TBS-6908

The Professional DVB-S2 Quad Tuner PCIe Card

Mike Stevens

This is the latest DVB Tuner Card from our friends in the Far East, and what a card it is!, I have been running one since July/August 2014 without any problems at all, so let me give you some technical details about this unit.

Technical Details

The **TBS-6908** is built to the highest possible professional standards and shows rock-steady reliability, which is capable of supporting ACM/VCM Multi-input stream, 16APSK and 32APSK Generic Stream Mode. Application of a unique DVB-S2 Demodulator Chipset makes it possible to receive all these modes at a rate of up to 190 Mbit/s channel bit-rate capture. It also has a wide range of symbol rate support from 1 Msps to 45 Msps, and is capable of High Speed Data download via a satellite link. The receiving Frequency ranges from 950 to 2150 MHz.

Power consumption is 0.66 - 33.13 watt, and it will support Data Burst and Tone Burst, DiSEqC2 and Motor. The card will operate on Windows XP/Vista/7/8/10 and Linux operating systems.

Installation

By now, most readers will be aware of PCIe Cards and how to fit them into a computer. The TBS-6908 is no different, fitting neatly into to a PCIe Slot on the motherboard, with one exception: this particular card will only fi t into a full size, 19 cm wide PC. As it is a Quad Tuner, it has four LNB inputs, making it impossible to fit into the narrower and smaller 9 cm wide small form factor desktop PCs (figure 1).
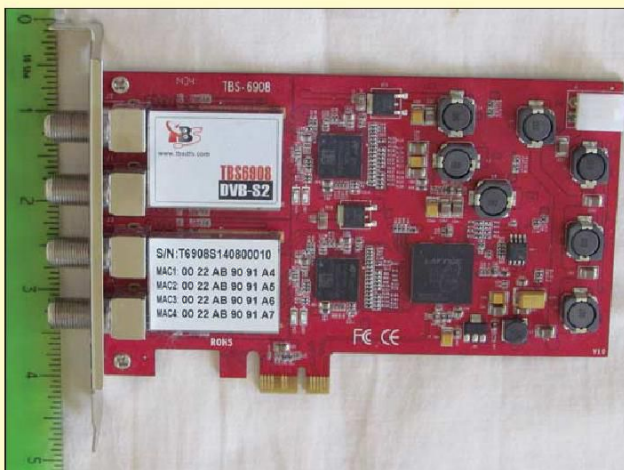

Figure 1 - The TBS-6908 PCIe Card

That is the only drawback, however, and all other connections are the same as for the TBS-6925/6983, with an additional connector for supplying power to a satellite dish rotor, should you plan to use one.

Once you have removed the cover and inserted the card into the PCIe slot its a case of downloading the required software from the TBS website at

www.tbsdtv.com/downloads

and installing same. The specifi c software required is as follows:

- **TBS 6908_windows_driver_v1.0.0.6**
- **TBS_IP_Tool_v3.0.4.6**
- **TBS_tsrecorder_v3.0.1.1 (this is required for test purposes)**

Just as a precaution, I downloaded these to a flash drive, then installed from there once I had checked for any problems.

I advise to start by installing the 6908 Windows Driver. And do not forget the dpinst file ('dpinst64' or 'dpinst86', depending on whether you run a 64-bit or 32-bit system); without that file the system will not open correctly as many members have discovered.

Once this software is installed, you then continue by installing the TBS-IP Tool software. Follow the on-screen details and all should be well. Then finally, of course, the last item is the TS-Recorder software. Immediately all three packages have been installed, I recommend a system restart to bed everything in.

System Set-up

After the PC has come back on-line you should have new icons on your Desktop for *TS-Recorder* and *TBS-IP Data*. Click on *IP-Data* to open the screen shown in figure 2 at the Tuner Setting tab. This is where you must enter all the relevant data for *Satellite*, *Frequency*, *Symbol Rate* and *MODCODES*.
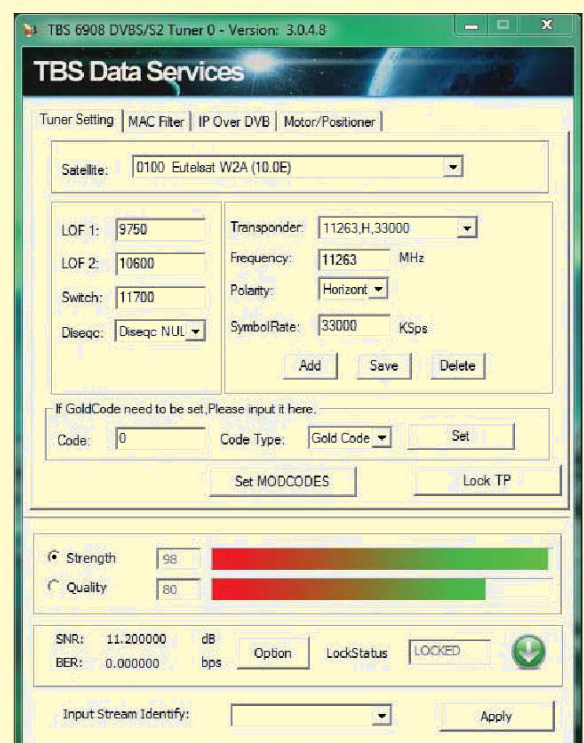

Figure 2 - The Tuner Setting Tab

Then press the '*Set MODCODES*' button to reveal the screen where you must tick the correct boxes for the services you wish to receive (figure 3):

- '8PSK_3/5' for the Basic Service
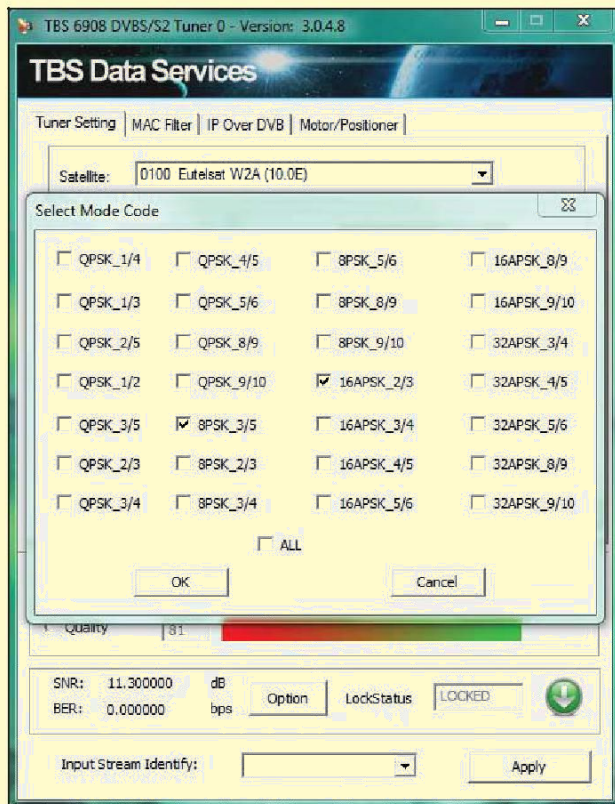- '16APSK_2/3' for the High Volume Service.

Figure 3 - Selecting the appropriate MODCODES.

You then open the IP Over DVB tab (fi gure 4) where you must enter all the *EUMETCast PIDs*. Once that operation is done, switch off the *TBS Data Services* box and reboot. You should now see the red-to-green bars in your *Strength* and *Quality* section, indicating that the system is receiving data from *EUMETCast.*
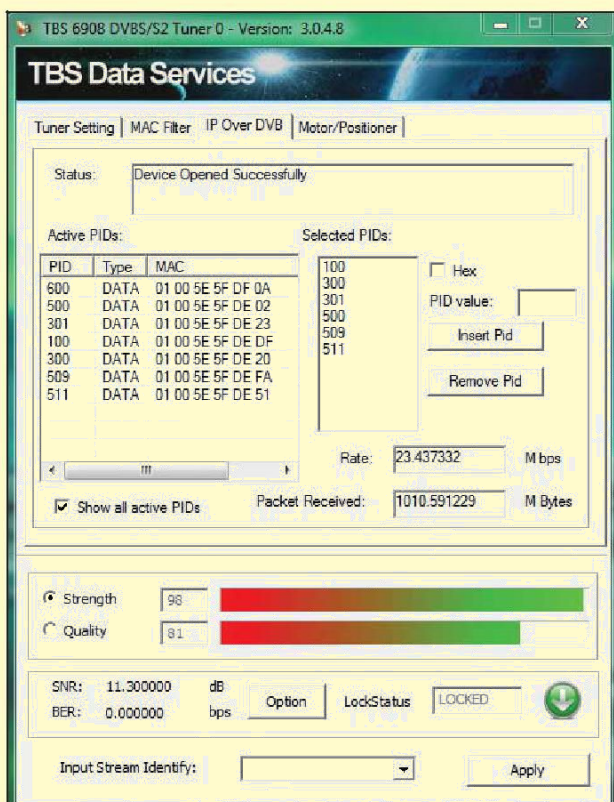

Figure 4 - The IP over DVB Tab

Next comes the task of making sure that *TBS-6908* card talks to *Tellicast* (which I assume is already installed). Open the Network and Sharing Centre and change the adaptor settings, locate Virtual MPE Decoder Adaptor , right-click, and go to *Properties* to enter in our old friend 192.168.238.238, which should coincide with the Interface Address in your *Tellicast* '*recv.ini*' file.

Next I advise going into Windows Firewall and allow the new programs to operate. You may need to use the Command Prompt to run the programme, to enter the line 'Run as Administrator' (see my article on the TBS-6925 in *GEO Quarterly* 44).

Once all that is completed, I would again advise a system re-start to bed everything in. When you next reopen *TBS-IP Data*, your tuner should open correctly and EUMETCast files should be coming into the system.

You are now ready to run David Taylor's software (MSG DataManager etc.) and start receiving some excellent satellite images.
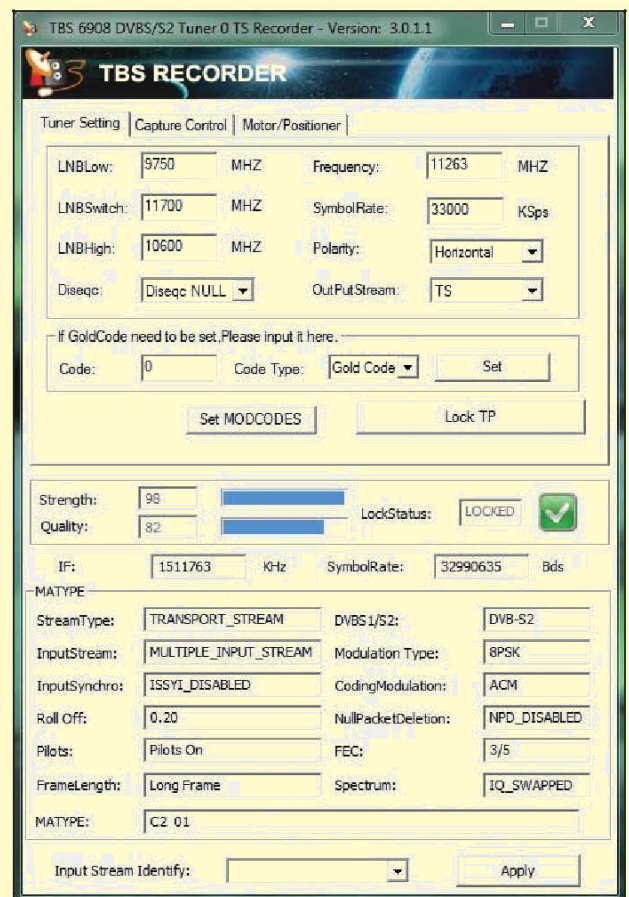

Figure 5 - The TBS-TSRecorder Capture Control Tab

TBS-TSRecorder

TBS-TSRecorder (figure 5) is a handy piece of software which allows the user to see the type of transmissions being received at the tuner. On the bottom half of the screen you have all the relevant details and information to show you what your Tuner is physically capable of.

Don't forget to add in all satellite details, and if you go to the Capture Control tab, you will find that you can set and record a *Q-capture file* for more analysis later. This has been used by me to send a file to *TBS Support,* for them to look into back at HQ.

Finally, you must run *TBS-TSRecorder* using 'Run as Administrator', and you <u>cannot</u> run the TBS-6908 at the same time. To reactivate the Tuner, you must switch off the Recorder, and sometimes may even require a PC re-boot to unlock the receiver.

Multiple LNB Inputs

If you plan to use the TBS-6908 receiver card, you will have three additional LNB inputs to play with. The tuner will handle them all, which gives you a lot of scope to carry out experiments with other satellites and different broadcast channels simultaneously with reception of *EUMETCast*. I have done this myself with no adverse effects at all using *DVB-Dream v 26*, so happy weather watch and satellite hunting from Portland.

The TBS-IP Data software, used in these trials at the time of writing this article, was not officially released but should now be available. Also, there is now a new PCIe Card available, the TBS-6903, which I will look at in detail and report back on for users later.

My thanks to *TBS Support*, whose help has been invaluable in testing these new tuners. I am sure there will be more to follow, getting ever more user friendly and affordable.
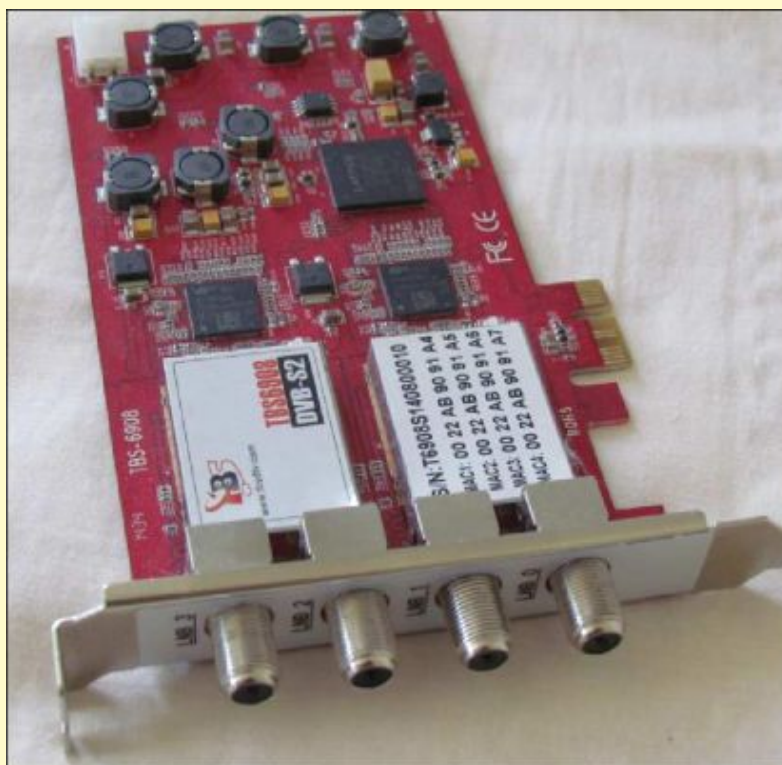

Figure 7
Another view of the the TBS-6908 PCIe Card, clearly showing the four LNB inputs.