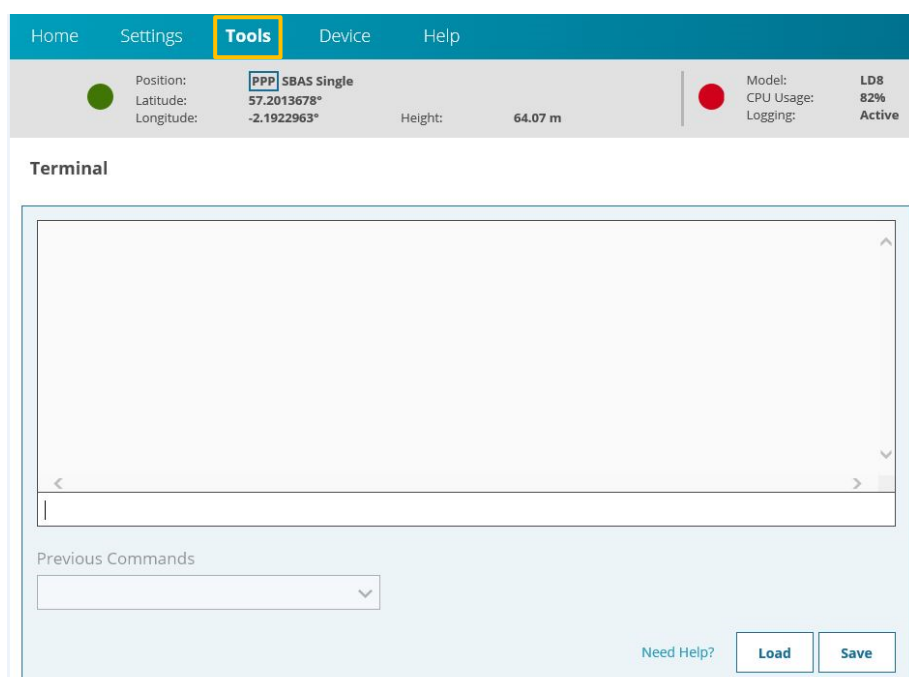


INTRODUCTION

This guide details how to configure the LD8 receiver to simulate the following FMEA trial requirements:

1. Loss of Differential Corrections
2. Total Loss of GNSS satellites

All commands to the LD8 unit described within this guide are to be sent using the LD8 WebUI terminal which can be accessed by navigating to **Tools > Terminal** as shown below. Further information on how to connect to the LD8 receiver using the WebUI can be found within the [LD8 Operations Manual](#).



LD8 FMEA TRIAL PROCEDURE – LOSS OF CORRECTIONS

Before starting the trial, make a note of the current L-band settings of the LD8 unit by entering the following command into the WebUI terminal:

```
LOG L BANDTRACKSTAT
```

The terminal will display a response similar to the following:

```
L BANDTRACKSTAT WCOM1_30 0 50.5 FINESTEERING 2062 457753.000 0a000020 29e3 15441
3
" LOR " 1545865000 1200 974c 00c2 0 -91.416 43.052 3.6091 15658.910 298176 2330 746
38166528 290966 0.0000
" 25E " 1545825000 1200 974c 00c2 0 -223.267 43.704 3.8057 78985.820 1504384 5 5 192561152
515 0.0000
" AORW " 1545845000 1200 974c 00c2 0 -280.645 40.858 2.8379 78986.523 1504448 607 571
192569344 68081 0.0015
```

The above example shows the LD8 in auto beam mode where multiple L-band beams are being tracked. If the L-band tracking was set to the Manual mode, then only one beam will be displayed on the terminal output. Make a note of the tracking mode and the selected beams.

To simulate the loss of L-band:

1. Enter the following command into the WebUI terminal:

```
ASSIGNLBANDBEAM IDLE
```

2. The LD8 will no longer be locked to an L-band beam.
3. DGNSS solutions (Standard) are valid for 120 seconds and PPP Solutions (Apex, Ultra) are valid for 360 seconds, so allow for these to timeout in DP.
4. Once the test is complete enter either of the following commands within the Web UI:

```
ASSIGNLBANDBEAM MANUAL BEAMNAME (with 'BEAMNAME' being the previously noted beam if manual beam)
```

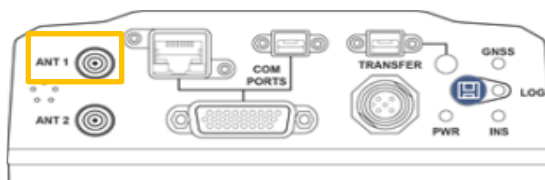
```
ASSIGNLBANDBEAM AUTO (If auto beam selection is required)
```

5. Wait until the PPP solution is fully restored before conducting the next part of the Trial.

LD8 FMEA TRIAL PROCEDURE – LOSS OF POSITION

To simulate the loss of GNSS:

1. On the rear of the LD8 unit disconnect the 'Ant 1' SMA connector from the Interface Panel:



2. The loss of position will be almost instantly detected by DP.
3. After the simulated failure reconnect the 'Ant 1' connector to the LD8 unit and allow time for the position to recalculate. A DGNSS calculation will take around 120 seconds, but a PPP calculation will take up to 30 minutes to fully converge.