



RealPort™ Modem 56
User's Guide

October 1998

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Some of the product names herein have been used for identification purposes only and may be trademarks of their respective companies.

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Windows 95, 98, and NT Online Documentation

See the Windows Help file HELPDOCS.HLP on the Xircom diskette for additional installation, troubleshooting, and modem information. After installation, this file can be accessed from the Xircom Utilities program group.

Windows 3.x Installation Utility

For Windows 3.x environments, run the Installation Program INSTALL.EXE from the Xircom diskette. For additional information, see the Windows Help file HELPDOCS.HLP on the Xircom diskette.

CHAPTER 1

Hardware Installation

Introduction

The Xircom RealPort™ Modem 56 supports modem speeds up to 56Kbps using either the V.90 or the K56flex standard. The RealPort Integrated PC Card plugs into a Type III or dual Type II PC Card slot.

Model RM56V1

Standard RJ-11 telephone cables plug directly into the RealPort Integrated PC Card. Two RJ-11 ports allow for both modem and telephone handset connections.

Installation and Configuration

- For **Windows 95, 98** and **NT** software installation instructions, see Chapters 2 and 3 in this User's Guide and the Help file HELPDOCS.HLP on the Xircom diskette. After installation, see the Xircom program group to view the Help file.
- For **Windows 3.x**, run the Xircom Installation Program INSTALL.EXE from the Xircom diskette. See the Help file HELPDOCS.HLP on the Xircom diskette for additional information.
- For **IBM OS/2**, use OS/2 Card and Socket Services to enable the modem.

Hardware Installation

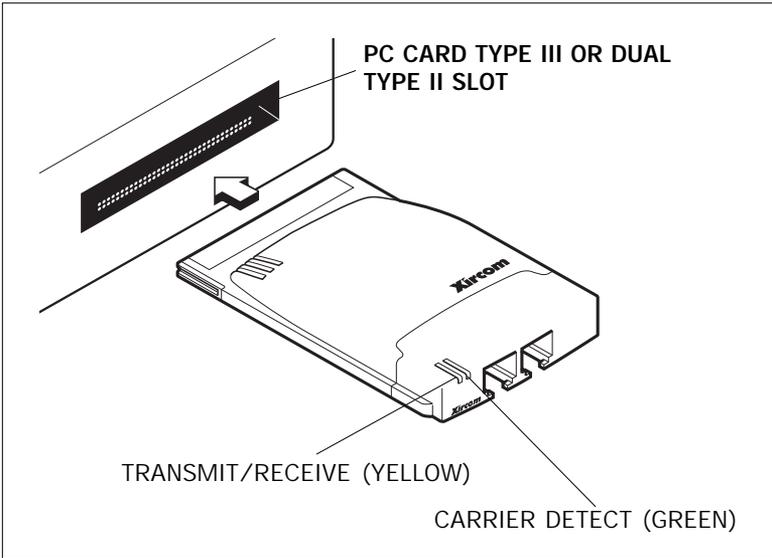
Package Contents

- Xircom RealPort Modem 56 (Model RM56V1)
- RJ-11 telephone line cord
- User's Guide and Quick Installation Card
- Software and online documentation on 3.5-inch diskette

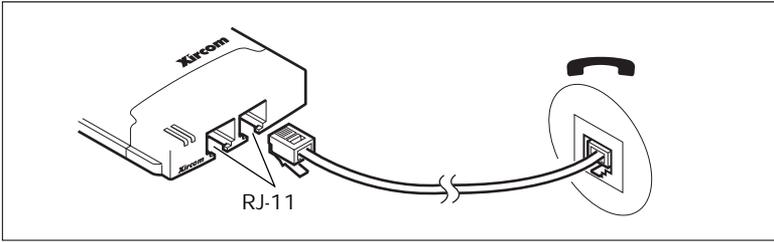
Other Requirements

- For **modem** operations: an analog telephone line, RJ-11 modular telephone cable (supplied), and if needed, RJ-11 adapter for the local telephone system. Communications software is required for modem and fax operations.

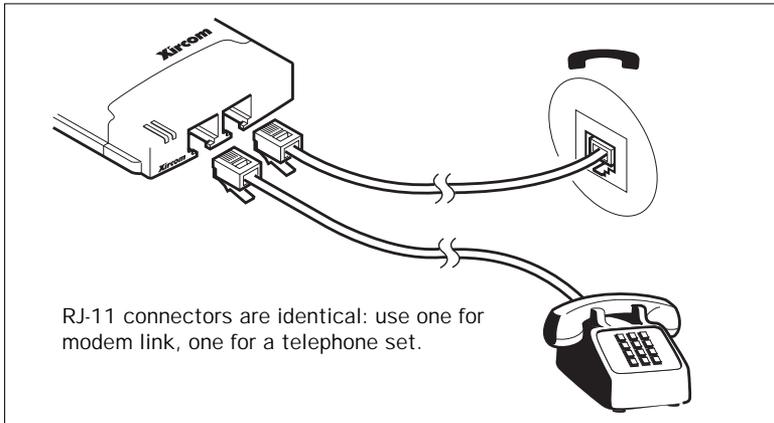
The two RJ-11 ports on the RealPort Integrated PC Card are identical: use one to connect the modem to the telephone line, the other for an approved telephone set.



Inserting the RealPort Integrated PC Card



Connecting Modem to the Telephone Network (RJ-11)



Connecting a Telephone (RJ-11)

Windows 95 and 98 Installation

Plug and Play Installation

Plug and play installation of the Xircom RealPort™ Modem 56 is supported under Windows 95 and 98. Installation with these versions of Windows is described in this chapter.

Use these instructions for a first-time installation of the Xircom RealPort Modem 56.

- 1** With the computer ON and Windows 95 running, insert the RealPort Modem 56 into the PC Card slot.
- 2** The RealPort Integrated PC Card will be detected as a **Xircom Modem 56**. Installation procedures vary slightly according to the Windows version.
 - **Windows 98 and 95 Version 950b and later:** Computer detects card and displays the Update Device Driver Wizard.
 - **Windows 95 Version 950/950a:** Computer detects card and displays **Xircom Modem 56**. Select “Disk provided by hardware manufacturer,” and click OK.
- 3** Insert the Xircom diskette, and follow the prompts to complete the installation.
- 4** Windows will recognize the Xircom modem and driver files will be installed. Proceed to step 5 before rebooting.

- 5 After plug and play installation is complete, and before restarting the computer, use Start/Run to execute SETUP.EXE from the Xircom diskette. Xircom Utilities will be copied to your hard disk, a program group will be set up, and CountrySelect and online registration utilities will launch. Make a country selection (U.S.A. is the default) and complete the registration.
- 6 Remove the Xircom diskette and reboot the system.

Xircom Utilities

The following utilities are installed into the Xircom Utilities program group by SETUP.EXE. Double-click the appropriate icon to run the utility.

- **COM Port Selector** - View and modify modem COM port settings
- **CountrySelect** - Configure your modem for a particular country
- **Modem Test** - Display COM port status and input modem commands
- **Online Documentation** - Windows Help file containing installation instructions, troubleshooting, and modem reference information
- **Readme file** - Supplementary technical information
- **Registration** - Register the product online using the modem

Windows 95 and 98 Troubleshooting

Review this section if any of the following problems occur:

- Modem initialization errors occur when attempting to dial-out using a communications application.
- Connection fails or other problems occur.

It may be necessary to define a modem type within your communications application. If the Xircom modem is not listed, choose a “Generic Hayes compatible” device.

If your computer is equipped with an infrared communications port, you may need to disable this port. These ports often use COM port resources required for other communications devices. Disable the infrared port both in the computer’s CMOS or BIOS setup program and the Windows Device Manager, as follows:

- 1** Some computers use a hardware setup utility to configure the infrared port in the BIOS. See your computer documentation.
- 2** To disable the infrared communications port in Windows, go to Device Manager tab under System in the Control Panel.
- 3** Double-click the Ports (COM & LPT) entry and the IR Serial Port entry. Remove the check mark under Device Usage. (Note: In Windows 95 version 950b or later check the “Disable in this Hardware Profile” option to disable the device.)

Use the Modem Diagnostics Tool to verify the computer-to-modem interface.

- 1** In the Modems option in Control Panel, click Diagnostics.
- 2** In Diagnostics properties, highlight the COM port associated with the Xircom modem and click the More Info button. This causes Windows to send commands to and read responses from the modem and display information about the modem and its COM port. The Port Information box should display the following information:
 - The IRQ and I/O address of the modem's COM port. These should match the physical configuration of the port or modem adapter.
 - Modem responses to various AT commands. The Xircom modem may return ERROR for some AT commands that are not supported. This does not indicate a failure.
- 3** A log file can be useful to help identify modem problems by recording modem commands and responses. Windows 95 and 98 have slightly different procedures for creating and maintaining a log file:
 - In **Windows 95**, go to Control Panel, Modems, Properties, Connection, Advanced. In the Advanced Connection Settings window, place a check mark in the Record a log file option box. A MODEMLOG.TXT file will be created in the C:\WINDOWS directory the next time the modem is used.
 - **Windows 98** creates a log file by default in the Windows directory, using a filename based on the modem device identifier, with a .LOG extension, in this case "Xircom_Modem_56.log" (or a shortened version in MS-DOS). To continue adding information to the log file, place a check mark in the Append to Log option box in the Advanced Connection Settings window (see the Windows 95 instructions above for the complete path to this window).

Windows NT 4.0 Installation

PCMCIA Services Verification

Before installing the Xircom RealPort Integrated PC Card, make sure that PCMCIA services are enabled on your computer.

- 1** Select Devices from the Control Panel.
- 2** Scroll down the Device list to the PCMCIA device. The Status should be Started and the Startup should be Boot. If this is not how PCMCIA is configured, then click Startup, set the Startup Type to Boot, and click OK.

Modem Installation

Use the following procedure to install the modem:

- 1** Shut off power to the computer (power down).
- 2** Insert the Xircom RealPort Modem 56 into the PC Card slot in the computer.
- 3** Power up the computer.
- 4** In the Control Panel, double-click the Modems icon.
- 5** In the Modem Properties window, click Add.
- 6** At the Install New Modem screen make sure that the *Don't detect my modem; I will select it from a list* checkbox is NOT checked. Click Next. NT will query the COM ports to find the Xircom modem. Click Next. If a *Standard Modem* is found, click Change. Click Have disk. Insert the Xircom diskette and verify or type the path to the diskette. Verify that the Xircom Modem 56 is selected, then click OK.
- 7** At the Install New Modem screen click Finish.

- 8 At the Modems Properties screen click Dialing Properties to set up dialing properties (not necessary if a modem had been previously installed). Click Close.
- 9 Use Start/Run to execute SETUP.EXE from the Xircom diskette. Xircom Utilities will be copied to your hard drive, a program group will be set up, and CountrySelect and online registration utilities will launch. Make a country selection (U.S.A. is the default) and complete the registration.

Xircom Utilities

The following utilities are installed into the Xircom Utilities program group by SETUP.EXE. Double-click the appropriate icon to run the utility.

- **CountrySelect** - Configure your modem for a particular country
- **Modem Test** - Display COM port status and input modem commands
- **Online Documentation** - Windows Help file containing installation instructions, troubleshooting, and modem reference information
- **Readme file** - Supplementary technical information
- **Registration** - Register the product online using the modem

Troubleshooting Modem Setup

Modem difficulties can usually be traced to interrupt, I/O address or communications port conflicts. A modification to the Windows NT 4.0 default communication drivers or physical damage to card or cables can also be the source of problems.

Symptoms and Possible Causes

Windows NT fails to detect a Xircom modem. These conditions can be caused by the lack of an available COM Port, or by a resource conflict with another device.

Possible Solutions

- 1** Modify the interrupt and/or I/O address for the Xircom card until no conflicts remain.
- 2** If your computer has an infrared communications port, disable it. These ports often use COM port resources required for other communications devices. Most infrared ports may be disabled from within the computer's CMOS or BIOS setup program. On some computers a hardware setup utility is used. See your computer documentation.
- 3** For difficulties in connecting to specific sites such as your Internet Service Provider, or company remote access locations, verify with the support personnel at the respective locations that your client software and dial-in communications software are configured properly.

APPENDIXES

Appendix A. Support Services

Service and Support

Xircom offers an extensive family of service and support programs, including world-class phone support, software updates, plus 24-hour access to our BBS, World Wide Web, and other electronic facilities.

Warranty Service Procedures

For details on warranty coverage and service, see the Appendix entitled **Lifetime Limited Warranty**. If you think there is a problem or defect with your Xircom product, your point of contact will be

In the U.S.A.

Xircom's Customer Support department at **(805) 376-9200**.

Outside the U.S.A.

Contact your local Xircom supplier or Xircom regional office.

Software and Driver Updates

World Wide Web

To download drivers (subject to the terms of the Xircom Software License Agreement) from the Xircom website, go to:

www.xircom.com

Bulletin Board System (BBS)

Set your modem to its maximum speed, no parity, 8 data bits, 1 stop bit to connect at up to 56,000 bps in the U.S. and Europe, 33,600 bps elsewhere.

To download drivers, go to the Main Menu, select **F**ile Menu and **S**earch by filename or keyword (e.g., Windows 95) or **L**ist files by area. Follow the instructions to select and download current versions of Xircom *released* drivers (subject to the terms of the Xircom Software License Agreement).

Xircom Worldwide Access

Americas Customer Support

Xircom, Inc.

2300 Corporate Center Drive
Thousand Oaks, California 91320-1420

Direct Line to Customer Support

(805) 376-9200	Customer Support
(6 a.m. to 5 p.m. Monday through Friday U.S. Pacific time)	
(805) 376-9100	Fax to Customer Support

Online or Automated Access (24 hours, 7 days a week)

(805) 375-5280	BBS (up to 56Kbps)
(805) 376-9130	BBS (up to 33.6Kbps)
cs@xircom.com	E-mail
www.xircom.com	World Wide Web

Europe, Middle East, and Africa Customer Support

Xircom Europe N.V.

King Square, Veldkant 39
2550 Kontich, Belgium

Direct Line to Customer Support

+32/(0)70 233 307	Telephone English language
+32/(0)70 233 852	Telephone Dutch language
+32/(0)70 233 851	Telephone French language
+32/(0)70 233 850	Telephone German language
(9:00 to 18:00 Monday through Friday)	
+32/(0)70 233 306	Fax to Technical Support

Online or Automated Access (24 hours, 7 days a week)

+32/(0)70 233 163	BBS (up to 56Kbps)
eurots@xircom.com	E-mail

Asia Pacific Customer Support

Xircom Asia Pacific (Pte) Ltd.

76 Shenton Way

Unit #06-01

Singapore 079119

+65 323 1511

+65 323 3404 Customer Support

+65 224 3313 Fax

+65 323 0455 BBS (up to 33.6Kbps)

asiats@xircom.com E-mail

Xircom Australia

Level 15, 99 Walker Street

North Sydney, NSW

Australia 2060

+61 (02) 9911 7794 Customer Support

+61 (02) 9911 7796 Fax

+61 (02) 9911 7758 BBS (up to 33.6Kbps)

aunzts@xircom.com E-mail

Xircom Japan Customer Support

KDD Otemachi Bldg. /21F

1-8-1, Otemachi, Chiyoda-ku

Tokyo 100-0004

+81 (03) 3243 1129 Customer Support

+81 (03) 3243 1019 Fax

japan_ts@xircom.com E-mail

Additional International Access

Contact your local reseller or distributor

www.xircom.com World Wide Web

Please fill out and return the Product Registration Card supplied with the product. Your information will be entered into our support database.

Appendix B. Specifications

General Specifications

Connectors:	RJ-11 (modem), RJ-11 (phone set pass-through)
Size:	85.6 mm x 54.0 mm x 10.5 mm (3.37 in x 2.13 in x 0.413 in)
Weight:	36 g (1.3 oz)
Temperature range:	
Operating:	0°C to 65°C (32°F to 149°F)
Storage:	-20°C to 85°C (-4°F to 185°F)
Humidity:	95% maximum noncondensing
Memory:	2 MB memory accommodates dual V.90 and K56flex operation
Power:	+5 VDC, 200 mA idle, 240 mA active
Approvals:	FCC Part 15, Class B, FCC Part 68, Industry Canada

Modem Specifications

Data modulation:	V.90 or K56flex up to 56000 bps; V.34 from 33,600 down to 2400 bps; V.32terbo at 19200 and 16800 bps; V.32bis at 14400, 12000, 9600, and 7200 bps, uncoded at 4800 bps; V.32 at 9600 bps, uncoded at 4800 bps; V.23 at 1200/75 and 75/1200 bps; V.22bis at 2400 bps; V.22 at 1200 bps; Bell 212A at 1200 bps
Fax modulation:	V.17 at 14400, 12000, 9600, 7200, and 4800 bps; V.29 at 9600, 7200, and 4800 bps; V.27ter at 4800 and 2400 bps
Fax support:	Group 3, EIA/TIA Class 1 and Class 2
Error control:	V.42 Error Control, MNP Levels 2-4 Error Detection
Data compression:	V.42bis (4:1) or MNP Level 5 (2:1)
Diagnostics:	Power-up self tests of program RAM, data RAM, and nonvolatile memory.
Nonvolatile RAM:	1 user definable profile; 2 thirty-six digit telephone numbers; serial number

Modem Specifications (continued)

Command set:	Hayes and Microcom compatible AT commands
Data interface:	PCMCIA Release 2.1 compliant, 68-pin connector
Analog interface:	RJ-11C modular telephone connector
DTE speeds:	1200, 2400, 4800, 7200, 9600, 14400, 19200, 37400, 57600, and 115200 bps

Appendix C. Lifetime Limited Warranty

Warranties

As the original purchaser, you receive these warranties from Xircom:

Hardware

Your RealPort Modem 56 (collectively, "Products"), will be free from defects in material and workmanship and will perform in substantial compliance with your user documentation accompanying the Products for as long as you own and properly use the Products.

Software

Software accompanying these Products (including driver, utility software, etc.) and the magnetic media containing the software are warranted to perform in substantial compliance with the specifications contained in your user documentation for two years from your purchase date. Our warranty does not cover or provide you with rights to upgrades or updates.

You are responsible for your choice of applications programs or related reference materials. Given the wide range of third party hardware and applications software products you might use our software with, you understand that Xircom does not warrant the compatibility or the uninterrupted or error free operation of our software.

Upon our confirmation of a covered defect or failure, at our option we will repair or replace the affected item or will refund your purchase price if repair or replacement is not possible or practical. At our option, replacement products or repaired items may be a new, refurbished, or functionally equivalent item. Our warranty on items serviced under warranty will be lifetime for **hardware** and, for **software**, 90 days from return to you of software/magnetic media or the remainder of the original warranty, whichever is longer. Repair, replacement, or refund are the exclusive remedies available to you from Xircom for products and software.

Your Obligations

Your warranty rights will be honored provided you

- 1 Read and follow your user documentation for installation, setup, software setup, and operating guidelines,
- 2 Use the Products and software only in suitable physical or operating environments as described in your user documentation and for purposes for which the Products and software are intended.

Warranty Service

If you think there is a problem or defect with your purchased item, your point of contact will be

In the U.S.A.

Xircom's Technical Support department at **(805) 376-9200**.

Outside the U.S.A.

Contact your local Xircom supplier or Xircom regional office.

Your Xircom contact will discuss your problem to confirm the defect. If warranty or return service is needed, you'll receive a *Return Material Authorization* (RMA) number. Replacement Product will be shipped when the original Product has been received by Xircom. (**U.S. only:** advance shipment of replacement Product is available with a credit card deposit.)

Ship your return Product prepaid, **with the RMA number clearly visible on the outside of the shipping package**, to:

From the U.S.A.

Xircom Service Department
2101 Corporate Center Drive
Thousand Oaks, CA 91320-1422

From outside the U.S.A.

Contact your local Xircom supplier or Xircom regional center for shipping instructions.

Returned Products may need to include, if requested by Xircom, all other components from your original package, including the Product and any cables, connectors, software diskettes, and user documentation. Be sure to enclose a copy of your purchase receipt or other proof of purchase confirming that you are the original purchaser.

Limitations

Our warranty is subject to the following limitations:

- a We do not cover or accept liability for any injury, damage or failure caused by misuse, abuse, acts of Nature, accidents (e.g., dropping the Products or software diskettes), electrical mishaps, causes beyond our control, or claims by other than the original purchaser.

- b** We will not honor, and will consider our warranty voided, if there has been any (1) tampering with the Product's external label or serial number, (2) attempt to open the Product's case, or (3) attempted or actual repair by anyone other than an authorized Xircom technician.

Disclaimer

THIS LIMITED WARRANTY IS THE ONLY WARRANTY WE MAKE FOR THE PRODUCT AND SOFTWARE. TO THE EXTENT ALLOWED BY LAW, NO OTHER WARRANTY APPLIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, OF FITNESS FOR A PARTICULAR PURPOSE, OR OF NON-INFRINGEMENT. XIRCOM WILL NOT BE LIABLE OR RESPONSIBLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES (e.g., LOST PROFITS, LOSS OF OR DAMAGE TO ANY COMPUTER EQUIPMENT OR RELATED DATA).

Additional Rights

Some states or countries do not allow exclusion or limitation of incidental or consequential damages, or limitations on the length of an implied warranty, so the above limitations or exclusions may not apply to you. Our warranty gives you specific legal rights, and you may also have other rights which vary from state to state or country to country.

International Notice

Due to differing national regulations and approval requirements, certain Xircom products are designed for use only in specific countries, and may not function properly in a country other than the country of designated use. As a user of these products, you are responsible for ensuring that the products are used only in the countries for which they were intended.

For information on specific products, contact Xircom's nearest regional center:

Xircom Corporate (U.S.A.)	(800) 438-4526
Xircom Europe	+32/(0)3 450.08.11
Xircom Asia Pacific	+65 323 1511

Unauthorized Applications

Xircom's products are not designed or authorized for use as a component in any life support, life safety, or other comparable application. Our products should not be used in any application where the failure or faulty performance of the product might create a risk of personal injury or death. Buyer assumes all risk of loss, damage or injury alleged to arise from the failure or faulty performance of a Xircom product in any unauthorized application. Buyer agrees to indemnify and hold harmless Xircom, and its officers, directors, employees, agents, representatives, and sales partners, from and against any and all claims, costs, damages, losses and expenses (including reasonable attorney fees) which arise from or are alleged to have been caused by any claim for personal injury or death connected with Buyer's use of a Xircom product in any unauthorized application, including claims which allege that Xircom has been negligent in connection with the design or manufacture of the product.

Appendix D. Regulatory Agency Notices

FCC Regulations - Part 15

Declaration of Conformity (DoC)

Xircom, Inc. declares that the equipment described in this document is within the requirements of the Code of Federal Regulations listed below:

Title 47 Part 15, Subpart B, Class B for a digital device.

This declaration is based upon compliance of the Xircom RealPort Modem 56 model RM56V1 to the above standards. Xircom has determined that model RM56V1 has been shown to comply with the applicable technical standards if no unauthorized change is made in the equipment and if the equipment is properly maintained and operated.

These units are identical to the units tested and found acceptable with the applicable standards. Records maintained by Xircom continue to reflect that units being produced under this Declaration of Conformity, within the variation that can be expected due to quantity production and tested on a statistical basis, continue to comply with the applicable technical standards.

Authorized Signature:



R.W. Bass

Vice President, Operations

Xircom, Inc.

2300 Corporate Center Drive

Thousand Oaks, California 91320

U.S.A.

FCC Rules and Regulations - Part 15

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.

The Xircom RealPort Modem 56 complies with the FCC Rules for a Class B digital device. As required by FCC Rules and Regulations, the following Class B information is provided for the guidance of the user.

WARNING: This equipment has been tested and found to comply with the limits for Class B digital devices pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- 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.

Changes or modifications to the digital device not expressly approved by Xircom Inc. could void the user's authority to operate the equipment.

It is suggested that only shielded and grounded cables be used with the equipment to ensure compliance with FCC rules.

FCC Regulations - Part 68

To comply with the Federal Communications Commission (FCC) Rules and Regulations, Parts 68, these instructions must be followed:

- 1** Your modem must not be connected to a party line or coin-operated telephone.
- 2** If a problem occurs on the telephone line, your modem must be disconnected from the telephone line until it has been determined that your modem is not the cause of the problem.
- 3** All repairs to your modem must be made by Xircom, Inc. Unauthorized or unorthodox repair methods can alter the modem's radio frequency emissions and other characteristics sufficiently to void your authority to operate the modem over a public telephone network.
- 4** If requested, you must be prepared to provide the telephone company with the following information:

Equipment Manufacturer:	Xircom, Inc. 2300 Corporate Center Drive Thousand Oaks, CA 91320-1420 U.S.A.
Model:	RM56V1
FCC Registration Number:	See the unit.
Ringer Equivalency Number:	See the unit.

This equipment complies with Part 68 of the FCC Rules. On the back of the RealPort Modem 56 is a label that contains, among other information, the FCC Registration Number and Ringer Equivalency Number (REN) for this equipment. You must, upon request, provide this information to your telephone company.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all those devices ring when your telephone number is called. In most but not all areas, the sum of the RENs of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

If your telephone equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If you experience trouble with this telephone equipment, please contact Xircom, Inc. at (805) 376-9200 for information on obtaining service or repairs. The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

There are no user serviceable parts contained in this equipment.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic devices, including fax machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other for which charges exceeds local or long-distance transmission charges.)

In order to program this information into your fax software, you should refer to the manual of the Fax software being used.

Canadian Department Of Communications

Industry Canada (IC) Notice

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

NOTICE: The Industry Canada (IC) label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by a user to this equipment, or equipment malfunctions, may give the telephone communications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection, that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

NOTICE: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

REN: See back of unit.

Warranty and Repair Service Center:

Xircom, Inc.

2300 Corporate Center Drive

Thousand Oaks, CA 91320-1420 U.S.A.

Phone: (805) 376-9200

Safety Notices

This card is intended for use with UL 1950/EN60950/IEC950 (or other NRTL) listed ITE computers that contain operator-accessible PC Card slots.

Appendix E. Software License Agreement

Xircom grants you a non-exclusive license to use the copies of software programs supplied with this product on the following terms:

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