



Printer Protocol Interpreter IEGL™
Programmer's Reference Manual for IER,
Siège® Printer Protocol Interpreter

Thermal Series Printers

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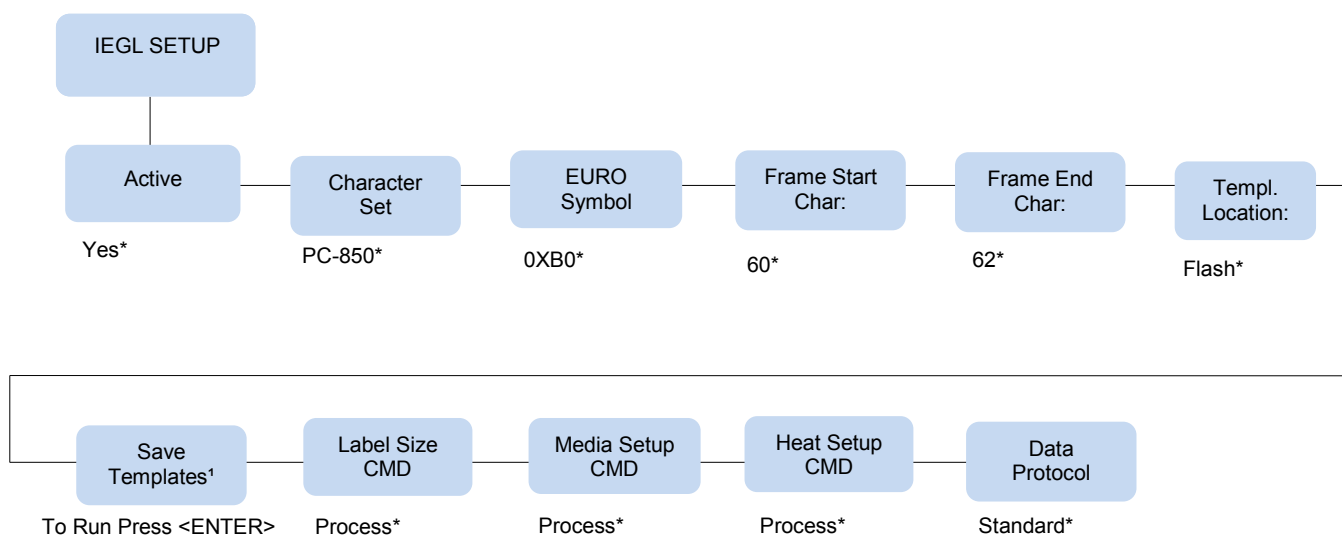
1 Introduction

About This Manual

This manual explains the differences between Printer Protocol Interpreter IER Siège® Graphic Language (IEGL) Utility and the IER printer language. Use this manual with your *Administrator's Manual*.

IEGL SETUP Menu

The IEGL Setup submenu is found by selecting the Application icon  within the Settings  section. The IEGL Setup submenu will only be present when the *Application > Control > Active IGP Emul* is set to IEGL.



NOTE: * = Default

¹ This menu is only present when the 'Templ Location' menu has been set to RAM.

IMPORTANT

The IEGL Setup submenu will only be present when the Active IGP Emulation menu *Application > Control > Active IGP Emul* is set to IEGL.

| Application > IEGL Setup > Active | |
|---|---|
| Indicates if the IEGL parser should process all incoming data, or that all data should be passed to the bottom emulation. | |
| Yes | IEGL is active; processes all IEGL commands. |
| No | IEGL is inactive; data is processed as pure text. |
| Factory Default | Yes |

| Application > IEGL Setup > Character Set | | |
|---|-----------------|--------------------|
| Allows you to select the character set. See Appendix A on page 25 for supported character sets. | | |
| Character Set | PC-850 Apple | Latin 1 Roman 8 |
| Factory Default | PC-850 | |

| Application > IEGL Setup > Euro Character | |
|---|------|
| Allows the operator to select the hexadecimal position of the Euro (€) symbol in the code page. | |
| Minimum | 0x20 |
| Maximum | 0xFF |
| Factory Default | 0xB0 |

| Application > IEGL Setup > FrameStartChar | |
|--|---|
| Allows you to select the decimal code for the frame start character. The default value is 60, which is code for the '<' character. | |
| Minimum | 0 |
| Maximum | 255 |
| Factory Default | 60 |
| IMPORTANT | This value can also be changed through the <+ENT...> command. In both cases, the value is only preserved during power down after the configuration is saved manually. |

| Application > IEGL Setup > FrameEndChar | |
|--|---|
| Allows you to select the decimal code for the frame end character. The default value is 62, which is code for the '>' character. | |
| Minimum | 0 |
| Maximum | 255 |
| Factory Default | 62 |
| IMPORTANT | This value can also be changed through the <+ENT...> command. In both cases, the value is only preserved during power down after the configuration is saved manually. |

| Application > IEGL Setup > Templ. Location | |
|--|---|
| Allows you to select the location to which templates are saved. By default, templates are saved to flash memory. For applications that send templates repeatedly, the set RAM must be used to prevent flash file system overflows. | |
| Flash | Flash memory |
| RAM | DRAM memory. The templates will be lost when the printer is powered off. You have the option to manually move the templates in RAM to FLASH by using the <i>Application > IEGL Setup > Save Templates</i> menu. |
| Factory Default | Flash |
| IMPORTANT | Overwritten files are not deleted from the file system until optimize and reboot is performed. |

| Application > IEGL Setup > Save Templates | |
|---|---------------------------------|
| Allows you to move the templates in RAM to FLASH memory. The menu is only present when 'RAM' is selected in the <i>Application > IEGL Setup > Templ. Location</i> menu. If no templates are saved and this menu is executed, the message 'Nothing to save Send Templ. First' will display on the printer front panel. | |
| Press ENTER | Moves the RAM files into FLASH. |

| Application > IEGL Setup > Labelsize Cmd | |
|---|---|
| Allows you to disable the set label size command. | |
| Process | The <+DL> command overrides the panel setting. |
| Ignore | The value set in the front panel configuration is used, and the <+DL> command is ignored. |
| Factory Default | Process |

| Application > IEGL Setup > Media Setup Cmd | |
|---|--|
| Allows you to disable the media handling command. | |
| Process | The <+CF> command overrides the panel setting. |
| Ignore | The media handling as set in the front panel configuration is used and the <+CF> command is ignored. |
| Factory Default | Process |

| Application > IEGL Setup > Heat Setup Cmd | |
|--|--|
| Allows you to disable the set heat command. | |
| Process | The <+C> command overrides the panel setting. The <+C> command range, 0 to 9, is mapped to the Printronix range, -15 to 15. For example, sending a value of 8 results in setting the intensity to +12. |
| Ignore | The value set in the front panel configuration is used, and the <+C> command is ignored. |
| Factory Default | Process |

| Application > IEGL Setup > Data Protocol | |
|--|--|
| Defines if the IER Ack/Nack communication protocol must be used. | |
| Standard | IER ACK/NACK protocol disabled. The communication protocol as defined in the interface setup menu is used. |
| Ack/Nack | IER Ack/Nack protocol enabled. IEGL acknowledges each received command with Ack. A Nack is sent in case of an error. |
| Factory Default | Standard |

2 *Supported Commands*

Label Programming Commands

| Command | Command Description | Support | Reference |
|----------|----------------------------------|---------|--|
| <I...> | Print Page | Full | |
| <F> | Erase Page Bitmap | Full | |
| <L...> | Print Line | Full | |
| <C...> | Print Box | Full | |
| <D...> | Print Oblique Line | Full | |
| <T...> | Print Text Direct | Full | |
| <B...> | Print Barcode Direct | Full | |
| <PDF...> | Print PDF417 Barcode Direct | Full | |
| <CD...> | Define Initial Counter Value | Full | |
| <CF...> | Delete Counter | Full | |
| <CI...> | Increment Counter After Printing | Full | |
| <CT...> | Create Text Counter | Full | |
| <CB...> | Create Barcode Counter | Full | |
| <ML...> | Request Template Status | Ignored | See “Ignored Configurations and Information Request Commands” on page 14 |
| <MR...> | Erase Template | Full | |
| <MI...> | Start Template Create Mode | Full | |
| <MF...> | End Template Create Mode | Full | |
| <MT...> | Text Variable Create | Full | |

| Command | Command Description | Support | Reference |
|-----------|---|---------|--|
| <MB...> | Barcode Variable Create | Full | |
| <MPDF...> | PDF417 Barcode Variable Create | Full | |
| <MD...> | Graphics Variable Create | Full | |
| <MC...> | Activate Template | Full | |
| <MA...> | Automatically Activate Template at Power-Up | Ignored | See "Ignored Configurations and Information Request Commands" on page 14 |
| <MV...> | Download Variable Data | Full | |
| <LG...> | Download PRV or HEX logo | Partial | See "Data Compression" on page 10 |
| <G...> | Print Logo Direct | Full | |
| <LPCX...> | Download PCX Logo | Full | |
| <GPCX...> | Print PCX Logo Direct | Full | |
| <LL...> | Send List of Stored Logo Names to Host | Ignored | See "Ignored Configurations and Information Request Commands" on page 14 |
| <LR...> | Clear Indicated Logo (or all when num is 0) | Full | |
| <LC...> | Activate Logo | Full | |

Data Compression

The data compression mode for the the <LG...> command (bit b1 of the transmission mode byte set to 1) is not supported on IEGL.

Configuration Commands

| Command | Command Description | Support | Reference |
|-------------|--|---------|--|
| <A...> | Print Test Pages | Ignored | See “Ignored Configurations and Information Request Commands” on page 14 |
| <!V> | Request Configuration | Ignored | |
| <!L> | Request Sensor Status | Ignored | |
| <E> | Status Request | Ignored | |
| <+SERIE...> | Program Printer Serial Number | Ignored | |
| <%SERIE...> | Request Printer Serial Number | Ignored | |
| <V> | Request Printer Program Version Number | Ignored | |
| <!R> | Program Printhead Resistance | Ignored | |
| <!NL> | Query Print Counter | Ignored | |
| <!NI> | Reset the Print Counter | Ignored | |
| <+TT..> | Select Print Technology <Direct/Transfer> | Ignored | |
| <R> | Reset | Ignored | |
| <RCOLD> | Reboot | Ignored | |
| <CM> | Cut Once | Full | See “Cutter Commands” on page 18 |
| <+U> | Unit Selection (dot or 1/10 mm) | Full | |
| <+CBR...> | Configure Memory Space | Ignored | See “Ignored Configurations and Information Request Commands” on page 14 |
| <LM> | Request Available Ram Disk Space | Ignored | |
| <+CF...> | Configure Media Handling Option | Full | See “Media Setup Cmd” on page 8 and “Cutter Commands” on page 18 |

| Command | Command Description | Support | Reference |
|----------------|---|----------------|--|
| <+D..> | Configure Sensor (gap, mark) | Ignored | See “Ignored Configurations and Information Request Commands” on page 14 |
| <+DL...> | Set Label Size | Full | |
| <+O...> | Configure Synchronisation Shift | Ignored | See “Ignored Configurations and Information Request Commands” on page 14 |
| <+OP...> | Vertical Image Shift | Ignored | |
| <+OX...> | Horizontal Image Shift | Ignored | |
| <LA...> | Language Selection for Config Print | Ignored | |
| <+DS...> | Eject Blank Document at Power Up | Ignored | |
| <S...> | Feed Command for Number of Labels Specified | Full | |
| <+TC...> | Heat Table Selection | Ignored | See “Ignored Configurations and Information Request Commands” on page 14 |
| <+C...> | Intensity Setting | Full | |
| <+L...> | Adjust Sensor Treshold Value | Ignored | See “Ignored Configurations and Information Request Commands” on page 14 |
| <+ENT...> | Select Framing Character | Full | See “Frame Start Char” and “Frame End Char” on page 6 |

| Command | Command Description | Support | Reference |
|---------|---------------------------------|---------|--|
| <%ENT> | Request Framing Character Value | Ignored | See “Ignored Configurations and Information Request Commands” on page 14 |
| <MS...> | Change Separator Character | Full | |

Fonts and Character Set Commands

| Command | Command Description | Support | Reference |
|----------|--|---------|--|
| <%N> | Request Number of Fonts Stored | Ignored | See “Ignored Configurations and Information Request Commands” on page 14 |
| <%F> | Request Names and Numbers of Fonts Stored | Ignored | |
| <+TF...> | Select Character Set | Full | |
| <FF...> | Download Font | Ignored | See “Ignored Configurations and Information Request Commands” on page 14 |
| <FL...> | Request List of Downloaded Fonts in RAM Disk | Ignored | See “Ignored Configurations and Information Request Commands” on page 14 |
| <FR...> | Clear Specified Font in Ram Disk (0 for all) | Full | |

Ignored Configurations and Information Request Commands

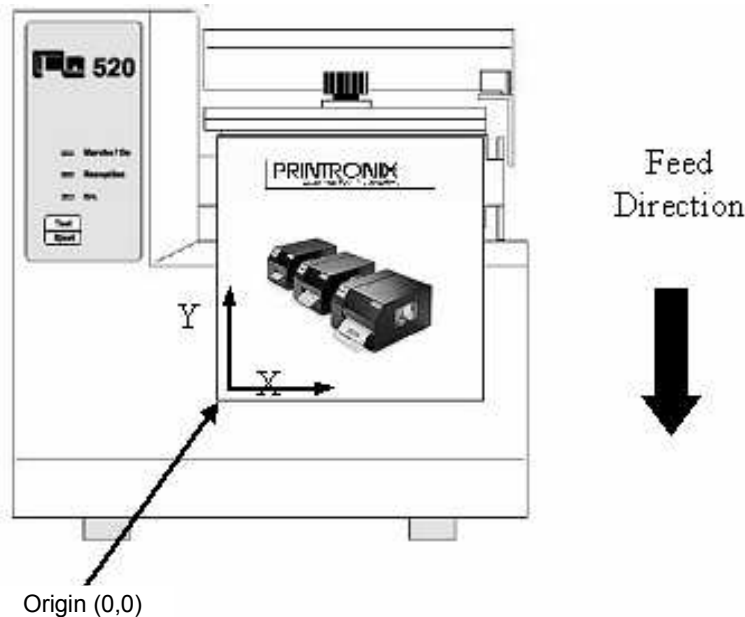
Ignored configuration commands are used to configure or request IER-520 specific parameters such as sensor threshold voltages. Some of these settings are not available on Printronix printers, or different ranges for the settings are used. Since most of the ignored commands are one-time adjustments, use the printer's front panel menus to configure these settings. For commands that initiate features such as printing test pages, select the *Tools > Print Tests > Run Tests* menu. For information request commands, use the Printronix PNE suite. See "Configuration Compatibility" on page 19.

Command Descriptions

Print Area

When looking at the front of the printer, the origin of the label is positioned at the bottom left of the label, and extends up and to the right. The label length for continuous labels can be set in the menu or with the `<+DL...>` command.

Physical page rotation is not available on IER printers. When rotation is required, each object should be rotated individually. See Figure below for a graphical representation of the print area, and the coordinate system used by the IER language.



Unit Selection

By default, positioning of page elements (text, barcodes etc.) is in dots. The unit can be changed to 1/10mm using the <+U...> command. If the 1/10mm unit is selected, positioning is independent of the printhead used.

Text Fields

Text fields are printed using the <T...> or <MT...> commands. These commands require parameters to:

- set the field origin
- select the font number to be used (0 to 3 for resident fonts)
- select the field rotation (four directions, 0, 90, 180 or 270, either left aligned or centered)
- select the color. The color parameter ranges from 0 to 3. Table 1 describes how text will print for each value.

| Parameter Value | Text Colors |
|-----------------|---|
| 0 | White text on black background (reverse). |
| 1 | Black text on white background (normal) |
| 2 | Black text on see thru background (OR Mode) |
| 3 | Text inverts the background (XOR Mode) |

Resident Fonts

Table lists the resident fonts for the IER 520 printer. The font size is represented by two numbers: the first is the dot size for the 300 dpi version, and the second is the dot size for the 200 dpi version. IEGL uses Agfa scalable fonts shown in the table to replace the IER fonts. Property tables are used to fine tune the fonts sizes to closely match the IER fonts.

| IER Font ID | Font Replacements | Agfa Replacement |
|-------------|---------------------------------|------------------|
| 0 | Bitmap Arial Bold, size 24/16 | 92244 |
| 1 | Bitmap Arial Bold, size 36/24 | 92248 |
| 2 | Bector Arial Bold, size 50/50 | 92248 |
| 3 | Vector arial Bold, size 100/100 | 92248 |

Downloaded Fonts

The IER-520 printer (program version 3.00 or higher) supports downloading of TrueType fonts to font ID locations starting after the resident fonts (4 to 99). The fonts is stored in the Ram Disk. Commands used for downloaded fonts are <FF...> for download, <FL...> to request status (not supported on IEGL), and <FR...> to delete downloaded fonts. The downloaded data is in a proprietary format.

Character Sets

The four character sets available on the IER-520 printer is also supported by the IEGL emulation. Select the sets using the <+TF..> command, or through the Character Set option under the IEGL Setup menu. See Appendix A on page 23 for an overview of characters in each of the sets.

Barcode Fields

All barcodes fields, except PDF417 are printed using the <B...> or <MB...> command. These commands require parameters to:

- set the field origin
- select the barcode type
- select the field rotation (four directions, 0, 90, 180 or 270, either left aligned or centered)
- set the ratio (enlargement factor)
- set readable fields.

Barcode PDF417 is printed using the <PDF...> or <MPDF ...> command. This 2-D barcode type requires other parameters: width and height of the window, number of rows, number of columns, column width, row height, rotation and error correction level.

The barcode types supported by IER printers.

| Type ID | Barcode Symbologies | Compatibility |
|---------|---|---------------|
| 0 | Code 3 of 9 | Full |
| 1 | Interleaved 2 of 5 without checksum calculation | Full |
| 2 | Standard 2 of 5 | Full |
| 3 | EAN-8 | Full |
| 4 | EAN-13 | Full |
| 5 | UPCA | Full |

| Type ID | Barcode Symbologies | Compatibility |
|--------------------|---|---------------|
| 6 | MONARCH (=Codabar) | Full |
| 7 | Code 128 C without checksum calculation | Full |
| 8 | Code 128 A,B,C without checksum calculation | Full |
| 9 | Automatic Code 128 C without checksum calculation | Full |
| 101 | Same as 1, but with checksum calculation | Full |
| 108 | Same as 8, but with checksum calculation | Full |
| 109 | Same as 9, but with checksum calculation | Full |
| (Separate Command) | PDF417 | Full |

Barcode Positioning

The barcode origin is at the bottom of the leftmost bar as shown in the figure below.



Logos

Logos can be printed directly on the page bitmap using the <G...> or <GPCX...> command. Or, logos can be downloaded using the <LG...> or <LPCX...> command, and then loaded onto the page bitmap using the <LC...> command. For downloaded logos, IEGL saves the logo in the flash file system to emulate the battery backed-up Ram Disk supported on the IER-520 printer.

Graphics

The following IER-520 graphic functions are supported by the IEGL emulation.

- Lines (using the <L...> command)
- Boxes (using the <C...> command)
- Oblique lines (using the <D...> command)

Cutter Commands

The cutter on IER printers can be activated manually by using the <CM> command, or automatically after each page with the <+CF...> command. Both commands are supported by IEGL. However, since Printronix printers support more media handling options, the <+CF...> command cannot be used to select all options. In such cases, the <+CF...> command can be ignored via the *Application > IEGL Setup > Media Setup Cmd* menu on page 8 and the *Media > Handling > Media Handling* value as selected in the front panel will be used.

3 Configuration Compatibility

Since the IER-520 printer does not have a control panel with LCD the printer can only be configured by commands. The below lists the IER-520 configuration commands, a description, and the corresponding Printronix menus that can be used to perform the equivalent configuration. The table also lists commands to request printer information or status. For those commands, equivalents available in the Printronix printer menu and equivalent functions in the PNE suite are listed.

| IER-520 Command | Font Replacement | PTX Setting |
|-----------------|---|---|
| <A...> | Print Test Pages | <i>Tools > Printer Tests > Run Tests</i> |
| <+CBR...> | Configure Memory Space | N/A – the printer is configured for optimal memory configuration |
| <+CF...> | Configure Media Handling Option | <i>Media > Handling > Media Handling</i> |
| <+D...> | Selects the top of form (TOF) sensing method for the media. Gap, Mark, etc. | <i>Sensors > Control > Gap/Mark Sensor</i> |
| <FL...> | Request list of downloaded fonts in RAM Disk | <i>System > Flash File Edit > Print File List</i> PNE: Flash File Manager |

| IER-520 Command | Font Replacement | PTX Setting |
|--------------------|--|--|
| <LA...> | Language Selection for Config Print | <i>System > Control > Display Language</i> PNE: Configuration Editor |
| <LM> | Request Available Memory Space | <i>System > Flash File Edit > Available Space</i> |
| <!NL> | Query Print Counter | <i>Configs > Control > Print Config</i> PNE: Information Capture, Configuration Editor |
| <+OP...> | Vertical Image Shift | <i>Media > Image > Vertical Shift</i> |
| <+OX...> | Horizontal Image Shift | <i>Media > Image > Horizontal Shift</i> |
| <+TT..> | Select Print Technology, DIRECT THERMAL, *THERMAL TRANSFER | <i>Media > Handling > Print Mode</i> |
| <!V...> | Request Configuration | <i>Configs > Control > Print Config</i> PNE: Information Capture, Configuration Editor |
| <V> | Request Program Version Number | <i>Tools > About > Printer F/W</i> |

Error Reporting

IEGL will not report errors through the host interface as supported on the IER520 printer. Instead, IEGL will use the error reporting option as supported on the other IGP emulation. If the menu is set to "Print", the label will print with the best possible quality, followed by a page which lists the errors.

If the menu is set to "Debug", the label will print with the best possible quality, and the errors will be sent through the printer debug port.

Templates

The IER-520 printer supports templates, referenced by number or by name. On the IER printers, templates are stored in the battery backed up memory.

In IEGL, by default, the templates are stored in flash memory. However, for specific applications that send templates repeatedly, templates can also be saved to RAM. See *Application > IEGL Setup > Templ. Location* and *Application > IEGL Setup > Save Templates* on page 7 for details.

The ID number ranges from 0 to 100, and the maximum length for the name is 16 characters. The template contents are saved to a flash file with the following format:

ierxxx_n...n.tpl

where xxx is a fixed three digit template number as supplied in the start template create command <MI...>. For instance, if the number supplied is three, then the filename will display as 003. "n...n" is the name of the template. The maximum length is 16 characters. If the supplied number is 12, and the name is MyTemplate, the file stored by IEGL is named:

ier012_MyTemplate.tpl

The file is saved after receiving the end template created command <MF>. The printer LCD shows the template number being saved and the free flash memory remaining.

Constraints

Non-Volatile Page Memory

In the IER-520 printer, the page bitmap is saved in the battery backed up memory. The content of this memory is preserved when the printer is turned off, and the page can be recalled after the printer is turned on again. The Printronix printers do not support battery backed up memory. Since saving to flash is slow and the number of times flash can be written to is limited, IEGL does not support page memory preservation when the power is turned off.

LoadTemplateatPowerUp

The IER-520 printer supports automatic loading of a template at power-up. The name or number of the template to be loaded can be set by using the <MA...> command. IEGL does not support this feature.

Changing Frame Start and End Characters

When the frame start and end characters are changed on the IER-520 printer, the changes are automatically saved in battery backed-up RAM. Since Printronix printers do not support battery backed-up RAM, these settings are saved with the configuration. See *Application > IEGL Setup > Frame Start Char* and *Application > IEGL Setup > Frame End Char* on page 6 for details.

A Character Sets

PC850 Character Set

| Decimal | 0 | 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240 |
|---------|---|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Hexa | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
| 0 | 0 | | | 0 | @ | P | ` | p | Ç | É | á | █ | Ł | đ | Ó | - |
| 1 | 1 | | ! | 1 | A | Q | a | q | ü | æ | í | █ | ± | Đ | ß | ± |
| 2 | 2 | | " | 2 | B | R | b | r | é | Æ | ó | █ | ± | È | Ô | █ |
| 3 | 3 | | # | 3 | C | S | c | s | â | ô | ú | | † | Ë | Ò | ¾ |
| 4 | 4 | | \$ | 4 | D | T | d | t | ä | ö | ñ | ‡ | — | È | ö | ¶ |
| 5 | 5 | | % | 5 | E | U | e | u | à | ò | Ñ | À | + | ı | Ö | § |
| 6 | 6 | | & | 6 | F | V | f | v | á | û | ª | Â | ã | í | µ | + |
| 7 | 7 | | ' | 7 | G | W | g | w | ç | ù | º | À | Ã | î | þ | ~ |
| 8 | 8 | | (| 8 | H | X | h | x | ê | ÿ | ¿ | © | Ł | ï | þ | ° |
| 9 | 9 | |) | 9 | I | Y | i | y | ë | Û | ® | ‡ | ŕ | ĵ | Ú | ˚ |
| 10 | A | | * | : | J | Z | j | z | è | Ü | ¬ | | ≠ | ŕ | Û | • |
| 11 | B | | + | ; | K | [| k | { | ï | ø | ½ | ¶ | ≠ | █ | Û | ¹ |
| 12 | C | | , | < | L | \ | l | | î | £ | ¼ | ¶ | ‡ | █ | ý | ³ |
| 13 | D | | - | = | M |] | m | } | ì | ∅ | ı | Ç | = | ı | Ý | ² |
| 14 | E | | . | > | N | ^ | n | ~ | Ä | x | « | ¥ | ‡ | ı | — | ■ |
| 15 | F | | / | ? | O | _ | o | | Å | f | » | ¬ | € | █ | . | |

Apple Character Set

| Decimal | 0 | 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240 |
|---------|---|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Hexa | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
| 0 | 0 | | | 0 | @ | P | ` | p | Ä | ê | | | ı | | | |
| 1 | 1 | | ! | 1 | A | Q | a | q | Å | ë | ° | ± | ı | | . | Ò |
| 2 | 2 | | " | 2 | B | R | b | r | Ç | í | ç | | ¬ | | , | Û |
| 3 | 3 | | # | 3 | C | S | c | s | É | ì | £ | | | | | Ü |
| 4 | 4 | | \$ | 4 | D | T | d | t | Ñ | î | § | ¥ | f | | | Ù |
| 5 | 5 | | % | 5 | E | U | e | u | Ö | ï | • | µ | | | | Å |
| 6 | 6 | | & | 6 | F | V | f | v | Ü | ñ | ¶ | | | + | Ê | |
| 7 | 7 | | ' | 7 | G | W | g | w | á | ó | ß | | « | | Á | |
| 8 | 8 | | (| 8 | H | X | h | x | à | ò | ® | | » | ÿ | Ë | |
| 9 | 9 | |) | 9 | I | Y | i | y | â | ô | © | | | | Ë | |
| 10 | A | | * | : | J | Z | j | z | ä | ö | | | | / | Í | |
| 11 | B | | + | ; | K | [| k | | ä | ö | · | ª | À | € | Î | |
| 12 | C | | , | < | L | \ | l | | á | ú | ¨ | º | Ã | | Ï | |
| 13 | D | | - | = | M |] | m | | ç | ù | | | Ö | | Ì | |
| 14 | E | | . | > | N | ^ | n | | é | û | Æ | æ | | | Ó | |
| 15 | F | | / | ? | O | _ | o | | è | ü | Ø | ø | | | Ô | |

Latin1 Character Set

| Decimal | 0 | 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240 |
|---------|---|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Hexa | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
| 0 | 0 | | | 0 | @ | P | ` | p | | | | ° | À | Ð | à | ð |
| 1 | 1 | | ! | 1 | A | Q | a | q | | | ı | ± | Á | Ñ | á | ñ |
| 2 | 2 | | " | 2 | B | R | b | r | | | ç | ² | Â | Ò | â | ò |
| 3 | 3 | | # | 3 | C | S | c | s | | | £ | ³ | Ã | Ó | ã | ó |
| 4 | 4 | | \$ | 4 | D | T | d | t | | | € | ´ | Ä | Ô | ä | ô |
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Roman 8 Character Set

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B *Contact Information*

Printronix Customer Support Center

IMPORTANT Please have the following information available prior to calling the Printronix Customer Support Center:

- Model number
- Serial number (located on the back of the printer)
- Installed options (i.e., interface and host type if applicable to the problem)
- Configuration printout: Refer to the *Administrator's Manual*.
- Is the problem with a new install or an existing printer?
- Description of the problem (be specific)
- Good and bad samples that clearly show the problem (faxing or emailing of these samples may be required)

| | |
|--|---|
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| Asia Pacific | +886 3 990 6155 APAC_support@PrintronixAutoID.com |
| China | +86 755 2398 0479 CHINA_support@PrintronixAutoID.com |

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Printronix Auto ID Consumables: <http://PrintronixAutoID.com/products/consumables/>

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