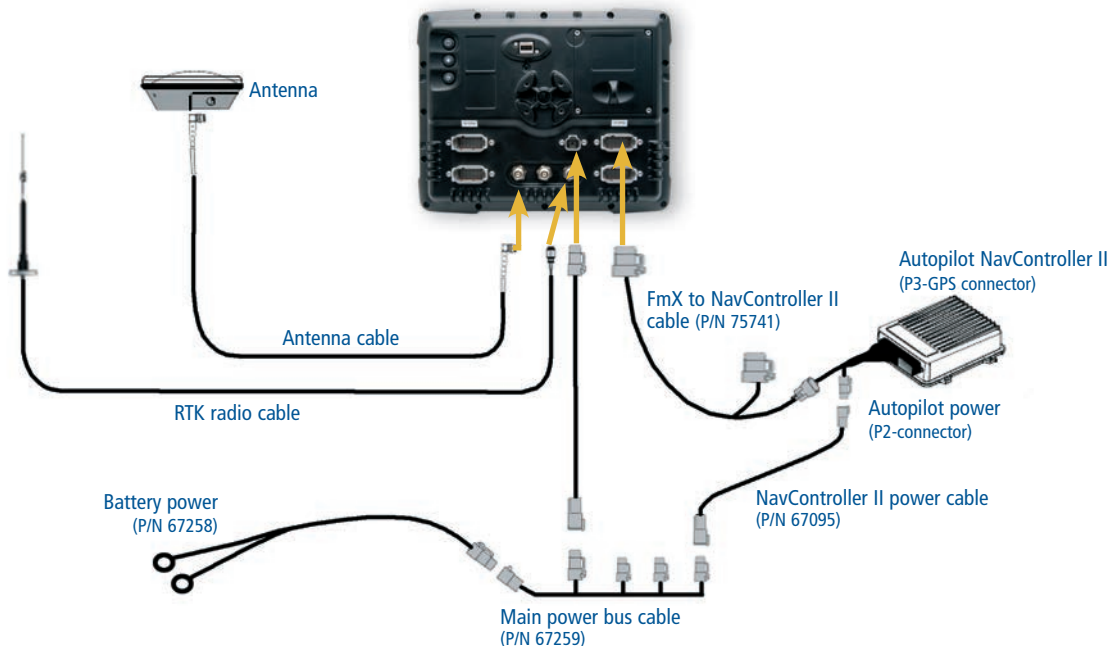


### CONNECTING THE SYSTEM

Once the Autopilot<sup>™</sup> system has been professionally installed, add the FmX<sup>®</sup> integrated display as shown:




## RUN SCREEN LAYOUT

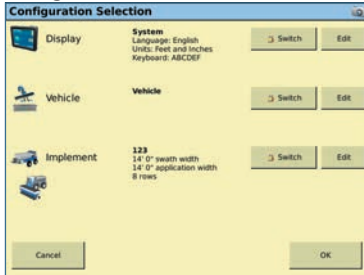


Item	Description	Item	Description
□	<b>Status items</b> – At the top of the Run screen, always visible. Tap any text item to toggle to a single status item with a larger font.	□	<b>Home</b> – Tap to close a field and return to the start window.
□	<b>Status items tab</b> – Tap the tab to display text information for operations connected to the FmX integrated display. Tabs can be set to retract automatically.	□	<b>Setup and Configuration</b> – Tap to change setup and display options when the field is open.
□	<b>Vehicle view icon</b> – Tap to toggle between overhead and trailing views.	□	<b>Run</b> – Tap to take an instantaneous picture of the current screen.
□	<b>Information icon</b> – Tap to display a larger amount of permanent text for operations relating to the display, while showing the Run screen in the upper right-hand corner.	□	<b>Active plug-in tabs</b> – Tap an icon to display status and control functions for the applications connected to the FmX display. For a full-screen view of the Run screen, tap the active plug-in tab twice.
□	<b>Zoom and Pan icons</b> – Tap to show zoom and pan function buttons. To zoom in and out, tap the magnifying glass; to pan in any direction, tap the arrow buttons. To adjust the zoom level, tap the main map window.	□	<b>Feature Mapping buttons</b> – Tap the required button to record point, line, or area features and map the feature at the current GPS position.
□	<b>Coverage theme</b> – Displays the coverage and variety tracking settings. Height, coverage/overlap, variety, and GPS quality can be shown. Also shows various status items for plug-ins, such as the Field-IQ™ crop input control system and the FieldLevel II system.	□	<b>Engage panel</b> – Shows the engage controls for plug-ins such as Autopilot, TrueTracker™ implement steering, and the FieldLevel II system. You can also control coverage logging.
□	<b>Virtual lightbar</b> – When the vehicle is online, the center indicators are green. When the vehicle moves offline, the indicators change to red and move to either side, depending on the line direction		

# CONFIGURATION

## CUSTOM CONFIGURATIONS

To define three primary configurations for specific applications, tap  to view the *Configuration Selection* screen:

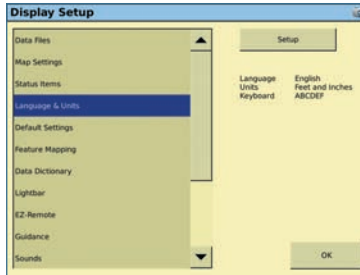


- Display configuration—create multiple display configurations for applications and/or operators. Features include Run screen layout, color theme (night mode), status items, language and units, map settings, and feature mapping:
- Vehicle configuration—store safety and warning settings with vehicle-specific information. You can store multiple vehicle configurations and easily interchange them.
- Implement configuration—store calibration and setup information for each implement, simplifying storage and changing implements for operations.

## DISPLAY CONFIGURATION

### Setting language and units

1. In the *Configuration Selection* screen, tap the **Edit** button next to *Display*.
2. In the *Configuration* screen, select *System* and then tap **Setup**.
3. Select *Language & Units* and then tap **Setup**:



4. Set the language, display units, and keyboard layout:



5. Tap **OK** until you return to the *Configuration* screen and then tap **Save Config**.

## IMPLEMENT CONFIGURATION

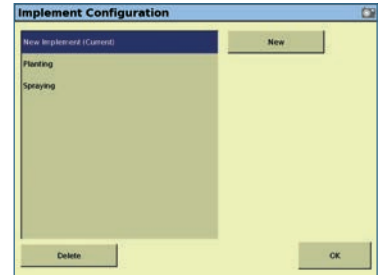
In the *Configuration Selection* screen, tap the **Edit** button next to *Implement*.

To **update** the implement configuration:

1. Select *Implement* and then tap **Setup**.
2. Edit the implement parameters as required and then tap **OK**.
3. Tap **Save Config** to save the updated implement configuration.

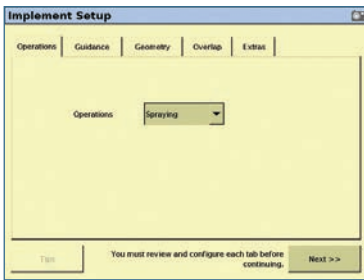
To **create** a new implement:

1. In the *Configuration Selection* screen, tap the **Switch** button next to *Implement*.
2. In the *Implement Configuration* screen, tap **New**:



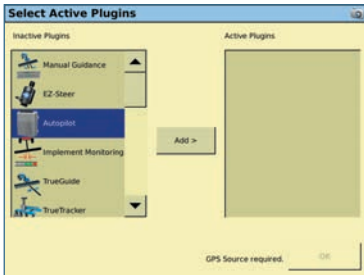
3. Name your implement and then tap **OK**.
4. In the *Implement Setup* screen, select the operation and layout. Enter the requested implement information on each tab.

- Tap **OK** or **Next** to advance through the tabs:



**Note:** Swath width is the distance between guidance paths. Application width defines the coverage width of the implement.

- In the *Select Active Plugins* screen, select the plugins or applications that will be used with the implement and then tap **Add**:

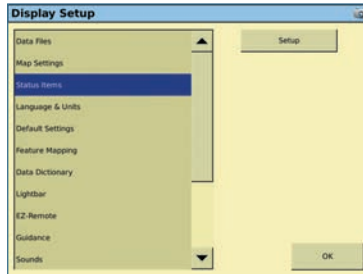


Your current configurations now appear in the *Configuration* screen.

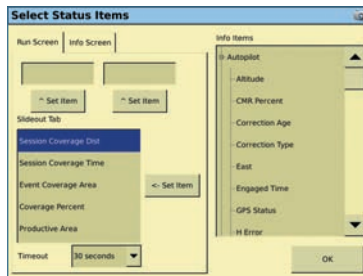
## Run screen and Info text

- In the *Configuration Selection* screen, tap the **Edit** button next to *Display*.
- Select *System* and then tap **Setup**.

- Select *Status Items* and then tap **Setup**:



- Status information can be displayed in three places: At the top of the map window, on the status items pull-out tab, and on the *Info* screen (access this screen by tapping the Information icon). To select the appropriate Info item, tap it and then tap **Set Item** to assign it to a location:



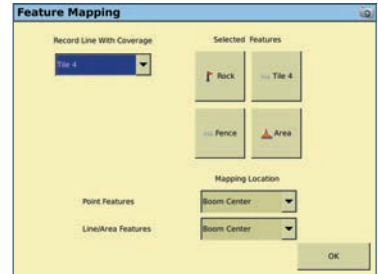
- Tap **OK** until you return to the *Configuration* screen and then tap **Save Config**.

## Feature mapping

You can map field boundaries or features in a field to record hazards, define non-productive areas, and create line features that can also be used for guidance.

- In the *Configuration Selection* screen, tap the **Edit** button next to *Display*.
- Select *System* and then tap **Setup**.

- Select *Feature Mapping* and then tap **Setup**.
- The feature buttons are arranged as they appear on the Run screen. Tap a button to select and assign a feature to the button:



- Select the required feature from the drop-down list.
- Tap **New** to define a new feature name or tap **Edit** to edit an existing name. Mapped features have a number of custom attributes and warning triggers once they are recorded in a field:

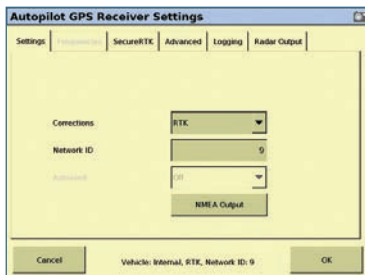
Setting	Description
Average Position	Area feature. Yes. The display calculates the average position of the feature over 30 seconds. No. The display places the feature at the coordinates that the vehicle is at when you tap the button
Alarm radius	Point feature. Visual and audible alarm.
Trigger warning	Area feature None Entering area Leaving area
Draw As	Area feature. Productive or Non-productive
Remote Output	Area feature. When enabled, restricts remote output pulses from being triggered while outside the boundary.

Setting	Description
Expand By	Area feature. Nothing: Maps the boundary exactly at the recorded position. 1/2 Swath Width: Expands the recorded boundary location by half the recorded swath width after the boundary is closed. 1 Swath Width: Expands the recorded boundary location by a one swath width after the boundary is closed.
Warning radius	Point feature. Visual and audible alarm

7. Tap **OK** until you return to the *Configuration* screen and then tap **Save Config**.

## Configuring the display for the Autopilot system

1. In the *Configuration Selection* screen, tap the **Edit** button next to *Vehicle*.
2. In the *Configuration* screen, select *GPS receiver* and then tap **Setup**.
3. From the *Autopilot GPS Receiver Settings* screen, select the required correction type from the *Correction* drop-down list and then tap **OK**:



## Saving an Autopilot configuration

1. In the *Current Configurations* screen, tap **Configure**.
2. Select *Autopilot* and then tap **Setup**.
3. In the *Vehicle* tab, tap **Edit**.
4. Select the *Vehicle Profile Location* and then tap **Save Vehicle**.
5. Name your configuration and then tap **OK**.

## Autopilot system operator settings

In the *Configuration* screen, select *Autopilot* and then tap **Setup**. The *Vehicle Controller Setup* screen appears. The tabs in this screen allow you to adjust the following settings:

Item	Description
AutoSense	The most recent Autopilot systems use an AutoSense™ device that requires this setting to be set to On. For Autopilot systems that use the electrical system to measure the vehicle status, see the <i>Legacy Sensors</i> setting.
Connector	Select the port on the back of the FmX display that the Autopilot system is connected to.
Coverage log	Setting allows the coverage logging to be turned on automatically when Autopilot is engaged.
End of Row Warning Distance	This warning appears when you are at the specified distance from the end of the current row. To make the warning appear earlier, increase the End of Row distance. This can be helpful if the operator is likely to be distracted (for example, by monitoring other equipment during operation).
Legacy Sensors	Select None, Wheel Speed Only, Gear Lever Only, or Wheel and Gear.

Item	Description
Nudge Increment	The Nudge/Trim can be adjusted from the <i>Autopilot</i> tab on the <i>Run</i> screen: <b>Nudge</b> : is available only with DGPS corrections and adjusts the guidance line perpendicular to the direction of travel. <b>Trim</b> : is available only with RTK corrections and adjusts the vehicle right/left of the guidance line without shifting the guidance line.
Operator Timeout	To verify the presence of the operator, a warning appears periodically. The warning requires you to acknowledge it to remain in normal automatic mode. This setting controls the frequency of the warning. The Operator Alert Timeout cannot be disabled.
Smoothing Turn Radius	This setting is only applied to curved and headland patterns. The value sets the minimum radius that a guidance line is calculated to and is used to smooth out sharp curves.
Valve On Speed	Normal: >0.4 m/s (1.3 ft/s) Low: >0.1 m/s (0.3 ft/s) Ultra Low: >0.02 m/s (0.07 ft/s)


## Home and Support screens

The *Home* and *Support* screens are visible every time you reboot the FmX integrated display or when you tap the Home icon:



- The *Support* tab displays the Authorized Reseller's contact information and the **Upgrade** (GPS) and **Unlocks** (Plugins) buttons.
- The *System Information* tab displays the firmware version of the FmX display and all the connected devices.
- The *Camera* tab displays images if external cameras are connected to the FmX display.

## Viewing GPS Status


To view details about the GPS status, tap the satellite icon  in the upper right of the Run screen to display a summary window.

## Engaging

To engage the Autopilot system using the FmX integrated display, you must have a guidance line defined and the vehicle must be within the engage limits of the system.

## GENERAL INFORMATION

To engage the system, do one of the following:


- Tap the Engage button  on the main guidance screen.
- Tap the optional remote engage foot pedal or rocker switch.

## Disengaging







The system automatically disengages when:

- The vehicle is outside the engage limits.
- GPS positions are lost.
- The *Minimum Fix Quality* is not maintained and the system receives low accuracy positions (for example, no corrections).

To manually disengage the system, do one of the following:

- Tap the Engage button  on the main guidance screen.
- Tap the Engage button on the optional remote control.
- Turn the steering wheel.

## Engage status indicators

Engage status	Engage button color	Vehicle icon color
Ready to engage		
Engaged		
Cannot engage		

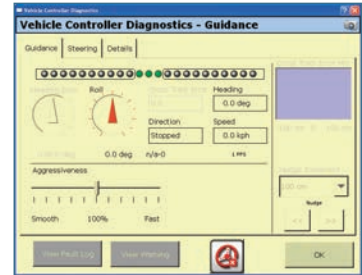
## Diagnostic screens

Use the Autopilot diagnostic menus to view and clear system faults and assess system performance.

1. From the *Configuration* screen, select *Autopilot* and then tap **Diagnostics**.
2. Tap **View Fault Log** to view faults from the current event.

Tap **View Warning** to view warnings from the current event.

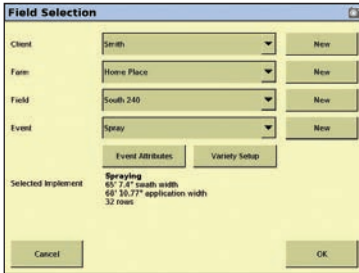
The *Controller Diagnostics* screen contains three tabs:



- *Guidance* tab: Displays information about guidance system performance.
- *Steering* tab: Displays information about steering system performance.
- *Details* tab: Provides sensor feedback information.

## Getting started in a field

1. From the Home screen, tap **Run**.
2. In the *Configuration Selection* screen, confirm that the current configurations are correct and then tap **OK**.
3. Select or create client, farm, field, event names, event attributes, and variety setup for the operation, and then tap **OK**:

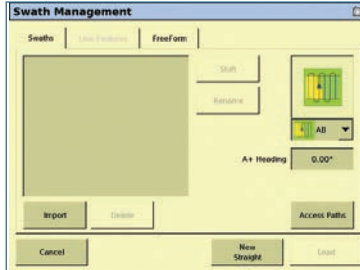


**Note:** Data that has been imported from Farm Works software automatically appears in the Field Selection screen.

4. In the Run screen, tap **Swaths**:




5. In the *Swaths management* screen, select the pattern type (AB, Curve, Pivot, or Headland) from the drop-down box and then tap **New**:



**Note:** Use the Headland pattern feature when you do not want the application to operate outside the field boundary. If you select this pattern, the Field-IQ system shuts off boom sections outside the field boundary. If you select another pattern, the Field-IQ system shuts off sections only when it is in a covered area.

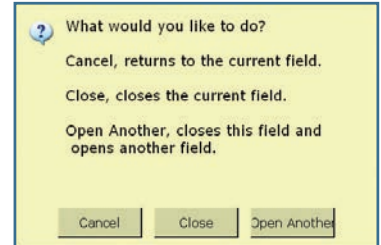
6. In the Run screen, tap **Set A** and then follow the on-screen instructions to finish the pattern:



7. Once the new swath has been created, engage the Autopilot system by tapping  or by using the remote engage switch.

## Closing a Field

1. From the Run screen, tap the Home icon.
2. On the *Close Field* screen prompt, tap **Cancel** to return to the current field, tap **Close** if you are finished with the field, or tap **Open Another** to close the current field and open another field:



**Note:** To access the most commonly-used configuration and setup menus, you must close the field.



# Setting up the FmX Integrated Display with the Autopilot™ System

## Quick Reference Card



P/N 93020-80-E06

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