MICROBOTICS, INC.

MIDG Series INS/GPS
Flash Utility

NOTE: This instruction assumes that the MIDG Series INS/GPS Software has previously been installed on the computer. This software needs to be installed prior to performing this operation.

1 Introduction. The MIDG Flash Utility is an easy to use program which enables users to upgrade the firmware of the MIDG Series INS/GPS and verify the date of calibration. This file will instruct the user on how to use the MIDG Flash Utility.

2 Prerequisites. MIDG Series INS/GPS, MIDG Series INS/GPS Interface Cable (either MBI# SLC2J09SF or MBI#SLC2JUSB) and MIDG Flash Loader.

Note: Refer to the MIDG Series INS/GPS User Manual for instructions on how to properly mount and interface the MIDG Series INS/GPS

1. **Plug the unit into an available com port.**

2. **Open an instance of the MIDG Flash Utility** (Figure 1)**.**

3. **Select the desired COM Number.**

    NOTE: Verify the "Skip Capture" check box is unchecked.

4. **Press the Capture Target button**.

    NOTE: If using the MIDG USB Interface Cable, the unit is powered via the USB port.
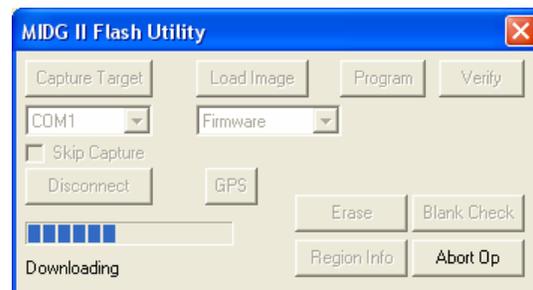

Figure 1. MIDG II Flash Utility.

The MIDG Flash Utility will download the information from the unit as seen in Figure 2. Once the download has finished the flash utility it is ready to interact with the user.

At this point, the user may do one of two things:

A. Change the firmware of the unit. (Section 3).

B. Verify the date of the calibration. (Section 4).

Figure 2. MIDG II Flash Utility download.

Changing the Firmware

3 Introduction. Updating the MIDG Series INS/GPS firmware is easy to accomplish. This section will instruct the user on how to update the firmware.

3.1 Prerequisites. MIDG Flash Utility, MIDG Series INS/GPS, MIDG Series INS/GPS Interface Cable (either MBI# SLC2J09SF or MBI#SLC2JUSB) and *UPDATED FIRMWARE.*

Figure 3. Selecting "Firmware" from the Dropdown Menu

1. **Complete Steps 1 - 4 of the first section.**

2. **Press the arrow on the dropdown list and select the "Firmware" option** (Figure 3).

3. **Press the "Region Info" button.**

This will display a small dialog box with the information about the currently loaded firmware (Figure 4).

VERIFY THE VERSION WHICH IS GOING TO BE LOADED IS UPDATED.

Figure 4. Firmware "Region Info" dialog box.

4. **Press the "OK" button on the "Region Info" information box to close it.**

5. **Press the "Erase" button.**

This will begin the procedure to erase the firmware from the unit (Figure 5).
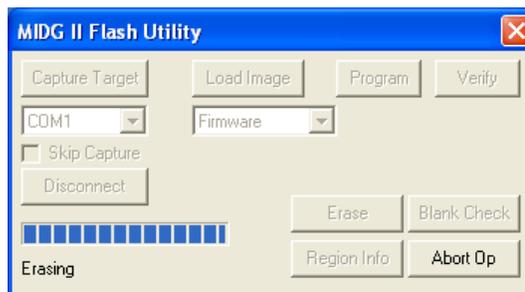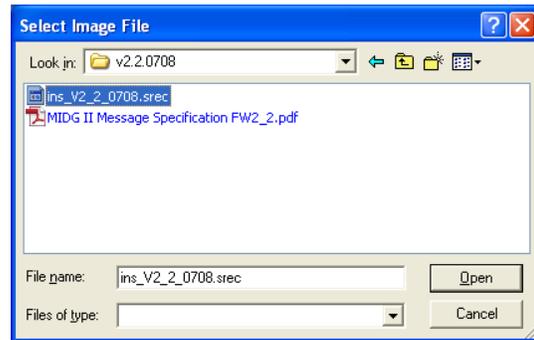

Figure 5. Erasing the firmware.

NOTE: Prior to loading new firmware, the old firmware must be erased.
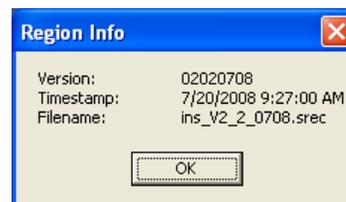
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6. **Press the "Load Image" button.** This will open the "Select Image File" dialog box (Figure 6).

7. **Select the path to the new firmware file and Press the "Open" button.**

8. **Press the "Program" button.** The flash utility will program the updated firmware into the unit (Figure 7).

9. **Press the "Region Info" button** to verify the update after the firmware is loaded.

Figure 6. Select Image File dialog box.

Figure 7. Programming the unit.

Figure 8. "Firmware" Update Verified

This completes the steps on updating the firmware for the MIDG Series INS/GPS.

Verifying the Calibration Date

WARNING

MICROBOTICS, INC. DOES NOT ISSUE ROUTINE UPDATES TO CALIBRATIONS.

ANY ATTEMPT BY THE USER TO UPDATE THE CALIBRATION FILE WILL RENDER THE UNIT INOPERABLE AND IT WILL HAVE TO BE RETURNED TO MICROBOTICS, INC. FOR RECALIBRATION. <u>THIS IS NOT COVERED BY WARRANTY.</u>
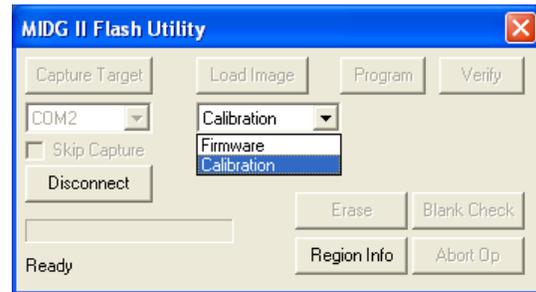
WARNING

NOTE: There is a Calibration sticker on the side of the MIDG II INS with the date of its last calibration.

4 Introduction. Verifying the calibration date of the MIDG Series INS/GPS is easy to accomplish. This section will instruct the user on how to verify the calibration date of the unit.

4.1 Prerequisites. MIDG Flash Utility, MIDG Series INS/GPS, MIDG Series INS/GPS Interface Cable (either MBI# SLC2J09SF or MBI#SLC2JUSB)

1.   <u>Complete Steps 1 - 4 of the first section.</u>

2.   <u>Press the arrow on the dropdown list and select the "Calibration" option</u> (Figure 9).

3.   <u>Press the "Region Info" button.</u>

Figure 9. Selecting "Calibration" from the Dropdown Menu

This will display a small information box about the calibration file which is currently loaded into the unit (Figure 10).

Figure 10. Calibration "Region Info" dialog box.

WARNING

MICROBOTICS, INC. DOES NOT ISSUE ROUTINE UPDATES TO CALIBRATIONS.

ANY ATTEMPT BY THE USER TO UPDATE THE CALIBRATION FILE WILL RENDER THE UNIT INOPERABLE AND IT WILL HAVE TO BE RETURNED TO MICROBOTICS, INC. FOR RECALIBRATION. <u>THIS IS NOT COVERED BY WARRANTY.</u>

WARNING

This completes the steps on verifying the calibration date for the MIDG Series INS/GPS.