



AVF-1101/1401/1801

## User's Manual

### Safety Instructions

To prevent personal injury and damage to the product and other products connected to it, Please pay special attention to the following safety instructions:

Do use the product in strict accordance with related regulations to prevent any potential damage.

Note:

1. Power voltage: The product can only be used to supply with AC power. Do not use it in other situation.
2. Use the right power cable and power supply. You shall use the power cables supplied with the product or other qualified power cable with housing protection ground terminal. The protection ground terminal of the power socket matching the power cable should be perfectly ground.
3. Pay attention to product grounding. The product is grounded through the grounding conductor in the power cable. To avoid electric shock, The grounding conductor in the power cable should be perfectly connected to the ground. Make sure that the product is properly grounded before the connection of the optical and electric ports of the products.
4. Pay attention to limits of all ports: To avoid fire or

electric shock, Please pay attention to all limits and related labels on the body of the product in this manual before the connection of the product.

5. Use specified fuses.
6. Do not operate at risk: if you suspect that the product does not operate normally, Please consult the professional service personnel of our company. Do not continue operations at risk.
7. Do not open, nonuser serviceable parts inside. Refer servicing only to service-trained maintenance personnel of our company or those authorized by us. Open the product without authorization will void the product warranty.

### Product Quality Warranty

It is guaranteed that our product will be free of quality defects in the materials or workmanship in one year after delivery. During the warranty period , If it is proved that any quality defects occur to our products, We would provide maintenance or replacement free of charge (Only material and labor fees ), based on our own tech team judgment.

To enable a user to enjoy the services promised in this warranty. The user shall inform our company have any quality defect during the quality warranty period. And give appropriate assistance to the service we are going to provide. The user shall pack the defective product properly, And send it to the customer service department of our company. Our company will not pay the shipping fees from the return of the product.

Unpack, first check the appearance of the equipment, it should be no damage and abnormal ring. Each fiber converter consists of a transmitter (T), a receiver (R) composed of optical transmitter and an optical receiver to be used in pairs, and cannot be used in conjunction with other types of fiber converter.

### LED indicator

Led	Description
PWR	Power supply on
LINK	Fiber link is on
Data interface	RS485/422
LEDV1-V8	1-8ch Video is on

### Ports connection

Video connection: Connecting the video signal to/or from the product through a 75ohm coax cable with BNC plug

Video In: connected to video source AHD camera, CVI camera or TVI camera

Video Out: Connected to video display AHD/CVI/TVI converter or AHD/CVI/TVI DVR..

RS-485: Data connection

Return data : D1+/D2+ indicates the data terminal connected positive , D1-/D2- indicates the data terminal connected negative (default D2+/D2-)

Pin5 is "GND" indicates ground connection.

External data transmitting devices (Like control keyboard) data output (+&-) should connect directly with the receiver's (+&-) terminal; The external data receiving device's (Like decoder/camera) data input (+&-) should connect directly with the transmitter (+&-) terminal

NOTE: For video-only Optical transceiver, without data terminals, cannot transmit RS485 signals.

Fiber connection: Connect the fiber optical cable pigtail (with FC/PC or SC/PC optical connector) to the products' fiber port.

The products use FC optical interface. When it's connected. The raised portion of the connector is aligned with the grooves on the FC interface, then moderate force pushed into the connector in the end, and finally tighten the fastener. During the operation, be sure to keep the connection with the optical port vertical, inclined insertion could damage the optical interface.

( PS .If you want to use Data control , please mention in the order list .Default setting data is idle .)

## Technical Specifications

Fiber optical	
Interface	FC/SC/ST
Mode	Single mode and single fiber
Wave length	1310/1550nm
Distance	20KM
Physical	
Power supply	DC5V , 2~3A
Size	157.1x116.5x48mm
Box Size	405X250X115MM
Work temperature	-20°C~70°C
Storage temperature	-40°C~85°C
Item	1/2/4/8/16 CH AHD/CVI /TVI/CVBS fiber Converter
Video	
Interface	75ohm, BNC
Bandwidth	25-60Mhz
Compatible	TVI and CVI and AHD and CVBS
Resolution	720P/25,720P/30,720P/50,720P/60,1080p/25、1080p/30
Video level	1Vp-p
Differential Phase	2
Differential gain	2%
SNR	67db
Audio	No
Data Communication	
Interface	Crimping Terminal block with screw clamps
Interface type	RS485/422
Connector	2/3pin screwing block
Operation mode	Simplex/Half Duplex
speed	9600bps
BER	<10 <sup>-9</sup>

## Packing List

1.	Transmitter
2.	Receiver
3.	Power supply
4.	User manual

## Trouble Shooting

Fault Symptom	Possible Cause
Power indicator off	Not power-on Loose power plug Power failure
No signal output	Broken fiber line or excessively high line loss
No video output	Dirty end face of optic fiber connector Poor contact of BNC connector Lose power plug Monitor not turned on Coaxial cable fault Feed-in failure of front-end video signal
Poor video quality	Received optical power too low Poor connection of cables Poor quality of monitor Local interference

### Powered use:

After the connection is confirmed the accuracy of the above, the end of the optical transceiver unit 220VAC power supply access power outlets, under normal circumstances, the light received, the originator of the front panel LEDs POWER,LINK should be steady. When the video signal access, corresponding to a video signal light should be lit.

Note: Optical off after shall be guaranteed for at least 15 seconds before re-powered on, in order to reduce the product of the instant electric shock.

Typical Application Diagram:

