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ACT-IR2000UL

IrReady FIR USB Adapter

User's Manual



July 6, 2007

Ver. 1.6

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Please install driver BEFORE you plug in ACT-IR2000UL to computer USB port.

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

All indicated copyrights and trademarks in the following pages are copyrights and trademarks of their respective corporations.

TABLE OF CONTENTS

	REVISION HISTORY	4
1	INTRODUCTION.....	5
2	PACKAGING CHECK LIST	5
3	SYSTEM REQUIREMENTS.....	5
4	BIOS SETUP	5
5	DRIVER INSTALLATION FOR WINDOWS 2000/ME/98SE	6
6	DRIVER INSTALLATION FOR WINDOWS XP.....	8
7	DRIVER INSTALLATION FOR WINDOWS VISTA.....	11
8	WINDOWS XP NATIVE DRIVER REMOVE PROCEDURE.....	12
9	DRIVER REMOVAL FOR WINDOWS XP/2000/ME/98SE.....	15
10	TROUBLE SHOOTING.....	17
11	PRECAUTIONS.....	18
12	WARRANTY INFORMATION	19
13	CONTACT INFORMATION	20

REVISION HISTORY

Revision History		
Revision	Date	Comment
1.5a	7/15/2003	Released
1.5b	3/10/2004	Added warning message on Driver installation before plugging USB dongle
1.6	7/06/2007	Overall reformatted; Added feature & Chapter for Vista OS. Extracted Technical Chapter. Updated Corporate address

1 INTRODUCTION

ACTiSYS ACT-IR2000UL 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 (Universal Serial Bus) port. Taking advantage of the true plug-and-play nature and high bandwidth of USB, ACT-IR2000UL offers the easiest conversion of existing wireless to the legacy-free personal computer platform with the following features:

- No external driver required in Vista OS (**Vista has Native driver for it**), just plug & play.
- 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 115.2 kbps).
- Bus-powered device. Obtain power from USB port. No external power supply required.
- Low power consumption in standby mode (Standby current less than 0.5 mA).
- Not occupy PC's COM or Parallel port and has no complicated hardware port and resource setting and conflict, such as IO address / IRQ / DMA numbers.
- True PNP (Plug And Play) device. Without re-installing USB driver when re-plugs in.
- Package size: 2.4"L x 1.4"W x 0.74"H, 65.0 g (2.4 oz).

2 PACKAGING CHECK LIST

The package includes

1. ACT-IR2000UL USB Dongle
2. ACT-USB Adapter Driver and CD for User's manual.

3 SYSTEM REQUIREMENTS

To use ACT-IR2000UL, your computer **MUST** meet the following requirements.

1. Windows 98SE/ME/2000/XP/**Vista**.
2. One unoccupied USB port.

4 BIOS SETUP

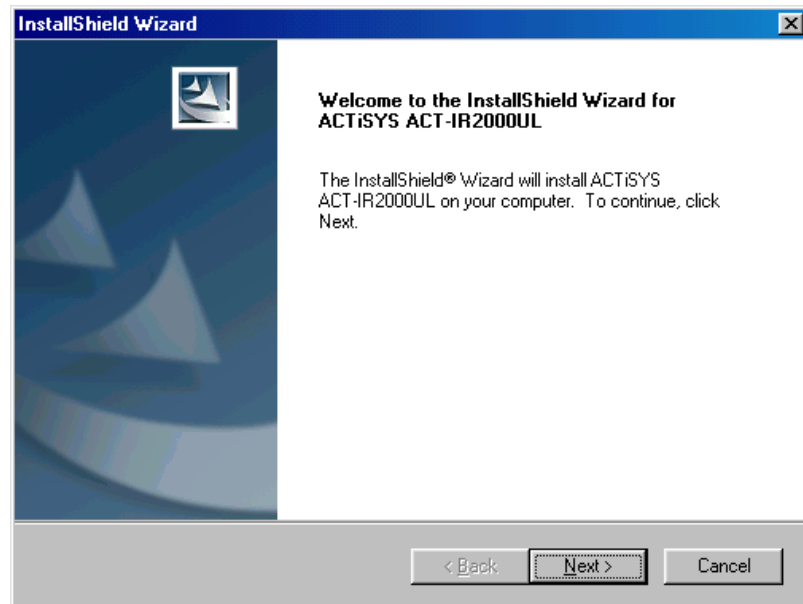
Before you use this device, You **MUST** enable your computer USB port in BIOS Settings.

5 DRIVER INSTALLATION FOR WINDOWS 2000/ME/98SE

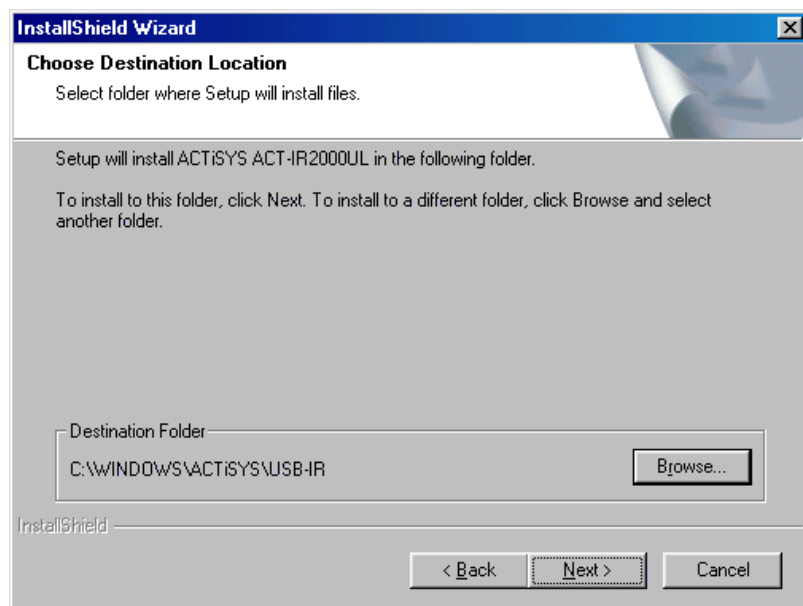
Following are the instructions to properly install ACT-IR2000UL Series under, Windows 2000, Windows ME, and Windows 98SE.

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

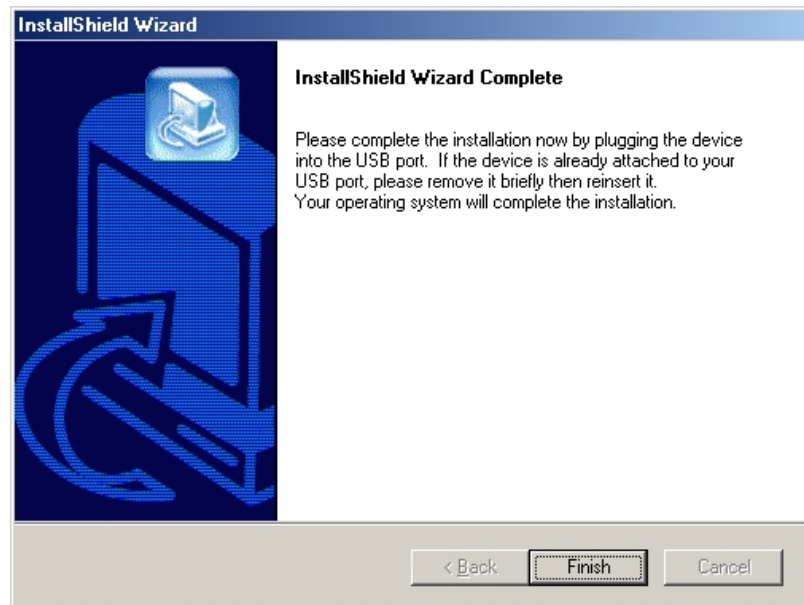
1. Insert the attached CD to CD-ROM, Windows will display install manual. Please click Installation then will execute InstallShield Wizard. Please Click on **Next** to continue.



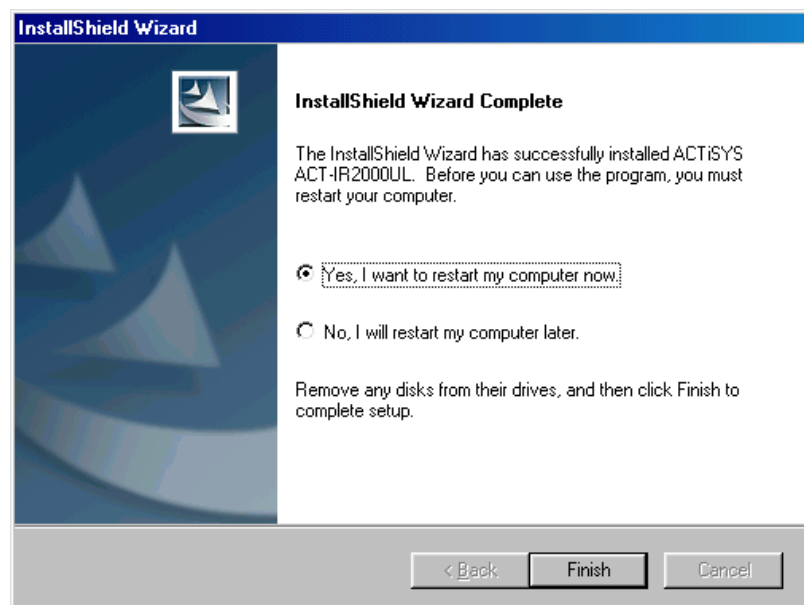
2. The Installer will install ACT-IR2000UL in the Destination Folder. To install to a different folder, click **Browse** and select one. To continue, click on **Next**.



3. To complete the installation, plug the ACTiSYS ACT-IR2000UL Series into the USB port. If the ACTiSYS ACT-IR2000UL Series is already plugged in, remove it then re-insert it. Click on **Finish** to continue.



4. Windows will now detect the ACTiSYS ACT-IR2000UL Series. In some operating systems, you may need to restart your computer. If so, click "Yes" to continue and the Installation is now complete.

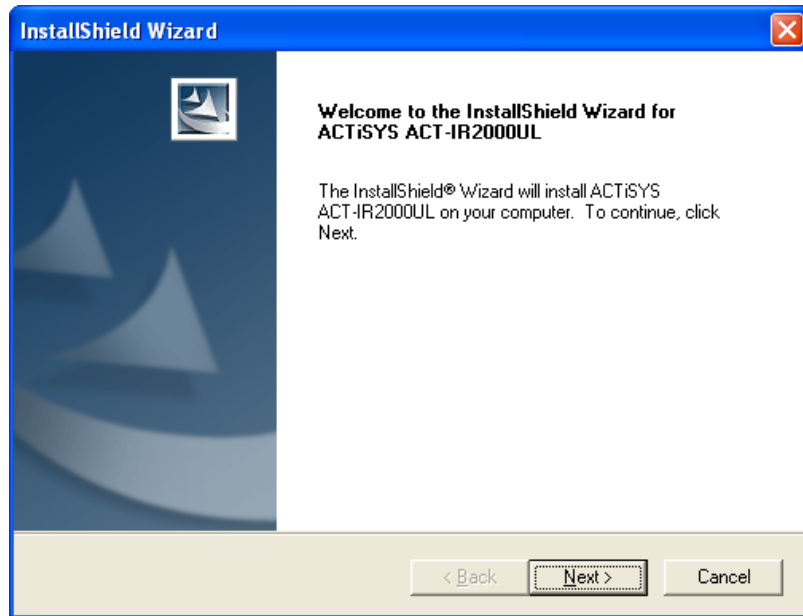


6 DRIVER INSTALLATION FOR WINDOWS XP

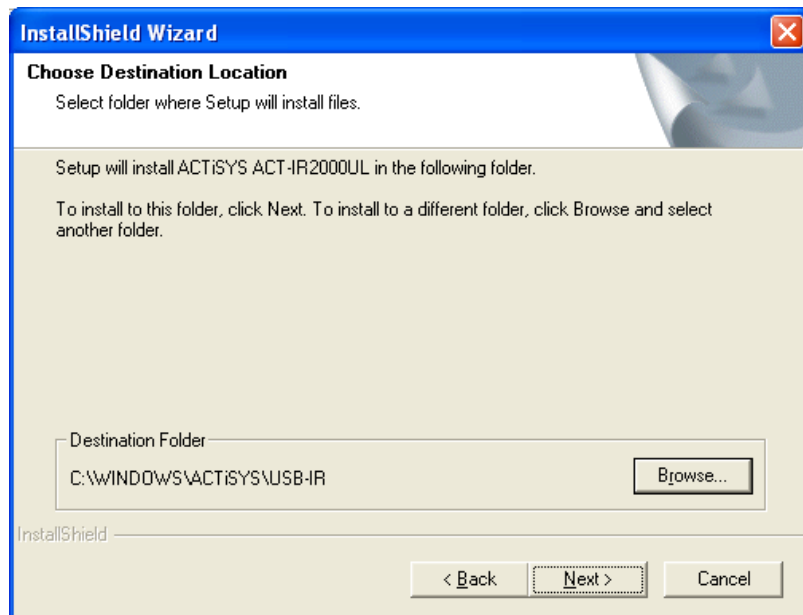
Following are the instructions to properly install ACT-IR2000UL Series under Windows XP.

Important: Do NOT use Windows' Native Driver. Please use the driver on this CD to assure a smooth installation. If you have plugged ACT-IR2000UL into USB port and mistakenly loaded WindowsXP Native Driver, please refer to the "IR2000UL WindowsXP Native Driver Remove Procedure" to remove the driver and follow the "ACTiSYS ACT-IR2000UL Series Driver Installation for Windows XP" to re-install the driver.

1. 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.



2. The Installer will install ACTiSYS ACT-IR2000UL in the Destination Folder. To install to a different folder, click **Browse** and select one. To continue, click on **Next**.



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



4. Insert the ACTiSYS ACT-IR2000UL Series into the USB Jack and click on **Finish**.



5. WinXP will detect ACT-IR2000UL Series. Select **"Install the software automatically (Recommended)"**. Please note you should take the CD out of the CD-ROM **BEFORE** clicking on **Next**.



If you keep the CD in the CDROM, Windows XP will automatically search for all drivers compatible with ACT-IR2000UL. You will see a window with a choice of different drivers, please select the OEM one. If you install the driver to WindowsXP, the driver will automatically copy to Hard disk (C:\Windows). Please highlight "C:\Windows\inf\oem0.inf" and click "OK" button, Windows XP will automatically install ACT-IR2000UL.

6. WinXP will detect the updated drivers. Click on **Continue Anyway** to continue.



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



7 DRIVER INSTALLATION FOR WINDOWS VISTA

Windows Vista has its native driver for ACT-IR2000UL. Only you need to do is Plug & Play.

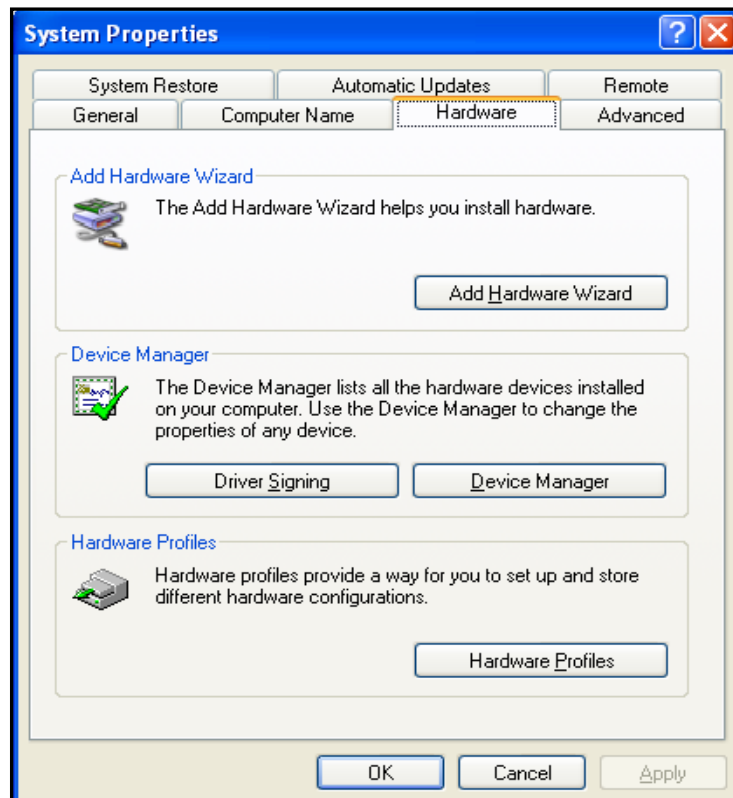
8 WINDOWS XP NATIVE DRIVER REMOVE PROCEDURE

Your ACTiSYS ACT-IR2000UL is shipped with the latest driver on the CD. If you had already installed the Windows XP Native Driver, the following steps will remove the Native Driver and then you can follow the ACTiSYS ACT-IR2000UL Installation Instruction to install the latest driver.

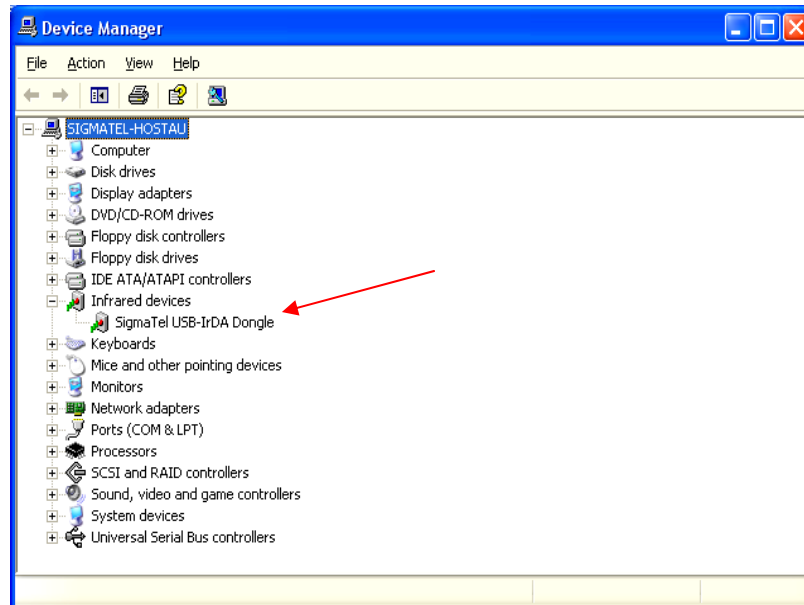
How do you know whether you have the Windows XP native driver?

Answer: It is YES, if your product name is “**SigmaTel USB-IrDA Dongle.**” Figure 1 and 2 will tell you whether this is the case or not.

1. Go to **Control Panel**, click **System** Icon then click “**Device Manager**”



2. You will see “**Infrared Devices**” at the **Device Manager**. Click and it will show “**SigmaTel USB-IrDA Dongle**”



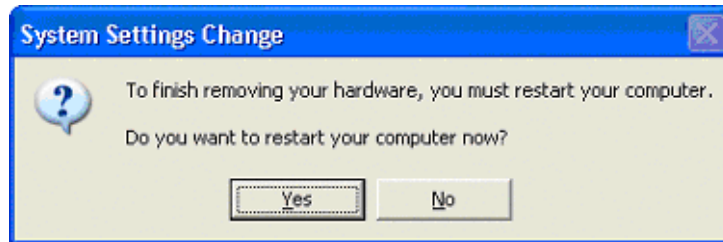
3. Right click on “**SigmaTel USB-IrDA Dongle**”
Click on **Uninstall**.



4. You will see a “**Confirm Device Removal**”
Window then press **OK**.



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



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

Before the PC is restarting, you should **un-plug your ACT-IR2000UL USB connector from the PC's USB port.**

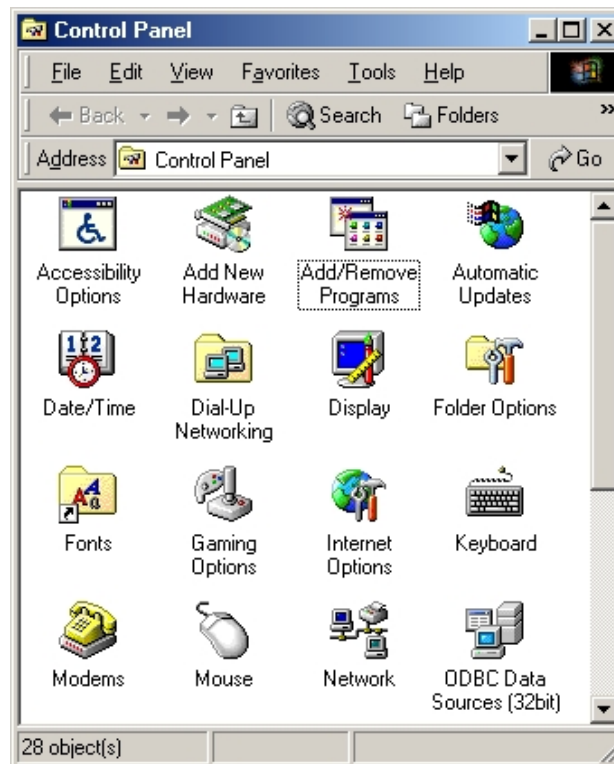
Please refer to ACTiSYS ACT-IR2000UL Installation Instructions for Windows XP Home or Professional.

9 DRIVER REMOVAL FOR WINDOWS XP/2000/ME/98SE

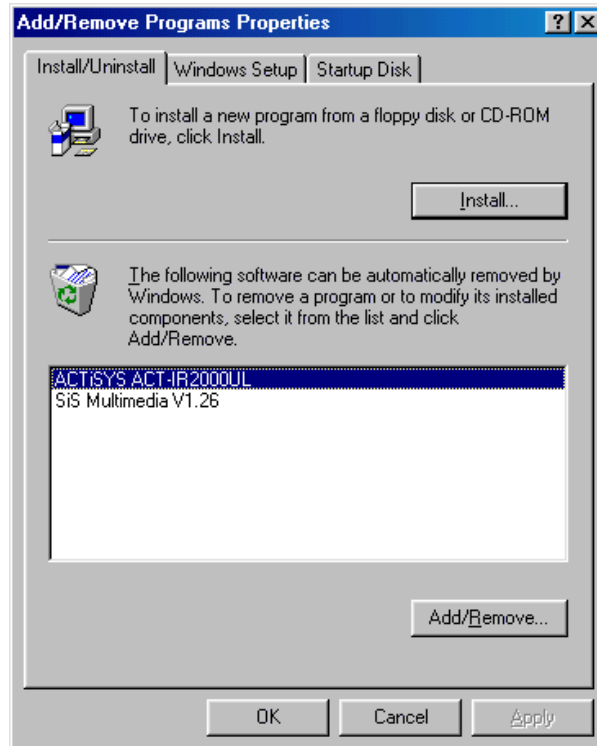
Following are the instructions to properly uninstall ACTiSYS ACT-IR2000UL Series under Windows XP, Windows 2000, Windows ME, and Windows 98SE.

Important: Please keep the ACTiSYS ACT-IR2000UL Series plugging into the computer until prompted to remove it.

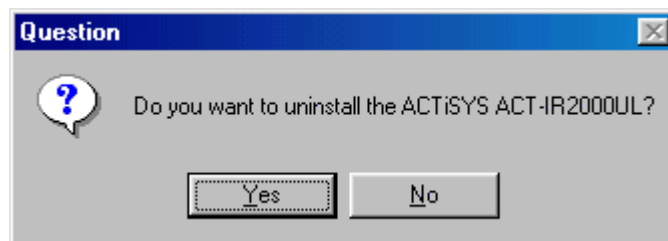
1. Open the **Control Panel** and select **Add / Remove Programs**.



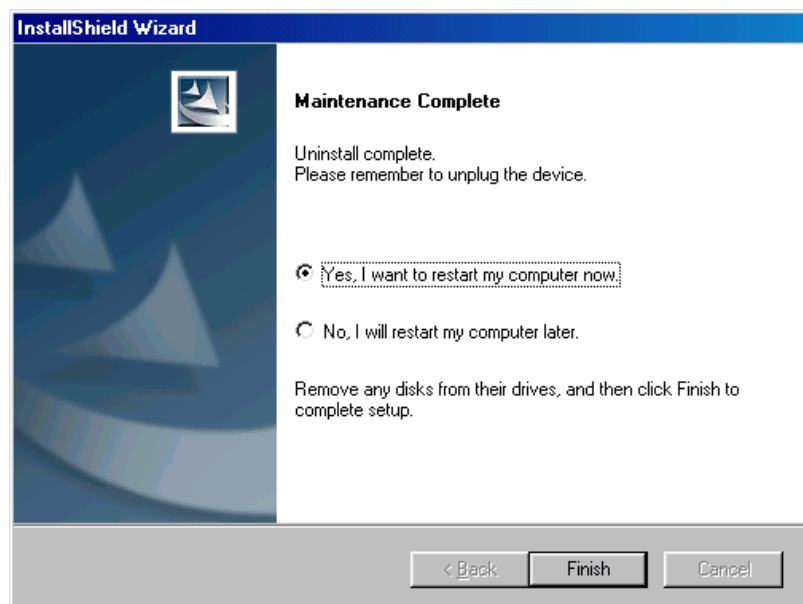
2. Select **ACTiSYS ACT-IR2000UL Series** from the list. Click on the **Add/Remove** button to begin the uninstall process.



3. To continue, click the **Yes** button to uninstall the ACTiSYS ACT-IR2000UL Adapter.



4. To complete the removal process, click the **Finish** button. Unplug the ACTiSYS ACT-IR2000UL Series from your USB jack.



10 TROUBLE SHOOTING

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

Symptom	Problem	Solution
Can not establish link (General)	<ol style="list-style-type: none">1. The two IR devices are not aligned properly.2. Distance is too near or far.3. Device is inactivated4. BIOS setting incorrect5. Installation is not correct.	<ol style="list-style-type: none">1. Properly align them again2. 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

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 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 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. An Electro Static Discharge can damage the internal circuits. 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 other peripheral device or software.

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.

FOR YOU RECORDS

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Model Number:	Serial Number:	Date of Purchase:
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13 CONTACT INFORMATION

GO WIRELESS WITH ACTiSYS IR

ACTiSYS
The Wireless Infra-red Expert

- ◆ IrDA Protocol Software For Portable Devices
- ◆ IrDA Test Software For Hardware Systems
- ◆ IrDA Printer And Computer Adapters

115.2K, 4M and 16M bps

IR2000L

IR220L/L+

IR100M/1000M

The graphic features a central red background with the ACTiSYS logo and tagline. Below the logo is a list of three bullet points. Further down, it lists data rates: 115.2K, 4M and 16M bps. At the bottom, three product images are shown: IR2000L, IR220L/L+, and IR100M/1000M. Surrounding this central text are various electronic devices including a printer, a PDA, a mobile phone, a digital camera, a laptop, and a desktop computer, all connected by red lines radiating from the center, symbolizing wireless connectivity.

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