



Smart Controller for HDMI over IP series



P/N: AV-GM0A83-S1



Safety and Notice

The AV-GM0A83-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-GM0A83-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.



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INTRODUCTION

The **AV-GM0A83-S1 Smart Controller for HDMI over IP series** provides central management and real time monitoring over the IP based EX-57E transmitters and receivers. With high expandability, a single AV-GM0A83-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, build video wall, create custom OSD, and schedule the operation for video and power. Plus, AV-GM0A83-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-GM0A83-S1 provides a QR code, allowing a fast access to the system from smart phones or tablets.

FEATURES

- Control center of the IP-based Transmitter and Receiver (EX-57E)
- 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
- QR code for user to quickly access into the control center with smart phone or tablet
- Supports video wall function

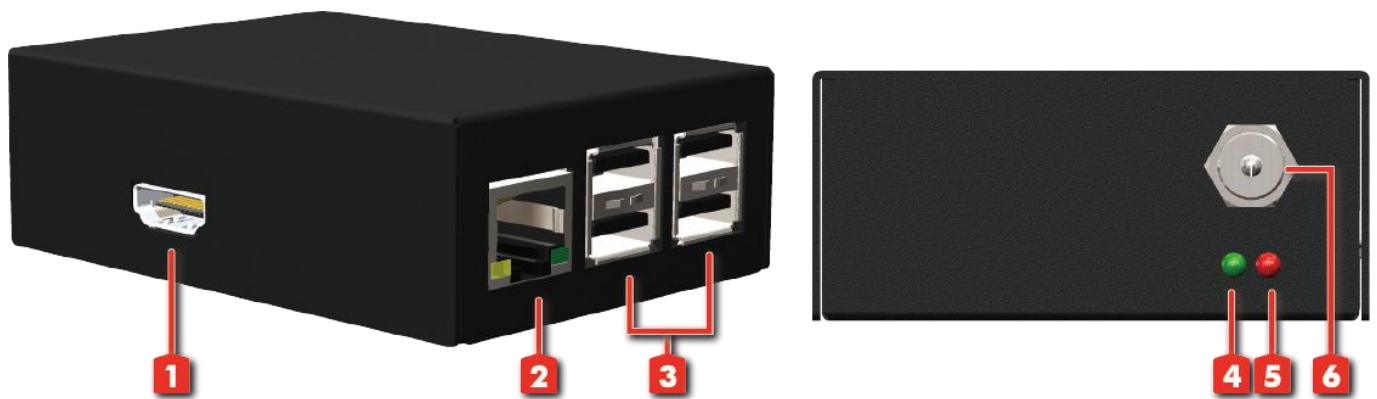
PACKAGE CONTENTS

- 1x AV-GM0A83-S1
- 1x Rack-mounting ear set
- 1x User Manual
- 1x DC 5V power supply

SPECIFICATIONS

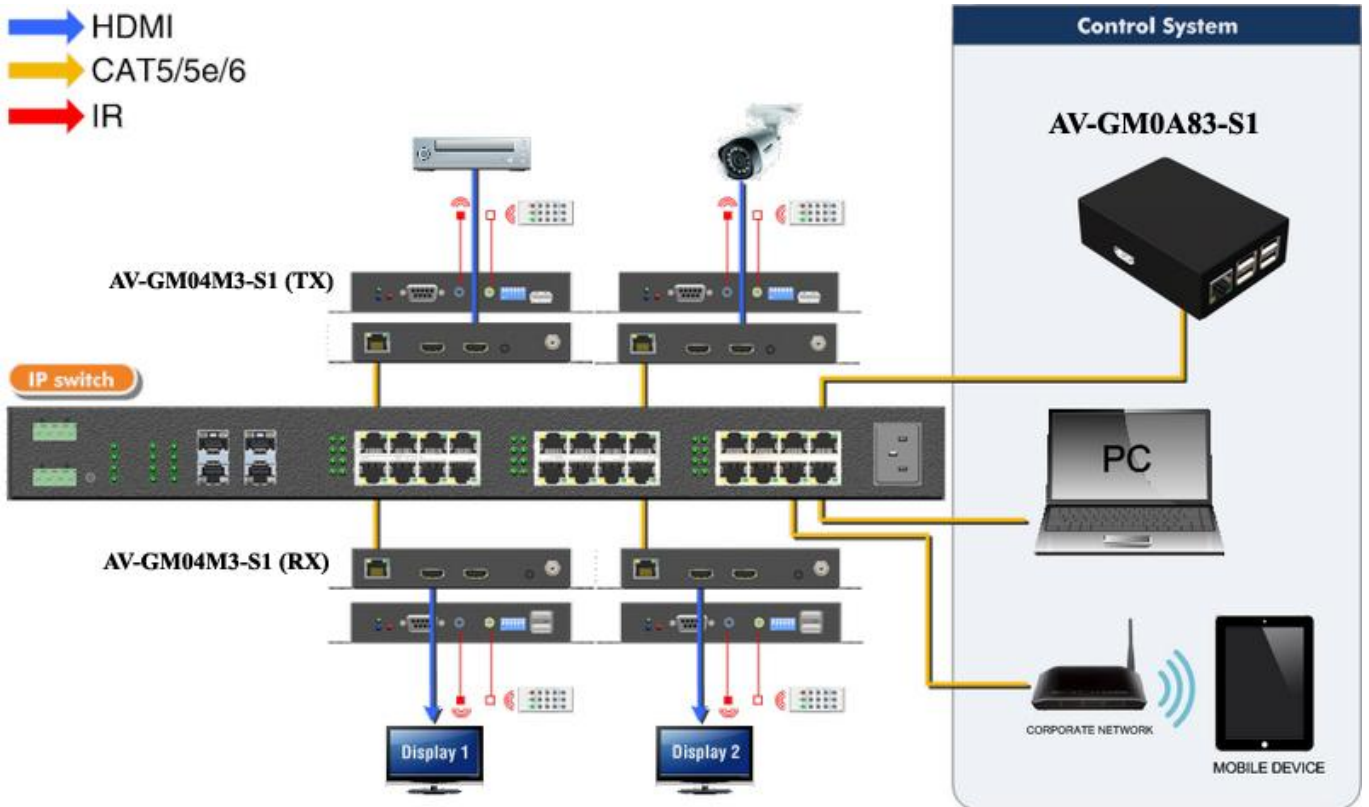
Model Name		AV-GM0A83-S1
Technical		
Role of usage		Smart Controller
Input		1x RJ-45
Output		1x HDMI
HDMI connector		Type A [19-pin female]
RJ-45 connector		WE/SS 8P8C
Mechanical		
Housing		Metal enclosure
Dimensions [L x W x H]	Model	90 x 65 x 29mm [3.5" x 2.5" x 1.1"]
	Package	198 x 137 x 74mm [7.8" 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		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]

PANEL DESCRIPTIONS



- 1. **Output:** HDMI output, it displays 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

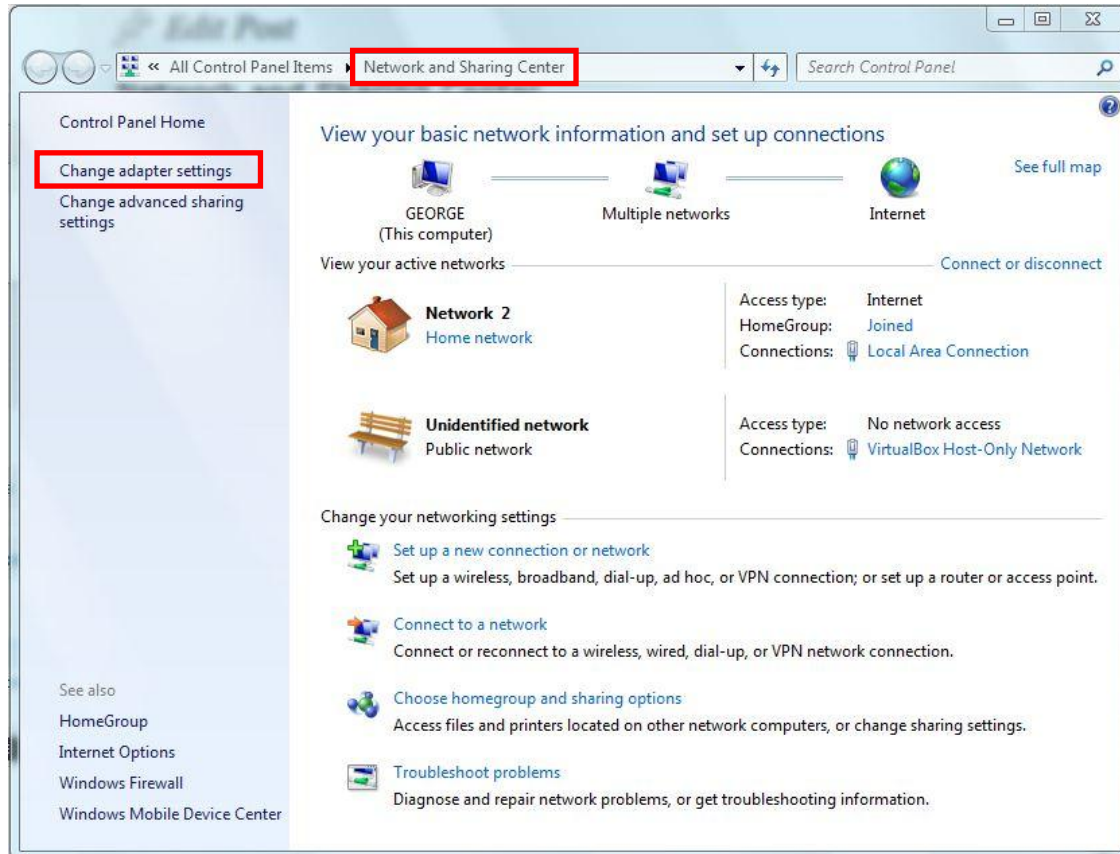
CONNECTION DIAGRAM



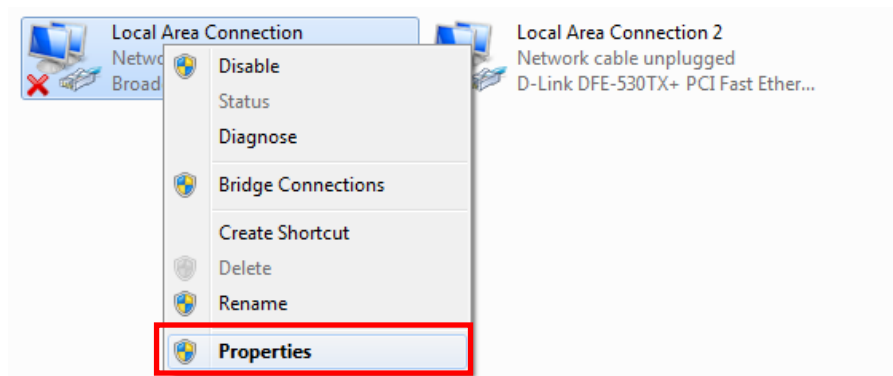
OPERATION APPROACH

Installation Setup

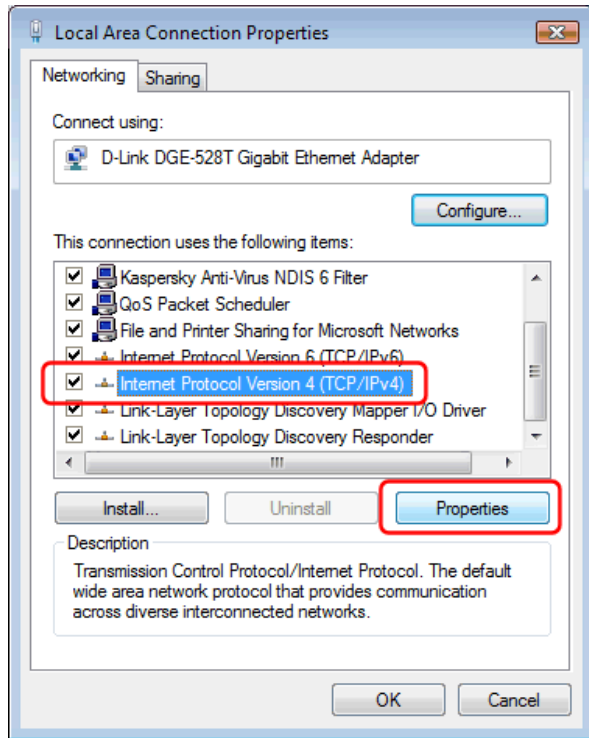
- Connect a Laptop/PC, AV-GM0A83-S1 into the Gigabit IP Switch/ Router/ Hub
 - * Ensure your Gigabit IP Switch/Router/Hub enables DHCP Server
- Open the **Network and Sharing Center** and enter the **Change adapter settings** page.



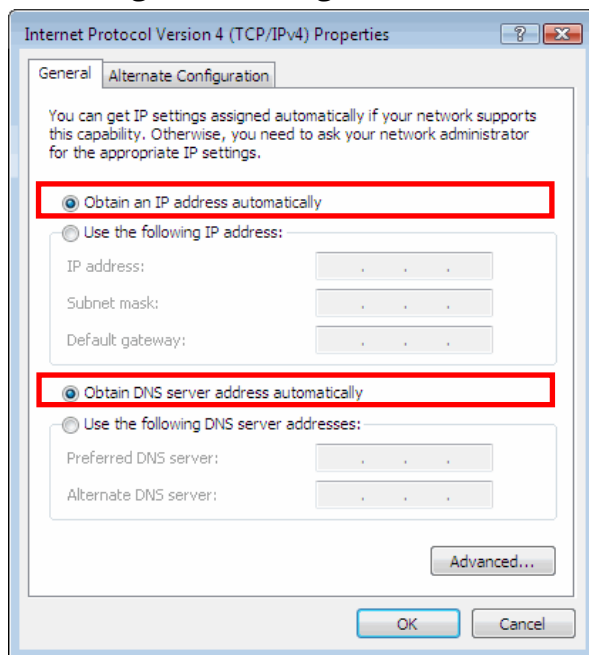
- Select the **Local Area Connection** item and click the right button to enter the **Properties** page.



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



- IP Setting as following:



➤ View AV-GM0A83-S1 information

Connect AV-GM0A83-S1 HDMI output to display.

The display will show information, as below image.

*The default IP is 169.254.100.100

* The QR code allows quick access into Web

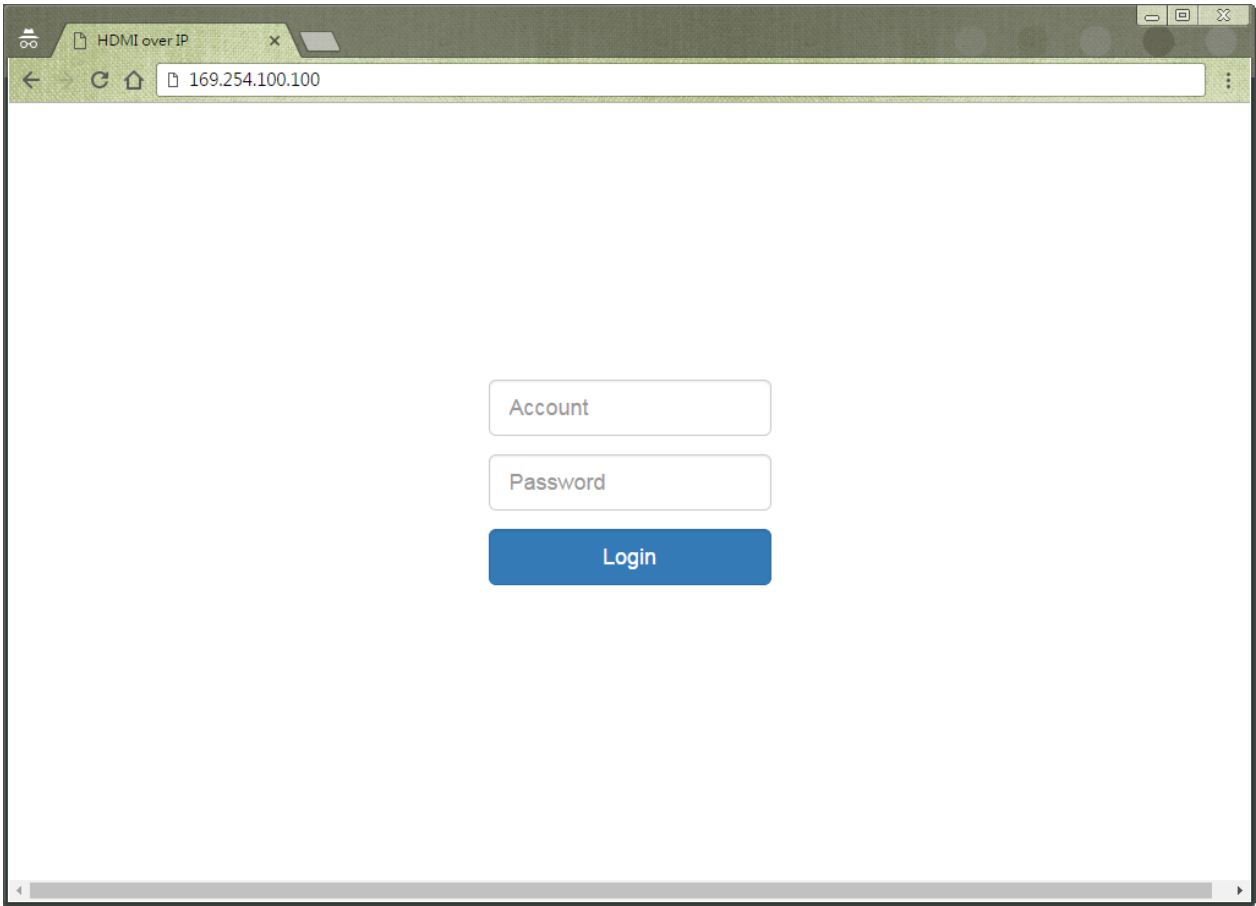


User Interface pages

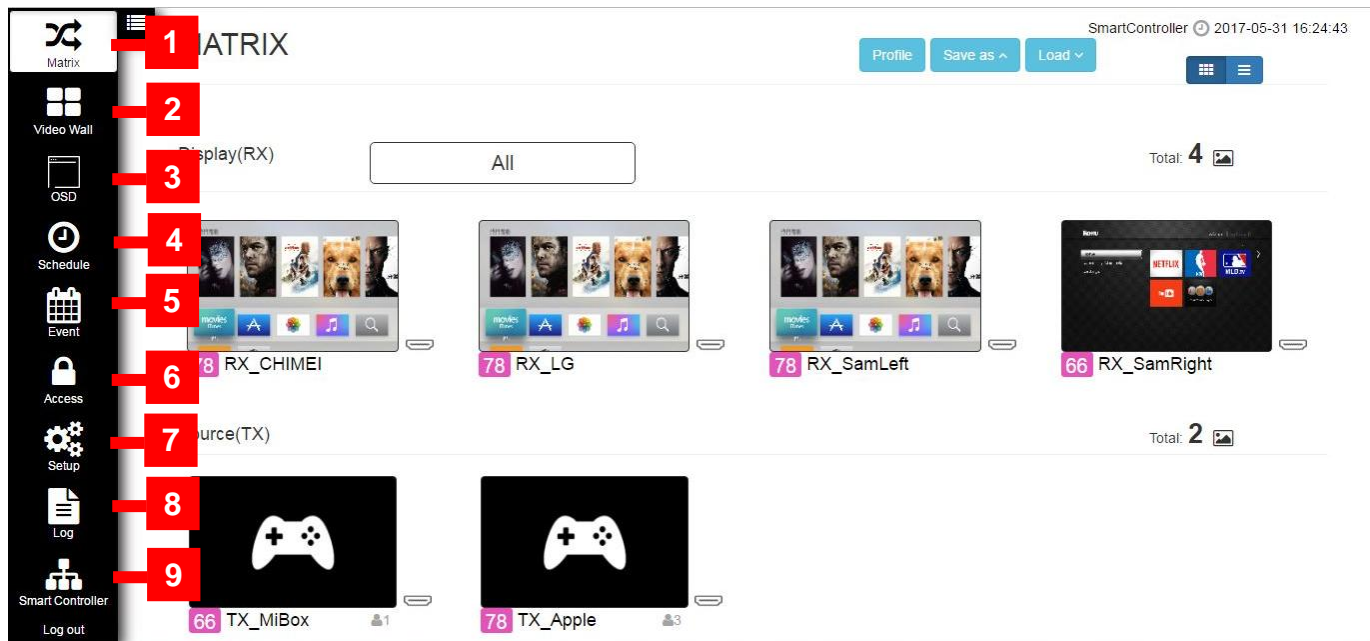
➤ Login

Open the browser and enter the IP address of AV-GM0A83-S1

- Account: admin
- Password: admin



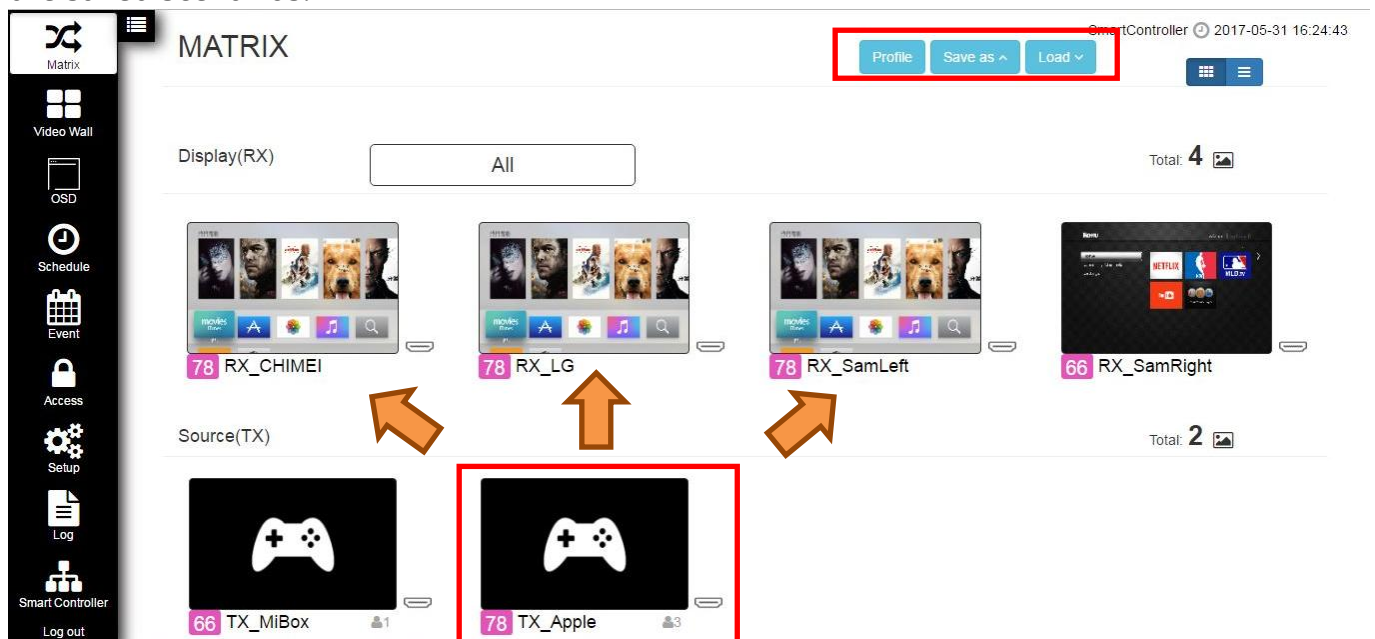
➤ Connect the HDMI over IP extenders to the Router/Ethernet Hub.






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.

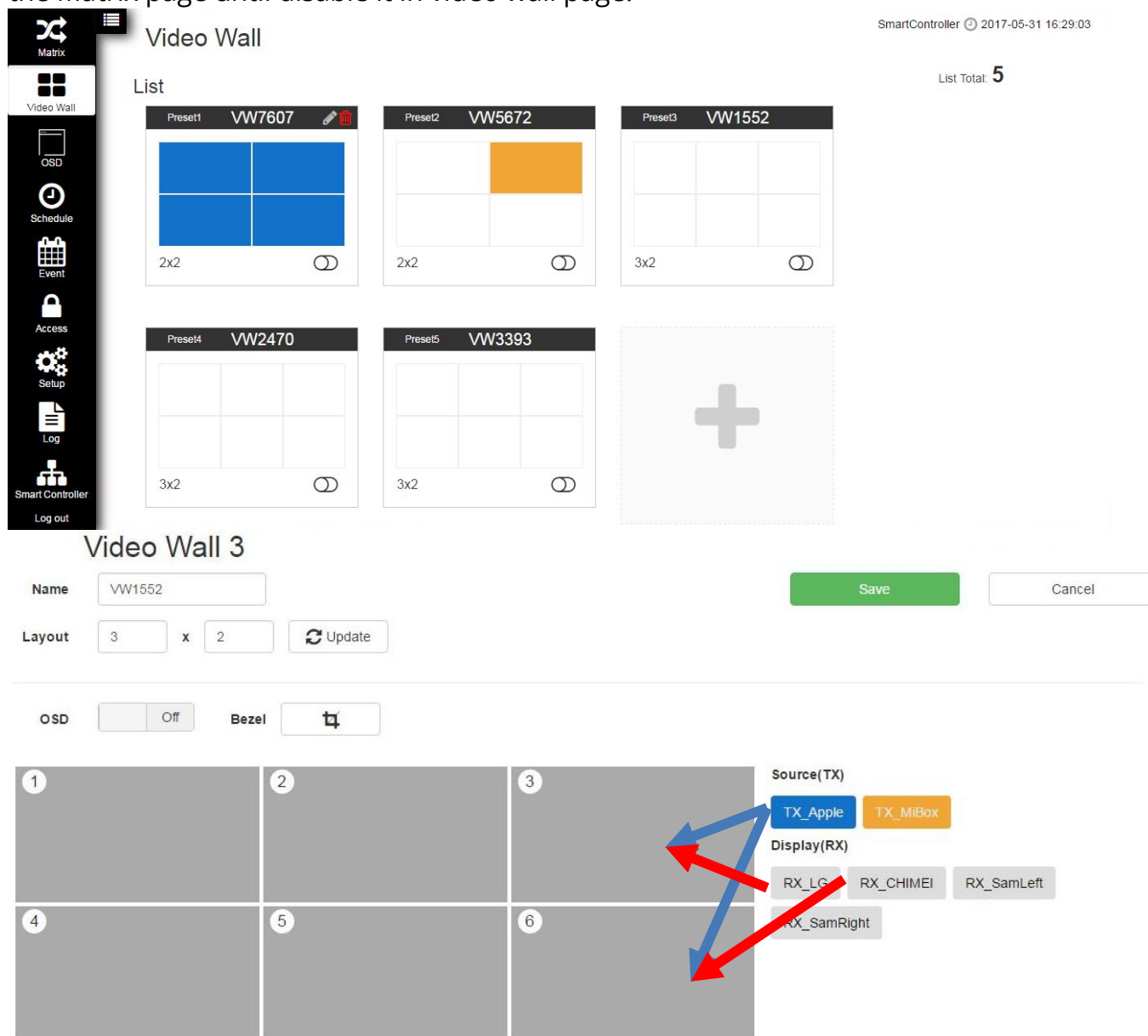


2. Video Wall

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.



SmartController 2017-05-31 16:29:03

List Total: 5

Video Wall List

- Preset1 VW7607 2x2
- Preset2 VW5672 2x2
- Preset3 VW1552 3x2
- Preset4 VW2470 3x2
- Preset5 VW3393 3x2

Video Wall 3

Name: VW1552

Layout: 3 x 2

OSD: Off

Bezel: Off


Source(TX)

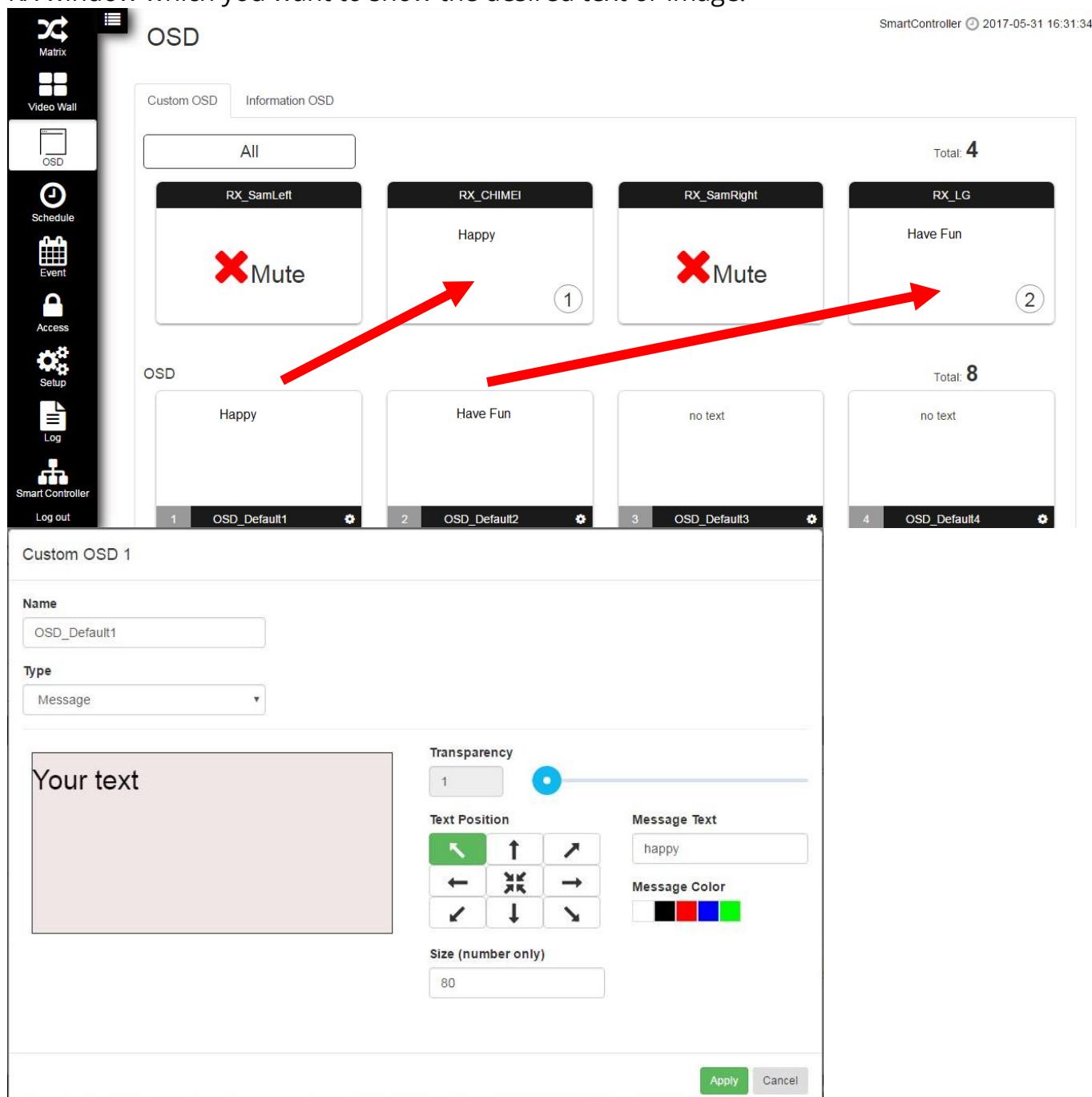
- TX_Apple
- TX_MiBox

Display(RX)

- RX_LG
- RX_CHIMEI
- RX_SamLeft
- RX_SamRight

3. OSD

AV-GM0A83-S1 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.



SmartController 2017-05-31 16:31:34

OSD

Custom OSD Information OSD

All

Total: 4

RX_SamLeft RX_CHIMEI RX_SamRight RX_LG

Mute Happy Mute Have Fun

1 2

OSD

Total: 8

Happy Have Fun no text no text

1 OSD_Default1 2 OSD_Default2 3 OSD_Default3 4 OSD_Default4

Custom OSD 1

Name

OSD_Default1

Type

Message

Your text

Transparency

1

Text Position

Message Text

happy


Message Color

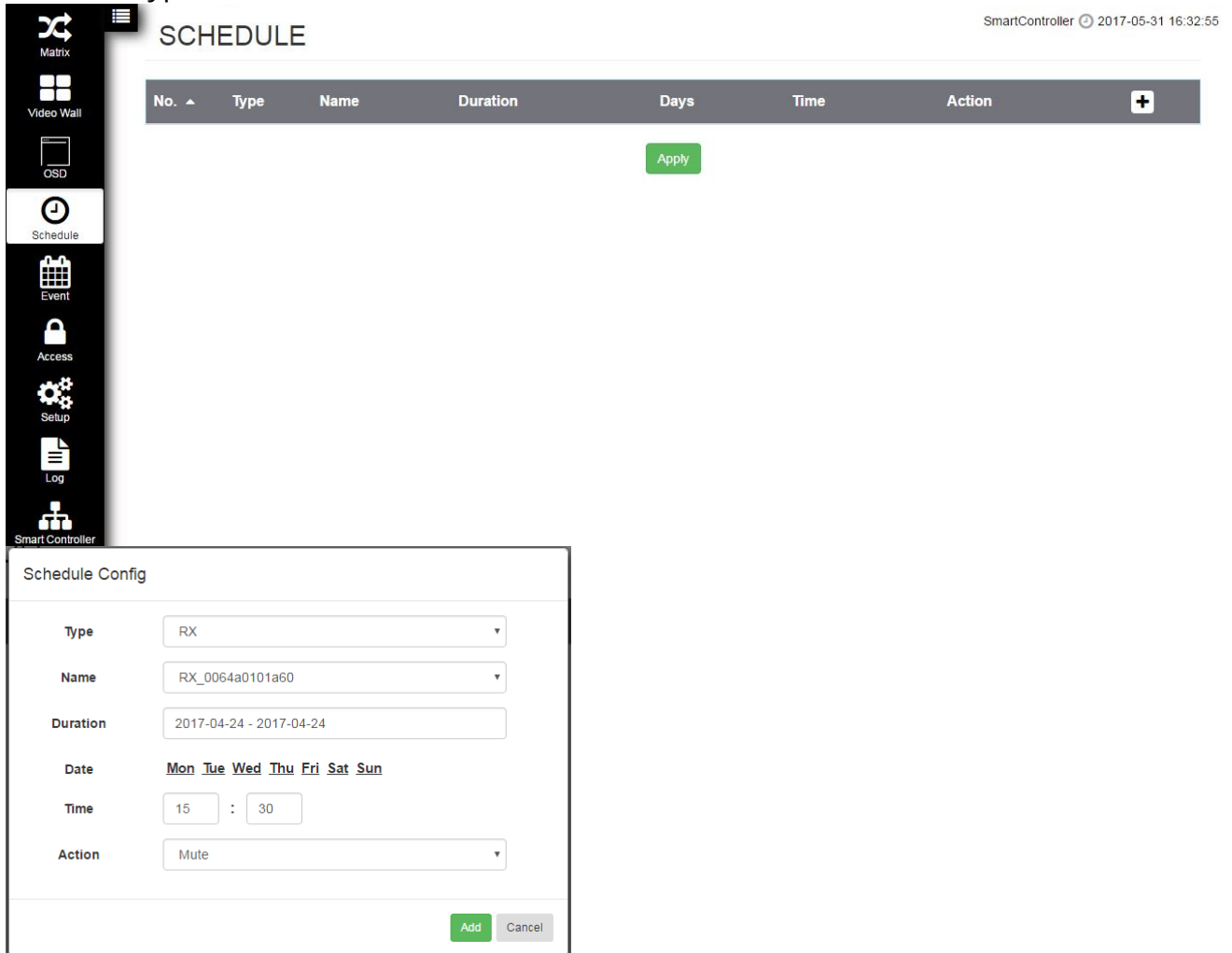
Size (number only)

80

Apply Cancel

4. Schedule

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



SCHEDULE

SmartController 2017-05-31 16:32:55

No. ▲	Type	Name	Duration	Days	Time	Action
-------	------	------	----------	------	------	--------

[Apply](#)

Schedule Config

Type: RX

Name: RX_0064a0101a60

Duration: 2017-04-24 - 2017-04-24

Date: Mon Tue Wed Thu Fri Sat Sun

Time: 15 : 30

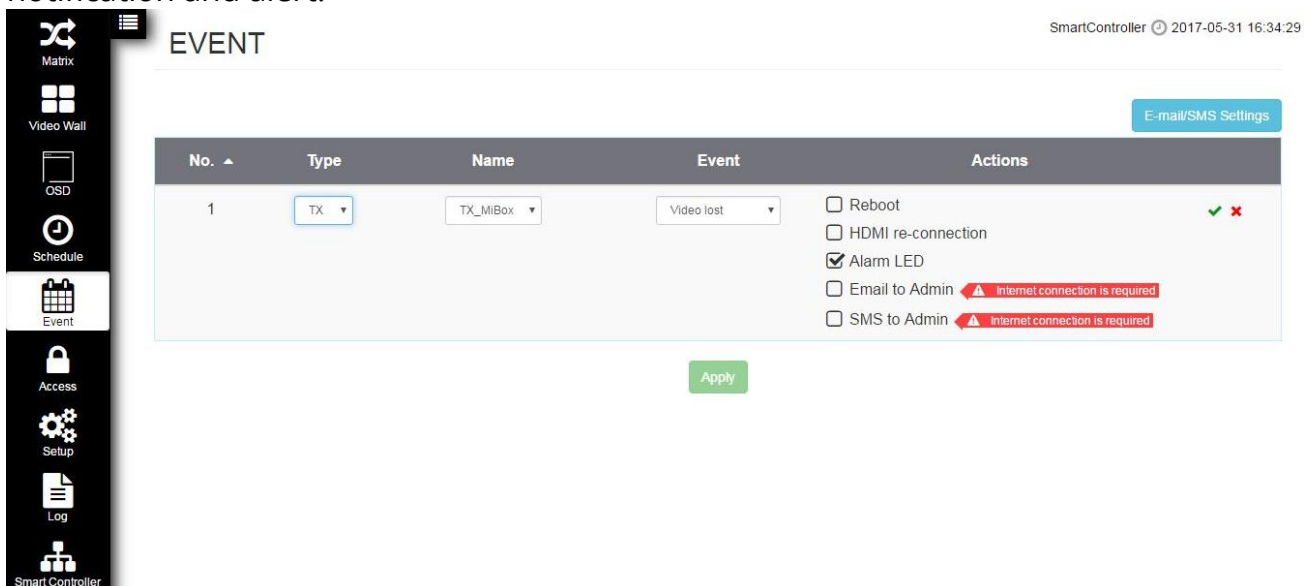
Action: Mute

[Add](#) [Cancel](#)

5. Event

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



Event happens, then AV-GM0A83-S1 will take Action for self-recovery, real-time notification and alert.



EVENT

SmartController 2017-05-31 16:34:29

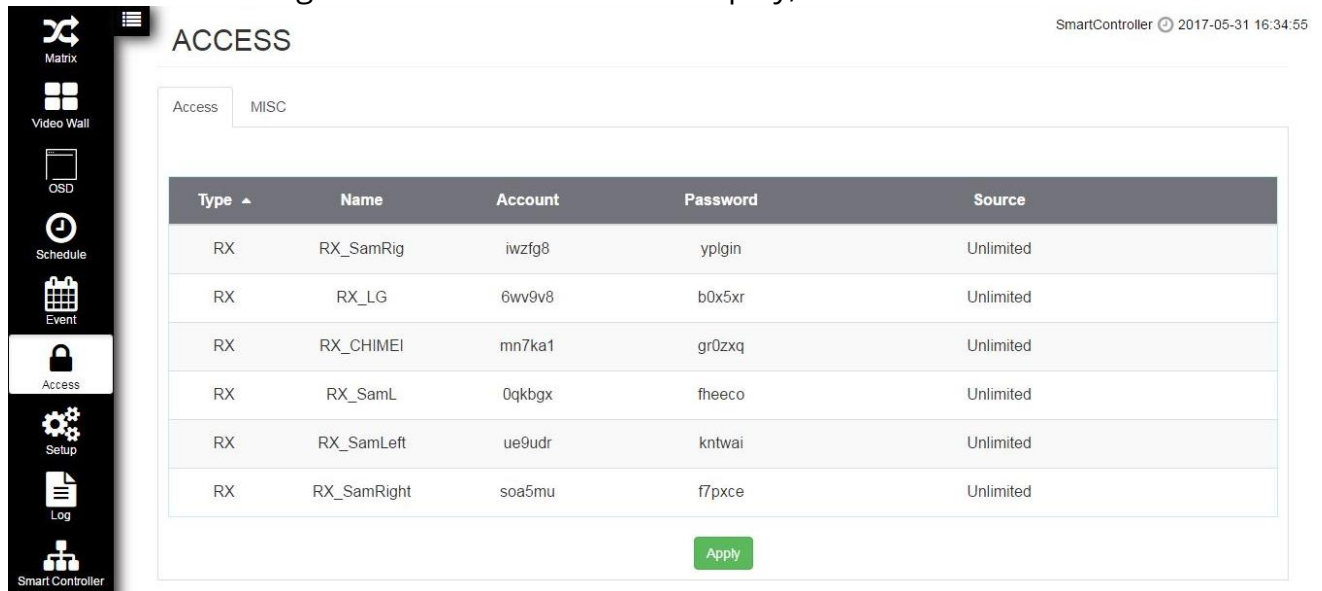
[E-mail/SMS Settings](#)

No. ▲	Type	Name	Event	Actions
1	TX ▼	TX_MiBox ▼	Video lost ▼	<input type="checkbox"/> Reboot <input type="checkbox"/> HDMI re-connection <input checked="" type="checkbox"/> Alarm LED <input type="checkbox"/> Email to Admin  Internet connection is required <input type="checkbox"/> SMS to Admin  Internet connection is required

[Apply](#)

6. Access

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



SmartController 2017-05-31 16:34:55

ACCESS

Access MISC

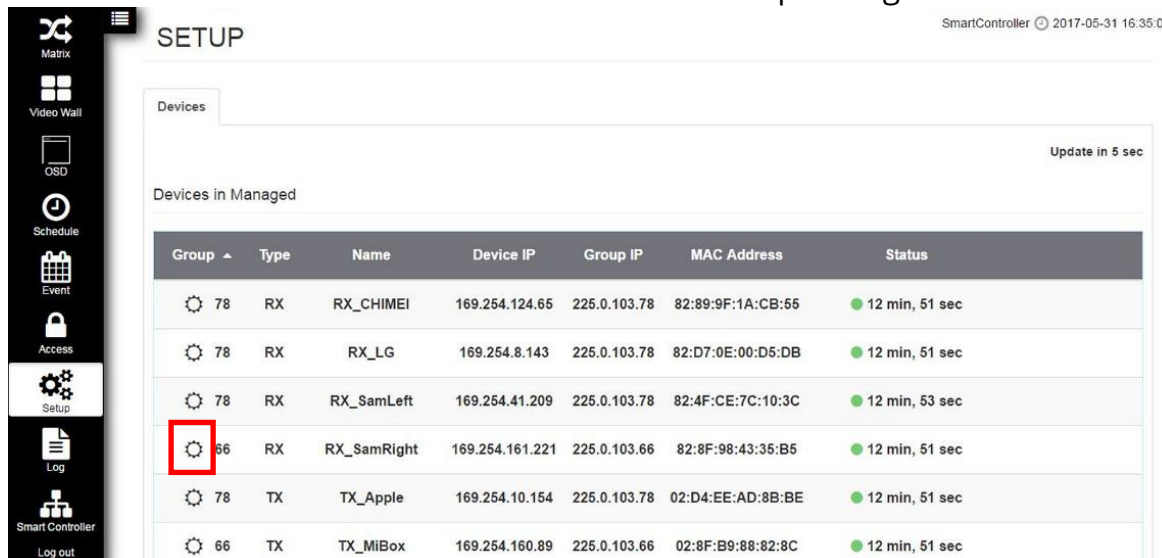
Type	Name	Account	Password	Source
RX	RX_SamRig	iwzfg8	yplogin	Unlimited
RX	RX_LG	6wv9v8	b0x5xr	Unlimited
RX	RX_CHIMEI	mn7ka1	gr0zxq	Unlimited
RX	RX_SamL	0qkbgx	fheeco	Unlimited
RX	RX_SamLeft	ue9udr	kntwai	Unlimited
RX	RX_SamRight	soa5mu	f7pxce	Unlimited

Apply

7. Setup

After connecting the HDMI over IP transmitter and receiver units to the Router/Ethernet Hub, the AV-GM0A83-S1 will automatically add the device into the control system.

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



SmartController 2017-05-31 16:35:09

SETUP


Devices


Update in 5 sec


Devices in Managed


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
66	RX	RX_SamRight	169.254.161.221	225.0.103.66	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.



Matrix



Video Wall



OSD



Schedule


Event


Access


Setup


Log


Smart Controller

Name

RX_CHIMEI

Group ID

77

Apply

Network

Auto IP

On

Apply

AV Settings

Mute

Off

Apply

Maintenance


Reboot

Blink LED

8. Log

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

LOGSmartController 2017-05-31 16:36:10

☒Event ☒Schedule ☒Action ☒Login/out ☒Others Clear 

Date Range:

« 1 2 3 4 5 6 7 8 9 »

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

Help admin ▾

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	May 31, 2017 at 4:22pm (CST)
Up Time	5 minuets 23 seconds
Software Version	scaV1.22.07
MAC Address	b8:27:eb:2e:87:82
Hardware Model	SmartController
Hardware Description	Centralized management for audiovisual equipments

WARRANTY

The SELLER warrants the **AV-GM0A83-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-GM0A83-S1 features and specifications is subject to change without further notice.**

Support

For more info or tech support

<http://www.siiig.com/support>