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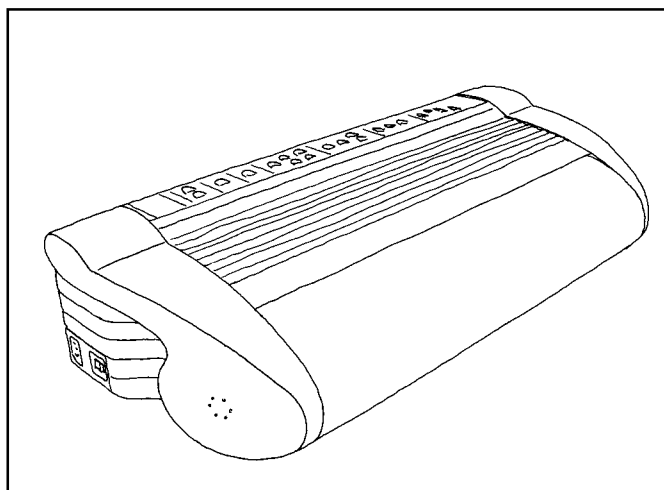
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INDEX BASIC

Braille printer for continuous tractor-fed paper

User manual version 3.18



1. Unpacking

1.1 Remove the transport locking

Open the box and lift out the printer.

1. Remove the transportation locking bar, located through the back plate of the printer.
2. Store it together with the packing material in the shipping box.

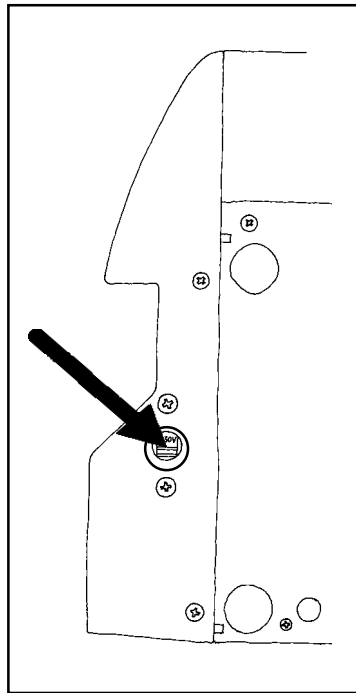
Note! It is very important to replace the printing head locker and to use the original packing whenever you need to ship the printer.

Before installing the printer make sure that there is no visible damage to the printer and that the delivery is complete. If you encounter any problems, contact your local dealer.

**IMPORTANT!
DO NOT DISCARD
THE ORIGINAL
PACKAGING.**

1.2 Safety instructions

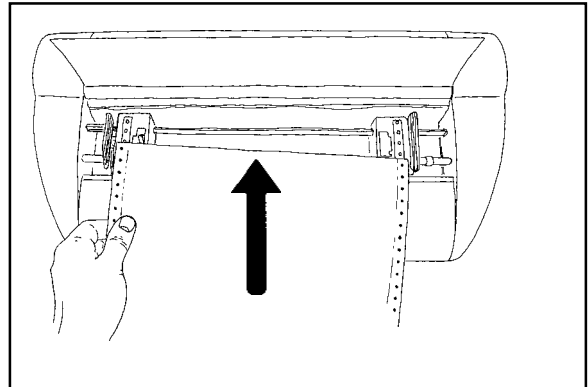
Before power on, make sure that the voltage selection switch is set for the correct value. The switch is located under the left hand panel.



2. Operating the printer

2.1 Loading paper

1. Open the front cover.
2. Release the tractor position lockers, and adjust the right tractor according to the paper width.
3. Load paper and close the tractors.
4. Pull the tractors outwards to give a slight tension to the paper and lock the tractors.



2.1.1 Top of form setting

The paper is automatically set in Top of Form (TOF) position, when a file is transmitted and the printing process starts. Just insert the first paper of the box should be inserted to the tractors.

2.1.2 Paper support

On the back of the printer there are two paper support rollers located. They will automatically hold the paper in position.

If there should be paper jam the rollers will detect that and a paper jam message is given.

2.1.3 Paper length setting

If the default setting is not suitable for your paper, set the correct length in the printer setup module. See chapter 4.3.3 to find correct setting.

2.2 Computer connection

Connect Index Basic to the computer with the Serial or Centronics interface. When turning on the Basic, both ports are ready to receive information.

2.2.1 Serial communication cable

Basic is equipped with a 9 pin female (D-sub) on the serial interface, and a standard centronics connector for the centronics interface.

Serial Pin configuration:

2=RXD in, 3=TXD out, 4=DTR out, 5=GND, 6=DSR in, 7=RTS out, 8=CTS in.

Transmitting parameters (factory setting) are:

Baudrate=9600, Data Bits=8, Parity=N, Stop Bits=1, Handshake=DTR hardware handshake.

2.2.2 Communication parameters

The communication parameters on the serial-port and centronics port on your PC are normally set with the following command in the AUTOEXEC.BAT file.

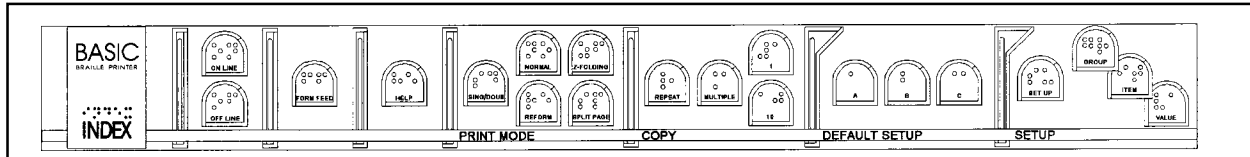
```
MODE COM1:9600,N,8,1,P
MODE LPT1:.,,P
```

2.3 Front panel

The front panel and user logic on the Basic is designed to make the use and installation of the printer as easy and efficient as possible. All the keys are marked both in Braille and ink print, and organized in clearly marked modules. The user is guided by digitized speech.

Note! The commands on the front panel are used when the embosser is connected to a DOS operated computer or together with a Braille editor working in Windows, controlling the embosser with a text based driver, e.g. Duxbury.

Note! WinBraille will overtake all commands from the front panel.



2.3.1 Start printing

Connect the printer to your computer, load the paper, turn it on and press Form Feed. Basic is ready for use with the default factory settings.

2.4 Default setup

To change the active default setup, press the DEFAULT SETUP KEY A, B or C.

2.5 Setup

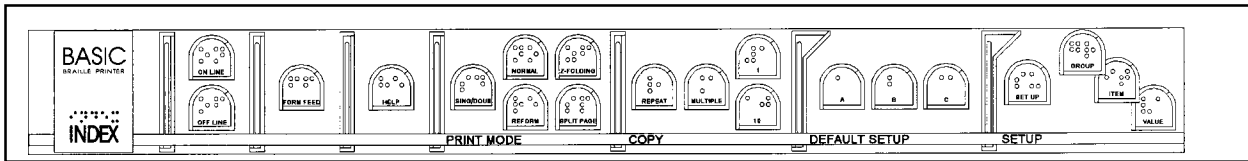
If you need to change the setup parameters use the front panel.

To start the setup sequence press SETUP. In setup mode you can change and save all parameters in the group: BRAILLE CODE, SERIAL COMMUNICATION, PAPER LAYOUT and OPTION.

2.6 Flow schematic for Setup

Setup	Group	Item	Value
	Braille code	Language	IBM437comp/IBM850comp/N.Amer.comp...
		..... Computer table	6/8 Dots
		..... Literary table	Without capital prefix/With capital prefix
	Serial communication	Baudrate	300/600/1200/.. 9600
		Data bits	7/8
		Parity	Odd/Even/None
		Stop bits	1/2
		Handshake	Hardware/Software
	Page layout	Characters per line	23/24/26/...48
		Left margin	0/1/2/3
		Binding margin	0/1/2/3
		Top margin	0/1/2/3
		Bottom margin	0/1/2/3
		Line spacing	0.5/0.75/0.90/0.95/1.0/1.05/1.10/1.50/2.0
		Page mode	Single sided/Double sided
		Print mode	Normal/Reformatted
		Page number	On/Off (bottom margin min 1 to set ON)
		Paper length 1	1-20 inch (full inch)
		Paperlength 2	1/4, 3/4, 1/3, 2/3 and 1/2" (part inch)
	Z-Folding	On/Off	
	Option	Word wrap	On/Off
		Auto line feed	On/Off
		Form feed	On/Off
		Volume	1/2/3/4/5
		Impact level	1/2/3/4/5
		Delay time	1/2/3/4/5
		Print quality	Normal/High
		Graphic dot distance	1.6/2.0/2.5 mm
		Text dot distance	2.2/2.5 mm
		Setup	Open/Not open
		Line type	Normal/Japanese
	Paper Jam	On/Off	
	Distance after file	1/2/None	

3. Front panel



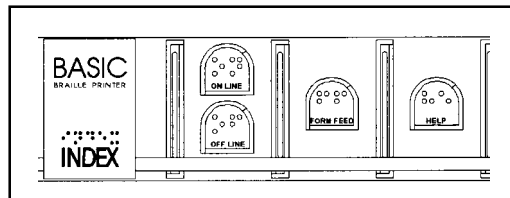
The front panel is designed to be easy to understand and use. The keys are organized in five groups and the user is guided by digitized speech.

Note! The commands on the front panel are used when the embosser is connected to a DOS operated computer or together with a Braille editor working in Windows, controlling the embosser with a text based driver, e.g. Duxbury.

Note! WinBraille will overtake all commands from the front panel.

1. STANDARD COMMANDS; On Line, Off Line, Form Feed, Help.
2. PRINT MODE; Normal, Reform, Split Page, Double/Single and Z-folding.
3. COPY; Repeat, Multiple, 1, 10.
4. DEFAULT SETUP;
 - A = Default setup A.
 - B = Default setup B.
 - C = Default setup C.
5. SETUP; Setup, Group, Item, Value.

3.1 Standard commands



3.1.1 On/off line

Connect/disconnect line to computer. Press *Off line* during printing to pause.

3.1.2 Form Feed

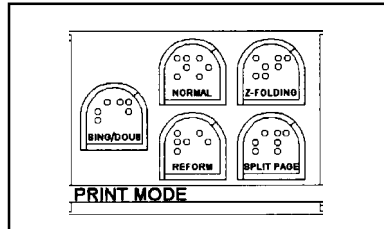
Form Feed sets the paper to start position by feeding the paper one form length. Double click *Form Feed* to set the first sheet in print position.

3.1.3 Help

The *Help* key, in the print mode, is used get a printout of active printer settings in both Braille and graphic. The printout includes the software version, Braille code, active setup parameters for Braille code, paper layout, serial communication and options. Press *Off line* and *FF* to interrupt the Braille printout and start the graphic printout.

3.2 Print mode

Print mode includes the keys for changing between the different print modes. You can choose between *single-sided* and *doublesided* or *normal*, *reformatted* or *split page*.



3.2.1 Double/Single sided

Press the key marked *Single/Double* to toggle between double and single-sided mode.

On the Single sided version of Basic this feature is not accessible.

3.2.2 Normal

In *Normal* mode the Basic will print the Braille as it is formatted in the text file. The text has to be formatted with the correct characters per line according to the setup of the printer.

3.2.3 Reformatted

In *Reformatted* print mode the Basic formats the text to erase space in the text file, like multiple space, FF (Form Feed) and CR/LF (New line). This function is very useful when printing a text file made for ink print in Braille or normal literary (grade 1) Braille.

Re-formatting function works in the following way:

- Auto linefeed and word wrap is automatically set ON.
- One or multiple space substituted with one space.
- One CR/LF is substituted with one space.
- Two CR/LF are substituted with one CR/LF
- Three CR/LF are substituted with one CR/LF followed by two spaces.
- More than three CR/LF's are substituted with two CR/LF's.
- One FF is substituted by one space.
- More than one FF are substituted with one FF.

3.2.4 Z-Folding

Z-folding gives a printout where every second sheet is printed “upside down” in order to create a suitable printout to be separated in a cutting unit.

Z-folding requires doublesided printout.

3.2.5 Split page

The *Split Page* prints Braille with more characters per line than the setting of the printer, by splitting up the file on several pages width. In SPLIT PAGE mode the printout will be single-sided with a maximum line length of 328 characters.

3.3 Copy

With the *Copy feature* you can produce large quantities of Braille without tying up your computer during the printout.

COPY includes the following keys REPEAT, MULTIPLE, 1 and 10.

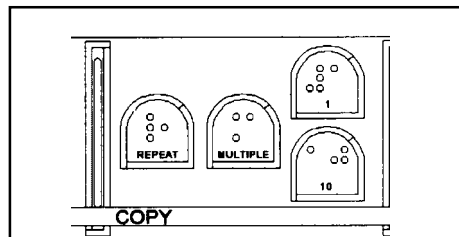
With REPEAT and MULTIPLE you can choose between the different copy functions and with "1" and "10" you can select the number of copies, and/or what part of a document to print.

3.3.1 Multiple

Multiple is used to select number of copies

Example: Make 54 copies.

MULTIPLE + 5 x 10 + 4 x 1 + MULTIPLE and send the file to Basic.



3.3.2 Repeat

Repeat is used to copy the last printed document or a part of it.

Press REPEAT twice to print one copy of latest document.

Press REPEAT once completed by the number 1+10 to select starting page, REPEAT 1 + 10 to select ending page. Press REPEAT again, and Basic will print one copy of the selected part of the document.

3.3.3 Load buffer

Repeat can be used to download a file to the printer buffer.

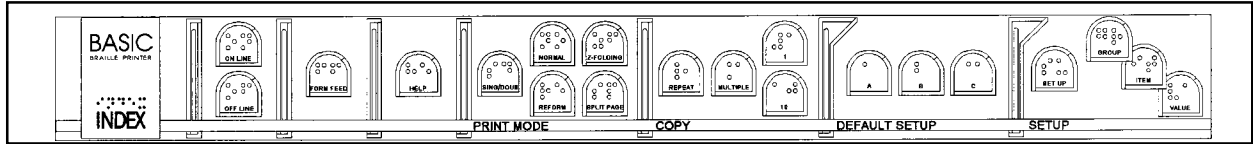
Press the repeat key after power on - Index echo "File to buffer".

Send the file to Basic and use the repeat/copy commands to start the printout.

4. Setup from control panel

Note! The commands on the front panel are used when the embosser is connected to a DOS operated computer or together with a Braille editor working in Windows, controlling the embosser with a text based driver, e.g. Duxbury.

Note! WinBraille will overtake all settings in the setup except the settings in the group *serial communication*.



4.1 Default setup A/B/C

Basic has three different setup parameter settings stored as DEFAULT SETUP A, B and C.

To select DEFAULT SETUP press A, B or C. All changes that are made in the setup are stored in the active default setup.

4.2 Setup

The group of setup keys includes four keys SETUP, GROUP, ITEM and VALUE.

4.2.1 Change Setup

To activate SETUP, press SETUP, Basic will echo “Change Setup A”. The changes will be stored in the active Setup.

The keys GROUP, ITEM and VALUE are organized in a tree structure where GROUP is the selection of four major groups, ITEM is the different items to change in each group and VALUE is the value for each item. (See description in chapter 2.6)

4.2.2 Setup keys

4.2.2.1 Group

GROUP includes four different groups of parameters, BRAILLE CODE, SERIAL COMMUNICATION, PAGE LAYOUT and OPTION. When pressing GROUP several times you will toggle between these four groups, in a similar way as in ITEM and VALUE.

4.2.2.2 Item

ITEM is the selection available within one GROUP. For example in the GROUP; PAGE LAYOUT you can select between the following ITEM: Characters per line, left margin, Binding-margin, top margin, bottom margin, line spacing, page mode, print mode, page number and lines per page.

4.2.2.3 Value

VALUE is the actual value that you can select in any item. For example left margin 0,1,2 or 3 characters.

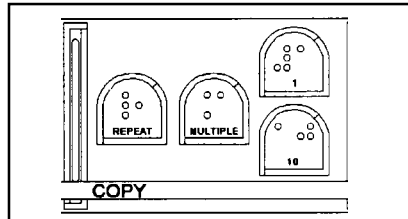
4.2.2.3.1 Page layout information

Pressing VALUE with the printer in stand-by mode, echoes the active number of “lines per page” and “characters per line”.

4.3. Change Setup

This is a command sequence that changes the item VOLUME in group OPTION to highest level.

1. Press SETUP.
2. Press GROUP until the printer echoes "Option".
3. Press ITEM until the printer echoes "Volume".
4. Press VALUE until the printer echoes "Five".
5. Press SETUP to save.



4.3.1 Braille code

In this group the following items can be changed; Language, Computer or Literary (Grade 1) Braille, 6 or 8 dot Braille in computer Braille, and with or without capital prefix in Literary (Grade 1) Braille. When a user defined Braille table is used, it can be changed to all combinations between literary and computer Braille with no system limitations.

4.3.2 Serial communication

In this group all serial communication parameters can be changed.

Baud rate	300/600/1200/2400/4800/9600.
Serial data	7/8.
Parity	Odd/Even/None.
Stop Bit	1/2.
Handshake	Hardware/Software.

4.3.3 Page layout

Page layout contains the following options:

Characters per line	23-48
Left margin	0/1/2/3.
Binding margin	0/1/2/3.
Top margin	0/1/2/3.
Bottom margin	0/1/2/3.
Line spacing	2.5, 3.8, 4.4, 4.7, 5.0, 5.2, 5.5, 7.5, 10 mm.
Page mode	Single/Double.
Print mode	Normal/Reformatted.
Page number	On/Off.
Paper length 1	1-20 " (Full inch)
Paper length 2	1/4", 1/3", 1/2", 2/3" and 3/4" (Parts of inch)
Z-folding	On/Off

4.3.3.1 Characters per line

With item *characters per line* you select the value for number of characters per line.

Max.. Char/line: Interpoint is 42
 Interline is 48
 Jumbo Braille 30

4.3.3.2 Left margin

The option *left margin* gives the width of your margin. Select number of characters.

4.3.3.3 Binding margin

Binding-margin is used to provide an extra width to the margin if you wish to bind it into a file binder or as a book.

4.3.3.4 Top margin

Top margin gives blank lines at the top of each page. Select number of lines.

4.3.3.5 Bottom margin

Bottom margin gives blank lines at the bottom of each page. Select number of lines.

4.3.3.6 Line distance

Line distance sets the distances between the lines.

4.3.3.7 Page mode

With *page mode*, you can select between single- or doublesided. Default is doublesided.

On the *Single sided* Basic this feature is not accessible.

4.3.3.8 Print mode

With the option *print mode*, select between normal and reformatted printout.

4.3.3.9 Page number

With the option *page number*, select page numbering - On/Off.

NOTE! Minimum bottom margin value 1 to choose *page number on*.

4.3.3.10 Paper length

Set the page length according to the installed paper form length. Paper sizes from 1" to 20 2/3" within 1/2", 1/3" and 2/3" can be used.

4.3.3.11 Z-Folding

Select Z-folding On/Off.

ON gives a printout where every second sheet is printed reversed in order to use a cutting unit. Off gives a normal printout with odd pages at the upper side and even pages at under side.

Z-folding requires doublesided printout.

4.3.3.12 Page layout guideline

In determining the layout of an interpoint printout, there is a few things to be aware of.

Line length

Maximum number of characters should never exceed the paper size, even if the file is correctly formatted, otherwise parts of the text on the even pages will start to be printed outside the paper and therefore be lost.

Use the following setting of the characters per line in *interpoint/interline 2,5 mm* mode.

8.5" / 215 mm width = max 32 char/line
 12" / 297 mm width = max 42 char/line

In Japanese standard *interline, 2,2 mm dot distance*, use the following setting

8.5" / 215 mm width = max 36 char/line
 12" / 297 mm width = max 48 char/line

Margins

See the description on the picture beside.

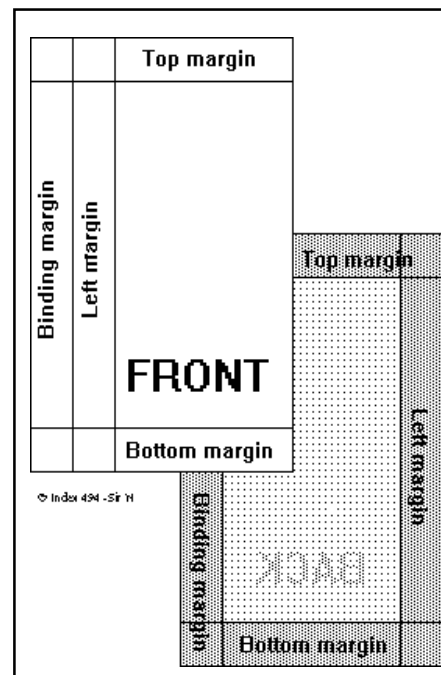
On the front-page all margins are at the given position. The left margin and the binding margin are both to the left of the page. On the back-page the left margin has "moved" to the opposite side, viewed from the front, and the binding margin remains on the same position.

When changing the size of the binding margin, the text-blocks on both sides move simultaneously in the same direction, but when changing the left margin, the text-block's moves in the opposite directions.

4.3.4 Options

The following options are available:

Word wrap	On/Off.
Auto Linefeed	On/Off.
Form feed	On/Off.
Volume	1/2/3/4/5.
Impact level	1/2/3/4/5.
Delay time	1/2/3/4/5.
Print quality	Normal/High
Graphic dot distance	1.6/2.0/2.5 mm
Text dot distance	2.2/2.5/3.2 mm
Setup	Open/Not open
Paper Jam	On/Off
Distance after file	1/2/None



4.3.4.1 Word wrap

Select between split words or wrap it to the next line.

4.3.4.2 Auto linefeed

Select an automatic linefeed together with a carriage return according to the computer software.

4.3.4.3 Form Feed

Select ON to get an empty page between each Braille copy of a document.

4.3.4.4 Volume

Select the volume of the speech feedback.

4.3.4.5 Impact level

Select the impact level on the hammers for different paper qualities.

4.3.4.6 Delay time

Select the delay time for the printer to wait for more information after a file transfer.

Note! Using a computer with a slow disc-drive requires a longer delay time in the printer.

4.3.4.7 Print quality

Select high or normal print quality. High will give about 50% reduced printing speed.

4.3.4.8 Graphic dot distance

Select resolution in graphic mode. Select between 1.6, 2.0 or 2.5 mm.

4.3.4.9 Text dot distance

Selects resolution in *text mode*. Select between 2.2, 2.5 or 3.2 mm.

4.3.4.10 Set up

Select access to setup. NOT OPEN gives access only by the command "power on + Setup key".

OPEN gives access by pressing the Setup key when printer is on stand by.

Changing of access to Set up (Open/Not open) will effect all three setups, A/B/C.

4.3.4.11 Paper Jam

Select paper jam ON or OFF.

Older units upgraded with a new back plate with the rollers but no sensor must be set OFF.

4.3.4.12 Distance after file

Select the distance the paper will be fed after a file is printed.

1. Short distance. The perforation of the paper is fed

2. Long distance. Used with the Basic acoustic hood. The paper is fed down to the document magazine.

3. None. The paper stops directly after the last page, keeping the last perforation inside the unit.

5 Support CD

5.1 CD contents

With the embosser you have also got a CD with all the required softwares for your embosser. The CD is designed as a web, using your default web browser to explore the CD.

On the CD you can find: Embosser Software's, Manuals in different formats, Product information, Link to Index Web site.

If you do not have a web browser in your computer, you can find the latest english versions of the Microsoft Explorer and Netscape browsers for Windows 95/98/NT.

If your computer can not accept any of these browsers, please refer to the readme.txt file on the CD for further instructions.

5.2 Start the CD

The contents of this CD is designed as a web site, containing html pages and executable programs applicable for use with Index Embossers.

Insert your CD in the CD-rom player. If your computer allows "autorun" the CD will start immediately. Else go to Start/Run and browse to your CD-rom driver, e.g. D:\ START.BAT and click OK. The browser embedded with the CD will start to display the first page of the CD. From here you can find links to the entire contents of the CD.

This browser has a special feature - it can execute commands directly from a html page, why we strongly recommend not to use any other browsers.

5.3 WinBraille system

The CD includes the WinBraille system, compatible to Windows 95/98/NT.

WinBraille will be used as the software platform for Index Embossers. Beside the editing and translation features it also provides functions for upgrading the embosser software's and give access to Index web site. There you can take advantage of our support features as well as download rule files for the WinBraille system.

WinBraille is a Braille editor with a full blown Windows driver. That means that you can install WinBraille with your embosser as default printer and print directly from any Windows application, e.g. your web browser and print any web page from the internet. WinBraille controls the embosser completely. There is no need for any settings in the set up nor the front panel of the embosser.

WinBraille also includes a *Rule file editor* for Braille tables. Use this editor to create or edit your literary Braille tables or Braille contraction tables for grade 2 Braille.

For detailed information about the WinBraille system, please refer to the help file in the WinBraille system.

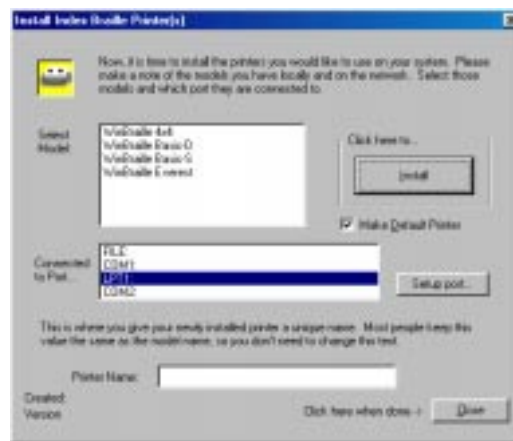
5.3.1 Install WinBraille

From the main page of the CD, browse to the WinBraille page and click on the link to install the WinBraille software and follow the instructions.

5.3.2 Install printer driver for WinBraille

When the installation of WinBraille is ready, the installation Wizard will continue to install the printer driver for the program.

The following dialog box will appear on the screen:



1. Select embosser type
2. Select port
3. Click on the Install button.

When the printer driver installation is ready, click on the Close button.

5.4 Embosser software installation.

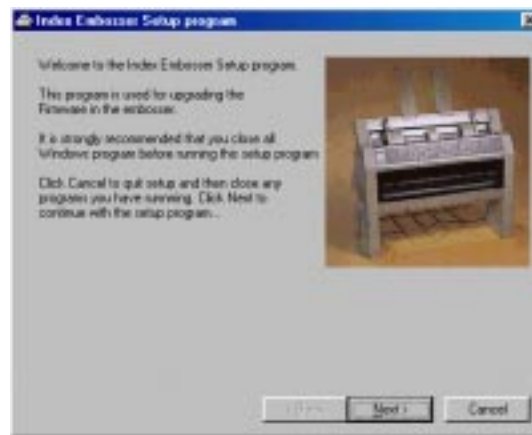


After the installation of the WinBraille software is completed, the installation program will suggest that you also upgrade your embosser to the latest software, provided on this CD. Continue with the installation wizard by following the instructions on the screen.

Note! The Windows compatible version 8.20 is required for the WinBraille.

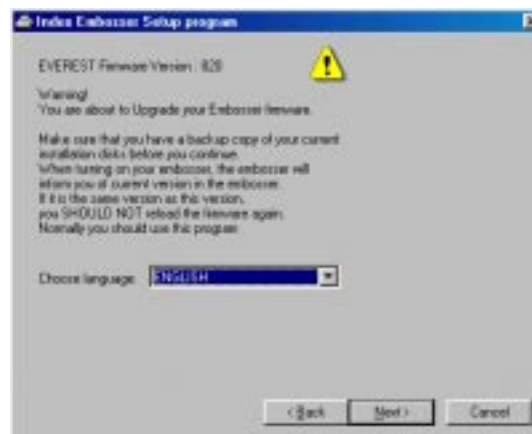
5.4.1 Firmware upgrade

A new dialog box will now appear. Read the instructions and click on NEXT to continue.



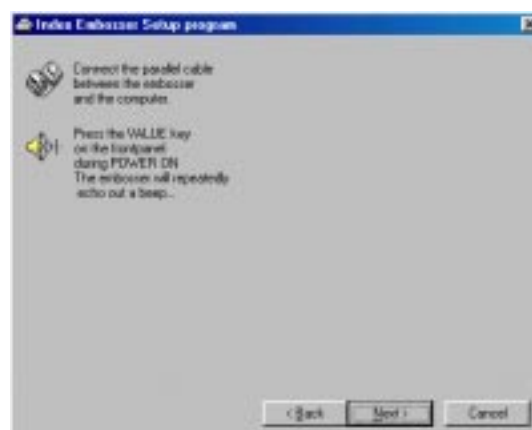
5.4.2 Select language

Select your desired language in the menu and click on NEXT to continue.



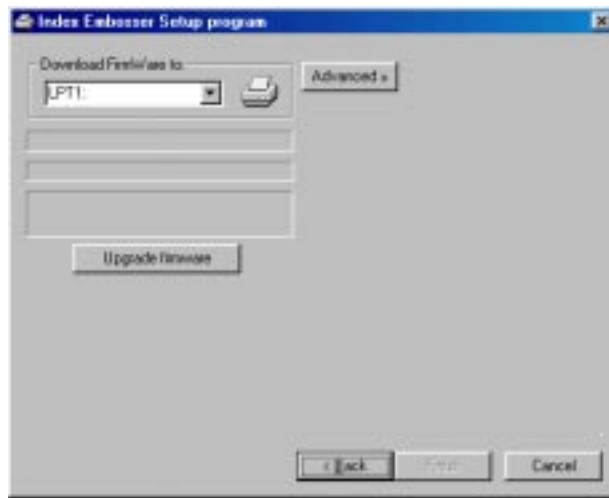
5.4.4 Set embosser in upgrade mode

When the next dialog box appears, power up the embosser whilst pressing the VALUE key. The embosser will now start up and giving a repeated beeping sound. Click next in the dialog box.



5.4.4 Firmware transfer

When the final download dialog box is displayed, make sure that the correct port is selected, then press the UPGRADE FIRMWARE button.



When the installation is ready, the program will shut down and the embosser will echo "Index Basic Ready".

The embosser is now ready for use with the WinBraille system.

5.1.2 Software Installation from CD.

There are several versions of the Basic software available on this CD. The Windows compatible version 8.20 is required to use the WinBraille system.

Compatible support software's are available on the CD in the 8.12 DOS version.

If you like to install a software without installing WinBraille continue from the main page of the CD, browse to the *Embosser software's page* and click on the link for *Index Embosser software's* and select version 8.20 for Windows or version 8.12 DOS. Finally, click on the *installation link* and the process will start immediately.

If you have an older Basic embosser and are using a DOS based system or e.g. an editor like Duxbury or likely, we recommend that you install the DOS based version 8.12.

Note! The DOS version should be **installed** to the computer whilst running in Windows mode but the program must run in pure DOS mode. Shut down the Windows and restart in DOS mode.

5.2 WinBraille

5.2.1 Start WinBraille

Go to the WinBraille folder on the Start menu and click on WinBraille.

The first time the program is started, a *tutorial wizard* will start to guide you through the profiles settings and teach you how to use the software.

The tutorial wizard is also accessible in the help menu.

5.2.1 Register WinBraille

By the end of the tutorial wizard a registration form will be displayed. Make sure that you fill the form and mail it to Index.

By registering as a WinBraille user, you will be notified on future program changes and upgrades.

The registration form is also accessible in the help menu.

5.2.2 Upgrade WinBraille

Upgrades can be automatically upgraded from Index Web site. On the help menu go to *Internet* and click on *get upgrades* and follow the instructions.

You can also visit our web site **www.indexbraille.com** if you like to download a new version.

6. Graphic

6.1 Graphic resolution

Basic has three different graphic resolutions, 1.6, 2.0 and 2.5 mm.

Change the resolution in the SETUP/group OPTION/ item GRAPHIC DOT DIST./ Value 1.6/2.0/ 2.5.

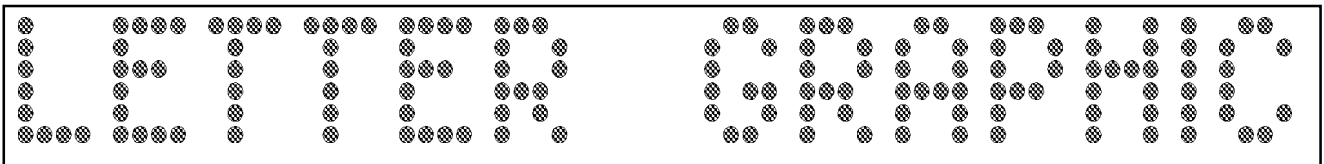
Graphic printout will be printed in single-sided mode, giving an empty back side of the graphic printout. If a text file contents a graphic image, Basic will automatically reform the connecting pages.

6.2 Letter graphic

Index Basic offers an implemented font system for printing raised letter graphic simply by adding a ESC-sequence in the text string.

Use Letter Graphic with the following command: `[ESC][252] TEXT [ESC]`

6.3 Braille graphic software's



There are a few good Braille graphic software's available on the market.

1. **TGD Pro.** This is the best Braille graphics software today, used as a "Braille CAD system". It is a fully Windows compatible software.

For detailed information contact:

Techovision System, 76 Bunting Road Ind. Est., NN2 6EE, Northhampton, England, Ph. +44-1604 792 777, Fax +44-1604 792 726, E- mail info@technovision.co.uk

or

Repro-Tronics, Inc., 75 Carver Avenue, 07675 Westwood, NJ, USA

Ph. +1 201 722 1880 / 1-800 948 8453, Fax +1 201 722 1881

2. **PictureBraille.** This is a very good software running in DOS. It is designed likely to Paint and Paintbrush. It can import PCX pictures and also type in Braille, Text and Moon format.

For detailed information contact:

Optek Systems, 73 Marion Street, N.S.W. Harris Park, 2150, Australia

Ph. +61-2 98916600, Fax +61-2 9891 6875, E-mail terryk@mail.mpx.com.au.

PictureBraille Demo disk can be downloaded at Index home page www.indexbraille.com

3. **DRAW.** This is an old Index software for DOS. It is controlled by the arrow keys, can draw lines in vertical, horizontal and diagonal directions. Text and Braille can be included.

A full version of Draw can be downloaded free of charge at Index home page www.indexbraille.com

7 Control sequences

7.1 Pro-printer emulation

The INDEX utilizes and interprets the control commands in a similar way to the IBM-PROPRINTER X24. The control commands which are only applicable to ink printers will automatically be removed by the printer.

Some of the command strings requires even additional variables. Refer to the IBM Proprinter X24 Mode Commands.

Table of ESC Sequences

* ESC A	65	Text Line Spacing
* ESC B	66	Vertical Tabs.
* ESC C	67	Form Length
* ESC D	68	Horizontal Tabs
* ESC E	69	Emphasized Print
* ESC F	70	Cancel Emphasized Print
* ESC G	71	Near Letter Quality
* ESC H	72	Cancel Near Letter Quality
* ESC I	73	Font Selection
* ESC J	74	Variable Line Space
* ESC K	75	Normal Density Bit Image Graphics
* ESC L	76	Dual Density Bit Image Graphics
* ESC N	78	Automatic perforation Skip
* ESC O	79	Cancel Automatic perforation skip
* ESC P	80	Proportional Space Mode
* ESC Q	81	De-select Proprinter XL
* ESC R	82	Reset Tabs
* ESC S	83	Super/Subscript Print
* ESC T	84	Cancel Sub/Superscript Print
* ESC U	85	Unidirectional Print
* ESC W	87	Double Wide Print
* ESC X	88	Set Horizontal Margins
* ESC Y	89	Dual Density Bit-Image Graphics
* ESC Z	90	High Density Bit-Image Graphics
* ESC 0	48	1/8 Inch Line Spacing
* ESC 1	49	7/72 Inch Line Spacing
* ESC 2	50	Start Text Line Spacing
* ESC 3	51	Graphic Line Spacing
* ESC 4	52	Set Top of Form
# ESC 5	53	Automatic Line feed
ESC 51		Auto Line Feed ON
ESC 51		Auto Line Feed OFF
# ESC 6	54	Select Character set 2
* ESC 7	55	Select Character set 1
* ESC -	95	Continuous Over-score
* ESC -	196	Continuous Underscore
* ESC :	58	12 CPI Print
* ESC ^N	14	Sets single line double width printing
* ESC ^O	15	17 CPI print
* ^R	18	Release compress printing
* ESC =	61	Font Image Download
* ESC [+@	91,64	Double height printing
# ESC \	92	Select all Characters Chart
ESC\n1(n2x256)		Transparent mode where n1 and n2 (Hex) are the number of characters in the transparent string. In the string there is no translation "bit 1" corresponds to "dot", "bit 2" to "dot 2" etc.
* Esc^	94	Prints 1 character from all character chart.
* ESC k	107	Selects print font style
* ESC *	42	Sets bits image mode selection
* ESC [+g	91,103	Sets bits image mode selection
* ESC [+\ * Esc d	91,92	Selects the base line feed unit
* Esc d	100	Sets relative position
* Esc j	106	Sets off line mode

7.2 Defined codes

Decimal	ctrl.char	Function
*8	^H	Backspace
*9	^I	Horizontal Tab. Skip
#10	^J	Linefeed
*11	^K	Vertical Tab-skip
#12	^L	Form Feed
#13	^M	Carriage return
*14	^N	Double with (for 1 line only)
*15	^O	17 CPI (condensed)
*17	^Q	Print suppress OFF
*18	^R	10 CPI (pica)
*20	^T	Double with OFF (Before end of line)
#24	^X	Clear Buffer
#27	ESC	ESC - before codes
#32	Space	Space

* = This ESC sequence is removed from the text file by INDEX

= This ESC sequence controls INDEX in a similar way to the IBM Proprinter

7.3 ESC Sequences - Index commands

ESC ^C	Select 6-dot Braille cell
ESC ^D	Select 8-dot Braille cell
ESC 1	Start 6-dot graphic
ESC]	End 6-dot graphic
ESC ^G	Start 4 dot graphic
ESC ^F	End 4 dot graphic
ESC ^A	Start 6-dot Braille printout for VersaPoint files
ESC ^B	End 6-dot Braille printout for VersaPoint files
ESC ^O	Start/End Setup sequence from computer
[ESC][252]"TEXT"[ESC]	Letter Graphic

7.4 VersaPoint graphic

ESC ^A	Start 6-dot Braille printout for VersaPoint files
ESC ^B	End 6-dot Braille printout for VersaPoint files

7.5 Multiple copies selection by ESC sequences

Choose number of copies by sending the following ESC sequence in the beginning of the file, like a driver:

[ESC][^R], xxx,[ESC][^R]

Note! If the printer is preset in multiple copy mode, that will override the software command!

7.6 Page numbering selection by ESC sequences

While printing several documents, that should be connected to each other as one document, it is possible to select continuous page numbering.

To choose continuing number from the of the previous document, send the following ESC-sequence in the beginning of the file, like a driver: ESC^Q,0,ESC

To choose a certain page number from the first page of the next document, send the following ESC-sequence in the beginning of the file, like a driver: ESC^Q,xxx,ESC

7.7 Remaining copies to print

While printing multiple copies of a document, it is possible to get a message of the number of copies left to be printed by the following command:

1. Press Off line.
2. Press Help. The printer will echo the remaining number of copies to print, and at what page the printout was interrupted: Number of copies #, page #.

Example: Print a document of 10 pages, interrupt in copy no. 3 at page no. 6:
ECHO: "Number of copies 7, page 6."

7.8 Transparent mode

Command = ESC\n1n2 "text"

n1 and n2 (hex) gives together the total number of characters printed in transparent mode and is given in the base of 256.

n1 is the number of singular and n2 the multiple number of 256.

When printing *transparent mode*, first set the printer for 8 dot computer Braille.

Example

Print 1 character; text "A". Command ESC\10A
[ESC][\][SOH][NULL]A

Print 257 characters; text "A". ESC\11AAAAA....(257xA)
[ESC][\][SOH][SOH]A....(text string)

Print 260 characters; text "A". ESC\41AAAAA....(260xA)
[ESC][\][EOT][SOH]A....(text string)

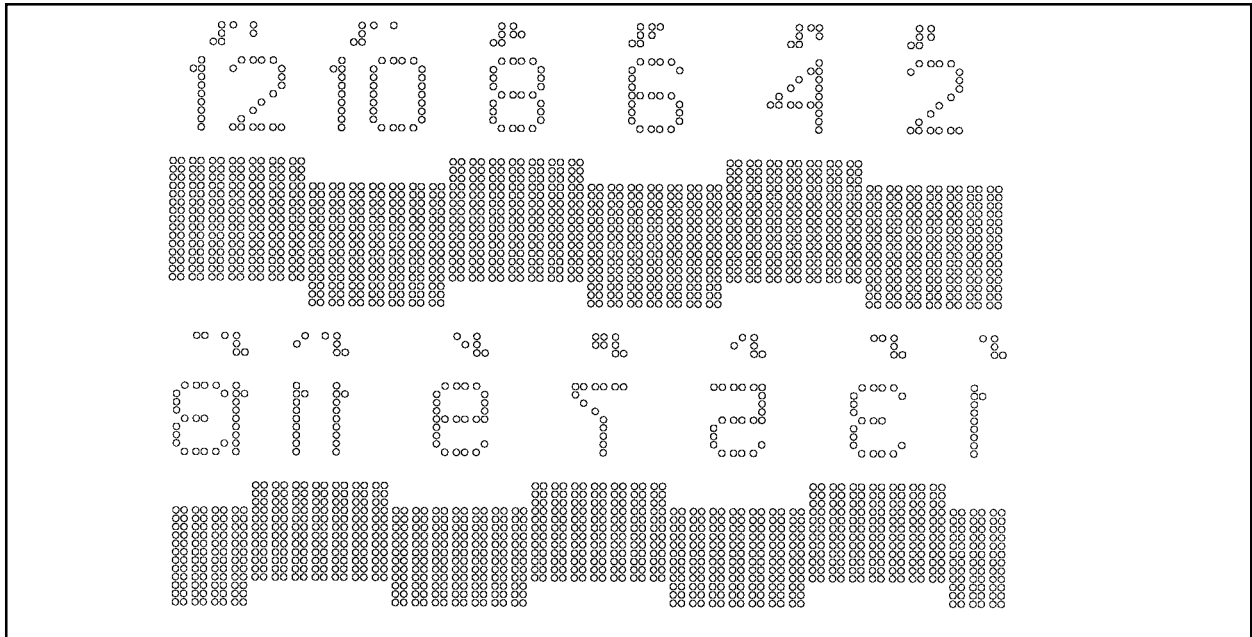
7.9 Power on commands

7.9.1 Self test

Command: on line + power on.

This command will print a pattern of all hammers.

Then choose a printout at *normal impact level* by pressing ON LINE again, or at *low impact level* by pressing OFF LINE to compare the variations between different hammers.



7.9.2 Factory setting

Command: group + power on.

The printer will reload all default parameter settings.

The factory setting will activate setup A.

After the system reset, the printer will echo "SETUP 000, Index Basic ready".

7.9.3 Transport mode

Command: Form Feed + power.

To find the correct position for the printing head in order to get the transport locker in position, press the Form Feed key while you power up the printer. The printing head will find the position, and then echo: "Basic ready". Turn the printer off again and insert the locker into the hole in transportation locking hole accessible from the back of the printer.

Note! It is very important to install the printing head transportation locking before you pack the printer in the original box. Ignoring this may cause major damage to the embosser.

7.10 Fault messages

7.10.1 Failure "Out of paper"

Appears when the printer runs out of paper. Insert new paper and press ON LINE to continue the printing.

7.10.2 Paper Jam

Appears if the paper folds and jams inside the printer unit

7.10.3 Failure invalid setup value

If there is a an invalid numeric value in the setup file, the printer will echo i.e. "Fail item Baudrate, Value10".

7.10.4 Failure "150" - invalid setup value

Appears if there is a non numeric value in the setup file.

7.10.5 Failure "160" - EEPROM failure

Appears if there is a major fault in EEPROM. Contact your distributor!

7.10.6 Failure "170" - Printer buffer exceeded

Appears if a file is larger then the available text buffer. Repeat command is not accessible.

8.0 Serial cable Basic D - IBM

There is a standard cable between the Everest and the PC. On the Everest side a 9 pin male D-sub and on the PC side a 25 or 9 pin female D-sub. Cable with the following wires.

Basic D/S - 25p D-sub.

2-2, 3-3, 4-6, 5-7, 6-20, 7-5, 8-4

Basic D/S - 9p D-sub.

2-3, 3-2, 4-6, 5-5, 6-4, 7-8, 8-7

9 ASCII-table

Dec värde		0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
▼ Hex värde		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	NULL	DLE	SP	0	@	P	`	p	Ç	É	á	█	L	⌌	α	≡
1	1	SOH	DC1	!	1	A	Q	a	q	ü	æ	í	█	⌋	⌌	β	±
2	2	STX	DC2	"	2	B	R	b	r	é	Æ	ó	█	⌋	π	Γ	≥
3	3	ETX	DC3	#	3	C	S	c	s	â	ô	ú	|	⌋	⌌	π	≤
4	4	EOT	DC4	\$	4	D	T	d	t	ä	ö	ñ	⌋	-	⌌	Σ	ƒ
5	5	ENQ	NAK	%	5	E	U	e	u	à	ò	Ñ	⌋	+	F	σ	J
6	6	ACK	SYN	&	6	F	V	f	v	å	û	ª	⌋	⌌	π	μ	÷
7	7	BEL	ETB	'	7	G	W	g	w	ç	ù	º	⌋	⌌	⌌	τ	≈
8	8	BS	CAN	(	8	H	X	h	x	ê	ÿ	¿	⌋	⌌	⌌	Φ	°
9	9	HT	EM	)	9	I	Y	i	y	ë	Ö	⌋	⌌	⌌	⌋	θ	•
10	A	LF	SUB	*	:	J	Z	j	z	è	Ü	⌋	⌌	⌌	⌋	Ω	.
11	B	VT	ESC	+	;	K	[	k	{	ï	¢	½	⌋	⌌	█	δ	√
12	C	FF	FS	,	<	L	\	l	|	î	£	¼	⌋	⌌	█	∞	η
13	D	CR	GS	-	=	M	]	m	}	ì	¥	ı	⌋	=	█	φ	²
14	E	SO	RS	.	>	N	^	n	~	Ä	Pt	«	⌋	⌌	█	ε	█
15	F	SI	US	/	?	O	_	o	Δ	Å	Œ	»	⌋	⌌	█	∩	

Control-codes

- | | | |
|----------------------------|--------------------------------|---|
| NUL = Null | VT = Vertical Tabulation | ETB = End Of Transmission Block |
| SOH = Start Of Heading | FF = Form Feed | |
| STX = Start Of Text | CR = Carriage Return | CAN = Cancel Line |
| ETX = End Of Text | SO = Shift Out | EM = End Of Medium |
| EOT = End Of Transmission | SI = Shift In | SUB = Substitute (even used as EOF= End Of File) |
| ENQ = Enquiry | DLE = Data Link Escape | ESC = Escape |
| ACK = Acknowledge | DC1 = Device Control 1 (XON) | FS = File Separator |
| BEL = Bell | DC2 = Device Control 2 | GS = Group Separator |
| BS = Backspace | DC3 = Device control 3 (XOFF) | RS = Record Separator |
| HT = Horizontal Tabulation | DC4 = Device control 4 | US = Unit Separator |
| LF = Line Feed | NAK = Negative Acknowledgement | SP = Space |
| | SYN = Synchronous Idle | |

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Use this pages to note your own Setup settings

Own settings setup A

Group	<u>Item</u>	<u>Value</u>
Language	Language	.....
	...Computer	.....
	...Litterary	.....
Serial comm.	Baudrate	.....
	Data bits	.....
	Parity	.....
	Stop bits	.....
	Handshake	.....
Page layout	Characters per line	.....
	Left margin	.....
	Binding margin	.....
	Top margin	.....
	Bottom margin	.....
	Line spacing	.....
	Page mode	.....
	Print mode	.....
	Page Number	.....
Option	Word wrap	.....
	Auto linefeed	.....
	Form feed	.....
	Volume	.....
	Impact level	.....
	Delay time	.....
	Print Quality	.....
	Graphic dot dist.	.....
	Text dot distance	.....
	Setup	.....

Use this pages to note your own Setup settings

Own settings setup B

Group	<u>Item</u>	<u>Value</u>
Language	Language	.....
	...Computer	.....
	...Litterary	.....
Serial comm.	Baudrate	.....
	Data bits	.....
	Parity	.....
	Stop bits	.....
	Handshake	.....
Page layout	Characters per line	.....
	Left margin	.....
	Binding margin	.....
	Top margin	.....
	Bottom margin	.....
	Line spacing	.....
	Page mode	.....
	Print mode	.....
Page Number	.....
Option	Word wrap	.....
	Auto linefeed	.....
	Form feed	.....
	Volume	.....
	Impact level	.....
	Delay time	.....
	Print Quality	.....
	Graphic dot dist.	.....
	Text dot distance	.....
	Setup	.....

Use this pages to note your own Setup settings

Own settings setup A

Group	<u>Item</u>	<u>Value</u>
Language	Language	.....
	...Computer	.....
	...Litterary	.....
Serial comm.	Baudrate	.....
	Data bits	.....
	Parity	.....
	Stop bits	.....
	Handshake	.....
Page layout	Characters per line	.....
	Left margin	.....
	Binding margin	.....
	Top margin	.....
	Bottom margin	.....
	Line spacing	.....
	Page mode	.....
	Print mode	.....
	Page Number	.....
Option	Word wrap	.....
	Auto linefeed	.....
	Form feed	.....
	Volume	.....
	Impact level	.....
	Delay time	.....
	Print Quality	.....
	Graphic dot dist.	.....
	Text dot distance	.....
	Setup	.....