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 the model and serial number which are located on the bottom of the case. Please retain this information.

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Serial Number</th>
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<tr>
<th>Date of Purchase</th>
<th>Place of Purchase</th>
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REVISION HISTORY

<table>
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<th>Comment</th>
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<td>1.5.1.1</td>
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1. INTRODUCTION

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

2. 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
4. 5 pins to 6 pins changer

3. 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.

4. BIOS SETUP

You MUST setup BIOS FIRST. It assumed that your IR Dongle would be installed to serial Com port 2 before install the device driver.

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 or 3/16 baud
   RXD,TXD Active: Hi,Lo
   IR Transmission delay: Disable
   IR FUNCTION DUPLEX: HALF
   IR Use Pins: IR-RX2, TX2
5. WINDOWS 98/ME/2000/XP 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 with other device on the same com port before, you MUST uninstall the devices first. ACT-IR210L would NOT work with your system anymore if the devices are uninstalled improperly because some drivers are still there and can cause conflicts with ACT-IR210L driver.

Note: If your computer system has installed any IrDA device before, ACT-IR210L would NOT work with your system. You HAVE to reinstall your Windows again.

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

Plug the ACT-IR210L to the Din8 connector and it will work.

If your computer operates under Windows 98 O.S, you may need to insert Windows 98 CD to your driver.

Following are the instructions to properly uninstall the ACT-IR210L under Windows 98, Me, 2000, XP.
6. WINDOWS 98 UNINSTALLATION GUIDE

1. Boot up your computer system.
2. Click Control Panel.
3. Double click System Icon.
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 Yes to restart your computer.
7. 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 **Infrared Communication Device** in the **Infrared devices**, then click **Remove** button.

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

5. The device has been successfully uninstalled.

8. WINDOWS 2000 UN_INSTALLATION GUIDE

1. Boot up your computer system.

2. Click Control Panel.

3. Double click System Icon.

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

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

6. Click Action and then Uninstall.

7. The device has been uninstalled, close Device manager, restart your computer.
9. WINDOWS XP UNINSTALLATION GUIDE

1. Highlight My Computer, then right click.

2. Highlight Properties, then left click.

3. Click Device Manager.

4. Highlight the Serial Cable using IrDA Protocol under Infrared device, then right click.
5. Click **Uninstall**.

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

7. Please close **Device manager**, restart your computer.
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 as following.

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>PROBLEM</th>
<th>Solution</th>
</tr>
</thead>
</table>
| Can not establish link (General) | 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.  
5. BIOS setting is wrong | 1. Properly align them again.  
2. Move one device to a proper distance.  
3. Enable the device by IR monitor.  
4. Refer to Uninstallation Guide to remove the device, then reinstall again.  
5. Correct BIOS setting. |

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. Software does not support the IrDA controller chip on the motherboard. Serial port is occupied and not available for IR transmission. | Check to find out the source of interference and eliminate it before trying again. If you were restoring data, simply try again. 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. Make proper model # selection in the software as specified in your PC system User’s manual. Make sure to disconnect modem, etc. from the serial port to make it available for IR transmission. |
11. SPECIFICATIONS

Model : ACT-IR210L+
Carrier : Infrared radiation (peak wavelength: 850 to 1050nm)
Communication Distance:
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

Pin Assignments:

5-PIN CONNECTOR

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

5 pins to 6 pins changer

<table>
<thead>
<tr>
<th>Pin</th>
<th>P1</th>
<th>P2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VCC</td>
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<td>2</td>
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</tr>
<tr>
<td>3</td>
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<tr>
<td>6</td>
<td>IRTX</td>
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</tbody>
</table>
12. WARRANTY INFORMATION

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.

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 MERCHANTABILITY AND FITNESS FOR USE 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 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 to you.
13. CONTACT INFORMATION

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