PROXIMITY SWITCH SSW-EB
Fiber-Optic Eye-blink Switch

Function:
The Fiber-Optic Eye-blink switch provides a switch closure when the user does a controlled purposeful eye blink, normal or rapid eye blinks are ignored (the Delay switch must be set ON). When the Delay switch is set in the OFF position, the Fiber-Optic Eye-blink switch can be used to sense any movement that passes through the fiber optic beam. The sensing range of the beam is a ¼”.

Usage:
Use this sensor when an eye-blink is the only movement that can be controlled to activate a switch or when only small movements are available that requires no touch. The types of appliances that can be activated include personal computers, communication systems, environmental controls, and toys.

Set-Up:
It is recommended that the Proximity Control Module be fully charged before using. The Proximity Control Module should be charged for at least 3 to 4 hours before using it. The Proximity Control Module is charging when the LED is RED and fully charged when the LED turns GREEN.

To charge the Power Control Module:

1. Plug the charging cable into the charging jack.
2. Plug the other end into an AC outlet. The charging LED will light and show RED.
3. When the Power Control Module is fully charged the charging LED will turn GREEN.

The Proximity Control Module can be used while the unit is charging. The Proximity Control Module has an internal 12Volt rechargeable battery. The battery should stay charged for about a week with normal usage, recharge as needed.
Connect one end of the 3.5mm cable into the jack on the Proximity Control Module labeled SWITCH OUTPUT and the other end into the device that you want to control.

Before connecting the fiber-optic cable into the Power Control Module, make sure that the ends of the cable going into the PCM are not frayed or distorted. If the ends of the cable do not look like they have a straight cut on them, you will need to cut them with the cable cutter provided.

Above is a picture of the cable cutter with the Blade of the cutter down.

Lift the top of the cutter up so that the blade is Elevated and the cable can be inserted.

To cut the end of the cable to clean the edge, Insert the end of one of the cables into the hole Of the cutter, the larger hole on the end.

The end of the cable should be seen at the back of the cutter. Push down all the way on Top of the cutter and repeat with the other cable.

With the ends of the cable cut, open the fiber-Optic cable connector by sliding the left end Of the connector to the left opening up the Holes for the cable.

Slide both ends of the cables into the fiber-optic connector as far as you can. Slide the left side of the fiber-optic connector to the right to lock the Fiber-optic cable into place.
Turn the Power Control Module on by setting the power switch to either On w/ Tone or On No Tone. When you set the power switch to On w/ Tone, you will hear a beep from the PCM each time the Fiber-Optic Eye Blink sensor is activated. When the power switch is set to On No Tone, no beep will be heard when the sensor is activated.

There are 2 settings for the Blink Delay. When the Blink Delay switch is set ON all normal blinks of the eye will be ignored and only when the user holds their eye closed for 3 to 3 seconds will the sensor be activated. When the Blink Delay switch is set OFF, then every blink will activate the sensor.

To setup the Fiber-Optic Eye-Blink sensor on the head strap and holder do the following:

Remove the first nut from the Fiber-Optic sensor
Insert the end of the Fiber-Optic Sensor that you removed the nut from into the plastic holder as shown above and replace the nut loosely but so that the Fiber-Optic sensor will not be able to move around. You will still need to adjust the sensor closer to the side of the eye while it is on the end-user.

To setup the Fiber-Optic Eye-Blink sensor on the end-user proceed as follows:

Attached the head strap with the plastic clip and sensor onto the user and position the plastic clip with the Fiber-Optic Eye-Blink sensor so that the red beam from the sensor is seen on the white part of the eye on the side of the eye. Adjust the sensor using the 2 nuts holding the sensor on the plastic clip closer to the eye until the sensor is activated and then back it off slightly and tighten up the 2 nuts to lock the sensor in place. With the sensor positioned properly, every time the user holds their eye closed for more than 2 seconds the sensor will be activated with the Blink Delay switch set to Blink Delay ON.

NOTE: Any movement of the head while the head strap and sensor are positioned in place will cause the sensor to come out of alignment.