



# SIGNAL EXTENSION

## SOLUTIONS GUIDE



# The WyreStorm Difference



## Your Multi-Technology, Cross-Market Specialists

We're a leading manufacturer of award-winning 4K and full HD AV signal distribution and control solutions for Pro AV/ commercial, residential/custom install and retail markets.

Specializing in providing innovative single-platform and hybrid solutions, WyreStorm products are developed to minimize system complexity and connectivity for increased ease of installation and reliability, while offering exceptional performance and functionality for the best value and end-user experience.



## Only Manufacturer Offering Clear, Unbiased Opinions and Advice

In an industry of bandwagon-jumping, self-promotion and exaggeration, we simply prefer to deal in fact so you'll never find us making a claim about our company or products that isn't technically accurate. We aim to demystify what can be at times be a confusing landscape with clear, impartial advice focused on dealer and end-user satisfaction to ensure the right technology is used and the right application achieved.



## Modular Product Architecture for Ultimate Install Options

Out-of-box doesn't fit all applications - build to your specification. The modular architecture of our matrix switchers and NetworkHD™ AV over IP products enable solutions to be perfectly tailored and effortlessly expanded to applications, no matter the size, budget, function or complexity of the project.



## Global Network of Offices, Sales Advisors & Support

With offices in the US, UK, India and the Middle East, our own R&D and production facilities in Asia, and an ever-growing network of distribution partners throughout the world, WyreStorm is ideally placed as a total solutions provider serving customers wherever they may be.



## Six Technology Platforms and Counting

When it comes to AV distribution, we believe there's no such thing as one size fits all. Our multi-platform approach to product design spans HDMI™, HDBaseT™, fiber, H.264, JPEG 2000, and SDVoE™. And with more technologies always on the horizon, we're all about giving the integrator the options they need to provide the best possible solution for their AV project.

# SIGNAL EXTENSION: AN EXTENSIVE RANGE OF SOLUTIONS FOR EVERY APPLICATION

WyreStorm continues to strive to be at the forefront of technology and meet consumer demands with the right product for the application and our wide range of extenders are no exception. Boasting features such as 18Gbps transmission over a single cat6 cable or fiber, a mixture of USB, Ethernet, control and PoH, our extenders have been engineered in a way to fit the demands in an existing system, as well as feature rich enough to serve as a stand-alone.

With ease of installation at their heart, WyreStorm's broad range of extenders ensure just that with their slim form factor design and plug & play setup. Coupled with an excellent build quality and warranty, WyreStorm's extenders create the ultimate in staying power and longevity.



2160p  
4:4:4 60

## SIGNAL INTEGRITY FROM SOURCE TO DISPLAY

Fact: Not all signal compression is the same. Most WyreStorm extenders can transmit 18Gbps HDMI content over conventional HDBaseT. We achieve this using our VLC (Variable Lossless Compression) technology which adds light compression at the point of transmission and re-builds the signal at the receiver without any visual degradation or artefacting.



## ENHANCED AUDIO WITH ARC

Free the audio from the on-demand content on your smart TV. The HDBaseT specification enables digital audio from a Smart TV to be sent back to the transmitter and broken out to an AVR or audio system. This has benefits for the installer as it means additional AVR switching commands aren't required thanks to the transparent ARC communication.



## FIBER REVOLUTION

WyreStorm products featuring fiber currently include a multimode fiber transmission card for the modular H2XC matrix switcher and receiver, extender set supporting transmissions up to 300m/984ft, and our line of Active Optical HDMI cables spanning from 2m to 50m distances.



## FULL SPEED USB DATA TRANSFER

Increasing the auxiliary channel within the HDBaseT™ link means that 190Mbps USB 2.0 data can be sent bidirectionally, at the same time as 4K video, audio, control and Ethernet. Not restricted to simple HID's like keyboard and mice, HDBaseT™ 2.0 can handle full HD webcams, interactive white boards and even USB flash drives.





**1080p HDMI-over-UTP Extender with IR and PoC  
(1080p: 40m/131ft)**

**EX-40-G3**

With the low-profile point-to-point EX-40-G3 extender set, it's never been easier to extend full 1080p HD video over a Cat5e cable; HD audio is also supported. Plus, IR source control and PoC (Power-over-Cable) all wrapped up in a compact chassis for unbeatable value, reliability and ease of installation.

- Transmits 1080p HDMI content over UTP to 40m/131ft
- PoC means receiver is powered via a single PSU at the transmitter
- IR pass-through RX>TX for source control
- Simple signal equalization via slider switch
- Slim 21mm chassis for discreet installation



**4K UHD HDBaseT Extender Set with HDCP 2.2 & 2-way PoH  
(4K: 35m/115ft | 1080p: 70m/230ft)**

**EX-70-G2**

With unbeatable value and reliability, the EX-70-G2 can be installed just about anywhere, but still packs the punch to deliver HDBaseT Class B technology, extending 4K UHD video and audio. With IR, RS-232 and even CEC signals able to be passed-through, end-to-end bidirectionally for simultaneous source & display control up to 35m/115ft.

- Extends 4K UHD transmissions up to 35m/115ft or 1080p to 70m/230ft
- Compatible with HDCP 2.2 content encryption
- Bidirectional pass-through of IR, RS-232 and CEC
- 2-way PoH for flexible and convenient installation



2160p  
4:4:4 60

**4K HDR HDBaseT Extender Set with 2-Way PoH and Control  
(4K: 35m/115ft | 1080p: 70m/230ft)**

**EX-35-H2**

For extension of 4K UHD and HDR transmissions over medium distances in residential or commercial applications, the EX-35-H2 features WyreStorm's dynamic compression and HDBaseT technology to deliver visually lossless, latency-free 4K/60 4:4:4 or HDR content, along with bidirectional control and 2-way PoH up to 35m/115ft or 1080p to 70m/230ft.

Dynamic visually lossless compression enables extension of up to 4K HDR content at 60Hz to 35m/115ft

- Supports full bandwidth HDMI content up to 17.8Gbps
- Compatible with the latest HDR standards, including HDR-10 and HLG content, with support for Dolby Vision™ up to 30Hz
- 2-way PoH for maximum installation flexibility and convenience
- Bidirectional IR, RS-232 and CEC



2160p  
4:4:4 60

**4K HDR HDBaseT Extender with 2-Way PoH and ARC  
(4K: 35m/115ft | 1080p: 70m/230ft)**

**EX-35-H2-ARC**

Support for ARC is often reserved for premium extender products with a price tag to match—not here. The EX-35-H2-ARC is a ClassB HDBaseT extender with not only the ability to send 5.1 digital audio back to the transmitter, but it can also send cutting-edge 2160p 4:4:4/60 content up to 35m/115ft.

Dynamic visually lossless compression enables extension of up to 4K HDR content at 60Hz to 35m/115ft

- ARC compatible receiver extracts 5.1 audio from TV and sends over HDBaseT to transmitter, S/PDIF input on receiver also included.
- Supports full bandwidth HDMI content up to 17.8Gbps
- Compatible with the latest HDR standards, including HDR-10 and HLG content, with support for Dolby Vision™ up to 30Hz
- 2-way PoH for maximum flexibility during installation
- Bidirectional IR and RS-232





**18Gbps 4K HDR HDBaseT Extender with HDCP 2.2 and 2-way PoH  
(4K: 70m/230ft | 1080p: 100m/328ft)**

**EX-70-H2**

Part of the latest generation of WyreStorm 4K extenders for the latest generation of 4K HDR content, the EX-70-H2 features dynamic compression technology to enable high frame rate HDR-10 and HLG content to be transmitted over standard 10Gbps HDBaseT™, both visually losslessly and without latency.

Dynamic visually lossless compression enables extension of up to 4K HDR content at 60Hz to 70m/230ft

Supports full bandwidth HDMI content up to 17.8Gbps

Compatible with the latest HDR standards, including HDR-10 and HLG content, with support for Dolby Vision™ up to 30Hz

Bidirectional IR, RS-232 and CEC

2-way PoH for convenient single PSU installation



2160p  
4:4:4 60



**4K HDR HDBaseT Splitter/Extender with Ethernet  
(4K: 70m/230ft | 1080p: 100m/328ft)**

**EX-70-H2X**

Part of the latest generation of WyreStorm 4K HDR extenders, the EX-70-H2X features dynamic compression supporting delivery of 4K/60 4:4:4, HDR-10, and HLG content. With transmissions also including HD audio, bidirectional IR and RS-232 control, Ethernet and 2-way PoH for flexible installation, the EX-70-H2X features an HDMI Loop Out to cascade signals to multiple locations via additional extenders or switchers to further expand distribution.

Dynamic visually lossless compression enables extension of up to 4K HDR content at 60Hz to 70m/230ft

Supports full bandwidth HDMI content up to 17.8Gbps

Compatible with the latest HDR standards, including HDR-10 and HLG content, with support for Dolby Vision™ up to 30Hz

EDID adjustment and link strength indicator on transmitter

HDMI loop output on transmitter allows source signal to be split

2-way PoH for convenient single PSU installation



2160p  
4:4:4 60



**18Gbps HDMI over Multimode Fiber Extender with HDCP 2.2  
(4K: 300m/984ft)**

**EXF-300-H2**

WyreStorm's first fiber-optical extender, ensuring perfect transmission of 18Gbps HDMI signals to 300m/984ft. The EXF-300-H2 is compatible with 2160p 4:4:4/60 or high frame rate HDR content with HDCP 2.2 encryption, and will send it via a 10G OM3 multi-mode cable without any effect from EM or RF interference along the way.

Variable compression supports extension of 18Gbps content for 4K/60 4:4:4 or HDR at 60Hz using multimode fiber up to 300m/984ft

Compatible with latest HDR standards including HLG, HDR-10+ and Dolby Vision  
HDCP 2.2 compliant

Passes IR or RS-232 control signals bidirectionally

Ideal for long distance transmission in environments with high-levels of EM or RF interference



2160p  
4:4:4 60



**4K HDR HDBaseT Extender with 2-Way PoH and ARC  
(4K: 100m/328ft)**

**EX-100-H2-PRO**

Utilizing the best in HDBaseT technology, the EX-100-H2-PRO uses the powerful 2.0 chipset for 5-Play functionality over 100m/328ft of Cat 6 cable. Using DSC (Display Stream Compression) this extender can support HDMI video up to 2160p 4:4:4 at 60Hz (18Gbps) without any visual loss in quality or latency. With HID's and data transfer in mind, this extender supports USB 2.0 devices at up to 190Mbps, catering for powerful webcams, smart whiteboards and flash drives alike.

Variable compression and advanced HDBaseT 2.0 technology extend 4K/60 4:4:4 and HDR up to 100m/328ft

VESA approved DSC technology applies visually lossless compression when required

HDCP 2.3 ready

4x USB 2.0 throughput with both TX and RX able to act as host or device

Bidirectional audio lane separate to TMDS





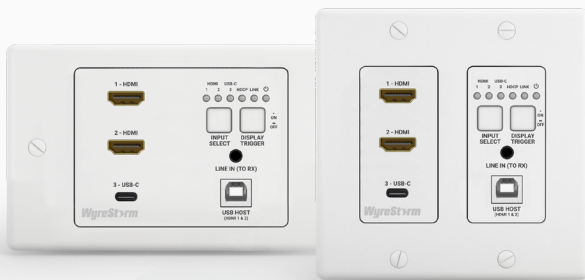
**4K HDMI/VGA Auto-Switching HDBaseT Extender with 2-way PoH  
(4K: 70m/230ft | 1080p: 100m/328ft)**

**EX-SW-0201-4K**

Supporting resolutions up to 4K, this fully-featured Class A HDBaseT extender is designed for use in small meeting room or classroom environments where distribution and control of VGA or HDMI devices up to 100m/328ft is required.

HDMI/VGA auto-switch transmitter with 4K HDMI input support  
HDBaseT device supporting video, audio, bidirectional IR and RS-232 control, PoH power, Ethernet

2-way PoH enables either end to be powered, removing the need for PSU at the other end



**3-Input In-wall HDBaseT Transmitter (2 HDMI, USB-C) with USB host & CEC trigger (4K: 100m/328ft) - 2-gang US and UK versions available**

**SW-110-TX-US | SW-110-TX-UK**

Boasting 2 HDMI inputs and a USB-C port supporting alt-mode functionality (A/V & control) the SW-110-TX in-wall switching transmitter features automatic & manual CEC triggering for a compatible display or projector at the receiving end and is PoH ready, meaning it can be powered by the RX-700. The USB host port means far-end devices can be connected over HDBaseT to a connected computer with transmission distance up to 100m/328ft at 4K/60 4:2:0

2 HDMI & 1 USB-C input with auto-switching and USB-C device charging (up to 5v 2A)

USB-C supports alt-mode functionality for USB device connection; USB host port for HDMI inputs

Transmission of 4K/60 4:2:0 content up to 100m/328ft with separate audio input to RX

Powered by PoH from RX-700 or local PSU (not included)



**2160p  
4:4:4 60**



**4K HDR 4:4:4 60Hz HDBaseT2.0 Receiver with USB device inputs, Ethernet & PoH (4K: 100m/328ft)**

**RX-700**

Utilizing the best in HDBaseT technology, the RX-700 extends 5-Play functionality to your display device over 100m/328ft of Cat 6 cable, support HDMI video up to 2160p 4:4:4 at 60Hz without any visual loss in quality or latency. With HID's and data transfer in mind, the RX-700 supports USB 2.0 devices like HD webcams, smart whiteboards and flash drives alike.

VESA recognised DSC compression technology enables extension of HDMI content up to 4K/60 4:4:4 or HDR 60Hz to 100m/328ft

Bidirectional USB host/device connectivity offering data transfer capability of 190Mbps for connection of smart whiteboards, webcams or touchscreens

Powerful HDBaseT 2.0 chipset supports delivery of 4K HDR video, HD audio, bidirectional IR and RS-232 USB 2.0 and Ethernet

Includes bidirectional analog audio lane separate to HDMI signal and 2-way PoH for flexible and convenient installation



All WyreStorm Signal Extension Solutions include a 5 Year limited warranty for one of the highest levels of cover available and ultimate peace of mind.





# WyreStorm<sup>®</sup> Essentials

WyreStorm Essentials Extenders have been developed as a simple and affordable line of plug-and-play HDMI products for 4K and HD connectivity in the home. Essentials Extenders are ideal for integrating satellite or cable boxes and the latest gaming consoles with consumer display devices over great distances.



**WyreStorm Essentials™ 1080p HD UTP KVM Extender  
with USB 2.0 & PoC (1080p: 80m/262ft)**

**EXP-EX-80-KVM**

The WyreStorm EXP-EX-80-KVM is a plug and play HDMI and KVM extender, capable of sending up to resolutions of 1080p@60Hz and HID (Human Interface Device) up to 80m (262ft) over a single CAT5e/6 cable.

Additionally, it supports bidirectional PoC (Power Over Cable) for powering at either the transmitter or the receiver with only one power adapter, making installations quick and effortless. Perfect use in office, home and presentation settings to extend HD video and USB keyboard and mouse from a local zone to a remote PC or laptop.

Full HD video resolution of up to 1080P@60Hz at up to 80m (262ft)

Supports up to USB 2.0 data transfers bidirectionally up to 60m (197ft) and HID (Human Interface Devices) up to 80m (263ft)

HDMI 1.3 and HDCP 1.4 Compliant.

Bidirectional PoC - Powered at either the transmitter or receiver with only one power adapter.

Slim 23mm chassis for discreet installation

**HDMI™ HDCP PoC**



**WyreStorm Essentials™ 18Gbps 4K HDR UTP Extender Set  
with PoC & IR Passthrough (4K: 35m/115ft, 1080p: 50m/164ft)**

**EXP-EX-35-G2**

18Gbps transmission rates are no longer reserved for just the ProAV extenders! Now featured in the EXP-EX-35-G2 you get the robust bandwidth capabilities in a smaller, cost effective form. IR for source control and PoC all wrapped up in a compact chassis for unbeatable value, reliability and ease of installation.

Transmits 4K@60Hz HDMI content over UTP to 35m (115ft) or 1080p@60Hz to 50m (164ft)

VLC technology making 18Gbps over 10.2 cable possible for perfect visually lossless video

PoC means receiver is powered via a single PSU at the transmitter

IR pass-through RX > TX for source control

Slim 15mm chassis for discreet installation

**HDMI™ HDCP 2.2 PoC**







*Powerful. Reliable. Simple.*

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