

DL-3H1U-WP-W Owners Manual





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Important Safety Instructions

- » Please completely read and verify you understand all instructions in this manual before operating this equipment.
- » Keep these instructions in a safe, accessible place for future reference.
- » Heed all warnings.
- » Follow all instructions.
- » Do not use this apparatus near water.
- » Clean only with a dry cloth.
- » Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- » Use only accessories specified or recommended by Intelix.
- » Explanation of graphical symbols:
 - Lightning bolt/flash symbol: the lightning bolt/flash and arrowhead within an equilateral triangle symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product enclosure which may be of sufficient magnitude to constitute a risk of shock to a person or persons.
 - Exclamation point symbol: the exclamation point within an equilateral triangle symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.
- » WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS.
- » Use the mains plug to disconnect the apparatus from the mains.
- » THE MAINS PLUG OF THE POWER CORD MUST REMAIN READILY ACCESSIBLE.
- » Do not defeat the safety purpose polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of your obsolete outlet. Caution! To reduce the risk of electrical shock, grounding of the center pin of this plug must be maintained.
- » Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and the point where they exit from the apparatus.
- » Do not block the air ventilation openings. Only mount the equipment per Intelix's instructions.
- » Use only with the cart, stand, table, or rack specified by Intelix or sold with the equipment. When/if a cart is used, use caution when moving the cart/equipment combination to avoid injury from tip-over.
- » Unplug this apparatus during lightning storms or when unused for long periods of time.
- » Caution! Shock Hazard. Do not open the unit.
- » Refer to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.







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Product Overview

The DigitaLinx DL-3H1U-WP-W is a 3x1 auto switching HDBaseT 2.0 transmitter that supports the long distance transport of HDMI and High Speed USB 2.0 signals up to 100 meters / 330' using category cabling. The DL-3H1U-WP-W is 4K compatible with a max resolution of 4K@60Hz / 4:2:0 8bit deep color. An additional analog audio pass through input is located on the wall plate that allows for audio distribution to the HDBaseT receiver side. With 48V integrated PoH, the DL-3H1U-WP-W can be powered via HDBaseT receiver with a PSE module or the wall plate can be powered by a local power supply. The DL-3H1U-WP-W is ideal for situations where USB must be extended alongside HDMI for display interactivity for items such as interactive whiteboards or projectors.

The DL-3H1U-WP-W gives you the ability to automate the display power ON by using pre-loaded RS232 commands whenever a video signal is introduced to the system using either HDMI input. It will also turn the display power OFF after a specified amount of time has passed when no video signal is present. It also gives you the ability to turn the display ON or OFF as well and switch from one input to another manually from the transmitter face plate.

NOTE: The DL-3H1U-WP-W HDBaseT transmitter must be used with the DL-HD2-RX or the DL-HD2A-RX HDBaseT 2.0 receiver (sold separately) to complete the circuit.

Package Contents

- DL-3H1U-WP-W HDBaseT Wall Plate Transmitter
- (1) Quick Install Guide
- (1) 2 pin Phoenix Male Connector
- (1) 2 gang Decorator style wall plate cover with screws
- (1) 2m / 6' USB A to B Cable



Front and Rear Panel

Transmitter View



- 1. HDMI IN1, IN2, IN3- HDMI inputs 1-3
- 2. RESET- Factory default reset button
- 3. HDMI LEDs
 - When ON; Corresponding HDMI input signal is being transmitter
 - When OFF; No HDMI signal is being transmitted or signal is unstable
- 4. HDCP LED
 - When ON; HDCP video is being transmitted
 - When BLINKING; Non-HDCP video is being transmitted
 - When OFF; No video is being transmitted
- 5. LINK LED
 - When ON; HDBaseT Link is normal
 - When OFF / BLINKING; No HDBaseT link or link error
- 6. POWER LED
 - When ON; The transmitter is powered on
 - When OFF; The transmitter is powered off





Transmitter View (continued)

- 7. INPUT- Input Selection Button
- 8. DISPLAY- Display On/Off Button
- 9. AUDIO IN- Pass-through Audio Input
- 10. USB- USB B Input
- 11. UPDATE- Micro USB Service Port for Firmware Update
- 12. HDBT OUT- RJ45 / HDBaseT Output
- 13. DC12V- DC12V Power Supply Input



Installation Instructions

Quick Start

- 1. Connect HDBaseT Link
- 2. Connect A/V sources
- 3. Connect USB peripherals
- 4. Connect display
- 5. Connect audio (optional)
- 6. Connect and configure control (optional)
- 7. Apply power

Connect HDBaseT Link

HDBaseT Connection

Connect a category cable from the DL-3H1U-WP-W HDBaseT output to the DL-HD2-RX or DL-HD2A-RX receivers HDBaseT input (sold seperately).

Twisted Pair Wiring Use TIA/EIA-568B wiring for Category 6 connection between the transmitter and receiver

| 1 8 1 1 | ТІ | A/EIA-568B |
|------------|-------|--------------|
| | Pin 1 | Orange/White |
| | Pin 2 | Orange |
| | Pin 3 | Green/White |
| | Pin 4 | Blue |
| | Pin 5 | Blue/White |
| | Pin 6 | Green |
| | Pin 7 | Brown/White |
| | Pin 8 | Brown |
| | | |

To ensure proper performance of the DL-3H1U-WP-W it is recommended that you use solid core shielded Category 6 F/UTP cabling at a minimum. Category 5e F/UTP may perform well but may not support power over HDBaseT reliably.



When using shielded category cabling ALWAYS...

....use shielded connectorsproperly ground the category cable

For optimized performance use the following Liberty Wire and Cable branded cabling;

Category 6 plenum; **24-4P-P-L6SH** Category 6A plenum; **24-4P-P-L6ASH**

Category 6 NON-plenum; **24-4P-L6SH** Category 6A NON-plenum; **24-4P-L6ASH**



Connecting A/V Sources

HDMI Inputs

Connect HDMI source devices to the HDMI inputs using HDMI cables that are less than or equal to 5 meters in length. For source devices that are further away, an extension device will be required to complete the connection.

Connecting USB Peripherals

USB Host

Connect a USB host device to the USB B input using a USB A to B cable that is less than or equal to 5 meters in length.

USB Client (Receiver)

Connect a USB client device to any USB A port on the DL-HD2-RX or DL-HD2A-RX receiver using a USB A to A cable that is less than or equal to 5 meters in length.

Connecting a Display (Receiver)

HDMI Output

Connect the display devices to HDMI output on the receiver using an HDMI cable that is less than or equal to 5 meters in length.

Connecting Audio

Audio Input

Connect an audio source to the transmitters audio input using a 3.5mm audio cable. The DL-3H1U-WP-W supports a 3.5mm stereo unbalanced input

Audio Output (Receiver)

Connect an audio amplifier to the receivers audio output using a 3.5mm audio cable. The DL-HD2-RX supports a 3.5mm stereo unbalanced output

Note: The DL-HD2-RX audio output only passes audio fed from the dedicated AUDIO IN port on the DL-3H1U-WP-W transmitter wall plate, it does not pass embedded HDMI audio. If this option is required use the DL-HD2A-RX HDBaseT receiver.



Connecting Control (Receiver)

Connect the DL-HD2-RX receivers RS232 port to a displays serial connection for serial control.

Note: The DL-HD2-RX RS232 port can be configured to send stored serial commands from the DL-3H1U-WP-W

For directions on RS232 configuration see complete list of control commands on pg13 RS232 / CEC Control Configuration

RS232 Control Wiring

Connect the display devices RX RS232 signal to TX port of the DL-HD2-RX receiver. Then connect the displays TX RS232 signal to the RX port on the DL-HD2-RX receiver.



Apply Power

Plug the power supply into the power input port on the rear of DL-HD2-RX receiver. The receiver will power the transmitter via HDBaseT. Twist the locking ring clockwise to prevent accidental disconnection of power.





Application Diagram



RS232 Port Configuration Software Usage

Overview

The Digitalinx RS232 Automation Configuration Software allows you to load ON and OFF serial commands into the RS232 control port of the DL-3H1U-WP-W so the commands can be sent to a connected display or projector to automate power when a video signal is introduced and the DL-3H1U-WP-W is in an off state. When programming ON/OFF commands using this software tool, it will also program the DISPLAY on/off button operation of the DL-3H1U-WP-W as well.

Downloading RS232 Port Configuration Software

The Digitalinx RS232 Automation Configuration Software can be found online on the DL-3H1U-WP-W product page under the SOFTWARE tab at *www.libav.com*. Download the zip file and extract the file, then run the tool on a Windows PC that will be used to configure the DL-3H1U-WP-W.

Making a PC Connection

The DL-HD2-RX compatible receiver must be used to configure automation when using this device and the receiver will come supplied with the cable in the box. If you do not have the cable you will need to connect a a DB9 (RS232) to USB adapter from the RS232 port of the HDBaseT receiver to your PC to configure using the software. The Liberty 120-DA-0004 RS232 to USB adapter can be used for this configuration connection.

Once the RS232 to USB adapter has been installed on the PC, connect the USB adapter to a DB9 female connector that is terminated to a 3 pin phoenix connector.



Running RS232 Automation Configuration Software

Open the configuration software by double clicking the configuration tool icon. The following screen will appear

| Power on/off pre-k | bading | | | | Send | 0 |
|--------------------|--------|----------------------|---------------------|-------|------|---|
| Power on | | | | HEX | Send | 0 |
| Power off Delay | ∼ minu | ters to trigger afte | er detecting no sig | HEX | Send | 0 |
| Set terminator | | | | | | |
| Select terminator | ۹۳ | Oh | Orm | Onone | Set | 0 |
| Set Relay Mode | | | | | | |
| Relay Mode | Latch | ~ | | | Set | 0 |
| Log | | | | | | ~ |
| | | | | | | |
| | | | | | | |



Serial Settings for DL-3H1U-WP-W

To establish communication with the software, select the DL-3H1U-WP-W under DEVICE TYPES.

| Digitalinx Port Con | figuration to | ol | | | _ | | × |
|---------------------------------|------------------------|---|-------------------|------------------------|-----------------|--------------|---|
| RS232 port configu Port COM8 | Devices Typ uration | EL-UHDILC DL-1H1V1U-WP- BaDL-SE3H1V-C | W | | ✓ Get curren | t settings | |
| Power on/off pre-lo | oading | DE BHIO MI M | | | | | |
| Baud rate | | \sim | | | Send | 0 | |
| Power on | | | | HEX | Send | 0 | |
| Power off | | | | HEX | Send | 0 | |
| Delay | ∼ min | uters to trigger afte | r detecting no si | gnal in the HDMI input | | | |
| Set terminator | | | | | | | |
| Select terminator | ● \r | ∩ \ n | ⊖ \r \ n | Onone | Set | 0 | |
| Set Relay Mode Relay Mode | Latch | ~ | | | Set | 0 | |
| Log | | | | | | | |
| | | | | | | ^ | |
| | | | | | d | ∨ ear log | |



After a device is selected, select the Port number in the drop down field that the USB to RS232 is connected to on the computer. Typically this will default when starting the software after the serial COM connection has been made.

Enter in the baud rate for the DL-3H1U-WP-W in the *BAUD RATE* field and click *CONNECT*. The default baud rate for the DL-3H1U-WP-W is 115200.

If you are successfully connected to the unit, a green light will appear next the *Connect* button which will now read *DISCONNECT*.

| | Devices Type: | DL-3H1U-WP-W | V | | \sim | | |
|---|------------------------------------|--------------------|--------------------|----------------------|--------|---------------|------------|
| RS232 port config | uration | | | | | | |
| Port COM8 | ~ B | Baud rate 9600 |) | Disconnect | ۲ | Get current s | ettings |
| Power on/off pre- | oading | | | | | | |
| Baud rate | 9600 | \sim | | | | Send | 0 |
| | | | | | | Sand | 0 |
| Power on | | | | | | Jenu | |
| Power off | | | | HEX | | Send | 10 |
| Delay | ✓ minut | ers to trigger aft | er detecting no si | nal in the HDMI inc. | ıt | Schu | |
| , | | | - | | | | |
| Set terminator — | | | | | | | |
| Select terminator | ● \r | ⊖ \n | O ∖r\ n | Onone | | Set | \bigcirc |
| Set Relay Mode | | | | | | | |
| Relay Mode | Latch | ~ | | | | Set | 0 |
| 1 | | | | | | | - |
| Serial port conn | ected successful | v | | | | | |
| Connecting to s | erial port | | | | | | |
| disconnecting to "Baud rate" feat |) serial port hire set successf | 5 dby | | | | | |
| disconnecting to | serial port | city. | | | | | |
| Send "9600" | | | | | | | |
| Configuring the | baud rate | h.r | | | | | |
| Serial port conn | ected successful erial port | iy. | | | | | |
| Connecting to s | control port | | | | | | |
| Connecting to s disconnecting to | senai purt | | | | | | |
| Connecting to s disconnecting to "Baud rate" feat | ture set successf | ully. | | | | | |

To obtain current RS232 settings you can click the GET CURRENT SETTINGS button.





Configuring RS232 Serial Commands

In the *Power on/off pre-loading* section, enter in the Baud Rate of the display device by selecting the correct setting from the drop down menu and the click Send. The baud rate of the display device will be located in the manufacturers owners manual of the display device.

| | | Devices Type | DL-3H1U-WP | -W | | ~ | | |
|---------------|-------------------------------|--------------------------------|---------------------|----------------------|-----------------------|-----|---------------|---------|
| RS232 | port config | uration | | | | | | |
| Port [| COM8 | \sim | Baud rate 96 | 00 | Disconnect | ۲ | Get current s | ettings |
| Power | on/off pre-l | oading | | | | | | |
| | Baud rate | 9600 | \sim | | | | Send | 0 |
| | Power on | | | | HEX | | Send | 0 |
| | Power off | | | | HEX | | Send | 0 |
| | Delay | ∼ mir | nuters to trigger a | after detecting no s | ignal in the HDMI inp | out | | _ |
| Set ten | minator | | | | | | | |
| Select | terminator | ⊙ v | ⊖ \ n | ⊙kh | Onone | | Set | 0 |
| Set Rel | ay Mode | | | | | | | |
| Re | ay Mode | Latch | ~ | | | | Set | 0 |
| log | | | | | | | | |
| Conr | l port conne necting to se | ected success erial port | tully. | | | | | Â |
| disco "Bau | nnecting to d rate" feat | serial port ture set succes | ssfully. | | | | | |
| disco | nnecting to | serial port | | | | | | |
| Conf | iguring the | baud rate | | | | | | |
| Seria | l port conne nectina to se | ected success erial port | fully. | | | | | |
| disco | nnecting to | serial port | | | | | | |
| Bau | d rate" feat Innecting to | ure set succes serial port | sstully. | | | | | J |
| uisco | _ | | | | | | | |

If connection was successful, the green light next to the Send button will illuminate and pop up window will notify you of the successful connection.

| Digitalinx Port Configuration tool | × |
|------------------------------------|---|
| Baud rate set successfully. | |
| ОК | |



Once you have entered in the *Baud Rate* of the display device in the software, the DL-3H1U-WP-W default baud rate setting will be changed to the same rate setting as well. The RS232 configuration tool will reset the connection to the device using the newly selected baud rate.



Enter the displays POWER ON and OFF/STANDBY command for the display device in the *Power on* and *Power off* field. Serial commands for displays and projectors are provided by the display manufacturer and can be found in the products instructional documentation.

Click the *Send* buttons adjacent to both the *Power On* and *Power off* field to upload the commands. If upload is successful a green light next to the *Send* button will illuminate and a pop up window will confirm a successful upload.

| Digitali | inx Port Cor | figuration too | I | | | | _ | |
|--|--|--|----------------------------------|-------------------|-----------------------|----|-------------|----------|
| | | Devices Type: | DL-3H1U-WP-W | 1 | | ~ | | |
| RS232 | 2 port configu | uration | | | | | | |
| Port | COM8 | ~ E | Baud rate 9600 |) | Disconnect | ۲ | Get current | settings |
| Power | on/off pre-l | oading | | | | | | |
| | Baud rate | 9600 | ~ | | | | Send | 0 |
| | Power on | PWRON | | | HEX | | Send | ۲ |
| | Power off | PWRON | | | HEX | | Send | ۲ |
| | Delay | ✓ minu: | ters to trigger aft | er detecting no s | ignal in the HDMI inp | ut | | |
| | | | | | | | | |
| Set te | rminator | 0 | <u></u> | | 0 | | | |
| Select | t terminator | ۹ | O \n | ⊖ \r \n | Onone | | Set | 0 |
| Set Re | elay Mode | | | | | | | |
| R | elay Mode | Latch | \sim | | | | Set | 0 |
| 100 | | | | | | | | |
| Por Sen Con Sen Con Seri Con disc Bai disc Sen | wer off" feat d "PWRON" nfiguring the wer on" feat d "PWRON" infiguring the all port conne- ting to so connecting to ud rate" feat connecting to d "9600" | ure set successi "power off" feat ure set successf "power on" feat ected successful erial port ure set successi serial port | fully. ure ure y. y. | | | | | Ŷ |
| | | | | | | | Cle | arlog |
| | | | | | | | | a log |

If the ASCII based commands require a terminator, choose the appropriate terminator from the *Set terminator* section and then click the Set button. If upload is successful a green light next to the Set button will illuminate and a pop up window will confirm a successful upload. Note, this option is only for ASCII based commands, this is not required or is an option for HEX based commands.

Explanation of terminator menu:

\r = Carriage Return <CR>
\n = Line Feed <LF>
\r\n = Carriage Return + Line Feed <CR><LF>
none = No terminator required



By default, ASCII command type is used. If the command for display ON/OFF is only available in Hex coding, check the *HEX* button next to the *Power On* command field and then enter the Hex command in the *Power On* and *Power Off* field.

NOTE: When entering in HEX formatted commands, place a space between each character. Prefix and suffix characters are not required i.e. 0x01 0x 02, 01h, 02h. Correct formatted example is below.

| | | Devices Ty | pe: DL-3H1U-WP-V | V | | ~ | | |
|--|--|--|--|------------------|-----------------------|-----|-------------|----------|
| RS23 | 2 port configu | uration | | - | | | | |
| Port | COM8 | ~ | Baud rate 9600 |) | Disconnect | ۲ | Get current | settings |
| Power | on/off pre-l | oading | | | | | | |
| | Baud rate | 9600 | \sim | | | | Send | 0 |
| | Power on | A1 A2 A3 | A4 A5 A6 A7 A8 A9 A | 0 | HEX | | Send | ۲ |
| | Power off | B1 B2 B3 B | 4 B5 B6 B7 B8 B9 B0 | | HEX | | Send | ۲ |
| | Delay | m | ninuters to trigger aft | er detecting no | signal in the HDMI in | put | | |
| Set te | rminator | | | | | | | |
| Select | t terminator | ⊘ \ r | ⊖ \n | ⊖ \r \n | Onone | | Set | 0 |
| Set Re | elay Mode Relay Mode | Latch | ~ | | | | Set | 0 |
| Log Po Ser Po Ser Cor Po Ser Cor Po | wer off" feat of "B1B2B3 offguring the wer on" feat offguring the wer on" feat of "A1A2A3 offguring the wer off" feat off "feat off "feat off guring the wer off" feat | ure set succ 34 B5 B6 B7 "power off" ure set succ A4 A5 A6 A "power on" f ure setting f A4 A5 A6 A "power on" f ure set succ "power off" | essfully. B8 B9 B0" feature essfully. 7 A8 A9 A0" feature ailed. Please try agai 7 A8 A9 A0" feature essfully. feature | n or check the s | erial connection. | | | |



Configuring System Timeout

By default system timeout is set to 3 minutes. After there is no present video signal passing through the DL-3H1U-WP-W for 3 minutes the system will transmit the *Power off* command to the display or projector and trigger the second relay port switch.

To change the default system timeout, choose the desired time from the Delay drop down menu underneath the *Power off* command field.

Click the *Send* button adjacent to the *Power off* field. If upload is successful a green light next to the *Send* button will illuminate and a pop up window will confirm a successful upload.

| Power off | PWR OFF | HEX | |
|-----------|---|--------------------------|------|
| Delay | 15 v minuters to trigger after detecting no s | signal in the HDMI input | Send |



RS232 / CEC Control Configuration

To configure control using command line interface so a connected display can be controlled by the wall plate, connect the DL-3H1U-WP-W USB service port to a local computer using a micro USB to USB A cable. Use a RS232 scripting tool like Putty or Docklight to issue the commands in this guide to set the CEC and RS232 settings according to the displays manufacturers instructions.

RS232 Settings: 115200 baud, 8 Data bits, 1 Stop bit, Parity = None

The commands are case sensitive

All responses end in a carriage return (hex OD) and a line feed (hex OA).

<cr>< = Carriage return (Hex OD)</r>< LF> = Line Feed (Hex OA)



CEC Setup and Control

A CEC enabled displays ON and OFF status can be controlled by the DL-3H1U-WP-W via HDMI from the DL-HD2-RX by pressing the DISPLAY button on the DL-3H1U-WP-W. By default the CEC control option is always on, simply turn the CEC option ON in the displays settings to use this control capability.

To turn the display ON using CEC, simply quick press the DISPLAY button on the DL-3H1U-WP-W; to turn display OFF simply long press the DISPLAY button on the DL-3H1U-WP-W for 3-5 seconds.

CEC ON command can also be automatically generated to a connected display via HDMI when an active video source is connected to the DL-3H1U-WP-W When using auto CEC on / off control of a display, use the CEC delay commands to define the time when the display will be turned OFF when no video signals are present in the DL-3H1U-WP-W.

For example if the delay time is set to 3 minutes, the CEC enabled display will turn off when there is no present video signal in the switcher / extender for 3 minutes. By default the auto CEC control is on and the default delay time is set to 3 minutes.

Use the commands below to adjust the settings for CEC control

| Description | Command | Example |
|--|--|--|
| Auto CEC On/Off | SET AUTOCEC_M {x} | Command: SET AUTOCEC_M on <cr><lf></lf></cr> |
| | $\{x\} = [on, off]$ | <i>Return:</i> AUTOCEC_M on <cr><lf></lf></cr> |
| Query Auto CEC Mode | GET AUTOCEC_M | Command: GET AUTOCEC_M <cr><lf></lf></cr> |
| Status | | <i>Return:</i> AUTOCEC_M on <cr><lf></lf></cr> |
| Reset Auto CEC Mode to | RESET AUTOCEC_M | Command: RESET AUTOCEC_M <cr><lf></lf></cr> |
| Factory Default (Default is ON) | | <i>Return:</i> AUTOCEC_M on <cr><lf></lf></cr> |
| Set CEC Power OFF Delay | SET AUTOCEC_D { t } | Command: SET AUTOCEC_D 5 <cr><lf></lf></cr> |
| Time | $\{t\} = [1-60]$ | <i>Return:</i> AUTOCEC_D 5 <cr><lf></lf></cr> |
| | Note: Maximum delay time is 60 minutes | |
| Query CEC Power OFF Delay | GET AUTOCEC_D | Command: GET AUTOCEC_D <cr><lf></lf></cr> |
| Time | | <i>Return:</i> AUTOCEC_D 5 <cr><lf></lf></cr> |
| Reset Auto CEC Delay Time | RESET AUTOCEC_D | Command: RESET AUTOCEC_D <cr><lf></lf></cr> |
| to Factory Default (Default is 3 minutes) | | Return: AUTOCEC_D 3 <cr><lf></lf></cr> |



RS232 Control and Configuration

An RS232 enabled displays ON and OFF status can be controlled by the DL-3H1U-WP-W via RS232 from the DL-HD2-RX by pressing the DISPLAY button on the DL-3H1U-WP-W.

To turn the display ON using RS232, simply quick press the DISPLAY button on the DL-3H1U-WP-W; to turn display OFF simply long press the DISPLAY button on the DL-3H1U-WP-W for 3-5 seconds.

RS232 ON command can also be automatically sent to a display when an active video source is connected to the DL-3H1U-WP-W. When using auto RS232 on / off control of a display, use the RS232 delay commands to determine the time when the display will be turned OFF when no video signals are present in the DL-3H1U-WP-W.

For example if the delay time is set to 3 minutes, the RS232 enabled display will turn off when there is no present video signal in the switcher / extender for 3 minutes. By default the auto RS232 control is on and the default delay time is set to 5 minutes.

Use the commands below to adjust the settings for RS232 control, be sure to consult the displays owners manual for the correct RS232 settings and commands so RS232 control can be generated by the DL-HD2-RX receiver.

| Description | Command | Example |
|--|--|---|
| Auto RS232 On/Off | SET AUTOUART_M {x} | Command: SET AUTOUART_M on <cr><lf></lf></cr> |
| | $\{x\} = [on, off]$ | Return: AUTOUART_M on <cr><lf></lf></cr> |
| Query Auto RS232 Mode Status | GET AUTOUART_M | Command: GET AUTOUART_M <cr><lf></lf></cr> |
| | | <i>Return:</i> AUTOUART_M on <cr><lf></lf></cr> |
| Reset Auto RS232 Mode to | RESET AUTOUART_M | Command: RESET AUTOUART_M <cr><lf></lf></cr> |
| Factory Default (Default is ON) | | <i>Return:</i> AUTOUART_M on <cr><lf></lf></cr> |
| Set RS232 Power OFF Delay | SET AUTOUART_D {t} | Command: SET AUTOUART_D 10 <cr><lf></lf></cr> |
| Time | $\{t\} = [1-60]$ | <i>Return:</i> AUTOUART_D 10 <cr><lf></lf></cr> |
| | Note: Maximum delay time is 60 minutes | |
| Query RS232 Power OFF Delay | GET AUTOUART_D | Command: GET AUTOUART_D <cr><lf></lf></cr> |
| Time | | Return: AUTOUART_D 10 <cr><lf></lf></cr> |
| Reset Auto RS232 Delay Time | RESET AUTOUART_D | Command: RESET AUTOUART_D <cr><lf></lf></cr> |
| to Factory Default (Default is 3 minutes) | | <i>Return:</i> AUTOUART_D 5 <cr><lf></lf></cr> |



| Description | Command | Example |
|---|---|---|
| Set RS232 Port Baud Rate | SET UART_B {b} | Command: SET UART_B 9600 <cr><lf></lf></cr> |
| | {b} = [9600] [19200] [38400] [57600] [115200] | <i>Return:</i> UART_B 9600 <cr><lf></lf></cr> |
| Query RS232 Port Baud | GET UART_B | Command: GET UART_B <cr><lf></lf></cr> |
| Кате | | <i>Return:</i> UART_B 9600 <cr><lf></lf></cr> |
| Reset RS232 Port Baud Rate | RESET UART_B | Command: RESET UART_B <cr><lf></lf></cr> |
| (Default is 115200) | | Return: UART_B 115200 <cr><lf></lf></cr> |
| Set RS232 End Character | SET UART_E {e} | Command: SET UART_E cr <cr><lf></lf></cr> |
| | <pre>{e} = [null] [cr] [lf] [crlf]</pre> | <i>Return:</i> UART_E cr <cr><lf></lf></cr> |
| Get RS232 End Character | GET UART_E | Command: GET UART_E <cr><lf></lf></cr> |
| | | <i>Return:</i> UART_E cr <cr><lf></lf></cr> |
| Reset RS232 End Character | RESET UART_E | Command: RESET UART_E <cr><lf></lf></cr> |
| to Factory Default (Default is crlf) | | <i>Return:</i> UART_E crlf <cr><lf></lf></cr> |

RS232 Control and Configuration....continued



RS232 Control and Configuration....continued

| Description | Command | Example |
|---|--|---|
| Edit RS232 Display On / | SET UART_STR {p} 1 {s} | Command: |
| Off ASCII String (Up to 64 Characters) | <pre>{p} = [poweron, poweroff] {s} = [xxxx]</pre> | SET UART_STR poweron 1 xxxx <cr><lf></lf></cr> |
| | xxxx = TV displays ON or OFF string command (issued by TV display manufacturer) | SET UART_STR poweron 1 xxxx <cr><lf></lf></cr> |
| Edit RS232 Display On / | SET UART_HEX {p} 1 {h} | Command: |
| Off HEX Code (Up to 64 Characters) | <pre>{p} = [poweron, poweroff]</pre> | SET UART_HEX poweron 1 xx xx <cr><lf></lf></cr> |
| | $\{h\} = [xx xx]$ | Return: |
| | xx xx = TV displays ON or OFF string command (issued by TV display manufacturer) | UART_HEX POWERON 1 xx xx <cr><lf></lf></cr> |
| Query the RS232 Stored | GET UART_STR {p} 1 | Command: |
| Display On / Off Command String | <pre>{p} = [poweron, poweroff]</pre> | GET UART_STR poweron 1 <cr><lf></lf></cr> |
| | | Return: |
| | | UART_STR poweron 1 xxxx <cr><lf></lf></cr> |

System / Factory Default

| Description | Command | Response |
|----------------------|----------------|---|
| Query Device Version | GET SW_VERSION | Command: GET SW_VERSION <cr><lf></lf></cr> |
| | | Return: |
| | | HDBaseT2.0 Wall Plate V1.8 <cr><lf></lf></cr> |
| Factory Reset | RESET | Command: RESET <cr><lf></lf></cr> |
| | | Return: RESET <cr><lf></lf></cr> |



Technical Specifications

| Video | | | | |
|-----------------------------|---|--|--|--|
| Video Inputs | (3) HDMI | | | |
| Video Input Connector | (3) HDMI type A | | | |
| Input Video Signal | HDMI | | | |
| Output Video Signal | HDBaseT 2.0 | | | |
| Input Resolutions Supported | HDMI: 4096 x 2160@24/30/60 (YUV4:2:0); 3840 x 2160@24/30/60 (YUV4:2:0); 2560 x 1600@60; 2560 x 1440@60; 1920 x 1200@60; 1920 x 1080@60; 1680 x 1050@60; 1600 x 1200@60; 1600 x 900@60; 1440 x 990@60; 1366 x 768@60; 1360 x 768; 1280 x 1024@60; 1280 x 960@60; 1280 x 800@60; 1280 x 768@60; 1280 x 720@60; 1024 x 768@60; 800 x 600@60 | | | |
| | VGA : 1920x1080@60; 1920 x 1200@60; 1680 x 1050@60; 1600 x 1200@60; 1600 x 900@60; 1440 x 900@60; 1360 x 768@60; 1280 x 1024@60; 1280 x 960@60; 1280 x 800@60; 1280 x 720@60; 1024 x 768@60; 800 x 600@60 | | | |
| Standards | Compliant with HDMI 2.0 & HDCP 2.2 | | | |
| USB | | | | |
| Supported USB Standard | Up to USB 2.0 High Speed up to 190Mbps | | | |
| USB Port Type | USB A | | | |
| Audio | | | | |
| Supported input formats | HDMI: PCM 2.0, LPCM 5.1, LPCM 7.1, Dolby TrueHD, DTS-HD Master Audio Unbalanced 3.5.mm: Stereo | | | |
| Audio Input | (1) Unbalanced stereo 3.5mm (VGA)(1) Unbalanced stereo 3.5mm (pass through) | | | |
| General | | | | |
| System Bandwidth | 10.2Gbps | | | |
| Transmission Distance | 100m or less when using Cat6A F/UTP, 70m or less when using Cat6 F/UTP | | | |
| Operating Temperature | 0 ~ +45 C (32 F to +113 F) | | | |
| Storage Temperature | -20- +70 C (-4- +158 F) | | | |
| Humidity | 10% ~ 90% | | | |
| Power Supply | DC12V / PoH | | | |
| Power Consumption | 7 watts (maximum) | | | |
| Dimension (W*H*D) | 106mm*91mm*36mm / 4.1"*3.6"*1.4" | | | |
| Weight | 0.18kg, .4 lbs | | | |
| Warranty | 5 years | | | |
| Certification | CE, FCC, RoHS | | | |



Thank you for your purchase.

For Technical Support please call our toll free number at 800-530-8998 or email us at supportlibav@libav.com

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