

## 412A KEY TELEPHONE UNIT

### IDENTIFICATION, CONNECTIONS, AND MAINTENANCE

#### 1. IDENTIFICATION

##### (a) Purpose

- Auxiliary (slave) relays for control of visual signals, buzzers, ringers, etc, or as required by field.

##### (b) Design Features (Fig. 1)

- Equipped with 21-pin plug designed to plug into the same receptacle (KS-8586, L32 connector) as KS-15900, L1 interrupter.
- Four mercury relays each equipped with two make contacts.
- Relay windings and contacts have protection networks for dc loads.
- Relays can be used individually or grouped as desired.
- Five-millisecond release time makes this unit desirable for extending lamp functions (lamp flash — lamp wink) from a master interrupter.
- Each contact rated at 2 amps or the equivalent of 50 lamps (51A).
- Current drain at 20 volts dc minimum voltage is 9 ma per relay.

##### (c) Application

- (1) With 584B and modified 584A panels: (Fig. 2)

- Synchronizes lamp functions (lamp flash — lamp wink) in centralized 1A2 key system arrangements having up to 200 panels.
- Installed in succeeding panels under control of an interrupter in master panel.

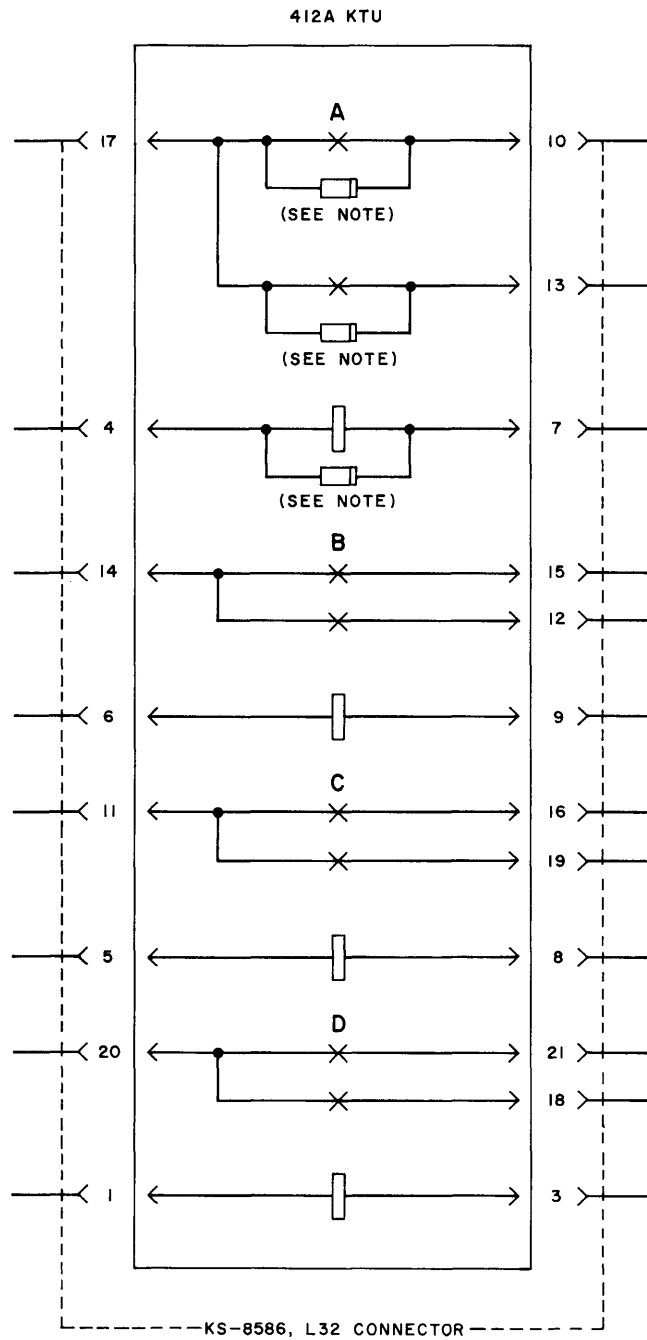
#### 2. CONNECTIONS

- 2.01 For use with 584A and B panels, see Section 518-270-401.

#### 3. MAINTENANCE

- 3.01 No field adjustment should be attempted on this unit. If it is determined the trouble is in the KTU it should be replaced by one known to be good.

*Caution: Care must be taken when removing or installing unit in 584A or B panels. Relays may be in the operate state depending on the condition of the master interrupter.*



NOTE:  
EACH RELAY EQUIPPED WITH  
PROTECTION NETWORKS.

Fig. 1 — Schematic Drawing of 412A KTU

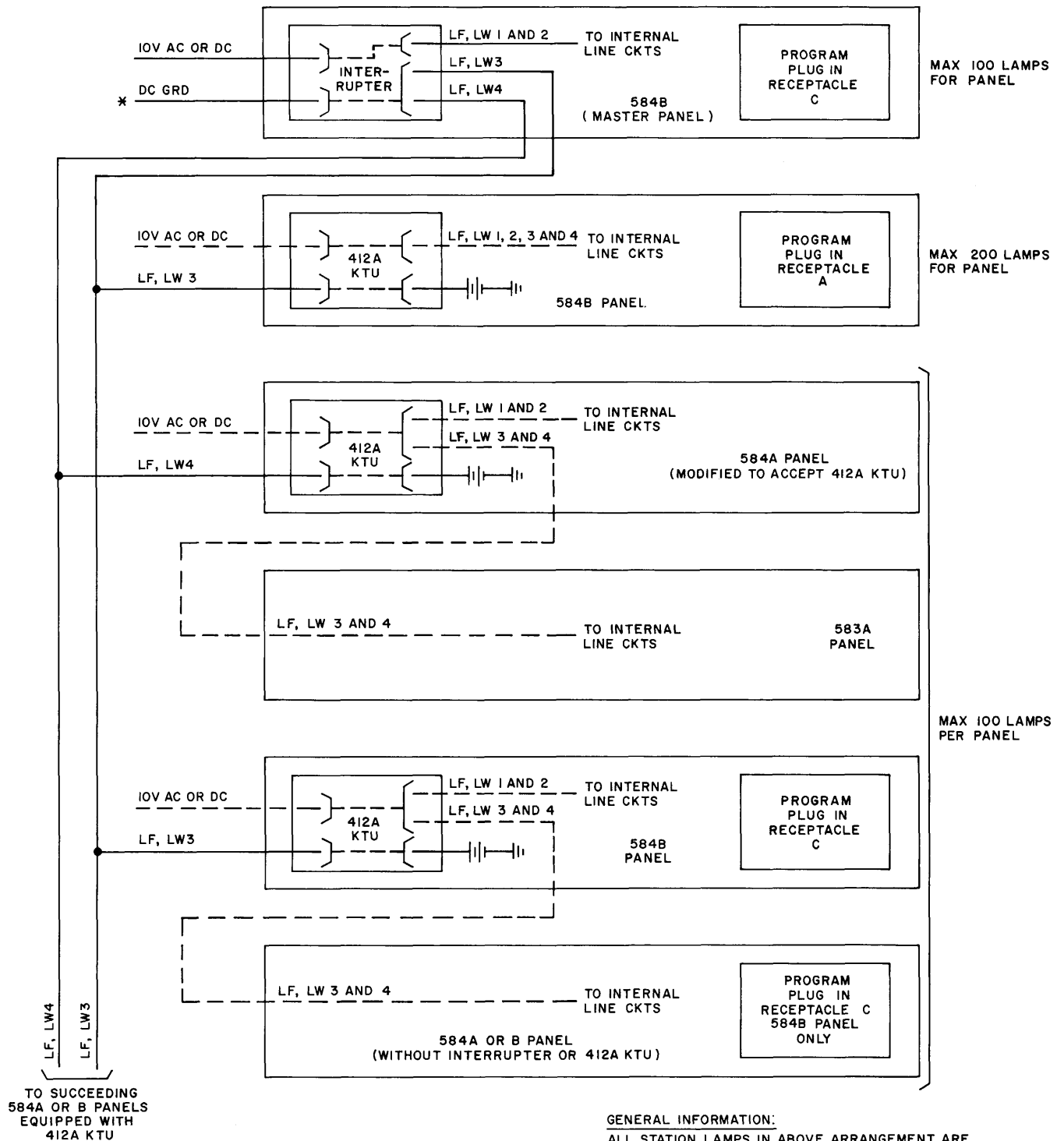


Fig. 2 — Use of 412A KTU with 584B and Modified 584A Panels