

## HOW TO GUIDE: Dual Frequency GLIDE

This document describes the mojoRTK feature, Dual Frequency Glide. The intended audience is Leica Value Added Resellers.

### Description

- The mojoRTK system provides guidance for a tractor along, and parallel to, a single straight line (the wayline)
- High accuracy guidance can only be guaranteed whilst the mojoRTK console has a good GPS fix and is receiving reference corrections
- Dual Frequency Glide offers the operator a lower cost (but lower accuracy) guidance solution. With Dual Frequency Glide a base station is not required.
- The mojoRTK must be receiving GPS data for Glide to be enabled
- In Dual Frequency Glide mode RTK corrections will not be used even if present
- Dual Frequency Glide mode requires RTK Fallback to also be enabled

### Benefits

Using Dual Frequency Glide allows the mojoRTK to operate without an RTK correction source.

### Limitations

Dual Frequency Glide has the following limitations:

- Glide can not be initiated until a GPS fix has been obtained on the mojoRTK console.
- Glide will cease to operate if the mojoRTK console loses GPS fix.
- Glide requires RTK Fallback to be enabled.

### Required Items

- Updated ME3 firmware (v3.610 B4 or later) does need to be installed via a USB stick for Glide to be enabled. Talk to your Value Added Reseller or Leica Geosystems representative about how to obtain the ME3 firmware.
- Unlock code to unlock the RTK Fallback (SP4 and higher) feature on the mojoRTK console. The unlock code will automatically be generated by Leica Geosystems for consoles purchased after 1 January 2009. For

consoles purchased before 1 January 2009, an unlock code can be purchased from Leica Geosystems.

- Value Added Resellers can obtain the unlock code directly from Leica or by logging onto [www.mojoRTK.com](http://www.mojoRTK.com) and viewing the information for the particular console which is uniquely identified by its serial number.
- Unlock code to unlock the Dual Frequency Glide (SP4.3 and higher) feature.
- Service Pack 4.3 or later software.

## ME3 upgrade procedure

(Once service pack 4 or later software has been installed the ME3)

- With the console turned off insert a USB with the ME3 firmware into the top USB port on the console.
- Turn on the console
- In the menu go to service -> upgrade gps and press OK
- The console will start to install the ME3 upgrade, this process will take around 5minutes
- DO NOT TURN OFF THE CONSOLE DURING THE UPGRADE
- Once the install is finished the screen should be green in colour with "upgrade complete" on the screen
- Turn off the console and remove the USB stick

## mojoRTK Configuration

### Installing the unlock codes manually on the mojoRTK console

- Start the mojoRTK console
- Press the OK button to enter the Menu
- Using the Main Dial, select Settings -> Extended Features -> Enter New Code
- Enter the 16 digit code by using the Main Dial to select the value for a digit and pressing OK or Escape to move backwards and forwards between digits
- Once all 16 characters are entered and checked press OK
- After the code has been accepted the Console will restart

### Installing the unlock codes using Virtual Wrench on the mojoRTK Console

- Start the mojoRTK console
- Press softkey 3 twice to bring up the Virtual Wrench connection screen
- Select Yes using the Main Dial and press the OK button to connect to Virtual Wrench
- Once connected the new unlock codes will be automatically downloaded and installed

- A message will then appear stating which unlock codes have been installed, press OK and the console will restart

## Dual Frequency Glide

To enable Dual Frequency Glide, press the **OK** button when on the navigation screen to bring up the main menu. Use the main dial to scroll down to Base Channel. Press the **OK** button to enter the Base Channel wizard. Use the main dial to select **Glide Only**. Press the **OK** button to enable Glide mode, the system will perform a restart. To switch back from Glide mode repeat the steps above but instead of selecting Glide select the desired correction source.

In Dual Frequency Glide mode the position will drift over time. This drift can be corrected for using the **Nudge Offset**.

**Note:** If guidance is being performed using the John Deere Greenstar™ 1 or 2 then the nudge function cannot be performed on the mojoRTK console. It must be performed on the Greenstar™.

## Nudge Offset

Nudge Offset provides the operator a mechanism to correct the drift that will occur while Glide is activated. To use the Nudge Offset press the Esc key repeatedly until the main screen is displayed. Press function 2 (the mojo button) and you are presented with the Nudge Offset menu.

Nudge Offset
Drive to the line and press Ok or use the main dial to nudge left and right 5cm.

Either drive to the line and press OK or tune the main dial left or right to nudge the vehicle left or right 5cm per click.