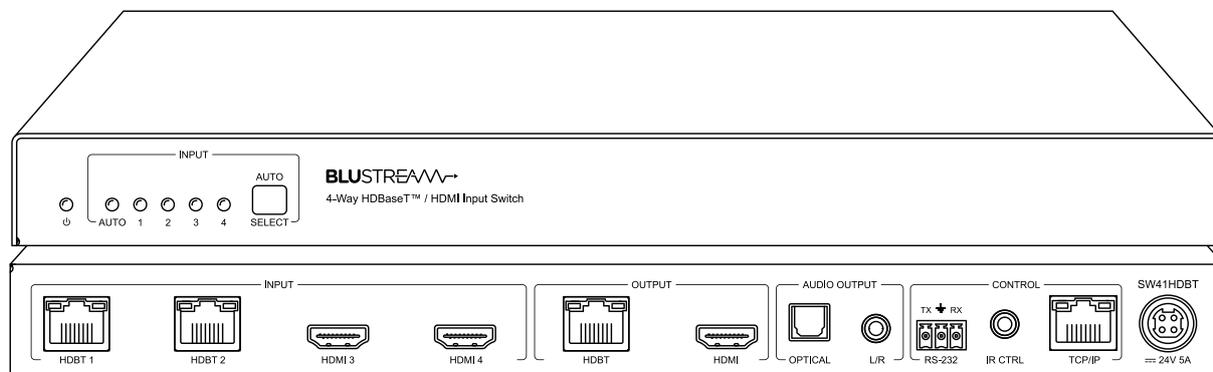


# SW41HDBT

## Quick Reference Guide



## Introduction

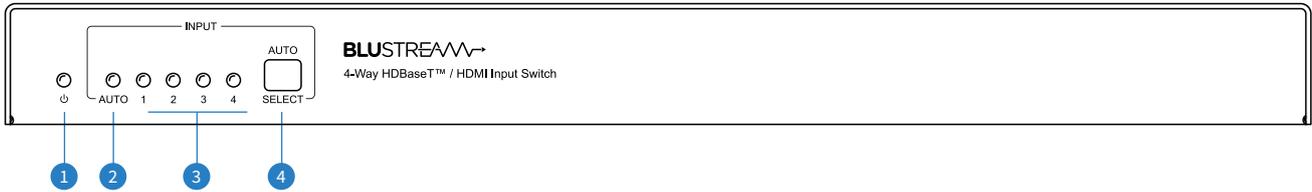
Our SW41HDBT is a 4-Way HDMI 2.0 4K 60Hz 4:4:4 HDBaseT™ switch utilising CSC technology to deliver HDMI and HDBaseT™ inputs to simultaneous HDMI / HDBaseT™ output. The SW41HDBT provides enhanced features including PoC to power Blustream transmitter and receiver products, Web GUI for control and configuration, source and display control via CEC, manual or automated source selection, RS-232 pass-through and control via front panel, IR, RS-232 and TCP/IP. The SW41HDBT is an ideal product for your boardroom, classroom or huddle-space application when used with our Blustream HDBaseT™ wall-plate solutions.

### FEATURES:

- Features 2 x HDMI 2.0 and 2 x HDBaseT™ inputs which can be switched to simultaneous HDBaseT™ and HDMI outputs
- Advanced HDBaseT™ technology offering distribution of video and audio over a single CAT cable
- Advanced Colour Space Conversion (CSC) supports HDMI 2.0 18Gbps specification including HDR
- Automatic downscaling of up to 4K 60Hz 4:4:4 video input to 4K 30Hz 4:4:4/4K 60Hz 4:2:0 or 1080p on HDBaseT™
- HDBaseT™ input supports 4K UHD video up to 40m (3840 x 2160 @30Hz 4:4:4, 4096 x 2160 @24Hz 4:4:4, and 4K @60Hz 4:2:0), HDBaseT™ output supports 4K UHD video up to 40m (3840 x 2160 @60Hz 4:4:4) with compatible CSC receiver\*
- Extends HDMI 1080p up to a distance of 70m from transmitter to SW41HDBT and up to 70m from SW41HDBT to receiver
- Supports all known HDMI audio formats including Dolby TrueHD, Dolby Atmos, Dolby Digital Plus and DTS-HD Master Audio transmission
- Supports PoC when used with compatible 12V HDBaseT™ transmitters and receivers\*
- Compatible with all Blustream HDBaseT™ transmitters and receivers\*
- Audio breakout to analogue L/R audio and Toslink (S/PDIF) digital outputs concurrently
- Web interface module for control and configuration of switch
- Manual or auto source selection with control via front panel, IR, RS-232 and TCP/IP
- Auto source selection supported by compatible Blustream HDBaseT™ transmitters only\*
- HDCP 2.2 compliant with advanced EDID management

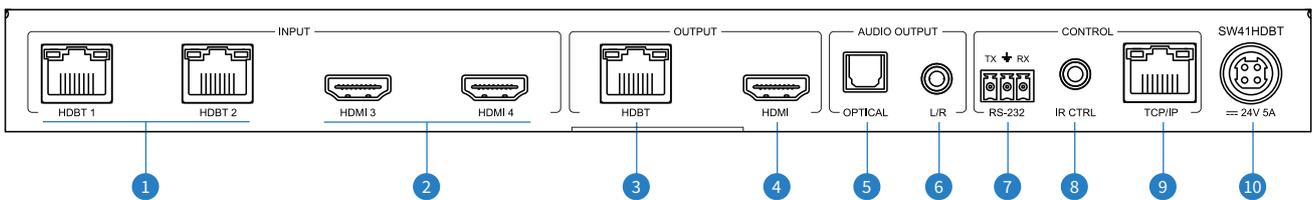
\*Technical performance is subject to the features supported on the connected HDBaseT™ transmitter / receiver. Please see Blustream website or documentation for a list of compatible products.

## Panel Description - Front Panel



- 1 Power status indicator
- 2 Auto signal sense switching enabled indicator
- 3 Input signal selection indicators
- 4 Auto / Select button - short press to manually change between inputs (1 - 4), long press to enable / disable auto signal sense switching

## Panel Description - Rear Panel



- 1 HDBaseT™ Inputs (1-2) - connect to Blustream HDBaseT™ transmitters
- 2 HDMI Inputs (3-4) - connect to source device
- 3 HDBaseT™ Output - connect to Blustream HDBaseT™ receiver for remote display equipment
- 4 HDMI Output - connect to local display equipment
- 5 Optical Audio Output - de-embedded audio from selected input
- 6 Analogue Audio Output - 3.5mm stereo jack, de-embedded audio from the selected input. Source input must be PCM 2 channel audio only
- 7 RS-232 - 3-pin phoenix connector for RS-232 pass-through, or switching inputs
- 8 IR CTRL - connect to Blustream 5V 3.5mm IR receiver, or 3rd party control processor via IR-CAB cable for control of switching
- 9 TCP/IP (RJ45) – connect to LAN for Web GUI or TCP/IP control
- 10 Power Port – use included 24V/5A DC adaptor to power the unit

## Web GUI Control

The SW41HDBT features an in-built Web GUI which can be used for control and configuration of the product.

Default **Username** is: [blustream](#)      Default **Password** is: [1234](#)      Default **IP Address** is: [192.168.0.200](#)

For further information please see the SW41HDBT User Manual - available to download from the Blustream website.

## HDBaseT™ Distance / Connection Guide

The SW41HDBT has been designed to be used in projects where source devices are not all centrally located, allowing for these remote signals to be brought to a central location, and further distributed out to either a local display (via HDMI), or to a remote location e.g. a projector (via HDBaseT™)

- **The HDBaseT™ inputs** support up to a maximum distance of 70m at 1080p (40m at 4K 60Hz 4:2:0 8-bit) between a Blustream transmitter (connected to the source) and the SW41HDBT.
- **The HDBaseT™ output** supports up to a distance of 70m at 1080p (40m at 4K 60Hz 4:4:4 8-bit) between the SW41HDBT and a Blustream HDBaseT™ receiver (connected to the display).

Due care and attention must be taken to the quality of CAT cabling used when pushing both input and output HDBaseT™ distances with this product to ensure a stable signal path from source to sink where multiple HDBaseT™ runs are used inline.

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## Auto Switching / Signal Sensing

The SW41HDBT can automatically switch input sources when a signal is connected or disconnected either via TMDS or 5V from the source device. It is designed to work with all Blustream HDBaseT™ transmitters however when using the HEX31WP-TX wall plate, special consideration must be taken.

As both the SW41HDBT and HEX31WP-TX have the ability to automatically switch sources connected to them, if both units are set to auto-switch mode, the HEX31WP-TX auto-switch mode will have priority and in turn will trigger the SW41HDBT when a source is connected or active source is disconnected from it (if the source is inactive on the HEX31WP-TX, disconnecting it will not affect auto switching).

The HEX31WP-TX must also have the following command sent to it via RS-232 or Telnet to support auto-switching to the SW41HDBT: `TRGPOCPWR`

Please refer to the Blustream manual of the SW41HDBT or HEX31WP-TX for further information, available on the Blustream website.

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## EDID Control

EDID (Extended Display Identification Data) is a data structure that is used between a display and a source to negotiate the best audio and video resolutions that are supported within the system. The default EDID setting for the SW41HDBT is 1080p with 2 channel audio. EDID selection for the SW41HDBT can be configured either via the Web GUI or using IP / RS-232 API commands.

Please refer to the SW41HDBT User Manual - available to download from the Blustream website.

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## RS-232 Configuration & Control

The RS-232 port is used for configuration / control of the product, as well as pass through of RS-232 commands between the serial ports of the Blustream HDBaseT™ transmitters or receiver. The default RS-232 communication settings are:

**Baud Rate:** 57600

**Data Bit:** 8

**Stop Bit:** 1

**Parity Bit:** none

For the complete RS-232 and TCP/IP command list please see the SW41HDBT User Manual - available to download from the Blustream website.

## Specification

- **Video Input Connectors:** 2 x HDMI Type A, 19-pin female, 2 x HDBaseT™ RJ45 connector
- **Video Output Connectors:** 1 x HDBaseT™ RJ45 connector, 1 x HDMI female, Type A
- **Audio Output Connectors:** 1 x optical Toslink (S/PDIF), 1 x 3.5mm analogue audio jack
- **RS-232 Serial Port:** 1 x 3-pin Phoenix connector
- **TCP/IP Control:** 1 x RJ45 female
- **IR Input Ports:** 1 x 3.5mm stereo jack
- **Product Upgrade:** 1 x USB Type A, female
- **Power Input:** 1 x 24V/5A DC 4-pin DIN Connector
- **Casing Dimensions (W x H x D):** 305mm x 28mm x 220mm
- **Operating Temperature:** 32°F to 104°F (-5°C to +55°C)
- **Storage Temperature:** -4°F to 140°F (-25°C to +70°C)
- **Shipping Weight:** 3.0Kg

## Package Contents

- 1 x SW41HDBT
- 1 x 24V/5A DC Power Supply
- 1 x IR Receiver
- 1 x IR Control Cable - 3.5mm - 3.5mm
- 1 x RS-232 Control Cable
- 1 x Mounting Kit
- 1 x Quick Reference Guide

**NOTE:** Specifications are subject to change without notice.  
Weights and dimensions are approximate.

## Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

## Certifications

### FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**CAUTION** - changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### CANADA, INDUSTRY CANADA (IC) NOTICES

This Class B digital apparatus complies with Canadian ICES-003.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

### CORRECT DISPOSAL OF THIS PRODUCT

This marking indicates that this product should not be disposed with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.

**Contact:** support@blustream.com.au | support@blustream-us.com | support@blustream.co.uk