

MM4Z RS485

Quick Start Guide:

Setting module read parameters.

Open MM4Z Software, plug programming cable into “COM” port of module. Plug USB port into your computer. Go to “START” button on computer. Depending on what version Operating System the computer is running, you need to determine what “COM” port the computer has selected for the prog. cable. After determining the com port, go to the top line of the software and select “Protocol”. The pull down menu has 2 selections: “Ethernet” and “Serial”. Select “Serial”. Then move next to “Protocol” and select/click on “Serial”. On the pull-down menu, select the com port (Com 1, Com 2, etc.) that the computer has selected for the programming cable.

The first test to see if you are communicating to the MM4Z module is to click the “Read” button under the “Zone 1” box. If you get the message “Read zone 1 successful” then you are in good communication with the module and should be able to perform all other functions of the software.

Entering/Changing Sensor ID#’s in Zones:

Select the “Zones” tab. To enter ID#’s into an empty zone, first click on the line beside #1 to highlight the line. Then go to the bottom of the page and enter your ID# into the Sensor ID box. Click the “ADD” button to the right and the sensor ID# will appear on line 1. Put your cursor behind the ID# just entered into the “Sensor ID” box and backspace to remove the previous number, then insert your next ID# and hit “ADD”. Repeat this procedure until you have the ID#’s that are required for this zone. When all ID#’s have been entered into the zone, click the “Write” to send the changes to the MM4Z module. You should see the message “Write Zone 1 successful” at the top of the page. If you are changing the ID#’s of an existing zone, click the ID# that you want to change to highlight it and select “Remove”, then type the new sensor ID# into the “Sensor ID” box and click “ADD”. This will replace the new ID# into the zone register.

Explanation of ID#’s and Negative/Positive numbers:

The MM4Z module has the unique ability to share sensors for multiple zone usage. Example, The trailing side sensor for Zone 1 can be used as the facing point sensor for Zone 2. For this reason we use negative (-) to identify sensors mounted on the right side rail as facing the switch machine, and positive (+) for sensors mounted on the left rail as facing the switch machine. The actual ID number, starting with number 4, can be odd or even. As long as the sensor numbers mounted on the rail, match what is entered into the module’s zone register.

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Using the “wheel sensor” tab to analyze sensors.

Select the “wheel sensor” tab. You will get a “Pop up” warning message. Hit “OK” to remove the warning message, this message doesn’t apply to the items you will be selecting.

The “Scan/Diagnose” tab will be the most useful item on this page. It will scan for sensors that are connected to the module that are able to communicate and give a “health check” of the wheel sensors (Pass/Fail). If you are scanning after an actual “fault” on the module you are more likely to see a “fail” on a sensor that could be causing the “fault”. If you suspect a particular sensor, or have information from reading the “event log” that a sensor is bad or intermittent, you can read the coils of that sensor to determine if it is unstable and should be replaced. Enter the ID # of the suspected sensor in the top sensor ID box in the column under “ID numbers”. Then on the “Coil Data” column, “check mark” the monitor box and click “read coil”. The Analog value will show in the coil 2/coil 1 boxes above “read coil”. These Analog valves should remain somewhat stable with only 1 or 2 increments of change. Any changes beyond 2 or 3 increments will suggest that the sensor is unstable and should be replaced.

Reading the Event Recorder.

The Event Recorder can be a very useful diagnostic tool to use after an actual “Fault” on the MM4Z module has appeared.

Select the “Event Log” tab and click “Read Log”. Allow a few seconds for the events to start to load. The items showing at the very top of the page will be the most recent. After about 15-20 seconds you can click the “Stop” button or the log file will be very large depending on how long the module has been installed.

The first item that appears in a red color will be the fault that disabled the system. Read the line item to diagnose the fault. Reading further into the log file, if there are any yellow colored log files, that would indicate a “caution” situation that could end as a full critical fault.

The full event log can be copied and e-mailed to the factory for further analyzing. Select “Export Log”, select “Excel File” or “Text File”. We prefer receiving the “Text File” because it will open on most all computers. The next window will prompt you to name the file. Create a name for the “Event Log” and click “Save”. Be sure to remember what location the file is being saved on the computer.