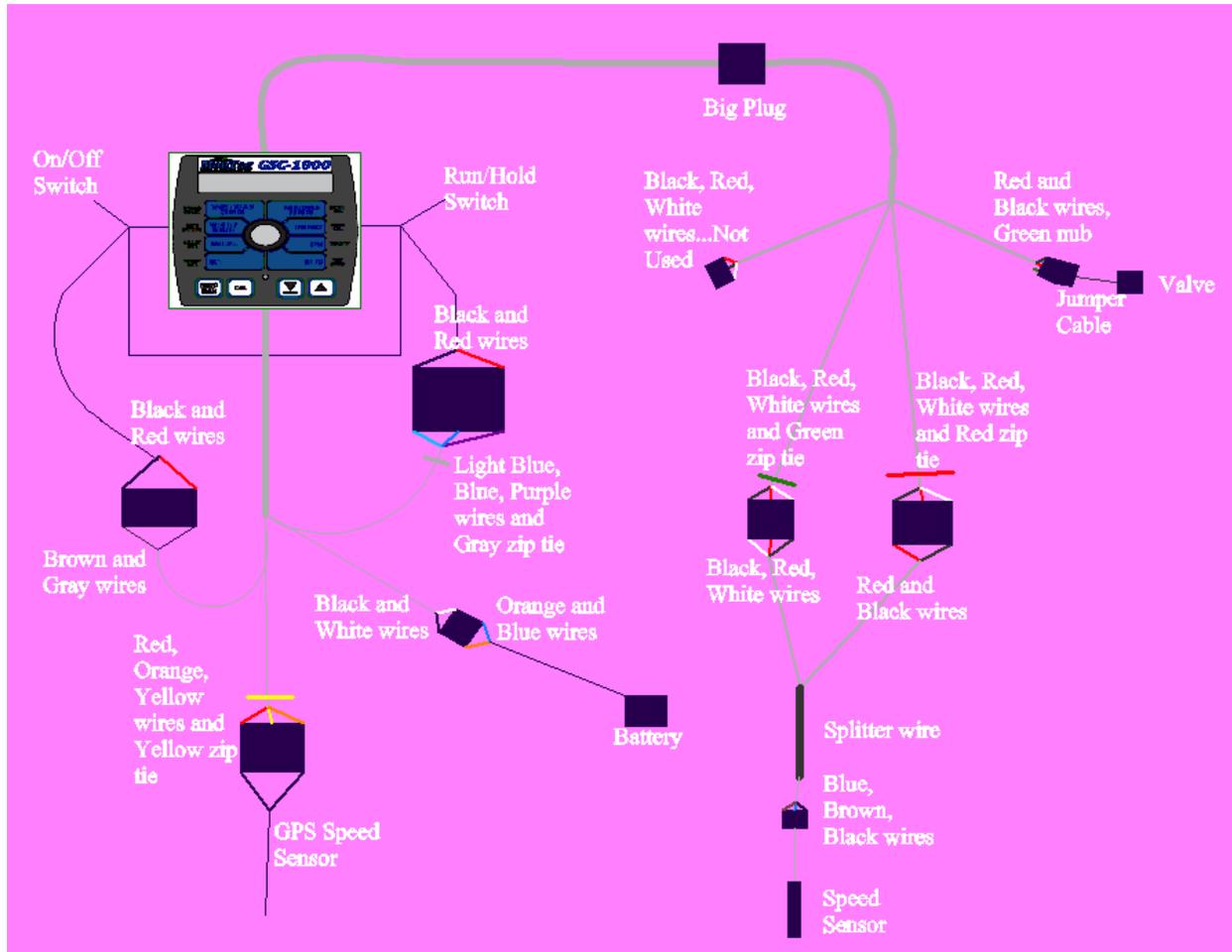


## Wiring Micro Trak

To wire in the Micro Trak controller follow the chart and instructions below:



1. There are two cables coming out of the back of the Micro Trak controller
2. The bottom one has a cable with 4 small plugs on it
3. The on/off switch is connected to the plug with gray and brown wires
4. The run/hold switch is connected to the plug with purple, blue, and light blue wires with a gray zip tie
5. The GPS speed sensor is connected to the plug with yellow, red, and orange wires with yellow zip tie
6. The power wire is connected to the plug with orange and blue wires (blue is negative, orange is positive)
7. The top cable coming out of the back of the Micro Trak controller has one big plug that is female
8. Plug the big plug female side from the controller into the big plug male side from the kit that has 4 cable plugs, there is also an extension cord that fits in between these plugs if needed
9. The 4 plugs from this cable all have different jobs to do and different places they need to be
10. The plug with the red, black, and white wires is not used so zip tie it out of harm's way
11. The plug with the red and black wires with the green nub is connected to a 6 inch jumper cable which is connected to the valve

12. The plug with the red, black, and white wires with the green zip tie is connected to a splitter wire which has a plug with black, red, and white wires
13. The plug with the red, black, and white wires with the red zip tie is connected to the other side of the splitter wire which has black and red wires
14. The splitter plug is connected to the speed sensor which is located above the sprocket
15. The speed sensor should be the thickness between a dime and a nickel away for the teeth of the sprocket
16. The speed sensor should be in the center over the sprocket facing the shaft
17. Make sure wires and plugs are clear of the drive chain and sprockets

### Calibrating Micro Trak

For Special Calibration:

1. Turn controller off
2. Hold “Cal” and “Auto/Man” buttons while turning controller back on
3. You will see on the screen “Spec” which means you are in Special Cal
4. The red light should be on when you are in Special Cal
5. Turn dial to desired fields
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 you are done putting in your numbers press and hold “Cal” until the red light turns off to save your special calibration numbers
9. Your special cal numbers should be:

<u>Special Cal</u>	<u>Page 1</u>	<u>Page 2</u>
RPM	-1	20
Speed	22	
Rate	1	
Bin Level	On	
Weight/Minute	Off	
Weight Totals	Off	
Area Totals	Eng	110
Distance	Std	90

For Calibrating:

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

<u>Cal</u>	<u>Standard Machine</u>	<u>High Output Machine</u>
Density	Density of Product	Density of Product
Test Speed	5 MPH	5 MPH
Target Rate	Number of lbs/acre	Number of lbs/acre
Adjustment Rate	10 lbs	10 lbs
Gate Setting	1	1
Spreader Constant	See Graph Below	See Graph Below
Width Cal	Width of bar (Inches)	Width of bar (Inches)
Speed Cal	.189	.189

Below are charts for your spreader constant. You need enter in your spreader constant according to your rows and spacing.

<u>Standard Machine</u>				
	<u>15 Inch Row Spacing</u>	<u>20 Inch Row Spacing</u>	<u>30 Inch Row Spacing</u>	<u>40 Inch Row Spacing</u>
<u>Number Of Rows</u>				
8	1620	1620	1620	1620
12	1080	1080	1080	1080
16	810	810	810	810
24	540	540	540	540

<u>High Output Machine</u>				
	<u>15 Inch Row Spacing</u>	<u>20 Inch Row Spacing</u>	<u>30 Inch Row Spacing</u>	<u>40 Inch Row Spacing</u>
<u>Number Of Rows</u>				
8	830	830	830	830
12	540	540	540	540
16	415	415	415	415
24	280	280	280	280

Standard Machine

When calibrating a Micro Trak on a Standard machine you will need to be in “Cal” mode. Following the numbers on the table above is important for calibrating our machine. If you enter other numbers in the controller your machine will not be calibrated correctly. When you get into “Cal” mode you will need to use the Montag Metering Calibration numbers. Meaning you use 62 pounds for the density, 250 pounds for your target rate, and 5 MPH for your test speed. If the machine is spinning 60 times a minute then the machine and controller are calibrated correctly. Once you have done this and it is correct you can switch your product density and/or target rate. The Micro Trak will automatically adjust the RPM to your target

rate and/or density. It will also tell you the number of RPM the machine is turning so you can make sure you have the correct RPM for your target rate and density.

### High Output Machine

When calibrating a Micro Trak on a High Output machine you will need to be in “Cal” mode. Following the numbers on the table above is important for calibrating our machine. If you enter other numbers in the controller your machine will not be calibrated correctly. When you get into “Cal” mode you will need to use the Montag Metering Calibration numbers. Meaning you use 62 pounds for the density, 250 pounds for your target rate, and 5 MPH for your test speed. If the machine is spinning 31 times a minute then the machine and controller are calibrated correctly. Once you have done this and it is correct you can switch your product density and/or target rate. The Micro Trak will automatically adjust the RPM to your target rate and/or density. It will also tell you the number of RPM the machine is turning so you can make sure you have the correct RPM for your target rate and density.

If your machine is not applying the rate you are wanting it to and you need to adjust it there is an equation that you can set up to find your spreader constant number. Say that you have a 12 row Standard Machine and you wanted it to be applying 250 lbs/acre but your machine is putting on 300 lbs/acre. Take your spreader constant number which in this case is 1080 divided by 300 which is what your machine is actually applying. You should get 3.6. Take this 3.6 times your wanted rate which in this case is 250. When you do this you should get 900 which would be your new spreader constant number.

$$(\text{Spreader Constant/Actual Rate}) \times (\text{Desired Rate}) = \text{New Spreader Constant Number}$$

For both the High Output and the Standard machine it is best to do a few acres and check to make sure it is doing the rate you want it to do. If you calibrated the machine correctly the rate should be what you set the machine for. This is a good way to make sure you have calibrated the controller and the machine correctly.

If you need to switch rates using a Micro Trak 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.

Micro Trak 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. So if you have a 12 row 30 inch row bar you should enter in 360 for boom one and make sure it is in the “On” position otherwise it will not turn on when you hit the “Run/Hold” switch to “Run”.

Micro Trak can interface with Ag Leader and John Deere. However, it can only run with certain displays. For Ag Leader, Integra and Insight are the only ones that it can run with. It will not run with the Edge. The Micro Trak can only hook into the newer/newest 2600 John Deere display. It will not run with the 1800. There are cable kits that you will need to order from Ag Leader and John Deere to be able to integrate the Micro Trak with one of these displays.

When entering information in an Ag Leader on what you are running for a controller you need to enter Raven 460 because the Micro Trak is pretending to be a Raven controller.

When entering information in a John Deere 2600 display you need to tell the 2600 its running with a Raven 660 because it looks for ID and checks to see if it matches the rate controller you specified. If it doesn't match it will give you an error message and will not allow you to run.