MultiDyne®
Video & Fiber Optic Systems

FiberNet Routing Matrix

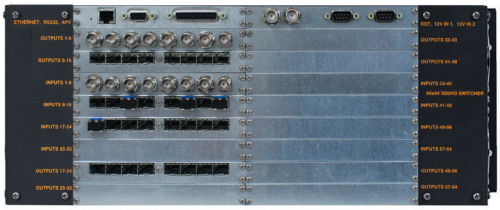
Modular 3G/HD/SD-SDI Video Router

FEATURES

- Re-clocking of standard SD, HD and 3G SDI data rates
- Auto bypasses non-standard SDI rates from 20Mbit/s to 3Gbit/s
- Video mute on every output
- Passes SDI embedded audio and ancillary data
- Interactive web page interface (demo)
- Vertical interval switching
- Store and recall up to 10 presets (complete or partial matrix state recall)
- Compact design
- Software updates via Ethernet port
- Backed by a full 2 year manufacturer parts and labor warranty
- Redundant power supply included
- Flexible control using the MASCOT text based protocol via TCP/IP, serial port or web page interface
- Sierra Video Systems protocol support
- Ask us about other 3rd party control protocol support

MultiDyne FiberNet Modular SDI Video Routing Matrix offers field expandable matrix size configurations in input or output increments of 8 up to 64 x 64.

Front of 64 x 64 chassis



Rear of 64 x 64 chassis

MultiDyne's SDI Routing Switcher offers the ultimate in modular system flexibility. Systems are fully factory assembled and tested to your specifications and can be expanded in the field as needed. System size is determined by modular cards which independently expand the system by 8 input or 8 output ports up to 64 inputs and 64 outputs. MultiDyne offers BNC, SFP, and mixed BNC/SFP modular I/O cards to meet your requirements. The FiberNet Router includes everything needed for a complete system except your choice of I/O cards and SFP modules. These same cards and SFP modules are interchangeable across all router chassis options.

When SFP (Small Form-factor Pluggable) modules are used, they offer additional I/O flexibility. Systems can be configured down to the individual input or output, which can be populated as desired. Choose from MultiDyne's selection of fiber optic and HDMI SFP modules. In addition, since these modular systems are SFP MSA compatible, many other MSA standard modules from other manufacturers may also be used.

The heart of the FiberNet Router is the control system and the rugged 4RU frame it resides in. The plug in controller offers a high level of connectivity and system integration ease through the included Ethernet, USB, RS-232, and RS-485 control ports, supporting a built in web page interface, and some common third party protocols. The rugged steel enclosure includes quiet redundant forced air cooling for extended service life and reliability. Each system also includes two external DC power supplies (one extra for power supply redundancy).

The SDI crosspoint provides auto re-clocking for standard 3G, HD, and SD rates, with bypass for non-standard rates between 20Mbps and 3Gbps. Switch on vertical sync functionality is provided through the included sync interface which accepts tri-sync, black burst, composite sync or analog video signals. Additional features include: embedded SDI audio pass-through, video mute on every output, stored routing presets (salvos), signal presence detection, re-clocker bypass control, ASI support, and more!

ORDERING INFORMATION

These modular systems can be factory assembled and configured for a particular size. Consult the ordering information below or call/email your MultiDyne sales contact.

Part #	Description
FN-16-CHAS	FiberNet 16 x 16 Modular SDI Video Switcher Chassis; Requires SDI and/or Fiber Optic Input/Output cards & SFPs
FN-32-CHAS	FiberNet 32 x 32 Modular SDI Video Switcher Chassis; Requires SDI and/or Fiber Optic Input/Output cards & SFPs
FN-64-CHAS	FiberNet 64 x 64 Modular SDI Video Switcher Chassis; Requires SDI and/or Fiber Optic Input/Output cards & SFPs
FN-8-IN-BNC	FiberNet SDI Input Card With 8 BNC Ports; Requires chassis
FN-8-OUT-BNC	FiberNet SDI Output Card With 8 BNC Ports; Requires chassis
FN-8-IN-SFP	FiberNet SDI Input Card with 8 SFP Ports; Requires chassis and up to 8 SFPs for operation
FN-8-OUT-SFP	FiberNet SDI Output Card with 8 SFP Ports; Requires chassis and up to 8 SFPs for operation
MDOPT00820	3G Video Transmitter SFP, 1310nm, For use with FN-8-IN-SFP Card
MDOPT00840	3G Video Receiver SFP, For use with FN-8-OUT-SFP Card

MultiDyne®
10 Newton Place
Hauppauge, NY 11788
877-685-8439 / 516-671-7278
sales@multidyne.com
www.multidyne.com

Specifications subject to change without notice

www.MultiDyne.com

Made in USA

MultiDyne®
Video & Fiber Optic Systems

FiberNet Routing Matrix

Modular 3G/HD/SD-SDI Video Router

TECHNICAL SPECIFICATIONS

General

# of Inputs	8 to 64 (varies depending on chassis size)
# of Outputs	8 to 64 (varies depending on chassis size)
Enclosure Type	1 RU - 4 RU (varies depending on chassis size)
Power	12 VDC 10A Adapter
Power Connector	D9 Male
Panel Type	Status
Ethernet	10/100 Base-T Auto MDIX

SDI Input Cards

Product	FN-8-IN-BNC (sold separately)
Connector Type	BNC
Data Rates	19 Mbit/s through 3.0 Gbit/s
Input Return Loss	> 15dB @ HD, > 12dB @ 3G
Input Impedance	75 Ohms +/- 1%
Input Level	800 mV P-P +/- 20%
Cable Equalization	400m @ SD, 140m @ HD, 120m @ 3G (1694A coax)

SFP Output Cards

Product	FN-8-OUT-BNC (sold separately)
Connector Type	BNC
Data Rates	19 Mbit/s through 3.0 Gbit/s
Re-clocking Data Rates	2.97 Gbit/s, 1.485 Gbit/s, 270 Mbit/s
Output Return Loss	> 15dB @ HD, > 12dB @ 3G
Output Impedance	75 Ohms +/- 1%
Output Level	800 mV P-P +/- 5%
Output Jitter	< 0.2 UI

SFP Input Cards

Product	FN-8-IN-SFP (sold separately)
Connector Type	SFP (MSA Standard Compatible)
Data Rates	19 Mbit/s through 3.0 Gbit/s

SFP Output Cards

Product	FN-8-OUT-SFP (sold separately)
Connector Type	SFP (MSA Standard Compatible)
Data Rates	19 Mbit/s through 3.0 Gbit/s

Fiber Optic SFP Output Modules

Product:	MDOPT00840 (sold separately)
Connector Type	LC
Fiber Type	Single Mode Fiber (SMF)
Wavelength	1200~1610nm (1310nm nominal)
Max Distance	10km
Data Rates	50 Mbit/s to 3 Gbit/s
Standard	SFP MSA Compliant
Pathological Signals	Supports Pathological Signals for 3G/HD/SD-SDI
SMPTE Standard	SMPTE 297-2006 Compatible

Fiber Optic SFP Input Modules

Product:	MDOPT00820 (sold separately)
Connector Type	LC
Fiber Type	Single Mode Fiber (SMF)
Wavelength	1310nm (DFB laser)
Max Distance	10km
Data Rates	50 Mbit/s to 3 Gbit/s
Standard	SFP MSA Compliant
Pathological Signals	Supports Pathological Signals for 3G/HD/SD-SDI
SMPTE Standard	SMPTE 297-2006 Compatible

SDI Standards

SD Formats	625i25 PAL and 525i29.97 NTSC
HD Formats	720p23.98, 720p24, 720p25, 720p29.97, 720p30, 720p50, 720p59.94, 720p60, 1080p23.98, 1080PsF23.98, 1080p24, 1080PsF24, 1080p25, 1080PsF25, 1080p29.97, 1080PsF29.97, 1080p30, 1080PsF30, 1080i50, 1080i59.94, 1080i60
3G Formats	1080p50, 1080p59.94, 1080p60
2K Formats	2048 x 1556p23.98/24/25
Compliance	SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 310M, SMPTE 425M-A, SMPTE 425M-B, ITU-R BT.656 and ITU-R BT.601
Video Sampling	4:2:2 and 4:4:4
Audio Sampling	24 bit @ 48 KHz
Color Precision	4:2:2 and 4:4:4 10 bit
Color Space:	YUV or RGB
Metadata Support	Ancillary data as defined by SMPTE 352M

Reference Sync

Connector Type	Analog BNC with pass-through
Format:	Tri-Level Sync and NTSC/PAL Black Burst

MultiDyne®
10 Newton Place
Hauppauge, NY 11788
877-685-8439 / 516-671-7278
sales@multidyne.com
www.multidyne.com

Specifications subject to change without notice

www.MultiDyne.com

Made in USA