Presentation Switcher

User Manual

Introduction

The MVS-41 is Multi- format switcher with HDMI, VGA and Display Port input to HDMI output with audio de-embedded. It can also support RS232, Contact Closure for remote control.

Package Contents

- 1×MVS-41

- 1×5V 2A DC power adapter

- 1×User manual

- 2×Wall mounting bracket

Features

- Multi-format inputs for VGA/DP/2HDMI;
- Support DP 1.2 with 4K@30Hz;
- Support HDMI 2.0 with 4K@30Hz or 4K@60Hz 4:2:0;
- HDCP compliant;
- Optional internal EDID or live EDID;
- Support RS232/Button/Contact closure for switching;
- Support Auto/Manual switching mode;
- Analog audio de-embedded at the output;
- Support output mute function;
- Support power standby mode;
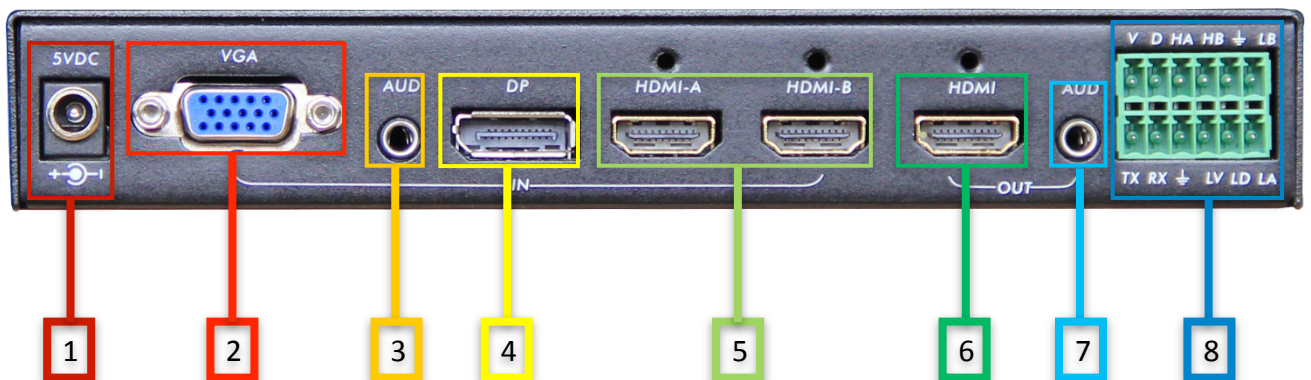
- Status LED for all connections on front;

Panel Description

Front Panel

1. **HD-O:**Led solid when outputto display, flashing with connection to display but without output signal, off mean no display connected;
2. **HDMI-A:**Led solid when selected, flashing when signal present, off mean no input signal;
3. **HDMI-B:**Solid LED when selected, flashing when signal present, off mean no input signal;
4. **VGA:**Solid LED when selected, flashing when signal present, off mean no input signal;
5. **DP:**Solid LED when selected, flashing when connecting well but not selected, off mean no input;
6. **PWR:** Solid Red when power on;
7. **SELECT:** Button for switching input signal. Pressing for 3-5secondor longer to toggle EDID selection。HD3-O flash once to indicate switching to internal EDID, HD-O flash 3 times mean switching to external display EDID.

Rear Panel

1. **Power:**DC Power Input;
2. **VGA:**VGA Input
3. **AUD:**VGA Audio Input;

4. **DP:**Display PortInput;
5. **HDMI-A/B:**HDMI Inputs;
6. **HDMI:**HDMI Output;
7. **AUD:**Analog Audio Output;
8. **Phoenix Port:** RS232 and Contact Closurewith LED indicator.

Connection and Installation

Specification

Video	
HDMI Compliance	HDMI 2.0
DP Compliance	DP 1.2 4K
VGA Compliance	VESA
HDCP Compliant	Yes
Max Resolution	4K*2K
Connectors	
Connectors	(3) HDMI,(1)VGA,(1)DP,(1)RS232, (2)Audio
Mechanical3	
Dimensions	190 x103 x29 mm(L/W/H)
Net Weight	0.728lbs[330g]
Package Size	240 x 180 x 70 mm(L/W/H)
Gross Weight	1.257lbs[570g]
Power	
Power Supply	5V2A DC
Environmental	
Operation Temperature	32~131°F [0~55°C]
Storage Temperature	-4~185°F [-20~85°C]
Relative Humidity	5~95% RH [no condensation]

RS232 Command Table

& - Command,? - Query, ^ Response
<cr> = 0x0D Hex / 13 Decimal

Command	Cuanbo String	Information	Example	Example String	Example Response
Baud Rate Setup Command	&Bab<cr>	a=baud rate =2400,4800, 9600,14400, 19200,38400, 56000,57600, 115200 b=bits, parity =8N, 8E,8O,9N, 9E,9O	Set RS232 Port Baud Rate to 9600,8,N	&B9600,8,N<cr>	^B9600,8, N<cr>
Switching VGA+Audio from input 1 to output	&Ra<cr>	a= V V for VGA	Switching VGA+ Audio from input 1 to output	&RV<cr>	VGA
Switching DP from input 2 to output	&Ra<cr>	a= P P for DP	Switching DP from input 2 to output	&RP<cr>	DP
Switching HDMI-A from input 3 to output	&Ra<cr>	a= HA HA for HDMI-A	Switching HDMI-A from input 3 to output	&RHA<cr>	HDMI-A
Switching HDMI-B from input 4 to output	&Ra<cr>	a= HB HB for HDMI-B	Switching HDMI-B from input 4 to output	&RHB<cr	HDMI-B
Mute the HDMI Output	&Va<cr>	a = 0 , 1 0 = Mute Output, 1 = UnMute Output	Mute the HDMI Output	&V0<cr>	Mute On

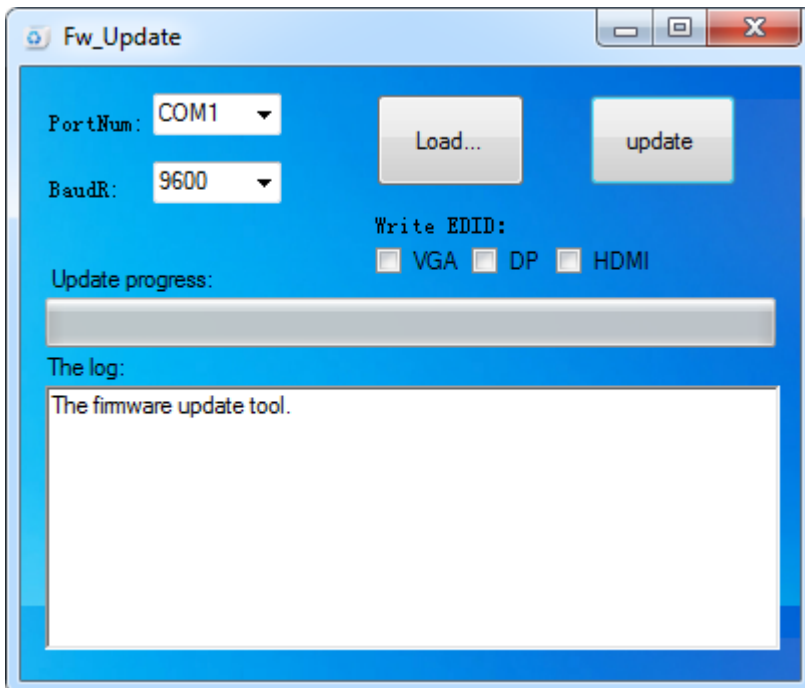| Query Active Route	&R?<cr>		Requesting the active route status	&R?<cr>	Channel status Current Input is VGA.
Switching mode	&Ma<cr>	a = 0, 1 0 = Manual switching mode , 1 = Auto switching mode	Set Auto switching mode	&M0<cr>	Manual Switch
Requesting switching mode, Feedback	&Ma<cr>	a = ? ?= State of the query	Requesting switching mode, Feedback	&M?<cr>	Manual Mode Switching
EDID Management	&Ea<cr>	a = ext , int ext = External Display EDID, int = Internal preset EDID , ? = Switching to preset EDID	Set preset EDID	&Eint<cr>	EDID: internal
Requesting the EDID Status, Feedback	EDID?<cr>	a = ? ? = Switching to preset EDID	Requesting the EDID Status, Feedback	EDID?<cr>	EDID: external

Note: The default baud rate 9600.

Firmware and EDID update tool

The tool below could be used to ease the update of the firmware of the MCUand also for writing the EDID for used on the input ports.
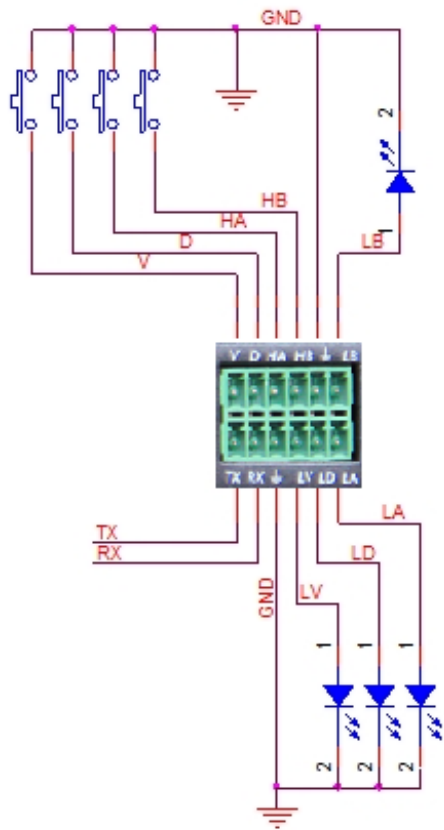
To update the FW, user could click on the load button and then select the bin file for the update. Once ready, click on the update button to run and load the firmware to the unit.

For the EDID, user could check the VGA/DP/HDMI to update the EDID for each video format.

NOTE: The EDID bin file must contain 128/256 byte data.

Phoenix contact connection diagram.

Note:

V :	VGA Input	LV:	LED indicator for VGA
D:	DP Input	LD:	LED indicator for DP
HA:	HDMI-AInput	LA:	LED indicator for HDMI-A
HB:	HDMI-B Input	LB:	LED indicator for HDMI-A

Safety Information

To reduce the risk of electric shock, do not expose this product to rain or moisture

Do not modify the wall plug. Doing so will void the warranty and safety features

If the wall plug does not fit into your local power socket, hire and electrician to replace your obsolete socket.

This equipment should be install near the socket outlet and the device should be easily accessible in the case it requires disconnection

Warranty

Warranty time is two year and from the date of original shipment.
This warranty shall be void if a serial number has been removed from the product.

Upon determination of a legitimate defect covered by this warranty and at CUANBO's sole discretion, user should bear the transport cost during the warranty.

If product is out of warranty then repair charge is required. Minimum repair charge: 10% of the retail price plus the cost of failed components. We will repair the failed product after repair cost has been approved by Customers and proper financial arrangements are made.   Customer must cover round trip shipment expenses.

Return and RMA Policies

Shipments will not be receiver and processed for warranty repair/replacement without an VitBest RMA(Return Materials Authorization).