

# **Printer Protocol Interpreter TGL™**

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*Programmer's Reference Manual for TGL,  
a TEC® Printer Protocol Interpreter*

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*Thermal Series Printers*

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Programmer's Reference Manual for TGL,  
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# 1 *Introduction*

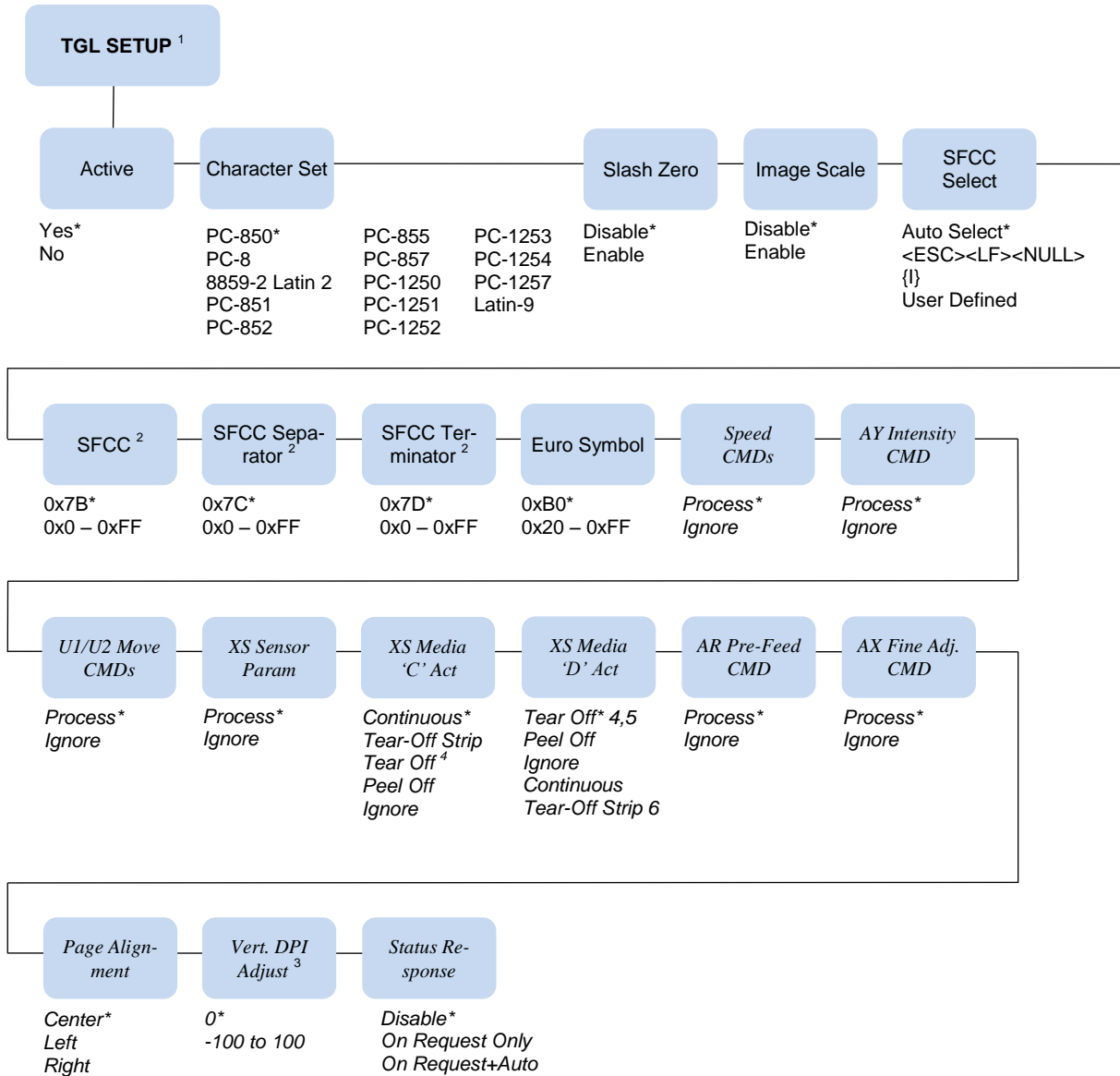
## **About This Manual**

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This manual explains the differences between the Printer Protocol Interpreter TEC® Graphic Language (TGL) Utility and the TEC printer language. If you have a SL5000r™/T5000r™ printer use this manual with your *SL5000r/T5000r Administrator's Manual* for complete printer-protocol operation. If you have a SL4M™/T4M™ printer use this manual with your *SL4M/T4M Administrator's Manual*.

**NOTE:** When substituting a TEC B-470/870 model printer with a SL5000r/T5000r or SL4M/T4M printer, refer to TGL Menu Conversions on page 25.

# TGL SETUP Menu



**Notes:**

\* = Default

For SL5000r/T5000r printers, *italicized* items are available only when you enable Admin User in the PRINTER CONTROL menu.

For SL4M/T4M printers, the TGL Setup Menu is available only when you enable Admin User in the PRINTER SETUP menu.

<sup>1</sup>When substituting a TEC B-470/870 model printer with a T5000r printer, refer to the menu conversion in Appendix A.

<sup>2</sup>These menus are available only when you select User Defined in the SFCC Select menu.

<sup>3</sup>Available for SL4M/T4M printers only.

<sup>4</sup>Available for SL5000r/T5000r printers only.

<sup>5</sup>Default for SL5000r/T5000r printers.

<sup>6</sup>Default for SL4M/T4M printers.



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## TGL SETUP Submenus

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### Active

- **Yes** (default). When enabled, all data is parsed by the TGL emulation. Non-TGL data is absorbed.
- **No**. When disabled, non-TGL text data prints.

### Character Set

Selects the character set: either PC-850, PC-8, 8859-2 Latin 2, PC-851, PC-852, PC-855, PC-857, PC-1250, PC-1251, PC-1252, PC-1253, PC-1254, PC-1257 or Latin-9. The factory default is PC-850.

### Slash Zero

- **Enable**. When enabled, the zero character is overlaid with a slash character.
- **Disable** (default). If disabled, the zero character does not have a slash character.

### Image Scale

- **Enable**. When enabled, images are scaled from TEC printer resolution (306 dpi) to the resolution of the TGL printer (300 dpi).
- **Disable** (default). If disabled, scaling will not take place, resulting in images that are 2% larger than images printed on the TEC printer. Printing is faster though, and the image keeps the right proportions.

### SFCC Select

Use this menu to select the SFCC, SFCC-Separator, and SFCC-Terminator sets.

- **Auto Select** (default). The printer selects the SFCC set based upon the received host data.
- **<ESC><LF><NULL>** Is a predefined set. The ESC character is the SFCC, the LF is the SFCC-Separator, and the NULL character is the SFCC-Terminator.
- **{ I }** is a predefined set. The { character is the SFCC, the I is the SFCC-Separator, and the } character is the SFCC-Terminator.
- **User Defined**. When you select User Defined, three additional menus appear in the tree. These menus allow the SFCC, SFCC-Separator, and SFCC-Terminator to be configured individually.

### SFCC

This menu is only present when “User Defined” is selected in the SFCC menu. Using this menu, the SFCC can be set to any value between 0x0 and 0xFF. The factory default is 0x7B.

### **SFCC Separator**

This menu is only present when “User Defined” is selected in the SFCC menu. SFCC-Separator can be set to any value between 0x0 and 0xFF. The factory default is 0x7C.

### **SFCC Terminator**

This menu is only present when “User Defined” is selected in the SFCC menu. SFCC-Terminator can be set to any value between 0x0 and 0xFF. The factory default is 0x7D.

### **EURO Symbol**

This menu allows you to configure the position of the EURO symbol in the code pages. EURO Symbol can be set to any value between 0x20 and 0xFF. The factory default is 0xB0.

### **Speed CMDs**

This option allows you to choose whether the engine commands that affect the print/feed speed should be processed or ignored. To adjust the print/feed speed through the front panel, use this menu to prevent the host commands from overriding these settings. When you select “Ignore,” TGL ignores the following commands or command parameters:

- The print speed parameter in the XS command. The parameter will have no effect; the “Print Speed” value as configured in the “MEDIA CONTROL” menu will be used.
- The feed speed parameter in the T command. The parameter will have no effect; the “Slew Speed” value as configured in the “MEDIA CONTROL” menu will be used.

The factory default is Process.

### **AY Intensity CMD**

This option allows you to choose whether the engine command to set the print intensity (AY) should be processed or ignored. If you want to adjust the print intensity through the front panel, use this menu to prevent the host commands from overriding these settings. When you select “Ignore,” the AY command will be ignored and “Print Intensity” as configured in the “MEDIA CONTROL” menu will be used.

The factory default is Process.

### **U1/U2 Move CMDs**

This option allows you to choose whether the engine command to move paper forward (U1) or backward (U2) will be processed or ignored. When you select “Ignore,” the paper will not be moved when either command is received.

The factory default is Process.

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### **XS Sensor Pram**

This option allows you to choose whether the sensor type parameter in the XS command will be processed or ignored. When you select "Ignore" TGL will use the sensor type as configured through "Gap/Mark Sensor" under the 'CALIBRATE CTRL" menu.

The factory default is Process.

### **XS Media 'C' Act**

This option defines which media mode TGL will operate on receipt of a 'C' (strip mode) for the issue mode parameter in the XS command. Any of the supported media modes can be selected. When you select "Ignore," TGL will use the issue mode as configured through "Media Handling" under the 'MEDIA CONTROL" menu.

The factory default is Continuous.

### **XS Media 'D' Act**

This option defines which media mode TGL will operate on receipt of a 'D' (stirp mode) for the issue mode parameter in the XS command. Any of the supported media modes can be selected. When you select "Ignore," TGL will use the issue mode as configured through "Media Handling" under the "MEDIA CONTROL" menu.

Tear-Off is the default for SL5000r/T5000r printers. Tear-Off Strip is the default for SL4M/T4M printers.

### **AR Pre-Feed CMD**

This option allows you to choose whether the engine command for a paper pre-feed (AR) should be processed or ignored. When you select "Ignore," the paper will not pre-feed.

The factory default is Process.

### **AX Fine Adj. CMD**

This option allows you to choose whether the engine command for a position fine adjust (AX) should be processed or ignored. When you select "Ignore," the paper will not fine-adjust.

The factory default is Process.

### Page Alignment

This menu is used to define the alignment of the image on the page. If set to Center, the image will be centered on the page, using the page width set in the configuration. For example, if the image is 4 inches wide, and the label width is 6 inches, a 1 inch margin is applied to the left and right sides of the image.

If set to Left the image will align to the left side. When the label is printed in portrait mode (top of label comes out first), the left side is the right side of the label when standing in front of the printer. If the label is printed in inverted portrait mode (bottom of label comes out first), left is also the left side of the label when standing in front of the printer.

If set to Right the image will align to the right side. When the label is printed in portrait mode (top of label comes out first), the right side is the left side of the label when standing in front of the printer. If the label is printed in inverted portrait mode (bottom of label comes out first), right is also the right side of the label when standing in front of the printer.

The factory default is Center.

### Vert. DPI Adjust

**NOTE:** Applies to SL4M/T4M printers only.

This option fine adjusts the resolution used to convert the coordinates of page elements (barcodes, font fields, graphic images, lines and boxes). The coordinates received from the host are in 1/10 mm and are converted to engine resolution (203 or 300 dpi). In cases where the printed image length is incorrect, the vertical resolution value TGL uses for calculations can be fine adjusted between -100 and +100. Negative values result in a lower DPI value and thus a longer image. Positive values result in a higher DPI value and thus a shorter image. Note that this adjustment does not affect the size of the fonts and barcodes, only the coordinates.

The factory default is 0.

### Status Response

This option selects when a status response is sent back to the host. This menu contains the following options:

- **Disable.** No status response will be sent to the host.
- **On Request Only.** A status response is sent to the host only after receiving the WS command.
- **On Request+Auto.** A status response is sent to the host after receiving the WS command, or automatically when specific conditions are met. See Appendix B on page 29 for details.

The factory default is Disable.

When this menu item is enabled (Set to 'On Request Only' or 'On Request+Auto'), Printronix PGL Windows Drivers cannot be utilized. For SL5000r/T5000r printers, the TN protocol cannot be utilized.

---

# 2 *Fully Supported Commands*

## **AR – Pre-Feed**

This legacy command sets the feed length in successive mode.

## **AX – Position Fine Adjustment**

This command configures the feed, cut/strip, and back feed distances.

## **AY – Print Density Fine Adjustment**

This command adjusts the print density.

## **C – Image Buffer Clear**

This command clears the image buffer.

## **D – Label Size Set**

This command defines the pitch, effective print width, and effective print length of a label in 1/10 mm units. Any label printed on continuous media will move the pitch length of media.

## **D..E – Label Length Set**

This legacy command defines the pitch and gap length of a label in 1/10 mm units. It does not define the label width. Any label printed on continuous media will move the pitch length of media.

## **IB – Eject**

This command ejects the current label.

## **J1 – Flash Format**

This command formats the sections in flash memory where the host data (through XO, XP commands) or bitmap graphic characters (through XD command) are stored.

## **LC – Line Format**

Using this command, lines or squares can be drawn in the drawing space. Coordinates are specified in 1/10 mm units. Squares can have rounded corners. If the radius is set higher than the square width and height, circles can be drawn.

### PC – Bitmap Font Format

This command formats bitmap font fields. The location coordinates are specified in 1/10 mm units. The font type can be set to any of the types listed in Table 1 **Error! Reference source not found.**. Attributes like expansion and everse can be applied. Data to be printed can be included in this command or supplied separately through the RC command.

Table 1.

Parameter	Font	Attributes	Size
A	Times Roman	medium	8 point
B	Times Roman	medium	10 point
C	Times Roman	bold	10 point
D	Times Roman	bold	12 point
E	Times Roman	bold	14 point
F	Times Roman	italic	12 point
G	Helvetica	medium	6 point
H	Helvetica	medium	10 point
I	Helvetica	medium	12 point
J	Helvetica	bold	12 point
K	Helvetica	bold	14 point
L	Helvetica	italic	12 point
M	Presentation	bold	18 point
N	Letter Gothic	medium	9.5 point
O	Prestige Elite	medium	7 point
P	Prestige Elite	medium	10 point
Q	Courier	medium	10 point
R	Courier	bold	12 point
S	OCR-A		12 point
T	OCR-B		12 point
01...40	Writable char. 1 ... Writable char. 40		1 x 1 dot to 720 x 720 dots

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## PV – Outline Font Format

This command formats outline (scalable) font fields. The location coordinates are specified in 1/10 mm units. The font type can be set to either a fixed pitch or a proportional font. The fonts are printed at the configured size in 1/10 mm units. Data to be printed can be included in this command or supplied separately through the RV command.

If a scalable font with Font-ID H, I, or J (as supported on newer TEC printers) is required, the font must be downloaded to the printer first. To ensure that the size and pitch matches the output of TEC printers, the font must be bought at [www.myfonts.com](http://www.myfonts.com), and converted to a Printronix download file using the `cnvt2fls` utility.

Use following table to select the correct font(s) and printer file name.

FontID	Font Name <a href="http://www.myfonts.com">www.myfonts.com</a>	Flash File
H	Dutch 801 BT (OpenType TTF)	Dutch801.ttf
I	Brush 738 (OpenType TTF)	Brush 738.ttf
J	Gothic 725 Black (OpenType TTF)	Gothic725.ttf

Usage of `cnvt2fls` utility: `cnvt2fls file_name1 file_name2 file_name3 A FONT <return>`

`file_name1`: Input file name to be converted from  
(the filename used by [myfonts.com](http://myfonts.com), e.g. `tt0013m_.ttf` )

`file_name2`: Output file name for file download  
(download filename e.g. `Dutch.dnl` )

`file_name3`: Flash file name (as shown in table above, e.g. `Dutch801.ttf` )

`hw_type`: Specify A.

`FONT`: Optional, specify FONT.

Place the printer in download mode and send the converted file (e.g. `Dutch.dnl`). The font will appear in the flash file system with the printer name (e.g. `Dutch801.ttf`), and can be used through the PV command.

## RB / rB – Barcode Data

This command supplies data for a barcode field configured by the XB command. The data will replace the data supplied with the XB command or with a preceding RB command.

## RC / rC – Bitmap Font Data

This command supplies data for a bitmap font field configured by the PC command. The data will replace the data supplied with the PC command or with a preceding RC command.

### **RV / rV – Outline Font Data**

This command supplies data for an outline font field configured by the PV command. The data will replace the data supplied with the PV command or with a preceding RV command.

### **SG – Graphic**

This command is used to draw graphics. The location and size of the image are specified in 1/10 mm units. Six modes are supported: Nibble mode (Overwrite), Hex mode (Overwrite), Bitmap (.BMP) mode, Topix Compression mode, Nibble mode (OR), and Hex mode (OR).

**NOTE:** A configuration setting (Scale Image) is provided to scale the images drawn with this command in order to exactly match the size of images on TEC printers (Scaling 306 > 300 dpi).

### **SG0 / SG1 – Graphic**

These are two legacy commands that were supported on older TEC models. The commands are used to draw graphics. The location of the image is specified in 1/10 mm units. The size is specified in multiples of 8 dots. For example, a width of 3 and a height of 2 will draw an image of 24 x 16 dots.

### **T – Feed**

This command feeds one label of the size set by the D command. Parameters specify the feed speed, sensor to be used, etc.

### **U1 / U2 – Forward/Reverse Feed**

This command moves the media forward (U1) or reverse (U2) over the specified distance in 1/10 mm units.

**NOTE:** On SL4M/T4M printers, the Backward Feed is limited to a maximum of 1 inch. Therefore the valid range for this parameter on the SL4M/T4M is 0030 to 0254 (in 0.1 mm units).

### **WS – Status Request Command**

This command tells the printer to send its own status to the host computer. The transmitted status is the current printer status, and indicates the latest status only. The remaining count indicates the remaining batch count currently being printed.

**NOTE:** The remaining batch count waiting to be printed is NOT transmitted.

Syntax: ESC WS LF NULL

Parameters: none

Response Format: See "Status Response" on page 29.

**NOTE:** The status request command is effective on serial (RS-232C) and Ethernet interfaces only. Since the status cannot be sent via the parallel interface (Centronics), this command is ignored.

After the code of the writable character command (XD) or the graphic command (SG) is received, the status request command is not processed until the printer receives the data type.



---

## **XB – Barcode Format**

This command formats barcode fields. The location coordinates are specified in 1/10 mm units. Many parameters of the barcode can be configured, such as bar and space widths, if and how the PDF must be printed, etc. The barcode types listed in Table 2 can be printed. Data to be printed can be included in this command or supplied separately through the RB command.

**Table 2. Barcode Types**

<b>Parameter</b>	<b>Type of Barcode</b>
0	JAN8, EAN8
1	MSI
2	Interleaved 2 of 5
3	CODE39 (standard)
4	NW7 (coda bar)
5	JAN13, EAN13
6	UPC-E
7	EAN13 + 2 digits
8	EAN13 + 5 digits
9	CODE128 (with auto code selection)
A	CODE128 (without auto code selection)
B	CODE39 (full ASCII)
C	CODE93
G	UPC-E + 2 digits
H	UPC-E + 5 digits
I	EAN8 + 2 digits
J	EAN8 + 5 digits
K	UPC-A
L	UPC-A+ 2 digits
M	UPC-A + 5 digits
N	UCC/EAN128
O	Industrial 2 of 5

Table 2. Barcode Types

Parameter	Type of Barcode
P	PDF417
Q	Data Matrix
T	QR
U	POSTNET (for US)
V	RM4SCC (for UK)
W	KIX CODE
X	MicroPDF417
Z	Maxicode
b	RSS

### **XD – Bitmap Writable Character**

This command downloads bitmap characters or logos into the flash memory of the printer. User-defined character sets 01 to 40 have been reserved for this. After downloading, the characters or logos can be printed through the PC/RC commands.

### **XJ – Message Display**

This command displays a message on the LCD of the printer's front panel. Since TEC printers have a 20-character display, and TGL printers have two lines of 16 characters each, any text exceeding 16 characters is word wrapped to the second line on the LCD. The message disappears when the ONLINE key is pressed.

### **XO – Save Start**

After this command is received, all subsequent commands will be stored in a file in flash memory until the save terminate command (XP) is received. The ID in this command specifies the file name. The files can later be loaded from flash and executed as host data using the XQ command.

### **XP – Save Terminate**

This command terminates the saving of data into a file in flash memory. Saving into a file is started through the XO command.

### **XQ – Saved Data Call**

This command loads a saved file from flash memory and executes it as host data. Files are saved in flash memory using the XO and XP commands.

---

### **XR – Clear Area**

This command clears or inverts a specified area in the drawing space. The area coordinates are specified in 1/10 mm units.

### **XS – Issue**

This command prints the label. Several parameters are provided which configure the print settings: speed, sensor type, and copy-count.

### **i / iN – Issue**

This legacy command prints the label. If N is provided, a copy count can be specified.



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# 3 *Ignored Commands*

## **HD – Head Broken Dots Check**

This command is used to check the print head for broken dots. This command is accepted but ignored, because TGL printers do not have the hardware facilities for checking the thermal head. On TEC printers, data processing is continued when no broken dots are found. The TGL emulation will always behave as if no broken dots were found.

## **RM – Ribbon Motor Drive Voltage Adjust**

This command is used to adjust the ribbon motor voltages. It is accepted but ignored, because TGL printers have a closed loop to control the motor voltages. Adjustment through host control is therefore not necessary.

## **WR – Reset**

This command resets the printer to its power-on state.



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# 4 *Command Enhancements And Differences*

## **J1 – Flash Format**

Similar to TEC printers, the flash files are removed, but the flash memory is not formatted. To reuse the flash memory, an optimize and reboot action is required.

## **~LI – Listen Mode**

This command is not supported on TEC printers. It allows the TGL emulation to become active again after it has been put in quiet mode through the ~QU command.

## **T – Feed**

The ribbon-saving function supported on TEC printers is not supported on TGL printers. Enabling ribbon-saving on TGL printers will therefore have no effect.

## **XB – Barcode**

The Japanese barcode types (parameter values R and S) are not supported in TGL.

## **XJ – Message Display**

Printronix printers have a 2x16 LCD whereas the TEC printer has a 1x20 LCD. Messages that are longer than 16 characters will wrap to the second line.

## **XS – Issue**

The ribbon-saving function supported on TEC printers is not supported on TGL printers. Enabling ribbon-saving on TGL printers will therefore have no effect.

## **~QU – Quiet Mode**

This command puts the TGL emulation in quiet mode, which allows for the printing of pure text until the listen command is received (~LI). In Quiet Mode TGL commands are ignored.





# A TGL Menu Conversions

When substituting a TEC B-470/870 model printer with a SL5000r/T5000r or SL4M/T4M printer, refer to the TGL conversion table below.

**Table 3: TGL Menu**

TEC B-470/870 Series	SL5000r/T5000r or SL4M/T4M with TGL Emulation
<p><b>PARAMETER SET MODE,</b>  <b>Feed Adjust</b> - (-50.0 to +50.0 MM) <b>+0.0 MM*</b>            - Feed length, fine adjustment. Adjusts vertical print position on label. (-) value moves the image down from the leading edge of the label. (+) value moves the image up toward the leading edge of the label.</p>	<p><b>SL5000r/T5000r: QUICK SETUP Menu</b>  <b>SL4M/T4M: MEDIA SETUP Menu</b>  <b>Ver Image Shift</b> - (-1 to+12.8") <b>0.0**</b>.</p> <p>Adjusts vertical print position on label. (-) value moves the image up toward the leading edge of the label. (+) value moves the image down from the leading edge of the label.</p>
<p><b>PARAMETER SET MODE,</b>  <b>Cut Adjust</b> - (-50.0 to +50.0 MM)<b>+0.0 MM -</b>            Cut or tear off strip position, fine adjustment. (-) value sets leading edge of label behind the tear bar. (+) value sets the leading edge of the label past the tear bar.</p>	<p><b>SL5000r/T5000r: QUICK SETUP Menu</b>  <b>Tear Off Adjust-</b> (-0.50 to+0.2) <b>0.00 Inch*</b>  <b>SL4M/T4M: MEDIA SETUP Menu</b>  <b>Paper Feed Shift</b> - (-0.50 to+12.8) <b>0.00 Inch*</b></p> <p>Adjusts Tear Off, Tear-Off Strip, Peel-Off &amp; Cut position in Inches or MM. (-) value sets leading edge of label behind tear bar. (+) value sets the leading edge of the label past the tear bar.</p>
<p><b>PARAMETER SET MODE,</b>  <b>Back Feed</b> - (-9.5 to +9.5 MM)  <b>+0.0 MM</b> - Adjusts vertical print position on label. (+) value moves the image down from the leading edge of the label. (-) value moves the image up toward the leading edge of the label.</p>	<p><b>SL5000r/T5000r: QUICK SETUP Menu</b>  <b>SL4M/T4M: MEDIA SETUP Menu</b>  <b>Ver Image Shift</b> - (-1 to+12.8") <b>0.0**</b>.</p> <p>Adjusts vertical print position on label. (+) value moves the image down from the leading edge of the label. (-) value moves the image up toward the leading edge of the label.</p>
<p><b>PARAMETER SET MODE,</b>  <b>X Adjust</b> - (-99.0 to +99.0 MM)  <b>+0.0 MM</b> - X axis (horizontal) print position, fine adjustment. (+) value shifts image left. (-) value shifts image right.</p>	<p><b>SL5000r/T5000r: QUICK SETUP Menu</b>  <b>SL4M/T4M: MEDIA SETUP Menu</b>  <b>Hor Image Shift</b> - (-1.0 to +1.0) <b>0.0**</b>.</p> <p>Adjusts image horizontally from left edge of label in inches. (+) value shifts image left. (-) value shifts image right.</p>

Table 3: TGL Menu

TEC B-470/870 Series	SL5000r/T5000r or SL4M/T4M with TGL Emulation
<p><b>PARAMETER SET MODE,</b>  <b>Tone Adjust &lt;T&gt;</b> - (-10 to +10) +0*.                      Darkness of image on label for Thermal Transfer printing (use of ribbon).</p>	<p><b>SL5000r/T5000r: QUICK SETUP Menu</b>  <b>SL4M/T4M: MEDIA SETUP Menu</b>  <b>Print Intensity</b> - (-15 to +15) -3*   <b>Print Mode</b> - (Transfer, Direct)</p>
<p><b>PARAMETER SET MODE,</b>  <b>Toner Adjust &lt;D&gt;</b> - (-10 to +10) +0*.                      Darkness of image on label for Direct Thermal printing (no ribbon).</p>	<p><b>SL5000r/T5000r: QUICK SETUP Menu</b>  <b>SL4M/T4M: MEDIA SETUP Menu</b>  <b>Print Intensity</b> - (-15 to +15) 0*   <b>Print Mode</b> - (Transfer, Direct)</p>
<p><b>PARAMETER SET MODE,</b>  <b>Font Code</b> - (PC-850* or PC-8)</p>	<p><b>TGL SETUP Menu,</b>  <b>Character Set</b> - (PC-850* or PC-8)</p>
<p><b>PARAMETER SET MODE,</b>  <b>Zero Font</b> - (0* or Ø) Selects 0 or slashed Ø.</p>	<p><b>TGL SETUP Menu,</b>  <b>Slash Zero</b> - (0* or Ø).</p>
<p><b>PARAMETER SET MODE,</b>  <b>Code</b> - (Auto*, ESC, LF, NUL or {   } )                      Selects the command code.</p>	<p><b>TGL SETUP Menu,</b>  <b>SFCC Select</b> - (Auto Select*, ESC, LF, NUL, User Defined or {   } )</p>
<p><b>PARAMETER SET MODE,</b>  <b>Ribbon</b> - (Trans. or Non-Trans*) -  <b>Non-Transmissive</b> - With ribbon                      Transmissive - Ribbon out</p>	<p><b>SL5000r/T5000r: QUICK SETUP Menu</b>  <b>SL4M/T4M: MEDIA SETUP Menu</b>  <b>Print Mode</b> - (Transfer* or Direct)</p>
<p><b>Auto Ribbon Save Function</b> - (Without*, With) – (Opt) Dip SW 1 (1)</p>	<p>N/A</p>
<p><b>Language</b> - Sets the display language.  <b>English*</b>, Spanish, French, German, Dutch, Japanese. Dip SW 1 (2-4)</p>	<p><b>SL5000r/T5000r: PRINTER CONTROL Menu</b>  <b>SL4M/T4M: PRINTER SETUP Menu</b>  <b>Display Language</b> - <b>English*</b>, Spanish, French, German, Italian, Portuguese.</p>
<p><b>Rewinder Use-</b> (Without*, With) Dip SW 1 (6)</p>	<p><b>Factory installed Option</b> - No menu selection required.</p>
<p><b>Baud Rate</b> - (9600*, 2400 - 19200) Dip SW 2 (1-2)</p>	<p><b>SERIAL PORT,</b>  <b>Baud Rate</b> - (9600*, 600 - 115200)</p>
<p><b>Stop Bits</b> – (1 bit* or 2 bits) Dip SW 2 (3)</p>	<p><b>SERIAL PORT,</b>  <b>Stop Bits</b> - 1* or 2</p>
<p><b>Word Length</b> – (7-bits* or 8-bits) Dip SW 2 (4)</p>	<p><b>SERIAL PORT,</b>  <b>Word Length</b> 7 or 8*</p>
<p><b>Parity Check</b> - (With* or Without) Dip SW 2 (5)</p>	<p><b>SERIAL PORT,</b>  <b>Parity</b> - (None*, Even, Odd)</p>

**Table 3: TGL Menu**

TEC B-470/870 Series	SL5000r/T5000r or SL4M/T4M with TGL Emulation
<b>Parity – (Even* or Odd) Dip SW 2 (6)</b>	<b>SERIAL PORT, Parity – (None*, Even, Odd)</b>
<b>Data Protocol – XON/XOFF*, Ready Busy (DTR), XON/XOFF +Ready Busy(DTR). DIP SW 2 (7-8)</b>	<b>SERIAL PORT, Data Protocol - (XON/XOFF*, ETX/ACK, ACK/NAK, Series 1 Char, Series 2 Char or DTR)</b>
<b>N/A</b>	<b>TGL SETUP Menu, Active - (Yes*, No) Yes - All data is parsed by the TGL emulation. Non-TGL data is absorbed. No – All non-TGL data prints.</b>
<b>N/A</b>	<b>TGL SETUP Menu, Image Scale - (Disable*, Enable) Enable - For SL5000r/T5000r, images are scaled from TEC printer resolution (306 dpi) to TGL resolution (300 dpi). For SL4M/T4M printers, images are scaled from TEC printer resolution (306 dpi) to TGL resolution (305 dpi). Disable - No scaling, resulting in 2% larger images on TGL printers vs TEC printers.</b>
<b>N/A</b>	<b>TGL SETUP Menu, EURO Symbol - (0x0 - 0xFF) 0XB0* Allows configuration position of _ symbol in the code pages.</b>
<b>N/A</b>	<b>TGL SETUP Menu, Speed CMDs - (Process*, Ignore) Process - Print speed in the XS command &amp; slew speed in the T command will be used and override the Media Control menu settings. Ignore - Print speed in the XS command &amp; slew speed in the T command will have no effect. The Media Control menu settings will be used instead.</b>
<b>N/A</b>	<b>TGL SETUP Menu, AY Intensity CMD - (Process*, Ignore) Process - Print Intensity via the AY command is used &amp; overrides the Quick Setup menu value (SL5000r/T5000r) or Media Setup menu value (SL4M/T4M). Ignore - Print Intensity via the AY command is ignored. Quick Setup menu value used instead.</b>

Table 3: TGL Menu

TEC B-470/870 Series	SL5000r/T5000r or SL4M/T4M with TGL Emulation
N/A	<p><b>TGL SETUP Menu,</b>  <b>U1/U2 Move CMDs - (Process*, Ignore)</b>  <b>Process</b> - U1 move media forward &amp; U2 move media backward cmds are used &amp; override the Quick Setup menu (SL5000r/T5000r) or Media Setup menu (SL4M/T4M) Ver Image Shift value.  <b>Ignore</b> - U1 and U2 commands are ignored and Quick Setup menu (SL5000r/T5000r) or Media Setup menu (SL4M/T4M) Ver Image Shift value is used.</p>
N/A	<p><b>TGL SETUP Menu,</b>  <b>XS Media 'D' Act - (Tear-Off*, Peel-Off, Ignore, Continuous, Tear-Off Strip)</b>  <b>Note:</b> Tear-Off is available for SL5000r/T5000r printers only and is the default value. Tear-Off is not available for SL4M/T4M printers. Tear-Off Strip is the default for SL4M/T4M.                      Uses the XS media 'D' command to select any of the Media Handling modes listed above  <b>Ignore</b> - The printer only uses the Media Handling mode selected in the Quick Setup menu (SL5000r/T5000r) or Media Setup menu (SL4M/T4M).</p>
N/A	<p><b>TGL SETUP Menu,</b>  <b>AR Pre-feed CMD - (Process*, Ignore)</b>  <b>Process</b> - Printer uses the media pre-feed AR command.  <b>Ignore</b> - Printer ignores the pre-feed AR command. Media is not pre-fed.</p>
N/A	<p><b>TGL SETUP Menu,</b>  <b>AX Fine Adj. CMD - (Process*, Ignore)</b>  <b>Process</b> - Position fine adjust AX command is acted on if received.  <b>Ignore</b> - Position fine adjust AX cmd is ignored if received. Media will not be fine adjusted.</p>

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# B *Status Response*

## **Serial And Ethernet Interface**

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### 1. Auto Status Response

The Auto Status Response feature is enabled or disabled by the status response parameter in the XS command.

Once an XS command enables the Auto Status Response feature, it will stay enabled until another XS command disables it. The status response menu defines whether the Auto Status Response after power up must be enabled or disabled. If set to 'On Request+Auto', Auto Status Response is enabled until disabled by an XS command.

If the Auto Status Response is enabled, a response will be sent to the host

- after processing the Issue (XS) command when
  - the Issue Mode parameter is set to Batch Mode, after printing the designated number of labels.
  - the Issue Mode parameter is set to Strip Mode, after printing one label.
- at the end of the Feed (T) command.
- if one of the errors listed in the table below occurs.

### 2. On Status Request command ( WS-command )

The Status Request command is enabled by selecting either the On Request Only or the On Request + Auto option in the TGL SETUP > Status Response menu. The printer sends its current status to the host, regardless of the option "status response" in the label issue command (XS). The remaining count indicates the remaining number of labels in the current batch.

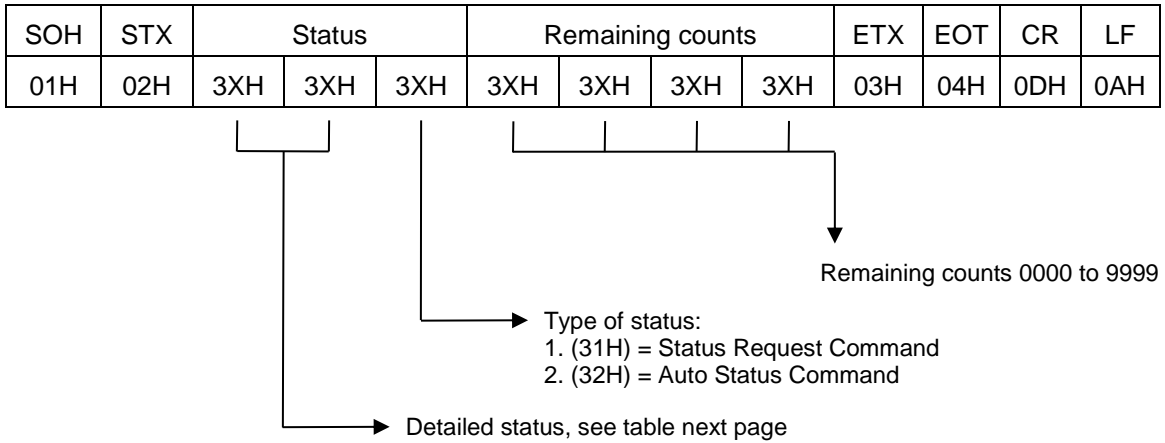


Figure 1. Format Status Response

Table 4. Status Response (not saving writable characters to flash)

LCD Message	Printer Status	Auto Status Transmission	Status Request Command
On line	Idle	X	00
Head open	The head was opened in online mode	01	01. See Note on page 31.
On line	In operation (analyzing, drawing, printing, feeding)	X	02
Pause	In pause	X	04. See Note on page 31.
On line	Waiting for stripping	X	05
On line	Command error found during analyzing	06	06. See Note on page 31.
Communication error	Parity, overrun, framing error occurred during serial comm.	07	07. See Note on page 31.

**Table 4. Status Response (not saving writable characters to flash)**

<b>LCD Message</b>	<b>Printer Status</b>	<b>Auto Status Transmission</b>	<b>Status Request Command</b>
Paper jam	Paper jam occurred during paper feed	11	11. See Note on page 31.
Cutter error	Fault condition in the cutter	12	12. See Note on page 31.
No paper	The label has run out	13	13. See Note on page 31.
No ribbon	The ribbon has run out	14	14. See Note on page 31.
Head open	An attempt was made to feed or issue with the head open	15	15. See Note on page 31.
Excessive head temperature	The thermal head temperature has become excessively high.	18	18. See Note on page 31.
Ribbon error	Fault condition in ribbon transport	21	21. See Note on page 31.
Rewind full	Overflow in the rewinder	22	22 See Note on page 31.
On line	No error in label issue	40	X
On line	No error in feed	41	X
<p><b>NOTE:</b> This status will not be sent out if the serial interface is used. Other than on TEC printers, Printronix printers will go offline when an error occurs, and therefore prevent the host computer from sending status request commands.</p>			

**Table 5. Status Response in Save Mode (saving writable characters to flash)**

LCD Message	Printer Status	Auto Status Transmission	Status Request Command
Save mode	Saving downloadable characters or labels	X	55
Flash write error	Error in writing to flash	50	50 See Note on page 32
Format error	Error in erasing flash	51	51 See Note on page 32
Flash memory full	Insufficient capacity of the flash memory	54	54 See Note on page 32
On line	Command error found during analyzing	06	06 See Note on page 32
Communication error	Parity, overrun, framing error occurred during serial comm.	07	07 See Note on page 32
<p><b>NOTE:</b> This status will not be sent out if the serial interface is used. Other than on TEC printers, Printronix printers will go offline when an error occurs, and therefore prevent the host computer from sending status request commands.</p>			



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# C *Contact Information*

## **Printronix Customer Support Center**

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**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:

Thermal Printer

See "Printing A Configuration" in the *User's Setup Guide*.

Line Matrix Printer

Press PRT CONFIG on the control panel, then press Enter.

- 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)

Americas (714) 368-2686

Europe, Middle East, and Africa (31) 24 6489 410

Asia Pacific (65) 6548 4114

China (86) 800-999-6836

<http://www.primtronix.com/public/support.aspx>

## Printronix Supplies Department

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Contact the Printronix Supplies Department for genuine Printronix supplies.

Americas	(800) 733-1900
Europe, Middle East, and Africa	33 (0) 1 46 25 19 07
Asia Pacific	(65) 6548 4116 or (65) 6548 4182
China	(86) 400-886-5598
India	(800) 102-7869

<http://www.printronix.com/supplies-parts.aspx>

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