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Miniature fiber-optic 3G-SDI extension module for HDCCTV

User Manual
SDISE-100-TR

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Welcome!

Congratulations on your purchase of the **Miniature Fiber-Optic 3G-SDI Extension module**, SDISE-100-TR. This manual contains information that will assist you in installing and operating the product.

Product Description

Shipping Group

- ☐ **SDISE-100-TX, RX Module:** One (1) set of unit.
- ☐ **DC 5V 1A power adapter :** Two (2) units
- ☐ **User Manual**

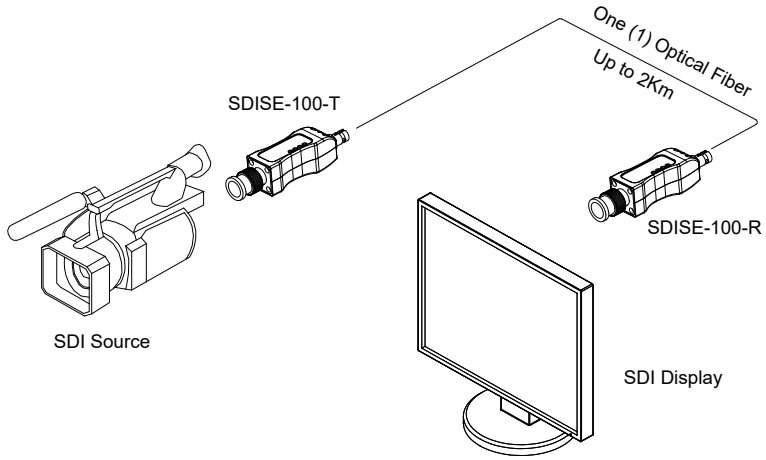

Figure 1 – Fiber-Optic 3G-SDI Extension module

System Requirements for Setup

- **Hardware requirements**
  - You must have HDCCTV or broadcast products and displays supporting HD-SDI input / output.
  - No special requirements of memory size, CPU speed and chipsets, if you've already properly installed your SDI systems.

- **Software requirements**
  - No special restrictions, if you've already properly installed your SDI systems.

- **DC Power Adapter Technical Advisory**
  - The SDISE-100-TR is designed to use only +5V external power.

Installation

Important: Please follow the installation procedure as below. Improper or no operation may result if the start-up sequence is not correctly followed.

Step 1
Carefully unpack the contents of the shipping group.

Step 2
Connect the plug of the TX side of SDISE-100 to the SDI output port of HDCCTV or broadcast products directly. It is **NOT** recommended to use any intermediate cable or adapter between them. It may deteriorate the signal transmission performance.

Figure 2 – TX module of SDISE-100

Step 3
As shown in Fig. 3, plug the 5V power adaptor in the shipping group to the TX & RX Module.
Connecting 5V power adaptor to SDISE-100-TR is indispensable procedure for working.

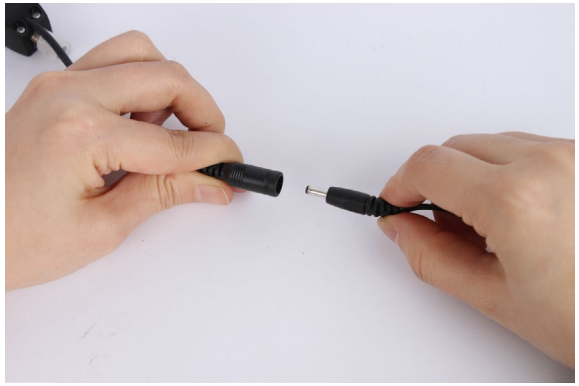

Figure 3 –SDISE-100 with power adapter

Step 4
Connect the RX side of SDISE-100 to the SDI input port of display or broadcast products directly. It is **NOT** recommended to use any intermediate cable or adapter between them. It may deteriorate the signal transmission performance.

figure 4 – RX module of SDISE-100

Step 5
Turn the power ON the SDI source and Display.

Note: Both of the TX and RX modules of SDISE-100 must be connected to 5V power adapters.

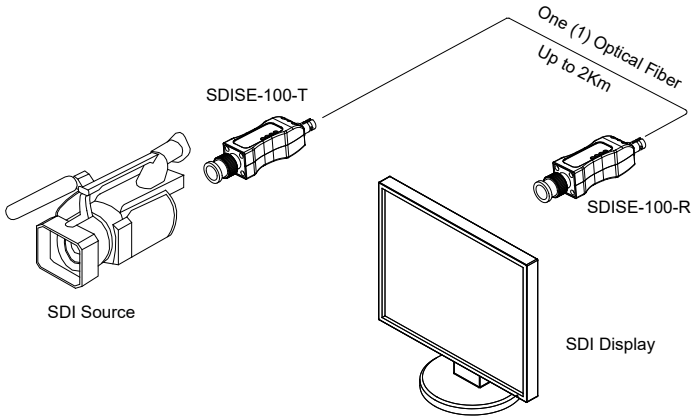

Figure 5 – Whole Connection of SDISE-100

Step 7
If the system does not work properly, go to page 1-5, trouble shooting.

Troubleshooting

The display shows black screen.

- Ensure that all DC plugs and jacks used by external power supplies are firmly connected.
- Ensure that the SDI connector is firmly plugged into the SDI source and SDI display. Ensure that the TX and RX module parts are plugged correctly to the SDI source and SDI display, respectively.
- Check if the SDI source and SDI display are powered on and properly booted.
- Reset the system by de-plugging and re-plugging the TX SDI module or RX SDI module. Re-boot up the system while connecting the SDISE-100.

Screen is distorted or displays noises.

- Ensure that the quality of SDI source and check the extension length of the fiber. SDISE-100-TR guarantees extension length of 2Km at 3G-SDI but it can be extended up to 30Km as an option.

Maintenance

- No special maintenance is required for the SDISE-100 and power supplies. Ensure that the cables and power modules are stored or used in a benign environment free from liquid or dirt contamination.
- There are no user serviceable parts. Refer all service and repair issues to Opticis.

Technical Support and Service

- For commercial or general product support, contact your reseller. For technical service, contact Opticis by email techsupp@opticis.com or visit its website at www.opticis.com.

Product Specifications

SDISE-100-TR, Fiber-Optic 3G-SDI Extension module

- **Transmission of Multi-rate HD-SDI Digital Video over one (1) Fiber:** It converts and transmits one (1) channel of 3G-SDI (SMPTE-424M), HD-SDI (SMPTE-292M) or SD-SDI (SMPTE-259M).

- **Extension limit:**
  - 2Km at 3Gbps, 1080p 3G-SDI format
  - 30Km at 3Gbps, 1080p 3G-SDI format as an option.

- **Recommended Fiber-optic Cable:** Glass Single-mode fiber with 1310, 1550nm of bandwidth and ST terminated connector.

- **General electrical specification**
  - Data Transfer Rate (Graphic Data) : Max. 3Gbps
  - Link Power Budget : Min.8dB
  - Optical Connector : ST Connector
  - Electric Connector Type from Modules : 75 Ohm BNC (Male)

- **Mechanical specifications of TX and RX module parts**
  - Dimensions: 19.5mm / 19.5mm / 50.3mm (W/H/D)

- **Environmental Specifications**
  - Operating temperature: -20°C to 70°C
  - Storage temperature: - 30°C to 85°C
  - Humidity: 5% to 95% RH

DC Power Adapter

- **Supply Power:** DC 5V, 1.0A
- **Cord DC Jack:** Core is 5V and outer is GND.

Warranty Information

1 (One) Year Warranty

Opticis warrants this fiber-optic 3G-SDI extension cable to be free from defects in workmanship and materials, under normal use and service, for a period of one (1) year from the date of purchase from Opticis or its authorized resellers.

If a product does not work as warranted during the applicable warranty period, Opticis shall, at its option and expense, repair the defective product or part, deliver to customer an equivalent product or part to replace the defective item, or refund to customer the purchase price paid for the defective product.

All products that are replaced will become the property of Opticis.

Replacement products may be new or reconditioned.

Any replaced or repaired product or part has a ninety (90) day warranty or the reminder of the initial warranty period, whichever is longer.

Opticis shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to Opticis for repair under warranty or not.

Warranty Limitation and Exclusion

Opticis shall have no further obligation under the foregoing limited warranty if the product has been damaged due to abuse, misuse, neglect, accident, unusual physical or electrical stress, unauthorized modifications, tampering, alterations, or service other than by Opticis or its authorized agents, causes other than from ordinary use or failure to properly use the Product in the application for which said Product is intended.

Dispose of Old Electrical & Electronic Equipment

(Applicable in the European Union and other European countries with separate systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.