

Digital Video Interfacing Products

AT78XUSB

DVB-T2/T/C Receiver, Recorder
DVB-C to DVB-ASI Converter
Receiver, Recorder & Converter
Small Handheld size
No External Power Supply needed



Standard Features

- High Speed USB 2.0.

- Windows XP, Vista, Win 7 (64bit) Drivers + SDK.
- Linux Drivers & sample application.
- Accompanied by DVSStaion3, Alitronika's Integrated TS Player, Recorder & Real Time Quick Analyser Software.

Input

- DVB-T2/T/C Compliant COFDM Reception.
- Input Frequency Range:
 - High Band: 434.0 MHz to 858.0 MHz.
 - Mid Band: 149.5 MHz to 426.0 MHz.
 - Low Band: 50.5 MHz to 142.5 MHz.
- Modulation Modes: DVB-T/T2: QPSK, 16QAM, 64QAM
- Modulation Modes: DVB-C: 64QAM, 128QAM, 256QAM
- Guard Interval: DVB-T/T2: 1/4, 1/8, 1/16, 1/32
- Supports hierarchical & non-hierarchical modes.
- Supports 188, 204 Transport Packet Sizes.

Output

- Supports DVB Standards **A1010Rev1** and **EN50083**.

Application

Targeted for Digital Video Professionals, Sophisticated End Users and OEMs the AT78XUSB is an ideal solution for A number of applications such as:

- Development Tools.
- DVB to IP or IP to DVB Gateway.
- Transport Stream Recording.
- Transport Stream Analysing
- Transport Stream Monitoring.
- Software Based decoding.
- DVB-T2/T/C TS for Tans-modulation.



Specifications

On Board Buffer: 8Mbytes

RF Connectors: 75 Ohms IEC female Type

Loop Through Connector: 75 Ohms IEC male Type.

Input Frequency Range: 50.5 MHz to 858.0 MHz.

Channel Bandwidth: 6, 7 & 8 MHz.

RF Sensitivity: -80dBm.

COFDM Spectrum: 2k & 8k carriers non-hierarchical and hierarchical.

Standards: DVB-T2, DVB-T, DVB-C compliant.

Modulation Modes: DVB-T/T2: QPSK, 16QAM, 64QAM

Modulation Modes: DVB-C: 64QAM, 128QAM, 256QAM

Guard Interval Modes: 1/4, 1/8, 1/16, 1/32.

DVB-ASI Connector: 75 Ohms BNC.

Output Signal level: 1.0Vp-p nominal.

DVB-ASI Output Clock: 270 MHz.

Size WxLxH: 140mmx120mmx30mm

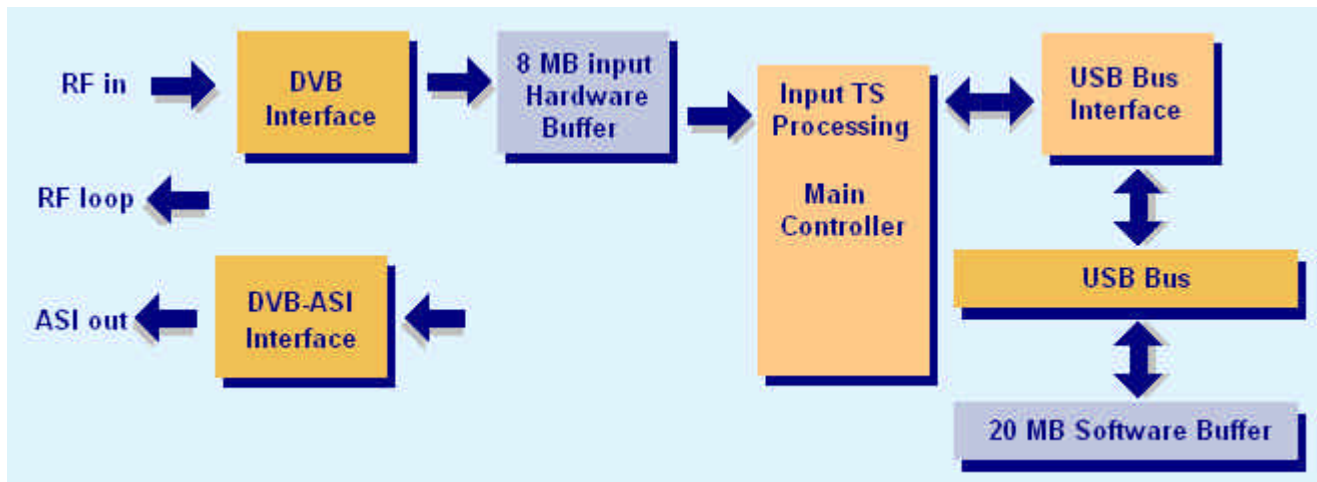
1 GENERAL DESCRIPTION

A member of Alitronika's state of art digital video interfacing products.

The AT78XUSB is a USB based interface device suitable for Recording and Analyzing of DVB Transport Streams.

2 BLOCK DIAGRAM

FIG4 illustrates the block diagram of the AT78XUSB device. The device communicates with the USB bus via the USB interface device. The RF signal is demodulated and then de-coded before entering the PC via the main controller and the USB bus as Full TS files. The main controller transfers the incoming Transport Stream to the application for recording via the hardware buffer, the USB controller and software buffer.



3 EXTERNAL INTERFACES

The external interfaces for the AT78XUSB are shown. There are two 75 Ohms IEC type connectors for the RF input and output of DVB-C, a BNC connector for DVB-ASI output as well as the USB connector.



The three LEDs in front of the unit function as follows:

PWR - Top LED	Power LED	ON = power is on, OFF = power is off
CD - Middle LED	Record LED	ON = Device is Recording TS Flashing = Record not activated
In Record mode this LED indicates that a Carrier has been detected.		
LCK - Bottom LED	LOCK LED	ON = device is locked to TS Flashing = no lock has been achieved
In Record mode this LED indicates that the device has locked into incoming TS.		

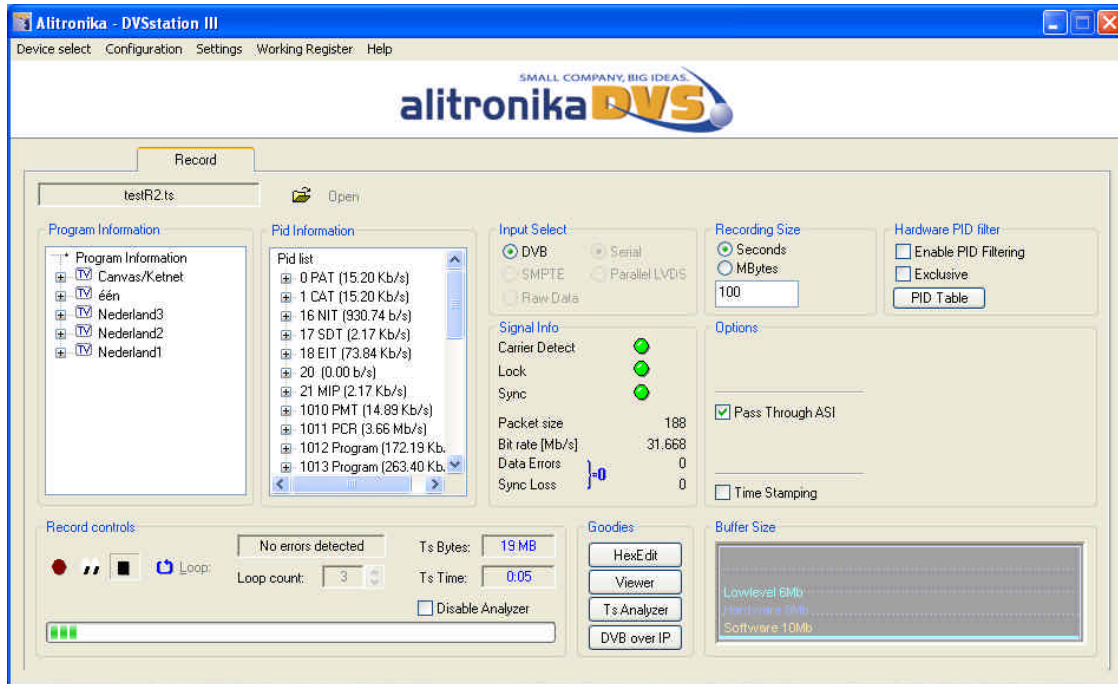
4 APPLICATION

Targeted for digital video professionals, sophisticated end users and OEMs the AT78XUSB is an ideal solution for a number of applications such as, development tools, universal interface for MPEG-II Transport Stream Playing and recording, video on demand server, transport stream test generator, high speed serial data link, software based MPEGII decoders & encoders and many other applications.

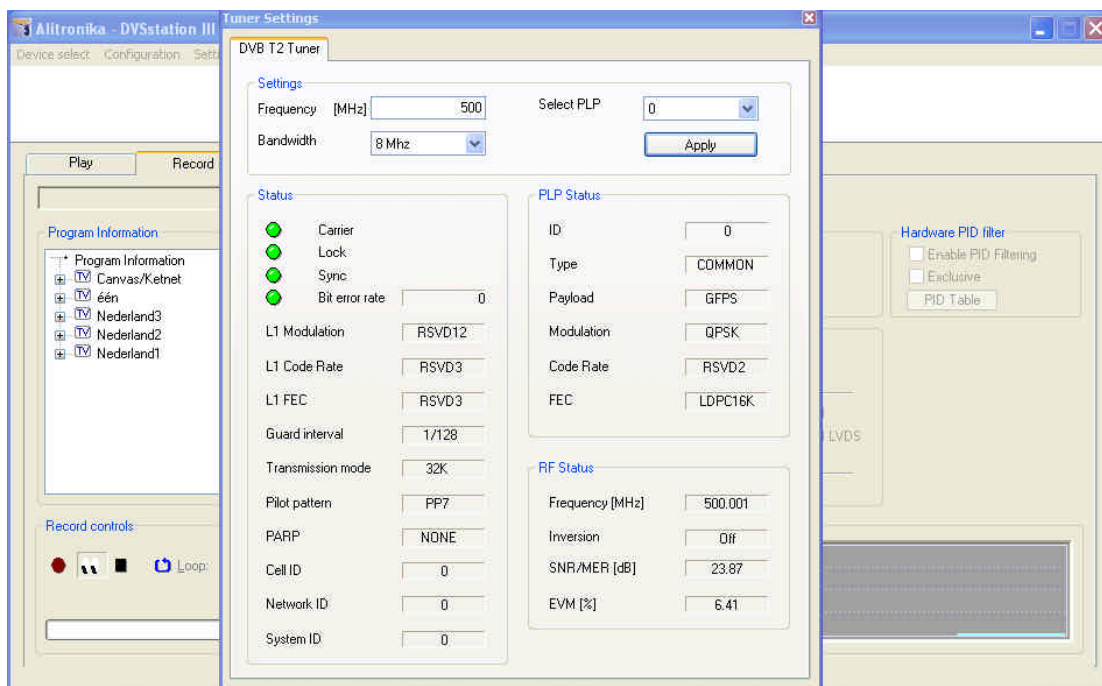
5 Software Application, DVStation3

5.1 - DVStation3: All of Alitronika devices are supported by DVStation3, Alitronika's **FREE** Transport Stream Player, Recorder, Analyser & converter application software. Please refer to DVStation3 specification and User Manual on our website for more information about DVStation3. Even better please download it from our website & try it out. It works in DEMO mode without any Alitronika devices.

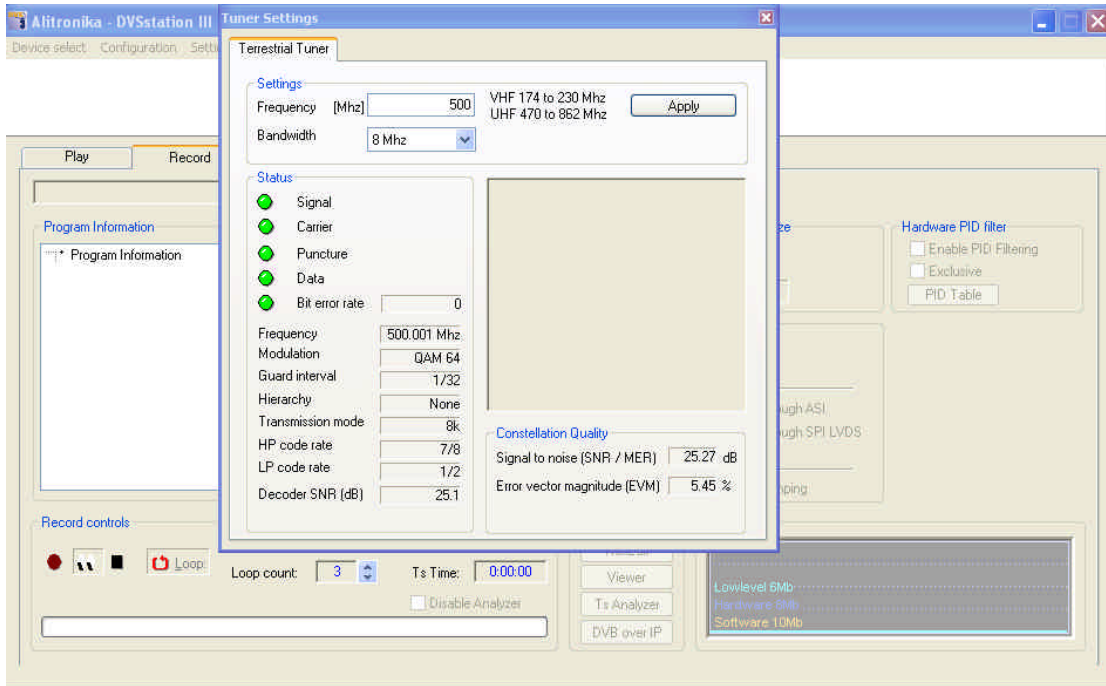
Record Screen



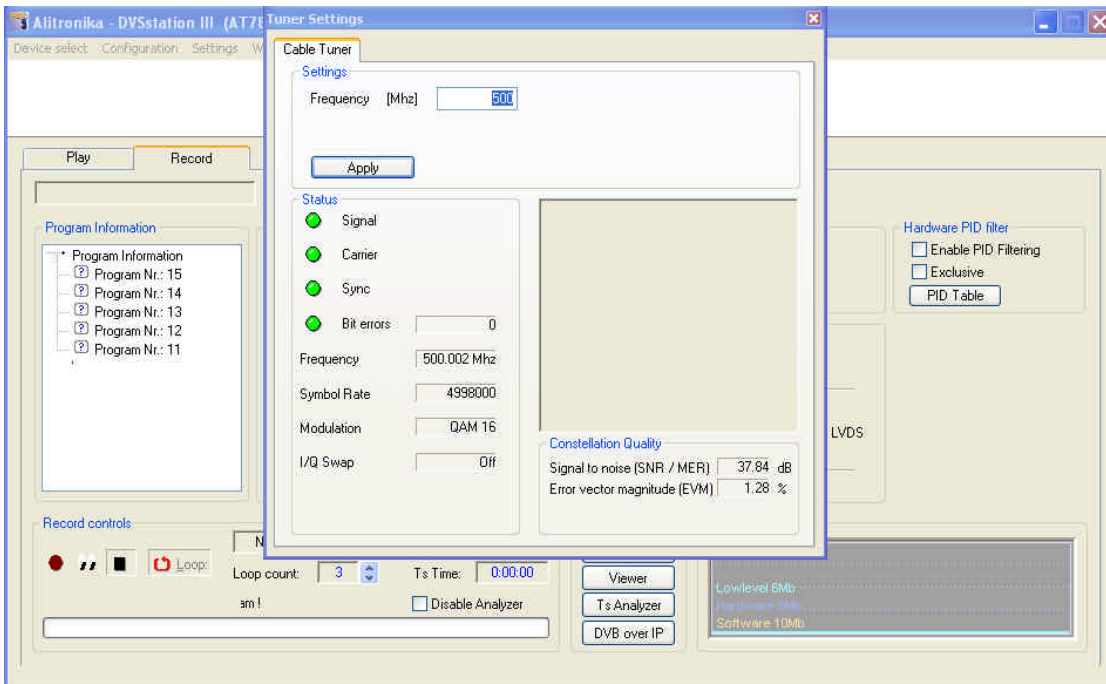
DVB-T2 Tuner Settings



DVB-T Tuner Settings



DVB-C Tuner Settings



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