FERGO COCKPIT CAM

For Prepar3D v4

User Manual

www.fergonez.net

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1. INTRODUCTION

Fergo Cockpit Camera (FCC) is an add-on for Lockheed Martin's Prepar3D that aims to provide an easy-to-use virtual cockpit camera system. The user navigates around the cockpit using the directional keys and mouse wheel and can save camera positions for easy access to different parts of the cockpit using custom hotkeys.

This is useful when flying aircrafts with complex systems, where quick access to multiple parts of the cockpit is a must-have, especially on busy stages of flying such as climbing and landing. You can, for example, setup hotkeys and cameras pointing to the FMC, lower overhead panel, throttle quadrant, MCP, etc.

Although some add-on aircraft developers provide custom cameras, that often involves changing the default camera file of the sim and can easily lead to conflicts and corruption when installing/uninstalling multiple add-ons. Fergo Cockpit Camera doesn't change any P3D file and works in a completely standalone fashion. The input handling is done through DirectInput outside of the sim and the interaction takes place through SimConnect interface.

2. COMPATIBILITY

Fergo Cockpit Camera was tested with the following simulator:

- Prepar3D v4

.NET Framework 4.6.1 is also required in order to run the add-on. Make sure it's installed prior to FCC installation.

3. REGISTRATION

You can use the unregistered version of this software free of charge for as long as you want. When operating in this mode, all the features will be available, but you will be limited to only 3 cameras per preset.

The registered version allows for unlimited camera views and costs only U$ 9.90. A license can be purchased in the link below:

https://www.fergonez.net/projects/cockpitcam

Fergo Cockpit Camera implements a simple licensing scheme. I believe the user should not be punished by complex and obstructive DRM that jeopardizes the user experience. Even the most elaborate protection systems will be eventually cracked, so it's more important to focus on improving the software and providing a better user experience than implement complex DRM schemes.

Once bought, the license will be yours to keep. You don't need an internet connection to activate the software.

In order to activate Fergo Cockpit Camera, open the main window (see chapter 4 below) and go to the "Help – Register..." menu. Fill in the email you've used when buying the license (from your PayPal account) and your license key.
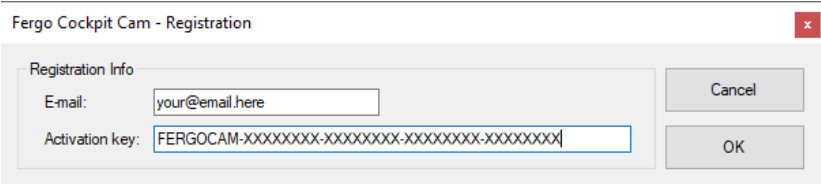
The key will be in the following format:

FERGOCAM-XXXXXXXX-XXXXXXXX-XXXXXXXX-XXXXXXXX

After clicking OK, if the license information is valid, you should see the main window title change to "Registered to: [your email]". You will now have full access to the registered version features.

Please save the email and registration key in a safe place. You will have to re-enter this information into FCC every time you reinstall the software, format your system or buy a new computer.

NOTE: Please test the software in unregistered mode before you buy. Since licenses are offline and cannot be deactivated, refunds are not possible.

4. MAIN WINDOW

Fergo Cockpit Camera was designed to be as simple to use as possible. After installing, there should be a "Fergo Cockpit Camera..." item in the "Add-ons" menu inside the sim. Use that option to open the main FCC window. If the P3D menu bar is hidden, hold the ALT key to display it. Hold again to hide it.

On the left side of the main FCC window there is a colorful status indicator, that will either show one of these alerts:

Waiting for sim...	This should only appear when you manually launch the add-on executable without the sim running or when there's a problem with SimConnect interface.
Connected!	Connection to SimConnect established and the add-on is running properly.
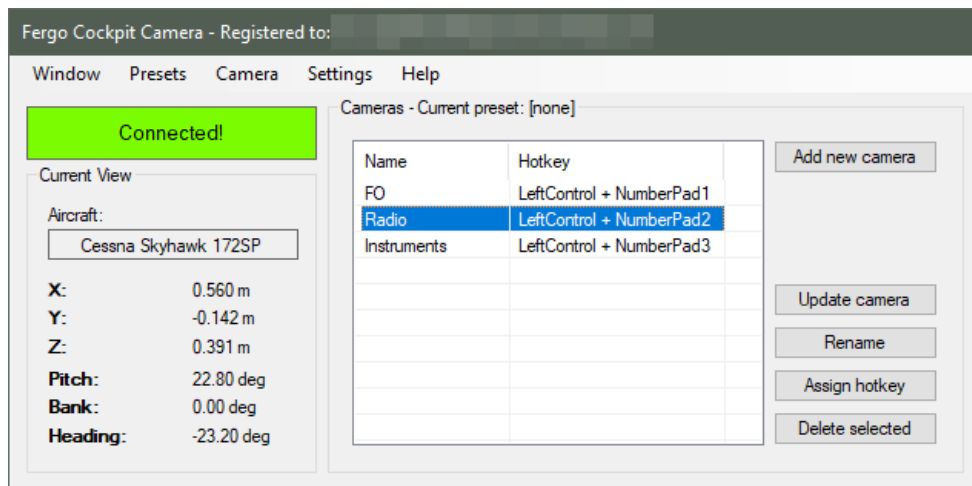
There are also two main panels:

1) **Current View:** this panel shows information about the current aircraft loaded by the simulator along with the current view coordinates and look-at angles. This panel is only informative;

2) **Cameras:** this panel shows a list of the saved camera views for the current preset and allows the user to manage them. More details about working with this panel in chapter 6.

There is also a menu bar at the top, which we will cover in more detail in the next chapters. For now, it's worth noting the difference between the menus "Window – Exit…" and "Window - Hide Window".

The first will permanently terminate the add-on. This will close the interface with SimConnect and restore the original mappings for the directional keys. To launch FCC again from this stage, you'd either have to restart the sim or manually launch the add-on executable from Windows.

The latter only hides the window from view, which is the most common scenario, as the add-on will continue to run on the background. To display the window again, just follow the procedure mentioned at the beginning of this chapter.

5. MOVING AROUND THE COCKPIT

Fergo Cockpit Camera implements a camera movement system inside the virtual cockpit using the directional keys similar to a first-person shooter game.
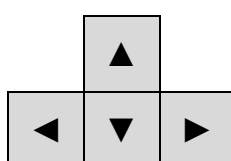
▲ Move towards the camera direction
▼ Move away from the camera direction
◀ Strafe left
▶ Strafe right

To change the direction the camera is pointing at, click and hold the mouse wheel button and move the mouse to look around.

As you move around, the values in the "Current View" panel will change, showing your current location within the cockpit. If you wish to reset the camera to the default cockpit view, go to the "Camera – Reset to origin" menu, at the top of the main window.

6. HANDLING VIEWS

To manage the views for the current preset, you can use the buttons inside the "Cameras" panel.

1) **Add new camera:** adds the current view as new camera to the list, with a default name;
2) **Update camera:** updates the selected item in the list to the current view;
3) **Rename:** renames the selected item. It's recommended to rename the cameras to something meaningful such as "Overhead", "FMC", "Pedestal", in order to make them easier to manage;
4) **Assign hotkey:** assigns a keyboard keypress or joystick button press as a hotkey to the selected camera. This allows for easy switching between different cameras. *See note below*.
5) **Delete selected:** deletes the selected cameras from the list.

NOTE: Fergo Cockpit Camera uses global DirectInput for input detection, which works completely standalone from the sim. Make sure to remove any keyboard mapping from the sim that matches the desired hotkey in order to avoid conflicts.

When clicking the "Assign hotkey" button, a new window will appear, waiting for the user to press a key or a key combination. You can use any combination you want, but it's recommend the use of CTRL + Numpad.
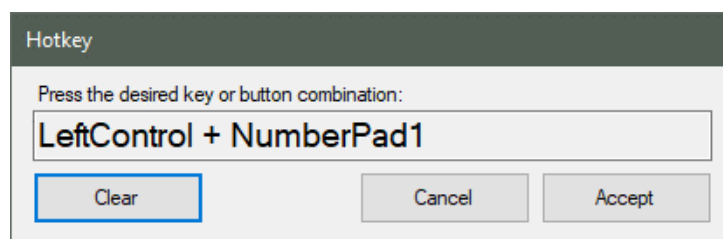
If you make a mistake while assigning the hotkey or wish to clear the assignment for that camera, simply press the "Clear" button.

After accepting the assignment, pressing that combination again will switch to that view inside the sim. This will work even when the FCC window is hidden.

7. HANDLING PRESETS

Fergo Cockpit Camera can store all cameras in presets, which are basically packages of cameras. One of the main uses for presets is to group multiple cameras for each type of aircraft, so you can have a set of cameras for your 747 and a distinct one for a Cessna 172, for example.

Presets are managed through the "Presets" menu at the top of the main window. When clicking that menu, the following options are available:

1) **Autoload aircraft preset:** if checked, FCC will try to find a preset with the same filename as the current aircraft and load it whenever there's an aircraft change within the sim;
2) **Save preset for current aircraft:** saves all the cameras to a preset with the name of the current aircraft. Useful in conjunction with the option above. Only available if there's at least one camera in the list;
3) **Load preset:** shows a list of all the presets currently available in the "presets" directory (see below). Selecting one of them will load all the cameras for that preset. Disabled if no presets are available;
4) **Save preset:** overwrites the loaded preset with the current cameras. This is only available if a preset is already loaded. Only available if there's at least one camera in the list;
5) **Save preset as...:** saves all the cameras to a preset with a custom name. Only available if there's at least one camera in the list;
6) **Clear cameras:** delete all the cameras in the list.

As always, the autoload functionality works even when the FCC window is hidden, meaning that after the presets for your favorite aircrafts are all setup, you will rarely need the FCC graphical user interface again.

Presets are stored as .fcc files in the "presets" directory inside the installation folder. If you download some presets from the internet, just save them inside this directory and they will appear in the "Load Preset" menu.

8. SETTINGS

Additional settings for the add-on can be found by clicking the "Settings" menu at the top of the main window. The window looks like this:
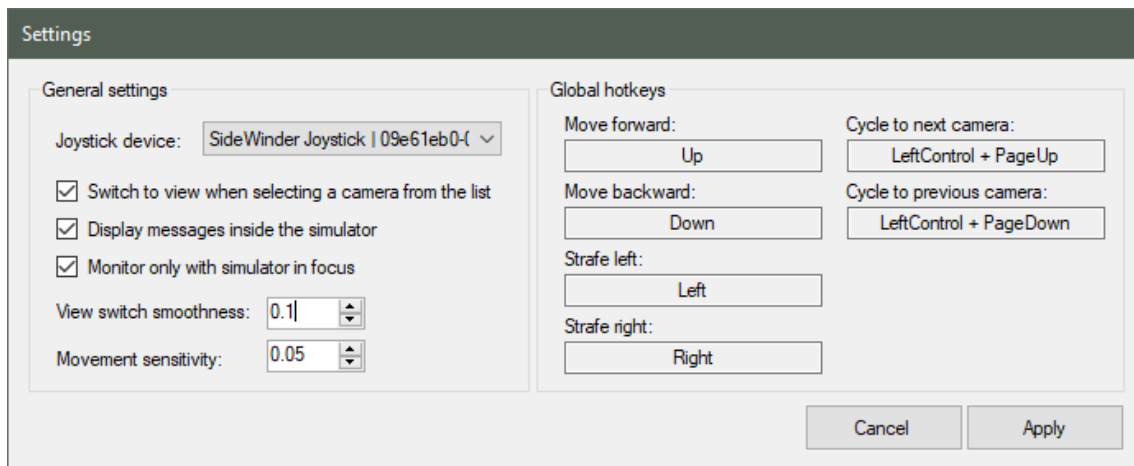
Hovering over each item will give a basic description of its functionality, which is replicated in more detail below:

1) **Joystick device:** selects the controller interface to be used for assigning hotkeys. The use of a controller is optional (you can use only the keyboard if desired)

2) **Switch to view when selecting a camera from the list:** if checked, when the user selects a camera from "Cameras" list, FCC will switch to that view inside the sim as well. With this option unchecked, the only way to switch between cameras is by using the assigned hotkeys;

3) **Display messages inside the simulator:** if checked, FCC will display confirmation messages inside the sim when assigning hotkeys, switching views and eventually errors and other debug information;

4) **Monitor only with simulator in focus:** as FCC operates with DirectInput on a system-wide level, this option enforces that the hotkeys will only activate if the simulator window is in focus, preventing unwanted changes when the sim is minimized. It's recommended to leave this item checked;

5) **View switch smoothness:** defines the smoothness of the transitions between different cameras. The minimum value is **0.0** and the maximum is **1.0**. A higher value means a slower/smoother transition;

6) **Movement sensitivity:** defines how fast the camera moves when using the directional keys to navigate the cockpit. The minimum value is **0.05** and the maximum is **1.0**. A higher value means more sensitive camera movement;

The panel on the right provides the user with global hotkeys for camera movement and cycling between each camera in the current preset. Simply click the desired box to open the hotkey assignment window.