



Micro Trak GSC-1000 Controller Quick Set-up Guide



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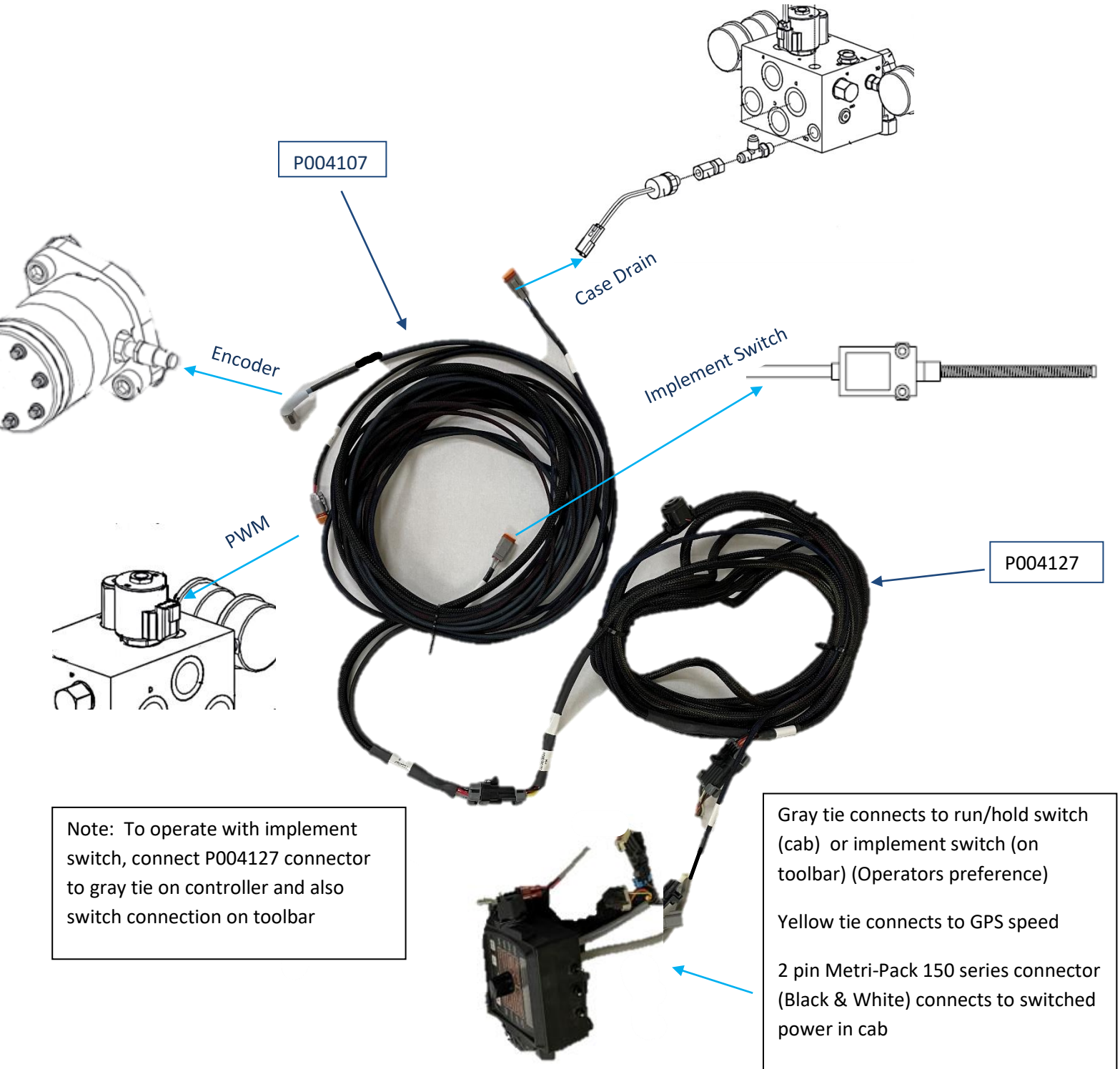
Models 2108 and Gen 1 Single section

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Read entire manual before operating Montag Equipment

This manual is a supplement to Micro-Trak's GSC-1000 Reference Manual. Read and understand Micro-Trak GSC-1000 Reference Manual before proceeding with Montag set-up.

Start by mounting the controller in tractor cab and route harness to Montag equipment. Care should be taken to route in manner that harness will not be pinched or stretched when folding or turning. Power the controller with switched power connection from cab of tractor on 7-amp minimum fused circuit. The diagram below shows harness connections.



Basic set-up of Micro Trak GSC-1000 to Run Montag machines



For Special Calibration:

1. Turn controller off
2. Hold “Cal” and “Auto/Man” buttons while turning controller back on
3. The screen reads “Spec” which means you are in Special Cal
4. The red light should be on when in Special Cal
5. Turn dial to desired fields, enter setting from table below into controller
6. To adjust fields, use + or – buttons
7. To get to page 2 on the specified areas below tap the “Cal” button (You will only need to change the fields on page 2 that are marked on the graph below)
8. When done putting in the numbers press and hold “Cal” until the red light turns off to save your special calibration numbers
9. Special cal numbers should be:

<u>Dial Label</u>	<u>Parameter</u>	<u>Page 1</u>	<u>Parameter</u>	<u>Page 2</u>
Area Totals	Units	Eng	PWM Frequency	110
Distance	Control Mode	Std	Max PWM	100
RPM	Control Speed	0	Min PWM	20
Speed	Shaft Cal	Gen 1=47, 2108=188		
Rate	Auto Delay Time	0		
Bin Level	Auto Shutoff	On		
Weight/Minute	Low Bin Level Set Point	Off		
Weight Totals	Full Bin Size	Off		

Setting Calibration Values:

1. With the controller on, press and hold the “Cal” button for about 5 seconds
2. When calibrating the red light should be on
3. Turn dial to desired fields
4. To adjust fields, use + or – buttons (See charts below for correct settings)
5. When done putting the numbers in for calibrating press and hold “Cal” button until the red light turns off to save your calibration numbers
6. Cal numbers should be:

<u>Cal</u>	
Density	Density of Product
Test Speed	Desired Speed
Target Rate	Number of lbs/acre
Adjustment Rate	10 lbs
Gate Setting	1
Spreader Constant	See Graphs Below
Width Cal	Width of bar (Inches)
Speed Cal	.189

Below are charts for your specific machine setup.

Gen 2 2108 GSC 1000 Settings	
Width Cal	Toolbar width (ft) x 12
Spreader Constant	60920/ # of meter outlets
Target Rate	
Density	
Speed Cal	.189
Adjust Rate	1-10
Gate Setting	1.0
Shaft Cal	188
PWM Freq	110
Max PWM	100
Min PWM	20

Spreader Constant = 60920/ # of meter outlets

Examples: 4 Meter = 15230, 6 Meters = 10153, 8 Meters = 7615

Width Cal = Toolbar width (ft) x 12

Examples: 10' = 120, 25' = 300, 30' = 360, 40' = 480



Gen 1 GSC 1000 Settings	
Width Cal	Toolbar width (ft) x 12
Spreader Constant	14880/ # of meter outlets
Target Rate	
Density	
Speed Cal	.189
Adjust Rate	1-10
Gate Setting	1.0
Shaft Cal	<u>47</u>
PWM Freq	110
Max PWM	100
Min PWM	20

Spreader Constant = 14880/ # of meter outlets

Examples: 8 Meter = 1860, 12 Meters = 1240, 16 Meters = 930, 24 Meters = 620

Width Cal = Toolbar width (ft) x 12

Examples: 20' = 240, 30' = 360, 40' = 480, 60' = 720



Calibrating Machine

When setting up a machine, make sure your controller is set correctly before putting product in the hopper. Once all the parameters are entered correctly, it is time to test the machine. Enter the “calibration” menu and enter a test speed, setting controller to auto and turning switch to run with the boom 1 switch on. The meter should run. Check the Montag Toolbox App (Android or iOS) and enter the numbers entered into the controller. The auger RPMs should match (+/- 2 RPM’s). If not, double check your settings in the controller.

Once the controller is running the same RPM as the Montag Toolbox App, the machine is ready to run product. The spreader constant number may need to be adjusted to fine tune the machine once in the field. If your machine is not applying the rate desired, adjust it using the formula below.

For example:

Target Rate= 250 Actual Rate = 265 Current Spreader constant = 1080

$$\begin{aligned}\text{New Spreader Constant Number} &= (\text{Current Spreader Constant}/\text{Actual Rate}) \times (\text{Target Rate}) \\ &= (1080/265) \times 250 \\ &= 1019\end{aligned}$$

It is best to monitor product output on the first acres you run. It is best to run out 500 lbs (2108) or 1000 lbs (Gen 1) in your machine and check to make sure it is applying the rate you want it to do. If needed, you can fine tune the calibration. After one adjustment, run 2000 lbs. or more to get a more refined spreader constant number. Once calibrated, the machine will correctly apply the desired rate.

Note: Depending on delivery system layout, rate, speed, and other variables you may need more or less air pressure. Too high of air pressure can cause excessive spitting and create calibration issues.

Operation

To operate the machine in the field:

- 1) Be out of calibration mode (no red) light
- 2) Engage “Run” switch if (equipped) or engage implement switch (if equipped)
- 3) Have speed (from GPS puck)
- 4) Boom switch set to on
- 5) Fan must be engaged

As GPS begins to sense movement the auger should begin to turn accordingly to compensate so the desired rate is applied regardless of speed.

If you need to switch rates on the GSC-1000 you will need to press and hold “Cal”, turn the dial to target rate and adjust your rate. Then you need to press and hold “Cal” again until the red light goes off to save your change.

The GSC-1000 has 3 boom switches that are on top of the controller. You will only need to run off boom number one. The other two should be set to zero and turned off. Boom number one should be set to your row width times your number of rows. Make sure it is in the “On” position otherwise it will not turn on when you hit the “Run/Hold” switch to “Run”.

The Montag GSC-1000 has a case drain alarm built into the harnessing. This is to monitor the hydraulic case drain pressure. If the buzzer alarms, verify that the zero pressure case drain is connected properly and that there are no obstructions between the hydraulic manifold and the tractor hydraulic sump. Do not operate until the issue is alleviated.

To shut off the meter either toggle the run switch to hold or raise the implement.

Refer to Micro-Trak GSC-1000 manual for more information.

