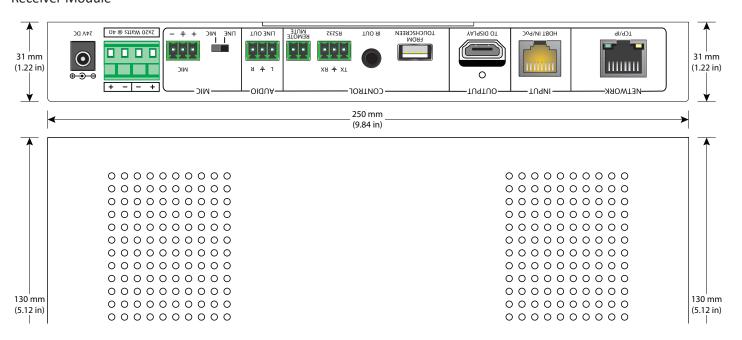


## **EDU-KIT-001 Technical Specifications**

HDMI AV Distribution and Control System
Rev 160523

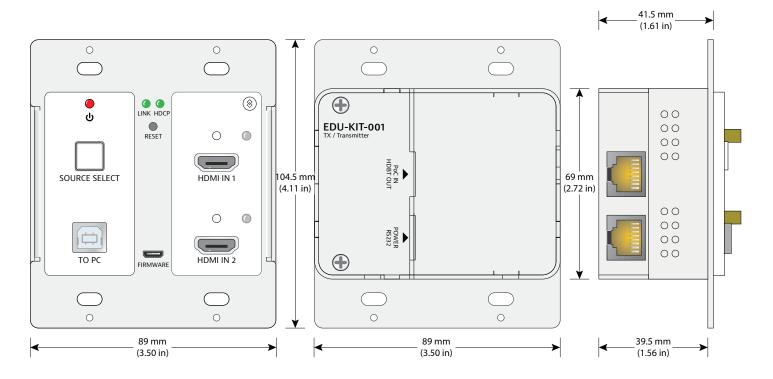
The Digitalinx EDU-KIT-001 is a multi-function AV distribution system designed to provide HDMI video switching, system control, video extension and analog audio amplification in a convenient kit. Utilizing the Valens Colligo VS2110 series chips, power, control, video up to 1080p, and audio are transported over a single 30m (98 ft) solid core Category 5e cable between the wall plate transmitter and the receiver. The wall plate control module connects to the wall plate transmitter with a second Category 5e cable. All the power needed for the system is provided by the receiver. Additionally, the receiver features a built-in web GUI for control and analog audio de-embedding to a built-in 2x20 watt stereo amplifier.

## Receiver Module

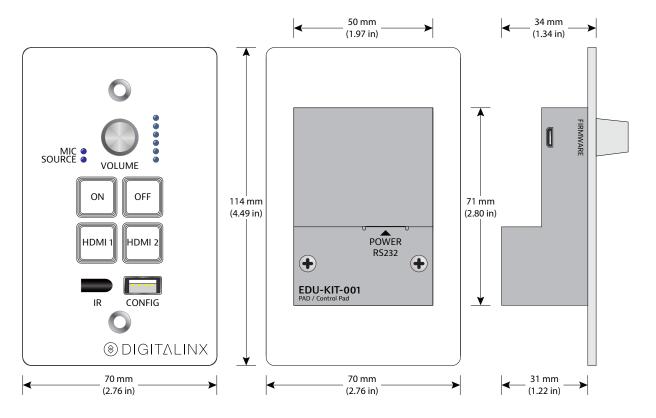




## **Transmitter Module**



## Control Pad Module







Receiver I/O Connections	
Ethernet	One (1) 8P8C port (Shielded RJ45)
HDBaseT In/PoC Out	One (1) 8P8C port (Shielded RJ45)
HDMI Output	One (1) HDMI Type A Receptacle
USB from Display	One (1) USB Type A Receptacle
IR Output	One (1) 3.5mm TRS Jack
RS232 to Display Only	One (1) 3-Pole Removable Terminal Block
Remote Mute Contact Closures	One (1) 2-Pole Removable Terminal Block
Analog Audio Output, Line Level	One (1) 3-Pole Removable Terminal Block
Mic/Line Switch	One (1) Two Position Sliding Microswitch
Microphone Input	One (1) 3-Pole Removable Terminal Block
Analog Audio Output, Speakers	One (1) 4-Pole Removable Terminal Block
24V DC Power	One (1) Threaded Barrel (5.5 mm OD; 2.6 mm ID)
Firmware (Front Panel)	One (1) USB Type B Micro Receptacle
Receiver Status Indicators	
System Power	One (1) Green LED
HDBaseT Link	One (1) Green LED
HDCP Active	One (1) Green LED
Receiver Power	One (1) Red LED
Transmitter I/O Connections	
Source Select Button	One (1) Illuminitating Momentary Push Button Switch
USB to PC	One (1) USB Type B Receptacle
HDMI Inputs	Two (2) HDMI Type A Receptacle
Firmware	One (1) USB Type B Micro Receptacle
Reset Button	One (1) Momentary Push Button Switch
HDBaseT Out/PoC In (Rear)	One (1) 8P8C port (Shielded RJ45)
Power/RS232 (Rear)	One (1) 8P8C port (Shielded RJ45)
Transmitter Status Indicators	one (1) or de port (smedeta 1943)
Transmitter Power	One (1) Red LED
HDMI Input 1 Active	One (1) Bi-Color LED (Green/Amber)
HDMI Input 2 Active	One (1) Bi-Color LED (Green/Amber)  One (1) Bi-Color LED (Green/Amber)
HDBaseT Link	One (1) Green LED
HDCP Active	One (1) Green LED
	One (1) Green LED
Control Pad I/O Connections	One (1) Detay: Freeder
Control Pad I/O Connections  Volume Knob	One (1) Rotary Encoder
Control Pad I/O Connections  Volume Knob  On, Off, HDMI 1, HDMI 2 Buttons	Four (4) Illuminitating Momentary Push Button Switches
Control Pad I/O Connections  Volume Knob  On, Off, HDMI 1, HDMI 2 Buttons  IR In	Four (4) Illuminitating Momentary Push Button Switches One (1) IR Receiver
Control Pad I/O Connections  Volume Knob  On, Off, HDMI 1, HDMI 2 Buttons  IR In  Configuration Port	Four (4) Illuminitating Momentary Push Button Switches One (1) IR Receiver One (1) USB Type A Receptacle
Control Pad I/O Connections  Volume Knob On, Off, HDMI 1, HDMI 2 Buttons IR In Configuration Port Power/RS232 (Rear)	Four (4) Illuminitating Momentary Push Button Switches One (1) IR Receiver One (1) USB Type A Receptacle One (1) 8P8C port (Shielded RJ45)
Control Pad I/O Connections  Volume Knob On, Off, HDMI 1, HDMI 2 Buttons IR In Configuration Port Power/RS232 (Rear) Firmware (Side)	Four (4) Illuminitating Momentary Push Button Switches One (1) IR Receiver One (1) USB Type A Receptacle
Control Pad I/O Connections  Volume Knob On, Off, HDMI 1, HDMI 2 Buttons IR In Configuration Port Power/RS232 (Rear) Firmware (Side)  Control Pad Status Indicators	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) 8P8C port (Shielded RJ45)  One (1) USB Type A Receptacle
Control Pad I/O Connections  Volume Knob On, Off, HDMI 1, HDMI 2 Buttons IR In Configuration Port Power/RS232 (Rear) Firmware (Side) Control Pad Status Indicators Microphone Active	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) 8P8C port (Shielded RJ45)  One (1) USB Type A Receptacle  One (1) Violet LED
Control Pad I/O Connections  Volume Knob On, Off, HDMI 1, HDMI 2 Buttons IR In Configuration Port Power/RS232 (Rear) Firmware (Side) Control Pad Status Indicators Microphone Active Source Active	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) 8P8C port (Shielded RJ45)  One (1) USB Type A Receptacle  One (1) Violet LED  One (1) Violet LED
Control Pad I/O Connections  Volume Knob  On, Off, HDMI 1, HDMI 2 Buttons  IR In  Configuration Port  Power/RS232 (Rear)  Firmware (Side)  Control Pad Status Indicators  Microphone Active  Source Active  Active Volume Level	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) 8P8C port (Shielded RJ45)  One (1) USB Type A Receptacle  One (1) Violet LED
Control Pad I/O Connections  Volume Knob  On, Off, HDMI 1, HDMI 2 Buttons  IR In  Configuration Port  Power/RS232 (Rear)  Firmware (Side)  Control Pad Status Indicators  Microphone Active  Source Active  Active Volume Level  Receiver HDBaseT Signal Characteristics	Four (4) Illuminitating Momentary Push Button Switches One (1) IR Receiver One (1) USB Type A Receptacle One (1) BP8C port (Shielded RJ45) One (1) USB Type A Receptacle One (1) Violet LED One (1) Violet LED Six (6) Violet LEDs
Control Pad I/O Connections  Volume Knob  On, Off, HDMI 1, HDMI 2 Buttons  IR In  Configuration Port  Power/RS232 (Rear)  Firmware (Side)  Control Pad Status Indicators  Microphone Active  Source Active  Active Volume Level  Receiver HDBaseT Signal Characteristics  Maximum Distance	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) BP8C port (Shielded RJ45)  One (1) USB Type A Receptacle  One (1) Violet LED  One (1) Violet LED  Six (6) Violet LEDs  30 m (98.4 ft)
Control Pad I/O Connections  Volume Knob  On, Off, HDMI 1, HDMI 2 Buttons  IR In  Configuration Port  Power/RS232 (Rear)  Firmware (Side)  Control Pad Status Indicators  Microphone Active  Source Active  Active Volume Level  Receiver HDBaseT Signal Characteristics  Maximum Distance  Cable Requirements	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) USB Type A Receptacle  One (1) USB Type A Receptacle  One (1) Violet LED  One (1) Violet LED  Six (6) Violet LEDs  30 m (98.4 ft)  Continuous solid core Category 5e or greater with TIA/EIA-568B crimp pattern (no couplers in-line)
Control Pad I/O Connections  Volume Knob  On, Off, HDMI 1, HDMI 2 Buttons  IR In  Configuration Port  Power/RS232 (Rear)  Firmware (Side)  Control Pad Status Indicators  Microphone Active  Source Active  Active Volume Level  Receiver HDBaseT Signal Characteristics  Maximum Distance  Cable Requirements  Bandwidth	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) WSB Type A Receptacle  One (1) USB Type A Receptacle  One (1) Violet LED  One (1) Violet LED  Six (6) Violet LEDs  30 m (98.4 ft)  Continuous solid core Category 5e or greater with TIA/EIA-568B crimp pattern (no couplers in-line)  10.2 Gbps
Control Pad I/O Connections  Volume Knob  On, Off, HDMI 1, HDMI 2 Buttons  IR In  Configuration Port  Power/RS232 (Rear)  Firmware (Side)  Control Pad Status Indicators  Microphone Active  Source Active  Active Volume Level  Receiver HDBaseT Signal Characteristics  Maximum Distance  Cable Requirements  Bandwidth  HDBaseT Chipset	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) USB Type A Receptacle  One (1) USB Type A Receptacle  One (1) Violet LED  One (1) Violet LED  Six (6) Violet LEDs  30 m (98.4 ft)  Continuous solid core Category 5e or greater with TIA/EIA-568B crimp pattern (no couplers in-line)
Control Pad I/O Connections  Volume Knob  On, Off, HDMI 1, HDMI 2 Buttons  IR In  Configuration Port  Power/RS232 (Rear)  Firmware (Side)  Control Pad Status Indicators  Microphone Active  Source Active  Active Volume Level  Receiver HDBaseT Signal Characteristics  Maximum Distance  Cable Requirements  Bandwidth  HDBaseT Chipset  Transmitter HDBaseT Signal Characteristics	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) SP8C port (Shielded RI45)  One (1) USB Type A Receptacle  One (1) Violet LED  One (1) Violet LED  Six (6) Violet LEDs  30 m (98.4 ft)  Continuous solid core Category 5e or greater with TIA/EIA-568B crimp pattern (no couplers in-line)  10.2 Gbps  VS2110RX
Control Pad I/O Connections  Volume Knob On, Off, HDMI 1, HDMI 2 Buttons IR In Configuration Port Power/RS232 (Rear) Firmware (Side) Control Pad Status Indicators Microphone Active Source Active Active Volume Level Receiver HDBaseT Signal Characteristics Maximum Distance Cable Requirements Bandwidth HDBaseT Chipset Transmitter HDBaseT Signal Characteristics Maximum Distance	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) Wish Type A Receptacle  One (1) USB Type A Receptacle  One (1) USB Type A Receptacle  One (1) Violet LED  Six (6) Violet LED  30 m (98.4 ft)  Continuous solid core Category 5e or greater with TIA/EIA-568B crimp pattern (no couplers in-line)  10.2 Gbps  VS2110RX
Control Pad I/O Connections  Volume Knob On, Off, HDMI 1, HDMI 2 Buttons IR In Configuration Port Power/RS232 (Rear) Firmware (Side) Control Pad Status Indicators Microphone Active Source Active Active Volume Level Receiver HDBaseT Signal Characteristics Maximum Distance Cable Requirements Bandwidth HDBaseT Chipset Transmitter HDBaseT Signal Characteristics Maximum Distance Cable Requirements	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) SP8C port (Shielded RI45)  One (1) USB Type A Receptacle  One (1) Violet LED  One (1) Violet LED  Six (6) Violet LEDs  30 m (98.4 ft)  Continuous solid core Category 5e or greater with TIA/EIA-568B crimp pattern (no couplers in-line)  10.2 Gbps  VS2110RX  30 m (98.4 ft)  Continuous solid core Category 5e or greater with TIA/EIA-568B crimp pattern (no couplers in-line)
Control Pad I/O Connections  Volume Knob On, Off, HDMI 1, HDMI 2 Buttons IR In Configuration Port Power/RS232 (Rear) Firmware (Side) Control Pad Status Indicators Microphone Active Source Active Active Volume Level Receiver HDBaseT Signal Characteristics Maximum Distance Cable Requirements Bandwidth HDBaseT Chipset Transmitter HDBaseT Signal Characteristics Maximum Distance	Four (4) Illuminitating Momentary Push Button Switches  One (1) IR Receiver  One (1) USB Type A Receptacle  One (1) Wish Type A Receptacle  One (1) USB Type A Receptacle  One (1) USB Type A Receptacle  One (1) Violet LED  Six (6) Violet LED  30 m (98.4 ft)  Continuous solid core Category 5e or greater with TIA/EIA-568B crimp pattern (no couplers in-line)  10.2 Gbps  VS2110RX



Receiver to Control Pad Connectivity	
Maximum Distance	30 m (98.4 ft)
Cable Requirements	Continuous solid core Category 5e or greater with TIA/EIA-568B crimp pattern (no couplers in-line)
Supported Audio, Video, and Control	
Maximum Video Compatibility	Deep Color 48/36/30/24 Bit at 1080p
Video Compliance	HDMI 1.4, HDCP 1.4
HDMI EDID	Pass-through from Display
Embedded Audio	Up to PCM 2 channel
Analog Audio Frequency Response	20Hz-20KHz
Analog Audio Output Impedance	50 Ω Analog Output; 4/8 Ω Speaker Output
Maximum Rated Power Output (Audio)	40 Watts
Maximum Passive HDMI Distance	5 m (16 ft)
IR Carrier Frequency Range	33-55kHz at 5 volts
RS232 Baud Rate	2400, 4800, 9600, 14400, 19200, 38400, 56000, 57600, and 115200 baud
Ethernet	100BaseT
USB	Supports USB 2.0 up to 100 Mbps
Contact Closure	NO and NC for system mute
Chassis and Environmental	
Enclosure Material	Painted aluminum
Receiver Dimensions (H x W x D)	31 mm x 250 mm x 130 mm (1.22 in x 9.84 in x 5.12 in)
Transmitter Overall Dimensions (H x W x D)	104.5 mm x 89 mm x 41.5 mm (4.11 in x 3.50 in x 1.61 in)
Transmitter In-Wall Dimensions (H x W x D)	69 mm x 89 mm x 39.5 mm (2.72 in x 3.50 in x 1.56 in)
Control Pad Overall Dimensions (H x W x D)	114 mm x 70 mm x 34 mm (4.49 in x 2.76 in x 1.34 in)
Control Pad In-Wall Dimensions (H x W x D)	71 mm x 50 mm x 31 mm (2.80 in x 1.97 in x 1.22 in)
Package Dimensions (H x W x D)	70 mm x 420 mm x 300 mm (2.76 in x 16.54 in x 11.81 in)
Shipping Weight	2.35 kg (5.2 lbs.)
Operating Temperature (Environment)	0° to +40° C (+32° to +104° F)
Operating Temperature (Chassis)	31° C (88° F) (S); 38° C (100° F) (R)
Operating Humidity (Environment)	20% to 90%, Non-condensing
Storage Temperature (Environment)	-10° to +60° C (+14° to +140° F)
Storage Humidity (Environment)	20% to 90%, Non-condensing
Power, ESD, and Regulatory	
Maximum Power Consumption	60 watts
Power Supply Input Voltage	100-240v AC at 50/60 Hz at 1.7 A
Power Supply Output Rating	24V DC at 2.5 A
ESD Protection	Contact discharge: ±15kV; Air discharge: ±8kV
Device Regulatory	CE, FCC, RoHS
Power Supply Regulatory	CE, ROHS, UL, TUV/GS, FCC, EAC, WEEE, CCC
Other	·
Standard Warranty	2 Years
Included Items	Receiver, Transmitter, Control Panel, Locking Power Supply with Power Cable, USB Type A to Type B Cable, IR Emitter, Tw Mounting Rails with Screws, Six Wall Box Screws, Three 3-pole Removable Terminal Blocks, One 2-pole Removable Terminal Block, One 4-pole Removable Terminal Block, Wall Plate for Transmitter, Installation Guide

Distances and picture quality may be affected by cable grade, cable quality, source and destination equipment, RF and electrical interference, and cable patches.

