

## BALL LEVITATOR

(Continued from page 52)

globe and find a good distance until the globe "levitates." Adjust the distance of the gap with potentiometer R6 and note how the floating globe moves up and down.

You might notice the globe is bouncing insanely. Adjust potentiometer R2 to correct such an instability.

If you use the Levitator in a bright room, the sensor might become overloaded. That will result in the Levitator occasionally dropping the globe. To correct that problem, simply dim some of the room lights.

Once you have the unit working, you might feel the suspended globe vibrating very rapidly and almost buzzing. That is actually a 60-Hz power hum caused by the room lights. The intensity of an incandescent light is not constant and carries a 60-Hz component, which the sensor picks up. Such a vibration should not affect stability, but can be annoying. To totally eliminate the problem, operate the Levitator in a room with only natural light.

That should just about do it. Go ahead and experiment with the unit, maybe trying different-sized metal globes. And don't forget to show the Levitator off to your friends, they will be impressed and think that you are a genius. If you have any problems getting your system to be stable, or any other problems at all, feel free to contact the author via e-mail at [75104.3104@compuserve.com](mailto:75104.3104@compuserve.com). ■

