



CDPS-6H2HFS

6 by 2 HDMI 4Kx2K Matrix



Operation Manual



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SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

| VERSION NO. | DATE DD/MM/YY | SUMMARY OF CHANGE |
|-------------|---------------|--------------------------|
| RDV1 | 29/10/13 | Preliminary Release |
| RDV2 | 07/02/14 | RS-232 EDID Command |
| RDV3 | 27/06/14 | RS-232 Command |
| RDV4 | 24/07/14 | Preview and PIP function |
| RDV5 | 01/08/14 | DVI Compliance |

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1. INTRODUCTION

The 6 by 2 HDMI matrix which allows HDMI signal from any of its six sources to be routed to and displayed on any of its two connected HDMI displays simultaneously with View All Mode and Picture-in-picture (PIP) supported. With fast switching technology the device can greatly eliminate the time required by swapping or turning ON/OFF the connected displays. It supports 4Kx2K, 3D, 36-bit Deep Color, Hi-Def lossless audio and other features defined by HDMI specifications. The management of source/sink scenarios can be operated easily through on-panel buttons, IR remote control, RS-232 or Ethernet protocol.

2. APPLICATIONS

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

3. PACKAGE CONTENTS

- 6 by 2 HDMI 4Kx2K Matrix
- Remote Control with Battery
- Left & Right Rack Ears
- 5V/2.6A DC Power Adaptor
- IR Receiver Cable
- Operation Manual

4. SYSTEM REQUIREMENTS

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

5. FEATURES

- HDMI with 3D & 4Kx2K supported, HDCP and DVI compliant
- Support six HDMI inputs and two HDMI outputs
- Displays any of six (6) High-Definition sources on two (2) HDTV displays simultaneously with fast switch
- When in Preview mode, the system will be treated as Switcher (two HDMI output same images at the same time)
- In Preview mode, it support View All (1 Main video source and 5 Sub video sources) and PIP (1 Main video source and 1 Sub video source). 3D and 4K2K sources inputs are not supported for sub-windows

Note: View All is TDM (Time Division Multiplexing display)

- 3DTV Pass-Through
- Supports HDTV resolutions up to 4Kx2K (3840x2160@24/25/30 & 4096x2160@30Hz, 50/60 @YUV420)
- Supports Optical audio extraction
- Supports Optical audio sampling rate output up to 192kHz
- Supports data rate from 300Mbps to 3Gbps and Deep Color up to 1080p 36-bit
- Supports individual EDID or common EDID
- Supports LPCM 2/5.1/7.1CH, Dolby Digital 2~5.1CH, DTS 2~5.1CH (Pass through), Dolby TrueHD and DTS-HD Master Audio
- Supports 6 sets of Matrix preset functions for input/output setting
- Input port HDCP support Standard and Apple mode. The Apple mode selection to guarantees the use of Apple devices
- Compliant with DVI source

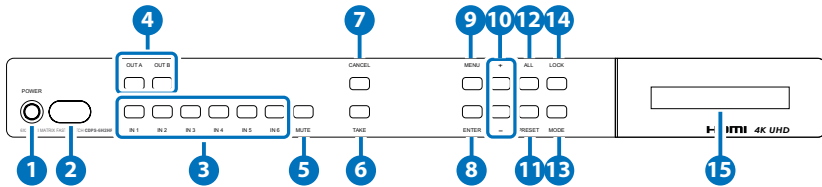
Note: Support HDMI to DVI conversion that HDMI source is non-deep color and color space RGB.

Not support HDMI to DVI conversion that HDMI source is deep color and color space YCbCr 444/422

- Supports OSD on output B under Preview Mode

6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



- 1 **POWER:** Press this button to turn ON the device and the LED will illuminated.
- 2 **IR Window:** This IR Receiver receives the remote control signal from the package includ remote control only.
- 3 **IN 1~6:** Press these IN buttons to select an input from the 6 input sources.
- 4 **OUT A/B:** Press these buttons once a time along with an IN buttons to select an input source for an output display. i.e. OUT A→ IN1→TAKE or OUT B→ IN6→TAKE.
- 5 **MUTE:** Press this button to mute video and audio on OUT A or B.
- 6 **TAKE:** Press this button to confirm the selection of an IN and an OUT button.
- 7 **CANCEL:** Press this button to cancel the IN/OUT selection.
- 8 **ENTER:** Press to confirm the selection.
- 9 **MENU:** Press to enter into the menu.
- 10 **+/-:** Press these buttons to move up/down under menu selection.
- 11 **PRESET:** (PV MUTE: Preview ON/OFF)
 - When select the MODE in Preview mode, press the button to turn ON/OFF the Sub video windows.
 - When select the MODE in Matrix mode, press “PRESET” to switch between Normal and Preset mode.
 - ✓ Normal mode:
Press OUT A or OUT B or ALL and then press IN 1~6 or MUTE to select the input sources. After the selection, press “TAKE” to confirm the selection or press “CANCEL” to cancel the selection.

- ✓ Preset mode:
Press "PRESET", the OLED menu will show Preset then select IN 1~6. Preset 1~6 after the selection, press "TAKE" to confirm the selection or press "CANCEL" to cancel the selection.

12 All: (SWAP)

Press this button to select all outputs to display with an input source. When in PIP mode, press to swap between Main video source and Sub video source.

13 MODE: Press to switch between Preview or Matrix mode.

- Preview mode: From MENU option select View All (1 Main video sources and 5 Sub video sources) or PIP mode (1 Main video sources and 1 Sub video sources).

Note: Under Preview mode, OSD display on output B only.

- ✓ View All: Press IN 1~6 or MUTE to select the Main channel. From OLED menu select "Preview Position" for Sub screens position.

Note: All sub screens will be display rotatively for about 0.5 second and those screens that are not rotatived will be freezed.

- ✓ PIP: Press OUT A (Main) or OUT B, then press IN1~6 or MUTE to select Main or Sub video source. Press "ALL" or Remote Control "SWAP" to exchange Main/Sub video source.

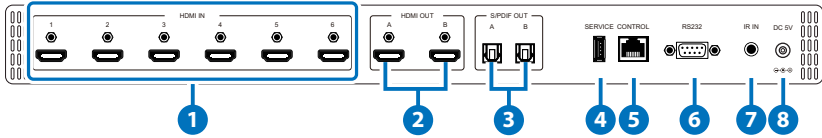
Note: When both Main and Sub select the same input source, Sub will be muted.

- Matrix mode: Press OUT A or OUT B or OUT A & B and then press IN 1~6 or MUTE to select the input sources. After the selection, press "TAKE" to confirm the selection or press "CANCEL" to cancel the selection.

14 LOCK: Press this button to lock all button functions on the panel. Press 3 seconds to relieve the lock function.

15 LCM: Displaying Input and Outputs selection and menu selection.

6.2 Rear Panel



- 1 HDMI IN:** Connect from source equipments such as Blu-ray/DVD/ PS3 players, Set-Top-Box or any HDMI equipped source device for input signal sending.
- 2 HDMI OUT:** Connect to HDMI TV/display or HD Amplifier for output image and or audio display.
- 3 S/PDIF OUT:** Connect to audio sound system or Amplifier for digital output sound.
- 4 SERVICE:** This slot is reserved for firmware update use only.
- 5 CONTROL:** Connect from PC/Laptop with active internet service for Web GUI control with RJ-45 terminated cable.
- 6 RS232:** Connect from PC/Laptop for RS-232 command sending to control the device.
- 7 IR IN:** Connect the IR Receiver included in the package for IR signal receive from the included remote control.
- 8 DC 5V:** Connect the adaptor with power cord included in the package and connect to AC wall outlet for power supply.

6.3 OSD Menu

| Main Menu | Sub Menu | Description | Default |
|-----------|------------------------|-------------------------------------------------------------------------------------------|--------------------|
| EDID Mode | All | All Input port is using same EDID. In menu "EDID All", can select suitable EDID. | All |
| | Appoint | Each Input port can select individual EDID. In menu "EDID IN1~6" select suitable EDID. | |
| | Exit | | |
| EDID All | Sink A | Copy Output A display EDID | 8/2D/ PCM/1080p |
| | Sink B | Copy Output B display EDID | |
| | 8/2D/ PCM/720p | Standard EDID, Content: deep color/2D3D/audio/ native resolution | |
| | 8/2D/PCM/ AC3/720p | Standard EDID, Content: deep color/2D3D/audio/ native resolution | |
| | 8/2D/ PCM/1080p | Standard EDID, Content: deep color/2D3D/audio/ native resolution | |
| | 8/2D/PCM/ AC3/1080p | Standard EDID, Content: deep color/2D3D/audio/ native resolution | |
| | 8/2D/ PCM/4K2K | Standard EDID, Content: deep color/2D3D/audio/ native resolution | |

| Main Menu | Sub Menu | Description | Default |
|---------------|------------------------|---------------------------------------------------------------------------|---------------|
| | 8/2D/PCM/ AC3/4K2K | Standard EDID, Content: deep color/2D3D/audio/ native resolution | |
| | 8/2D/PCM/ Y420 | Standard EDID, Content: deep color/2D3D/audio/ native resolution | |
| | 8/2D/PCM/ AC3/Y420 | Standard EDID, Content: deep color/2D3D/audio/ native resolution | |
| | Exit | | |
| EDID IN1 | Same EDID All | Select Input 1's EDID | Same EDID All |
| EDID IN2 | Same EDID All | Select Input 2's EDID | Same EDID All |
| EDID IN3 | Same EDID All | Select Input 3's EDID | Same EDID All |
| EDID IN4 | Same EDID All | Select Input 4's EDID | Same EDID All |
| EDID IN5 | Same EDID All | Select Input 5's EDID | Same EDID All |
| EDID IN6 | Same EDID All | Select Input 6's EDID | Same EDID All |
| Matrix Preset | Preset 1 | IN/OUT default No.1 | A=1 , B=2 |
| | Preset 2 | No.2 | A=1 , B=2 |
| | Preset 3 | No.3 | A=1 , B=2 |
| | Preset 4 | No.4 | A=1 , B=2 |
| | Preset 5 | No.5 | A=1 , B=2 |
| | Preset 6 | N0.6 | A=1 , B=2 |
| | Exit | | |
| HDCP Input | IN1 Standard/ Apple | Set IN1 in Apple/ Standard mode | Standard |
| | IN2 Standard /Apple | Set IN2 in Apple/ Standard mode | Standard |
| | IN3 Standard /Apple | Set IN3 in Apple/ Standard mode | Standard |
| | IN4 Standard /Apple | Set IN4 in Apple/ Standard mode | Standard |

| Main Menu | Sub Menu | Description | Default | |
|------------------|---------------------|--------------------------------------------|-------------------------------------|----------|
| | IN5 Standard /Apple | Set IN5 in Apple/ Standard mode | Standard | |
| | IN6 Standard /Apple | Set IN6 in Apple/ Standard mode | Standard | |
| | Exit | | | |
| Preview Mode | View All | 1 Main video source and 5 Sub video source | View All | |
| | PIP | 1 Main video source and 1 Sub video source | | |
| | Exit | | | |
| Preview Position | View ALL | Top | Preview 5 Sub screens position | Top |
| | | Right | Preview 5 Sub screens position | |
| | | Bottom | Preview 5 Sub screens position | |
| | | Left | Preview 5 Sub screens position | |
| | PIP | Top Left | Preview Sub screen position | Top Left |
| | | Top Right | Preview Sub screen position | |
| | | Bottom Right | Preview Sub screen position | |
| | | Bottom Left | Preview Sub screen position | |
| | Exit | | | |
| | OSD Transparency | 0~15 | Preview OSD background transparency | 6 |
| | | Exit | | |

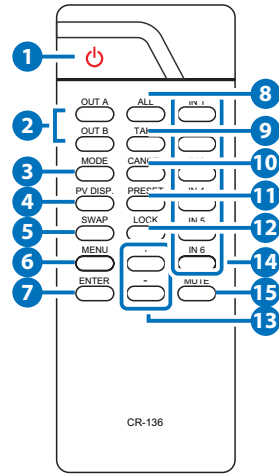
Note: Under Preview mode, OSD display on output B only.

| Main Menu | Sub Menu | Description | Default |
|------------------|-------------------------|-------------------------------------------------------------|---------------|
| OSD Timeout | OSD Off | Preview without OSD Info | OSD Always On |
| | 5~20 | Preview with OSD Info 5~20 sec and disappear | |
| | OSD Always On | Preview with OSD Info remain ON | |
| | Exit | | |
| Network Setup | IP Mode | DHCP , Static | DHCP |
| | IP | Setup Static IP | 192.168.5.83 |
| | Mask | Setup Static Netmask | 255.255.255.0 |
| | Gate | Setup Static Gateway | 192.168.5.254 |
| | Do Re-Link | Re-Link. After setup Network, the system need to re-link | --- |
| | Exit | | |
| Network Status | Link | Network status DHCP,Static or Not Linked | --- |
| | IP | Get IP | --- |
| | Mask | Get Netmask | --- |
| | Gate | Get Gateway | --- |
| | MAC | System MAC Address | --- |
| | Exit | | |
| Source Detection | IN1 On/Off , IN2 On/Off | IN1 , IN2 detect source with/without the signal | --- |
| | IN3 On/Off , IN4 On/Off | IN3 , IN4 detect source with/without the signal | |

| Main Menu | Sub Menu | Description | Default |
|---------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------|---------|
| | IN5 On/Off , IN6 On/Off | IN5 , IN6 detect source with/without the signal | |
| | Exit | | |
| Sink A Info | Type, Manuf. | Detect and Analysis Output A display's EDID Content: type(HDMI/ DVI/VGA), Manufactory/Model number | --- |
| | Native | Content: native resolution | |
| | Video Format | Content: deep color, 2D or 3D, 4K2K | |
| | Audio Format | Content:PCM, BitStream, HBR | |
| | Exit | | |
| Sink B Info | Same Sink A Info | Detect and Analysis Output B display's EDID | --- |
| Firmware | FW Version | Display the model number and FW version | --- |
| | Update | FW Update | |
| | Exit | | |
| Factory Reset | Do Reset | Do system Reset | --- |
| | Exit | | |
| Exit | | | |

6.4 Remote Control

- 1 **POWER:** Press this button to switch the system ON/OFF.
- 2 **OUT A/B:** Press these buttons once a time along with an IN buttons to select an input source for an output display.
- 3 **MODE:** Press to switch between Preview or Matrix mode.
 - Preview mode: From MENU option select View All (1 Main video sources and 5 Sub video sources) or PIP mode (1 Main video sources and 1 Sub video sources).
 - ✓ View All: Press IN 1~6 or MUTE to select the Main channel. From OLED menu select "Preview Position" for Sub screens position.
 - ✓ PIP: Press OUT A (Main) or OUT B, then press IN1~6 or MUTE to select Main or Sub video source. Press "ALL" or Remote Control "SWAP" to change Main/Sub video source.
 - Matrix mode: Press OUT A or OUT B or OUT A & B and then press IN 1~6 or MUTE to select the input sources. After the selection, press "TAKE" to confirm the selection or press "CANCEL" to cancel the selection.
- 4 **PV DISP:** Press to set ON/OFF the Preview Display.
- 5 **SWAP:** In PIP mode, press to swap Main/Sub video source.
- 6 **MENU:** Press to enter into the menu.
- 7 **ENTER:** Press to confirm the selection.
- 8 **ALL:** Press this button to select all outputs to display with an input source.
- 9 **TAKE:** Press this button to confirm the selection of an IN and an OUT button.
- 10 **CANCEL:** Press this button to cancel the IN/OUT selection.
- 11 **PRESET:**
 - When select the MODE in Matrix mode, press "PRESET" to switch between Normal and Preset mode.



- ✓ Normal mode:
Press OUT A or OUT B or ALL and then press IN 1~6 or MUTE to select the input sources. After the selection, press "TAKE" to confirm the selection or press "CANCEL" to cancel the selection.
- ✓ Preset mode:
Press "PRESET", the OLED menu will showing Preset and select IN 1~6. After preset 1~6, press "TAKE" to confirm the selection or press "CANCEL" to cancel the selection.

- 12 LOCK:** Press this button to lock all button functions on the panel. Press 3 seconds to relieve the lock function.
- 13 +/-:** Press these buttons to move up/down under menu selection.
- 14 IN1~6:** Press the IN buttons to select an input from the 6 input sources.
- 15 MUTE:** Press this button to mute video and audio that OUTA/B selected.

6.5 RS-232 Protocols

| CDPS-6H2HFS | |
|-------------|------------|
| PIN | Assignment |
| 1 | NC |
| 2 | Tx |
| 3 | Rx |
| 4 | NC |
| 5 | GND |
| 6 | NC |
| 7 | NC |
| 8 | NC |
| 9 | NC |



| Remote Control | |
|----------------|------------|
| PIN | Assignment |
| 1 | NC |
| 2 | Rx |
| 3 | Tx |
| 4 | NC |
| 5 | GND |
| 6 | NC |
| 7 | NC |
| 8 | NC |
| 9 | NC |

Baud Rate: 115200bps
 Data bit: 8 bits
 Parity: None
 Flow Control: None
 Stop Bit: 1

6.6 Telnet & RS-232 Commands

| Command Name | Description | Description of Parameter |
|------------------------------|----------------------------------------|--------------------------|
| P0 | POWER OFF | NONE |
| P1 | POWER ON | NONE |
| IPCONFIG | DISPLAY THE CURRENT IPCONFIG | NONE |
| SIPADDR XXX.XXX. XXX.XXX | SET ETHERNET IP AD- DRESS | XXX=0~255 |
| SNETMASK XXX. XXX.XXX.XXX | SET ETHERNET NETMASK | XXX=0~255 |
| SGATEWAY XXX. XXX.XXX.XXX | SET ETHERNET GATEWAY | XXX=0~255 |
| HTTPPORT | SET CURRENT HTTP PORT NUMBER | NONE |
| HTTPPORT N | SET CURRENT HTTP PORT NUMBER TO N | N=0~65535 |
| TELNETPORT | SHOW CURRENT TELNET PORT NUMBER | NONE |
| TELNETPORT N | SET CURRENT TELNET PORT NUMBER TO N | N=0~65535 |
| RSTIP | IP CONFIGURATION RESET TO <DHCP> | NONE |
| A N | SET OUTPUT A SOURCE | N=1~6 inputs |
| B N | SET OUTPUT B SOURCE | N=1~6 |
| I N | SET ALL OUTPUTS SOURCE | N=1~6 |
| EDIDMODE | SHOW EDID MODE | NONE |
| EDIDMODE N | SET EDID MODE | N={0}Appoint {1}All |
| EDIDALL | SHOW EDID MODE SOURCE FOR ALL | NONE |

| Command Name | Description | Description of Parameter |
|--------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EDIDALL N | SET EDID CONTENT FOR ALL | N=0~9 (0)Sink A, (1)Sink B, (2) 8/2D/PCM/720p, (3)8/2D/PCM/AC3/720p, (4) 8/2D/PCM/1080p, (5)8/2D/PCM/ AC3/1080p, (6)8/2D/ PCM/AC3/4K2K, (7)8/2D/ PCM/AC3/4K2K, (8)8/2D/ PCM/Y420, (9)8/2D/ PCM/AC3/Y420 |
| EDIDIN | SHOW ALL INPUT EDID SOURCE | NONE |
| EDIDIN N1 | SHOW INPUT N1 EDID SOURCE | N1=1~6 |
| EDIDIN N1 N2 | SET INPUT N1 EDID SOURCE | N1=1~6 N2=0~9 (0)Sink A, (1)Sink B, (2) 8/2D/PCM/720p, (3)8/2D/PCM/AC3/720p, (4) 8/2D/PCM/1080p, (5)8/2D/PCM/ AC3/1080p, (6)8/2D/ PCM/AC3/4K2K, (7)8/2D/ PCM/AC3/4K2K, (8)8/2D/ PCM/Y420, (9)8/2D/ PCM/AC3/Y420 |
| HDCPIN | SHOW ALL INPUT HDCP STATUS | NONE |
| HDCPIN N1 | SHOW INPUT N1 HDCP STATUS | N1=1~6 |
| HDCPIN N1 N2 | SET INPUT N1 HDCP ON/OFF | N1=1~6 N2=(0)OFF (ON) |

| Command Name | Description | Description of Parameter |
|--------------|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PRESET | SHOW ALL PRESET CONFIG | NONE |
| PRESET N1 | RECALL PRESET N1 | N1=1~6 |
| PRESET N1 N2 | SET PRESET N1 CONFIGURE | N1=1~6 N2=AXBX (X=1~6) |
| PVMODE | SHOW PREVIEW MODE | NONE |
| PVMODE N1 | SET PREVIEW MODE | N1=(0)View All/(1)PIP |
| PVPOS | SHOW PREVIEW POSITION | NONE |
| PVPOS N1 | SET PREVIEW POSITION | N1=0~3 In View All mode: (0) Top (1) Right (2) Bottom (3) Left In PIP Mode: (0) Top Left (1) Top Right (2) Bottom Right Bottom Left |
| PVSRC | SHOW PREVIEW SOURCE SELECT | NONE |
| PVSRCE N1 | In View All Mode: SET MAIN SCREEN SOURCE | N1= INPUT 1~6 |
| | In PIP Mode: SHOW MAIN/SUB SCREEN SOURCE | N1= (0)MAIN/(1)SUB |

| Command Name | Description | Description of Parameter |
|--------------|-----------------------------------------------|-------------------------------------------------------|
| PVSRC N1 N2 | In View All Mode: NOT SUPPORT | NONE |
| | In PIP Mode: SET MAIN/SUB SCREEN SOURCE | N1=(0)MAIN/(1)SUB |
| OSDTRANS | SHOW OSD Transparency | NONE |
| OSDTRANS N1 | SET OSD Transparency | N1=0~15 (0)completely transparent (15)opaque |
| OSDTO | SHOW OSD TIME OUT | NONE |
| OSDTO N1 | SET OST TIME OUT | N1=0~17 (0)off (1~16)5~20s (17)always on |
| SOURCEDET | SHOW ALL INPUT SIGNAL | NONE |
| SOURCEDET N1 | SHOW INPUT N1 SIGNAL | N1=1~6 |
| SINKINFO | SHOW ALL OUTPUT INFORMATION | NONE |
| SINKINFO N1 | SHOW OUTPUT N1 INFORMATION | N1=A/B |
| INNAME | SHOW ALL INPUT NAME | NONE |
| INNAME N1 | SHOW INPUT N1 NAME | N1=1~6 |
| INNAME N1 N2 | SET INPUT N1 NAME | N1=1~6 N2=ABCDEFGH |

| Command Name | Description | Description of Parameter |
|---------------|--------------------------|----------------------------------|
| OUTNAME | SHOW ALL OUTPUT NAME | NONE |
| OUTNAME N1 | SHOW OUTPUT N1 NAME | N1=A/B |
| OUTNAME N1 N2 | SET OUTPUT N1 NAME | N1=A/B N2=ABCDEFGH |
| MATRIXMODE | SHOW MATRIX CURRENT MODE | NONE |
| MATRIXMODE N1 | SET MATRIX MODE | N1=(0)Matrix/(1)Preview |
| VER | SHOW DESCRIPT OF UNIT | NONE |
| REBOOT | SYSTEM REBOOT | NONE |
| ? | SHOW COMMAND LIST | NONE |
| HELP | SHOW COMMAND LIST | NONE |
| HELP N | SHOW DESCRIPT OF COMMAND | N : command name Ex: HELP VER |

Note: All the RS-232 command will be not executed unless followed with a carriage return. All commands are case-sensitive.

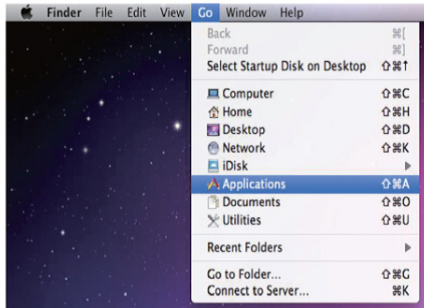
6.7 Telnet Control

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

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

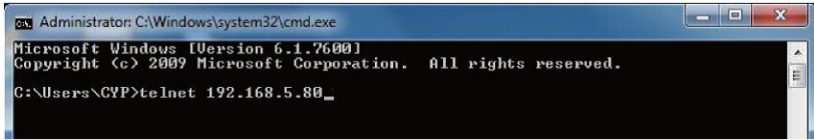
Under Windows XP go to the 'Start' menu and click on "Run", type "cmd" with then press enter.

Under Mac OS X, go to Go→Applications→Utilities→Terminal See below for reference.



Once in the command line interface (CLI) type "telnet", then the "IP address" of the unit and hit enter. Only when the Telnet port (device port) is not set to 23, the number "(device port)" then needs to be entered after

IP address (device IP) and before hit enter.



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

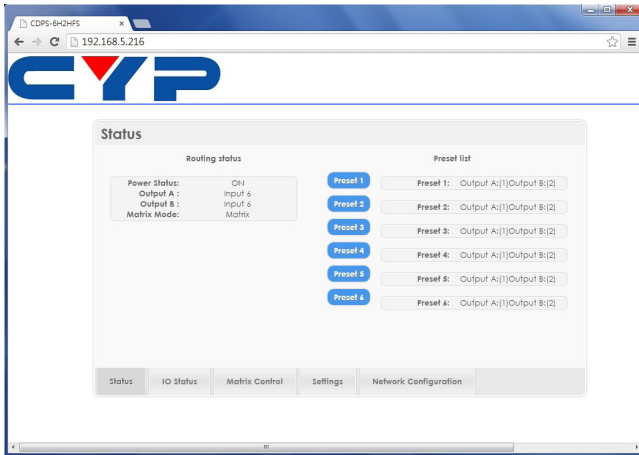


Type "IPCONFIG" To show all IP configurations.

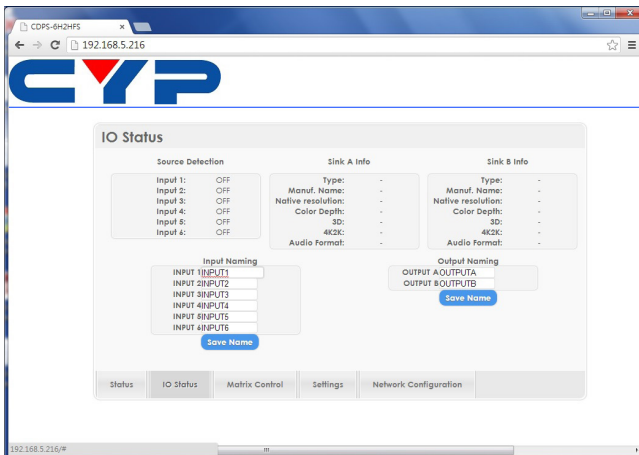
Note: All the commands will be not executed unless followed by a carriage return. Commands are case-insensitive. If the IP is changed then the IP Address required for Telnet access will also change accordingly.

6.8 Web GUI Control

On a PC/Laptop that is connected to an active network system, open a web browser and type device's IP address (available from LCM monitor or OSD menu) on the web address entry bar. The browser will display the device's Status, IO Status, Matrix Control, Settings and Network Configuration control pages for users to control.

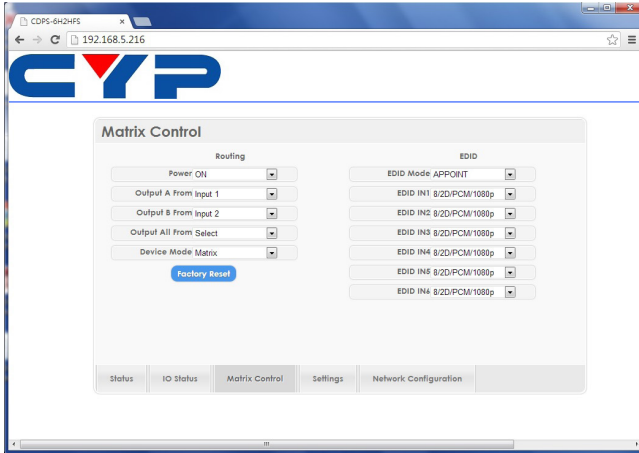


Click on IO Status for input and output selection.

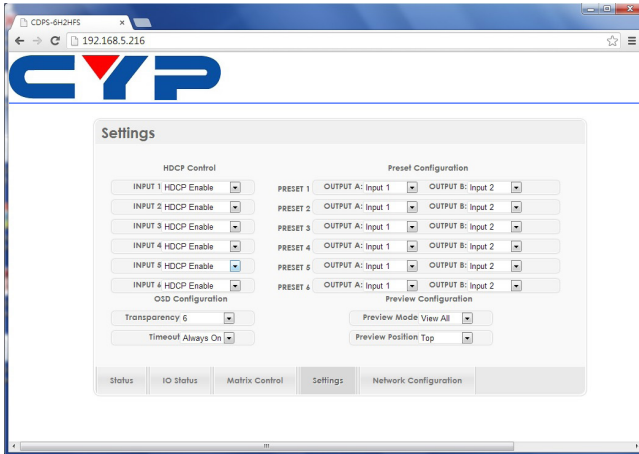




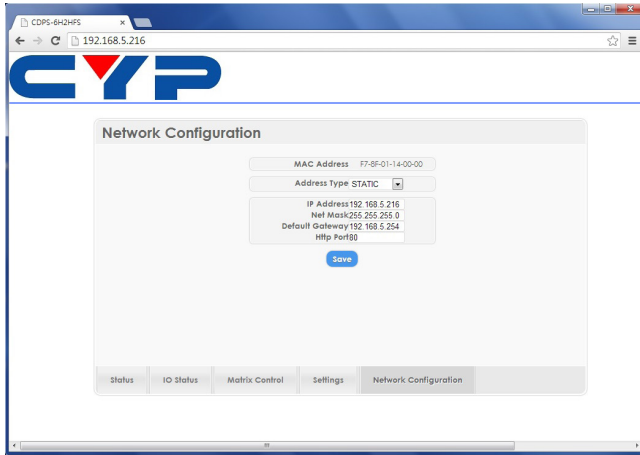
Click on Matrix Control for outputs and EIDID selections.



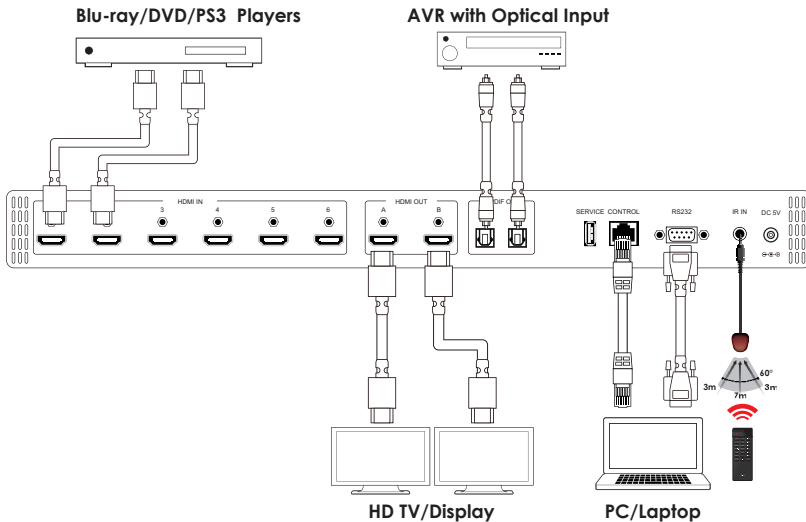
Click on Settings to set each input's HDCP Control and Preset Configuration.



Click on Network Configuration to set the device's IP configuration. Once the changes is saved the system will reset the IP address on the device automatically and user will need to re-enter the IP address to continue the Web GUI function.



7. CONNECTION DIAGRAM





8. SPECIFICATIONS

| | |
|------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Frequency Bandwidth | 300Mbps to 3Gbps |
| Input Ports | 6 x HDMI 1 x USB (Service only) 1 x Control 1 x RS-232 1 x IR |
| Output ports | 2 x HDMI 2 x Optical (S/PDIF) |
| Resolution | 480i~1080p@50/60, 1080p@24, 4K x 2K (3840x2160/4096x2160@30Hz) |
| Output Level | VGA~WUXGA |
| THD+N | |
| Frequency Response | |
| SNR | |
| Crosstalk | |
| IR Frequency | 30~50kHz |
| Power Supply | 5VDC/2.6A (US/EU standards, CE/FCC/ UL certified) |
| ESD Protection | Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge) |
| Dimensions | 438mm (W) x 269mm (D) x 44mm (H) /Jacks Excluded 482mm (W) x 278mm (D) x 53mm (H) /Jacks & Rack Ears Included |
| Weight | 3042 g |
| Chassis Material | Metal |
| Silkscreen 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 (no condensation) |
| Power Consumption (W) | 4.7 |

| DVI and HDMI Supported Resolutions | Input | Output |
|------------------------------------|-------|--------|
| 640x480@60 | ✓ | ✓ |
| 640x480@72 | ✓ | ✓ |
| 640x480@75 | ✓ | ✓ |
| 720x480@60 | ✓ | ✓ |
| 720x576p@50 | ✓ | ✓ |
| 800x600@60 | ✓ | ✓ |
| 800x600@72 | ✓ | ✓ |
| 800x600@75 | ✓ | ✓ |
| 1024x768@60 | ✓ | ✓ |
| 1024x768@70 | ✓ | ✓ |
| 1024x768@75 | ✓ | ✓ |
| 1280x720@50 | ✓ | ✓ |
| 1280x720@60 | ✓ | ✓ |
| 1280x720p@60 | ✓ | ✓ |
| 1280x768@60 | ✓ | ✓ |
| 1280x800@60 | ✓ | ✓ |
| 1280x1024@60 | ✓ | ✓ |
| 1360x768@60 | ✓ | ✓ |
| 1600x1200@60 | ✓ | ✓ |
| 1920x1080i@50 | ✓ | ✓ |
| 1920x1080i@60 | ✓ | ✓ |
| 1920x1080p@24 | ✓ | ✓ |
| 1920x1080p@25 | ✓ | ✓ |
| 1920x1080p@30 | ✓ | ✓ |
| 1920x1080p@50 | ✓ | ✓ |
| 1920x1080p@60 | ✓ | ✓ |
| 1920x1200@60(RB) | ✓ | ✓ |
| 3840x2160@30 | ✓ | ✓ |
| 4096x2160@24 | ✓ | ✓ |



Audio Sampling Rate Up to 192 kHz

| HDMI input (Up to 192kHz) | HDMI output | Optical output |
|------------------------------------|-------------|----------------|
| LPCM 2CH | V | N/A |
| LPCM 5.1CH | V | X |
| LPCM 7.1CH | V | X |
| Dolby Digital 2~5.1CH/ DTS 2~5.1CH | V | N/A |
| Dolby TrueHD/ DTS-HD Master Audio | V | X |

Audio Format LPCM 2/5.1/7.1CH, Dolby Digital 2~5.1CH, DTS 2~5.1CH (Pass through), Dolby TrueHD and DTS-HD Master Audio

| HDMI input | HDMI output | Optical output |
|------------------------------------|-------------|----------------|
| LPCM 2CH | V | V |
| LPCM 5.1CH | V | X |
| LPCM 7.1CH | V | X |
| Dolby Digital 2~5.1CH/ DTS 2~5.1CH | V | V |
| Dolby TrueHD/ DTS-HD Master Audio | V | X |

9. ACRONYMS

| ACRONYM | COMPLETE TERM |
|---------|-------------------------------------------|
| CAT5e | Category 5 Cable |
| CAT6 | Category 6 Cable |
| CAT7 | Category 7 Cable |
| CEC | Consumer Electronic Control |
| DVI | Digital Visual Interface |
| HDCP | High-bandwidth Digital Content Protection |
| HDMI | High Definition Multimedia Interface |
| PoE | Power over Ethernet |
| 4Kx2K | 3840x2160/ 4096x2160 |



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