



# Quickstart Guide

WyreStorm HDBaseT PoH Display Receiver  
with 2-Way IR and RS232

**RX-70-POH**



## Before Installation

**4K @ 35m/114ft and 70m/230ft @1080p video are the maximum recommended transmission distances for this model and denotes recommended transmission conditions including 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** Connect a good quality, well-terminated Cat6 cable of no more than 35m/114ft for 4K\* or 70m/230ft for 1080p between the HDBT or UTP OUT of the transmission device (matrix or transmitter) to the HDBT IN or UTP IN Input of the RX-70-POH. If the transmission device is PoH enabled, the PoH function will carry power along the length of the cable to power the receiver so no local power is required at display zones.

\*4K transmission device required.

**NOTE: Optional 12V power connectivity is available if required - for example, if installation conditions, or cable quality is too low to carry power, or if a non-PoH enabled transmission device is being used.**

**2** Connect the HDMI display device to the HDMI OUT of the RX-70-POH.

**NOTE: a WyreStorm EXP-CON-4K-DD scaler may be required for combined 4K and 1080p HD distributions.**

See [wyrestorm.com](http://wyrestorm.com) for more details

**3** Check POWER, STATUS & LINK lights are illuminated on the receiver to indicate successful connection, with a lit HDCP illustrating the presence of encryption within the signal

**NOTE: STATUS and HDCP LEDs should blink, POWER and LINK are static LEDs.**

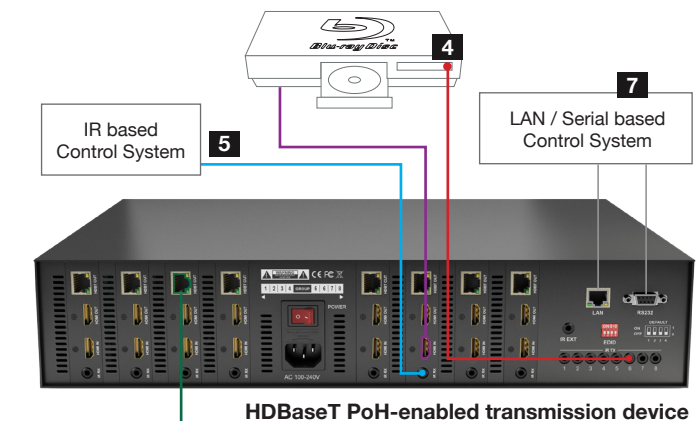
## Signal IR/RS232 Control Connection

**4** For two-way IR control of connected source and display, connect IR TX emitters from IR TX port of the transmission device and receiver to the IR receiving area of the source on the display. Care should be taken to firmly attach emitters directly over the infrared receiving area of devices. Location of the emitter eye may need to be adjusted later to achieve best IR performance.

**5** For use with a control system, an IR Link cable (sold separately) should be connected from the transmission device IR RX port to the controller used. An IR receiver should be connected from the IR RX port of the RX-70-POH to the display, placing the receiver eye on or near the display in clear line of sight to the remote handset used to control.

**6** At both display and source locations, position the IR receiver in clear line of sight to the remote handset used to control it, ensuring the receiver is not obstructed.

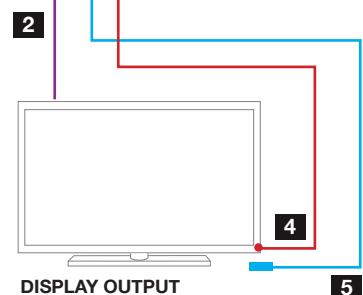
**7** For an RS232-based control system, an RS232 cable should be used from transmission device to control system and between the RX-70-POH and display to enable serial control between devices.



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

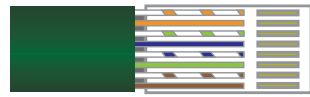


- KEY**
- HDMI
  - HDBaseT Cat6
  - Power
  - IR RX
  - IR TX





■ 4K Transmission    ■ HD Transmission



### Cat5e/6 Wiring Guide

The quality of termination for every RJ45 is essential. Poor terminations leads to intermittent performance and longer install times.

### Troubleshooting

Regardless of manufacturer or product, the majority of installation difficulties can typically be attributed to communication problems between devices or when high bandwidth transmissions are attempted with insufficient cable/connections. Should you find yourself in such a situation, we have drawn up the following checklist of general issues and causes that should help you shoot your way out of trouble without seeking further assistance.

#### No or poor quality picture?

■ Device Connection - Are you connected and powered? Double check all HDMI, HDBaseT and 12v power connections are firmly inserted into correct ports and that all devices are powered.

**NOTE: If PoH powering issues are experienced at either end, connect a 12v local power supply to the unit.**

■ Cable length – is your signal struggling to transmit signals or power the distance of your cable? You may be experiencing interference that exceeds the maximum capacity of your transmission cable distance. Make sure you are within specified cable distances for this product and check cable and connection condition and installation environment for issues.

Try a shorter cable run, an extender with a longer range or EDID management - **see full manual for EDID DIP switch settings**

■ Signal strength – please note the use of cable joins, stranded patch panels, wall outlets and stranded patch leads as interconnects between them, can significantly reduce signal strength. Use solid core, straight through connections wherever possible.

■ Resolution - If you reduce the resolution of the source, do you get a picture? If so, this suggests a conflicting resolution between source and display or a bandwidth capacity issue with your cable. Check all inputs and outputs share the same resolution and make sure the signal is being successfully transmitted the full length of your cable run.

■ Picture 'snow' / HD 'noise' – signifies a failure to fully establish a signal and can often be caused by poorly terminated RJ45 connectors or excessive cable lengths. Ensure your cable is correctly wired to 568B standards. Try swapping in a display and receiver from a fully functioning location – if the problem continues on the same output, turn off all equipment and swap your signal carrying cables at both ends.

■ Cable quality and condition – HDMI cable/connectors can be easily damaged and the quality of material can vary, especially in lower price brackets. Successful transmission of video, audio and control, can all be affected by cable and termination quality. Always use good quality leads and cables, with RJ45 connectors wired to the 568B standard at both ends. Should transmission problems be experienced, try swapping cables/leads for those already working to see if this improves your image to identify cable issue as source of problem.

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

■ Combined 4K / HD distributions - a WyreStorm EXP-CON-4K-DD 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

■ Blu-Ray, 3D - Make sure all your equipment has been configured and enabled to transmit and accept the signal, or is capable of passing a signal. Are resolutions between source and display compatible and cable adequate for the large bandwidth required by Blu-ray and 3D transmissions?

### IR Control

■ Check IR emitter and receiver eyes are correctly positioned to allow infrared signals to be transmitted and received through the extenders. IR emitter eye should be fixed firmly over infrared sensors of devices. IR receiver eye should be attached on or near devices ensuring a clear line of sight to the remote control used to operate.

■ Is your remote control powered and sending a signal? As IR is invisible to the naked eye, check your remote is transmitting a signal by viewing the remote handset sensor through a digital camera/camera phone – the sensor should flash when a button on the handset is held down.

■ IR signal dropout can be experienced due to environmental infrared radiation. Ensure IR emitters and receivers are away from direct sunlight, halogen lighting and plasma screens that may interfere with IR signals.

### Safety Recommendations:

- Do not expose this apparatus to any form of moisture, including the placement of anything containing liquids on the unit.
- To prevent risk of electric shock or fire hazard, ensure apparatus is installed in an unobstructed, well ventilated area away from any external heat sources - including other electrical devices which may produce heat.
- Only use attachments / accessories specified by the manufacturer and refer all servicing to qualified service personnel.
- Failure to adhere to these recommendations may invalidate your warranty.

### Warranty Information



This product is covered by a 3 year limited parts and labour warranty. During this period there will be no charge for unit repair, component replacement or complete product replacement in the event of malfunction. The decision to repair or replace will be made by the manufacturer.

This limited warranty only covers defects in materials or workmanship and excludes normal wear and tear or cosmetic damage.

Visit [wyrestorm.com](http://wyrestorm.com) for full details on this product and to download the complete user guide including technical specification, RS232 update mode and warranty information.

**wyrestorm.com**