

## What's in the Box?

PART NO.	QTY	DESCRIPTION
DPX-1P-Plus-RX	1	DPX-1P-Plus Receiver. DisplayPort + USB + RS-232 Receiver over CAT5/5e/6
DPX-1P-Plus-TX	1	DPX-1P-Plus Transmitter. DisplayPort + USB + RS-232 Transmitter over CAT5/5e/6
Power Supply	2	PS5VDC4A
OPTIONAL	QTY	DESCRIPTION
SM-Rack	1	Universal Half Rack Shelf System. Includes: [SmartRack Shelf, 2 Slotted Mounting Brackets and Hardware.]
CCDPMMKVM-06	1	6 ft KVM USB DisplayPort Cable

## Technical Specifications

VIDEO	
Format	DisplayPort 1.2
Maximum Pixel Clock	275 MHz
Input Interface (TX)	(1) DP female
Output Interface (RX)	(1) DP female
Resolution	Up to 4K (3840x2160 @ 30Hz)
DDC	via AUX
Input Equalization	Automatic
Input Cable Length	Up to 15 ft.
Output Cable Length	Up to 15 ft.
AUDIO	
Frequency Response	30KHz to 80KHz
Input Interface (TX)	(1) 3.5 mm (Female)
Output Interface (RX)	(1) 3.5 mm (Female)
USB	
Signal Type	USB 1.1 and USB 2.0 Compatible
Input Interface (TX)	(1) USB Type B (Female)
Output Interface (RX)	(2) USB Type A (Female)
RS-232	
Input Interface (TX)	DB9 (Female)
Output Interface (RX)	DB9 (Female)
Flow Control	Software up to 115,000 kbps
OTHER	
Power	External 100-240 VAC/5VDC4A @20W
Dimensions	9 in W x 2 in H x 3 in D
Weight	1.45 lb per TX/RX unit
Operating Temp.	0-55 °C (32-131°F)
Storage Temp.	-20-85 °C (-4-185 °F)
Humidity	Up to 95%

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### Rack Mountable Option



Our SmartRack is the perfect solution to allow virtually all SmartAVI devices to be custom mounted in a standard 19" server rack. The SmartRack is fully adjustable and can secure/organize several devices.

**Smart-AVI**  
SMART AUDIO VIDEO INNOVATION

## DPX-1P-Plus

DisplayPort, USB Keyboard and Mouse Extender with RS232 and Audio



Extend DP Video, USB Keyboard and Mouse, Audio, and RS232 up to 328 feet (100m) over CAT5/5e/6 cable

## Quick Start Guide

**Smart-AVI**  
SMART AUDIO VIDEO INNOVATION

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## Introduction

The DPX-1P-Plus DisplayPort extender is capable of sending a DP signal up to 328 feet (100m) over a conventional and inexpensive CAT5/5e/6 cable. The technology is superior to standard extenders that require a special CAT6 shielded cable to go a short distance. The DPX-1P-Plus also has USB keyboard and mouse, and RS-232 extension, giving users the ability to control displays or devices remotely.

## Features

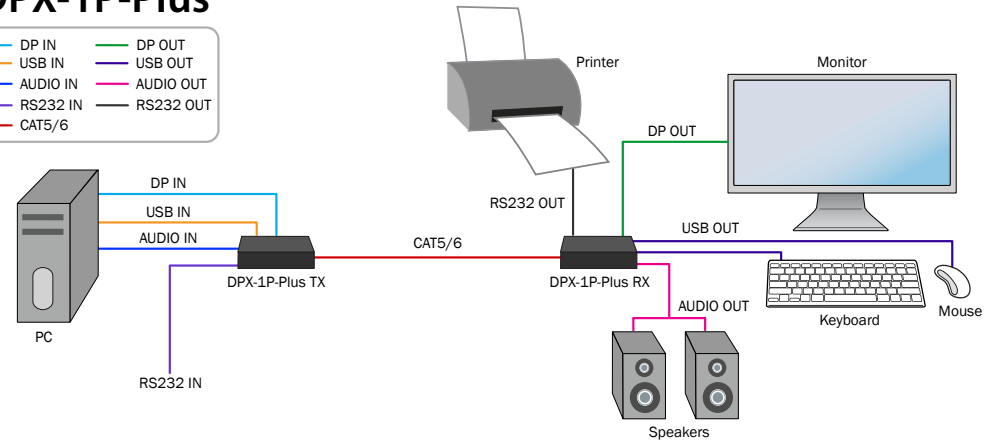
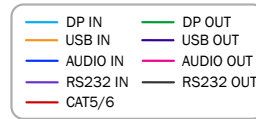
- Extend DisplayPort signals up to 328 feet (100m)
- Data recovery for digital video
- Supports 1080p (1920x1200 @ 60Hz)
- Supports up to 4K (3840x2160 @ 30Hz) video resolution
- Automatic EDID Learning via AUX
- USB Keyboard and Mouse
- Supports RS-232 extension
- External power adapter for transmitter and receiver unit
- Supports SST only (no MST support)
- Plug-and-play ready

## Applications

- Digital Signage
- Security
- PC Networking
- Conference Center Systems
- Point of Sale
- Camera Surveillance
- Video Phone
- Control Room Systems
- Recording Studio
- PC KVM Extension

To reach maximum distances it is recommended to use the best possible quality cable available. CAT5e/6 shielded cabling is ideal for best performance.

## Diagram Smart-AM DPX-1P-Plus



## Connecting the DPX-1P-Plus

1. Power off all devices.
2. Connect a DisplayPort source (computer) to the DisplayPort port on the DPX-1P-Plus-TX.
3. Connect a USB source (computer) to the USB port on the DPX-1P-Plus-TX using a USB A to B cable (not included).
4. Optionally connect RS-232 for control functions.
5. Connect the DPX-1P-Plus-TX to the the DPX-1P-Plus-RX with one CAT5 UTP (Unshielded Twisted Pair) cable.
6. Connect a DisplayPort compatible display to the DisplayPort port on the rear of the DPX-1P-Plus-RX.
7. Connect USB keyboard and mouse to the USB ports on the DPX-1P-Plus-RX.
8. Optionally connect RS-232 for control functions.
9. Connect the power to the DPX-1P-Plus-RX and the DPX-1P-Plus-TX.
10. Power on the display and then the computer.

**The DDC of your display will be learned automatically.**

### DPX-1P-TX Front



### DPX-1P-TX Rear



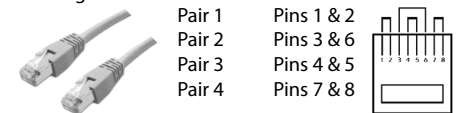
### DPX-1P-RX Front



### DPX-1P-RX Rear



The following is the wiring standard for terminating UTP/STP cable using RJ-45 connector:



Connectors:	RJ-45
Capacitance:	14 pf/ft (46.2 pf/m)
Conductor Gauge:	24 AWG
Impedance:	100 +/- 15 ohms