sy

User Manual

UFM-4K-T
and
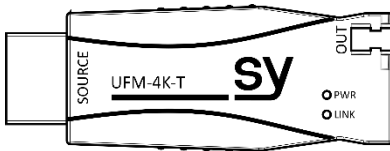# UFM-4K-R

Mini 4K Optical Fibre Extender

This Mini Optical Fibre Extender Set consists of a transmitter and receiver pair that can handle HDMI video resolutions up to 4K30 to a distance of 400m when using single-mode fibre or 300m when using multi-mode fibre. This extender pair also fully supports HDMI 1.4 and HDCP 1.4.
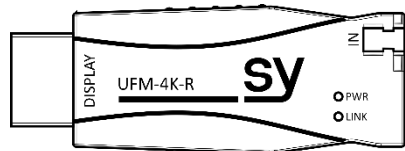
Features

- Supports HDMI 1.4 up to 4K30
- Supports HDCP 1.4
- LC optical fibre connection
- LED indicators for power and link status
- USB powered
- Transmits up to 400m with single-mode fibre
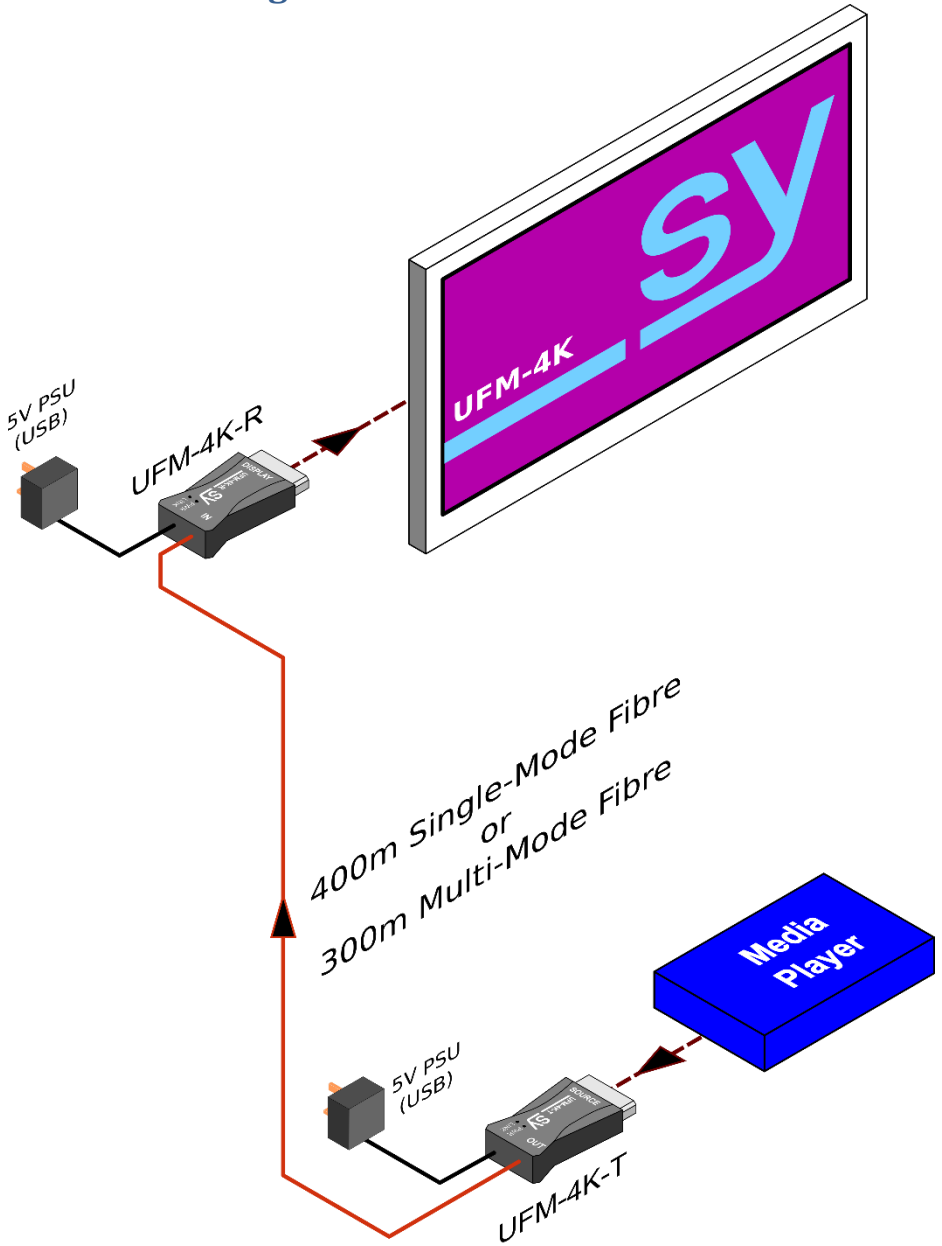- Transmits up to 300m with multi-mode fibre

Connections

Transmitter

Receiver

Name	Transmitter – SY-UFM-4K-T	Receiver – SY-UFM-4K-R
HDMI Connector	Input signal from SOURCE	Output signal to DISPLAY
Fibre Connector (LC)	Output to fibre optic cable	Input from fibre optic cable
LINK LED	Lit when the fibre cable is passing the data signal.	
PWR LED	Lit when the 5V USB power is present – Micro USB power input is on the right-hand face next to the LC fibre port.	
Micro USB	5V DC input – located beside the LC fibre connector	

Connection Procedure

- Connect the HDMI-Fibre transmitter to the HDMI output of the source equipment.
- Connect the HDMI-Fibre receiver to the HDMI input of the display equipment.
- Connect a fibre cable between the transmitter and receiver units.
- Connect 5V DC power supplies to the micro USB connectors on both the transmitter and the receiver units.
- Confirm that both the PWR and LINK LEDs are lit on both the transmitter and the receiver units.

Connection Diagram

5V PSU (USB)

UFM-4K-R

UFM-4K

400m Single-Mode Fibre
or
300m Multi-Mode Fibre

Media Player

5V PSU (USB)

UFM-4K-T

Specifications

General

HDMI Video Input	VESA and SMPTE 480p to 2160p with 3D. All HDMI resolutions to 3840x2160p @60Hz 4:4:4 480p@60Hz 576p@50Hz 720p@60Hz 1080p@24Hz 1080p@50Hz 1080p@60Hz 4K@24Hz 4K@30Hz 4K@60Hz 4:2:0 All PC resolutions to 1920x1200@60Hz
HDMI Version	Up to HDMI 1.4b
HDCP Version	HDCP 1.4
CEC	Supported
HDMI Audio Format	PCM, Dolby Digital®, DTS and DTS-HD®
Input Connectors	1x HDMI on UFM-4K-T 1x LC Optical Fibre port on UFM-4K-R 1x Micro USB 5V DC
Output Connectors	1x HDMI on UFM-4K-R 1x LC Optical Fibre port on UFM-4K-T
Transmission distance	Up to 400m using single-mode fibre Up to 300m using multi-mode fibre
Power Supply	5V DC @ 1A max.
Power Consumption	2.5W max.

Environmental

Operating Temperature	-10 to +55°C (+14 to +131°F)
Operating Humidity	10 to 90 % RH (non-condensing)

Physical

Dimensions (WxHxD)	60 x 10 x 22 mm
Case Material	Aluminium chassis
Weight	26g

Part Number

SY-UFM-4K-T	UHD HDMI-Fibre Transmitter
SY-UFM-4K-R	UHD HDMI-Fibre Receiver

Troubleshooting

Symptoms	Causes	Solutions
Losing colour **Fuzzy or double image**	Poor quality HDMI cable	Use a higher quality cable or connect directly to the HDMI connectors on the source and display devices.
Power LED is off	No power	Power up the unit.
	Poor contact to USB port	Ensure the Micro USB is fully inserted.
No output on the display	Source or Display not powered	Turn on both the HDMI source and the display.
	Incorrect input selected	Ensure that the correct HDMI input is selected.
	Poor contact of HDMI ports	Ensure that the HDMI connector is fully inserted at the HDMI source device and the HDMI display device.

Packing List

1	SY-UFM-4K-T
1	SY-UFM-4K-R
2	5V USB Power Supplies (5V 1A)
1	User Manual

Safety Instructions

To ensure reliable operation of this product as well as protecting the safety of any person using or handling these devices while powered, please observe the following instructions.

1. Use the power supply provided. If an alternate supply is required, check the voltage, polarity and that it has sufficient power to supply the device it is connected to.
2. Do not operate this product outside the specified temperature and humidity range given in the above specifications.
3. Ensure there is adequate ventilation to allow this product to operate efficiently.
4. Repair of this equipment should only be carried out by qualified professionals as this product contains sensitive devices that may be damaged by any mistreatment.
5. Only use this product in a dry environment. Do not allow any liquids or harmful chemicals to come into contact with this product.

After Sales Service

1. Should you experience any problems while using this product, firstly refer to the Troubleshooting section in this manual before contacting SY Technical Support.
2. When calling SY Technical Support, the following information should be provided:
   - Product name and model number
   - Product serial number
   - Details of the fault and any conditions under which the fault occurs.
3. This product has a two year standard warranty, beginning from the date of purchase as stated on the sales invoice. For full details please refer to our Terms and Conditions.
4. SY Product warranty is automatically void under any of the following conditions:
   - The product is already outside of its warranty period
   - Damage to the product due to incorrect usage or storage
   - Damage caused by unauthorised repairs
   - Damage caused by mistreatment of the product
5. Please direct any questions or problems you may have to your local dealer before contacting SY Electronics.

NOTES

NOTES