Digital Video Interfacing
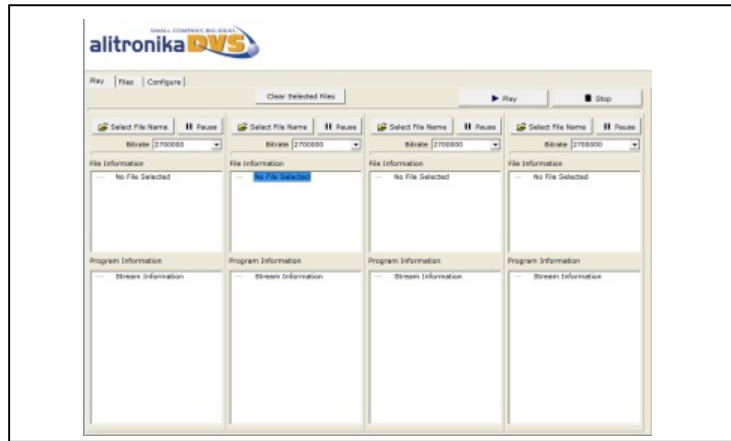
DVSStationX4

Integrated Transport System
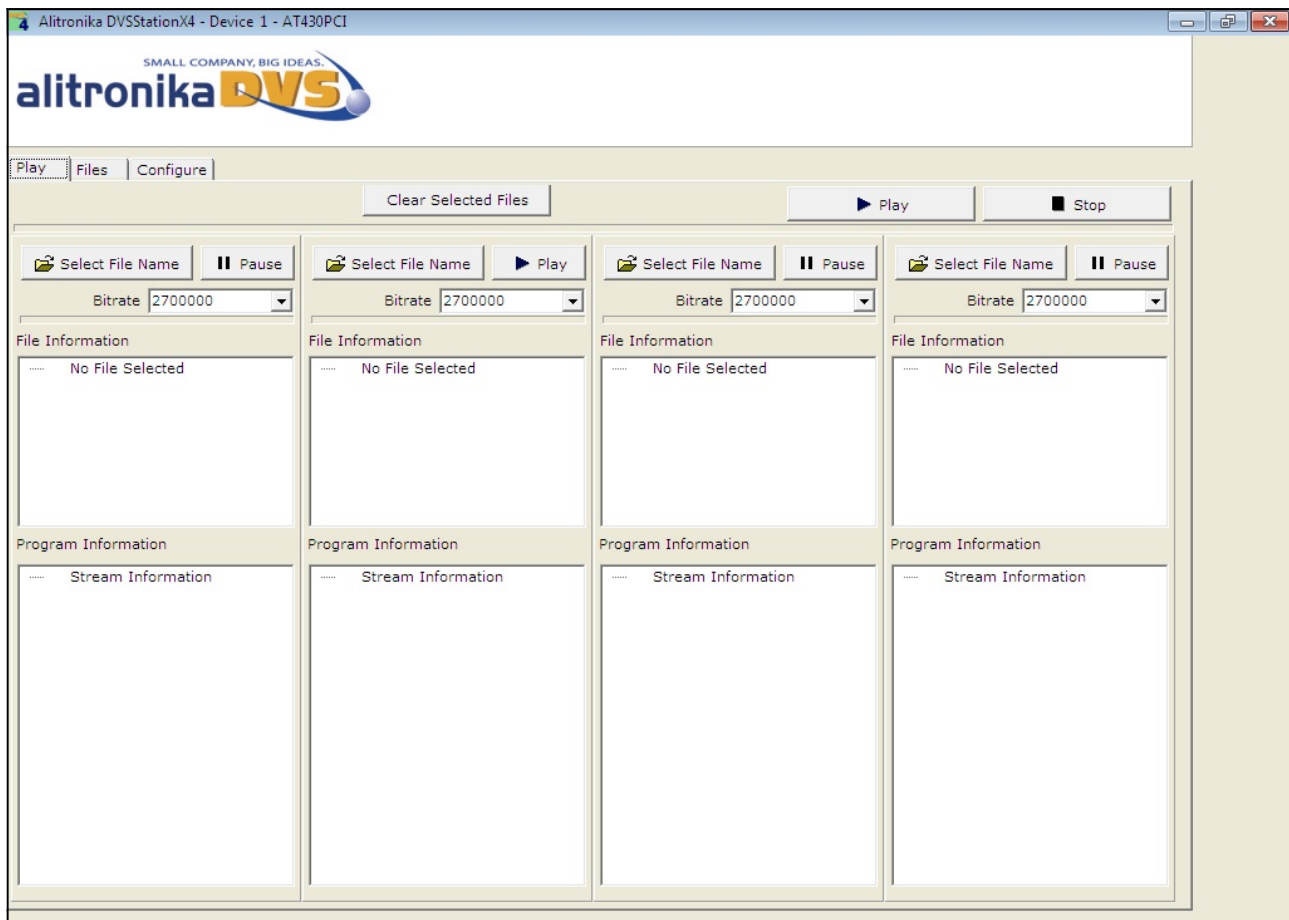
Player

Recorder

Analyser

DVSStation4 - Standard Features:

- High performance MPEG-2 stream player, recorder and analyser.
- Can combined up to 4 input and de-combine 4 outputs
- Automatically obtains bit rate from the PCR during recording and playing.
- Accurate estimation of bit rate when there is none in the PCR.
- Recoding file selectable by size by duration of recording.
- Allows PID filtering using hardware only.
- Support for hardware null packet and counter packet generation for testing without any load on the PC.
- Multiple application can be run simultaneously on the same PC for recording or playing of multiple streams
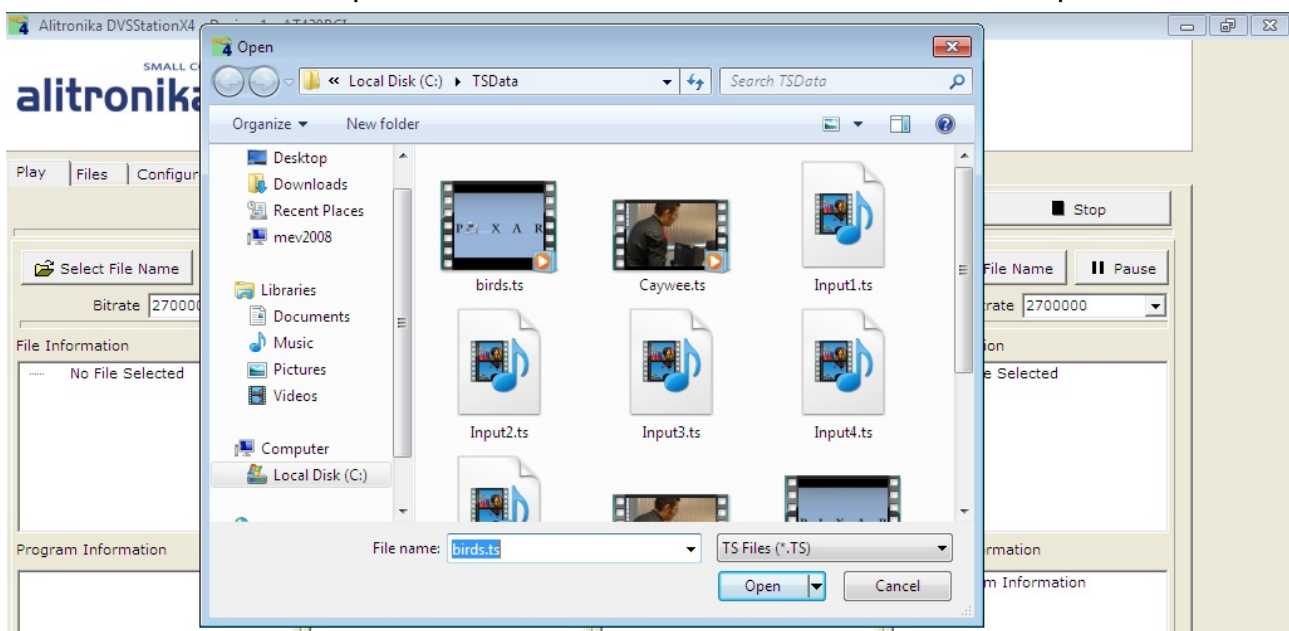
Applications:

- Universal MPEG-2 transport stream generator and recorder for feeding or recording. To or from any digital video equipments.
- High speed serial data link.
- Transport stream recording.
- Transport stream playing.
- Transport stream analysing.
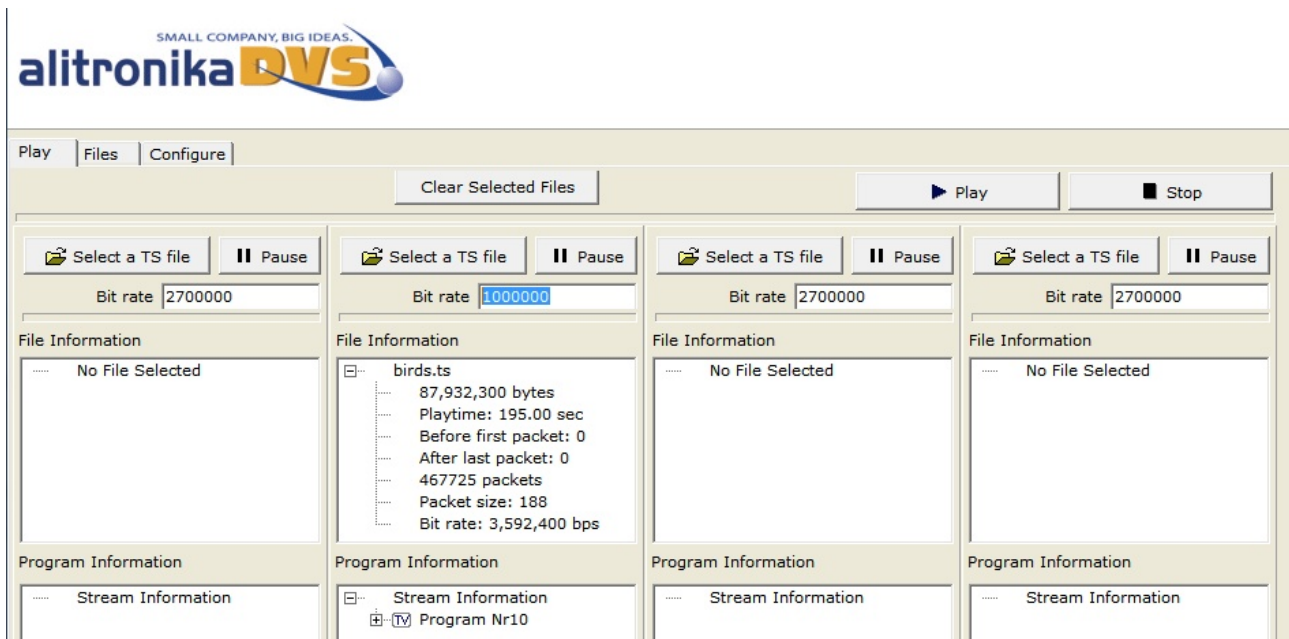- Transport stream monitoring.

1.0 The "play" application:

1.1 Selecting a TS file to play:

To select a file to play simply click on "select file name" and choose the file you want from the files on your computer and click open. You can choose up to 4 files to run in one session. You can also open a .ATS file which contains data for all four outputs.
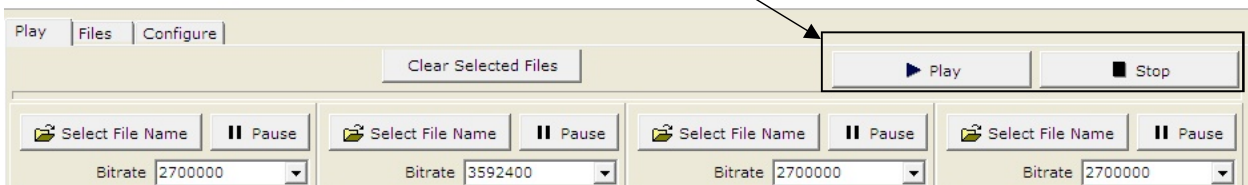
1.2 Selecting the level of output bit rate:

To select the level of bit rate in your output you simply select the edit box above your outputs file information and choose the bit rate level you require.
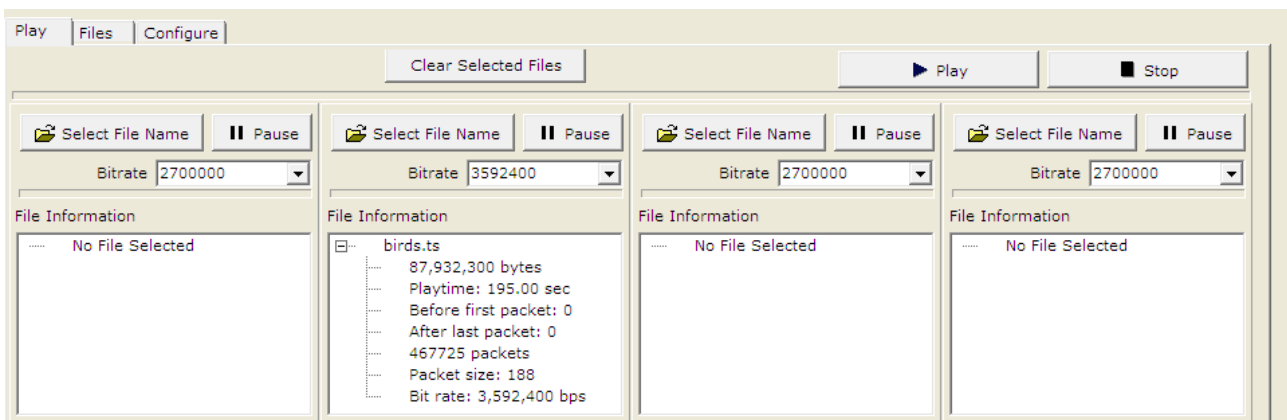
1.4 The play panel:

The play panel is located at the top of the application screen. It consist of a play and a stop button, when you click play ALL of the selected files will play simultaneously and when you click stop ALL of the selected files will stop simultaneously.
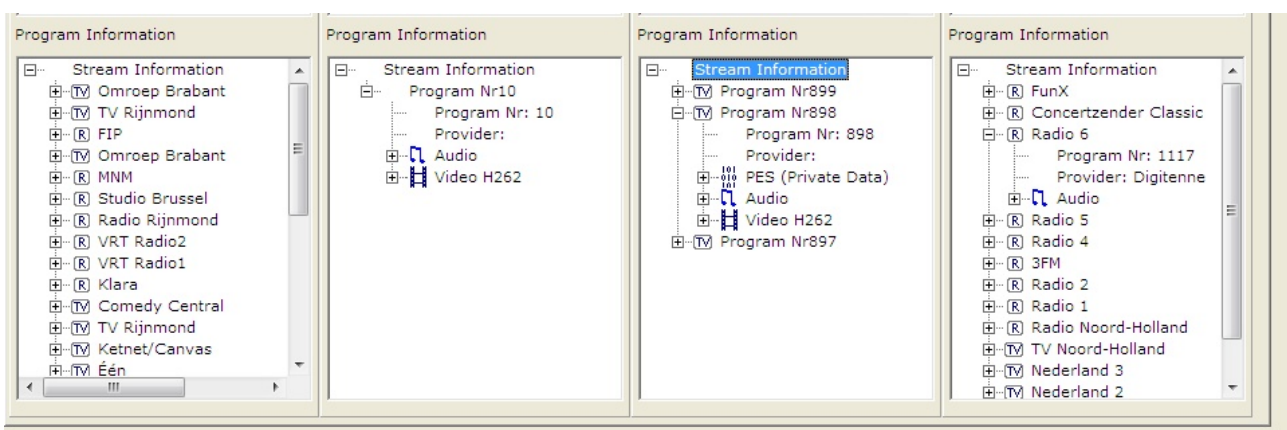

1.5 The "File Information" panel:

This panel displays the file properties. For example it displays are the name of the file, the playtime in seconds, the bit rate, the number of bytes and the packet size.

1.6 The "Program Information" panel:

This panel shows most of the useful information about the content of the TS (Transport Stream). For example it shows each of the programs carried on the TS. Clicking on a particular program gives you information on it, such as the program number, the provider and information as to whether the data is purely visual, audio or both.
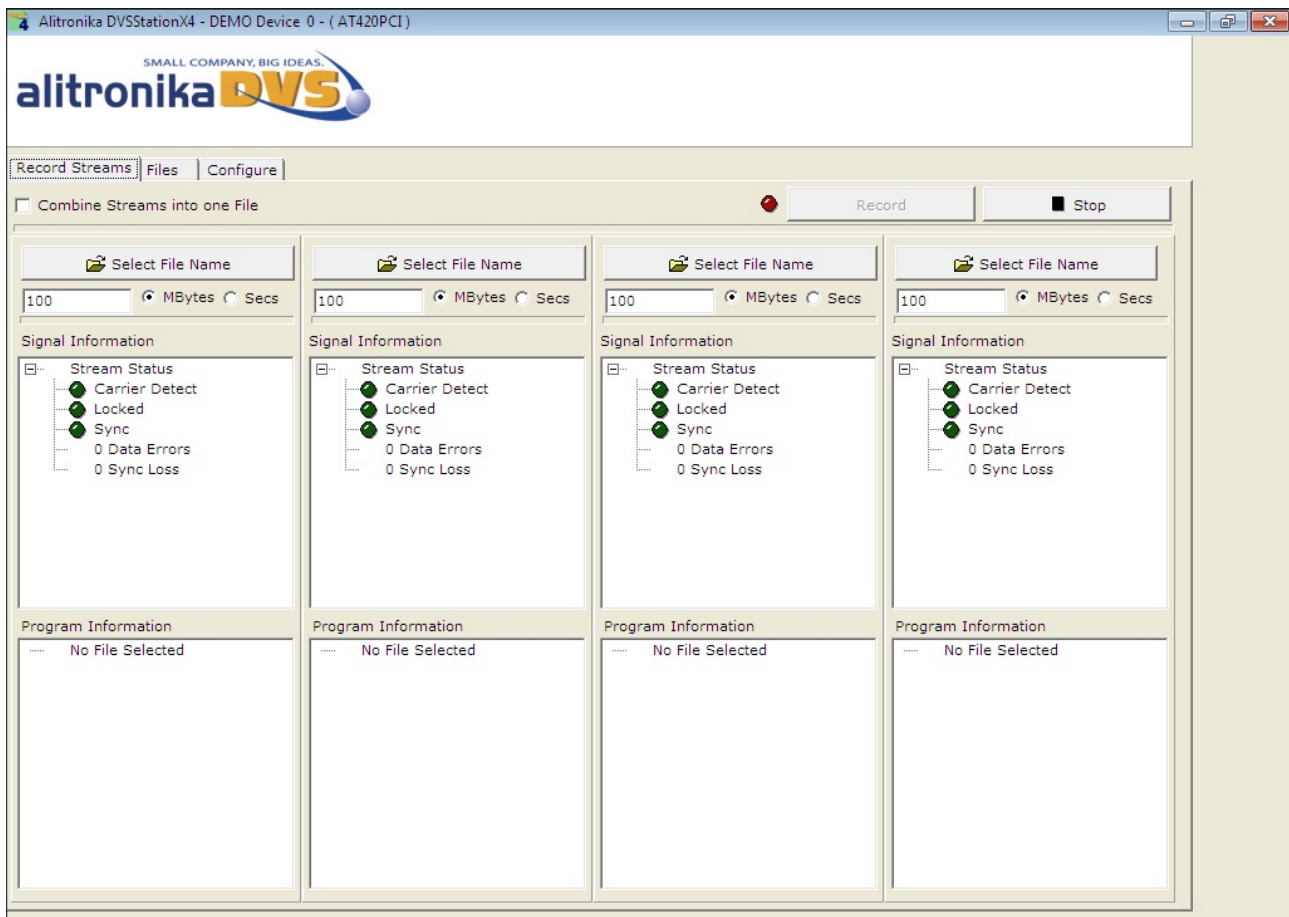

Alitronika DVS DVSStationX4

1.7 Test Data Generation

Clicking generate test data will suspend play back on the selected output and cause the card to output hardware generated test data. This can either be NULL packets or counter packets
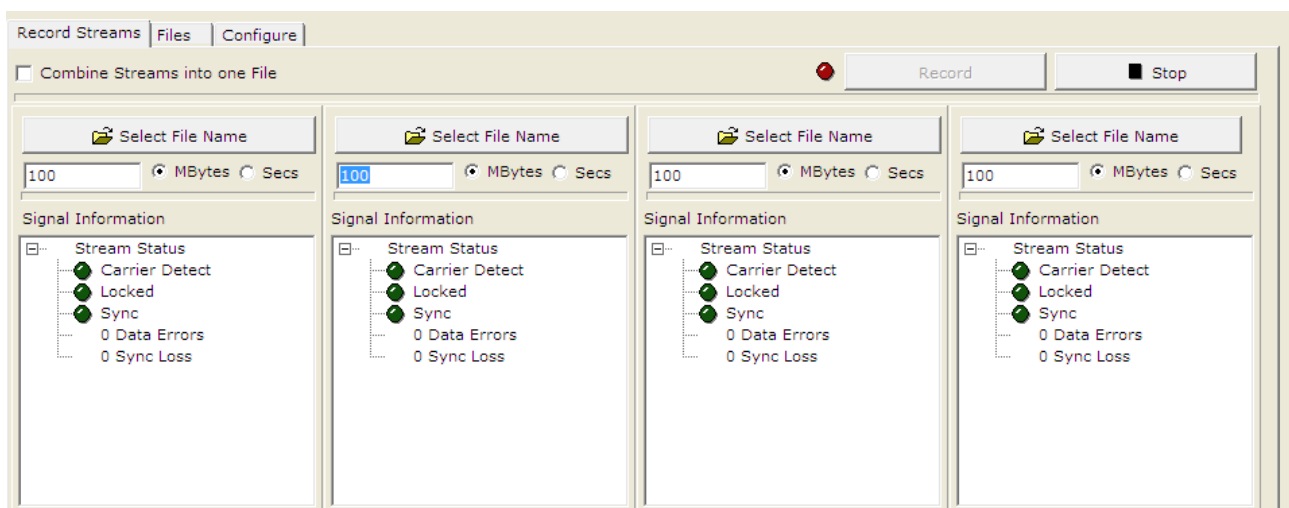
2.0 the "Record and Monitor" application:

2.1 Recording options:

Users can choose the size of the file to be recorded by typing a number into the box and deciding whether to decide the size of the file in Seconds or MBytes. Meaning that if you type 100 into the box you can choose to record until you reach 100 Mbytes or 100 Seconds.
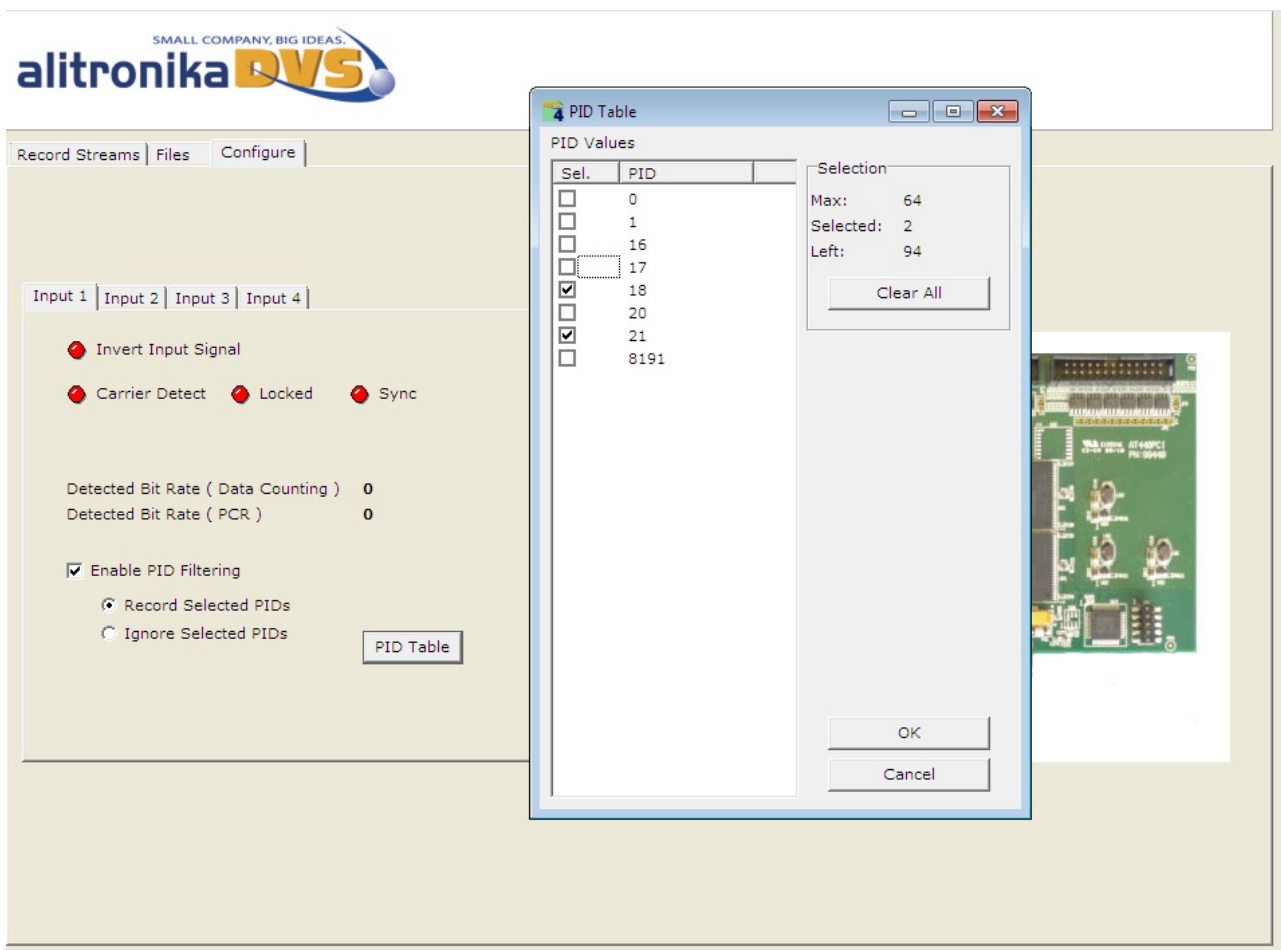
2.2 PID filtering:

All Alitronika devices with input support PID filtering because, some applications may require PID filtering in order to reduce the amount of data, so that further processing can take place.

There are two PID filtering options; you can choose to "Ignore selected PID's" or to "Record selected PID's". Having both these options makes using this application easier for example if you wanted to record all but one of the PID's you would choose to "Ignore selected PID's" and tick the box next to the PID you don't want to record, whereas if you only wanted to record one of the PID's you would "Record selected PID's" and tick the box corresponding to the PID you do want to record.

In order to bring up the PID table that allows you to select which PID's you do or don't want to record, you simply need to press the "PID Table" button for the input you are working with.
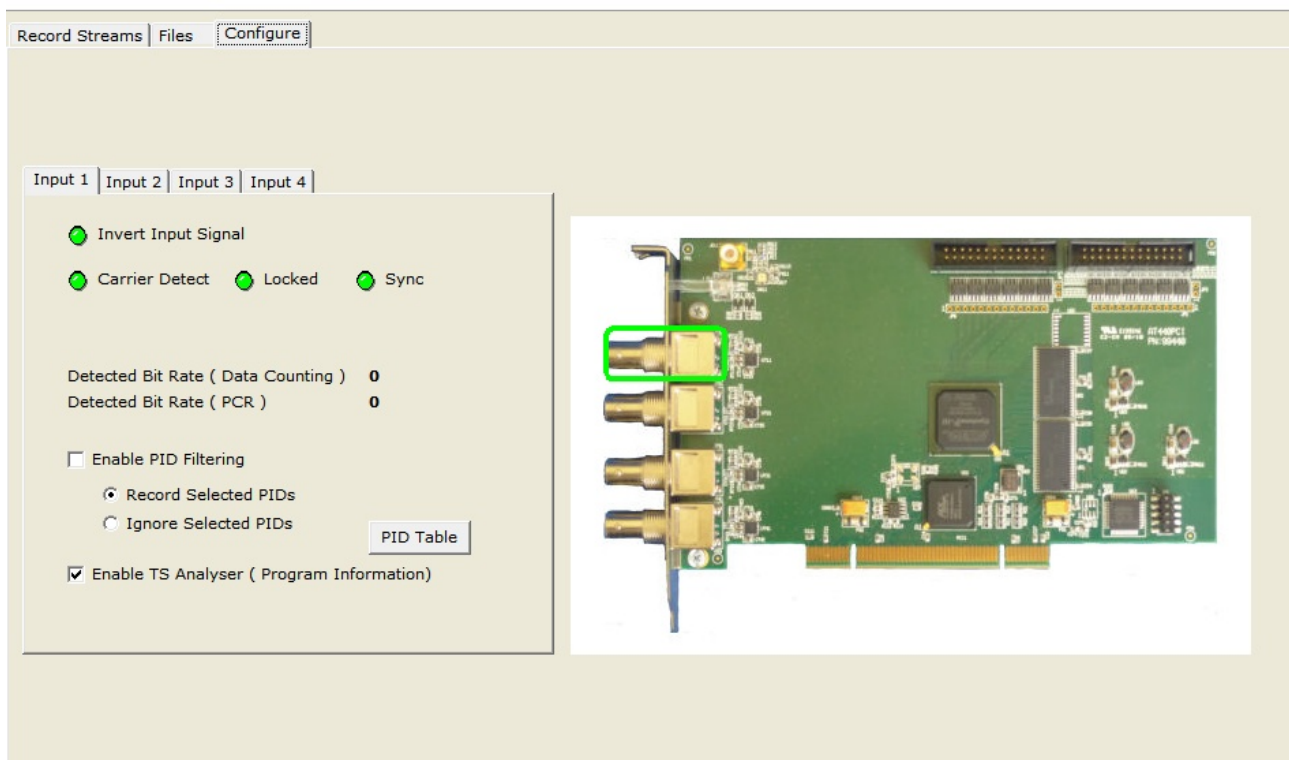
2.2 Carrier detection, lock and synchronization.

Alitronika devices that have DVB-ASI inputs, first detect the presence of a valid signal, then the receiver modules on board these devices lock into the incoming TS if needed after decoding, and then synchronise to the input TS.

There are three indicators showing the status of each of these（carrier detection, lock and synchronisation）. A red colour indicates a lack of a valid signal of lock or the device isn't able to synchronize to the input stream.

When everything is correct, normal operating condition, the indicators all show green.

The enable TS Analyser（Program Information）allow the analysis of the transport stream for program information to be turned on and off on a channel by channel basis.

Warning statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection
against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.
Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.