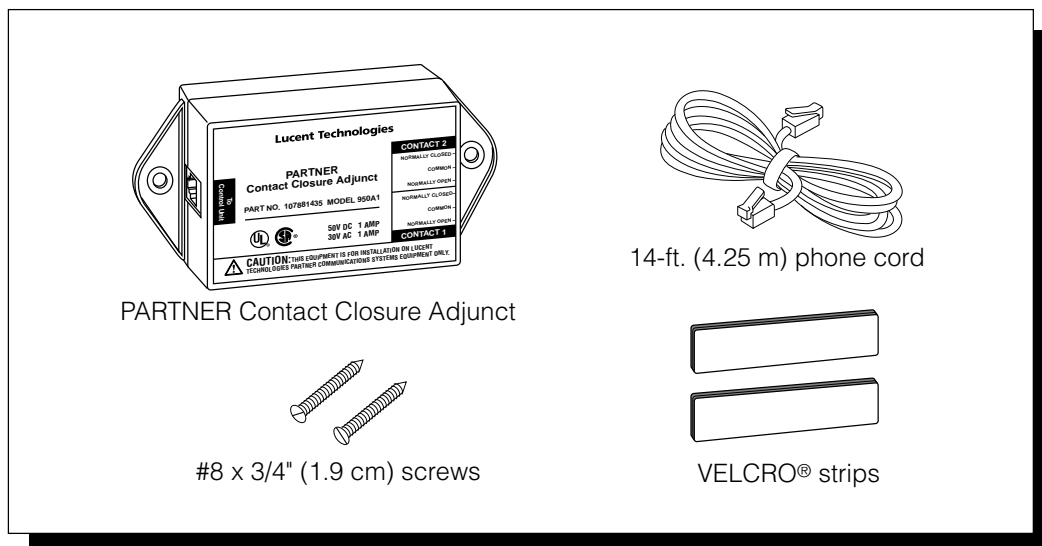**Lucent Technologies**
Bell Labs Innovations

PARTNER Contact Closure Adjunct
Installation Instructions

BEFORE STARTING INSTALLATION, READ AND UNDERSTAND ALL SAFETY INSTRUCTIONS ON PAGE 2.

The PARTNER® Contact Closure Adjunct is used with a PARTNER Advanced Communications System processor module (available separately) to activate or deactivate up to two auxiliary devices such as door locks or door alerts. Your PARTNER Contact Closure Adjunct package should include the parts shown below. If any parts are missing, call the Lucent Technologies™ hotline at 1 800 628-2888.

PARTNER Contact Closure Adjunct

14-ft. (4.25 m) phone cord

#8 x 3/4" (1.9 cm) screws

VELCRO® strips

PARTNER is a registered trademark and Lucent Technologies is a trademark of Lucent Technologies. VELCRO is a registered trademark of the Velcro companies.

Important Safety Instructions

Always follow these basic safety precautions when using this product:

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. DO NOT block or cover the ventilation slots and openings. They prevent the product from overheating. DO NOT place the product in a separate enclosure, unless proper ventilation is provided.
4. Never spill liquid on the product or drop objects into the ventilation slots and openings. Doing so may result in serious damage to the components.
5. Repair or service must be performed by a qualified repair person.
6. DO NOT use the product near water or in a wet or damp place (such as a wet basement).
7. Install the product in the same building as the PARTNER Advanced Communications System.

Additional Safety Instructions
for Installation Personnel

1. Install the product to meet all the environmental and electrical requirements listed in the specifications. (See the *PARTNER Advanced Communications System Installation* guide.)
2. DO NOT install telephone wiring during a lightning storm.
3. Never touch uninsulated telephone wires or terminals, unless the telephone line has been disconnected at the network interface.
4. Use caution when installing or modifying telephone lines.

SAVE THESE INSTRUCTIONS

Important Installation Guidelines

The Contact Closure Adjunct *must* be installed within the same building as the PARTNER ACS processor module. It is recommended that you wall-mount the Contact Closure Adjunct next to the PARTNER ACS processor module; however, if this is not practical, use the following guidelines, depending upon how many devices you are controlling:

2 devices: Wall-mount the Contact Closure Adjunct within 150 feet (46 m) of the PARTNER ACS processor module.

1 device: Wall-mount the Contact Closure Adjunct within 800 feet (244 m) of the PARTNER ACS processor module.

> **NOTE:**
> If you add a second device to the Contact Closure Adjunct and the Adjunct is mounted more than 150 feet (46 m) from the PARTNER ACS processor module, you must reposition the Contact Closure Adjunct to within 150 feet (46 m) of the PARTNER ACS processor module.

The following guidelines apply to any device attached to the Contact Closure Adjunct:

- Maximum rating per closure for the Contact Closure Adjunct is 50VDC, 1 AMP or 30VAC, 1 AMP.
- A surge protector (properly grounded to an approved earth ground) must be installed if the device being controlled is not located in the same building as the PARTNER ACS processor module and the Contact Closure Adjunct. The surge protector protects the Contact Closure Adjunct and the PARTNER ACS processor module, but not the device being controlled. Lucent Technologies 146G Surge Protector—SCL/8 is recommended.
- The maximum distance between the Contact Closure Adjunct and the device being controlled depends upon the device. Consult the manufacturer of the device to determine this distance.
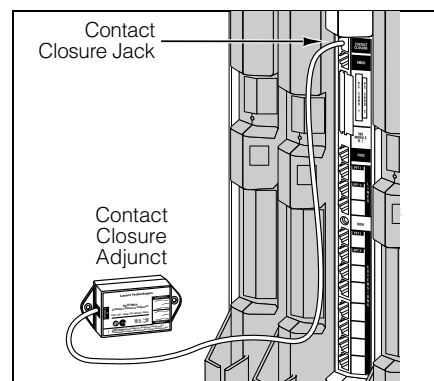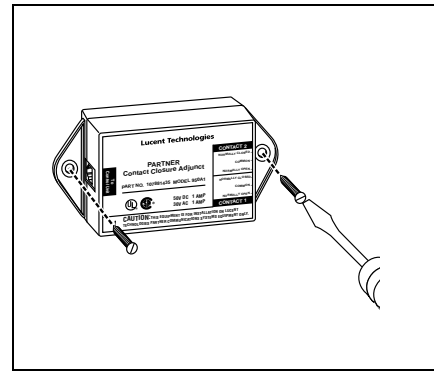
> ⚠ **CAUTION:**
> In the case of a power failure, a security risk can be incurred when the Contact Closure Operation Type is set to Toggle and an entrance door is wired so that when the feature is activated, the door is locked. If a power failure occurs, for example, after a user activates the Contact Closure to lock the door for the night, the Toggle setting flips back to the default (unlocked), and remains off even after power is restored.

Wall-Mounting and Connecting the Contact Closure Adjunct

1 Mount the PARTNER Contact Closure Adjunct to the wall using *either* the #8 screws or the VELCRO® strips:

- Insert a screw into the wall through the screw hole in the tab at each end of the Contact Closure Adjunct. Do not overtighten the screws.
- Use the VELCRO strips as follows:
  A) Peel the protective paper from one side of the first pair of VELCRO strips, and firmly press the exposed adhesive to the back of the Contact Closure Adjunct near the top.
  B) Peel the protective paper from one side of the second pair of VELCRO strip, and firmly press the exposed adhesive to the back of the Contact Closure Adjunct near the bottom.
  C) Peel the protective paper from the other side of the two VELCRO strips, exposing the adhesive.
  D) Place the Contact Closure Adjunct against the wall. Firmly press the exposed adhesive to the wall.

2 Plug one end of the phone cord into the jack marked "To Control Unit" on the end of the Contact Closure Adjunct.

3 Plug the other end of the phone cord into the CONTACT CLOSURE jack on the PARTNER ACS processor module, or plug it into a modular wall jack that is connected to the CONTACT CLOSURE jack.

> **NOTE:**
> The Contact Closure Adjunct is polarity-sensitive. Please use the phone cord provided.
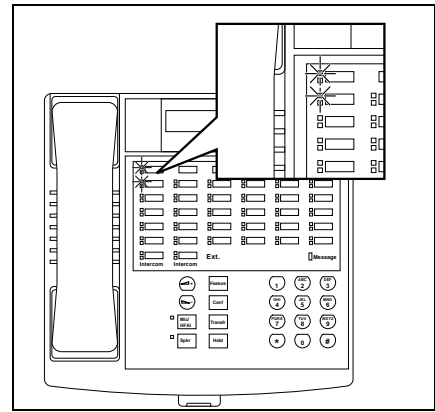
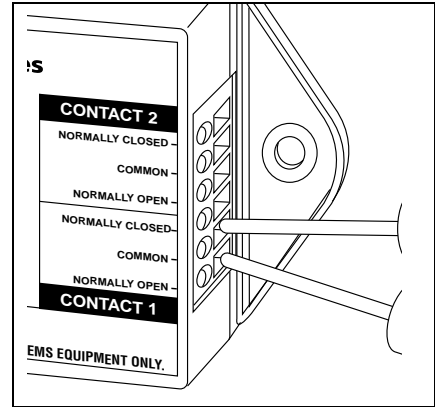## Testing the Contact Closure Adjunct Installation

Test that the Contact Closure Adjunct is connected properly using the following procedure. (See *PARTNER Advanced Communications System Programming and Use* for programming instructions.)

1 At extension 10 or 11, press (Feature) (0) (0) (System Program) (System Program) to enter programming mode and do the following:

- Assign extension 10 to Contact Closure Group 1 and Contact Closure Group 2:
  A) Dial **#612**
  B) Dial a group number (1 or 2).
  C) Dial the extension number (10).
  D) Press (Next Procedure) (Prev Procedure), and repeat Steps B and C for the other Contact Closure Group.
- Set Contact Closures 1 and 2 to Toggle operation:
  A) Dial **#613**
  B) Dial a Contact Closure (1 or 2).
  C) Press **4** for the Toggle operation type.
  D) Press (Next Item) or (Prev Item), and repeat Step C for the other Contact Closure.

2 At extension 10, program a button with lights for Contact Closure 1 and Contact Closure 2:
  A) Press (Central Tel Program).
  B) Dial the extension number (10).
  C) Press a programmable button.
  D) Press (Feature) (4) (1) (for Contact Closure 1).
  E) Repeat Step C and press (Feature) (4) (2) (for Contact Closure 2).

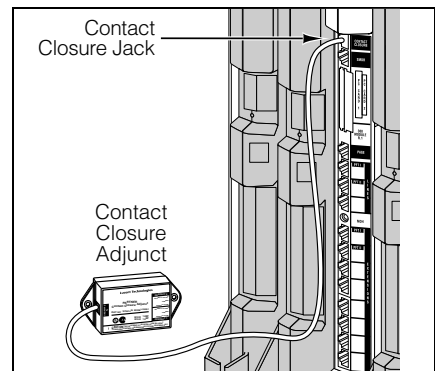**3** Press (Feature) (0) (0) to exit programming mode.

4 At extension 10, press the programmable buttons assigned as Contact Closure buttons. The green LEDs next to those two buttons should light.

5 Using a multimeter or continuity tester, perform the following tests:

A) Attach the tester probes to the Normally Open and the Common screws for Contact Closure 1 on the Contact Closure Adjunct. The tester should indicate continuity between the terminals.

B) Repeat Step 5A for Contact Closure 2.

6 If the tester shows continuity, a licensed electrician can wire the Contact Closure Adjunct to the auxiliary device or devices you want to use, in accordance with your local electrical code. [See the instructions that came with the device(s) and the sample configurations in "Typical Contact Closure Configurations" below.]

If there is no continuity in either Step 5A or Step 5B, the Contact Closure Adjunct may be miswired. Continue with Step 7.

7 If the Contact Closure Adjunct is not wired directly to the PARTNER ACS processor module with the modular cord provided, disconnect the cord from the Contact Closure Adjunct and from the PARTNER ACS processor module.

8 Plug one end of the 14-foot (4.25 m) D4BU phone cord provided with your Contact Closure Adjunct into the jack marked "To Control Unit" on the end of the Contact Closure Adjunct. Plug the other end of the cord directly into the CONTACT CLOSURE jack on the PARTNER ACS processor module. [If you have wall-mounted the Contact Closure Adjunct more than 14 feet (4.25 m) from the processor module, you will need to remove it from the wall to move it closer. Remove the two screws or release the VELCRO fastener.]

9 Repeat Steps 5A and 5B above.

If the tester shows continuity, the problem is in the wiring for the modular wall jack you want to use. Have a technician check the wiring. Re-install and retest the Contact Closure Adjunct.

If continuity still does not exist, either the D4BU phone cord or the Contact Closure Adjunct is defective. Contact the Lucent Technologies hotline at 1 800 628-2888.

10 Press the programmable buttons assigned as Contact Closure buttons at extension 10 to deactivate the Contact Closures. The green LEDs go out.

11 Revise the system programming (Steps 1–3 above) to meet the requirements of your application.

Typical Contact Closure Configurations

Following are examples of typical configurations for a magnetic door lock, an electronic door lock, and an outside automatic gate. In each of these examples, the Contact Closure Adjunct is wall-mounted within 150 feet (46 m) of the PARTNER ACS processor module, although the distance could be as great as 800 feet (244 m) since only one device is being controlled.

System programming of the Contact Closure Group (#612) and the Contact Closure Operation Type (#613) features is required, and programming a feature button for Contact Closure 1 (F41) [and Contact Closure 2 (F42), if used] is recommended. When a user presses the button programmed for Contact Closure 1, Contact Closure 1 is activated and the green LED next to that button lights. If the Contact Closure Operation Type is set to Toggle, Contact Closure 1 remains active until the user presses the button again to deactivate it. The green LED then goes out.
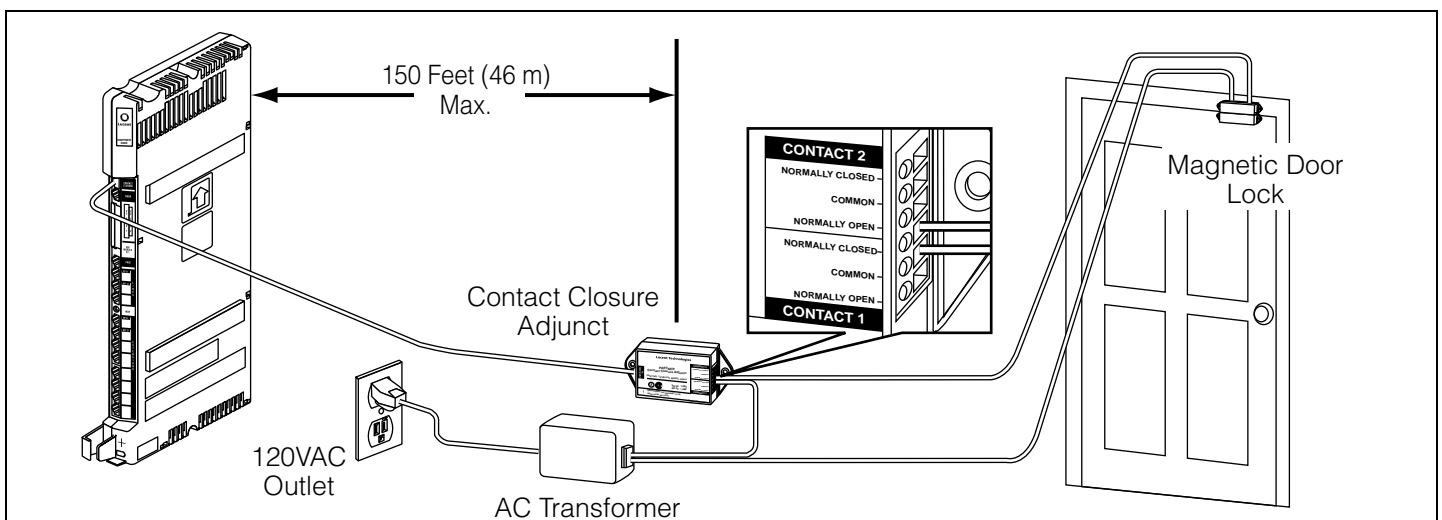
NOTES:
1. If other users are also included in Contact Closure Group 1, Contact Closure 1 could be activated or deactivated by any one of them. It need not be deactivated by the same user who activated it.

2. If the Contact Closure Operation Type (#613) is set to 1 Second On, 3 Seconds On, or 5 Seconds On, instead of to Toggle, the Contact Closure deactivates itself when the specified time has elapsed.

3. Be aware that, in the case of a power failure, a security risk can be incurred when the Contact Closure Operation Type is set to Toggle and an entrance door is wired so that when the feature is activated, the door is locked. If a power failure occurs, for example, after a user activates the Contact Closure to lock the door for the night, the Toggle setting flips back to the default (unlocked), and remains off even after power is restored.

Controlling a Magnetic Door Lock

This configuration uses Contact Closure 1 to control a magnetic door lock that is normally locked. The configuration example has the following characteristics:

- The Normally Closed terminal of Contact Closure 1 is wired (by a licensed electrician) to the magnetic door lock.

- The Common terminal of Contact Closure 1 is wired (by a licensed electrician) to an AC transformer that is plugged into a 120 VAC wall outlet not controlled by a switch. (The AC transformer is not provided with the Contact Closure Adjunct.)

- The Contact Closure Operation Type is set to Toggle.

Pressing the programmed button for Contact Closure 1 opens the circuit and releases the door lock. Pressing the button again relocks it.
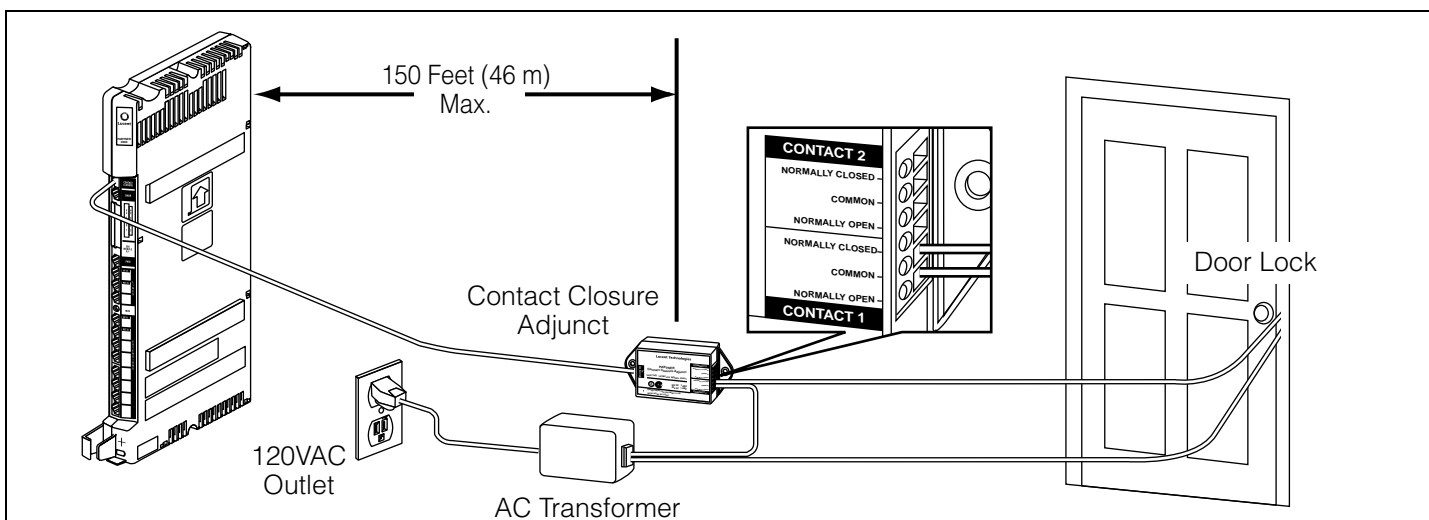
Controlling an Electronic Door Lock

This configuration uses Contact Closure 1 to control an electronic door lock that is normally locked. The configuration has the following characteristics:

- The Normally Open terminal of Contact Closure 1 is wired (by a licensed electrician) to an AC transformer that is plugged into a 120 VAC wall outlet not controlled by a switch. (The AC transformer is not provided with the Contact Closure Adjunct.)

- The Common terminal of Contact Closure 1 is wired (by a licensed electrician) to the electronic door lock.

- The Contact Closure Operation Type is set to **2**, which is 3-Seconds On.

Pressing the button programmed for Contact Closure 1 unlocks the door for three seconds.

Controlling an Outdoor Automatic Gate

This configuration uses Contact Closure 1 to open and close an exterior electronic gate via a "dry contact." The configuration has the following characteristics:

- The Normally Open and the Common terminals of Contact Closure 1 are wired (by a licensed electrician) to a grounded surge protector. (Lucent Technologies 146G Surge Protector—SCL/8 is recommended.)

- The grounded surge protector is located in the same building as the PARTNER ACS processor module and the Contact Closure Adjunct, and is wired (by a licensed electrician) to the electronic gate.

- The Contact Closure Operation Type is set to Toggle.

Pressing the button programmed for Contact Closure 1 opens or closes the gate. Pressing the button again stops it.