



Catalogue and price list



2024

The LipStick

Mouth-operated Mouse



The Lipstick is an alternative for people who cannot use a standard computer mouse. All mouse functions can be controlled with the mouth. The screen cursor follows the movements of the mouth; the buttons are operated with the lips.

- *Very sensitive force control. Only small head movements necessary.*
- *Very accurate at small movements. Pixel by pixel is quite feasible.*
- *Automatic acceleration for smooth and fast large movements.*
- *Mouse clicks by raising and lowering lips.*
- *Free choice of upper- or lower lip for left- or right mouse clicks.*
- *Mouse dragging and scrolling is easily possible.*
- *Bite proof mouthpiece of high-performance medical grade plastic.*
- *Robust metal case. Not sensitive to shock or vibration.*
- *Completely closed construction for optimal hygiene.*
- *Easily cleaned with any common detergent or disinfectant.*
- *No parts that can wear or have to be replaced regularly.*
- *Can be used in any position. Use while lying in bed possible.*
- *Automatic sensor calibration. No reset button necessary.*
- *Plug and play for Windows, Apple, Linux and Android.*
- *With Windows software for individual adjustments.*

Order code: **LipStick**

The Skipper



The Skipper is a very sensitive wheelchair controller that is based on a force sensor. Other controllers are based on a joystick which needs a force and some movement to operate. The Skipper can be operated by force alone without any perceptible movement. For some wheelchair users this can be a game-changing property.

Various settings can be changed by the wheelchair dealer with a wireless programmer while the user is free to drive around.

- Based on a very sensitive inductive force sensor.
- Operation by force alone or by force and movement.
- Removable rigid or flexible sticks available.
- Rigid sticks are for control by force without movement.
- Rigid sticks break at a controlled force to protect the sensor and the user. It will automatically restore itself because of built-in magnets.
- Flexible sticks make the Skipper behave like a normal joystick.
- Various combinations of force and movement possible.
- Minimum force necessary for full output 10 grams.
- Maximum force for full output adjustable to 500 grams.
- Adjustable non-linear Force/Speed relationship gives users more precise control at low speed and more responsive control at high speed.
- Adjustable tremor damping low pass filter.
- A dealer can make adjustments with a wireless programmer while the user drives around freely. Optimal values found quickly and easily.
- During adjustment, the dealer can stop the wheelchair immediately if anything goes wrong. This means safety for an inexperienced user.
- Automatic compensation of sensor drift caused by temperature changes.
- Automatic protection against unwanted wheelchair movement if the stick is outside the zero position on power up.
- Compatible with the R-net Omni joystick standard.

Order code: Skipper

Skipper

Options

The control stick of the Skipper is removable. It can be rigid or flexible. With the rigid version the Skipper operates like a true force stick. With the flexible version it operates like a normal joystick. The amount of movement for a particular operating force depends on the stiffness of the spring in the flexible stick.

The removable sticks can be screwed on the skipper body, which has a fixed m4 stub.

A rigid stick comprises two halves that are firmly held together with strong magnets. If the applied force gets strong enough to potentially damage the sensor (or the user), the magnets give way and the stick breaks. A broken stick will automatically repair itself because of the magnetic attraction.



Order code: **Skipper Break-out stick**

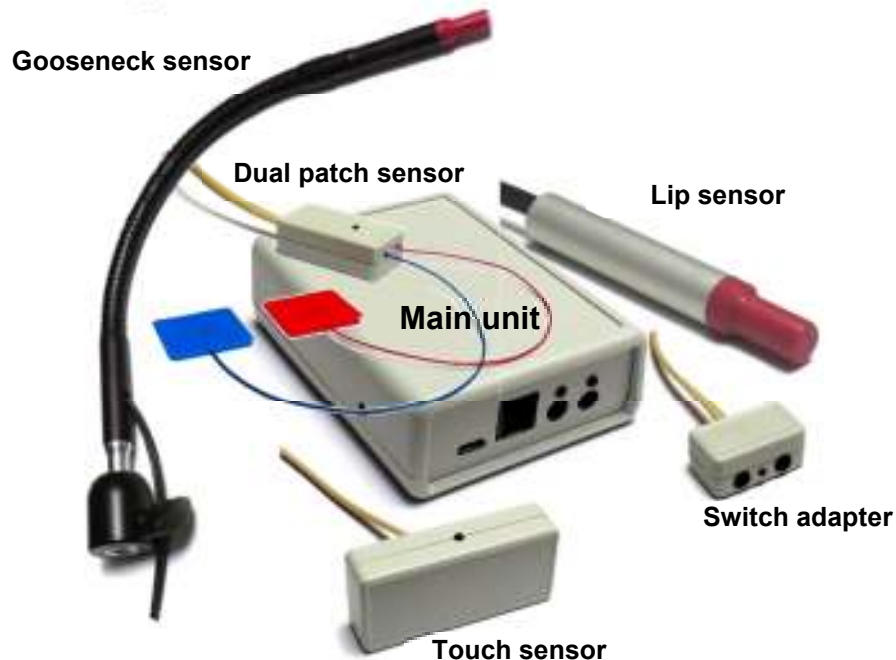
The two halves of a flexible stick are connected by a spring. It is operated by both force and movement, similar to a regular joystick. The standard option is a flexible stick that moves 5 mm with a force of 150 grams. In special cases, Shannon can provide sticks with different spring stiffness.



Order code: **Skipper Flex stick**

SPA

Sip and Puff Alternative



The SPA is an alternative for the widely used sip and puff switches. These devices are commonly used to activate two switch functions; one by sipping and the other by puffing. They are used in alarm systems, for calling assistance, environmental control, computer access, and more.

Standard Sip and Puff switches use tubes or straws and membrane chambers where saliva and other fluids can build up during use. They have to be cleaned often to remain hygienic and require maintenance for reliable operation. When used by different people, they need interchangeable parts or thorough cleaning and disinfection. Also, they cannot be used by people on a respirator.

The SPA system comprises a main switch unit and a sensor of choice. Several types of touch or proximity sensors are available and they can be exchanged easily. There is almost always a solution possible to control the SPA with fingers, head, chin, foot, lips or other body parts.

The Lip sensor is an obvious alternative for a conventional sip/puff switch. The mouthpiece has fully closed capacitive touch sensors into which contamination cannot penetrate. It can be cleaned easily with any usual detergent or disinfectant. There are no interchangeable parts and the system is maintenance free. The sensors require zero force and can be used by people with very limited motor skills or people on a respirator.

Also, a Dual Patch sensor to which many different touch patches can be connected is available.

In addition to standard Sip and Puff switch replacement, the SPA has a sophisticated USB interface that enables direct connection to a computer, tablet or mobile phone. Both switch channels can be programmed to send any key, key combination or mouse click to the computer. Various properties of the SPA like the sensor sensitivity and switch timing can be controlled with the accompanying Windows software.

SPA

Options



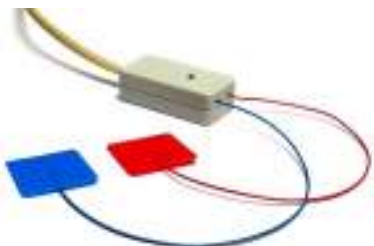
Main Unit
(9 × 6,5 × 2,5 cm)



Lip sensor
(Ø 1 × 7 cm)



Touch sensor
(6,5 × 3 × 1,5 cm)



Dual Patch sensor
(ex. patches)



Switch adapter
(3,5 × 2 × 1,5 cm)



Gooseneck sensor
(total length 35 cm, flex 16 cm)



Mounting tube straight
(Ø 0,6 × 7 cm)



Clamp straight 6 - 8 mm
(1,5 × 1 × 1 cm)

Order codes:

SPA Main Unit
SPA Lip Sensor
SPA Touch Sensor
SPA Dual Patch Sensor
SPA Pads for Dual Patch
SPA Switch Adapter
SPA Gooseneck sensor
SPA Mounting tube straight
SPA Clamp straight 6 – 8 mm

The TAC

Touch Alarm Controller



The TAC is a special touch switch for an alarm or assistance call in hospitals and rehabilitation centres. It is meant for patients who are unable to operate a standard call button.

The TAC consists of an operating sensor and a base unit that are connected with a strong but flexible cable. A light touch or even approaching the sensor is enough to activate the alarm.

The sensor is housed in a closed hygienic housing made of high-quality plastic (POM). This is resistant to disinfection with 70% alcohol.

The sensor can easily be fixed to the Shannon Table mount with 10 mm adapter, using either the straight adapter 7 cc or the flexible gooseneck adapter 27 cm.

The connection cable between the sensor and the base unit has two robust RCA connectors. The cable can have any length up to 10 meters. The switch output of the base unit can be connected to the calling system to replace the standard call button.

The TAC comes with a Windows computer program that can be used to adjust the sensor sensitivity, the reaction time of the alarm and the type of switch (normally open or normally closed). It is also possible to configure the TAC in such way that the alarm is only activated after a double click, to avoid unwanted activation.

All settings are stored in the base unit or the sensor even when the system is turned off.

The TAC

Options



Main Unit
(9 × 6,5 × 2,5 cm)



TAC sensor
(6,5 × Ø1,4 cm)



Table mount adapter
Straight 7 cm



Table mount adapter
Gooseneck 27 cm



TAC sensor cable
3 m



Mains power adapter
9 V DC

Order codes:

TAC Main Unit
TAC Sensor
TAC Table mount adapter Straight 7 cm
TAC Table mount adapter Gooseneck 27 cm
TAC Sensor cable
TAC Mains adapter 9 V DC

Table mount



The Shannon table mount is both elegant and firm. It is fully adjustable and can be used to mount the LipStick or other devices in almost any position.

It is made of black anodized aluminium.

The arms of this mount are approximately 30 cm long. The clamp fits table tops up to 4,5 cm thick.

The table mount with $\frac{1}{4}$ " threaded adapter can be used to mount devices like the LipStick.

The table mount with 10 mm adapter is suitable for the TAC sensor.

The table mount with 6 mm adapter can be used to mount several SPA sensors.

Table mount

Options



Table mount
With 1/4" adapter
For LipStick



Table mount
With 10 mm adapter
For TAC



Table mount
With 6 mm adapter
For SPA



1/4" threaded adapter
for table mount
($\varnothing 1 \times 6,5 \text{ cm}$)



10 mm adapter
for table mount
($2 \times 1 \times 1 \text{ cm}$)



6 mm adapter
for table mount
($1,5 \times 1 \times 1 \text{ cm}$)



Table clamp for 6 mm
tubes



Table clamp for 10 mm
tubes



Table clamp for 12 mm
tubes

Order codes:

Table mount with 1/4" threaded adapter (for LipStick)

Table mount with 10 mm adapter (for TAC)

Table mount with 6 mm adapter (for SPA)

1/4" threaded adapter for table mount

10 mm adapter for table mount

6 mm adapter for table mount

Table clamp for 6 mm tubes

Table clamp for 10 mm tubes

Table clamp for 12 mm tubes

Mitch

Mouse control with switches



Mitch is an alternative for people who cannot use a normal computer mouse. All mouse functions can be controlled by switches. Up to 10 switches with a standard 3.5 mm mono jack plug can be connected to the front of Mitch. The back has a standard 9 pin D connector for a switch joystick or tablet.

Up, Down, Left and Right cursor movements, Left and Right mouse buttons and scroll Up or Down can be controlled. Both slow and fast movements are possible: click and hold for low speed, double click and hold for high speed.

Mitch is plug and play and does not need any special drivers. The factory settings will satisfy most users. However, it comes with special Windows software to change various speed settings to suit personal preferences. Also, two front switches can be programmed to function as middle mouse button, drag lock function or double click.

Mitch comes complete with USB cable and user software.

Order code: Mitch