

# SpaceMouse Pro Wireless

www.3dconnexion.com

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## 1 Product Description

#### 1.1 General

3Dconnexion SpaceMouse Pro Wirelss is a motion controller aimed at designers, modelers, animators and graphic artists. Figure 1 shows a picture of the device.

SpaceMouse Pro Wireless is designed through both wired and wireless link for use with either right or left hand in addition to the common mouse. With one hand on the motion controller and the other hand on the mouse, performance of 3D applications can be increased considerably. SpaceMouse Pro enables the user to pan, zoom and rotate 3D-models simultaneously, while at the same time editing can be done with the mouse. In addition to that, the Product comes with 15 Programmable buttons which Provide quick access to frequently used commands. The SpaceMouse Pro Wireless incorporates six blue LEDs under the Cap.

#### 1.2 Description

The use of the Controller Cap and the functions of all buttons are explained in this section.

#### 1.2.1 Controller Cap

The main element of SpaceMouse Pro Wireless is the Controller Cap, which contains a 6 degrees-of-freedom optical sensor that allows the following movements: Horizontal shift in x-direction and z-direction, vertical shift in y-direction, rotational tilt around x-axis and z-axis, plus twist around y-axis. In the same way the user moves the Controller Cap of SpaceMouse Pro, the model moves on the screen. Thus, panning, zooming and rotation can be done simultaneously.

The usage of the Controller Cap can be described as follows:

### Horizontal movement in x-direction:

- Move the Cap straight right parallel to the desk to pan the model towards the right.
- Move the Cap straight left parallel to the desk to pan the model towards the left.

#### Vertical movement in y-direction:

- Pull the Cap up away from desk to pan the model upwards.
- Push the Cap down to desk to pan the model downwards.

#### Horizontal movement in z-direction:

- Move the Cap straight away from you parallel to desk to zoom out on the model.
- Move the Cap straight towards you parallel to desk to zoom in on the model.

#### Turning around y-axis:

- Twist the Cap clockwise or counterclockwise to rotate the model correspondingly. Rotational tilt around x- or z-axis:
  - Tilt the Cap around x- or z-axis to rotate the model around the corresponding axis.

#### 1.2.2 Keys labeled "1", "2", "3" and "4"

By default, these buttons Provide quick access to the most popular commands of the currently active application. The functions of these buttons can (like all other buttons of SpaceMouse Pro) be edited by the user via the control panel (see section 1.2.4 "Menu" for more details).

#### 1.2.3 Modifier Keys: Esc, Alt, Shift, Ctrl

These buttons Provide the same functionality as the identical keyboard functions, with press and hold capabilities. This allows your hand to remain on the controller while typing shortcuts.

#### 1.2.4 Menu

This button opens the 3Dconnexion popup menu on the desktop. The popup menu allows the user to easily configure the device.

## 1.2.5 View keys: T, R, F

SpaceMouse Pro Provides three buttons for selecting preProgrammed views. By default these buttons automatically move the model or design to Top (T), Right (R) and Front (F).

#### 1.2.6 2D

For CAD applications, select this button to turn off rotations. SpaceMouse Pro will then only pan and zoom. For DCC applications, select this button to turn on 3DView, which allows you to move your cursor in an orthogonal view while navigating with SpaceMouse Pro in a 3D view.

#### 1.2.7 Roll CW

The Roll CW button lets rotate the model 90 degrees in clockwise direction.

#### 1.2.8 Fit

Selecting this button will zoom-to-fit the model or drawing in the user's application window.



Figure 1: SpaceMouse Pro Wirelss

## FCC Caution.

#### § 15.19 Labelling requirements.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### § 15.21 Information to user.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### § 15.105 Information to the user.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

#### RF warning for Portable device:

The device has been evaluated to meet general RF exposure requirement.

The device can be used in portable exposure condition without restriction.