

G400 Bootloader Installation

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If you received your G400 before the bootloader was released or your G400 arrived without it, you can flash it to your device by following the steps below. This process may only be completed for the 2016 R1 SDK and later. Earlier SDKs do not contain a loader compatible with the bootloader.

Until the 2016 R1 SDK is out of preview, a version of TinyBooter compatible with the bootloader and the 2015 R1 SDK can be found here (<https://www.ghielectronics.com/downloads/NETMF/G400%202015%20R1%20Loader.ghi>).

To determine if your G400 already has the bootloader installed on it, you may hold LDR0 and LDR1 low and then reset the system. If in serial mode at 115,200 baud, a banner will be sent over COM1. If in USB mode, a virtual COM port will appear in the Device Manager.

1. Begin by downloading and extracting the G400 Bootloader Installer (<https://www.ghielectronics.com/downloads/NETMF/G400%20Bootloader%20Installer.zip>).
2. Make sure you have installed the G400/FEZ Hydra Loader Updater with the NETMF SDK. If you haven't, you can download it from here (<https://www.ghielectronics.com/downloads/NETMF/SDK/samba.2.12.exe>).
3. If you are using the FEZ Raptor, connect pin 8 on socket 3 to ground.
4. If you are using another product based on the G400S or G400D, connect SPI1 SCK to ground.
5. Apply power to the board and remove the connection between the above pin and ground after 3 seconds.
6. Open up the Device Manager, look under Ports, and find a COM port similar to "Bossa Program Port" or "GPS Detect".
7. Once you find the COM port, run "Flash Bootloader.bat" from the above downloaded archive.
8. When prompted, enter just the number of the COM port. For example: for COM10, enter just 10.
9. It should take a few moments to complete. Once finished, reboot the board.
10. The G400 should now show up in the Device Manager under Ports as "GHI Bootloader Interface".
11. Follow the instructions in this document (<https://www.ghielectronics.com/docs/344/ghi-bootloader>) to load the loader.