

Technical Solutions

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Information Sheet

Sensa Switch

Catalogue Number: SS1

Sensa Switch

The Sensa Switch combines the functions of both a touch switch and a (piezo) twitch switch.

As A Touch Switch:- The extremely sensitive touch switch Requires absolutely no pressure. It can be operated by touching the built in aluminum plate or by plugging in the touch lead with alligator clip – small metal objects can be clipped on and used as the touch surface. Any small metal surface can be used. Typical examples are a teaspoon (makes a great tongue switch), a small area of aluminium foil (makes a very thin switch, just 0.1mm high!), or a small metal bowl. These contacts can be placed in any position convenient for the user.

As A Twitch Switch:- Plug in the optional Piezo Transducer (PZT) and strap in place against any muscle that can move or twitch – see over for detailed instructions.

The Sensa Switch provides latching (press once for on, press again for off), as well as an instant/timer mode. The adjustable response period of the instant/timer mode gives a preset 'on' time, even if the user only strikes the switch briefly. This mode is particularly helpful when establishing a cause and effect understanding, and for giving a longer 'reward' period for people who cannot maintain constant pressure on a switch.

Familiarity and correct adjustment is essential if you want to get the most out of this switch – (See Over for **Sensitivity Adjustment**). Experiment with the device. If you still have any problems or queries, please phone us.



Sensa Switch –
Touch the aluminium surface or plug in an external sensor.



Touch Lead –
Use on its own or clip on a small metal object as a touch sensor.
eg. a coin.



Piezo Sensor –
Any muscular movement that puts pressure on the copper surface will activate the switch.

OPERATION

- Plug the plug pack into a 240Volt power outlet and turn it on.
- If using the touch lead with alligator clip or the Piezo Transducer, plug it into the ‘Sensor’ socket.
- Plug the lead from the *Sensa Switch* into the toy or equipment to be operated.

- **IMPORTANT - Sensitivity Adjustment.**

1. Initially set the toggle switch to timer.

2. Initially set the sensitivity and time to minimum – fully anti-clockwise.

Now turn the sensitivity adjuster clockwise until the unit will operate reliably with a touch or twitch. If the unit locks on, turn the sensitivity down a little (anti-clockwise)

- When you are happy with the sensitivity adjustment:
 - Choose either latching or instant/timer mode with the small toggle switch. For the instant/timer mode, adjust the time adjuster to give the “on time” you want.

Using the Piezo Sensor

The Piezo Switch is activated by changes in pressure. Unlike conventional switches, maintaining constant pressure on the piezo sensor will not keep the controlled equipment on.

- Once the initial set up and adjustment is complete, (See Above) Choose either latching or instant/timer mode with the small toggle switch.
- For the instant/timer mode, adjust the time adjuster to give the “on time” you want.

USING THE PIEZO SENSOR AS AN EYEBROW SWITCH

Once the initial set up has been done, and you are familiar with the operation of the unit, the flexibility of the Piezo Switch can be taken advantage of.

To use the Piezo switch as an eyebrow switch, use the headband supplied to hold the sensor firmly against the bone just above and to one side of the eye. Lifting the eyebrow and forehead muscles will move the sensor against the skull altering the pressure between it and the headband. It will take some experimenting to find the best position.

OTHER METHODS OF USING THE PIEZO SENSOR

Finger bending - with a bit of tape or ribbon, tie the sensor on top of a knuckle. Bending the finger will activate the switch.

Tensing a muscle - Use the headband to hold the sensor against an arm or leg muscle (be careful not to restrict blood circulation). It may be necessary to increase the pressure on the sensor by putting something between the sensor and the user. A piece of pencil eraser cut to the size of a ten cent coin is ideal.

Tapping the Sensor - Lay the sensor flat on a table with the brass side up. A very small movement pressing on the sensor will activate the Piezo Switch.