

IC45 SPRAYER

IC45 Sprayer v1.03

January 2023

NOTE: Should as minimum use PLP12 software version 1.10.

New Features:

- It is now possible to use the sprayer with and without DynaJet without changing the sprayset.xml file (sprayer/fertilized mode), since the configurations file supports two configurations. Selection is done from the GUI and requires a reboot.
- Added up/down control of incorporator (chemical tank) when used together with TankMatic
- Added PLP12 alarms when PLP12 has entered a safe state. This may e.g. happen when an output is overloaded.
- Added diagnostic page that provides detailed information about PLP12 safe state.
- Added encoding of the hysteresis for agitation on/off tank level.
- Added menu for enabling stop of agitation when filling is active.

Fixes:

- The maximum allowed current supply from a individual PLP12 output has been increased from 3A to 3.5A.
- Pressing two softkeys simultaneously will only activate one function.



IC45 Sprayer v1.02

July 2022

NOTE: Should as minimum use PLP12 software version 1.10.

New Features:

- External Master input can now be:
 - Steady +12 volts (Requires a 620 ohm resistor between the +12 volts and pin 1 of the IC45).
 - Pulse signal +12 volts. (Requires a 620 ohm resistor between the +12 volts and pin 1 of the IC45).
 - Steady GND
 - Pulse GND

The input type is configured via the sprayset configuration file.

- Added the functionality to stop application outside of field boundary.
- Improved precision of tank volume measurement with tank level sensor.
- Added maximum pressure setting for hydraulic pump control modes.
- DynaJet IC7140 saturated nozzle information is normally shown as a part of the boom icon on the work page. This information can now be disabled. (Saturated nozzles are where the duty cycle has reached maximum or minimum value and action should be considered such as adjusting speed of vehicle.)
- DynaJet IC7140 and Pump menus have been moved to the Machine Setup menu for easier access.
- Improved Idle and Minimum pressure regulation in hydraulic pump setup, used for systems without DynaJet IC7140. It is now possible to encode a "Minimum Pump RPM Master OFF" and "Minimum Pump RPM Master ON".
 - "Minimum Pump RPM Master OFF", helps ensure enough pump pressure when idle pressure is active.
 - "Minimum Pump RPM Master ON" helps ensure enough pump pressure when minimum pressure has to be maintained while spraying. This is important if pump RPM is dependent on the vehicle speed and if the speed becomes so low, that pump RPM is not sufficient for maintaining adequate pressure.

Fixes:

- The power supply voltage value shown on the diagnostic page has been corrected.
- Hydraulic functions can now be controlled via AUX control devices (example: ISOBUS Joystick).
- Fixed unlock codes for bed application features: Section Pattern (allows setups with manually made nozzles on/off patterns) and Manual VRA (allows for different rates across the boom).
- The information softkey on work screen is now working correctly.
- Corrected update of ISM switchbox section status after a power cycle.

- When operating DynaJet IC7140 in flow mode, the red warning arrow on the work screen located next to the pressure bar graph could lock-up.
 - If DynaJet IC7140 configuration “Keep Flow” is ON, then pressure is increased/decreased depending on vehicle speed. If pressure falls out of selected drop size range, the warning is shown, so vehicle speed can be adjusted.
- Corrected LED colors on ISOBUS switchbox v2.
- “Agitation opposite master” setting is now working correctly.

IC45 Sprayer v1.01

May 2022

Key Features and Benefits:

- Global first release of IC45 series
- ISOBUS sprayer controller
- Based on newly developed hardware, enclosure, and connector concept, but providing same type of functionality as the existing IC35 product
- Includes features like VRA and support for Spot spray sensors when combined with DynaJet IC7140
- Includes also following features offered via unlock codes:
 - Pressure Control Device: Support for Ramsay valve
 - Spray Pattern: Configuration of sections to support Bed Applications and more.
 - Manual VRA: Manual Variable Rate to support Bed applications and more. This feature requires DynaJet availability.
 - Virtual Switch box: A graphical representation of a switch box which allows for easy on-screen manual control of individual sections.
- Can interface with a range of TeeJet developed distributed modules to provide functionality on top of the core control of the sprayer. This release covers for this reason also the release of following supporting software packages:
 - PLP12 version 1.00: PowerLink+ module with 12 outputs for control of sections and/or On-Off control of hydraulic functions.
 - PLP25 version 1.00: PowerLink+ module for active steering of trailer wheels or trailer drawbar pivot point to track the wheels of the tractor during turns.
 - TankMatic Small version 2.00: External 2.8” display to control the tank filling process.
 - TankMatic Medium version 2.00: External 4.3” display to control the tank filling process.
 - ISOBUS Single Row Switch Box version 1.00: Proprietary ISOBUS switch box for easy manual control of section status.
 - ISOBUS Double Row Switch Box version 1.00: Proprietary ISOBUS switch box for easy manual control of section status and hydraulic functions.