

# 4x1 HDMI 2.0a Switch with ARC support and Multi Control

**User Manual** 







The **SW-5004RZ 4x1 HDMI 2.0a Switch with ARC support and Multi Control** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **SW-5004RZ** 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 **SW-5004RZ 4x1 HDMI 2.0a Switch with ARC support and Multi Control** provides easy switching among 4 HDMI sources to your high definition display including HDMI equipped or DVI enable monitors. Full digital and high quality video/audio from any of these 4 sources can perfectly be transmitted to the connected high definition monitor via IR remote control, front panel button, software control and cloud control. With HDCP support, up to four HDMI/DVI sources such as PS3, DVD players, camcorders, or set-top boxes can seamlessly & simultaneously connected to this SW-5004RZ.

### FEATURES

- HDMI 2.0a compliant
- Supports 4K2K@60 4:4:4 8bits
- Supports HDR\* which is 4K2K@60 4:2:0 10bits\*\*
- HDCP 2.2 and 1.4 compliant
- Wide frequency range: 25MHz~600MHz
- Video bandwidth: 18Gbps
- Supports ARC
- Supports xvYCC, x.v.Color & Deep color
- The switcher can select any HDMI input by front panel button, IR remote control, USB and Eagleyes (Cloud) control
- Handy front panel button to switch any four HDMI/DVI sources
- Front Panel LED indictors
- Equalization on input ports and pre-emphasis on output port
- Easy installation
- Supports Cloud control\*\*\*

\* HDR = High Dynamic Range.

\*\* The video bandwidth of 4K2K@60 4:2:0 10bits (HDR) is 384MHz, and the 4K2K@60 4:4:4 8bits is 594MHz

\*\*\* Cloud support is thru an encrypted communication to provide the best private protection when using SW-5004RZ

## PACKAGE CONTENTS

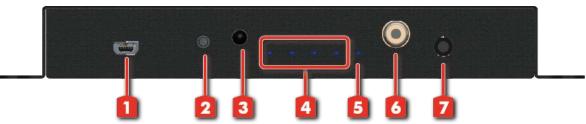
- 1x SW-5004RZ
- 1x 5V DC power adapter
- 1x Installation Software CD
- 1x User Manual
- 1x IR Remote Control (15 keys)

# SPECIFICATIONS

Model Name		SW-5004RZ				
Technical						
Role of usage		4x1 switch				
HDMI compli	ance	HDMI 2.0a				
HDCP compl	iance	HDCP 2.2				
Video bandw	idth	Single-link 600MHz [18Gbps]				
Video Suppo	rt	HDR 4K2K@60 (4:2:0 10bits) / 4K2K@60 (4:4:4 8bits)				
Audio Suppo	rt	DTS-HD Master Audio, Dolby TrueHD Dolby Digital DTS, DVD-Audio, LPCM, SACD, MPCM				
Input TMDS S	Signal	1.2 volts (peak-to-peak)				
Input DDC sig	gnal	5 volts (peal-to-peak)				
ESD Protecti	on	Human body model—±15kV [air-gap discharge] & ±8kV [contact discharge]				
Input		4x HDMI + 1x mini-USB + 1x RJ-45				
Output		1x HDMI + 1x S/PDIF + 1x 3.5mm (stereo)				
IR Remote C	ontrol	Electro-optical characteristics: $\pi = 25^{\circ}$ / Carrier frequency: 38kHz				
HDMI connec	ctor	Type A [19-pin female]				
RJ-45 conne	ctor	WE/SS 8P8C with 2 LED indicator				
RCA connect	or	50Ω female				
3.5mm connector		Earphone socket for analog stereo audio				
USB connect	or	Mini USB				
Mechanical						
Housing	-	Metal enclosure				
<b>D</b>	Model	187 x 62 x 24mm [7.4" x 2.4" x 0.9"]				
Dimensions [L x W x H]	Package	263 x 170 x 97mm [10.3" x 6.7" x 3.8"]				
	Carton	512 x 364 x 288mm [1'7" x 1.2' x 11.3"]				
Waight	Model	300g [10.1oz]				
Weight Package		697g [1.16 lbs]				
Fixedness		Wall-mounting case				
Power supply	/	5V DC				
Power consu	mption	4.5 Watts [max]				
Operation ter	nperature	0~40°C [32~104°F]				
Storage temp	perature	-20~60°C [-4~140°F]				
Relative hum	idity	20~90% RH [no condensation]				

## PANEL DESCRIPTIONS

### **Front Panel**



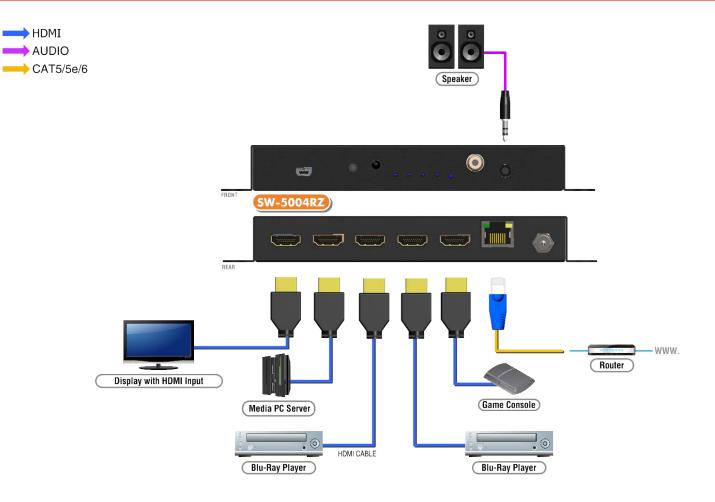
- 1. Mini USB: for software control or firmware udpate
- 2. Channel Push Button: Select input channel
- 3. IR Sensor: IR sensor for receiving the IR commands from IR remote
- 4. Selected Source Status LED: When users use port channel push button, the indicator LED will show the selected source. (from the left to the right is input 4, input 3, input 2, input 1)
- 5. Power Status: Power indicator LED
- 6. S/PDIF Out [ARC]: Connect to an S/PDIF digital audio output
- 7. Steroe Out [ARC]: Connect to an stereo analog audio output

### **Rear Panel**

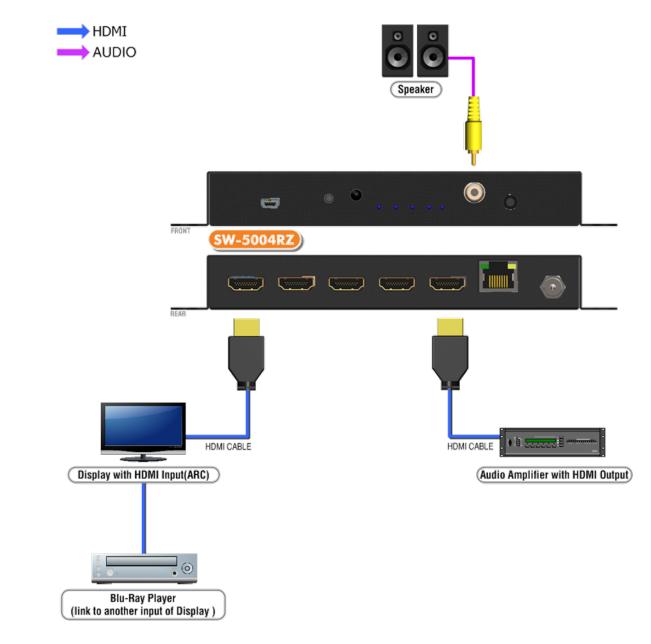


- 8. HDMI OUT: HDMI output
- 9. HDMI Input 1~4: HDMI inputs (from the left to the right is input 1, input 2, input 3, input 4)
- 10. Ethernet: Ethernet control port
- 11.+5V DC: Connect to a 5V DC power supply

## **CONNECTION DIAGRAM**



## **CONNECTION DIAGRAM (ARC OUTPUT)**



#### Procedure of ARC configuration:

- Make sure your device (A/V Receiver/Audio Amplifier/Display) supports ARC (Audio Return Channel) function.
- Connect a HDMI display which with ARC input to the SW-5004RZ HDMI output.
- Check the connection way of the source and audio amplifier is the same as above connection diagram.
- Connect the audio speaker to the SW-5004RZ S/PDIF output (ARC output)
- Make sure your display source from other HDMI input ports (without ARC input), and TV will send audio data return to S/PDIF speaker.
- Plug in power supply unit to the power jack of the SW-5004RZ.

## **OPERATION APPROACH**

### Method A: IR Remote Control

	Function Key	Function Description
	POWER	Standby mode
		Reserved
	•	Reserved
	SOURCE SELECT 1	Select HDMI INPUT 1 to be the input source
	SOURCE SELECT 2	Select HDMI INPUT 2 to be the input source
F1 F2	SOURCE SELECT 3	Select HDMI INPUT 3 to be the input source
	SOURCE SELECT 4	Select HDMI INPUT 4 to be the input source

### Method B: Software Control through RS-232 port

### 1. System Requirement

- (1) OS information : MS Win XP/7/8/10
- (2) Baud rates: 9600
- (3) Software size: 1MB
- (4) Minimum RAM requirement: 256MB

### 2. Control interface



1	Power ON / Standby mode	4	I/O Mapping
2	Control software via RS-232	5	System
3	COM port selection		

### (1) I/O Mapping

Mapping	System						
			Source 1	Source 2	Source 3	Source 4	
			0	O	O		

Mapping

You can assign arbitrary video source here.

IR Setting

This setting controls the operation of the front panel IR receiver. You can enable/disable the IR status.

### (2) System

etwork DHCP	© Sta	atic					System
IP	192	. 168		1	*	65	Factory Reset
Mask	255	. 255	0	255		0	Firmware Version
Gateway	192	. 168		1		1	Firmware Update
Association	Code :						Main Board

- Network function
  - DHCP mode: Select DHCP and click "Read" button to automatically get the IP address.
  - Static mode: Select Static and then key in the "IP", "MASK", "Gateway" information. After setting IP address, please click "Save" button to save IP address information.
- Association Code To get an "association code". The device can use this code to pair with cloud server
- Reset Cloud
  Reset the cloud server
- Factory Reset
  To do factory default reset

- Firmware version
  Get the firmware version information
- Firmware update
  Firmware update device

### Method B: Cloud Control (Eagleyes) through Ethernet port

#### Create Account

The first time to use the Eagleyes service, please create a new account.

1. Access Eagleyes (<u>http://www.eagleyes.io</u>) and click "Create new account".

Login
Forgot password

2. The Registration page will pop up and please fill in your email and password information to create your private account.

Create new account	×
Please enter your email as account	
example@gmail	
Please enter your password	
1234XXX	
Please enter your password again	
please enter your password again	
	Cancel Apply

#### Add Device to Eagleyes

1. Firstly, please make sure the device is connected to the Ethernet. Then please executing the software with device to get the association code (Note: the status of software is connected).

Mapping System			
Network			System
O DHCP	Static		
IP			Factory Reset
Mask		Read	Firmware Version
Gateway		Save	Commence the data
			Firmware Update
			çõ þ
Association	n Code : 928882	Read	Main Board
Reset Clou	d :	Арріу	

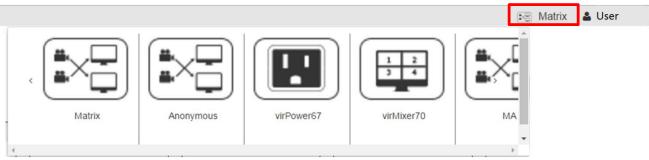
2. Access Eagleyes (<u>http://www.eagleyes.io</u>), and then log in your account on the right top corner. Click **Add device** to add the device which you just got its association code.



3. Enter the Installer Email for online support in the future, and the Association Code for pairing with your device.

Add new device	×
Installer Email	
Association Code	
	Close Apply

4. After adding the device, the list of device related to your account will show on the right top corner. You can click the button to switch device for control.



### WARRANTY

The SELLER warrants the **SW-5004RZ 4x1 HDMI 2.0a Switch with ARC support and Multi Control** 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 SW-5004RZ features and specifications is subject to change without further notice.