



Installing the Unit

Guidance Screen

Mount to the windscreen using suction mount and ram arm

Important – Please remove the suction mount from the windscreen when not in use.

SD Card

For recording job data.
Must be inserted for the unit to operate.

Screen Connector

Tilt Correction Unit

Secure down on a flat surface in the cab with the arrow pointing forward.

Magnetic Antenna

Install on the roof of the vehicle (if the roof is not metal use the roof mount plate).

12v DC Plug

To cigarette lighter socket on vehicle.

Warning – Please disconnect the unit from the power supply, if you need to jump start your vehicle.

Unit Functions

Tilt Correction Unit

Power On/Off button – This turns the power to the tilt correction unit on/off. The power must be on to provide power to the screen.

GPS On/Off button - To use the built in GPS this needs to be set to On.

Tilt Reset button – When setting up the Tilt Compensator in Ports Setup use this button to reset tilt angles.



Guidance Screen

Power On/Off button – This turns the screen on and off, providing the tilt correction unit is switched on.

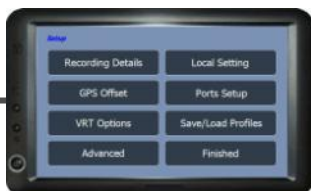
Brightness button – Press this button to scroll through different levels of brightness for the display screen

Touch Screen – The unit uses an LCD Touch Screen which allows the user to interact with the BlackBox software. Use the Touch Screen by touching and applying some pressure to the area of the screen where the required button or option is.

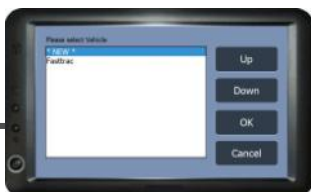


Setting up for guidance and recording

1) Ensure the SD card is inserted and power up the unit. When displayed press **Start BlackBox** and once loaded press **Setup**.



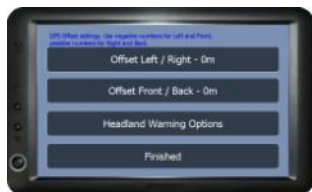
2) Press **Recording Details**, then an item (i.e. Vehicle) and with ***NEW*** highlighted press **OK**. Enter the details, press **OK** and select the next item. Repeat until the details are complete.



3) Press **Recording Options**. To record the job data ensure Recording is set to **Yes**. To manually enter the farm and field name, set Autonaming to **No**. Once set press **Finished** twice.



4) Press **GPS Offset**, and set the distance from the antenna to the working part of the implement (not necessary when creating a field boundary map). Once set press **Finished**.



5) Press **Ports Setup**, then **On/Off** and select the required option from the list (Controls how the trace recording is turned on and off). Once selected press **OK**.



Press **Tilt Compensator**, press and hold the Tilt Reset button on the Tilt Correction Unit for two seconds to zero the angle (Perform on a fairly level surface).

Press **Height** to set the distance the antenna is from the ground and press **OK**.



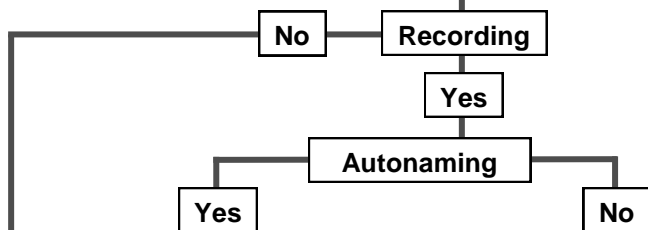
Press **Finished** three times to return to the BlackBox menu.

Starting a New Job

Press **Start New Job**.



The first screen that appears will depend on what has been set for the Recording and Autonaming options under the Recording Options menu.



Highlight farm name or enter *NEW* and press **OK**.

Press **OK**



Highlight field name or enter *NEW* and press **OK**.



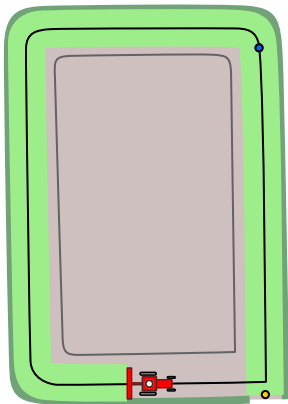
Select Guidance Mode.



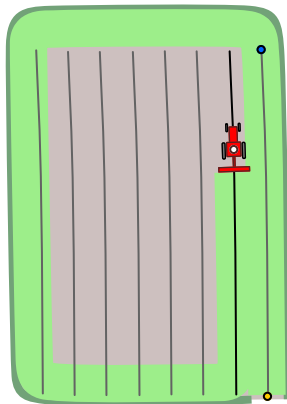
Guidance screen opens ready to begin job.

Guidance Modes

First Pass Straight / Curved - These modes create a headland guidance line based on the implement width and the field boundary map for guidance around the headland. During the headland run a straight or curved AB line can be set and once the headland runs are completed the guidance mode can be switched from headland guidance to the set straight or curved AB line to complete the inner area of the field.



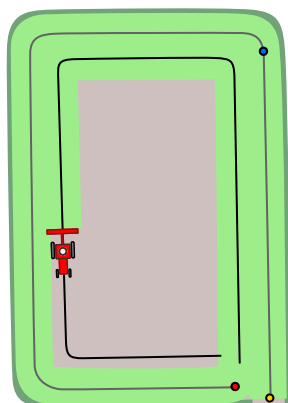
Headland guidance line used for first headland pass and inner headland passes.



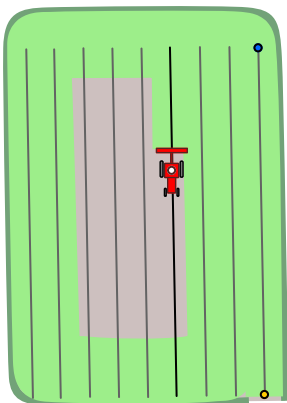
Change to set AB line to complete inner work.



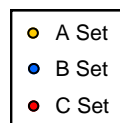
Headland Straight / Curved - These modes require the user to firstly create a straight or curved AB line down the longest edge of the field. Once the guidance line is set it is then possible to drive the rest of the headland until point A is reached and set a third guidance point 'C'. With the C point set a guidance line based on the headland run and implement width can be activated and used for inner headland runs. Once runs are completed the guidance mode can be switched from 'Headland' guidance to the straight or curved AB line initially set to complete the inner area of the field.



A,B and C points set, headland guidance line used for inner headland passes.



Change to set AB line to complete inner work.



Screen Overview (3D Guidance Screen)



Information Panel



Creating a Field Boundary Map

1) After starting a new job, position the vehicle near to edge of the field that the field boundary map will start from and press the **Start Boundary** button.

2) Change the settings as required:-

Boundary Type – leave as is.

Offset – the distance that the antenna is from the field edge.

Direction – which side the field edge is on when moving forward.



3) Press **Start** and drive around the field edge until the start point is reached. The BlackBox will automatically close and save the boundary map, displaying the field area size in the mini map.

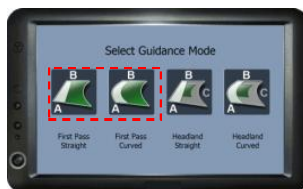
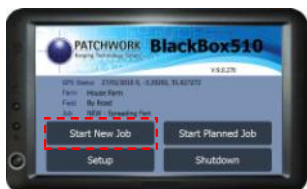
Finishing a Job

To complete a field boundary map or guidance job to start a new one, press the **Menu** button and then **Finished Job**. This will save the job and return to the BlackBox menu screen.

Using First Pass Guidance

N.B. A field boundary map must be created for the headland guidance to work; otherwise it can only be used as standard Straight line or Curved AB.

1) Position the vehicle in the field where the job will begin. (When using a curved line it is important to use the longer edge of the field to set a guide line). The farm field name will be automatically detected from the field boundary map.



2) Press **Start New Job** and then **OK** to confirm Farm/Field name.

3) Select **First Pass Straight** or **Curved**.



Grid area

4) Press **Menu** and then **Show Headland**, to display the Headland guidance line.

5) Turn on the Green Trace using selected method.
At the beginning of a straight run press the **Grid area** to set point A.



Grid area



6) Drive to the end of the run and press the **Grid area** to set B. Use the Headland guidance line around the first few passes.

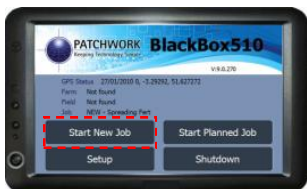
7) When the headland work is complete press **Toggle Guidance** to switch to the set AB line for guidance in the inner area of the field.

To reset the AB line press the grid area used to set the A and B points and select **Yes** when prompted.



Using Headland Guidance

- 1) Position the vehicle in the corner of the field along the longest edge.



- 2) Press **Start New Job**
(see 'Starting a New Job' for details).



- 3) Select **Headland Straight** or **Curved**.



Grid
area

- 4) Turn on the Green Trace using
selected method.
Press the **Grid area** to set point A.



Grid
area

- 5) Drive to the end of the field and
press the **Grid area** to set B.
The set AB line will appear ready for
guidance.



Grid
area

- 6) Work the headland until near to
where point A was set.
Press the **Grid area** to set point C and
press **Toggle Guidance** to show the
headland guidance line.



- 7) Use the headland guidance line to
work the inner headlands.
Once complete press **Toggle
Guidance** to switch back to AB line for
guidance in the inner area of the field.

To reset the ABC line press the grid area used to set
the A, B and C points and select **Yes** when prompted.

