TriCom Card Technologies, Inc.

ID-e User's Manual

Key Definition

SET

1. **Main menu entry**, press and hold this key at least 3 seconds to enter menu mode.
2. **Time adjusting**, press this Key to switch to next field during time adjusting mode.

ENTER / Power

1. **Power on**.
2. **Power off**, press and hold this key at least 3 seconds to turn off power
3. **Function execution**.
4. **Time adjusting**, press this key to end of time adjusting mode

UP

1. **View the last record**, press this key to display the last cardholder's age.
2. **Menu scroll up**.
3. **Increase**, during time adjusting mode.

DOWN

1. **View the last record**, press this key to display the track 1 and track 3 data of last card swiped.
2. **Menu scroll down**.
3. **Decrease**. During time adjusting mode

SET & DOWN

1. **2D bar code reading**, click both keys will trigger the scan function of Imager on.

Operation Sequence

Power ON / OFF

1. Press [ENT / POWER] key to power on ***ID-e*** Reader.
2. Press and hold [ENT / POWER] key for 3 seconds to power off ***ID-e*** Reader.

Power Status

1. If the power is from USB or AC power adaptor, the power indicator will display a "plug" icon.
2. If the power is from battery, the power indicator will display a "battery" icon.
3. If the battery power is low, the power indicator will display an "empty battery" icon.

Notice:

ID-e will not immediately detect power jack or USB plug-in or plug-out. However, it checks the status of external power after key pressing or RTC (Real Time Clock) interrupt happened. In other word, if user does not press the key after plug-in power jack. The maximum delay for showing the “plug” icon may be up to 1 min.

Main Menu

1. Press [SET] key for 3 seconds at clock display to enter main menu.
2. Press [UP] or [DOWN] key to scroll up or down the selection bar.
3. Press [ENT] key to execute the function.
4. If no any keys are pressed, after 6 seconds ***ID-e*** will exit main menu and back to clock display.

Set Time & Date

1. Press [SET] key to set the real time calendar (including date/time).
   The setting sequence as follows.
   <Month>→<Date>→<Year>→<AM / PM>→<Hour>→<Minute>
2. The setting object will be blinking, then press [UP] or [DOWN] key to increase/decrease timer.
3. Press [ENT] key to exit. ***ID-e*** will reset “second” to zero at this moment.

Upload Data

1. ***ID-e*** will send the first record and wait for an <ACK > (hex code: 06h) to send the next one or a NAK (hex code: 15h) to resend the record.
2. All of the records will not erase after uploading. Please refer to [Erase Record] section for record erased, if user intends to do that function.
3. When upload done, the display will go back clock display after idle 6 seconds, this is due to power saving.

View Report

1. Press [UP] or [DOWN] key to view the record.
2. Press [ENT] key to exit.

Name-Age-DL#

1. Set the display sequence for each card swiping.

Age-DOB-Exp

1. Set the display sequence for each card swiping.

Age-DOB

1. Set the display sequence for each card swiping.

Erase Records

1. Press [ENT] key.
2. Select [Yes] to erase records.
3. Select [No] to exit.

Update Config

1. Press [ENT] key.
2. Insert SLE4428 card which state format included.
3. Press [ENT] to starting update or [SET] to exit.

Read 2D bar code

1. Press [SET] and [ENT] key to start the 2D Imager scanning.
2. The Imager will be turned on and wait for reading driver licenses.
3. If no cards to be read, the Imager will be turned off after 6 seconds.

Notice:

There are two setting of 2D barcode reader must be set before attaching it to ***ID-e***.

1. Set the baud rate at **19200.**
2. Set the **Power Hold** mode to **ON** to keep the Imager always in ready state.

(The factory default settings of barcode reader are baud rate 38400 and power hold mode off. ***ID-e*** cannot talk to barcode reader for such setting. Please refer to HHP4410/4710 user's manual page 2-11 and 2-17. Press the button on the HHP 2D Imager and scan correct barcode pattern to change setting. This setting will store in nonvolatile memory that can keep forever.)

ID-e Programmer's Manual

Communication Data Format

For PC communication

Baud rate:	**19200**
Parity:	**None**
Data bit:	**8**
Stop bit:	**1**
Hardware flow control:	**None**

For communication of 2D barcode imager

Baud rate:	**19200**
Parity:	**None**
Data bit:	**8**
Stop bit:	**1**
Hardware flow control:	**None**

Definition

<STX>	start of text	02h
<FS>	form separator	1Ch
<ETX>	end of text	03h
<LRC>	longitudinal redundancy check	00h~FFh

For example:

LRC = 0 xor 0 xor 0 xor 0 xor 1 xor <FS> 0 xor 2 xor – xor 0 xor 8 xor….. <FS> xor T xor K xor 1 xor …xor <ETX>

(All characters except <STX>)

<EOT>	end of transmission	04h

<Time setting command>	RTC
<Time format>	YYMMDDHHMMSS (24 hour)
<Record Number>	00001 ~ 99999
<Time Stamp>	MM-DD-CCYY HH:MMPM(AM)
<Card Type>	B (Barcode), C (Credit card), D (Driver license) or O (ISO card)
<Driver License#>	driver license number

<Age>	age
<Birth date>	CCYYMMDD
<Name>	Cardholder's name
<Credit Card#>	Credit card number
<Expiration Date>	Expiration date (YYMM)
<Track 1 data>	track one data
<Track 2 data>	track two data
<Track 3 data>	track three data

Command Set Format

Time setting

<STX><Time setting command><Time format><ETX><LRC>

Example

Time setting

<STX>RTC020522162100<ETX><LRC>

Output Data Format

2D barcode

<STX><Record Number><FS><Time Stamp><FS><Card Type><FS><Driver License#>
<FS><Age><FS><Birth date><FS><Expiration Date><FS>2D barcode raw data<ETX>
<LRC>

Credit Card

<STX><Record Number><FS><Time Stamp><FS><Card Type><FS><Name><FS><Credit Card#><FS><Expiration Date><FS>TK1<Track 1 data><FS>TK2<Track 2 data><FS>TK3 <Track 3 data><ETX><LRC>

Driver License

<STX><Record Number><FS><Time Stamp><FS><Card Type><FS><Driver License#>
<FS><Age><FS><Birth date><FS><Expiration Date><FS>TK1<Track 1 data>
<FS>TK2<Track 2 data><FS>TK3<Track 3 data><ETX><LRC>

ISO Card

<STX><Record Number><FS><Time Stamp><FS><Card Type><FS><FS><FS><FS>
TK1<Track 1 data><FS>TK2<Track 2 data><FS>TK3<Track 3 data><ETX><LRC>

Example

2D barcode

<STX>00278<FS>06-10-2002 10:29PM <FS>B<FS>9336410<FS>37<FS>19650101
<FS>20010808<FS>@_AAMVA AL001DL00290240 ?DAASAMPLE D DRIVER
DAL500 DEXTER AVE DANMONTGOMERY
DAOALDAQ9336410DARDMVDASA DAT
DAU5-07DAW125DAYBRODAZREDDBA08-08-2001DBB01-01-1965DBCFDBD08-08-1997D
BF0DBHYDBK _ _00278_06-10-2002
10:29PM_B_9336410_37_19650101_20010808_@_AAMVA
AL001DL00290240 ?DAASAMPLE D DRIVER DAL500 DEXTER AVE
DANMONTGOMERY DAOALDAQ9336410DARDMVDASA DAT
DAU5-07DAW125DAYBRODAZREDDBA08-08-2001DBB01-01-1965DBCFDBD08-08-1997D
BF0DBHYDBK <ETX><LRC>

Credit Card

<STX>00002<FS>02-08-2002 12:01AM<FS>C<FS>Jerry Wang<FS>B0123456789<FS>
0311<FS>TK1B0123456789^Jerry Wang^1111111111000<FS>TK20123456789=0311001
111111111000<FS>TK3<ETX><LRC>

Driver License

<STX>00001<FS>02-08-2002 12:00AM<FS>D<FS>0971018666<FS>28<FS>19741115
<FS>19971115<FS>TK1DSAM K DRIVER
2415 1ST AVE
SACRAMENTO<FS>TK26006460971018666=9711=19741115<FS>
TK3C CA95818 MBRNBRN510180 11151993131888819<ETX><LRC>

ISO Card

<STX>00003<FS>02-08-2002 12:02AM<FS>O<FS><FS><FS><FS>TK1111111111111111111
11111111<FS>TK2222222222222222222222222222<FS>TK3333333333333333333333333
333333333333<ETX><LRC>

SLE 4428 Memory Map For State Format Update

Note:

The data that color in red cannot be modified. Total memory size for ID-e using is 976 bytes.

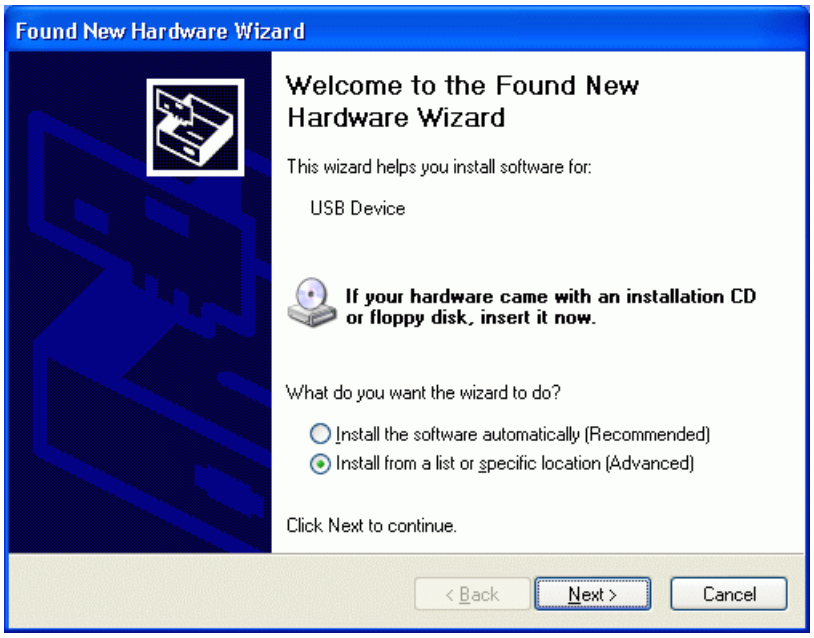
The way to write data into SLE4428 for update ID-e state format.

1. Will provide a binary file for writing this file into memory card.
2. The valid memory is from address

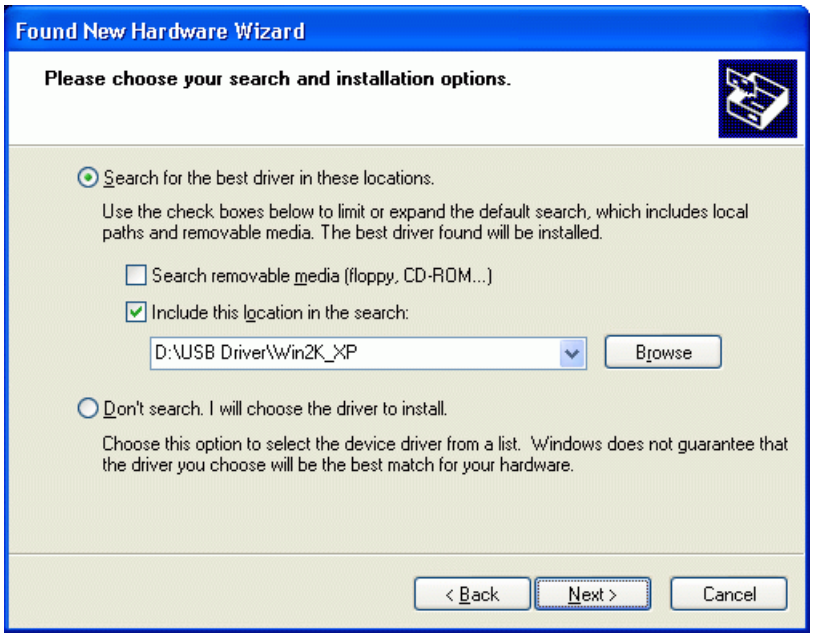
3. Write the binary file into memory card from 0xxxxo 0xxxxh.

ID-e USB Driver Installation Guide

For Windows XP

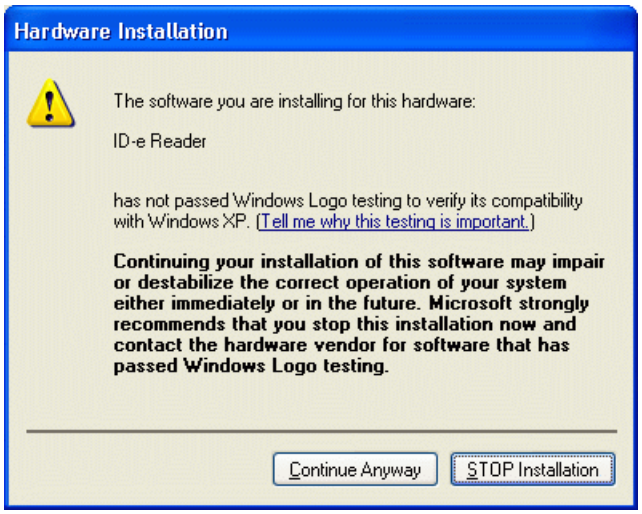


1. Select **Install from a list or specific location (Advanced).**
2. Click **Next**.



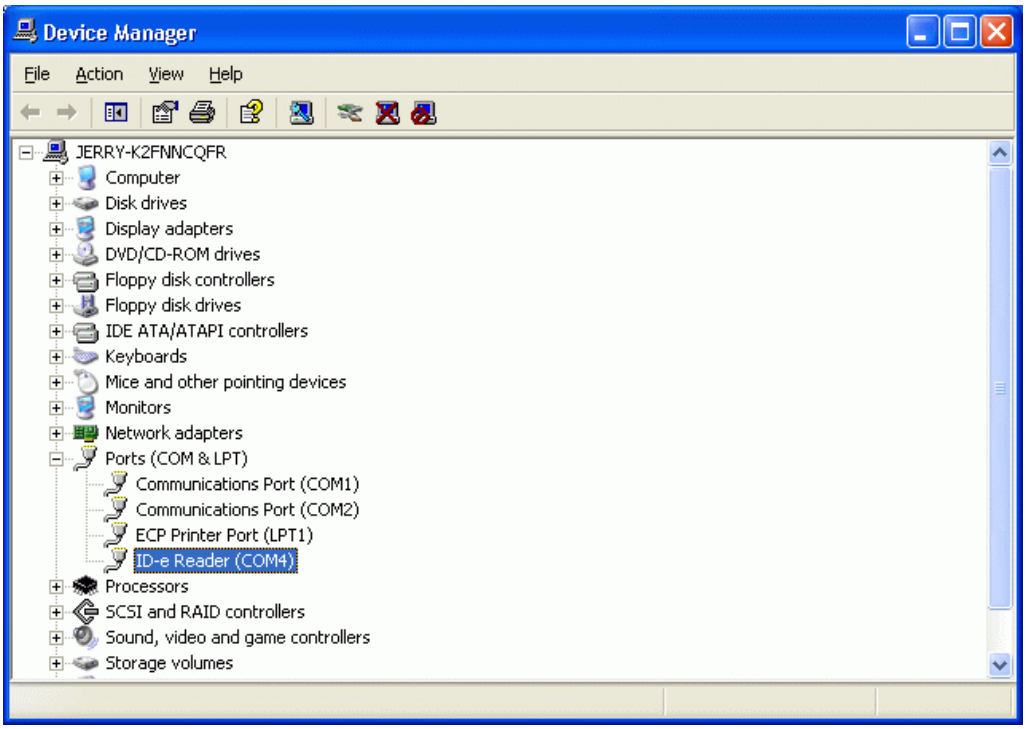
1. Specify the location of USB driver. **(For example: \USB Driver\Win2K_XP)**
2. Click **Next**.

At the time of this product's release, Microsoft strongly encouraged companies to submit their hardware solutions for certification. If a hardware device driver is not submitted, or does not qualify, for Microsoft certification, a warning message appears. You may see this warning message when installing this driver or update. If you do, you may choose to click the Continue Anyway button. We have tested this driver or update on Windows XP, and it does not impair or destabilize your computer.



1. Click **Continue Anyway**.

1. Windows will detect a new USB device. **For example: ID-e Reader.**
2. Click **Finish**.

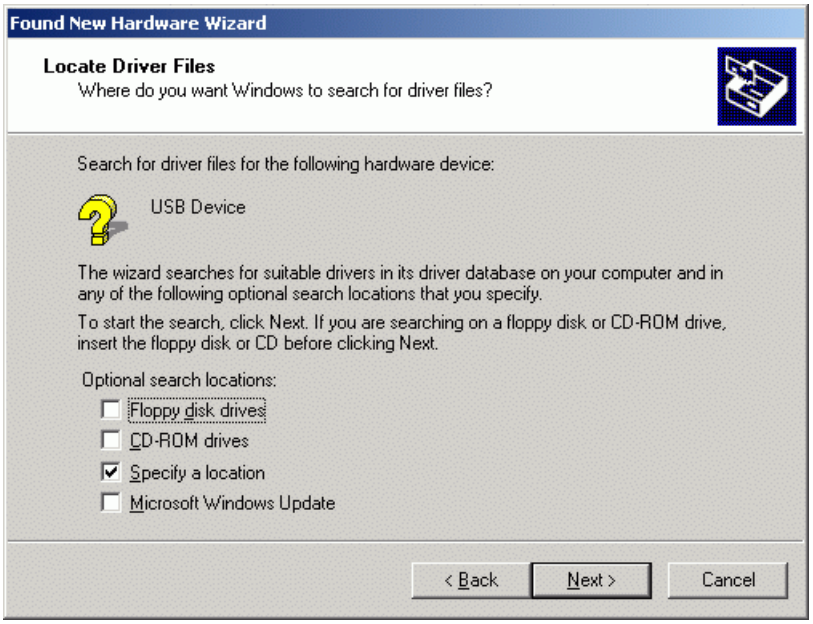


1. If no any virtual COM port is assigned to this device, you may need to re-install the driver.

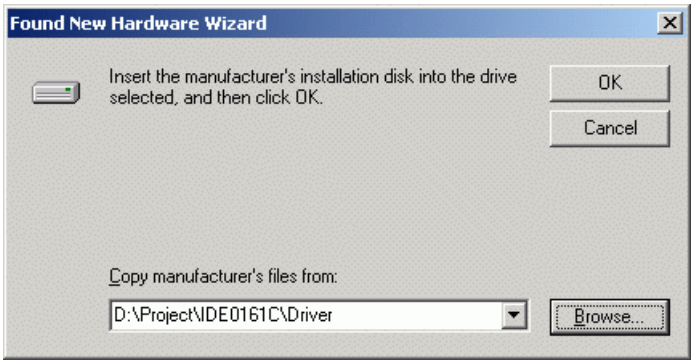
For Windows 2000

1. Click **Next**.

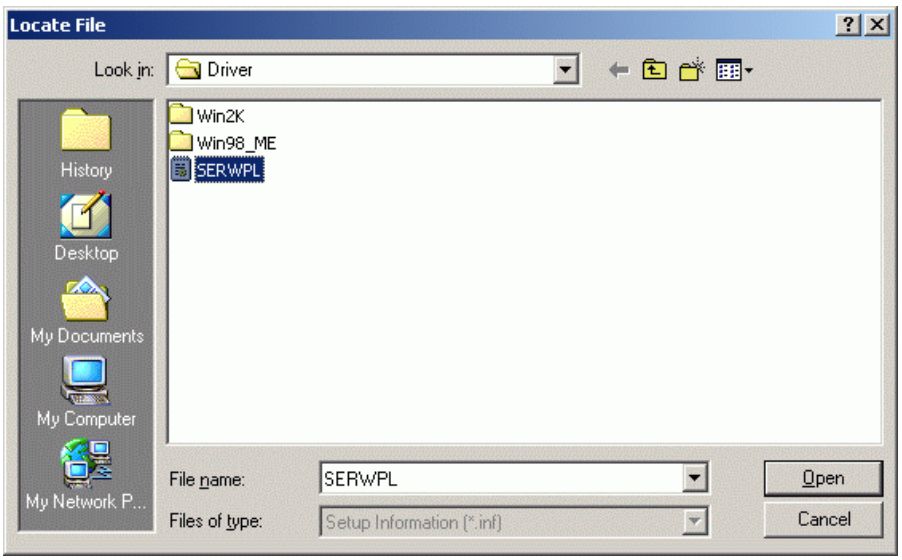
1. Select **Search for a suitable driver for my device**.
2. Click **Next**.



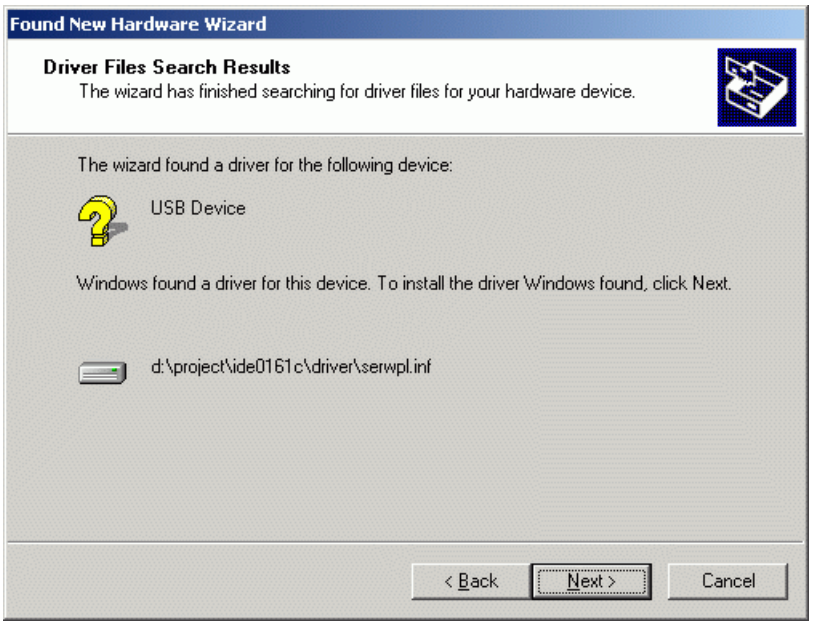
1. Specify the location.
2. Click **Next**.



1. Specify the location of USB driver.
2. Click **OK**.

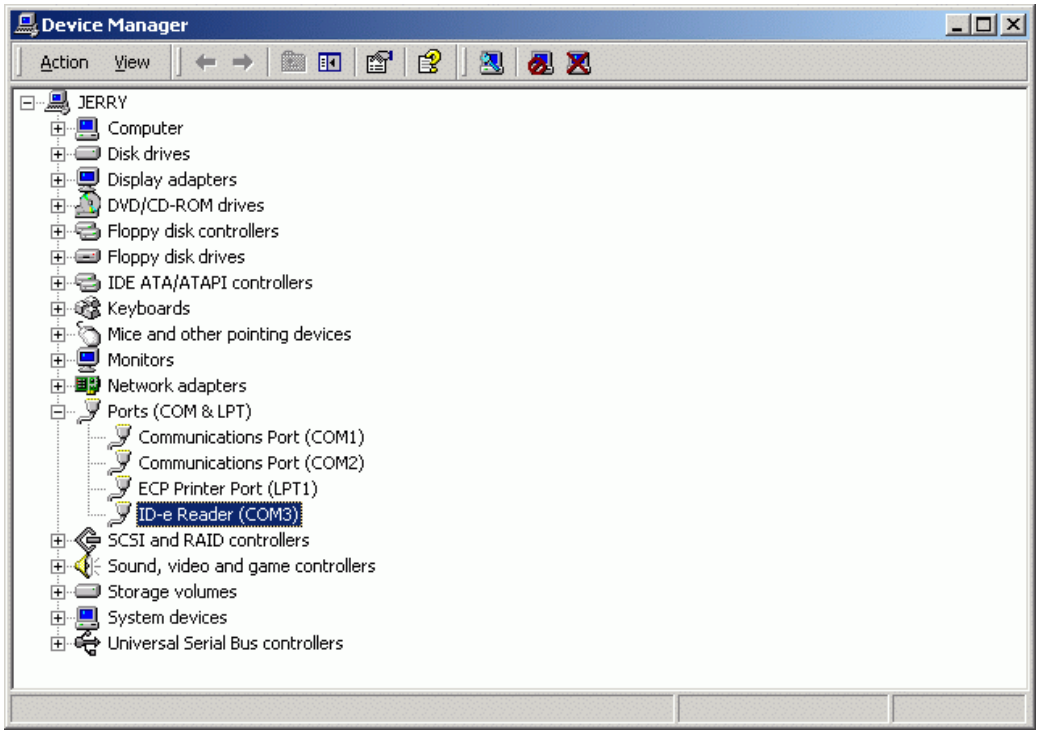


1. Select the file **SERWPL**.
2. Click **Open**.



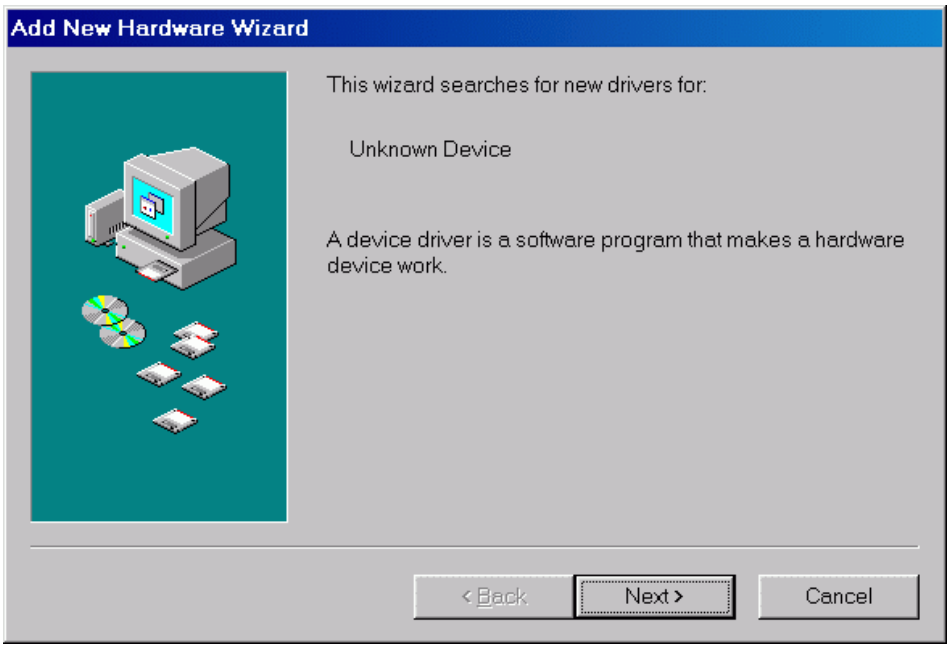
1. Click **Next** to install the driver.

1. Click **Finish**.

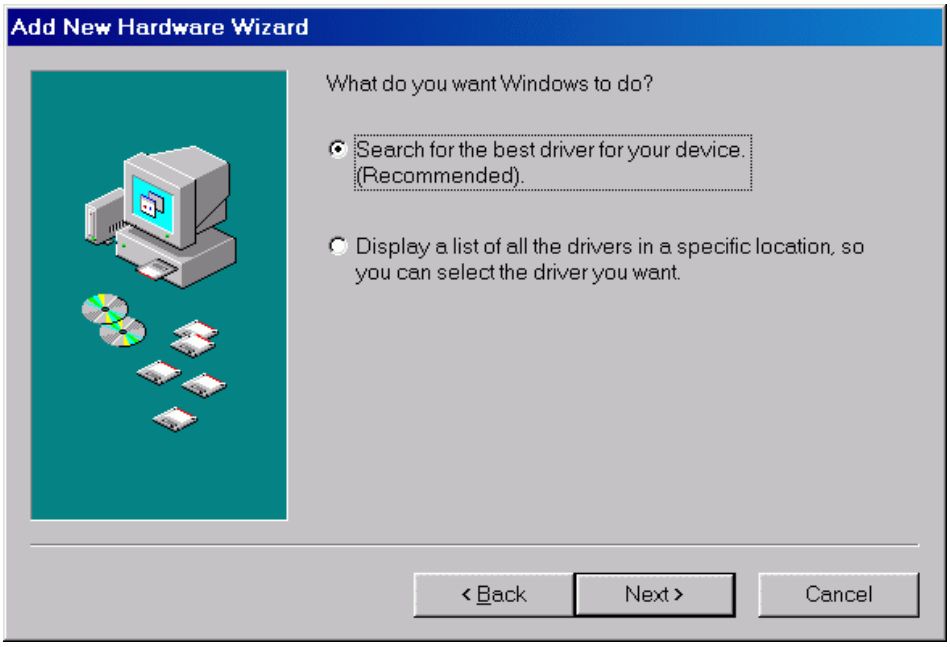


2. If no any comm. port is assigned to this device, you may need to re-install the driver.

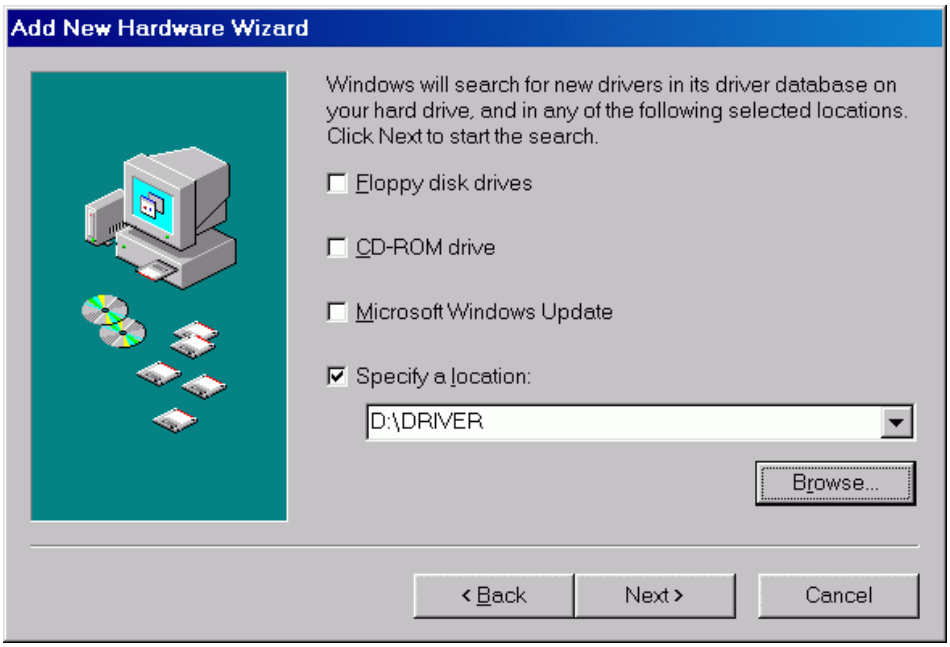
For Windows 98



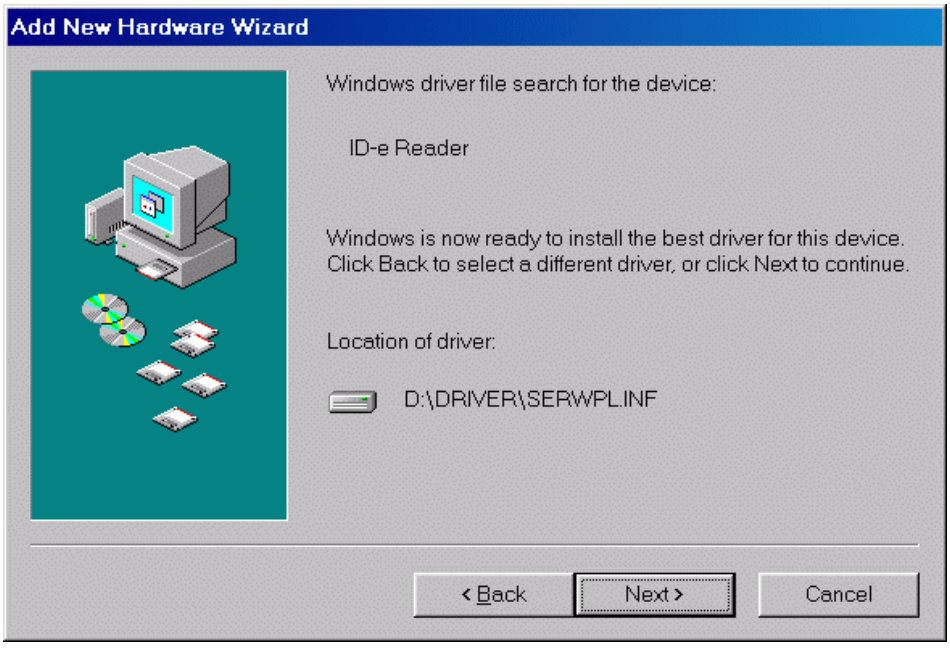
1. Click **Next**.



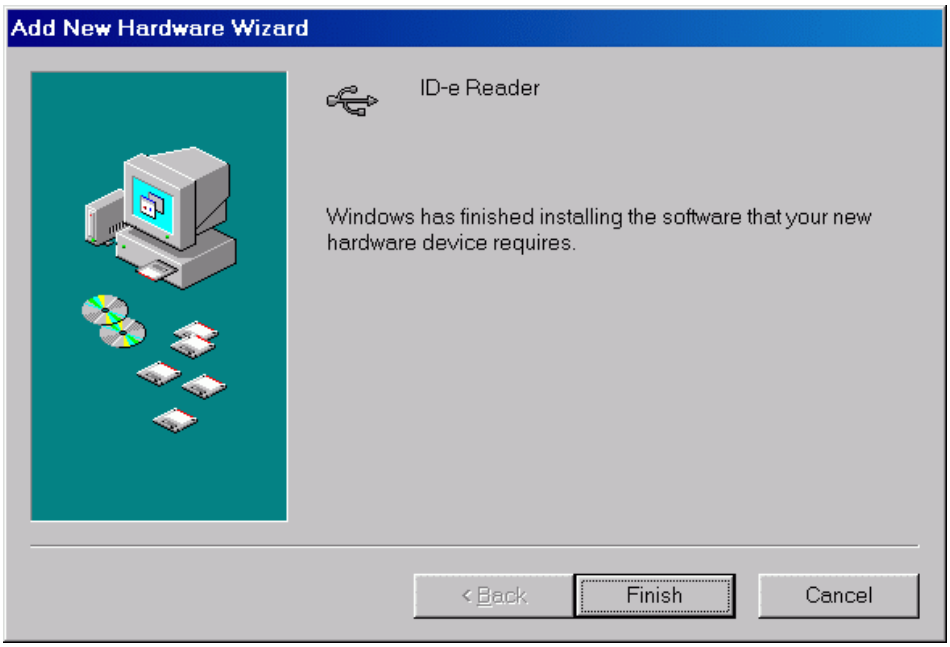
1. Select **Search for the best driver for your device**.
2. Click **Next**.



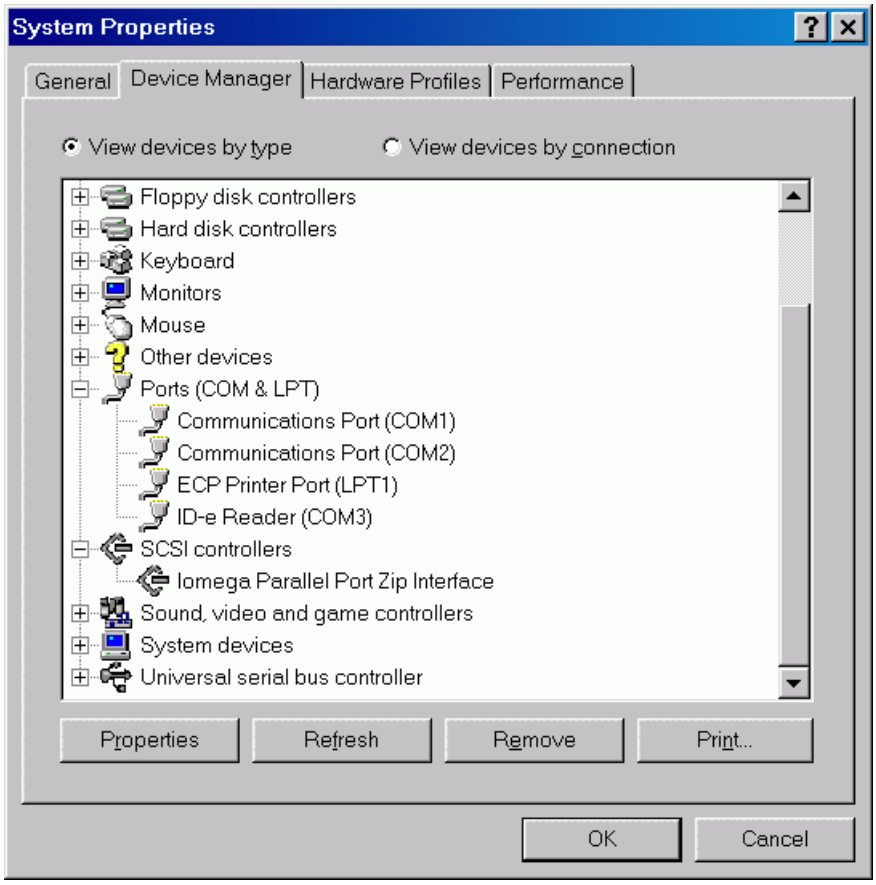
1. Specify the location of USB driver.
2. Click **Next**.



1. You can see a new device of ***ID-e*** Reader.
2. Click **Next** to install the driver.



1. Click **Finish**.
2. When finished, there is one more driver has to be installed.



1. If no any comm. port is assigned to this device, you may need to re-install the driver.

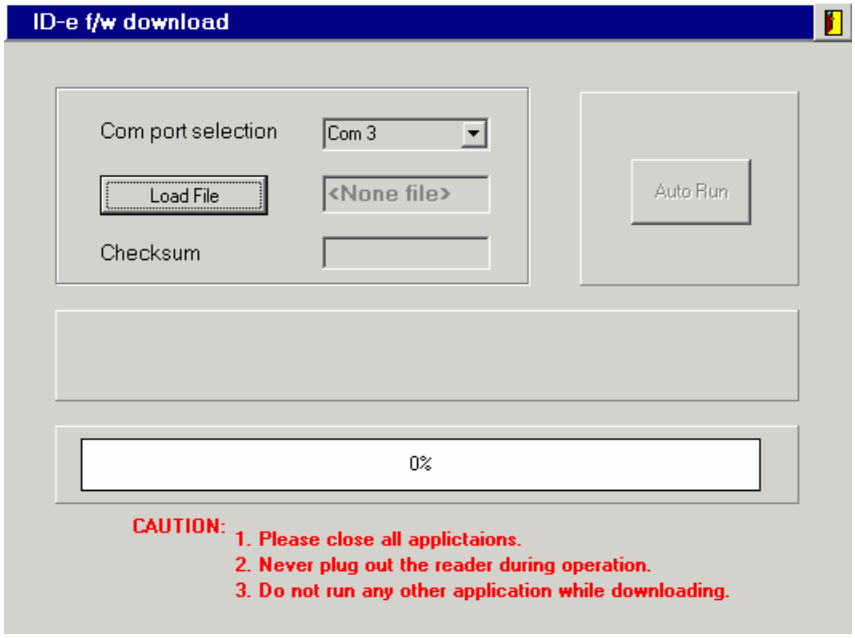
ID-e Firmware Update Instruction

1. Power on ***ID-e***.
2. After you see the firmware version displayed the second the unit boots-up,…for instance IDE01A5F.BIN….. displayed,…. press the correct key sequence to enter download mode. The key sequence for entering boot mode is from the “OFF” position,……..**ENT**,- **ENT** – **UP** – **SET** – **ENT** – **DOWN** – **SET.**
   Note: ***ID-e*** waits about 3 sec. (max) for key entry.

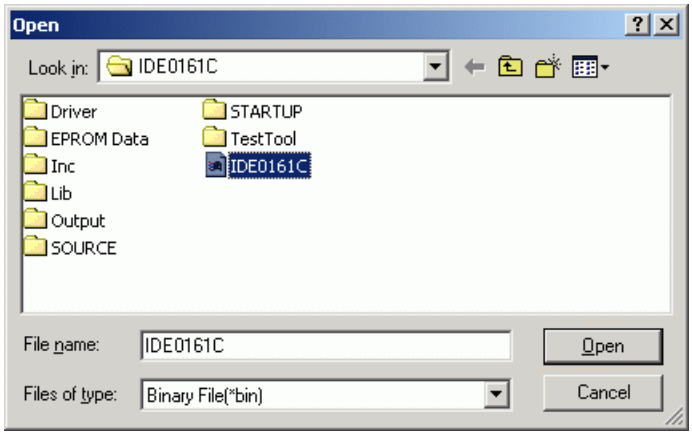
Caution:

If the firmware is corrupt, the firmware version will not be displayed. Power on ***ID-e*** again and press both [SET] & [ENT] key as soon as possible then release. If succeed, ***ID-e*** will display ENTER PASSWORD. The password is same as above. After enter password, the system will be forced to enter download mode.

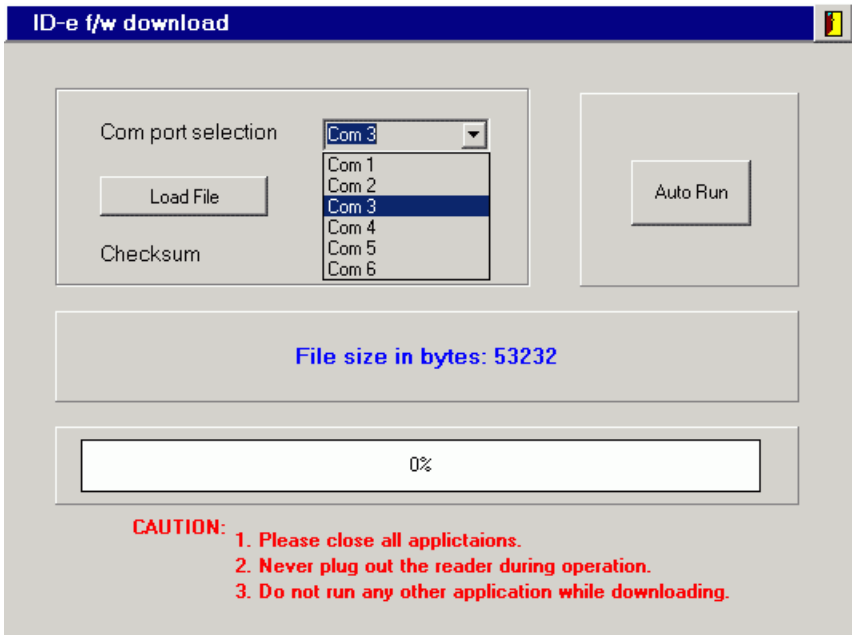
3. ***ID-e*** prompts a dialogue message to make sure that you really want to do that.
4. Press [ENT] to select YES for flash erasing. Otherwise, press [DOWN] key to select “NO” to exit whole process.
5. The firmware will be erased and then display READY FOR DOWNLOAD.
6. Run the download program **IDEDLX1A.exe**
7. Click **Load File.**



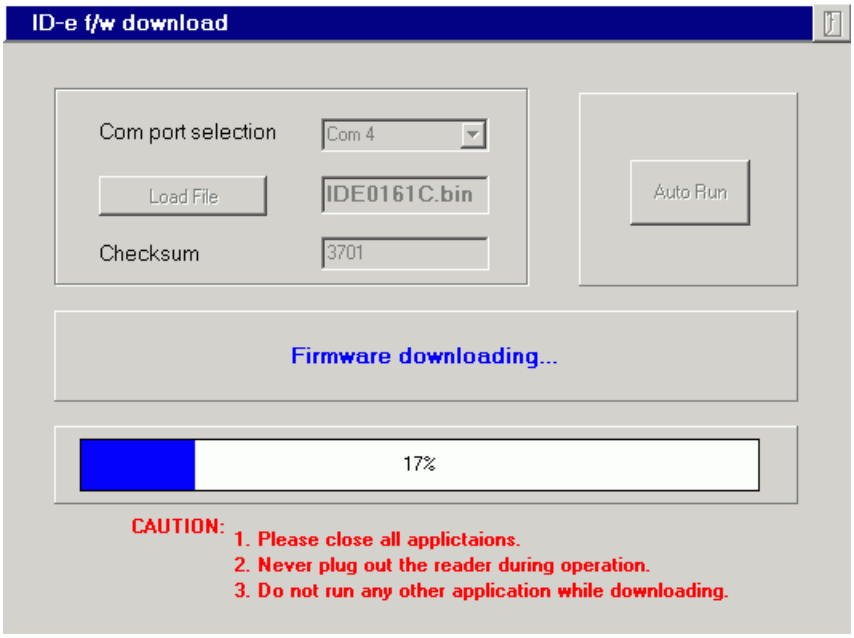
8. Choose IDE01A5H.bin



9. Select the correct comm. port that ***ID-e*** is using.



10. Click Auto Run.



11. When download done ***ID-e*** will power off automatically.
12. Click No to exit.