

Digital Video Interfacing Products

AT80XUSB

DVB-T (COFDM) Terrestrial Input
6, 7 and 8 MHz Bandwidth
DVB-T to DVB-ASI Converter
Receiver & Recorder
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 DVStation3, Alitronika's Integrated TS Player, Recorder & Real Time Quick Analyser Software.
- Supports DVB Standards **A1010Rev1** and **EN50083**.

Input

- **DVB-T Compliant COFDM Reception.**
- Input Frequency Range:
 - UHF: 470 MHz to 862 MHz.
 - VHF: 174 MHz to 230 MHz
- Modulation Modes: QPSK, 16QAM, 64QAM.
- COFDM Spectrum: DVB-T and DTG compliant.
- Integrated RF Loop Through output.
- Sync, Error & Code Violation Detection.
- Support for Time Stamping, PID filtering.
- Supports 188 /204 byte Packet Sizes.

Output

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

Application

Targeted for Digital Video Professionals, Sophisticated End Users and OEMs the AT80XUSB 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-T TS for Trans-modulation into DVB-S or DVB-C.



Specifications

On Board Buffer: 8Mbytes

RF Tuner Connector: 75 Ohms Female IEC Type

RF Loop Through Connector: 75 Ohms Male IEC Type

Input Frequency Range:

UHF: 470 MHz to 862 MHz

VHF: 174MHz to 230MHz

Channel Bandwidth: 7 & 8 MHz

Channel Assignment: C.C.I.R Channel & +/- 166.666KHz offset

OFDM Spectrum: 2k & 8k carrier Hierarchical & non-hierarchical

Standards: DVB-T and DTG compliant

Modulation Modes: QPSK, 16QAM and 64QAM

Guard Interval Modes: 1/32, 1/16, 1/8, 1/4 active symbol duration

FEC Modes: Rate 1/2, 2/3, 3/4 and 7/8

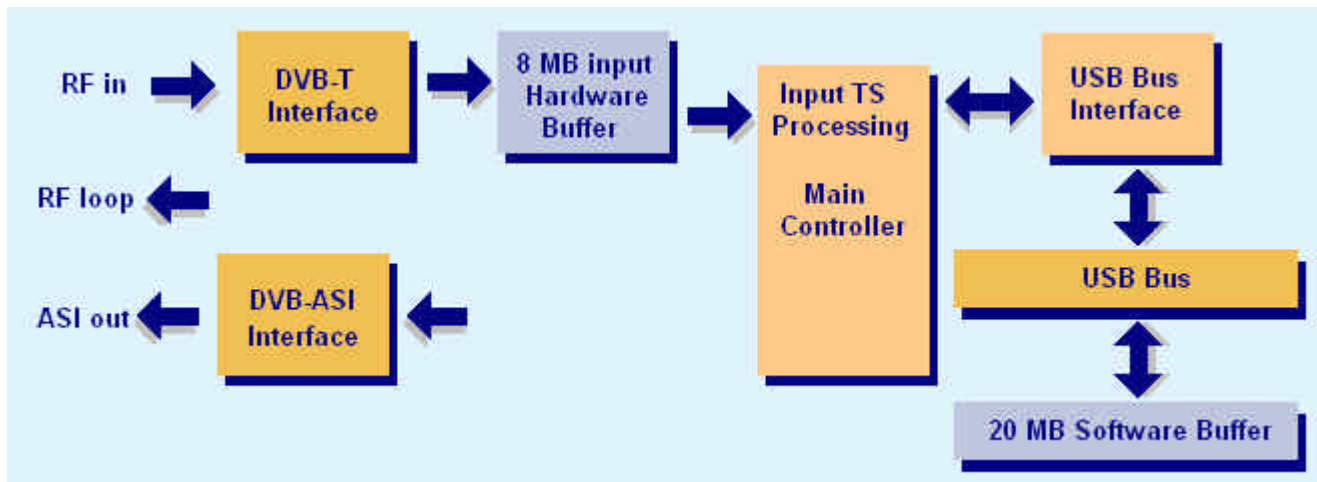
1 GENERAL DESCRIPTION

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

The AT80XUSB 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 AT80XUSB 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 AT80XUSB are shown. There are two 75 Ohms IEC type connectors for the RF input and output of DVB-C as well as 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.

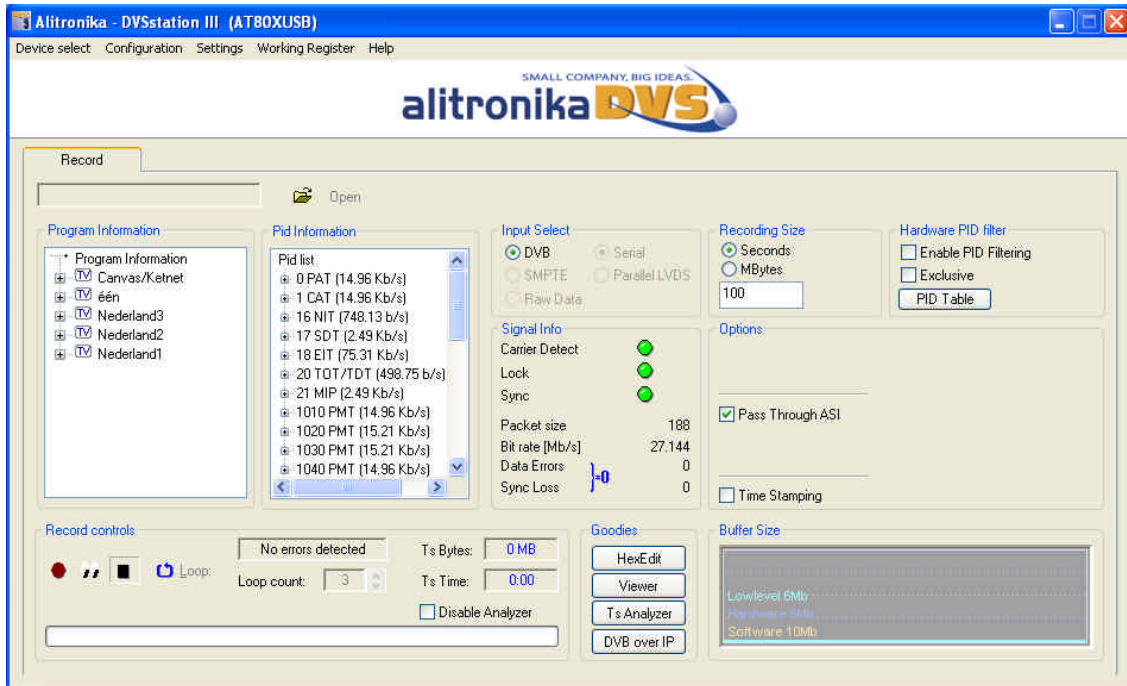
4 APPLICATION

Targeted for digital video professionals, sophisticated end users and OEMs the AT70XUSB 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.

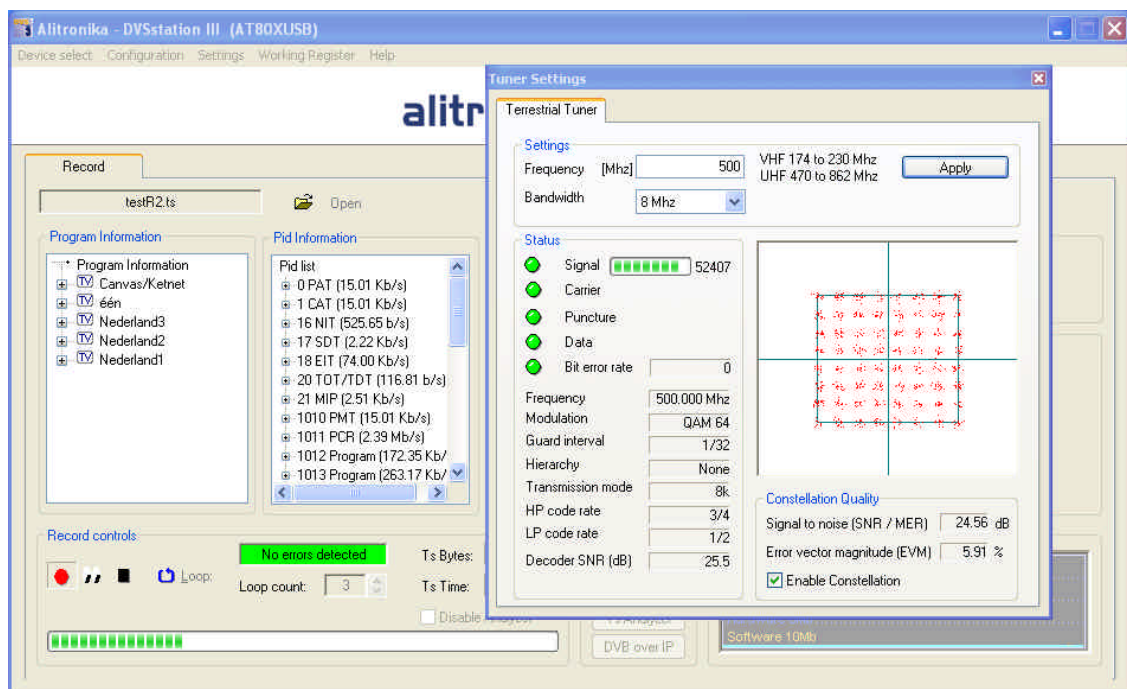
5 Software Application, DVStation3

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.

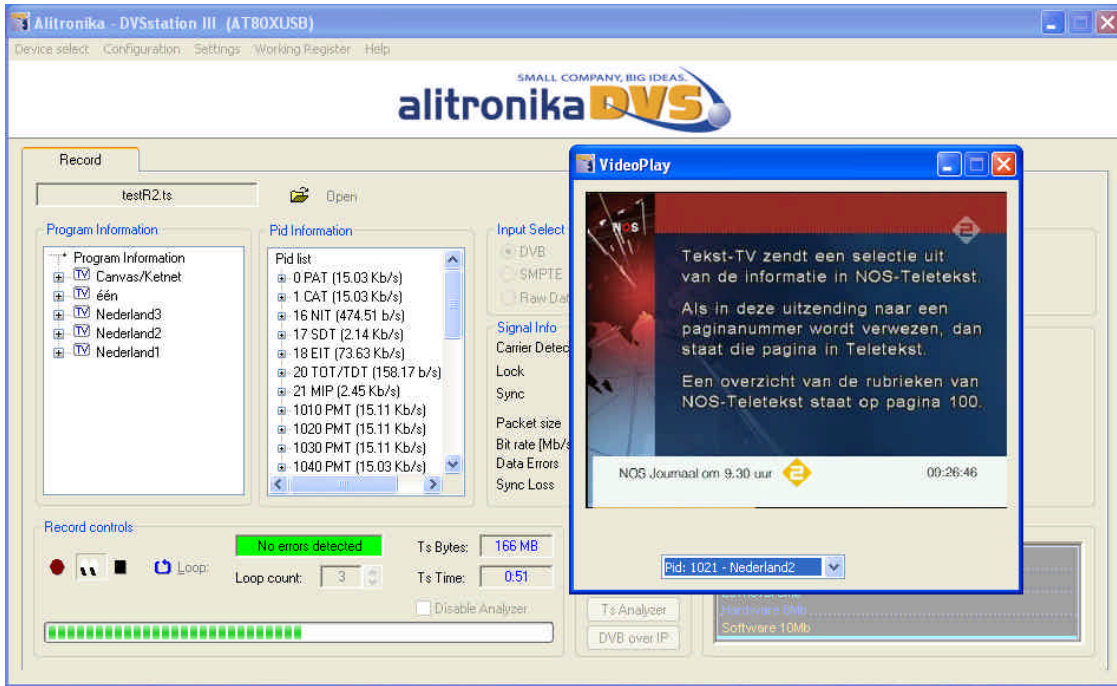
Record Screen



DVB-T Tuner Settings QAM64



Video Viewer



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