MPEG-2 or H.264 Transport Stream Playback and Capture Application with DVB ASI In and Out for Continuous Playback and/or Capture of Selected (by PIDs) Transport Streams from a "Bouquet" by Time or by MB. Includes a Simple TS Analyzer that Recognizes SI and PSIP Tables, a software based TS viewer (VLC), Remote Management, and Transport Streams for Test Purposes (Custom TS Available).

**Features**

- MPEG-2 or H.264 Transport Stream (SPTS or MPTS) playback and capture
- Transport Streams can be selected by PIDs
- Plays and Captures TS from all well known Video Encoders, Decoders, and Servers including Harmonic®, Tandberg®, Omneon®, Tektronix®, Radyne®, Big Band®, Seachange®, Scopus®, and many others
- Playback rates of up to 210 MBits with fast SCSI hard drives
- Captures to standard IDE hard drive at 60 Mbps
- Plays back a sequence of transport streams
- Input: TS via CD, 100 BT, GigE, or DVB-ASI
- Output: TS via DVB-ASI
- Includes automatic TS analysis utility with PID and PCR clock info (Needs CBR for best result)
- Automatically uses the TS PCR info to calculate proper transport stream rate
- Selectable 188/204 packet size with auto conversion
- Continuous play or single play modes
- Buffer Overrun or Underrun warnings
- Runs on Windows® 7 or Windows® XP
- Option: Custom Transport Streams can be provided.
- TS ANALYZER Table Support
  - DVB: NIT, SDT, EIT, TDT, BAT, RST, TOT, ST
  - ATSC: STT, RRT, MGT, EIT, ET, TVCT/CVCT, DCCT, DCCSCT
- Decodes all MPEG and DVB service information to the descriptor level. SI information for "other" transport streams is decoded as well. The full range of descriptors defined in MPEG-2 and DVB are supported.
- Identifies AC3/Dolby Digital, DTS and MPEG-4 AAC/AVC streams
- Locates unreferenced and hidden streams in the PID map

**Applications**

- Capture or playback transport streams for testing
- Record and analyze transport streams in digital head-ends
- Development labs, manufacturing shop floors, and trade shows where users need to either capture and playback, or just continuously playback transport streams in real time
- Analyze and preview transport streams

**Overview**

MPEG transport streams are specialized MPEG-2 or H.264 streams with features necessary to enable them to run on any MPEG-2 or H.264 decoder. Transport stream asset management is important for anyone interested in capturing or playing back video assets or “clips” to test their signal paths or the robustness of their equipment, or sharing their transport stream content with others.

This application is designed to provide an easy-to-use and intuitive interface that will give you a quick way to analyze, capture, filter, play, and view single and multiprogram streams.

Prior to capturing a transport stream, one needs to analyze it. Our built-in transport stream analyzer provides a complete view of all the SI or PSIP tables. Click on a PID and the analyzer will present considerable information about that PID – such as 1) stream type, 2) stream tag information, 3) packet counts, 4) stream statistics, 5) CRC error counts, 6) packet size, 7) bit rate.

Besides having capture and playback ability, StreamValve™ III allows you to filter out selected PIDs that you do not wish to record. This way you can capture only the PIDs desired.

In order to provide confidence to the capture process, we have included a copy of the VideoLAN VLC viewer, which allows you to decode and view any of the incoming or captured streams.

A VCR-like interface provides complete control over the capture and playback process. A recent feature is remote management capability. This allows you to record, start, stop, or play via a remote browser. This is greatly appreciated by anyone using this with an automation system.

For those wishing to have perfect “cut” on iframe boundaries, we recommend VideoReDo™. This program does an excellent job of cutting transport streams on iframe boundaries. This way splice points are not discontinuous and looping videos do not “break up”.

**StreamValve III ASI**

Main GUI with viewer
Tables Displayed

**MPEG-2 PSI Tables:**
- Program Association Table (PAT)
- Conditional Access Table (CAT)
- Transport Stream Description Table (TSDT)
- Program Map Table (PMT)
- Network Information Table (NIT)

**ATSC PSIP Tables:**
- Master Guide Table (MGT)
- Directed Channel Change Table (DCCT)
- DCC Selection Code Table (DCCSCT)
- System Time Table (STT)
- Region Rating Table (RRT)
- Terrestrial Virtual Channel Table (TVCT)
- Cable Virtual Channel Table (CVCT)
- Event Information Table (EIT)
- Extended Text Table

**DVB-SI Tables:**
- Bouquet Association Table (BAT)
- Network Information Table (NIT)
- Service Description Table (SDT)
- Event Information Table (EIT)
- Time and Date Table (TDT)
- Time Offset Table (TOT)
- Running Status Table (TOT)
- Stuffing Table (ST)
- Discontinuity Information Table (DIT)
- Selection Information Table (SIT)

TS Analyzer Screens

**Analyzer GUI – Table View**
(Displays the table data stored in the Transport Stream)

**Analyzer GUI – Program View**
(Displays programs and their corresponding elementary streams in the Transport Stream, plus Bitrate, PIDs, and PCR information)
Highlights

- Multi-stream architecture allows *simultaneous recording of up to four transport streams with four DVEO cards, or one four channel DVEO card*
- Automates capture and playback with new online remote management features
- Includes transport stream analyzer and video viewer
- Ships with transport streams for test purposes

Compatible DVEO Cards

- DVB Master Dual/i FD
- DVB Master 2i/2o
- DVB Master FD
- DVB Master FD LP
- DVB Master FD-B
- DVB Master FD-BR
- DVB Master FD-R
- DVB Master FD-U
- DVB Master III Rx
- DVB Master III Tx
- DVB Master III Tx LP
- DVB Master Quad/i
- DVB Master Quad/o

StreamValve III is also compatible with all PCIe versions of the cards shown above.

Typical Configuration

- RAM: 1 GB
- Two IDE hard drives – One for system, one for data
- For high bit rates above 60 Mbps we suggest SCSI drives or RAID subsystems

Note: for optimum performance, use enterprise level SATA or SAS hard drives.

Remote Management GUI

Ordering Info

StreamValve III / ASI
Option – Custom transport streams