

# Field Manager: Guidance Patterns

AGRICULTURE

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## Field Manager: Guidance Patterns

To take full advantage of the auto guidance and auto steering capabilities of Precision-IQ™, you must define the appropriate guidance patterns for your field.

From the Run screen, use the guidance pattern to define:

- Boundary of the field, including the headland area to incorporate an inner and outer boundary.
- Pivots for fields laid out in a circle pattern requiring concentric circles.
- Straight lines to identify parallel guidance lines.
- Curved lines to identify guidance lines with both straight and curved segments.

Once you have created a guidance pattern, you can use Field Manager to edit, activate, and deactivate the pattern.

A variety of guidance patterns are provided by Precision-IQ.

1. To begin, tap the **Guidance Patterns** button on the Run screen:



A selection of available guidance pattern buttons appears.

2. Tap the **Guidance Patterns** button to dismiss the buttons.

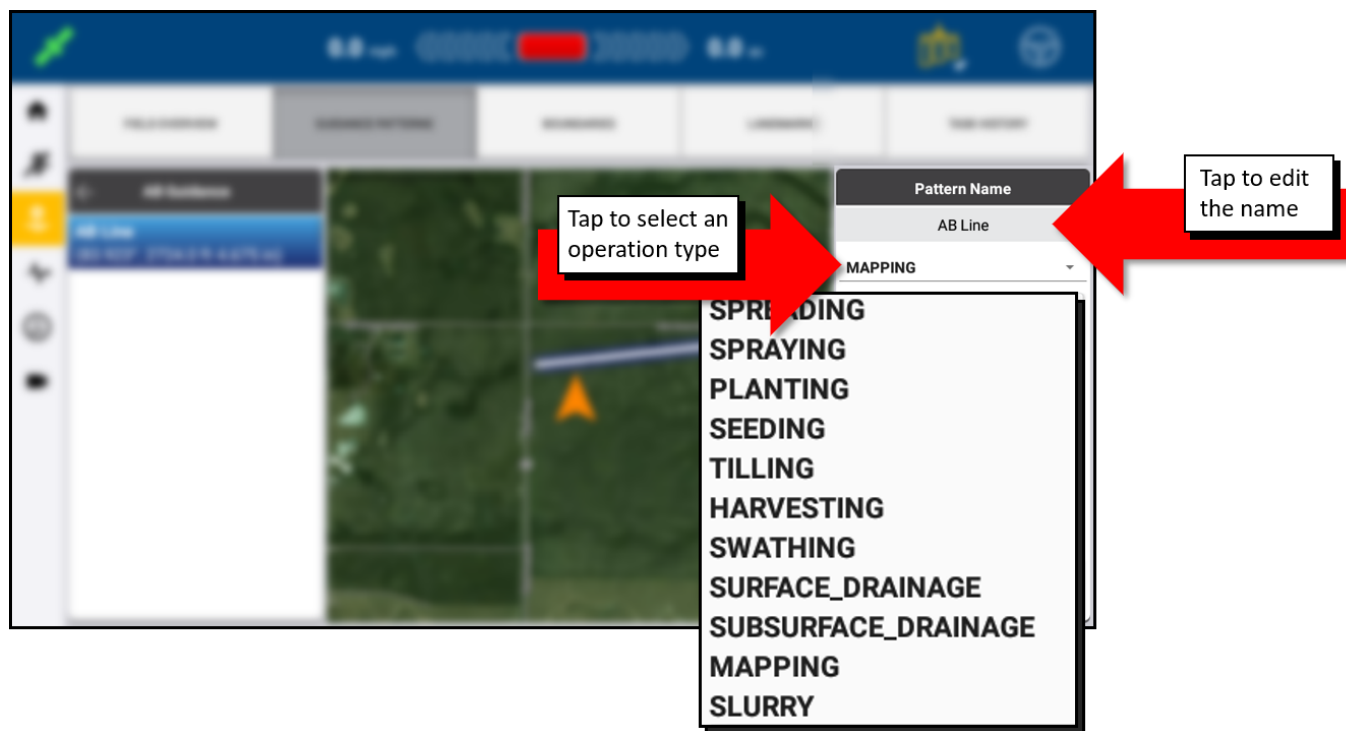
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In the Field Manager AB Guidance menu when a Guidance line has been selected, it is possible on the right side of the display to see the Line Name (which is editable) as well as the assigned operation type that was given to the line when it was created. You can change that operation type by tapping on the operation type and selecting the new operation type from the drop-down list:



## Guidance Patterns: Boundaries

A boundary defines the outer edge of your field. To set a boundary:

1. From the Run screen, tap the **Guidance Patterns** button.
2. From the list of available guidance pattern buttons, tap the **Boundary** button:



3. Position your vehicle where you want to begin recording the field boundary. You can change the point on the implement's swath where you wish to record the boundary's edge.

Tap the **Recording Point** button, then select a recording point location for your implement. Choose from **Right**, **Center**, or **Left**:



Tap the green check to save your recording point selection.

4. Tap the **Record** button to start the recording.

As you begin driving around the perimeter of the field, Precision-IQ marks the point where you began recording and shows the recorded path with a dashed line. To suspend recording while creating the boundary, tap the Pause button.

Precision-IQ will replace the path you travel while paused with a straight line, from the point where you tapped the Pause button to the point where you resume recording. To resume recording, tap either the **Pause** button or the **Record** button. To cancel the boundary line creation, tap the red **X** button.

5. Drive around the field until you are near your starting point.
  - If Auto-Close is **on**: When you reach auto-close distance, Precision-IQ will connect the vehicle's current location to the starting point with a straight line and save the boundary.
  - If Auto-Close is **off**: Drive to the beginning point and tap the Record button. The application will connect the vehicle's current location to the starting point with a straight line and save the boundary.
6. When you have completed the boundary creation, tap the **Guidance Patterns** button to hide the selection of guidance pattern buttons.

## Guidance Patterns: Headlands

A headland is a strip of land within the boundary of your field to allow space for the vehicle to turn around to continue the work within the field. To set a headland:

1. From the Run screen, tap the **Guidance Patterns** button.
2. From the selection of available guidance pattern buttons, tap the **Headlands** button:



Tap the **Circuits/Infill** button to modify the Headlands Options:

If the number of circuits is not correct, tap the number and enter the correct amount.

If you want to specify an Infill Pattern (the default is **No**), tap **Yes** and then tap to select an **AB Line** or an **A+ Line**. See [Guidance Patterns: AB Line](#) or [Guidance Patterns: A+ Line](#).

Tap the green check mark to save the headland options you have selected.

3. Position your vehicle where you want to begin recording.
4. Tap the **Record** button.

As you begin driving around the perimeter of the field, Precision-IQ marks the point where you began recording and shows the recorded path with a dashed line. The controls for the infill line (if any) appear below the headland recording controls. To suspend recording while creating the headland, tap the **Pause** button.

Precision-IQ will replace the path you travel while paused with a straight line, from the point where you tapped the Pause button to the point where you resume recording. To resume recording, tap either the **Pause** button or the **Record** button. To cancel the boundary line creation, tap the red **Cancel** button.

5. Drive around the field until you are near your starting point.
  - If Auto-Close is **on**: When you reach auto-close distance, Precision-IQ will connect the vehicle's current location to the starting point with a straight line and save the headland pattern.
  - If Auto-Close is **off**: Drive to the beginning point and tap the **Record** button. The application will connect the vehicle's current location to the starting point with a straight line and save the boundary.
6. When finished, Precision-IQ saves the headland pattern with a unique name (for example, *HL01*).

Also, an inner boundary and an outer boundary is generated based on the recorded path and the width of the implement. The headland boundaries are saved with a unique name related to the headland (for example, *HL01 inner boundary* and *HL01 outer boundary*).

An infill swath is generated based on the number of circuits selected and the width of the implement. The infill swath is saved with a unique name related to the headland (for example, *DefaultInfillSwath*).

7. Tap the **Guidance Patterns** button to dismiss the selection of guidance pattern buttons.

**Note:** To edit the infill line, see Field Manager Guidance Patterns.

## Guidance Patterns: Pivots

Use the Pivot guidance pattern to record the exterior curve of a circular field and repeat the pattern. Precision-IQ uses the implement width to generate concentric circles. It also creates a pivot field boundary based on the specified distance to the pivot field edge.

To create a pivot guidance pattern:

1. From the Run screen, tap the **Guidance Pattern** button.
2. From the selection of guidance pattern buttons, tap the **Pivot** button:

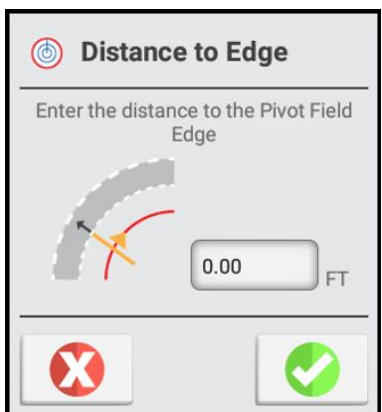


3. Position the vehicle where you want to be recording the pivot pattern.
4. Tap the **A** button.

Precision-IQ marks your starting point on the map, at the vehicle's location when you tapped the record button. It shows the recorded path with a dashed line.

5. Drive at least 50 feet on an outer tower rut and then tap the **B** button.

Enter the distance to the pivot field edge in the Distance to Edge pop-up window:



Tap the green check mark to save the distance-to-edge value, or tap the red Cancel button to cancel.

6. When finished, Precision-IQ:
  - Saves the pivot pattern with a unique name (for example, *P01*).
  - Generates a pivot boundary based on the recorded path and the width of the implement. The pivot boundary is saved with a unique name related to the headland (for example, *P01 Boundary*).
  - Makes the pivot boundary active.
7. Tap the **Guidance Patterns** button to dismiss the selection of guidance pattern buttons.

## Guidance Patterns: AB Line

With AB lines, you define the start and end points. Precision-IQ records a straight line from point A to point B. Parallel guidance lines (or swaths) will be projected multiple times on either side of the AB line.

**Note:** Precision-IQ uses the implement width to project swaths for the master line. Active lines project swaths in either direction based in the width used to create the line.

To create an AB line:

1. From the Run screen, tap the **Guidance Pattern** button.
2. From the selected list of available guidance pattern buttons, tap the **AB Line** button:



3. Position the vehicle where you want to begin recording the AB line.
4. To set the beginning of the AB line, tap the **A** button.

Precision-IQ marks on the map where you tapped the A button. It shows a straight dashed line between the A point and the vehicle's current location.

5. To complete the line and close the controls, tap the **B** button.
6. To save the line, tap the green check mark, tap the red **Cancel** button to cancel the AB line creation.

The distance between swath lines is based on the width of the implement that was used when creating the line.

## Guidance Patterns: A+ Line

With an A+ line, you define a point on the line and the direction the line is heading. Precision-IQ sets a straight directional line from point A toward the selected direction (compass direction, path of travel, or heading value). Parallel guidance lines will be projected multiple times on either side of the A+ line.

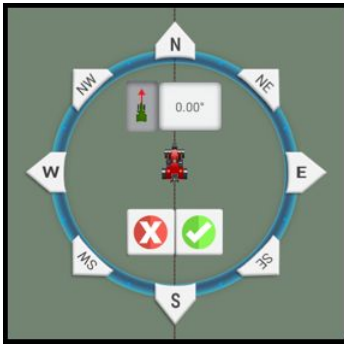
To create an A+ line:

1. From the Run screen, tap the **Guidance Pattern** button.
2. From the selected list of guidance pattern buttons, tap the A+ button:



Precision-IQ changes to an overhead view if you were in trailing view. The A point is set at the vehicle's current location. The A+ line controls appear in the center of the screen.

3. Select the direction you want for the A+ line from the compass:



- To use the direction that the vehicle is facing as the heading, tap the vehicle direction:



This option is selected by default.

- To enter a specific, exact heading, use the on-screen number pad.
- To use a cardinal (N, S, E, W) or ordinal (NE, SE, SW, NW) direction, tap that direction on the compass.

Precision-IQ saves the line direction.

4. To accept the line and direction and close the controls, tap the green check mark, or tap the red **Cancel** button to cancel the A+ line creation.

Precision-IQ saves the A+ line. The distance between swath lines is based on the width of the implement that was used to create the line.

## Guidance Patterns: Curves

You can record a line with curved and/or straight segments. Matching guidance lines will be projected multiple times on either side of the curved line.

To create a curved guidance pattern:

1. From the Run screen, tap the **Guidance Patterns** button.
2. From the list of available guidance pattern buttons, tap the **Curve** button:



3. Position the vehicle where you want to begin recording the curve.
4. Tap the **Record** button to start the recording.

As you being driving, Precision-IQ marks your starting point on the map, at the point where you tapped the record button. It shows the recorded path with a dashed line between the starting point and the vehicle's current location.

To create a straight line as part of your curved line, tap the **Pause** button.

To resume recording the curve, tap either the **Pause** button or the **Record** button.

To cancel the curve line creation, tap the red **Cancel** button.

5. When you are at the end of the curve line, tap the **Record** button.
6. Tap the **Guidance Pattern** button to dismiss the selection of guidance pattern buttons.

## Guidance Pattern Adjustments

To adjust guidance while performing field activities, at the Run screen, tap the Guidance **Pattern Adjust** button:



The guidance adjustments buttons display.

**Note:** These adjustments are removed if you enter a new task. Your system may also be set up to remove these adjustments with a power cycle. See Steering and Guidance Settings for these settings.

Buttons	Use to...
<b>Nudge</b>	Temporarily move the vehicle left or right depending on the direction you chose.
<b>Remark</b>	Temporarily move the pattern to the vehicle's current location.
<b>Implement Draft Correction</b>	Move the implement back on the guidance line if the implement is physically drifting offline in the field. The value between the arrow buttons indicates the amount of distance for the correction.

## Pattern Select

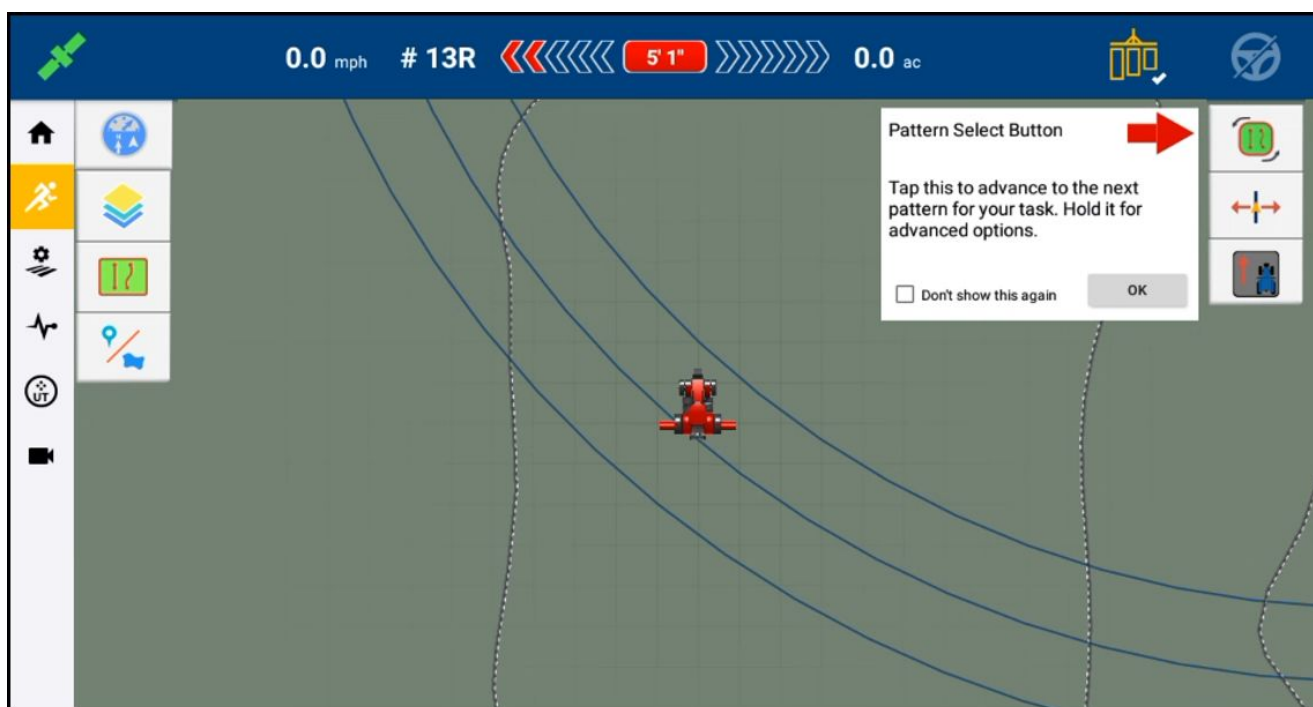
For fields and farms that use a variety of guidance lines and boundaries, Precision-IQ includes the ability to select them directly from the Run screen. Tap the **Pattern Selector** button to toggle between all AB guidance patterns for a selected field, or you can long hold the button for a list of all AB guidance lines and created boundaries for the selected field:



By default, an onscreen help window appears on the Run screen. You can dismiss this window and opt for it to remain hidden. You can reset this help text window by going to Precision-IQ Settings under Display and resetting the systems help menus and text.

In previous releases, the operator had to enter the Field Manager to select and activate AB guidance patterns and boundaries; now this action can be done from the Run screen.

When you enter the Run screen, an onscreen help window highlights the **Pattern Selector** button:



Tap **OK** to dismiss this help window.

**Note:** Enable the **Don't show this again** option to keep this help window hidden. You can reset this option in Precision-IQ's Display Settings menu.

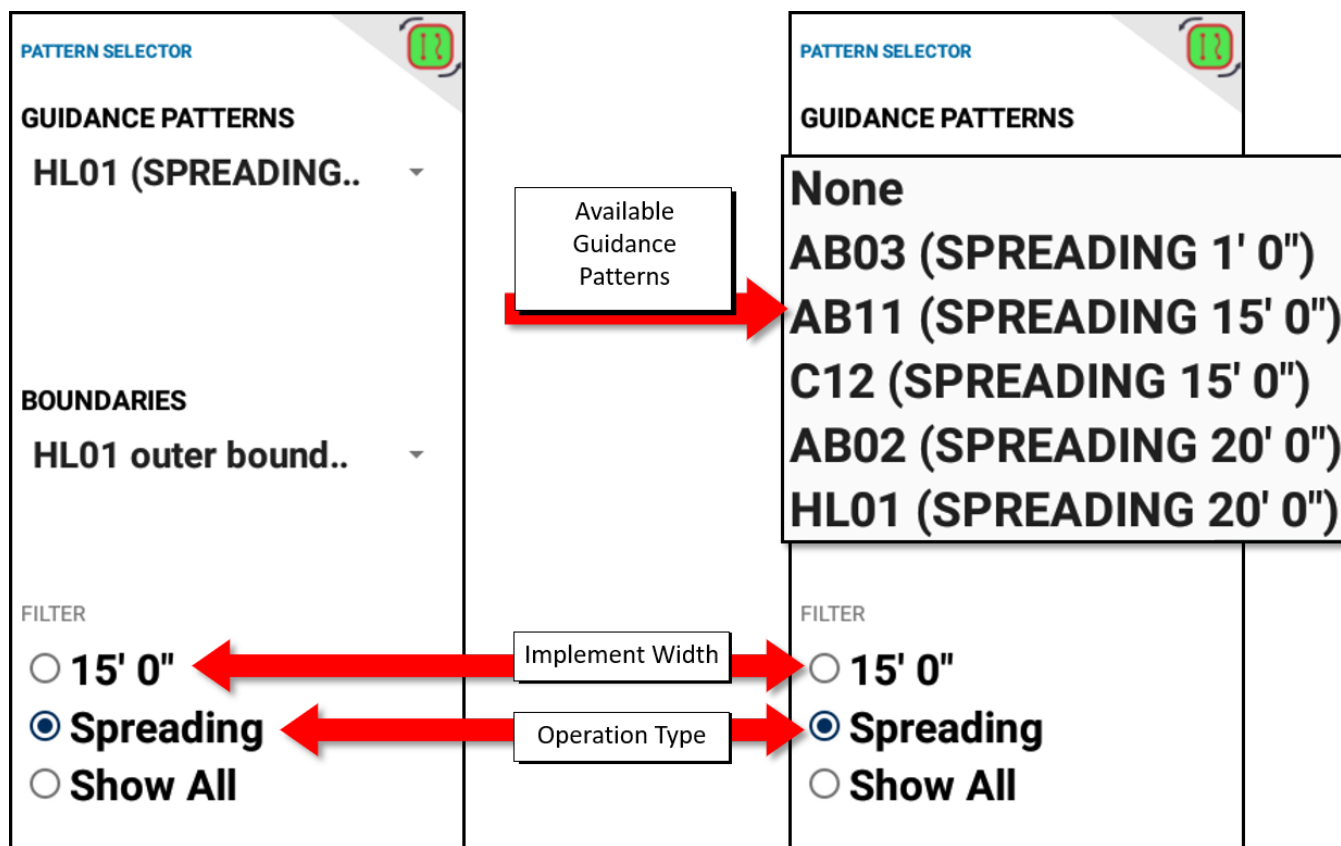
For farms that have multiple AB guidance lines, briefly tap the Pattern Selector button to select and activate the first line in the AB line manager. Tap Pattern Selector again to toggle to the next guidance line in the library:



As you toggle through the available guidance lines, a pop-up notification will appear to show the current selected (activated) pattern, and the pattern that will be activated with the next tap:



Long hold the Pattern Select button for a pop-up list of all available guidance lines and boundaries, as well as set AB guidance line filter settings:



#### Notes:

- You can filter AB guidance lines displayed and activated by the short tap function of the Pattern Selector based on: current implement width, current operation type, or turn the filter off by selecting Show All for a complete list of all guidance lines regardless of implement width or assign operation type (operation types can be changed in the Field Manager).
- Pattern Selection feature is disabled when: actively engaged on a AB line set, or when using Line Sets associated with "Guide to Line" functionality.

## For More Information

Contact your local Trimble Regional Sales Manager.