The **Twitch Switch** utilizes small muscle movement to activate any device which requires a switch, enabling the individual with limited motor skills to control the device with a wrinkling of the forehead, a slight flexing of the arm, or a twitch of the finger. Many other applications are possible using the hypoallergenic tape provided with the unit.

DESCRIPTION OF FEATURES:

<u>On-Off/Sensitivity Control</u>: The left-hand knob is used to turn the unit on and off, and to adjust the sensitivity of the **Twitch Switch**. Turn the knob clockwise to increase sensitivity and counterclockwise to decrease.

Mode Selector/Timing Control: The right-hand knob is used to select one of the three modes of operation - Latch Mode, Momentary Mode, or Timed Mode (See "Set-up and Operation"). In Timed Mode, this control is also used to select the amount of time (from 2 to 40 seconds) that you wish the device to remain on after activation of the switch. Turn the knob clockwise to increase the duration and counterclockwise to decrease.

<u>"Switch On" Indicator Light</u>: The green lamp on the face of the unit will light to indicate that the switch is currently activated.

<u>Sensor Element Jack</u>: The small jack facing the user is used to plug in the flexible Sensor Element.

<u>Sensor Element</u>: The flexible Sensor Element is provided with nonirritating tape for convenient placement, and is plugged into the Sensor Element Jack.

Device Output Jack: The small jack facing the user is used to connect a toy, computer, audio/video or communication device that has a 1/8" plug.

SET UP AND OPERATION

1. Turn unit over carefully to reveal the battery compartment. Install one "9V" battery, observing proper polarity, and secure by pressing down into the clip.

- 2. Plug Sensor Element into the control unit. Select a comfortable location for the flexible Sensor Element and affix securely to the body using the supplied non-irritating tape. Area should be free of oil and perspiration. It is advisable to attach the Sensor Element cord in several points along its way as well, to prevent it from activating the sensor during unrelated movements of the user.
- 3. Plug device to be controlled into the large Device Output jack.
- 4. Turn unit on and adjust sensitivity to the desired level. "Switch On" indicator may remain lit with sensitivity control set to "MAX." Turn knob counterclockwise until light goes off. Experiment with different settings until switching action is easily controlled.
- 5. Select Mode of operation:

Latch Mode: Turn the right-hand knob fully counterclockwise until it clicks into "Latch" position. Device will turn on with movement of Sensor Element and remain on until turned off by the next movement.

Momentary Mode: Starting from the "Latch" position, turn knob clockwise until it clicks. Set "Timing" pointer to "MIN" position. Device will turn on, then off immediately with each movement of the Sensor Element.

Timed Mode: Starting from the "MIN" position in Momentary Mode, turn knob clockwise until the desired timed cycle, from 2 to 40 seconds, is selected. Device will turn on with movement of the Sensor Element and remain on for the duration of the cycle.

APPLICATION NOTES:

■ The **Twitch Switch** is designed primarily to be activated by the wrinkling of user's forehead. For best results, attach the Sensor Element to the center of forehead, and make sure the Element is already slightly arched forward when forehead muscles are relaxed. This will result in maximum bending of the element during the wrinkling and generate best possible input signal. Bear

In mind that the switch was designed to discriminate between
purposeful and uncontrolled wrinkling. Adjusting of the
sensitivity level should allow you to find the position when fast
purposeful movements will activate the switch, while slow
uncontrolled movements will not.

- As an alternative, the switch can be attached to any other part of the body, and activated by any movement, which results in bending of the Sensor Element. As in the previous case, user should be aware that the switch reacts much better on short, quick movements. The speed, not the degree, of bending initiates the switching action.
- There are many other possible applications of this switch. For example, the Twitch Switch is sensitive to vibration. Thus, it can be used as an impact switch, e.g., if the Sensor Element is attached to the surface of the table, it will react on any vibrations of this surface, such as caused by striking it by a body part or any other object.
- **unit** Turn the control unit off after use to preserve the battery.

If you have any problems or questions about this unit or any of our products, please call our Technical Assistance Department at:

THE TWITCH SWITCH

Catalog No. 1061

User's Manual