



## KD-X3x1WUTx

3x1 4K/18G 328 ft. (100m) HDBaseT Transmitter Wall Plate with Auto Switching, HDMI, Display Port and VGA Inputs, USB 2.0, LAN, CEC Control Keypad, Audio De-Embed, IR and RS-232 Pass-Thru, IP Control, Power over HDBaseT. KD-App and KDPlug & Present™ Ready.

# Operating Instructions







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## Always follow the instructions provided in this Operating Manual.



Please visit <a href="https://www.keydigital.com">www.keydigital.com</a> for the latest product documentation and software downloads. Product features and specifications are subject to change without notice.

Default IP Address: 192.168.1.239, Port 23

## Introduction

Key Digital® KD-3x1WUTx is an HDBaseT wall-plate transmitter + universal presentation switcher + soft-codec enabling interface with HDMI, Display Port, and VGA inputs, as well as USB-A and USB-B connections. KD-X3x1WUTx is ideal for professional video installations in conference rooms, class rooms, lecture halls, auditoriums, and more. KD-X3x1WUTx is natively received by KDX100MRx or by KD-UPS52U Presentation Switcher. Both Rx options have audio de-embedding for ease of integration with audio systems. Additional Key Digital Presentation Switchers also support integration with KD-X3x1WUTx. KD-X3x1WUTx features push-button or IP switching and is KD-App Ready. CEC Manager™ keypad enables basic controls of the connected display for a simplistic all-in-one integration system. KD-X3x1WUTx is HDCP 2.2 compliant and supports 4K/UHD 24/25/30/60 (4:4:4) resolutions with up to 18Gbps bandwidth. 4K/UHD signals are extended up to 100m / 328ft and 1080p up to 150m / 492ft via single CAT5e/6 cable.

In addition to AV signals, KD-X3x1WUTx extends USB 2.0, IR, RS-232 for controlling remotely located equipment. The wall-plate unit fits in a standard US three-gang box and is powered by the Rx unit or Presentation Switcher for convenient installation.

#### **Key Features**

- Presentation Switching: 1 HDMI, 1 Display Port, and 1 VGA with Analog Audio, source selection by push button or IP control
- **Installation**: Fits in standard US 3-gang wall box or table and wall AV boxes.
- Rx Options: Native integration with KD-X100MRx black box HDBaseT Rx or KD-UPS52U Presentation Switcher. Future Rx options may be available.
- > Soft-Codec Enabling System: USB Host + Device ports on wall plate and chosen Rx / Presentation Switch create connectivity hub for professional USB cameras and microphones, audio DSP, keyboard, mouse, or touchscreen display with connected computer
- Ultra HD/4K: Supports up to 4096x2160 or 3840x2160 24/25/30/60hz at 4:4:4 (signals up to 18Gbps bandwidth)
- Auto-Sensing: Automatic selection of newly detected source and switching from newly disconnected source when enabled
- > CEC Manager™: Power, volume, and muting controls of the connected displays/projectors without any additional control wiring
- > KD-App Ready: Network scan & detect populates pre-built GUI including connected display/projector controls via CEC Manager™
- > KDPlug & Present™ Ready: Add KD-CX800 to build a programming-free automation system
- **Ease of Integration**: Complete configuration using Key Digital Management Software™ Pro
- > HDCP Licensing: Fully licensed and compatible with HDCP 2.2
- > HDR10 and Dolby Vision: More life-like images through a greater range of luminance levels
- **> Power Over HDBaseT**: Wall-plate unit powered by Rx/Presentation Switch unit
- > Installation: Tx unit designed for installation in standard US three-gang box
- > Signal Extension: For resolution and cable quality
  - » 4K/UHD (18G): Up to 100m / 328ft
  - » 1080p: Up to 150m / 492ft
- **Deep Color Support**: Up to UHD/4K 30Hz 4:4:4/12 bits or 60Hz 4:2:2/12 bit
- > Full Buffer System™: Manages TMDS re-clocking / signal re-generation, HDCP authentication to source & display, EDID Control handshake, and Hot Plug Detection Voltage
- EDID Management: Internal library with 15 internal EDID handshakes including 4K with HDR in addition to native EDID data copied from the Rx display/device
- > IR Sensor: Wall-plate collects line-of-sight IR from remote(s) without external IR wiring
- > RS-232: Bi-Directional control to/from Tx and Rx/Presentation Switch unit
- Lossless compressed digital audio: Support for Dolby® TrueHD, Dolby® Digital Plus, Dolby Atmos®, and DTS-HD Master Audio™
- Control System Support: Fully controllable by all TCP/IP and RS-232 supported control systems via open API: Compass Control® Pro, AMX®, Crestron®, KNX®, RTI®, Savant, URC®, Leviton® etc.

#### Included Accessories

- > USB-A to USB Micro Data Cable
- > Aluminum decora plate (qty 1) + Decora mounting screws with flat head (qty 6)
- Gang-box mounting screws (qty 6)
- > 6-pin phoenix terminal (gty 1)
- 3-pin phoenix terminal (qty 1)
- 2-pin phoenix terminal (gty 1)

## **Quick Setup Guide**



Rx UNITS SOLD SEPARATELY. Go to <u>Presentation Solutions section</u> for compatible Rx models.

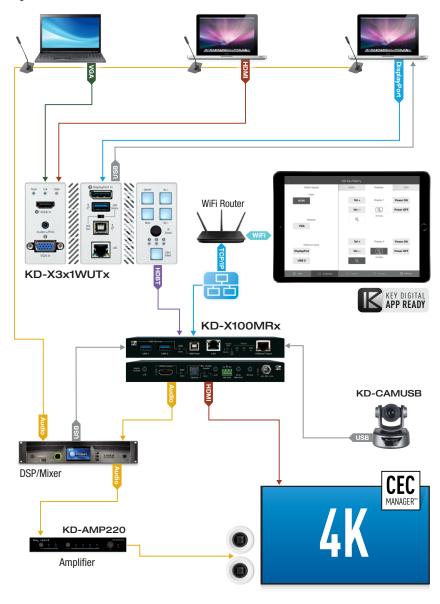
#### CONNECT:

Begin with the KD-UPS52U unit, KD-X100MRx, KD-X3x1WUTx, USB camera (sold separately), all input/output devices, and audio system powered off.

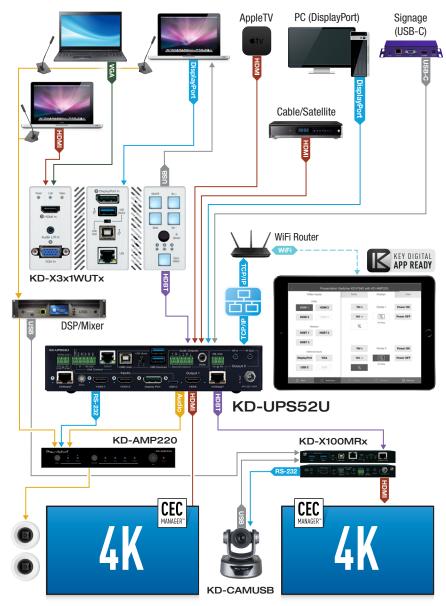
- 1. Connect HDMI, Display Port, and VGA sources to the input ports of Tx unit
- (Optional) Connect HDMI, Display Port, USB-C, VGA sources to presentation switcher (sold separately). Port connectivity varies by presentation switcher model.
- 3. Connect HDMI displays / projectors to the HDMI output port of the RX unit / presentation switcher
- **4.** Connect USB devices into desired USB A ports and USB host computer to desired USB B ports at wall plate transmitter, HDBaseT Rx, or presentation switcher.
  - » a. Note: When using KD-UPS52U presentation switcher the connection location of the USB devices and host is determined by the USB mode selection switch. Please refer to KD-UPS52U Quick Setup Guide for more information.
- **5.** Connect CAT5e/6 cabling to Tx and Rx unit / presentation switch. Use 568-B standard termination on both ends. Avoid couplers and excess CAT cable length.
- **6.** To send the selected audio source into audio systems, connect from the analog or digital audio de-embed outputs of the Rx unit / presentation switcher, or connect to the analog audio de-embed port of the wall plate
- 7. Connect control system or PC to LAN port of the KD-X3x1WUTx or the Rx for network connectivity
- **8.** Connected monitors are controlled by CEC Manager<sup>™</sup> on the HDMl connection. Alternatively, connect IR/RS-232 wiring from control system into pass-thru ports of KD-X3x1WUTx and IR/RS-232 ports of the Rx unit / Presentation Switch
- **9.** Screw-in power supply to the KD-UPS52U or KD-X100MRx unit, and then connect power to outlets.
- 10. Power on HDMI sources and displays, audio systems, connected computers, USB devices and hosts

## **Integration Options**

Integration with KD-X100MRx Receiver:



#### Integration with KD-UPS52U:

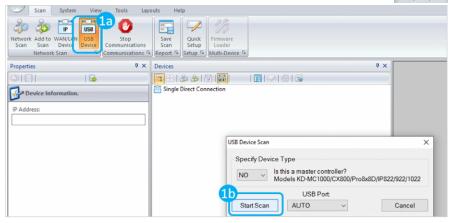


#### CONFIGURE:

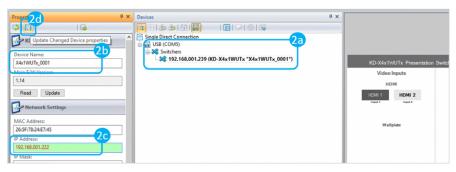
# Configure and control your KD-X3x1WUTx via Key Digital Management Software™ Pro (KDMS™ Pro) that can be downloaded here: KDMS™ Pro Download

- Connect to KD-X3x1WUTx from your PC using the USB micro port on the face of the unit
- 2. Open KDMS<sup>™</sup> Pro software and perform a USB Device scan (fig. 1a-1b)

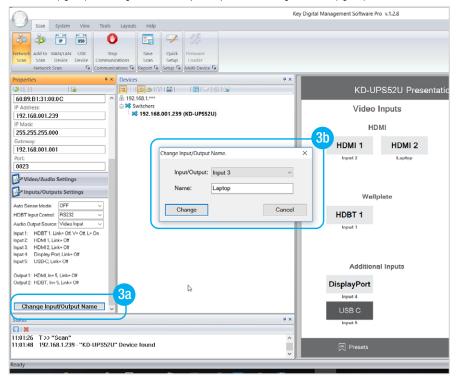




- 3. Choose the device from the Devices window (fig. 2a)
- **4.** Set the desired Device Name in the KD-X3x1WUTx Information window (fig. 2b)
- 5. In the Network Settings section of the Properties window, enter the desired IP settings (fig. 2c)
  - » a. IP Address (default is 192.168.1.239)
  - » b. Subnet Mask (default is 255.255.255.0)
  - c. Gateway (default is 192.168.1.1)
  - » d. Port (default is 23)
  - » i. Note: If using KD-App, please do not change the port number.
- 6. Save (fig. 2d)



7. If using KD-App or KDMS for control, set the desired Input/Output names by entering the Input/Output Settings section of the properties window, and selecting the Change Input/Output Name button (fig. 3a), selecting the desired input/output and entering the name (fig. 3b)



- 8. Set the EDID rotary to position "A" for 4K video with 2ch audio. Choose setting "4" for 1080p video with 2ch audio. Refer to the <u>Connections, Buttons, and LEDs</u> section for more options and information.
- **9.** Set the Forced HPD to the ON position to fix a high HPD state to connected displays.
- 10. Additional settings may be adjusted in the KDMS software. Full access to all settings/commands is achieved via terminal session using Tera Term or PuTTy software.
- 11. Ensure that CEC is enabled on your displays/projectors. Depending on the manufacturer, HDMI-CEC may be given a different name. View <u>THIS</u> article for a list of CEC names and how to enable CEC on popular displays.
- 12. Your unit is now ready to control from the KDMS Control Panel, KD-App, or by professional control system.



#### CONTROL:

#### Option 1: Control via Push Button

- 1. Display Control via CEC Manager™
  - » a. Requires CEC supported display with CEC enabled
- 2. Input Select
  - » a. Advances through inputs 1, 2 and 3 respectively
  - » b. Press and hold for 5 seconds to active Auto switching. Solid illumination of the button's backlighting indicates mode has been set



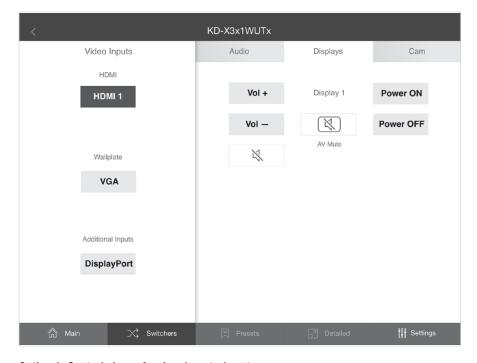
## Option 2: Control via KD-App, Key Digital Management Software™

#### > KD-X3x1WUTx is controllable by:

- » Key Digital's user-friendly iOS App (<u>downloadable in the App Store</u>)
- » Key Digital Management Software (<u>downloadable here</u>).

## Configuration Steps:

- $\,$  » Connect and configure KD- X3x1WUTx as described in this Quick Setup Guide.
- » Download and open KD-App and/or KDMS
- » Ensure the iOS device and/or PC computer are on the same network with KD-X3x1WUTx
- » Perform a network scan in the KD-App/KDMS
- » Select and control the selected KD-X3x1WUTx



## Option 3: Control via professional control system

KD-X3x1WUTx allows control over TCP/IP interface for bi-directional communication. You may connect to the LAN port of the KD-X3x1WUTx, KD-X100MRx, or KD-UPS52U to deliver network connectivity to the Key Digital devices.

## Default IP Address: 192.168.1.239, Port 23

- > For TCP/IP control, the default static IP address is 192.168.1.239, with port 23
- RS-232 connection is used for control pass-thru to connected devices, not for unit control of the KD-X3x1WUTx
- For the past 10 years, most Key Digital switches have supported a standard audio+video switching command. KD-X3x1WUTx is also controllable by this command, so if you have previously integrated Key Digital switches by third-party control systems you may have success using the same driver/module.
  - » Switching Video + Audio together (two commands supported)
    - » **SP001Slyy** yy = input number (01-02)
    - » SPOSlyy yy = input number (01-02)

## Connections, Buttons, and LEDs

#### Front Connections and LEDs

- **HDMI Input:** Using an HDMI cable, connect your HDMI sources.
  - » Supports up to UHD/4K @ 50/60 fps [4:4:4], 18Gbps
    - » See Supported Standard 4K Video Formats table below
  - » Supports HDR10 and Dolby Vision
  - » Compliant with HDCP 2.2 and previous
  - » Supports lossless compressed audio formats including Dolby® TrueHD, Dolby® Digital Plus, DTS-HD Master Audio™, and Dolby® Atmos
  - » Does not support CEC pass through from display connected to Rx unit / presentation switch
- **Display Port Input**: Using a Display Port cable, connect your source.
  - » Supports up to UHD/4K @ 50/60 fps [4:4:4], 18Gbps
  - » Supports HDR
  - » Supports Display Port version 1.3 and previous
  - » Compliant with HDCP 2.2 and previous

#### Supported standard 4K Video Formats:

	Resolution	Bandwidth
1	4K@24/25/30 [4:4:4] 8bit	< 10.2Gbps
2	4K@24/25/30 [4:2:2] 8/10/12bit	< 10.2Gbps
3	4K@50/60 [4:2:0] 8bit	< 10.2Gbps
4	4K@24/25/30 [4:4:4] 10/12bit	< 18Gbps
5	4K@50/60 [4:2:2] 8/10/12bit	< 18Gbps
6	4K@50/60 [4:2:0] 10/12bit	< 18Gbps
7	4K@50/60 [4:4:4] 8bit	< 18Gbps

- **VGA Input**: Using a 15pin VGA cable, connect your source.
  - » Supported resolutions: 640x480@60/75, 800x600@56/60/75, 1024x768@60/75, 1280x720@60, 1280x768@60/75, 1366x768@60/75, 1280x1024@60/75, 1440x900@60/75, 1600x900@60, 1600x1200@60, 1920x1080@60, 1920x1200@60s
  - » Video Scaler built-in for up-scale & down-scale to desired output resolution
  - » Default video output is 1920x1080p / 60fps







- Analog Audio Input: Using a 3.5mm stereo cable, connect your audio source to be associated with the VGA video input.
  - » Embedded with VGA Input
  - » 2 VRMS line audio
  - » Sampling Frequency: 48kHz, Data Length: 24Bits
  - » If sending audio only, VGA must be the selected source. The video will display a "No Signal" message, but audio will work.
- > Power, Link, Video LEDs: Indicate system connectivity status
  - » Power (red) illuminates solid with proper powering from local connection / presentation switch
  - » Link (blue) illuminates solid from healthy HDBaseT connectivity with Rx unit / presentation switch
  - » Video (green) illuminates solid with active HDMI signal



USB

USB

Device

#### > USB Device Port

- » Supports USB2.0 and previous
- » Used for connecting USB endpoints (ie KD-CAMUSB, keyboard, mouse)
- » Not used for connecting USB hosts (ie computer)
- » Supports connectivity to USB hubs, but may not exceed 15 endpoint devices
- » Provides 5V 500mA power
- » Use USB toggle switch to determine if KD-X3x1WUTx will be used to connect a USB host (USB-B port) or USB device (USB-A port). Both host and device are not simultaneously possible.

#### > USB Host Port

- » Supports USB2.0 and previous
- » Used for connecting USB host (ie computer)
- » Not used for connecting USB hosts (ie KD-CAMUSB, keyboard, mouse)
- » Use USB toggle switch to determine if KD-X3x1WUTx will be used to connect a USB host (USB-B port) or USB device (USB-A port). Both host and device are not simultaneously possible.



#### > LAN Port

- » Default static IP address is 192.168.1.239, port 23
- » Used to connect with Network Switch and peripheral devices needing network connectivity and/or TCP/IP control
- » Unit configuration, control, and firmware updates are most commonly achieved with Key Digital Management Software™ Pro, download at KDMS™ Pro Download





#### > Reset Pin

» Push and hold for approximately 10 seconds to restore all settings to default. Front LEDs will turn off and restore during bootup process to indicate the reset has completed.



#### EDID Rotary

- » EDID authentication is provided from the unit to the connected inputs/sources.
- » The EDID file (AKA "handshake") is selected using the EDID rotary on the unit and provides a list of compatible video and audio formats as well as digital data, informing the source device what it should output.
- » Most sources will comply with a new EDID file without a power-cycle, but devices do behaves differently
- » Adjustments may speed up sync time during source selection.



Position	EDID Handshake Description	EDID Rotary
0	Copy EDID from HDMI Output 1	Note: Default position is "A"  IMPORTANT: Please apply light pressure to the EDID rotary when making your selection.
1	1080i, 2CH AUDIO	
2	1080i, DOLBY/DTS 5.1	
3	1080i, HD AUDIO	
4	1080p, 2CH AUDIO	
5	1080p, DOLBY/DTS 5.1	
6	1080p, HD AUDIO	
7	4Kx2K@60, 10.2G, HDR, 2CH AUDIO	
8	4Kx2K@60, 10.2G, HDR, DOLBY/DTS 5.1	
9	4Kx2K@60, 10.2G, HDR, HD AUDIO	
Α	4Kx2K@60, 18G, HDR, 2CH AUDIO	
В	4Kx2K@60, 18G, HDR, DOLBY/DTS 5.1	
С	4Kx2K@60, 18G, HDR, HD AUDIO	
D	1280x720p@60 DVI (no audio)	
E	1920x1080p@60 DVI (no audio)	
F	4Kx2K@30, 10.2G, HDR, 2CH AUDIO	

## > Forced HPD Switch: Troubleshooting tool

- » When ON, Hot Plug Detection voltage is fixed on to the connected sources
- » Standard HPD passthrough from display to source when set to OFF position



#### Firmware Load Switch:

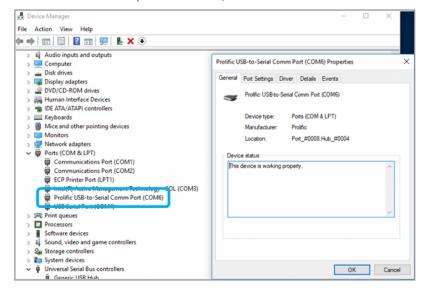
- » Used to select the firmware load location
- » IMPORTANT: Consult with Key Digital tech support <u>before</u> updating firmware

# Main | CEC

#### > Service USB Port:

- » Used for configuration and control from PC via KDMS Pro, KDMS, or third-party control terminal
- » Used for firmware updates (consult with Key Digital tech support before updating firmware)
- » Supports USB driver for Windows 10, 7, XP, Mac, Linux
- » Will register as "Prolific USB-to-Serial Comm Port in Device Manager
- Can be used as RS-232 control port. Baud rate is 57,600





## > Display Control Buttons

- » Sends CEC Power Toggle, Volume Up, Volume Down, and Mute Toggle commands to Display connected to RX unit / Presentation Switcher
  - » Requires CEC supported display with CEC enabled
  - » Future updates may enable additional control options without programming needed



#### > Input Select Button

- » Advances through inputs 1, 2, 3 and 4 respectively
- » LED display indicates selected source
- » Press and hold for 5 seconds to active Auto switching. Solid illumination of the button's backlighting indicates mode has been set
  - » Note: Auto switching is disabled when a manual push button switching is executed. A fixed auto switching mode may be set via command string or through KDMS Pro software.



#### > IR Sensor

- » Used to collect line-of-sight IR from remote control
- » Receives signals from a 90° angle at up to 30ft away
- » Signal is output on Rx unit / presentation switch's IR Out port
- » KD-X3x1WUTx is NOT controllable via IR
- » IR and RS-232 supported simultaneously

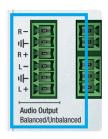


#### **Rear Connections**

- > HDBaseT Output: Connect a CAT5e/6 cable to the Rx unit / presentation switch at the port labeled "HDBaseT In"
  - » 4K/UHD (18G): Up to 100m / 328ft
  - » 1080p: Up to 150m / 492ft
  - » Must connect with KD-UPS52U, KD-X100MRx, or KD-PS42
  - » Has been verified some third-party HDBaseT Rx / projectors. Contact Key Digital Technical Support for more information.
  - » Power over HDBaseT from Rx



- > Analog L/R Audio Output: Connect to audio system.
  - » 6-pin terminal block with de-embedded audio from the selected source
  - » Drives audio signals up to 2 VRMS with a sampling rate of 192KHz
  - » Automatically mutes if audio formatting is not PCM 2ch
  - » The Pin assignment is as follows:
    - » Left + is Pin 1; Left is Pin 3; Left Ground is Pin 2.
    - » Right + is Pin 4; Right is Pin 6; Right Ground is Pin 5.
  - » There are no pre-amp or format conversion feature
- IR In: Connect to the IR In terminals from a control system or an IR connecting block.
  - » Signal is output on Rx unit / presentation switch's IR Out port simultaneously as any IR input collected by the IR Sensor
  - » KD-X3x1WUTx is not controllable via IR





- > RS-232 Terminal: Connect with control system for pass-thru of bi-directional RS-232 signals to/from controlled device.
  - » Supports baud rate up to 115,200bps
  - » KD-X3x1WUTx is not controllable via RS-232



#### TCP/IP Commands

KD-X3x1WUTx allows bi-directional control over TCP/IP connection made at KD-X3x1WUTx, KD-UPS52U, or KD-X100MRx.

Default static IP address is 192.168.1.239, port 23

#### Notes:

- » Commands are not case-sensitive
- » Commands require a carriage return following each string
- » Spaces are shown for clarity; commands should NOT have any spaces
- » After a new command is received, a prompt should be sent back

#### Help Command (H). Returns entire API in readable format:

```
Key Digital Systems HELP
    KD-X3x1WUTx
                                                 F/W Version : 1.02
-- H
             : Help
-- STA
            : Show Global System Status
-- VGA Input Setup Commands:
-- SPV EDID x : Set VGA EDID to x,
        [0=1920x1080@60, 1=1920x1200@60, 2=1360x768@60, 3=1280x720@60]--
-- SPV RES x : Set Output Resolution (Video Scale) x
        [0=Auto, 1=1080p@50, 2=1080p@60, 3=720p@50, 4=720p@60,]
        [5=1280x1024@60, 6=1024x768@60, 7=1360x768@60, 8=1920x1200@60]--
-- SPV AR x : Set Aspect Ratio x, [0=Auto, 1=16:9, 2=4:3]
             : Set Picture Mode x,
              [0=Standard, 1=Natural, 2=Dynamic, 3=Movie]
-- SPV CT x : Set Color Tone x, [0=Standard, 1=Cool, 2=Warm, 3=User] --
-- SPV CTR xxx : Set Red Color Tone xxx = [1-255]
-- SPV CTG xxx : Set Green Color Tone xxx = [1-255]
-- SPV CTB xxx : Set Blue Color Tone xxx = [1-255]
-- SPV PB xxx : Set Picture Brightness xxx = [0-100]
-- SPV PC xxx : Set Picture Contrast xxx = [0-100]
-- SPV MIH xxx : Move Output Horizontal Image xxx = [0-100]
-- SPV MIV xxx : Move Output Vertical Image xxx = [0-100]
-- SPV AHS xxx : Adjust Output Horizontal (Width) Size to xxx = [0-100] --
-- SPV AP xxx : Adjust Output Phase to xxx = [0-100]
-- Video Output Setup Commands: xx = [01,A=All], yy = [01-03,U,D]
```

```
-- ( yy : 01=HDMI1, 02=VGA, 03=DisplayPort[DP] )
-- SPO SI yy : Set Output to Video Input yy

-- SPO xx SI yy : Set Output to Video Input yy

-- SPO xx ON/OFF : Set Output xx ON/OFF
-- SPO xx VM E/D : Set Output xx Video Mute Enable/Disable
-- SPO xx DBG ON/OFF : Set Output xx Debug Mode ON/OFF
-- SPO xx LRM ON/OFF : Set HDBT Output xx Long Range Mode ON/OFF
-- Display Control Commands: xx = [01, A=All]
-- SPO xx TV ON/OFF : Set Display xx ON/OFF (Turn TV On/OFF)
-- SPO xx AV U/D : Set Display xx Volume Up/Down
-- SPO xx AM E/D/T : Set Display xx Audio Mute Enabled/Disabled/Toggle--
-- Input/Output/Device Naming Commands [xx=01-04] (c=Max. 16 Chars)
-- SPI xx WN cccccccccccccc : Write Input xx Name
-- SPI xx RN
                           : Read Input xx Name
-- SPO xx WN cccccccccccccc : Write Output xx Name
-- SPO xx RN
              : Read Output xx Name
-- SPC WN ccccccccccccc : Write Device Name
-- SPC RN
                            : Read Device Name
-- Network Setup, (xxx=[000-255], zzzz=[0001~9999])
-- SPCETIPA xxx.xxx.xxx : Set Host IP Address to xxx.xxx.xxx
-- SPCETIPM xxx.xxx.xxx.xxx : Set Net Mask to xxx.xxx.xxx.xxx
-- SPCETIPR xxx.xxx.xxx.xxx : Set Route IP Address to xxx.xxx.xxx.xxx --
-- SPCETIPP zzzz
                        : Set TCP/IP Port to zzzz
-- SPCETIPB
                          : Apply New Network Config
-- System Control Setup Commands:
-- SPC AS x : Set Auto Sense Mode x = [0=OFF, 1=AUTO, 2=FORCED ON]
-- SPC FB E/D : Enable/Disable Front Panel Buttons
-- SPC RSB z : Set USB RS232 Baud Rate to z bps, z=[0-5]
              [0:115200, 1:57600, 2:38400, 3:19200, 4:9600, 5:4800] --
-- SPC DF : Reset to Factory Defaults
-- SPC DF00 : Reset to Factory Defaults without Network Reset
______
Status Command (STA). Returns unit status and settings in readable format:
______
```

```
-- Key Digital Systems STATUS --
-- Model: KD-X3x1WUTx, Device Name: X3x1WUTx_0001 --
-- Main F/W Ver: 1.02, CEC Ver: 1.05 --
-- USB(RS232): Baud Rate=115200bps, Data=8bit, Parity=None, Stop=1bit --
-- Front Panel Button: Enabled --
-- Network Setting(Web Server/TCP Control) Status --
-- MAC Address = 60:89:B1:34:00:01 --
-- Host IP Address = 192.168.001.239 --
-- Net Mask = 255.255.255.000 --
-- Router IP Address = 192.168.001.001 --
-- TCP Port = 0023
```

```
-- Video Input Status
-- EDID = DEFAULT 10, FORCED HPD = ON, AUTO SENSE = OFF
-- 01: HDMI, LINK = ON
-- 02: VGA, EDID = DEFAULT 0, LINK = OFF
-- RES=2, AR=1, PM=0, CT=1, CTR=128, CTG=128, CTB=128, PB=50, PC=50, --
-- MIH=50, MIV=50, AHS=50, AP=50
-- 03: DP, LINK = ON
-- Video Output Status (D=Disable, E=Enable)
-- HDBT Output: IN = 01, OUT = ON, V/MUTE = D, LINK = ON, DBG = OFF --
-- LRM = OFF
-- Display Output Status (CEC Control)
-- HDBT Output: TV = ON, A/V MUTE = DISABLE, A/MUTE = DISABLE
```

## **Specifications**

#### Technical:

- » Inputs: 1 HDMI, 1 Display Port, 1 VGA with 3.5mm Stereo Audio, 1 IR Sensor, 1 Serial IR, 1 Bi-Directional RS-232
- » Outputs: 1 HDBaseT RJ45, 1 Bi-Directional RS-232
- » DDC Signal (Data): Input DDC Signal: 5 Volts p-p (TTL)
- » HDMI Video/Audio Signal: Input Video Signal: 1.2 Volts p-p
- » VGA Signal: Input Video Signal: 1.2 Volts p-p
- » USB-C Video/Audio Signal: Input Video Signal: 1.2 Volts p-p
- » RJ45 Connector: Shielded Link Connector, HDBaseT
- » IR Connectors: 1 IR Sensor, 1 2-pin phoenix terminal
- » RS-232 Connector: 3-pin phoenix terminal

#### General:

- » Regulation: CE, RoHS, WEEE, EAC
- » Wallplate: Standard 3-gang Wallplate
- » Enclosure: Faceplate Silver Brushed Metal, Body Texturized Silver Metal
- » Product Dimensions: 5.5 x 4.1 x 1.43" (141 x 105 x 36.4mm)
- » Product Weight: Weight: 1.3 lbs
- » Packaging Dimensions: 11" x 7.9" x 2.1" (280 x 200 x 55 mm)
- » Packaging Weight; Weight: 2.1 lbs
- » Accessories:
  - » USB-A to USB Micro Data Cable
  - » Aluminum decora plate (qty 1) / Decora mounting screws with flat head (qty 6)
  - » Gang-box mounting screws, (gty 6)
  - » 6-pin phoenix terminal (qty 1), 3-pin phoenix terminal (qty 1), 2-pin phoenix terminal (qty 1)



## Important Product Warnings:

- 1. Connect all cables before providing power to the unit.
- 2. Test for proper operation before securing unit behind walls or in hard to access spaces.
- If installing the unit into wall or mounting bracket into sheet-rock, provide proper screw support with bolts or sheet-rock anchors.



## **Safety Instructions:**

Please be sure to follow these instructions for safe operation of your unit.

- 1. Read and follow all instructions.
- 2. Heed all warnings.
- 3. Do not use this device near water.
- 4. Clean only with dry cloth.
- **5.** Install in accordance with the manufacturer's instructions.
- 6. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 7. Only use attachments/accessories specified by the manufacturer.
- 8. Refer all servicing to qualified service personnel. Servicing is required when the device has been damaged in any way including:
  - » Damage to the power supply or power plug
  - » Exposure to rain or moisture



## **Power Supply Use:**

You MUST use the Power Supply **PROVIDED** with your unit or you **VOID** the Key Digital® Warranty and risk damage to your unit and associated equipment.

## Warranty Information

All Key Digital® products are built to high manufacturing standards and should provide years of trouble-free operation. They are backed by a Key Digital Limited 3 Year Product Warranty Policy.

http://www.keydigital.com/warranty.htm



### **Technical Support**

For technical questions about using Key Digital® products:

> Phone: 914-667-9700

> E-mail: tech@keydigital.com

## **Repairs and Warranty Service**

Should your product require warranty service or repair, please obtain a Key Digital® Return Material Authorization (RMA) number by contacting us at:

Phone: 914-667-9700E-mail: rma@keydigital.com



Key Digital®, led by digital video pioneer Mike Tsinberg, develops and manufactures high quality, cutting-edge technology solutions for virtually all applications where high-end video and control are important. Key Digital® is at the forefront of the video industry for Home Theater Retailers, Custom Installers, System Integrators, Broadcasters, Manufacturers, and Consumers.

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