

DisplayPort CAT5e Extender Series

ITEM NO: DP02U DisplayPort KVM with USB/RS232 CAT5e Extender

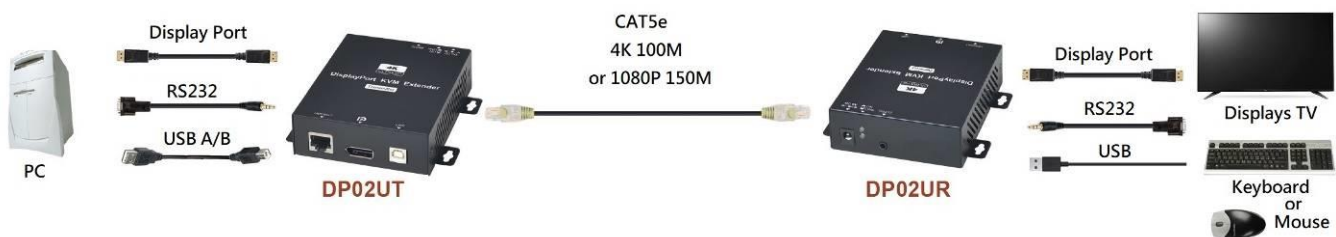
DP02U DisplayPort CAT5e Extender uses HDBaseT technology to transfer DisplayPort signal through one cost-effective CAT5e/6 cable, along with 4 ports of USB or 1 port of RS232 signals. It is an ideal solution for long range extension between a PC/laptop and a projector/monitor.



Features:

- Extend DisplayPort, USB or RS232 signals over one CAT5e/6 cable.
- Video resolution up to 4K@30Hz 4:4:4.
- Transmission distance: 4K UHD up to 100M, 1080p@60Hz up to 150M.
- Built-in 4 ports of USB Type-A. Compatible with USB 2.0, 1.1, and 1.0.
- Support Bi-Directional RS232 transmission.
- Audio supports up to LPCM 7.1 @ 192KHz, Dolby TrueHD, DTS-HD MA

Installation:



Transmission Distance Chart:

Cable Type	Max Distance	Max Resolution
CAT5e / CAT6/CAT6a/CAT7	150M	Long Reach Mode 1080p 60Hz 8bit
CAT5e / CAT6	100M	1080p 60Hz 12bit
CAT5e	90M	1080p 60Hz 16bit 4096x2160@30Hz 4:4:4 4096x2160@60Hz 4:2:0
CAT6/ CAT6a/ CAT7	100M	

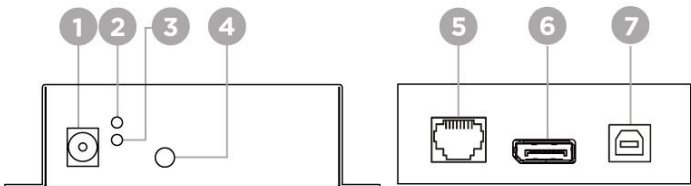
If the Ethernet cable passes through the wall socket, the length of the cable between DP02U and Wall Jack must be fewer than 3 meters as connection diagram shown below:



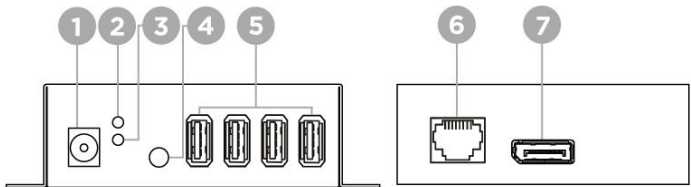
Cable used:

We recommend using high-quality CAT5e, CAT6, CAT6a, CAT7 UTP/STP, or FTP cables to connect DP02UT and DP02UR. Poor quality cables and any improper connection will cause video or audio disruptions and picture noise.

Panel view:



DP02UT		
No.	Interface	Functionality
1	Power Jack	To connect with 5V 2A power adapter
2	Power Indication	To indicate power status (Refer to Description 1)
3	Link Indication	To indicate link status (Refer to Description 1)
4	3.5 mm Phone Jack	To connect with RS232 cable (Refer to Description 2)
5	RJ45 Connector	To connect with Ethernet cable (Refer to Description 3)
6	DisplayPort Connector	To connect with DisplayPort cable
7	USB-Type A Connector	To connect with USB cable



DP02UR		
No.	Interface	Functionality
1	Power Jack	To connect with 5V 2A power adapter
2	Power Indication	To indicate power status (Refer to Description 1)
3	Link Indication	To indicate link status (Refer to Description 1)
4	3.5 mm Phone Jack	To connect with RS232 cable (Refer to Description 2)
5	USB-Type B Connector	To connect with USB cables
6	RJ45 Connector	To connect with Ethernet cable (Refer to Description 3)
7	DisplayPort Connector	To connect with DisplayPort cable

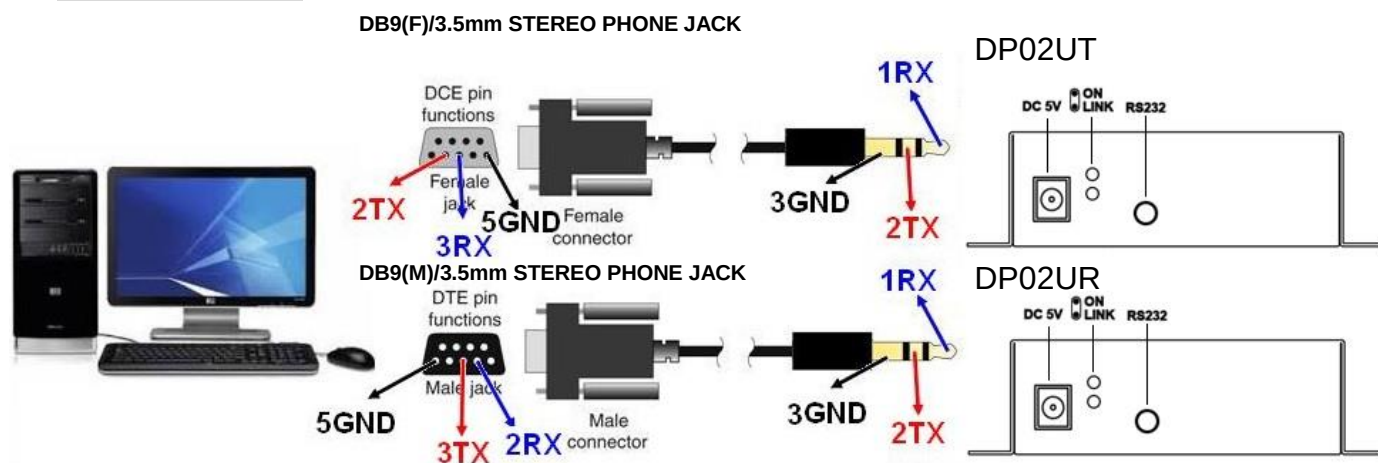
1. LED Indication :

Color	Status	DP02UT	DP02UR
GREEN	ON	Power on	
BLUE	ON	Linked	
	Flash	Power Saving Mode	

Power Saving Mode :

No video displaying or no connecting with any devices, DP02U will automatically activate Power Saving Mode to save power. When power saving mode enabled, RS232 and USB transmission are not able to function.

2. RS232 Define:



DB9(F)/3.5mm STEREO PHONE JACK

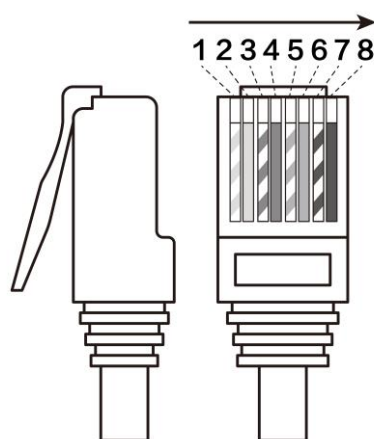
RS232		3.5 mm Phone Jack	
Footprint	Define	Footprint	Define
Pin 2	TX	Pin 1	RX
Pin 3	RX	Pin 2	TX
Pin 5	GND	Pin 3	GND

DB9(M)/3.5mm STEREO PHONE JACK

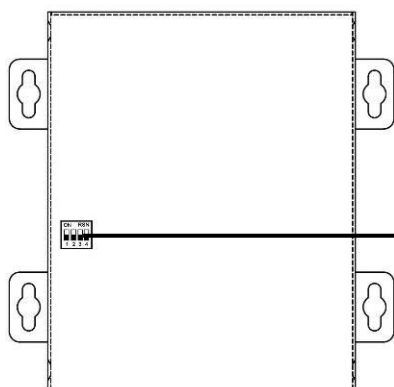
RS232		3.5 mm Phone Jack	
Footprint	Define	Footprint	Define
Pin 2	RX	Pin 1	RX
Pin 3	TX	Pin 2	TX
Pin 5	GND	Pin 3	GND

3. RJ45 Pinout:

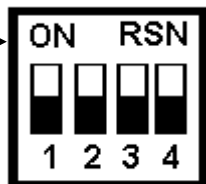
(PIN TIA/EIA-568B)	
PIN	Wire Color
1	Orange-white
2	Orange
3	Green-white
4	Blue
5	Blue-white
6	Green
7	Brown-white
8	Brown



4. Switch Function:



Switch	Position	Function		
SW1	ON	Long Reach Mode 1080p	OFF	4K Resolution
SW2	ON	Reserve	OFF	RS232 Extension
SW3	ON	Firmware Update	OFF	Reserve
SW4	Reserve			



Caution:

This device does not support MST (Multi Stream Transport) hub function based on DP1.2

Trouble Shooting:

1. The connection cables must keep a distance from any equipment with an electromagnetic wave, i.e., mobile phone, microwave, radio equipment, fluorescent lamp, high voltage power lines.
2. The cable must remain straight to avoid any crosstalk interference and to maintain good stability of the transmission.
3. The HDBaseT technology does not communicate through the general Ethernet signal. Therefore, using the HDBaseT port to connect with network devices may cause damage to the extender.
4. If there is interference or multiple DP02U used in the environment, using STP or FTP cable is highly recommended.

DP02U Package Include:

- 1 x DP02UT Transmitter
- 1 x DP02UR Receiver
- 1 x USB A/B cable
- 1 x DB9 (M)/3.5mm STEREO PHONE JACK
- 1 x DB9 (F)/3.5mm STEREO PHONE JACK
- 2 x Mounting Screw pack
- 2 x DC5V 2Amp Power Adapter

Specification:

ITEM NO.	DP02UT	DP02UR
DP Input Interface	1	x
DP Output Interface	x	1
HDMI Video Support	4K@30Hz 4:4:4, 1080p@60Hz 48bits, 3D	
HDMI Audio Support	Up to 7.1 LPCM 192KHz / Dolby TrueHD / DTS-HD MA	
HDBaseT Connector	RJ45 x 1	
HDBaseT Distance	4K@30Hz 4:4:4 at 100M, 1080P@60Hz at 150M	
RS-232 Interface	DB9(F)/3.5mm STEREO PHONE JACK	DB9(M)/3.5mm STEREO PHONE JACK
RS-232 Baud Rate	115200 bps / full duplex	
USB input/output	USB-Type B x 1	USB-Type A x 4
Power Consumption	Max: 5W, Power saving mode: 1W	Max: 6W, Power saving mode: 1W
Power Adapter	Regulated DC 5V/2A	
Temperature	Operation: -10 to 45°C, Storage: -30 to 70°C, Humidity: up to 90%	

RoHS CE FC 

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