# JARLTECH

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*Lead with technology*
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# 15"Touch Monitor
# SERIES 8615

**Version 1.0**

**OPERATION**

**MANUAL**

# *Table of Contents:*

| CHAPTER 1 | *Specification Introduction* |

Preview

The new touch monitor, 8615, is designed with the option of integrated Smart Card Reader and Magnetic Stripe Reader. This is leading new edge of fully functional touch monitor with various options to countless market sectors.

8615 gives new impressed image to user that is friendly MSR swipe angle. The 45 degree angle design is based on the user of humanized aptitude. It's the factor of 8615 that can easy to swipe and insert the smart card. It's another advantage is the flexibility of the adjustable stand suits for a variety of industries and applications.
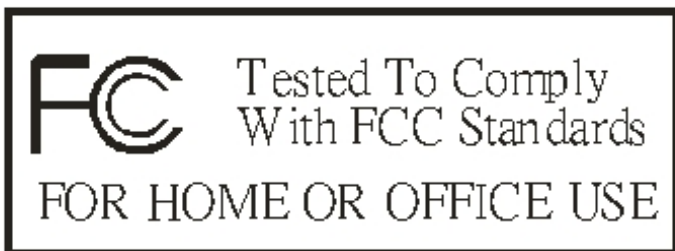
A WORLD OF POS & AUTO-ID SOLUTION

Touch POS

I-button Reader

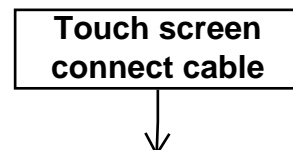Programmable Keyboard
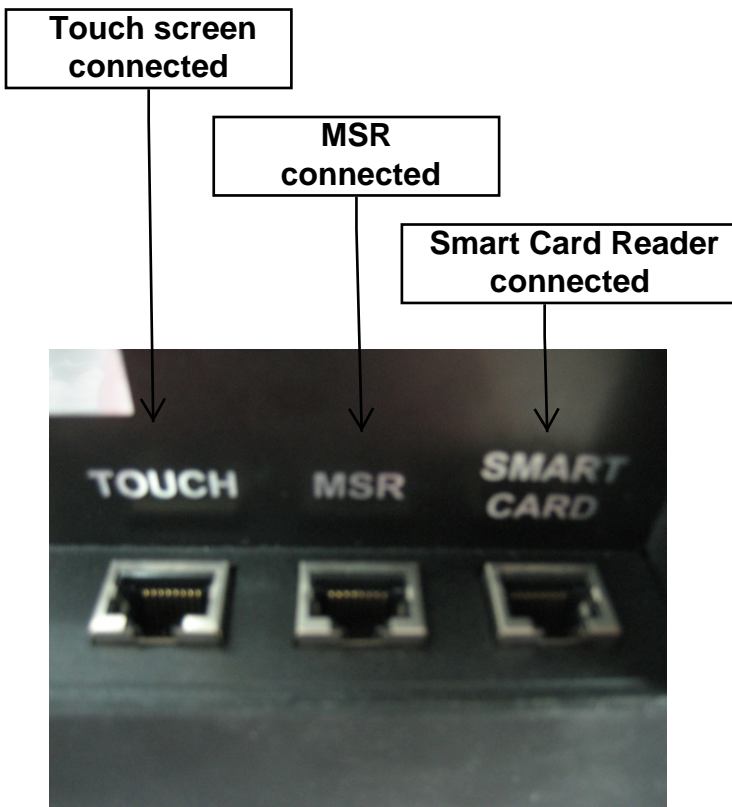
Customer Pole Display

Magnetic Stripe Reader/Writer

| CHAPTER 2 | *Appearance* |

**Touch Monitor**

**SmartCard Reader**

**LED Indicator: Standby or not**

**LED Indicator: Power ON/OFF**

**Magnetic Stripe Reader**

**Power Button**

**Power adapter**

**VGA port**

**Touch screen connected**

**MSR connected**

**Smart Card Reader connected**



**Touch screen connect cable**



**MSR & Smart Card Reader connect cable**
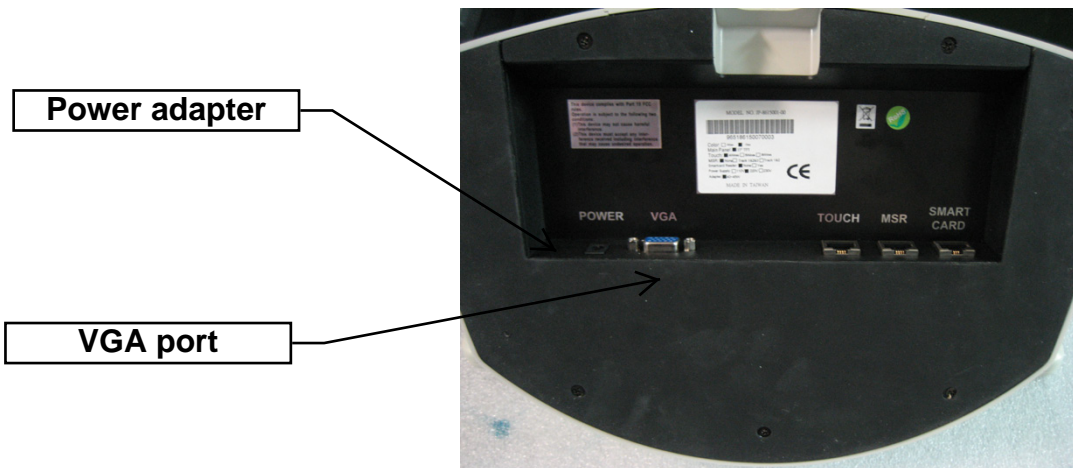
## CHAPTER 3    *OSD Setting*

There are four buttons on OSD panel:  Menu / Enter, Right, Left and LCD
ON/OFF.  The functions of these four buttons are as follows

**Menu/Enter** Button
> Press it to open OSD window and enter "User Mode" to do the
> function adjustment or selection of the item.  It may have many levels
> in one item.  As you select this kind of item, you will enter   the next
> level and see the sub-items.

**Right** Button
> Press it to Scroll item "Right" or decrease the value or switch the
> selected item to another.

**Left** Button
> Press it to Scroll item "Left" or increase the value or switch the
> selected item to another.

**Auto** Button
> Press it to Auto image adiust.

**LCD ON/OFF** Button
> Control LCD ON/OFF button

### OSD Menu Structure

### Main Menu

If press the " MENU" key, the screen will appear this main menu page, you can use the "UP" or "ADJ. +" and "Down" or "ADJ. –" key ( Pic1 )
to select the function you need.



PIC1

The end of this page will be shown the working resolution and frequency.


A.Auto Adjust

Press the Auto key. ( PIC2 )

In this function, it will be activated the auto adjusting for the picture.



PIC2

B..BRIGHTNESS

   If select BRIGHTNESS function on OSD MAIN MENU and press the MENU key.（PIC3）

  You can press ADJ+ or ADJ- key to increase or decrease backlight current of the inverter.



PIC3

C. CONTRAST

    If select CONTRAST function on OSD MAIN MENU and press the MENU key. ( PIC4 )

    You can press ADJ+ or ADJ- key to increase or decrease video gain of the picture.



PIC4

D. COLOR TEMPERATURE

   If You select COLOR TEMPERTURE function on OSD MAIN MENU
   and press the MENU key.

   In this function, it will enter into the sub-page ( PIC5 ) to adjust the display

   color of the picture



PIC5

E. Management

   If select DISPLAY ADJUST function on Management and press the MENU key.
   In this mode, it will enter into the sub-page ( PIC6 ) to adjust display' s
   function of the picture.



PIC6

**8**

E-1. H-Position

    In this function, it could adjust the picture in horizontal position.



E-2. V-Position

    In this function, it could adjust the picture in vertical position.



E-3. Sharpness

    In this function, it could adjust the sharpness of the picture.

E-4. PHASE

In this function, it could adjust the clock phase of the picture.



E-5. CLOCK

In this function, it could adjust the clock frequency of the picture.

## F. Tools

If select OSD DISPLAY function on OSD MAIN MENU and press the MENU key. this function will enter into the sub-page to adjust the display' s function for OSD.

```
          800x600   60Hz

  📺  OSD H.Pos.
  🖥  OSD V.Pos.
  🌐  Language
  ⏳  OSD Timer
  ⓘ  Reset



  MENU :ENTER           AUTO :EXIT
```

## F-1. OSD H-Pos

In this function, it could adjust the horizontal position of OSD display.

```
          800x600   60Hz

  📺  OSD H.Pos.
  🖥  OSD V.Pos.
  🌐  Language
  ⏳  OSD Timer
  ⓘ  Reset


  [==============        ]      50
  MENU :ENTER           AUTO :EXIT
```

## F-2. OSD V-Pos

In this function, it could adjust the vertical position of OSD display.

```
          800x600   60Hz

  📺  OSD H.Pos.
  🖥  OSD V.Pos.
  🌐  Language
  ⏳  OSD Timer
  ⓘ  Reset


  [==============        ]      50
  MENU :ENTER           AUTO :EXIT
```

F-3. LANGUAGE

In this mode, it could enter into the sub-page to select the language for display.



F-4. OSD TIMER

In this function, it could adjust the time of OSD display.
Except "0" is always display.



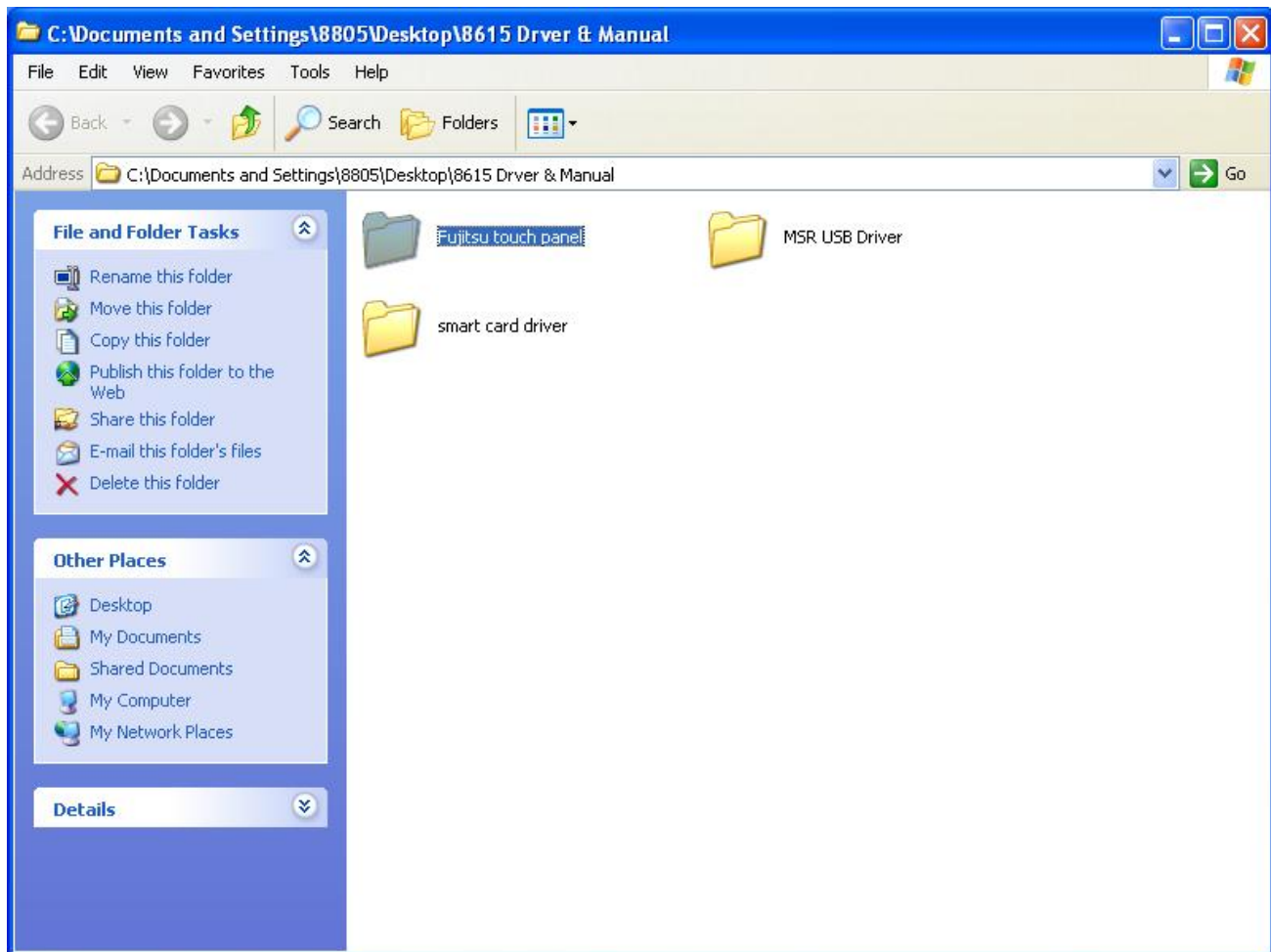F-5. Reset

In this function, it could reset all setting.
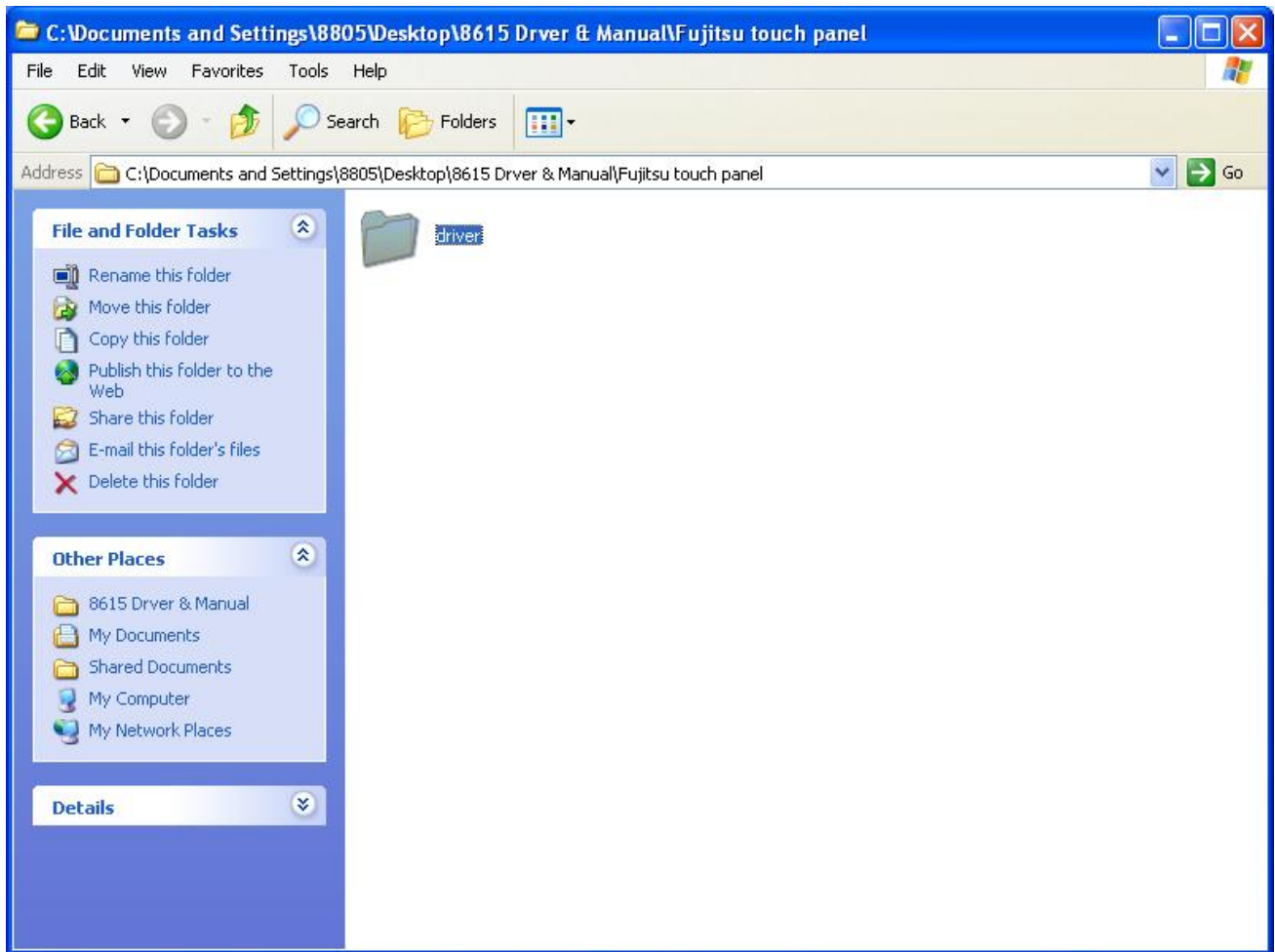


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CHAPTER 4

## *Driver Installation*

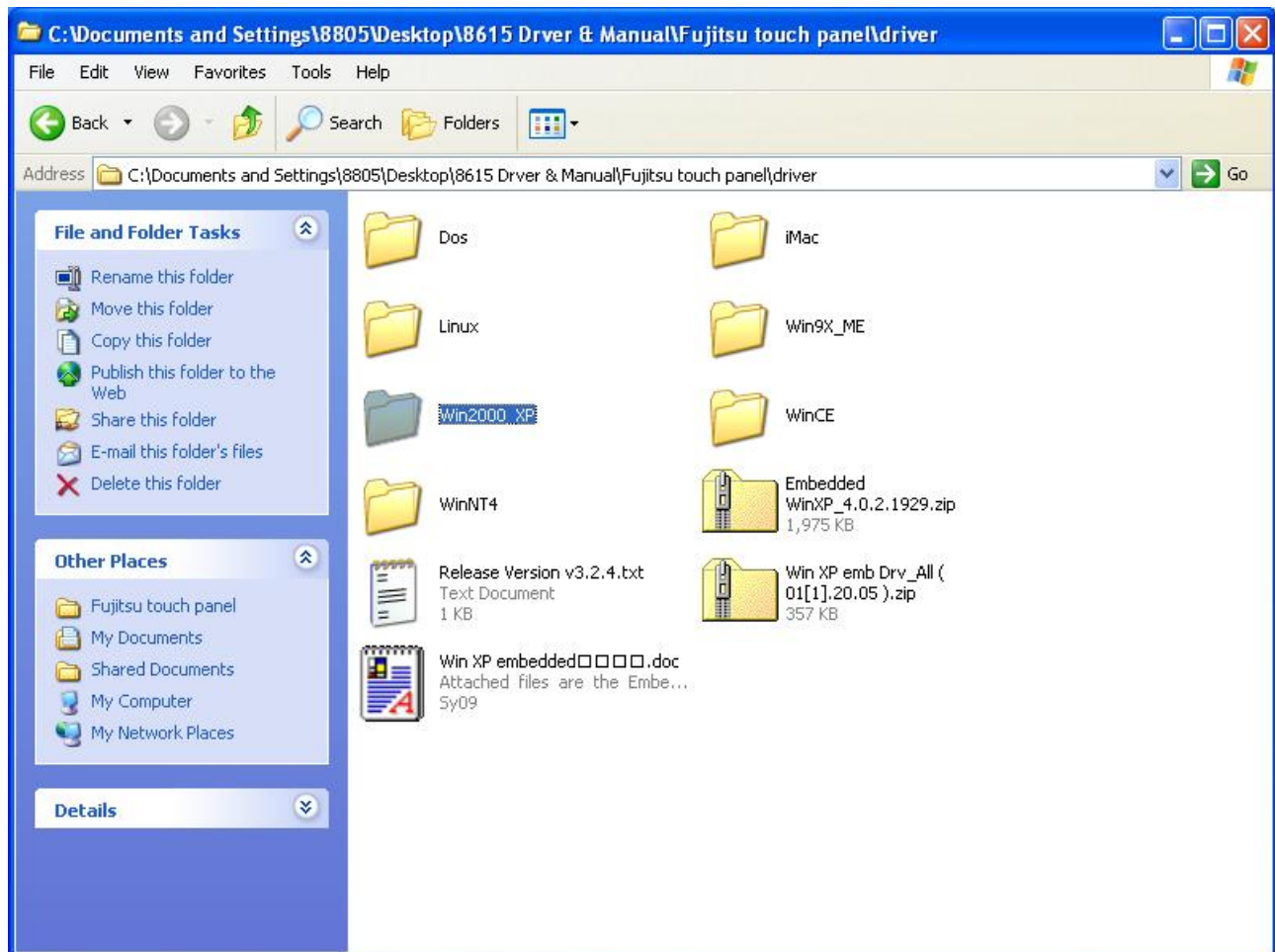## Touch Drivers



**Insert CD-ROM and select 8615 driver & manual folder.**
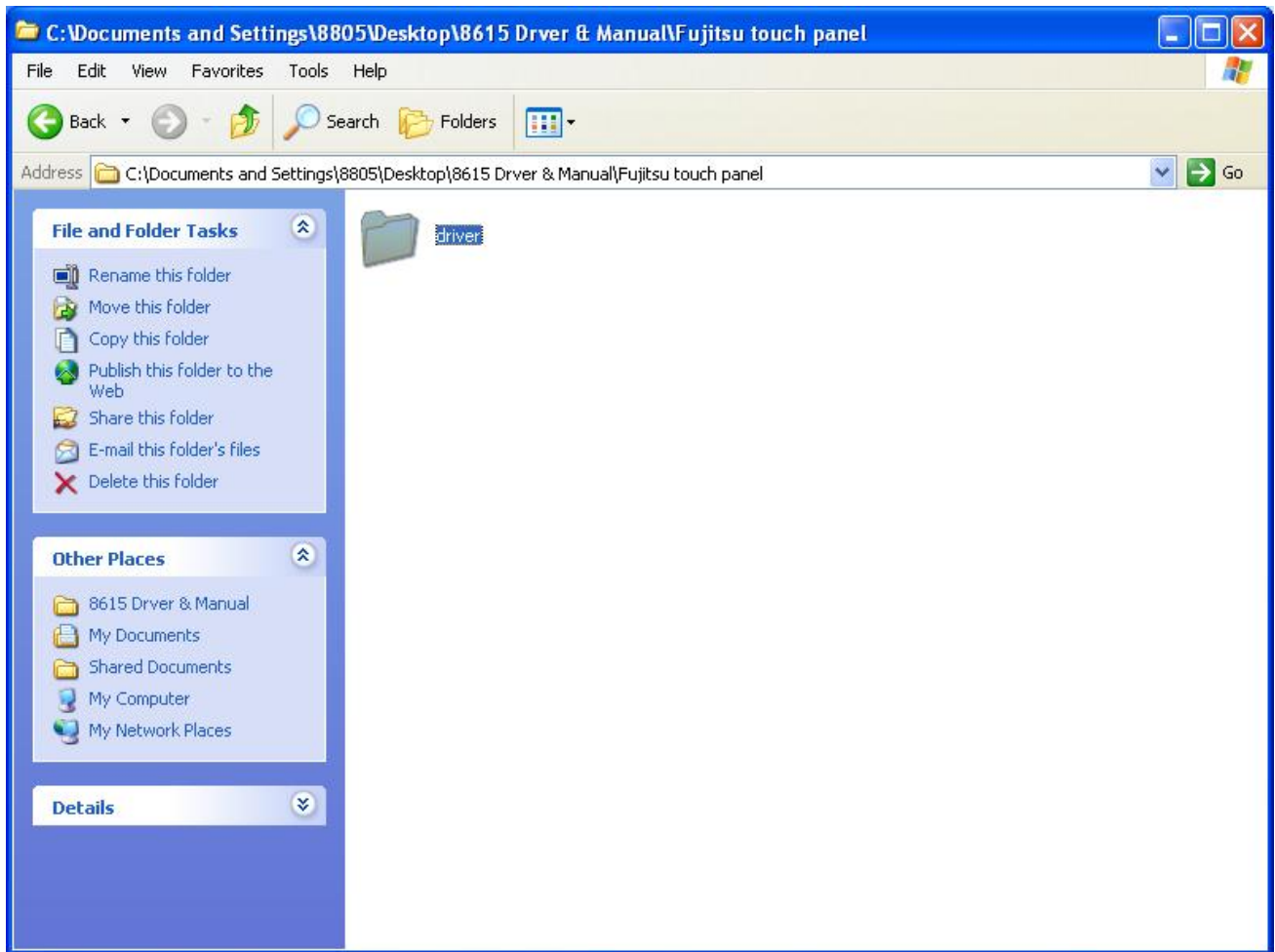
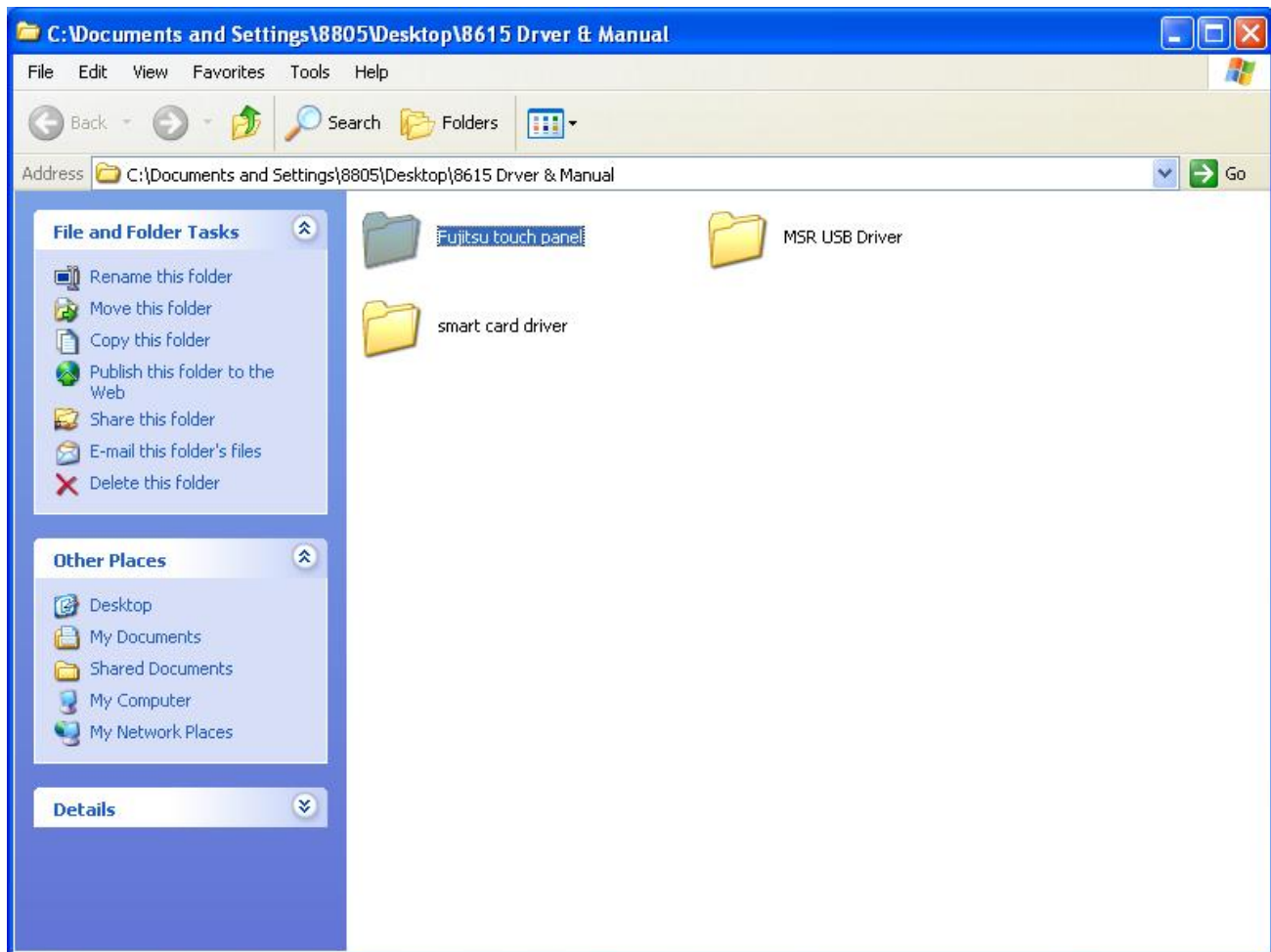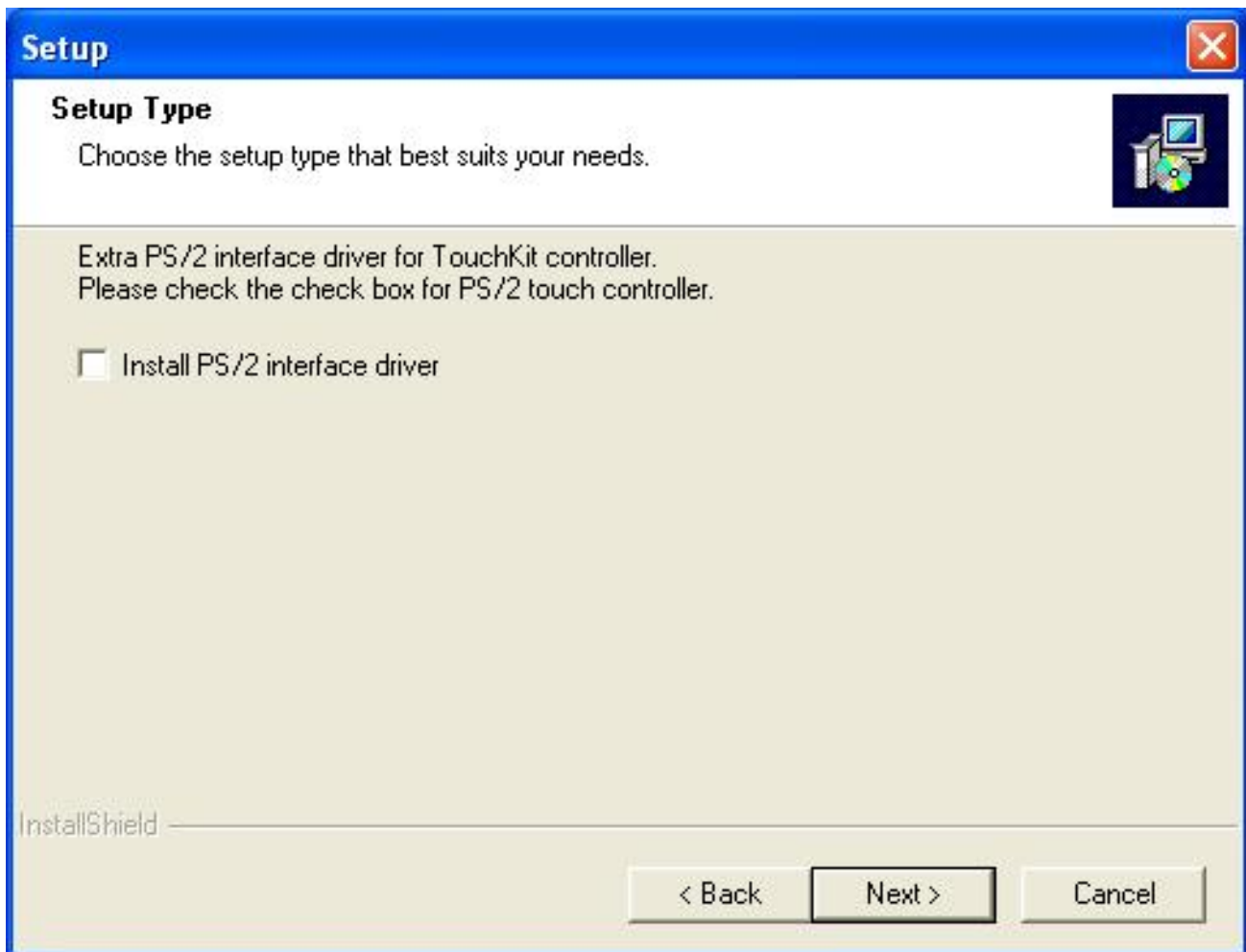**Select Fujitsu Touch driver folder.**

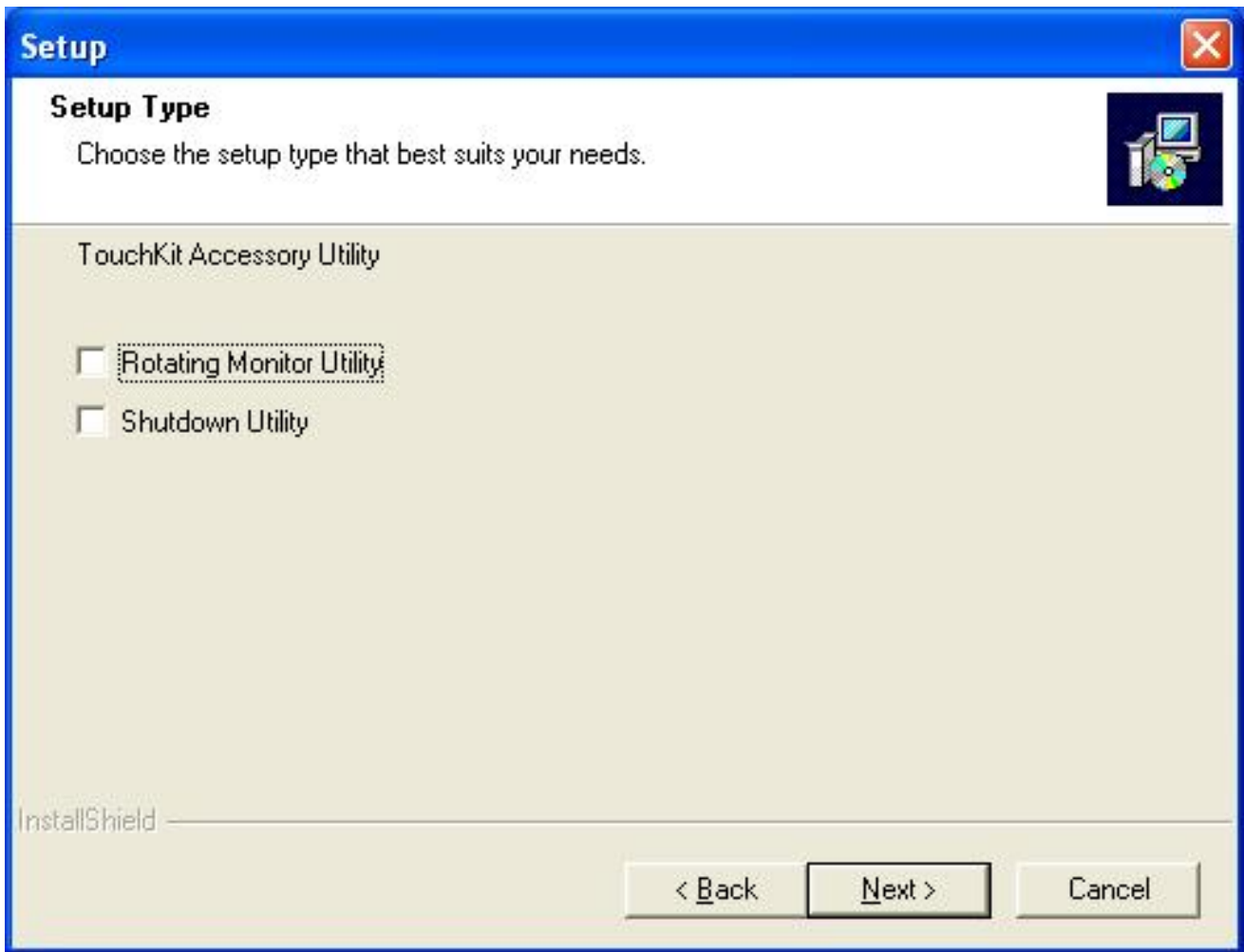**Select driver folder.**

**Select Win2000_XP folder.**
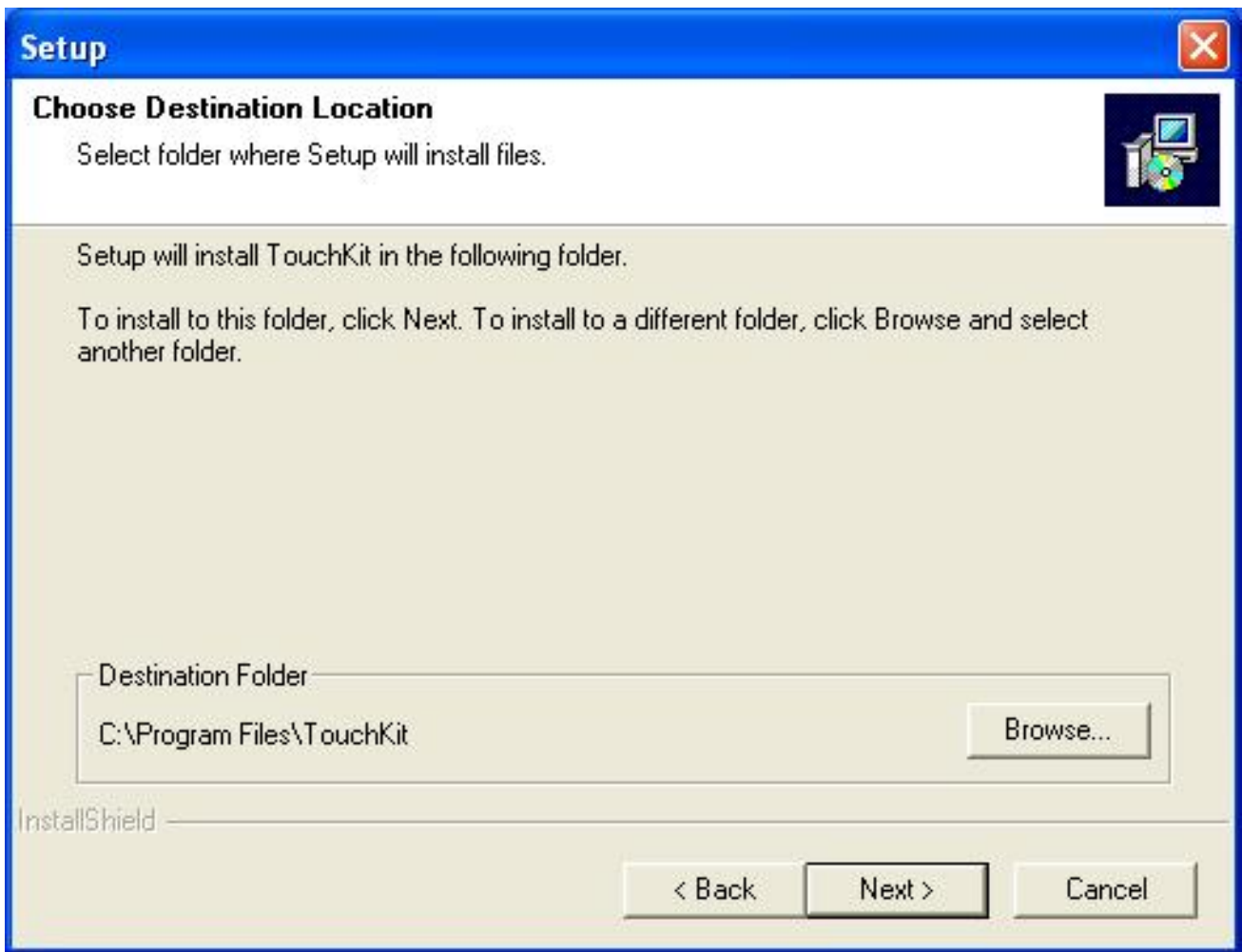
**Select driver folder.**
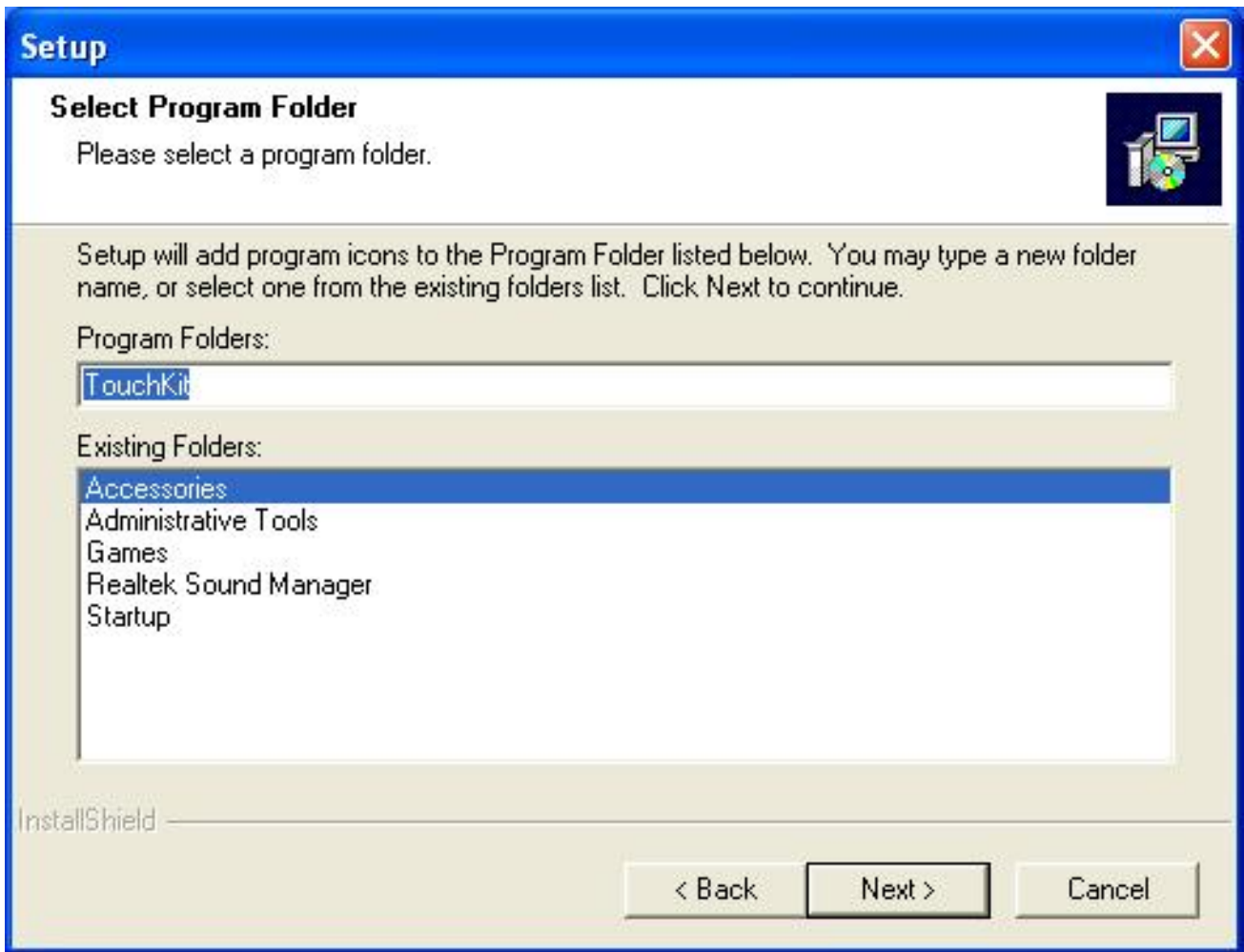
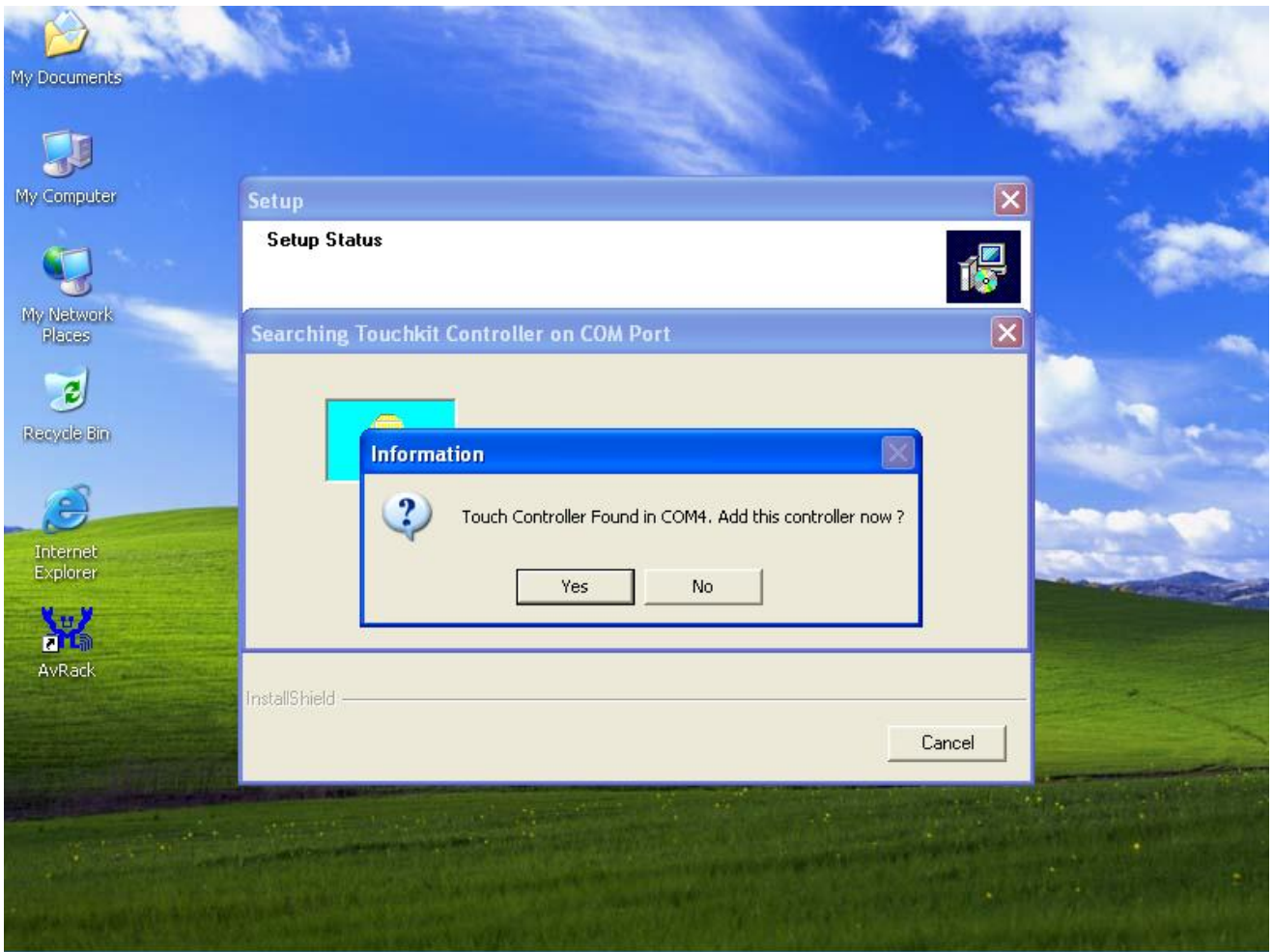**Select Fujitsu Touch driver folder.**

**When the setup screen appears then to select next step.**

**When the setup screen appears then to select next step.**

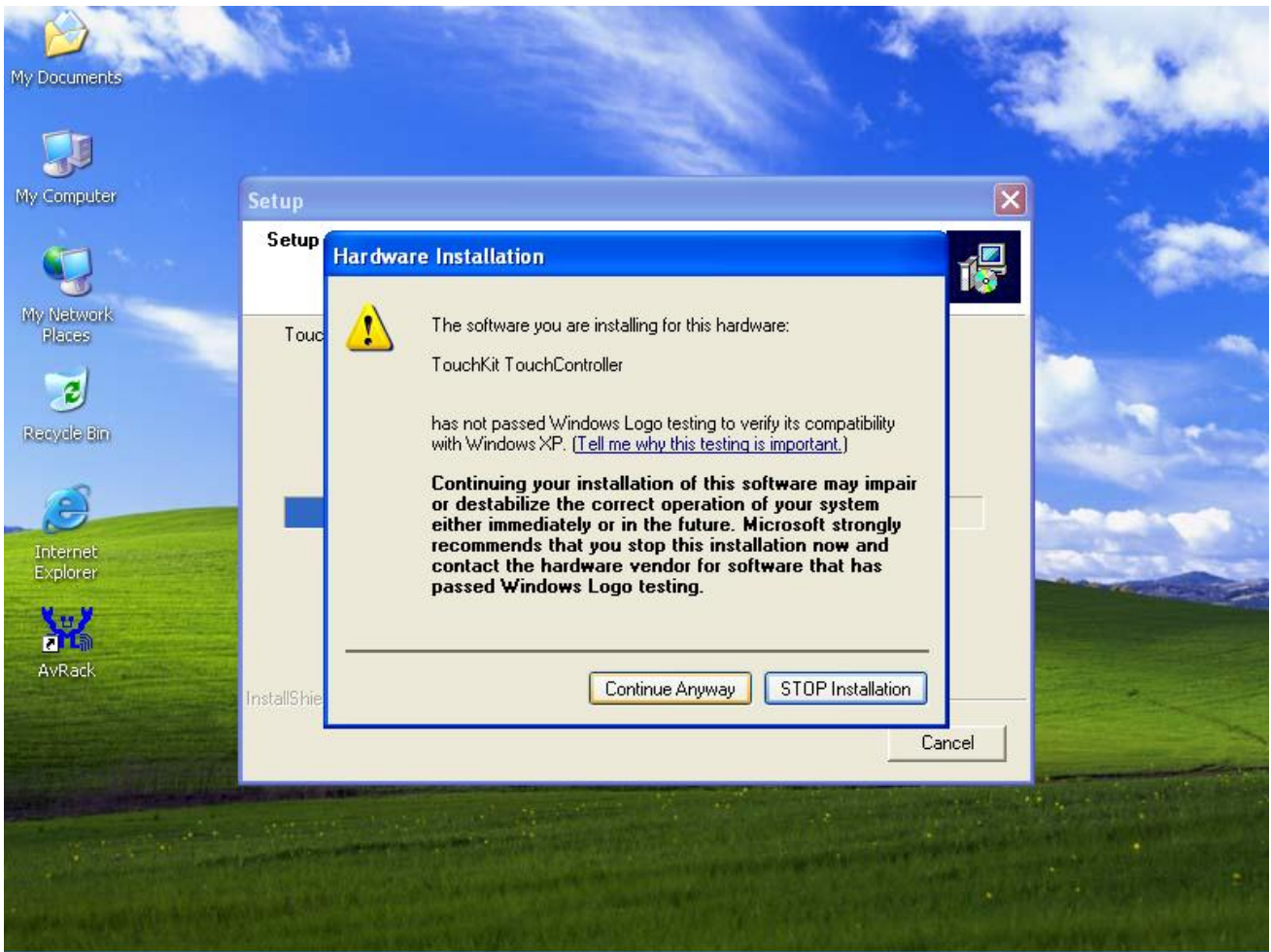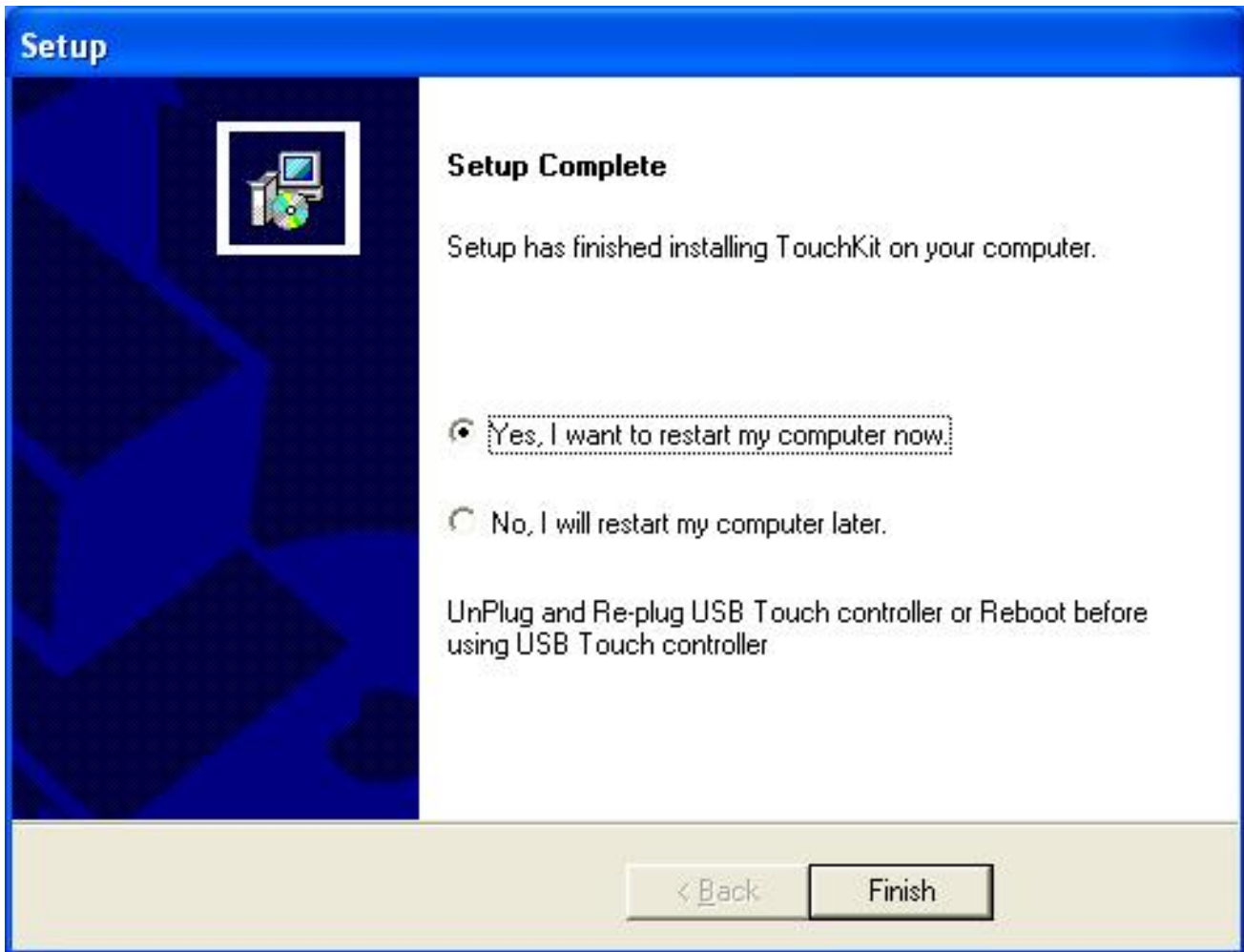**When the setup screen appears then to select next step.**

**When the setup screen appears then to select next step.**

**When the setup screen appears then to select " YES".**

**When the setup window appears then to select the "Continue Anyway".**

**Setup**

**Setup Complete**

Setup has finished installing TouchKit on your computer.

○ Yes, I want to restart my computer now.

○ No, I will restart my computer later.

UnPlug and Re-plug USB Touch controller or Reboot before using USB Touch controller

< Back    Finish

**After installation, system will require to restart, please select " YES."**

**When first time completes Touch installation, require to process the cursor accuracy calibration, to search for the Touchkit utility shortcut on the desktop and select Touchkit utility to setup.**
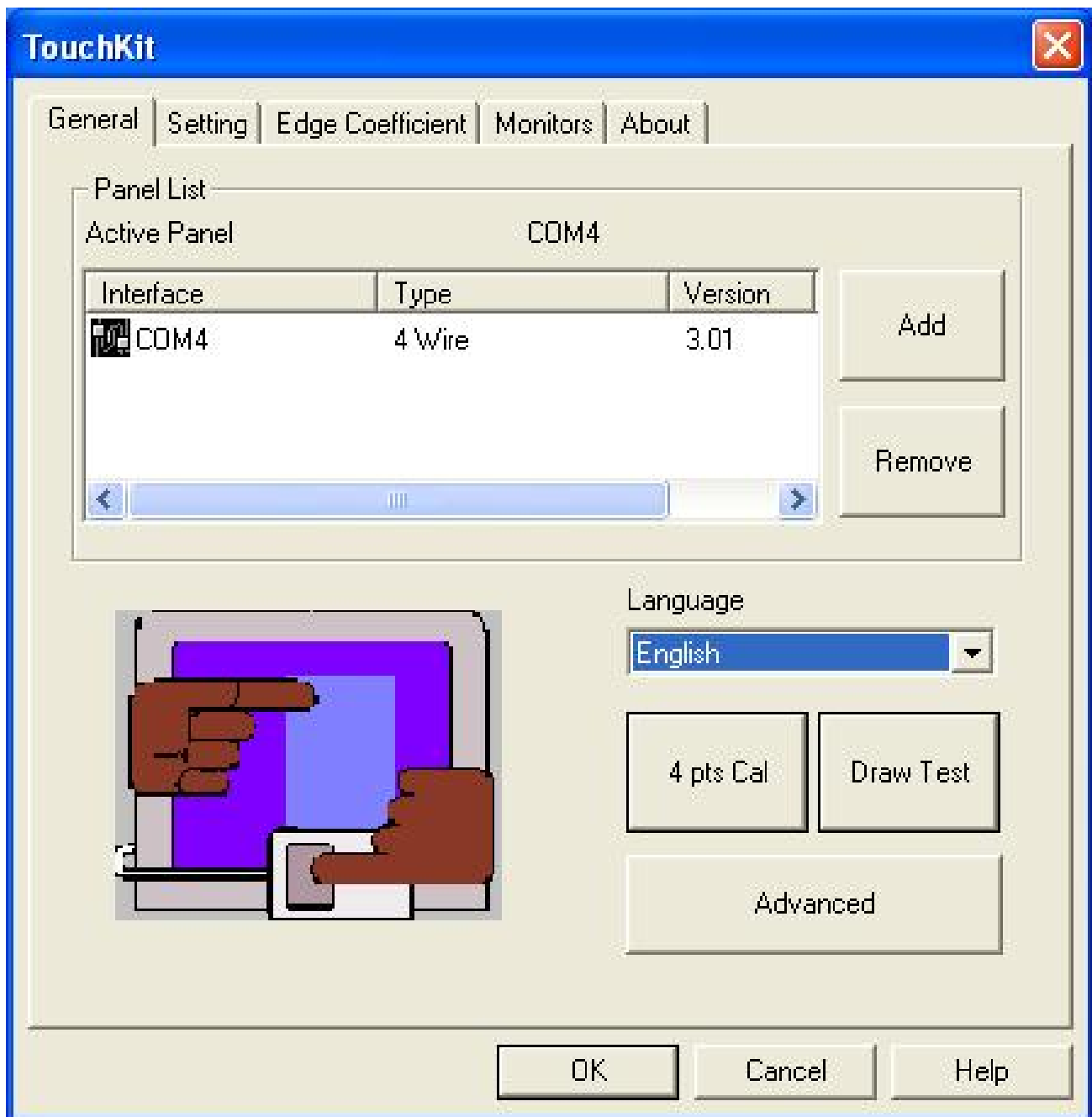
**When configuration window appears, select the language which you use.**

**(As above selected picture explanation)**
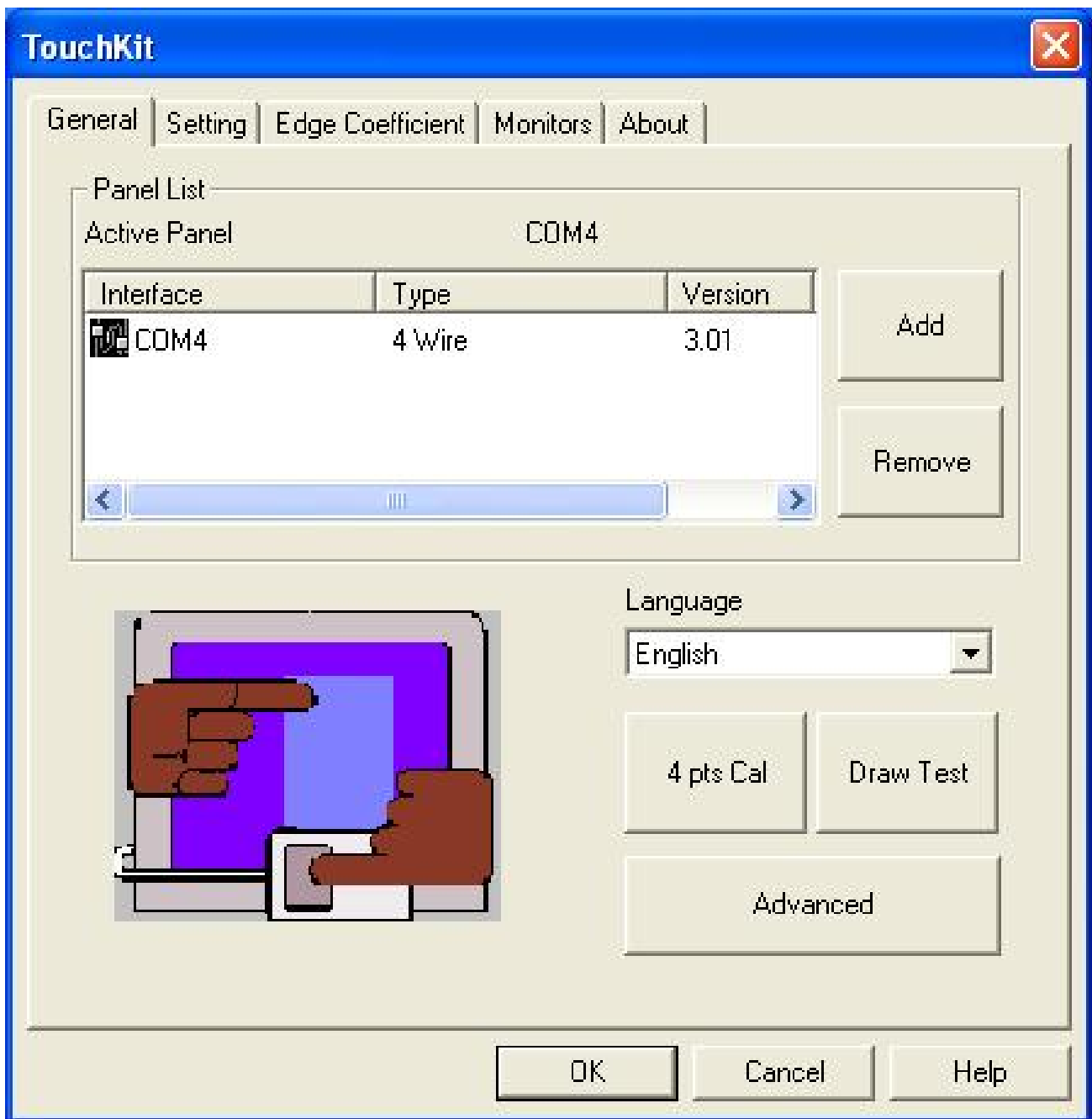
**Then to select calibration function and numbers of calibration point in advance.**

**(above picture shows select by 25 numbers) Next to click on calibrate button.**

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Please touch the blinking symbol until stop blinking.

✕

**The screen will show as above picture, use the Touch pen to point on dot and align the cursor, if the actual alignment has too much difference then the system will skip back to previous screen and require calibration again.**

Please touch the blinking symbol until stop blinking.
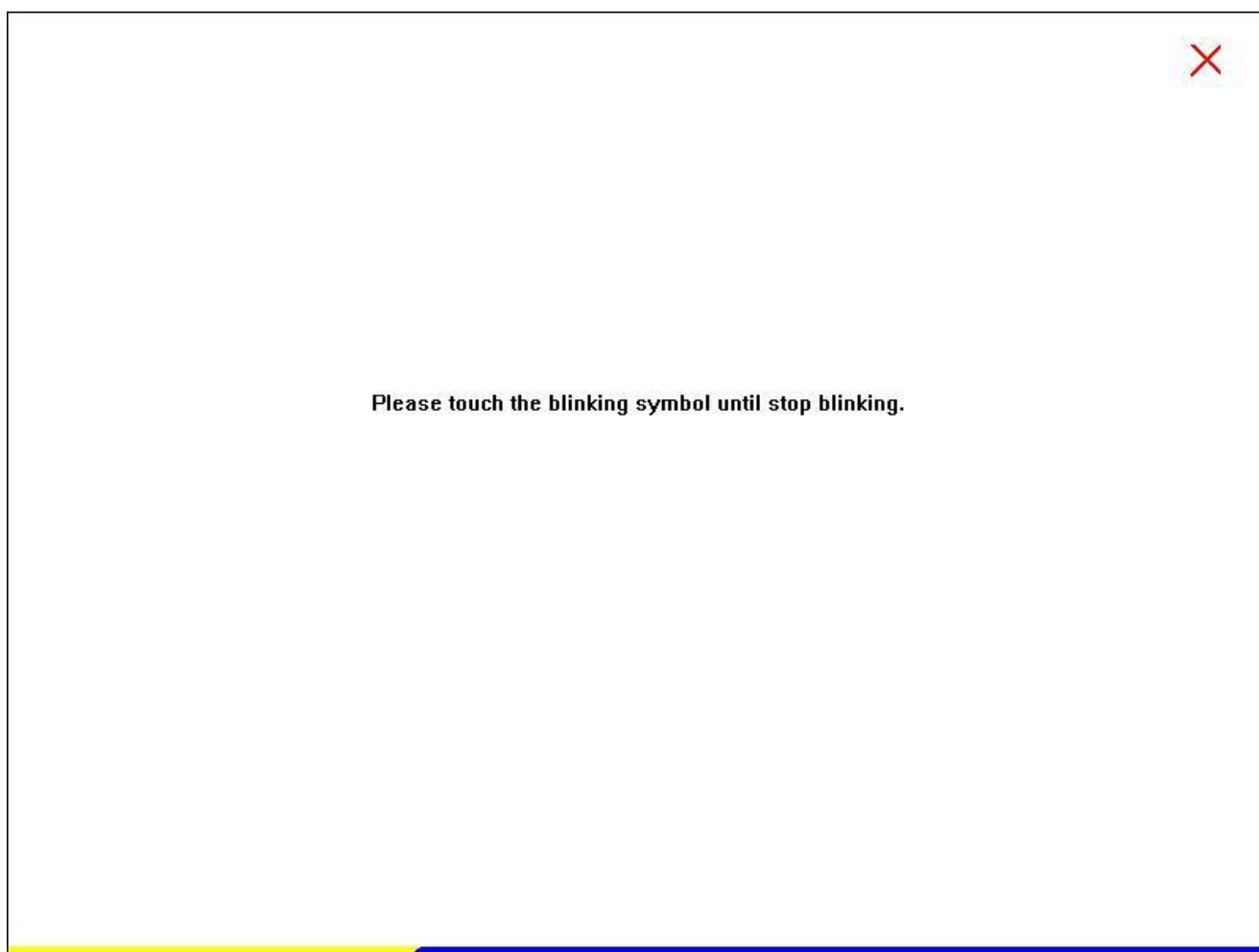
**The numbers of the calibration point shows on the screen will depend on the number you have set before, after complete system will skip back to desktop (if the cursor still not accurate, please repeat the calibration again).**
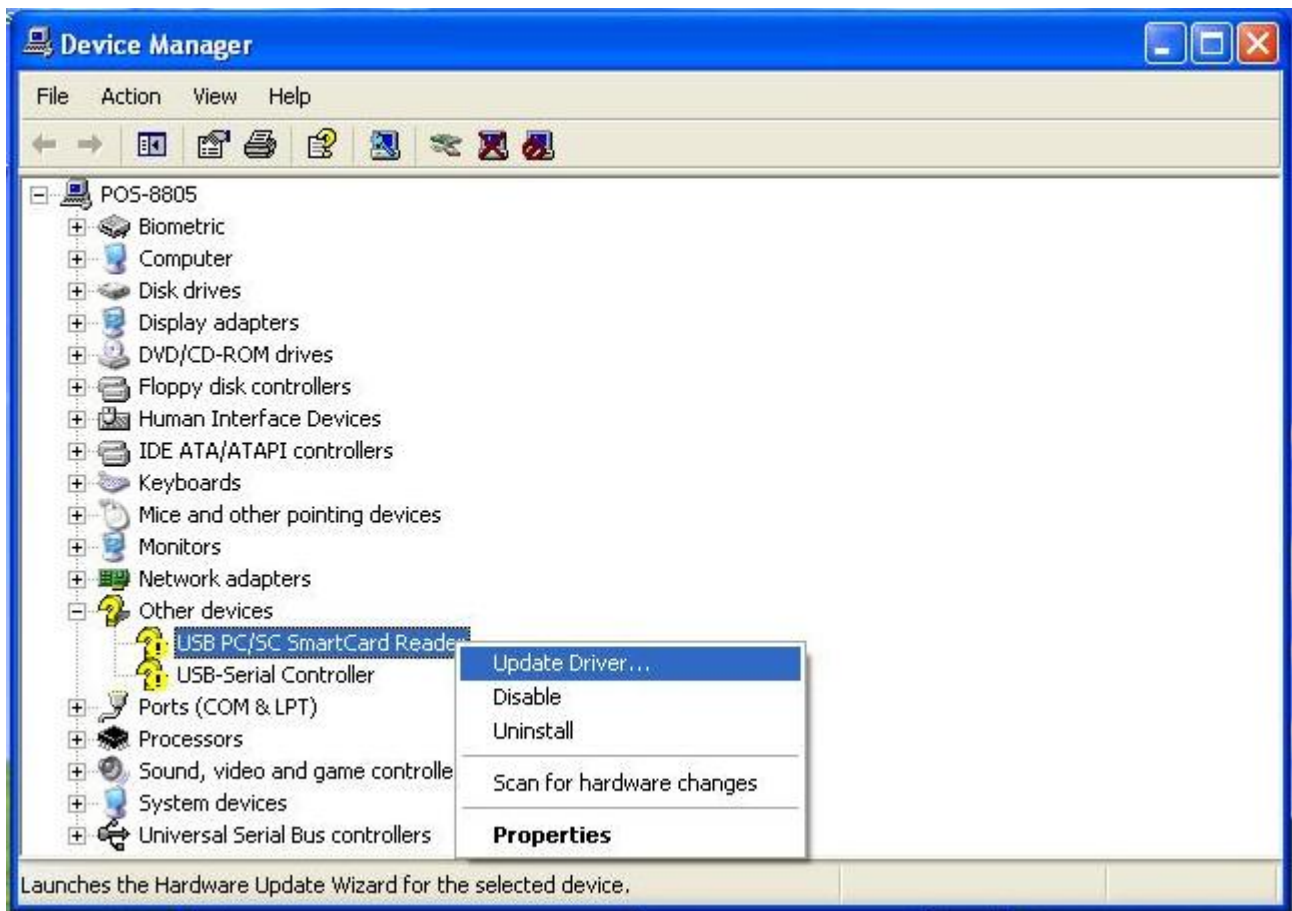
### SmartCard Reader Driver



**Point to " My computer" and press " Right Click". Please select " Properties."**
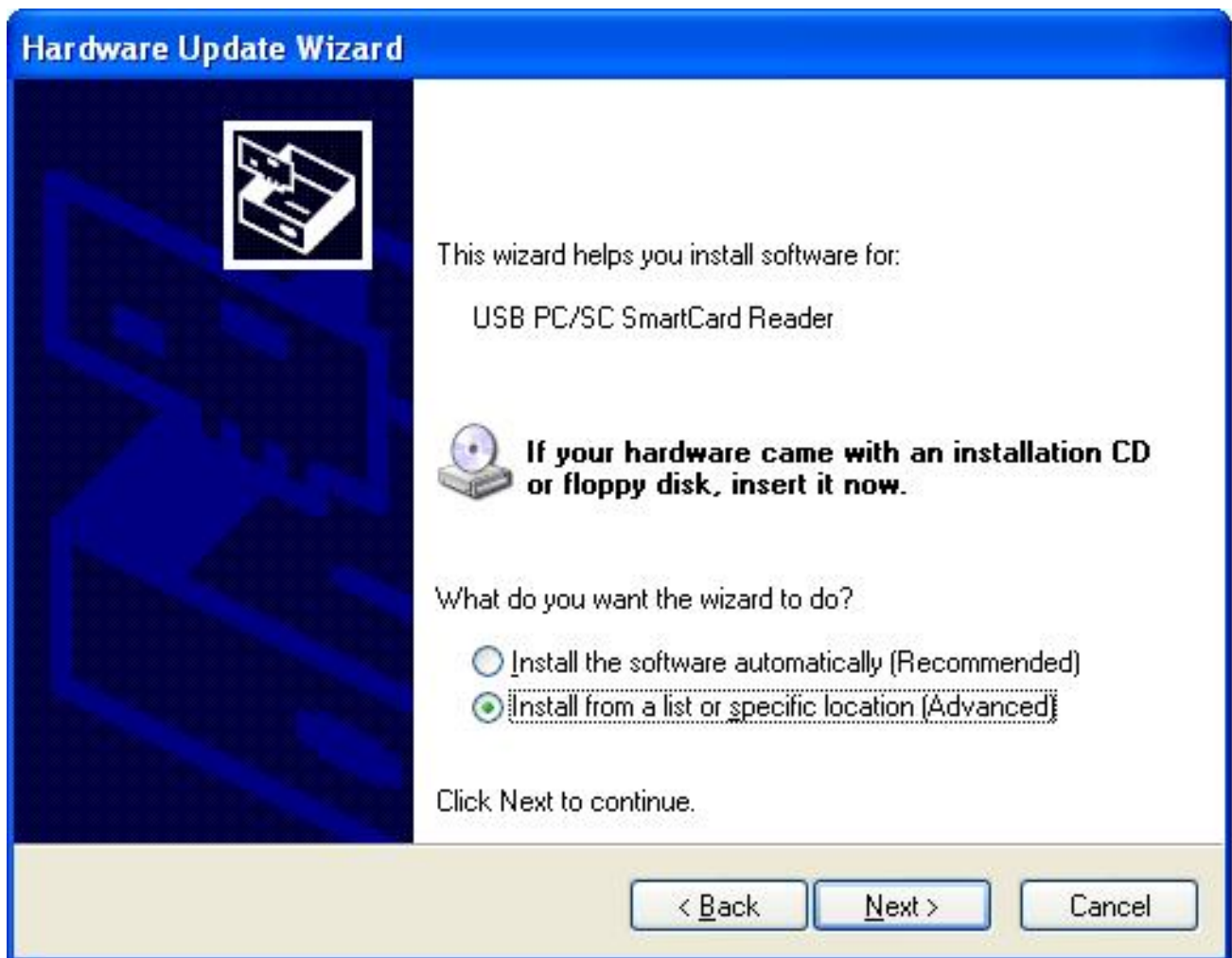
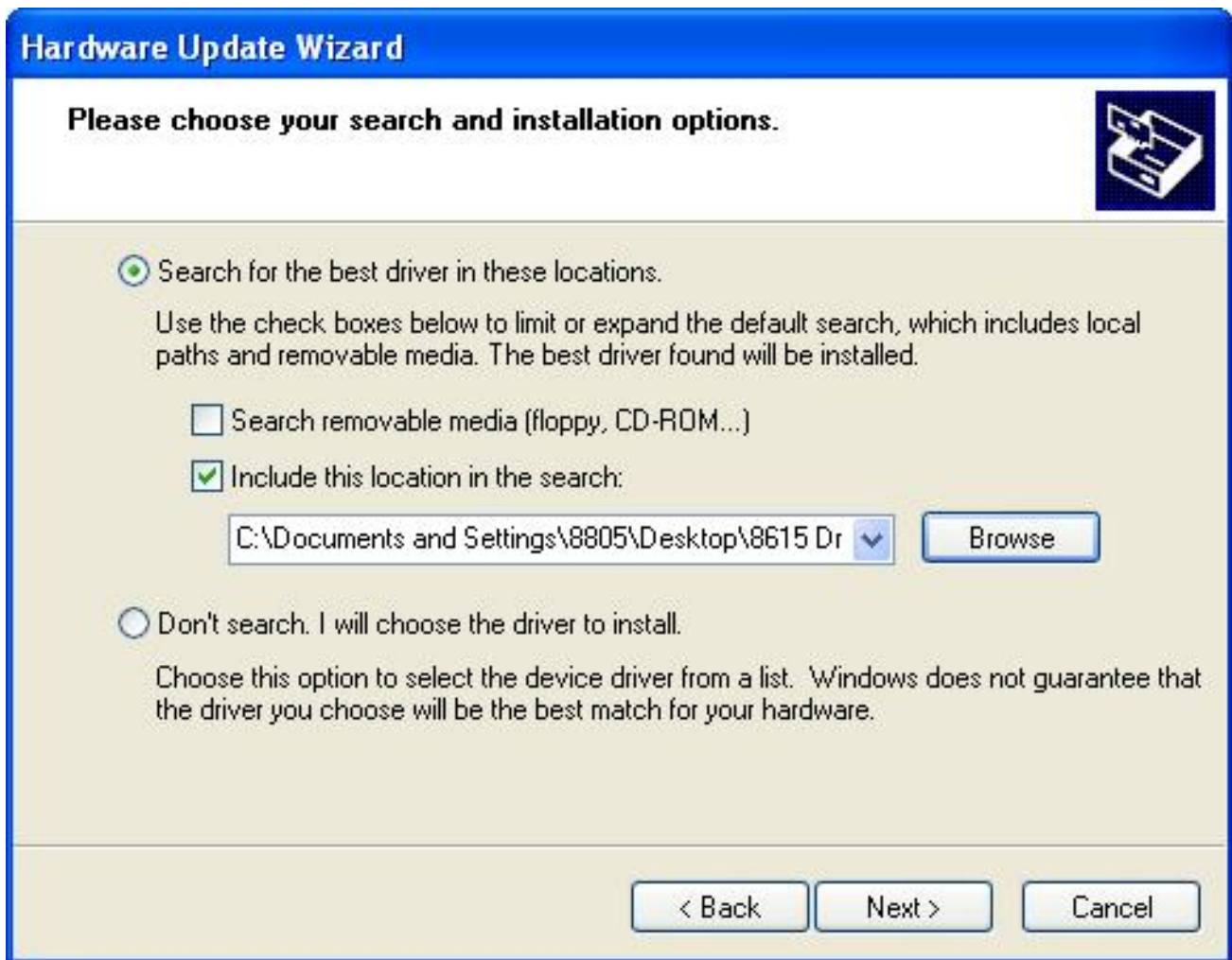Select the "Device Manager".

**Select "USB PC/SC SmartCard Reader" and right click to choose "Update Driver.."**

**When the setup screen appears then to select "Advanced" & "Next" step.**

**Select "IMT5123 USB Driver" folder.**

When the next setup windows appears, please select the next step to continue the setup.

When the next setup window appears, please select the next step to continue the setup.
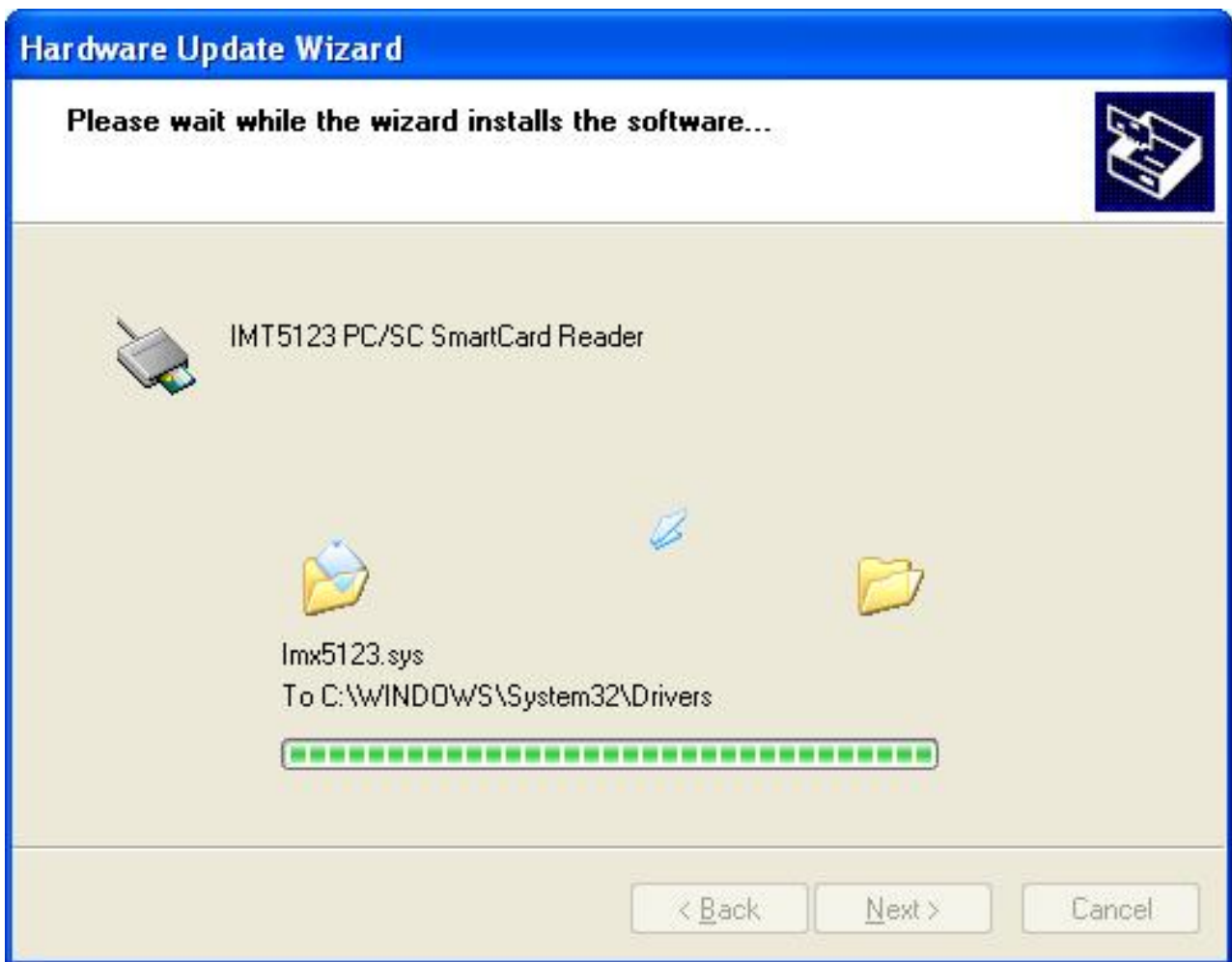
**Above screen shows the installation process window.**

**After installation completes, select "Finish".**

## MSR Driver



**Select "MSR USB Driver"Folder.**

**Select "USB for Win SERIES"Folder.**

**Select "PL-2303 Driver Installer"to start install.**

**When the setup screen appears then to select next step.**

**When the setup screen appears then to select finish .**

| CHAPTER 5 | *Hardware Specifications* |

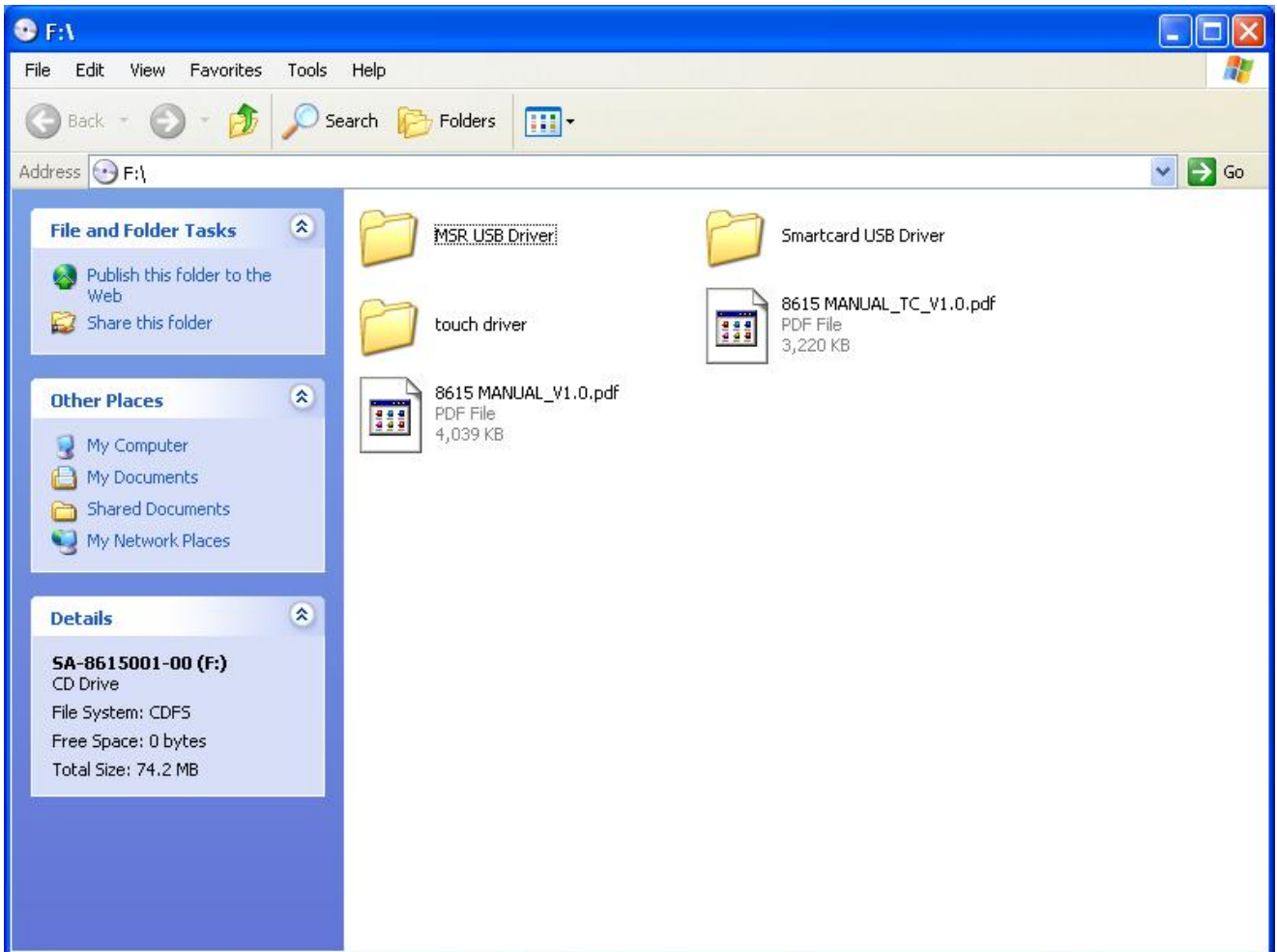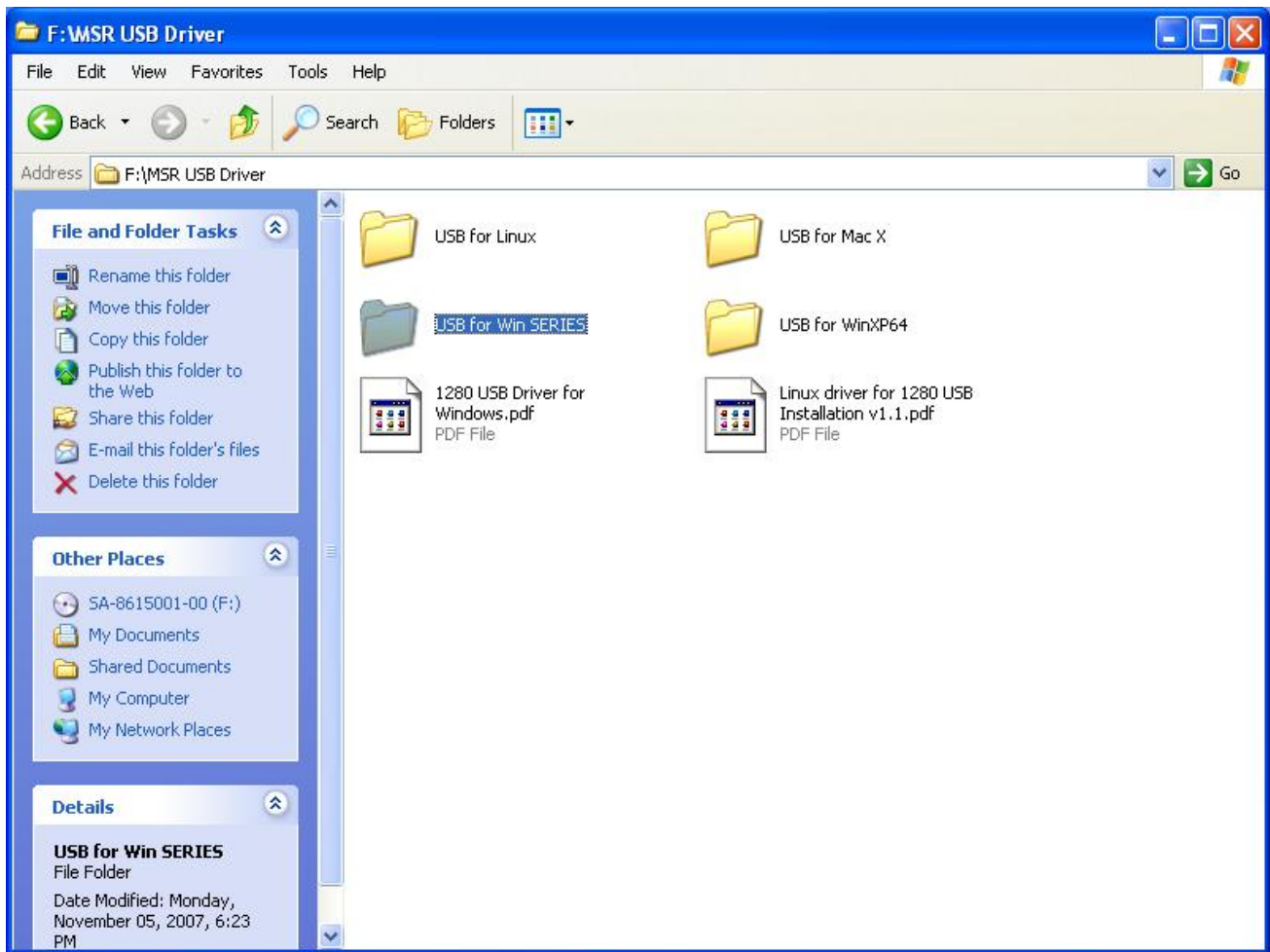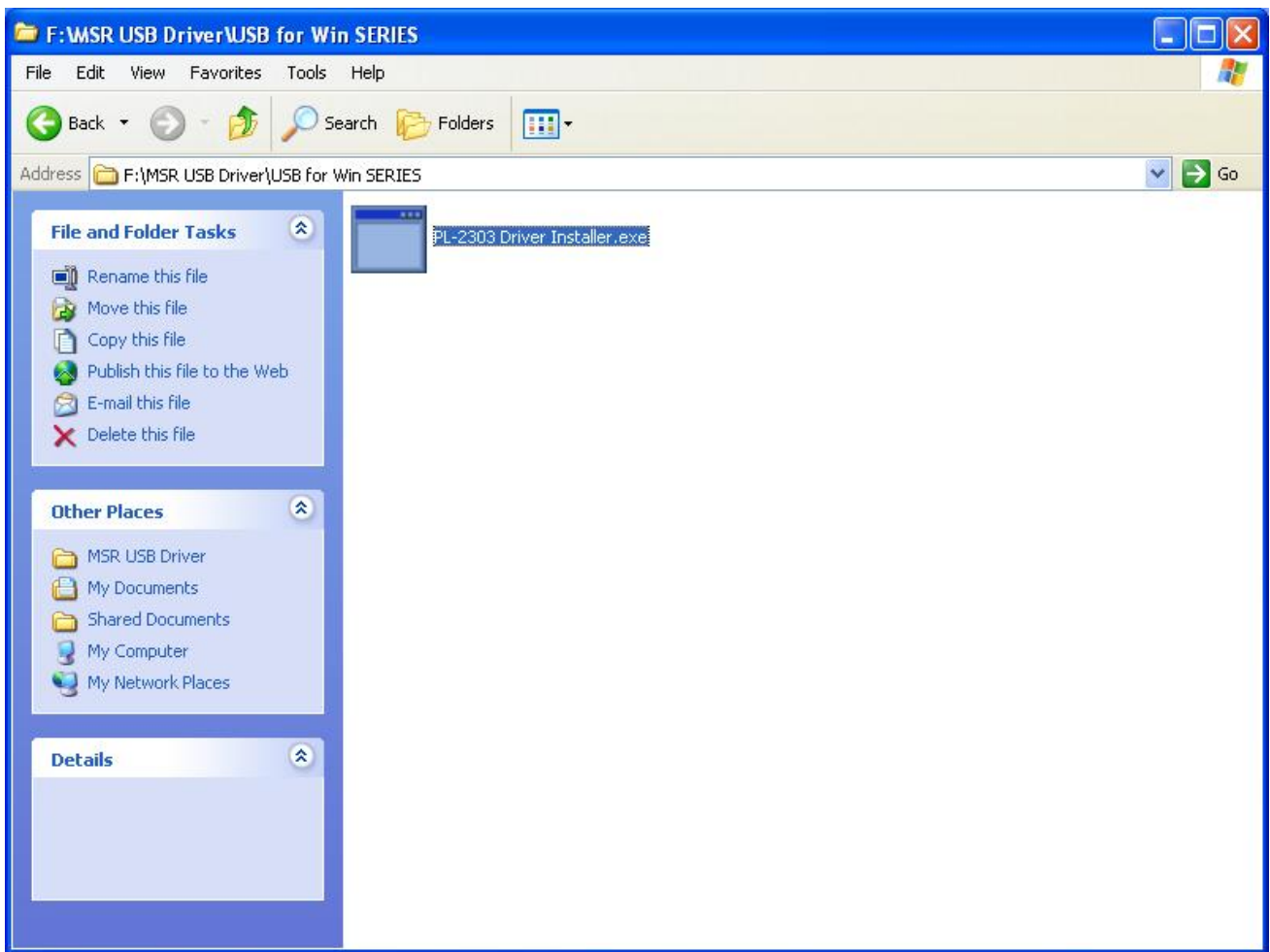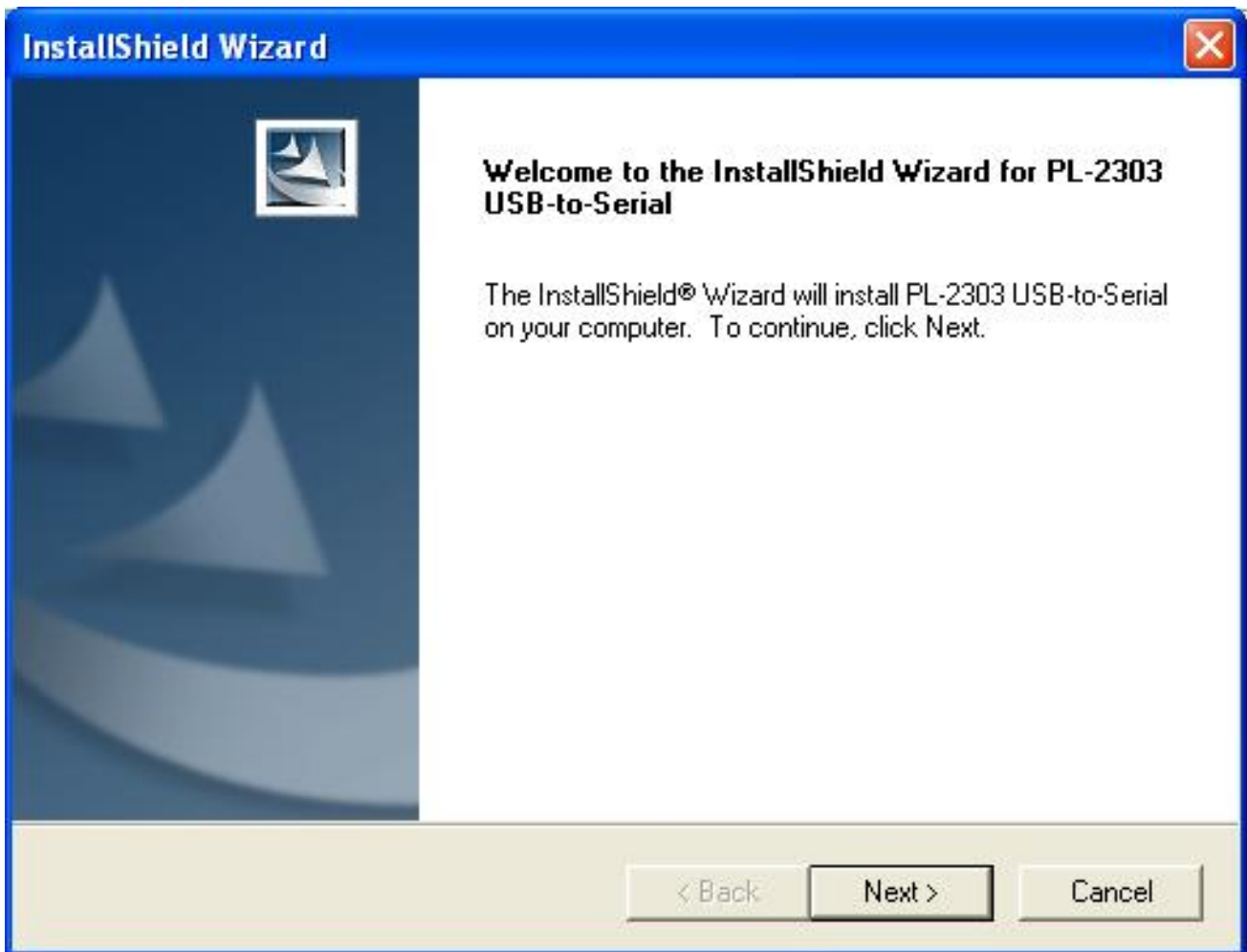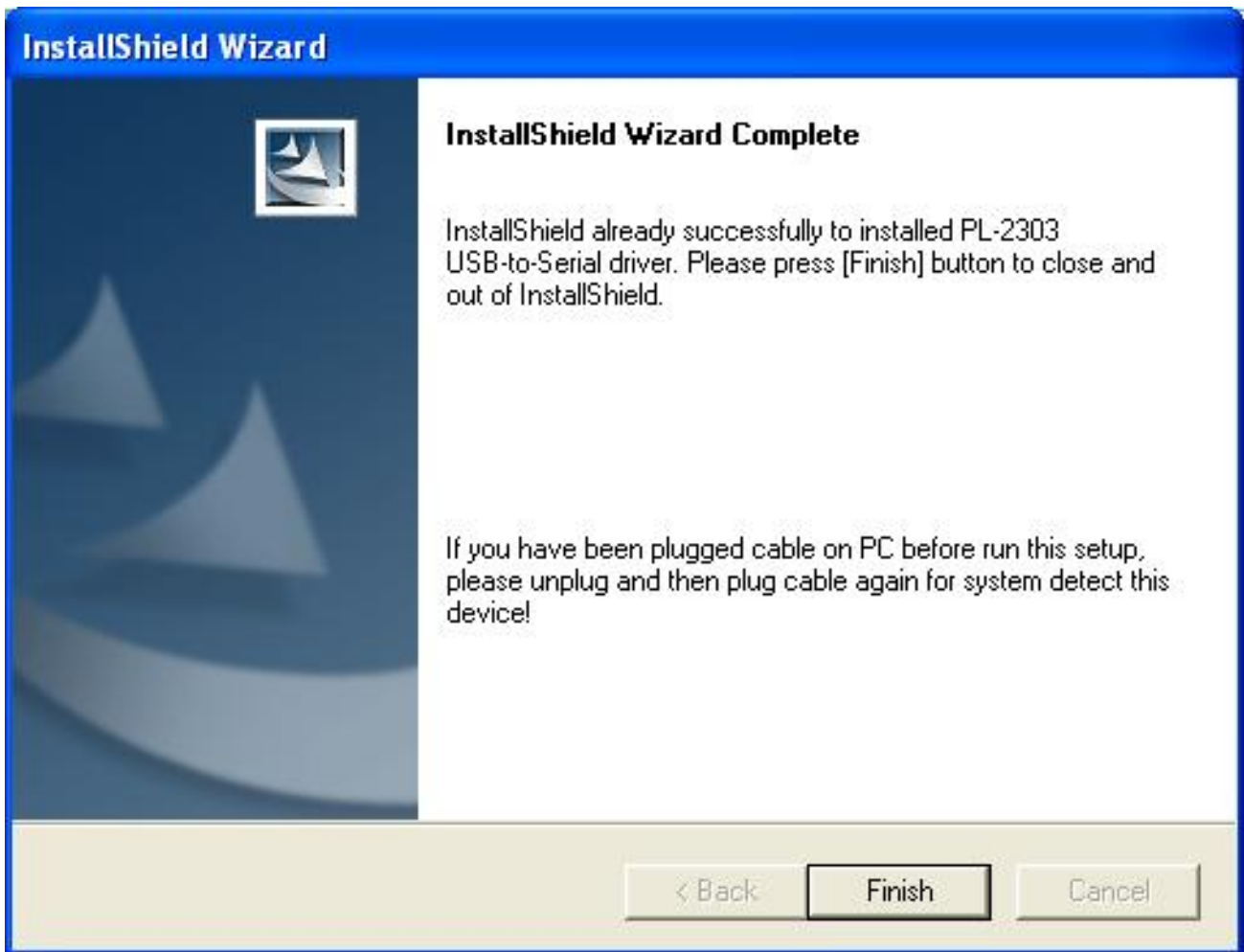| Model | 8615 |
|---|---|
| LCD Display | 15"TFT LCD |
| Max Resolution | XGA 1024 x 768 |
| Pixel Pitch | 0.297(H) x 0.297 (H)mm |
| Brightness | 250 cd/m2 (Typ) |
| Contrast Ratio | 500:1(Typ) |
| Display Color | 16.2M(6bits+FRC) |
| ResponseTime( msec) | 16ms |
| Touch Screen | 4 Wire Resistive |
| OSD Button | Menu , Set - , Set + , Auto |
| Touch Panel Interface | RS232 |
| **Cable I/O connectivity** | |
| Serial port | 1 x RS232 interface (RJ45) connect |
| USB Port | 2 x USB(Smart Card, Mifare) interface (RJ45) connect |
| VGA Port | 1 x 15Pin VGA |
| **Integrated Option** | |
| Magnetic Stripe Reader | 1 x Built-In Magnetic Stripe Reader: Dual/Triple Tracks  (USB Interface) |
| Smart Card Reader | 1 x Built-In Smart Card Reader, compatiable with Microsoft PC/SC  (USB Interface) |
| Power Adapter | Input: AC 100-240V, 50~60HZ (1.7A) |
| | Output: DC 12V(3.33A) |
| **Physical Dimension** | |
| Dimension (W)x(L)x(H)cm | Physical: cm x cm x cm |
| | Package: 32cm x 50cm x 46cm |
| Weight | N.W:7.5 kg |
| | G.W:8.5kg |
| Color | Black, White, Black/Silver(Frame) |
| **Environment** | |
| Operating Temperature | 0℃ ~ 45℃ (32℉ ~ 113℉) | Storage Temperature | -20℃ ~ 60℃ (-4℉~ 140℉) |
| Operating Humidity | 0% ~ 80% RH non condensing | Storage Humidity | 10% ~ 90% RH non condensing |
| **Certification** | |
| EMC & Safety | FCC, CE, RoHS, Class A, CCC |
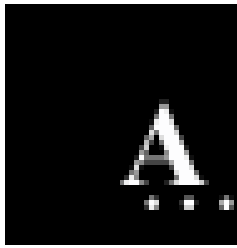
# *Appendix:AC ADAPTER*

**Dimension:** 108*65*31 mm

**Applications:** TV, Electronical Product

CB  UL  CCC  TÜV Rheinland  CE

K  BSMI  PS E
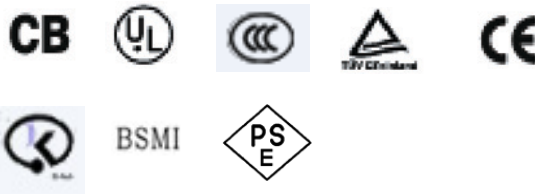
## *Features:*

.42W O/P,universal I/P, desktop design3

.Support Blue Angel - less than 0.75W @ no losd
.OVP,OCP, and short circuit protection
.OTP protection (optional)
.Operating temperature range from 10 to 40'C
.Operating relative humidity range form 10% to 90% (non-condensing)
.MTBF  100KHRs @ 25  per MIL-HDBK-217F

## *Specifications :*

.Input  Voltage         100~240  VAC
.Input  Current        1.7/0.85A @ 90/180 VAC
.Input  Frequency      50/60 Hz
.Efficiency            >78% @ full load, 115Vac I/P
.Input Current         No  damage occur @ cold start
.Leakage Current       3.5mA max. @ 230Vac input
.Output Power          42W
.Output Voltage        12V
.Output Current        3.3~3.5A

Tuning Fork Type　　　　　Power Indicator Color Green

2.36
(60.0)

0.98
(25.0)

1.22
(31.0)

A
A

2.56
(65.0)

0.43
(11.0)

Ø0.63
(Ø16.0)

1.299
(33.0)

59.06+1.18/−0
(1500+30/−0)

4.25
(108.0)

A
A

1.22
(31.0)Max

Ø0.37
(Ø9.5)

Ø0.083
(Ø2.1)

Ø0.217
(Ø5.5)

VIEW "A"

RATING LABEL
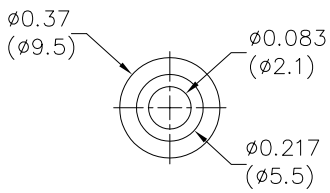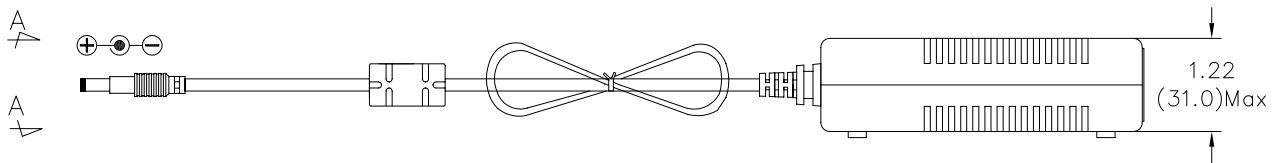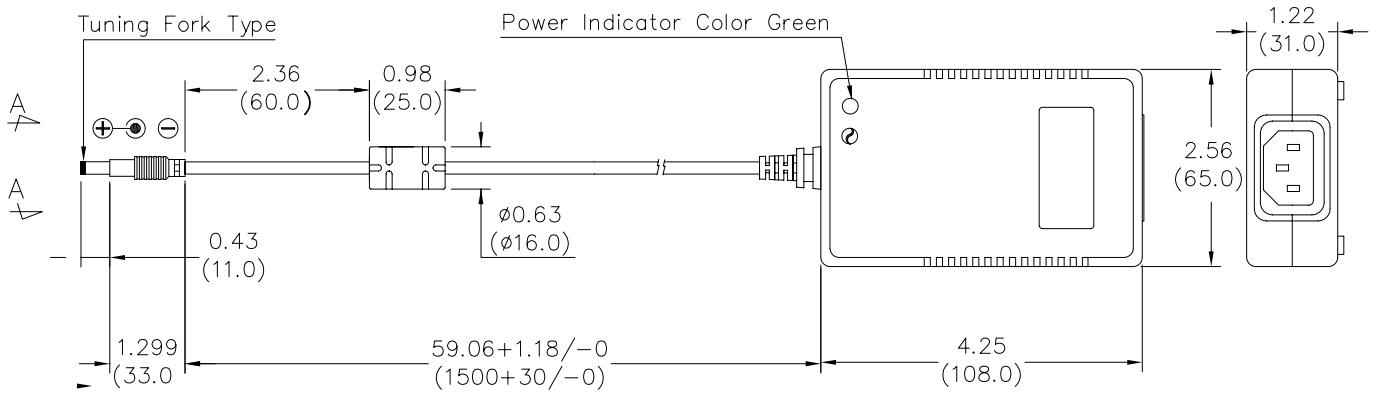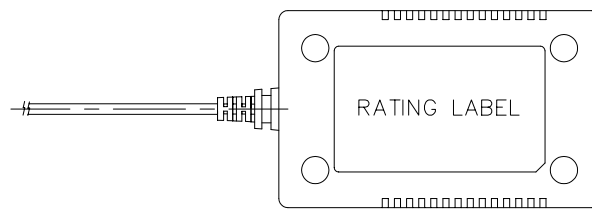
## 1. SCOPE

This specification describes a full range of AC input voltage with single output voltage switching power adapter.

## 2. ELECTRICAL SPECIFICATION

### 2.1. AC INPUT REQUIREMENTS

#### 2.1.1. INPUT VOLTAGE

The operating range of the power adapter is 90 to 264Vac.

#### 2.1.2. INPUT FREQUENCY

The input frequency range is 47 to 63 Hz.

#### 2.1.3. EFFICIENCY

The power adapter efficiency is 80% min. At full load and with 115Vac input.

#### 2.1.4. INRUSH CURRENT

No Damage (Cold Start ).

#### 2.1.5. MAX. INPUT AC CURRENT

1.7A @90Vac,0.85A @180Vac.

### 2.2. DC OUTPUT REQUIREMENTS

#### 2.2.1. OUTPUT VOLTAGE

The output voltage under all conditions of rated input voltages and frequencies, of output loads from minimum to maximum of environmental requirements shall remain within the following limit:

| Normal Voltage | Limit |
|---|---|
| +12.0V | 11.5 to 12.5 |

The output voltage is measured at the connector at the output end of the cable.

### 2.2.2. OUTPUT CURRENT

The minimum and maximum continuous output current are listed in this section.

| Output Voltage | Minimum (A) | Maximum (A) |
|---|---|---|
| 12.0V | 0.0 | 3.33 |

### 2.2.3. OVER CURRENT CONTROL

Over current protection will prevent damages to power supply when output is short-circuited continuously with100 milliohms or less. The output current shall be internally limited to 150% Max or less at load condition .In the mean time, the temperature rise shall not exceed the limit specified in 4.5 Damage to the power supply must not occur if operated at short circuit.

### 2.2.4. OUTPUT RIPPLE / NOISE

Ripple is defined as a composite of a power line frequency component plus a high frequency component due to the power oscillator. Common mode noise, which may be observed due to oscilloscope connections, will be ignored. The output voltage ripple and noise limits under all conditions of rated input voltages and frequencies, output loads from minimum to maximum, and to add 0.1uf and 10uf capacitors at output connector terminal for ripple and noise test.

The spec as follow table.

| Normal Voltage | Ripple & Noise |
|---|---|
| +12.0V | 200mV |

### 2.2.5. OUTPUT POWER AND TURN-ON DELAY

The turn–on delay from application of AC input power to the establishment of rated DC power voltage should not exceed 3 seconds@115Vac under any conditions at CC mode test.

### 2.2.6. OUTPUT OVER VOLTAGE PROTECTION

The output shall be protected from over voltage fault at all conditions including open- loop by breakdown that is set to trip at 16Vdc maximum.

### 2.2.7. VOLTAGE HOLD-UP TIME

When the power supply is operated at 100% of maximum continuous output load, the minimum output holdup time after loss of input power shall be **8mS** for AC input voltage (115Vac, 60Hz) and at 60-degrees cut angle.

## 3. MECHANICAL REQUIREMENTS

### 3.1. PHYSICAL DIMENSIONS

The overall dimension of this switching power adapter is

**108 mm (L) x 65 mm (W) x 31 mm (H) Max.**

## 4. ENVIRONMENTAL REQUIREMENTS

### 4.1. TEMPERATURE AND HUMIDITY

| | | |
|---|---|---|
| Operating Temperature Range | 10 | to +40 |
| Non-operating Temperature Range | 0 | to +85 |
| Operating Humidity | 10 to 90% relative humidity (non–condensing) | |
| Non-operating Humidity | 5 to 95% relative humidity (non–condensing) | |

### 4.2. VIBRATION AND SHOCK

The power adapter shall withstand forces of 2G at variable recurrent frequencies of 20 to 30 Hz and a simulated transportation test.   Transportation test will consist of a 1/2G vibration force at the resonant frequencies of the board or components.

The test will last for 15 min.  The adapter will be tested in a configuration representative of the intended application with shipping cartons.   The adapter must survive a 50G force for duration of 20 ms in all 3 orthogonal planes from normal mounting points.

### 4.3. DROP TEST

The power adapter shall successfully comply with the following drop test requirements: 6 random drops from a height of 70 cm onto concrete covered with 1/8 inch asphalt tile or similar material.   No impairment of normal function, breaking away of any parts or change that would render power adapter potentially harmful shall occur.

### 4.4. EMI
#### 4.4.1. CONDUCTED EMI

For 240 Vac input operation, the power adapter must below the CISPR 22, Class B limit for HF equipment and DP equipment with a 3 dB margin. For 120 Vac input operation, the power adapter must below the FCC part 15 sub–part B for Class B computing device with a 3 dB margin. For 100 Vac operation, the power adapter must below the VCCI limit by a 3 dB margin. Both conducted and radiated emissions shall be measured in the applicable system and complied with the required standards.

#### 4.4.2. RADIATED EMI AND EMC

No peak emission in the frequency range 30 MHz to 1G Hz shall exceed Class B limit when measured per ANSI C63.4, CISPR 22 and VCCI measurement procedure.

### 4.5. TEMPERATURE RISE

The maximum temperature measured at any point on the enclosure surface shall not exceed 70    at room temperature of 25    i.e., the maximum temperature rise on the surface of enclosure shall not exceed 45   .

### 4.6. SURGE WITHSTAND AND EFT

The power supply shall withstand the line transient for both Common Modes at 2KV and Differential Mode at 2KV operations.

## 5. RELIABILITY

### 5.1. MEAN TIME BETWEEN FAILURES (MTBF)

The MTBF for the power adapter shall equal or exceed 50,000 hours when operated at full rated load in an ambient temperature of 35   , and 100,000 hours when operated at full rated load in an ambient of 25    by MIL-HDBK-217F.

## 6. DIELECTRIC WITHSTAND TEST

### 6.1.  HI-POT

Primary to secondary 4242Vdc for 1 minute

### 6.2. LEAKAGE CURRENT

3.5 mA Max., at 230 Vac input.

# *Troubleshooting*

When encountering difficulties in using this product, please follow the steps or solutions.. If the problem persists, please contact the dealer.

1. **No picture on screen**
   a. Check the AC cord and signal cable. Make sure they are properly connected.
   b. Check that the power button on the OSD panel is turned on.
   c. Check if the computer has entered energy saving mode.

2. **Abnormal display colour**
   a. Check if the signal cable is properly connected to the computer.
   b. For model 8615 using the on-screen-adjustment mode to adjust the colour parameters.

3. **Skewed or distorted display**
   a. Check if the signal cable is properly connected to the computer.
   b. For model 8615, using the on-screen-adjustment mode to adjust the geometric parameters.

4. **Picture too large or too small**
   a. Check if the display resolution is set correctly in the operating system.
   b. For 8615, using the on-screen-adjustment mode to adjust the size parameters.

5. **Touch screen does not work**
   a. Check if the COM port cable is properly connected to the computer.
   b. Check if the Fujitsu touch driver has been loaded properly.
   c. Check if the COM port number is set correctly.

6. **VFD Customer Display does not display properly**
   a. Check if the power cable is connected properly.
   b. Check whether the power switch is turned on.

7. **Magnetic Card Reader does not work**
   a. Check if the KB Connector is properly connected to the computer's PS/2 port.

8. **The card swipe character(s) is incorrect or shows random characters**

   a. The country code parameter setting may need modification, please refer to the section, MSR Parameter Modifications.