MuxLab PRODIGITAL™

6x1 HDMI
Multimedia Presentation Switch

Installation Guide

500445

SAFETY PRECAUTIONS

To insure the best from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.   Keep the product away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Using supplies or parts not meeting the product's specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- Install the device in a place with good ventilation to avoid damage caused by overheat.
- Unplug the power cord when left unused for a long period of time.
- Do not put any heavy items on the unit or on extension cable.
- Do not remove the housing of the device as you may be exposed you to dangerous voltage or other hazards.
- Do not twist or pull by force ends of the UTP cable. It can cause malfunction.
- Information on disposal of devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.
- Unpack the equipment carefully and save the original box and packing material for possible future shipment

NOTICE:

1.   Please read this user manual carefully before using this product.
2.   The "far-end" item is the device (e.g. display device, 3rd party RS232 device etc.) connected via the 500445.

Contents

1. Introduction

1.1 Introduction to the 500445

The 6x1 2.0 Multimedia Presentation Switch is a compact scaler switcher with 6 video inputs (3x HDMI, 1x DisplayPort 1.2a, 1x USB Type-C, and 1x VGA) and supports up to a 4K/60 (4:4:4) video resolution @ 8 bits and 1080p/60 3D. The unit supports HDCP 2.2, HDR 10, smart EDID management, and a 2CH Analog Audio extract port, plus 5.1CH Digital Audio extract. The device will pass-through audio signals up to Dolby Atmos and DTS:X. In addition, two of the HDMI ports support MHL for smartphone & tablet connectivity.

The 6x1 HDMI 2.0 Multimedia Presentation Switch scales & switches any video signal to the HDMI output. The inputs may be switched under user control, either locally via push buttons and remotely via IP, RS232 and IR remote control, or it may be controlled automatically via "Auto" mode.

The unit offers CEC control for remote management of end devices.

1.2 Features

- Supports video source auto-switching function

- Supports 6 inputs, including 3 HDMI, DisplayPort 1.2a, USB Type-C, and VGA inputs

- Supports resolutions up to 4K/60 (4:4:4) 8 bit, 1080p/60 3D, and HDR 10

- Compliant with HDCP 2.2

- Supports audio pass-through up to Dolby Atmos and DTS:X

- Supports 2CH analog audio extract, and 5.1CH Digital (Dolby and DTS) audio extract

- Supports CEC command for remote control of end devices

- Controllable via "Auto" mode, and manually via push button, IP, RS232 and IR

- Firmware may be updated over the LAN port

1.3 Package Contents

- One (1) 6x1 HDMI Multimedia Presentation Switch
- Two (2) Mounting brackets
- Four (4) Plastic cushions

- One (1) IR Receiver
- One (1) RS232 cable
- One (1) IR remote (Two AAA batteries needed, not included)
- One (1) 1 x 3 pin Terminal Block
- One (1) 1 x 5 pin Terminal Block
- One (1) 12VDC, 2A Power Adapter with interchangeable blades

Note：   Please confirm if the product and the accessories are all included, if not, please contact your dealer.

2. Specification

Environment	HDMI 2.0, DisplayPort 1.2a, USB Type-C and VGA
Devices	DVD, plasma, projectors, monitors, TV, PC, laptops, and servers.
Transmission	Transparent to the user
Video Bandwidth	18 Gbps
Video Resolution	HDMI: Up to 4K@60Hz MHL: Up to 1080p@60Hz USB-C: Up to 4K@60Hz DP: Up to 4K@60Hz VGA: Up to 1920x1200@50/60Hz
Audio Bandwidth	20Hz to 20KHz
Stereo Channel Separation	>70dB @1KHz
Signals	HDMI 2.0, DisplayPort 1.2a, USB Type-C and VGA (1920 x 1200)
Connectors	Four (4) HDMI connectors; Three (3) Inputs and One (1) Output. One (1) DisplayPort connector (input). One (1) USB Type-C connector (input). One (1) 15 Pin VGA connector (Input). One (1) RJ45 for LAN unit control and firmware updates.

	One 3-Pin Phoenix connector for RS232 unit control.
	One (1) IR input jack for unit control.
	One 3.5mm output jack for 2CH audio extract of selected input
	One TosLink Optical port for Digital audio extract (5.1CH Dolby and DTS) of selected input
	One (1) 2.1mm barrel jack for Power.
	Note: HDMI cables not included.
Power Supply	One (1) 110-240V/12VDC power supply with interchangeable blades (locking PSU connector)
Power Consumption	10 Watts
Temperature	Operating: -10° to 55°C Storage: -25° to 70°C Humidity: Up to 90% non-condensing
Enclosure	Metal
Dimensions	13.4" x 1.02" x 4.52" (342.5mm x 26mm x 115mm)
Weight	14.59lb (620g)
Compliance	Regulatory: FCC, CE, RoHS
Warranty	2 years
Order Information	500445 HDMI 2.0 Multimedia Presentation Switch

3. Panel Description

3.1 The 500445 Front Panel

No.	Name	Description
1	Power indicator	Turns on red when power is on, turns green in standby mode.
2	Video Source	1 – 6 buttons to select specific video source. Pressing and holding for three seconds the **AUTO** button to enable automatic switching mode
3	Display / Control	● Press **ON** to turn on the display. ● Press **OFF** to turn off the display. ● Press 🔇 to mute/unmute display audio. ● Press 🔉 to decrease the audio volume gradually, or press and hold it to decrease the audio volume constantly. ● Press 🔊 to increase the audio volume gradually, or press and hold it to increase the audio volume constantly.
4	VGA Resolution	When the VGA input is selected, press RES repeatedly can set the VGA resolution to 1280x720, 1920x1080 or 1920x1200. The three LEDs illuminate green to indicate the VGA resolution is selected.
5	FW	Micro-USB port for firmware upgrade

3.2 The 500445 Rear Panel

No.	Name	Description
1	Video Input	Three type A female HDMI input ports to connect HDMI video sources. One USB C input port to connect devices with SlimPort interface. One DisplayPort input port to connect a DisplayPort video source. One 15 pin VGA input port to connect a VGA video source, and an auxiliary audio input stereo (3.5mm mini jack) can be embedded in VGA video.
2	HDMI Out	Type A female HDMI output port to connect a video display
3	Optical	Toslink connector for digital audio output
4	L R	5 pin terminal block for balanced audio output
5	EDID	4 pin DIP switch for EDID settings
6	IR IN	3.5mm mini jack to connect the IR receiver to control the switcher by the included IR remote
7	RS232	3 pin terminal block to connect a RS232 device
8	TCP/IP	RJ45 connector to manage the switcher via its GUI
9	DC 12V	DC barrel port for power adapter connection

4. System Connection

4.1 Safety Precautions

1) System should be installed in a clean environment with temperature and humidity within the operating levels.

2) All devices should be connected before power on.

4.2 System Diagram
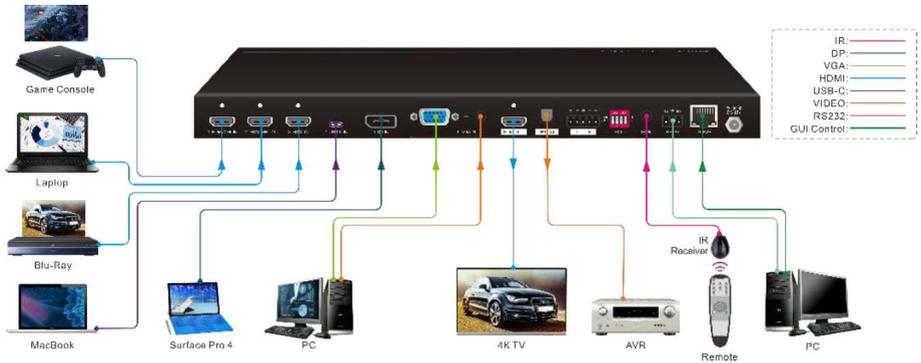
4.3 Connection Procedure

a)   Connect HDMI source devices (e.g. Blue-ray DVD) to HDMI input ports of the 500445 with HDMI cables. Connect VGA source device (e.g. PC) to VGA input port of the 500445 with VGA cable.

b)   Connect audio source to be embedded in the VGA signal.

c)   Connect an HDMI display device to the HDMI output port of the 500445 with HDMI cable.

d)   Connect an audio device with optical input in to the Toslink port of the 500445.

e)   Connect control device (e.g. PC) to the RS232 port of the 500445.

f)   Connect the IR Receiver into the IR IN port.

g)   Connect 12V DC power to the power port.

5. Operations

5.1 Operations of Front Panel Buttons

Front panel buttons can be used for adjusting output resolution, switching operations, software updating, volume adjusting and other operations in the menus.

5.1.1 Manual Switching

There are two modes available: auto and manual switching. In manual model you may select a video source by pressing one of the six buttons. If a valid source is detected the LED will illuminate green. **Auto Mode LED must be off**.

5.1.2 Automatic Switching Operation

In order to enable auto mode switching you may press and hold **AUTO** button for **3 seconds.** Auto mode LED will light.

Auto-switching function:

The auto-switching function works as follows:

New input

When a new input signal is detected, the 500445 will switch to this new signal automatically.

Signal loss

When the current display signal is lost, the 500445 will detect other input signals with priority from INPUT 1 to INPUT 6. It will detect the first signal and switch it to the output devices.

Power reboot

The 500445 offers the function to remember the last displayed signal when rebooting. Once rebooted, the 500445 will automatically enter auto-switching mode, and then detect all inputs and memorize their connection status for future rebooting.

If the last displayed signal is still available, the 500445 will output that signal. If not, there will be no signal on output devices.

Operation Examples:

- Connect Input 2, Input 4, and Input 6 ports with source devices, select Input 4.
- Press and hold **Source/Auto** button for **3 seconds** to enter the auto-switching mode.
- The 500445 is now in auto-switching mode. If there is no signal loss or no new input, the Output will still be connected to Input 4.
- Connect Input 3 with an active source device; the outputs will automatically connect to Input 3.
- Remove the signal of Input 3; the 500445 will detect from Input 1 to Input 5, and will automatically switch to Input 2.
- Turn off the power of the 500445. As the 500445 is in auto-switching mode, it will choose Input 2 to output when power is restored.

5.1.3 Adjusting the Volume

When not in OSD menu, press VOL – to decrease line volume, VOL + to increase line volume; press MIC – to decrease MIC volume, MIC + to increase MIC volume.

5.1.4 Display Control

The switcher supports CEC , and the DISPLAY CONTROL buttons on the front panel are designed for Display On/Off and volume adjustment.

ON: Display is On

OFF: Display is Off

🔇 Mute/unmute audio

🔈 Lower Audio volume

🔊 Increase Audio Volume

5.1.5 VGA Resolution

The **RES** button on the front panel allows you to select a VGA resolution. To select a specific resolution you may press the RES button repeatedly until the LED of the desired resolution is lighted green.

5.2 Operations of the Rear panel

5.2.1 EDID Settings

The Extended Display Identification Data (EDID) allows the source to match the display resolution. By default, the source device obtains its EDID from the first connected display. The 4 pin DIP switch on the rear panel can be used to set the EDID to a fixed value. Following table shows pre-defined EDID settings.
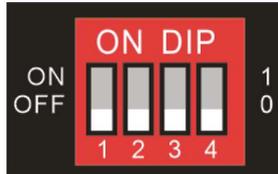
Switch Settings (1 - 4)	Video Resolution	Audio Format
0000	Pass-through	
0001	1080p60Hz RGB 4:4:4 8 bit	Stereo audio
0010	1080p60Hz RGB 4:4:4 8 bit	High Definition Audio
0011	1080p60Hz RGB 4:4:4 12 bit	Stereo audio
0100	1080p60Hz RGB 4:4:4 12 bit	High Definition Audio
0101	3840x2160p60Hz RGB 4:2:0 12bit	Stereo Audio
0110	3840x2160p60Hz RGB 4:2:0 12bit	High Definition Audio
0111	3840x2160@60Hz HDR	Stereo Audio

1000	3840x2160@60Hz HDR	High Definition Audio
1001	1280x800@60Hz RGB 4:4:4 8bit	Stereo Audio
1010	1920x1200@60Hz RGB 4:4:4 8bit	High Definition Audio
1011	User defined 1	
1100	User defined 2	
1101	User defined 3	
1110	User defined 4	
1111	Enable GUI or RS232 EDID management	

Note

Stereo Audio: LPCM 2Ch

High Definition Audio: LPCM 8Ch, AC 3 6 Ch, DTS 5.1, Dolby Digital 5.1

5.2.2 IR Remote

The 500445 can be managed through its remote control.
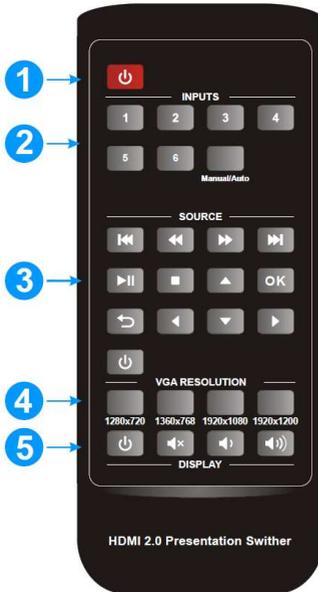
1. Power button

Enter/exit power standby mode

2. Input channel selection buttons

Input 1 is for HDMI1, Input 2 for HDMI2…and Input 6 for VGA.
Manual/Auto: Enable/ disable auto-switching mode.

3. Source device buttons

▲,▼,◄, ►: UP/DOWN/LEFT/ RIGHT buttons, for value setting or page-turn.

⤺ Exit

⏻ Power On/Off

OK: confirm button.

4. VGA Resolution buttons

Select resolution by pressing the corresponding button.

5.   Display buttons

⏻ Power On/Off

◀× Mute/unmute audio

◀) Lower Audio volume

◀)) Increase Audio Volume

5.2.3 Operation of RS232 Control

The 500445 can also be controlled via RS232 commands. Please refer to the following table to settings and commands. You can use a terminal software to control 500445. Please set the parameters of the COM Port (baud rate, data bit, stop bit and the parity bit) to 9600, 8, 1, none.

Note

1. All commands do not need to end with "<CR><LF>".

2. In the commands, "["and "]" are symbols for easy reading and do not need to be typed.

3. Remember to end the commands with the ending symbols "." or ";".

5.2.4 RS232 Communication Commands

Communication protocol: RS232 Communication Protocol
(Baud rate: 9600, Data bit: 8, Stop bit: 1, Parity bit: none)

Command	Function	Feedback Example
Switch Commands		
POWON	Power on the system	Power On
POWOFF	Power off the system	Power Off
LOCK	Lock front panel buttons	Front panel locked
UNLOCK	Unlock front panel buttons	Front panel unlocked
GETGUIIP	Report GUI IP	GUI_IP:< IP_Address>
SETGUIIP: [xxx.xxx.xxx.xxx]	Set GUI IP to [xxx.xxx.xxx.xxx]	Example: SETGUIIP:192.168.0.178. Feedback: SETGUIIP:192.168.0.178!
STA	Report system status	GUI/RS232 QUERY STATUS! SCU61E VERSION V1.0.0 POWER ON! FRONT PANEL UNLOCK! HDMI OUT SWITCH TO AUTO MODE! HDMI OUT SWITCH TO 2! DIP0000! 5

Command	Function	Feedback Example
		DIP EDID0000!
		SPDIF OUT ON!
		IIS OUT ON!
RST	Factory reset	FACTORY DEFAULT!
		SCU61E
		VERSION V1.0.0
		POWER ON!
		FRONT PANEL UNLOCK!
		HDMI OUT SWITCH TO AUTO MODE!
		HDMI OUT SWITCH TO 1!
		DIP0000!
		DIP EDID0000!
		SPDIF OUT ON!
		IIS OUT ON!
HELP	Get the command list	RS232/GUI COMMANDS LIST:
		1 - POWON
		2 - POWOFF
		3 - RST
		4 – UNLOCK
		…
Source Switching Commands		
HDMI1	Switch to HDMI input 1	HDMI Out switch to 1
HDMI2	Switch to HDMI input 2	HDMI Out switch to 2
HDMI3	Switch to HDMI input 3	HDMI Out switch to 3
HDMI4	Switch to HDMI input 4	HDMI Out switch to 4
HDMI5	Switch to HDMI input 5	HDMI Out switch to 5
HDMI6	Switch to HDMI input 6	HDMI Out switch to 6
HDMIA	Enable auto switching mode	HDMI Out switch to auto
HDMIA	Enable manual switching mode	HDMI Out switch to manual

Command	Function	Feedback Example
VGA Resolution Commands		
VGARES1	Set the VGA output resolution to 1024x768@60Hz	Set VGA resolution output to 1024x768@60Hz
VGARES2	Set the VGA output resolution to 1280x720@50Hz	Set VGA resolution output to 1280x720@50Hz
VGARES3	Set the VGA output resolution to 1280x720@60Hz	Set VGA resolution output to 1280x720@50Hz
VGARES4	Set the VGA output resolution to 1360x768@60Hz	Set VGA resolution output to 1360x768@60Hz
VGARES5	Set the VGA output resolution to 1600x1200@60Hz	Set VGA resolution output to 1600x1200@60Hz
VGARES6	Set the VGA output resolution to 1920x1080@50Hz	Set VGA resolution output to 1920x1080@50Hz
VGARES7	Set the VGA output resolution to 1920x1080@60Hz	Set VGA resolution output to 1920x1080@60Hz
VGARES8	Set the VGA output resolution to 1920x1200@60Hz	Set VGA resolution output to 1920x1200@60Hz
VGAAUTO	Auto adjust the VGA output image	VGA Auto adjust
VGAUPGR	Upgrade the firmware Of VGA input port chip	Upgrading firmware of VGA chip
EDID Managements Commands		
EDIDR[xxxx]	Read the preset EDID. [xxxx] represents the 4-pin DIP switch status	EDID_0001! …
EDIDUSE[xxxx]	Invoke the preset EDID. [xxxx] represents the 4-pin DIP switch status	EDIDUSE0001! EDID_RS232&GUI_MODE! EDID0001!
User-define EDID Commands		

Command	Function	Feedback Example
There are four EDID values can be customized by sending the below command. When send the below commands to configure EDID, the 4 pin EDID DIP switch on the rear panel must be in the "1111" status.		
EDIDW[xxxx]	User-define EDID. xxxx = 1011, 1100, 1101 or 1110. **Operation:** **Step 1:** Prepare the EDID file (.bin). **Step 2:** Set the 4-pin DIP switch to "1111" status. **Step 3:** Send the command "**EDIDW1101.**", and the feedback is "**PLEASE SEND THE EDID FILE!**". **Step 4:** Send the EDID file (.bin). If successfully upload, the feedback is: "RECEIVED THE FILE, LENGTH=134! **EDID1101 UPDATE SUCCESSFULLY!**"	
Audio Control Commands		
IISON	Turn on the stereo analog L/R audio output	IIS Out is on
IISOFF	Turn off the stereo analog L/R audio output	IIS Out is off
SPDIFON	Turn on the Toslink digital audio output	ISPDIF Out is on
SPDIFOFF	Turn off the Toslink digital audio output	ISPDIF Out is off
Display Control Commands		
TVON	Power on the display	CEC TV Power on!
TVOFF	Power off the display	CEC TV Power off!
TVVOL+	Increase the display audio	CEC TV volume increase!
TVVOL-	lower the display audio	CEC TV volume decrease!
TVMUTE	Mute/unmute the display	CEC TV volume mute/unmute!
CEC Commands		
If the input sources and display support CEC, they can be controlled by sending the below commands to replace IR remote.		

Command	Function	Feedback Example
CECxx **<yy:yy:yy>**	Send CEC command "yy yy yy" to control the source device or the display device. The " xx " represents the port <table><tr><td>xx</td><td>Port</td></tr><tr><td>00</td><td>1-HDMI/MHL IN</td></tr><tr><td>01</td><td>2-HDMI/MHL IN</td></tr><tr><td>02</td><td>3-HDMI IN</td></tr><tr><td>03</td><td>4-USB C IN</td></tr><tr><td>04</td><td>5-D P IN</td></tr><tr><td>05</td><td>HDMI OUT</td></tr></table> The " "<yy:yy: yy>" represents the specific control command of source device or display device	CEC00 <40:44:41>. Send CEC command "40:44:41" to control the source device which is connected to the 1 HDMI/MHL IN port.
Third party Device Control Commands The switcher supports RS232 pass through control, the third party device can be controlled by RS232 command, and the command format as shown below		
/+[B]:xxx.	xxx: ASCII string. The "B" represents the baud rate of third party device. B=1, the baud rate is 2400 B=2, the baud rate is 4800 B=3, the baud rate is 9600 B=4, the baud rate is 19200 B=5, the baud rate is 38400 B=6, the baud rate is 57600 B=7, the baud rate is 115200	/+3:abc123 Send the ASCII command "abc123" to the third-party whose baud rate is 9600
/-[B]:xx xx xx	xx xx xx: HEX string. The "B" represents the baud rate of third party device. B=1, the baud rate is 2400	/-3:1A 2A 3A 4A Send the HEX command "1A 2A 3A 4A" to the third-party whose baud rate is 9600

Command	Function	Feedback Example
	B=2, the baud rate is 4800 B=3, the baud rate is 9600 B=4, the baud rate is 19200 B=5, the baud rate is 38400 B=6, the baud rate is 57600 B=7, the baud rate is 115200	
CMDON/+[B]:xxx	Send ASCII command "xxx" to power on the third party device	CMDON/+3:abc123
CMDON/-[B]:xx xx xx	Send HEX command "xx xx xx" to power on the third party device	CMDON/-3:1A 2A 3A 4A
CMDOFF/+[B]:xxx	Send ASCII command "xxx" to power off the third party device	CMDOFF/+3:abc123

6. Web Interface

The 500445 can also be managed by a GUI. Its default IP address is as follows: 192.168.0.178. Subnet mask: 255.255.250.0

To log in, open a browser and type the above IP address. The following login screen will appear:

Default username and password are: admin

6.1 Switching page

Once logged in, the following page appear

Clicking on the Auto button will enable the automatic switching mode. While the 1 – 6 buttons allows you to switch among the current connected sources.

6.2 Display control page

The display control page allows you to set both the CEC and VGA resolution. On the CEC page you may execute one the following settings:

⏻ ON: Turn the display on

⏻ OFF: Turn the display off

◤✕ Mute/unmute audio

◤◗ Lower Audio volume

◀)) Increase Audio Volume
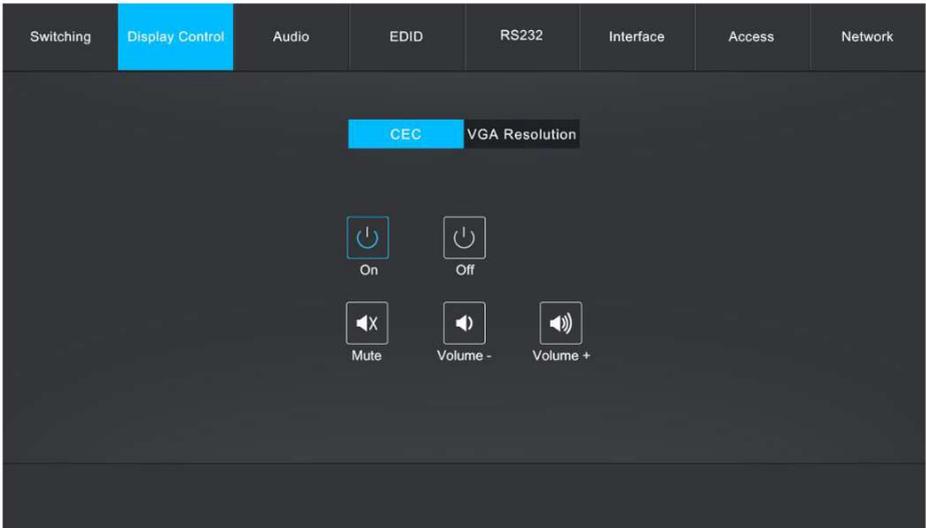
On the other hand, the VGA resolution page will allow you to select the VGA output resolution. You may select among 1024x768@60Hz, 1280x720@50Hz, 1280x720@60Hz, 1360x768@60Hz, 1600x1200@60Hz, 1920x1080@50Hz, 1920x1080@60Hz (Default) or 1920x1200@60Hz.
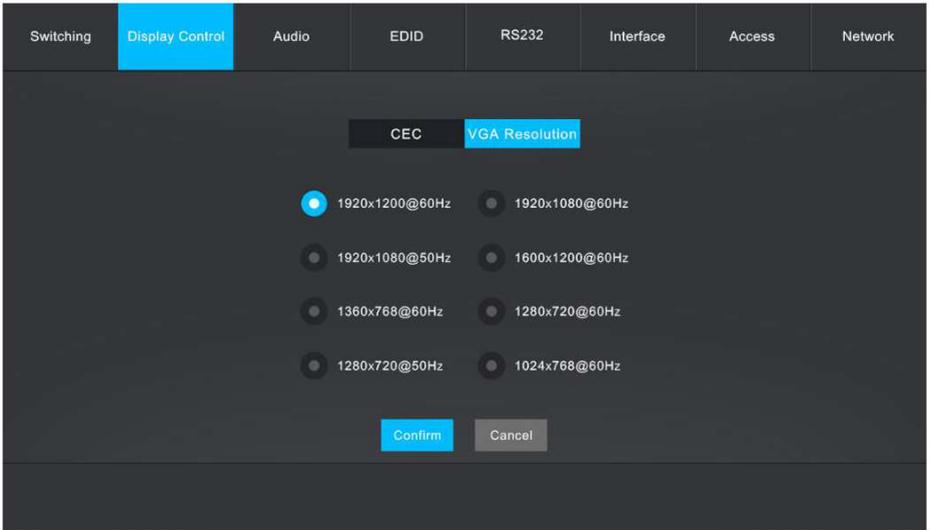
6.3 Audio page

On the audio page you can control both the digital and analog audio outputs. You may either turn on/off the digital audio or turn on/off the analog audio output.
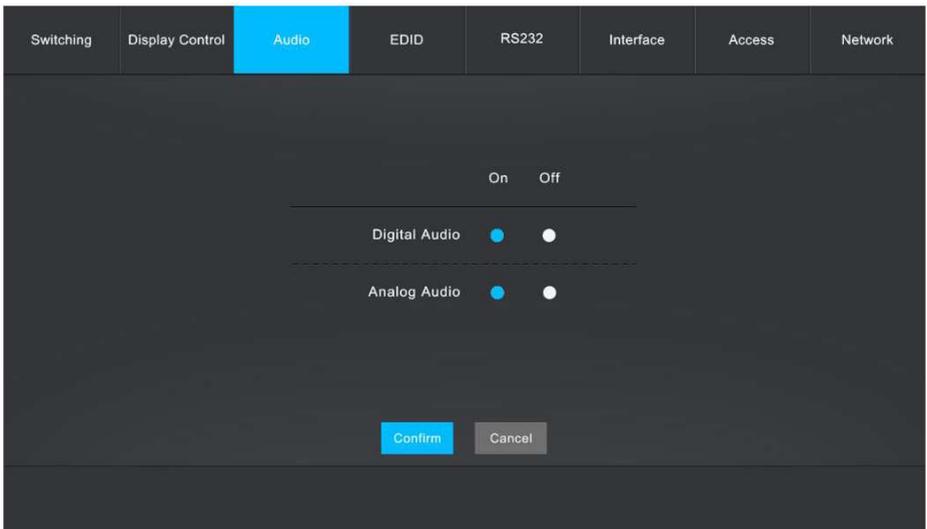
Clicking on the Confirm button will apply the change while the Cancel one will not execute the settings.

6.4 EDID page

The 500445 allows you to manage EDID, there are ten (10) different values you can select from the EDID page. Additionally, there are four (4) user defined values you can custom according to your needs. Please follow these steps to achieve so:

1. Prepare the EDID file (.bin) on the control PC
2. Select the user defined 1/2/3/4 box
3. Click on the black box [.bin] then select the EDID file (.bin)
4. Click Apply to upload the user defined EDID

Note: Prior to selecting an EDID, please ensure the 4 pin DIP switch on the rear panel is on the "1111" position.
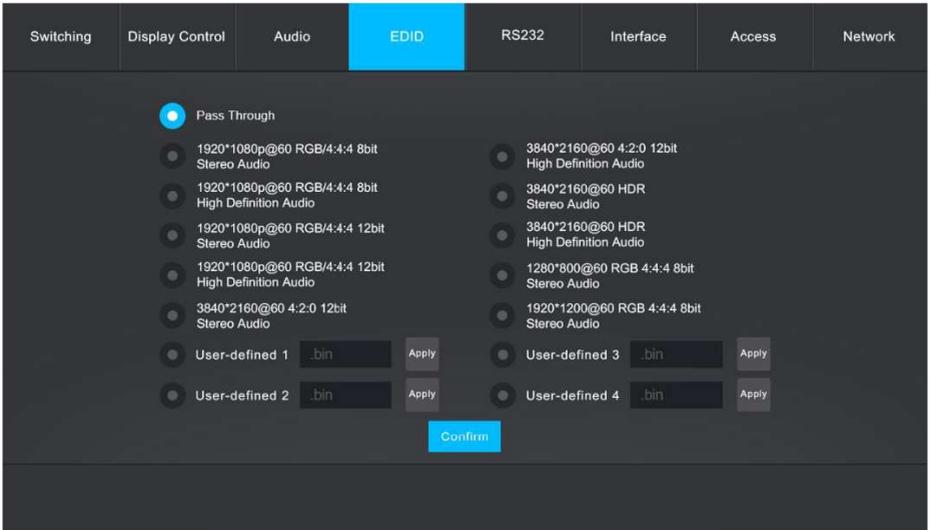

6.5 RS232 page

This page allows you to set the RS232 to control a third party device. Baud rate can be chosen among: 2400, 4800, 9600, 19200, 38400, 57600 or 115200. The command ending drop box allows you to select among the following: NULL, CR, LF and CR+LF. In the command box you may type the command to control the third party device that is connected in to the RS232 port of the switcher.
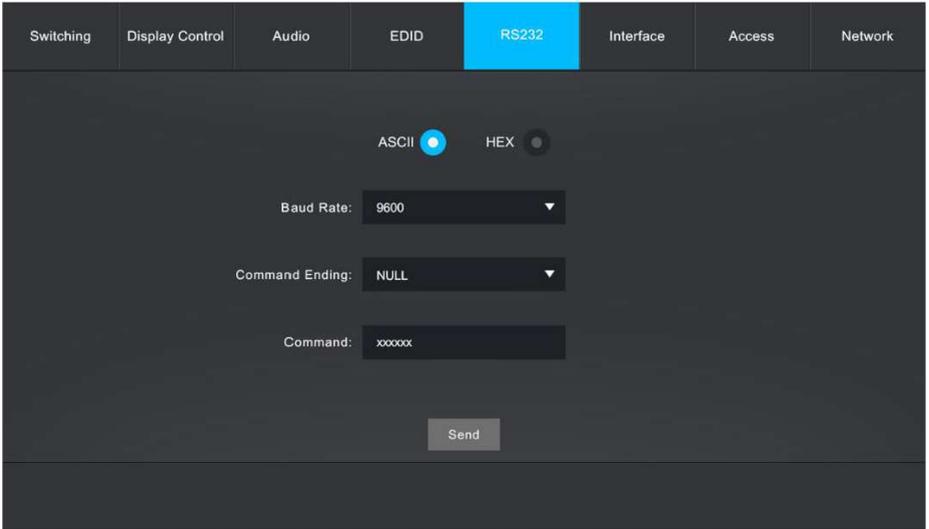
6.6 Interface page

On the interface page you may modify either the title bar or the button labels.
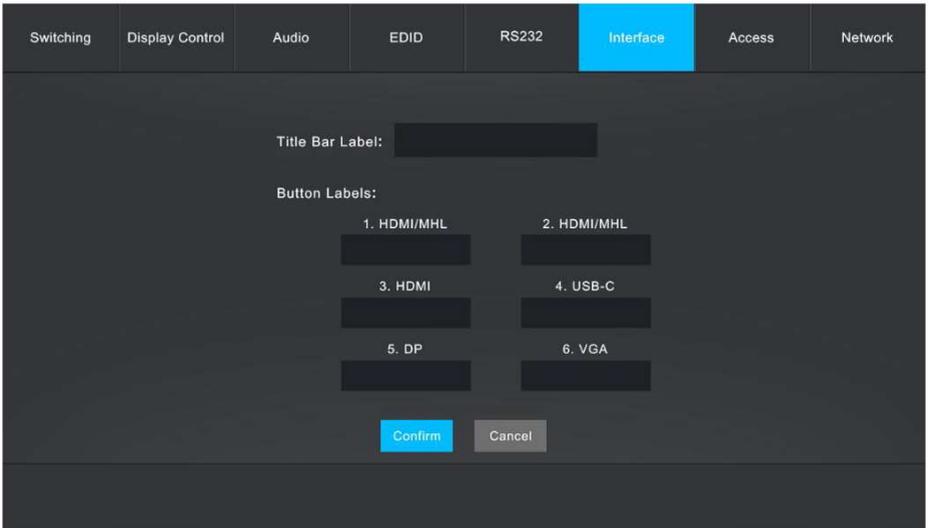
6.7 Access page

The access page allows you to change the default password as well as to lock the front panel buttons

| Switching | Display Control | Audio | EDID | RS232 | Interface | Access | Network |

Credentials

Password: admin   Confirm

Front Panel Lock

ON ‖   OFF
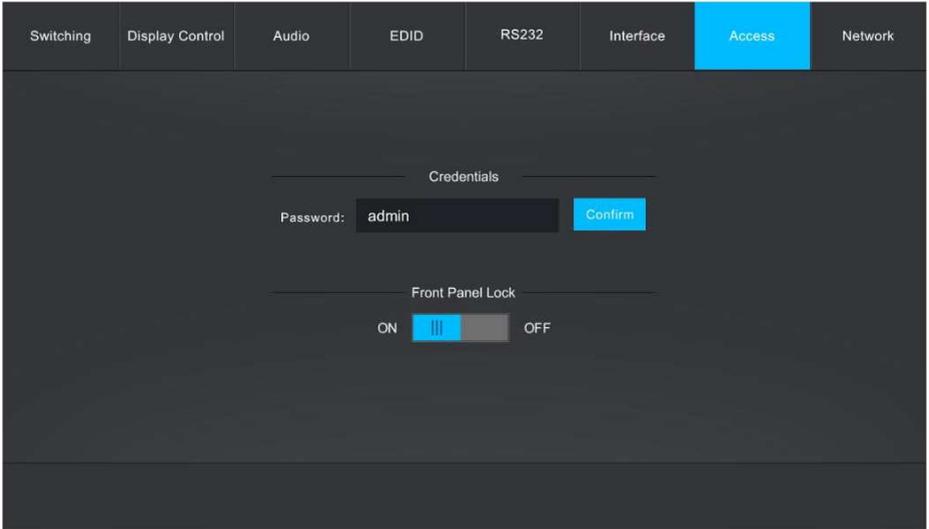
6.8 Network page

On the network page you can enter a new IP address, additionally you may select between static or dhcp address.

| Switching | Display Control | Audio | EDID | RS232 | Interface | Access | Network |

MAC Address: 44-33-4C-C9-35-12

DHCP ‖ Static IP

IP Address: 192.168.0.178

Subnet Mask: 255.255.255.0

Gateway: 192.168.0.1

Confirm
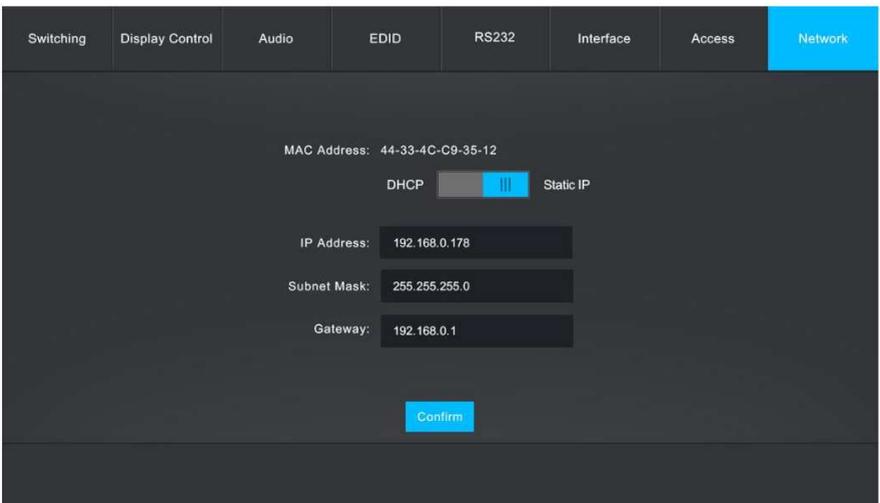
6.9 Upgrading page

To upgrade the unit you may use the web interface, please follow these steps to do so:

1. Open your browser

2. Type the unit IP address and add the port number 100:   192.168.0.178**:100**

3. Enter username and password

4. Once logged in, navigate to the Administration folder

5. Upload the file

6. Click on the apply button

7. Panel Drawing

8. Troubleshooting & Maintenance

The following table describes some of the symptoms, probable causes and possible solutions in respect to the installation of the 500445.

Problems	Causes	Solutions
Output image with snowflakes	Bad quality of the connecting cable	Try another high quality cable.
	Failed or loose connections	Make sure the connection is good
No output image when switching	No signal at the input / output end	Check with oscilloscope or multi-meter if there is any signal at the input/ output end.
	Failed or loose connection	Make sure the connection is good
	The product is broken	Send it to authorized dealer for repairing.
POWER indicator doesn't work or doesn't respond to any operation	Failed connection of power cord.	Make sure the power cord connection is good.
EDID management does not work normally	The HDMI cable is broken at the output end.	Change for another HDMI cable which is in good working condition.
There is a blank screen on the display when switching	The display does not support the resolution of the video source.	Switch again.
		Manage the EDID data manually to make the resolution of the video source compliant with the output resolution.
Static becomes stronger when connecting the video connectors	Bad grounding	Check the grounding and make sure it is well connected.

Problems	Causes	Solutions
Cannot control the device through RS232 port	Wrong RS232communication parameters	Type in correctRS232communication parameters
	Broken RS232 port	Send it to authorized dealer for checking.
Cannot control the device from the front panel buttons, but can control it through RS232 port	The front panel buttons are locked	Unlock the front panel buttons either from RS232 or GUI.
Cannot control the device by RS232, IR remote, or front panel buttons	The device has already been broken.	Send it to authorized dealer for repair.

If you still cannot diagnose the problem, please call MuxLab Customer Technical Support at 877-689-5228 (toll-free in North America) or (+1) 514-905-0588 (International).

9. Regulatory Compliance

Disclaimer Information in this document is subject to change without notice. The manufacturer does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any other commercial damage, including but not limited to special, incidental, consequential, or other damages.

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CE/FCC & Recycling Information

CE Certification
This equipment complies with the requirements relating to Electromagnetic Compatibility Standards EN55022/EN55024 and the further Standards cited therein. It must be used with shielded cables only. It has been manufactured under the scope of RoHS compliance.

FCC Certification
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. You are cautioned that changes or modification not expressly approved by the party responsible for compliance could void your authority to operate the equipment.
This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
  1. This device may not cause harmful interference, and
  2. This device must accept any interference received, including interference that may cause undesired operation

WEEE (Waste of Electrical and Electronic Equipment), Recycling of Electronic Products

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. It is no longer allowable to simply throw away electrical and electronic equipment. Instead, these products must enter the recycling process.
Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products. More details can be obtained from your national WEEE recycling agency.

2321 Cohen St, Montreal, Quebec, Canada. H4R 2N7
Tel: (514) 905-0588   Fax: (514) 905-0589
Toll Free (North America): (877) 689-5228
E-mail: info@muxlab.com   URL: www.muxlab.com