# DELUXE ELECTRIC MISTRESS ALIGNMENT
(FOR UNITS SHIPPED AFTER 3/15/79)

OBSOLETES PREVIOUS PROCEDURE. MUST BE DONE AS WRITTEN HERE.

Set RATE and COLOR (feedback) to min (CCW), set mode switch to FILTER MATRIX. The clock frequency is now unmodulated and determined by the RANGE control.

Set RANGE fully CW. Set the clock freq. trim (100K) for approx. 35KHZ(a 28:6 microsec. period) square wave at pin 1&5 of the 4013B. Connect a 200HZ sine wave sig. to the input and set the bias trim for the max. possible unclipped sig. at the balance trim wiper; this should be 1.6V p-p or more. Set input level for 1.0Vp-p at pin 6 of the 741 and set gain trim for same level(unit gain) at bal. trim wiper. Disconnect the input and set bal. trim for min. clock noise, and recheck unity gain when sig. reconnected.

Vary RANGE control over its full travel and trim the bias for max. unclipped signal through the SAD 1024A over the range.

Set input to 0.5Vp-p at 3KHZ. The gain through to the bal. trim wiper should go almost to ×2(about 0.9Vp-p) due to the pre-emphasis, but the output should remain at about 0.5Vp-p due to the de-emphasis.

Look at the clock(pin 1 or 5 of 4013B) and switch to FLANGE mode. Check for proper freq. modulation and action of RATE & RANGE controls; at higher RANGE settings the freq. should sweep to a lower minimum.

Set input to 0.20Vp-p 400HZ and COLOR at max. Switch to FILTER MATRIX and look at output. If unit oscillates, adjust F.B. trim to stop it. Set RANGE to a point where output is maximum(about 2/3 of way CW). Set F.B. trim for an output of 0.70Vp-p.

That's it.