

K401PA KEY TELEPHONE UNIT Paging Adapter Circuit

1.00 GENERAL

1.01 The K401PA Key Telephone Unit (KTU) is a plug-in unit designed for use in a K1A2 Key Telephone System (KTS) equipped with dial intercom. It will provide access to a paging amplifier from intercom stations. The paging circuit is accessed by dialing an assigned intercom number. The K401PA is not intended for use with 36A or 601A key telephone systems.

1.02 This document has been re-issued to change a pin number on the 401PA card in Figure 1 from 18 to 17.

1.03 The K401PA paging access circuit is designed to include the following characteristics:

- (1) Performs all functions from a power supply with a voltage range from -20 Vdc to -28 Vdc. (Key System Power Supply.)
- (2) Operates with 100 Vac \pm 30% or 14 Vac \pm 40% signal voltage inputs.
- (3) Permits the transfer of audible communications from input to output (intercom to paging amplifier) at -3.5 dBv to +0.5 dBv.
- (4) Reference frequency is 1 kHz at an amplitude of 1.0 Vrms.
- (5) Strapping Options: (See figure 2 and paragraph 2.05 and 2.06).

Option	Strap	Description
B	N to O	14 Vac \pm 40% signal voltage
A	M to N	100 Vac \pm 30% signal voltage

- (6) Reset controlled by normally closed contact at intercom KTU.
- (7) Provide a contact closure to control paging amplifier. Contact rated at 1 amp. resistive DC load.

- (8) Works into an input impedance of from 300 to 1000 ohms. (Paging amplifier should have an impedance of approximately 600 ohms for proper matching.)

OPERATING ENVIRONMENT

Temperature: 0° to +55°C
Humidity: 0% to 90% without condensation

2.00 INSTALLATION

2.01 The K401PA KTU may be inserted into any vacant CO/PBX line card connector and may be assigned any available intercom station number.

CAUTION: Do not install the K401PA until all connections are complete and checked.

CONNECTIONS (See Figure 1)

2.02 After determining the CO/PBX line card connector and the intercom number to be used:

Connect P.A. Amplifier to 401PA KTU

2.03 Connect the PA amplifier input leads to T and R terminals of the line position used. (These are the two terminals designated for connection of the CO or PBX line. They are internally wired in the KSU to pins 14 and 9 of the associated line card connector.)

Connect Intercom to 401PA KTU

2.04 Connect the intercom KTU to the 401PA KTU:

- (1) Connect the intercom RT lead (for the station number assigned to voice paging) to the R1 terminal of the line position used. (This terminal is internally wired in the KSU to pin 1 of the line card connector.)

(2) Connect intercom T and R to T and R terminals (on station block) assigned to the the line position used. (These terminals are internally wired in the KSU to Pins 12 and 13 of the line card connector.)

(3) Connect the A-lead terminal (on the station block) assigned to the line position used to one side of the NC contacts on the intercom unit to system ground. (This A-lead terminal is internally wired in the KSU to Pin 16 of the line card connector.)

INSTALLATION OF KTU IN KSU

Strap KTU for Proper Ringup Voltage

2.05 If a ringing voltage (105Vac) is used for intercom signaling, strap the 401PA KTU for option A.

2.06 If a buzzing voltage (18 Vac) is used for intercom signaling, strap the 401PA KTU for option B.

Insert 401 PA KTU in KSU

2.07 With component-side of card to your right, insert the 401PA KTU in the line card position that has been connected for voice paging. Lock all cards in position with retainer.

OPTIONS

2.08 The 401PA KTU has a set of normally-open contacts across Pins 4 and 8. The associated wiring in the KSU can be rewired to provide an "on-off" control of the paging amplifier if desired.

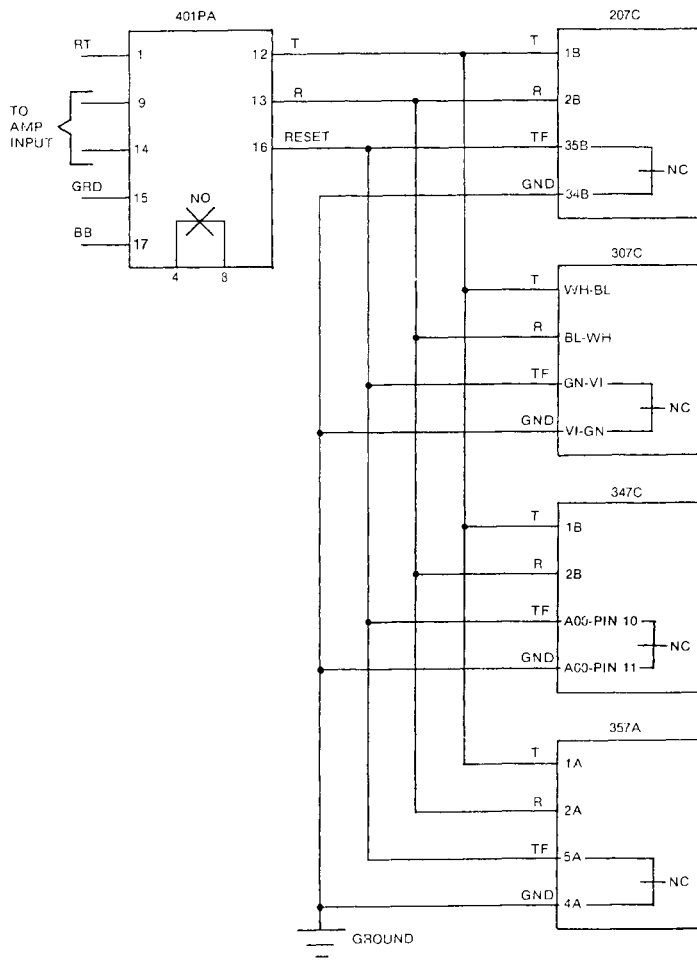
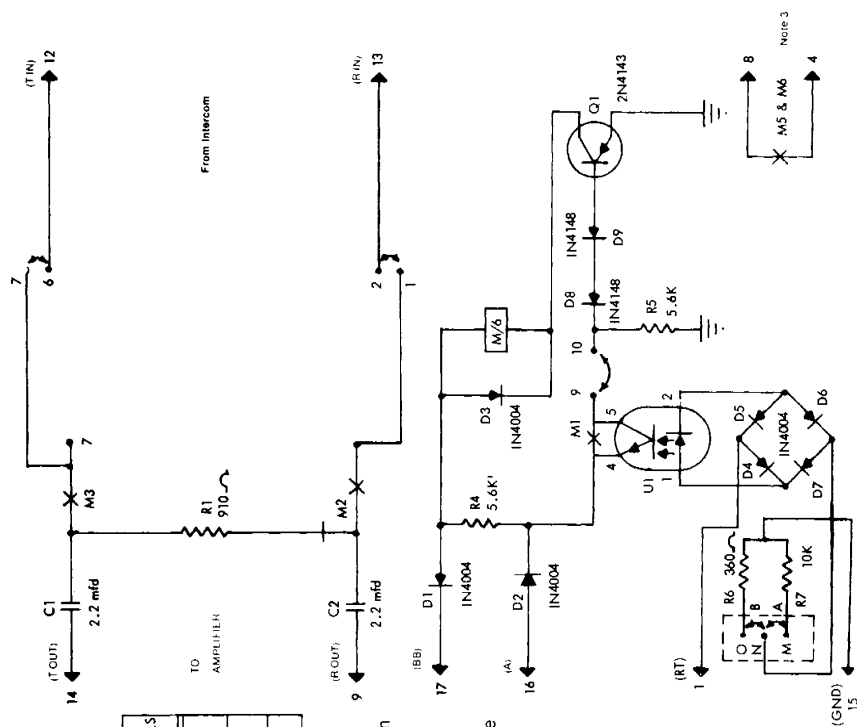


Fig. 1.—K401PA KTU Hookup to Intercom



OPTIONS	STRAPPING OPTIONS	STRAP TERMINALS
A	105 VAC RINGING	M-N
B	10 VAC RINGING	N-O

Fig. 2—Schematic, 401PA KTU

1. All strapping terminals not mentioned in "Options" are to have no connections.
2. Strap terminal 1 to 2, 6 to 7, and 9 to 10.
3. This normally-open set of contacts can be used for on-off control of paging amplifier.