This manual is applicable to: Kinze Blue Vantage System

Record the serial numbers of your planter Blue Vantage system and the purchase date:

Service Tag __________________________________________________

Date Purchased _______________________________________________
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Kinze Manufacturing, Inc. thanks you for your patronage. We appreciate your confidence in Kinze farm machinery. Your Kinze planter has been carefully designed to provide dependable operation in return for your investment.

This manual has been prepared to aid you in the operation and maintenance of the planter. It should be considered a permanent part of the machine and remain with the machine when you sell it.

It is the responsibility of the user to read and understand the Operator's Manual in regard to safety, operation, lubrication, and maintenance before operation of this equipment. It is the user's responsibility to inspect and service the machine routinely as directed in the Operator Manual. We have attempted to cover all areas of safety, operation, lubrication and maintenance; however, there may be times when special care must be taken to fit your conditions.

Throughout this manual the symbol and the words **DANGER**, **WARNING**, and **CAUTION** are used to call attention to safety information that if not followed, will or could result in death or injury. **NOTICE** and **NOTE** are used to call your attention to important information. The definition of each of these terms follows:

---

**DANGER**

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components which, for functional purposes, cannot be guarded.

**WARNING**

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

**CAUTION**

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**NOTICE**

Used to address safety practices not related to personal injury.

NOTE: Special point of information or machine adjustment instructions.
WARRANTY

The Kinze Limited Warranty for your new machine is stated on the retail purchaser’s copy of the Warranty And Delivery Receipt form. Additional copies of the Limited Warranty can be obtained through your Kinze Dealer.

The Warranty, within the warranty period, is provided as part of Kinze’s support program for registered Kinze products which have been operated and maintained as described in this manual. Evidence of equipment abuse or modification beyond original factory specifications will void the warranty. Normal maintenance, service and repair is not covered by the Kinze warranty.

To register your Kinze product for warranty, a Warranty And Delivery Receipt form must be completed by the Kinze Dealer and signed by the retail purchaser, with copies to the Dealer, and to the retail purchaser. Registration must be completed and submitted to Kinze Manufacturing, Inc. within 5 business days of delivery of the Kinze product to the retail purchaser. Kinze Manufacturing, Inc. reserves the right to refuse warranty on serial numbered products which have not been properly registered.

If service or replacement of failed parts which are covered by the Limited Warranty are required, it is the user’s responsibility to deliver the machine along with the retail purchaser’s copy of the Warranty And Delivery Receipt to the Kinze Dealer for service. The Kinze warranty does not include cost of travel time, mileage or hauling. Any prior arrangement made between the Dealer and the retail purchaser in which the Dealer agrees to absorb all or part of this expense should be considered a courtesy to the retail purchaser.

*Kinze warranty does not include cost of travel time, mileage, hauling, or labor.*
BLUE VANTAGE

Once Blue Vantage has been properly set up, it can be ready to plant in three taps.

The Health screen has the most comprehensive diagnostics on the market. This single screen provides all critical parameters and controls. The grower can observe row-by-row planting performance in real-time.

Blue Vantage provides fast and reliable communication with the planter and an easy to read high definition rugged touchscreen with touch, pinch and zoom screen actions. The quick disconnect dock and USB ports allow for easy removal and data transfer.

Blue Vantage is designed by Kinze for Kinze. One manufacturer for all components from the display in the cab to the high-speed Ethernet communications on the planter provides a complete solution that is ready to use immediately.

GENERAL INFORMATION

The information used in this manual was current at the time of printing. However, due to Kinze’s ongoing product improvement, production changes may cause your planter control system display to appear or operate slightly differently in detail. Kinze Manufacturing, Inc. reserves the right to change specifications or design without notice and without incurring obligation to install the same on machines previously manufactured.

Right hand (R.H.) and left hand (L.H.), as used throughout this manual, are determined by facing in the direction the machine will travel when in use, unless otherwise stated.
BASIC CONTROLS

With Blue Vantage almost everything can be tapped to select an item, perform an action, view more information, or open more controls.

Accept. Selecting a check mark will save any changes and exit. This is known as accepting.

Cancel. Selecting an “x” will cancel any changes and exit. This is known as canceling.

+ Add. Selecting “+ ADD” is used typically to add items to a list.

Number Entry. Tap to adjust numeric values.

Toggle. Selecting a side of this switch will select one option and disable the other option.
POINTS OF PLANTING

Tractor Power. Blue Vantage must be docked with power being supplied.

Planter Attached. A planter with the correct system must be attached.

Aux Modules Ready. All expected aux modules must be in the discovered state.

Power Pack Ready. The power pack must be in either the healthy or unhealthy active states.

Row Modules Ready. All expected row modules must be in the discovered state.

If all five points of planting are true then the system is ready to plant.
3 Taps to Plant

PLANT - STEP 1

Points of planting

(See Page 5 for details.)

Step 1 - Tap the Plant Button.

PLANT - STEP 2

(See Page 10 for Task Setup.)

Step 2 - Tap the “✓” to Choose a Plant Task.
PLANT - STEP 3

(See Page 10 for task setup.)

Step 3 - Tap the Plant Button.

(See next page for Plant Screen details.)
**OVERALL ROW STATUS**
Displays status of every row. Tap a row column to stop scanning and see row status details in the “ROW DETAIL” area.

**MARKERS**
Monitor and enable markers.

**FIELD DISPLAY**
Pinch to zoom. Drag to pan.

**TOOLBAR**
Displays current implement switch status.

**CENTERFIELD ZOOM**
Tap to toggle between a full-field zoom level or to center the tractor on the display.

**SHUTOFFS**
Tap to access manual shutoffs.

**PRESSURES**
Monitor all system pressures. Tap gauges to adjust.

**POPULATION**
Displays live population data. Tap to change population settings.

**ROW DETAIL**
Monitor population of a single row. With “SCAN” selected, Blue Vantage scans through the rows. Tap “HOLD” to stop scanning and constantly monitor one row. Tap arrows to step through rows.

**MAP LAYER**
Displays legend for planter swath and bar graphs. Tap for details.

**NAVIGATION BAR**
(See Page 8.)

**ACRES/SPEED**
Displays acres planted in current session, current speed, and bulk fill scale information. Tap for details.

**PLANT**
* These options may appear differently depending on the current mode.
NAVIGATION BAR

**Plant.** Begin task setup. All points of planting (Page 5) must have a “✓” in order to plant. The button will begin to pulse when ready to plant.

**Actions.** Control planter functions. (Page 25)

**Alerts.** Display Alerts History as well as Active Alerts. (Page 39)

**Health.** Display overview of all diagnostics on Blue Vantage. (Page 41)

**Settings.** Adjust various system and display settings. (Page 53)

**Home.** Display the Home Screen. (Page 6) Tapping the home button while in a task gives the option to pause the task.

**Manage.** Manage Rx and boundary files as well as export reports or as-applied data. Other functions such as Grower/Farm/Field data and other information can be managed here as well. (Page 65)
TASK SETUP - GPS

<table>
<thead>
<tr>
<th>GPS Setup</th>
<th>GPS Baud Rate</th>
<th>GPS Antenna Side</th>
<th>Tractor Type</th>
<th>GPS Offsets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter baud rate for communication with GPS.</td>
<td>GPS RADIO</td>
<td>LEFT, CENTER, RIGHT</td>
<td>ARTICULATED, TRACK, TRADITIONAL</td>
<td>FORWARD, WHEELBASE, GROUND CONTACT</td>
</tr>
<tr>
<td>Enter GPS antenna placement for proper seed spacing.</td>
<td>COMMUNICATING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FORWARD OFFSET</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WHEELBASE</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LATERAL OFFSET</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GROUND CONTACT OFFSET</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: This screen will not appear if the GPS has already been configured. However, general GPS and tractor settings can be controlled from settings. (Page 55)
CHOOSE PLANT TASK

From the Choose Plant Task screen, you can choose to resume a previous task or create a new task. To resume a previously created task, select it from the list and tap the accept button. Tasks are listed in the order they were last planted.
**TASK SETUP**

Use Task Setup to enter all necessary task information. Correct task setup is critical in ensuring the highest performance from the system.

![Task Setup Screen](image)

Task Setup

The task setup screen provides the ability to give detailed task information including Seed Type, Population, Pressures, Prescriptions, Boundaries, and Manual Sections.

Tap “GROWER” to Begin Task Setup (See Page 13)

**Seed.**  (Page 14)
**Population.**  (Page 15)
**Prescription.**  (Page 17)
**Pressures.**  (Page 18)
**Boundary.**  (Page 19)
**Manual Sections.**  (Page 20)

**NOTE:** This data can be accessed from the manage screen as well. Additional functions are available in the manage screen. (See Page 63)

**NOTE:** When adding a new task, settings will default to the previous task used. Grower/Farm/Field will be blank. If Grower, Farm, and Field are not added, they will be auto-populated with the “UNNAMED”, current date, and current time, respectively. See Grower/Farm/Field. (Page 13)
Add Grower, Farm, and Field:

Tap "+ ADD".

Enter Grower information using keyboard.

Tap "✓" to save changes, returning to Task Setup - Grower/Farm/Field.

Tap "X" to close and return to Task Setup - Grower/Farm/Field. (Any changes will not be saved.)

NOTE: If Grower, Farm, and Field are not added, they will be auto-populated:

- Grower - "UNNAMED"
- Farm - Current Date
- Field - Current Time

To Edit/Delete Grower, Farm, or Field:
- Return to Home Screen
- Tap Manage
- Tap Names
- Tap on desired category
- Tap Edit or Delete
TASK SETUP - SEED

Crop & Disc. Select a Crop & Disc.

Seed Hoppers. Select or add a product for each seed hopper.

Note: Any unique seed entered is listed under both tanks and can be selected independently for each tank.

Reassign. This allows you to change the hybrid/variety that has been planted in a field. For instance, if you planted with a hybrid set as ABC123 and realize that was incorrect, you can reassign to ABC987 to correct your as-planted data. This is different than renaming a hybrid/variety as ABC123 is still available and valid within your other tasks.
TASK SETUP - POPULATION

Select population control type from whole, split, or Rx.

Split Population (shown in figure to right) provides the operator the ability to plant at different rates on each half of the planter.

NOTE: Population values will be saved with each task.

Accept to continue.

Tap “X” to close and return Task Setup screen (any changes will not be saved).
The population screen will provide a third field if a prescription file is selected.
Select a prescription file, then accept to continue. If you wish to remove a prescription and continue with no prescription, select nothing and accept.

**Note:** These files are imported through MANAGE. ([See Page 63](#))
TASK SETUP - PRESSURES

Pressures

Enter and accept desired pressures.

Refer to planter operator’s manual for recommended settings.

Note: This screen may appear differently depending on your configuration.
Select a boundary file, then accept to continue. If you wish to remove a prescription and continue with no prescription, select nothing and accept.

**Note:** These files are imported through MANAGE. ([See Page 63](#))
Select desired number of sections for manual shutoffs. (See Manual Shutoffs - Page 23.) Accept to continue.
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PLANT SCREEN

Plant Screen Introduction. The plant screen provides significant planting information all in one display. Overall field view, population, and row data are available. The grower can also monitor speed and acres as well as system pressures, or tap to control row markers. Detailed row data is also available at a glance and can be investigated in detail with a tap.
PLANT SCREEN (CONTINUED)

Bar Graph. Displays row by row population or singulation depending on the currently selected map layer.

Population - Displays the average population for the whole planter in the upper right. Row by row population is also displayed and differs depending on the current population control type (whole, split, prescription). The blue line represents the target population. The bars represent the actual row population and are colored as follows:

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange</td>
<td>In the over range (above the high threshold (default 105%))</td>
</tr>
<tr>
<td>Green</td>
<td>In the good range (above the good threshold(half the low threshold, default 80%) and below the high threshold)</td>
</tr>
<tr>
<td>Yellow</td>
<td>In the warn range (above the low threshold (default 60%) and below the good threshold)</td>
</tr>
<tr>
<td>Red</td>
<td>In the error range (below the low threshold)</td>
</tr>
</tbody>
</table>

The high threshold and low threshold can be changed in alert settings. The good threshold is calculated using the low threshold, and is half the low threshold (low threshold + (100 - low threshold) / 2).

NOTE: Population accuracy = 100% + % of Doubles - % of Skips.

Singulation - Displays how consistently the seed meter delivers seeds.

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>In the good range (between the good threshold(half the low threshold, default 90%) and 100%)</td>
</tr>
<tr>
<td>Yellow</td>
<td>In the warn range (between the low threshold (default 80%) and the good threshold)</td>
</tr>
<tr>
<td>Red</td>
<td>In the error range (below the low threshold)</td>
</tr>
</tbody>
</table>

NOTE: Singulation accuracy = 100% - % of Doubles - % of Skips.

Row Detail. Displays a readout of seed population for individual rows as well as percent of singulation accuracy, skips and doubles. This box will rotate through all rows, changing every few seconds.

Pressures.

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum</td>
<td>Displays vacuum pressure levels.</td>
</tr>
<tr>
<td>Yellow</td>
<td>Displays the pressure level of the bulk fill system.</td>
</tr>
<tr>
<td>Red</td>
<td>Displays the amount of down pressure, in pounds, being placed on the row units.</td>
</tr>
</tbody>
</table>

NOTE: There will be no down pressure reading if Kinze True Depth option is installed.

Center/Field Zoom. Centers the tractor/planter on map. Toggles between centering on the tractor/planter and zooming to display the entire field.

NOTE: Field zoom may not accurately display large or disparate fields.

GPS. Indicates GPS status.

Shutoffs. Provides the ability to manually disable a section. Manual control is always enabled and the user can select whether there are one, two, or four sections.

NOTE: Other sections will still perform automatic section control if the automatic section control feature is enabled.
PLANT SCREEN (CONTINUED)

**Speed/Acres.** Displays the current speed in miles per hour and actual acres planted. Tap for Acres to Empty, weights, GPS, and wheel speed.

**Map.** Displays current work progress.

**Markers.** Allows user to enable the left and right markers. Includes an auto function to automatically switch markers when the toolbar is lifted.

**NOTE:** The electronics do not control the lift of the markers. They only enable the deployment. Both markers can be lifted by using the hydraulics. Both can be lowered, but they must be lowered individually.

**Toolbar.** Shows current implement switch status.
The Actions menu contains all of the controls for moving parts of the planter. These options will be different depending on the planter model. Ensure you are referencing the pages of this manual specific to your planter.
Position planter in a relatively flat open area. Avoid an area with furrows, etc.

1. Remove and store tongue safety pin.

2. Remove and store transport latch locking pin.

3. Remove and store safety lockup.

4. Press and hold “ROTATE TOOLBAR”. Operate proper hydraulic tractor control until planter has fully rotated into field position. Transport latch will automatically release.

5. Press and hold “LOWER TOOLBAR”. Operate proper hydraulic tractor control to fully lower the planter on center post.

6. Operate hydraulic control to raise planter using field lift.

7. Press and hold “RELEASE WING LOCKS”. Operate proper hydraulic tractor control, releasing wing locks.

8. Press and hold “RETRACT TONGUE”. Operate proper hydraulic tractor control to fully retract tongue. Tongue latch automatically engages.

9. Lower planter to ground.

10. Remove row marker lockups.
FOLD (MODEL 3660 LIFT & PIVOT)

**NOTICE**
DO NOT fold or unfold planter without planter attached to a tractor. DO NOT unhitch planter from tractor unless fully folded for transport or fully unfolded with planting units lowered to ground.

**WARNING**
Improperly operating or working on this equipment could result in death or serious injury. Make sure there is no one in the area of the moving parts of the planter.

Position planter in a relatively flat open area. Avoid an area with furrows, etc.

1. Install row marker lockups.
2. Operate hydraulic control to raise planter using field lift.
3. Press and hold “EXTEND TONGUE”. Operate hydraulic control to fully extend tongue. Tongue latch automatically engages.
4. Press and hold “ENGAGE WING LOCKS”. Operate hydraulic control.
5. Lower planter to ground.
6. Press and hold “RAISE TOOLBAR”. Operate hydraulic control to fully raise planter on center post.
7. Press and hold “ROTATE TOOLBAR”. Operate hydraulic control to rotate planter to transport position. Transport latch automatically engages.
8. Install safety lockup.
9. Install hitch safety pin.
10. Install transport latch locking pin.
UNFOLD - MODEL 4900 FRONT FOLDING

NOTICE
Tractor must be in neutral and allowed to roll freely when unfolding to prevent equipment damage, especially in soft conditions or when loaded with seed. Use tractor assist as needed to aid in unfolding and to reduce stress on frame and transport components.

NOTICE
DO NOT fold or unfold planter without planter attached to a tractor. DO NOT unhitch planter from tractor unless fully folded for transport or fully unfolded with planting units lowered to ground.

WARNING
Improperly operating or working on this equipment could result in death or serious injury. Make sure there is no one in the area of the moving parts of the planter.
UNFOLD - MODEL 4900 FRONT FOLDING (CONTINUED)

1. Remove lockups.

2. Press and hold “ROTATE TRANSPORT AXLE”. Operate proper hydraulic tractor control to lower transport axle to field turnaround position.

3. Press and hold “LOWER WING WHEELS”. Operate proper hydraulic tractor control to lower wing wheels into field turnaround position.

4. Press and hold “LOWER HITCH”. Operate proper hydraulic tractor control to unhook the wings.

5. Press and hold “UNFOLD”. Operate proper hydraulic tractor control to move wing out, away from tractor. Planter is completely unfolded when stub wings are latched into the H-frame.

   **Note:** Place tractor in reverse and slowly reverse when unfolding to prevent damage to wheel arm.

6. Lower planter and hold hydraulic lever for an additional 30 seconds to rephase lift cylinders.

7. If equipped with row markers, remove lockups and place in storage position.

8. Lower hitch to level machine during planting.
FOLD - MODEL 4900 FRONT FOLDING

NOTICE
Tractor must be in neutral and allowed to roll freely when folding to prevent equipment damage, especially in soft conditions or when loaded with seed or fertilizer. Use tractor assist as needed to aid in folding and to reduce stress on frame and transport components.

NOTICE
DO NOT fold or unfold planter without planter attached to a tractor. DO NOT unhitch planter from tractor unless fully folded for transport or fully unfolded with planting units lowered to ground.

WARNING
Improperly operating or working on this equipment could result in death or serious injury. Make sure there is no one in the area of the moving parts of the planter.
FOLD - MODEL 4900 FRONT FOLDING (CONTINUED)

1. If equipped with row markers, remove lockups from storage and installation marker cylinder rods.

2. Place planter into field turnaround position.

3. Press and hold “RAISE HITCH” (If equipped). Operate proper hydraulic tractor control to raise drawbar to level planter frame.

4. Press and hold “FOLD”. Operate proper hydraulic tractor control until 2 hooks are over the top of the inner hitch.

   **Note:** If tractor assist is needed place tractor in forward and slowly move forward when unfolding to prevent damage to wheel arm.

5. Lift drawbar hitch to lock wings into place after folding.

6. Press and hold “ROTATE TRANSPORT AXLE” button. Operate proper hydraulic tractor control to raise transport axle to either transport height.

7. Press and hold “RAISE WING WHEELS”. Operate proper hydraulic tractor control to raise wing wheels into transport position.

8. Install locking pin on drawbar (if equipped).

Calibrate

**Speed Wheel.** Bring tractor to 4 MPH. Tap “CALIBRATE". Maintain speed until timer expires. When timer has expired, calibration is complete.

**Zero Bulk Fill Pressure.** Tap “ZERO”. When timer has expired, calibration is complete.

*Note: All calibrations EXCEPT SPEED WHEEL can be cancelled by tapping zero before the timer expires. If calibration is cancelled, the last value registered by the system is used.*
**Zero Vacuum Pressure Sensor (Left/Right).** Confirm that the vacuum fan is off. Tap “ZERO”. When timer has expired, calibration is complete.

**Zero Down Pressure Sensor.** Confirm that toolbar is down. Tap “ZERO”. Toolbar must remain down until timers expire. The first timer will count down while the pressure is released. When the second timer has expired, the sensor has reset and the calibration is complete.

---

**NOTICE**  
Zeroing the down pressure system will cause the pressure to be released from the down pressure system. It may take a few minutes for the system to restore to its normal state.
LIGHTS

Turns planter work lights off and on.
Flush allows you to flush any remaining seed from the planter in preparation to switch crops or store the planter. The bulk fill and vacuum fans can be controlled. While flushing, a bar graph will show the number of seeds per second through each row.

**NOTICE**

The toolbar must be raised to enable Flush Control.
FRONT ROWS (3660)

Indicate to the system whether the front rows are raised or lowered. Front rows must still be manually raised/lowered.
Adjust desired options then slide to apply configuration.
This page left blank intentionally.
ALERTS - INTRODUCTION

The Blue Vantage Alerts screen gives you an overview of all the alerts generated by the system.

Alerts

All active alerts will be displayed including the level, contributors, date, and time. Tapping on an alert will take you to the appropriate area of the Health screen or the appropriate diagnostic. An alert will be cleared from the active list once it has been corrected. All cleared alerts will remain visible in the history list.

- **Error.** Planting or safety is affected, problem needs to be corrected before proceeding with planting.

- **Warning.** Planting may be affected, problem should be investigated.

- **Information.** Planting should not be affected, problem should be investigated at a lower priority.
This page left blank intentionally.
HEALTH - INTRODUCTION

The Blue Vantage Health screen provides an overview of all of the metrics recorded by the system. All of the subsystems can be monitored quickly and easily from this screen. The Health screen also provides an access point for system diagnostics. Select a row in the top toolbar view to displayed detailed row information. Select “ALL ROWS” from the row detail screen for detailed statistics for all rows.

HEALTH SCREEN

Diagnostics (Page 47)
**BLUE VANTAGE**

**Blue Vantage.** Provides current battery charge level and lifetime hours of Blue Vantage display.

![Blue Vantage Display]

**GPS**

**GPS.** Displays overall GPS status, positional information, and NMEA sentence information.

![GPS Display]

**SPEED**

**Speed.** Displays overall speed status, source, and reported speeds.

![Speed Display]
**ROUTER**

**Router.** Displays overall router status, model and option information, and version information.

<table>
<thead>
<tr>
<th>ROUTER: DISCOVERED</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL</td>
</tr>
<tr>
<td>ROW COUNT</td>
</tr>
<tr>
<td>SEED DELIVERY</td>
</tr>
<tr>
<td>DOWN PRESSURE</td>
</tr>
<tr>
<td>MARKERS</td>
</tr>
<tr>
<td>HITCH TYPE</td>
</tr>
</tbody>
</table>

**AUX MODULES**

**Aux Modules.** Displays overall status, firmware version, hardware version, unique ID, and supply voltage.

<table>
<thead>
<tr>
<th>FOLD: DISCOVERED</th>
</tr>
</thead>
<tbody>
<tr>
<td>FW VERSION</td>
</tr>
<tr>
<td>HW VERSION</td>
</tr>
<tr>
<td>UNIQUE ID</td>
</tr>
<tr>
<td>INPUT VOLTAGE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>3660</th>
<th>4900</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fold</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bulk Fill</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Left Wing</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Right Wing</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Raise</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Rotate</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Aux Module Use By Planter Model
IMPLEMENT SWITCH

**Implement Switch.** Displays overall toolbar status and left and right implement switch position.

![Implement Switch Icon]

<table>
<thead>
<tr>
<th>TOOLBAR: DOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEFT IMPLEMENT SWITCH</td>
</tr>
<tr>
<td>RIGHT IMPLEMENT SWITCH</td>
</tr>
</tbody>
</table>

DOWN PRESSURE

**Down Pressure.** Displays overall down pressure status.

![Down Pressure Icon]

<table>
<thead>
<tr>
<th>DOWN PRESSURE: OK</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOWN PRESSURE</td>
</tr>
<tr>
<td>TARGET</td>
</tr>
<tr>
<td>STATE</td>
</tr>
</tbody>
</table>

VACUUM

**Vacuum.** Displays overall vacuum status and pressures.

![Vacuum Icon]

<table>
<thead>
<tr>
<th>LEFT VACUUM: OFF</th>
<th>RIGHT VACUUM: OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRESSURE</td>
<td>0.0 INWC</td>
</tr>
<tr>
<td>TARGET</td>
<td>0.0 INWC</td>
</tr>
<tr>
<td>FAN CONTROL</td>
<td>NO</td>
</tr>
<tr>
<td>PWM DUTY CYCLE</td>
<td>---</td>
</tr>
<tr>
<td>INPUT VOLTAGE</td>
<td>---</td>
</tr>
</tbody>
</table>
**SCALES**

**Scales.** Displays overall bulk fill scales status, weights, and overall acres to empty.

**Note:** Overall Acres to Empty is calculated by doubling the Acres to Empty of the lowest tank value.

<table>
<thead>
<tr>
<th>SCALES: OK</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEFT WEIGHT</td>
</tr>
<tr>
<td>RIGHT WEIGHT</td>
</tr>
<tr>
<td>TOTAL WEIGHT</td>
</tr>
<tr>
<td>LEFT ACRES TO EMPTY</td>
</tr>
<tr>
<td>RIGHT ACRES TO EMPTY</td>
</tr>
<tr>
<td>OVERALL ACRES TO EMPTY</td>
</tr>
</tbody>
</table>

**POWER PACK**

**Power Pack.** Displays overall power pack status, voltages, and on/off statuses.

<table>
<thead>
<tr>
<th>POWER PACK: HEALTHY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALTERNATOR OUTPUT</td>
</tr>
<tr>
<td>AC VOLTAGE</td>
</tr>
<tr>
<td>DC VOLTAGE</td>
</tr>
<tr>
<td>BATTERY 1 VOLTAGE</td>
</tr>
<tr>
<td>BATTERY 2 VOLTAGE</td>
</tr>
<tr>
<td>FREQUENCY</td>
</tr>
<tr>
<td>BATTERY PACK ON/OFF</td>
</tr>
<tr>
<td>ROW POWER ON/OFF</td>
</tr>
<tr>
<td>RUNNING ON/OFF</td>
</tr>
</tbody>
</table>
BULK FILL FAN

**Bulk Fill Fan.** Displays overall bulk fill fan status and pressures.

![Bulk Fill Fan Diagram](image-url)
DIAGNOSTICS - INTRODUCTION

The diagnostics guides you through the most common issues that might occur with Blue Drive / Blue Vantage. Enter diagnostics by selecting "DIAGNOSTICS" from the main HEALTH screen.
**Alternator Power Lost While Planting**

Check the direction of the remote selection on the tractor control panel.

Set the remote to Extend and confirm that alternator output is greater than 24V and the voltage for Battery 1 and Battery 2 are greater than 12V in the Power Pack status window.

Set the remote to Retract and confirm that alternator output is greater than 24V and the voltage for Battery 1 and Battery 2 are greater than 12V in the Power Pack status window.

Check for proper installation and condition of the hydraulic tips at the tractor.

Check the hydraulic flow setting on the tractor control panel.

Increase the hydraulic flow.

Confirm that the hydraulic motor is turning.

Confirm that alternator power is present by checking the Power Pack icon in the Health screen.

Confirm that alternator output is greater than 24V in the Power Pack Status window.

Confirm the voltage for Battery 1 and Battery 2 are greater than 12V in the Power Pack status window.

If you are still experiencing issues, move the hydraulic remote to another function that's known to be working.

If the problem has not been resolved, power cycle Blue Vantage and the tractor.

**Issue Still Persists**

Contact Kinze Dealer
Communication Harness Routing

Refer to Diagnostics on Blue Vantage for communication harnessing diagrams.

Issue Still Persists

Contact Kinze Dealer
Intermittent Module Communication

Module Status LEDs:

- Solid white
  Allow the software to start.
- Blinking green
  No Ethernet data communication with Blue Vantage display (J1/J2 connectors).
- Solid green
  No further action required
- Fast red
  Reboot the module by removing and reinserting the power connector (J3)

Confirm that the LED on the module is illuminated.

- Check the power connector (J3) at the module to confirm that it is clean and free from damage.
- Check the fit of the power connector (J3) at the module to confirm that it is snug and seated properly.
- Check the Ethernet communication cable (J1/J2) at the module to confirm that it is clean and free from damage.

If the problem has not been resolved, power cycle Blue Vantage and the tractor.

Issue Still Persists

Contact Kinze Dealer
GPS Signal Not Present

Confirm that the power lights on the GPS are illuminated.

Inspect the harness for cleanliness.

Inspect the harness for fit.

Check whether the SETTINGS > TRACTOR screen indicates GPS communication.

Turn on all GPS messages at 10 Hz.

Verify the baud rate matches your receiver setup:
- John Deere StarFire - 115200 baud
- Ag Leader 6000 - 115200 baud
- CNH 372 - 57600 baud

Confirm proper GPS configuration by reviewing the configuration instructions in the GPS instruction sheet.

Refer to the Kinze GPS instruction sheet - IS1040 (“the instruction sheet”) for correct harness and cabling setup. Inspect all required cabling per the instruction sheet.

If the problem has not been resolved, power cycle Blue Vantage and the tractor.

Issue Still Persists

Contact Kinze Dealer
Planter Not Attached

Confirm that all power plugs are properly seated and have 12 volts or greater between dock and convenience plug.

Confirm that all power plugs are properly seated and have 12 volts or greater from tractor power to planter router.

Confirm that all Ethernet data cables are properly seated from Blue Vantage dock to planter router.

Remove the Blue Vantage display from the dock and check for damage to pins and connections.

Reinsert the Blue Vantage display.

The Blue Vantage display fit should be snug and encounter increasing resistance throughout insertion.

Solid green and the Health screen displays "Invalid Planter Characteristics": Contact your Kinze Service representative for repair or replacement of the planter router.

Blinking green or red: Reboot the Planter Router by removing and reinserting power on J10 connector.

Solid white: Wait for the Planter Router to complete initialization. The LED color will change.

If the problem has not been resolved, power cycle Blue Vantage and the tractor.

Issue Still Persists

Contact Kinze Dealer
SETTINGS - INTRODUCTION

Blue Vantage provides settings for many areas pertaining to the planter, tractor, and Blue Vantage display.

PLANTER

Auto Section Control. Controls whether Auto Section Control is Disabled or Enabled. Enables GPS guided control of row “on/off” when entering or exiting an already-planted area.

Turn Compensation. Controls whether Turn Compensation is Disabled or Enabled. Maintains consistent speed spacing across the planter while turning.

Planting Start. Controls the distance for the meter to turn on and start dropping seed when leaving an already-planted area, or entering an area defined by a boundary or prescription file.

Planting Stop. Adjusts the distance for the seed meter to turn off when entering an already-planted area or leaving an area defined by a boundary or prescription file.

NOTE: Section controls have been calibrated by planter model. They can be adjusted manually for personal preference.

NOTE: Planting accuracy may be affected by sudden speed changes.
Alerts

Turn alerts on and off, set the thresholds that trigger applicable alerts, and set the time delay between when the condition is met and the alert is triggered for applicable alerts.

Example: If the vacuum pressure high/low threshold is set to 10% and the delay is set to 10 seconds, the vacuum pressure alert is triggered when above 10% of the desired value for more than 10 seconds.
TRACTOR

Specific GPS and tractor offset information must be entered for accurate planting.

**GPS Baud Rate.** Set the GPS baud rate.

**GPS Antenna Side.** Set location of GPS antenna.

**Tractor Type.** Set the tractor type.

**Offsets.** Set tractor and GPS offsets.

**Tractor Color.** Set display tractor color.
Planter offsets are static and provided for the user’s benefit. They cannot be edited in the system or physically.
**SPEED**

**Speed Source.** When auto is selected, the system will choose source based on available options. When fixed is selected, the system will use the fixed speed set by the user as the speed source.

**Fixed Speed.** Overrides other seed sources with a user-defined fixed speed.

*NOTE: The planter seed meters will turn as soon as the toolbar is down.*

**Jump Start Speed.** Sets the speed limit for jump start. Once planter reaches the jump start speed, jump start will cease.
Blue Vantage

**Map Orientation.** Sets map orientation. In the North Up option the map will remain oriented with North at the top. In the Heading Up option the map will change its orientation so that the planter's heading is always at the top.

**Color Mode.** Toggle between light and dark color modes.

**Brightness.** Sets screen brightness. In the Auto option the display automatically adjusts brightness based on current light conditions. In the Manual option the brightness is manually set using the slider.

**Volume.** Use the Volume slider to adjust the volume of sounds, including alerts.
Blue Vantage

**Date & Time.** Opens the Date & Time screen. Date and time will be set automatically when you have a valid GPS signal. Time zone will not be set automatically however.
BLUE VANTAGE (CONTINUED)

**Back Up My Data.** Backs up settings and user data to a connected USB drive.

**Restore From Back Up.** Restores settings and user data from the most recent back up on a connected USB drive.

**Diagnostic Data.** Exports diagnostic data to a connected USB drive.
**FACTORY RESET**

Factory Reset

**Reset All.** Resets all settings to factory default.

**NOTICE**

“RESET ALL” will reset all settings to factory defaults. This cannot be undone.

Other Settings:

Tap the arrow to expand the list and reset individual settings.

- Crop Settings
- Speed Tools
- Blue Vantage Settings
- Alerts
- Tractor Settings
- Planter Settings

**Wipe for sale.** Restores Blue Vantage to factory defaults.

**NOTICE**

“WIPE FOR SALE” will remove all user data and restore settings to factory defaults. This cannot be undone.
About

**About.** Displays information about Blue Vantage, including the currently loaded software version.
MANAGE - INTRODUCTION

Blue Vantage provides management tools, tasks, reports, and file management.

TASKS

Tasks

Manage current tasks. Adding and editing tasks here is the same as in task setup described on Page 10. Tasks can also be deleted and exported to a connected USB drive here.

NAMES

Names

Manage current grower, farm, and field names. Adding names here is the same as in task setup described on Page 10. Names can also be edited and deleted here.
PRODUCTS

Products

Products. Products are added through the same process as task setup described on Page 10.

BASIC REPORTS

Reports

Basic Reports. View and export reports to a USB drive as a PDF file.
PLANTING REPORTS

**Planting Reports**. View and export reports to a USB drive as a PDF file.
SCREENSHOTS

Screenshots

Navigation Bar Screen. If the screen has the “HOME” button, hold on “HOME”. A “Screenshot captured” message will appear at the bottom center of the screen.

Other Screen. If the screen does not have the “HOME” button, hold on the area below the accept button.

Alerts. An alert may be captured by holding on the alert icon.

Manage. Screenshots can be deleted and exported to a connected USB drive.
PRESCRIPTION AND BOUNDARY FILES

Import and select prescription and boundary files.
UNDOCKING BLUE VANTAGE

If previously locked, unlock docking station with the supplied key.

While holding the display with one hand, lift the latch handles. The front hooks will release the tablet.

When unlatched, grab both sides of the display and carefully lift up and out of the docking station, top end first.

Undocking Blue Vantage

The display can be undocked for any “non-planter” functions. Manage functions may be completed while undocked. All functions requiring Blue Drive will be locked out in this mode. The display will run on battery unless connected to an AC power source.
BLUE VANTAGE PORTS

Blue Vantage Ports

1. Power Connector
2. Micro Serial Connector
3. USB 3.1 Gen1 Type-C Connector
4. USB 3.0 Connector
5. Micro SD Card Reader
6. Headset Connector
7. Power Button
UPDATING BLUE VANTAGE

System updates will be released periodically on the Kinze website. To update the Blue Vantage system, simply download the file and place it on the root of a USB drive. Insert the USB drive and follow the on-screen prompts to update.

NOTE: The planter systems will be automatically updated when the Blue Vantage system restarts. Additional time may be required before the system is ready to plant.