

Keypanel Acoustical Upgrade Procedure

KP96 & 97 Series Keypanels

ACOUSTIC UPGRADE.DOC

8-19-99

This procedure should be used when changing U401 and U402 from the SSM2015 leaded chip to the SSM2017 Surface Mount PCB assembly telex part number 9030-7601-000. Refer to PMB-95 Component Layout Drawing in Keypanel Drawing & Parts Manual (9300-7101-00 Rev D 2/94)

NOTE : If the keypanel has the surface mount pcb assembly in place of U401 and U402, **skip section 3**.

- 1.) Remove the top cover of the key panel.
- 2.) Remove the mother board from the key panel.
- 3.) **Preamplifier Replacement**
 - A. Remove IC sockets for U401 and U402 from the PMB-95 mother board.
 - B. Remove C403 and C410 and replace with 0 ohm resistors.
 - C. Remove C402 and C409.
 - D. Remove C407 and C414 and replace with 0.47uF capacitors (frequency upgrade).
 - E. Remove R408, R417, R406, and R415.
 - F. Remove R407 and R416 and replace with 10 ohm 5% 1/4 watt resistors.
 - G. Remove R433 and replace with a 1.6K 5% 1/4 watt resistor.
 - H. Remove R489 and replace with a 16K ohm 1/4 watt resistor.
 - I. Install new preamp pcb assembly PN. 9030-7601-000 in place of the U401 and U402.
 - J. Install a 22uF, 50 volt capacitor on the bottom side of the mother board (+) lead to pin 3 of P16, (-) lead to pin 2 of P16 (P16 is located in the front right corner of the mother board).
- 4.) **Compressor Upgrade – 1** (if step 3 above *was not required*)
 - A. Remove R407 and R416 and replace with 10 ohm, 1%, 1/4 watt resistors.
 - B. Remove R433 and replace with a 1.6K, 5%, 1/4 watt resistor.
 - C. Remove R489 and replace with a 16K, 5%, 1/4 watt resistor.
 - D. Remove R408, R417, R406, and R415.
 - E. Remove RV404 and RV402.
 - F. Remove C405 and C412.
- 5.) **Compressor Upgrade – 2** (if step 3 above *was required*)
 - A. Remove RV404 and RV402.
 - B. Remove C405 and C412.

After performing either of the above two upgrades, re-calibration of the mother board is required per KP96-7 Installation Manual (part # 9330-7101-000) detailed in section 2.2.

PMB-95 Component Layout
(partial view)

