TESmart

User Manual

300m DP Fiber Optic KVM Extender

DKE30SS-M25

English

TESmart

English

Preface

It's our great honor that you have chosen the DP KVM Extender produced by our company, TESmart Technology Co.,Ltd. In this user manual, you will learn how to operate and use this product. Please read this user manual comprehensively before use. If you have any questions, comments or suggestions, please contact us via the following email:
support@tesmart.com.

Copyright Notice

The user manual, compiled by TESmart Technology Co.,Ltd, shall not be duplicated or translated by any person or organizations without written permission. This user manual shall not be used for commodity transaction in any form or by any means (electronically, mechanically, photocopying or recording, etc.) or be used for any business practices or profitable activities. The ownership of the trade names and brand names adopted in this user manual belongs to their companies.

Product Information

For more information about TESmart products and how they can help you to enjoy your job, please visit the following TESmart website or contact an TESmart Authorized Reseller.

www.tesmart.com

Contents

1. Safety Tips and Warnings····01
2. Warranty Information····02
3. Preface····03
4. Features····04
5. Packing List····05
6. Panel Description····06
   6.1 Transmitter Panel Description
   6.2 Receiver Panel Description
7. Connection Description····10
   7.1 Connection Diagram
   7.2 Connection Steps

1. Safety Tips and Warnings

Tips: Read the safety tips and warnings for DP KVM Extender comprehensively before use. Use this produce in accordance with its instructions, safety tips and warnings to prevent unnecessary damage to the product and potential dangers to users.

- Keep the product away from water.
- Clean the product with dry cloth.
- Use the product in accordance with its instructions and do not block its vents.
- Keep the product away from ignition sources, such as heat sinks, heat accumulators, stovepipes and other heat production settings (including audio amplifiers).
- Do not touch the product and the power cord with wet hands so as to lower the risk of electric shock and the damage to the product. Do not let the product get wet or become damp.
- Unplug the power supply of this product in thunderstorm days or when it has been not used for a long time.
- Do not expose this product and its battery to open fire or overheating environment. Dispose the waste battery in accordance with instructions.
- Users shall not remove and repair the product without authorization.

2. Warranty Information

We warrant this product as free of defects in material and workmanship for a period of one (1) year from the date of shipment. If during the period of warranty this product proves defective under normal use, we will repair or replace this product, provided that this product has not been subjected to mechanical, electrical, or other abuse or modifications. If it fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for six (6) months from the day of reshipment to the buyer.

3. Preface

Dear Users:

In professional AV, data centers, and industrial control environments, even millisecond delays can impact critical operations. The DP Fiber Optic KVM Extender leverages the inherent advantages of fiber optics to break the limitations of traditional copper cables, delivering 8K Ultra High Definition video and USB 2.0 control signals with near-zero latency over distances of up to 300m (OM4 multimode). Built on DisplayPort 1.4 standards and OM4 multimode fiber (LC connectors), it supports HDR10, 10-bit color depth, and 3D stereoscopic imaging for true-to-source visual fidelity. Keyboard, mouse, and touch inputs respond in <1ms latency, matching the feel of a direct connection, ideal for high-performance applications where reliability is non-negotiable.

Tips: If you need to control more computers or conduct more complex and professional switching, you can also choose other products of our company. For more details, you can visit our official website: www.tesmart.com.

4. Features

- Use single OM4 Multimode Duplex LC-LC Fiber Patch Cable to substitute DP cable to extend 300m(984ft.) transmission distance
- DP 1.4 compliant
- Support resolution up to 8K(4320p)@60Hz and is backward compatible with 4K(2160p)@60Hz/120Hz/144Hz/240Hz
- HDCP 2.2 compliant
- Achieving low latency (<1ms), making it indistinguishable from a local connection
- No software installation required—works instantly upon connection
- Automatically negotiates optimal display resolution for flawless video output
- Locking DC power jack ensures secure connection, preventing accidental disconnection
- Independent left/right channel audio transmission
- Fiber optic medium inherently eliminates electromagnetic interference (EMI/RFI), ensuring flawless operation in harsh electromagnetic environments.

5. Packing List

- 1 * Transmitter
- 1 * Receiver
- 2 * DC 12V Power Adapter
- 1 * User Manual

Tips: After received the product, you should check the packing list carefully to make sure that no components have been lost and no damage to the product has been caused during transportation. If you have any problems, you can contact with us.

6. Panel Description

6.1 Transmitter Panel Description

ID	Name	Function
1	Fiber Optic Port	Connect a standard LC-LC duplex OM4 multimode fiber patch cable to RX.
2	Video Signal Indicator	Blue LED activation confirms detection of an active video signal.
3	Power Indicator	Red LED activation confirms main power input detection.
4	DC 12V	DC 12V power supply.

ID	Name	Function
5	DP input port	Connect to DP source device.
6	USB connection port	Using USB Type-A to Type-B cable to connect to the input device for USB data signal input.

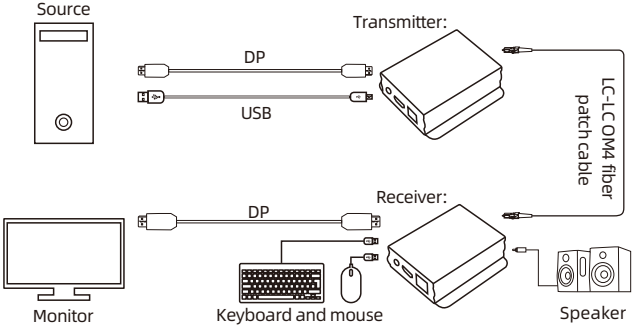
6.2 Receiver Panel Description

ID	Name	Function
7	Stereo Output	Connect speakers or headphones here to output audio from the source.
8	Fiber Optic Port	Connect a standard LC-LC duplex OM4 multimode fiber patch cable to TX.
9	Video Signal Indicator	Blue LED activation confirms detection of an active video signal.
10	Power Indicator	Red LED activation confirms main power input detection.
11	DC 12V	DC 12V power supply.

ID	Name	Function
12	DP Output Port	Connect DP display for video output.
13	Keyboard and mouse input	For USB keyboard and mouse input, including wireless keyboard and mouse.

7. Connection Description

7.1 Connection Diagram



Tips: 1. Ensure LC-terminated multimode fiber meets IEC 60793-2-10 specifications for OM4 performance.
2. The device operates exclusively in direct point-to-point mode, as its signal protocol does not support intermediary fiber switch connectivity.

7.2 Connection Steps

1. Connect a PC to the transmitter with one DP cable and one USB Type-A to Type-B cable. Connect the type-B end of the USB cable to transmitter's USB connection port, and the type-A end to PC (as shown below).

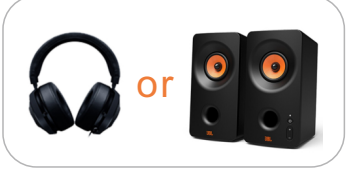
2. Connect one end of LC-LC OM4 fiber patch cable to transmitter's fiber optic port.

3. Connect the power cable to transmitter's DC 12V port and plug it to a power socket. The transmitter connection has been completed.

4. Connect receiver's DP output port to a display with one DP cable.

5. Connect external mouse and keyboard to receiver's keyboard and mouse input port.

6. Connect external audio device to stereo output port.



8. Connect the other end of LC-LC OM4 fiber patch cable to receiver's fiber optic port.

9. Connect the power cable to receiver's DC 12V port and plug it to a power socket.

10. By now, all the connection has been completed. The Extender will begin to work if the PC is turned on.

V001

TESmart

To Enjoy Smart

DKE30SS-M25

TESmart Tech Co.,Ltd

WEEE-Reg.-Nr. DE 66784279