




USER'S MANUAL
English

The  symbol on our products signifies that they have been certified according to the EMC directive 89/336/EEC and the Low Voltage directive 73/23/EEC when applicable. The products fulfill the requirements according to the following standards:

EN 50 081-1:1992 Electromagnetic compatibility, Generic Emission Standard.

EN 50 082-1:1992 Electromagnetic compatibility, Generic Immunity Standard.

Second edition (April 1999).

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C PEN

Congratulations - you have just bought yourself a photographic memory! C Pen is a Mobile Information Collector that reads, remembers, processes and transfers printed text cordlessly to your Windows-equipped PC. C Pen is in essence an electronic highlighter that remembers the text that you are marking.

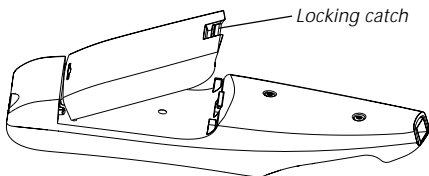
C Pen is equipped with 8 MB of memory, of which 6 MB can be used to store about 3,000 standard size pages. C Pen communicates with your PC via a built-in infrared interface, using the IrDA standard. When C Pen is connected to your Windows PC, it is recognized as a standard drive. C Pen contains a digital camera, OCR (Optical Character Recognition) technology and a powerful computer, yet weighs no more than 100 grams. Carry it with you wherever you go.



The Battery

Attaching

1. Place the battery as shown below.
2. Push down until you hear a click.
3. Secure the battery by pushing the locking catch forward.



To remove the battery, press the locking catch away from the reading end of the pen and lift the battery upwards.

Charging

1. Connect the charger to C Pen.
2. Plug the charger into a mains socket.

When the battery is fully charged, the charging stops automatically. You cannot overcharge the battery. While charging, you may use C Pen as usual, but the charging time will be longer. The normal charging time is 12 hours.

How C Pen Works

As C Pen is moved over the text, C Pen's internal light source illuminates the characters and a camera takes pictures of the text. These images are transformed to computer-readable text by an OCR-system.

What is OCR?

Optical Character Recognition is the process of turning an image into computer-readable text. During OCR, C Pen analyzes the images taken by its camera and translates them into text characters. After OCR, you can transmit the resulting text to your PC and use it in your Windows applications.

However, you cannot always expect C Pen to achieve 100 % correct character recognition. The result depends on a number of circumstances:

- The quality of the printed text you want to read with C Pen. You can calibrate C pen to optimize its performance under difficult conditions. See **Calibration** under **Settings/Text Quality**, p. 32. High-quality printed text produces, of course, maximum OCR accuracy. With lower-quality pages, e.g. poor fax copies, OCR accuracy will be poorer.
- How you hold and move C Pen over the original text. Please read the Quick Start folder to learn how to use C Pen correctly. It is crucial that you follow these instructions in order to get optimal results.
- The language of the text C Pen is reading. The text language should be set in **Settings**.

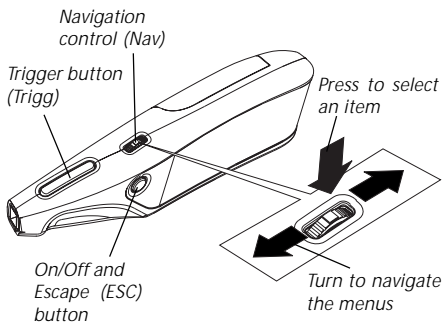
- Anything that is not a printed character, and any character distorted by a mark or smudge on the paper could be unrecognizable.
- Characters in the text should not overlap.
- Underlined text is difficult for C Pen to read because the underline changes the shape of descenders of the letters q, g, y, p, and j.
- C Pen can't read red or yellow text on a white or red background, or white text on a red background.
- The size of the characters should be 7–20 points.

Read more about settings in the **Settings** chapter on p. 30.



NOTE: C Pen only recognizes machine-printed characters such as laser-printed or typewritten text. C Pen does not recognise handwritten text.

The Buttons



Nav Turn the navigation control left or right to move in menus and text. Press it to select an item or option.

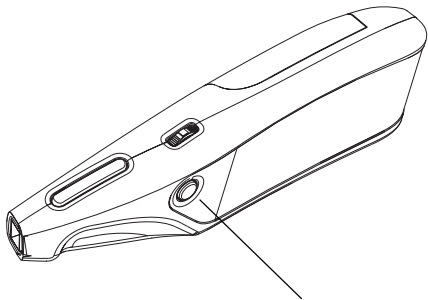
Trigg Press and hold down to read text.

**On/Off
ESC** This button is used to turn C Pen on and off. It also closes menus and cancels text.

Turning On and Off

To turn C Pen on and off, press and hold down the **On/Off** button until the display is activated/deactivated.

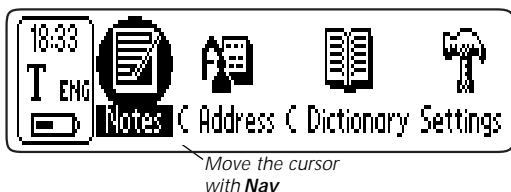
C Pen turns off automatically after 4 minutes of non-use. To change the automatic power-off time, see **Settings**, p. 30.



Press to turn C Pen on.

The Main menu

The **Main menu** is what you see when you turn C Pen on. It displays C Pen's different applications.



Notes contains the collected texts; see p. 17.

C Address is an address book, where you can store and search for information about your contacts; see p. 36.

C Dictionary is an application where you can translate words from one language to another; see p. 43

Settings contains parameters you can change like power-off time and reading options; see p. 30.

C Direct contains information on how to enter text from C Pen directly into Windows program by infrared communication; see p. 55.

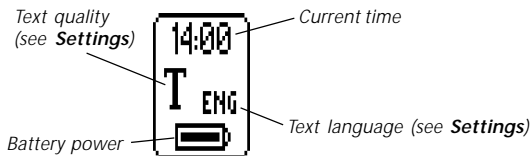
Info contains information like C-Pen's serial number, OS version number, free memory space, etc; see p. 35.

Storage is a storage area that can be used like a floppy disk when C-Pen is connected to a PC. In Storage you can store any kind of file. See **Connecting to a PC**, p. 51.

Move the cursor using **Nav**. Press **Nav** to start an application.

Status field

The area on the left is called the status field. This field displays the time, the current text settings and the battery indicator. Text settings are described in **Settings**, p. 30.



Using dialogs

C Pen uses a number of graphic elements on the display to give information. Some of these require interaction from the user. The graphic elements are:

Dialogs

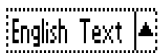
A dialog box appears when you need to make selections or enter information. A dialog box contains one or more elements like buttons, list boxes or edit boxes.

Dialog Buttons



An on-screen button, e.g. **OK**, **CANCEL**, **YES** or **NO**. To select a button that appears in a dialog, use the navigation control; turn **Nav** until the button you want to select is marked with inverted colors, then press **Nav**. **CANCEL** will cancel any changes and close the dialog.

List Box



A list box contains a list of items that can be selected by the user.

Edit Box



It is possible to enter and edit text in an edit box. Select the box and the text will be highlighted. Use your **C Pen** to read a text or press **Nav** to enter edit mode. In edit mode you can use the **Edit menu** or **C Write** for editing text, see p. 19 and p. 22.

Check box

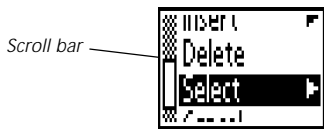


Check a box by clicking the item with **Nav**. Normally, only one item in a list of check box items can be selected.

Using menus

Menus provide you with different options. Move between different menu items by turning **Nav** and select an item by pressing **Nav**.

A scroll bar indicates if there are more menu items above or below the borders of the menu box.



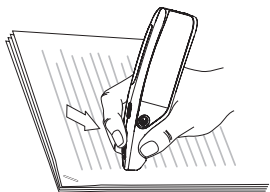
Selecting an item marked with a **▶** will display further alternatives. Selecting **Cancel** will only close the menu.

Reading text

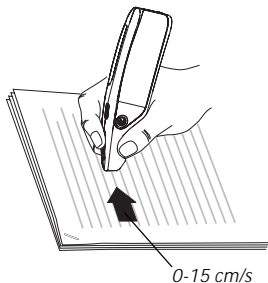
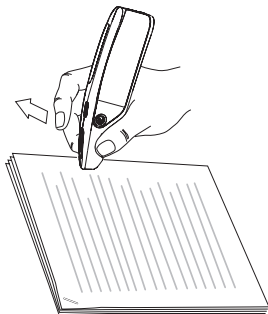
Please follow the instructions in this chapter in order to get the best results from your C Pen. Take a few minutes to learn how to use C Pen correctly.

To read a line, follow the steps below.

1. Turn C Pen on. Make sure that the text settings are set for the appropriate values. The text settings are **Text Quality**, **Text Language** and **Read Mode**. There is also a possibility to calibrate C Pen for best performance. Refer to **Settings**, p. 30, to read about the different settings and how to modify them.
2. Place C Pen over the first character you want to read. Hold C Pen with the nose opening flat against the surface. Aim at the center of the line. C Pen reads one line at a time.
3. Press and hold the trigger.



4. Move C Pen over the line of text. Keep the trigger pressed as you move C Pen over the text.



5. Release the trigger at the end of the line.

The text will appear on the display.



The collected text is placed in a new text file in **Notes**; see p. 17. You can also select **New...** and then **File** in **Notes**. This creates a new, empty text file.



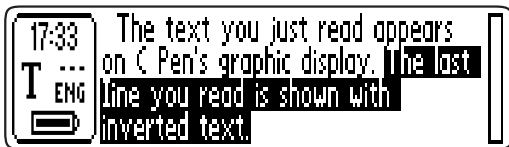
NOTE: You can move C Pen either left-to-right or right-to-left over the text.

You can read up to 15 cm/second.

Reading another line

Read the second line the same way you read the first. A space or a line break is inserted between the lines (see **Read Mode** under **Settings**, p. 31). You can also insert a line break by clicking **Trigg** once.

The most recent line read is shown as negative text, i.e. white text on a black background.



To cancel the last line collected, press **ESC** briefly.

Stop reading

Press **Nav** to open the **text menu** (see **Notes**, p. 17) and choose **Exit**. The **Save As** dialog box appears. Choose **YES** if you want to save the text, **NO** if you want to discard the text or **CANCEL** if you want to return to the text. The dialog also contains an edit box with the file name. See p. 12 how to use dialogs and edit boxes.

NOTES

Notes contains the text files you have read. Enter **Notes** by moving the cursor to the **Notes** icon in the **main menu** and by pressing **Nav**. Inside **Notes**, move between items using **Nav**.

The Command menu

The **Command menu** contains commands for handling texts. Open the menu by selecting a text file and pressing **Nav**.



*Press **Nav** to open the **command menu***

The options in the **Command menu** are:

- Open** Opens a file.
- Rename** Renames a file. A dialog with an edit box appears; see **Using Dialogs**, p. 12.
- Delete** Removes a selected file.
- Properties** Displays the creation date, the date of last modification and the file size.
- Cancel** Cancels the **Command menu**.

Creating a new file or folder

To create a new file, close the open text, if any, and read a line. You can also create a new file with the command **New...** in **Notes**. Select **FILE** in the dialog box and press **Nav**. The new file is placed in **Notes**.

Create a new folder with the command **New...** in **Notes**. Select **FOLDER** in the dialog box and press **Nav**. A dialog box appears. Select the edit box if you want to edit or read a folder name. Use your C pen to read a name or press **Nav** to enter edit mode. To save the folder, select **OK** and press **Nav**. The folder is placed in **Notes**.

The Text menu

In an open text you move the cursor line by line with **Nav**. You can insert a new line at the cursor position (the flashing triangle) by reading a new line with C Pen.

Press **Nav** if you want to edit the text, change text settings or stop working with the text. Pressing **Nav** opens the **Text menu**.



Press Nav to open the text menu

The items in the **Text menu** are:

Exit Closes the text. If the text has been changed you are prompted to save it before it is closed.

- Edit** Enters edit mode. You can edit text either by using the **Edit menu** (see below) or by using **C Write** (see p. 22).
- Settings** Sets the text settings of the text you are reading; see **Settings**, p. 30.
- Select** Selects a read line/word. After selecting a reading, you automatically enter edit mode.
- Cancel** Closes the text menu.

The Edit menu

In edit mode you move the cursor one character at a time by turning **Nav**. Move the cursor to a position where you want to edit the text. Press **Nav** to open the **Edit menu**.

The items in the **edit menu** are:

Quit Editing Leaves the edit mode.

Change Changes the character to the right of the cursor.



Insert ▶ Inserts new characters at the cursor's position.

Cut Cuts a selection (available only if characters have been selected)

Copy Copies a selection (available only if characters have been selected).

Paste Pastes a cut or copied selection (available only if a selection has been cut or copied).

- Delete** Deletes a character or a selection.
- Select ▶** Selects characters or a whole text.
- Settings** Sets the text settings of the text you are reading.
- Cancel** Closes the edit menu.

Change

Place the cursor to the left of the character you want to change and choose **Change** from the menu.

Turn **Nav** to select the new character from the character frame and then press **Nav**.

The character frame



Insert

Move the cursor to the place where you want the insertion and select **Insert** from the menu. When pressing **Nav** you can choose between inserting a space, a line break, one character or multiple characters.

To insert one character, select **Character** and press **Nav**. Then turn **Nav** to select a character from the character frame and press **Nav**. The character frame closes automatically after the insertion.

To insert more than one character, select **Multiple Character** and press **Nav**. Turn **Nav** to select a character from the character frame and press **Nav**. The character frame remains and you can continue inserting characters.

When you are finished, press **ESC** to return to the text you are editing.

Select

Use the **Select** command to edit more than one character at a time. Choose **Select > Characters** and turn **Nav** to select multiple characters. Press **Nav** and choose **Cut**, **Copy** or **Delete** from the menu.

If you select **All**, the whole text will be selected.

Delete

Place the cursor to the left of the character you want to delete and choose **Delete** from the menu.

If text is selected, the whole selection will be deleted.

Settings

You can change text settings here. The text settings are

- **Text Language:** Select the language of the text you are reading
- **C Write Feedback:** Check the box if you want C Write feedback on
- **Read mode:** Select Continuous or Separate lines
- **Text Quality:** Select Normal or Inverted
- **Calibration:** Select Default Setting if your C Pen is calibrated and you want to revert to the factory setting.

Quit Editing

Quit **Edit mode** by pressing **Nav** to open the **Edit menu** and selecting **Quit Editing**.

C Write

C Write is a feature that allows you to draw characters by using C Pen as an ordinary pen. C pen can track its own movement over a surface and recognize the movement as a letter, digit or a symbol. Using **C Write** is an alternative to using the character frame when inserting characters in a text.

To be able to use **C Write**, the surface you “write” on must have a distinct pattern. A printed text is the best choice.

Use **C Write** in the following way:

1. Enter edit mode
2. Place **C Pen** against a text surface
3. Press and hold **Trigg**
4. Form a letter (see the prototypes, p. 25)
5. Release **Trigg**


When you release **Trigg** an image will shortly turn up, showing the letter shape as perceived by your **C Pen**. You do not have to wait for this image to disappear to write your next letter.



Visual feedback

This visual feedback can be switched on/off in **Settings**. Select **C Write Settings** (called **C Write** if you enter **Settings** from **Notes**) and press **Nav**. A dialog box appears where you can check or uncheck the **Feedback** utility.

Basic rules when using C Write

- In order to obtain maximum accuracy when writing with **C Pen**, your characters should resemble the prototypes on the following pages as much as possible.
- A character must be drawn in *one single stroke*. *Start here*
- The dot indicates the starting point of the stroke. 
- The height of the character should be 1 - 4 cm.
- **Trigg** must be pressed *before* you start writing.
- It is important that the pen tip is in contact with the surface while you are writing.
- The writing surface must have a distinct pattern, such as a printed text. Solid colors or simple repetitive patterns (lines, squares, grids) should be avoided.

Capital letters

When you enter edit mode the status field will look like this:



C Write Lower case icon

The **ab** icon indicates that **C Write** will generate lower-case letters.

In order to write a capital letter, you have to write the shift sign first (see **C Write Prototypes**). Only the first letter will be a capital. The status field will reflect this choice.



C Write Capital letter icon

If you write two shift signs, **C Write** will enter Caps Lock mode. All letters will be capitals until you write a shift sign again.



C Write Caps Lock mode icon

Symbols

Press **Trigg** shortly to enter symbol mode. The status field displays a symbol icon.









































C Write Symbol mode icon

Write one of the symbols in the symbol table. You are automatically brought back to normal mode. If you want to quit symbol mode without writing a symbol, you have to write a backspace sign.




C Write Prototypes

Letters, digits and shift

Shift	Space	Backspace		
				
Aa	Bb	Cc	Dd	Ee
				
Ff	Gg	Hh	Ii	Jj
				
Kk	Ll	Mm	Nn	Oo
				


Pp	Qq	Rr	Ss	Tt
				
Uu	Vv	Xx	Yy	Zz
				
1	2	3	4	5
				
6	7	8	9	0
				







Special characters

Çç	Ææ	Øø			
					

Accents and umlauts







Write the letter first and then the accent or umlaut.

























Example: ä = a + 

¨	°	^	´	`	~
					

Symbols

Enter symbol mode by pressing **Trigg** briefly.

.	,	:	;	/	\
					

()	[]	{	}
					
-	+	*	\$	@	“
					
#	_	<	>	?	ı
					
!	i	£	§	ß	%
					

Closing a text

Press **Nav** to open the **text menu**, then select **Exit**. C Pen prompts you to save before closing if changes have been made.

Leaving Notes

To leave **Notes**, close the open text and select **Exit** in the **Notes** application.

SETTINGS

Settings contains the parameters controlling C Pen. Enter **Settings** from the **main menu** by moving the cursor to the **Settings** icon and pressing **Nav**. A list of the available settings appears.

To modify a setting:

1. Select the setting from the settings list with **Nav**. A dialog box appears.
2. Turn **Nav** to highlight the setting value. Press **Nav** to modify.
3. Turn **Nav** to change the value and press **Nav** to confirm.
4. Select the OK button to close the dialog and save the changed setting.
5. Exit **Settings** by selecting **Exit** at the top of the **Settings** list.

The following settings are available:

- Text Language
- Read Mode
- Text Quality
- C Write Feedback
- System Settings

Text Language

Select the language of the text you are reading from the list of check boxes. If you read text containing numbers only, select **Numbers Only** as language.

Read Mode

This setting indicates how C Pen should format the readings. The read modes are:

Continuous text: A space is inserted between two separate readings with C Pen. Suitable when you read a complete paragraph which will be used in a document on your PC.

Separate lines: Each reading starts on a new line. Text Quality

Text Quality

Select text quality from the list of check boxes.

Normal: Black text on white background.

Inverted: White text on black background.



Calibration

C Pen's reading ability can be adjusted to the present contrast between the text and its background in the following way:

1. Hold C Pen with the pen tip flat against the surface.
2. Press **Trigg** for two seconds without moving C Pen.
3. A progress indicator appears on C Pen's screen.
4. Move C Pen over the text, in circles or back and forth. Continue to move C Pen until the progress bar has reached the end.
5. A message shows up to indicate that the calibration is ready:



During the calibration process, C Pen will find the appropriate balance of black and white for the particular surface.

The calibration overrides factory setting. The calibration is not saved when C Pen is turned off. If you want to revert to the factory setting without turning C Pen off, choose **Calibration** under **Text menu/Settings** or **Edit menu/Settings**:



Select Calibration and press Nav and a dialog box appears:



In the calibration dialog box, select **CANCEL** to go back or **DEFAULT SETTING** to revert to the factory setting. If you press the scan button (**Trigg**), calibration will start.

You can do a calibration whenever you use C Pen. This method increases C Pen's reading ability if the text is not black and/or the background is not white. Inverted text must still be set in **Text Quality**. Remember that red text is not possible to read.

Text Quality, **Text Language** and **Read mode** are referred to as **text settings**. You must use these text settings in order to achieve the optimal OCR.

C Write Feedback

Check the box if you want enable the feedback facility in C Write.

System Settings

PIN code You can control the access of your C Pen by a four-digit code. Enter the PIN code setting to enable or disable your PIN (Personal Identification Number).



When the dialog box opens, the zero in the first position is blinking. Turn **Nav** to select the first digit in your PIN. Then press **Nav** to go the next position. Continue in the same way. When you have reached **OK**, press **Nav** and confirm the PIN in a new dialog box.

If PIN-code is enabled, you must enter the PIN each time C Pen is turned on. After three unsuccessful attempts, C Pen will turn off. You get three attempts each time you start C Pen.

Warning! If you start C pen by selecting **DISABLE PIN CODE** at start up, all data in C Pen will be lost!

Contrast Display contrast. Select the bar and turn **Nav** to change display contrast.

Time Date and time. Select the numbers with **Nav**.

- Menu Language** The language that C Pen uses in its menus and dialog boxes. Select the desired menu language in the list of check boxes.
- Power-off time** The time of inactivity in minutes before C Pen turns off automatically.

STORAGE

Storage is a storage area that can be used as a floppy disk when C Pen is connected to a PC. See **Connecting to a PC** for how to use **Storage**, p. 56.

This application has the following menu items:

- Delete** Removes a file.
- Properties** Displays the file size, creation date and date of last modification.
- Cancel** Cancels the command menu

INFO

Info contains a list of help and information topics. Select one of the topics from the list to read the topic text.

C ADDRESS

C Address is an application in C Pen for storing and looking up contact information such as addresses, phone numbers and e-mail addresses to people and organizations you communicate with.

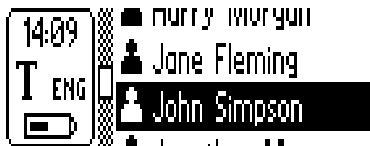


Start **C Address** by moving the cursor to the **C Address** icon in the **main menu** and press **Nav**. The **C Address main screen** will open:



C Address main screen

Below **Exit**, **New...** and **Find** you will find your contacts in a list.



Contact list

Enter a new contact

To enter a new contact, select **New...** and press **Nav**. The **Contact edit screen** will open.



Contact edit screen

You can change the choice of contact details (addresses, phone numbers, e-mail addresses etc.) in **OPTIONS**.

Select **OPTIONS**, press **Nav** and scroll through the options. Check or uncheck the boxes according to your personal preferences. When you are finished, select **OK** and press **Nav** or just press **ESC**.



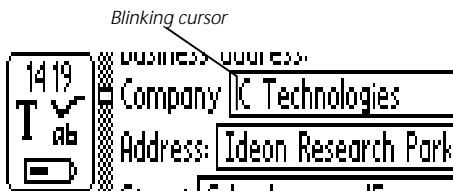
|
Check boxes

In the **Contact edit screen**, turn **Nav** to go to the first box, called **First name**. Read the first name of your contact with your C Pen, for instance from a business card or a telephone list. When you stop reading you will automatically be moved to the next box, **Last Name**. Read the last name to this box and you will be moved to

a box called **Full name**. The name in this box will later be suggested as your contact file name. Continue reading text into the following boxes in the same way.

You can always move to any box you want by turning **Nav**. If you want to redo a reading with C Pen, just select the box and read again.

You can edit the content of a box by selecting it and pressing **Nav**. A cursor indicates that you are in edit mode:



Press **Nav** again to open the **edit menu** or use **C Write** to edit the text. When you have finished editing, select **Done** in the **edit menu** and press **Nav**.

If you want to discard the information you have entered, press **ESC** or select **Cancel** and press **Nav**. A dialog box appears, asking if you want to discard all changes. Select **Yes** and press **Nav**.

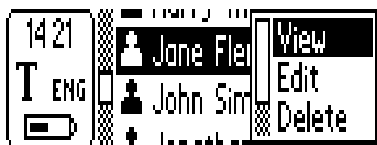
Select **Save and Close** when you are finished (or select **Top** at the end of the box list and press **Nav**). By pressing **Nav** the **Save As** dialog box appears. The suggested file name is the name you entered in the **Full name** box. If this box is empty or unchecked the suggested file name will be "**Last name, First Name**". You can edit the file name or you can read a file name with your C Pen.

A file name must not be longer than 64 characters. Invalid characters like ‘\’ or ‘.’ will be replaced with a blank space. If the file name already exists, a number suffix will be added to the file name, for instance ‘John Mill (1)’ if ‘John Mill’ already exists.

To save the contact file, select **Yes** and press **Nav**. A new contact is added to your contact list.

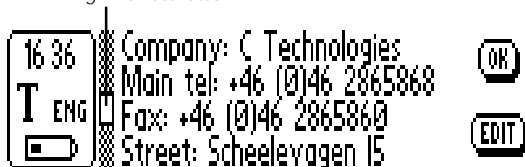
View a contact

Select a contact in the contact list and press **Nav**. You will see the following menu:



To view a contact, select **View** and press **Nav**. The contact information is presented in the **Contact view screen**. At opening the scroll bar is selected. Press **Nav** to activate it. The rectangle starts blinking and you are able to scroll through all contact information.

Blinking when activated



Contact view screen

To select **OK** or **EDIT**, first press **Nav** to deactivate the scroll bar - the rectangle stops blinking - then turn **Nav** to go to the buttons. If the buttons are not visible, just turn **Nav** to the right to scroll the text sideways.

Edit a contact

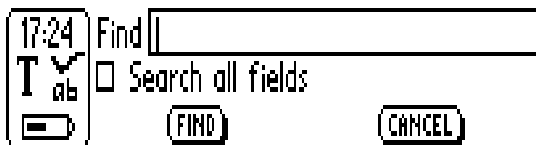
There are two ways to edit a contact:

1. Select a contact in the contact list, press **Nav**, select **EDIT** and press **Nav** again.
2. Select **EDIT** in the **Contact view screen** and press **Nav**.

In both cases the **Contact edit screen** will open, displaying the previously entered information in the boxes. Editing and saving the text in a box can be performed in the same way as described in **Enter a new contact**.

Find a contact

To find a contact, navigate to the **C Address main screen**, select **Find** and press **Nav**. The **Find contact screen** will open. Enter the search text either by using **C Write** or inserting characters from the character frame.

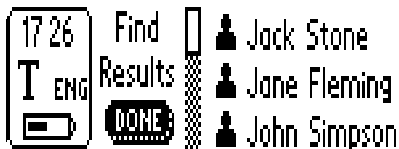


Find contact screen

If the **Search all fields** check box is checked, all information stored in C Address will be searched in order to find matching text.

If the check box is not checked only names will be searched, (**First name, Last name and Full name**).

To start the search, select **Find** and press **Nav**. The **Find contact screen** closes and a contact list containing only the contacts with matching information will be displayed. You can select these files, just as you do in the contact list.



Search result

Select **EXIT** and press **Nav** to close the screen and return to **the C Address main screen**.

If no matching text is found, a dialog box appears telling you “No matches found”. Select **OK** and press **Nav** to go back to the **Find Contact screen**.

Delete a contact

Select a contact in the contact list, press **Nav** and select **Delete**. A dialog box asks you to confirm that you are sure. Select **Yes** and press **Nav**. The contact is now deleted.

Exit C Address

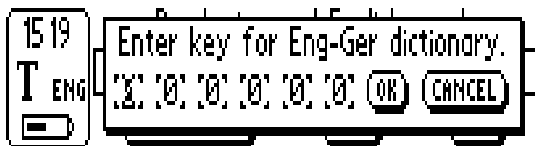
You can exit **C Address** from the **C Address main screen** by selecting **EXIT** and pressing **Nav** or by pressing **ESC**.

C DICTIONARY

C Dictionary is an application where you can translate a word from one language to another. One word is translated at a time, but you can read several words at the same time and then select and translate word by word.

Dictionary license key

After a dictionary is installed, you must enter the dictionary key for this dictionary. The dictionary key is obtained when buying a dictionary from <http://www.cpen.com>. A dialog box appears, letting you enter the dictionary key:

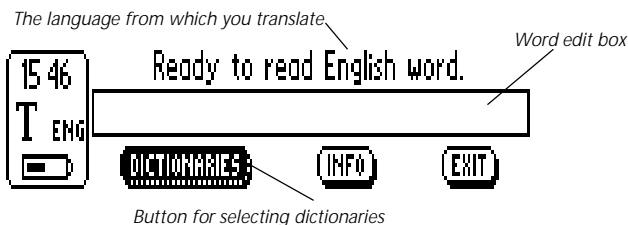


Turn Nav to enter the first digit in the dictionary key. Then press Nav to go to the next position. Continue in the same way until OK is selected. Press Nav and you are able to use the dictionary.

Introduction



Start **C Dictionary** by moving the cursor to the **C Dictionary** icon in the **main menu** and press **Nav**. C Pen is now ready to read words to be translated. If you want to change dictionary before you start reading, see **DICTIONARIES** button p. 49.



C Dictionary main screen

To translate a word, just read the word with C Pen as usual. One of the following situations occur:

1. The word is found in the dictionary and the translation is presented on the screen (see **Translation screen** p. 45).
2. No exact match of the word is found in the dictionary and a list of alternatives is displayed (see **Word selection list** p. 46).

3. Several words are read and the words are shown in a new screen (see **Word selection screen** p. 47).
4. A dialog box appears, telling that the word cannot be found in the dictionary.

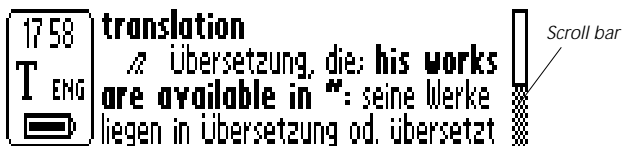
When you are reading a word it may happen that the word (or part of the word) in front of and/or behind your look up word is also included. If this is the case

C Dictionary acts according to the following rules:

- If two words are read, the longest word is looked up
- If three words are read, the middle word is looked up
- If more than three words are read, **the Word selection screen** (see p. 47) is displayed

Translation screen

The **Translation screen** displays the translation of the selected word. A scroll bar appears if only part of the text is shown. Turn **Nav** to scroll the text.



Translation screen

The meaning of bold and italic characters is explained in **Info** (see **INFO button** p. 50).

Close the **Translation screen** by pressing **Nav** or **ESC**.

Pressing **Trigg** briefly will delete the current reading and bring you back to the **C Dictionary main screen**.

You can start reading a new word without closing the screen.

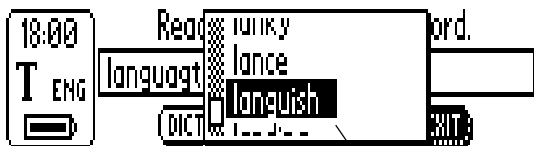
Word selection list

If the look up word doesn't match any word in the dictionary, the application will search for similar words and present these alternatives in a **Word selection list**.

The reason why a word isn't found can be that the word is misspelt or that the OCR has given an erroneous result. Another reason can be that the word is not in its base form (e.g. chairs instead of chair).

The most probable word is presented at the top of the list and the others in probability order. A maximum of ten words is displayed. Select the matching word and press **Nav** to see the translation.

A Word selection list can also be displayed if more than one word is found with the same spelling as the look up word but with different meanings.



Word selection list

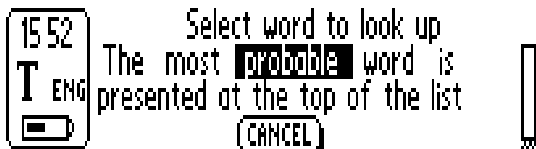
Close the **Word selection list** by selecting **Cancel** and press **Nav** or by pressing the ESC-button.

Pressing **Trigg** briefly will delete the current reading and bring you back to the **C Dictionary main screen**.

You can start reading a new word without closing the list.

Word selection screen

If more than three words are read the **Word selection screen** appears. Turn **Nav** to select a word and then press **Nav**. The selected word is looked up and either the **Translation screen**, a **Word selection list** or the **Can't find** dialog box is presented.



Word selection screen

Close the **Word selection screen** by pressing **ESC** or by selecting the **CANCEL** button and then pressing **Nav**.

Pressing **Trigg** briefly will delete the current reading and bring you back to the **C Dictionary main screen**.

You can start reading a new word without closing the screen.

Word edit box

The read word or words are directed to an edit box where you can edit them in the usual way. To be able to do this you must first close dialogs, lists or screens that have turned up after reading.

Turn **Nav** to select the edit box and then press **Nav**. A cursor indicates that you are in edit mode. Press **Nav** again to open the **edit menu** or use **C Write** to edit the word. When you have finished editing, select Done in the **edit menu**, then press **Nav** and the edited word will now be looked up in the dictionary.

You can also use the edit box to see the result of a reading.

Word references

Some words in the dictionaries contain references to other words. The word references are displayed in *bold and italic* style.

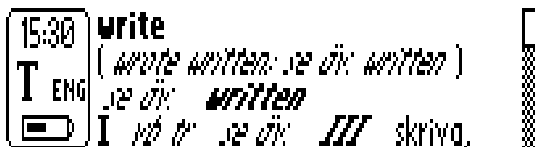


If you press **Nav** when a word reference is displayed, a menu appears:



In this menu you can select to look up the reference, canceling the menu or closing the translation containing the reference (**wrote** in our example).

If you choose to look up the reference (**write** in our example), this word will be translated.



Text Language

The **Text Language** is automatically set to the language you are translating from; i.e. German is set for the German-English dictionary. Exiting **C Dictionary** will restore the **Text Language** to the language that was set before entering **C Dictionary**.

DICTIONARIES button

The **DICTIONARIES** button gives you access to the installed dictionaries. Turn **Nav** to the **DICTIONARIES** button and then press **Nav**. Select the dictionary you want to use by checking the appropriate box, and then select **OK** and press **Nav**.

If you want to use the same dictionary the next time you use your C Pen you do not have to repeat this procedure, since the dictionary setting is stored when C Pen is turned off.

INFO button

The **INFO** button displays information about the currently selected dictionary; number of words, manufacturer of database, explanatory chart and abbreviations.

Removing dictionaries

Dictionaries are removed from the Host Computer.

Exiting C Dictionary

You can exit **C Dictionary** from the **C Dictionary main screen** by selecting **EXIT** and pressing **Nav** or by pressing **ESC**.

CONNECTING TO A PC

C Pen can be connected to a PC by Infrared (IR) Communication. To enable this communication certain hardware and software must be installed on your PC and configured properly. The following are required:

1. IR port. Portable computers often have a built-in IR port. Refer to your computer's manual to find out whether your notebook is equipped with an IR port and if so, where it is located. Most desktop computers do not have a built-in IR port. In this case you must use an external IR adapter. Refer to your retailer if you don't have an IR adapter.
2. Infrared drivers for Windows 95 (included on the C Pen Software CD). If you use Windows 98 or Windows NT, please read the ReadMe file on the C Pen Software CD.
3. C Pen Windows Software. This software is installed using the C Pen Software CD.

Installing software

Both the Infrared drivers and the C Pen Windows Software are installed when you run the installation program on the CD-ROM. Infrared drivers are possibly already installed on your computer. The installation program automatically detects if infrared drivers are installed or not.

Infrared hardware on notebooks can be configured in many different ways. Please refer to the ReadMe file on the C Pen Software CD before installing infrared software on a notebook. If you have questions and the ReadMe

file does not help, please refer to C Pen Windows Software Help or your notebook's retailer or manufacturer.

To install C Pen Windows Software:

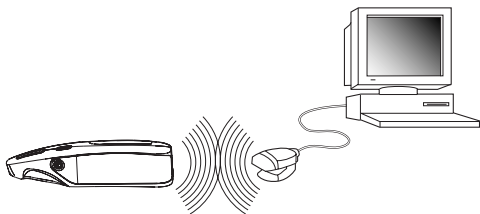
1. Put the C Pen Software CD into your computer's CD-ROM drive and the installation program will start automatically.
2. If the installation does not start, open the Start menu in the Windows taskbar, select Run and type `d:\setup.exe`, where `d:` is the drive letter for your CD-ROM drive.
3. To install C Pen Windows Software, click on Install C Pen.

To install Infrared drivers, click on Install Infrared (Windows 95 only).

The installation program also enables you to view the C Pen Demo, which demonstrates how you should use C Pen for best results. To play the demo, click on Demo.

To open the ReadMe file, click on ReadMe.

To connect C Pen to your PC, position C Pen so that it is aligned with the PC's IR port as shown in the figure (if



C Pen is within range of the computer's IR port, the On/Off button flashes with a green and red light). The installation program will place the C Pen icon (My C Pen) on your computer's desktop. Double-click on the icon to connect to C Pen.

Getting help

To get help using C Pen Windows Software, first open C Pen Viewer (by double-clicking on My C Pen) and from the *Help* menu select *C Pen Help Topics*. You can also press F1 on your keyboard to enter C Pen Windows Software Help.

C Pen Viewer

C Pen Viewer enables you to browse the contents of your C Pen. The user interface looks like Windows Explorer and you will recognize the applications from the Main Menu in C Pen. Use C Pen Viewer to open and browse files, to create new folders and to install or remove applications in your C Pen.



Transferring files

Transfer files between C Pen and the PC the same way as when working with a floppy disk or a hard drive. In C

Pen Viewer, find the file you want to transfer (e.g. a text file in Notes) and drag the file to a folder on your PC. When transferring files from the PC to C Pen, remember that each application, except Storage, accepts only its own kind of files. Notes, for example, may only contain text files. Storage accepts any kind of file.

C Address

C Address, the C Pen address book, is available in C Pen Viewer on your PC. Double-clicking on C Address in C Pen Viewer presents the address files stored in C Pen, listed by their contact name. An address file can be opened by Netscape Communicator or Microsoft Outlook on your PC by double-clicking on it and clicking Yes in the dialog. Please note that this will open a copy of the file and that your changes will be saved on your hard drive, not in C Pen. To put an edited address file back into C Pen, simply drag it from a folder on your PC and drop it into the C Address application in C Pen Viewer.

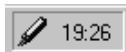
C Dictionary

The **C Dictionary** application is also available in C Pen Viewer. While translation of words is done in C Pen, installation and removal of dictionaries is done on your PC. The number of dictionaries that can be installed in C Pen depends on the amount of free memory in your C Pen. For information on how to install and remove dictionaries, please refer to the C Pen Windows Software Help.

C Direct

C Direct gives you the opportunity to enter text from your C Pen at the cursor position in all Windows programs.

To activate **C Direct** place C Pen in front of the IR-port on your PC, click the right mouse button on the C Pen icon (My C Pen) and select **C Direct** from the menu. The **C Direct** icon will appear in the system tray in the lower right corner of your screen.



The display on your C Pen will show “C Direct”. When you read text now with C Pen, it will appear as usual on the display. To transfer the text to the active application in Windows, direct C Pen’s IR-eye towards the IR-port of the PC. The text will disappear from C Pen’s display and be transferred to the cursor position in Windows.

The easiest way to control **C Direct** is from the **C Direct** icon in the system tray in Windows. By clicking the icon with the right mouse button, you can choose **Connect**, **Disconnect** or **Exit C Direct**. For more information on how to use **C Direct**, please refer to the C Pen Windows Software Help.

C Pen Edit

C Pen Edit is a simple text editor that lets you edit files stored in C Pen directly without having to first move them to your PC. **C Pen Edit** provides basic text editing, such as cut, copy, paste, find and replace. **C Pen Edit** can open and save files that reside either on your PC or in your C Pen. If you double-click on a text file in **Notes** it

is automatically opened in **C Pen Edit** and it can be saved directly back into C Pen.

Storage

To start using **Storage**, double-click its icon in C Pen Viewer. Files in **Storage** are opened if you double-click on them. Text files (files with the extension .txt) are opened by **C Pen Edit**. Other file types are first copied to a temporary folder on your hard drive (as defined in **Settings**) and then opened by their default Windows application. In this case, if you edit the file and save, your changes will be saved on your hard disk and not in C Pen.

Copying files is done according to Windows standard, i.e. either by using drag-and-drop or Copy/Paste in the **Edit** menu. You can delete files in **Storage** by selecting the file(s) you wish to delete and then pressing *Delete* on your keyboard. The *Delete* command is also available in the **File** menu. Please note that this operation CANNOT BE UNDONE.

Closing the connection

Close the connection between your C Pen and your PC by selecting *Disconnect C Pen* from the File menu in C Pen Viewer.

TROUBLESHOOTING

Problem: C Pen won't turn on.

Solution: Battery is not charged. Charge battery or use AC/DC adapter.

You must press the On/Off button for two seconds.

Problem: The text on the display does not match the text you are reading.

Solutions: Make sure you have chosen the correct language under **Settings**.

Make sure that you have chosen inverted text if the text is white on black background, or normal text if you have black text on white background. These are also under settings.

Make sure that you hold C Pen so that the nose is flat against the surface of the text you are reading. If you have an angle between the nose and the surface, C Pen will take incorrect pictures of the text.

Problem: A dialog box with the message "Nothing read" appears.

Solution: You must keep the trigger pressed as you move C Pen over the text.

You must hold the nose opening flat against the surface before you press the trigger.

Problem: The infrared communication to the PC does not work.

Solutions: Make sure that you have an external IR receiver installed on your stationary PC. If you have a portable PC, it is normally equipped with a built-in IR receiver.

Check the infrared under the Control panel in Windows 95/98.

Problem: C Pen turns off itself too quickly.

Solution: Enter Settings and increase Power-off time; see **Settings**, p. 30.

CARE & SAFETY

- Keep C Pen away from direct sunlight, heat, moisture and dust.
- Do not expose C Pen to extreme variations in temperature.
- Make sure that the camera opening is free from dust or any other objects.
- Clean C Pen with a dry cloth. Do not use detergents or other chemicals when cleaning C Pen.
- Do not use other batteries than the one supplied with C Pen. Should you need a new battery, contact your local dealer.
- When charging, use the charger supplied with C Pen. The charger is specially designed for C Pen and should not be used for other equipment.
- Make backup copies of the files in your C Pen regularly and keep the copies in a safe place.

TECHNICAL SPECIFICATIONS

<i>Size:</i>	150x38x23 mm
<i>Weight:</i>	100 g (with battery installed)
<i>Display:</i>	202x32 pixels, 40 characters per row, 4 rows
<i>Processor:</i>	Intel® StrongARM™ 100 MHz processor
<i>Memory:</i>	1 MB RAM 8 MB flash memory, of which 6 MB can be used for text files
<i>Reading speed:</i>	max 15 cm/s (up to 75 characters/s)
<i>Character sizes:</i>	7-18 points

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Warranty

C Technologies AB warrants that this product is free from defects in materials and function at the time of original purchase and for a period of one year from that date. When the name C Technologies is mentioned in the following text, it means, unless otherwise stated, C Technologies AB (reg. number 556532-3929), its subsidiaries and retailers.

If, during the warranty period, any defect in the product arises due to a deficiency in materials or function, C Technologies pledges to, at C Technologies' option, either repair or replace the defective product with the same or an equivalent model.

C Technologies, however, takes no responsibility for:

1. Damage caused during shipping, by accidents, malicious damage, modification, incorrect usage, force majeure or any cause beyond the control of C Technologies, including but not limited to lightning, water, fire, public disturbances, riots, strike, war or other similar conflicts.
2. C Technologies is not responsible for damage (including but not limited to direct or indirect personal injury, lost profits, fall in production, losses of or alterations to processed information or any other incidental or consequential damages) caused by the product or the usage of the product or because the product cannot be used.
3. Deficient maintenance or a repair performed by unauthorized persons.
4. Incompatibility due to technological developments.
5. Defects caused by external equipment or abnormal wear.
6. Defects caused by normal wear and tear.
7. Damage caused by the usage of inappropriate battery.
8. Damage arising in connection with or as a consequence of upgrading with additions to or alterations of the product, using software or hardware not produced by or approved in writing by C Technologies.

If your C Pen product requires warranty service you should return the product to the dealer/retailer from whom it was purchased. The product must be packed in original packaging or with sufficient care so as to avoid shipping damage. The original purchaser must be able to show proof and date of purchase with receipt/invoice from point of purchase in order for this warranty to be valid.

Repair or exchange does not extend or renew the warranty period. Exchanged defective parts become the property of C Technologies. When the warranty period has expired, the warranty of exchanged/replaced parts also ceases.

This product is not to be regarded as having defects in materials or function if it must be rebuilt in order to be modified in accordance with national or local technical safety regulations in a country other than one that the product was meant to be used in.

C Technologies reserves all rights to the product, its hardware, software and trademark. Whoever buys or uses the product has no right to alter, disassemble, reverse engineer or in any other way use any part of the hardware or software in the product, except in the way and for the purposes permitted by law.

This warranty does not affect the purchaser's rights against the dealer arising from the sales/purchase contract, nor the purchaser's legal rights according to existing, mandatory rules in applicable laws.

If there are no such applicable laws or mandatory rules, the purchaser's rights are limited to those which are stated in this warranty. C Technologies shall not be liable for any incidental or consequential damages for breach of any expressed or implied warranty of this product.