

D2MUX[™] 5120 and 5420 Series HD/SD MPEG IP/ASI Multiplexers



The D2Mux 5120 and 5420 are powerful **HD/SD MPEG digital video multiplexers** that transform services from ASI and Gigabit Ethernet into a tailored transport stream ready for distribution over ASI, IP and SMPTE-310. Service components from any input can be used to create each output for true flexibility in building your own MPEG-2 or MPEG-4 services.

Once the new services are defined, the D2Mux faithfully handles all of the table processing to ensure a pristine output on ASI or IP. With the D2Mux, you get essential control in a compact multiplexer for reliable contribution of live events, production and content delivery with distribution capability for broadcast, cable and IPTV.

Applications

Contribution: Dynamically adjust services or easily load profiles to customize the ASI or IP feeds and multiplexing functionality for live events, live production, post production and content delivery playout.

Distribution: Easily aggregate services from many sources and local programming with service processing and preparation for transmission over satellite uplinks, terrestrial broadcast, cable and IPTV.

Key Benefits

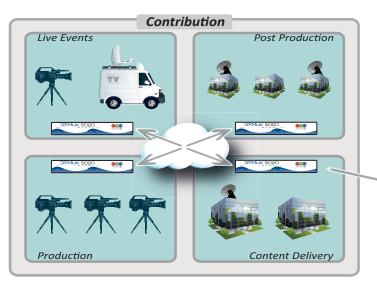
Optimize Transport Bandwidth: Get the most out of your transport by creating a Multiple Program Transport Stream (MPTS) from all of the service inputs. Satisfy demanding bandwidth constraints by removing unwanted elementary streams like secondary audio or even drop complete programs.

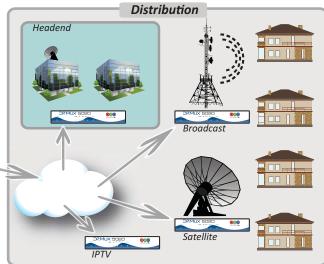
Easily Rebrand Channels with EPG: Control the PSIP/SI branding of all your service channels with advanced ATSC table processing and insert the necessary guide information so your customer can find the programs they want.

Value you can count on: The D2Mux delivers a strong Return on Investment (ROI) in a compact multiplexer with proven reliability. In just minutes, you can create a custom multiplex ready for the most demanding contribution and distribution requirements.

Features

- Transport Stream (TS) grooming and remultiplexing of 2 ASI inputs and up to 4 IP streams received on GIGE.
- Static PSIP table management, service filtering and remapping of any input to any output.
- ASI to IP (TSoIP) conversion for transporting digital video content over IP networks.
- IP (TSoIP) to ASI conversion provides a full duplex network video gateway.
- Network jitter correction and adaptation for transport of MPEG TS over IP.
- Optional D2Alert for insertion of EAS Emergency Alerts in your digital channels.
- Optional D2Guide for dynamic PSIP guide generation from Titan TV or spreadsheet.







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Specifications

ASI Inputs

- Two ASI BNC female inputs, 75Ω
- 213 Mbps per input
- Receive MPTS and SPTS with service filtering

ASI Outputs

- Two independent ASI BNC outputs
- Output up to 213 Mbps constant bit rate
- Programmable unique MPTS or SPTS
- PCR regeneration

SMPTE 310 Output (Option on 5x21 models)

- One SMPTE 310 BNC output at 19.39Mbps
- Programmable unique MPTS or SPTS
- PCR regeneration

Gigabit Ethernet (Option on 512x models)

- One independent Gigabit Ethernet (GIGE), RJ45
- 10/100/1000Base-T auto-sensing
- Half and full duplex
- Maximum aggregate data rate: 400Mbps with up to 64 services.
- Input and output unique SPTS and MPTS
- IP/UDP and IP/UDP/RTP multicast or unicast Transmission (IGMP)
- PCR regeneration

Management

- Control over Ethernet 100BaseT, RJ45
- D2Mux Control application for MS Windows XP, 2003, 2008, Vista, and 7.

Interoperability

- Video Formats: Transport stream MPEG-2 SD/HD and MPEG-4 (AVC) SD/HD
- Audio Formats: MPEG-1 Layer II and Dolby AC-3 service type control

MPEG Processing

- Service and component PID filtering and remapping
- Advanced component/service/TS analysis and bit rate measurements
- Pass-through of scrambled services on TS level.
- Local and remote logs

PSIP Processing

- Pass-through and dynamic regeneration of PSIP tables.
- PSIP Tables Supported: PAT, PMT, CAT, SDT, NIT,
- ATSC Tables Supported: MGT, VCT, STT, RTT, EIT,
- EPG Guide Services (D2Guide option): Titan TV

Multiplexing

- Service and component remapping (route any input to any output port)
- Each output (ASI, GIGE, SMPTE-310) is programmed uniquely
- PCR re-stamping
- PAT/PMT computation band insertion
- Synchronization of data and video
- Configurable packet format of 188 or 204 bytes per packet

Physical Characteristics

- Size: 1.75" high x 9.80" wide x 5.25" deep
- Power: 110V/220V, 50/60Hz. Single external power supply.

Environmental Conditions

- Convection cooled (no fans)
- Operating Temperature: 5°C to +40°C
- Storage Temperature: -5°C to +45°C
- Maximum Humidity: 90% (non-condensing)

Ordering Information

- D2Mux 5120: Multiplexer with 2 ASI inputs, 2 ASI outputs and 1 IP Stream in/out on GIGE.
- D2Mux 5121: Multiplexer with 2 ASI inputs, 2 ASI outputs, 1 IP Stream in/out on GIGE, 1 SMPTE 310 output.
- D2Mux 5420: Multiplexer with 2 ASI inputs, 2 ASI outputs, 4 IP Streams in and 1 out on GIGE.
- D2Mux 5421: Multiplexer with 2 ASI inputs, 2 ASI outputs, 4 IP Streams in and 1 out on GIGE, 1 SMPTE 310 output.
- D2Alert: Optional D2Alert for insertion of Emergency Alert System in transport stream.
- D2Guide: Optional D2Guide dynamic PSIP Guide generation from Titan TV or spreadsheet.

Specifications and product availability are subject to change without notice. D2D Technologies™, D2Mux™, D2Guide™ and D2Alert™ are trademarks of D2D Technologies, LLC. D2Mux5120.Rev.3.3.

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