BroaMan Route/Repeat 66/33
3G/HD/SD-SDI Video Router/Repeater/Converter with OPTOCORE and SANE

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

Complete DiViNe systems are built from a collection of modules that include; coaxial and optical I/O, routers, repeaters, and optical multiplexers. Using the modular DiViNe building blocks, any system configuration can be realized.

DiViNe systems are specified and built to provide an application engineered solution, tailored to the requirements of the customer. The modular nature of DiViNe paves the way for construction of fully cost optimized systems.

The cornerstones of DiViNe systems are the Route66, Route33, Repeat66 and Repeat33. The devices are capable of 66 and 33 channels of routing, signal repeating, as well as conversion to and from electrical to optical.

Route/Repeat 66/33 devices can be customized to meet the most sophisticated requirements.

Route/Repeat 66/33 are signal independent and can be used to route and repeat signals such as SD/HD/3G-SDI, MADI, Optocore as well as optical signals from third party converters.

Route/Repeat 66/33 can be equipped with video clock output modules. The clock outputs are derived from a synchronized video source in the system.

Route/Repeat 66/33 are 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.

Route 66/33 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.

Route/Repeat 66/33 are populated with routers, I/O and multiplexers at the time of manufacturing, according to customer’s specifications.

Route 66/33 can be controlled by an external controller or by using automated routing, according to customer’s specifications.

Route/Repeat 66/33 are equipped with a built-in redundant power supply with an automatic switchover.

**Product Features**

- **Capable of routing / repeating up to 66 or 33 channels**
- **Available in two frame sizes:**
  - 2RU frame with capacity of:
    - 24 SD/HD/3G-SDI ports
    - 20 duplex LC fibre ports
    - 36 simplex LC fibre ports
  - 1RU frame with capacity of:
    - 10 SD/HD/3G-SDI ports
    - 8 simplex LC fibre ports
- **SD/HD/3G-SDI port options**
  - Input with adaptive EQ
  - Input with reclocker
  - Output
  - Output with reclocker
  - Switchable I/O
  - Genlock
- **Optional CWDM modules**
- **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**
Line Drawings

2 RU Frame

1 RU Frame

Technical Specifications

**Video**
- **Standards**: SD, ED, HD, Dual Link, 3G
- **Complies with SMPTE**: 259M, 292M, 344M, 372M, 424M
- **Interface**: SDI – Serial Digital Interface

**Optical Connection**
- Complies with 21 CFR 1040.10 and 1040.11

**SANE, LAN**
- **Audio**: TIA - 568A/B, Optocore, 200 Mbit/s
- **LAN**: TIA - 568A/B, IEEE - 802.3, 10/100 Mbit/s

**Word Clock**
- **Hardware standard BNC - 75 Ω**: Up to 192 kHz
- **Data rate**: Depending on selected sample rate
- **Impedance**
  - Output: ≤ 5 Ω
  - Input: 75 Ω
- **Drive level**
  - Output: ≥ 1 Vpp
  - Input: ≥ 400 mVpp
- **Zero level**: Referring to GND, + 1.7 V
- **Sense level**: Input

**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**
- **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

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