OCEAN MATRIX®

Instruction Manual

Smart Series Passive A/B Switchers

Thank you for purchasing this 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.

Smart Series Passive A/B Switchers

The Ocean Matrix series of "Smart" A/B switchers provides the finest performance of A/B selector signal and data switching available today. It offers a variety of signal types and formats all centered around Ocean Matrix's "Smart" technology developed to "Link" these products together.

Each Smart A/B switcher is designed to work in series with each other. Up to 10 switchers can be looped to create a unique control system where one switcher simultaneously controls all switchers on the loop. At any time, any of the switchers can be set to LOCAL MODE for independent control.
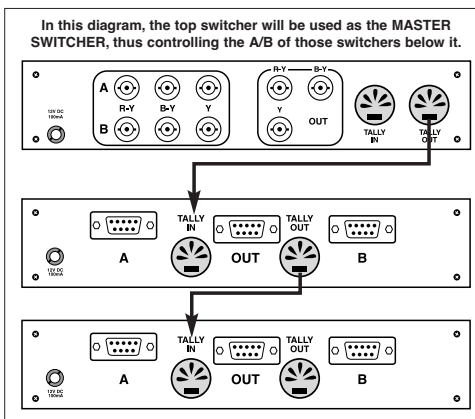
USE IN LOCAL MODE

Toggle the top front panel switch toward the LOCAL position. In this mode, the A/B function is controlled by the lower A/B selector switch. The front panel LEDs will light up to indicate A or B accordingly.

USE IN REMOTE MODE

In this mode, the A/B switch functions are controlled by an external source such as:

- **A.** Another Smart A/B switcher by connecting the optional control cables
- **B.** The OMX-REMPSW handheld remote control
- **C.** A GPI port control on compatible edit controllers
- **D.** Ocean Matrix E-SCREEM A/V alarm systems.

In this diagram, the top switcher will be used as the MASTER SWITCHER, thus controlling the A/B of those switchers below it.

Using the control cables (sold separately), connect a cable from the TALLY-OUT of each A/B switcher to the TALLY-IN of the next A/B Switcher. Continue this step for all Smart A/B Switchers you are using. (See diagram above)

After connecting the necessary control cables, toggle the **FIRST A/B Switcher** you want to act as the A/B Master Switch to the **LOCAL position**.

Toggle all other switchers connected **BEHIND THE MASTER** A/B Switcher to the REMOTE position. As you toggle between A or B on the MASTER Smart A/B Switch, it will also select A or B on the connected SMART A/B SWITCHERS. **NOTE:** The first switcher connected in a series does not have to act as the MASTER A/B Switch. Any Smart A/B Switcher in **LOCAL MODE** connected in series becomes the MASTER, controlling any other Tally-Connected A/B Switch in **REMOTE MODE** behind it.

The Smart A/B series also provides looped DC power to each switcher in the loop. Though each switcher comes with a 12VDC powerpack, the powerpack inserted in the first switcher will power other looped switchers, up to a maximum of 10 units. Of course, you can choose to power each switcher with its own powerpack if you desire.

Loss of power will automatically default to input A. Loss of cable connection in the remote mode will also default the switcher to A position.

EXTERNAL CONTROL (GPI)

The OMX Series Smart A/B Switchers can be controlled by either dry contact closure or by providing a ground signal to the 5-Pin DIN Tally IN Connector. Follow the pin-out below.

Pin#	Function
1	No Connection
2	Trigger In
3	Frame Ground
4	12 Volt In (not needed if powerpack is used for power)
5	No connection

To externally trigger the unit, short Pin 2 and 3 with a dry contact closure or provide ground level to Pin 2 (provided ground must be tied to pin 3).

OCEAN MATRIX®

Smart Series Passive A/B Switchers

IEEE 1394 6-PIN FIREWIRE
Firewire A/B smart switcher for full
400Mbps 6-Pin FireWire switching.
OMX-PSWFWC

BETA/YUV FORMAT VIDEO
A/B Smart Switcher for BETA format
video R-Y, B-Y & YUV standards.
OMX-PSWBET

RS-422 9-PIN EDIT CONTROL
An RS-422 control data A/B smart switcher
for today's multi-format & multimedia facility.
OMX-PSW422

CAT5/6 RJ45 A-V Switcher
Smart A/B Switcher
designed for Standard RJ45 CAT 5/6 Type
B configuration.
OMX-PSWCAT5

2 CHANNEL XLR BALANCED AUDIO
A/B Smart Switcher for balanced stereo
audio. Uses Neutrik XLR connectors.
OMX-PSWAUD

RGB FORMAT
A/B Smart Switcher for RGB/Sync
format video and graphics.
OMX-PSWRGB

Y/C VIDEO
A/B Smart Switcher for Y/C
video systems.
OMX-PSWSVS

COMPOSITE VIDEO
A/B Smart Switcher for composite
video using true 75Ω BNC connectors.
OMX-PSWBNC

OCEAN
MATRIX ®

OCEAN
MATRIX®

812 Kings Highway • Box 397 • Saugerties, NY 12477

845-246-0428 • FAX 845-246-0626

www.oceanmatrix.com