

EX-27

USB 2.0 Extender over Single Cat.X

User Manual

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Transmitter



Receiver

INTRODUCTION

The **EX-27 USB 2.0 Extender over Single Cat.X** makes USB equipped device accessible over single Cat.X cable. EX-27 helps you extend USB peripheral device up to 264feet (80 meters) over single Cat.X cable. The extender consists of two units, local and remote unit. The local unit connects to the PC and the remote unit connects to the peripheral device, such as USB printers, USB camera, USB Storage devices, USB Card-Readers, and more. EX-27 offers the most convenient solution for long distance USB 2.0 transmission path.

FEATURES

- Supports four USB peripheral devices
- Extends the transmission up to 264feet (80 meters) from USB device
- Supports USB 1.0(low-speed), USB 1.1(full-speed) and USB 2.0(high-speed)
- Supports suspend/resume detection
- Does not require additional drivers
- Supports hot plug function
- Easy to setup



1. HDR = High Dynamic Range.
2. The video bandwidth of 4K2K@60 4:2:0 10bits (HDR) is 384 MHz, and the 4K2K@60 4:4:4 8bits is 594MHz.



The RS-232, IR and USB function cannot be used at the same time

PACKAGE CONTENTS

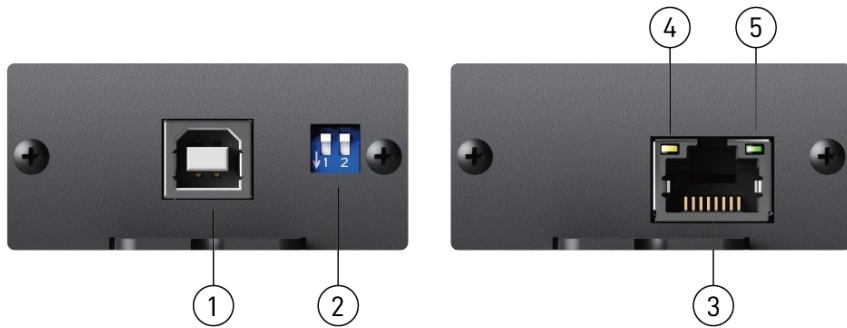
- 1x EX-27 [TX & RX]
- 1x 5V power adapter
- 1x User Manual

SPECIFICATIONS

Model Name		EX-27	
Technical			
Role of usage	Transmitter [TX]		Receiver [RX]
USB compliance	USB 2.0 high speed compliant		
Bandwidth	Up to 480 Mbit/s		
USB over UTP transmission	Up to 264feet (80 meters)		
Signal Equalization	2-pin dip switch at TX & RX		
ESD protection	[1] Human body model-±19 kV [air-gap discharge] & ±12 kV [contact discharge] [2] Core chipset-±8kV		
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]		
Input	1x USB(Type B)	1x RJ-45	
Output	1x RJ-45	4x USB(Type A)	
USB connector	USB 2.0 Type A & B (High-Speed USB)		
RJ-45 connector	WE/SS 8P8C with 2 LED indicators		
Dip Switch	Signal level equalization	Signal level equalization	
Mechanical			
Housing	Metal enclosure		
Dimensions [L x W x H]	Model	97 x 54 x 27mm[3.8" x 2.1" x 1"]	97 x 54 x 27mm[3.8" x 2.1" x 1"]
	Package	264 x 170 x 77mm[10.3" x 6.7" x 3"]	
	Carton	430 x 358 x 291mm[1'4" x 1'2" x 11.5"]	
Weight	Model	95g[3.7oz]	104g[4oz]
	Package	226g[8oz]	217g[7.6oz]
Power supply	Via USB		5V 2A DC
Power consumption	2 Watts [max]	4 Watts [max]	
Operation temperature	0~40°C [32~104°F]		
Storage temperature	-20~60°C [-4~140°F]		
Relative humidity	20~90% RH [no condensation]		

PANEL DESCRIPTIONS

Transmitting unit ▶ EX-27-TX

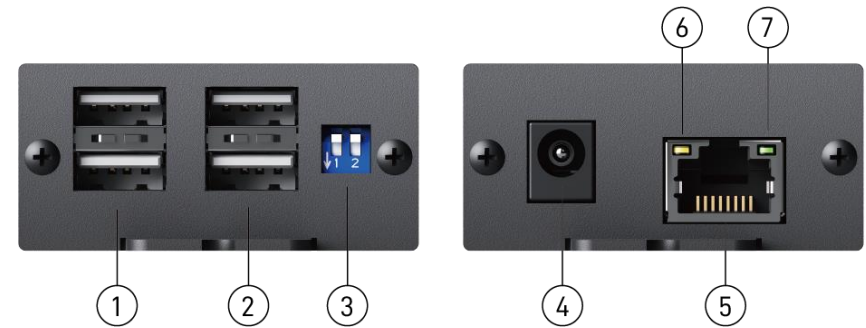


1. **USB:** Connect to USB Host
2. **2-Pin Dip Switch for Equalization Selection:**
Use the dip switch (please refer to below table) to adjust equalization level. The equalization level varies from EQ#1 (MAX or strongest) to EQ#3 (MIN or weakest) for respective transmission length from longest possible range to short distance

DIP Switch Position				Description
PIN#1	PIN#2	ON [↓]	OFF [↑]	EQ#1 (MAX or Strongest)
		OFF [↑]	ON [↓]	EQ#2
		OFF [↑]	OFF [↑]	EQ#3 (MIN or Weakest)
		ON [↓]	ON [↓]	Reserved

3. **RJ-45:** Plug in a CAT-5/5e/6 cable that needs to be linked to the RJ-45 connector of the matched unit
4. **Power indicator**
5. **Signal indicator**

Receiving unit ▶ EX-27-RX

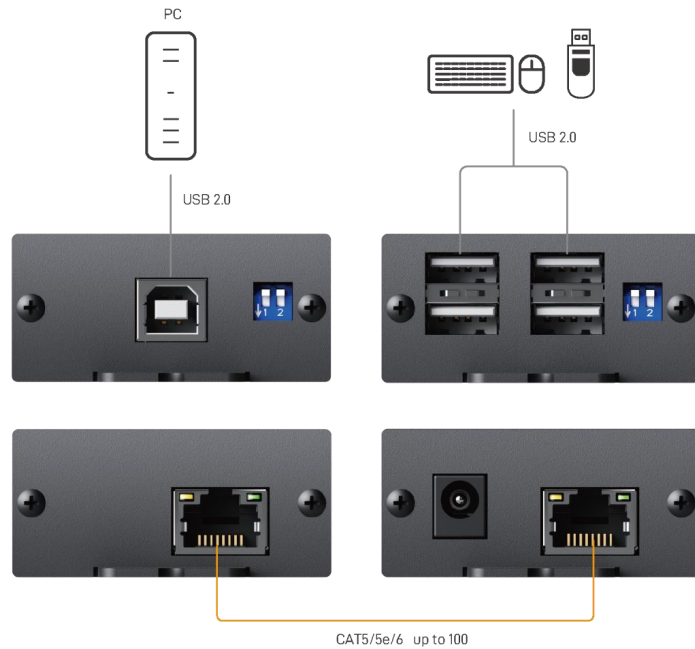


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		OFF [↑]	OFF [↑]	EQ#3 (MIN or Weakest)
		ON [↓]	ON [↓]	Reserved

4. **5V DC power jack**
5. **RJ-45:** Plug in a CAT-5/5e/6 cable that needs to be linked to the RJ-45 connector of the matched unit
6. **Power indicator**
7. **Signal indicator**

CONNECTION DIAGRAM



WARRANTY

The SELLER warrants the **EX-27 USB 2.0 Extender over Single Cat.X** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surges.

Unit that 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 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables are limited to a 30 day warranty and cable must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. **Also, the technical information contained herein regarding the EX-27 features and specifications is subject to change without further notice.**