Smart Controller for HDMI over IP series

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Safety and Notice

The **AV-GM0A93-S1** 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 **AV-GM0A93-S1** 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.

ESD CAUTION !

TABLE OF CONTENTS

INTRODUCTION

The **AV-GM0A93-S1** Smart Controller for HDMI over IP series provides central management and real time monitoring over the IP based EX-57IP/AV-GM04R3-S1 transmitters and receivers. With high expandability, a single AV-GM0A93-S1 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, create presets profile, and schedule the operation for video and power. Plus, AV-GM0A93-S1 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. Moreover, AV-GM0A93-S1 provides a QR code, allowing fast access into system for smart phone or tablet.

FEATURES

- Control center of the IP-based Transmitter and Receiver (EX-57IP/AV-GM04R3-S1)
- Monitor all devices in one central system
- Cost effective solution for IoT
- Intuitive and powerful user interface
- Include Web interface and mobile support
- Easy installation with auto-detection of transmitter and receiver units in the network.
- Drag-and-drop easy matrix switching
- Schedule time for audio/video mapping, cycle-play and mute/resume
- Watch-dog with self-recovery
- Assign the video sources for each display with account/password submit
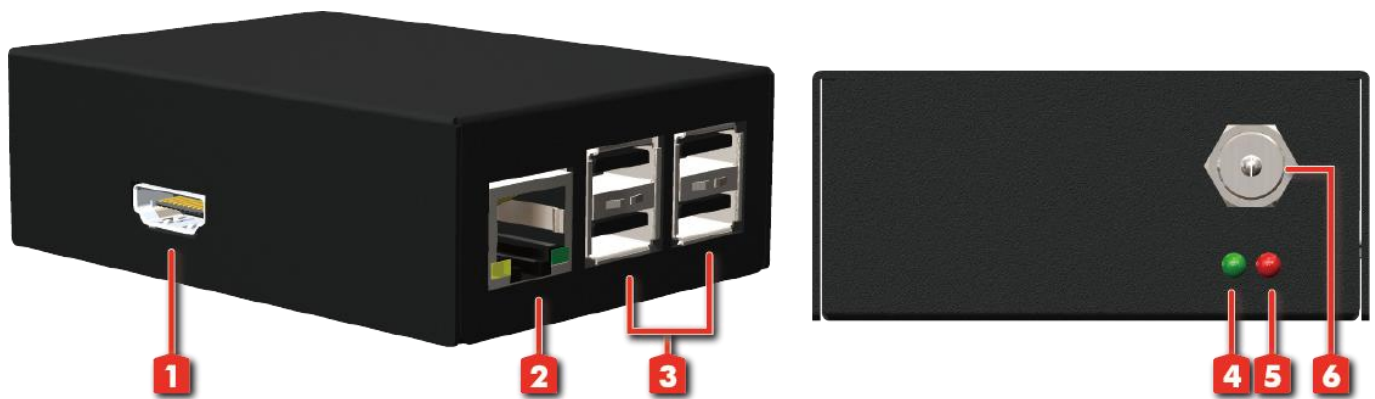- QR code for user to quickly access into the control center with smart phone or tablet.

PACKAGE CONTENTS

- 1x AV-GM0A93-S1
- 1x Rack-mounting ear set
- 1x User Manual
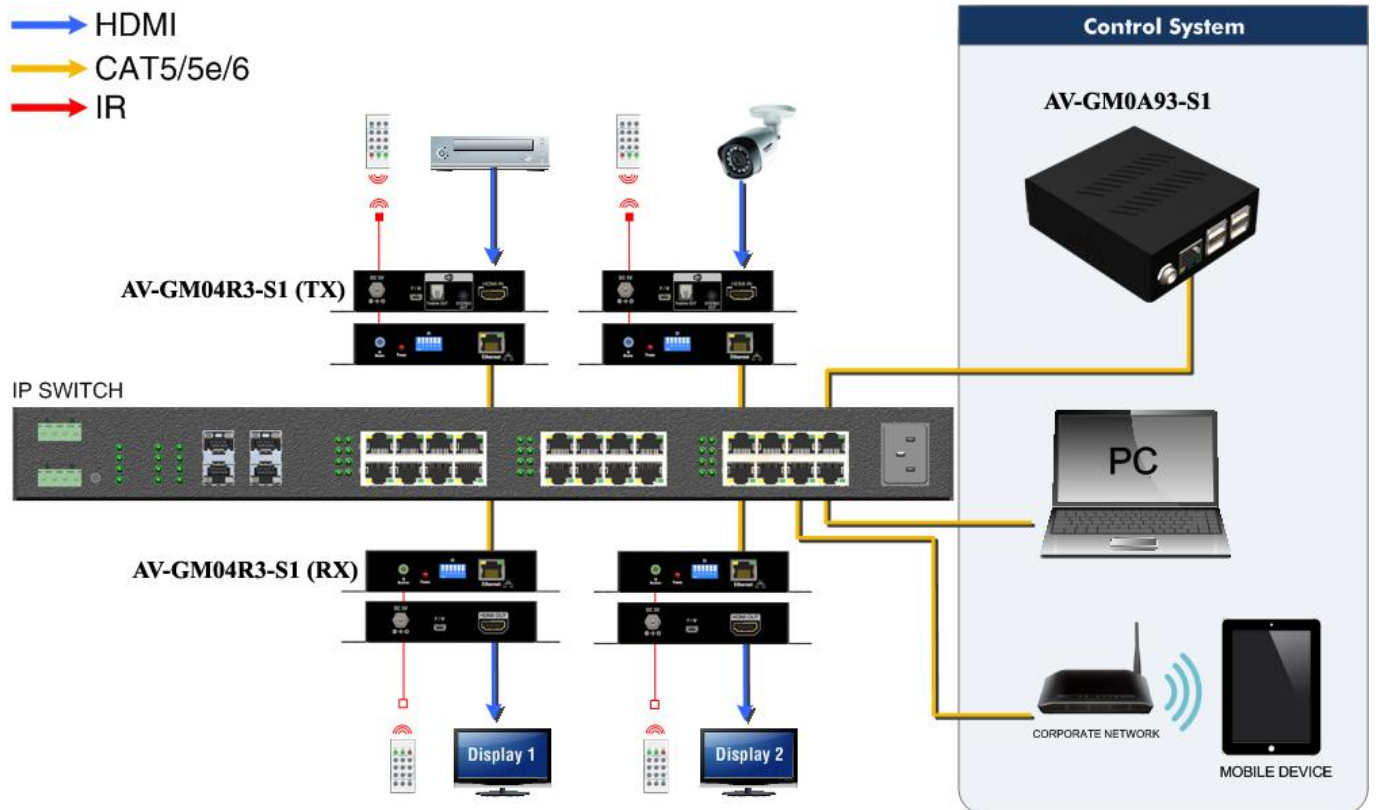- 1x DC 5V power supply

SPECIFICATIONS

Model Name		AV-GM0A93-S1
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 65 x 29mm [3.5" x 2.5" x 1.1"]
	Package	198 x 137 x 74mm [7.8" x 5.4" x 2.9"]
	Carton	420 x 400 x 300mm [1'4"x 1'3" x 11.8"]
Weight	Model	90 x 65 x 29mm [3.5" x 2.5" x 1.1"]
	Package	198 x 137 x 74mm [7.8" x 5.4" x 2.9"]
Fixedness		Rack-mount with ears
Power supply		5V DC
Power consumption		2A
Operation temperature		0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidity		20~90% RH [no condensation]

1. **Output:** HDMI output, it display the information of controller
2. **RJ-45:** Ethernet control port
3. **USB:** Reserved
4. **Signal indicator LED**
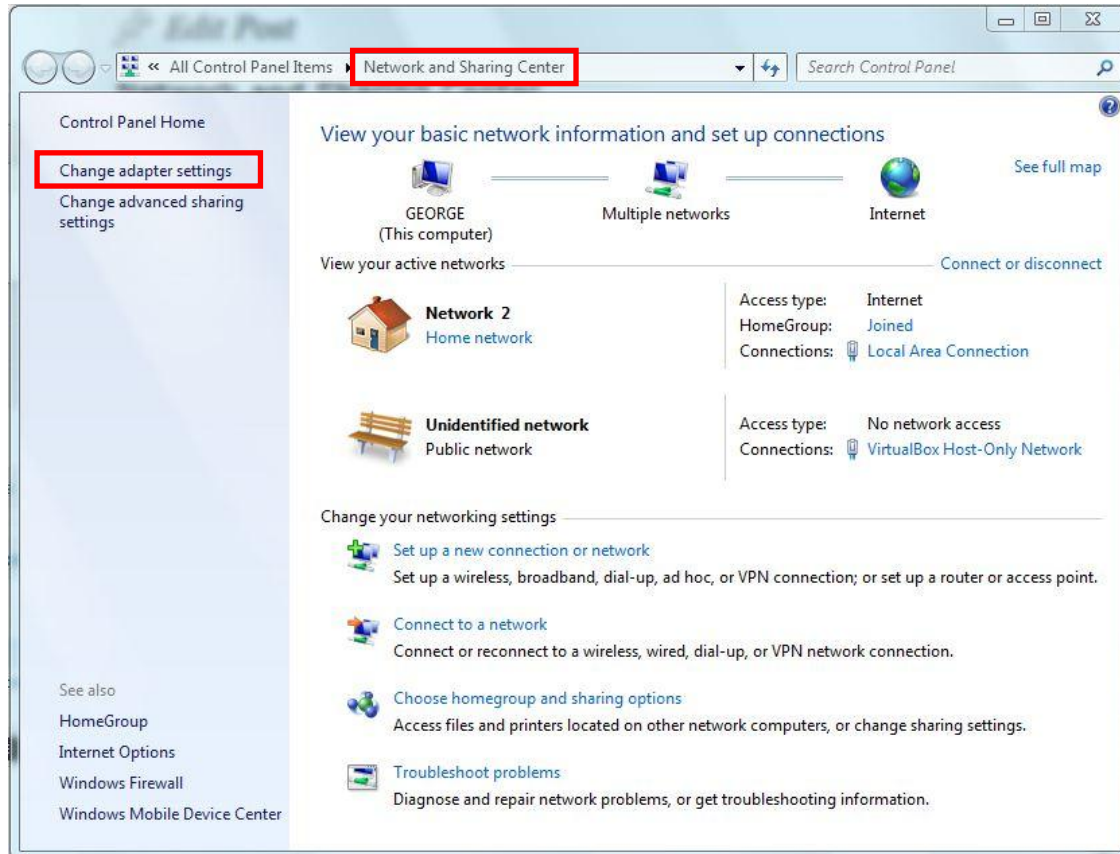5. **Power indicator LED**
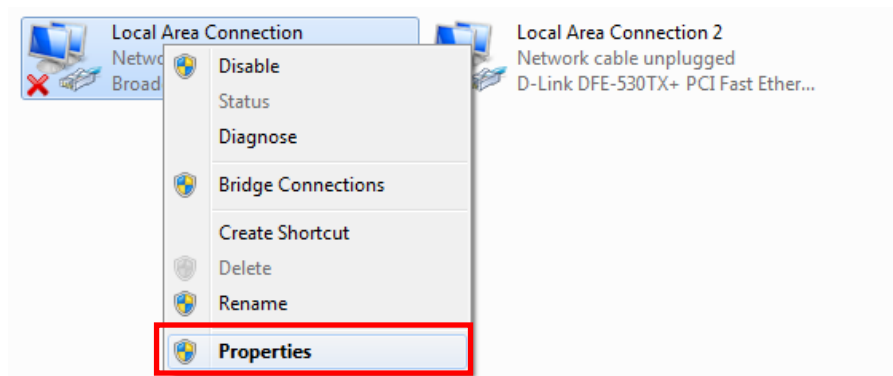6. **+5V DC:**+5V DC power jack
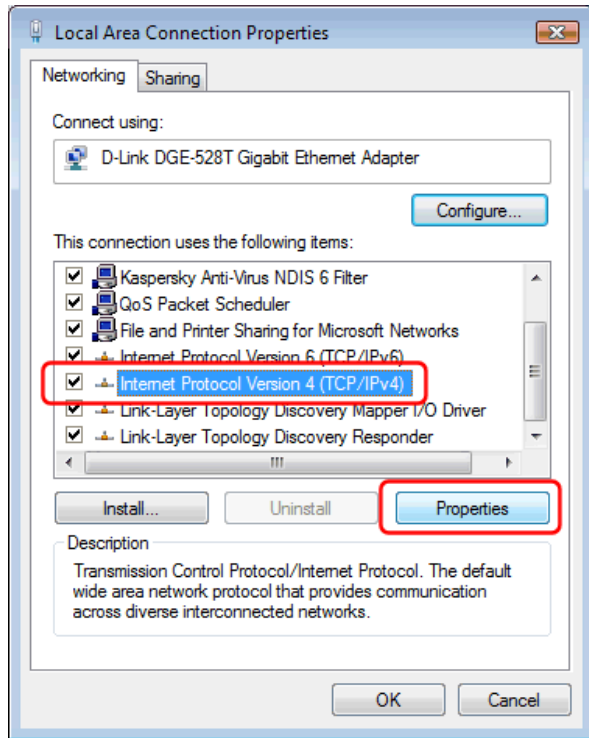
CONNECTION DIAGRAM

Installation Setup

➢ Connect a Laptop/PC, AV-GM0A93-S1 into the IP Switch/ Router/ Hub
  * Ensure your IP Switch enables DHCP Server

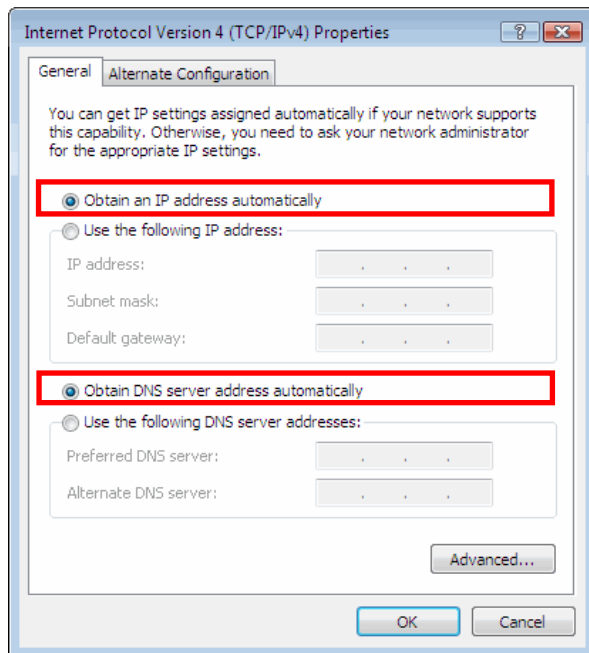➢ Open the **Network and Sharing Center** and enter the **Change adapter settings** page.

➢ Select the **Local Area Connection** item and click the right button to enter the **Properties** page.

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

Local Area Connection Properties

Networking | Sharing

Connect using:

D-Link DGE-528T Gigabit Ethernet Adapter

Configure...

This connection uses the following items:

☑ Kaspersky Anti-Virus NDIS 6 Filter
☑ QoS Packet Scheduler
☑ File and Printer Sharing for Microsoft Networks
☑ Internet Protocol Version 6 (TCP/IPv6)
☑ Internet Protocol Version 4 (TCP/IPv4)
☑ Link-Layer Topology Discovery Mapper I/O Driver
☑ Link-Layer Topology Discovery Responder

Install... | Uninstall | Properties

Description

Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

OK | Cancel

➢ IP Setting as following:

Internet Protocol Version 4 (TCP/IPv4) Properties

General | Alternate Configuration

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

◉ Obtain an IP address automatically
○ Use the following IP address:

IP address:
Subnet mask:
Default gateway:

◉ Obtain DNS server address automatically
○ Use the following DNS server addresses:

Preferred DNS server:
Alternate DNS server:

Advanced...

OK | Cancel

➢ View IOT-1002IEH information

Connect IOT-1002IEH HDMI output to display.

The display will show information, as below image.

*The default IP is DHCP (obtain an IP address automatically)
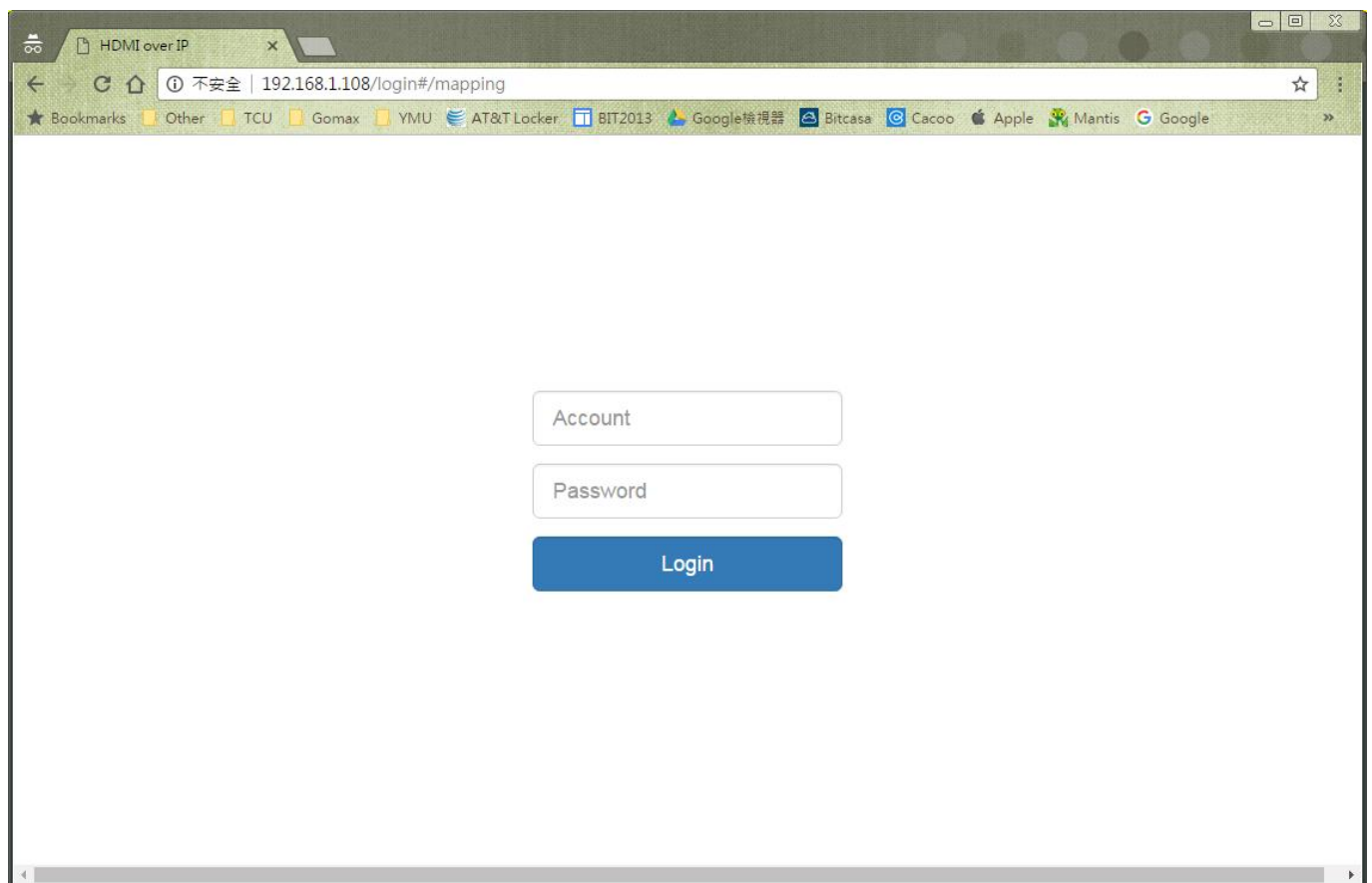
* The QR code allows quick access into Web

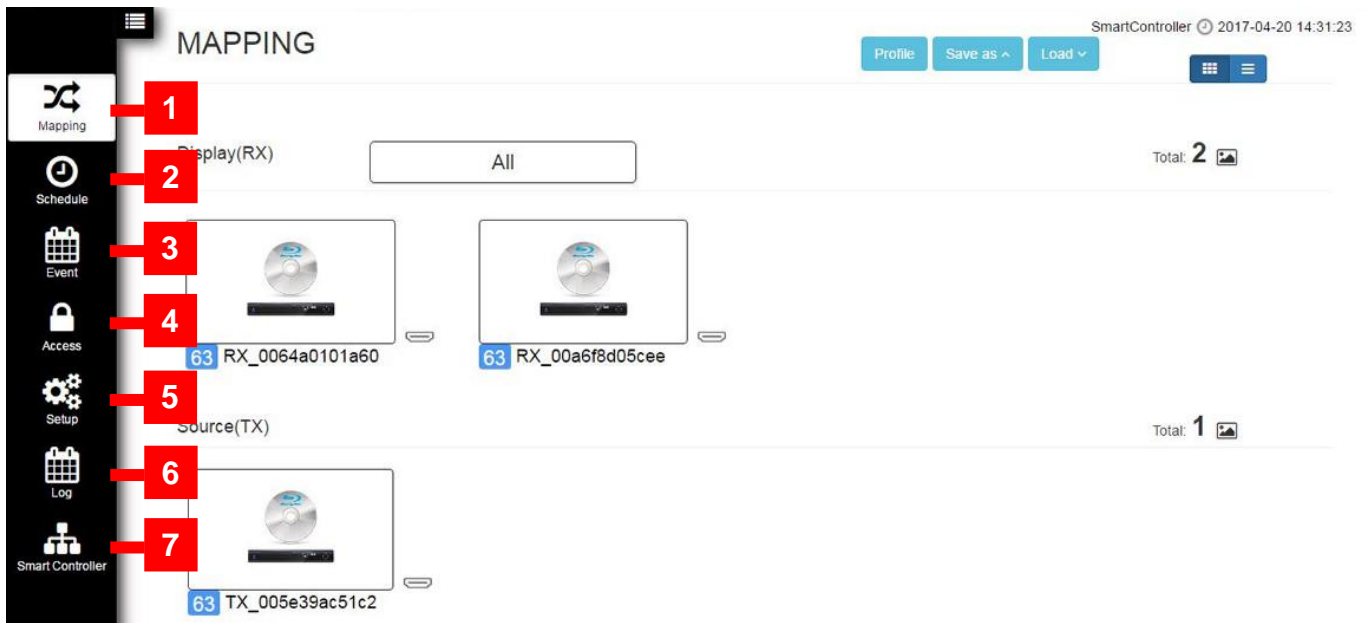## User Interface pages

➢ Login

Open the browser and enter the IP address of AV-GM0A93-S1.
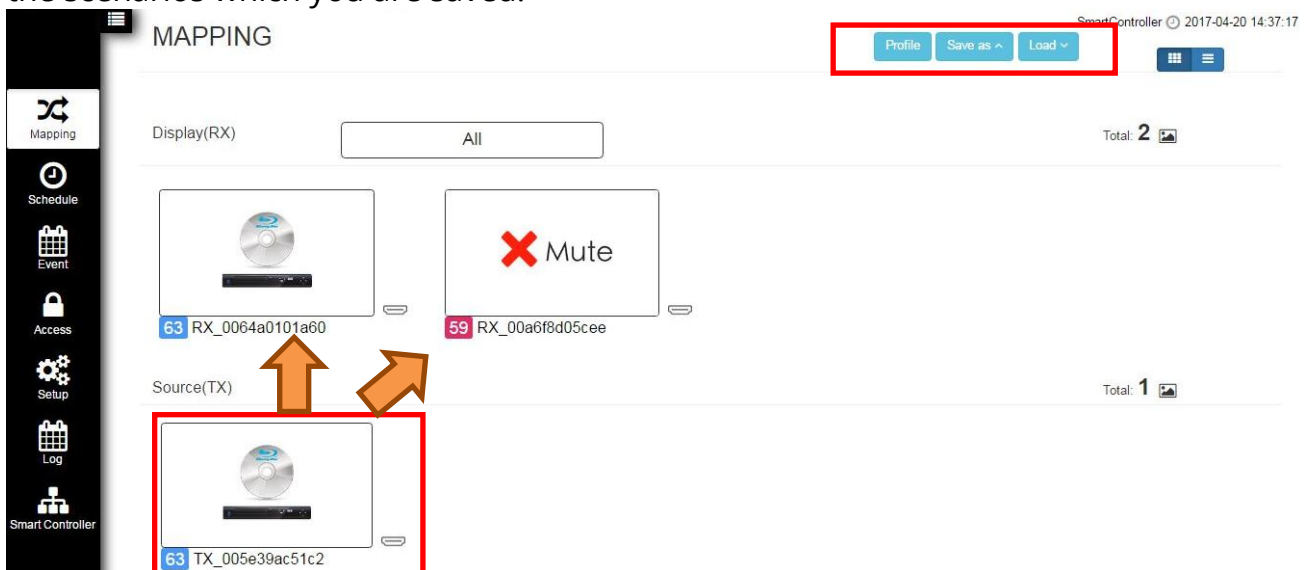
- Account: admin
- Password: admin

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

1	Mapping	5	Setup
2	Schedule	6	Log
3	Event	7	Smart Controller
4	Access		

1. Mapping

   In 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 provide 10 profile spaces to save the frequent-used scenarios into the device. Clicking the profile button to preview the scenarios which you are saved.

2. Schedule

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

3. Event

   User can set up the condition of trigger point in advance.

   Event happens, then IOT-1002IEH will take Action for self-recovery, real-time notification and alert.

4. Access

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

5. Setup

After connecting the HDMI over IP transmitter and receiver units to the Router/Ethernet Hub, the AV-GM0A93-S1 will automatically add the device into the control system. More TX and RX information will display here, allowing advanced setting (A/V setting/Reboot/HDMI Re-connect/Blink LED).

SETUP

Devices **MISC**

Update in 1 sec

Devices in Managed

Group ▲	Type	Name	Device IP	Group IP	MAC Address	Status
⚙ 63	TX	TX_005e39ac51c2	169.254.81.194	239.255.42.207	00:5e:39:ac:51:c2	● 04 hr, 20 min, 28 sec
⚙ 63	RX	RX_0064a0101a60	169.254.26.96	239.255.42.207	00:64:a0:10:1a:60	● 04 hr, 20 min, 28 sec
⚙ 63	RX	RX_00a6f8d05cee	169.254.92.238	239.255.42.207	00:a6:f8:d0:5c:ee	● 04 hr, 20 min, 28 sec

New Discovery in LAN

Group ▲	Type	Name	Device IP	Group IP	MAC Address	Status

6. Log

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

7. 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.

System ▾

○ Configuration
○ Information
○ IP Address
○ Time
○ Administration
○ Monitoring

DHCP Server

Cloud

Maintenance

System Information

Identification

Name	SmartController
Description	Centralized management for audiovisual equipments
Location	Taiwan Taipei
Contact	

Information

Device Time	Apr 25, 2017 at 11:46am (CST)
Up Time	4 hours 30 minuets 24 seconds
Software Version	sciV1.22.03
MAC Address	b8:27:eb:9f:6f:c2
Hardware Model	SmartController
Hardware Description	Centralized management for audiovisual equipments
Serial Number	0000 0000 489f 6fc2

WARRANTY

The SELLER warrants the **AV-GM0A93-S1** Smart Controller for HDMI over IP series free from defects in the material and workmanship for 3 years from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 3 years 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 AV-GM0A93-S1 features and specifications is subject to change without further notice.**

Support
For more info or tech support
http://www.siig.com/support

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