

## CatX DVI Fibre Transmitter/Receiver

### *Manual and Installation Guide*



### Fibre DVI Extenders

DVI Video, Audio + USB extenders over a single Multi-Mode Fibre Cable

## CatX DVI Fibre Tx/Rx

The CatX DVI Fibre Transmitter and Receiver pair provides a perfect solution for extending DVI-D video with USB keyboard and mouse as well as audio and RS232 signals over a single multi-mode fibre optic cable. These DVI extender units provide high-quality video with real-time USB keyboard and mouse control, even in noisy environments, up to a distance of 550 metres using multi-mode fibre or 2km using single-mode fibre.

## Installing and Using CatX DVI Fibre

1. Connect the **CatX DVI Fibre Tx** (transmitter) to the DVI-D source connector, and the **CatX DVI Fibre Rx** (Receiver) to the display device DVI-D connector using suitable DVI-D to DVI-D cable.
2. Connect a microphone to the Mic input and powered speakers to the Receiver, as required.
3. Connect the Line In and Line Out connectors to the DVI source, as required.
4. Connect a keyboard and mouse to the receiver USB sockets and the mini USB connector to any available USB port on the source device, as required.
5. Connect the RS232 signals (TxD and RxD only) to the 3.5mm jack on the front of Transmitter and Receiver units as required.
6. Connect the fibre optic cable between the Transmitter and the Receiver.
7. Connect 12V DC PSU to both the Transmitter and Receiver units.
8. Wait few seconds for an image to appear on the DVI display device.

**For best results, use Cat6 cabling.**

## Connectors, Controls and Indicators

Product	CatX DVI 180 Tx	CatX DVI 180 Rx
<b>DVI Connector</b>	DVI-D Input (Digital, Single Channel Only)	DVI-D Output (Digital, Single Channel Only)
<b>Fibre Optic connector</b>	Single Port Type SC Fibre Connector	
<b>Audio In connector</b>	3.5mm Jack (Line)	3.5mm Jack (Mic)
<b>Audio Out connector</b>	3.5mm Jack (Line)	
<b>USB</b>	Mini USB connector	Two Type A USB connectors
<b>RS232</b>	3.5mm Jack (on front panel)	
<b>Power connector</b>	12V DC 2.1mm	
<b>Power LED</b>	Green LED on front panel	
<b>RJ45 Green LED (Link)</b>	Fibre Data Link Connected	
<b>RJ45 Amber LED (Data)</b>	Fibre Data Link Activity	

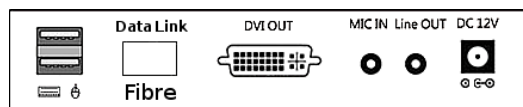
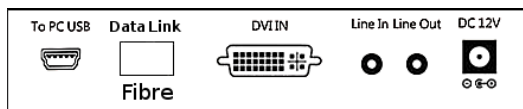
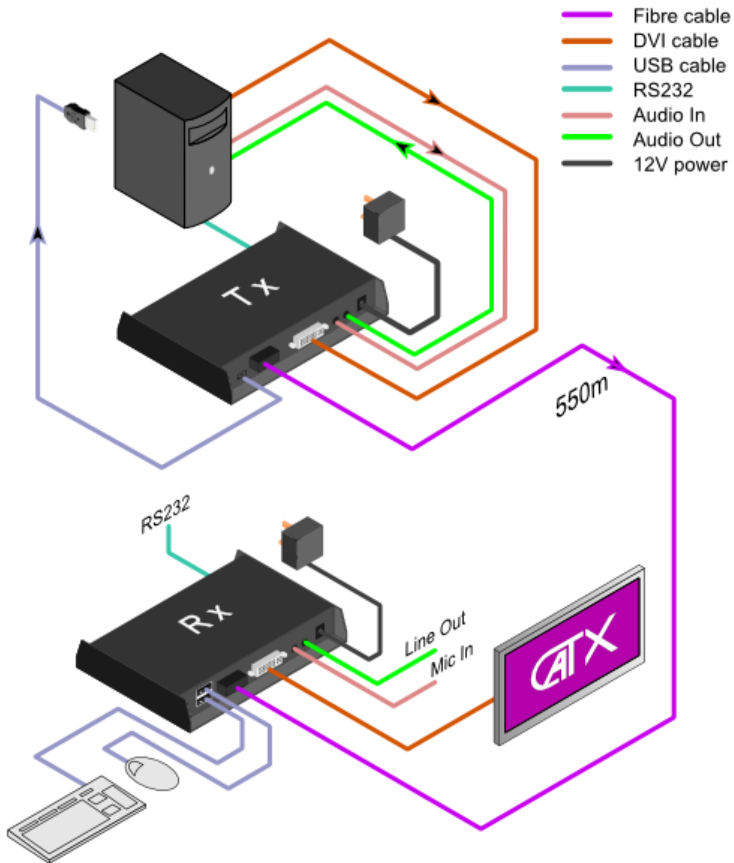


Figure 1 - Connecting the DVI Fibre Transmitter and Receiver



### RS232 connections

The RS232 interface uses a 3.5mm stereo-style jack socket with the following connections at both the CatX DVI 180 Transmitter and the CatX DVI Fibre Receiver. Refer to the CatX DVI Fibre Technical Manual for further details on how to set up and use the RS232 interface.

Jack Connection	Signal Direction	PC 9-way RS232 Connection
<b>Tip</b>	Data in from PC	TxD from pin 3
<b>Ring</b>	Data out to PC	RxD to pin 2
<b>Sleeve</b>	Ground	GND to pin 5



## Fibre Cable Termination

These CatX DVI Fibre products use a single fibre connection terminated in type SC connectors.

## Display Resolutions

All DVI-D resolutions up to 1920 x 1200 @ 60Hz (inc. 1080p) supported to a maximum distance of 180m. A HDMI source can also be used but only the video signal will be transmitted, HDMI digital audio is not supported by the DVI-D interface. The CatX DVI devices do not support analogue audio.

## Technical Specification

	CatX DVI180 Tx	CatX DVI180 Rx
Maximum Distance	550m on multi-mode fibre optic cable or 2km on single-mode fibre optic cable	
Fibre Connector Type	Type SC Fibre Terminating Connector	
DVI-D Video	DVI-D resolutions: VGA – UXGA compatible; HD 1080p compatible	
Audio input	3.5mm stereo unbalanced, max. 3.5V p-p	
Audio output	3.5mm stereo unbalanced, max. 3.5V p-p	
USB	For Keyboard, Mouse, Touch Screen	
RS232	Supports all standard baud rates up to 115.2kbps - Tx and Rx signals only	
External Power	12V 1A PSU with 2.1 mm power jack connector	
Housing (W x L x H)	Metal casing – 153 mm x 110 mm x 29 mm	
Operating Temp.	0 - 40 °C non Condensing	

Note: Touch screens require a suitable OS on the source computer.

## Product codes and accessories

	Product	Part Number	
CatX DVI 180 (CX-DVI180-P)	CatX DVI Fibre Tx, including 12V PSU	CX-DVI180-T	
	CatX DVI Fibre Rx, including 12V PSU	CX-DVI180-R	
For a full range of CatX products, contact your supplier or visit <a href="http://sy.co.uk">sy.co.uk</a>			
Optional extras	12V PSU (2.1mm plug)	PS-12V1A-2.1- **	For pin type replace ** with the following UK - UK 3 pin EU - European Schuko US - US 2 pin
	RS232 D-type - 3.5mm stereo jack cable		



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