## STATION LINE CONCENTRATORS 235A AND 236A KEY TELEPHONE UNITS IDENTIFICATION AND CONNECTIONS

## 1.00 INTRODUCTION

This section covers the identification and connection of 235A and 236A key telephone units, which are referred to as *Station Line Concentrators*.

## 2.00 IDENTIFICATION

- 2.01 Station line concentrators are used as a means for reducing the number of conductors required between key telephone system line circuit units and associated Call Director sets or 400-type mounting and associated modular-type key positions.
- 2.02 The 235A KTU is a station line concentrator for a maximum of 18 lines and is designed for use with the 18-button Call Director sets (see Fig. 1 and 2).

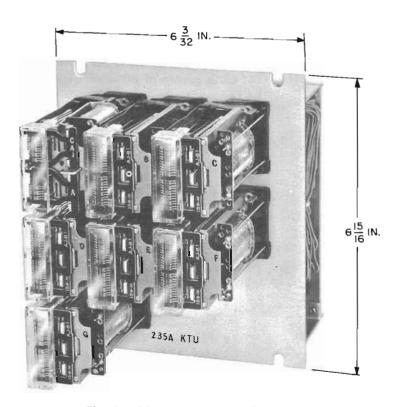


Fig. 1 - 235A KTU, Front View



Fig. 2 - 235A KTU, Rear View

2.03 The 236A KTU is a station line concentrator for a maximum of 30 lines when used with a 30-button Call Director set or 400-type key mounting position (see Fig. 3 and 4).

## 3.00 CONNECTIONS

- 3.01 One transmission pair (TT and TR) and control leads TA, CA, CA1, CB, CC, CD, CE, and CF are required between line concentrator units and 18-button Call Director sets. All these leads, plus control leads CG, CH, and CJ, are required between line concentrator units and 30-button Call Director sets or 400-type key mountings.
- 3.02 Lamp control leads and the A1 lead bypass line concentrator units. These leads connect directly between line circuit equipments and Call Director sets or 400-type key mountings.

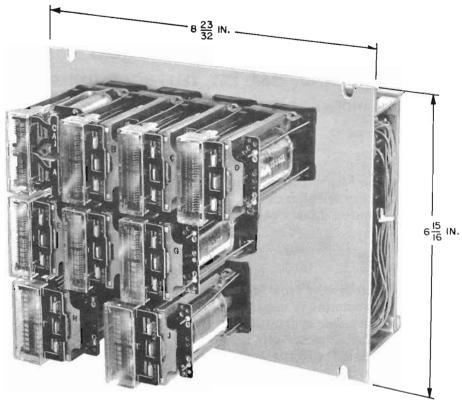


Fig. 3 - 236A KTU, Front View

**3.03** Station line concentrators must be furnished on a per station basis. Also, stations cannot share line concentrator units.

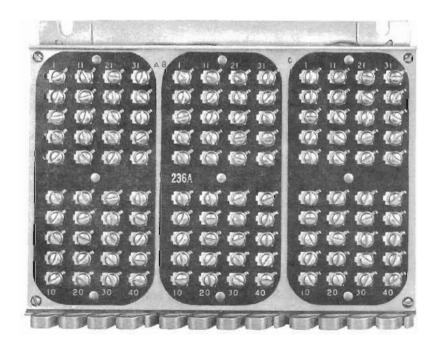
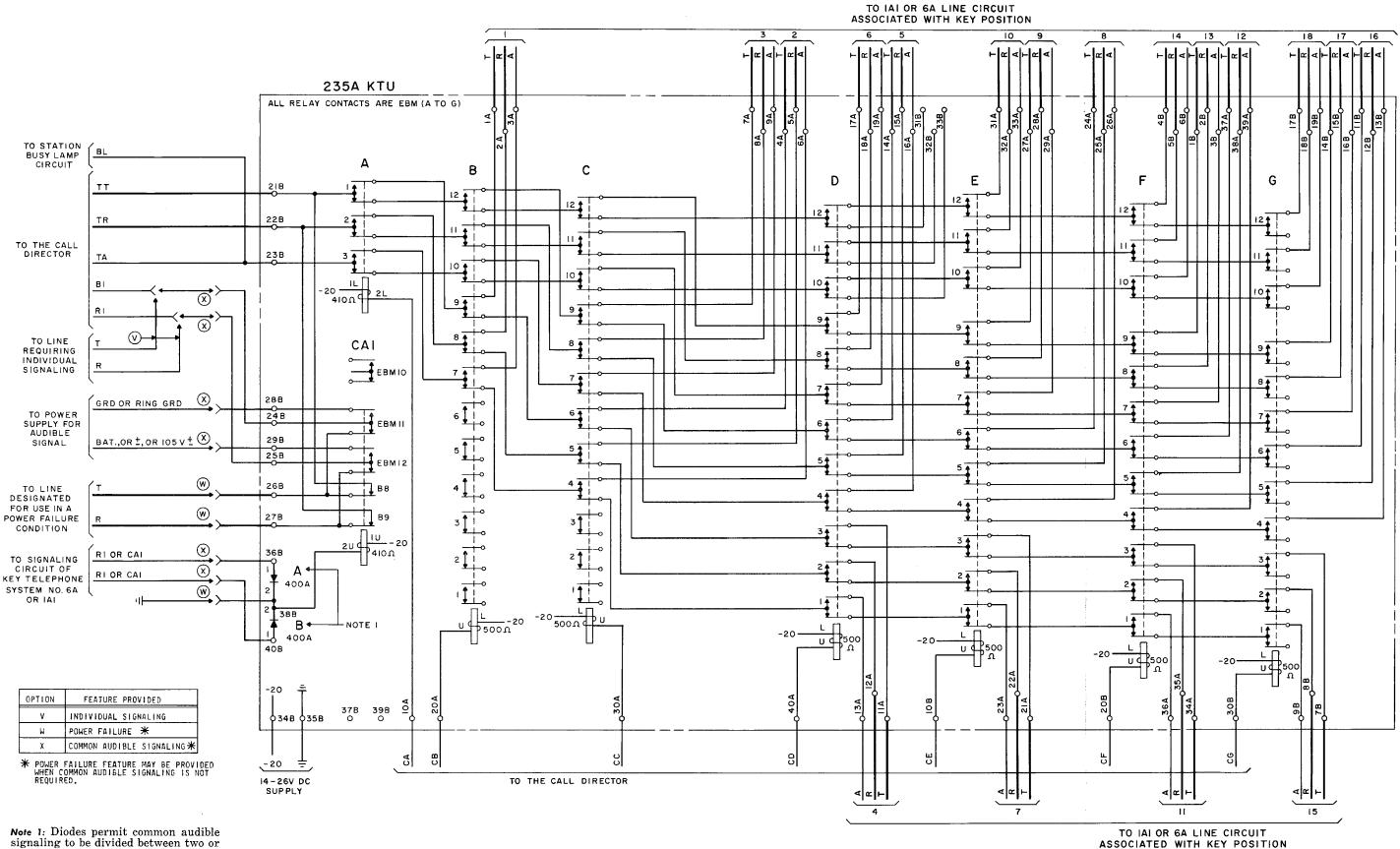


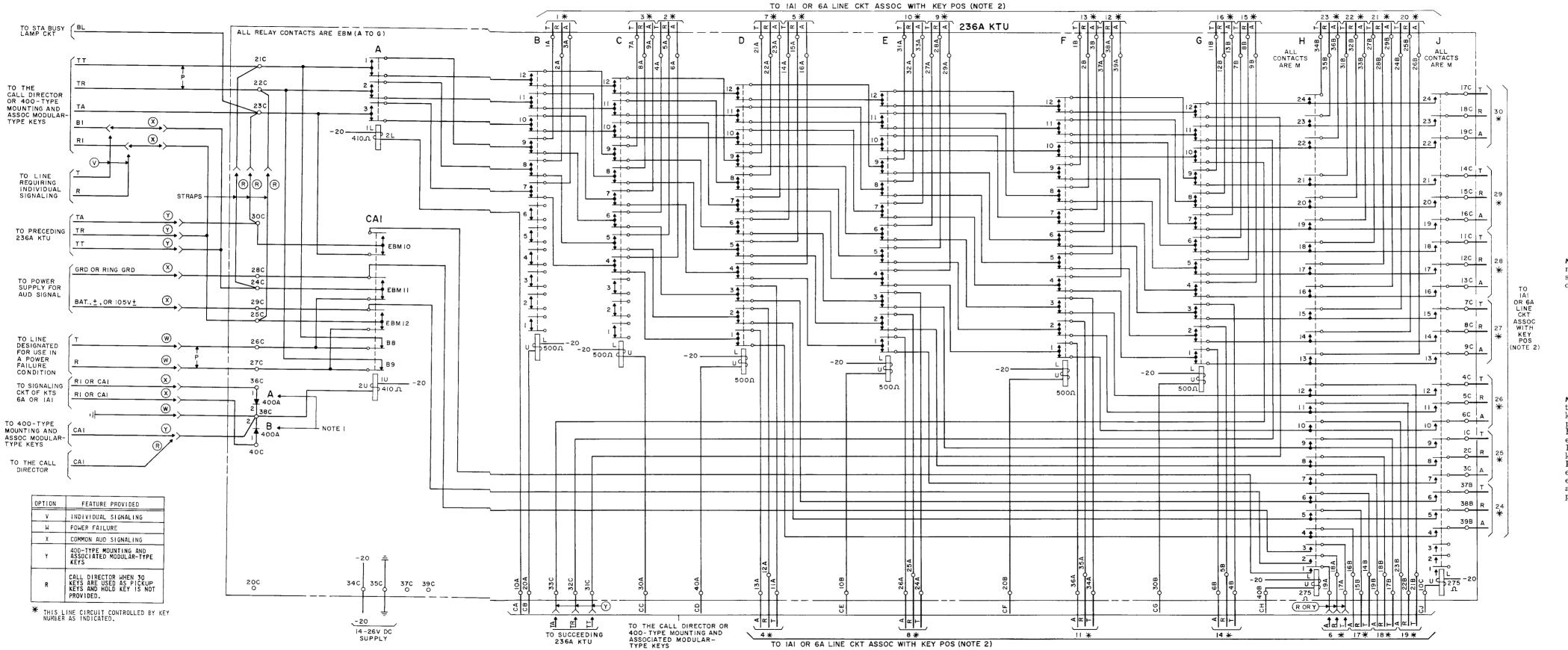
Fig. 4 - 236A KTU, Rear View

- 3.04 Each 400-series key mounting position may require more than one 236A KTU per position, depending on the number of lines picked up. One 236A KTU is required for each group of 30 lines picked up by the position.
- 3.05 Fig. 5 shows connections for a 235A KTU; Fig. 6 shows connections for a 236A KTU.
- 3.06 Connections of various telephone set circuits to station line concentrators are to be found in appropriate connection C Sections pertaining to:
  - Telephone Sets, The Call Director
  - 400-Type Mountings and Associated Modular-Type Keys
  - 1A1 Telephone Systems, List of Sections
  - 6A Key Telephone System.



signaling to be divided between two or more stations that have access to the same line or group of lines.

Fig. 5 — Station Line Concentrator for 18 Lines



Note 1: Diodes permit common audible signaling to be divided between two or more stations that have access to the same line or group of lines.

Note 2: When 236A KTU is used with 400-type mountings and associated modular key units, number shown indicates key position in each group of 30 key positions. Example: Leads shown going to the eighth line circuit will do so when this Fig. 6 is applied to the first group of 30 key positions and its associated 236A KTU. However, leads shown going to the eighth line circuit will go to the thirty-eighth line circuit when this Fig. 6 is applied to the second group of 30 key positions and its associated 236A KTU.

Fig. 6 — Station Line Concentrator for 30 Lines