D2iMUX™
5400 and 5800 HD/SD MPEG IP Stream Multiplexer

AdvancedDigital Inc.

The D2iMux is a cost effective HD/SD MPEG digital video IP stream multiplexer that transforms 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 D2iMux faithfully handles all of the table processing to ensure a pristine output. With the D2iMux, 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.
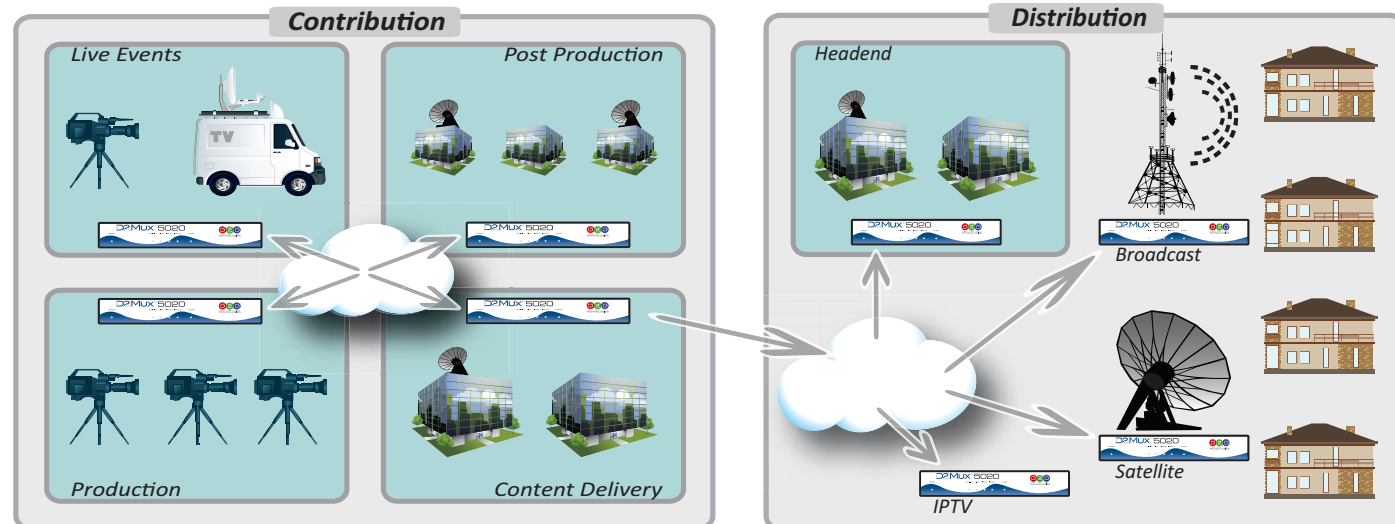
Key Benefits

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: Control the PSIP/SI branding of all your service channels with advanced ATSC table processing required for terrestrial broadcast.

Value you can count on: The D2iMux 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

- PSIP table management, service filtering and remapping.
- Service aggregation and local program insertion.
- Transport Stream (TS) grooming and remultiplexing of any service received over ASI or Gigabit Ethernet.
- IP output for transporting digital video content over IP networks.
- Converts up to 8 IP Streams to ASI providing a full duplex network video gateway.
- Network jitter correction and adaptation for transport of MPEG TS over IP.

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.

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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

Gigabit Ethernet

- One independent Gigabit Ethernet (GIGE), RJ45
- 1000Base-T
- Half and full duplex
- Combines up to 8 unique IP streams.
- Input and output unique SPTS and MPTS
- IP/UDP and IP/UDP/RTP multicast or unicast Transmission (IGMP)
- PCR regeneration

SMPTE 310 Output (Option)

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

Management

- Control over Ethernet 100BaseT, RJ45
- D2Manage 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 , AAC 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 of dynamic PSIP tables and regeneration of static PSIP.
- PSIP Tables Supported: PAT, PMT, CAT, SDT, NIT
- ATSC Tables Supported: MGT, VCT, STT, RRT
- Please see our D2Guide product for generation of dynamic PSIP

Multiplexing

- Service and component remapping (route any input to any output port)
- Each output (ASI, GIGE, SMPTE-310) is programmed uniquely
- PCR de-jittering and re-stamping
- PAT/PMT computation and 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

- D2iMux 5400: IP Stream Multiplexer supporting up to 4 unique input streams
- D2iMux 5401: IP Stream Multiplexer supporting up to 4 unique input steams and 1 SMPTE-310 output

Specifications and product availability are subject to change without notice.

Power   RS-232   Ethernet   Control Ethernet   ASI 1 IN   ASI 1 OUT   ASI 2 IN   ASI 2 OUT   SMPTE 310

CONTACT INFORMATION

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