Overview

IP is quickly becoming the dominant infrastructure for reliable delivery of digital content to broadcasters and head ends.

Multiplexers combine several 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/IP™ is a professional transport stream multiplexer with the ability to combine many GigE inputs to a single output. It also combines or multiplexes 50+ incoming MPEG-2 and/or H.264 IP Transport Streams, SPTS or MPTS to MPTS. The muxed stream can be output to IP (UDP or RTP) or optional DVB-ASI.

The T-Mux IP/IP provides extensive table processing and stream grooming. Customized table modifications can be implemented on request.

Both cable companies and IP TV operators deliver content via dedicated IP circuits or public internet. Delivering content in a multiplexed format ensures that streams are delivered in a bit aligned manner. The purpose of this device is to feed DVB-S/S2 or 8VSB modulators, Edge QAMS, or VOD servers with complex transport streams. This unit provides an affordable way to deliver multiplexed content across their broadband infrastructure.

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 to IP (MPTS up to 300 Mbps, UDP, RTP) or optional ASI
- De-multiplexes single transport streams (SPTS/MPTS) to any number of MPEG-2 and H.264 transport streams
  - Inputs: One or many IP inputs (MPTS up to 300 Mbps, UDP, RTP) or one optional DVB-ASI input
  - Outputs: 7 IP output ports (up to 300 Mbps for all 7 ports combined, UDP, RTP)
- 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 300 Mbps
- Program filter and mapping
- PID filtering and mapping
- PID remapping
- 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

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
Inputs: 7 IP input ports (H.264 or MPEG-2), plus one optional DVB-ASI input
IP Input Protocols: UDP, RTP
IP Throughput: Up to 300 Mbps (combined throughput for all seven ports)
DVB-ASI Throughput: 213 Mbps (Optional)
Audio: AC-3, Enhanced AC-3, MPEG Audio (Layers I, II, and III), AAC, and DTS
SMPTE 302M 8 channel audio (pass through)

Outputs: One multiplexed stream to IP or optional ASI
IP Output Protocols: UDP, RTP
IP Throughput: Up to 300 Mbps
DVB-ASI Throughput: 213 Mbps (Optional)
Audio: AC-3, Enhanced AC-3, MPEG Audio (Layers I, II, and III), AAC, and DTS
SMPTE 302M 8 channel audio (pass through)

Access: Front panel controls, Web interface

Power Supply: 270W ATX power (85-265 volts)
Temperature Range: Operating: 0-45°C (32-113°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)
Weight: 21.61 lbs. (9.8 kg)
Conformities: FCC class A, CE class A, RoHS