



**MTD2000**  
**Firmware Downloader**  
**User Guide R03**

## Revision History

<b>Rev</b>	<b>Date</b>	<b>Author</b>	<b>Description</b>
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

## 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 the 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 v4.02.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

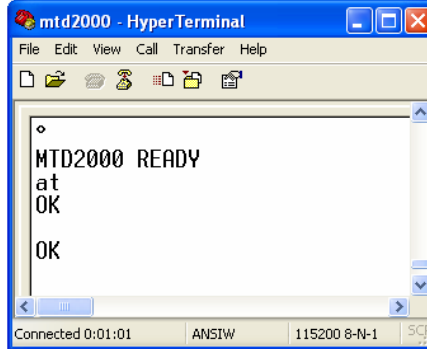
This Setup Guide is applicable for the following hardware and software version:

- MTD2000 Downloader - Version 4.02
- The Product – MTD2000

## 1.4 MTD2000 Downloader User Guide

### 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.

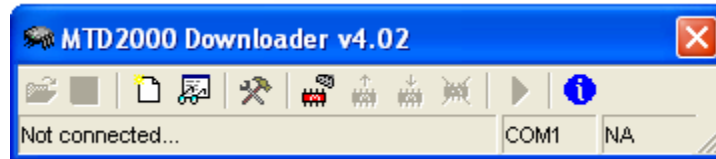


### Step 2

Disconnect from HyperTerminal and close the program.

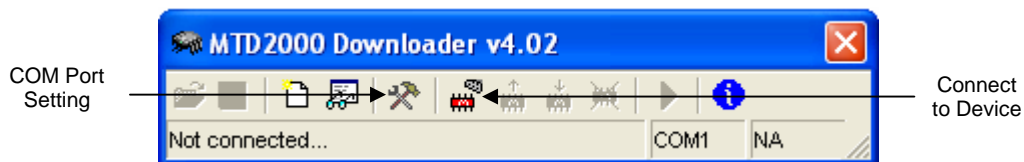
### Step 3

Launch the *MTD2000 Downloader v4.02* Program.



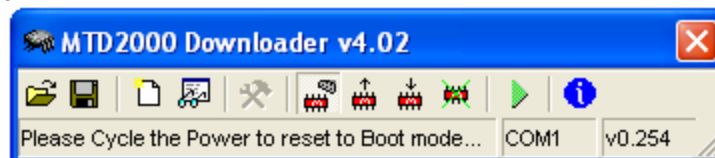
### Step 4

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

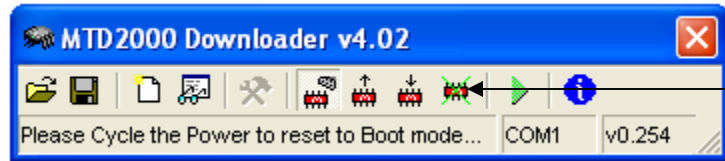
When device is connected, the status of the downloader should state "*Please Cycle the Power to reset to Boot mode...*".



Cycle the power of the device and wait for 5s for the device to go to boot mode.

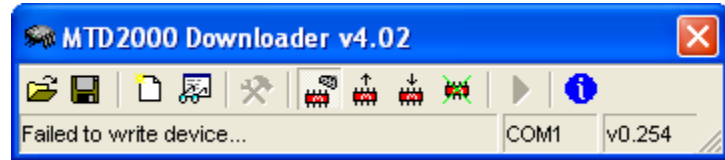
### Step 6

After 20 seconds, click *Erase Device* to erase the previous firmware in the device.



Erase Device

If the status is "*Failed to write device...*", go to **Step 7**.



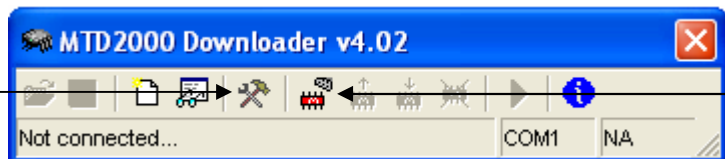
If the status is "*Erasing: XXXXX*", go to **Step 8**.



Erase Device in progress

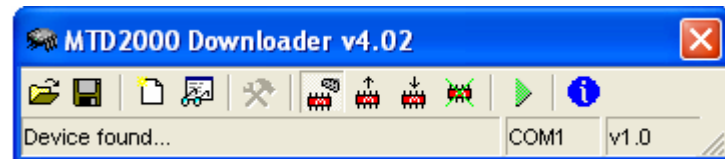
### Step 7

Close the MTD2000 Downloader v4.02 program and cycle the power of the device. Re-launch the MTD2000 Downloader v4.02 program and connect to device. Repeat **Step 6**.



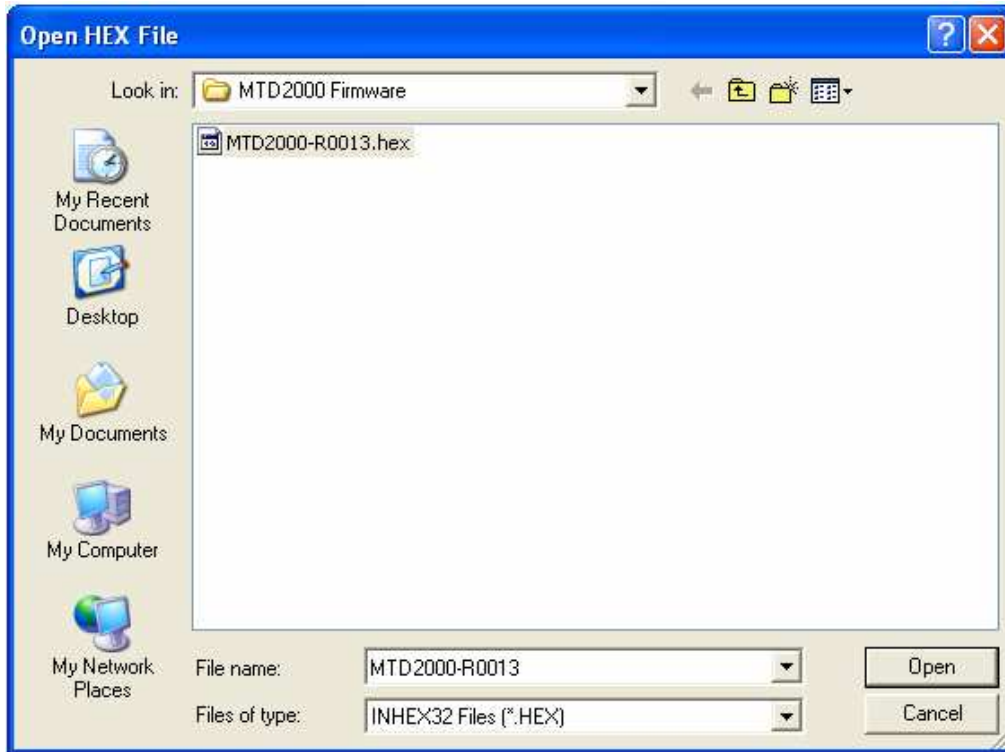
COM Port Setting

Connect to Device



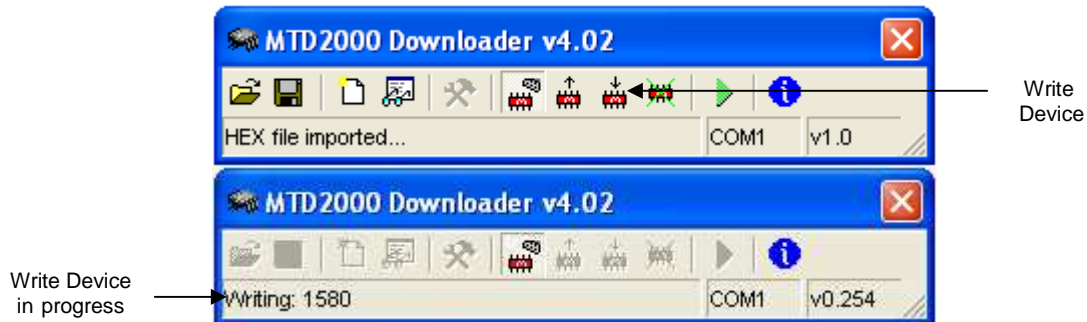
### Step 8

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



### Step 9

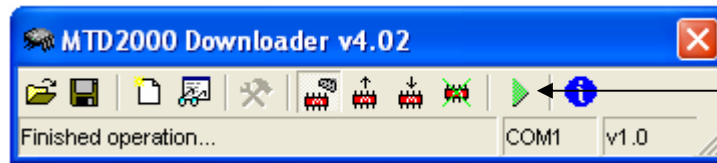
Click *Write Device* to start downloading the firmware application into the device.



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

### Step 10

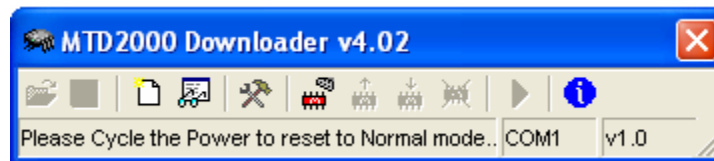
Click on *Normal Execution Mode* to set the device back to run mode.



Set Device to Normal Execution Mode

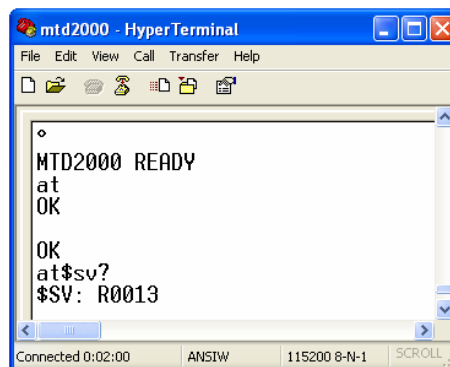
### Step 11

Cycle the power of the device to reset the device to normal mode. Exit from the downloader program.



### 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..."