KORTEX 56000

USER GUIDE
PC & MACINTOSH®

1.4 Version

Works even when your COMPUTER IS SWITCHED OFF

FOLLOW ME: Calls you automatically when you receive faxes or voices messages

A POWERFUL VOICE MODEM

56 K BPS (K56 FLEX) capability Ideal for high speed Internet access

ANSWERING MACHINE

A fully featured telephone-fax answering machine

HANDS-FREE SPEAKERPHONE

Full Duplex Speakerphone
No computer required

Print received faxes simply by pressing the KORTEX button



KORTEX 56000



Location and purpose of the KORTEX 56000 function keys

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PRODUCT REGISTRATION AND GUARANTEE

Guarantee:

1. Description:

This quarantee gives you the right to a free replacement of any parts which are faulty due to a manufacturing defect.

2. Exclusions

- a) All accidental damage cause by improper or incorrect usage.
- b) All damage caused by using the product with a non-standard telephone system or PABX.
- c) All damage cause by exceeding the recommended voltage, product abuse, customer negligence, defective electrical supply, failure to follow the installation or usage instructions or opening of the product casing by the customer or a third party.
- d) This guarantee also excludes any damage resulting from major force due to a third party.

3. Payment of damages:

The guarantee does not give any right to payment of damages for losses caused by the unavailability of the product.

4. Other Terms and Conditions:

- a) No distributor or reseller has the right to change the terms of this guarantee.
- b) This guarantee does not effect your consumer rights.
- c) To take advantage of the guarantee you must return the product registration form below within 15 days of the date of purchase of your modern.
- d) The modem serial number must not have been modified or removed.

To benefit from this guarantee, you must complete the product registration form, which must include the serial number marked on the case (not that of disks) and return it within 15 days of purchase to the address indicated overleaf. Please note that if you fail to return the product registration certificate with this 15 days period, the guarantee will cover only the first year of usage.

KORTEX 5 years product guarantee registration

Name :		
Surname :		Date of purchase :
Company :		Please indicate three factors which influenced
Job Title :		your purchase :
Address :		□ Product design
	Post Code :	□ Company Reputation
City :	<u>.</u>	—— □ Advice of your reseller □ Price
Tel:	Fax:	☐ Technical specification
Serial N°:		☐ The answer phone
Name add	ress of reseller :	feature
Product No	nme:	

WHY RETURN YOUR PRODUCT REGISTRATION CARD?

You will benefit from a 5 years guarantee You will receive information about upgrades

By returning your product registration card, KORTEX will keep you informed on the availability of new upgrades to your hardware and software : prices, special upgrade offers, technical specifications

YOU WILL RECEIVE PRIORITY UPDATES

KORTEX will keep you informed of the latest news, products, promotions and technical information

HOW TO BENEFIT FROM THE SUPPORT HOT-LINE :

You can take advantage of the KORTEX support hot-line during the first 120 days following the purchase of your modem. by sending a fax to +33 (0) 1 49 92 55 48, and our highly trained support engineers will give you personal technical assistance, please note your system configuration (modem type, machine, operating system, communications software, type of phone line...) and notes your questions on the fax.

HOW TO RETURN A FAULTY PRODUCT:

When returning your faulty modem to the repair centre during the 5 years guarantee period, it is essential that you include a copy of your original purchase invoice. You must also have previously returned your product registration form within 15 days of the date of purchase of your modem. We also ask you to include a description of the fault that you have encountered.



Affix Stamp

KORTEX INTERNATIONAL
SERVICE REPARATION
139, 147 AVENUE PAUL-VAILLANT COUTURIER
93126 LA COURNEUVE CEDEX FRANCE



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User Safety Precautions

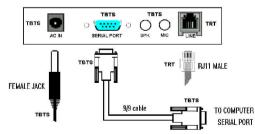
Declaration

The KORTEX 56000 conforms to the **IEC 950** standard for electrical safety. The unit does not contain a circuit breaker, the wall plug provides the only mechanism to break the power. Furthermore, the mains electrical socket must be in easy reach of the unit.

Connector schematic

KORTEX 56000 TOP VIEW

KORTEX 56000 REAR VIEW



TRT : PSTN voltage TBTS : Very low voltage

CE Approval Marks

This product conforms with directives **CEM 89/336/CEE** for electromagnetic interference and **CEM 73/23/CEE** for user safety.

Telephone Network Safety Approval

This product conforms to the standard **EN 41003**. It can be connected to telephone networks.

Installation safety precautions

- Avoid placing the KORTEX 56000 in a humid environment or near to a heat source.
- Please do not open the case of your KORTEX 56000, contact after sales service for all repairs.
- Where there is a high risk of storms, protect your KORTEX 56000 against electrical shock.

Cleaning

- Before cleaning your KORTEX 56000, unplug the power and telephone cables.
- Do not use solvent based cleaning products.

Approval

This product may only be used legally in those countries for which it is approved. Approvals obtained are shown on the label fixed to the underside of the case.

Introduction



You have just purchased a **KORTEX 56000**, which supports all major communication functions operating either standalone or in conjunction with a computer:

- 🤏 High speed modem
- 🦠 Fully-featured Telephone/Fax answering machine
- 🤏 Hands-free telephone
- 🤏 Caller ID Presentation
- 🤏 Flash upgradeable firmware

The KORTEX 56000 was conceived as a modem for today that is capable of evolving to meet your needs of tomorrow.

Both the KORTEX 56000 hardware and software can be upgraded. It's new **DSP** (Digital Signal Processor) architecture enables you to upgrade the modem easily as your needs and as modem technology develops.

One of the unique features of the KORTEX 56000 is its upgrade socket which enables it to be upgraded to support future technologies simply by inserting optional upgrade modules.

The **K.A.O.S.** (**K**ORTEX **A**dvanced **O**perating **S**ystem) in the KORTEX 56000 can be flash upgraded to meet many upgrade requirements simply by downloading a new version.

Numerous function keys and LED's on the KORTEX 56000 enable you to easily access all major communication features.

The KORTEX 56000 supports Plug & Play. Used in conjunction with your PC/Macintosh, it becomes an extremely powerful communication tool :

Internet (up to 56000 BPS)

*Fax

On Line services

Answer phone

File transfer

Telephony functions...

The KORTEX 56000 supports all major communication functions operating standalone or in conjunction with a PC.

The KORTEX 56000 is fully compatible with Windows 3.1, Windows 95 and Windows NT (modern drivers and communications software for Windows 95 and NT 4.0 are supplied) and Macintosh V 7.5 or later.



KORT€X 56000 features

KORT€X 56000 function keys

Using the keys on the KORTEX 56000, you can easily access the available functions:

K€Y	FUNCTION	
Ans.	Enable the answer phone feature.	
PLRY	Replay voice messages.	
FAX	Prints a fax (provided the computer is switched on and necessary software is loaded). If the computer is switched off, this button announces the number of faxes received.	
follow me	Announces the telephone number, date and time of calls (the announcement of the telephone number requires that you have subscribed to the 'Caller ID' service of your telephone service provider).	
Frase Rec	Erase all stored voice messages.	
Frase Rec KORTEX	Erase all stored fax messages.	
Erase Follow me Rec	Erase details of calls received (number, date, time).	

КЄЧ	FUNCTION
	Hands-free call or answer.
	Volume adjustment.
Frase Am. Mc	Record your greeting message.
Ann.	Replay greeting message.
	Replay voice messages, next/previous message, stop message replay.
FAX KORTEX	Activate call screening.
FAX KORTEX	Set the date and time.
FAX HORTEX	Set the PIN code.
Ann. KORTEX	Announce the date and time held by the KORTEX 56000.
Ann. Ans.	Announce the currently installed firmware version (date and time).

Note: Each key press is indicated by an LED (lit, unlit or flashing).

BUTTON AT THE BACK OF THE KORTEX 56000		
ON ON	KORTEX 56000 ON/OFF Switch	

Supplied software features

- Start sleep mode to save energy.
- Set/Adjust the PIN number.
- Retrieve the configuration and system messages (verbal messages enable you make use of the features of the KORTEX 56000.
- Retrieve stored messages, faxes and telephone numbers (requires 'Caller ID' service).
- Print a received fax from the 'Print' menu or by pressing the KORTEX function key(your computer must be switched on and the software loaded).

The LED indicators

Your modem has 7 LED indicators and 5 back light function keys which have the following function:

LED / KEY	Meaning	FUNCTION
<u>(h</u>	Sleep mode and power on indicator	This LED is lit in yellow when the KORTEX 56000 is in sleep mode. It is lit in red when sleep mode is not active. It is unlit when the KORTEX 56000 is switched off.
○ DTR	Data Terminal Ready	Lit when the KORTEX 56000 is in use by the computer. Unlit when the KORTEX is in stand-alone mode, not in use by the computer (communication software not loaded) or in sleep mode.

LED / KEY	Meaning	FUNCTION
○ RD	Receive Data	Flashes when the KORTEX 56000 receives data or is in update mode (transfer of faxes/messages etc onto the computer).
О ТD	Transmit Data	Flashes when the KORTEX 56000 transmits data.
О ОН	On Hook	Lit when the KORTEX 56000 is using the phone line (receiving a fax, message, handsfree phone call).
(D	Carrier Detect	Indicates that modem to modem communication is in progress.
RI	Ring Indicator	Signals that the KORTEX 56000 is receiving a call.
FAX	Faxes	Unlit when the KORTEX 56000 has not received a fax. Flashes to indicate that faxes have been received. Lit during announcement of the number of faxes stored.
PLAY	Messages	Unlit when the KORTEX 56000 has not received a voice message. Flashes to indicate that voice messages have been received. Lit during message retrieval.

LED / KEY	Meaning	FUNCTION
	Hands-Free and Call screening	Lit when the KORTEX 56000 is in hands-free mode. Flashes when call screening is active.
Ans.	Answer phone feature and Memory- full warning	Lit when the answer phone feature is active. Flashes when 90% of memory is filled with messages. Off when the answer phone feature is deactivated.
Follow Me	Calls	Unlit if the KORTEX 56000 has not received any calls. Flashes to indicate that calls have been received. Lit during replay of call details.

Using your KORT€X 56000



The KORTEX 56000 is operated using the function keys. A key press takes effect when you release the key. A key or key combination must be pressed for approximately half a second in order to register.

When the KORTEX 56000 is switched on, for a brief period the indicator lights flash sequentially from left to right. When this flashing stops, the KORTEX 56000 is ready for use. As a general rule, you should not use the function keys whilst the sequential flashing is in progress.

Before using the KORTEX 56000, you must :

- Record a greeting message
- Set the date and time
- Set the PIN number

Please read the following instructions to complete these operations.

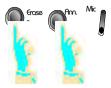
Note: Memory capacity is limited (Standard capacity: 2 Mb). We recommend that you delete your stored messages, faxes and numbers regularly. The Rep. LED flashes to indicate when only 10% of memory remains free.

▶ If you wish to increase memory capacity, you can add a flash memory upgrade module (see section «installation of a flash memory upgrade module»).

Recording a greeting announcement

You are able to record a greeting announcement of up to 50 seconds in length.

♦ In order to record a greeting announcement, you must press simultaneously the following function keys:



Release the function keys and speak clearly approximately 30cm from the KORTEX 56000 microphone.



- The function key is now lit to show you that the greeting announcement recording is in progress.
- To stop recording, press the announce function key.





>> The

function key is no longer lit.

Replaying the greeting announcement

 $\ensuremath{\diamondsuit}$ To replay your greeting announcement, press the announce function key.



➤ The announcement is replayed through the KORTEX 56000 loudspeaker.



The function key is now lit to show that the greeting announcement is being played.

- Replay stops automatically at the end of the announcement.
- If you would like to stop replay before the end of the greeting announcement, press the announce key again.



The function key is non longer lit.

Set the KORTEX 56000 date and time

You can set the date and time either by using the KORTEX 56000 function keys or by using the supplied communications software.

To set the date and time push simultaneously the function keys :



- You enter set-up mode.
 - ➤ Enter 10 digits to indicate the date and time. For example the 2 March 1998, 9.40am should be entered as 0203980940 (02 for the 2nd, 03 for March, 98 for 1998, 09 for 9 o'clock and 40 for forty minutes) by using the function keys as shown below:



Note: For simplicity, note the numbers corresponding to the date and time on a piece of paper before entering them. Each key press is confirmed verbally when you release the key. For example, on pressing the 8 (Play) function key you will hear "EIGHT" through the KORTEX 56000 loudspeaker.

- After entering the 10 digits, the date and time is announced verbally for verification.
 - **▶** If the date and time are not correct, restart the process from the beginning.

Check the KORTEX 56000 date and time

To check the date and time press the following keys simultaneously:



>> The date and time are announced verbally

Note: if you would like to set the date and time, see the previous section: Setting the KORTEX 56000 date and time.

Activate the answer phone feature

To activate the answer phone feature, push the key

function

>> The function key is now lit to indicate that the answer phone feature is active.

Deactivate the answer phone feature

To deactivate the answer phone feature without replaying the greeting announcement, push the function key is now unlit).

If memory is full

The answer phone function key $\sqrt{}$ flashes to indicate that the KORTEX 56000 memory is 90% or more full.

- To record new messages you must delete faxes, messages or numbers.
 - **▶** When the memory is full, a pre-recorded greeting announcement «Thank you for your call» is played to callers.
 - >> You can free up memory space either locally or by remote control.

If you have received voice messages

▶ Waiting voice messages are indicated by the flashing of the



function key.

Replay voice messages



- Press the function key to replay voice messages, the KORTEX 56000 indicates verbally the number of messages received. The length of each message is limited to a maximum of 2 minutes.
 - At the beginning of the replay of each message the time is announced. The date is announced only if it is different to the current date
 - → At the end of replay of each message, the KORTEX 56000 proceeds to the following message
 - → At the end of replay of the last message, the KORTEX 56000 stops. automatically.

Stopping the replay of voice messages

You can stop the replay of voice messages at any time by pressing the



function key.

Listen to the next or previous message

You can move from one message to the next during replay.





- function key to proceed to the next message or the
 - function key to return to the previous message.

If you have received calls

At any time you can find out if you have received calls. To ascertain the telephone number of the caller, you must subscribe to your telephone service provider's «caller id» service. If you do not have this service, only the date and time of each call can be established.



• If you have received a call, the

function key flashes.

Listen to the details of received calls

- Press the T function key to replay the number, date and time of calls received. The KORTEX 56000 announces verbally the number of calls received.
- The time is announced for each call. The date of the call is announced only if it is different to the current date.
 - ⇒ After announcing each call's details, the KORTEX 56000 proceeds to the next call.
 - ➡ After announcing the last call's details, the KORTEX 56000 stops automatically.

Stopping the replay of details of received calls

At any time you can stop the replay of details of received calls by



pressing the

function key.

Listen to the next or previous call's details

You can move from one call's details to another during replay.



Push the function key to proceed to the next call or the function key to return to the previous call.

If you have received faxes



The function key flashes approximately once a second if you have received a fax.

FAX

- Press the function key. The KORTEX 56000 announces verbally the number of faxes received.
 - ► If your computer is switched on and the communications software is loaded the KORTEX 56000 will immediately print your fax.

Erasing messages

You can erase all voice messages, all call details or all faxes.

Erasing all voice messages





To erase all voice messages, press the function keys simultaneously.

Erasing a voice message during replay



To erase a voice message during replay, press the key. function

The message being played is deleted, the KORTEX 56000 announces «message deleted» and plays the next message.

Erase all call details





To erase all call details records, push the function keys simultaneously.

Erase all faxes



To erase all faxes, push the simultaneously.

function keys

Loudspeaker volume adjustment

To adjust the loudspeaker volume on the KORTEX 56000 press the «+» and «-»

Note: You can adjust the volume level during replay of a message (greeting announcement, system messages, call details ...) or in handsfree mode.

Using the KORTEX 56000 in hands-free mode

The KORTEX 56000 enables you to answer a call without using a telephone handset. In hands-free mode you can adjust the speaker volume. If you wish to initiate a call in hands-free mode, you must dial the

number using a telephone handset before pressing the $\overbrace{}$ function keys.

Answering a call in hands-free mode

To answer a call in hands-free mode, press the function key and speak into the microphone .



The function key is lit to indicate hands-free mode and the one LED is lit to indicate that a call is in progress.

To hang up, press the function key again. The function key and the Oth LED are no longer lit.

Making a call in hands-free mode

- Lift your telephone handset.
- Dial the recipient's telephone number using your handset, then press the function key and speak into the microphone.
- Hang up your telephone handset.

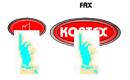
The (function key is lit to indicate hands-free mode and the OH is lit to indicate that a call is in progress.

Call screening

Call screening enables you to listen on the KORTEX 56000 loudspeaker. You can listen to your caller's telephone number, provided you subscribe to your telephone service provider's Caller ID service, or you can listen to a caller leaving a message without them hearing you. You can interrupt call screening by lifting the telephone handset (from any extension) or by initiating hands-free mode.

Enabling call screening

To enable call screening, press the



function keys simultaneously.



The function key flashes to indicated that call screening is active.

Example of call screening with the answer phone feature switched on.

- >> You have switch on the answer phone feature and call screening
- You receive a call
- The caller's telephone number is announced (if you have subscribed to your telephone service provider's «Caller ID» service). The greeting announcement plays and recording begins. At any time

you can accept the call by pressing the function key.

Example of call screening with the answer phone feature switched off.

- > You have enabled call screening and switched off the answer phone feature.
- The caller's telephone number is announced (if you have subscribed to your telephone service provider's «Caller ID» service). At

any time you can accept the call by pressing the fur

ne ⁽ function key.

In both of these two examples, the call details are stored in memory.

Sleep mode

Sleep mode reduces electrical consumption and is only enabled by changing the modem settings using the communications software provided. Sleep mode ends automatically when a call is received or when a communication application is started (on DTR). In sleep mode, the «Caller ID» service is not active and the date and time of calls are not recorded.

Remote control

The Remote control feature will only operate after a four digit PIN code has been set. You can set the PIN code using the communications software provide or using the KORTEX 56000 function keys.

Note: Remote control is only possible using a touch tone telephone handset.

Setting the PIN code using the function keys

♦ To set the PIN code, press the three function keys simultaneously



➤ You are in PIN entry mode.

➤ Enter your four digit pin code using the function keys as shown below:



Note: Each key press is confirmed verbally when you release the key. For example, on pressing the 8 (Play) function key you will hear "EIGHT" through the KORTEX 56000 loudspeaker.

- After entering the four digits, the PIN code is announced verbally for verification.
 - ▶ If the PIN codes is not correct, restart the process from the beginning.

Note: If you forget your PIN code, reset the code locally on the KORTEX 56000. It is not possible to reset the PIN code remotely.

Controlling the answer phone feature remotely

- 1. Dial your telephone number
- 2. Once the greeting announcement has started playing, press the # key on your telephone
 - ➤ The KORTEX 56000 verbally asks you to : « Enter your code ».
- 3. Enter your 4 digit PIN code
 - The KORTEX 56000 announces the system information. Press the *key on your telephone to access the voice menu which guides you through the replay of messages. Press the buttons on your telephone to choose an operation (see the table «Guide to Remote Operation Keys» for the function of each telephone key)
 - At any time you can hang-up by pressing the S key on your telephone or by replacing the receiver.

Activating the answer phone feature remotely

It is possible to activate the answer phone feature remotely if you have forgotten to switch it on.

- To activate the answer phone feature remotely, dial your telephone number and let it ring nine times.
 - **▶** The KORT€X 56000 will answer and play the greeting announcement.
 - ► Hang-up during the greeting announcement. The KORTEX 56000 is now set to answer calls.

Guide to Remote Operation Keys

Using your telephone, dial :	Function	
0	Listen to Follow me information.	
0	During replay : erase the current message. During the greeting announcement : record a new greeting announcement.	
2	Replay the greeting announcement / Stop recording of the greeting announcement.	
6	Switch off the answer phone feature.	
4	Erase all voice messages.	
6	Hang up during remote control.	
6	Listen to Caller ID details.	
0	Listen to the previous message.	
8	Play messages.	
0	Listen to the next message.	
*	Access the voice menu «For more information».	
#	During replay of the greeting announcement: enter remote control mode.	

follow me (automatic call back)

Follow me function allows you to be automatically advertised when you receive new messages on the KORTEX 56000. To use the follow me function you may set a call back phone number and the calls times periods. Note: If the call back phone number dialled by KORTEX 56000 is Busy or not responding it is redialled a second time.

Set the KORTEX 56000 call back phone number

You can set the call back phone number by using the KORTEX 56000 function keys.

To set the call back phone number push simultaneously the function Follow

keų.

. You enter set-up mode.

Enter the phone number (don't forget the prefix if you are on a PBX) using the function keys as shown on graphic page 30 (Each key press is confirmed verbally when you release the key). For example the 01 49 92 55 55 should be entered digit by digit as 0149925555

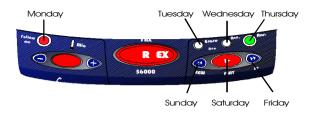
the end of the phone number is confirmed by pressing the



Set the KORTEX 56000 calling days

By default, the follow me function is set to call you back at the entered call back number 7/7 days. You can reduce the days range by using the KORTEX 56000 function keys.

- To set the days range push simultaneously the function keys: You enter set-up mode.
 - ▶ Delete a day or more by using the function keys as shown behind (Each key press is confirmed verbally when you release the key). For example to delete the Saturday and Sunday days press then press and confirm the end of deleting by pressing the **KORTEX**



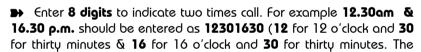
Set the KORTEX 56000 calling times

♦ To set the calling time range push simultaneously the function



➤ Enter 4 digits to indicate one time call by using the function keys as shown on graphic page 30. For example 12.30 am should be entered as 1230 (12 for 12 o'clock and 30 for thirty minutes) The end

of the time is confirmed by pressing the



end of the times is confirmed by pressing the



▶ To instruct the KORTEX 56000 to call you immediately after a new message has been received, enter the special number 9999. The KORTEX 56000 understands this mean 'imediately'.

Remote change of the call phone number

To change the call back phone number remotely, dial your telephone number, follow the page 30 instructions (Controlling the answer phone feature remotely) press the **0 key** (use a touch tone telephone handset) to change the call back phone number. This feature will be available on our web site.

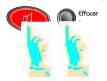
Enabling Follow me

To enable follow me, press the function keys simultaneously. The action is confirmed verbally when you release the key.

Recording a follow me announcement

We have recorded a follow me greetings message for you. If you want to change this announcement, you are able to record a follow me announcement of up to 50 seconds in length.

In order to record a follow me announcement, you must press simultaneously the following function keys:



Release the function keys and speak clearly approximately 30cm from the KORTEX 56000 microphone.



- The function key is now lit to show you that the follow me announcement recording is in progress.
- To stop recording, press the announce function key.

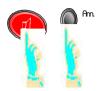




The function key is no longer lit.

Replaying the follow me announcement

To replay your follow me announcement, press the SPK and announce function keys simultaneously.



➤ The announcement is replayed through the KORTEX 56000 loudspeaker.



- The function key is now lit to show that the follow me announcement is being played.
- ▶ Replay stops automatically at the end of the announcement.
- If you would like to stop replay before the end of the follow me announcement, press the announce key again.



➤ The

function key is non longer lit.



Quick Guide to KORTEX 56000 features

-----Cut here -----

KEYS	FUNCTION
Ans.	Switch the answer phone feature on or off.
PLRY	Replay voice messages.
FAX	Print a fax (when the computer is switched on and the communications software is loaded). Announce the time faxes were received and the number of the sending fax machine (when the computer is switched off).
Follow me	Announce the telephone number of received calls (if you have subscribed to the «Caller ID» service of your telephone service provider). Announce the time or date of calls.
Frase Rec.	Delete all stored voice messages.
Frase Rec. KORTEX	Delete all stored faxes.
Frase follow me	Delete details of received calls .
	Call or answer in hands-free mode.
	Volume adjustment.
Grase Ann. Mic	Record the greeting announcement.
	Replay voice messages, proceed to the next message, return to the previous message, stop message replay.
(KORTEX	Start call screening (listen to incoming call numbers and messages).



------ Cut here ------

Remote control (Using a touch tone telephone)				
Dial :	Function			
0	Listen to Follow me information.			
0	During replay: erase the current message. During the greeting announcement: record a new			
	greeting announcement.			
2	Replay the greeting announcement / Stop recording of the greeting announcement.			
3	Switch off the answerphone feature.			
4	Erase all voice messages.			
6	Hang up during remote control.			
6	Listen to caller ID details.			
7	Listen to the previous message.			
8	Play messages.			
9	listen to the next message.			
*	Access the voice menu «For more information».			
#	During replay of the greeting announcement: enter remote control mode.			



Installing your KORT€X 56000 on a PC

Recommended configuration

Computer	er PENTIUM	
Colour screen	SVGA 800 x 600	
Hard disk	1.2 Go	
Memory	16 Mb	
Windows 95 or late		

Installation of your modem is straight-forward, and requires only five steps \colon

- Connecting the modem to your PC
- 2. Connecting the modem to mains power and to the telephone line.
- 3. Connecting optional peripherals
- 4. Installation of the modem driver (for Windows 95 or later)
- Software installation.

This chapter shows you the procedure to follow to complete the first three of these steps. The fourth step is detailed in the section entitled *Installing* the modem driver (Windows 95, NT 4.0). To install the software, see the software documentation.

Contents of the box (PC version)

Before beginning installation, check that you have all the necessary parts. In addition it is recommended that you make a backup copy of the disks containing the software.

Contents (PC version)			
Standard	Plus version	Optional	
The KORTEX ADAPTIX modem	Communications software	Stereo headset with	
and its user guide.		integrated	
		microphone	
Serial modem cable	Internet access & on-line	Miniature	
	services software	Microphone	
12V AC Power supply		16Mbit Memory	
		Expansion module	
Telephone cable		Stereo cable	
		Ø 3.5 mm	

Step 1: Connection to the PC

Finding a free PC serial port



Before you begin, check that one of the serial ports on your computer is free (COM1 or COM2). To do this, look for a socket at the back of your PC as shown:



Figure 2: Location of PC serial port connectors (DB 9 male)

Note: Your PC serial port connector may have 25 pins, in which case you will need to use a 9 pin male to 25 pin female adapter. You can purchase one of these adapters from your modem reseller.



Figure 3: 9 pin male to 25 pin female adapter

If no serial port is free (it may for example be in use by a mouse or other device), you have two options :

- lpha Add a serial port to your PC (by buying an additional serial port card).
- ** Replace your serial port mouse by a bus port mouse to free your existing serial port.

KORTEX 56000 connectors

Before connecting your modem, check how each cable should be connected as shown in figure 4.

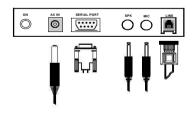


Figure 4: KORTEX 56000 connectors

Connection to the serial port

Connect the 9 pin male connector on the supplied serial cable to the female serial port socket on your modem.



Figure 5 : DB 9 pin male- DB 9 pin female serial cable

- ! Check that the cable is firmly connected.
- Connect the other end of the cable to your PC serial port (COM1 or COM2). If necessary use a 9 pin to 25 pin adapter(see figure 3).



Installing the KORTEX 56000 on a Macintosh®

Step 1: Connection to the Macintosh®

The installation of your KORTEX 56000 for Macintosh $^{(8)}$ is straightforward and requires four simple steps:

- 1. Connecting your modem to the Macintosh®
- 2. Connecting your modem to the power supply and telephone line
- Connection of optional peripherals (not supplied with the KORTEX 56000)
- 4. Software installation

This chapter show you the procedure to follow to complete the first three of these steps. To install the software, see the software documentation.

Contents of the box (Macintosh® version)

Before beginning installation, check that you have all the necessary parts. In addition it is recommended that you make a backup copy of the disks containing the software.



Contents (Macintosh version)			
STANDARD	In addition	OPTIONS	
KORTEX 56000 modem	Communications	Stereo headset with	
and user guide	software	integrated microphone	
Macintosh	Internet access & On-	16Mbit Memory Expansion	
DB9 to Mini Din 8 serial	line Services software	module	
cable			
12V AC			
Power supply			
Telephone cable			

Locating the modem port

Before starting, you must locate a free Macintosh modem port. To do this, look for a socket marked with a telephone symbol at the rear of your Macintosh.





Figure 2' Macintosh modem port

Macintosh® modem connectors

Before connecting your modem, check how each cable should be connected as shown in figure 4'.



Figure 4': KORTEX 56000 connectors (Macintosh® version)

Connecting to the Macintosh® modem port

Connect the serial cable supplied to the female serial port on your modem and check that it is firmly pushed in.



Figure 5': DB 9 male - Mini din 8 male serial cable

Connect the other end of the cable to your Macintosh® modem port(a female serial socket indicated by the telephone symbol).

Step 2: Plugging the modem into the power supply and phone line

Connection to the power supply

Plug the power adapter into the power supply and connect the power cable jack to the female AC IN socket on your modem.



(12 V AC) Power supply adapter

Note: Do not use any other power supply adapter other than that supplied with your modem.

Connection to the telephone line

Plug the telephone cable supplied into the LINE socket on your modem.



Plug the other end of the telephone cable into your telephone wall socket.



If you have a telephone handset plug this into the socket on the rear of the modem's telephone plug as shown below.



Step 3: Connecting optional peripherals

You can purchase the optional peripherals from your reseller.

Connecting the headset to your modem

The headset enables the user to use the hands-free feature without disturbing others nearby. Connect the headset's **red plug** to the **MIC** socket and the **black plug** to the **SPK** socket of your KORTEX 56000. These sockets are located at the rear of the modem.

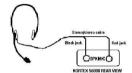


Figure 6: Connection of the optional headset

Connection to a sound card using the optional stereo cable (PC onlu)

If your PC has a sound card, you can use the optional stereo cable:

- Connect one end of the cable to the speaker outlet (SPK) at the back of the modem;
- Connect the other end to the LINE IN socket of your sound card. Alternatively, you can plug in speakers in place of a sound card.

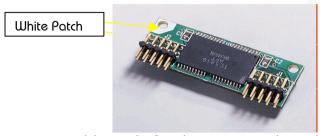
Installation of a Flash memory expansion module

To install a Flash memory expansion module:



- Disconnect the KORTEX 56000 power supply.
- Unscrew and open the memory expansion socket cover which is located on the underside of the KORTEX 56000.

- Align the white patch on the Flash memory expansion module with the two white marks on the KORTEX 56000 motherboard.
- ♦ Once aligned, firmly push the male connector on the Flash memory



expansion module into the female connector on the motherboard.

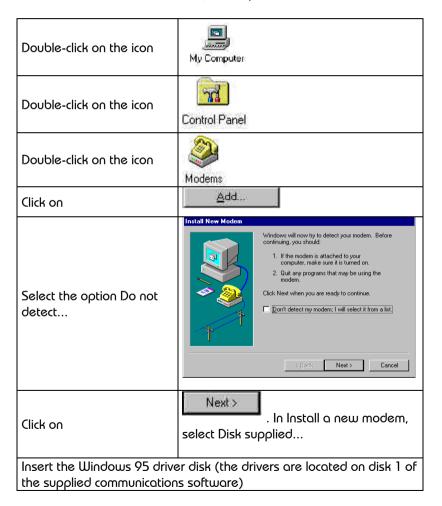
Note: a second memory expansion module may also be inserted if required.

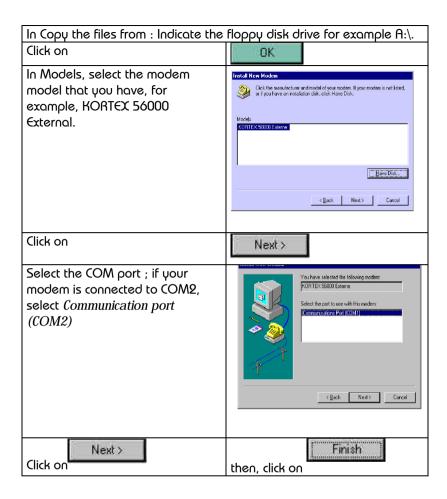
- Close the memory expansion socket cover and replace the screw.
- Switch the modern back on.
- You can now use the additional memory to store even more faxes and voice messages.



KORTEX 56000 modern driver installation (Windows NT, 95, 98 or later)

You can install a modem driver which supports Windows 95 or NT communications applications (Hyper Terminal, Dial Up Networking which is used for connection to the Internet, Fax etc). To install the modem driver:





The installation of the Windows 95 modem driver is now complete, you can now use Windows 95 communication software that requires this driver.



Solving common problems

Checking the firmware version number of your KORTEX 56000



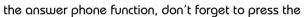
You can identify the firmware version number by pressing the: function keys simultaneously.

The KORTEX 56000 announces verbally the date and time of the installed version of K.A.O.S. (the KORTEX ADVANCED OPERATING SYSTEM).

Checking that your KORTEX 56000 is installed correctly

Checking the answer phone feature

Check that you have connected the power and telephone cables. To enable





function key.

Testing your modem under Windows 3.1



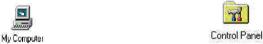


- Click on the Accessories program group then click on Terminal , a window is displayed which allows you to choose a serial port.
- 2. Select the serial port to which the modem is connected, e.g. COM2.
- 3. Click on the Terminal window is displayed
- 4. Type AT then press Enter. The modem should respond OK. If the modem does not respond, check that your modem is switched on and that the correct serial port has been selected. See the section entitled Problem Solving.

Testing your modem under Windows 95 or NT 4.0

After installing your modem under Windows 95 or NT 4.0, you can easily check that your modem is working. To do this :

Check that the modem is switched on.



2. Double-click the

icon then double click the

icon

3. Double-click the Modems icon, the following window is displayed:



- Click on the Diagnostics tab and select the modem that you have just installed
- 5. Click on
- The following window is displayed if your modem has been installed correctly. If the Response column is empty, check that your modem is switched on and that the cables are connected correctly or change the COM port.





Problem solving: Questions & Answers

Answer phone feature

- The KORTEX 56000 does not record the greeting announcement.
 - > You are not speaking sufficiently close to the microphone. Record the greeting announcement again this time speaking closer to the microphone.



- You have not held down the two function keys for a sufficient time. Press more firmly, the key press takes effect once you release the keys.
- The KORTEX 56000 is no longer recording incoming messages.
 - Delete stored messages or faxes to release more memory.
- The KORTEX 56000 remote control feature does not work
 - The greeting announcement does not stop until you press the # key. You cannot use a pulse dial telephone to remotely control the answer phone function. If you are calling from a phone box or from a digital phone, it may be necessary to press the * key to make the keypad send audible tones.
- The KORTEX 56000 will not receive faxes.
 - ➤ Check that the remote fax transmits on a frequency of 1100 Hz.
 - ▶ If the remote fax does not use this frequency, use some terminal emulation software to send the HAYES command AT*NC55Z to your modem.

Modem feature

- After the first failed call to a telephone number, my modem will not redial.
 - **▶** Use some terminal emulation software to send the HAYES command AT%TCB to your modem.
- What should I do if one of the messages: "Blacklisted" or "Delay" is displayed?
 - **▶** Use some terminal emulation software to send the HAYES command AT%TCB to your modem.
- You hear a dial tone, but the modem does not dial.
 - Theck that your telephone cable is plugged in correctly. Is your modem plugged into an extension of a telephone switchboard(PABX)? Although KORTEX modems are designed to work with most switchboards, if possible, connect your modem to a direct telephone line to see if this resolves the problem. Note that your modem will only dial after detecting a standard 440Hz dial tone.
- You do not get a dial tone or the dial tone is not the one you normally hear when you use a direct telephone line.
 - Some telephone systems use digital extensions. Your modem will not work with this kind of telephone system. Use a direct line instead.
- Your modem dials, but without effect and you continue to hear the dial tone.
 - This often happens if you try to dial when your communications software is not configured correctly with regard to your telephone line. Your phone line must use tone (DTMF) or pulse dialling. To check the appropriate dialling mode, press a key on your telephone handset. If you hear a single tone (musical note), your phone line works with tone dialling; if you hear a series of clicks, your phone line works with pulse dialling. Configure your software appropriately.
- When you dial, you see the message "Unable to open communications port".

- ➤ The communications port is not configured correctly or is in use by another application. Check that the correct COM port is selected in your communications software.
- You are using an extension of a telephone switchboard.
 - ➤ Check that in the "Dialling prefix" for your communications software you have entered the number necessary to obtain an outside line, followed by a comma (e.g.: "9,").



KORT€X 56000 Technical Specification

TECHNICAL SPECIFICATION			
HARDWAR€			
Modem control language HAYES AT compatible command set			
Detection & Installation	Plug & Play		
DSP Processor LUCENT			
Sleep mode	The KORTEX ADAPTIX exits sleep mode on detection of RI (Ring Indicator), DTR		
	(Data terminal Ready) or when the		
	KORTEX function key is pressed.		
Expansion	1 expansion bay with 2 sockets for		
Capanision	Flash memory expansion modules		
Memory expansion	Uρ to 32 M bits (2*16)		
options	op to 32 M oits (2 10)		
Flash Memory (code)	512 Kb		
RAM	32 Kb		
Flash Memory (data)	16 M bits		
Serial connector	DB9 female		
Loudspeaker	50 mm diameter		
Microphone 6 mm diameter			
Speaker output (SPK)	3.5 mm diameter stereo		
Microphone input	3.5 mm diameter		
Backlit function keys	5		
Modem indicator lights (LEDS)	7		
Function keys	11 + 1 (On/Off)		
Weight	350 grams		
Dimensions	140*145*65 mm		
	OICE MODEM		
Supported modem	V21, V23, V22, V22 bis, V32, V32 bis,		
modulation types	V34, K56 FLEX (Flash upgradeable),		

TECHNICAL SPECIFICATION		
Supported fax	V27ter, V29, V17	
modulation types		
Fax interface	Tr29 class 1, class 2	
Voice interface	Class 8 IS-101 (AT+V), Hands-free	
	telephone	
Configuration	Stored factory default configuration	
DTMF tone detection	DTMF tone detection active during	
	message replay	
Voice encoding	G729 AB (6.8 kbps-5.44 kBps)	
Error correction	V42 (LAPM) MNP2 - 4	
Data compression	V42 BIS, MNP5	
flow control	RTS/CTS, XON/XOFF	
Diagnostics	Auto test on power on, local analogue	
-	loop, local and remote digital loop	
Communications	Asynchronous	
Dialing	Tone dialling(DTMF)	
Upgrade*	Flash memory, upgrade software	
	available on the Internet :	
	http://www.kortex.com/	
PCM 56K* encoding	A law and μ	
	TELEPHONE	
Hands-free telephone	SIMULTALK	
Fax-Switch	Fax/Voice/Data	
Caller ID presentation	You may subscribe to the 'Caller ID'	
	service of your telephone service	
	provider and your Caller Id has to be	
	compatible with the US Caller ID or	
	European caller ID system.	
Off-hook management	Off-hook detection of handsets on any	
	extension	



Commands and registers

The KORTEX 56000 is programmable by means of HAYES AT commands and registers. For more detailed information on these commands, you can download more detailed documentation from the Internet.

HAYES compatible AT commands:

Command	Function
/	Display firmware version
A/	Repeat last command
A	Answer mode
В	Select modulation type
B0	V22
B1	Bell 212 A
ß2	V23
ß3	V23
ß15	V21
B16	Bell 103J
D	Dial mode, followed by (L P T , W V @ ! ; $^{S}=n$ \$)
€0	Echo off
€1	Echo on
НО	Hang up
10	Display firmware version
14	Display firmware version
LO-L1	Volume adjustment (low)
L2	Volume adjustment (medium)
L3	Volume adjustment (high)
MO	Disable loudspeaker
M1	Enable loudspeaker during connection
M2	Enable loudspeaker during communication
M3	Enable loudspeaker on answer
NO	Handshake using ATB or S37
N1	Handshake using ATB or S37 with reply
00	Off hook
01	Go on-line and reinitiate Handshake
03	Renegotiate speed
P	Pulse dialling

Command	Function
Ϙ 0	Send return codes
Q1	Do not send return codes
S	Access to S registers
T	Tone dialling
V0	Numeric responses
V1	Verbose responses
wo	Connection return codes sent to DTE Protocol return
	codes disabled
W1	Connection return codes sent to DTE Protocol return
	codes enabled
W2	Connection return codes sent to DTE Protocol return
	codes enabled
X	Level of return codes (see section on return codes)
Z	Initialise
\G0	Returns OK for compatibility
\K5	Break management
\N0	Normal Mode
\N1	Direct Mode
\N2	Error correction mode
\N3	Auto Reliable mode
\N5	
\N7	
\N4	V42 mode
\ Q 0	Disable flow control
\Q1	as &K4
\ Q 3	as &K3
\Tn (n=0 à 255)	Delay time
\V0	Deactivate connection speed return codes
\V1 &60	Activate connection speed return codes Disable V32 auto retrain
&β1	
ØC0	Enable V32 auto retrain
&C1	CD always on CD indicates carrier
&D0	Ignore DTR
&D1	_
&D2	Drop of DTR forces Escape mode Drop of DTR drops the call
&D3	Drop of DTR forces modem reset (equivalent to ATZ)
&FO	Select default profile 0
&TO	·
QIU	Stop loop test

Command	Function
&T1	Analogue loop test
&T3	Digital local loop test
&K0	Disable flow control
&K3	RTS/CTS flow control
&K4	XON/XOFF flow control
& Q 0	Asynchronous mode
&Q5	as \N3
& Q 6	as \NO
& Q 8	MNP Error correction
& Q 9	V42 or MNP Error correction
& S0	DSR always on
&S1	DSR conforms to V25
&V0	Display current configuration
&W0	Store the current configuration
&Y0	Select default profile 0 on power on
%€0	Enable auto-retrain
&Zn (n=0 à 3)	Store telephone number
% € 1	Disable auto-retrain
%C0	Disable compression
%C1	MNP5 and V42 bis Compression
%TCB	Reset blacklisted numbers table
% В	Display 'Delay' and blacklisted numbers
* NC 5	France mode
* NC 55	Europe mode
* NC 6	Germany mode
* NC 8	Italy mode
* NC 25	US mode
* NC 33	Greece mode



S Registers

Syntax : AT<S register> =<Value> **Example :** "ATS0=0" to switch auto-answer off

	S REGISTERS	&FO Factory
Register	Function	Profile
SO	Number of rings on answer	3
S1	Ring counter	0
S2	Escape	43
S3	Carriage Return	13
S4	Line Feed	10
S5	Back Space	8
S6	Wait for dial tone	8
S7	Wait for carrier detect on connection	60
S8	Pause length	2
S9	Carrier duration time	6
S10	Carrier lost duration time	14
S11	Length of DTMF number tone	0
S12	Guard time for the escape sequence	50
S30	Inactivity hang-up timeout	0
S36	Handshake negotiation	7

	S REGISTERS	&F0
		Factory
Register	Function	Profile
S37	Maximum modulation selection	0
	Reserved	1
	1200/75 bits/s	2
	300 bits/s	3
	Reserved	4
	1200 bits/s	5
	2400 bits/s	6
	4800 bits/s	7
	7200 bits/s	8
	9600 bits/s	9
	12000 bits/s	10
	14400 bits/s	11
	16800 bits/s	12
	19200 bits/s	13
	21600 bits/s	14
	24000 bits/s	15
	26400 bits/s	16
	28800 bits/s	17
	31200 bits/s	18
	33600 bits/s	19
S48	LAPM Protocol	7
589	Sleep counter	0
S90	Telephone handset status (off or on hook)	0
S91	Transmission sensitivity	10



Response codes

Numerical value	Literal value	Value of	ATX
		χ0-χ5	X1
		and X7	and
			χ6
0	OK	,	,
1	CONNECT	,	,
2	RING	,	,
3	No Carrier	,	,
4	ERROR	,	,
5	CONNECT 1200		,
6	NO DIAL TON€		,
7	BUSY		,
8	NO ANSWER		,
10	CONNECT 2400		,
11	CONNECT 4800		,
12	CONNECT 9600		,
13	CONNECT 14400		,
14	CONNECT 19200		,
24	CONNECT 7200		,
25	CONNECT 12000		,
86	CONNECT 16800		,
40	CONNECT 300		,
55	CONNECT 21600		,
56	CONNECT 24000		,
57	CONNECT 26400		,
58	CONNECT 28800		,
88	DELAYED		,
89	BLACKLISTED		,
90	BLACKLIST FULL		,
60	CONNECT 33600		,
59	CONNECT 31200		,
28	CONNECT 38400		,
18	CONNECT 57600		,
87	CONNECT 115200		,

Numerical value	Literal value	Value of ATX	
		X0-X5	X1
		and X7	and
			χ6
70	CONNECT 32000		,
71	CONNECT 34000		,
72	CONNECT 36000		,
73	CONNECT 38000		,
74	CONNECT 40000		,
75	CONNECT 42000		,
76	CONNECT 44000		,
77	CONNECT 46000		,
78	CONNECT 48000		,
79	CONNECT 50000		,
80	CONNECT 52000		,
81	CONNECT 54000		,
82	CONNECT 56000		,
83	CONNECT 58000		,
84	CONNECT 60000		,



Internet Server*

KORT€X on the Internet

Using the KORTEX web site you can post technical questions, obtain the latest information on a product and download software and flash firmware updates.

♦ KORTEX Web site: http://www.kortex.com/



Before contacting technical support

If you have a technical problem with your modem, please complete the form below as fully as possible prior to contacting technical support.

Hardware			
Required Information	Notes	Response	
Date of purchase			
Product reference no.	Indicated on the modem example :		
	вО000930		
Firmware version	Send the HAYES command: AT/ in		
	Terminal mode, the response is of		
	the form: KORTEX ADAPTIX 56K		
	Europe 110 780 00 V1.00 BOX		
Format	PC Card, External,		
line type	Analogue, direct line, PBX, ISDN,		
	GSM		
Prefix	Yes/No		
Type of computer	IBM Compatible PC, Mini-Computer,		
	Power PC (RISC)		
	Software		
Environment	Windows 3.X, Windows 95, DOS,		
	Windows NT 3.51, NT 4.0		
Software version	See Help, About		
Winphone	Version 2.0		
FotoMac	Version 1.9		
Describe the problem you			
have encountered as			
accurately as possible and			
note any error message.			

MODEM USER GUIDE

TECHNICAL SUPPORT:

TEL: 33 (0) 1 49 92 55 50 FAX: 33 (0) 1 49 92 55 48

€ :MAIL ADRESS : support@kortex.com

SALES:

FAX: 33 (0) 1 49 92 55 77 E:MAIL ADRESS: sales@kortex.com

W€B:

http://www.kortex.com/

ADRESS:

139, 147 Avenue Paul Vaillant Couturier 93126 LA COURNEUVE CEDEX France

Tél.: 33 (0) 1 49 92 55 55 - fax: 33 (0) 1 49 92 55 77

MN 120 360

