

# **Translation of the Original Operator's Manual SMART GUIDE**

Visual Guidance System in SMART COMMAND

Article no.: 560884  
Version: EN 1.0  
September 2023  
SW version: 3.3.0.0.1056

Corresponds to Version DE 1.1

## Imprint

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Responsible party for the content and layout of this publication: Reichhardt GmbH Steuerungstechnik.

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# 1 General Information

These operating instructions describe the SMART GUIDE application in SMART COMMAND.

The SMART GUIDE operating instructions are part of the SMART COMMAND instruction manual.

The general information and safety notices in the SMART COMMAND instruction manual also apply to these operating instructions.

Read the notices in the SMART COMMAND instruction manual carefully and observe them.

The basic use and operation of SMART COMMAND is also detailed in the SMART COMMAND instruction manual.

## 1.1 Manufacturer's Data

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## 1.2 Product Information

SMART GUIDE is an application within SMART COMMAND that is used to cultivate fields.

It is designed to record field boundaries, create tracks, and set markers.

SMART GUIDE is also used to control and monitor the work process during automatic steering using SMART CONTROL.



## 2 Introduction to SMART GUIDE

The initial steps and prerequisites for using the SMART GUIDE application in SMART COMMAND are explained in the following.

The user interface and operating principles of individual displays, operating elements, and objects are also described.

### 2.1 Starting SMART GUIDE

In the application overview of SMART COMMAND, tap the SMART GUIDE symbol to start SMART GUIDE (see Fig. 1 – A).

If there is a shortcut on the sidebar, you can also use this to open the application (see Fig. 1 – B).

(More information about shortcuts is provided in the SMART COMMAND instruction manual.)

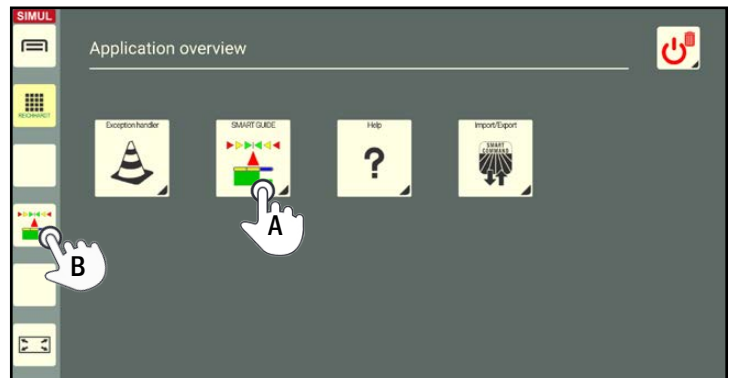


Fig. 1: Starting the SMART GUIDE application

The SMART GUIDE application then opens in the main window of SMART COMMAND (see Fig. 2).

If all of the prerequisites for using SMART GUIDE are met, a field with the machine combination and other operating elements are displayed (see Fig. 2).

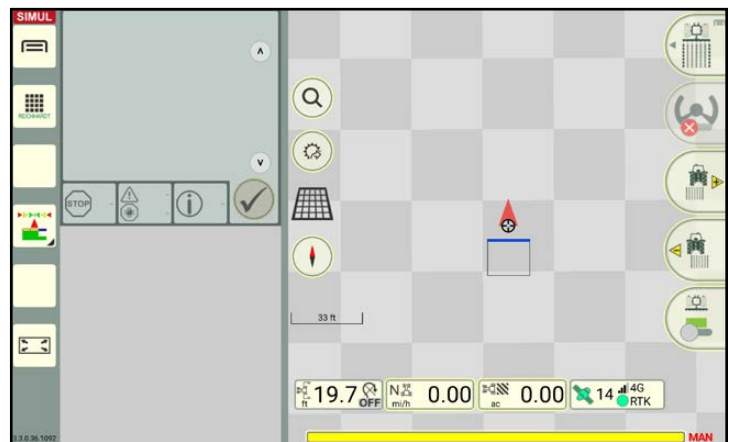


Fig. 2: SMART GUIDE in the main window of SMART COMMAND

## INTRODUCTION TO SMART GUIDE

### Starting SMART GUIDE

#### Not all of the prerequisites are met

If all of the prerequisites for using SMART GUIDE are not met, a dark gray background with notices about possible errors is displayed instead of the field and machine combination (see Fig. 3).

The prerequisites for using SMART GUIDE are explained in chapter 2.2.

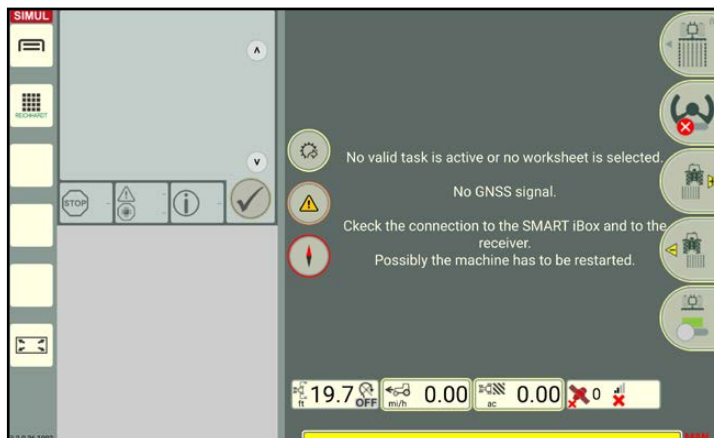


Fig. 3: Not all of the prerequisites for using SMART GUIDE are met

#### Using SMART GUIDE in full screen mode

You can have SMART GUIDE displayed in full screen mode.



To activate full screen mode, tap the full screen symbol on the left in the sidebar (see Fig. 2).



Tap the button again to exit full screen mode (see Fig. 4).

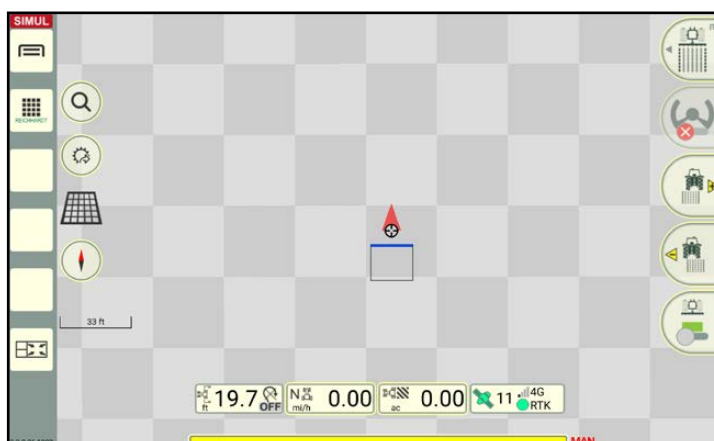


Fig. 4: SMART GUIDE in full screen mode

#### Using SMART GUIDE in a small window

##### NOTICE

SMART GUIDE can also be executed in a small window. Although the functions will be limited.

In these instructions, SMART GUIDE is only displayed in the SMART GUIDE main window.

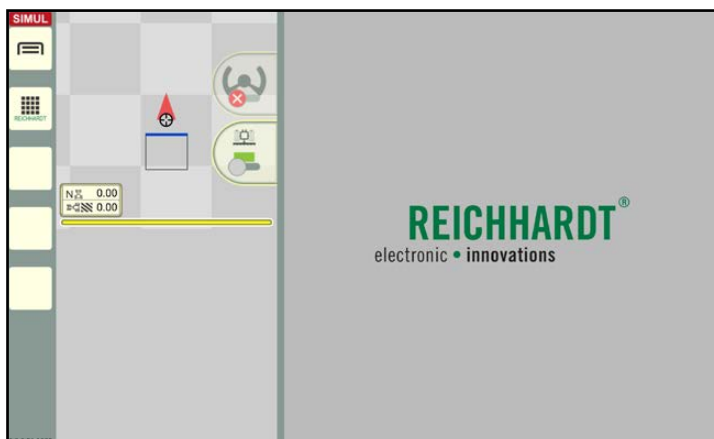


Fig. 5: SMART GUIDE in a small window of SMART COMMAND

Using simulation mode in these instructions

#### NOTICE

### SIMUL

SMART GUIDE was used and documented in simulation mode for these instructions.

This is why, in all of the figures, the simulation symbol is displayed in the top left of the sidebar instead of the operation mode (see Fig. 6).



To use SMART GUIDE it is necessary for machine combination mode to be active and to be able to see the black machine combination.

If the machine combination is displayed in red, then there is a configuration error.

SMART GUIDE will inform you which settings are missing.

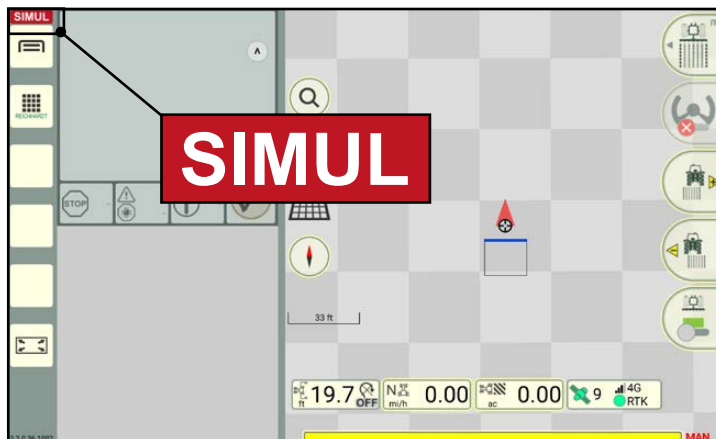


Fig. 6: SMART GUIDE in simulation mode

## 2.2 Prerequisites for Using SMART GUIDE

The following prerequisites must be met to use SMART GUIDE:

- If a SMART iBox is installed in the vehicle that is being used (only when using automatic steering SMART CONTROL), it must be configured beforehand (see chapter 2.2.1).
- A GNSS-compatible tractive unit (machine combination) must be selected (see chapter 2.2.2).
- A worksheet must either be selected or a task must be started (see chapter 2.2.3).

### 2.2.1 Configuring SMART iBox (only in SMART CONTROL)

#### NOTICE

You can skip this chapter, if the vehicle being used only uses SMART GUIDE and does not use the automatic steering system – SMART CONTROL.

#### NOTICE

Before configuring the SMART iBox, the initial setup and calibration of the SMART iBox must first be completed by Reichhardt Customer Service. Otherwise it will not be possible to implement the configuration described in the following.

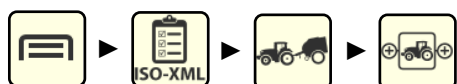
#### Opening the vehicle configuration

Open the list of machine combinations via the main menu (see Fig. 7).

When using the farm management menu:



When using ISO-XML mode:



Press and hold the machine combination (see Fig. 7).

Select the "Edit" option in the window that is displayed (see Fig. 8).



Fig. 7: Pressing and holding the machine combination

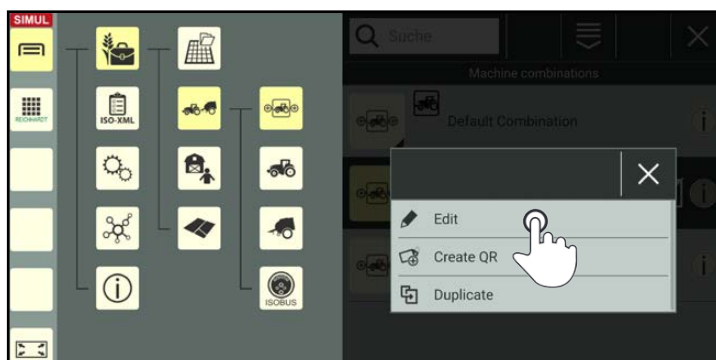


Fig. 8: Editing the machine combination



This will take you to the properties of the machine combination.

Tap the vehicle in the machine combination (see Fig. 9).



Fig. 9: Tapping the vehicle in the machine combination properties

Then open the vehicle properties (see Fig. 10).



Fig. 10: Vehicle properties open



First tap the gearwheel and then the vehicle configuration (see Fig. 11).

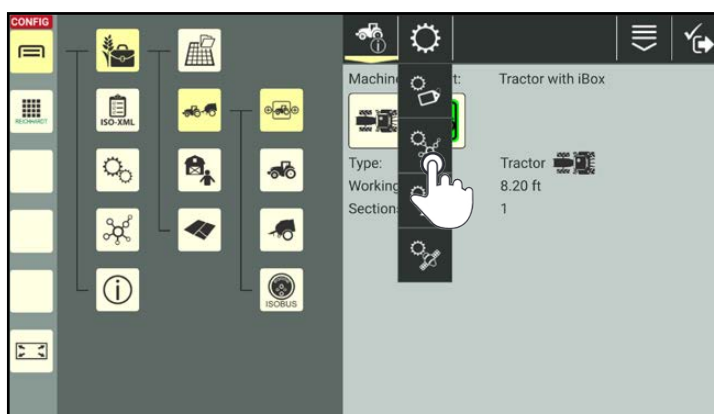


Fig. 11: Opening the vehicle configuration

### Activating the topology settings for SMART CONTROL



Open the topology settings by tapping the arrow (see Fig. 12).



Fig. 12: Opening topology in the vehicle configuration

Ensure that the checkbox after "SMART GUIDE" is selected. This is a prerequisite for being able to activate SMART CONTROL.

Then tap the checkbox after "SMART CONTROL" to also activate it (see Fig. 13).

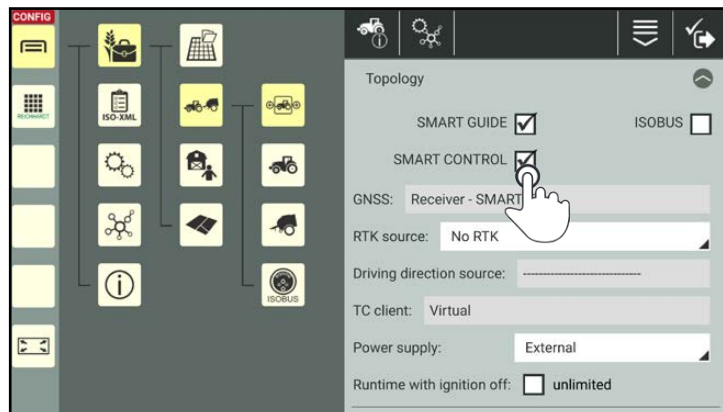


Fig. 13: Activating SMART CONTROL

The SMART iBox is then automatically pre-selected as the GNSS source (see Fig. 14).

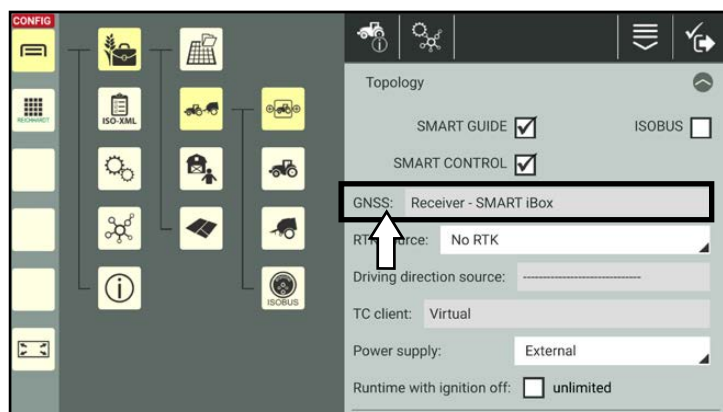


Fig. 14: SMART iBox is selected as the GNSS receiver

### SMART iBox settings

- Open the topology settings and the SMART iBox settings (see Fig. 15).

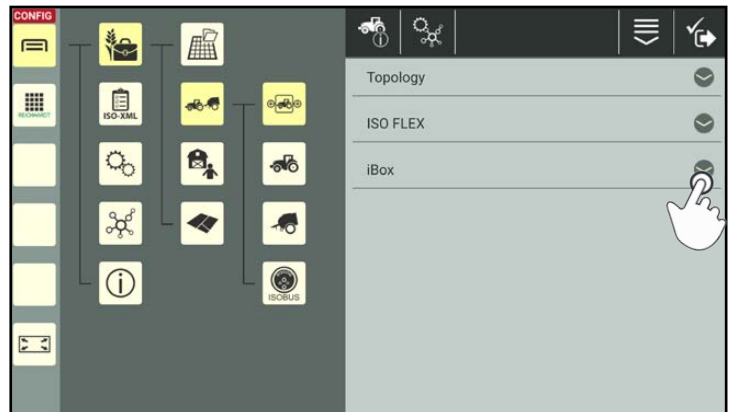


Fig. 15: Opening the SMART iBox settings

- Transfer the serial number of the connected SMART iBox by tapping the arrow symbol (see Fig. 16).

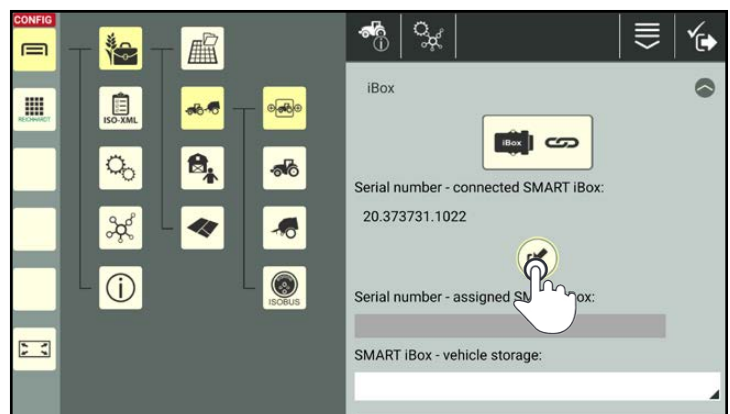


Fig. 16: Transferring the serial number

Confirm the prompt with "Yes" to confirm that it is the SMART iBox that is being used in the vehicle (see Fig. 17).

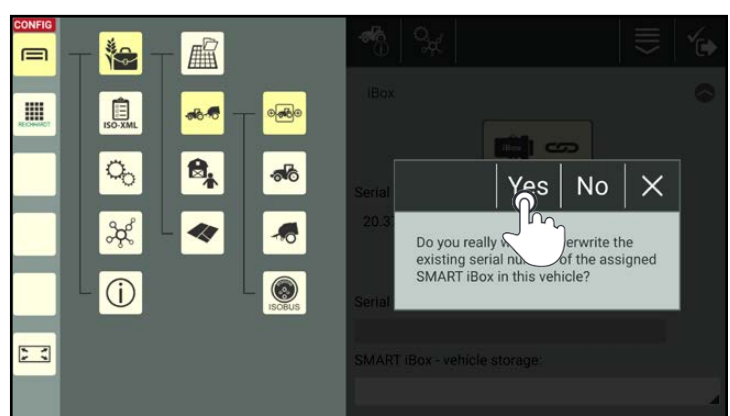


Fig. 17: Confirming the prompt

## INTRODUCTION TO SMART GUIDE

### Prerequisites for Using SMART GUIDE

Once the serial number has been transferred successfully, it is then displayed in the grayed out box (see Fig. 18).

A green checkmark also confirm the successful transfer.



Fig. 18: Transferred serial number

Then select the suitable vehicle storage for the vehicle from the selection list (see Fig. 19).

#### NOTICE

The vehicle code and storage is machine-dependent and is assigned by Customer Services.

Only select the storage that has been created for the vehicle being used.



Fig. 19: Selecting the vehicle storage

### Saving settings



Tap the checkmark to the right of the header twice to save the settings and first return to the machine combination properties and then to the list of machine combinations (see Fig. 20).

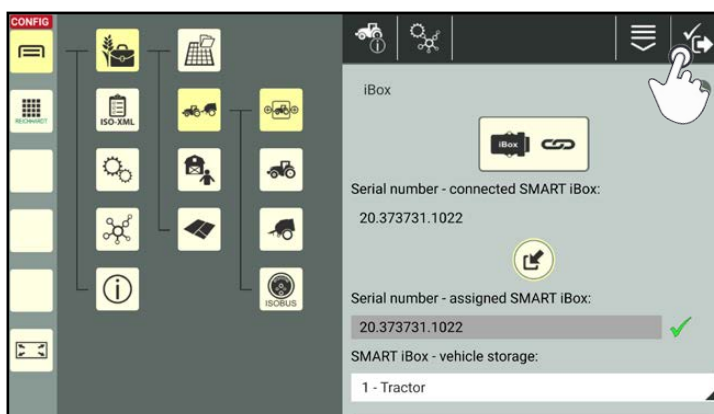


Fig. 20: Saving changes

## 2.2.2 Selecting the Machine Combination

### Opening the list of machine combinations

If no machine combination is selected or no GNSS source is set for the vehicle, corresponding notices are displayed in the user interface of SMART GUIDE.

The working mode indicator also flashes with a red outline (see Fig. 21).

(If various prerequisites are not met, the working mode indicator can also display a warning triangle.

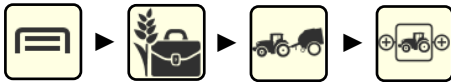
More information about the working mode indicator is provided in chapter 2.4.2.4.)



From the working mode indicator select the machine combination symbol to access the list of machine combinations (see Fig. 22).

Alternatively, you can open the list of machine combinations via the main menu.

When using the farm management menu:



When using ISO-XML mode:

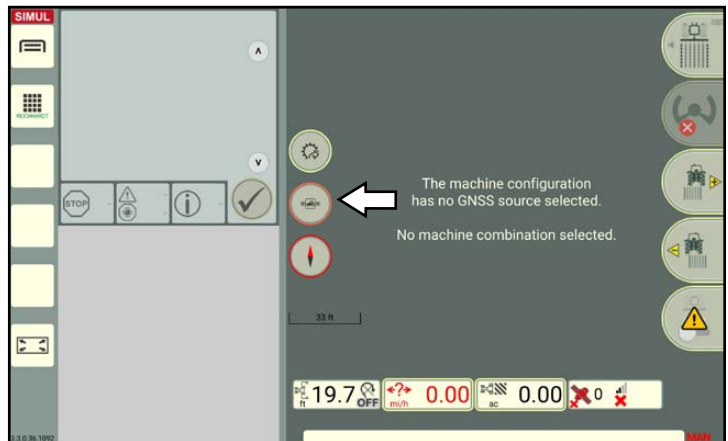
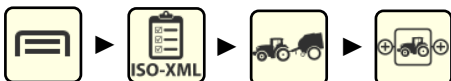


Fig. 21: Working mode indicator including notice regarding the selection of a machine combination in SMART GUIDE

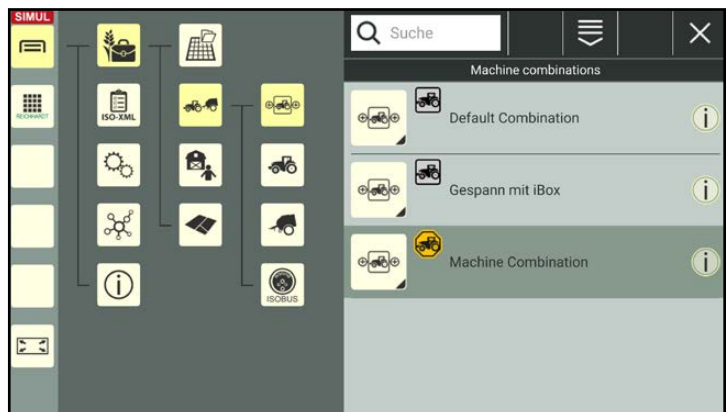


Fig. 22: List of machine combinations

### Selecting the machine combination

Tap the required machine combination to select it for field marking (see Fig. 23).

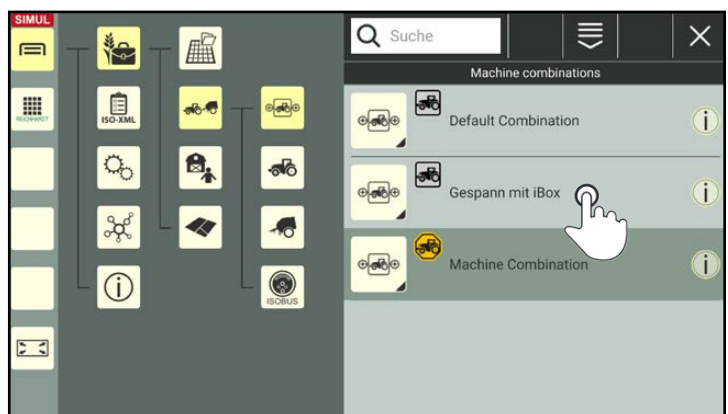


Fig. 23: Selecting the machine combination in the list of machine combinations

## INTRODUCTION TO SMART GUIDE

### Prerequisites for Using SMART GUIDE



The machine combination is selected and ready for operation when the list entry is displayed in black and a checkmark is displayed on the right (see Fig. 24).

If the machine combination is displayed in dark gray (see Fig. 23), it is selected but there is a configuration error.



Fig. 24: Machine combination selected

A default combination is created as standard.



If you would like to use a different machine combination, you can create it by tapping the plus symbol in the marking options and then select it (see Fig. 25).



Detailed information on creating or editing a machine combination is provided in the SMART COMMAND instruction manual.

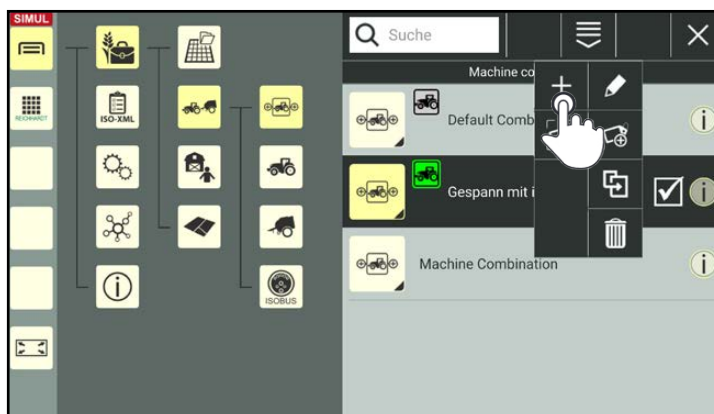


Fig. 25: Adding a machine combination

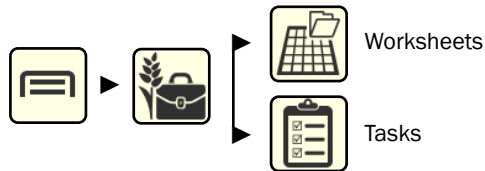


## 2.2.3 Selecting a Worksheet or Activating a Task

### Opening task management

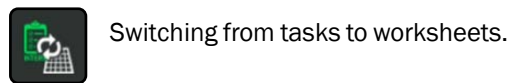
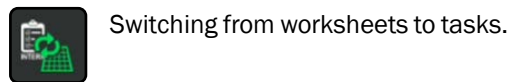
Open task management via the main menu to select a worksheet or activate a task.

Using the farm management menu:



The menu item of the currently selected working mode (worksheet mode or task mode) is displayed in the main menu. The corresponding list is displayed by tapping (see Fig. 26).

Tap the button in the header of the relevant list to change the mode, if required:



Using ISO-XML mode:



In ISO-XML mode, task mode is always displayed with the task list (see Fig. 27). Worksheets are not available in ISO-XML mode.

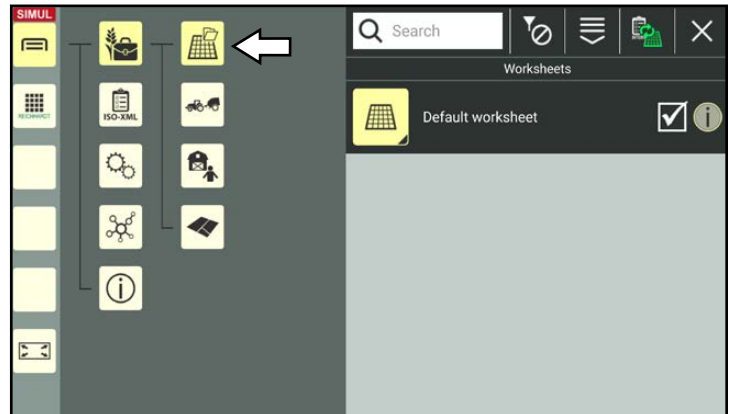


Fig. 26: Opening task management in the farm management menu (worksheets active)

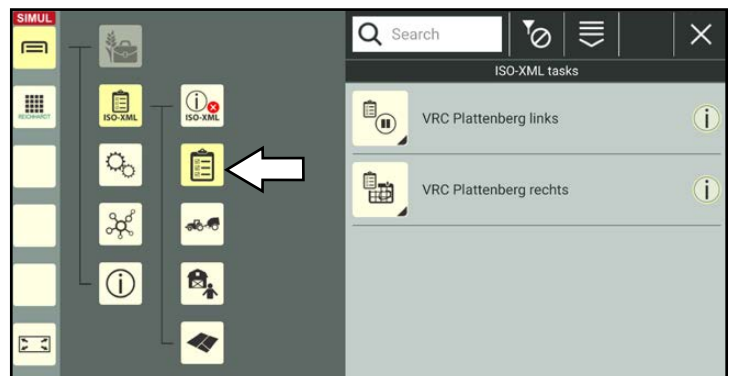


Fig. 27: Opening tasks in ISO XML mode

## INTRODUCTION TO SMART GUIDE

### Prerequisites for Using SMART GUIDE

### Selecting a worksheet

If you are in worksheet mode, a worksheet is selected automatically.

A default worksheet is created as standard.



If you would like to use a new worksheet, you can create it by tapping the plus symbol in the marking options and then select it (see Fig. 28).



#### NOTICE

Creating an individual worksheet for each field is recommended because if distances between objects on a worksheet are too large this can result in inaccuracies.

Tap the worksheet, you wish to select for field marking (see Fig. 29).

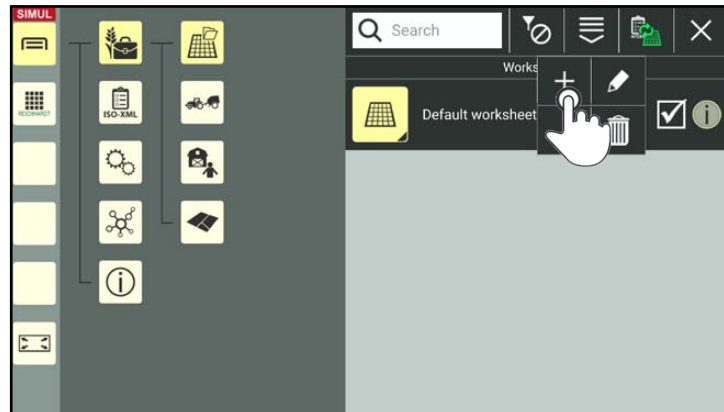


Fig. 28: Creating a worksheet

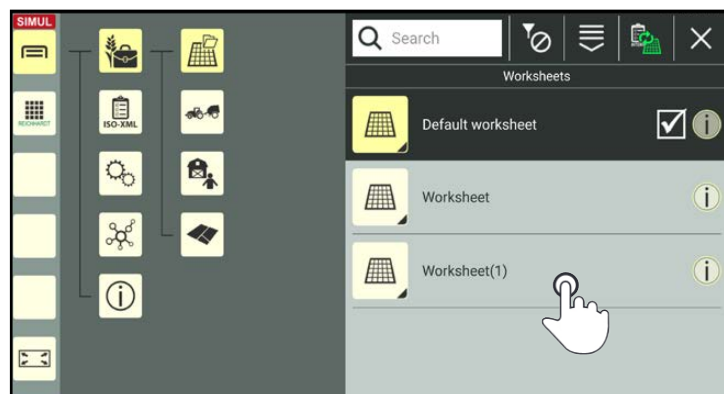


Fig. 29: Selecting a worksheet



The selected worksheet is displayed in black and marked with a checkmark (see Fig. 30).

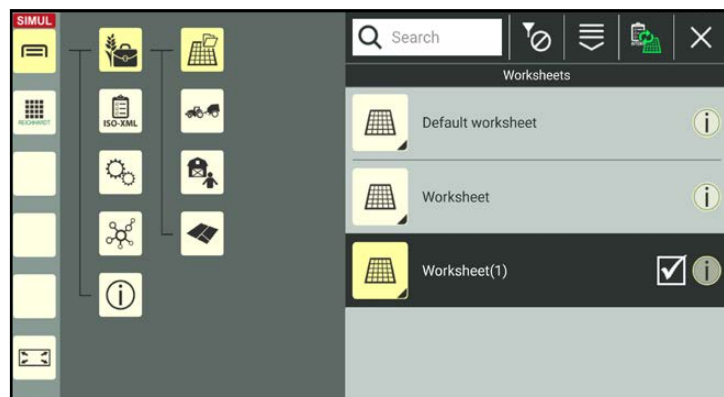


Fig. 30: Worksheet selected and marked



### Selecting and activating a task



If you would like to use a new task, you can create it by tapping the plus symbol in the marking options and then select it (see Fig. 31).

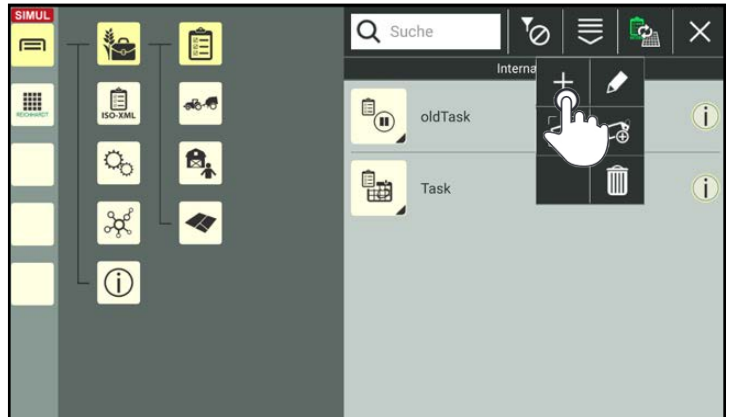


Fig. 31: Adding a task

Press and hold the required task in the task list (see Fig. 32).

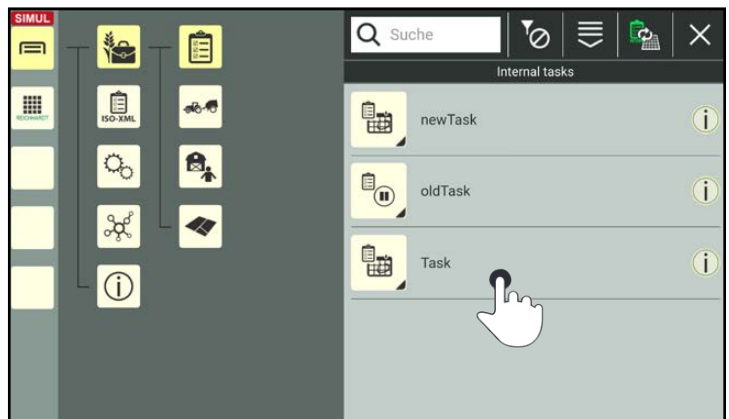


Fig. 32: Selecting a task

In the menu that is displayed, tap "Change task status" (see Fig. 33).

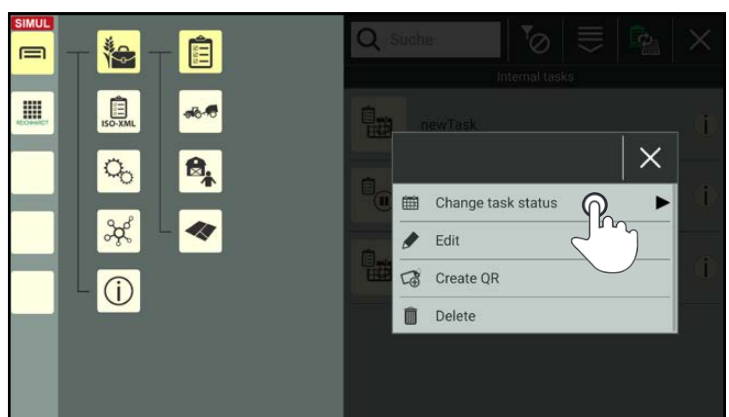


Fig. 33: Changing the tasks status

## INTRODUCTION TO SMART GUIDE

### Prerequisites for Using SMART GUIDE

Tap the option "Active" to activate the task (see Fig. 34).

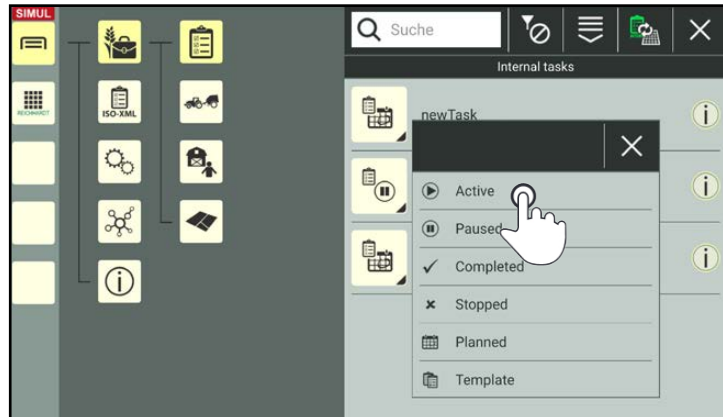


Fig. 34: Activating a task

### Task mode selected but no task active

If you are using task mode but have not activated a task, a corresponding notice is displayed in the user interface of SMART GUIDE. The working mode indicator also flashes with a red outline (see Fig. 35).



Tap the working mode indicator to access the task list.

(If various prerequisites are not met, the working mode indicator can also display a warning triangle.

More information about the working mode indicator is provided in chapter 2.4.2.4.)

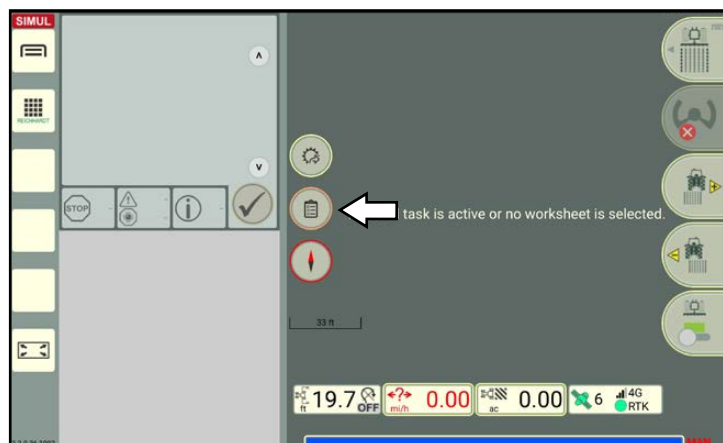


Fig. 35: Working mode indicator including notice regarding the selection of a task in SMART GUIDE

## 2.2.4 All prerequisites Are Met

After selecting a GNSS-enabled machine combination and selecting a worksheet or activating a task, the SMART GUIDE user interface and machine combination are displayed (see Fig. 36).

The working mode indicator shows the selected working mode.

The preparations for working with SMART GUIDE have now been completed.

You can now start working in SMART GUIDE.

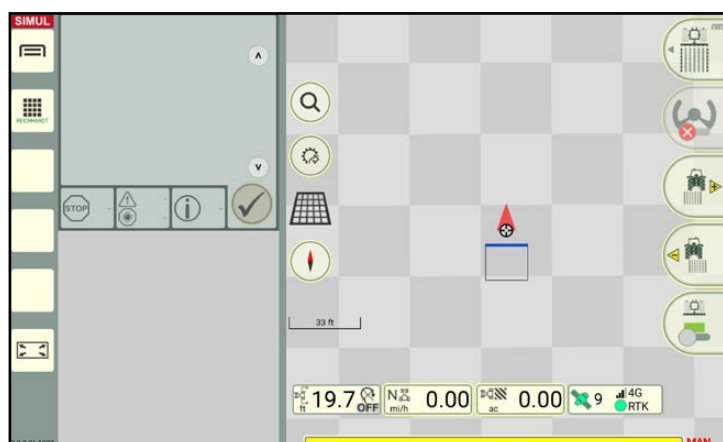


Fig. 36: SMART GUIDE available

## 2.3 Prerequisites for Using the RDU3 Steering Motor with SMART GUIDE

### NOTICE

You can skip this chapter, if the vehicle being used does not have a RDU3 steering motor.

To be able to use SMART CONTROL automatic steering with an RDU3 steering motor in SMART GUIDE, the following prerequisites must be met:

- A machine combination and vehicle (see chapter 2.2.2) must be selected, ensuring that the SMART iBox has been configured (see chapter 2.2.1) and a corresponding vehicle storage, that is designed for a vehicle with an RDU3, has been selected in the SMART iBox settings (see Fig. 37).
- The RDU3 must be calibrated.

The calibration of the RDU3 steering motor is explained in the following.

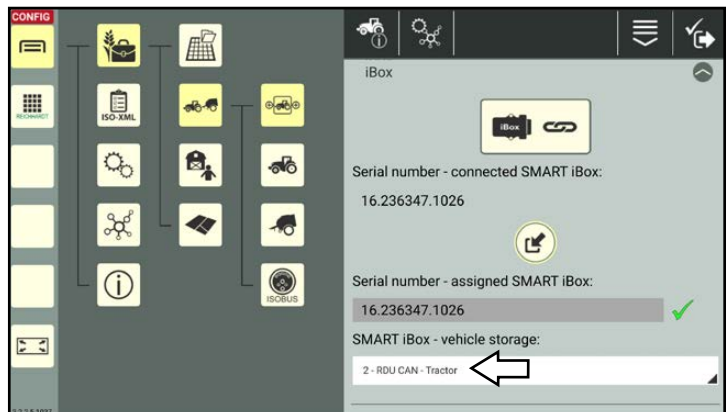
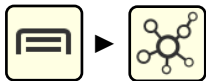


Fig. 37: Vehicle storage of RDU tractor selected

### Opening the RDU3 configuration in the SMART COMMAND configuration

Open the SMART COMMAND configuration via the main menu:



Tap the steering motor symbol in the SMART COMMAND configuration (see Fig. 38).

### NOTICE

You may have to deselect the machine combination in the list of machine combinations by tapping it and then select it again so that the steering motor is displayed in the SMART COMMAND configuration.

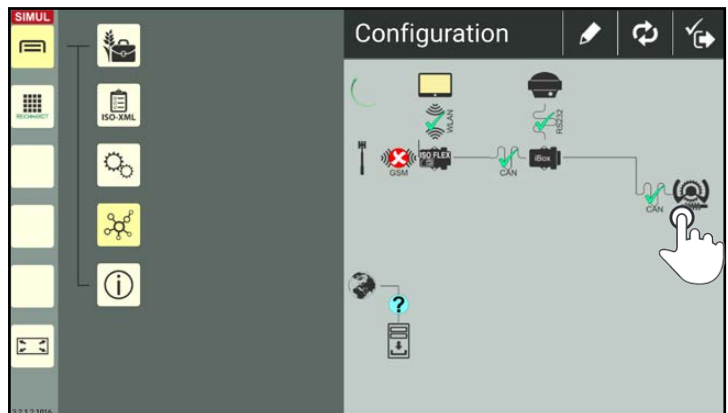


Fig. 38: Opening the RDU3 configuration

## INTRODUCTION TO SMART GUIDE

### Prerequisites for Using the RDU3 Steering Motor with SMART GUIDE

The RDU3 configuration will then open (see Fig. 39).

This will provide information about the following steering motor data:

- SW no.: Software version
- HW no.: Hardware version
- S/N: Serial number
- Operation hours
- Steering ratio

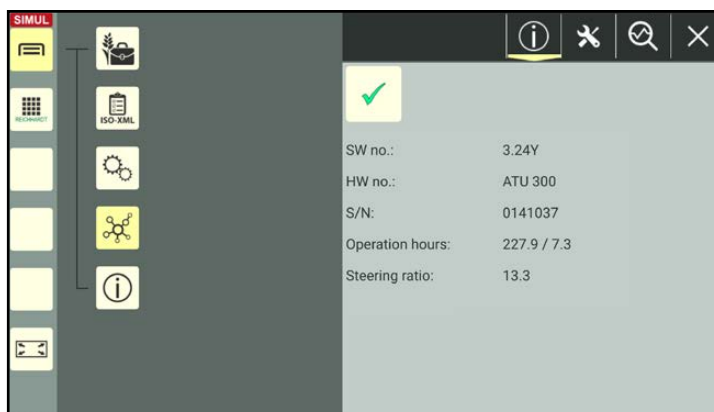


Fig. 39: RDU3 data

### Opening the calibration menu



In the RDU3 configuration, tap the tool symbol to open the calibration menu (see Fig. 40).

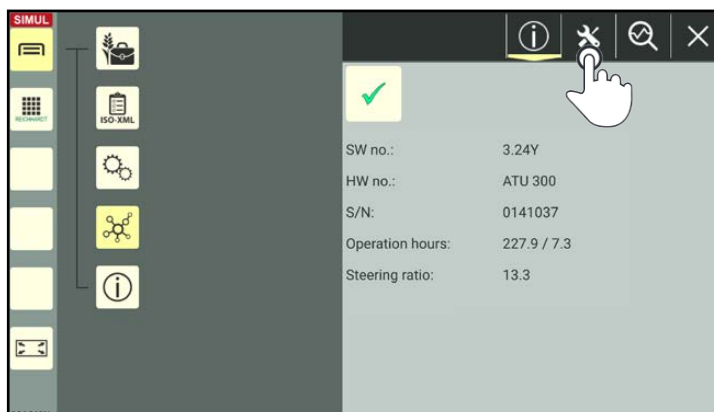


Fig. 40: Opening the calibration

### Starting the calibration

#### NOTICE

The following prerequisites must be met to complete the calibration:

- You require a free area that is 330 ft (100 m) long and 30 ft (10 m) wide.
- The speed of the vehicle must continuously remain at 2.8 to 5 mph (4.5 to 8 km/h) until the end of the calibration.

Tap the "Start" button to start the calibration (see Fig. 41).

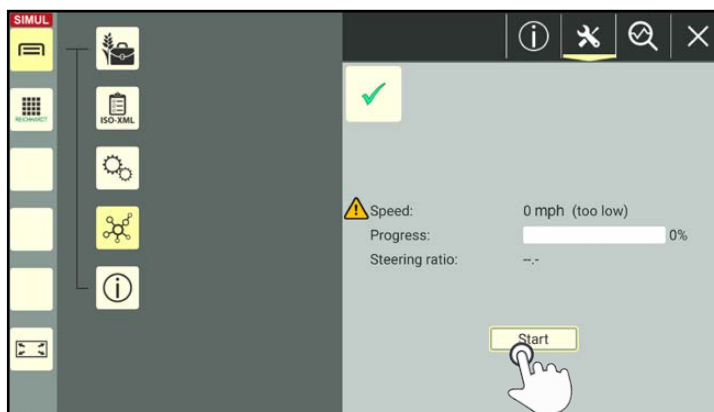


Fig. 41: Starting the calibration

A notice is then displayed detailing the specifications for the calibration process (see Fig. 42).

#### NOTICE

If the speed falls below or exceeds the required speed while driving, the calibration will be aborted and must be restarted.

Then press the activation switch in the vehicle to activate automatic steering (activation switch on steering motor or externally installed activation switch).

The calibration process is then started (see Fig. 43).

The progress of the calibration and current speed are displayed during the calibration. The dialog box "Calibration running" also indicates that a calibration is in progress.

#### NOTICE

If the steering wheel is touched, the calibration will be aborted and must be completed again.

During the calibration, only touch the steering wheel in exceptional circumstances, for example, if the area is not big enough or if an obstacle is in the way.

If the speed falls below or exceeds the required speed, a warning triangle is displayed next to the speed.

Adjust your speed until the warning triangle disappears (see Fig. 44).

The calibration is then restarted.

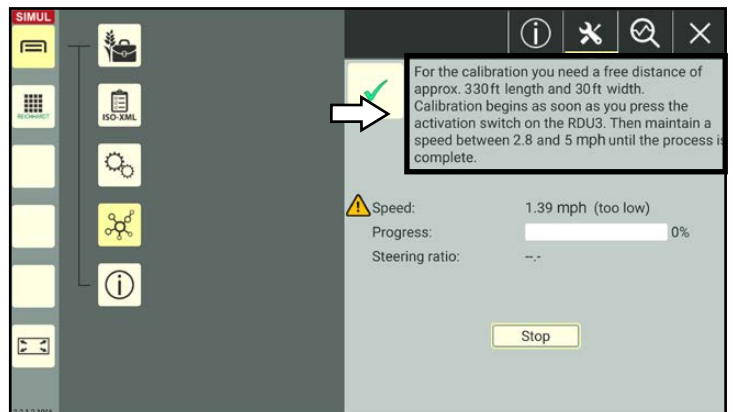


Fig. 42: Notice about the calibration

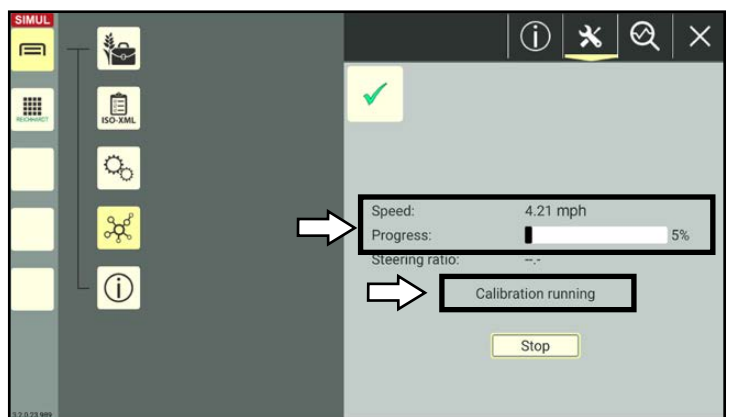


Fig. 43: Calibration in progress, display of the speed and progress

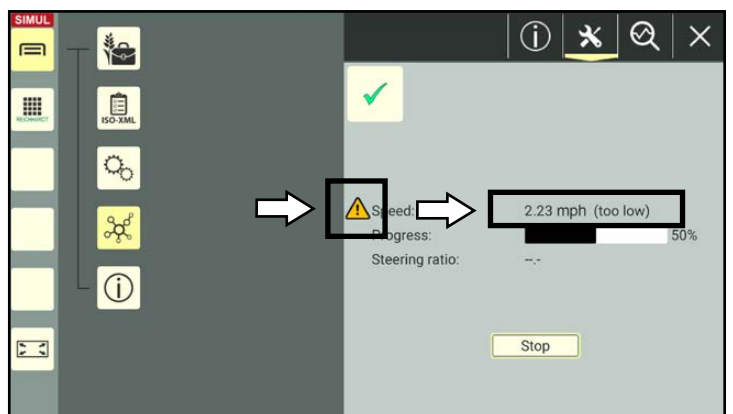


Fig. 44: Warning triangle: The speed is too high for the calibration

## INTRODUCTION TO SMART GUIDE

Prerequisites for Using the RDU3 Steering Motor with SMART GUIDE

### Stopping the calibration

If you would like to stop the current calibration, you can either move the steering wheel or tap the "Stop" button (see Fig. 45).

If you would then like to start a new calibration, tap the "Start" button again.

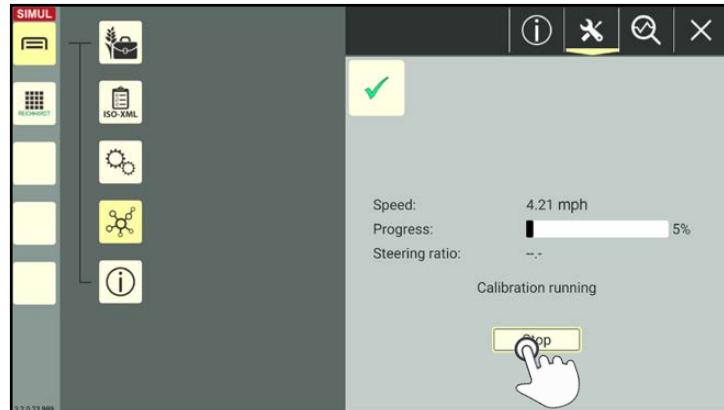


Fig. 45: Stopping the calibration

### Finishing the calibration

The calibration is finished as soon as the progress reaches 100 % and the "Calibration finished" dialog box is displayed.

A value for the steering ratio is displayed (see Fig. 46).

Tap "OK" to finish the calibration.

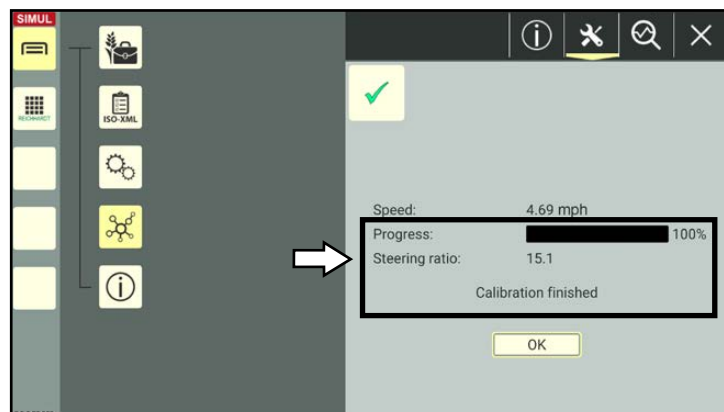


Fig. 46: Progress at 100 %: The calibration is finished.

## 2.4 User Interface of SMART GUIDE

The user interface of SMART GUIDE shows a map with a machine combination in the field. Operating elements, status displays, and field elements are also displayed. These are explained in the following.

### 2.4.1 Object Overview

#### Operating elements and status displays

SMART GUIDE displays, amongst other things, the operating elements and status displays shown in Fig. 47. These can vary depending on the settings and system status.

Operating elements and status displays are explained in chapter 2.4.2.

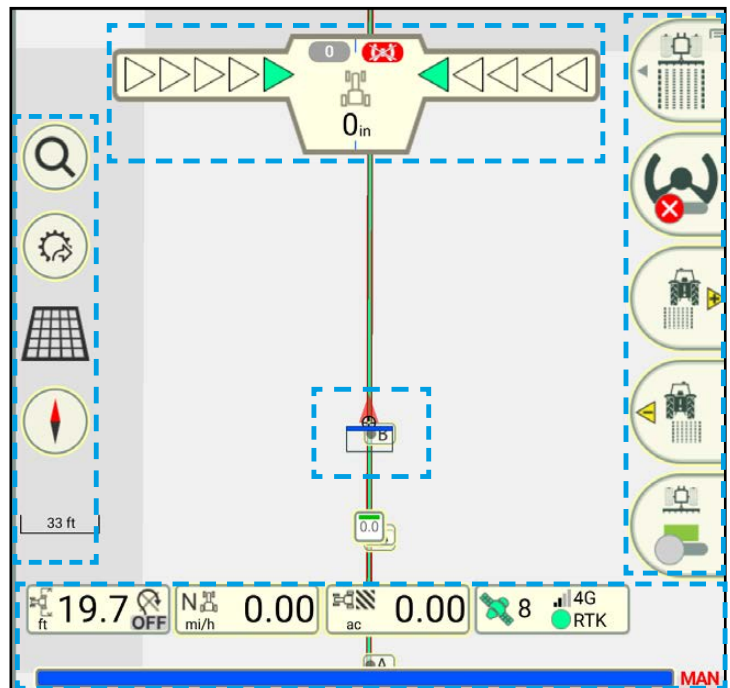


Fig. 47: Operating elements and status displays



### Field elements – boundary lines

Boundary lines are displayed in different ways in SMART GUIDE:

- Open and not active (see Fig. 48),
- Closed and active (see Fig. 49).

The display of boundary lines is explained in more detail in chapter 2.4.3.

The creation and editing of boundary lines are explained in chapter 3.2.

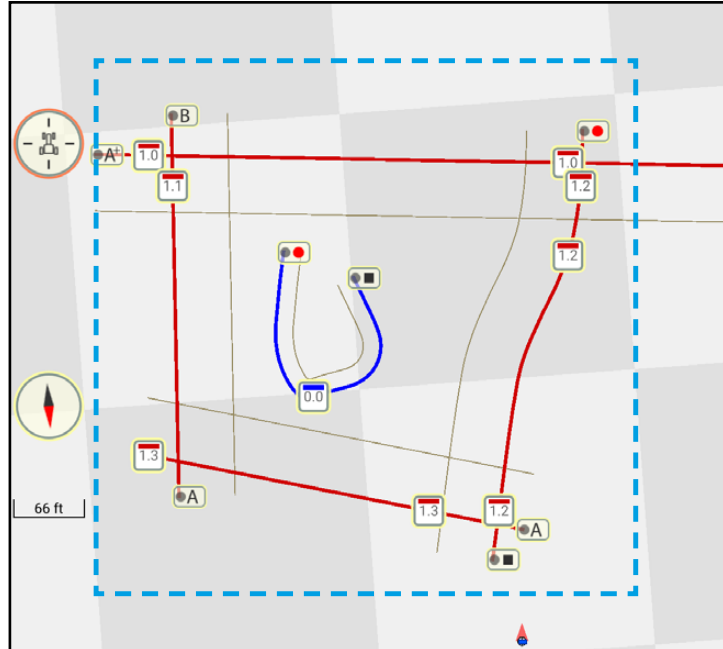


Fig. 48: Boundary lines open and not active

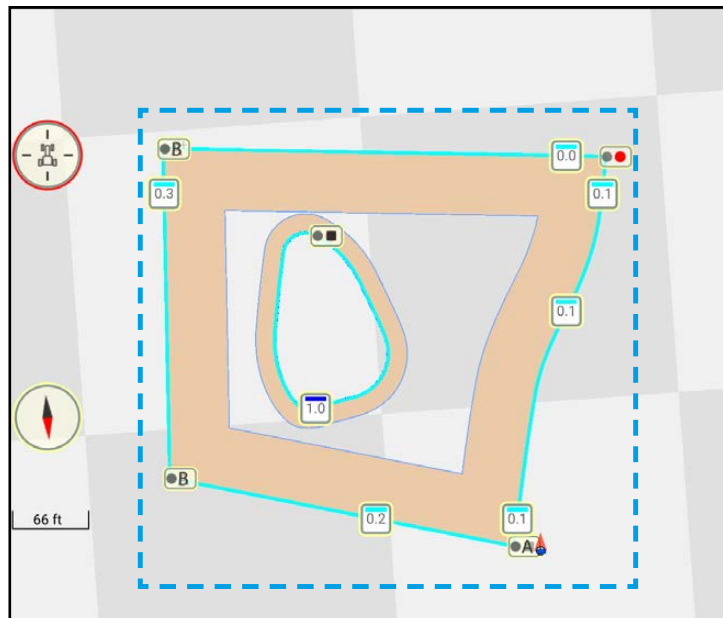


Fig. 49: Boundary lines closed and active



### Field elements – reference tracks and track patterns

Different track patterns based on a reference track can be created in SMART GUIDE (see Fig. 51).

The display of reference tracks and track patterns is explained in more detail in chapter 2.4.4.

The creation, editing and use of reference tracks and track patterns are explained in chapter 3.1.

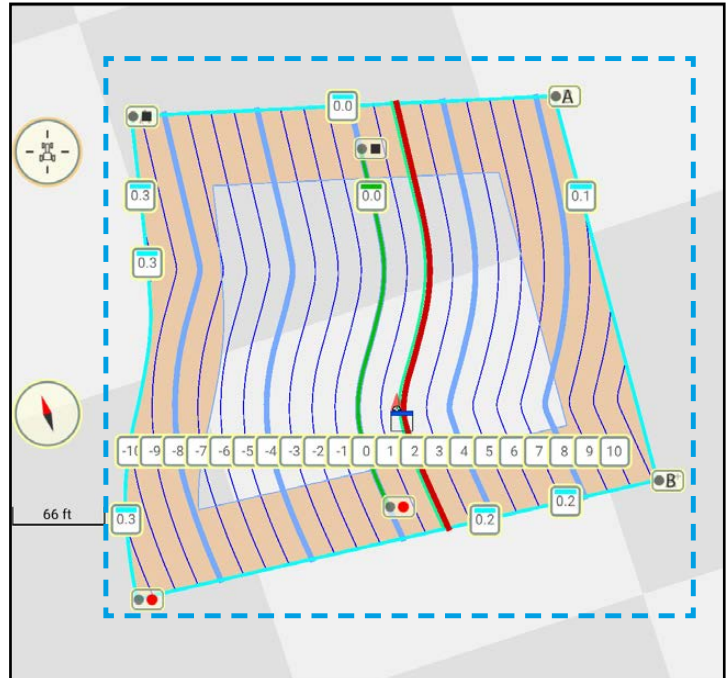


Fig. 50: Reference track with track pattern

### Field elements – markers

In SMART GUIDE there are different symbols for markers in the field (see Fig. 51).

The display of markers is explained in more detail in chapter 2.4.5.

The creation and editing are explained in chapter 3.3.

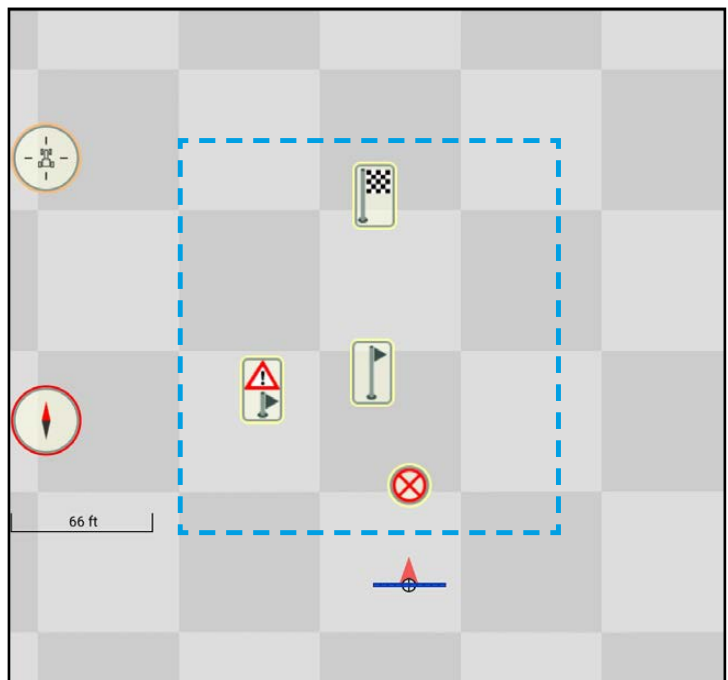


Fig. 51: Markers

## 2.4.2 Operating Elements and Status Displays

The following provides an explanation of the individual elements in the user interface of SMART GUIDE (see Fig. 52).

- ① Guide bar (see chapter 2.4.2.1)
- ② Zoom options in the map view (see chapter 2.4.2.2)
- ③ Quick access (see chapter 2.4.2.3)
- ④ Working mode indicator (see chapter 2.4.2.4)
- ⑤ Compass (see chapter 2.4.2.5)
- ⑥ Scale (see chapter 2.4.2.6)
- ⑦ Status bar (see chapter 2.4.2.7)
- ⑧ Section status (see chapter 2.4.2.7)
- ⑨ Machine combination overview including section status (see chapter 2.4.2.7)
- ⑩ Field marking menu (see chapter 2.4.2.7)

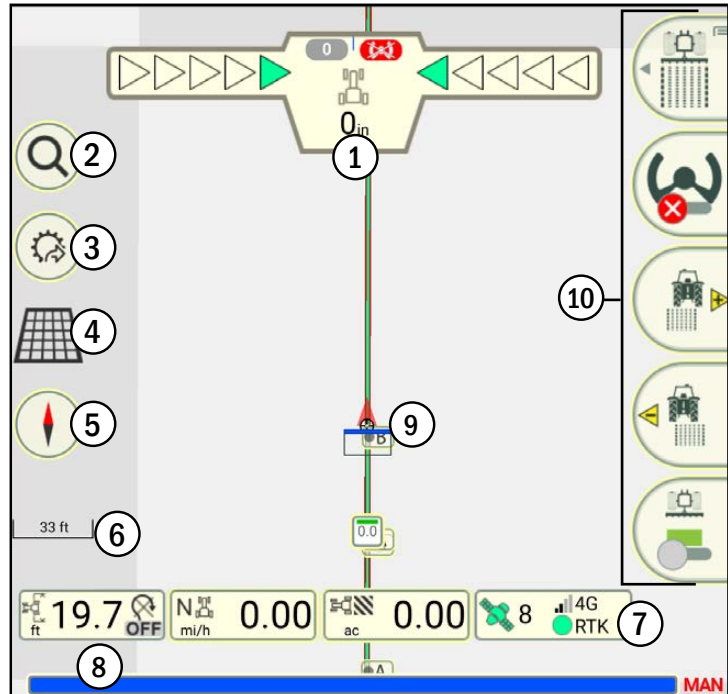


Fig. 52: Operating elements and status displays in SMART GUIDE

### Difference between operating elements and status displays

Example	Function	Explanation
	Display	Elements, that are only for display purposes, either do not have a frame or have a gray frame.
	Operating element: Tap	Elements, that can be tapped to execute a function, either have a yellow, red, or red flashing frame in addition to a gray frame.
	Operating element: Press and hold, or tap	If an element has a long press function, that is executed by pressing and holding it, this is indicated by black triangle in the bottom right corner.

## 2.4.2.1 Guide Bar

### NOTICE

The guide bar is only displayed if you

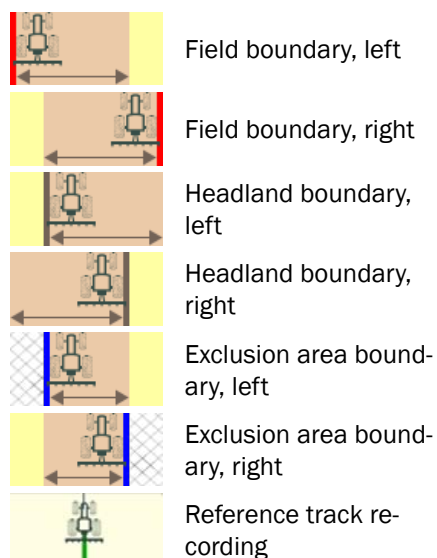
- Record a track pattern in reference track recording mode (see chapter 3.1.1);
- Create boundary lines in boundary line recording mode (see chapter 3.2);
- In field marking mode, use a worksheet or task with a linked field in which a track pattern has already been created (see chapter 3.1.3).

Activation of field marking mode and the various recording modes is explained in chapter 2.4.2.10.1 and chapter 2.4.2.10.2.

### Guide bar in reference track and boundary line recording mode

In the recording modes, the guide bar contains the following information (see Fig. 53 and Fig. 54):

Ⓐ Type of recording;



Ⓑ Headland width:

Ⓒ A red flashing recording point during an ongoing recording of a boundary line or reference track (AB, A<sup>+</sup>, contour).

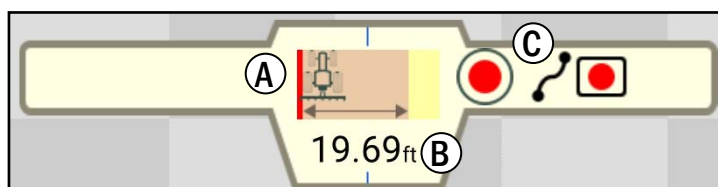


Fig. 53: Guide bar during ongoing boundary line recording (left field boundary)

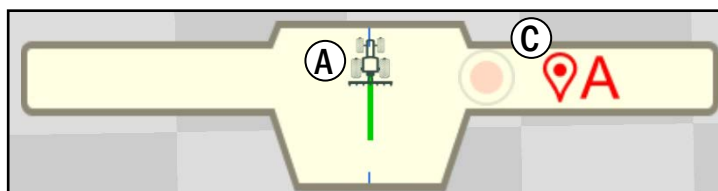


Fig. 54: Guide bar during ongoing reference track recording (AB)

### Guide bar in field marking mode

In field marking mode, the guide bar is designed to display the target track (track of the tractive unit; also see chapter 2.4.4) and the deviation from this track.

The guide bar is hidden if no track is active.

The guide bar contains the following information (see Fig. 55):

- (A)** Active track number
- (B)** Display of the steering status (automatic steering SMART CONTROL):  
 Red = Steering not possible  
 Gray = Steering not in progress  
 Green = Steering in progress
- (C)** LED- arrows indicate deviation from target track  
 Green = Vehicle is roughly on the target track  
 Yellow/red = vehicle is deviating slightly/a lot from the target track
- (D)** Deviation from the target track/track offset (in cm)
- (E)** Shows the direction of the deviation in relation to the target track and the angle of deviation. (A maximum deviation of 90° in the field is illustrated in the guide bar by a tractor rotated by max. 45°.)

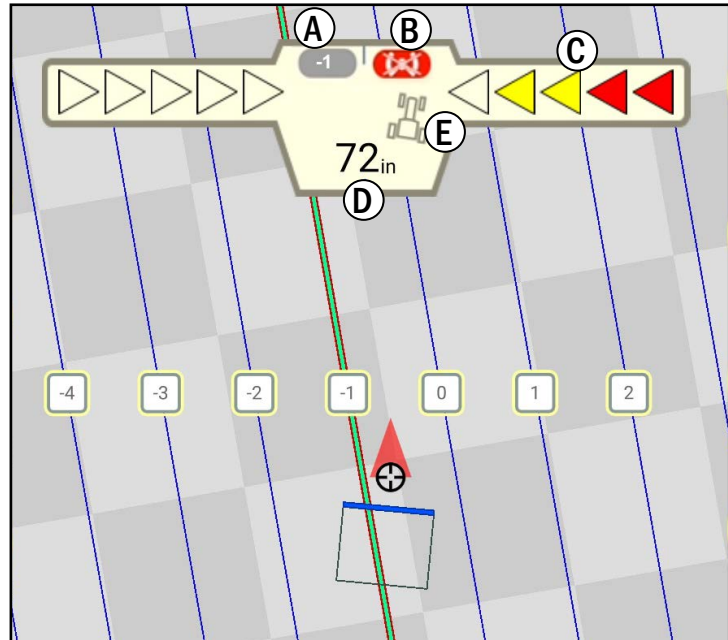














Fig. 55: Guide bar with active track pattern

### 2.4.2.2 Zoom Options in the Map View




Symbol	Description/submenus
	Tapping the magnifying glass will open the following zoom options:
	This zoom option is designed to center the machine combination (red arrow on the map), for example, after the map has been moved. The zoom level after the centering process equates to the basic zoom defined in the settings (see chapter 6.3.1). You can manually zoom in and out of the worksheet by moving your fingers together and apart.
	If the worksheet or the field linked to the task contains an active field boundary, it is displayed in full after tapping the button. The button is grayed out if there is no active field.
	All of the recorded field boundaries and other objects (markers, track patterns, etc.) on this worksheet or in the field linked to the task, are displayed. The button is grayed out if this is not possible, for example, if there is no object on the worksheet yet.

### 2.4.2.3 Quick Access

Symbol	Description/submenus
	Frequently required menus in SMART COMMAND are opened via the quick access buttons:
	Opens the section control settings for the selected machine combination in the main menu (see chapter 4.3).
	Opens the SMART TURN settings for the selected machine combination (see chapter 5.1).
	Opens the steering settings for SMART CONTROL in the SMART GUIDE menu (see chapter 6.4).
Of the three following buttons, only one can be displayed at a time:	
	Opens the list of worksheets
	Opens the internal task list
	Opens the ISO-XML task list
	Opens the list of machine combinations

## 2.4.2.4 Working Mode Indicator

The working mode indicator specifies whether worksheet or task mode is selected.





Symbol	Description
	Worksheet selected
	Task from farm management menu active
	Task in ISO-XML mode active

### Status displays for error messages

If there are any configuration problems in SMART GUIDE, the working mode indicator turns into a button with a red flashing ring.

This is designed as a quick access button to take you directly to the source of the configuration problem.



Tapping the button opens the list of relevant problem sources (e.g., in the list of machine combinations).

Symbol	Description/submenus
	<p>Problem with a task (only in task mode):</p> <ul style="list-style-type: none"> <li>No field is assigned to the task.</li> <li>No task was started (no active task).</li> </ul> <p>Tapping, opens the task list.</p>
	<p>Configuration problems in the machine combination:</p> <ul style="list-style-type: none"> <li>No GNSS signal reception.</li> <li>The tractive unit has not saved a GNSS source.</li> <li>No machine combination selected.</li> <li>No tractive unit defined.</li> <li>The machine combination does not have a working width.</li> </ul> <p>Tapping, opens the list of machine combinations.</p>
	<p>Configuration problems in the vehicle:</p> <ul style="list-style-type: none"> <li>Link ISO FLEX to vehicle</li> <li>Link SMART iBox with vehicle</li> <li>Select vehicle storage for SMART iBox</li> </ul> <p>Tapping, opens the list of vehicles.</p>
	<p>Several problems:</p> <p>If several configuration problems occur simultaneously, the button contains a yellow triangle.</p> <p>Tapping the button opens a circular segment that contains buttons for the relevant problem sources.</p>

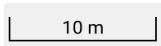


### 2.4.2.5 Compass

Two different symbols can be selected to display the compass. Tap to switch between them:

Symbol	Description
	The compass rose (indicates the geographic direction in which the machine combination is moving)
	Large compass rose

### 2.4.2.6 Scale

Symbol	Description
	The scale is displayed below the function buttons on the left side. It changes if you zoom in and out of the screen by moving your fingers together and apart.

### 2.4.2.7 Status Bar

The status bar has four display elements (see Fig. 56).

The two center displays also have functions that can be called up by tapping them.

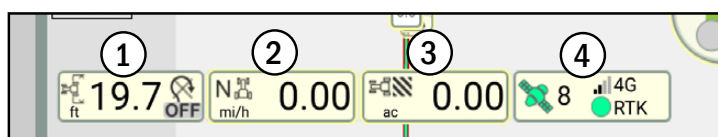
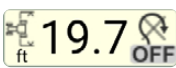







Fig. 56: Status bar

#### 1. Working width of the machine combination and SMART TURN status (display only)

Symbol	Description
	The first display shows the working width of the machine combination and the SMART TURN status. Possible SMART TURN status:
	SMART TURN is active for the current machine combination. At least one boundary line is activated for SMART TURN.
	SMART TURN is deactivated for the active machine combination or no boundary lines were activated for SMART TURN.
	The selection has been made from the selection dialog but the maneuver has not been released yet (only on vehicles where a maneuver must be explicitly released via a switch in the vehicle).
	The maneuver has been released.
	The maneuver has been released and the execution has started.



## 2. Speed status and manual change of the driving direction (display with function)

By tapping the display, a window in which you can change the driving direction of the machine combination will be shown.

### NOTICE

The driving direction can only be changed if the corresponding settings in the SMART iBox (SMART CONTROL only) or machine combination are provided.  
In addition, the vehicle must be moving at a steady speed of 0.5 to 5 km/h in one direction (see chapter 4.1).

Symbol	Description
	Neutral driving direction at standstill (only for preassembled machines)
	Driving direction (forward)
	Driving direction (reverse)
	Unknown driving direction

## 3. Area counter

Depending on the settings in the SMART GUIDE menu (see chapter 6.3.1), the area counter shows the worked area or the area that still needs to be worked.

Tapping the area counter rests the value.

Symbol	Description
	Display of the worked area. Reset the value (display with function).
	Display of the area that still needs to be worked.

## 4. Status on GNSS reception

Symbol	Description
	Status on GNSS reception (display only)
	Satellites available (number of available satellites displayed to the right of the symbol)
	No satellites available
	Network connection
	GNSS quality status: GPS, DGPS, RTK-F, RTK <ul style="list-style-type: none"> <li>No text: no signal available</li> <li>Green dot: no error</li> <li>Red X: error</li> </ul>



## 2.4.2.8 Section Status

The section status shows the number of sections set in the section control settings of the implement.

Only one section is displayed if a virtual vehicle was selected as the section transmitter in the machine combination settings.

It also provides information on whether the sections are active or inactive (see Fig. 57).

In manual mode, you can tap individual sections in the section status to activate and deactivate them (see chapter 4.3.1.2).

The individual sections can have the following status:

- Steady yellow: Section is active, area marking is active
- Steady blue: Section is active, area marking is inactive  
Section is inactive, area marking is active
- Flashing yellow/blue: Sections are active, area marking is inactive  
(only on non-ISOBUS-compatible machines in manual mode)

The section control mode is displayed next to the section status:

- MAN: Manual section control (see chapter 4.3.1.2)
- AUTO: Position-based section control (see chapter 4.3.1.3)
- EXT: External section control (see chapter 4.3.1.4)

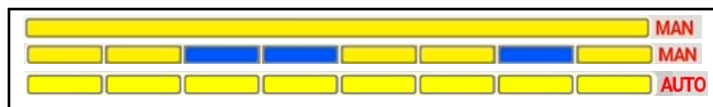
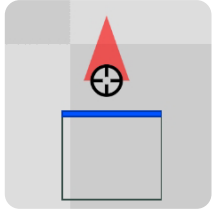
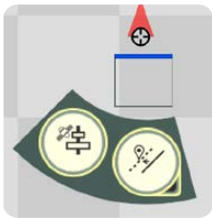





Fig. 57: Examples of the section status

## 2.4.2.9 Overview of the Machine Combination

Symbol	Description/submenus
	<ul style="list-style-type: none"> <li>• The red arrow represents the machine combination.</li> <li>• The center of the cross hairs in the black circle corresponds to the device reference point (=pivot point) of the vehicle.</li> <li>• The blue bar provides a visual representation of the application point of the machine combination that was selected for the section control.</li> <li>• The black frame behind the blue bar shows the application width.</li> </ul>
	<p>Tapping the machine combination symbol will open further options in a semicircle. Settings for track nudging and the GNSS drift can be implemented via these options.</p>
	<p>Setting the GNSS drift to the center track (see chapter 3.1.5.1). All of the field objects are moved in relation to the current position so that the vehicle is back on the track. Resetting the process is described in chapter 6.6.</p>
	<p>Shifting the track pattern (see chapter 3.1.5.3)</p>

### 2.4.2.10 Field Marking Menu







The field marking menu is located on the right side of the user interface (see Fig. 58).

 The button at the very top shows the currently selected marking mode.




Swiping to the left will open a menu in which you can select a different marking mode or open the SMART GUIDE menu (see Fig. 58 and Fig. 59).

(The SMART GUIDE menu can also be opened by tapping the button. The SMART GUIDE menu is explained in chapter 6.)

The following marking modes are available in the menu that is displayed (see Fig. 59):

-  Opening the SMART GUIDE menu (see chapter 6)
-  Selecting field marking mode
-  Selecting boundary line recording mode – "left boundary line"
-  Selecting boundary line recording mode – "right boundary line"
-  Selecting reference track recording
-  Selecting marker mode

If a boundary line recording mode was selected, a boundary line-specific menu is displayed when tapping the marking mode button again (see Fig. 60):

-  Selecting boundary line recording mode – "left boundary line"
-  Selecting boundary line recording mode – "right boundary line"
-  Stopping boundary line recording mode

The remaining buttons of the field marking menu on the right side of the user interface change depending on which marking mode is selected. The individual marking modes and associated buttons are explained in the following.

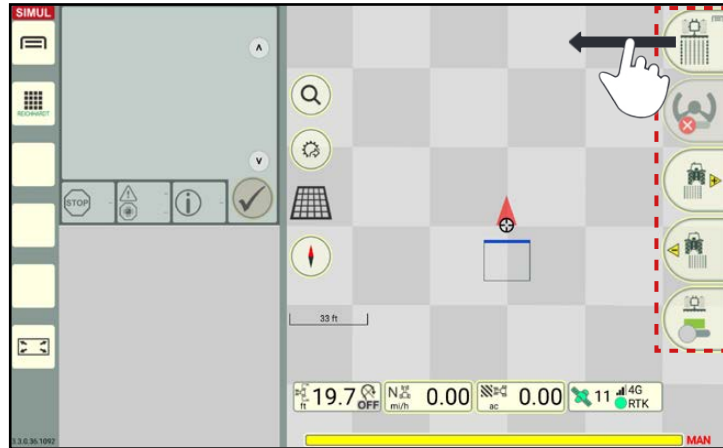


Fig. 58: Opening marking modes

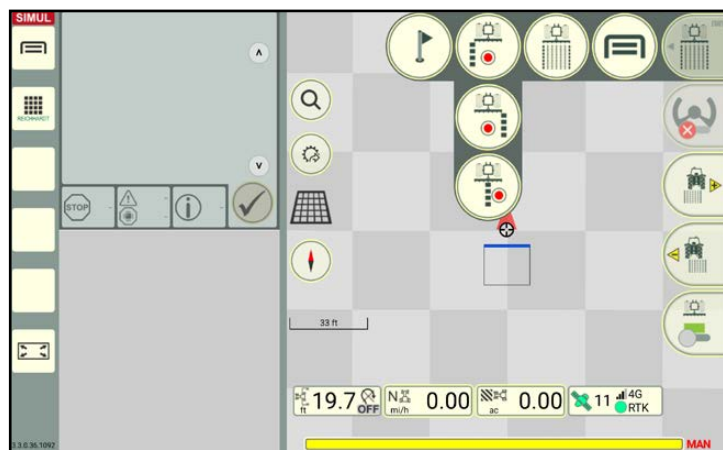


Fig. 59: Overview of the marking modes

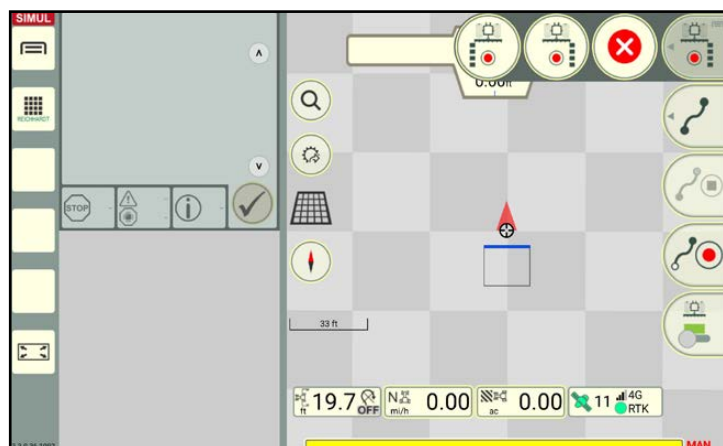












Fig. 60: Overview of the marking modes

## 2.4.2.10.1 Buttons in Field Marking Mode

### Selected marking mode






Symbol	Description
	Field marking mode

### Additional buttons in the field marking menu


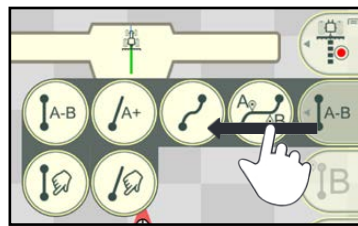




Symbol	Submenus/description
	Steering activation (only available with SMART CONTROL; see chapter 4.2): Active steering requires the activation of the steering button. This automatically steers towards the active (= red) track that is closest to the selected implement and then drives along it.
	 Automatic steering cannot be activated.
	 Automatic steering is switched on and active.
	 Automatic steering can be activated.
	Nudging to the right: Track nudged to the left in relation to the driving direction of the vehicle (in 1 cm increments) (see chapter 4.4).
	Nudging to the left: Track nudged to the right in relation to the driving direction of the vehicle (in 1 cm increments) (see chapter 4.4).
	Activate/deactivate area marking (see chapter 4.3.1 ff.)
	 OFF = Area marking deactivated
	 ON = Area marking activated











## 2.4.2.10.2 Buttons in the Boundary Line and Reference Track Recording











### Selected marking mode

Symbol	Description
	Reference track recording (see chapter 3.1). Marking mode can be changed by tapping the button.
	Boundary line recording mode (see chapter 3.2) The side of the boundary line recordings can be switched or recording mode can be stopped by tapping the button.
	Select boundary line recording mode – "left boundary line"
	Select boundary line recording mode – "right boundary line"
	Stopping boundary line recording mode




### Selected track type and displayed buttons in the field marking menu

Symbol	Submenus/description
	<p>SMART GUIDE provides different track types for boundary lines and reference tracks.</p> <p>The second button on the right edge shows the currently selected type of recording or track.</p> <p>A track type can be selected by swiping to the left and then tapping.</p> 
	<p>Track type: "A-B track": Record straight track from point A to point B (A-B track).</p> <p>If you select this track type, the following buttons are displayed:</p>
	Tap this button to set point A. The recording is started.
	Tap this button to set point B and to terminate the recording at this point. The button is grayed out if no recording is activated/no A point is set.
	<p>Track type: "A-B track, manual": Create an A-B track by entering coordinates.</p> <p>When you tap this button, a window in which you can enter the coordinates for the start (A point) and end (B point) of the reference track, will be displayed.</p>

Symbol	Submenus/description	
		Track type: "A <sup>+</sup> track": Record a straight track from point A in one direction (A <sup>+</sup> ). If you select this track type, the following button is displayed:
		 Tap this button to set point A. A window is displayed in which you can adopt the currently measured direction and coordinates or change them manually.
		Track type: "A <sup>+</sup> track, manual": Create an A <sup>+</sup> -track by entering coordinates. If you select this track type, the following button is displayed:
		 Tap this button to set point A. A window is displayed in which you can adopt the currently measured direction and coordinates or change them manually.
		Track type: "Contour": Record a track in any direction. If you select this track type, the following buttons are displayed:
		 Tap this button to start the recording.
		 Tap this button to stop the recording. The button is grayed out if no recording is active.
		 Tap this button to stop the recording and to discard the track recorded so far. Confirm the abort with the checkmark that is displayed. 


Symbol	Submenus/description		
		Track type: "Mixed contour": Create a track made up of curved and straight segments. If you select this track type, the following buttons are displayed:	
			 Tap this button to set point A for a straight part of the recording. If you are currently recording a contour, the contour is completed and point A is set.
			Tap this button to definitively complete the recording.
			 Tap this button to start recording a contour (the part of the track that is not straight). If you are currently recording a straight track, tapping this button will automatically set point B and a start point for a contour will be set.
			
			Tap this button to stop the recording and to discard the track recorded so far. Confirm the abort with the checkmark that is displayed. 

**Additional button displayed in the field marking menu for every track type**










Symbol	Options	
	Activate/deactivate area marking (see chapter 4.3.1 ff.)	
		OFF = Area marking deactivated
		ON = Area marking activated

## 2.4.2.10.3 Buttons in Marker Mode

### Selected marking mode

Symbol	Description
	Marker mode (see chapter 3.3).

### Additional buttons in the field marking menu

Symbol	Submenus/description
	<p>SMART GUIDE has four different marker modes.</p> <p>The buttons shows the selected marker mode.</p> <p>A different marker mode can be selected by swiping to the left and then tapping.</p>
	 <p>Reference point: The reference point is a point that can be approached to center track a possible GNSS drift. This is not necessary if an RTK correction signal is used.</p>
	 <p>Low obstacle: Low obstacles are indicated by a small flag pole and warning triangle.</p>
	 <p>High obstacle: High obstacles are indicated by a tall flag pole.</p>
	 <p>Field entry/exit: This markers indicates the field entry and exit. The position data of this marker can be accessed via a navigation application (e.g., Google Maps) (only available for SMART COMMAND app)</p>
	Tap this symbol to set the markers selected above.
	Activate/deactivate area marking (see chapter 4.3.1 ff.)
	 <p>OFF = Area marking deactivated</p>
	 <p>ON = Area marking activated</p>

## 2.4.3 Display of Boundary Lines

The display of boundary lines in SMART GUIDE is explained in the following.

The creation and editing of boundary lines is described in chapter 3.2.

### Boundary lines open and not active

Open boundary lines that are not active are displayed as follows (also see Fig. 61):

- Red: Field boundaries
- Brown: Headland boundaries
- Blue: Exclusion area boundaries

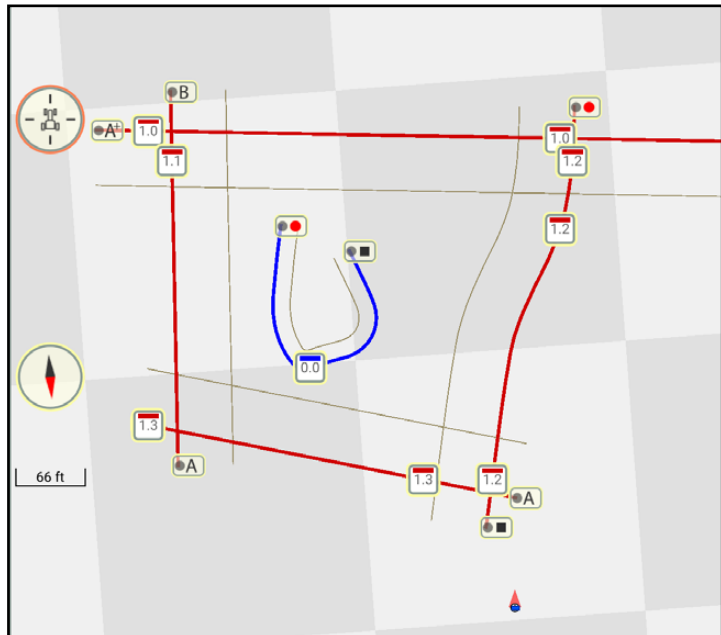


Fig. 61: Different boundary lines that are open and not active

### Boundary lines closed and not active

Closed boundary lines have joint corner points; there are no overlaps or gaps (see Fig. 62).

- Red: Field boundaries
- Brown: Headland boundaries
- Blue: Exclusion area boundaries

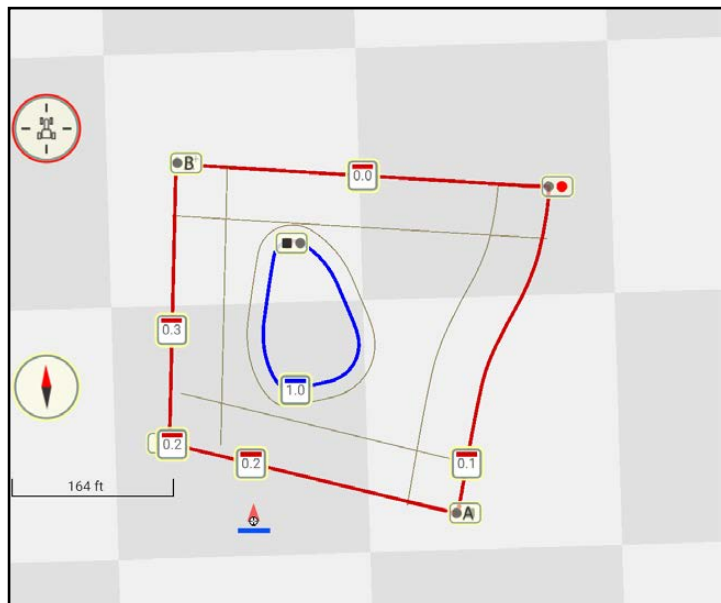


Fig. 62: Different boundary lines that are closed and not active



### Boundary lines closed and active

Field boundaries must be activated to use section control.

#### NOTICE

Only closed boundary lines can be activated.

Activated fields with boundary lines are displayed as follows (see Fig. 63):

- Turquoise: Field or exclusion area boundaries
- Light brown: Headland surfaces
- Dark blue: Inner headland boundary/exclusion area boundaries



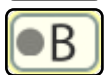
Fig. 63: Boundary lines closed and active

### Track markers of boundary lines

The following track markers are used on the boundary lines:



Start point A of a linear track



End point B of a linear track



Start point A of a linear track in a certain direction



Start point of a contour (not linear)



End point of a contour (not linear)



Reference track marker on every boundary line, including:




- Color of the boundary line
  - Red: Inactive field boundary
  - Dark blue: Inactive exclusion area boundary
  - Turquoise: Active field boundary and exclusion area boundary
- Number before the decimal point: Boundary line group
- Number after the decimal point: Number of the boundary line within the group

## 2.4.4 Display of Reference Tracks and Track Patterns

SMART GUIDE provides different track patterns for the field marking process.

Each track pattern is created based on a reference track (dark green) (see Fig. 64).


Parallel tracks (thin, dark blue lines) are created for this reference track when the track pattern is created.

 The reference track is labelled with a 0 by default.

Active implement track is highlighted in red. The steering track of the vehicle is illustrated in light green.

In Fig. 64 tramline mode is selected as the track pattern. Maintenance/tramline tracks are light blue.

As seen from the recording direction, the tracks to the left of the reference track have a negative number and to the right have a positive number.

 Track right of the reference track


 Track left of the reference track








Fig. 64: Tracks in tramline mode

The following provides an overview of the symbols for individually selectable track patterns and how tracks are illustrated in the field.







Further information on reference tracks and track patterns is provided in chapter 3.1.

### Available track modes

The track pattern can be changed by tapping the track number.





Symbol	Track pattern	Description
	Parallel mode	Draws parallel tracks within a reference track (see chapter 3.1.3.5).
	Bed mode	A definable number of tracks can be combined into beds which are skipped when driving across the field (see chapter 3.1.3.6).
	Tramline mode	Track pattern that displays highlighted tramline tracks (see chapter 3.1.3.7).
	Async mode	Maintenance and bed tracks alternate. The pattern is repeated continuously (see chapter 3.1.3.8).
	Single track mode	The reference track is used as a drivable track without parallel tracks (see chapter 3.1.3.9).

### Illustration of track varieties

Symbol	Designation	Illustration
	Reference track	Dark green
	Active implement track (next to active steering track of the tractive unit)	Red
	Active steering track of the tractive unit (next to active implement track)	Light green, narrow
	Active steering track of the tractive unit and implement above one another	Light green with red border
	Maintenance tracks/tramline tracks	Light blue, bold
	Bed tracks Parallel tracks	Dark blue, narrow

## 2.4.5 Display of Markers in the Field

The following markers can be set/displayed in the field (see Fig. 65).

- ①  Field entry/exit
- ②  High obstacle (that is always visible)
- ③  Low obstacle (that may not be visible)
- ④  Reference point (correcting a GNSS deviation)

Different parameters can be specified for the individual types of markers.

Details on creating and editing markers is provided in chapter 3.3.

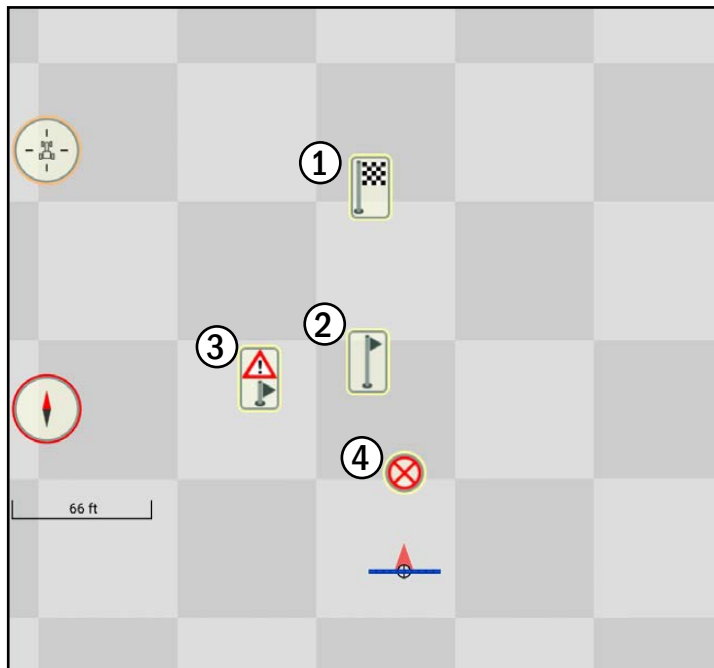


Fig. 65: Markers in the field

## 2.4.6 Section Control in SMART GUIDE

Section control is designed to control sections in SMART GUIDE.

The section status (1) and section control mode (2) are displayed in the section status of SMART GUIDE (see Fig. 66).

In the field, the worked area is highlighted by the active sections (see Fig. 66 – 3).

Detailed information on activating/deactivating the sections and working with different section control modes is specified in chapter 4.3.

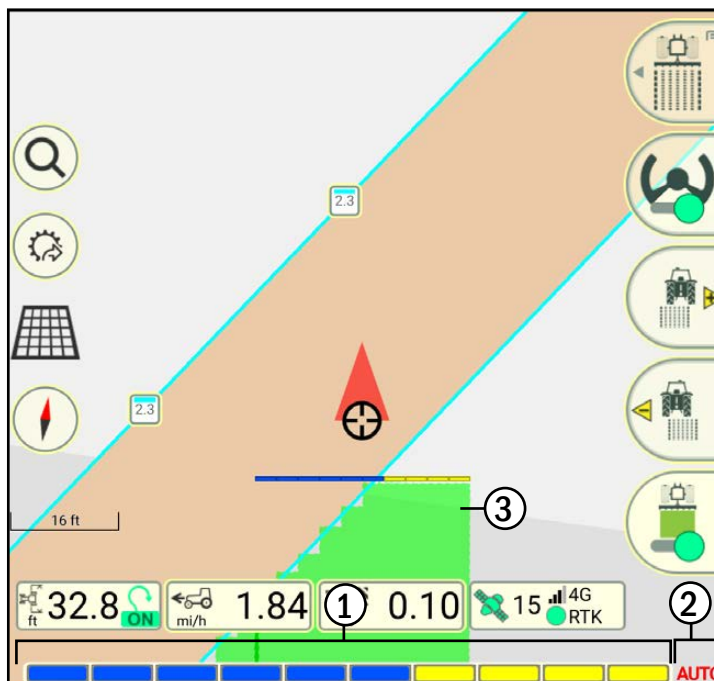


Fig. 66: Section control

## 2.4.7 Moving Mode in SMART GUIDE – Moving the Map

Moving mode provides you with a better overview of the working area in SMART GUIDE.

Open moving mode by pressing and holding any area within the field of SMART GUIDE (see Fig. 67).

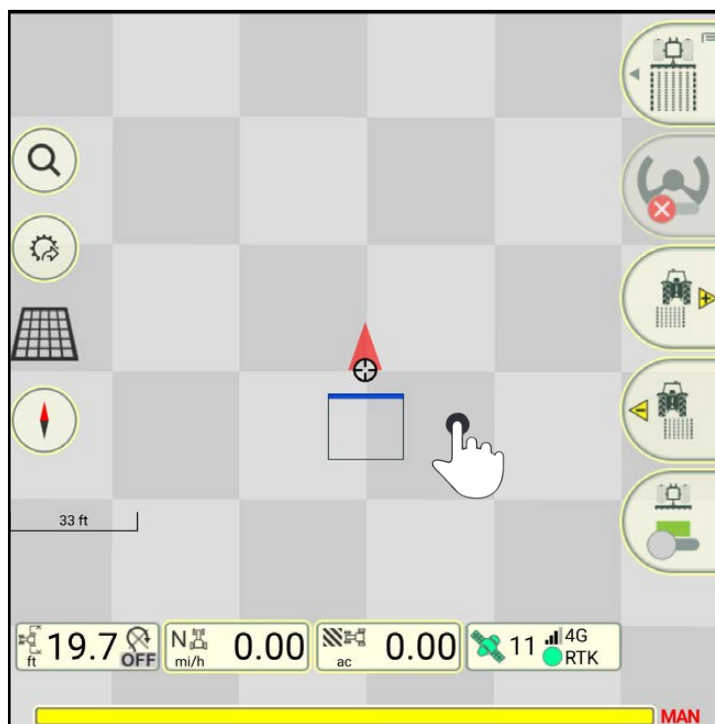


Fig. 67: Opening moving mode by pressing and holding

Moving mode then opens (see Fig. 68).

Buttons on the side and the status bar are hidden.

You can now move the map.

You can zoom in and out by moving your fingers together and apart.

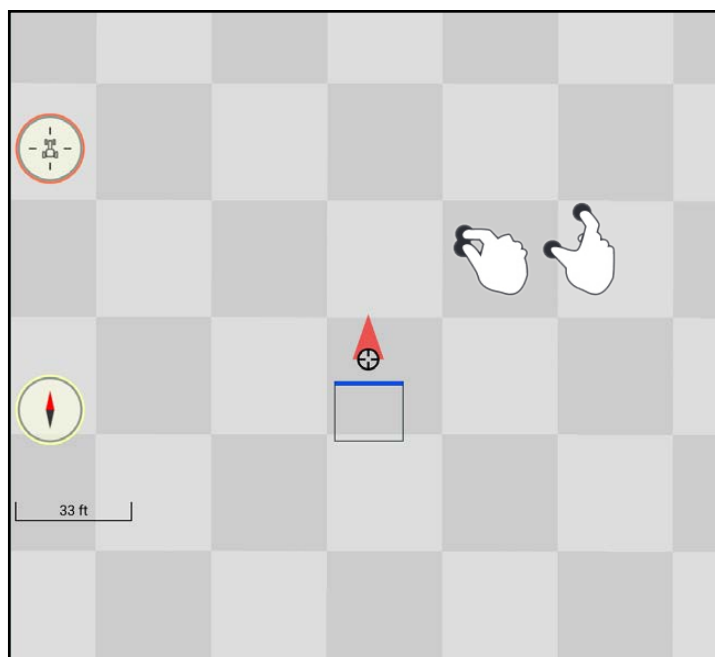


Fig. 68: Moving mode



Tap the red flashing tractor symbol on the left edge of the main window to return to the normal view of SMART GUIDE (see Fig. 69).

The map is then displayed in the pre-set basic zoom again (see chapter 6.3.1).

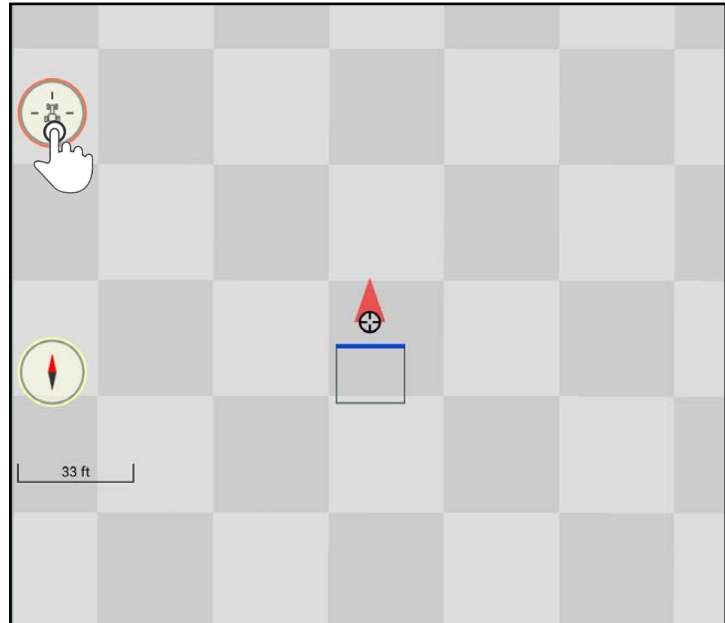


Fig. 69: Exiting moving mode

## 3 Field Objects

This chapter provides a description of how to create and mark reference tracks, show track patterns (see chapter 3.1), create and mark boundary lines (chapter 3.2), and set and mark markers (see chapter 3.3).

### 3.1 Reference Tracks

Track patterns, that can be used for work on the field, can be created by recording reference tracks and then assigning track modes.

Reference tracks are recorded in reference track recording mode (see chapter 3.1.1).

Field marking mode is used to create, mark, and use track patterns (see chapter 3.1.3).

A reference track can be marked in both modes (see chapter 3.1.2).

The described steps are detailed in the following.

#### 3.1.1 Recording a Reference Track

The creation of reference tracks in reference track recording mode is explained in the following.

##### 3.1.1.1 Position of the Recording Point during Reference Track Recording

A reference track is created based on one or more reference points.

The position of a reference point in a field is dependent on where the recording point is located on the machine combination.

The recording point equates to the pivot point of the machine that was selected for the section status in the machine combination settings of SMART COMMAND.

The creation of a reference track varies depending on which machine specifies the recording point.

Fig. 70 illustrates the effects during reference track recording.

The machine that specifies the section status is labelled with yellow sections in the figure.

- ① Track recording point/section status on front implement.
- ② Track recording point/section status on rear implement.
- ③ Track recording point/section status on the vehicle.

You must therefore ensure that the right device is selected for the section status in the machine combination settings.

If the tractive unit is selected, no implement is displayed or taken into consideration in SMART GUIDE.

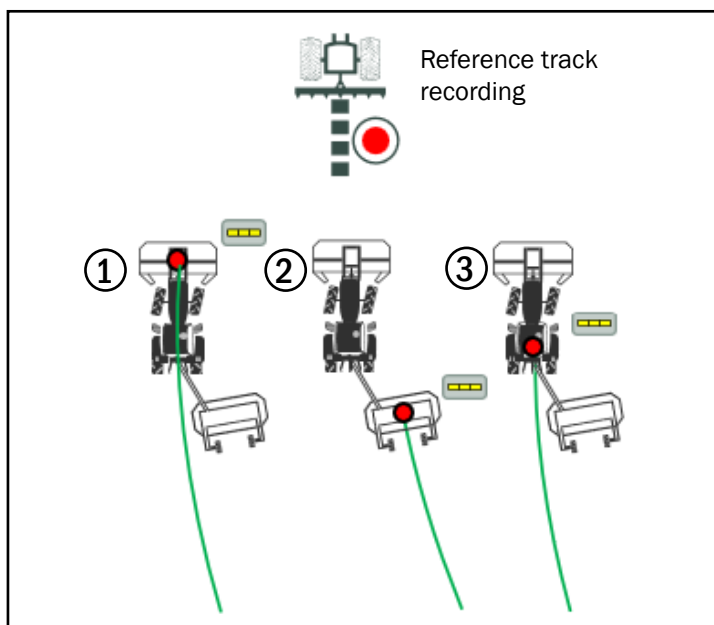


Fig. 70: Track recording point for reference tracks

### 3.1.1.2 Calling up Reference Track Recording Mode



Swipe the first button of the field marking menu to the left (see Fig. 71).

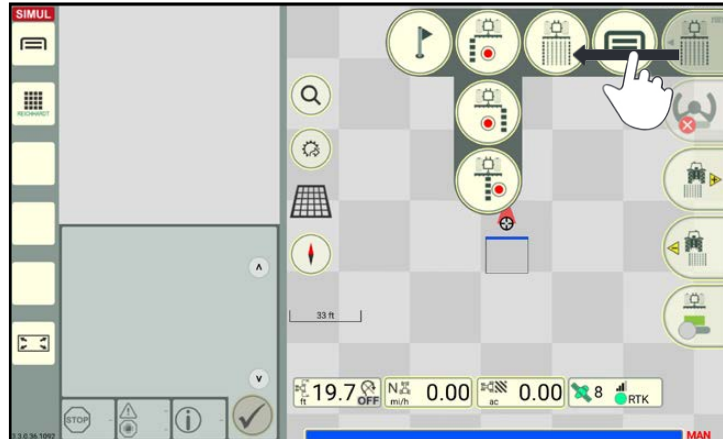


Fig. 71: Swiping the first button of the field marking menu to the left



Tap the symbol for the reference track recording (see Fig. 72).

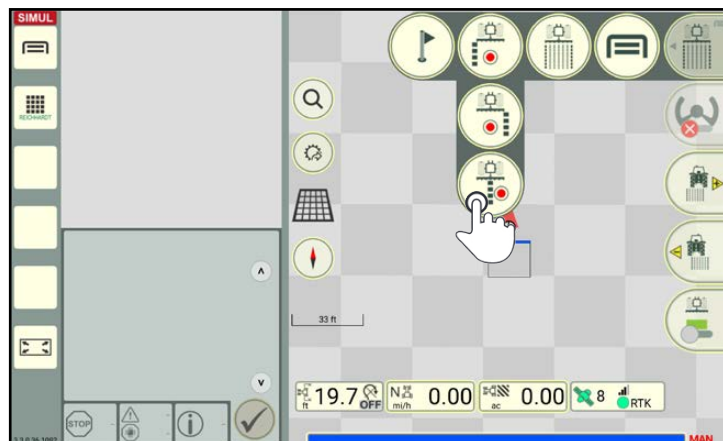


Fig. 72: Tapping the reference track button

The display to record reference tracks then appears (see Fig. 73).

- ① The guide bar is located at the upper edge of the user interface. It shows corresponding information when recording a reference track.

The buttons on the right edge are provided to

- ② Select the track type
- ③ Start recording the track
- ④ Stop recording the track

The buttons vary depending on the selected track type (also see chapter 2.4.2.10.2).

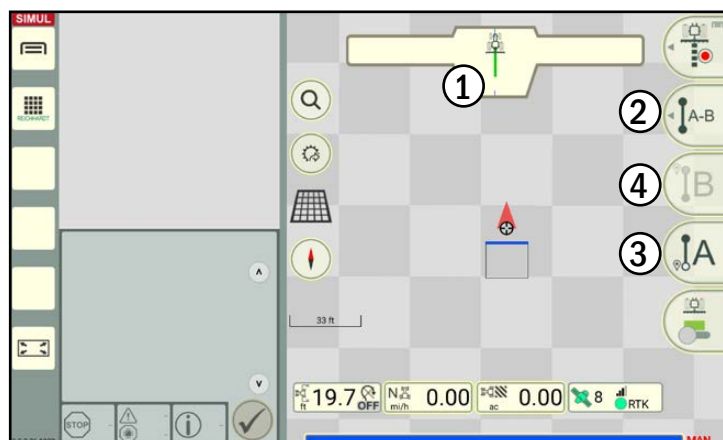



Fig. 73: User interface for recording tracks



### 3.1.1.3 Selecting a Track Type/Overview of Track Types

You can select the required track type in reference track recording mode.

 To do so, swipe the second button of the field marking menu to the left (see Fig. 74).

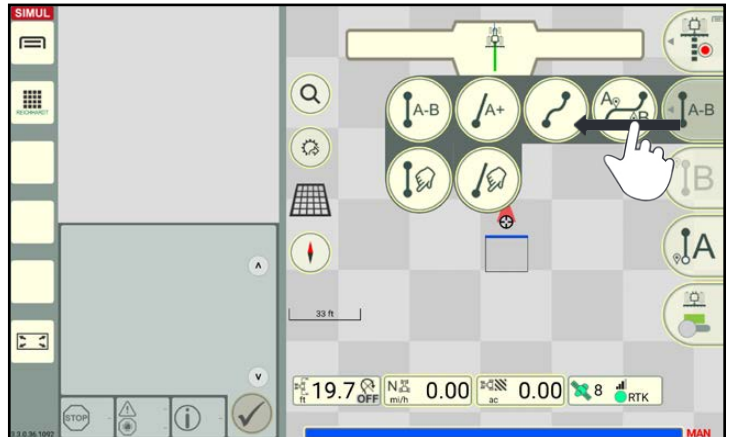








Fig. 74: Calling up track types

Tap the symbol for the required track type to select it (see Fig. 75).

The following track types are available:

-  Contour (curved track):  
Track represents the driven distance.
-  A-B track:  
Driving to and recording two track points from which a linear reference track is automatically created when a B point (end point) is set.
-  A-B track, manual:  
Input of two coordinates that are used to create a linear reference track.
-  A<sup>+</sup>-track/ A<sup>+</sup>-track, manual:  
Linear reference track that runs from point A in a defined direction.
-  Depending on whether a checkmark is set in the input window, current position data or manually entered data can be adopted.
-  Mixed contour:  
Linear sections (A-B track) and contours can be used alternately when recording a reference track.

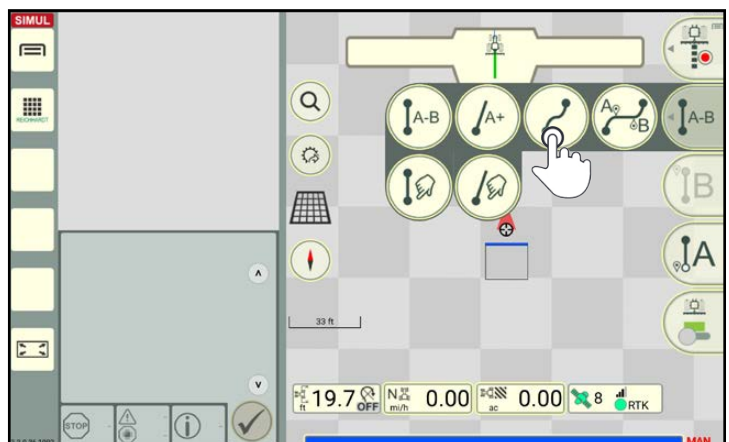


Fig. 75: Selecting the track type

### 3.1.1.4 Starting a Reference Track Recording ("Contour" Track Type)



The following provides a description of recording a "Contour" type reference track.



Tap the "Record" button to start the reference track recording (see Fig. 76).

The reference track recording can be started when at a standstill or when driving. If you have not done so yet, set the vehicle in motion.

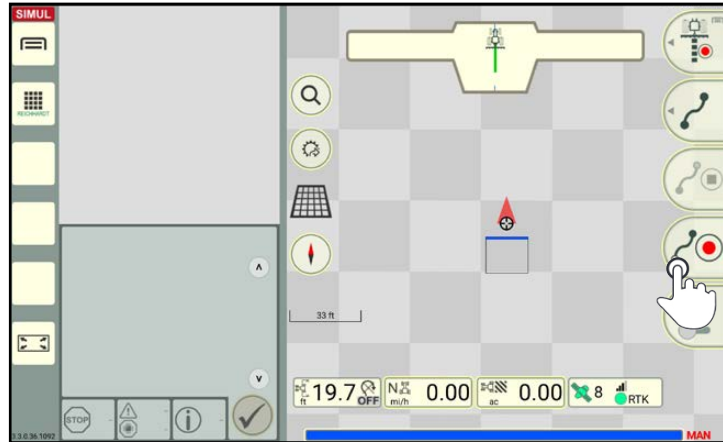


Fig. 76: Starting a "Contour" type reference track recording

The guide bar indicates the active recording with a red flashing recording point (see Fig. 77).

The selected track type is shown to the right of this.

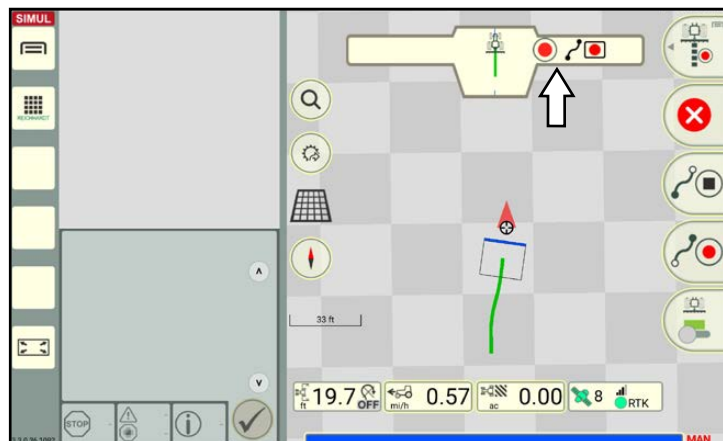


Fig. 77: Active reference track recording

The recorded reference track is shown in green in the center of the machine that was selected for the section status (see Fig. 78).

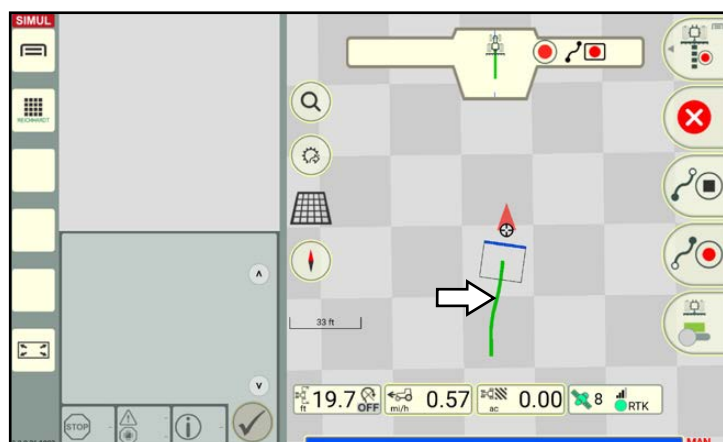


Fig. 78: Reference track is being recorded (in green)

### 3.1.1.5 Canceling and Restarting a Reference Track Recording ("Contour" Track Type)



If you want to cancel and restart a reference track recording that is already in progress, tap the "Record" button again (see Fig. 79).

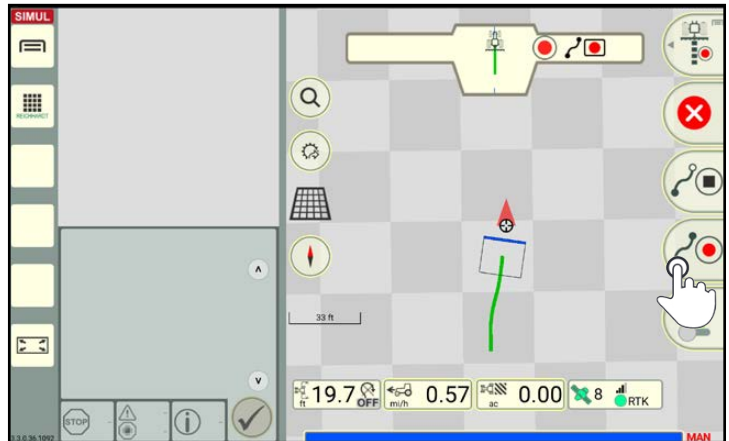


Fig. 79: Press the "Start" button to restart the track recording

A prompt will then appear asking whether the reference track recorded to date should be discarded and a new reference track recording should be started (see Fig. 80).

Confirm the prompt with "Yes".  
Otherwise the track recording will continue.

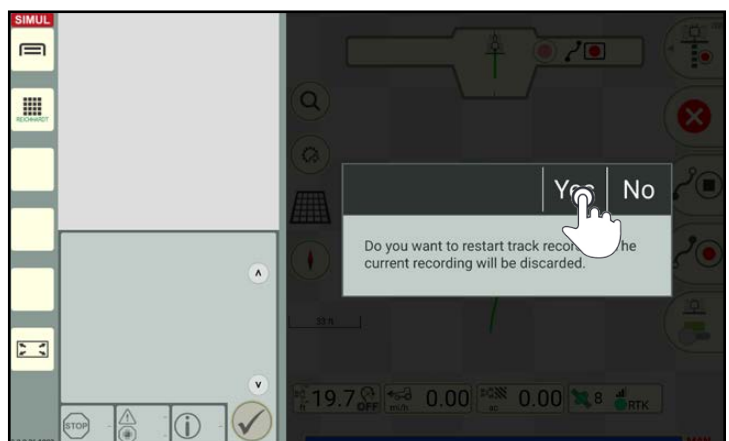


Fig. 80: Confirming the prompt

### 3.1.1.6 Canceling a Track Recording ("Contour" Track Type)



Tap the "Cancel" button on the right of the user interface to cancel a track recording that is currently in progress (see Fig. 81).

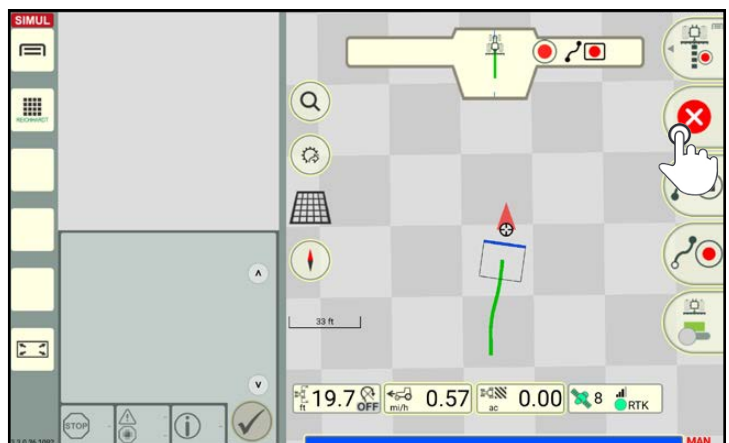


Fig. 81: Pressing the "Cancel" button

### 3.1.1.7 Completing a Reference Track Recording ("Contour" Track Type)



Tap the "Stop" button to stop the recording (see Fig. 82).

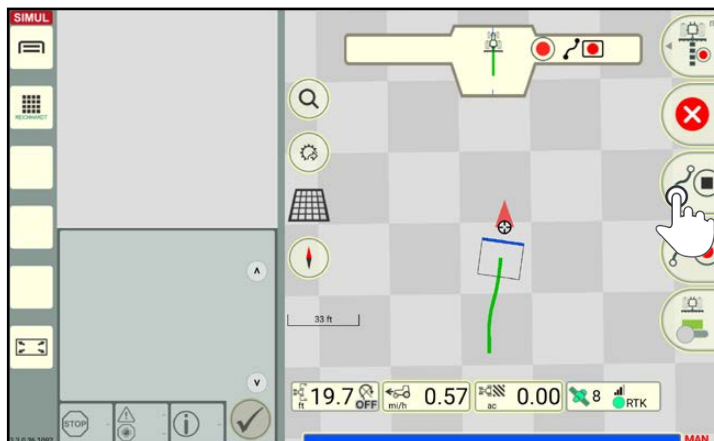


Fig. 82: Tapping the "Stop" button and completing the recording

A prompt will then be displayed in which you can specify if you want to stop the track recording (see Fig. 83).

Tap "No" to record another reference track.

Tap "Yes" if you want to complete the reference track and want to automatically switch to field marking mode.

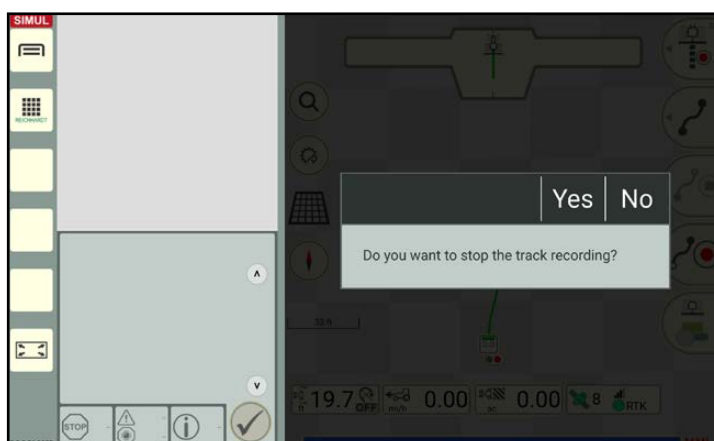


Fig. 83: Prompt about stopping the track recording

#### Recording Other Reference Tracks

If you tapped "No" in the window that was displayed (see Fig. 83), you will remain in the reference track recording (see Fig. 84).

The reference track, that has already been created, is labelled with a reference track marker, other track markers (starting and end points), and a green reference track.

These track markers are explained as part of the reference track marking process (see chapter 3.1.2.1).

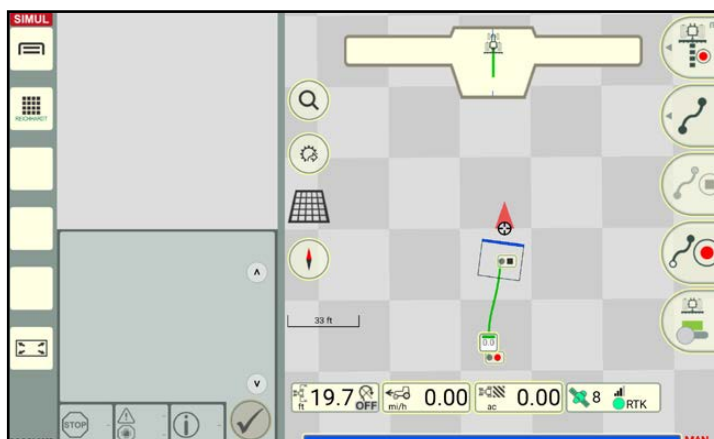


Fig. 84: Reference track recording with completed reference track



Change the track type, if required, by

- Swiping the second button of the field marking menu to the left (see Fig. 85)
- And tapping the required track type.

Then record the next reference track.

Instructions on how to record a linear reference track or a manually created reference track are provided in chapter 3.1.1.8 to chapter 3.1.1.10.

A reference track made up of linear and curved sections can be created using the "Mixed contour" track type and is described in chapter 3.1.1.11.

### Stopping the Reference Track Recording

If you tapped "Yes" in the window that was displayed (see Fig. 83), then the track recording will be stopped.

You will automatically return to field marking mode (see Fig. 86).

Depending on the settings in the automatic functions of the SMART GUIDE menu (see chapter 6.3.2), the following applies in field marking mode:

- A parallel track pattern is created for the last created reference track (see Fig. 86);
- Single track steering is activated for the last created reference track (steered along the reference track);
- No further actions are executed.

Information on how to manually create or change a track pattern for work on the field is detailed in chapter 3.1.3.

### NOTICE

If there are no field boundaries, then the track pattern of the contour is extended by 3281 ft (1 km) to the front and rear.

If there are field boundaries, then the track pattern is only extended to these boundaries.

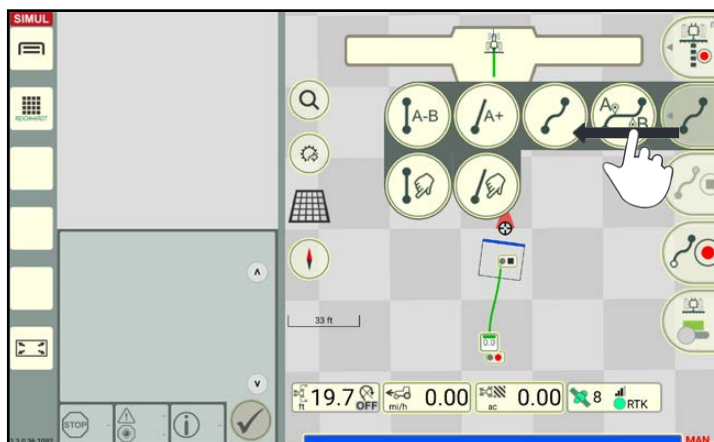


Fig. 85: Selecting the track type

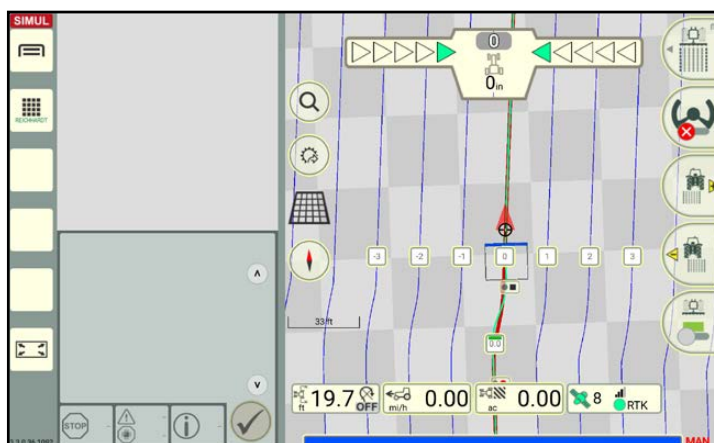


Fig. 86: SMART GUIDE in field marking mode with a reference track and track pattern



### 3.1.1.8 Recording an A-B Reference Track

#### Starting a reference track recording



Swipe the second button of the field marking menu to the left. Select track type "A-B" (see Fig. 87) to create a linear track between a recorded A point and B point.

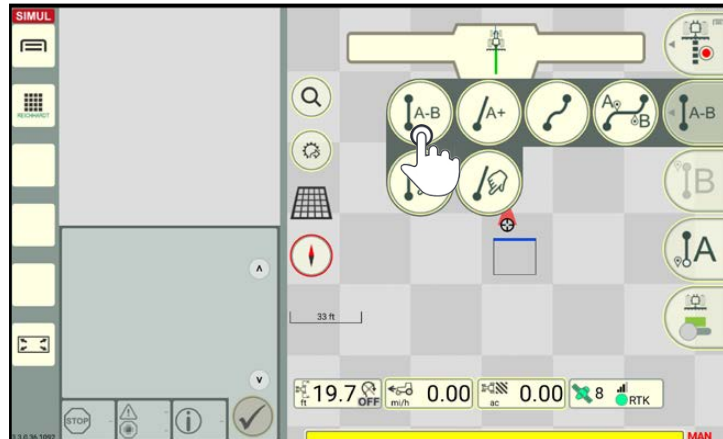


Fig. 87: Selecting track type "A-B track" for the reference track recording



Tap the "A" button (see Fig. 88) to start the recording immediately (see Fig. 89).

Set the vehicle in motion.  
(You can also set an A point while the vehicle is moving.)

- ① In the guide bar, a flashing "Record" button is displayed as a symbol for the current recording and the symbol for the track type is displayed to the right.
- ② The reference track is shown in green in the center of the machine that was selected for the section status.

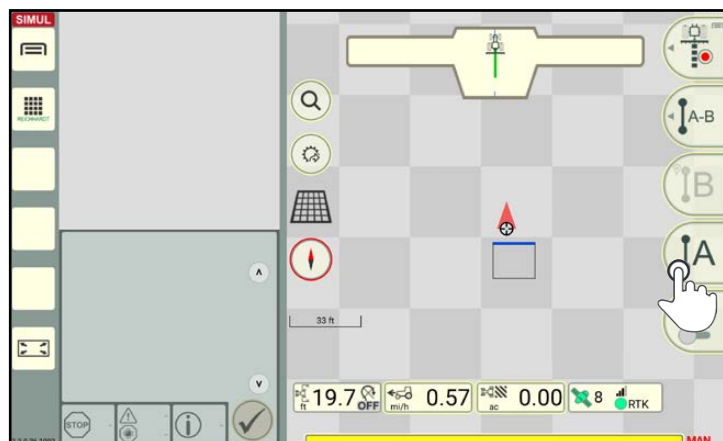


Fig. 88: Tapping the "A" button

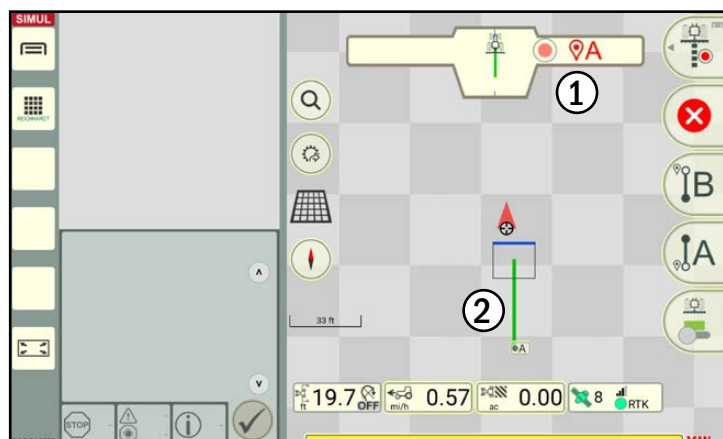


Fig. 89: A-B recording

### Canceling and restarting a reference track recording



Tap the "A" button again to discard the current reference track recording and to set an A point for a new reference track.

### Canceling a reference track recording



Tap the red X to discard the current reference track recording.

### Completing a reference track recording

A B-point can be set once you have driven at least 66 ft (20 m).



Tap the "B" button (see Fig. 90) to set a B point and stop the recording.

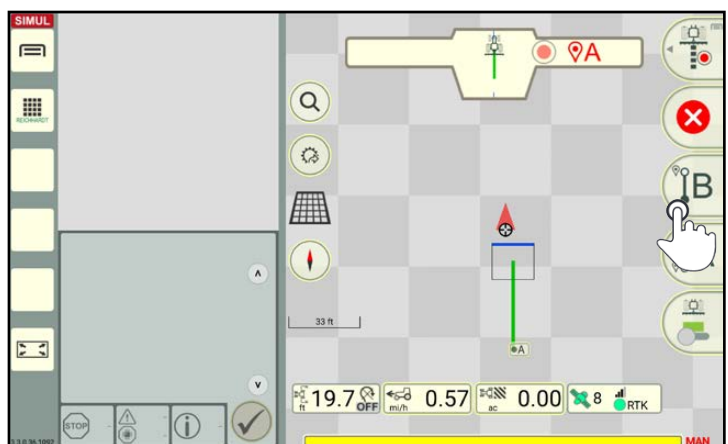


Fig. 90: Tapping the "B" button

The two set points (A and B) are automatically connected by a linear reference track (see Fig. 91).

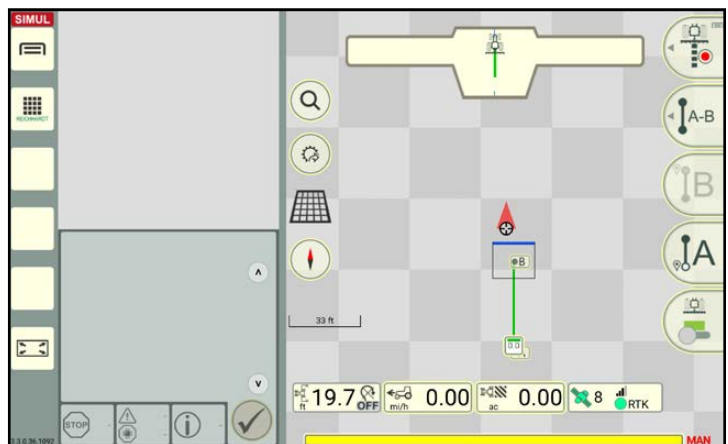


Fig. 91: B point set – reference track recording completed

## FIELD OBJECTS

### Reference Tracks

If the prompt to stop track recording was confirmed, you will automatically switch to field marking mode (see Fig. 92).

Depending on the settings in the auto functions of the SMART GUIDE menu (see chapter 6.3.2), the following applies in field marking mode:

- A parallel track pattern is created for the last created reference track (see Fig. 92);
- Single track steering is activated for the last created reference track (steered along the reference track);
- No further actions are executed.

Information on how to manually create or change a track pattern and how to use a track pattern for work on the field is detailed in chapter 3.1.3.

### NOTICE

If there are no field boundaries, then the track pattern of the A-B track is extended by 3281ft (1 km) to the front and rear.

If there are field boundaries, then the track pattern is only extended to these boundaries.

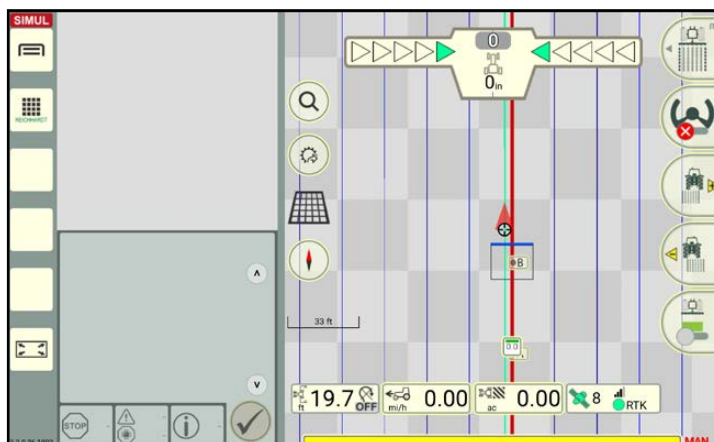


Fig. 92: Parallel track pattern after stopping the reference track recording



### 3.1.1.9 Manually Creating an A-B Reference Track

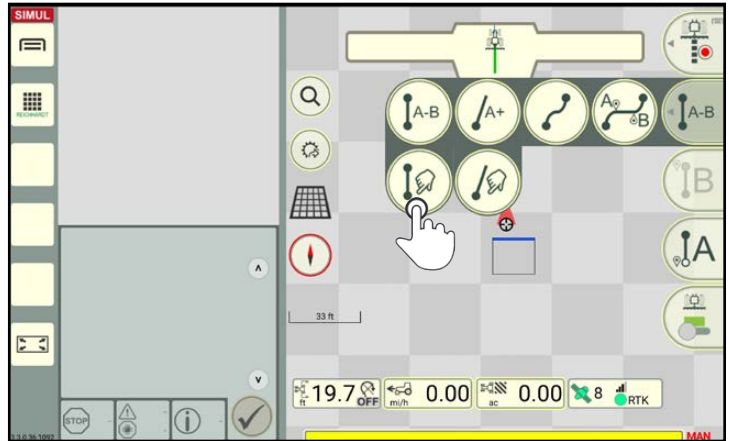
## Starting the reference track creation



Swipe the second button of the field marking menu to the left.



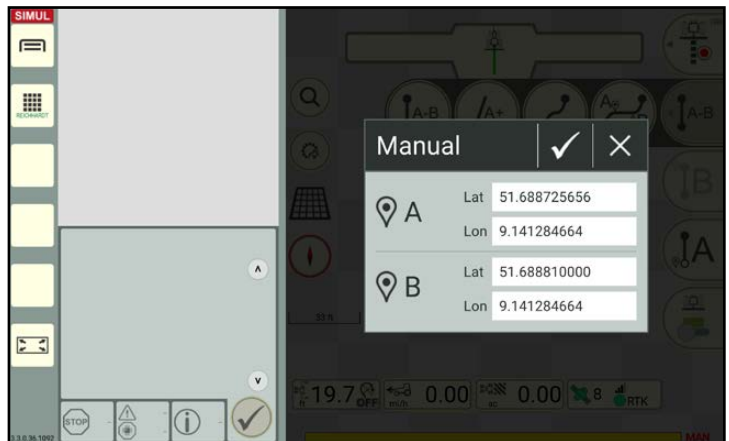
Select track type "A-B manual" (see Fig. 93) to create a reference track by entering two coordinates.



**Fig. 93:** Selecting track type "A-B track, manual" to create the reference track

A window, in which you can enter the coordinates for an A point (starting) and a B point (end), will then be displayed (see Fig. 94).

Enter the required coordinates via the keyboard that is displayed.



**Fig. 94:** Entering the coordinates

## Stopping the reference track creation



Tap the X in the coordinates input window (see Fig. 94) to discard the reference track creation.

(If you have already confirmed the coordinates with the checkmark, it is no longer possible to cancel. You must delete the reference track if you wish to discard it. Refer to chapter 3.1.2.)

## FIELD OBJECTS

### Reference Tracks

#### Completing the reference track creation



Tap the checkmark in the coordinates input window (see Fig. 94) to confirm your input and complete the creation of the reference track.

A and B points are set and connected by an automatically created reference track (see Fig. 95).

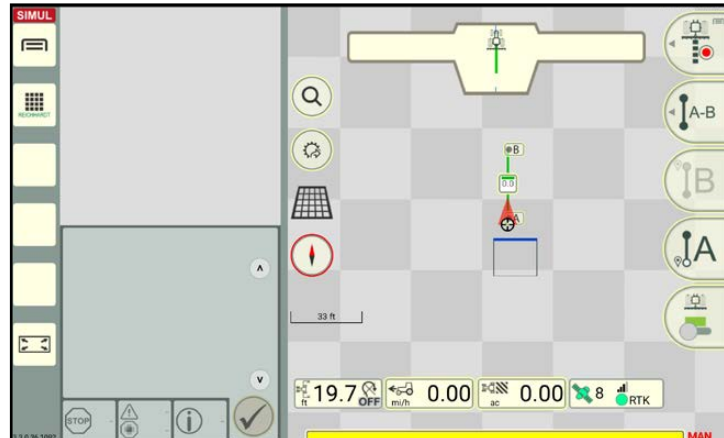


Fig. 95: A and B points with reference track

If the prompt to stop track recording was confirmed, you will automatically switch to field marking mode (see Fig. 96).

Depending on the settings in the auto functions of the SMART GUIDE menu (see chapter 6.3.2), the following applies in field marking mode:

- A parallel track pattern is created for the last created reference track (see Fig. 96);
- Single track steering is activated for the last created reference track (steered along the reference track);
- No further actions are executed.

Information on how to manually create or change a track pattern and how to use a track pattern for work on the field is detailed in chapter 3.1.3.

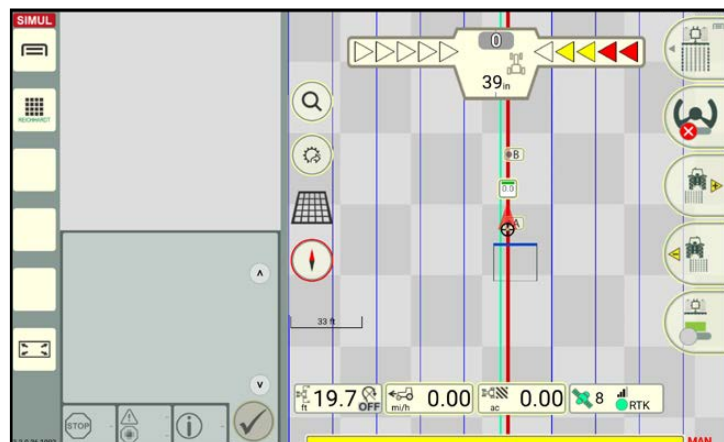


Fig. 96: Parallel track pattern after stopping the reference track recording




#### NOTICE

If there are no field boundaries, then the track pattern of the A-B track is extended by 3281 ft (1 km) to the front and rear.

If there are field boundaries, then the track pattern is only extended to these boundaries.

### 3.1.1.10 Recording an A<sup>+</sup> Reference Track/Manually Entering an A<sup>+</sup> Reference Track

#### Starting a reference track recording/creation

-  Swipe the second button of the field marking menu to the left (see Fig. 97).
-  Select track type "A<sup>+</sup>" to create a reference track by recording an A-point and a direction.
-  Select track type "A<sup>+</sup> manual" to create a reference track by entering the coordinates of an A-point and a direction.

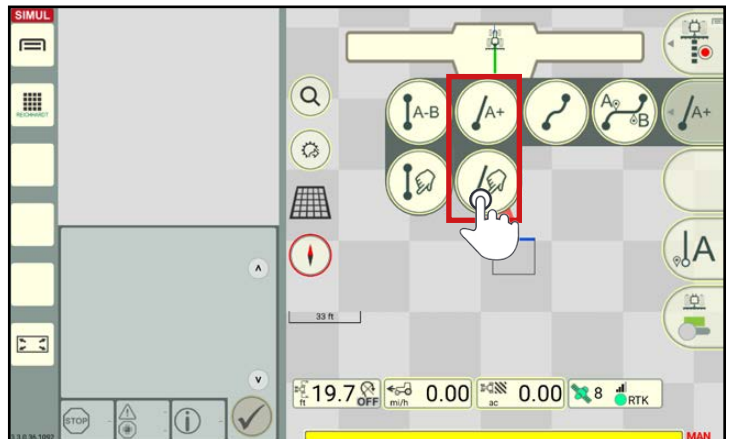



Fig. 97: Selecting track type "A<sup>+</sup> track" or "A<sup>+</sup> track, manual" for the reference track recording/creation

Drive at least 33 ft (1 m) with the vehicle.

-  Tap the "A" button to start the track creation (see Fig. 98).

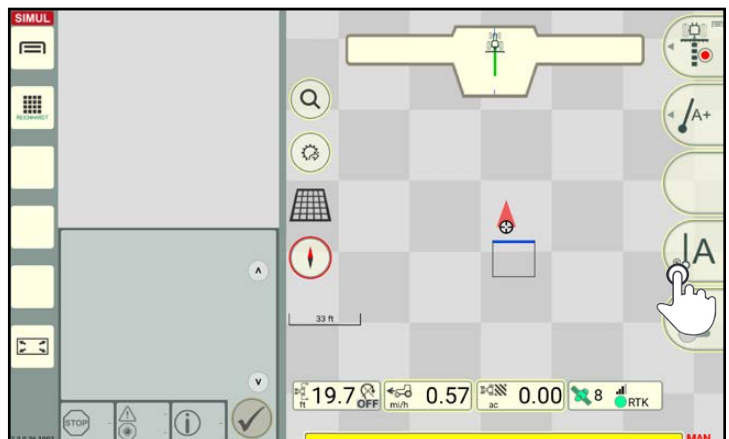



Fig. 98: Starting the reference track creation

A window with details about the current coordinates and driven direction is displayed (see Fig. 99).

#### Using current position data:

-  If the checkbox in the window is marked with a checkmark, the current coordinates and direction of the machine combination are used automatically.

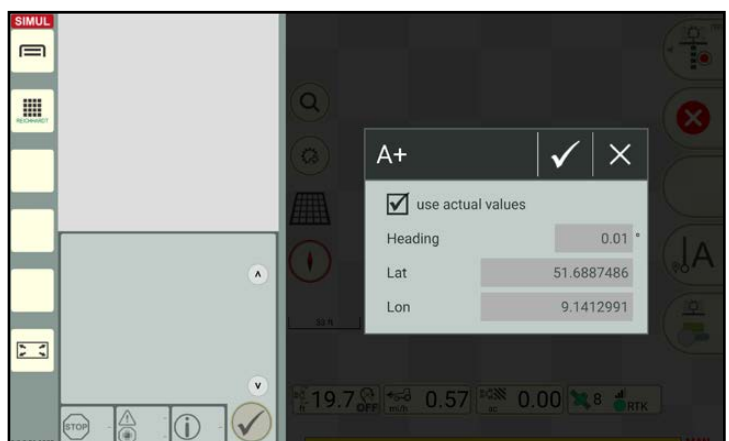


Fig. 99: Using the current coordinates and direction

## FIELD OBJECTS

### Reference Tracks

#### Entering different coordinates



Tap to disable the checkmark in the checkbox if you wish to enter the coordinates and direction manually (see Fig. 100).

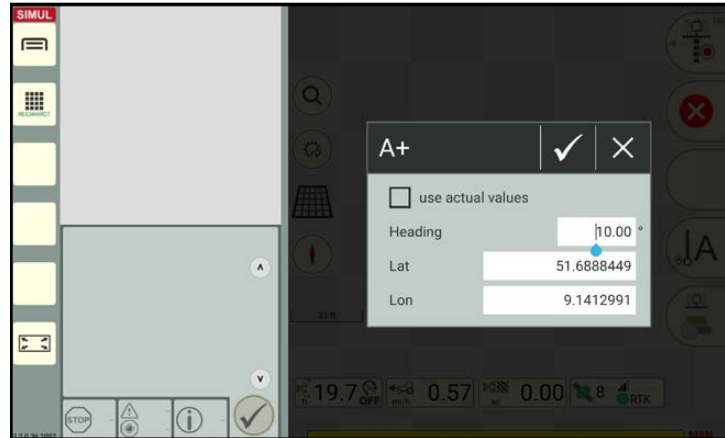


Fig. 100: Entering the coordinates and direction manually

#### Stopping the reference track creation



Tap the X in the coordinates input window (see Fig. 99 or Fig. 100) to discard the reference track creation.

(If you have already confirmed the coordinates with the checkmark, it is no longer possible to cancel. You must delete the reference track if you wish to discard it. Refer to chapter 3.1.2.)

#### Completing the reference track creation



Tap the checkmark in the coordinates input window (see Fig. 94) to confirm your input and complete the creation of the reference track.

The required reference track is generated automatically (see Fig. 101).

The track extends approx. 3281ft (1km) from the A point.

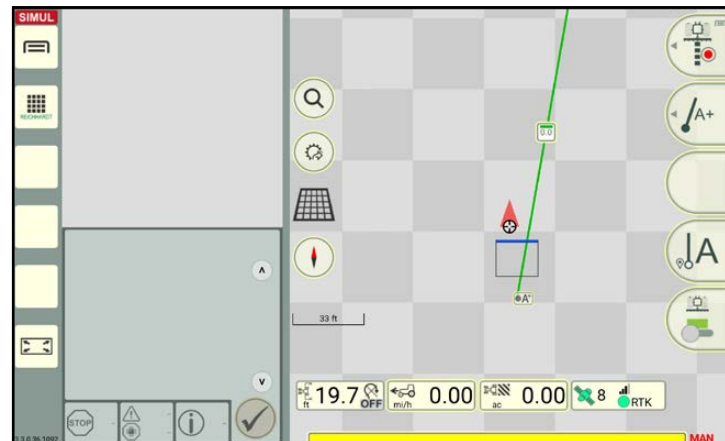


Fig. 101: Reference track created automatically

If the prompt to stop track recording was confirmed, you will automatically switch to field marking mode (see Fig. 102).

Depending on the settings in the automatic functions of the SMART GUIDE menu (see chapter 6.3.2), the following applies in field marking mode:

- A parallel track pattern is created for the last created reference track (see Fig. 102);
- Single track steering is activated for the last created reference track (steered along the reference track);
- No further actions are executed.

Information on how to manually create or change a track pattern and how to use a track pattern for work on the field is detailed in chapter 3.1.3.

#### NOTICE

If there are no field boundaries, then the track pattern of the A<sup>+</sup> track is extended by approx. 1 mi (2 km) to the front and by approx. 3281 ft (1 km) to the rear. If this is not long enough, use of A-B mode and driving the track is recommended.

If there are field boundaries, then the track pattern is (only) extended to these boundaries.

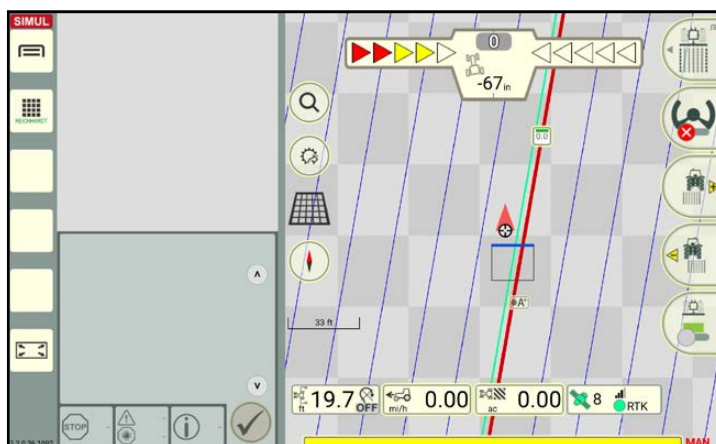


Fig. 102: Parallel track pattern after stopping the reference track recording

### 3.1.1.11 Recording a Mixed Contour Reference Track

#### Starting a reference track recording



Use the second button of the field marking menu to select the "Mixed contour" track type (see Fig. 103) to create a reference track that is made up of linear and curved sections.

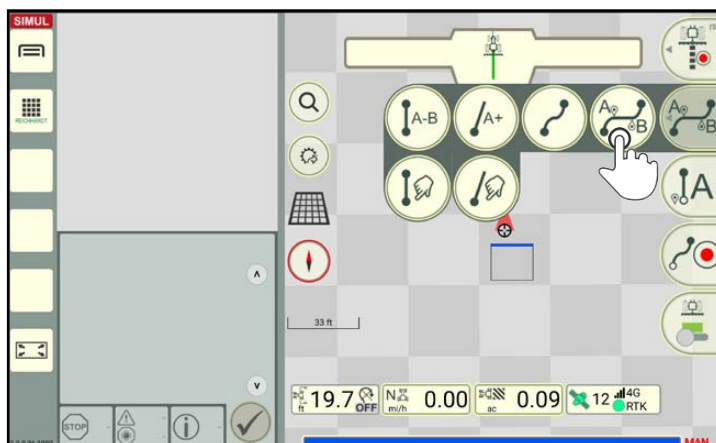


Fig. 103: Selecting "Mixed contour" track type for the reference track recording

The process for creating a "Mixed contour" reference track type is made up of processes for creating an A-B track and contour.

The following buttons are available alternately (see Fig. 104 ff.):



Press this button to create an A point for a linear track.

If a starting point for a curve has previously been set, tapping this button will simultaneously set an end point for the curve.



The button for setting an A point changes after being tapped.

This button can now be used to set a B point.

Tapping the button completes the track recording.



Tap this button to set the starting point for a curve. If an A point has previously been set, tapping this button will simultaneously set a B point.



The button for setting a curve starting point changes after being tapped.

This button can be used to set the end point of a curve.

Tapping the button completes the track recording.

The following example illustrates the creation of a track that is made up of a straight line, a curve, and another straight line.



Setting an A point for the straight line (see Fig. 104).

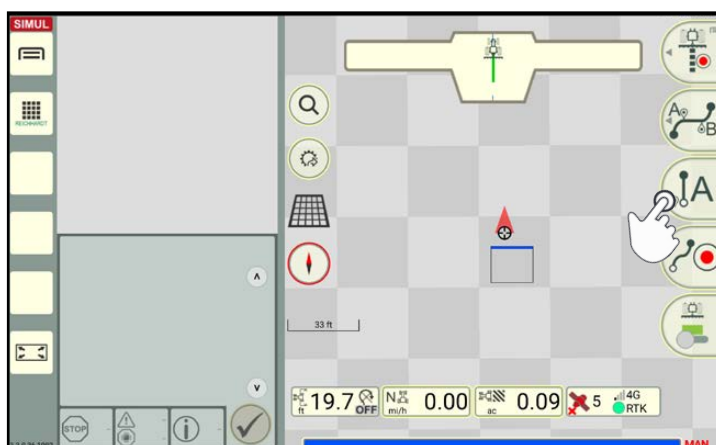


Fig. 104: Setting an A point for the straight line





Setting the starting point for the curve and a B point for the straight line (see Fig. 105).

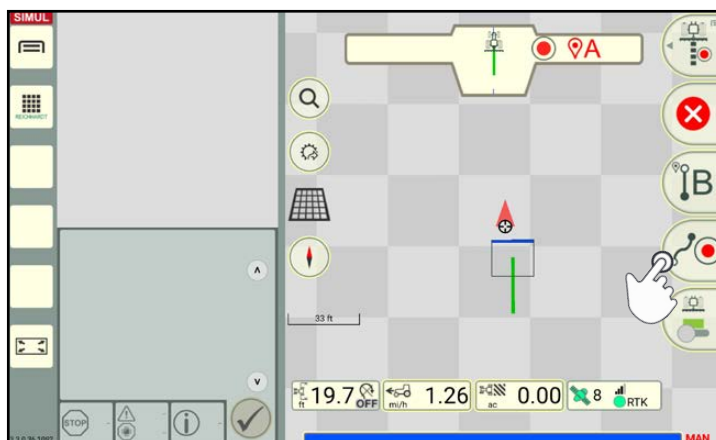


Fig. 105: Setting the starting point for the curve and B point for the straight line



Setting an A point for the straight line and the end point for the curve (see Fig. 106).

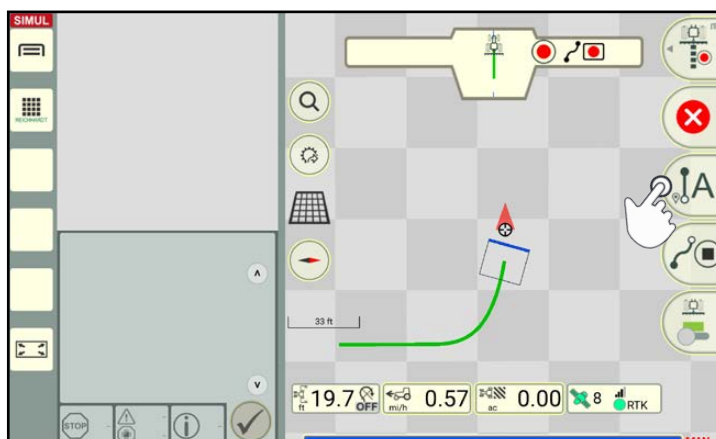


Fig. 106: Setting an A point for the straight line and the end point for the curve

### Canceling a reference track recording



Tap the red X to discard the current reference track recording.

### Completing a reference recording



The recording for the reference track is completed when you set a B point for the straight line (see Fig. 107).

(The same applies if you are recoding a curve and you tap the button to set an end point.)

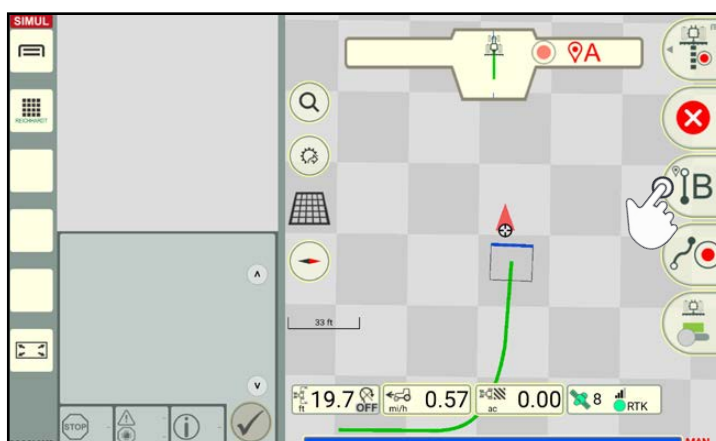


Fig. 107: Setting a B point for the straight line and completing the reference track recording

## FIELD OBJECTS

### Reference Tracks

The required reference track is generated automatically. The starting and end point are marked with two corresponding track markers for contours (see Fig. 108).

These track markers are explained as part of the reference track marking process (see chapter 3.1.2.1).

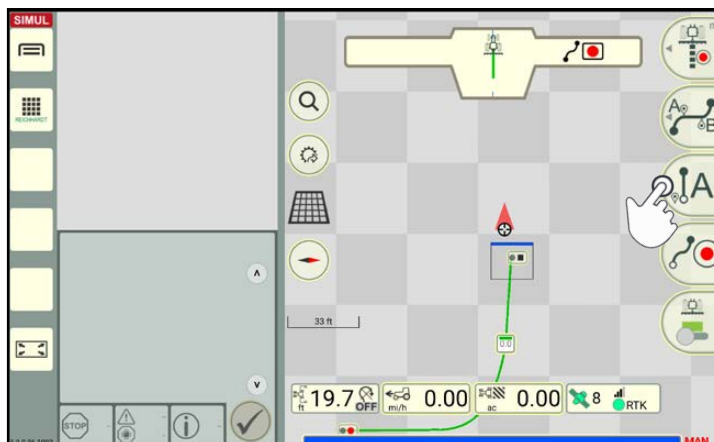


Fig. 108: Reference track created automatically

If the prompt to stop track recording was confirmed, you will automatically switch to field marking mode.

Depending on the settings in the automatic functions of the SMART GUIDE menu (see chapter 6.3.2), the following applies in field marking mode:

- A parallel track pattern is created for the last created reference track (see Fig. 109);
- Single track steering is activated for the last created reference track (steered along the reference track);
- No further actions are executed.

Information on how to manually create or change a track pattern and how to use a track pattern for work on the field is detailed in chapter 3.1.3.

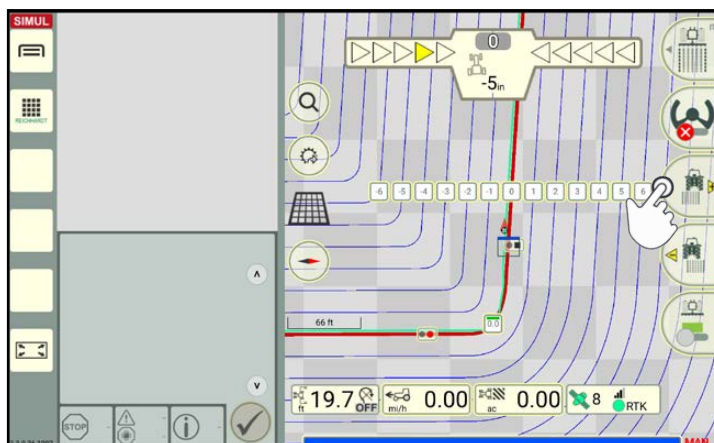


Fig. 109: Parallel track pattern after stopping the reference track recording

### NOTICE

If there are no field boundaries, then the track pattern of the mixed contour is extended by 3281 ft (1 km) to the front and rear.

If there are field boundaries, then the track pattern is only extended to these boundaries.



## 3.1.2 Marking and Deleting the Reference Track

You can subsequently edit reference tracks, that were recorded with a linear track type, by offsetting the starting and end points (see chapter 3.1.2.2).



All of the reference track types can also be deleted (see chapter 3.1.2.3).







A reference track can be marked and deleted in field marking and reference track recording modes.

### 3.1.2.1 Track Markers of Reference Tracks (and their Marking Options)

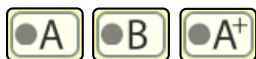
A reference track (green) is made of different track markers. These provide different information. Tapping enables you to execute different actions for the reference track.

Symbol	Description	Functions in reference track recording mode <sup>1</sup>	Functions in field marking mode
	Reference track marker	<ul style="list-style-type: none"> <li>Shows the number of the reference track and a green line as a reference track indicator</li> <li>Tapping opens the track dialog box for the reference track: <ul style="list-style-type: none"> <li>- Deleting the reference track (see chapter 3.1.2.3)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Shows the number of the reference track and a green line as a reference track indicator</li> <li>Tapping opens the track dialog box for the reference track: <ul style="list-style-type: none"> <li>- Opening the context menu for the track pattern: <ul style="list-style-type: none"> <li>+ Displaying and configuring the track pattern (see chapter 3.1.3)</li> <li>+ Shifting the track pattern (see chapter 3.1.5.3)</li> <li>+ Hiding the track pattern (see chapter 3.1.6)</li> </ul> </li> <li>- Deleting the reference track (see chapter 3.1.2.3)</li> </ul> </li> </ul>
	"A point" track marker	<ul style="list-style-type: none"> <li>Shows the starting point of a linear track (A-B mode)</li> <li>Tapping opens the context menu for the track marker: <ul style="list-style-type: none"> <li>- Editing the track marker (by changing the coordinates of the A and B points; see chapter 3.1.2.2)</li> <li>- Shifting the track marker (manually on the map; see chapter 3.1.2.2)</li> <li>- Deleting a track (see chapter 3.1.2.3)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Shows the starting point of a linear track (A-B mode)</li> <li>Tapping opens the context menu for the track marker: <ul style="list-style-type: none"> <li>- Editing the track marker (by changing the coordinates of the A and B points; see chapter 3.1.2.2)</li> <li>- Shifting the track marker (manually on the map; see chapter 3.1.2.2)</li> <li>- Opening the track dialog box (context menu for the reference track)</li> <li>- Deleting a track (see chapter 3.1.2.3)</li> </ul> </li> </ul>

<sup>1</sup> In field marking mode, track patterns can be created for a reference track. This is why there are more options than in recording mode.

Symbol	Description	Functions in reference track recording mode <sup>1</sup>	Functions in field marking mode
	"B point" track marker	<ul style="list-style-type: none"> <li>Shows the end point of a linear track (A-B mode)</li> <li>Tapping opens the context menu for the track marker: <ul style="list-style-type: none"> <li>- Editing the track marker (by changing the coordinates of the A and B points; see chapter 3.1.2.2)</li> <li>- Shifting the track marker (manually on the map; see chapter 3.1.2.2)</li> <li>- Deleting a track (see chapter 3.1.2.3)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Shows the end point of a linear track (A-B mode)</li> <li>Tapping opens the context menu for the track marker: <ul style="list-style-type: none"> <li>- Editing the track marker (by changing the coordinates of the A and B points; see chapter 3.1.2.2)</li> <li>- Shifting the track marker (manually on the map; see chapter 3.1.2.2)</li> <li>- Opening the track dialog box (context menu for the reference track)</li> <li>- Deleting a track (see chapter 3.1.2.3)</li> </ul> </li> </ul>
	"A <sup>+</sup> -point" track marker	<ul style="list-style-type: none"> <li>Shows the starting point of a linear track in a certain direction (A<sup>+</sup>-mode)</li> <li>Tapping opens the context menu for the track marker: <ul style="list-style-type: none"> <li>- Editing the track marker (by changing the coordinates or the direction of the A point; see chapter 3.1.2.2)</li> <li>- Shifting the track marker (manually on the map; see chapter 3.1.2.2)</li> <li>- Deleting a track (see chapter 3.1.2.3)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Shows the starting point of a linear track in a certain direction (A<sup>+</sup>-mode)</li> <li>Tapping opens the context menu for the track marker: <ul style="list-style-type: none"> <li>- Editing the track marker (by changing the coordinates or the direction of the A point; see chapter 3.1.2.2)</li> <li>- Shifting the track marker (manually on the map; see chapter 3.1.2.2)</li> <li>- Opening the track dialog box (context menu for the reference track)</li> <li>- Deleting a track (see chapter 3.1.2.3)</li> </ul> </li> </ul>
	"Starting point of a curve" track marker	<ul style="list-style-type: none"> <li>Shows the starting point of a curve (contour, mixed contour)</li> <li>Tapping opens the context menu for this track marker: <ul style="list-style-type: none"> <li>- Deleting a track (see chapter 3.1.2.3)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Shows the starting point of a curve (contour, mixed contour)</li> <li>Tapping opens the context menu for the track marker: <ul style="list-style-type: none"> <li>- Opening the track dialog box (context menu for the reference track)</li> <li>- Deleting a track (see chapter 3.1.2.3)</li> </ul> </li> </ul>
	"End point of a curve" track marker	<ul style="list-style-type: none"> <li>Shows the end point of a curve (contour, mixed contour)</li> <li>Tapping opens the context menu for this track marker: <ul style="list-style-type: none"> <li>- Deleting a track (see chapter 3.1.2.3)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Shows the end point of a curve (contour, mixed contour)</li> <li>Tapping opens the context menu for the track marker: <ul style="list-style-type: none"> <li>- Opening the track dialog box (context menu for the reference track)</li> <li>- Deleting a track (see chapter 3.1.2.3)</li> </ul> </li> </ul>

### 3.1.2.2 Shifting the Track Marker



On linear tracks, you can offset the A and B point, or the A<sup>+</sup> point.



The starting and end points of a contour or mixed contour cannot be offset.

#### Shifting the track marker by changing the coordinates

1. Tap the relevant track marker.

The context menu for the track marker is then displayed (see Fig. 110).

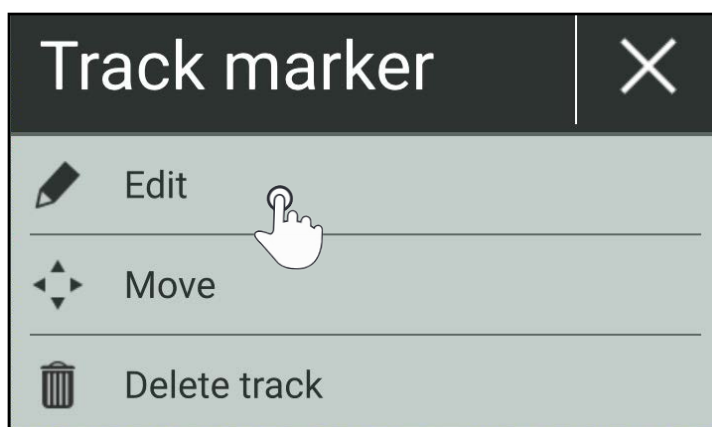


Fig. 110: Context menu for track marker A, B, and A<sup>+</sup> (in reference track recording mode)

2. Tap "Edit" to execute one of the following actions:

- A point: Change the coordinates of the A and B points (see Fig. 111).
- B point: Change the coordinates of the A and B points (see Fig. 111).
- A<sup>+</sup> point: Change the coordinates of the A<sup>+</sup>-point and direction of the track (see Fig. 112).

Manual		✓	✕
A	Lat	51.688518834	
	Lon	9.141299116	
B	Lat	51.688634001	
	Lon	9.141299125	

Fig. 111: Editing the coordinates of the A and B points

A+		✓	✕
<input type="checkbox"/> use actual values			
Heading		0.00 °	
Lat		51.6888449	
Lon		9.1412991	

Fig. 112: Editing the coordinates (or direction) of the A<sup>+</sup>-point

## FIELD OBJECTS

### Reference Tracks

#### Moving the track marker on the map

1. Tap the relevant track marker.  
The context menu for the track marker is then displayed (see Fig. 110).
2. Tap "Move".  
The selected track marker is now surrounded by four small arrows (see Fig. 113).  
A counter counts down from 5 seconds.
3. Tap the required position in the field to position the track marker (see Fig. 114).  
Once moved the counter will start to count down again.
4. Wait until the countdown has finished.  
The moving option is then terminated.  
The changed reference track is displayed automatically (see Fig. 115).

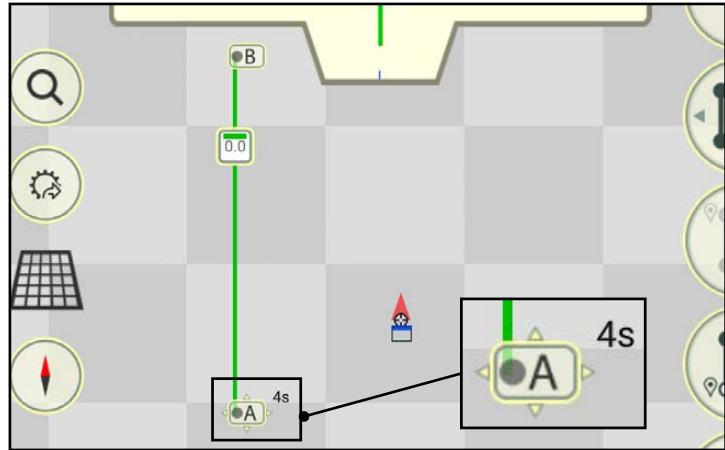


Fig. 113: Moving the A point selected

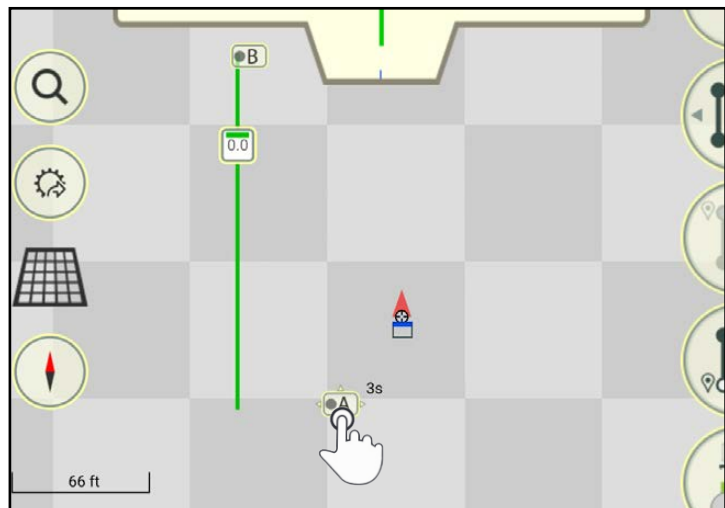


Fig. 114: A point moved

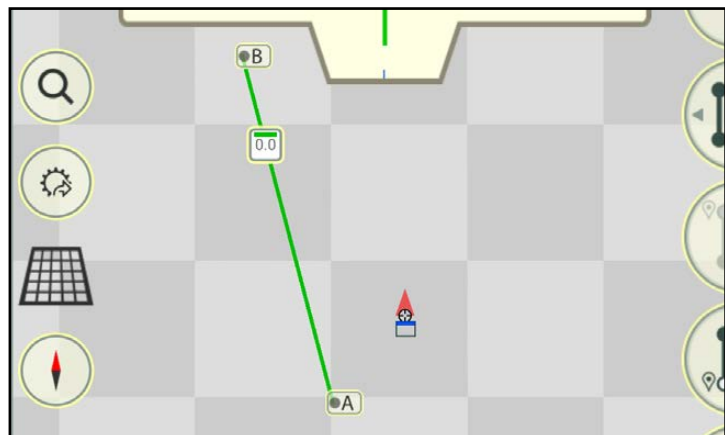


Fig. 115: Changed A+ reference track

### 3.1.2.3 Deleting the Reference Track

The complete reference track can be deleted as follows:

1. Tap a track marker or the reference track marker (see Fig. 116).  
The relevant context menu for the track marker is then displayed (see Fig. 117).
2. Tap "Delete track" or "Delete" to remove the reference track.

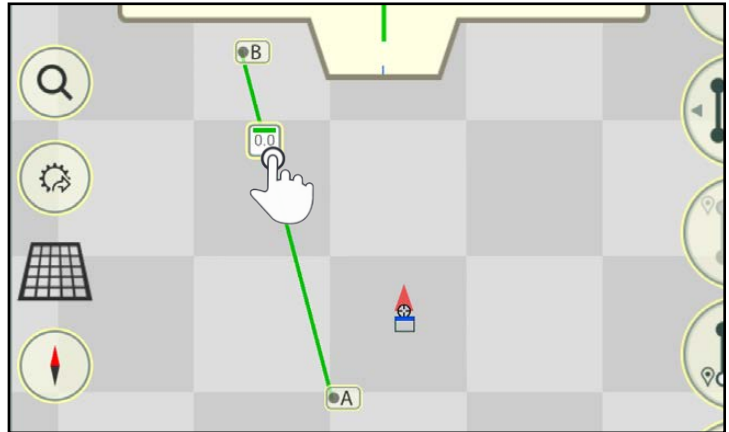


Fig. 116: Tapping the track marker

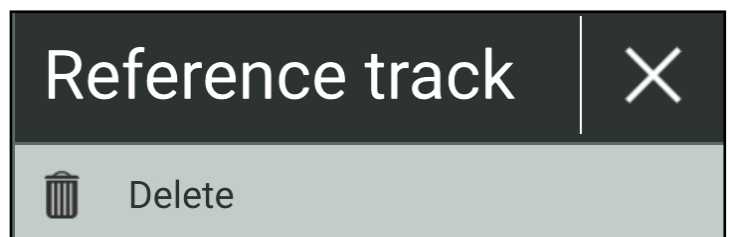


Fig. 117: Context menu for the reference track marker

### 3.1.3 Displaying the Track Pattern

After recording reference tracks, you can create or display a track pattern for the field marking.

There are different track modes to create the track patterns.

Selecting a track mode, the available track modes, the settings for the different track patterns, and the resulting track patterns are explained in the following.

#### 3.1.3.1 Selecting Track Mode and Calling up the Track Pattern Settings



Field marking mode must be called up to display the track pattern (see Fig. 118).



Tap the reference track marker of the reference track for which you want to create a track pattern (see Fig. 118).

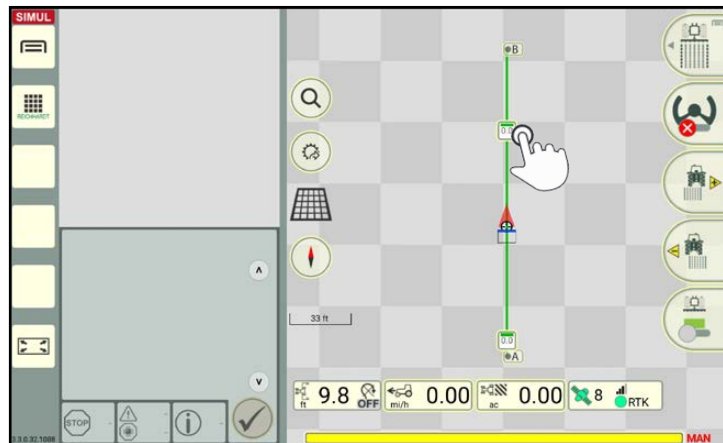


Fig. 118: Tapping the reference track marker

The context menu for the reference track is then displayed (see Fig. 119 – A).

Tap the "Track pattern" option.

#### NOTICE

If some of the track elements are in close proximity to one another, a more detailed view may be displayed beforehand (see Fig. 119 – B).

Generally, you can call up the track dialog box to create a track pattern via every track marker.

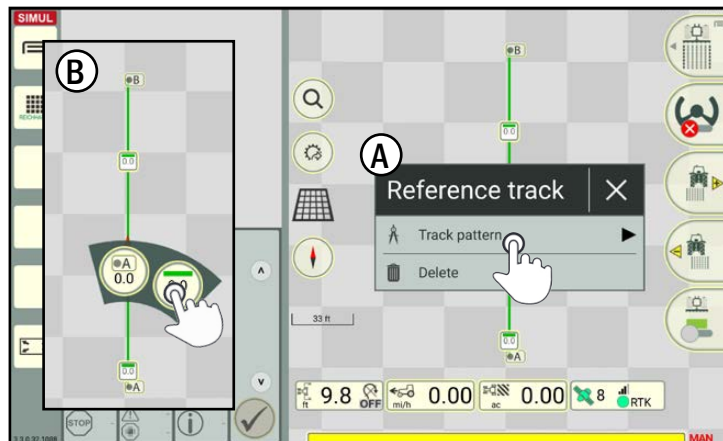


Fig. 119: Tapping the "Track pattern" option

A window with the available track modes then opens to create a track pattern (see Fig. 120).

Tap to select the corresponding track mode.

#### NOTICE

If the field already contains a track pattern, it is replaced with the selected one.

Existing track patterns can be hidden via the context menu (see chapter 3.1.6).

This will take you to the track pattern settings for the relevant track mode.

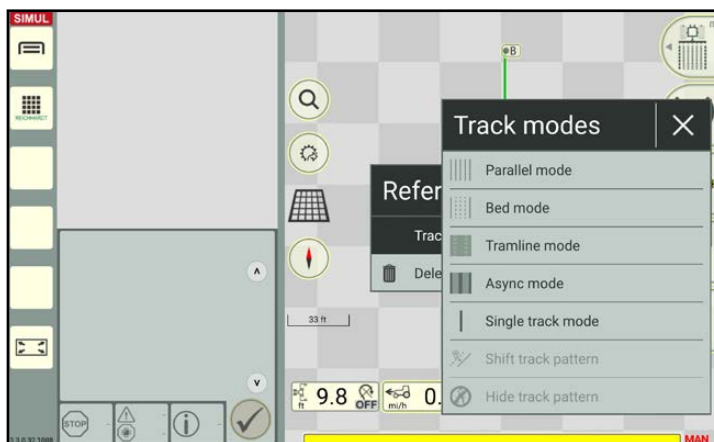







Fig. 120: Track modes










### 3.1.3.2 Available Track Modes

The following track modes can be used for a track pattern in the field:

Symbol	Track pattern	Description
	Parallel mode	Draws parallel tracks within a reference track (see chapter 3.1.3.5).
	Bed mode	A definable number of tracks can be combined into beds which are skipped when driving across the field (see chapter 3.1.3.6).
	Tramline mode	Track pattern that displays highlighted tramline tracks (see chapter 3.1.3.7).
	Async mode	Maintenance and bed tracks alternate. The pattern is repeated continuously (see chapter 3.1.3.8).
	Single track mode	The reference track is used as a drivable track without parallel tracks (see chapter 3.1.3.9).



### 3.1.3.3 Explanation of the Track Varieties in a Track Pattern

Symbol	Track type	Color/illustration	Illustration of the track number
	Reference track	Dark green	 Number consisting of a number (group) before and a number (subgroup) after a point; with a green line above it.
	Active implement track (next to active steering track of the tractive unit)	Red	-
	Active steering track of the tractive unit (next to active implement track)	Light green, narrow	-
	Active steering track of the tractive unit and implement above one another	Light green, red border	-
	Maintenance tracks/tramline tracks	Light blue, bold	 Negative number: left of the reference track Positive number: right of the reference track 0: Reference track
	Parallel tracks Bed tracks	Dark blue, narrow	 Negative number: left of the reference track Positive number: right of the reference track 0: Reference track

### 3.1.3.4 General Settings for Track Patterns – Total Width and Position

The relevant track pattern settings are displayed once you have selected the required track mode. These specific settings are explained in chapter 3.1.3.5 to chapter 3.1.3.9.



The header of the relevant track pattern settings contains a button with a gearwheel symbol (see Fig. 121).

This button is used to set the general settings (total width and position) that are applied to every track pattern in every track mode.

Tap the gearwheel symbol to open the general settings.

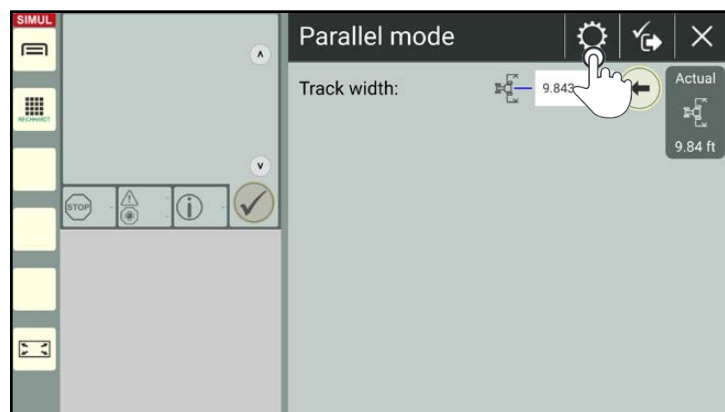


Fig. 121: Tapping the gearwheel symbol in the track pattern settings

### Total width:

Enter the required value for the width of the entire track pattern (see Fig. 122).

#### NOTICE

Very high values will result in lots of parallel tracks, which will have a negative impact on the performance of the overall system.

If the reference track is within a field boundary, the track pattern is calculated for the entire surface of the field.

(The creation and use of different boundary lines is explained in chapter 3.2.)

### Positioning to the reference track

Select the position of the track pattern being created in relation to the reference track:

- To the right:  
Specified total width is created to the right of the reference track.
- To the left:  
Specified total width is created to the left of the reference track (see Fig. 123).
- Both sides:  
Specified total width is distributed equally to the left and right of the reference track (see Fig. 124).



Confirm the entries with the checkmark.

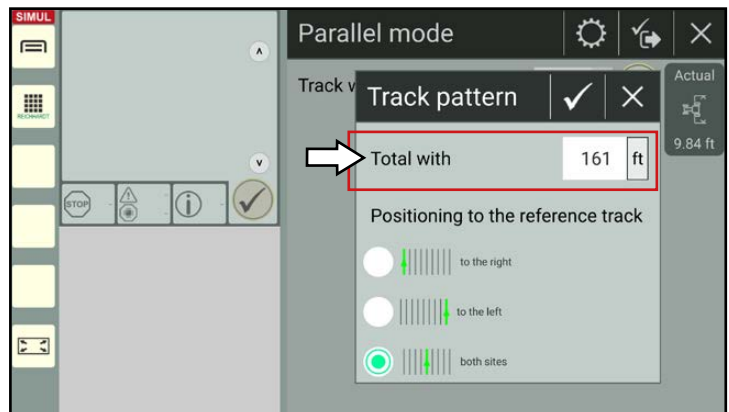


Fig. 122: Setting the total width and position to the reference track

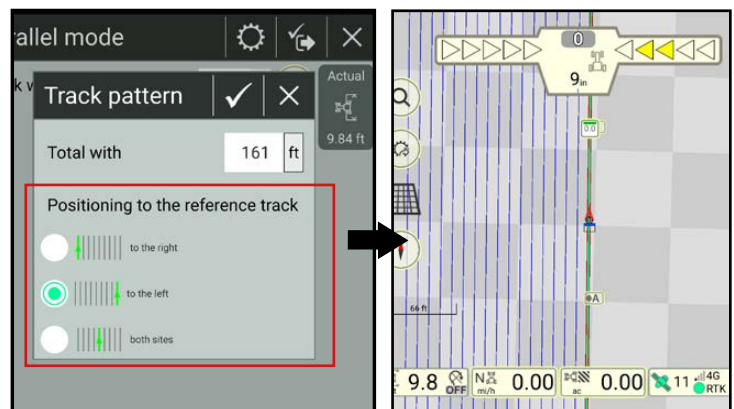


Fig. 123: Example of a parallel track pattern to the left of the reference track

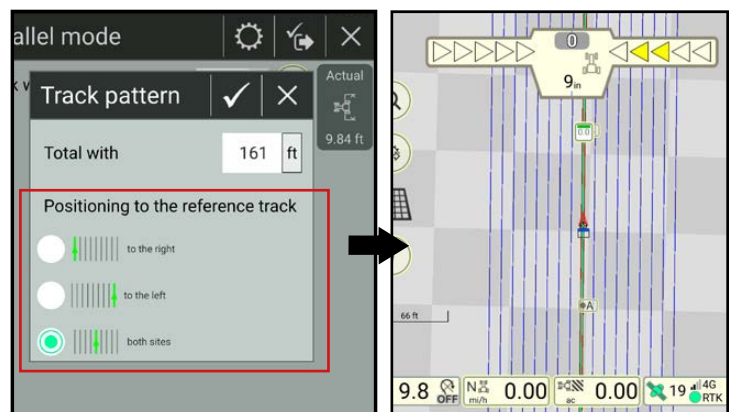


Fig. 124: Example of a parallel track pattern on both sides of the reference track

### 3.1.3.5 Settings for Parallel Mode

Parallel track mode is the most common track mode.

It illustrates tracks in parallel to the reference track at a distance of a specified track width (see Fig. 123 and Fig. 124, for example).

#### Track width:

In addition to the general track pattern settings, you can specify the track width in the parallel mode settings (see chapter 3.1.3.4).



Tap the arrow pointing to the left to specify the current working width as the track width (see Fig. 125).

If you would like to specify a different track width, enter the required value in the white box to the left of the arrow.



After saving the track pattern settings, the track pattern is displayed in the SMART GUIDE user interface.

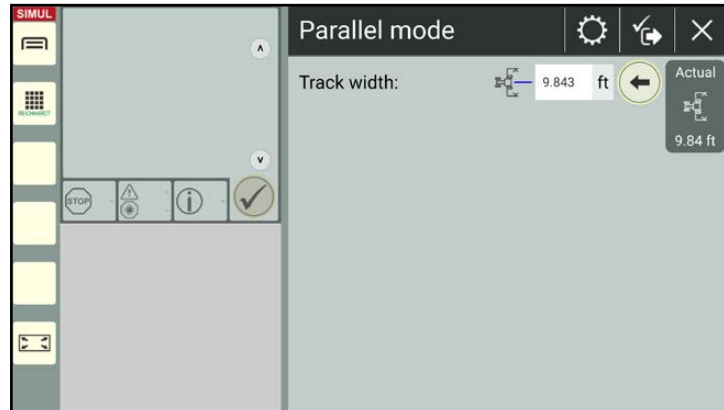


Fig. 125: Specifying the track width

### 3.1.3.6 Settings for Bed Mode

Bed mode is designed to make it easier to mark the field and split it into beds (see example in Fig. 126).

#### Track width:



By tapping the arrow pointing to the left, you can adopt the current working width as the track width.

Alternatively, you can enter the track width in the white box to the left of the arrow.

#### Skipped:

Once you have entered the track width, you can specify how many tracks in the track pattern should be skipped before another bed track is added (see Fig. 127).

#### Shift track pattern:

Once you have entered the track width, you have the option of shifting the entire track pattern by one track width.

This process is the same for bed tracks, tram-lines, and asynchronous tracks (async) and is thus explained for all of the tracks in chapter 3.1.5.2.



After saving the track pattern settings, the track pattern is displayed in the SMART GUIDE user interface.

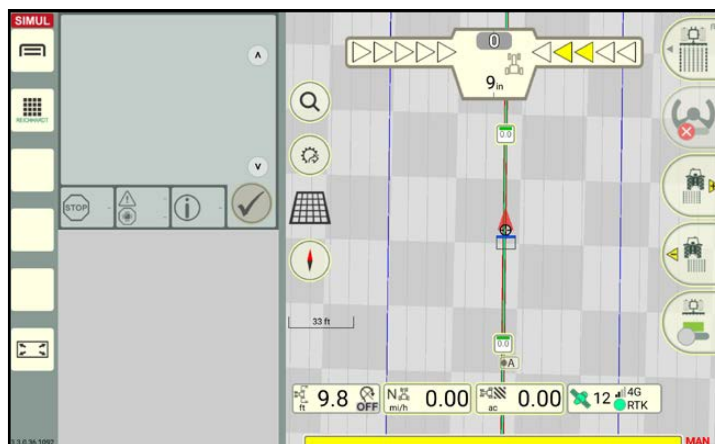


Fig. 126: Example of a bed track pattern



Fig. 127: Settings for bed mode

### 3.1.3.7 Settings for Tramline Mode

Tramline mode is designed to visually highlight tramlines during the field marking process (see example in Fig. 128).

#### Track (track width):



By tapping the arrow pointing to the left, you can adopt the current working width as the track width.

Alternatively, you can enter the track width in the white box to the left of the arrow.

#### Tramline:

The following settings can be implemented for tramlines (see Fig. 129).

- ① Tramline number: In the first box, you can specify the nth track that should always be a tramline.
- ② Tramline distance: In the second box, you can specify the distance between two tramlines.



By tapping the arrow pointing to the left, you can adopt the current working width as the track width.

The setting in the other relevant box is recalculated automatically.

#### NOTICE

If the box for the tramline number does not contain a whole number, an orange warning triangle is displayed in the box (see Fig. 130 – A).

If the track width does not correspond to the current working width, an orange warning triangle is displayed in the box (see Fig. 130 – B).

#### Shift track pattern:

Once you have entered the track width, you have the option of shifting the entire track pattern by one track width. This process is the same for bed tracks, tramlines, and asynchronous tracks (async mode) and is thus explained for all of the tracks in chapter 3.1.5.2.



After saving the track pattern settings, the track pattern is displayed in the SMART GUIDE user interface.

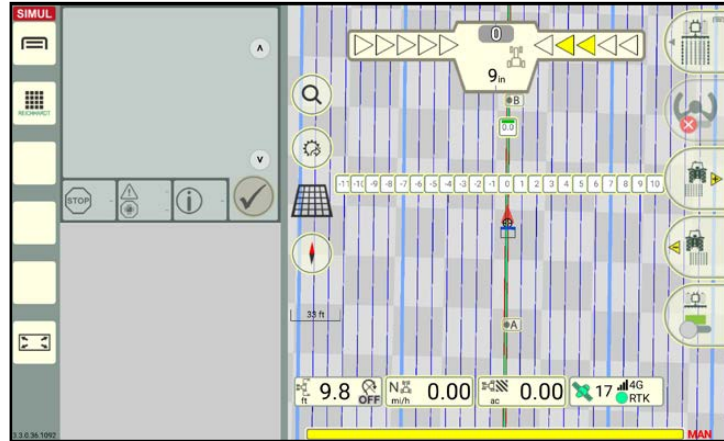


Fig. 128: Example of the tramline pattern

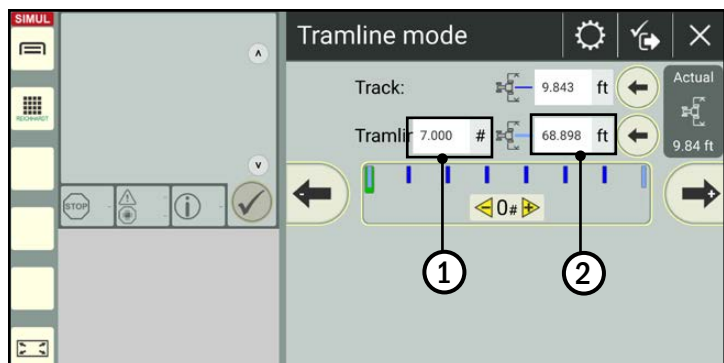


Fig. 129: Setting tramlines

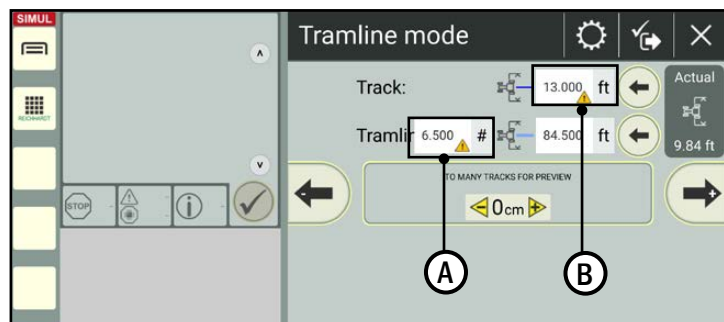


Fig. 130: Warning triangles for unsuitable number



### 3.1.3.8 Settings for Async Mode

Async mode can be used to generate a track pattern with uneven track distances (see example in Fig. 131).

#### Bed tracks and maintenance tracks:

Enter the required values for the number (#) and width (m) of the bed and maintenance tracks in the fields provided (see Fig. 132).

#### NOTICE

In async mode, you can also enter uneven values for the track widths and number of tracks.



By tapping the arrow pointing to the left, you can adopt the working width as the track width.

#### Shift track pattern:

Once you have entered the track width, you have the option of shifting the entire track pattern by one track width.

This process is the same for bed tracks, tramlines, and asynchronous tracks (async mode) and is thus explained for all of the tracks in chapter 3.1.5.2.



After saving the track pattern settings, the track pattern is displayed in the SMART GUIDE user interface.

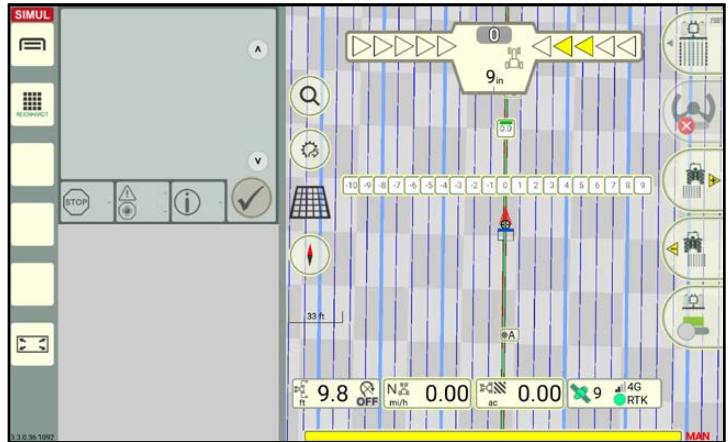


Fig. 131: Example of a track pattern with asynchronous tracks

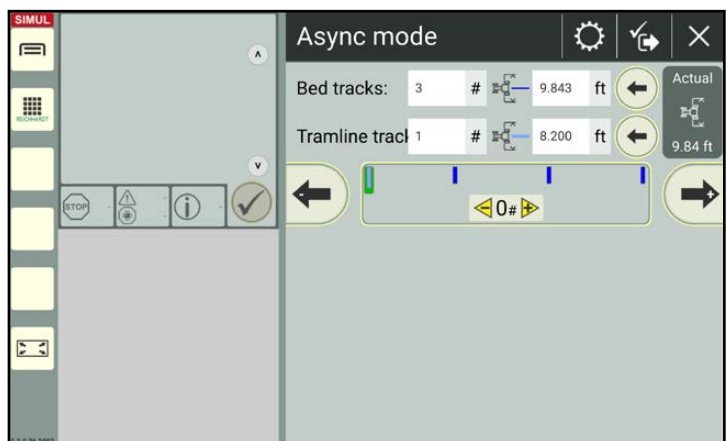


Fig. 132: Setting async mode

### 3.1.3.9 Settings for Single Track Mode

In single track mode, the reference track is used as the steering track (see Fig. 133).

No other settings are required.

The track pattern is displayed when the track mode is selected.

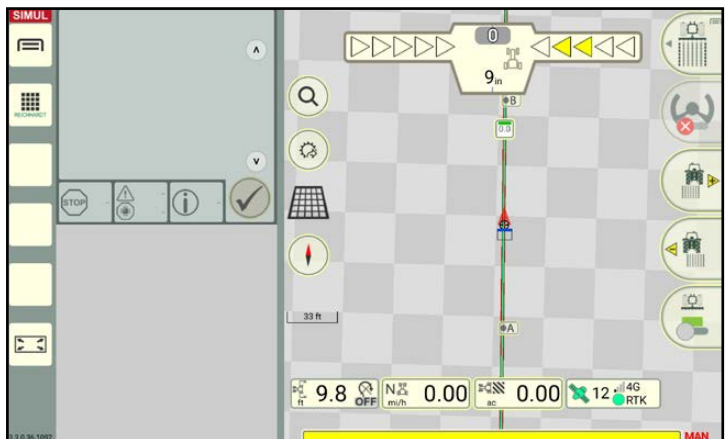


Fig. 133: Single track mode

### 3.1.4 Displaying the Track Pattern over the Boundary Line – Boundary Lines as a Reference Track

You can use boundary lines as a reference track and thus display track patterns along the boundary lines in the headland (see chapter 3.1.4.1) or field (see chapter 3.1.4.2).

The creation of different boundary lines is explained in chapter 3.2.

#### NOTICE

Track patterns can only be displayed beyond boundary lines if the boundary line is closed (see chapter 3.2.2) and consists of individual boundary line sections on each side. The boundary line can be activated for section control but does not have to be.

If the boundary line is only made up of a single boundary line track, parallel tracks are created for the entire boundary line. This can cause unwanted results.

#### 3.1.4.1 Displaying the Track Pattern in the Headland

If a headland is defined for the boundary line (see chapter 3.2.1.2 and chapter 3.2.4.1 – „Context menu options“), you can decide whether you want to create a track pattern for the headland side of the selected boundary line section or for the entire headland (entire boundary line group).

##### Track pattern for selected boundary line section:

Tap the reference track marker for the required boundary line section of a closed boundary line. Fig. 134

##### Track pattern for entire boundary line group:

Tap any reference track marker on the boundary line.

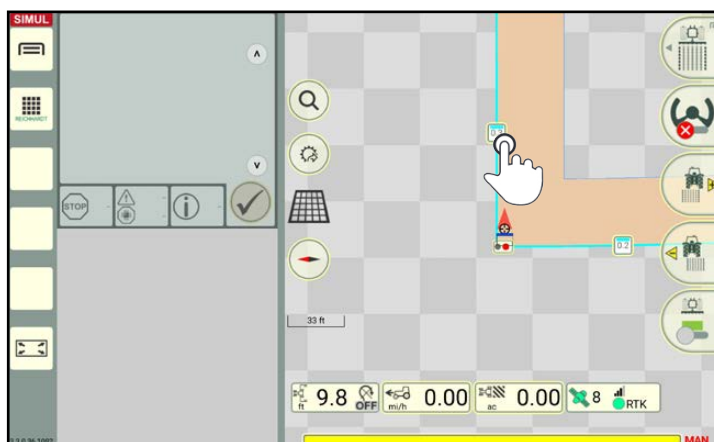


Fig. 134: Tapping the reference track marker

The context menu for the boundary lines then opens (see Fig. 135).

In the context menu, you can tap the relevant symbol to define whether the settings below the symbol should only apply to a boundary line section or to the entire boundary line group.



Boundary line section (individual boundary line):  
Display track pattern for one side of the headland or the entire field.



Entire boundary line group:  
Display track pattern for headland.

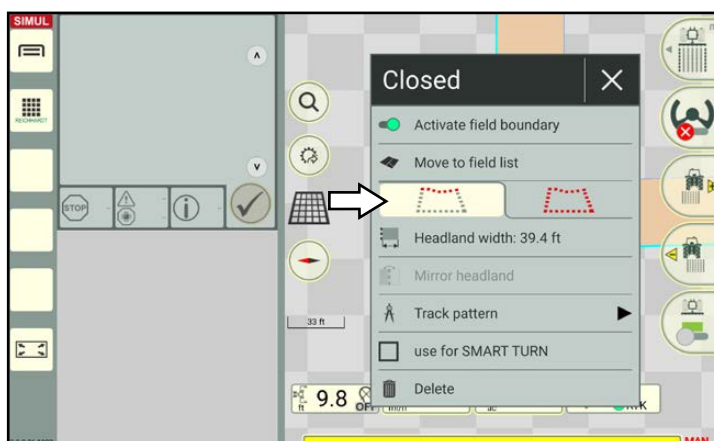


Fig. 135: Selecting the boundary line section/entire boundary line group

The selected area is highlighted yellow. The "Boundary line section" option is selected by default.



Tap the "Track pattern" option (see Fig. 136).

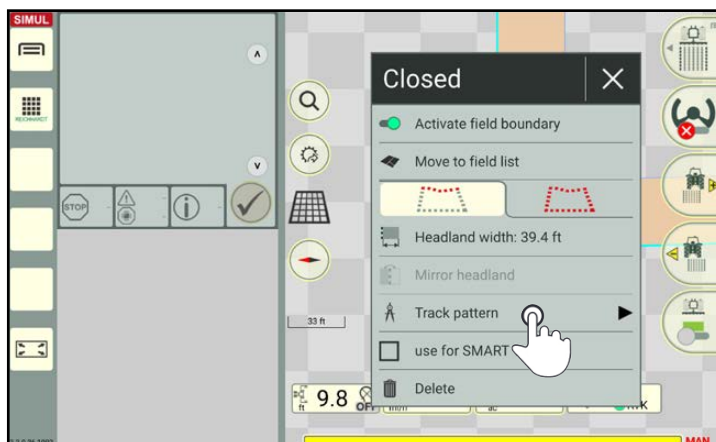


Fig. 136: Tapping the "Track pattern" option

Another context menu will open if you have selected a boundary line section within a field boundary.

Tap the "Display only in headland" option (see Fig. 137).

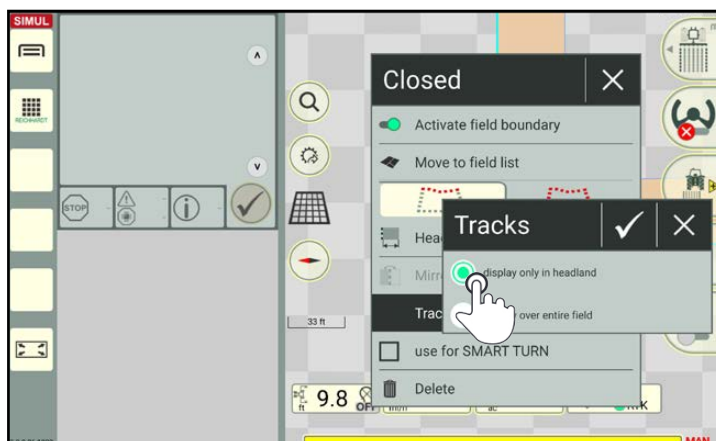


Fig. 137: Only display in headland

You can then select the different track modes (see Fig. 138).

Tap to select the required track mode.

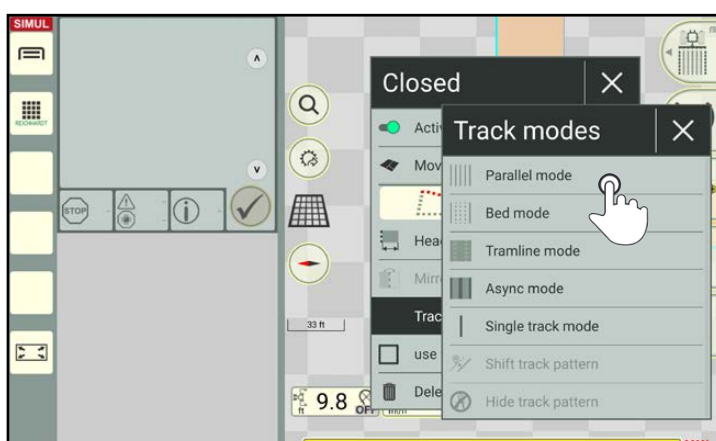


Fig. 138: Selecting the track mode

## FIELD OBJECTS

### Reference Tracks

Specify the track width (see Fig. 139).

#### NOTICE

A yellow warning triangle is display in the input box if the track width is narrower than the current working width.

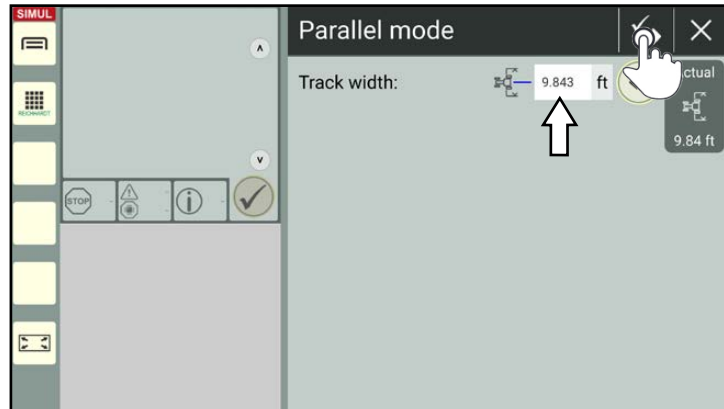


Fig. 139: Specifying and saving the track width

Once saved, the track pattern is displayed in the headland (see Fig. 140 and Fig. 141).

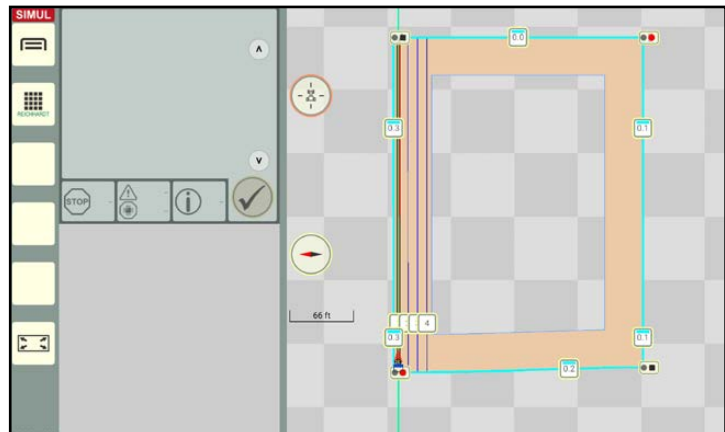


Fig. 140: Track pattern for boundary line section in the headland

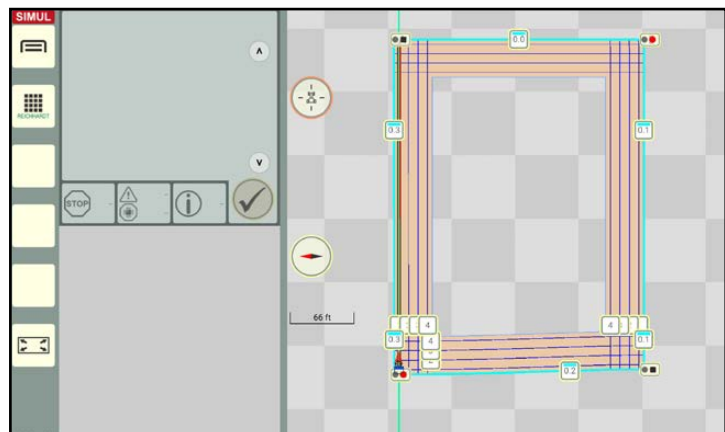


Fig. 141: Track pattern for entire boundary line group in headland

### 3.1.4.2 Displaying the Track Pattern over the Entire Field

#### NOTICE

This option is only available for field boundaries and not for exclusion area boundaries.

Decide which boundary line section should be used as the reference track for the track pattern in the field.

Tap the corresponding reference track marker of the closed field boundary (see Fig. 142).

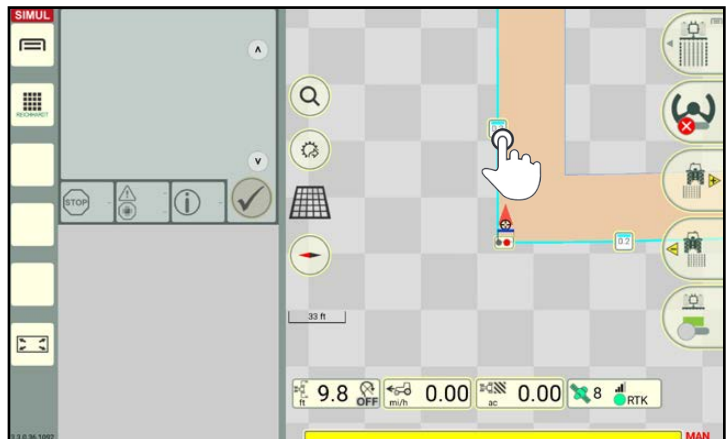


Fig. 142: Tapping the reference track marker

The context menu for the boundary lines then opens (see Fig. 143).



Track patterns in the field can only be created in relation to an individual boundary line section. You must thus ensure that the symbol for the boundary line section is selected and highlighted yellow.

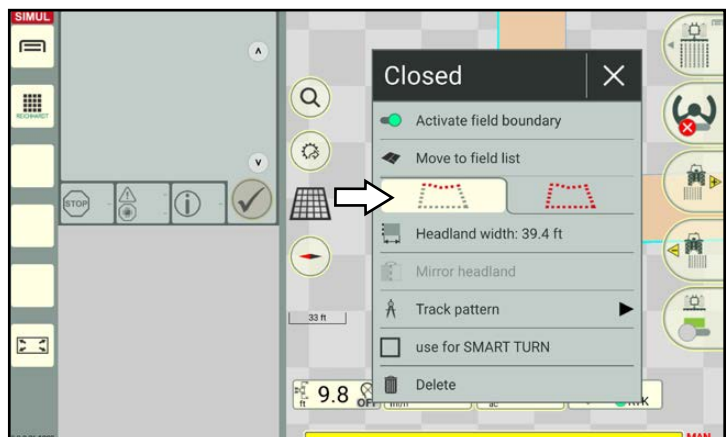


Fig. 143: Selecting the boundary section

Tap the "Track pattern" option (see Fig. 144).

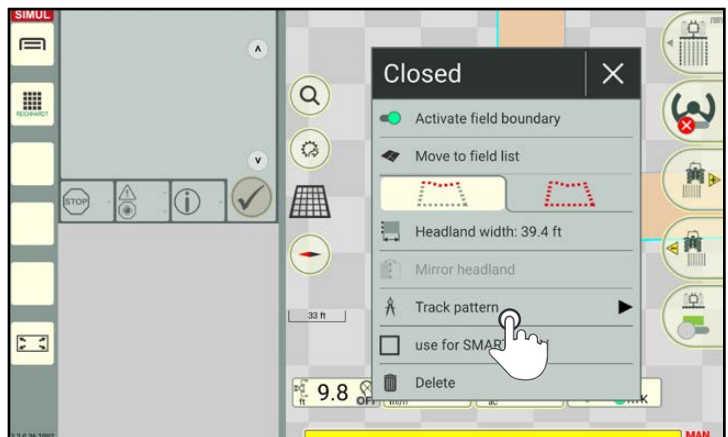


Fig. 144: Selecting the "Track pattern" option

## FIELD OBJECTS

### Reference Tracks

Tap the "Display over entire field" option (see Fig. 145).

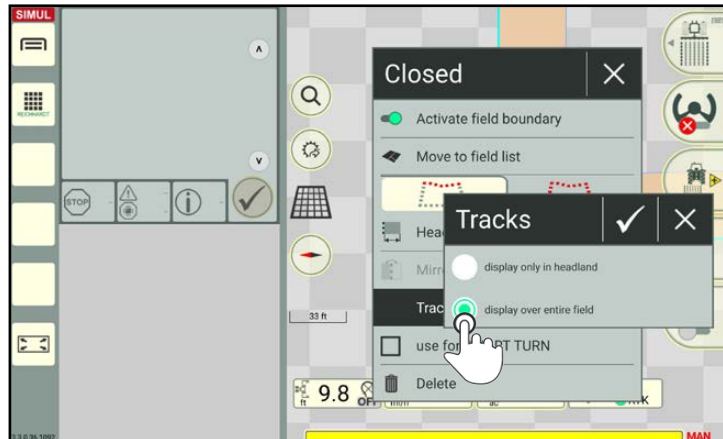


Fig. 145: Displaying the track pattern over the entire field

You can then select the different track modes (see Fig. 146).

Tap to select the required track mode.

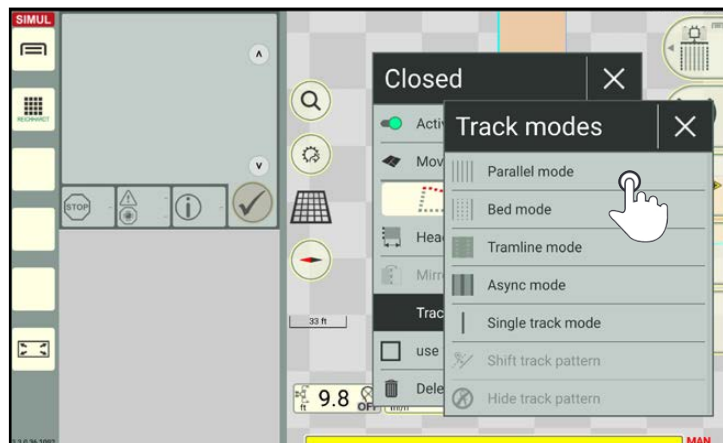


Fig. 146: Selecting the track mode

Specify the track width and then tap the save symbol (see Fig. 147).

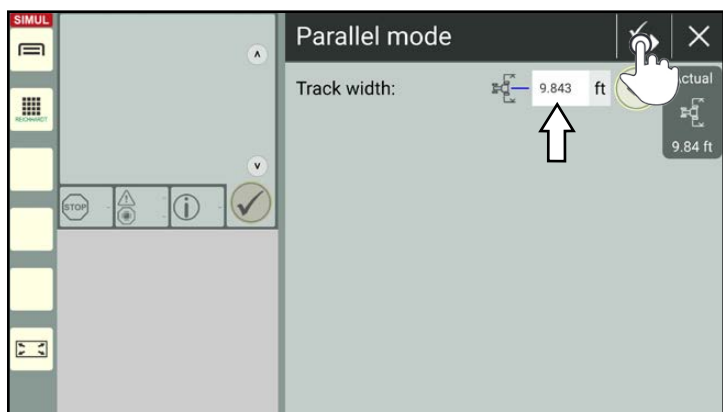


Fig. 147: Specifying and saving the track width

The selected track pattern is then displayed along the selected boundary line section of the entire field (including the headland) (see Fig. 148).

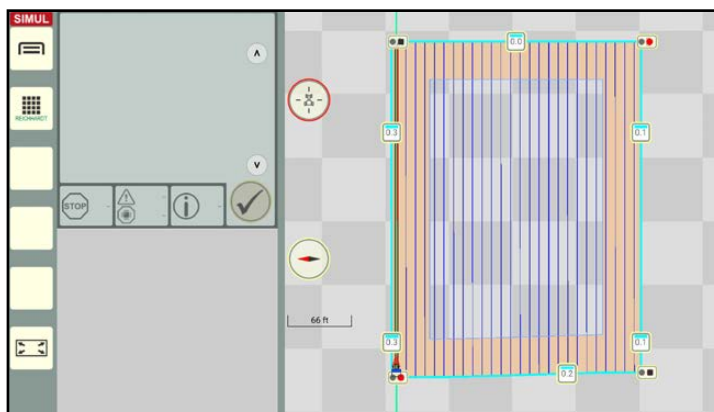


Fig. 148: Track pattern is displayed over the entire field

### 3.1.5 Shifting the Track Pattern

If the created track pattern does not match the actual conditions in the field, there are different ways in which you can shift the track pattern:

- Setting the GNSS drift to the center track (see chapter 3.1.5.1),
- Shifting the track pattern by a whole track (only available for bed tracks, tramlines, and async mode) (see chapter 3.1.5.2),
- Shifting the track pattern so it is accurate to a centimeter (all track modes) (see chapter 3.1.5.3),
- Setting the reference point to the center track (see chapter 3.3.3.3).

#### 3.1.5.1 Setting the GNSS Drift to the Center Track

##### NOTICE

This option is available for all track modes.

If a GNSS drift occurs while working in the field and the created tracks no longer match the actual conditions, then the GNSS drift can be set to the center track. During this process, the track pattern (including the reference track, boundary lines, and markers) are moved to the position of the vehicle.



Tap the cross hairs in the machine combination (see Fig. 149).

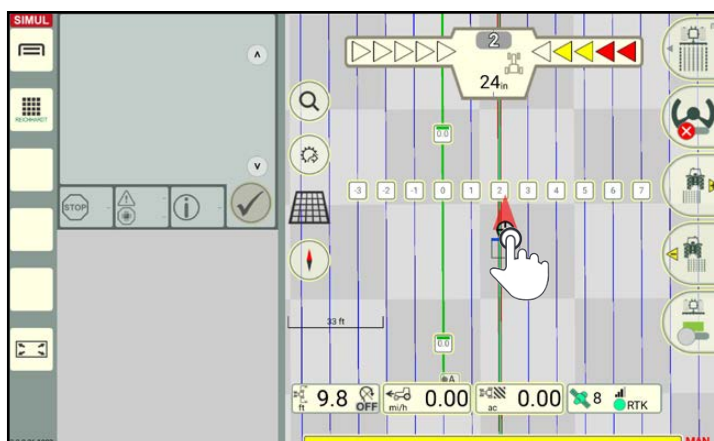


Fig. 149: Tapping the machine combination

## FIELD OBJECTS

### Reference Tracks

An option is then displayed (see Fig. 150).



Tap the symbol to set the GNSS drift to the center track.

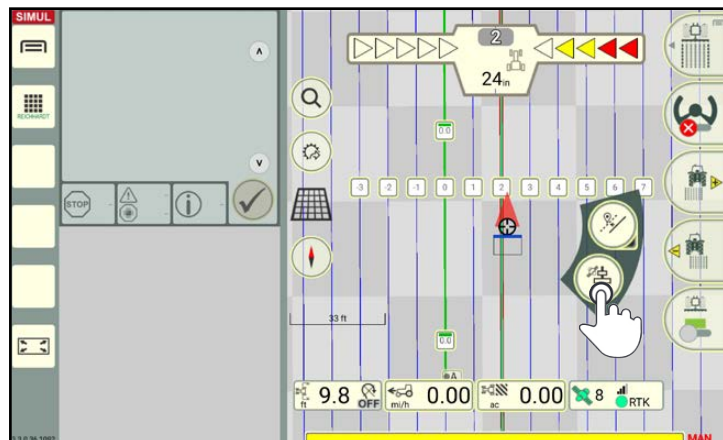


Fig. 150: Tapping the symbol to set the GNSS drift to the center track

The GNSS drift is then automatically set to the center track. The field objects are moved in such a way that the vehicle is located in the nearest, accessible track (see Fig. 151 and Fig. 152).

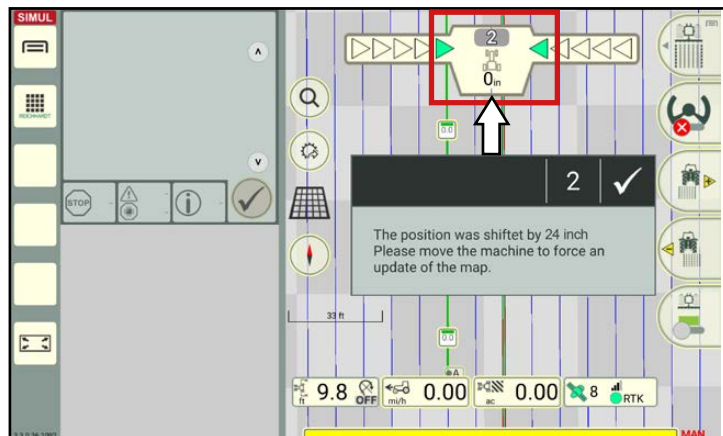


Fig. 151: Setting the GNSS drift to the center track

The corrected GNSS drift is indicated by a small warning triangle next to the vehicle (see Fig. 152).

### Resetting the center track of the GNSS drift

The center track of the GNSS drift can be reset by shifting the position in the SMART GUIDE menu (see chapter 6.6).

Setting a GNSS drift to the center track also resets the center track of a reference point (see chapter 3.3.3.3).

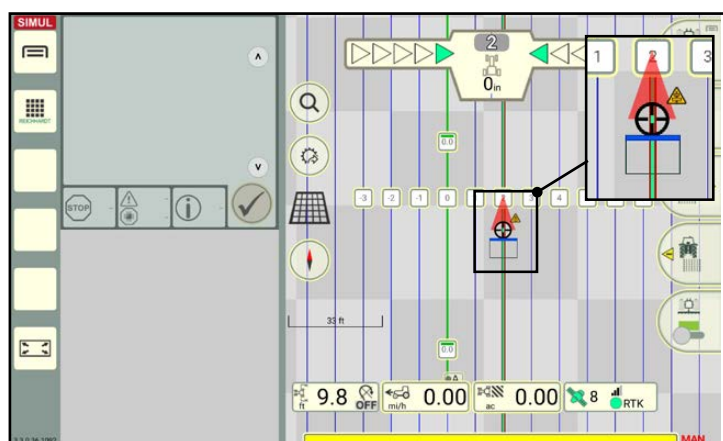


Fig. 152: GNSS drift set to center track



### 3.1.5.2 Shifting the Track Pattern by a Whole Track (Asynchronous Track Modes Only)

#### NOTICE

This option is only available for bed tracks, tramlines, and async mode.



If the track you want to drive along is marked as inaccessible in SMART GUIDE, then the track pattern must be moved. You thus have the option of shifting the entire track pattern by whole tracks in relation to the reference track.

#### NOTICE

The reference track, boundary lines, and markers are not moved.

Open the track pattern settings via the context menu of the reference track marker (see Fig. 153 and chapter 3.1.3.1).

You can shift the track pattern at the bottom of the menu if all of the other settings have been set.

-  Tap the left arrow to shift the track pattern to the left.
-  Tap the right arrow to shift the track pattern to the right.

Each tap moves the track pattern in the relevant direction by one track.

The number of movements is displayed in positive and negative values (see Fig. 154):

- Positive value: Shifting the track pattern to the right
- Negative value: Shifting the track pattern to the left

Bars, that illustrate the individual tracks, are displayed above these number (see Fig. 154):

- Light gray: Skipped tracks
- Dark blue: Bed tracks
- Green: Reference track

Fig. 155 shows the track pattern before and after shifting.

The entered offset can be reset by setting the value in the track pattern settings back to 0.

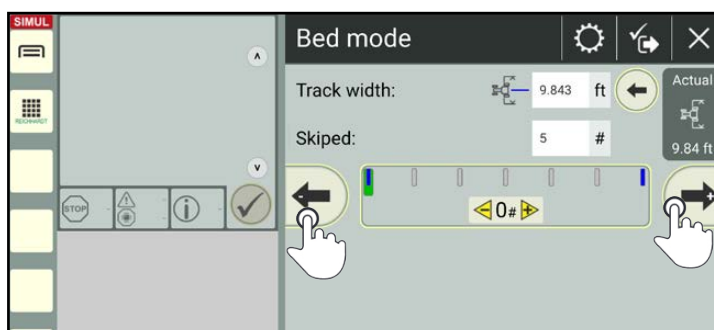


Fig. 153: Tapping arrows to shift the track pattern

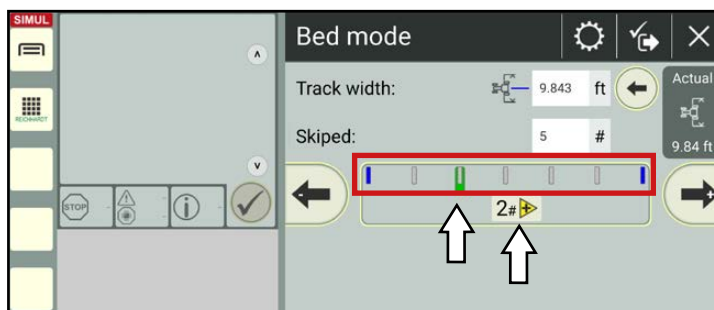


Fig. 154: Track bar and number of the movements

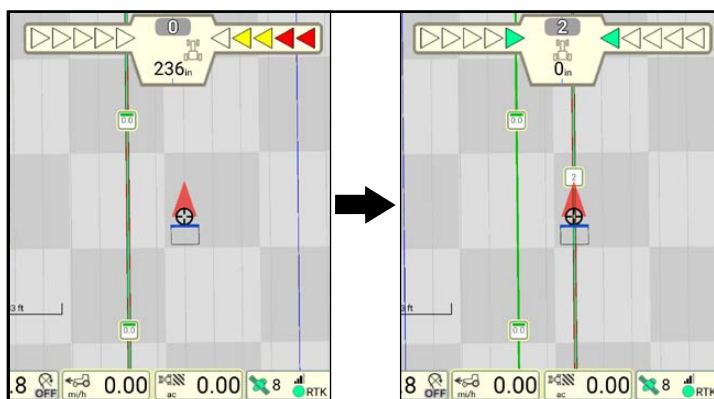


Fig. 155: Track pattern before and after shifting



### 3.1.5.3 Shifting the Track Pattern

If the track pattern created in SMART GUIDE no longer matches the actual conditions (e.g., because of a GNSS drift or implement offset caused by different implement dimensions), you can accurately shift the track pattern by entering a track offset.

#### NOTICE

The reference track, boundary lines, and markers are not moved.

There are two ways to open the window to enter the track offset:

- Via the machine combination in the SMART GUIDE user interface,
- Via a track marker.

In addition, the track pattern can be shifted automatically so that the vehicle is then on the nearest, accessible track. This procedure as well as resetting the set track offset are explained in the following.

#### Opening the input for the track offset via the machine combination



Tap the cross hairs in the machine combination (see Fig. 156).

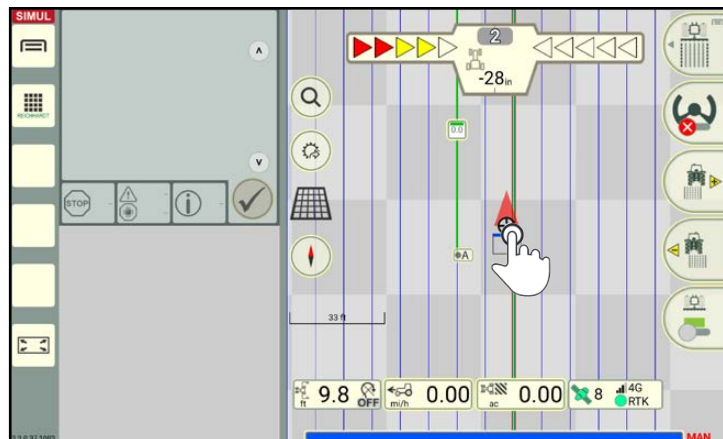


Fig. 156: Tapping the machine combination

An option is then displayed (see Fig. 157).



Press and hold the track pattern shift symbol to subsequently enter an offset value (see Fig. 161 ff.).

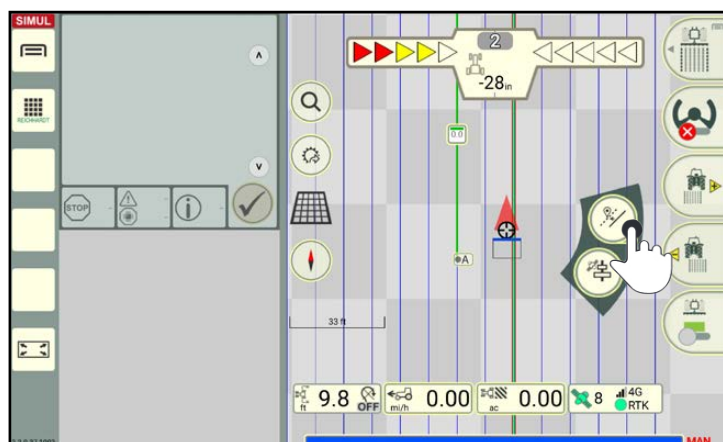


Fig. 157: Pressing and holding the track pattern shift symbol

### Opening the input for the track offset via the context menu for track modes



Tap the reference track marker and select the "Track pattern" option (see Fig. 158 and Fig. 159).

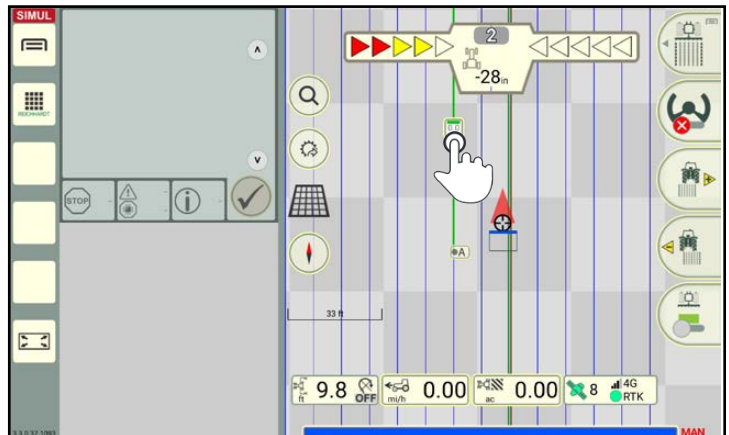


Fig. 158: Tapping the reference track marker

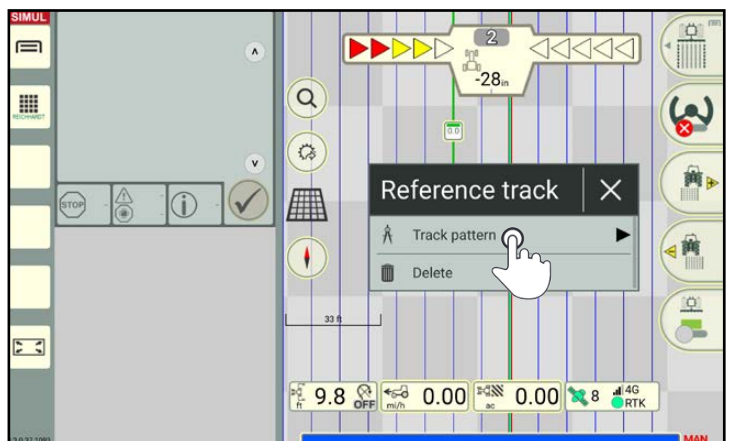


Fig. 159: Selecting the "Track pattern" option

The context menu for the track modes is then displayed (see Fig. 160).

Select the "Shift track pattern" option to subsequently enter an offset value (see Fig. 161 ff.).

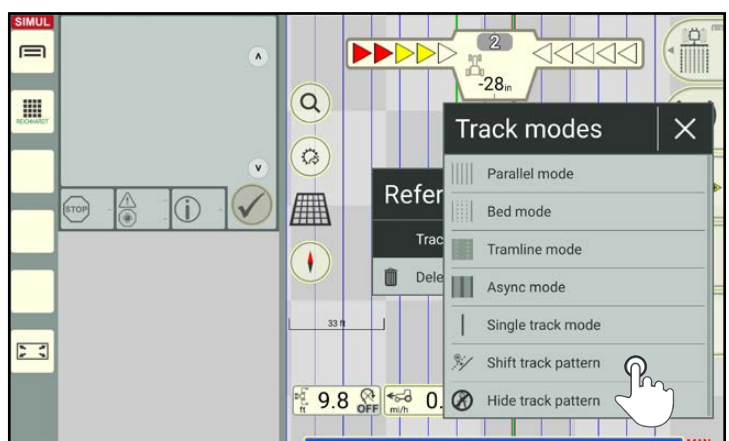


Fig. 160: Selecting "Shift track pattern"

## FIELD OBJECTS

### Reference Tracks

### Specifying the required track offset

A window is displayed in which you can specify the required track offset by which the track pattern should be shifted (see Fig. 161).

- Positive value: Shifting the track pattern to the right.
- Negative value: Shifting the track pattern to the left

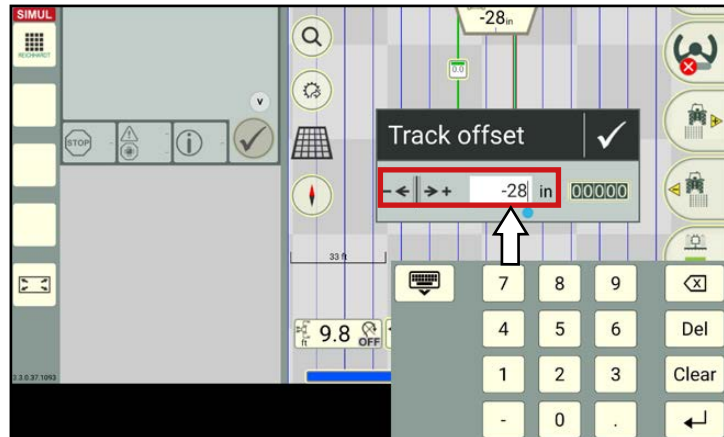


Fig. 161: Entering the required track offset

Confirm the entry with the checkmark (see Fig. 162).

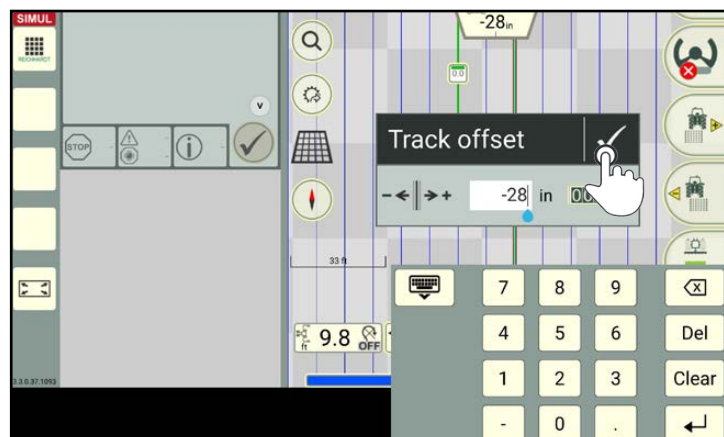


Fig. 162: Confirming the track offset with the checkmark

The entered track offset is then applied to the track pattern (see Fig. 163).

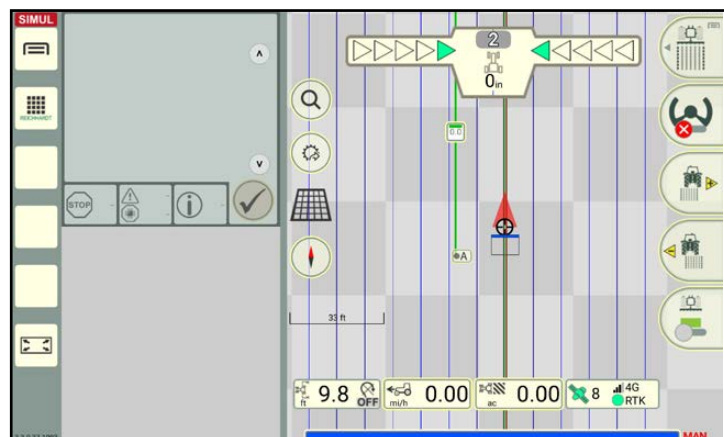


Fig. 163: Track pattern with track offset

### Automatically shifting the track pattern

The track pattern can also be shifted automatically so that the machine combination is then on the nearest, accessible track.



Briefly tap the track pattern shift symbol to automatically correct the deviation to the nearest track (see Fig. 164).

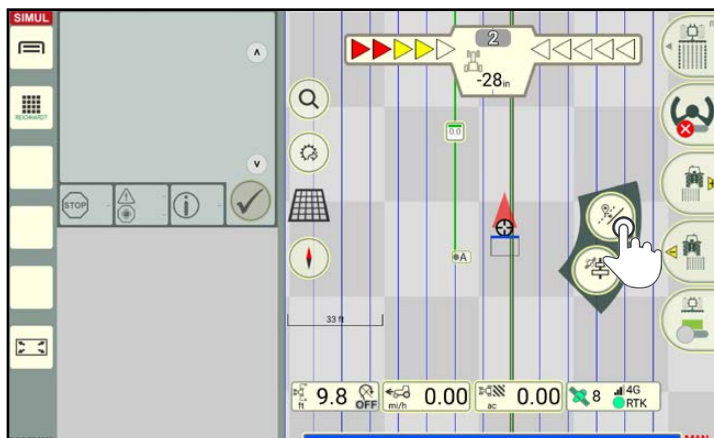


Fig. 164: Tapping the track pattern shift symbol

The track pattern is shifted automatically (see Fig. 165 and Fig. 166).

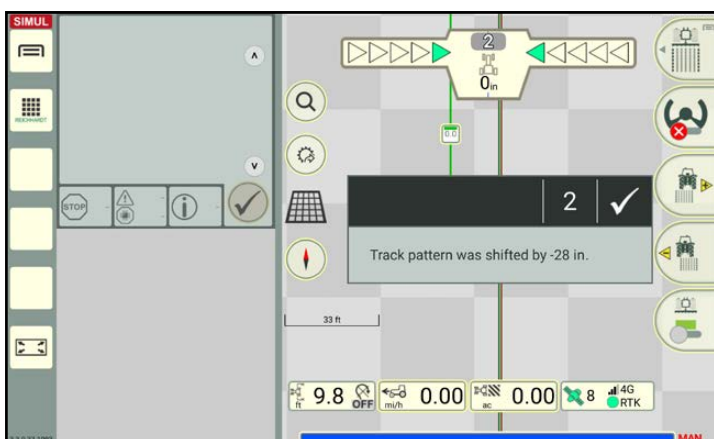


Fig. 165: Automatic track pattern offset is applied

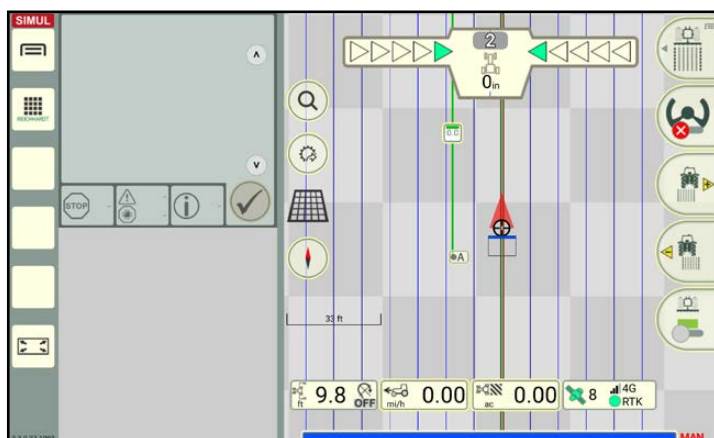


Fig. 166: Track pattern with track offset

## FIELD OBJECTS

### Reference Tracks

#### Resetting the track offset settings

1. Open the track offset input via the machine combination or a track marker.
2. Tap the reset button (000000) to reset the track offset (see Fig. 167).

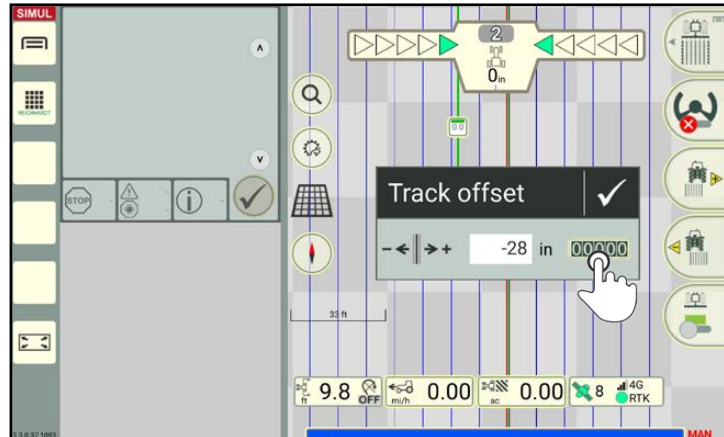


Fig. 167: Resetting the track offset

### 3.1.6 Hiding the Track Pattern

A displayed track pattern can be hidden in two ways.

- BY creating a new track pattern (the new one replaces the old one),
- "Hide offset" option.

To hide the track pattern, proceed as follows:

1. Tap a track marker (ideally the reference track marker) (see Fig. 168).
2. Open the context menu for the track pattern (see Fig. 169).

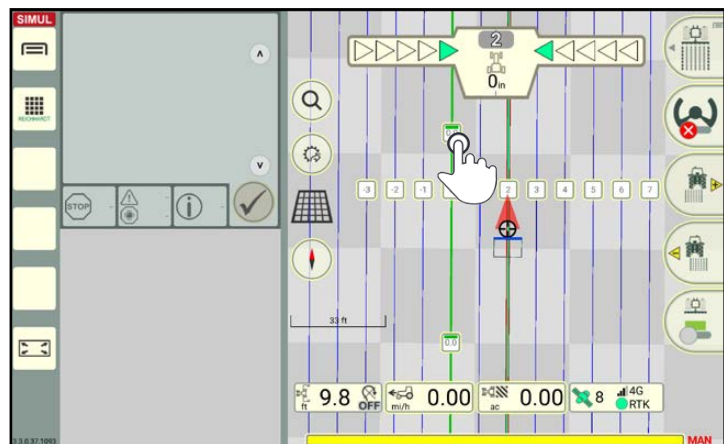


Fig. 168: Tapping the reference track marker

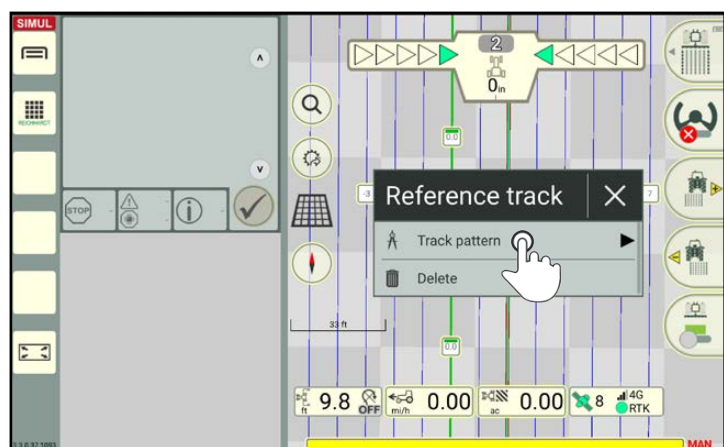


Fig. 169: Opening the context menu for the track pattern:



3. Tap "Hide track pattern" (see Fig. 170).

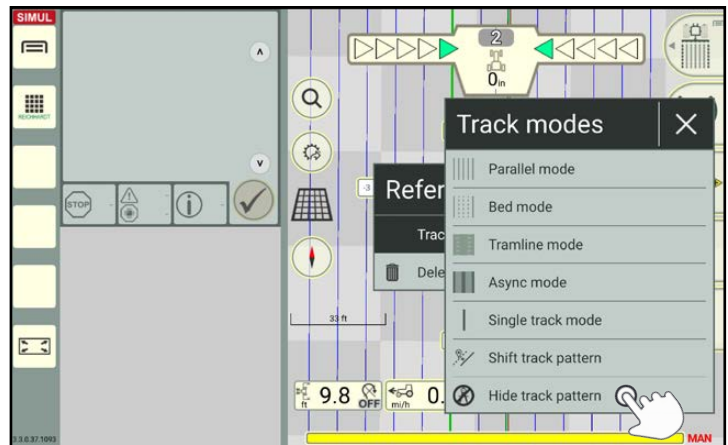


Fig. 170: Tapping "Hide track pattern"

After this, the reference track and set markers, if applicable, can be seen (see Fig. 171).

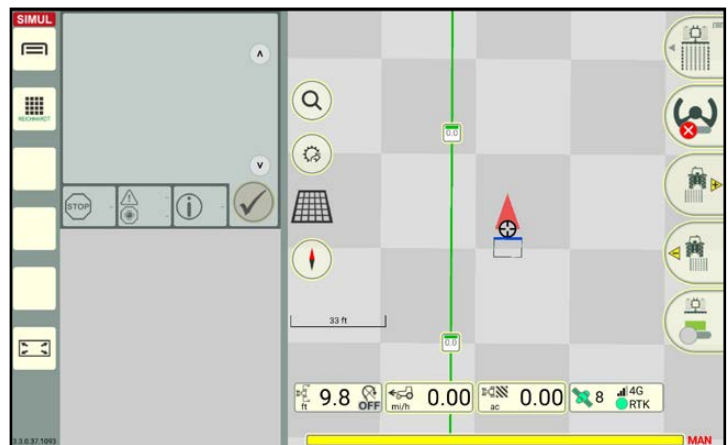


Fig. 171: Track pattern hidden

## 3.2 Boundary Lines

Boundary lines are designed to define fields by setting a field boundary or restrict areas to be excluded. A headland and track pattern can be created along boundary lines. Boundary lines are also important when using section control.

### 3.2.1 Recording Boundary Lines

The creation of boundary lines in boundary line recording mode is explained in the following.

#### 3.2.1.1 Position of the Recording Point during Boundary Line Recording

A boundary line is created based on one or more reference points.

The position of a reference point in a field is dependent on where the recording point is located on the machine combination.

The recording point equates to the pivot point of the machine that was selected for the section status in the machine combination settings of SMART COMMAND.

The creation of a boundary line varies depending on which machine specifies the recording point.

Fig. 172 illustrates the effects during boundary line recording.

The machine that specifies the section status is labelled with yellow sections in the figure.

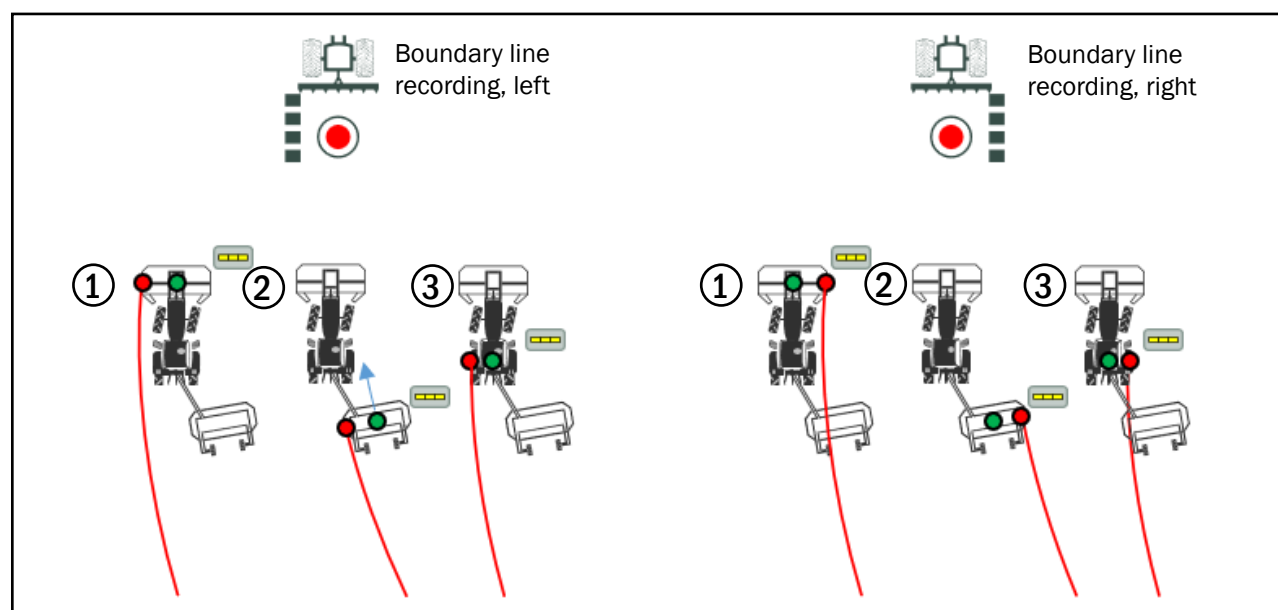


Fig. 172: Track recording points: Boundary track line, left/boundary track line, right

- ① Track recording point/section status on front implement.
- ② Track recording point/section status on rear implement.
- ③ Track recording point/section status on the vehicle.

You must therefore ensure that the right device is selected for the section status in the machine combination settings. If the tractive unit is selected, no implement is displayed or taken into consideration in SMART GUIDE. A boundary line is recorded based on the track recording point on the machine combination.



### 3.2.1.2 Opening Boundary Line Recording Mode – Specifying the Boundary Line Type and Headland Width



Swipe the first button of the field marking menu to the left (see Fig. 71).

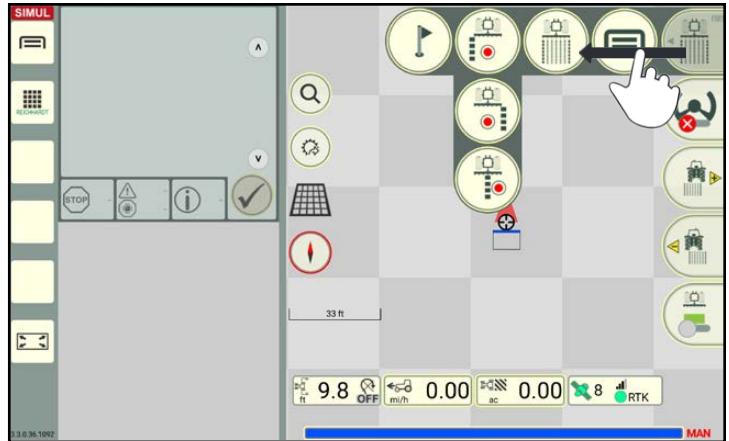


Fig. 173: Swiping the first button of the field marking menu to the left

Tap the symbol for the boundary line recording you want to use (see Fig. 174).



Boundary line, left



Boundary line, right

#### NOTICE

The side (left/right) can be changed at any time during the boundary line recording.

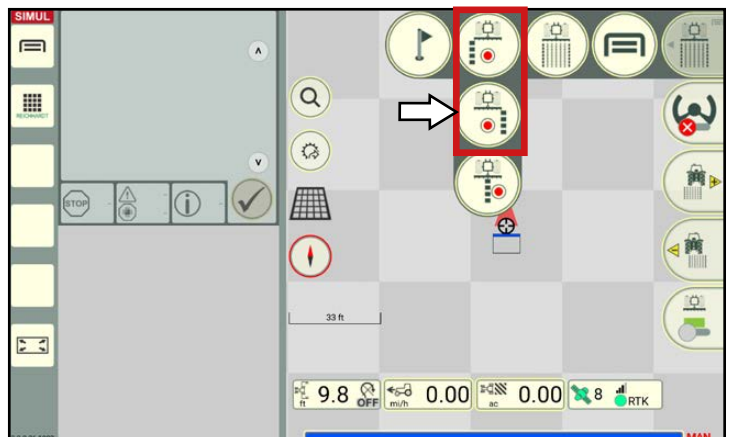


Fig. 174: Selecting the "left" or "right" boundary line

A window then opens in which you can specify the type of boundary line and headland width (see Fig. 175).

There are three types of boundary lines:

- Field boundary
- Headland boundary (function is currently not available yet and therefore grayed out)
- Exclusion area boundary

Select the required type of boundary line.

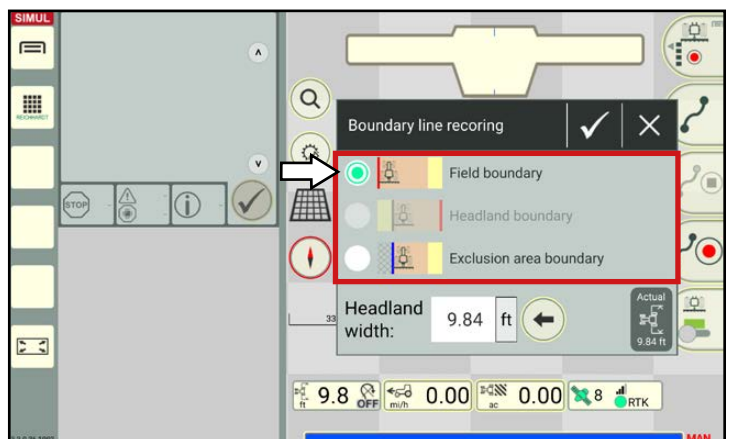


Fig. 175: Selecting the type of boundary line

## FIELD OBJECTS

### Boundary Lines

Enter the value for the headland width via the text box (see Fig. 176).



By tapping the arrow, you can adopt the current working width as the headland width.

#### NOTICE

On field boundaries, the headland is automatically created within the field boundary. On exclusion area boundaries, the headland is automatically generated outside the exclusion area boundary (in the field).

You must pay attention to this when selecting the boundary line recording (left/right).

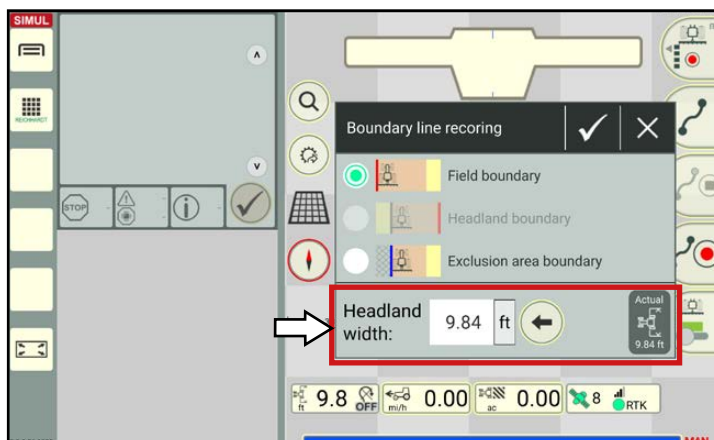


Fig. 176: Specifying the headland width

### 3.2.1.3 Selecting a Track Type/Track Types for Boundary Lines

In boundary line recording mode, select the required track type via the field marking menu (see Fig. 177).

The different track types for boundary lines correspond to the track types for the reference track recording (see chapter 3.1.1.3).

The following track types are available:



Contour (curved track):  
Track represents the driven distance.



A-B track:  
Driving to and recording two track points from which a linear reference track is automatically created when a B point (end point) is set.



A-B track, manual:  
Input of two coordinates that are used to create a linear reference track.



A<sup>+</sup>-track/ A<sup>+</sup>-track, manual:  
Linear reference track that runs from point A in a defined direction. Depending on whether a checkmark is set in the input window, current position data or manually entered data can be adopted.



Mixed contour:  
Linear sections (A-B track) and contours can be used alternately when recording a reference track.

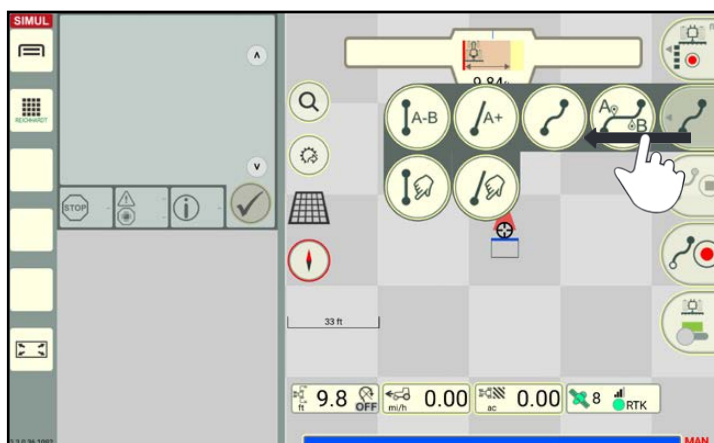


Fig. 177: Selecting the track type

### 3.2.1.4 Starting a Boundary Line Recording

As boundary lines are recorded in the same way as reference tracks, the procedure will not be described again here.

Please refer to the chapters on reference track creation for the boundary line recording process (see chapter 3.1.1, especially chapter 3.1.1.4).

#### NOTICE

In contrast to reference tracks, field boundaries are not displayed in green after the machine combination but in red (see Fig. 178).

#### NOTICE

Exclusion area boundaries are displayed in dark green behind the machine combination (see Fig. 179).

#### NOTICE

If you would like to create the headland sides with different widths or subsequently use the boundary lines to create track patterns, we recommend creating separate boundary line sections for each side of the field.

You can use as many boundary lines as you want.

#### NOTICE

If, after recording a boundary line you, would like to record another boundary line of a different type (field boundary, exclusion area), the previous boundary line recording must first be completed beforehand (see chapter 3.2.1.5).

You can then start the boundary line recording again and select a different type of boundary line.

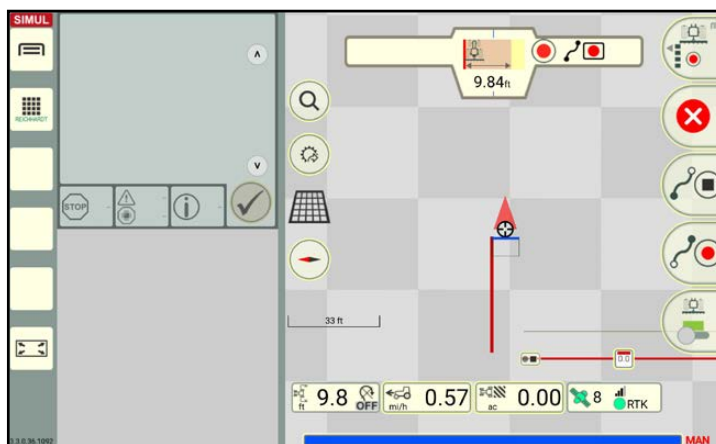


Fig. 178: Boundary line recording – boundary line

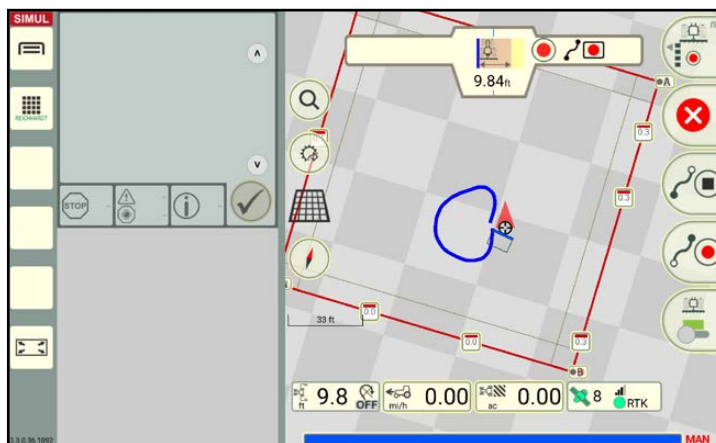


Fig. 179: Boundary line recording – exclusion area

#### NOTICE

Individual boundary line sections can have gaps or overlap with one another. After being recorded, these can be combined to form a field boundary or exclusion area boundary using the field assistant. The boundary line sections continue to have their own track markers that can be selected/edited (see chapter 3.2.2).

However, the more accurate the boundary line recording is, the better the subsequent result will be.

### 3.2.1.5 Finishing the Boundary Line Recording

After completing the boundary line recording for all of the field boundaries of a specific type (field boundaries or exclusion area boundaries), you can finish boundary line recording mode.



Swipe the first button of the field marking menu to the right.



Then tap the X symbol (see Fig. 180).

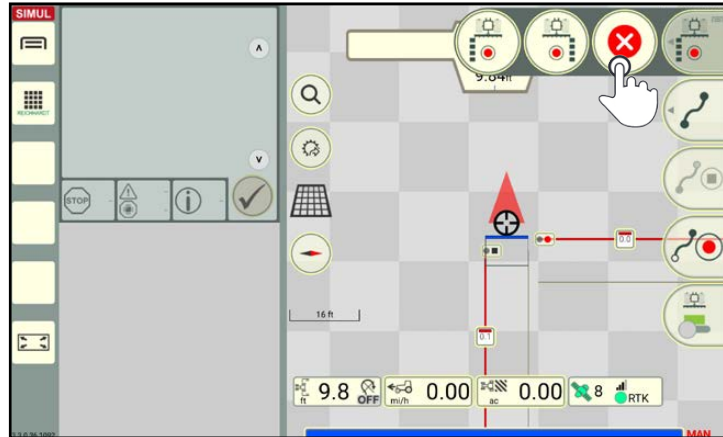


Fig. 180: Exiting recording mode

A prompt to finish the boundary line recording and process the boundary line sections is displayed (see Fig. 181).



Remove the checkmark if you want to close any gaps between the boundary lines and/or remove overlaps of boundary lines immediately afterwards.

The box is closed automatically if the boundary line sections only overlap and do not have any gaps.

If there are gaps, the field assistant will start automatically to guide you through the process of handling gaps (see chapter 3.2.2.2).

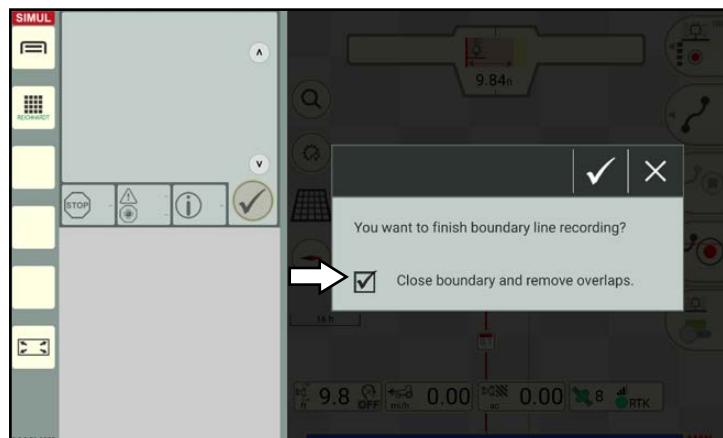


Fig. 181: Prompt to finish the boundary line recording

#### NOTICE

Once the boundary is closed, the headland can no longer be mirrored (see chapter 3.2.4).



Remove the checkmark if you do not want to close the boundary line yet. The field assistant can also be opened at a later point in time to close the boundary lines (see chapter 3.2.2.1).



Tap the large checkmark to confirm the prompt and to terminate boundary line recording mode.



Tap "X" to cancel the process.

## 3.2.2 Closing Boundary Lines

Closing boundary lines is important when using section control.

Individual boundary line sections within a field boundary or exclusion area boundary can be consolidated using the field assistant. Gaps are closed and overlaps are removed during this process.

The field assistant will start automatically if you selected the checkbox when finishing the boundary line recording (see Fig. 181). You can skip chapter 3.2.2.1.

chapter 3.2.2.2 provides a description of using the field assistant.

### 3.2.2.1 Opening the Field Assistant



If you have finished boundary line recording mode without connecting the individual boundary lines using the field assistant, you can subsequently open the field assistant in field marking mode.

The field assistant cannot be opened in boundary line recording mode.

#### Tapping the track marker



To close the field boundary, tap the track marker on any boundary line section within a field boundary (see Fig. 182).

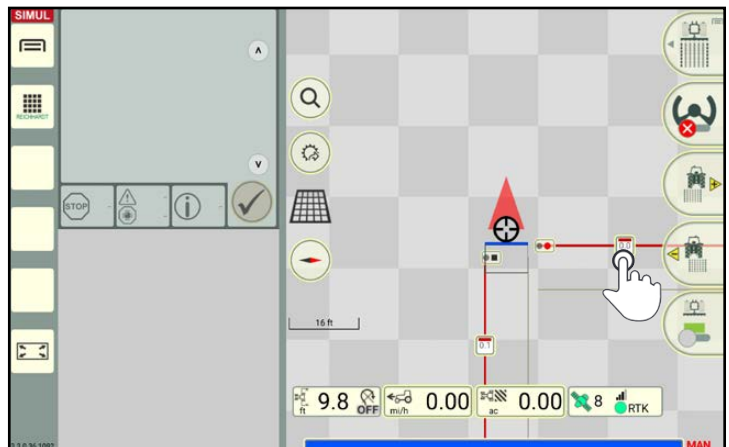


Fig. 182: Tapping the track marker on a field boundary



To close the exclusion area, tap the track marker on any boundary line section within an exclusion area (see Fig. 183).

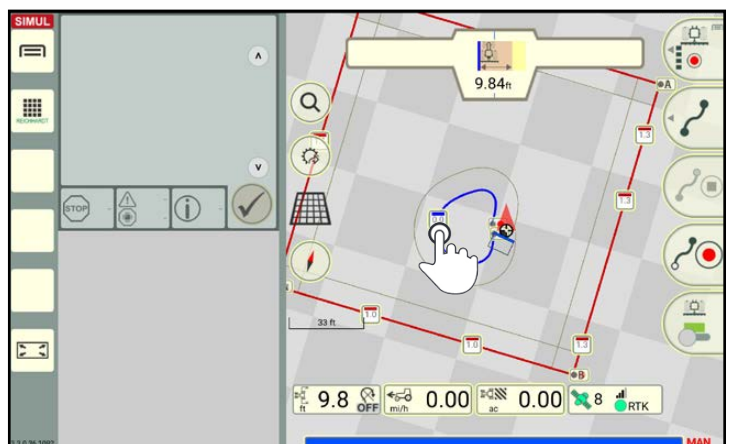


Fig. 183: Tapping the track marker on an exclusion area boundary



## FIELD OBJECTS

### Boundary Lines

#### Opening the field assistant via the context menu

The context menu for the boundary line/exclusion area boundary is then displayed. Tap the "Field assistant" to start the field assistant (see Fig. 184 and Fig. 185).

#### NOTICE

The box is closed automatically when tapping the button, if the boundary line sections only overlap and do not have any gaps.

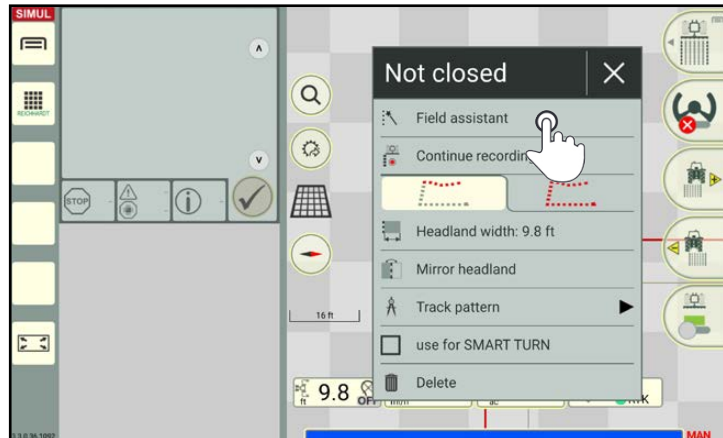


Fig. 184: Activating the field assistant (field boundary line)

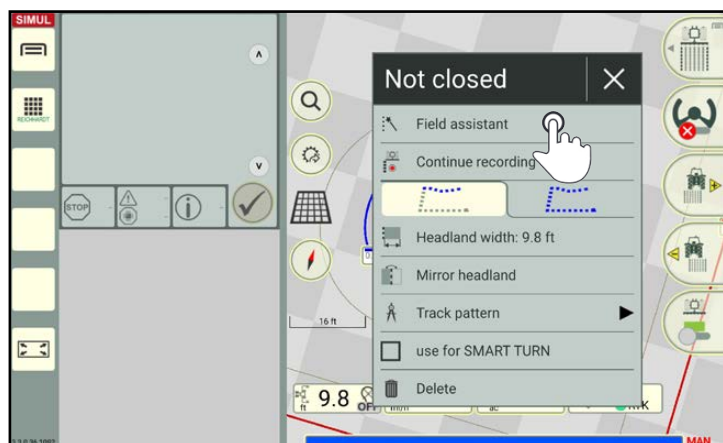


Fig. 185: Activating the field assistant (exclusion area boundary)

### 3.2.2.2 Connecting Boundary Lines Using the Field Assistant

#### NOTICE

Exclusion area boundaries are combined in the same way as field boundaries.

You can use the field assistant to edit gaps between boundary line sections.

Any overlapping section boundaries are automatically removed when the field assistant is opened.

Suggestions on ways to handle gaps between boundary line sections are displayed successively in the field assistant.

The current gap is highlighted with a yellow circle (see Fig. 186).



The second button on the right of the user interface shows the current suggestion for handling the gap.

Swipe the button to the left to tap and select a different way of handling the gap (see Fig. 187).

Gaps can be handled in different ways:



**Connecting the ends - point**  
Overlaps are removed.



**Connecting the ends - point**



**Connecting the ends - round**  
Overlaps are removed.



**Connecting the ends - straight line**  
Overlaps are removed.



**Do not connect ends**

#### NOTICE

Not every way is suitable for every gap. Therefore, only the ways which are deemed suitable for this gap are displayed.

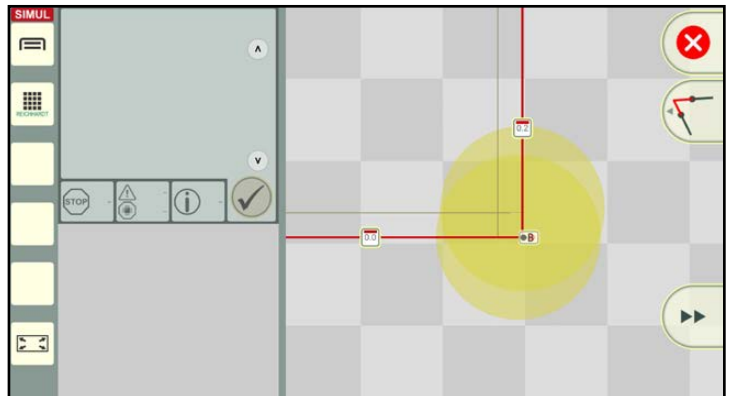


Fig. 186: Field assistant

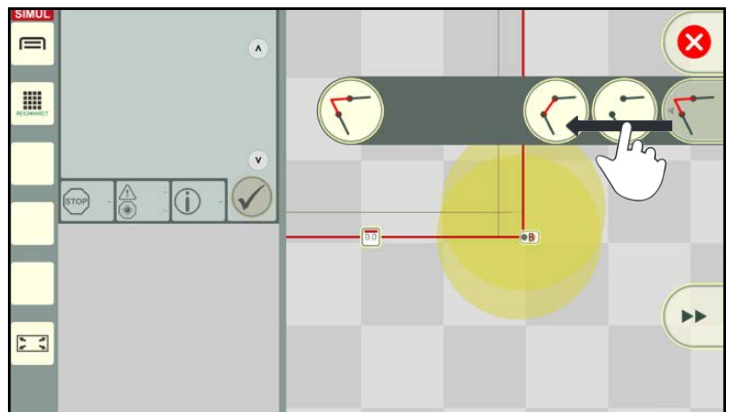


Fig. 187: Selecting the way to handle the gap



## FIELD OBJECTS

### Boundary Lines

Press the double arrow to confirm the way in which the gap is processed (see Fig. 188).

The next gap will then be displayed.

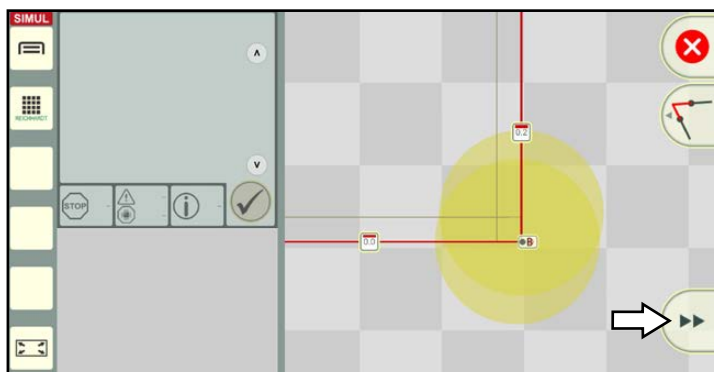


Fig. 188: Confirming gap processing and editing the next gap

Continue until a checkmark is displayed instead of a double arrow (see Fig. 189).

By tapping the checkmark

- The last gap is edited,
- the combination of the edited boundary line sections is confirmed, and
- the field assistant is closed.

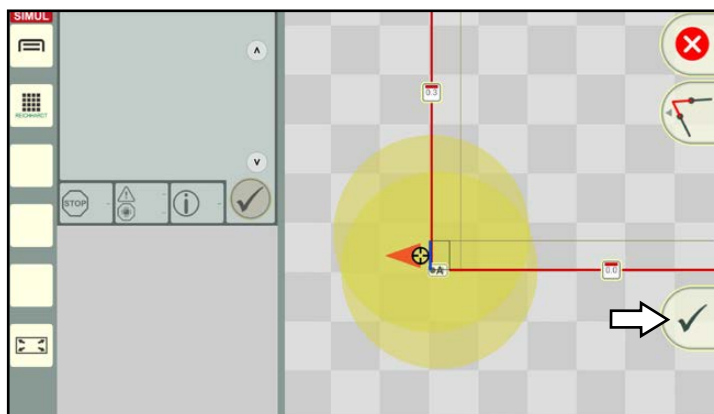


Fig. 189: Completing gap processing and closing the field assistant

### NOTICE

The gaps on a completed (combined) boundary line cannot be edited at a later date.

Tap the red button with an X on, if you would like to discard gap processing and close the field assistant.

The boundary line is closed once gap processing has been confirmed (see Fig. 190).

### NOTICE

Closed boundary lines are generally activated automatically for section control.

In the active state, they are displayed in turquoise. The headland is displayed in beige.

Activating and deactivating the boundary lines is described in chapter 3.2.3.

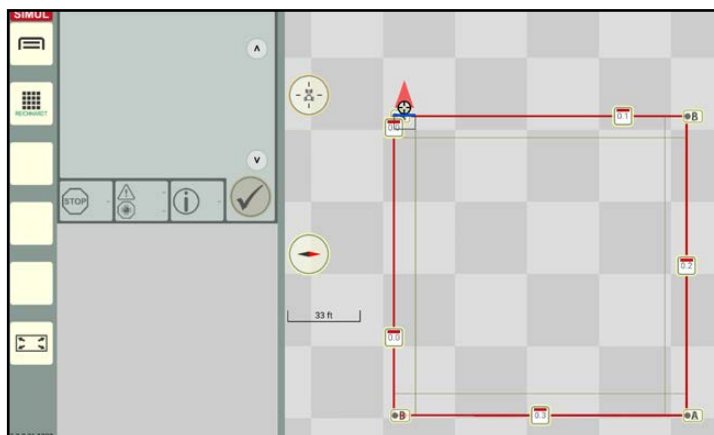


Fig. 190: Closed field boundary

### 3.2.3 Activating/Deactivating Field Boundaries for Section Control

Field boundaries must be activated to ensure they are taken into consideration when using section control during arable farming.

If you are working with a worksheet that contains several fields, you must select the current field. If applicable, the previously active field is automatically deactivated.

If a field boundary contains exclusions areas, these are automatically activated when the field boundary is activated. Exclusion areas cannot be activated by themselves.

If you are working on a task that is linked to a field, the boundary lines within the field are always activated automatically as this way of working can only contain one field.

#### NOTICE

Only closed field boundaries can be activated.  
How to close field boundaries is described in chapter 3.2.2.



Open field marking mode.  
Field boundaries can only be activated and deactivated in field marking mode and not in boundary line recording mode.

To activate the field, tap a track marker on the closed field boundary (field boundary including any closed exclusion area boundaries it may contain) (see Fig. 191).

The context menu for the field boundary then opens (see Fig. 192).

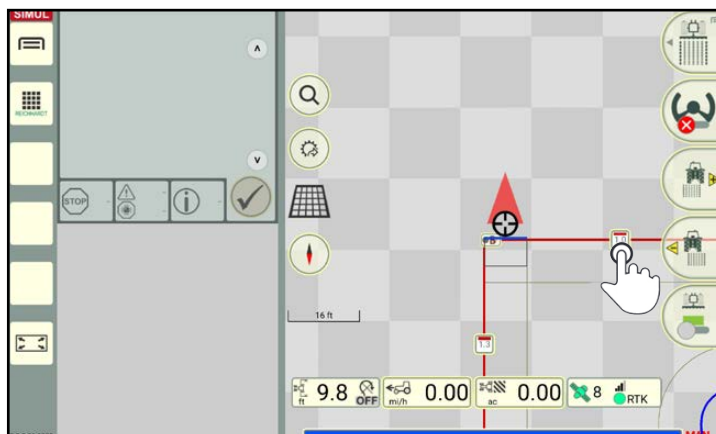


Fig. 191: Tapping the track marker on a closed field boundary

In the context menu of the track marker, tap the "Activate field boundary" option to activate the field for arable farming (see Fig. 192).

(You can deactivate the field in the same way.)



Field inactive, activate field



Field active, deactivate field



Tap the X symbol to close the context menu.

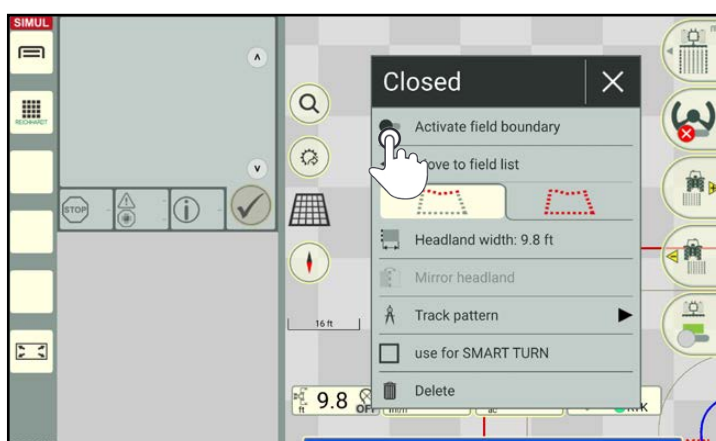


Fig. 192: Tapping the "Activate field boundary" option

## FIELD OBJECTS

### Boundary Lines

The field will then be active.

The following features indicate active boundary lines (see Fig. 193 and Fig. 194):

- Turquoise boundary line,
- Beige headland surfaces (if available).

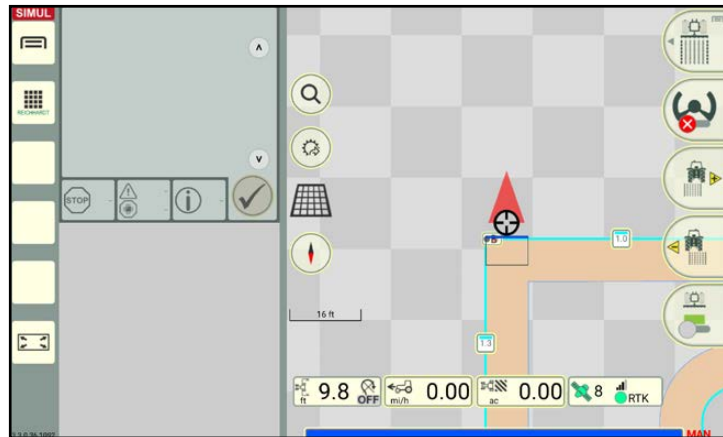


Fig. 193: Active field boundary



Fig. 194: Active field with exclusion area (zoomed in on entire field)

### 3.2.4 Context Menus – Other Options for Editing and Deleting Boundary Lines



Boundary lines can be edited in field marking mode and in boundary line recording mode. However, the marking options in the boundary line recording mode are limited.

#### 3.2.4.1 Context Menu for the Reference Track Marker



Tapping the reference track marker of a field boundary will take you to the context menu for the boundary lines.

The way in which the context menu is displayed can vary depending on which mode it is opened in and for which boundary lines it is opened.

The different displays are illustrated in the following.

The available options are explained on the following pages.

##### Context menu when boundary lines are not closed in field marking mode

The context menu shown in Fig. 195 is displayed in field marking mode when the boundary lines (field boundary or exclusion area boundary) are not closed.

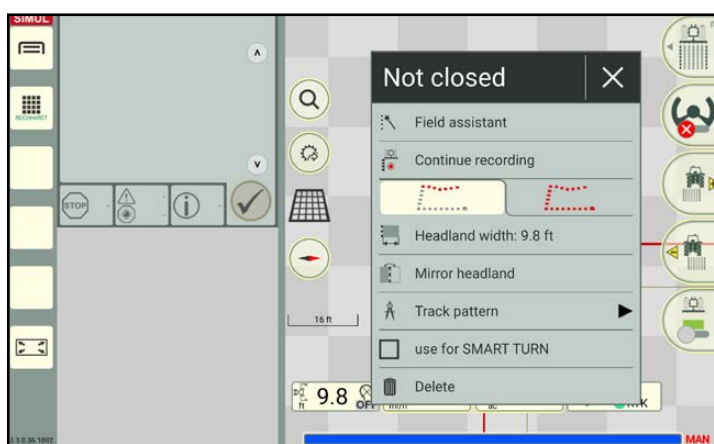


Fig. 195: Context menu of a reference track marker on a field boundary that is not closed in field marking mode

##### Context menu when boundary lines are closed in field marking mode

The context menu shown in Fig. 196 is displayed in field marking mode when the field boundaries are closed.

The first two options are not available for exclusion area boundaries.

Exclusion area boundaries cannot be activated or saved from a worksheet into a field.

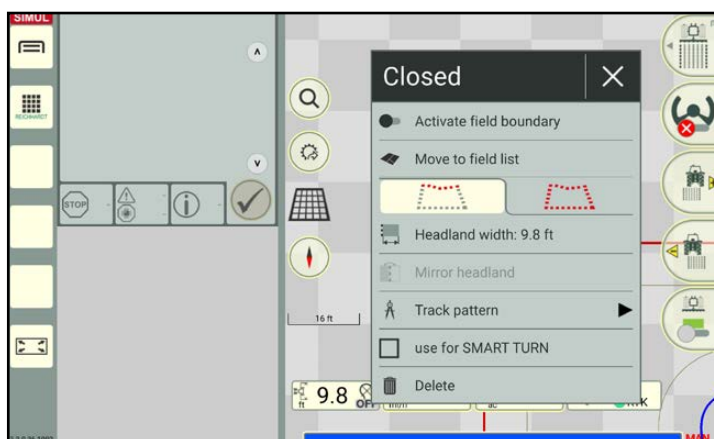


Fig. 196: Context menu of a reference track marker on a field boundary that is closed in field marking mode

## FIELD OBJECTS

### Boundary Lines

#### Context menu when boundary lines are closed and active in field marking mode

The context menu shown in Fig. 196 is displayed in field marking mode when the field boundaries are closed and active.

The first two options are not available for exclusion area boundaries.

Individual exclusion area boundaries cannot be activated or saved from a worksheet into a field.

If one of the two options is executed for a field boundary, it is automatically executed for every closed exclusion area boundary.

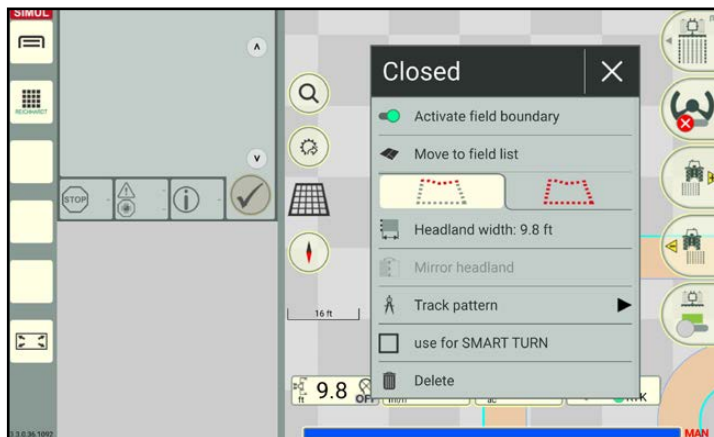


Fig. 197: Context menu of a reference track marker on a field boundary that is closed and active in field marking mode

#### Context menu when boundary lines are not closed in boundary line recording mode

The context menu shown in Fig. 198 is displayed in boundary line recording mode when the boundary lines (field boundary or exclusion area boundary) are not closed.

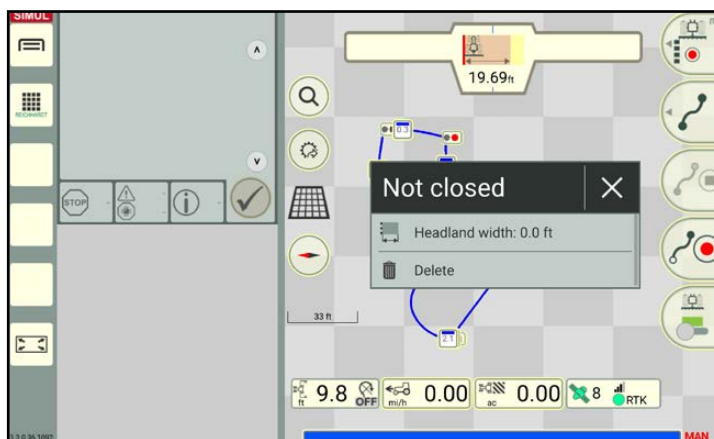


Fig. 198: Context menu of a reference track marker on an exclusion area boundary that is not closed in boundary line recording mode

#### Context menu when boundary lines are closed in boundary line recording mode

The context menu shown in Fig. 199 is displayed in boundary line recording mode when the boundary lines (field boundary or exclusion area boundary) are closed.

The same context menu is displayed for closed and active boundary lines.

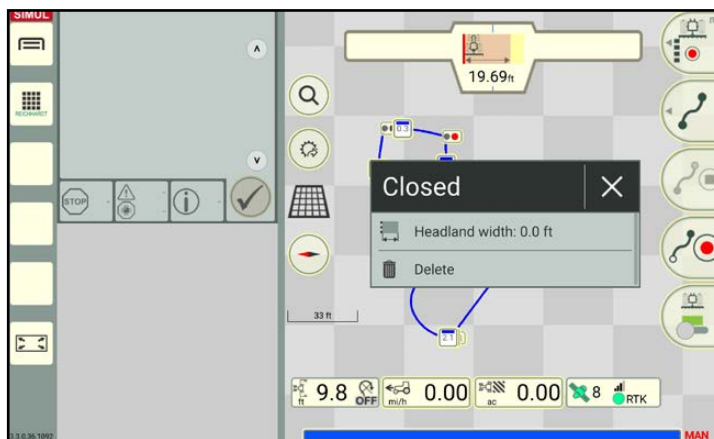


Fig. 199: Context menu of a reference track marker on an exclusion area boundary that is not closed in boundary line recording mode

### Context menu options

- Status:  
The header of the context menu (black box) whether the field is closed or not closed (compare Fig. 195 and Fig. 196).
- Field assistant:  
Opening the field assistant (see chapter 3.2.2.1).
- Continue recording:  
Boundary line recording mode, including recording of the boundary line type (field boundary, exclusion area boundary), is started for the selected boundary line section.

#### NOTICE

The option is only available for boundary lines that are not closed.

- Activate field boundary:  
Activate the field boundary and all of the closed exclusion areas it contains (see chapter 3.2.3)
- Add to field list:  
The active field (field boundary and all of the active exclusion area boundaries it contains) is saved in a field in the SMART COMMAND field list and deleted from the worksheet.

#### NOTICE

This option is only available if worksheet mode is being used and the field is active.

The option is grayed out if task mode is used or the status is not active.

Assign a name to the field (see Fig. 200).



By confirming with the checkmark, the field is removed from the worksheet and saved in the field list.

You will then be asked if you would like to create an associated task for the field (see Fig. 201).

Tap X if you do not want to create a task. If you tap the checkmark, another window to create a task name is displayed. The field is linked to the task. The task is active once the window has been acknowledged.

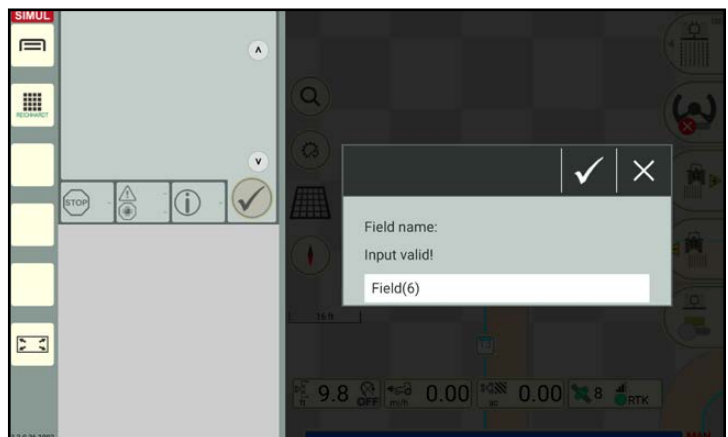


Fig. 200: Adding the field to the field list

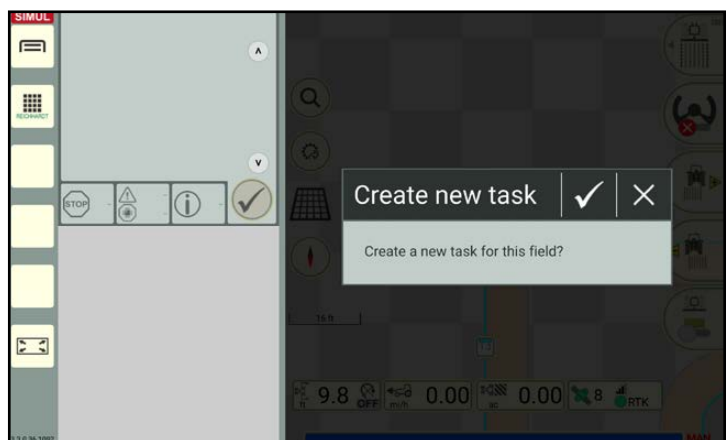


Fig. 201: Creating a task



## FIELD OBJECTS

### Boundary Lines

- Options for boundary line sections and the entire boundary line group (see Fig. 202):  
By tapping the relevant following symbol, you can define whether the settings below the symbol should only apply to the boundary line section of the selected reference track marker or to the entire boundary line group.



Boundary line section (individual boundary line)



Entire boundary line group

The selected area is highlighted yellow (see Fig. 202).

The "Boundary line section" option is selected by default.

The following settings are available for the selected boundary line section or boundary line group:

- Headland width:

Changing the headland width (see Fig. 203).

Enter the required width in the white box.



Use the arrow to adopt the working width as the headland width.

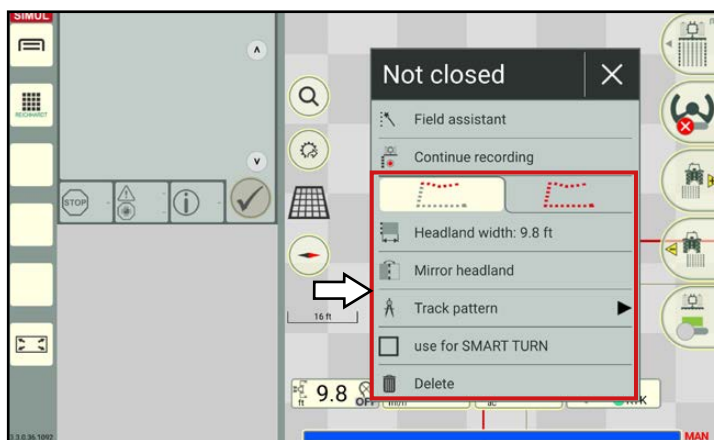


Fig. 202: Options for boundary line sections and the entire boundary line group of a boundary line that is not closed

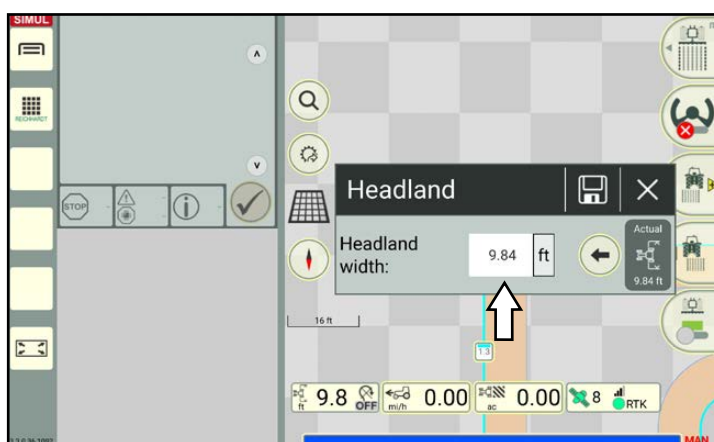


Fig. 203: Changing the headland width



- Mirror headland:

Create the headland on the other side of the recorded boundary line (see Fig. 204).

**NOTICE**

The "Mirror headland" option can only activated and used for boundary lines that are not closed.

The function is reset once the boundary line is closed.

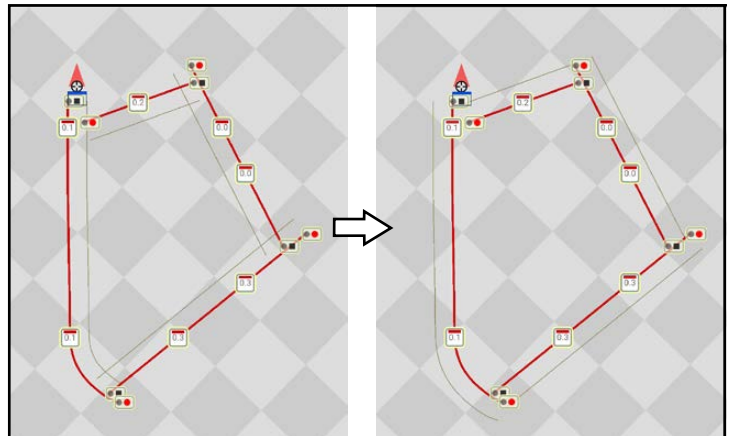


Fig. 204: Headland before and after mirroring

- Track pattern:

Display the track pattern in the headland or field along the selected boundary line section or boundary line group (see chapter 3.1.4).

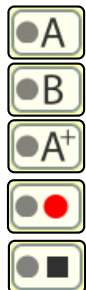
- use for SMART TURN:

Activate (checkbox selected) or deactivate (checkbox not selected) the selected boundary line section or boundary line group for SMART TURN (see chapter 5.2.1).

- Delete:

Delete the selected boundary line section or entire boundary line group.

### 3.2.4.2 Context Menu for Other Track Markers



Tapping another track marker on a field boundary will take you to the context menu of the track marker (see Fig. 205).

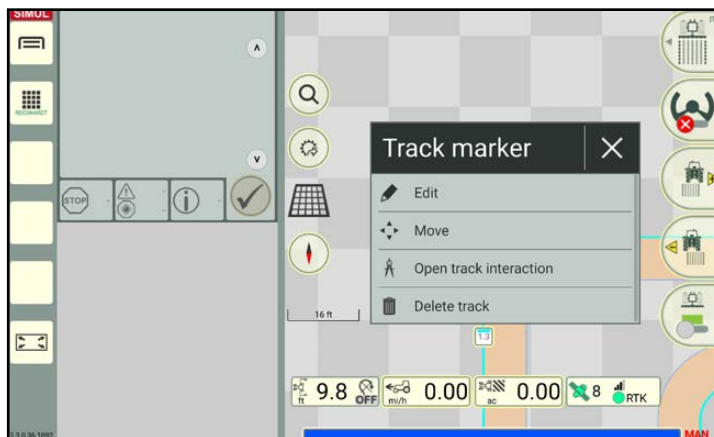


Fig. 205: Context menu of another track marker on a boundary line section

The following options are available in the context menu for the other track markers:

- **Edit:**  
Shifting the track marker by entering coordinates.  
The procedure is the same as that used to edit a reference track marker on a reference track (see chapter 3.1.2.2).

#### NOTICE

This function is only available for track markers of linear tracks and not for contour track markers.

- **Move:**  
Manually moving the track marker on the map.  
The procedure is the same as that used to move a track marker on a reference track (see chapter 3.1.2.2).

#### NOTICE

This function is only available for track markers of linear tracks and not for contour track markers.

- **Open track interaction:**  
Opens the context menu for the reference track marker (see chapter 3.2.4.1).

#### NOTICE

The option is only available in field marking mode and not in boundary line recording mode.









- **Delete track:**  
Delete the boundary line section selected via the track marker.

## 3.3 Markers

The different types of markers, as well as setting, editing, and deleting markers in the field are described in the following.

### 3.3.1 Types of Markers

The following types of markers are available:

Selection button in the field marking menu	Symbol in the field	Description
		Reference point The reference point is designed to correct a possible GNSS drift.
		Low obstacle (that may not be visible)
		High obstacle (that is always visible)
		Field entry/exit

### 3.3.2 Placing a Marker



Swipe the first button of the field marking menu to the left (see Fig. 206 – 1).



Tap the marker symbol to open marker mode (see Fig. 206 – 2).

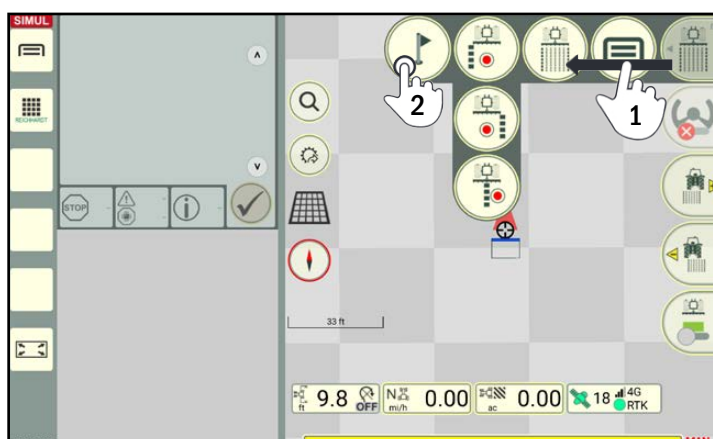


Fig. 206: Opening marker mode

## FIELD OBJECTS

### Markers



Swipe the second button on the right of the user interface to the left to select the type of marker (see Fig. 207).

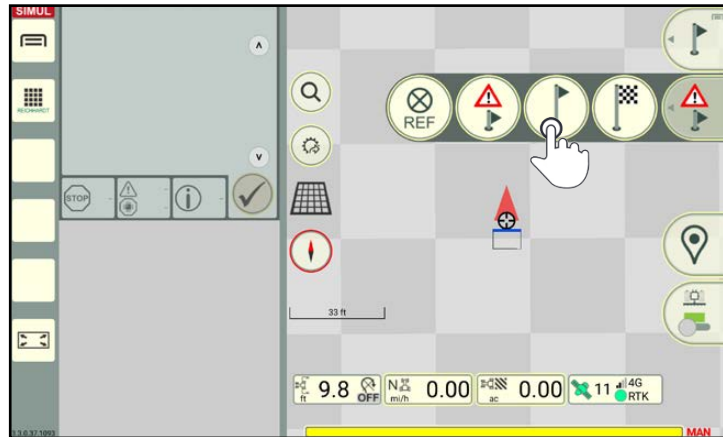


Fig. 207: Selecting the type of marker



Tap the location symbol, to set a marker in the field at the position of the GNSS receiver on the vehicle (see Fig. 208).

#### NOTICE



To ensure a reference point is positioned sensibly, you should position it at a reference point on the floor that you can always approach in the same way (e.g., at the field entry point).

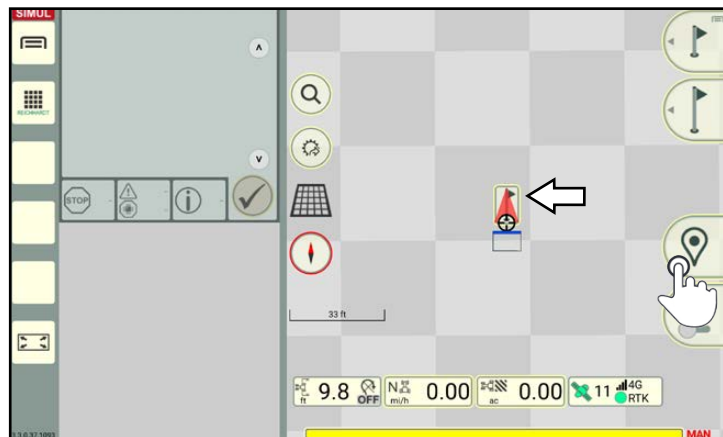
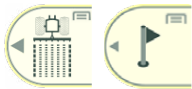


Fig. 208: Placing a marker

### 3.3.3 Context Menu – Marking Options for Markers

Various marking options are available for markers.



Markers can be edited in field marking mode and in marker mode. The marking options are identical in both modes.



Tap the marker (see Fig. 209) to open the context menu for this marker (see Fig. 210).

The following marking options are available for markers:

Marker type Option				
Delete (see chapter 3.3.3.5)	X	X	X	X
Edit (see chapter 3.3.3.1)	X	X	X	X
Move (see chapter 3.3.3.2)	-	X	X	X
Transmit coordinates (see chapter 3.3.3.4)	-	-	-	X
Center track (see chapter 3.3.3.3)	X	-	-	-
Show picture (see chapter 3.3.3.5) <sup>2</sup>	(X)	(X)	(X)	(X)

The following text is displayed in the header of the context menu (black box; Fig. 210): "Marker -".

Use the "Edit" option to create a name for the marker, which will then be displayed in that box.

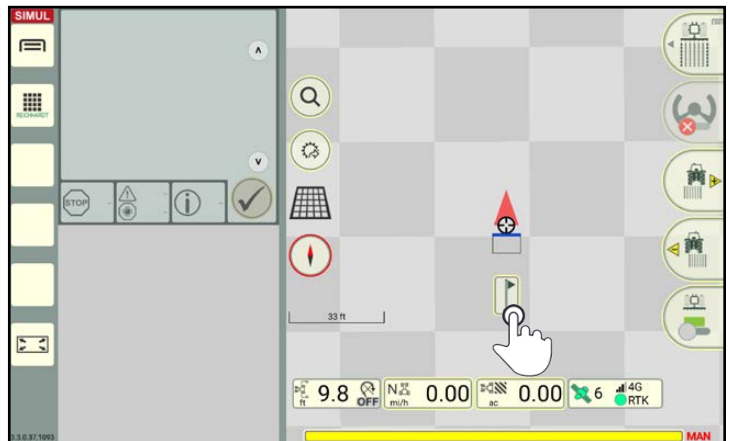


Fig. 209: Opening the context menu for markers

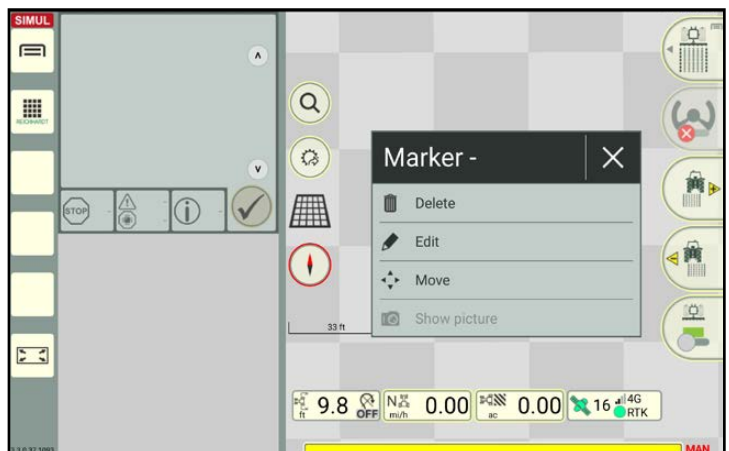


Fig. 210: Context menu for a large obstacle

<sup>2</sup> Only available if using the SMART COMMAND app on a tablet with a camera and if a picture is assigned under "Edit".

### 3.3.3.1 Editing Markers

Tap "Edit" in the context menu (see Fig. 211).

The name and position of existing markers can be edited. A picture can also be added, if applicable (see Fig. 212).

The type and width of an obstacle can also be entered under obstacles (see Fig. 212).



Open/close the individual categories by tapping the arrows.

#### ① Marker name:

Enter a name for the marker in the white box.

This name will subsequently be displayed at the top of the header in the context menu (example: "Marker - tree").

#### ② Marker symbol/picture:

##### NOTICE

The option is only available if using the SMART COMMAND app on a tablet with a camera.

Tap the marker symbol to select a picture in the window that appears (see Fig. 213).



You can also use the camera symbol to take a picture with the camera on the tablet.

For further information on pictures, please read the "Opening, Displaying, and Editing User Properties" section in the "Farm management menu" chapter of the SMART COMMAND instruction manual.

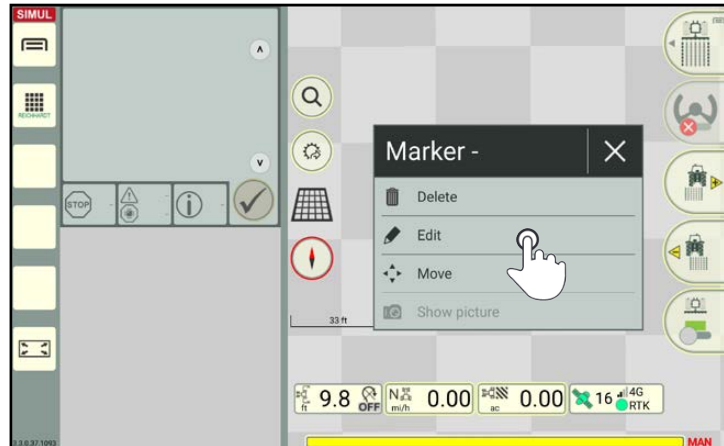


Fig. 211: Editing a marker

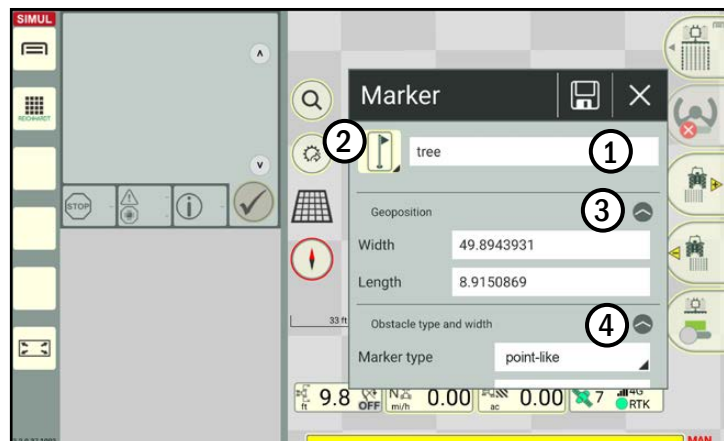


Fig. 212: Marking options for large obstacles

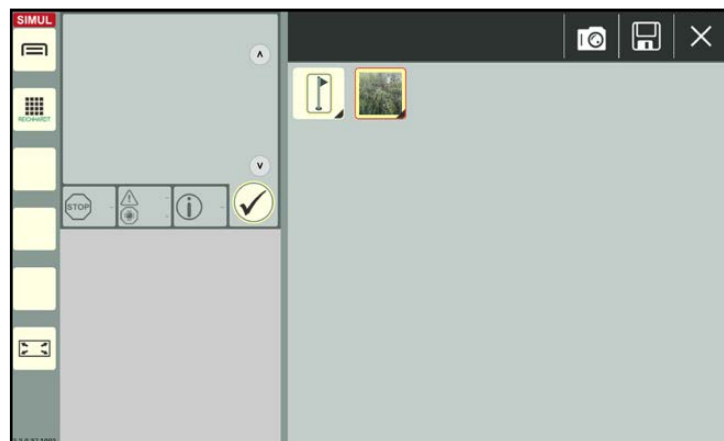


Fig. 213: Taking a photograph

- ③ Geoposition:  
Adjust the specified width and length of the marker in degrees using the corresponding text boxes (see Fig. 214).

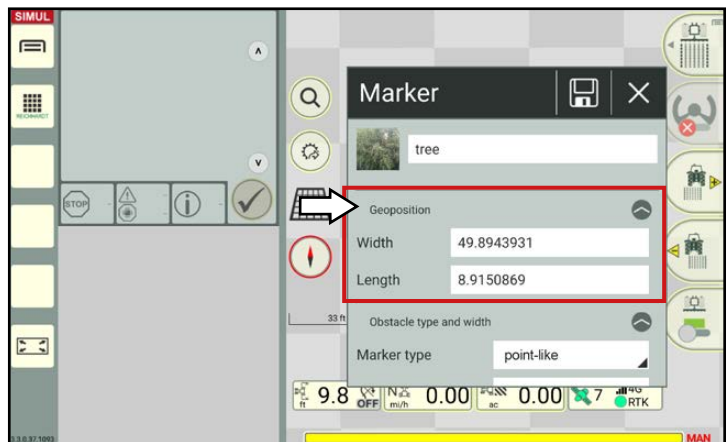


Fig. 214: Changing the geoposition

- ④ Obstacle type and width:

**NOTICE**

The option is only available for obstacles.

Select a marker type from the selection list (see Fig. 215).

Other setting options are displayed depending on the set marker type (see Fig. 216):

- Point-like: Height
- Rectangular: Height, width, length, north alignment
- Round: Height, diameter

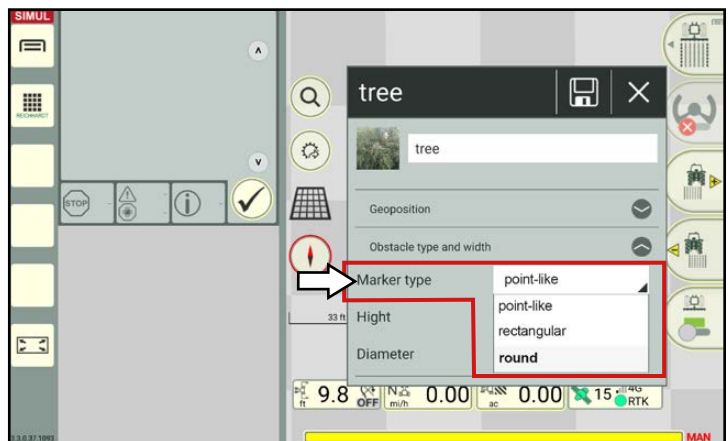


Fig. 215: Changing the marker type

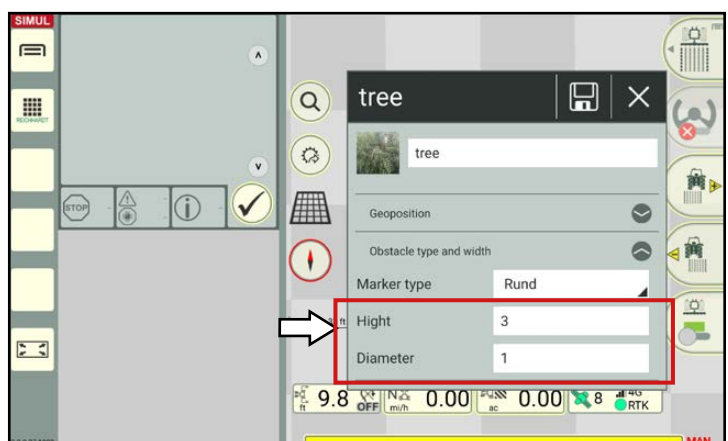


Fig. 216: Changing the obstacle size (using "Round" as an example)



### 3.3.3.2 Moving Markers

You can change the position of a marker on the map.

Open the marker context menu and tap "Move" (see Fig. 217).

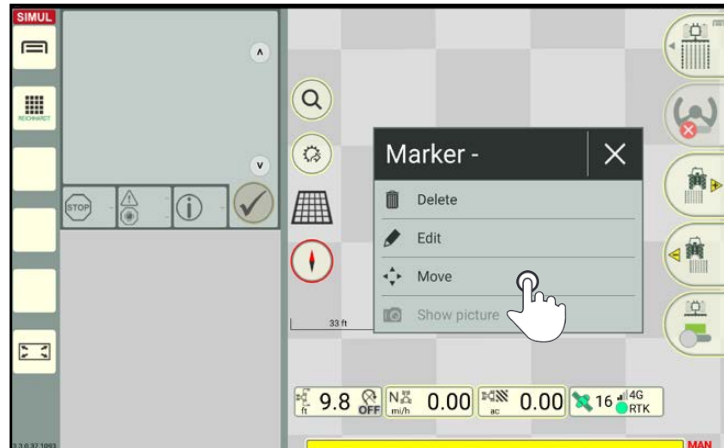


Fig. 217: Moving a marker

The selected marker is now surrounded by four small arrows (see Fig. 218).  
A counter counts down from 5 seconds.

Tap the required position in the field to move the marker there.  
Once moved the counter will start to count down again.

Wait until the countdown has finished before adopting the current position.  
The moving option is then terminated.

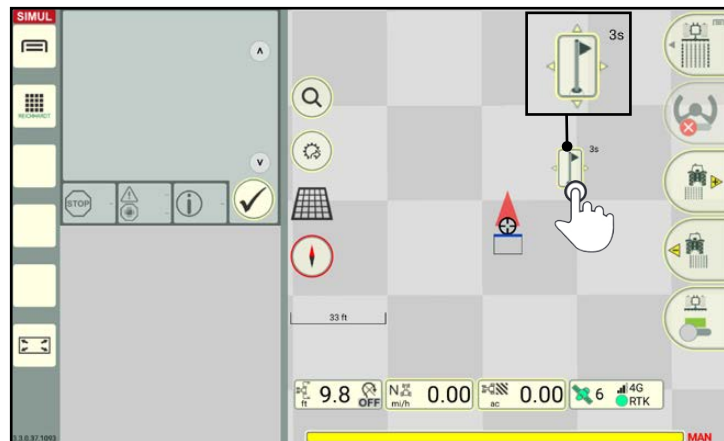


Fig. 218: Positioning markers by tapping

### 3.3.3.3 Center Track – Moving the Reference Point to the Position of the Vehicle

If a GNSS drift occurs, you can center track a reference point set in SMART GUIDE to correct the GNSS drift.

During this process, the reference point in SMART GUIDE is reset to a physical position in the field. All of the field objects in SMART GUIDE are shifted accordingly.

Drive to the reference point in the field in the same way you always would.



Tap the corresponding reference point in SMART GUIDE (see Fig. 219).

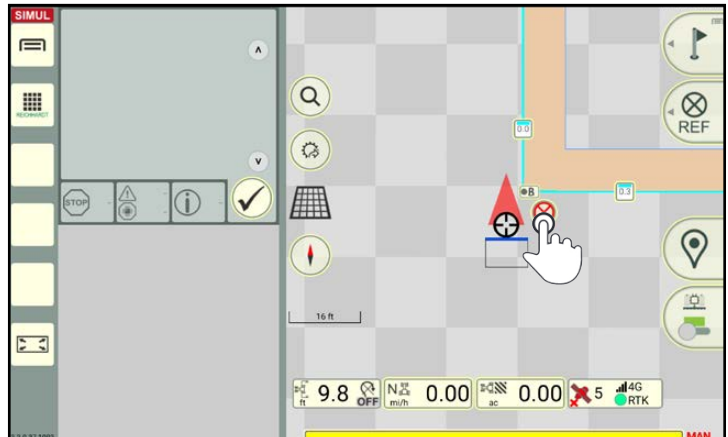


Fig. 219: Tapping the reference point

Select the "Center track" option in the context menu that is displayed (see Fig. 220).

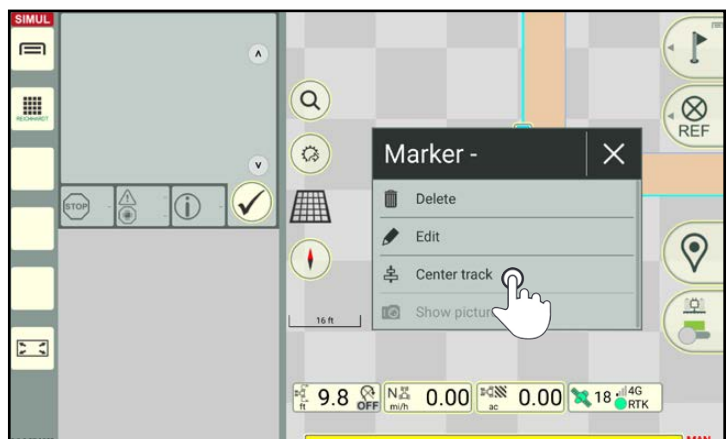


Fig. 220: Tapping the "Center track" option

The reference point is then moved to the current position of the machine (see Fig. 221). All of the objects on the map (track pattern, reference track, markers, boundary lines) are also moved.

The corrected GNSS drift is indicated by a small warning triangle next to the vehicle.

Resetting the centering of a reference point resets the center track of a GNSS drift (see chapter 3.1.5.1).

#### Resetting the center track of a reference point

The center track of a reference point can be reset by shifting the position in the SMART GUIDE menu (see chapter 6.6).

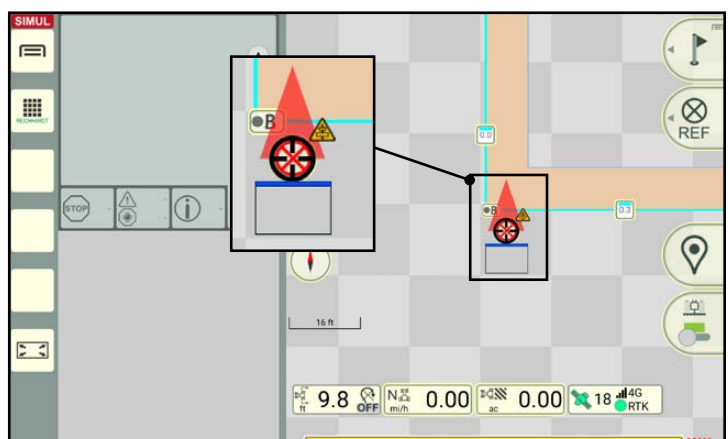


Fig. 221: Reference point and all of the other field objects have been moved

### 3.3.3.4 Transmitting the Coordinates of a Field Entry/Exit



The coordinates of the field entry/exit can be created as a Google Maps link.

#### NOTICE

This option requires an internet connection. It is thus not available on the SMART COMMAND terminal.

Open the marker context menu and tap "Transmit coordinates" (see Fig. 222).

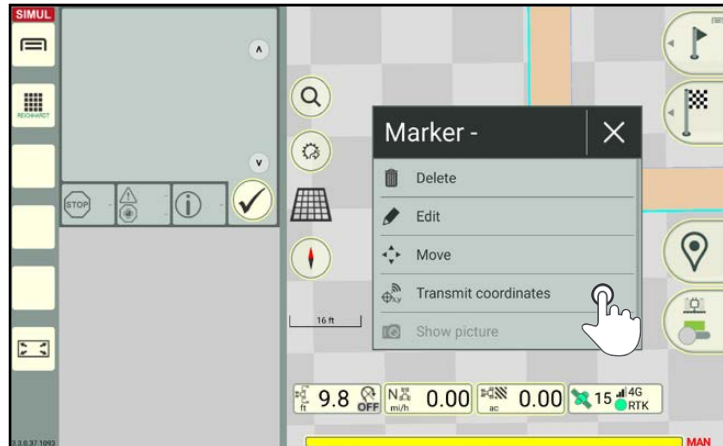


Fig. 222: Transmitting the coordinates of a field entry/exit

You can then select the application (see Fig. 223).

- Select an e-mail app, to transmit the coordinates as a Google Maps link.
  - Select a browser or the Google Maps app to open the coordinates directly in Google Maps.
- From there you can implement other tasks.

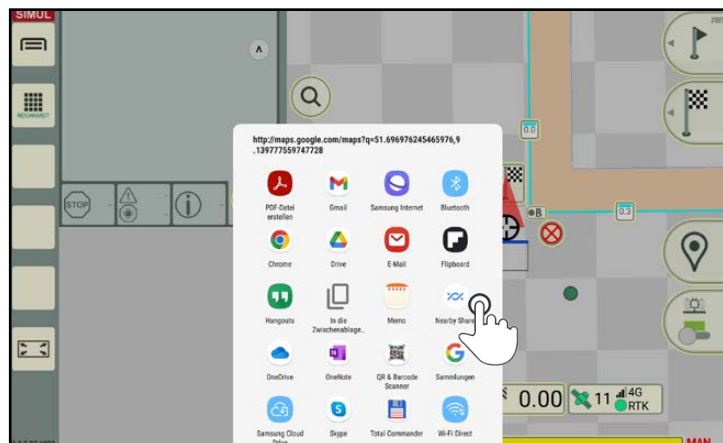


Fig. 223: Selecting an application

### 3.3.3.5 Deleting Markers

Tap the required marker to open the context menu.

In the context menu, select the "Delete" option to delete a marker (see Fig. 224).

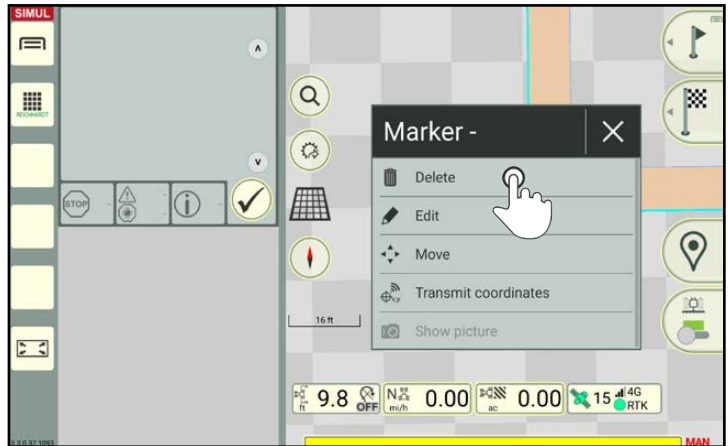


Fig. 224: Deleting the marker

Confirm the prompt with the checkmark (see Fig. 225).

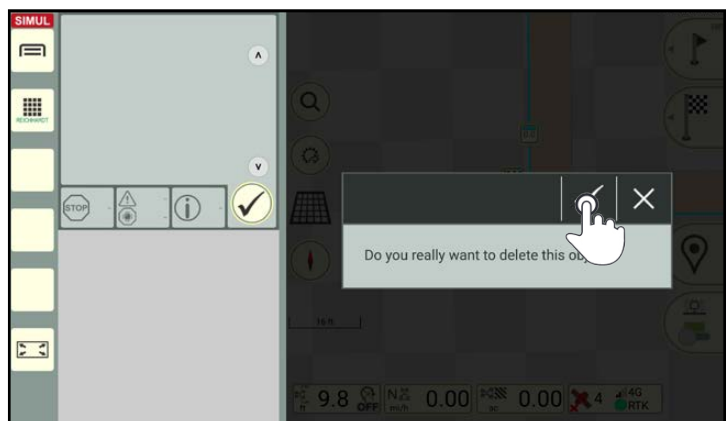


Fig. 225: Confirming the prompt



## 4 Field Work in SMART GUIDE

This chapter explains the use of SMART GUIDE during active field work.



Field work is completed in field marking mode.  
Ensure that this mode is open in SMART GUIDE.

### 4.1 Specifying the Driving Direction

The second box in the status bar shows the driving direction and speed (see Fig. 226).

Tap the box to specify/change the driving direction in SMART GUIDE if it is incorrect or not detected.

#### NOTICE

To be able to detect the driving direction, the vehicle must be moving at a steady speed of 0.5 to 5 km/h in one direction.

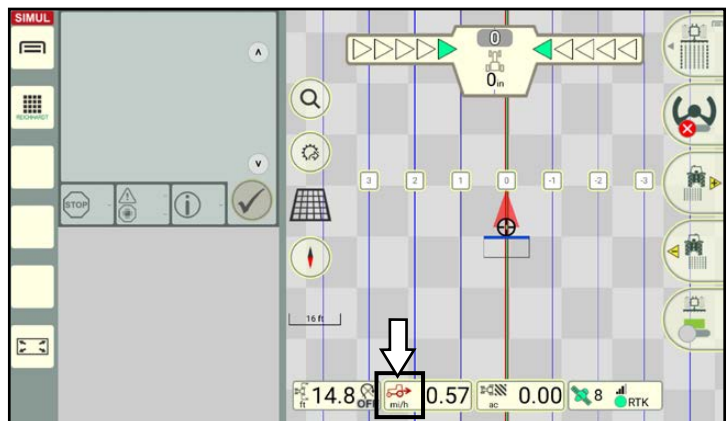


Fig. 226: Reverse driving direction detected – tapping the status bar

In the window that appears, tap the corresponding driving direction of the vehicle to specify it (see Fig. 227).

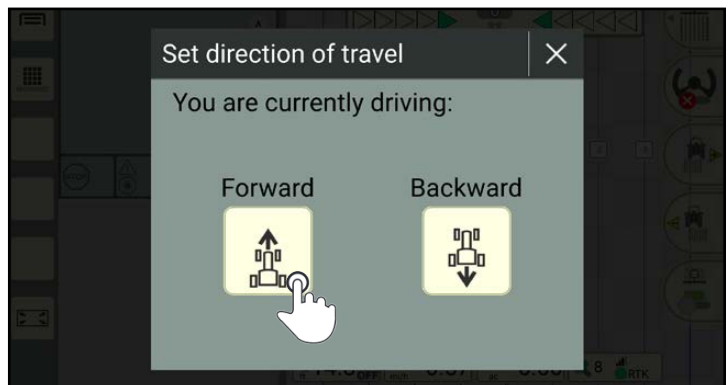


Fig. 227: Specifying the driving direction

The specified driving direction is then displayed (see Fig. 228).

It may be the case that the map rotates, as the map is always displayed so that the front of the vehicle is at the top.

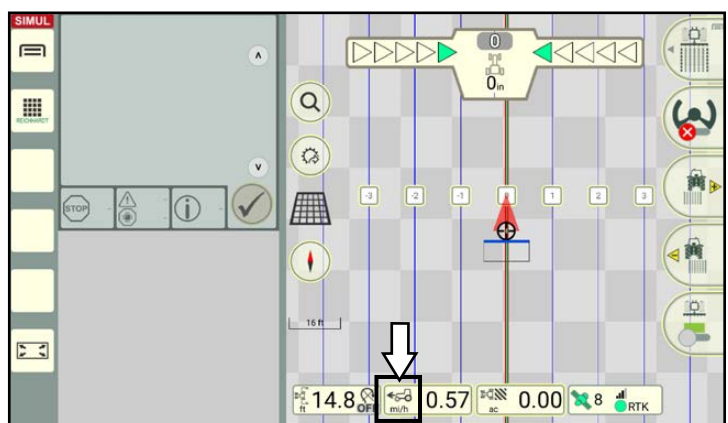


Fig. 228: Forward driving direction specified

## 4.2 Activating Automatic Steering (SMART CONTROL)

### NOTICE

To be able to use and activate SMART CONTROL automatic steering in SMART GUIDE, the following prerequisites must be met:

- You must have an active SMART CONTROL license (see "Licenses" chapter in the SMART COMMAND instruction manual).
- A SMART iBox must be available and set up (see chapter 2.2.1).
- The RDU3 must be calibrated, if applicable (see chapter 2.3).
- A reference track has been recorded (see chapter 3.1.1).
- A track pattern is available (see chapter 3.1.3).
- Position data and a driving direction are available.



Automatic steering that cannot be activated, is indicated by a red steering button (see Fig. 229).

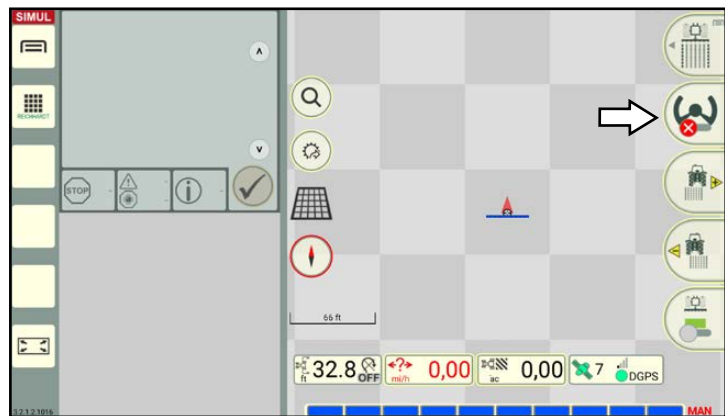


Fig. 229: Steering cannot be activated



If all of the settings have been implemented correctly and a track pattern is displayed, then the steering button turns gray (see Fig. 230).

Automatic steering is still inactive, but can be activated.

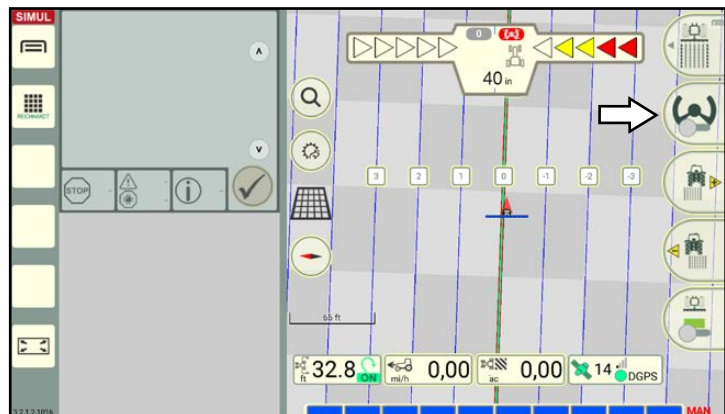


Fig. 230: Steering can be activated, but is still inactive



In the vehicle, activate the switch to activate automatic steering.

In some vehicles, the steering can also be activated by tapping the steering button in SMART GUIDE.



The steering button in SMART GUIDE then turns green and the steering is activated (see Fig. 231).

If you have not done so yet, set the vehicle in motion.

The vehicle automatically moves towards the closest track.

Take your hands off the steering wheel.  
Continue to operate the accelerator pedal.

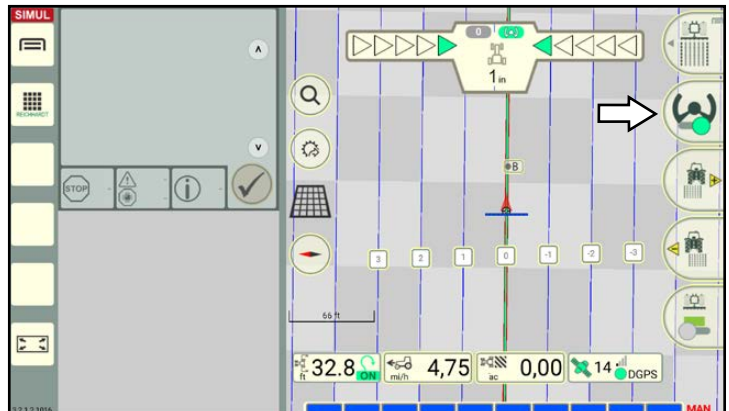


Fig. 231: Steering is active

## 4.3 Section Control

Section control is designed to control sections in SMART GUIDE.

Different modes for switching sections, including the associated settings and overlapping settings, are explained in the following.

### 4.3.1 Section Control Modes

In SMART GUIDE there are three different modes for switching sections:

- Manual (MAN): Sections are activated/deactivated manually via the SMART GUIDE user interface (see chapter 4.3.1.2)
- Automatic (AUTO): Sections are activated/deactivated automatically (see chapter 4.3.1.3)
- External (EXT): Sections are activated/deactivated via the ISOBUS operating screen of the ISOBUS implement and displayed in SMART GUIDE (see chapter 4.3.1.4).

#### 4.3.1.1 Setting Section Control Mode

Opening the section control settings



Tap the quick access button in the SMART GUIDE user interface (see Fig. 232).

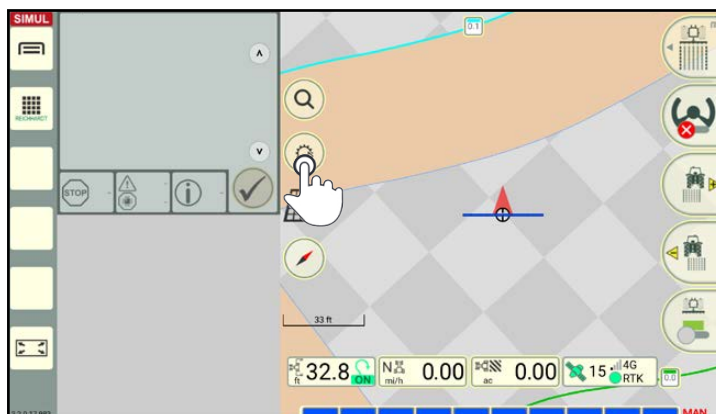


Fig. 232: Tapping quick access



Then select the quick access to the section control settings of the active machine combination (see Fig. 233).

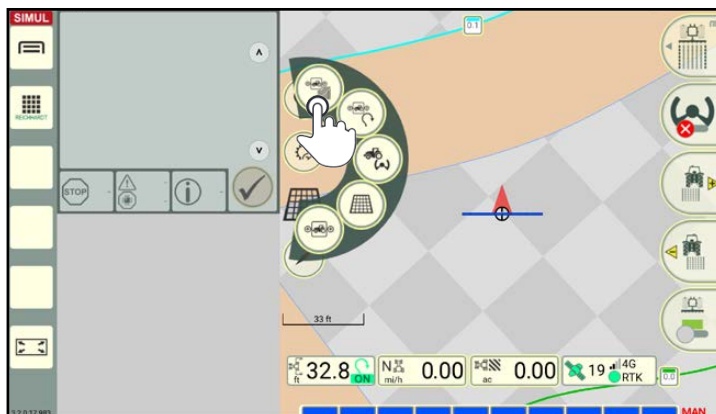


Fig. 233: Section control settings for the active machine combination



Alternatively, you can open the properties of a machine combination via the list of machine combinations and then tap the section control settings (see Fig. 234).

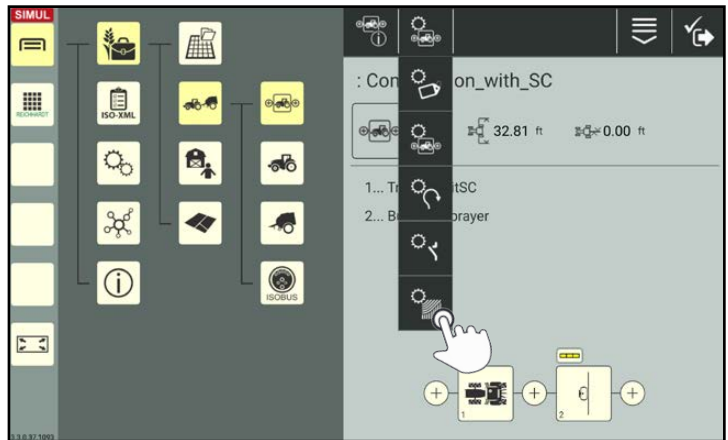


Fig. 234: Opening the section control settings directly via the machine combination

### Section control – setting the mode



In the section control settings, open the section control settings (see Fig. 235).

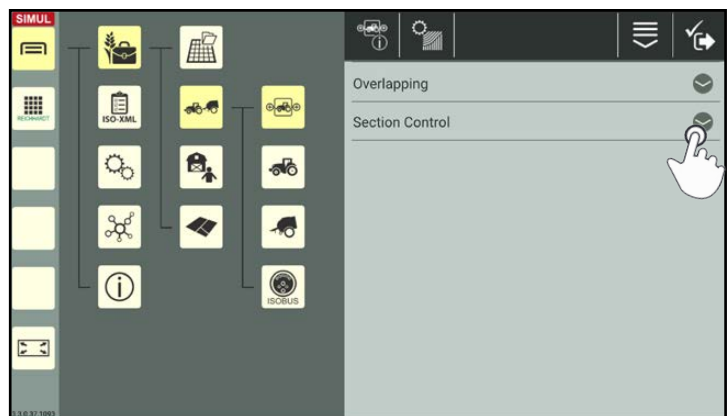


Fig. 235: Opening section control



Select the required option for the section control from the selection list (see Fig. 236).

- Auto: Automatic section control mode
- Manual: Manual section control mode
- External (ISO-VT): External section control mode

#### NOTICE

Automatic section control mode is only available if a SMART SECTION license is available.



Fig. 236: Selecting section control mode

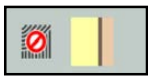
### NOTICE

The following three switches can only be activated if automatic mode (Auto) is selected. They cannot be activated for manual and external mode.

By activating these switches in Auto mode, you can specify whether the sections should be deactivated automatically in certain circumstances.



Automatic deactivation when reversing.



Automatic deactivation in the headland (only if field boundary is active).



Automatic deactivation at field boundaries.

Activate/deactivate the following options as required. For further information on this, see chapter 4.3.1.3.

### NOTICE

If you deactivate the third switch to deactivate sections when crossing over field boundaries, then the switch for headland boundaries is deactivated automatically.



Save the settings by pressing the checkmark in the header.



Fig. 237: Additional section control options for "Auto" mode

### 4.3.1.2 Manual Section Control Mode

#### Manual mode set (area marking deactivated)

If you have selected manual section control mode (see Fig. 238) in the section control settings of the machine combination, the following section information is displayed in the SMART GUIDE user interface (see Fig. 239):

#### ① Section status

Non-ISOBUS-compatible machines:  
All of the sections of the section status flash alternatively in yellow and blue.  
This means that all of the sections have been preselected but are not active yet.

ISOBUS machines:

The individual sections are continuously illuminated yellow (ON), blue (OFF), or red (missing communication to the ISOBUS device).

#### ② Section control mode

The label "MAN" to the right of the section status indicates that manual mode is active.

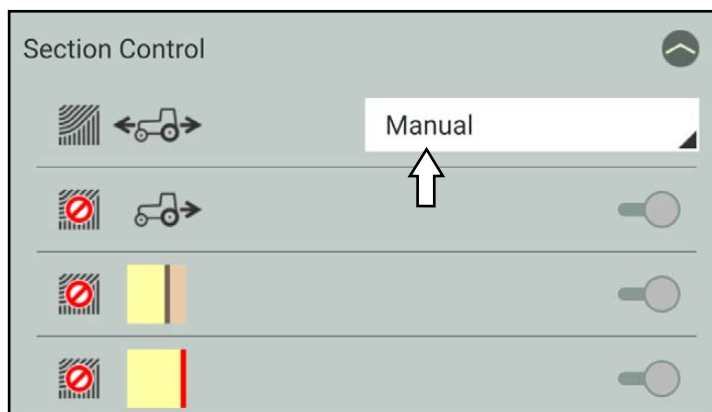


Fig. 238: Manual section control mode selected

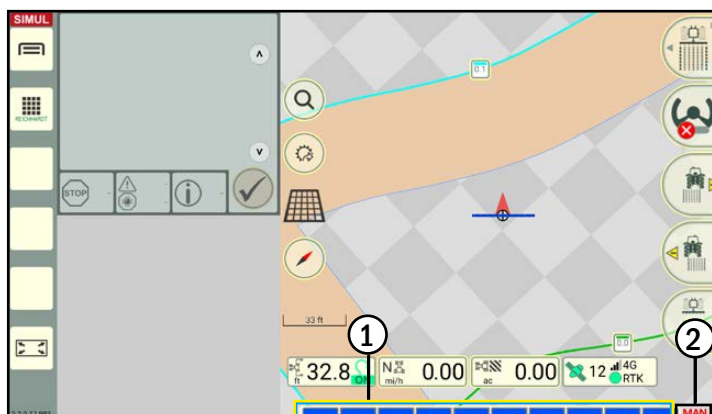


Fig. 239: Section status of a non-ISOBUS-compatible machine in manual mode, with area marking inactive

#### Area marking activated



Tap the button at the bottom right of the SMART GUIDE user interface to activate area marking.

Section status:

Active sections are illuminated yellow (see Fig. 240). (Inactive sections are illuminated blue.)

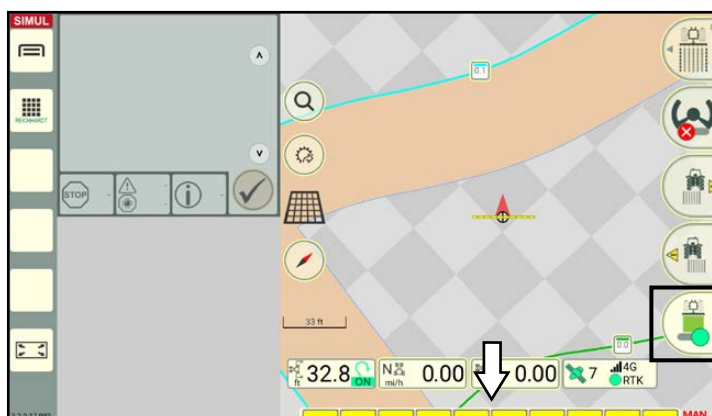


Fig. 240: Area marking activated, section status illuminated yellow

## FIELD WORK IN SMART GUIDE

### Section Control

As soon as you start moving the vehicle, the worked area behind the implement is highlighted green (see Fig. 241).

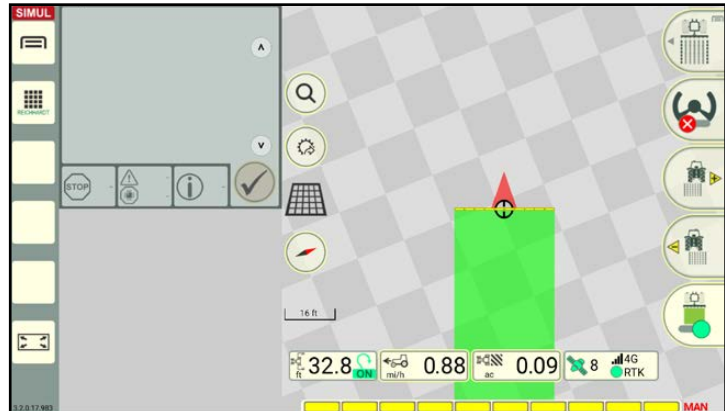


Fig. 241: Marker of the worked area

If you drive over field and headland boundaries, the sections in these areas are not deactivated in manual mode (see Fig. 242).



Fig. 242: Field and headland boundaries are ignored

### Activating/deactivating sections manually

In manual section control mode, the sections must be activated/deactivated manually via the SMART GUIDE user interface.

Tap individual sections in the section status to activate/deactivate them (see Fig. 243).

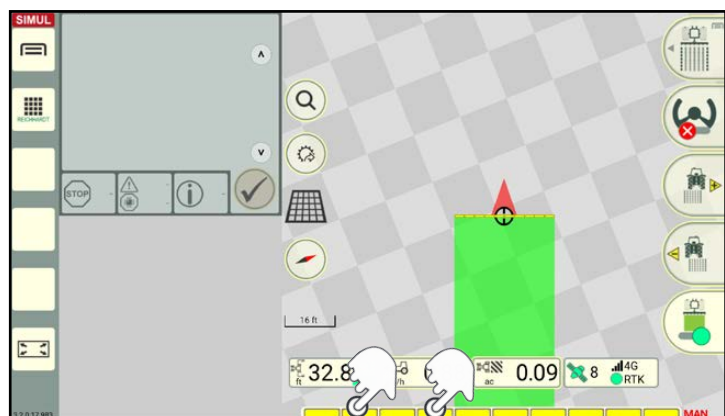


Fig. 243: Deactivating sections



The sections are labelled as follows (see Fig. 244):

- Blue sections: inactive
- Yellow sections: active

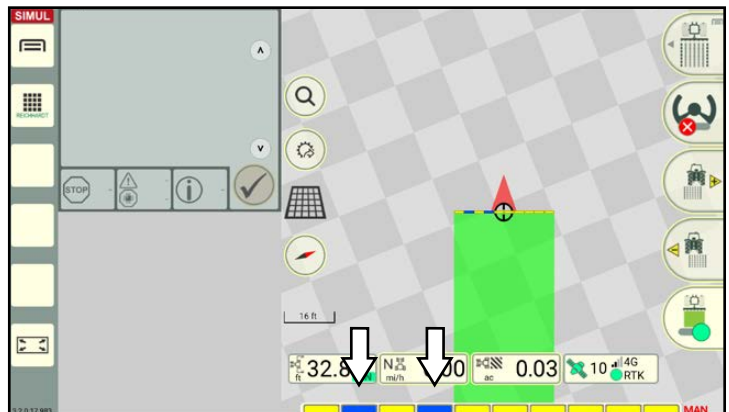


Fig. 244: Deactivated sections are blue

If you continue to drive with the machine combination, the worked area behind the implement is no longer marked if the sections are deactivated (see Fig. 245).

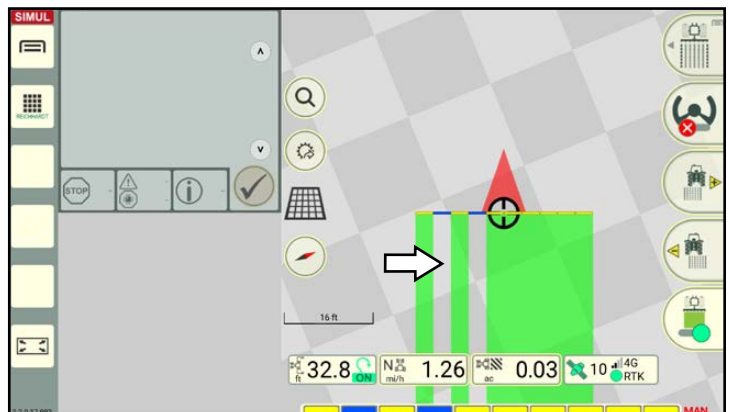


Fig. 245: Surfaces that have not been marked/worked after deactivated sections

Tap the deactivated sections again to activate them again (see Fig. 246).

The sections are then illuminated yellow again.

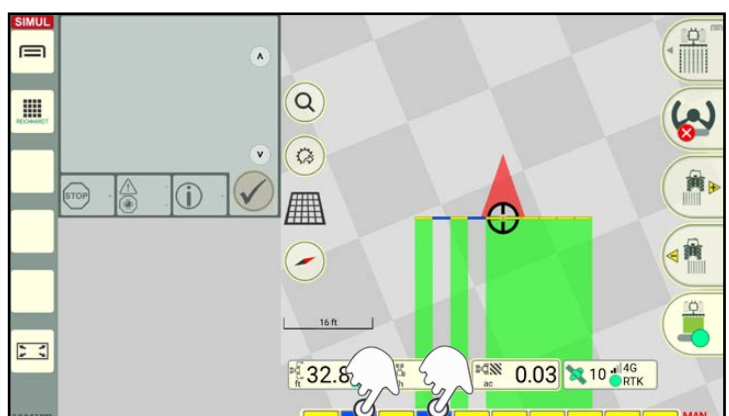


Fig. 246: Activating individual sections again



### 4.3.1.3 Automatic Section Control Mode

#### Automatic mode set (area marking deactivated)

If you have selected automatic section control mode (Auto) (see Fig. 247) in the section control settings of the machine combination, the following section information is displayed in the SMART GUIDE user interface (see Fig. 248):

- ① **Section status**  
All of the sections of the section status are blue.
- ② **Section control mode**  
The label "AUTO" to the right of the section status indicates that automatic mode is active.

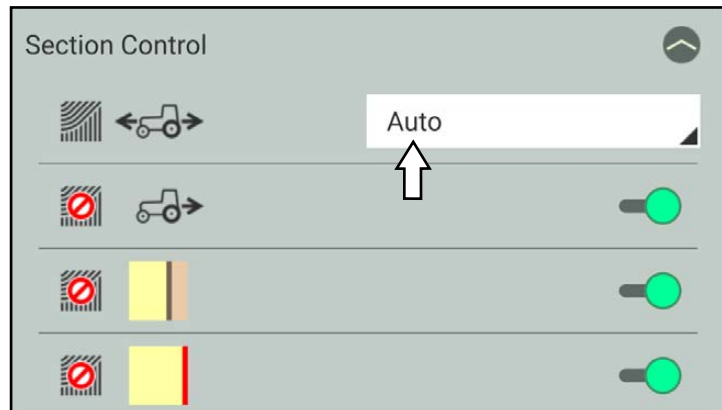


Fig. 247: Automatic section control mode selected

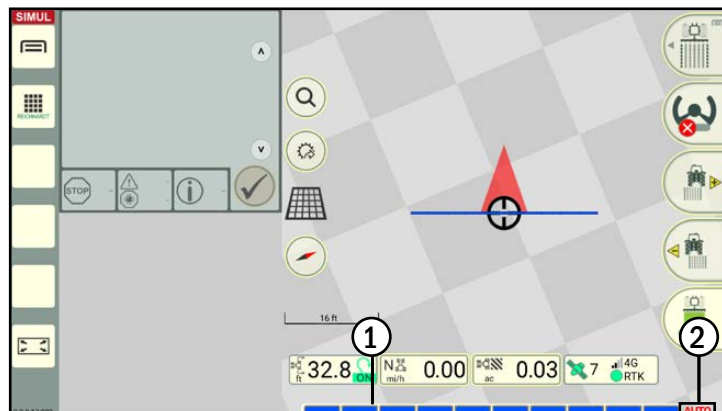


Fig. 248: Section status of a non-ISOBUS-compatible device in automatic mode, with area marking inactive

#### Area marking activated



Activate area marking if this does not occur automatically.

#### Section status:

If the machine combination is at a standstill, all of the sections are illuminated blue.

When the machine combination is moving, inactive sections are illuminated blue and active sections are illuminated yellow (see Fig. 249).

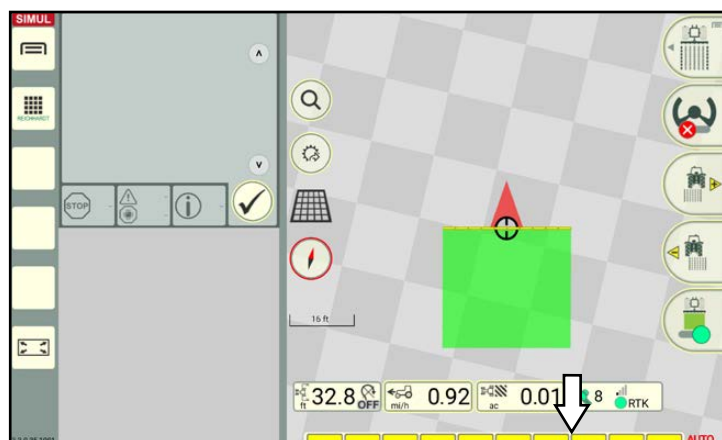
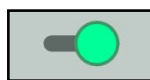


Fig. 249: Area marking activated, section status illuminated yellow



If the switches in the section control settings are activated, the sections are automatically deactivated in the selected situations:



When reversing



When driving over headland boundaries (see Fig. 250)



When driving over field boundaries and outside the field (see Fig. 251)

The sections are also deactivated if they overlap worked areas.



Fig. 250: Sections deactivated for headland and field boundaries

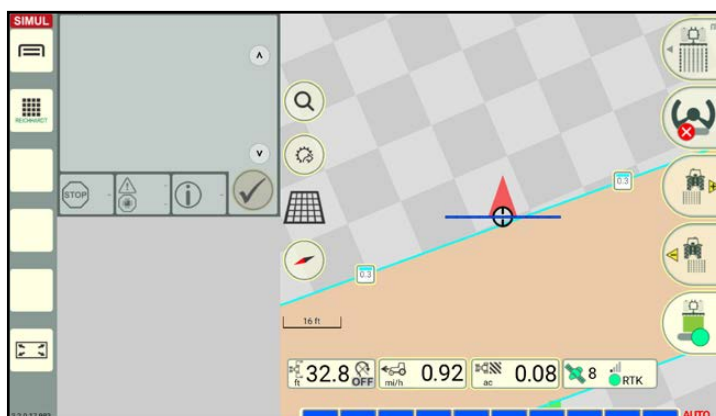


Fig. 251: Sections outside the sections in the field deactivated

### Using section control when reversing



Deactivate the first switch to specify that the sections should remain active when reversing (see Fig. 252).



Fig. 252: Deactivating the switch to use section control when reversing

### Enabling section control in the headland



Deactivate the middle switch to specify that sections on headland boundaries should not be deactivated (see Fig. 253).



Fig. 253: Deactivating the switch to use section control in the headland boundaries

If the switch is deactivated, the headland area is grayed out (see Fig. 254).

The headland boundary is only marked by a thin, dark blue line.

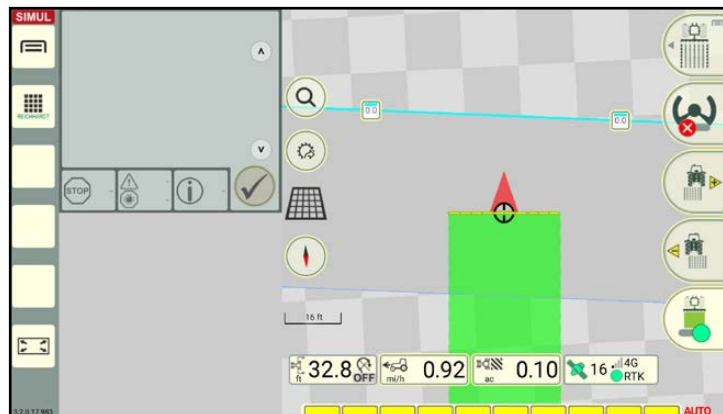
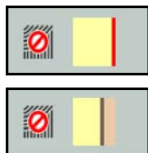


Fig. 254: Working in the headland permitted

### Maintaining section control based on the field and headland boundaries



If you deactivate the bottom switch, then the switch for headland boundaries is deactivated automatically, and the sections on the field and headland boundaries are not deactivated (see Fig. 255).



Fig. 255: Deactivating the switch to use section control beyond the field and headland boundaries

The headland area is then grayed out in the field.

The headland boundary is only marked by a thin, dark blue line (see Fig. 256).

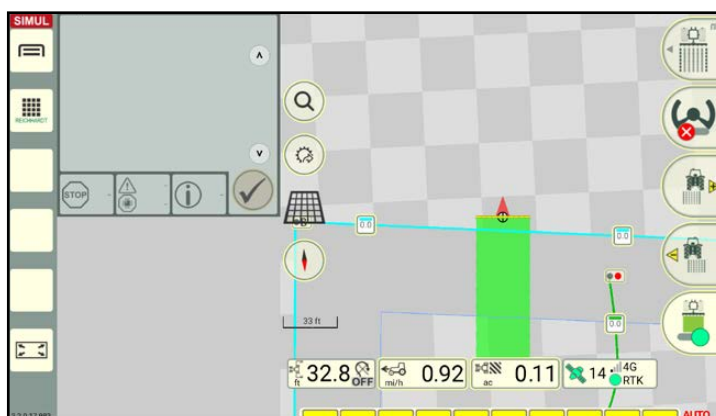


Fig. 256: Going beyond the field and headland boundaries permitted

### 4.3.1.4 External Section Control Mode

External section control mode is only available for ISOBUS machines.

In external mode, SMART GUIDE does not take over section control for the ISOBUS machine.

SMART GUIDE communicates with the ISOBUS machine and shows its activities in the SMART GUIDE user interface.

#### External mode set (area marking deactivated)

If you have selected external section control mode (see Fig. 257) in the section control settings of the machine combination, the following section information is displayed in the SMART GUIDE user interface (see Fig. 258):

- ① **Section status**  
All of the sections of the section status are blue.
- ② **Section control mode**  
The label "EXT" to the right of the section status indicates that external mode is active.

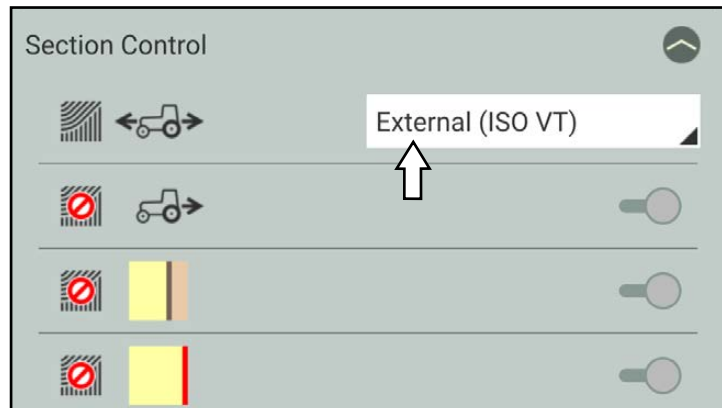


Fig. 257: External section control mode selected

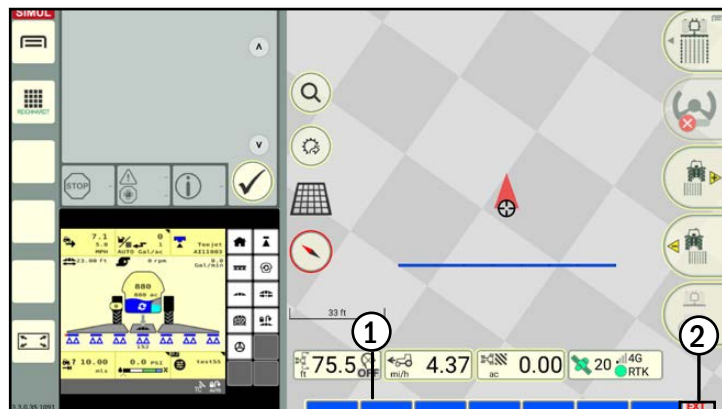


Fig. 258: Section status of a ISOBUS-compatible machine in external mode, with area marking inactive

### Area marking activated



The area marking is controlled via the ISOBUS screen of the ISOBUS machine. The switch in SMART GUIDE is grayed out (see Fig. 259).

Sections must be activated/deactivated manually via the ISOBUS screen.

In the event of sections overlapping with worked areas, or field and headland boundaries, area marking is not deactivated automatically.

#### Section status:

As soon as marking with the ISOBUS machine is activated in the corresponding ISOBUS screen, active sections in SMART GUIDE are highlighted yellow (see Fig. 259). Inactive sections remain blue.

The following error messages can occur when working with ISOBUS machines (see Fig. 260):

- Warning triangle with an exclamation mark on the area marking button.
- Section status highlighted red.

Both warnings indicate a communication error between section control on an ISOBUS device and SMART GUIDE.

If it is not possible to control the sections of the ISOBUS machine, a notice is displayed (see Fig. 261) when tapping the warning triangle (see Fig. 260).

Acknowledge the notice with the checkmark and reactivate control of the sections in the section control settings.

#### NOTICE

Even once you have switched to external mode, a notice will still be displayed in such a case.

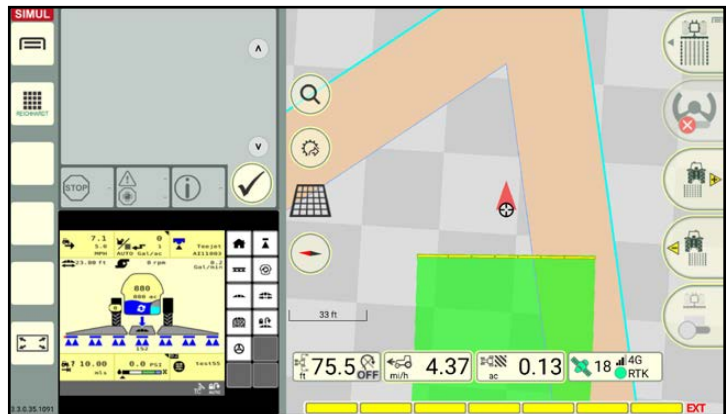


Fig. 259: Headland boundaries (and field boundaries) are ignored, sections cannot be influenced

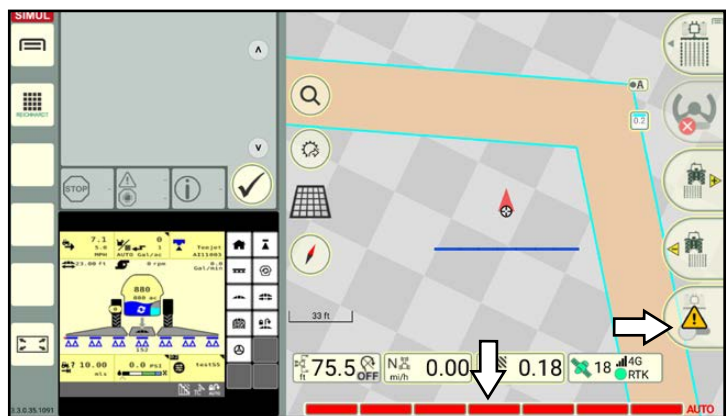


Fig. 260: Exceptions in external mode

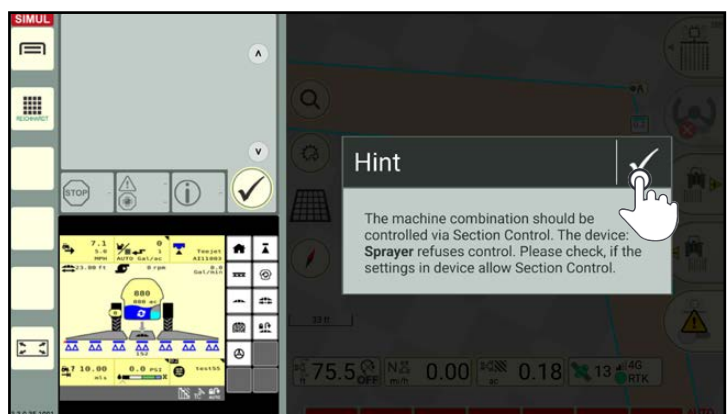


Fig. 261: Notice about controlling the sections



### 4.3.2 Overlapping Settings in Section Control

The overlapping settings are designed to prevent the section widths from "fluttering". The settings are designed to reduce imperfections/overlapping.

#### Opening the section control settings



Tap the quick access button in the SMART GUIDE user interface (see Fig. 262).



Then select the quick access to the section control settings of the active machine combination.

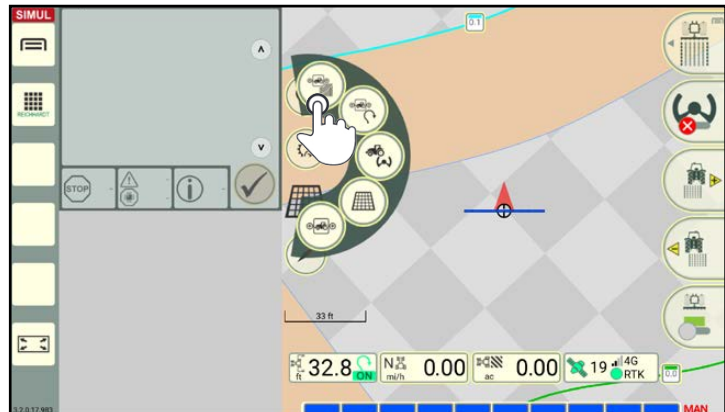


Fig. 262: Opening the section control settings via quick access



Alternatively, you can open the properties of a machine combination via the list of machine combinations and then tap the section control settings (see Fig. 234).

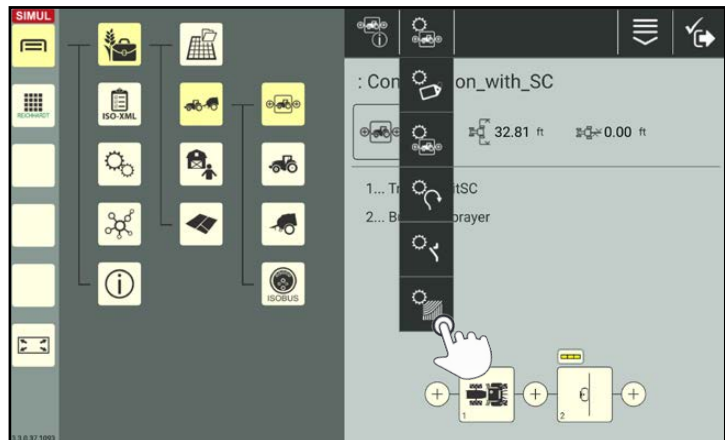


Fig. 263: Opening the section control settings directly via the machine combination



### Changing the overlapping settings


 Open the overlapping settings in the section control settings (see Fig. 264).



Fig. 264: Opening the overlapping settings

You can set the following values (see Fig. 265):

- Overlapping degree – Boundary (0 %, 50 %, 100 %)
- Overlapping degree – Area (0 %, 50 %, 100 %)
- Overlapping tolerance – Boundary (0 - 20 in resp. 0 - 50 cm)
- Overlapping tolerance – Area (0 - 20 in resp. 0 - 50 cm)

Change the values by:

- Moving the slide bar,
- Tapping the plus and minus buttons, or
- Entering them in the white boxes to the right.

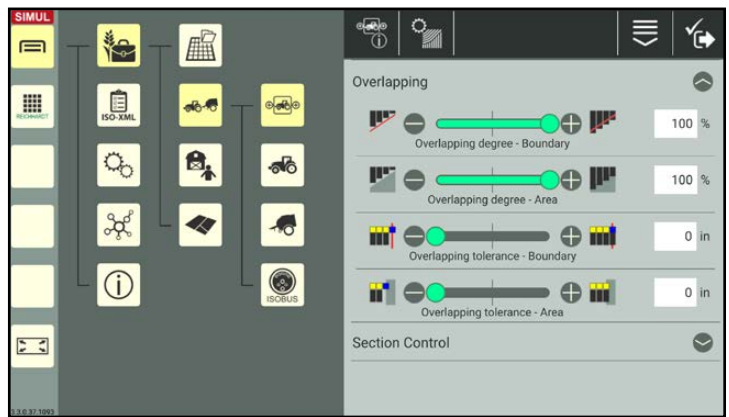


Fig. 265: Overlapping settings

### 4.3.2.1 Overlapping Degree

In the settings for the overlapping degree, you can specify from what point individual sections should be deactivated when driving over headland and field boundaries, or worked areas.

The overlapping degree can be set at 0 %, 50 %, and 100 %:



#### Overlapping degree of 0 %

Sections are deactivated before there is any overlap with headland and field boundaries, or worked areas.

Continuous operation is not possible if the overlapping degree is set to 0 %.

Small gaps of areas that have not been worked will be left at the headland and field boundaries, or worked areas (see Fig. 266).

#### – Overlapping degree of 50 %

Sections are deactivated as soon as at least half of the relevant section is over the headland and field boundary, or worked area (see Fig. 266).



#### Overlapping degree of 100 %

Sections are only deactivated once the relevant sections are completely driven over the headland and field boundary, or worked area (see Fig. 266).

Continuous operation is only possible if the overlapping degree is set to 100 %.

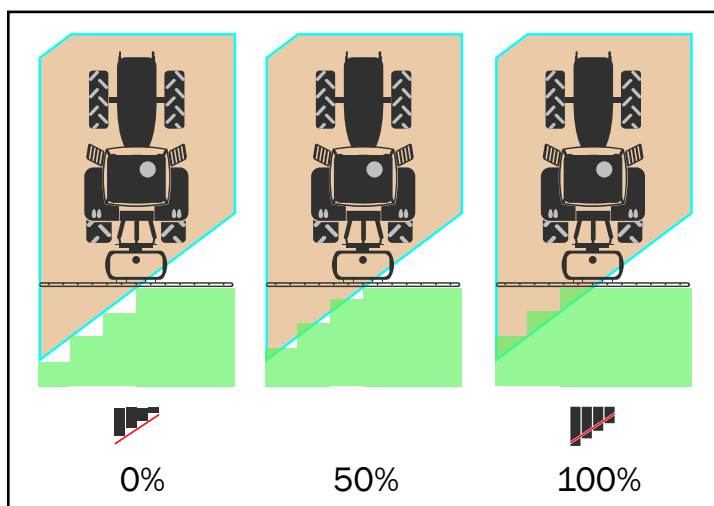


Fig. 266: Overlapping degree at 0%, 50%, and 100% at the headland boundary

Set the overlapping degree to 0 % to completely prevent the headland and field boundaries, or worked areas from overlapping (see Fig. 267).



Fig. 267: Overlapping degree of 0 %

Set the overlapping degree to 50 % to ensure that sections are deactivated as soon as at least half of the relevant section is over the headland and field boundary, or worked area (see Fig. 268).

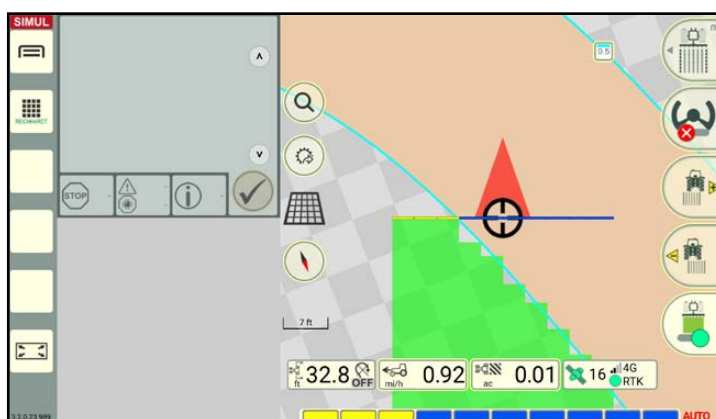


Fig. 268: Overlapping degree of 50 %

Set the overlapping degree to 100 % to ensure that continuous operation on the field is guaranteed (see Fig. 269).

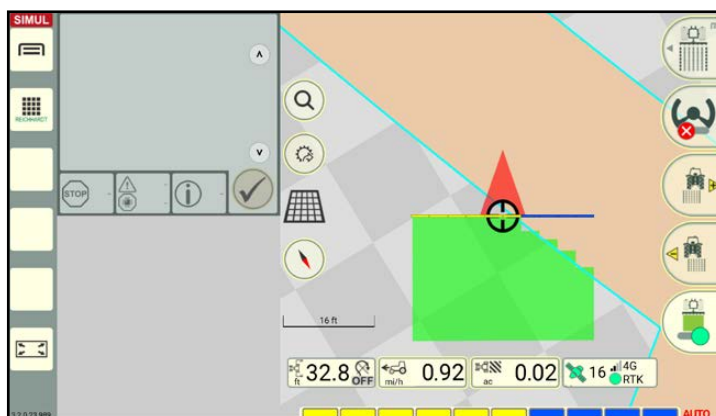


Fig. 269: Overlapping degree of 100 %

### 4.3.2.2 Overlapping Tolerance

The overlapping tolerance controls from which overlapping value (in cm) onwards, the external sections (to the right and left) should be deactivated for headland and field boundaries, and worked areas.

The overlapping tolerance can be set to 0 to 20 inches or 0 to 50 centimeters.

An overlapping tolerance of 0 cm means that the external sections are deactivated immediately if they come into contact with headland and field boundaries, or worked areas (see Fig. 270).

#### NOTICE

A higher overlapping tolerance can prevent the continuous activation and deactivation of the external sections caused by a GNSS drift.

However, this can result in areas over boundaries or worked areas being processed again.

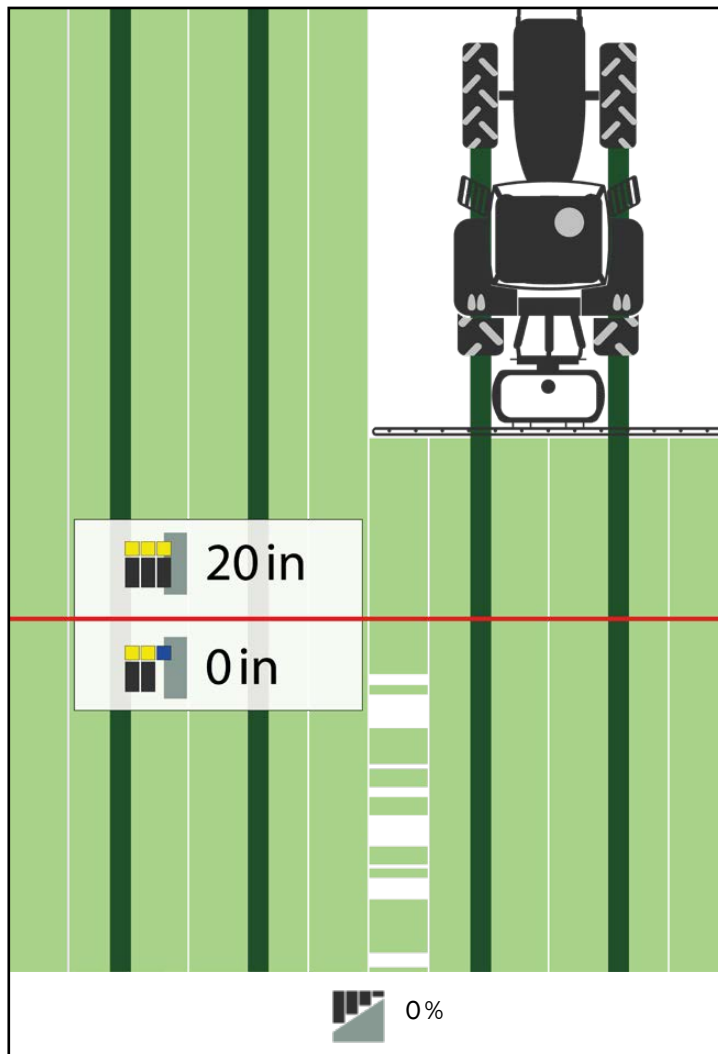


Fig. 270: Overlapping tolerance at 20 in (top) or at 0 in (bottom) at an overlapping degree of 0 %

## 4.4 Nudging – Offset Correction by Moving the Track

Nudging can be used in SMART GUIDE to correct the lateral offset of an implement caused by external factors. Nudging moves the track pattern by the corrected value, so that the tractive unit and implement are back on the corresponding target track (the reference track and all of the other field objects are not moved). The correction is completed in the selected unit of measurement – inches (max. 20 in) or centimeters (max. 50 cm).

There are two fundamental causes of an offset:

- Lateral pull of the implement
- Slope drift of the implement

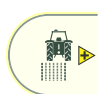
### NOTICE

Use of the nudging function is only sensible during automatically controlled driving (with SMART CONTROL).

(The offset corrected using the nudging process must not be confused with the physical, existing offset of an implement in relation to the tractive unit. If you wish to set this offset, it must be set in the geometry settings of the implement. Refer to the section "Machine Geometry – Dimensions of the Machine" in the chapter "Farm Management in SMART COMMAND" in the SMART COMMAND instruction manual.)

### 4.4.1 Nudging – Operating Principles

Track nudging is completed using the two buttons to the right of the user interface (see Fig. 271):



#### Nudge right:

Nudging the track pattern to the right. Tap the nudge right button, to shift the track pattern to the right.



#### Nudge left:

Nudging the track pattern to the left. Tap the nudge left button, to shift the track pattern to the left.

Each time the button is tapped, the track pattern is moved by 1 in or 1 cm.

If you press and hold the button, the tracks are moved at intervals of 5 in/cm.

The tracks can be moved by a maximum of 20 in or 50 cm.

Shifting the track pattern by nudging it, is not displayed in SMART GUIDE.

The nudge is displayed with a yellow arrow and the number of centimeters next to the vehicle (see Fig. 272).

The prefix indicates the nudging direction: Left (-), right (+).

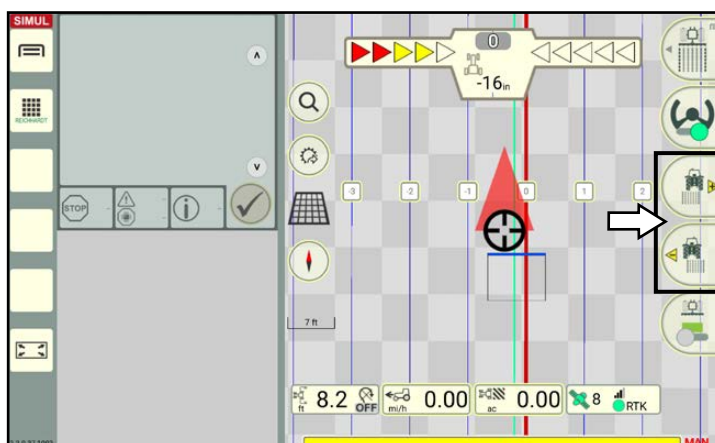


Fig. 271: Tapping the nudge right/left button, to shift the track pattern

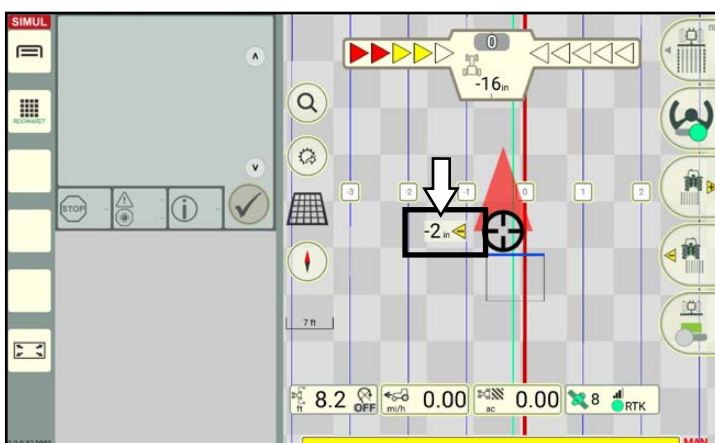


Fig. 272: Overview of a set offset

## 4.4.2 Completing a Nudging Process

The following example is designed to clarify the nudging application:

The tractive unit is driving along the track and has not been offset by being nudged. The guide bar shows 0 cm (see Fig. 273).

A slope drift or lateral pull causes the implement to shift by 10 in. The is not shown in the guide bar.

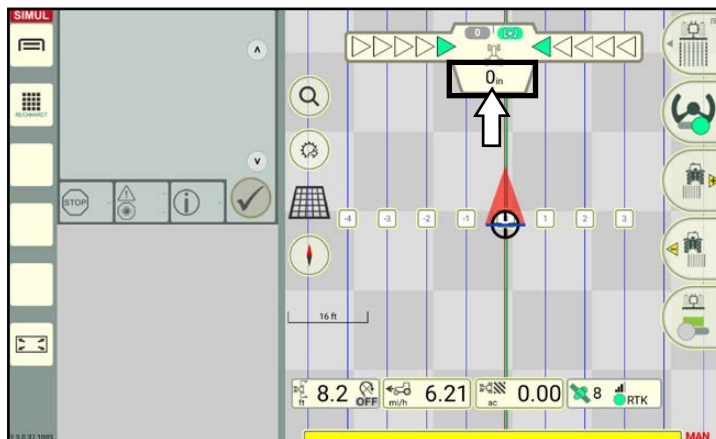


Fig. 273: Vehicle drives along the track, deviation: 0 cm



Tap the nudge left button, to shift the tracks to the left by 10 in.

The number of centimeters is displayed next to the machine combination to indicate by how many centimeters the track was nudged to the left (see Fig. 274).

The image of the track does not change.

If the nudging process is completed while the vehicle is at a standstill, the guide bar now shows that the vehicle is deviating by +10 in from the target track (see Fig. 274).

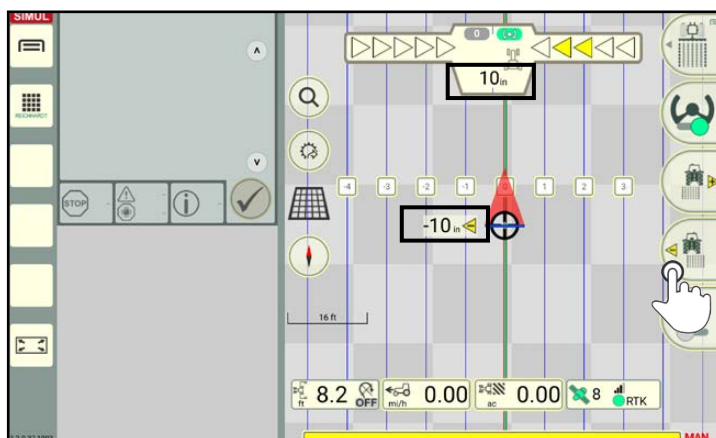


Fig. 274: Tracks nudged to the left by 10 in, vehicle still in same position, deviation is 10 in

When you operate the accelerator, the vehicle is automatically steered to the track that has been nudged to the left (if steering is active). The guide bar then shows 0 cm again (see Fig. 275).

Even though the vehicle is actually on the track selected during the nudging process, 10 in to the left of the original steering track (see Fig. 275).

The slope drift is thus adjusted as the track has now been set up 10 in "too far" to the left.

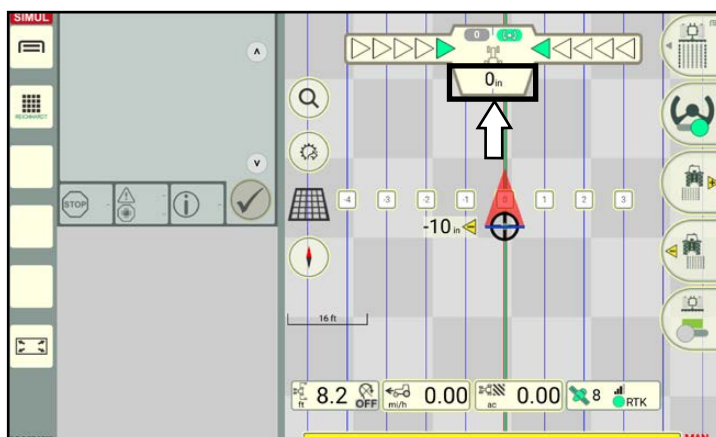


Fig. 275: Nudging tracks to the left by 10 in, system steers vehicle to shifted track (not visible), deviation is back to 0 cm



## 5 SMART TURN

SMART TURN is a function to automatically turn in the headland.

### NOTICE

SMART TURN is currently only available for HOLMER TerraDos in combination with the corresponding license.

The required settings (chapter 5.1) and use in the field (chapter 5.2) are explained in the following.

### 5.1 SMART TURN Settings

To be able to use SMART TURN, implement the settings described in the following.

### NOTICE

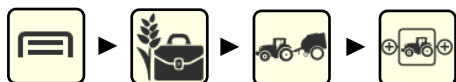
The settings are saved specifically for each machine combination and must be implemented separately for each machine combination.

#### 5.1.1 Opening the SMART TURN Settings

##### Opening the SMART TURN settings via the machine combination properties in SMART COMMAND

Open the list of machine combinations via the main menu.

When using the farm management menu:



When using ISO-XML mode:



In the list of machine combinations, press and hold the machine combination to be edited to open the processing options (see Fig. 276).

Tap "Edit" (see Fig. 277).

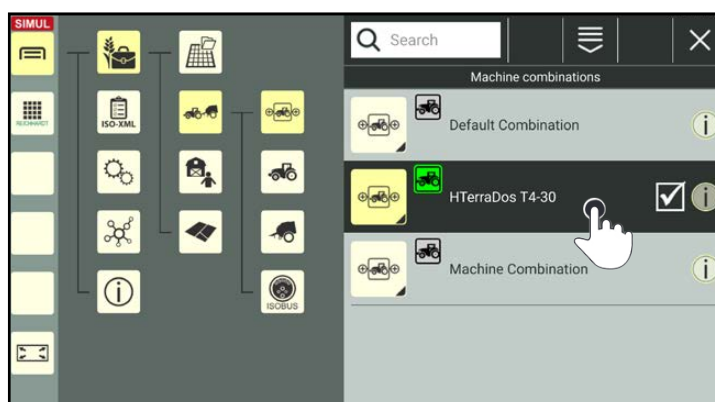


Fig. 276: List of machine combinations

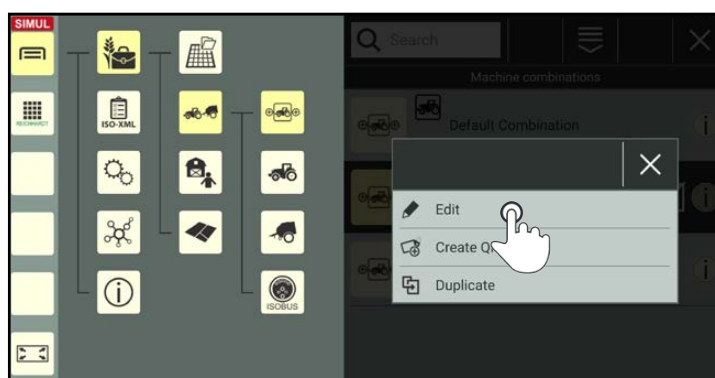


Fig. 277: Editing the machine combination



## SMART TURN

### SMART TURN Settings



Open the SMART TURN settings via the gearwheel in the machine combination properties (see Fig. 278).

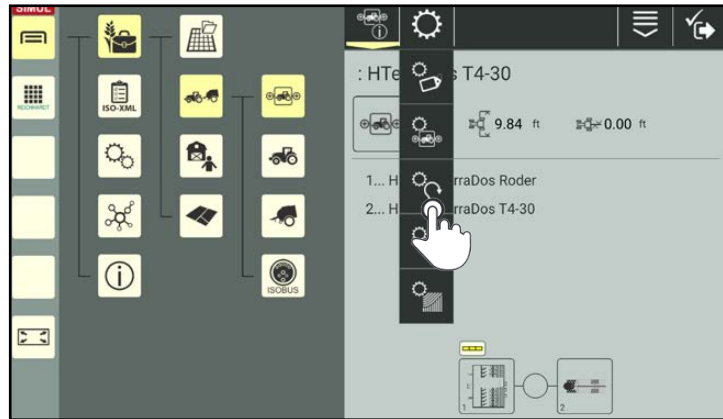


Fig. 278: SMART TURN settings

You can then access the SMART TURN settings (see Fig. 279).

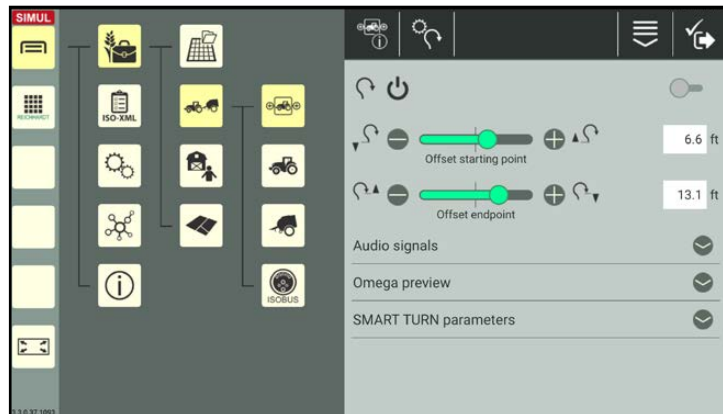


Fig. 279: Enabling SMART TURN in the SMART TURN settings

### Opening the SMART TURN settings via quick access in SMART GUIDE



Alternatively, you can also open the SMART TURN settings via the quick access button in the SMART GUIDE user interface (see Fig. 280).



Select the quick access to the SMART TURN settings for the selected machine combination.

You can then access the SMART TURN settings (see Fig. 279).

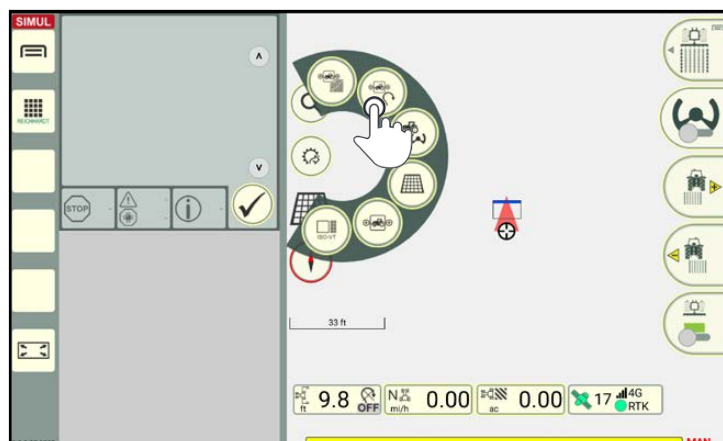


Fig. 280: Quick access to the SMART TURN settings for the active machine combination

## 5.1.2 Activating/Deactivating SMART TURN

Activate SMART TURN for the selected machine combination by tapping the switch on the right edge of the SMART TURN settings screen (see Fig. 281).



SMART TURN deactivated



SMART TURN activated

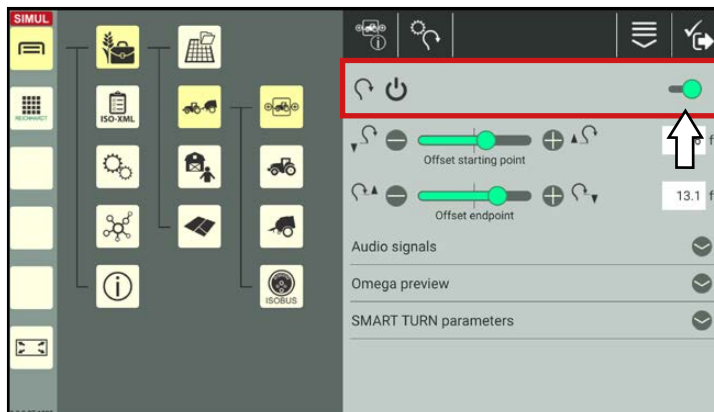


Fig. 281: Activating/deactivating SMART TURN

## 5.1.3 Offset of the Starting Point and End Point

The starting point specifies from when the vehicle will implement a SMART TURN maneuver.

The end point specifies when the vehicle will terminate a SMART TURN maneuver.

The offset enables you to move the starting point and end point to the front (-) or rear (+) (see Fig. 282).

Change the values by moving the slide bars, tapping the plus or minus buttons, or by manually entering the value in the white input box.

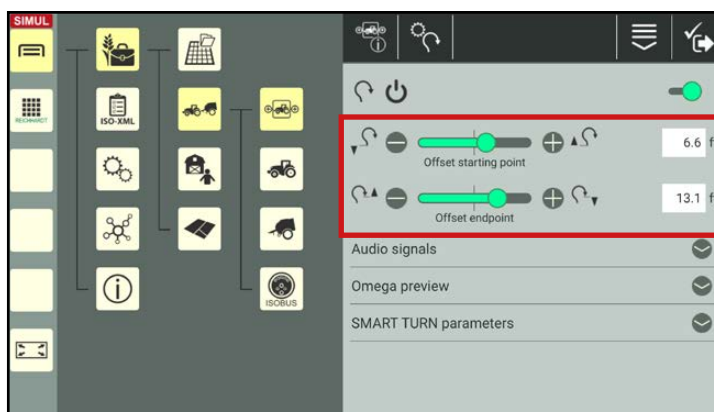


Fig. 282: Specifying the offset of the starting and end points

## 5.1.4 Audio Signals



Tap the arrows to show and hide the settings.

To activate the audio signals for the following actions, tap the switches for the audio signals so that they turn green (see Fig. 283):

- When starting a SMART TURN maneuver,
- At the end of a SMART TURN maneuver,
- When in contact with the prewarning limit (light green trigger line in SMART GUIDE; see Fig. 284)

(The prewarning limit is displayed next to the headland boundary line, once SMART TURN has been activated for a boundary line).

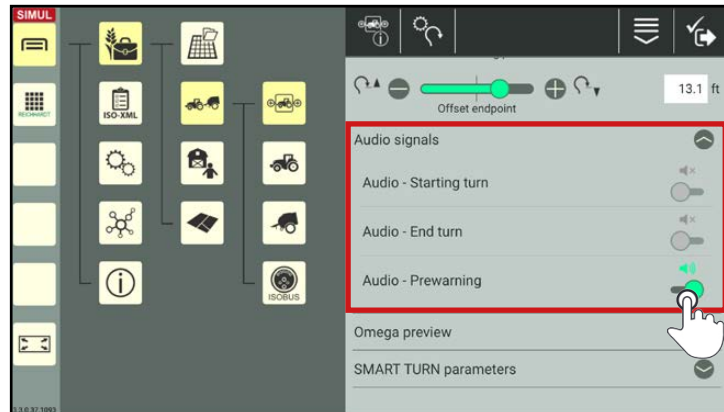


Fig. 283: Tapping the switch to activate/deactivate audio signals

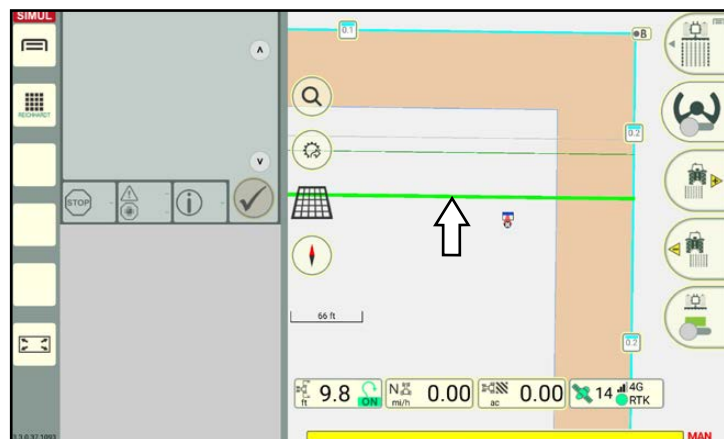


Fig. 284: Prewarning limit (light green trigger line)

### 5.1.5 Omega Preview



Tap the arrows to show and hide the Omega preview.

The Omega preview (see Fig. 285) provides a detailed preview of the planned SMART TURN maneuver based on the set offset (see chapter 5.1.3) and the set SMART TURN parameters (see chapter 5.1.6).

- ① Distance covered from the inner headland boundary line (horizontal axis) to the field boundary
- ② Distance covered from the headland parallel to the inner headland boundary line

If the Omega preview cannot be displayed, then the selected SMART TURN parameters are not plausible.

Check and correct these parameters (see chapter 5.1.6).

The Omega preview is only updated once the settings are saved. Open the SMART TURN settings again, if required, to display the current Omega preview.

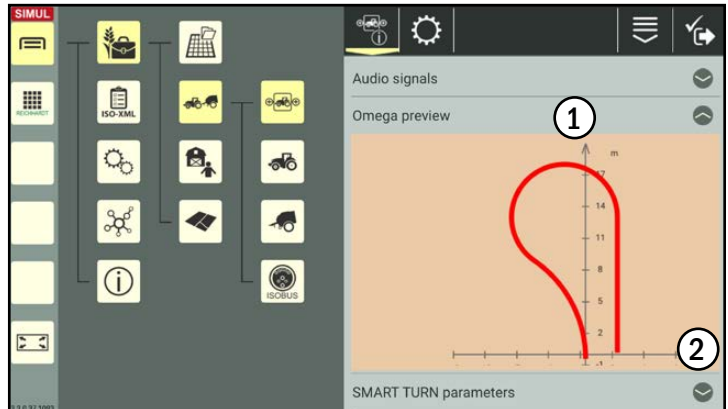


Fig. 285: Omega preview

## 5.1.6 SMART TURN Parameters



Tap the arrows to show and hide the SMART TURN parameters.

If required, change the SMART TURN parameters by moving the slide bars, tapping the plus or minus buttons, or by manually entering the parameters in the white input boxes (see Fig. 286).

The following parameters are available:



### Radius ratio:

Possible steering lock percentage for the vehicle during a SMART TURN maneuver.

To ensure a pleasant drive, the standard value of 50 % should not be changed, if possible.



### Turning maneuver extension:

Distance covered by the vehicle from the inner headland boundary line to the field boundary during the SMART TURN maneuver.



### Initial track:

Distance that the vehicle steers in a straight line at the start of the SMART TURN maneuver. A higher value equates to a longer SMART TURN maneuver.



### Positional track:

Distance that the vehicle steers in a straight line at the end of the SMART TURN maneuver. A higher value equates to a longer SMART TURN maneuver.



### Turning maneuver calculation:

Distance to the inner headland boundary line (gray line in the field; see Fig. 289 – 1) from which the SMART TURN maneuver will be calculated.

The direction must not be adjusted from this time onwards.



### Autom. hide confirmation dialog:

Distance to the headland boundary line (dark green line in the field; see Fig. 289 – 1) from which the confirmation dialog for the maneuver should automatically be hidden.

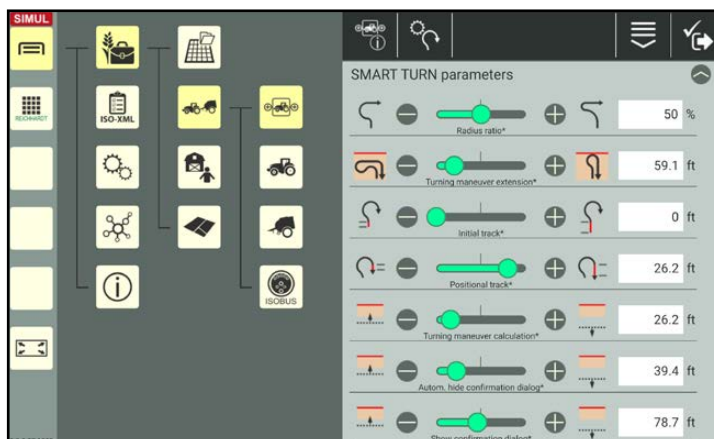


Fig. 286: Specifying the SMART TURN parameters via the slide bar or input box

### NOTICE

By this time, a direction for the maneuver must have been selected via the display that is shown (see Fig. 291). Otherwise no SMART TURN maneuver will be calculated.



### Show confirmation dialog:

Distance to the headland boundary line (light green line in the field; see Fig. 289 – 1) from which a dialog box to preselect the direction of the turning maneuver should be displayed.

## 5.2 Executing SMART TURN Maneuvers

The basic steps for using SMART TURN and executing the different maneuvers is explained in the following.

### 5.2.1 Activating SMART TURN for Boundary Lines

SMART TURN must be activated for the relevant boundary lines so that a SMART TURN maneuver can be executed.



To do so, tap the track marker of an active or inactive boundary line section (see Fig. 287).

#### NOTICE

When using SMART TURN maneuvers, the boundary should be made up of individual boundary line sections (closed or not closed).

If the boundary is only made up of a single, long boundary line, it may be the case that the SMART TURN maneuver is not triggered when working in the headland as you will not drive across trigger lines.

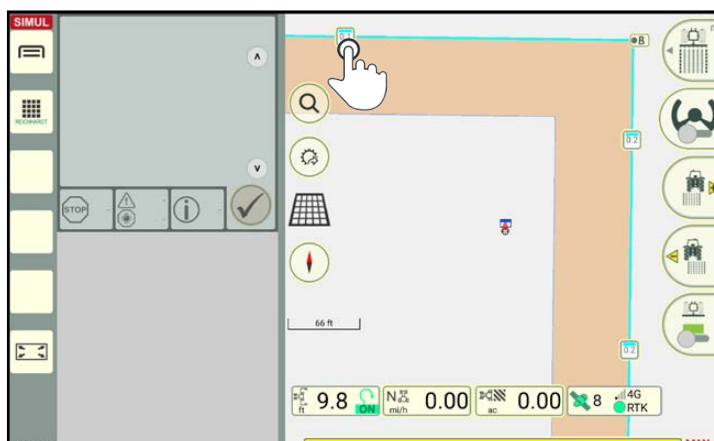


Fig. 287: Tapping the track marker of a boundary line



The context menu for the track marker is then displayed.

Here you can activate SMART TURN for the selected boundary line or for the entire boundary line group via a check box (see Fig. 288).

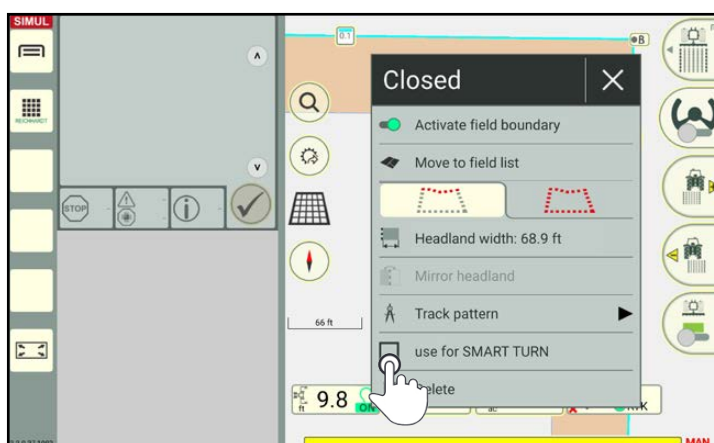


Fig. 288: Activating SMART TURN for a boundary line

## SMART TURN

### Executing SMART TURN Maneuvers

Depending on the parameter settings (see chapter 5.1.6), three additional trigger lines (see Fig. 289 – 1) are displayed on the boundary lines for which SMART TURN has been activated:

- Gray trigger line:  
SMART TURN parameter "Turning maneuver calculation"
- Dark green trigger line:  
SMART TURN parameter "Autom. hide confirmation dialog"
- Light green trigger line:  
SMART TURN parameter "Show confirmation dialog"



If the SMART TURN main switch in the SMART TURN settings was switched on and at least one boundary line is activated for SMART TURN, the SMART TURN status in SMART GUIDE shows a green turn symbol labeled "ON" (see Fig. 289 – 2). For further information on the SMART TURN status, see chapter 5.2.3.

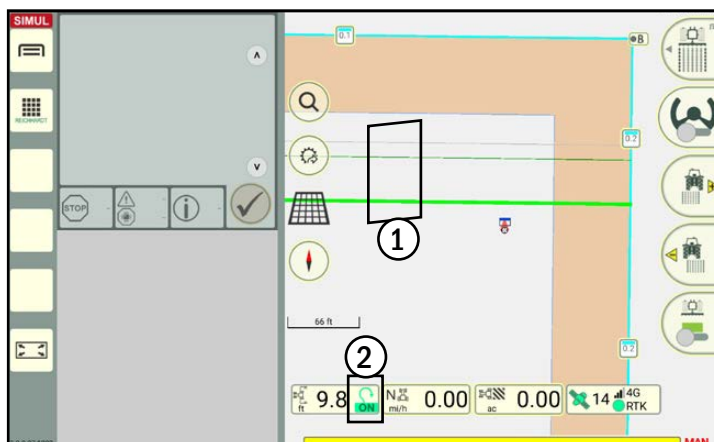






Fig. 289: Trigger lines and status symbol following activation



## 5.2.2 Selecting SMART TURN Maneuvers

If you drive over the light green trigger line (see Fig. 290), a selection dialog is displayed in which you can specify which type of SMART TURN maneuver you want to execute (see Fig. 291):

-  Exit maneuver, left  
(next track = more than 5 tracks away from the current track)
-  Omega turning maneuver, left  
(next track = one of the next 4 tracks next to the current one)
-  Omega turning maneuver, right  
(next track = one of the next 4 tracks next to the current one)
-  Exit maneuver, right  
(next track more than 5 tracks away from the current track)

### NOTICE

If a maneuver cannot be executed due to surrounding variables, then the relevant button is grayed out.

Tap the required maneuver.

Confirm the selection manually via the joystick in the machine (HOLMER TerraDos only).

### NOTICE

If the corresponding audio signals are activated in the SMART TURN settings, a signal sounds when driving over the line.

### NOTICE

No turning maneuver is executed if no selection has been made by the time contact is made with the dark green trigger line (see Fig. 292).

On HOLMER TerraDos, an automatic preselection is made based on the position of the lifting plow, that can be confirmed via the machine joystick.

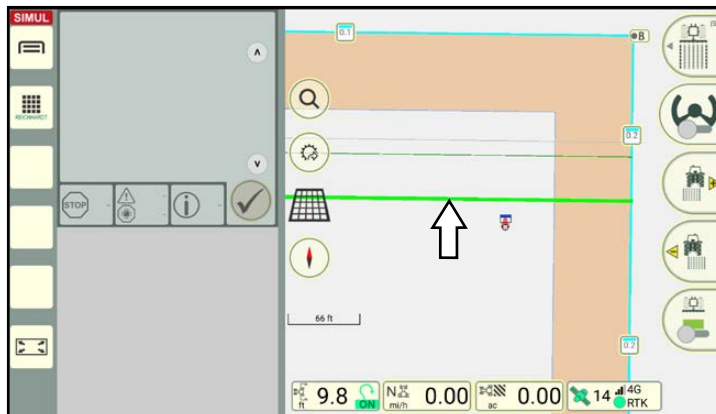


Fig. 290: Light green trigger line



Fig. 291: Selecting the required SMART TURN maneuver

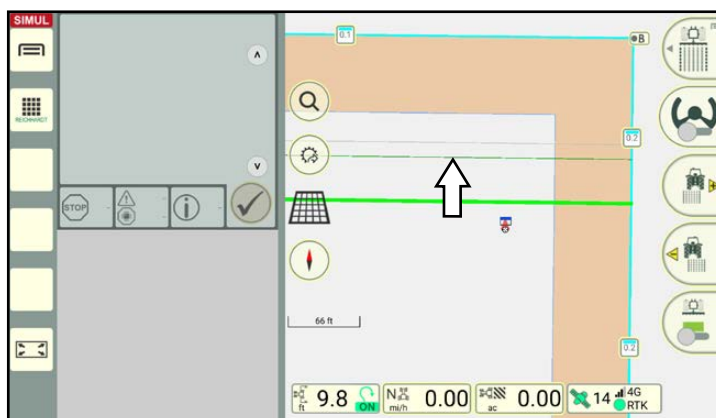


Fig. 292: Dark green trigger line

## 5.2.3 SMART TURN Status

The SMART TURN is displayed next to the working width in the status bar of SMART GUIDE (see Fig. 293). The SMART TURN status varies depending on how far a SMART TURN maneuver has progressed:



SMART TURN is active for the current machine combination. At least one boundary line is activated for SMART TURN.



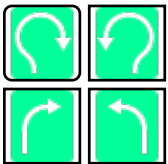
SMART TURN is deactivated for the active machine combination or no boundary lines were activated for SMART TURN.



A selection has been made on the selection dialog but the maneuver has not been released yet. (Only on vehicles where a maneuver must be explicitly released via a switch in the vehicle.)



The maneuver has been released.



The maneuver has been released and the execution has started.

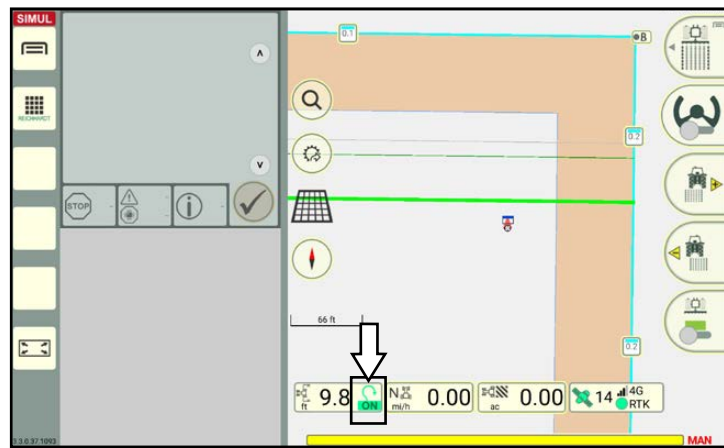
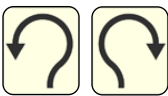


Fig. 293: SMART TURN status

## 5.2.4 Executing a Right/Left Omega Turning Maneuver



If contact is made with the light green trigger line and once the maneuver has been selected (see chapter 5.2.2) you will return to the field view in SMART GUIDE (see Fig. 294).



There are now blue dots with numbers along the headland boundary line that indicate the individual tracks (1).



If a track has already been processed and a turning maneuver has been completed, the track dot turns yellow.



If the maneuver has been selected but not started yet, the SMART TURN status is illuminated red (2).

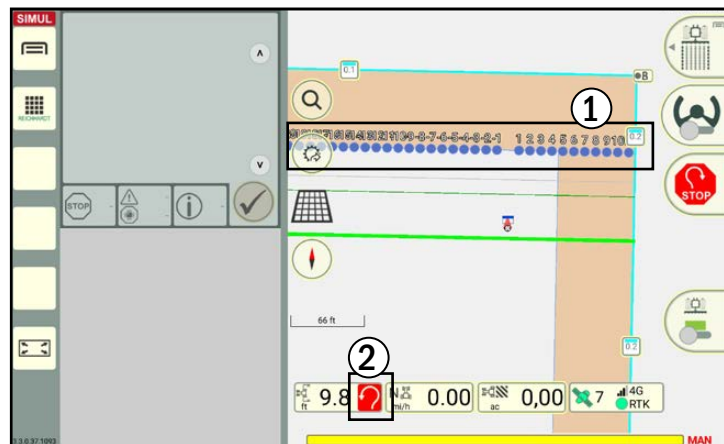


Fig. 294: The maneuver has been selected (but not started yet); dots on the headland boundary line indicate the tracks; the SMART TURN status is red

If contact is made with the gray line (see Fig. 295) the turning maneuver is calculated in the headland and is initiated shortly afterwards (see Fig. 296).

When driving out of the headland into a new track, the vehicle is automatically steered to the nearest (blue) dot that has not been processed yet.

#### NOTICE

If the nearest dot has already been processed (yellow) then the next closest unprocessed dot is selected and the maneuver is adjusted.

If the next five dots indicate that the tracks have already been processed, then the turning maneuver in this direction can no longer be selected. It is only possible to select an exit maneuver (see chapter 5.2.5).

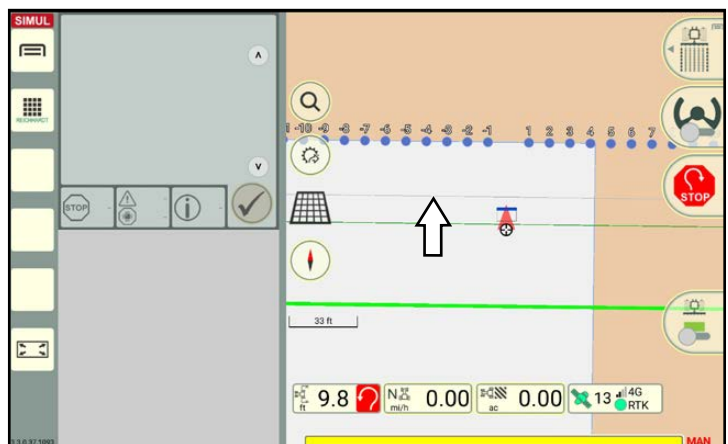


Fig. 295: Gray trigger line initiates a calculation and the maneuver is started shortly afterwards

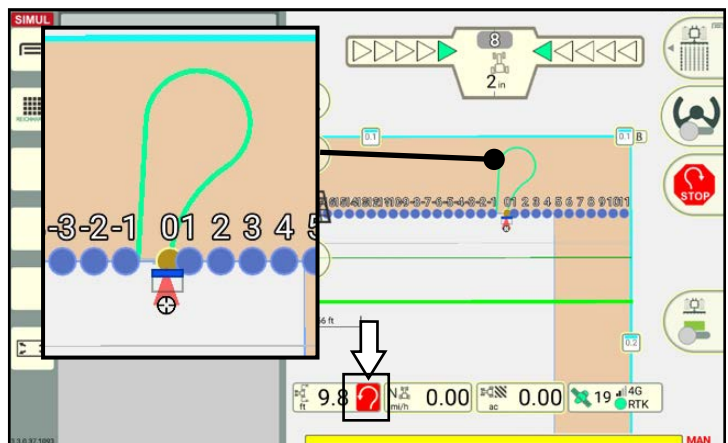


Fig. 296: The maneuver is displayed in the headland; the SMART TURN status is red



Activate automatic steering to move towards the maneuver track.



The SMART TURN status in the status bar turns green when the maneuver has been selected and steering has been activated (see Fig. 297).

If the audio signals are activated in the SMART TURN settings, a signal sounds when the maneuver is started.

At this time, the lifting plow is lifted up and moved into the correct direction. The vehicle executes the maneuver independently.

If activated in the SMART TURN settings, a signal also sounds after the maneuver is complete.

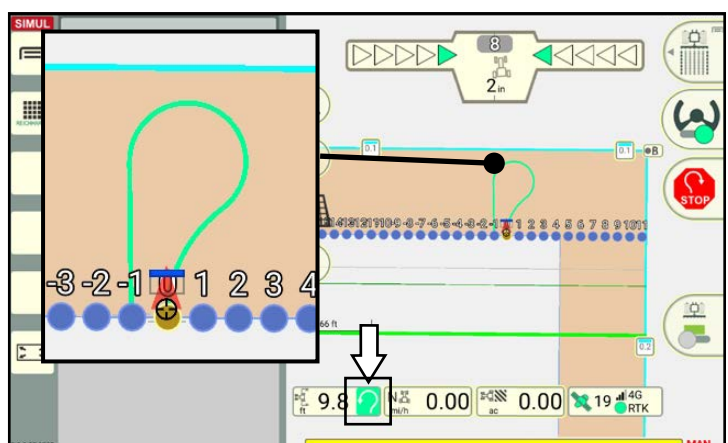


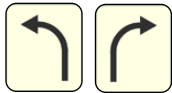
Fig. 297: Steering activated and maneuver started; the SMART TURN status is green

## SMART TURN

### Executing SMART TURN Maneuvers

## 5.2.5 Executing a Right/Left Exit Maneuver

An exit maneuver should be used if the next track to be accessed is more than five tracks away.



If contact is made with the light green trigger line and once the maneuver has been selected (see chapter 5.2.2) you will return to the field view in SMART GUIDE (see Fig. 298).



There are now blue dots along the headland boundary line that indicate the individual tracks (1).



If a track has already been processed and a maneuver has been completed, the track dot turns yellow (1).



If the maneuver has been selected but not started yet, the SMART TURN status is illuminated red (2).

If contact is made with the gray line, the exit maneuver is calculated and displayed in the headland (see Fig. 299).

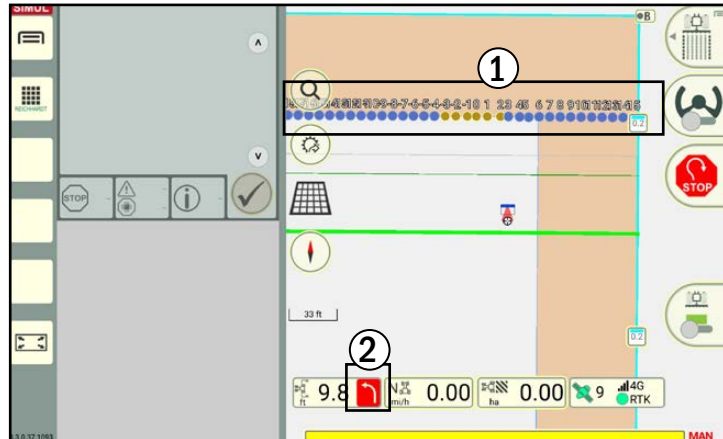


Fig. 298: The maneuver has been selected (but not started yet); blue dots on the headland boundary line indicate the tracks; the SMART TURN status is red

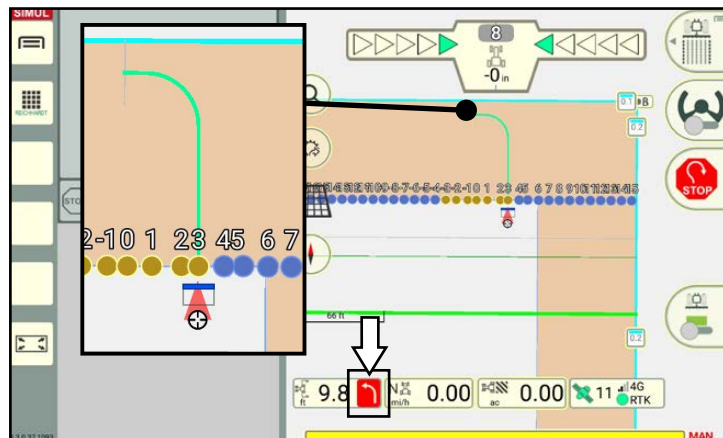


Fig. 299: The exit maneuver is displayed in the headland; the SMART TURN status is red





Activate automatic steering to move towards the maneuver track.



The SMART TURN status in the status bar turns green when the maneuver has been selected and steering has been activated (see Fig. 300).

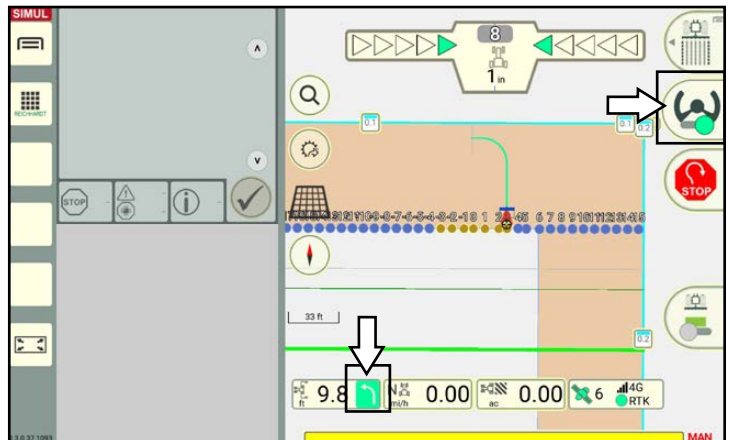


Fig. 300: Steering activated and maneuver started; the SMART TURN status is green

Once the exit maneuver is completed, a button showing the number of the track suggested for the entry maneuver, is displayed on the right edge of the screen (see Fig. 301).

The dot for the suggested track is highlighted green (see Fig. 301).

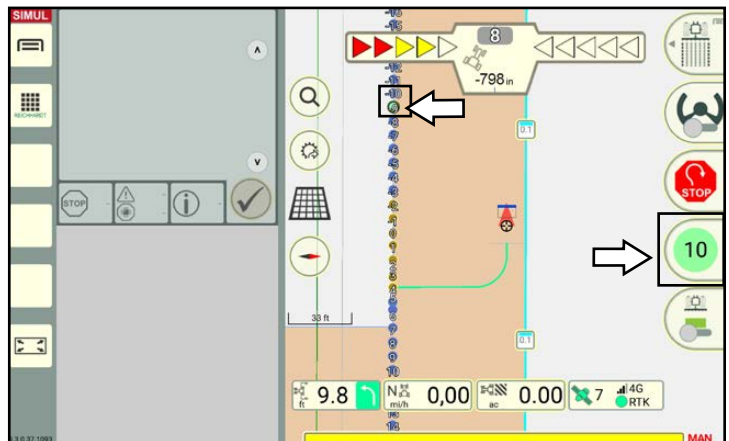


Fig. 301: Display of the suggested track in the field (green dot) and on button on the right edge of the screen



Tap the number with the track number to select the corresponding track for the entry maneuver.

If the vehicle continues to drive in a straight line without selecting a track, the following track is highlighted and suggested (see Fig. 302).

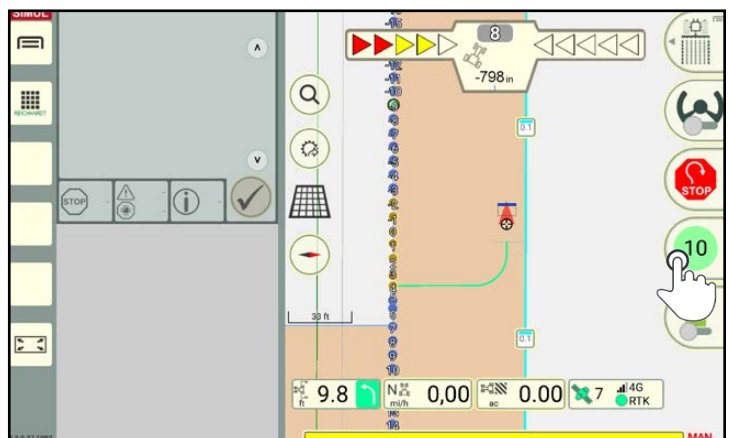


Fig. 302: Tapping the number of the track for the entry maneuver

## SMART TURN

### Executing SMART TURN Maneuvers



The steering is deactivated, if required. Activate it again to move towards the maneuver track.

The entry maneuver is then started and displayed in the headland (see Fig. 303).

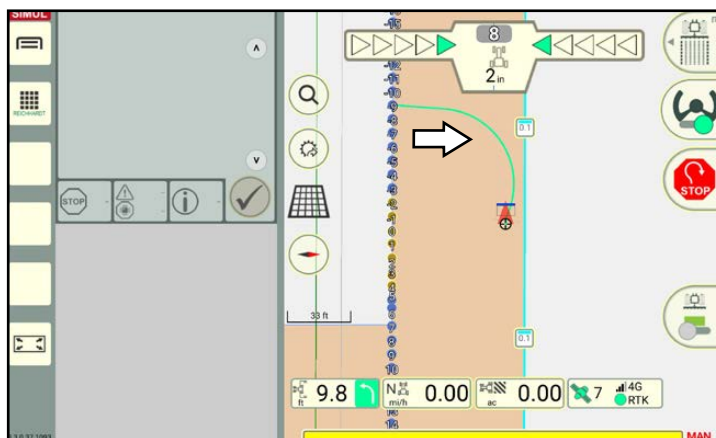


Fig. 303: Entry maneuver has been started

At the end of the entry maneuver, the track is hidden again and automatic steering is deactivated (see Fig. 304).

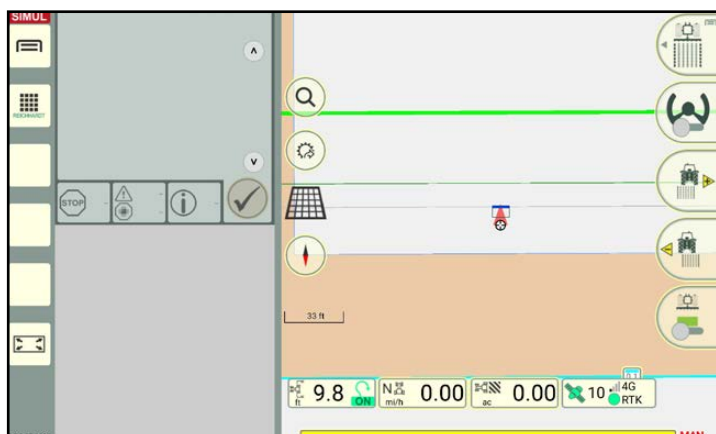


Fig. 304: Maneuver has been completed

## 5.2.6 Stopping SMART TURN Maneuvers



If you would like to stop a SMART TURN maneuver, tap the STOP button during the maneuver (see Fig. 305).

A maneuver is also stopped if you drive over the dark green trigger line and before a SMART TURN maneuver is selected/confirmed.

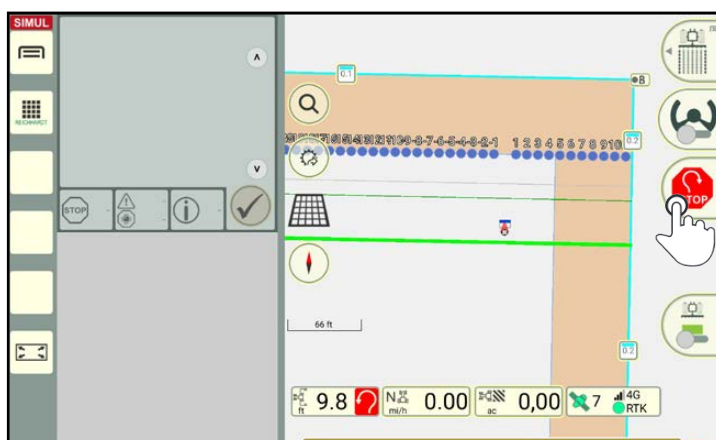


Fig. 305: Stopping a SMART TURN maneuver

## 6 SMART GUIDE Menu

In the SMART GUIDE menu, you can implement settings relating to the display of objects in SMART GUIDE and settings for the automatic steering via SMART CONTROL.

### 6.1 Opening the SMART GUIDE Menu

There are two ways to open the SMART GUIDE menu. These are described in the following.

#### Tapping the marking mode button



In the SMART GUIDE user interface, tap the top right button on which marking mode is displayed (see Fig. 306).

An overview of other settings in the SMART GUIDE menu then opens (see chapter 6.3).

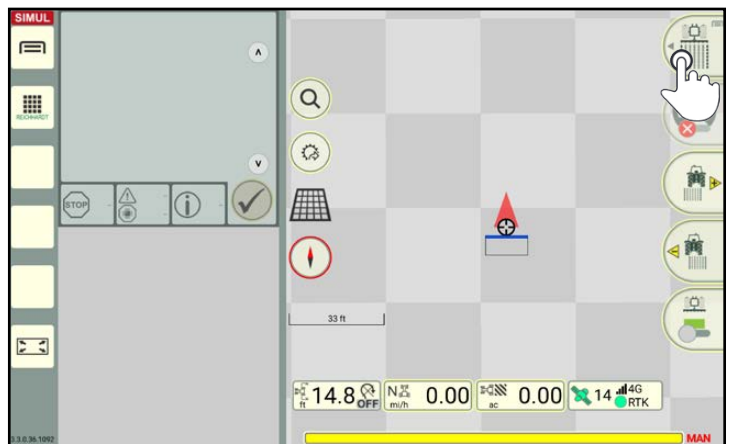


Fig. 306: Tapping the marking mode button

#### Swiping the marking mode button



You can also open the SMART GUIDE menu by swiping the button on the top right to the left (see Fig. 307).



Then tap the menu symbol (see Fig. 308).

An overview of other settings in the SMART GUIDE menu then opens as well (see chapter 6.3).



Fig. 307: Swiping the marking mode button to the left

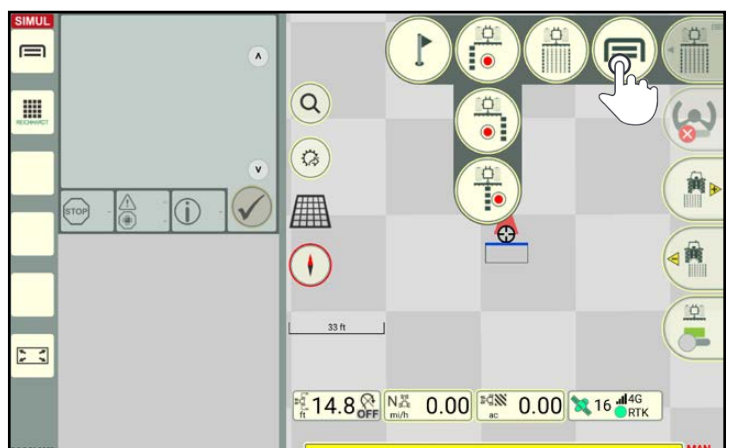


Fig. 308: Opening the SMART GUIDE menu



## 6.2 SMART GUIDE-Menu – Overview

In the SMART GUIDE menu, you can access the following settings via the various menu items and tabs (see Fig. 309):



Closing the SMART GUIDE menu (see chapter 6.7)



SMART GUIDE settings (see chapter 6.5)



Further settings (see chapter 6.3)

- Map settings
- Auto functions
- Guide bar



SMART CONTROL (steering settings; see chapter 6.4)



Measured value (see chapter 6.5)



Position offset (displaying and resetting the GNSS drift correction; see chapter 6.6)



Fig. 309: Welcome page of the SMART GUIDE menu

## 6.3 SMART GUIDE-Settings – Further Settings

Open the SMART GUIDE menu (see chapter 6.1).



In the SMART GUIDE settings tap the tab with the gearwheel and dots on.



When you open the SMART GUIDE menu for the first time following a restart, the "Further settings" menu is opened by default (see Fig. 309).

The following settings can be implemented in the Further settings:

- Map settings: Settings to display objects in the working area and in the status bar.
- Auto functions: Settings to create tracks.
- Guide bar: Settings to display deviations on the guide bar.



Open/close the individual settings by tapping the arrows.

### 6.3.1 Map Settings – Display Settings in SMART GUIDE

Under further settings open the the map settings options.

#### Basic zoom:

Specify whether a certain scale or a multiple of the working width should be specified as the parameter for the basic zoom in the map view (see Fig. 310).

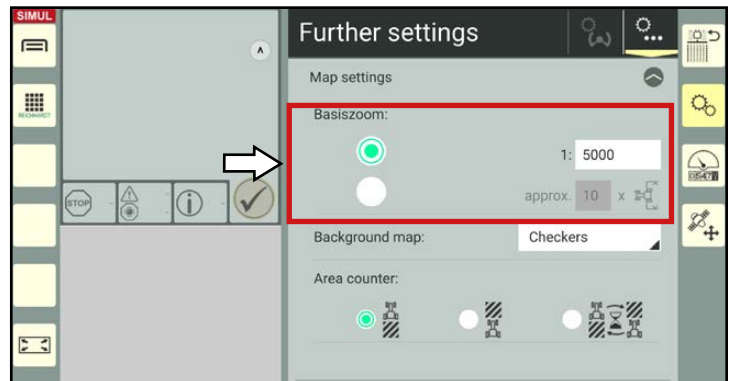


Fig. 310: Specifying the basic zoom

#### Background map:

Tap the selection list next to the "Background map:" to specify how the background of the map should be displayed in SMART GUIDE (see Fig. 311):

- Using Open Street Map (see Fig. 312),
- No (light gray) background, or
- Checkers.

#### NOTICE

The Open Street Map is only available for the SMART COMMAND app if the ISO FLEX module has an internet connection (SIM card).

Open Street Map cannot be used on the SMART COMMAND terminal as it does not have an internet connection.

Please be aware that using Open Street Map will use up additional data.

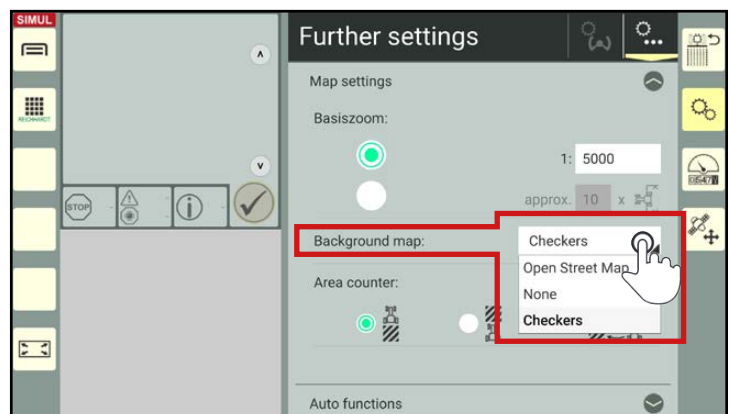


Fig. 311: Selecting a background map



Fig. 312: SMART GUIDE with Open Street Map as the background

## SMART GUIDE MENU

### SMART GUIDE-Settings - Further Settings

#### Area counter:

Via the "Area counter" option (see Fig. 313), you can specify what the area counter in the status bar of SMART GUIDE (see Fig. 314) should count or display:



Already worked area,



Remaining area to be worked,



Alternating between both areas.

#### NOTICE

The remaining area to be worked can only be displayed for closed fields.

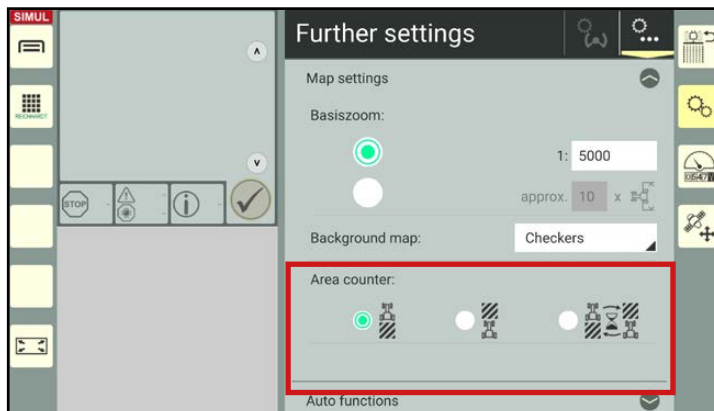


Fig. 313: Specifying the area counter display

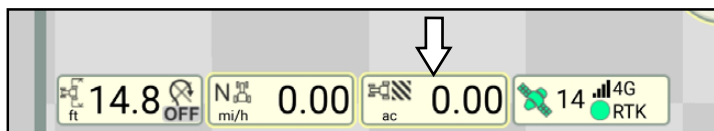


Fig. 314: Area counter in status bar

## 6.3.2 Auto Functions – Specifying the Action After Track Recording

Under further settings open the the auto functions options.

In the Auto functions, you can specify which action should be executed after completing a track recording (see Fig. 315 and chapter 3.1.1.7):

- Show parallel tracks,
- Activate single track,
- No action.

Select the required function by tapping the white circle next to the relevant text.

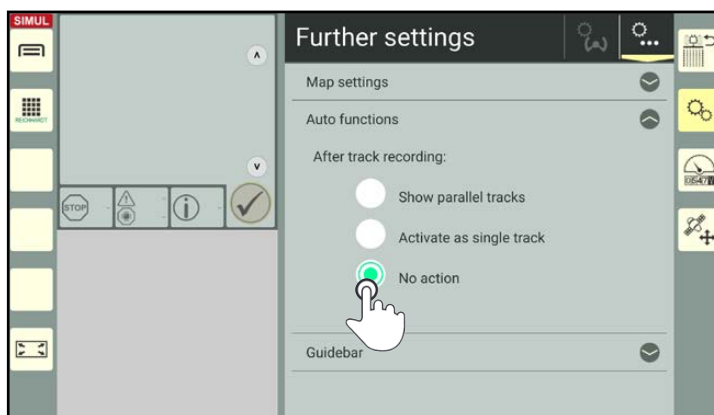


Fig. 315: Selecting the function to be executed after completing a track recording

### 6.3.3 Guide bar – Settings

Under further settings open the guide bar options.

The following settings can be implemented (see Fig. 316):

- **Deviation per LED:**

Specifies from which deviation from the target track (in cm) a LED (triangle) should light up on the guide bar (see Fig. 317 – 1).

- **Deviation sensitivity:**

Specifies the sensitivity at which the tractor moves from left to right in the guide bar (see Fig. 317 – 2).

At 100%, the tractor is at the lateral stop if the deviation equates to the value of the working width.

1% equates to a minimum value of 20 cm.

At a deviation of 20 cm, the tractor has already reached the lateral stop in the guide bar.

The values between this are calculated accordingly.

- **Sensitivity of direction indicator:**

Influences the intensity of the displayed deviation angle (to the target track) in the guide bar (see Fig. 317).

Change the values by:

- Moving the slide bar,
- Tapping the plus and minus buttons, or
- Entering them in the white boxes to the right (see Fig. 318).

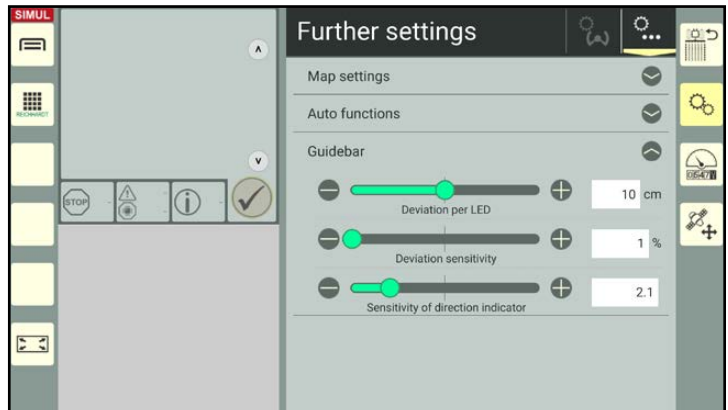


Fig. 316: Guide bar settings

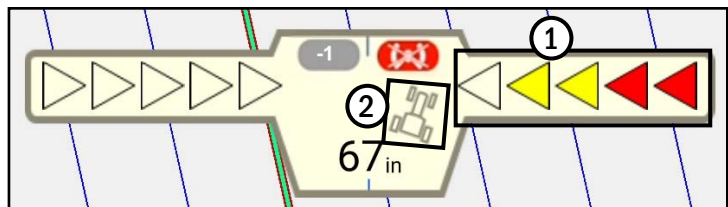


Fig. 317: Guide bar

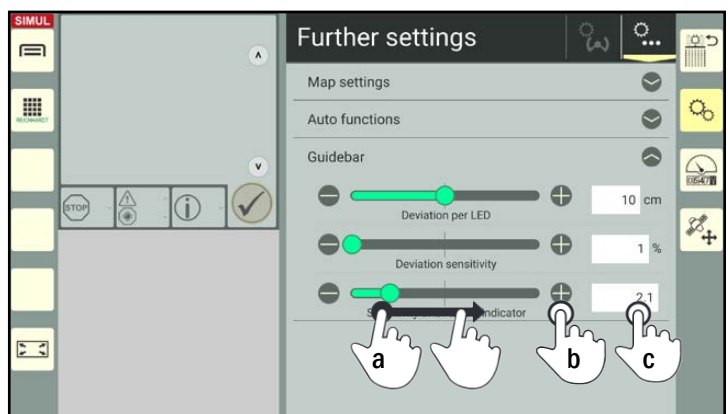


Fig. 318: Changing the values

## SMART GUIDE MENU

SMART GUIDE Settings – SMART CONTROL (Steering Settings)

### 6.4 SMART GUIDE Settings – SMART CONTROL (Steering Settings)

Open the SMART GUIDE menu (see chapter 6.1).



In the SMART GUIDE settings tap the tab with the steering wheel symbol (see Fig. 319).



Fig. 319: Opening the steering settings in the SMART GUIDE menu



Alternatively, you can also open the steering settings via the quick access button in the SMART GUIDE user interface (see Fig. 320).

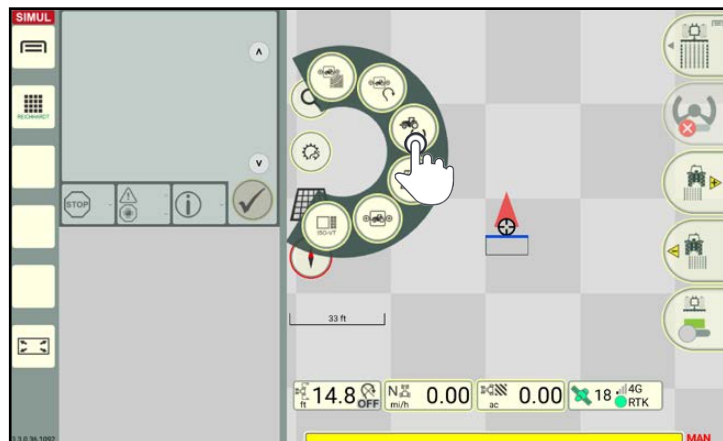


Fig. 320: Opening the steering settings via quick access in the SMART GUIDE user interface

#### 6.4.1 Steering Settings for Hydraulically Controlled Vehicles

The menu "Steering dynamic" is displayed in the steering settings for hydraulically controlled vehicles.



Tap the arrow symbol to open the menu (see Fig. 321).

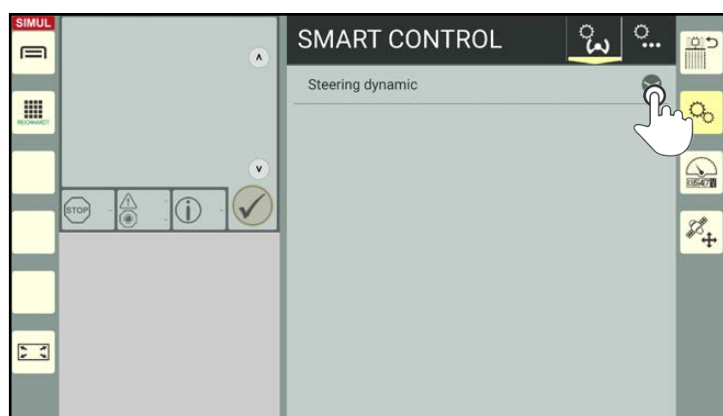


Fig. 321: Opening the steering settings

Here you can implement the following settings (see Fig. 322):

- **Steering dynamic forward/backwards:**  
The track steering dynamics control how aggressively a vehicle will steer towards a track.  
If the value is low, the vehicle will steer quite slowly towards the track. This ensures vehicle handling is more pleasant than at a higher value, which will result in fast steering maneuvers and oversteering the track.
- **Line holding forward/backwards:**  
Line holding controls how the vehicle reacts on the track.  
A lower value ensures the vehicle moves more smoothly, as it reacts more slowly to deviations.  
A higher value will result in the vehicle not moving as smoothly, as the vehicle reacts faster to deviations.
- **Contour sensitivity:**  
The contour sensitivity controls the driving behavior of the vehicle while driving around curves.  
A low value can result in the vehicle oversteering through curves.  
A high value will increasingly shorten curves while driving, which will result in understeering.

The values are set to 50 % by default.

Change the values based on the specific machine by:

- Moving the slide bar,
- Tapping the plus and minus buttons, or
- Entering them in the white boxes to the right (see Fig. 323).

#### NOTICE

Different types of field marking and weather conditions require different values for the steering dynamic, line holding, and contour sensitivity values.

The values thus have to be adjusted on a continuous basis.

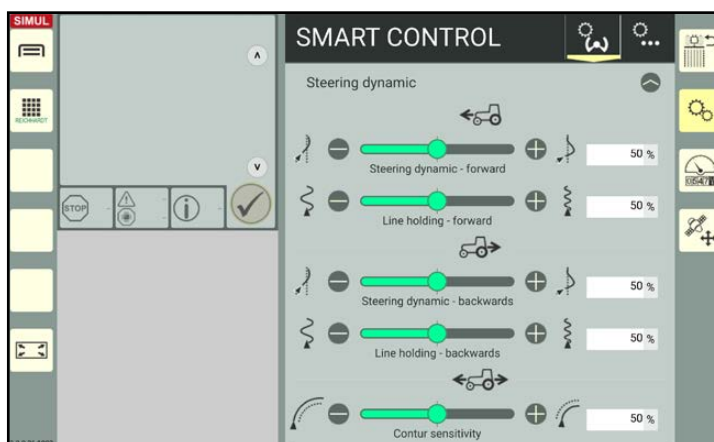


Fig. 322: Steering dynamic settings for hydraulically controlled vehicles

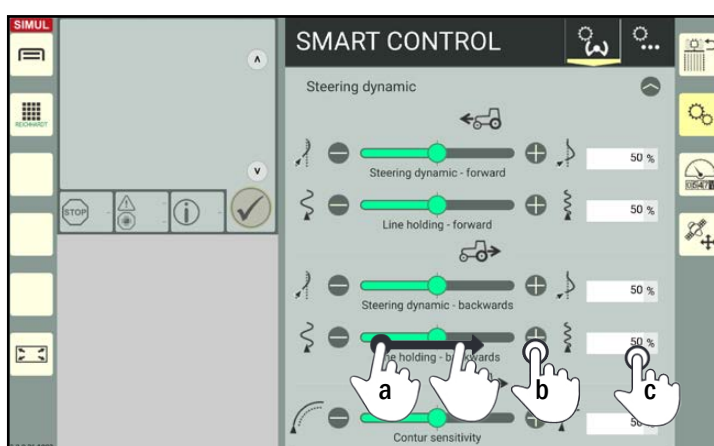


Fig. 323: Changing the values



## 6.4.2 Steering Settings for Electronically Controlled Vehicles (RDU3)

You can implement the following settings for electronically controlled vehicles:

- RDU3: Settings for the steering dynamic and line holding.
- RDU3 extended settings: Additional settings for using a RDU3.



Open/close the individual settings by tapping the arrows.

### 6.4.2.1 RDU3 Parameters

Parameters for the line holding and steering dynamic can be set for the RDU3 (see Fig. 324).

Information about the line holding and steering dynamic is provided in chapter 6.4.1.

Change the machine-specific values for the line holding and steering dynamic by moving the slide bars, tapping the plus or minus buttons, or by manually entering the values in the white input boxes.

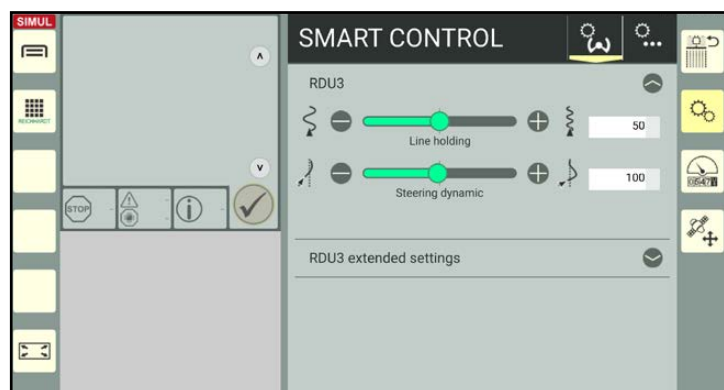


Fig. 324: Changing the RDU3 parameters

### 6.4.2.2 RDU3 Extended Settings

#### NOTICE

These settings are set by Customer Services during installation of the system and should only be changed after consulting Customer Services.

The following parameters can be set in the RDU3 extended settings (see Fig. 325 and Fig. 326):

- **Tracking error sensitivity:**  
Influences the reaction of the vehicle to deviations from the target track. Higher values result in more aggressive steering behavior, while lower values result in calmer steering characteristics.
- **Driving direction sensitivity:**  
Influences the reaction of the vehicle to directions that deviate from the target track. Higher values result in more aggressive reactions to deviations from the direction, while lower values result in calmer reactions.

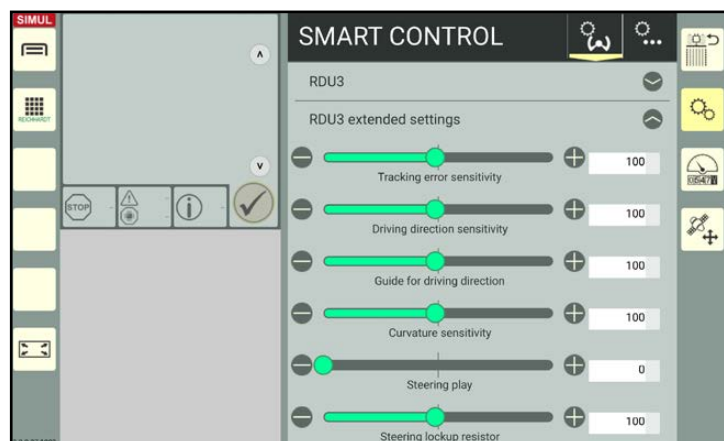


Fig. 325: RDU3 extended settings 1/2

- **Guide for driving direction:**  
Influences the preview when driving along the track and can reduce the oversteering of the vehicle, if applicable.
- **Curvature sensitivity:**  
Works in the same way as the contour dynamics.
- **Steering play:**  
Adjusts any excessive play in the steering behaviour of vehicles.
- **Steering lockup resistor:**  
Defines the resistance with which the steering wheel must be turned to deactivate the steering.  
If the value is set very low, it may be the case that automatic steering is deactivated automatically in the event of jerky steering movements.
- **Steering asymmetry:**  
Ensures that any asymmetry in the steering behavior of the vehicle is adjusted (the number of possible steering movements in both directions of vehicles usually deviate from one another by default).

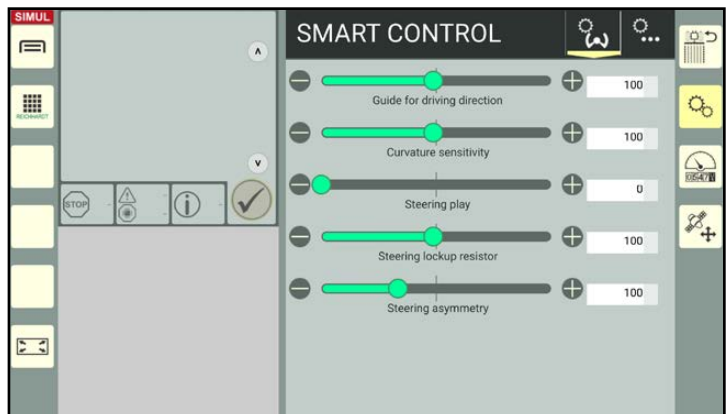


Fig. 326: RDU3 extended settings 2/2 – changing values

## 6.5 Displaying and Resetting the Measured Value of the Worked Area

Open the SMART GUIDE menu (see chapter 6.1).



Tap the tachometer symbol on the right edge of the screen to open the settings for the measured values (see Fig. 327).

Here you can

- View the worked area that has been processed to date
- Reset the area counter by tapping the right box (see Fig. 327).

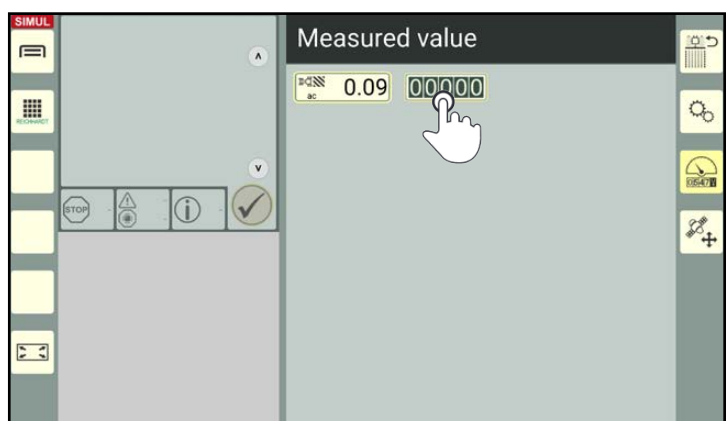


Fig. 327: Viewing and resetting the worked area

## SMART GUIDE MENU

Position Offset – Displaying and Resetting the GNSS Drift Correction

### 6.6 Position Offset – Displaying and Resetting the GNSS Drift Correction

Open the SMART GUIDE menu (see chapter 6.1).



Tap the satellite symbol on the right edge of the screen to display the position offset data (see Fig. 328).

A position offset occurs if the field has been moved following a GNSS drift.

There are two types of position offsets:

- ① Offset after setting the center track of a reference point (see chapter 3.3.3.3).
- ② Offset after setting the center track of the GNSS drift (see chapter 3.1.5.1).

Tapping the "00000" box will reset all of the position offsets, see Fig. 329).

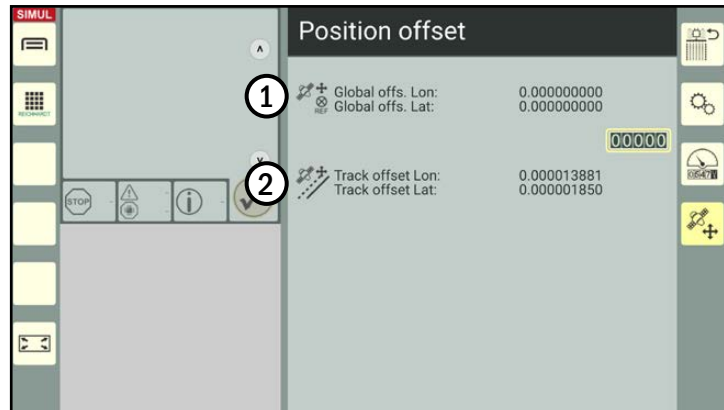


Fig. 328: Position offset

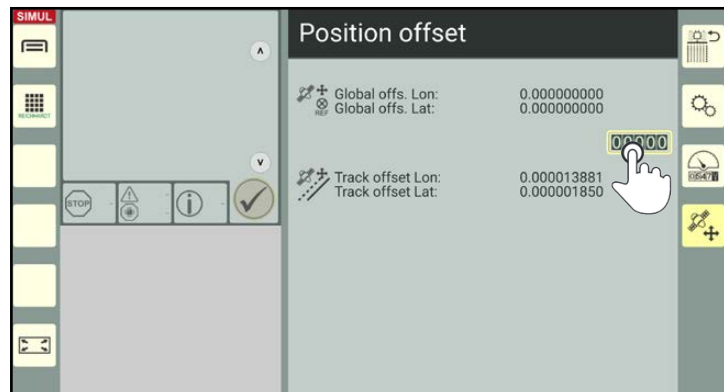


Fig. 329: Resetting the position offset

### 6.7 Closing the SMART GUIDE Menu



Tap the button with the field marking mode symbol on the right edge of the screen to exit the SMART GUIDE menu (see Fig. 330).

This will take you back to the mode that was last active (field marking, track recording, etc.) in the SMART GUIDE interface.

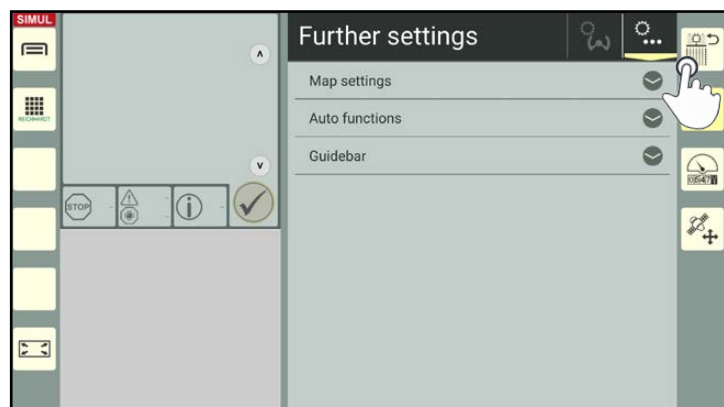


Fig. 330: Closing the SMART GUIDE menu