



# DRILL & PLANTER MONITOR

## OPERATION MANUAL



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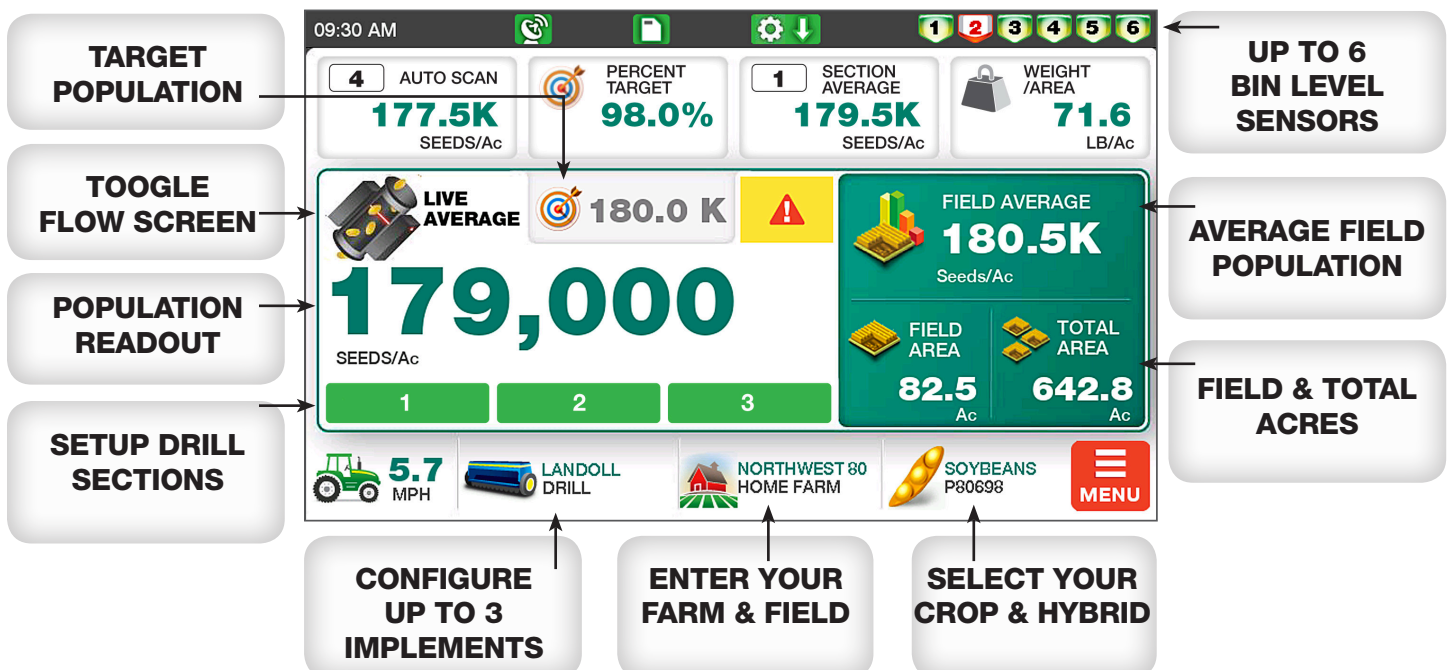
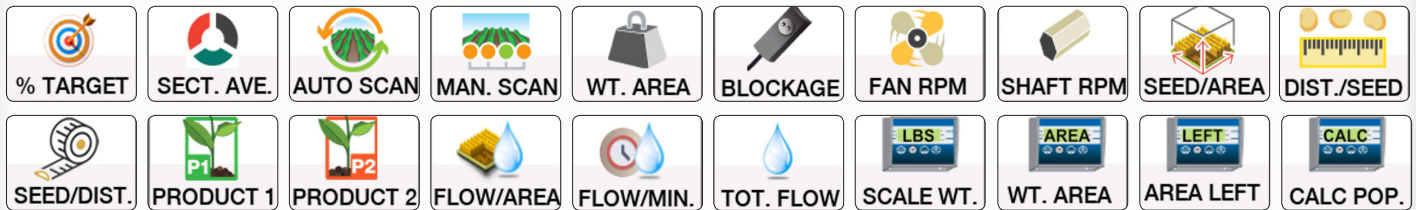
## OVERVIEW

The Loup Elite Monitor is a full featured display designed to provide accurate population, blockage, bin level, shaft RPM and other readings for gravity drills, air seeders and planters. This manual will familiarize you with operation, calibration and technical information. All aspects and features are detailed but may not be applicable to your system configuration.

### THE LOUP ELECTRONICS ELITE MONITOR IS CAPABLE OF MONITORING AND DISPLAYING:

- Ground speed (Implement Mounted Speed Sensor, optional Radar, GPS Speed or Simulated Speed)
- Population in Seeds/Acre (up to 48 sensors can be connected)
  - Population readouts for Average Population, Auto Scan, and Section Average are available
- Target Population display along with readout for Percent of Target
- Spacing between seeds or Seeds per Foot (S/FT or IN/S)
- Six shaft speed RPM's (Left, Center & Right)
- Seed Flow (up to 192 sensors can be connected)
- Flow Summary page of all learned population and blockage sensors
- Field Area and Total Area
- Rate Calibration
- Six Hoppers (displayed as bargraph display)
- Three Fan Speed Sensors
- Sixteen Liquid Flow Sensors
- External Scale Functionality

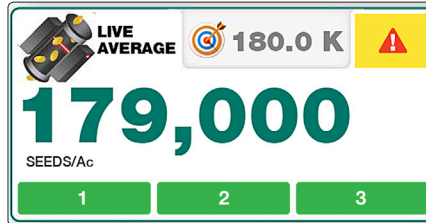
### CUSTOMIZE UP TO 4 TOP DISPLAY WINDOWS WITH THE INFORMATION YOU WANT TO SEE.



## MAIN SCREEN LAYOUT

### POPULATION DISPLAY

The primary reading for Seeds/Ac is an average of all learned population sensors.



### CROP & VARIETY SELECTION

To change the type of crop being planted, select the crop button to enter the Crop Information Screen. From here select the Crop type, Seeds Per Pound and Variety you desire. Select “Exit & Save” to apply the changes made.



CROP SELECT			
SOYBEANS	WHEAT	PEAS	RYE
CANOLA	OATS	RICE	MILO
SUNFLOWER	CORN	COVER CROP	OTHER

**Note:** The variety information is only used when Tasks/Mapping features are unlocked and population data is being logged to SD memory.

### FARM & FIELD SELECTION

To change the Farm and Field information, select this button to enter the Farm/Field screen. Enter the Farm and Field names you desire into the appropriate fields. Select “Exit & Save” to apply the changes made.



**Note:** The Farm/Field information is only used when Tasks/Mapping features are unlocked and population data is being logged to SD memory.

### IMPLEMENT SELECTION



Selecting the Implement from the Main screen will bring you directly to the **Implement Setup** screen. From here you may edit the implement type, make and details such as width or section info. You may also select a different implement entirely using the “My Saved Implements” button.

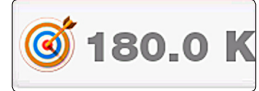
### SPEED & ICON SELECTION

Implement Speed will display in lower left corner of the display. Select the speed icon if you'd like to change the color of the graphic displayed.



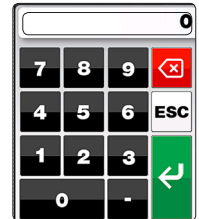
### SETTING A TARGET RATE

To set your Target Rate, select the window for target icon in the center of the screen and from the pop-up enter the desired target in seeds/acre.



Rates of 999,999 or less will appear in thousands (180,000 displays as 180.0K).

Rates of 1,000,000 or more will appear in millions (1,200,000 displays as 1.2 M).



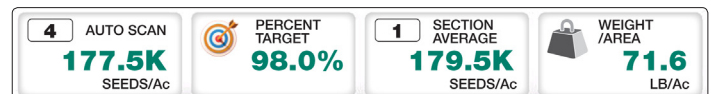
### CLEARING FIELD & TOTAL ACRES

To clear either the Total or Field acres, select the value on screen you wish to clear and select the “Confirm” button from the pop-up message.

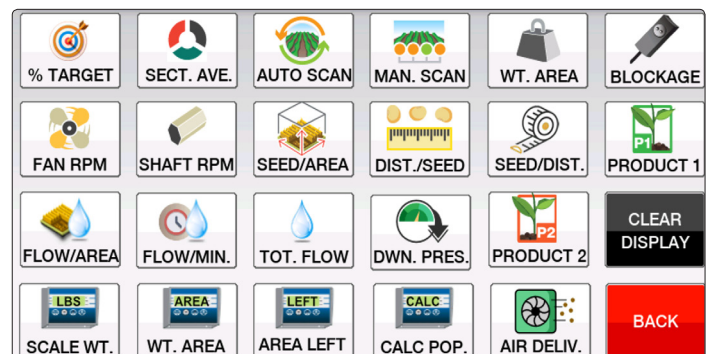


**Note:** These cannot be reset when a task is logging.

### TOP DISPLAY SETUP



The top 4 windows on the main screen can be customized to display information you want to see. Select the window you wish to change and from the pop-up window select the readout you wish to display.


























**Note:** Some Display Options may not be available or displayed depending on how your implement is configured.



## TOP DISPLAY OPTIONS

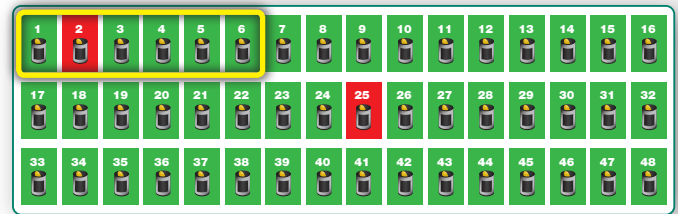
Available options for readouts to display on the top screen are as follows:

- **Seed/Distance:** Displays the Seeds/Ft information. 
- **Distance/Seed:** Displays the Distance/Seed information. 
- **Seeds/Square Area:** Displays the Seeds/Square Ft information. 
- **Weight/Acre:** Displays the LB/Acre information. Ensure the correct “Seeds Per Pound” is defined in the Crop Details. 
- **Section Average:** If sections are setup on your drill, this will scroll through and display each section average for the sensors active on that section. 
- **Auto Scan Row:** Scans through and displays population for each individual seed sensor. 
- **Manual Scan Row:** Displays population for each individual seed sensor. Manual selection using the Up and Down arrows is needed to cycle through each sensor. 
- **Blockage:** Displays the current status of blockage sensors learned to the system. If no blockages are detected status will display “Flow Open”. Conversely if any blocked runs are detect, the run number will be displayed along with a Blocked status. 
- **Fan RPM:** Displays current RPM of any Fan sensors learned to the system. 
- **% of Target:** Displays the percentage of the current seeds/acre reading in relation to the entered Target Population. 
- **Shaft RPM:** Displays current RPM of any Shaft sensors learned to the system. 
- **Fertilizer:** Displays status of sensors assigned to monitoring fertilizer flow. See Section 5.8 for more information. 
- **Product 1/2:** If using Dual Products when seeding Covercrop, autoscans between sensors associated with Product 1 or 2. See Section 5.8 for more information.  
- **Liquid Flow/Area:** When enabled from implement settings, displays liquid flow per acres. 
- **Liquid Flow/Min:** Displays liquid flow per minute. 
- **Total Liquid Flow:** Displays total liquid flow 

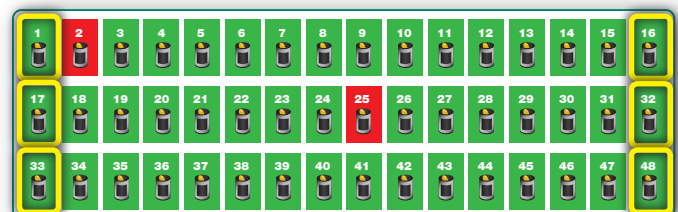
- **Scale Weight:** When using an external scale head, displays total weight from the scale indicator. 
- **Scale Weight/Area:** Displays a Weight/Area reading when using an external scale indicator. 
- **Scale Area Left:** Displays remaining area left based on weight readings from external scale indicator. 
- **Scale Calculated Population:** Displays calculated Seeds/Acre based on weight readings from external scale indicator. 
- **Down Pressure:** Displays Down Pressure (PSI) value when using a down pressure sensor. 
- **Air Seed Delivery (ASD):** Displays ASD status when using certain Kinze Planters. 

## FLOW SCREEN

By selecting the Sensor Icon in the upper left of the main screen, the Elite will toggle to a Flow Screen. This screen gives a flow status overview of all Population and Blockage sensors learned.

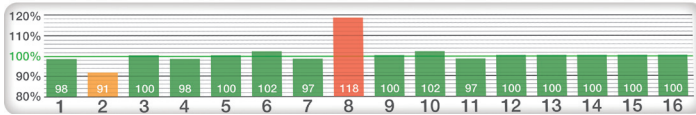


**Note:** Population sensors are displayed according to the Row Number they were learned as. Ex: If 6 population sensors are learned as rows 1-6 (see above), they will show as the first 6 icons with blockage sensors following. Alternatively if they are learned as rows 1, 16, 17, 32, 33, and 48 (see below); they will appear as such on the Flow Screen.



To return to the main screen, tap anywhere on the screen.

## PLANTER BAR GRAPH



If the current implement is set to a **Planter**, the top left window will display a bar graph for the number of sensors learned. Depending on the number of sensors learned, this window will occupy either 1/2, 3/4 or the full width of the top screen.

## ALARMS



### ACTIVE ALARMS

#### GENERAL ALARMS:

LIFT SWITCH OPEN  
ROW 12 HIGH SEED RATE  
SHAFT 1,2,3,4,5,6 HIGH RPM

#### COMM ERRORS:

SHAFT 1,2,3,4,5,6 COMM ERROR  
SPEED  
BIN 1,2,3,4,5,6  
FAN 1,2,3  
BLOCKAGE 1  
ROW 1

When an alarm is active a popup message will display the alarm. You may choose to either clear that single alarm or clear all alarms if multiple are active to clear the popup and silence the display.

A flashing yellow button will display in the center of the screen to signify alarm(s) are currently active. Select this icon to go to the Alarms Page which will outline all current alarms active on the console. The flashing indicator will not disappear until all alarms have been resolved.

## BASIC OPERATING PROCEDURE

1. **Ensure the correct Implement type** (gravity drill, air seeder or planter) is selected on-screen.



2. **Select the correct Crop** on-screen. If you know the Seeds/Pound you may also enter that information for the current crop.

SELECTED CROP

**SOYBEANS**

SEEDS PER POUND

**2650**

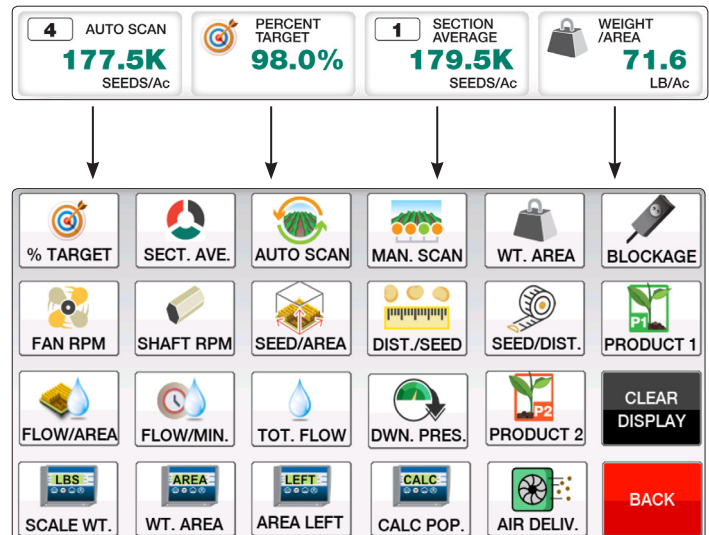
CROP VARIETY

**P89561**

3. **Enter the target population (optional)** in the middle of the screen next to the target icon. For example if planting soybeans at 180k, enter "180,000" in the target window. If planting wheat at 1.5 million seeds/acre enter "1,500,000".



4. **Set the desired readouts** for the 4 display windows at the top of the screen. You may choose between % Target, Section Average, Auto Scan Rows, Manual Scan Rows, Seeds per Square area, Blockage, Fan RPM, Shaft RPM, Seeds per Distance, Distance per seed, Weight per Area or leave the display blank.



**NOTE: If the Elite system is a newly purchased kit from Loup Electronics, all Implement Settings and Sensor Installation has been pre-configured by Loup Electronics. You may skip this section.**

Select the Implement Icon at the bottom of the screen to enter the **Implement Setup** page. From this screen you can define what type of Implement you are using, implement width and individual section widths. Up to three separate implements can be saved.



### IMPLEMENT SETUP

IMPLEMENT: **DRILL**

MAKE: **CRUSTBUSTER**

WIDTH & SECTION SETUP

MY SAVED IMPLEMENTS

BACK

1. Select the type of implement you are using (**Gravity Drill, Air Seeder or Planter**).
2. Select the appropriate **Implement Make**.

## WIDTH & SECTION SETUP

SECTION SETUP

SECTION 1 DETAILS:

LAST ROW NUMBER:

SECTION WIDTH:

ROW 12

12FT

PREVIOUS SECTION

NEXT SECTION

BACK

SAVE & EXIT

TOTAL SECTIONS: 6

-

+

TOTAL WIDTH: 30FT

ROW SPACING: 7.5 IN

1. Select the number of sections (up to 12 possible)
2. Starting with Section 1, enter the **last population sensor number** installed on that section followed by the **width** for that section.

**Example:** If installing 6 population sensors on a 30ft, 3-section folding drill, the last row number for section 1 would be "Row 2", section 2 would be "Row 4" and section 3 as "Row 6". Each Section Width would be 10ft.

**Note:** The Row Number here is referring the number assigned by the Loup Elite monitor when sensor was learned. Row numbers can be learned in different ways such as sequential order (1-6) or to match the physical row number on a drill (1, 16, 17, 32, 33, and 48).

SECTION 1 DETAILS:

LAST ROW NUMBER:

SECTION WIDTH:

ROW 12

12FT

PREVIOUS SECTION

NEXT SECTION

3. Select the "Next Section" button to scroll to the next section. Repeat steps 1 & 2. Each Section width will contribute to the overall implement width.

When all sections are setup, check that the total width is correct and Select "Exit & Save".

## CHANGING IMPLEMENTS

Up to three separate implements can be selected on the Loup Elite. Unless pre-configured by Loup, all three implements will default as gravity drills. To switch implements simply select the "My Saved Implements" button and select the implement number you'd like. From here you can configure the type of implement, make, width and so forth. All implement settings are automatically saved as they are made.



MY SAVED IMPLEMENTS

1 CRUSTBUSTER 30FT DRILL	2 GREAT PLAINS 15FT DRILL	3 CASE 15FT PLANTER
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**Note:** When selecting a different implement, the Elite console needs to be restarted.

## INSTALL/SETUP MENU

Located by selecting "Menu" and "Install Setup". The Install/Setup Menu is used to Learn a New system, Add new sensors to your existing system or Remove specific sensors from your implement.



## LEARN NEW SYSTEM

Select "Learn New System" if your monitor did not come pre-programmed or you wish to relearn all sensors.



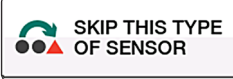
1. Start by unplugging all sensors on the implement and then selecting "Learn New System". A popup will warn you that all current sensors will be overwritten. Select "Yes, Learn New System".
2. The monitor will prompt you to Plug In Fbus sensors (all fbus sensors have a 3 pin connector with white, black and green wires) in the following order. The sensor being prompted will automatically be learned upon connecting the 3 pin connector.
  1. **Speed Sensor:** Shaft mounted ground speed sensor
  2. **Lift Switch**
  3. **Rate Cal Sensor**
  4. **Population/Row Sensors:** Up to 32 sensors
  5. **Bin Level:** Up to 6 bin level sensors
  6. **Shaft Speed Sensor:** Up to 6 possible Shaft RPM Sensors
  7. **Fan:** Up to 3 Fan RPM sensors
  8. **Blockage Module:** Up to 12 Modules with 192 runs of product detection.

- It is likely your system will not be configured for the maximum possible sensors or even certain types of sensors the Loup Elite is capable of.

Use the “**Skip This Sensor**” button to advance ahead one sensor at a time.



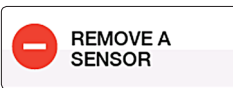
Use the “**Skip This Type of Sensor**” to advance to the next category of sensor.



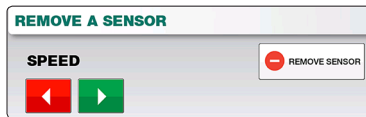
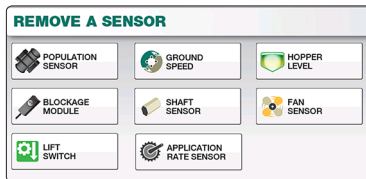
- When you’ve reached the end of the list of sensors, you will be prompted with “**Manual Learn Complete**”. Push “**Ok**” to finish.

## REMOVE A SENSOR

Select this option to remove a sensor from your existing system.



- Select the type of sensor you wish to remove.
- Use the **Left and Right Arrows** to navigate to the sensor number you wish to remove.
- Select the “**Remove Sensor**” button to complete the removal.

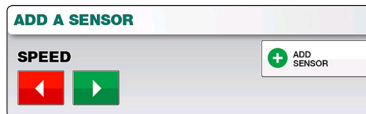
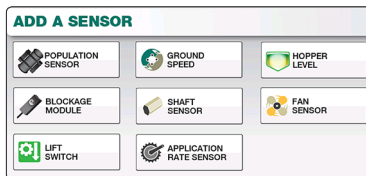


## ADD A SENSOR

Select this option to add a new sensor to your existing system.

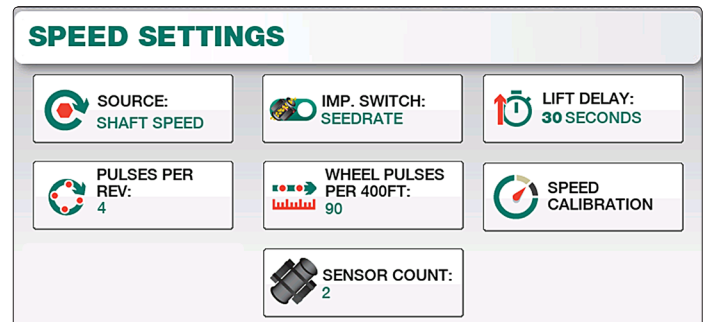


- Select the type of sensor you wish to add.
- Use the Left and Right arrow buttons to navigate to the sensor number you wish to add.
- Select the “**Add Sensor**” button to complete the sensor addition.



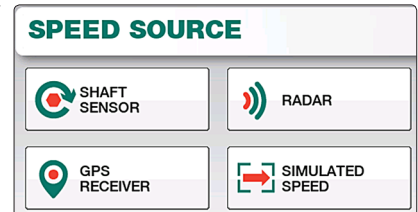
## SPEED SETTINGS

Located by selecting “**Menu**” and “**Speed Settings**”, these settings control the type of speed input being used as well as calibrating the speed displayed on the main screen.



## SPEED TYPE/SOURCE

Select the “**Source**” button to change the type of Speed Input you’d like to use. You may choose between Shaft Speed, Radar, GPS, and Simulated Speed.



## SHAFT SPEED SENSOR

Uses the shaft rotation sensor located on the drill to obtain ground speed. Unless otherwise configured this is also used as the lift switch for acres accumulation.



## RADAR SPEED

If your tractor is equipped with radar, you may select this option as your source for ground speed. Depending on your implement configuration a lift switch may be needed when using radar, this is to ensure accurate accumulation of field acres.



## GPS SPEED

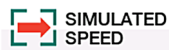
Uses a GPS receiver for your source of ground speed. Depending on your configuration a lift switch may be needed when using GPS, this is to ensure accurate accumulation of field acres.





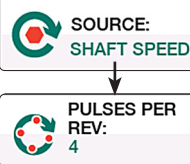
## SIMULATED SPEED

Allows you to enter a static speed into the monitor without any other speed source. For use in more unique conditions such as a GPS/Radar failure, or other troubleshooting.



## PULSES PER REVOLUTION

Available when “Shaft Speed” is selected. Pulses per Rev (Revolution) are the number of magnets the implement mounted speed sensor sees in one revolution of the shaft being monitored. For most applications this number will be 4.

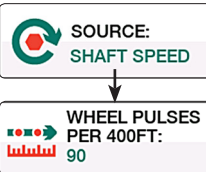


To change, enter a new number into the keypad and select “Exit & Save”.

## WHEEL PULSES PER 400FT

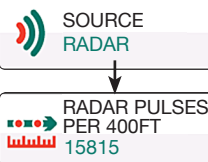
Available when “Shaft Speed” is selected. This is the ground speed calibration number for a implement mounted speed sensor.

The Default number is 90. To change, enter a new number into the keypad and select “Exit & Save”. Increasing this number will cause the monitor to show a slower MPH, decreasing it causes the MPH to increase.



## RADAR PULSES PER 400FT

Available when “Radar” source is selected. This is the ground speed calibration number for a radar speed sensor.



## IMPLEMENT SWITCH

The implement switch sensor is used for in/out of motion detection. The lift sensor is used when ground driven shaft rotation cannot be used or a variable rate drive as common on air seeders is being used.

Each button push toggles this setting between “Disabled”, “Enabled”, and “Seedrate”.

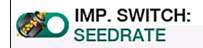


## IMPLEMENT SWITCH ON

When a “Lift Switch” sensor is learned to the monitor, toggle the “Imp. Switch” button to “Enabled”.

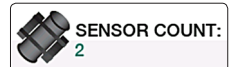


## IMPLEMENT SWITCH BY SEEDRATE



When using the “Seedrate” mode, the monitor will wait to see seed flow for a specified time across a specified number of population sensors before going in or out of motion.

Change the value for “Sensor Count” to specify how many sensors of seedflow are needed for in/out of motion.

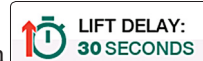


Change the value for “Seed Delay” to specify how long seedflow must be detected for in/out of motion.



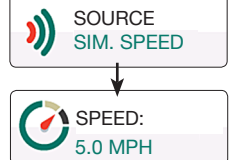
## LIFT DELAY

When enabled, the Lift Delay specifies the seconds given to make a turn. This value can range between 1 and 99 seconds.



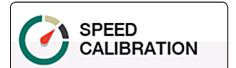
## SIMULATED SPEED

Available when “Simulated Speed” is selected as the source. Use this field to enter the static speed of your choice. The monitor will continually display this speed at all times until otherwise specified.



## SPEED CALIBRATION

All new systems require a ground speed calibration to ensure accurate population readings, accurate area totals and accurate ground speed readings. To complete the calibration, measure a course 400 ft long preferably on level ground with a start and finish point. The drill must be in the down position throughout this procedure.



### SPEED CALIBRATION

1. Measure 400ft distance.
2. Select “START CALIBRATION” and begin driving.
3. Pulses will start accumulating below.
4. Select “EXIT AND SAVE” below to complete.



### START

WHEEL PULSES RECEIVED : 0  
RADAR PULSES RECEIVED : 0



**Note:** During the calibration the monitor is looking for the number of pulses produced from the drill mounted sensor or in the case of radar, the number of radar pulses.

1. Select the “Start Calibration” button to begin.



- As you drive the 400ft distance, pulses for both Wheel Pulses and/or Radar Pulses will begin accumulating on-screen.
- When you've reached the end of the 400ft distance, select "Exit & Save" to complete the calibration procedure. Depending on which "Speed Source" is selected, the monitor will store this value into either the "Wheel Pulses Per 400ft" or "Radar Pulses Per 400ft" area.

## POPULATION AND RATE SETTINGS

Located by selecting "Menu" and "Population & Rate Settings", this screen is used to setup High & Low Population Alarms, Row Spacing, Population adjustments and sensor sensitivity settings.



### HIGH ALARM

The High Alarm point is set as a reference point for the population alarm. If the seed population goes above this designated point, an alarm will sound.



**Range = 0 to 9,999,999** (Must be at least 1 point above the Low Alarm)

**Default = 500,000 Seeds per Acre**

### LOW ALARM

The Low Alarm point is set as a reference point for the population alarm. If the population drops below this designated point, an alarm will sound.



**Range = 0 to 9,999,999** (Must be at least 1 point below the High Alarm)

**Default = 50,000 Seeds per Acre**

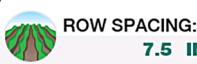
### POPULATION ADJUST

The Population Adjust setting will influence your population by a set percentage. Typically used when planting small grains such as wheat. Contact Loup Electronics for further assistance with the Population Adjustment.



### ROW SPACING

Defines the row spacing of your implement. To change select the "Row Spacing" button and enter the desired row spacing number.



## RATE CALIBRATION

The Rate Calibration sensor is an optional add-on used to help initially calibrate your drill. This is an external kit that can be moved from section to section to calibrate all sections. You must have the correct rate calibration number given to you by Loup Electronics. There are 4 unique Drive numbers to calculate different rates as you see fit.

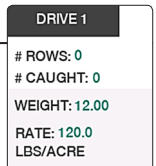


### RATE CALIBRATION

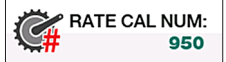


### RATE CAL PROCEDURE:

- Enter the number of rows being caught.
- Press the "Prime Meter" button and begin turning the main drive wheel until this indicator changes to "Start Cal".
- Turn the main drive wheel over 10 times, weigh the material and enter the weight into the corresponding drive number.
- If the rate is not correct, make an adjustment and run the calibration again.



### RATE CAL NUMBER



If using Rate Calibration Sensors, use this number to adjust the calibration factor for these sensors. A PIN number (7131) is required in order to change this number.

## SEED SENSITIVITY

The Seed Sensitivity setting affects the smoothing rate at which the monitor displays seed rate. The type of implement you are using affects the type of sensitivity you should be using. For drills and air seeders its recommended to use either settings "Low" or "Med Low". For planters its recommended to use either "Med High" or "High". Once changed, select "Exit & Save" for the change to take effect.



### SEED FILTER

The Seed Filter is defaulted to "Elite" but can also be set to Legacy mode or Off. Its recommended this stay on "Elite" unless otherwise specified by Loup Electronics.



## SENSOR SETUP

### ASSIGN FLOW ONLY ROWS



If specific population sensors are being used for monitoring flow only, these sensors can be defined as such through the “Sensor Setup” menu. To get to this screen select “Menu - Population & Rate Settings - Sensor Setup”.

The Sensor Setup screen will display all current population sensors learned to the system. Simply select the Row number to toggle it between being **On (Green)**, **Flow (Orange)**, or **Off (Red)**. All runs that are defined as flow will not be factored into the Live Population reading. You may also select the “Flow” option from the selectables and display flow information the top screen.

### COVERCROP/DUAL PRODUCT SETUP

CROP DETAILS

☒ DUAL PRODUCT: ON

SELECTED CROP  
**COVERCROP**

CROP VARIETY  
**P89561**

ASSIGN SENSORS TO PRODUCT

SEEDS PER POUND

**18242**

LBS/ACRE CALIBRATION

COUNT

**003487**

RESET

SAMPLE WEIGHT (LBS)

**0.191**

SET

The Dual Product feature can be enabled when planting Covercrop. With Covercrop selected on the Crop Details screen, toggle the “Dual Product” option to “ON” to bring up the dual product settings.



**Note: The Dual Product feature is only available when Covercrop is selected. All other crops can be toggled between seed and fertilizer runs within the Sensor Setup page.**

You will now be given two product windows in which you can define product names and Seeds/Pound information. Simply select the buttons for Product name and Seeds/lb to enter the appropriate names.

PRODUCT 1

ABCDEF GHIJKL

SEEDS PER LB

**15000**

PRODUCT 2

ABCDEF GHIJKL

SEEDS PER LB

**15000**

### ASSIGN SENSORS TO PRODUCT

To define which of your learned population sensors are set to Product 1 or Product 2, select the “Assign Sensors to Product” button. The following page will allow you to toggle between each product you’ve defined.



## COVERCROP LB/AC CALIBRATION

The LBS/Acre Calibration allows you to determine the Seeds/LB for various covercrop mixtures. This process involved catching a sample of seed and weighing that sample.

### CALIBRATION STEPS:

1. Calibration is done on the first population sensor learned to the Elite’s memory. Situate a bag or container to catch seed from this sensor.

**Note: If calibrating with Dual Products ON, use the first population sensor defined as Product 1 and Product 2.**

2. Select “Covercrop” from the Crop Selection Page. At the bottom ensure the “Count” is reset to 0.

**Note: If calibrating with Dual Products ON, you will have two separate calibration windows for each product.**

3. Meter a sample of seed into the container. Be sure to meter this sample at your normal tractor speed. As you travel, the COUNT window will increase for the number of seeds detected.
4. Weigh the sample of seed and enter that weight on the “Sample Weight” window. Select “Set” to apply the calibration. You’ll notice when setting the rate, the “Seeds Per Pound” automatically change based on the sample weight.

CROP DETAILS

☒ DUAL PRODUCT: ON

SELECTED CROP  
**COVERCROP**

CROP VARIETY  
**P89561**

ASSIGN SENSORS TO PRODUCT

SEEDS PER POUND

**18242**

LBS/ACRE CALIBRATION

COUNT

**003487**

RESET

SAMPLE WEIGHT (LBS)

**0.191**

SET

While on this screen, run a sample of seed through Sensor 1 on your implement. Enter the weight of this sample above and select “SET RATE”.

EXIT & SAVE

At this point, you can use the “Weight/Area” selectable on the main operate screen to see your application rate.



## BLOCKAGE SETTINGS

Located by selecting “Menu” and “Blockage Settings”, this screen is used to define how many runs are per module, individual runs on/off, blockage thresholds and more.



BLOCKAGE SETTINGS

### BLOCKAGE SETTINGS



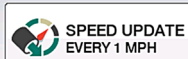
RUNS PER MODULE



INDIVIDUAL RUNS SETUP



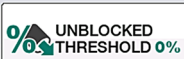
BLOCKAGE THRESHOLD 0%



SPEED UPDATE EVERY 1 MPH



RESET MODULES



UNBLOCKED THRESHOLD 0%

## RUNS PER MODULE

The **Runs Per Module** screen is used to define the number Blockage Sensors that are connected to each Module. Simply select the module you wish to change and enter the appropriate number of runs associated with it.



RUNS PER MODULE

The number of modules you can edit on this screen depends on the number of modules learned for your particular drill, the maximum number of modules being 12.

Default Runs Per Module = 16

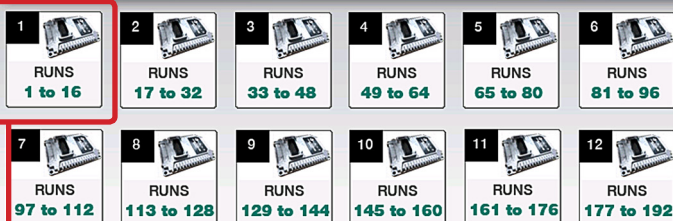
## INDIVIDUAL RUNS SETUP

The **Individual Runs Setup** screen allows you to turn specific blockage sensors associated with a module On or Off. Select the module you wish to adjust and from the following screen toggle the sensors of your choice to On or Off. When finished select “Exit & Save”.



RUNS PER MODULE

### INDIVIDUAL RUNS ON/OFF



### TURN ON/OFF RUNS FOR MODULE



## BLOCKAGE THRESHOLD

The Blockage Threshold defines the limit of product flow the blockage sensors need to see before an alarm is activated.

Lowering this number will require less product before an alarm sounds while a higher number requires more product prior to an alarm.



BLOCKAGE THRESHOLD 0%

## UNBLOCKED THRESHOLD

The Unblocked Threshold is not changable and is automatically linked to the Blockage Threshold.



UNBLOCKED THRESHOLD 0%

## SPEED UPDATE

The Speed Update toggles between “Auto”, “1 MPH”, and “2 MPH”. Under the “Auto” setting, blockage is calculated in accordance to the current speed. Leave this setting as “Auto” unless otherwise specified by Loup Electronics.



SPEED UPDATE EVERY 1 MPH

## RESET MODULES

Resets all currently learned blockage modules to their default factory settings.



RESET MODULES

## SHAFT & FAN SETTINGS

Shaft & Fan Settings is located by selecting “Menu” and “Shaft & Fan Settings”, this menu can only be accessed if at least one shaft or fan sensor is learned to the monitor’s memory.



SHAFT & FAN SETTINGS

### SHAFT & FAN SETTINGS

#### SHAFT 1



PULSES PER 4



HIGH RPM: 5,000



LOW RPM: 2,500

Within this menu, use the Left and Right arrow buttons to navigate to the Shaft or Fan sensor you wish to modify. You can then update the Pulses per Revolution, High RPM and Low RPM alarm points for each sensor. Select “Exit & Save” to apply any changes made.

## GPS SETTINGS

Located by selecting “Menu” and “GPS Settings” this menu defines any GPS offsets, Baudrate, Speed corrections or the current GPS status.



GPS SETTINGS



## GPS SETTINGS

## GPS OFFSETS

The GPS Offsets screen is used to modify the forward/rearward and left/right position of the GPS receiver. Depending on what direction you need to offset, enter either a positive or negative value in inches into the appropriate field.



### Forward Offset:

Positive (+)  
Number

### Rearward Offset:

Negative (-) Number

### Right Offset:

Positive (+) Number

### Left Offset:

Negative (-) Number

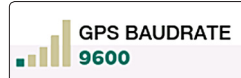
## GPS STATUS

The GPS Status screen gives a diagnostics report of the current Latitude, Longitude, Number of Sats connected and the Type/Quality of the GPS Fix. If the GPS Icon on the top of screen is Yellow or Red, check this status page to help identify GPS signal issues.



## GPS BAUDRATE

Sets the baudrate at which the console communicates with the GPS receiver you are using. Available speeds are 4800, 9600, 19200, 38400, and 115200.



## SELECT GPS BAUDRATE

## GPS SPEED CORRECTION

If your GPS is displaying an incorrect speed reading, use this screen to add the desired correction in MPH.



**0.4 MPH**



## TASKS & LOGGING

The Tasks screen is located by selecting “Menu” and “Tasks & Logging”.

**Note: This feature is not enabled by default. To unlock this feature please contact Loup Electronics.**

## ENTERING A TASK NAME

Begin a new task by first entering the task name you desire. Select the task name button and using the keyboard enter the name you wish followed by the enter key.

## FARM & FIELD NAMES

The current Farm and Field name associated with the task your starting is displayed below the task name. To change select the “Edit” button next to the Farm and Field names. This will bring you to the Farm and Field information screen where you can change each value. Select “Exit & Save” when complete to return to the Tasks screen.

## CROP, SEEDS/LB, & VARIETY

The current Crop, Seeds/LB and Variety are displayed as part of the current task as well. To change select the “Edit” button next to this information. This will bring you to the Crop information screen where you can change these values. Select “Exit & Save” to return to the Tasks screen.

**CROP: SOYBEANS**  
**SEEDS / LB: 2650**  
**VARIETY: P89561**

**CROP DETAILS**

SELECTED CROP  
**SOYBEANS**

SEEDS PER POUND  
**2650**

CROP VARIETY  
**P89561**

## STARTING A TASK

When the **Task Name**, **Farm**, **Field** and **Crop information** is entered correctly, push the “Start Task” button to begin logging the task. Once started you should see a **SD Card icon** as well as **GPS icon** at the top of the screen to confirm the task is currently running and saving to your SD card.



**Note: If no SD card is present, insert the SD card on the right side of the monitor, securely close side-cover and cycle the power to the Elite monitor.**

## STOPPING A TASK

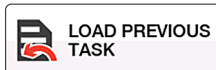
Select the “Stop Task” button to stop the current log.



**Note: Its critical the task be stopped prior to removing the SD card or turning off the monitor.**

## RESUMING A PREVIOUS TASK

If you wish to resume a previously started task, select the “Load Previous Task” button to display a list of available tasks from the SD card. Select the desired task and “Start Task” to resume logging under that task name.



**LOAD PREVIOUS TASK**

<b>TASK 4</b>	Date: 5-24-19	
Farm: <b>HOME</b>	Field: SOUTH 40	Ac:3.2
<b>TASK 3</b>	Date: 5-20-19	
Farm: <b>HOME</b>	Field: NORTHWEST	Ac:80.0
<b>TASK 2</b>	Date: 5-19-19	
Farm: <b>HOME</b>	Field: SOUTH LANE	Ac:15.3
<b>TASK 1</b>	Date: 5-18-19	
Farm: <b>HOME</b>	Field: NORTH 40	Ac:24.2

**BACK**

**Note: If the task resides on a different SD card, that card will need to be inserted before the task can be resumed.**

## EXTERNAL SCALE

If using an external scale with Loup Elite, you may turn on these features within the “Implement Setup” screen.



Toggling the “Scale Indicator” ON will open the Scale Settings page as well as 4 different selectable windows associated with a scale indicator.



## SCALE CALCULATIONS

Calculations for the current **Scale Weight**, **Weight/Area**, **Area Left**, and **Calculated Population** are only done when the minimum area (.5 Ac. default) has been met and the implement is out of motion (either raised or below 2.0 MPH).

## SCALE SETTINGS

To enter the scale settings, select “Menu” - “Scale Settings”. Within this page you can define the minimum area to cover before calculations begin. You may also reset any weight calculations that have been done.

**SCALE SETTINGS**

CALC. STARTS AFTER: **0.5** AC

**RESET WEIGHT CALCULATIONS**

## LIQUID FLOW

If using Liquid Flow sensors with Elite, you first need to enable this feature inside “Implement Setup” by turning



“Liquid Flow” ON. Once enabled you can access the Liquid Flow Settings and Liquid Flow selectable displays for **Flow/Area**, **Flow/Min**, and **Total Flow** on the main screen.



## LIQUID FLOW SETTINGS

To enter the Liquid Flow Settings, select “Menu” - “Liquid Flow Settings”. Inside the Liquid Flow Settings you can define the Pulses per gallon, Target Rate, High Alarm, and Low Alarm.

**LIQUID FLOW SETTINGS**

METER CAL: **4** pulses/gal

TARGET RATE: **15** gal/Ac

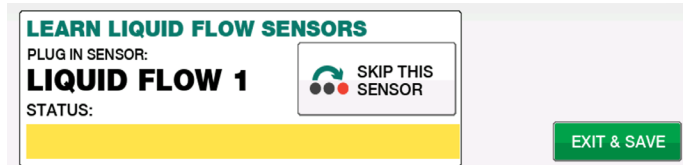
HIGH ALARM: **20**

RE-LEARN ALL FLOW SENSORS

LOW ALARM: **10**

## LEARNING LIQUID FLOW SENSORS

If you need to add Liquid Flow Sensors to the Elite console, you may do so on this page using the “**Learn Liquid Flow Sensors**” window. Simply plug in the first Liquid Flow Sensor and the Elite console will detect that sensor and increment to Liquid Flow 2, 3, and so on. Selecting “**Re-Learn All Flow Sensors**” will remove all Liquid Flow sensors from Elite’s memory.



Alternatively you may also Add or Remove Liquid Flow sensors through the “**Install/Setup**” menu and selecting “**Add a Sensor**” or “**Remove a Sensor**”.

## DOWN PRESSURE

If using a Down Pressure sensor, you first need to enable this feature inside “**Implement Setup**” by turning “**Down Pressure**” ON. Once enabled you can access the Down Pressure selectable display on the main screen.



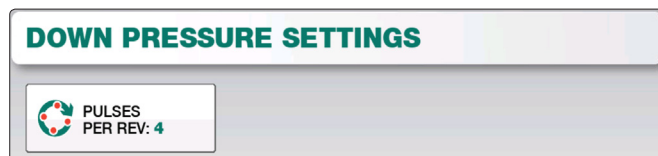
## LEARNING DOWN PRESSURE SENSOR

The Down Pressure Sensor can be Learned by selecting “**Menu**” - “**Install/Setup**” - “**Add a Sensor**” and select “**Down Pressure Sensor**”. On the Add a Sensor page, plug in the Down Pressure Sensor and select the “**Add Sensor**” button to complete the install.

Alternatively you can also Remove the Down Pressure Sensor through this menu.

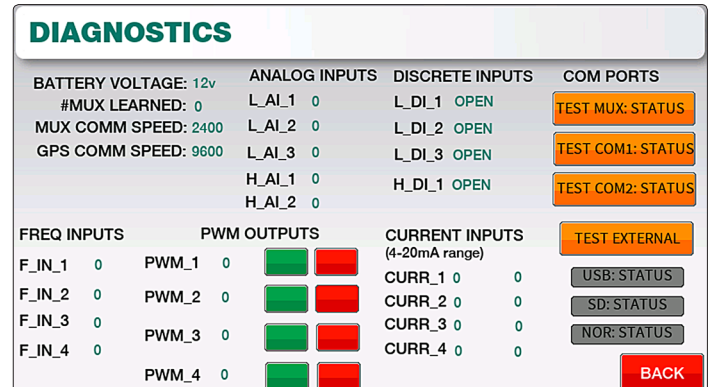
## DOWN PRESSURE PULSES PER REV

Pulses per Rev can be changed within the Down Pressure Settings page by selecting “**Menu**” - “**Down Pressure Settings**”

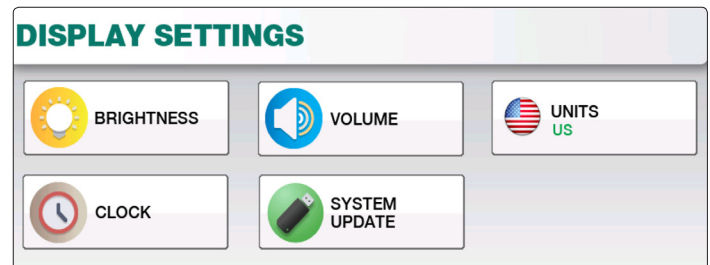


## DIAGNOSTICS

The Diagnostics screen can help in identifying issues with sensors, harnessing or other items. Status reports for Battery Voltage, Sensors Learned, MUX Communication speed and GPS Communication speed are displayed. Contact Loup Electronics if you need technical support.



## DISPLAY SETTINGS



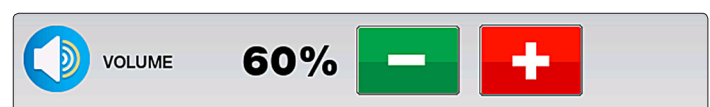
### BRIGHTNESS

Use the Plus or Minus keys to increase or decrease the brightness of the screen or the keypad backlight.



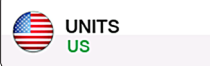
### VOLUME

Use the Plus or Minus keys to increase or decrease the volume to the desired level. An audible alarm will sound with each increment.



## UNITS

Toggles between US (feet) or Metric (meters) units.



## DATE & TIME

To set the time, simply select the related buttons for Month, Day, Year, Hour and Minute and enter the appropriate value into each field. Lastly toggle the time between AM or PM and push “Save” to complete.



DATE

MONTH

DAY

YEAR

11

22

2017

TIME

HOUR

MIN.

AM

12

59

## SYSTEM UPDATE

The system update screen is used to update to newer versions of software, unlock additional functions, or reset to factory default settings.



SYSTEM UPDATES

APP VER:  
UNIQ ID:

SOFTWARE UPDATE

UNLOCK TASKS

SWITCH TO YIELD APP

UNLOCK YIELD APP

FACTORY RESET

UNLOCK RESET

BACK

HOME

## SOFTWARE UPDATE

The **Update App** button is used to perform a system update to newer version of software. To update follow the following steps:



- On a USB drive, create a folder titled “EliteUpdate” on the root level of the USB. Within this folder place the update file from Loup Electronics, this should appear as a .srec file format.
- Insert USB into the Elite console and select the “Update App” button. From the popup window select the version you wish to update, newest software versions will appear at the top of the window.
- Allow the application to load into the console and when finished, cycle power to the console. The update will finish installation upon startup.
- Ensure the newest software is updated by selecting the “MENU” button and checking the “APP VER” number in the upper right corner.

## TASKS/LOGGING UNLOCK

If you wish to unlock the ability to log field maps call Loup Electronics for the unlock code required for this feature.



## YIELD MONITORING UNLOCK

Loup Elite can be used in both seeding and harvest applications. Contact Loup Electronics for the unlock code for unlocking the yield monitoring application.



## FACTORY RESET

Selecting this will reset all settings back to Factory Default. All existing implements and sensors will be removed from memory and need to be reinstalled if choosing to reset the console.





## NOTES

## NOTES

[illegible]





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1-877-489-5687