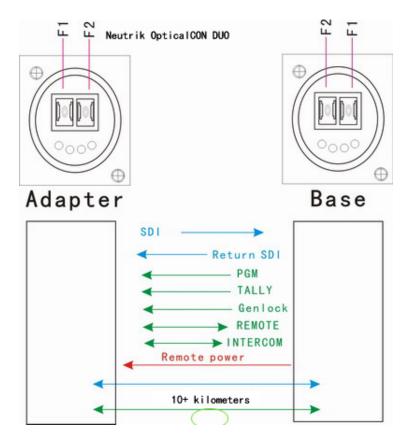


EFP To Fiber with Neutrik Hybrid Connector

#### **Description:**

BY-EFP-417 with Neutrik Hybrid Connector includes a Camera Optic Adaptor and a Optic Base Station. The system transports 1 ch 3G/HD-SDI signal from the camera to the Base Station, 1 ch Reverse 3G/HD-SDI, PGM, Genlock or TC/BB, Remote control(for Sony/ Panasonic/JVC/ Datavideo), intercom (Camera end can be connected professional 4-pin or 5-pin XLR headset, OB end can be connected intercom main station), tally(One color or two colors can be selected), Remote camera power supply (15V DC up to 150 Watts). The system puts all of the signals needed for multi-camera 3G/HD-SDI production on a SM tactical or SMPTE hybrid cable, insuring robust, trouble-free connectivity on any studio or remote production..

BY-EFP-417 with Neutrik Hybrid Connector Function diagram.



#### **Features**

- 1 ch forward and 1 ch reverse SDI
- Handle all Pathological patterns
- Automatic cable equalization to ensure signal integrity
- 3G/HD/SD-SDI input auto recognition, support 270Mbit/s 2.97Gbit/s according to SMPTE 424M, SMPTE 292M and SMPTE 259M
- 10+Km on single mode fiber transmission
- Mic inputs with mute and pre-amps
- Headphone with PGM / Intercom volume up or down
- Remote control (for Sony/ Panasonic/JVC/ Datavideo)
- Tally LED+/- output or dry Contact Closure optional
- V-mount or A-mount battery plate optional, Upper battery plate can be changed to heat sink
- Genlock or TC/BB are also available
- Remote camera power supply (15V DC up to 150 Watts), with insertion detection protection

#### Application:

- 1. Television Broadcast(studio):
  - Sports
  - News
  - SNG
  - Trackside
- 2. Links Between in-field and OB van(outside broadcast truck)

### Specifications:

#### **General index**

| Work Temp            | -25°C to 55°C                                |
|----------------------|--|
| Storage Temp         | -40°C to 85°C                                |
| humidity             | 0 ~ 95% (non-condensing)                     |
| Camera Optic Adaptor |  |
| Input power          | DC 11~19V                                    |
| Power consumption    | <12W   |
| Net weight           | 1kg  |
| Appearance size      | 188mm*116mm*45mm (without V-mount / A-mount) |
| Optic Base Station   |  |
| Input power          | AC90~240V                                    |
| Power consumption    | <12W   |
| Net weight           | 3kg  |
| Appearance size      | 19" 1U standard rack mount                   |

#### Optical:

| Wavelength            | 1310nm / 1550nm / CWDM                     |
|-----------------------|--|
| Output Power          | -6~-1dBm                                   |
| Rx sensitivity        | <-18dBm                                    |
| Transmission Distance | Remote power 150W,SMPTE hybrid cable 200+m |
| Optical connector     | Lemo SMPTE 304 / Neutrik OpticalCON DUO    |
|                       | Camera end can be rotated 90 degrees       |

# SDI input/output:

| Signal format      | SMPTE 424M, SMPTE 292M, SMPTE 259M                |
|--------------------|---|
| Data rate          | 270Mbit/s - 1.48Gbit/s - 3Gbit/s                  |
| Cable Favelization | Automatic cable EQ (Belden 1694A cable)           |
| Cable Equalization | 250m @ 270Mbit/s, 140m @ 1.5Gbit/s, 80m @ 3Gbit/s |
| SDI interface      | BNC 75 Ohm  |

### Genlock / TC / BB

| Number of Channels     | 1                   |
|------------------------|---------------------|
| Input/output impedance | BNC 75Ω (unbalance) |
| Input/output voltage   | 1.0Vp-p             |
| Differential Gain      | < ±1.5%             |
| Differential Phase     | < ±1%               |
| SNR                    | >60dB               |

### Intercom:

| Camera Optic Adaptor |  |
|----------------------|--|
| Interface            | 4pin XLR(Male) /5pin XLR(Female)/ 3.5mm headset jack                 |
| Microphone           | Mic inputs with mute and pre-amps                                    |
| Headphone            | with volume up or down   |
| Optic Base Station   |  |
|                      | 3pin XLR Female/Male: Party line audio for Clearcom and RTS Intercom |
| Interface            | main station ,or Line level balanced audio input and output          |
|                      | DB9(Male): Line level unbalanced audio input and output,             |

# PGM:

| Camera Optic Adaptor |  |
|----------------------|--|
| Interface            | 4pin XLR(Male) /5pin XLR(Female)/ 3.5mm headset jack |
| Headphone            | with volume up or down                               |
| Optic Base Station   |  |
| Interface            | 3pin XLR Female: Line level balanced audio input     |

# Tally:

| Camera Optic Adaptor |   |
|----------------------|---|
| Interface            | 4pin air head or 3pin mini XLR                    |
|                      | Dry Contact Closure or wet LED+/-                 |
| Output               | On: short or LED on                               |
|                      | Off: open or LED off                              |
| Optic Base Station   |   |
| Interface            | DB9(Male)   |
| Input                | Dry Contact Closure or TTL                        |
|                      | On: short to GND or TTL low Off: open or TTL high |

### Remote:

| Camera Optic Adaptor |  |
|----------------------|--|
| Interface            | SONY's 8 pin , Panasonic's 10 pin interface or JVC Round 6-pin |
| Data                 | RS422 /RS232/RS485   |

| Optic Base Station |  |
|--------------------|--|
| Interface          | SONY's 8 pin , Panasonic's 10 pin interface , JVC Round 6-pin or |
|                    | Datavideo RJ45   |
| Data               | RS422 /RS232/RS485   |

### Panel diagram(Satellite+ Base):

