

Manual 3Dconnexion® SpaceMouse Pro



Driver Version: 3DxWare 10.8.15 and higher

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# **QuickStart Guide**

### **Desktop Setup**







Place the SpaceMouse Pro on the opposite side of the keyboard to your standard mouse. One hand engages the 3D mouse to position your model: rotating, panning and zooming. The other hand uses the standard mouse to select, create and edit.

### **Hand Position**



Position your hand as shown. The contoured controller cap will guide your fingers into the perfect position for precise and effortless control.

#### <u>Installation</u>



#### 1. Connect

Plug the USB cable of your SpaceMouse Pro into a USB port of your PC.

#### 2. Download the latest 3Dconnexion software

Get the latest 3Dconnexion software (3DxWare) at <u>3dconnexion.com/drivers</u>.

#### 3. Install the 3Dconnexion software

Install the 3Dconnexion software by following the instructions.

#### 4. Familiarize with your SpaceMouse Pro

Open 3D connexion Home and launch the Trainer to get help taking the first steps with your SpaceMouse Pro.

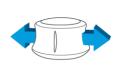
# **Feature Guide**

# 3Dconnexion SpaceMouse Pro



# Controller Cap

The Controller Cap is the heart of your SpaceMouse Pro. Its Six-Degrees-of-Freedom (6DoF) sensor allows you to push, pull, rotate, or tilt to pan, zoom and rotate your drawings and 3D models. The SpaceMouse has different motion profiles depending on the application you are using. In **Object Mode** applications the 3D navigation behaves as if you were reaching into the screen and holding the object in your own hand. In **Fly Mode** applications, the navigation behaves like a camera you are viewing through. For many applications, you can adjust this behaviour in the **Advanced Settings** of your SpaceMouse Pro.













#### Menu Button

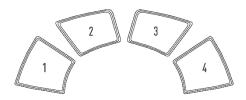
The Menu Button allows for fast and easy customization of your 3Dconnexion devices. Pressing it will take you directly to the **3Dconnexion Settings**. Select the device you want to configure in the flyout window and customize it.

#### Fit Button

With the Fit Button, you will never lose sight of your drawing or 3D model. Press it to bring your drawing back to the center of your screen.

#### **3Dconnexion Buttons**

The SpaceMouse Pro features four additional programmable function buttons, located above the controller cap. It instantly recognizes the applications you are using, as well as their environments, and automatically assigns the most used commands to the buttons. You can personalize commands assigned to the function buttons using the **3Dconnexion Settings**.



#### **On-Screen Display**

The SpaceMouse Pro Wireless offers an On-Screen Display (OSD) that shows you the current assignment of the 3Dconnexion buttons. To display the OSD of your SpaceMouse Pro, press and hold any of the 3Dconnexion Buttons. It will be displayed as long as you keep the button pressed. This function can be disabled in the **3Dconnexion Settings**.



#### **Keyboard Modifiers**

The SpaceMouse Pro comes with four Keyboard Modifiers that work like the corresponding keys on your keyboard. You can personalize the commands assigned to the Keyboard Modifiers using the **3Dconnexion Settings**.

#### **QuickView Buttons**

The SpaceMouse Pro features four QuickView Buttons helping you to quickly bring your drawing or 3D model into the desired view. You have the option to change the assignment of the buttons in the **3Dconnexion Settings**.

# **Rotation Toggle Button**

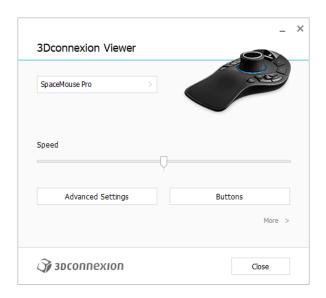
In the center between the QuickView Buttons is the Rotation Toggle Button. Pressing it once locks the rotation around all axes.

# **3Dconnexion Settings**



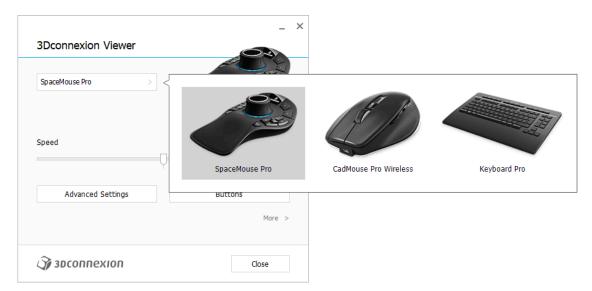
You can access the **3Dconnexion Settings** panel via the Menu Button on your SpaceMouse Pro, **3Dconnexion Home** (on your desktop), the icon in your notification area (systray), or the Windows start menu.

The name of the active application is displayed at the top of the panel. Any setting change is relevant to this application only.



### **Speed**

This slider sets the overall speed for your device. In other words, it changes the amount of force or torque that needs to be applied to the SpaceMouse cap to move an object, scene, or image.



If multiple 3D connexion devices are connected, you can select the desired product to configure by clicking on the flyout button at the top left of the panel.

#### **Advanced Settings**

Settings you can configure in the **Advanced Settings** panel are application-specific. So, it's easy to configure your SpaceMouse to work just how you prefer in each application.



#### **Navigation**

Pan / Zoom: Enables/disables panning of your part, assembly or drawing. Enabled by default.

Rotation: Enables/disables rotation of your part, assembly or drawing. Enabled by default.

<u>Dominant:</u> Turns on and off dominant filter axis, which when enabled restricts the pan, zoom or, rotations to a single axis.

#### **Zoom Direction**

Forward / Backward: Zoom by pushing the cap toward or away from you parallel to the desk.

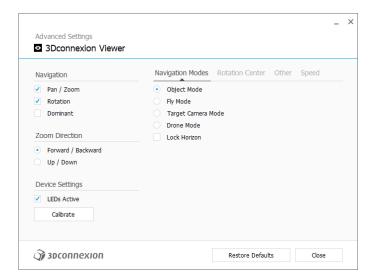
<u>Up / Down:</u> Zoom by pulling the cap upwards or pushing the cap downwards parallel to the screen.

#### **Speed**

Use the slider to set the speed for each of the 6-Dimensions-of-Freedom individually. To reverse the direction of a movement, check the **Reverse** box for that movement.

# **Application Specific Advanced Settings**

Some applications feature additional SpaceMouse settings. For those applications you have additional options available in the **Advanced Settings Panel**:



#### **Navigation Modes**

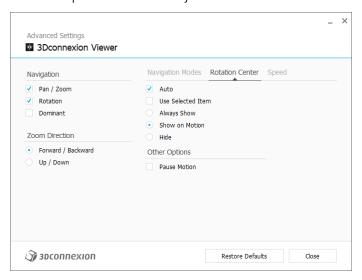
<u>Object Mode</u> enables **Object Mode** navigation - this mode is like reaching into the screen and holding the model in your hand. Push the SpaceMouse cap left, and the model moves left. Push right and the model moves right.

<u>Fly Mode</u> enables using the Controller Cap as if it is a flying camera. Push into the scene and the camera flies forward into the scene. Push left and the camera flies to the left (the scene moves to the right). Lift up and the camera flies up (the scene moves down). You are entering the scene as if flying around in it.

<u>Target Camera Mode</u> enables **Target Camera Mode** navigation. Manipulate the SpaceMouse cap as if it is a target camera. Push into the scene and the camera moves forward into the scene. Push left and the camera moves to the left (the scene moves to the right). Lift up and the camera moves up (the scene moves down). When rotating the cap in any direction you will orbit around the target point (see **Rotation Center** below).

<u>Drone Mode</u> enables a **Fly Mode** navigation but pushing the cap forward while looking down will not change the altitude of the camera.

Lock Horizon forces the horizon to be kept leveled as it currently is.



#### **Rotation Center**

<u>Auto</u> sets the center of rotation dynamically. When the complete model is in view, the center of volume of the whole model is used as the rotation point. When you move closer, the center of rotation will be set on an object close to your center of the view.

<u>Use selected Item</u> forces the rotation center to only take the currently selected objects into account.

Always Show always visualizes the Rotation Center.

Show on Motion will visualize the Rotation Center only during movement.

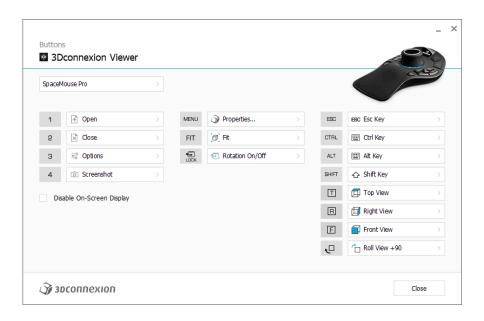
Hide will disable the Rotation Center visualization.

### Other Options

The applications below feature special options. More information can be found in the <u>3Dconnexion FAQ</u>: Autodesk 3ds Max, Autodesk Maya, Solid Edge, SOLIDWORKS

#### **Buttons**

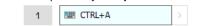
The **Buttons** panel within **3Dconnexion Settings** allows you to assign commands, macros or, radial menus. The name of the active application is displayed at the top of the panel. Any setting change is relevant to this application only. Press and hold a 3Dconnexion Button to get the button assignment for the current app displayed on the OSD. To disable this function, check **Disable On-Screen Display**.



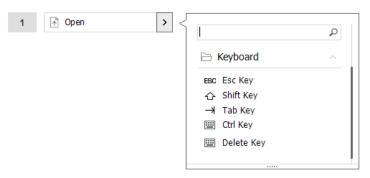
A note about Environment sensitivity: Some applications feature environment sensitive key mapping. In those applications, you can have different key assignments depending on the currently active environment.

# Assigning Quick Macros to buttons

Click on the text in the input field and press the required key or key combination to quickly assign a keystroke or macro.



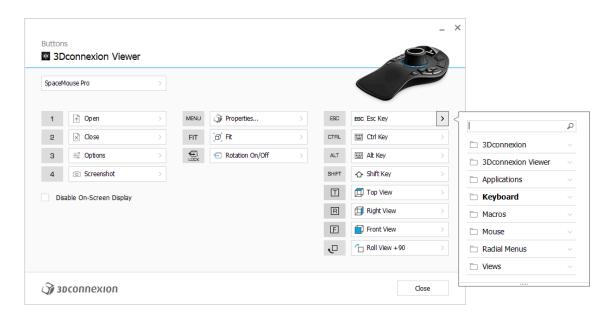
When a macro is created, it always sends a **press and release** command. If you want to assign a **press and hold** command instead (for example Ctrl or Shift), you should use the **Keyboard** command category in the flyout window.



### Assigning Commands using the flyout window

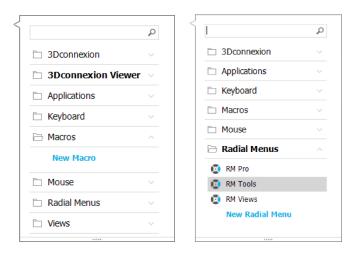
Clicking on the > arrow on the right-hand side of the button field opens a flyout window for that SpaceMouse button:

The flyout window allows you to browse or search for commands in different categories. When you select a command by clicking on it, it is automatically assigned to the corresponding SpaceMouse button. The category of the command that it is currently assigned to is highlighted in bold.



# **Creating Macros and Radial Menus**

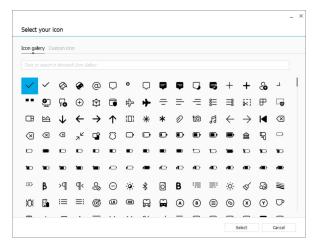
To create a new macro or radial menu, first click on the > arrow on the right of the key field, then expand the Macro/Radial Menu category and click on New Macro/New Radial Menu.



#### Assigning icons to Macros and Radial Menus

In a first step you are asked to give your macro or radial menu a name and assign an icon to it.

You can choose to use one of the icons already provided in the icon gallery tab or upload your own icon in the custom icon tab.

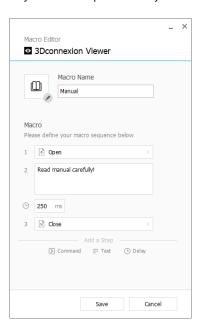




Note: The image must not be larger than 500x500px and must be in one of the following file formats: SVG, ICO, PNG, GIF, BMP, TIFF, EXIF, WMF, and EMF. For an optimal rendering result, we recommend an image in 24x24px with a transparent background.

### **Creating Macros**

As a second step, when creating a new macro, you have the option to edit your macro sequence by adding steps to it.

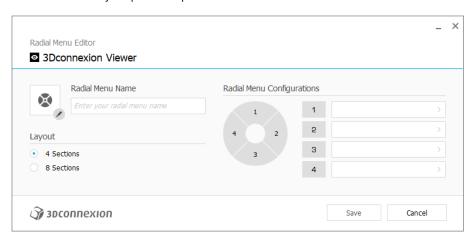


Within this sequence you can assign keyboard shortcuts to a "Command"-step as well as use the flyout window to assign application commands to it. "Text"-steps allow you to add text blocks to your macro. "Delay" steps allow you to compensate for longer loading times of your application.

The sequence of your macro is editable by dragging the single steps into the right order or deleting steps that are not needed. When you are done editing your macro, click save to automatically assign the new macro to the button from where you opened the panel.

# **Creating Radial Menus**

When creating a new radial menu as a second step you have the option to choose between a four and an eight-section layout. Assign commands or macros to the different sections and save your radial menu. Your new radial menu will be automatically assigned to the button from where you opened the panel.



# **3Dconnexion Home**



Once you have successfully installed the latest 3Dconnexion driver, 3Dconnexion Home gives you access to various 3Dconnexion apps:



#### Trainer:

Learn how to quickly use the 3Dconnexion SpaceMouse.

Manual

Here you can find the manuals for all 3Dconnexion products.

Settings:

Open the settings panel to customize your 3Dconnexion devices.

Viewer:

Use the 3Dconnexion Viewer to review 3D models.

Supported formats (.stp, .step, .igs, .iges, .obj, .stl, .ply, .jt, .glTF).

Demo:

Test and practice your skills by assembling the landing gear of an aircraft.

Registration:

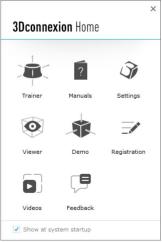
Register your product after the installation to benefit from 3Dconnexion services.

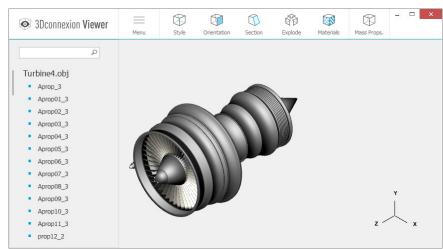
- Videos:

Find instructive <u>videos</u> for your 3Dconnexion devices.

Feedback:

Provide feedback to the 3Dconnexion product team.





# **Technical Specifications**

# **Dimensions & Weight**

Length: 204 mm / 8" Width: 142 mm / 5.6" Height: 58 mm / 2.3"

Weight: 665 g / 1.47 lb / 23.46 oz

# **Supported Operating Systems**

Microsoft Windows, macOS, Linux More information

# **Supported Software**

More information

# **Package Contents**

3Dconnexion SpaceMouse Pro

#### **Part Numbers**

Packaging unit numbers (on packaging): 3DX-700040
Part number (on device): 3DX-600043

# Safety, Compliance and Warranty Information

# Manufacturer

3Dconnexion GmbH Clarita-Bernhard-Straße 18 81249 Munich Germany

# **Certifications and Registrations**

CE, UKCA, EAC, FCC, KC, RCM, BSMI, WEEE, RoHS-EU, RoHS-CN More information

# Warranty

3-years limited hardware warranty

# Support

3dconnexion.com/support