



## Firmware Update Instructions for SynScan GoTo Controllers

### System Requirements

- SynScan EQ or AZ GoTo hand controller version 3.0 or greater
- Windows 95 or later
- An available RS-232 COM port on the PC; or a Serial to USB adapter (sold separately) if your computer does not have a serial port
- Computer interface cable (supplied with mount)
- DC power supply (7.5V to 15V @ 100mA or greater output with 2.1mm tip positive plug)

### Preparing the Computer for the Update

1. Create a folder where you will store the files necessary for the update. Remember the location of this folder as you will need to point to it during the install process.
2. Download and save the Firmware Loader program to the folder you have created on your computer. You will need to download this program only once; after it is saved on your computer, only the firmware data file is needed for future updates.
3. Download and save the Firmware Update data file to the folder you created. The file will be named OrionVxxxxEQ.ssf, where xxxx indicates the version number of the firmware.

### Updating the GoTo Hand Controller

1. Plug the modular plug end of the computer interface cable into the middle jack in the hand controller. Plug the serial connector end of the cable to the COM port on your PC (or your Serial to USB Adapter).
2. Press and hold down the 0 and 8 numerical buttons simultaneously. This will engage the hand controller into update mode. Then plug the power supply into the hand controller's DC power jack. The hand controller will beep and display "SynScan Update Ver. x.x" on the LCD screen.

3. Run the Firmware Loader program on your computer.
4. Click on the "Browse" box and select the OrionVxxxx.ssf file location where it was saved previously on your computer.
5. Click on the "Update" button, and the new firmware will begin loading into the hand controller. The Firmware Loader will show the progress of the update on your computer screen. It will usually take approximately 5 minutes for the new firmware to load into the hand controller. It may take longer if a serial-to-USB adapter is employed on your computer.

6. When the download is complete, the Firmware Loader will display "Update Complete".

The firmware in the GoTo hand controller has now been updated.

You can click on the "HC. Version" button to confirm the new version number of the firmware (and possibly the database, but the hardware version will not change with internet updates).

**Note:** If the error message "Can not connect to a SynScan hand control" appears on your computer, check all cable connections. Also, try closing all other computer programs that might be attempting to use the COM port.

**Note:** If the error message "Firmware update failed..." appears on your computer, remove the power plug from the hand controller, and then reconnect it. Now, repeat the firmware update procedure.

By default, the data communication rate between the GoTo hand controller and the computer is 115kbps. The RS-232 port on some PCs may not support this high data transfer rate. If the firmware update procedure fails after a few tries, try reducing the data transfer rate by pressing the SETUP button on the hand controller. This will reduce the data transfer rate to 9.6kbps. The controller's LCD screen will show "Lo" in the lower right hand corner to indicate the lower transfer rate setting. The firmware update procedure remains the same except it will take much longer for the firmware to load into the hand controller.