PRINTRONIX®
AUTO ID

TEC ® Printer Protocol Interpreter

Programmer's Reference Manual

Thermal Series Printers

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1 *Introduction*

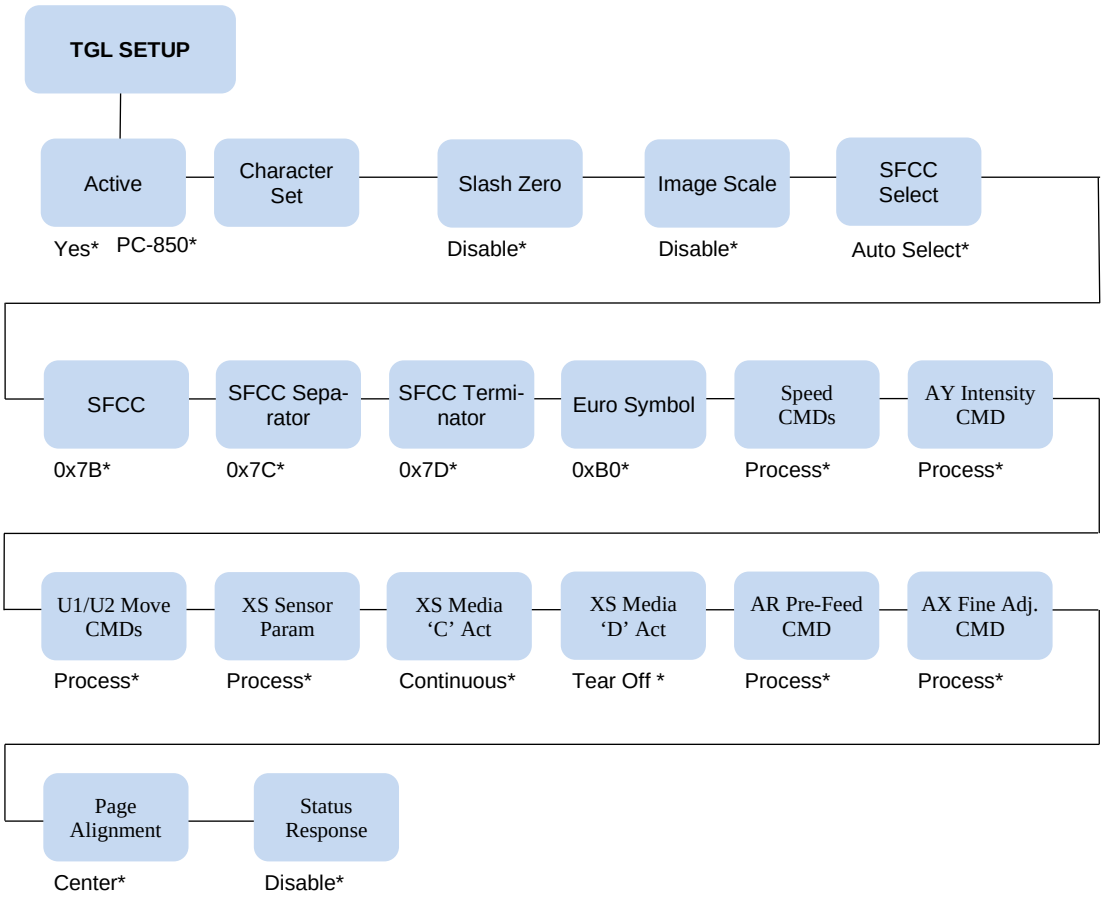
About This Manual

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

NOTE: When substituting a TEC B-470/870 model printer with a PSA 4 Printronix thermal printer, refer to TGL Menu Conversions on page 23.

TGL SETUP Menus

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



TGL SETUP Menus

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

Application > TGL Setup > Active	
This option selects the Special Function Control Code. Run a configuration printout to determine the currently selected SFCC.	
Yes	When enabled, all data is parsed by the TGL emulation Non-TGL data is absorbed.
No	When disabled, non-TGL text data prints.
Factory Default	Yes

Application > TGL Setup > Character Set		
This option will Selects the legacy TGL character set.		
Character Set	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 Latin-9
Factory Default	PC-850	

Application > TGL Setup > Slash Zero	
Determines if the Zero character will have a diagonal slash through it when printed.	
Disable	If disabled, the zero character does not have a slash character.
Enable	When enabled, the zero character is overlaid with a slash character.
Factory Default	Disable

Application > TGL Setup > Image Scale	
Determines if scaling will take place with regards to positioning the graphic elements in order to obtain greater compatibility with TEC printers.	
Disable	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
Enable	When enabled, images are scaled from TEC printer resolution (306 dpi) to the resolution of the TGL printer (300 dpi).
Factory Default	Disable

Application > TGL Setup > SFCC Select	
Use this menu to select the SFCC, SFCC-Separator, and SFCC-Terminator sets.	
Auto Select	The printer selects the SFCC set based upon the received host data.
<ESC><LF> <NULL>	A predefined set. The ESC character is the SFCC, the LF is the SFCC-Separator, and the NULL character is the SFCC-Terminator.
{|}	A predefined set. The { character is the SFCC, the I is the SFCC-Separator, and the } character is the SFCC-Terminator.
User Defined	is a predefined set. The { character is the SFCC, the I is the SFCC-Separator, and the } character is the SFCC-Terminator.
Factory Default	Auto Select

Application > TGL Setup > SFCC	
This menu is only present when “User Defined” is selected in the SFCC menu.	
Minimum	0x00
Maximum	0xFF
Factory Default	0x7B

Application > TGL Setup > SFCC Separator	
This menu is only present when “User Defined” is selected in the SFCC menu.	
Minimum	0x00
Maximum	0xFF
Factory Default	0x7C

Application > TGL Setup > SFCC Terminator	
This menu is only present when “User Defined” is selected in the SFCC menu.	
Minimum	0x00
Maximum	0xFF
Factory Default	0x7D

Application > TGL Setup > EURO Symbol	
This menu allows you to configure the position of the EURO symbol in the code pages.	
Minimum	0x20
Maximum	0xFF
Factory Default	0xB0

Application > TGL Setup > 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.	
Ignore	When you select “Ignore,” TGL ignores the following commands or command parameters: (1) The print speed parameter in the XS command. The parameter will have no effect; the “Print Speed” value as configured in *Media* > *Speed* > *Print Speed* will be used. (2) The feed speed parameter in the T command. The parameter will have no effect; the “Slew Speed” value *Media* > *Speed* > *Slew Speed* will be used.
Process	Parameters will be processed and change the MEDIA menu commands appropriately.
Factory Default	Process

Application > TGL Setup > 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 only, use this menu to prevent the host commands from overriding these settings.	
Ignore	When you select “Ignore,” the AY command will be ignored and *Media* > *Image* > *Print Intensity* will be used.
Process	The AY command will be processed.
Factory Default	Process

Application > TGL Setup > U1/U2 Move CMDs	
This option allows you to choose whether the engine commands to move paper forward (U1) or backward (U2) will be processed or ignored.	
Ignore	When you select “Ignore,” the paper will not be moved when either command is received.
Process	The commands will be processed.
Factory Default	Process

Application > TGL Setup > XS Sensor Param	
This option allows you to choose whether the sensor type parameter in the XS command will be processed or ignored.	
Ignore	When you select “Ignore” TGL will use the sensor type as configured through *Sensors* > *Control* > *Gap/Mark Sensor*.
Process	The XS sensor type parameter will be processed.
Factory Default	Process

Application > TGL Setup > 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.	
Continuous	Continuous media mode will be operated on.
Tear-Off Strip	Tear-Off Strip media mode will be operated on.
Tear Off	Tear-Off media mode will be operated on.
Peel Off	Peel Off media mode will be operated on.
Ignore	When you select “Ignore,” TGL will use the issue mode as configured through *Media* > *Handling* > *Media Handling*.
Factory Default	Continuous

Application > TGL Setup > XS Media ‘D’ Act	
This option defines which media mode TGL will operate on receipt of a ‘D’ (strip mode) for the issue mode parameter in the XS command. Any of the supported media modes can be selected.	
Continuous	Continuous media mode will be operated on.
Tear-Off Strip	Tear-Off Strip media mode will be operated on.
Tear Off	Tear-Off media mode will be operated on.
Peel Off	Peel Off media mode will be operated on.
Ignore	When you select “Ignore,” TGL will use the issue mode as configured through *Media* > *Handling* > *Media Handling*.
Factory Default	Tear Off

Application > TGL Setup > 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.	
Ignore	The paper will not pre-feed.
Process	The engine command will be processed.
Factory Default	Process

Application > TGL Setup > AX Fine Adj. CMD	
This option allows you to choose whether the command AX to fine adjust feed, cut and back feed positions should be processed or ignored.	
Ignore	The command will be ignored
Process	The command will be processed.
Factory Default	Process

Application > TGL Setup > Page Alignment	
This menu is used to define the alignment of the image on the page.	
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.
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.
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.
Factory Default	Center

Application > TGL Setup > Status Response	
This option selects when a status response is sent back to the host.	
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 Only	A status response is sent to the host after receiving the WS command, or automatically when specific conditions are met. See *TGL Programmer's Reference Manual* for details.
Factory Default	Disable
IMPORTANT	When this menu item is enabled (Set to 'On Request Only' or 'On Request+Auto'), Printronix PGL Windows Drivers or 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. Attributes like expansion and reverse 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
q	Gothic 725 Black	Medium	Note: to print this font, download font Gothic725.ttf first. See command PV on the next page.
01…40	Writable char. 1 … Writable char. 40		1 x 1 dot to 720 x 720 dots

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, 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 www.myfonts.com	Flash File
H	Dutch 801 BT (OpenTtype TTF)	Dutch801.ttf
I	Brush 738 (OpenTtype TTF)	Brush 738.ttf
J	Gothic 725 Black (OpenTtype 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, 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: The Backward Feed may be limited to a smaller value based on the limitation of the printer. Check the *Administrator's Manual* for details.

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 26.

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

Parameter	Type of Barcode
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
P	PDF417
Q	Data Matrix
T	QR
U	POSTNET (for US)
V	RM4SCC (for UK)

Table 2 Barcode Types

Parameter	Type of Barcode
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.

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.

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 PSA 4 Printronix thermal printer, refer to the TGL conversion table below. The ranges allowed in the TGL emulation will depend on the capabilities of the printer. Please refer to the *Administrator's Manual* for specific range values.

Table 3 TGL Menu

TEC B-470/870 Series	TGL Emulation
PARAMETER SET MODE, **Feed Adjust** - (-50.0 to +50.0 MM) **+0.0 MM*** - 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.	***Media > Image > Vertical Shift*** - **0.0***. 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.
PARAMETER SET MODE, **Cut Adjust** - (-50.0 to +50.0 MM)**+0.0 MM -** 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.	***Media > Image > Paper Feed Shift*** **- 0.00 Inch*** Adjusts Tear Off, Tear-Off Strip, Peel-Off & 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.
PARAMETER SET MODE, **Back Feed** - (-9.5 to +9.5 MM) **+0.0 MM** - 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.	***Media > Image > Vertical Shift*** - **0.0***. 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.
PARAMETER SET MODE, **X Adjust** - (-99.0 to +99.0 MM) **+0.0 MM** - X axis (horizontal) print position, fine adjustment. **(+)** value shifts image left. **(-)** value shifts image right.	***Media > Image > Horizontal Shift*** **-** (-1.0 to +1.0) **0.0"***. Adjusts image horizontally from left edge of label in inches. **(+)** value shifts image left. **(-)** value shifts image right.
PARAMETER SET MODE, **Tone Adjust <T> -** (-10 to +10) **+0***. Darkness of image on label for Thermal Transfer printing (use of ribbon).	***Media > Image > Print Intensity*** **-** (-15 to +15) **-3*** ***Media > Handling > Print Mode*** **-** (**Transfer,** Direct)
PARAMETER SET MODE, **Toner Adjust <D>** - (-10 to +10) **+0***. Darkness of image on label for Direct Thermal printing (no ribbon).	***Media > Image > Print Intensity*** **-** (-15 to +15) **0*** ***Media > Handling > Print Mode*** **-** (Transfer, **Direct**)
PARAMETER SET MODE, **Font Code** - **(PC-850*** or **PC-8)**	***Application > TGL Setup > Character Set*** **- (PC-850*** or **PC-8)**

Table 3 TGL Menu

TEC B-470/870 Series	TGL Emulation
PARAMETER SET MODE, **Zero Font** - (**0*** or Ø) Selects 0 or slashed Ø.	***Application > TGL Setup*** **> Slash Zero - (0*** or Ø**).**
PARAMETER SET MODE, **Code -** (**Auto*,** ESC, LF, NUL or { | }) Selects the command code.	***Application > TGL Setup > SFCC Select*** **- (Auto Select***, ESC, LF, NUL, User Defined or { | }**)**
PARAMETER SET MODE, **Ribbon** - (Trans. or **Non-Trans***) **-** **Non-Transmissive -** With ribbon Transmissive - Ribbon out	***Media > Handling > Print Mode*** - (**Transfer*** or Direct)
Auto Ribbon Save Function - (**Without*,** With) **– (Opt) Dip SW 1 (1)**	**N/A**
Language - Sets the display language. **English***, Spanish, French, German, Dutch, Japanese. **Dip SW 1 (2-4)**	***System > Control > Display Language*** **- English***, Spanish, French, German, Italian, Portuguese.
Rewinder Use- (**Without*,** With) **Dip SW 1 (6)**	**Factory installed Option -** No menu selection required.
Baud Rate - (**9600*,** 2400 - 19200) **Dip SW 2 (1-2)**	***Host IO > Serial > Baud Rate*** **-** (**9600***, 600 - 115200)
Stop Bits – (**1 bit*** or 2 bits) **Dip SW 2 (3)**	***Host IO > Serial > Stop Bits*** **- 1*** or 2
Word Length – (**7-bits*** or 8-bits) **Dip SW 2 (4)**	***Host IO > Serial > Word Length*** - 7 or **8***
Parity Check - (**With*** or Without) **Dip SW 2 (5)**	***Host IO > Serial > Parity*** **-** (**None***, Even, Odd)
Parity – (**Even*** or Odd) **Dip SW 2 (6)**	***Host IO > Serial > Parity*** **–** (**None***, Even, Odd)
Data Protocol – XON/XOFF*, Ready Busy (DTR), XON/XOFF +Ready Busy(DTR). **DIP SW 2 (7-8)**	***Host IO > Serial > Data Protocol*** **-** **(XON/XOFF*,** ETX/ACK, ACK/NAK, Series 1 Char, Series 2 Char or DTR)
N/A	***Application > TGL SETUP > Active*** **-** (**Yes***, No) **Yes** - All data is parsed by the TGL emulation. Non-TGL data is absorbed. **No** – All non-TGL data prints.
N/A	***Application > TGL SETUP > Image Scale*** **-** (**Disable***, Enable) **Enable** - Images are scaled from TEC printer resolution (306 dpi) to the actual printer resolution. **Disable** - No scaling, resulting in 2% larger images on TGL printers vs TEC printers.
N/A	***Application > TGL SETUP > EURO Symbol*** **-** (0x0 - 0xFF) **0XB0*** Allows configuration position of _ symbol in the code pages.

Table 3 TGL Menu

TEC B-470/870 Series	TGL Emulation
N/A	***Application > TGL SETUP > Speed CMDs -*** (**Process***, Ignore) **Process** - Print speed in the XS command & slew speed in the T command will be used and override the *Media* menus. **Ignore** - Print speed in the XS command & slew speed in the T command will have no effect. The *Media* menus will be used instead.
N/A	***Application > TGL SETUP > AY Intensity CMD -*** (**Process***, Ignore) **Process** - Print Intensity via the AY command is used & overrides the *Media* menus. **Ignore** - Print Intensity via the AY command is ignored. *Media* menu values are used instead.
N/A	***Application > TGL SETUP > U1/U2 Move CMDs -*** (**Process***, Ignore) **Process** - U1 move media forward & U2 move media backward cmds are used & override the *Media* > *Image* > *Vertical Shift* value. **Ignore** - U1 and U2 commands are ignored and the *Media* > *Image* > *Vertical Shift* value is used.
N/A	***Application > TGL SETUP > XS Media 'D' Act -*** (**Tear-Off***, Peel-Off, Ignore, Continuous, Tear-Off Strip) Uses the XS media 'D' command to select any of the Media Handling modes listed above **Ignore** - The printer only uses the *Media* > *Handling* > *Media Handing* menu selection.
N/A	***Application > TGL SETUP > AR Pre-feed CMD -*** (**Process***, Ignore) **Process** - Printer uses the media pre-feed AR command. **Ignore** - Printer ignores the pre-feed AR command. Media is not pre-fed.
N/A	***Application > TGL SETUP > AX Fine Adj. CMD -*** (**Process***, Ignore) **Process** - Position fine adjust AX command is acted on if received. **Ignore** - Position fine adjust AX cmd is ignored if received. Media will not be fine adjusted.

B *Status Response*

Serial and Ethernet Interface

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 *Application* > *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.

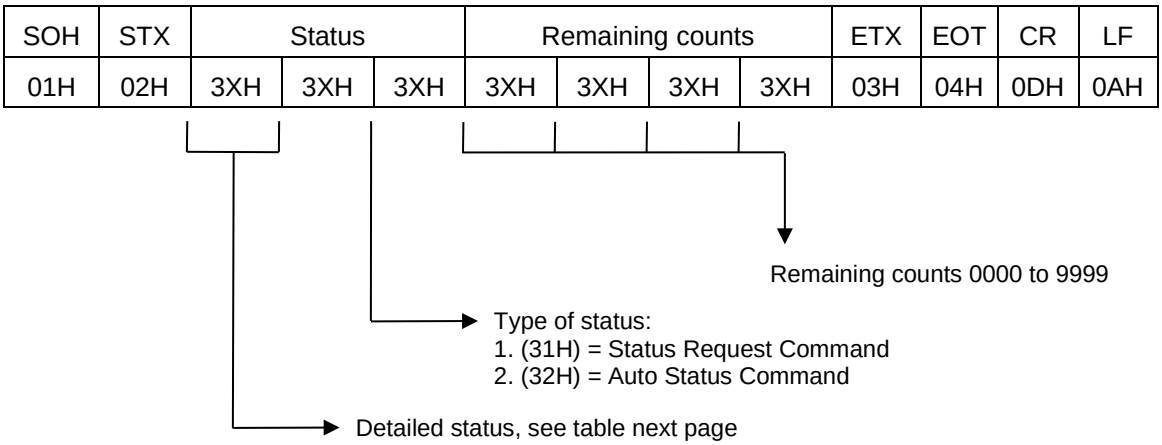


Figure 1 Format Status Response

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 28.
On line	In operation (analyzing, drawing, printing, feeding)	X	02
Pause	In pause	X	04. See Note on page 28.
On line	Waiting for stripping	X	05
On line	Command error found during analyzing	06	06. See Note on page 28.
Communication error	Parity, overrun, framing error occurred during serial comm.	07	07. See Note on page 28.
Paper jam	Paper jam occurred during paper feed	11	11. See Note on page 28.
Cutter error	Fault condition in the cutter	12	12. See Note on page 28.

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

LCD Message	Printer Status	Auto Status Transmission	Status Request Command
No paper	The label has run out	13	13. See Note on page 28.
No ribbon	The ribbon has run out	14	14. See Note on page 28.
Head open	An attempt was made to feed or issue with the head open	15	15. See Note on page 28.
Excessive head temperature	The thermal head temperature has become excessively high.	18	18. See Note on page 28.
Ribbon error	Fault condition in ribbon transport	21	21. See Note on page 28.
Rewind full	Overflow in the rewinder	22	22 See Note on page 28.
On line	No error in label issue	40	X
On line	No error in feed	41	X

NOTE: 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.

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 29
Format error	Error in erasing flash	51	51 See Note on page 29
Flash memory full	Insufficient capacity of the flash memory	54	54 See Note on page 29
On line	Command error found during analyzing	06	06 See Note on page 29
Communication error	Parity, overrun, framing error occurred during serial comm.	07	07 See Note on page 29
NOTE: 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.			

C Contact Information

Printronix Auto ID 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 pictures that clearly show the problem (faxing or emailing of these pictures may be required)

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