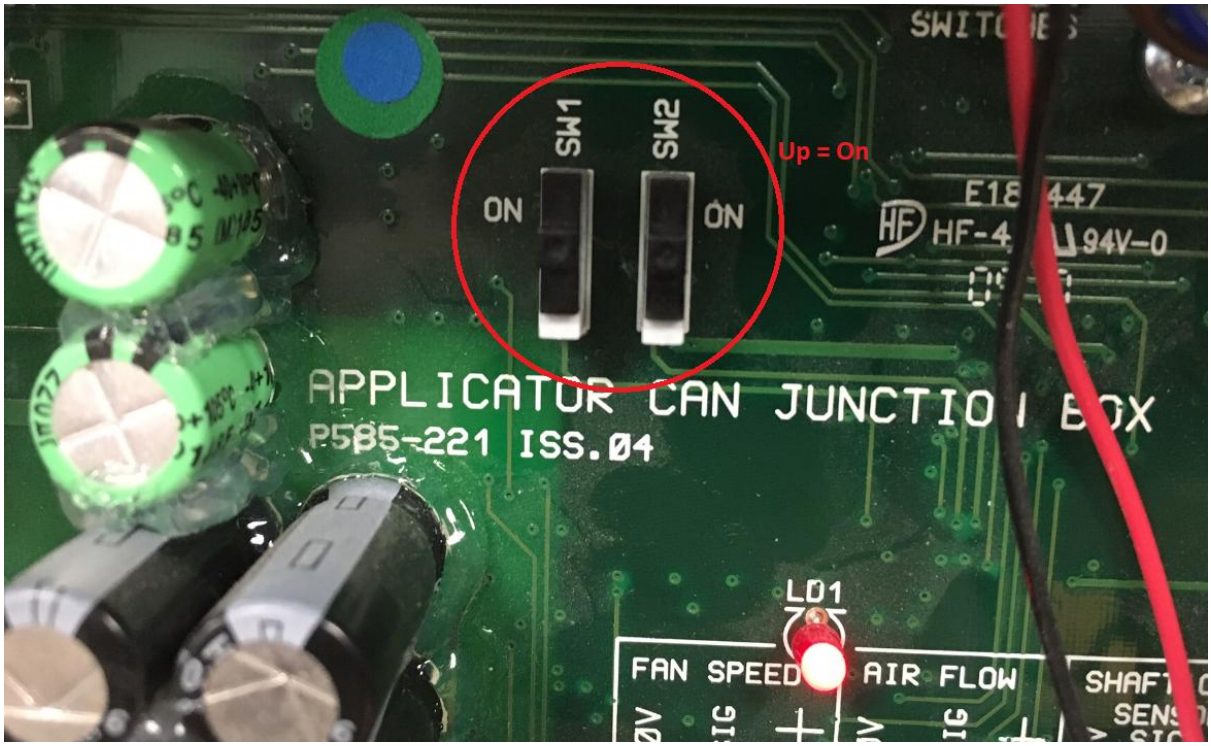
Stocks CAN Applicator Setup with Artemis Isobus

This guide covers all the required settings when using a Stocks CAN Applicator ECU as a standalone, single channel system, with Artemis Isobus.

ECU

The ECU must be setup for the correct channel on Artemis. For a single ECU installation this will be set to Channel 1. If this is incorrect you will receive an M.1 “Module Offline” alarm.

Applicator Module ID config (ON = Up, OFF = Down)	
Channel 1	SW1 + SW2 ON
Channel 2	SW1 ON, SW2 OFF
Channel 3	SW1 OFF, SW2 ON
Channel 4	SW1 + SW2 OFF

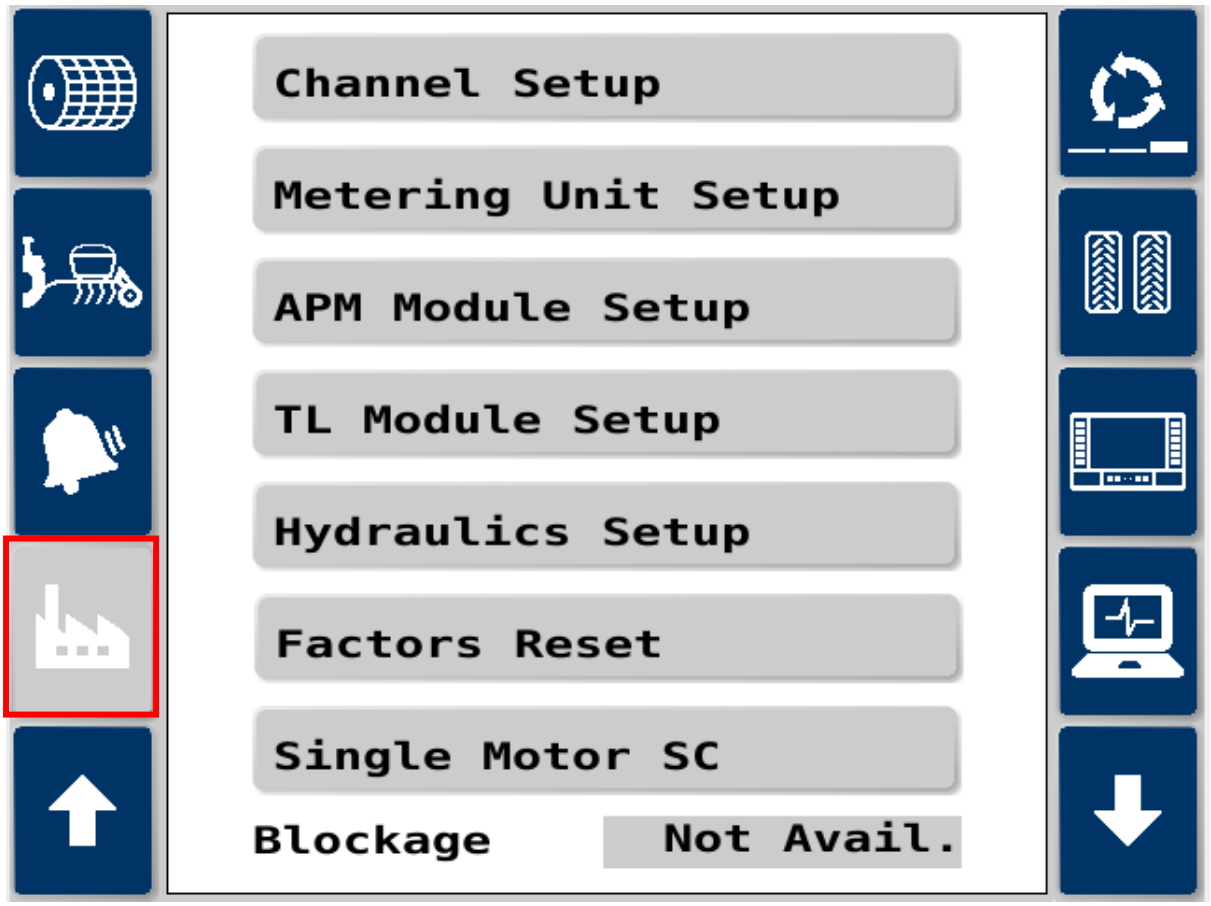


Artemis Settings

There are a number of settings that need to be adjusted when using the Artemis software for the applicator. These are all accessed in the main menu:

Factory Menu

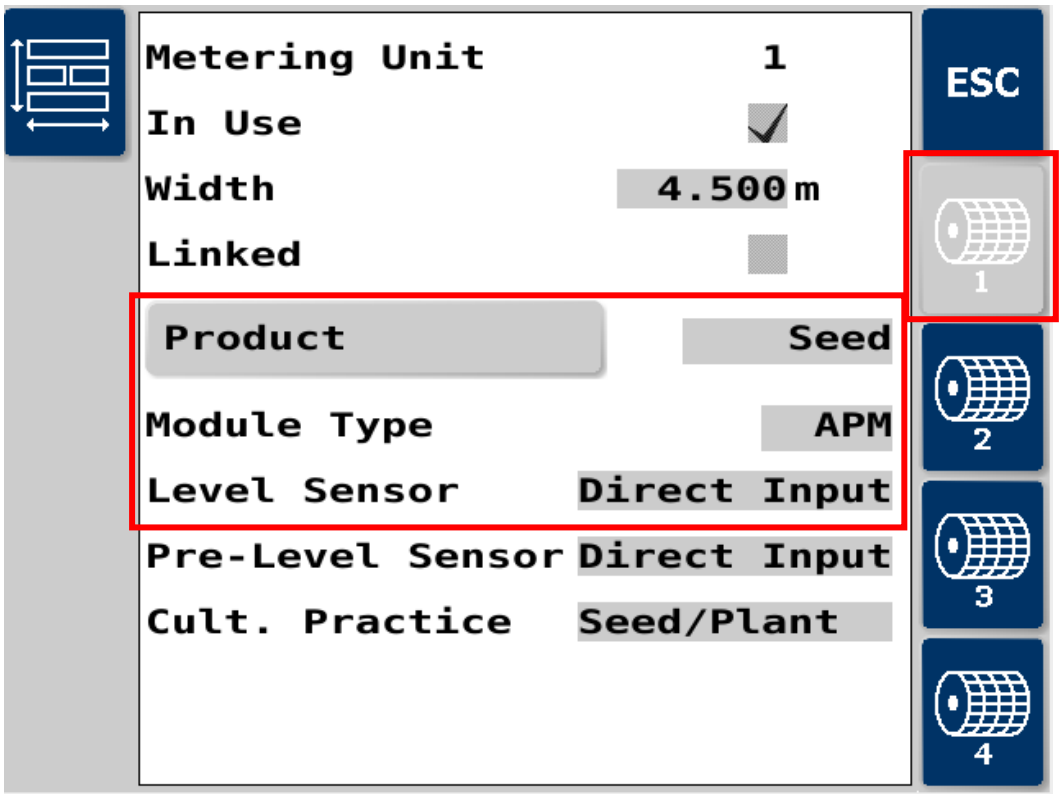
The main settings are in the Factory menu, the PIN number is 1234.



Channel Setup

In the channel setup, ensure you have metering unit 1 selected.

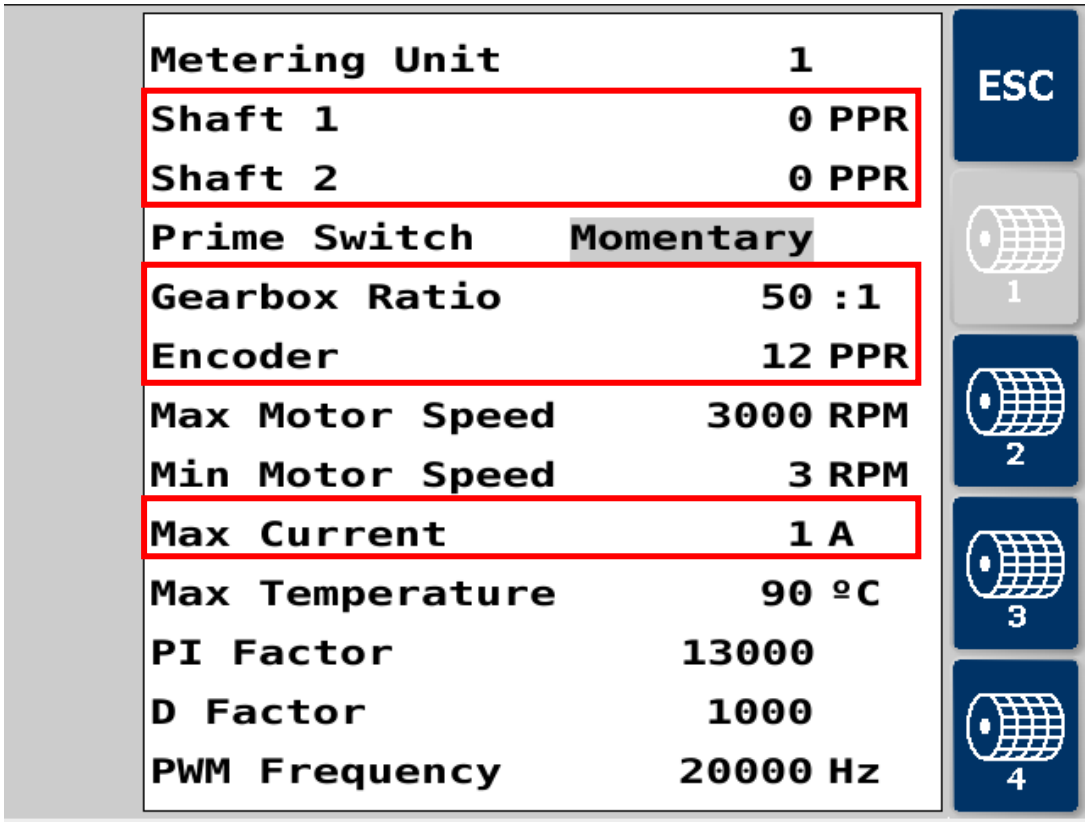
- Set the width as appropriate for your machine, then set the product name as required.
- Change the “Module Type” to “APM”, this is the most important point.
- Ensure the Level Sensor is set to Direct Input



Metering Unit Setup

From the metering unit setup, make sure you have cannel 1 selected.

- Set the Shaft 1 and 2 PPR to 0, unless you have added a metering unit shaft confirmation sensor, in which case enter the appropriate value.
- Set the Gearbox Ratio to 50:1
- Set the Encoder PPR to 12
- It is also recommended to reduce the Max Current to something more relevant to the motor being used. If the standard 100w Topcon motor is fitted, then 10A can be set.



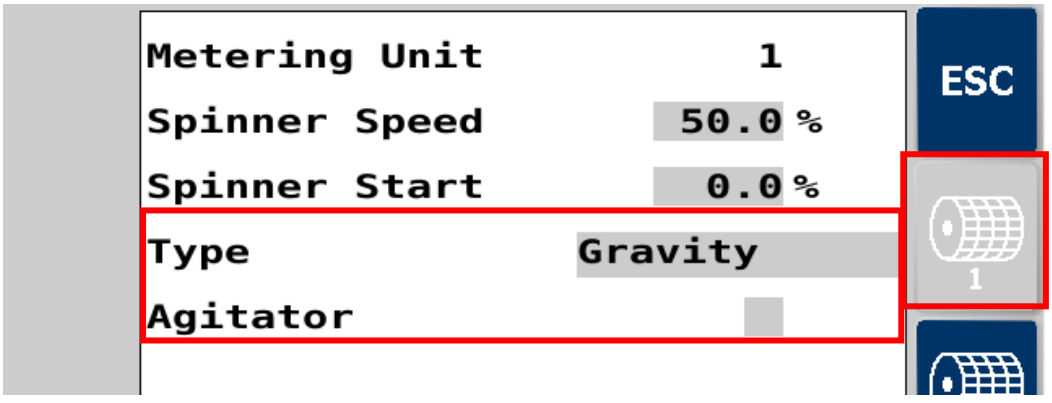
APM Module Setup

From the APM module setup, make sure you have channel 1 selected.

Select the appropriate type setting for your machine:

- **Fan** - (the default setting) for machines with standard 12v Fans fitted
- **Digital Fan** – required when using a PWM driven brushless fan that has separate signal and power supply
- **Gravity** - required for machines with no fan/spinner output, or with a hydraulic fan
- **Spinner** - required for machines with electric spinners

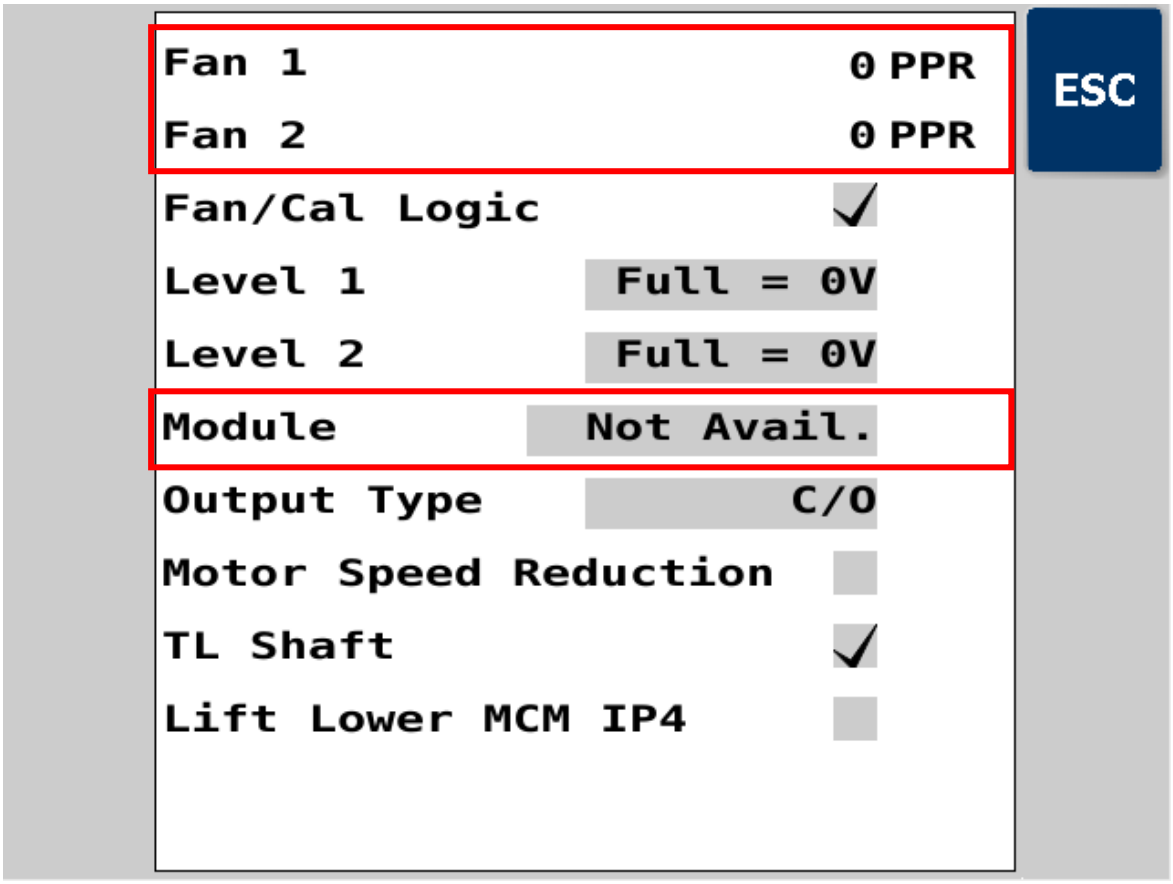
Turn on/off the agitator output as required.



TL Module Setup

From the TL (Tramline) Module Setup page

- Ensure both FAN PPR settings are 0, unless you are using gravity mode with a hydraulic fan input on the APM ECU. In that case, set the FAN 1 PPR to the relevant value based on the sensor fitted.
- Set module type to “Not Available”



Alarm Menu

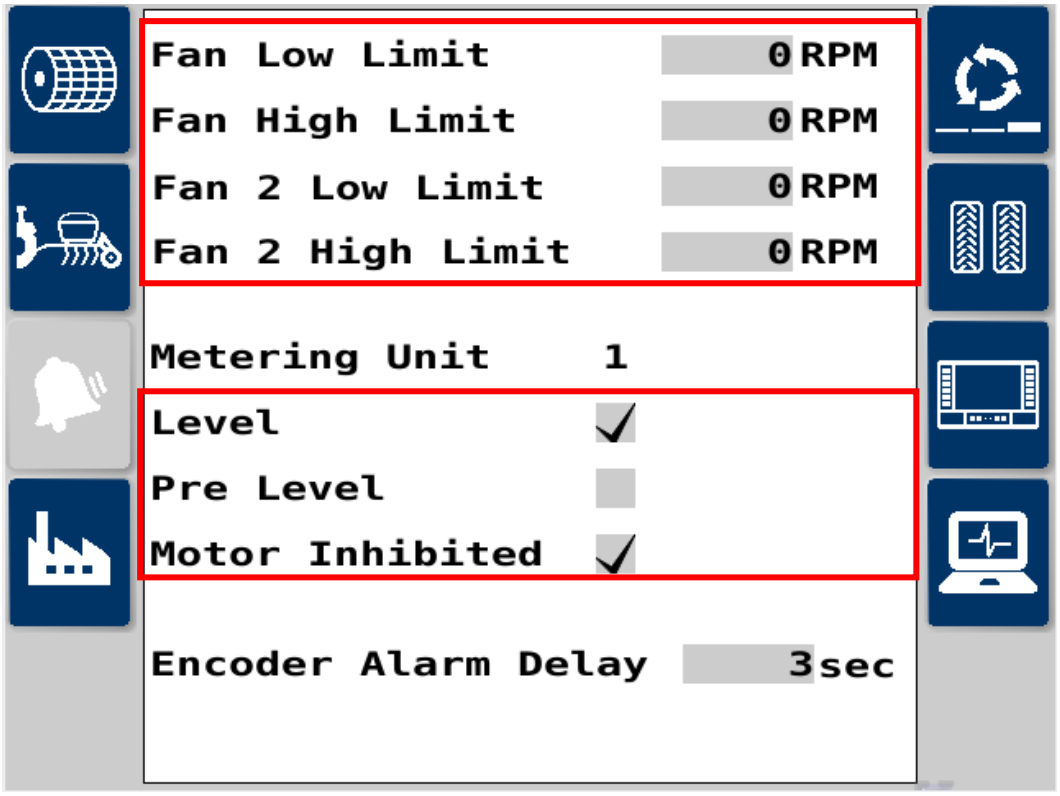
From the alarm menu, ensure all Fan RPM alarms are at 0, unless using a hydraulic fan input in gravity mode. **This is very important.**

With an electric fan the applicator measures current draw to monitor if the fan/spinner is working. It does not measure RPM.

If these alarms are left as default it will stop the feed motor running when in work.

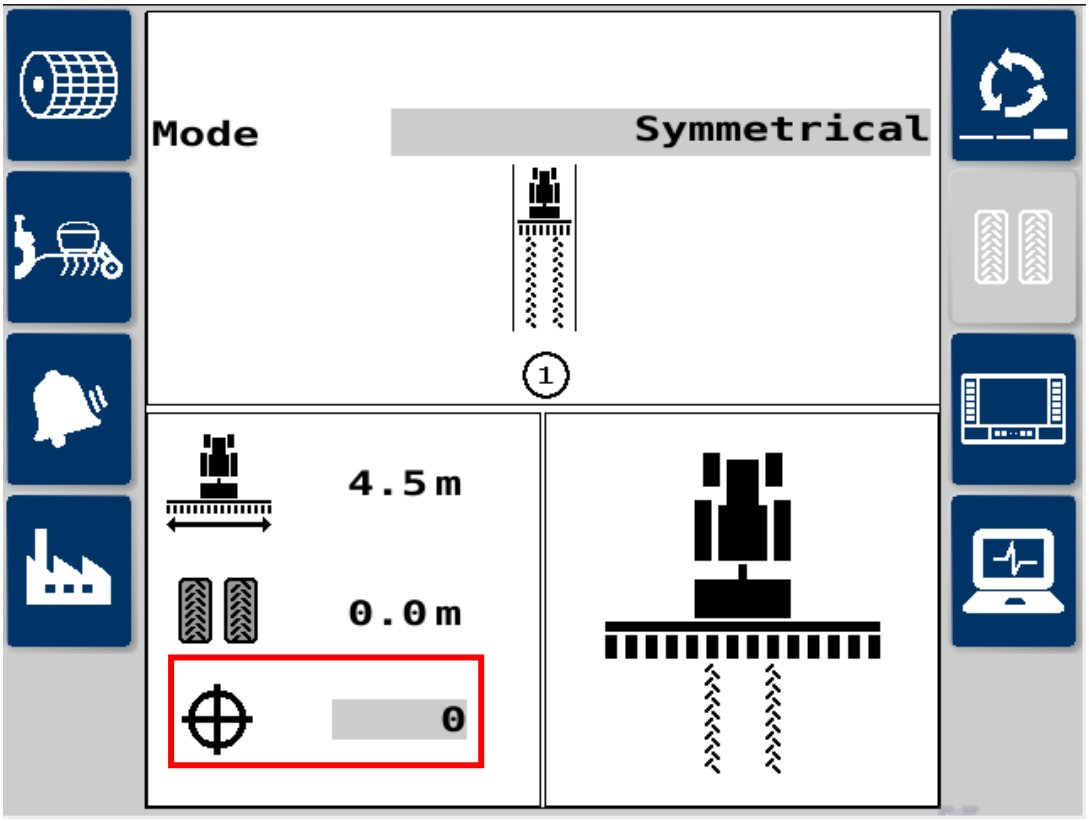
If you are using a hydraulic fan with RPM input, then set the limits accordingly.

Also ensure the Level and motor inhibit options are turned on, and pre level is disabled



Tramline Menu

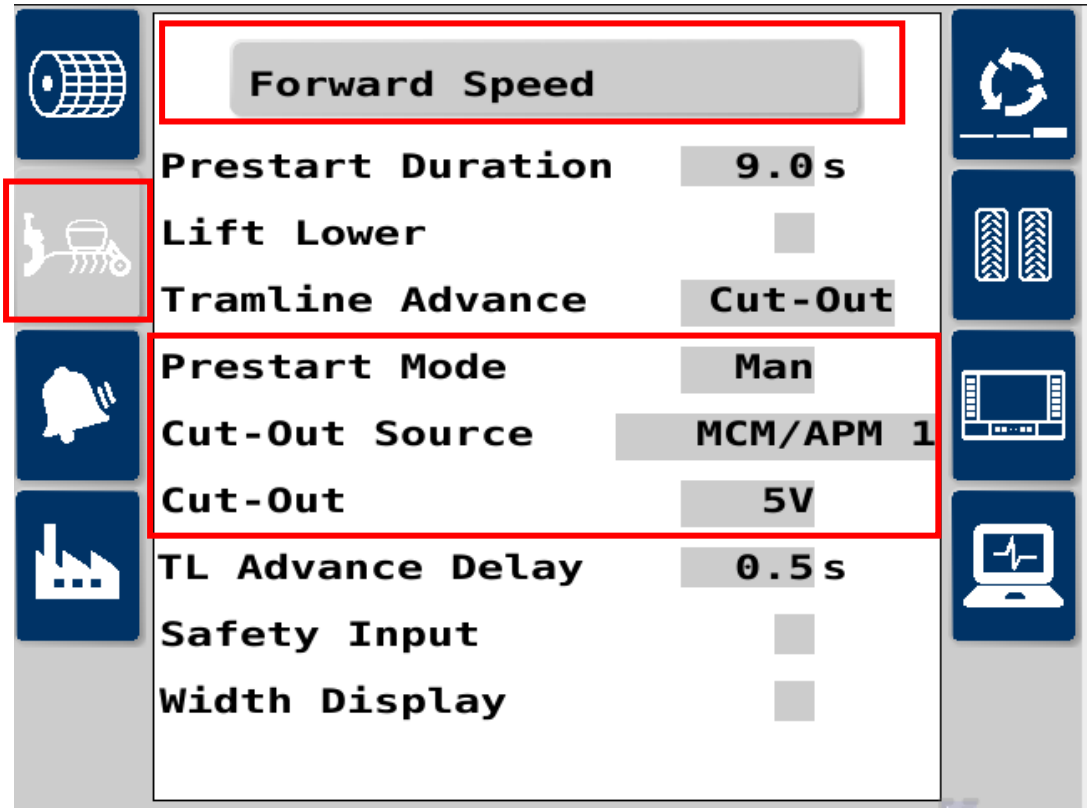
From the tramline menu, set the target bout number to 0. This will stop it showing on the main operating page.



Drill Configuration Menu

From the Drill configuration menu you will need to set the appropriate speed source, cut out source and pre-start options

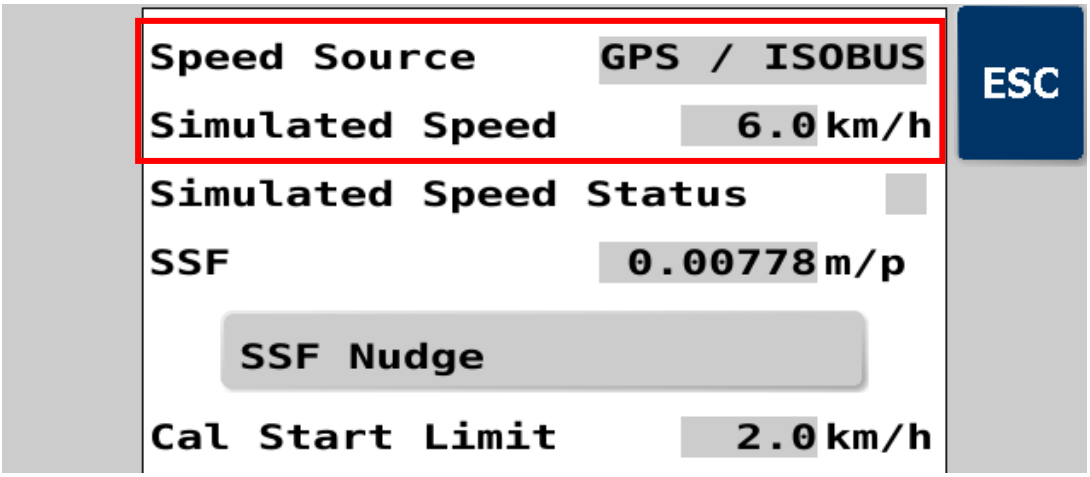
- Set the Cut-Out Source to “MCM/APM 1”. *Note: If the cut-out switch is working back to front, change the Cut-Out setting from 5v to 0v (or vice versa)*
- Set the prestart mode to Manual or Automatic as desired and set the duration you would like this to run for



Forward Speed

Choose the appropriate input. When working with Isobus, the options should always be “GPS/ISOBUS”.

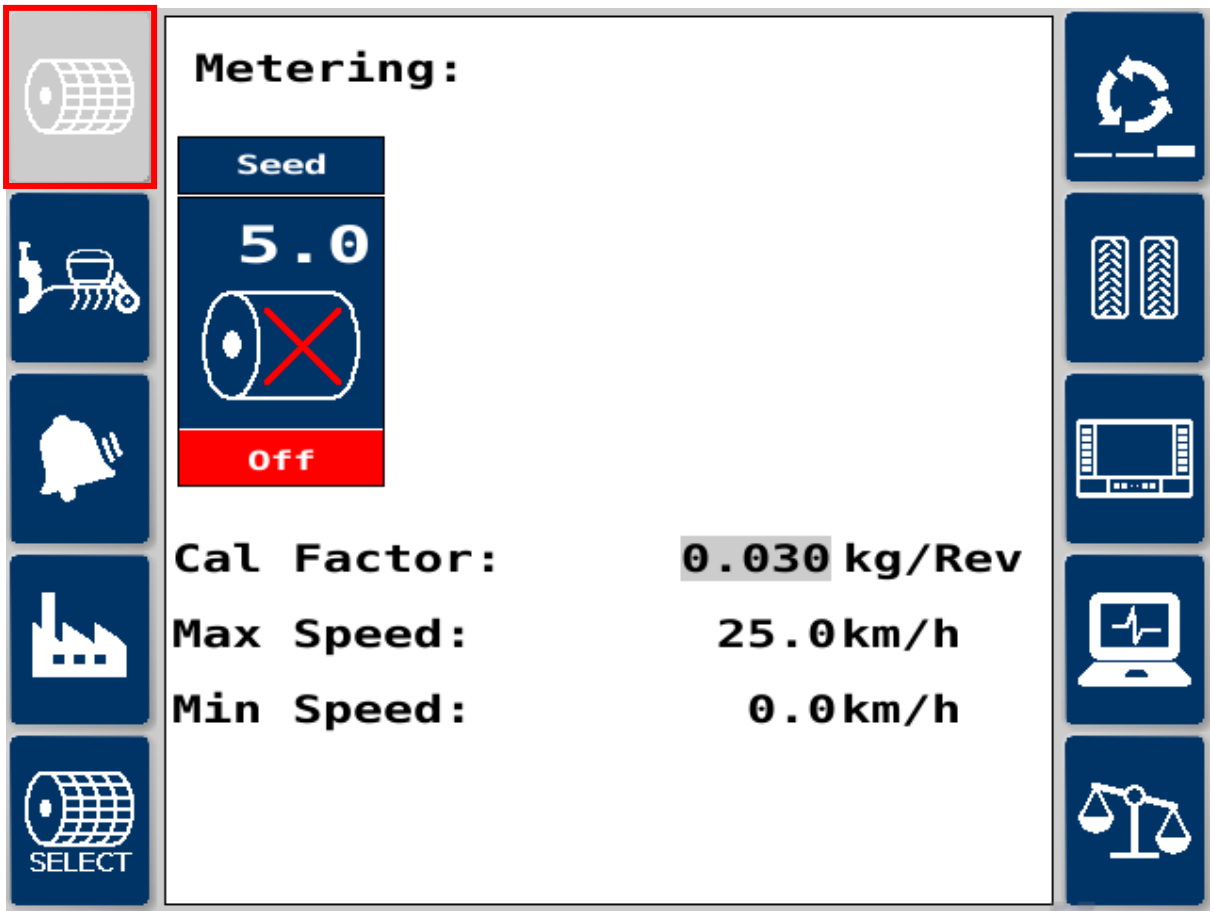
Set the Simulated Speed to the average operating speed when using the machine



Calibration Menu

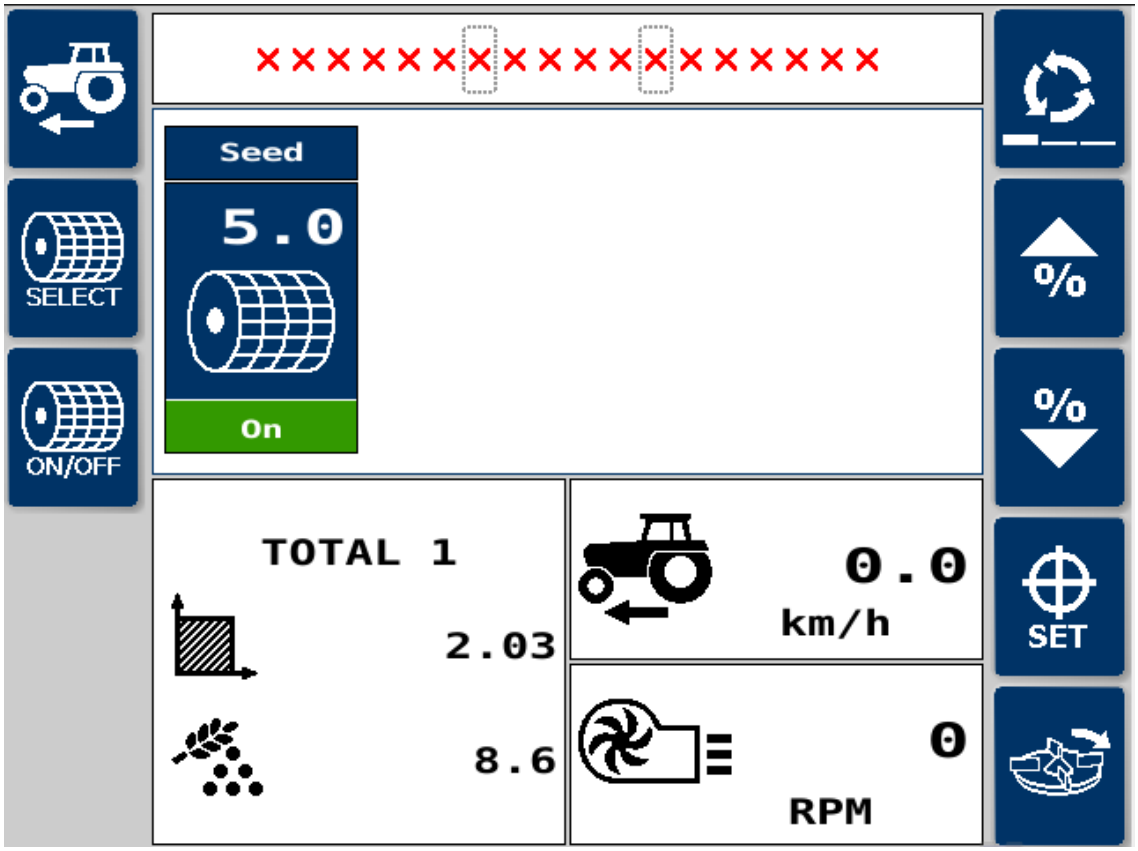
This menu shows the current calibration factor and the maximum speed possible for the current application rate.

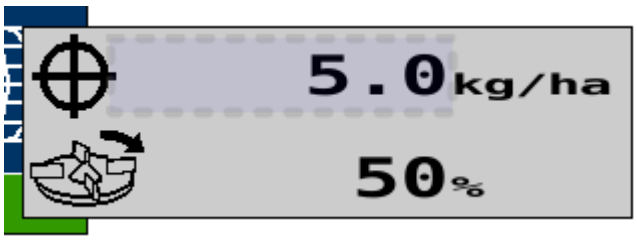
- Calibrate the Applicator using the prime button as normal.



Setup Complete

The main screen should now look similar to the image below. The icon for the spinner or fan will change appropriately, depending on the selection in the APM menu.





Unless you have a hydraulic fan with a speed sensor, the fan speed will always read 0. In this case the current draw is being monitored by the APM ECU when in use. If there is no current draw from the fan/spinner you will get an alarm to show this and the feed motor will stop.

When you go into work the red crosses will turn to a row of green crop (below). If this is not happening the system will not operate. You must have a cut-out switch fitted when using Artemis.