

IPVS-1



IP VIDEO SNIFFER

INSTRUCTION BOOK
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IPVS-1 IP VIDEO SNIFFER

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DESCRIPTION:

The IP VIDEO SNIFFER is a hand-held meter used to check new installations and trouble shoot existing IP video installations. It instantly displays the communication status of both transmit and receive data lines and also indicates the status of Power Over Ethernet (P.O.E.) lines. The meter can be used with any 10Base-T or 100Base-T Ethernet IP video system using the two RJ-45/8 loop-through connectors. A short patch cable is used to connect to the data path at any point in the system using T568A or T568B wired cables.

DISPLAY INDICATORS:

When the meter is connected to an IP video data system it will display two Blue LED indicators that stay on solid, one indicates data activity on wires 1-2 and the other one indicates data activity on wires 3-6. If the system is using P.O.E. on wire pairs 4-5 and 7-8 then one or more of the Green LED's will be lit to indicate the status of the P.O.E. wires. The P.O.E. Green LED's indicate the wire pair that is carrying the power for easy identification. If two pair P.O.E. is being used on lines 1-2 and 3-6 wire pairs then at least one of the blue LEDs will be on indicating both data and power transmission and all the green LEDs will be off. If wire pairs 1-2 and 3-6 are not being used for P.O.E. and the blue LEDs are on then the equipment is being power locally.

The P.O.E. LED's will indicate voltages from 5 Volts up to 60 Volts. Standard 4 pair P.O.E. implementation requires wire pairs 4-5 to be connected together and wire pairs 7-8 to also be connected together so that no voltage should be measured between 4-5 or 7-8 wire pairs. The P.O.E. voltage should exist between pairs 4-5 and 7-8 only. However non-standard P.O.E. can be measured. Standard two pair P.O.E. will be indicated by the presence of data on the line.

INPUT SIGNALS AND CONNECTORS:

The unit has two RJ-45/8 data connectors on the front panel to connect the data cables from the camera and the receiver equipment. At either end of the system use a short T568A or T568B patch cable to connect the signal for measurement. Connecting the cables from the camera and the receiver equipment will show both communication paths and any P.O.E. lines being used.

When the camera is transmitting video images the two blue LED's will be fully illuminated and very bright. If video images are not being sent and only house keeping data or polling data is being sent then the blue LED's will be dim and flashing to indicate that the system is polling the line.

By connecting only one cable to the unit at a time you can check for reverse cables and damaged or defective TX outputs from any equipment. Connecting only one cable to the meter measures the TX signal being sent by that equipment. The meter will flash one blue LED to identify the line that is being used, it also verifies that the equipment is communicating and polling the system. By connecting the other data cable only you can also check the TX channel on the equipment at the opposite end of the cable. To check for reverse cables pay attention to the channel wire pair that is illuminated, be sure that the correct wire pair is being used for each type of equipment. The camera should be using 3-6 pair and the receiver equipment should be using the 1-2 pair unless a reverse cable is being used in the installation. By connecting only one cable at a time this system information can be derived.

BATTERIES:

A battery compartment door allows easy access to the 9 Volt battery that powers the device. One alkaline 9 Volt "transistor" battery is used. If the unit will not power up the battery must be replaced by a fresh 9 Volt battery.

The battery is located in the case with access provided by a sliding plastic cover plate that has an arrow printed on it. Slide in the direction of the arrow to open. When replacing the cover, place it flat into the grooves so that both ends engage when closing.

ENCLOSURE:

The comfort grip hand-held case is made of flame retardant ABS plastic with a flame rating of 94-5VA. The meter comes with an impact resistant rubber boot to protect it during daily use.

CARE AND MAINTENANCE:

No routine maintenance or test procedures are required other than battery replacement. Attempts at field repair or adjustment will void the warranty.

The IPVS-1 is a precision measuring instrument and should be treated accordingly. While it can withstand ordinary everyday indoor use, it should not be left outside in the rain or otherwise mistreated. It is not waterproof. The battery should be removed if it is placed into storage to prevent leakage of corrosive fluids from batteries as they discharge and age.

Replace batteries at least once a year even if ordinary use does not discharge the battery because old batteries may leak and cause corrosion damage.

If the IPVS-1 fails to operate even after battery replacement, or does not read a known video signal correctly, call the factory for a Return Authorization Number and return it to the factory for repair.

AUXILIARY EQUIPMENT:

The MC1, MC2, and MC3 are Protective Carry Cases to house and protect the IPVS-1 and your other test meters while being transported. These are very rugged water resistant ABS cases with foam-lined interiors suitable for transporting this meter and other test equipment. You can order these carry cases as an option.