Trimble TMX-2050 Display Quick Reference Card

The Trimble[®] TMX-2050[™] display is a touchscreen platform for precision agriculture.

HOME SCREEN



Left side of screen

Tap the buttons on the left side of the screen to add, select, or configure fields; access the Connected Farm^M dashboard; and enter the **Run** screen.



Hide: Tap the up button to hide all buttons on the right side of the *Home* screen. Tap the down arrow to display the buttons.



Add Field: Create a new field.



List Fields: Displays a list of fields already created. You must select an existing field to enter the *Run* screen and perform field activities.



Field Manager: Launch the Field Manager to edit the boundaries, guidance lines and patterns, landmarks of fields, and field tasks.



Connected Farm dashboard: Launch the dashboard for the Connected Farm solution.



Start: Enter the *Run* screen to begin a field activity with the selected vehicle and implement

Right side of screen

Tap the buttons on the right side of the screen to set up and select equipment.



Menu: Access help, diagnostics, and system settings.



GNSS: Set up GNSS.



Vehicle: Display the panel for vehicle setup, calibration, and to select a vehicle for a field activity.



1

Implement: Display the panel for implement and application control setup, calibration, and to select an implement for a field activity.



Material: Display the panel for material setup and selection.



DISPLAY BAR

The display bar is available on every screen. Notification icons on the right side of the bar indicate status, including the status of GNSS and xFill™ technology.



Left side of display bar



Back: Tap to return to a previous view.



Home: Tap to return to the Home screen.



Right side of display bar



Notification List

Tap the right side of the bar to display a notification list.

Tap items in the list to go to details on notifications, diagnostics, and activities such as data transfer.

Middle of display bar

Emergency: Tap the emergency button to stop all activities controlled by the display.

Notification icons on display bar



GNSS normal (green): Corrections are being provided.



GNSS converging (yellow): Position data is being updated from the correction service(s).



No GNSS (red): Unable to provide correction data.



Signal Strength: Strength of signal to DCM-300 modem.

xFill Available (white): Turned on and communicating with satellites.



((X))

2

xFill on (blue): xFill corrections are in use and have been used for less than 15 minutes.



xFill Warning (red): Less than 5 minutes of xFill correction time

GNSS SETUP

Required before entering the **Run** screen.

Tap and then tap GNSS Setup. The GNSS setup panel displays.

Antenna Type	AG 25
Correction Source	CenterPoint RTK
Radio	Internal (450MHz)
xFill	
Scintillation Mode	×
Position Quality	Favor Accuracy

2. Select the antenna type.



- Select the correction source. Depending on your choice for correction source, you may need to complete more settings.
- Either accept or edit the position quality and then tap to save the setttings.

SETUP PANELS

Setup panels allow you to add, edit calibrate or select items as part of the setup procedure to configure vehicles, implements, and materials. Add a vehicle

Required before entering the Run screen.

1. At the Home screen, tap





2. Tap Add Vehicle.

3

- 3. Select the vehicle type.
- Set the vehicle make and model and either accept the name or enter a different one.
- 5. Select the source of the vehicle profile.
- 6. Select the serial number of the installed GNSS receiver.
- 7. Select the type of guidance system you are using.
 - For the Autopilot[™] or EZ-Steer[®] automated steering systems, set the controller orientation and then review the sensor settings.



 For the EZ-Pilot[®] system, indicate the position of the label on the IMD-600 unit. 8. Enter vehicle measurements and edit as required.



- At the vehicle summary, tap _____ to save the vehicle settings and return to the Vehicle setup panel.
- 10. For the Autopilot, EZ-Pilot, or EZ-Steer systems, calibrate the guidance system. With the current vehicle selected (this is the vehicle identified by ✓), tap Calibrate to go to Vehicle calibration.

You must select a vehicle before you can enter the **Run** screen. To select a vehicle, highlight it in the vehicle list and then tap **Select**. A green check mark displays, indicating that this vehicle is now selected.

Add an implement

Required before entering the **Run** screen.

1. At the *Home* screen, tap _____. The Implement setup panel displays.



- 2. Tap Add Implement.
- 3. Select the operation and implement type.
- 4. Enter implement measurements and other setup items.



- 5. For Field-IQ[™] application control:
 - Turn on Application Control.
 - Complete the setup of rate and section control.



- 6. For boom height control:
 - Turn on Boom Height Control.
 - Complete the setup.

OPERATION	IMPLEMENT	APPLICATION CONTROL	BOOM HEIGHT	INPUTS	Field Level	WM Drain	SUMMARY
	CONTROL		SENSOR	LOCATION			
2	Target Heigh	¢				6 ft 0.00 i	
	Minimum Target P	teight.				1 ft 4.00 i	
	Maximum Target I	reight				10 ft 0.00 i	
	System Appressiv	eress				100.01	
	Noll Stabilize					50.0	
	Sensing Mod	•				Carep	y
Back	Target Height S	Mp				2.00 (Next
	-						

- If you are using pressure sensors, at the *Input* section tap Add and then complete the setup. Tap Calibration to calibrate each one of the pressure sensors.
- 8. At the implement summary, tap to save the implement settings and return to the *Implements* setup panel.
- 9. Select the current implement and then tap Calibrate.
- 10. Enter the appropriate calibrations for application control / boom height control.

You must select an implement before you can enter the **Run** screen. To select a vehicle, highlight it in the vehicle list and then tap **Select**. A green check mark displays, indicating that this vehicle is now selected.

Add materials

1. At the *Home* screen, tap ¹. The Materials setup screen displays.



- 2. Do one of the following:
 - For existing materials, select a material from the list.
 - For new materials, tap Material Library. Enter the material type, name, target rates, and other values to add it to the material library and then select it.

Material Type	Incomplet
Material Name	
Material Units	Incomplete
Material Details	
Target Rate 1	0.0
Tarreet Rate 2	0.0

- At the Materials setup screen, with the current channel selected, tap Flow Calibration.
- 4. To disassociate a channel and material from an implement, tap **Disable Channel**.

Add a field

Required before entering the **Run** screen.

- 1. At the *Home* screen, tap
- 2. Enter a name for the field.



3. Tap ✓.

Select a field

Required before entering the **Run** screen.

- 1. At the *Home* screen, tap
- 2. Tap a field in the list.



3. Tap **Select**. A green checkmark ✓ displays next to the field name. *You must select a field before you can enter the Run screen*.

Edit a field

Required before entering the **Run** screen.



- At the *Home* screen, tap
 Use the buttons to edit:
 - Boundaries
 - Guidance lines and patterns
 - Landmarks
 - Tasks
- 5

RUN SCREEN

The **Run** screen is where you perform field activities. Before you enter the Run screen, you must:

- Set up GNSS •
- Set up and select a vehicle .
- Set up and select an implement
- Add and select a field .

To enter the *Run* screen, at the *Home* screen tap

Left side of screen



Hide: Tap the up button to hide all buttons on the left side of the Run screen. Tap the down arrow to display the buttons.



Field Manager: Launch the Field Manager to edit the boundaries, guidance lines and patterns, landmarks of fields, and field tasks.



Layers: Select the map layer that you want to display, for example, coverage.



Boundaries, guidance lines, and patterns: Create boundaries, guidance lines, and patterns.



Landmarks: Record lines (such as fences), points, and areas.



Right side of screen



Menu: Access data transfer, diagnostics, widgets, help, and system settings.



Guidance adjust: Adjust the guidance system. Use with automatic guidance system to adjust values such as aggressiveness.



Patttern adjust: Adjust patterns and guidance lines.





Boom height control: Adjust boom height settings if you have a boom height control system.

Logging: Control logging of covered area.



Boom height engage: Turn on or turn off the automatic boom height control, if applicable.

Auto steering engage: Engage or disengage auto steering if you have a guidance system installed.

Bottom of screen

The implement bar shows the status of sections for Field-IQ applications. Tap the left side to toggle the bar to see the boom height control status. Tap **V** to show or hide the implement bar.

6



FIELD GUIDANCE MAPPING

Boundaries, guidance lines, and patterns

To create boundaries, guidance lines, and patterns, at the *Run* screen tap

Create a boundary

- 1. Tap 🛄 .
- 2. When you are ready to begin recording the boundary, tap 🥹.
- 3. Drive the boundary of your field.
- 4. To complete the boundary:
 - Drive within auto-close distance. The system automatically closes the area if you have auto-close turned on.
 - Drive to the end of the boundary and tap I if you do not have auto-close turned on.

Create a headland

- 1. Tap 🔘 . A popup displays indicating circuit and infill options.
- 2. Set or accept the number of circuits you want.
- 3. Optionally, indicate the type of guidance line you want for infill.
- Tap I to begin recording the headland. If you are creating an infill pattern, refer to the AB, A+ or curved line sections.
- 5. To close the headland area:
 - Drive within auto-close distance. The system automatically closes the area if you have auto-close turned on.
 - Drive to the ending boundary of the headland and tap I if you do not have auto-close turned on.

Auto close

To use auto close for boundaries and headlands:



2. At the Boundaries and Headlands sections, turn on auto close. You can also set the auto close distance in these sections.

Create a pivot

- 1. Tap 🍥
- When you are ready to begin recording the pivot, tap ⁽⁹⁾.
- 3. Drive the boundary of your pivot area.
- 4. Tap 🥑.

Create an AB guidance line

- 1. Tap A
- 2. When you are ready to begin recording the line, tap (A).
- 3. Begin driving, and drive at least 3 m (10 ft).
- 4. When you are at the end of the line, tap $\textcircled{1}{10}$ to stop recording.
- 5. Tap 🥑.

Create an A+ directional guidance line

- 1. Tap 👫 .
- 2. To set the direction of the line, you can do any of the following:
 - Lock the vehicle's current direction by tapping
 - Enter degrees for the direction.
 - Tap a direction on the compass
- 3. When the direction you want is set, tap 🥑.

Create a curved line

- 1. Tap -.
- When you are ready to begin recording the line, tap ⁽⁹⁾.
- 3. When you are at the end of the line, tap \bigcirc to stop recording.



Landmarks

To access landmark buttons, at the **Run** screen tap 1/2 .

Create a landmark line

1. Tap 🖊 .

- 2. When you are ready to begin recording the line, tap 0.
- 3. When you are at the end of the line, tap 🕑 to stop recording.

Create a landmark area (productive or non-productive)

1. For a productive area, tap 🧮 ;

for a non-productive area, tap 🙋

- 2. Tap 🖲 to begin recording the area.
- 3. Drive to the ending boundary of the area and then tap \bigcirc .

Create a landmark point

When you are driving and want to create a landmark point, tap \uparrow .

Boundaries,	Patterns, and Li	nes				Landmarks			
		٦	A	A	~	Ŷ	/		
Boundary	Headland	Pivot	AB Line	A+ Line	Curve	Point	Line	Area	Non-productive area
Decending by									
Recording bu	ittons			_					
9	A		B		0			1	N
Record	Set A		Set B	Complete	Pause	Cancel	Use	current heading	Compass controls

(8)

TMX-2050 DISPLAY HARDWARE

	Description	Use to
0	Power button	Turn the display on or off.
0	TM-200 module socket (RJ45)	Connect the display to the TM-200 module.
6	USB socket (rear)	Connect a USB memory stick to the display to transfer data to
4	USB socket (side)	and from the unit.
6	CAN socket (RJ11)	Connect to CAN devices.
6	HDMI/DVI port	Future use
0	Cable clips	



Note: Ensure that the cable is fastened into the cable clip that is next to the port on the rear of the display. This prevents the cable from being removed from the port and reduces stress on the cable.

	Description	P/N
0	TMX-2050 display	96700-00
0	TM-200 Module to display cable	93843
€	TM-200 Module	95060-00
4	TM-200 Module power and I/O cable	92676
6	TM-200 Module battery cable	92905
6	AG-25 GNSS antenna to TM-200 Module cable	50449
0	AG-25 GNSS antenna	77038-10
8	AG-815 radio	95080-xx
Ø	Radio antenna cable	62120
0	Radio antenna	24253-44 / 24253-46 / 22882-10





© 2013. Trimble Navigation Limited. All rights reserved. Trimble, the Globe and Triangle logo, EZ-Pilot, and EZ-Steer are trademarks of Trimble Navigation Limited, registered in the United States and in other countries. Autopilot, Connected Farm, Field-IQ, TMX-2050, and xFill are trademarks of Trimble Navigation Limited. Version 1.00, Rev B (November 2013).

P/N 96500-00-ENG

Trimble.

