



## **User Manual**

Version 2019

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## Introduction

*“So fast, we had to drop the vowels.”*

qckPck 2019 is a navigation system for Lightwave 3D Layout. It's aim is to speed up navigation and common tasks drastically by providing access to often used functionality quickly.

### Compatibility

qckPck is compatible with LightWave3D 2018.0.6 and higher on Windows and MacOS.

Please visit <http://qckpck.db-w.com> for more up to date information.

### Features

qckPck is navigations system for Layout designed to speed up day-to-day tasks tremendously.

As of version 2019, qckPck also include qckHuD, a system to create customer overlays for Layout viewports.



## Setting up qckPck

### Installation

The download contains ZIP compressed files for all platforms supported by qckPck. Extract the appropriate ZIP file for your platform.

### Windows

The **qckPck2019.p** file can be copied to any directory where you keep your plugins. We recommend using a manually created plugin directory to separate third party plugins from plugins shipped with LightWave 3D. This will simplify upgrades of LightWave 3D.

Now use the Edit Plug-ins panel (alt-F11) of the Add Plugins menu item to add the plugin file **qckPck2019.p** to LightWave 3D.

You can also copy it to

**%userprofile%\NewTek\LightWave\2018.0.6\plugins**

to allow LightWave to detect the plugin automatically.

### MacOS

The MacOS versions of qckPck are included as a ZIP file which includes this documentation as a PDF and the plugin file.

You can copy the **qckPck2019.plugin** file into one of two locations for LightWave to use it automatically.

You can either copy it to:

**~/Library/Application Support/Newtek/LightWave2018.0.6/Plugins**

or

**/Library/Application Support/Newtek/LightWave2018.0.6/Plugins**

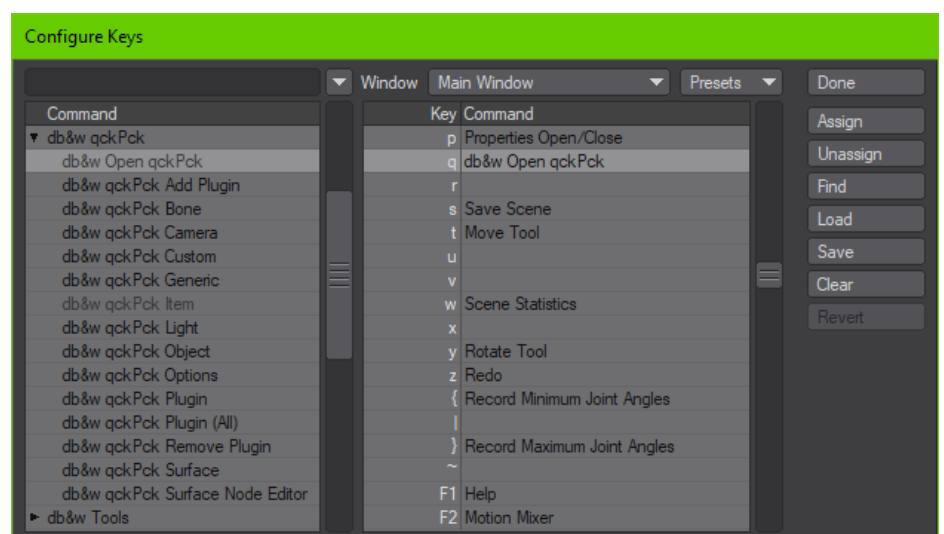
In both cases LightWave 3D will automatically pick up the plugins once you launch it.

You are of course free to copy the plugin file to another location and add it manually.

### Configuring Layout

In Layout, launch the Configure Keys panel to assign Open qckPck... (Generic) to a key.

We recommend 'q', but you may pick anything else of course. Make sure it is a key that is very easy to reach - and also easy to remember. ;)



## (Optional) Add individual commands to the menu

You can add the individual Commands to a menu or to a shortcut.

qckPck 2019 also ships with a menu branch which you can import in the menu editor.

## Registration

Once you've installed the plugin, just press the shortcut you've configured above or launch any of the other included plugins. A registration panel will be displayed.

Enter your full name, company name (if applicable) and e-mail address. Export the registration and attach it to an e-mail to [registration@db-w.com](mailto:registration@db-w.com). We will mail you an activation code within 24 hours after payment is received, depending on the time difference<sup>1</sup>.

Please make sure that our replies don't end up in your spam folder - or check your spam folder for our e-mails. A safe way would be the white list any mail from [@db-w.com](mailto:@db-w.com).

You can now either import the keyfile attached to the activation e-mail, or copy and paste the activation key into the registration panel (please make sure that the personal information is identical to the one submitted to us for the registration).

Your registration is now complete and you will see the interface of nodeMeister, allowing you to use it.

The registration file is stored in **%appdata%db&w\licenses** in Windows or **~/Library/Application Support/db&w/licenses** on MacOS, the license file is named **qckPck2019.key**. If you use multiple licenses of LightWave 3D from a single network share, the registration manager will only append/edit licenses locked to the dongle installed on the host machine. It will however manage multiple licenses allowing for a single registration file on your network share.

<sup>1</sup> Our key generator needs some sleep every now and then ;)

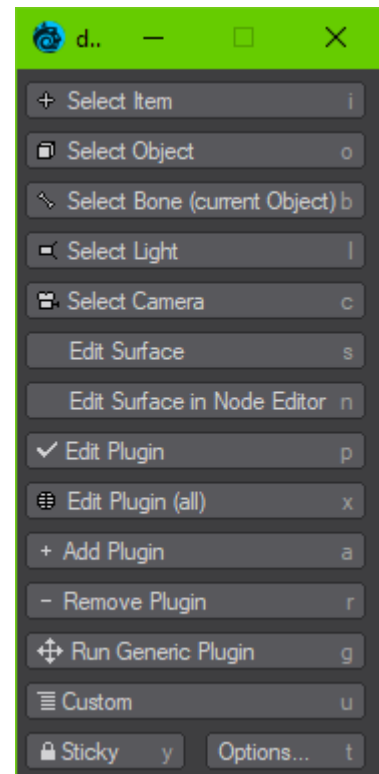
## qckPck (Master)

This plugin contains the main panel, it will show a list of available menus and their respective shortcuts. You can either add and activate it via the Master Plugins in LightWave 3D or, preferably, launch it via the Open qckPck... (Generic) plugin.

We recommend assigning Open qckPck... (Generic) to a shortcut, such as 'q'.

Since it can be very tricky to move using the title bar<sup>2</sup>, you can also press the cursor keys on the keyboard to judge. Another open is to re-open it using a shortcut, since it always centres under the mouse when opening.

The menus themselves are individual, Generic plugins that can also be assigned to a menu or shortcut individually.



### Select Item - i

This button launches qckPck Item (Generic).

It displays a list of all available items in the current scene to select.

### Select Object - o

This button launches qckPck Object (Generic).

It displays a list of all available objects in the current scene to select.

### Select Bone (current Object) - b

This button launches qckPck Bone (current Object) (Generic).

It displays a list of all available bones attached to the current object to select.

### Select Light - l

This button launches qckPck Light (Generic).

It displays a list of all available lights in the current scene to select.

### Select Camera - c

This button launches qckPck Camera (Generic).

It displays a list of all available cameras in the current scene to select.

### Edit Surface - s

This button launches qckPck Surface (Generic).

It opens a list of all available surfaces<sup>3</sup>. Selecting a surface will open the surface editor (if required) and selects the surface for editing.

<sup>2</sup> On Windows, which, unfortunately, can't be changed due to SDK restrictions.

<sup>3</sup> Except for surfaces on primitives, which we can't get at using the SDK.

## Edit Surface in Node Editor - n

This button launches qckPck Surface Node Editor (Generic).

It opens a list of all available surfaces<sup>4</sup>. Selecting a surface will open the node editor for the surface.

## Edit Plugin - p

This button launches qckPck Plugin (Generic).

It shows all plugins attached to the current item as well as scene based plugins, with the exception of plugins that are either disabled or hidden.

Selecting one of them will open their user interface.

## Edit Plugin (all) - x

This button launches qckPck Plugin (All) (Generic).

It shows all plugins attached to the current item as well as scene based plugins.

This includes plugins that are either disabled or usually hidden from the user.

Selecting one of them will open their user interface.

## Add Plugin - a

This button launches qckPck Add Plugin (Generic).

It displays a list of all available plugins to add to either the current selection or the scene.

This adds the selected plugin either to the selected items or the scene, depending on the kind of plugin. The user interface of the added plugin will then be displayed – except when a plugin has been added to multiple items at once.

## Remove Plugin - r

This button launches qckPck Remove Plugin (Generic).

It shows a list of plugins attached to the current item selection and the scene.

Plugins that may be attached to more than one item in the current item selection will display how many times they're attached as a number behind their name.

Selecting one will remove it either from the item selection or the scene.

## Run Generic Plugin - g

This button launches qckPck Generic (Generic).

It displays a list of all available generic plugins and allows selecting one of them to run.

## Custom - u

This button launches qckPck Custom (Generic).

This is a menu that you can edit using the Options. By default, a small selection of commands populates it.

<sup>4</sup> Except for surfaces on primitives, which we can't seem to get at.

## **View Layout - v**

This button launches qckPck ViewLayout (Generic).

This menu show all available viewport layouts. Picking one will change to the selected layout.

## **Flat Menu - f (LightWave 3D 2019 and higher only)**

Pressing 'f' while the panel is open launches the flat menu added to LightWave 3D 2019. There is no corresponding button in the user interface.

## **Sticky - y**

This toggles the behaviour of the panel.

By default, if sticky is off, the panel will close again after selecting a menu.

If sticky is on, the panel will stay open.

## **Options... - t**

This opens the qkcPck Options... (Generic).

Currently this allows you to edit the custom menu and view the about box.

## qckPck Options... (Generic)

This opens the Options panel for qckPck. Currently the only options are editing the custom menu.

You can also check the current version by clicking on the About button.

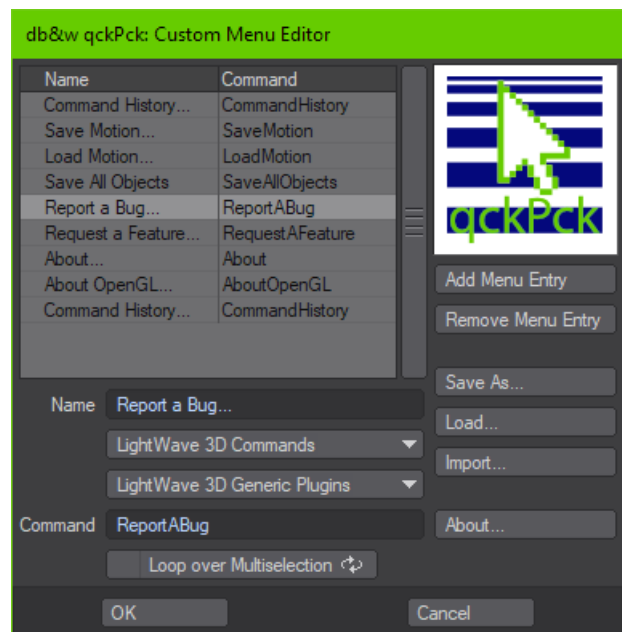
This plugin is usually launched from qckPck itself but may also be assigned to a shortcut or menu individually.

The custom menu allows you to add any of LightWave 3D's commands.

### Menu List

This displays the current entries of the custom menu. You can drag and drop to reorder them.

Selecting an item will make it available for editing below.



### Name

This is the name as displayed in the custom menu.

### Lightwave 3D Commands

This pop-up provides a list of all native commands available in Layout (as exported from LW 2018.0.6).

Selecting an entry here copies it to the Command to the entry being edited.

### Lightwave 3D Generic Plugins

This pop-up provides a list of all generic plugins available in Layout - this also includes third party plugins and is generated on the fly.

Selecting an entry here copies it to the Generic Plugin to the entry being edited, adding a prefix of "Generic\_" so that LW can call it properly.

### Command

This is the command that will be execute if the menu item is selected.

### Loop over Multiselection

Some commands may operate on the currently selected (single) item.

If this option is enabled **and** multiple items are selected, the custom menu will select each of the multi-selected items, one after the other, and call the command for each of them. Afterwards it restores the multi-selection.

### Add Menu Entry

This adds a new, blank menu entry to the menu.

**Remove Menu Entry**

This removes the currently selected item from the menu.

**Save As...**

Saves the current custom menu to a file.

**Load...**

Loads the current custom menu from a file, replacing the current menu.

**Import...**

Loads a custom menu from a file, appending it to the current menu.

**About...**

Displays the about window showing the current version number, your licensing information as well as our credits.

---

## Individual Menus

These are individual Layout Commands and can also be directly assigned to a shortcut or placed in menus.

### qckPck Surface (Generic)

This lists all<sup>5</sup> surfaces present in the current scene. Selecting an entry will open the surface editor (if required) and select the surface.

This plugin is usually launched from qckPck itself but may also be assigned to a shortcut or menu individually.

### qckPck Surface Node Editor (Generic)

It opens a list of all available surfaces<sup>6</sup>. Selecting a surface will open the node editor for the surface.

### qckPck Item (Generic)

It displays a list of all available items in the current scene to select.

### qckPck Object (Generic)

It displays a list of all available objects in the current scene to select.

### qckPck Bone (current Object) (Generic)

It displays a list of all available bones attached to the current item to select.

### qckPck Light (Generic)

It displays a list of all available lights in the current scene to select.

### qckPck Camera (Generic)

It displays a list of all available cameras in the current scene to select.

### qckPck Plugin (Generic)

It shows all plugins attached to the current item as well as scene based plugins.

Only active and visible plugins are shown.

Selecting one of them will open their user interface.

### qckPck Plugin (All) (Generic)

It shows all plugins attached to the current item as well as scene based plugins.

This includes plugins that are either disabled or usually hidden from the user.


Selecting one of them will open their user interface.

<sup>5</sup> almost, unfortunately we can't list the surfaces of primitives at the moment.

<sup>6</sup> See the previous footnote. ;)




### qckPck Add Plugin (Generic)

If multiple items are selected, then plugins marked with  will be applied to each selected item.

### qckPck Remove Plugin (Generic)

This removes a plugin from the current selection of the scene.

If  is displayed behind a plugin name, then it is applied to multiple, selected items and will be removed from those. The number in brackets displays how many items it's applied to.

### qckPck Generic (Generic)

This menu displays all Generic plugins currently available in Layout. This can include many third party plugins as well.

### qckPck Custom (Generic)

The entries for this menu can be edited in the qckPck Options... (Generic) plugin, either launched directly or via qckPck (Master).

If a custom menu entry has been flagged as being multi-select aware and multiple items are selected, the command will be triggered once with each of the selected items being the only selected item.

## qckHuD

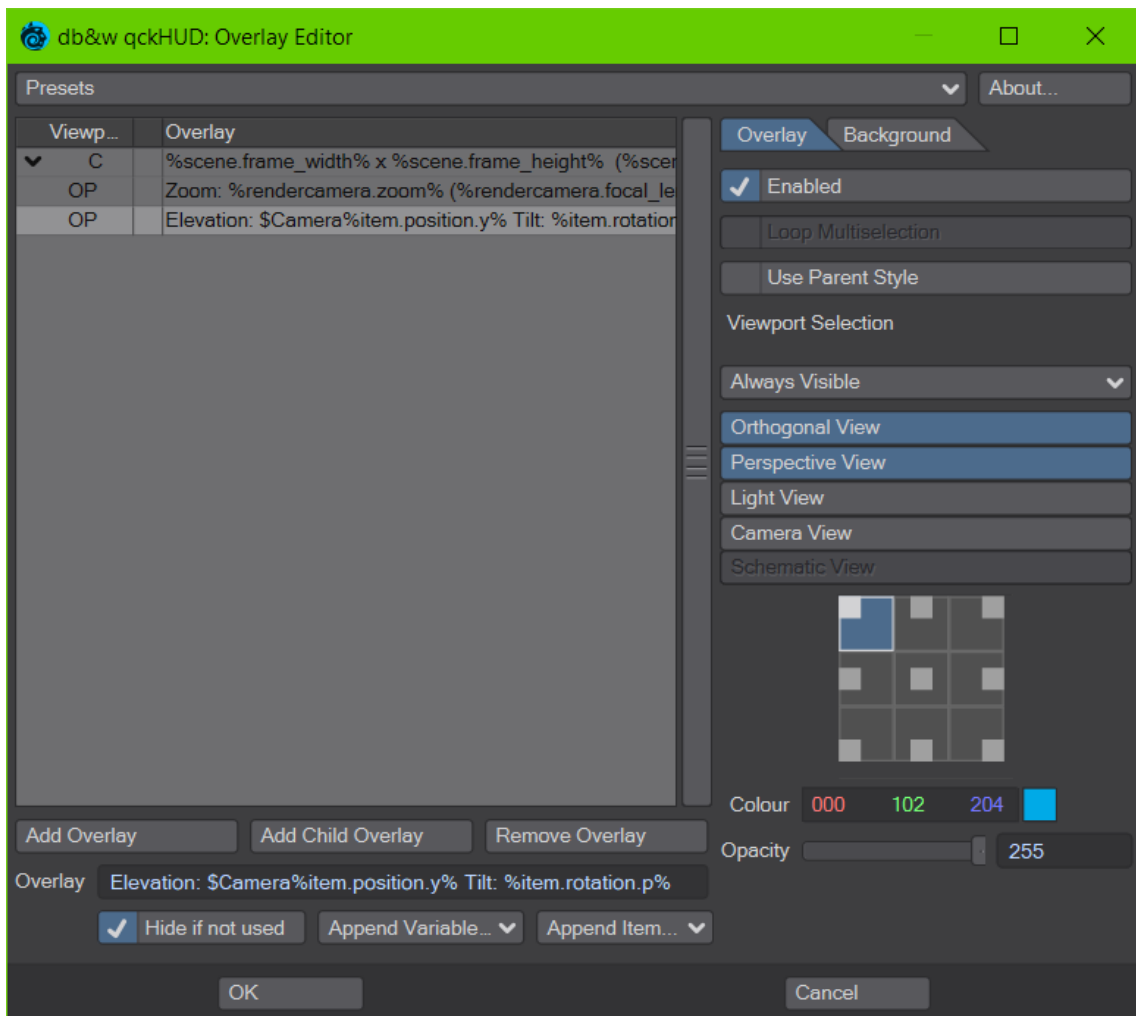
qckHuD is an addition to qckPck that will displays a variety of information about the current scene as well as items as an overlay.

The type, location and colour of the information can be configured.

qckHuD is a master plugin that is saved with the scene. It comes with four generic plugins which can be added to a menu or attached to a shortcut:

- **Add qckHuD** Adds the plugin to the current scene, if it's not a part of it yet, and opens the user interface.
- **Show qckHuD** Shows the qckHuD overlay
- **Hide qckHuD** Hides the qckHuD overlay
- **Toggle qckHuD** Toggles the visibility of the qckHuD overlay. Best assigned to a keyboard shortcut.

Opening the master plugin displays a user interface to edit the overlays for the current scene. This user interface can be resized freely.



## Presets

This uses the same presets system as our other plugins.

## About

Displays the current version and your licensing information.

## Overlay List

This displays all overlays. You can drag and drop items to re-arrange them. Hierarchies of items are supported.

The Viewport column shows for which viewport types the overlay is being used: **O**rthogonal, **P**erspective, **L**ight, **C**amera or **S**chematic view<sup>7</sup>.

The second column shows a rotate icon if the overlay (as well as it's children) will be used for multiple selected items.

The third column shows the overlay text itself.

You can left click on this list to select an overlay item to edit. Right clicking on an item opens a context menu:

### Add

Adds a new overlay at the end of the list

### Add Child

Adds a new overlay as the child of the current selection

### Remove

Removes the current item. If it has child items, you will be prompted if you really want to delete it, including the children.

### Export Selected...

Exports the selected item (and children) as a file.

### Import

Imports a file saved with export. The imported overlays will be added to the list.

## Add Overlay

This adds a new overlay to the end of the list.

## Add Child Overlay

This adds a new overlay as the child of the currently selected item.

<sup>7</sup> Currently not supported by LightWave 3D

## Remove Overlay

Removes the current item. If it has child items, you will be prompted if you really want to delete it, including the children.

## Overlay

This is the text displayed as an overlay. You may include any of the available variables to dynamically extract data from the current scene.

## Hide if not used

If the overlay contains variables, but none of them can retrieve any data in the current context (i.e. light information but you have a bone selected) then the overlay will not be displayed at all and ignored.

## Append Variable...

This appends the selected Variables to the current overlay.

## Append Item...

This appends the name of the selected item, pre-fixed by a \$, to the current overlay. This is used to limit the item selection of the following variables.

## Overlay Properties (right hand side)

These controls allow you to edit the individual attributes of every overlay.

### Enabled

This enables or disables the current overlay completely, including children.

## Loop Multiselection

If multiple items are selected, this overlay - as well as all children - will be displayed for every selected item.

## Use Parent Style

This option is only available if the overlay is a child. It will inherit all of the following options from the parent overlay item.

## Viewport Visibility

This defines when this overlay is visible in a viewport.

### Always Visible

The overlay is always visible

### **Active Viewport only**

The overlay is only visible in the viewport you're interacting with. This is triggered by the first mouse interaction in a viewport.

### **Inactive Viewport Only**

The overlay is only visible in a viewport you're *not* interacting with. Essentially the opposite of the previous option.

### **Never Visible**

This effectively disables the overlay

### **Viewport Type**

This defines which kind of viewport the overlay will be visible at.

### **Overlay Position**

Overlays can be positioned along the sides of viewports or the centre.

### **Colour**

This defines the colour of the overlay text.

### **Opacity**

This defines the opacity of the text.

### **Background**

The following controls allow you to enable a background for each of the 9 possible overlay positions. You can also change the colour as well as the opacity.

#### **Position**

This selects the background position to edit.

#### **Enable**

En- / disables the background for the current position.

#### **Colour**

Defines the colour for the background.

#### **Opacity**

Defines the opacity for the background.

### **Variables**

Variables need to be enclosed in % within the overlay, i.e.

**Scene: %scene.name% - %scene.num\_polygons% polygons**

Variables related to specific items can be limited to a specific item as opposed to the current selection. This is done by adding the item name in front of the variable, designated by a \$, i.e.

**\$my\_Camera%camera.zoom%**

If you actually want the characters % or \$ to show up in an overlay, just type them twice. %% shows a single %, \$\$ a single \$.

**Scene**

scene.fps	Frames per second of the current scene
scene.time	Time of the current frame in the scene in seconds
scene.frame	Current frame of the scene
scene.frame_start	The first frame of the scene
scene.frame_end	The last frame of the scene
scene.frame_step	The frame step used for rendering
scene.frame_width	The render width of the scene
scene.frame_height	The render height of the scene
scene.name	The name of the scene
scene.filename	The file name of the scene
scene.num_points	The total number of points in the scene
scene.num_polygons	The total number of polygons in the scene
scene.render_camera	The camera used for rendering

**Item**

item.name	The name of the item
item.position	Position of the item in local coordinates. Append .x/.y/.z to display individual components
item.rotation	Rotation of the item in local degrees. Append .h/.p/.b to display individual components
item.scaling	Scale of the item in local coordinates. Append .x/.y/.z to display individual components
item.world_position	World position of the item in local coordinates. Append .x/.y/.z to display individual components
item.position_controller	Controller for the position, can be one of the following: Key Frames, Point at Target, Align to Velocity, Inverse Kinematics, Align to Path, Align to Pole, Same as Item or Spline Control
item.rotation_controller	Controller for the rotation, for a list of items see item.position_controller
item.scaling_controller	Controller for the scaling, for a list of items see item.position_controller
item.parent	Name of the parent item
item.type	The type of item: Object, Light, Camera, Bone
item.target	The name of the target item if applicable
item.goal	The name of the goal item if applicable
item.breadcrumbs	The complete hierarchy of items to the selected item

**Object**

object.filename	File name of the object
object.num_points	The number of points in the object
object.num_polygons	The number of polygons in the object

## Light

light.intensity	The intensity of the light
light.type	The type of light or custom if it's driven by a plugin
light.quality	The quality setting for the light
light.flags	Various light related flags

## Camera

camera.zoom	The camera zoom factor
camera.focal_length	The focal length in mm
camera.focal_distance	The distance to the camera focus
camera.f-stop	The f-stop of the camera
camera.resolution	The image resolution of the camera, displayed as " <i>width x height</i> "

## Bone

bone.strength	The strength of the bone as a percentage
bone.twist	The amount of twist on the bone
bone.weightmap	The name of the weightmap being used by the bone.
bone.falloff	The falloff for the bone
bone.rest_length	The rest length of the bone
bone.type	The type of bone, Z-Axis or Joint
bone.flags	Various bone specific flags
bone.limits	Minimum and Maximum rotation limits. Append .h/.p/.b to display individual components

If you think that any variables are missing to display the information you need, please get in touch with us and we'll see if we can add them.