

User Manual

UTE-FOUB30

4-Port USB3.2 Gen1x1 Fiber Optic Extender



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Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till September, 2022. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

All product function is valid till 09-28-2022.

Trademarks

Product model and logo  are trademarks of U.T.E. electronic GmbH & Co. KG. Any other trademarks mentioned in this manual are acknowledged as the properties of the trademark owner. No part of this publication may be copied or reproduced without the prior written consent.

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



SAFETY PRECAUTIONS

To ensure the best performance from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment.
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the specifications of product may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheat.
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time.
- Information on disposal for scrapped devices: do not burn or mix with general household waste, and please treat them as normal electrical wastes.

Table of Contents

1. Product Introduction	1
1.1. Features	1
1.2. Packing List	2
2. System Connection	3
2.1. Usage Precaution	3
2.2. System Diagram UTE-FOUB30	3
2.3. Application	3
3. Technical Specification	4
4. Customer Service.....	5

1. Product Introduction

The 4-Port USB 3.1 Optical Fiber Extender Set UTE-FOUB30 consists of a local unit and a remote unit.

UTE-FOUB30 uses optical fiber conversion technology to realize the optical fiber transmission of USB3.2 Gen 1x1/ USB2.0/ USB1.1 signals. When used for long-distance transmission of USB3.1 signals, the data rate can up to 5Gbps, and the non-real-time transmission distance can be up to 300m and the real-time transmission distance can up to 100m by using single-mode or multi-mode fiber.

When used for long-distance transmission of USB2.0 or USB1.1, the non-real-time transmission distance can up to 10km and the real-time transmission can up to 6km by using single-mode fiber, or the transmission distance can up to 500m by using multi-mode fiber.

The extender adopts metal enclosure and has four mounting holes for easy installation. It has an integrated USB 3.2 Gen 1x1 hub with four ports and supports Plug-and-Play (PnP), no need to install driver is required.

This product adopts advanced optical fiber transmission technology to ensure good anti-electromagnetic interference ability.

1.1. Features

- Compatible with USB3.2 Gen 1x1 (formerly known as USB3.1 Gen 1 or USB3.0)/ USB2.0 and USB1.1.
- USB3.2 Gen 1x1/ USB3.1 Gen1 data rate is 5Gbps.
- USB2.0 data rate is 480Mbps, USB1.1 data rate is 12Mbps.
- Integrated USB 3.1 hub with four ports, support all USB 3.1, 2.0, 1.1 devices.
- Transmits audio and video signal over Single-mode Fiber or OM3 multi-mode fiber.
- 1x LC Fiber connector.
- Supports the technology of converting USB3.1 to optical fiber without delay.
- External DC 12V power supply.
- Strong anti-interference ability.
- Plug and Play - no driver installation required

1.2. Packing List

- 1x Local Unit
- 2x TX Mounting Ears with 2 Screws
- 2x Power Adapter (12V DC 1.25A)
- 1x Remote Unit
- 2x RX Mounting Ears with 2 Screws
- 1x User Manual



Note: Please contact your distributor immediately if any damage or defect in the components is found.

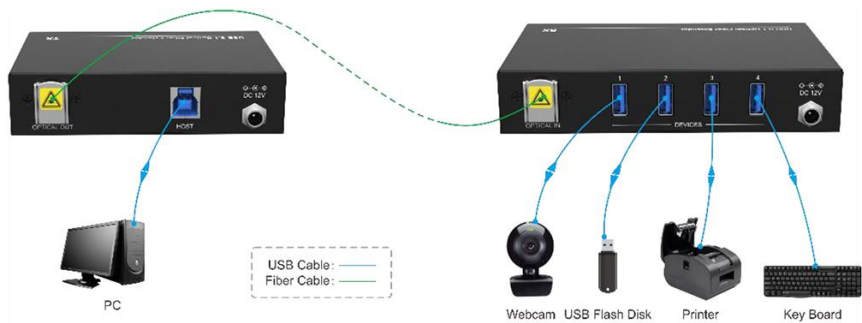
2. System Connection

2.1. Usage Precaution

- Make sure all components and accessories included before installation.
- System should be installed in a clean environment with proper temperature and humidity.
- All of the power switches, plugs, sockets, and power cords should be insulated and safe.
- All devices should be connected before power on.

2.2. System Diagram UTE-FOUB30

The following diagrams illustrates typical input and output connections that can be utilized with the USB 3.1 Optical Fiber Extender UTE-FOUB30.



2.3. Application

- Machine vision
- Security monitoring
- Data storage
- Video conference
- Medical equipment system

3. Technical Specification

	UTE-FOUB30T (Local Unit)	UTE-FOUB30R (Remote Unit)
Interfaces		
USB Interface	(1) USB3.0 type-B male connector	(4) USB3.0 type-A female connector
Fiber Interface	(1) LC	(1) LC
USB Standard		
Supported USB standard	USB3.2 Gen1x1 (also known as USB3.1 Gen1 or USB3.0) Backward compatible with USB 2.0 and USB 1.1	
Supported USB data rate	USB3.1 GEN1: 5Gbps USB2.0: 480Mbps USB1.1: 12Mbps	
Distance		
USB3.1 Gen1	Single-mode fiber or OM3 multi-mode fiber: Non-real-time transmission: 300m Real-time transmission: 100m	
USB2.0/1.1	Single-mode fiber: Non-real-time transmission:10km Real-time transmission:6km OM3 multi-mode fiber: 500m	
Control Connector	(4) Type-A USB 2.0, (1) Type-B USB 2.0, (1) 2-pin DIP switch, (2) 3.5mm jacks, (1) 3-pin terminal block, (1) RJ45	(4) Type-A USB 2.0, (1) Type-B USB 2.0, (2) 3-pin DIP switch, (2) 3.5mm jacks, (1) 3-pin terminal block, (1) RJ45
General		
Operation Temperature	-10 to +60°C (+50° to +140°F)	
Storage Temperature	-45 to +85°C (-49° to +185°F)	
Operating Humidity	20% to 80% relative humidity, non-condensing	
Storage Humidity	10% to 80% relative humidity	
Power Supply (External PS)	Input:100V~240V AC; Output:12V DC	Input:100V~240V AC; Output:12V DC
Enclosure Material	Metal	
Dimension (W*D*H)	135mm x 75mm x 26mm	160mm x 85mm x 26mm
Installation	4 mounting holes for fixing	4 mounting holes for fixing

4. Customer Service

Any transport costs are borne by the users during the warranty.

The return of a product to our Customer Service implies the full agreement of the terms and conditions hereinafter. These terms and conditions may be changed without prior notice.

- 1) Product Limited Warranty:** We warrant that its products will be free from defects in materials and workmanship for two years, which starts from the first day you buy this product (The purchase invoice shall prevail).

Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.

2) Scope

These terms and conditions of Customer Service apply to the customer service provided for the products or any other items sold by authorized dealer only.

3) What the warranty does not cover:

- Warranty expiration.
- Factory applied serial number has been altered or removed from the product.
- Damage, deterioration or malfunction caused by:
 - Normal wear and tear
 - Use of supplies or parts not meeting our specifications
- No certificate or invoice as the proof of warranty.
- The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
- Damage caused by force majeure.
- Servicing not authorized.
- Any other causes which does not relate to a product defect
- Delivery, installation or labor charges for installation or setup of the product

- 4) Documentation:** Customer Service will accept defective product(s) in the scope of warranty coverage at the sole condition that the defect has been clearly defined, and upon reception of the documents or copy of invoice, indicating the date of purchase, the type of product, the serial number, and the name of dealer.

5) Technical Support: Email to our after-sales department or make a call, please inform us the following information about your cases.

- Product version and name.
- Detailed failure situations.
- The formation of the cases.

Remarks: For any questions or problems, please try to get help from your local dealer or our customer support (info@ute.de).



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