

Dell™ KB813 Smart Card Keyboard

User Guide



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October 2015 Rev.A01

Introduction

Overview

Congratulations on the purchase of your new Dell Smart Card Keyboard.

This user's guide has been developed to provide information that will assist you in the setup and operation of your new smart card keyboard.

The Dell Smart Card Keyboard can be used on PC systems running Windows 2000, Windows XP (32/64 bit), Windows Vista (32/64 bit), Windows 7 (32/64 bit), Windows 8 (32/64bit), Windows 10 (32/64bit), Windows Server 2003, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, ,Linux Ubuntu, OpenSuse and RedHat.

This product can be used for banking transactions, identification systems, secure web applications, and secure logon. This smart card interface can be used with all microprocessor smart cards.

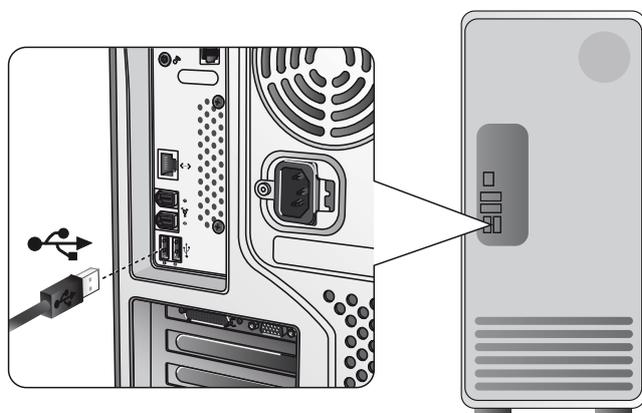
For more details see [Features](#).

Setup

NOTE: The drivers are already factory installed if the keyboard is purchased with computer. This section is included in case you have to re-load your operating system.

Install the Keyboard

Connect the Keyboard to any USB port on the computer. The USB port shown in the diagram is at the rear of the computer. USB ports may also be located at the front.



Follow the instructions in [Install the driver](#) section.

System Requirements

In order to properly install and operate your Dell Smart Card Keyboard, the following system requirements are necessary:

- Windows 2000, Windows XP (32/64 bit), Windows Vista (32/64 bit), Windows 7 (32/64 bit), Windows 8 (32/64 bit), Windows 10 (32/64 bit), Windows Server 2003, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Linux Ubuntu, OpenSuse, and RedHat.
- The Smart Card Keyboard Driver CD
- One free USB port

Features

- Reads from and writes to all ISO7816-1/2/3/4 microprocessor smart cards (T=0, T=1) up to 826Kbds (TA1=17) @4.8Mhz depending on smart card
- Supports 3 V, 5 V, and 1.8 V cards
- Powers off automatically when the card is removed
- Smart Card secure PIN entry
- PC/SC 2.0 driver up to Windows 10

Install the Windows XP driver

1. When the Dell Smart Card Keyboard is plugged into a USB port, the following window will appear:



2. Then the following window will appear:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

3. The installation wizard will install the driver. After a successful installation, the system will prompt you with the following message:



4. Select **Finish**. Your Smartcard Keyboard is now ready for use.



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

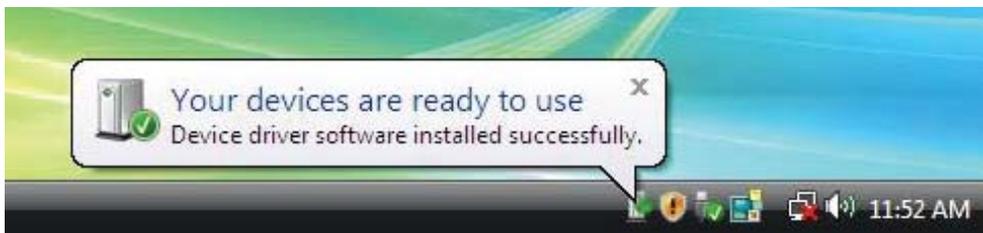
[Update the Windows 10 driver](#)

Install the Vista driver

1. When the Dell Smart Card Keyboard is plugged into a USB port, the following window will appear:



2. Wizard will install driver. After a successful installation, the system will prompt you with the following message:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

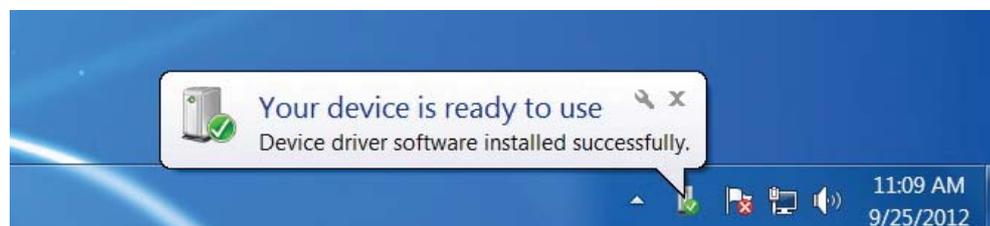
[Update the Windows 10 driver](#)

Install the Windows 7 driver

1. When the Dell Smart Card Keyboard is plugged into a USB port the following window will appear:



2. The installation Wizard will install driver. After a successful installation, the system will prompt you with the following message:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

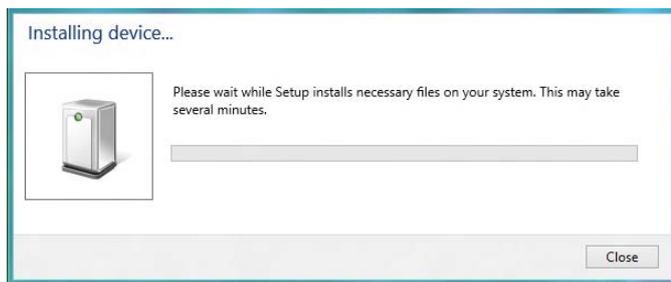
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

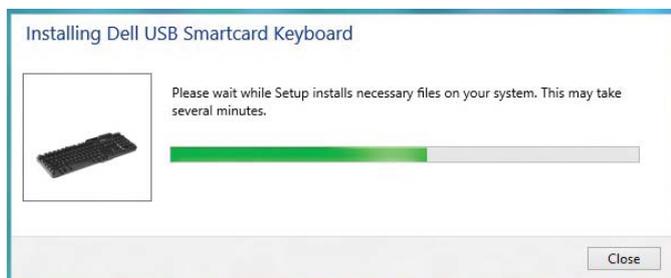
[Update the Windows 10 driver](#)

Install the Windows 8 driver

1. When the Dell Smart Card Keyboard is plugged into a USB port, the following window will appear:



2. The installation Wizard will install driver. During installation, the system will prompt you with the following window:



3. When installation is completed, your device is ready to use.

[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

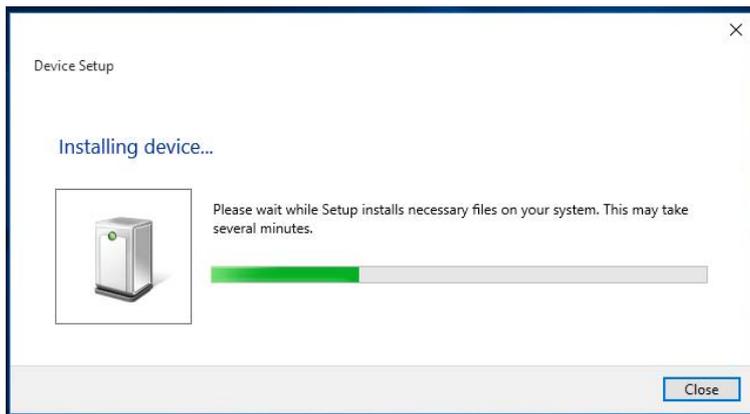
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

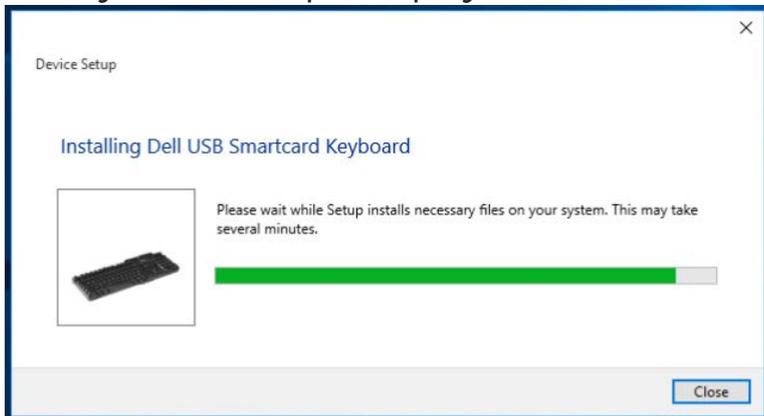
[Update the Windows 10 driver](#)

Install the Windows 10 driver

1. When the Dell Smart Card Keyboard is plugged into a USB port, the following window will appear:



2. The installation Wizard will install driver. During installation, the system will prompt you with the following window:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

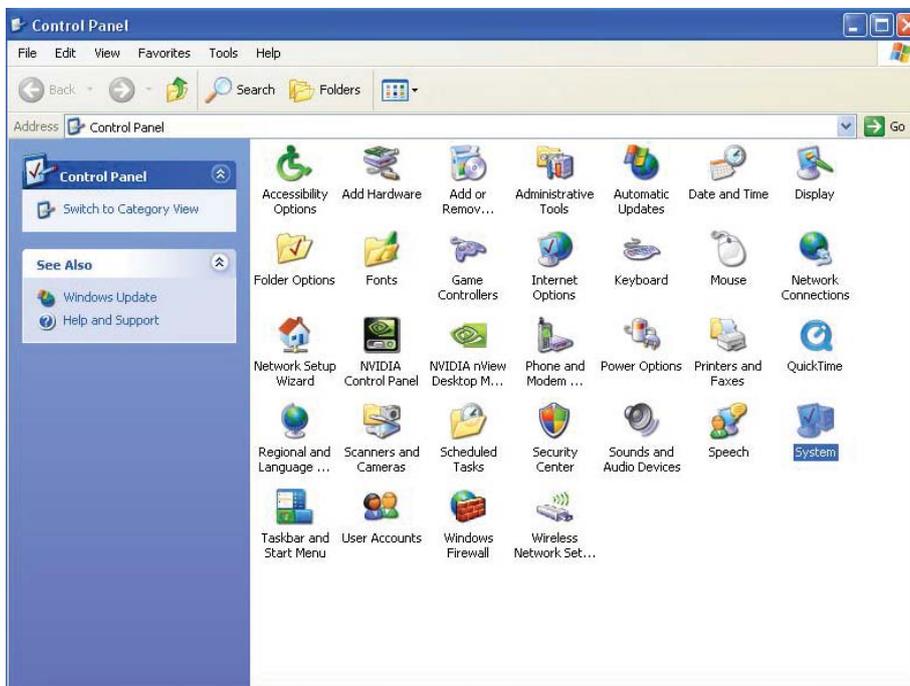
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

Update the Windows XP driver

1. With the Smart Card reader connected, the old driver that is built in inside the operating system will be installed automatically.
2. From the Start Menu, open the Control Panel.



- [Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)
[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)
[Install the Windows 10 driver](#)
[Update the Windows XP driver](#) | [Update the Vista driver](#)
[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)
[Update the Windows 10 driver](#)

Update the Windows XP driver

3. Double click **System**. The following window will be shown:



4. Select **Hardware**. The following screen displays:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

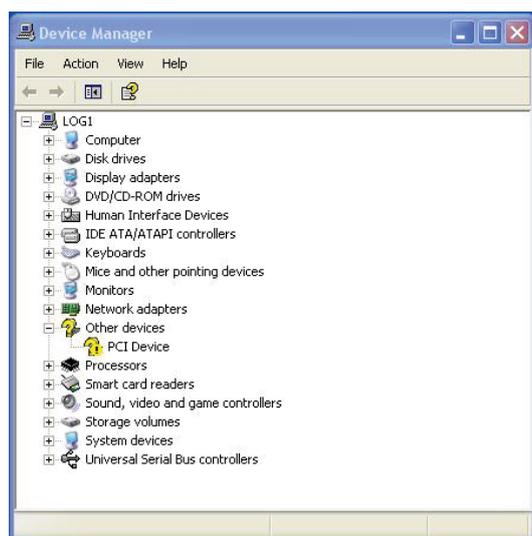
[Update the Windows 10 driver](#)

Update the Windows XP driver

5. Select **Device Manager**.



6. The following screen will be shown. Select **Smart card readers**.



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

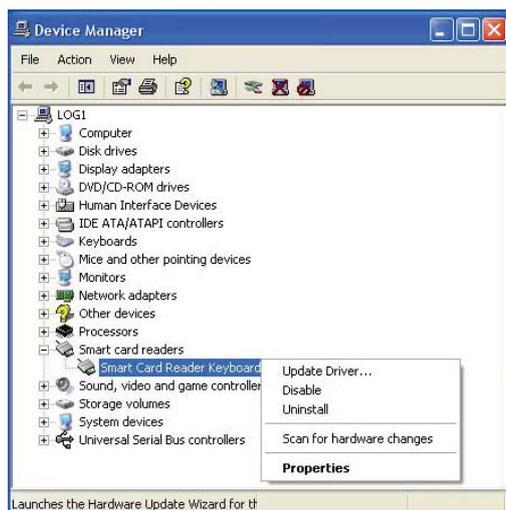
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

Update the Windows XP driver

7. Right click on **Smart Card Reader Keyboard**.
The display shows as follows:



8. Select **Update Driver**. Then, the following window will appear:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

Update the Windows XP driver

9. Select **Next**. The wizard will install the driver. After a successful installation, the system will prompt you with the following message:



10 .Select **Finish**. Your device is ready to use.



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

Update the Windows Vista driver

1. With the Smart Card reader connected, the old driver that is built in inside the operating system will be installed automatically.
2. From the Start Menu, open the Control Panel:



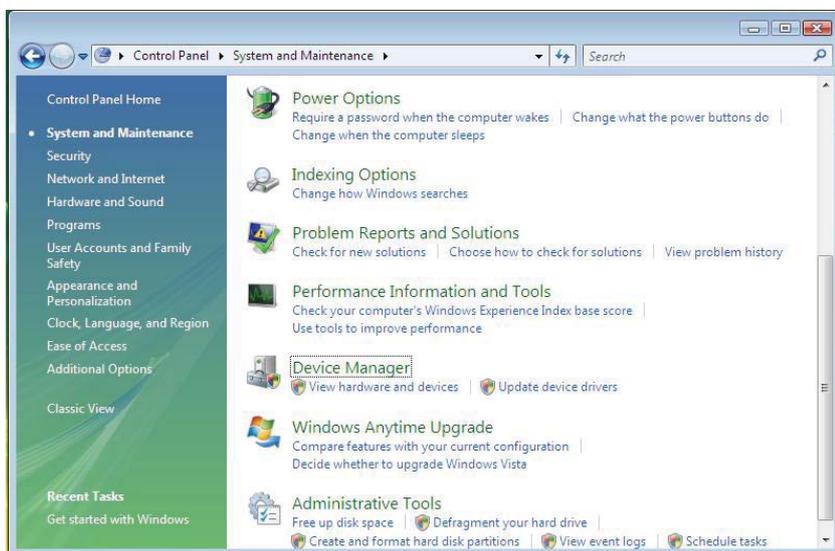
- [Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)
- [Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)
- [Install the Windows 10 driver](#)
- [Update the Windows XP driver](#) | [Update the Vista driver](#)
- [Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)
- [Update the Windows 10 driver](#)

Update the Windows Vista driver

3. Select **System and Maintenance**.



4. Select **Device Manager**. Then, the operating system will pop up the **Windows needs your permission to continue** dialog box. Click **Continue** to install.



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

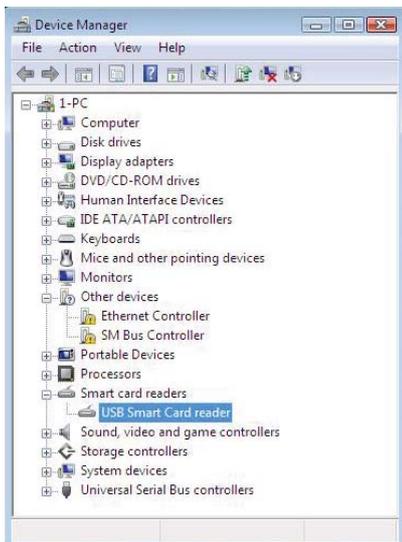
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

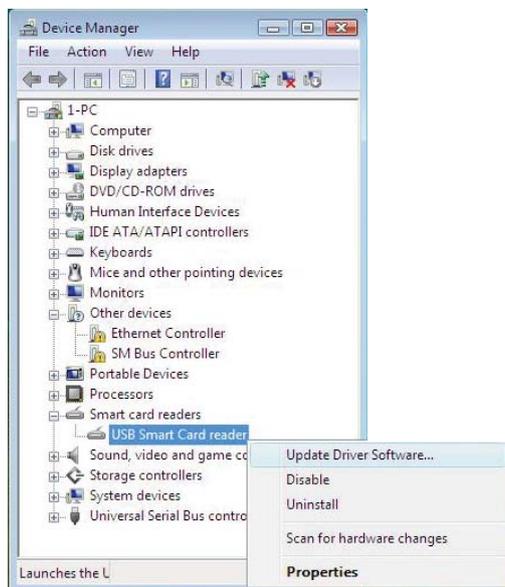
Update the Windows Vista driver

5. Select **Smart Card readers**.



6. Right click on **USB Smart Card reader**.

The display shows as follows:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

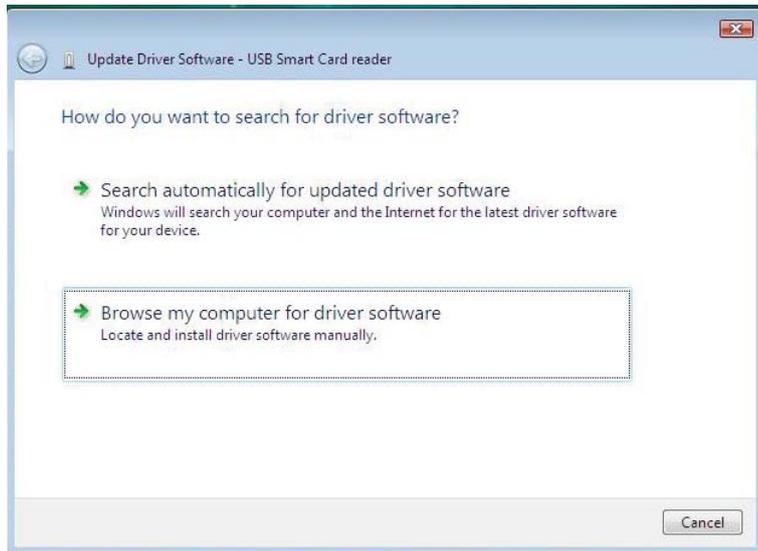
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

Update the Windows Vista driver

7. Select **Update Driver Software**.



8. Select **Browse my computer for driver software**.

9. Insert the drivers CD into the CD/DVD drive, browse to **Drivers** folder, select **Windows**, and click **Next**.



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

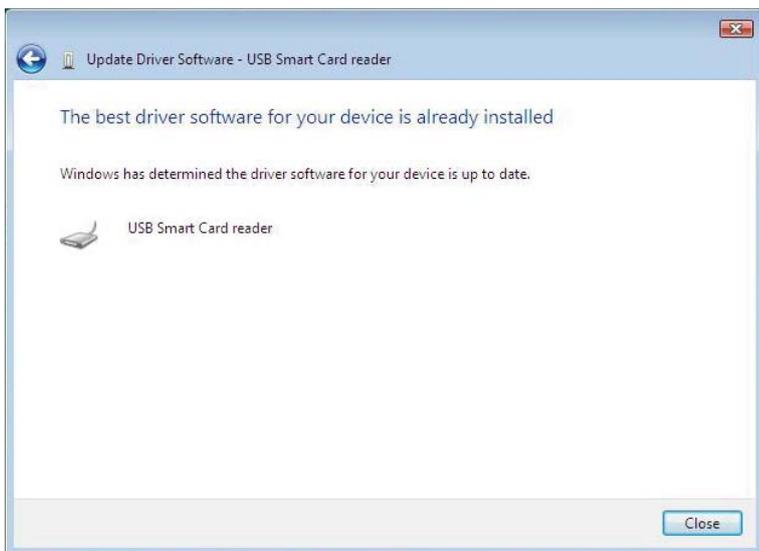
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

Update the Windows Vista driver

10. The installation wizard will install driver. After a successful installation, the system will prompt you with the following message:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

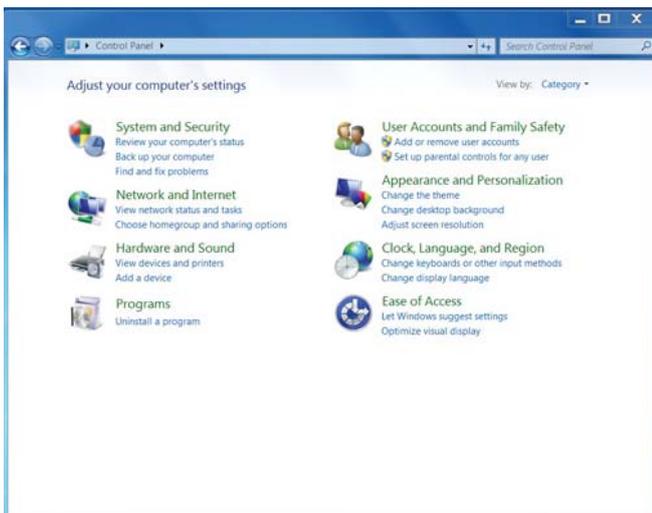
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

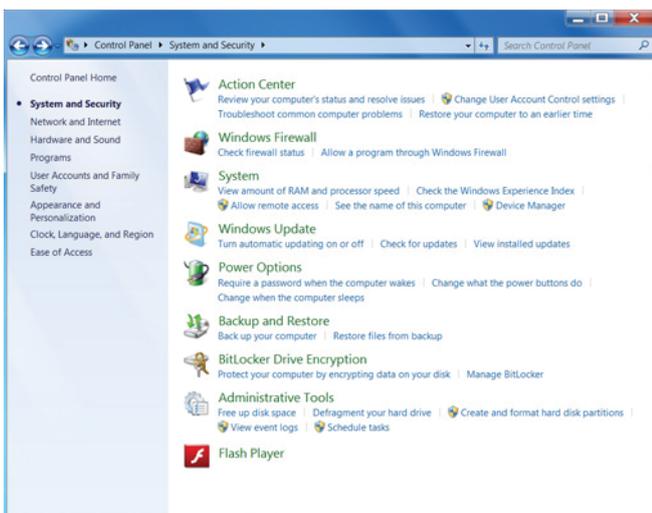
[Update the Windows 10 driver](#)

Update the Windows 7 driver

1. With the Smart Card reader connected, the old driver that is built in inside the operating system will be installed automatically.
2. From the Start Menu, open the Control Panel.



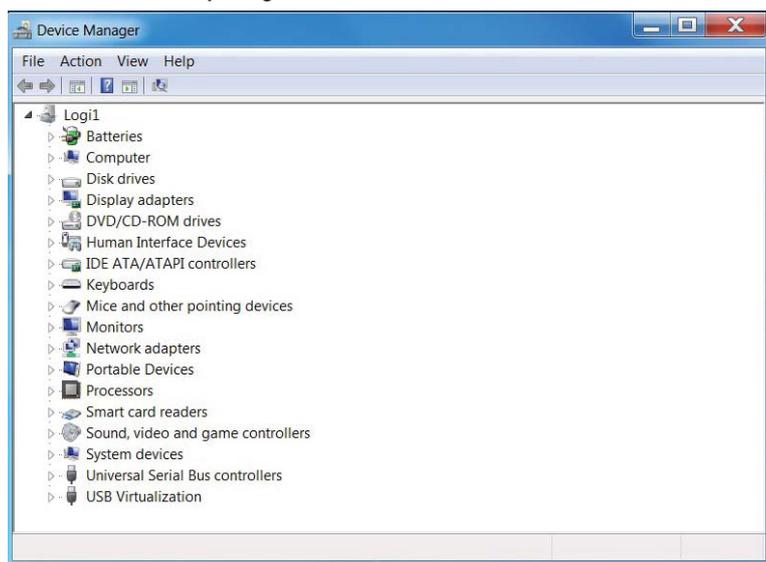
3. Double click **System and Security**. The following window will be shown:



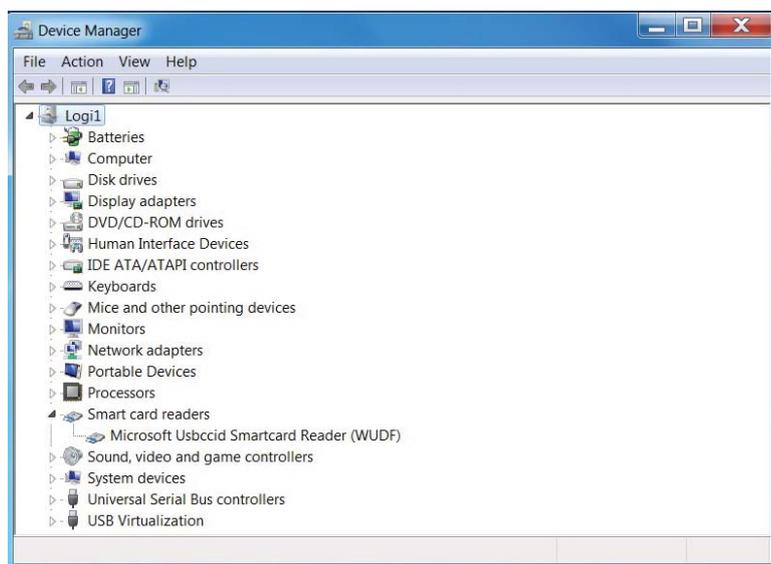
- [Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)
- [Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)
- [Install the Windows 10 driver](#)
- [Update the Windows XP driver](#) | [Update the Vista driver](#)
- [Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)
- [Update the Windows 10 driver](#)

Update the Windows 7 driver

4. Select **Device Manager** under **System**. The following screen displays:



5. Select **Smart card readers**. The following screen will be shown:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

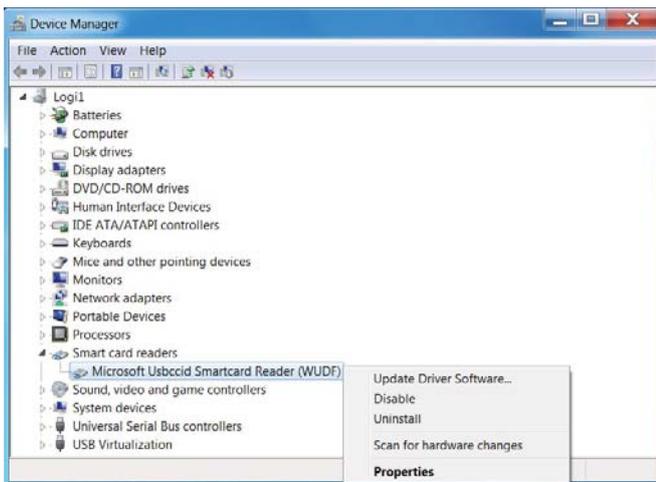
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

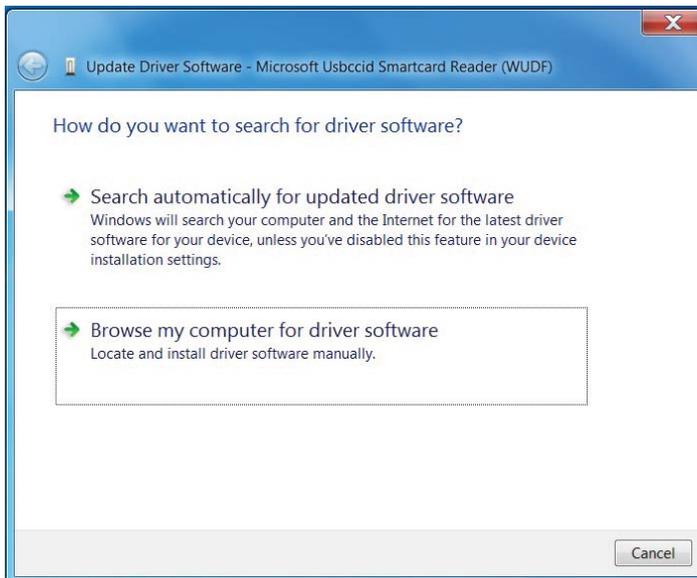
[Update the Windows 10 driver](#)

Update the Windows 7 driver

6. Click on your right button of the device. The display shows as follows:



7. Select **Update Driver**. Then, the following window will appear:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

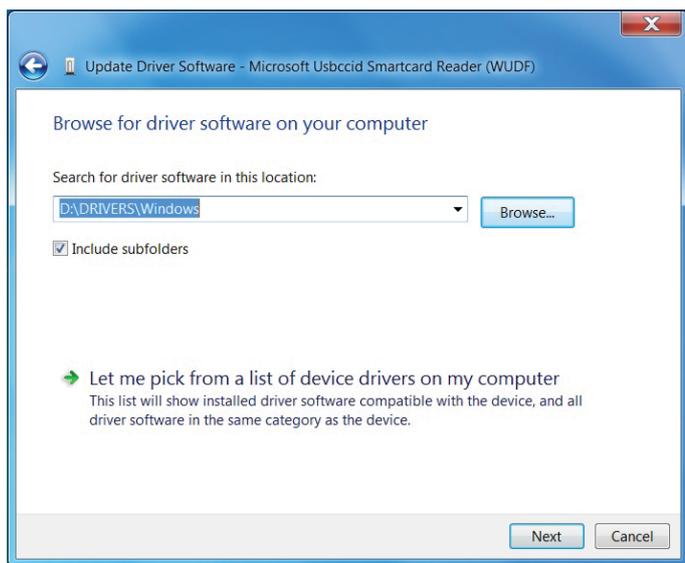
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

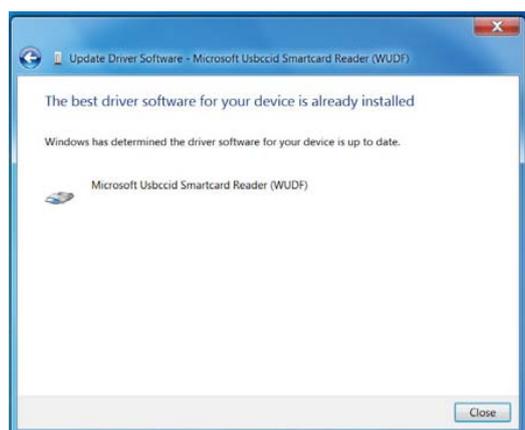
[Update the Windows 10 driver](#)

Update the Windows 7 driver

8. Insert the drivers CD into the CD/DVD drive, browse to the **Drivers** folder, select **Windows**, and click **Next**.



9. Select **Next**. The installation wizard will install the driver. After a successful installation, the system will prompt you with the following message, and the device is ready to use.



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

Update the Windows 8 driver

1. With the Smart Card reader connected, the old driver that is built in inside the operating system will be installed automatically.
2. Open the Control Panel.



3. Double click **System**. The following window will be shown:



- [Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)
- [Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)
- [Install the Windows 10 driver](#)
- [Update the Windows XP driver](#) | [Update the Vista driver](#)
- [Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)
- [Update the Windows 10 driver](#)

Update the Windows 8 driver

4. Select **Device Manager** under **System**. The following screen displays:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

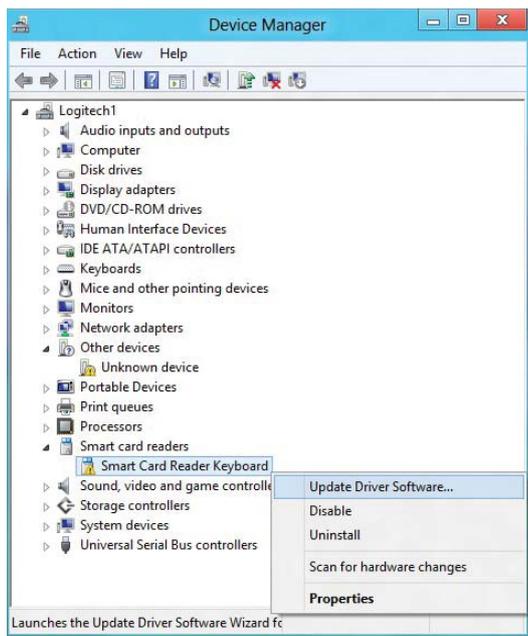
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

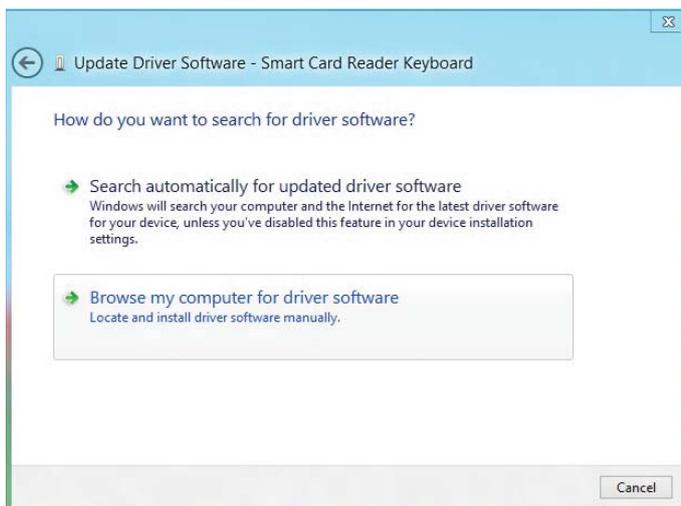
[Update the Windows 10 driver](#)

Update the Windows 8 driver

5. Select **Smart card readers** and right click on the device. The device shows as follows:



6. Select **Update Driver**, then the following window will appear:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

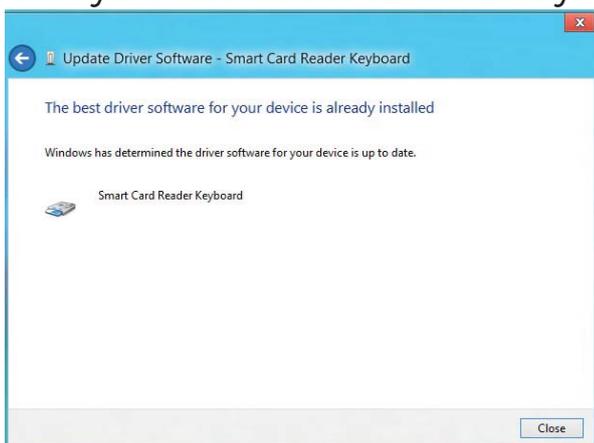
[Update the Windows 10 driver](#)

Update the Windows 8 driver

7. Insert the drivers CD into the CD/DVD drive, browse to the **Drivers** folder, select **Windows**, and click **Next**.



8. The installation wizard will install the driver. After a successful installation, the system will prompt you with the following message and your device is now ready to use.



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

[Update the Windows XP driver](#) | [Update the Vista driver](#)

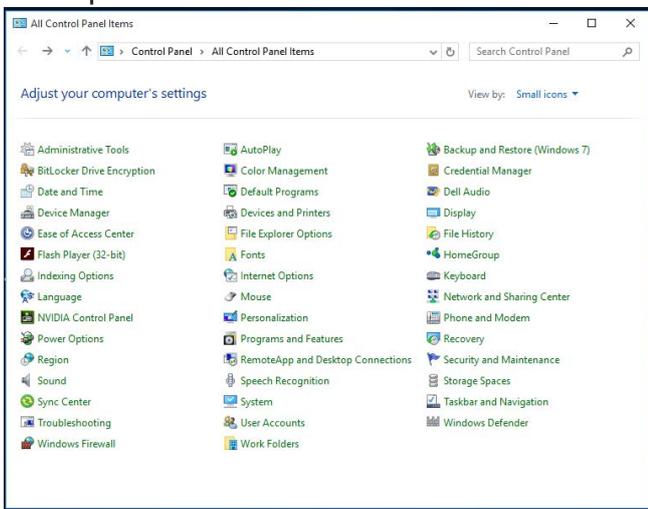
[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

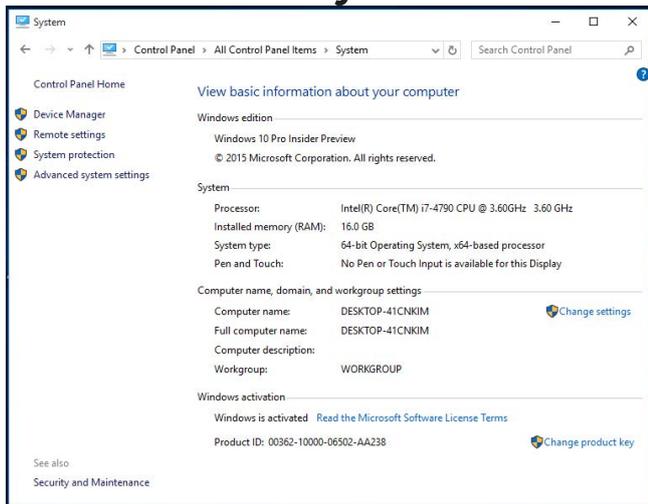
Update the Windows 10 driver

1. With the Smart Card reader connected, the old driver that is built in inside the operating system will be installed automatically.

2. Open the Control Panel.



3. Double click **System**. The following window will be shown:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

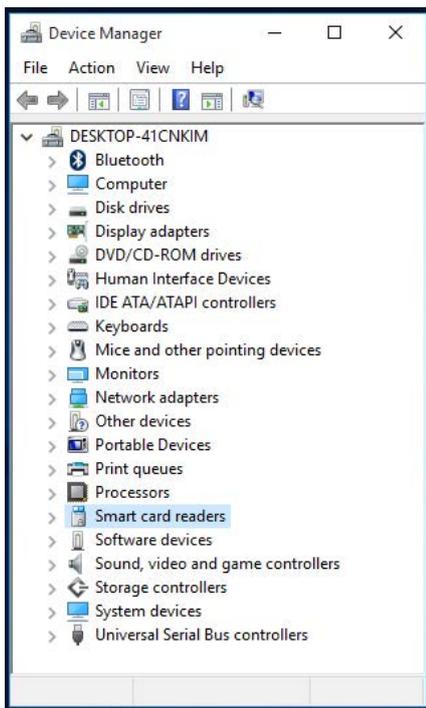
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

[Update the Windows 10 driver](#)

4. Select **Device Manager** under **System**. The following screen displays:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

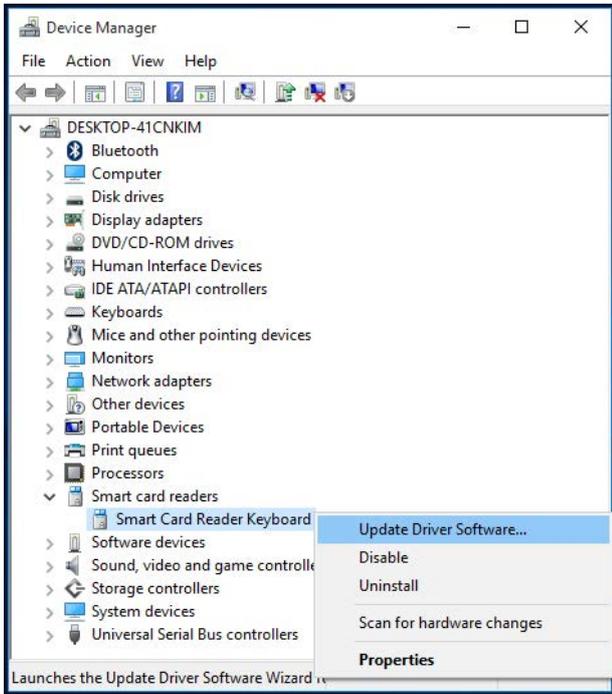
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

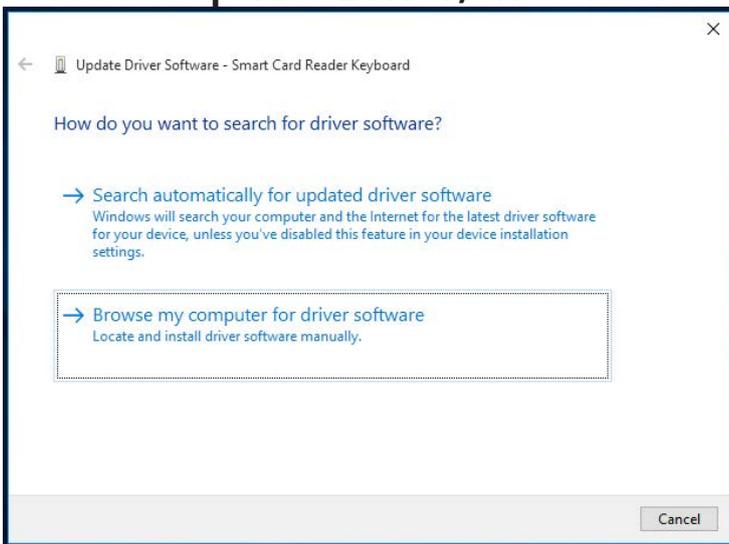
[Update the Windows 10 driver](#)

Update the Windows 10 driver

5. Select **Smart card readers** and right click on the device. The device shows as follows:



6. Select **Update Driver**, then the following window will appear:



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

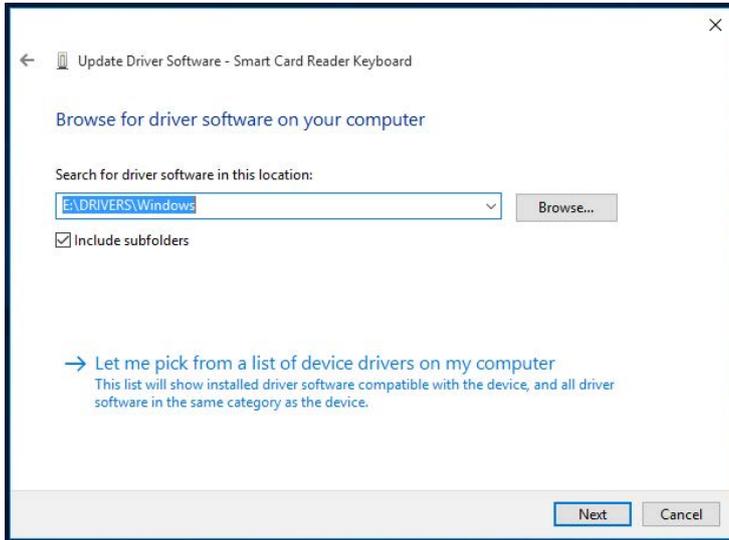
[Update the Windows XP driver](#) | [Update the Vista driver](#)

[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

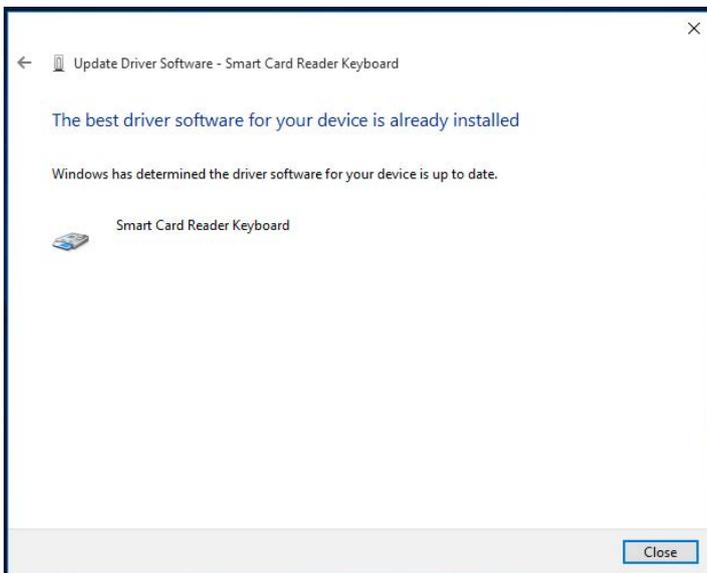
[Update the Windows 10 driver](#)

Update the Windows 10 driver

7. Insert the drivers CD into the CD/DVD drive, browse to the **Drivers** folder, select **Windows**, and click **Next**.



8. The installation Wizard will install the driver. After a successful installation, the system will prompt you with the following message and your device is now ready to use.



[Install the Keyboard](#) | [Install the Windows XP driver](#) | [Install the Vista driver](#)

[Install the Windows 7 driver](#) | [Install the Windows 8 driver](#)

[Install the Windows 10 driver](#)

[Update the Windows XP driver](#) | [Update the Vista driver](#)

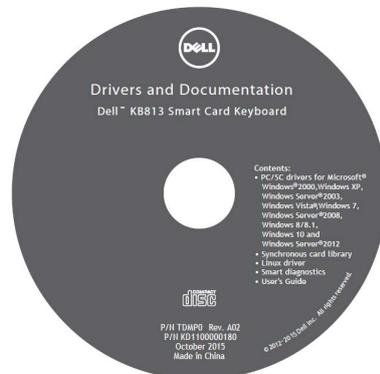
[Update the Windows 7 driver](#) | [Update the Windows 8 driver](#)

[Update the Windows 10 driver](#)

Using the Smart Card Keyboard

Box Contents

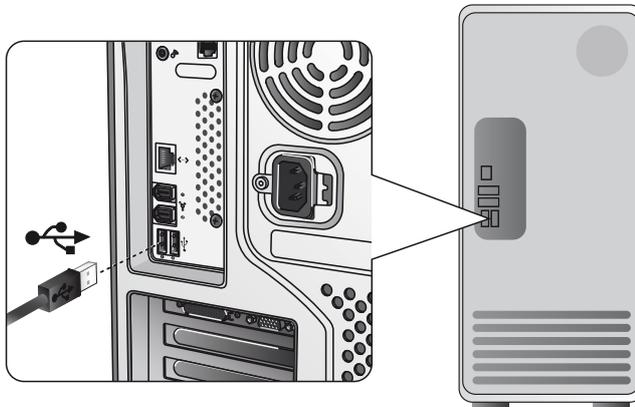
The Smart Card Keyboard includes the following items:



Open the package and remove the contents to begin the installation.

Connect Keyboard

- Connect the keyboard to any USB port on the computer.
- The USB port shown in the diagram is at the rear of the computer. USB ports may also be located at the front.



Attach Palm Rest

- As an option, you may attach the Palm Rest to the keyboard as shown.



Inserting a Smart Card

To insert a smart card in the Dell Smart Card keyboard, the side of the smart card with the metallic part (contacts) must face you. In the case of a credit card, your name must face you.



If the Dell Smart Card Keyboard is installed properly (see section [Setup](#)) and the smart card is inserted correctly, the smart card indicator LED should turn blue (see section [LED Indicator](#) for details about smart card indicator).

LED indicator

On the Dell Smart Card Keyboard, there are four LED indicators:

- Three standard keyboard LEDs: Num Lock, Caps Lock, and Scroll Lock.
- One additional LED (2 colors) to indicate the smart card interface status as below:

LED status	Description
OFF	Smart Card is OFF or absent
Blue ON	Smart Card is present and powered on
Blue Flashing	Smart Card is used
Amber ON	Secure PIN Entry procedure : this is the safe moment to enter your PIN code

The Windows Keys and Applications Keys

There are three specific keys on the keyboard for more convenient use, as described below. The two Windows logo keys located on the keyboard could be used in combination with other keys.

Key Combinations	Function
One Application key	The same shortcut menu as right-clicking the desktop while pressing this key
Windows key	Start Menu
Windows key + E	Windows Explorer
Windows key + F	Find Document
Windows key + M	Minimize All
Windows key + R	Display Run Dialog Box
Windows key + F1	Display Help Menu
Windows key + TAB	Activate Next Taskbar Button
Windows key + Ctrl + F	Find Computer
Windows key + Shift + M	Undo Minimize All
Windows key + Pause/Break	Perform a System Function

Diagnostic and Troubleshooting

Diagnostics

NOTE 1: The diagnostic program needs to be installed on your system from the CD.

NOTE 2: Run this diagnostic software if you are having issues using smart cards with your application. It will be able to determine if the smart card software and hardware are loaded and functioning properly.

Install the Diagnostic Program

1. To install the diagnostic program in the CD-ROM.

Click **DIAGNOSTICS** folder, and select the desired language. Then, launch the SmartDiag.msi under the desired language folder.

2. Click "Next."



Diagnostic and Troubleshooting

3. Click **Next**.



4. Read **the agreement** and then click **Install**.



Diagnostic and Troubleshooting

5. Then installation starts.



6. Installation completed.



Diagnostic and Troubleshooting

7. Click **Finish**.



Run SmartDiag 2.4

1. Execute the diagnostic software SmartDiag.



Diagnostic and Troubleshooting

2. Click **Start**.



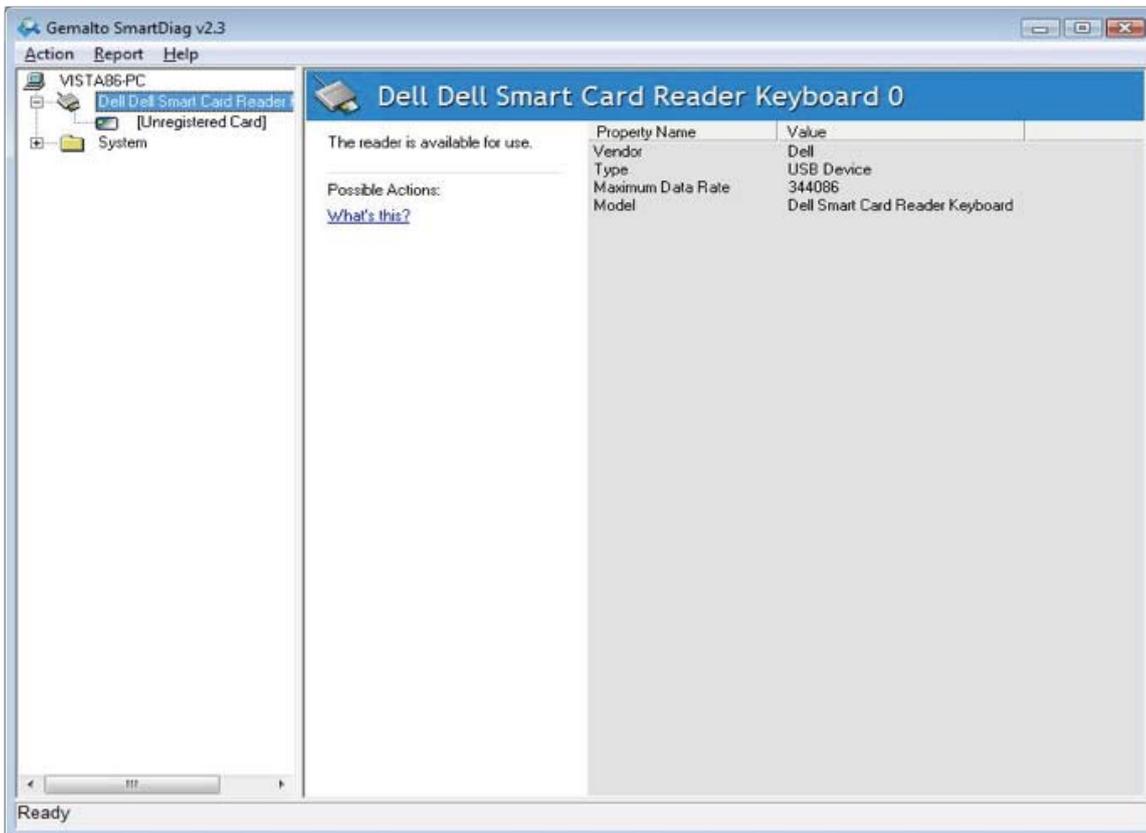
3. If no smart card is present, the above screen will appear. Insert a smart card and click **Next**.



Diagnostic and Troubleshooting

If the smart card reader and smart card have **Passed**, this means the software and hardware are both working properly. **Failed** means the smart card driver or the hardware is not present or is not installed correctly. If this occurs, go to www.dell.com/support to resolve this problem.

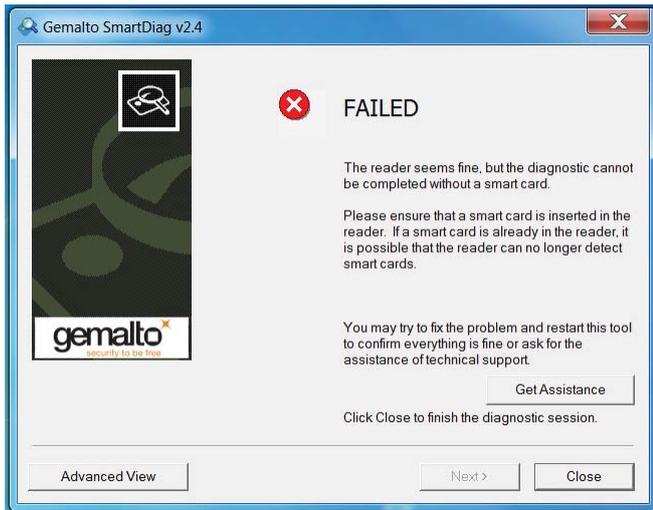
Smart Card Present: (when Advanced view is selected from the screen above)



The above screen shows that the smart card is inserted and the system is able to read the smart card.

Diagnostic and Troubleshooting

Smart Card Removed



When the smart card is removed, the above screen will appear.

Diagnostic and Troubleshooting

Troubleshooting

My smart card is not detected.

- A. The driver may not be installed or you may not be using the correct driver. Reinstall the driver (see [Reinstall the Driver](#)).
- B. The reader could be contaminated. Extract and reinsert the smart card several times to dislodge any contaminants such as dust or foreign objects.
- C. The smart card chip is damaged. Obtain a new smart card.

My smart card is detected, but does not work.

- A. The smart card is not inserted correctly. The smart card must be inserted chip-end first. See diagram (section [Inserting a smart card](#))
- B. The smart card contacts may be dirty and need to be cleaned. To clean the smart card contacts use a dry tissue.
- C. The smart card chip is damaged. Obtain a new smart card.

I can see the Dell Smart Card Keyboard in Windows device manager, but I cannot communicate with the smart card.

If this occurs, it is possible that the Microsoft Smart Card Resource Manager did not start. Type **net start scardsvr.exe** in the run dialog box. Once the Smart Card Resource Manager has been successfully started, the smart cards should be accessible. On the next boot, the resource manager should auto start.

The Dell Smart Card Keyboard LED goes solid green for a few seconds when I insert a smart card and then goes off again.

This is normal Operating System behavior. Please refer to Usage section of the User's Guide regarding LED indicators.

The Dell Smart Card Keyboard is not functioning under Windows NT4.0.

Windows NT4.0 does not support USB interfaces (see [System Requirements](#)).

Specifications

General

Manufacturer	Liteon
Model number	KB813t
Connection type	USB
Supported operating systems	Microsoft Windows 2000, Microsoft Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10, Microsoft Windows Server 2003, Windows Server 2008, Microsoft Server 2012, Linux Ubuntu, OpenSuse and RedHat

Keyboard interface	USB
Keyswitch feeling	Rubber dome tactile feedback
Rollover	Pseudo 6-key rollover capability

Electrical

Power requirements	4.75 to 5.25 Vdc (through PC USB port)
Power consumption	100mA max.
Switch actuation force	59 g \pm 12g

Physical

Height	40 mm
Width	446.5 mm
Depth	151.5 mm
Weight	670 g
Cable length	1.8 m

Environmental

Operating temperature	-10 oC ~ 50 oC
Storage temperature	-40 oC ~ 65 oC
Operating humidity	0 ~ 90% RH, non condensing
Storage humidity	0 ~ 90% RH, non condensing

Reliability

Card Reader Insertion Life	100K times
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Regulatory

Regulatory Model : KB813t

Regulatory Notices

For additional regulatory information, see the Regulatory Compliance home page on www.dell.com at the following location: **www.dell.com/regulatory_compliance**

Certifications

Microsoft WHQL Logo

The Dell Smart Card Keyboard/Reader has passed WHQL logo testing by Microsoft Windows Hardware Quality Labs.

WHQL Logo is a certification provided by Microsoft Windows Hardware Quality Labs. This logo ensures that the hardware and accompanying software for the Dell Smart Card Keyboard are compatible with Microsoft Operating Systems.

EMV Level 1 Compliance

The Dell Smart card Keyboard is EMV Level 1 compliant.

EMV certification ensures security for customer card payments by reducing fraudulent transactions on counterfeited or lost/stolen cards.

USB IF Compliance

The Dell Smart Card Keyboard is compliant with USB Logo Testing Requirements.

The compliance testing ensures the quality of products and compatibility with other USB peripherals.

FIPS 201 Certification

The Dell Smart Card Keyboard is FIPS201 compliant.

FIPS 201 is a United States Federal Government standard that specifies Personal Identity Verification (PIV) requirements for Federal employees and contractors. The certification makes the product meet the standard.