



TC1100

CCD Scanner

Quick Reference Guide



The TC1100 is a linear CCD Scanner for OEM applications. It is available in two different versions:

Model	Description	Order Number
TC1100-1100	CCD scanner for linear codes	939501020
TC1100-1200	CCD scanner for linear and PDF417	939501030

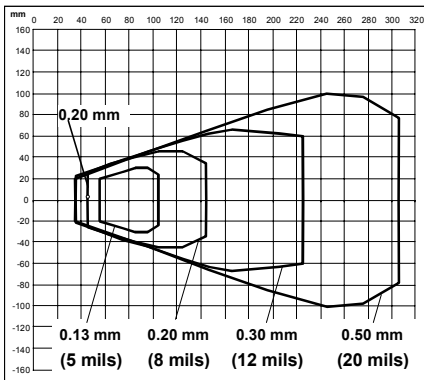
Technical Specifications

Power supply	5 Vdc \pm 5%
Consumption	1.5 W
Interfaces	RS232, WEDGE, PEN Emulation
Max Scans/sec	270
Max resolution	0,076mm (3mils)
Readable codes:	EAN/UPC, Code 39, 2/5 family, Codabar, Code 128, EAN 128, ISBT 128, Code 93, pharmaceutical codes, Delta IBM, Code 16K, Code 49, (Telepen, MSI/Plessey, Pharmacode only TC1100-1100), (Codablock-A, Codablock-F Std, Codablock-F EAN, PDF417 only TC1100-1200)

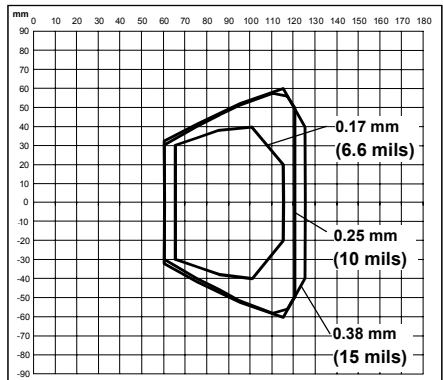
Default Configuration

Power Save	270 scans/sec, sleep disabled, standby disabled
Reading Parameters	On-Line
Code Selection	<ul style="list-style-type: none"> Interleaved 2 of 5: Check Digit transmitted, length: min 4, max 99 Code EAN8, EAN13, UPCA, UPCB: without ADD ON, Check Digit transmitted, no conversions Code 39: length: min 1, max 99 Code 128: Check Digit not transmitted, length: min 1, max 99 PDF417
Enabled codes (Only TC1100-1200)	
Data Format	Code ID disabled, Header = <STX>, Terminator = <CR> <LF>, no Field Adjustment, Code length TX disabled, character replacement disabled, No Read Character = <CAN>
Decoding Parameters	Ink spread enabled, overflow control enabled, interdigit control enabled, Puzzle Solver™ disabled, decoding safety = 1 read
Enabled interface	RS232, 9600, N, 8, 1, no handshaking, ACK/NAK disabled, RX timeout 100 ms, FIFO enabled, inter-character delay disabled

Reading Diagrams



Reading Diagram TC1100-1100 (code 39)



Reading Diagram TC1100-1200 (PDF417)

Electrical Connections

25-pin connector		
1	Shield	earth ground
2	TX	transmit data
3	RX	receive data
4	RTS	request to send
5	CTS	clear to send
6	nc	not connected
7	SGND	signal ground
8	EXT BEEPER	external beeper connection
9	VCC+	+5Vdc
10	nc	not connected
11	OUT+	See Figure 1
12	OUT-	
13	VCC+	+5Vdc
14	nc	not connected
15	nc	not connected
16	nc	not connected
17	nc	not connected
18	EXT TRIG+	
19	EXT TRIG-	See Figure 2
20	DATAIN WAND	
21	DATAOUT	
22	OUT-	
23	CLKIN	
24	CLKOUT	
25	GND	power ground

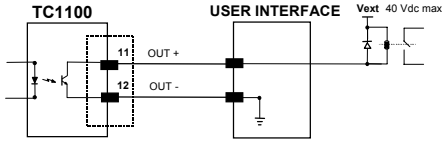


Figure 1 - Output Connection (Good Read). Example NPN

Return to RS232 Interface



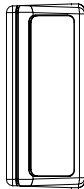
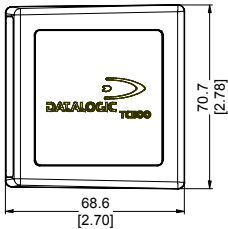
For WEDGE Users

Led Status

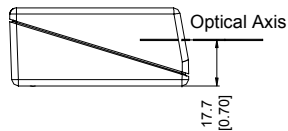
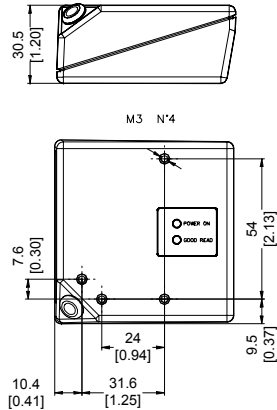
POWER ON	ON = Power ON
	OFF = Power OFF
GOOD READ	ON = Good Read (the LED will remain ON until status changes)
	OFF = No Read

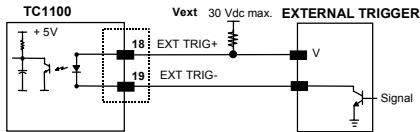
Physical Dimensions

Width	70.7 mm	2.78 inches
Length	68.6 mm	2.70 inches
Height	30.5 mm	1.20 inches

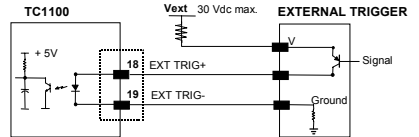


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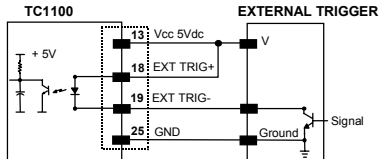




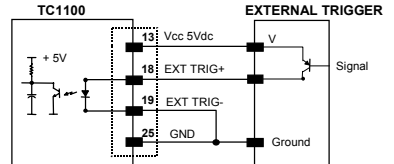
Input NPN command using external power



Input PNP command using external power



Input NPN command using TC1100 power



Input PNP command using TC1100 power

Figure 2 - Trigger Connections

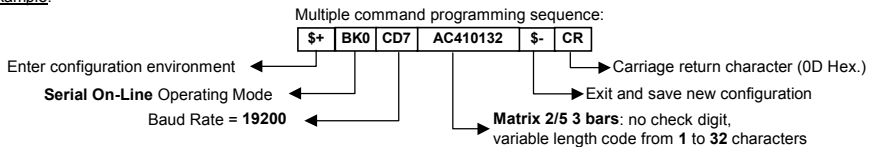
Basic Commands for TC1100

The TC1100 default configuration can be changed by receiving commands through the RS232 Interface. The command syntax is given below with an example.

Command syntax

\$+ Command(s) \$- <CR> the new setting will be definitive (stored in FLASH EPROM)

Example:



Commands:

OPERATING MODES			
On-line	BK1		
Serial On-line	BK0		
Automatic	BK3		
Automatic / Lighting System Standby	BK2		
To enter in Test mode	#+DStat1<CR> (does not require \$+ or \$-)		
To exit Test mode	#+DStat0<CR> (does not require \$+ or \$-)		
GENERAL FEATURES			
RS232 interface selection	CP0		
RS232 Baud Rate	CD0 for 150 Baud up to CD8 for 38400 Baud		
WEDGE AT	CP500		
WEDGE Notebook	CP505		
Keyboard Nationality	FJ7	Belgian	FJ1 Italian
	FJ4	English	FJ6 Spanish
	FJ2	French	FJ5 Swedish
	FJ3	German	FJ0 USA
	CCD Scan Rate	BT0	67 scans/sec
	BT1	135 scans/sec	
	BT2	270 scans/sec	
Puzzle Solver	AU1	enable	AU0 disable
Ink Spread	AX1	enable	AX0 disable
Decoding safety	ED0	1 read	ED2 3 reads
	ED1	2 reads	ED3 4 reads
To restore the default configuration	\$\$+<CR> (does not require \$-)		
To get configuration from the scanner	\$\$\$&<CR> (does not require \$-)		

CODE SELECTION

EAN/UPC disable	AA0	
EAN 8/EAN 13/UPC A/UPC E enable	AA1 AA5 AA8	without ADD ON with ADD ON with and without ADD ON
EAN 8/EAN 13 enable	AA3 AAK AAL AA6	without ADD ON with ADD ON 2 ONLY with ADD ON 5 ONLY with ADD ON 2 AND 5
UPC A/UPC E enable	AA4 AAAM AAN AA7	without ADD ON with ADD ON 2 ONLY with ADD ON 5 ONLY with ADD ON 2 AND 5
EAN 8 enable	AAG0 AAG1	check digit transmission disable check digit transmission enable
EAN 13 enable	AAH0 AAH1	check digit transmission disable check digit transmission enable
UPC A enable	AAI0 AAI1	check digit transmission disable check digit transmission enable
UPC E enable	AAJ0 AAJ1	check digit transmission disable check digit transmission enable
Code 39 disable	AB0	
Code 39 Standard enable	AB11xxyy AB12xxyy AB13xxyy	no check digit control check digit control and transmission check digit control without transmission
Code 39Full ASCII enable	AB21xxyy AB22xxyy	no check digit control check digit control and transmission
Code 2/5 family disable	AC0	
interleaved 2/5 enable	AC11xxyy AC12xxyy AC13xxyy	no check digit control check digit control and transmission check digit control without transmission
Normal 2/5 5 bars enable	AC21xxyy AC22xxyy AC23xxyy	no check digit control check digit control and transmission check digit control without transmission
Industrial 2/5 (IATA) enable	AC31xxyy AC32xxyy AC33xxyy	no check digit control check digit control and transmission check digit control without transmission
Matrix 2/5 3 bars enable	AC41xxyy AC42xxyy AC43xxyy	no check digit control check digit control and transmission check digit control without transmission
Codabar family disable	AD0	
Codabar standard enable	AD111xxyy AD112xxyy AD121xxyy AD122xxyy AD212xxyy	no start/stop character equality control - nor transmission no start/stop character equality control but transmission start/stop character equality control but no transmission start/stop character equality control and transmission ABC Codabar no start/stop character equality control but transmission
Code 128 family disable	AI0	
Code 128 enable	AI11 xxyy	control without transmission of check digit
EAN 128 enable	AI21 xxyy	control without transmission of check digit
Code Length	AI Lxxyy	
Code 93 family disable	AK0	
Code 93 enable	AK1 xxyy	control without transmission of check digit
PDF417 disable	AR0	
PDF417 enable	AR1	
Pharmacode disable	AQ0	
Pharmacode enable	AQ1xxyy AQ2xxyy	forward code tx direction reverse code tx direction
Overflow ratio	AQAZz	

xxyy = ASCII numbers that define:

xx = min. acceptable code length

yy = max. acceptable code length

zz = overflow ratio value

The minimum code length must always be less than or equal to the maximum.

For more detailed information on the TC1100 programmability and complete parameter list, please refer to the TC1100 Reference Manual.

