

Follow this Quick Start Guide to enable the robust functionality of the SF-5050.

By opening, assembling, and using this product, you agree to the terms of the License Agreement contained in the SF-5050 GNSS Product User Guide.

Important: This device will not track satellites until after the option file is loaded in the receiver. See instructions contained in this guide.



Consult your dealer to determine if the SF-5050 is fully configured. If it is, the SF-5050 is ready to use. Refer only to these sections: *Connect Equipment* and *Factory Default User Profile*.



If the SF-5050 is not dealer-configured, the receiver is not operational until the steps in this guide are performed.

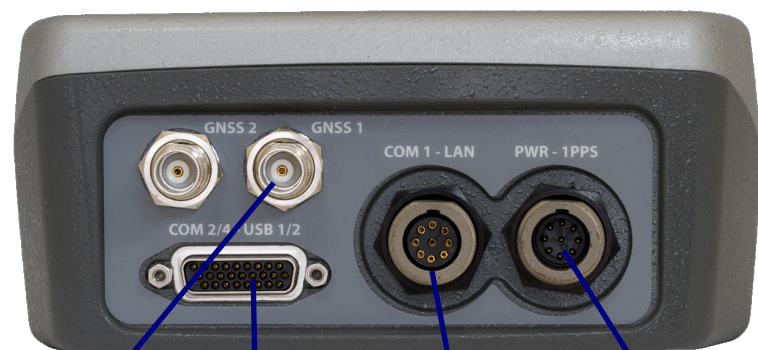
The supplied SF-5050 Product Configuration USB Flash Drive includes all the files needed to set up the ordered configuration of the SF-5050. It also includes guides with complete product information:

- ✓ SF-5050 User Guide
- ✓ StarUtil-5000 User Guide
- ✓ ONYX Technical Reference Manual

■ **NavCom Customer Support:**

Telephone: +1 (310) 381-2808

Web: <https://www.navcomtech.com/en/support/contactsupport/>



ANTENNA COM2 - USB COM1 - LAN POWER

Connect Equipment

1. Use the supplied data cable for communications:
 - Connect the Positronic connector end to COM1 - LAN at the rear of the SF-5050. Connect the DB9S and RJ45 connector ends to the PC.
2. Mount the supplied GNSS antenna to a mast. Locate the antenna in an area with a 360° clear view of the sky.
3. Connect the supplied GNSS antenna cable to the GNSS antenna. Connect the other end to the TNC connector, labeled GNSS 1, at the rear of the SF-5050.
4. Perform these steps to set up power:
 - a. Plug the supplied AC power cord into the supplied AC/DC power adapter. The adapter operates on either 120 or 240 VAC power.
 - b. Connect the female Positronic connector end of the power adapter to the connector, labeled PWR – 1PPS, at the rear of the SF-5050.
 - c. Plug the AC power cord into an AC receptacle.
 - d. The receiver will automatically power on.



The purchase of a separate appliance cable may be necessary if the VAC plug configuration needed is not the standard 2-prong American connector.

Save Folder/Files to PC



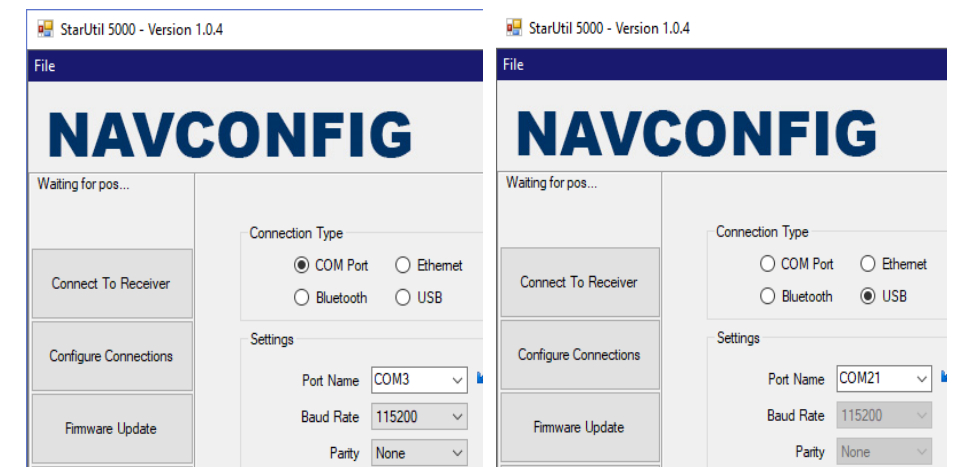
The SF-5050 Product Configuration USB Flash Drive includes:

- Root Directory: Software Options File and StarFire License (if purchased)
- NavCom Folder: Includes these sub-folders: Firmware, Marketing Materials, User Guides (The contents of the NavCom folder are subject to change.)

5. Plug the SF-5050 Product Configuration USB Flash Drive into the PC.
6. Browse to the USB Flash Drive.
7. Save the Software Options File, StarFire License (if purchased), and NavCom folder to the PC.

Establish Communications

8. Browse to Navcom\Firmware\Onyx - SF5050\v1.0.2\StarUtil5000 on the PC or the latest (highest value) version number on the USB drive (i.e. v2.x.x, v3.x.x).
9. Ensure that these files are in the same directory as StarUtil5000: “StarUtil5000_v1.0.4.exe” or greater, “navcomx1c45x5050.inf” (USB driver), and StarUtil5000DLL.dll.
10. Double-click “StarUtil5000_v1.0.4.exe” to open the program.
11. Depending on the current *Connection Type*, do not change the default option, *COM Port*, or select *USB*. If using a *USB to serial/COM Port* adapter, select the *USB Connection Type*.



12. Set the appropriate options according to the *Connection Type*:

- **COM Port:**
 - *Port Name*: The appropriate PC COM Port
 - *Baud Rate*: 115200 (keep the default)
 - *Parity*: None (keep the default)

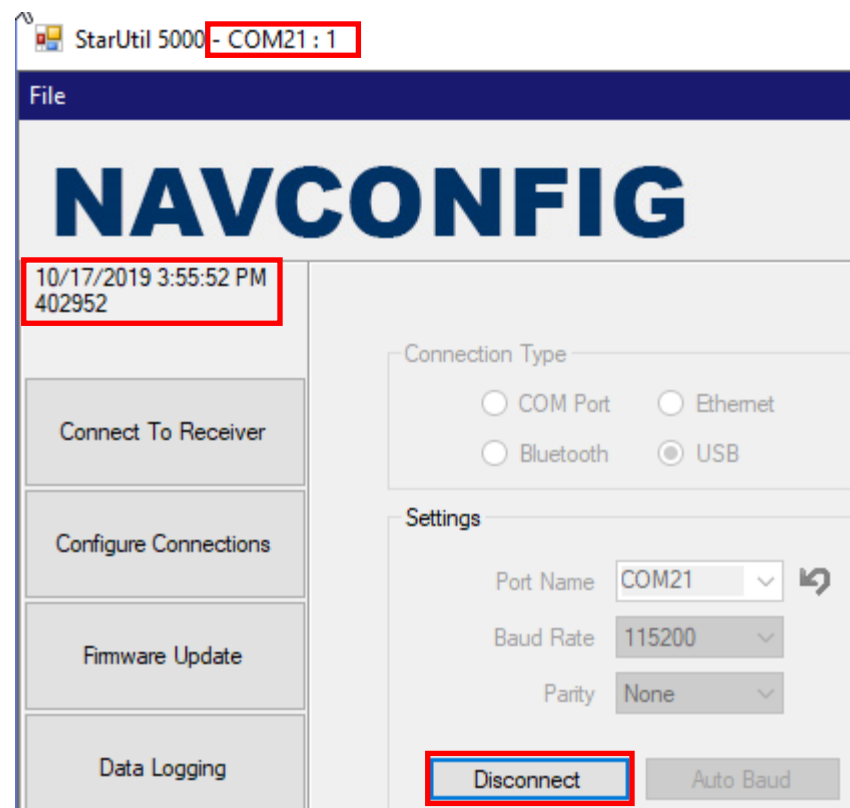
Or

- **USB Port:**

- **Port Name:** The appropriate virtual PC COM Port

13. Click **Connect**

14. Verify that the SF-5050 is connected to the PC: Date is current and time is updating, it will also report the PC COM Port and receiver port that connected on the top left corner and the **Connect** button will change to **Disconnect**. The same applies to all **Connection Types**.



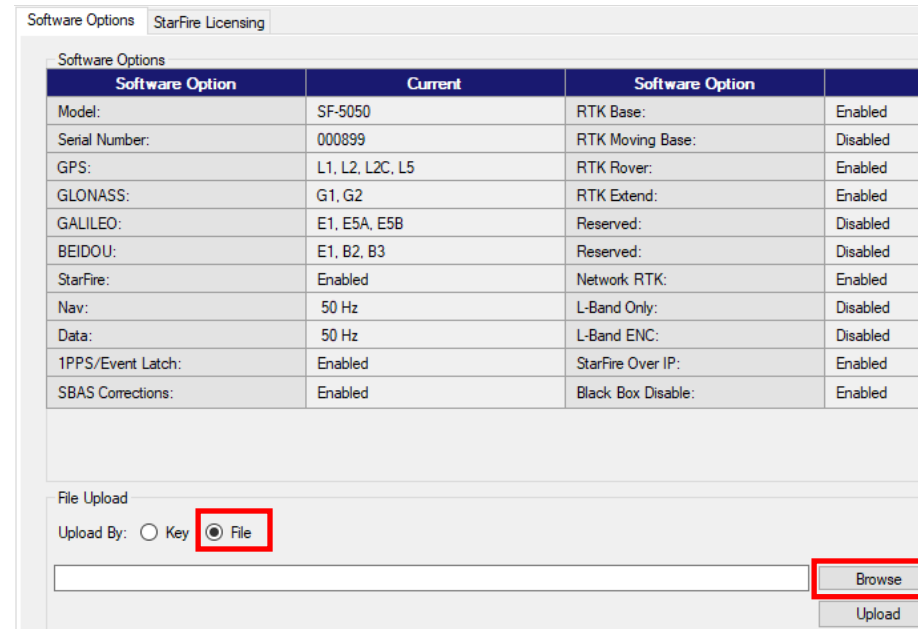
Upload Software Options

- Software Options must be uploaded before the StarFire License (if purchased) is loaded.

Important: This device will not track satellites until after the option file is loaded in the receiver.

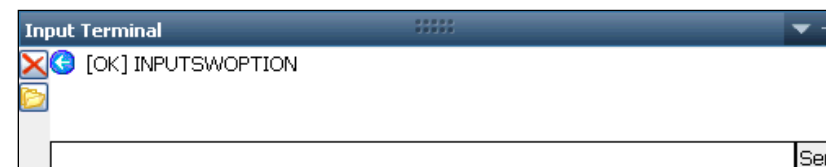
15. Select **Options and License**

16. In the **Software Options** tab select **File** then click **Browse**



17. Browse to the software options file (the file extension is *.opt) then click **Upload**.

- The **Input Terminal** window also displays the outcome of the upload. In this case, the load is successful:



18. Click **Refresh** on the **Software Options** window to view the loaded software options.

Also refer to the *ONYX Technical Reference Manual* for detailed information on the [INPUTSWOPTION] command.

- StarFire: Enabled” indicates that the StarFire Software Option is loaded. It does not indicate that a StarFire License is installed. Do not close StarUtil5000. Perform one of these steps:

- If a StarFire License is purchased, go to the **StarFire License** section.

Upload StarFire License

- For this initial configuration, the StarFire license must be installed via data cable. Subsequent renewals of the license are typically transmitted to the receiver via radio broadcast. Refer to the SF-5050 User Guide.

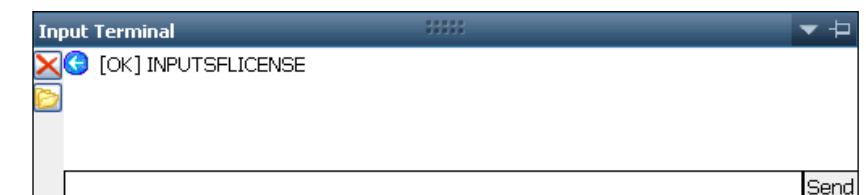
- The receiver must be tracking GPS satellites and providing a valid position solution at the time of the StarFire license upload to accept the license.

19. Select **StarFire Licensing** tab select **File** then click **Browse**

20. Browse to the StarFire license file (the file extension is *.lic) then click **Upload**

21. Click **Refresh SF License** to view the loaded SF license

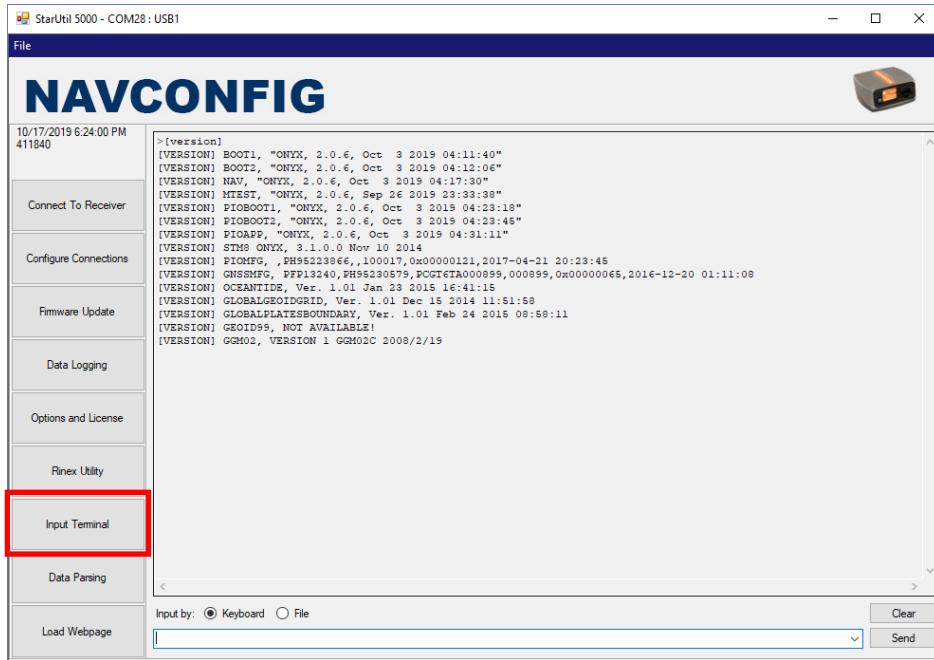
- The **Input Terminal** window also displays the outcome of the upload. In this case, the load is successful:



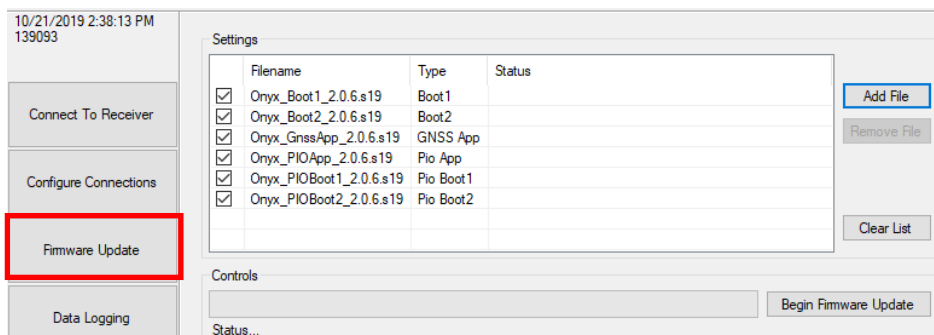
Determine Firmware Versions and Updating

The user determines if the firmware installed in the SF-5050 is the most current. The version of the installed firmware is important to ensure the proper operation of the receiver.

22. Select *Input Terminal* and send [VERSION] command to check FW version



23. Click on *Firmware Update* then select Add Files and browse for files to upload. Select Begin Firmware Update to initiate

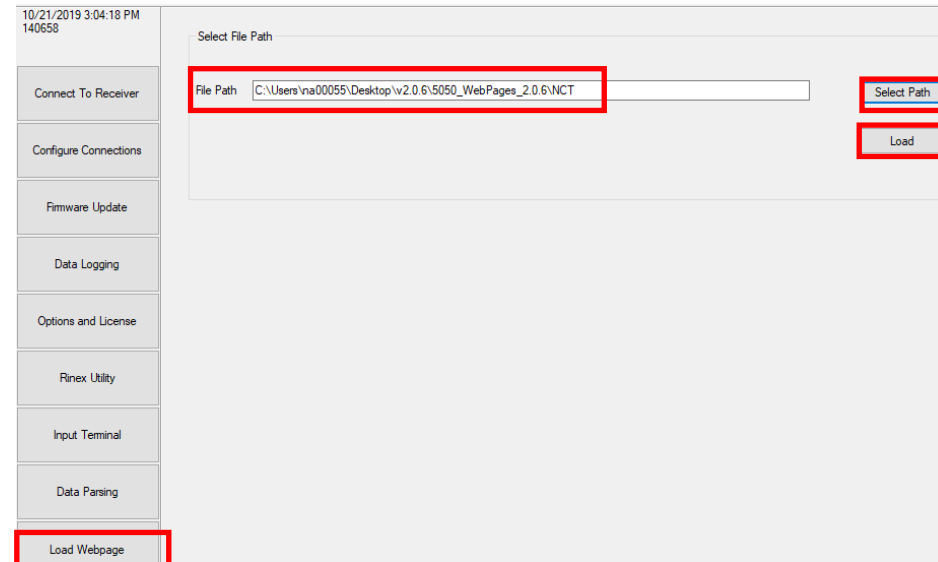


24. After a Successful Upload repeat Step 22 to check receiver firmware version.

Upload Web Pages

25. Select *Input Terminal* and send the following commands
- [FTPCONTROL] ENABLE, A:
 - [FSFORMAT] A:
 - [WEBCONTROL]ENABLE, NCT

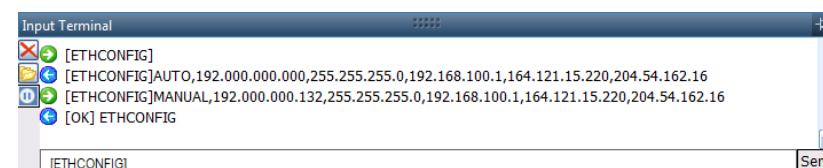
26. Select *Load Webpage* then click on *Select Path* browse to the WebPages and click *Load* to initiate upload



Accessing the WebServer

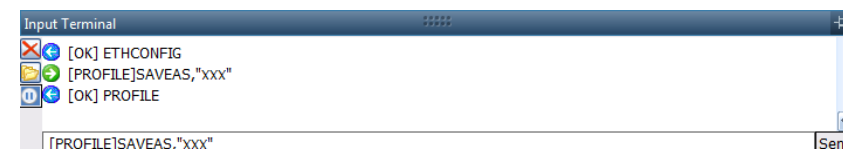
27. Determine the receiver's IP address OR give it a static IP address by entering the [ETHCONFIG] command in the Input Terminal screen.

- Specify [ETHCONFIG]MANUAL to manually change the IP address.
- Using [ETHCONFIG]AUTO will automatically set the IP address.



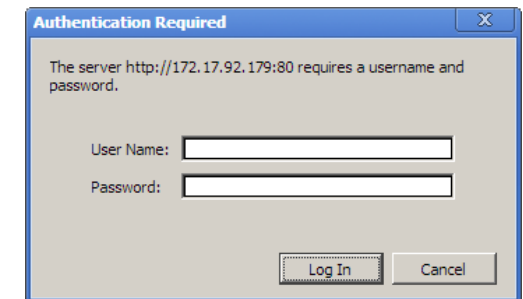
- The IP address consists of the first four sets of three numbers separated by periods. For further information on this command, see the Onyx Technical Reference Manual.

28. Save the profile by entering [PROFILE]SAVEAS "XXX" in the Input Terminal screen where the Xs indicate the name chosen for the profile.



- If the profile is not saved, the IP address will be lost the next time the receiver is shut off and rebooted.

29. Type the IP address into the Address box on the browser page. A security screen will display.



A default user name and password is pre-programmed into the receiver's memory consisting of the following:

- User Name: admin
- Password: admin

This default user name automatically has ADMIN level access, which enables the user to view all webpages including the Input Terminal page and the Manage Accounts page. The user name and password for this default account can be changed in the Manage Accounts page. The password can be changed in the Change Password page. New user names, passwords and access levels (USER and TECH) can be added in the Manage Accounts page.

- This ADMIN account cannot be deleted or given a different access level in the Manage Accounts page.