

BE-MUX-5000 Multiplexer

The BE-MUX-5000 is an efficient and economical 1RU broadcast quality multiplexer for 8, 16, or 32 input standard MPEG-2 DVB-ASI multi-program or single-program transport streams (MPTS/SPTS). The unit automatically filters empty packets from the transport streams, regenerates and recalibrates program clock references (PCRs), and redefines PID entries and PAT, PMT, and other information tables as required, including PID filtering and remapping. Users can also insert their own data into the stream. The unit supports a wide variety of conditional access (CA) systems. ASI inputs and outputs are standard; unit optionally may be configured with a G.703 input and output. Outputs can be directly connected to most types of digital transmission equipment, including both SDH and PDH microwave radios, and QPSK and QAM modulators. Like all Telairity broadcast equipment, the BE-MUX-5000 is fully backed by Telairity service and support policies.



Features and Options

General Features

- Fully compliant with MPEG-2 DVB standard for transport streams
- Multiplexes up to 8 ASI channel program streams, MPTS/SPTS
 - 16-input and 32-input options available
- Redefines entries in service information (SI) and program specific information (PSI) tables, including Packet IDs (PIDs) in the Program Association Table (PAT) and Program Map Table (PMT)
- Automatically regenerates and recalibrates Program Clock References (PCRs)
- Filters empty packets from the transport streams
- Enables insertion of user data
- Remuxing capability allows services to be dropped from incoming transmissions and added to output transmissions
- Support for all types of Conditional Access (CA) systems
- Able to process transmissions for standard DVB-T (Digital Video Broadcast – Terrestrial) Single Frequency Networks (SFN)
- Directly connects to digital transmission equipment, including SDH and PDH microwaves and QPSK and QAM modulators

Control Interface

- **Front Panel**
 - Menu-driven
 - 6-button keypad
- **Web Browser**
 - Ethernet Interface
 - RJ-45 socket
 - Supports SNMP

BE-MUX-5000 Professional MUX

Applications

The Telairity BE-MUX-5000 is a professional multiplexer capable of coalescing up to 32 separate input DVB-ASI transport streams into a single output transport stream. It can easily integrate into any head-end or other facility, supporting SDH or PDH microwave transmission, satellite, DVB-T, MMDS, digital CATV, VOD, or telecommunication networks.

Benefits

Compact 1RU low-power (15W maximum) system

Part of the Telairity family of professional video compression products for trouble-free integration with Telairity encoders and transcoders

Combines up to 8, 16, or 32 input streams with a maximum bit rate of 108 Mbps each

Three output ports: all ASI, or 2 ASI and 1 G.703/E3

Supports both 188 and 204 byte packet formats

Supports a variety of CA systems, including Conax, Irdeto, Viaccess, Nagravision, CTI, DV-crypt, etc.

Automatically filters empty packets

Automatically regenerates and recalibrates PCRs

Redefines PID entries, PAT, PMT and other service information (SI) and program specific information (PSI) tables in the transport streams

Allows insertion of user data

Front panel and web browser control

Full Telairity service and support

Ordering Information

Part Number: **BE-MUX-5000**

Contents

- MUX 5000-series Multiplexer
- User Manual
- Cables
 - Power cord (IEC to USA plug)
 - RS-232/485 (control/data)

Requirements

- PC for control system
- ASI inputs
- BNC 75 ohm cables (data)
- CAT-5 Ethernet cable (control)

System Control

- LCD panel menus
- Web browser

About Telairity

Telairity, based in Santa Clara, California designs, manufactures and markets H.264/AVC and other advanced encoding and transcoding solutions for broadcast and professional video applications. Telairity's breakthrough video architecture (Telairity-1™) is the foundation for all its real time encoding products, which combine outstanding video quality with state-of-the-art, video compression based on the AVC (H.264 / MPEG-4.10) standard to achieve the lowest possible bitrates.

Telairity

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GPS Clock Input

- **1 channel, 10 MHz**
 - BNC 50 ohm, AC coupling
- **1 channel, 1 pps (pulse per second)**
 - BNC 50 ohm, TTL Level

Input Interfaces

- BNC 75 ohm coaxial cable
- **ASI Configuration**
 - 8 ASI ports (16- and 32-input options available)
 - 108 Mbps maximum bit rate per channel
 - Either 188 or 204 byte format
- **G.703 Configuration**
 - Replace ASI port with G.703 DS3/E3 port
- **Serial Interface for Control/Data Insertion**
 - DB-9 connector (female)
 - RS-232, 115200bps maximum
 - Supports EPG/ESG data (Electronic Program/Service Guide)

Output Interfaces

- BNC 75 ohm coaxial cable
- **ASI Configuration**
 - 3 DVB-ASI ports
- **G.703 Configuration**
 - 2 DVB-ASI ports
 - 1 G.703 DS3/E3 port
 - Either 188 or 204 byte format

Physical Specifications

- AC Power: 90V~260V, 47/63Hz, 15W (max, 8-inputs)
- DC Power: 12 / 24 / 48V (optional)
- Dimensions: 1RU (H) / 19 (W) x 15 (L) in / 48.3 (W) x 38 (L) cm
- Weight: 10.6 lbs / 4.8 Kg
- Temperature: 0° to 45° C working; -20° to 70° C storage
- Humidity: 20% to 95% non-condensing



8-input back panel with ASI Interface (note option for DS3/E3 out/in connectors)

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