Digital Video Interfacing Products

DVSStationIP

Integrated Transport Stream
Player
Recorder
Analyser
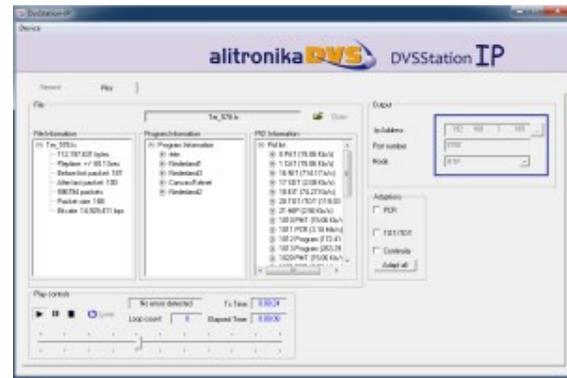
Free, unlimited licence with every Alitronika device

Standard Features

- High performance MPEG Transport Stream Player,
  Recorder and Analyser supporting all Alitronika's devices.
- Automatically obtains the bitrate from the PCR during
  Recording and Playing.
- Accurate estimation of bitrate when there is none in the
  PCR.
- Unlimited numbers of play loops.
- Automatic correction of PCR/PTS/DTS and continuity
  counter.
- Integrated file information, (P)SI viewer.
- Supports Time stamping using hardware only.
- Multiple application can be run simultaneously on the
  same PC for playing/recording of multiple Streams.
- Support DVB-T/T2/H/S/S2/C/C2 and ATSC Demodulator
  settings

Application

- Universal MPEG-2 Transport
  Stream generator and recorder
  for feeding or recording to/from
  any digital video equipments
- Transport Stream Recording.
- Transport Stream Playing.
- Transport Stream Analysing
- Transport Stream Monitoring.
- Video on Demand Server.
- Transport Stream Test Generator.
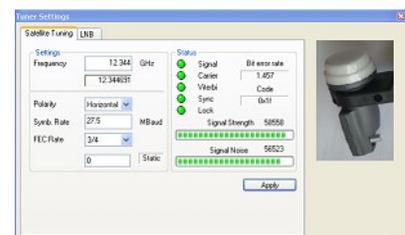
1 GENERAL DESCRIPTION

The layout of the DVSStationIP has the same familiar look as the DVSStation4 and many other application software. There are two basic screens, play & record. The screen shot below shows the record screen.
As it can be seen the DVSStationIP has many functions, since it must support all Alitronika devices.
Therefore not all of these functions are used by all devices.
In general if a device does not support a function, then the option for selecting that function is disabled by the application software and is not selectable by the user.
For examples the play screen does not appear for devices that only have input and do not have any output capability, or the tuner settings only applies to the De-modulator devices such as AT88IP.
In most cases the DVSStationIP pre-selects (Default) the options that are valid for a device.
As an example when a device has only DVB-ASI output, then this output is automatically selected by the application and the user need not make any selections.
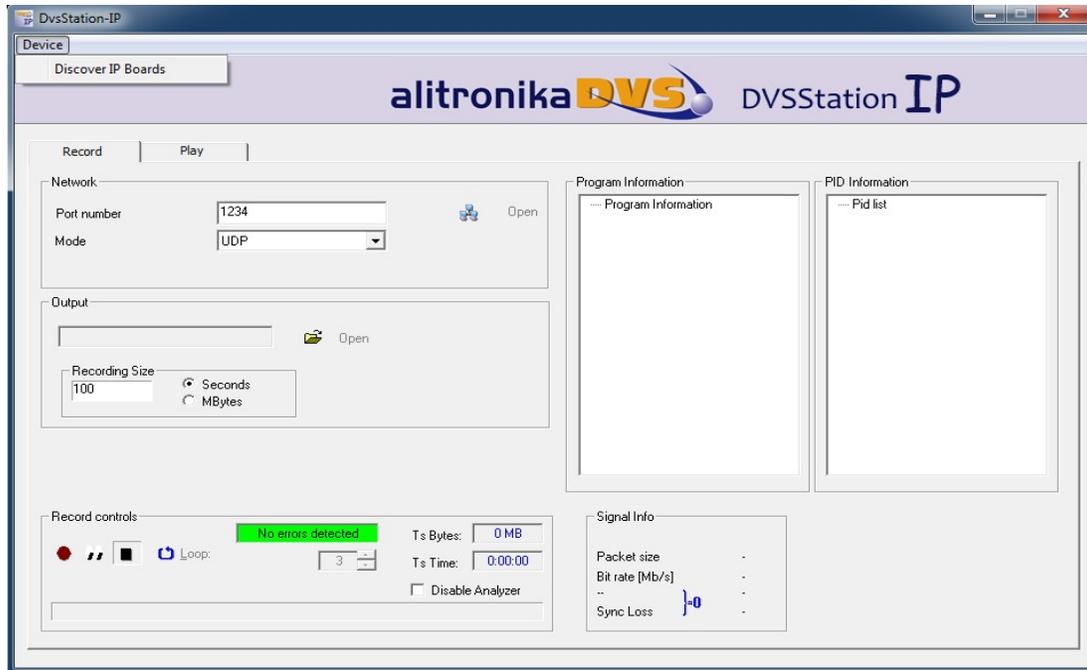
2.1 Discover Function

The "Discover" function of DVSStationIP can be used to locate any Alitronika's IP devices.
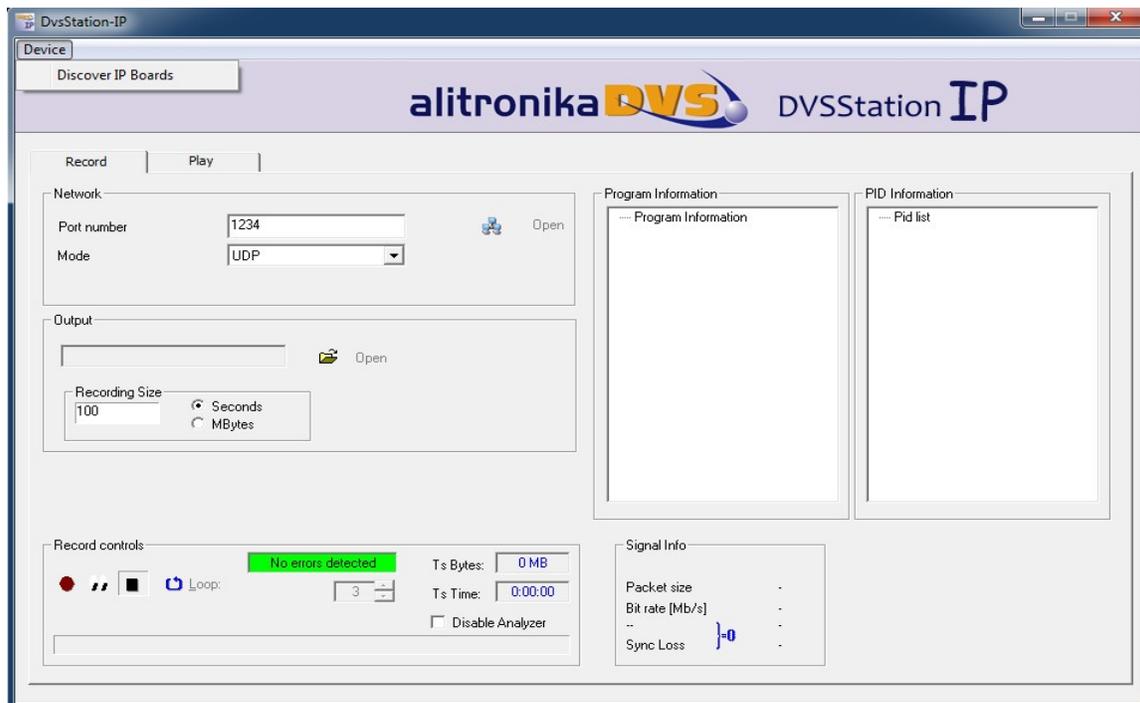
2.2 User Options

Once a device has been detected, DVSStaionIP shows 3 options.
- "Update" this function is used to update the device's Firmware whenever needed.
- "Settings" which opens the Web Base Application in your browser.
- "Reset to factory defaults"; in case of mistakenly selecting an invalid IP address and the device can no longer be found.
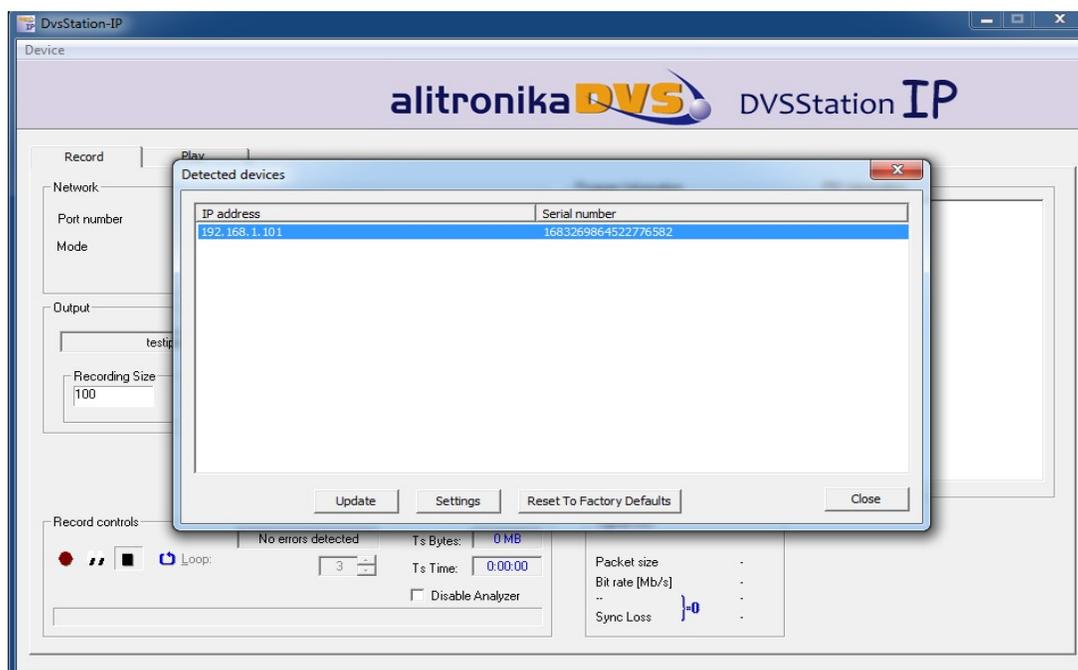
2.3 Updating the Device's Firmware

This process will take a few seconds. Use this option only when & if you need it or have been told by the Application or Alitronika to do so.

During the updating process do not switch off, power down or disconnect the device from the IP connection otherwise the device will lose its firmware.
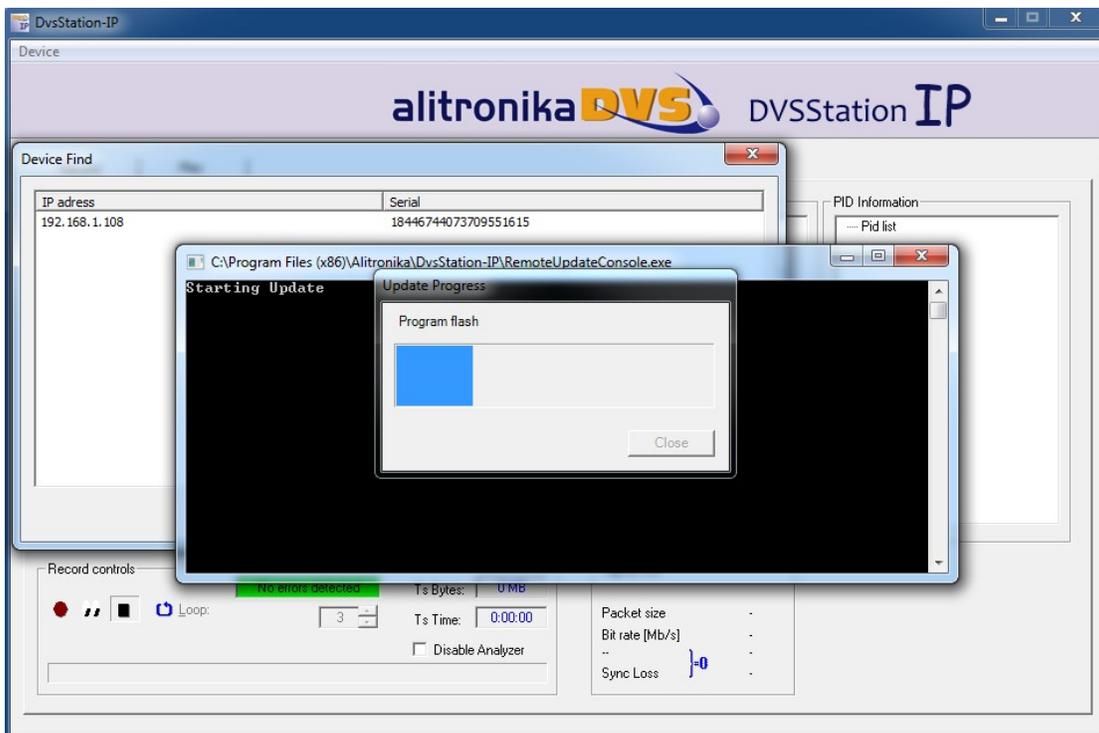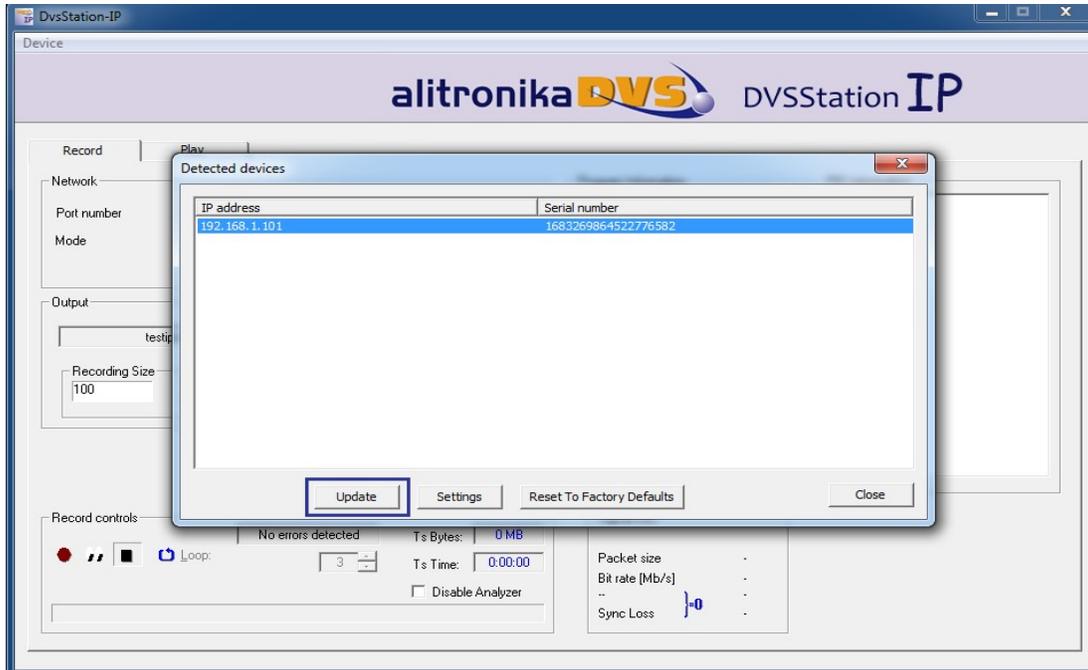
2.4 Resetting to factory settings

If the device is not functional or cannot be detected by "Discover" function, for example in case of using an invalid IP address or forgetting the password, the Resetting to the factory settings will resolve the problem.
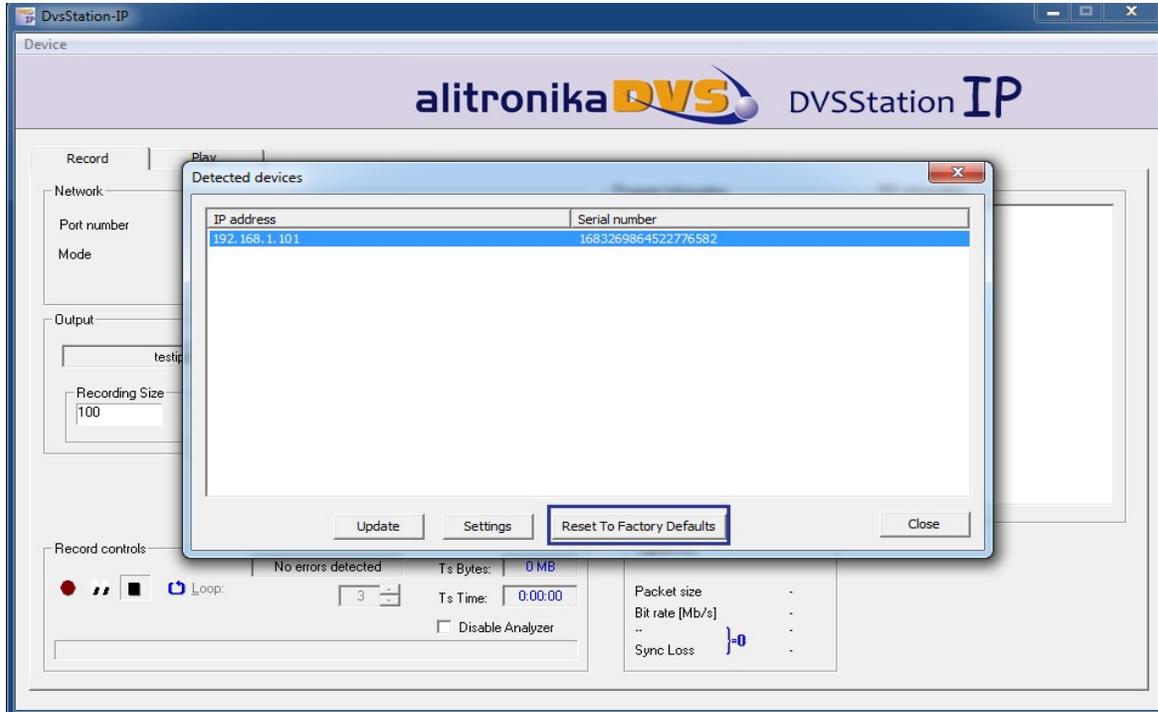
2.5 Use "Settings" to open the Web Base Application in your default browser.
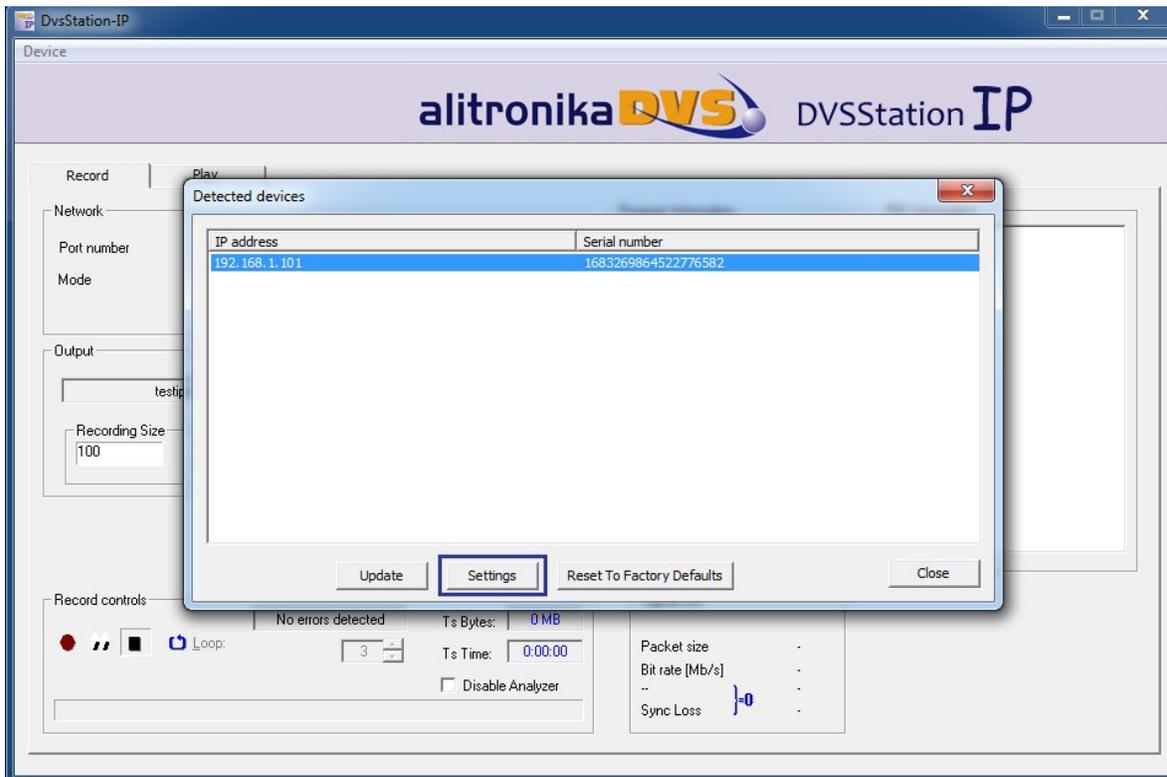
3.1 Login
In order to access the Web Based Management Software, a login process is required.

Default user   : alitronika
Default PassWord : admin
These should be changed by the user after first time login.
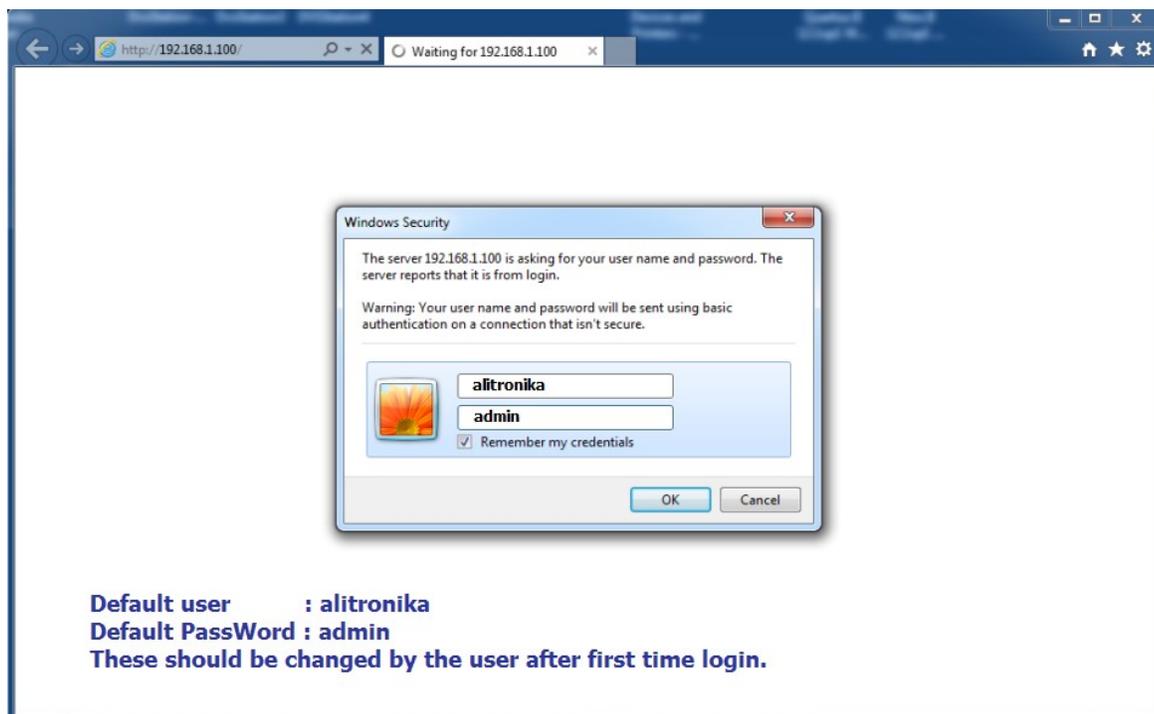
3.2 Web Application Main Screen

The Web Application is designed to be as standard and as user friendly as possible. All the functions & feature are self-explanatory. For each device, such as AT240IP or AT60IP/AT88IP, only the applicable function & feature are displayed & are selectable.

Most of the settings are pre-selected and only a few ever need changing.

3.3 Input Settings

Key	Value
Demodulator Settings	
Enable	☑
Frequency (GHz)	11.000000
Symbolrate (MSymb/s)	22.500000
LNB Settings	
Polarisation	Vertical
Power on	☐
Extended power	☐
Minimum Frequency (GHz)	10.000000
Switch overFrequency (GHz)	11.000000
Maximum Frequency (GHz)	12.000000
Oscilator Frequency Low range (GHz)	9.000000
Orcilator Frequency High range (GHz)	10.000000
IP Encapsulation Settings	
Mode	RTP
Packet Count (1~7)	7
Pro-MPEG FEC Settings	
Enable	☐
L (Column)	10
D (Row)	10
Column Only	☐
Interleaver mode	ANNEXB
IP Settings	
Target IP address	172.31.1.35
Target IP Port	9150

Apply   Reset

Key	Value
RF Status	
Carrier Detected	YES
Locked	YES
Inverted	NO
SNR (dB)	39
Level (dBm)	-18
Bit error rate	0
Demodulator mode Status	
Standart	DVB-S
Constellation	QPSK
Code Rate	1/2
Filter Roll Off	35%
Pilots	NO
Longframe	NO
TS Packet Status	
In Sync	YES
Packet Size	188
TS Bitrate Status	
DataCnt Locked	YES
DataCnt	20735208
PCR Locked	YES
PCR	20735240
TS Error Status	
Overflow error	NO
Data Errors	3196
Sync Errors	14

3.4 Output Settings

DVB-ASI Output Configuration

Menu

» Network Configuration
» DVB-S/S2 Demodulator Input Configuration
» DVB-ASI Output Configuration

Key	Value
Output Settings	
Output Mode	OFF / DVB-IP / Demodulator Loop
Remux Bitrate Enable	
Remux Bitrate	40000000
Burst size	1
IP Encapsulation Settings	
Encapsulator mode	RTP
IP Settings	
Source IP Port	9150
Source IP Delay (ms)	500

Apply   Reset

TS Status (DVB-IP mode only)	
Carrier Detected	-
Locked	-
In Sync	-
Packet Size	-
TS Bitrate (DVB-IP mode only)	
DataCnt Locked	-
DataCnt	-
PCR Locked	-
PCR	-
TS Error (DVB-IP mode only)	
Overflow error	-
Data Errors	-
Sync Errors	-

4.1 Selecting a TS file in play mode
To select a file to play simply click on "open" and then select the desired file from any location on your PC drive which it resides.
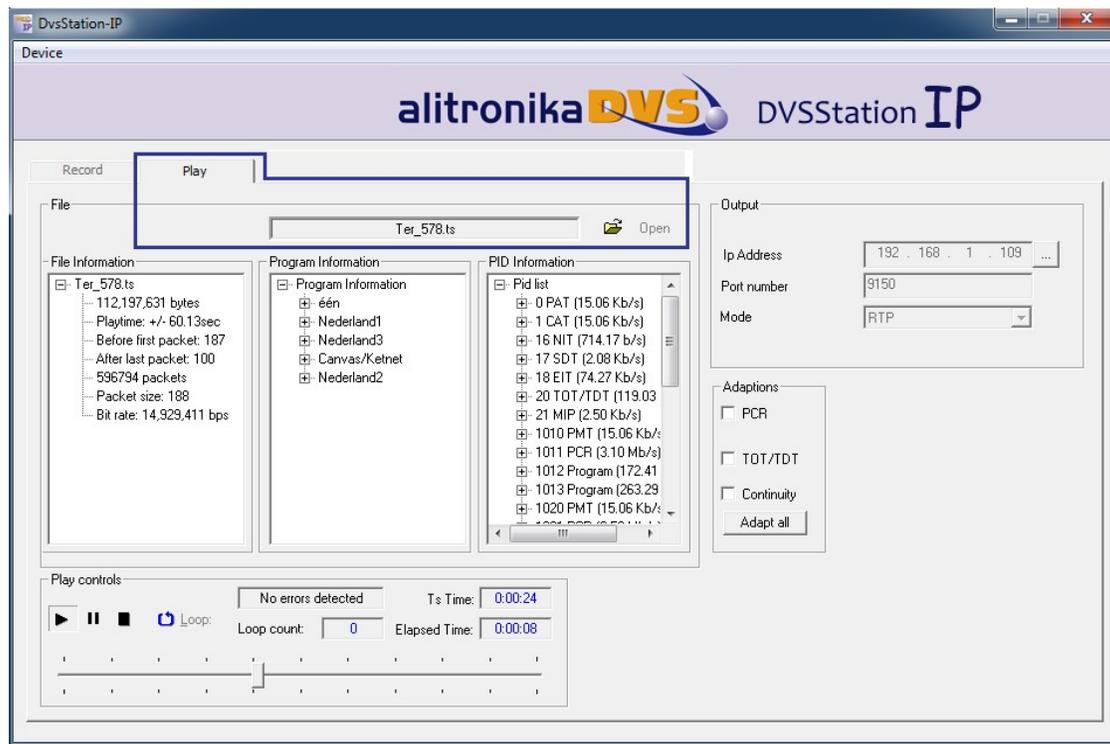
4.2 Output Selection
Select the Device's IP address & send Transport Streams to it.
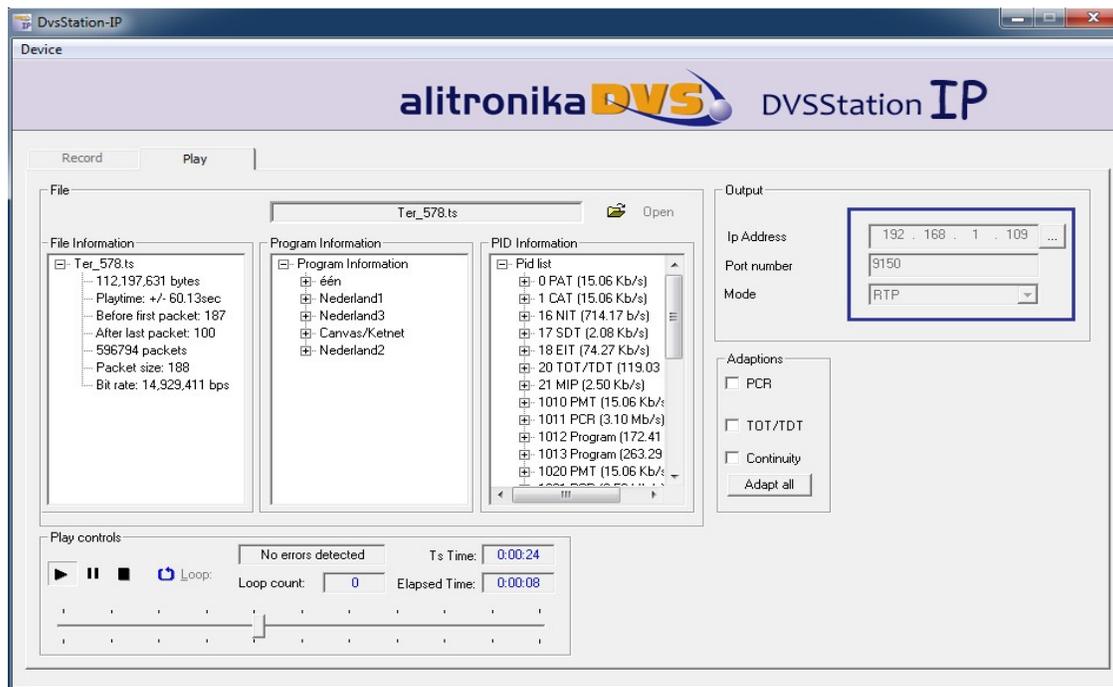
4.3 The Play panel

The play back interface is based on a typical control layout.

In addition to "Play", "Pause" and "Stop" there is a progress bar and a timing indictor.

Files may be played once or be "looped" to play continuously by selecting the loop option.

This is particularly useful as a source of repeatable DVB, when testing other equipment for performance, conformance and fault diagnosis.

A loop counter shows the number loops played out.

The progress bar can be controlled by the user to move to a desired location in the file.
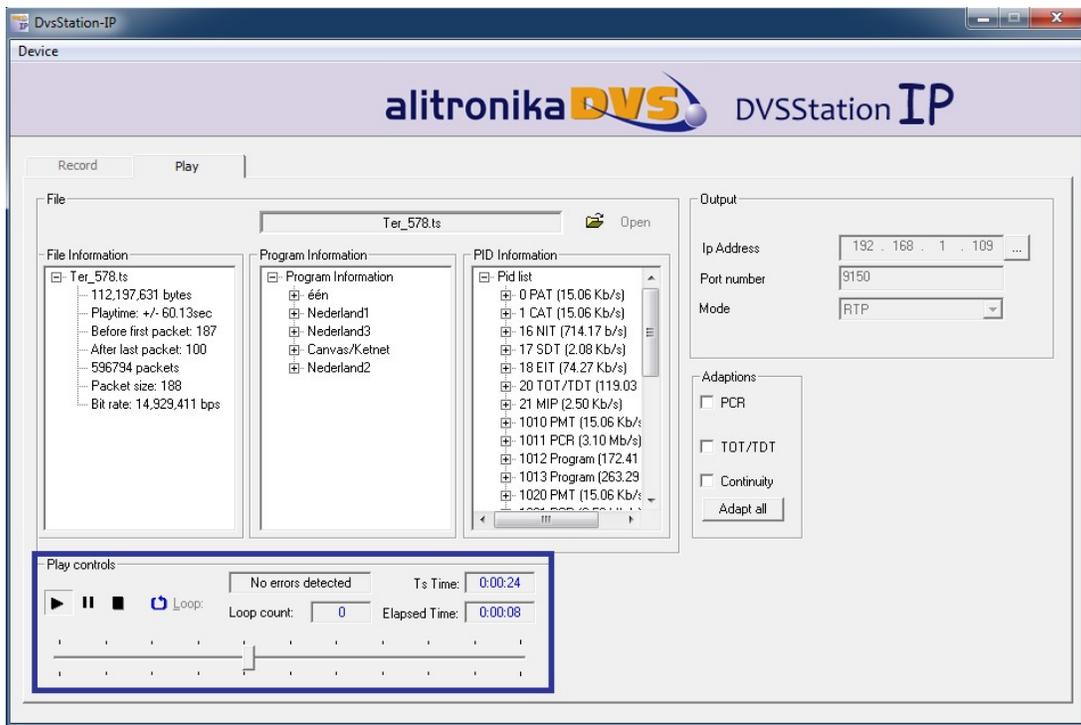
4.4 File information window

The "File Information" window displays all the file properties, such as the size of the file, bitrate, packet size and other useful information about the TS file.
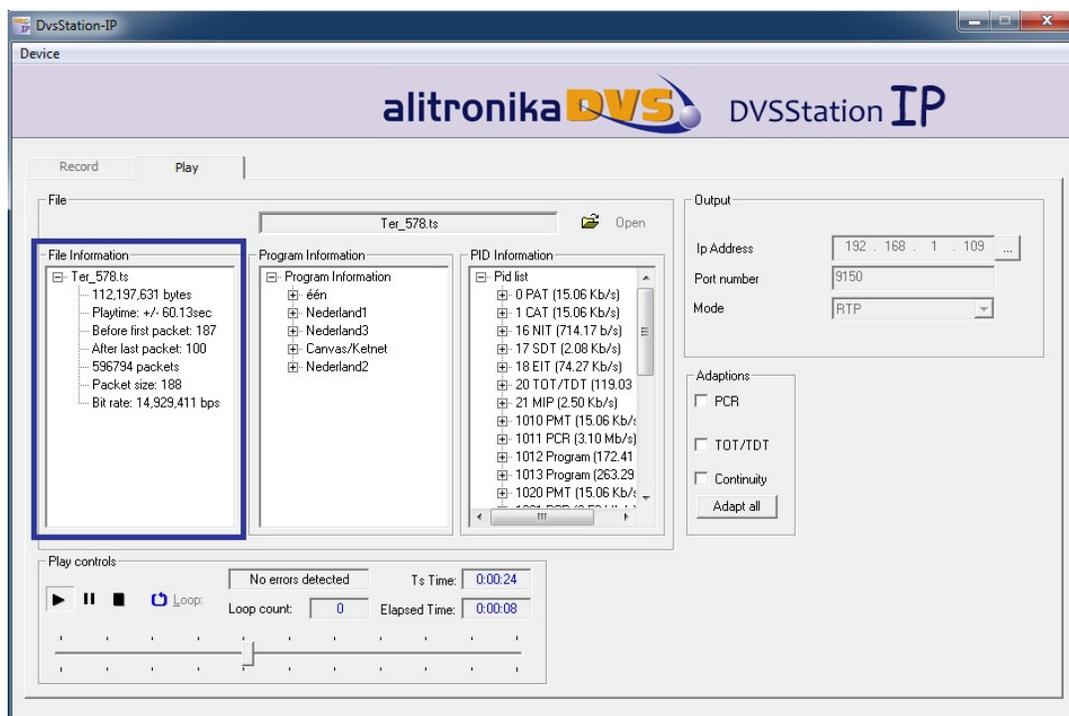
4.5 Program Information Window

The section shows most of the useful information about the content of the TS.
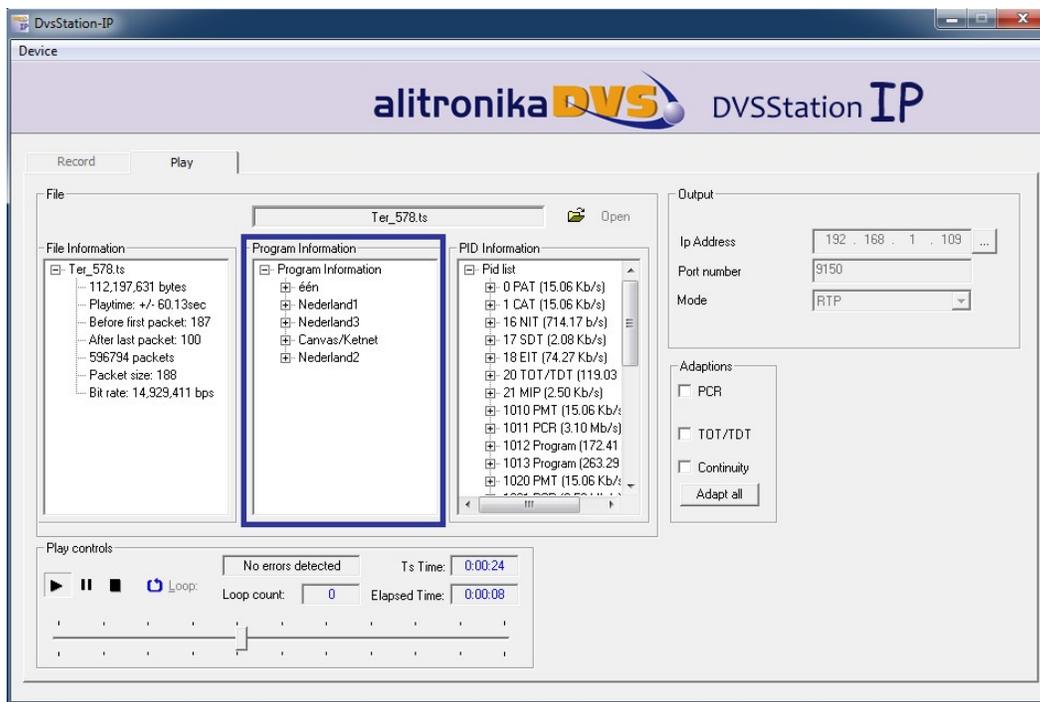
4.6 PID Information Window

The Real Time Integrated Transport Stream analyzer displays the result of the stream analyses in this window. Alitronika's powerful application software, DVSStationIP supports a Real Time Quick Transport Stream Analyser. The DVSStationIP is an integrated transport stream player, generator, recorder and monitor and has an integrated TS analyser function. This is not a full transport stream analyser, since it does not display all the information about the TS which is being recorded or played back, but when working with a lot of TS a simple tool is sufficient to show what is in the TS streams. DVSStationIP is just the right tool for such cases. It generates a complete list of the PIDs used in the transport stream. The PID information is then displayed as seen.
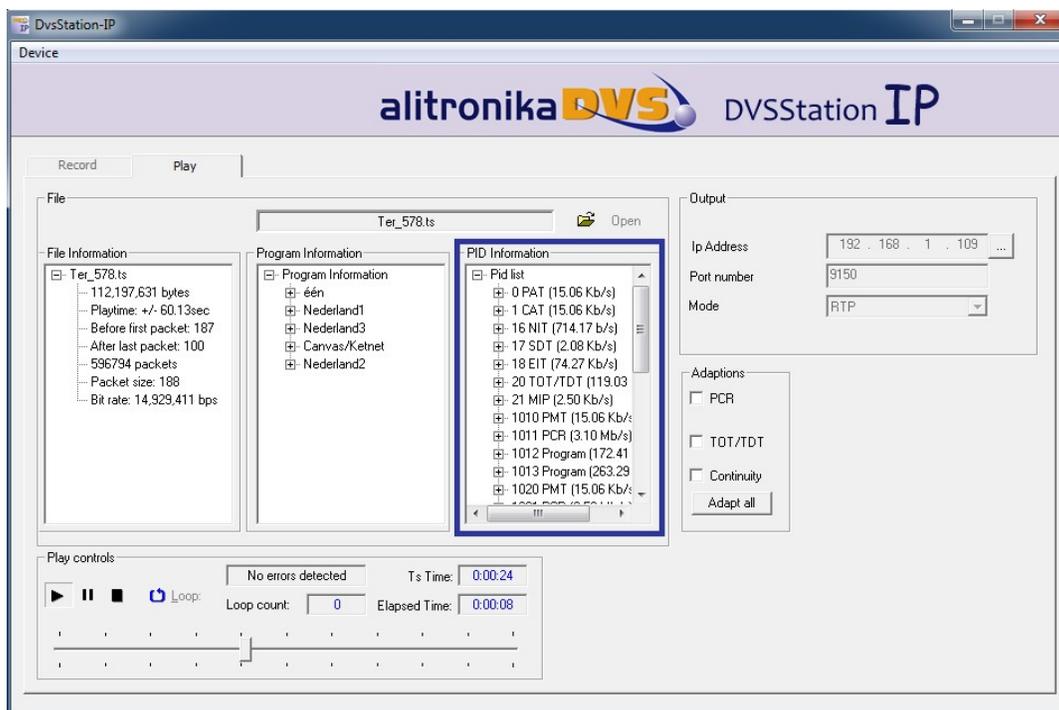
5.1 Record Screen
The Record function allows Receive, Monitor and Record Transport Streams.
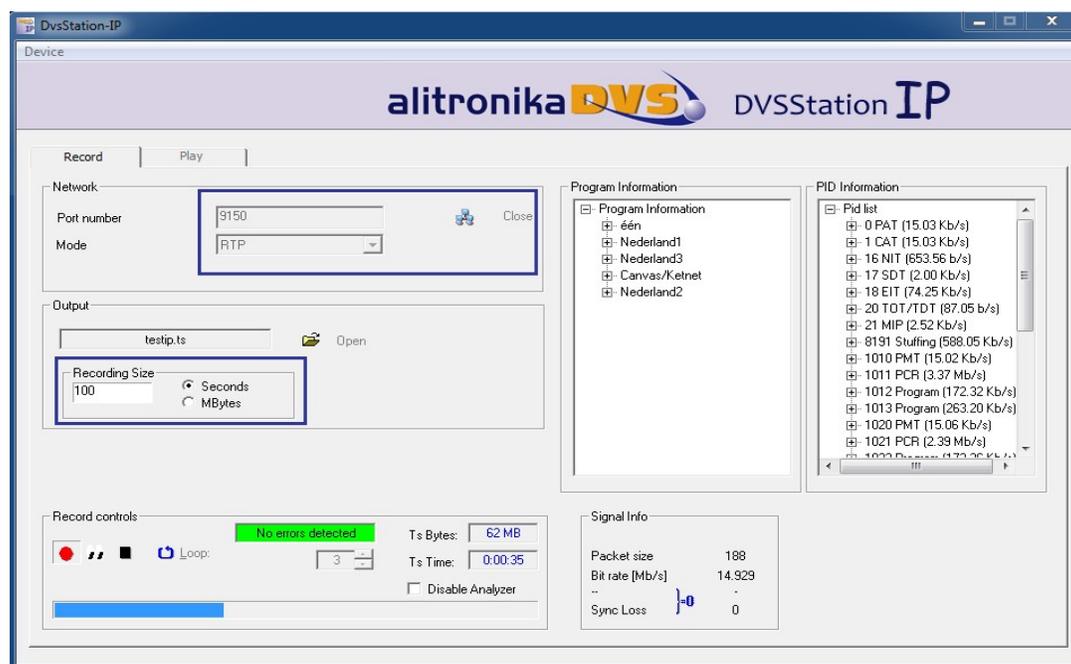
5.2 The record panel
The Record interface is also based on a typical control layout with "Record" and "Stop" buttons.
The progress bar indicates the status of recording. A byte or time indictor is also present.
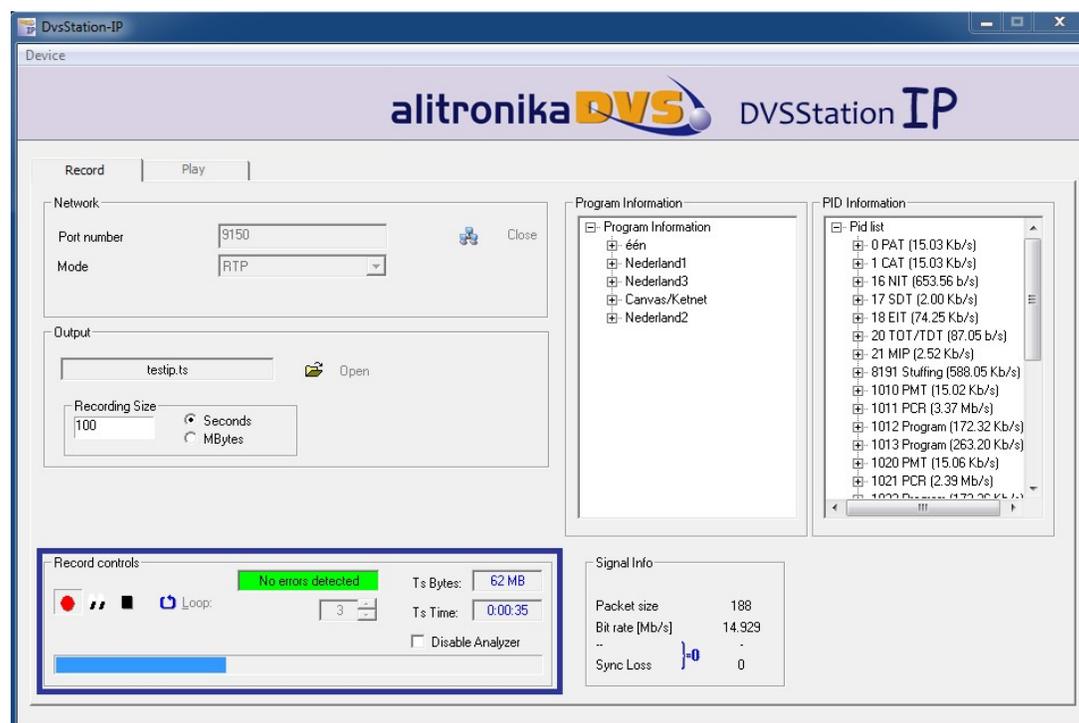
5.3 The Integrated TS analyzer

During recording or monitoring the integrated TS analyser indicated the content of the incoming TS as shown below. Both Program and PID information are available.
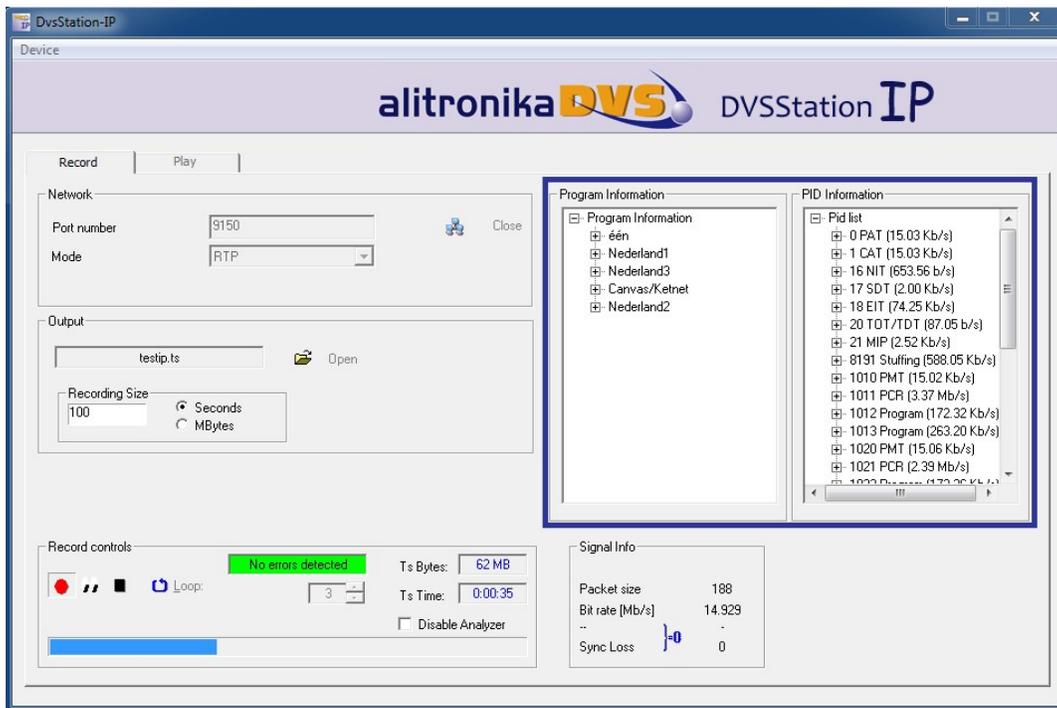
Alitronika DVS continually strives to improve its products to keep up with ever increasing demands of the broadcasting industry.

Therefore Alitronika DVS reserves the right to make changes in its product specifications at any time without notice. The reader is cautioned to verify that the specification documents are current before placing orders.

Information furnished in this document is believed to be accurate and reliable.

However, Alitronika DVS assumes no responsibility for any errors that may appear in any of its documents. Furthermore, Alitronika DVS assumes no responsibility for the consequence of use of such information or for any infringement of patents or other rights of third parties that may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Alitronika DVS.

This document supersedes and replaces all information previously supplied.

Alitronika DVS makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Alitronika DVS assumes any liability arising out of the application or use of any product and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Conformity to standards, all operating parameters and compliance to regulations must be validated for each customer application by customer's technical experts.

Alitronika DVS products are not authorized for use as critical components in any systems such as life supporting systems.