

SDI/HDMI/DVI Products Troubleshooting

Optical Fiber

The Rancent SDI/HDMI/DVI Video Transmission Products are available with most applications using multimode or singlemode optical fibers. Please be certain that the correct size and type of the fiber is being used for the particular mode transmitter/receiver combination. Also be certain that the attenuation and bandwidth of the fiber optic cable being used is within the range of the system's loss budget specifications.

Any dirt or dust may easily pollute or block the fiber from accepting or radiating light. Therefore, please try to keep the optical connector clear and always use the dust caps whenever the connector is exposed to air. It is suggested that the tip of the optical connected should be carefully cleaned with a lint-free cloth moistened with alcohol from time to time.

HD-SDI Connection Troubleshooting

The status of any of the LEDs on the SDI units should provide the first clue as to the origin of any operational failure. On the SDI transmitter and receiver, at least one of the indicators (PWR LED) should be illuminated. If no indicators are illuminated, check the power supply connections. If the VIDEO LED on the transmitter unit is off, please check if the SDI camera or video source is correctly connected to the transmitter. If the VIDEO LED on the receiver unit is off, it usually means that the fiber is not normally connected or has too much attenuation. FX LEDs on both the transmitter and receiver should be blinking green when normal fiber connection is successfully established.

If no video signal is shown on the SDI monitor, check to ensure that the monitor is ON and the video cable is connected to the correct video port on the TX and RX. Check to ensure that video input to the channels is working and that you have the associated receive channel is being monitored. With an optical power meter, verify that the wavelength for the suspect optical channel is working properly at the input to the receiver unit.

For SFP modules, please ensure that the SFP modules meet the specification requirements for the SDI units. If the SFP module is suspected to be faulty. Please check the following steps:

- Inspect the SFP module. Exchange the suspect module with a known good module.
- Verify that the module is supported on this platform.
- Make sure that all fiber-optic connections are clean and securely connected.

HDMI/DVI Connection Troubleshooting

Please check if the fiber optic cable is correctly connected if the screen of HDMI monitor shows “searching TX”. Please check if the HDMI/DVI source is normally connected to the transmitter if the screen of HDMI/DVI monitor shows “check TX’s input signal”.

Please also make sure that the transmitter and the receiver are not used in opposite position.

The status of any of the indicator LEDs should provide the first clue as to the optical and electrical status of the units. The FX1/FX2 LED should be blinking green when fiber connection is normally established.

When HDMI/DVI source is normally connected to the transmitter, the Link1/Link2 indicator should be blinking green. If the Link1/Link2 indicator is not lighted, then check HDMI/DVI source and cable connections.

On the Rancent HDMI/DVI receiver, the Link1/Link2 indicator on the receiver should be blinking green. If no indicators are illuminated, check the power supply, power source, and HDMI/DVI connections.

The PWR LEDs should be illuminated red when power supplies are normally applied to the transmitter and receiver. The USB LEDs should be lighted green when USB devices (PC, Mouse, Keyboard) are normally connected to the transmitter or receiver.

For the Ethernet ports connection on the transmitter and receiver, If the Ethernet link is not normally applied, please make sure that PCs connected at TX and RX are in the same IP network segment of Transmitter (192.168.168.55) and Receiver (192.168.168.56).

For help installing, operating, maintaining, and troubleshooting this product, refer to this document and any other documentation provided. If you still have questions or if you have any particular fiber topic inquires you would like to know more about, please send an email to support@rancent.com.