



PHOENIA^{R/C} 5

*Professional Radio Control
Flight Simulation*

User Guide





Introduction

Welcome to Phoenix R/C, the professional model flight simulator for all levels of R/C pilot - from absolute beginner to seasoned competition-level flier.

Phoenix features over 200 models out of the box, each built and tuned by established industry veterans and in most cases by the actual model designers and developers themselves for the most accurate simulation possible. You can also use our incredibly flexible and accessible editing system to adjust any model to your exact specifications if you so choose.

You can choose to fly on a huge range of beautiful, detailed Photographic Panoramic sites - complete with 3D collision and water - or on one of our unique "InfinityScape" 3D flying sites where you can literally fly forever without ever reaching a map boundary.

Phoenix also features a great range of training and competition modes which makes learning to fly easy and fun. These modes will take you through from your first Hover to advanced manoeuvres such as autorotations. You can also use our complete library of tutorial videos with voice commentary to learn complex techniques, all flown by industry veterans.

These are just some of the features you will enjoy in Phoenix:

- World-class physics developed with the aid of established experts, competition pilots and model designers.
- Over 200 beautifully detailed models of all aircraft styles, types and levels.
- Detailed model editing system with a huge number of attributes and values lets you change any model in Phoenix to fly like almost any other.
- Over 30 gorgeous high-definition photographic panoramic flying sites with full 3D collision and moving water.
- Unique 3D "InfinityScape" sites where you can fly forever on an infinite landscape that you create and control.
- Breath-taking next-generation graphics engine with advanced features such as HDR, bump and specular-mapping, real-time reflections and realistic shadow effects.
- Realistic model sounds sampled from dozens of real-life model aircraft.
- Huge range of training modes and tutorial videos recorded by world-class pilots.
- Great selection of fun and challenging competition modes that can be played alone, with an AI pilot or online against other Phoenix users around the world.
- Fully-features online multiplayer system complete with easy to use worldwide matchmaking and voice-chat.
- Integrated downloads system lets you download new models, flying sites and other content seamlessly without ever leaving the simulator.
- Phoenix Builder companion toolset lets you create new models, flying sites and colour schemes quickly and easily, then test in Phoenix or publish online for others to download and enjoy.

Getting Started

Phoenix has been designed from the ground up to run on a huge range of computer hardware configurations, so you do not need a powerful system in order to enjoy our product. We do however strongly recommend that you update your graphics drivers for your installed graphics-card or chipset from the manufacturer's website in order to get the most out of Phoenix.

Minimum Specifications

Our minimum recommended specifications for running Phoenix are as follows:

- IBM-Compatible PC Computer with at least 1.0 Ghz Pentium 3 or 4, or AMD Athlon or 64 processor **OR** Intel-based Apple Macintosh computer running VMWare Fusion, Parallels Desktop or a Bootcamp partition
- Microsoft Windows XP, Vista, 7, 8/8.1 operating system
- 256 MB System RAM
- 2.5 GB free, uncompressed hard-drive space (more may be required for additional online downloads)
- Intel HD-Graphics 4000 or better 100% DirectX 9-compatible chipset with 128 MB graphics memory
- DVD-ROM drive for installation
- 1 free USB 1.1/2.0/3.0 port
- 100% DirectX 9-compatible sound card (optional)
- Keyboard and mouse for program operation
- Broadband internet connection (optional, required for online updates)
- Microphone (optional, required for online voice-chat)

Additional radio adaptors

Phoenix is supplied with its own USB interface unit which must be connected to the training port of a compatible transmitter in order to successfully control the simulated models. Some radio brands may require a small additional adaptor.

A list of compatible radios is as follows:

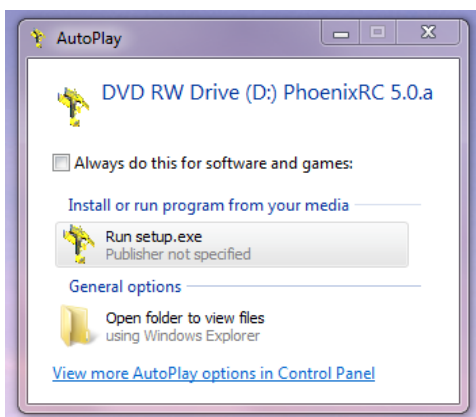
- All JR MC/MX (no adaptor required) - please note that the MC-Series requires the "DSC Interface" accessory
- Spektrum DX4e/DX6/DX7/DX7S/DX8/DSX9/DSX10/DSX10t/DX18 (no adaptor required)
- Please note that the DX7 "SE" (Special Edition) is not compatible with Phoenix
- Spektrum DX5e older-style with side-mounted training port (Spektrum DX5e adaptor required)
- Spektrum DX5e new-style with rear-mounted training port (no adaptor required)
- All Futaba radios (requires either Futaba Square or Futaba Round adaptor as appropriate)
- Futaba FX-18 with 2.5mm training port (Futaba FX-18 adaptor required)

- Hitec Aurora (no adaptor required)
- All Hitec radios excluding Aurora (Futaba/Hitec adaptor required)
- All Multiplex radios (Multiplex adaptor required)
- All Sanwa RD and RDS-Series (Sanwa adaptor required)
- E-Sky ETB41 2.4 Ghz (no adaptor required)
- All other E-Sky radios (Mini-DIN adaptor required)
- BMI Co-Pilot (Mini-DIN adaptor required)
- Blade CX/CP/CP+/CP Pro (Mini-DIN adaptor required)
- Blade CX2/CX3/CP Pro 2/SR (no adaptor required)
- ParkZone radios with training port (Spektrum DX5e adaptor required)
- Art-Tech 100B (no adaptor required)
- Art-Tech 100C (Art-Tech 100C adaptor required)
- Walkera 2401/2601 (use the Mini-DIN adaptor supplied with radio)
- Walkera 2402/2602/2801 (Walkera 2801 adaptor required)

Please note that the following radios and controllers are not supported:

- Any USB-only controller or joystick
- Spektrum DX7SE (Special Edition)
- HobbyZone radios and any radio included with a ParkZone/E-Flite Ultra-Micro product
- Any Walkera apart from those above (2401/2601/2402/2602/2801)
- Any other radio without a compatible training port

Installing the software

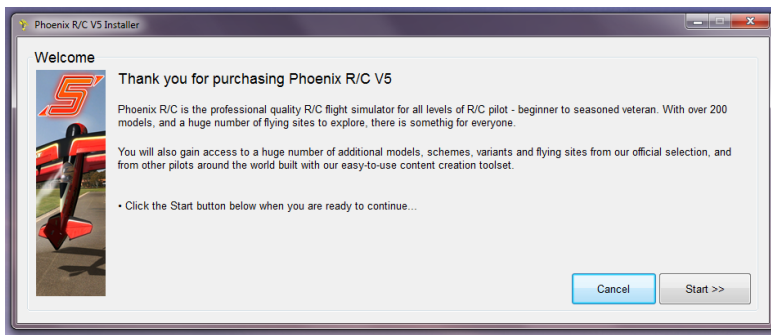


To install the Phoenix software on your computer, insert the Phoenix installation DVD which came with your Phoenix package. A message should appear asking if you wish to "Run setup.exe" - click on this option to begin the installation process.

On Windows 8/8.1 operating systems a banner may appear at the top of the screen shortly after inserting the DVD prompting you to run "Setup.exe". Click this to start the installation process.

If your computer is configured with autorun disabled, or a message does not appear, open a My Computer or Windows Explorer view, navigate to your computer's DVD-ROM drive and double-click "Setup.exe" to start the process.

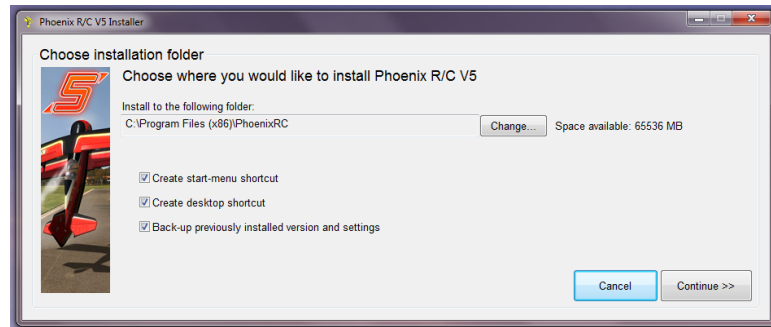
Welcome



You will be first taken to the installation Welcome screen.

Click "Start" to continue the process.

Choose installation folder



This screen lets you customise where you wish Phoenix to be installed on your computer.

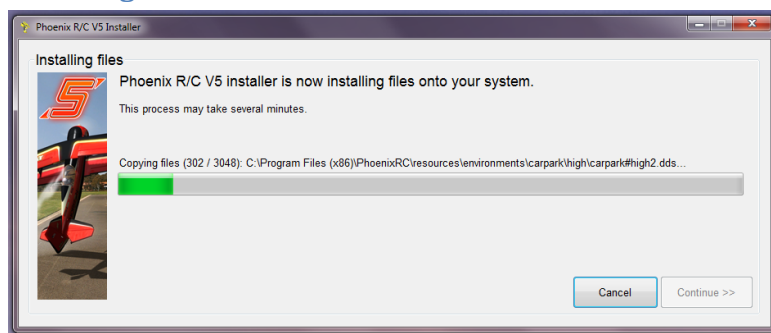
If you have an existing version of Phoenix already installed, the installation wizard will detect it and automatically set the installation folder to this location.

Click the "Change..." button beside the installation folder display to select a new folder where Phoenix should be installed. When you do so, you can see the remaining disk space shown to the right of the selected folder.

You can also select whether to create a shortcut on your Start Menu (recommended), on your desktop, and whether to back-up your previous Phoenix installation and settings if one has been located.

Click the "Continue" button to move to the next stage.

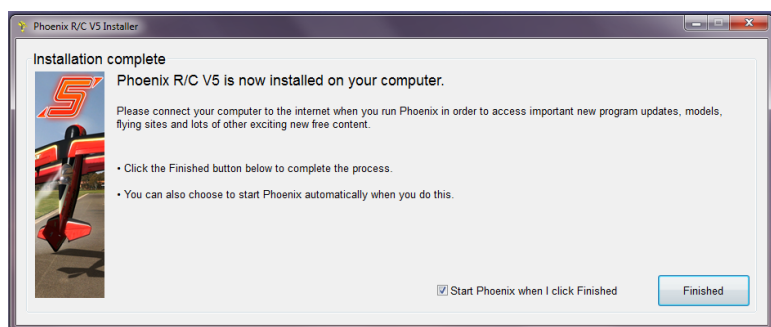
Installing files



Phoenix will now be installed onto your computer with the options that you chose in the previous step.

Depending on your DVD-ROM and computer speed, this may take several minutes to complete.

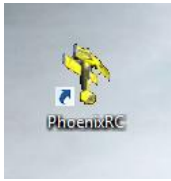
Installation complete



Once all files are copied onto your system, you can now complete the installation process by clicking the "Finished" button.

An option is included for starting Phoenix when you do this.

Starting Phoenix R/C



If you did not elect to automatically start Phoenix when you complete the installation process, double-click the "Phoenix R/C" shortcut on your Desktop, or the "Phoenix R/C" shortcut from the "PhoenixRC" folder in your Start Menu to start the Phoenix R/C Launcher.

The Phoenix R/C Launcher



The Phoenix R/C Launcher runs before the main simulator and handles automatic detection and installation of program updates as well as letting you perform several other actions easily and quickly without needing to start the full program.

This is useful in case an incompatibility or corrupted installation causes the program to fail on startup.

The current version of Phoenix you have installed is displayed in the lower-left of the Launcher window.

Automatic updates

When you start the Launcher, if you are connected to the internet then the program will automatically search for a later version of the software. If one is found then you will be prompted whether or not you wish to download and install it.

Click "Yes" to begin the update process. A progress box will appear showing you the current download state. When all required files have been successfully downloaded, you will be asked to allow the installer permission to make changes to your computer. Click "Allow" to enable this to occur. The downloaded updates will be installed, and a message will appear showing you which version you now have.

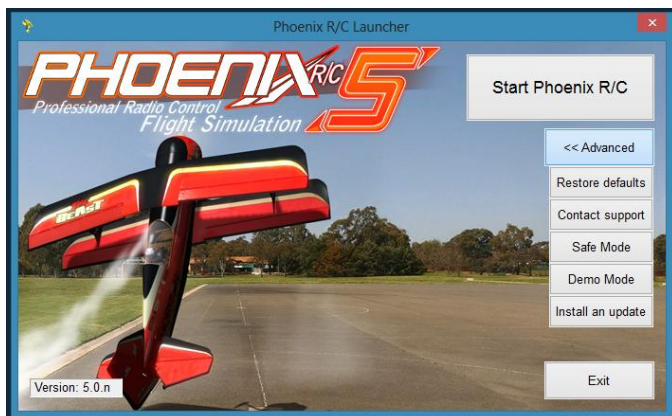
Launching the program

Click the "Start Phoenix R/C" button in the upper-right corner of the Launcher window to launch the program.

You can also exit the Launcher without starting Phoenix R/C by clicking either the "X" button on the title-bar, or the "Exit" button in the lower-right of the Launcher window.

Advanced options

Click the "Advanced" button to show/hide advanced Launcher options:



- **Restore Defaults:** Click this button to restore all program settings and user data to their default states as they were when the program was first installed.
- **Contact Support:** Click this button to open a new e-mail with our support service's e-mail address already filled in.
- **Safe Mode:** Click this button to start Phoenix with the most basic options, default model and default flying site selected. This is useful in the rare case that an option is preventing the software from successfully starting.
- **Demo Mode:** This button starts Phoenix in a rolling Demo Mode.
- **Install an Update:** If your computer is not directly connected to the internet, you can use this button to manually install a Phoenix update package (.pkg) file that you may have downloaded from our website's Downloads section.

Using Phoenix R/C

Connecting your radio

To connect your radio to your computer in order to fly the simulated models in Phoenix, you should first connect the USB connector end of your Phoenix USB interface to a spare USB 1.1/2.0/3.0 port. You may hear a tone when you do so, and the first time you do this you may be informed that Windows is installing drivers. This will take a few seconds, then you will be informed that the device you have connected is ready to use.



Once your USB interface is connected and has been detected by Windows, you will need to connect it to your radio's training port. If your radio requires an additional adaptor (see the "Additional radio adaptors" section above for more information on this), please connect it now to the Stereo plug end of your Phoenix USB interface.

Now connect this to the training port of your radio unit. Most modern radios have a special "Simulator mode" which is activated by connecting the USB interface to the training port with the radio's power switch in the OFF position. If this is the case then when you connect your USB interface to your radio with the radio turned off, it will "power-on" automatically in this mode. This mode is very useful as all R/F signals are disabled which drastically improves battery life when using your radio with the simulator.



If your radio does not automatically "power on" when you do this, and you are sure that all connections are firm, and you have the correct adaptor fitted (if required), then you may need to also switch your radio on at this stage.

First-time startup



Phoenix comes with 10 languages included, with more being added on a regular basis.

The first time that you start Phoenix, you will be prompted to select the language you wish to use the program in. To select the language you wish to see program text shown in, simply click the corresponding flag.

You can change language at any time from the **System > Program Setup > Language** tab.

First-time startup



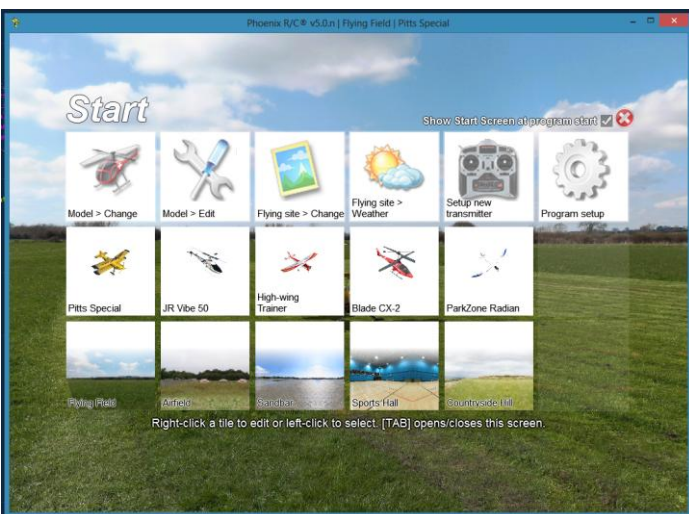
The first time you run Phoenix, after you have selected which language you want to use, you will be taken to the **Initial Setup Wizard**.

This takes you through some basic radio calibration and setup options, as well as setting graphics quality and units of measurement.

Carefully read the instructions on each step and follow the directions displayed to quickly set Phoenix up with the most common settings and begin flying.

Setup complete

Once you have completed the Initial Setup Wizard, you will see the default flying site displayed on your screen, along with the default model sitting on the field.



Start Screen

By default, the Start Screen is shown when you first start Phoenix. This is a special menu which gives you instant access to any function or feature of Phoenix.

The Start Screen is composed of a number of customisable tiles, each which can be set to activate a menu item, change to a specific model or flying site, or load a previously saved Scenario (see Scenarios Toolbar later on for more information).

To show or hide the Start Screen, press the TAB key on your keyboard at any time, or click the red "X" button in the top-right of the display when visible. You can also access the Start Screen from the View > Displays menu.

When visible, you can also set whether the Start Screen should appear automatically when you first start Phoenix using the "Show Start Screen at program start" checkbox at the top-right of the display.

To edit a tile, either left-click an empty tile, or right-click any tile to open the Select Start Screen Tile menu. From here you can set which function or feature that tile should activate when clicked - or set to "Clear Tile" to clear that tile's function.

The Main Window



When Phoenix is started, you will see the following things:

- The **simulation window** where your currently selected flying site and model can be seen.
- The **Main Menu Bar** which sits atop the window, and appears when you move your mouse.
- Any active **Toolbars** along the left-hand side of the screen which appear when you move your mouse.
- Any active **Widgets** which will sit on top of the simulation and can be moved and resized with your mouse cursor.

Main Menu Bar

Almost all of the functions and features of Phoenix are accessed via the Main Menu Bar which sits at the top of the main window and appears automatically when you move your mouse.



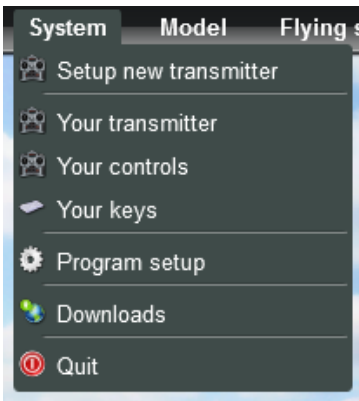
If you leave your mouse still for more than a few seconds without placing it over the menu bar then the menu will automatically hide itself to show you a full uncluttered view of the simulation.

Highlight a menu item with your mouse cursor, and then Left-Click to open it. You will then see a sub-menu appear with further options. Highlighting and selecting these in the same way will access further sub-menus or dialog boxes.

Exit Button

The large red Exit Button sits at the far-left of the Main Menu Bar, and provides a fast way to close Phoenix.

System Menu



The **System Menu** contains functions for changing the way that the core program functions.

This includes settings for graphics, physics and sound, and also for configuring your radio, controls and keyboard functions.

You can also check for new downloadable content and exit the simulator from this menu.

Setup new transmitter



Clicking this menu item will launch the **Setup new transmitter** wizard.

This is a simple-to-follow wizard which will take you through all the steps needed to add a new radio to Phoenix, including calibration and control configuration.

This is a two-stage process starting with calibration and ending with selecting a control profile.

You can fine-tune these settings later using the **Your Transmitter** and **Your Controls** menus.

Your transmitter



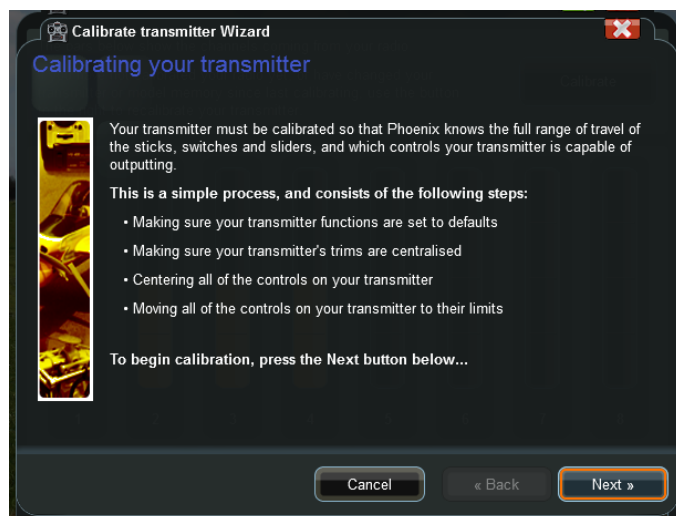
Clicking this will open the **Your Transmitter** menu, which contains functions for calibrating your radio for use with Phoenix.

The menu display shows a series of bars which each represent a channel coming from your radio.

When calibrated correctly, you should see each stick on your radio move one (or more) of the bars smoothly from one extent to the other, and centered when the corresponding stick is in its centre of travel.

Clicking the **Calibrate** button will start the calibration wizard. You must do this each time you change radios, or make any changes in your radio unit.

Radio calibration

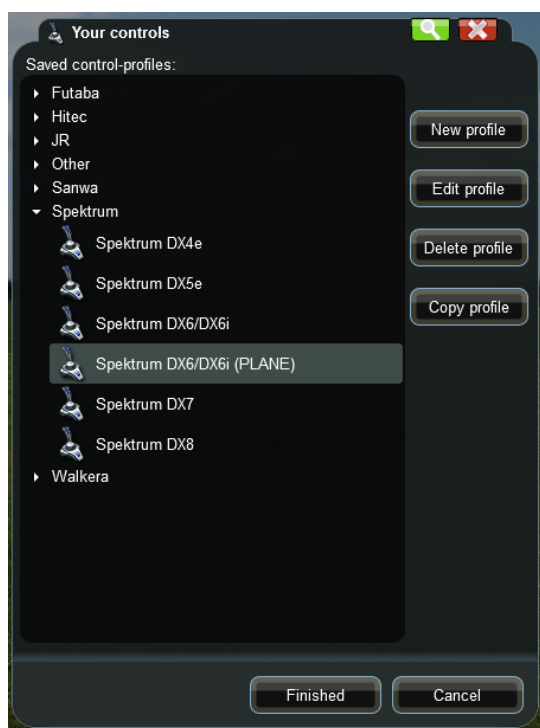


Before you can use your radio with Phoenix it must be calibrated correctly so that the software knows the full range of movement of each stick on your transmitter, as well as the function of every programmable switch, knob or slider.

Click Calibrate to start the Radio calibration wizard, which will take you through the steps required to successfully calibrate a new radio ready for use with Phoenix.

Click Finished to exit this menu.

Your Controls



This menu lets you select which channels coming from your radio will be activated which controls on the simulated model.

For example, Channel 1 on your radio may be set to control the model's Throttle, and Channel 5 may control the model's retractable landing gear.

Phoenix saves these links between channels and model functions in a "Control Profile", and you can either select from a list of commonly-used profiles for various radio makes and models, or create your own custom profile entirely from scratch.

Saved control-profiles list

This list shows the current selection of saved control profiles, organised by radio manufacturer. You can expand a category by double-clicking the name of the category, or left-clicking the small arrow to the left of each category. Any custom control profiles you may create are saved in the "Custom" category at the top of the list.

To select a control profile, highlight it in the list with your mouse cursor, and then left-click to select it.

New profile

Click this button to start the **New profile** wizard which guides you through creating a new, custom control profile. You should use this if your radio make and model is not visible in the saved control profile list. See below for more detail on this process.

Edit Profile

Click this to edit the currently selected control profile. If you try to edit a preset profile, a copy of it will be made for you in the Custom category automatically. See below for more detail on this process.

Delete Profile

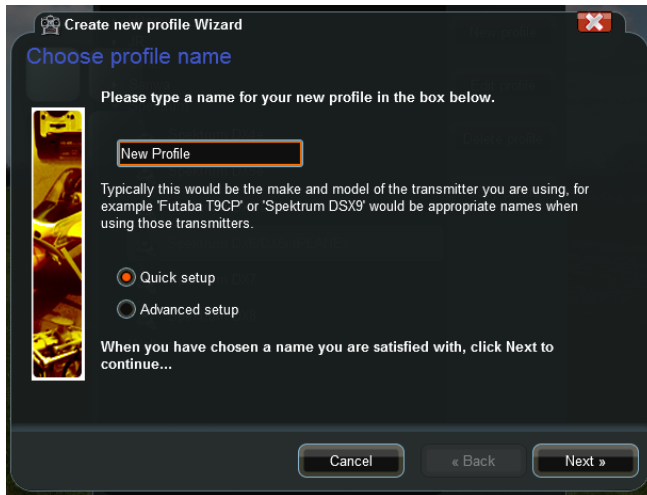
Click this to delete the currently selected profile. You cannot delete preset profiles, only ones from the Custom category.

Copy Profile

Click this to duplicate the currently selected profile. The copy will appear under the Custom category.

New Profile Wizard

This wizard guides you through creating a new control profile for Phoenix.



You must have your radio calibrated successfully using the **System > Your Transmitter > Calibrate** wizard before you can use this menu correctly.

There are two choices when creating a new profile:

- **Quick Setup** is a faster method which assigns the most common functions by detecting your stick movements.
- **Advanced Setup** will create a new, blank profile for you and open it ready for editing. See the Edit Profile Menu section below for more information on this function.

Edit Profile Menu

This menu lets you assign any model function to any channel coming from your radio or any keyboard key (where appropriate).



Name of profile

This lets you set the visible name of this profile as shown in the Saved control profiles list.

Simple and Detailed views

Here you can choose between a cut-down view of the most commonly used controls, or a complete list of all available functions and features.

Controls list

This list shows you each model function, and what input is currently set to control it, as well as the ability to adjust the minimum and maximum travel of the control, whether you wish to reverse the input or set an exponential curve for that input.

- The left-hand label shows the model function.
- The Min edit-box lets you set the minimum travel for this function (0-100).
- The Status bar in the centre shows you the current state of this function. If set to a radio channel, this will change with your radio's stick inputs.
- The Max edit-box lets you set the maximum travel for the function (0-100).
- The Invert check-box lets you flip the input.
- The Curve button opens the Curve Editor where you can select from a range of different preset curves, or create your own.
- The Input drop-down box lets you select which input should control this function:

- Unmapped means that the function is disabled.
- Controller channel 1 - 8 will mean that channel (radio stick, switch, slider or knob) will control the function.
- Clicking Keyboard key(s) will open the Assign Keyboard Key menu which lets you press any key on your keyboard to control this function. In the case of a function which requires two inputs (such as flaps up/down), you will be prompted to press two keys in sequence.
- Static 0/25/50/75/100% lets you set a fixed value for this input.

Filter channels

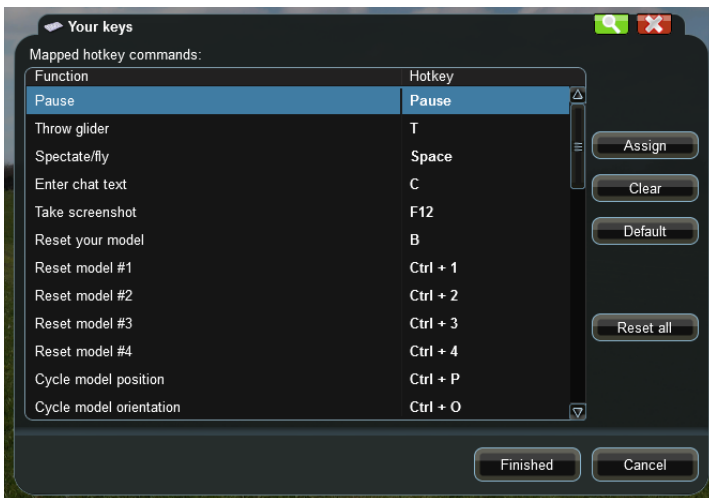
This is an advanced checkbox which is preset on certain radios, and attempts to filter out any unwanted spikes or sudden changes caused by the connection from the trainer port.

Finished/Cancel

Return to the **System > Your Controls** menu with or without saving your changes.

Your Keys

This menu lets you set hotkeys for commonly used program functions and features.



Mapped hotkey commands

This list shows the currently set list of assignable functions, and the hotkey combination (if any) that is currently set to activate them. To select an entry, highlight it in the list with your mouse cursor, and then left-click to select it.

Assign

Click this button to open the assign hotkey menu which will prompt you to press a key combination that should activate the selected function.

If the key combination is already in use you will be prompted to clear the conflict or choose another key combination.

Clear

Clears this hotkey assignment.

Default

Resets this function to the default hotkey setting (if any).

Reset All

Resets all functions to their default settings (if any).

Finished/Cancel

Return to the simulation with/without saving your changes.

Program Setup

This menu contains all of the main program settings to control how the program performs and runs on your computer. The menu is split into several sections which are accessed via the tabs along the top edge of the menu:

General

This section contains personalisation and user-interface settings.



Avatar

Your avatar is an image that is displayed when you fly online with other pilots, and is used to represent you. There is a wide range of different avatar images to choose from, but for security we do not allow custom avatars.

Click the avatar image to open the **Avatar Browser** and select a new avatar image if you wish. When you load Phoenix for the first time, a random avatar is automatically chosen for you.

Personal details

In this section you can enter some information about yourself which is visible to others when you fly online. This information is completely optional.

User-interface theme

Select from a range of different colour themes for the Phoenix user-interface.

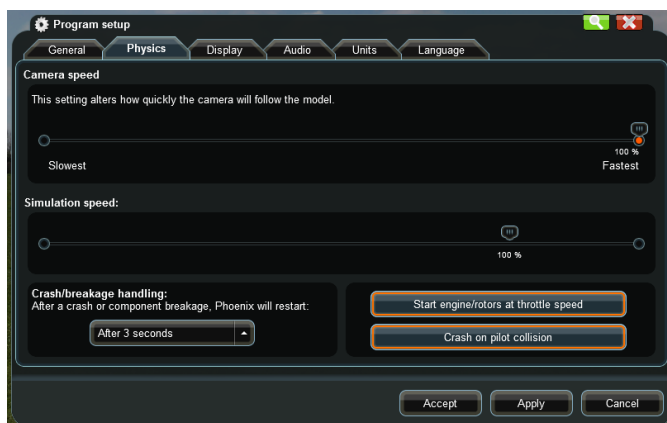
Display

This section controls some onscreen messages:

- **Controls/Expo/Modules:** Toggle whether model control, expo or module information is displayed each time the model is reset in the bottom-right of the simulation window.
- **Reset help messages:** If you have selected "do not show this message again" on a help message, clicking this button will reset that option, and the help message will re-appear as appropriate in the future.

Physics

This section contains functions for changing various physics-related options.



Camera speed

This slider controls how quickly the camera will follow the onscreen model. A fast speed (high setting) will mean the model is always directly in the centre of the screen, while a slower speed (low setting) will allow the model to drift a small amount, but can be more comfortable and natural to watch.

Simulation speed

This slider lets you set the speed of the simulation so that actions which would normally occur at a normal speed will do so at a slower rate. This is useful when

training as you do not need to have such fast reflexes to correct a mistake.

Crash/breakage handling

This drop-down box lets you when Phoenix resets the model when you have crashed or broken it:

- **Immediately:** Resets the model on the field as soon as a crash or breakage is detected
- **After 1/3/10 seconds:** Phoenix will wait the specified time before resetting the model after a crash or breakage.
- **No auto-restart:** Phoenix will not automatically reset the model after a crash or breakage. You can reset the model yourself using the "Reset Model" hotkey ("B" by default) or by assigning the "Reset model" function to a transmitter input using the **System > Your Controls > Edit** menu.
- **At idle throttle:** Phoenix will reset the model only when you have returned the throttle control to idle. This is useful to teach good practices for real-life flying, when leaving the throttle up after a crash can further damage your model.

Start engine/rotors at throttle speed

Select this option if you wish to speed up the time it takes to get flying again after a model reset by starting the rotors, propellers or turbines of the model at a speed comparative to the throttle position you have set, reducing time taken waiting for the model to "spool up" from idle.

Crash on pilot collision

Set this option if you want Phoenix to treat a collision between the model and your camera/eye position as a crash. When active, the model will always reset instantly in the event that this occurs.

Display

This section contains options for adjusting the graphics fidelity of the program.



Simple/Detailed view

Selects either a simplified view with an easy-to-use slider, or the full range of detailed graphics settings (which may require some knowledge of graphical options and terms).

Graphics quality

This slider lets you easily and quickly adjust a range of graphics options with one control. The further to the right that this slider is set, the more advanced and graphics-card intensive features will be activated, and the more modern and powerful computer you will

require in order to maintain a smooth and fluid simulation. Conversely, moving the slider to the left will reduce graphics quality options, resulting in a faster, smoother experience on lower-end graphics hardware.

Fullscreen mode

Select between Windowed and Fullscreen mode. Windowed mode will display the Windows Title Bar and Start Menu, and makes switching from Phoenix to other applications faster if required. Fullscreen mode will take full control of your display, but results in a smoother experience.

Rotor Disk Visibility

Fine-tune the visibility of rotor and propeller-blur discs.

Detailed options

The following options are shown when the **Detailed** view is selected.



Fullscreen resolution

Select the resolution you wish Phoenix to run at when fullscreen mode is selected. By default, only "60 hz" modes are displayed in the list, but selecting the small "<<" button to the right will enable all display modes your graphics card supports.

Enable V-Sync

Selecting this option will enable Vertical Sync. This attempts to synchronise updates of the simulation graphics to the refresh rate of your display, reducing "tearing" effects. When this is enabled, the frame rate will not rise above your selected refresh rate.

Quality options

- **Anti-aliasing:** Enable full-scene anti-aliasing (if supported). This will make the edges of objects in the scene appear smoother and more realistic.
- **Night-light glow:** Enables glow effects when flying on a night-time site with a model equipped with a night-glow colour scheme.
- **Sun glow:** Enables HDR effects, where bright areas of the scene will "bleed" over objects in the foreground as they would in real life.
- **Enable Stereo 3D:** If you have an NVIDIA 3D-Vision ready display and glasses, this option control whether the simulator will utilise stereoscopic 3D mode. Stereoscopic 3D mode is currently only available when flying on a 3D flying site.
- **Reflections:** Enables/disables model reflections, for instance if the model has shiny or chromed areas these will reflect the background.
- **Advanced rotor effects:** Enable motion-blur on fast-moving surfaces such as rotor-heads, blades and props.
- **Crash debris:** Enable additional crash particles that are generated when you crash or break your model.
- **Sun lens-flare:** Enable additional lens effects when looking at the sun.
- **Shadow quality:** Set the quality of model and object shadows on the flying site.
- **Smoke quality:** Set the quality and amount of smoke generated by IC/glow models.
- **Water quality:** Set how realistic the water appears on supported sites. This includes whether the water will reflect the model and other objects in the scene.
- **Scenery quality:** If the selected photographic panoramic site has a high-definition option, select whether it should be used.
- **Foliage quality:** On 3D flying sites, select how much foliage (e.g. trees) is displayed.
- **3D terrain quality:** On 3D flying sites, select how detailed the terrain texturing will be.

Audio

This section contains options for changing sound settings, and the currently used sound library.



Sound volume

Use this slider to set the master volume for all sound effects.

Sound library

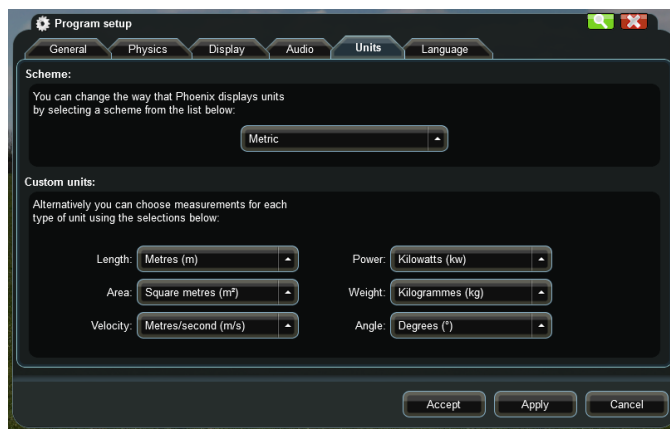
If you are having sound-related issues or problems, changing the sound library may help. **This requires a program restart to take effect.**

Mute sounds during voice-chat

Set the level of sound volume muting that occurs when another pilot is talking during a multiplayer session. 100% means that no muting will occur, while 0% means that the sound will mute completely when a pilot is talking.

- **Wind sound:** Enable or disable wind-sound effects when wind is enabled on a flying site.
- **Play ambient effects:** Enable or disable background noises (e.g. animal sounds) if enabled on a flying site.
- **Enable reverb:** Enable echoing of model sounds when flying in an interior flying site.

Units



This section lets you change which units of measurement you wish to choose for the various displays and read-outs throughout the program. You can select from preset options, or completely customise your units of measurements.

Scheme

Select either **Metric** or **Imperial** units of measurement.

Custom units

Select from the options to completely customise your units for each type of measurement.

Language

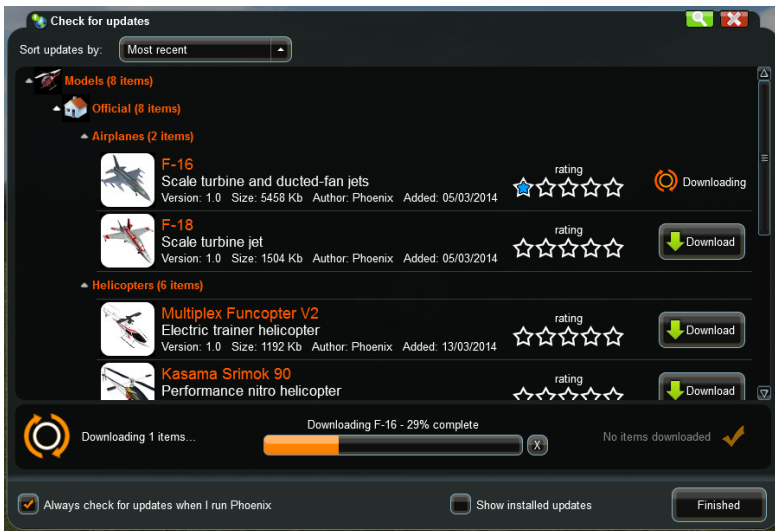


This section lets you choose which language all text appears as in Phoenix.

Select a language by clicking on its flag in the menu, then click "Accept" to set.

Please note that changing language requires a program restart in order to take effect.

Downloads



The **Downloads** menu is where you can access additional downloadable content such as new models, flying sites, colour schemes and more.

Before clicking this menu item, please make sure that you are connected to the internet and you have your Phoenix USB interface attached to your computer's USB port.

Phoenix comes with a high number of models and flying sites out-of-the-box, but new content is released on a regular basis and when new downloads are available a message will appear on startup and you can download it from this menu.

Sort updates by

Select how you wish to see updates sorted:

- **Most recent:** This will show the most recently added updates at the top of the list, and the oldest at the bottom.
- **Highest rated:** This will show the highest rated updates at the top of the list, and the lowest at the bottom.
- **Name:** This will sort all updates by alphabetical order.

Downloads list

In this list you can see all available downloadable content, sorted into categories. To expand a category and see the downloads within, click the category name. Each download has a name and description with an icon. You can also see the download version, size (in KB), the author and when it was added to the system.

To the right of the download information is the current rating of the item. You can also add your own rating here by clicking one of the stars.

To download an item, click the "Download" button at the far right of the item's entry in the list. The update will be added to your download queue and will be downloaded and installed in turn. You can see the currently downloading item using the status bar in the lower-middle of the menu. When an item is downloading you can also click the "X" button next to the status bar to cancel the current download and move onto the next one in the queue.

Always check for updates when I run Phoenix

Select this option to be notified when new updates are available for download when you first start Phoenix.

Show installed updates

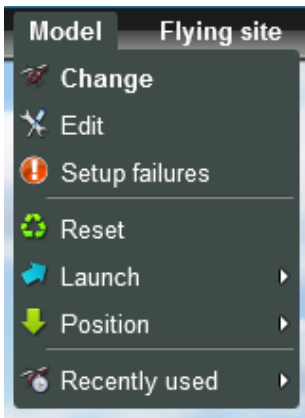
Select this option to display updates you already have installed in the download list. By default, downloads you have already installed are hidden in the list.

Quit

Click this menu item to close Phoenix and save all settings.

By default, if you have your radio switched on you will be prompted to turn it off before the program will exit. This behaviour can be changed using the "Show this message" checkbox on the warning message, but it is highly recommended to leave this functionality enabled to ensure best practices at the field.

Model Menu



The **Model Menu** contains all model-specific functions, features and settings, including model selection and editing.

You can also use this menu to adjust settings for where your model will start on the field, and how it will be launched.

You can also easily find the most recently used models here and select them quickly.

Change

Click this item to open the **Change Model** menu.



This menu displays every model that you currently have installed on your simulator.

Models are divided into categories and can be sorted by several different methods to make locating and selecting the model you want to fly easy and fast.

This menu also shows additional information about the selected model and lets you select a variant or alternate colour scheme (if available).

Sort by

Select how you wish the models in the list to be sorted:

- **Class:** Sort models by their general aircraft class. This is the default sorting method.
- **Style:** Sort models by the type/style of aircraft.
- **Power:** Sort models by the type of engine/power (if applicable) they use.
- **Level:** Sort models by how difficult they are to fly.
- **Manufacturer:** Sort models by their manufacturer.

Model List

This list shows all models that are currently installed, sorted by the options above. A small icon is shown by each entry in the list. To select a model, highlight it in the list with your mouse cursor, and then left-click to select it. When you do so, the selected model will appear in the model preview pane to the right.

If a model has edited variants available, you will see a small arrow to the left of its entry in the list. Expand the model in the list by left-clicking the arrow or double-clicking its name. You can then select the required variant.

Model Preview Pane

Here you can see a 3D preview of the currently selected model and colour scheme, as well as various information about the model and a larger icon.

You can hold down the right mouse button and drag in the preview window to rotate the model preview, and use the mouse wheel to zoom in and out. To the bottom-right of the preview there are also four view buttons which let you set the preview orientation to a preset rotation.

Delete Variant

In the bottom-left of the menu is the Delete Variant button. If you have a non-system variant selected in the list and click this button, the variant will be deleted.

Colour Scheme

This drop-down box lets you select from any alternative colour schemes that are available for this model. When you select one, the 3D preview window will update to reflect your choice.

Favourites



You can add any combination of Model, Variant and Scheme as a favourite using these buttons. Favourites appear at the top of the Model List for easy selection.

- **Add favourite:** Click this button to add the currently selected model, variant and scheme as a favourite.
- **Remove favourite:** Click this button to delete the currently selected favourite.
- **Organise favourites:** Click this button to open the Organise Favourites menu.

Finished/Cancel

Click this button to exit the menu with/without saving your changes and return to the simulation.

Edit

This menu lets you view and change a huge range of model attributes and create a "Variant" of the model which can be selected from the Model > Change menu. Almost any aspect of a model can be altered to create an almost unlimited number of different models and duplicate the flying characteristics of virtually any flying aircraft.

Simple View



Select **Simple View** from the bottom-left of the menu to view a simplified version of the edit menu. In this view you can change the setup of the model as well as the selected variant, scheme and scale the model to create new versions.

Model Preview Window

In this window you can see a 3D view of the currently selected model you are editing. Drag with the right-mouse-button to rotate the preview. Drag with the middle mouse button to pan the view, and use the mouse wheel to zoom in and out. This view also shows you the location of physical objects on the model, as well as the centre of gravity.

Colour Scheme

This drop-down box lets you select from any alternative colour schemes that are available for this model. When

you select one, the 3D preview window will update to reflect your choice.

Current variant

This drop-down box lets you select the current variant from those previously created.

Create Variant

Click this to create a new variant based on the variant that is currently selected.

Delete Variant

Click the button to delete the currently selected variant.

Model Setup Wheel

This wheel lets you change the general setup of the selected model and create a new variant which you can easily select at a later time. Rotating the wheel to the left (towards the Beginner setting) makes the model more docile and easy to handle. Rotating the wheel to the right (towards the Advanced setting) will make the model more aggressive.

Scale Model



Click this button to open the **Scale Model Wizard**.

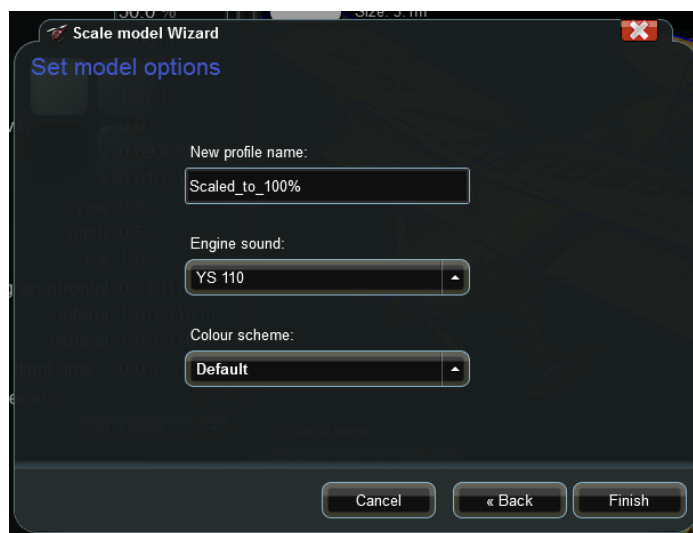
This wizard enables you to enlarge or reduce the size of a model and automatically adjusts all associated parameters for you. When you start the wizard, you will see a preview of the model, as well as a display of the starting and ending size.

Starting variant

Select the variant that forms the original basis of the model scaling operation.

Scale by

Drag this slider to set the scale factor of the model. The display above will change to reflect the final result of your changes.



When you have set the required scale amount, click the "Next" button to continue.

In the next stage you can set some additional options:

New profile name

Set the name of the variant which will be created when you complete the scaling operation.

Engine sound

Select the new engine sound for the scaled model.

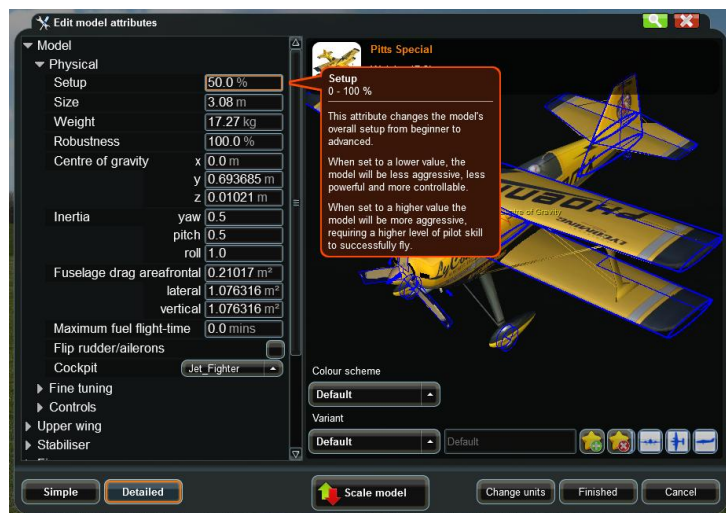
Colour scheme

Select the scheme that will be selected after the scaling operation is complete.

Once you are satisfied with your changes, click the **Finished** button to scale the model, build and select the new variant.

Detailed View

This view shows you the full range of editable attributes that can be altered to change the way the model looks, feels and behaves in flight.



Attribute list

This list contains all available attributes, sorted by object and category.

To expand an object or category, left-click the entry in the list.

Each attribute in the list will display detailed help when your mouse cursor is held over it, along with the range of possible values, units and a description of the attribute's effects.

When you make changes to an attribute, a variant will be automatically created for you so it can be selected later.

Change units

Click this button to open the **Units** section of the **System > Program Setup** menu.

Setup failures

This menu lets you choose from a range of different problems that can be made to occur during flight, so that you can prepare for them possibly occurring in real life.



The possible failures that can occur are shown in the list, along with options for setting when the failure may occur, and additional options for each failure type.

When a failure occurs, a flashing icon will appear on the Notifications toolbar (if active), and you can reset the failure by clicking on the icon to return to normal flight.

Reset

Reset all failures to their default, disabled state.

Accept/Cancel

Exit this menu with/without saving your changes.

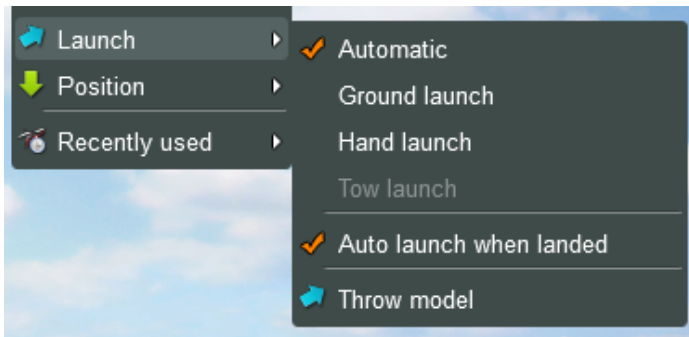
Reset

Click this menu item to reset the model on the flying field.

Launch

This menu contains options for setting how the selected model is launched on the field.

Launch options

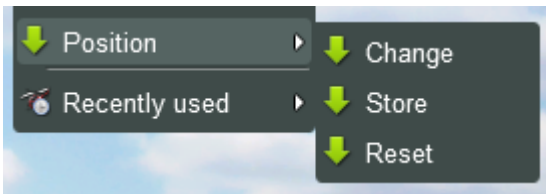


- **Automatic:** Selects the most appropriate launch method for the selected model based on the model's type, power and undercarriage.
- **Ground launch:** Always launch this model from the ground, sitting in the correct position on the field.
- **Hand launch:** Throw this model using the mouse or your radio to set the throw direction, then use the mouse-button or throttle stick to launch.
- **Tow launch:** For gliders, create a tow-plane which will drag your model into the air. Use the throttle stick to detach from the tow-line.

Auto launch when landed

If your selected model has no undercarriage or engine, automatically reset the model when it has landed on the ground.

Throw Model



Launch the model into the air. Continue pressing the menu item to gain more altitude.

Position

This menu contains functions for changing the model's starting position on the field.

You can store a custom starting position, and the model will launch from that position until reset.

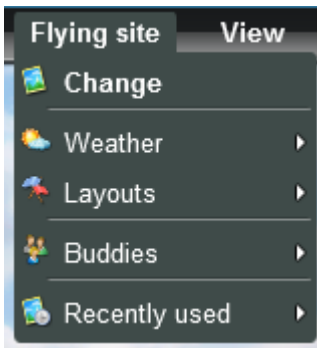
Position options

- **Change:** Enter position changing mode. In this mode you can select which of the preset positions the model will start from.
- **Store:** Store the current model position and orientation. The model will restart from these settings in future until changed or reset.
- **Reset:** Reset the stored model position and orientation to defaults.

Recently used

This menu contains a list of the 10 last models and variants you selected for quick and easy access.

Flying Site Menu

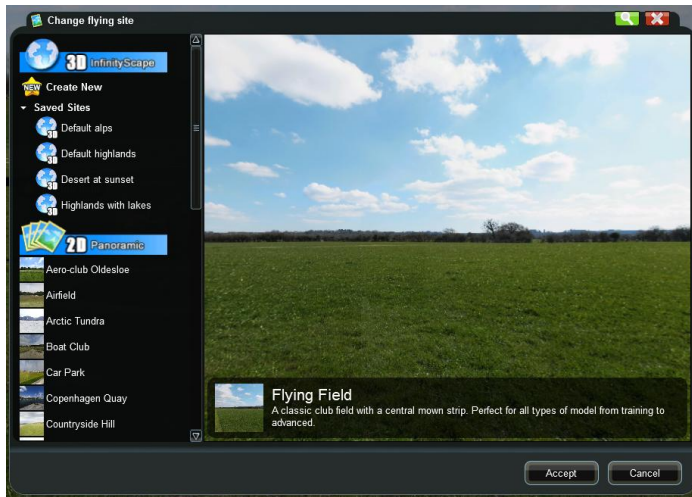


This menu contains all of the functions and features needed for setting up the environment you want to fly on, including the current field, weather conditions and additional objects in the scene.

You can also setup a layout (flags and markings) on the site from this menu as well as configure AI pilots to fly alongside you.

You can also quickly choose from the most recent sites flown on.

Change



The **Change Flying Site** menu lets you select from a huge range of different locations to fly from. Phoenix comes with a great selection of gorgeous photographic panoramic sites (with more to download online), as well as our unique fully-3D "InfinityScape" sites where you generate your own infinite 3D landscape to fly across.

Flying site list

This list shows the selection of sites you currently have installed on your system, as well as any 3D InfinityScape sites that have been previously created and saved. To select a site from the list, highlight it with your mouse-cursor and left-click the item. The preview pane will then change to show your new selection.

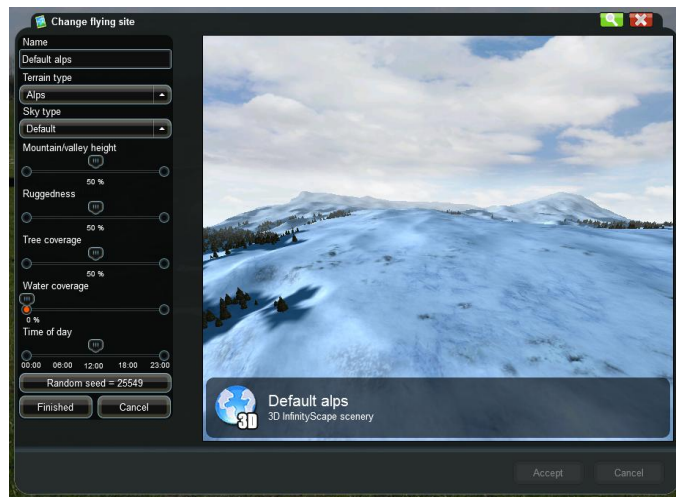
3D InfinityScape Sites

At the top of the site list are the 3D "InfinityScape" flying sites that you have previously created and saved (there are several preset sites included by default to choose from and get you started). InfinityScape sites are full-3D landscapes that are generated from a selection of options that you can change, each resulting in a completely new, limitless terrain to fly across that has no map boundaries.

Create New

Click this button to create a new InfinityScape site with default settings. The new site will be added to the bottom of the InfinityScape section in the list and be selected and a preview will appear in the Preview panel to the right. You can now edit this site by clicking the Edit button in the upper-left of the preview pane, or delete it by clicking the Delete button next to it.

Edit InfinityScape Site



Click this button to show the available options for changing an InfinityScape site:

- **Name:** Set the name of the site which will be shown in the Flying Site > Change menu.
- **Terrain type:** Select from a range of different basic landscape styles.
- **Sky type:** Select from a range of different sky styles.
- **Mountain/Valley height:** Set how high mountains are, and how deep valleys are on the landscape.
- **Ruggedness:** Set how bumpy and convoluted the terrain appears.
- **Tree coverage:** Set how many trees appear on the terrain.
- **Water coverage:** Set how much water appears on the terrain.
- **Time of day:** Select the time of day you wish to fly on.
- **Random seed:** Click this button to re-randomise the terrain.
- **Finished/Cancel:** Click this to go back to the flying sites list with/without saving your changes

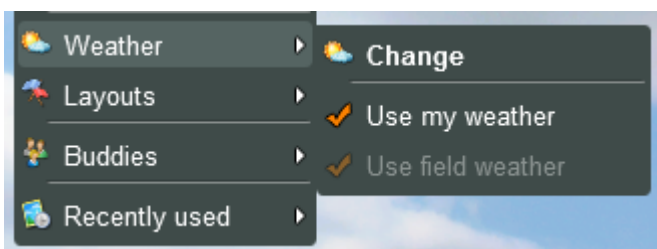
2D Panoramic Sites

Phoenix comes with a great selection of photographic panoramic flying sites, many featuring complex collision objects and even fully-3D moving water. Select a panoramic flying site from the list under this heading. Official sites created by the Phoenix team are shown under the "Official" section, and if you have downloaded a user-made site from our Downloads menu it will appear under the "User-made" section near the bottom of the list.

Accept/Cancel

Once you have made your selection, click one of these buttons to return to the simulation with/without saving your changes.

Weather

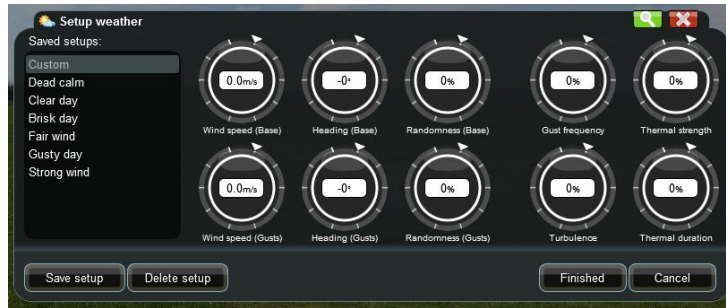


This menu contains functions for setting up weather conditions on the selected flying site.

This can be very useful for preparing for real-life flight, as there is very rarely a time when there is absolutely no wind when flying on a real field.

Change

Opens the **Change Weather Settings** menu.



This menu lets you select from a list of preset wind condition profiles, or completely customise your weather setup and save them for easy selection later on.

Saved setups

Here you can see a list of preset weather condition setups, as well as any custom setups you have saved. To select a setup, highlight it

with your mouse cursor, and then left-click to select. The various conditions will be shown on the other controls in the menu.

Save setup

Save the currently set conditions as a custom weather setup which will appear in the **Saved Setups** list for easy selection.

Delete setup

Delete the currently selected weather setup from the list.

Weather controls

The rest of the menu contains controls for adjusting the current weather conditions:

- **Wind speed (base):** Set the overall wind speed in your chosen units.
- **Heading (base):** Set the direction that the wind will blow from.
- **Randomness (base):** This controls how much the base wind speed you have set will vary randomly over time. A setting of 0% means that the wind speed will stay exactly at the value you have set without changing. If you set this to 50% then the wind speed will randomly vary up to 50% of the set base speed over or under the original value over time.
- **Wind speed (gust):** Set the an additional gust speed which is added to the base speed to create the final wind conditions, in your chosen units.
- **Heading (gust):** Set the direction that the additional gust will blow from.
- **Randomness (gust):** This controls how much the gust wind speed you have set will vary randomly over time. A setting of 0% means that the wind speed will stay exactly at the value you have set without changing. If you set this to 50% then the wind speed will randomly vary up to 50% of the set gust speed over or under the original value over time.
- **Gust frequency:** This controls how often a gust will occur.
- **Thermal strength:** This controls how many thermals appear on the flying site.
- **Thermal duration:** This controls how long a thermal will last for before disappearing and a new thermal appearing elsewhere on the site.
- **Turbulence:** This controls the fine turbulence effect on models.

Finished/Cancel

Click one of these buttons to return to the simulation with/without saving your changes.

Use my weather

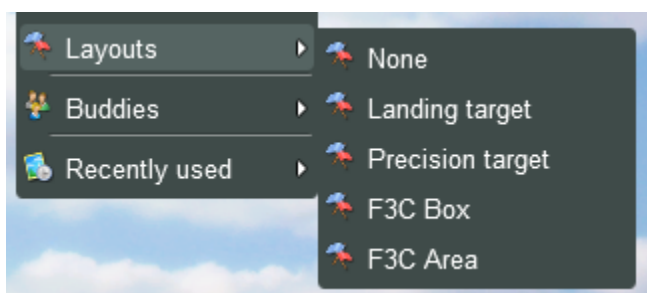
This option quickly enables or disables your weather conditions as set using the **Weather > Change** menu (see above) without needing to reset or change your weather setup.

Use field weather

This option enables or disables preset site weather conditions. Some flying sites (such as slope soaring sites) have built-in weather conditions that are created when the flying site is built. This option lets you remove these effects if you so wish.

Layouts

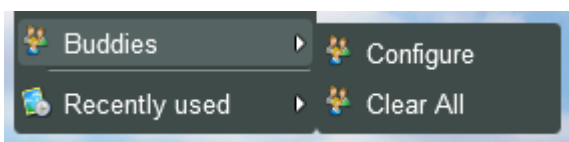
A layout is a combination of markings and flags on the flying site for training purposes.



Layout options

- **None:** Remove any layouts from the site.
- **Landing target:** Adds a round target to the site in front of the flight line as a marker to aim for when landing.
- **Precision target:** Adds a more precise target with distance measurements.
- **F3C Box:** Adds the standard "F3C Box" layout to the site.
- **F3C Area:** Adds the standard "F3C Area" layout to the site.

Buddies



Buddies are computer-controlled AI pilots which fly around you and perform various manoeuvres and routines. Buddies are fun to have around, as well as providing useful experience with flying on a site where other pilots may also be practicing.

Configure



This menu opens the **Configure Buddies** dialog.

From here you can select up to three AI buddies which will appear on the flying site with the selected model type and skill level.

Depending on the options you have set, these buddies may perform manoeuvres and techniques around the site.

The menu has 3 buddy "slots" which will each have an "Enable" button in the centre when the buddy is disabled - Click this button to enable that particular buddy and access the buddy options.

Buddy options

- **Avatar:** Click the large avatar icon to change the avatar that this Buddy uses.
- **Name:** Enter a name for this Buddy.
- **Skill:** Set a skill level for this Buddy. Depending on the level that you have set, different model options will appear in the "Model" box below, and the buddy will perform more or less complex

manoeuvres on the field. You can also select "Random" and the Buddy will display a different level of skill each time.

- **Model:** Select either a random model for this Buddy to select, a random helicopter or airplane model, or a specific model depending on the skill level set above.
- **Random:** Click this button to randomise all of the settings above.
- **Disable:** Disable this buddy slot.

Finished/Cancel

Click one of these buttons to return to the simulation with/without saving your changes.

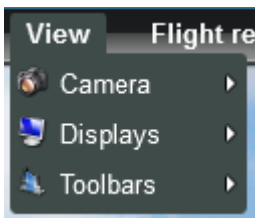
Clear All

Click this menu item to disable all Buddies quickly and easily.

Recently used

This menu contains a list of the 10 last flying sites you selected for quick and easy access.

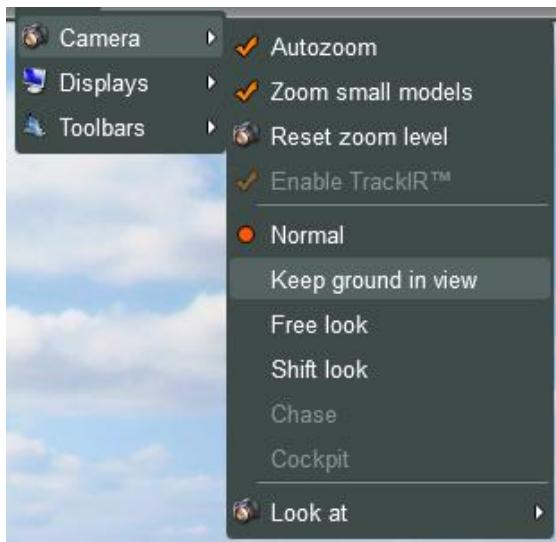
View Menu



This menu contains functions for setting up the camera and adding various user-interface elements such as toolbars and widgets.

Camera

This menu contains all of the settings for adjusting the simulation's virtual camera.



Auto-zoom

Enable or disable the Auto-zoom function of the camera. As your model moves away from your pilot position, the virtual camera will automatically adjust the level of zoom in the scene to keep it at a reasonable size. It is recommended that you leave this enabled, as without it the virtual model can become very small in the viewport very quickly.

Zoom small models

This function applies an additional amount of zoom when you are flying a particularly small model.

Reset zoom level

Click this button to reset any manual zoom you may have applied using your mouse-wheel.

Enable TrackIR

TrackIR is a head-tracking system where the users wears a small unit attached to their head (or commonly a cap) which is tracked by a sensor in front of them. This means that the system can detect which direction the user's head is facing, and this data can be used in Phoenix instead of the default automatic model tracking to give a more natural, realistic feel when flying the virtual model.

If you have a TrackIR system attached, you will be able to enable or disable it here. Please note that you must have an official TrackIR system and software installed, as well as the software updated so that "Phoenix R/C" appears in the list of supported products under the TrackIR program.

Once you have done the above, you will also need to select the "Free look" camera tracking mode (see below).

Tracking modes

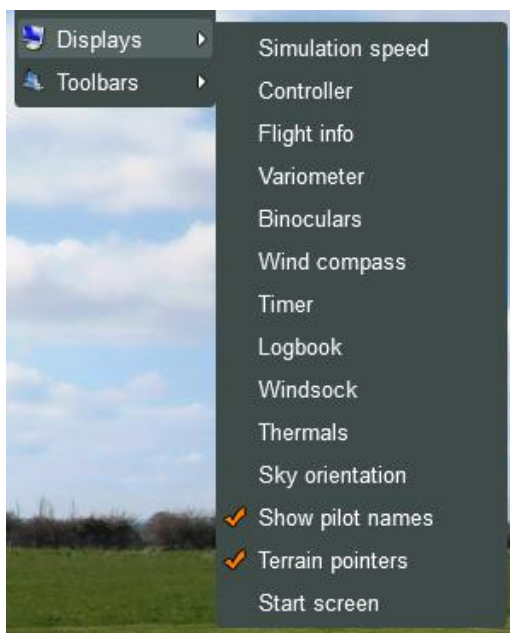
The virtual camera in Phoenix automatically tracks the pilot's model so that it does not fly out of view. All of the tracking options use the Camera Speed setting under the System > Program Setup > Physics menu. The following options let you change the way that the camera follows the model:

- **Normal:** The standard tracking method which will attempt to keep the pilot's model in the centre of the view, and use the auto-zoom options set above. The camera will adjust slightly to show more of the ground as the model nears ground level.
- **Keep ground in view:** The camera will automatically zoom in and out to keep both the model and the ground in front of you in view. In this mode, all other zoom options are disabled.
- **Free look:** The camera will not follow the model or zoom automatically at all. In this mode you can use your mouse to look around the scene by right-button-dragging, or if you have a TrackIR system connected (see above) then this will also move the camera.
- **Shift look:** The camera will only track to follow the pilot's model when the model reaches the edge of the camera's field of view. The rest of the time the camera will stay stationary.
- **Chase:** When flying on a 3D InfinityScape site, select this camera mode to view the model from a vantage point behind the aircraft. The vantage point can be rotated around the model by right-button-dragging the mouse.
- **Cockpit:** When flying on a 3D InfinityScape site, select this camera mode to see a view from within the model's cockpit. If set, you will also see the cockpit visually including dials, switches and control sticks. The view can also be altered by right-button-dragging the mouse.

Look at

This menu lets you select which model you wish the virtual camera to track (if set) if there is more than one model on the field. This can include Buddies and also multiplayer pilots. The selected "look at" model also affects which source of data the **Flight Information Panel** and **Onscreen Controller** widgets use and show (see the **Displays** section below for more information).

Displays



Phoenix features a large range of additional displays that provide additional information about your model and the environment. These are enabled and disabled here.

Widgets

Many of the various displays appear as onscreen items known as "widgets" which can be moved, docked to the window sides and resized as you wish. When a Widget is on the screen, place your mouse cursor over it to show the resizing points and additional options.

To move a widget, place your mouse-cursor over it and hold down the left mouse button, then drag to the new location. If you drag to the sides of the viewport then the widget will automatically "dock" to that side and move if you then resize the simulation viewport.

To resize a widget (if available), move your mouse cursor over the widget onscreen to show the resizing points which show as grey circles arranged around the widget's area. Left-click-drag any one of the circles to adjust the widget's size on screen.

To close a Widget, click the Red "X" button to its top-right (you may need to have your cursor over its area to show this option), or click its menu item under the Displays menu. Any additional options are also shown beside the Widget's close button. See each display in turn for more information on these options.

Simulation speed

This widget sits on top of the simulation window and lets you easily and quickly adjust the speed of the simulation playback. To change the simulation speed, left-click-drag on the large dial face, and then release when the required speed has been set as shown by the digital readout. 100% is the default simulation speed. Please see the System > Program Setup > Physics > Simulation Speed section for more information on this feature.

Controller

The controller widget shows you a virtual onscreen radio displaying the current state of your transmitter sticks and model functions. If you are spectating a multiplayer pilot or AI Buddy then this will change to reflect that pilot's control inputs instead.

On the front of the onscreen controller is a small "MODE" option (this will be mode 2 by default). Clicking this area will let you cycle through available transmitter modes until you have set it to the same one you are currently using.

Flight Info

The Flight Information widget is a customisable display which can be set to show a range of different readouts relating to the current model, environment and system.

There are a range of common and useful default readouts set when you load Phoenix, but you can select what you wish to see on the panel by clicking the blue options button beside the red "X" close button at the top-right of the panel. The Flight information settings menu will appear, and from here you can select which readouts you wish to see using the checkboxes on the right-hand side of the list.

The flight info panel will change depending on how you resize the widget, and can be set in this way to the values horizontally or vertically. If the panel is too small to hold all of your set readouts, a small "..." icon will be shown at the bottom to denote that some have been hidden.

Variometer

The Variometer widget contains all of the functions of a standard glider-style variometer unit. The left-hand display shows you the current climb or ascent rate in meters per second (green is ascent, red is descent), while the actual value is shown on the top-right panel. The lower panel shows you the model's altitude.

When the Variometer is enabled, you will hear a tone which represents the model's climb or ascent rate. A steady tone means that the model is in level flight. If the tone drops in pitch this means that the model is descending - the lower in pitch the tone drops, the faster the model is descending. If the model climbs then the tone will become broken and rise in pitch the faster the model is climbing.

You can use the controls in the bottom-right of the Variometer panel to control the tone. Clicking the larger button will mute/unmute the tone, while the other two buttons are used to increase or decrease the tone's volume.

Binoculars

This widget shows you a close-up, unobstructed view of just the currently tracked model at all times. This is useful when flying far away from yourself. The binocular view only shows the model - without any flying site or other objects - as seen from your eye point of view. Please note that the Binocular view is not enabled when flying in Chase or Cockpit mode.

Wind Compass

The Wind Compass widget shows you the current direction of your model and the overall site wind (if any).

The red airplane outline shows the direction that the model is facing relative to the camera (view) direction. The blue double-arrow shows the current direction that the wind is blowing from, again relative to your view direction. As the camera pans, the entire compass will rotate so that your current view direction is always at the top.

Timer

This widget provides a timer function you can use while flying. The time shows the current elapsed time both in analogue and digital formats.

To start the timer, press the green "Start" button on the timer face. To stop, press the red "Stop" button. To reset the timer, again press the red "Stop" button when the timer is stopped.

Logbook

The logbook is a handy way to keep track of your model flights in Phoenix, and stores information such as how many times and for how long you have flown each model, how many times you have crashed a particular model and your favourite variants, schemes and sites used with each aircraft.

Every time you fly a model, this data is automatically updated and is displayed on the left-hand side of the Logbook. You can reset the information if you wish by pressing the "Reset" button at the bottom-left of the widget.

The right-hand side of the Logbook lets you keep any additional notes you wish about the selected model.

Windsock

Enable this menu item to place a large windsock object onto the flying site in the preset windsock position. The onscreen windsock will react realistically to changes in wind speed and direction.

Thermals

Enable this menu item to see a visual representation of any thermals that are active on the flying site (if any). Thermals appear as large semi-transparent cylinders.

Sky orientation

Enable this menu item to see a spherical grid overlaid on the current flying site with markings set at regular angular intervals. This can make it easier to see how fast your model is flying, and where it is located relative to certain objects.

Show pilot names

This menu item enables/disables the small pilot name displays which are shown when flying in a multiplayer session or with AI Buddies enabled.

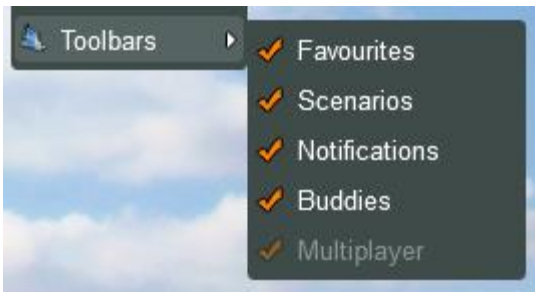
Terrain pointers

This menu item enables/disables the small "Landing strip" pointer which appears when flying on a 3D InfinityScape flying site to show you where the nearest flying site is located.

Start screen

This menu item toggles the Start Screen. For more information on this feature, please see the "Start Screen" section above.

Toolbars



Toolbars are additional panels which are docked to the edge of the simulation window and give fast access to commonly used functions and features.

When retracted, they also automatically hide when the mouse has not been moved for several seconds, and may expand to give alerts and warnings (such as when a previously setup failure occurs on the model).

Each toolbar has a small "X" button at the top of the toolbar tab which can be used to close the toolbar (it can be reopened from the Toolbars menu). Underneath this is the expand/retract button which will pop the toolbar out to show its contents, or retract it again. When a toolbar is popped out, it will remain visible even when the mouse has not been moved.



Favourites

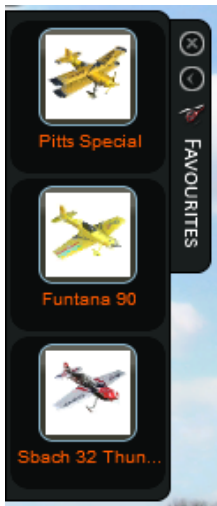
The Favourites toolbar provides a fast, easy way to access your previously saved favourite models, if you have created any.

When model favourites are available, they will appear as items moving down the side of the viewport.

To change to a favourite, simply left-click the item in the list.

If you have more favourites than can be shown on the screen, you will see a scroll up/down button located at the top and bottom of the toolbar.

Clicking these will scroll through your favourites.



Scenarios

Scenarios are a combination of model and flying site, along with optional buddies, layouts and training/competition modes all saved into a handy and fast preset.

When you have selected the options you wish to save into a Scenario, expand the Scenarios toolbar and click the top "Create New Scenario" button (star with a green plus icon) to create the scenario and add it to the toolbar. Click the small "X" button in the top-right of any scenario on the toolbar to delete it.

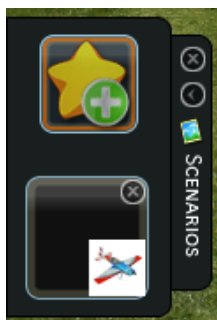
Scenarios can also be used in the Start Screen (see the "Start Screen" section above).

Notifications

This toolbar displays important occurrences that may happen while flying, and will automatically expand when these are triggered.

This includes a model crash, or if you have setup failures to occur during flight then these will show on the Notifications toolbar when they happen.

You can also click on the flashing icon to reset a failure or an empty fuel state when it is triggered.





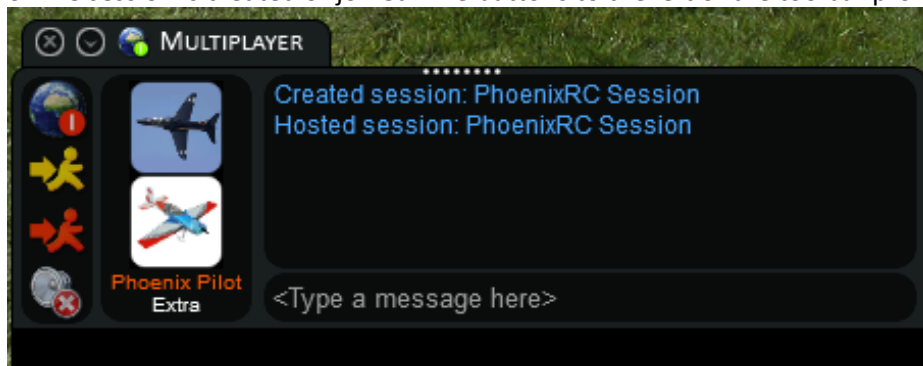
Buddies

The Buddies toolbar shows you information on any currently enabled Buddies (if you have set any), as well as quick and easy ways to change them or remove them from the scene.

To remove a Buddy using the toolbar, left-click the small "X" button located in the top-right of the Buddy's entry on the toolbar.

Multiplayer

This toolbar contains functions and displays when flying on a multiplayer session, and only appears when an online session is created or joined. The buttons to the left of the toolbar provide various multiplayer functions:



- **Go offline:** Click this button to exit the current session and return to the session browser (see the Multiplayer menu later on for more information on creating or joining a multiplayer session).
- **Kick user:** If you are the session's host, select a user from the list on the right and press this to kick them from the session. They will be able to rejoin after a couple of minutes.
- **Ban user:** If you are the session's host, select a user from the list on the right and press this to permanently ban them from the session. They will not be able to rejoin the session again.
- **Mute/unmute user:** Click this button to toggle whether the selected user is muted or not. When muted, you will not receive any text messages or voice-chat communications from that person until you un-mute them.

Session Users

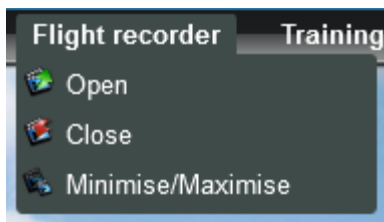
To the right of these tools you will see each user that is connected to the session. Each user has the following information: The top icon shows the user's avatar. The icon beneath this shows the user's selected model. Beneath this is the user's username, their selected model (or "Spectating" if they are currently not flying), and if the toolbar is expanded enough you will also see that user's ping.

To select a user, highlight them in the list with your mouse-cursor, and then click the left mouse button.

Chat window

On the right-hand side of the toolbar you will see the chat window. This shows all text messages from the system and other users (if they are not muted). To send a new message, click the edit-box at the bottom of the chat window (It will say <Type a message here>), then type your message and press **ENTER** to send it.

Flight recorder menu



This menu accesses all functions relating to the Flight Recorder in Phoenix. The Flight Recorder is a powerful tool that lets you store any series of flights you wish, and then replay them at any speed at a later time. You can even fly with your previous recording.

Open

Opens the Flight Recorder panel. This will sit as a widget and can be docked to any side or corner of the viewport.

Close

When opened, click this button to close the Flight Recorder panel.

Minimise/Maximise

Click this button to toggle whether the Flight Recorder is in its full state, or in its cut-down minimised state.

Using the Flight Recorder

To use the Flight Recorder, click the Flight Recorder > Open menu item to display the Recorder panel. The panel can be moved around the screen by left-dragging on the Recorder's title bar, and docked to any side or corner of the viewport. To close the panel, click the red "X" button in its top-right corner (it can be reopened again from the Flight Recorder menu). You can also minimise the panel using the blue minimise button to the left.



View mode

The view-mode button cycles through the various flight recorder view modes available:

- **Fly with recording:** In this mode, your model stays on the screen with the camera tracking it as normal and the playback model will appear alongside it on the site. You cannot collide with playback models.
- **Spectate recording:** In this mode you will not see your currently selected model when the flight recorder is active. When you playback a recording, the camera will track the playback model.
- **Free-look:** In this mode you will not see your currently selected model when the flight recorder is active. You can pan the camera around by right-button-dragging with the mouse.

Loop playback

This option sets whether the playback should automatically restart and play again when it reaches the end of its running time.

Rewind playback

Click and hold the left-hand mouse button on this item to rewind the playback.

Play/pause playback

Click this button to play the currently stored recording. When already playing, click this button to pause it.

Stop playback or recording

If recording, click this button to stop the recording process. If playing, click this button to stop the current

playback and reset to the beginning of the recording.

Start/stop recording

Click this button to start recording the currently selected model. If recording has already begun, click this button to stop the recording process.

Fast-forward playback

Click and hold the left-hand mouse button on this item to fast-forward the playback.

Save recording

Once you have recorded a flight, click this button to save the recording for later viewing.

Load recording

Click this button to load a previously saved flight.

Playback speed



Click this to toggle the playback speed slider. When visible, adjust the slider to change the speed at which the model playback occurs. This does not function when flying with your recording.

Playback colour



Click this to toggle the playback colour sliders.

When visible, use the sliders to change the colour or transparency of the playback model.

Playback progress

This bar shows the current status and progress of the playback or recording. You can also left-button-drag on this bar when playing back a flight to "scrub" back and forth through the recording and jump to a specific point.

Set playback in/out point

Use these buttons to set the playback in or out point to the current playback position. When set, the recording will play from the "in" point to the "out" point.

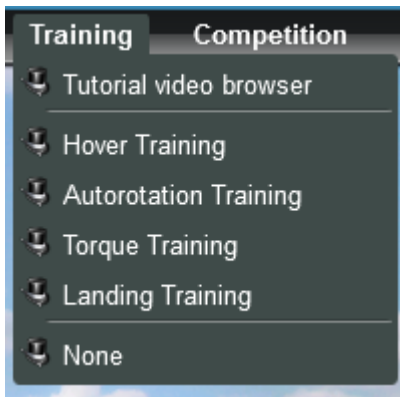
Minimised mode



When in minimised mode, only the most common controls are shown in a cut-down display which auto-hides when the mouse is not moved for several seconds.

This mode lets you play, stop and record the current recording. Click the maximise button in the top-right of the panel to restore the panel to full size.

Training menu



This menu lets you access all of the dedicated training modes available in Phoenix.

These are special modes which change the way that the simulation functions in various ways in order to make learning faster and easier.

These are invaluable as a tool to learn techniques from your first hover to advanced manoeuvres such as autorotation and prop-hanging more quickly and easily.

Tutorial video browser

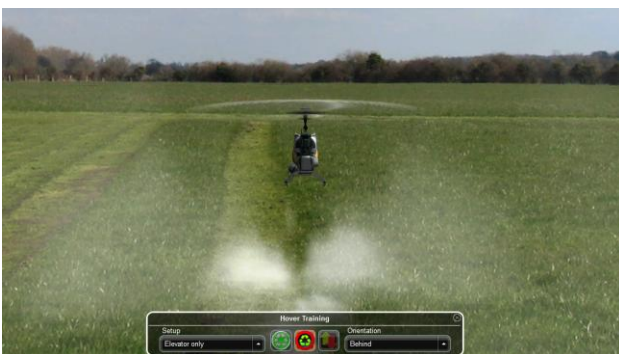


This menu lets you choose from a large selection of tutorial videos which take you through a great many techniques and manoeuvres - from beginner to advanced - with full voice commentary explaining how to perform the technique.

All of the videos are sorted into Airplane or Helicopter, and by how complex they are to perform. To play a video, expand a category from the list to the left of the menu by double-clicking the category name or left-clicking the small arrow to its left, and then locate the video you wish to view. Highlight the video using your mouse cursor and then left-click to select.

Information about the video is displayed on the panel to the right of the video list. To begin the video, click the "Start" button in the bottom-right. The video will start and the browser window will close.

Hover trainer



Click this option to start the **Hover Trainer**.

This mode lets you more easily and quickly learn how to hover your helicopter by only requiring you to take control of one model function at a time while keeping the model at a set height. You can then gradually add more functions until you are controlling all of them confidently.

Please note that only helicopter models can be used with this trainer.

- **Setup:** Use this drop-down box to select which function(s) you want to take control of.
- **Reset:** Click this button to reset the model.
- **Enable/disable auto-restart:** This option sets whether the model will automatically be reset when you move too far from the starting point, or the model tips too far over from level flight.
- **Normal/Inverted:** This option sets whether you wish to practice normal or inverted (upside-down) hovering.
- **Orientation:** Use this drop-down box to set the starting orientation of the model. You should be able to hover in all orientations confidently.

Autorotation trainer



Click this menu to start the **Autorotation trainer**.

This mode sets your model up for an autorotation from a preset height and speed and automatically cutting the throttle, letting you practice the manoeuvre without needing to fly the model to a starting position each time and saving you valuable training time.

Please note that only helicopter models can be used with this trainer.

- **Height:** Select from a range of different starting heights for the manoeuvre.
- **Reset:** Click this button to reset the model.
- **Enable/disable auto-restart:** This option sets whether the model will automatically be reset after a landing.
- **Orientation:** Select which direction the model starts from, as well as if you wish to attempt a normal or inverted autorotation.

Torque trainer



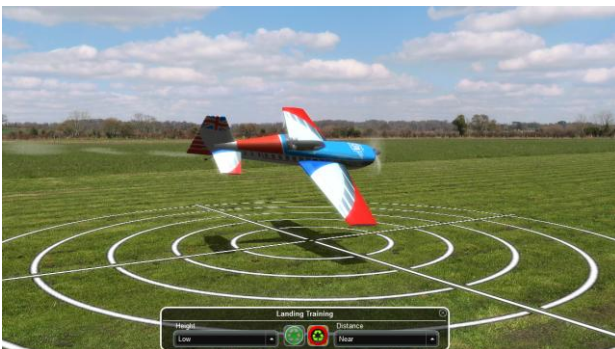
Click this menu to start the **Torque trainer**.

Similar to the Hover trainer, this mode lets you practice torque-rolling or prop-hanging your model by only requiring you to take control of one function at a time. You can then gradually add more functions until you are controlling all of them confidently.

Please note that only airplane models can be used with this trainer.

- **Setup:** Use this drop-down box to select which function(s) you want to take control of.
- **Reset:** Click this button to reset the model.
- **Enable/disable auto-restart:** This option sets whether the model will automatically be reset when you move too far from the starting point, or the model tips too far over from level flight.
- **Orientation:** Use this drop-down box to set the starting orientation of the model. You should be able to prop-hang/torque-roll in all orientations confidently.

Landing trainer



Click this menu to start the **Landing trainer**.

This trainer sets your model up on approach to the landing position of the selected flying site, letting you practice the manoeuvre without needing to fly the model to a starting position each time and saving you valuable training time.

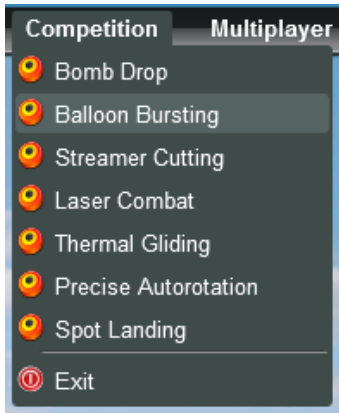
Please note that only airplane models can be used with this trainer.

- **Height:** Select from a range of different starting heights for the manoeuvre.
- **Reset:** Click this button to reset the model.
- **Enable/disable auto-restart:** This option sets whether the model will automatically be reset after a landing.
- **Distance:** Select how far the model starts away from your position.

None

Select this option to clear any training modes and return to normal free flight.

Competition menu



Phoenix features a range of fun and exciting competition modes and games which can also improve your flying skills.

Many of these modes can also be activated while flying in a multiplayer session against other pilots online.

Please note that not all competition modes are available for all competitions.

Challenge mode

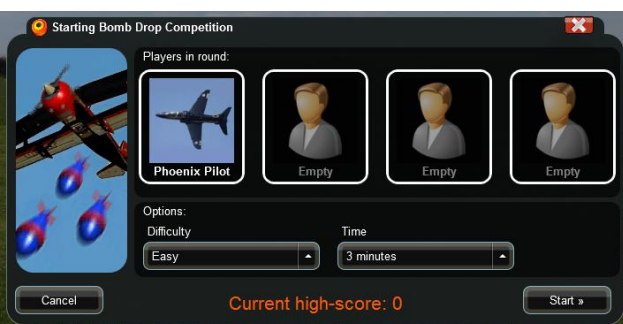


Begins the competition in Challenge mode (if available).

In this single-pilot mode, you are set a series of score challenges or tasks to complete before you can move to the next level.

The goal is to reach the highest level you can, as each level is more difficult than the last.

High-score mode



Begins the competition in High-score mode (if available). In this mode you must try to reach the highest score you can before the time runs out, and beat your previously set score.

If you have select a the high-score competition mode, you are taking to the Start Competition lobby where you can see which players will take part in the competition and set round time and difficulty level options. You can also see your current high-score for this mode.

Bomb drop



In the Bomb-drop competition, you must fly around the selected environment and drop bombs on the targets which will appear randomly.

You will earn points for hitting a target, and the closer to the target centre you strike, the more points you will earn.

All models can participate in this competition mode.

Balloon bursting

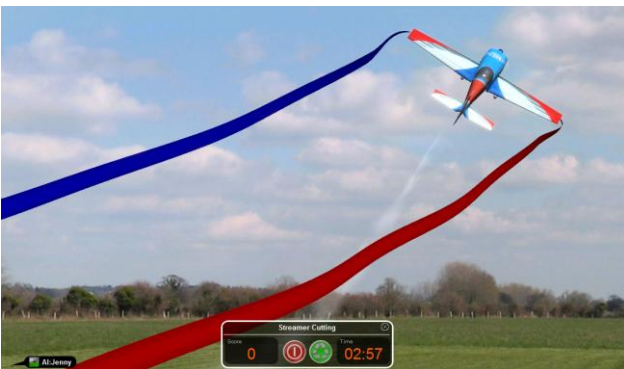


In this competition mode you must fly around the selected flying site and strike the balloons which are randomly created around you.

Depending on the difficulty level set, the balloons may move faster or slower.

All models can participate in this competition mode.

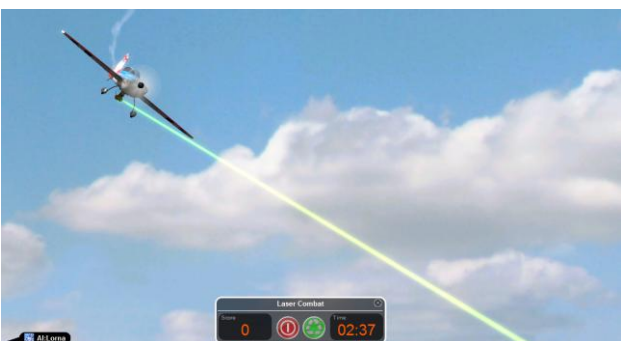
Streamer combat



This is a competition mode for two or more players - either you and an AI Buddy, or you and an online multiplayer pilot. Each pilot's model is fitted with streamers which will be shorter or longer depending on the difficulty level set. The goal is to strike the streamers of the other pilots, cutting them and scoring points.

Only airplane models can participate in this competition mode.

Laser combat

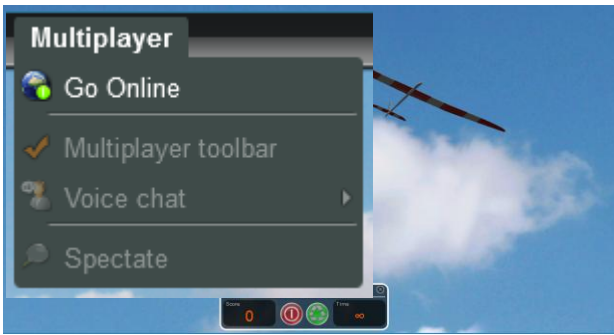


In this mode, all pilots are fitted with laser emitters which fire a beam in the direction of the model.

You score points whenever your model's laser beam is striking another pilot's model.

All models can participate in this competition mode.

Thermal gliding



In this single-player mode, you start high in the sky with a glider model and no throttle.

The aim is to ride the randomly created thermals and stay in the sky for as long as possible.

Only glider models can participate in this competition mode.

Precise autorotation



In this single-player mode, you start in the sky with a helicopter model and no throttle.

The aim is to land as close to the target's centre as possible.

Only helicopter models can participate in this competition mode.

Spot landing



In this single-player mode, you start in the sky with an airplane model.

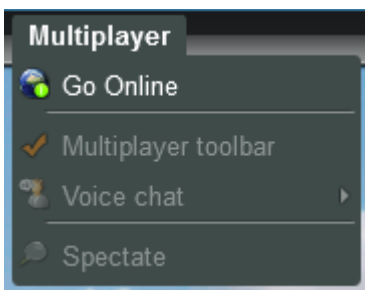
The aim is to land as close to the target's centre as possible.

Only airplane models can participate in this competition mode.

Exit

Click this button to cancel all active competition modes and return to standard free-flight.

Multiplayer menu



This menu contains all functions related to the online multiplayer aspect of Phoenix.

Phoenix features a complete online multiplayer component which lets you fly with and learn from other pilots around the world, as well as a voice-chat facility and a global matchmaking system for finding sessions others have created.

Go online

Click this menu item to sign into the Phoenix Online system where you can create an online session or join a session created by other pilots.

Online sign-in

The 'Online Sign in' window is divided into several sections. On the left, under 'Personal settings', there is an 'Avatar' field with a small image of a jet. To its right are input fields for 'Username' (containing 'Phoenix Pilot'), 'First name' (containing 'Jim'), 'Middle name' (containing 'James'), 'Last name' (containing 'Brown'), 'Location' (a dropdown menu set to 'Europe'), 'Town' (containing 'My town'), 'State/Country' (containing 'My country'), and 'Country' (containing 'United Kingdom'). Further right, under the heading 'This information is used online and is optional', are fields for 'Favourite brands' (containing 'My favourite brands'), 'Favourite models' (containing 'My favourite models'), 'Other info', and 'My notes'. At the bottom left, there is a checkbox labeled 'Automatically open ports on my router' which is checked. At the bottom right are 'Sign in' and 'Cancel' buttons.

Before you can access the online multiplayer system, you must sign into Phoenix Online.

This menu lets you enter information about yourself which other pilots can view, as well as set an online user-name and avatar that represents you to the other pilots.

All information is completely optional.

Automatically open ports on my router

Enable this option if you are having problems connecting to other pilots' sessions. This attempts to use router commands to open the required ports (**UDP ports 65000 - 65005**) on your router and improve connection reliability.

Sign-in

Click this button to sign into the online service and enter the Online Lobby.

Cancel

Click here to cancel the online sign-in process.

Online lobby

The 'Phoenix Online Lobby' window shows a list of sessions on the left, categorized by location: 'Local sessions' (with a note 'No sessions found'), 'Europe (3)' (listing 'New Phoenix session (1/8)', '3D Helioeum (3/8)', and 'warpt dive (3/8)'), 'Canada (3)' (listing 'IRCHA Field (3/6)', 'HelisQuebec (2/8)', and 'Flying in my igloo (1/4)'), and 'North America (1)' (listing 'New Phoenix session (1/8)'). A tooltip for the 'New Phoenix session' is displayed, showing details: Address: 50.88.128.91, Program version: 5.0.n, Pilots: 1 / 8, Session type: Balloon Bursting, Allowed models: All models, Hosted by: New pilot, Flying on: airfield, Location: Europe, Voice-chat: enabled, and Model collisions: enabled. At the bottom left are 'Create session' and 'Join session' buttons, and at the bottom right is a 'Cancel' button. A chat window on the right contains a welcome message and a text input field with a 'Send' button.

Once you have signed into the Phoenix Online service, you will be taken to the online lobby where you can see all sessions that are available to join, create your own session, as well as chat with other pilots in the lobby.

Session list

Here you can see all available sessions - both local and internet. Sessions are categorized by the geographical location of the pilot who created the session. When you hold your mouse cursor over a session you will see additional information about the session. To select a session, highlight it with your mouse cursor and click the left mouse button.

If a session has a padlock icon in the list it has been created with a password - you will need to know the password in order to join such a session.

Chat window

To the right of the session list is the chat window. Here you can chat with other pilots also in the lobby. To send a message, click in the chat-box below the chat window and type your message, then press **ENTER** or click the "Send" button.

Lobby pilots

The panel below the chat window shows all pilots currently in the lobby but not flying in a session. Your pilot appears with an orange border.

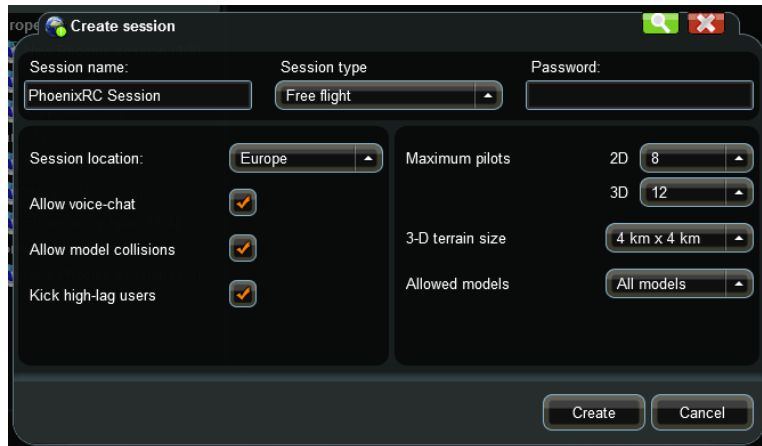
Create session

Click this button to open the **Create session** menu. See **Creating a new session** below for more information on this process.

Join session

Click this button to join the selected session in the list. If the session is passworded you will be prompted to enter it.

Creating a new session



This menu lets you set up a new online session that other pilots can join and fly with you.

When you create a session with your computer connected to the internet, your session will appear in the Available Sessions List when other pilots sign into the online service.

If you have not set a password they will then be able to join your session and fly on the field with you.

- **Session name:** Enter the name of the new session you wish to create. This is how it will appear to other users in the Session list.
- **Session type:** Select the type of session you wish to create. You can choose the standard "Free flight" mode, or select a competition mode.
- **Password:** If you wish, you can enter a password in this box that other users must enter in order to join your session.
- **Session location:** Select the geographical location that most closely matches where you are based. This is useful for others to know so that they can join sessions that are likely to have a lower ping time.
- **Allow voice-chat:** Select this to enable online voice-chat between pilots in the session.
- **Allow model collisions:** Select this to enable model-to-model collisions in the session.
- **Kick high-lag users:** Select this to have the system automatically disconnect users with abnormally high ping times from the session.
- **Maximum pilots:** Set the maximum number of pilots that can join your session when flying on 2D or 3D flying sites.
- **3D terrain size:** When flying on a 3D InfinityScope site, this is the maximum distance that pilots can fly away from the starting point. If a pilot attempts to fly further away, they will see a warning message and must turn back. This is to prevent pilots simply flying a large distance away from each other and never encountering one another.
- **Allowed models:** Select which model types can be selected in your session - or all models.

When you are satisfied with your session options, click the **Create** button to begin the session, or click the **Cancel** button to return to the lobby.

Multiplayer toolbar

Show or hide the multiplayer toolbar. You can also do this from the **View > Toolbars** menu.

Voice chat

Phoenix features full voice-chat functionality which lets you chat with other pilots in your session without needing to type messages. To use this feature you will need a working microphone and speakers.

Enabled

Enable or disable voice-chat in this session. With voice-chat disabled, your voice will not be transmitted to other pilots, and you will not hear their voices.

Voice activated

Enable this option to automatically transmit your voice if it is over a certain volume level. If disabled, you must hold down the voice-chat hotkey ("V" by default) to transmit your voice.

Mute all users

Click this button to mute all users in the session. You will not hear their voices or receive their text messages.

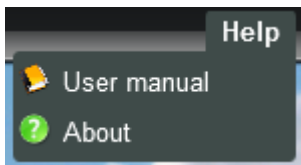
Fly/Spectate

This option switches between Flight and Spectate mode. In flight mode your model will appear on the field and you can fly as normal with the other pilots. In spectate mode your model will not appear on the field, and you can cycle through the other flying pilots in the session to view and track their models.

Pressing SPACE on your keyboard also toggles between Flight and Spectate mode.

If you disconnect your radio or USB interface then you will automatically be placed in Spectate mode.

Help menu



This menu contains any help related subjects.

User manual

Click this item to open the Phoenix user manual in the language you have selected.

About

This menu item opens the "About" box, which shows information about the current version.