

Leica **mojo**MINI

Public Release Notes



Version 2.0.1216
English

- when it has to be **right**

Leica
Geosystems

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1

Introduction

General information

Leica Geosystems provides free of charge software updates for the Leica mojoMINI in order to provide customers with the best possible experience. This document describes the changes in the latest software release, how to use the new functionality and how to upgrade the software.

Current Version

- Leica mojoMINI version 2.0.1216
 - Released May 2012
-

Compatibility

This software is compatible with all Leica mojoMINI displays.

2

New functionality & key changes

Software

- Boundary and Speed Display in Night Mode (2.0.1216)
 - SBAS changes for EGNOS (2.0.1216)
 - Display Area Optimization (2.0.1210)
 - On Screen Speed Display (2.0.1210)
 - SBAS Activation Control (2.0.1210)
 - Data Export (2.0.1210)
 - Lightbar Mode (2.0.1210)
 - Record real time coverage map (2.0.1108)
 - Record a field boundary (2.0.1108)
 - Display total field area and treated area (2.0.1108)
 - Added antenna to flow point offset (2.0.1108)
 - Added option to continue last job after power cycle (2.0.1108)
 - Improved 3D visualisation on main navigation screen (2.0.1108)
 - Improved lightbar colours for increased readability in poor light conditions (2.0.1108)
 - Field overview displayed before continuing job (2.0.1108)
 - Record boundary or coverage without first setting a guideline (2.0.1108)
-

-
- Nudge to adjust for GPS position drift (2.0.1108)
-

2.1

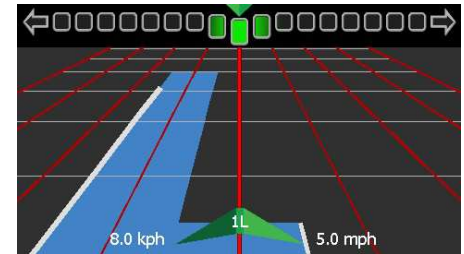
Boundary & Speed Display in Night Mode

Overview

The Boundary & Speed Display color has been changed to make them more visible when operating in night mode.

Night Time Display

When Night mode is enabled the color of the Boundary and Speed Display has been changed to White to make them more visible at night time. In daytime mode the color of these two items remain as black.



2.2

SBAS Changes for EGNOS

Overview

The Satellite Based Augmentation System (SBAS) for Europe which is called the European Geostationary Navigation Overlay Service (EGNOS) has recently changed satellites that their system is using. The tracking of these satellites has been updated in this version of software.



In addition to the above information, an SBAS configuration file can now be used and modified to allow for future changes in Satellites used by SBAS providers.

Refer to the [Leica mojoMINI Downloads page](#) on Virtual Wrench for further information.

2.3

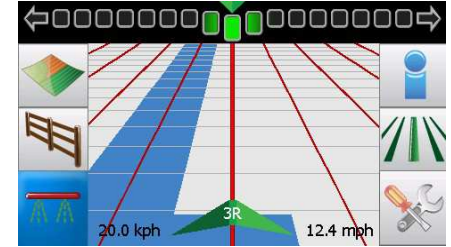
Display Area Optimization

Overview

Display Area Optimization allows the operator to see more of the field on the display. This is where the buttons on the main screen will disappear after 20 seconds to provide a better view of the field. The buttons will appear again after the display is tapped anywhere under the lightbar.

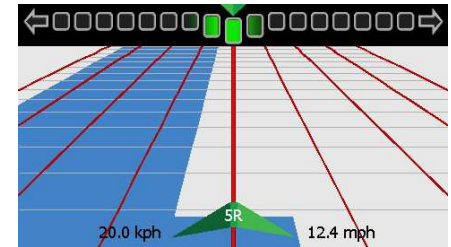
Normal Display

When menu items are being tapped the buttons on the display are visible as shown here.



Optimized Display

If the display hasn't been tapped for a period of 20 seconds the buttons disappear providing a larger view of the field until the display is touched again by the operator.



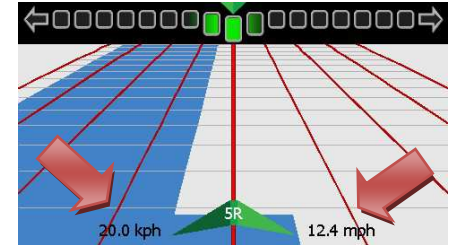
2.4 On Screen Speed Display

Overview

On Screen Speed Display displays the Speed of the machine on the main screen to assist customers in keeping a constant speed in applications like spraying.

Speed Display

Speed is displayed on the bottom of the display. It is displayed in both kilometres per hour (kph) and miles per hour (mph).




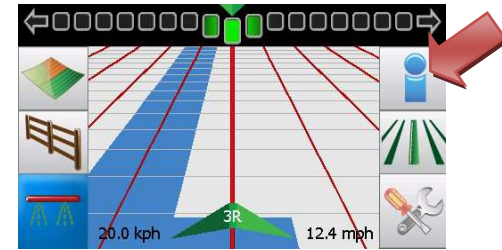
2.5 SBAS Activation Control

Overview

SBAS Activation Control allows the operator to turn SBAS (EGNOS/WAAS) On or Off for a particular region.

SBAS setup

Access the SBAS setup screen by tapping the **information**  button on the main display.



Tap the button that corresponds to your region. The region button once selected changes from being shaded to color to indicate which one is active.



Turns EGNOS **on** for Europe.



Turns WAAS **on** for North America.



Turns SBAS (EGNOS/WAAS) **off** for other regions that do not have access to SBAS.



2.6 Data Export

Overview

Data Export allows the operator to export the current Wayline, Boundary and Coverage as a KML file to the SD Card if inserted.

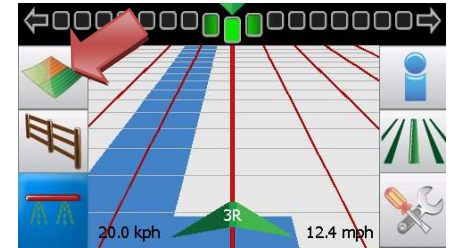



KML files can be viewed on a personal computer using Google Earth.

Data Export

The Data Export button is accessed by going into the "Continue last job" screen. This is done by tapping

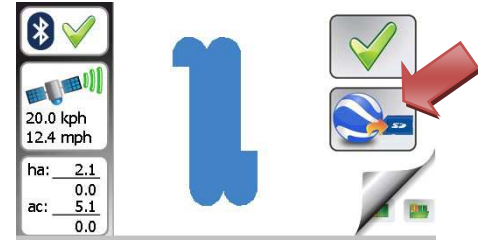
the **treatment**  button.



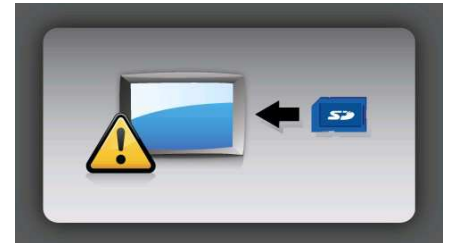
Tap the **continue last job**  button.



The display will show the current coverage map and boundary if created. Tap the **Export** button to export the job to the SD Card



If a SD Card is not inserted or the SD Card is corrupted an error screen will be displayed after the **export** button is tapped.




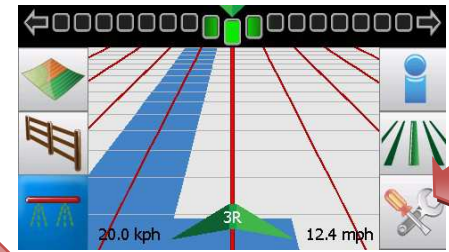
2.7 Lightbar Mode



Overview


Lightbar Mode allows the operator to select different lightbar options. Two options are available the current Leica Smart lightbar or the more conventional crosstrack only lightbar.

Lightbar setup

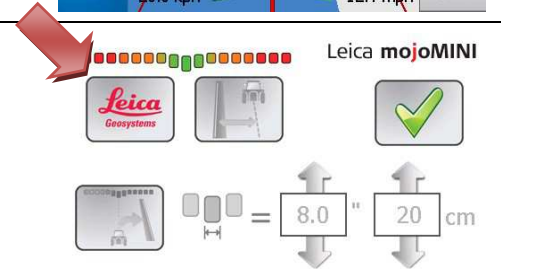
Tap the **setup**  button on the main display to enter the setup screen.



Tap  or  to select the type of lightbar required.

 Selects the existing **Leica Smart Lightbar**

 Selects the new **Crosstrack Only Lightbar**



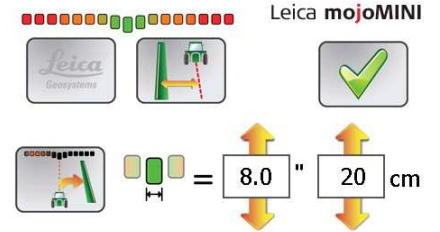
If the **Crosstrack Only Lightbar** is selected, two types of CrossTrack Only lightbar are possible by tapping the button in the bottom left of the screen.



Chase Mode Off





Chase Mode On

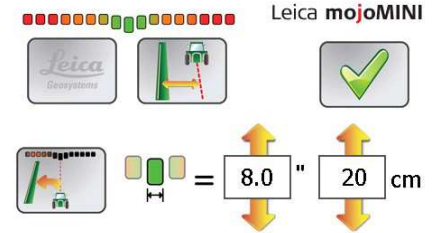


Chase Mode Off – Is where the lightbar represents the position of the vehicle relative to the line and to steer the vehicle onto the line you steer away from the light to **“pull”** the light to the line.



Chase Mode On – Is where the lightbar represents where the line is relative to where the vehicle is and to steer to the line you steer towards (**Chase**) the light.

For each **Crosstrack Only Lightbar** option you can select how much cross track error is displayed for each segment of the lightbar by tapping the up arrow  or the down arrow  on the metric or imperial measurement.



The Crosstrack Only Lightbar is adjustable between 0.4"/1cm to 8.0"/20cm per segment

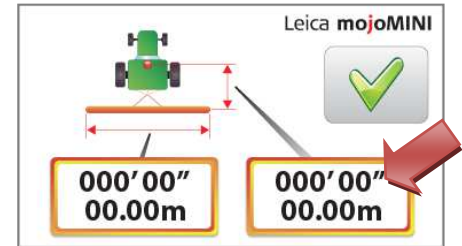
2.8 Record real time coverage map

Overview

Real time coverage allows the operator to see what areas of the field have been covered and which have not. This makes it easy to find where the vehicle left after a break and work can be resumed knowing there are no missed areas.

Vehicle setup

Accurate recording coverage requires the distance from the antenna to the application point on the vehicle to be entered.



Recording coverage

Start and stop recording coverage by tapping on the **coverage** button.



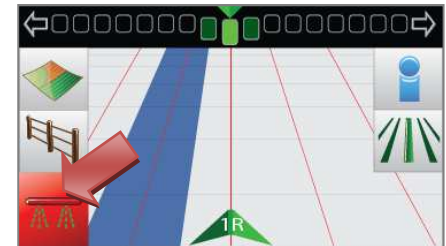
Coverage off.



Coverage on, but not recording due to vehicle speed.



Coverage on and recording.



2.9

Record a field boundary

Overview

By recording a field boundary the operator is able to determine accurately how much product is required for the field. This significantly reduces waste and problems related to disposal of excess.

Record boundary before starting guidance

Record a boundary or coverage before starting guidance by tapping on the **navigation** button.

If required, at any time tap the **guidance** button to return to the guidance type selection.



Record a boundary

Record a boundary by tapping on the **boundary** button, then select the recording point:



Left implement tip



Antenna point



Right implement tip

After driving around the field, close the boundary by tapping on the **close boundary** button.

When the boundary is closed the boundary overview and area information will be shown.

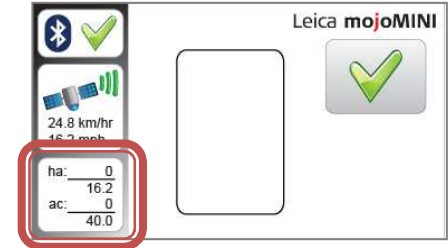
ha:	0
	16.2
ac:	0
	40.0

← Treated area (ha)

← Total field area (ha)

← Treated area (ac)

← Total field area (ac)



2.10

Continue last job

Overview

It is not always possible to complete a field without taking a break to fill up or stop for the night. The continue last field option allows the operator to pick up exactly where they left off. The field overview quickly gives the operator a reminder of the shape of the field and what areas have not been covered.

Continue last job

When taking a break from a job, if the mojoMINI is turned off, there will be an option to continue the last job when field guidance is started again.

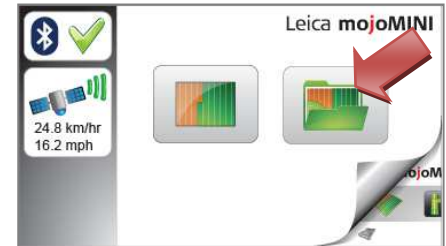


Clear all data and start a new job



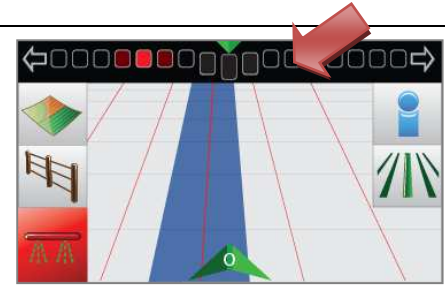
Load and continue last job

Before loading, an overview map of the last job is displayed along with the treated and total area values.

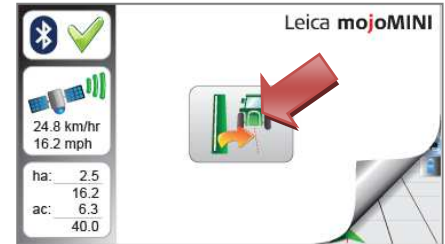


Adjust for GPS position drift

When continuing a job after a long period of absence it is possible that the GPS position may have drifted. Re-align the guidance and map data on the mojoMINI by tapping the **lightbar**.



Positioning the vehicle on a previously driven path and tap the **nudge** button.



3 Upgrading the Leica mojoMINI software

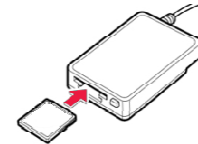
General information The mojoMINI field guidance software can be updated using the SD Card provided with the system. Download the latest software version from Virtual Wrench.

Prerequisites

- SD Card & SD Card reader
- mojoMINI upgrade files (download from www.virtualwrench.com)

Upgrade mojoMINI step-by-step

1. Insert SD Card in Card Reader.

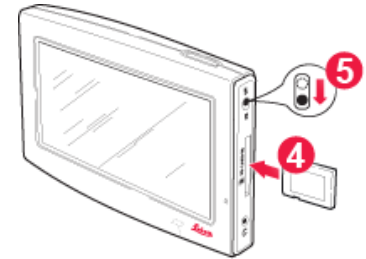



2. Unzip the mojoMINI upgrade files and copy them to the root directory of the SD Card. There should be two files, **explorer.atr** and **mojoMINI_vXXXX.exe** (where XXXX is the software version).




3. Remove the SD Card from the Card Reader.

4. Insert SD Card in mojoMINI.
5. Turn mojoMINI on using the slide switch.



6. If the files have been correctly loaded onto the SD Card the installer screen will be displayed. Tap  to install the upgrade



7. When the installer successfully completes tap  to restart the mojoMINI.



Leica Geosystems AG
Heinrich-Wild-Strasse
CH-9435 Heerbrugg
Switzerland
Phone: +41 71 727 31 31
www.leica-geosystems.com

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