



Operators Guide Seeder V201



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Foreward

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

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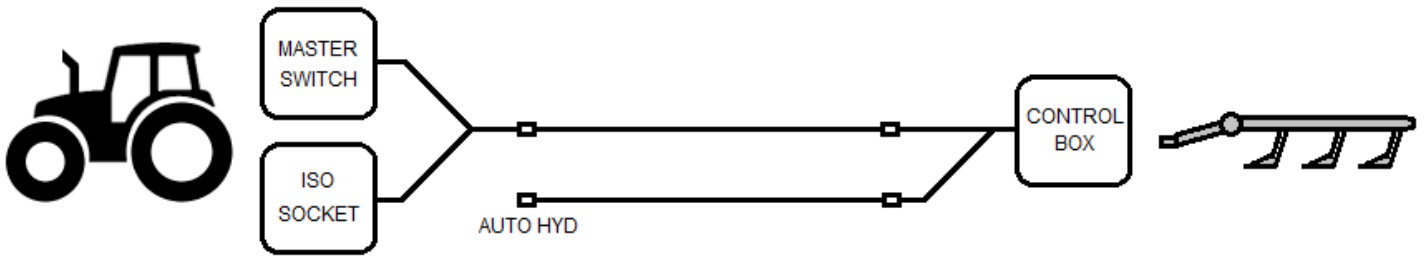


**SAVE YOUR MONEY
LEAVE THE HOPPER EMPTY UNTIL SETUP IS DONE**



**WANT THE FASTEST SETUP?
FOLLOW THIS GUIDE FROM START TO FINISH**

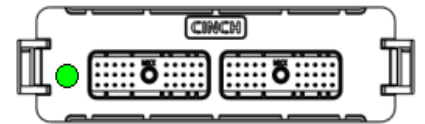
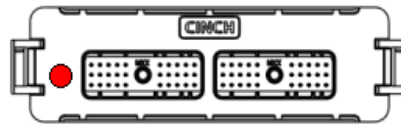
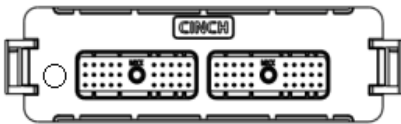
Installation



- Install the master switch in the tractor cab
- Connect the harness to the ISO socket
- The ISO socket is used for power only, it is not connected to the tractor CANBUS
- If equipped - Connect the GPS box to key power in the cab
- The GPS automatically communicates to the control box using WIFI

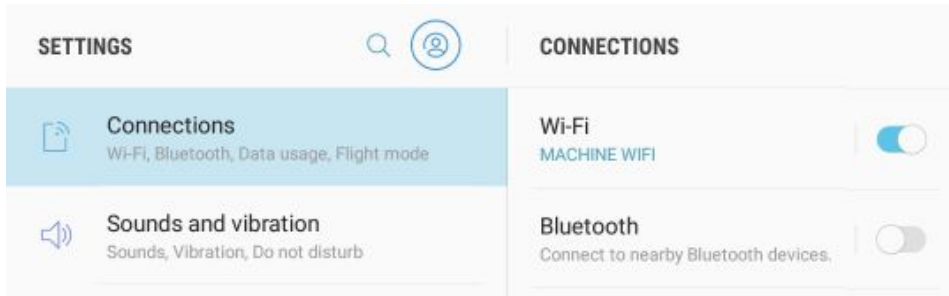
Power On

- The i4M controller and GPS box take 60 seconds to boot up
- There is a diagnostic LED on the boxes
- Control Box LED: Red is booting up, Green is on solid when ready to use
- GPS Box LED: Green comes on 15 seconds after power on, Flashes green when ready to use



Android App

- Install the i4M Seeder V2 app on your tablet
- After the app is installed, connect the tablet to the controller
- Open the wifi settings and connect to MACHINE WIFI



- Open the i4M Seeder app



Machine Setup

EXIT	PRODUCT	SETTINGS	CHECKS	LICENSE	SOFTWARE
------	---------	----------	--------	---------	----------



HOME	BIN	HECTARES	MACHINE	GPS	DEVICE
------	-----	----------	---------	-----	--------



GPS Settings

CHANGE	i4M GPS Receiver is installed
4.0	Distance from GPS to coverage area in metres, adjust to prevent coverage gaps



Check these settings

i4M GPS is Optional Equipment, it may not be installed

i4M GPS Receiver is required for Coverage and Auto Shutoff

Adjust the distance to prevent coverage gaps

HOME	BIN	HECTARES	MACHINE	GPS	DEVICE
------	-----	----------	---------	-----	--------



Machine Settings

12	Implement width m
CHANGE	Bin low sensor is not installed
CHANGE	Fan is not installed



Check these settings

Seeding width

Bin low sensor is optional, it is used for the bin low alert

Fan is optional, it will display fan speed and enables the fan speed alerts

Meter Drive

40	Jump start 1 to 100
20	Adjusting speed 1 to 100
60	Damping 1 to 100
20	Green zone 1 to 100







See 'Fine Tuning' later in this document

Jump Start - Increase this to make the meter start up quicker
Adjusting Speed - How fast the meter reacts to rate/speed changes
Damping - Increase this to dampen adjustments when it's close the target rate
Green Zone - The area close to the target where adjustment stops

Products

- EXIT
- PRODUCT
- SETTINGS
- CHECKS
- LICENSE
- SOFTWARE

	5000
	48.1
	Urea



HOME ← →



Tap to choose a product
There's 10 stored products

Current Product

Name

Calibration factor, pulses per kg

There are 20 products, use the arrows to choose one
Tap any box to edit
Increasing the cal factor will put out more product

Edit the name if you want
You can manually adjust the calibration factor to increase or decrease the output

Calibration Sample

Start a new sample

Amount dispensed kg



Follow these steps to calibrate
More kilograms will be more accurate

- 1 Start a new sample
- 2 Go seeding, or manually run out some product
- 3 Come back to this page, enter the actual kg that went out

Hopper Kilograms

- The display will count down the kilograms in the hopper
- This is calculated based on your calibrated product
- Go to MACHINE and tap the kilogram reading to enter the new amount after filling up

Operating the Seeder

- When first using the seeder, do not fill the hopper (save your money, test it empty)
- Go to the app Main Menu

 Work Screen

  Maps

 Machine

 About

Would you like to use a Map or Preset values?

 Maps

  Preset

 Home

Enter values to use on the Work Screen

1000 _____

1500 _____

2000 _____

Enter a Rate (in kg/ha)

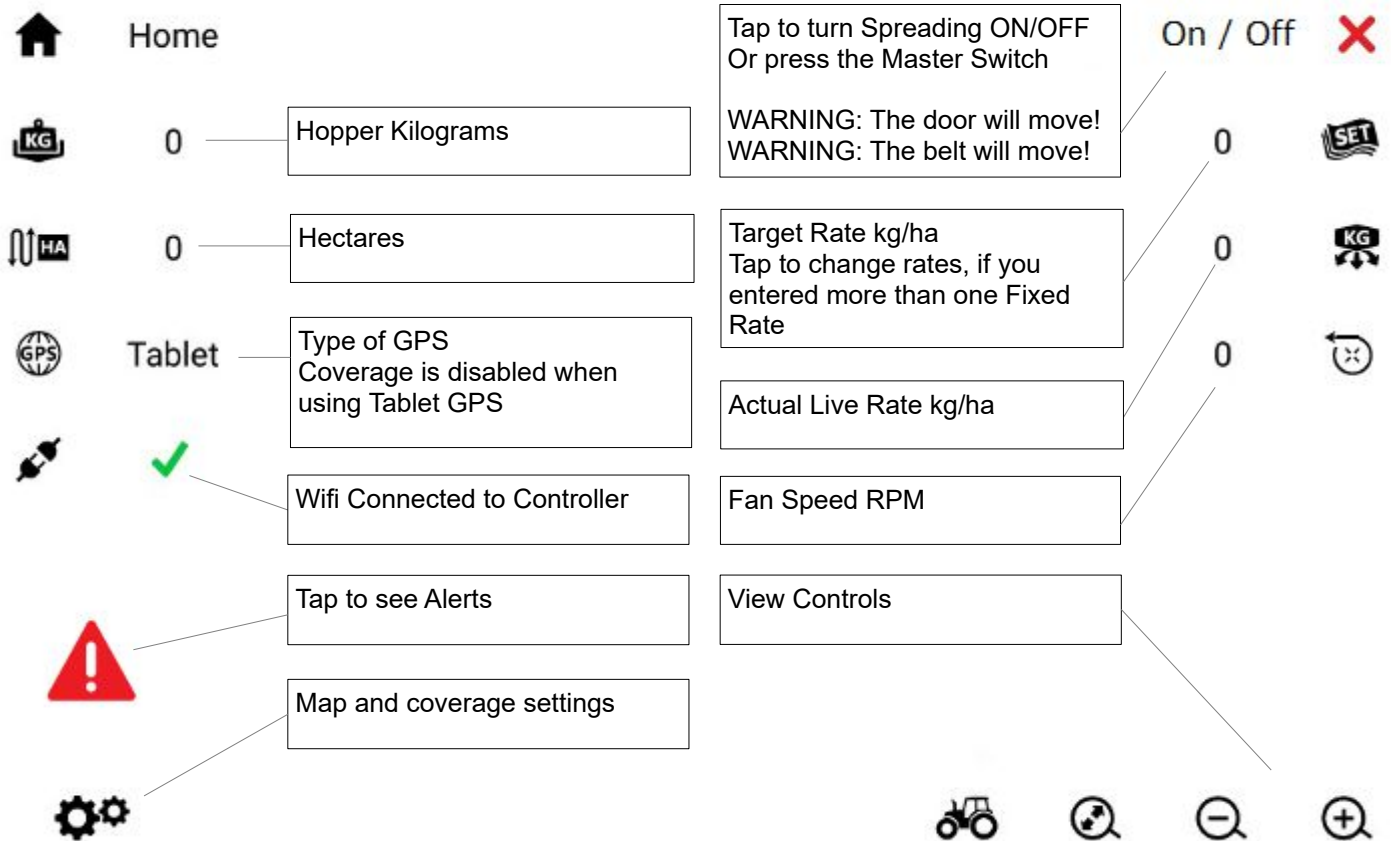
You can enter more rates if you want to change them on the run

  Work Screen

 Maps

 Machine

 About



The screenshot shows the 'Home' screen of a farming application. On the left, there is a vertical menu with icons for Home (house), Hopper Kilograms (KG), Hectares (HA), Tablet (GPS), Wifi Connected to Controller (green checkmark), Alerts (red warning triangle), and Map and coverage settings (gears). The main area contains several data fields and controls:

- On / Off**: A toggle switch with a red 'X' icon, used to turn spreading on or off. A callout box explains: "Tap to turn Spreading ON/OFF Or press the Master Switch".
- Hopper Kilograms**: A field showing '0'. A callout box contains warnings: "WARNING: The door will move! WARNING: The belt will move!".
- Hectares**: A field showing '0'. A callout box explains: "Target Rate kg/ha Tap to change rates, if you entered more than one Fixed Rate".
- Tablet**: A field showing '0'. A callout box explains: "Type of GPS Coverage is disabled when using Tablet GPS".
- Actual Live Rate kg/ha**: A field showing '0'.
- Fan Speed RPM**: A field showing '0'.
- View Controls**: A button to view controls.
- Tap to see Alerts**: A button to view alerts.
- Map and coverage settings**: A button to access map and coverage settings.

At the bottom right, there are four icons: a tractor, a magnifying glass with a location pin, a minus sign (zoom out), and a plus sign (zoom in).

- The controller is ready to use
- If the meter drive is already setup (hydraulic or electric), you can start seeding
- If the meter drive needs to be setup, see the Hydraulics Section

Hydraulics

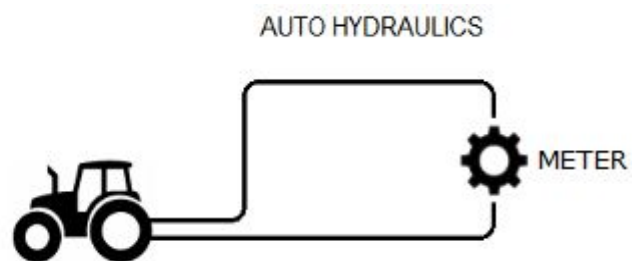
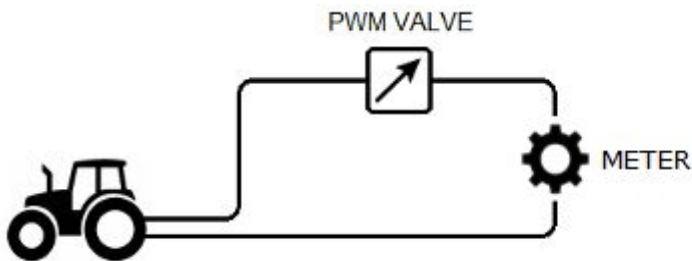
- **IMPORTANT:** Low engine RPM will cause Fan and Meter drive issues
- Tractor hydraulic pumps are coupled to the engine (low engine revs = low hydraulic flow)
- Tractor hydraulic specs are taken at high engine RPM (2000RPM or more)
- Auto transmissions that throttle back the engine can cause low flow issues
- Disable engine throttling, set to 1600RPM or more, as required

Setup Hydraulic Fan

- Fan speed is controlled manually
- Connect hoses to tractor remote number 1 (or priority remote)
- Connect to standard remotes, Do not use high flow return, Incorrect return will damage the tractor

Setup Hydraulic Meter

- Two types of Hydraulic Meter Drives
- PWM Valve has a solenoid valve on the Seeder
- AUTO Hydraulics controls the tractor hydraulic flow (Deere CNH only)



PWM Valve Setup

- Connect hoses to any tractor remote
- Connect to standard remotes, Do not use high flow return, Incorrect return will damage the tractor
- Set the tractor hydraulic flow to 50% (**IMPORTANT:** Too much oil will starve the fan)
- Set time to continuous
- Engage the remote before you start seeding

Quick Manual Test

- Engage the remote
- On the tablet go to MACHINE > CHECKS > OUTPUT and send a Manual Command of 50
- Tap Cancel when done

AUTO Hydraulics Setup – DEERE Tractors

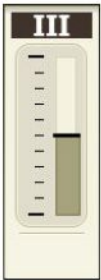
- Connect the AUTO Hydraulics cable (WARNING: key and battery isolator must be off)
- Connect the hoses to tractor remote number 3
- Set the hydraulic flow to 70%
- Push remote 3 forward slowly, meter must turn correctly (swap hoses if it turns backwards)



AUTO
CONNECTOR

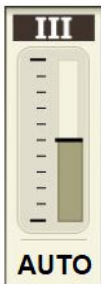
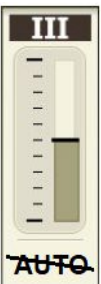


- Check the tractor hydraulic display shows AUTO below remote number 3



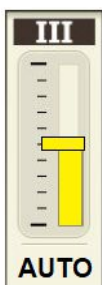
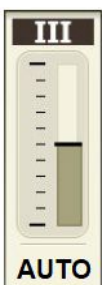
If AUTO is missing

- Turn tractor off, kill battery isolator
- Unplug the auto hydraulics connector at the front of the spreader
- Start the tractor
- Move remote lever 3 forward for 5 seconds
- Turn tractor off, kill battery isolator
- Plug in the auto hydraulics connector
- Start the tractor, check the display shows AUTO



If AUTO is crossed out

- Quickly click the lever forward and release it
- The line should disappear
- Don't click too far forward, that will engage float



If AUTO is showing

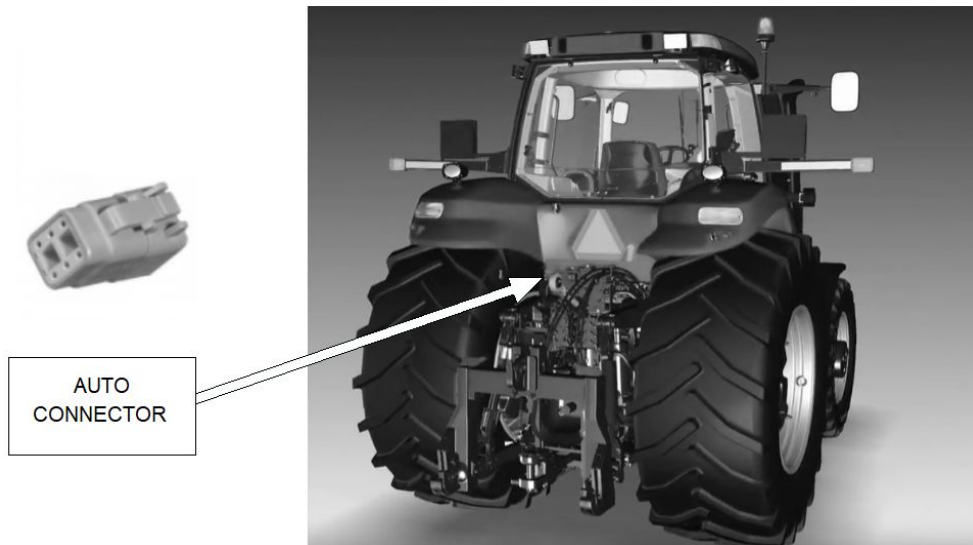
- The hydraulics will run automatically when you start spreading
- Display will turn yellow when oil is flowing
- The tractor must be moving (this is a tractor safety feature, cannot be changed)

Quick Manual Test

- Drive the tractor slowly
- On the tablet go to MACHINE > CHECKS > OUTPUT send a Manual Command of 50
- Tap Cancel when done

AUTO Hydraulics Setup – CNH Tractors

- Connect the AUTO Hydraulics cable (WARNING: key and battery isolator must be off)
- Connect the hoses to tractor remote number 3
- Set the hydraulic flow to 70%
- Push remote 3 forward slowly, meter must turn correctly (swap hoses if it turns backwards)



- Check the tractor cornerpost display shows AUTO 1 3
- If not, you need to activate AUTO mode
- Steps may be different for some tractors, please contact your tractor dealer

Key off

Press the PROG button, do not release it

Key on

Wait 5 seconds

Release PROG button

Cornerpost shows CONFIG MENU

Select AUX/HITCH/PTO option from the list

Select EHR from the list (Electronic Hyd Controller)

Select AUX SETUP from the list

Set the SCRPR option to: 2 LASER

Select EXIT

- Press button 3 to put the remote in auto mode

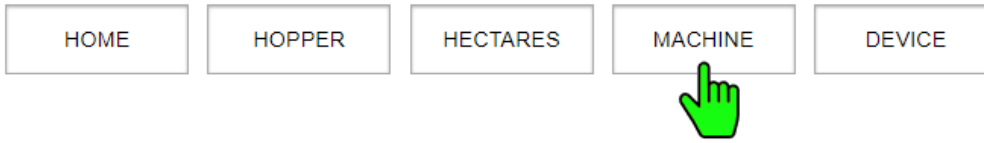


Quick Manual Test

- Drive the tractor slowly
- On the tablet go to MACHINE > CHECKS > OUTPUT and send a Manual Command of 50
- Tap Cancel when done

Fine Tune Meter Drive (Hydraulic and Electric Drives)

- All machines require some fine tuning
- Changing products may also require some fine tuning
- On the tablet go to MACHINE > SETTINGS



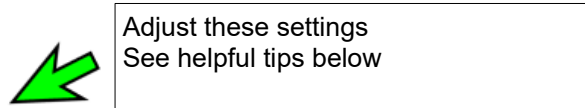
Hydraulic Drive

80 Valve jump start 1 to 100

30 Valve speed 1 to 100

60 Valve damping 1 to 100

20 Green zone 1 to 100



Valve Jump Start - Increase this to make the belt start up quicker

Valve Speed - How fast the valve reacts to rate/speed changes

Valve Damping - Increase this to dampen the valve when it's close the target rate

Green Zone - The area close to the target where the valve stops adjusting

Helpful Tips

- Valve Jump Start
 - Used when you tap seeding ON
 - Increase this if it takes too long for the meter to start turning
 - Decrease this if it jumps to a high rate, then slows down to the correct rate
- Valve Speed
 - The valve adjusts to match your speed and rate
 - A large number will make large adjustments to the valve, too big will make the rate jump up and down
 - A small number will make small adjustments to the valve, too small will take a long time to reach the rate
 - Increase this if it is very slow to reach the desired rate
 - Decrease this if the rate is hunting up and down, also increase the Valve Damping
- Valve Damping
 - When it's close to the desired rate, the adjustments are dampened (they are very gentle)
 - A large number will dampen more, if it's too large the valve won't adjust
 - Increase this if the rate is hunting up and down, also decrease the Valve Speed
- Green Zone
 - When the rate is in the green zone, the valve will stop adjusting
 - If the number is too large, it will stop before it reaches the target
 - If it's too small, it will never stop adjusting
 - Increase this if the rate adjust ok but overshoots the desired rate
 - Decrease this if the rate stops adjusting before it reaches the desired rate

Using Multiple Machines

- When using multiple machines nearby, set different network names for each machine
- First confirm your GPS is connected, go to CHECKS > GPS
- Then follow steps below



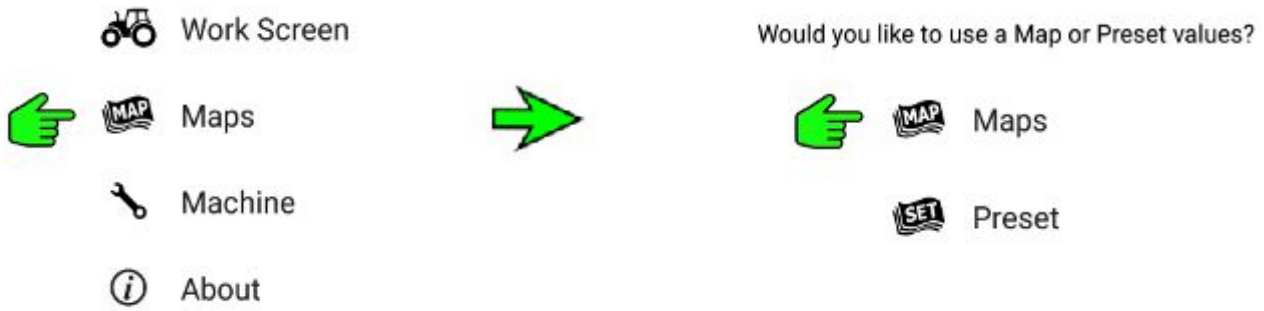
Wifi Network



Each machine must use a different network
Tap CHANGE then tap SAVE, device will reboot
If GPS installed, check it is connected before changing networks

Prescription Maps

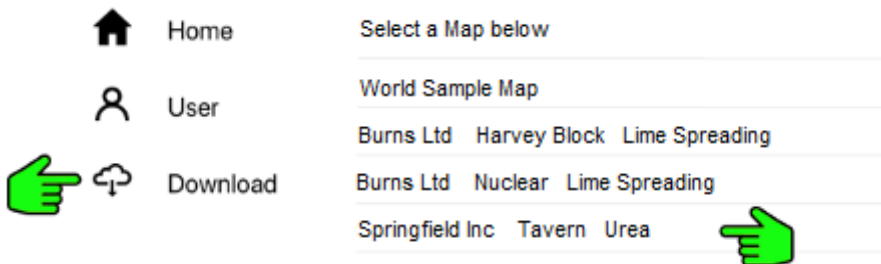
- Go to the app Main Menu



- Login with your i4M username and password



- Download your maps
- Select the map you want to use



- Go to Work Screen, your map will be loaded

