

SW-5004R

4x1 HDMI Switch with IR

User Manual



rev: 130628
Made in Taiwan



Safety and Notice

The **SW-5004R 4x1 HDMI Switch with IR** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **SW-5004R** 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-5004R** provides easy switching among 4 HDMI sources to your high definition display including HDMI equipped or DVI enabled 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 or front panel button. 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-5004R.

The SW-5004R has 4 input HDMI definition receptacle connectors and 1 output HDMI definition receptacle connector. Users simply connect all the HDMI/DVI sources to the inputs of SW-5004R, and then connect HDMI/DVI equipped display system on the output port. Via IR remote control or front panel button, users can select which source they would like to be displayed. Auto-scan function provides quick surf on the connected sources sequentially and auto-detection function makes the device automatically switch to the first working source among 4 channels at power on. Extra superior equalization functions on input ports and pre-emphasis on output ports provide users the most adaptive way to improve the transmission distance.

FEATURES

- Support HDMI Deep Color
- Fully HDCP compliant
- Handy front panel button to switch any four HDMI/DVI sources
- Supports 480p, 720p, 1080i, 1080p, and VESA resolutions
- Front panel LED indicators
- Equalization on input ports and pre-emphasis on output port
- Easy installation

PACKAGE CONTENTS

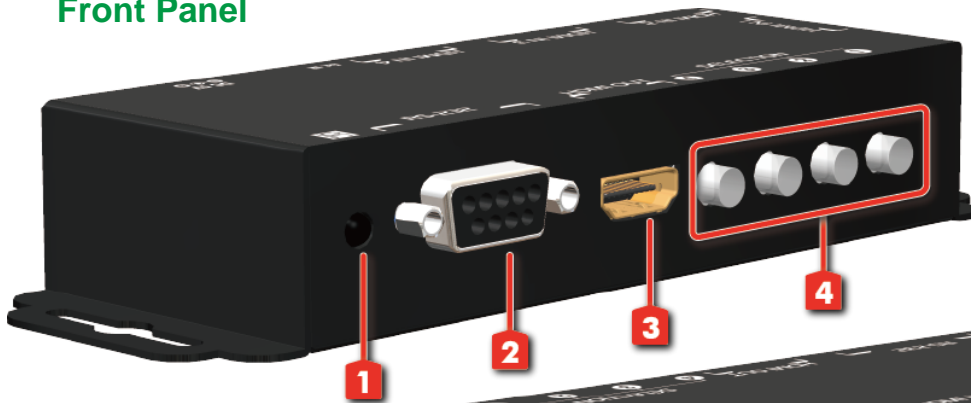
- 1x SW-5004R
- 1x IR controller
- 1x 5V 0.85A power adapter
- 1x IR receiver
- 1x User Manual

SPECIFICATIONS

| Model Name | | SW-5004R |
|---------------------------|---------|---|
| Technical | | |
| Role of usage | | 4x1 switch |
| HDMI compliance | | HDMI Deep Color |
| HDCP compliance | | Yes |
| Video bandwidth | | 6.75 Gbps |
| Video support | | 480p, 720p, 1080i, 1080p, and VESA resolutions |
| Transmission | | up to 15m/50ft at 1080p |
| Audio support | | Surround sound (up to 7.1ch) or stereo digital audio |
| Input TMDS signal | | 1.2 volts (peak-to-peak) |
| Input DDC signal | | 5 volts (peak-to-peak) |
| ESD protection | | [1] Human body model—±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±8kV |
| PCB stack-up | | 4-layer board [impedance control — differential 100Ω; single 50Ω] |
| Input | | 4x HDMI / 1x RS-232 / 1x IR Receiver |
| Output | | 1x HDMI |
| IR remote control | | Electro-optical characteristics: $\pi = 25^\circ$ / Carrier frequency: 38kHz |
| HDMI connector | | Type A [19-pin female] |
| RS-232 connector | | DE-9 [9-pin D-sub female] |
| Mechanical | | |
| Dimensions [L x W x H] | Model | 107 x 53 x 27mm [4.2" x 2.1" x 1"] |
| | Package | 175 x 270 x 80mm [6.9" x 10.4" x 3.1"] |
| | Carton | 370 x 450 x 300mm [1.3" x 1.6" x 1"] |
| Weight | Model | 202g [7.1oz] |
| | Package | 517g [1.14 lbs] |
| Fixedness | | Wall-mounting case |
| Power supply | | 5V 0.85A DC |
| Power consumption | | 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

Front Panel



Rear Panel

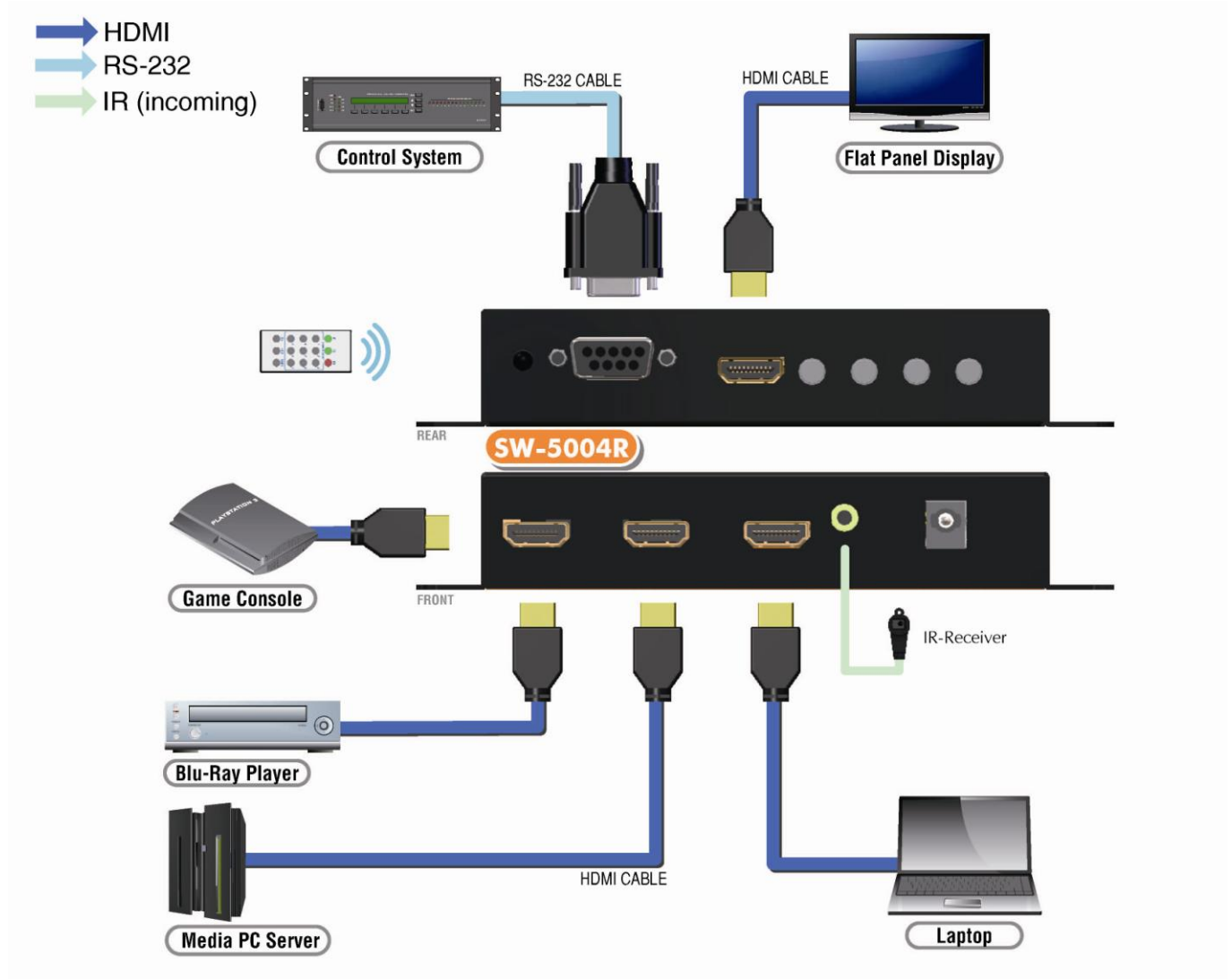


1. IR Sensor
2. Serial channel control
3. HDMI OUT
4. channel push button and indicator LED
5. HDMI Input 1~4
6. IR Receiver
7. +5V DC



HARDWARE INSTALLATION

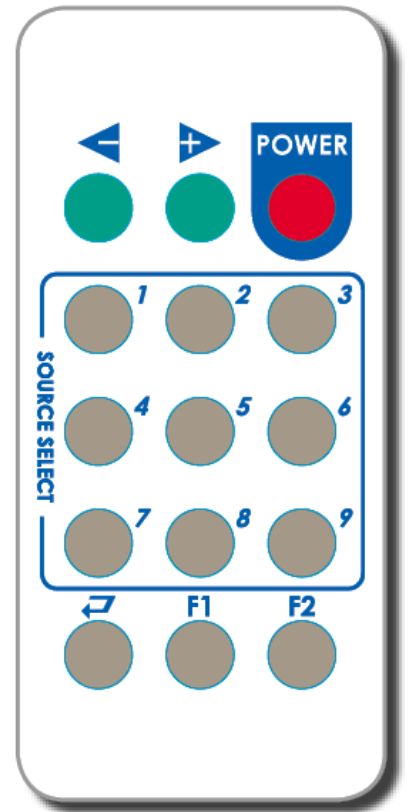
1. There is no power switch on the device. Power is automatically turned on when the power cord is plugged into a wall outlet.
2. Connect your HDMI/DVI sources to the input ports of SW-5004R.
3. Connect your HDMI/DVI enabled receiver (monitors etc.) into the output port of SW-5004R.
4. Power up SW-5004R.
5. Select the input you want to be displayed on the connected monitor with IR remote control or push button on the front panel.
6. If long cable transmission (>15m/50ft) is considered, HDMI extender is needed.

CONNECTION DIAGRAM



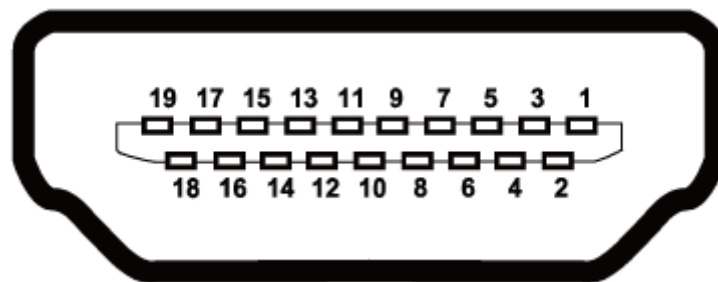
IR REMOTE CONTROL

| Function Key | Function Description |
|---|---|
| POWER | Reserved |
|  | 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 |
| SOURCE SELECT 3 | Select HDMI INPUT 3 to be the input source |
| SOURCE SELECT 4 | Select HDMI INPUT 4 to be the input source |



HDMI PIN DEFINITION

HDMI



Type A (Receptacle) HDMI

| | | | |
|--------|-------------------|--------|---------------------------|
| Pin 1 | TMDS Data2+ | Pin 11 | TMDS Clock Shield |
| Pin 2 | TMDS Data2 Shield | Pin 12 | TMDS Clock– |
| Pin 3 | TMDS Data2– | Pin 13 | NC |
| Pin 4 | TMDS Data1+ | Pin 14 | Reserved (N.C. on device) |
| Pin 5 | TMDS Data1 Shield | Pin 15 | SCL |
| Pin 6 | TMDS Data1– | Pin 16 | SDA |
| Pin 7 | TMDS Data0+ | Pin 17 | DDC/CEC Ground |
| Pin 8 | TMDS Data0 Shield | Pin 18 | +5V Power |
| Pin 9 | TMDS Data0– | Pin 19 | Hot Plug Detect |
| Pin 10 | TMDS Clock+ | | |

WARRANTY

The SELLER warrants the **SW-5004R 4x1 HDMI Switch with IR** to be 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 surges.

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 are limited to a 30 day warranty and cable 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-5004R features and specifications is subject to change without further notice.