

Conexant HCF 56K

User's Guide

FCC Requirements

This equipment complies with Part 68 of the FCC Rules. On the bottom of this equipment is a label that contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. IF REQUESTED. THIS INFORMATION MUST BE GIVEN TO THE TELEPHONE COMPANY.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have these entire devices ring when your telephone number is called In most. But not all areas the sum of the REN' s 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 of the area you are calling from. If your telephone equipment causes harm to the telephone network. The Telephone Company may discontinue your service temporally. If possible, they will notify you in advance. But if the advanced notice is failed, 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 change in its facilities, equipment, operations or procedures that could affect the proper functions of your equipment. If this occurs, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If you experience trouble with this telephone equipment, ple ase contact the following address and phone number for information on obtaining service or repairs. The Telephone Company may ask you to disconnect this equipment from the network until the problem is solved or until that the equipment is not detected malfunctioning. This equipment may not be used on coin service provided by the Telephone Company. Connection to party lines is subject to state Tariffs.

Federal Communications Commission

Radio Frequency Interference Statement.

Note: This equipment has been tested and found to comply with the limitation for a lass B digital device pursuant to Part 15 of the FCC Rules. These restrictions are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the equipment does cause harmful interference to radio or television reception, which can be determine by tuning the equipment off and on, the user is suggested to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the distance between the equipment and 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.

Notices:

- (1) The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- (2) Shielded interface cables and AC power cord if any must be used in order to comply with the emission limits.

Notices to Australian users:

The modem card must only be used in a data terminal equipment (DTE) e.g. computer, that has a screw down cover (lid). As unsafe voltages (TNV) exist on the modem card, disconnect the modem card from the telephone line while the cover (lid) of the DTE (computer) is removed.

Installation of the modem card in a DTE (computer) which does not require a tool to open the cover (lid) will render the permit void.

Disconnect the telephone line before opening the cover (lid) of the DTE (computer). Do not connect the customer equipment to the telephone line while the cover (lid) of the DTE (computer) is open.

WARNING ONLY CONNECT EQUIPMENT WITH A TELECOMMUNICATIONS COMPLIANCE LABEL

WARNING FOR SAFETY REASONS, ONLY CONNECT EQUIPMENT WITH A TELECOMMUNICATIOS COMPLIANCE LABEL. THIS INCLUDES CUSTOMER EQUIPMENT PREVIOUSLY LABELLED PERMITTED OR CERTIFIED.

Modems connected to the Australian telecommunications network must be marked in accordance with the Labeling Notice. This modem has been specifically configured to ensure compliance with the ACA Standards. Do not adjust your modem or software outside the values indicated as below. To do so would result in your modem being operated in a non-compliant manner.

Modem Commands:

Command	Default	Permissible Range
ATA	-	Do not use
ATB	B0	Do not set to B1
AT&G	&G0	&G2
AT&P	&P0	&P1
ATSn	see table b	elow
<u>S register</u>	<u>Default</u>	Permissible Range
s6	2	2 to 6

Call Attempts/Retries:

Applications software shall be configured so that no more than 3 attempts are made to establish a connection to a given number (Note: if the modem can detect service tones, up to 10 attempts can be made). If the call sequence is unsuccessful, there shall be a delay of at least 30 minutes before attempting to call the number again.

Failure to set the modem and any application software used with the modem, to the values shown as above will result in the modem being operated in a non-compliant manner. Consequently, this would be in violation of the Labeling Notice for this equipment, and the Telecommunications ACT 1997 prescribes penalties for the connection of non-compliant equipment.

CONTENTS

5
5
5
5
5
7
3
8
1
3
7
3
5
5
6
8
)
0
2
4
5
6
7
8
9
2

Chapter 1 Introduction

1.1 Introduction

Thank you for selecting the internal modem. The *Hoover HCF Win Modem* is the second generation of *Win Modem* (Control less Modem). It provides the modem function under Windows GUI interface which also the DOS box supplied by Windows. All of the above advances come from the special design of Windows control function, which move the dominating of control signal of modem from modem body to the Windows system. Therefore and it makes the *Hoover HCF Win Modem* work more smoothly than traditional RS-232 Modem. If you are just working under Windows system, *Hoover HCF Win Modem* is the best product you need to work with.

1.2 Packing

The Hoover Win Modem series include the following accessories:

- Internal modem card
- User's manual
- Application Software (CD-ROM)
- Driver Diskette (Optional)
- Phone Cord

1.3 Features

- Win Modem (control less)
- ITU 56K V.90 Standard
- PCI V2.1 compliant
- Windows 98/ME/2000/XP
- Software up gradable

Chapter 2 Specifications

Specifications:

Line data rate	56000,54000,52000,50000,48000,46000,44000,42000,
	40000,38000,36000,34000,33600,31200,28800,26400,
	24000,19200,16800,14400,12000,9600,7200,4800,2400
	,1200,600,300
Modem protocol	ITU-T V.90/K56flex/ITU-T
-	V.34bis/V.34/V.32bis/V.32/V.22bis/V.22/V.21/V.23
	Bell 212A/103,V.80,V8/V.8bis
ITU-T V.92	Quick Connect
	Modem on-Hold
	PCM upstream
Chip Set	Conexant RH56D/SP-PCI
Interface	PCI BUS
Fax Compatibility	14.4k bps Send/Receiver G3 compatible
Error Correction	MNP2-4,V.42 LAPM
Data Compression	MNP 5, V.42bis, V.44bis
Max. DTE data rate	115200bps
PnP	Build in
Modem operation	Dial up
Speaker phone	Full duplex speaker phone
Audio Monitoring	Mini-speaker and Programming Volume control
Line interface	RJ-11 Line/Phone
Software Compatibility	AT command set Compatible
System Requirement	P450 MMX + 256K Cable 64M RAM
System compatibility	OS Windows 98/ME/2000/XP

Chapter 3 Hardware Installation

- 1. Remove the computer's case.
- 2. Insert the modem card into a spare PCI expansion slot.
- 3. Close the case.
- 4. Unplug the telephone from the wall socket, then plug the telephone into the socket on the back of the modem marked PHONE.
- 5. Plug the phone cord supplied into the socket on the back of the modem marked LINE.
- 6. Plug the other end of the cord into the wall socket.
- 7. Proceed to Software installation.



Chapter 4 Software Installation

Power on your computer and modem then start Windows 98/ME/2000/XP. Windows 98/ME/2000/XP will detect the modem automatically.

4.1 Windows 98

1. The message of **PCI Communication Device** will appear. However it may vary with the type of your mother board. Then insert the driver CD supplied and click **Next**.



2. Select Search for the best driver for your device [Recommended] and click Next.



3. Select **Specify a location** and type **E:\Driver\Hoover-Win98** (E is the letter of CD-ROM drive) and click **Next**.



4. Windows will find the driver for **Conexant PCI Modem Enumerator** and click **Next**.



User' s Guide

5 Click **Finish** to end this installation procedure.



4.2 Windows ME

1. The message of **PCI Communication Device** will appear. Select **Specify the location of the driver [Advanced]** and click **Next**.

Add New Hardware Wizard



2. Select **Specify a location** and type **E:\Driver\Hoover-WinME** (E is the letter of CD-ROM drive) and click **Next**.



3. Windows will find the driver for **Conexant PCI Modem Enumerator** and click **Next**.



4. Click **Finish** to end this installation procedure.



4.3 Windows 2000

1. Windows will detect the modem automatic; please click **Next**.



2. The message of PCI SimpleCommunication Controller will appear. Select Search for a suitable driver for my device [recommended] and click Next.

Found New Hardware Wizard
Install Hardware Device Drivers A device driver is a software program that enables a hardware device to work with an operating system.
This wizard will complete the installation for this device:
PCI Simple Communications Controller
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.
What do you want the wizard to do?
 Search for a suitable driver for my device (recommended)
C Display a list of the known drivers for this device so that I can choose a specific driver
<back next=""> Cancel</back>

3. Select **Specify a location** and click **Next**.



4. Type E:\Driver\Hoover-Win2K(E is the letter of CD-ROM drive) and click OK.



5. Click **Next** to continue.



6. Click **Yes** to end procedure.



7. Click **Finish** to end this installation procedure.



4.4 Windows XP

1. Move your cursor as following sequence **Start \ Settings \ Control Panel** and click **Control Panel**. Then double-click on the **Performance and Maintenance** icon.



2. Then double-click on the **System** icon.



3. Click Hardware tab and select the modem, the click Derive Manager.



4. Click **Modem** tab and select the modem, Then double-click on the **Bast Data Data Fax Modem**.



5. Click Driver tab, then click Update Driver.



6. Select Install from a list specific location [Advancea]; then click Next.



7. Select **Don't search. I will choose the driver to install;** the chick **Next.**



8. Click Have Disk.

Hardware Update Wizard
Install New Modem Please select the modern you want to install.
Select the manufacturer and model of your modern. If your modern is not listed, or if you have an installation disk, click Have Disk.
Models
🖙 Best Data Data Fax Modem
This driver is digitally signed. <u>Tell me why driver signing is important</u>
<pre></pre>

9. Type in **E:\Driver\Hoover-WinXP** (E is the letter of CD-ROM driver) or use **Browse..**to search, then click **OK** to continue.



10. Windows has found the driver for the **CXT1085 – HCF PCI Modem**, click **Next** to start the installation.

Hardware Update Wizard	
Install New Modem Please select the modem you want to install.	
Select the manufacturer and model of your have an installation disk, click Have Disk.	modem. If your modem is not listed, or if you
Show compatible hardware	
Models	
CXT1085 - HCF PCI Modem	
This driver is not digitally signed! <u>Tell me why driver signing is important</u>	Have Disk
C	< Back Next > Cancel

11. Click Continue Anyway.



12. Then installation has been done; click **Finish** to end this procedure.



4.5 Windows NT

 Please insert the driver CD supplied. Then click Start \ Run on the desktop and use Browse to open the file of H:\Driver\Hoover\WinNT \Setup.exe (H is the letter of CD-ROM drive).



2. Click Next



User's Guide

3. Click Next.



4. The message of **The modem driver was installed successfully** and clicks **Finish**.



Chapter 5 Selecting Modem Country

5.1 Windows 98

1. Move your cursor as following sequence **Start \ Settings \ Control Panel** and click **Control Panel**. Then double-click on the **HCF Modem Region Select**.



2. Select a region the list; then click **OK** to confirm the settings.

Modem Region Select 🔀
CXT1085 - HCF PCI Modem
CXT1085 - HCF PCI Modem installed. Please select the region in which this modem will be used. Selecting a region other than the one in which you are currently located may cause your modem to be configured in a way that violates the telecommunication regulations/laws of that region.
In addition, your modem may not function properly if the correct region selection is not made. Only select the region in which you are located.
Select a region: Switzerland Taiwan Thailand UK United Arab Emirates USA
OK Cancel

5.2 Windows ME/NT

1. Move your cursor as following sequence **Start \ Settings \ Control Panel** and click **Control Panel**. Then double-click on the **Modem**.



2. Click **Dialing Properties** to continue.

Modems Properties	<u>? ×</u>					
General Diagnostics						
The following modems are se	et up on this computer:					
CXT1085 - HCF PCI Modem						
Add Remove	P <u>r</u> operties					
Dialing preferences						
Dialing from: New Location						
Click Dialing Properties to modify how your calls are dialed.						
Dialing Proper	ties					
	OK Cancel					

3. Select I am in this country/region the list; then click **OK** to confirm the settings.



5.3 Windows 2000/XP

1. Move your cursor as following sequence **Start \ Settings \ Control Panel** and click **Control Panel**. Then double-click on the **Phone and Modem Options**.



2. Click **Edit..**to continue.

hone And Modern Options	<u>গ</u> ×
Dialing Rules Modens Advanced	
The list below deplays this for location from which you are a Locations:	sations you have specified. Select the lialing
Location	Area Code
My Location	02
Non	Edt Cesto

3. Select Country/region the list; then click **OK** to confirm the settings.



Chapter 6 Diagnostics

6.1 Windows 98/ME

1. Move your cursor as following sequence **Start \ Settings \ Control Panel** and click **Control Panel**. Then double-click on the **Modems** icon.



2. To test the modem by clicking on the **Diagnostics** tab.

Modems Properties		<u>?</u> ×
General Diagnostic	s	
😂 The follo	wing modems are set up	p on this computer:
≪ <mark>CXT1085 - HC</mark> I	FPCI Modem	
Add	R <u>e</u> move	P <u>r</u> operties
Dialing from: N	lew Location	
Click Dialing Pr dialed.	operties to modify how y	your calls are
	<u>D</u> ialing Properties	
	OK	Cancel

3. Select the **COM port** that the modem is setting, and clicks **More Info...**

Modems F	Properti	es					? X
General	Diagno	stics					
Ĵ				e following Ilowing de		and has	
Port		Instal	led				
- % co	M1	No M	odem Ins	talled.			
<u></u> %_CO	M2	No M	odem Ins	talled.			- 11
•	M3	LXII	082 - HC	F PCI Mod	lem		
<u> </u>	<u>)</u> river		<u>M</u> ore Ir	nfo		<u>H</u> elp	
				OK		Car	ncel

4. If your modem is responding to AT commands and functioning correctly, it means that your modem is working properly. Click **OK** to end this procedure.

ł	ore Info		
	- Port Information		
	Port:	COM3	
	Interrupt:	0	
	Address:	3E8	
	UART:	NS 16550AN	
	Highest Spee	d: 115K Baud	
	- C×T1085 - HCF	PCI Modem	
	Identifier: I	PCI\CXT1085	
	Command	Response	
	Command ATI1	Response	
		255 OK	
	ATI1 ATI2 ATI3	255 OK 212.172.059.000	
	ATI1 ATI2 ATI3 ATI4	255 OK 212.172.053.000 Conexant HCF V.90 56K RTAD,Speaker	
	ATI1 ATI2 ATI3 ATI4 ATI5	255 OK 212.172.059.000 Conexant HCF V.90 56K RTAD,Speaker 181	
	ATI1 ATI2 ATI3 ATI4 ATI5 ATI6	255 OK 212.172.059.000 Conexant HCF V.90 56K RTAD,Speaker 181 DP Rev P8773	
	ATI1 ATI2 ATI3 ATI4 ATI5 ATI6 ATI6	255 OK 212.172.059.000 Conexant HCF V.90.56K RTAD,Speaker 181 DP Rev P8773 V92 SPX RAM Ver 30	
	ATI1 ATI2 ATI3 ATI4 ATI5 ATI6	255 OK 212.172.059.000 Conexant HCF V.90 56K RTAD,Speaker 181 DP Rev P8773	
	ATI1 ATI2 ATI3 ATI4 ATI5 ATI6 ATI6 ATI6	255 OK 212.172.059.000 Conexant HCF V.90 56K RTAD,Speaker 181 DP Rev P8773 V92 SPX RAM Ver 30 V92 CTL RAM Ver 30	

6.2 Windows 2000

1. Move your cursor as following sequence **Start\Settings\Control Panel** and click **Control Panel**. Then double-click on the **Phone and Modem Options** icon.



2. Click on the **Modems**, then select the modem and click **Properties**.



3. Click **Diagnostics**. To test the modern by clicking **Query Modem**.

CXT1085 - HCF PCI Modem Properties
Modem Information
Field Value Hardware ID PCI/VEN_14F1&DEV_1085&SUBSYS_10851
Command Response
Query Modem
Logging
Append to Log View log
OK Cancel

4. If your modem is responding to AT commands and functioning correctly, it means that your modem is working properly. Click **OK** to end this procedure.

CXT1085 - HCF PCI Modem Properties
General Diagnostics Advanced
Modem Information
Field Value Hardware ID PCI/VEN_14F1&DEV_1085&SUBSYS_10851
Command Response AT00V1E0 OK AT+GMM + GMM: HCF V.90 56K RTAD,Speakerpl AT+FCLASS=? 0,1,1.0,8 AT#CLS=? COMMAND NOT SUPPORTED ▼
Query Modem
Logging Append to Log View log
OK Cancel

6.3 Windows XP

1. Move your cursor as following sequence **Start\Settings\Control Panel** and click **Control Panel**. Then double-click on the **Phone and Modem Options** icon.



2. Click on the **Modems**, then select the modem and click **Properties**.



3. Click **Diagnostics**. To test the modem by clicking **Query Modem**.

Driver	Recourses	Pee	er Management
General	Modern	Diagnostics	Advanced
Indem Information			
Field Va	due		
Hardware ID PD	WEN_14F16DEV	10958SU8SYS_	1 0951
¢			>
Connend Bea			
Control Control	porieo.		
		0	
		Query	taden
Logoing		Query	taden s
Logging		Query N	- Fig
			- Fig
			- Fig

4. If your modem is responding to AT commands and functioning correctly, it means that your modem is working properly. Click **OK** to end this procedure.

oden Inform		
	POWEN_14F18DEV_10058	SUBSYS_1085
i –	10	
Commend	Response	^
ATQDV1ED AT+GMM AT+FCLASS= AT#CLS=?	Success +6MM HCFV.90 56K RT ? 01.108 COMMAND NDT SUPPO	
		Query Moder
gong		
Append to	Log	Viewlog

Chapter 7 Uninstalling Procedures

7.1 Windows 98/ME

1. Move your cursor as following sequence **Start** \ **Settings** \ **Control Panel** and click **Control Panel**. Then double-click on the **Add/Remove Programs** icon.



2. Select **CXT1085 - HCF PCI Modem** from the list and then click the **Add/Remove** button.



7.2 Windows 2000

1. Move your cursor as following sequence **Start****Settings****Control Panel** and click **Control Panel**. Then double-click on the **Add/Remove Programs** icon



2. Select **CXT1085 -HCF PCI Modem** from the list and then click the **Change/Remove** button to remove the modem driver.



7.3 Windows XP

1. Move your cursor as following sequence **Start\Control Panel** and click **Control Panel**. Then double-click on the **Add or Remove programs** icon



2. Select **CXT1085 -HCF PCI Modem** from the list and then click the **Change/Remove** button to remove the modem driver.



7.4 Windows NT

1. Move your cursor as following sequence **Start \ Settings \ Control Panel** and click **Control Panel**. Then double-click on the **Add/Remove**

Programs icon.



2. Select CXT1085-HCF PCI Modem from the list and then click

Add/Remove.

Add/Remove Programs Properties 🛛 🤗 🗙				
Install/Uninstall Windows NT Setup				
æ	To install a new program from a floppy disk or CD-ROM drive, click Install.			
				nstall
3	Windows.	To remove a pro its, select it from	be automaticall ogram or to modil the list and click	y its installed
Capture Professional 3 CXT1095-HCF PCI Modem ELSA Windows NT 4.0 Display Drivers PCI Audio Applications				
			Add	/ <u>R</u> emove
		OK	Cancel	Apply

3. Click Next.



4. The message of The modem driver was un-installed successfully will appear, and click **Finish**.



User' s Guide

5. Click Yes to restart your computer.



Chapter 8 Troubleshooting

If you failed to install your modem in Windows 95/98

Make sure the COM port and IRQ Setting have been set correctly, and it doesn't conflict with another board installed in your computer.

Please go to Start, Settings and Control Panel. Double click on the System icon. Click Device Manager and double click on the Modem icon. Please select Rockwell HCF 56K Data Fax Speakerphone PCI Modem and click on the

Properties button.



• Click on the *Resources* tab, then, *disable* the setting of *Use automatic settings*. Continue changing the setting of **Setting based on** from the list until **No conflicts** showing up, and then clicks *OK*!

CXT1035 - HCF PC	I Modem Properties	? ×
Forwarding	odem Connection C DOS Support Driver 5 - HCF PCI Modem	istinctive Ring Resources
Use automatic : Setting <u>b</u> ased on: Resource type (settings Basic configuration 0002 Basic configuration 0002 Basic configuration 0003 Basic configuration 0004	×
Change Setting Conflicting device I No conflicts.	<u> </u>	A N
	ОК	Cancel

Modem will not dial-out

- Check your phone cable connected properly into LINE jack.
- If you use the Tone-dialing on a line, but required the Pulse-dialing method, please change the command T to P in your dial command line.

Modem will not answer an incoming call

- Check your phone cable connected properly into LINE jack.
- By connect a Telephone to the PHONE jack. The attached telephone will ring if you try calling from another telephone line.
- Configured the modem to Auto-answer modem.

No connection after modem dial out

- Remote modem may be not setting to answer mode, if you aren't hearing a high-pitch tone when remote modem answering.
- Perhaps poor-quality or noise telephone lines try another call.

Data error when modem connection

- Make sure your software data format is match to remote side (for example: 8,N, 1).
- Make sure the modem flow control method is matched to communication software.
- Try another call may be poor quality or noise telephone lines.

Fax and voice problems

• Be sure the Data Communication is installed and worked properly, otherwise check the mentioned procedure carefully and consult the Fax/Voice manual step by step.