

OCEAN MATRIX®

USER MANUAL OMX-3GSDI-SC

3GSDI Extender Over Fiber Optical



Ocean Matrix

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OMX-3GSDI-SC

3GSDI Extender

The Ocean Matrix OMX-3GSDI-SC extends 3GSDI signal transmission beyond the standard cable distance limitations and transmits 1080p 3GSDI signal over a singlemode SC fiber optic cable up to 12.43 miles (20km). Consisting of a transmitter and a receiver, this system supports SD-SDI, HD-SDI and 3G-SDI signal input.

IR signal transmission allows for remote control of the source at a secondary location using IR extension cables.

Includes

- One transmitter
- One receiver
- Two 5VDC/2A power adapters
- One IR blaster extension cable, connects to transmitter
- One IR receiver extension cable, connects to receiver

Specifications	
Supported Resolutions	SD-SDI 480i@60Hz, 576i@50Hz HD-SDI 720p@50/60Hz, 1080i@50/60Hz, 1080p@24/25/30Hz 3GSDI 1080p@50/60Hz
SDI Signal Format	SD-SDI, HD-SDI, 3GSDI
SDI Rate	270Mb/s, 1.485Gb/s, 2.97Gb/s
SDI Resistance	75Ω
Transmission Range	1080p resolution up to 12.43 miles (20km) over singlemode
IR Remote Control	Supports 20-60kHz standard IR remote controls
Power Supply	5VDC/2A
Power Consumption	Transmitter 10W, Receiver 10W
Working Temperature	32°F - 140°F (0°C- 60°C)
Dimensions (LxWxH)	6.6 x 3.74 x 0.87 in (168 x 95 x 22mm) TX & RX
Weight	Transmitter: 14 oz (400g), Receiver: 14 oz (400g)

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Installation Requirements

1. SDI source device such as a video camera, media player, monitoring equipment or computer.
2. SDI display device such as an SDTV, HDTV, or projector.
3. SDI cables and singlemode SC fiber optic cables.

Installation Safety

1. Identify the receiver and the transmitter in order to make proper connections during installation.
2. Do not hot plug/swap when in operation.
3. Use 5VDC power supply only.

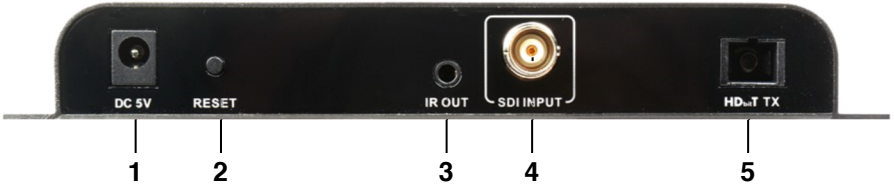
IR User Guide

1. Plug the IR blaster extension cable into the IR-out port of the Transmitter TX.
2. Plug the the IR receiver extension cable into the IR-IN port of the Receiver RX.
3. Place the emitter of the IR blaster as close as possible to the IR receiver of the signal source device.
4. Direct the IR remote controller of the signal source device towards the IR receiver (connected to the RX of HDMI extender), to remote control source media playback.



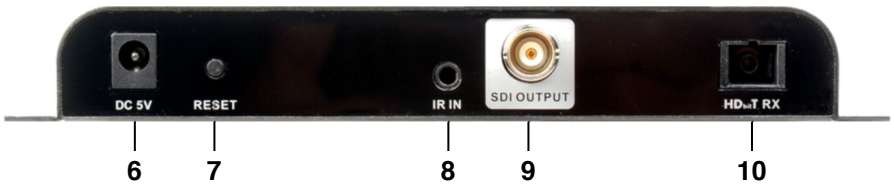
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Transmitter



- 1 TX Power Input 5VDC
- 2 TX Reset Button
- 3 TX IR Blaster Extension Cable Port
- 4 TX SDI Signal Input
- 5 TX Fiber Optic Signal Transmit Port

Receiver



- 6 RX Power Input 5VDC
- 7 RX Reset Button
- 8 RX IR Extension Cable Port
- 9 RX SDI Signal Output
- 10 RX Fiber Optic Signal Receive Port

Rear of Both Units



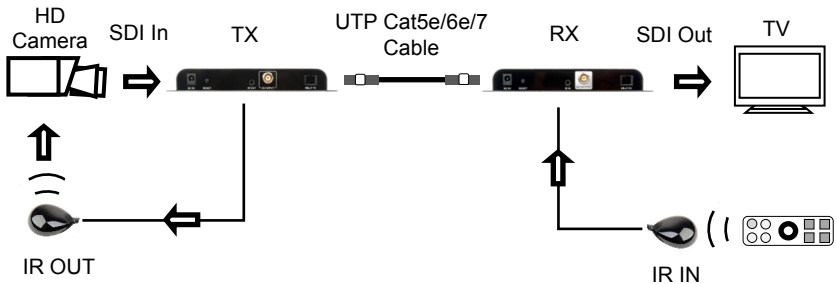
- 11 Power Status Indicator
- 12 Data Transmission Indicator
- 13 Network Connection Indicator

OMX-3GSDI-SC

Installation Procedures

CONNECTION

Transmission distance up to 12.43 miles (20km) over singlemode SC fiber optic cable.



Troubleshooting

Display shows “Waiting for Connection”

- Ensure power supply is firmly connected.

Display shows “Signal Loss”

- Check signal input of the TX.
- Connect the signal source directly to the display device to ensure there is a signal output. Change the signal source if necessary.

Degraded video signal

- Check cable lengths between the TX to the switch, the switch to RX.
- Ensure the connection between each level is within required ranges.
- Press the RESET button on the TX/RX front panel.
- Ensure the fiber optic cables are clean.



SAFETY PRECAUTIONS



1. To prevent fire or shock hazard, do not expose this equipment to high humidity and/or dust. Do not use in an unprotected outdoor installation nor any area classified as overly damp or wet.
2. The temperature for installation should be kept between 32°F to 140°F (0°C to 60°C). Avoid direct sunlight exposure or extreme changes of temperature over a short period of time.
3. Do not disassemble the unit or place it on an unstable base.
4. Do not drop the unit and avoid heavy impact.
5. This unit should not be permanently installed unless proper ventilation is provided. Any enclosure openings must not be blocked or covered as they protect the unit from overheating.
6. Before cleaning, turn off the power and unplug the unit from all connections. Use a damp cloth. Do not use liquid cleaners nor aerosol cleaners.
7. Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.
8. Enclosure entry is dangerous. Never push objects of any kind, including liquids, into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
9. Do not attempt to open or service this unit yourself as opening or removing covers may expose you to dangerous voltage and other hazards.
10. There are no user-serviceable parts inside the unit. If the unit requires service contact your authorized dealer, or an authorized repair service company.

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