

# PureLink

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## VIP-200



Video over IP Extender and Matrix System

## Point to Point Extension Configuration Quick Start Guide

**PureLink™**

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## What is in the box

### Transmitter kit

- 1x VIP200H/D/V-TX
- 1x Power Adapter
- 1x Infrared Receiver



### Receiver kit

- 1x VIP200H/DV-RX
- 1x Power Adapter
- 1x Infrared Emitter
- Remote Control



## Overview

The VIP200 series allows point to point, point to many, many to point, and many to many configurations. The VIP200 series is set to work out of the box as a point to point system, no configuration is necessary, simply plug them together using CAT5e or better cable. The VIP200 series can work out of the box this way because it employs its own Auto IP addressing method.

If you are using the VIP200 series through a network switch, you will need to determine if the switch is using DHCP or assigned IP addressing methods. In either of these cases, you would then need to configure the VIP200 devices to DHCP or Manual IP addressing methods.

The VIP200 series provides three modes of addressing.

### Auto IP Addressing

The VIP200 system default configuration provides automatic IP addressing in the 169.254.xxx.xxx range. The Auto IP method provides instant and easy setup and operation of the VIP200 devices when a specific manual IP address method is not required, and DHCP is not required.

### Methods to determine Auto IP assignments

There are two ways to determine the Auto IP assignments of the transmitters and receivers.

1. On Screen Display

Once the receiver discovers the transmitter that equals the channel it is assigned to, it will display both Auto IP addresses in the lower right corner when no video signal is present. If a video signal is present, you can request display of the host (transmitter) and client (receiver) with the following remote control buttons:

2. Network Discovery

This method is available only when the transmitter(s) and receiver(s) are connected together via a network switch, and a computer running the VPX discovery tool is utilized. The computer's ip4v address must be set within the 169.254.xxx.xxx range to detect the devices. Please see the 'Discovery of Devices Utilizing Auto IP' section in this manual.

### Manual IP Addressing

The VIP200 device IP addresses can be configured manually. Using our simple software application to identify the devices Auto IP address, you can then access their built in web page interface to change the devices to Manual IP mode. Manual IP addressing is utilized when the network is not DHCP, and the Auto IP range 169.254.xxx.xxx does not work with the current network, or the intended design. These settings are normally done prior to adding on to a network. Please see the 'Setting Devices for Manual IP Addressing' in this manual.

### DHCP Addressing

The VIP200 device IP addresses can be configured to accept IP addresses using DHCP. Using our simple software application to identify the devices, you can then access their built in web page interface to change the devices to DHCP IP mode.

## One Transmitter to One Receiver Setup (point to point extension)



*Point to Point direct connection via CAT5e or better cable (Auto IP mode recommended)*

The Transmitter and Receiver ship in Auto IP mode, which allows them to discover each other with no configuration required. While it is possible to reconfigure the transmitter and receiver to Manual IP or DHCP IP mode, there is no value to making these changes, unless you need them to be on an existing network and not connected point to point (direct).

- Connect the transmitter and receiver together using a CAT5e or better cable.
- Connect your source to the input of your transmitter
- Connect a display to the output of your receiver
- If desired, connect your confidence monitor to the loop out of the transmitter (VIP200H-tx)
- Connect the power adapters for each unit, and apply power. The system will go through a normal bootup sequence that takes approximately ten seconds to display the image.

## KVM Operation

The receiver has four USB ports, the first two operate at 1.1 speeds, the third and fourth ports operate at 2.0 speeds. Please use ports 3 and 4 when using a mouse or keyboard via USB to ensure ultra low latency.

## Typical reference streaming rates

Resolution (@60Hz)	Average Bandwidth (Mbps)
1080p	77 (24 ~ 91)
720p	46 (29 ~ 150)
480p	63 (36 ~ 73)
1600x1200 (UXGA)	59 (24 ~ 73)
1280x1024 (SXGA)	58 (31 ~ 76)
1024x768 (XGA)	118 (56 ~ 138)
800x600 (SVGA)	83 (64 ~ 107)

Use of USB may add up to 50 mpps to stream rate, depending on the USB device(s).

## Remote Control

### Initial setup of remote control

**NOTE:** In point to point configuration, many of the remote functions are not valuable/applicable, as they are meant for managing multiple transmitters or receivers.

A remote being used for the first time, or after battery replacement, needs to be assigned an ID

The universal ID that will control all receivers is 8. Press the 'Power' and '8' button at the same time.



### Typical remote control operation for Point to Point Operation

OSD will clear ten seconds from displaying any menu.

- Display MAC address
  - "Menu", "0", "Enter"
  -
- Display Local (Receiver) address
  - "Menu", "1", "Enter"
  -
- Display Host (Transmitter) address
  - "Menu", "2", "Enter"
  -
- Display Receiver Firmware
  - "Menu", "5", "Enter"
  -
- Restart Link
  - "Menu", "6", "Enter"
  -
- Stop Link
  - "Menu", "7", "Enter"
  -
- Enable Channel Buttons on Receiver
  - "Menu", "26", "Enter"
  -

- Disable Channel Buttons on Receiver
  - “Menu”, “27”, “Enter”
- Display Selected Channel
  - “Enter”
- Set to Factory Default
  - “Menu”, “333”, “Enter”
- Receiver reboot
  - “Menu”, “999”, “Enter”

It is typical in a point to point system that the transmitter is set on channel 0. The receiver must match in order to receive the signal. Setting the units to factory default will set the transmitter to channel 0 and Auto IP, and the receiver to listen for channel 0 and Auto IP.

### **Mute/unmute image**

Press the ‘Power’ button to toggle mute/unmute. Note: there is an approximate four second delay to unmute.

## Troubleshooting – Point to Point

### Receiver can't find Transmitter

- Receiver is not set to correct channel for transmitter
- Receiver or Transmitter are not connected via CAT cable or via network switch
- Power to transmitter is off
- Power to network switch is off

### Transmitter report no source (via OSD on Receiver lower left corner)

- Check source
- Ensure input cable is plugged in to correct port on transmitter (input vs loop out)
- Power to transmitter is off

## Specifications

Subject to change without notice

ITEM NO.	VIP200H-TX	VIP200D-TX	VIP200V-TX
Support Resolution	480i / 480p / 720p / 1080i / 1080p @ 24Hz、25Hz、30Hz、50Hz、60Hz		
Transmission Distance	CAT.5e : 150M / CAT.6 : 180M (Max)		
USB Connector	USB Type B x 1		
RS232 Connector	DB9 (Female) x 1		
Video Input Connector	HDMI type A x 1	DVI-I x 1 (29 Pin) Digital Only	15-pin Mini D-sub
Video Loop Output Connector	HDMI type A x 1	DVI-I x 1 (29 Pin) Digital Only	15-pin Mini D-sub
Link Connector	RJ45 x 1		
Audio Connector	3.5 mm Phone Jack x 2 (10KΩ / 1Vpp)		
IR Receiver (Internal)	30-60Khz / ±45° / 5M		
IR Emitter (External)	3.5mm Stereo Phone Jack		
Power Supply	DC 5V 2A		
Power Consumption	750mA (Typical) / 1000mA (Max)		
Temperature	Operation: 0 to 55°C, Storage: -20 TO 85°C, Humidity: up to 95%		
Dimensions mm	125x140x30	167x105.5x40	167x105.5x40
Weight g	380	470	460

ITEM NO.	VIP200H-RX	VIP200DV-RX
Support Resolution	480i / 480p / 720p / 1080i / 1080p @ 24Hz、25Hz、30Hz、50Hz、60Hz	
Transmission Distance	CAT.5e : 150M / CAT.6 : 180M (Max)	
USB Connector	USB Type A x 4	
RS232 Connector	DB9 (Male) x 1	
Video Output Connector	HDMI Type A x 1	DVI-I x 1 (29 Pin) Digital Only / 15-pin Mini D-sub
Link Connector	RJ45 x 1	
Audio Connector	3.5 mm Phone Jack x 2 (10KΩ / 1Vpp)	
IR Receiver (Internal)	30-60Khz / ±45° / 5M	
IR Emitter (External)	3.5mm Stereo Phone Jack	
Power Supply	DC 5V 2A	
Power Consumption	750mA (Typical) / 1000mA (Max) Without USB Power Consumption	
Temperature	Operation: 0 to 55°C, Storage: -20 TO 85°C, Humidity: up to 95%	
Dimensions mm	125x140x30	167x105.5x40
Weight g	390	480



## Network Switch Requirements

While a Point to Point normally is configured with the transmitter and receiver directly connected to each other by CAT cable, it is possible to have point to point over a network switch. The requirements for a network switch are:

- IGMP
- JumboFrame

The network switch does not need to be of the managed switch family. Determination of bandwidth is up to system designer.

### Pure Assurance Tested Network Switches

*Subject to change without notice. [Please check our website for current updated listing.](#)*

#### Netgear

**GS108: 8 port**

[https://www.netgear.com/support/product/GS108?cid=wmt\\_netgear\\_organic](https://www.netgear.com/support/product/GS108?cid=wmt_netgear_organic)

**JGS524E: 24 port**

[https://www.netgear.com/support/product/JGS524E.aspx?cid=wmt\\_netgear\\_organic](https://www.netgear.com/support/product/JGS524E.aspx?cid=wmt_netgear_organic)

The VIP lines of PureStream IP Video products can be found at the purelinkav.com website

[http://main.purelinkav.com/main/index.php?dispatch=products.view&product\\_id=223](http://main.purelinkav.com/main/index.php?dispatch=products.view&product_id=223)

