i4M Troubleshooting – Depth Command
Android Tablets
Version 201

Maps and Tablet

SIM Card and network signal

- The i4M app will work without phone signal
- It also works without a SIM card
- A sim card and phone signal is required if you want to download maps in the field
- You can connect the tablet to any internet wifi to download maps
- After downloading maps, you can connect to the i4M controller on the machine

Cannot download maps to the Tablet

- Check that you are logged in under the user tab
- Check that you have an internet connection
- If you have a SIM card in the tablet, check it has phone signal
- If you don't have a SIM card, disconnect from the i4M controller wifi, connect to your phone hotspot, or office wifi etc
- Check that you have maps ready for download, on the i4M cloud

Username and Password

- The username and password is the same for the tablet and the online i4M maps server
- To reset your password email PAA support admin@precisionag.com.au

Uploading prescription maps to the cloud

- Each map is a shapefile in a single zip folder. It must contain these files .shp .shx .dbf
- The shapefile names and the zipped folder name must be the same
- Exampe: NewShape.zip contains these files: NewShape.shp NewShape.shx NewShape.dbf

Controller Startup and Connecting

Startup

The i4M controller takes 5 seconds to boot up. Check the diagnostic LED on the controller.

- LED off = no power
- LED red = booting up, please wait
- LED green = controller is running and wifi is available

Connecting to Controller

- The controller has a wifi hotspot
- Connect the Android Tablet to MACHINE WIFI 1
- Ignore the 'No Internet' warnings (the controller is not connected to the web)
- The i4M app shows the connection status on the Work Screen

Power and Fuses

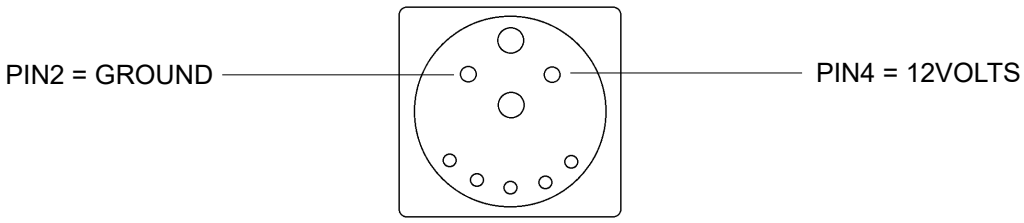
Power Check

Controller has a LED to show power, on the connector face

- LED off = no power
- LED red = booting up, please wait
- LED green = controller is running and wifi is available

Power From the Tractor ISO Socket

- Use the tractor ISO socket if equipped (It does NOT use ISOBUS, it uses power and ground only)
- Check the tractor has power and ground on the pins below



View: Looking into the tractor ISO socket

Power From the Battery or Cab
- Power supply must be 12volts and capable of 10amps
- Power should be taken after the battery isolator (so the controller turns off when the isolator is off)
- If wired direct to battery, the 3pin power connector must be unplugged when not using the machine

Blown Fuses
- If the supply harness goes to the cab or battery, the main fuse is on the positive connection
- If the supply harness goes to the ISO socket, the fuse is part of the tractor wiring
- Check the power harness for damage or shorts

Depth Control Problems

The machine won't raise or lower
- Check for locked couplers, manually raise and lower it using the tractor hydraulic remote
- In the app go to CHECKS > MACHINE and tap Raise or Lower
- Tractors with Auto Hydraulics must be in Auto mode and moving (see Auto Hydraulics section below)
- Tractors without Auto Hydraulics must have oil flowing to the Solenoid Valve on the machine

Machine moves the wrong way
- In the app go to SETTINGS > MACHINE and tap Reverse Hyd Flow Direction
- Check it moves the right way, go to CHECKS > MACHINE and tap Raise or Lower

Machine hunts up and down
- Reduce the hydraulic flow on the tractor remote
- Reduce the Hydraulic Flow Fine Adjust Speed in the app, go to SETTINGS > MACHINE (for Auto Hyd tractors)
- Increase the Valve Green Zone in the app, go to SETTINGS > MACHINE (all tractors)
- Follow the Depth Sensor Checks Below

Machine doesn't reach the target depth
- Increase the hydraulic flow on the tractor remote
- Increase the Hydraulic Flow Fine Adjust Speed in the app, go to SETTINGS > MACHINE (for Auto Hyd tractors)
- Reduce the Valve Green Zone in the app, go to SETTINGS > MACHINE (all tractors)
- Follow the Depth Sensor Checks Below

Depth Sensor Checks
- Check the position sensor on the machine is secured and moves correctly when raising and lowering
- Setup the sensor positions using the app, go to SETTINGS > MACHINE
- Check the sensor reading is changing smoothly, go to CHECKS > MACHINE watch Actual Depth ADC
- Check the wiring at the sensor, pinouts below
- Check connector pin A has 5 volts
- Check connector pin C is connected to ground
- Check connector pin B changes voltage when the sensor moves

Alerts on Screen

The implement depth does not match your desired depth
- Check the Auto Hydraulics is in AUTO mode and working (tractors with Auto Hydraulics)
- Check there is oil flowing to the Solenoid Valve on the machine (tractors without Auto Hydraulics)
- Follow the checks above for Depth Control Problems

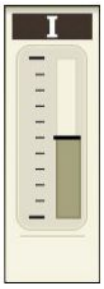
Map depth is greater than max machine depth (or Preset depth)
- The map or preset depth you entered is trying to drive the machine deeper than the maximum depth
- Increase the machine max depth in the app, Setup the depth positions in SETTINGS > MACHINE
- Change your prescription map online so the depth is less (if using a map)
- Change your Preset Depths so the depth is less (if using preset depths)

Hydraulic Drive – John Deere tractor Auto Hydraulics

Machine won't move

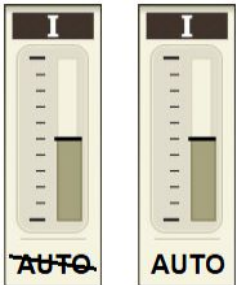
- WARNING: Prevent error codes - the key must be off when plugging or unplugging the Auto Hyd Connector
- Connect the AUTO Hydraulics cable to the 10pin metripack connector, see operators guide
- Connect the hoses to tractor remote number 1
- Set the hydraulic flow to the speed you want (move the implement using the tractor lever)

- Check the tractor hydraulic display shows AUTO below remote number 1



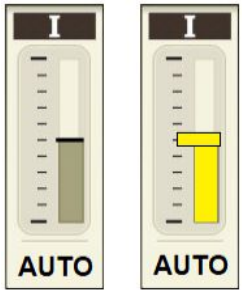
AUTO is missing

- Turn tractor off, kill battery isolator
- Unplug the auto hydraulics connector at the front of the spreader
- Start the tractor
- Move remote lever 1 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 still missing, turn tractor off, kill isolator
- Unplug the auto hydraulics connector at the front of the spreader
- Power up the i4M controller
- Check the voltage at the 3pin auto hydraulics connector: PIN B = 2.5v PIN C = ground



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



AUTO is showing

- Drive the tractor slowly (tractor must be moving)
- On the tablet go to SETTINGS > MACHINE and tap RAISE or LOWER
- Display will turn yellow when oil is flowing
- The implement will raise or lower

Hydraulic Drive – Case or New Holland tractor Auto Hydraulics

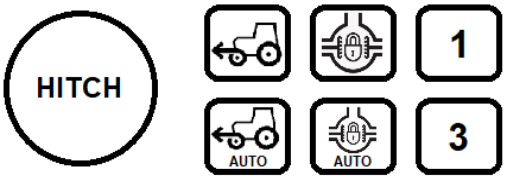
Machine won't move

- WARNING: Prevent error codes - the key must be off when plugging or unplugging the Auto Hyd Connector
- Connect the AUTO Hydraulics cable to the 6pin deutsch connector, see operators guide
- Connect the hoses to tractor remote number 1
- Set the hydraulic flow to the speed you want (move the implement using the tractor lever)

Note: CNH displays may differ, consult your tractor dealer if it doesn't match below

- Check the tractor cornerpost display shows AUTO 1 3
  If not, follow these steps
  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 1 to put the remote in auto mode



- Drive the tractor slowly (some machines need to be moving)
- On the tablet go to SETTINGS > MACHINE and tap RAISE or LOWER
- The machine will raise or lower
- If the machine still won't move , turn tractor off, kill isolator
- Unplug the auto hydraulics connector at the front of the machine
- Power up the i4M controller
- Check the voltage at the 3pin auto hydraulics connector: PIN B = 2.5v PIN C = ground

Using external solenoid valves

Machine won't move

- Set the tractor hydraulic flow to 50% and the time to constant
- Engage the tractor remote lever
- On the tablet go to SETTINGS > MACHINE and tap RAISE or LOWER
- If the machine doesn't move
  Engage the lever the oppostite direction
  Check for locked couplers (unplug hoses and plug back in) and retry
  Change hoses to a different hydraulic remote and retry
  Test the connectors on the solenoid coils, there should be 12 volts when the Raise or Lower is tapped