REQUIRED TOOLS AND EQUIPMENT TO PERFORM A LINK TEST

Small Flathead Screwdriver

Batteries
CR123A 3v
(Panasonic or Duracell)
One per each device

2 or more SWIFT Devices
All SWIFT devices must be in
the factory default state.

SWIFT Detector Bases

OPTIONAL TOOLS TO ANALYZE LINK DATA

Windows® Laptop with
SWIFT Tools

W-USB Software Interface
W-USB software may need to be
updated before use with SWIFT
Tools. SWIFT Tools will automatically
update the software, if necessary.
BEFORE PERFORMING A LINK TEST

Ensure you are running the latest version of SWIFT Tools

Use SWIFT Tools to update all devices to the latest firmware version. All devices must be running the latest firmware for proper functionality.

Ensure devices are in the Factory Default state

With the address code wheels set to 000, insert one battery into the device. The LED on the front will blink red if the device is in the factory default state.

If the device is not in the factory default state, follow the directions below.

RESET DEVICES TO FACTORY DEFAULT

Use SWIFT Tools to reset devices to the factory default state

1. Insert the W-USB adapter into your computer and launch the SWIFT Tools application
2. On the home screen, select Site Survey, Create Mesh Network, or Diagnostics.
3. Click Operations and select Set device to factory default.
4. You are now on the Reset Devices screen. Select the desired device and click Reset.
PREPARE WIRELESS DEVICES

1. Tamper each device by removing the base or cover plate and remove the batteries.

2. Use a screwdriver to set the address on each device. Addresses must be between 001-100, and must be in ascending order. For example, if the first device is set to address 001, the second device should be 002. When the link test begins, each device will test the link between itself and the next lowest address.

CONDUCT LINK TEST

1. Insert one battery to power up the device with the lowest address.
   Note: You can insert the battery into any slot in the device. Once the battery is inserted, the device LEDs will blink red twice every five seconds. If the device is not showing this pattern, it is not set to the factory default state. Refer to the previous page for instructions on how reset the device.

2. Place the device in its intended location in order to increase accuracy of the link test.

3. Twist the device into its base.
4 Observe the LED pattern.
The device will blink yellow once every half second for 20 seconds and then turn on steady red. The device is now ready to perform a link test to the device with the next highest SLC address. Proceed to step #5.

5 Insert one battery to power up the device with the next highest SLC address.
For example: set device to address 002 if the first address on the device used in the link test was 001.

6 Place the device in its intended location in order to increase accuracy of the link test.

7 Twist the device into its base.

8 Observe the progress of the link test.
The LEDs on the device will blink once every half second for 20 seconds. After this, the results of the link test can be observed.

9 Observe Link Test results.
- 4 blinks = Excellent link
- 3 blinks = Great link
- 2 blinks = Good link
- 1 blink = Poor link
- Solid Red (on steady) = No link

10 To test additional links, repeat steps 6-9 while the first and second devices are still mounted in their locations.
ANALYZE LINK TEST DATA IN SWIFT TOOLS (OPTIONAL)

1. Insert the W-USB into your laptop’s USB port. Launch SWIFT Tools. Note: W-USB software may need to be updated before use with SWIFT Tools. SWIFT Tools will automatically update the software, if necessary.

2. Click Create on the Create New Jobsite screen. Note: An existing jobsite can also be used.

3. Enter jobsite information.
   1. Enter jobsite name.
   2. Enter jobsite location/description.
   3. Click Create.

4. Click Start on the home screen to start the Site Survey function.

5. Tamper the devices to return them to the factory default state once they have completed the Link Test. 
   Caution: Do not replace the base or cover plate onto a device that is in site survey mode or the existing results will be replaced. Refer to the SWIFT manual for more information.

6. In the Communicator Panel, select the devices from which you wish to retrieve data.
   Note: Only devices that have site survey data can be selected. Devices collect site survey data by performing an RF Scan or Link Quality Test as described on pages 4 and 5.
7 Click Retrieve.

8 Once the data is retrieved, click Next near the bottom right of the screen to view the results of your link test.

9 View your Link Test results. To view more detailed results, click Detailed View. To export data to an Excel spreadsheet, click Export to Excel. Note: Link Test data will only appear in SWIFT Tools if a full Link Test was performed on the selected devices.