

Quick Setup Guide for IntelliAg MVT



The Quick Setup Guide assumes the Virtual Terminal, Working Set Master Module, Working Set Member Module, and all sensors have been connected and properly installed. Reference the Operator's manual for installation instructions.

STEP 1: Pre-Programming Preparation:

1. Power on vehicle via ignition switch to activate Virtual Terminal (VT). Main menu displays pre-programmed default settings.
2. If errors are detected (e.g., failed sensors, incorrect configuration) an alarm and code displays. Alarms are silenced by pressing the Alarm Cancel button . Refer to Operator's manual for troubleshooting assistance.
3. The system has two user levels. The system loads in user level 1 (operator level) at every power cycle. Access to user level 2 screens to setup constants (system configuration) requires a password available through an authorized Great Plains dealer.

STEP 2: Change Operator Level to OEM/Dealer Level

To change to Dealer level, a 6-digit password is required. Password includes the five-digit serial number found on the label of the working set master or Information screen.

1. On the Main Work screen, press the Top Menu button .
2. At the Top Menu screen, press the Next Page button .
3. Press the Information button .
4. At the Information screen, press the Password button .
5. On the Password screen, enter the 6-digit password. (Enter first digit as 2; the next five digits enter the PCM serial number taken from the PCM or Information screen (example S/N 11685)).
6. Press the OK button . "Dealer screens on" appears at the bottom of screen confirming the password and dealer screens are activated. The Lev 1 Lock button appears while in Dealer mode . Press Lev 1 Lock button to change to Operator mode.

STEP 3: Auto Configuration (identifies sensors connected to each module)

Auto config is performed at the factory, but may need to be done in the field as changes are made to the system or if options are added to the base system. Verify that the correct number of rows are assigned to the correct module and number of hoppers and pressure sensors are assigned accurately.

To Perform an Auto Configuration:

1. At the Top Menu screen, press the Module Configuration button .
2. Press Auto Config button . An hour glass indicates the system is detecting the presence of seed, pressure, or hopper sensors connected to each module and automatically assigns to the appropriate module.
3. When Auto Config completes, the number of seed rows assigned to a module and the Row MAP value automatically populates.
4. To verify proper seed row assignment, press the Top Menu button . Seed Rows button , and then the Row Assign button .

Module Configuration Screen

SERIAL NUMBER	MODULE TYPE	ADDR
✓ 11685	MT - PDC	1
✓ 10	MB2 - 18R	2
✓ 11	MB2 - 18R	3
✓ 12	MB2 - 18R	4

Seed Sensor Configuration Screen

ADDR	MODULE		ROWS	
	TYPE	#	MAP	
1	MB2 - 18R	16	1 - 16	
2	MB2 - 18R	16	17 - 32	
3	MB2 - 18R	16	33 - 48	

Above screens depict setup for 48 rows.

STEP 4: Seed Row Setup

1. At the Top Menu screen, press the Seed Rows button .
2. Enter desired values using Table A as reference.
3. Press the Top Menu button to continue setup.

TABLE A: Row Status/ Row Width Setup	Default Value/ Value to Enter	Instructions/Definitions
Row Width	15 in 35 cm	Enter row width distance in inches or cm to calculate seed rate data.
Auto Update Width	Disabled	When enabled, implement width will automatically calculate. If disabled, manually enter implement width.
Implement Width	480 in 1120 cm	Manually enter implement width in inches. or cm
On/Off Pattern	Every Row On	On/Off Pattern indicates specific row patterns to be on or off. Select pre-defined seeder All Row On pattern. For other pre-defined seeder patterns or individual row settings, reference Operator's manual.
Pop/Block Pattern	Rows 1-32 Pop Rows 33-48 Blockage	Determines which sensors are used to calculate population and those used only for blockage detection. Select pre-defined Every Row Blockage. For other pre-defined patterns, reference Operator's manual.

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STEP 5: Material Setup (Monitor Only)

Monitor Only is typically used for ground drive applications to monitor population with high and low alarms. ALL seeding control channels must be disabled and no rows assigned for this feature to work. Reference the System Configuration section in the Operator's manual for additional setup instructions.

1. Press the **Materials** button .
2. At the Materials screen, use the rotary dial to highlight one of the 16 material buttons to edit.
3. Enter desired values from **Table B**.
4. Press the **Materials** button  to add additional materials.
5. Repeat steps 2-4 to add materials.
6. Press the **Controls** button  and selected *Disabled* as the channel.
7. Press the **Top Menu** button  .
8. Press the **Seed Rows** button .
9. Press the **Row Monitor** button .
10. At the Row Monitor screen, select the desired material name. "Material Name" only appears when the channel is disabled and Monitor Only is selected. A material name is required to activate high and low population alarms.

TABLE B: Material Setup Monitor Only	Default Value/ Value to Enter	Instructions/Definitions
Matri Label	Corn TR	Material Name can be customized to accurately define the material's type. Creating a name allows for quick identification at the Material Summary screen.
Type	Monitor Only	Desired type of application control channel being used for a specific material.
Units	Ks/ac	Displays primary and secondary readouts (Ks/ac, Ks/ha).
Target Population	32.0	1000s of seeds per acre or hectare.
Hi Pop Alarm	20	This is the percentage above the target population of the seeder channel if rows are assigned to the seeder channel. If rows are not assigned to a seeder, this is the percentage above average seeder population for all unassigned rows.
Low Pop Alarm	20	This is the percentage below the target population of the seeder channel if rows are assigned to the seeder channel. If rows are not assigned to a seeder channel, this is the percentage below average seeder population for all unassigned rows.
On/Off Pattern	Every Row On	On/Off Pattern indicates specific row patterns to be on or off. Select pre-defined seeder All Row On pattern. For other pre-defined seeder patterns or individual row settings, reference Operator's manual.
Row Fail Rate	2/1 (2 seeds every 1 second)	Set to desired number of seeds per second to trigger seed sensor failure alarm.
Row Monitor Screen	Default Value/ Value to Enter	Instructions/Definitions
Material Name	Corn TR	A material name is required to activate high and low population alarms. This field only displays if there are NO seeding channels enabled and no rows assigned to these channels.
High Alarm Delay	5	Enter the delay between the detection of a high population alarm condition and the resulting alarm display.
Low Alarm Delay	5	Enter the delay between the detection of a low population alarm condition and the resulting alarm display.
Pop Adjust	100%	Scales the displayed population value to allow for inaccuracies with seed sensors in certain applications. For true calculated results the value should be 100%.
Pop Filter	50.0%	Stabilizes the monitored population display. For true population the number should be set to 0.0%

STEP 6: Channel Setup (Planter Control)

Disable all active control channels.

1. Press the **Controls** button .
2. Disable all active controls per Table C.
3. When channel setup is complete, press the **Work Screen** button  to return to the Main Work screen.

TABLE C: Channel Setup	Default Value/ Value to Enter	Instructions/Definitions
Type	Disabled	All control channels are disabled in Monitor Only mode.

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STEP 7: Ground Speed Calibration Setup

1. Press the **Speed Set** button .
2. Enter desired values using **Table D** as reference.
3. When ground speed configuration is complete, press the Top Menu button  to return to the Setup screen.

TABLE D: Ground Speed Setup	Default Value/ Value to Enter	Instructions/Definitions
Source	Digital Frequency	Select CAN Ground if radar is connected to ISO tractor cab harness. Select Digital Frequency if radar or hall-effect is connected to WSMT actuator harness.
Gspd Constant	2546 Pul/400 ft	Input based on pulse count produced by the ground speed sensor over 400' distance. See Operator's manual for calibration instructions.
Shutoff Speed	0.5 mph 0.8 kph	Indicates the minimum ground speed allowed before the system shuts off all control channels.
Min Override	2.0 mph 3.2 kph	Minimum Override takes over when actual ground speed is below the designated value. The control operates at this speed until actual ground speed rises above the minimum override speed or the actual speed drops below the shutoff speed.
Master Switch Timeout	10 sec	Determines the length of time before the system disables the operate function after ground speed is 0 if the master switch remains in the ON position.
Failure Alarm Delay	5 sec	Set to desired number of seconds alarm sounds after the ground speed is zero and seed flow continues. (monitor only)
Implement Lift	Enabled	Implement lift switch must be in the down position to operate.

STEP 8: Accessory Sensor Setup

Hopper Setup

1. Press the **Accessories** button .
2. Press the **Hop Assign** button .
3. Verify # of hoppers is correct or enter # of hoppers assigned.
4. Press the **Hopper Set** button .
5. Enter desired values using **Table E** as reference.

RPM Sensor Setup

6. Press the **Accessories** button .
7. Verify # of RPM sensors are correct or enter # of sensors assigned.
6. Press the **RPM Setup** button .
7. Enter desired values using **Table E** as reference.

For additional information regarding hopper level and RPM sensor setup, reference the Operator's manual.

TABLE E: Accessory Setup	Default Value/ Value to Enter	Instructions/Definitions
# of Hoppers	1	# of hopper sensors connected to each module. # of hopper data items for each listed module and the Hopp #'s value will automatically populate if Auto Config is used to configure installed sensors.
Logic Level	Active Lo	Sets the active state to low signifying that an alarm is generated if the sensor's output is in a low state. Use this setting if the connected sensor outputs a low condition when empty similar to the DICKEY-john hopper sensor.
Alarm Delay	5 sec	Controls the delay time between the detection of a high/low hopper alarm condition and the generation of the resulting alarm. The value is entered in seconds.
# of RPMs	1	Number of RPM sensors connected to each module to monitor a shaft/fan.
High Alarm	7000 RPM	Sets the RPM value at which a high RPM warning error is generated.
Low Alarm	2300 RPM	Sets the RPM value at which a low RPM warning error is generated.
High Alarm Delay	10 sec	Establishes the delay between the detection of a high RPM alarm condition and the resulting alarm display (entered in seconds).
Low Alarm Delay	10 sec	Establishes the delay between the detection of a low RPM alarm condition and the resulting alarm display (entered in seconds).
RPM Constant	3 pul	Number of pulses per sensor revolution.
RPM Filter	0%	Filters the signal out of the RPM sensor.
Disable Control on Low Alarm	Disabled	Allows for disabling of all control channels if the RPM value of the selected sensor falls below the low alarm level setting.

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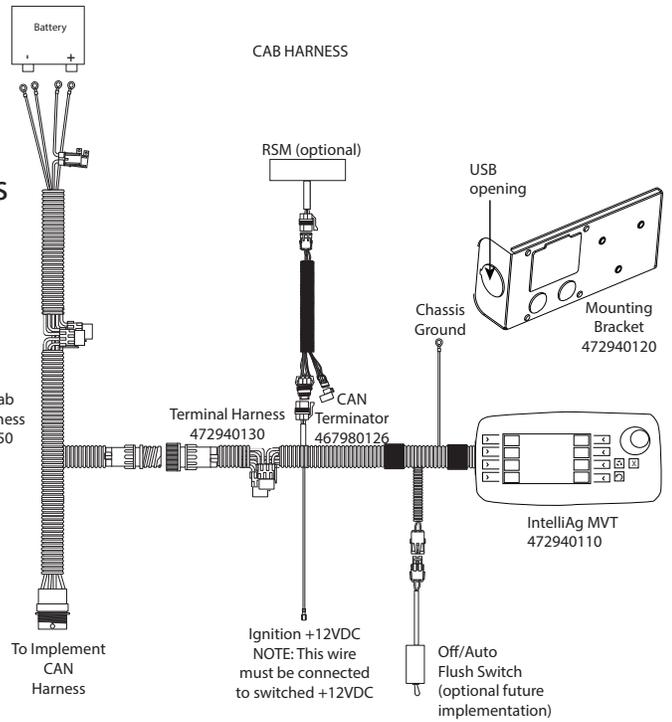


Implement Harness

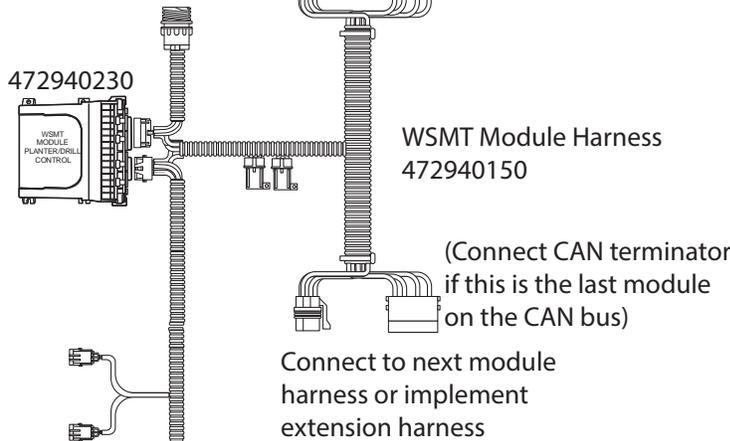
Connect harnesses and accessory devices as shown. Verify that PWM Solenoid Valves have a properly connected feedback sensor.

Connect to Cab Harness

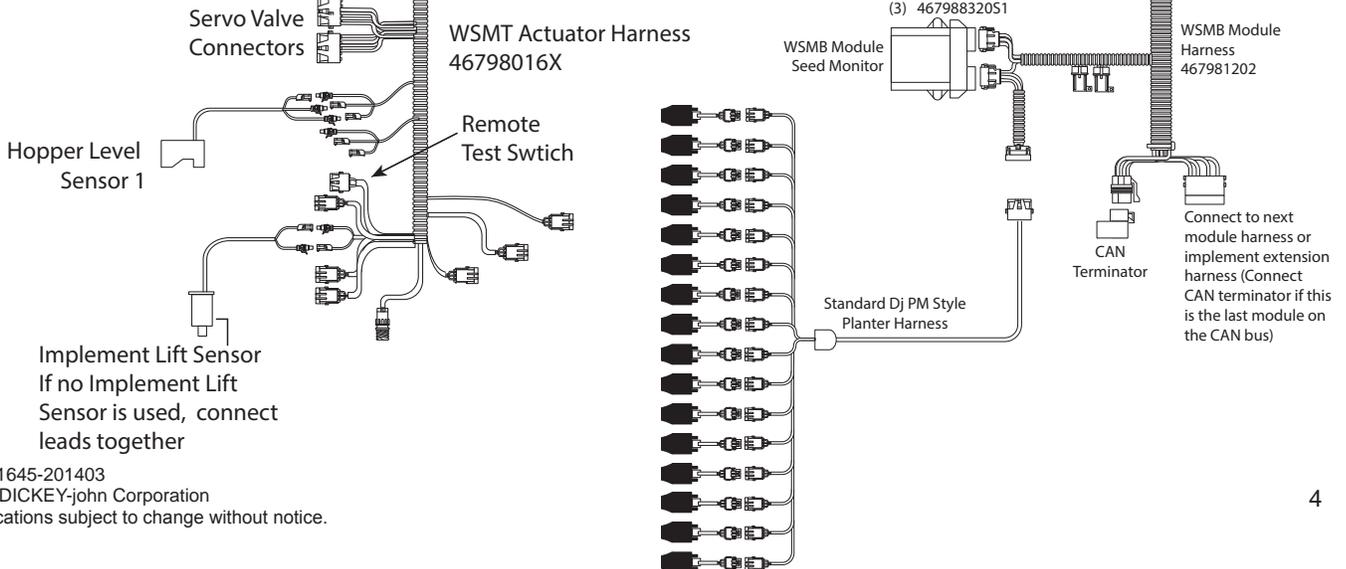
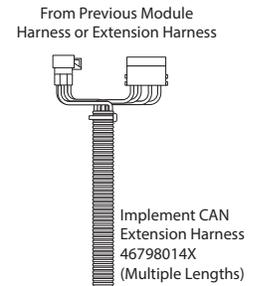
Implement CAN Breakaway Harness 467980130 (multiple lengths)



NOTE: Connect the WSMT Actuator Harness and the Dj Planter Harness to the mating connectors of the WSMT Module Harness



EXTENSION HARNESS



Implement Lift Sensor
If no Implement Lift Sensor is used, connect leads together