

**Serial-Matrix PCL3 Emulation Commands:
HP 2934A, HP Rugged Writer(HP2235A) and TallyGenicom T2265**

Command	ESC sequence	HP 2934A	Tally PCL3 T2265/T2280	HP Rugged Writer (HP2235A)
FONT CONTROL				
Set #ID as Primary Character Set	ESC (#ID	X	X	X
Set #ID as Secondary Character Set	ESC) #ID	X	X	X
Primary Set to Logical – Math	ESC (A	X		
Secondary Set to Logical - Math	ESC) A	X		
Primary Set to Logical – Line Drawing	ESC (B	X		
Secondary Set to Logical – Line Drawing	ESC) B	X		
Primary Set to ISO Denmark/Norway	ESC (0 D	X	X	X
Secondary Set to ISO Denmark/Norway	ESC) 0 D	X	X	X
Primary Set to Roman Extension	ESC (0 E	X		
Secondary Set to Roman Extension	ESC) 0 E	X		
Primary Set to ISO United Kingdom	ESC (1 E	X	X	
Secondary Set to ISO United Kingdom	ESC) 1 E	X	X	
Primary Set to France	ESC (0 F	X	X	
Secondary Set to France	ESC) 0 F	X	X	
Primary Set to ISO Germany	ESC (0 G	X	X	
Secondary Set to ISO Germany	ESC) 0 G	X	X	
Primary Set to Greek8	ESC (8 G	X		
Secondary Set to Greek8	ESC) 8 G	X		
Primary Set to Hebrew7	ESC (0 H	X		
Secondary Set to Hebrew7	ESC) 0 H	X		
Primary Set to Hebrew8	ESC (8 H	X		
Secondary Set to Hebrew8	ESC) 8 H	X		
Primary Set to Italian	ESC (0 I	X	X	
Secondary Set to Italian	ESC) 0 I	X	X	
Primary Set to JASCII	ESC (0 K	X		
Secondary Set to JASCII	ESC) 0 K	X		
Primary Set to Katakana	ESC (1 K	X		
Secondary Set to Katakana	ESC) 1 K	X		
Primary Set to Katakana-8	ESC (8 K	X		
Secondary Set to Katakana-8	ESC) 8 K	X		
Primary Set to Line Draw	ESC (0 L	X		X
Secondary Set to Line Draw	ESC) 0 L	X		
Primary Set to Math Symbols	ESC (0 M	X		
Secondary Set to Math Symbols	ESC) 0 M	X		
Secondary Set to ECMA-94 Latin 1	ESC) 0 N			X
Primary Set to OCR-A	ESC (0 O	X	X	
Secondary Set to OCR-A	ESC) 0 O	X	X	
Primary Set to OCR-B	ESC (1 O	X	X	
Secondary Set to OCR-B	ESC) 1 O	X	X	
Primary Set to Orator-A	ESC (0 Q	X		
Secondary Set to Orator-A	ESC) 0 Q	X		
Primary Set to ISO Sweden/Finland	ESC (0 S	X	X	
Secondary Set to ISO Sweden/Finland	ESC) 0 S	X	X	
Primary Set to ISO Spain	ESC (1 S	X	X	
Secondary Set to ISO Spain	ESC) 1 S	X	X	
Primary Set to Turkish8	ESC (8 T	X		
Secondary Set to Turkish8	ESC) 8 T	X		
Primary Set to USASCII	ESC (0 U	X	X	
Secondary Set to USASCII	ESC) 0 U	X	X	
Primary Set to HPL	ESC (5 U	X		
Secondary Set to HPL	ESC) 5 U	X		
Primary Set to Roman-8	ESC (8 U	X		X
Secondary Set to Roman-8	ESC) 8 U	X		

Primary Set to PC8-US	ESC (10 U			X
Primary Set to PC8-Denmark	ESC (11 U			X
Primary Set to Arabic8	ESC (8 V	X		
Secondary Set to Arabic8	ESC) 8 V	X		
Primary Set to All Blanks	ESC (0 Z	X		
Secondary Set to All Blanks	ESC) 0 Z	X		
Primary Default set to Primary	ESC (0 @	X		
Secondary Default set to Secondary	ESC) 0 @	X		
Primary Default set to Primary	ESC (1 @	X		
Secondary Default set to Secondary	ESC) 1 @	X		
Current Primary set to Primary	ESC (2 @	X		
Current Secondary set to Secondary	ESC) 2 @	X		
Set Pitch to 10 CPI	ESC & k 0 S	X	X	X
Set Pitch to 5 CPI	ESC & k 1 S	X	X	X
Set Pitch to 16.7 CPI	ESC & k 2 S	X	X	X
Set Pitch to 12 CPI	ESC & k 4 S	X	X	X
Select Proportional Spacing	ESC & K 9 S	X	X	
Select Primary Print Pitch	ESC (s # H	X	X	X
Select Secondary Print Pitch	ESC) s # H	X	X	
Primary Character Set Proportional Spacing	ESC (s # P	X	X	X
Secondary Char Set Proportional Spacing	ESC) s # P	X	X	
Primary Character Set Density	ESC (s # Q	X	X	
Secondary Character Set Density	ESC) s # Q	X	X	
Primary Character Set Style	ESC (s # S	X	X	X
Secondary Character Set Style	ESC) s # S	X	X	
Primary Character Set Typeface	ESC (s # T	X	X	
Secondary Character Set Typeface	ESC) s # T	X	X	
BOLD OR EMPHASIZED				
Disable Stroke Weight – Normal	ESC (s 0 B			X
Enable – Bold	ESC (s 3 B			X
Enable – Emphasized Print	ESC (s 7 B			X

UNDERLINE				
Enable Underline	ESC & d D	X	X	X
Disable Underline	ESC & d @	X	X	X
Enable Underline	84 hex		X	
Disable Underline	80 hex		X	

SUB/SUPERSCRIPTS				
Begin Subscript	ESC (s -1 U			X
Begin Superscript	ESC (s 1 U			X
Resume Normal Printing	ESC (s 0 U			X
SELECTING CHARACTER SETS				
Select Typeface – Courier	ESC (s 3 T	X	X	X
Select Typeface – Line Printer	ESC (s 0 T	X	X	X
Select Typeface – Gothic	ESC (s 6 T	X	X	X
Select Typeface – Prestige Elite	ESC (s 8 T	X	X	X
Select Typeface – Times Roman	ESC (s 5 T		X	X
Select Typeface – Helvetica	ESC (s 4 T	X	X	X
Select Draft Quality	ESC (s 0 Q		X	X
Select Letter Quality	ESC (s 2 Q		X	X
Character Height – 12 point	ESC (s 12 V		X	
Character Height – 8 point	ESC (s 8 V		X	

GRAPHICS				
Transfer One Raster Row	ESC * b # W	X	X	X
Temporary X Offset	ESC * b # X			X
Temporary Y Offset	ESC * b # Y			X
Raster Graphics On	ESC * r # A	X	X	X
Raster Graphics Off	ESC * r # B	X	X	X
Raster Graphics Density	ESC * t # R			
Specify Raster Width	ESC * r # S			X
Set Graphics Resolution to 90 DPI	ESC * t 90 R			X
Set Graphics Resolution to 180 DPI	ESC * t 180 R			X
PRINT POSITIONING				
Define VMI	ESC & l # C			X
Perform Half Line Feed	ESC =	X	X	X
Set Vertical Spacing to # LPI	ESC & l # D	X	X	X
Vertical Forms Control	ESC & l # V	X	X	
Vertical Position – Dots	ESC * p # Y			X
Vertical Position – Decipoints	ESC & a [+/-] # V	X	X	X
Move to Row	ESC & a [+/-] # R	X	X	X
Define HMI	ESC & k # H			X
Horizontal Position – Dots	ESC * p # X			X
Horizontal Position – Decipoints	ESC & a # H	X	X	X
Move to Column	ESC & a # C	X	X	X
PAGE FORMAT				
Define Text Length	ESC & l # F	X	X	X
Define Page Length	ESC & l # P	X	X	X
Enable Perf Skip	ESC & l # L	X	X	X

TABS				
Set Horz Tab at Current Pos.	ESC 1	X	X	
Clear Horz Tab at Current Pos.	ESC 2	X	X	
Clear All Horz Tabs	ESC 3	X	X	
Horizontal Tab	ESC I	X	X	
Set Horz Tab at Absolute Column	ESC & a # T	X	X	
Clear Horz Tab at Absolute Column	ESC & a # U	X	X	
Set/Clear Vert. Tab at Current Row	ESC & I # M	X	X	
Clear Vert. Tab at Absolute Row	ESC & I # R	X	X	
Set Vert. Tab at Absolute Row	ESC & 1 # Y	X	X	
MARGINS				
Set Left Margin at Current	ESC 4	X	X	
Set Right Margin at Current	ESC 5	X	X	
Clear Margins	ESC 9	X	X	X
Set Left Margin	ESC & a # L	X	X	X
Set Right Margin	ESC & a # M	X	X	X
Set Top Margin	ESC & I # E			X
PAPER PATH CONTROL				
Eject Current Page	ESC & I 0 H			X
Feed from Sheet Feeder	ESC & I 1 H			X
Feed from Handfed Path	ESC & I 2 H			X
Feed from Tractor	ESC & I -1 H			X

CHARACTER & FONT DOWNLOAD				
Copy ROM to RAM	ESC * c 6 F			X
Delete Character	ESC * c 3 F			X
Download One Character	ESC (s # W			X
Define New Font	ESC) s # W			X
Set Character Code	ESC * c # E			X
Clear RAM Font	ESC * c # F			X
Download Primary Font	ESC (0 X			X
Download Secondary Font	ESC) 0 X			X
DISPLAY FUNCTIONS MODE				
Enable Display Functions	ESC Y	X	N/A	X
Disable Display Functions	ESC Z	X	N/A	X
MISCELLANEOUS				
Printer Reset	ESC E	X	X	X
Perform Self Test	ESC z	X	X	X
Serial I/O Status Request	ESC ?	X	X	
Request I/O Status	ESC ? DC1	X	X	X
Primary Status Request	ESC ^ DC1	X	X	
Modem Disconnect	ESC f	X	N/A	
Off-line	ESC o	X	X	
Transparent Print Data	ESC & p # X	X	N/A	X
Line by Line Enhanced Control	ESC & k 0 E	X	N/A	X
SI SO Control	ESC & k # F	X	N/A	X
Select Line Terminator	ESC & k # G	X	X	X
Enable Wrap-around Mode	ESC & s 0 C			X
Disable Wrap-around Mode	ESC & s 1 C			X
Mode Enhancement Control	ESC & k 1 E	X	N/A	X
Mode Basis (Default) SI SO	ESC & k 1 F	X	N/A	X
Enable View Mode	ESC & k 0 V			X
Disable View Mode	ESC & k 1 V			X
Request Model Number	ESC * r k	X	N/A	X
Return Model Number	ESC * s ^	X	N/A	
Return Model Number	ESC * s 1 ^	X	N/A	
Auto Centering & Justification	ESC & l # J	X	X	
Enable/Disable Loopback Mode	ESC - c # T	X	N/A	
Ignore UEL sequence	ESC % - 1 2 3 4 5 X		X	
BLOCK CHARS				
Absolute Column (LCP)	ESC * c # C	X	X	
Char size (norm/double)	ESC * c # M	X	X	
Move to Next tab (LCP)	ESC * c # N	X	X	
Relative Horizontal Offset, Dots (LCP)	ESC * c # X	X	X	
Large Character Print Data	ESC * c <text> Z	X	X	

BARCODES				
Barcode Label Placement	ESC * z # C	X	X	
Barcode Label Height	ESC * z # H	X	X	
Barcode Tabulate	ESC * z # N	X	X	
Barcode Header Control	ESC * z # Q	X	X	
Barcode Wide Bar Width	ESC * z # R	X	X	
Barcode Narrow Bar Width	ESC * z # S	X	X	
Barcode Width Space Width	ESC * z # T	X	X	
Barcode Narrow Space Width	ESC * z # U	X	X	
Barcode Selection	ESC * z # V	X	X	
Barcode X- Offset	ESC * z # X			
Barcode Label	ESC * z # <barcode> Z	X	X	

CONTROL CODES				
Null	NUL	X	X	
Start of Heading	SOH	X	X	
Start of Text	STX	X	X	
End of Text	ETX	X	X	
End of Transmission	EOT	X	X	
Enquiry	ENQ	X	X	
Acknowledge	ACK	X	X	
Bell	BEL	X	X	
Backspace	BS	X	X	X
Horizontal Tabulation	HT	X	X	
Line Feed	LF	X	X	X
Vertical Tabulation	VT	X	X	
Form Feed	FF	X	X	X
Carriage Return	CR	X	X	X
Shift Out	SO	X	X	X
Shift In	SI	X	X	X
Data Link Escape	DLE	X	X	
Device Control 1	DC1	X	X	X
Device Control 2	DC2	X	X	
Device Control 3	DC3	X	X	X
Device Control 4	DC4	X	X	
Negative Acknowledge	NAK	X	X	
Synchronous Idle	SYN	X	X	
End of Transmission Block	ETB	X	X	
Cancel	CAN	X	X	
End of Medium	EM	X	X	
Substitute	SUB	X	X	
Escape	ESC	X	X	X
File Seperator	FS	X	X	
Group Seperator	GS	X	X	
Record Seperator	RS	X	X	
Unit Seperator	US	X	X	
Space	SP	X	X	X
Delete	DEL	X	X	X

PCL3 Barcodes Implemented:

Code 39
 Industrial 2/5
 Matrix 2/5
 Interleaved 2/5

ESC sequences not implemented in the TG serial PCL3 emulation:

Command	ESC sequence	HP 2934A	Tally SIDM PCL3	HP Rugged Writer
Enable Display Functions	ESC Y	X	N/A	X
Disable Display Functions	ESC Z	X	N/A	X
Modem Disconnect	ESC f	X	N/A	
Transparent Print Data	ESC & p # X	X	N/A	X
Line by Line Enhanced Control	ESC & k 0 E	X	N/A	X
SI SO Control	ESC & k # F	X	N/A	X
Mode Enhancement Control	ESC & k 1 E	X	N/A	X
Mode Basis (Default) SI SO	ESC & k 1 F	X	N/A	X
Request Model Number	ESC * r k	X	N/A	X
Return Model Number	ESC * s ^	X	N/A	
Return Model Number	ESC * s 1 ^	X	N/A	
Enable/Disable Loopback Mode	ESC - c # T	X	N/A	

Character set selections NOT available in the TG serial PCL3 emulation:

Primary	Secondary	
ESC (A	ESC) A	Primary / Secondary set select Logical – Math
ESC (B	ESC) B	Primary / Secondary set select Logical – Line Drawing
ESC (0 @	ESC) 0 @	Primary / Secondary Default Set Designated to Primary / Secondary
ESC (1 @	ESC) 1 @	Primary / Secondary Default Set Designated to Primary / Secondary
ESC (2 @	ESC) 2 @	Current Primary / Secondary Set Designated to Primary / Secondary
ESC (0 E	ESC) 0 E	Primary / Secondary Designated to Roman Extension
ESC (0 H	ESC) 0 H	Primary / Secondary Designated to Hebrew
ESC (0 K	ESC) 0 K	Primary / Secondary Designated to JASCI
ESC (1 K	ESC) 1 K	Primary / Secondary Designated to Katakana
ESC (0 L	ESC) 0 L	Primary / Secondary Designated to Line Draw
ESC (0 M	ESC) 0 M	Primary / Secondary Designated to Math Symbols
ESC (0 O	ESC) 0 O	Primary / Secondary Designated to OCR-A
ESC (1 O	ESC) 1 O	Primary / Secondary Designated to OCR-B
ESC (0 Q	ESC) 0 Q	Primary / Secondary Designated to Orator A
ESC (5 U	ESC) 5 U	Primary / Secondary Designated to HPL
ESC (0 Z	ESC) 0 O	Primary / Secondary Designated to All Blank
ESC (8 G	ESC) 8 G	Primary / Secondary Designated to Greek8
ESC (8 H	ESC) 8 H	Primary / Secondary Designated to Hebrew8
ESC (8 K	ESC) 8 K	Primary / Secondary Designated to Katakana-8
ESC (8 T	ESC) 8 T	Primary / Secondary Designated to Turkish8
ESC (8 V	ESC) 8 V	Primary / Secondary Designated to Arabic8