

Badgerloop: Max32 Module Command-line Interface

Instructions: windows users install YAT [here](#), Mac users try coolterm [here](#), there are tons of Serial Terminal pieces of software for all operating systems so either use one of those or find a different one that works

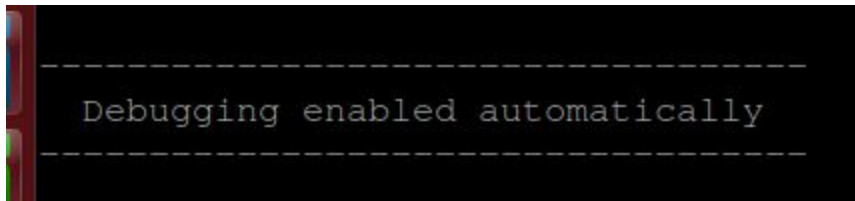
Once you have the software installed and open, connect a module to your computer via USB. Find how to open a new terminal window and find a list of available ports, there might be a default COM1 (Communications) or something like that but most of the time the modules are COM5-11.

The settings are: 115200 baud, 8 bit, no parity, 1 stop bit

Click open and you should be presented with a blank window that you can either type directly into or a message bar that you can type into and press "send".

You won't see anything printed out until YOU type something to it. Everything you type needs to be terminated by pressing enter.

If you press enter you will see:

A screenshot of a terminal window with a black background. The text "Debugging enabled automatically" is displayed in a light gray, monospaced font. The text is centered between two horizontal dashed lines. The terminal window has a standard macOS-style title bar on the left with red, yellow, and green window control buttons.

Essentially the modules don't attempt to print out until they know you are there to accept what they send.

If you are fairly certain you are typing to it and it's not responding, let me know (Vaughn).

On the following page is the list of commands

WARNING: CASE-SENSITIVE

| | |
|------------------|--|
| heartbeat | -- sends a heartbeat message (acting as the WCM) to all of the modules (quickest way to see if all of the modules respond, i.e. CAN bus healthy) |
| whoami | -- tells you which module you are plugged in to |
| bushealth | -- shows you any errors the CAN hardware has picked up on the bus |
| state | -- tells you previous state, current state, and next state |
| info | -- a bunch of information regarding the software |
| fault | -- tells you previous fault and current fault |
| serialOn | -- turns serial output on, you won't need to use this (it's automatic now) |
| serialOff | -- turns serial output off, DO THIS IF YOU PLAN TO EXIT SERIAL AND CONTINUE OPERATION |
| build | -- current software version |
| variables | -- one of the most useful messages, gives you a snapshot of all of the current sensor data the module holds |

ping [MCM|BCM|VSM|VNM|WCM] -- send a PING message to this module, you should get back a PING_BACK message and a message containing that module's software version

pin [0-86] [on|off] -- another useful command, turn any I/O pin on or off (note: not all pins default to off, so best to write 'off' first) it will warn you if you attempt to use a pin that is in use by another peripheral