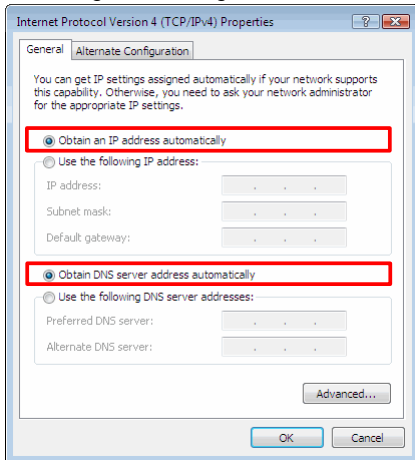➢ Open the **Network and Sharing Center** and enter the **Change adapter settings** page.
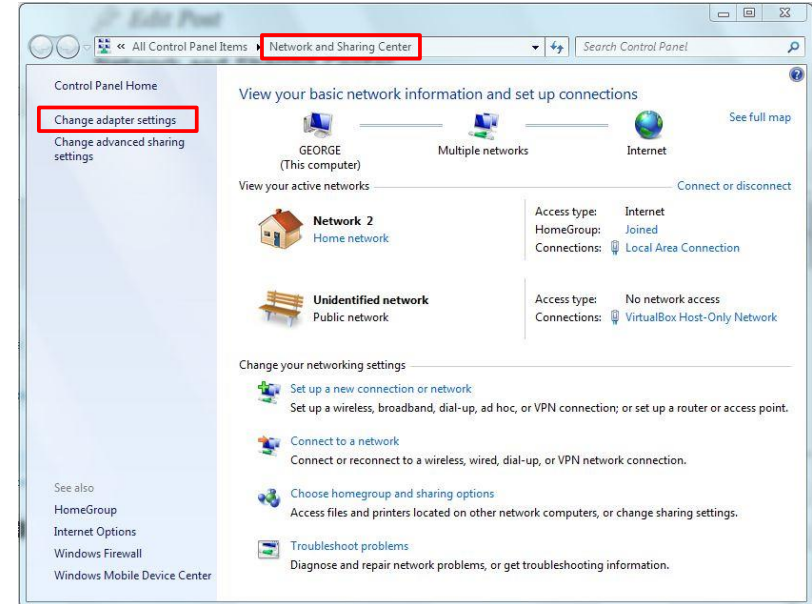
➢ Select the **Local Area Connection** item and click the right button to enter the **Properties** page.

3   4
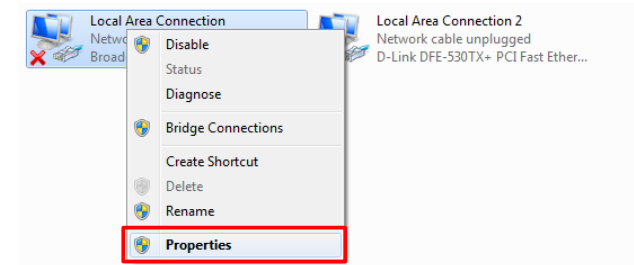
➤ Enter the Properties of Internet Protocol Version 4 (TCP/IP)
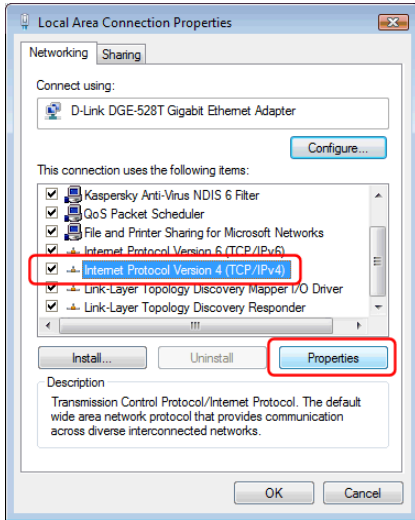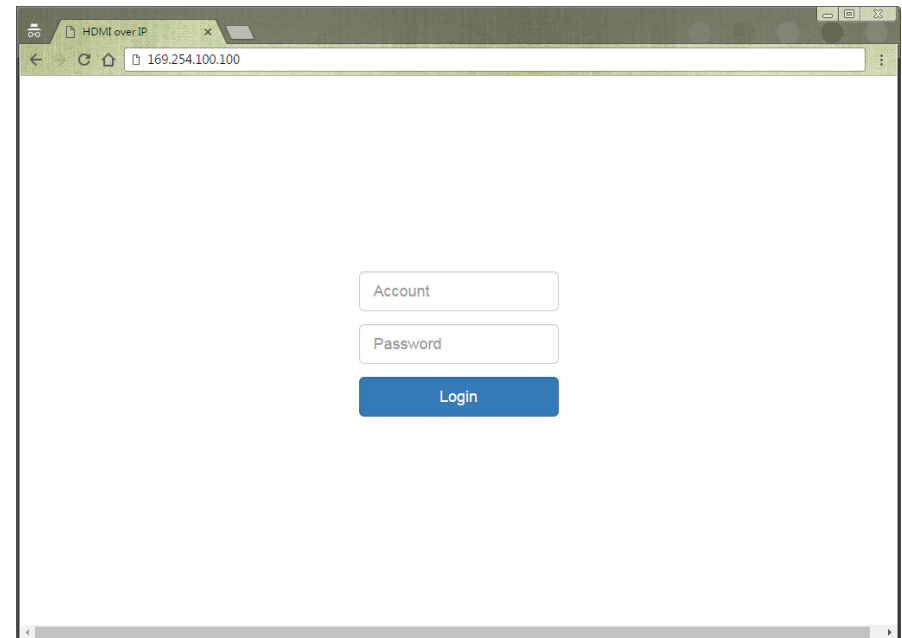

➤ IP Setting as following:

➤ View IOT-1002-AD information
Connect IOT-1002-AD HDMI output to display.
The display will show information, as below image.
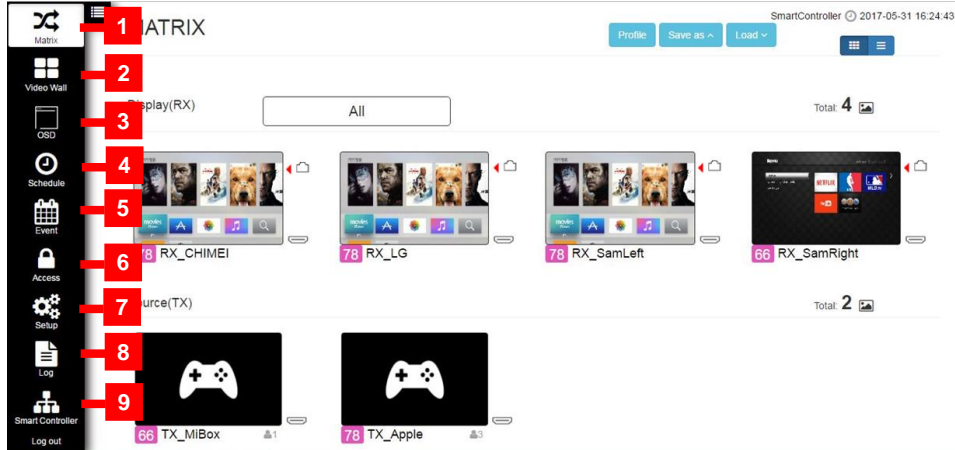*The default IP is 169.254.100.100

User Interface pages

➤ Login
Open the browser and enter the IP address of IOT-1002-AD
- Account: admin
- Password: admin

➤ Connect the HDMI over IP extenders to the Router/Ethernet Hub.

1	Mapping	6	Access
2	Video Wall	7	Setup
3	OSD	8	Log
4	Schedule	9	Smart Controller
5	Event		

1. Mapping

On this Page, you can see runtime status of all TX/RX device in controller. The way to do input/output mapping is to drag TX icon to RX icon. It also provides 10 profile spaces to save the frequently used scenarios into the device. Clicking the profile button to preview the saved scenarios.
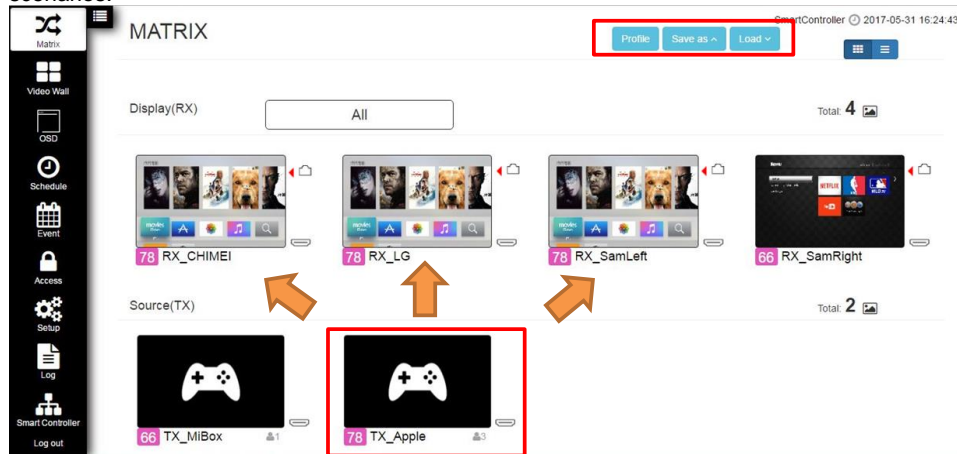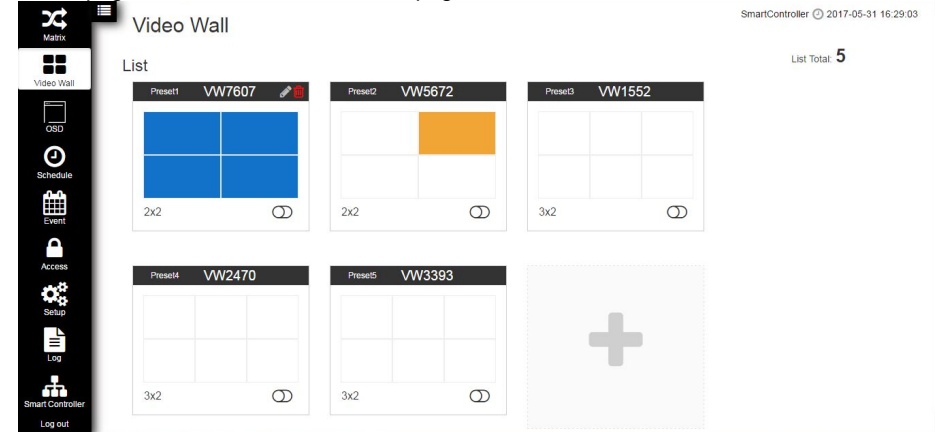

2. Video Wall

It supports video wall function. User can click the ➕ button to add the setting window of video wall. Click the ✏️ button to do more advanced setting. On the video wall setting page, you can define the layout, determine the OSD to turn on/off, and adjust the bezel function. The method of setup the video wall is to drag TX and RX to gray preview display area (see below example diagram) and then click the save button. After saving, just go back to Video Wall List and click ⬭ button to enable the video wall.

*Please note that, the TX /RXs selected into preview display much be rectangle layout.
*When you enable the video wall function, the corresponding TX and RX will be locked in the Matrix page until disable it in video wall page.
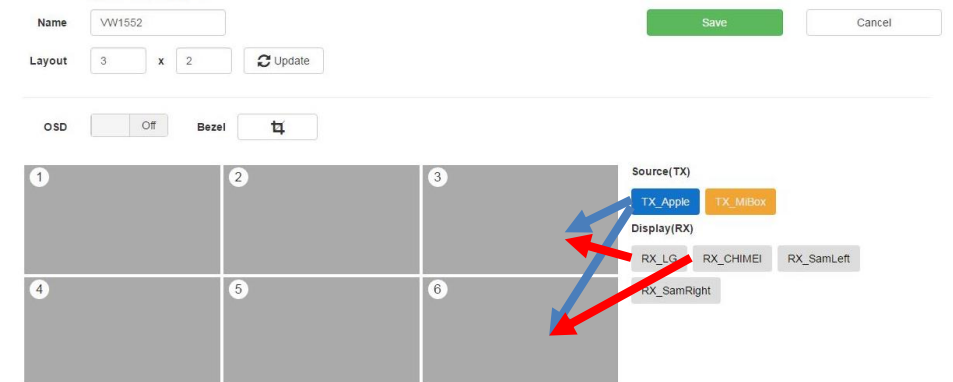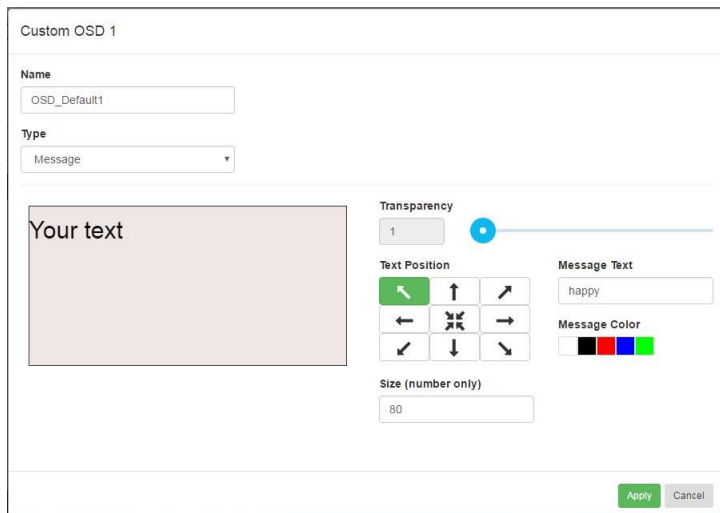
3. OSD

IOT-1002-AD provides 8 custom OSD windows for users to input the texts or images to be shown with the video. User can click the ⚙ button to adjust the image, message text, transparency, position, color and size. After setting, please drag the OSD window to RX window which you want to show the desired text or image.
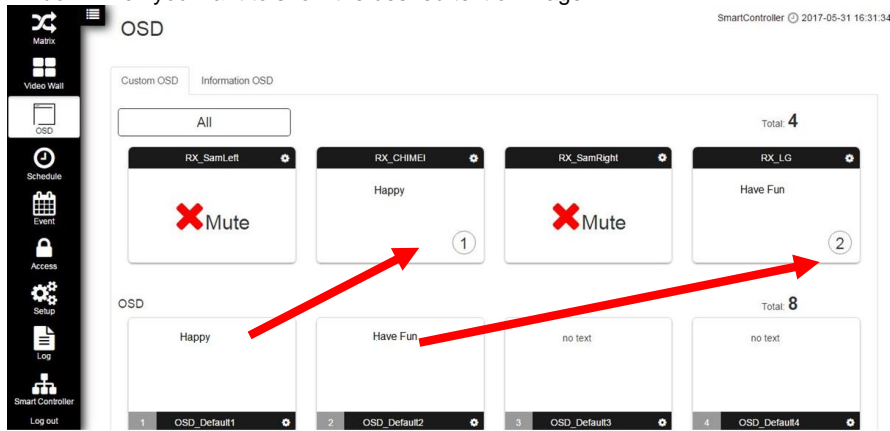
4. Schedule

User can schedule the operation for video and power. Just click the ➕ button to setup the time, type and action.
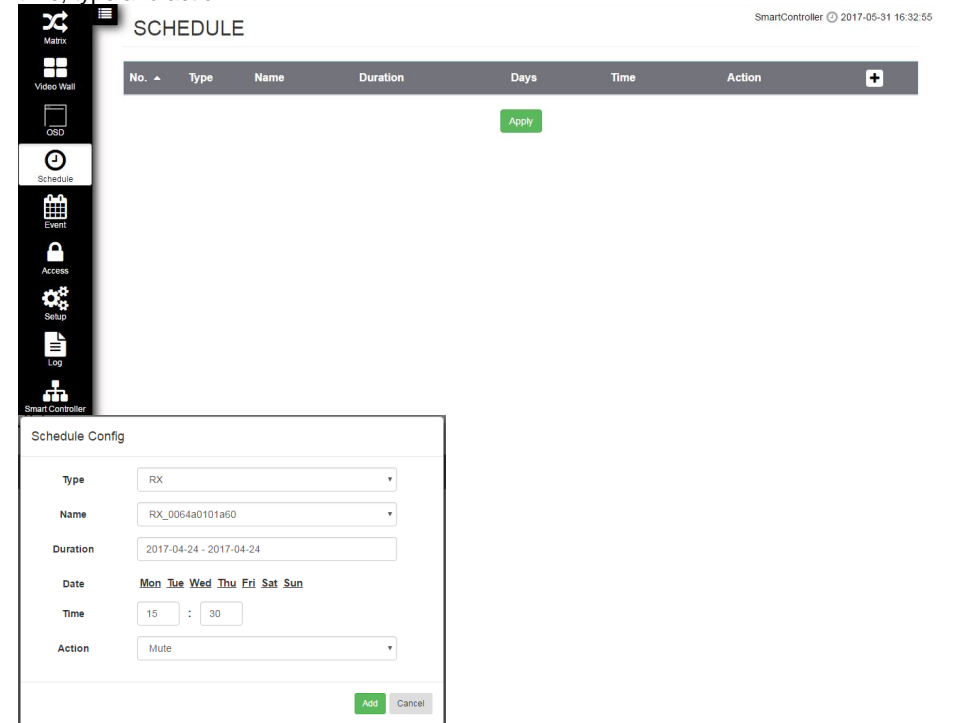
5. Event

User can set up the condition of trigger point in advance.
Event happens, then IOT-1002-AD will take action for self-recovery, real-time notification and alert.

6. Access

Allow admin to assign video sources for each display, with Account / Password submit.

ACCESS   SmartController ⊘ 2017-05-31 16:34:55

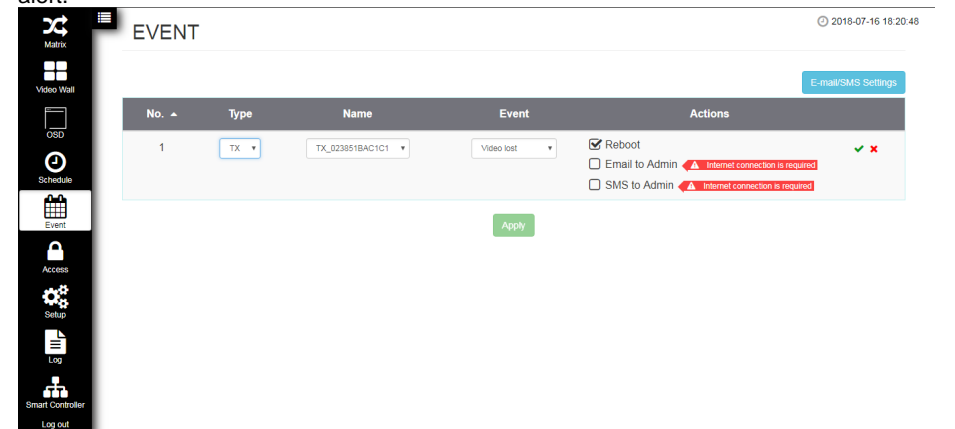| Type ▲	Name	Account	Password	Source
RX	RX_SamRig	iwzfg8	yplgin	Unlimited
RX	RX_LG	6wv9v8	b0x5xr	Unlimited
RX	RX_CHIMEI	mn7ka1	gr0zxq	Unlimited
RX	RX_SamL	0qkbgx	fheeco	Unlimited
RX	RX_SamLeft	ue9udr	kntwai	Unlimited
RX	RX_SamRight	soa5mu	f7pxce	Unlimited

Apply

7. Setup

After connecting the HDMI over IP transmitter and receiver units to the Router/Ethernet Hub, the IOT-1002-AD will automatically add the device into the control system.

*You can click the blink LED button to search corresponding transmitter/receiver device.

SETUP   SmartController ⊘ 2017-05-31 16:35:09

Devices

Devices in Managed   Update in 5 sec

Group ▲	Type	Name	Device IP	Group IP	MAC Address	Status
⚙ 78	RX	RX_CHIMEI	169.254.124.65	225.0.103.78	82:89:9F:1A:CB:55	● 12 min, 51 sec
⚙ 78	RX	RX_LG	169.254.8.143	225.0.103.78	82:D7:0E:00:D5:DB	● 12 min, 51 sec
⚙ 78	RX	RX_SamLeft	169.254.41.209	225.0.103.78	82:4F:CE:7C:10:3C	● 12 min, 53 sec
⚙ 56	RX	RX_SamRight	169.254.161.221	225.0.103.56	82:8F:98:43:35:B5	● 12 min, 51 sec
⚙ 78	TX	TX_Apple	169.254.10.154	225.0.103.78	02:D4:EE:AD:8B:BE	● 12 min, 51 sec
⚙ 66	TX	TX_MiBox	169.254.160.89	225.0.103.66	02:8F:B9:88:82:8C	● 12 min, 51 sec

For more information and advanced setting, please go into here.

Name	TX_023851BAC1C1		Apply
Group ID	66		
Photo	Photo 1		

A/V Settings

| Streaming Video | On | Loop-out | On | Apply |
| EDID Mode | Default EDID (4K2K@60Hz HDR - 24bit 2D video & 2ch audio) | | | Apply |

Maintenance

Factory Default   Reboot   Blink LED

| LAN | ON | | HDCP | ON | | TV | Connected |

Information

| Name | RX_8219EF8893C3 | Group ID | 66 | Apply |

A/V Settings

| Streaming Video | On | Scaling | passThrough | Apply |

Maintenance

Factory Default   Reboot   Blink LED

8. Log

This page contain a text log of your system operation history.

LOG   SmartController ⊘ 2017-05-31 16:36:10

☑Event ☑Schedule ☑Action ☑Login/out ☑Others   Clear ⬇
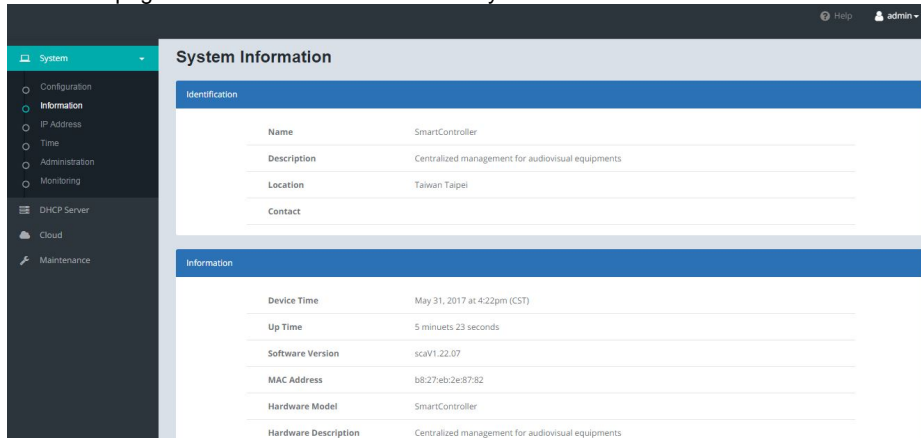
Date Range: Click to input Data Range

« **1** 2 3 4 5 6 7 8 9 »

Time ▼	Type ⇅	Device ⇅	Name ⇅	Message ⇅
2017-05-31 16:35:58	Others	IP Switch	HDMIoverIP	169.254.41.209 device.IpAddress is not consistent with config.IpAddress
2017-05-31 16:35:58	Others	IP Switch	HDMIoverIP	169.254.160.89 device.IpAddress is not consistent with config.IpAddress
2017-05-31 16:35:58	Others	IP Switch	HDMIoverIP	169.254.161.221 device.IpAddress is not consistent with config.IpAddress
2017-05-31 16:35:56	Others	IP Switch	HDMIoverIP	169.254.161.221 device.IpAddress is not consistent with config.IpAddress

9. Smart Controller

Enter the Smart Controller page to do advance setting.

- Account: admin
- Password: admin

The home page of Smart Controller shows the system information.

The SELLER warrants the **IOT-1002-AD Smart Controller for HDMI over IP series** free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge. This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and power adapters are limited to a 30 day warranty and must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. **Also, the technical information contained herein regarding the IOT-1002-AD features and specifications is subject to change without further notice.**