

Combined Carrier

File Carrier changes

for ContentDepot

This document is intended to help guide interconnected stations through the changes being made to the File Delivery Carrier for ContentDepot on November 6th 2017.

Stations can use this document to review the Carrier Definitions, how to obtain readings and serial numbers from either a web browser or via the front panel LCD of your receiver. There is also information on how to verify the reception of the test files that will be delivered to all receivers after the carrier switch.

We recommend you write down and take notes of your receiver settings for your own reference. You do not need to submit these photos to the PRSS.

Contents

Finding the IP Address on a Receiver:.....	2
Verifying via a Browser:	3
L-Band Carrier Definitions:.....	3
Checking Signal Levels and Carrier to Noise:	5
Verifying File Delivery:	5
Finding the Receiver Serial Number:	7
Using the Front Panel LCD display:	7
Verifying L-Band 2 Carrier Definitions:	8
Finding the Serial Number:	8
Getting the Receiver’s Readings:	9
Getting Help:.....	9

Finding the IP Address on a Receiver:

Stations should be familiar with the IP Addresses for their receivers. One will use the IP Address in a web browser. This will allow one to log into the unit using a browser and review receiver configuration. One will also be able to verify the presence of the test files to be sent out by PRSS.

If you do not know the IP Address, you can obtain the address from the front LCD display of the unit.



Start by pressing the red 'X' to wake the display.



There are two network interfaces. Eth0 and Eth1.

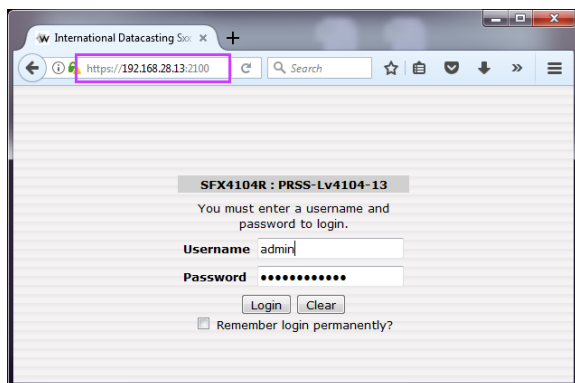
Your station could be networked to either one of these interfaces.

You should make note of the address assigned to both interfaces.



Using the down arrow button, find Eth0 Interface. Once displayed, press the Left arrow button. This will display the IP Address assigned to that network interface.

You should write down the IP Address for both Eth0 and Eth1.



One can then enter this address into a web browser of a computer that is on the same computer network as the satellite receiver. Typically this would be the computer that ingests the audio files for your automation system.

The default Username is: admin

The default password is: 12345

NOTE: *If the password has been changed by station personnel, PRSS will not have a record of what the password has been changed to.*

If you are having difficulty or are not able to connect using this method, it could be that your computer is not on the same network as your receiver. If this is the case, you might need assistance from your IT support person to help resolve any network configuration issues.

Once you have successfully connected to your receiver and logged in via a browser, you check the following:

- The L-Band Carrier Definitions
- Checking Signal Quality and Carrier to Noise
- The ability to browse files downloaded to your receiver.
- The Serial Number

Verifying via a Browser:

L-Band Carrier Definitions:

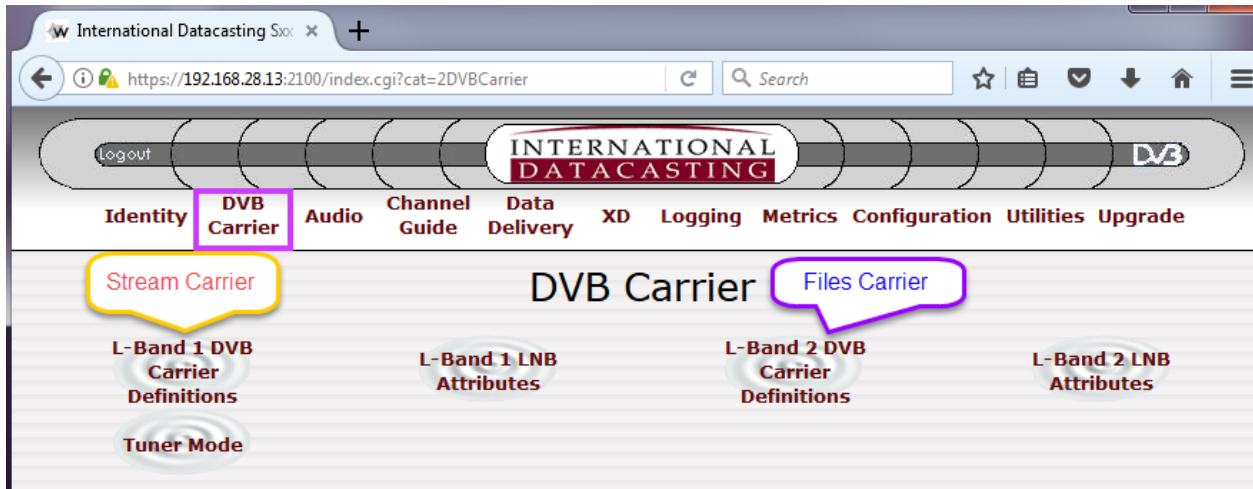
The PRSS will automatically update your receivers L-BAND 2 Carrier definitions.

The first item to check using a browser will be the DVB Carrier definitions.

Your receiver has two tuners with one being tuned to Live Streams and the other being tuned to the File Delivery carrier.

L-Band 1 is used for the Live Streams carrier. These are the Live streams that your station is subscribed to. You **DO NOT** want to change any settings in L-Band 1.

L-Band 2 is used for the File Delivery carrier. This carrier is being updated.



Once logged in, click on: DVB Carrier

In this screen click on: L-BAND 2 DVB Carrier Definitions

The updated definitions will be applied to Carrier A. The definition is shown below.

L BAND 2	
Carrier A	Carrier B
Locked to Carrier A	
Preferred Carrier is Carrier A	
Description: PRSS File Delivery	PRSS File Delivery
Frequency: 1427.100000 MHz	1349.750000 MHz
Symbol Rate: 9090.000 ks/s	4940.000 ks/s
Modulation Standard: DVB-S2	DVB-S
Viterbi/Code Rate: AUTO	AUTO
Alpha Factor: AUTO	N/A
NCC PID: 4154 (103A)	4154 (103A)
Enable 22kHz Tone: Disabled	Disabled
Polarization: Horizontal (18V)	Horizontal (18V)

Checking Signal Levels and Carrier to Noise:

When logged into the receiver via a browser, you will see receiver metrics displayed at the bottom of your browser and are visible at the bottom of the page on every screen.

For example:

L-Band1	Lock:	Signal Level: 71%	Signal Quality: 88%	C/N: 19.2 dB	Eb/No: 17.8 dB	Viterbi Rate: 3/4	Viterbi BER: 0.0
L-Band2	Lock:	Signal Level: 60%		C/N: 16.6 dB	Modulation: QPSK	Code Rate: 5/6	Alpha Factor: 0.20

In this example, L-BAND 1 is locked on the Streams carrier and will be displaying both Signal Level and Signal Quality. You will also see Carrier to Noise (C/N) and Energy per bit to Noise density (Eb/No) values.

The updated Files carrier on L-BAND 2 will have a different display.

Above, L-Band 2 is locked on the Combined Carrier and tuned to the Files carrier. You will see Signal Level and Carrier to Noise (C/N). You will not see values for Signal Quality or Eb/No.

NOTE: *There will be a slight difference in the readings between the carriers – this is normal.*

We do not need the information sent to PRSS. This is for the station's reference.

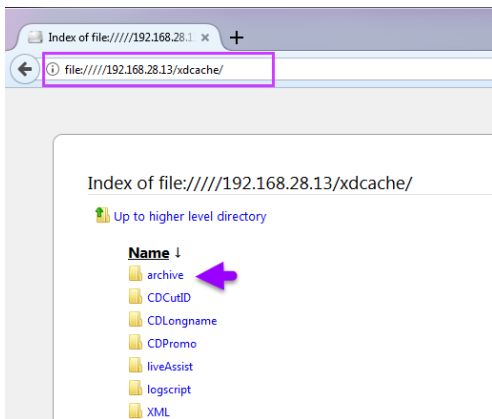
Verifying File Delivery:

The PRSS will push three files to your receivers automatically after the switch to the new carrier has been made. The purpose of these test files is to help you verify that you are receiving files via the updated carrier.

Using the IP Address for your receiver, you can enter it into your browser to browse your receiver's disk share.

Enter: `\\<IPAddress>\xdcache\`

For example, if your address is 192.168.28.13, you will enter: `\\192.168.28.13\xdcache`



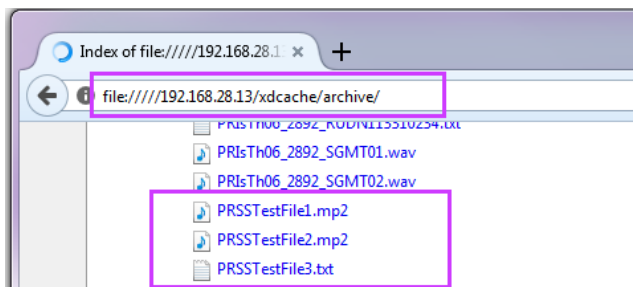
This should display the directory structure and files on your receiver's disk share.

The test files will be delivered to the 'archive' directory.

Clicking on this directory will open and display the files within that directory folder.

NOTE: it might take some time for your browser to display all files within this directory.

In the archive directory, look for the following files:



- PRSSTestFile1.mp2
- PRSSTestFile2.mp2
- PRSSTestFile3.txt

The presence of these files confirms that your receiver is properly receiving files.

If you do not see these files, refresh your browser to ensure that you are seeing all files and files names that are beyond the letter 'P'.

If you have verified that you are not seeing the test files, please verify your L-BAND 2 Carrier A definition as described above.

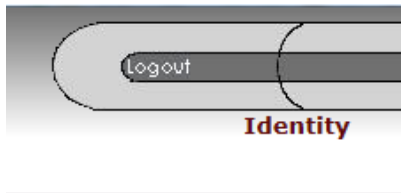
If the carrier definition is correct, you should call the PRSS Help Desk at 800.971.7677.

Finding the Receiver Serial Number:

If you believe that there is an issue with the move to the combined files carrier, PRSS will need to know your receiver's serial number.

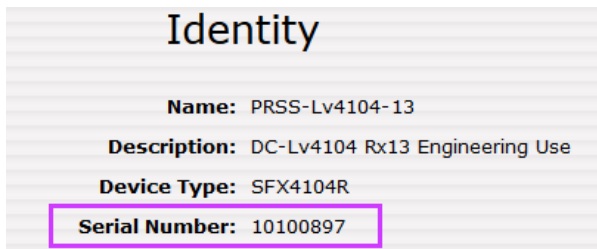
Please have the serial numbers for both receivers before calling for assistance.

Log into the receiver using a web browser as described above.



Click on: Identity

This will display information about your unit.



In the center you will find the Serial Number. Please write down the serial number for all of your receivers.

PRSS will then work with you directly on determining the issue and if needed, will remotely reprogram your receiver.

Using the Front Panel LCD display:

If you cannot connect to your receiver via a web browser, you can verify your carrier definitions, locate your Serial Number and obtain metric readings directly via the LCD display on the front of the unit.

Verifying L-Band 2 Carrier Definitions:

Press the 'X' several times to go to the start of the menu.



Press the down arrow until you see **L-BAND 2**



Use the right arrow button to move to **2nd Carrier A**



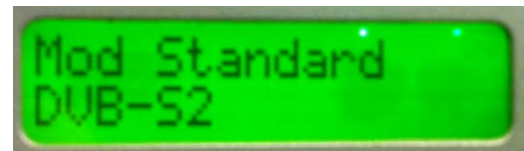
Press the right arrow again to display the **Frequency**

This should be set to: **1427.100000**



Press right again for the Symbol **Rate**

This should be set to: **9090.000**



Continue pressing right for the **Modulation Standard**

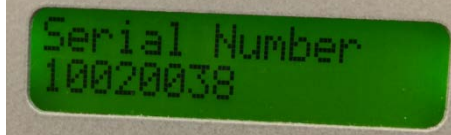
This should display: **DVB-S2**

Finding the Serial Number:

Press the 'X' several times to go to the start of the menu.



Press the down arrow until you see the Info screen.



Press the right arrow until you see the Serial Number displayed. Write down the Serial Number for all of your receivers.

Getting the Receiver's Readings:



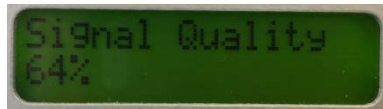
Press the X key until Stream1 Channel1 is displayed.



Press the Right Arrow key approximately 15 times to view the Eb/No and C/N readings. These will be the values for L-BAND 1.



Press the Right Arrow key twice to get the Signal Level. This value will be for L-BAND 1.

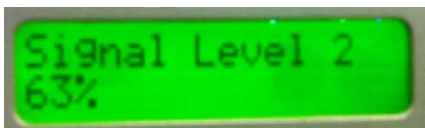


Press once more to get the Signal Quality for L-BAND 1.

Keep pressing the right arrow button to get values for L-BAND 2.



C/N 2 will display the Carrier to Noise for L-BAND 2.



Signal Level 2 will display the Signal Level for L-BAND 2.

Getting Help:

If you believe that you have a problem receiving files, please call the PRSS Help Desk at 800.971.7677 or send email to: PRSSHelp@npr.org

Please have your receivers Serial Number prior to calling for assistance.