



Operators Guide i4M Sprayer



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Foreward

This is a basic guide for the i4M Control System only. Important Safety and Operating information is contained in your tractor and implement Operators Manuals and must be read prior to operating this equipment. This guide provides supplementary information only.

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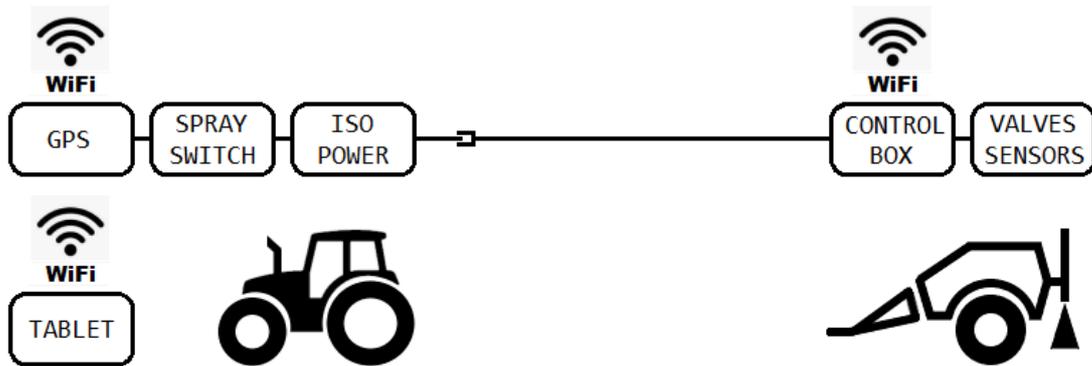
**WANT THE FASTEST SETUP?
FOLLOW THIS QUICK GUIDE**

Features

- Prescription map variable rate control
- Applied rate recording
- Coverage with auto shutoff (whole boom)
- Auto and manual spray modes, change on the fly
- Preset rates, change on the fly
- Holds a minimum nozzle flow, for best spray pattern
- 3 Boom sections or 2 sections plus 1 fence jet
- Manual section control (user manually controls boom sections)
- Wifi network for tablet, controller and GPS
- Spray pressure, tank level, hectare counter, ground speed indicators
- User friendly help and tips within the app
- Interactive checks for easy setup and troubleshooting
- Auto section control in development, release TBD

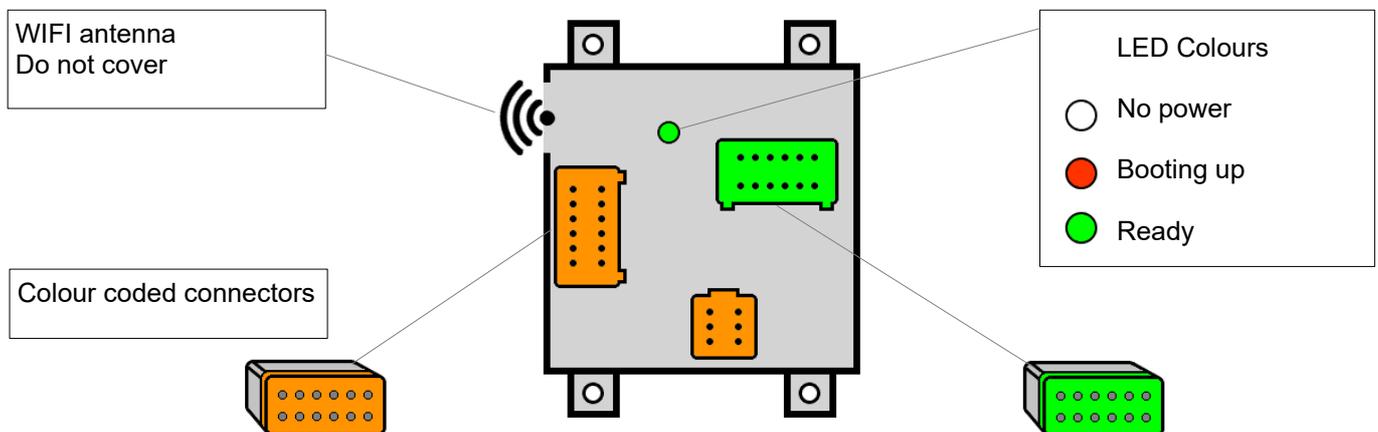
Installation

- The Control Box is fitted to the sprayer
- Connect power using the ISO socket or a power outlet in the cab
- The ISO socket is for power only, it is not connected to the tractor CANBUS
- The GPS should be mounted on the tractor (preferred), or the front of the sprayer
- The GPS must be along the machine center line
- The GPS communicates automatically with the control box using wifi



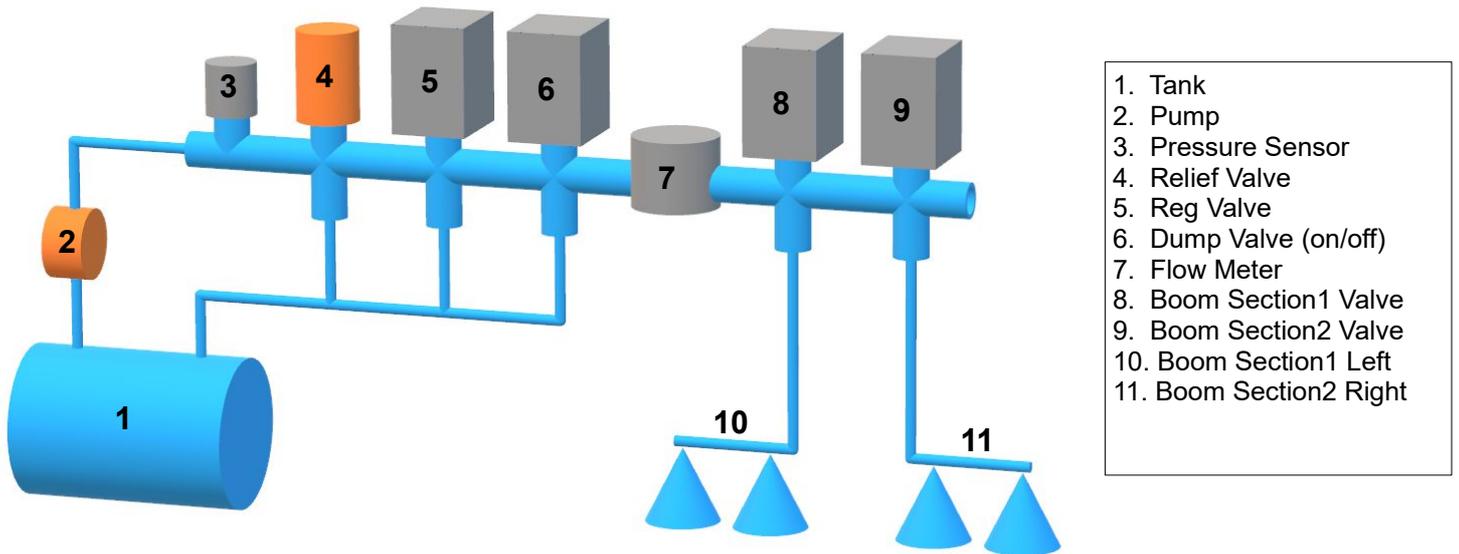
Controller Info

- The i4M controller takes a few seconds to boot up
- There is a diagnostic LED on the box
- The Tracer GPS will auto connect to the box after a few seconds
- Sockets are colour coded, harness connectors have coloured ends



Common Sprayer System

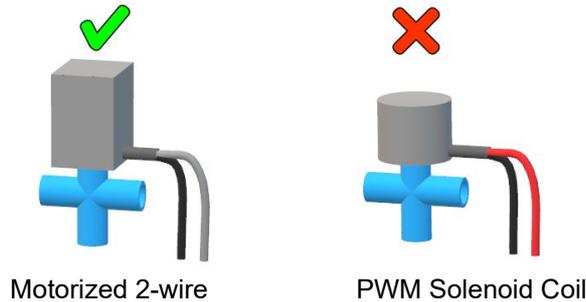
- i4M Sprayer is designed to run a system like to this below
- It can also be adapted to run many other variants different to this



1. Tank
2. Pump
3. Pressure Sensor
4. Relief Valve
5. Reg Valve
6. Dump Valve (on/off)
7. Flow Meter
8. Boom Section1 Valve
9. Boom Section2 Valve
10. Boom Section1 Left
11. Boom Section2 Right

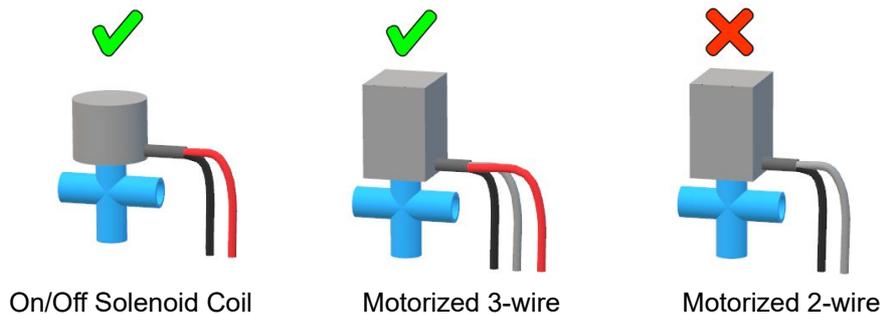
Regulating Valve

- The reg valve must be a 2-wire motorized valve
- Fast-close valve is OK (for systems without a dump valve)
- Not compatible with PWM solenoid coil reg valves



ON / OFF Valves

- Section valves, dump valve, spray On/Off valve, fence jet valve
- Compatible with motorized 3-wire valves, compatible with solenoid-coil on/off valves
- Compatible with dual mode valves, check the valve datasheet for 2-wire and 3-wire configuration
- Not compatible with motorized 2-wire valves (reversing input voltage)



Sensors

- Compatible with 3-wire flow meters, with voltage output signal
- Compatible with 3-wire pressure sensors 0-5volt output, not compatible with 2-wire 4-20mA output

Connector pins

- These are the pinouts on the i4M harness, you need to wire the valves to match this
- Diagram shows male connectors with female pins (looking into the pins)



2 Pin Connectors	Pin 1	Pin 2
Reg valve 2-wire (increasing sprayer output)	12V	Ground
Reg valve 2-wire (decreasing sprayer output)	Ground	+12V

3 Pin Connectors	Pin A	Pin B	Pin C
On/Off valves 3-wire motorized	Ground	+12V Supply	+12V Switch on/off
On/Off valves 2-wire solenoid-coil	Ground	Don't connect	+12V Switch on/off
Flow meter	Ground	+12V Supply	Flow signal
Pressure sensor	Ground	+12V Supply	Pressure signal
Power connector on the tractor harness	Spray on/off	Ground	+12V Supply



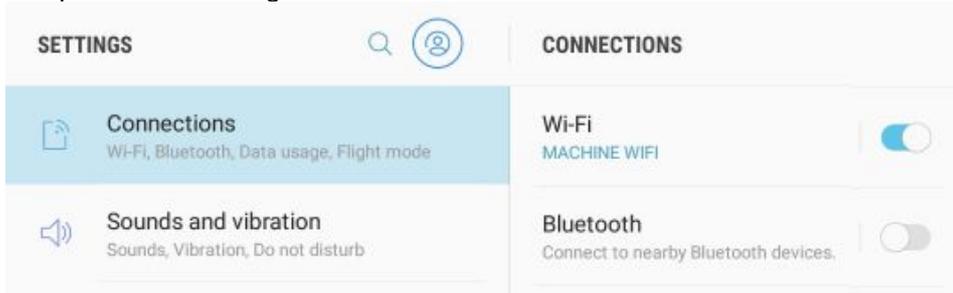
Controller Orange 12-Pin Connector	
Pin 1	+12V Supply to controller for electronics
Pin 2	Ground to cont
Pin 3	Spray on/off switch in tractor cab (momentary on/off button)
Pin 10	Flow meter signal

Controller Green 12-Pin Connector	
Pin 1	+5V Supply (if required for flow meter / pressure sensor)
Pin 2	Pressure sensor signal
Pin 7	Reg valve increase
Pin 8	Reg valve decrease

Controller Orange 6-Pin Connector	
Pin 1	Ground to controller
Pin 2	Boom section 3 or fence jet
Pin 3	Dump valve
Pin 4	Boom section 1
Pin 5	Boom section 2
Pin 6	+12V Power to controller for drivers/switches

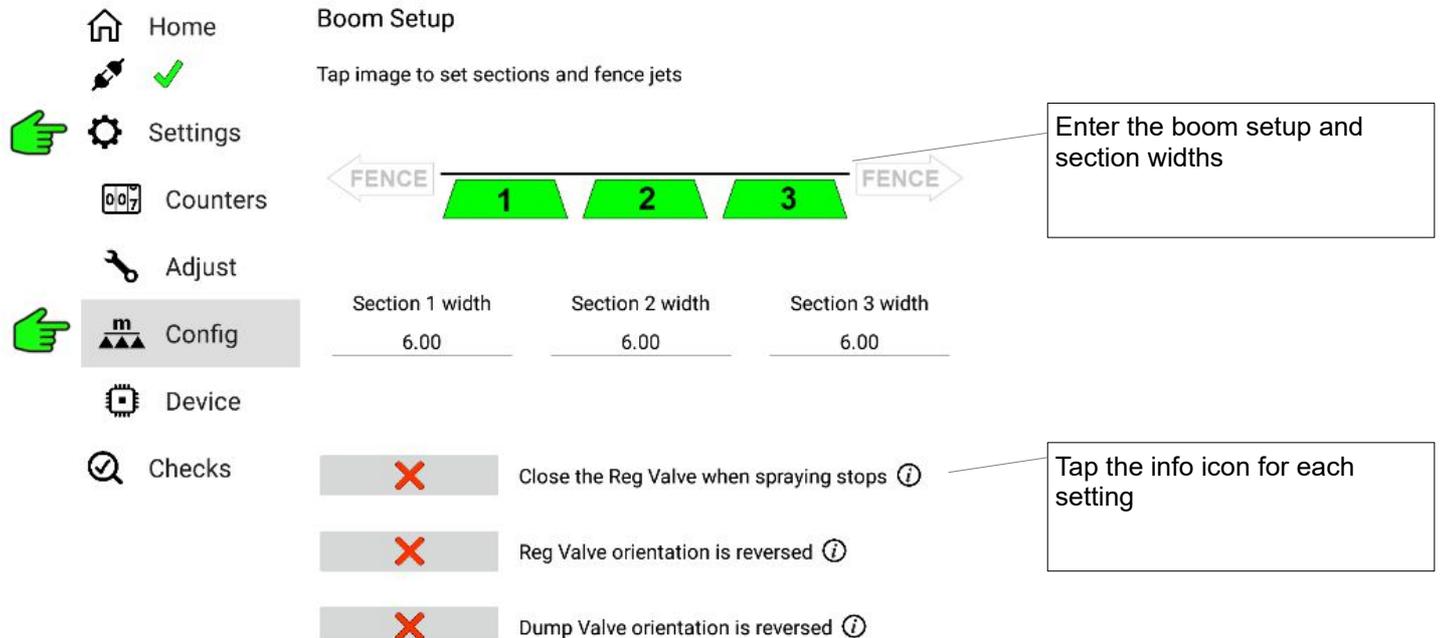
Android App

- Install the i4M Sprayer app on your tablet
- After the app is installed, connect the tablet to the controller
- Open the wifi settings and connect to MACHINE WIFI 1

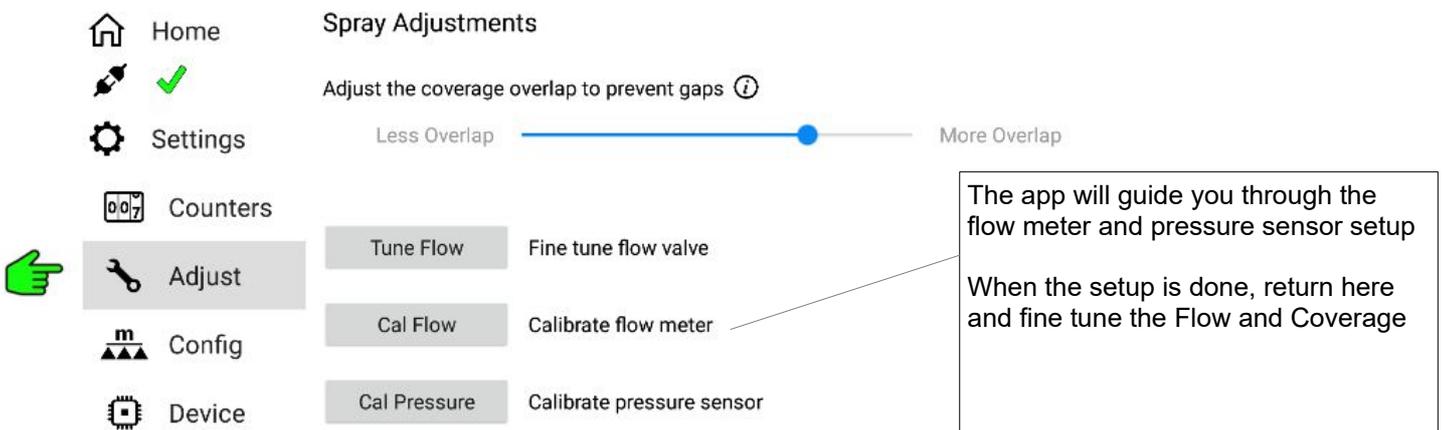


Machine Setup

- Open the i4M Sprayer app
- Tap MACHINE
- Tap SETTINGS > CONFIG



- In SETTINGS, Tap ADJUST



Setting Spray Rate

• In the HOME menu, tap SPRAY RATES

Home Do you want to use a Prescription Map or Set Values?

Help  Use a Map

 Set Spray Rate

 Do you want to set a Minimum Nozzle Flow?

 Min Nozzle Flow

Set the spray rate you want to use
Or load a prescription rate map

Also set the minimum nozzle flow if
you want
This holds the flow rate when you slow
down, for good spray pattern
Warning: the L/Ha rate will jump up

Recording Files

Back Enter spray rates to use on the Work Screen

Recording  100 L/Ha Preset 1

Help 110 L/Ha Preset 2 (optional)

120 L/Ha Preset 3 (optional)

Tap Recording, to select a recording
file

Home Choose a Recording File

Help  Recording file 0 - Western Block 09

 Recording file 1 - Deep Valley Field

 Recording file 2 - Chief Wiggum's Back Yard

 Edit

 Recording file 3

You have 10 recording files
These files store your Coverage and
Recorded data

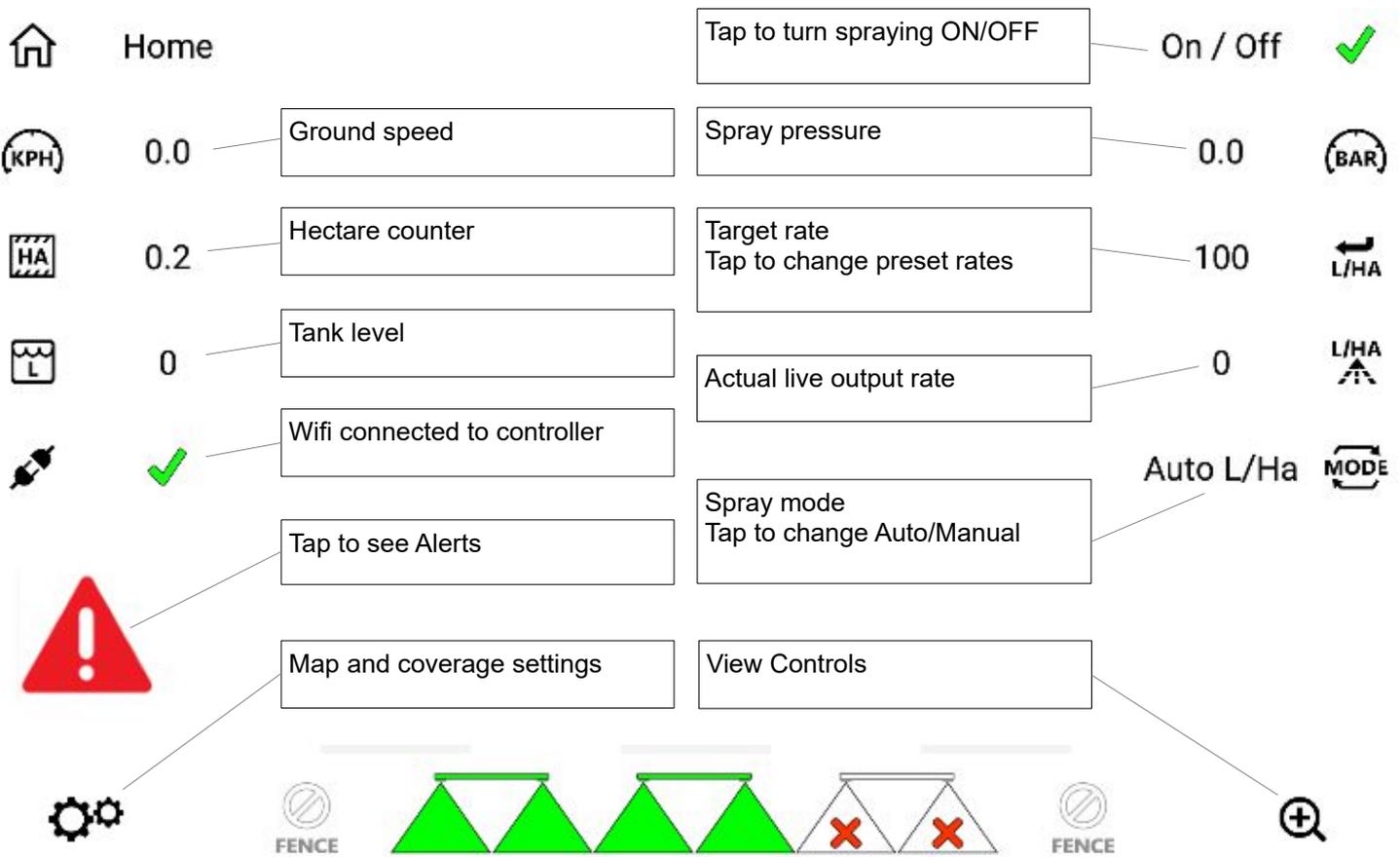
Choose any file you want

Tap Edit to enter a name for the file

When you have finished the job, you
can Export the recording file
You can also delete the recording

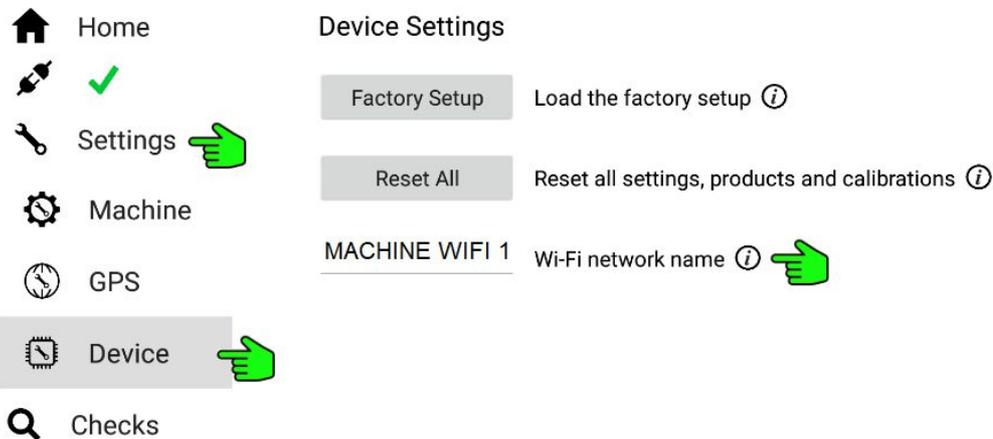
Operating the Machine

- In the HOME menu, tap WORK SCREEN



Using Multiple Machines

- When using multiple machines nearby, set different network names for each machine
- The GPS must be connected to receive the new Wi-Fi network name
- To confirm your GPS is connected, go to CHECKS > GPS
- Then follow steps by tapping the Wi-Fi network name



Prescription Maps

Home

Help

Do you want to use a Prescription Map or Set Values?

Use a Map 

Set Spray Rate

Tap Spray Rates in Home Menu
Tap Use a Map

Home

User 

Download

Help

Select a Prescription Map

World Sample Map

Login to your i4M account
If you don't have an account:
• Create one online at i4m.tech
• Upload your shapefile maps

Home

User

Download 

Help

Select a Prescription Map

World Sample Map

Springfield Inc Harvey Yard depth Depth Test

Springfield Inc Gravel Pit depth Depth Test 

Recording

Airstrip Dairy Main Block depth Depth Test

Download your maps
Select the map you want to use

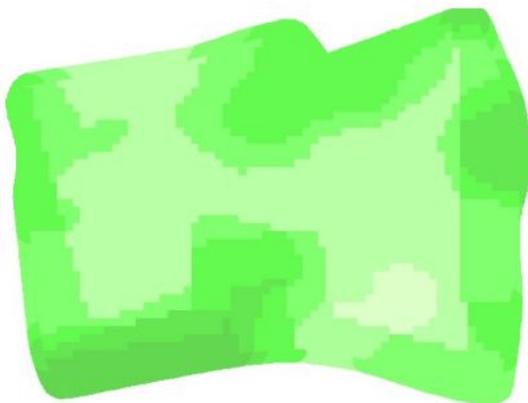
Home

0.0

0.2

0





On / Off 

0.0 

100 

0 

Auto L/Ha 

Open the Work Screen
Your map will be loaded