



Chapter 1

Setting Up the LS 9100

Purpose

This Product Reference Guide provides detailed information about setting up and programming your scanner. For instructions on routine LS 9100 operation, see the *Quick Reference Guide* (Symbol p/n 70-12495-0X or 70-19797-0X) included with the scanner. If you are interested in Advanced Data Formatting, an *Advanced Programmer's Guide* (Symbol p/n 70-15600-0X) may be purchased separately.

Product Description

The LS 9100 projection scanner brings easy, hands-free scanning to your Point-of-Sale (POS) system. The scanner can be easily mounted virtually anywhere, such as to the POS countertop, or to the side of your POS terminal. The LS 9100 provides a number of positional adjustments to optimize its usefulness in a given POS environment or to suit a particular user's scanning preference. The LS 9100 can also be used as a hand-held scanner that can be removed from its cradle and brought to heavy or bulky merchandise. The compact LS 9100 reads all popular retail symbologies, and interfaces to all popular POS terminals.

Set Up

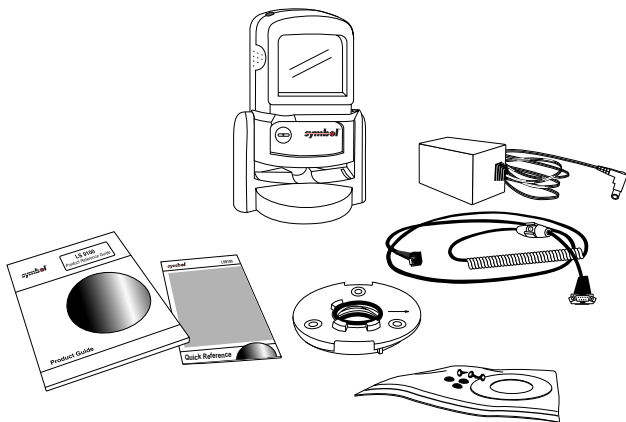
Unpacking

Inspect the LS 9100 shipping carton for damage. If the carton is torn or crushed, carefully inspect the contents to ensure that no damage has occurred. If the scanner was damaged in transit, call the nearest Symbol Support Center at the telephone number listed in *Symbol Support Center* on page About-iii. **KEEP THE PACKAGING**, it is the approved shipping container and should be used if you ever need to return your equipment for service or upgrade.

Contents

The contents of your scanning system will vary depending on the host POS terminal you are using and the options you have selected. In most cases, your system will include the following:

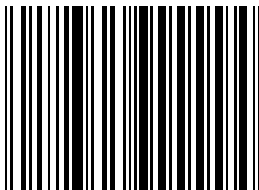
- Scanner/stand
- Host interface cable(s)
- Quick Reference Guide
- Mounting Plate
- Mounting Hardware Kit (screws, double sided tape etc.)
- Power supply (if necessary)



Verify Scanner Operation

Before you install your LS 9100, verify that it is scanning properly:

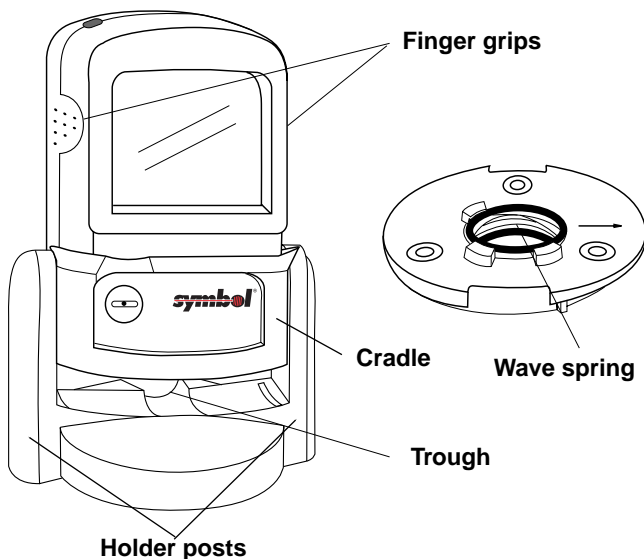
- Connect the interface cable to the connector on the bottom of the scanner.
- If the POS system provides the necessary power, simply power down the host POS terminal and connect the other end of the interface cable into the appropriate port on the POS terminal.
- If a power supply is necessary, plug the AC adapter into an AC outlet, and connect the supply lead into the mating receptacle on the interface cable.
- Power up the terminal.
- When the scanner powers up, it will beep three times, and the green LED will flash three times and then remain lit.
- Present the “test bar code” below to the scanner. If the scanner is functioning properly, it will issue a short beep. **Note:** This bar code will not be transmitted to your host.



If the scanner does not emit any beeps, see *What If...* on page 3-2. Otherwise, power down the host, disconnect the scanner and continue with the installation!

Mounting

The LS 9100 Scanner can be mounted on a counter, on top or on the side of the POS terminal, or on the wall. Both free-standing (movable) and permanent mounting (fixed) options are available.

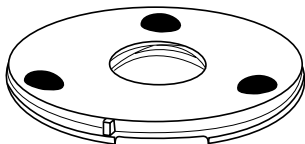


Adjustment

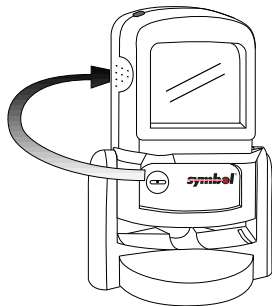
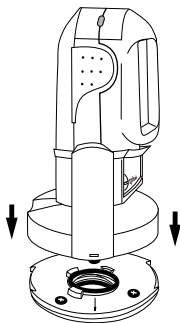
Once mounted, the scanner's position in the stand may be adjusted. Grasp the finger grips and tip the scanner forward or backward to the desired angle.

Counter Top Installation - Free Standing

1. Remove the protective paper from the three rubber feet and press the feet into the recessed areas on the bottom side of the mounting plate.



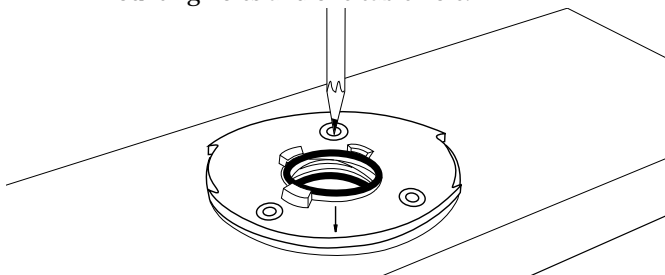
2. Place the mounting plate onto the counter top, top side up.
3. Hold the scanner assembly by the holder posts so the trough is facing left (and the scanner facing right).
4. Place the assembly onto the plate so the cylinder underneath the holder is in contact with the wave spring in the mounting plate.
5. Press the holder downward and rotate clockwise 90° and release to lock the scanner assembly into the mounting plate.



6. Proceed to *Scanner Configuration* on page 1-10.

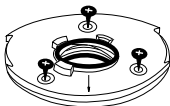
Counter Top Installation - Permanent Mounting with Screws

1. **With the arrow pointing in the direction the scanner will face**, place the mounting plate on the counter top.
2. Using the plate as your template, mark the three mounting holes and one cable hole.



3. Remove the mounting plate.
4. Drill 3.2 mm (1/8") pilot holes in the center of the three mounting hole marks.
5. **If the interface cable is going to be routed through the counter top only**, drill through the counter top in the center of the cable hole mark using a 25.4 mm (1") drill bit. (Skip this step if the cable will exit the rear of the holder assembly.)
6. Place the mounting plate centered over the cable hole.

7. Using a Phillips screwdriver, secure the plate to the counter with the three screws provided.



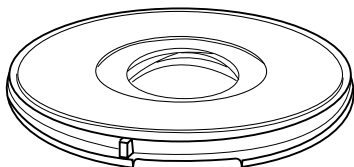
8. Feed the scanner connector of the interface cable up through the center of the mounting plate (if applicable), and connect to the LS 9100.
9. Hold the scanner assembly by the holder posts so the trough is facing left (and the scanner facing right).
10. Place the assembly onto the plate so the cylinder underneath the holder is in contact with the wave spring in the mounting plate.
11. Press the holder downward and rotate clockwise 90° and release to lock the scanner assembly into the mounting plate.
12. Proceed to *Scanner Configuration* on page 1-10.

Counter Top Installation - Permanent Mounting with Double-Sided Tape

Make sure your counter top is clean and dry before performing these steps.

1. **If the interface cable is going to be routed through the counter top only** (and will not exit the rear of the holder assembly):
 - a. Place the mounting plate on the counter top with the arrow pointing in the direction the scanner will face.

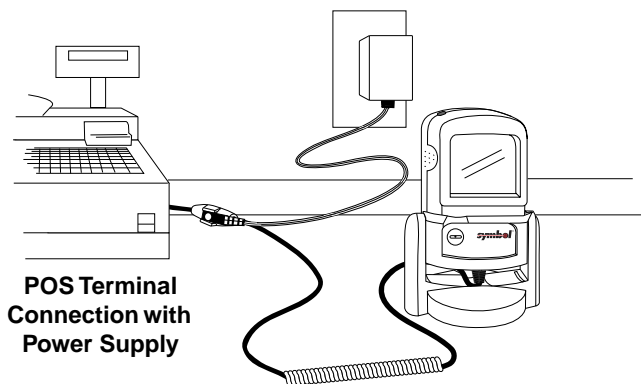
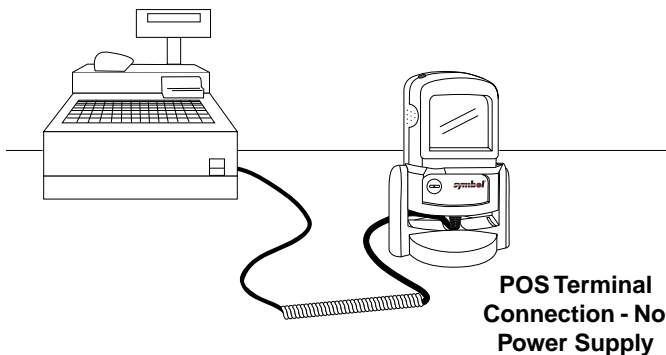
- b. Using the plate as your template, mark the center cable hole. Remove the mounting plate.
 - c. Drill through the counter top in the center of the cable hole mark using a 25.4 mm (1") drill bit.
2. Remove the protective paper from one side of the tape, and press the tape to the bottom side of the mounting plate.



3. Remove the protective paper from the remaining side of the tape.
4. **With the arrow pointing in the direction the scanner will face**, press the mounting plate onto the counter top.
5. Feed the scanner connector of the interface cable up through the center of the mounting plate (if applicable), and connect to the LS 9100.
6. Hold the scanner assembly by the holder posts so the trough is facing left (and the scanner facing right).
7. Place the assembly onto the plate so the cylinder underneath the holder is in contact with the wave spring in the mounting plate.
8. Press the holder downward and rotate clockwise 90° and release to lock the scanner assembly into the mounting plate.
9. Proceed to *Scanner Configuration* on page 1-10.

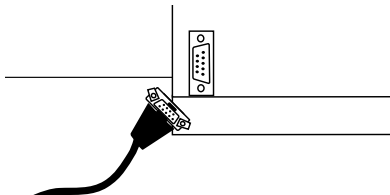
Scanner Configuration

Illustrated below are the two possible LS 9100 configurations, one with no power supply, and one using a power supply. The following pages provide detailed instructions for connecting the LS 9100 in each of these configurations.

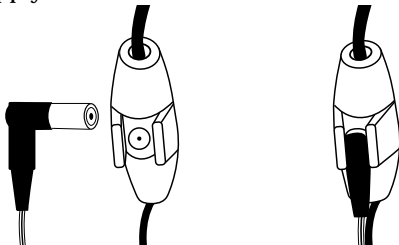


Connecting the Scanner

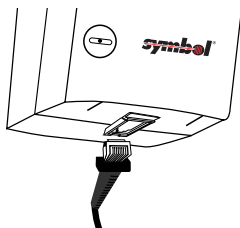
1. Power down the host terminal.
2. Connect the interface cable to the host terminal (refer to your terminal manual to locate the correct port).



3. If necessary, plug the power supply into the power jack on the interface cable. Plug the other end of the power supply into an AC outlet.



4. Connect the other end of the interface cable to the scanner.



5. Set the LS 9100 to communicate with your particular POS terminal by scanning the appropriate bar code(s). Depending on your terminal, these are located either in *Chapter 5: Parameters*, or the ***Synapse Interface Guide***.
6. Power up the host terminal. Ensure that the scanner driver port is enabled by following the terminal instructions.
7. Verify that the scanner is successfully reading bar codes and transmitting their content to the host terminal.

Note: See *What If...* on page 3-2 if you are having problems after completing these steps.