

Setting Up an SR2000pro Stream Decoder for NPR Squawk Channel Reception

The document explains how to set up your SR2000pro stream decoder to receive the NPR Squawk Channel. In this procedure, you will:

1. Change the NCC Packet Identifier (PID) to interrupt any head-end control instructions.
2. Add a PID (1043) to allow the decoder to tune to the NPR Squawk Channel.

Remember, you cannot tune both ports of your decoder to the same stream. The Channel Guide will not let you do that.

NOTE: These instructions apply to an SR2000pro stream decoder that has been running under network control. If you have already fixed tuned one of your decoders and are already using the channel guide, you need to follow a different, simpler procedure to enable the NPR Squawk Channel PID. Those instructions can be found at the end of this document.

Instructions to Tune Streaming Decoders Locally

The PRSS streaming system is based on the Digital Video Broadcasting (DVB) standards suite. Each audio stream has its own DVB PID.

Under normal operation, a stream decoder responds to commands from the PRSS Network Operations Center (NOC) to start decoding a particular stream, based on the multicast IP address and the UDP port number of that stream. Each PID carries one stream (program "channel"). An additional PID, called the NCC (Network Control Channel) PID, carries all commands from the PRSS NOC to your decoders. The NCC PID carries information about the RF tuning, general configuration, PID structure, and particular stream to decode for each streaming decoder in the system. This information is continuously transmitted in a rotation called the broadcast wheel. Any changes to the settings on your decoder that you make from its front panel automatically revert back to the "proper" settings within a few minutes due to this broadcast wheel.

To override the broadcast wheel settings to tune your decoder to a particular stream (e.g., NPR Breaking News), you must make the streaming decoder stop listening to the commands in the NCC PID.

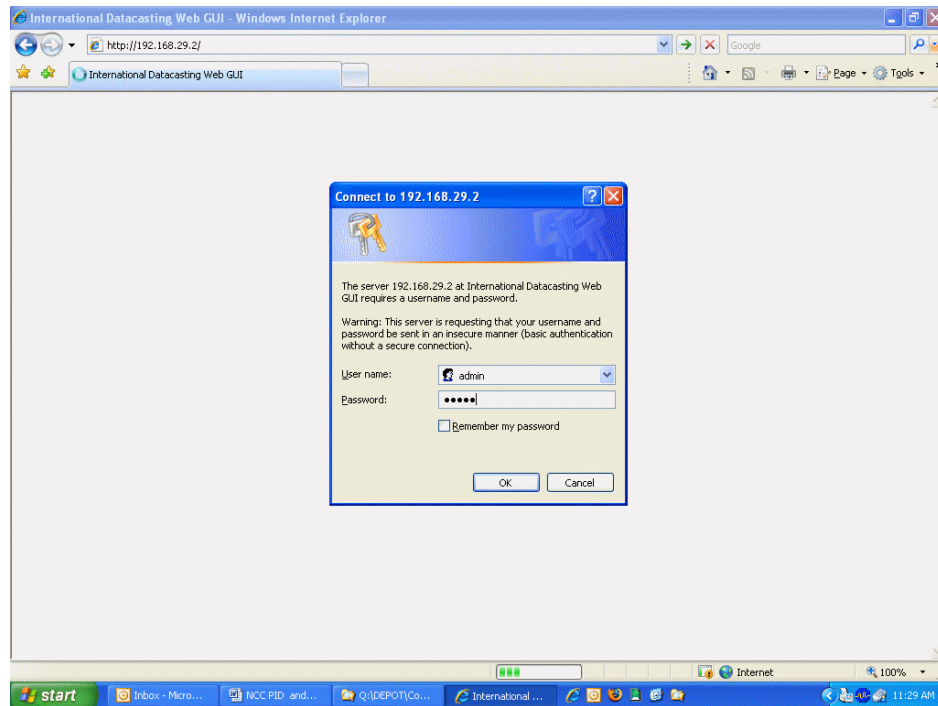
The easiest way to tune a streaming decoder locally is by using the **Channel Mode** feature.

To turn off the NCC PID and tune the streaming decoder locally, use the web-based interface that is available on the Ethernet port on the rear panel on the device. Connect a computer to the Ethernet port and set the IP address of the computer to the same subnet as the address of the port. Open a web browser and point it to the IP address of the port.

Setting Your SR2000pro Stream Decoder to the Channel Mode:

1. **Disable the NCC PID through the web interface:** (Note: Make sure you do these steps first.)

Step	Instruction
1	LOG IN (user name: admin - password: 12345)



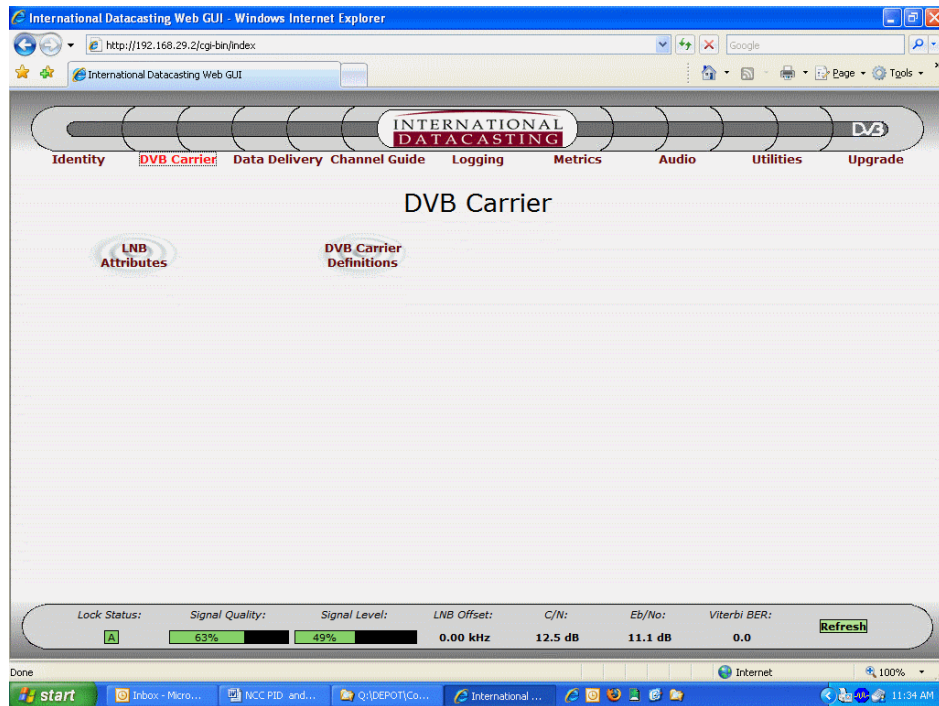
2

From the top line menu, Choose DVB CARRIER



3

Select CARRIER DEFINITION puddle



5

Select SEND CHANGES

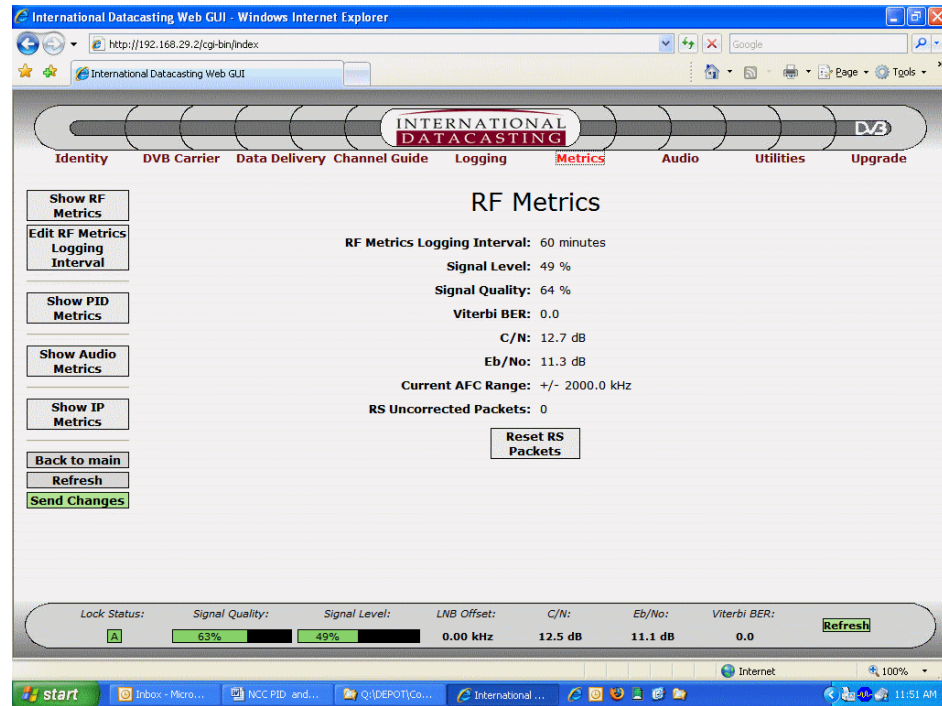
Check that the NCC PID # has changed to **4150**

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If you intend to operate in the local mode for any length of time, you need to protect against the possibility that your decoder may switch to the other set of carrier parameters. Use the proper COPY button to copy the settings for the carrier you have changed into the other set of carrier parameters. If your decoder loses RF lock, you cannot predict which set of parameters will lock up first, so you are now covered either way.

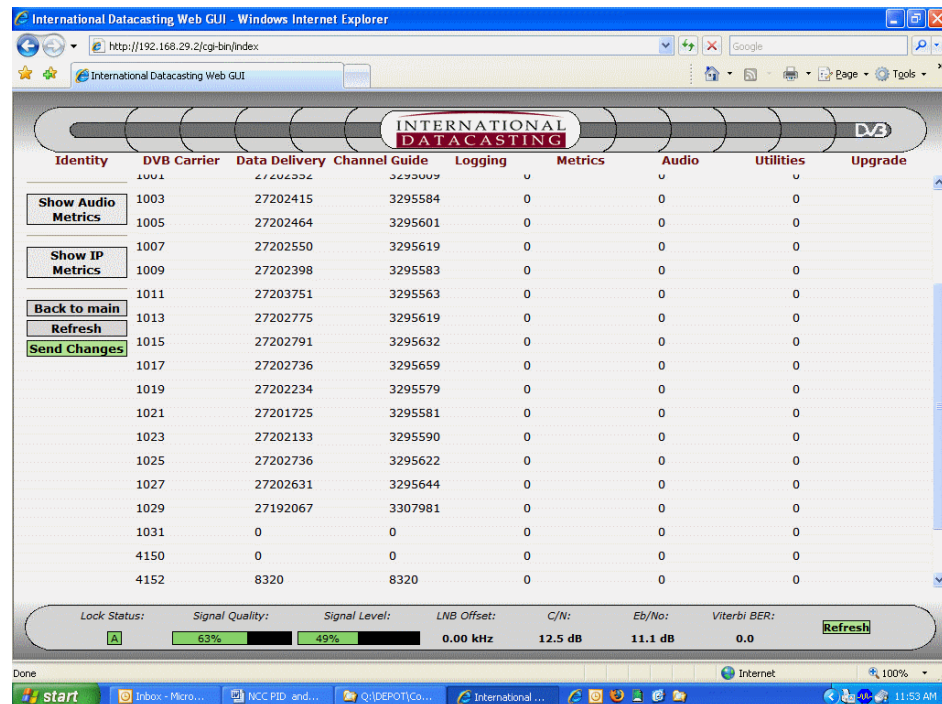
7

From the top line menu, select METRICS
At the metrics page, select SHOW PID METRICS



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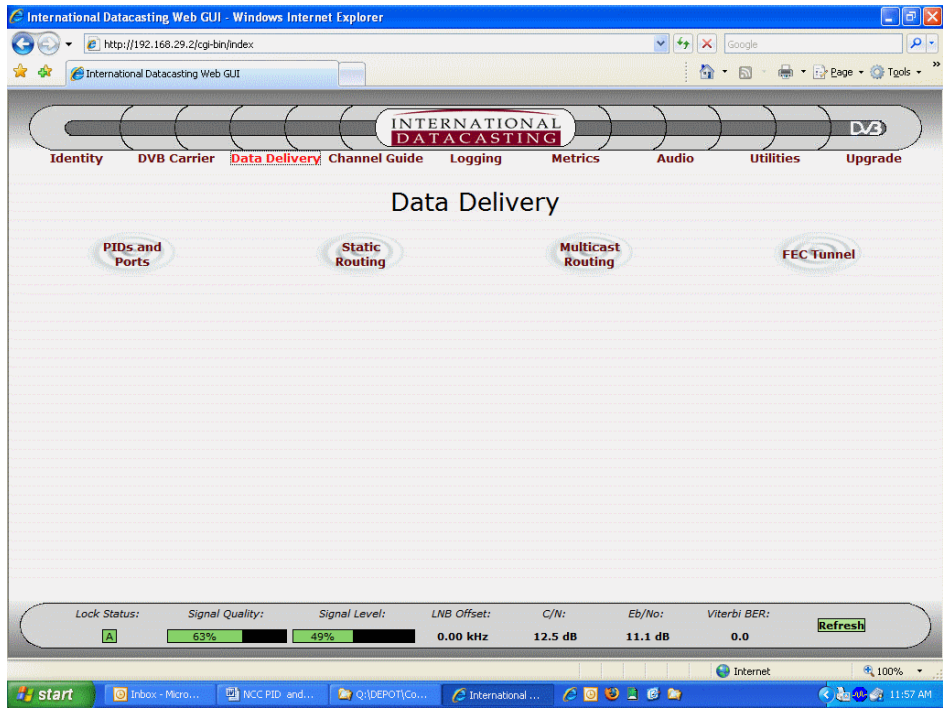
In the list of active PIDs, 4151 should be gone replaced by 4150



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- 9 The control light (on the front panel) should stop flashing
You are still tuned to the last event
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- 3. Add PIDs for the new features:
 - a. Add PID 1043 for the NPR Squawk Channel
 - b. Add PID 4153 to enable tuning with the Channel Guide

Step	Instruction
10	From the menu choose DATA DELIVERY



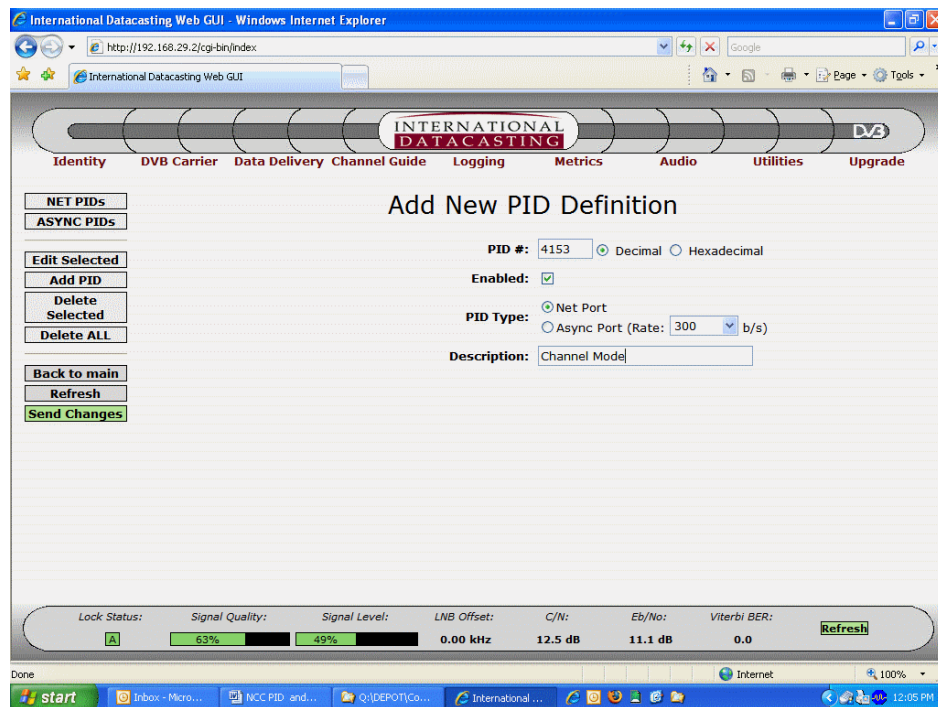
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Select the PIDS and PORTS puddle

The screenshot shows the 'International Datacasting Web GUI' in a Windows Internet Explorer browser. The main content area is titled 'Net PID List' and includes a sub-header 'NET port enabled.' Below this is a table with three columns: 'PID#', 'Enabled', and 'Description'. The table lists various PIDs, each with a radio button for selection and a checkbox for enabling. The 'Enabled' column shows that all listed PIDs are currently enabled. To the left of the table is a sidebar with several control buttons: 'NET PIDS', 'ASYNCR PIDS', 'Edit Selected', 'Add PID', 'Delete Selected', 'Delete ALL', 'Back to main', 'Refresh', and 'Send Changes'. At the bottom of the page, there is a status bar with several indicators: 'Lock Status: A', 'Signal Quality: 63%' (with a green bar), 'Signal Level: 49%' (with a black bar), 'LNB Offset: 0.00 kHz', 'C/N: 12.5 dB', 'Eb/No: 11.1 dB', and 'Viterbi BER: 0.0'. A 'Refresh' button is located to the right of these indicators. The browser's address bar shows the URL 'http://192.168.29.2/cgi-bin/index'.

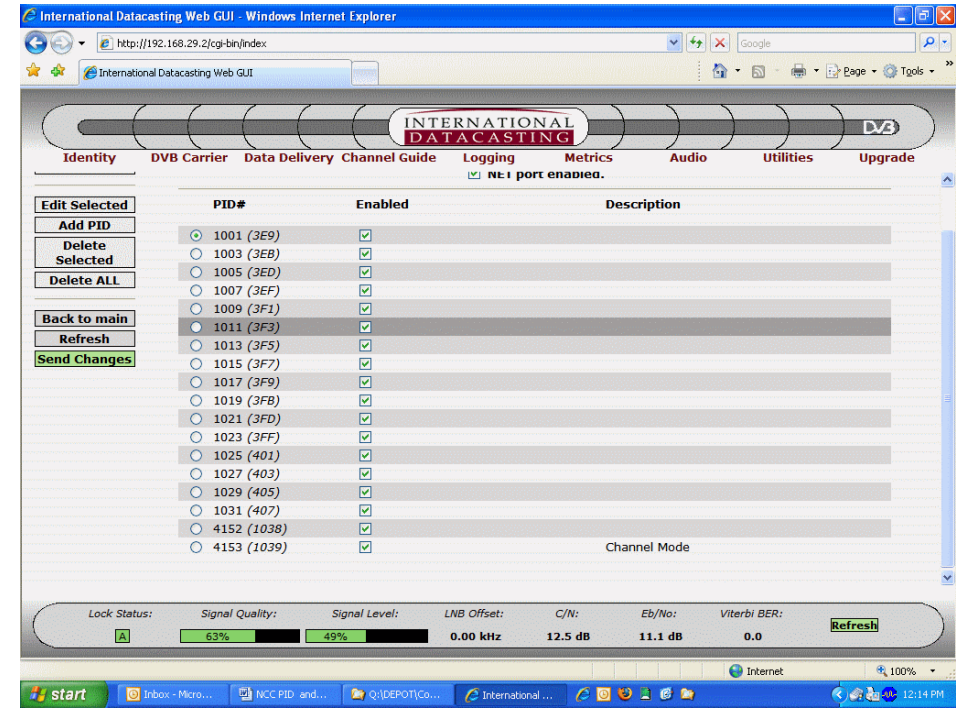
PID#	Enabled	Description
<input checked="" type="radio"/> 1001 (3E9)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1003 (3EB)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1005 (3ED)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1007 (3EF)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1009 (3F1)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1011 (3F3)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1013 (3F5)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1015 (3F7)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1017 (3F9)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1019 (3FB)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1021 (3FD)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1023 (3FF)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1025 (401)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1027 (403)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1029 (405)	<input checked="" type="checkbox"/>	
<input type="radio"/> 1031 (407)	<input checked="" type="checkbox"/>	
<input type="radio"/> 4152 (1038)	<input checked="" type="checkbox"/>	

- A: Select ADD PID - Type **1043**
Choose ENABLE
For PID type, select NET PORT
Select SEND CHANGES
- B: Select ADD PID - Type **4153**
Choose ENABLE
For PID type, select NET PORT
Select SEND CHANGES



Write in a description if you wish (e.g., Channel Mode)

Select SEND CHANGES

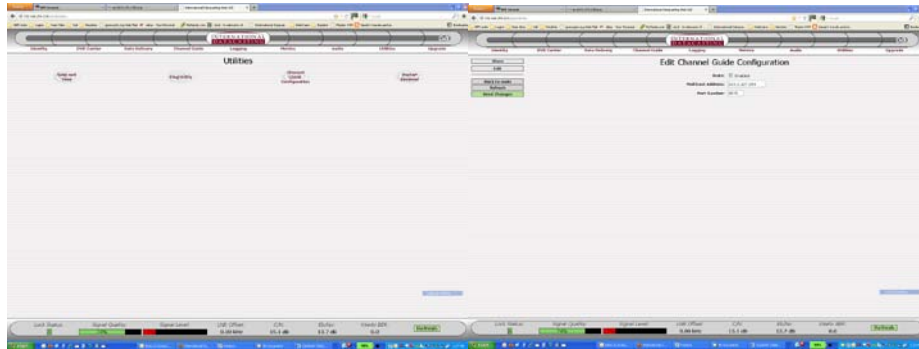


4. Tuning in the Channel Mode

Step	Instruction
14	Select CHANNEL GUIDE from the top line menu. (The channel choices will display.)

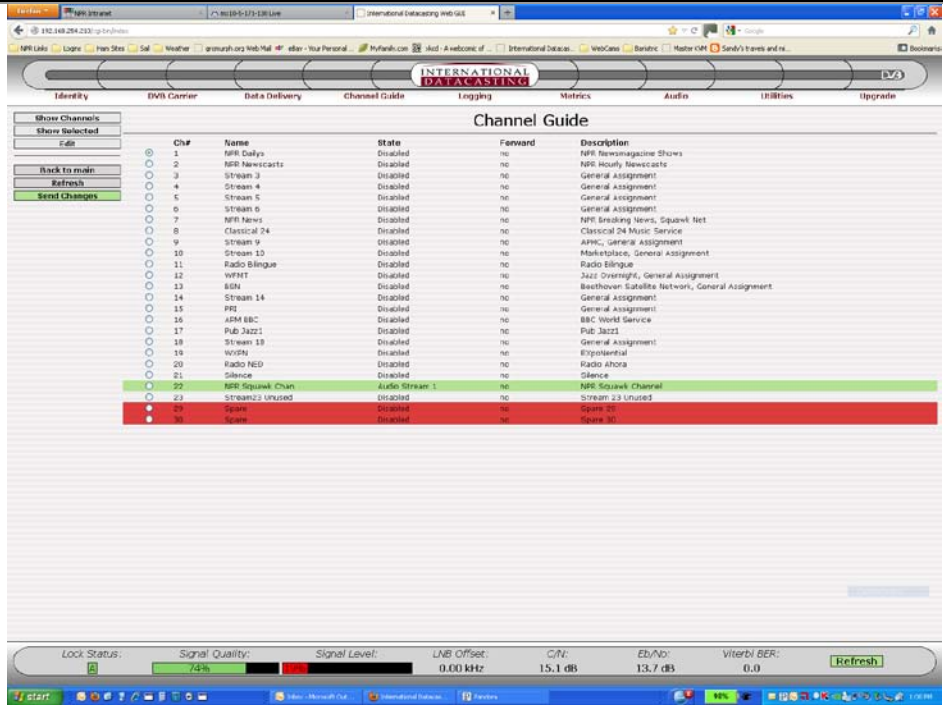
If the CHANNEL GUIDE does not display any channel choices, your receiver may have it disabled. Enable the CHANNEL GUIDE by:

1. Select UTILITIES from the top line menu.
2. Select the CHANNEL GUIDE CONFIGURATION puddle
3. Select EDIT
4. Place a check in the box ENABLE under the section STATE
5. Select SEND CHANGES



The CHANNEL GUIDE should now be visible as below:

Step **Instruction**



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Select EDIT
 Select the Channel # button that is currently assigned to the decoder port that you want to tune.



Step | **Instruction**

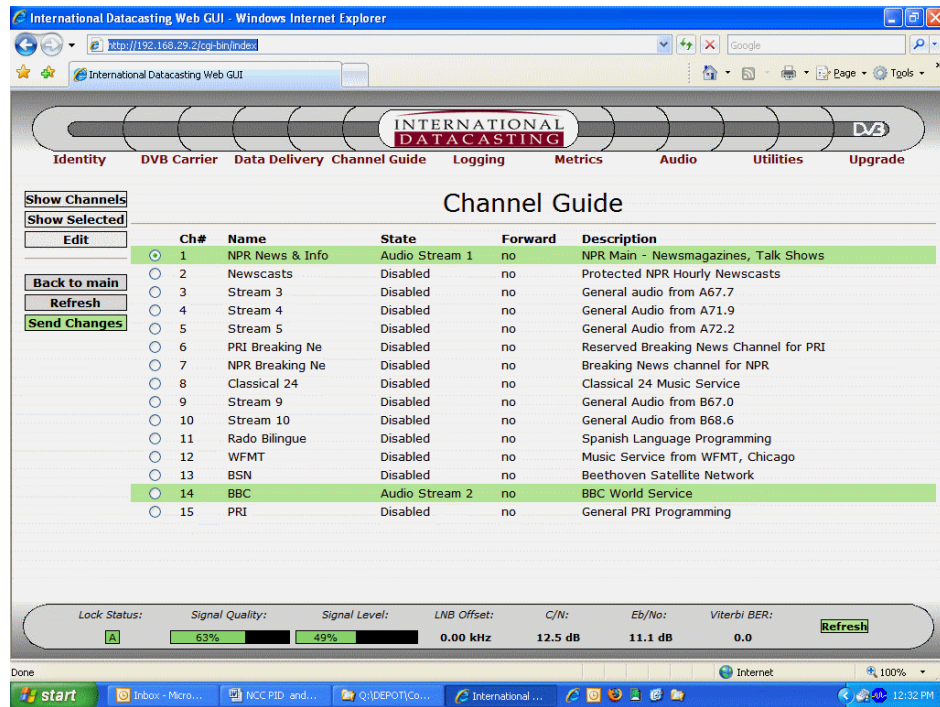
16 | Change that channel's state to disabled.



17 | Select the CHANNEL # button you want to tune to and change the state from DISABLED to the decoder audio port (AUDIO STREAM 1 or 2) that is desired.

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SEND CHANGES (you should now be "tuned" to the channel of your choice. This will not change until you select another channel or re-enable the NCC PID (4151))



If you stay in the channel mode, you will only need to repeat the "Tuning in the Channel Mode" instructions to change tuning.

For stations that have already been using the Channel Guide to locally tune their SR2000 Stream Decoders:

In your Channel Guide, the NPR Squawk Channel should be shown with a red background. You cannot select it or use it in any way. This is because your decoder does not have the PID for this channel available to it. All you need to do is add the PID for the NPR Squawk Channel to the PID list and the red background will go away. You should then be able to select the NPR Squawk Channel as you would any other channel.

Go to Step 12-A (above) and enter PID 1043.