KD-DA2x4G
KD-DA2x8G

2x4/2x8 4K/18G POH/HDBT/HDMI Distribution Amplifier/Switcher with Audio De-Embedding (Includes KIT 4/8 Rx 100 Meters Extenders)

Operating Instructions

KD-DA2x4G

KD-DA2x8G

Key digital®

Table of Contents

Visit product pages for most recent version of the manual, quick setup guide, firmware, control drivers and all additional downloads.

KD-DA2x4G

KD-DA2x8G

Always follow the instructions provided in this Operating Manual.

› **Note:** Please visit www.keydigital.com for the latest product documentation and software downloads. Product features and specifications are subject to change without notice.

About KD-DA2x4G/KD-DA2x8G

Key Digital's KD-DA2x4G and KD-DA2x8G are 18Gbps and HDCP2.2 supporting HDMI Switcher + Distribution Amplifier kits with HDBaseT output and 4/8 Rx units included. The KD-DA2x4G/KD-DA2x8G kit is designed for applications such as Digital Signage and other professional AV installation types, where the selected HDMI source is distributed to up to 4/8 displays. All connected displays show the same image at the same time. The 4/8 KD-XDALRx HDBaseT Rx extenders are all powered via HDBaseT from the KD-DA2x4G/2x8G unit, and support extension of resolutions up to UHD/4K up to 250 ft. (76m) using CAT5e/CAT6/CAT6A/CAT7. 1080p resolutions may be extended up to 328 ft. (100m). KD-DA2x4G/KD-DA2x8G is easily integrated into professional AV systems with the audio from the selected source being de-embedded on analog and digital audio connectors, and switching controllable via TCP/IP, RS-232 or IR. KD-DA2x4G/KD-DA2x8G is Key Digital App ready and also controllable by control systems such as Compass Control Pro. EDID handshaking is easily selected via front panel rotary dial and all UHD/4K EDID handshake files include HDR header information.

Key Features

- › **HDMI Switching & Distribution:** 2 HDMI sources to 4/8 HDBaseT outputs
- › **Power over HDBaseT:** All included Rx units powered by the main unit
- › **UHD/4K Support:** 4096x2160 or 3840x2160 24/25/30/60hz at 4:4:4 (signals up to 18Gbps bandwidth)
- › **Signal Extension:** For resolution and cable quality
    - » **4K/UHD:** Up to 250 ft. (76m) using CAT5e/CAT6/CAT6A/CAT7
    - » **1080p:** Up to 328 ft. (100m) maximum
- › **18 Gbps Bandwidth:** High Speed / Performance for latest HDMI standards
- › **High Dynamic Range (HDR) Format Support:** HDR10 and Dolby® Vision
- › **HDCP 2.2:** Compliancy up to HDCP 2.2 and backward compliant
- › **Resolution Support:** Supports all SD, HD, and VESA (VGA, SVGA, XGA, WXGA, SXGA, UXGA) up to 4096x2160p
- › **Deep Color Support:** Up to UHD/4K 60Hz 4:2:0/12 bits, 60Hz 4:2:2/12 bits
- › **Auto-Sensing:** Automatic selection of newly detected source and switching from newly disconnected source via hot plug detection voltage when enabled
- › **Audio De-embedder:** Audio of the selected HDMI input is de-embedded at the Coax digital (PCM) and Analog L/R balanced/unbalanced connectors
- › **Control Pass-Thru:** 4/8 three pin phoenix connectors for bi-directional IR or RS-232 for each HDBaseT output. 4/8 IR sensors and IR emitters included.
- › **Full Buffer System™:** Manages TMDS re-clocking / signal re-generation, HDCP authentication to source & display, and EDID Control handshake
- › **EDID:** Internal library with 15 internal EDID handshakes including 4K with HDR in addition to native EDID data copied from an Output/Display 1
- › **Lossless Compressed Digital Audio:** Dolby® TrueHD, Dolby® Digital Plus, DTS-HD Master Audio™, and Dolby® Atmos
- › **CEC Disconnect:** Prevents all device communication signals via CEC, ARC, and HDMI Ethernet channels
- › **Control:** Front panel buttons/LEDs, Serial IR, Optical IR, RS-232 Control, and TCP/IP Control
- › **Control System Support:** Key Digital® app ready. Key Digital Management Software™ Pro (KDMS™ Pro) ready, Compass Control® Pro ready. Fully controllable by all IR, RS-232, and TCP/IP supported control systems via open API.

› **Key Digital® App & KDMS® Pro Ready:** Scan & detect population for pre-built GUI and TCP/IP control via Key Digital® iOS App and Key Digital Management Software™ Pro (KDMS™ Pro) PC Software

Accessories

› Qty 2 power supplies:
  » KD-PS80W48VD 48V/1.66A (80W) DC power jack, screw-in type
› Rack ears and screws
› KD-RMSWPROK remote control
› Qty 4/8 IR Emitters
› Qty 4/8 IR Sensors
› Qty 5/9 3-pin terminal blocks for IR/RS-232
› 6-pin terminal block for analog audio
› Quick Setup Guide

Rack Mounting:

› Secure the rack ears to each side of the KD-DA2x4G/KD-DA2x8G with the supplied hardware and then fasten the unit to the rack rails with the included machine screws.

Quick Setup Guide

Test for proper operation of the unit and cables in your system before permanently securing the unit for final installation. Ensure that you leave enough ventilation space to provide sufficient airflow and cooling.

1. Connect your HDMI sources to the input ports of KD-DA2x4G/KD-DA2x8G unit
2. Connect your HDMI displays to the output ports of KD-XDALRx units
3. Connect CAT wires to the KD-DA2x4G/KD-DA2x8G's HDBaseT output and KD-XDALRx CAT5e/6 input.
4. Connect the analog audio output to an amplifier/receiver via the analog 6-pin phoenix terminals and the digital destination via the PCM output
5. Connect control system and/or PC to TCP/IP, RS-232, or place IR emitter over IR sensor.
6. Screw-in the two power supplies to the KD-DA2x4G/KD-DA2x8G's unit, and then connect power to outlets. Both power connections are needed.
7. Power on HDMI sources and displays
8. Operate the KD-DA2x4G/KD-DA2x8G switcher via front panel buttons, IR Remote, RS-232, or TCP/IP control.
9. See TCP/IP and RS-232 Command or IR Remote Control sections for more adjustments options

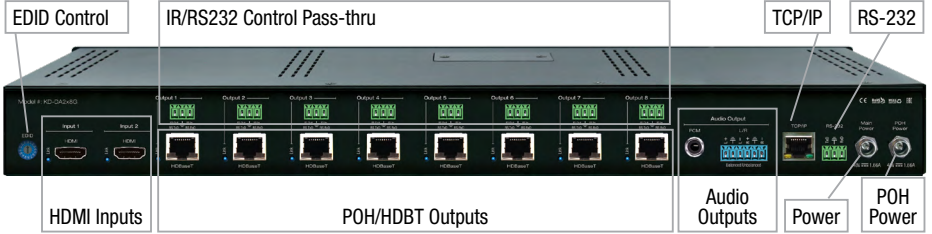Default static IP address:
192.168.1.239, port 23

Application Example
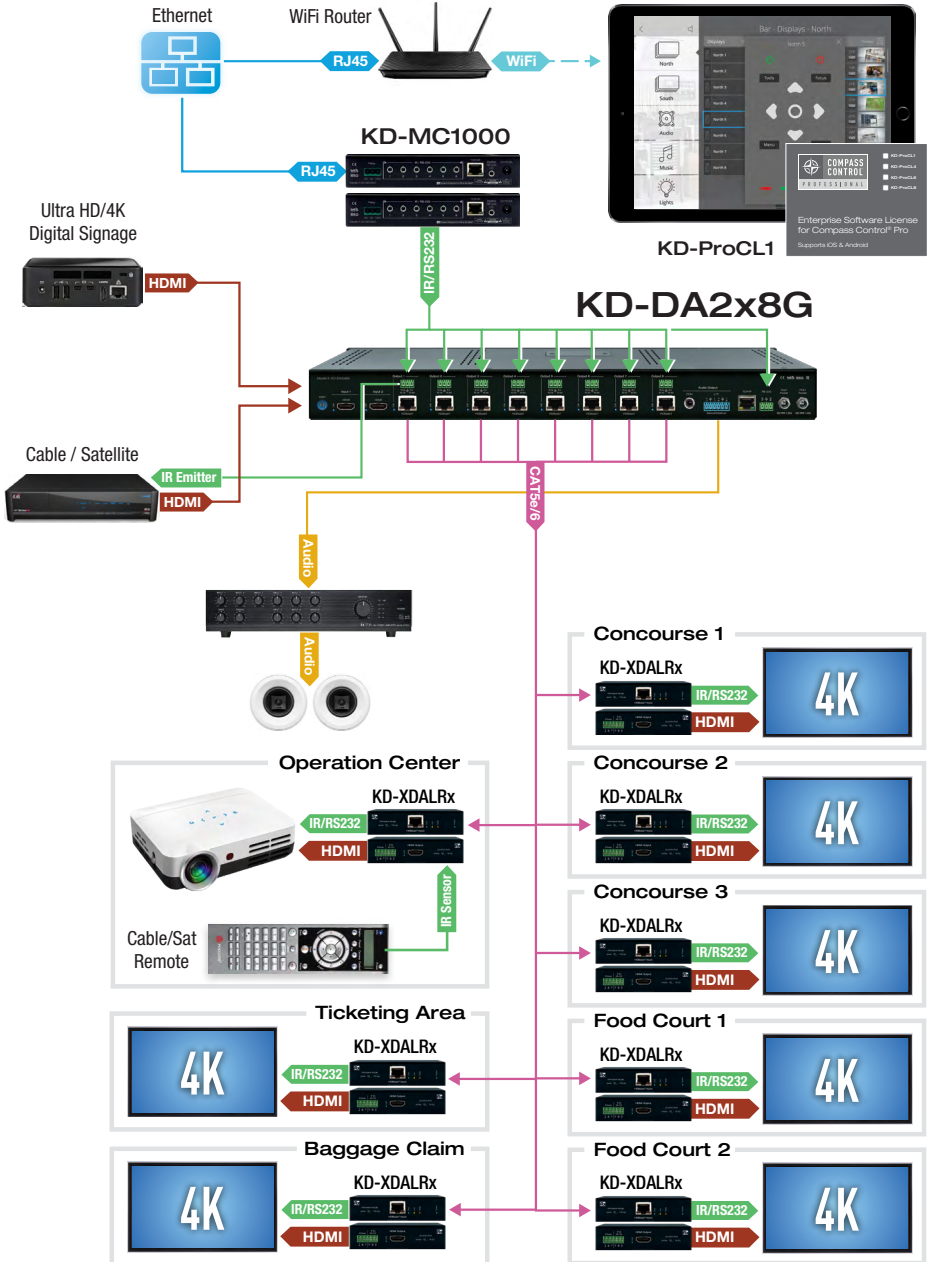
Connections, Buttons and LEDs

HDMI Inputs and HDBaseT Outputs

> **HDMI Inputs:**
>   » The HDMI Inputs are located on the bottom left side of the back panel.
>   » The Inputs have a blue LED that will illuminate solid to indicate an active HDMI signal is incoming.

> **HDBaseT Outputs:**
>   » The 4/8 HDBaseT outputs are located on the center to right side of the back panel.
>   » The outputs have a blue LED that will illuminate solid when linked with the respective Rx extender.
>   » All HDBaseT outputs show the same selected source. There is no independent switching.

> **HDMI Input/HDBaseT Output Port Specifications**
>   » Supports up to UHD/4K @ 50/60 fps [4:4:4], 18Gbps signals
>   » See Supported standard 4K Video Formats table
>   » Supports HDR10
>   » Compliant with HDCP 2.2 and previous
>   » Supports lossless compressed audio formats including Dolby® TrueHD, Dolby® Digital Plus, Dolby Atmos®, and DTS-HD Master Audio™
>   » Does not support CEC
>   » For Display Port sources/monitors, use active converters
>   » HDBaseT extension via Valens VS100 Class A chip

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

Audio Outputs

- › Analog: One Analog L/R Balanced/Unbalanced 6-Pin Terminal Block which provides de-embedded 2ch Balanced Analog Audio Output from the HDMI input source
- › The Pin assignment for the audio 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.
- › Digital: One Digital Audio RCA output port which provides de-embedded Digital Audio Output from the HDMI input source
    - » Compatible with SPDIF format IEC 60958 supporting 2ch PC, Dolby 5.1ch, DTC 6.1ch
    - » Compatible with sampling rates up to 192KHz
- › Each output drives audio signals up to 2VRMS with a sampling rate of 48KHz
- › There are no volume or tone control features, only muting control of the external audio outputs via RS-232 and TCP/IP
- › There are no DSP features. Audio must be configured in the source. For example, in order to achieve 2ch analog audio output, the selected HDMI input source audio format must be 2ch.

Audio Input Signal Format	Audio L/R Output	Digital Audio Output (Coax and Optical)
2ch PCM	Pass-Through	Pass-Though
Multi-Channel PCM	MUTE	MUTE
Dolby DTS	MUTE	Pass-Though
HD Audio	MUTE	MUTE

IR/RS-232 Control Pass-Thru Ports

In addition to HDMI signals, bi-directional IR or RS-232 signals may be extended to each HDBaseT Rx to control connected displays or to collect line-of-sight IR from the Rx to control a connected video source.

IR or RS-232 **must be selected** at each respective KD-XDALRx's slide switch as desired.
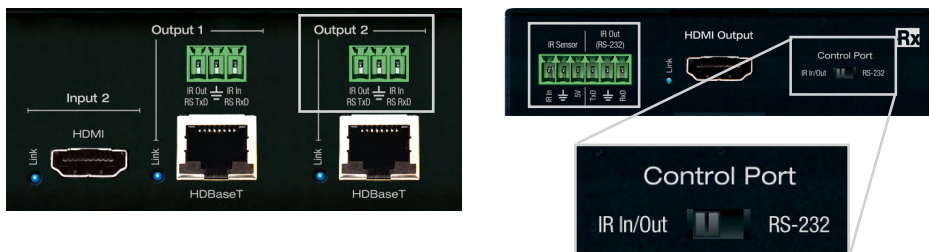
IR

> Main Unit IR In corresponds with Rx unit IR Out. Main Unit IR Out corresponds with Rx unit IR In.
> Rx Unit IR In corresponds with Main unit IR Out. Rx Unit IR Out corresponds with Main unit IR In.
> Ground pin is shared if using both channels of IR

RS-232

Connect a stripped wire to DB9 adapter cable for bi-directional RS-232 control.

» Supports baud rate up to 115,200bps

Refer to the "Extending IR or RS-232 Control" section for more information.

KD-XDALRx LEDs

> **Power:**
>
>   » Color: Blue
>   » Solid illumination during power on state, as provided by healthy connection with power supply and healthy Power over HDBaseT extension.
>   » Steady blink if unit has a power short

> **Live:**
>
>   » Color: Yellow
>   » Steady blink from healthy unit CPU state

> **HDBaseT Link:**
>
>   » Color: Blue
>   » Solid illumination from healthy HDBaseT link between Tx and Rx units

> **Video:**
>
>   » Color: Orange
>   » Illumination with active TMDS (video + audio) signal
>   » Off with no TMDS (video + audio) signal

> **HDMI Link:**
>
>   » Color: Blue
>   » Tx Unit: Solid illumination from active signal from connected source
>   » Rx Unit: Solid illumination from active Hot Plug Detection voltage with connected display/output device
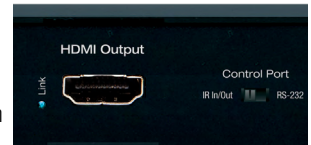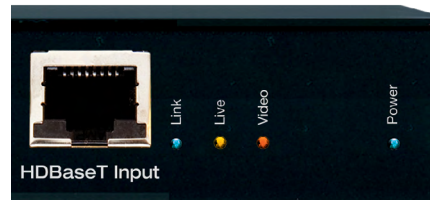
TCP/IP Control Port

> Default static IP address is 192.168.1.239, port 23
> TCP/IP and RS-232 commands may be found in the TCP/IP and RS-232 Commands section
> Connect an Ethernet cable from the KD-DA2x4G/KD-DA2x8G to a network router or connect a straight through cable directly from a PC
> Unit configuration, control, and firmware updates are most commonly achieved with **Key Digital Management Software™ Pro (KDMS™ Pro)** downloaded **HERE.**

Default static IP address:
192.168.1.239, port 23

RS-232 Control Port

> 3-Pin Terminal Block
> Pin out:
>> » Pin 1 = RS-232 Tx Data
>> » Pin 2 = RS-232 Ground
>> » Ping 3 = RS-232Rx Data
> Default baud rate is 57,600

Front Buttons and LEDs

> **IR Control Sensor**
>> » For collecting IR commands from included remote, or a mounted IR emitter from a control system
> **Input Select button**
>> » Used to choose which of the two connected sources will be distributed to all connected outputs
>> » Will also turn on any outputs that have been turned off
> **Input Select LEDs**
>> » Illuminated solid when respective input is selected and source signal is present
>> » Blinks once per second if input is selected but source signal is not detected
>> » Front button control can be disabled/enabled via serial control if desired.
>> » Press and hold for 10 seconds to reset the unit to factory default (including default network settings).
> **Output Active LEDs**
>> » Illuminated solid with active HDBaseT link and hot plug detection received from connected display
>> » Blinks once per second when the output has been turned off in the KD-DA2x4G/KD-DA2x8G unit
> **All LEDs ramp from left to right during unit boot up process.**

EDID Handshaking Control

EDID authentication is provided from the KD-DA2x4G/KD-DA2x8G unit to the connected input/source device.

> 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 each source may behave differently.

> Adjustments may be necessary to help achieve desired video and audio formatting and may speed up sync time.

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

Auto Sensing Mode

> May be set to Fixed On via serial command (TCP-IP / RS-232) or set to Soft On via IR remote (auto sensing will turn off with any manual switching).

> Activated via Hot Plug Detection voltage

> **When on** a newly plugged in or powered on source will automatically be selected.

> **When on** a newly disconnected or powered off source will advanced the unit to the next available active input.

IR Remote Control

Basic switching and troubleshooting may be achieved with the factory remote control. Not all of the remote buttons are used.

Other advanced settings may be configured using TCP/IP or RS-232 and via **Key Digital Management Software™ Pro (KDMS™ Pro)** downloaded **HERE.**

Input Button

> » Used for video source switching

Auto Button

> » Used to enable auto switching mode.

Note: IR enabled Auto switching mode is disabled with manual switching. Auto sensing can be fixed on via the serial TCP/IP RS-232 commands

Troubleshooting via IR

If you experience no picture on an output, activate troubleshooting mode to fix hot plug detection related issues:

> » IR Button Sequence = **R3, R2, R1, X, Y**
> » X = Output number (1-4 / 1-8). Chosen using Device Select numerical keypad
> » Y = 1 (On) / 0 (Off). Chosen using Device Select numerical keypad

Extending IR and RS-232 Control

IR In

> Maximum supported IR burst frequency is 55kHz.
> The IR Sensor can be connected at the Rx unit only and receives signals from a 90° angle at up to 30 ft. away.
> > » Only the included IR sensors are compatible. Third-party IR Sensors may not be compatible.

IR Out

> » IR Out driving power: 5V with 32mA minimum current

IR Sensor / IN Pinout	Wire	Signal
	Red	5V Power
	White	IR Signal
	Black	Ground

IR Emitter / OUT Pinout	Wire	Signal
	Dashed/ Marked	IR Signal
	Solid/ Black	Ground

RS-232

> RS-232 cables are available through Key Digital and other wire suppliers, and can also be fabricated by skilled technicians.

Model	Wire	DB9 Pin	Signal
KD-3.5FDB96 3.5mm Stereo to Female DB9 (sold separately)	Red	2	TxD
	White	3	RxD
	Black	5	Ground
	Green	N/C	NA

KD-3.5FDB96 with 3.5mm TRS Connector	KD-3.5FDB96 after stripping wire

Model	Wire	DB9 Pin	Signal
KD-3.5MDB96 3.5mm Stereo to Male DB9 (sold separately)	Red	2	TxD
	Black	3	RxD
	Shield	5	Ground

KD-3.5MDB96 with 3.5mm TRS Connector	KD-3.5MDB96 after stripping wire

RS-232 and TCP/IP Commands

KD-DA2x4G/KD-DA2x8G allows control over serial
interface for advanced control and bi-directional
communication.

RS-232 Pinout:
- » Pin 1 = RS-232 Tx Data
- » Pin 2 = RS-232 Ground
- » Ping 3 = RS-232Rx Data

> **Default IP address is 192.168.1.239, with
default port 23**
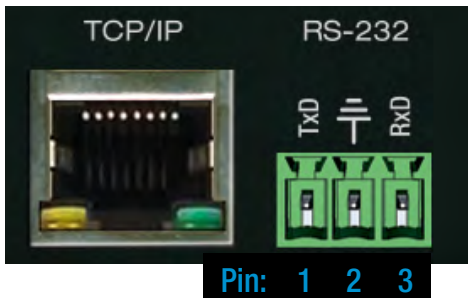
> Default static IP address:
> **192.168.1.239, port 23**

Connection Protocol:
- » Baud Rate = 57,600 bits per second
- » Data Bits = 8
- » Stop Bits = 1
- » Parity = Non
- » Flow Control = None
- » Carriage Return: Required at end of string

> Notes:
- » Commands are not case-sensitive
- » Spaces are shown for clarity; commands should NOT have any spaces
- » After a new command is received, a prompt should be sent back

KD-DA2x4G Help Command (H). Returns entire API in readable format:

```
-----------------------------------------------------------------------
-----------------------------------------------------------------------
--                      Key Digital Systems HELP                     --
-----------------------------------------------------------------------
-- KD-DA2x4        System Address = 00        F/W Version : 1.07  --
--                                                                   --
-- Azz      : All Commands may have Prefix System Address zz=[01-99] --
-- H        : Help                                                   --
-- PF       : Power Off                                              --
-- PN       : Power ON                                               --
-- STA      : Show Global System Status                              --
--                                                                   --
-- Video Output Setup Commands: xx = [01-04], yy = [01-02,U/D]       --
-- SPO SI yy    : Set Output to Video Input yy                       --
-- SPO01 SI yy  : Set Output to Video Input yy                       --
--                                                                   --
-- SPO xx ON/OFF    : Set Output xx ON/OFF                           --
-- SPO xx DBG ON/OFF : Set Output xx Debug Mode ON/OFF               --
--                                                                   --
-- Audio Output Setup Commands: [E=Enable, D=Disable]                --
-- SPO AA E/D : Enable/Disable External Analog Audio Output          --
-- SPO DA E/D : Enable/Disable External Digital Audio Output         --
```

```
--                                                                      --
-- Input/Output/Device naming Commands xx=[01-04], <Max. 16 Chars>
-- SPI xx WN cccccccccccccccc : Write Input xx Name                 --
-- SPI xx RN                            : Read Input xx Name
--
-- SPO xx WN cccccccccccccccc : Write Output xx Name                --
-- SPO xx RN                            : Read Output xx Name
--
-- SPC WN cccccccccccccccc : Write Device Name              --
-- SPC RN                            : Read Device Name
--
--                                                                      --
-- Network Setup,  ( xxx=[000-255], zzzz=[0023~9999] )                 --
-- SPCETIPA xxx.xxx.xxx.xxx : Set Host IP Address to xxx.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 Address Setup Command: xx = [00-99], 00 = Single            --
-- SPC Axx    : Set System Address to xx                              --
--                                                                      --
-- 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 FHPD ON/OFF: Set Forced HPD ON/OFF                             --
-- SPC RSB z  : Set RS232 Baud Rate to z bps, z=[0-4]                 --
--             [0:57600, 1:38400, 2:19200, 3:9600, 4:4800]            --
-- SPCDF      : Reset to Factory Default All                          --
-- SPCDF00    : Reset to Factory Default without Network Reset        --
-------------------------------------------------------------------------
```

KD-DA2x4G Status command (STA). Returns current state and settings of the unit:

```
-------------------------------------------------------------------------
--                    Key Digital Systems STATUS                      --
-------------------------------------------------------------------------
-- KD-DA2x4         System Address = 00         F/W Version : 1.07  --
--                                                                      --
-- Power : ON                                                          --
-- Forced HPD : ON                                                     --
-- Front Panel Button : Enabled                                        --
-- Auto Sensing Mode  : OFF                                            --
-- RS232 : Baud Rate=57600bps, Data=8bit, Parity=None, Stop=1bit      --
--                                                                      --
-- Network Setting(Telnet Server) Status                              --
-- MAC Address = 60:89:B1:28:00:04                                    --
-- 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 01: EDID = DEFAULT 10,  Link = OFF                     --
-- Video Input 02: EDID = DEFAULT 10,  Link = OFF                     --
--                                                                      --
-- Video Output 01: Input = 02, Output = ON , Link = OFF , DBG = ON   --
-- Video Output 02: Input = 02, Output = ON , Link = OFF , DBG = ON   --
-- Video Output 03: Input = 02, Output = ON , Link = OFF , DBG = ON   --
-- Video Output 04: Input = 02, Output = ON , Link = OFF , DBG = ON   --
--                                                                      --
-- Audio Output   : Analog = Enabled , Digital = Enabled              --
-------------------------------------------------------------------------
```

KD-DA2x8G Help Command (H). Returns entire API in readable format:

```
-------------------------------------------------------------------------
-                     Key Digital Systems HELP                        --
-------------------------------------------------------------------------
-- KD-DA2x8          System Address = 00        F/W Version : 1.11  --
--                                                                    --
-- Azz       : All Commands may have Prefix System Address zz=[01-99] --
-- H         : Help                                                   --
-- PF        : Power Off                                              --
-- PN        : Power ON                                               --
-- STA       : Show Global System Status                              --
--                                                                    --
-- Video Output Setup Commands: xx = [01-08], yy = [01-02,U/D]        --
-- SPO SI yy    : Set Output to Video Input yy                        --
-- SPO01 SI yy  : Set Output to Video Input yy                        --
--                                                                    --
-- SPO xx ON/OFF     : Set Output xx ON/OFF                           --
-- SPO xx DBG ON/OFF : Set Output xx Debug Mode ON/OFF                --
--                                                                    --
-- Audio Output Setup Commands: [E=Enable, D=Disable]                 --
-- SPO AA E/D : Enable/Disable External Analog Audio Output           --
-- SPO DA E/D : Enable/Disable External Digital Audio Output          --
--                                                                    --
-- Input/Output/Device naming Commands xx=[01-08], <Max. 16 Chars>    --
-- SPI xx WN cccccccccccccccc : Write Input xx Name            --
-- SPI xx RN                         : Read Input xx Name             --
--                                                                    --
-- SPO xx WN cccccccccccccccc : Write Output xx Name           --
-- SPO xx RN                         : Read Output xx Name            --
--                                                                    --
-- SPC WN cccccccccccccccc : Write Device Name             --
-- SPC RN                         : Read Device Name                  --
--                                                                    --
--                                                                    --
-- Network Setup,  ( xxx=[000-255], zzzz=[0023~9999] )                --
-- SPCETIPA xxx.xxx.xxx.xxx : Set Host IP Address to xxx.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 Address Setup Command: xx = [00-99], 00 = Single           --
-- SPC Axx    : Set System Address to xx                              --
--                                                                    --
-- 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 FHPD ON/OFF: Set Forced HPD ON/OFF                             --
-- SPC RSB z  : Set RS232 Baud Rate to z bps, z=[0-4]                 --
--             [0:57600, 1:38400, 2:19200, 3:9600, 4:4800]            --
-- SPCDF      : Reset to Factory Default All                          --
-- SPCDF00    : Reset to Factory Default without Network Reset        --
-------------------------------------------------------------------------
```

KD-DA2x8G Status command (STA). Returns current state and settings of the unit:

```
--------------------------------------------------------------------------
--                     Key Digital Systems STATUS                       --
--------------------------------------------------------------------------
-- KD-DA2x8          System Address = 00         F/W Version : 1.11  --
--                                                                      --
-- Power : ON                                                           --
-- Forced HPD : ON                                                      --
-- Front Panel Button : Enabled                                         --
-- Auto Sensing Mode  : OFF                                             --
-- RS232 : Baud Rate=57600bps, Data=8bit, Parity=None, Stop=1bit        --
--                                                                      --
-- Network Setting(Telnet Server) Status                                --
-- MAC Address = 60:89:B1:28:00:05                                      --
-- 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 01: EDID = DEFAULT 10,  Link = ON                        --
-- Video Input 02: EDID = DEFAULT 10,  Link = OFF                       --
--                                                                      --
-- Video Output 01: Input = 02, Output = ON  , Link = ON  , DBG = OFF  --
-- Video Output 02: Input = 02, Output = ON  , Link = ON  , DBG = OFF  --
-- Video Output 03: Input = 02, Output = ON  , Link = ON  , DBG = OFF  --
-- Video Output 04: Input = 02, Output = ON  , Link = ON  , DBG = OFF  --
-- Video Output 05: Input = 02, Output = ON  , Link = ON  , DBG = OFF  --
-- Video Output 06: Input = 02, Output = ON  , Link = OFF , DBG = OFF  --
-- Video Output 07: Input = 02, Output = ON  , Link = OFF , DBG = OFF  --
-- Video Output 08: Input = 02, Output = ON  , Link = OFF , DBG = OFF  --
--                                                                      --
-- Audio Output  : Analog = Enabled , Digital = Enabled                 --
--------------------------------------------------------------------------
```

Specifications

Technical:

› Inputs (2): 1 HDMI Connector, Type A, 19 Pin Female

› Outputs (4/8): 1 HDBaseT, Valens VS100 Class A, RJ45 Female

› Output (1): RCA female for digital audio following SPDIF format (IEC 60958). Supports sampling rate up to 192KHz; Balanced/unbalanced line level audio on 6-pin terminal block. Drives 2VRMS line audio input with a sampling rate of 48KHz

› Control Pass-Thru (Main Unit): 3-Pin Terminal Block for IR or RS-232 supporting voltage levels from +0.1V to +12V

› Control (Rx Unit): IR In and Out on Phoenix Connector 5V IR sensor power. RS-232 on 3-Pin Phoenix connector

› Wired IR: modulated IR signal input, 0-5V TTL or -10 to +10V

› Analog Audio Max Output Level: 4dBu on 150kΩ, DC coupling

› Audio Bandwidth: 20Hz to 20kHz @ 0dBu

› TND + Noise: 0.33% @0dBu @ 1kHz » PCM Max Input Level: 1Vpp on 75Ω, AC coupling

› PCM Max Output Level: 1Vpp on 75Ω, DC coupling

› DDC Communication: EDID and HDCP Bi-directional buffering to Display and Source

› Wired IR: modulated IR signal input, 0-5V TTL or -10to +10V

› Power: +48V/1.66A, 80W

General:

› Regulation: CE, RoHS, WEEE, EAC

› Rack Mount: 1U, 1 Rack Width (rack ears included)

› Enclosure: Black Metal

› Product Dimensions: 17.3 x 5.25 x 1.72" (440 x 133.5 x 43.8 mm)

› Shipping Carton Dimensions: 20 x 10 x 5.7" (510 x 255 x 145 mm)

› Product Weight: 6 lb

› Shipping Weight: 9 lb

› Accessories: IR Remote, UL Certified Power Supply

⚠️ 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.
3. 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.

How to Contact Key Digital®

System Design Group (SDG)

For system design questions please contact us at:
> Phone: 914-667-9700
> E-mail: sdg@keydigital.com

Customer Support

For customer support questions please contact us at:
> Phone: 914-667-9700
> E-mail: customersupport@keydigital.com

Technical Support

For technical questions about using Key Digital® products, please contact us at:
> 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: 914-667-9700
> E-mail: rma@keydigital.com
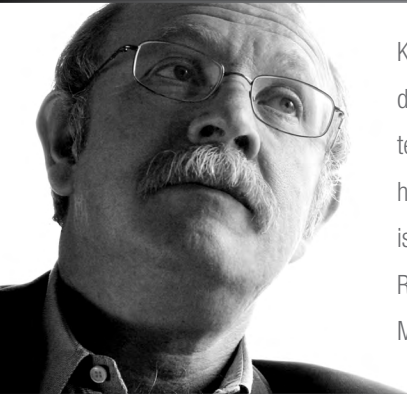
Feedback

Please email any comments/questions about the manual to:
> E-mail: customersupport@keydigital.com

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

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.

Key Digital® • 521 East 3rd Street, Mount Vernon, NY 10553
Phone: 914.667.9700 • Fax: 914.668.8666 • www.keydigital.com