MATRIX® 430 GUIDANCE (BROAD ACREAGE)

The compact Matrix 430 is an easy-to-use, low-cost, graphical guidance system ideal for first-time users. The full-color, touchscreen display allows the operator to efficiently navigate fields with minimal skips and overlaps in coverage.

* Versatile GNSS guidance in a compact, portable package.
* Full time, on screen numeric display of cross-track error with user selectable display of two additional parameters including: worked area, worked time, and ground speed.
* High-quality, internal GPS/GLONASS engine with ClearPath technology that enhances GNSS performance.
* Guidance modes include: Straight AB, Curved AB, Circle Pivot, and Last Pass.
* Applied alert provides operator with audible alarm when entering previous applied areas.
* Simple reporting function provides coverage reports in .KML or .PDF.

PART NUMBER	DESCRIPTION
GD430-GLO-P-B	Kit, Matrix 430, GLONASS, Patch Antenna, Battery Leads
GD430-GLO-P-L	Kit, Matrix 430, GLONASS, Patch Antenna, US Lighter Connector
GD430-GLO-R30-B	Kit, Matrix 430, GLONASS, RXA-30 Antenna, Battery Leads
GD430-GLO-R30-L	Kit, Matrix 430, GLONASS, RXA-30 Antenna, US Lighter Connector

MATRIX 430VF GUIDANCE (VINEYARDS/ORCHARDS)

Matrix 430VF is an easy-to-use, reliable, and cost-effective GNSS guidance system specifically designed to simplify operations in vineyards and orchards. It offers the functionality and reporting features of the original Matrix 430, but with mapping and guidance features specific to these specialized applications.

* Applied rows are colored to show where applications have occurred, and where skips or double applications have occurred.
* Alerts operator when entering an applied row or area.
* Storage for up to five jobs make record keeping easy.
* Five different machine profiles allow easy switching between machines or machine setups.
* Excellent display visibility in bright light or at night.
* Easy to understand and easy to use.

PART NUMBER	DESCRIPTION
GD430VF-GLO-P-B	Kit, Matrix 430VF, GLONASS, Patch Antenna, Battery Leads
GD430VF-GLO-P-L	Kit, Matrix 430VF, GLONASS, Patch Antenna, US Lighter Connector
GD430VF-GLO-R30-B	Kit, Matrix 430VF, GLONASS, RXA-30 Antenna, Battery Leads
GD430VF-GLO-R30-L	Kit, Matrix 430VF, GLONASS, RXA-30 Antenna, US Lighter Connector

MOBILE ELECTRONICS

MATRIX®908

Matrix 908 is built for expandability, rugged performance, and easy operation in many agricultural and turf applications. As the latest in the Matrix family, the Matrix 908 offers a bright, clear display, intuitive menu structure and long-lasting construction. Choose a field navigation model for GNSS guidance and coverage mapping, including automatic boom section control. Or opt for an ISOBUS-ready model that performs guidance functions plus an ISOBUS UT for sprayer or spreader control. The high-performance, built-in GNSS receiver offers accuracy upgrade options with no change in hardware, making the Matrix 908 a great fit for a wide range of current or future applications.

- Integrated GNSS receiver offers upgradable accuracy with no changes in console or antenna hardware.
- Base version offers guidance, mapping, and automatic section control; an ISOBUS UT and task control available via convenient feature unlock.
- TwinView allows the operator to view guidance and UT screen side-by-side.
- The 8" high-resolution display can be viewed in bright daylight or set to night mode for low-light conditions.
- Rugged metal enclosure makes the Matrix 908 durable and long lasting.

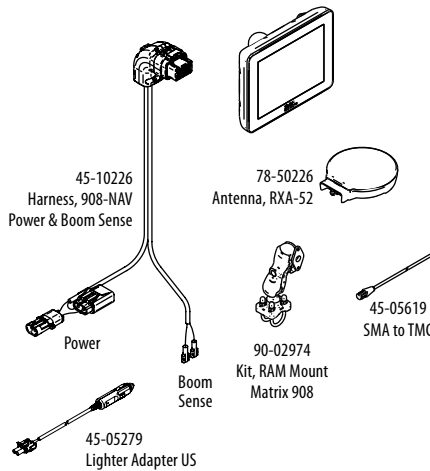### NAV WITH HARNESS KITS & INTERNAL RECEIVER

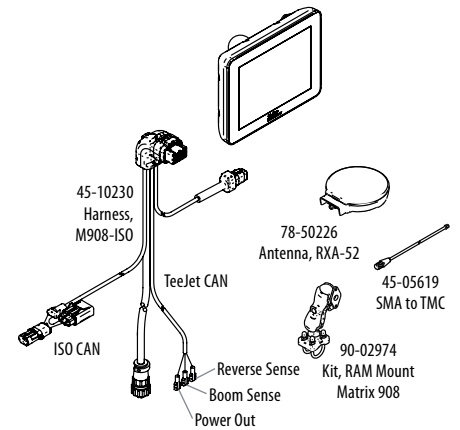| PART NUMBER	DESCRIPTION
90-1006-ENUS	Kit, M908 NAV-L1-GLO-ENUS
90-1007-ENUS	Kit, M908 NAV-L2+TSL-GLO-ENUS
90-1008-ENUS	Kit, M908 NAV-L2+TSC-GLO-ENUS

ISO WITH HARNESS KITS & INTERNAL RECEIVER

PART NUMBER	DESCRIPTION
90-10011-ENUS	Kit, M908 ISO-L1-GLO-ENUS
90-10012-ENUS	Kit, M908 ISO-L2+TSL-GLO-ENUS
90-10013-ENUS	Kit, M908 ISO-L2+TSC-GLO-ENUS

90-10006-ENUS KITS PARTS DIAGRAM

45-10226 Harness, 908-NAV Power & Boom Sense

78-50226 Antenna, RXA-52

45-05619 SMA to TMC

Power

Boom Sense

90-02974 Kit, RAM Mount Matrix 908

45-05279 Lighter Adapter US

90-10011-XX KITS PARTS DIAGRAM

45-10230 Harness, M908-ISO

TeeJet CAN

78-50226 Antenna, RXA-52

45-05619 SMA to TMC

ISO CAN

Reverse Sense
Boom Sense
Power Out

90-02974 Kit, RAM Mount Matrix 908

M 9 0 8 N A V - L 1 - G L O - E N

MODEL	
908	8" Screen

CONFIGURATION	
NAV	Navigation
ISO	ISOBUS

GNSS FREQUENCY CONFIGURATION	
N	No Internal Receiver
L1	Single Frequency SBAS
L2+TSL	Dual Frequency with TERRASTAR-L
L2+TSC	Dual Frequency with TERRASTAR-C

GNSS CONSTELLATIONS	
N	No Internal Receiver
GLO	GLONASS

LANGUAGES	
EN	English Metric
EN US	English US Units
BG	Bulgarian
CZ	Czech
DA	Danish
DE	German
ES	Central & South America
ET	Estonian
FI	Finnish

MATRIX 908 SYSTEM DIAGRAM

Console, Matrix 908
75-10006-EN (or similar)

Kit, RAM Mount
Matrix 908
90-02974

Steering Control Module (SCM Pro)
78-08111 (UniPilot Pro)
78-08112 (FieldPilot Pro with Hydraulic Value)

Terminator
45-08102

Harness, 908 NAV
TeeJet CAN
45-10236

CAN "T" to 6 Socket
Deutsch DTM, 6'
45-08120

Cable
45-10172

Bracket SCM Pro Flat
65-05251

Ethernet Interface
45-04053

Pressure Interface Kit
90-04005 (10')
90-04006 (32')

Harness, BoomPilot
TeeJet 844
45-05719

Section Driver Module (SDM)
78-05072

Assy. Anti-Rotation Pin
UniPilot Pro
65-05250

(Optional)
Cable, WAS Ext.,
15', 3 pos, WP
45-04010-15

Optional
Wheel Angle Sensor
16-05022

UniPilot Pro
Harness
45-10194

UniPilot Pro
Anti-Rotation Bracket Kit
Generic
65-05246

Seat Switch
Input

Foot Switch
32-04020

Switch Kit
UniPilot Pro
91-05028

Electric Steering Device,
UniPilot Pro
91-05023

ACCESSORIES

UNIPILOT® PRO

- Automatic steering solution.
- Easy to install without removing steering wheel.
- Fast to transfer between different applications.
- Compatible with a broad range of machines.
- Upgradable feature for Matrix 908, 570GS, and 840GS consoles.

BOOMPILOT® KITS

- Automatically control boom section valves according to GPS as applied mapping.
- Eliminate costly overlaps or skips that can occur from manual control.
- Compatible with sprayers and dry spreaders.
- Can control up to 15 sections.
- BoomPilot kits developed to interface with a wide variety of existing controllers.

MOBILE ELECTRONICS

744E-3

744A-3

744 MANUAL SPRAYER CONTROLS

The 744 family of sprayer controls offer simple manual control of electric boom section valves and an electric pressure regulating valve. These controls are available in a range of kits configured for connection to solenoid or ball valves. The 744 offers a backlit pressure gauge and LEDs to indicate section switch status. A convenient master switch allows all boom sections to be switched simultaneously.

- 744A kits offered with 3 section switches and a choice of 100 PSI or 300 PSI gauges.

- 744E kits offered with 100 PSI gauge and choice of 3 or 5 section switches.

- Kits include convenient harnesses to make connections fast and easy. Optional extension cables allow custom fit to many machine types.
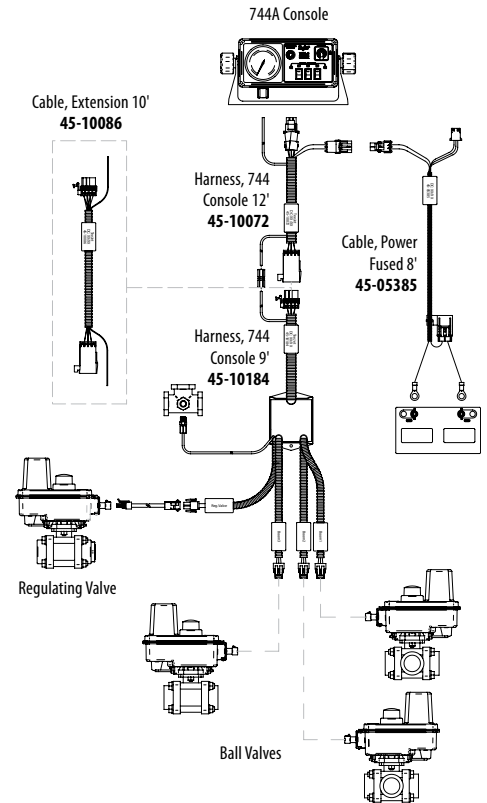
3 SECTION 744 (100 PSI) BALL VALVE KITS

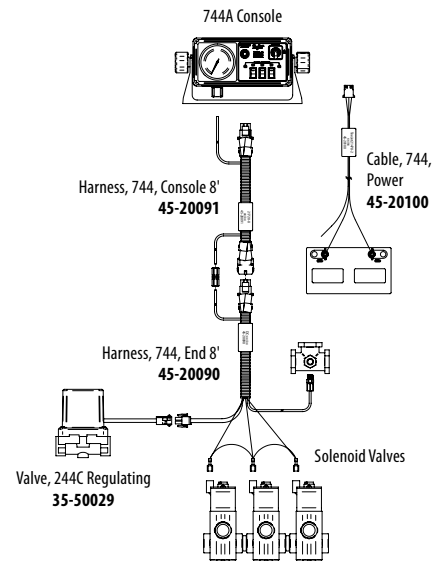| PART NUMBER	DESCRIPTION
90-02439-MP	Kit, 744A, 3 Boom 100 PSI, Metri-Pack Ball Valve Harness
90-02439-MD	Kit, 744A, 3 Boom 100 PSI, MINI-DIN Ball Valve Harness
90-02439-UX	Kit, 744A, 3 Boom 100 PSI, 4 POS WP Valve Harness
90-50254	Kit, 744A, 3 Boom 100 PSI, with 430 DIN Harness

3 SECTION 744 (100 PSI) SOLENOID KITS

PART NUMBER	DESCRIPTION
90-50149	Kit, 744A, 3 Boom 100 PSI, Solenoid Cables
90-50161	Kit, 744A, 3 Boom 100 PSI, Solenoid Cables, with 244C ¾ Reg Valve
90-50163	Kit, 744A, 3 Boom 100 PSI, Solenoid Cables, with 244C ¾ Reg Valve & 144A-3
90-50177	Kit, 744A, 3 Boom 100 PSI, Solenoid Cables, with 244C ¾ Reg Valve & 144P-3

BALL VALVE SYSTEM DIAGRAM

744A Console

Cable, Extension 10'
45-10086

Harness, 744
Console 12'
45-10072

Cable, Power
Fused 8'
45-05385

Harness, 744
Console 9'
45-10184

Regulating Valve

Ball Valves

SOLENOID VALVE SYSTEM DIAGRAM

744A Console

Cable, 744,
Power
45-20100

Harness, 744, Console 8'
45-20091

Harness, 744, End 8'
45-20090

Solenoid Valves

Valve, 244C Regulating
35-50029

RADION 8140 AUTOMATIC SPRAYER CONTROL

Radion is an advanced automatic spray controller that features a touch screen interface. The convenient planning tool automatically shows the available speed range for the spray tip capacity that has been selected.

- 4.3" touch-screen display is packed with useful information and can be configured to match the user's preferences.
- Tank level monitoring and automatic tank filling features are included.

- Droplet size function shows the operator approximate droplet size based on the selected nozzle and application pressure.
- Compatible with 844, 854 and 845-style wiring harness.
- Available in models to control 5, 7 or 9 boom sections.
- Performs GPS-based automatic section control when connected to a Matrix 908 field computer (feature unlock required).

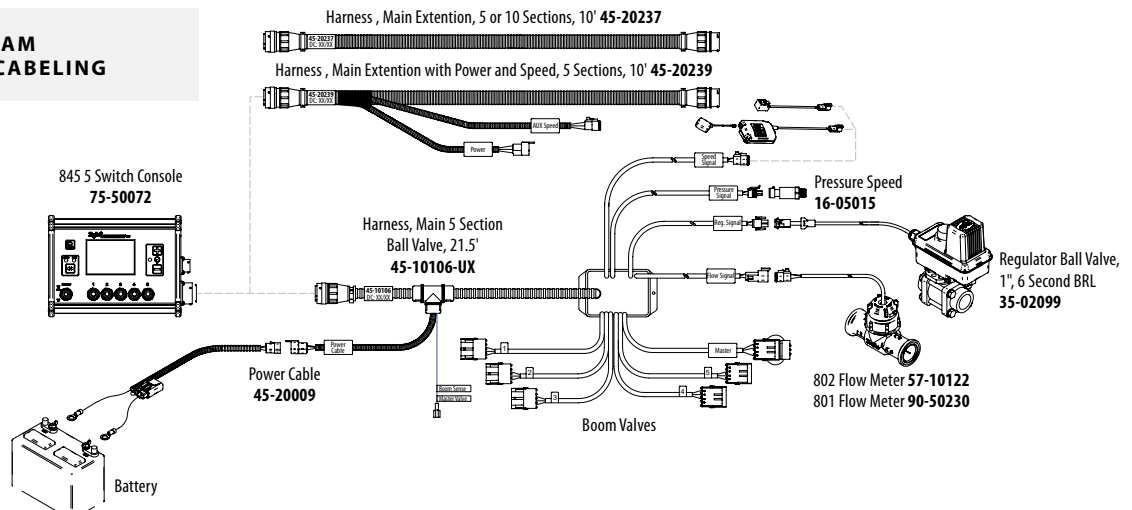| PART NUMBER	DESCRIPTION
90-50259	Kit, Radion 8140-5, RAM Mount, 12' Power Cable, User Guide
90-50263	Kit, Radion 8140-7, RAM Mount, No Cables, User Guide
90-50265	Kit, Radion 8140-9, RAM Mount, No Cables, User Guide

TEEJET 845 SPRAYER CONTROL

The TeeJet 845 was designed with simplicity in mind. The updated color display is easily visible in all light conditions and makes operation easier than ever. Key application data is always visible—including speed, application rate, volume sprayed, system pressure, and area covered. The 845 can be operated in flow or pressure-based regulation modes and offers 5 boom section control switches plus a master switch.

- Updated LCD display is backlit and easier to read than previous models.
- A single cable connection allows for easy installation and removal.
- Simple step-by-step programming is logical and easy to maneuver.
- Durable weather-resistant aluminum enclosure is durable and offers easy mounting options.
- Built-in planning tool makes spray tip selection easy.

PART NUMBER	DESCRIPTION
90-50268	Kit, 845, Mounting Bracket, 12' Power Cable, User Guide
90-50143	Kit, 845, Mounting Bracket, No Cables, User Guide

845 SYSTEM DIAGRAM WITH BALL VALVE CABELING

Harness , Main Extention, 5 or 10 Sections, 10' **45-20237**

Harness , Main Extention with Power and Speed, 5 Sections, 10' **45-20239**

AUX Speed

Power

Speed Signal

Pressure Signal

Pressure Speed
16-05015

Reg. Signal

Flow Signal

Regulator Ball Valve, 1", 6 Second BRL
35-02099

845 5 Switch Console
75-50072

Harness, Main 5 Section Ball Valve, 21.5'
45-10106-UX

Master

802 Flow Meter **57-10122**
801 Flow Meter **90-50230**

Power Cable
45-20009

Boom Valves

Battery

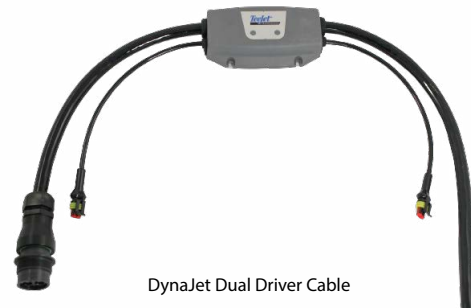MOBILE ELECTRONICS

DYNAJET®
SMART DROPLET MANAGEMENT

DynaJet is a nozzle control platform that extends the limits of your sprayer using PWM nozzle control. PWM stands for pulse width modulation, a technique of controlling nozzle flow rate by rapidly switching each nozzle on and off to control flow rate. Higher on time (or duty cycle) means greater flow, lower duty cycle means less flow. This control allows flow rate and pressure to be managed independently, which enables advanced application capabilities.

DynaJet alternates the on/off status of each nozzle to eliminate skips. DynaJet also performs turn compensation, applying greater rates on the outside of a turn than the inside.

- Extended speed or application rate working while maintaining pressure.
- Easily set the operating pressure from the cab, and DynaJet maintains application rate by changing nozzle duty cycle.
- 20 Hertz on/off frequency eliminates concerns about skips between spray pulses.
- Make a wide range of applications (rates, speeds and droplet sizes) with a single nozzle.
- DynaJet controls each nozzle individually, allowing swath control with high accuracy.
- Make your spray distribution uniform during turns with the Turn Compensation feature.
- On/Off control of up to 150 individual nozzles when connected to TeeJet IC45 rate control.
- Control of up to 30 sections with a third-party controller.
- Solenoid valves and cabling system tested and proven in the harshest environments, including application of liquid nitrogen fertilizer.
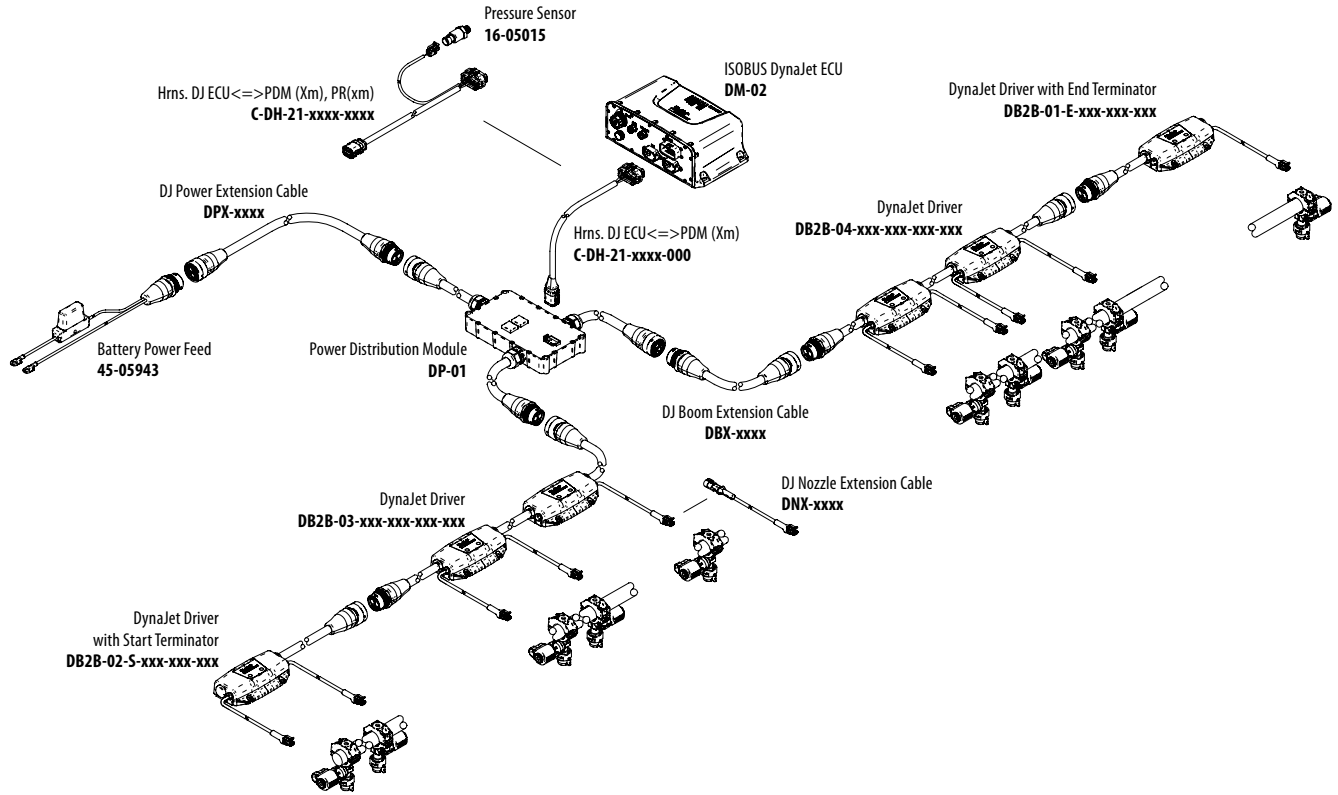
DynaJet ECU: DM-02

DynaJet Dual Driver Cable

DYNAJET SYSTEM DIAGRAM

Pressure Sensor
16-05015

ISOBUS DynaJet ECU
DM-02

DynaJet Driver with End Terminator
DB2B-01-E-xxx-xxx-xxx

Hrns. DJ ECU<=>PDM (Xm), PR(xm)
C-DH-21-xxxx-xxxx

DJ Power Extension Cable
DPX-xxxx

DynaJet Driver
DB2B-04-xxx-xxx-xxx-xxx

Hrns. DJ ECU<=>PDM (Xm)
C-DH-21-xxxx-000

Battery Power Feed
45-05943

Power Distribution Module
DP-01

DJ Boom Extension Cable
DBX-xxxx

DynaJet Driver
DB2B-03-xxx-xxx-xxx-xxx

DJ Nozzle Extension Cable
DNX-xxxx

DynaJet Driver
with Start Terminator
DB2B-02-S-xxx-xxx-xxx

DynaJet is compatible with TeeJet solenoid valves. These nozzle valves are designed with PWM in mind. They balance power efficiency, flow capacity and durability. See page 134 for more details on TeeJet PWM nozzle solenoid valves.

115880 DynaJet Valve

116280 DynaJet High Flow Valve

Contact a sprayer manufacturer to discuss how to get DynaJet on your next sprayer.

IC45 integrates the latest in rate control features and functionality from TeeJet®. Fast and stable spray regulation is combined with modular expansion options to create a complete spray control platform.

- Updated user interface is attractive and easy to navigate.
- Modular design that allows convenient fitting on any type of sprayer.
- Section valves controlled by driver modules that control 12 valves per module. Multiple modules can be fitted, allowing control of high numbers of sections and/or other electrical functions.
- Additional modular features include tank filling with remote control station, drawbar or sprayer wheel steering for trailed sprayers, ISOBUS AUX control, with more functionality to come.
- Control for up to 30 boom section valves, or up to 150 individual nozzles when combined with DynaJet IC7140.
- Designed to operate with third party ISOBUS terminals.
- Engineered for reliability and long life.
- External status LEDs allow quick status confirmation.
- USB port for easy firmware updates.
- Multiple cable lengths to suit your needs.

MOBILE ELECTRONICS

IC45 ECU

IC45 Graphical Interface
on Matrix 908 UT

ISOBUS Sprayer Cable

PLP 12 Output Driver

DYNAJET & IC45 BRING ADVANCED FEATURES TO YOUR SPRAYER

IC45 is the brand new ISOBUS Job computer. It integrates the best regulating performance and functionality from TeeJet.

DynaJet is a nozzle control platform that extends the limits of your sprayer by using PWM nozzle control.

When used together, DynaJet and IC45 become more than the sum of each component. By communicating with each other, the DynaJet and IC45 ECUs can offer advanced features, including:

- Extremely fast and stable regulating performance across a wide range of flow rates—even down to single nozzles.
- Complex manual bed application patterns with different rates by section.
- Map-driven applications that include different rates across the boom.
- Dynamic section widths depending on manual or automatic operating modes.
- Compatibility with advanced spot spraying systems.
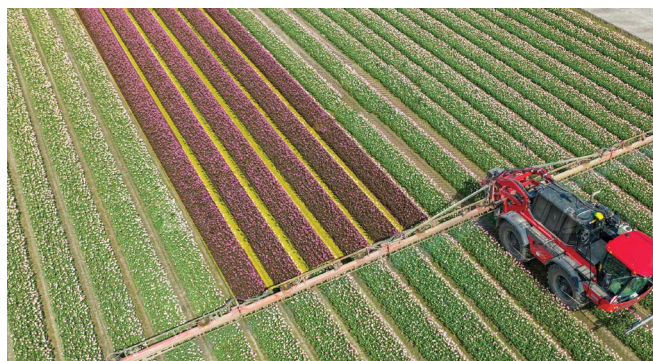- Easy to use on-screen virtual switch box.

DynaJet ECU

IC45 Sprayer Control

✔ **MORE PERFORMANCE**

✔ **MORE FEATURES**

✔ **MORE SAVINGS**

Variable Rate Application By Sections

Bed & Row Support

Spot Spraying Compatible

MOBILE ELECTRONICS

IC38

ISOBUS SPREADER JOB COMPUTER IC38

IC38 integrates the latest in spreader rate control features and functionality from TeeJet. A foundation of fast and stable spreader regulation is combined with other functions to create a complete spreader control platform.

- Available for Belt spreaders and drop spreaders.
- Control of up to 3 different products.
- Variable rate compatible via ISOBUS.
- Spinner speed control.
- Belt(s) speed control.
- Section control of up to 12 sections.
- Static and dynamic weighing interface.
- Designed to operate with third-party ISOBUS terminals.
- Junction-box style wiring system makes installation simple.

IC38 ECU

IC38 Graphical Interface
on Matrix 908 UT

MOBILE ELECTRONICS

SENSORS & FLOW METERS

PRESSURE SENSOR

- Available in two pressure ranges for maximum accuracy in your application.
- Reverse polarity protected.
- Weather-resistant connector.

- 145 PSI and 363 PSI.
- ¼" NPT connections.
- Sensors can withstand 2x rated pressure without damage.

Pressure Sensor

800 SERIES FLOW METER

- Turbine style design for optimal accuracy.
- Durable ruby-bearings for long wear life.
- Easily removed "quick check" turbine design for quick cleanup and service.
- Operating voltage of +4.5–16 VDC with LED status light.

- Wetted parts are glass-filled polypropylene, stainless steel and Viton.
- Wide range of plumbing fittings available with DirectoValve flange fittings.
- Wide range of cable connectors for compatibility to many brands of rate controllers.

801 & 802 Flow Meters

PART NUMBER	DESCRIPTION	FLOW CAPACITY*
801A	801A Flow Meter, 4 Bolt Flange, 300 PSI	2–45 GPM
801	801 Flow Meter, 50 Series Flange, 300 PSI	2–45 GPM
802	802 Flow Meter, 75 Series Flange, 200 PSI	3–130 GPM

*14.5 PSI pressure drop at max rated flow.

D SERIES FLOW METER

- Simple paddle wheel design for minimal flow restriction.
- Nylon construction for chemical resistance and durability.
- Sensor assembly easily removed for service.

- Pin clip-on hose barbs for easy removal from plumbing systems.
- 230 PSI pressure rating.
- Wide range of cable connectors for compatibility to many brands of rate controllers.

16D Flow Meter

PART NUMBER	DESCRIPTION	FLOW CAPACITY*
10D Series	10 mm Flow Meter	1.0–15 GPM
16D Series	16 mm Flow Meter	2.0–17 GPM
20D Series	20 mm Flow Meter	4.0–38 GPM
26D Series	26 mm Flow Meter	5.3–105 GPM

*14.5 PSI pressure drop at max rated flow. Please see Technical Document 98-01111 for detailed ordering information.

20D Flow Meter

GPS SPEED SENSOR

The GPS Speed Sensor uses a GPS receiver to measure true ground speed, then delivers a frequency signal compatible with the radar speed signal input of on most controllers and monitors.

- Eliminates problems frequently found with radar speed sensors on wet surfaces, with moving crops, or vehicle vibration.

- Convenient enclosure mounts inside cab, only small patch antenna is mounted outside.
- Status LEDs show power, GPS lock, and speed output conditions.
- Wide range of adapter cables available making it compatible with all popular application rate control systems.
- Speed range 0.5–80 MPH.

GPS Speed Sensor

MOBILE ELECTRONICS