

## Using the DTR-Flash Upgrade Utility Program

Step 1: Download the firmware DTRflashupxxx.exe or DTRFlashUpxxx.zip to your desktop

**Step 2**: Connect the DTR Model 8510 to the computer. (batteries should be fully charged prior to upgrade.)

**Step 3**: Double click the exe file to launch the upgrade utility. A folder named DTRFlashUp### will be created. If the .zip file was downloaded then unzip to desktop and run DTRFlashUp.exe from within the created folder.

| nstrument   | Refresh |
|---|---------|
| DTR Model 8510, (SN 243295HMDv)   | ]       |
| Flash Upgrade Type  | Program |
| <ul> <li>Normal</li> <li>Fail safe (open unit, set switches and press reset)</li> </ul> | Exit    |
| Status  |         |
| Firmware file: Model8510.pgm, Revision 1.23   |         |

**Step 4**: The Model and serial number will appear in the drop-down list if the instrument was detected. Click "Refresh" if the list is empty. Note: The firmware file will be automatically selected.

**Step 5**: Click on the "Program" button to start the firmware upgrade process. Normally the "Normal" mode can be used, however, if programming is not possible then "Fail Safe" mode may be used. When the "Fail safe" mode is selected the following message will appear otherwise the programming will start right away and no further steps are needed. NOTE: It may be necessary to press the reset switch again after selecting OK to start the download process.

| 1. Set all flash upgrade sv | vitches insid | le the instr | ument to the | ON position |  |
|-----------------------------|---------------|--------------|--------------|-------------|--|
| 2. Press reset on the instr | ument.        |              |              |             |  |
| 3. Select OK when ready.    |               |              |              |             |  |
|                             |               | OK           | 7            |             |  |

**Step 6**: To access the flash upgrade switches when performing a fail-safe upgrade, the instrument must be removed from the case. The upgrade switches and reset switch are located on the main pcb under the TEST button.





**Step 7**: Select OK to start loading the firmware into the instrument. During this process you should see the Programming count increase. Shown below.

| DTR Model 8510, (SN 243295HMDv)                     |      |
|---|------|
| lash Upgrade Type Prog                              |      |
| C Normal  | gram |
| - Nollina   |      |
| Fail safe (open unit, set switches and press reset) | xit  |
| Status  |      |

**Step 8**: Once completed the following message will appear. Switch both of the DIP switches to the off position and press reset.



**Step 10**: Turn both DIP switches to the "OFF" position then press the reset button. Assemble the unit in the reverse order.

## Firmware Upgrade is completed.