

# BYONICS

## TinyTrak4 Firmware Manual

Version 0.9

<http://www.byonics.com/tinytrak4>

This manual explains how to manually update the firmware in the Byonics TinyTrak4. The recommended way is to use the TinyTrak4 Firmware Loader application available from the TinyTrak4 website. (Note: Microsoft DotNet is required to run that application) For those unable to run that application, the instructions below should also work. Firmware can be downloaded from the TinyTrak4 website above, and programmed into a TinyTrak4 with a terminal program, and a female to female null modem adapter or cable (available from [www.byonics.com](http://www.byonics.com))

- Download **Tera Term Pro** from <http://tinyurl.com/hc1w> , <http://tinyurl.com/55sob5> or any other location. This is a free terminal program for Windows, and is known to work well. Other terminal programs may also be used, if they have the ability to upload a file in **binary mode**.
- Start TeraTermPro.
- Select "**Setup**" then "**Serial Port**" and select correct com port and **19200** baud, click **OK**.
- Connect the TinyTrak4 Serial Port (J2) to a computer serial port with a female to female null modem adapter or cable.
- Power up the TinyTrak4.
- It should send a **?**
- You have about 1 second to send back a **b** or **B**.
- If you make it, it responds with **TinyTrak4 v1.2b >**
- If you don't make it, it runs the current code, if any. Cycle power and try again. If you have to, hold the **b** key down while powering up the TT4.
- You can send a **v** or **V** to confirm you are in the bootloader. It will respond with the version again.
- It will then send another **>**.
- You send a **s** or **S** be begin to send a new TT4 firmware file.
- It will respond with nothing.
- In Term Term Pro, Select "**File**" and "**Send File**".
- Check the **Binary** option box at the bottom left of the send file screen.
- Select the proper file you want to send (ending with .TT4) and then **Open**.
- It should respond with many **.** (period) as it is updating.
- It should finally end with a **\*** (asterisk) to show the update was complete
- After that you can either type **x** or **X** to run the new code,
- Or just cycle power and don't press **b** this time.
- The LEDs should flash and cycle as you go through the above modes.

After uploading the Tracker firmware, you should run the TinyTrak4 Tracker Config program to set your settings.