CTDK™ ASI-IP-ASI Converter

Compact (Under 7 Inches), Cost Effective, Low Latency, Real Time, Bidirectional ASI to IP Gateway or IP to ASI Converter for Forwarding Bidirectional SPTS or MPTS Transport Streams over High Speed IP Backbones. Converts MPTS ASI Transport Stream to 1 to 7 IP Transport Stream Outputs with a Latency of Only One Millisecond. IP to ASI Latency is Only 10 Milliseconds. Supports Pro-MPEG FEC SMPTE 2022-1/2 and IP De-encapsulation. Supports Unicast and Multicast. Works Well as a Pure Standalone Media Converter.

Features

- ASI to IP and IP to ASI converter
- Converts HD and SD MPEG-2 or H.264/MPEG-4 AVC transport streams from DVB-ASI to IP in real time
- Receives HD and SD MPEG-2 or H.264/MPEG-4 AVC transport streams over Ethernet-based Internet Protocol (IP) networks and converts them to DVB-ASI
- Inputs:
  - One DVB-ASI input
  - One GigE IP input
- Outputs:
  - One DVB-ASI output
  - One GigE IP output port – supports seven IP outputs from one transport stream
- ASI to IP latency: One millisecond
- IP to ASI latency: Ten milliseconds
- IP Protocols: UDP or RTP
- Jitter tolerance range: 1~120 milliseconds
- Supports Pro-MPEG FEC SMPTE 2022-1/2
- IP address assignment from DHCP server and static IP address
- Interchangeable plugs – power adaptor clips for US and EU (UK, AUS types are optional)
- An alternative to dedicated satellite links – connects digital video equipment to computer networks
- Supports IGMPv2 and IGMPv3 multicast

Applications

- Studio to Transmitter Links
- ENG (Electronic News Gathering) – Stream content to and from remote locations
- ASI input to Cable System
- Distance education/Corporate training
- Converting ASI out from encoders to IP, or vice versa
- Supports IP encapsulation and 2D FEC decoding according to SMPTE 2022-1/2

Overview

DVB-ASI and IP are both physical interconnect technologies widely used to interconnect devices such as receivers, encoders, and multiplexers. ASI is an older interconnection scheme gradually being displaced by IP. It is important to have handy inexpensive appliances that convert between the two technologies.

Such devices are also useful to deliver transport streams between two devices over LANs and WANs. In summary, then the CTDK is a perfect way to re-use older IRDs and/or transport transport streams across IP networks. The CTDK works across LANs and WANs. It will connect to multicast networks via IGMP.

To manage packet loss, our CTDK™ incorporates Pro-MPEG FEC. This well known technology is able to correct 2-3% packet loss. This on board SMPTE 2022 FEC has been tested to work in many third party appliances.

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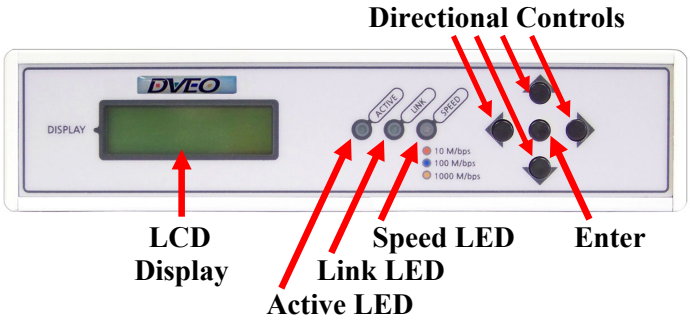
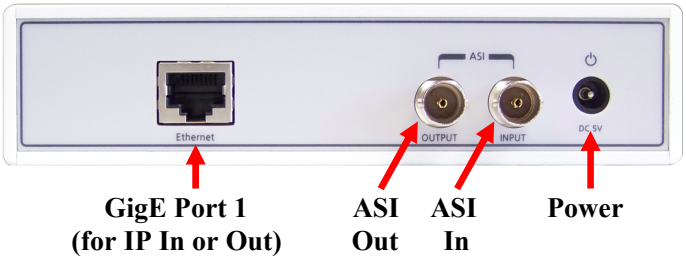
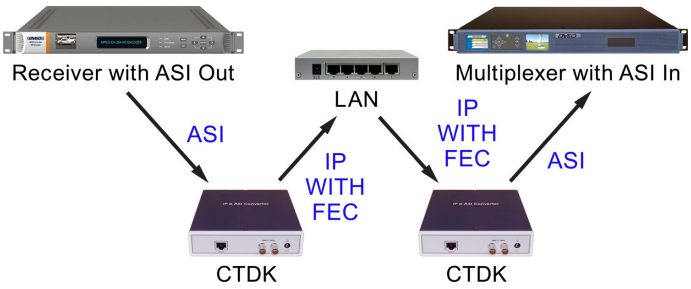
Front View



Rear View



Typical Application



Specifications

DVB-ASI Input/Output

Input/Output:	DVB-ASI (coax)
TS Bitrate:	< 214 Mbps
Connector:	75 Ω BNC

IP Input/Output

Input/Output protocols:	UDP, RTP
Transport Streams per IP Output:	1-7
FEC:	SMPTE 2022
GigE Port Physical Layer:	IEEE 802.3a
Data Rate:	10/100/1000
Connector:	RJ-45

Latency

IP to ASI Latency:	10 milliseconds
ASI to IP Latency:	One millisecond

Jitter Tolerance

Jitter Tolerance Range:	1~120 milliseconds

Administration

IP Address Assignment:	DHCP or static
Multicast Support:	IGMP v2
Controls:	Front panel controls

Physical & Power

Dimensions:	5.83 x 6.69 x 1.38 inches (W x D x H) 148 x 170 x 35 mm (W x D x H)
Weight:	1.1 lbs. (0.5 kg)
Power Requirements:	DC 5V 2A
Conformities:	FCC, CE, LVDS, RoHS

Ordering Information

CTDK ASI-IP-ASI

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