CONFIGURING L-BAND BEAM

To use VERIPOS services, it is necessary to ensure that the LD5 is connected to an L-band beam appropriate for the vessel work area. Beams and coverage areas are highlighted on the right. Detailed coverage charts can be generated using the VERIPOS Verichart application.

When an appropriate L-band beam is selected, the three green bars shown in the L-band strength indicator at the top of the screen will indicate a healthy (>36.5db/Hz) beam sync.

To select an L-band beam, if not already on the homepage (as shown above) click the home button.

Using the front panel tick and arrow buttons, navigate to **L-Band** > **Config** > **Beam Selection**. Select the desired beam and press the tick button twice to confirm.

Beam	Coverage
98W	North America, Gulf of Mexico, South America
AORW	North America, Gulf of Mexico, South America, North Sea, West Africa
25E	North Sea, Mediterranean Sea, Africa, Persian Gulf, Caspian Sea
IOR	Asia, Indian Ocean, East Africa, Persian Gulf, Caspian Sea, East Mediterranean
143.5E	Asia, Australasia, Indian Ocean
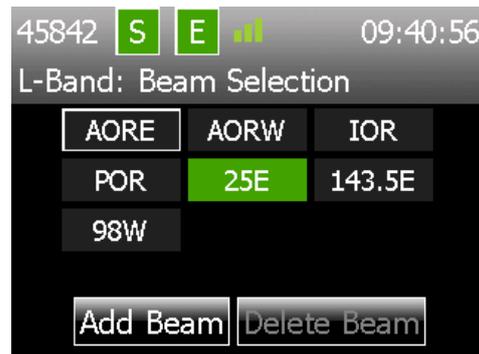
CONFIGURING MF / IALA

IALA DGPS is a network of coastal reference stations providing free, ground-based MF transmissions. See www.iala-aism.org for station listings (Note that these stations are not managed or monitored by VERIPOS).

As shown on the right, there are three different modes available for using the MF / IALA backup solution. These can be configured by navigating to **MF > Config > Mode**.

The default setting (AUTOMATIC) is recommended. However, a specific local station can be selected if required by using MANUAL. This will allow manual input of a station frequency and data rate.
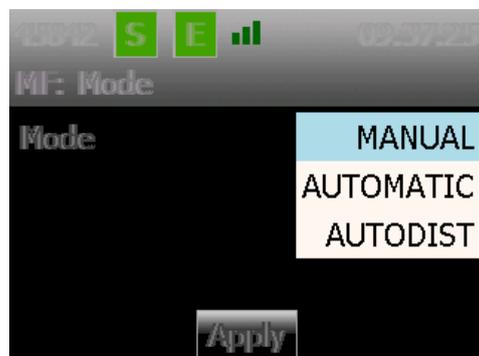
LD5 FMEA TRIAL PROCEDURE – LOSS OF CORRECTIONS

Note: Before commencing this test, make sure any external corrections (such as NTRIP, MF, UHF or Cross Corrections) are turned off or disconnected.

To remove NTRIP corrections, simply switch off the IOLAN.

To remove Cross Corrections, refer to the VERIPOS drawing and either remove the connection from the rear of the LD6, or switch off the source of the Cross Correction.

To remove MF corrections, place MF into the **Manual** mode and then select a station frequency outside the range of the vessel.

To simulate the loss of L-band:

1. If not already on the homepage, click the home button.
2. Using the arrow and tick buttons on the front of the unit, navigate to **LBand > Config > Beam Selection**.
3. Select a beam outside the range of the vessel and press the tick button twice to confirm. The 'LBand' tab on the home screen should turn red, along with the top bar 'S' Sync icon. While the GNSS tab will also turn red, a position will still be shown as the unit will continue to output an uncorrected position.
4. Standard solutions are valid for 120 seconds and PPP Solutions are valid for 360 seconds, so allow for these to timeout in DP.
5. Once the test is complete, select a valid L-band beam and wait for the PPP solution to converge.

45842	S	E	...ul	14:06:59
Latitude			57° 12' 04.9295" N	
Longitude			002° 11' 32.2660" W	
Height			115.92 m	
LBand SS			0.00 dB/Hz	

| LBand | GNSS | MF | Config |

LD5 FMEA TRIAL PROCEDURE – LOSS OF POSITION

To simulate a loss of position:
1. It is necessary to determine the type of LD5 variant in use. This can be found by navigating the menu to **Config > Config**.
2. Remove the **ANT** antenna unless the Hardware Variant includes 'Mod 1' or 'Mod2', in which case remove the rear **Beacon** antenna. Locations of both are shown on the right:
3. Position loss will be almost instantly rejected by DP. Once the test has concluded and the antenna has been reconnected, please allow time for the position to recalculate.