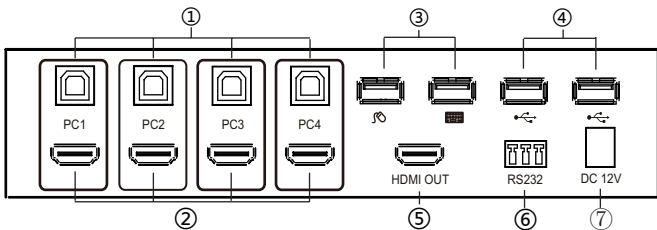# HDMI 4X1 KVM QUAD MULTI-VIEWERWITH SEAMLESS SWITCHER

Quick Installation Guide
Ver. 1.0

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INTRODUCTION:

The KVM switcher allows 4 PCs with HDMI ports to share one display and one keyboard&mouse, allowing the display to switch seamlessly between 4 PCs. In addition, it supports the unique 4IN1 Multi-Viewer mode, which allows you to operate 4 PCs with a keyboard&mouse on the same screen without switching.It provides 2 additional USB 2.0 sharing ports,allow 4 PCs to share one printer or other USB2.0 device
It supports resolutions of up to 1080p@60Hz . Also, It is fully compatible with a wide variety of Windows and Mac OS operating systems
The product can be controlled by various ways, through the mouse button,keyboard Hot key,front panel button, IR control, etc.

FEATURES:

● Compliant with HDMI 1.3a, HDCP 1.2
● Supports multiplexed HDMI 4-input and 1-output
● Supports up to 1080p@60Hz High Definition resolution
● Support 4 by 1 Quad Multi-viewer and seamless switch(with same resolution)
● Support seamless switch
● Supports the unique 4IN1 Multi-Viewer mode, which allows you to operate 4 PCs with a keyboard&mouse on the same screen without switching
● Support mouse button,keyboard hot keys,front panel button, IR control
● Support multi output resolution

PACKAGE CONTENTS:

● 1× Main unit
● 1× 12V/DC, 2A Power Supply
● 1× User Manual
● 1× Remote control
● 2x L shape stand feet
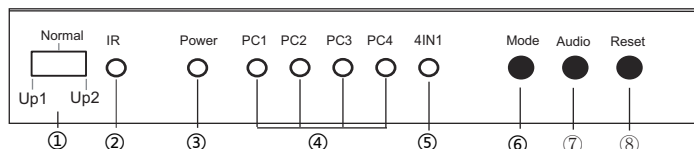● 1x Phoenix plugs for RS232 cable termination
● 6x Screw

PRODUCT OVERVIEW:

Front Panel:

1. Connect to USB ports of 4 PCs respectively
2. Connect to HDMI ports of 4 PCs respectively
3. Connect the keyboard&mouse
4: Provides 2x additional USB 2.0 sharing ports,connect the US B2.0 devices (such as U-Disk, Printer..)
5: HDMI OUTPUT: The HDMI is where you connect the HDTV or monitor with HDMIcable for input source display
6: RS232: Upgrade data
7: DC 12V: Plug the 12V DC power supply into the unit and connect the adaptor to AC wall outlet

Back Panel:

1. Updata function select switch
   Normal : This is where you must dial for normal use
   Up_1: Upgrade data for MCU_1 via RS232
   Up_2: Upgrade data for MCU_2 via RS232
2. IR :Remote control receiver windo w.
3. POWER LED: This blue LED illuminates when the device is connected with power supply
4. Input Mode LED: Indicate which Input Mode is selected
5. 4IN1 Mode LED:Indicate which 4IN1 Mode is selected
5. Mode Button: Press this button to select the Input Mode.
7. Audio Button: At the 4IN1 Mode ,Press this button to select the audio from the input sources
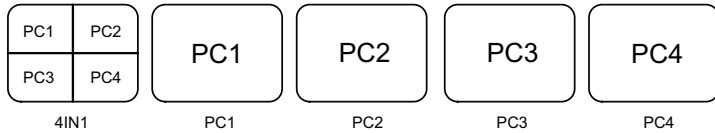8. Reset Button: Press this button to Reset the KVM Switcher

CONNECTION AND OPERATION:

1.Use 4 HDMI cables were used to connect the HDMI Input interfaces of the product to the HDMI Output prot on the 4 PCs respectively, and 4 USB cables were used to connect the USB Input interfaces of the product to the USB prot onthe 4 PCs respectively
2. Connect the HDMI output of the HDMI Switcher to a high-definition display device via HDMI Cable
3. Connect the keyboard, mouse and USB2.0 device to the corresponding interface of the KVM switcher
4. The Switcher is powered by an external power supply which is included. Connect power first to the source
5. Select the computer screen you want to operate by mouse button,keyboard hot keys,front panel button, IR control

CONNECTION DIAGRAM:

DETAIL DESCRIPTION OF DISPLAY MODE:

PC1	PC2
PC3	PC4

4IN1

PC1	PC2	PC3	PC4
PC1	PC2	PC3	PC4

The product provides 5 Screen Modes as below Mode1 ~ 5.
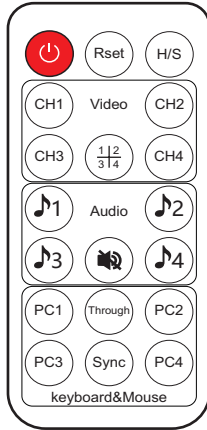**4IN1:** The 4 PCs are displayed in 2x2 on one screen,you can operate 4 PCS without switching
PC1: PC1 full screen mode,you can operate PC1 only
PC2: PC2 full screen mode,you can operate PC2 only.
PC3: PC3 full screen mode,you can operate PC3 only.
PC4: PC4 full screen mode,you can operate PC4 only

REMOTE CONTROL:

ON/OFF: Power on/off switch.
Reset button Reset the KVM Switcher
H/S Resolution button:upscale 720P signal into 1080P ordownscale 1080P signal into 720P.
Mode select button(Ch1-Ch4, $\frac{1|2}{3|4}$): Press these buttons,the quad multi-viewer will select the Corresponding mode, see the detail description of display mode.
Audio Select button(♪1- ♪4): Press these buttons to select the audio from the input sources at the 4IN1 mode
Mute button: Turn off Sound
Keyboard&Mouse Mode select button(PC1-PC4) Press these buttons to select the PC you want to operate at the 4IN1 mode,at this point, the keyboard&mouse can only operate the selected PC
Through&Sync button:Into Through or Sync mode

HOTKEY:

Follow the hotkey command listed below for selected operating functions:

Command	Function
Mouse HOTKEY	
[wheel key]+[wheel key]	1.At 4IN1 mode,switch to full screen mode 2.At full screen mode,Switch to 4IN1 mode
Keyboard HOTKEY	
[*]+[1]	Switch to PC1
[*]+[2]	Switch to PC2
[*]+[3]	Switch to PC3
[*]+[4]	Switch to PC4
[*]+[5]	Switch to 4IN1 Mode
[*]+[0]	At 4IN1 Mode,Keyboard&Mouse switch to Sync Mode
[*]+[S]	At 4IN1 Mode,Keyboard&Mouse switch to Through Mode
[*]+[F1]	At 4IN1 Mode,Keyboard&Mouse and USB2.0 switch to PC1
[*]+[F2]	At 4IN1 Mode,Keyboard&Mouse and USB2.0 switch to PC2
[*]+[F3]	At 4IN1 Mode,Keyboard&Mouse and USB2.0 switch to PC3
[*]+[F4]	At 4IN1 Mode,Keyboard&Mouse and USB2.0 switch to PC4
[*]+[Page Up]	At 4IN1 Mode,switch the audio from the input sources
[*]+[Page Down]	Switch to next PC

THROUGH MODE & SYNC MODE:

There are 2 modes for Keyboard&mouse at the 4IN1 mode
Through Mode: At this mode, the Mouse can move unordered across the screen of 4 PCS. You can operate any PC at will. The Keyboard and USB2.0 device will be switched to the PC where the mouse stays
Sync Mode: At this mode,The keyboard&mouse can synchronous operate 4 PCs, and USB2.0 devices will be stay on the PC of your last select

SPECIFICATIONS:

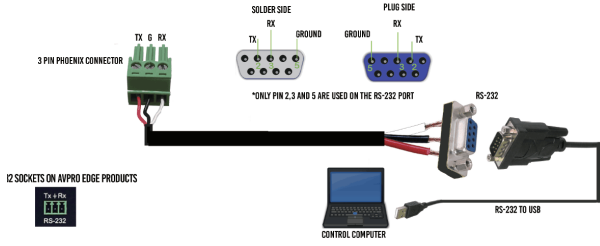| Signal Inputs/Output	
Maximum Single Link Range	1920x1080@60
HDMI Input/Output Connector	Type A 19 pin
Operating Frequency	
Vertical Frequency Range	50/60Hz
Video Amplifier Bandwidth	2.25Gbps
Resolutions	
Input Resolution	480i60Hz,480p60Hz,576i50Hz,576p50Hz,720p50/60Hz, 1080i50/60Hz,1080p24/25/30/50/60Hz
Output Resolution	720p,1080p
Mechanical Data	
Dimensions	
Weight	
Chassis Material	Metal
Color	Black
Warranty	
Limited Warranty	1 Year Parts and Labor
Environmental	
Operating Temperature	0 ℃ to +70 ℃
Operating Humidity	10% to 85 % RH (no condensation)
Storage Temperature	-10 ℃ to +80 ℃
Storage Humidity	5% to 90 % RH (no condensation)
Power Requirement	
External Power Supply	12V DC@2A
Power Consumption(max)	24 W
Regulatory Approvals	
Main Unit	FCC,CE
Power Supply	UL,CE,FC C, REACH, ROHS

FIRMWARE UPGRADE

Please connect the product and PC with serial port cable as below picture, when you ready to upgrade the firmware.

RS-232 CABLE FOR AVPRO EDGE

ER TO CONNECT YOUR COMPTER TO THE SWITCH BY RS-232 YOU NEED TO MAKE YOUR OWN CABLE WITH ONE END A PHOENIX CONNECTOR AND THE OTHER END A RS-232 PORT.
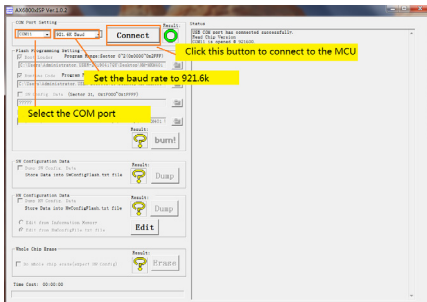COMPUTER DOESN'T HAVE A RS-232 INPUT, GET A USB CONVERTER (AS SHOWN BELOW), AND PLUG THE USB END TO ANY COMPUTER

9.Plug in the DC power and start upgrading (refer figure 2)

Note: if the upgrade is not started, please check steps 1-8, and reconnect the DC power supply.

10. When the upgrade is completed, it will display "complete" (refer figure 3)

UPGRADE FOR STC_MCU

1. Switch the select button on front panel to up1
2. Open the software "stc-isp-15xx-v6.86i.exe"
3. Click the right mouse button on the title bar of the software window and select English from the pop-up options
4. Select MCU mode "STC90LE516RD+" from the MCU type,and the MCU Series is "STC90C58RD+"(refer figure 1)
5. Select the COM port connected by the product from COM port (refer figure 1)
6.Open the code file "hdmi_it6604_vs4210_dvi_hdcp_20200401_3.hex" (refer figure 1)
7. Check these three boxes "enable 6T (double speed) mode" "enable internal" "ale pin used as p4.5"(refer figure 1)
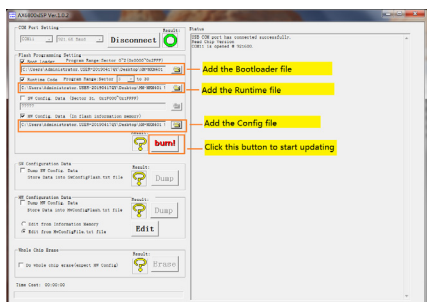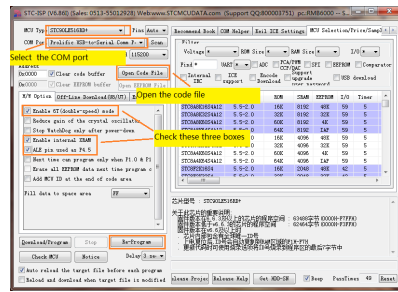8. Click "re program" to enter the upgrade mode (refer figure 1)

UPGRADE FOR AX_MCU

1. Switch the select button on front panel to up2, then connect to DC power.
2. Open the corresponding upgrade software "ax6800xisp_x64.exe" or "ax6800xisp_x32.exe"   according to the current Windows version.
3. Select the COM port which connected by product (Refer figure 4)
4. Set the Baud rate to 921.6k (Refer figure 4)
5. Click "connect" button to connect MCU (Refer figure 4)
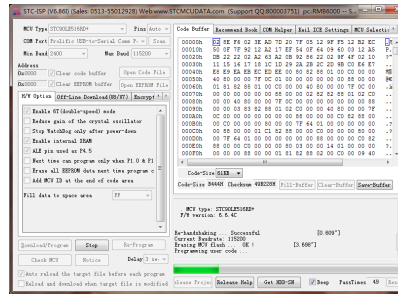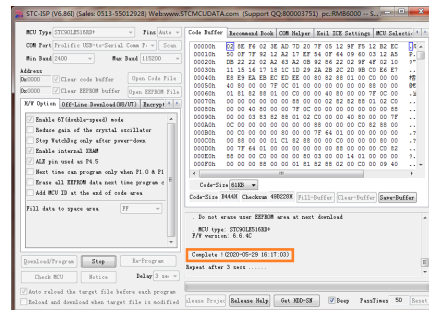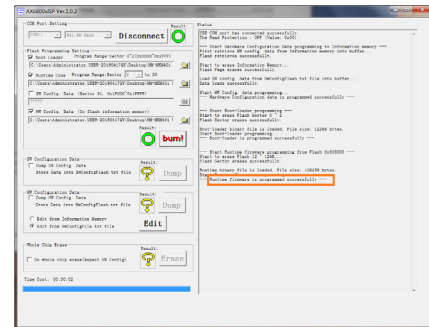Note:If fails to connect to MCU, please check 1-4 again.

6. Add the code file (refer Figure 5)
7. Click "burn" button to start upgrading (refer Figure 5)

8.When the upgrade is completed, it will show "Runtime firmware is programmed successfully" (refer figure 6)

Note:
1. The software and code file are provided by the supplier
2. After the upgrade is completed, it has to switch the select button on the front panel to "normal" position, then the product can be used normally