



MTD2000
Firmware Downloader
User Guide R05

Revision History

Rev	Date	Author	Description
01	12-May-09	Yingsi	Initial Release
02	21-May-09	Yingsi	Made changes to Step 6
03	31-July-09	Yingsi	Added 1 step in between step 1 and 2
04	10-Sep-09	Yingsi	Added warning statements before step 1. Changed Steps 4, 5, 10. Removed Step 7. Updated pictures of MTD2000.
05	29-Sep-09	Yingsi	Updated with Downloader 4.03. Amended Step 4, 5, 6, 9, 10, 11, 12. Updated pictures with Downloader 4.03.

MTD2000 Firmware Downloader

1.1 Firmware Downloader

There is NO need to perform the firmware download for the MTD2000 device (unless requested by Daviscomms). The MTD2000 is already loaded with the latest firmware.

In the case whereby a firmware upgrade is required, the steps in this document will give details on how the process is being carried out.

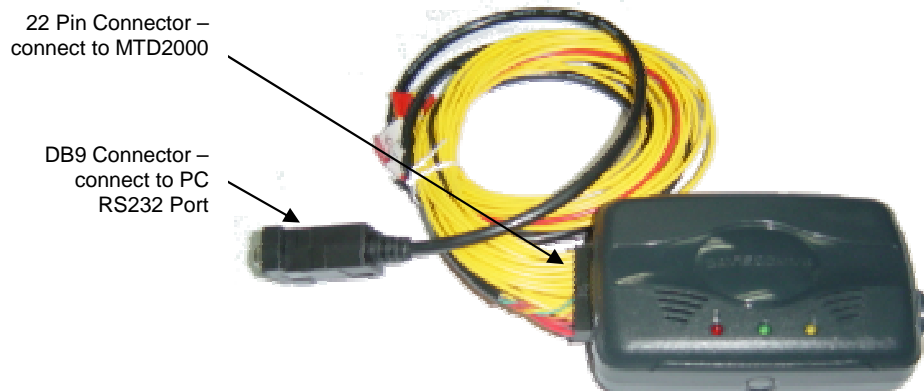
1.2 Hardware set-up for flashing of firmware

Step 1

Remove internal battery and plug in the power source of MTD2000.

Step 2

Connect the cable from PC host to MTD2000 via the 22 pin-DB9 wire harness cable.



Step 3

Run and install the MTD2000 Downloader v4.03.exe file.

**Notes:**

You will need the software Microsoft .Net Framework 1.0 and above for the downloader to function properly. (To check your system, go to [Control Panel/Add or Remove Programs](#))

You can download and install the program from <http://msdn.microsoft.com/en-us/netframework/aa569264.aspx>.
The download will take a while.

1.3 Use of the MTD2000 firmware downloader setup guide

This Setup Guide is applicable for the following hardware and software version:

- MTD2000 Downloader - Version 4.03
- The Product – MTD2000

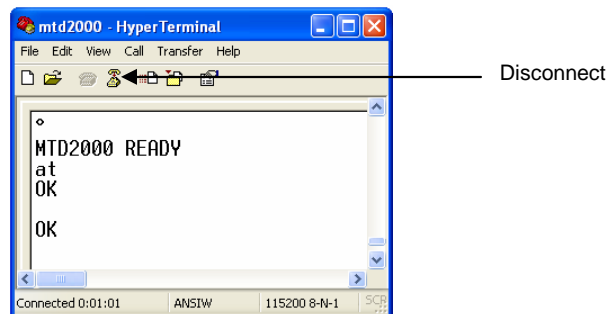
1.4 MTD2000 Downloader User Guide



Warning: DO NOT disconnect MTD2000 from serial cable or power adaptor or reset the unit when MTD2000 is connected to the downloader. Doing so might cause unforeseen damage to the module.

Step 1

Turn on the power of the device and connect to HyperTerminal (Settings as in MTD2000 User Guide). Check that device is able to return "OK" when **AT** is typed into HyperTerminal.

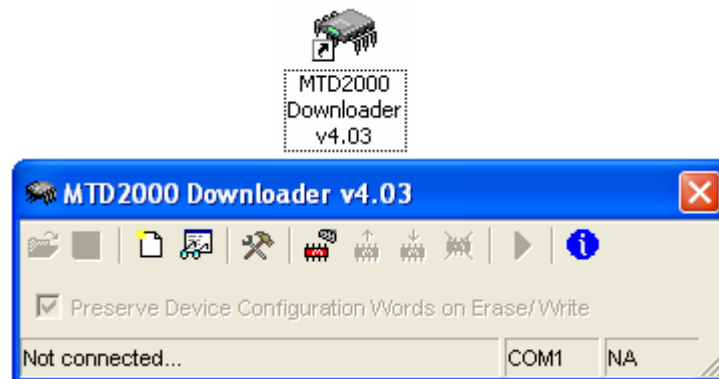


Step 2

Click on the disconnect icon on HyperTerminal and close the program.

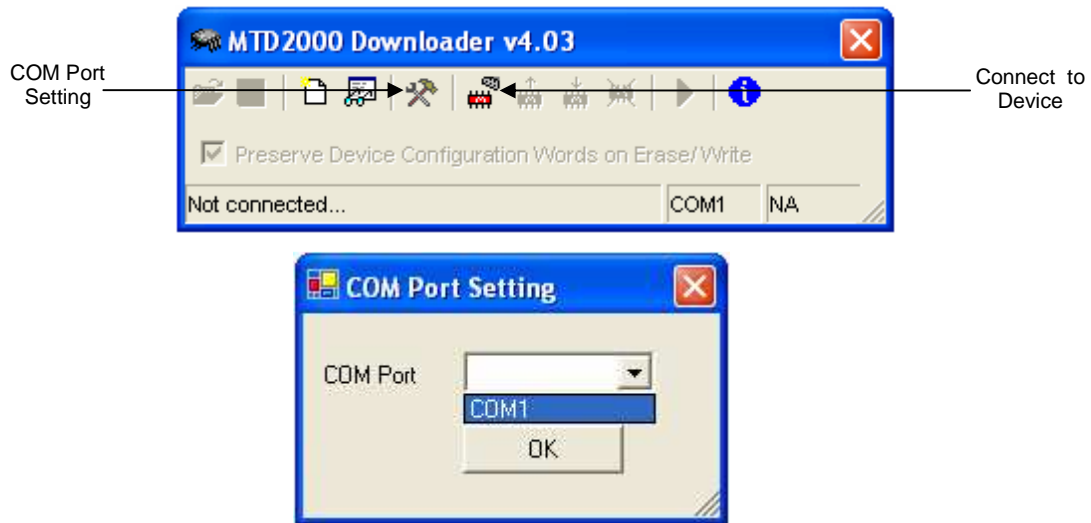
Step 3

Launch the *MTD2000 Downloader v4.03* Program.



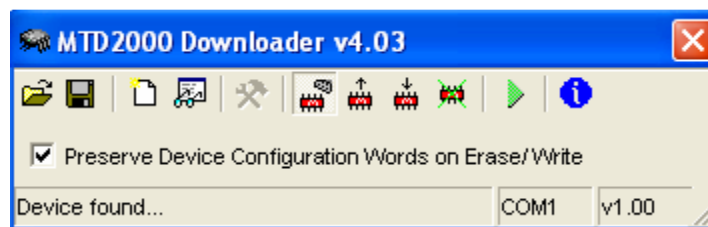
Step 4

Set the downloader to use the correct *COM Port* and click the *Connect to Device* button.
(Note: Please ensure you have the new firmware hex file before connecting the device)



Step 5

When device is connected, the status of the downloader should state "*Device found*".



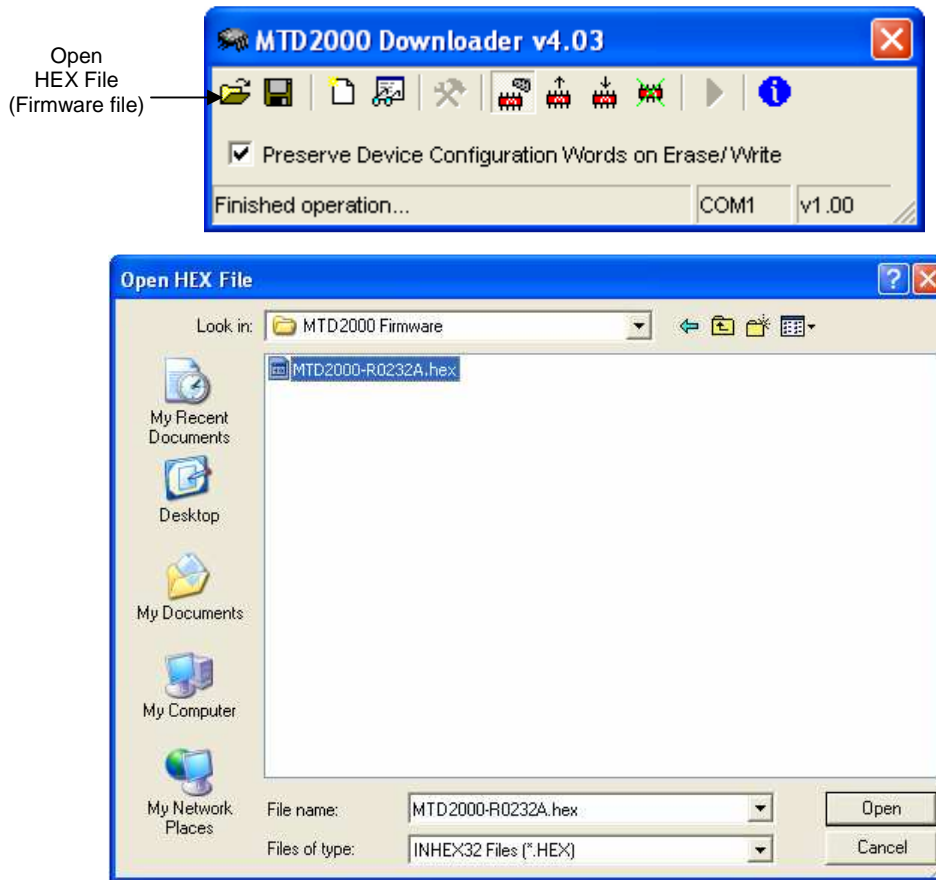
Step 6

Click on *Erase Device* to erase the previous firmware in the device.



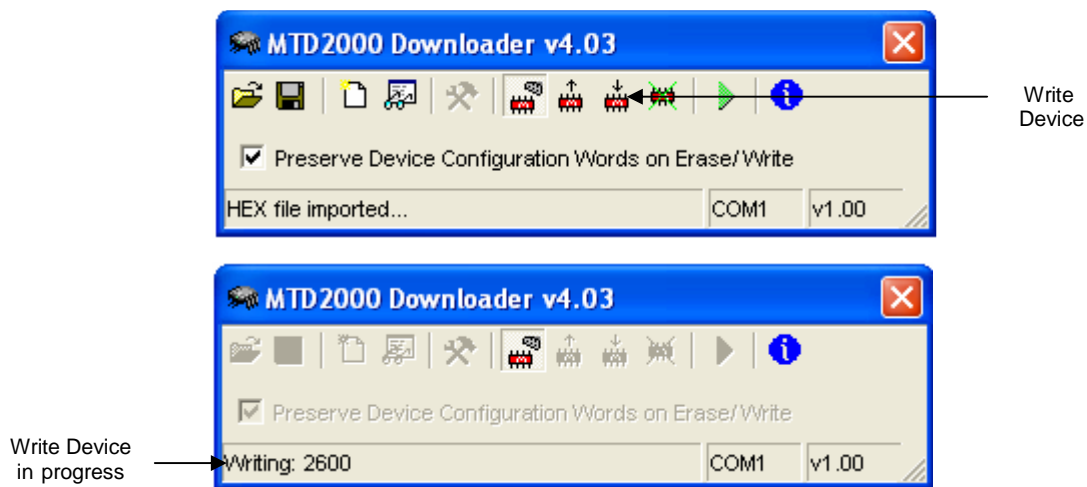
Step 7

Click *Open HEX File* to load the new firmware application. (Ensure that you have the latest firmware HEX file before you open file.)



Step 8

Click *Write Device* to start downloading the firmware application into the device.

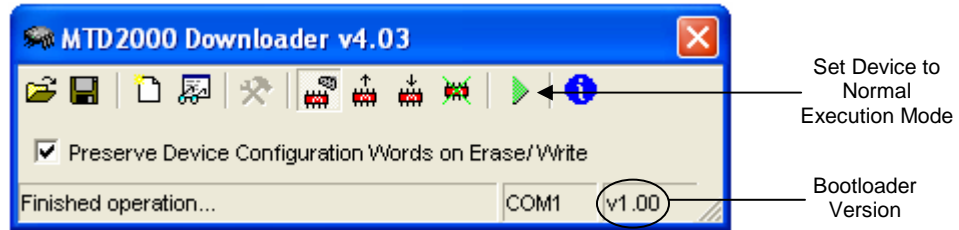


Notes:
If an error occurs when writing into the device, do not disconnect from the downloader. Proceed to repeat from **Step 6** again.

Step 9

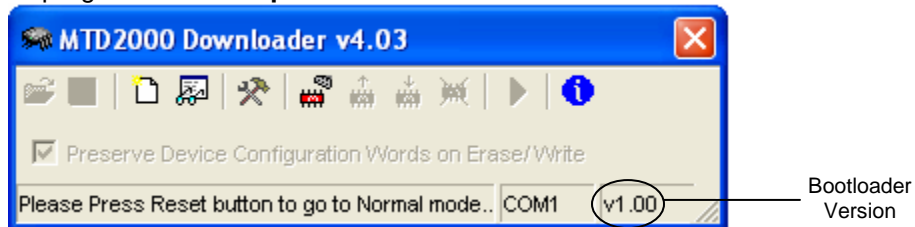
Click on *Normal Execution Mode* to set the device back to run mode.

Check the Bootloader version on your device: For bootloader V1.00, go to **Step 10**.
For bootloader V1.01, go to **Step 11**.



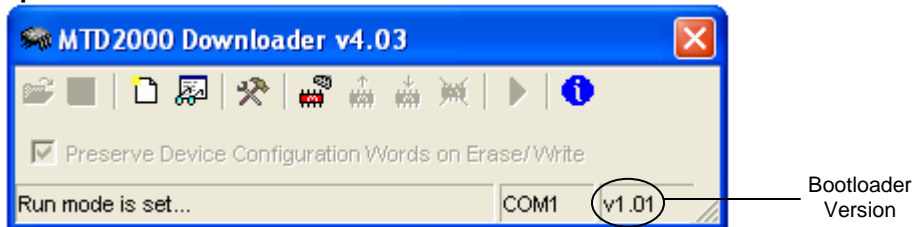
Step 10

For Bootloader V1.00: Press the reset button to set the device back to *run (normal) mode*. Exit from the downloader program. Go to **Step 12**.



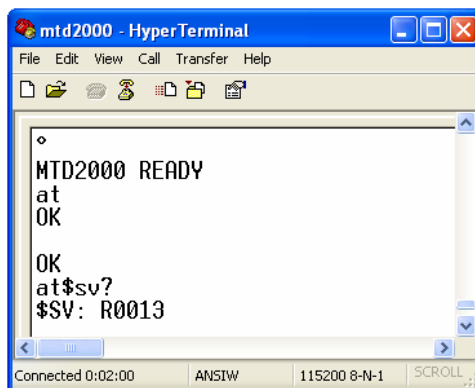
Step 11

For Bootloader V1.01: Device has been set to *run (normal) mode*. Exit from the downloader program. Go to **Step 12**.



Step 12

Wait for 20 seconds for the device to fully power up. Check that device is able to return "OK" when **AT** is typed into HyperTerminal. Check the firmware version by typing **AT\$SV?** on HyperTerminal.



Notes:

It will take a few minutes to perform the erasing, reading and writing. Please wait until the status message shows "Finished operation..."