

Music Mux™

Real Time Music and Radio over IP to DVB-ASI Multiplexer for Music Channel Creator for Cable and Satellite Networks. Converts Up to 60 Channels of MP3 or WMA IP Radio Streams to a Single Multi Program TS with DVB-ASI Out. Designed to Multiplex Real Time Radio or Other Audio Streams Arriving Via Internet for Inclusion Into a Traditional Video Transport Stream Multiplex. Ideal System for Delivering Local Radio Stations into Unused QAM or Satellite Lineups.



Features

- Real Time Conversion of IP Radio Station Feeds to ASI Over QAM or ASI Over DVB-S2
- Input: Up to 60 channels of WMA or MP3, arriving via IP
- Output: Multi program DVB-ASI transport stream (MPTS)
- Decoding format: WMA and MP3 (We will consider any other format if required)
- CBR over ASI out
- Audio format: WMA/MP3 (32, 56, 92, 128, 192 kbps)
- Conversion format: MPEG-2 Layer II audio
- Mono or Stereo
- Each stream is assigned a unique PID
- Reader: HTTP, MMS, or any server string IP
- Automatic recovery from unstable IP drop-out
- Message display for input channel performance
- Log file to track all channel activities
- Store and recall different sets of IP channels
- Based on highly reliable server technology
- PSI table insertion
- Enterprise Class server
- 10/100 BaseT Interface
- Windows® 7
- Units in operation on 3 continents
- Audio output supports MPEG-1 Layer II or optional AC3 Dolby® Digital®
- Options: IBM Server, No brand server, Audio over IP modules

Applications

- Adding music to a cable service lineup
- Adding Music to Satellite service lineup
- Satellite radio

Overview

Music and distant radio stations are always a welcome occurrence on cable television systems. Providing such a service can be lucrative to the cable operator. With this in mind we created our Music Mux™.

The Music Mux is a real time multiplexer for audio. Audio typically arrives via the Internet. We buffer it and in real time convert the streams to audio-only transport streams. Once they are transport streams, we multiplex them onto a single Multi Program Transport Stream.

This software-based solution relies on a hardware server and the Internet to bring in audio streams and prepare them for use on cable video networks.

The application will simultaneously read multiple channel WMA IP streams in real time, and convert/multiplex them into a transport stream with a unique PID for each channel, then output the transport stream on a DVB-ASI transmitter via a 75 ohm BNC connector.

The resulting DVB-ASI streams can be sent to traditional video multiplexers such as DVEO's T-Mux ASI/8™, or any other brand of video transport stream multiplexer.

The Music Mux is designed for 24/7 operation, and when shipped on our selected server platform it is extremely reliable.



Computer Modules, Inc.

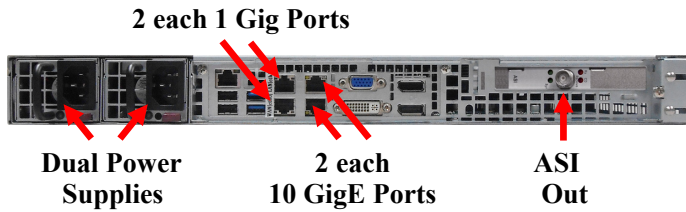
11409 West Bernardo Court

San Diego, CA 92127

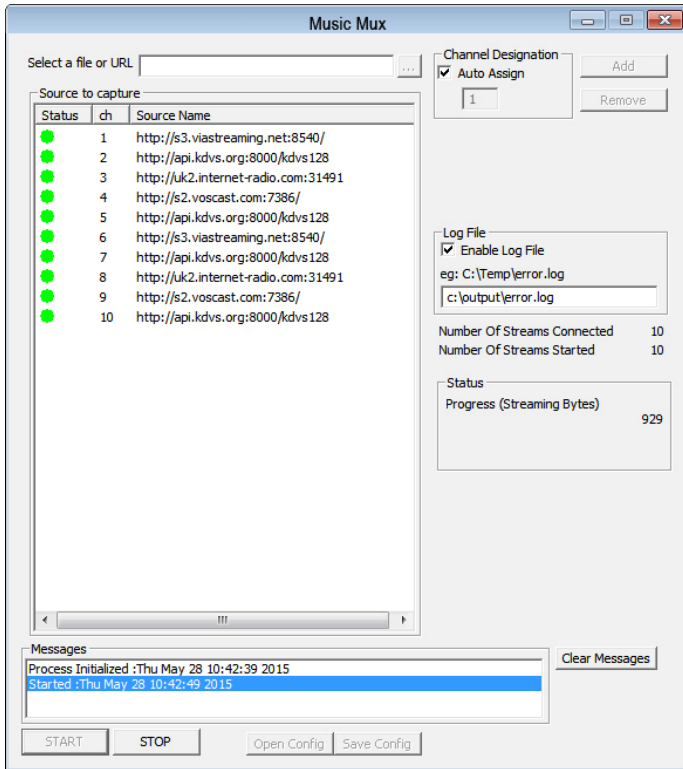
Tel: 858-613-1818 Fax: 858-613-1815

www.dveo.com

Inputs/Outputs



Sample of GUI



User Interface

Mode of Operation

1. The system receives the WMA/MP3 audio file sent over IP or local MMS playout server (single or multiple playout).
2. It decodes the incoming WMA/MP3 files, and converts them to Musicam (MP2) format in real-time.
3. Then, the MP3 Musicam formatted file feeds our Audio Multiplexer which converts it to a DVB-ASI transport stream with a unique PID and provides the multiplexed transport streams on a single BNC connector.

This all happens in real time on 4-60 channels.

Specifications

IP Input

Inputs	Up to 60 channels of WMA/MP3, arriving via IP
IP Protocol	IP network MPEG-2 transport stream conforming to ISO/IE 13818-2

DVB-ASI Output

Outputs:	Multi program DVB-ASI transport stream (MPTS)
Audio:	MPEG-1 Layer II, Optional AC-3


CPU and Operating System

CPU:	Intel® Xeon® processor
OS:	DVEO embedded Linux® on SSD
Hard Drive:	.5 TB SSD Default

Network

Network:	2 each 10 Gig, 2 each 1 GB
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Physical & Power

Size (W x D x H):	19 x 20.5 x 1.75 inches (483 x 521 x 44 mm)
Voltage:	00V-240Vac, 47-63Hz, 5-2.5A, 300 watts
Operating Temperature:	0°C ~ 40°C (32°F~ 104°F)
Non-operating Temperature:	-40°C ~ 70°C (-40°F~ 158°F)
Operating Humidity:	20% to 90% RH non-condensing
Non-operating Humidity:	5% to 95% RH non-condensing
Weight:	17 lbs. (7.7 kg)
Redundancies:	Dual power supplies, Port redundancies
Memory:	32 GB DDR3
Conformities:	UL, BSMI, CSA, FCC, CE, RoHS 

Ordering Information

Music Mux

Options: IBM Server, No brand server, Audio over IP modules, AC3 Dolby® Digital® license