

## **BIAS PROCEDURE SM-400/SM-900/ST-800**

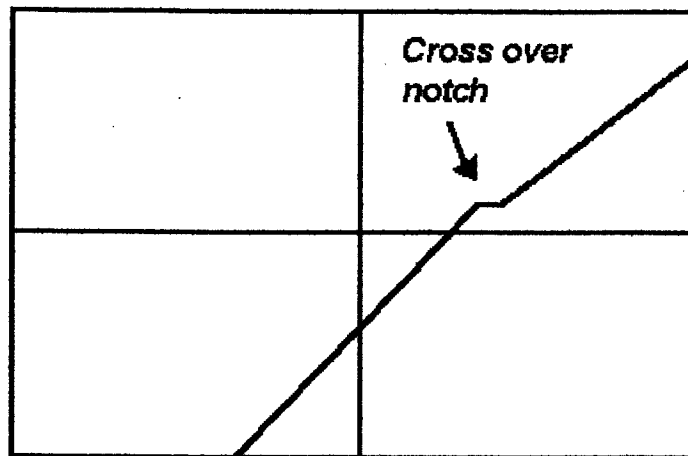
### **Equipment required:**

**Sinewave generator  
2 ohm, 250 watt load  
AC millivolt meter  
Oscilloscope**

- 1. Lower signal generator output to minimum, set frequency to 1KHz and insert into "mono" effects return jack (unbalanced line in for Stereo 800).**
- 2. Set Power Amp Assign Switch on back panel to "Stereo" position (up). Plug 2 ohm dummy load in channel to be tested.**
- 3. Raise Master Volumes on SM-900 and ST-800 to full clockwise. Set Effects Blend control on SM-900 to "wet" (full clockwise). Set Balance control on SM-400 to mid-position.**
- 4. Adjust bias trim pots to full counter-clockwise position.**
- 5. Turn on/off switch to "on" position. Connect unit to autotransformer (variac) and raise AC line level to 115 volts.**
- 6. Position ground reference on oscilloscope just above center line of screen.**
- 7. Raise signal generator level so that 2 volts RMS appears at the speaker output.**
- 8. Monitor signal on scope with the following settings:  
Load: 2 ohms  
Scope: Sweep Time: 50us    Volts/Div: 0.2V  
Signal Generator: Freq. 1KHz**

**9. The signal should have a prominent crossover notch at about zero crossing. Refer to diagram below.**

**Figure 1.**



**10. Adjust bias trimpot of amp being tested just past the point the crossover notch disappears. DO NOT OVER ADJUST as this will set the idle current too high and the power amp will overheat**

**11. Repeat procedure for other side.**