

NiStune

NISSAN REALTIME TUNING



USB Drivers Installation Manual V1.1

(JECS ECCS 1986-1989 Legacy Engine Control Units)

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INTRODUCTION

Welcome to NIStune.

The NIStune hardware and software solution provides a means for the car enthusiast to retune their vehicles whilst retaining their factory ECU and its default programming.

This solution provides many advantages over aftermarket ECUs in that the

- Factory default tuning is maintained once the NIStune board is installed. Upon installation of the board, vehicle will be operational as usual.
- Additional tuning can then be made against the factory maps for modifications made to the vehicle. There is no need to tune the car to get it running from scratch, reducing time and costs of tuning required on dyno.
- There is no need for wiring loom modifications due to inferior controller unit installation
- Installation of aftermarket ECUs may result in vehicles being deemed as unroadworthy by authorities. When installing a NIStune board, the vehicle maintains factory ECU and is undetectable without removing the the ECU and its cover. Removal of the NIStune board is trivial and factory ROM can be reinstalled in minutes where necessary.

NIStune provides realtime tuning and maptracing. It provides the ability to make changes on the fly to the factory ECU and then the desired results are achieved, save these permanently in non-volatile memory on the programmable board.

NIStune also provides data logging and playback facilities, the first available for legacy type 1980s Nissan JECS ECUs. NIStune software also provides a user friendly responsive graphical interface to perform modifications.

Contained in this manual are the instructions for installing USB drivers for a NIStune board.

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Windows 98 Instructions

1. Using a USB A-B cable, plug the B end into the NISTune modified ECU and the A end into your PC.
2. The PC should then attempt to recognise a device is plugged in and search for drivers as seen below. Click the 'Next' button to continue.



3. Select 'Search for the best driver for your device' and click 'Next'



4. Tick the 'Specify a location' option only and then click 'Browse'.



5. From the 'Browse' window select the location of where your drivers are located. These will normally be located where you installed the NISTune. The default location for these drivers is C:\Program Files\NISTune\drivers
6. Once the directory has been selected from the 'Browse' window, it will appear in the location box as seen in the picture below. Click 'Next' button to continue the driver installation.



Location:

Windows 2000, XP, Vista

C:\Program Files\NISTune\Type1_USB_Win2K_XP_Vista_Drivers

Windows 98, ME

C:\Program Files\NISTune\Type1_USB_Win98_ME_Drivers

7. The installer will then copy the files across into the Windows folders and registry. Once it has finished the following screen will appear. Your NISTune USB device has now been successfully installed.

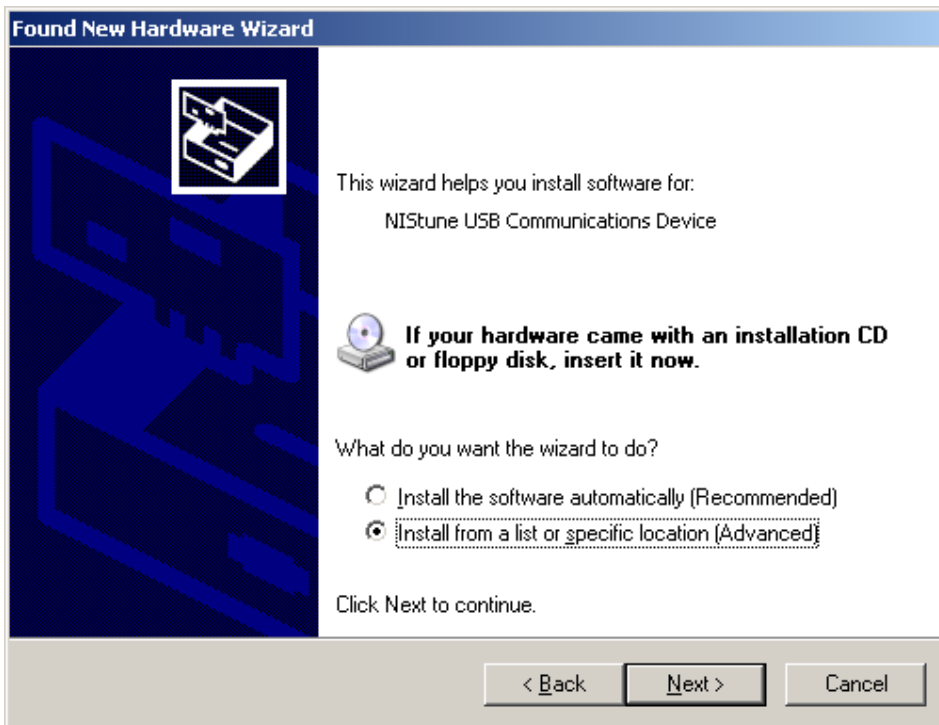


Windows XP Instructions

1. Windows XP will display the following screen upon connection of the NISTstune modified ECU to the PC when the ECU is powered on.
2. Click 'No, not this time' and Next to continue.



3. The next screen will identify 'NISTstune USB Communications Device' and ask how you wish to install the driver. Click 'Install from a list or specific location'



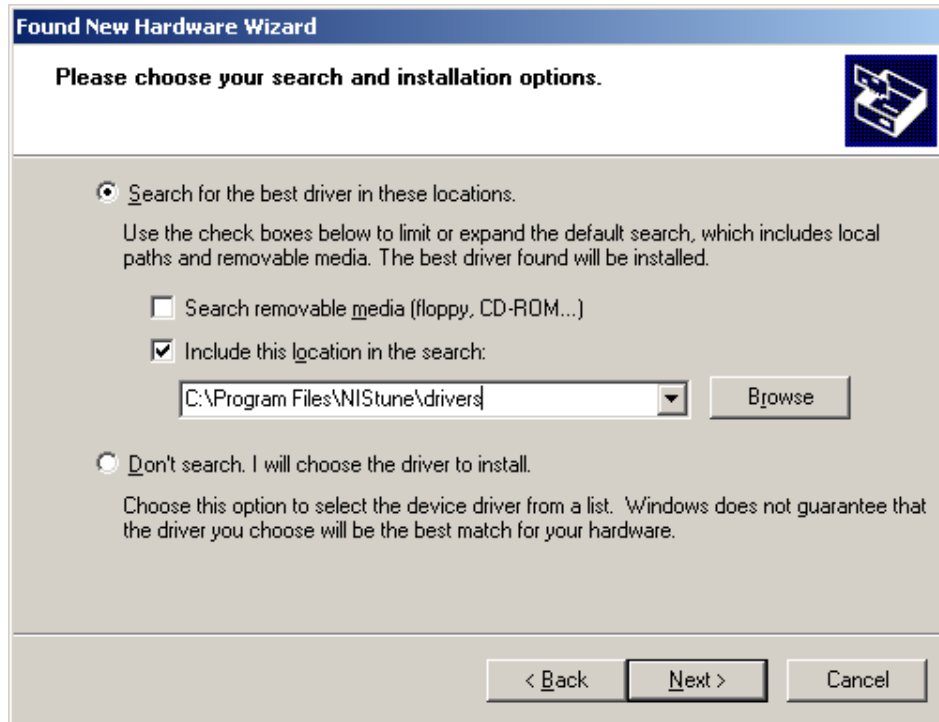
4. The next screen will ask how to find the driver. Put the NISTune installation path into the ‘Search for the best driver in these locations’ path

Windows 2000, XP, Vista

C:\Program Files\NISTune\Type1_USB_Win2K_XP_Vista_Drivers

Windows 98, ME

C:\Program Files\NISTune\Type1_USB_Win98_ME_Drivers

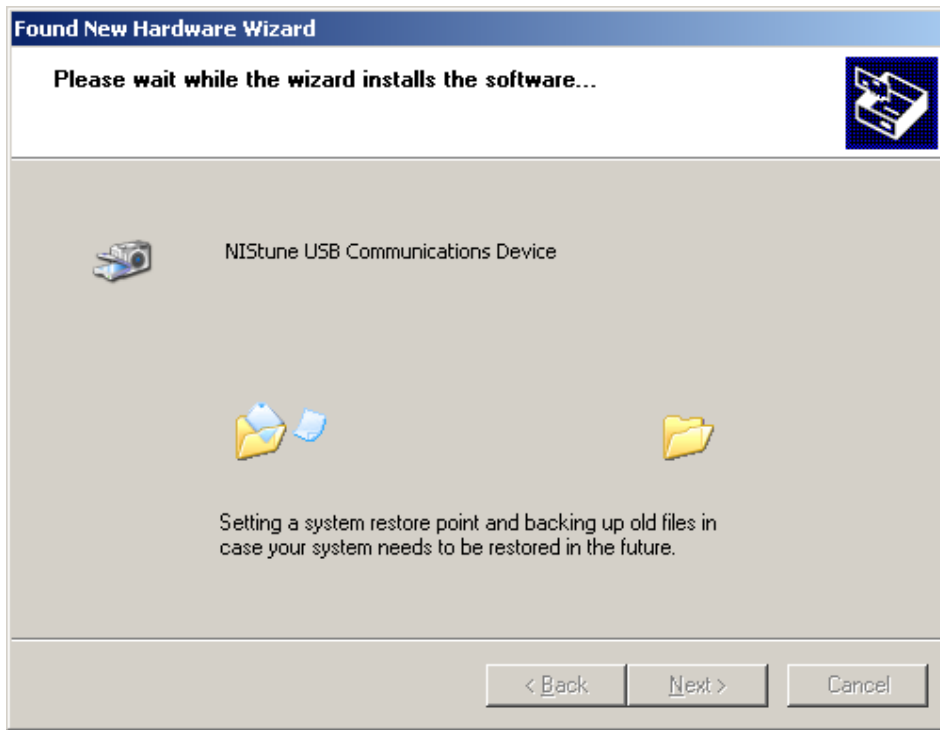


5. You will receive a warning message



The base FTDI device drivers used by NISTune have been certified for operational use on Windows, however the allocated ProductID for NISTune software has not been certified individually. You may continue installation as the drivers will not cause any system impairment or instability.

6. Windows will now install the software



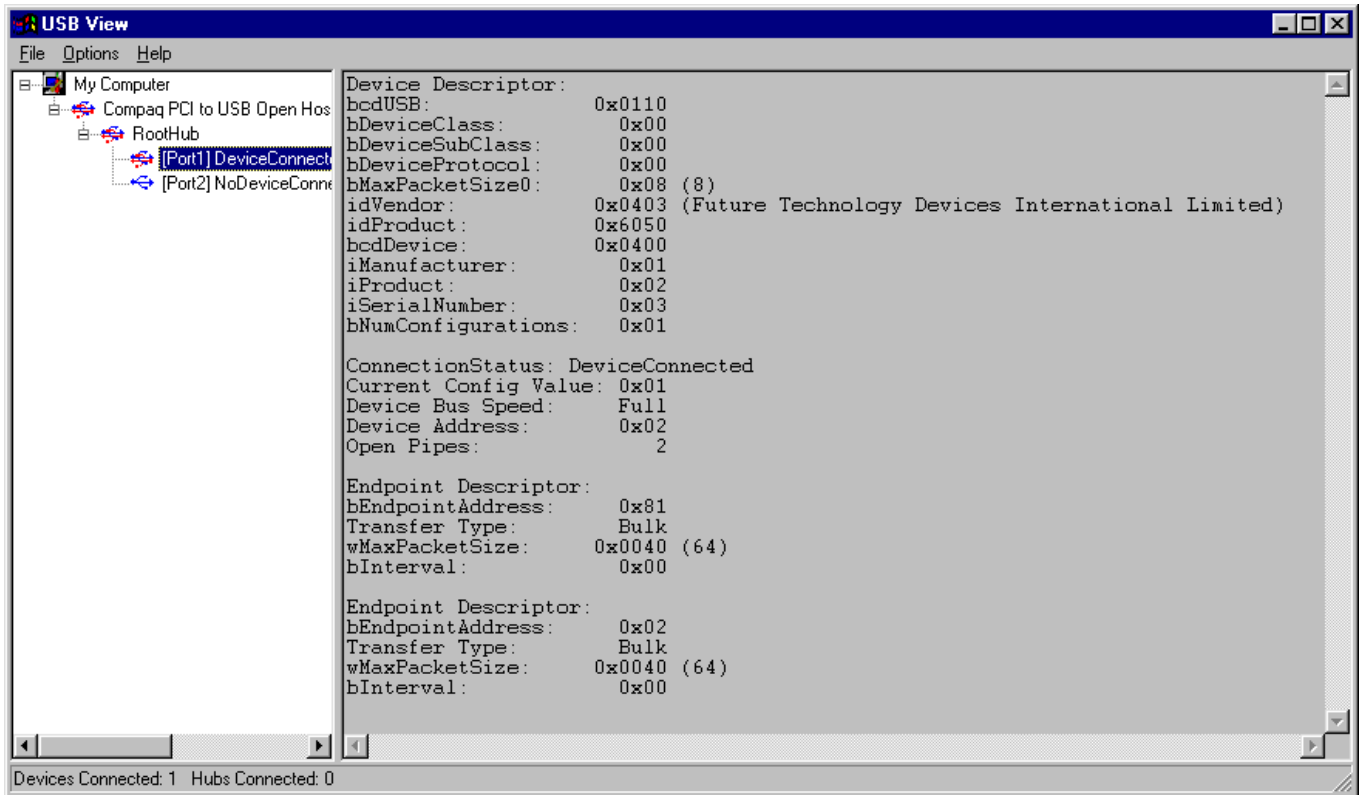
7. Windows will then report completion of the installation. Your NISTune USB device has now been successfully installed.



Appendix A - Help for Problems During Installation

If you have problems detecting or installing the NISTune USB device, please follow the following procedures before reporting to NISTune Developments the problems you have found.

1. Firstly run the program **USBView.exe** supplied in the NISTune/drivers folder supplied as part of your installation. This look on your computer to see what USB devices on your PC have been found by Windows, and report some information about them:



2. Ensure that a device with idVendor 0x0403 and idProduct 0xC7D8 was found.

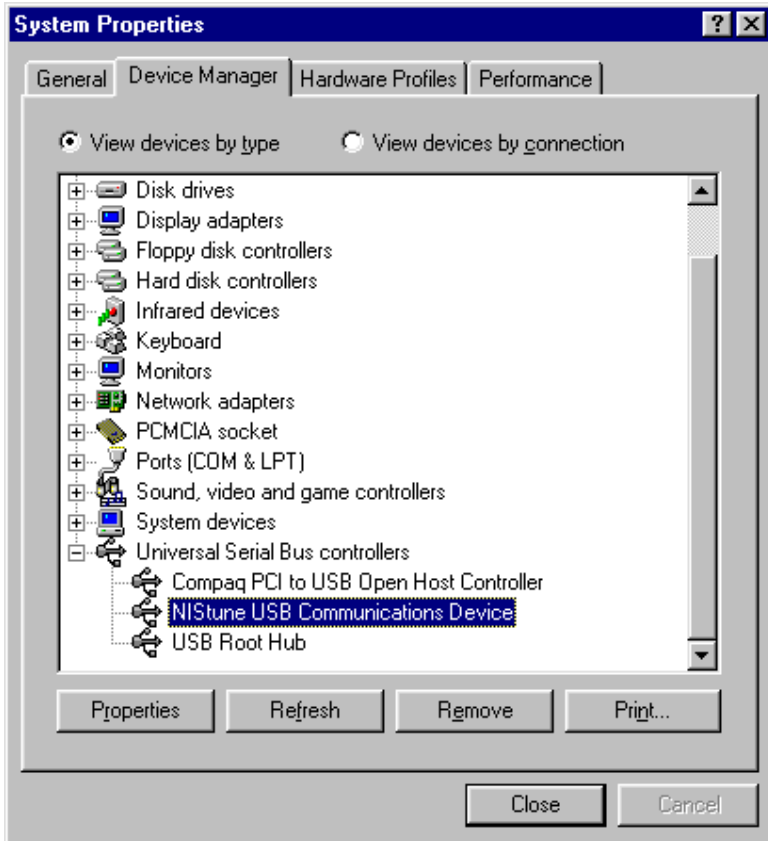
If no devices were found, firstly try another USB device on your PC and see if it appears when connected (such devices may be a USB scanner, printer, camera, flash key etc). If they appear, then we can confirm your USB ports are working correctly.

If they do not appear, confirm in your BIOS settings that USB is enabled and in Windows that you have a functioning USB Host Controller and Root Hub (this can be found in Device Manager, see the picture in step 3). You may need to consult your PC hardware documentation for further information.

If other devices were found but the NISTune communications device was not, you may have a hardware communications problem. Please ensure that your ECU is powered on (ie. the ignition key is ON). Also ensure that the USB cable is firmly plugged in at the ECU and at the PC ends. If all appears to be powered on and connected properly, please contact NISTune Developments for product support.

If a device was found but not installing correctly, check the idProduct is 0xC7D8 in this window. If the idProduct is a different value then the onboard EEPROM may be corrupt or not read correctly. Contact NISTune Developments for an EEPROM image and report to them the reported idProduct. Appendix B explains how to upload a new EEPROM image.

3. If the correct vendor ID and product ID were found, but there was no request for driver installation, confirm that the driver is not already installed. To check driver installation, right click 'My Computer' and then 'Properties'. Under 'Device Manager' tab expand 'Universal Serial Bus Devices'. Check if 'NISTune USB Communications Device' was found.



If so, then it already is installed.

Note: To uninstalle the driver, run **UNistune.exe** from the NISTune\devices directory.

4. If the driver did install to completion, but NISTune complains that it cannot detect a USB device, then follow the procedure in steps 1-3 and ensure that the device can be detected by Windows in **USBView.exe** and the device when plugged in and ECU powered on is visible in the Device Manager window.

Note where you detected a failure in the above steps and report to NISTune Developments with the following information:

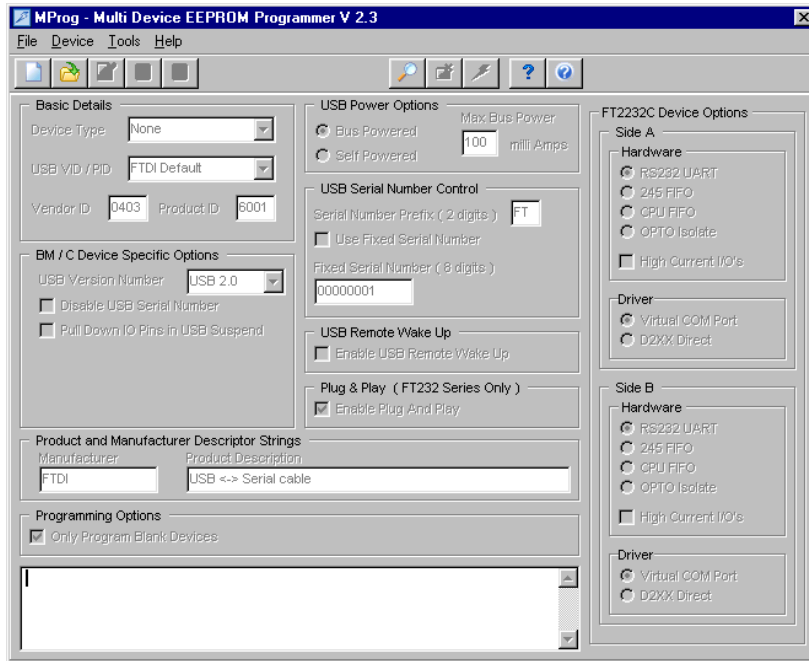
- Name
- Company (where applicable)
- License type (individual/business)
- Registration key
- Operating system
- PC type
- Other installed USB devices (if any)
- Where failure occurred and other details

Appendix B – Performing an EEPROM reprogram

In the rare occurrence where the EEPROM may be corrupted or contain an invalid Vendor/Product ID, request NISTune Developments for a user EEPROM image.

The following steps detail how to reprogram the EEPROM:

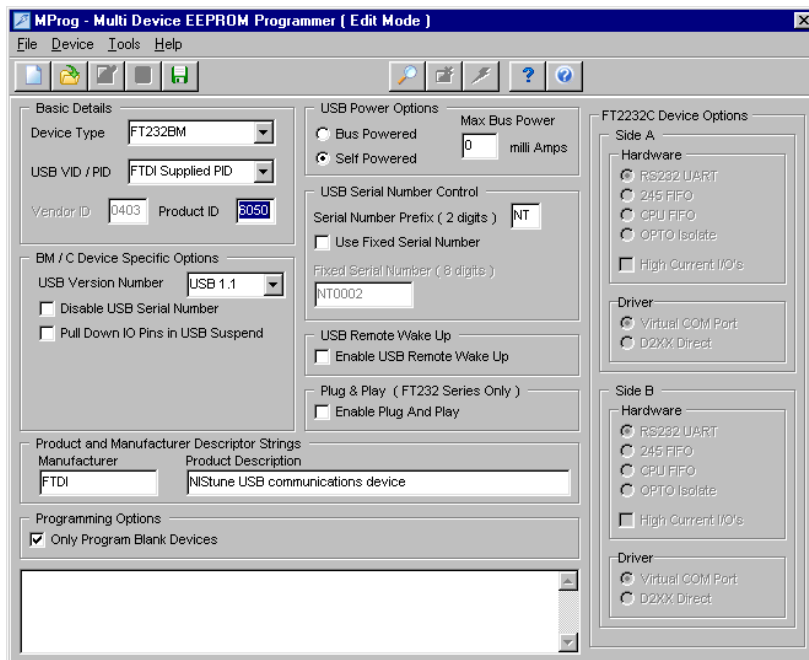
1. Obtain the MProg program from NISTune Developments located in the Utilities folder from the website. Install the executable onto your PC and run it



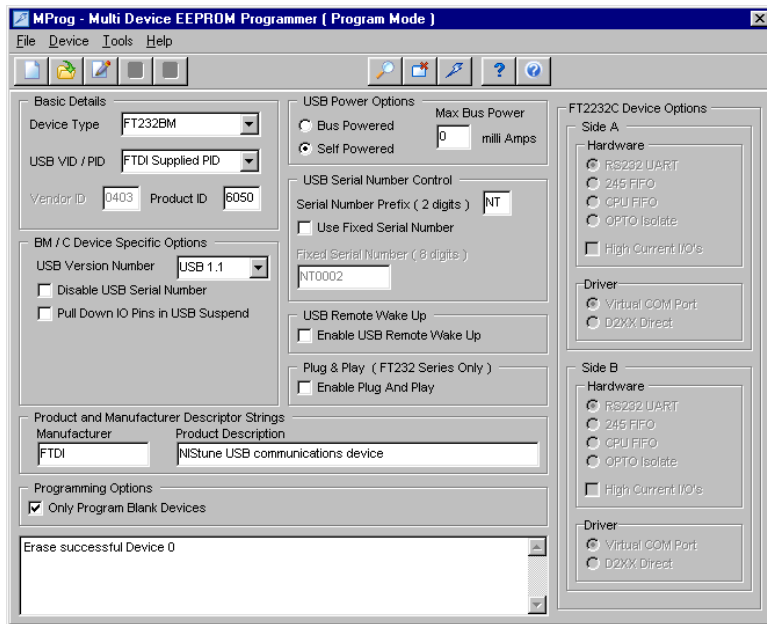
2. Power on the ECU (Ignition ON) and then click on Device > Scan.

This will report the number of Blank and Programmed Devices connected. There should be at least one Device connected. If not, the device has not been installed correctly or detected during installation. A device driver containing the default 6001 ProductID must be obtained from NISTune Developments and installed.

If there is a found device, click on File > Open and then open the supplied nistune.ept file. This will contain the correct product ID.



Next click on Device > Erase which will display 'Erase successful Device 0' when complete



Next click on Device > Program which will program the EEPROM and display the serial number upon completion.

