

External EasyFMC



External EasyFMC - Introduction

What is EasyFMC?

As its name says, **EasyFMC** is a simplified Flight Management Computer that can be easily used with any aircraft in Flight Simulator (FSX, Prepar3D or FS2004). As it uses the internal navigation database in FSX/P3D/FS2004, it does not require any additional database. A complete description and documentation is provided to describe and explain all the features of this Flight Management Computer, which is provided with 2 different look-and-feel: Airbus and Boeing.

This documentation is dedicated to the specificity of the External EasyFMC product as a standalone application. It works exactly the same as the EasyFMC gauge, so the usage of the Flight Management Computer is explained in the [EasyFMC documentation](#).

External EasyFMC is a specific product that offers EasyFMC as a standalone application, an independent executable that can run on the same computer as Flight Simulator or on a different computer on the same network.

External EasyFMC is a separate and independent product. It just requires FSUIPC to establish the communication between FSX/P3D/FS2004 and the **External EasyFMC** application, and optionally requires WideFS for network communication if you want to have FSX/P3D/FS2004 and External EasyFMC running on 2 different machines (remote mode).

Compatibility:

- FSX: any edition (SP1, SP2, Accel, Gold, Steam Edition)
- Prepar3D version 3 (please contact me if you want a P3D v2 support)
- FS2004 (version fs9.0 or 9.1)

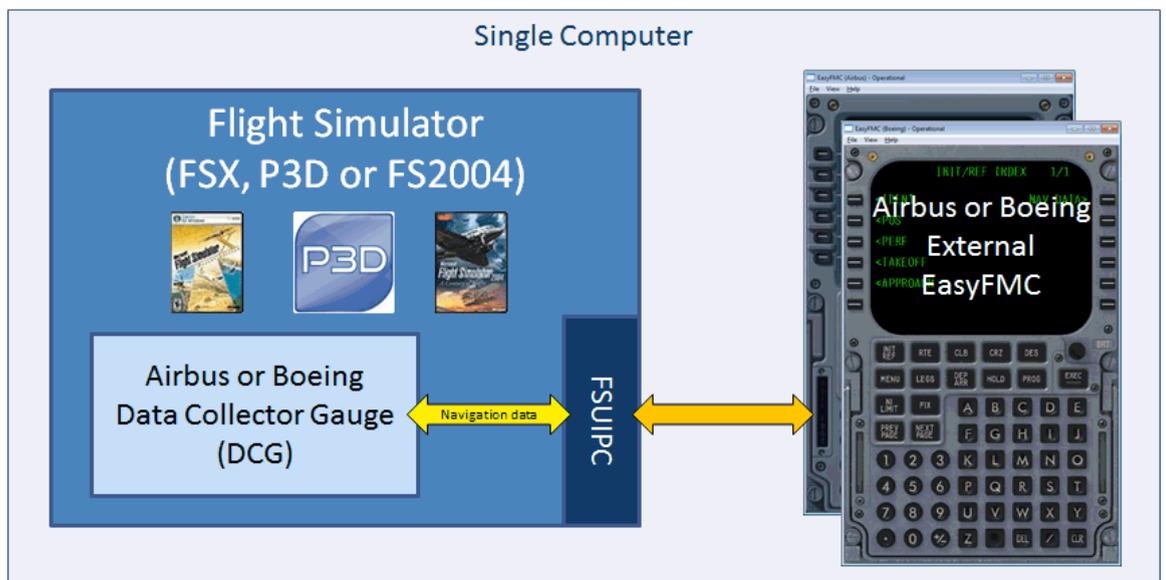
Requirements:

- FSUIPC (any version)
- Optional: WideFS for remote mode (dual machine usage)

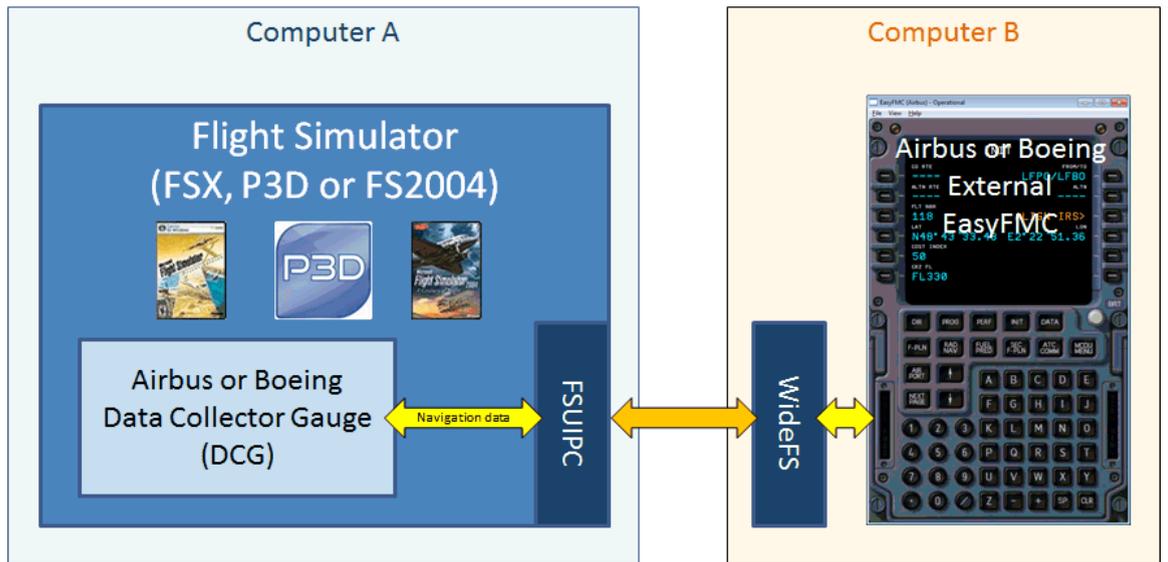
How does it work?

In order to install and properly use **External EasyFMC**, you need to understand how it works. This FMC uses the simulator (FSX/P3D/FS2004) internal navigation database so it needs to have a gauge running into the simulator to collect the navigation information and provide to the **External EasyFMC** application using FSUIPC. This gauge is called a [Data Collector Gauge](#) (or DCG).

This image illustrates the way it works with a single computer:



Dual computer mode (remote mode) :



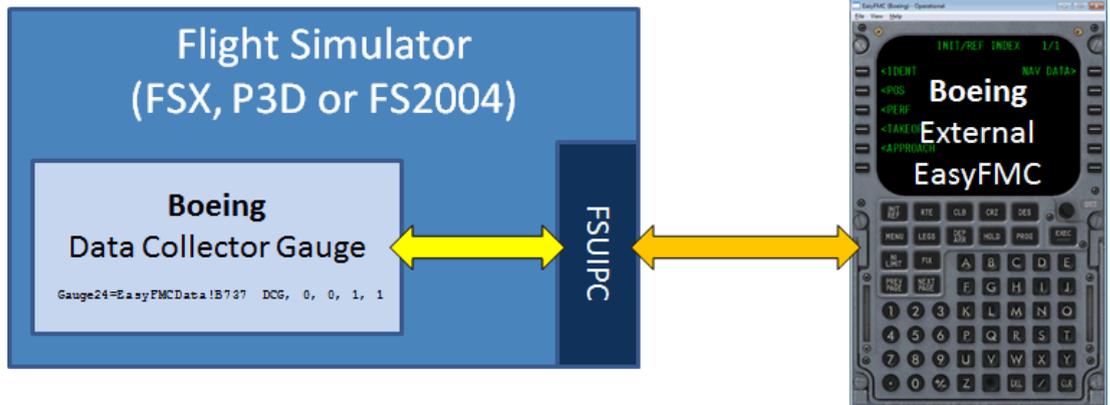
External EasyFMC - Installation

Single Computer Installation

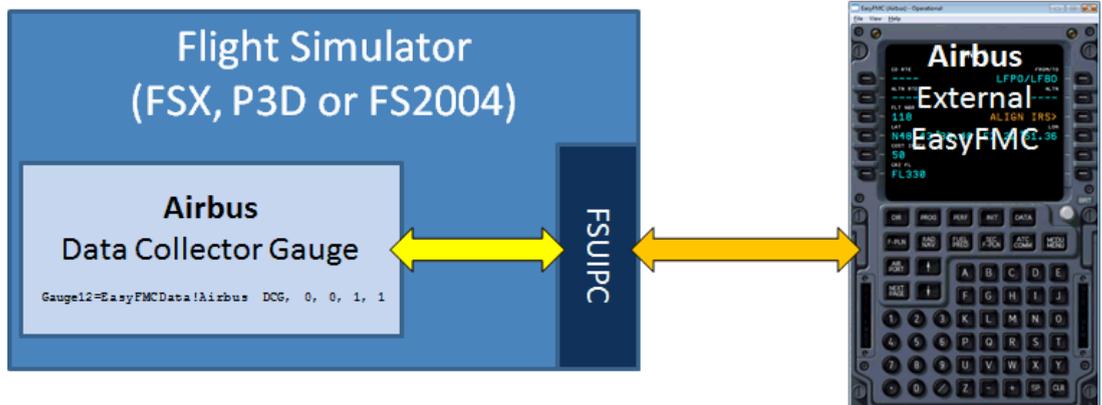
Installation is very easy, just run the automatic installer and follow the instructions. Then you must add a Data Collector Gauge in an aircraft. You can use the [External EasyFMC Panel Updater](#) for this, it will automate the modification of the panel.cfg so you don't have to do it manually. Just remember that 2 Data Collector Gauges are available, 1 for Airbus and 1 for Boeing, so you should use the one that corresponds to the look-and-feel you want to use (Airbus or Boeing).

When this is done, you just have to run the simulator (FSX/P3D/FS2004), select an aircraft that has a Data Collector Gauge, then run **External EasyFMC** application (Airbus or Boeing) using the Windows shortcut created by the installer.

Correct configuration for Boeing look-and-feel:



Correct configuration for Airbus look-and-feel:



Dual Computer Installation (Remote mode)

If you run the simulator (FSX/P3D/FS2004) on a computer and **External EasyFMC** on another computer, you just have to run the automatic installer on both computers.

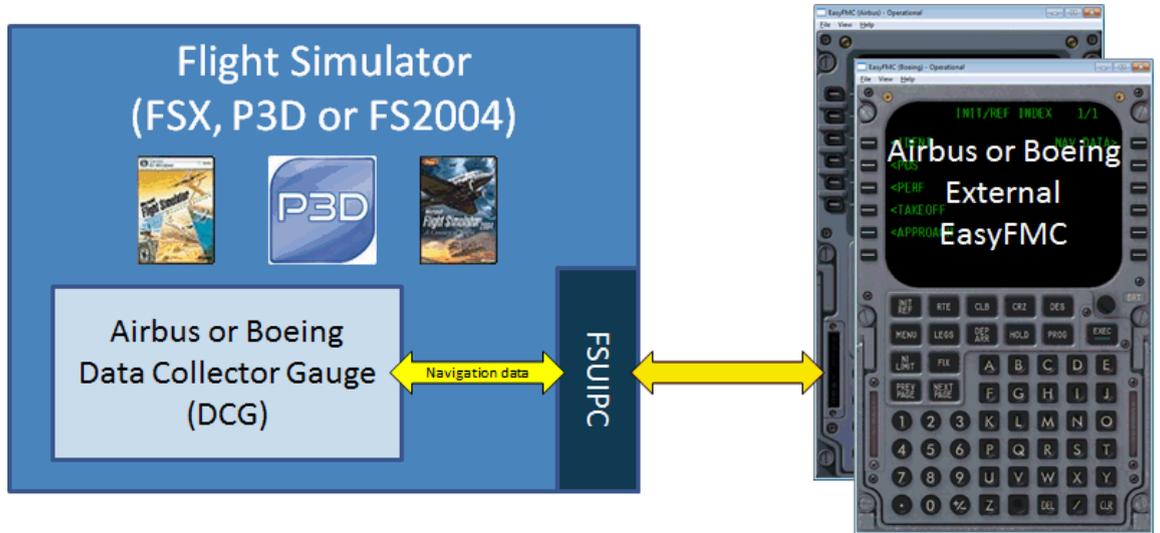
On the computer that runs the simulator, you must add a Data Collector Gauge in an aircraft using the **External EasyFMC Panel Updater**. Then you can run the simulator and select an aircraft that has a Data Collector Gauge.

On the other computer, you just have to run the **External EasyFMC** application using the Windows shortcut created by the installer and that's it... Please make sure you have **WideFS** running for the FSUIPC network communication between the computers.

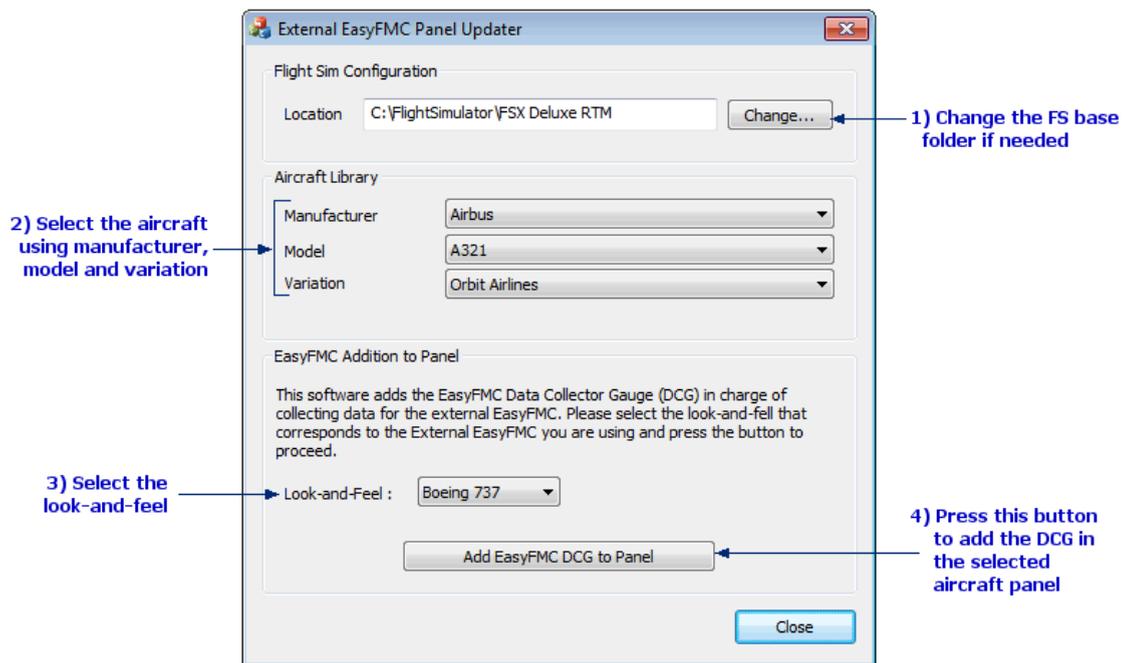
External EasyFMC Panel Updater

Automatic Gauge Installation

In order to run properly, External EasyFMC needs to grab navigation information from the simulator (FSX/P3D/FS2004). This is why a gauge must run in the simulator itself, a gauge called "Data Collector Gauge" that communicates with the External EasyFMC application using FSUIPC.



The External EasyFMC Panel Updater helps you for installing the data Collector Gauge in any aircraft. It fully automates the process and modifies the panel.cfg file for you.



Run the application through the Windows shortcut (in External EasyFMC folder). Then follow the instructions as shown in the image above:

1. The Panel Updater automatically detects the Flight Simulator installation folder, shown in 'location'. If it is wrong or empty, you can specify it manually by pressing the 'Change' button.
2. The Panel Updater reads your aircraft collection and lets you select one of them using the manufacturer, model and variation.
3. When the aircraft is selected, you can select the look-and-feel (Airbus or Boeing).
4. Press the 'Add to Panel' window. As soon as the operation is executed, the Data Collector Gauge (DCG) is added and a confirmation window appears.

Important Notes:

- The Data Collector Gauge (DCG) has no visual appearance. It runs without being visible so it will not impact the panel of the aircraft in which it is added.
- You must select the look-and-feel that corresponds to the External EasyFMC look-and-feel you plan to use. The Airbus DCG is designed to work with the Airbus External EasyFMC, and the Boeing DCG is for the Boeing version. A mismatch would result in a "Wrong gauge loaded" status (see Operations section for more information)

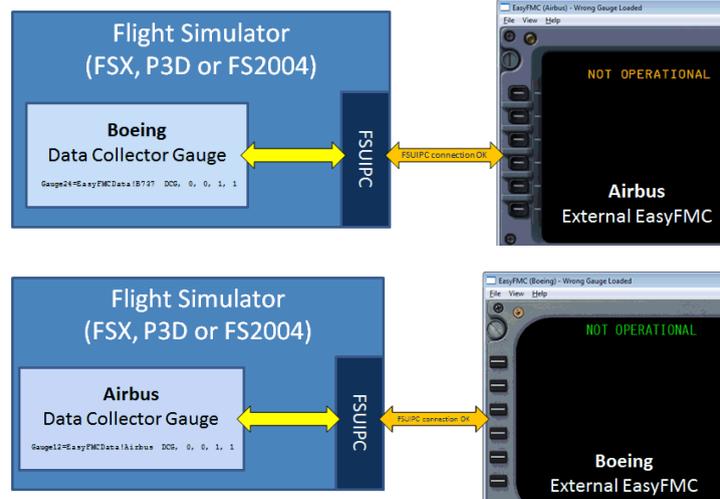
External EasyFMC - Operations

Airbus and Boeing Look-and-Feel

External EasyFMC is provided with 2 different executable applications: 1 for Boeing and 1 for Airbus look-and-feel. Both applications are accessible through the Windows shortcuts created by the installer.

You just have to care about using the right look-and-feel, according to the Data Collector Gauge you have installed. You should avoid the wrong configurations, that are:

- The Boeing Data Collector Gauge with the Airbus External EasyFMC
- The Airbus Data Collector Gauge with the Boeing External EasyFMC



Viewing Features

The Airbus and Boeing External EasyFMC applications have some viewing features that can help, especially in the context of using them in a home-made cockpit. They are all present in the "View" menu and the "Help" menu shows the keyboard shortcuts associated to these features.

- Hide Menu Bar (Alt-M key)
Show/hide the menu bar. The pulldown menus are obviously not accessible when the menu bar is hidden, so press M again to show it if you need to get access to the menu.
- Hide Frame (Alt-F key)
Show/hide the window frame. This is especially useful if you use External EasyFMC on a separate screen integrated in a cockpit. The window cannot be move or resized if the frame is not visible, so press F again to show it if you need to move/resize the window.
- Show Clickspots (Alt-S key)
Show/hide the clickable zones.
- Reset Ratio (Alt-W and Alt-H keys)
As the window can be resized in any way, you may lose the aspect ratio (the keys may not be square anymore). In this case, you can reset the correct aspect ratio by changing the window width (Alt-W key) or the window height (Alt-H key).
- Initial Size (Alt-I key)
This resets the window size to its initial size, which is the original size of the background image that represents the FMC.
- Always on top (Alt-A key)
Activate/deactivate the topmost priority for the External EasyFMC window.

Status

As soon as you fly FSX, P3D or FS2004 with an aircraft that has a Data Collector Gauge in its panel, you just have to run one of the External EasyFMC application. The current status is always displayed in the window title bar. Here is the meaning of each status:

No FSUIPC Connection	The External EasyFMC application cannot connect to the simulator (FSX/P3D/FS2004) using FSUIPC. For this reason, it cannot get the navigation information. This may be because FSUIPC is not installed in FSX/P3D/FS2004 (single computer) or WideFS is not running in dual computer mode.
Gauge not loaded	The FSUIPC connection is OK but the link with the Data Collector Gauge could not be established. This is probably because the aircraft used in FSX/P3D/FS2004 does not have a Data Collector Gauge in its panel.
Wrong gauge loaded	The FSUIPC connection is OK and the link with the Data Collector Gauge works fine, but the wrong DCG is used with the current External EasyFMC application. This happens when the Boeing DCG is used with the Airbus External EasyFMC, or when the Airbus DCG is used with the Boeing External EasyFMC.
Operational	Everything is running fine: the FSUIPC connection and the link with the Data Collector Gauge are OK.

Keyboard Mode

The keyboard is always active with External EasyFMC. As soon as the window is active, any key typed on the keyboard will appear in the scratchpad. This makes data entry much easier.
The Backspace key can be used to erase characters (equivalent to the CLR button). Please note the / - + . keys are available on the numeric keypad only.
Functions keys are used for the LSK and RSK buttons:

- F1 to F6: LSK1 to LSK6
- F7 to F12: RSK1 to RSK6

WARNING: The F10 key toggles the menu bar, this is a standard Windows behavior. It means you may have to press F10 twice to activate RSK4.

Some minor differences exist between Airbus and Boeing keys:

Airbus	Boeing
Up Arrow key: Scroll Up Down Arrow key: Scroll down	Page UP key: Previous Page Page Down key: Next Page Del key: DEL

Standard Operation

Except minor differences about the keyboard mode, External EasyFMC works exactly like EasyFMC, so please read the [EasyFMC manual](#) for the standard operation of the EasyFMC Flight Management Computer.