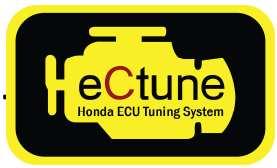


eCtune

Moates Hardware troubleshooting

Rev: 001
Date: 6/14/08
By: Calvin Baank

eCtune

Contents

Introduction 3

Hardware Pictures 4

Ostrich 1 & 2 4

Hulog 5

Extreme Hulog 5

Ecu with ribbon cable and cn2 connected 6

ECU CN2 header description 7

Drivers 8

Device Manger / Finding com port for device 8

Device Manager / Lookup current driver version 9

Downloading latest drivers 10

Updating drivers/Clean old drivers 10

Updating Driver/Install latest drivers 11

Device manager/Advance FTDI settings 14

Firmware updating 15

eCtune emulator connect 17

eCtune emulator settings 17

eCtune emulator connect 18

eCtune emulator connect with auto-scan 18

eCtune emulator connect with manual settings 19

eCtune emulator debug screen 20

eCtune Ostrich Pairing 21

eCtune Ostrich License Request 22

eCtune Ostrich Paired 23

eCtune Ostrich UNPAIR 23

eCtune And Moates Ostrich Communication test 24

eCtune emulator upload BaseRom + Calibration 24

eCtune Emulator Verify 25

eCtune emulator download 26

Ostrich <-> ECU testing 27

eCtune Ostrich Reset Application 27

eCtune

Introduction

This document assumes:

- You have purchased eCtune PRO and that you are using a Moates Ostrich 1 or 2 and a Moates Hulog.
- You have a correctly chipped JDM/EDM/USDM ecu. This manual won't go into details how to chip an ecu.
- Tuner version connection will be very similar without the ostrich licensing part.
- Datalogging in eCtune J12(usdm/edm ecu) or J4(jdm) should be removed.

eCtune

Hardware Pictures

Ostrich 1 & 2

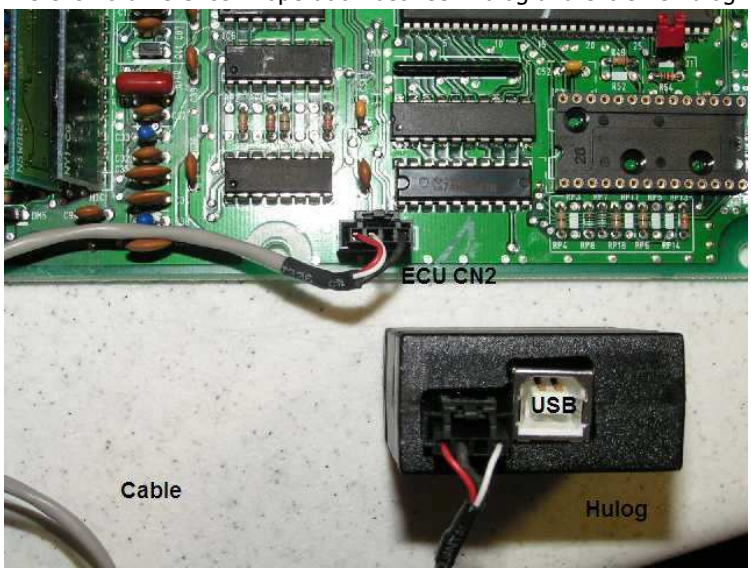
Ostrich 1

Ostrich 2

ectune

Hulog

There is no difference in operation between hulog and extreme hulog.

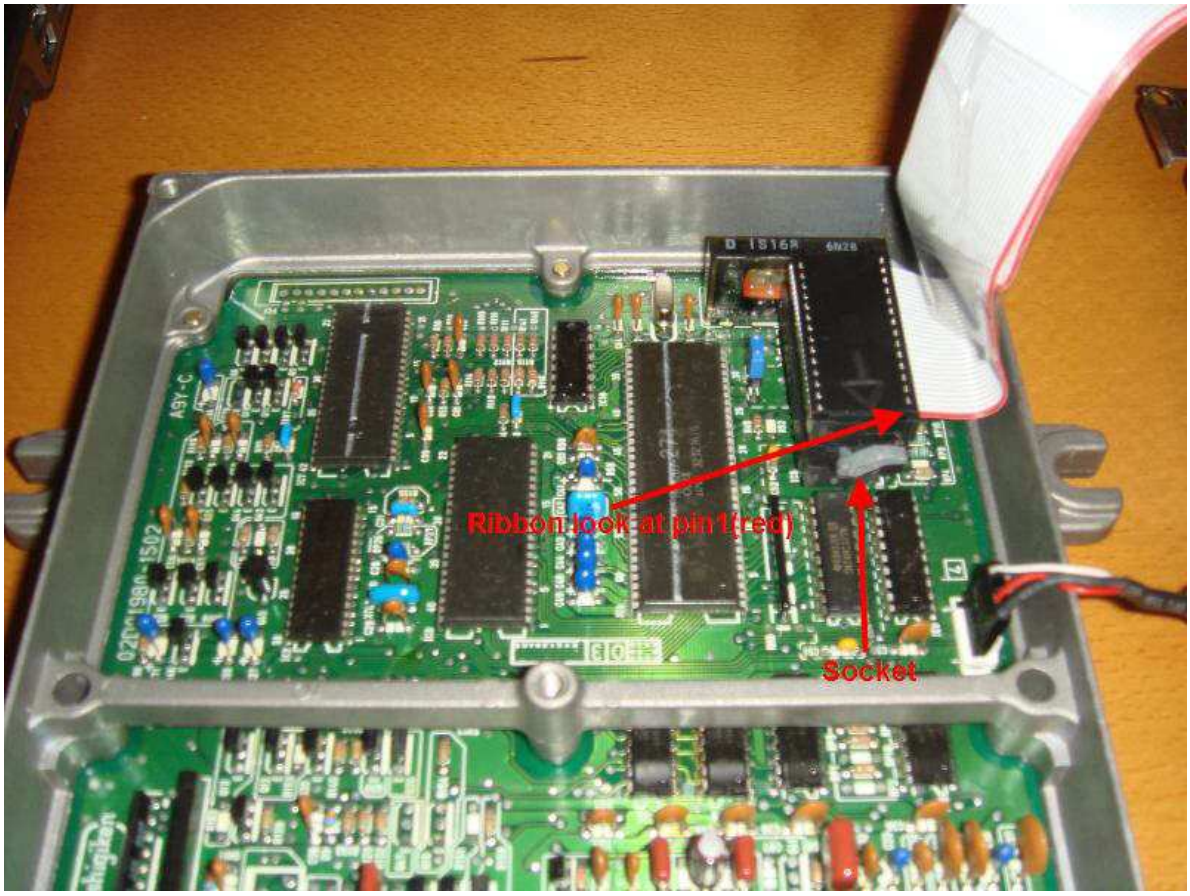


Extreme Hulog

ectune

Ecu with ribbon cable and cn2 connected

Warning color on cn2 cable differ be aware!



ectune

ECU CN2 header description

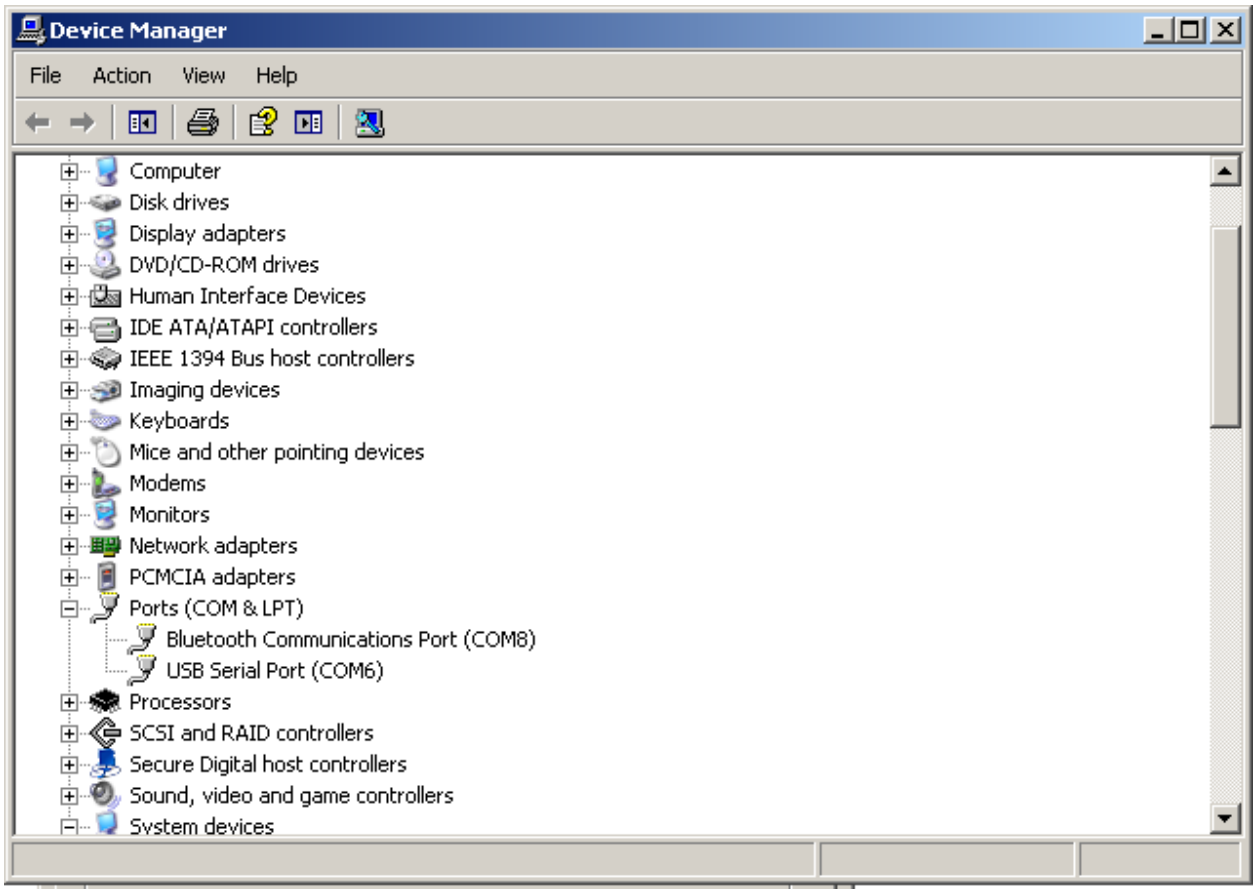
ectune

Drivers

Device Manger / Finding com port for device

Plug in the device e.g. ostrich or hulog

Go to Control panel-> System -> Hardware->Device Manager(windows xp)
Expand “Port(COM & LPT)”



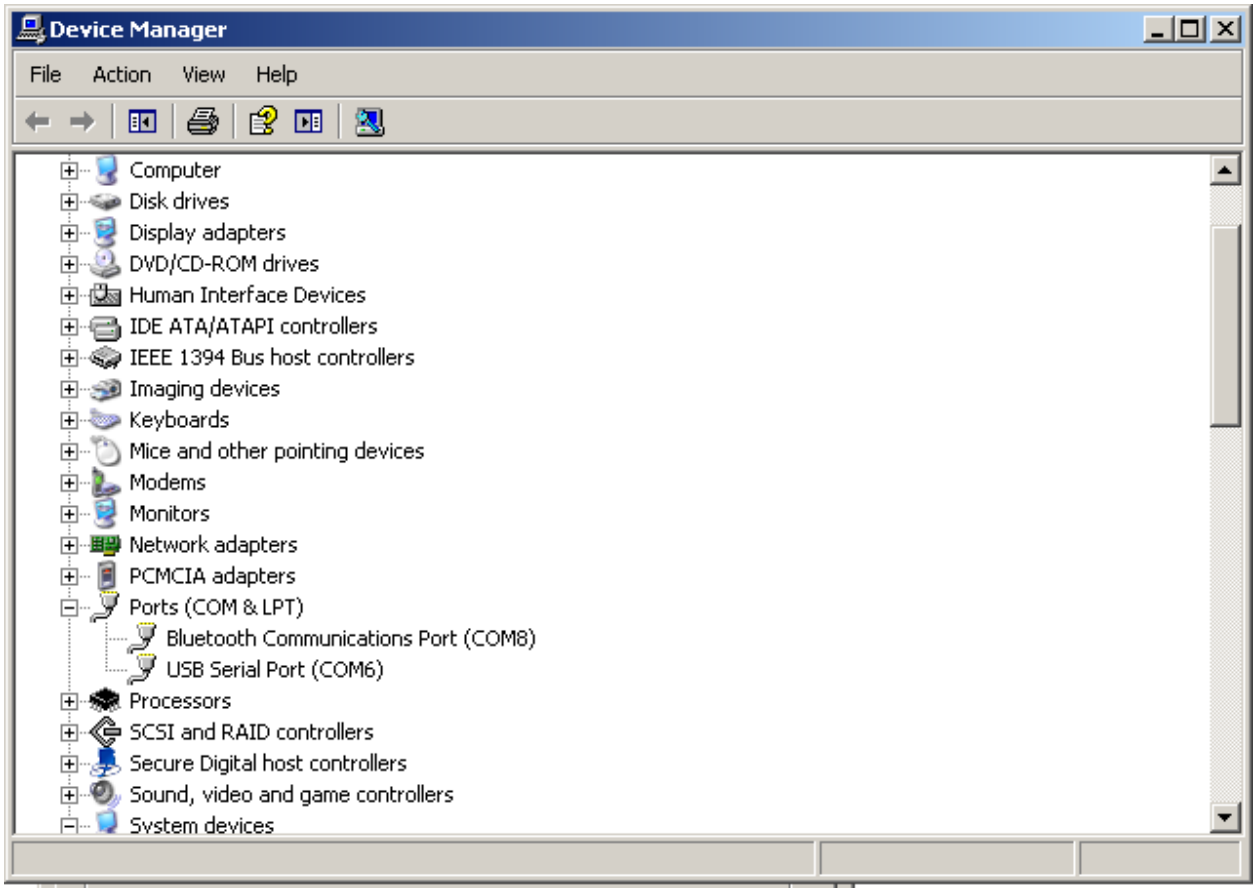
Look at “USB Serial Port(COMx)”.
if your ostrich was plugged in the ostrich has the com port 6. ***Write down for later use.***

ectune

Device Manager / Lookup current driver version

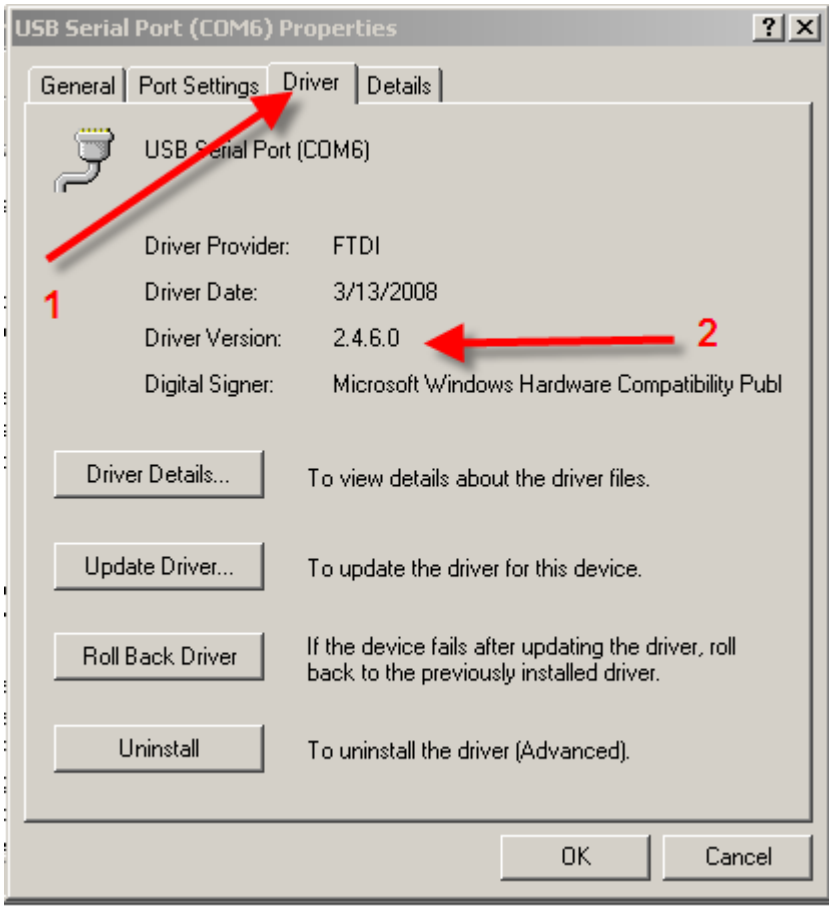
Go to Control panel-> System -> Hardware->Device Manager(windows xp)

Expand “Port(COM & LPT)”



eCtune

Right click “USB Serial Port (COMX)”
Right click “Properties”->”Driver” Tab



Arrow 2 shows the current version of the installed drivers.
Please see eCtune forum here(http://forum.ectune.com/viewtopic.php?p=9867)what the latest FTDI driver is.
Alternative go here (www.FTDIchip.com) and see what the lastest FTDI driver is

Downloading latest drivers

Please go here(FTDIChip.com) and download the latest driver for you operation system.

Updating drivers/Clean old drivers

Step 1: Uninstall in device manager(see steps how to get to FTDI com port properties above)
Press “Uninstall”
Uninstall each FTDI device.

Step 2: Unplug Hulog and Ostrich

Step 2: Clean drivers with FTClean.zip (http://forum.ectune.com/viewtopic.php?p=9867)
Unzip the files
Run FTClean.exe

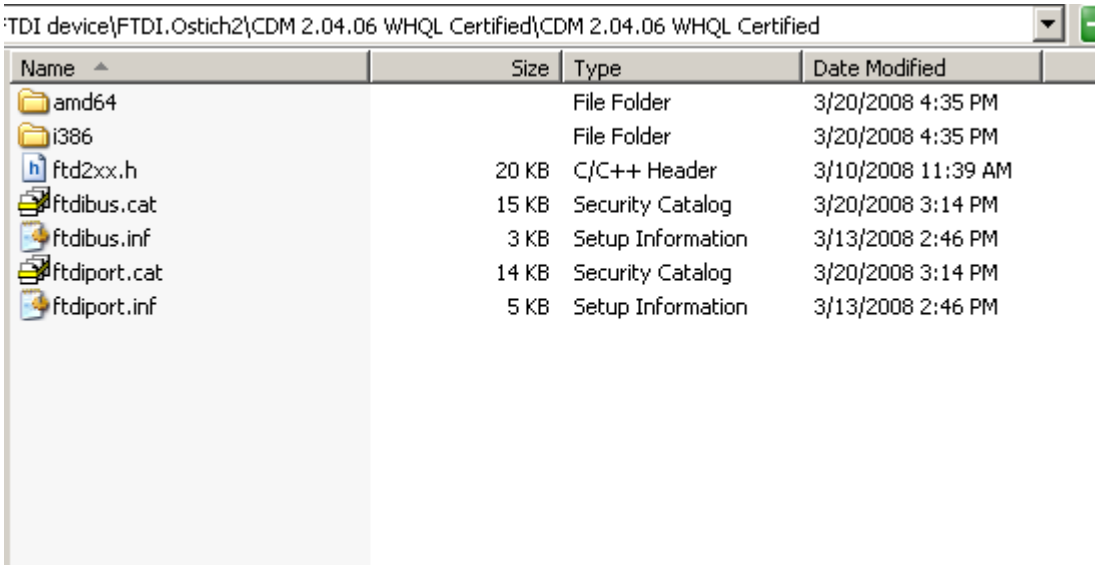
eCtune

Press “Clean System”

System Clean/uninstall finished:

Updating Driver/Install latest drivers

Step 1: Extract the zip file from the FTDIchip.com driver download(example 2.04.06 WHQL)

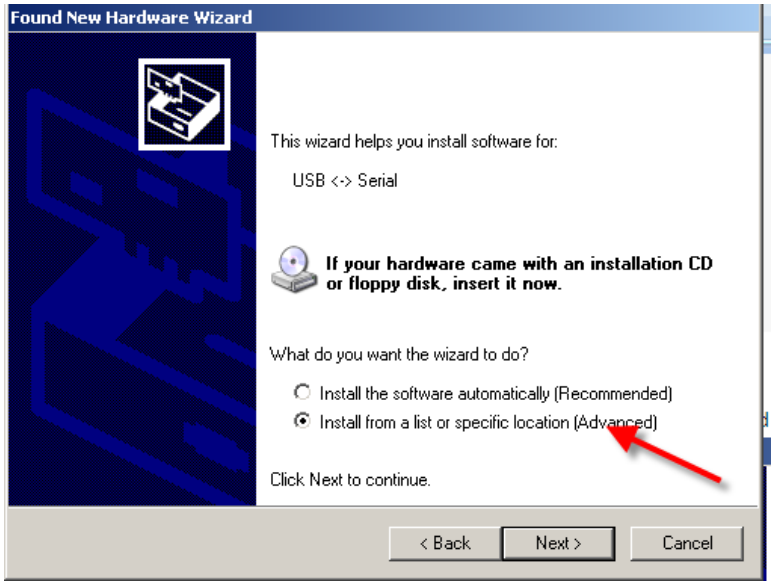


ectune

Step 2: Plug in Ostrich

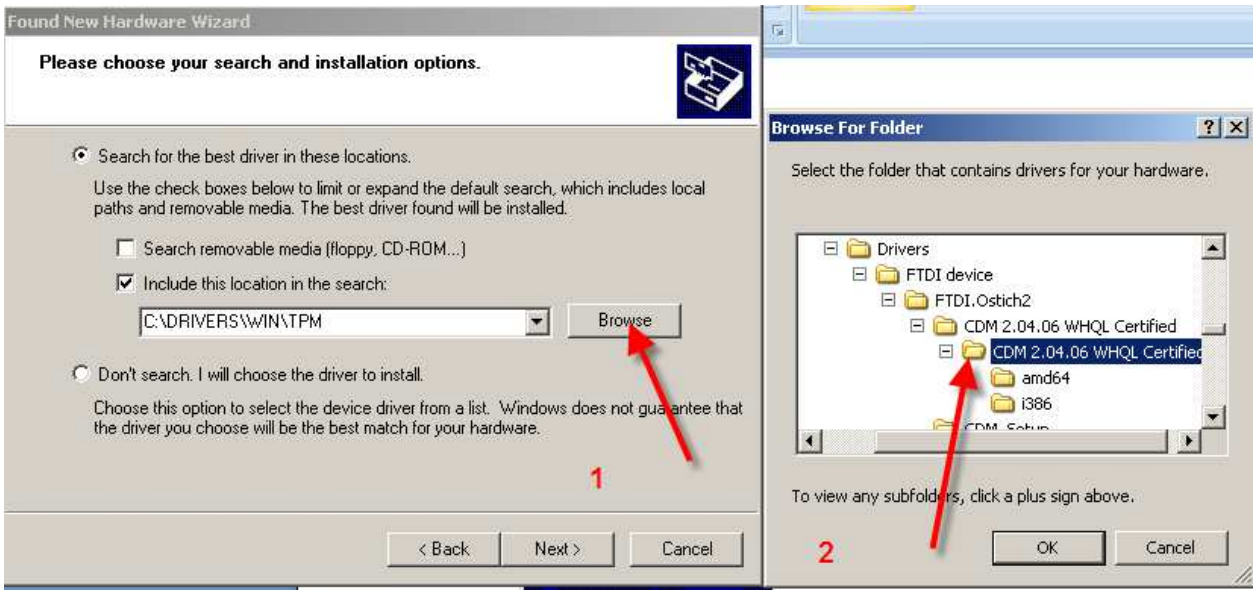
Step 3: Found new hardware wizard

Select “No, not at this time”



Select “Install from list or specific location(Advance”

eCtune



click “Browse” and select the folder where you extract the ftdi driver(CDM 2.04.06 WHQL for example)

Step 3: Found hardware wizard will start again follow the above steps and point the FTDI driver folder

Step 4: Finished installing the driver of the ostrich.

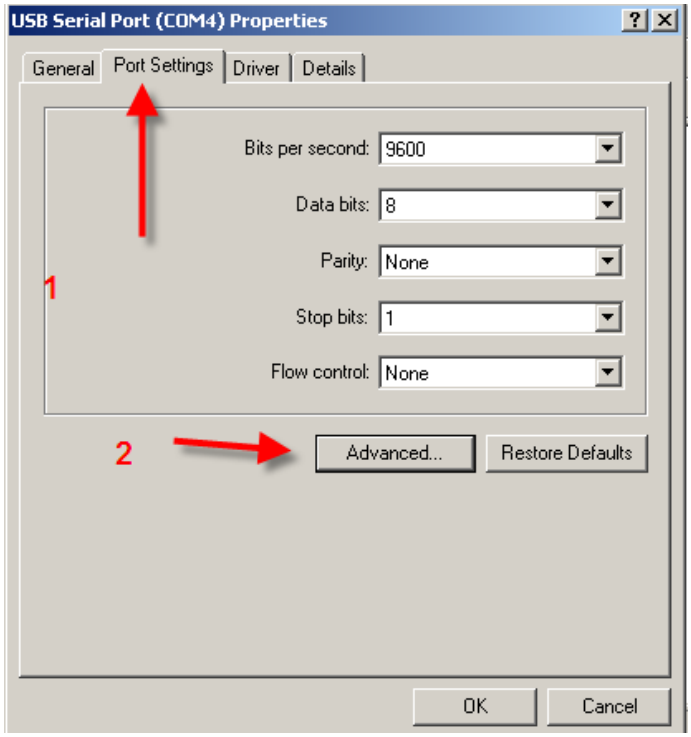
Step 5: Unplug the Ostrich for the Laptop

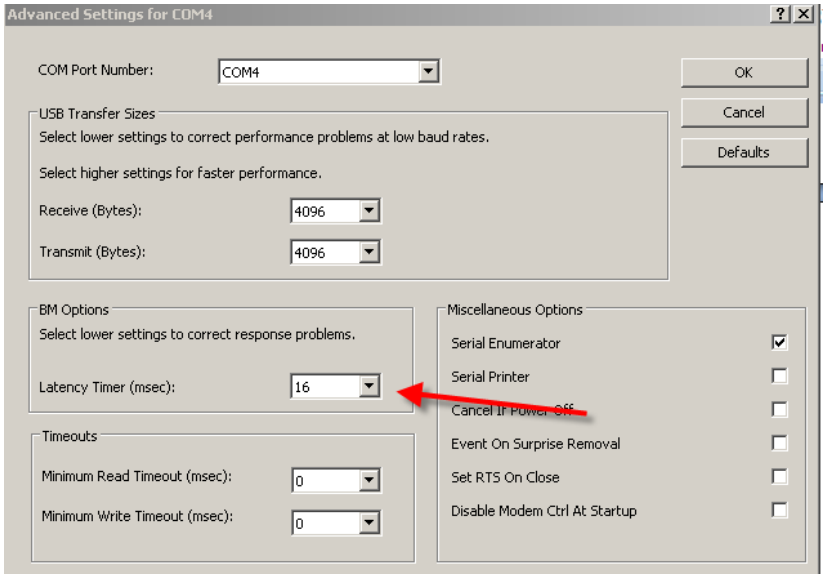
Step 6: Plug in the Hulog and goto step 1

ectune

Device manager/Advance FTDI settings

Please see above how to open advance properties of FDTI com port.





Set latency timer(msec) to 2 for Hulog and to 10 for Ostrich.

This will greatly boost your datalogging speed and ostrich upload time.

eCtune

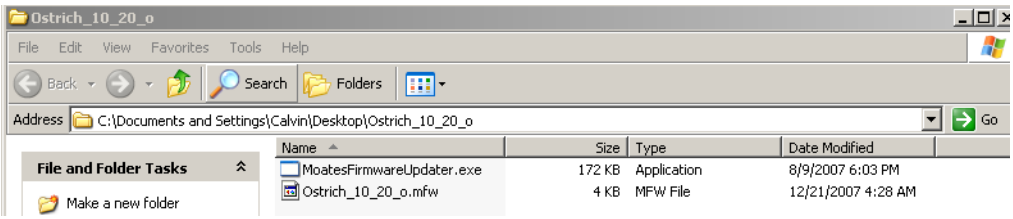
Firmware updating

Download the ostrich firmware for your ostrich 1 or ostrich 2

Step 1: You can download the latest firmware here (http://forum.ectune.com/viewtopic.php?p=9867)

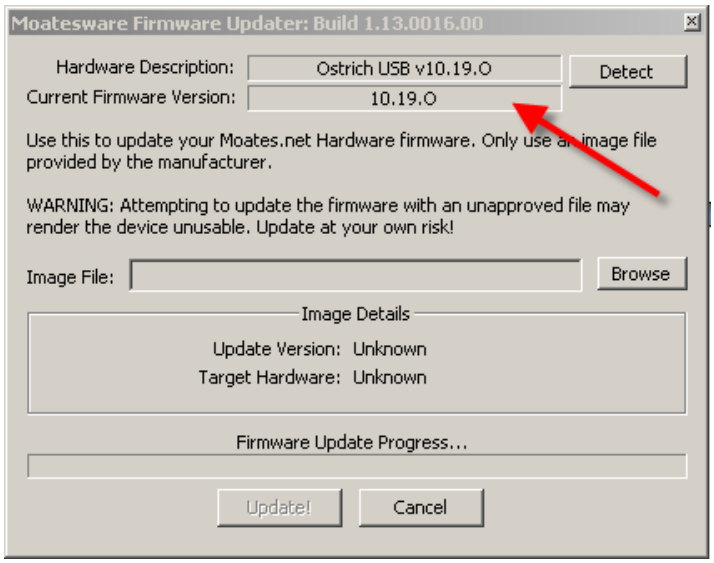
Step 2: Extract X_X_X.zip

Step 3:



Step 4: Run MoatesFirmwareUpdate.exe

Step 5: Ostrich found by update if not found please press detect or check driver settings.

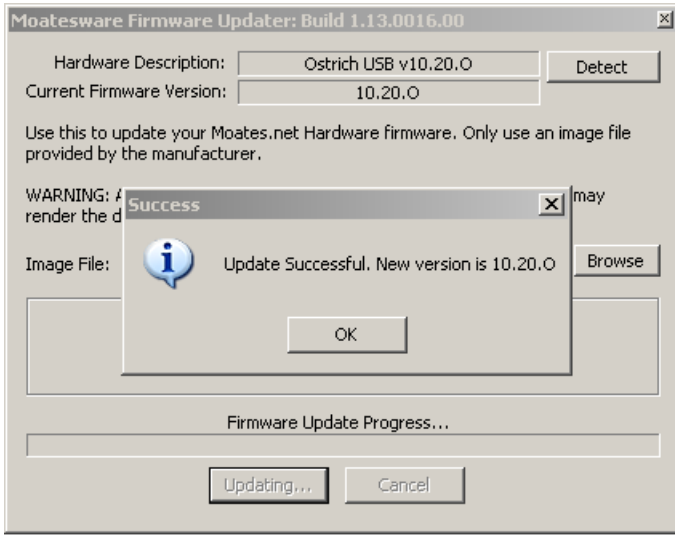


Step 6: Click “Browse”

Step 7: Click “Update”

ectune

Step 8: Success



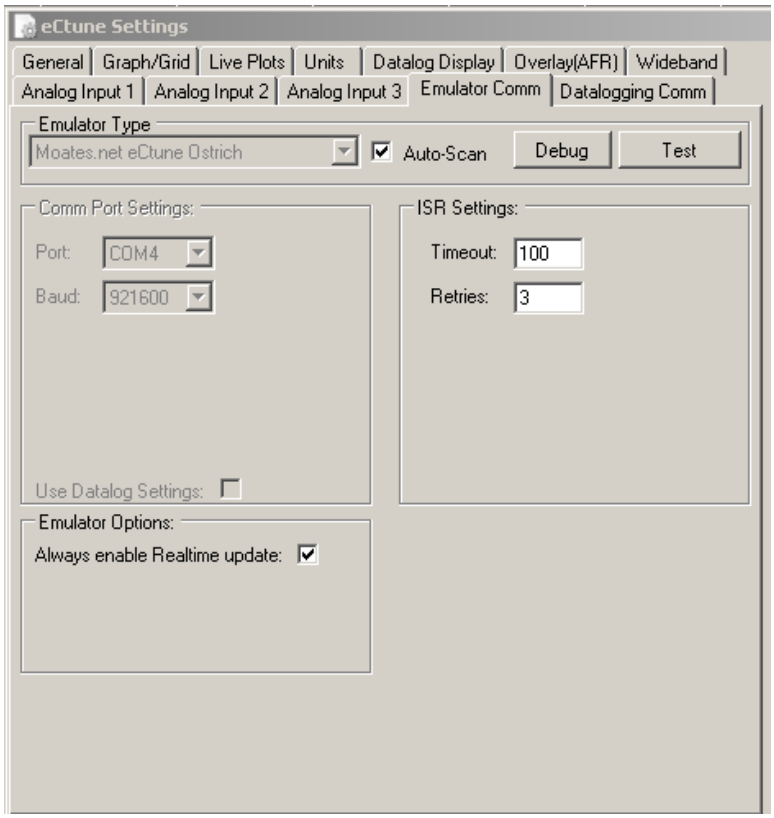
This example has been done with the ostrich 1 but it goes exactly the same way with ostrich 2. You only have to download the proper firmware.

eCtune

eCtune emulator connect

eCtune emulator settings

your settings screen should look like:

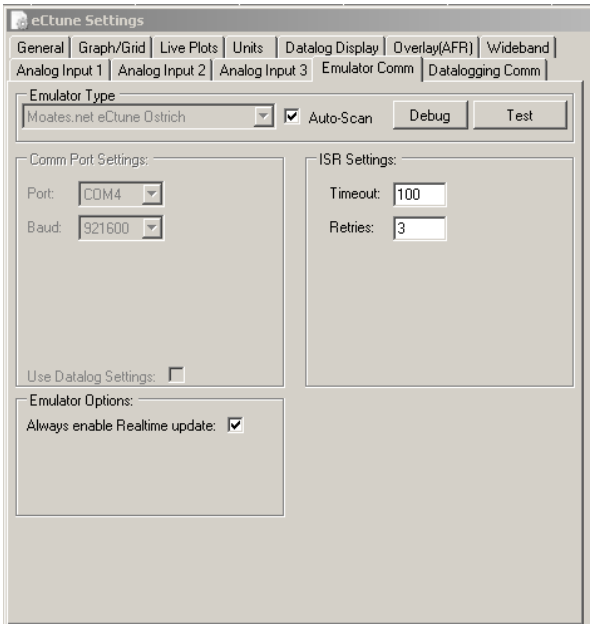


eCtune

eCtune emulator connect

eCtune emulator connect with auto-scan

Auto-scan will search for the Ostrich on very com port and then try to connect to it. Some system(laptops) have problems with this.

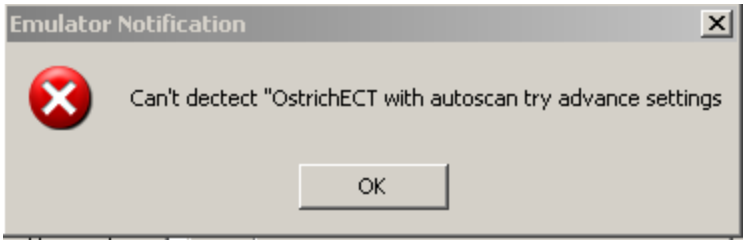


Step 1: Press “Test”

Step 2: Result:

Success:

Failed:

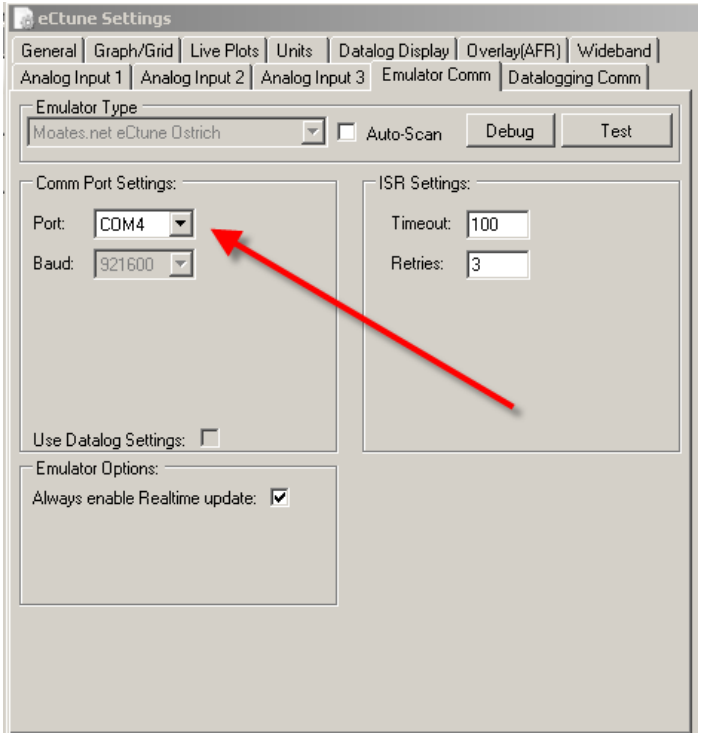


If failed disable auto-scan and continue with help below this.

eCtune

eCtune emulator connect with manual settings

Manual settings let you select the proper com port and connect to your ostrich.



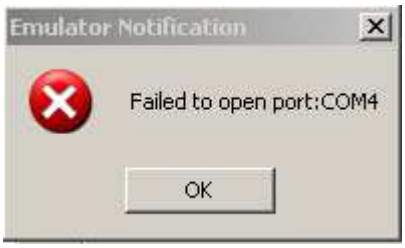
Step 1: Select the proper com port. You need to find this in your device manager see “Device manager“ in this help file.

Step 2: Press “Test”

Step 3: Result:

Success:

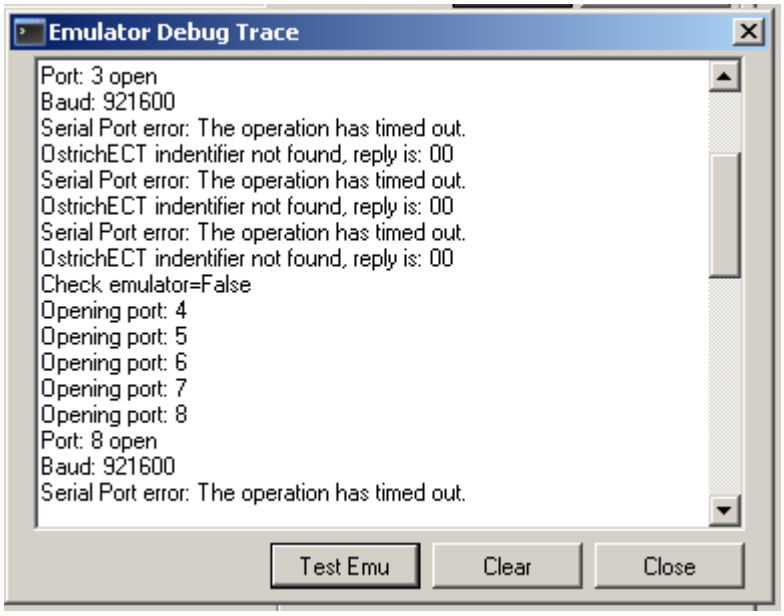
Failed:



eCtune

eCtune emulator debug screen

This debug screen lets you see what steps were taken and why the connection to ostrich fails.
this is an example:



this was auto-scan enabled and ostrich not plugged in.
Com port 3 is an existing port on my system, but no ostrich on that port.
When we give support we will asked you to run this and we also require what the actual com port of the ostrich is(device manager).

eCtune

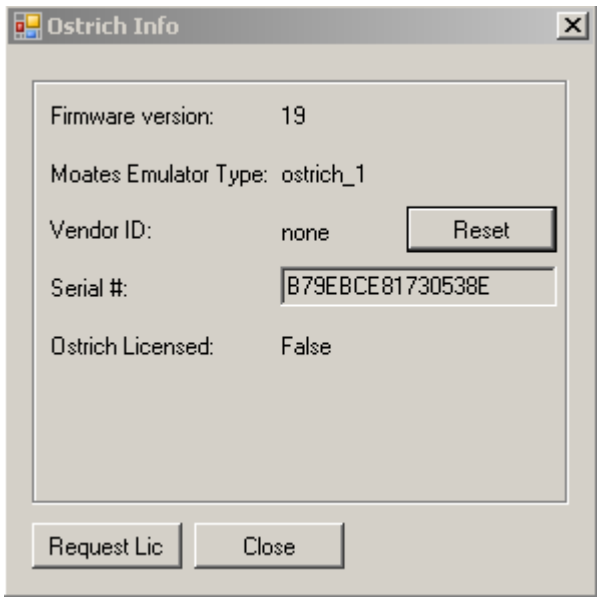
eCtune Ostrich Pairing

Before you can pair your ostrich should be connect to eCtune. Please see "eCtune emulator connect" above if you cannot connect.

Step 1: Open eCtune
Step 2: Click "emulator" -> "Connect"

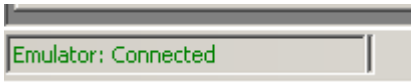
If the connect is successful and you ostrich is not licensed yet, you will see:

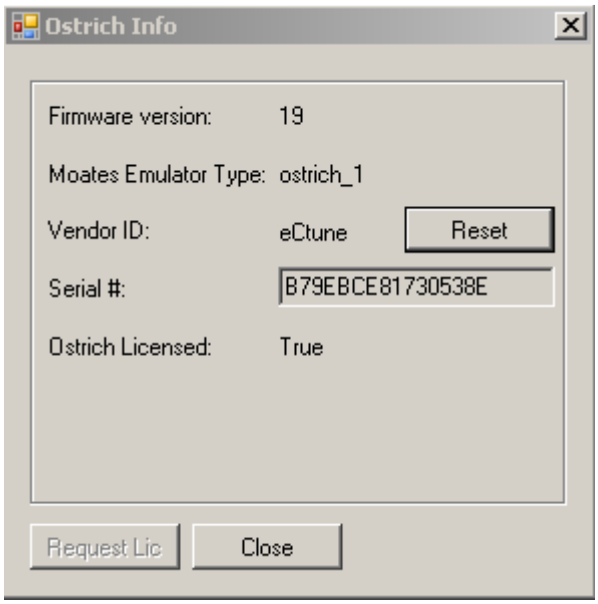
Step 4: Click "Emulator" -> "Ostrich Info"



eCtune

If the connect is successful and your ostrich is licensed, you will see:



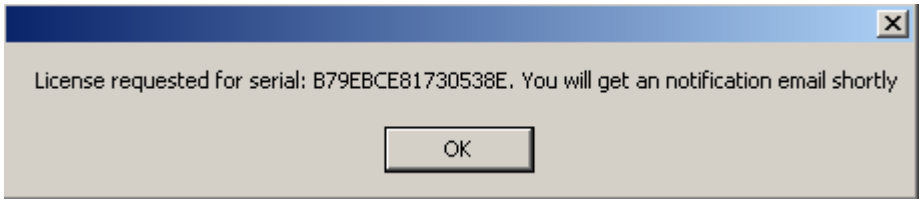


eCtune Ostrich License Request

Step 1: Open ostrich info(see above)

Step 2: Click “Request license”

If license request was successful you will get this message:



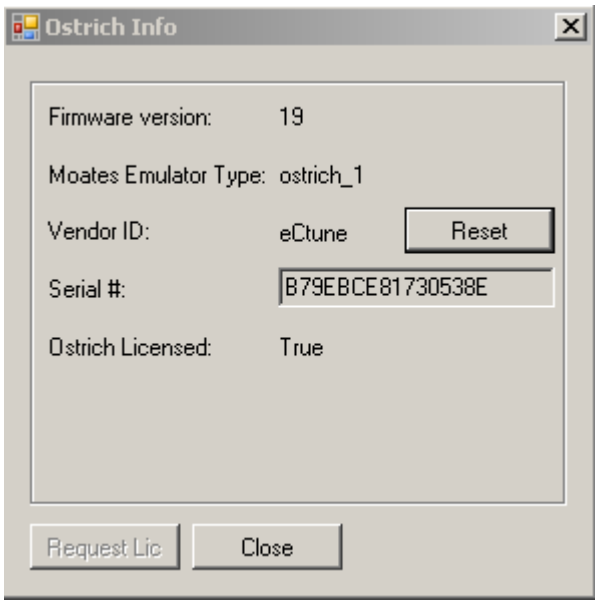
If this is the first time you pair your ostrich with eCtune PRO. You will receive you new license per email instantly.

Please install your license as per instruction in the email.

eCtune

eCtune Ostrich Paired

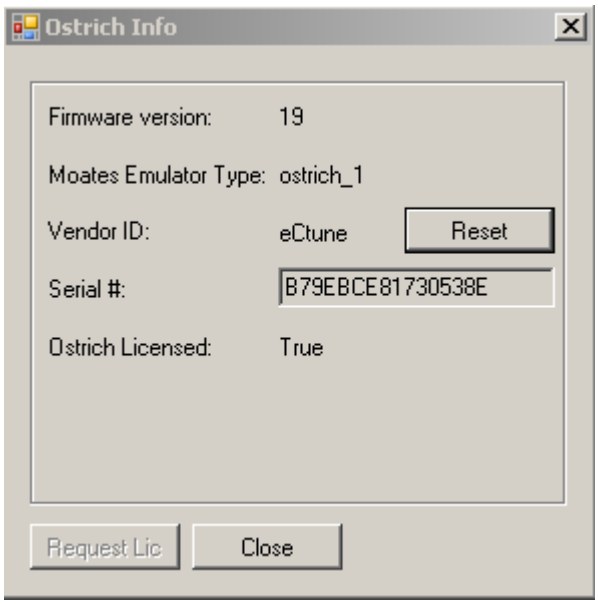
Step 1: Open ostrich info(see above)



You will notice that “request lic” is disable and that the ostrich is licensed.

eCtune Ostrich UNPAIR

This is a question often asked. How can we make the ostrich compatible again with other software.



Simply click reset in the ostrich info screen.

eCtune

eCtune And Moates Ostrich Communication test

eCtune emulator upload BaseRom + Calibration

Step 1: Open “eCtune”

Step 2: Click “emulator” -> “Connect”

Step 3: Create basemap or open calibration

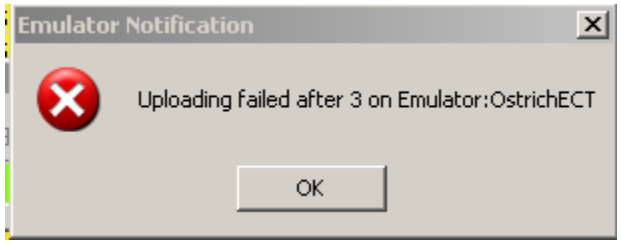
Step 4: Click “Put Base Rom & Calibration”

Step 5: If the progress bars completes that means the data is upload.

Error during upload:

Ostrich not licensed:

General error:



eCtune

eCtune Emulator Verify

Step 1: Open “eCtune”
Step 2: Click “emulator” -> “Connect”
Step 3: Create basemap or open calibration
Step 4: Click “Put Base Rom & Calibration”
Step 5: No errors when uploading rom.
Step 6: Click “emulator” -> “Verify rom”

Result:

Success:

Failed:

eCtune

eCtune emulator download

Step 1: Open “eCtune”
Step 2: Click “emulator” -> “Connect”
Step 3: Click “File” -> “close rom” if you have a calibration open
Step 4: Create Basemap or open cabibration.
Step 5: Select the whole fuel map and right click “Adjust selection”
Step 6: Select “Set selection to: “ and fill in 100
Step 7: Click “Put Base Rom & Calibration”
Step 8: Click “File” -> “close rom” if you have a calibration open
Step 9: Click “emulator”-> “Get Rom”

If you get the same calibration where the whole selection or map is set to 100.
The communication between the ostrich and eCtune is perfect.

eCtune

Ostrich <-> ECU testing

Make sure: you uploaded the correct baseRom + startup calibration and that all tests above succeeded.

Step 1: Connect ostrich ribbon cable to ecu socket
Step 2: Connect ostrich ribbon cable to ostrich
Step 3: Turn Key To "ON" position
Step 4: What you "Check engine light"/"Error code light"/"MIL"
Step 5: eCtune PRO: 3 flashes ID and eCtune DIY: 4 flashes ID

These flashes will be seen after the normal mil light up(on) where you hear the fuel pump. You won't see these flash if you have an error code.
Disconnect battery for 1 minute and reconnect battery.
Key On you should see the fast flashes before the erro/mil code pops up.

If you have a solid cel(MIL) it can be the following reasons(if you have solid cell you won't be able to datalog):

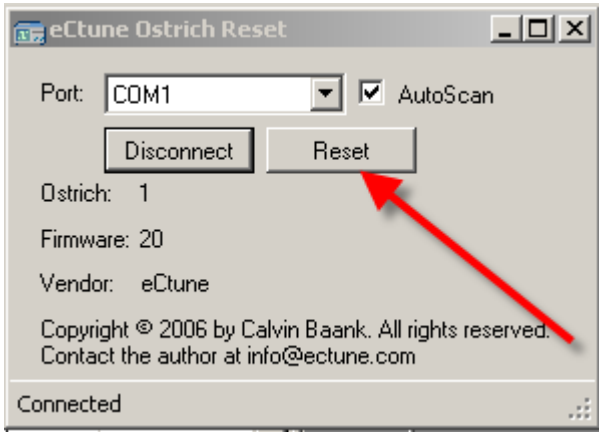
- ***Ribbon cable bad***
- ***Ribbon cable connected wrong to ecu***
- ***Problem between ostrich and ribbon cable***
- ***ecu soldering problem***
- ***ecu socket problem***
- ***broken ecu***

I would advice to see an authorized eCtune Tuner or contact Moates.net of support

eCtune Ostrich Reset Application

Download here (http://forum.ectune.com/viewtopic.php?p=9867)
Reset app is a small application that while clear the ostrich rom memory and reset the vendor ID.
By connecting to ostrich(auto-scan/manual)
By pressing reset after connection
Your ostrich will be compatible with all other software.

eCtune


eCtune Ostrich Reset
Port:
COM1
AutoScan
Disconnect
Reset
Ostrich: 1
Firmware: 20
Vendor: eCtune
Copyright © 2006 by Calvin Baank. All rights reserved.
Contact the author at info@ectune.com
Connected

eCtune