

Chapter 3

Maintenance and Specifications

Maintenance

Cleaning the exit window is the only maintenance required. A dirty window may affect scanning accuracy.

- Do not allow any abrasive material to touch the window.
- Remove any dirt particles with a damp cloth.
- Wipe the window using a tissue moistened with ammonia/water.
- Do not spray water or other cleaning liquids directly into the window.
- Do not remove the nose of the scanner.

What If...

Nothing happens when you follow the operating instructions.

You Should

- Check the system power.
- Make sure the controller is programmed to decode bar codes of the symbology you are scanning.
- Check for loose cable connections.
- Make sure the symbol is not defaced.
- Try scanning test symbols of the same code type.

Note: If after performing these checks the symbol still does not scan, contact your distributor or call the Symbol Support Center. See *Symbol Support Center* on page ii for the telephone number.

Accessories

Standard Accessories

Part Number	Description
70-08042-0X	LT 1810 Product Reference Guide
70-16223-0X	LT 1810/1820 Quick Reference Guide
50-01400-184	Shipping Box
25-10446-01	Standard 9-Pin D Straight Cable
25-05611-03	Standard 9-Pin D Coil Cable
25-05622-01	Coil Cable for PDT 3300
25-06380-02	Coil Cable for Norand RT 1000/3210/3310/3410/3510
25-05712-01	Coil Cable for Telxon PTC 710
20-10615-01	Battery Box (5V Regulated)

Cable Requirements

(to be used in conjunction with cable #25-05611-03)

Part Number	Battery Box Required?	Host
50-06000-193	Yes	PDT I/II/III, PDT 1500/1510, FST 1600/1610
20-03353-01	No	Permits connection to Symbol 300/500 Family controllers
20-02643-01	Yes	Welch Allyn/Opticon Digital Wand
20-02658-01	Yes	HP Digital Wand
20-02642-01	Yes	Barcode Industries Digital Wand
20-02656-01	Yes	Data Logic Digital Wand for Caere Terminal
20-02831-01	Yes	HP 16800A Digital Wand
20-03492-01	Yes	Panasonic Hand-Held Terminal
20-03873-01	Yes	Furuno Terminal
20-03393-01	No	VERIFONE Model TRAN Z 330
25-04289-01	Yes	Fujitsu
20-05745-01	Yes	Telxon PTC 610-01
20-05821-01	Yes	Telxon PTC 701
20-05817-01	Yes	Telxon PTC 750

Optional Accessories

Optional accessories, listed below, are supplied at extra cost and include additional units of any item listed in *Standard Accessories* on page 3-2.

Part Number	Description
20-12769-01	Hands-Free Stand - Desk Mount (non-adjustable)
20-08414-01	Hands-Free Stand - Free Standing (adjustable)
20-08415-01	Hands-Free Stand - ECR Mount (adjustable)
21-08288-02	Desk-Mount Stand
23-08253-01	Wall-Mount Stand
20-08416-01	Holster/Belt Clip

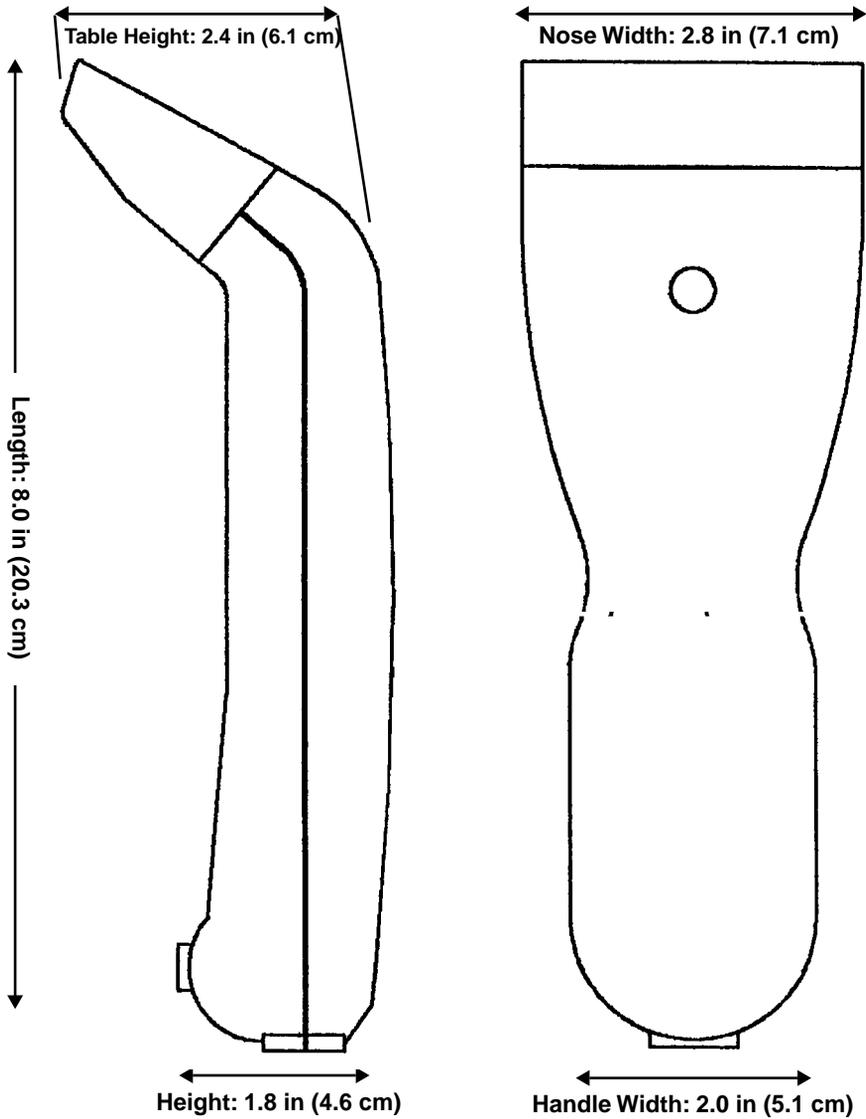
In addition, there is an optional power supply, selected from the following to match local power conditions:

Part Number	Power Supply
50-14000-005	117V Input, 5V Output Power Supply
50-04000-083	220/240V Input, 5V Output Power Supply

Technical Specifications

ITEM	DESCRIPTION
Power Requirements	5 VDC \pm 10%; 120 mA average current (160 mA peak)
Off Current Stand-By Mode	10 μ A
Decode Capability	The LT 1810 can be programmed to decode the following code types: UPC/EAN, Code 39, Codabar, Interleaved 2 of 5, Code 128, Discrete 2 of 5, and Code 93. Set code length(s) for any 2 of 5 code type. Full autodiscrimination as required.
Beeper Operation	User-selectable: Enable, Disable
Beeper Volume	User-selectable: Full Volume, Low Volume
Decode Depth of Field	Maximum typical working distance is 5.0 in. (12.70 cm) (100% UPC/EAN); minimum element width resolution is 5.5 mils
Code 39 Conversion	Selectable (via bar code menus) to convert data output to Code 39 format regardless of decoded symbol's actual code type. Any coded character not in the Code 39 character set is replaced by a Code 39 blank.
Scan Repetition Rate	Approximately 40 (\pm 3) scans/sec (bidirectional)
Skew Tolerance	\pm 35° min. (from normal)
Pitch Tolerance	-20° to +60° (from normal)
Print Contrast Minimum	25% minimum reflectance differential, measured at 675 nm.
Ambient Light Immunity	Immune to direct exposure to normal office and factory lighting conditions, as well as direct exposure to sunlight.
Durability	5 ft (152 cm) drops to concrete
Operating Temperature	32° to 104°F (0° to 40°C)
Storage Temperature	-40° to 140°F (-40° to 60°C)
Straight Cable Length	6 ft (183 cm)
Coil Cable Length (extended)	5 ft (152 cm)
Weight (without cable)	6.0 oz. (170 gm)

LT 1810 Dimensions



LT 1810 Signal Descriptions

The following signal descriptions apply to the connection between the scanner and the cable, and are for reference only.

PIN	SIGNAL NAME	FUNCTION
2	V+	This pin is connected to the power supply.
3	Ground	Current return for power supply of 5V \pm 10% and circuit ground reference.
4	RTS	Request-to-send handshaking output line. It may be optionally used by the scanner to signal another device that data is available to send. It can only be used in conjunction with the CTS line.
8	Digital Bar Pattern	This is an open collector signal capable of sinking 25 mA. An external pullup resistor connected to any voltage up to 20 V may be used. This output from the scanner provides a series of pulses with widths proportional to widths of scanned bar code elements. See signal description below.
9	CTS	Clear-to-send handshaking input line. It may be optionally used by another device to signal the scanner that it may begin transmitting data. It can only be used in conjunction with the RTS line.

Typical Signal Characteristics for Code 39 Output

Leading Margin	=	80 ms (programmable)
Trailing Margin	=	52 ms
Narrow Element	=	0.95 ms
Wide Element	=	1.9 ms
Wide-to-Narrow Ratio	=	2.0 to 1.0

Note: All measurements are approximate.