

Clarity™

Clarity Install Guide

Precision Planting®

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Clarity Installation Overview – Systems without a PDM

The blockage sensors must see product flowing for a row to map on the 20|20 monitor. It is recommended to install a sensor on every row for the best quality map. Blockage sensing is compatible only with Dickey John style blockage sensors with a 3-pin weather pack analog style connector. Please consult the order guide when determining hardware needed for a system.

Clarity can be installed on systems with or without a PDM present.



DJ Blockage Sensor 32mm
PN: 735097

All Clarity systems will require a lift switch in order to function.

SRMs are required to plug in a Lift Switch (required) or Load Sensors (optional), to connect an SRM to the BXM you will need to utilize an Air Seeder Sensing Row Harness of the appropriate length to go between the SRM and the BXM. The SRM can be mounted anywhere on the implement.

*NOTE: A lift-switch adapter harness (725798) may be required.



Air Seeder Sensing Row Harness 48"
PN: 735365

Install for Air Seeders with Towers- Systems without a PDM

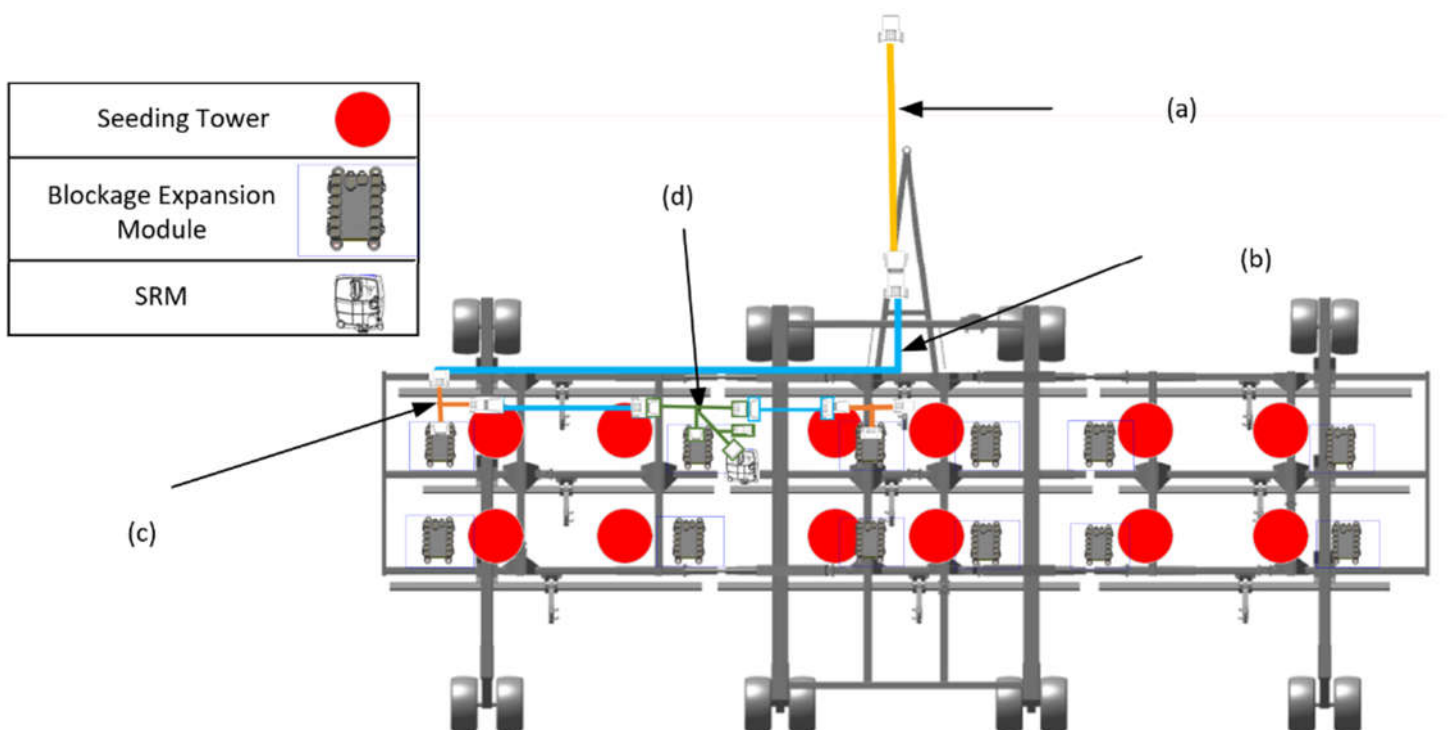
Start by installing the DBM CAN harness (725935). Plug the 12-pin connector into the DBM and route the side with 8-pins out of the tractor cab towards the implement.

Each CAN network (from DBM to terminator) should not exceed 130' of length. For air seeders or drills where this is not possible on a single CAN network, you should utilize the DBM Sensing Triple CAN Harness (725946).

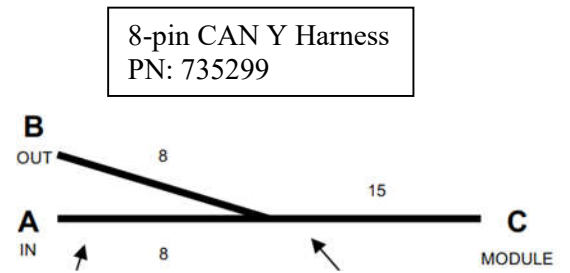


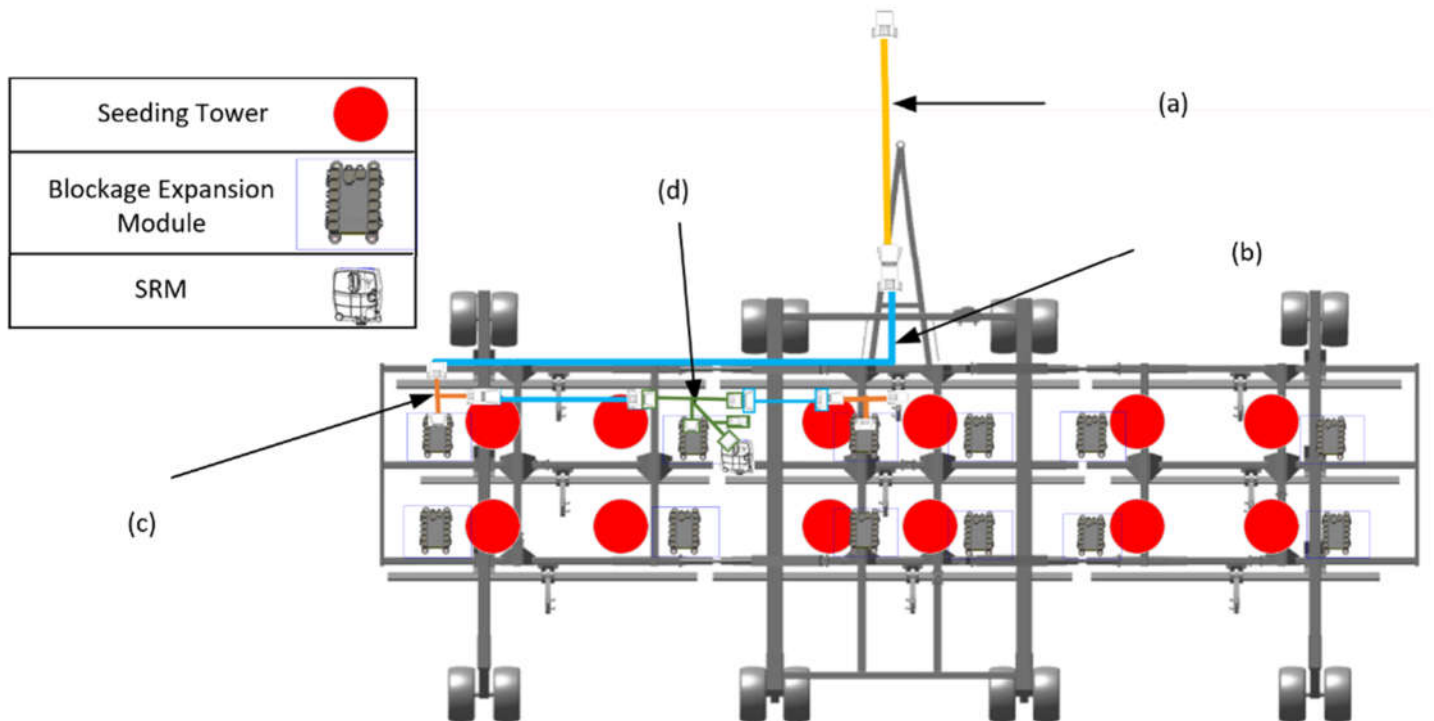
***NOTE:** A terminator must be installed at the end of each CAN network

In many cases, an 8-pin Deutsch Extension (725932) will be needed to reach from the DBM CAN Harness to the first tower. Additionally, these extensions may be needed to reach from one BXM to the next.



Connect the 8-pin CAN Y Harness (735299) to the BXM. The connector labeled “MODULE” will plug into the BXM, the connector labeled “IN” will plug into the side with CAN coming from the DBM, the connector labeled “OUT” will plug into the harness running to the next tower.





For Clarity to function, we must have one lift switch installed on the implement. Due to this requirement, we must also have one SRM to plug the lift switch into. To connect to the SRM, you will need to install the Air Seeder Sensing Row Harness (735365) on one of the towers. This will take the place of the 8-pin CAN Y Harness on that tower. The Air Seeder Sensing Row Harness has 3 8-pin connectors (“In”, “Out”, and “Module”) as well as a 12-pin connector to plug your SRM into and a 6-pin auxiliary connector.

Figure (a): DBM CAN Harness PN: 725935

Figure (b): 8-pin Deutsch Extension PN: 725932

Figure (c): 8-pin CAN Y Harness PN: 735299

Figure (d): Air Seeder Sensing Row Harness PN: 735365

BLOCKAGE EXPANSION MODULES

Blockage Expansion Modules (BXMs/ 735300) require one 8 pin implement CAN connector to connect to the 20|20 system, via either the 8-pin CAN Y Harness (735299) or the Air Seeder Sensing Row Harness (735365). A Blockage Sensor Input Module is not compatible with a BXM.

One BXM mount kit (735315) should be ordered per BXM kit. For JD box drills, the 4"x6" U-bolt kit (735320) should also be ordered.

Each BXM contains 12 inputs that allow you to monitor up to 12 blockage sensors. The BXM also contains an 8-pin CAN connection, and one 6-pin local CAN connection that is not currently used.



For tower style seeders, in most cases you will install one BXM (735300) per tower.

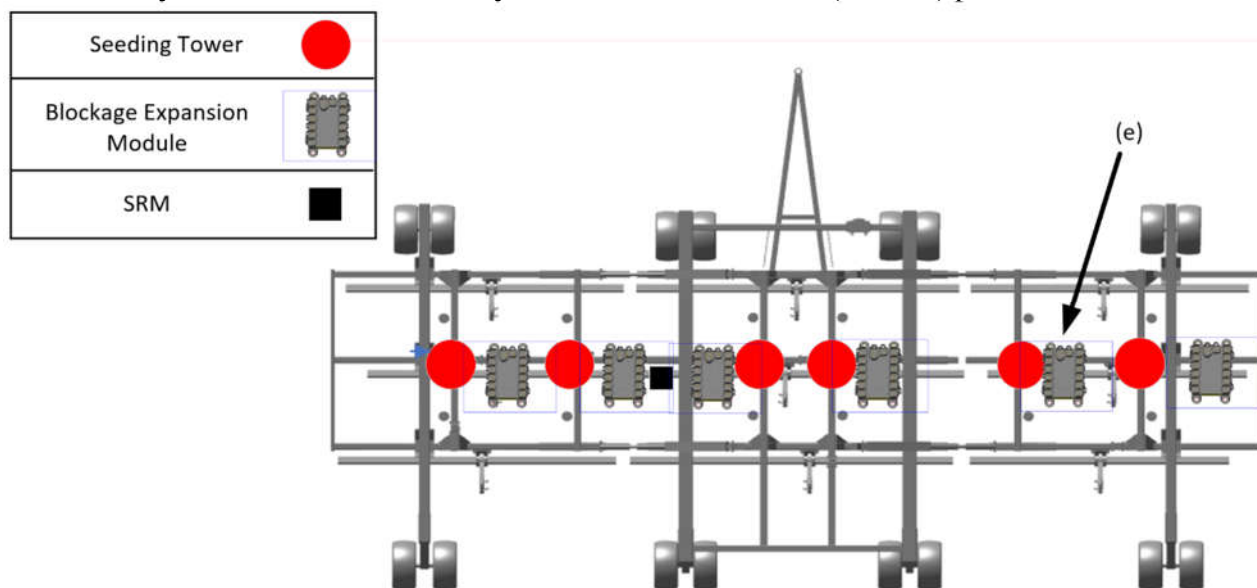


Figure (e): Blockage Expansion Module PN: 735300

BLOCKAGE SENSORS

The blockage sensors must see product flowing for a row to map on the 20|20 monitor. It is recommended to install a sensor on every row for the best quality map. Blockage sensing is compatible only with Dickey John style blockage sensors with a 3-pin weather pack analog style connector. Please consult the order guide when determining hardware needed for a system.

Blockage Sensors (735099) come in three different inside diameter sizes (25mm, 32mm, 45mm) depending on the size of hose you are installing the sensors on.

For Tower style seeders, install the blockage sensors along the seed delivery hoses running to each row.

Use a hose cutter to cut the secondary line roughly 8 inches from the manifold/tower. Install the sensor where the cut was made.

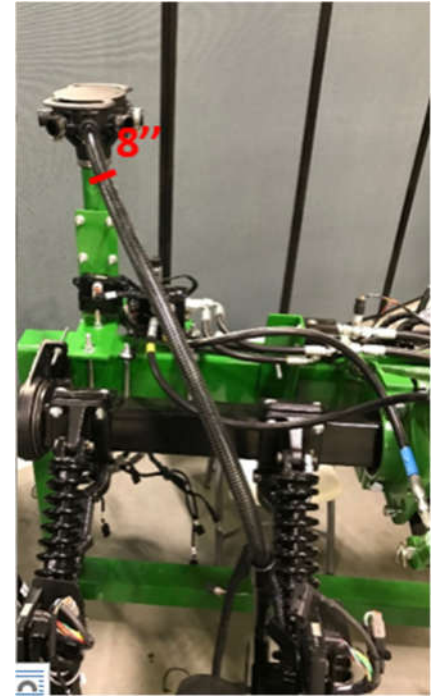
Each blockage sensor has an arrow on the plastic housing which indicates the direction of product flow. Ensure that the sensors are installed with the correct orientation.

To secure the sensor to the hose, use an 8mm nut driver to tighten the two hose clamps.

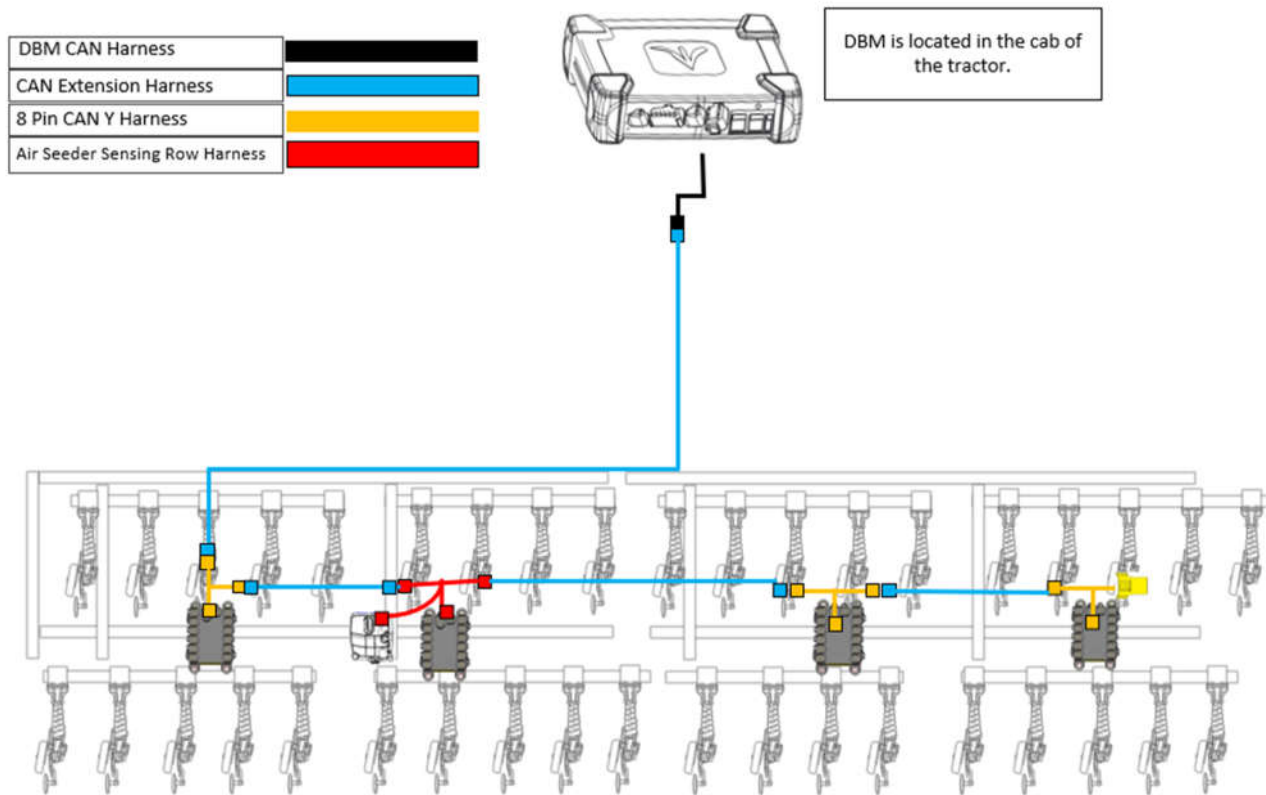
You will connect each blockage sensor (735099) to one of the 12 inputs on the BXM (735300) using a blockage sensor adapter harness (735090).

The blockage sensor adapter harness (735090) comes in five lengths. You will need to measure the distance from each blockage sensor to its corresponding BXM in order to determine the appropriate length needed for each blockage sensor adapter harness.

Harness lengths: 24", 48" , 68", 96", 180"



Install for CCS Air Seeder- Sensing Only, No PDM



Start by installing the DBM CAN harness (725935). Plug the 12-pin connector into the DBM and route the side with 8-pins out of the tractor cab towards the implement.

Each CAN network (from DBM to terminator) should not exceed 130' of length. For air seeders or drills where this is not possible on a single CAN network, you should utilize the DBM Sensing Triple CAN Harness (725946).



***NOTE:** A terminator must be installed at the end of each CAN network

In many cases, an 8-pin Deutsch Extension (725932) will be needed to reach from the DBM CAN Harness to the first BXM module connection point. Additionally, these extensions may be needed to reach from one BXM to the next.



Connect the 8-pin CAN Y Harness (735299) to the BXM. The connector labeled “MODULE” will plug into the BXM, the connector labeled “IN” will plug into the side with CAN coming from the DBM, the connector labeled “OUT” will plug into the harness running to the next BXM module (if applicable). If this “OUT” connection is the end of the CAN line, a terminator needs to be installed.

8-pin CAN Y Harness PN: 735299
