BroaMan Route66

3G/HD/SD-SDI VIDEO ROUTER/REPEATER/CONVERTER WITH OPTOCORE AND SANE

BroaMan (Broadcast Manufactur), the German-based broadcast network specialist provides scalable, protocol independent, routing, repeating, transport and distribution of multiple professional video signals, such as 12G/3G/HD/SD-SDI, over optical fibre.

OVERVIEW

DiViNe, the Digital Video Network technology developed by BroaMan, provides scalable, protocol independent, routing, repeating, transport and distribution of multiple professional video signals, such as SD/HD/3G-SDI, over optical fibre.

The cornerstones of BroaMan systems is the Route66. The device is capable of 66 channels of routing, signal repeating, as well as conversion to and from electrical to optical.

Route66 devices can be customized to meet the most sophisticated requirements.

Route66 is protocol independent and can be used to route and repeat signals such as 3G/HD/SD-SDI, MADI, OPTOCORE as well as optical signals from third party converters.

Route66 can be equipped with video clock output modules. The clock outputs are derived from a synchronized video source in the system.

Route66 is equipped with an OPTOCORE FX module. The low latency, synchronous, OPTOCORE network provides the capability of transporting, and patching, up to 1024 audio inputs into thousands of outputs over a redundant network. Additionally, the OPTOCORE FX module includes 64 channel SANE audio ports on Cat5, 4 RS485/422 ports, 100Mbit Ethernet switch and a Word Clock input and output.

Route66 devices can be configured as switched or automatic OPTOCORE routers, providing the capability to build OPTOCORE networks in star topology or as a mixture of ring- and star topology.

Route66 is populated with routers, I/O and multiplexers at the time of manufacturing, according to customer's specifications.

Route 66 can be controlled by an external controller or by using automated routing, according to customer's specifications.

Route66 is equipped with a built-in redundant power supply with an automatic switchover.

SCHEMATICS
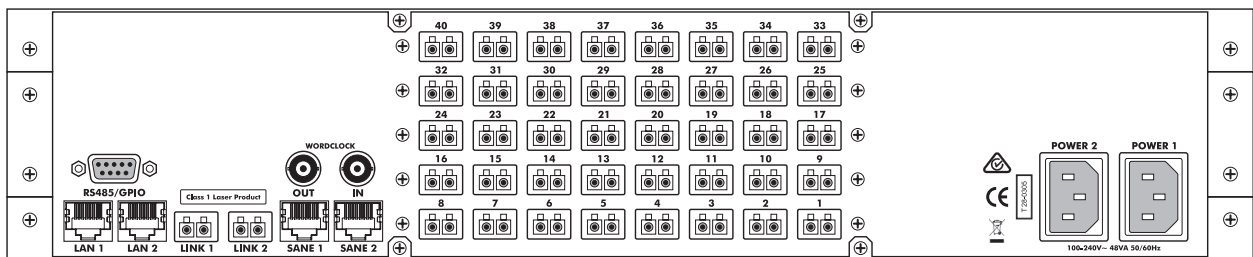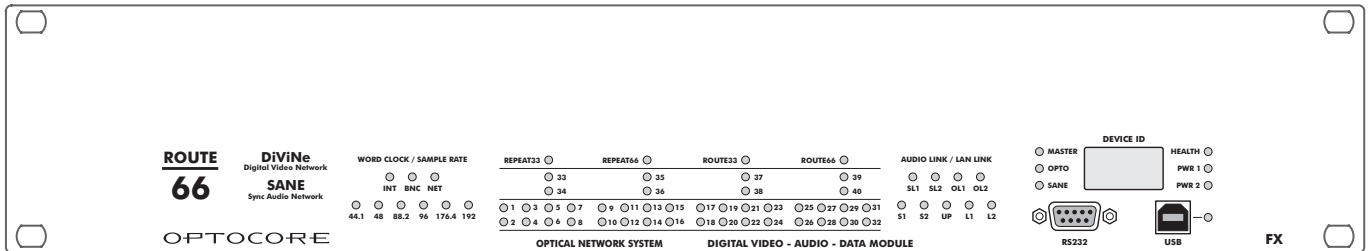
FEATURES

- Capable of routing up to 66 signals

- 2RU frame with capacity of 40 duplex LC fibre ports

- Optocore module

  - 2 x Optocore 2Gbps ports

  - 2 x SANE ports

  - 2 x LAN ports

  - 4 x RS485/422 ports

  - Word Clock I/O

- Modular hardware design

- Automated routing or control using a third party controller

- Redundant power supplies

- LAN, USB and RS232 ports for configuration

- Upgradeable internal logic

- Comprehensive front panel status indicators

TECHNICAL SPECIFICATIONS

Video		
Standards	**SD, ED, HD, Dual Link, 3G, 12G**	
Complies with SMPTE	**259M, 292M, 344M, 372M, 424M, ST 2082**	
Interface	**SDI - Serial Digital Interface**	
Optical Connection		
Connection	**LC**	
Data rate	**Dependent on the Video data rate – no bandwidth restriction**	
Fibre cable lengths	**Standard singlemode transceiver** **Special singlemode transceiver**	≤ 10 km ≤ 80 km (on request)
SANE & LAN ports	**Convention**	
Audio	**TIA - 568A/B, Optocore -** 200 Mbit/s	
LAN	**TIA - 568A/B, IEEE - 802.3 -** 10/100 Mbit/s	
Auxiliary Ports	**Convention EIA / TIA-485**	
Data channels	**Digital control data**	4
Data rate		Up to 10 Mbps
Impedance	**Termination** **Source**	330 Ω ≤ 10 Ω
Word clock	**Hardware standard 75 Ω / BNC**	
Data rate	**Depending on used sample rate** 44,1 / 48 / 88,2 / 96 / 176,4 / 192 kHz	
Impedance	**Output**	≤ 5 Ω
	Input	75 Ω
Drive level	**Output**	≥ 1 V_{pp}
Zero level	**Referring to GND**	+ 1.7 V
Sense level	**Input**	≥ 400 mV_{pp}

Remote Control		
RS232	**EIA / TIA – 232**	57 600 Baud
USB	**USB 2.0 – Device**	12 Mbit/s
LAN	**IEEE – 802.3**	10/100 Mbit/s
Power Supply	2 independent PSUs with function check and automatic switch-over	
Type	Switch-mode, universal input	
Mains voltage	100-240 V	
Frequency	50-60 Hz	
Power consumption	Depending on the configuration of the device, 32VA - Max	
Security classification	Class 1: basic insulation, connected to the protective grounding conductor	
Security regulations	Harmonised European standard EN60065	
Mains connector	acc. to IEC-950	
Cooling	Passive, via surface and ventilation openings on both sides of the device	
Dimensions (WxHxD)	2 RU / 19": 483 x 88 x 200 mm / 19.2 x 3.46 x 7.87 inches	
Weight	Depending on the configuration	

BroaMan
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Broadcast Manufaktur GmbH
Alte Allee 28
81245 München, Germany

For more information on our
products, please visit our
website or contact us directly:

www.broaman.com
inquiry@broaman.com
Tel: +49 89 899 964 - 60