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I. Set up setting bias

- A. Speaker cable from SVT2PRO to 2 ohm load box
- B. Speaker cable from 2 ohm load box to oscilloscope
- C. Set oscilloscope to 5 volts/div.
- D. Select "2 ohm" on the SVT2PRO Impedance Selector switch (rear of unit)
- E. Oscilloscope set to 5 volts / div
- F. Speaker cable from Oscilloscope to multimeter
- G. Multimeter set to AC volts (200 V range)
- H. All SVT2PRO switches should be in the "out" position

II. Set bias

- A. Turn on the Power switch
 - 1. The Power/Standby/Fault led should illuminates red.
- B. Let the SVT2PRO warm up
- C. Turn on the Standby switch
 - 1. The Power/Standby/Fault led should glow solid green.

D. Set Bias 1 and Bias 2 (rear of unit) so that the green led is illuminating and the red led is not.

III. Set up power amp test

- A. Audio generator set to 1 kHz, -20dB output and sine wave
- B. Signal cable from audio generator to the In jack of the SVT2PRO
- C. All SVT2PRO switches should be in the "out" position

IV. Power amp test

- Always put unit in standby mode before removing signal, load or switching impedence.
 - A. Check for symmetric wave form
 - B. Check output level
 - 1. 24.5 Vac @ 2 ohms
 - C. Select "4 ohm" on the Impedance Selector switch of the SVT2PRO
 - D. Check output level
 - 1. 34.6 Vac @ 4 ohms
 - E. Make sure the fan is drawing air into the SVT2PRO
 - F. Check other speaker jack
 - G. Move signal cable from power amp input jack to effects return jack
 - H. Check the Master pot and the wave form.
 - I. Check the speakon jack
 - 1. Cable needs to be wired 1 + = positive and 2 + = negative
 - J. Check all 3 positions of polarity switch



- III. Set up for preamp test
- A. Audio generator set to suggested frequency, attenuation @-50 dB and sine wave selected
- B. Signal cable from generator to unit input jack
- C. 2 function footswitch attached to unit footswitch jack (rear of unit)
- D. Pot settings
 - 1. Gain, Master and Tube Gain full
 - 2. Bass, Midrange and Treble @ $\frac{1}{2}$
 - 3. Drive @ 0
- E. All switches in out position
- F. EQ and mute turned off with the footswitch
- IV. Preamp test

* Pots / sliders and switches should have a smooth feel while turning / pushing. There should be a smooth change on the oscilloscope appropriate to the pot's function.

- A. Check that peak LED is illuminating
- B. Check Gain pot (60 dB @ 1 kHz)
 - 1. Peak led should turn off between 6 & 9
- C. Check 15dB Pad switch
- E. Check Ultra low switch (+ 3dB @40 Hz)
- F. Check Bright switch (+ 7 dB @ 2 kHz)
- G. Check Drive pot
- H. Check Bass pot (+/-12dB @ 40 Hz)
- I. Check Midrange pot and Frequency switch
 - 1. #1 = 30 dB @ 220 Hz
 - 2. #2 = 30 dB @ 450 Hz
 - 3. #1 = 30 dB @ 800 Hz
 - 4. #1 = 30 dB @ 1.6 kHz
 - 5. #1 = 30 dB @ 3 kHz
- J. Check Treble pot (+/- 12 dB @ 4 kHz)

K. Check graphic EQ by switching on with the footswitch. The Active EQ led should come on at this time.

- 1. 40 Hz (+/- 12 dB)
- 2. 90 Hz (+/- 12 dB)
- 3. 180 Hz (+/- 12 dB)
- 4. 300 Hz (+/- 12 dB)
- 5. 500 Hz (+/- 12 dB)
- 6. 900 Hz (+/- 12 dB)
- 7. 1 kHz (+/- 12 dB)
- 8. 2 kHz (+/- 12 dB)
- 9. 4 kHz (+/- 12 dB)
- 10. Level (+ 8 dB / 10 dB @ 1kHz)





L. EQ Level and 1 kHz sliders at 10, switch the audio generator to 0 dB 1. The EQ Active / Peak led should illuminate red

M. With the Level slider full, check the EQ footswitch and Mute footswitch effect on the signal (mute footswitch should also light the peak/mute LED).

N. Pull the footswitch out of the unit and check the Mute, and EQ switches

- V. Line out jack set up
 - A. Unit remains loaded @ 4 ohms
 - B. Disconnect the load box from the scope
 - C. Set scope to 50 volts/div.
 - D. Audio generator is set to 1 kHz
 - E. Signal cable remains in Input jack

VI. Line out jacks test (rear of unit)

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- A. Check tuner out jack
- B. Check Effects Loop Send jack
- C. Check Slave out jack
- D. Check Pre Amp out jack
- E. Check Balanced out jack, pot and Post/Pre switch

VII. Noise Test

- A. Conditions:
 - 1. 4 ohm load
 - 2. bias set

B. Test:

- 1. Shorting plug in power amp input. < 8 mv
- 2. Master @ 10, tones @ 5, gain & drive @ 0. < 16.5 mv
- 3. Shorting plug in input, EQ out, master & gain @ 10, tones @ 5, drive @ <44mv