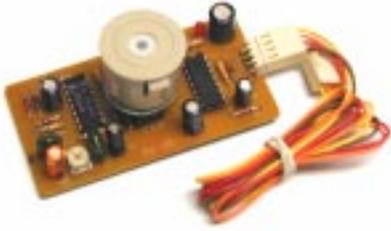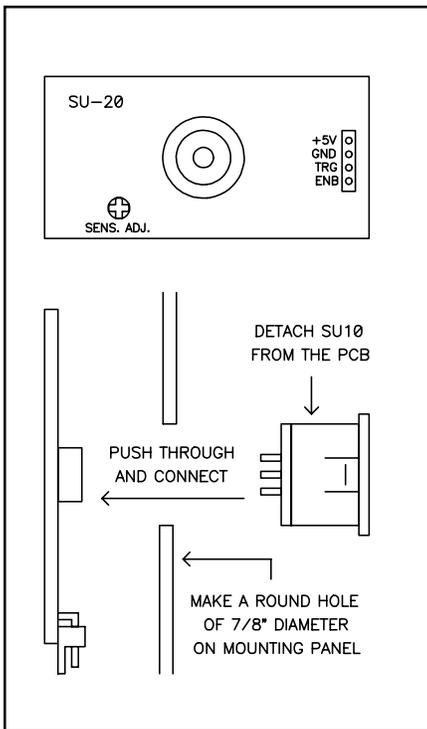# SU20 Motion Sensor

- Passive infrared motion sensor
- More reliable than photocell based motion sensors
- Adjustable detection range up to about 10 feet
- Spring action panel mount
- Wiring harness included

The SU20 is a passive infrared motion sensor which detects the change of heat volume from a moving human body. Unlike photocell based motion sensors, the SU20 works well under any lighting conditions, even in total darkness. The SU20 is also less picky about the mounting angle and location.

The SU20 cosists of a sensor element (called the SU10) and a base board. To install the unit, the SU10 is first detached from the base board and mounted on the panel through the integrated spring clips. The base board is then re-attached to the SU10 behind the panel.

Wiring Scheme
SU20 can be plugged directly into our audio boards featuring an "SU20 ready" connector. For other boards, here is the header pin definitions:

+5V: supply voltage
* Voltage range is 5~6 VDC or 9~30 VDC (selectable by jumper JP1).
* Operating current is 1 mA (5~6 VDC) or 5.5 mA (9~30 VDC).

GND: ground

TRG: sensor output
* Connect TRG directly to the audio board's trigger input. The sensitivity can be adjusted with trim pot VR1 - turning it clockwise reduces the sensitivity.

ENB: enable signal
* To enable the sensor, apply +5V to ENB or leave it unconnected. To disable the sensor, apply 0V (ground) to ENB.

Caution
Jumper JP1, located on the upper right corner of the board, must be set to W2 when the power voltage is below or equal to 6V. JP1 must be set to W1 when the power voltage is above 6V. SU20 may be damaged if JP1 is not set properly. Please check the jumper setting before applying power.