



VSW-HDMI2X2-4K
VSW-HDMI4X2-4K

4K HDMI Matrix Switch—2 x 2 or 4 x 2

Switch one of two or four HDMI source devices to one or two HDMI displays.

Supports 4K HDMI formats with RS-232 serial or IR remote control.



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1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
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3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
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8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
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10. El equipo eléctrico debe ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.
11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.

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Chapter 1: Specifications

1. Specifications

Technology	
Standards	Video Mode: Supported Resolutions: 3840 x 2160p, 1920 x 1080p, 1280 x 720p
	EDID Configuration: Video: Auto/inventory, Audio: Auto/inventory
	Mode Configuration: Switch/Autosensing/Priority/Matrix
Interface	HDMI Ports: Input: VSW-HDMI2X2-4K: (2) HDMI female, VSW-HDMI4X2-4K: (4) HDMI female, Output: (2) HDMI female
	Serial Port: VSW-HDMI2X2-4K or VSW-HDMI4X2-4K: (1) RJ-12 female
	IR Controls: VSW-HDMI2X2-4K or VSW-HDMI4X2-4K:: Yes
	User Controls: (2) Port Selection buttons, (1) EDID Copy button
Mechanical	Casing: Metal
	Dimensions: 0.78"H x 6.1"W x 2.6"D (2 x 15.6 x 6.5 cm)
Power	Power Supply: 9–12 VDC
Environment	Operating Temperature: 32 to 104° F (0 to 40° C), Storage Temperature: -5 to 140° F (-20 to 60° C), Ambient Relative Humidity: 80%
Approvals	FCC, CE, RoHS2, UL®

2. Overview

2.1 Introduction

The 4K HDMI Matrix Switch—2 x 2 or 4 x 2—routes two or four HDMI sources to two HDMI displays (projectors, monitors, and so on). It displays the same image from one video source to all monitors or images from different video sources to different monitors.

Multi-controlled functions include front-panel buttons with LED indicators, IR remote, and serial control, allowing you to operate the system easily. You won't have to frequently move around video input and output cables.

The 4K HDMI Matrix Switch can operate in Auto mode and Priority mode. The system can either automatically select the latest video source for display in Auto mode, or automatically select a video source following priority order in Priority mode. It also offers EDID Copy function to ensure the optimal resolution for your application.

The built-in serial interface allows users to control the HDMI Matrix through a PC, serial controller devices, or home theater system, integrating the whole A/V environment.

2.2 Features

- Select from 2 or 4 HDMI sources and then distribute to 2 HDMI displays.
- Buttons provide easy switching.
- Non-volatile memory stores all settings in case of blackout.
- Supports innovative technology designed to avoid unnecessary flicker when adding system instruments.
- Optimizes signals by choosing the best output setting from the available alternatives.
- Complies with HDCP standard.
- Compatible with HDTV and 3D HDTV.
- Configurable audio channel setting is ideal for a 5.1/7.1 home theater AV receiver.
- Supports up to Full HD 1080p / 1920 x 1200 / 4K (3840 x 2160) resolution.
- Advanced auto-sensing supports versatile port selection functions including Priority, Auto-sensing, Switch, and Matrix modes.
 - Priority: System automatically selects highest priority source to display (Priority order: Source-1 > Source-2 >)
 - Auto-sensing: System automatically selects the latest video source to display
 - Matrix: supports 2-BUS function which can display 2 sources simultaneously
- Switches via either pressing a button or setting priority.
- Includes multiple functions for setting EDIDs, such as EDID Copy and EDID Pre-setting, which ensure accurate output display.
- Separately learns Audio and Video EDID for multimedia/ Home Theater system integration.
- Emulates EDID information to ensure optimum video performance.
- Read and store the EDID from the connecting display to the video extension.
- Graphical User Interface (GUI) shows connection status for optimum control.
- Most commonly used menu items are duplicated as icons on the top of the display.
- You can name and use your own images for every source and display icon.
- GUI function makes control easier and more effective.

2.3 What's Included

- (1) 4K HDMI Matrix Switch: 2 x 2 or 4 x 2
- (1) Power adapter
- (1) IR Remote Controller
- (1) CD containing users manual and GUI application.
- (1) set of foot pads
- (1) RJ-12 Cable for serial (RS-232) control
- (1) RJ-12-to-RS-232 Converter for serial (RS-232) control

To download this user manual from the Black Box Web site, follow the instructions below:

1. Go to www.blackbox.com
2. Enter the part number in the search box:
3. Click on the "Resources" tab on the product page, and select the document you wish to download.

If you have any trouble accessing the Black Box site to download the manual, you can contact our Technical Support at 724-746-5500 or info@blackbox.com.

2.4 Hardware Description

2.4.1 VSW-HDMI2X2-4K



Figure 2-1. VSW-HDMI2X2-4K front panel.

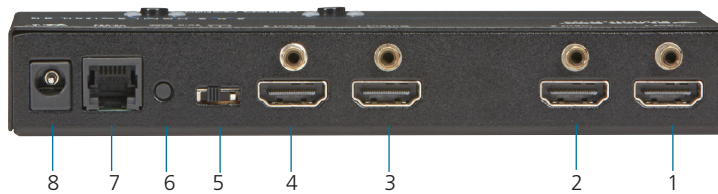


Figure 2-2. VSW-HDMI2X2-4K back panel.

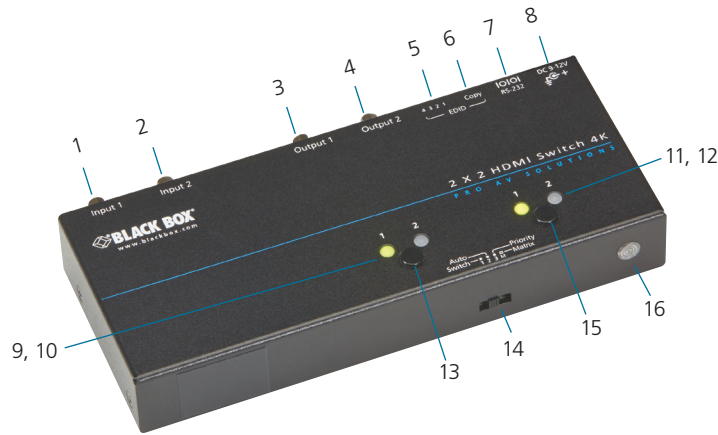


Figure 2-3. VSW-HDMI2X2-4K top panel.

Table 2-1. VSW-HDMI2X2-4K components.

Number in Figure 2-1, 2-2, or 2-3	Component	Description
1, 2	Video input 1 and 2	Connect to an HDMI video source
3, 4	Video Output 1 and 2	Connect to an HDMI display
5	Audio/Video EDID Setting Switch	Configure Audio/Video EDID Setting
6	EDID Copy button	Copy the monitor's EDID
7	Serial port	Port for serial control using RJ-11 connector
8	Power supply	Apply power to the unit.
9, 10	Video Output 1 Status LED	Lights when Output 1 is selected
11, 12	Video Output 2 Status LED	Lights when Output 2 is selected
13	BTNA	Selects Input for Output 1
14	Advanced auto-sensing setting switch	Switch/Auto-sensing/Priority/Matrix mode setting
15	BTNB	Selects Input for Output 2
16	IR sensor	Sensor for IR remote control

2.4.2 VSW-HDMI4X2-4K

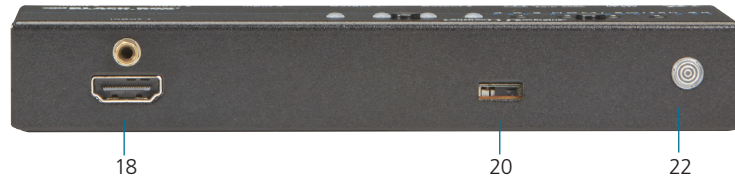


Figure 2-4. VSW-HDMI4X2-4K front panel.

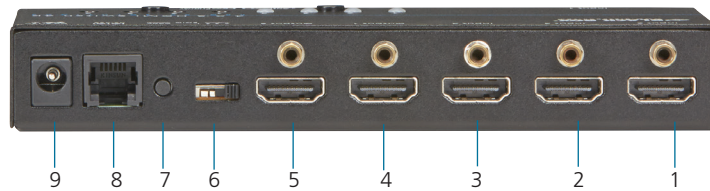


Figure 2-5. VSW-HDMI4X2-4K back panel.

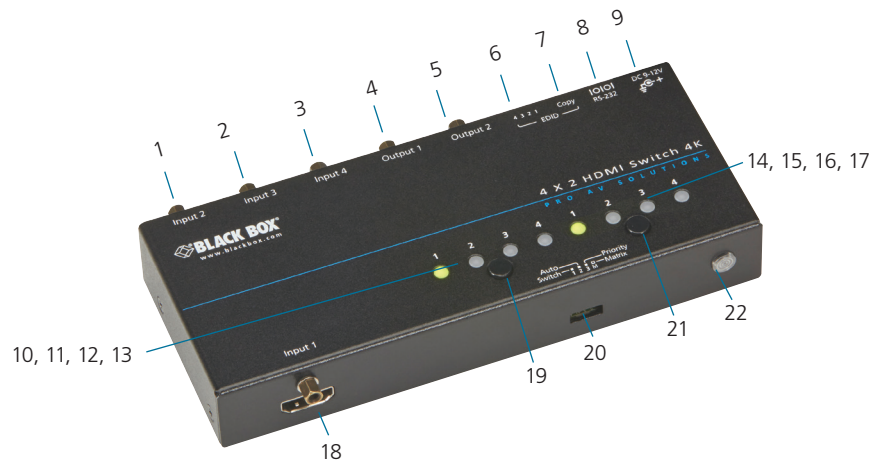


Figure 2-6. VSW-HDMI4X2-4K top panel.

Table 2-2. VSW-HDMI4X2-4K components.

Number in Figure 2-4, 2-5, or 2-6	Component	Description
1, 2, 3, 18	Video Input 1, 2, 3, and 4	Connect to an HDMI video source
4, 5	Video Output 1 and 2	Connect to an HDMI display
6	Audio/Video EDID Setting Switch	Configure Audio/Video EDID Setting
7	EDID Copy button	Copy the monitor's EDID
8	Serial port	Port for serial control using RJ-11 connector
9	Power supply	Apply power to the unit.
10, 11, 12, 13	Video Output 1 Status LED 1, 2, 3, and 4	
14, 15, 16, 17	Video Output 2 Status LED 1, 2, 3, and 4	
19	BTNA	Selects Input for Output 1
20	Advanced auto-sensing) setting switch	Switch/Auto-sensing/Priority/Matrix mode setting
21	BTNB	Selects Input for Output 2
22	IR sensor	Sensor for IR remote control

Slide Switch



EDID Setting switch

Figure 2-7. Audio/Video EDID Setting switch on back panel of Matrix Switch.

Table 2-3. Slide switch settings.

Mode	Video	Audio
1	Auto	Auto
2	Auto	Inventory
3	Inventory	Auto
4	Inventory	Inventory

NOTE: For more operation details, refer to the Operation section.

Advanced Auto-sensing Setting Switch



Figure 2-8. Advanced Autosensing Setting switch.

Table 2-4. Advanced Autosensing switch functions.

Number in Figure 2-8	Setting	Description
1	Switch	Press BTNA or BTNB on the top panel to select source in sequence.
2	Auto-sensing	System will automatically select the latest video source for display. <i>NOTE: If the latest video source is unplugged, the system will automatically display the second latest one.</i>
3	Priority	System will automatically select the high-priority video source for display. (Priority: Source-1> Source-2> Source-3> Source-4)
M	Matrix	Divide 2 monitors into 2 groups (1 + 1): BUS-A (Monitor 1) plays Sn; BUS-B (Monitor 2) plays Sn

NOTE: Functions in Switch mode apply to Auto-sensing, Priority, and Matrix modes.

Chapter 3: Installation

3. Installation

WARNING:

- Before installing the switch, power off all devices that will be connected to this system.
- Make sure that all devices you will connect are properly grounded.
- Place cables away from fluorescent lights, air conditioners and machines that are likely to generate electrical noise.

3.1 Device Connection

1. Use a video cable (HDMI) to connect the display to the video output port on the unit.
2. Use a video cable (HDMI) to connect the source device to the video input port on the unit.
3. Apply power to the unit.
4. Turn on the display (monitor, projector, or TV) and then power on the source device(s).
5. If necessary, apply EDID Copy process (see EDID Setting section).

NOTE: When each video source is powered on, make sure it has a display pointing to it for EDID communication. If a source does not have a display pointing to it, a video image might not display.

If no screen displays, follow these steps:

1. Make sure the device cables are correctly and firmly attached.
2. Set your display device's input source as HDMI.
3. Check the PC BIOS configuration for the video output settings.
4. Connect your video source to the display DIRECTLY to check if the video signal gets through.
5. Apply EDID Copy to your display (see EDID Setting section).

3.2 Connection Pattern

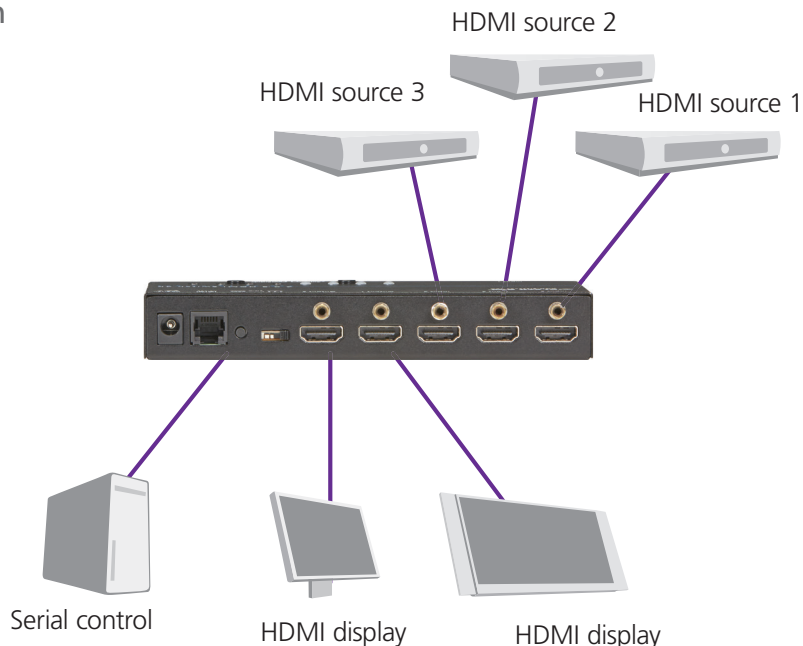


Figure 3-1. Connection pattern.

4. Operation



Figure 4-1. LEDs on the top panel of the 2 x 2 switch.



Figure 4-2. LEDs on the top panel of the 4 x 2 switch.

4.1 LED Indicator

- Switch Mode (Switch, EGO-Auto, EGO-Priority)
S1-S4 LED: 4 x 2 switch/ S1-S2 LED: 2 x 2 switch
- Matrix Mode (2-Bus)
(Left) S1-S4 LED: BUS-A (4 x 2 switch)
(Right) S1-S4 LED: BUS-B (4 x 2 switch)
(Left) S1-S2 LED: BUS-A (2 x 2 switch)
(Right) S1-S2 LED: BUS-B (2 x 2 switch)

Table 4-1. LED indicators on the unit.

Input or Output in Figure 4-1 or 4-2	LED	Switch/Auto/Priority Modes Status
Video Input Status LED 1	The selected LED emits green and goes off 3 times per 2 seconds.	The input video signal isn't ready.
Video Input Status LED 2	The selected LED emits green and goes off once per 2 seconds.	The input video signal is ready but cannot detect the monitor.
Video Input Status LED 3	The selected LED emits steady green.	The input video signal is ready and can detect the monitor.
Video Input Status LED 4	The selected LED emits green with red flashing 3 times.	The input video signal and monitor HDCP are not matched.
Video Output Status LED 1, 2, 3, or 4	Off	Not selected: the LED turns off when it's not selected, no matter what the source condition is (with or without source input, HDCP...etc.).

4.2 Push Button Control

4.2.1 A/V Source Selection

- Switch Mode (Switch, Auto, Priority): left LED S1–S4 (4 x 2 switch)/ left LED S1–S2 (2 x 2 switch)>

Press BTNA or BTNB once to select the source in sequence (S1—>S2—>S3—>S4—>S1...). The monitor immediately shows the video source once selected. The corresponding LED lights when the source is selected.

- Matrix Mode (2-Bus):
BUS-A: left LED S1–S4 (4 x 2 switch)/left LED S1–S2 (2 x 2 switch);
BUS-B: right LED S1–S4 (4 x 2 switch)/ right LED S1–S2 (2 x 2 switch)

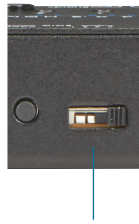
For BUS-A (Monitor 1): Press BTNA: Select Source1/Source 2/Source 3/Source 4.

For BUS-B (Monitor 2): Press BTNB: Select Source 1/Source 2/Source 3/Source 4.

NOTE: Idle time-out is set to around 6 seconds.

4.2.2 EDID Setting

NOTE: Before starting, slide the Audio/Video EDID Setting Switch to position 2/3/4.



EDID Setting switch

Figure 4-3. EDID Setting switch on back panel of Matrix Switch.

Copy Monitor EDID (2 methods):

Method 1

Step 1: Apply power to the unit.

Step 2: Connect the (EDID compliant) monitor to the output port of the unit and power on the monitor.

Step 3: Press and hold the button "EDID COPY" for 3–5 sec. and release the button RIGHT AFTER the LED L1–L4 (4 x 2 switch)/ LED L1 and L2 (2 x 2 switch) flash GREEN and RED.

Result: If the LED S1–S4 (4 x 2 switch)/ LED S1 and S2 (2 x 2 switch) return to normal status, it indicates that the EDID Copy is completed.

Method 2

NOTE: Before starting, power off the unit and connect monitor to the output port of the unit.

Step 1: Press and hold the button "EDID COPY."

Step 2: Apply power to the unit.

Step 3: Release right after the LED L1–L4 (4 x 2 switch) LED L1 and L2 (2 x 2 switch) flash GREEN & RED. (3–4 seconds).

Result: If the LED L1–L4 (4 x 2 switch)/ LED L1 and L2 (2 x 2 switch) return to normal status, it indicates that the EDID Copy is completed.

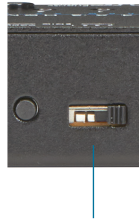
Otherwise, the LED flashes RED, indicating that:

- a. The monitor is not properly connected.
- b. The monitor is not powered on.
- c. EDID data of the monitor is not applicable.

Chapter 4: Operation

EDID Emulation

Slide the switch to the desired position as shown below.



EDID Setting switch

Figure 4-2. Audio/Video EDID Setting switch on back panel of Matrix Switch.

Table 4-2. Slide switch settings.

Mode	Video	Audio
1	Auto (Va)	Auto (Aa)
2	Auto (Va)	Inventory (Ai)
3	Inventory (Vi)	Auto (Aa)
4	Inventory (Vi)	Inventory (Ai)

Table 4-2. Slide switch settings.

Va	Video Auto	Automatically use the EDID of the attached display (video algorithm).
Aa	Audio Auto	Automatically use the EDID of the attached display (audio algorithm).
Vi	Video Inventory	After copying Video EDID, use the copied Video EDID on the connected display.
Ai	Audio Inventory	After copying Audio EDID, use the copied Audio EDID on the connected display.

4.2.3 EQ Adjustment

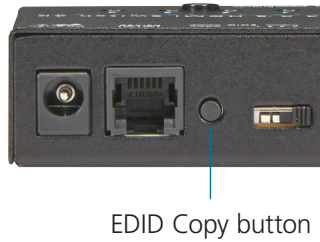


Figure 4-3. EQ Adjustment switch on the units.

Press the BTNB and EDID Copy buttons for 3 seconds and release right after the (left) LED L1–L4 flash red. (LED L1–L4 indicates which level is on). Then press BTNA to decrease one level or press BTNB to increase one level. (8 levels: GREEN: level 1–4, RED: level 5–8). Press the EDID Copy button once to exit the setting.



Figure 4-4. EQ adjustment steps.

4.2.4 Factory Default Setting

If you have problems with the unit’s settings, reset it to the factory default. To return all settings to the factory default, press the BTNB and EDID Copy buttons for 9 seconds, and release right after four LEDs (L1–L4) flash green twice.

NOTE: After resetting to factory default, the system will select source 1 to start displaying. When the system is in Priority or Auto Mode, refer to Figure 2-8 and Table 2-4, Advanced Auto-sensing Setting switch and functions.

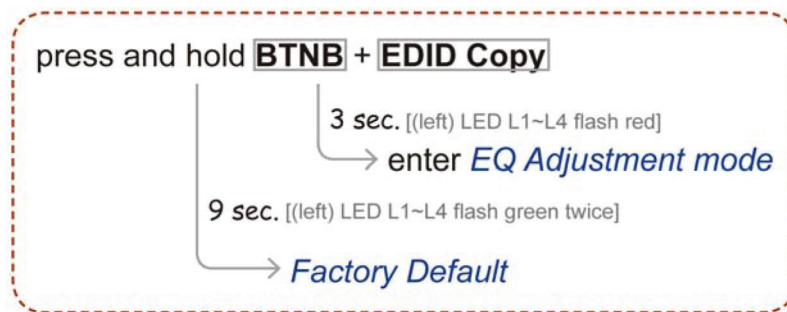


Figure 4-3. User control functions.

Chapter 4: Operation

4.3 IR Remote Control

- A/V Source selection:

- Switch Mode (Switch, Auto, Priority)

Press 1/ 2/3/4: Select Source1/Source 2/Source 3/Source 4.

- Matrix Mode (2-BUS)

For BUS-A (Monitor 1): Press 1/2/3/4: Select Source1/Source 2/Source 3/Source 4.

For BUS-B ((Monitor 2): Press S1/S2/S3/S4: Select Source1/Source 2/Source 3/Source 4.



Figure 4-4. IR remote control.

5. Serial Configuration

The HDMI Switch-Splitter with built-in serial interface allows users to control the unit via a PC, serial controller devices, or a home theater system.

Configure the ontrroller's serial port as shown below:

Baud Rate: 38400 bps

Data Bits: 8

Parity: None

Stop Bits: 1

Flow Control: None

5.1 Simple Serial Connection

The following window is an example of Windows XP HyperTerminal. Connect and power on the unit, and then set up serial configuration, including the correct baud rate and com port.



```

ABC - HyperTerminal
File Edit View Call Transfer Help

Booting ..

-----
Digital Switch Splitter 4 x 2 (MTC32)
H/W version: 01 F/W version: 003-8
RC ID: none
-----

CE=n,a2 - Copy EDID (Inventory) to all input ports
n: Method a1,a2: Options
1. Copy from specified monitor a1
2. Copy from corresponding monitor (1 on 1)
3. Make 1024 x 768 EDID
4. Make 1280 x 800 EDID
5. Make 1280 x 1024 EDID
6. Make 1360 x 768 EDID
7. Make 1400 x 1050 EDID
8. Make 1440 x 900 EDID
9. Make 1600 x 900 EDID
10. Make 1600 x 1200 EDID
11. Make 1680 x 1050 EDID
12. Make 1920 x 1080 EDID
13. Make 1920 x 1200 EDID
14. Make 1920 x 1440 EDID
15. Make 2048 x 1152 EDID

when n = 1:
a1: monitor index (1^2). a2: not required
when n = 2:
a1,a2: not required
when n = 3^15:
a1: video options
1. DVI 2. HDMI(2D) 3. HDMI(3D)
a2: audio options
1. LPCM 2 ch 8. DTS 5.1 ch
2. LPCM 5.1 ch 9. DTS HD 5.1 ch
3. LPCM 7.1 ch 10. DTS HD 7.1 ch
4. Dolby AC3 5.1 ch 11. MPEG4 AAC 5.1 ch
5. Dolby TrueHD 5.1 ch 12. 5.1 ch combination
6. Dolby TrueHD 7.1 ch 13. 7.1 ch combination
7. Dolby E-AC3 7.1 ch

AVI=n,m - Select input port n as the source of output Group m
m: A - Group A, B - Group B
AVOEN=n - Enable output port n
n: 1^max - output port, * - All ports
AVODIS=n - Disable output port n
n: 1^max - output port, * - All ports
VS - View current settings
EQ=n - Set EQ level as n (1^8)
FACTORY - Reset as factory default setting
REBOOT - Reboot the device
3. LPCM 7.1 ch 10. DTS HD 7.1 ch
4. Dolby AC3 5.1 ch 11. MPEG4 AAC 5.1 ch
5. Dolby TrueHD 5.1 ch 12. 5.1 ch combination
6. Dolby TrueHD 7.1 ch 13. 7.1 ch combination
7. Dolby E-AC3 7.1 ch

AVI=n,m - Select input port n as the source of output Group m
m: A - Group A, B - Group B
AVOEN=n - Enable output port n
n: 1^max - output port, * - All ports
AVODIS=n - Disable output port n
n: 1^max - output port, * - All ports
VS - View current settings
EQ=n - Set EQ level as n (1^8)
FACTORY - Reset as factory default setting
REBOOT - Reboot the device
More...
RCID=n - Set Remote Control ID as n
n: 0 - Reset as null (Always on)
1^16 - Valid ID
LI=n - Set terminal interface n: 0 - Human 167 - Machine
LOCK n - Lock / Unlock device n: 0 - Unlock 167 - Lock
BBS
>

Connected 01:05:09 Auto detect 38400 Baud 8 N 1 SCROLL CAPS NUM Cursor Print echo

```

Figure 5-1. Windows XP hyperterminal screen.

Chapter 5: Serial Configuration

5.2 GUI over Serial

The switch-splitter allows users to control the unit by GUI operation via a built-in serial interface. Follow the installation and operation steps described next.

1. Installing Application

A serial console (PC) running Windows 98/2000/X/Vista/7 is required to install the appropriate software. Follow the step-by-step instructions listed below.

All prompt screens and dialog boxes shown in this section are for Windows XP and above. Some dialog boxes and folders may slightly different in other versions of Windows.

- Install the "AV Console Center" application (Windows 98 and above)
 - a. Insert the CD into the CD/DVD-ROM drive and the Web browser opens.
 - b. Copy the file "AV Console" to your PC or any hard disk. Do not run the app directly on the CD.

2. Uninstalling Application

To uninstall the application, you can manually delete the file "AV Console" from the Windows platform.

3. Description and Operation

The Graphical User Interface (GUI) is designed for user-friendly operation. The application is divided into two parts—Basic Operation and Advanced Operation. For more information, refer to the following descriptions:

5.2.1 Basic Operation

1. GUI Connection

After software installation, connect the serial cable to serial port of the Switch-Splitter. Connect the other end to the serial port (COM1, COM2...) of your computer. Next, click "TuApp.exe" on the file "AV Console" to start GUI operation.

If it's your first time running this GUI utility without previously saving a device file, the window shown below will pop up.

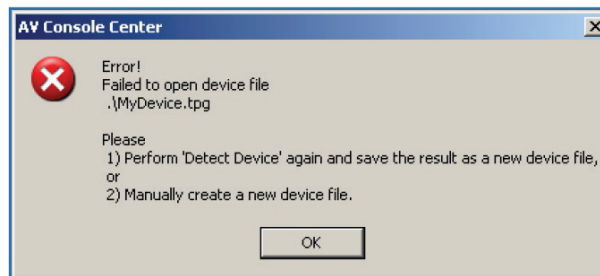


Figure 5-2. OK prompt.

Click "OK" to continue.

The window shown below pops up next.

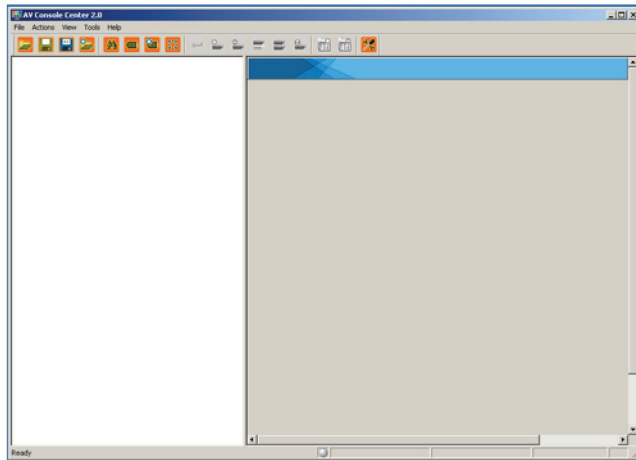


Figure 5-3. AV Console Center screen.

Step 1: Open "Tools" on the tool bar, and select "Communication Port."

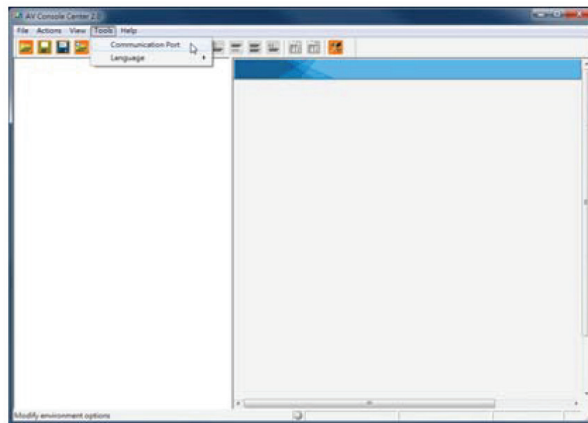


Figure 5-4. Tools drop-down menu.

Step 2: Check "COM Port" and choose the serial port you want to connect, such as COM1, and set the Baud Rate as "38400."

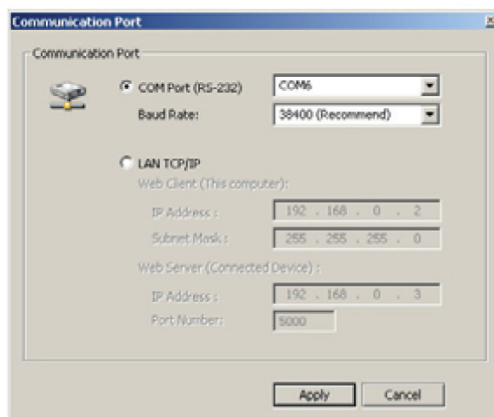


Figure 5-5. Communication Port screen.

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Step 3: A dialog box will pop out indicating device(s) detected.

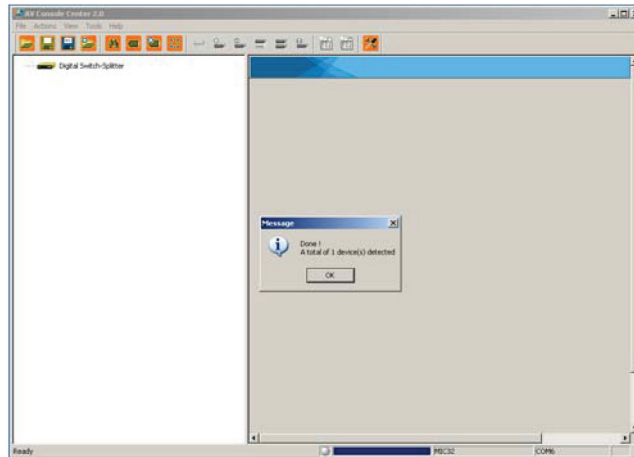


Figure 5-6. Devices detected OK prompt.

Step 4: Double-click “Digital Switch-Splitter” on the left block. (There are other ways to detect the device. For more information, refer to Toolbar Guidance/Action.)

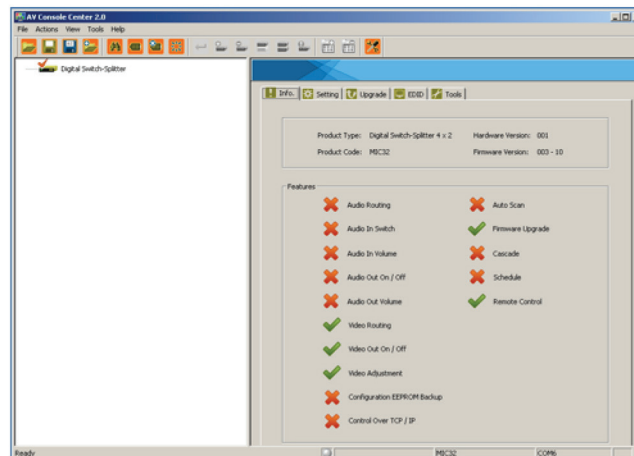


Figure 5-7. Digital Switch-Splitter screen.

2. GUI Toolbar Guidance

You can see the toolbar on the upper-left corner. Both top toolbars are identical in functions. For further information, refer to the following for guidance.

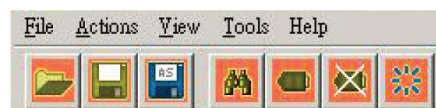


Figure 5-8. GUI toolbar.

- File: Allow users to open or save topology files. A topology is a schematic description of the arrangement of a network, including its nodes and connecting lines. We suggest saving a topology file.

Table 5-1. Topology file options.

Number	Option	Function
1	Open Existing Topology	Open pre-stored topology file
2	Save Current Topology	Allow users to save current topology file in the location where the software is installed.
3	Save Current Topology As...	Allow users to save current topology file in the requested location.
4	Create New Device File	(reserved)
5	Exit	Exit the system

Actions: Detect all devices or connect the selected device. When you check “Detect All Devices,” the dialog box in Figure 5-8 will appear. This means the system successfully detects the device.

View: Show or hide the (Icon) Toolbar/Status Bar (on the bottom of the window).

Tools:

- a. Communication Port: set up COM Port and Baud Rate or set up TCP/IP address for the device.
- b. Language: “English” and “Traditional Chinese” are available.

Help: Show the software version and copyright information.

3. GUI Function Description



Figure 5-9. GUI functions.

The following describes the overall functions. Four sections are included: Info, Setting, Upgrade, EDID, and Tools.

- Info: Show information and features.
- Setting: In this section, users can set up port connection, enable or disable audio/video separately, set scan time rate, etc. By default, the system will automatically apply source 1 routing to all displays as shown below.

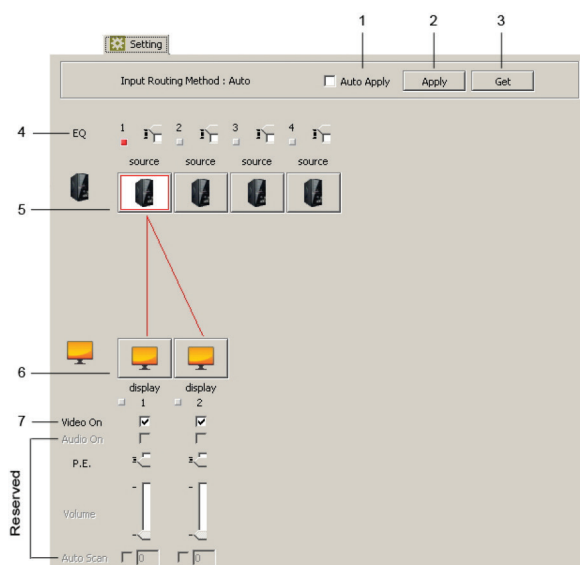


Figure 5-10. User controls on the unit.

Table 5-2. GUI option functions.

Number	Option	Function
1	Auto apply	Automatically apply settings. We do not recommend checking this item, because it could slow down the system.
2	Apply	Activates the settings.
3	Get	Detect and show the current setting status. Users can operate the unit via front panel push button or IR remote controller.
4	EQ	Adjust the video equalization (sharpness).
5	Source Icon	Linking: Click one of the source icons and then click "Apply" to activate the settings.
6	Display Icon	Double-click the icon and there will be a pop-up menu. Users can change the picture (.ico file with 32 x 32 or 36 x 36 pixel) and assign an alias for the source or display.
7	Video On	Check/uncheck the item to turn on/off the display.

5.2.2 Advanced Operation

EDID: Users can not only select the desired ports to copy EDID via multiple methods, but also use built-in EDID for all connected monitors.

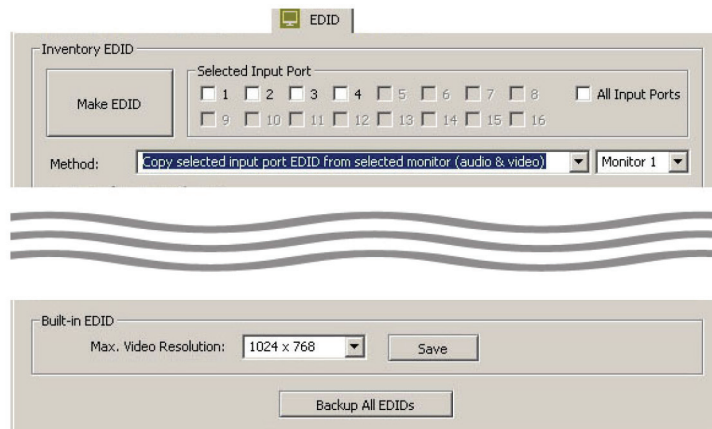


Figure 5-11. EDID screen.

Table 5-3. EDID options.

Number	Option	Function
1	Inventory EDID	Make EDID
2		Method
3	Built-In EDID (optional)	All connected monitors use the selected built-in EDID; resolution ranging from 1024 x 768 to 2048 x 1152. After saving, you must reboot the system (click on the "reboot the selected device" icon on the top toolbar).

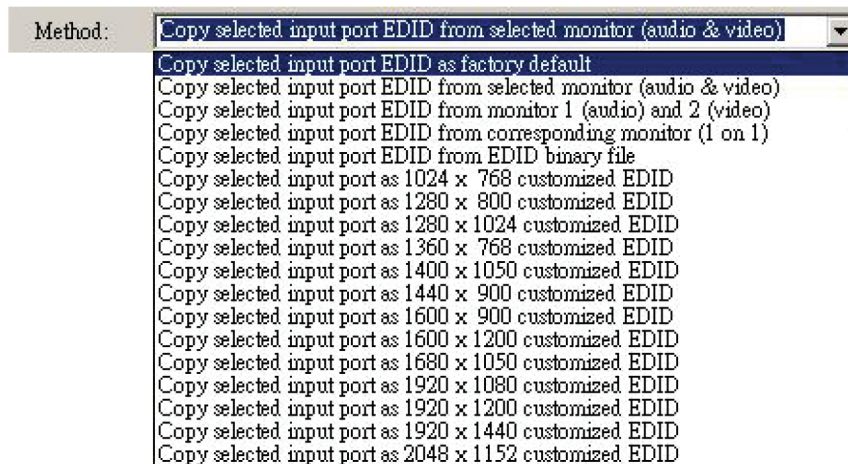


Figure 5-12. Method copy screen.

Table 5-4. Method Operation Steps.

Method	Operation Steps
Copy selected input port EDID as factory default.	<p>Step 1. Check the desired input port(s) or check All input ports to select all.</p> <p>Step 2. Click Make EDID.</p>
Copy selected input port EDID from selected monitor (audio and video).	<p>Step 1. Check the desired input port.</p> <p>Step 2. Select the desired Monitor (next to Method).</p> <p>Step 3. Click Make EDID.</p>
Copy selected port EDID from corresponding monitor (1 on 1).	<p>Step 1. Check the desired input port(s) or check All Input Ports to select all.</p> <p>Step 2. Click Make EDID.</p> <p><i>NOTE: For the 2-input port model, input ports 1 and 2 can copy the corresponding monitor.</i></p> <p><i>For the 4-input port model, only input ports 1 and 2 can copy the corresponding monitor; the rest of the ports use the default setting.</i></p>
Copy selected input port EDID from *EDID binary file.	<p>*EDID binary file: A file that stores EDID information.</p> <p>Step 1. Check the desired input port(s) or check All input ports to select all.</p> <p>Step 2. Click Make EDID.</p> <p>Step 3. Select the desired binary file.</p>
Copy selected input port as *1024 x 768 customized EDID.	<p>*Customized EDID: selectable resolution ranging from 1024 x 768 to 2048 x 1152.</p> <p>Step 1. Select a resolution.</p> <p>Step 2. Check the desired input port(s) or check All input ports to select all.</p> <p>Step 3. Click Make EDID.</p>

Tools: Allow users to set up the Remote Controller ID. Up to 16 units can share one remote controller. We recommend that you name the units to avoid receiving commands simultaneously.

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Changing Source/Display Icon:

Double-click the source/display icon and a pop-up window will appear. Users may change the icon and name the selected source or display.

Name the display/source: Click the corresponding icon and insert any name you want.

Change the icon:

a. Built-in Icons: The GUI application provides commonly-used icons (Built-in Icons) as shown on the top of the pop-up window.

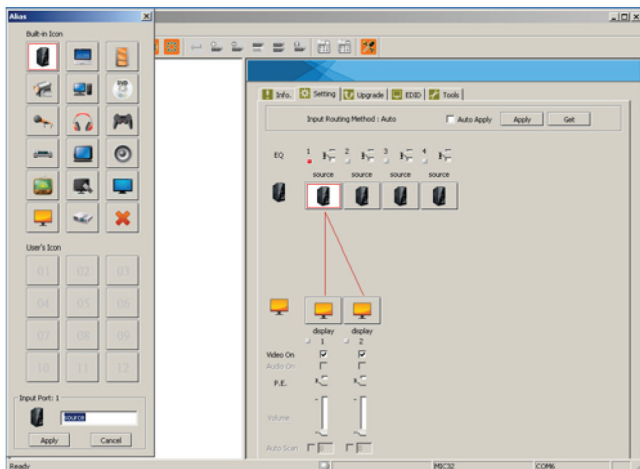


Figure 5-13. Built-in icons on the GUI window.

b. User's Icon: Reset the button to null.

As shown on the bottom of the pop-up window, you can double-click the icon (01-12) in the dialog box. Click this option to set the icon as blank.

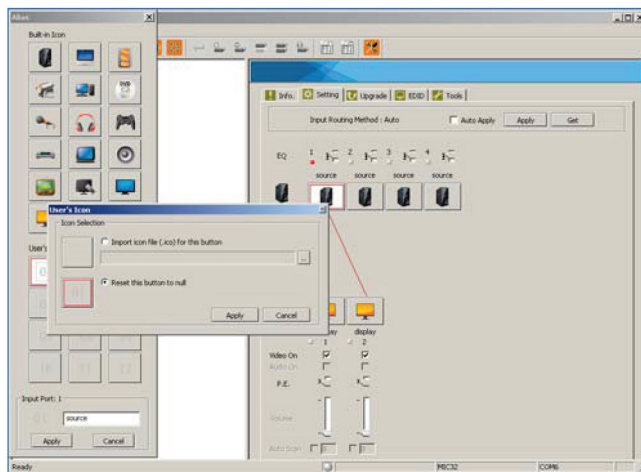


Figure 5-14. User's icon on the GUI window.

c. User's Icon: Import icon file (.ico) for this button.

As shown on the bottom of the pop-up window, you can double-click the icon (01-12) in the dialog box. If you want to upload your own icon, name it as an .ico file with 32 x 32 or 36 x 36 pix.

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