



# ISOBUS ECU1224 SPRAYER

Connect your sprayer to Any ISOBUS tractor !

## Quick reference



ECU Manufacturer : **Tecomec Srl**

Hardware ID: **00284**

Software version . **ECU-1224 ISOBUS 2.5.0#**

# INTRODUCTION

Congratulations Dear User,

You have chosen a product by Tecomec, a leading company in the development and production of electronic systems for agriculture. This manual provides information about operating and maintaining. For your safety and the safety of the people working with this equipment, is very important that you read the manual carefully before using this system.

Proper maintenance extends the life of the product and ensures the safe operation of the system.

The manufacturer reserves the right to redesign and change the system as necessary without notification.

ECU 1224 is an Electronic Control Unit ISOBUS AEF certified, dedicated to sprayer implement. ECU1224 is a rate controller capable of Automatic Section Control when connected to ISOBUS Virtual Terminal enabled for GPS navigation. This device works only with certified ISOBUS VT, please verify documentation of your VT installed on the tractor.

Find complete user manual at [WWW.TECOMEC.COM](http://WWW.TECOMEC.COM)



User manual

## INTENDED USE

ISOBUS ECU 1224 is high performance electronic control unit for liquid distribution, specially designed to work on agricultural machinery for spraying. The accurate control of the sprayer parameters increases the effectiveness and efficiency of the treatments, reducing the waste of chemicals.

ISOBUS ECU 1224 is certified ISO 11783. The ISO 11783 standard protocol usually called ISOBUS protocol is the result of an agreement between the main manufacturers of agricultural machinery and equipment. ISOBUS allows communication between the ISOBUS display installed in most recent tractors and sprayers, seeder etc. A unique display in the cabin (called Virtual Terminal) will control your implement, avoiding expensive and bulky proprietary displays. The certification guarantees you full compatibility with all ISOBUS certified tractor's consoles.

## LEGEND

This user's manual uses some conventional signs and words, to lead the user during the reading of important instructions and advices; these concern especially the setting of the parameters of the system and thus its correct working.

**INFO** : Indicates further explaining and information.

**DANGER**: Indicates an imminently hazardous situation that, if not avoided, could result in DEATH OR VERY SERIOUS INJURY.

**WARNING** Indicates a potentially hazardous situation that, if not avoided, may result in MINOR INJURY or system damage

## RECOMENDATION

**WARNING**: Before operating or installing this equipment read and understand manual and all safety information. Good safety practices protect operators from injuries. Safety practices reported in this manual do not override standard good practice.

# CONFORMANCE

**WARNING:** Always check that any suspended vehicle attachments are lowered to the ground before beginning repair or maintenance work on a vehicle.

**WARNING** The power supply must be protected with fuse (10A recommended). Tecomec s.r.l is not responsible for damages to ISOBUS ECU1224.

**WARNING:** Disconnect power supply cable ECU when battery is undergoing recharge. If it is not the case Tecomec s.r.l is not responsible for damages to the ECU1224.

**WARNING:** Disconnect power supply ECU before reparations, or welding procedure on the vehicle. If it is not the case, Tecomec s.r.l is not responsible for damages to the ECU.

**WARNING:** For a correct functioning, please make sure that the battery voltage is higher than 10, 5 Volt.

**WARNING:** This marking on the product or on its packaging illustrates that this product may not be disposed of with normal household waste. The user is responsible for the disposal of this equipment through a designated collection of electrical and electronic equipment. To determine where to dispose of such electrical and electronic waste, contact the government office, the waste disposal organization serving the family, or the company where the product was purchased.



**WARNING:** Before cleaning the implement with high pressure water jets, protect the equipment from water. Do not orientate high pressure water jet directly on ECU or cables connected to ECU 1224.



**WARNING:** Clean equipment using a soft, damp, lint-free cloth. Do not use sprays, solvents, abrasives, or sharp or pointed objects that could damage ECU1224.

**WARNING:** Wear appropriate protective clothing for the task being undertaken and conditions.

**WARNING:** ECU helps the operator to regulate rate control and automatic section control, but the operator remains the responsible for all the activities. Operator must keep the control of the vehicle all time. The operator is ultimately responsible

for safe operation of this equipment, preventing and repairing faulty parts and calibration.

ZERTIFIKAT · CERTIFICATE · 認定証 · СЕРТИФИКАТ · CERTIFICADO · CERTIFICAT · CERTIFICATO

## CERTIFICATE

The Agricultural Industry Electronics Foundation (AEF)  
certifies that the below mentioned product developed by

**TECOMEC S.r.l.,**  
Strada della Mirandola 11, 42124 Reggio Emilia, Italy,

has been successfully tested and is in compliance with the ISO standard 11783  
and with the AEF ISOBUS functionality guidelines.



The AEF ISOBUS Conformance Test Version 2020/1 has been executed on July 2nd, 2020 by

Fondazione REI  
Via Sicilia 31  
42122 Reggio Emilia  
Italy

This Certificate is registered under Compliance Certification ID (CCID) 1087/2020/1/523/1.

ECU Manufacturer **TECOMEC S.r.l.**  
Hardware-ID **000284**  
Software-Version **ECU-1224 ISOBUS v1.0.0#**

Functionalities

IT 2.0	AXX-N 1.0	TC-8AS 1.0	TC-8C 1.0	TC-8C 1.0
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Peter van der Vlugt, Chairman,  
July 2nd, 2020

Agricultural Industry Electronics Foundation (AEF), Lyoner Straße 18, 60528 Frankfurt/Main, Germany.

# COMPONENTS

## COMPONENTS

- A) ISOBUS ECU 1224
- C2) Valve/sensors connection cable (Gray connector)
- C3) Valve/sensors connection cable (Brown connector) \*
- T1) ISOBUS terminator ( connect on ISOBUS cable , ISOBUS Cable must be purchased apart)



Figure 1 Kit composition

## INSTALLATION DIAGRAM

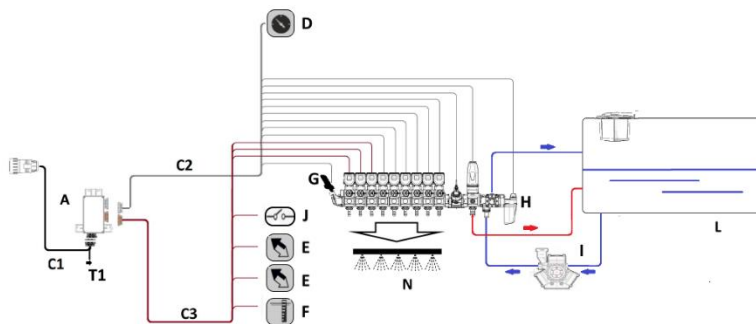
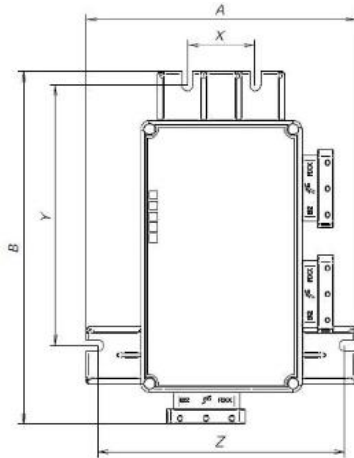


Figure 2 Installation Diagram

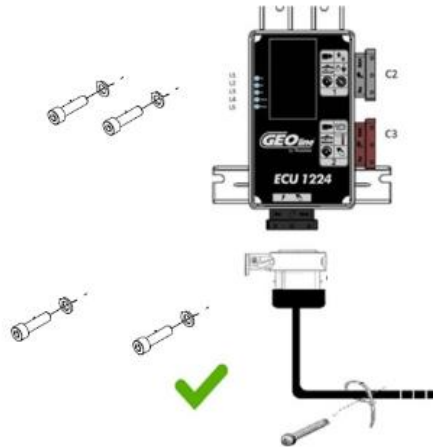
PART	Description	PART	Description
A	Driver ISOBUS ECU 1224	I	Pump
--	-----	J	External Switch Main Valve
D	Speed sensor (Optional)	L	Tank
E	Output 12V max 1.5 A	N	Sprayer Boom
F	Level Sensor (Optional)	C1	Main cable
G	Pressure sensor (Optional)	C2	Gray connector valve cable
H	Electric valves	C3	Brown connector valve cable
		T1	ISOBUS T

# COMPONENTS

## MECHANICAL FIXING



Dimension	(mm)
A	160
B	208
C	47
X	40
Y	154
Z	146



Recommended 4Cylindrical head screws with hexagon socket M6

Figure 3 Mechanical Installation

# START

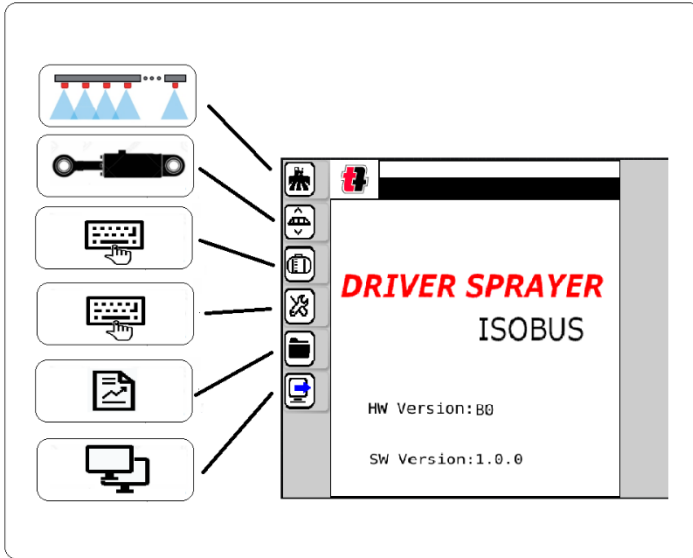


Figure 4 Main

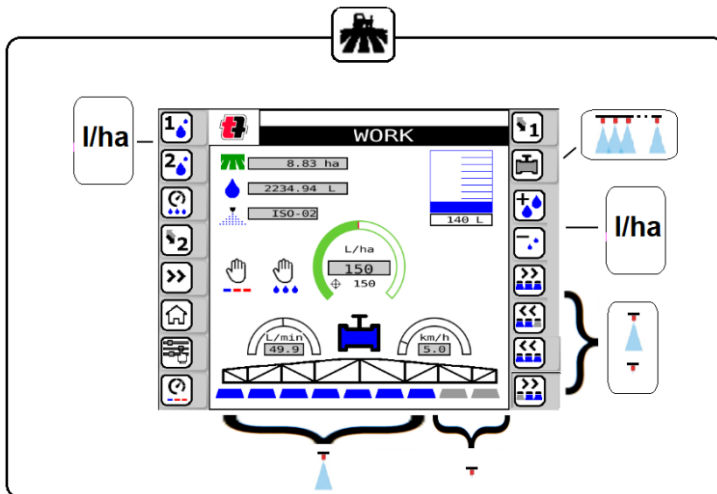


Figure 5 Working Interface



# START

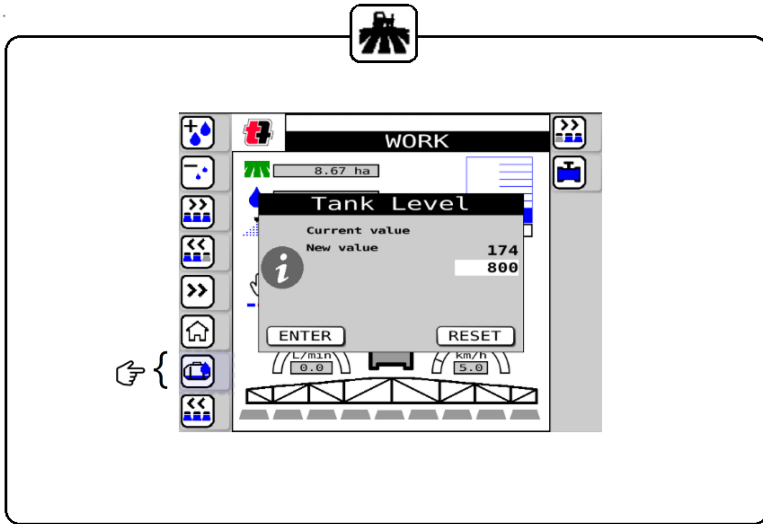


Figure 6 Main

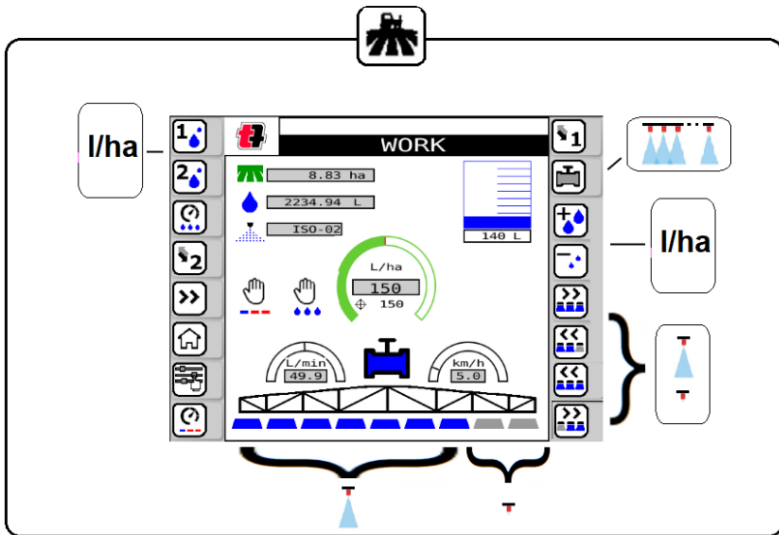


Figure 7 Manual Section Control

# SECTIONS CONTROL

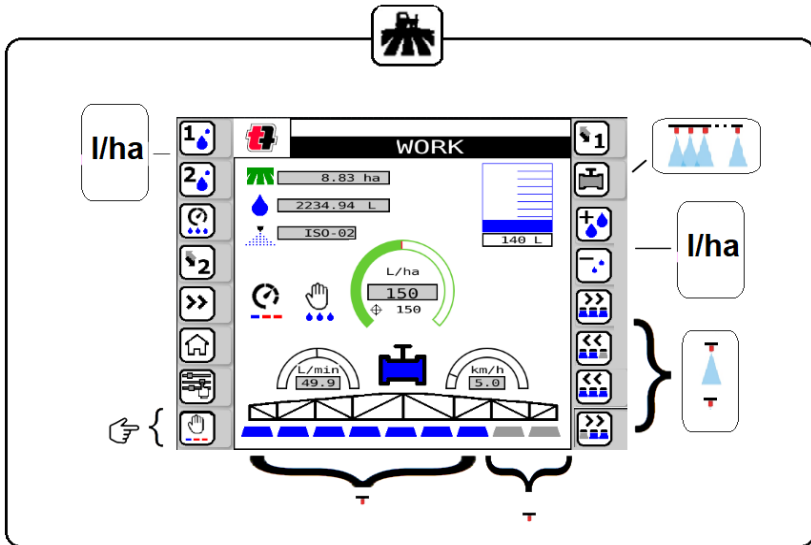


Figure 8 Automatic Section Control

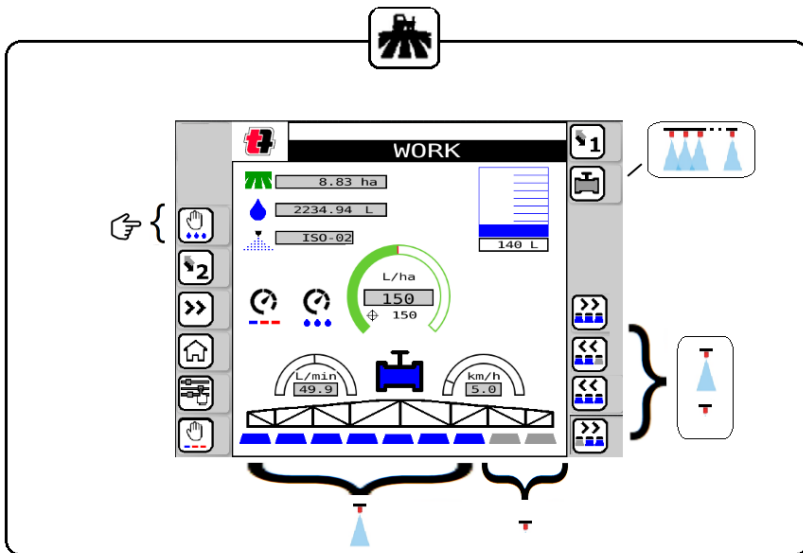


Figure 9 Automatic Section Control Prescription Map

# DIRECT SPRAYING

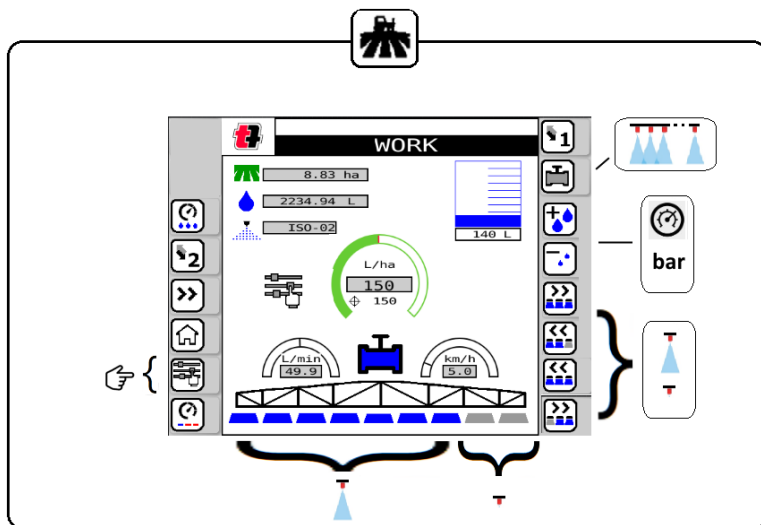


Figure 10 Direct Mode

# RESET COUNTERS

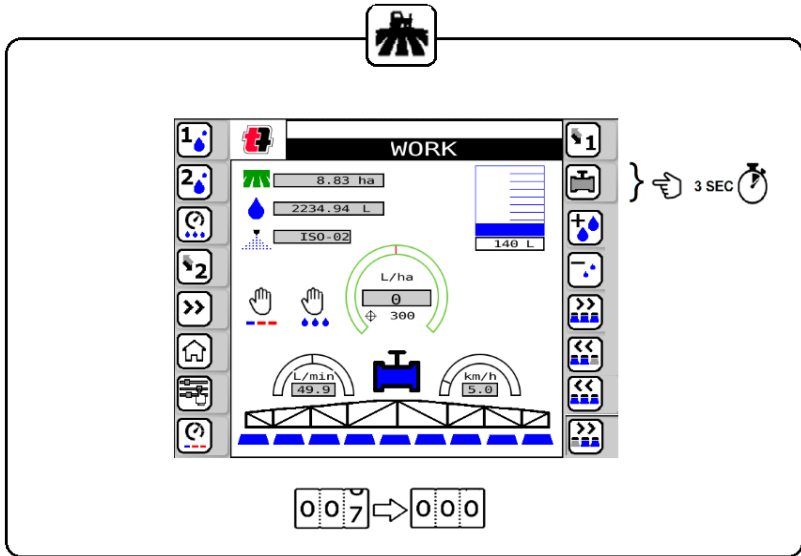


Figure 11 Reset Counters

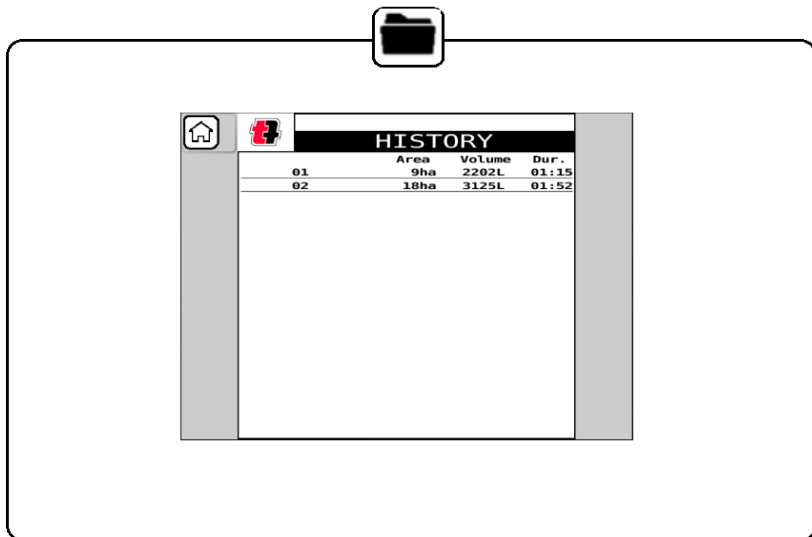


Figure 12 Reports

# TRAILED SPRAYER

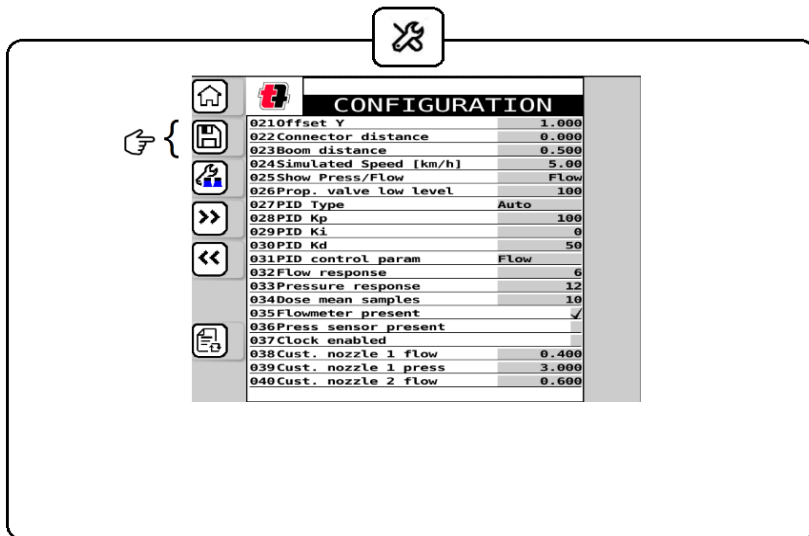


Figure 13 Dimensions configuration

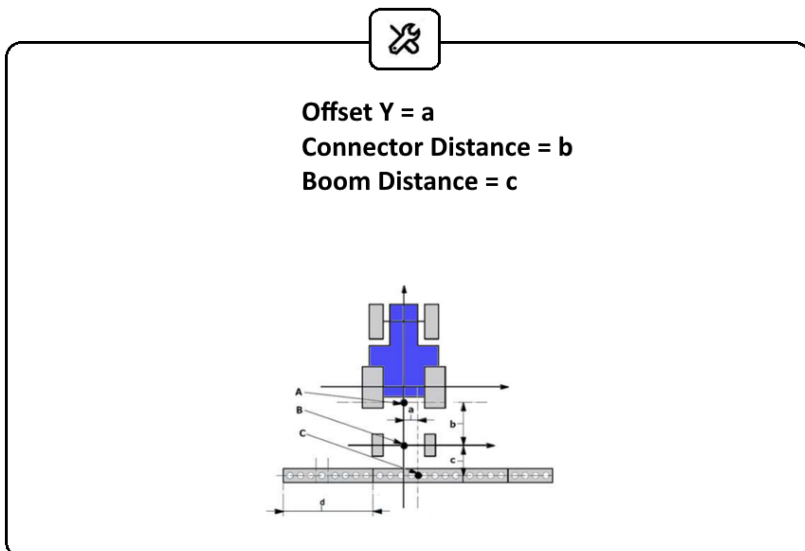


Figure 14 Trailed sprayer

# THREE POINT LINKAGE

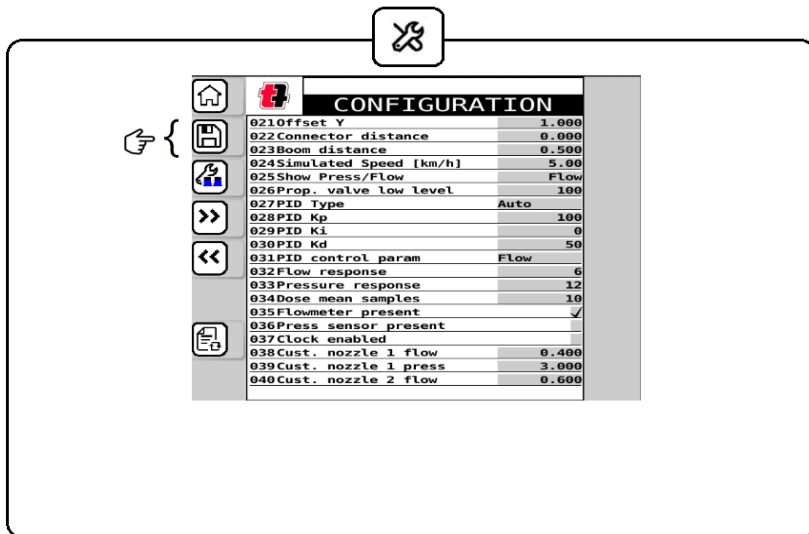


Figure 15 Dimension Configuration

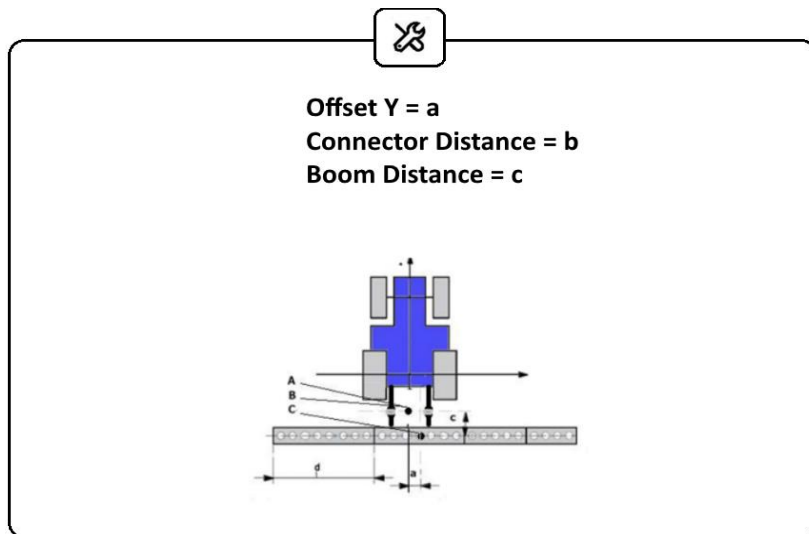


Figure 16 Three point linkage

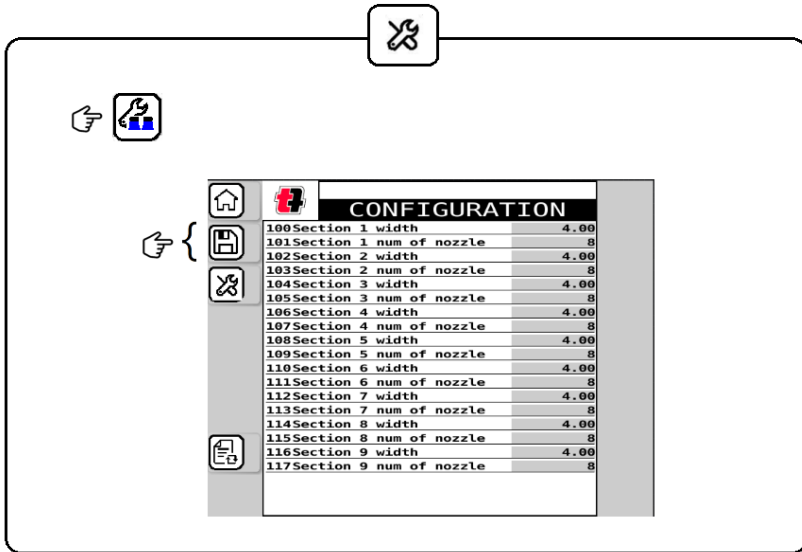


Figure 17 Boom Settings

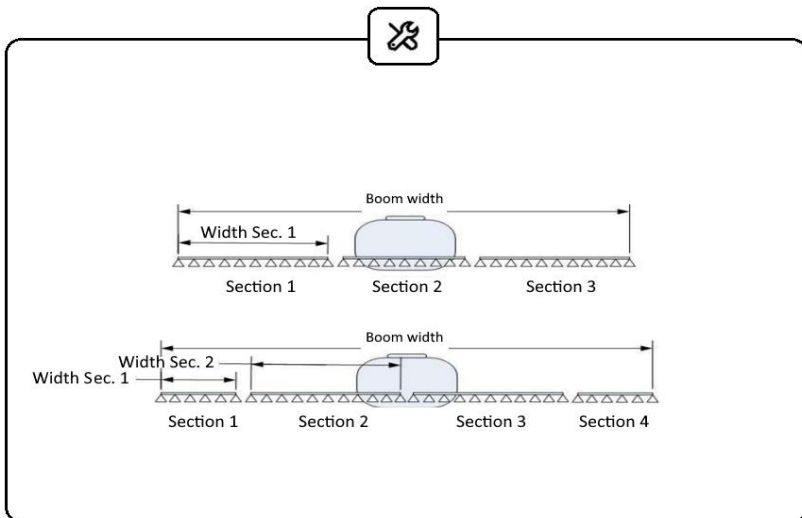


Figure 18 Boom Diagram

# Sensor:Flowmeter

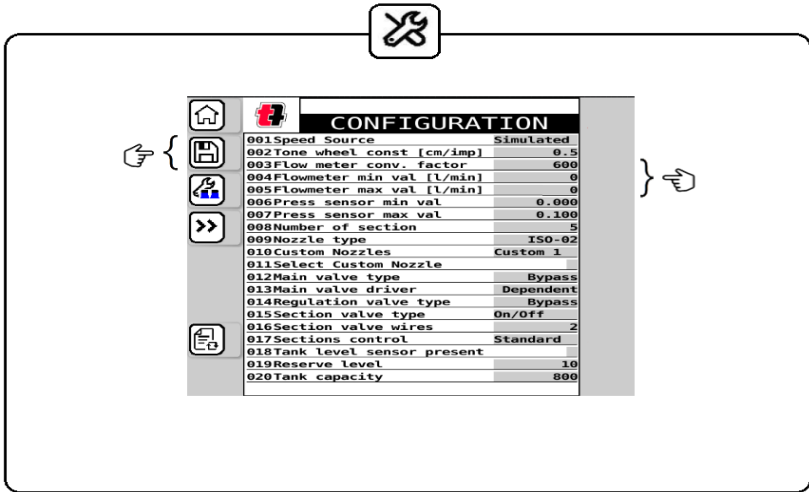


Figure 19 Flow meter regulation sensor

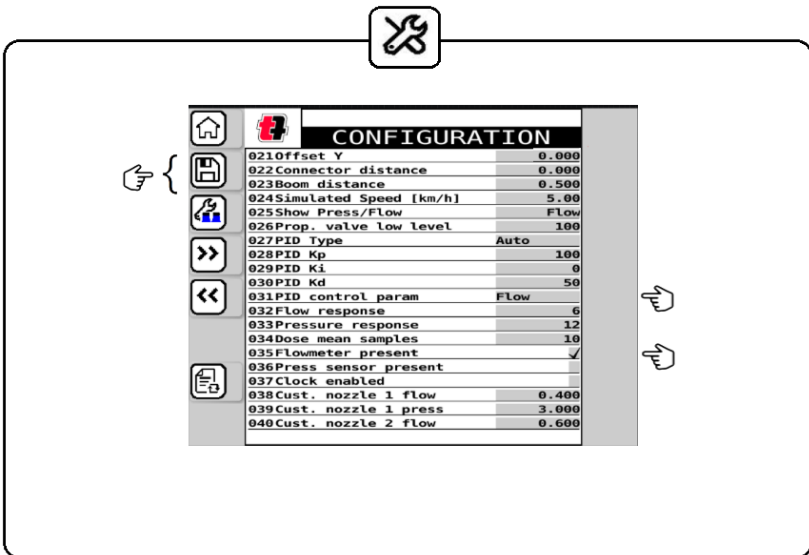


Figure 20Flow meter regulation sensor(b)



# Sensor:Flowmeter

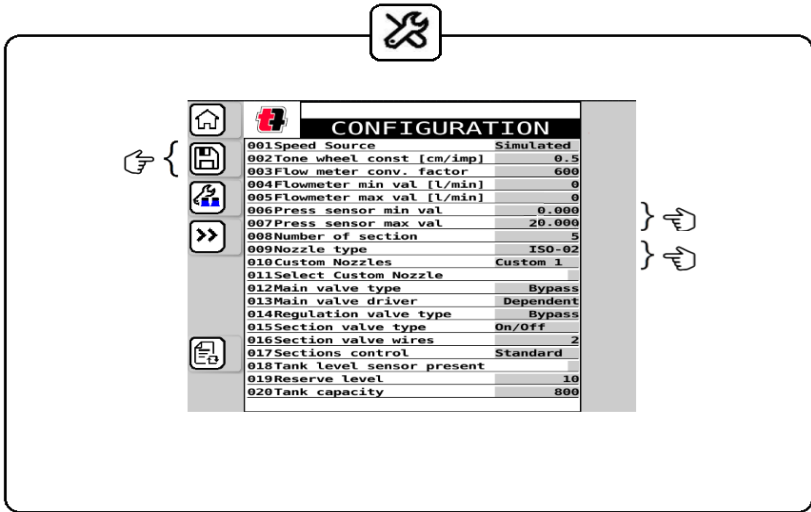


Figure 21 Pressure regulation sensor

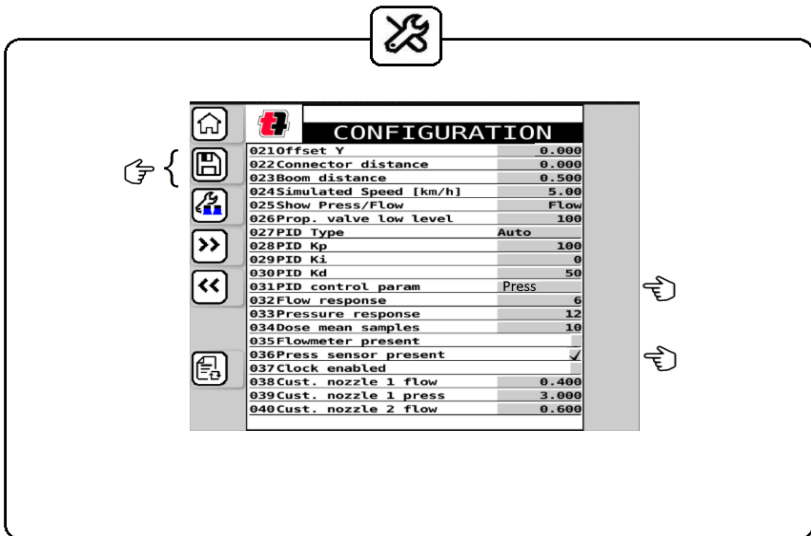


Figure 22 Pressure regulation sensor (b)

This product has been designed and manufactured using the most modern techniques. The manufacturer guarantees the products for 24 months from the date of purchase.

Tecomec S.r.l. guarantees that ISOBUS ECU 1224 SPRAYER labeled products are covered against manufacturing defects during the following periods.

## Warranty periods

- Finished products – 2 years from Invoice date to end user
- Warranty on parts or reparation made during warranty period will end at the end of initial warranty period.

## Product warranty terms

1. The warranty period starts at the date of purchase. The guarantee will be applied upon presentation of the purchase invoice. The manufacturer, acting through the sales and technical assistance network, shall replace free of charge any defective component. The warranty does not modify the purchaser's rights as established under legislation governing the consequences of defects in the product.
2. The technical staff will intervene as soon as possible within the time limits granted by organizational arrangements.
3. Any claim under the warranty, must include details of invoice or receipt showing the date of purchase.

4. The manufacturer excludes consumables and parts subject to normal wear and tear.
5. The guarantee excludes intervention for updating and improvement of product.
6. The warranty does not cover the tuning maintenance interventions which should occur during the period of guarantee.
7. Any damage caused during transport must be reported immediately to the carrier or warranty will be void.
8. The warranty does not cover any damage, direct or indirect, caused to people or things
9. The warranty is void in the event of:
  - Obvious lack or wrong installation or maintenance.
  - Use of not original spare parts or accessories
  - Interventions carried out by non-authorized personnel.

## Returning goods

To have an effective guarantee, it is necessary to comply with the following requirements:

- The product must be delivered in the original packaging and with all the accessories (if applicable) in good condition.
- Provide a copy of the purchase invoice.
- Attach a letter in writing (from the distributor or user) explaining in detail the equipment failures and / or anomalies, mentioning the device serial number.

# *Sensor:Flowmeter*

- Get the official approval from the seller before returning any goods

## Notes

- Customer is not allowed to rework or try to repair the device under any conditions. Reworked devices will not be covered by warranty.
- The guarantee will be applied after the analysis of technical staff which will carry out the necessary tests for diagnosis.
- Parts warranty, will start from the seller sales invoice.
- The serial number must appear on the sales invoice to the final customer.
- Repair and maintenance must be carried out only by Agres, Tecomec s.r.l. or authorized centers

As indicated in the Returning goods topic, the documentation must be correct for the equipment analysis to begin.







## Documentation and certification



Manufacturer:

<https://www.tecomec.com/>

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