

Chapter 3 Cradle Hardware Installation

Introduction

PPT 41xx cradle hardware installation consists of setting up the cradles for charging and communicating with the host computer or with cradle chains.

The CRD 4100-1010X cradle provides RS-232 communication, charging, and storage capabilities for the PPT 41xx terminal.

This chapter provides a functional overview of the cradle, including its parts, accessories, and recommended use.

Getting Started

Unpacking the CRD 4100-101X

To unpack the CRD 4100-101X from the shipping material, carefully remove all protective material from around the terminal. Save the shipping container for later storage and shipping. Inspect all equipment for damage, and make sure you have received everything listed on the packing slip.

If you find anything damaged or unsatisfactory, contact your authorized Symbol customer support representative immediately.

The Parts of the CRD 4100-101X

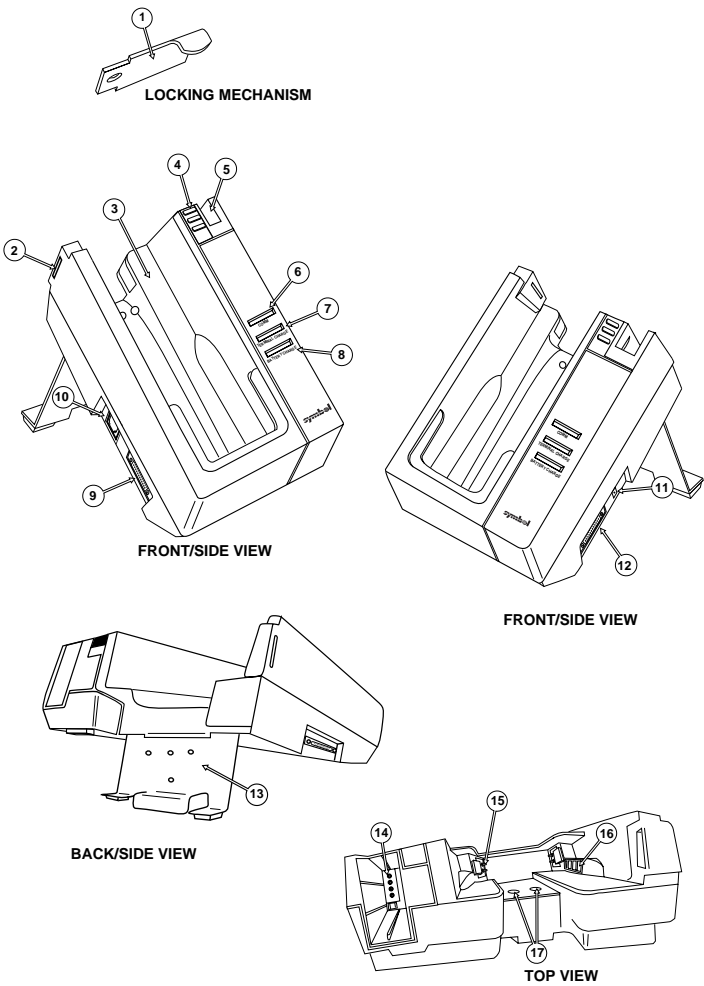


Figure 3-1. Parts of the Cradle

Parts of the Cradle (cont'd)

1. Locking Mechanism
2. Locking Slot
3. Terminal Insertion Slot
4. Battery Pack Release Switch
5. Battery Pack Charging Slot
6. Communications (COMM) Light
7. TERMINAL CHARGE Light
8. BATTERY CHARGE Light
9. DB-25 Communications Port 1
10. RJ-41 Connection
11. AC Power Connector
12. DB-25 Communications Port 2
13. Mounting Bracket
14. Battery Pack Charging Contacts
15. Terminal Charging Contacts
16. Infrared (IR) lights
17. Mounting Bracket Screw Slots

Wall and Desk Mounting the CRD 4100-101X

The CRD 4100-101X can be placed on a desk, or mounted on a wall.

To wall mount the cradle:

1. Remove the mounting bracket from the back of the cradle by removing the two phillips head screws on the front plate and sliding the mounting bracket out of the cradle.
2. Secure the mounting bracket to the selected position on the wall with the appropriate hardware.
3. Align the cradle assembly on the mounting bracket and slide into place as shown.

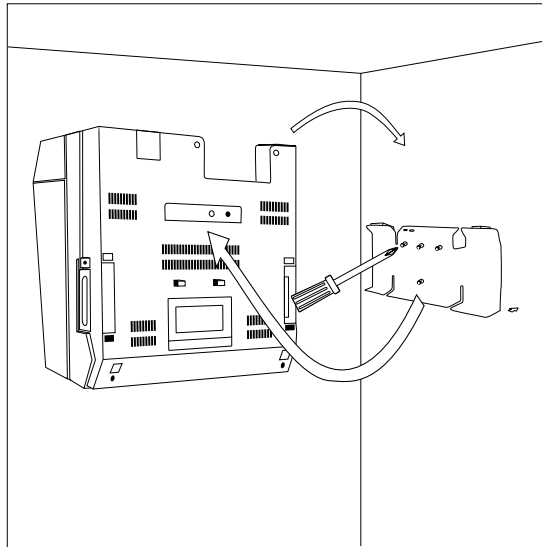


Figure 3-2. Wall Mounting the Cradle

4. Secure the cradle assembly to the mounting bracket by replacing the two phillips head screws.

The CRD 4100-101X may also be desk mounted for your convenience.

To desk mount your cradle:

1. Remove the mounting bracket from the back of the cradle by removing the two phillips head screws from the front plate and sliding the mounting bracket out of the cradle.

2. Turn the mounting bracket around (table pads should be facing downward - see figure 3-3.).

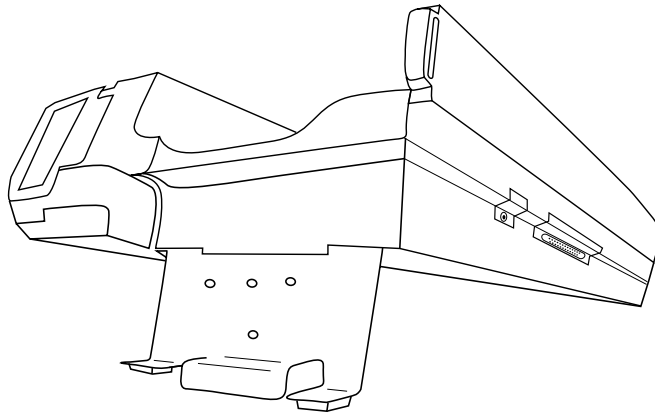


Figure 3-3. Desk Mounting the Cradle

3. Slide the bracket hinges into the mounting slot and secure using the two phillips head screws.

Connecting Power to the CRD 4100-101X

1. Connect the power supply plug to a standard electrical outlet.

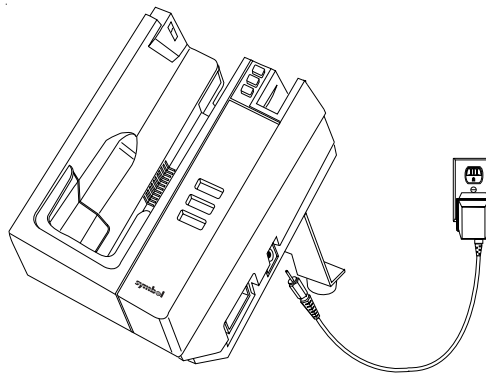


Figure 3-4. Connecting Power to the Cradle

2. Connect the power supply cord jack to the power connector on the side of the cradle.

When the cradle is powered up, all three indicator lights (*COMM*, *TERMINAL CHARGE*, and *BATTERY CHARGE*) flash for a short time while initialization is taking place. If any of the lights do not flash, then the cradle requires service.

Operating the CRD 4100-101X

Connecting to Other Cradles

Up to four cradles can be interconnected using an 25-pin, straight-through RS-232 cable.

WARNING

Each cradle must have its own power supply; any other method of power hookup will not supply adequate power for reliable operation.

1. Plug one end of the inter-cradle cable into the communication port located on the right side of the first cradle.

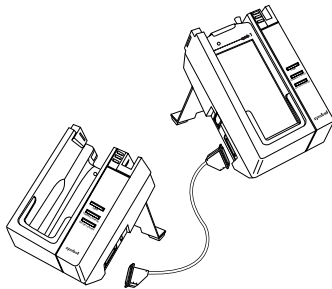


Figure 3-5. Interconnecting Two Cradles

2. Plug the other end of the inter-cradle cable into the communication port on the left side of the second cradle.
3. Connect the power supply to both cradles as described in the *section Connecting Power to the CRD 4100-101X*.
4. Install a terminator plug (p/n 50-12100-105) in communications port 2 on the right side of the last cradle.

Repeat steps 1 and 2 to connect a third and fourth cradle.

Connecting to Other Devices

The CRD 4100-101X enables the PPT 41xx to communicate through an RS-232 interface to a computer, printer, modem, or other peripheral device.

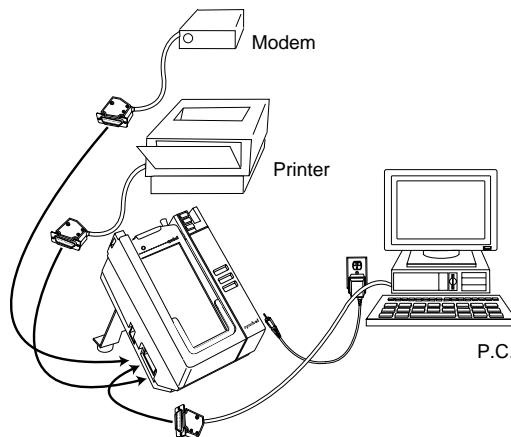


Figure 3-6. Connecting the Cradle to Other Devices

1. Plug the RS-232 cable into the cradle communications port 1, located on the left side of the cradle.
2. Connect the other end of the cable to the serial port of the printer or host. DCE-type serial printers require a null-modem cable. If your computer uses a 9-pin serial port, connect a 25-to-9 pin adapter to the cable, and then connect to the printer or host. If connecting to a modem, a null modem cable is not required.
3. Install a terminator plug (p/n 50-12100-105) in communication port 2 on the right side of the cradle.

Placing the Terminal in Cradle

1. Slide the terminal into the bottom of the cradle, making sure the terminal is seated firmly in the cradle. The terminal should automatically power on.

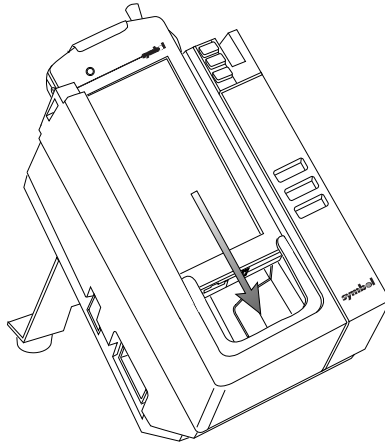


Figure 3-7. Placing the Terminal in the Cradle

The green *TERMINAL CHARGE* indicator lights (solid or flashing) if the terminal is properly inserted in the cradle, provided the appropriate software driver is installed.

2. To remove, pull straight up and lift the terminal out of the cradle.

Caution

Removing the terminal from the cradle when the red *COMM* light is blinking may disrupt communications between the terminal and the host. See the *PPT 41xx System Software Manual* (p/n 70-12524-xx) for more information.

Using the Locking Mechanism

The CRD 4100-101X has an optional locking mechanism which ensures that the terminal is secured in the cradle.

To lock the terminal in the cradle:

1. Seat the terminal firmly in the cradle.
2. Slide the locking mechanism into the slot, as shown in figure 3-8.

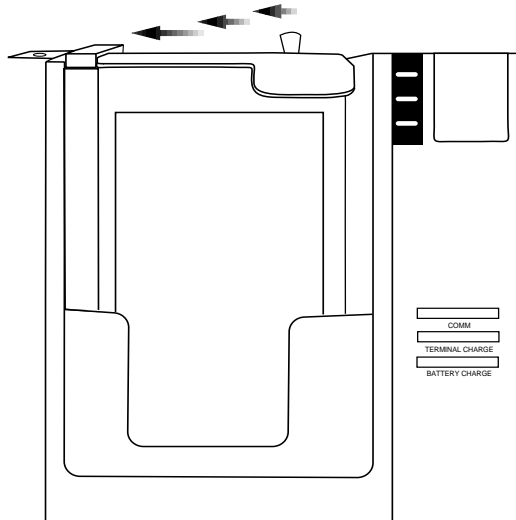


Figure 3-8. Sliding the Locking Mechanism into Place

3. Use a combination or key lock to secure the mechanism in place.

If properly inserted, the locking mechanism should rest on top of the terminal, and should keep the terminal from moving while it is seated in the cradle.

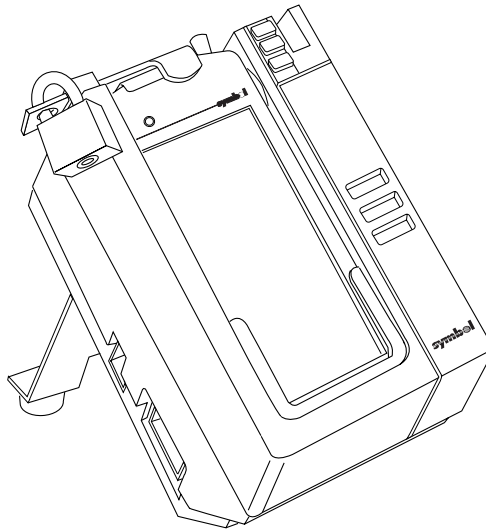


Figure 3-9. Locking the Terminal in the Cradle

To remove the terminal:

1. Unsecure and remove the lock.
2. Slide the locking mechanism out of the slot.
3. Lift the terminal out of the cradle.

Printing or Sending Data to the Host Computer

Caution

Removing the terminal from the cradle when the red COMM light is blinking may disrupt communications between the terminal and the host. See the *PPT 41xx System Software Manual* (p/n 70-12524-xx) for more information.

1. Place the terminal into the cradle.
2. Perform communications as defined by your application documentation.

Indicator Lights

Table 3-1. Cradle Indicator Lights

Light	Off	Solid	Flashing	Quickly Flashing
COMM	The cradle has no power. All cradle functionality is disabled, or The terminal is not ready to communicate, or the cradle handler is not installed, or no terminal is in the cradle.	Power is supplied to the cradle. A terminal is in the cradle, it may be receiving data, but is not allowed to transmit.	Power is supplied to the cradle. A terminal is inserted and is able to transmit.	
TERMINAL CHARGE	No terminal is in the cradle. If a terminal is in the cradle, then: a. the terminal is not correctly seated, b. the cradle handler software is not loaded in the terminal, c. either the terminal or the cradle is not functioning.	A terminal is in the cradle and the battery is being trickle-charged. If a spare battery is being fast charged, then the terminal battery may not be fully charged. Otherwise, the terminal battery is fully charged.	A terminal is in the cradle and the battery is being fast charged.	
BATTERY CHARGE	No battery pack is in the cradle.	A fully charged battery pack is in the cradle.	A battery pack is in the cradle and is being fast charged. In this state, the cradle can only charge a terminal with a trickle charge.	A new battery is needed. (see note on next page).

Note: During the fast-charge, the LED flashes at the rate of 1 flash per second. If the battery has shorted cells or is unable to charge properly, the LED will flash faster, at approximately 3 flashes per second.