

Electronics and Instrumentation

Name _____ ENGR-4300 Fall 2001 Section _____

Extra Credit #1

In any of the projects we have done, we have occasionally experienced some kind of performance from the circuits that seems very strange. In Project 2, for example, one group obtained a signal with their receiver with the phototransistor removed. This indeed seems very odd, since this is the device that is supposed to detect the signal. If you have had something like this happen, describe it fully and you will receive some extra credit points. It is very important that you explain as completely as possible the circumstances you experienced. If you can explain why something so odd happened, that would also be good.

Sometimes circuits behave in very strange ways because we do not do a good job of building them. It seems most likely that the receiver mentioned above transmitted the signal either through wires that stuck up into the air a bit far and thus acted like antennas or the signal was passed from one circuit to the other via some common wiring. Many groups tried to build both the transmitter and the receiver on the same protoboard. Others shared power leads. Either could provide a path for signals.

Remember that the amount of credit given will be determined by the thoroughness of the description and the uniqueness of the effect.