

KP96-7 ACOUSTIC UPGRADE KITS

90027633000 and 90027633001

Telex Communications, Inc. is constantly looking for ways to improve our products. This kit contains the parts necessary to upgrade an older keypad reflect the engineering changes made to the product. There are three upgrades.

- Microphone Preamplifier/Frequency Response upgrade
- Keypad firmware update (New Surface Mount keypad only)
- * Speaker Update

Parts List

Qty.	Part
1	Programmed Altera chip
2	10 Ohm resistor
2	Microphone daughter board preamplifier assembly
1	1.6 K ohm resistor
2	0.47 μ F disk capacitor
1	16 K ohm resistor
2	Zero Ohm resistor
1	22 μ F 50V electrolytic capacitor
2	3/4" 18 GA Teflon spaghetti
*1	Speaker
2	39 K Ω resistor
3	0.001 μ F capacitor

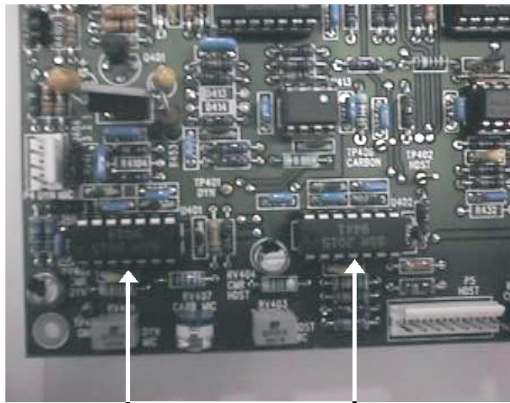
* = 90027633000 kit including speaker

Installation Instructions

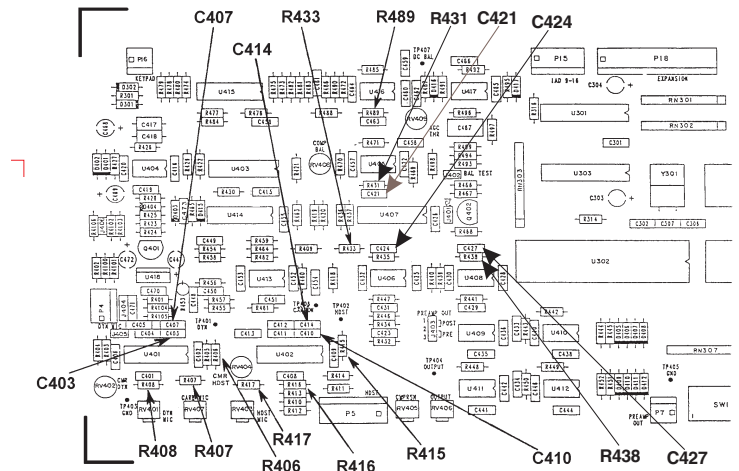
Unplug power cord and remove top cover of keypanel.

1) Microphone preamplifier replacement.

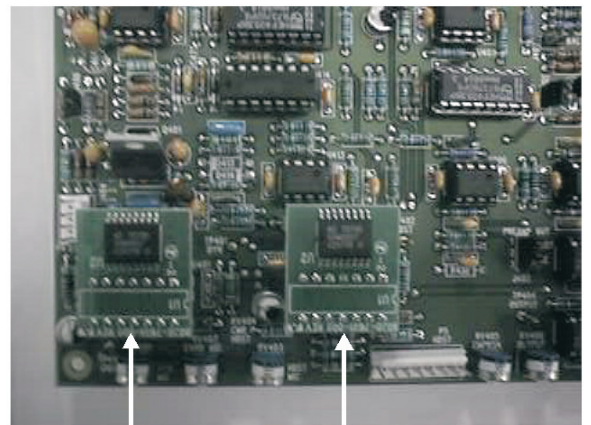
If your keypanel has the older leaded SSM 2015 Microphone Preamplifiers in U401 and U402:



**OLDER LEADED SSM 2015
MICROPHONE PREAMPLIFIERS**

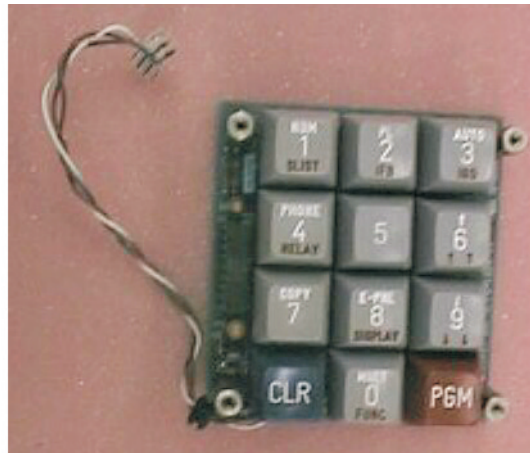


- A) Remove C403, C410 and replace with zero Ohm resistors.
- B) Remove C402, C409 (Nothing is put back in these locations).
- C) Remove C407 and C414 and replace with 0.47 μ F capacitors (Frequency response upgrade).
- D) R408, R417, R406, and R415 are removed and nothing is installed in their place.
- E) R407 and R416 are removed and replaced with 10 Ohm, 5%, 1/4 Watt, resistors
- F) R433 is removed and replaced with 1.6K Ohm, 5%, 1/4 Watt, resistor.
- G) R489 is removed and replaced with 16K Ohm 5%, 1/4 Watt, resistor.
- H) Remove the 12 DIP sockets for U401 and U402.
- I) Solder new daughter board microphone preamplifier PCB assemblies in U401 and U402 locations.
- J) Change R431 and R438 to 39K Ohm resistor (5% will do)
- K) Change C421, C424 and C427 to Ceramic Caps 0.001 μ F
- L) Keypanel will need to have the levels readjusted after modification. See installation instructions, KP96 and KP97 manual 93307101001. Section 3 on electric adjustments has level readjustment procedure.
- M) If your keypanel already has the newer daughter board microphone preamplifier assemblies in U401 and U402 it is not necessary to replace them unless they are defective. Check C407 and C414 to confirm that they are 0.47 μ F, if not, replace them with the capacitor which came with your kit.



**NEWER DAUGHTER BOARD
MICROPHONE PREAMPLIFIERS**

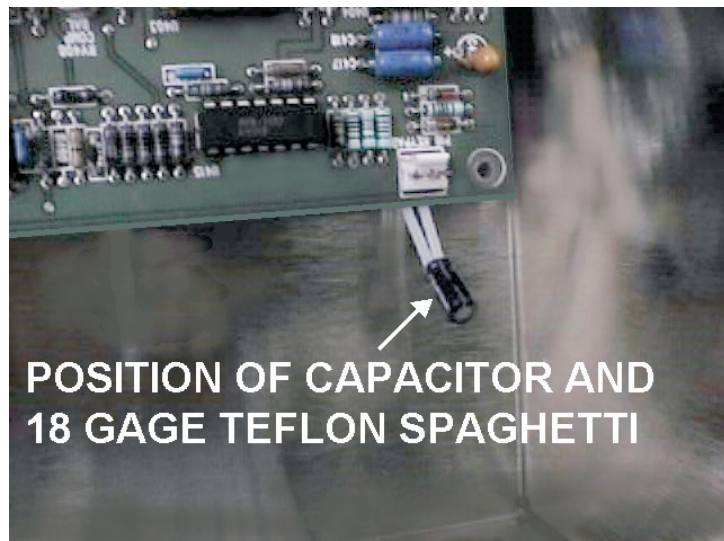
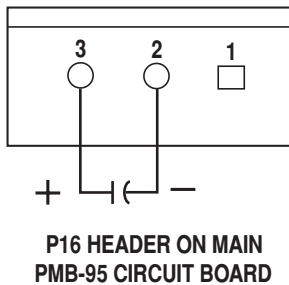
- N) If your keypanel has the older through hole construction DKP-3 you will need to add the 22 Φ F 50 Volt electrolytic capacitor in your kit to the P16 connector. The main PMB-95 circuit board will need to be removed because the leads of the capacitor are soldered on the bottom foil side.



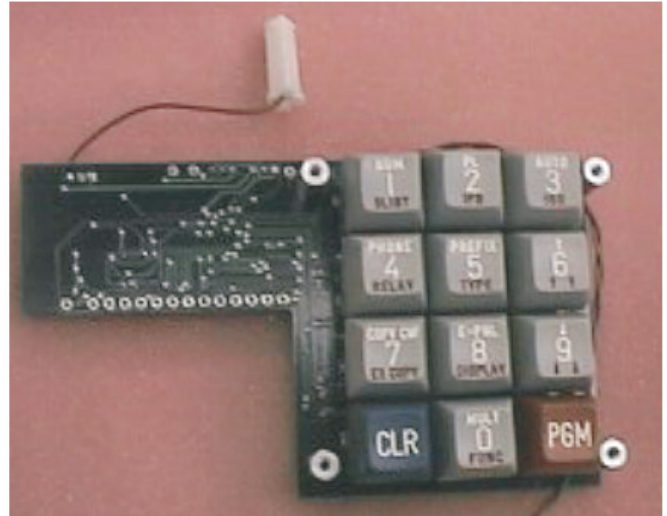
**OLDER THROUGH HOLE
CONSTRUCTION DKP-3 KEYPAD**

The + led of this capacitor will connect to pin 3 and the negative lead will connect to pin 2 of P16.

Use the two pieces of 18 gage Teflon spaghetti to on the leads of the capacitor and position the capacitor so it is in front of the PMB-95 circuit board.



If your keypanel has the newer DKP-3 surface mount keypad with Rev. 1.0 firmware it will need to be updated. The keypad assembly **will not** need to be removed for this upgrade.



*3) Speaker update.