

# Panel Designer 2025

Support for the Hangar Flying Instrument Panel Designer App, offering step-by-step guides, FAQs, and video tutorials to help with design and technical questions.

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# Panel Designer 2025 Features Overview

## Overview of Panel Designer 2025 Tools

The Panel Designer offers a comprehensive suite of tools designed to streamline the creation, customization, and management of your panel designs. Each tool is crafted to enhance your workflow, ensuring that your panel layouts are precise, organized, and professional.

### Design Tools

**Drag and Drop Instruments to Your Panel Design:** This intuitive functionality allows you to easily place and arrange instruments on your panel. Simply select the desired instrument from the library, drag it onto your panel template, and position it where needed, facilitating quick and efficient layout adjustments.

**Undo and Redo Actions:** Mistakes happen, and this feature lets you swiftly correct errors or experiment with different layouts without losing progress. By using the undo and redo buttons, you can easily navigate through your design changes, providing flexibility and control over your panel design process.

**Rename, Copy, and Delete Panel Designs:** Efficiently manage your panel projects by organizing, duplicating, and removing designs as needed. Renaming helps keep your projects identifiable, copying allows for creating variations of existing designs, and deleting removes outdated or unnecessary projects, maintaining a clean and organized workspace.

### Alignment and Positioning

**Align Instruments to the Left, Right, Top, or Bottom:** Ensure precise placement of instruments by aligning them to the panel's edges. This tool helps maintain consistent margins and a structured appearance, contributing to a clean and organized panel layout.

**Align Two Instruments on Center Horizontally and Vertically:** Achieve symmetrical and balanced designs by aligning two instruments along the center axes both horizontally and vertically. This ensures that the instruments are evenly spaced from the panel's central lines, enhancing the overall aesthetic of your design.

**Align Two Instruments Center to Center:** Perfect for balancing elements within your panel, this tool aligns the centers of two instruments, ensuring they are perfectly matched in both horizontal and vertical positioning. This alignment fosters harmony and uniformity in your panel design.

**Align a Single Instrument to the Center of the Panel:** Highlight key instruments by centering them within the panel space. This feature moves the selected instrument to the exact middle of the panel, making it a focal point and enhancing the overall symmetry of your design.

### Advanced Alignment Tools

**Enable or Disable Snap-to Grid or Another Instrument:** Customize your alignment preferences by toggling the snap-to grid feature or snapping to specific instruments. Enabling snap-to grid helps maintain consistent spacing and alignment, while disabling it allows for more freeform placement according to your design needs.

**Group and Ungroup Instruments to Move Them Together:** Manage multiple instruments as a single unit by grouping them. This simplifies the process of moving, aligning, or editing grouped instruments collectively, saving time and ensuring uniform adjustments. Ungrouping allows you to revert back to individual elements for separate modifications.

**Lock and Unlock Instrument Locations:** Prevent accidental movement of critical instruments by locking their positions. This ensures that essential components remain fixed while you edit or adjust other parts of the panel, maintaining the integrity and accuracy of your design.

**Bring Instruments to Front or Send Them to Back Individually or in Groups:** Layer instruments to create depth and visual hierarchy within your design. By bringing instruments to the front or sending them to the back, either individually or in groups, you can control the stacking order, enhancing the visual organization and clarity of your panel layout.

## **Customization and Editing**

**Add Multiple Instruments at Once:** Accelerate your design process by placing several instruments simultaneously. This feature allows you to select and add multiple instruments to your panel in one action, ensuring consistent placement and saving valuable time during the design phase.

**Move a Single Instrument by Specific Dimensions:** Make precise adjustments to instrument placement by moving them based on exact measurements. Enter specific distances and directions to accurately position an instrument, ensuring meticulous alignment and spacing within your panel design.

**Shift and Drag Instruments Along a Horizontal or Vertical Path:** Easily align instruments along specific axes by shifting and dragging them horizontally or vertically. This tool facilitates consistent spacing and orderly arrangement, maintaining a structured and professional panel layout.

**Use Construction Lines for Advanced Instrument Placement:** Utilize guidelines and construction lines to achieve intricate and accurate instrument arrangements. Construction lines serve as temporary guides that help you align and position instruments precisely, enabling the creation of complex and detailed panel designs.

## **Export and Sharing**

**Export an Image or Image Link of Your Panel Design:** Share your designs visually by exporting high-quality images or direct links. This feature allows you to present your panel designs in presentations, emails, or social media, making it easy to showcase your work to others.

**Export Detailed Equipment List:** Generate comprehensive lists of all instruments and components included in your panel design. This tool is useful for reference, procurement, or documentation purposes, providing a clear inventory of your design elements for efficient project management.

**Request Quotes from Vendors Listed in Our Extensive Vendor Directory:** Connect with suppliers directly through the platform to obtain pricing and availability information for your chosen instruments and materials. This feature streamlines the procurement process, helping you efficiently plan and budget your projects by accessing an extensive network of vendors.

## **Comparison and Analysis**

**Panel Designs Compare Tool:** Analyze and compare different panel designs side by side using the Panel Designs Compare Tool. This feature allows you to evaluate features, layouts, and functionalities of multiple designs simultaneously, aiding in making informed decisions by highlighting the strengths and weaknesses of each option.

## **Conclusion**

The Panel Designer's extensive array of tools empowers you to create detailed, organized, and professional panel designs with ease. From basic functionalities like drag-and-drop and undo/redo actions to advanced alignment and customization features, each tool is designed to enhance your workflow. Additionally, export and sharing options, along with comparison tools, ensure that your designs are not only well-crafted but also easily communicated and evaluated. Whether you're managing multiple projects or fine-tuning intricate layouts, the Panel Designer provides the necessary tools to bring your visions to life efficiently and effectively.

## **Video - Panel Designer 2025 Features Overview**

<https://www.youtube.com/embed/ikRZP99u1TA?feature=oembed>

# Create new panel design

## Creating a New Panel Design in Panel Designer

Once you're logged into the site, navigate to the **Panel Designer** by either clicking the **Panel Designer** link in the main menu or selecting **My Panel Designs** from your profile dropdown menu located in the top-right corner of the page. This action will take you to the **Panel Designs Management Page**, where you can manage your projects by creating new designs, opening existing ones, renaming, copying, or deleting your saved panel designs.

To start a new panel design, click on the **Create New Panel Design** button. You'll be prompted to enter a name for your design and have the option to add extra space to the top and/or bottom of your panel template to suit your layout needs. Use the search function on the right side of the screen to browse and select a panel template that fits your project requirements. Once you've chosen your desired template, click the **Create** button on the left to finalize your selection.

After creating your new design, you'll be automatically redirected to the **Panel Designer** interface, where your selected panel template will load in the main window. From here, you can begin customizing your panel by adding and arranging instruments, ensuring your design meets your specific needs.

Be sure to save your panel before exiting out of the **Panel Designer**.

By following these steps, you can efficiently create and manage your panel designs, leveraging the intuitive tools provided by the Panel Designer to bring your projects to life.

## Video - Create new instrument panel design

<https://www.youtube.com/embed/8FxSrYCTID8?feature=oembed>

# Open a Panel Design

## Open a New Panel Design in Panel Designer

Once you're logged into the site, navigate to the **Panel Designer** by either clicking the **Panel Designer** link located in the main menu or selecting **My Panel Designs** from your profile dropdown menu found in the top-right corner of the page. This action will direct you to the **Panel Designs Management Page**, where you have the ability to manage your panel designs. Here, you can open existing designs, rename them, create copies, or delete any saved projects that are no longer needed.

If you are looking for a specific panel design, utilize the search feature available on the management page. Enter relevant keywords or the name of the design you wish to find, and the search results will display matching entries. To open a particular design, simply click on the corresponding row in the search results. This will seamlessly load your selected panel design into the Panel Designer interface.

Upon selecting a design, you will be redirected to the **Panel Designer**, where your chosen panel template will appear in the main window. From here, you can begin customizing and editing your panel design, adding or adjusting instruments as needed to fit your project requirements.

By following these steps, you can efficiently access and manage your panel designs, ensuring that your workflow remains smooth and organized within the Panel Designer platform.

## Video - Open a panel design

<https://www.youtube.com/embed/UaA1QEf-Hd0?feature=oembed>

# Save a Panel Design

## How to Save a Panel Design in the Panel Designer

Saving your panel design is a crucial step to ensure that your work is preserved and can be accessed or modified later. Here's a simple guide to help you save your panel design efficiently within the Panel Designer platform.

Once you have completed your panel design or reached a point where you want to save your progress, locate the **Save Design** menu item within the Panel Designer interface. This option can be found in the top toolbar. Click on the **Save Design** Menu Item to initiate the saving process.

If you have made changes to an existing design, simply clicking **Save Design** will overwrite the previous version with your latest updates. It is good practice to periodically save your work to prevent any loss of progress due to unexpected issues like software crashes or power outages. As a safety feature, the Panel Designer will auto-save your work every 15 minutes.

Your design is now securely stored and can be accessed anytime through the Panel Designs Management Page. To revisit or edit your saved design, simply navigate to this page, select your design from the list, and open it in the Panel Designer.

## Video - Save a panel design

<https://www.youtube.com/embed/001gLnI7WB4?feature=oembed>

# Rename, Copy, and Delete Panel Designs

## Managing Your Panel Designs: Rename, Copy, and Delete

To effectively manage your panel designs, you can easily rename, copy, or delete your projects through the Panel Designs Management page. Begin by navigating to this page either by clicking on the **Panel Designer** link followed by **My Panel Designs** in the main menu or by accessing the profile dropdown menu located in the top-right corner of the page and selecting **Panel Designs**. Once you're on the Panel Designs Management page, you'll notice distinct icons representing each of the available functions.

To **rename** a panel design, locate the design you wish to update and click on the rename icon associated with it. This will prompt you to enter a new name, allowing you to organize your projects with clarity and ease.

If you need to **copy** a panel design, simply click on the copy icon next to the desired project. This will prompt you to enter a new name for the copied panel design. This action creates a duplicate of the selected design. However, to finalize the copy and generate a thumbnail for the new design, you must open the copied design and save it. This step ensures that your duplicated project is properly initialized and visually represented in your management page.

When it comes to **deleting** a panel design, identify the project you want to remove and click on the delete icon. Confirming this action will permanently remove the selected design from your portfolio, helping you maintain an organized and clutter-free workspace.

By utilizing these icons on the Panel Designs Management page, you can seamlessly rename, copy, and delete your panel designs, ensuring that your projects remain well-organized and up-to-date. This streamlined approach allows you to focus on creating and refining your panel layouts without the hassle of managing redundant or outdated designs.

## Video - Rename, copy, and delete panel designs

<https://www.youtube.com/embed/YDfHQXdU0r4?feature=oembed>



# Add a Single Instrument

## **Adding a Single Instrument to Your Panel Design**

Adding individual instruments to your panel design is a straightforward process that allows you to customize your layout precisely to your needs. Follow these steps to seamlessly incorporate a single instrument into your panel design using the Panel Designer.

### **Open Your Panel Design**

Begin by launching the Panel Designer application. Once the application is open, navigate to the design you wish to work on by selecting it from your list of saved projects. This will load your existing panel design, providing you with a workspace to add and arrange new instruments.

### **Search for Instruments**

Locate the search box situated at the bottom-left corner of the Panel Designer window. Click on this search box to activate it. Here, you can enter specific details such as a manufacturer name, part number, model, or any relevant keyword associated with the instrument you need. As you type, the Panel Designer will display a list of matching instruments below the search box. Use the scroll bar to explore all available options that meet your search criteria, ensuring you find the perfect instrument for your design.

### **Add an Instrument to Your Design**

Once you have identified the desired instrument from the search results, click and hold on the instrument icon. Drag it towards the panel template displayed in the main window. Position the instrument precisely where you want it within the panel. After placing it in the desired location, release the mouse button to drop the instrument into position. This intuitive drag-and-drop functionality makes it easy to customize your panel layout efficiently.

### **View Instrument Details**

To gain more information about the instrument you've added, simply click on it within your panel template. This action will display the instrument's details in the info box located on the right side of the Panel Designer interface. Additionally, you can view these details directly from the search results by clicking on the instruments there. This feature ensures that you have all the necessary information at your fingertips to make informed design decisions.

### **Move Instruments on the Panel**

If you need to rearrange the instruments within your panel, the Panel Designer provides an easy method to do so. Left-click and hold the instrument you wish to move on the panel template. Drag it to the new desired location within the panel. Once you have positioned it correctly, release the mouse button to drop the instrument in place. This flexibility allows you to adjust your design layout effortlessly, ensuring optimal placement of each component.

## **View Panel Template Details**

For a comprehensive understanding of your panel's overall configuration, you can view the panel template's details. Click anywhere on the panel template that is not occupied by an instrument. This action will display the panel's details in the info box on the right side of the Panel Designer. Reviewing these details helps you maintain an organized and well-structured panel design, ensuring that all elements are accurately placed and aligned.

By following these steps, you can efficiently add and manage single instruments within your panel design, enhancing both the functionality and aesthetics of your project. The Panel Designer's user-friendly interface and intuitive tools make the process of customizing your panel layout seamless and enjoyable.

## **Video - Add a single instrument to your panel design**

<https://www.youtube.com/embed/HN-w9mW73WM?feature=oembed>

# Add Multiple Instruments Simultaneously

## **Adding Multiple Instruments to Your Panel Design - *Premium Feature***

Adding multiple instruments simultaneously is a valuable feature available exclusively to Panel Designer Premium users. To efficiently incorporate several instruments into your panel design, begin by opening the specific panel you intend to work on. Once the panel is open, use the search function to locate the instrument you wish to add multiples of to your design.

Next, access the **Add Multiple Instruments** tool by double-clicking on the desired instrument from the search results within the Panel Designer. This action will trigger a popup dialog where you can customize the arrangement of your instruments. In the dialog, you will need to specify the number of rows you want, the number of instruments per row, as well as the vertical and horizontal spacing between them, measured in inches.

For example, if your project requires two rows of ten circuit breakers each, you would set the following;

Number of rows to 2

Instruments per row to 10

Both vertical and horizontal spacing to 0.25 inches

After configuring these settings to match your design requirements, click the **Add** button. This will insert a total of twenty circuit breakers into the designer window, automatically grouped together for your convenience. These grouped instruments can then be easily dragged and dropped onto your panel template in the desired locations. This method not only significantly saves time but also ensures that all instruments are consistently spaced and neatly organized within your panel design, maintaining a professional and orderly layout.

By utilizing the Add Multiple Instruments tool, you streamline the design process, allowing for rapid and precise placement of multiple components. This feature enhances both the efficiency and accuracy of your panel designs, making it easier to achieve a clean and organized final product.

## **Video - Add multiple instruments to a panel design simultaneously**

<https://www.youtube.com/embed/9bzbmvEsURY?feature=oembed>

# Selecting, Grouping, and Ungrouping Instruments

## Selecting, Grouping, and Ungrouping Instruments in Panel Designer - *Premium Feature*

In Panel Designer, managing your instruments efficiently is essential for creating organized and professional panel layouts. This guide, available as a Panel Designer Premium Feature, will walk you through the processes of selecting, grouping, and ungrouping instruments to enhance your workflow and organization.

To select an instrument, simply move your mouse cursor over the desired instrument and click on it once. A thin red box will appear around the instrument, indicating that it is now selected. If you need to deselect the instrument, click anywhere on the panel template that isn't occupied by another instrument. This action will remove the selection, allowing you to continue working without the previously selected instrument being highlighted.

When working with multiple instruments, grouping them can significantly streamline your design process. Begin by clicking on each instrument you wish to group, ensuring that all desired instruments are selected simultaneously. Once you have selected the instruments, navigate to the top tools menu and click on the Group icon on the toolbar. This action will combine the selected instruments into a single group, making it easier to move or manage them together as a unified entity.

If you need to make individual adjustments to instruments within a group, ungrouping them is straightforward. Start by clicking on the grouped instruments to select the entire group. Then, return to the top tools menu and click on the Ungroup icon. This will separate the instruments back into their individual elements, allowing you to edit or move them independently as needed.

By mastering the selection, grouping, and ungrouping of instruments, you can efficiently organize your panel designs, making adjustments faster and maintaining a clean and structured layout. These capabilities not only enhance your design workflow but also contribute to creating more professional and aesthetically pleasing panel configurations.

## Video - Selecting, grouping, and ungrouping instruments

<https://www.youtube.com/embed/p57ZkOsFEWU?feature=oembed>

# Send to Back, Bring to Front

*\*This is a Panel Designer 2025 Premium Feature*

## **Managing Instrument Layers: Sending Back and Bringing Front in Panel Designer**

Enhancing the visual hierarchy of your panel design is essential for creating clear and organized layouts. With Panel Designer's premium features, you can effortlessly manage the layering of your instruments by sending them back or bringing them to the front. This tutorial will guide you through the process of selecting, deselecting, instruments, enabling you to effectively utilize the send back and bring front functionalities to refine your design.

To begin, selecting an instrument is straightforward. Simply click on the desired instrument once with your mouse, and a thin red box will appear around it, indicating that it is selected. This visual cue helps you identify which instrument you are working with. If you need to deselect an instrument, click anywhere on the panel template that isn't occupied by another instrument. This action removes the selection from the currently selected instrument, allowing you to proceed without inadvertently modifying it.

With your instrument selected, you can now take advantage of the premium features to adjust their layering. Sending an instrument back or bringing it to the front alters its position relative to other elements on the panel, creating depth and enhancing the visual organization of your design. To send an instrument backward, ensure it is selected and choose the Send to Back icon from the top tools menu. This action moves the instrument to the bottom layer, allowing other instruments to appear above it. Similarly, to bring an instrument forward, select it and choose the Bring to Front option, which moves the instrument to the top layer, placing it above other elements.

By following these steps, you can efficiently select, deselect, group, and ungroup instruments within your panel design, while also managing their layering to create a well-organized and visually appealing layout. Utilizing the send to back and bring to front features not only enhances the aesthetic quality of your panel but also ensures that each instrument is positioned optimally for functionality and ease of use. Embrace these powerful tools to elevate your panel designs and achieve professional-grade results with ease.

## **Video - Send to back, bring to front**

<https://www.youtube.com/embed/-WvL2OIuJP8?feature=oembed>

# Using Lock and Unlock

## Using Lock and Unlock to Keep Your Instruments in Place - *Premium Feature*

Maintaining the precise placement of instruments within your panel design is crucial for both functionality and aesthetics. The Lock and Unlock features in the Panel Designer are essential tools that help ensure your instruments remain exactly where you position them, preventing accidental movements during the design process.

When you first place an instrument on your panel, it remains freely movable, allowing you to adjust its position as needed. However, once you have finalized the placement of an instrument and want to secure it in place, you can use the **Lock** feature. Locking an instrument restricts any further movement, ensuring that it stays fixed in its designated spot. This is particularly useful when working with complex designs that involve multiple instruments, as it helps maintain the overall structure and alignment without the risk of unintended shifts.

To lock an instrument, simply select the instrument by clicking on it, then click the **Lock Icon** located in the toolbar. Once locked, the instrument will no longer respond to drag-and-drop actions or other movement commands, safeguarding your design from accidental alterations. This allows you to focus on other aspects of your panel without worrying about disrupting the placement of already positioned instruments.

The Lock feature is not limited to single instruments; it also extends to multiple and grouped instruments. If you have several instruments that you want to secure simultaneously, you can select each one individually or group them first and then lock the entire group. Locking multiple instruments at once ensures that all selected components remain in their relative positions, maintaining the integrity of complex arrangements. Similarly, when instruments are grouped, locking the group prevents any movement of the entire collection, allowing you to manage large sections of your design effortlessly.

Conversely, there may be times when you need to make adjustments to previously locked instruments. In such cases, the **Unlock** feature becomes invaluable. By selecting the locked instrument or group of instruments and clicking the **Unlock Icon**, you regain the ability to move and modify them as required. This flexibility ensures that you can refine your design iteratively, making precise changes without compromising the stability of other elements within the panel.

Utilizing the Lock and Unlock features effectively can significantly enhance your workflow. By locking instruments that are correctly positioned, you reduce the likelihood of errors and maintain a consistent layout throughout your design process. Additionally, selectively unlocking instruments when adjustments are necessary ensures that your panel design remains both accurate and adaptable to evolving project requirements.

## Video - Using lock and unlock

<https://www.youtube.com/embed/1foZPpDLMkQ?feature=oembed>

# Using the Snap-To Function

## Using the Snap-To Function in Your Panel Design - *Premium Feature*

The Snap-To function is a valuable feature in the Panel Designer that helps ensure your instruments and elements are precisely aligned on your panel template. By automatically snapping objects to other instruments or construction lines, it promotes consistency and neatness in your design. Here's how you can toggle the Snap-To function on or off:

To **enable** the Snap-To function, locate the Snap-To toggle button in the lower toolbar of the Panel Designer interface. Clicking this button activates the snapping behavior, allowing your instruments and objects to automatically align with each other as you move or place them on the panel. When Snap-To is enabled, you'll notice that objects "snap" into place, making it easier to maintain uniform spacing and alignment throughout your design. This feature is particularly useful for creating a professional and organized layout, as it minimizes manual adjustments and ensures that all elements are consistently positioned.

If you require more precise control over the placement of your instruments without the automatic alignment, you can **disable** the Snap-To function. To do this, simply click the Snap-To toggle button again, and the snapping behavior will be turned off. With Snap-To disabled, objects can be freely positioned anywhere on the panel template without automatically adjusting to align with grid lines or other elements. This flexibility is beneficial when placing items that need specific positioning that does not conform to the grid, allowing for creative arrangements and custom layouts that might be necessary for certain design requirements.

Using the Snap-To function effectively can significantly enhance the efficiency and accuracy of your panel design process. When enabled, it ensures that all elements are consistently aligned, contributing to a clean and professional appearance. However, there are times when precise, non-aligned placement is necessary, and turning Snap-To off provides that level of control. By toggling the Snap-To function based on your current design needs, you can achieve the best results in your panel layout, balancing both consistency and flexibility to create an optimal design.

## Video - Using the Snap-To Function

<https://www.youtube.com/embed/VO8Ym6jiOOY?feature=oembed>



# Using Construction Lines

## Using Construction Lines in the Panel Designer - *Premium Feature*

Construction Lines are vital tools for panel designers, allowing you to accurately position and align your instruments and components. These temporary guides help you organize elements efficiently without appearing in the final design, ensuring a clean and professional layout.

**Adding Construction Lines:** To add Construction Lines, locate the Construction Lines tool in the lower toolbar of the Panel Designer interface. This tool is represented by four intersecting lines forming a box. Click on either the horizontal or vertical line to add a Construction Line to your panel. You can add multiple Construction Lines as needed, placing them manually on your panel or snapping them to existing instruments and components.

**Moving Construction Lines:** Once added, you can move a Construction Line by simply clicking and dragging it to your desired location on the panel design. For more precise adjustments, use the “Center on Panel” tool by selecting the Construction Line and clicking the Center on Panel button in the lower toolbar. This will automatically position the Construction Line at the center of your panel.

**Moving by Direction and Dimensions:** For exact placement, select the Construction Line you wish to move and click the Move by Dimension button in the lower toolbar. Choose the direction you want to move the line (e.g., up, down, left, right) and specify the distance. Click Move to apply the changes, ensuring your Construction Line is positioned accurately according to your design requirements.

**Centering on Panel:** To center a Construction Line on your panel, select the line and click the Center on Panel button. This tool automatically aligns the Construction Line to the exact center of your panel, providing a precise reference point for aligning other instruments and components.

**Deleting Construction Lines:** If a Construction Line is no longer needed, removing it is straightforward. Click on the Construction Line to highlight it and then click the Delete button in the lower toolbar. This will remove the Construction Line from your panel design.

**Hiding Construction Lines:** If you prefer not to delete your Construction Lines but want to remove them from view, you can hide them. Click the Construction Lines toolbar button and select the Show/Hide option. This will toggle the visibility of all Construction Lines, allowing you to work without the temporary guides cluttering your workspace.

To get the most out of Construction Lines, plan your layout in advance by sketching a rough design using these lines to define key areas and alignments. This planning allows you to hide Construction Lines as needed, preventing them from interfering with other design elements. Use only the necessary number of Construction Lines to avoid cluttering your workspace and regularly reference them as you add or modify components, ensuring consistent spacing and alignment throughout your design.

## **Video - Using Construction Lines**

<https://www.youtube.com/embed/VZPEa8bt2l8?feature=oembed>

# Center an Instrument

## **Centering an Instrument on Your Panel - *Premium Feature***

Achieving a balanced and professional panel design involves precisely centering your instruments. Whether you're aiming to place a single instrument right in the middle of your panel or align your construction lines for a meticulous layout, this guide will help you do so effortlessly.

Start by selecting the instrument you want to center on your panel. Click on the instrument once to highlight it. Then, locate the Center on Panel icon on the toolbar of the Panel Designer interface. By clicking this tool, the selected instrument will automatically move to the exact center of your panel, ensuring it is perfectly positioned both horizontally and vertically.

With your instrument centered, you create a harmonious foundation for your entire panel design. This focal point not only enhances the symmetry of your layout but also draws attention to key components, resulting in a more organized and aesthetically pleasing panel.

## **Video - Center Instrument on Panel**

<https://www.youtube.com/embed/7tcpw7EG6qo?feature=oembed>

# Move Instruments by Direction & Dimension

## **Moving Instruments by Direction & Dimension - *Premium Feature***

Accurately positioning instruments and construction lines is essential for creating a well-organized and functional panel design. By utilizing the direction and dimension tools in your Panel Designer software, you can make precise adjustments to ensure each element aligns perfectly within your layout.

To begin, simply select the instrument or construction line you wish to move by clicking on it. Once selected, locate and click on the Move/Space Items tool on the toolbar of the Panel Designer interface. From there, choose the desired direction and specify the distance you want to move the item, then click Move to apply the change.

Using these tools allows you to perform both broad and fine adjustments, enhancing the precision and organization of your panel designs. Incorporating direction and dimension movements into your workflow not only improves the efficiency of your layout process but also contributes to creating professional and aesthetically pleasing designs. Regular practice with these tools will help you become proficient in adjusting your panel components, leading to more effective and visually harmonious panel designs.

## **Video - Move / space instruments by direction and dimension**

<https://www.youtube.com/embed/6wZzBArVfTI?feature=oembed>

# Move Instrument on Horizontal or Vertical Plane

## **Moving Instruments Horizontally or Vertically - *Premium Feature***

As a premium feature of the Panel Designer, you can move instruments strictly along horizontal or vertical planes for precise placement. To utilize this feature, start by pressing and holding the Shift key on your keyboard. While holding Shift, click on the instrument you wish to reposition and begin dragging it in your chosen direction. The software will automatically lock the movement to either the horizontal or vertical axis based on your initial drag, ensuring the instrument stays perfectly aligned. Once you've moved the instrument to the desired location, simply release the mouse button followed by the Shift key to finalize its new position. This functionality allows for smooth and accurate adjustments, enhancing the overall precision of your panel design.

## **Video - Move instrument on horizontal or vertical plane**

<https://www.youtube.com/embed/7u-DRwz7KOU?feature=oembed>

# Aligning Instruments on Center Horizontally & Vertically

## **Aligning Instruments on Center Horizontally and Vertically - *Premium Feature***

Achieving a balanced and professional panel design often hinges on the precise alignment of its components. Centering instruments both horizontally and vertically ensures a harmonious layout, enhancing both the functionality and aesthetic appeal of your panel. This tutorial will guide you through the process of centering two instruments using the Panel Designer software.

To align 2 instruments both horizontally and vertically, first select the instruments or other components you wish to center. Then, locate and click on the “Align Centers” tool on the lower toolbar. This tool will align the selected instruments both vertically and horizontally to the anchor, placing them perfectly in the center of the panel.

## **Video - Centering 2 instruments horizontally and vertically**

<https://www.youtube.com/embed/IRetXOKv5es?feature=oembed>

# Aligning Instruments

## **Aligning Instruments in the Panel Design - *Premium Feature***

Achieving precise alignment of instruments within your panel design is essential for creating a professional and organized layout. Whether you need to align instruments to the center horizontally and vertically or position them along the top, bottom, left, or right sides, understanding how to use the alignment tools effectively will enhance both the functionality and aesthetic appeal of your design.

When aligning instruments to the left edge, start by selecting the anchor instrument and the instruments you want to align. Find the Align Left button on the lower toolbar, usually depicted by arrows pointing to the left edge. Clicking this button will move the selected instruments so their left edges align perfectly with the anchor's left edge, maintaining a uniform position along the left margin.

Similarly, to align instruments to the right edge, select the anchor and other instruments, then click the Align Right button. This action adjusts the selected instruments so their right edges match the anchor's right edge, creating a clean and consistent appearance along the right margin.

For vertical alignment, select the anchor instrument along with the instruments you wish to align to the top. Click the Align Top button on the lower toolbar to move the selected instruments so their top edges align with the anchor's top edge, ensuring uniform positioning along the top margin.

To align instruments to the bottom, choose the anchor and additional instruments, then click the Align Bottom button. This will move the selected instruments so their bottom edges align with the anchor's bottom edge, providing a consistent look along the bottom margin.

In addition to aligning to the edges, you can achieve symmetrical and balanced designs by aligning instruments to the center both horizontally and vertically. Select the anchor instrument and the instruments you wish to center, then use the Center Horizontally and Center Vertically buttons available in the alignment tools. This will position the selected instruments exactly in the middle of the panel, creating a harmonious and visually appealing layout.

By utilizing these alignment tools, you can ensure that your panel design remains orderly and professional. Proper alignment makes your setup easier to navigate and enhances the overall functionality, resulting in a well-organized and aesthetically pleasing panel.

## **Video - Aligning Instruments on centers and sides**

[https://www.youtube.com/embed/yP1YQMvx\\_aY?feature=oembed](https://www.youtube.com/embed/yP1YQMvx_aY?feature=oembed)

# Export & Share

## Export & Share Panel Design Image

Once you've finalized your panel design, you can easily export or share it as an image or a link. Follow these simple steps to export your design:

### Click on Export/Share Design Image

Navigate to the menu bar and click on the **Export/Share Design Image** link. After clicking, please wait a moment as the server generates the image and the corresponding link for your design.

### Share Your Design via URL

If you want to share a shortcut to your panel design image, click the **Copy URL** button. This action copies the link to your clipboard, allowing you to paste it into an email, text message, or social media post for easy sharing.

### Download Your Design Image

To save a copy of your panel design image to your computer, click the **Save Image** button. A prompt will appear, asking you to choose a location on your computer where you'd like to save the image file. Select your desired folder and confirm to download the image.

By following these steps, you can effortlessly export your panel design as an image or share it with others using a simple link. Whether you need to include your design in a presentation, send it to a colleague, or keep a personal copy, the Export/Share Design feature makes the process quick and straightforward.

## Video - Export / Share Panel Design Image

[https://www.youtube.com/embed/S\\_Klt0zwtq0?feature=oembed](https://www.youtube.com/embed/S_Klt0zwtq0?feature=oembed)



# Export Equipment List

## **Export Equipment List - *Premium Feature***

To export an equipment list for your completed instrument panel design, simply click on the Export Equipment List menu item on the menu bar. Please allow the server some time to generate the list for you.

Once the list is complete, you'll be taken to a page where you may delete items from, and add items to, your equipment list before downloading.

Once you have completed editing your equipment list, click on the Download PDF button to download your document.

# Upload Your Own Panel Templates & Instruments

## Adding Custom Panel Templates and Instruments to Your Panel Designer

Occasionally, you might not find the specific Panel Template or Instrument you need for your project within the Panel Designer. Whether it's a unique component or a specialized template, you have the option to reach out and contribute to expanding the available resources. This tutorial will guide you through the process of requesting new templates or instruments and uploading your own custom images to ensure your design needs are met effectively.

### Requesting a Missing Panel Template or Instrument

If you're unable to locate the Panel Template or Instrument required for your project, don't worry. We are here to help expand the library to better suit your needs. To request the addition of a new template or instrument, simply [\*\*Click Here\*\*](#) to let us know. This will open a message form where you can send a detailed request outlining the specific template or instrument you need.

Once your message is received, we will assess the request and work diligently to incorporate the new item into the Panel Designer. This ensures that not only you but also other users can benefit from the expanded selection of templates and instruments in the future.

### Uploading Your Own Panel Templates or Instruments

In addition to requesting new items, you have the option to upload your own custom Panel Templates or Instruments. This feature is particularly useful if you have specialized components that are not currently available in the public database. Here's how you can upload your own designs:

**Access the Upload Feature:** Navigate to the upload section within the Panel Designer interface. This is typically found under the **My Panel Designs**, [\*\*Upload Custom Panel Template\*\*](#) and [\*\*Upload Custom Instrument Imagery\*\*](#).

**Upload Your Image:** Select the option to upload a new Panel Template or Instrument. Browse your computer to locate the image file you wish to upload, and follow the prompts to initiate the upload process.

**Exclusive Availability:** Once uploaded, your custom Panel Template or Instrument will be available exclusively to you. This private access allows you to use your designs immediately while we evaluate them for accuracy and image quality.

**Verification and Public Addition:** We will review your uploaded items to ensure they meet the required standards. If the design is accurate and the image quality is sufficient, your custom template or instrument will be resampled if necessary and added to the public database. This makes it accessible to all users, enhancing the overall resource pool available within the Panel

Designer.

## Guidelines for Uploading High-Quality Images

To ensure that your uploaded Panel Templates and Instruments integrate seamlessly into the Panel Designer, it's important to adhere to specific image formatting guidelines. Following these recommendations will help maintain consistency and quality across all designs.

### Image Type:

- Use **.PNG** format for all uploads. PNG files support transparent backgrounds, which are essential for accurately overlaying your designs onto panel templates.

### Image Resolution:

- Ensure that your images have a resolution of at least **72 pixels per inch (PPI)**. This resolution is sufficient for clear and detailed representations within the Panel Designer.

### Image Size:

- While the Panel Designer automatically adjusts image dimensions, starting with an accurately dimensioned image improves the overall quality of the upload. For example, if you have a 3¼-inch instrument, at 72 PPI, your image should be at least **225 pixels wide**, **but no more than 1000 pixels wide**. This ensures that the instrument appears proportionate and clear within your panel design.

### Remove All White Space:

- Before uploading, crop or trim your image to eliminate any unnecessary white space around the Panel Template or Instrument. Extra space can interfere with the alignment and appearance of your design elements.

### **Use a Transparent Background:**

- Delete any white space or other background colors surrounding your image. A transparent background ensures that only the Panel Template or Instrument is visible, allowing for seamless integration into your panel design without unwanted borders or backgrounds.

### **Best Practices for Image Editing:**

- For the best results, use a quality image editor to prepare your images. High-quality editing tools provide better control over image dimensions, resolution, and background transparency, ensuring that your uploads meet the required standards for accuracy and visual clarity.

**Access the Upload Feature:** Navigate to the upload section within the Panel Designer interface. This is typically found under the **My Panel Designs**, **Upload Custom Panel Template** and **Upload Custom Instrument Imagery**.

# Mobile Devices

## Optimizing Your Experience with Hangar Flying Apps on Mobile Devices

At Hangar Flying, we strive to ensure that our applications provide a seamless and enjoyable experience across various devices, including iPhones, Android phones, and tablets. However, to achieve the best performance and usability, it's important to understand our device compatibility guidelines and recommendations. This tutorial will help you determine if your device is suitable for our apps and provide tips for optimizing your experience, especially when using the Panel Designer.

### Understanding Device Compatibility

While our apps are designed to work on a wide range of devices, not all screens offer the same level of compatibility. To ensure you have the best possible experience, your device should meet certain minimum screen size requirements.

### Defining a Mobile Device

**Mobile devices** are essential for enjoying our apps without frustration. Here's how we define them:

**Phones:** All smartphones, regardless of brand or operating system (iOS, Android), are considered mobile devices.

**Tablets:** Any tablet with a screen size **less than 10 inches** is classified as a mobile device.

This classification helps us tailor our app functionalities to suit the capabilities and limitations of different screen sizes.

### Using Hangar Flying Content and Apps on Mobile Devices

Our Hangar Flying website and all general content, including Blogs and Forums, are optimized for viewing on any device. However, when it comes to more interactive tools like the **Panel Designer**, certain device specifications can significantly enhance your experience.

### Panel Designer on Mobile Devices

While the Panel Designer is accessible on mobile devices, we **recommend** using a device with the following specifications for optimal performance:

**Screen Size:** At least **10 inches**

**Input Devices:** Ability to connect an external **mouse** and **keyboard** (or trackpad)

These requirements ensure that you can navigate and design your panels with precision and ease, avoiding the limitations that smaller screens and touch-only interfaces might present.

## **Recommended Devices for Panel Designer**

Based on user experiences and our testing, here are some devices that work exceptionally well with the Panel Designer:

### **iPad Air (4th Generation):**

**Screen Size:** 10.8 inches

**Features:** When paired with an external keyboard and mouse, the iPad Air provides a smooth and responsive design experience without any issues.

### **iPad Pro:**

**Screen Sizes:** 12.9 inches

**Features:** The larger display offers ample space for detailed panel designs. Coupled with an external keyboard and mouse or trackpad, the iPad Pro ensures high efficiency and ease of use.

These devices offer the necessary screen real estate and support for external input devices, making them ideal for complex design tasks within the Panel Designer.

To get the most out of your Hangar Flying apps on mobile devices, consider the following tips:

### **Use External Input Devices:**

Connecting a mouse and keyboard or a trackpad can greatly improve navigation and precision within the Panel Designer.

External input devices reduce the strain of using touch controls for detailed design work.

### **Optimize Screen Settings:**

Ensure your device's display settings are configured for optimal brightness and contrast.

Adjusting screen orientation (portrait or landscape) can provide a better view of your panel designs.

### **Keep Your Device Updated:**

Regularly update your device's operating system to ensure compatibility with the latest app features and security enhancements.

Update the Hangar Flying apps to benefit from performance improvements and new functionalities.

### **Manage Screen Space:**

Close unnecessary apps running in the background to free up system resources, ensuring smoother performance of the Panel Designer.

Utilize split-screen or multitasking features on tablets to manage multiple tasks efficiently.

## **Troubleshooting Compatibility Issues**

If you encounter issues while using our apps on your mobile device, consider the following steps:

**Check Screen Size:**

Verify that your device meets the minimum screen size requirements. Smaller screens may limit functionality and ease of use.

**Update Software:**

Ensure both your device's operating system and the Hangar Flying apps are up to date.

**Connect External Devices:**

If experiencing navigation difficulties, try connecting a mouse and keyboard to improve control and precision.

**Contact Support:**

If problems persist, reach out to our support team by [Clicking Here](#). Provide detailed information about your device and the issue to receive tailored assistance.

# Request a Quote Pop-up Blocked

## Quote Pop-up Blocked by Browser

If you are experiencing a pop-up blocked message after starting the quote workflow like the one below.

Simple click on the icon, select “**Always allow pop-ups and redirects from <https://hangarflying.com>**”, then click on done. This will only allow pop-ups on HangarFlying.com.

Once you have allowed pop-up in Hangar Flying, simply click on the **Request a Quote** link again and complete the workflow.



# Request a Quote Workflow

## **Request a Quote Workflow**

We have created a simple but detailed workflow allowing you to create a quote request to send that will be provided to our Partner Vendor.

Once you have completed and saved your panel design, simply click on the Request a Quote link on the status bar of the Instrument Panel Designer.

\* If you get a pop-up blocked message in your browser, [please follow these instructions](#).

After clicking on the Request a Quote link, you will be taken to the workflow.

The first part of the workflow allows you to add any additional equipment you wish. Click on the Add Equipment button, search for specific items you wish to add, click on Add to Quote and then close the dialog box.

To continue with the quote workflow, simply click on Request a Quote. If you would rather just download a PDF equipment list, click on Download PDF.

Complete the request by providing as much info as would like to provide to our Partner Vendor. Your contact info, aircraft info, and details pertaining to what products and services you would like to be quoted. The more information you provide, the more complete quote you will receive.

Once you have completed the request form, including any additional information you wish to provide, check the "I agree" box and then the Request a Quote button.

\* We value you as a customer and would never provide your information to anyone without your explicit permission. By checking this box, you are allowing to provide this information, one time only, to our Partner Vendor.