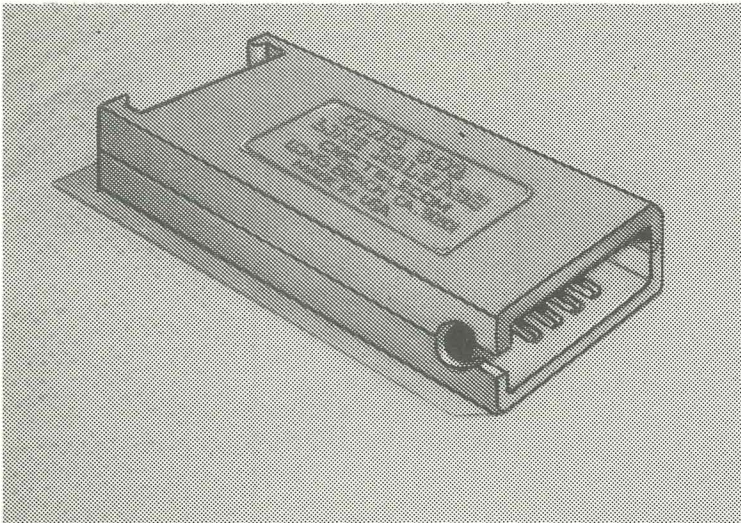# CMC 502
LINE RELEASE NETWORK
DESCRIPTION AND OPERATION

CMC 502 LINE RELEASE NETWORK

- Control Permanent Signals
- Release Trunks, Channels and Selectors for regular traffic
- Decrease Marker and Controller usage
- Protect the Central Office from cable troubles
- Defer equipment additions
- Line powered, easy installation

1. GENERAL

1.01 This Section provides the description and operation procedures for the use of the CMC 502 LINE RELEASE NETWORK.

1.02 The 502 is a small, portable unit designed to release Central Office line equipment after 14 seconds of continuous dial tone.

2. DESCRIPTION

2.01 The CMC 502 is Line Powered. No external power cabling or wiring is required for installation.

2.02 Receiver off-hook, short circuits, crosses and Ring grounds are timed 14 seconds after dial tone detected.

2.03 A momentary on-hook or clearing of the trouble condition will reset the 502.

2.04 Incoming calls to an active unit will ring to the open line. This will prevent false charge conditions on calls to permanent subscriber's lines.

3. APPLICATION

3.01 The CMC 502 LINE RELEASE NETWORK is designed for use on line circuits in SXS, X-Bar, ESS, DMS Central Office or P.B.X. It is not recommended for use on Long Line Equipment exceeding ± 130 Vdc.

3.02 The 502 is factory set for precision Dial Tone (350 + 440 Hz). Units may be adjusted to other frequencies on special request.

4. INSTALLATION — See Application Drawings

4.01 The CMC 502 LINE RELEASE NETWORK may be connected at any place in the subscriber's line circuit, e.g., modular jack, station protector, building terminal, VMDF, HMDF or C.O. line equipment.

4.02 Wire wrap pin #1 is internally connected to wire wrap pin #3 to provide for three or four wire jumper connections. The subscriber's RING lead must be opened.

4.03 Connect the Central Office TIP lead to either #1 or #3 wire wrap terminal of the 502.

4.04 Connect the subscriber's TIP lead to either #1 or #3 wire wrap terminal of the 502.

4.05 Connect the Central Office RING to #2 wire wrap terminal.

4.06 Allow 30 second warm up time if the subscriber line is permanent.

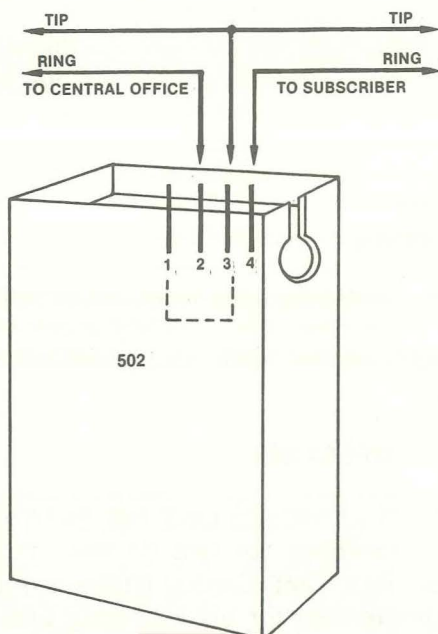4.07 Connect the subscriber's RING lead to #4 wire wrap terminal of the 502.

Figure 1
3-Wire Connection
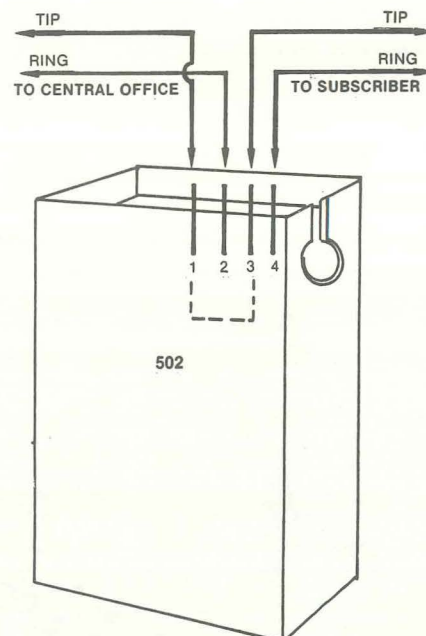**Application Drawing**

Figure 2
4-Wire Connection
Application Drawing

5. TEST PROCEDURES — FOR PERMANENT LINE

5.01 Connect Hand Test Telephone to C.O. side of the CMC 502 NETWORK (#1 and #2) to verify idle C.O. equipment. — Dial Tone is available.

5.02 Connect Hand Test Telephone to Subscriber side of the CMC 502 NETWORK (#3 and #4). — Dial Tone is not available.

— FOR IDLE LINE

5.03 Connect Hand Test Telephone to Subscriber side of the CMC 502 NETWORK (#3 and #4).

5.04 Establish dialing connection, — (OFF-HOOK).

5.05 The CMC 502 will open the Line towards the subscriber after 14 seconds of uninterrupted Dial Tone. 9 Volts of sidetone may be heard in this mode.

5.06 Momentary hook-switch flash (on-hook and off-hook) will restore the line to use.

6. REPAIR

6.01 The CMC 502 LINE RELEASE NETWORK has a 90 day warranty. It should be returned for replacement in case of a malfunction.

ORDERING INFORMATION

CMC 502 LINE RELEASE NETWORK