

Mini-type 3G/HD-SDI to Fiber Converter

USER MANUAL



Characteristics

- 4 channel 3G/HD-SDI video transmission over optic fiber
- Automatic cable equalization to ensure signal integrity
- Automatic relocking 270Mbit/s - 1.48Gbit/s - 3Gbit/s
- Directly compatible with HD-SDI camera systems, and support 4Ch Loop output
- Long transmission capability at least 10 km (6.2miles) , up to 100 km with Options
- Terminal block power input for industrial application
- Supports hot swapping and hot plugging
- Full digital non-compression broadcast level transmission;
- super optic dynamic range and free of adjustment prior to use;
- surface coating technique;
- fiber optic WDM/CWDM/DWDM technique;
- 1000M optical fiber transmission, easy for update;
- industry level ultra-broad temperature range (-40°C~+85°C), adaptable to various environments;

Application

- Animal films recording;
- Live events broadcast over fiber
- High performance(error-free) surveillance networks in Army or security;
- Large video wall system
- Intelligent Traffic Monitoring System
- Security systems
- School networking
- Industrial monitoring (Electricity, Chemistry, Steel, Oil, Railway & etc)
- Military Monitoring (Warehouse, Border, Guards, etc)
- Stadium (For LIVE HD video, audio transmission)

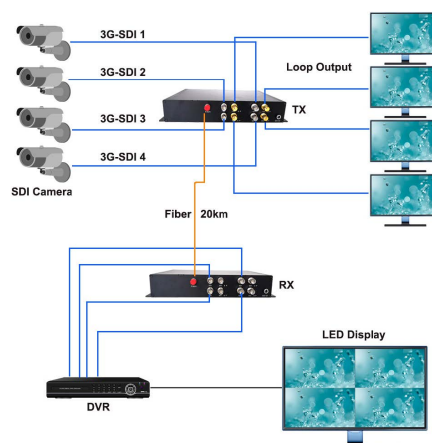


Figure 1 System point-by-point application

Technical Indexes

Formats	3 Gbps, 1.5 Gbps, 270 Mbps (automatically selected based on input)
Input	4 x 3G/HD/SD-SDI on BNC
Output	1 x FC optical fiber
Supported Resolution	625/25PAL;525/29.97NTSC;525/23.98NTSC; 720p50; 720p59.94; 1080P23.98/24/25/30/50/60; 1080i 23/24/30/50/59.94;
Power	12 VDC
Power Consumption	12 W (Max.)
Dimensions (LxWxH)	265 x 160 x 45 (mm)
Operating Temperature	-40°C ~ +75°C

POWER REQUIREMENT

1. DC 12V/1A
2. Power supply ripple less than 100mV
3. The selected power supply unit should fit for the environment.

Instruction of installation

1. Before you install
 - (1) Here we have 5 pieces of product in total.1 piece of transmitter,1 receiver, 1 piece of user's ,manual and 2 pieces of power supply unit.
 - (2) Please read the user's manual carefully before you install the product.
 - (3) Please read safety instruction carefully
 - (4) Do not open the device
 - (5) Please note the sticker on the devices ,T is transmitter, R is receiver.
2. Procedure of installation
 - (1) Connect optical Transmitter and camera or other output device .And connect with fiber. Then power device on.
 - (2) Connect optical Receiver and monitor. And connect with fiber. Then power device on.

3. TALLY Connection:

Transmitter TALLY Signal Output Connection: (Can drive the LED indicator directly)

	P	F	R	D
LED Type	Power	Fiber	RUN	Data

Receiver TALLY Signal Input Connection: (LED load type is only suitable for OC drive LED - driver)

	A	B	C	D
LED Type	SDI-A	SDI-B	SDI-C	SDI-D
RS485	Com	NC/NO		

Responsibility instruction

- (1) Customer will take the responsibility for the loss if returns/replacement is damaged during transportation.
- (2) Please contact us directly if devices are damaged during transportation from our side.
- (3) We'll not be responsible for the damage if devices are damaged with customers' own power supply.
- (4) Please use the power supply strictly as per the user's manual.
- (5) The user's manual can't be printed personally or spread via internet without our permission.
- (6) We'll not be responsible for anyone who amend the manual or add some features our product. This may cause damage for other external devices.
- (7) We will repair/replace for the faulty devices which still under the warranty.
- (8) Please recycle the packing of device, there we have only one earth.

Safety



BE CAREFUL!

WARNING THIS LABEL REMINDS YOU THIS EQUIPMENT MAY DO HARM TO YOU.



TAKE CARE OF ELECTRIC SHOCK!

WARNING THIS LABEL REMINDS YOU THIS EQUIPMENT MAY DO HARM TO YOU OR YOUR PROPERTY.

Instructions

In order to save the loss, please read the following item carefully.

The product has a good reliability on original design. But still need avoid human damage.

1. Please read the instruction carefully, and keep it well.
2. Please keep the device away from water or other damp place
3. Please don't cover anything on the wire of power supply and arrange it a safe place.
4. Please connect all part tightly, especially the power supply unit with the socket.
5. When power devices on, please make sure the power supply you are using can meet the below request:

(1) AC output: 220V (100~260V), 50~60Hz

(2) DC output: 12V/1A

6. Please cut off the power and contact us with below situation.
 - (1) water ruin the equipment
 - (2) Devices break(including the shell break)
 - (3) Devices work abnormally
 - (4) Gas , smog or noise from equipment.
7. Do not repair the device on your own.
8. Please arrange thunder protect device when install the product outdoor.

Fault analysis

You can consider to pick the below solutions to settle down the issues you have when you install the devices.

1. POWER LED can't work normally:

Please check whether the power connection is well.

2. No video signal .

1) Please check the video LED of receiver

A: LED lights, means here has video signal output in this channel. Please check the connection of end equipment (monitor or DVR).

B: LED down, please check whether the LED of Transmitter lights or not(Here we suggest to restart the device in order to keep the synchronization.

C: If the fault still can't be solved with above solution, please replace with some part number product and check again to exclude the possibility of device.

3. Interfere with snow screen

This is normally caused by attenuation of fiber or long wire between camera and optical Transmitter.(PS: please use high quality wire and connector.)

1: Please check whether there is over bending of pigtail

2: Please check whether there is a flange ceramic core connected between fiber port and terminal box

3: Please check the cleanliness of fiber port and pigtail(please clear with cotton and alcohol), And then, insert the fiber again.

4: Please select 75Ω impedance cable when arrange the project line. And please avoid AC line and other object which can cause Electromagnetic interference