# Windows98 IR setup forIR220L/220L+/210L/200L

Caution: **To install IR driver for this SIR adapter in Windows98, please be sure no FIR adapter was installed previously. If the FIR adapter and driver were already installed, even you remove this FIR driver in 'Device Manager' and then install IR driver for this SIR adapter, it may not work properly.**

Connect ACT-IR2xxL serial adapter to the Corn port of desktop PC. If there is no IR window on the portable PC, another IR2xxL should be connected to the portable PC.
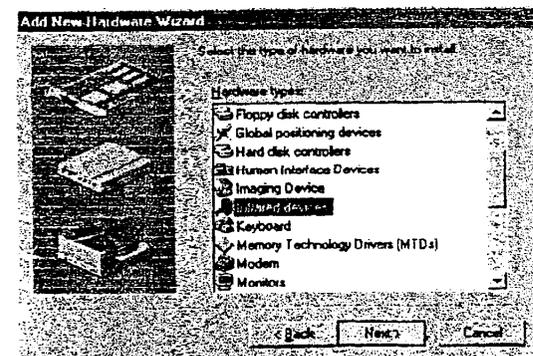
1. Go to "Control Panel" and double click on "Add New Hardware".

2. On the following screens, click on "Next" twice, then select "No, the device isn't in the list". And click on "next".
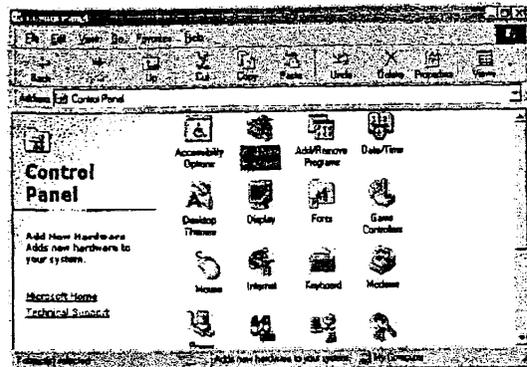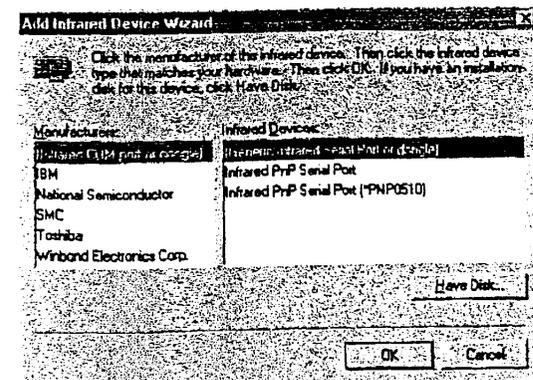
3. Select "No I want to select Hardware from the list",
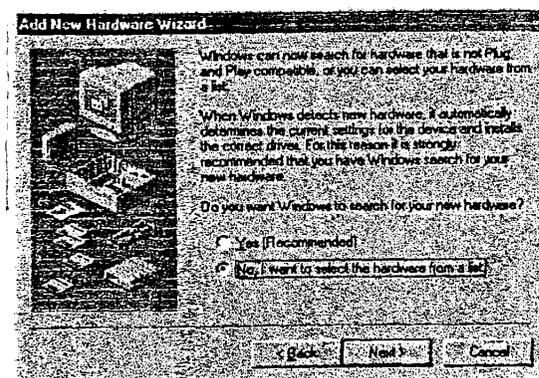
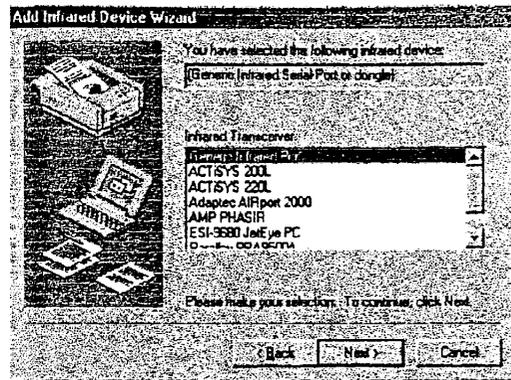4. Scroll down the menu and highlight "Infrared Devices", then click on "Next" twice.

5. Under "Manufacturers" Select "(Infrared COM port or dongle)", and then in "Infrared Devices" Select "(Generic Infrared Serial Port or dongle)".

   Click on "OK".

6. At "Infrared Transceiver", Select "ACTiSYS IR-220L or ACTiSYS IR-200L". For ACT-IR-2 1 OL, Select "Generic Infrared Port" instead. Then click on "Next'".

7. Select the COM port to which the Infrared device is physically connected. In most cases, choose COM2. Click on 'Next".
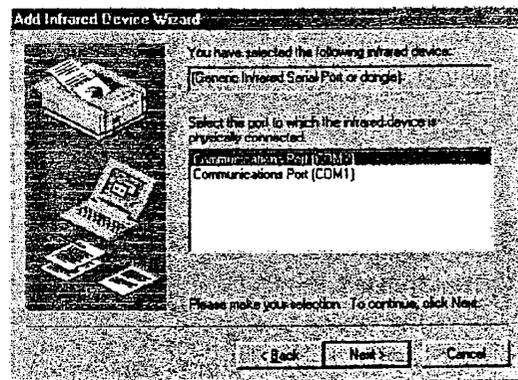
8. Follow the screen prompts until it asks you what default ports to use. Select "Use default ports (recommended)". Click on "Next".
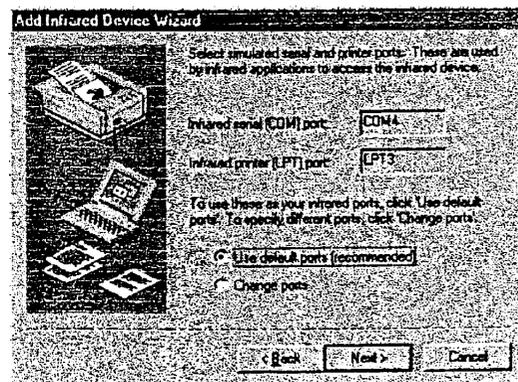
9. Click on "Finish", The driver is installed successfully.

10. Please reboot your computer.

11. Please refer to ACT-IR 200L/220L User's Manual, "Setting Up" - Section B to continue installation.

(Ver. 1.0, 8-3 1-98)

Drucker

oder

Handy

oder

Laptop

freier Com-Port (RS 232)
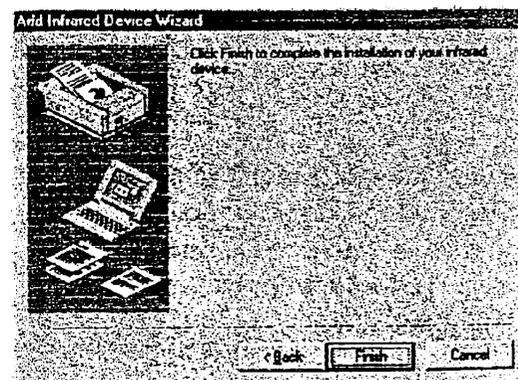
IrDA kompatibler Infrarot Adapter ⒟
- Zum Anschluß an die serielle Schnittsteile
- Unterbrechungs- **und** fehlerfreie Datenübertragung
- Zuverlässige Übertragung der Daten bis zu 1 m Entfernung
- Einfache Installation und Handhabung
- Für alle IrDA fähigen Geräte wie Drucker, Handys, Notebooks, Handhelds, PDAs, Digital Cameras.. .
- Kabellänge: 2 m

IrDA compatible infrared adapter GB
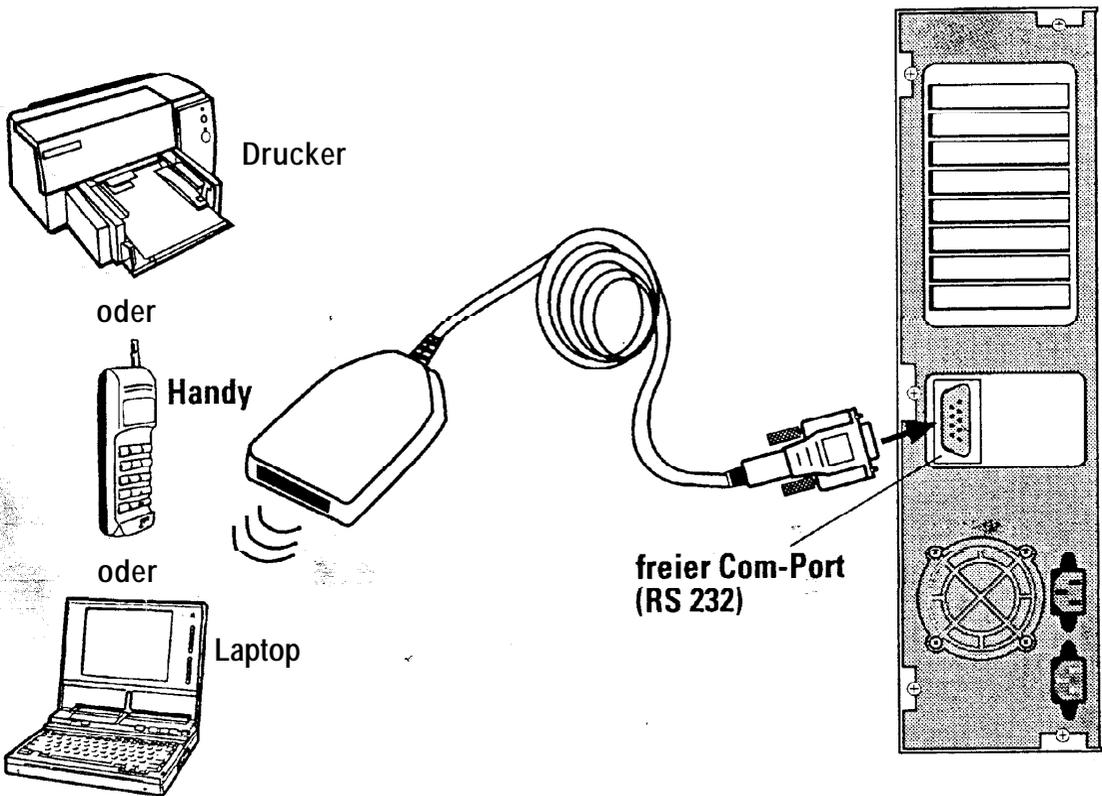- hooked up at the serial port
- Interruption free, error free data transmission
- Accurate and fast data transmission up to 3 ft (1 m)
- Easy to set up and use
- For all IrDA units like printers, mobile phones, notebooks, handhelds, PDAs, Digital Cameras.. .
- Cable length: 2 m

CE ♻ DER GRÜNE PUNKT QC passed by Hama Germany

ACTiSYS

ACTiR

ACT-IR 200L/220L

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 a Class B digital device. pursuant to Part 15 of the FCC Rules.This equipmentgenerates. 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 noguarantee that interference will nor 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 or an adjacent area thereto) 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.
All indicated copyrights and trademarks in the pages of this Reference Guide are copyrights and trademarks of their respective corporations.

Note: Must be used with shielded cable only.

FOR YOUR RECORDS......
For your assistance in reporting this product in case of loss or theft. please record below the model number 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** _____

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

Congratulations on purchasing the ACT-IR infrared wireless interface products from ACTiSYS. The ACT-IR products enable you to build a wireless data highway between your convenient mobile devices and your host computers. The compact IR head can be attached easily to any convenient location using Velcro.

- *IR200L* attaches to the PC serial port connector and is compatible with multiple IR standards; ASK

  (500KHz) used by Sharp's Wizard and Zaurus, Apple's Newton, and IrDA-1.O (SIR) used by many IrDA capable

  notebook PCs, PDAs, etc. No external power needed!

- *IR220L* attaches to the PC serial port connector and is IrDA-1.O (SIR) compatible that in most cases can

  reach an IR communication distance of 0 cm to 240 cm, by using serial-port power only. No external power needed!

P A R T S   I D E N T I F I C A T I O N

ACT-IR200L/IR220L

DB9F conector
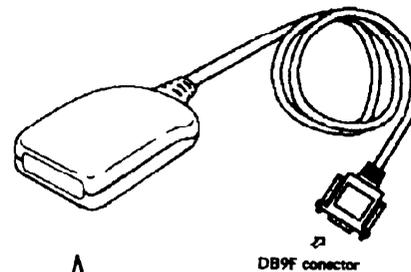
This IR head can be attached to any convenient desktop location
using two Velcro strips which can be attached to the back. along
the edge of the two lone sides. between rubber pads.

Notebook:
AcerNote 950C/CX, AST Ascentia 950N,
Cannon Note PC, Compaq LTE,
NEC Notebook PC, HP Omnibook
IBM-Thinkpad 775, Gateway 2000-Liberty,
Sharp PC, Toshiba PV 3000
And many more....

IrDA Software:
Windows 95-IR driver,
HP-5MP LaserJet driver,
Puma-Tranxit,
Traveling Software-Laplink

Printer:
HP-5P, 6P Laser Printers.
O'Neil, Extech Portable Printers

Cellular phone:
Nokia communicator 9000

ASK-IR link Software:
Rupp Tech-Rupplynx,
Sharp-Zaurus Link,
Parra-Clipboard Link.

Digital Camera:
Sony DSC-F1,
Sharp VE-LS5.

Desktop PC:
All models with the standard
RS-232 port.

Handheld PC/PDA:
LXE, Norand, Husky,
Industrial Handheld PC.
Zaurus, Psion3C, Newton 2000
Windows CE-HPC like HP 320LX, etc

Pager:
NEC, Motorola.

A. *ACT-IR200L/IR220L*

1. Locate a COM (serial) port on the back of your PC. Most COM ports use 9-pin male connectors.

Note:

If all of your PC's COM ports are already used by a mouse and / or a modem, you must disconnect the modem or the mouse (both pbysical device and the corresponding software COM port connection) to vacate one COM port, or install an add-in board with additional COM ports.

2. insert the 9-pin *ACT-IR200L/IR220L* connector in the Q-pin COM port, as shown in the following diagram.
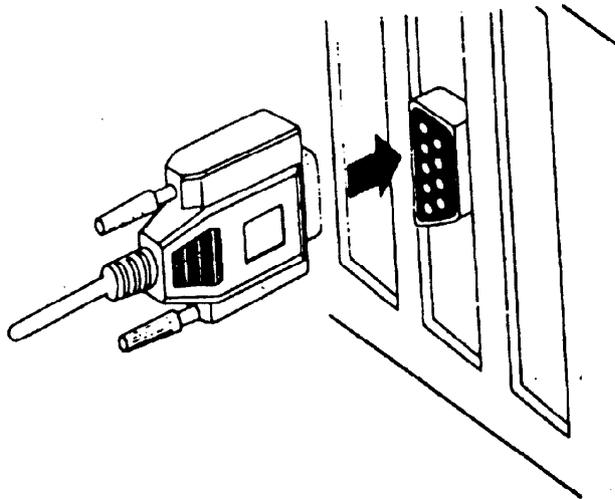
If your PC has a 25-pin connector, you must use a 9-pin-to-25-pin converter, as shown in the following diagram.
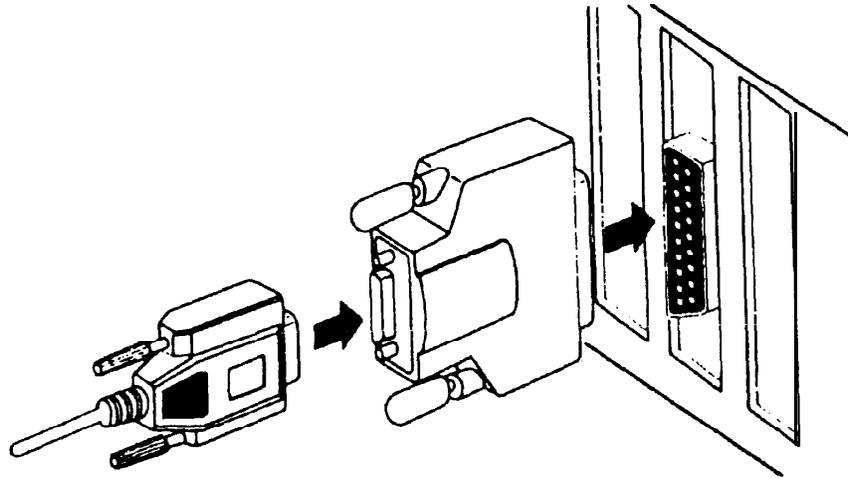
B. Windows 95-IR Application

I. Connect ACT-IR2xxL serial adapter to the desktop PC. If there is no infrared window on the portable PC. another ACT-IR200L/ACT-IR220L should be connected to the portable PC.

2. a.) Download the free Windows 95 IR-Driver's software from Microsoft's web page at http://www.rnicrosoft.com

   b.) Insert the driver diskette into drive A or B.

3. Run A:\w95ir.exe or B:\95ir.exe. Windows 95 will make a subdirectory named "Msir20"and extract the files into this subdirectory.

4. Run C:\Msir20\setup.exe.

5. For ACT-I R200L/ACT-IR220L: Follow the prompts until you reach under "Manufacturers" Select "ACTISYS" and then in "Model" section. select "ACT-IR200L" or "ACT-IR220L". Then go to step 7.

6. For ACT-IR220L only: Follow the screen prompts until you reach under "Manufacturers" Select' "Standard Infrared Device" and then select "Built-in Infrared Port on Laptop or Desktop" under "Model" section.

7. Follow the screen prompts until it asks you to select a Communications Port. Choose COM2.

8. Follow the screen prompts again until it asks you what default ports to use. Use the following settings:

   The IR Printer Port: LPT3

9. Click on "Finish". The driver is installed successfully.
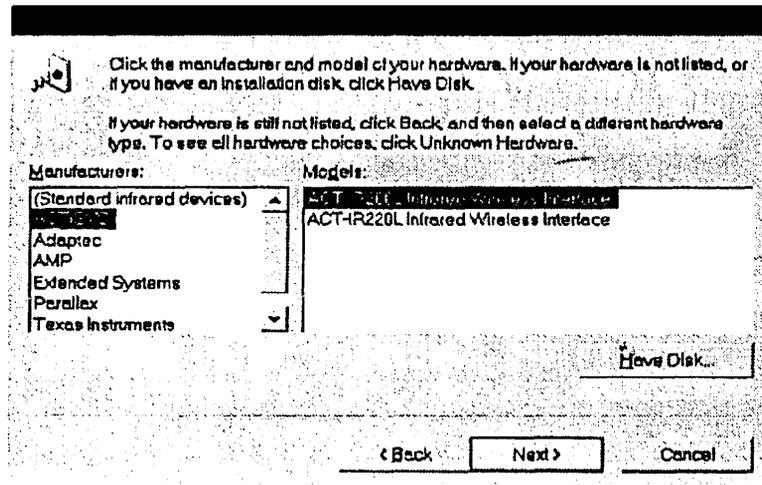
Enable Infrared communication and Windows 95 IR driver on tne portable PC:

Aim the ACT-I R2xxL serial adapter to the portable PC infrared window. Double click the Infrared icon in the Control Panel, and select "Option" and check "Enable infrared communication" . To automatically enable the infrared port when the computer is started, create a shortcut to Windows\System\irmon.exe in the Startup folder.

Setup "Direct Cable Connection" in Windows 95:

If Windows 95 "Direct Cable Connection*' program has not been activated in both PCs, please follow the instructions as listed below:

1. Go to "Control Panel" and double click on "Add/Remove Programs"
2. Click. "Windows Setup" tab.
3. Highlight "Communications" and then click on "Details*'
4. Check the "Dial-up Networking" and "Direct Cable Connection" boxes, then click "OK"
5. Click on "OK" under 'Windows Setup" and follow the instructions on your screen.

When transfering a file. one computer has the ability to "share" certain files or the whole disk drive with the other computer. This is the "Host" computer. The computer that accesses the "Host" computer is called the "Guest" computer. You have to setup which computer is the "Host" and which one is the "Guest". You also need to choose what files. directory or whole disk drive to share with the "Guest" computer. This gives the '*Host" computer control of the files the "Guest" computer can access.

1. Click "Start". go to "Programs". then "Accessories". The "Accessories menu has the application "Direct Cable Connection". and then choose this to setup the connection.
2. Click on "Change" and choose whether or not the computer you are using is the "Host" or the "Guest". Click on "Nest".
3. Set the serial cable to use "COM4". Click "Finish" and "Close".
4. To share files or the whole disk drive. you should go to "Windows Explorer". It is usually found under the "Programs" menu when you click "Start".
5. Click the mouse right button on any directory. files. or the whole disk drive that you may want to share with the other computer. From the menu choose "Sharing...".
6. Under the "Sharing" index choose the "Shared As" option. It will usually use the name of the tile as the "Share Name" by default. Or you can choose to give it your own new file name.
7. You also have the choice to select "Full or Read- only access". Then click on "OK".
8. The shared files or drives will be represented by "a hand" holding the file or disk drive.

IR wireless file transfer:

1. On the "Host" computer. go to "Direct Cable Connection". and then click "Listen".
2. On the "Guest" computer. go to '*Direct Cable Connection". and click "Connection".
3. You will see the display box that contains the shared files or directory of the "Host" computer. You can do fife transfer now.

Before making a service call, please check the following:

SYMPTOM	PROBLEM	REMEDY
Can not establish link (General)	• ACT-IR device and IR ready device on the other side are not aligned properly • Distance is not optimum.	*Check to be sure units are properly aligned & leveled. • Check to keep optimum distance.
ACT-IR200L/220L is connected to and takes power only from the serial port of the notebook computer, not working or communication distance is too short.	• 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, • Certain notebook computer requires you to set the Comm port to "Serial" or "Infrared", especially when it has a built-in IR window.	• Set the "Power management" control to "Advanced" or "off" to enable power supplied from computer serial port to ACT-IR220L/200L devices. • Go to the appropriate control panel specified in the user's manual of your notebook computer and set the Comm port to "Infrared".
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 strong light source, etc.	• 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, sometimes 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.

SYMPTOM	Problem	REMEDY
	• Software does not drive the IrDA controller chip on the motherboard. • Serial port is occupied and not available for IR transmission.	• 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.

SPECIFICATIONS

Type: ACT-IR200L/ACT-IR220L

Carrier: Infrared radiation (peak wavelength : 850 to 1050nm)

Sub-carrier: 500 KHz for SHAPR ASK-IR and ASK(37KHz) for TV remote spec.(IR200L only)

Communication distance: IR200L.............Between 0 cm and 80cm. For best results.
                                        between 20cm (7.9 in) and 60cm (1ft 11.6 in)
                                IR220L.............Between 0 cm and 250cm. For best results.
                                        between 10cm (3.95 in) and 150cm(4ft 11.05 in).

SHARP ASK-IR

Transmission speed: 9600 bps to 38.4 K bps (IR200L only)
Parity bit: Odd
Data: 8 bit
Stop bit: 1 bit
Error check: Check Sum

IrDA-IR

Transmission speed: 9.6. 19.2. (38.4). 57.6. 115.2K bps
                        (IR200L/220L)
Parity bit: None
Data: 8 bit
Stop bit: 1 bit
Error check: CRC

Serial interface: Cable interface (to host computer)
Signal level: RS-232 level
Connector: DB-9 female connector
Power source: PC RS-232 serial port

Power consumption:		0.30W (I lmA max.)	
Operating temperature:		0°C to 40°C (32° F to 104° F)	
Dimensions(Inches):		2.0-L × 1.63"W × 0.62-H 51mm × 41mm × 16mm	
Weight:		2.0 oż (54 gr.)	
Accessories:		User's Manual	
Optional accessories:		DB9/DB25 Converter. Windows 3.11 IR Software. Windows 95 IR Software.	
Pin assignments:		Serial interface; DB9 female connector	

pin	Name	Symbol	I/O	Function
2	Receive Data	R X D	I	Input signal
3	Transmit Data	TXD	0	Output signal
4	Data Terminal Readv	D T R	0	For data link to build up and maintain
5	Signal Ground	GND	-	Reference ground (Ov) for all signals
7	Request to send	RTS	O	Output signal from host computer
8	Clear to Send	CTS	I	Input signal to host computer

ACTiSYS CORPORATION

1507 Fulton Place, Fremont
CA' 94539 - 7969, U.S.A.

Please use a separate envelope to assure that we will receive your registration form, to offer you special discount for your future purchase and mail you new product infortnation.
Thank you very much !

Warranty Registration Form

Name Last First	Company Name Position
Mr. / Ms.	

Street	City	State	Zip

Phone :   Fax :   E-Mail :

Product Model No.	Purchase Date	Purchased From

Serial No.	From where did you hear about us ?

In order to help us meet your future needs, please fill out the following.

APPLICATIONS: SALES ☐   FIELD SERVICE ☐   ENGINEERING ☐

         MANAGMENT ☐   OTHERAPPL: _____

YOU OWN(Model Number): PC: _____   MAC: _____

WIRELESS MODEM: _____ ORGANIZER MODELS: _____

        PC LINK (H/W): _____ (WV): _____

WIRELESS Comm. DEVICES: IR _____   RF _____

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

LIMITED WARRANTY

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 interlacing. **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 .
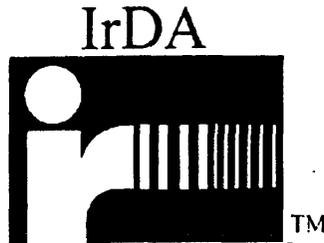
The limited warranty described above is in addition to whatever implied'warranties may be granted to purchasers by law. To the extent permitted by applicable law. **ALL IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MERCHANT ABILITY AND FITNESS FOR USE ARE LIMITED TO A PERIOD OF 1 YEAR FROM THE DATE 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, 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 to you.