OCEAN MATRIX®

Instruction Manual

Thank you for purchasing an Ocean Matrix component. This unit is designed to give you years of trouble free professional operation for your most demanding applications. It is our goal to develop long term partnerships with our customers through our commitment to exceed their expectations.

OMX-9068

For Repair Information and to view the entire Ocean Matrix product line, please visit our web site.

www.oceanmatrix.com

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1 Introduction

Congratulations on purchasing your OCEAN MATRIX® **OMX-9068** *4x1 Audio-Video Switcher*. This product is ideal for the following applications:

- Small editing systems
- Security, CCTV and home theater systems
- Any application where a passive "hard-wired" signal path is preferred

2 Getting Started

We recommend that you:

- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment
- Review the contents of this instruction manual

3 Overview

The high quality **OMX-9068** *4x1 Audio-Video Switcher* for composite video and stereo audio signals is a mechanical switcher that is designed for applications that require an "unpowered" rack mountable or desktop unit for routing video and stereo audio signals.

In addition, with the **OMX-9068** *4x1 Audio-Video Switcher*:

- Audio always switches together with the corresponding video signal
- Unselected video inputs terminate with 75Ω
- High quality switching components provide excellent isolation between inputs
- Its "unpowered" passive design is advantageous for applications for which various regulatory compliances would otherwise be required
- The "hard-wire" signal path offers excellent bandwidth, and can also switch other signal formats

Achieving the best performance means:

- Connecting only good quality connection cables, thus avoiding interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables)
- Avoiding interference from neighboring electrical appliances that may adversely influence signal quality and positioning your **OMX-9068** in a location free from moisture and away from excessive sunlight and dust

4 Your Audio-Video Switcher

Figure 1 and Table 1 define the **OMX-9068**:

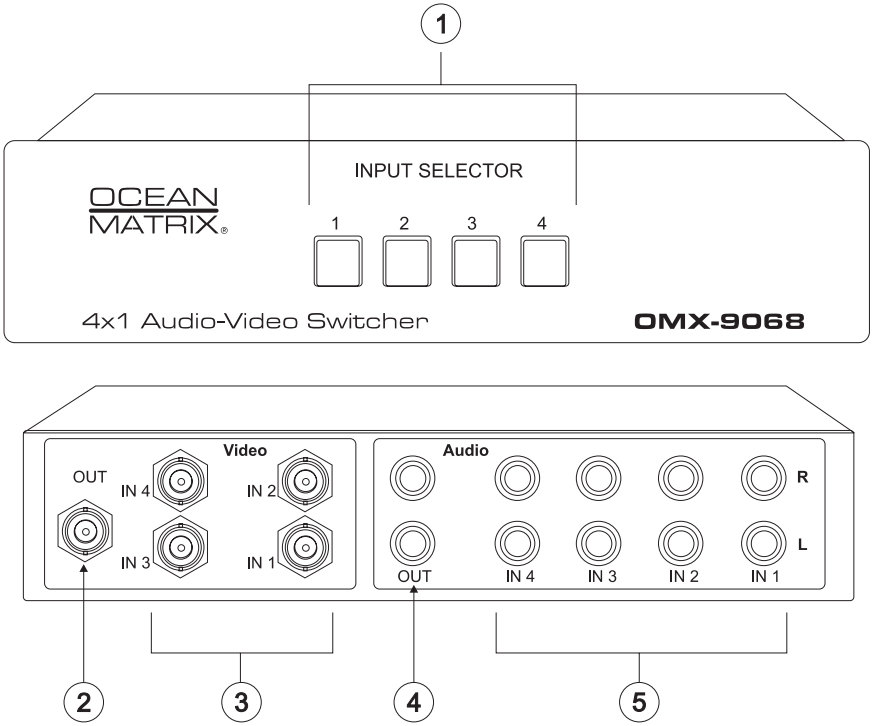

Figure 1: OMX-9068 4x1 Audio-Video Switcher

Table 1: Features and Functions of the OMX-9068 4x1 Audio-Video Switcher

#	Feature	Function
1	*INPUT SELECTOR* Buttons	Select the audio-video source (from 1 to 4)
2	*VIDEO OUT* BNC Connector	Connects to the audio-video acceptor
3	*VIDEO IN* BNC Connectors	Connect to the audio-video source (from 1 to 4)
4	*AUDIO OUT (R* and *L)* RCA Connectors	Connect to the audio-video acceptor
5	*AUDIO IN (R* and *L)* RCA Connectors	Connect to the audio-video source (from 1 to 4)

5 Connecting the Audio-Video Switcher

To connect an **OMX-9068** *4x1 Audio-Video Switcher* unit, do the following:

1. Connect up to 4 composite video-audio sources to the appropriate input video connectors and input AUDIO L and AUDIO R connectors.
2. Connect the appropriate output video connector and output AUDIO L and AUDIO R connectors to a composite video-audio acceptor.
   Pressing an INPUT SELECTOR button routes that video-audio input to the video-audio output.

6 Technical Specifications

Table 2: OMX-9068 4x1 Audio-Video Switcher Technical Specifications

Inputs:	4 video, 1Vpp / 75Ω on BNC connectors, 4 stereo audio, +4dBm typical, on RCA connectors
Outputs:	1 video, 1Vpp / 75Ω on a BNC connector, 1 stereo audio, +4dBm typical, on RCA connectors
Switching System:	Mechanical, "break-before-make", audio- follow-video mode
Bandwidth:	500 MHz –3 dB (video), 100 kHz –3 dB (audio)
Crosspoints:	4 for video, 4x2 for audio, 1 set active at any given time
Signal levels:	Up to 3Vpp Video, +30dBm audio
Dimensions:	18.8cm x 10.2cm x 4.4cm (7.4" x 4" x 1.7"), W, D, H
Weight:	0.65kg. (1.44lbs.) approx.