EXP-EX-HDBT-50

WyreStorm Express™ HDBaseT 4K Extender with Two-way IR Control to 25m/82ft (1080p to 50m/164ft)

Instruction Manual

Thank you for choosing this WyreStorm Express product.
Please read these instructions carefully before installing to avoid complications later.

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Introduction

The WyreStorm Express™ EXP-EX-HDBT-50 extender features Class B HDBaseT technology for an even more affordable HDBaseT extender solution over shorter distances up to 25m/82ft for 4K or 50m/164ft for 1080p transmissions.

Designed for smaller projects that may not require the feature set of full Class A HDBaseT yet still benefit from the signal stability and functions offered by this powerful technology, the EXP-EX-HDBT-50 extender comprises of a transmitter and receiver to distribute full, uncompressed HD and UHD video, HD multichannel audio with bidirectional IR control over distances of up to 25m/82ft for 4K or 50m/164ft for 1080p using a single shielded or unshielded Cat5e/6 cable.

The EXP-EX-HDBT-50 transmitter includes EDID management to manually handle device communication via DIP switch setting, with receivers containing cable distance setting mode to encourage successful transmission if the distance of the cable run is an issue.

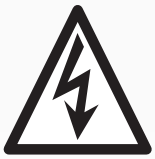
Both transmitters and receivers feature protection against ESD (electrostatic discharge) to further stabilize transmission with LED indication on the unit housing providing clear confirmation of power and signal link status.

The WyreStorm Express™ EXP-EX-HDBT-50 is also fully cascadable with distribution increased by connecting multiple extenders for greater flexibility, whatever the application.

Features

- HDBaseT single Cat5e/6 extenders capable of:
  - 1080p HD @60Hz up to 50m/164ft
  - UHD 4K @30Hz up to 25m/82ft
  - HD multichannel audio
  - Two-way IR control
- EDID Management - manually handles communication between connected devices for improved compatibility
- Supports 3D applications - frame packing/ sequential (Blu-ray) and Interlaced Stereoscopic (satellite/cable) broadcasts
- Supports 36bit Deep Color @1080p, 24bit True Color @ 4K
- Cable termination follows IEEE-568B standards
- Automatically adjusts feedback, equalisation and amplification of signal for easy installation.
- LED indication for visual power and HDMI / HDBaseT video signal status.

Safety Precautions



WARNING
To reduce the risk of fire, electric shock or product damage:

1. Do not expose this apparatus to rain, moisture, sprays, drips or splashes and ensure that no objects containing liquids are placed on the apparatus, including cups, glasses and vases.

2. Do not place this unit in a confined space such as enclosed shelving, cabinets or bookshelves. Ensure the unit is adequately ventilated.

3. To prevent the risk of electric shock or fire hazard due to overheating, do not cover the unit or obstruct ventilation openings with material, newspaper, cardboard or anything that may restrict airflow into the unit.

4. Do not install near external heat sources such as radiators, heat registers, boilers or any device that produces heat such as amplifiers or computers and do not place near sources of naked flame.

5. Unplug apparatus from power supply during lightening storms or when unused for long periods of time.

6. Protect the power cable from being walked on, pinched or restricted in any way, especially at plug connections.

7. Only use attachments/accessories specified by the manufacturer.

8. Units contain non-servicable parts - Refer all servicing to qualified service personnel.

Package Contents

- 1 x WyreStorm EXP-EX-HDBT-50 Transmitter
- 1 x WyreStorm EXP-EX-HDBT-50 Receiver
- 1 x Printed Quickstart guide*
- 2 x pairs of mounting brackets
- 2 x 5V DC power supply
- 2 x IR emitter for IR control of source device from display zone
- 2 x IR receiver to receive IR control signals at display.
- (IR frequency range: 940nm IR Frequency: 38-56KHz

Specification

Dimensions (W x H x D)	120mm x 24mm x 101mm /4.72” x 0.94 x 3.97”
Weight	0.36kg / 0.79lb (Each)
Operating Temperature Range	-5 to +35°C (-41 to +95 °F)
Operating Humidity Range	5 to 90 % RH (no condensation)
Video Amplifier Bandwidth	6.75Gbps
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p TTL
Maximum Single Link Range	1920x1200p 36bit Color / 4096x2160p 24bit Color
Transmission distance	50m / 164ft (max.) @ 1920x1200p
Video Format Supported	VESA: 640x480, 800x600, 1024x768, 1280x1024, 1600x1200, 1920x1080,1920x1200, 4096x2160p (DCI), 3840x2160p (UHD) DTV/HDTV: 480i/576i/480p/576p/720p/1080i/1080p/4Kx2K
Output Video	HDMI 1.4+ HDCP (Display device mirrors source)
Audio Format Supported	Dolby TrueHD, DTS Master HD Multi-channel 7.1 / 5.1 Stereo audio (PCM only)
Power Supply	5V DC - from mains
Power Consumption	5 Watts (max.)
BTU Rating (British Thermal Unit)	25.59

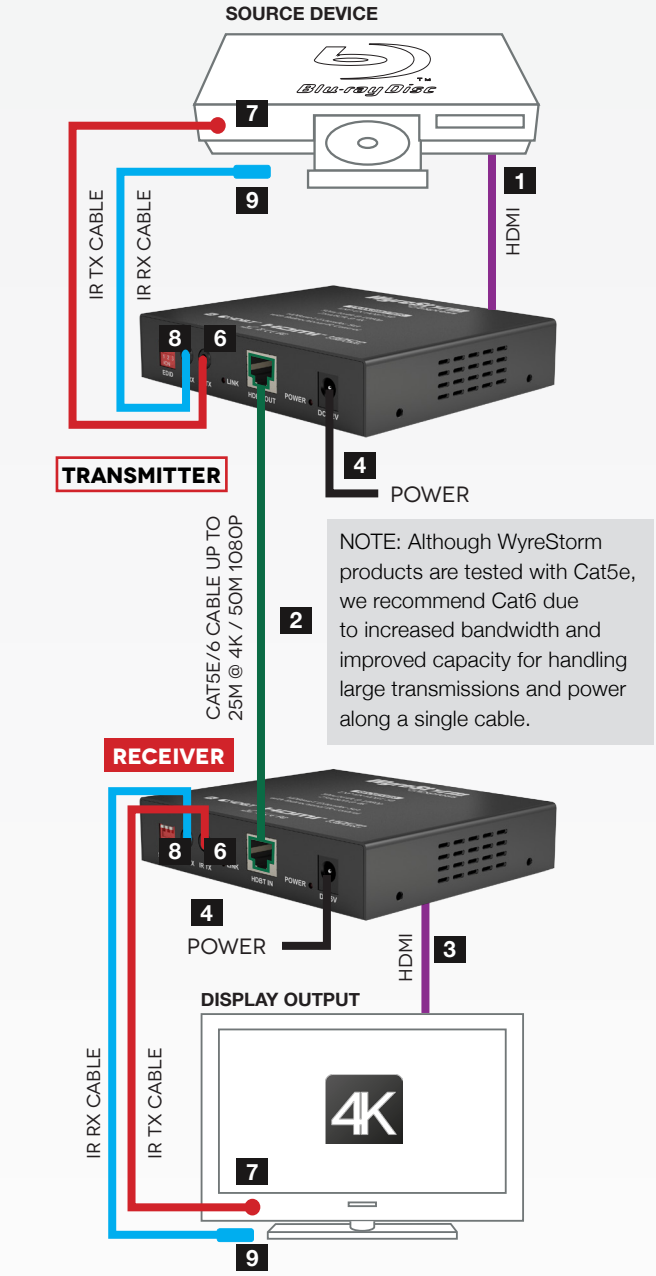
Panel Description - Transmitter

1. EDID management – see Transmitter EDID Settings for details (section 9)
2. IR RX Input – 3.5mm IR Receiver placed at display location to remotely control the source device.
3. IR TX Output – 3.5mm IR Transmitter connecting to source device for control from display location.
4. Signal LINK status – LED lit when signal detected
5. HDBaseT OUTPUT
6. Power indication – LED lit when powered
7. 5v Power Input
8. Ground Point
9. HDMI INPUT
10. HDMI connection - lit when connection to device detected

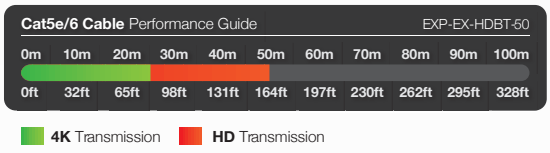
Panel Description - Receiver

1. Distance SETTING - see Receiver distance Settings for details (section 9)
2. IR RX Input – 3.5mm IR Receiver placed at display location to remotely control the source device.
3. IR TX Output – 3.5mm IR Transmitter connecting to source device for control from display location.
4. Signal LINK status – LED lit when signal detected
5. HDBaseT INPUT
6. Power indication – LED lit when powered
7. 5v Power Input
8. Ground Point
9. HDMI OUTPUT
10. HDMI connection - lit when connection to device detected

Typical Application



NOTE: Although WyreStorm products are tested with Cat5e, we recommend Cat6 due to increased bandwidth and improved capacity for handling large transmissions and power along a single cable.



Connection & Operation

The maximum transmission distance for this model is 4K: 25m/82ft or 1080p: 50m/164ft and denotes recommended transmission conditions - straight cable runs with no electrical interference, bends, kinks, patch panels or wall outlets. If any of the above is a factor in your installation, transmission range may be affected – take care to avoid where possible.

We strongly recommend using supplied mounting brackets to secure the receiver to a flat surface behind/near the display device. Sudden movement of these devices could lead to loss of picture/sound if connections become loose or strained, resulting in unnecessary service call-backs.

If unsure of positioning, IR sensors can be located on devices by shining a flashlight onto the fascia of the device - the IR sensor should be identifiable as a small round sensor behind the panel. Consult your device manufacturer handbook if difficulties are experienced.

Setup and Operation

1 Using quality HDMI cables, connect an HDMI source (such as Blu-ray, games console, satellite/cable TV, media server etc.) to the HDMI IN of the transmitter.

2 Connect a good quality, well-terminated Cat5e/6 cable of no more than 50m/164ft in length between the HDBT OUT of the transmitter to the HDBT IN input of the receiver.

3 Connect the HDMI display device (LED/LCD display or projector) to the HDMI OUT of the receiver.

4 Connect the included 5v power supply to the EXP-EX-HDBT-50 transmitter and receiver and power on.

5 Check POWER & STATUS lights are illuminated and static on both units to indicate successful connection.

NOTE: If daisy-chaining extenders, repeat process for all transmitters and receivers used.

IR Control Connection

6 For two-way IR control of connected sources and displays from either location, first connect IR emitters to the IR TX ports of the transmitter and receiver.

7 Firmly attach the IR emitter eye directly over the infrared receiving sensors of the devices to be controlled (source at transmitter location, and display device at receiver location). Location of the emitter eye on the device may need to be adjusted later to achieve best IR performance.

8 Insert IR receivers into IR RX ports of the EXP-EX-HDBT-50 transmitter and receiver.

9 At both display and source locations, position the IR receiver on or near the device to be controlled, ensuring a clear line of sight to the remote handset used to control it.

Optional: For control system integration a WyreStorm IR Integration Cable (CAB-IR-LINK) should be used to connect the IR RX port of the transmitter and the control system.

EDID & Distance Setting

Distribution of HD signals through devices requires mutual communication or ‘handshake’ between source and display. If there is any disparity between the two, successful transmission becomes problematic.

EXP-EX-HDBT-50 extender sets comes equipped with EDID management on the Transmitter to encourage communication between INPUT and OUTPUT devices and Distance SETTINGS on the Receiver to toggle Long Cable mode ON/OFF should the length of the cable run impact transmission quality.

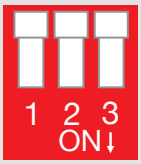
If compatibility or transmission issues arise during installation, check the settings on your connected devices and adjust the DIP settings as required.

! Changes to DIP settings become effective upon powering ON extender. Changes to settings should be made with all devices OFF, ideally with all power cables and HDMI leads and UTP cables removed to guard against electrostatic build up that may damage your system.

DO NOT HOTSWAP your cables when changing DIP SETTINGS.

! Make sure switches are set to DEFAULT for initial installation.

Remove all cables and power supply for switch changes to take effect. Switch settings become active on re-boot.

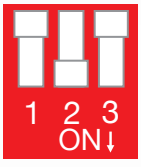


Transmitter
Default: EDID set to copy HDMI Output EDID

Receiver
Default: Long cable setting OFF

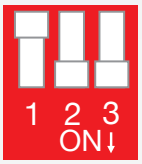
Transmitter
EDID set to 1080p Stereo - 3D

Receiver
Long cable setting on



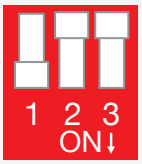
Transmitter
EDID set to 1080p 2ch Stereo - 2D

Receiver
Reserved for future use - no function



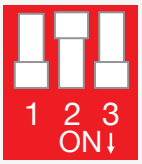
Transmitter
EDID set to 1080i 2ch Stereo - 2D

Receiver
Reserved for future use - no function



Transmitter
EDID set to 1080p 5.1 - 2D

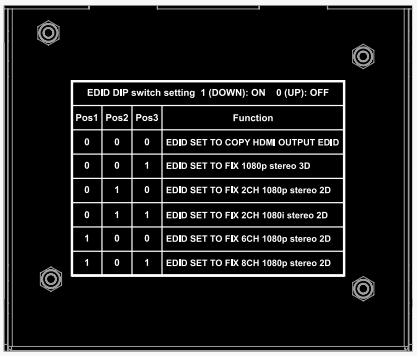
Receiver
Reserved for future use - no function



Transmitter
EDID set to 1080p 7.1 - 2D

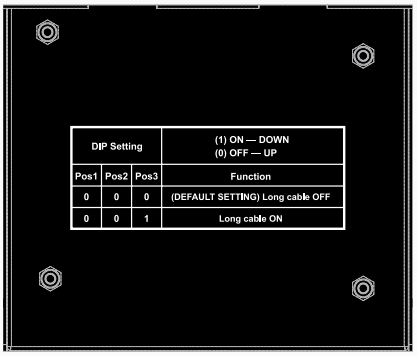
Receiver
Reserved for future use - no function

Transmitter



EDID DIP switch setting 1 (DOWN): ON 0 (UP): OFF			
Pos1	Pos2	Pos3	Function
0	0	0	EDID SET TO COPY HDMI OUTPUT EDID
0	0	1	EDID SET TO FIX 1080p stereo 3D
0	1	0	EDID SET TO FIX 2CH 1080p stereo 2D
0	1	1	EDID SET TO FIX 2CH 1080i stereo 2D
1	0	0	EDID SET TO FIX 6CH 1080p stereo 2D
1	0	1	EDID SET TO FIX 8CH 1080p stereo 2D

Receiver



DIP Setting			(1) ON — DOWN (0) OFF — UP
Pos1	Pos2	Pos3	Function
0	0	0	(DEFAULT SETTING) Long cable OFF
0	0	1	Long cable ON

NOTE: For ease of installation and convenience on site, we have printed the DIP SETTINGS for both Transmitter and Receiver on the base of the units.

Troubleshooting

Generally, the majority of AV distribution installation issues are either caused by minor connection errors, communication problems between devices, or when the transmission of high signal bandwidth is attempted using insufficient cable. Should you encounter any technical difficulties when installing

and configuring the matrix, we are confident solutions can be found by working through the following troubleshooting checklist before seeking alternative technical support.

No Picture or Poor Quality Picture

1) Power – is your Transmitter and Receiver powered with correct LED indication?
The EXP-EX-HDBT-50 Transmitter and Receiver needs to be locally powered - Please use power supply included.

2) If possible, always use test equipment prior to installation and to troubleshoot any problems.

3) Check display device supports HDCP, is switched to the correct source input mode and is compatible with the receiver - if any issue is suspected, replace display device with another model.

4) Distance - Is the cable too long for the signal to be transmitted effectively? The HDBaseT classification used within EXP-EX-HDBT-50 allow transmission of 4K up to 25m/82ft and 1080p up to 50m/164ftft.
Ensure the cable distance matches the project requirements and is well within the maximum transmission distance of the signal.

Note: If approaching the limits of the transmission capabilities, transmission should be extended by using another extender set to ensure the signal reaches its destination effectively.

5) Cable Joins - Joins in the cable run or RJ45 connectors can impact on signal strength, resulting in reduced transmission that may manifest itself in incorrect picture quality, picture dropping out or a complete lack of picture

6) Cable Choice and Signal Reduction – Are stranded patch leads being used as interconnects between patch panels or wall outlets? CCA (Copper Clad aluminium) cables being used? These can reduce transmission rates by up to 40% – we recommend solid core straight through with minimum connections used wherever possible.

7) Correct connection – It may seem obvious but double check all UTP, HDMI, power and IR cables are connected to the correct ports.

Note: Even a fraction off can be the difference between a perfect picture and a blank screen. Double check all connections are firmly made in the correct ports.

8) Check LED indication on Receiver for confirmed operation. Are LEDs on and/or behaving properly (static or blinking - see Panel Description for details on LED indication). If LEDs are not correctly lit, connections, cable/terminations, interference , distance etc. should be investigated. Swap cables out if necessary.

9) Cable wired to 568B standard? Is the cable wired and terminated correctly and are those terminations connected to the correct ports? Incorrect wiring and termination will result in unstable operation or a blank screen.

10) Electrical interference – HDBaseT is less susceptible to interference compared to regular transmissions but the location of cables and devices should be considered - could any form of interference be generated? If so, attempt to remove the source of electrical interference or move the cable run to decrease the effects of the interference.

11) Is a picture achieved when connecting the source directly to the display? If not then the problem could lie with the input or output device rather than the means of distribution i.e. the display rather than cable, transmission device or receiver itself.

12) HDMI lead condition and quality – HDMI cables and connectors are delicate and can be damaged much easier than component or coax cable. Furthermore, lead quality varies dramatically, particularly in lower price brackets. Swap HDMI leads and check operation – damage to or quality of your leads could be the problem. If in doubt, swap them over. Always take care inserting and extracting your HDMI from matrix ports so as not to damage the connectors or ports.

13) Picture speckles/HD 'noise' – represents a poorly established signal that may be caused by poor quality or excessive HDMI cable lengths. To rule out equipment fault, if you have more than one extender set, try swapping transmitters and receivers from a location functioning properly. If the problem remains on the same screen this may be caused by a connection problem between source, transmitter, receiver or display - turn off all equipment and swap the signal carrying cables at both ends to ascertain if the cable or termination is at fault.

HD Noise (NO image) may be an HDCP Issue between the source and display but poor cabling can also cause this due to poor communication.

14) Blu-ray: 3D – is the equipment used 3D enabled/ compatible? Is a 3D disc being played in a 3D enabled Blu-ray player or through a compatible AV receiver?

15) 4K - Are you trying to pass a 4K signal? Ensure connected devices are 4K enabled, correctly configured and outputting compatible transmissions.

4K resolution - ensure all connected devices are compatible with the UHD or DCI resolutions being transmitted. See Specification section for more details
1080p - 1920x1080p, 60Hz (if problems are experienced at 60Hz, try lowering to 50Hz)

Combined 4K / HD distributions - a WyreStorm EXP-SCL-DAC-4K scaler may be required between receiver and display to scale down 4K transmissions to 1080p 24fps for HD screens and upscale 1080p to 4K 30Hz for UHD displays

16) Colour distortion – a pink or green screen indicates an incompatibility between colour spacing formats – the commonly used RGB or YUV used by older displays. Some sources allow switching between RGB and YUV which may solve any colour problems. If not, try changing the HDMI cable between the source and the matrix to rule out defective cabling.

No Sound or Poor Quality Audio

Audio is transmitted within the video signal – there is no separate audio track – so generally a problem with sound will be accompanied by a problem with picture. However, if technical issues with audio are experienced, the cause is typically communication between sources, displays and/or AV receiver settings.

1) Have specific speaker sets or zones been enabled? Some AV receivers allow individual speaker selections assigned to specific zones in the set up so check the speakers used are fully connected to the amplifier and correctly assigned within the system set up. It may be an EDID issue in that the source reads the audio EDID from the display and only requests two channel audio.

The EXP-EX-HDBT-50 features automatic internal handling of EDID between devices so in EDID disparity cases, inclusion of a compatible device enabling manual EDID management to copy EDID from the AVR may be required. Contact WyreStorm Tech Support for assistance.

Note: If problems are experienced when an AV receiver is used, the cause is usually the settings of the AVR itself. Refer to the AVR manufacturer's guidelines on the correct settings to use for your requirements.

2) Consistency of audio output between devices – Is there any discrepancy between the audio output of the source, the audio or zonal settings of the AV receiver and the speaker configuration used needed for successful audio replication? If outputting 7.1, make sure all devices connected are also outputting 7.1

Note: Occasionally with some sources, the device settings allow the specification of audio output through a TV or an HDMI port. If using an AV receiver, check the HDMI output option is selected.

3) Do all the local sources work through the AV receiver?
Check the operation of each source individually.

Bandwidth

1) If using a graphics-based source (such as a PC/Mac/ media server), make sure the source resolution is correctly set to the maximum capabilities of the devices:

4K - Supported screen resolutions - consult the Specification section of this manual for details on supported UHD and HD resolutions.

Higher resolutions available for graphics-based systems require higher bandwidth that may affect transmission of signals as well as incompatibility with devices.

IR

1) Check emitters at the IR TX transmitter end and receivers at the IR RX receiver end – are they connected to the correct ports on each unit.

2) Is the emitter correctly positioned on the source?
Fix the emitter directly over the infrared sensor of the source and attach using the adhesive backing.
Note: Locate the infrared source sensor by using a flashlight to find the sensor within the fascia of the source display. If necessary, secure the emitter over the sensor with a small amount of contact adhesive.

3) Is the remote handset powered and sending a signal?

Note: IR is invisible to the naked eye, so use a digital camera/ phone camera to check the remote signal – point the camera at the remote control when pressing a button. The remote transmitter can be seen flashing to indicate a signal being sent. Replace batteries if flashing is not seen on the digital camera screen.

4) IR dropout issues can be due to exterior influences emitting infrared radiation that can interrupt IR signals. Ensure emitters and receivers are away from the following causes of IR interference.

- Direct sunlight, Fluorescent lighting (on cold start up)
- Halogen lighting
- Plasma screens

5) UTP Termination Issues – ensure cables and RJ45 terminations are correct and in good condition at both transmitter and receiver ends to see if control is established. If so, a possible re-termination of the cable could remedy the problem.

6) Are WyreStorm emitters and receivers being used? The use of third party products/magic eyes may not be compatible. Always use WyreStorm components included with your purchase or check compatibility of third party control systems with your WyreStorm dealer.

7) If problems persist, swap out the IR emitters and receivers to rule out faults with the units themselves. Use emitters you know are fully operational to test working condition.

9) Should IR remain unresponsive, turn off and disconnect all cables from the extenders and reconnect one at a time to assess if one device or location in particular is the problem.

If so, run new cables directly to the display – if this fixes the problem, it is likely that electromagnetic interference / damage to the cable somewhere along the run is causing the IR signal to drop out. Investigate and remove EM interference from the run or replace damaged UTP cable.

FAQ

Cat5e or 6?
While our equipment is tested and graded to Cat 5e cable standard; tests have shown that better results are achieved when using Cat6 cable.

The lower AWG (American Wire Gauge) uses thicker copper cores ensure better signal transfer/Transmission rates. Newly installed cabling should always conform to Part P Regulation and BS 7671 (17th Edition), and should be terminated to 568B standard.

Can I use a single Cat 5e/Cat 6 cable?
Although conventional transmission used to be considered two Cat5e cables for video, audio and control, HDBaseT transmission only requires a single cable.

All features found with dual cable transmissions are supported with HDBaseT, with addition of RS232 serial control, Power and Ethernet passed along a single Cat5e/6/7, depending on feature set/model of product

How far can the signal travel?
Under recommended transmission conditions WyreStorm HDBaseT equipment can distribute to 100m (4K / 1080p) depending on the type of product and model used.

Recommended conditions denotes no electrical interference, straight cable runs with no bends or kinks and no patch panels or wall outlets. If some of the above are factors in your installation then signal strength and bandwidth can be compromised.

Should a cable run approach the upper limit of the receiver capabilities, the signal can be boosted by connecting to an another compatible extender set.

What about 3D?
All our matrix switches and the majority of our extender products will pass-through a 3D Blu-ray signal.

How do I control the sources?
All of our HDMI distribution products support IR pass-through from point-to-point extender sets to AMP and HDBaseT matrices. Most of the range now supports wideband IR meaning it is compatible with any IR device available on the market. Our PP and HDBaseT matrix range (Cat 5e/Cat6) has IR pass-through from each of the outputs and has discrete IR outputs at the switch end, meaning you can have multiple identical sources yet the IR would be routed only to the applicable source.

Do I need power at the TV end?
It depends on the WyreStorm device. Products with one-way PoH or PoE technology require local power at the Transmitter end to power the Receiver remotely, but products with two-way PoH or PoE can be locally powered at either the Transmitter OR Receiver ends,

depending on which location offers best power availability. Products without PoH or PoE technology require local 12v or 5v DC power at both ends for both units to operate. Check your instructions carefully for details.

Are WyreStorm products compatible with HDMI 1.4?
HDMI 1.4 refers to a list of 'features' that a device is capable of supporting, including Ethernet channel, return audio channel, 3Detc. Due to the continuously evolving nature of the technology, HDMI Licensing LLC have now decided to simplify terminology by testing and referring to cable in terms of STANDARD or HIGH-SPEED rather than in generations 1.3, 1.4 etc.
• STANDARD (or "category 1") HDMI cables perform at speeds of 75Mhz or up to 6.75Gbps, which is the equivalent to a 720p/1080i signal – These HDMI cables are NOT recommended.

• All WyreStorm equipment support HIGH-SPEED (or "category 2") HDMI cables that have been tested to perform at speeds of 340Mhz or up to 10.2Gbps, which is the highest bandwidth currently utilised over an HDMI cable and can successfully handle 1080p signals including those at increased colour depths and/or increased refresh rates from the Source. High-Speed cables are also able to accommodate higher resolution displays, such as WQXGA cinema monitors (resolution of 2560 x 1600).

What about screens with different resolution capabilities?
When sending a signal point to point a TV will communicate it's capabilities to the source, then the source will output a suitable signal that compatible (i.e. 1080p Stereo audio). If you were to use a matrix switch with three 1080p screens and one 1080i screen, the resultant image would be1080i across all screens. The matrix switches do not scale per output but instead negotiate with the source a signal that all screens are capable of supporting.

For combined 4K and 1080p HD distributions, a WyreStorm EXP-SCL-DAC-4K scaler between receiver and display is required to scale down 4K transmissions to 1080p 24fps for HD screens and upscale 1080p to 4K 30Hz for UHD displays.
See **wyrestorm.com** for more details

How does the Transmission device handle HDCP?
HDCP (High Definition Copyright Protection) is a feature built in to HDMI devices to prevent theft of or illegal distribution of HD content. Unlike competing products, WyreStorm equipment are legal and comply with HDCP regulations.

They do this by assigning a "key" to any display connected to the device. HDCP "keys" are assigned to a display when connected to a HDMI device normally. This doesn't change when connecting to an extender, receiver or matrix switch; rather keys are duplicated or more are assigned.

I can get 1080i but not 1080p, or 4K but not 1080p at a TV location
Firstly ensure that both the source is capable of outputting the higher resolution and that the TV supports that screen resolution.

If this is the case then the distribution device may require EDID management setting up using the DIP switches. This useful feature provides a successful "send and receive" to ensure swift and stable EDID negotiation between the source and display. See Troubleshooting section for more tips on problem solving. section for more tips on problem solving.

I cannot get a signal from my A/V receiver along a Cat 5e extender set
Check to ensure that the A/V Receiver isn't adding CEC (HDMI Control Protocol) to the outgoing signal, this can sometimes have an effect on the HDMI signal.

Maintenance

Clean this unit with a soft, dry cloth only. Never use alcohol, paint thinner or other harsh chemicals.

Provided Service

1. Damage requiring service: This unit should be serviced by a qualified service personnel if:
• The DC power supply or AC adaptor has been damaged.
• Objects or liquid have gotten into the unit.
• The unit has been exposed to rain.
• The unit does not operate normally or exhibits a marked change in performance.
• The unit has been dropped or the cabinet damaged.

2. Servicing Personnel: Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorised

servicing personnel.

3. Replacement Parts: When parts need replacing, ensure parts approved by the manufacturer are used – either those specified by the manufacturer or parts possessing the same characteristics as the original parts. Be aware – unauthorised substitutes may result in fire, electric shock, or other hazards and will invalidate your warranty.

4. Safety Check: After repairs or service, ask the service personnel to perform safety checks to confirm the unit is in proper working condition.

When shipping the unit, carefully pack and send it prepaid, with adequate insurance and preferably in the original packaging.

Please include a document or letter detailing the reason for return and include a daytime telephone number and/or email address where you can be contacted.

Mail-in-Service

If repair is required during the limited warranty period, the purchaser will be required to provide a sales receipt or other proof of purchase, indicating date and location of purchase as well as the price paid for the product. The customer will be charged for the repair of any unit received unless such information is provided.

Warranty

Should you feel your product does not function adequately due to defects in materials or workmanship, we (referred to as "the warrantor") will, for the length of the period indicated below (starting from the original date of purchase) either:

a) Repair the product with new or refurbished parts.
or
b) Replace it with a new or refurbished product.

Limited warranty period:
All WyreStorm products are covered by a 3 year PARTS and LABOUR warranty. During this period there will be no charge for unit repair, replacement of unit components or replacement of product if necessary.

The decision to repair or replace will be made by the warrantor. The purchaser must mail-in the product during the warranty period. This limited warranty only covers the product purchased as new and is extended to the original purchaser only. It is non-transferable to subsequent owners, even during the warranty period.
A purchase receipt or other proof of original purchase date is required for the limited warranty service.

Warranty Limits and Exclusions

1. This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship and DOES NOT COVER normal wear and tear or cosmetic damage.

The limited warranty also DOES NOT COVER damage that occurs in shipment or failures caused by products not supplied by the warrantor, failures resulting from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, incorrect installation, set-up adjustment, implementation of/to consumer controls, improper maintenance, power line surge, lightening damage, modification, service by anyone other than a manufacturer-approved service centre or factory-authorised personnel, or damage attributable to acts of God.

2. There are no express warranties except as listed under "limited warranty coverage." The warrantor is not liable for incidental or consequential damage resulting from the use of this product or arising out of any breach of this warranty.

For example: damages for lost time, the cost of having a person/persons remove or re-install previously installed equipment, travel to and from service location, loss of or damage to media, images, data or other recorded/stored content. The items listed here are not exclusive, but are for illustration only.

Parts and service not covered by this limited warranty are not the responsibility of the warrantor and should be considered the responsibility of the individual.

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WyreStorm reserves the right to change product specification, appearance or dimensions at any time.