T-MUX™ IP/ASI+IP

Hardware Based Professional Transport Stream Multiplexer-Demultiplexer with Gig/E Input – Combines or Uncombines Any Number of Incoming MPEG-2 and or H.264 IP Transport Streams, SPTS or MPTS. Supports Hundreds of Output PIDS. After PID Filtering or PID Addition, Automatically Re-generates PSI and SI Tables. Support for DVB Standard Table Editing. Able to Insert or Remove Electronic Program Guides and Local Programming into Incoming MPTS Streams Arriving via IP Backbone. Designed to Groom Many IP Streams for Delivery over ASI. Able to generate accurate 19.238 mbps streams irrespective of payload.

Front

Rear

Features

- Multiplexes any number of MPEG-2 and H.264 transport streams (SPTS/MPTS)
  - Inputs: 7 IP input ports (up to 300 Mbps for all 7 ports combined, UDP, RTP)
  - Outputs: One multiplexed stream over DVB-ASI and one multiplexed IP stream
- De-multiplexes single transport streams (SPTS/MPTS) to any number of MPEG-2 and H.264 transport streams
- UDP Unicast and Multicast support
- Supports all video layers and profiles including Multi-view and 4:2:2
- Audio stream types supported: AC-3, Enhanced AC-3, MPEG Audio (Layers I, II, and III), AAC, DTS
- SMPTE 302M 8 channel audio (pass through)
- Transport packet size: 188 bytes
- LCD front panel controls plus web-based management
- Front panel connectors for IP inputs, for easy setup
- Transport stream output rates up to 213 Mbps
- Program filter and mapping
- PID filtering and mapping plus remapping
- Creates accurate 19.238 mbps irrespective of payload
- PSI (PAT/PMT) signaling
- PCR dejittering and restamping
- PCR reclocking
- Service ID remapping
- ServiceName renaming
- TS CBR to VBR conversion
- TS VBR to CBR conversion
- Bit rate conversion CBR to CBR, VBR to VBR
- Tested with PSIP, Audio, EAS, PIDs…

Applications

- IP re-multiplexing
- Adding or dropping services in IP TV
- PID filtering
- IP over satellite or over RF
- PSIP table modification
- Cable Television Edge QAM presentation
- ATSC Mux

Overview

IP is quickly becoming the dominant infrastructure for reliable delivery of digital content to broadcasters and head ends. ASI is the legacy I/O standard in broadcast and cable.

Multiplexers combine many MPEG-2 and/or H.264 transport streams into a single multiplex transport stream, or “mux” for short. They also combine several multiplexes into a single remultiplex, or “remux”.

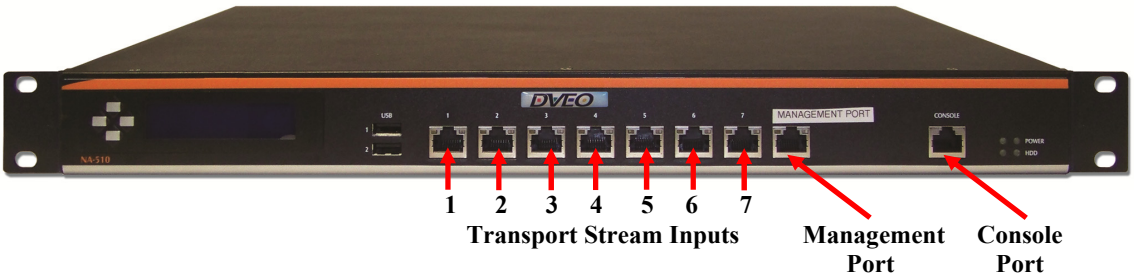
The T-Mux™ IP/ASI+IP is a professional transport stream multiplexer with many GigE inputs and a single ASI output. It also combines or multiplexes 50+ incoming MPEG-2 and/or H.264 IP Transport Streams, SPTS or MPTS to MPTS.

Audio stream types supported are: AC-3, Enhanced AC-3, MPEG Audio (Layers I, II, and III), AAC, and DTS.

Both cable companies and IP TV operators source content via dedicated IP circuits. At the end point this device is designed to feed DVB-S/S2 or 8VSB modulators, Edge QAMS, or VOD servers. This unit provides an affordable way to deliver multiplexed content across a hybrid infrastructure.

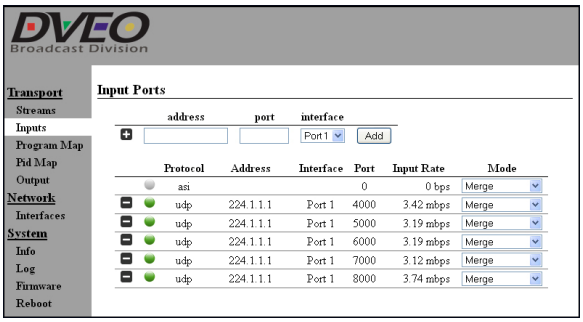
Computer Modules, Inc.
11409 West Bernardo Court
San Diego, CA 92127
Tel: 858-613-1818 Fax: 858-613-1815
www.dveo.com

Front Connectors

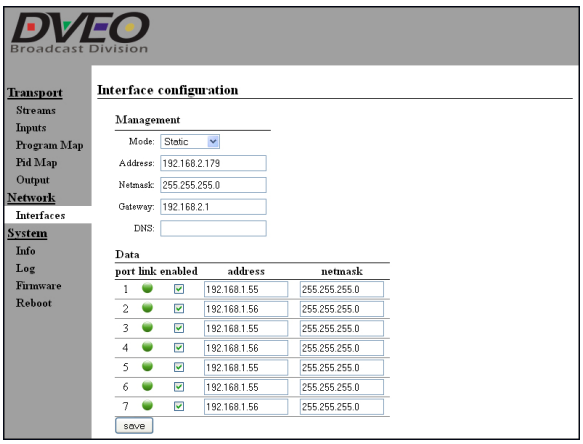


Rear Connectors

Sample GUIs



Input Ports



Network Configuration

Specifications

Inputs

Inputs:	2-7 IP input ports (H.264 or MPEG-2)
IP Input Protocols:	UDP, RTP (10/100/1000 Mbps)
IP Throughput:	Up to 300 Mbps (combined throughput for all seven ports)
Audio:	AC-3, Enhanced AC-3, MPEG Audio (Layers I, II, and III), AAC, and DTS SMPTE 302M 8 channel audio (pass through)

DVB-ASI Output

Outputs:	One multiplexed ASI transport stream
DVB-ASI:	188 byte MPTS
DVB-ASI Throughput:	Manageable to 213 Mbps

IP Output

IP:	One multiplexed IP MPTS

Administration

Access:	Front panel controls, Web interface

Physical & Power

Power Supply:	270W ATX power (85-265 volts)
Temperature Range:	Operating: 0-45°C (32-113°F) Storage: -20-70°C (-4-158°F)
Non-operating Humidity:	10% to 95% relative humidity, non-condensing
Dimensions – 1 RU:	15.53 x 16.93 x 1.73 inches (L x W x H) 394.4 x 430.0 X 44.0 mm (L x W x H)
Weight:	21.61 lbs. (9.8 kg)
Conformities:	FCC class A, CE class A, RoHS

Ordering Information

T-Mux IP/ASI+IP – Seven UDP/RTP input ports, one ASI output port

© 2017 Computer Modules, Inc. DVEO and T-Mux are trademarks of Computer Modules, Inc. All other trademarks and registered trademarks are the properties of their respective owners. All rights reserved. Specifications are subject to change without notice.

Computer Modules, Inc.
11409 West Bernardo Court
San Diego, CA 92127
Tel: 858-613-1818 Fax: 858-613-1815
www.dveo.com