ACTiSYS

The Wireless Connectivity Expert

IrReady

ACTiSYS ACT-IR4000US Series User's Manual

FCC ID : KPRACTIR22XX   CE   VCI

WARNING

Please install driver BEFORE you plug in ACT-IR4000US to your computer USB port.

July 8,2008

Version 1.6.0.1

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FCC & VCCI Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING-FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user authority to operate this equipment

NOTE: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Increase the separation between the equipment and receiver.

-Reorient or relocate the receiving antenna.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

This equipment is in the 2nd Class category (information equipment to be used in a residential area there to) and conforms to the standards set by the Voluntary Control Council For Interference by Data Processing Equipment and Electronic Office Machines aimed at preventing radio interference in such residential area.

When used near a radio or TV receiver, it may become the cause of radio interference. Read the instructions for correct handling.

NOTE: Must be used with shielded cable only.

FOR YOU RECORDS.....

For your assistance in reporting this product in case of loss or theft, please record below the model number and serial, which are located on the bottom of the case. Please retain this information.

Model Number	Serial Number
Date of Purchase	**Place of Purchase**

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REVISION HISTORY

Revision	Date	Comment
1.5c	1/11/2006	• Overall Reformat. Rewrite some sections. • Add cross-out wheeled bin logo at the warranty chapter, per WEEE directive, EN-50419.
1.6	4/27/2007	• Added feature & Installation Chapter for Vista OS
1.6.0.1	7/08/2008	• Updated company Address

ACTiSYS reserves the right to make changes without further notice to any products herein to improve reliability, function or design.   ACTiSYS does not assume any liability arising out of the application or use of any product or circuit described herein.

All trademarks, logos, organization & company names and product model names are the properties of the respective organizations and/or companies.

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1. OVERVIEW

ACTiSYS IR4000US is an advanced wireless Fast Infrared USB adapter designed to replace the serial port or FIR controller-based FIR/SIR wireless peripheral through the PC USB port. Taking advantage of the true plug-and-play nature and the high bandwidth of USB, IR4000US offers the easiest conversion of existing wireless to the legacy-free personal computer platform with the following features:

- Fully compliant to USB specification 1.1 and IrDA$^®$ specification 1.1
- Full-speed (12 Mbps) USB device operation
- Supports FIR (4Mbps) and all SIR speeds (9.6, 19.2, 38.4, 57.6 and 115.2Kbps).
- Bus-powered device. Obtain power from USB port. No external power supply required.
- Low power consumption in standby mode (Standby current is less than 0.5 mA).
- Not occupy any PC's COM or Parallel port and has no complicated hardware port and resource setting and conflict, such as IO address / IRQ / DMA numbers.
- Vista OS provides local driver for it. Just plug & play without any click.
- True PNP (Plug And Play) device. Without re-installing USB driver when re-plugs in.
- Package size: 1.85"L x 0.7"W x 0.35"H, 2.08 oz (6.0 gr)

2. PACKAGING CHECK LIST

The package includes
A. ACT-IR4000US USB Dongle
B. USB Cable
C. ACT-USB Adapter Driver and CD for User's manual.

3. SYSTEM REQUIREMENTS

To use ACT-IR4000US, your computer MUST meet the following requirements:

A. Windows 98SE/ME/2000/XP or Vista.

B. One unoccupied USB port.

4. BIOS SETUP

Before you use this device, You MUST enable your computer USB port in BIOS Settings.

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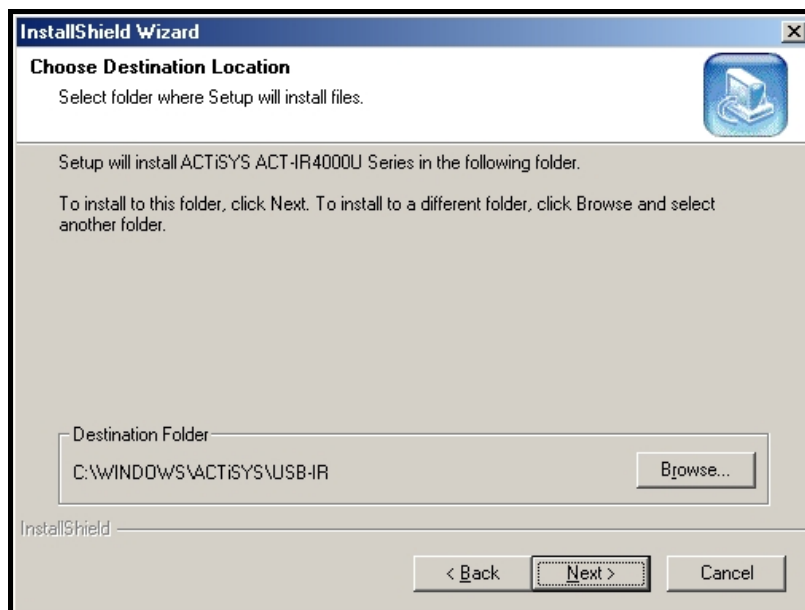## 5. ACT-IR4000US DRIVER INSTALLATION FOR WINDOWS 2000/ME/98SE

Following are the instructions to properly install the ACTiSYS ACT-IR4000US Series under Windows 2000, Windows ME, and Windows 98SE.

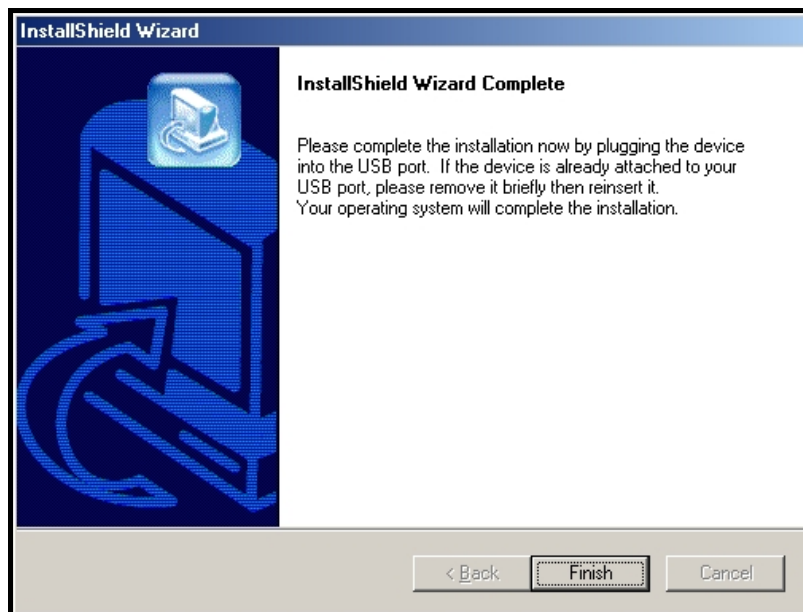**Important: Do NOT use Windows' Native Driver. Please use the driver on this CD to ensure a smooth installation.**

A. Insert the attached CD to CD-ROM, Windows will display install manual. Please click Installation then it will execute InstallShield Wizard. Click on **Next** to continue.
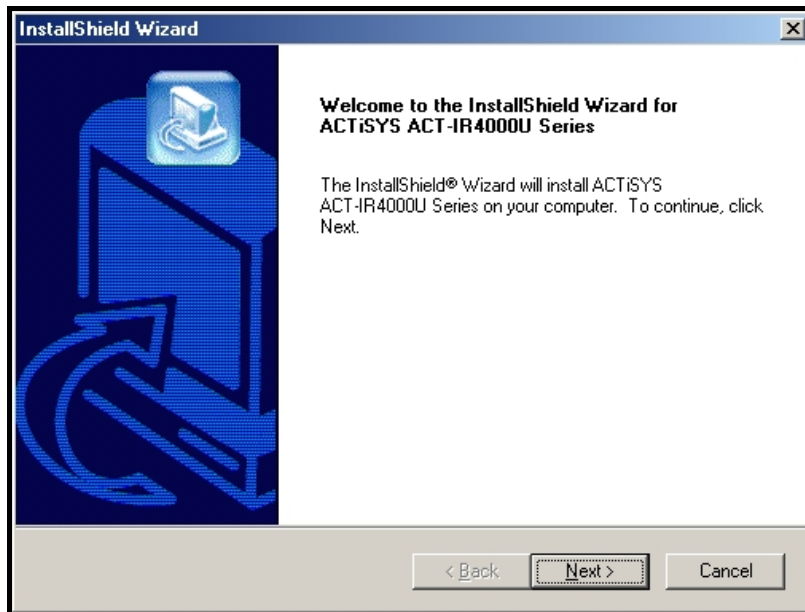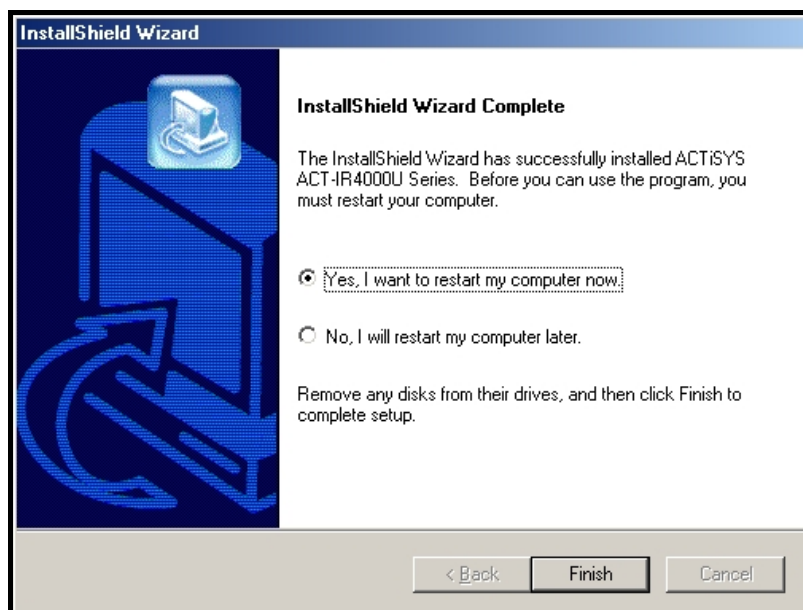

B. The Installer will install ACT- IR4000US in the Destination Folder. To install to a different folder, click **Browse** and select one. To continue, click on **Next**.

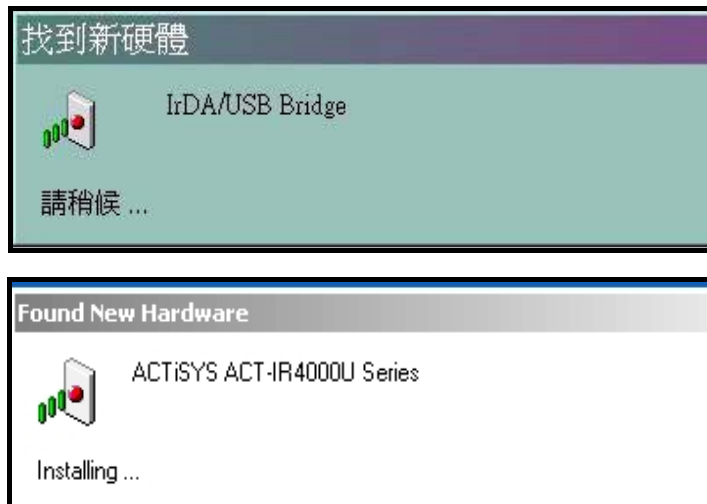C. To complete the installation, Click on **Finish** to continue.

D. You need to restart your computer. Select "Yes" and click **Finish** to reboot.

E. After reboot, plug the ACT-IR4000US into the USB port.

It will pop up a "Found New Hardware" window and install the detected drivers as follows:

找到新硬體

IrDA/USB Bridge

請稍候 ...

Found New Hardware

ACTiSYS ACT-IR4000U Series

Installing ...

F. After this "ACTiSYS ACT-IR4000U Series" installation complete, it then completes the whole installation.

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## 6. ACT-IR4000US DRIVER INSTALLATION FOR WINDOWS XP

Following are the instructions to properly install ACT-IR4000US Series under Windows XP:

Important: Do NOT use Windows' Native Driver. Please use the driver on this CD to assure a smooth installation. If you have plugged IR4000US into USB port and mistakenly loaded WindowsXP Native Driver, please refer to Chapter 7 "ACT-IR4000US Windows XP Native Driver Removal Procedure" to remove the driver and then refer back to this Chapter to re-install the correct driver.

A. Insert the attached CD to CD-ROM, Windows will display install manual. Please click Installation, then execute InstallShield Wizard. Please Click on **Next** to continue.

B. The Installer will install ACT-IR4000US in the Destination Folder. To install to a different folder, click **Browse** and select one. To continue, click on **Next**.

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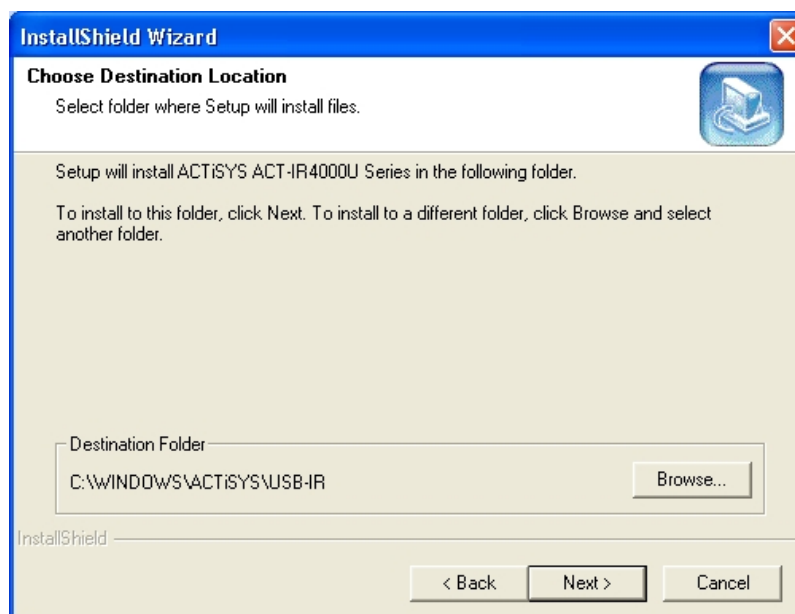
C. Click on **Continue Anyway** to continue.

D. Insert the ACTiSYS ACT- IR4000US Series into the USB Jack and click on **Finish**.

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E. Windows XP will detect ACTiSYS ACT-IR4000US Series. Select **Install the software automatically (Recommended)**. Please note that you should take the CD out of the CD-ROM **BEFORE** clicking on **Next**.

  Note: **If you keep the CD in the CDROM, Windows XP will automatically search for all drivers compatible with IR4000US. You will see a window with a choice of different drivers, please select the OEM one. If you install the driver to Windows XP, the driver will automatically copy to Hard disk (C:\Windows). Please highlight "C:\Windows\inf\oem0.inf" and click "OK" button, the Windows XP system will automatically install IR4000US.**

F. Windows XP will pop up an alert window like the picture as below. Click on [**Continue Anyway**] to continue. Windows will install the driver for you.

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G. Click on **Finish** to complete the installation.

**7. ACT-IR4000US WINDOWS XP NATIVE DRIVER REMOVAL PROCEDURE**

Your ACTiSYS ACT-IR4000US is shipped with the latest driver on the CD. If you had already installed the Windows XP Native Driver, the following steps will tell you how to remove it and then you can follow Chapter 6 to install the correct driver from installation CD.

Question: How do you know whether you have installed the Windows XP native driver?

Answer: It is **YES**, if your product name is "**SigmaTel USB-IrDA Dongle.**

Following steps A and B will tell you whether this is the case or not:

A. Go to **Control Panel**, click **System** icon then click "**Device Manager**"

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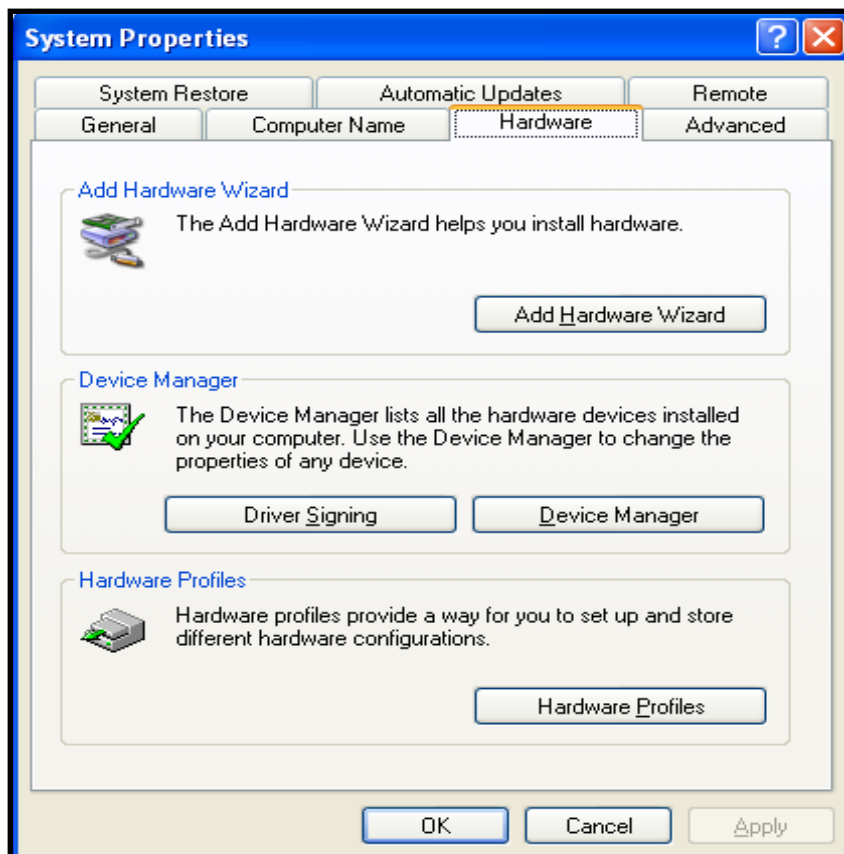
B. If you see "Infrared Devices" at the Device Manager, click it. If it shows "SigmaTel USB-IrDA Dongle", that means you have installed Windows XP Native Driver.

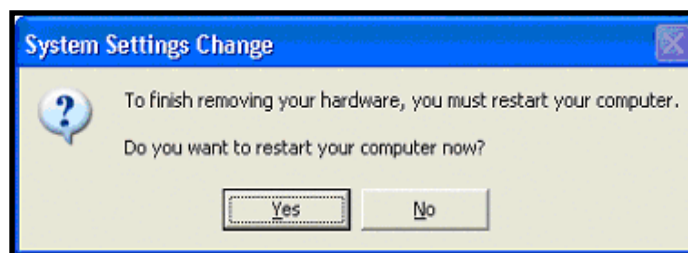C. Then you need to follow next step to remove it before go back to install the correct driver from installation CD.

D. Right click on "SigmaTel USB-IrDA Dongle". Click on **Uninstall**.

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Version 1.6.0.1
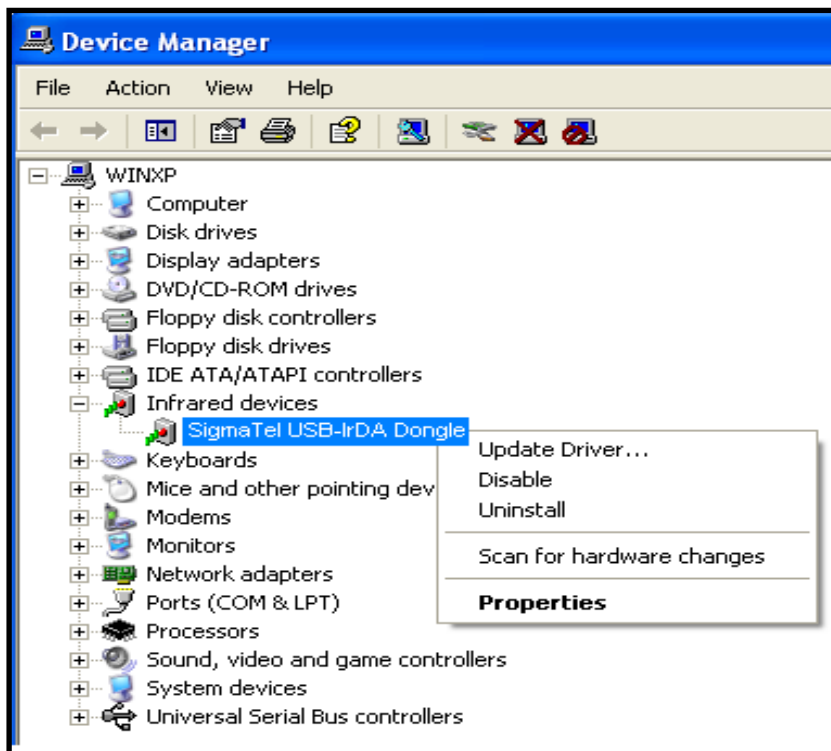
E. You will see a **"Confirm Device Removal"** Window then press **OK**.

F. You have completed the removal of the Windows XP Native Driver. Click **Yes**.


Congratulation!

You have successfully removed the Windows XP Native Driver for the USB Infrared Adapter.

Before PC restarting, you should un-plug your ACT-IR4000US USB connector from the PC's USB port. Then please refer back to Chapter 6 "ACT-IR4000US DRIVER INSTALLATION For WINDOWS XP" to install the correct driver after PC restarted.

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8. ACT-IR4000US DRIVER REMOVAL PROCEDURE FOR WINDOWS XP/2000/ME/98SE

Important: Please keep the ACTiSYS ACT-IR4000US Series plugging into the computer until prompted to remove it.

A. Open Control Panel and select **Add / Remove Programs**.
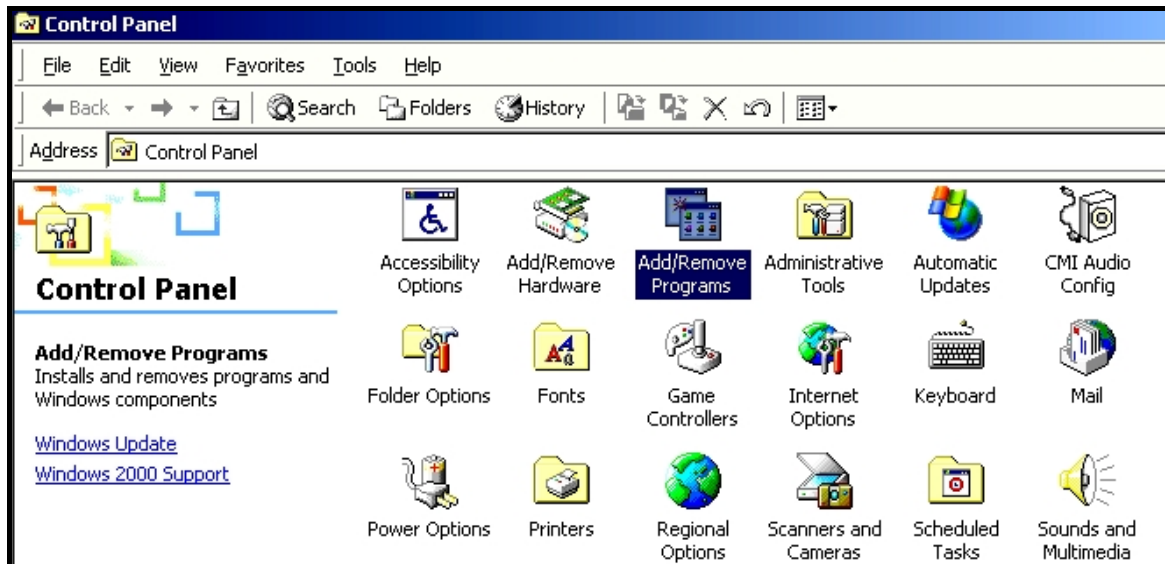
B. Select **ACTiSYS ACT-IR4000US Series** from the list.
   Click on the **Add/Remove** button to begin the removal process.

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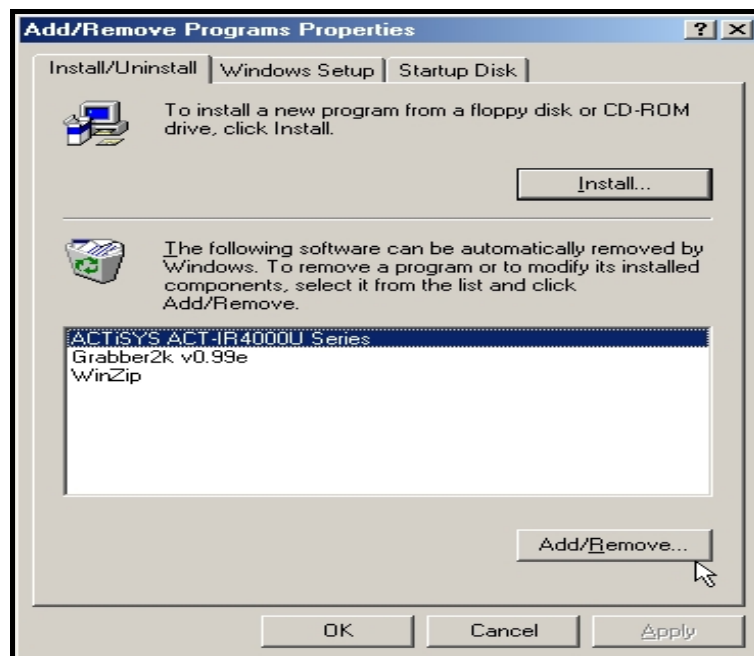
C. To continue, click the **Yes** button to uninstall the ACTiSYS ACT-IR4000US Adapter.
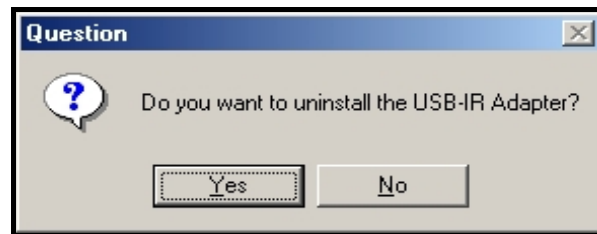
D. To complete the removal process, unplug the ACTiSYS ACT-IR4000US Series from your USB jack. Then click the **Finish** button.

9. DRIVER INSTALLATION FOR VISTA

Since Vista has already had its local driver for this dongle, you can just directly enjoy plug & play!

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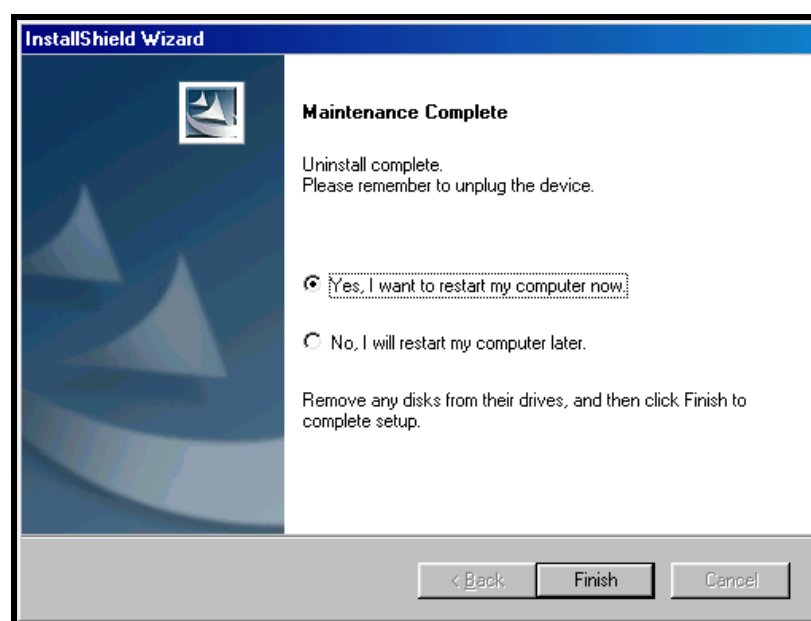
10. TROUBLE SHOOTING

In order to help on general and miscellaneous problems you may be experiencing with, refer to the following pages for possible solutions. Look up your problem and try the solution.

SYMPTOM	PROBLEM	Solution
Can not establish link (General)	1. The two IR devices are not aligned properly. 2. Distance is too near or far. 3. Device is inactivated 4. BIOS setting incorrect 5. Installation is not correct.	1. Properly align them again 2. Move one device to a proper distance. 3. Enable the device by IR monitor. 4. Correct the BIOS Setting. 5. Refer to un-installation guide to remove the device, then install again.
File Transfer between IR-equipped PDA and ACT-IR device-attached host computer stops before finishing up and an error message appears.	The infrared communication is interfered. For example, something blocks out the infrared beam or the burst of string light source, etc.	Check to find out the source of interference and eliminate it before trying again.
The device work well before. But after I unplug it then plug, it does not work again.	Improper unplug and plug procedure	Before you unplug it, you should disable the device. And enable the device after you plug it into your computer

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11. PRECAUTIONS

To ensure trouble-free operation, please observe the following precautions:

Optical communications are easily affected by external light sources, weak batteries, transfer distance, transfer angle, etc. Any of these conditions may cause a data transfer failure, incomplete, missing or incorrect data. Make sure that the wireless interface is away from direct sunlight and the other strong light source.

● Do not terminate arbitrarily during file transfer process between DUT and computers until finished. Otherwise DUT internal data integrity may be damaged, which is due to the violation of DUT's.
● Do not expose the unit to moisture, as this will damage the internal circuitry.
● Do not expose the unit to extreme temperatures. It should not be placed in direct sunlight or in a closed vehicle, neither should it be placed near heaters nor any other heat sources.
● Do not store the unit in a humid or dusty place.
● Use a soft, dry cloth to clean the unit. Do not use a wet cloth or any solvent.
● Do not drop the unit or handle the unit carelessly.

CAUTION:
● Never touch the pins of computer connection terminal. The internal circuits can be damaged by a Electro Static Discharge. If this device requires any servicing, use only an ACTiSYS service dealer, an ACTiSYS approved service facility, or an ACTiSYS repair service.
● When exchanging data with host computer, be sure the appropriate serial communication port is available and is not in conflict with the other peripheral device or software.

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12. WARRANTY INFORMATION

ACTiSYS Corporation warrants the first end-user purchaser, for a period of 1 year from the date of purchase, that this wireless interface (The Product) will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof at no charge to the purchaser for parts or for labor.

This warranty does not apply to any appearance items of the Product, any consumable items such as paper, ink ribbon, or batteries supplied with the Product, or to any equipment or any hardware, software, firmware, or peripheral other than the Product.   This warranty does not apply to any Product the exterior of which has been damaged or defected, which has been subjected to misuse, abnormal service or handling, or which has been altered or modified in design, construction or interfacing.   Tampering with Label Voids Warranty.

In order to enforce the rights under this limited warranty, the purchaser should mail, ship or carry the Product, together with proof of purchase, to ACTiSYS.

The limited warranty described above is in addition to whatever implied warranties may be granted to purchasers by law.   To the extent permitted by applicable law, ALL IMPLIED WARRANTIES INCLUDE THE WARRANTIES OF MERCHANT ABILITY AND FITNESS FOR USER ARE LIMITED TO A PERIOD OF 1 YEAR FROM THE DATE OF PURCHASE.   Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described above, nor to extend the duration of any warranties beyond the time period described above on behalf of ACTiSYS. Corporation.

The warranties described above shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described above, shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise.   In no event shall ACTiSYS Corporation be liable or in any way responsible, for any damages or defects in the Product which were caused by repair or attempted repairs performed by anyone other than ACTiSYS technician. Nor shall ACTiSYS Corporation be liable or in any way responsible for any incidental or consequential economic or property damage. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

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