

## boat-rustler alarm

Here's a simple alarm circuit that looks easy to defeat, but in reality isn't. The key ingredient is a resistor hidden under the dock and connected to the boat by a loop of insulated wire—ordinary lamp cord will work quite well. A potential thief, seeing the wire, will either cut it or try to short circuit it on the boat. Either

action will trigger the alarm. The hidden resistor and another with identical resistance form a voltage divider connected to the alarm input. If the wire is cut or shorted, the voltage at the alarm input will change, and the alarm will sound for about 5 minutes. The value of these resistors is not critical—anything from 20 to 100,000 ohms will work.

