

ACTiSYS

**ACT-IR210L
IrDA PC Adapter**

User's Manual



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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 helps.

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 the model and serial number 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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INTRODUCTION

This document provides instructions to install the ACT IR210L Serial-IR Dongle along with Windows 98/ME/2000/XP device driver. It is assumed that the user is familiar with basic operation of Window 98/ME/2000/XP.

PARTS CHECK LIST

When you unpack the package, the following items should be found.

1. ACT-IR210L Adapter
2. 5 pins Motherboard Connector
3. User's Guide

SYSTEM REQUIREMENTS

To use ACT-IR210L, your computer **MUST** meet the following requirements.

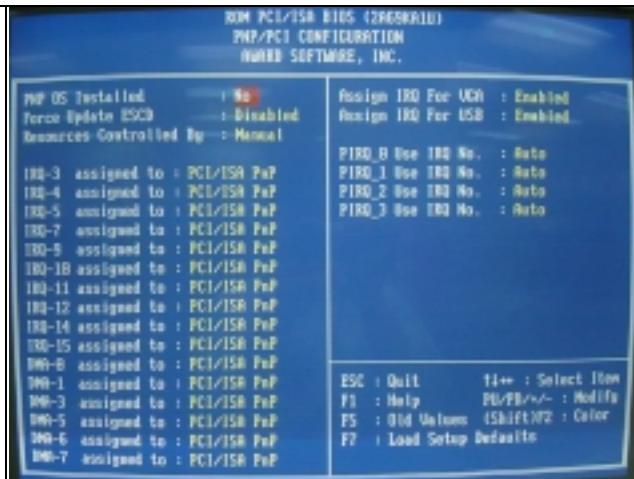
1. Window 98/ME/2000/XP.
2. Built in infrared I/O controller or super I/O chip on the motherboard with infrared connector available and documented in the user's manual.

BIOS SETUP

Before installing the device driver, you **MUST** setup your BIOS **FIRST**. It assumed that your IR Dongle would installed to serial port 2.

1. Choose **PNP & PCI** from **BIOS SETUP**

PNP OS Installed: NO
Resource Controlled by: Manual



2. Choose **Integrated Peripherals** from **BIOS SETUP**

Onboard UART2 Serial Port 2 : 2F8H/IRQ3

Onboard IR function: SIR, HPSIR or IrDA



WINDOWS 98 INSTALLATION GUIDE

Note: If you do not change your computer BIOS setting, **STOP** here and go to Chapter BIOS SETUP.

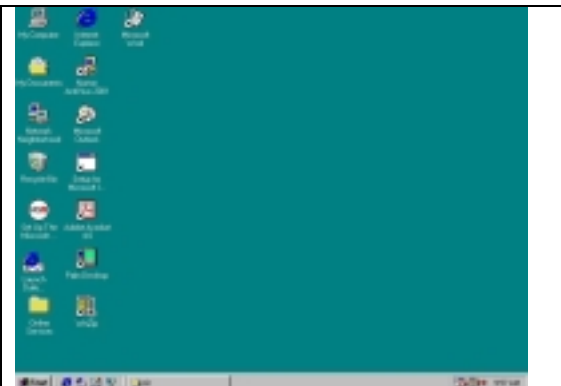
Note: If your computer system has installed some device on the same com port before, you **MUST** properly uninstall the devices first. ACT-IR210L would **NOT** work with your system any more if the devices are uninstalled improperly because some drivers are still there and cause conflicts with ACT-IR210L driver. You **HAVE** to re-install your Windows 98 again.

Note: If your computer system has installed a **FIR** device before, ACT-IR210L would **NOT** work with your system any more. You **HAVE** to re-install your Windows 98 again.

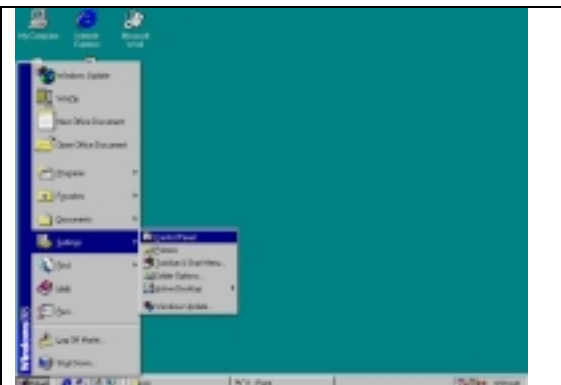
Following are the instructions to properly install the ACT-IR210L Dongle. You need a computer system with a built-in SIR chip and Windows 98 already installed. If your motherboard's IR head is not 5 pins, you have to re-assign the pins according the definition.

1. Connect motherboard connector to your motherboard.
2. Connect ACT-IR210L to Mini DIN 8
3. Boot up your computer system.

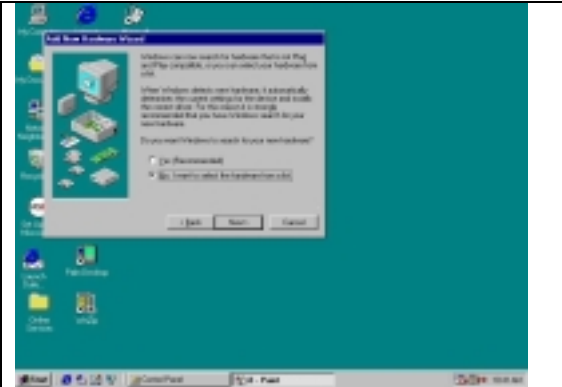
4. Double Click **My Computer** on DeskTop



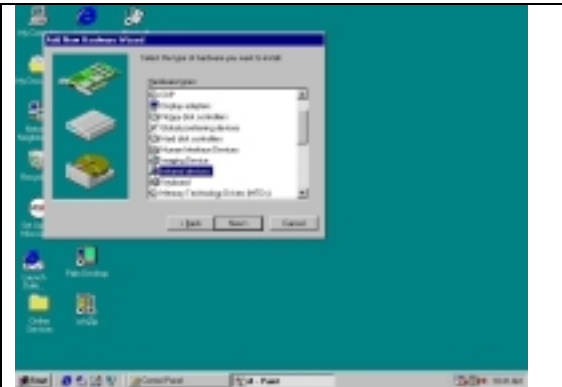
5. Double Click **Control Panel** on My Computer Page



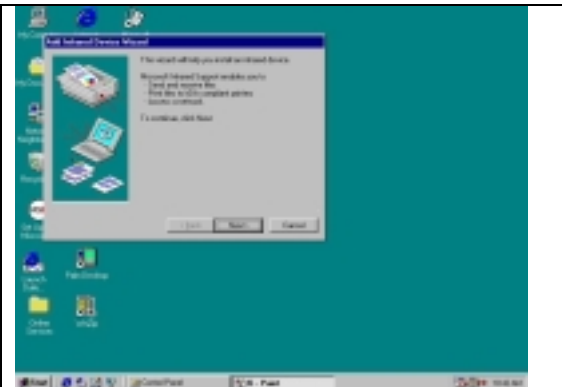
9. Select **No**, the device isn't in the list in the box. Then click **Next**.



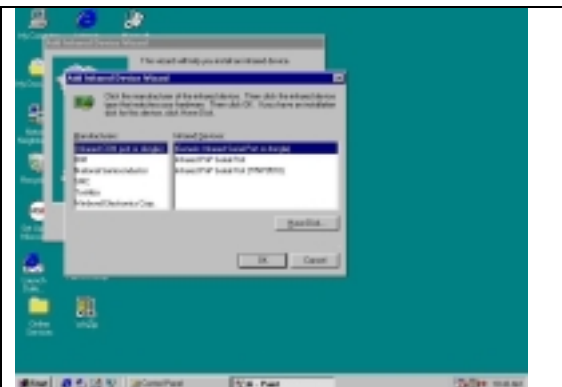
10. Highlight **Infrared Devices** from the **Hardware types** list, then click **Next**.



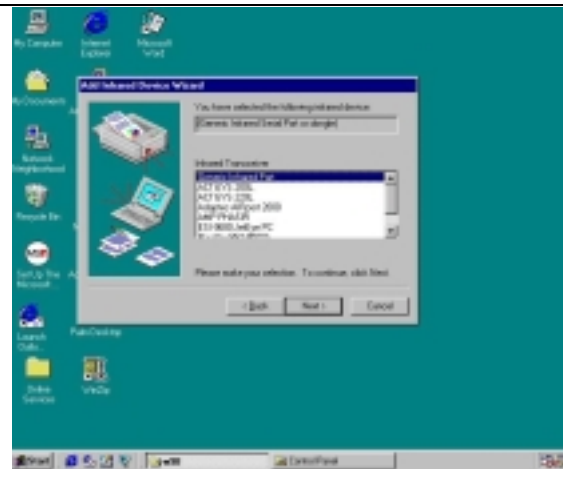
11. Click **Next**.



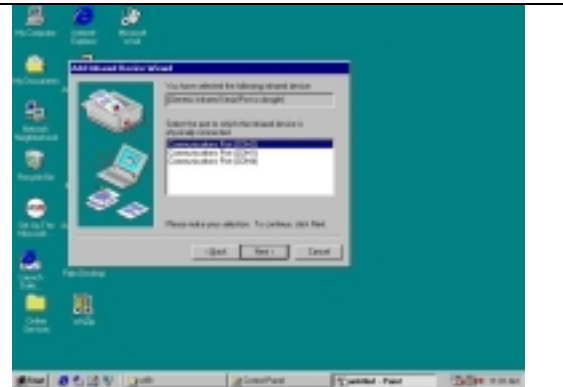
12. From **Manufacturers** list, choose **(Infrared COM port or dongle)**, from **Infrared Devices** list, choose **(Generic Infrared Serial Port or dongle)**. Then click **OK**.



13. From **Infrared Transceiver** list, choose **Generic Infrared Port** for IR200L. Then click **Next**.

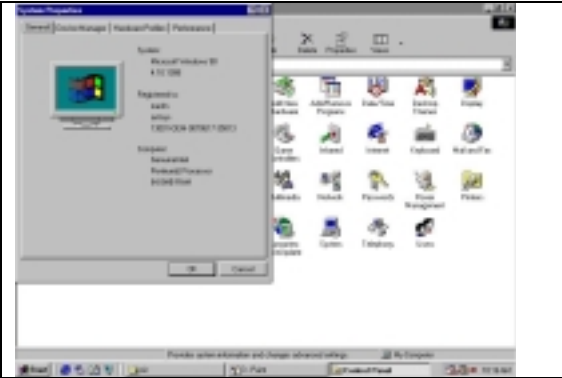


14. Select **COM port** which is physically connected to the Dongle. In most cases, the Dongle is connected to COM2. Choose **Communication Port (COM2)** from the Port list, click **Next**.

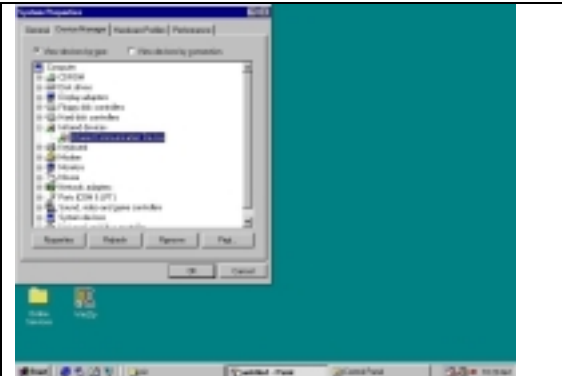


15. Reboot your computer.

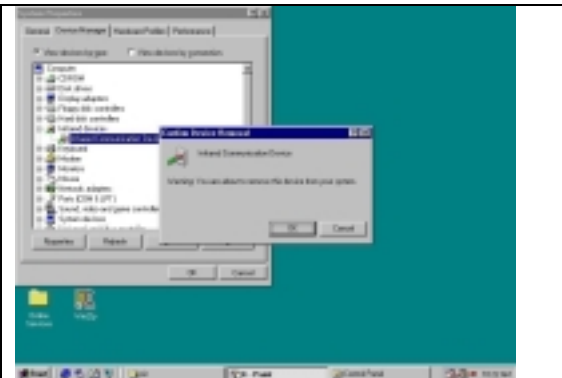
4. Click **Device Manager** tab.



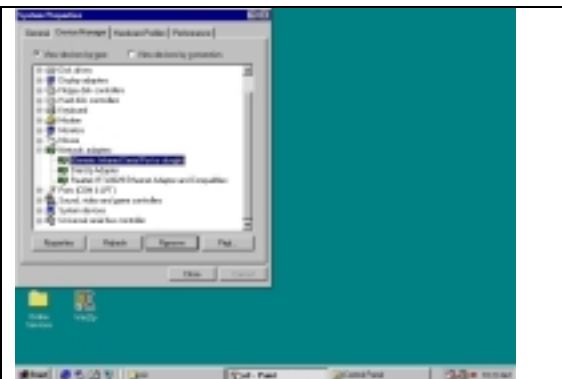
5. Highlight **Infrared Communication Device**, and then click **Remove**.



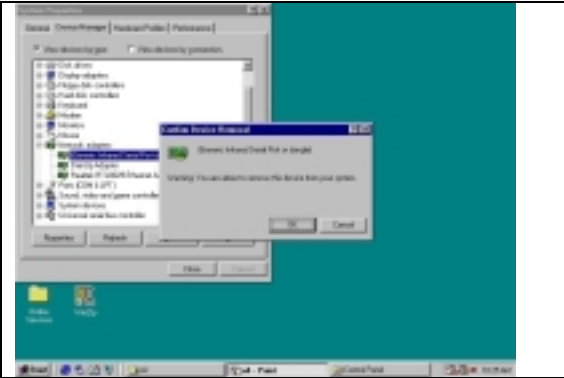
6. Click **OK** in the **Confirm Device Removal** box.



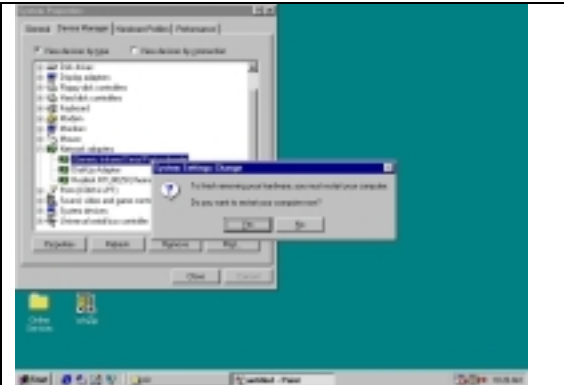
7. Highlight **(Generic Infrared Serial Port or Dongle)**, then click **Remove**.



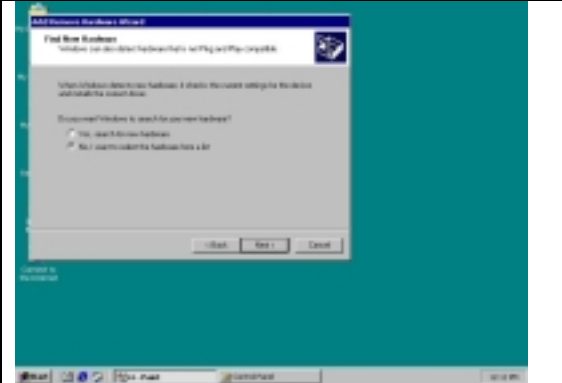
8. Click **OK** in the **Confirm Device Removal**.



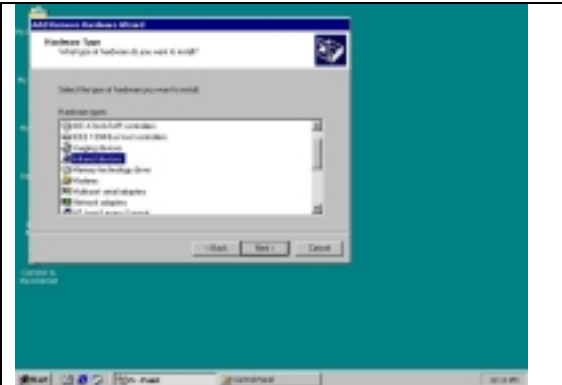
9. Click on **OK** to restart your computer.



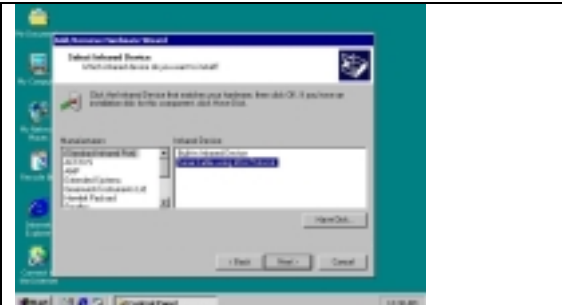
8. Choose **No, I want select the hardware form a list then click OK**



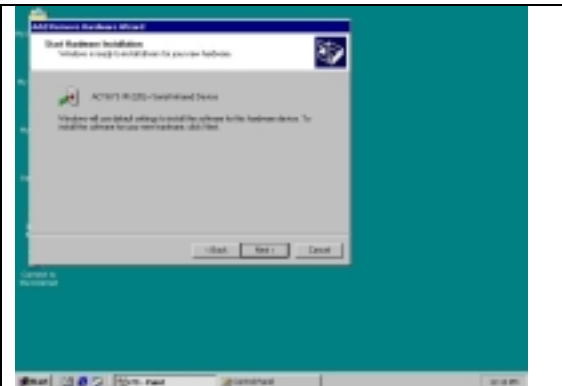
9. Select the **Infrared** device from the **Hardware types**.



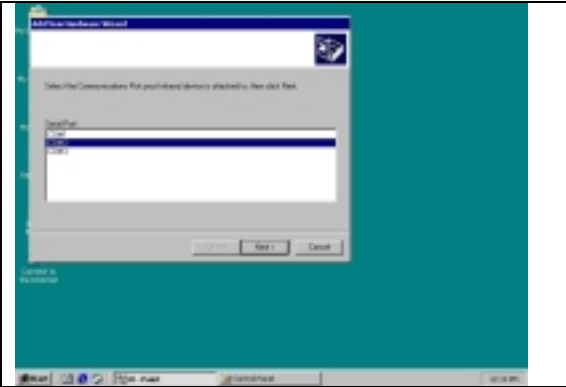
10. From **Manufacturers** list, choose **Standard Infrared Port**, from **Infrared Device** list, choose **Serial Cable using IrDA Protocol** for IR210L; click **Next>**.



11. Click **Next>**.



12. Choose **COM2** in most case, then click **Next>**

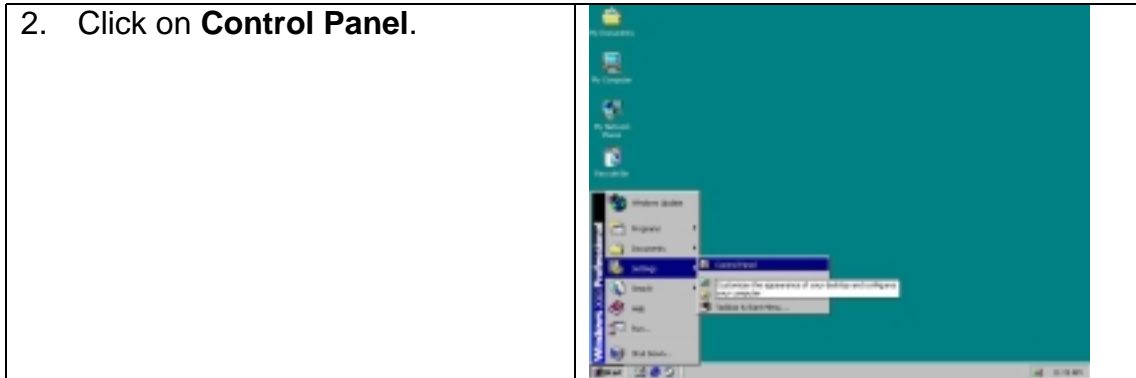


13. Click **Finish**.

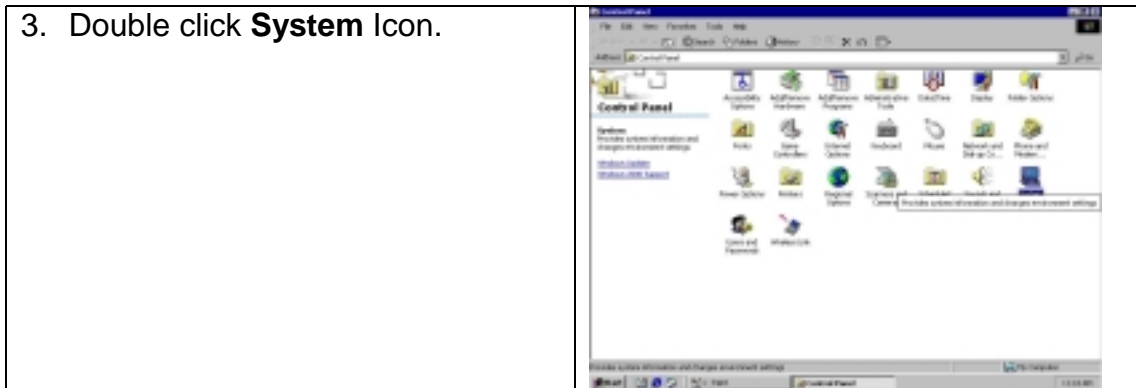
WINDOWS 2000 UNINSTALLATION

1. Startup your computer system.

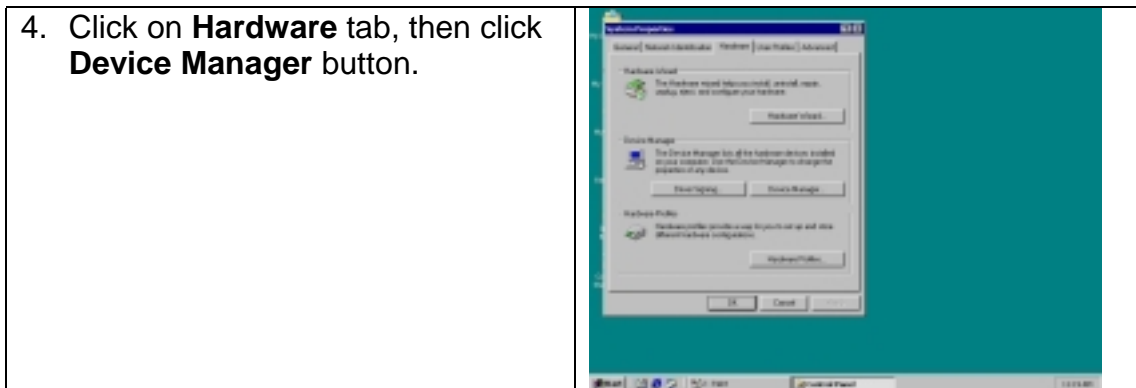
2. Click on **Control Panel**.



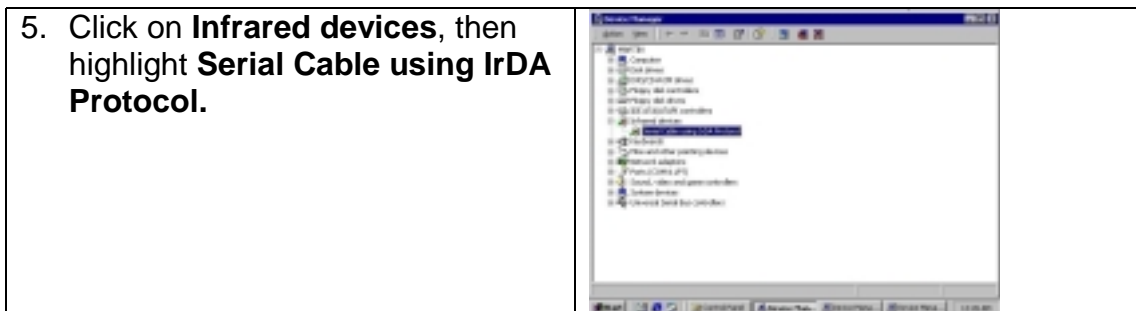
3. Double click **System** Icon.



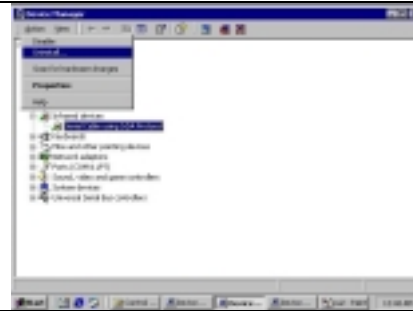
4. Click on **Hardware** tab, then click **Device Manager** button.



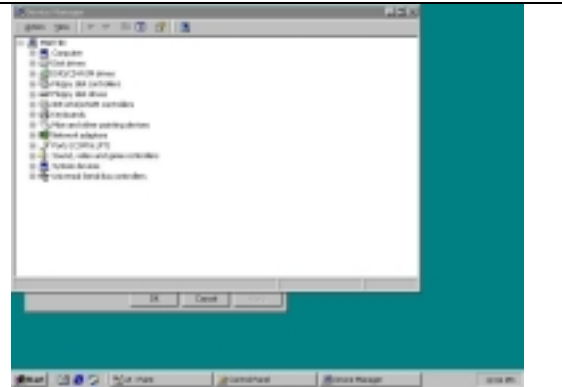
5. Click on **Infrared devices**, then highlight **Serial Cable using IrDA Protocol**.



6. Click **Action** and then **Uninstall...**



7. The device has been uninstalled and close device manager, restart your computer.



WINDOWS ME INSTALLATION GUIDE

Note: If you do not change your computer BIOS setting, **STOP** here and go to Chapter BIOS SETUP.

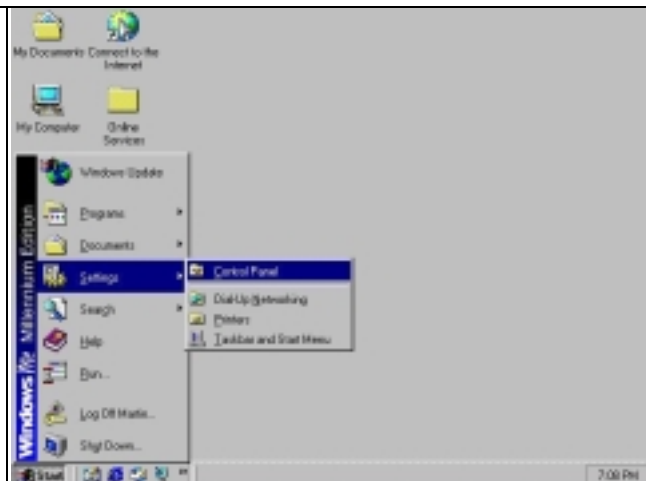
Note: If your computer system has installed some device on the same com port before, you **MUST** properly uninstall the devices first. ACT-IR210L would **NOT** work with your system any more if the devices are uninstalled improperly because some drivers are still there and cause conflicts with ACT-IR210L driver. You **HAVE** to re-install your Windows ME again.

Note: If your computer system has installed a **FIR** device before, ACT-IR210L would **NOT** work with your system any more. You **HAVE** to re-install your Windows ME again.

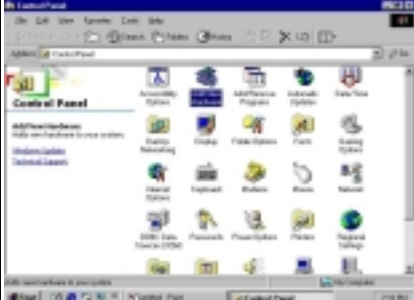
Following are the instructions to properly install the ACT-IR210L Dongle. You need a computer system with a built-in SIR chip and Windows ME already installed. If your motherboard's IR head is not 5 pins, you have to re-assign the pins according the definition.

1. Connect ACT-IR220L+/220L/200L serial adapter to the Desktop PC.
2. Boot up your computer system.
3. Double Click **My Computer** icon on DeskTop

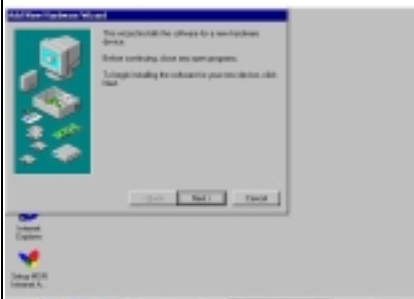
4. Double click **Control Panel** icon.



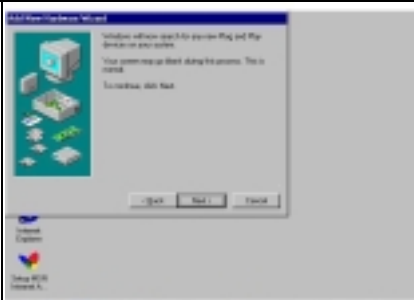
5. Double click **Add New Hardware** icon.



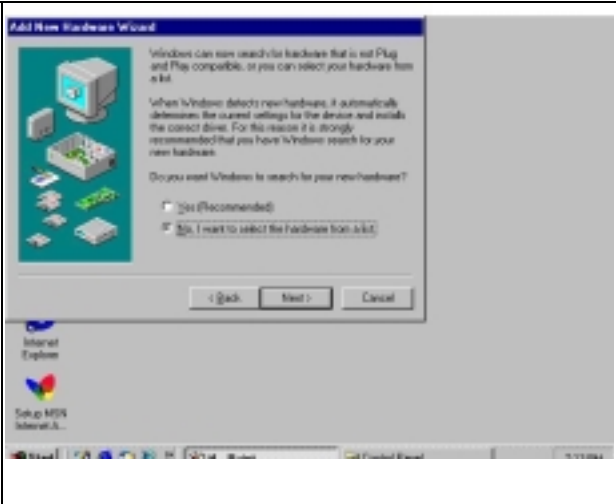
6. On the following boxes, click **Next>**.



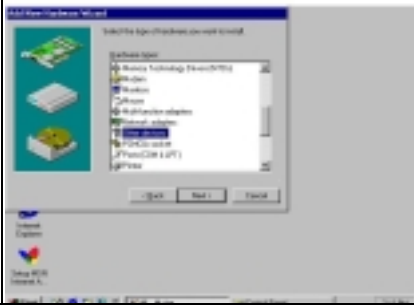
7. Click **Next>**.




8. Choose **No I want to select the hardware from a list**, then click **Next>**.



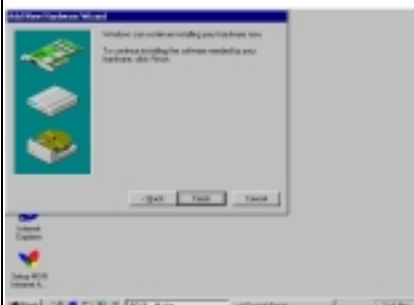
9. If you can not find Infrared device from **Hardware types** list, choose **Other devices** from the **Hardware types** list, then click **Next >**. Otherwise go to step 16.



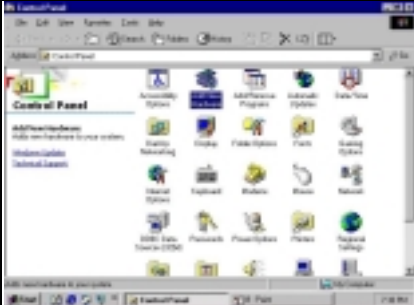
10. From **Manufacturers** list, choose (**legacy serial infrared device**), from **Models** list, Choose **ACT-IR200L Infrared Wireless Interface**, then click **Next>**.



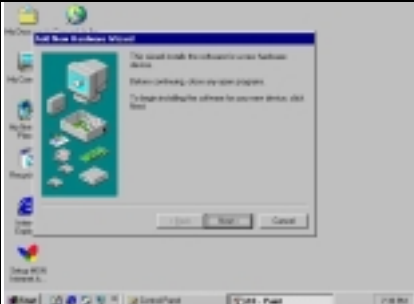
11. Click **Finish**.



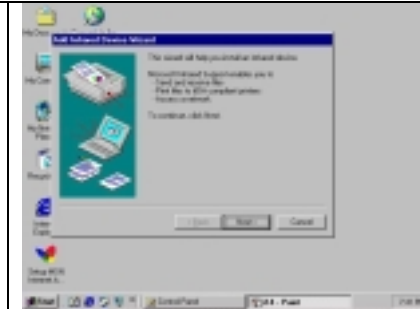
12. Double click **Add New Hardware** icon.



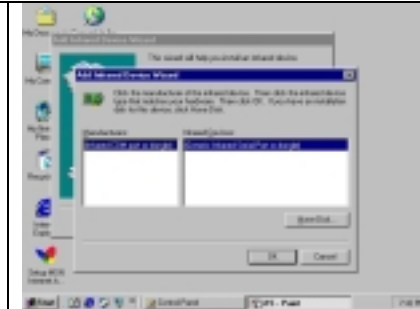
13. Click **Next>**.



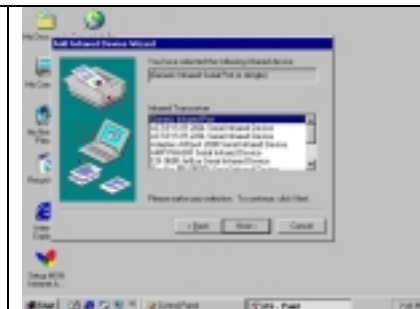
17. Click **Next>**.



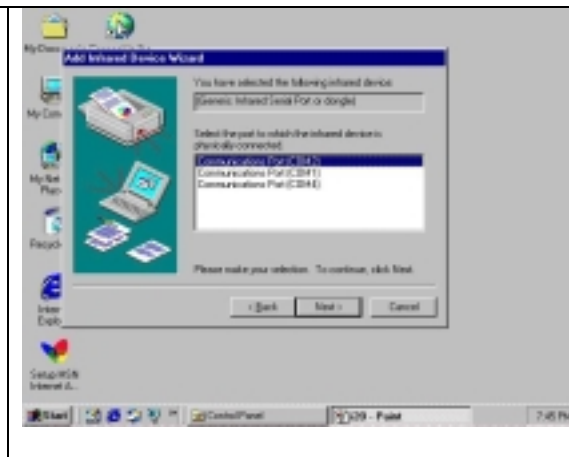
18. Click **Next>**



19. Highlight **Generic Infrared Port**, then click **Next>**



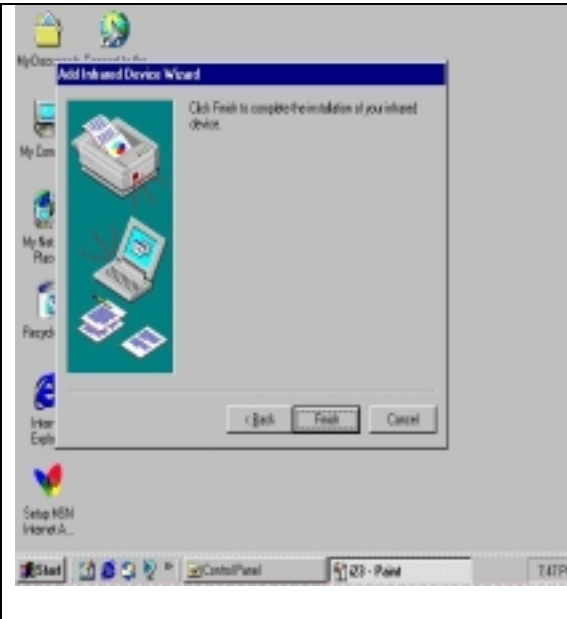
If your device is physically connected to COM2, highlight **Communications ports (COM2)**, then click **Next>**.



20. Click **Next>**.



21. Click **Finish**

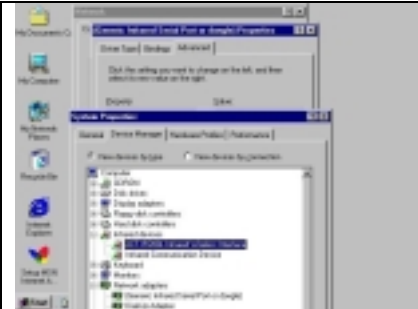


WINDOWS ME UNINSTALLATION GUIDE

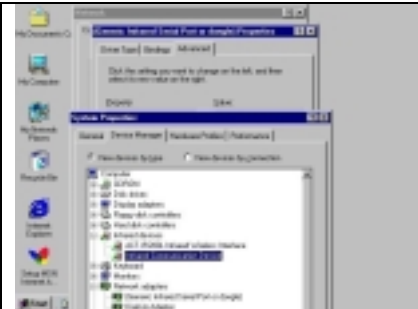
1. Double click **System** icon on **Control Panel**



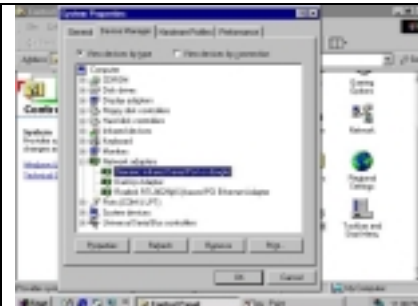
2. Go to Device Manager, highlight the items in the **Infrared devices**, then click **Remove** button.



3. Highlight the items in the **Infrared devices**, then click **Remove** button.



4. Highlight (**Generic Infrared Serial Port or dongle**), then click **Remove** button. Click **OK** button.



The device has been successfully uninstalled.

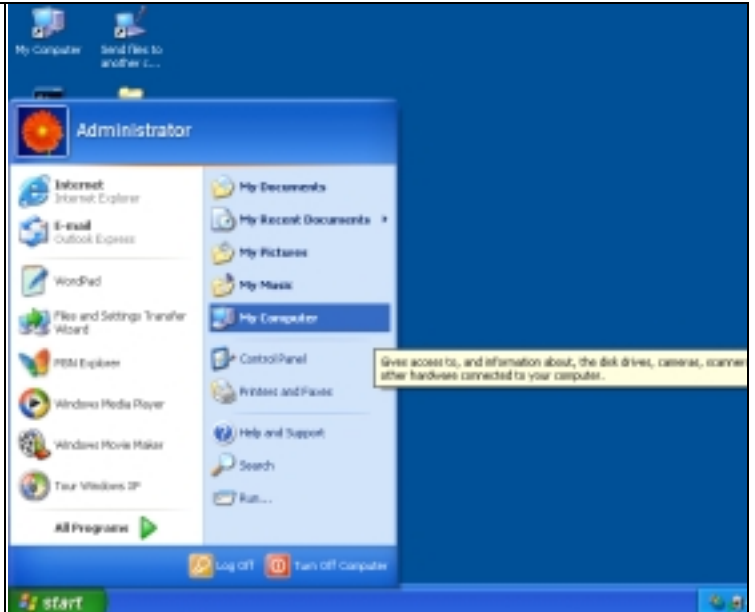
WINDOWS XP INSTALLATION GUIDE

If your motherboard has built-in infrared I/O controller or super I/O chip, Windows XP will automatically install the driver if the IrDA is enabled in BIOS settings.

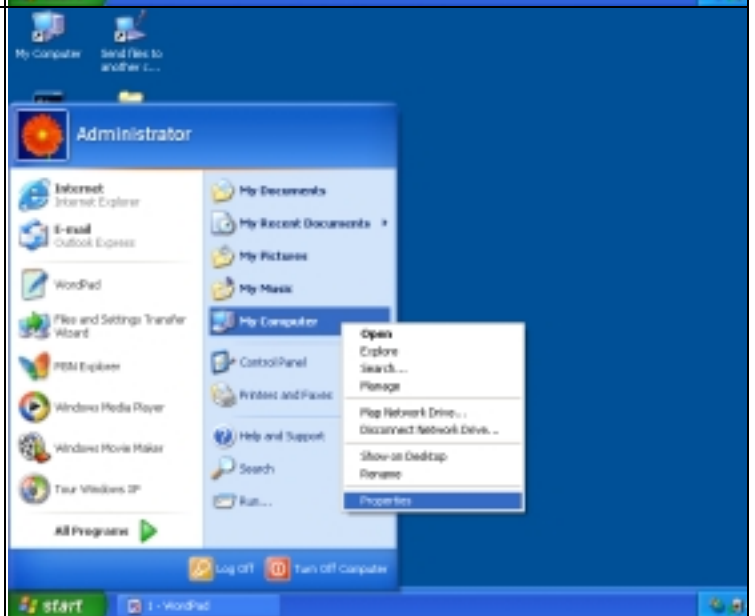
You are supposed to connect the device to the IrDA header simply. It will work.

WINDOWS XP UN-INSTALLATION GUIDE

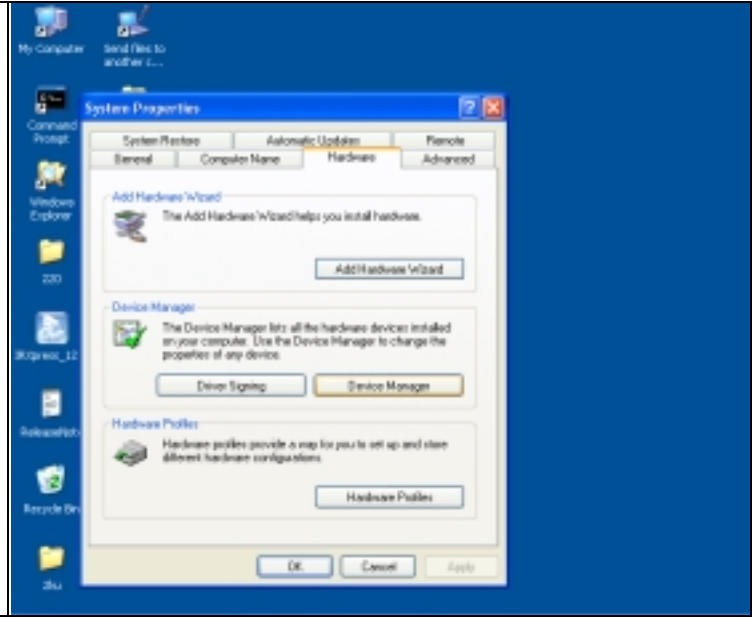
1. Highlight **My Computer**, then right click.



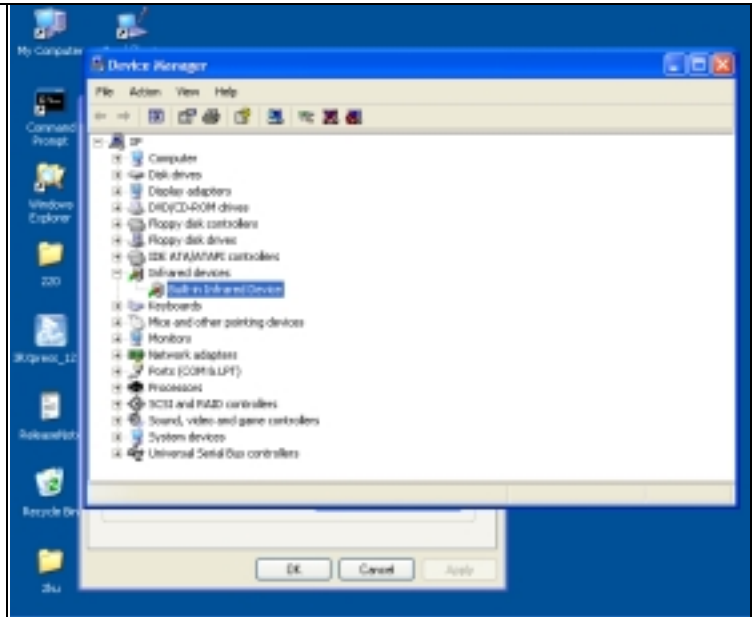
2. Highlight **Properties**, then left click



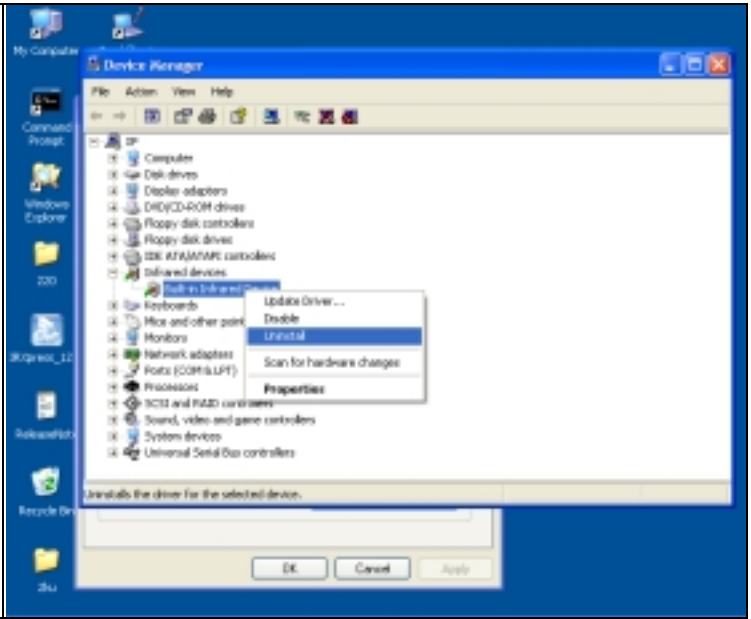
3. Click **Device Manager**



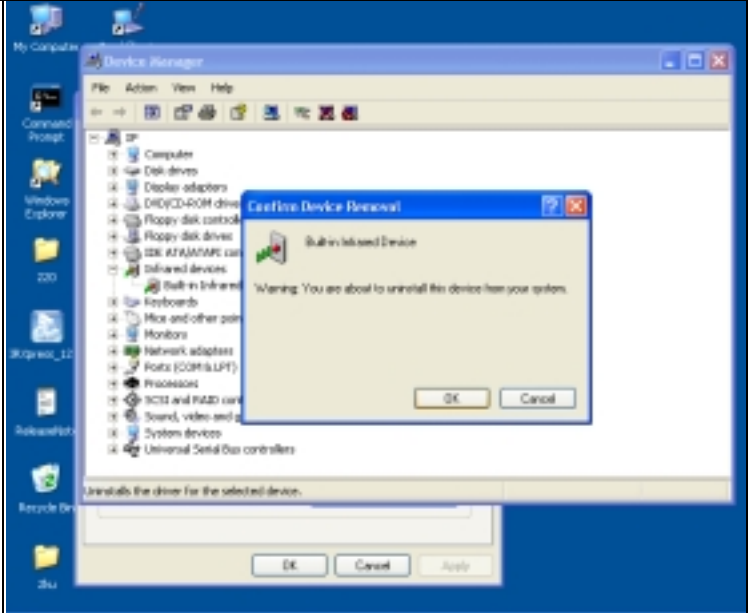
4. Highlight the items under **Infrared device**, then right click.



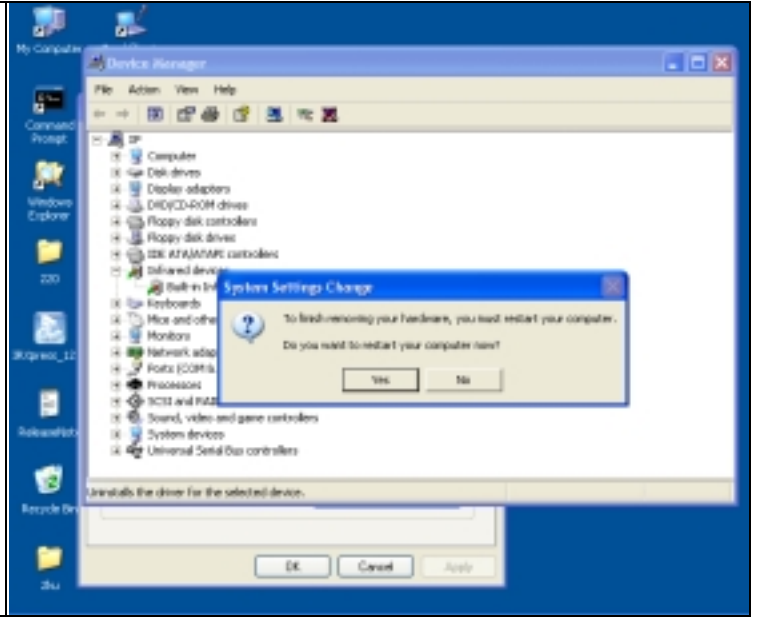
5. Click **Uninstall**



6. Click **OK**, you have successfully uninstalled the device on your system.



7. Restart your computer



TROUBLE SHOOTING

For help on general and miscellaneous problems you may be experiencing with your installation, 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. The device is inactivated. 4. The device is not installed properly 	<ol style="list-style-type: none"> 1. Properly align them again 2. Move one device to a proper distance. 3. Activate it by IR monitor. 4. Refer to Un-installation Guide to remove the device, then reinstall again.
ACT-IR200L/220L+ is connected to and takes power only from the serial port of the notebook computer.	The power-saving feature in the notebook computer either stops or reduces power output from the signal lines of the serial port to the ACT-IR200L/220L+ devices.	<ol style="list-style-type: none"> 1. Set the "Power Management" control to "Advanced" or "Off" to enable power supplied from computer serial port to ACT-IR200L/220L+ devices. 2. Go to Integrate Peripheral to set the COM port to "Infrared". 3. Do not install more than one infrared device on one computer.
File Transfer between IR-equipped PDA and ACT-IR device-attached host computer stops before finishing up and an error message appears.	<ol style="list-style-type: none"> 1. The infrared communication is interfered. For example, something blocks out the infrared beam or the burst of string light source, etc. 2. Software does not support the IrDA controller chip on the motherboard. 3. Serial port is occupied and not available for IR transmission. 	<ol style="list-style-type: none"> 1. Check to find out the source of interference and eliminate it before trying again. 2. If you were restoring data, simply try again. 3. If you were doing backup something the PDA does not reset its flags and keeps stopping at the same position unless you press the RESET button once. Be very careful. DO NOT initialize (press ON key and RESET button at the same time) your PDA. Otherwise you may lose all your data. 4. Make proper model # selection in the software as specified in your PC system user's manual.

		5. Make sure to disconnect modem, etc. from the serial port to make it available for IR transmission.
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SPECIFICATIONS

Model: ACT-IR210L+
Carrier: Infrared radiation (peak wavelength: 850 to 1050nm)
Communication Distance:
 IR210L From 0 cm to 250 cm.
 For best results, from 10 cm (3.95 in) to 150 cm (4 ft. 11.05 in)

IrDA-IR:

Baudrate: 9.6,19.2,57.6,115.2K bps
Parity Bit: None
Data: 8 bit
Stop Bit: 1 bit
Error Check: CRC

Connector: 5-pins connector to motherboard
Power Source: Motherboard
Power Consumption: 0.30mW (11mA max.)
Operating temperature: 0°C to 40°C (32°F to 104°F)
Dimensions (Inches): 2.0"L x 1.63"W x 0.62"H 51mm x 41mm x 16mm
Weight: 2.0 oz (54 gr.)
Accessories: User Manual
Windows 98/ME/2000: IR Software

Pin Assignments: 5-pin connector

Pin	Color	Symbol	I/O	Function
1	Red	VCC	O	+5V Power Supply
2	Blue	NC	-	Non Connected
3	Yellow	IRRX	I	IR Receive
4	Black	GND	-	Reference ground (0V) for all signals
5	Green	IRTX	O	IR Send

WARRANTY INFORMATION

THE FOLLOWING WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

ACTiSYS Corporation warrants to the first consumer purchaser, for a period of one 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 INCLUDING THE WARRANTIES OF MERCHANT ABILITY AND FITNESS FOR USE ARE LIMITED TO A PERIOD OF ONE 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, or 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 repairs 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 for you.

ACTiSYS Corporation warrants to the first consumer 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.

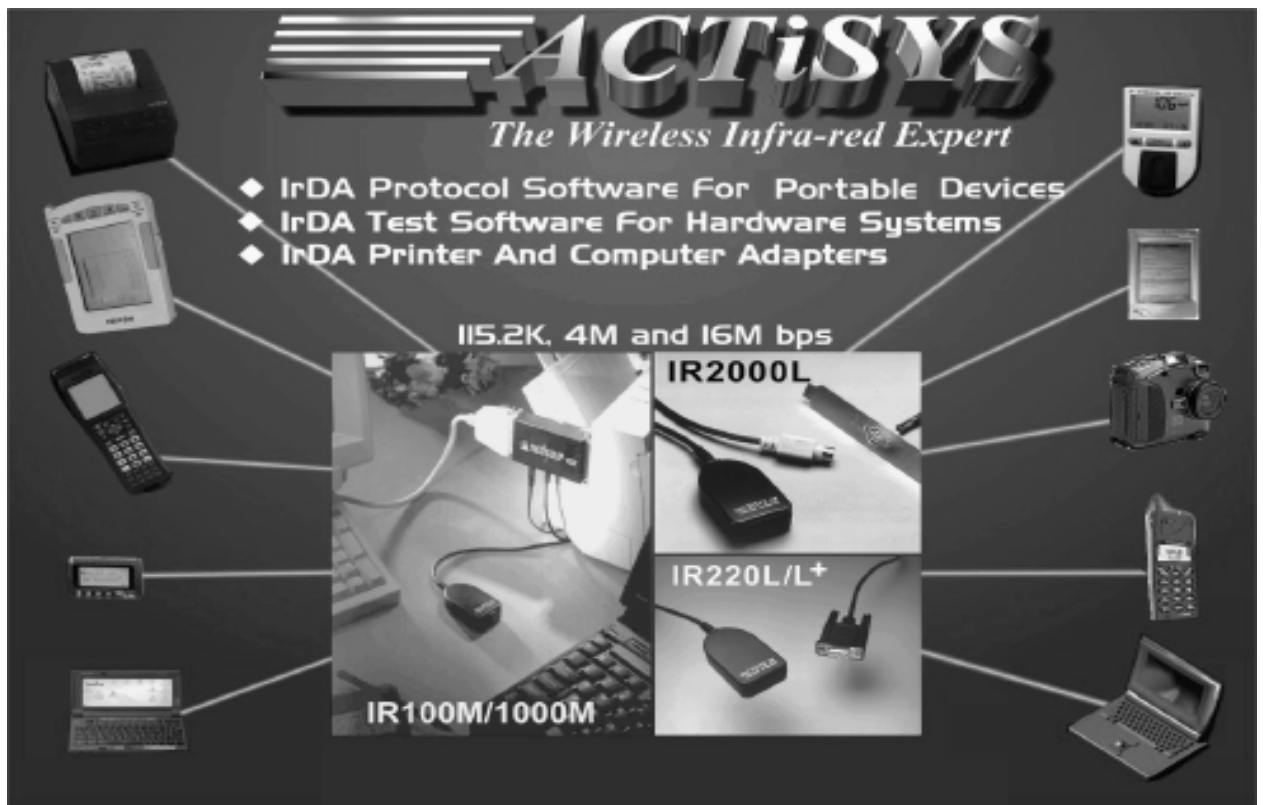
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CONTACT INFORMATION



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 advertisement features a central collage of images including a printer, a handheld device, a mobile phone, a laptop, and various IrDA dongles. Lines radiate from the central text and images to smaller images of these devices on the left and right sides of the advertisement.

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