

S-321™ LINE HOLD**1. GENERAL**

1.01 The S-321 Line Hold provides the hold function for single-line telephones. It allows the user to replace the handset after a call has been answered. The call can be resumed at any telephone on the same premises including the original one.

→ 1.02 To comply with FCC Regulations, the following requirements must be met:

- a. Upon installation, the FCC Registration Number AQT9PZ-69199-TX-N must be reported to the telephone company and recorded in logs kept by the installations and maintenance personnel.
- b. This unit must be installed by grantee, grantee's authorized agents, equipment manufacturers, telephone companies, or agents authorized under Part 68, of the FCC Rules and Regulations.
- c. Installation of this device can only be made with the permission of the owner of the host equipment.
- d. If this unit malfunctions, the telephone company may disconnect service temporarily. If disconnection is necessary, the telephone company must attempt to notify the user in advance, if possible. If not, they must notify the user as soon as they are able. Repair work in this unit must be done by Melco Labs or its authorized agent.

2. DESIGN FEATURES

- 2.01 The S-321 is enclosed in a plastic capsule and mounts on the base of the telephone instrument.
- 2.02 The Line Hold is self-contained; no additional equipment or modifications are required. The instrument is readily restored to its original condition.
- 2.03 A tempered plastic bracket holds the Line Hold to the instrument base and cover.
- 2.04 A red lamp (LED) indicates when a call is on hold.

2.05 The S-321 circuit will not permit a hold to be inadvertently placed. The telephone must be off-hook and the S-321 button pressed while the handset is replaced on-hook before a hold will be initiated.

3. INSTALLATION

3.01 Remove instrument cover.

3.02 Connect either wire of the S-321 to the L1 and the other to the L2 terminal of the telephone. Place the wires where they will not interfere with the mechanical operation of the telephone.

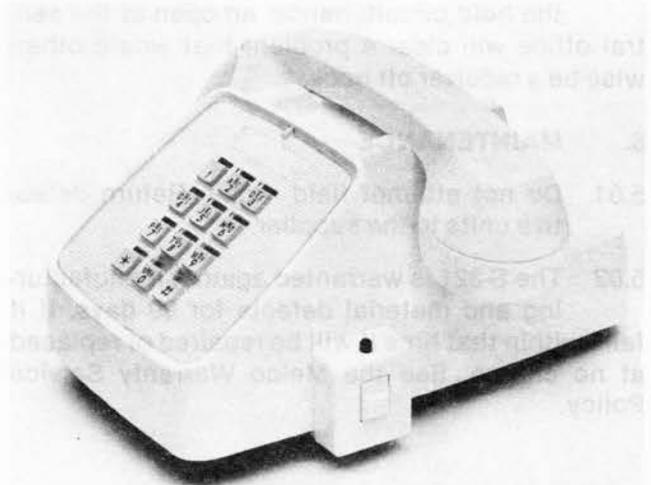


Fig. 1

3.03 Locate the wedge block of the Line Hold bracket (Fig. 3) in the upper set of holes. In this position it will fit most telephones.

3.04 Slide the bottom edge of the telephone cover in between the back of the Line Hold capsule and its bracket as far as it will go.

3.05 Replace the telephone cover carefully. If it is allowed to snap into position over the base, the wedge block could be knocked out of position.

3.06 If the Line Hold is loose on the cover after the telephone base screws are tightened, remove the cover and move the wedge block to the lower holes.

3.07 Reassemble and test.

4. OPERATION

4.01 To place a call on hold, press the S-321 button in and hang up. When the S-321 lamp turns on, release the button. The lamp will glow and the call will remain on hold until answered.

4.02 The call can be answered at any telephone on the same premises including the original one. Answering the call disengages the hold and extinguishes the lamp.

4.03 Call attempts from stations on multi-party lines close enough to change the line current sufficiently will also lift a hold inadvertently left on.

4.04 Interruption of the line current will release the hold circuit; hence, an open at the central office will clear a problem that would otherwise be a receiver off hook.

5. MAINTENANCE

5.01 Do not attempt field repair. Return defective units to the supplier.

5.02 The S-321 is warranted against manufacturing and material defects for 90 days. If it fails within that time it will be repaired or replaced at no charge. See the Melco Warranty Service Policy.

6. SPECIFICATIONS

- Line loop 1400 ohms max ←
- Power source line current
- Voltage drop min. 15.0V
- Holding current 0.015A min
- Longitudinal balance better than -60dB
- Connections line bridging — bipolar
- Hold impedance 220 ohms ± 10%
- Operating temperature 0° to 50°C
 32° to 122°F
- Operating humidity 0 to 95% ←
- Color white
- Dimensions 1.5" wide, 1.75" high, 0.75" thick

7. ORDERING GUIDE

- 7.01 Order the MELCO S-321 as follows:
 (QTY) S-321 LINE HOLD
 from your local supplier or distributor.
- 7.02 For further information or assistance on the S-321 or any Melco product contact:
MELCO LABS
 14408 N.E. 20th St.
 P.O. Box 4026
 Bellevue, WA 98009
 (206) 643-3400

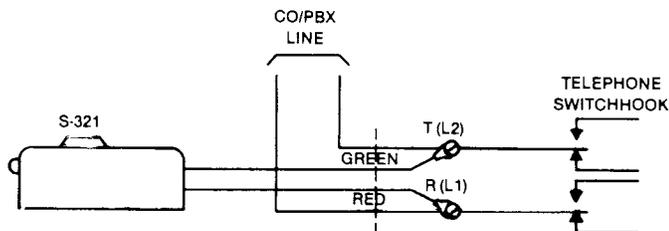


Fig. 2 — Application Schematic of S-321.

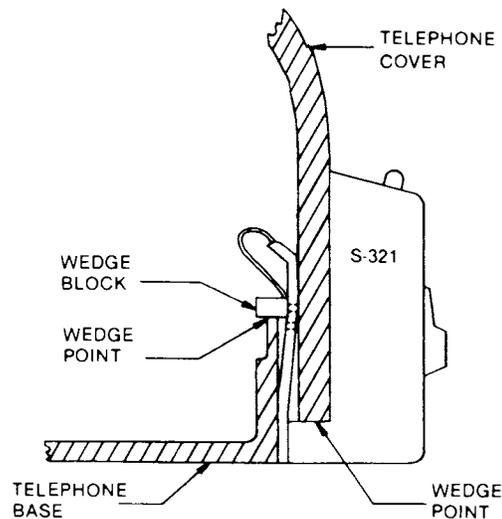


Fig. 3 — Schematic Showing Connections to Outside of Telephone Instrument.

S-321M™ MODULAR LINE HOLD

1. GENERAL

1.01 The S-321M Line Hold provides the hold function for single-line modular telephones. It allows the user to replace the handset after a call has been answered. The call can be resumed at any telephone on the same premises including the original one.

1.02 This device has been given Registration Number AQT9PZ-69199-TX-N under FCC Rules and Regulations, Part 68. Ringer Equivalence is 0.0B.

2. DESIGN FEATURES

2.01 The S-321M is enclosed in a plastic housing and mounts on the base of most modular telephones.

2.02 Modifications of the telephone are not required. The instrument is readily restored to its original condition.

2.03 Internal telephone wiring is not disturbed. S-321M connections are made through the provided T-adapter which is plugged into the modular telephone jack.

2.04 Velcro strips are provided to attach the Line Hold to the instrument base and cover.

2.05 A red lamp (LED) indicates when a call is on hold.

2.06 The S-321M circuit will not permit a hold to be inadvertently placed. The telephone must be off-hook and the S-321M button pressed while the handset is replaced on-hook before a hold will be initiated.

3. INSTALLATION

3.01 Unplug the modular line cord from the modular jack on the telephone (see Figure 2a).

3.02 Insert the T-adapter into the modular jack on the telephone (see Figure 2b).

3.03 Insert the line cord modular plug into one of the modular receptacles on the T-adapter.

Insert the S-321M cord modular plug into the other modular receptacle on the T-adapter (see Figure 2c).

3.04 Attach the S-321M to the telephone using the Velcro strips furnished (see Figure 2d).

3.05 Test the telephone.

4. OPERATION

4.01 To place a call on hold, press the S-321M button and hang up. When the S-321M



Fig. 1

lamp turns on, release the button. The lamp will glow and the call will remain on hold until answered.

4.02 The call can be answered at any telephone on the same premises including the original one. Answering the call disengages the hold and extinguishes the lamp.

4.03 On multi-party lines, call attempts from stations close enough to change the line current sufficiently will also lift a hold inadvertently left on.

4.04 Interruption of line current will release a line placed on hold and then abandoned. Hence, an open at the central office will clear a trouble that might be classed as a receiver off-hook.

5. MAINTENANCE

- 5.01 Do not attempt field repair. Return defective units to the supplier.
- 5.02 The S-321M is warranted against defects in material and workmanship. If it fails from such defects within the warranty period, the unit will be repaired or replaced without charge. See the Melco Warranty Service Policy for additional warranty and service information.

6. SPECIFICATIONS

Line loop	1400 ohms max
Power source	line current
Voltage drop	min 15.0V
Holding current	15 ma min
Connections	line bridging, bipolar
Longitudinal balance	better than -60dB 200 Hz to 1 KHz
Hold impedance	220 ohms \pm 10%
Humidity range	0 to 95% noncondensing

Color beige
Dimensions 1.50" x 1.75" high,
0.75" thick
Cord length 6"

7. ORDERING GUIDE

- 7.01 Order as follows:
(QTY) 120307 S-321M MODULAR LINE HOLD
from your local supplier or distributor.
- 7.02 The Modular Line Hold is furnished with the T-adaptor plug.
- 7.03 For additional information and assistance on the S-321M or any Melco product contact:

MELCO LABS, INC.
14408 N.E. 20th Street
Bellevue, WA 98007
(206) 643-3400
TWX: 910-443-3040

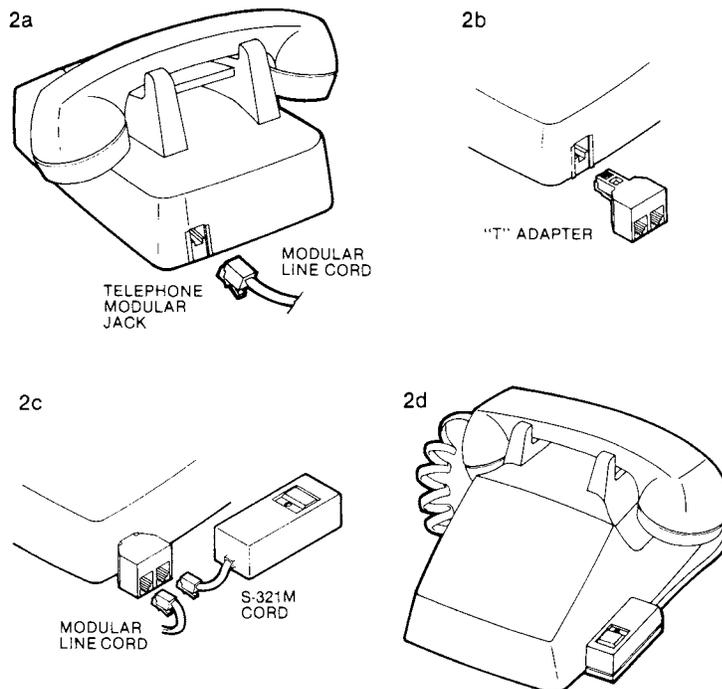


Fig. 2a-d — S-321M Connections.