

All Rows
Displays the planter average for the four display items: Population, Spacing Quality, Singulation, and Skips and Doubles.

Population
Displays the average population for the planter, or selected sections of the planter, along with the highest and lowest population row.

Population	32000
High Row:	1: 32000
Low Row:	1: 32000

Spacing Quality
Displays the average spacing quality for the planter, or selected sections of the planter. Spacing quality is a measure of the percent of seeds being properly placed so that the spacing is as expected in the seed trench.

Spacing Quality:	95.5 %
Seed Spacing:	6.3 in

Home button

Map View button

Advanced Seed Monitoring button
Press button to view Planter Performance screen or Row Performance screen.

Planter Performance screen
Screen Display Information for All Rows

Hydraulic Drive
Displays the drive status, drive RPM, and target population for the hydraulic drive. There can be up to three displayed. Pressing the hydraulic drive channel will show the average of that section of the planter for the four display items at the bottom of the screen.

DKC53-45	59 rpm
	32000 sds/ac

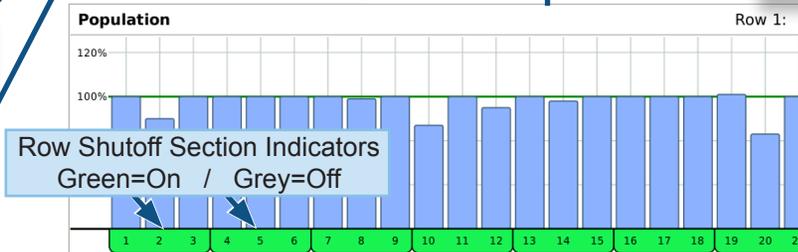
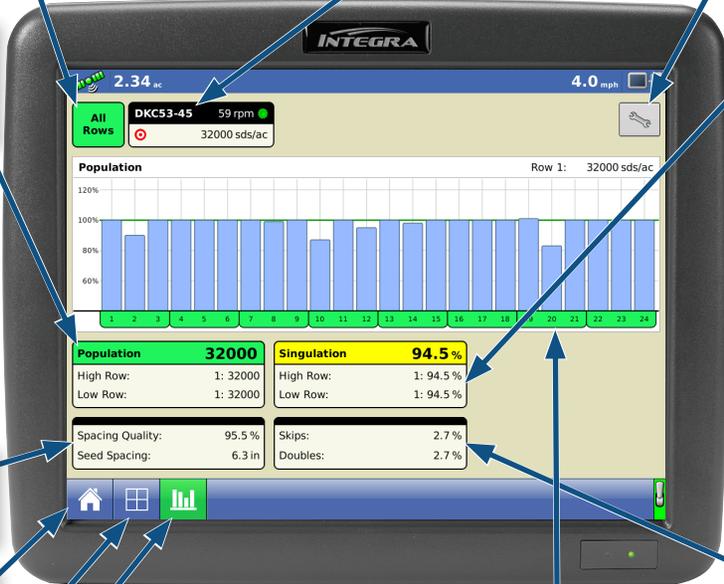
Seed Monitor Setup
Pressing this button brings up Seed Monitor Options screen.

Singulation
Displays the average Singulation for the planter, or selected sections of the planter, along with the highest and lowest rows. Singulation is a measure of the percent of seeds being properly metered so that one and only one seed drops from each seed cell of the seed meter.

Singulation	94.5 %
High Row:	1: 94.5 %
Low Row:	1: 94.5 %

Skips and Doubles
Displays the average skips and doubles for the planter or selected sections of the planter. Skips are a measure of the percentage of seed expected to be planted but that do not plant due to a seed not being dropped by the seed meter. Doubles are a measure of the percentage of seed expected to be planted individually but instead two or more are dropped by the seed meter.

Skips:	2.7 %
Doubles:	2.7 %



Bar Graph
Displays population, singulation, spacing quality, skips, and doubles, as selected by the operator. Pressing on the desired population, singulation, or spacing will select the corresponding bar graph.

Row Performance screen

The Row Performance screen displays information on specific rows.



Press Advanced Seed Monitoring button to view Advance Seed Monitoring screen with seed trench.

Row Indicator
THE USER CAN TOGGLE THROUGH THE ROWS USING THE ARROW BUTTONS.

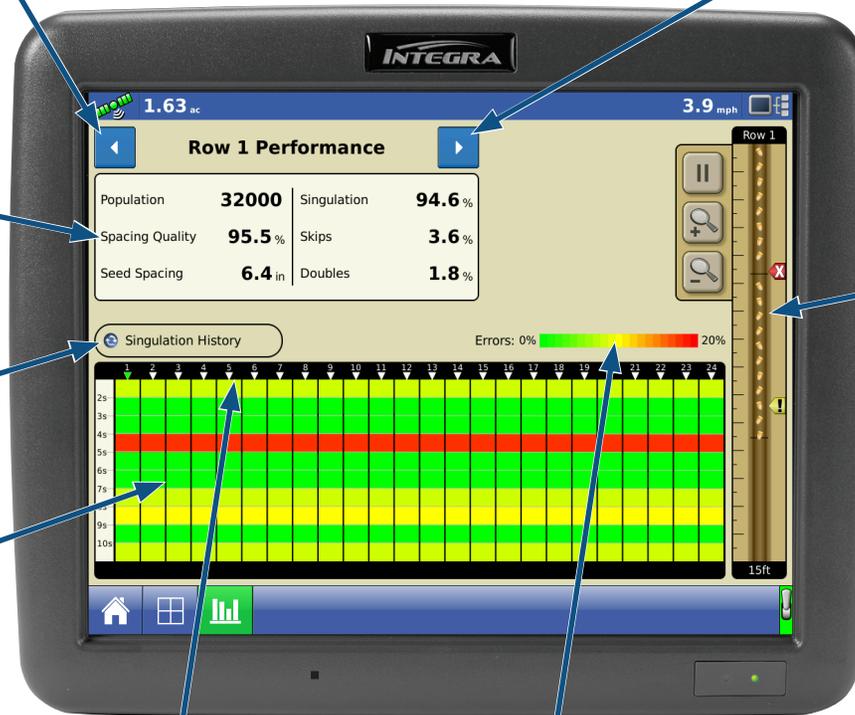
Population
Spacing Quality
Seed Spacing
Singulation
Skips
Doubles
for selected row

Singulation History/
Spacing Quality History
toggle

The Singulation History/
Spacing Quality History
bar graph gives a 10
second rolling history for
each row.



The user can toggle to a row by selecting
the row on the history graph.



ERRORS SCALE

Virtual Seed Trench

The virtual seed trench shows the placement of each seed of a problematic row to help determine if the problem is in the seed meter or seed tube. The yellow and red indicators show where there are seeding errors. The display does not log this information

Play/Resume button

Pause button

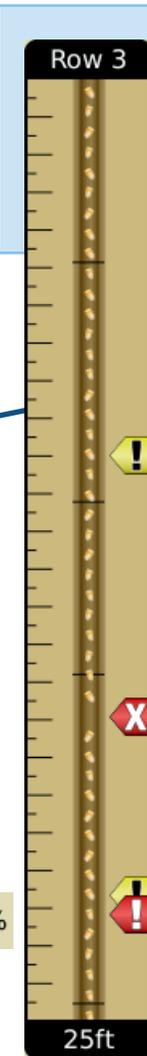
Zoom In button

Zoom Out button

Double - two or more seeds
planted at once

Skip - a seed was not planted
as expected

Poor Spacing - a single seed
was planted
but close to
another



Seed Monitor Options screen

The Seed Monitor Options screen adjust Seed Tube Monitor Module alarm thresholds.



Pressing this button, on the Planter Performance screen, brings up Seed Monitor Options screen.

Gain shows the population adjust value used to adjust the population if the seed tube is not sensing the actual seed population.

The screenshot shows the 'Seed Monitor Options' screen with the following settings:

- Gain:** 1
- Advanced:**
 - Thresholds: (button)
 - Singulation Alarm: 98.5 %
 - Spacing Alarm: 93 %
- Alarms:** Ignore seed alarms when row clutches turn off

For the correct Gain setting for your operation, please refer to your planter's operator manual. For Corn Gain values should be set to 1.

Note: Gain setting is not crop specific.

- Advanced Thresholds
 - Double Seed threshold
 - Poor Spacing threshold
- Singulation Alarm
- Spacing Alarm

Ignore seed alarms when row clutches turned off check box

Table View tab shows seeds per acre and seeds per second for each row. (Generally used for diagnostics)

The screenshot shows the 'Table View' tab with the following data:

Seed Sensors			
	sds/sec	sds/ac	
14	11	31986	▲
15	11	31986	
16	11	31986	
17	11	31986	
18	11	31986	
19	11	31986	
20	11	31986	
21	11	31986	
22	11	31986	
23	11	31986	
24	11	31986	▼

Seed Monitor Alarms screen

Press the Alarm button on the Seed Monitor Option screen, above, to access the Seed Monitor Alarms screen.

The screenshot shows the 'Seed Monitor Alarms' screen with the following data and controls:

Row	Low	High	
1	50%	150%	High
2	50%	150%	Low
3	50%	150%	Disable High
4	50%	150%	Disable Low
5	50%	150%	Select All
6	50%	150%	
7	50%	150%	
8	50%	150%	

Buttons: High, Low, Disable High, Disable Low, Select All, [Green Checkmark], [Red X]

High and Low buttons assign a percentage of error that will trigger the rate alarm.

The Disable High and Disable Low buttons deactivate the respective high or low rate alarms.

The Select All button selects all rows so that you may change the alarm threshold for the entire group.

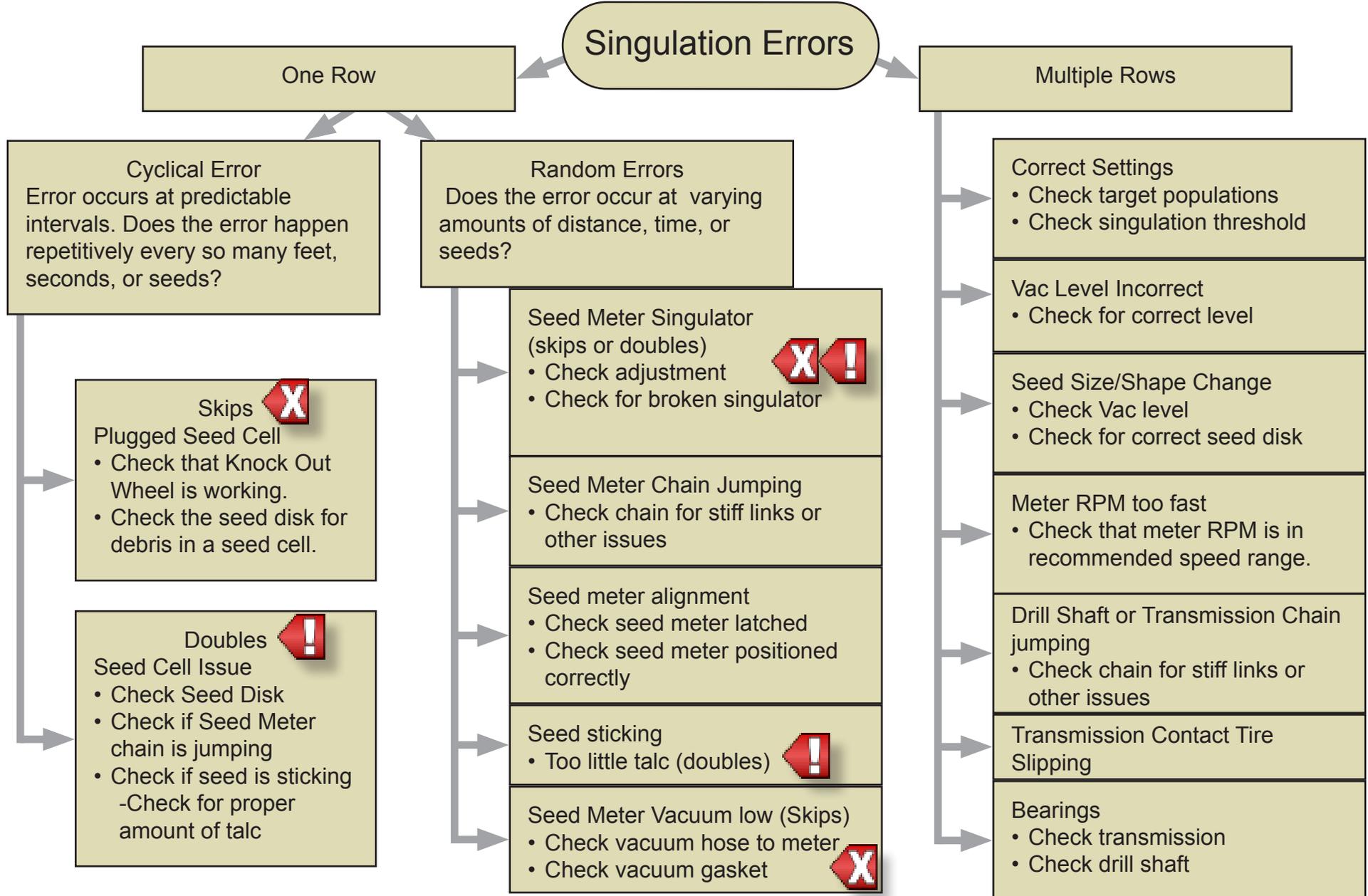


Advanced Seed Monitoring

ASM Recommended Thresholds

Row Spacing									Dbls Threshold	Spacing Threshold
15	18	20	22	28	30	36	38	40		
139,392	116,160	104,544	95,040	74,674	69,696	58,080	55,023	52,272	1.5	2.5
119,479	99,566	89,609	81,463	64,007	59,739	49,783	47,163	44,805	1.5	2.5
104,544	87,120	78,408	71,280	56,006	52,272	43,560	41,267	39,204	1.7	2.5
92,928	77,440	69,696	63,360	49,783	46,464	38,720	36,682	34,848	2.0	3
83,635	69,696	62,726	57,024	44,805	41,818	34,848	33,014	31,363	2.3	3.5
76,032	63,360	57,024	51,840	40,731	38,016	31,680	30,013	28,512	2.6	4
69,696	58,080	52,272	47,520	37,337	34,848	29,040	27,512	26,136	2.9	4.5
64,335	53,612	48,251	43,865	34,465	32,167	26,806	25,395	24,126	3.2	5
59,739	49,783	44,805	40,731	32,003	29,870	24,891	23,581	22,402	3.5	5.5
55,757	46,464	41,818	38,016	29,870	27,878	23,232	22,009	20,909	3.8	6
52,272	43,560	39,204	35,640	28,003	26,136	21,780	20,634	19,602	4.1	6.5
49,197	40,998	36,898	33,544	26,356	24,599	20,499	19,420	18,449	4.5	7
46,464	38,720	34,848	31,680	24,891	23,232	19,360	18,341	17,424	4.5	7
44,019	36,682	33,014	30,013	23,581	22,009	18,341	17,376	16,507	4.5	7
41,818	34,848	31,363	28,512	22,402	20,909	17,424	16,507	15,682	4.5	7
Population										

- Singulation Alarm Threshold: 98%
- Spacing Alarm Threshold: 98%
- * The system will alert the operator with a yellow flashing box on the Planter Performance screen identifying the mis-performing function.



Spacing Quality Errors

One Row

Seed Tube
 Debris interfering in seed drop
 • Check for debris
 Tube misaligned interfering with seed drop
 • Check installed correctly
 Tube worn
 • Check for burrs or edges catching seed
 • Check for seed sensor protruding into tube

Row Unit Bounce
 • Check that row unit is adjusted correctly
 • Check if row unit is broke

Seed Meter Chain Jumping
 • Check chain for stiff links or other issues

Seed Meter Alignment
 • Check seed meter is latched
 • Check seed meter is positioned correctly

Multiple Rows

Correct Settings
 • Check target population
 • Check spacing threshold

Row unit bounce
 • Check ground speed for field conditions

Seed meter RPM too fast
 • Check meter RPM is recommended speed range

*Disclaimer to consult planter Operator's Manual when adjusting
 *Disclaimer this is for information only, consult Operator's manual or dealer for final solution