

GEARBOX™ ASI 2ch/ASI 2ch

Broadcast Quality, Multichannel, Real Time, Standard or High Definition (up to 1080p), Integrated ASI Receiver, and MPEG-2 to H.264 or H.264 to MPEG-2, or MPEG-2 to MPEG-2 Transcoder, Scaler, and Streamer. Optional H.265 Available. Receives Up to 2 ASI Transport Streams and Outputs Them Over Up to 2 ASI Ports. Based on Embedded Linux®, it Boots Quickly from Flash Drive and Remembers all Settings. Easy to Use GUI Allows Full Config of Each Stream and via SNMP can Report its Status to Remote Network Operations. Will Transcode and Process Multiple Streams up to CPU Limitations.



Features

- Inputs and Outputs: 2 DVB-ASI inputs, 2 DVB-ASI outputs
- Supports NTSC or PAL
- Transcoding bit rates: .1 to 15 Mbps
- Creates simultaneous High, Medium, and Low bitrate streams
- Resolutions: SQVGA, QCIF, QVGA, CIF, or any custom size up to 1080p
- Simultaneous demodulation, transcoding, and encapsulation
- SNMP, REST, SOAP support for remote management and monitoring
- Tested compatible with major brands of professional H.265, H.264 and MPEG-2 decoders and video servers
- Audio output: AAC, MPEG-1 Layer II, optional MP3, and/or optional "SurCode for Dolby Digital" AC-3
- Settings are remembered when power cycled
- Based on embedded Linux®
- Remote GUI includes some scheduling

Applications

- Cable TV
- Telco TV
- Reduce distribution bitrate by up to 60% with no change in picture quality

Overview

The **Gearbox™ ASI 2ch/ASI 2ch** is a real time multichannel transcoder/scaler designed to receive multiple ASI signals and transform them into existing streams that are best suited for new customers. It is designed to be scalable, easily adaptable, and field upgradeable to meet the needs of cable operators who are very comfortable with embedded Linux® based appliances. It relies on an Intel® Xeon® CPU as an accelerator. We have also optimized the transcode engine for reliability, efficiency, and flexibility.

The Gearbox ASI 2ch/ASI 2ch is an MPEG-2 to H.264 transcoder or scaler. It receives up to two DVB-ASI services, transcodes them to H.264 or optional H.265, and outputs them over ASI. The Gearbox ASI 2ch/ASI 2ch receives DVB compliant streams, demultiplexes the requested services, and streams these services over ASI. The system transcodes individual streams into H.264 format up to a maximum individual bitrate of 15 Mbps.

The system supports MPEG-2 or H.264 input and transcoded H.264 or MPEG-2 output. Processing of PIDs and packets is transparent and does not depend on the content of each individual elementary stream.

The unit provides PID filtering of all unwanted traffic, increasing system performance and the number of channels which can be transmitted per unit.



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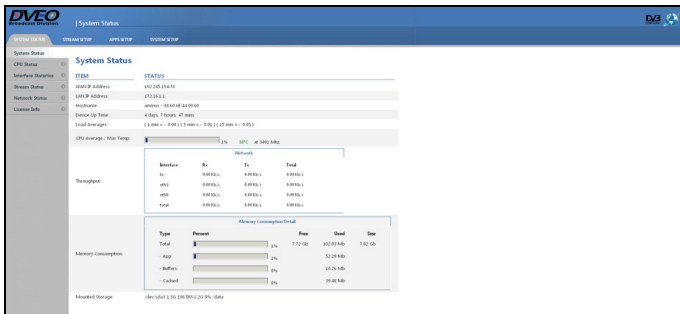
Input/Outputs



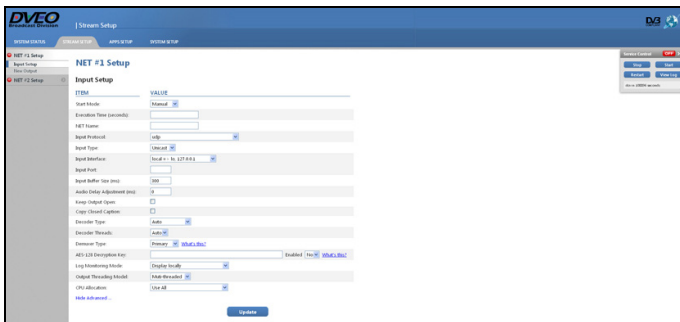
Web Management Port

ASI In ASI Out

GUI's



Status Screen



IP Input Setup

Specifications

Supported Resolutions – Input and Output

1920 x 1080	720 x 480	480 x 480
1280 x 720	704 x 480	480 x 320
720 x 576	640 x 480	320 x 240

Also supports any custom resolution not listed here.

Note: Lower resolution results in higher transcodes. Note: Supports closed captions. H.265 output resolutions supported are 1080, 720, 576, 480.

H.265 576/480 resolutions only have 4:3 aspect ratio.

DVB-ASI Input

Input:	DVB-ASI, 200 Mbps per port
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DVB-ASI Output

Output:	DVB-ASI, 200 Mbps per port
Bit Rates:	Multiple H.264, MPEG-2, and/or optional H.265 video streams at different bit rates (.1 to 15 mbps)

Administration

Access:	Web interface, SSH (Secure command line interface)
SNMP:	Monitoring and alerts
Scheduling:	On, Off support for timeslots

CPU and Operating System

CPU:	Intel® Xeon® processor
OS:	DVEO embedded Linux® on SSD

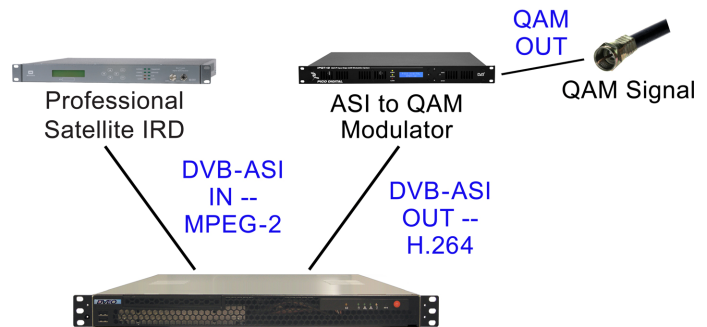
Physical & Power

Size – 1 RU high:	19 x 14.96 x 1.7 inches (W x D x H) 483 x 380 x 43.4 mm (W x D x H)
Voltage:	100-240V, 4-2A, 60-50 Hz, 220 watts
Operating Temperature:	10°C to 35°C
Non-operating Humidity:	20% to 90% non-condensing
Conformities:	UL, BSMI, CSA, FCC, CE, RoHs
Weight:	15 lbs. (6.8 kg)

Security

Ports security scanned to MIL requirements prior to shipment
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Block Diagram



Ordering Information

Gearbox ASI 2ch/ASI 2ch

Other versions available: MF (Multifunction), ASI 4ch/ASI 4ch, 12 Port ASI/IP, IP/IP, 8VSB 8 Tuners/IP, QAM 8Ch/IP, ISDB-Tb 8 Tuners/IP, DVB-S-S2 8 Tuners/IP, DVB-S-S2 8 Tuners+DECR/IP, DVB-T+T2 8 Tuners/IP

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