**Planter At a Glance**

- **Black bars**: Section active and ready to plant.
- **Green Bars**: Section active and ready to plant.
- **Orange bars**: Section deactivated manually by operator.
- **Outlined Bars**: Section deactivated by SwathControl™ command (when activated).
- **Black Bars**: Section deactivated manually by operator.

**Buses Not Visible**: Section active, but cannot be controlled manually or with RowCommand™.

**RowCommand™ Buttons**: Select buttons to turn sections on and off manually.

**Target Pneumatic Down Force Level**: Select button to view Pneumatic Down Force Control Panel.

**Pneumatic Down Force System Indicator Arrows**
- Up arrow indicates system is increasing down force level.
- Down arrow indicates system is decreasing down force level.

**Population and Rates**

- **Target Seeds per Area**: Displays the desired seeding rate entered in Planter Rates Setup. On VRD machines, select this button to toggle between programmed rates including prescriptions (Rate 6, VRD only).
- **Average Seeds per Area**: Displays the actual average rate planted. Select button to toggle between whole planter average and drive section average.

**Other Useful Buttons**

- **Enable All Sections**
- **User Defined Totals**
- **Actual Pneumatic Down Force Level**
- **Vacuum Level Icon**

**Getting Started**

- **Planter – Main**: Select for planter main run screen.
- **Planter – Configuration**: Select to change planter frame, drives, and sensor configuration.
- **Planter – Rates**: Select to change crop type, rates, and meter configuration.
- **Totals**: Select to view planted area, hours, and calculators.
- **Diagnostics**: Select to view sensor readings and fault codes.

**Pneumatic Down Force Control Panel**

- Enter target down force in input box.
- Select up or down arrow buttons to change pneumatic down force by preset Step Value.
- Enter low down force level alarm set point and Step value in PDF Air Pressure Setup Screen.
- Select: Menu>>Planter>>Configuration Softkey>>Sensor Tab>>Select PDF Air Pressure from drop down menu.
Crop Setup – Ground Drive

Select Rates Softkey (H).
Select Crop Name from drop down menu. Select desired crop from list. If desired crop name is not listed, select a Custom crop name.
Select Target Rate input box and enter desire population.
High and low warning limits are automatically set to a percentage above and below target rate. To change limits, select High and Low Warning input boxes and enter a new value.
Refer to Rate Charts & Settings Manual or Seed Transmission Sprocket Calculator (Menu>>Planter>>Totals>>Calculator>>Seed Transmission).
To access Seed Estimators and Vacuum Calculator select Totals softkey (I) >> Calc tab >> and choose the desired calculator from the drop down menu.

Crop Setup – Variable Rate Drive

Select Rates Softkey (H).
Select Use 1 Rate for All Motors check box. A check indicates one rate for all motors. An empty box indicates different rates for each motor.
Rate 6 is used for map based prescription. To enable controller to use a prescription, select the On drop down box under rate 6. From RUN screen select the Rx rate. Once rate is selected, the run page has a small Rx indicator near the Target Seeds per Area icon.
Select Crop Name from drop down menu. Select desired crop from list. If desired crop name is not listed, select a Custom crop name.
Select Disk Type drop down menu. If planter has mechanical meters, mechanical meter selections appear. If planter has vacuum meters, vacuum disk selections appear. Select meter or crop from list.
Select Seed Disk drop down menu and select the vacuum disk used. Verify this disk is in meter.
Select Show Rates button, then select Change Rates button.
If using different rates for each motor, select Motor drop down menu to assign rates to each motor.
Select Rate drop down menu and choose a rate from the list to assign a population to that rate.
Select Target input box and enter the target population for the selected rate.
High and low warning limits are automatically set to a percentage above and below target rate. To change limits, select High and Low Warning input boxes and enter a new value.
To see a rate on the RUN page as a choice, select On and Off drop down box and choose ON.
Select Enter button.

Standard Run Screen

Planter At a Glance

Black bars indicate row is planting normally.
Orange bars indicate row is planting above or below alarm setpoints.
Red bars indicate row is not planting.

Drives Status Bar

Green bar indicates that clutch or motor is engaged and drives are active.
Gray bar indicates that clutch or motor is disengaged and drives are inactive.

Transport Mode:

To disable seed sensor warnings while in transport, navigate to: Planter >> Planter Configuration >> depress “Transport Mode” key. To disable “Transport Mode” to resume planting, depress key on screen.

Headland Warning Suppression:

Check box (Planter Configuration >> Sensor >> Seed) to disable seed sensor warnings when the planter is raised in field position (requires a height sensor and height sensor must be calibrated).

VRD Status

1. No Activity
2. Wheel Motion, Sensor Active
3. Planter Lowered
4. Drives Engaged
SeedStar™ XP Planter Quick Reference Guide

**SeedStar XP Navigation Buttons**

- **Seed Population**
  - Select to view all SeedStar XP monitor information on one screen.

- **Seed Singulation**
  - Select button to view Pneumatic Down Force Control Panel

- **Seed Spacing**
  - Select to scan SeedStar XP run screens. Select and hold to change scan settings.

- **Down Force**

- **Ride Dynamics**
  - Select to view all monitored information for a specific row.

**Target Seeds per Area**

- Select button to view all monitored information for a specific row.

**Average Seeds per Area**

- Select to view all SeedStar XP monitor information on one screen.

**Pneumatic Down Force System Indicator Arrows**

- Up arrow indicates system is increasing down force level.
- Down arrow indicates system is decreasing down force level.

**Actual Pneumatic Down Force Level**

**Alarms and Limits Setup**

- **Singulation Alarm** 92%
- **Seed Spacing CV Alarm** 0.35
- **Ride Quality Alarm** 90%
- **Step Value** 5 (lb)
- **Active PDF Pause Timer** 5 sec
- **High Margin Alarm** 131 (lb) + 75%
- **Target Margin** 75 (lb)
- **Low Margin Alarm** 37 (lb) - 50%

**Alarms and Limits Setup Page:**

Select and hold any SeedStar XP monitor navigation button for 4 seconds to change alarm setpoints for that function. Enter “0” to disable alarm for monitor function.
Seed Population
Center line is target population. Bars above line indicate rows planting above target. Bars below line indicate rows planting below target. Bars turn orange when above or below alarm setpoint. Bars turn red when row is not planting (less than 2 seeds/second). Select Menu>>Planter>>Rates Softkey to change alarm setpoints.

Seed Singulation
Center line is perfect singulation (100%). Bars above line indicate increasing percentage of multiples. Bars below line indicate increasing percentage of skips. Bars turn orange when nearing alarm setpoint. Bars turn red when multiples or skip percentage is above alarm setpoint. Change Singulation alarm setpoint on Alarms and Limits Setup Page.

Seed Spacing Coefficient of Variation (CV)
Bottom of graph is perfect seed spacing (CV = 0). Bars increase in height as seed spacing becomes more variable. Bars turn orange when nearing alarm setpoint. Bars turn red when seed spacing CV is above alarm setpoint. Change Seed Spacing CV alarm setpoint on Alarms and Limits Setup Page.

Down Force Margin
Center line is target down force margin. Bars above line indicate rows with gauge wheel loads above target margin. Bars below line indicate rows with gauge wheel loads below target margin. Bars turn orange when nearing alarm setpoint. Bars turn red when down force margin is above alarm setpoint. Change Down Force Margin target and alarm setpoint on Alarms and Limits Setup Page.

Ride Dynamics
Top of graph is optimum ride quality (100%). Bottom of graph is poorest ride quality (0%). Bars decrease in height as row unit ride quality decreases. Bars turn orange when nearing alarm setpoint. Bars turn red when ride quality is below alarm setpoint. Change Ride Quality alarm setpoint on Alarms and Limits Setup Page.
Active Down Force

This system automatically makes down force adjustments based on target down force margin and feedback from the gauge wheel sensors. Data from the row unit gauge wheel sensors is displayed as margin on the monitor.

The operator selects a desired target margin (the amount of extra down force applied to the row unit, over and above what is required for the opener disks to penetrate the soil and achieve full planting depth). Active Down Force automatically monitors the readings from the gauge wheel down force sensors and make pressure changes to the air spring system to ensure the actual margin is equal to the target margin. As field conditions change the system automatically makes the necessary pressure adjustments to maintain target margin.

**Target Margin:**
The center line of the Down Force at a Glance chart is the target margin. Down Force at a Glance bars above the center line indicate down force levels are higher than desired. Bars below the center line indicate down force levels are less than desired.

Active Downforce input screen. When the Active Down Force Status icon is shown, the system is in active mode and margin is displayed.

The Active Down Force Margin run screen contains the active on/off check box, actual system down force, the row with the lowest margin, and the row with the highest margin.
Set-Point Down Force

This system allows the operator to make manual down force adjustments on the display. Data from the air pressure sensor located in the air tank valve block is displayed as down force on the monitor. The operator selects a desired target margin (the amount of extra down force applied to the row unit, over and above what is required for the opener disks to penetrate the soil and achieve full planting depth). The operator then monitors the readings from the gauge wheel down force sensors to determine if down force changes are necessary to ensure the actual margin is equal to the target margin. As field conditions change, margin should be monitored to determine if down force adjustments should be made to maintain target margin.

Target Margin:
The center line of the Down Force at a Glance chart is the target margin. Down Force at a Glance bars above the center line indicate down force levels are higher than desired. Bars below the center line indicate down force levels are less than desired.

The set-point Down Force input screen displays target down force and actual down force in the air spring circuit. Pressure changes are made when the target is changed by the operator and on a timed interval to ensure that target and actual down force is equal.

The set-point Down Force Margin run screen displays average margin, the row with the lowest margin, and the row with the highest margin.

Pneumatic Down Force

Control Panel

- Enter target down force in input box.
- Select up or down arrow buttons to change pneumatic down force by preset Step Value.
- Enter low down force level alarm set point and Step value in Alarms and Limits setup page.
- Select: From main run screen select and hold any SeedStar XP monitor navigation button for 4 seconds.

Down Force Margin

- Enter target down force margin based on field conditions.
- Use default high and low margin alarm values or enter custom values as desired in Alarms and Limits setup page.
- Select: From main run screen select and hold any SeedStar XP monitor navigation button for 4 seconds.