



## **3G-SDI Fiber Optic Digital Extension Modules in 19" 1RU Frame**

**User's Manual  
(BR-300 / BR-310)**



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# Welcome!

Congratulations on your purchase of the **19" 1RU multi-mounting and power supply frame, BR-300 and BR-310** for 3G-SDI extension modules. This manual contains information that will assist you in installing and operating the product.

## Product Description

### 1. BR-300 / BR-310

OPTICIS **BR-300 and BR-310**, 19" 1RU multi-mounting and power supply frame are modular and systematic fiber-optic solution providing a flexibility to adopt multi-rate 3G-SDI fiber-optic extension modules, SDIX-100-TR and SDIX-100C-TR up to 12 units.

Each module slot is connected into a central power bus and both two (2) frames, **BR-300** with primary power and **BR-310** with dual power use 100-240VAC, 50-60Hz of input power. **BR-310** supports load-sharing feature and redundant backup.

**BR-300 and BR-310** adopts LEDs in the front panel for power supply failure to run the stable system without any disruption or disconnection from the power failure. Both compact two (2) frames can be widely used and incorporated into any broadcast workflow from small studio and OB vans to master control room.

**\* Note: Opticis mini 3G-SDI extender, SDIX-100-TR and SDIX-100C-TR are sold separately.**



## Shipping group

- **BR-300 or BR-310:** One (1) unit
- **AC power cord:** One (1) for BR-300, Two (2) for BR-310
- **Hexagonal head nut:** Twelve (24) units (two types)
- **BNC bulkhead receptacle:** Twelve (12) units
- **Wrench:** One (1) unit
- **User manual:** One (1) unit

# Installation

## 1. BR-300 / BR-310

### Step 1

Unscrew two (2) bolts to remove the upper cover.

### Step 2

Screw smaller hexagonal head nut halfway along the thread of the ST connector side as shown in Fig. 1. (Do not fasten it tightly)



Fig. 1: Screwing smaller hexagonal head nut at ST connector side

### Step 2

Screw larger hexagonal head nut halfway along the thread of BNC bulkhead receptacle as shown in Fig. 2. (Do not fasten it tightly)



Fig. 2: Screwing larger hexagonal head nut into a 75Ohm BNC bulkhead receptacle

**Step 3**

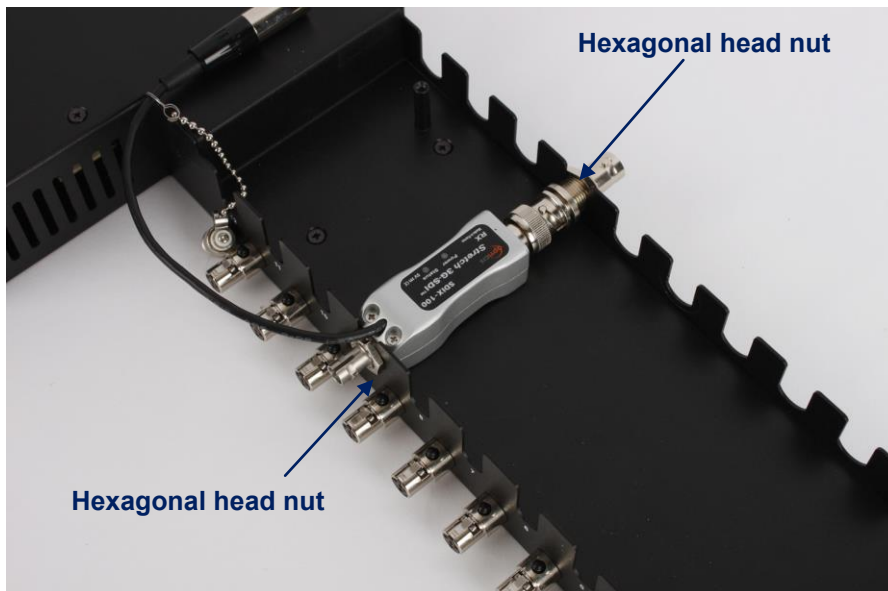
Connect the BNC bulkhead receptacle to a connector of SDIX-100 as shown in Fig. 3. (Make sure that the larger hexagonal head nut is placed outside)



**Fig. 3: Connection of the BNC bulkhead receptacle into BNC connector of SDIX-100**

**Step 4**

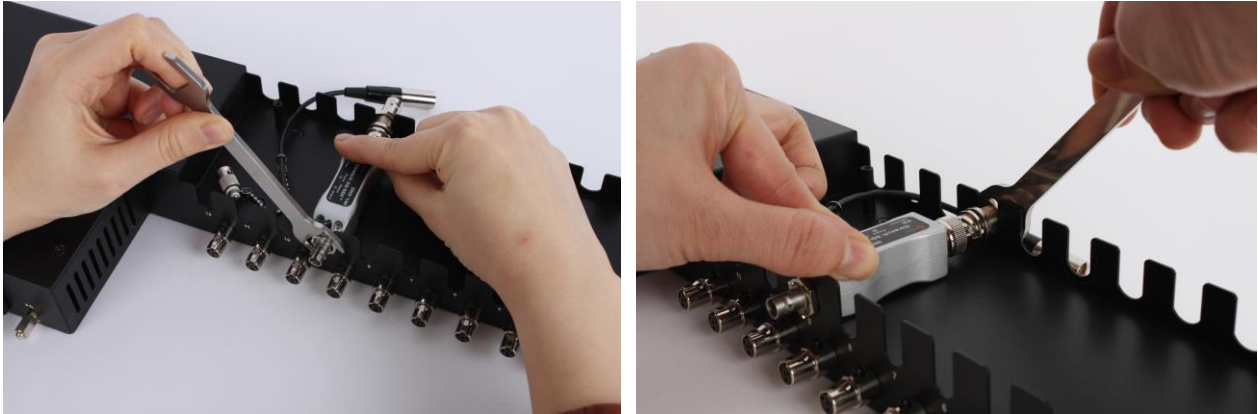
Place SDIX-100 on the slot of BR-300 or BR-310 and make sure two (2) hexagonal head nuts are placed outside of the frame as shown in Fig. 4.



**Fig. 4: Placement of SDIX-100 in BR-300 or BR-310**

**Step 5**

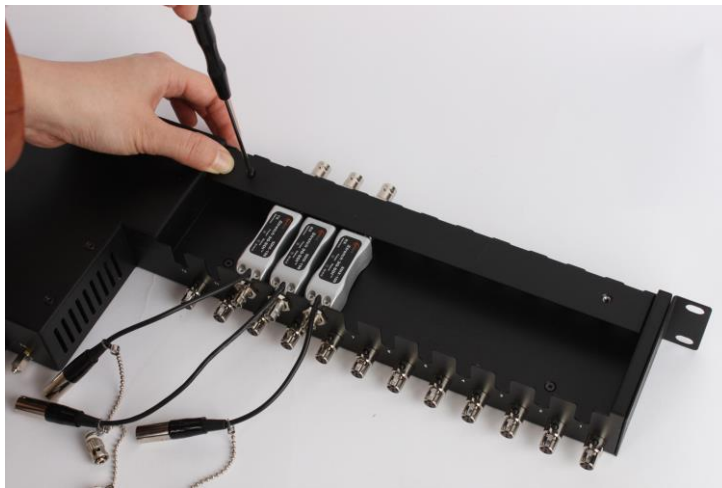
Fasten the hexagonal head nuts clockwise direction using the included wrench to fix SDIX-100 in BR-300 or BR-310 as shown in Fig. 5.



**Fig. 5: Fastening of two (2) hexagonal head nuts**

**Step 7**

Screw two (2) bolts to fix the upper cover on BR-300 or BR-310 as shown in Fig. 6.



**Fig. 6: Fixing of upper cover in BR-300 or BR-310**

**Step 8**

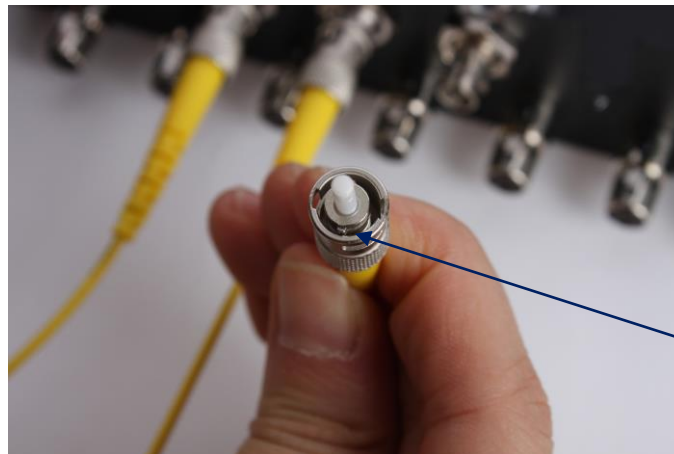
Connect BNC cable from of SDI source to BNC receptacle of SDIX-100 transmitter or SDI display to SDIX-100 receiver as shown in Fig. 7.



**Fig. 7: Connection of BNC cables into the BNC receptacle of SDIX-100**

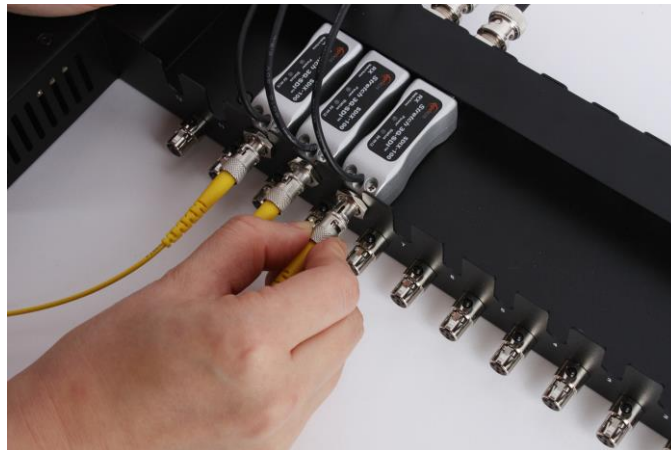
**Step 9**

Uncap dust cover and check the position of insertion guide inside of ST fiber optic cable as shown in Fig. 8. Insert it into the ST receptacle as guided and rotate it to fasten it as shown in Fig. 9.



Insertion guide

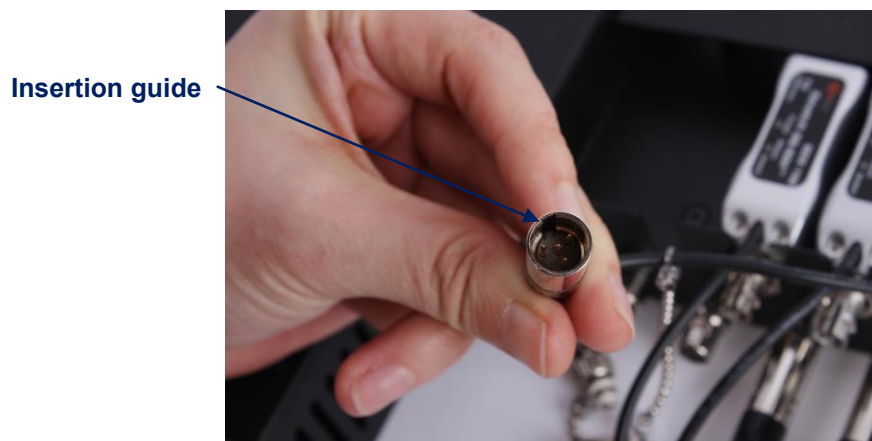
**Fig. 8: Insertion guide Inside of ST fiber optic cable**



**Fig. 9: Connection of ST fiber optic cable into ST receptacle of SDIX-100**

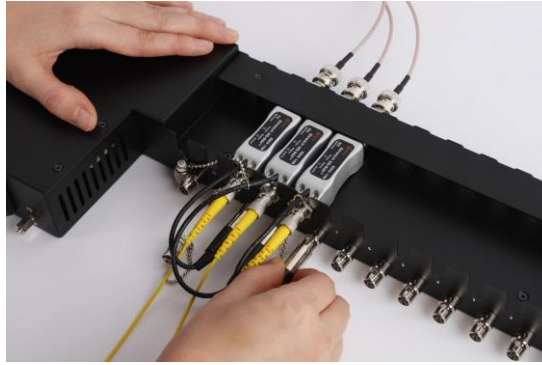
**Step 10**

Check the position of insertion guide inside of latch-locking ITT connector of SDIX-100. Plug it into 4-pin power receptacle on the rear side of BR-300 or BR-310 as shown in Fig. 10, 11.



Insertion guide

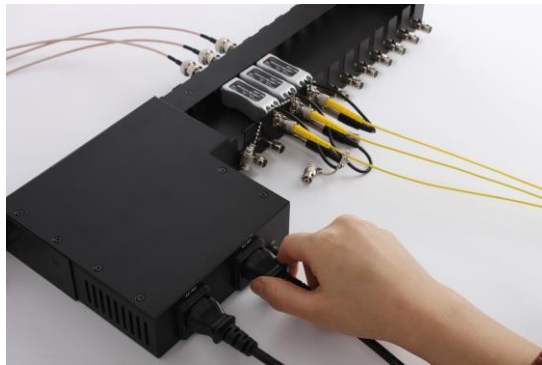
**Fig. 10: Insertion guide inside of ITT power connector of SDIX-100**



**Fig. 11: Plugging of ITT power connector into the power receptacle of BR-300 or BR-310**

**Step 11**

Connect two (2) AC plugs into BR-310 as shown in Fig. 12. In case of BR-300, only one power receptacle is available.



**Fig. 12: Connection of two (2) AC plugs to BR-310**

BR-310 has load-shared dual power suppliers to run the system stable without any disruption or disconnection from the power failure. So, it is highly recommend to connect separate power source to AC IN1 and AC IN2 and turn on Power 1 and Power 2 switcher to avoid power failure problem.

**Step 11**

Red LEDs on Power 1 and Power 2 switcher indicate the normal status of power and Blue power LED on SDIX indicate it is powered from BR-300 or BR-310.



**Fig. 13: Normal power status of BR-310 and SDIX-100 (In this case only Power 1 is running)**



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