VingCard Elsafe

ASSA ABLOY

ASSA ABLOY, the global leader
in door opening solutions

Quick Reference Guide

DRAFT

EST-4938

Magnetic Card Encoder

Copyrights

Table of contents

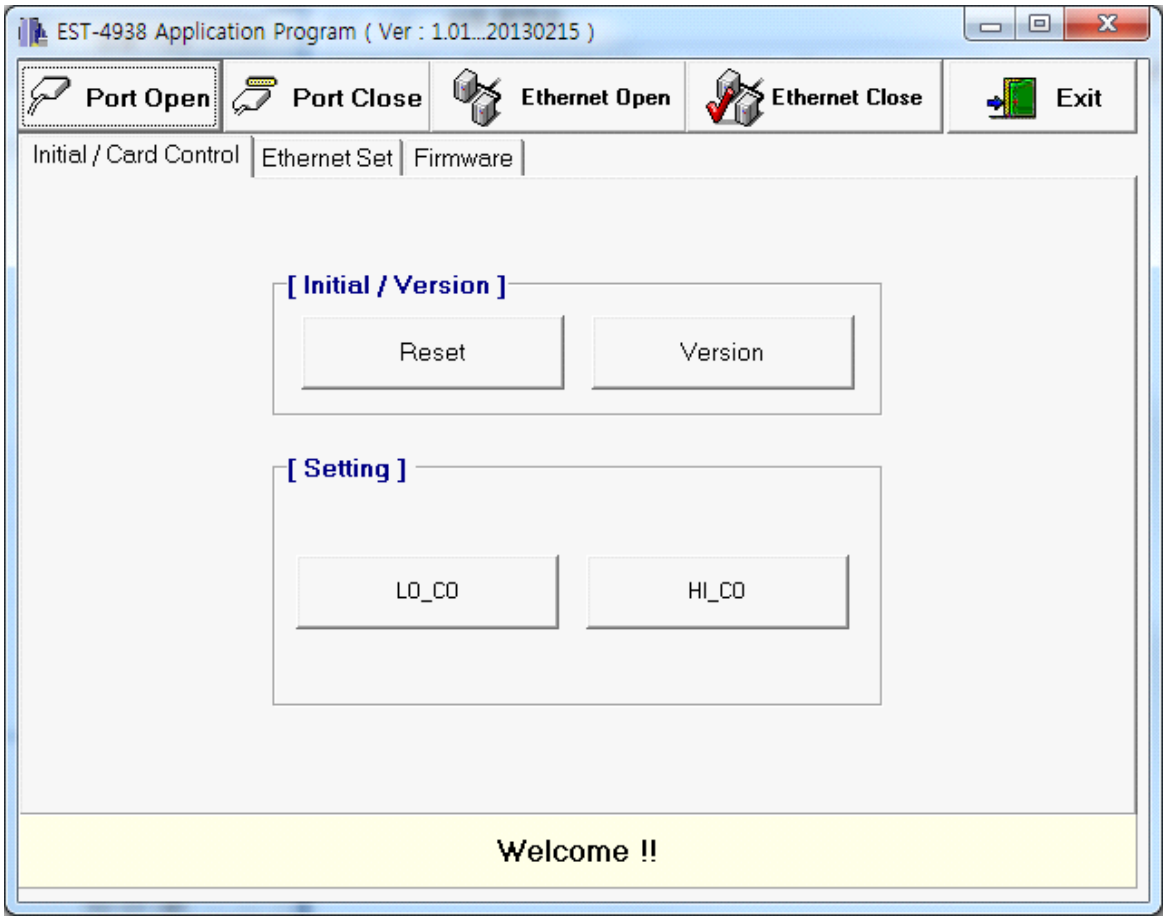
1. Introduction

The *EST-4938* encoder, which has a motorized insertion, reads/writes magnetic cards for the VISION software. This document describes how to set up the encoder in the **EST-4938 Application Program**. Using a switch on the back, the encoder can be connected to one of the three below alternatives:

- RS232
- LAN (Ethernet)
- USB

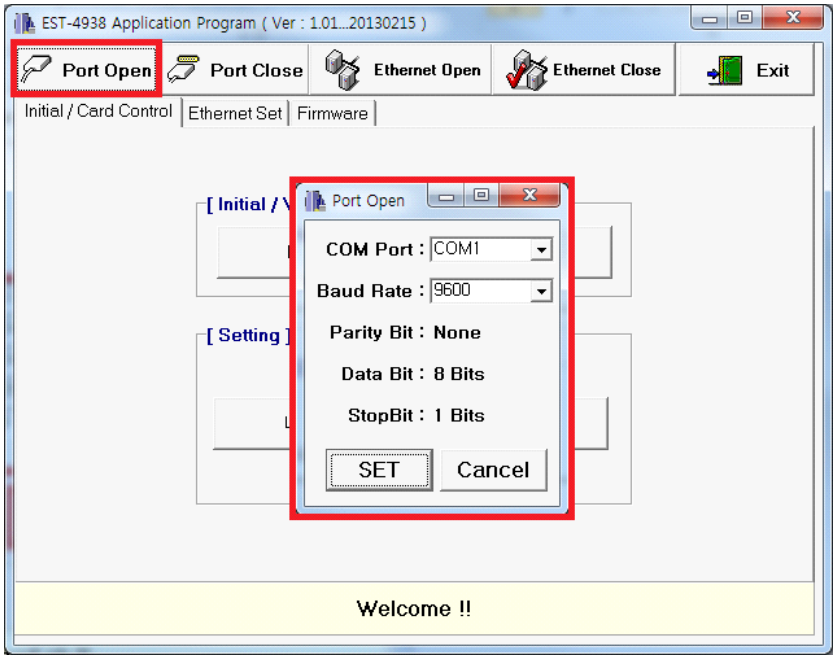
2. Connecting the encoder

1. Double click on **EST4938_CUSTOMER_101.exe**; the **EST-4938 Application Program** will open.
2. Follow the steps in the applicable section Connecting to RS-232, Connecting to USB (virtual COM port) or Connecting to Ethernet.



2.1 Connecting to RS-232

1. Select '232' by a switch on the back of the encoder.
2. Press **Port Open** in the upper left corner of the **EST-4938 Application Program** window.
3. In the **Port Open** dialog that opens, select the applicable **COM Port** and **Baud Rate**, and then press the **SET** button.

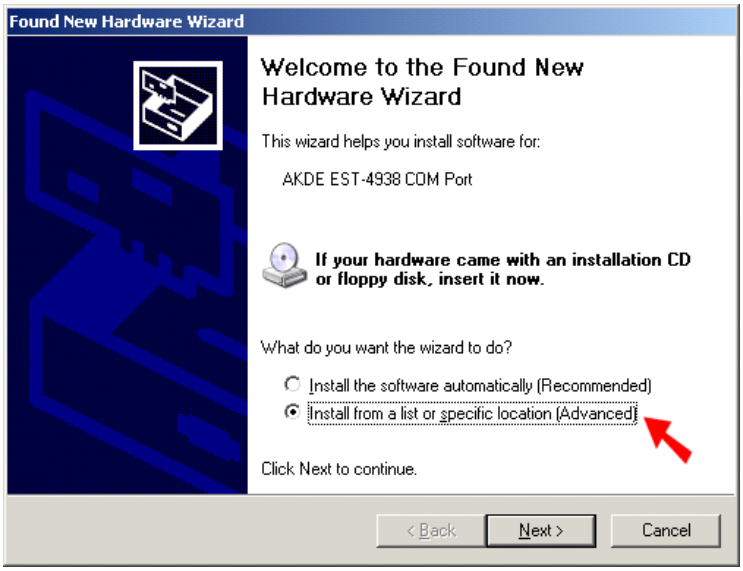


2.2 Connecting to USB (virtual COM port)

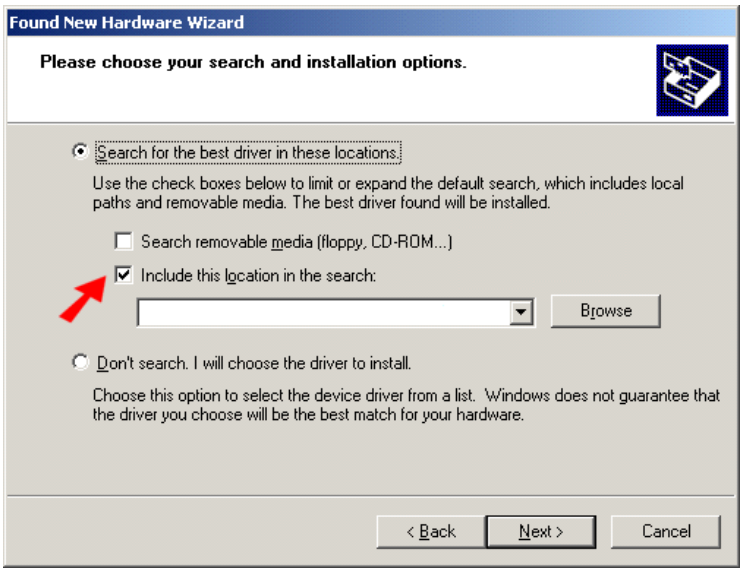
If the encoder should be connected via USB, encoder drivers for virtual COM port should be installed. Choose the applicable instruction for Windows XP, Windows 7 or Windows 8.

2.2.1 Connect to USB (virtual COM port) - Windows XP

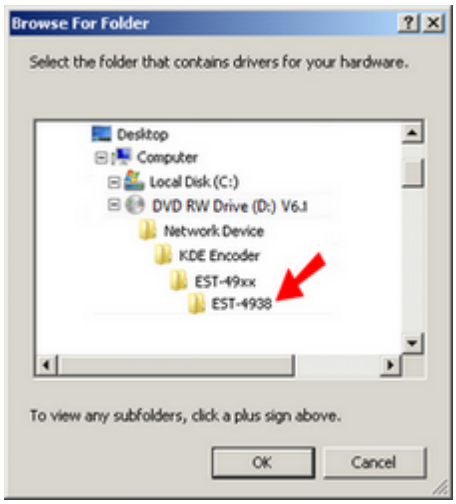
1. Select 'USB' by a switch on the back of the encoder.
2. Connect the USB cable to the PC and then turn the power on. A Plug&Play driver search wizard opens on the PC.
3. In the **Welcome to the Found New Hardware Wizard** dialog, mark the radio button 'Install from a list or specific location (Advanced)'; click **Next**.



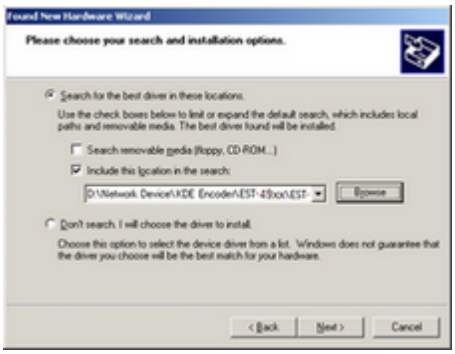
4. In the search dialog that opens, mark the checkbox 'Include this location in the search' and click the **Browse** button.



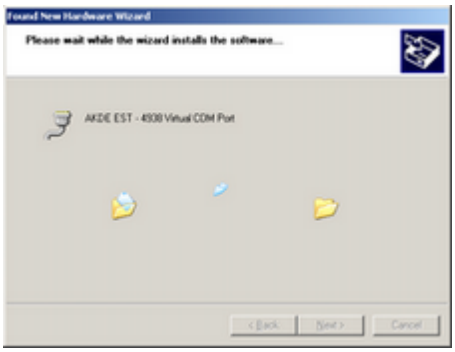
5. Navigate to the driver folder that is found in the VISION CD structure at **\Network Device\KDE Encoder\EST-49xx\EST-4938**, mark the folder and click **OK**.



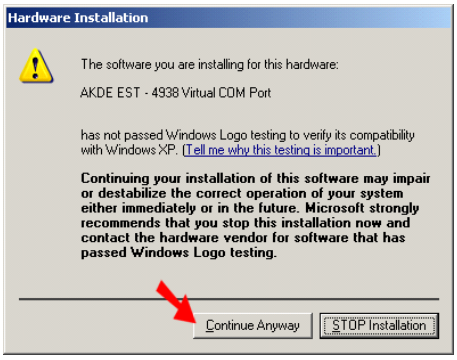
6. When the driver folder is listed in the **Found New Hardware Wizard** dialog, click the **Next** button.



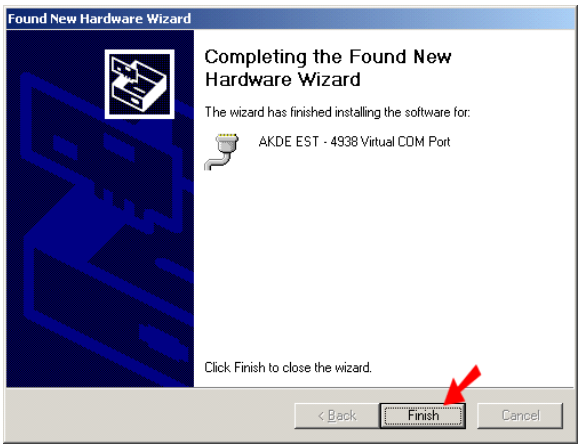
7. The driver installation starts:



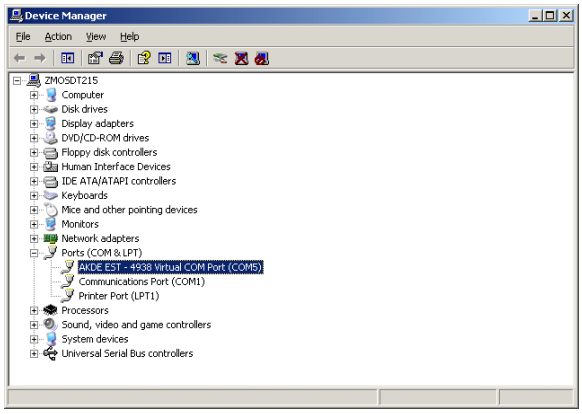
8. Windows will warn that the driver is non-certified; click **Continue Anyway**.



9. To complete the driver installation, click **Finish**.

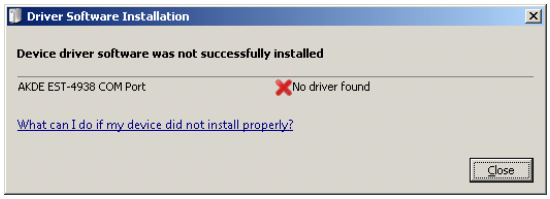


10. Go to **Device Manager** and click the plus sign in front of **Ports (COM & LPT)**; double click on the 'AKDE EST-4938 Virtual COM Port' entry and make sure that it says 'This device is working properly'. ***Note:*** The VISION system can only use ports from COM1 to COM8 for encoding devices.

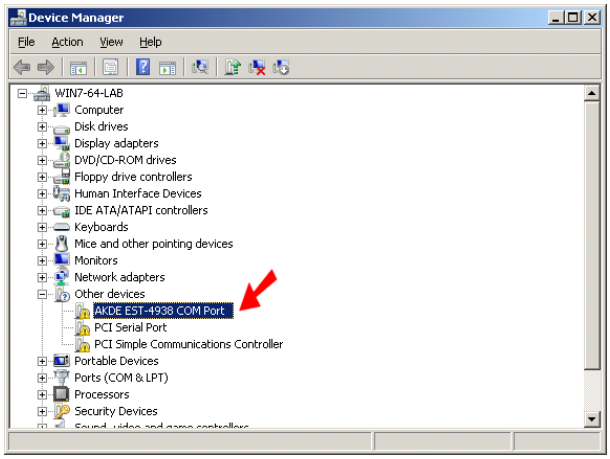


2.2.2 Connect to USB (virtual COM port) - Windows 7

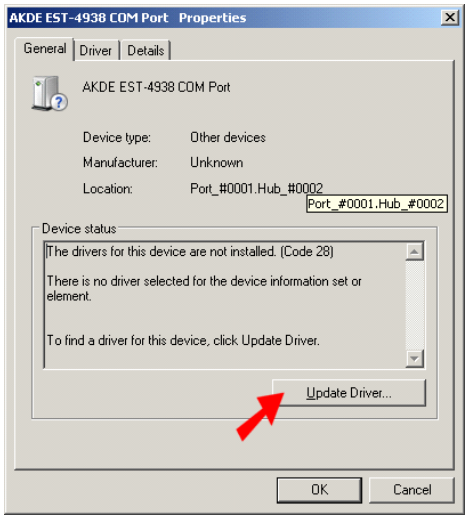
1. Select 'USB' by a switch on the back of the encoder.
2. Connect the USB cable to the PC and then turn the power on.
3. The operating system will not find any driver for the encoder.



4. Go to **Device Manager** and click the plus sign in front of **Other devices**; double click on the 'AKDE EST-4938 COM Port' entry.



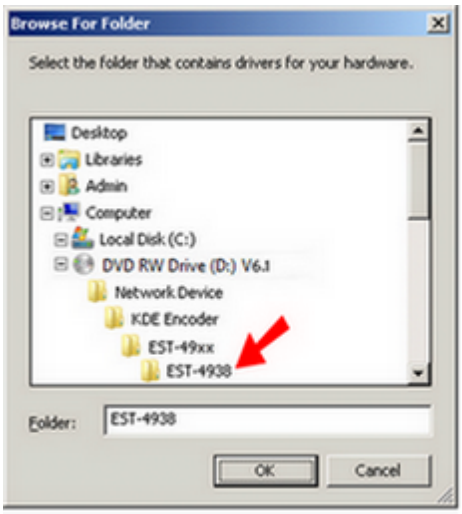
5. The **Properties** dialog will open; click the **Update Driver** button.



6. The below dialog for driver search opens; click 'Browse my computer for driver software'.

7. The below dialog is shown; click the **Browse** button to search for the driver folder.

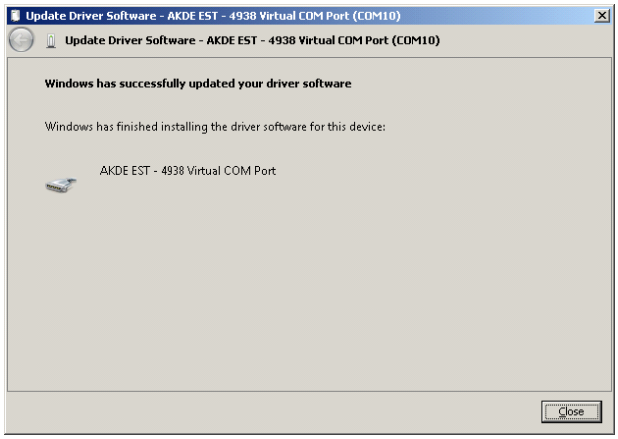
8. Navigate to the driver folder that is found in the VISION CD structure at **\Network Device\KDE Encoder\EST-49xx\EST-4938**, mark the folder and click **OK**.



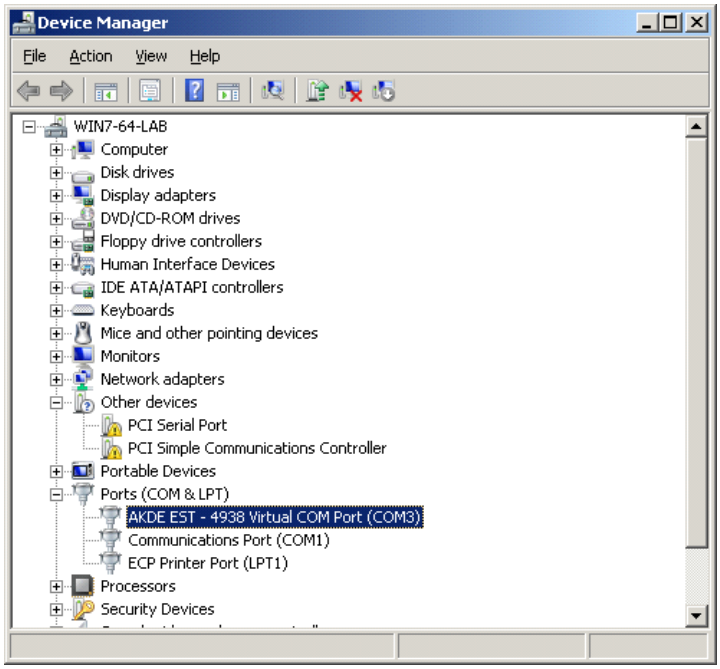
9. When the driver folder is listed in the **Found New Hardware Wizard** dialog, click the **Next** button.

10. Windows will warn that the driver is non-certified; click **Install this driver software anyway**.

11. To complete the driver installation, click **Close**.



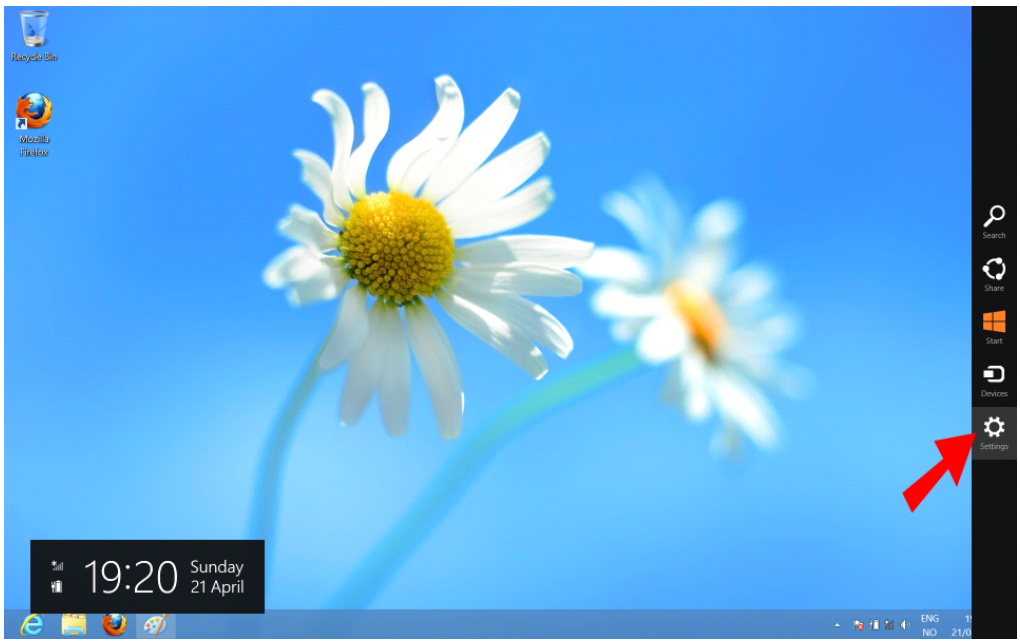
12. Go to **Device Manager** and click the plus sign in front of **Ports (COM & LPT)**; double click on the 'AKDE EST-4938 Virtual COM Port' entry and make sure that it says 'This device is working properly'. ***Note:*** The VISION system can only use ports from COM1 to COM8 for encoding devices.



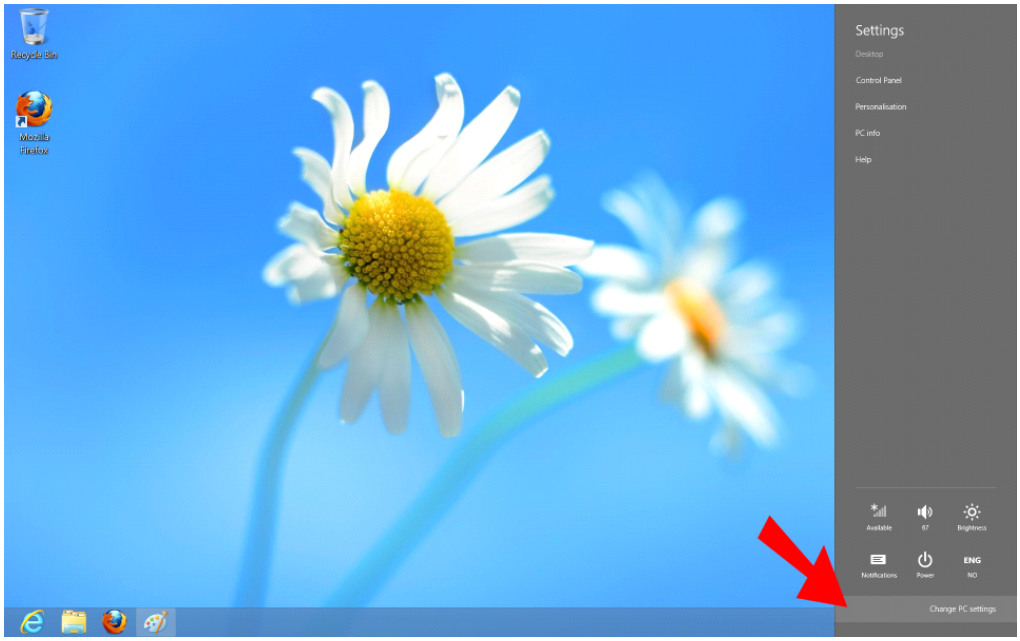
2.2.3 Connect to USB (virtual COM port) - Windows 8

Note: In Windows 8, the driver must be installed before plugging the encoder cable to the USB port.

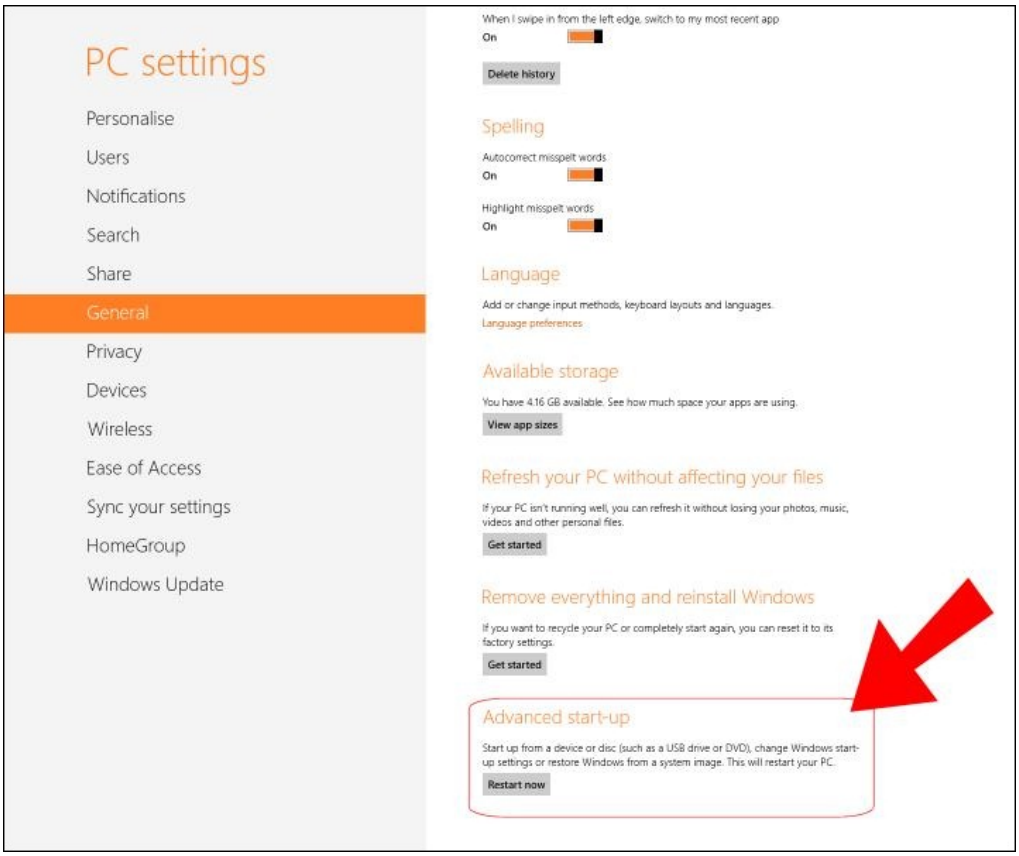
1. Go to the main **Desktop**, bring up the action bar and click the **Settings** symbol.



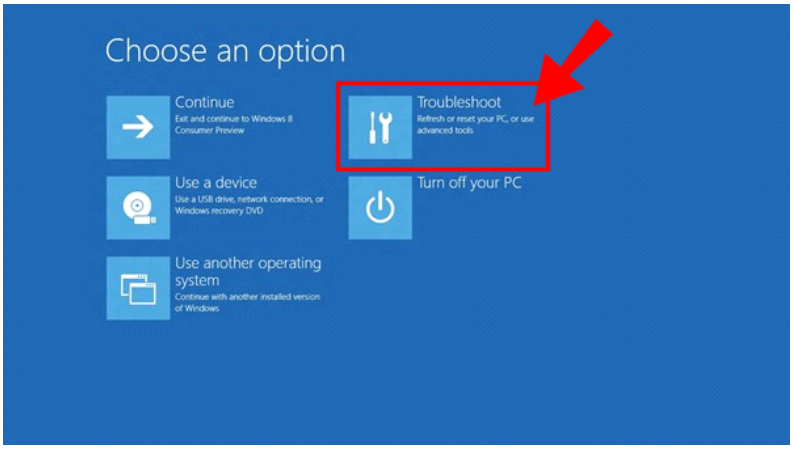
2. In the **Settings** window, click **Change PC settings** down to the right.



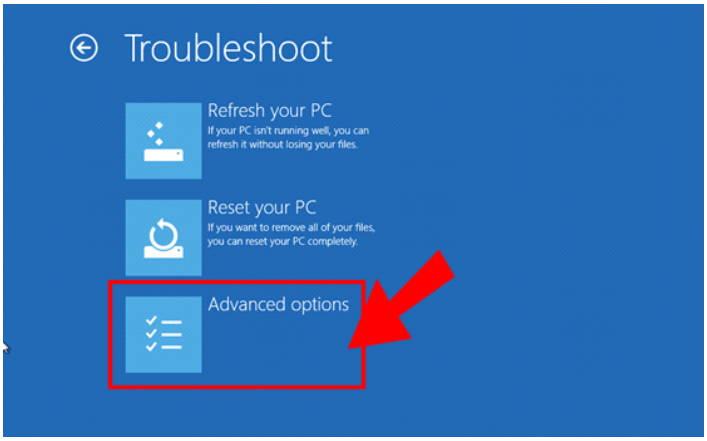
3. The **PC settings** window will be shown; scroll down to the area **Advanced start-up** and click the **Restart now** button.



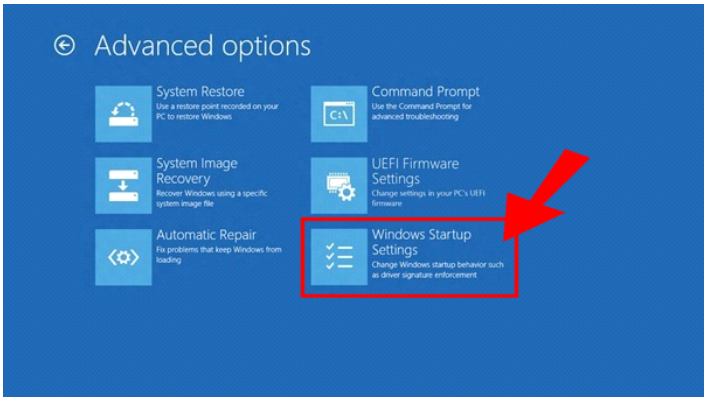
4. Different start-up options will be shown; click **Troubleshoot**.



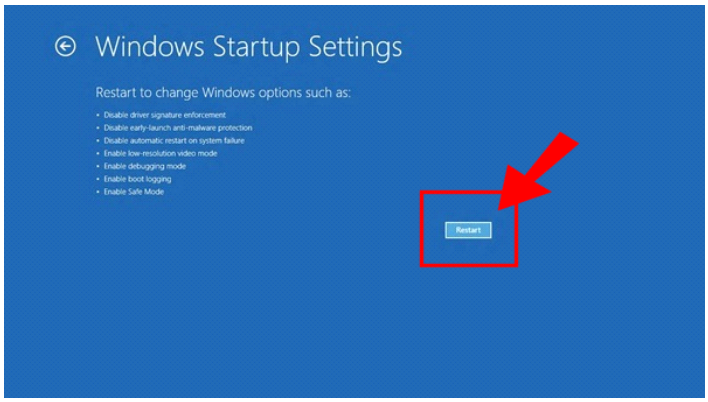
5. In the **Troubleshoot** window that is shown; click **Advanced options**.



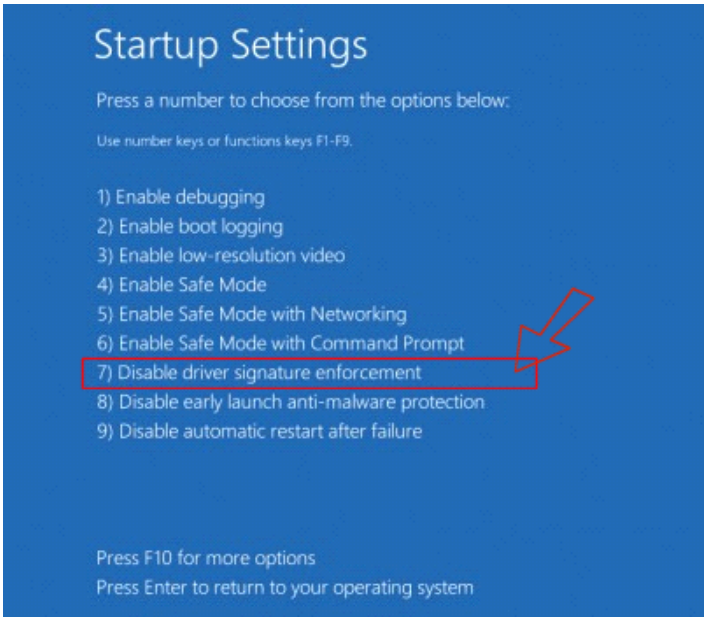
6. In the **Advanced options** window that is shown; click **Windows Startup Settings**.



7. In the **Windows Startup Settings** window that is shown, click the **Restart** button; this will initiate a special Windows startup procedure.

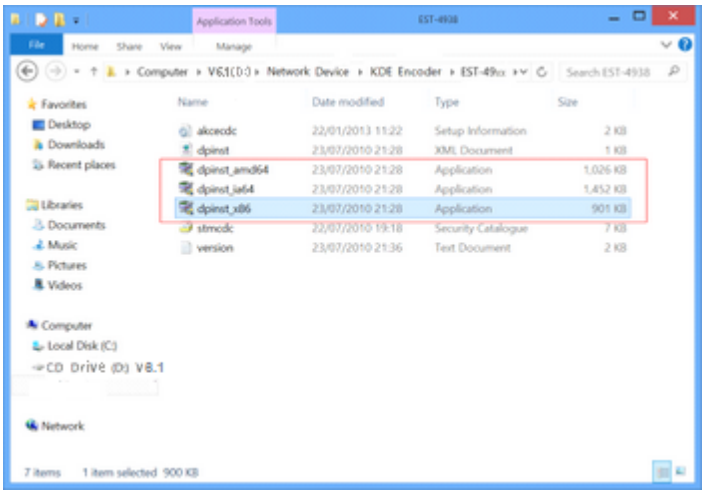


8. When the PC starts again, several options will be offered; press the keyboard button **F7** to choose the option 'Disable driver signature enforcement'.

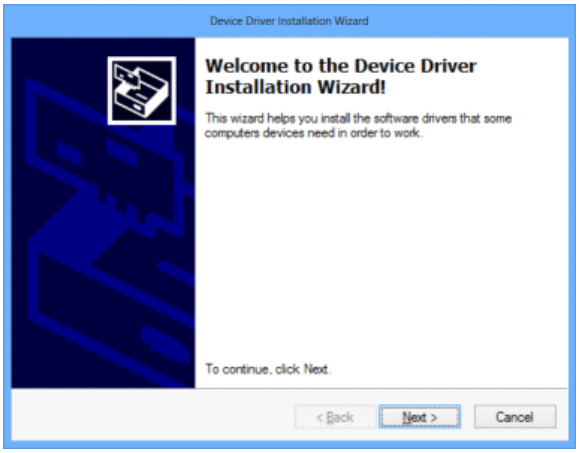


9. Navigate to the folder with drivers for the EST-4938 encoder (in the VISION CD structure at **\Network Device\KDE Encoder\EST-49xx\EST-4938**) and run the applicable driver installation for your CPU. Three different files are available; double click on the file which matches your CPU.

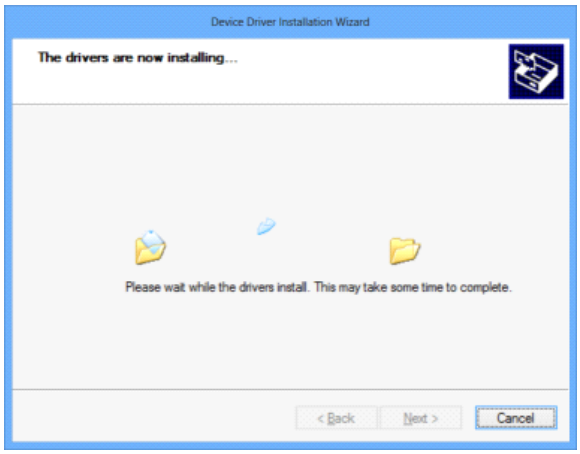
- **dpinst_amd64.exe** for 64-bit AMD processors
- **dpinst_ia64.exe** for 64-bit Intel processors
- **dpinst_x86.exe** for 32-bit processors



10. The driver installation program starts; click **Next**.

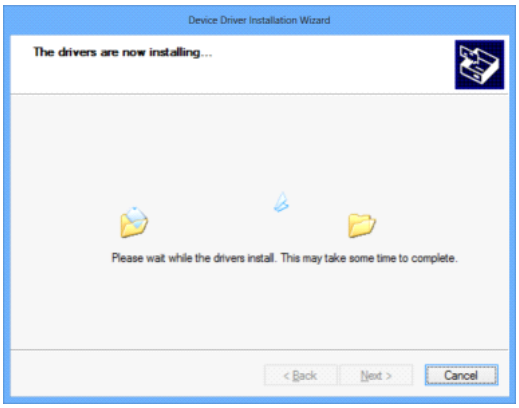


11. Windows starts installing the driver.

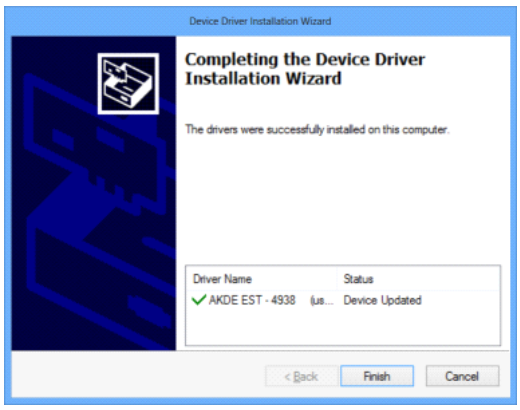


12. Windows will warn that the driver is non-certifier; click **Install this driver software anyway**.

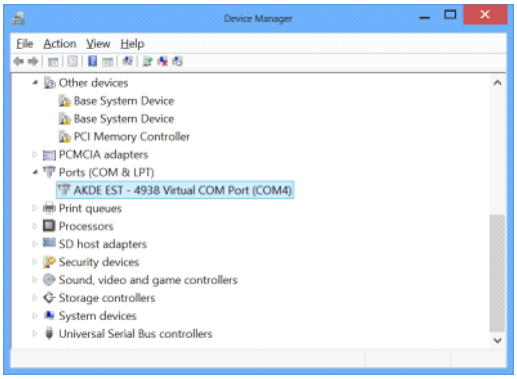
13. The driver files will be copied to the operating system.



14. To complete the driver installation, click **Finish**.



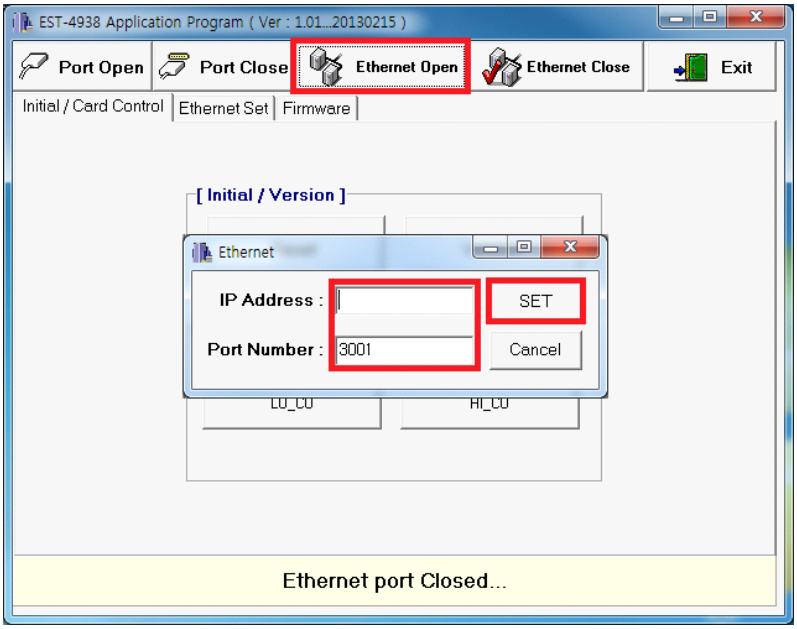
15. Go to **Device Manager** and click the plus sign in front of **Ports (COM & LPT)**; double click on the 'AKDE EST-4938 Virtual COM Port' entry and make sure that it says 'This device is working properly'. ***Note:*** The VISION system can only use ports from COM1 to COM8 for encoding devices.



16. Select 'USB' by a switch on the back of the encoder.
17. Connect the USB cable to the PC and then turn the power on.

2.3 Connecting to Ethernet

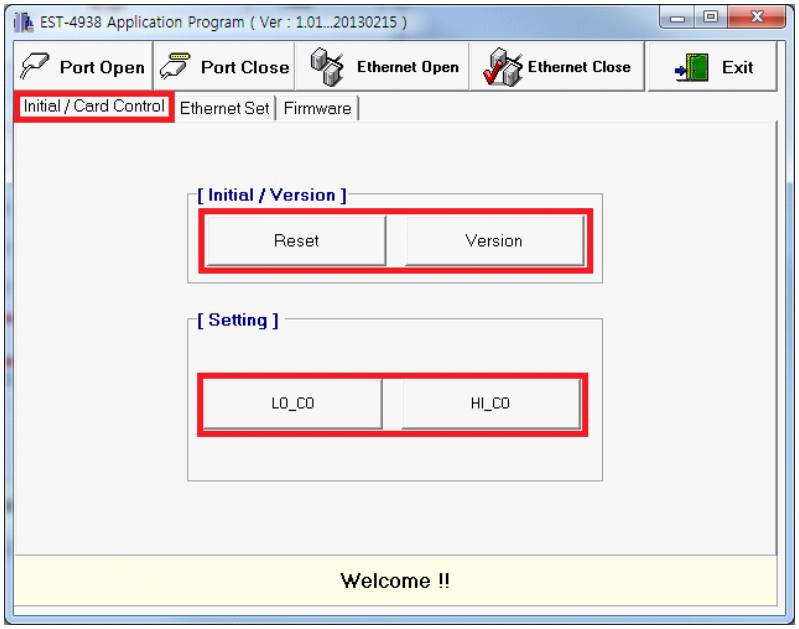
1. Select 'LAN' by a switch on the back of the encoder.
2. Press **Ethernet Open** in the upper part of the **EST-4938 Application Program** window.
3. In the **Ethernet** dialog that is shown, enter **IP Address** and **Port Number**; then click the **SET** button.



3. Making settings in the encoder

3.1 Initial/Card Control tab

Note: The **Initial/Card Control** tab is available via RS-232, Ethernet and USB.

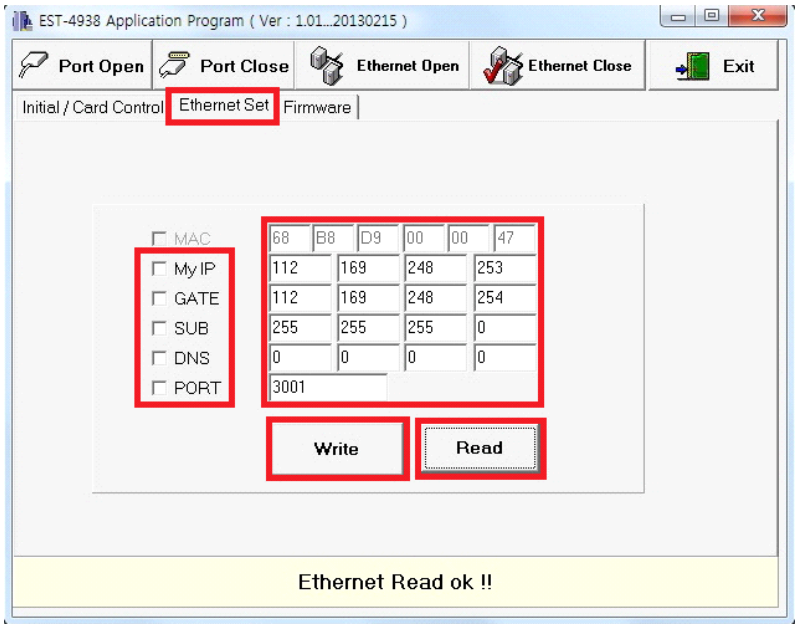


Under the **Initial/Card Control** tab, the following alternatives are available:

Button	**Description**
Reset	Puts the encoder into idle state (ends ongoing reading/writing processes)
Version	Checks the encoder firmware version
LO_CO	Sets the encoder in 'LO_CO card' mode ***Note:*** This setting should be used for 300 Oe cards.
HI_CO	Sets the encoder in 'HI_CO card' mode ***Note:*** This setting should be used for 2750˜4000 Oe cards.

3.2 Ethernet Set tab

Note: The **Ethernet Set** tab is available via RS-232 and USB.



1. Mark the applicable one of the checkboxes **My IP**, **GATE**, **SUB**, **DNS** and **PORT**.
2. To display existing values, click the **Read** button.
3. To modify a value, enter the new value and click **Write**.

3.3 Setting the encoder in factory status

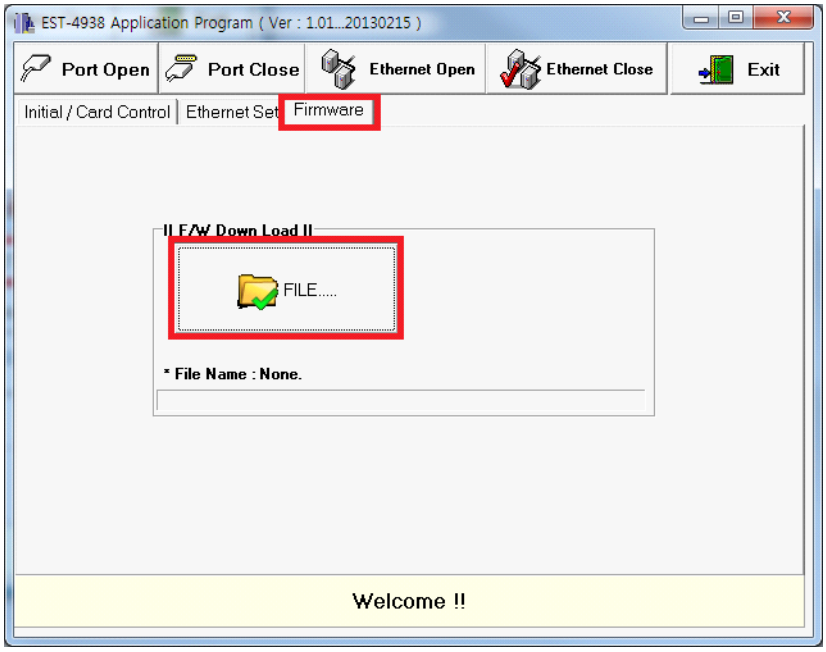
If the settings regarding coercivity and Ethernet should be set back to factory status, follow the steps below. The factory status for coercivity is *LO_CO*.

1. Make sure that the switch on the back of the encoder is on '232' and that the encoder is powered on.
2. Press the **EJECT** button on the encoder front.

4. Downloading firmware

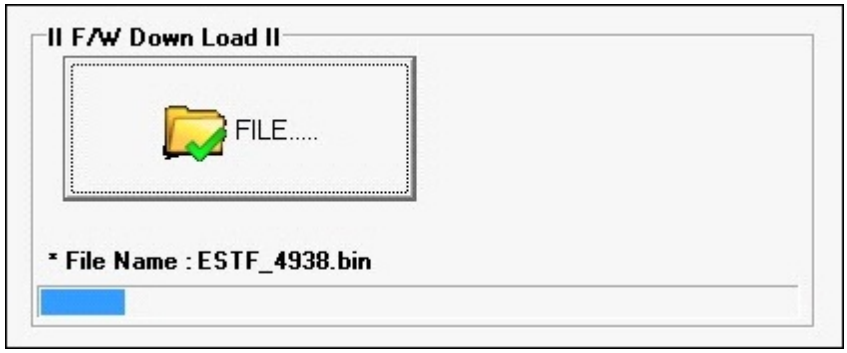
Note: Firmware download is only available via RS-232.

1. Choose the **Firmware** tab in the **EST-4938 Application Program**.
2. Click **FILE** in the middle of the **EST-4938 Application Program** window.

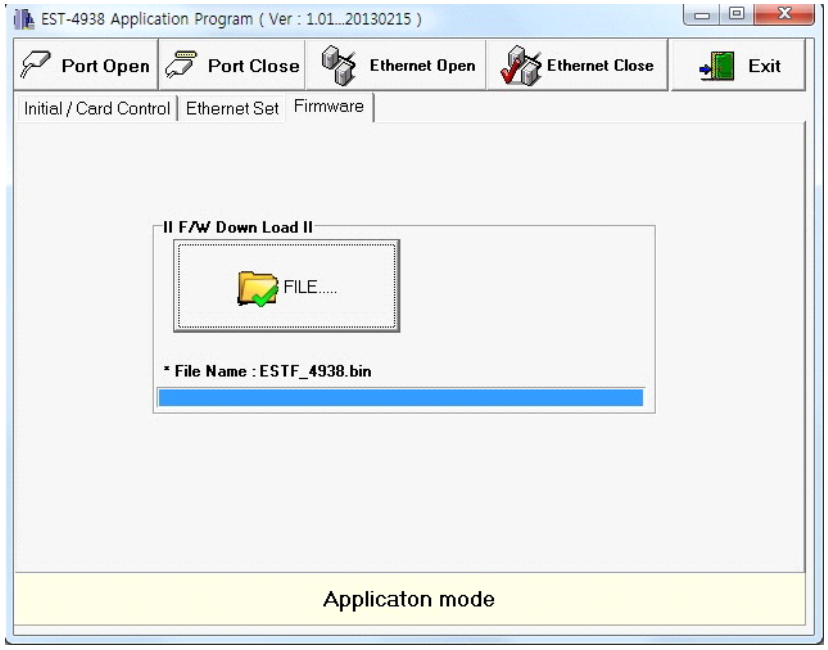


3. Browse to the applicable firmware file; mark the file and click **Open**.

4. The firmware download will start automatically.



5. When the firmware download is completed, the bottom of the dialog will say **Application mode**.



6. To verify that the encoder has been upgraded with the new firmware, power off the encoder and power it on again. The firmware version will be shown on the encoder display for some seconds, together with current position of the connectivity switch (RS232/LAN/USB) and coercivity selection.

Appendix: Quick reference of technical data

- Dimensions (W x H x D): 286 x 123 x 136 mm (11 17/64" x 4 27/32" x 5 23/64")
- Material in encoder: metal housing, composite front
- Graphic display
- Connection via RS-232, USB or Ethernet
- Automatic adjustment to 10 or 100 Mbit/s networks
- LO_CO setting (default from factory) should be used for 300 Oe cards;
  HI_CO setting should be used for 2750˜4000 Oe cards
- 100-230V 50/60Hz 2Amp
- Voltage: 24VDC ± 10%
- Intended for indoor use only, temperature range +5°C to +50°C
- Surrounding relative humidity: 20-90%
- For USB connectivity, VISION 6.1 or higher is required

Asia / Pacific:
E-mail: aspac@vcegroup.com
Phone: +65 67 48 7 227

Europe / Middle East / Africa:
E-mail: emea@vcegroup.com
Phone: +47 69 24 50 00

Latin America:
E-mail: lam@vcegroup.com
Phone: +52 55 36 40 12 14

North America:
E-mail: noram@vcegroup.com
Phone: +1 972 907 2273

ASSA ABLOY Hospitality – P.O. Box 511 – 1522 Moss – Norway – Phone: +47 69 24 50 00
info@vcegroup.com | www.vingcardelsafe.com
Provider of: VingCard Locks & Systems | Elsafe Safes | Orion EMS | PolarBar Minibars
Specifications may change without notice