CYP

CDPS-41SQ
4 x 1 HDMI Seamless Quad PIP Scaler

Operation Manual

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Version 1.0 December 2012

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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
VR0	17/10/13	Preliminary Release
VR1	07/03/14	Add Support Chart
VR2	20/06/14	Update RS-232 & OSD, Add WebGUI
VR3	18/07/14	Add RS-232 Command

CONTENTS

1. INTRODUCTION

The 4 x 1 HDMI Seamless Quad PIP Scaler is a high performance, high speed zooming/shrinking system that can be easily configure and control for quad or picture-in-picture video processing. Allowing 4 different input sources to be freely selected and arranged on one single display with supporting output resolution up to 1080p and audio up to 8CH 192kHz for both input and output. Screen setting hot keys with IR and RS-232 & Telnet allows instant control and switching on the output display.

2. APPLICATIONS

- Broadcasting room and control
- Surveillance room and control
- Public advertisement and control
- Digital Presentation

3. PACKAGE CONTENTS

- 1 x 4 by 1 HDMI Seamless Quad PIP Scaler
- 1 x Remote Control (CR-124)
- 1 x 12V/3A DC Power Adaptor
- Operational Manual

4. SYSTEM REQUIREMENTS

Input source equipments such as DVD/Blu-ray players and PC/NB devices and output HD TV/monitor.

5. FEATURES

- Seamless switching between channels and windows
- Zoom and Shrink 4CH input image and or to overlay them
- Supports PIP, POP and multi-windows display
- Supports OSD, RS-232, Telnet, Remote and on-panel controls
- Fade-In-Out, Chromakey, Mirror and Rotation (90˚ left & right and 180˚ up & down) functions
- 8 Screen setting hot keys and extra 4 customized favorite screen setting
- Support individual channel size and position adjustment

6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel
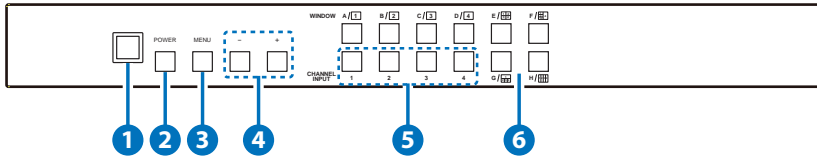
1 **IR Window**

Accept IR signal from the device's remote control included in the package.

2 **POWER**

Press this button to power ON the device or set it to standby mode.

3 **MENU**

Press this button to bring up the OSD menu on screen.

4 **-/+ Buttons**

Press these buttons to scroll down/up the OSD selections.

5 **CHANNEL INPUT 1~4**

Press these buttons to rotate HDMI 1~4 input source on each channel to be display on screen. All channels can select the same input or each channel a different input.

6 **WINDOW A~H**

Press these hot keys to select the screen setting where A~D are display a full screen of each channel and E~H are a different combination of a full screen setting with all 4 channels.

Windows A~D's channel input selection is corresponding to channel input no. 1~4. That is, to change window A's input channel must press channel input 1's button. Channel input 2~4's button will not activate under window A's selection. Windows E~H's size are adjustable through the OSD menu setting and only window G is PIP (Picture in Picture) where E,F & H are POP (Picture out Of picture) settings.

Under window E~H when the size setting is overlapping one another, channel display sequence is CH4 > CH3 > CH2 >CH1. That is, CH4 will cover CH3 and CH3 will cover CH2 and so on. Under some dislay the borderline may have interference, adjusting display's motion setting may resolve the interference issue.

6.2 Rear Panel
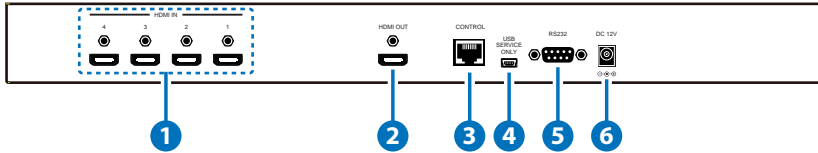
① HDMI IN

Connect with source equipments such as DVD/Blu-ray players and or PC/NB devices.

② HDMI OUT

Connect with HD TV/monitor for output image display at 1080p.

③ CONTROL

Connect to an active network for Telnet control.

④ USB SERVICE ONLY

This slot is reserved for factory use only.

⑤ RS-232

Connect from PC/NB with D-Sub 15pin cable for RS-232 command sending.

⑥ DC 12V

Plug the 12V DC power supply into the unit and connect the adaptor to an AC outlet.

6.3 Remote Control

1 Power

Press this button to switch on the device or press it again to set it to standby mode.

2 Info

Press this button to show the device's firmware version.

3 Input CH 1~4

Press these buttons to rotate HDMI 1~4 input source on each channel to be display on screen

4 WA~WH

Press these hot keys to select the screen setting where WA~WD are display a full screen of each channel and WE~WH are a different combination of a full screen setting with all 4 channels.

5 Mute

Press this button to mute the audio from HDMI output port.

6 ▲ ▼ ► ◄ & OK Buttons

Press this buttons to scroll through the OSD selection and press OK to enter and confirm the setting.

7 Menu

Press this button to enter into the OSD menu.
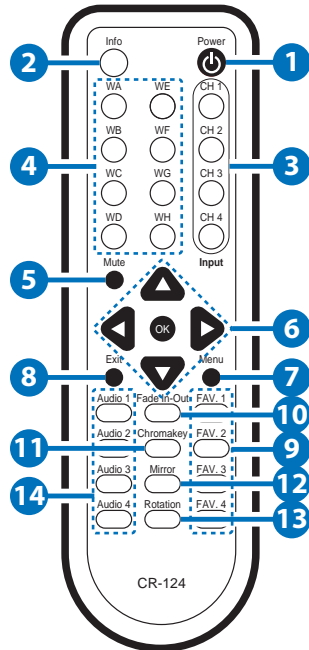
8 Exit

Press this button to exit the OSD menu or the OSD settings.

9 FAV. 1~4

Press these buttons to bring up the customized screen settings.

10 Fade-In-Out*

Press this button to switch on or off the Fade-in-out function.

⑪ Chromakey*

Press this button to enter into Chroma function where CH 1 is the background and CH 2 is the top image.

⑫ Mirror*

Press this button to display the screen in mirror image.

⑬ Rotation*

Press this button to rotate the image 90˚ left and right or 180˚ upside down.

⑭ Audio 1~4

Press these buttons to select audio from HDMI input source 1~4.

* Functions only work under Window A to D. The system will force to switch to Window A when operate under Window E~H.

6.4 RS-232 Protocols

CDPS-41SQ			Remote Control	
PIN	Assignment		PIN	Assignment
1	NC		1	NC
2	Tx		2	Rx
3	Rx		3	Tx
4	NC		4	NC
5	GND		5	GND
6	NC		6	NC
7	NC		7	NC
8	NC		8	NC
9	NC		9	NC

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

6.5 OSD MENU

Main Menu	1st Layer	2nd Layer	3rd Layer
I/O Setup	Output Resolution	480P, 579P, 720P50/60, 1080P24/25/30/50/60, 1024x768, 1280x800, 1280x1024, 1366x768, 1440x900, 1600x900, 1600x1200, 1680x1050, 1920x1200, NATIVE	
		Menu Back	
	OSD Settings	Info Display	On/**Off**
		H Offset	0~20 (5)
		V Offset	0~20 (5)
		Timeout	**Off**~50
		Gain	0~10 (2)
		Menu Back	
	Menu Exit		
Image Adjust	Brightness Adjust	CH 1	0~100 (50)
		CH 2	0~100 (50)
		CH 3	0~100 (50)
		CH 4	0~100 (50)
		Value Reset	
		Menu Exit	
	Contrast Adjust	CH 1	0~100 (50)
		CH 2	0~100 (50)
		CH 3	0~100 (50)
		CH 4	0~100 (50)
		Value Reset	
		Menu Exit	

Main Menu	1st Layer	2nd Layer	3rd Layer
	Hue Adjust	CH 1	0~100 (50)
		CH 2	0~100 (50)
		CH 3	0~100 (50)
		CH 4	0~100 (50)
		Value Reset	
		Menu Exit	
	Saturation	CH 1	0~100 (50)
		CH 2	0~100 (50)
		CH 3	0~100 (50)
		CH 4	0~100 (50)
		Value Reset	
		Menu Exit	
	Picture Reset		
	Menu Exit		
			CH1 Wxxx Hxxx
			Width Unit
			Width Ten
		Size	Width Hundred
			Height Unit
			Height Ten
			Height Hundred
			CH1 Hxxx Vxxx
	Channel 1 Select		Horizontal Unit
			Horizontal Ten
Window Setup		Position	Horizontal Hundred
			Vertical Unit
			Vertical Ten

Main Menu	1st Layer	2nd Layer	3rd Layer
			Vertical Hundred
		Image Output	*On*/Off
		Priority	CH1→4,CH2→3, CH3→2,CH4→1
		Window Reset	
		Menu Exit	
			CH2 Wxxx Hxxx
			Width Unit
			Width Ten
		Size	Width Hundred
			Height Unit
			Height Ten
			Height Hundred
			CH2 Hxxx Vxxx
	Channel 2 Select		Horizontal Unit
			Horizontal Ten
		Position	Horizontal Hundred
			Vertical Unit
			Vertical Ten
			Vertical Hundred
		Image Output	*On*/Off
		Priority	CH1→4,CH2→3, CH3→2,CH4→1
Window Setup		Window Reset	
		Menu Exit	

Main Menu	1st Layer	2nd Layer	3rd Layer
			CH3 Wxxx Hxxx
			Width Unit
			Width Ten
		Size	Width Hundred
			Height Unit
			Height Ten
			Height Hundred
			CH3 Hxxx Vxxx
			Horizontal Unit
	Channel 3 Select		Horizontal Ten
		Position	Horizontal Hundred
			Vertical Unit
			Vertical Ten
			Vertical Hundred
		Image Output	*On*/Off
		Priority	CH1→4,CH2→3, CH3→2,CH4→1
		Window Reset	
		Menu Exit	
			CH4 Wxxx Hxxx
			Width Unit
			Width Ten
		Size	Width Hundred
			Height Unit
			Height Ten

Main Menu	1st Layer	2nd Layer	3rd Layer
Window Setup			Height Hundred
			CH4 Hxxx Vxxx
			Horizontal Unit
			Horizontal Ten
	Channel 4 Select	Position	Horizontal Hundred
			Vertical Unit
			Vertical Ten
			Vertical Hundred
		Image Output	*On*/Off
		Priority	CH1→4,CH2→3, CH3→2,CH4→1
		Window Reset	
		Menu Exit	
		VIDEO 1	VIDEO *1*/2/3/4
		VIDEO 2	VIDEO 1/*2*/3/4
	Label Select	VIDEO 3	VIDEO 1/2/*3*/4
		VIDEO 4	VIDEO 1/2/3/*4*
		Menu Exit	
		FAV 1 Store	ON/*OFF*/OK
Window Setup	Favours Store	FAV 2 Store	ON/*OFF*/OK
		FAV 3 Store	ON/*OFF*/OK
		FAV 4 Store	ON/*OFF*/OK
		Menu Exit	
	Menu Exit		
		Mirror	On/*Off*

Main Menu	1st Layer	2nd Layer	3rd Layer
		Fade In-Out	*Off/*1.0/1.1/1.2 Convert /1.3/1.4 /1.5/1.6/1.7/1.8/ 1.9/2.0/2.1/2.2/ 2.3/2.4/2.5/2.6/ 2.7/2.8/2.9/3.0
	Channel 1 Convert	Rotation	R90/L90/Up-Side Down180/*Off*
		Window Reset	
Window Convert		Menu Exit	
		Mirror	On/*Off*
		Fade In-Out	*Off/*1.0/1.1/1.2 Convert /1.3/1.4 /1.5/1.6/1.7/1.8/ 1.9/2.0/2.1/2.2/ 2.3/2.4/2.5/2.6/ 2.7/2.8/2.9/3.0
	Channel 2 Convert	Rotation	R90/L90/Up-Side Down180/Off
		Window Reset	
		Menu Exit	
		Mirror	On/*Off*

Main Menu	1st Layer	2nd Layer	3rd Layer
	Channel 3 Convert	Fade In-Out	*Off/*1.0/1.1/1.2 Convert /1.3/1.4 /1.5/1.6/1.7/1.8/ 1.9/2.0/2.1/2.2/ 2.3/2.4/2.5/2.6/ 2.7/2.8/2.9/3.0
		Rotation	R90/L90/Up-Side Down180/Off
		Window Reset	
		Menu Exit	
	Channel 4 Convert	Mirror	On/*Off*
		Fade In-Out	*Off/*1.0/1.1/1.2 Convert /1.3/1.4 /1.5/1.6/1.7/1.8/ 1.9/2.0/2.1/2.2/ 2.3/2.4/2.5/2.6/ 2.7/2.8/2.9/3.0
		Rotation	R90/L90/Up-Side Down180/Off
		Window Reset	
		Menu Exit	
Chromakey Setup*	Minimum For R		000~255(0)
	Maximum For R		000~255(15)
	Minimum For G		000~255(0)
	Maximum For G		000~255(15)
	Minimum For B		000~255(0)
	Maximum For B		000~255(15)
	Switch		ON/*OFF*
	Exit		

Main Menu	1st Layer	2nd Layer	3rd Layer
	IP Mode	Static/*DHCP*	
	Static Set	IP/Mask/Gate	
	Byte1 High	XXX *192 255 192*	000~255
	Byte2	XXX *168 255 168*	000~255
	Byte3	XXX *5 255 5*	000~255
	Byte4 Low	XXX *159 0 254*	000~255
Ethernet Setup	Re-Link	*No*/Yes	
	Exit		
	Static/DHCP IP	LINKED/NOT LINKED	
	IP	IP/Mask/Gate	
	Mask	XXX.XXX.XXX.XXX	
	Gate	XXX.XXX.XXX.XXX	
	Mac	XXX.XXX.XXX.XXX	
	Sink HDMI /DVI		
Information	Model xxxxxxx Native xxxxxxx F/V version		
Menu Exit			

Note: BoldItalic fonts and ( ) figures are factory defualt setting figures.

* *Chromakey Setup works only under CH1& CH2 where CH1 is the background and CH2 is the top layer.*

This special function is designed for picture overlap video such as news reporter, weather forecast or educational video taping. CH2 the top layer's background color is usually a single color which can be easy for remove. RGB's setting is for CH2 video where the minimum setting figures cannot be greater than the maximum figures and the maximum figures cannot be lower than the minimum setting figures.

When input 1 or 2 has no source connection a warning message will appear on OSD.

6.6 RS-232 & Telnet Commands

Command	Description
RESO 0~18	SET OUTPUT RESOLUTION (0) 480p, (1) 576p, (2) 720p 50Hz, (3) 720p 60Hz, (4) 1080p 24Hz, (5) 1080p 25Hz, (6) 1080p 30Hz, (7) 1080p 50Hz, (8) 1080p 60Hz, (9) 1024x768 60Hz, (10) 1280x800 60Hz, (11) 1280x1024 60Hz, (12) 1366x768 60Hz, (13) 1440x900 60Hz, (14) 1600x900 60Hz, (15)1600x1200 60Hz, (16) 1680x1050 60Hz, (17)1920x1200 60Hz, (18) Native
OSDDIS 0/1	ENABLE/DISABLE ONSCREEN DISPLAY (0) OFF, (1) ON
OSDH 0~20	OSD H OFFSET 0~20
OSDV 0~20	OSD V OFFSET 0~20
OSDTIME 0~50	OSD TIMEOUT 0~50
OSDGAIN 0~10	OSD GAIN VALUE 0~10
BRI 0~4 0~100	SET BRIGHTNESS VALUE FOR CHANNEL (0) All, (1~4) CHANNEL, (0~100) VALUE
CON 0~4 0~100	SET CONTRAST VALUE FOR CHANNEL PORT (0) All, (1~4) CHANNEL, (0~100) VALUE
SAT 0~4 0~100	SET SATURATION VALUE FOR CHANNEL PORT (0) All, (1~4) CHANNEL, (0~100) VALUE

Command	Description
HUE 0~4 0~100	SET HUE VALUE FOR CHANNEL PORT (0) All, (1~4) CHANNEL, (0~100) VALUE
HSIZE 1~4 0~X	SET IMAGE HORIZONTAL SIZE (1~4) CHANNEL, (0~X) X=HORZONTAL PIXEL FOR CURRENT RESOLUTION
VSIZE 1~4 0~X	SET IMAGE VERTICAL SIZE (1~4) CHANNEL, (0~X) X=VERTICAL PIXEL FOR CURRENT RESOLUTION
HPOS 1~4 0~X	SET HORIZONTAL POSITION OF SPECIFIED CHANNEL (1~4) CHANNEL, (0~X) X=HORZONTAL PIXEL FOR CURRENT RESOLUTION
VPOS 1~4 0~X	SET VERTICAL POSITION OF SPECIFIED CHANNEL (1~4) CHANNEL, (0~X) X=VERTICAL PIXEL FOR CURRENT RESOLUTION
IMAGE 1~4 0~1	CHANNEL(S) OUTPUT ON/OFF (1~4) CHANNEL, (0/1) OFF/ON
PRI 1~4 1~4	SET CHANNEL PRIORITY (1~4) CHANNEL, (1~4) PRIORITY
LABEL 1~4 XXX	ASSIGN A VIDEO NAME (1~4) VIDEO, (XXX) ABCEDFGH...
STORE 1~4	SAVE THE CURRENT WINDOW STATE TO FAV. (1~4) FAV.
RECALL 1~12	RECALL A WINDOW STATE (1) WINDOW A, (2) WINDOW B, (3) WINDOW C, (4) WINDOW D, (5) WINDOW E, (6) WINDOW F, (7) WINDOW G, (8) WINDOW H, (9) WINDOW FAV. 1, (10) WINDOW FAV. 2, (11) WINDOW FAV. 3, (12) WINDOW FAV. 4

Command	Description
MIRROR 0/1	ENABLE/DISABLE MIRROR EFFECT (0/1) OFF/ON
FADE 0~21	ENABLE/DISABLE FADE EFFECTS (0) OFF, (1) 1.0 s, (2) 1.1 s, (3) 1.2 s, (4) 1.3 s, (5) 1.4 s, (5) 1.5 s, (6) 1.6 s, (7) 1.7 s, (8) 1.8 s, (9) 1.9 s, (10) 2.0 s, (11) 2.1 s, (12) 2.2 s, (13) 2.3 s, (14) 2.4 s, (15) 2.5 s, (16) 2.6 s, (17) 2.7 s, (18) 2.8 s, (19) 2.9 s, (20) 3.0 s
ROTATE 0~3	SET VIDEO ROTATION VIDEO TO PRESET POSITIONS (0) ROTATE OFF, (1) R90, (2) L90, (3) 180
CHRC R/G/B MIN/MAX 0~255	SET THE RGB COLOR RANGE FOR THE CHROMA KEY (R/G/B) COLOR CHANNEL (MIN/MAX) COLOR VALUE (0~15) SET PRESENT VALUE 0~255 RBG MAX (0)15, (1)31, (2)47, (3)63, (4)79, (5)95, (6)111, (7)127, (8)143, (9)159, (10)175, (11)191, (12)207, (13)223, (14)239, (15)255 RGB MIN (0)00, (1)16, (2)32, (3)48, (4)64, (5)80, (6)96, (7)112, (8)128, (9)144, (10)160, (11)176, (12)192, (13)208, (14)224, (15)240
CHRSW 0/1	SET THE CHROMA KEY ON/OFF (0) OFF, (1) ON
IPMODE 0/1	SET IP MODE TO DHCP OR STATIC (0) DHCP, (1) STATIC
IPADD XXX.XXX. XXX.XXX	SET IP ADDRESS (XXX) 0~255
MAADD XXX. XXX.XXX.XXX	SET SUBNET ADDRESS (XXX) 0~255
GAADD XXX. XXX.XXX.XXX	SET GATEWAY ADDRESS (XXX) 0~255

Command	Description
ETHTIME 0~6	ETHERNET TIMEOUT (0) OFF, (1) 10 MINUTE, (2) 20 MINUTE, (3) 30 MINUTE, (4) 40 MINUTE, (5) 50 MINUTE, (6) 60 MINUTE
RELINK	RELINK THE UNIT IN 2 SECONDS
DEFAULT	RESET THE UNIT TO FACTORY DEFAULTS
VICH 1~4 0~4	VIDEO CHANNEL COMMAND (1~4) VIDEO, (0) ALL CHANNEL OUTPUTS, (1~4) CHANNEL OUTPUTS
MUTE 0/1	MUTE AUDIO (0) OFF, (1) ON
POW 0/1	POWER THE UNIT ON/OFF (0) OFF, (1) ON
AUDIO 1~4	CHANGE OUTPUT AUDIO TO SPECIFIED SOURCE (1~4) AUDIO SOURCE
IMRE B/C/S/H	RESET THE IMAGE TO FACTORY DEFAULTS (B) BRIGHTNESS, (C) CONTRAST, (S) SATURATION, (H) HUE
PIRE	RESET THE UNIT PICTURE SETTINGS TO FACTORY DEFAULTS
CHRE 0~4	*RESET THE WINDOWS SETTINGS TO FACTORY DEFAULTS (0) ALL CHANNEL OUTPUTS, (1~4) CHANNEL OUTPUTS*
WICORE	**RESET THE WINDOW CONVERT TO FACTORY DEFAULTS**
RIPM	SHOW CURRENT IP MODE
IPCONFIG	SHOW IP CONFIGURATION
HELP	PRINTS ALL AVAILABLE RS-232/TELNET COMMANDS TO THE SCREEN
?	PRINTS ALL AVAILABLE RS-232/TELNET COMMANDS TO THE SCREEN

Command	Description
WND001	Change to Window A
WND002	Change to Window B
WND003	Change to Window C
WND004	Change to Window D
WND005	Change to Window E
WND006	Change to Window F
WND007	Change to Window G
WND008	Change to Window H
CH1001	Change CH1 to Source 1
CH1002	Change CH1 to Source 2
CH1003	Change CH1 to Source 3
CH1004	Change CH1 to Source 4
CH2001	Change CH2 to Source 1
CH2002	Change CH2 to Source 2
CH2003	Change CH2 to Source 3
CH2004	Change CH2 to Source 4
CH3001	Change CH3 to Source 1
CH3002	Change CH3 to Source 2
CH3003	Change CH3 to Source 3
CH3004	Change CH3 to Source 4

Command	Description
CH4001	Change CH4 to Source 1
CH4002	Change CH4 to Source 2
CH4003	Change CH4 to Source 3
CH4004	Change CH4 to Source 4
IO1000	*CH1 Image OFF*
IO1001	*CH1 Image ON*
IO2000	*CH2 Image OFF*
IO2001	*CH2 Image ON*
IO3000	*CH3 Image OFF*
IO3001	*CH3 Image ON*
IO4000	*CH4 Image OFF*
IO4001	*CH4 Image ON*
MUT000	Mute Off
MUT001	Mute On
AUD001	Change Output Audio to Source 1
AUD002	Change Output Audio to Source 2
AUD003	Change Output Audio to Source 3
AUD004	Change Output Audio to Source 4
FAD000	**Fade In-Out Off**
FAD001	**Fade In-Out On**
CHR000	**Chromakey Function Off**
CHR001	**Chromakey Function On**
MIR000	**Mirror Function Off**
MIR001	**Mirror Function On**
ROT000	**Rotation Function Off**
ROT001	**Rotation Function R**
ROT002	**Rotation Function L**
ROT003	**Rotation Function Up-Side Down**

Command	Description
SFA001	*Store window format to FAV 1**
SFA002	*Store window format to FAV 2**
SFA003	*Store window format to FAV 3**
SFA004	*Store window format to FAV 4**
RFA001	*Recall window from FAV 1*
RFA002	*Recall window from FAV 2*
RFA003	*Recall window from FAV 3*
RFA004	*Recall window from FAV 4*
POW000	OFF
POW001	ON

Commands with Italic fonts are only functioning under Window E~H and FAV.1~4

Commands with Bold fonts are only functioning under Window A~D

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.

Note: The IP address of the Scaler can be found under Ethernet Setup on the device's OSD menu.
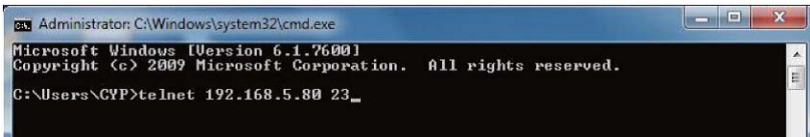
This will bring us into the device which we wish to control. Type "?" to lists all the available commands.

Type "IPCONFIG" To show all IP configurations. To reset the IP, type "IPMODE" to set static IP/DHCP (For a full list of commands, see Section 6.6).

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 need to be change accordingly. A power relink is also required for every IP change.

6.8 WebGUI Control

On a PC/Laptop that is connected to an active network as the Scaler, open a web browser and type device's IP address on the web address entry bar. The browser will display the device's Image Adjust, Output Resolution, and ... etc.
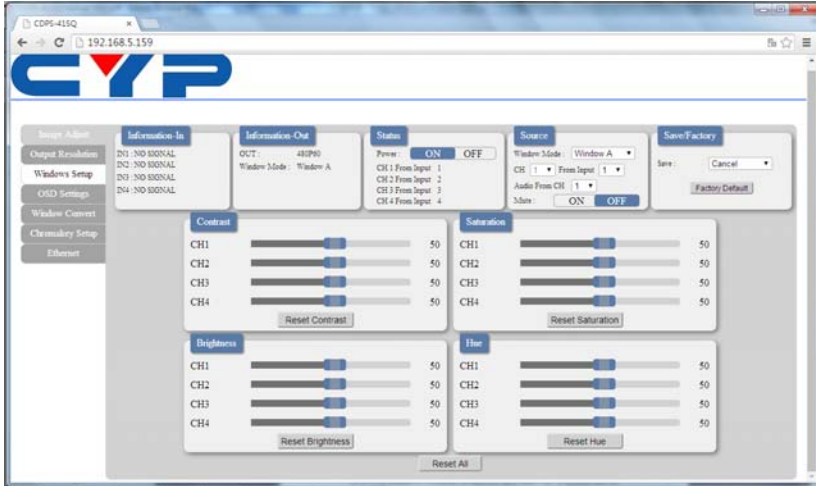
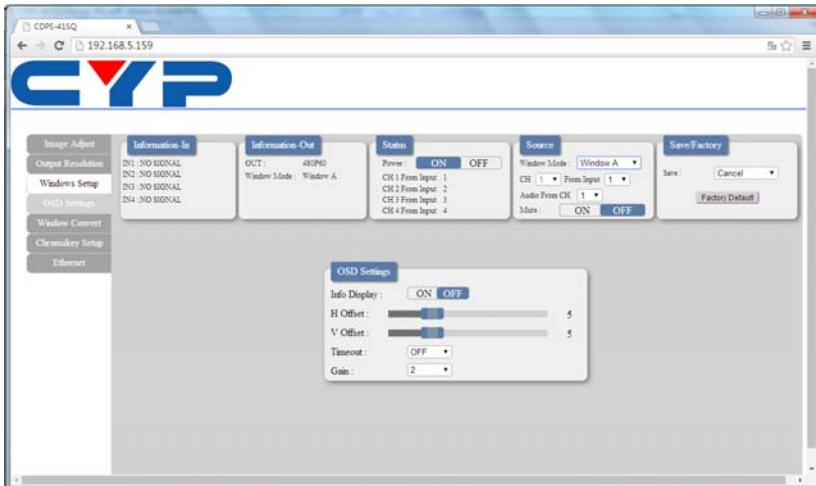Click on the 'mage Adjust' tab to control power, Window Mode and the window setting.
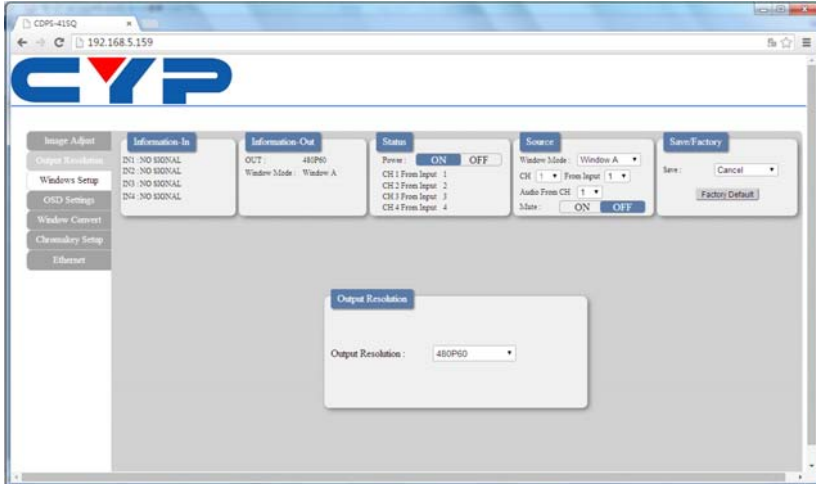
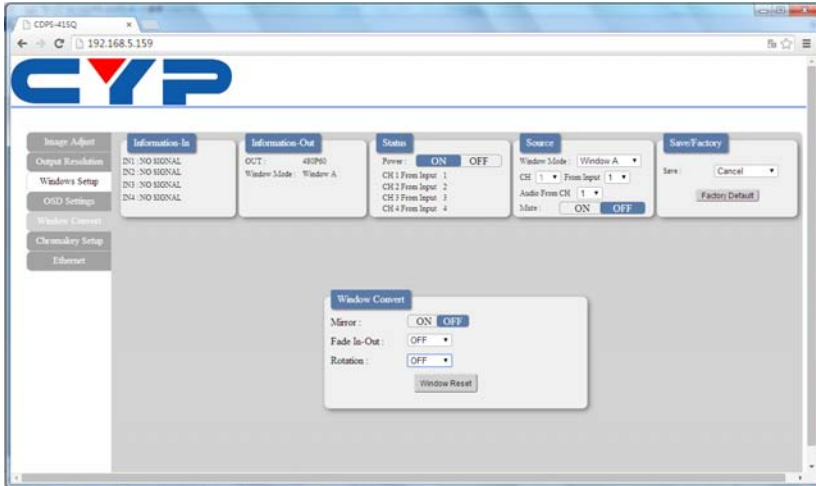Clicking on the 'Output Resolution' tab to set the output display resolution.
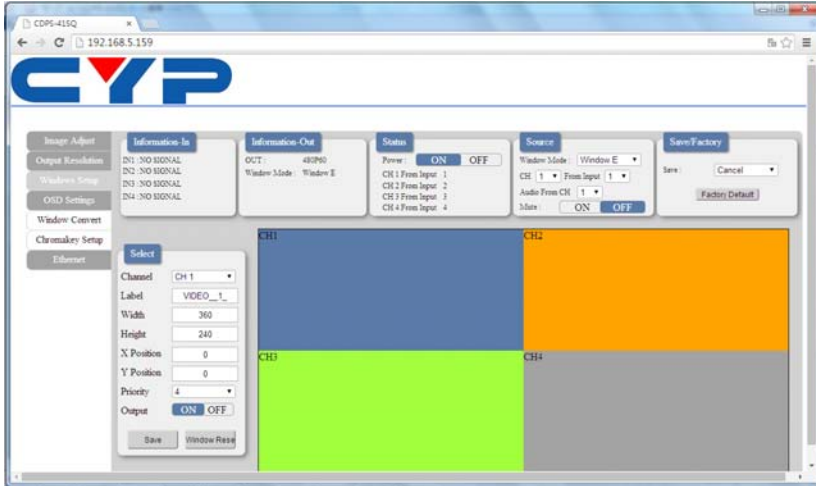
Clicking on the 'Windows Setup' tab to set the output display fomate.

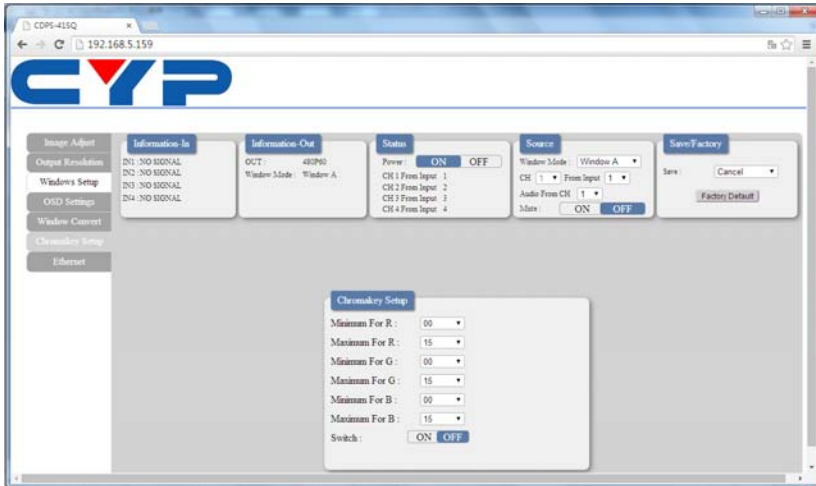*Note: This function is only available under window E~H.*

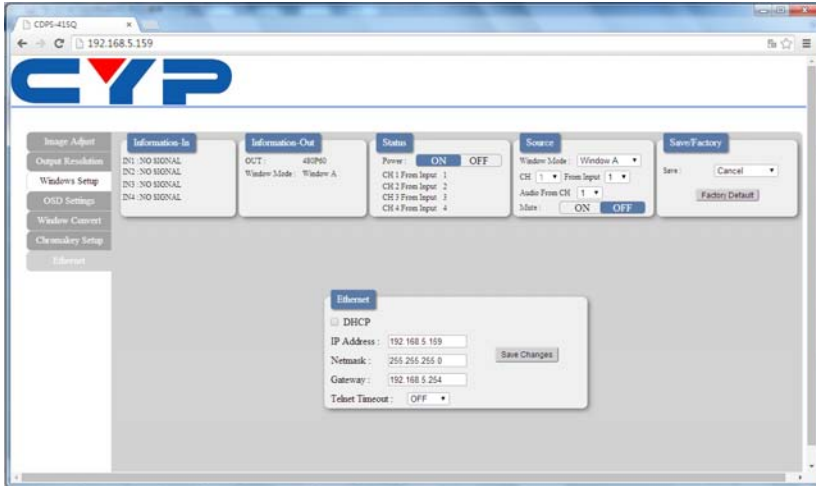Clicking on the 'OSD Settings' tab to set the OSD function and position.

Clicking on the 'Window Convert' tab to set the output display angle.

Note: This function is only available under window A~D.

Clicking on the 'Chromakey Setup' tab to set the output display color.

Note: This function is only available under window E~H.

Clicking on the 'Ethernet' tab to reset the IP configuration. The system will ask for a reboot of the device every time when any of the settings is changed. The IP address needed to access the Web GUI control will also need to be changed accordingly on the web address entry bar.

Note: All command will be not executed unless followed with a carriage return and commands are case-insensitive.
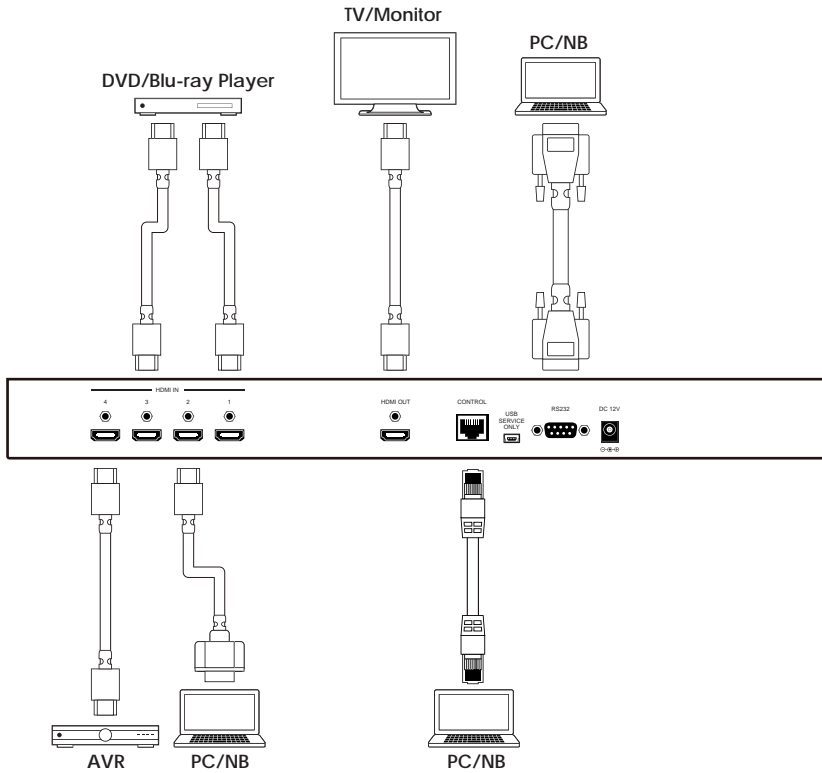
7. SPECIFICATIONS

Video Bandwidth	225MHz/6.75Gbps
Input Ports	4x HDMI
Output Port	1 x HDMI
Supports Input Resolution	PC:VGA~WUXGA, HD: 480i~1080p
Supports Output Resolution	1080p@60
HDMI Input Cable Distance	Up to 15M/1080p@12 bits
HDMI Output Cable Distance	Up to 15M/1080p@8 bits
Supports Sampling Rate	32~192kHz
ESD Protection	Human body model:
	±8kV (air-gap discharge)
	±4kV (contact-gap discharge)
Power Supply	12V/3A DC (US/EU standards, CE/FCC/UL certified)
Dimensions	436mm(W) x 247mm(D) x 44mm(H)
Weight	2200g
Chassis Material	Aluminum
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 (non-condensing)
Power Consumption	18W

HDMI Supported Resolutions	Input	Output
640x480@60,72,75,85	V	
800x600@56,60,72,75,85	V	
1024x768@60,70,75,85	V	V@60
1360x768@60	V	
1280x768@60,75	V	
1280x800@60		V
1280x1024@60,75	V	V@60
1366x768@60	V	V
1440x900@60		V
1600x900@60		V
1600x1200@60	V	V
1680x1050@60		V
1920x1200@60	V	V
480i60	V	
576i50	V	
480p60	V	V
576p50	V	V
720p50	V	V
720p60	V	V
1080i50	V	
1080i60	V	
1080p24	V	V
1080p25		V
1080p30		V
1080p50	V	V
1080p60	V	V

8. CONNECTION AND INSTALLATION

TV/Monitor

PC/NB

DVD/Blu-ray Player

HDMI IN
4   3   2   1

HDMI OUT   CONTROL

USB
SERVICE
ONLY

RS232   DC 12V

AVR   PC/NB   PC/NB