

DirectCommand™ - Precision Application

F A C T S H E E T



DirectCommand – Precision Application

The Ag Leader, Insight DirectCommand™ system allows operators to control application rates directly from the Insight display, eliminating the need for a separate in-cab controller, reducing cab clutter and more tightly integrating technology from field to office.

Key Features

- ▶ Direct control of sprayers, anhydrous, and other liquid applicators.
- ▶ Direct control of strip-till carts for dry and liquid fertilizer application.
- ▶ Direct control of spinner spreaders for granular application.
- ▶ **AutoSwath™** - Automatic boom section shutoff.
- ▶ **Smart Report™** - Application report in PDF format.
- ▶ Control and record up to 5 products.
 - ▶ Compatible with up to 10 boom section valves.
 - ▶ Can use factory switches already in the cab.
- ▶ Manual or Variable rate with a prescription file (.tgt, .irx, or Shape file).
- ▶ Record as applied data.
- ▶ Raven adapter harness available for replacing select Raven consoles.
- ▶ Rate-1 and Rate-2 selection.
- ▶ Manual override of control valve (used to charge boom pressure).
- ▶ Minimum flow setting available to maintain pressure.
- ▶ Control fertilizer products in lbs of N, P, or K. Insight automatically converts lbs to units of the flow meter.
- ▶ Control Trimble AgGPS® AutoPilot™ system while using DirectCommand.
- ▶ 4 Hz or higher GPS receiver is recommended.
- ▶ 3 pressure sensor readouts.

DirectCommand – AutoSwath™ Control

With DirectCommand comes an exciting feature called AutoSwath™. AutoSwath automatic boom control allows the Insight to automatically turn individual boom sections on and off as the sprayer enters into and out of already applied areas or field boundaries. Gone are the days of manually switching boom sections off. (And gone are the days of forgetting to turn them back on!) This is

especially useful around point rows, waterways, and field borders where over-application is most likely to occur. The boom section won't turn off until all areas under the boom section are applied. An on-screen coverage map, showing skips and overlaps as small as one foot, provides visual verification that the system is doing its job.

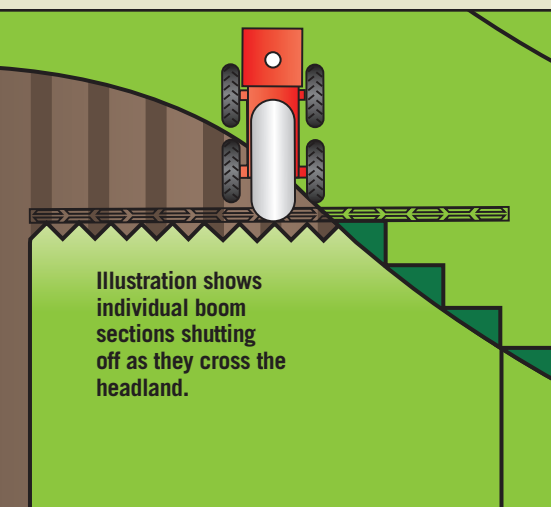
AutoSwath control also works on applicators that don't have boom sections, such as granular and anhydrous applications.

DirectCommand – Smart Report™

The Insight display makes application report generation easy. Grower/field information, product details, applied totals, field area, and as-applied maps are automatically supplied by the Insight system. These are combined with weather, soil, and field notes supplied by the user into a PDF report file that is stored on the memory card.



Illustration shows individual boom sections shutting off as they cross the headland.



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Components – Physical Characteristics



SC110 Switch Console

Dimensions:
10.4" W x 2.9" H x 2.1" D
(265 x 74 x 54 mm)
Weight: 1.8 lbs (0.82 kg)
Enclosure: High Impact PC/ABS



Liquid Product Control Module

Dimensions:
7.7" W x 5.2" H x 1.6" D
(195 x 132 x 40 mm)
Weight: 2.9 lbs max (1.32 kg)
Enclosure: High Impact PC/ABS.
Weather Proof for External Mounting.
Chemical and UV Resistant.
Polyurethane Potting.



Auxiliary Input Module

Dimensions:
6.8" W x 4.0" H x 2.1" D
(173 x 102 x 54 mm)
Weight: 2.1 lbs max (0.95 kg)
Enclosure: High Impact PC/ABS.
Weather Proof for External Mounting.
Chemical and UV Resistant.
Polyurethane Potting.



Master Foot Switch

Dimensions:
3.5" W x 1.5" H x 4.5" D
(89 x 38 x 114 mm)
Weight: 2.5 lbs (1.13 kg)
Enclosure: Cast Iron

Components – Additional Features

- ▶ CAN modules and Insight display firmware are upgradeable through compact flash card.
- ▶ CAN modules and display have over current and short circuit protection.
- ▶ Rugged designed CAN modules can be mounted outside of the cab.
- ▶ Foot switch comes with a nonskid base pad.

DirectCommand - Valve Support

Boom Valves

- ▶ Single wire control signal – On=12 volts, Off=0 volts.
- ▶ Most high current 3 wire valves.
- ▶ Motorized and solenoid boom valves.
- ▶ 4 continuous amps max per boom valve with 25 total continuous amp max.
- ▶ Boom switch console available or connect direct to factory switches in cab.

Control Valve

- ▶ 4 continuous amps max drive for control valve.
- ▶ Controls in-line or by-pass control valves.
- ▶ Controls hydraulic servo or hydraulic PWM control valves (rate controlled through solution pump).

Flow Meter

- ▶ 5 volt or 12 volt power options
- ▶ 0-2000 Hz
- ▶ 20-10000 pulses/gallon
- ▶ 5 volt pull-up on signal

DirectCommand – CAN bus

Insight uses the newest industry standard CAN bus technology (Controller Area Network). This technology allows Insight to serve as the user interface for a simple, modular system where a single high-speed cable distributes vast amounts of information to and from the other control modules.

Insight - The Complete Precision Solution

Yield and Moisture Mapping. Display harvest and moisture maps so you can instantly see how field conditions affect yield.

Variety/Hybrid Mapping. Generate color maps while planting so you can see the location of each hybrid or variety. Also record Split Planter Data. Record up to 3 hybrids/varieties simultaneously. Each will display as its own color.

Trimble AgGPS Autopilot. The Insight display features a seamless interface with the Trimble AgGPS Autopilot steering system.

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