

PORTA-THIEL

OPERATION MANUAL

BRAILLE - PRINTER

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1.- INTRODUCTION.

The PORTA-THIEL is a small, lightweight Portable Braille embosser. The Braille quality is equal to that of all THIEL embossers.

The PORTA-THIEL prints on all types of paper from 80 to 180 grams, and on a range of paper sizes starting with A4.

It prints on single sheets, continuous forms and plastic. The Braille quality is excellent on whatever paper you use. The dots can be adjusted according to any paper thickness.

The PORTA-THIEL front loaded paper feed loads the paper by pressing a button, which automatically positions the paper to the top of form.

The PORTA-THIEL uses a built-in speech synthesiser to inform the user when it is out of paper and will wait for the user to insert more paper. Data will not be lost from the computer during this operation.

The parameters of the printer can be changed according to the user's own needs through a configuration dialogue.

NOTE: Whilst every care has been taken to ensure this manual is as accurate as possible, mistakes can, and do, occur. If you should find any errors, or aspects which are unclear, the manufacturers (Unidad Tiflotécnica, ONCE) would be most grateful if they could be advised via your local distributor.

2.- PRINTER INSTALLATION AND STARTING UP.

2.1.- INSTALLATION SITE.

The installation site for the printer should be easily accessible. The printer should be placed on a table near the computer equipment. An AC outlet should be in the vicinity.

2.2.- UNPACKING.

The PORTA-THIEL is shipped in a cardboard box. The printer is wrapped in a plastic bag and is buffered on each side by foam buffers. The following procedures must be carefully read and closely followed:

- 1.- Take the manual, reading table and cables out of the box.
- 2.- Grip the foam buffers and lift the printer out of the box.
- 3.- Remove the foam buffers and the plastic bag.
- 4.- Place the buffers, etc. in the box. Do not destroy any packaging. It may be needed, if the printer has to be returned.
- 5.- Mount the transparent reading table to the rear side of the printer with the two knurled screws.

2.3.- STARTING UP.

Once the PORTA-THIEL has been unpacked, inspected and set up, the printer must be properly connected when the power is applied. Proceed as follows:

- 1.- Connect the AC power cord between the power inlet of the printer (rear of the right hand side) and the AC outlet.
- 2.- Switch the printer on with the ON/OFF switch situated at the right-hand side of the PORTA-THIEL.
- 3.- The printer starts and will say "**PAPER OUT**".

3.- OPERATION.

3.1.- INSERTING THE PAPER.

To insert the paper into the PORTA-THIEL proceed as follows:

- 1.- Adjust the right-hand paper guide in front of the printer according to the width of paper used.
- 2.- Insert two sheets or more of continuous forms (12") by loading it in front of the PORTA-THIEL.
- 3.- Push the paper as far as possible in the printer until it stops.
- 4.- Depress any button of the PORTA-THIEL, the paper will move and stops on "TOP OF FORM POSITION".
- 5.- The PORTA-THIEL now says "**PRINTER READY**".

3.2.- OPERATOR CONTROLS, SOUND AND BUZZING SIGNALS.

The PORTA-THIEL has one on/off switch and three operation buttons. The on/off switch is situated to the front right-hand side of the PORTA-THIEL. It turns the printer on and off. If you turn it on, the printer will say "**PAPER-OUT**", if you have no paper loaded or "**PRINTER READY**", if the paper feeder is full.

At the rear of the right hand side of the PORTA-THIEL is located a rotary switch with several positions to adjust the print quality according to the thickness of paper being used.

Interpoint printers are equipped with a second rotary switch placed on the left hand side of the machine to adjust the printer pressure of back side print outs.

3.3.- OPERATION BUTTONS.

A.- NORMAL MODE.

PAPER INSERT:	BUTTON 1 (left-hand side).
PAPER INSERT:	BUTTON 2 (front right-hand side).
PAPER INSERT:	BUTTON 3 (rear right-hand side).

B.- AFTER PAPER IS LOADED.

READ TEXT:	BUTTON 1 (left-hand side).
PARK PAPER:	BUTTON 3 (rear right-hand side).
FORM FEED:	BUTTON 2 (front right-hand side).
PRINT ACTIVE PARAMETERS:	
	BUTTON 2 and 3 ON/OFF.
PRINT STANDARD PARAMETERS:	
	BUTTON 1, 2 and 3 ON/OFF.
SET-UP MODE BUTTON:	BUTTONS 2 and 3.

C.- SET-UP MODE.

YES:	BUTTON 2.
NO:	BUTTON 3.
STOP/SAVE:	BUTTON 2 and 3.
STOP/NOT SAVE:	BUTTON 1 and 2.

D.- PRINT STATUS.

PAUSE:	BUTTON 1, 2 and 3.
STOP PRINT:	BUTTON 2 and 3.

E.- PRINTER MODE.

ONE-SIDE/TWO-SIDES:	BUTTON 3.
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NOTE .- Mode E is only available in interpoint printers. See chapter 3.4.4.

The PORTA-THIEL is also provided with a speech synthesiser and a buzzer.

3.4.- FUNCTION OF THE OPERATION BUTTONS IN THE NORMAL MODE.

3.4.1.- PAPER INSERT.

Button 1, 2, and 3 (READ, FORM and PARK BUTTON).

If there is no paper in the printer, depress any one of these buttons to insert paper. After paper is loaded the PORTA-THIEL will say "**PRINTER READY**".

3.4.2.- READ TEXT POSITION AND/OR JUMBO BRAILLE.

Button 1 (READ BUTTON/JUMBO BRAILLE), situated in the front of the left-hand side of the printer. After paper is loaded use this button as follows:

- 1.- Press this button until the buzzer sounds once. Release the button and the paper will go to the read-position.
- 2.- If you depress the button again the paper moves back to the print position.
- 3.- Depress the button till the buzzer sounds twice. Release the button and the printer will switch to **JUMBO MODE**.
- 4.- Depress the button again till it sounds twice release the button and the printer will switch back to **NORMAL MODE**.

3.4.3.- FORM FEED.

Button 2 (FORM FEED BUTTON), situated at the front right-hand side of the printer. After paper is loaded use this button as follows:

Press this button and the paper will move to the tear off position and say "**CUT PAPER**". You can now tear off the paper. After this

is done, and more data is sent from the computer, the paper will now return to TOP OF FORM and start printing automatically.

NOTE.- If a printed text from the computer is ready, and a form feed is sent, the paper will move automatically to the tear off position and say "**CUT PAPER**".

3.4.4.- PARK PAPER AND PRINTER MODE.

Button 3: PARK BUTTON.

Situated behind the first button of the right-hand side of the printer. After paper is loaded use the button as follows:

To change or take out the paper from the printer press this button.

The paper will move to the park position and make it possible to take the paper out of the PORTA-THIEL.

The following is the description of the steps necessary to toggle between double and single sided printing on a Interpoint PORTA-THIEL printer:

- 1.- Insert paper.
- 2.- Switch on the printer.
- 3.- Wait till the printing head reach the left hand side of the printer.
- 4.- Depress button 3 till:
 - a.- the buzzer sounds once: single-sided mode,
 - b.- the buzzer sounds twice: double-sided mode (interpoint).

3.4.5.- PRINT ACTUAL PARAMETERS.

Button 2 and 3 (FORM FEED and PARK BUTTON).

- 1.- Depress both buttons at the same time.
- 2.- Switch on the printer.
- 3.- Hold the buttons till the buzzer sounds.
- 4.- Release button 3 (PARK BUTTON).

5.- Release button 2 when the buzzer sounds again.

3.4.6.- SET STANDARD PARAMETERS.

Button 1 and 2 (READ and FORM FEED BUTTON).

Depress both buttons at the same time while you switch on the printer the PORTA-THIEL returns to the standard SET-UP program.

3.4.7.- PRINT QUICK REFERENCE MANUAL.

Button 1,2 and 3 (READ, FORM FEED and PARK-BUTTON).

Depress all three buttons at the same time until the buzzer sounds. Continue to hold button 3 but release button 1 and 3 until the buzzer sounds again. The manual will be printed.

3.4.8.- SET-UP DIALOGUE .

Button 2 and 3 (FORM FEED and PARK BUTTON).

Depress the Form feed and the park Button (situated on the right-hand side of the printer) until the buzzer sounds once. Release the PARK BUTTON (button 3) until the buzzer sounds again and the SET-UP will be activated.

3.5.- FUNCTION OF THE OPERATION BUTTONS IN THE "SET UP MODE".

3.5.1.- BUTTON 2 (FORM FEED/YES BUTTON).

Depressing this button means "YES" in the SET-UP MODE.

3.5.2.- BUTTON 3 (PARK/NO BUTTON).

Depressing this button means "NO" in the SET-UP MODE.

NOTE.- The pointer located above the last line printed will normally be located above the option currently being used.

3.5.3.- STOP SET-UP DIALOGUE (WITHOUT SAVING).

Button 1 and 2 (READ and FORM FEED BUTTON).

Depressing the Form feed and the read Button at the same time in the SET-UP MODE stops the SET-UP dialogue without SAVING.

3.5.4.- STOP SET-UP DIALOGUE (SAVING SET-UP).

Button 2 and 3 (FORM FEED and PARK BUTTON).

Depressing the Form feed and the Park Button at the same time in the SET-UP MODE stops the SET-UP dialogue and saves the parameters.

3.5.5.- SET UP DIALOGUE (SEE ALSO 3.4.8).

With the Set-Up dialogue is it possible to set your parameters according to the text you wish to print. For Example:

- 1.- The printer must know the length of the paper being used to determine how many lines can be printed on this page.
- 2.- The printer must also know the width of the paper being used to determine how many Braille characters can be printed on a line.

After the printer has been Set-Up (See chapter 3.4.8) the printer prints the following text:

ACTUAL PARAMETER SET # NEW PARAMETER SET?

If you answer "NO", then the existing parameter set is used. No further questions are asked and you will be taken to the next section Text Layout.

If you have answered "YES", the next question is:

PARAMETER SET 1 2 3 4 5 6 7 8

(Note that the pointer will be above the current selection).

Your printer has 8 built in parameters sets. You have the facility to create your own parameter set. Which can then be stored in the memory. Later you can change from one parameter set to another.

NOTE.- All 8 sets are Standard Sets. The actual "PAR-SET" is 1 (Standard Set).

If you wish to create a new set or switch from one set to another set, then push the "NO" Button (button 3). Any time you push the "NO" button the pointer (underneath the 1) will moves to the next position. Push the "YES" Button (button 2) when the pointer indicates the set you wish to change.

The printer prints the following text:

CHANGE PARAMETER

You have the option of changing this par-set. If your choice is "NO" then you are switched into that set and the dialogue is finished if your choice is "YES" then following text will be:

TEXT LAYOUT

The dialogue contains four sections:

Section 1: TEXT LAYOUT.

Section 2: PAGE LAYOUT.

Section 3: ESC SEQUENCES.

Section 4: FORM FEED.

(1) TEXT LAYOUT.

If you do not wish to change the section 1: **TEXT LAYOUT** then answer the question with "NO" (You will switch to the next section; **PAGE LAYOUT**).

However, if you do wish to change the **TEXT LAYOUT**, then answer "YES" and the next question is:

CODE: GR US SP FR UK EU 7 8 U

WHICH LANGUAGE WOULD YOU LIKE USE?

GR = German.

US = U.S.A.

SP = Spanish.

FR = French.

UK = English.

EU = EURO.

7 = Free.

8 = Free.

U = user.

Make your choice with the "YES" or "NO" Button.

The next question is:

CODE: ORIGINAL MODIFY

The PORTA-THIEL is provided with 8 variable and 8 fixed character code sets.

Changing the variable sets can be only done by ESC sequences.

If your choice is "ORIGINAL" then you move in section 2.

(2) PAGE LAYOUT.

The printer responds:

PAGE LAYOUT

If you do not wish to change section 2: **PAGE LAYOUT** then answer the question with "NO" (You will switch to the next section **ESC SEQUENCES**).

If the answer is "YES" then the next question is:

TEXT WRAP CUT

"WRAP" means that if it is not possible to print the last word complete on a line, the word will be printed at the next line.

"**CUT**" means that if it is not possible to print the last word complete on a line, the word will be cut, and the rest of the word will be printed on the next line.

After your choice, the next question is:

TEXT INDENT NO INDENT

"**INDENT**" means: If a text is longer than the maximum number of characters you can print on a line, than the rest of the text will be on the next line, starting 2 positions to the right. (It reminds the reader that the text belongs to the first line).

"**NO INDENT**" means: If a text is longer than the maximum number of characters you can print on a line, then the rest of the text will be printed on the next line.

After you choose, the next question:

DOTS 6 8

Your PORTA-THIEL can print 6 or 8 dot Braille.

After your choice, the next question is:

PAGE LENGTH

After you change the paper size, then the page length must be adjusted. Answer this question with "**YES**".

PAGE-LENGTH 8 9 10 11 12

It is possible to use the following paper sizes: 8, 9, 10, 11 & 12 inches long.

After your choice with the "**YES**" or "**NO**" buttons the next question is:

LINES PER PAGE

If you wish to change the number of lines per page, answer this question with "**YES**"

LINES 10 20 30

The number of lines you can print are from 10 to 29. If you want to print 24 lines then choose 20.

The next question is:

AD 0 1 2 3 4 5 6 7 8

Now your choice is 4 (plus 4).

The next question is:

CHARACTERS PER LINE

The maximum number of characters per line you can print is 32. If you want to print 28 characters per line then choose 20.

The next question is:

AD 0 1 2 3 4 5 6 7 8 9

Now your choice is 8 (plus 8)

The next Question is:

LINE DISTANCE

It is possible to change the distance between the printed lines (more or less space). If you want to change the distance your answer is "YES".

The next question is:

LINE-DISTANCE 0 1 2 3

The distance between Braille lines can be changed from 1 to 3 dots.

After your choice, the next question is:

LEFT MARGIN

You can change the left margin from 1 up to 8 characters.

After your choice you move to section 3.

(3) ESCAPE SEQUENCES.

The next question is:

ESC-SEQUENCES?

If you wish to allow your computer's ESC sequences to be obeyed by the PORTA-THIEL then answer this question with "**YES**". Otherwise by answering. "**NO**", escape sequences will be ignored. The next question is:

ESC-SEQUENCES ACTIVE PASSIVE

"**ACTIVE**" means: ESC sequences activated.

"**PASSIVE**" means: ESC sequences not activated.

After your choice you move to section 4.

(4) FORM FEED.

The printer responds:

FORM FEED?

If you answer "**YES**", then form feeds sent by your software will be obeyed by the PORTA-THIEL. However, if you are printing direct from a word processor, you may wish to suppress form feeds that could appear in the middle of pages. Form feed active passive active means: Form feed activated passive means: Form feed not activated. After your choice is the next question is:

PARAMETER SAVE?

If you wish to save the parameters you have just changed then push the "**YES**" button If you answer this question with "**NO**" then the Set-Up dialogue will start from the beginning. If you wish to stop in the middle of the Set-Up Dialogue with or without saving the parameters than see chapter 3.5.3.

3.6.- FUNCTION OF THE OPERATION BUTTONS IN THE PRINT MODE.

3.6.1.- PAUSE.

Buttons 1,2 and 3 (READ, FORM and PARK BUTTON).

Depressing one of these buttons and the printer will stop after the line has been completed. Depress it again and the printer resume printing.

3.6.2.- STOP PRINT.

Button 2 and 3 (FORM and PARK BUTTON).

Depress both buttons at the same time will stop printing. The paper will then move to the tear off position.

4.- SET-UP DIALOGUE USING A PC.

A 3.5" disk is supplied with a SETUP program on it. This can be used to alter the PORTA-THIEL's parameters via an MS-DOS PC.

It is also possible to change the parameters in the SET-UP program via a Multi-Function KEY BOARD, RS 232 or PARALLEL INTERFACE. The characters "J", "Y", and "S" are acceptable as "YES". The character "N" is used for "NO".

To stop SET-UP MODE and SAVE the parameters you must use the character "E".

To stop the SET-UP MODE without saving the parameters use the character "A".

It is not necessary to have paper in the printer if you are setting up your parameters via the RS 232 or *Parallel Interface*.

Users of devices such as the *Eureka A4*, *Jotta*, *Braille'n Speak*, etc., can set their parameters using their host equipment. The PORTA-THIEL will not then print, but be spoken via the host, and appropriate responses made via the host's keyboard.

For a detailed PORTA-THIEL Dialog Set-Up description using a personal computer, see appendix A.

5.- PRINTER CONFIGURATION.

5.1.- SERIAL INTERFACE.

To make the PORTA-THIEL work with the computer the user needs to know the specifications of both the equipment and the printer. The pin numbering of the serial RS 232 Interface connector is: Interface Parameter.

The communication data parameters employed by the printer are:

- **Data transmission speed:** 9600 baud's
- **Parity:** none (n),
- **Data Length:** 8.
- The **pin-out** of the connector is as follows:

Pin Number	Signal/Name
1	+5V.
2	TxD (Output).
3	RxD (Input).
4	CTS (Input).
5	GND.
6	DTR (Output). (connected to Pin 8)
7	---
8	DTR.
9	---

- **Connector type:** 9 Pin SUB-D.

5.2.-KEYBOARD CONNECTION.

The Keyboard connector is located on the left side of the PORTA-THIEL. By connecting the Multi-Function Keyboard from the Computer the PORTA-THIEL may be used as a typewriter.

Note that most PC keyboards will operate with the PORTA-THIEL, but you may require to consult your dealer for technical advice if you are having difficulties.

6.- TECHNICAL SPECIFICATIONS.

- **Dimensions:**

Width: 39 cm (15 inches).

Depth: 25 cm (10 inches).

Height: 11 cm (4 inches).

- **Weight:** 4.5 kg (9.9 pounds).

- **Printing Method:**

Single-sided printers: serially Braille formed characters by means of a single embossing hammer.

Double-sided (interpoint) printers: serially Braille formed characters by means of two embossing hammers.

- **Printing Rate:**

Single-sided printers: bi-directional printing at 10 char./sec. for average English text.

Double-sided (interpoint) printers: bi-directional printing at 15 char./sec. for average English text.

- **Formats:**

Horizontal: max. 42 columns.

Vertical: 29 Lines 6 dot Braille.

23 Lines 8 dot Braille.

- **Paper Forms:**

Single sheets or continuous forms.

Width: 210-240-270 mm.

Length: 8 to 12 inches.

- **Electronic Connections:**

Data format: 8 bits, parity check on request.

Data rate: 110 to 9600 Baud.

Character Sets:

8 available, 6 installed and 8 user definable parameter tables can be entered by means of a set up program or ESC-sequences.

- **Power requirements:**

110 Volts ($\pm 10\%$) 60 Hz-160 VA.

220 Volts ($\pm 10\%$) 50 Hz-160 VA.

- **External Connections:**

Serial port (standard).

Parallel port (standard).

- **Controls:**

Switch On/Off.

Button 1: Top of form.

Button 2: Paper to read position.

Button 3: Paper feeds one sheet backwards.

SET UP MODE: Buttons 2 and 3 pressed at the same time.

NOTE.- The PORTA-THIEL has a built in "IBM-PRO" emulation. It is possible to work with word processor programs directly (*WORD*, *WORDSTAR*, etc.).

7.- ESC SEQUENCES FOR SINGLE PRINTER.

NOTE:

- 1.- No "BLANKS" are allowed when programming ESC sequences.
- 2.- Paper must be always in the printer.

FORMAT.

ESC ! D T '6' '8' <CR>	Dots 6 points 8 points.
ESC ! L M '0' '8' <CR>	Left Margin 0-8 Spaces.
ESC ! S L '0' '3' <CR>	Interline space 0-3 Lines.
ESC ! P L '08' '13' <CR>	Page Length 8-13 inches.
ESC ! L P '10' '31' <CR>	Line per Page 10-31 lines.
ESC ! C L '10' '42' <CR>	Characters per Line: 10-42 Characters.
ESC ! C T '0' or '1' <CR>	Cut=1, Wrap=0.
ESC ! N I '0' or '1' <CR>	Not indent=1, Indent=0.

CHARACTER SETS.

ESC ! C S '1' '8' <CR>	1 = German,	5 = UK,
	2 = MIT,	6 = EURO,
	3 = Spain,	7 = ---,
	4 = French,	8 = ---.
ESC ! C C <ASCII> '1' '8' '0' <CR>	Change Character.	
	<ASCII>=Char.'1'.'8' Braille dots.	
	'0'=end.	

ESC ! M C '1'.'9' <CR>	Modify Code
	1 = German, 5 = UK,
	2 = MIT, 6 = EURO,
	3 = Spain, 7 = NR 8,
	4 = French, 8 = NR 8,
	9 = NR Fre.
ESC ! M S '1'..'8' <CR>	Modify Code Set.
ESC ! A S <CR>	ASCII.

CONTROLS.

ESC ! T P <CR>	Transparent Mode.
	199 = FF Form feed
	205 = CR Carriage Return
	218 = LF Line Feed
	247 = ESC
ESC ! N P <CR>	New Page.
ESC ! L F <CR>	Line Feed.
ESC ! F F '0' or '1' <CR>	Form Feed =1
	No Form Feed = 0
ESC ! E S '0' or '1' <CR>	ESC Sequence.
	YES = 1.
	NO = 0.
ESC ! X0 '0' OR '1' <CR>	0 = DTR ON
	1 = DTR OFF
	(X ON / X OFF)
ESC ! P B <CR>	Print Buffer.

ESC ! P P '1' to '8' <CR> Print Parameters 1-8.

ESC ! P S '1' to '8' <CR> Active Param. Set 1-8.

ESC ! J B '0' or '1' <CR> Jumbo Mode.

 Jumbo = 1.

 Normal = 0.

8.- MAINTENANCE.

8.1.- FUSE REPLACEMENT.

The fuse of the PORTA-THIEL is situated above the power cord entry at the back of the right hand side of the printer:

- a.- Turn the On/Off switch into the OFF position.
- b.- Disconnect the AC power cord from the printer.
- c.- Use a screwdriver to remove the fuse holder.
- d.- Remove the fuse from the holder and check it.
- e.- For continued protection against the risk of fire replace only with the same type and ratings of fuse.
- f.- Replace the holder by pushing it back.
- g.- Replace the AC power chord.

APPENDIX A: PORTA-THIEL SET-UP.

A disk is provided which contains the software required for the set-up of any printer parameter such as lines per page, characters per line, etc. This software will let the User to perform these modifications in a friendly and fast way.

The User will not need to go through the whole Set-Up dialogue (see section 3.5.5.). As a matter of fact, the lines per page can be configured straightforwardly.

In addition, the software supplied will help the User to define each single Braille character.

A.1.- BRAILLE CHARACTER SET DEFINITION BY MEANS OF A PERSONAL COMPUTER.

Braille Character set definition and ESC Sequences.

PORTA-THIEL printer has got a predefined set of character tables already installed and another set that can be defined and modified by the user. The following is a description of the procedure for the definition of any Braille character related to a certain ASCII code. The method described below is based on ESCAPE SEQUENCES. The definition of the ESCAPE SEQUENCE would be:

```
ESC! CC <character> 1-8 0 <RETURN>
```

ESC!	Start of the ESC sequence.
CC	Change Character.
<character>	character to be modified.
1-8	New Braille definition.
0	Digit Zero sets the end of the braille code.
<RETURN>	Input confirmation.

The new Braille character definition is stored in the definable table automatically.

Braille Character set definition and the PORTA . EXE program.

It is possible to send **ESC sequences** to the printer by means of the PORTA . EXE (A : \ENGLISH\) program, which is also supplied with your printer. All **ESC sequences** must start with ESC ! . As a general rule, blanks are not allowed. However, blanks can be filtered by means of the PORTA program.

Example:

If character “A” is to be defined as Braille dots 2, 3, 4, 6, 8, the command to be issued from the A : \ENGLISH > prompt would be:

```
PORTA CC A 23468 0 <CR>
```

NOTE.- The printer should be switched on, connected to the PC via the serial or parallel port and paper should be fed. The port must be configured previously.

Modifications will be stored in the current (activated) definable table. In case you wish to define several characters, it is wiser to store the **ESC sequences** or the commands in a separate file.

Note that all modifications will be lost as soon as the standard parameters are set again (see section **3.4.6**). After setting the standard parameters, the redefinition of the former characters will be required.

The laborious task of character definition will be done just once if you use a separate file. For an example have a look at the STARTUP . BAT file (A : \ENGLISH \).

The User should take into account that after setting standard parameters the activation of the User’s definable table is required.

In order to activate the User definable table, issue the following command from the DOS (A : \ENGLISH \) prompt.

```
PORTA MC 5
```

For further information about the ESC sequences, see section **7**.

A.2.- PC PRINTER CONFIGURATION.

The User will find the program `GS-PT.EXE` in the directory `A:\ENGLISH\PORTA` of the supplied configuration disk.

The `GS-PT.EXE` program is a set-up program based on menus. To run the program issue the following command from the DOS (`A:\ENGLISH\PORTA`) prompt:

```
GS-PT port          port = COM1, COM2, LPT1, LPT2.
```

And to display on screen information about the program:

```
GS-PT /?
```

Examples:

```
GS-PT lpt1          specifies that the parallel port has been set,
```

```
GS-PT COM1          specifies that the serial port has been set,
```

The `GS-PT` program will allow the User to have access to all printer parameters. After running the program, a parameter table will be displayed on the screen. The **cursor keys** let the User go from one pre-selected parameter to another one.

Information about any pre-selected option will be shown pressing **F1**. Press **ESC** key to close the help window.

Pre-selected parameters can be activated just by pressing the **RETURN** key. The selection of any parameter makes the printer beeps that means that the parameter change has been accepted.

A.3.- USING THE PC MONITOR AS A PORTA-THIEL TERMINAL.

The `DIALOG.EXE` (`A:\ENGLISH\`) program has been specially written to allow eye-sighted Users to read the Set-Up dialog on the screen of a personal computer and to perform the printer configuration using a standard keyboard.

The information to be printed by the PORTA-THIEL can be displayed on the monitor screen executing the `DIALOG.EXE` program.

The printer must be connected to the PC via the serial port.

To start the program issue the following command from the DOS (`A:\ENGLISH\`) prompt:

```
DIALOG
```

Press both **ALT** and **X** to quit the program.

