



# CRT3 STAFF TELEPHONE INSTALLATION

RAULAND-BORG CORPORATION • 3450 West Oakton Street, Skokie, Illinois 60076-2951 • (708) 679-0900

## PRELIMINARY

### DESCRIPTION

The CRT3 is a dial-less telephone designed for use with the Rauland Telecenter® systems. On the Telecenter IV and Telecenter TCS, it can serve as a single-link or a multi-link staff phone. On the Telecenter 5500, it can serve as a common-line staff phone in conjunction with an ADS5510 Console and an RS503 Staff-Telephone Adapter.

In addition to the standard "tip" and "ring" wiring, the CRT3 has a second pair of contacts that provide a dry contact when the phone is lifted off-hook. This connection enables the phone to call in when the handset is lifted.

**Important:** *Never* connect the CRT3 to the modular jack of an Administrative *Display* Telephone: the CRT3's extra set of contacts would place a short across the display lines.

The CRT3 has been approved by the Federal Communications Commission (F2S6BN-72738-TE-E).

**This Telephone is *Not* Hearing-Aid Compatible.**

### MOUNTING PARTS

The telephone comes with the following mounting parts:

Qty.	Description
1	Modular jack.
1	Short four-wire connector with a modular plug at each end.
1	Long four-wire connector with a modular plug at each end.
2	#6-32 x 3 3/4" machine screws.
1	Locking clip (to secure the phone to the mounting plate).

The following will need to be supplied by the user:

- ✓ Wiring from the Telecenter to the telephone.
- ✓ Single-gang electrical box.
- ✓ On the TC5500: ADS5510 Console, RS503 Module, and speaker.

## INSTALLATION

These instructions tell how to mount the telephone. Wiring diagrams are included in the main Telecenter IV manual (KI-1435), the Telecenter TCS drawings manual (KI-1550), and in the installation manual for the ADS5510 console (KI-1557). The installer is responsible for complying with all local codes and the National Electrical Code or the Canadian Electrical Code.

**Step 1.** For the TC5500, use shielded conductors; conduit is also strongly recommended. Connect all shields to ground (see KI-1551). For the Telecenter IV, use a twisted pair, shielded or unshielded (see KI-1435). Install the electrical box in the wall vertically, and pull through the wires.

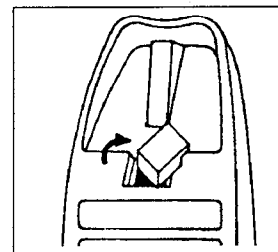
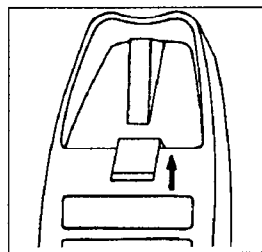
**Step 2.** Set aside the front plate from the modular jack. Orient the module in keeping with its *TOP* marking. Find the unused hole near each screw terminal. Pull each field wire through the appropriate hole. On the modular jack, the *T1* (green wire) and *R1* (red wire) terminals provide the conventional "tip" and "ring" telephone contacts; the *AUX* (black wire) and *GN* ("ground" - yellow wire) provide a dry contact for calling in.

**Step 3.** Secure the module to the back box with the two #6 screws provided. Use the two holes immediately inside the module's studs.

**Step 4.** Fasten the system wires to the appropriate screw terminals. Push the front plate onto the module.

**Step 5.** If the telephone is to be wall-mounted, skip to Step 6. If the telephone is to be desk-mounted, use the longer modular cord to connect the phone to the jack, then set the phone in place. Skip to Step 9.

**Step 6.** If the telephone is to be wall-mounted, locate the uni-clip reversible hook near the hook switch on the base. Pull up on this uni-clip until it is clear of the hole, then rotate it 180° (see the following illustration).



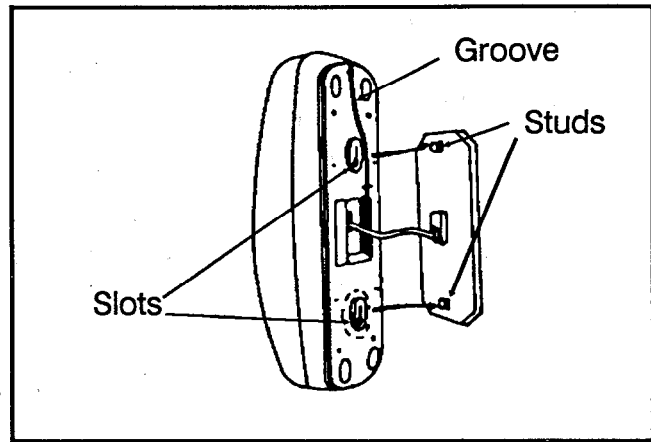
**Step 7.** To complete the wall-mounting, orient the phone with the hook switch on top and use the shorter

cord to connect the phone to the jack. Align the slots in the base of the phone with the studs on the module, then push down on the phone to seat it on the studs (see the illustration at the right).

**Step 8.** To make it more difficult for unauthorized persons to remove the phone from the wall, install the locking clip in accordance with the attached manual, KI-1569.

**Step 9.** Locate the ringer switch (to the right of the hook switch on a wall-mounted phone). For a TC5500, a Telecenter IV, or Telecenter TCS single-link phone, turn the ringer off (down). For a Telecenter IV or Telecenter TCS multi-link phone, turn the ringer on (up).

**Step 10.** Program the main system for the desired functions to the phone, then test the phone for call-in, talking, and ringing (Telecenter IV or Telecenter TCS multi-link only).




 The logo for Rauland, featuring the word "Rauland" in a stylized, cursive font inside a white oval, which is set against a black rectangular background.

## AB3556 Telephone Locking Clip Installation

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### Description

This locking clip slips into the bottom mounting slot of a wall-mounted CRT3 or TC4300 telephone to prevent an unauthorized person from easily lifting the phone from its mounting studs and stealing it. One clip is enclosed with each CRT3 and TC4300 telephone.

### Installation

Refer to IL0270, on the next page, as needed. Note that this view is from the wall side of the mounting plate.

**Step 1.** Install the telephone in the usual way.

**Step 2.** Orient the clip with its rounded end facing upward and its perpendicular tab facing you.

**Step 3.** From the bottom of the phone, start the rounded end of the clip into the bottom slot on the telephone. You will need to angle the clip by holding its bottom end next to the wall.

*Hints:* If you find it difficult to hold onto the clip, try grasping its perpendicular tab with a scissors-nosed pliers. If you need a little extra working space between the

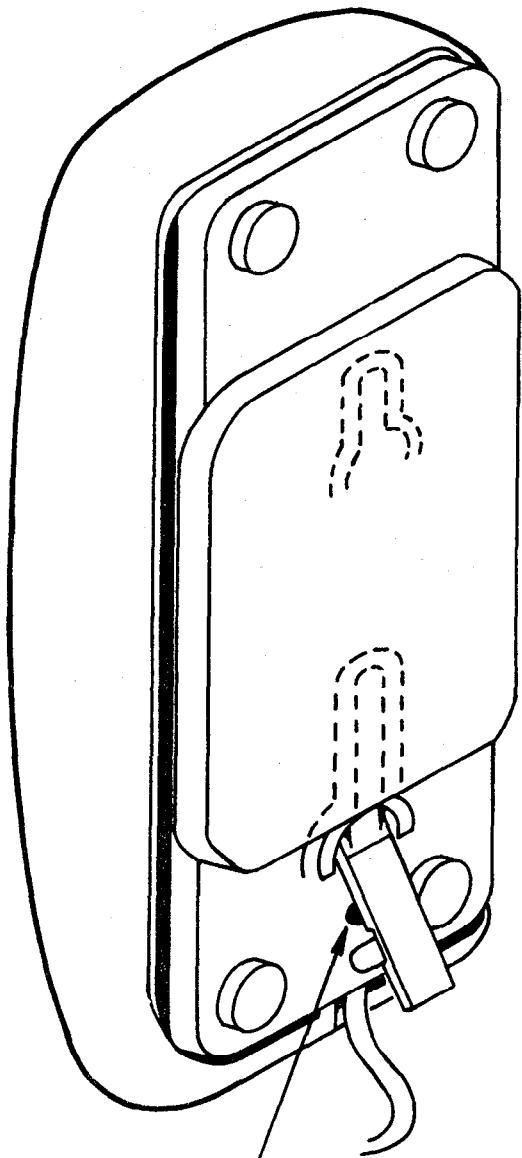
bottom of the phone and the wall, try sliding the phone further up on its mounting studs (however, the clip must follow the stud into the bottom slot). If you need still more space, try loosening the bottom mounting stud about a quarter-turn (but not so much that the phone will be loose—test-mount the phone before installing the clip).

**Step 4.** Push up on the clip until its perpendicular tab fits into the small hole between the bottom feet on the phone. Pull the clip against the rear of the phone so that the perpendicular tab is securely seated.

### Removing the Clip

Should it become necessary to remove the clip, insert a long, thin flat-bladed screwdriver between the clip and the body of the phone. Pry the bottom of the clip towards the wall until the perpendicular tab clears the hole in the phone, then pry the clip downward until it comes out of the phone.

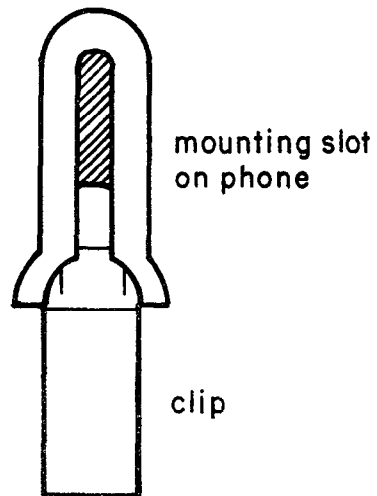
*Important:* After a clip has been removed two or three times, replace it: its diminished resiliency could make it ineffective.



Hole for the tab  
on the security clip

Mount the phone to the plate. Slide the clip into the mounting slot, between the phone and the mounting plate. Push the clip up until its tab fits into the hole in the phone.

To remove the phone, carefully lift the tab out of the hole with a screwdriver.



**Installing a Locking Clip  
on Wall-Mounted Telephones  
ILO270**