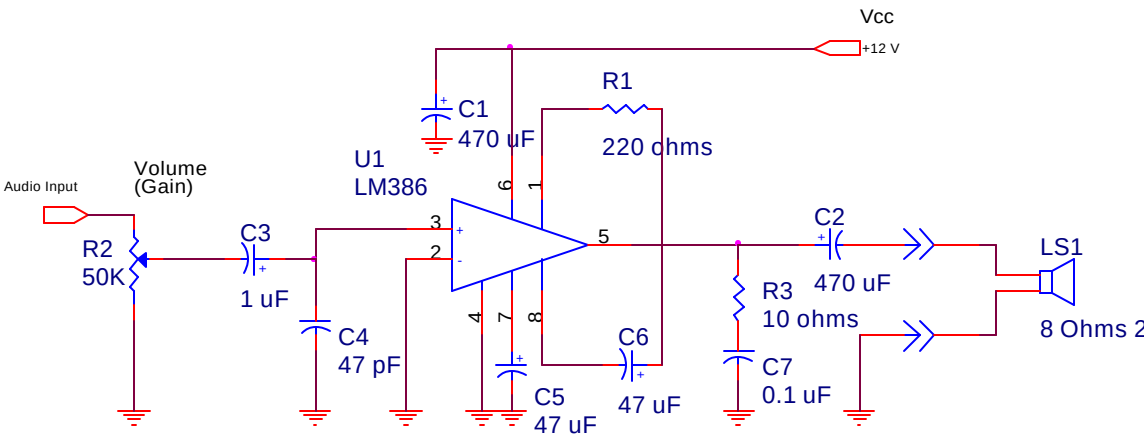
Electronic Communications for Technicians

Lab Manual Errata (1st ed – Printed Versions Only)

These errata apply only to the original printed laboratory manual. The errors have been corrected in the online PDF files.

Experiment 1: In Figure 1-1 on page 2, add a snubber network consisting of R3 and C7 as shown below.
Reason: Will help prevent undesired oscillation of U1.

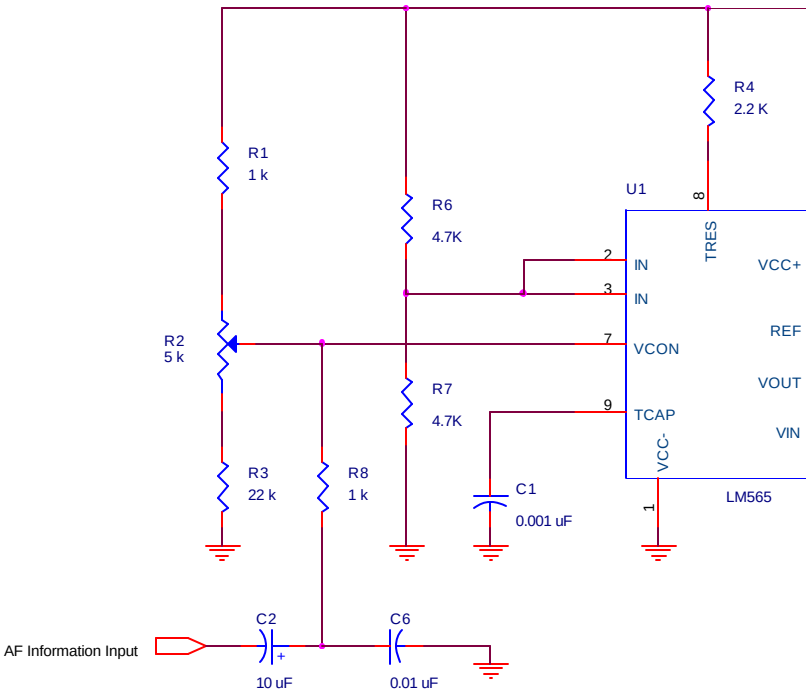


Experiment 6: On page 41, some of the IC pin numbers are misprinted below the equation. The text should read as:

Vcc = the supply voltage on pin 10 of the chip;
Vc = the control voltage on pin 7 of the chip;
Rt = the value of the timing resistance on pin 8;
Ct = the value of the timing capacitor on pin 9.

Experiment 7: Not really an error, but in step 5 on page 50, it is best to remind students to use a sine wave signal of 1 to 2 Vpp. (I've seen students accidentally drive the circuit with square waves, 20 Vpp sine waves, and so on with very strange results.)

Experiment 8: In Figure 8-1, change R1 to 1k, R2 to 5k, and R3 to 22k. Reason: Some lots of the LM565 draw more current than others on the control pin, loading the "divider" formed with these resistors. Most circuits will work without this change, but a few will have difficulty attaining the 100 kHz setpoint. Also, there is considerable 100 kHz leakage from pin 7 of the LM565, which will appear as "fuzziness" on the signal at the AF INFORMATION INPUT. *This does not affect the circuit's operation*. Addition of a low pass section to the AF INFORMATION INPUT consisting of a R8 and C6 as shown below will make it easier to measure the AF INFORMATION INPUT accurately.



Experiment 10: Not an error, but may cause a problem: The clock source driving U1 pins 17 and 40 needs to be CMOS compatible. Some signal generators do not swing all the way up to 5 V on their digital outputs. To fix this, add a 4.7k pull-up resistor to the *CLOCK SOURCE* input.

Experiment 12: In step 2b on page 89, change the text "SO" to "TRO" to match the UART nomenclature.