

OMX-04SISI0001

1x8 12G/6G/3G/HD/SD-SDI Distribution
Amplifier w/ Re-Clocking

OPERATION MANUAL



Description:

The Ocean Matrix OMX-04SISI0001 is a 1x8 12G/6G/3G/HD/SD-SDI Distribution Amplifier with built-in re-clocking. The unit receives one SDI input, duplicates it, and distributes it to up to eight SDI outputs for real-time multi-viewing. The OMX-04SISI0001 also features cable equalization, signal retiming, LED indication of signal lock and video rate, as well as the passing of ancillary data and embedded audio.

Features:

- 12G/6G/3G/HD/SD-SDI Distribution
- Eight Separately Buffered and Re-Clocked Outputs
- Cable Equalization and Signal Retiming
- LED Indication of Signal Lock and Video Rate
- Passes Ancillary Data and Embedded Audio
- Provides Automatic Input Cable Equalization up to 180m (594ft) @3G, 100m (330ft) @6G and 70m (230ft) @12G
- Re-Clocks SDI Signals for Cascading and Longer Transmission
- Locking Power Supply

Specifications:

- **HDMI Compliance:** 2.0
- **SDI Formats:** SMPTE 2082; 11.88 Gbps/12G-SDI: 2160p at 50/59.95/60 Hz | SMPTE 2081; 5.94 Gbps/6G-SDI: 2160p at 25/29.97/30 Hz | SMPTE 424M; 2.97 Gbps/3G-SDI 1080p at 50/59.94/60 Hz (4:2:2) | SMPTE 274M; 1.485 Gbps/HD-SDI: 1080p at 23.98/24/25/29.97/30 Hz, 1080i at 50/59.94/60 Hz | SMPTE 296M; 1.485 Gbps/HD-SDI: 720p at 23.98/24/25/29.97/30/50/59.94/60 Hz | SMPTE 292M; 1.485 Gbps/HD-SDI: 1080i at 30 Hz, 720p at 60 Hz | SMPTE 259M; 270 Mbps/SD-SDI: NTSC 525 at 59.94 Hz, PAL 625 at 50 Hz
- **HDMI Formats:** 4K UHD Video Standards/2160p at 23.98/24/25/29.97/30/50/59.94/60 Hz | UHD Video Standards/1080p at 50/59.94/60 Hz (4:2:2) | HD Video Standards/720p at 50/59.94/60 Hz, 1080i at 50/59.94/60 Hz, 1080p at 23.98/24/25/29.97/30 Hz | SD Video Standards/NTSC at 59.94 Hz, PAL at 50 Hz
- **SDI Bitrate:** 270 Mbps, 1.485 Gbps, 2.97 Gbps, 5.94 Gbps, 11.88 Gbps
- **Video Sampling:** 4:2:2
- **Audio Sampling:** 48 kHz & 24 bit
- **Auto Switching:** Auto switching between SD/HD/3G/6G/12G-SDI
- **Cable Reach:** [12G-SDI] up to 60m (200ft) | [6G-SDI] up to 75m (250) | [3G-SDI] up to 90m (300ft) | [HD-SDI] up to 150m (500ft) | [SD-SDI] up to 300m (1000ft)
- **Eye-patten Measurements:** Amplitude: within 800mV | Raise & Fall Time: <45ps> | Timing jitter: <8> | Alignment jitter: <0.3 (100KHz to 1188MHz)
- **ESD Protection:** 8 KV—Contact Discharge | 15KV—Air Discharge
- **Power Supply:** 5V DV, 1A
- **Power Consumption:** 3.5W (Max)
- **Operating Humidity:** 20-90% RH (no condensation)
- **Operating Temperature:** 32°F-104°F (0°C-40°C)
- **Weight:** 0.4lbs (198g)
- **Certifications:** CE, FCC, RoHS



Unit Dimensions:

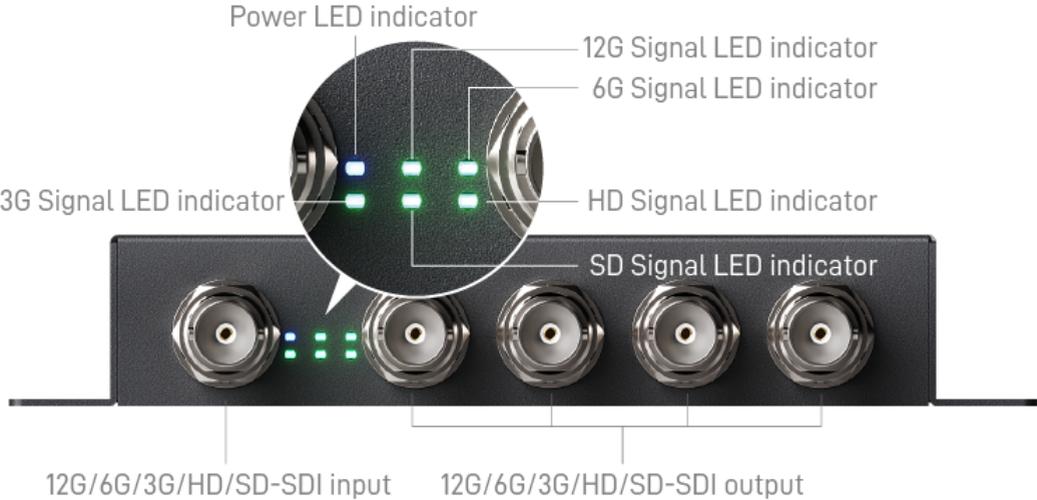


Item Includes:

- 1 x 5V Power Adapter
- 1 x 75 ohm BNC Connector
- 2 x Mounting Screws

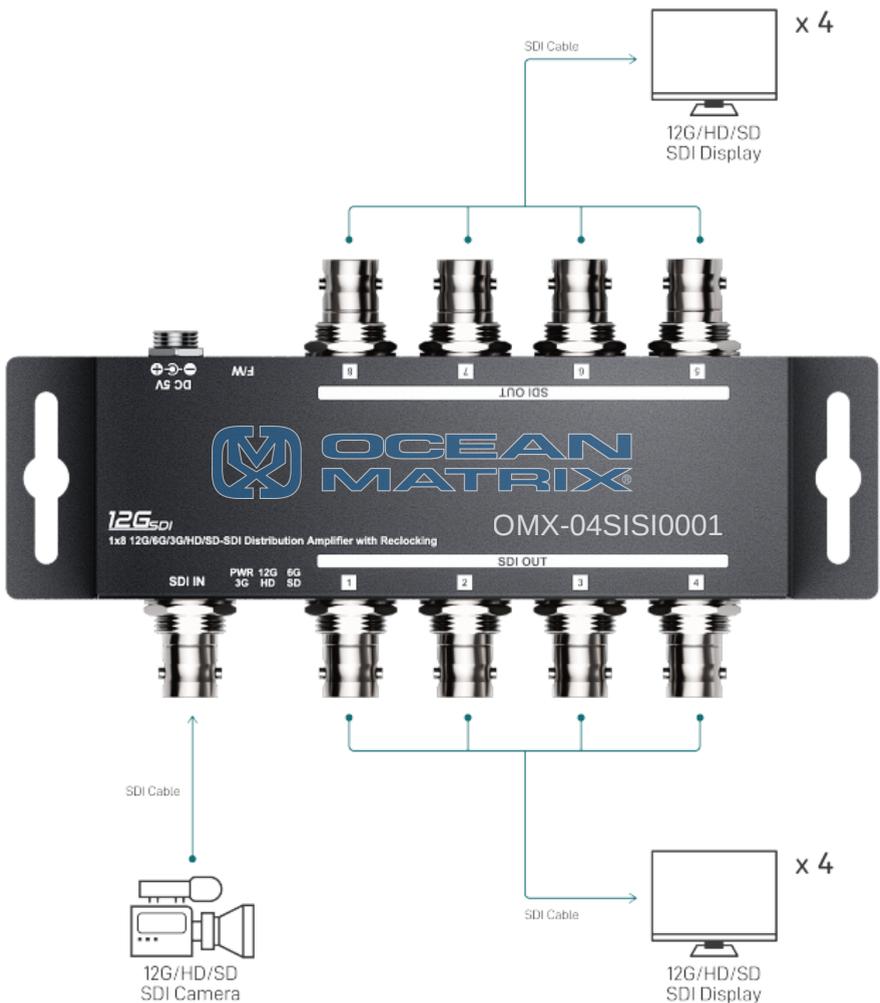


Operation Controls and Functions:



Connection Diagram

1. Connect a camera or other devices equipped with 12G/6G/3G/HD/SD-SDI outputs to OMX-04SISI0001's 12G/6G/3G/HD/SD-SDI input
2. Connect devices equipped with 12G/6G/3G/HD/SD-SDI inputs (e.g. monitors or video processors) to OMX-04SISI0001's 12G/6G/3G/HD/SD-SDI outputs.
3. Plug power adapter cable into 5V DC power jack



PRODUCT SERVICE

Damage requiring service:

- The unit should be serviced by qualified service personnel if:
 - (a) The DC power supply cord or AC adaptor has been damaged
 - (b) Objects or liquids have gotten into the unit
 - (c) The unit has been exposed to rain
 - (d) The unit does not operate normally or exhibits a marked change in performance; The unit has been dropped or the cabinet is damaged.
- (2) Servicing Personnel: Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- (3) Replacement parts: When parts need replacing ensure the servicer uses parts specified by the manufacturer. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- (4) Safety check: After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install the unit:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit

WARRANTY

1 Year



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