

Startup Manual

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Intermec Shell 4.01 Enhanced

**ntermec**

A **UNOVA** Company

Intermec Shell 4.01 Enhanced – Startup Manual

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INTRODUCTION

Startup Files

Intermec Shell is a so called startup program (also called “autoexec-file”), i.e. a program that automatically starts running when the printer is turned on. *Intermec Shell* helps the operator to choose between a number of standard or custom-made application programs and to start certain useful facilities, as listed below.

Application Programs

- *LabelShop* (WYSIWYG label design program)
- *Windows Driver* (for printing from *Windows* programs)
- *Fingerprint* (for writing your own programs)
- *Direct Protocol* (easy-to-use slave protocol)
- *Line Analyzer* (prints all characters received by printer)
- Other application programs in the printer's memory

Other Facilities

- Terminal Setup (remote setup and *Shell* control)
- Setup Mode (manual setup from printer's keyboard)
- Print Setup (printing setup on label)
- Testfeed (formfeed + auto-adjust of the LSS)
- Test Label (printing of test labels)
- *Font Scaling* (if an optional *Scalable Fonts Kit* is fitted)
- Ser-Com Reset (resetting communication to default)
- Clear RAM Memory (erasing the printer's RAM memory)
- Reboot (restarting the printer)

<i>EPROM</i>	= Erasable Programmable Read-Only Memory
<i>OTPROM</i>	= One-Time Programmable Read-Only Memory
<i>RAM</i>	= Random Access Memory
<i>ROM</i>	= Read-Only Memory
<i>SRAM</i>	= Static Random Access Memory

There can be one startup file stored in each of the following parts of the printer's memory: RAM, ROM, and memory cards. If there are startup files stored in more than one place, they will be used with the following priority:

1. Dos-formatted memory cards (SRAM).
2. Printer's RAM memory.
3. Non DOS-formatted memory cards (SRAM or OTPROM).
4. Printer's ROM memory, e.g. the configuration EPROM's.

This implies that if you e.g. have Intermec Shell stored in the printer's configuration EPROM's and insert a memory card with another startup file before you turn on the printer, the startup file of the memory card will be used.

USING INTERMEC SHELL

Starting Up with Intermec Shell

A few seconds after you have turned on the power to the printer, the countdown menu of the *Intermec Shell* program will be displayed:

```
ENTER=SHELL
5 sec.    v.4.01
```

Now you have 5 seconds to enter *Intermec Shell* by pressing the <Enter> key.

Provided you have a working two-way communication with a terminal program in a host computer, you may – as an alternative – enter the *Terminal Setup* by transmitting “TTT” or “ttt” to the printer. The *Terminal Setup* is described in a separate chapter later on.

The lower line keeps you informed on how much time you have left. Should the time run out before you have taken any action to enter *Intermec Shell*, the last selected application in *Intermec Shell* will be opened. This implies that if you use the same application all the time, you will only need to turn on the power, once the application has been selected.

If no other application has been selected yet, the default choice will be displayed when the countdown is completed, e.g.:

```
FINGERPRINT
6.13
```

This message means that you have entered the immediate mode of *Intermec Fingerprint* with "uart1:" selected as std I/O channel (see *Intermec Fingerprint 6.13* manuals).

If you want to enter another application, just turn off and on the power and enter *Intermec Shell* before the countdown is completed.

If you enter *Intermec Shell* from the countdown menus, the *Select Application* menu will be displayed:

```
SHELL
SEL. APPLICATION
```

In this menu, you can choose between three options:

- Go to a stack of menus, where you can select an application program, by pressing <Enter>.
- Go to the *Facilities* part of *Intermec Shell* by pressing <F5>.
- Start the *Terminal Setup* program by transmitting “TTT” or “ttt” from the host.

Continued!

USING INTERMEC SHELL, cont'd.

Options in Intermec Shell

In *Intermec Shell*, the options are presented in stacks of menus, organized as infinite loops, where you can move around and select the desired option, as illustrated by the diagram at the end of this chapter.

Select Application

The *Select application* option allows you to enter a stack of menus showing the different application programs in the printer's memory¹.

Note that after having selected an application, you must wait for the printer to restart and perform the 5 seconds countdown before the selected application is opened.

- **Current appl.** starts the last selected application (by default Intermec Fingerprint with "uart1:" selected as std I/O channel) without restarting the printer.
- **LabelShop** selects the standard serial interface "uart1:" as standard IN/OUT channel and sets up the printer for the various *Intermec LabelShop* label design program, which you can run on a personal computer.

Refer to the manuals for the various versions of *Intermec LabelShop*.

- **Windows Driver** selects the optional parallel interface "centronics:" as standard IN/OUT channel and sets up the printer for the *Intermec Windows Drivers*, which you can use on a personal computer to produce printouts from almost any standard program run under various versions of *Microsoft Windows*, e.g. word processors, spreadsheet programs, drawing programs etc.
- **Fingerprint** is used to create or modify programs written in the *Intermec Fingerprint* programming language. This option requires that you also select a standard IN/OUT channel, i.e. the channel you want to use for communication between the printer and the computer or terminal on which you will write your program. Normally, select "uart1:" (default). For programming, do **not** use the parallel "centronics:" channel (one-way communication only).

Refer to the *Intermec Fingerprint 6.13 Reference Manual* and the *Intermec Fingerprint 6.13 Programmer's Guide*.

- **Direct Protocol** is an easy-to-use printer protocol for downloading label layouts and variable input data to a printer from a host computer. This option requires that you also select a standard IN/OUT channel, i.e. the channel you want to use for communication between the printer and the computer or terminal. Normally, select "uart1:" (default).

Refer to the *Intermec Direct Protocol 6.13 Programmer's Guide*.

¹/ A prerequisite is that the program is provided with the extension ".PRG". However, some original Intermec utility programs are excluded from the list:

ERRHAND.PRG
ERRH910.PRG
FILELIST.PRG
MKAUTO.PRG
TEST910.PRG

Continued!

USING INTERMEC SHELL, cont'd.

Options in Intermec Shell, cont'd.

- **Line Analyzer** is an *Intermec Fingerprint* programs that captures all characters received by the printer on a specified communication channel and prints them on labels.

Refer to the chapter “*Line Analyzer*” later in this manual.

- **Other Application Programs**

If the printer contains any other application programs – standard or custom-made – these will be presented as additional options.

When you have selected an application, the printer beeps and the error lamps come on. Then the display goes blank as the printer is restarted. After a short moment, the printer starts up and the *Intermec Shell* countdown menus are shown again. You can either enter *Intermec Shell* or ignore the countdown menus and just wait 5 seconds for the selected application to be started.

As an alternative to selecting an application, you can step through a number of useful facilities:

Setup Mode

The *Setup Mode* option allows you to enter the printer's setup mode, where you can read or change any parameter, as described in the *Technical Manual* for the printer model in question.

Print Setup

The *Print Setup* option allows you to produce a printout of the printer's current setup values.

Testfeed

The *Testfeed* option allows you to feed out one label, ticket, tag or piece of strip while the printer auto-adjusts its paper feed and label stop sensor or black mark sensor. It is recommended to perform at least two *Testfeed* operations.

Test Label

The *Test Label* option allows you to print a series of four test labels in order to test the printout quality and printhead alignment. The labels are presented in an infinite loop, so you can print the series over and over again.

Font Scaling

This menu is only displayed in *Intermec Shell* when an optional *Scalable Fonts Kit* is installed (standard in some models, not possible in others). The menu is the first in an extension to *Intermec Shell* that allows bitmap fonts to be generated from scalable outline fonts in *Speedo* and *TrueType* format. Refer to the chapter “*Font Scaling*” later in this manual and to the *Technical Manual* of the printer model in question for further information.

Continued!

USING INTERMEC SHELL, cont'd.

Options in Intermec Shell, cont'd.

Ser-Com Reset

The *Ser-Com Reset* option allows you to reset the serial communication setup parameters for **all** serial communication channels to their respective default values:

Default Communication Setup:	
Baudrate:	9600
Parity:	none
Char. length:	7 bits
Stopbits:	2
Flow control:	XON/XOFF to/from host
New line:	CR/LF

Clear RAM Memory

The *Intermec Windows Drivers* require a certain amount of free memory space in the printer, depending on the size of the print image. The *Clear RAM Memory* option is used to erase most of the printer's RAM memory in order to provide such memory space, if necessary. Only use the *ClearMemory* option when you experience problems with printing via any of the drivers and when you are sure that you do not have any irreplaceable files in the RAM memory!

The *Clear RAM Memory* option is protected by a password (491601) to avoid being activated unintentionally.

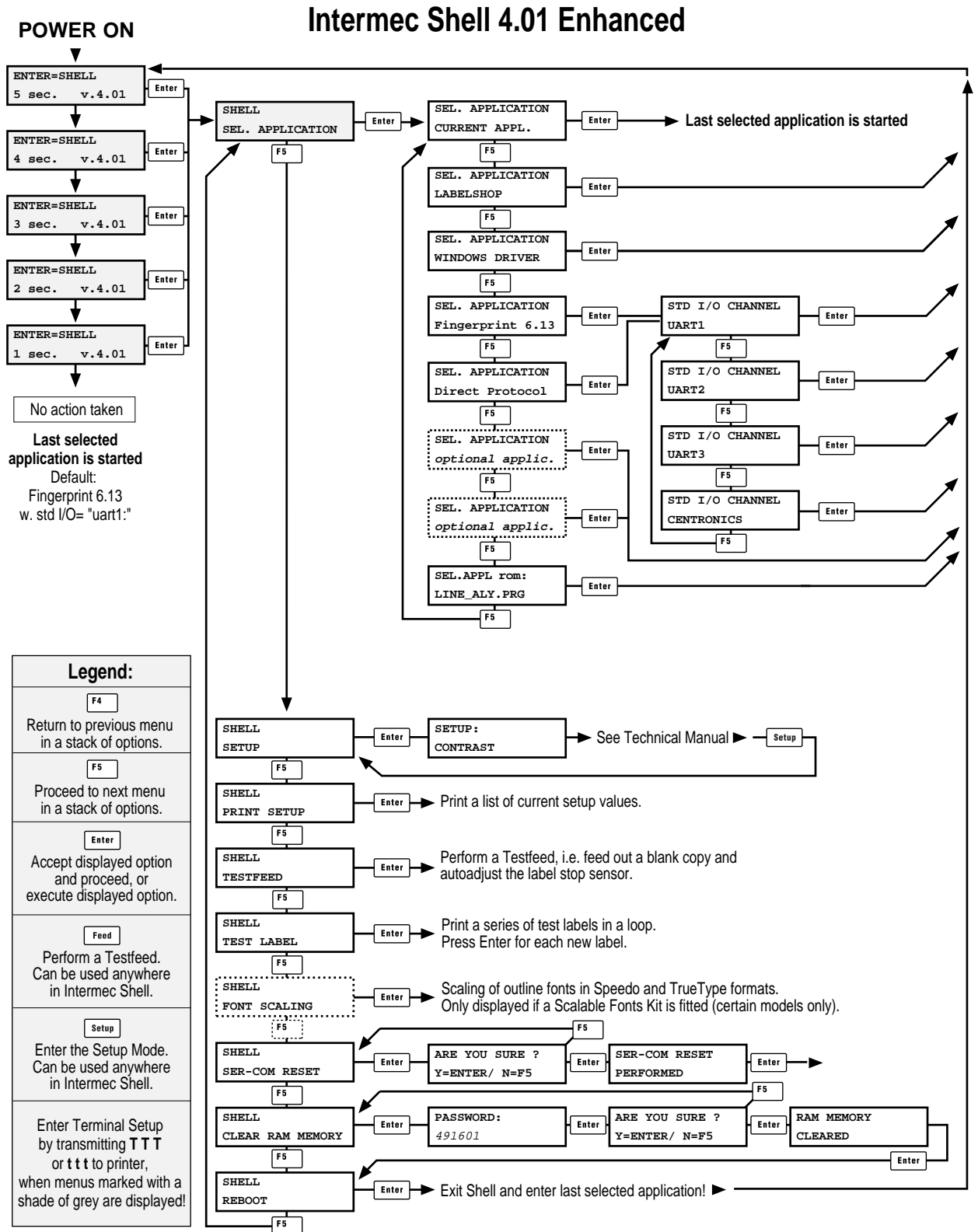
Reboot

The *Reboot* option has the same effect as turning off and on the power to the printer. To exit *Intermec Shell* without having selected any application program, use *Reboot* or restart the printer. Then wait for the 5 seconds countdown without taking any action, and the last selected application will be opened.

Continued!

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USING INTERMEC SHELL, cont'd.



FONT SCALING

Font Scaling in Intermec Shell

Some *EasyCoder* printer models can be fitted with a “*Scalable Fonts Kit*”, that allows the printer to use scalable outline fonts in *Speedo* and *TrueType* formats.

The *Intermec Shell* startup program offers a convenient way of scaling outline fonts. When a Scalable Fonts kit is installed in a printer, an additional menu will be displayed in *Intermec Shell*. This new menu is inserted immediately after the “*Test Label*” option and shows:

```
SHELL
FONT SCALING
```

Press <Enter> to use this facility, or <F5> to bypass.

```
PRINT:FONTLIST
1:SCALE 2:DELETE
```

This menu offers three options:

- To print a list of the outline font files stored in the various parts of the printers memory ("rom:", "ram:", and "card1:") by pressing the <Print> key.
- To scale an outline font by pressing <1>.
- To delete an already scaled font by pressing <2>.

Assuming you have selected to scale fonts and have pressed <1>, a menu like this will be displayed:

```
SEL. FONT rom:
TT0630M .TTF
```

This menu is the first in a stack of menus which shows all outline font files. The text "rom:", "ram:", or "card1:" in the upper line indicates in which part of the memory the file is stored. You can browse through the stack in an infinite loop by repeatedly pressing the <F5> key.

If you want to see what the selected font looks like, press the <Print> key for a printout sample.

Once you have made your choice, press <Enter>.

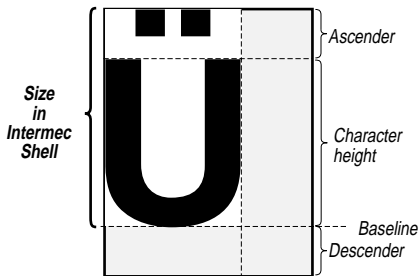
```
SELECT SIZE
_
```

In this menu you specify the height in **dots** of the bitmap font you want to create from the outline font file. Type the desired value and press <Enter>, taking into consideration that large fonts require a lot of free memory.

Continued!

FONT SCALING, cont'd.

Font Scaling in Intermec Shell, cont'd.



Roman 8 Character Set

	0	1	2	3	4	5	6	7	8	9
30		space	!	"	#	\$	%	&	'	
40	()	*	+	,	-	.	/	0	1
50	2	3	4	5	6	7	8	9	:	;
60	<	=	>	?	@	A	B	C	D	E
70	F	G	H	I	J	K	L	M	N	O
80	P	Q	R	S	T	U	V	W	X	Y
90	Z	[\]	^	_	`	a	b	c
100	d	e	f	g	h	i	j	k	l	m
110	n	o	p	q	r	s	t	u	v	w
120	x	y	z	{		}	~			

For ASCII values above 126 decimal, refer to the Intermec Fingerprint 6.13 Reference Manual.

The height is the vertical distance between the baseline and the extreme ascending parts of the characters in the font, e.g. the lowest and the highest parts of an “Ü” character, see illustration.

In this and any of the following font parameter menus, you can get a preview on how the bitmap font will look according to the parameters entered so far. Just press **<Print>** and the printer will produce a sample.

ASCII RANGE FROM
_ 32

In order to save memory space, you can limit the number of characters to be scaled within a certain range of ASCII characters according to the Roman 8 character set (see table to the left). In this menu, you specify the decimal ASCII value of the first character in the range. Default is ASCII 32 dec., i.e. a space character.

Type the desired start value (if other than default) and press **<Enter>**.

ASCII RANGE TO
126

In this menu you specify the last character in the range. The size of the font and the number of characters in the font decides how much space in RAM will be required. Accept the default value 126, or type another value. Then press **<Enter>**.

DIRECTION: 1 or 2
1

If a font is to be printed in all four directions, there must be two bitmap fonts; one for printing across the web (DIR 1 & 3) and another for printing along the web (DIR 2 & 4). In this menu you must specify for which printing direction you want the bitmap font to be used:

- For printing across the web (DIR 1 & 3), select Direction 1.
- For printing along the web (DIR 2 & 4), select Direction 2.

Accept the default value 1, or change the direction by typing 2. Then press **<Enter>**.

SLANTING:
_ _ 0

Slanting means that you can create the same effect as in *ITALIC* characters. The higher value, the more askew the upright parts of the characters will come. Slanting increases clockwise. Default value is 0.

Accept the default value, or type a new value. Then press **<Enter>**.

Continued!

FONT SCALING, cont'd.

Font Scaling in Intermec Shell, cont'd.

```
ROTATION
_ _ 0
```

Rotation means that each character is individually rotated clockwise. Default value is 0.

Accept the default value, or type a new value. Then press <Enter>.

```
SAVE? 1:Yes 2:No
_
```

In this menu, you can choose between scaling and saving the scaled bitmap font in the printer's RAM memory, or to do neither.

Type <1> to scale and save the font, or <2> not to save it, then press <Enter>. If you choose not to scale and save the font, next menu will not appear.

When a font is saved, the software automatically provides it with a name based on the name of the original outline font and the selected size and direction. Note that saving a font will erase possible existing bitmap fonts with the same name.

```
SCALING FONT
PLEASE WAIT
```

This menu is shown while the scaling is performed. When the operation is completed, a label will automatically be produced, where the assigned name of the generated bitmap font is printed using the font in question. Then the menu changes automatically:

```
FREE RAM SPACE
nnnnnn bytes
```

This menu shows the remaining number of free bytes in the printer's RAM memory. Press <Enter> to return to the first menu.

```
PRINT: FONTLIST
1:SCALE 2:DELETE
```

In this menu, you can also choose to delete bitmap fonts stored in RAM. Press the <2> key.

```
DELETE:
XXnnnnnn.n
```

All bitmap fonts in RAM will be presented in a stack of menus. You can browse through the stack, which is organized in an infinite loop, by pressing <F5> repeatedly. Any time, you can exit by pressing <C>. When the font you want to delete appears, press <Enter>.

```
FONT XXnnnnnn.n
DELETED
```

This menu confirms that the font has been deleted. Press <Enter>.

Continued!

FONT SCALING, cont'd.

Font Scaling in Intermec Shell, cont'd.

```
FREE RAM SPACE  
nnnnnn bytes
```

This menu shows the remaining number of free bytes in the RAM memory. Press <Enter> to return to the first menu, where you can select a new font to be deleted.

```
DELETE:  
YYnnnnnn.n
```

If you do not intend to delete any more fonts, but want to return to the main menu press <C>.

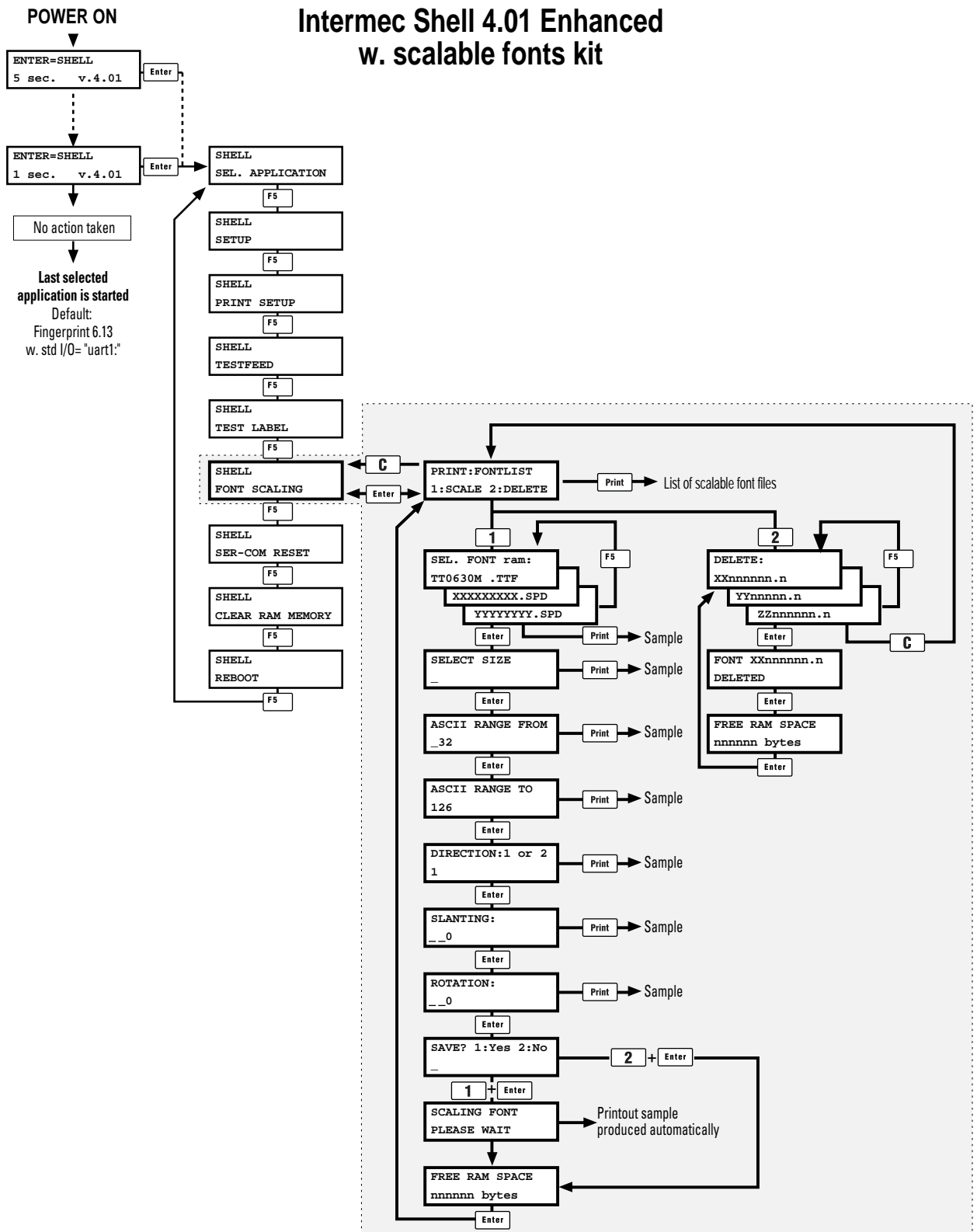
Pressing <C> a second time takes you back to *Intermec Shell*.

On next page, you will find a schematic overview of the scaling of fonts in *Intermec Shell*.

Continued!

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FONT SCALING, cont'd.



TERMINAL SETUP

Starting Terminal Setup

The *Terminal Setup* program in *Intermec Shell* allows the operator to control the whole *Intermec Shell* program remotely from a host computer or terminal and also to read and change the printer's setup. Obvious prerequisites are that there must be a working two-way (serial) communication between printer and host, and that the host runs a suitable communication program (e.g. *MS Windows Terminal*) that can transmit and receive data in ASCII format, i.e. printable characters.

You can enter *Terminal Setup* by transmitting three uppercase or lowercase **T** characters (**TTT** or **ttt**) while the printer either shows the *Intermec Shell* countdown menus or the *Select Application* menu.

Solving Communication Problems

If this does not work, the communication protocols of the printer and the host probably do not match, or there is some other communication error, e.g. a defect communication cable, wrong port selected on the host, or cable connected to some other port than "uart1:" on the printer¹.

You can check and change the printer's setup in the Setup Mode, which you can enter by pressing the <Setup> key on the printer's built-in keyboard. Proceed as described in the Technical Manual.

Among the facilities in *Intermec Shell*, you will also find a number of options that allow you to read or change the communication setup of the printer:

- **Setup**
This is another way of entering the Setup Mode, where you can browse through the setup parameters and make changes by means of the printer's keyboard.
- **Print Setup**
Here you can print the current setup on one or more labels.
- **Ser-Com Reset**
This option allows you to reset the communication parameters for all serial communication channels on the printer to default values.

Change the communication setup of the printer according to the host or vice versa.

Once printer and host has been set up with the same communication parameters, go to the "Select Application" menu and use the triple T (TTT/ttt) to start *Terminal Setup*.

¹/ By default, "uart1:" is standard IN/OUT channel and should be used for communication between printer and host, e.g. for running *Terminal Setup* or for programming. However, other ports could be appointed standard IN and/or OUT channel by means of the statement SETSTDIO. Refer to the Intermec Fingerprint manuals for further information.

TERMINAL SETUP, cont'd.

Using Terminal Setup

The *Terminal Setup* program is self-instructing by means of prompts. You can move around in *Intermec Shell* in the same manner as when you control *Intermec Shell* manually by means of the printer's display and keyboard.

The Setup part of *Terminal Setup* follows the same structure as setup files, see later in this chapter. Comprehensive explanations of the various setup parameters can be found in the Technical Manual for the printer model in question.

When you transmit the triple T (TTT/tt) to the printer, the following message will appear on printer's display:

```
SETUP FROM
TERMINAL
```

On the screen of the host, another message will appear:

```
-----
Welcome to SHELL v.4.01 in terminal mode
-----
```

Answer Y <CR> for Yes, <CR> for No.

```
-----
SHELL
SEL. APPLICATION
-----
```

(Y / N / B):

From here on, you can move around in *Intermec Shell* according to the diagram in the chapter “*Using Intermec Shell*” by answering **Y** (=Yes), **N** (=No), or **B** (=Back) to the prompts that successively appear on the screen.

Note that the program also accepts the corresponding lowercase characters, e.g. y, n, and b.

TERMINAL SETUP, cont'd.

Selecting an Application

This example shows how you for example can select the *Intermec Fingerprint* application:

```
-----  
SHELL  
SEL. APPLICATION  
-----
```

```
(Y / N / B):Y
```

```
-----  
SEL. APPLICATION  
CURRENT APPL.  
-----
```

```
(Y / N / B):N
```

```
-----  
SEL. APPLICATION  
LABELSHOP  
-----
```

```
(Y / N / B):N
```

```
-----  
SEL. APPLICATION  
WINDOWS DRIVER  
-----
```

```
(Y / N / B):N
```

```
-----  
SEL. APPLICATION  
Fingerprint 6.13  
-----
```

```
(Y / N / B):Y
```

```
-----  
STD I/O CHANNEL  
UART1  
-----
```

```
(Y / N / B):Y
```

When you have answered the final prompt, the printer will exit *Terminal Setup*, reboot and start the selected application.

TERMINAL SETUP, cont'd.

Changing the Setup

If you want to set up the printer or use any other of the facilities, you should answer **N** (=No) to the “*Select Application*” prompt. The following example illustrates how to change the printer's communication setup from 19,200 baud to 9,600 baud:

```
-----  
SHELL  
SEL. APPLICATION  
-----
```

(Y / N / B):N

```
-----  
SHELL  
SETUP  
-----
```

(Y / N / B):Y

```
-----  
SETUP FROM  
TERMINAL  
-----
```

Reading printer setup, please wait.
If no change, press ENTER
To end terminal setup: enter QUIT (Q), or QUIT and SAVE (S)

```
CONTRAST,5  
New value: (0-10) :
```

```
UART1,BAUDRATE,19200  
New value: (1:300 2:600 3:1200 4:2400 5:4800 6:9600 7:19200) :6
```

Comment: You must specify the baudrate by a digit (1–7) according to the displayed list of options and then press enter.

```
UART1,PARITY,NONE  
New value: (1:NONE 2:EVEN 3:ODD 4:MARK 5:SPACE) :S
```

*Comment: Enter **Q** to quit without saving, or **S** to save the new setup and quit the Terminal Setup.*

Are you sure? (Y / N):Y

Comment: As a safety measure, you must acknowledge your command.

```
xf~xxff xx~f ffffffffxxxxf ff ffffffffxxxx~fx
```

Comment: Since you have changed the communication parameters, the messages from the printer will become garbled. Reset the communication setup in your terminal program according to the printer's setup and press Enter.

TERMINAL SETUP, cont'd.

Exiting Terminal Setup

To exit the *Terminal Setup* program, e.g. after having changed the setup, you must select the *Reboot* option after having stepped through all the facility options, as illustrated below:

```
-----  
SHELL  
PRINT SETUP  
-----  
  
(Y / N / B):N  
-----  
SHELL  
TESTFEED  
-----  
  
(Y / N / B):N  
-----  
SHELL  
TEST LABEL  
-----  
  
(Y / N / B):N  
-----  
SHELL  
FONT SCALING  
-----  
  
(Y / N / B):N  
-----  
SHELL  
SER-COM RESET  
-----  
  
(Y / N / B):N  
-----  
SHELL  
CLEAR RAM MEMORY  
-----  
  
(Y / N / B):N  
-----  
SHELL  
REBOOT  
-----  
  
(Y / N / B):Y
```

If you answer **N** (=No) here, you will return to the “*Select Application*” option, but if you answer **Y** (=Yes) the printer will start up again and begin the *Intermec Shell* countdown. Then you can enter *Terminal Setup* once more by transmitting a triple T, enter the *Intermec Shell* manually by pressing <**Enter**> in the countdown menus, or return to the last selected application by waiting for the countdown to be completed without taking any action.

TERMINAL SETUP, cont'd.

Setup Parameters

The displayed values refer to the default setup of an Intermec EasyCoder 501 E with one communication port and 8 dots/mm printhead density.

Note:

After you have pressed CR, a series of additional prompts will appear where you can adjust the LSS following the same principles as described in the Technical Manual.

```
-----
SETUP FROM
TERMINAL
-----
Reading printer setup, please wait.
If no change, press ENTER
To end terminal setup: enter QUIT (Q), or QUIT and SAVE (S)
CONTRAST,5
New value: (0-10) :
UART1,BAUDRATE,9600
New value: (1:300 2:600 3:1200 4:2400 5:4800 6:9600 7:19200) :
UART1,PARITY,NONE
New value: (1:NONE 2:EVEN 3:ODD 4:MARK 5:SPACE) :
UART1,CHAR LENGTH,7
New value: (1:7 2:8) :
UART1,STOPBITS,2
New value: (1:1 2:2) :
UART1,FLOWCONTROL,RTS/CTS,DISABLE
New value: (1:ENABLE 2:DISABLE) :
UART1,FLOWCONTROL,ENQ/ACK,DISABLE
New value: (1:ENABLE 2:DISABLE) :
UART1,FLOWCONTROL,XON/XOFF,DATA FROM HOST,ENABLE
New value: (1:ENABLE 2:DISABLE) :
UART1,FLOWCONTROL,XON/XOFF,DATA TO HOST,ENABLE
New value: (1:ENABLE 2:DISABLE) :
UART1,NEW LINE,CR/LF
New value: (1:CR/LF 2:LF 3:CR) :
DETECTION,LSS ADJUST,80
New value: (0-127) Press F <CR> for testfeed. Press <CR> when OK :
DETECTION,FEEDADJ,STARTADJ,0
New value: (-9999 thru +9999) :
DETECTION,FEEDADJ,STOPADJ,0
New value: (-9999 thru +9999) :
MEDIA SIZE,XSTART,0
New value: (0-999) :
MEDIA SIZE,WIDTH,832
New value: (0-9999) :
MEDIA SIZE,LENGTH,1200
New value: (0-9999) :
MEDIA TYPE,LABEL (w GAPS)
New value: (1:LABEL (w GAPS) 2:TICKET (w MARK) 3:TICKET (w GAPS)
(4:FIX LENGTH STRIP 5:VAR LENGTH STRIP) :
PRINT DEFS,HEAD RESIST,519
New value: measured
PRINT DEFS,PAPER TYPE,UBI HP 20
New value:
      0:RICOH 130LAB/LAM  1:KANZAKI 86S      2:UBI DT 110++      3:UBI DT 110+
      4:UBI DT 110      5:UBI DT 120      6:UBI GP 10      7:UBI GP 11
      8:UBI HP 20      9:UBI HP 21      10:UBI HR 31      11:UBI HR 30
Select paper type, (0-11):
PRINT DEFS,NEW SUPPLIES
New value:
PERFORMANCE,NORMAL
New value: (1:NORMAL 2:HIGH 3:ULTRA HIGH) :
MEMORY ALLOC,IMAGE BUFF SIZE,48
New value: (0-9999) :
MEMORY ALLOC,REC BUF UART1,300
New value: (0-99999) :
MEMORY ALLOC,TRANS BUF UART1,300
New value: (0-99999) :
End of setup, enter QUIT (Q), or QUIT and SAVE (S)
```

LINE ANALYZER

Description

The *Line Analyzer* (LINE-ALY.PRG) is a program written in the *Intermec Fingerprint* programming language and intended to help solving possible communication problems. As the name implies, the *Line Analyzer* captures all incoming characters on a specified communication channel and prints them on one or several labels.

Printable characters are printed in black-on-white, whereas control characters and space characters (ASCII 00–32 dec) are printed in white on a black background.

While the printer is receiving data, the “Ready” control lamp blinks. There is a 0.5 sec timeout. If no more character has been received after 0.5 seconds, the program considers the transmission terminated and prints out a label.

As long as a continuous string of characters is being received, the program wraps the lines until the label is full and then starts to print another label. At the bottom of each label, the following information is printed:

- Page number
- Number of characters printed on the label
- Total of characters received so far

If the whole label is not filled, before the printer starts printing another one, the image buffer is too small. We recommend to increase the image buffer before starting the *Line Analyzer*.

The *Line Analyzer* is displayed as the option “LINE_ALY.PRG” under the “SEL. APPLICATION” menu. After the *Line Analyzer* has been selected and the printer has started up again, the printer feeds out two labels and the following menu is displayed:

```
Line Analyzer
Sel.port(1-4) 1
```

The communication port are numbered as follows:

- 1 = "uart1:"
- 2 = "uart2:"
- 3 = "uart3:"
- 4 = "centronics:"

You can scroll between the ports, which are organized as a continuous loop (1-2-3-4-1....) by pressing the <Print> key with the printhead lifted. If the printer is not fitted with a port, an error message appears in the display:

```
Line Analyzer
Error:56
```

Go on pressing the <Print> key until the number of the desired port is displayed, then lower the printhead.