Montana AG Plastics

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Montana Ag Plastics is a division of
Reds Fixit Shop LLC

The Dataloggers were developed because of a need for a low cost accurate GPS data collection. This system was developed with different components so it can fit any spray system and spray budget.

Why All Topo
The MAP Dataloggers were developed to get good, accurate, complete GPS Data simply. While looking for a simple GPS system, the need for an equally simple GIS system arose. We found the I Gage, All Topo MAP system could meet this need. The map system is easy to use. Maps can be printed from any printer. Your map data can be exported to almost any other map system, for easy delivery of your information to your customers. (Easy export to shape files) Tech support is second to none. We offer a low cost training video to learn how to use the map system

How the Datalogger works:

MAP GIS III and GIS V

We used the Garmin III+, V+, and the GPS 60 receivers. Because many of our customers all ready had Garmin receiver, by using Garmin we eliminated the need to buy duplicate equipment. They just used the receivers they all ready had.

We developed our MAP GIS III Dataloggers to be simple to install and use on any spray equipment, easy to download, and easy to build usable maps. MAP GIS III &V Can be used with any satellite receiver, which will export information in a NEMA format.

How the system works is as easy as,

1. Plug the Datalogger and GPS receiver into the sprayer.
   <mark>(A flow switch is installed on the sprayer to turn on the datalogger whenever it is spraying)</mark>

2. Turn on the GPS receiver.

3. When GPS receiver finds satellites the LED on the MAP GIS III & V will do a double blink **whenever you are spraying**. The Double blink indicates logging GPS waypoints.

   <mark>(If the LED is blinking all of the time in your spray truck the switch on the end of the datalogger is in the on position and should be in the off position when in the spray truck)</mark>

4. The new GIS V Datalogger works the same in your spray truck as your old datalogger, but with the added convenience of the 5 event buttons. By pushing a button when you start to spray the data collected from the button push is identified by the color and number of the button. The track points will remain identified the same as the last button pushed until you push another button. This comes in handy if you are only spraying one pest, by eliminating the need to continually push the button. We have also added a switch on the end of the datalogger for **out of the truck** mapping. When switch is in the on position the datalogger will continuously track without the use of external power. The steady blinking of the LED can identify this. Turn the switch off and it is ready to put back in the truck and map where you are spraying. This will add flexibility to your mapping program.

5. When finished spraying for the day take the Datalogger out of the sprayer, hook it to your computer and download your data into ALL Topo maps.

We provide installation guides and electrical diagrams for instillation on Trucks, ATV's, Back Pack Sprayers, and virtually any spray system.

Datalogger Download:

To download the MAP Dataloggers start by connecting the MAP GIS III or the MAP GIS V Multi Event Datalogger to your computer.

<mark>(For computers with USB ports you will need a USB to Serial port converter. If you do not have one we offer them to you for $36.00. Contact Kathy at kthomas3@redsfixit.com)</mark>

 Next open All Topo Maps. Uncheck the open last project button.

Select the state you are using, and push OK.

Go to Annotations – New Annotation file – Save your map file name. The default location is the <mark>user</mark> location in All Topo. We recommend you save your map data in this location, as this is where MAP 2006 Record Keeping Software looks for your map information.

Now select Tools – GPS Tool – GPS Setup tab at the top of the toolbox. Select the GPS Datalogger (MT Ag) this is at the top right of the GPS Tool Box. Select the Com port output, <mark>(Finding the correct com port. Go to My computer-right click and select properties. Pick the hardware tab- Device Manager. When you select Device Manager, a list will come up. Go down the list and click on the + in front of ports. This will tell you the com ports. Select one of these ports)</mark> than Test GPS link.

If the correct com port is selected your computer should communicate with the Datalogger.

Select the tab at the top of the toolbox labeled Coordinate list, than select 1. Load Coordinates From.

Push the GPS Receiver Button.

A box will appear that states Load Coordinates from GPS Receiver. Click on Waypoint list and select OK.

The Button Attributes box in open.

This box allows you to name the weeds you are mapping.

First scroll through the list with the up and down arrows to the right of the first box selecting the weeds you would like to name.

These weed are preloaded for you with the federal code so all information will be standard thoughout all inanities across the United States.

Then go to one of the five button positions and load the weed selection in that location.

Next fill out the Applicator and Location Information.

Press OK to download your information. The download should be in progress. This will take awhile depending on the amount of points in the Datalogger. The download speed is automatically selected so the setting in the setup is not necessary.

Blue section is for use in North Dakota only.

After the download is complete, a box will come up telling you that your data has been downloaded, formatted and compressed. At this point it is ready to send to the state. The file has been put in the Windows clipboard and is ready to past to the state server.

Browse the Internet to:

http://www.agdepartment.com/weeds
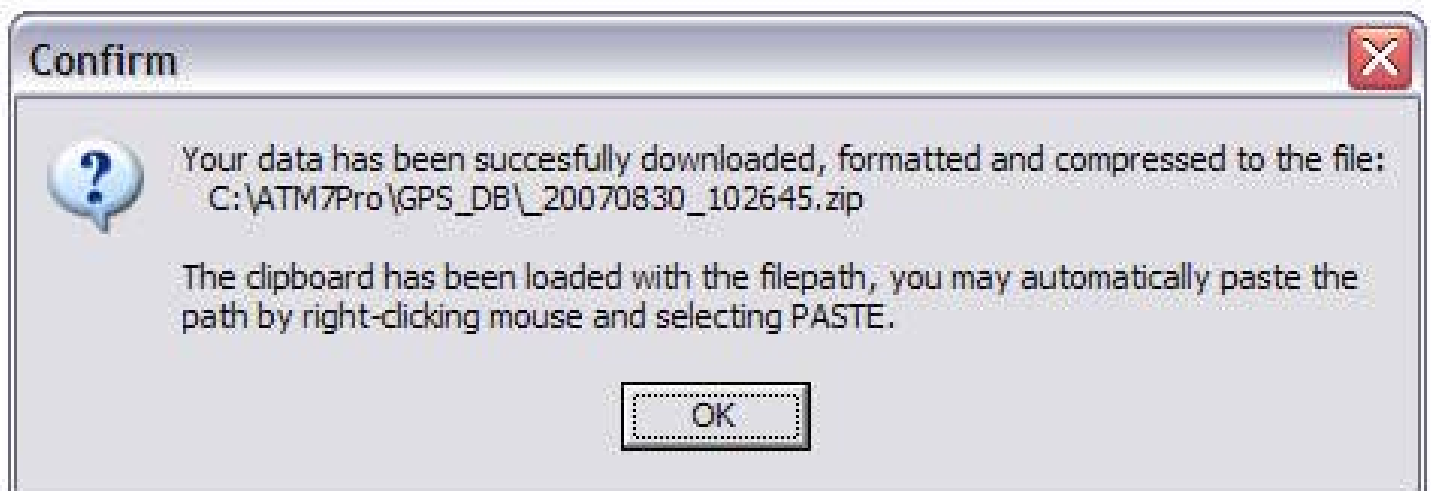
Enter your User ID, and Password:

Now to put the info you just downloaded on your map, go to the bottom of the GPS toolbox and pick the button that says Save Selected Coordinates to All Topo Maps.

A box will appear to save waypoints. Select Connected Route of Waypoints. Click OK.

Close your GPS Tool.
This will put your information in the Wpt file list. Find the Wpt button with the binoculars beside it.

Go down about three or four lines and highlight a line by clicking on it. Go to the bottom of the Wpt tool and click on the button that says Center Way Point.

Close Search Annotation List. You have just downloaded your data, put it in All Topo and made a map. Easy as that!

All Topo has a great book to guide you through using your information or you can purchase the video training program. You can get this video at www.redsfixit.com or e-mail us at kthomas3@redsfixit.com.

How to clear your datalogger.

After you have your data saved in All Topo you need to delete the data in your Datalogger. This is done by going to GPS Tool – GPS Setup Tab – at the bottom of the tool. Select erase all waypoints in GPS. The LED on the front of the MAP Datalogger will blink and all data will be cleared making the Datalogger ready to collect new data. In some cases the Erase Button is not visible. Just grab the bottom of the tool box and drag it down a little. The Erase Button should now be seen.

What the Datalogger does and does not do!
To keep the cost of our produce down and keep it as simple as possible the are a few features we have not added the datalogger such as reading gallons of spray output, acres sprayed, etc. These type features have to be kept manually. We have database software MAP 2006 that is designed to store this information for you. What the datalogger system does do for you is gives you flexibility and easy in mapping that is second to none.

First it is designed to be used in multiple sprayers. When not using your truck, just unplug it and put it on your ATV, or any other piece of spray equipment. It can also be taken out and used for manual mapping.

What the datalogger collects is
1. Location
2. Time (in real time)
3. Track data
4. Type of feature being mapped
5. Date
6. Day of week

Another words What, When Where!!! This makes mapping as easy as 1,2,3!

For help please e-mail us at redsfixit@redsfixit.com.
For help with All Topo e-mail them at info7@igage.com

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