FLEX4000

The **D2Flex 4000** is a comprehensive broadcast-quality IP Encoder, Decoder, Multi-Layer PIP, edge Transcoding unit designed to deliver your most important streams over a variety of network conditions.

The D2Flex 4000 serves as both an encoder and decoder with unparalleled capabilities.

Featuring an HDMI input capable of streaming 8K resolution and 2 HDMI outputs. 1 8K and 1 4K.

Effortlessly handle high-definition content to a file or across various networks.

Built-in support for SRT, ZIXI, and RIST ensures secure and reliable transmissions over the public internet or within your private network.

Time delay capable with optional Drive.

Features

2.5 Gigabit Ethernet: Leveraging a 2.5 Gbps connection ensures high-quality delivery to multiple endpoints simultaneously.

ARQ: Supports Secure Reliable Transport (**SRT**), **ZIXI**, and Reliable Internet Stream Transport (**RIST**) protocols, ensuring secure and optimized streaming performance across unpredictable networks.

Dual HDMI Outputs allowing for resolutions of up to **8K**.

HDMI 2.1 input for up to **8K** resolution input.

Bi-Directional Encode-Decode: Reducing the need for separate hardware for each function. Increases space available, lowers power usage.

Time Delay: Optional 1 TB internal storage. Up to 142 hours UHD storage.

4 Layer PIP: Resize and position streams with precision, customizing proportions and locations for tailored multi-view or overlay displays for banners, Id's, or multiple programs on one display.

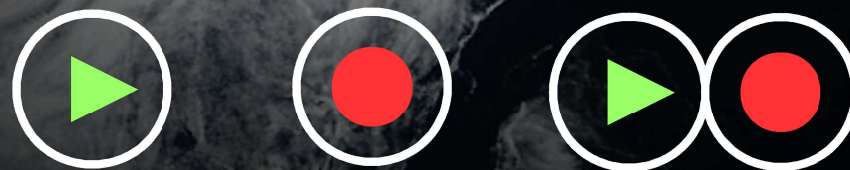Bidirectional Full Duplex Encode & Decode

Live Transcoding

Multi-Layer Picture in Picture

Time-delayed playback

IP/SRT IP/SRT IP/SRT

Decoding | Encoding | Transcoding

Securely Over Public Internet

D2D TECHNOLOGIES
DESIGNED TO DELIVER

D2FLEX™

4000 IP/HDMI Encoder Transcoder Decoder

D2D TECHNOLOGIES
DESIGNED TO DELIVER

Specifications

HDMI

- 1 HDMI input.
- 2 HDMI output
  (One supports 8K@60fps or 4K@120fps, while the other supports 4K@60fps.)

USB

- 2 USB-A 2.0 I/O
- Transfer rates up to 480 Mbps
- 2 USB-A 3.0 I/O
- Transfer rates up to 4.8 Gbps
- 1 USB-C

Interoperability

- Video Formats: Transport stream MPEG-2 SD/HD, MPEG-4 (AVC) SD/HD, MPEG-5 (HEVC) HD

Management

- Control over Ethernet, RJ45
- D2Manage Control browser interface
- SNMP remote monitoring with configurable traps

Payload Processing

- Maximum aggregate data rate: 1.65 Gbps
- RTMP - MPEG-2 SD/HD, MPEG-4 (AVC) SD/HD
- Multicast: IGMP v1, IGMP v2, IP/UDP and IP/UDP/RTP Multicast or Unicast.

Automatic Repeat Request (ARQ)

- Protocols: TS over SRT (UDP), TS over RIST (UDP), TS over ZIXI (UDP)
- Encryption: Advanced Encryption Standard AES-128, AES-256.
- Modes: Source (Caller), Destination (Listener) or Rendezvous.

Encoding:

- 8K @ 60fps: H.265/VP9/AVS2
- 8K @ 30fps: H.264 AVC/MVC
- 4K @ 60fps: AV1
- 1080P @ 60fps: MPEG-2/-1/VC-1/VP8

Physical Characteristics

- Size: 1.75" high x 8.5" (1/3 RU) wide x 4.25" deep
- Power: 90-254 VAC at 50 or 60 Hz. Single external power supply.

Environmental Conditions

- Convection cooled (no fans)
- Operating Temperature: 5°C to +40°C
- Storage Temperature: -5°C to +45°C
- Relative Humidity: 10 to 90% (non-condensing)
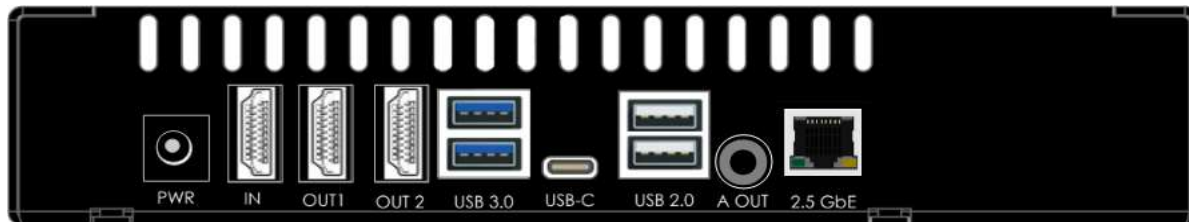
Ordering Information

- D2Flex4000: Encoder|Decoder
- D2Code: Optional Streaming Transcoding 1 TB internal storage.
- D2View: Optional Multi-PIP
- D2F4PS: Power supply, 90-254 VAC at 50 or 60 Hz
- D2F4RM: Optional 1RU rack mount kit.
- D2Care: Optional Monitoring and Replacement

PWR   IN   OUT1   OUT 2   USB 3.0   USB-C   USB 2.0   A OUT   2.5 GbE