



Model No.: **EX-1FIB-5000**

Extending HDMI over Fibre

Operating Instructions

Thank you for purchasing this WyreStorm product.
Please read this instruction manual carefully
before use.



Introduction

The Wyrestorm EX-1FIB-5000 is a point to point extender set capable of delivering high spec HD video and audio distribution over distances up to 5km (3.1miles) using single mode optical fibre as a transmission medium.

Designed for projects that require stable HD video @60Hz and HD audio distributed over great distances, the EX-1FIB-5000 is an excellent choice for large scale installations such as airports, shopping centres, factories, universities, or indeed anywhere that necessitates the reliable transmission of clear, uncompressed video/audio to single or multiple displays over distances that makes conventional UTP distribution unfeasible.

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Extending HDMI by Single Mode Optical Fibre



EX-1FIB-5000

■ Features

- **Single mode optical fibre** lengthens 1080p HD video @60Hz and multi-channel audio transmissions over great distances up to **5km (3.1miles)**
- Automatically adjusts signal feedback, equalization and amplification.
- **EDID DIP switches** on Transmitter and Receiver encourages communication between source/display devices to solve compatibility issues
- HDMI V1.3 supported.
- Each port supports HDMI or DVI signals.
- HDCP compliant.

- LED indication of unit power and video signal status.
- Units contain ESD (electrostatic discharge) protection technology to guard against static build-up that can damage circuitry.
- 24bit colour depth.
- 5v power to extenders provided by mains adapter (included) or optional USB 5v cable for ease of power management and greater energy efficiency.
- Mounting brackets supplied.
- 5v mains power supply included
- Firmware updates through ISP port
- Units can be cascaded

Notice

Wyrestorm Technologies reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.

Warning

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



1. Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.



6. Clean this apparatus only with dry cloth.



2. Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated.



7. Unplug this apparatus during lightning storms or when unused for long periods of time.



3. To prevent risk of electric shock or fire hazard due to overheating, do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.



8. Protect the power cord from being walked on or pinched particularly at plugs.



4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



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



5. Do not place sources of naked flames, such as lighted candles, on the unit.





10. Refer all servicing to qualified service personnel.

■ Package Contents

- 1 x WyreStorm EX-1FIB-5000 single mode optical TRANSMITTER
- 1 x WyreStorm EX-1FIB-5000 single mode optical RECEIVER
- 1 x Printed quickstart installation guide (also downloadable from this product main page)
- 2 x pairs of extender mounting brackets
- 2 x 5VDC power supply (part # VDC0501) - Optional USB 5V power adapters available. See accessories section)

■ Connections and Operations

- 1) Connect the HDMI input source ( such as HD-DVD, PS3, STB etc.) to the EX-1FIB-5000 Transmitter.
- 2) Connect a single mode optical fiber from optical output of the EX-1FIB-5000 Transmitter to the optical input of EX-1FIB-5000 Receiver.
- 3) Connect the HDMI sync device ( such as HD-LCD, HD-DLP) to the EX-1FIB-5000 Receiver.
- 4) Add power supplied to both Transmitter and receivers and switch on extenders, inputs and outputs.

 **Attention:** Please insert and extract cables gently.

■ DIP switch settings

EX-1FIB-5000 Transmitter

Position1	Function
0	Disable Range Scaling
1	Enable Range Scaling

Position2	Position3	Function
0	0	1080P stereo (Using Embedded EDID) (note1)
0	1	1080P 5.1 (Using Embedded EDID) (note2)
1	0	1080P 7.1 (Using Embedded EDID) (note3)
1	1	1080I stereo (Using Embedded EDID) (note4)

Note1: The Transmitter will use embedded 1080P-stereo EDID when the DIP switch is in this mode. The EDID will be 1080P video and stereo audio.

Note2: The Transmitter will use embedded 1080P-5.1 EDID when the DIP switch is in this mode. The EDID will be 1080P video and 5.1 audio.

Note3: The Transmitter will use embedded 1080P-7.1 EDID when the DIP switch is in this mode. The EDID will be 1080P video and 7.1 audio.

Note4: The Transmitter will use embedded 1080I-stereo EDID when the DIP switch is in this mode. The EDID will be 1080I video and stereo audio.

EX-1FIB-5000 Receiver


Position1	Position2	Position3	Function
0	0	0	Normal mode. 8bit colour depth
0	0	1	Long Cable (LC) mode (note1) 8bit colour depth
0	1	0	Normal mode. Colour depth dictated by sync device.
0	1	1	LC mode (note1). Colour depth dictated by sync device
others			Normal mode. 8bit colour depth

Note1: Long Cable mode is intended for instances where received video transmissions appear to be affected by interference or 'noise' when long or low quality HDMI cables are used. However, this should not be taken as a reason to extend HDMI signals over the suggested distances or use sub-standard cables.

HDMI distance of no more than 15m / 49ft and always use good quality materials.

■ Specifications

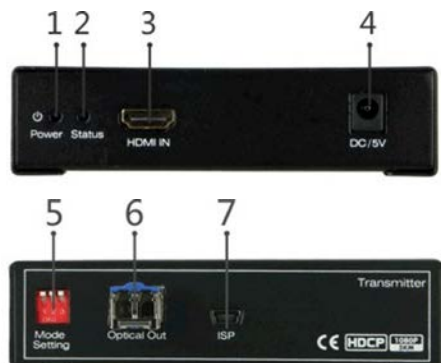
Operating Temperature Range	-5 to +35°C (-41 to +95 °F)
Operating Humidity Range	5 to 90 % RH (no condensation)
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Video Format Supported	DTV/HDTV; 1080P/720/1080i/576i/480i
Output Video	HDMI 1.3+HDCP (mirrors the source to the sync)
Output Audio	Supports 7.1/5.1/stereo audio (PCM only)
Maximum Transmission Distance	5Km / 3.1miles
Power Supply	5VDC
Power Consumption	5Watts (EX-1FIB-5000 Transmitter) 5Watts (EX-1FIB-5000 Receiver)
Dimensions	125mmHx120mmWx31mmD /5.98"Wx4.13"Hx1.22"D
Mass (Main unit)	0.9Kg / 1.98lb (Pairs)

 **NOTE1:** Specifications are subject to change without notice. Mass and dimensions are approximate.

■ Panel Descriptions

1. EX-1FIB-5000 Transmitter





1. Power input status. LED lit when Transmitter is powered.
2. Signal connection status. LED lit when a strong signal connection is detected.
3. HDMI input.
4. 5V DC Power input.
5. EDID DIP switch.
6. Optical output.
7. ISP port – used for firmware updates

2. EX-1FIB-5000

Receiver





1. Power input status. LED lit when Transmitter is powered.
2. Signal connection status. LED lit when a strong signal connection is detected.
3. HDMI Output.
4. 5V DC Power input.
5. EDID DIP switch.
6. Optical input.
7. ISP port – used for firmware updates

■ Typical Application



■ Maintenance

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

■ Product Service

- 1) **Damage Requiring service:** The unit should be serviced by qualified service personnel if:
 - The DC power supply cord or AC adaptor has been damaged;
 - Objects or liquids 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 authorized servicing personnel.
- 3) **Replacement parts:** When parts need replacing ensure the service uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- 4) **Safety check:** After repairs or service, ask the service to perform safety checks to confirm that the unit is in proper working condition.

● Mail-In Service

When shipping the unit, carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a daytime phone and/or email address where you can be reached.

If repair is needed during the limited warranty period the purchaser will be required to furnish a sales receipt/proof of purchase indicating date of purchase, amount paid and place of purchase. Customer will be charged for the repair of any unit received without such proof of purchase.

● Warranty

If your product does not work properly because of a defect in materials or workmanship, Wyrestorm Technologies (referred to as “the warrantor”) will, for the length of the period indicated as below, **(Parts (2) Year, Labor(90) Days)** which starts with the date of original purchase (“Limited Warranty period”), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

During the “Labor” Limited Warranty period there will be no charge for labor. During the “Parts” warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for 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 damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up configuration, incorrect adjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service Center or other Authorized Service, or damage that is 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 damages resulting from the use of this product, or arising out of any breach of this warranty.** (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service location, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.)
- 3) **Parts and service, which are not covered by this limited warranty, is the responsibility of the purchaser/user.**



Thank you for your purchase.

We appreciate your business. Please contact us with your questions or comments.

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