

UHD Matrix 4in 2out HDCP 2.2

- # 15385



Operation Manual

Introduction

The 6G UHD 4 by 2 HDMI Wall Plate Matrix is the most advance HDMI solution for your true Ultra High-Definition signal distribution. It allows you to manipulate one 6G HDMI input signals with switching into two 6G HDMI displays simultaneously. With supports 4K2K@60, 48-bit Deep Color, Hi-Def audio and other features defined by HDMI specifications. The device can be operated easily through Telnet, WebGUI, IR remote and on-panel controls.

Applications

- Entertainment Room / Home Theater
- Show Room / Demo Room
- Lecture Room/Hall Presentation
- Show Room/Demo Room
- Public Commercial Display

Features

- HDMI with 6G 4Kx2K supported, HDCP 2.2 and DVI compliant
- Supports 4 HDMI inputs of one 6G and 2 HDMI outputs of two 6G
- Supports HDTV resolutions up to 4Kx2K (3840x2160@24/25/30/50/60 & 4096x2160 @24/25/30/50/60Hz)
- Supports data rate up to 6Gbps and Deep Color up to 1080p 48-bit
- Supports pass-through of HD audio formats of LPCM 2/5.1/7.1CH, Dolby Digital 2~5.1CH, DTS 2~5.1CH, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos and DTS-HD Master Audio
- Compliant with DVI source

System

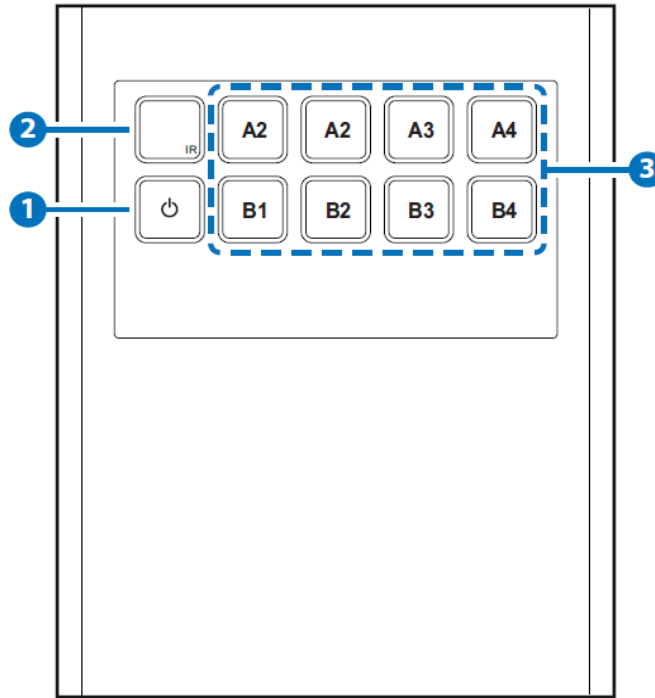
Requirements

Input source equipment such as Blu-ray/DVD/PS3 player or Set-Top-Box and output HDMI TV/Display and or audio amplifier with connection cables.



Operation Controls and Functions

Top Panel

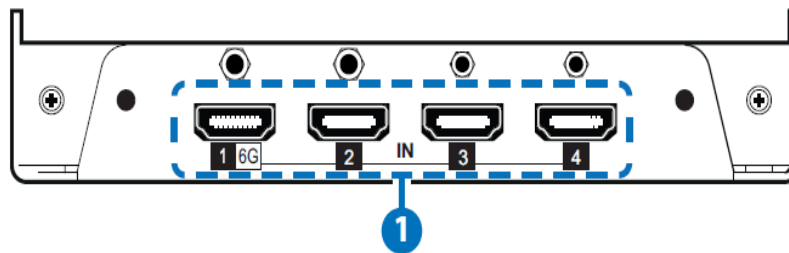


1. POWER: Press the Power key to turn on the device and the LED will illuminated in green, press again to set it to standby mode and the LED will turn red. This device obtain power last memory function therefore, when power supply is re-plugged it will return to last power status.

2. IR Window: This IR Receiver receives IR signal from the remote control included in the package only.

3 OUTPUT A1~A4 & B1~B4: Press these IN buttons to select for each output with an input source to display.

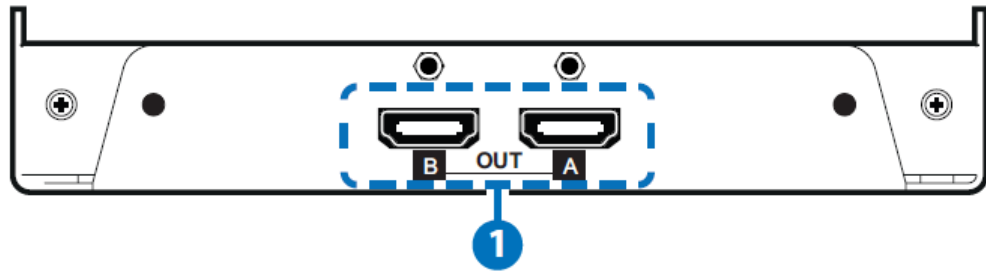
Left Panel



1. HDMI IN 1~4: Connect from source equipment such as Blu-ray/ DVD/PS3 player, Set-Top Box or any HDMI equipped source device for input signal sending.

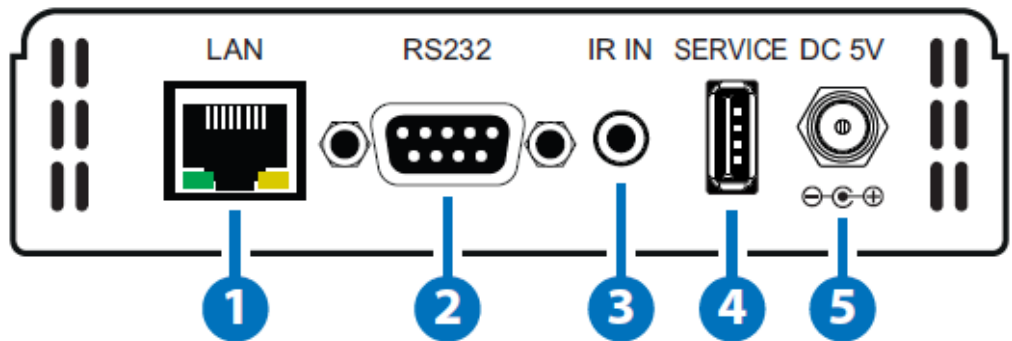
Note: Only port 1 supports 6G signal and other ports support up to 3G signal.

Right Panel



1. HDMI OUT A~B: Connect to HDMI TV / display or HD amplifier for output image and audio or audio display up to 6G each port.

Bottom Panel



1. LAN: Connect to PC / Laptop with active internet service for Telnet / WebGUI control with RJ-45 terminated cable.

2. RS232: Connect to PC / Laptop to control the device.

3. IR IN: Connect the IR Receiver cable from the package for receive IR signal from the remote control.

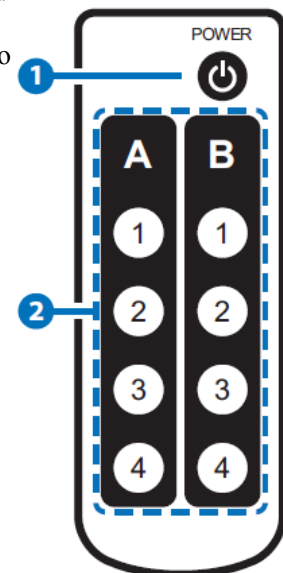
4. SERVICE: This is reserved for firmware update use only.

5. DC 5V: Connect with adapter included from the package and connect to AC wall outlet for power supply. Once it's connected all LEDs on the panel will light up for few seconds to represent a successful connection.

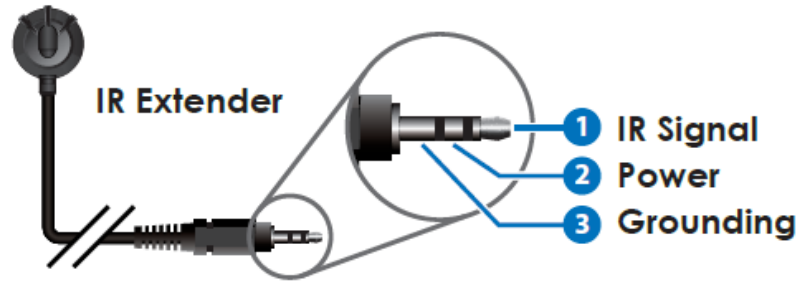
Remote Control

1. POWER: Press Power key to turn on the device or set to standby mode.

2. OUTPUT A1~A4 & B1~B4: Press these OUT buttons once a time to select an input source for an output display.



IR Cable Pin Assignment



RS-232 Protocol

Wall Plate	
Pin	Assignment
1	NC
2	TxD
3	RxD
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC



Remote Controller	
Pin	Assignment
1	NC
2	RxD
3	TxD
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

Baud Rate: 19200bps
 Data bit: 8 bits
 Parity: None
 Flow Control: None
 Stop Bit : 1

RS-232 and Telnet Commands

Command	Description
A 1~A 4	Switch output A to 1~4
B 1~B 4	Switch output B to 1~4
IPCONFIG	Display the current IP config
IPDHCP	0=Set IP mode to static, 1=Set IP mode to DHCP
SIPADDR	Set Ethernet IP address
SNETMASK	Set Ethernet netmask
SGATEWAY	Set Ethernet gateway
HTTPPORT	Set http port number
RSTIP	IP configuration reset to factory defaults (DHCP) IP mode: static, IP address: 192.168.1.50 Netmask: 255.255.255.0, Gateway: 192.168.1.1 Http port: 80, Telnet port: 23
P0	Power off
P1	Power on
ST	Displays the current matrix state and firmware version
?	Display all available commands
REBOOT	Reboot the unit
FADEFAULT	Reset all settings to factory default
UPDATE	Firmware update

Note: Any commands will be not executed unless followed with a carriage return. All commands are case-sensitive

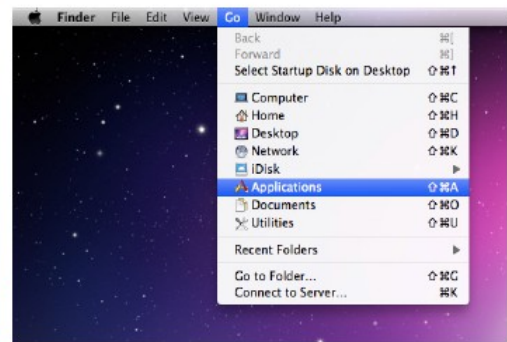
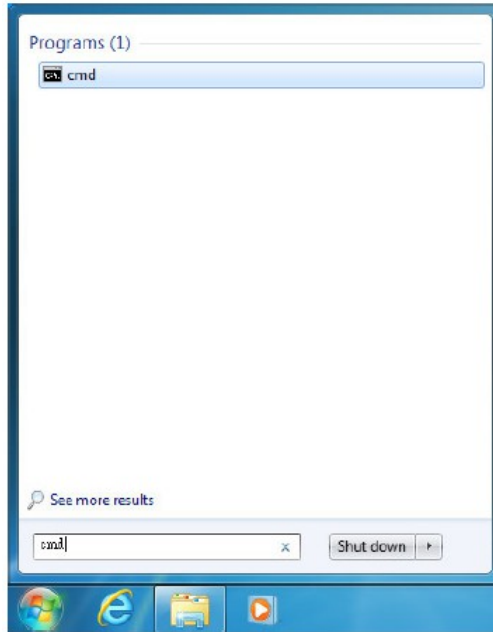
Telnet Control

Before attempting to use the Telnet control, please ensure that both the Matrix (via the 'LAN /CONTROL' port) and the PC/Laptop are connected to the same active networks.

To access the telnet control in Windows 7, click on 'Start' menu and type "cmd" in the Search field then press enter.

Under Windows XP go to the 'Start' menu and click on "Run", type "cmd" and press enter.

Under Mac OS X, go to Go→Application→Utilities→Terminal



Once in the command line interface (CLI) type "telnet", then the IP address of the unit and "23", then hit enter.

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>telnet 192.168.5.80 23
```

This will bring us into the unit which we wish to control. Type "help" to list the available commands.

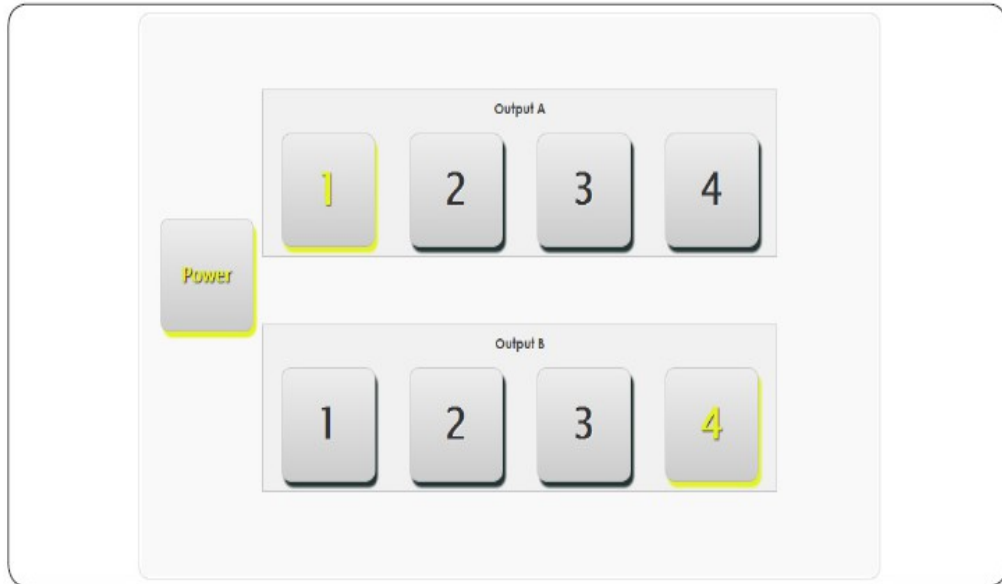
```
Welcome to TELNET.
?

Command List
-----
P0
P1
A
B
IPCONFIG
SIPADDR
SNETMASK
SGATEWAY
HTTTPORT
IPDHCP
RSTIP
ST
REBOOT
UPDATE
```

Note: Commands will be not executed unless followed by a carriage return. Commands are case-insensitive. If the IP is changed then the IP Address required for Telnet access will also change accordingly.

Web GUI Control

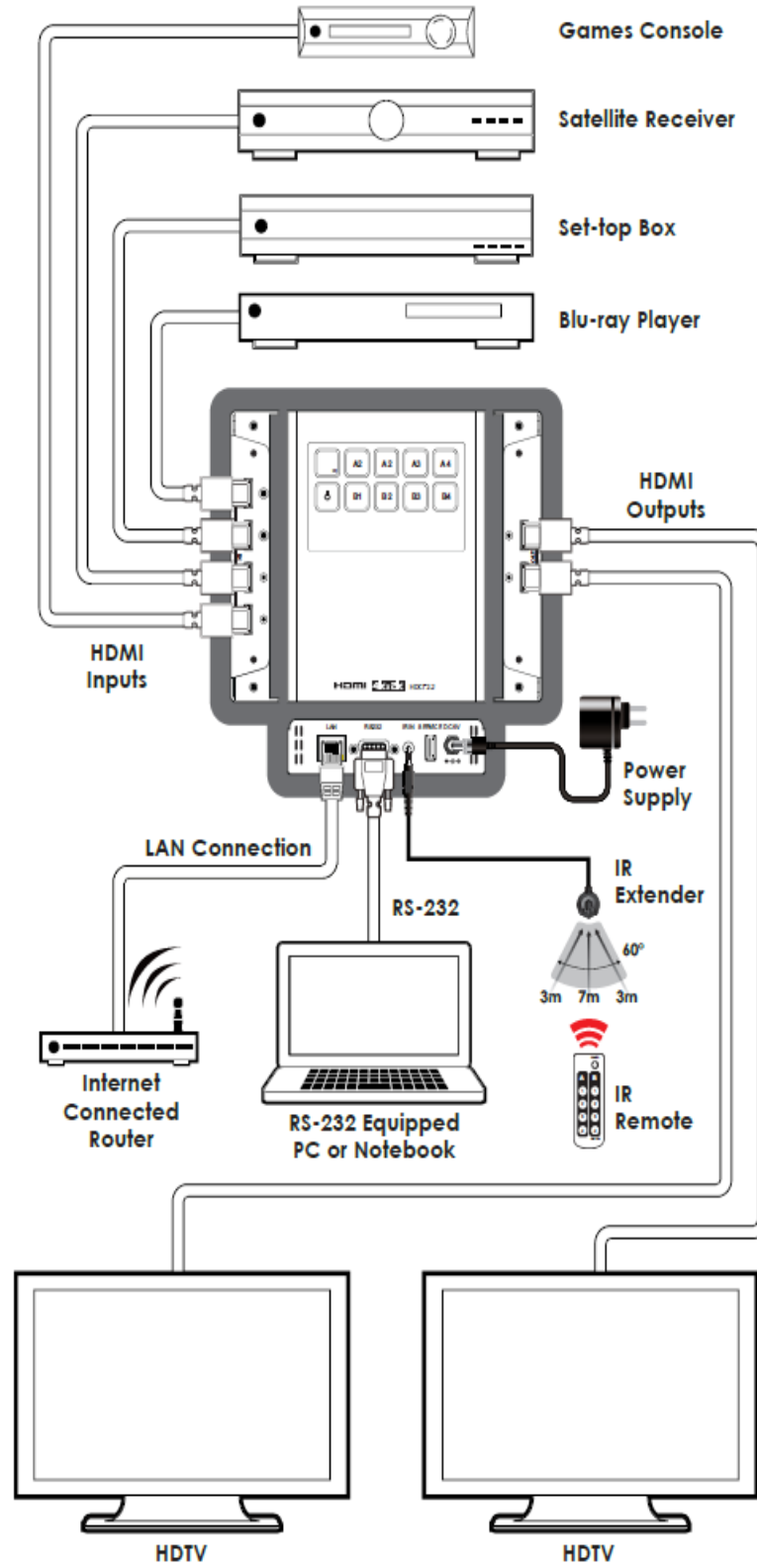
On a PC/Laptop which is connected to an active network system, open a web browser and type device's IP address (factory default static IP: 192.168.1.50) on the web address entry bar. The browser will display the device's control page for users to control.



Specifications

Video Bandwidth	600 MHz/6 Gbps
Input Ports	4×HDMI, 1×IP Control (RJ-45), 1×IR, 1×RS-232 (9-pin D-sub), 1×USB (Service only)
Output Ports	2×HDMI
Supported Resolutions	480i~1080p@24/50/60, 4K2K@24/25/30/50/60 & VGA~WUXGA
IR Frequency	38 kHz
Baud Rate	19200 bps
Power Supply	5 V/2.6 A DC (US/EU standards, CE/FCC/UL (certified))
ESD Protection	Human body model: ±8 kV (air-gap discharge) ±6 kV (contact discharge)
Dimensions	150 mm (W)×162 mm (D)×31 mm (H)
Weight	744 g
Chassis Material	Metal
Color	Black
Operating Temperature	0°C~40°C/32°F~104°F
Storage Temperature	-20°C~60°C/-4°F~140°F
Relative Humidity	20~90% RH (non-condensing)

Connection Diagram



Supported Resolutions

Resolution	Input	Output
640×480@60/72/75/85	√	√
720×480@60	√	√
720×576p@50	√	√
800×600@60/72/75/	√	√
1024×768@60/70/75	√	√
1280×720@50/60	√	√
1280×720p@60	√	√
1280×768@60	√	√
1280×800@60	√	√
1280×1024@60	√	√
1360×768@60	√	√
1600×1200@60	√	√
1920×1080i@50	√	√
1920×1080i@60	√	√
1920×1080p@24/25/30/50/60	√	√
1920×1200@60(RB)	√	√
3840×2160@24/25/30/50/60	√	√
4096×2160@24/25/30/50/60	√	√