

# VIDEO WALLS VIDEO PROCESSORS VIDEO MATRIX SWITCHES EXTENDERS SPLITTERS WIRELESS CABLES & ACCESSORIES

## **Control Commands**





















Model #: SW-HBT4K-C6-4X4E

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### **SECTION I: COMMAND PROTOCOL FORMAT (RS-232 SERIAL PORT)**

### I. SERIAL PORT SETTING

- Baud Rate: 19200 bps

Data Bit: 8 bits Parity: None

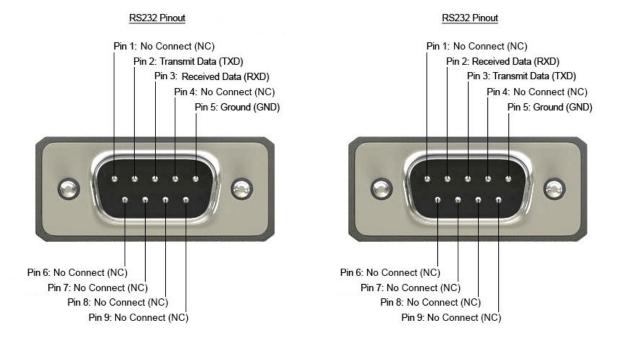
- Flow Control: None

- Stop Bit: I

### **RS-232 Wiring (Straight Connection)**

SW-HBT-4K-4X4E	
PIN	Assignment
I	NC
2	TxD
3	RxD
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

	Remote Controller(PC)		
	PIN	De finition	
	I	NC	
	2	RX	
	3	TX	
	4	NC	
	5	GND	
	6	NC	
	7	NC	
	8	NC	
	9	NC	





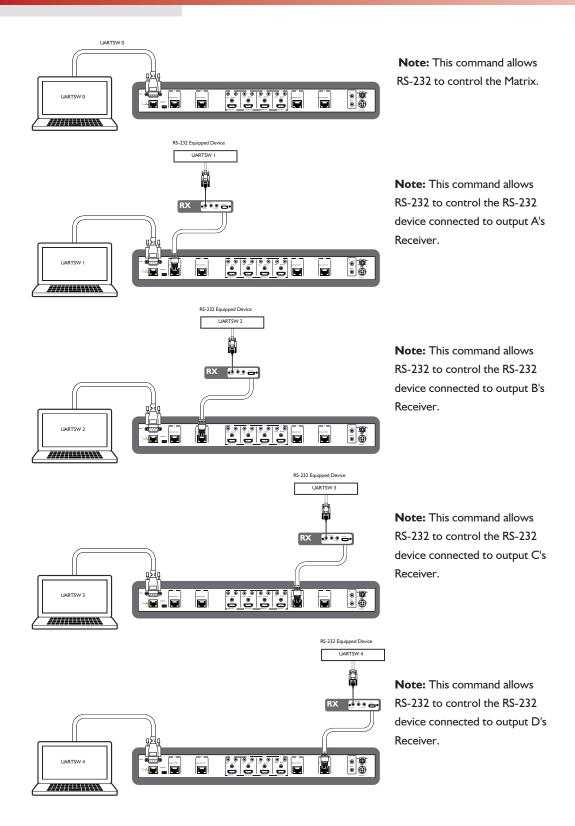
# 2. RS-232 & TELNET COMMANDS

All commands will be not executed unless followed with a carriage return (0x0D) and commands are case sensitive.

Command	Active
A1~A4	Switch Output A to 1~4
B1~B4	Switch Output B to 1~4
C1~C4	Switch Output C to 1~4
D1~D4	Switch Output D to 1~4
UARTSW?	Display the UART switching state
UARTBAUD?	Display all the output's UART baud
AB1~AB4	Switch Output A B C D to 1~4 at the same time
SETIP <ip> <subnet> <gw></gw></subnet></ip>	Setting IP. SubNet. GateWay (Static IP)
RSTIP	IP Configuration Was Reset To Factory Defaults < DHCP>
IPCONFIG	Display the Current IP Config
P0	Power OFF
P1	Power ON
STORE 01~04	Store current I/O position (01~04)
PRESET 01~04	Recall the store I/O Position (01~04)
SHOW 01~04	Show current port's I/O position (01~04)
NAME NI N2	Name the stored port NI(01 $\sim$ 04) no more than 8 charactors, N2 (ABCDEFGH)
11~14	Switch all the Output to 1~4
ST	Display the current matrix status and F/W version
RS	System Reset to H4
EM	Setting EDID MODE. 1-STD 2-TV
UARTBAUDI~4	Set output A~D's uart baud rate from 1~6 1: 9600bps 2: 14400bps 3: 19200bps 4: 38400bps 5: 57600bps 6: 115200bps
UARTSWI~4	Switch output's UART to A $\sim$ D and allow Matrix to send commands to Receiver's connected RS-232 device.
UARTSW0	Switch output's UART to MCU. Restoring RS-232 control to the Receiver output back to Matrix
?	Display all the available commands
Quit	Exit (for telnet only)



# 2. RS-232 UART Command Illustration Diagram





### 3. TELNET CONTROL

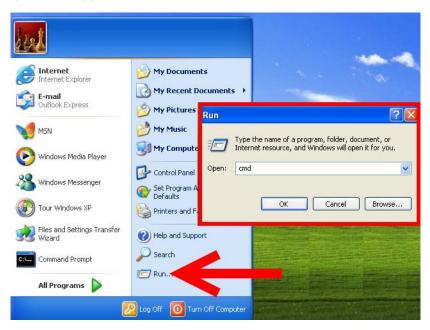
Using TCP/IP protocol, sent to Port 23 for Telnet communication.

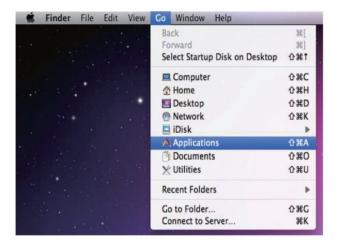
The user can confirm from the OSD menu or through RS-232 command to check Telnet connection behavior.

To use the telnet control, please ensure that both the Matrix (via the 'LAN /CONTROL' port) and the PC/Laptop are connected to the active networks not directly connected.

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 $\rightarrow$ Applications $\rightarrow$ Utilities $\rightarrow$ Terminal See below for reference.







In the CMD window proceed to type "telnet", then the IP address of the unit and "23", then hit enter/return.

Note: The IP address of the Matrix can be displayed on the device's LCM monitor by pressing the Menu button twice.

```
C:\Windows\system32\cmd.exe

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

C:\Users\Sales2> telnet 192.168.5.80 23
```

After connecting to the Matrix Switcher via IP address. Type "HELP" to preview the list of commands available.

```
Telnet 192.168.5.139
                                                                             _ 🗆 x
 Welcome to Avenview Matrix Telnet
telnet-> help
                  PØ : Power Off
                  P1 : Power On
               RESET : System Reset to 0111,0212,0313,0414,0515....
     0xxIxx(x:01~8) : Output 0~8 set to Input 1~8
  ALLOUT xx(x:01^8): All Output set to Input 1^8
    MUTE xx(x:0~8): Video mute command at output interface
  UNMUTE xx(x:0~8) : Video unmute command at output interface
             MUTEALL: Mute all outputs
           UNMUTEALL: Unmute all outputs
            SHOWMUTE: Show mute status of all output(0=not muted,1=muted)
  RDMUTE xx(x:0~8) : Read MUTE Status at Output
  HPDLOW xx(x:01~8) : Pull the Hot-Plug-Detect signal to 'LOW'
  HPDHIGH xx(x:01~8) : Pull the Hot-Plug-Detect signal to 'HIGH'
          HPDLOW ALL : Set All Input HPD to Low
         HPDHIGH ALL : Set All Input HPD to High
             SHOWHPD: Report ALL Input Hot-Plug-Detect signal status
 STATUSHPD x(x:1^8): Show HPD status of input(x)
            SHOWTEMP : Show temperature sensor values y1, y2
 STATUSIN xx(x:01~8) : Report Input connection status
STATUSOUT xx(x:0~8) : Report Output connection status
           STATUSALL: Report ALL Output connection status
          STATUSEDID : Report ALL Input EDID mode&port
 SETEDIDMODE ii mm(ii:01~8 mm:1~3) : Set EDID mode(mm) to Input(ii)
 SETEDIDMODE ALL mm (mm=1~3): The EDID mode(mm) of All Input(ii)
SETEDIDPORT ii pp(ii:01~8 pp:01~8) : Set EDID Assigned Port(pp) to Input(ii)
 SETEDIDPORT ALL mm (pp=01-8): The EDID of All Inports is assigned to Output
              ACTIVE : Report I/O active channels
            INDETECT : Input channels detect indicator
            OUTDETECT : Output channels detect indicator
            IPCONFIG : Display the current IP config
SETIP <IP> <SubNet> <GW> : Setting IP.SbuNet.GateWay(Static IP)
               RSTIP : IP Configuration Was Reset To Factory Defaults(DHCP)
      SETIPADDR <IP> : Setting IP address
  SETSNMASK (SubNet): Setting subnet mask
      {\tt SETGWADDR} \ {\tt <GW>} : {\tt Setting \ gateway} \ {\tt IP \ address}
            R
```

Type "IPCONFIG" To confirm all IP configurations.

To RESET the IP ADDRESS; type "RSTIP" /To SET a STATIC IP, type"SETIP" (For a full list of commands, see Section 1.3).

**Note**: Commands will not be 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.

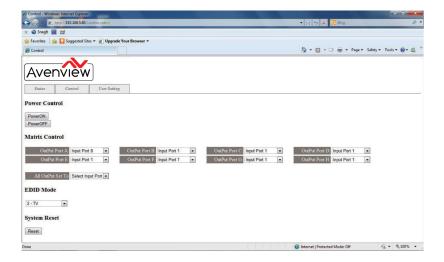


## 4. WEB GUI CONTROL

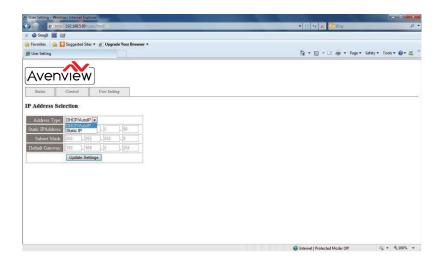
On a PC/Laptop that is connected to the same active network as the Matrix, open a web browser and type device's IP address on the web address entry bar. The browser will display the device's status, control and User setting pages.



Click on the 'Control' tab to control power, input/output ports, EDID and reset mode



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





## **TECHNICAL SUPPORT**

### CONTACT US



Phone: I (866) 508 0269



Email: support@avenview.com



USA Head Office Avenview Corp. 275 Woodward Avenue Kenmore, NY 14217

### **USA Head Office**

Office Avenview

Corp. 275 Woodward Avenue

Kenmore, NY 14217

Phone: +1.716.218.4100 ext223

Fax: +1.866.387-8764 Email: info@avenview.com

### Canada Sales

Avenview

151 Esna Park Drive, Unit 11 & 12 Markham, Ontario, L3R 3B1

Phone: 1.905.907.0525

Fax: 1.866.387.8764

Email: info@avenview.com

#### **Avenview Europe**

Avenview Europe

Demkaweg I I 3555 HW Utrecht

Netherlands

Phone: +31 (0)85 2100-613

Email: info@avenview.eu

#### **Avenview Hong Kong**

Unit 8, 6/F., Kwai Cheong Centre,

50 Kwai Cheong Road,

Kwai Chung, N.T.

Hong Kong

Phone: 852-3575 9585

Email: wenxi@avenview.com

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