

LINDY®

CONNECTION PERFECTION

Fibre Optic DVI-D Cable

User Manual

English



LINDY No's 41307 to 41311

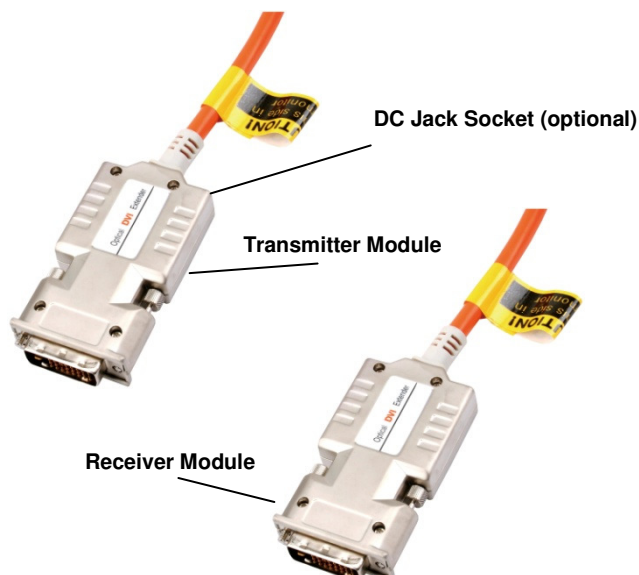
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Package Contents

- 1 x LINDY Fibre Optic DVI-D Cable
- This User Manual
- Handling fibre document

Product Information

At each end of the cable is a module with an integrated single link DVI-D connector. The Transmitter and Receiver modules are each identified by a label: the transmitter must be connected to the source device and the receiver must be connected to the display.



Introduction

Thank you for purchasing the LINDY Fibre Optic DVI-D cable. This cable is an integrated solution for extending DVI digital signals over long distances. The fibre-optic technology used allows transmission distances that far exceed the maximum supported by standard copper-based cables.

The LINDY Fibre Optic DVI-D cable is a hybrid solution which features H-PCF (Hard-Polymer Clad Fibre) glass fibres for the digital display signals and copper wires for the DDC / HDCP control signals.

The Transmitter and Receiver modules are each equipped with standard DVI-D Male connectors for connecting to the source (PC with DVI graphics card etc.) and the display. The modules are connected together by the combined fibre optic and copper cable. This integrated design makes for true 'Plug & Play' operation.

System Requirements

Hardware Requirements

- You must have a Graphics card with a DVI-D port correctly installed. It should support the maximum resolution of the display to be connected
- Compatible with PC and Mac computers
- There are no special requirements for memory, CPU speed and chipsets

Power Requirements (Using the optional DC adapter)

- Depending on the make & model of your display you may require one external 5V DC power adapter to drive the transmitter module. This is not included and can be purchased if required.

Installation

IMPORTANT

Please use the installation procedure below. Improper operation may result if the installation procedure is not correctly followed.

Ensure all devices including the source, display and cable are powered down.

Step 1

Carefully unpack the contents of the box.

Step 2

Plug the Transmitter module of the fibre Optic Cable in to the DVI port on the source (i.e. PC). **DO NOT** use any cables or adapters between these connections.

Step 3

Plug the Receiver module into the DVI-D port on your display device.

Step 4

Power on both the display and source devices.

Note: You can hot swap the cable without powering down either the source or display.

Step 5

The system will now boot up as normal.

Troubleshooting

The display shows a black screen

- Ensure that both ends of the Fibre Optic Cable are firmly connected.
- Check the source is powered on and in the case of a PC, booted up.
- Reset the system by un-plugging and re-plugging the Transmitter and Receiver modules.

The image is distorted or displays noise

- Check the graphics resolution is set correctly.
- Ensure the resolution set is no higher than (WUXGA) 1920x1200 at 60Hz refresh rate.
- Reset the system by un-plugging and re-plugging the Transmitter and Receiver modules.

Maintenance

No special maintenance is required for the LINDY Fibre Optic DVI-D Cable. Ensure the cables are stored or used in a benign environment free from liquid or dirt contamination.

There are no user serviceable parts. Refer all service and repair issues to LINDY.

Product Specifications

- Complies with DVI standards: supports DVI 1.0 and DDC 2B, fully implemented by fibre optic communication.
- Cable length: Available from LINDY from 10m up to 50m. Lengths up to 100m are also available. Please contact LINDY for more information
- Maximum resolution: 100m (330 Feet) for WUXGA 1920x1200 at 60Hz refresh rate.
- Graphic Transmission Bandwidth: 1.65Gbps bandwidth per graphic channel.
- Hybrid Fibre Optic Cable: Riser jacket of retardant PVC employing 4 strands.
- Fibre cable characteristics
 - Tensile Load: 245N
 - Minimum bend radius: 75cm
 - Cable outer diameter: 150mm
- Specifications of modules
 - Dimensions: 71 x 39 x 15mm (WxDxH)
- Environmental Specifications

If the cable is handled such that the lateral pressure applied to it exceeds the permitted maximum, the optical fibres may break and the optical characteristics of the cable may be impaired. Even where the optical fibres do not break and there is no immediate loss of optical performance, such handling can have adverse long term effects. Plan the route and installation method so as to avoid conditions where lateral pressure is permanently applied to the optical cable, caused by actions such as bindings the cable strongly or laying other cables or heavy objects on the cable.

- Do not allow the cable to be immersed in water

Because optical fibre is not highly resistant to moisture, immersing the cable in water can have long term undesirable effects, such as impaired optical characteristics.

This product is not suitable for outdoor installation. Even for indoor installation, the cable route and installation method should be selected so as to ensure that the cable is not immersed in water.

Warranty Information

LINDY Electronics warrants this Fibre Optic DVI-D Cable to be free from defects in workmanship and materials, under normal use and service, for a period of 2 years from the date of purchase.

Limitation and Exclusion

LINDY Electronics shall have no further obligation under the foregoing limited warranty if the product has been damaged due to abuse, misuse, neglect, accident, unusual physical or electrical stress, unauthorised modifications, tampering, alterations, or service other than by LINDY, causes other than from ordinary use or failure to properly use the product in the application for which it is intended.

Technical Support and Service

For commercial or general product support, contact LINDY.

For technical help contact LINDY by email: technical@lindy.co.uk or visit our website at www.lindy.co.uk

- Operating temperature: -20° to 70°
- Storage temperature: -40° to 70°

Precautions for safety

Do not place heavy objects on the transmitter, receiver or cable.

Do not drop the transmitter or receiver modules.

Do not pull the cable through conduit or pipes.

Do not touch the modules with wet hands.

Do not disassemble or modify the transmitter or receiver modules.

Failure to comply with these precautions could damage your product and invalidate your warranty.

In terms of appearance the cable described in these specifications is virtually indistinguishable from an ordinary power or communications cable. However, this cable contains optical fibres, so great care is required in its handling.

- Observe the permissible operating temperature range.

Subjecting optical fibre to a high temperature environment for long periods or to any other form of thermal stress can impair its optical characteristics. Ensure that the cable is not in contact with objects that become hot, such as cross-linked cable or hot water pipes. Take care not to lay the cable in locations where there is a risk of exposure to high temperature vapour. When designing the installation path for the optical cable, take the operating temperature into consideration before deciding on the route and method.

- Observe the permitted bend radius

Bending the optical cable in a radius smaller than the minimum permitted bend radius may break the optical fibres and impair the optical characteristics of the cable. Even where the optical fibres do not break and there is no immediate loss of optical performance, such handling can have adverse long term effects. Take particular care to avoid bending the cable sharply at the neck of the optical connector.

When designing the installation path for optical cable and the boxes in which the cable is laid, take the minimum permitted bend radius into consideration before deciding on the construction method and the sizes of the conduits, pits, troughs and boxes.

- Observe the permitted lateral pressure

Certifications

FCC Certifications

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received; including interference that may cause undesired operation.

CE Certification

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55024 and EN55022 class A for ITE, EN61000-3-2/-3 the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

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