

Overview

This guide will instruct the user to access the StarFire Over IP (SFOIP) protocol via FieldGenius software installed on the Handheld unit available through the LAND-PAK system.

The StarFire Over IP network consists of two independent StarFire servers/casters which can be accessed through four mount points from two different locations. A choice of three data delivery rates ensures maximum reliability. This connection can be made via a cellular phone modem from the handheld unit.

FieldGenius offers a way of accessing the StarFire Over IP system directly from the handheld unit. The unit can be programmed to automatically access the StarFire Over IP casters thereby increasing the accuracy of the points location.

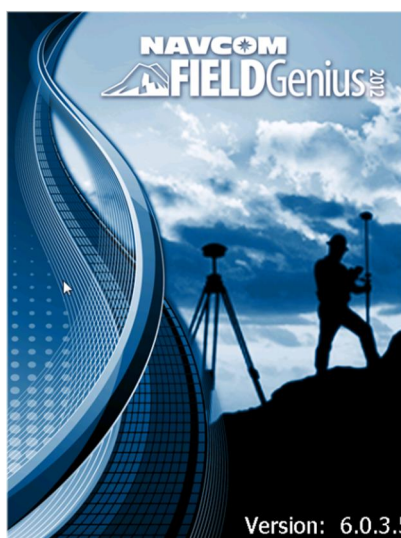


Figure 1: FieldGenius Software logo

Hardware Requirements

The following hardware is required for this function:

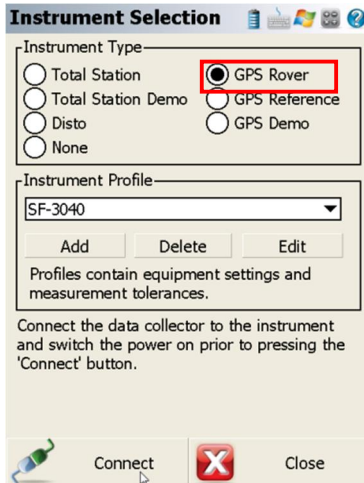
- ✓ SF-3040 or SF-3050 receiver
- ✓ Handheld unit equipped with GSM card.

Software Requirements

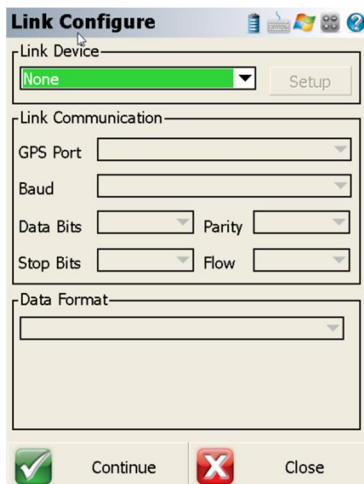
- ✓ FieldGenius 6.0.3.5
- ✓ Cellular service that includes a data plan. Make sure that cellular service is enabled with a user name and password.
- ✓ Sapphire Firmware v3.2.11.0
- ✓ SFOIP Software Option Enabled
- ✓ Valid SF License

Procedure

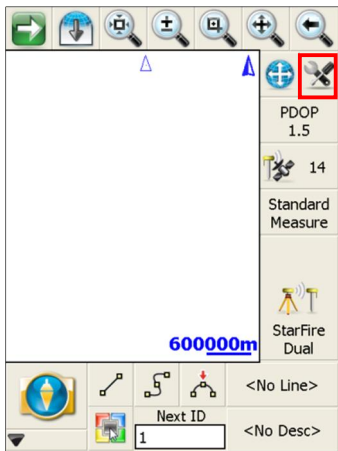
1. Click the FieldGenius icon on the handheld screen.
2. Create a new Project OR select the name of an existing project.



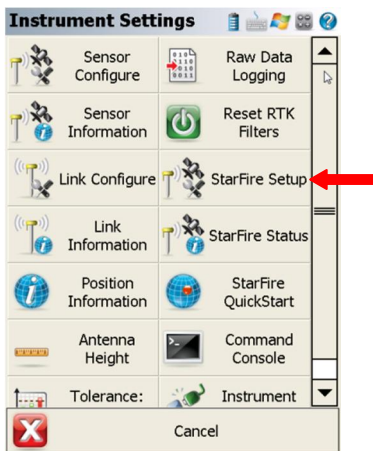
3. Access the Instrument selection screen
4. Click the GPS Rover button.
5. Make sure that SF-3040 appears in the profile field.
6. Click Connect.



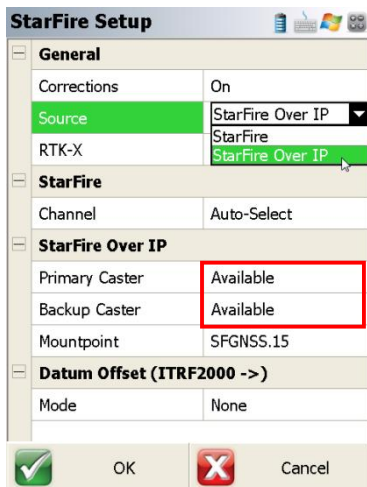
7. Access the Link Configure screen
8. In the Link Device field, select None from the pulldown list.
9. Click Continue.



10. Access the Map Screen.
11. Click the Tools icon on the far right of the screen.

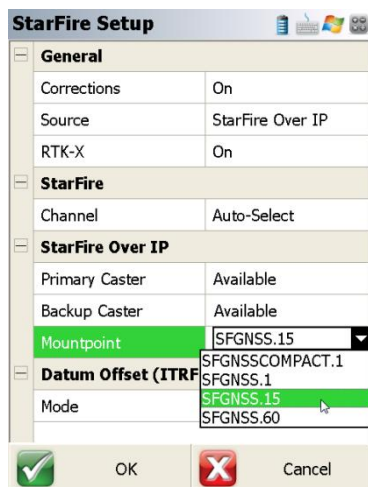


12. Access the Instrument Settings screen.
13. Click the StarFire Setup button..
14. Allow StarFire Setup to complete the configuration and dial out to the internet.



15. Access the StarFire Setup screen
16. In the Source field, select StarFire Over IP from the pulldown list. Note that “StarFire” is selected as the default.
17. In the StarFire Over IP section, determine that the Primary Caster and Backup Caster fields show “Available.”

Note: Casters are hardcoded and cannot be changed.



18. Select a Mountpoint from the Mountpoint dropdown list. Four mountpoints are available:

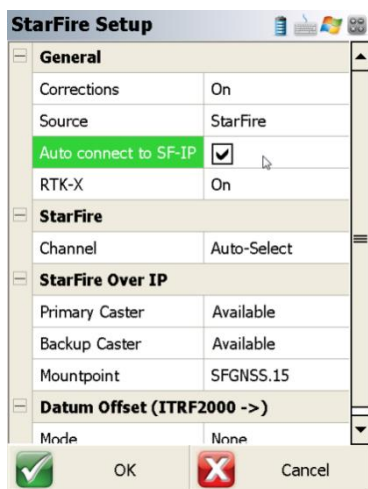
SFGNSSCOMPACT.1 – this option has a frequency of one per second but delivers a smaller data packet. Can be used when cellular signal strength is less than optimal.

SFGNSS.1 – this option delivers the standard StarFire data packet at the rate of one per second.

SFGNSS.15 – this option delivers the standard StarFire data packet at the rate of one every 15 seconds

SFGNSS.60 – this option delivers the standard StarFire data packet at the rate of one every 60 seconds.

19. Click OK.
20. Allow the StarFire Over IP setup to complete the configuration.



Optional step:

21. Click the checkbox to make StarFire Over IP function as a backup to the StarFire service. This configuration directs the software to automatically connect to the StarFire Over IP service if the StarFire corrections become unavailable.

Note: The checkbox is only available when “StarFire” appears in the Source field.

User Tips

- For FieldGenius, StarFire Over IP is connected via phone modem. This can only be accomplished if the handheld device is disconnected from the PC.
- The handheld unit accesses the GNSS receiver by means of a Bluetooth connection.
- Connection to cellular service must be made prior to StarFire Over IP setup. The Phone option must be set to ON.
- The handheld unit can access the StarFire Over IP feature via WIFI as well as via the cellular phone connection.