

Flight Simulator French Development Team

**F.S.
copilot**

VERSION 1.6

for

MS Flight Simulator

**OPERATION
MANUAL**

Introduction.

FSCopilot is a package of very practical free add-ons, created by the F.S.F.D.Team to help us in the use of our favorite flight simulator: M.S. Flight Simulator, and enhance our flying experience.

Always improved and followed up in the forum www.mcd�.com/forum , each module of this package is directly reachable from the main menu of Flight Simulator.

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1. INSTALLATION.

WARNING !!!

The install file has changed for the new FSCopilot 1.6 and FSInn 1.2. The previous versions of this software **MUST** be uninstalled, before you install these versions... and the next one...

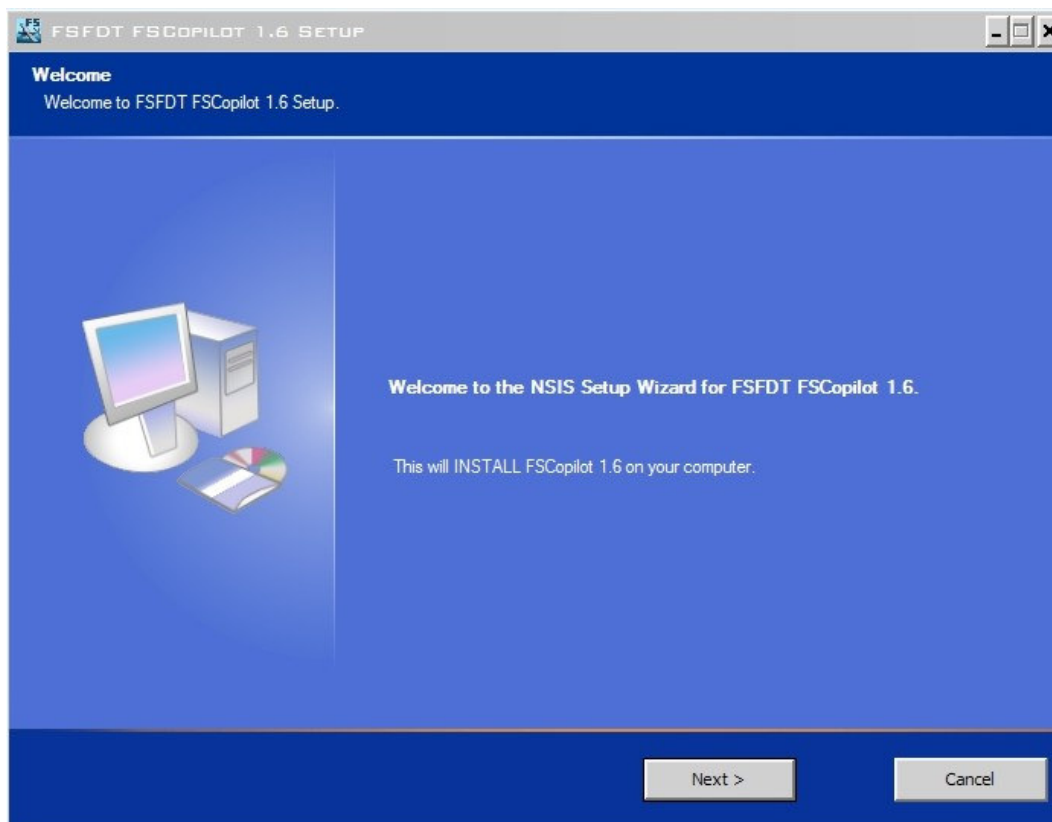
Two ways to proceed:

- run the install file of the previous version, and choose 'Uninstall'.
- in the Windows Control Panel, select 'Add/Remove programs', and suppress all previous software.

If you used beta versions of FSCopilot 1.6 and FSInn 1.2, you can install these new ones over the previous one.

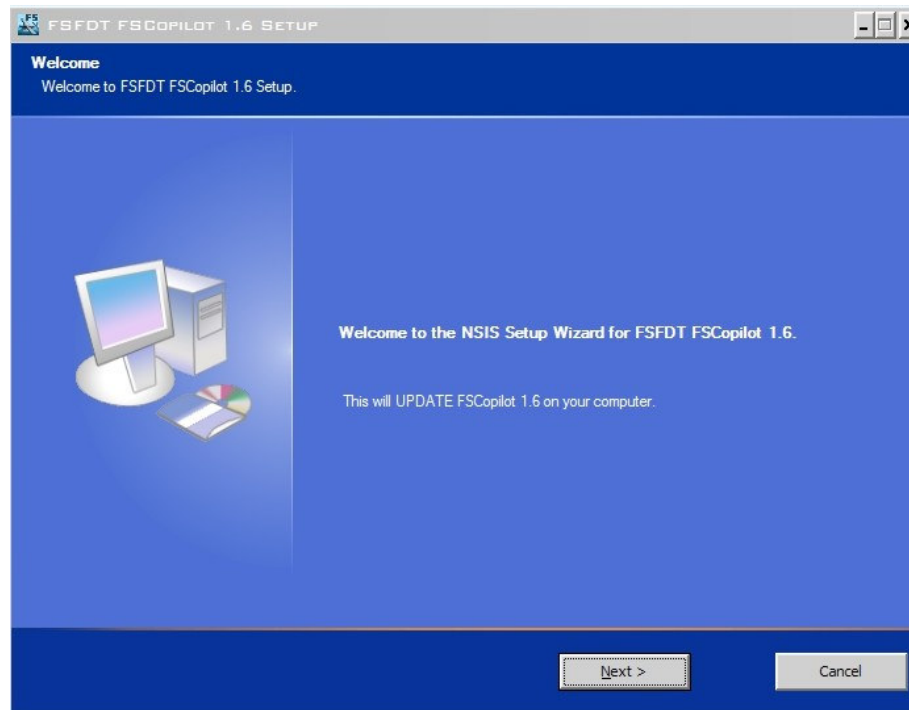
If you install a new version of FS, or if you move an existing one to a new location, you must run the FSCopilot 1.6 install file (without uninstall), and then the FSInn 1.2 install file, so that the new location is detected.

Download FSCopilot 1.6 at www.mcd�.com , and run the install file.
This window opens:



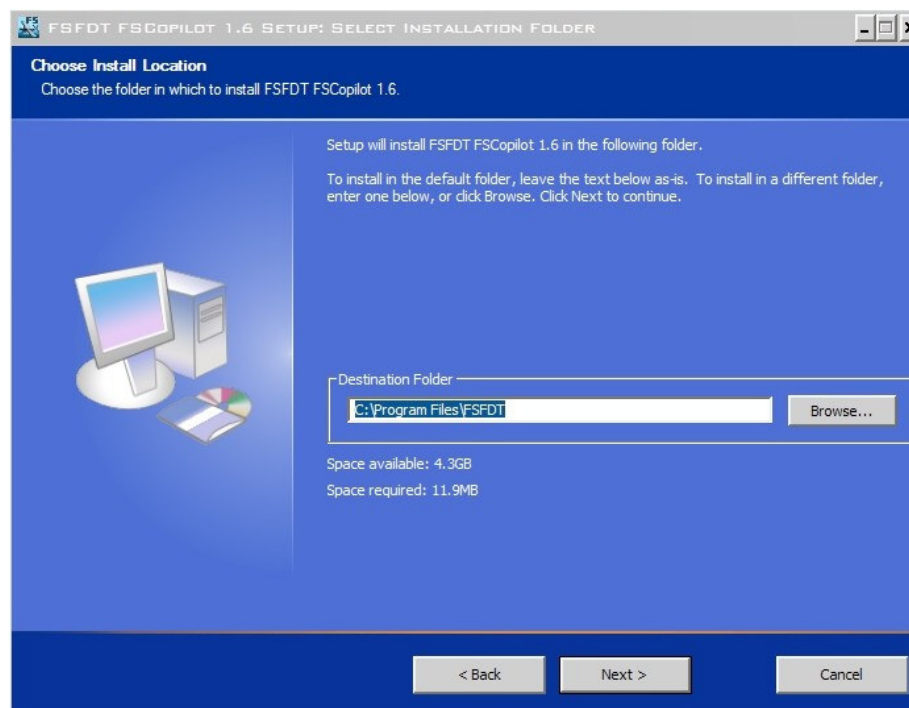
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If you install the software over an existing version, this window tells you that FSCopilot will be updated:



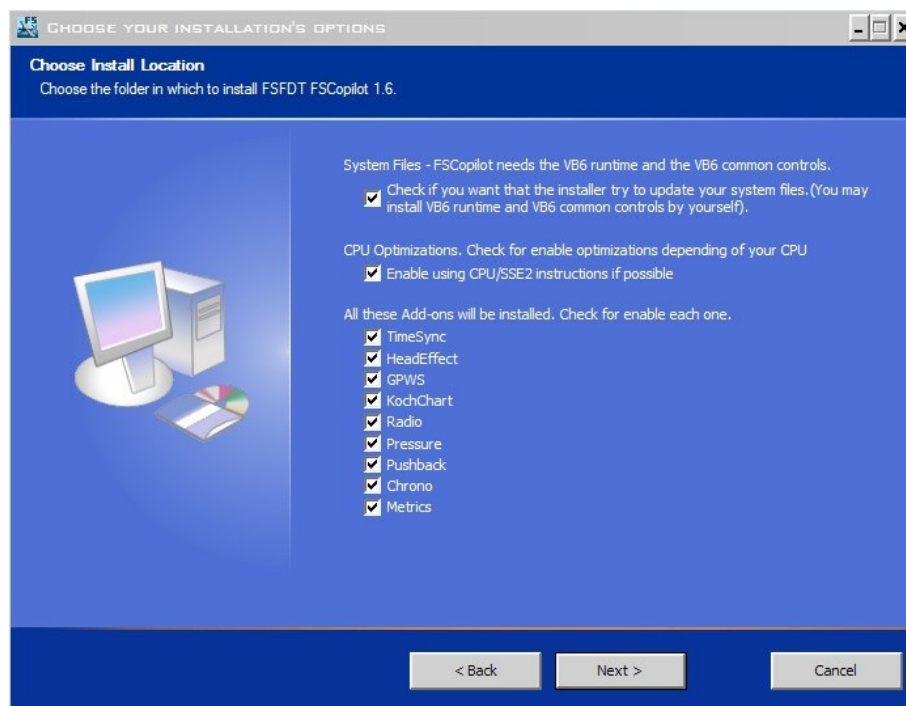
In this case, it is not necessary to give the install path; it will be automatically detected by the install file.

Click on 'Next'.



If you don't want to keep the default install path, click on 'Browse' to choose the new one. The software needs 11.9 MB of disk space to be installed.

Click on 'Next'.



This window reminds you that 'Runtime' from Visual Basic 6 is necessary to run FSCopilot.

Select the first option if you want the install file to verify your configuration, to update your system, but you will possibly have to install 'VB6 runtime and VB6 common controls' by yourself.

The second option enables the optimization of your CPU, depending on its features. The install file will check the SSE2 capability of your processor. If it does not support it, it will not be used.

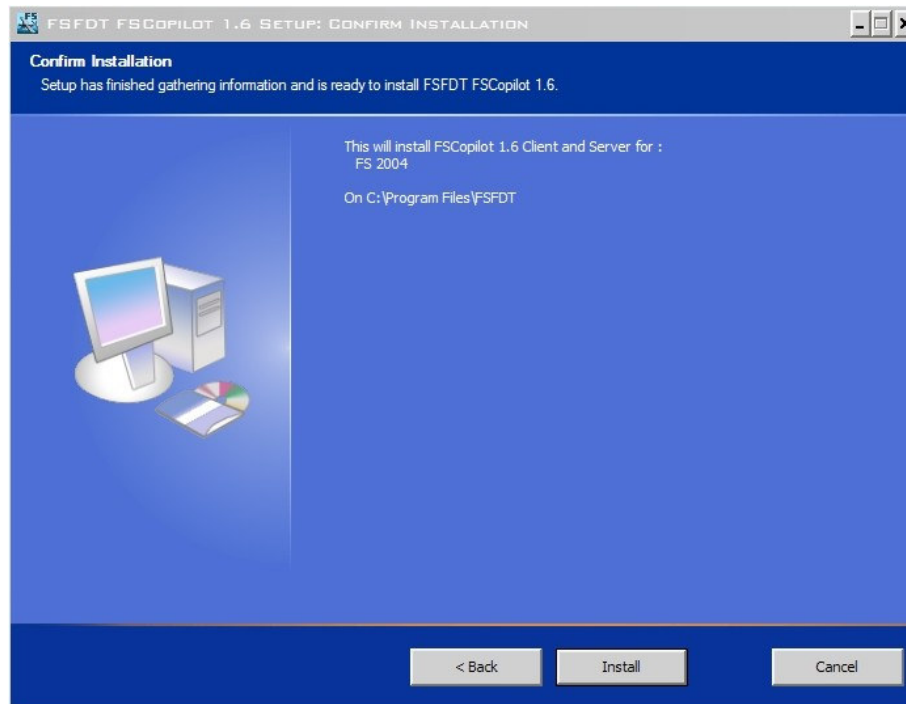
Then you can choose which add-on you want to enable on your system.

Click on 'Next'.

You will then have a summary of the information selected for the installation.

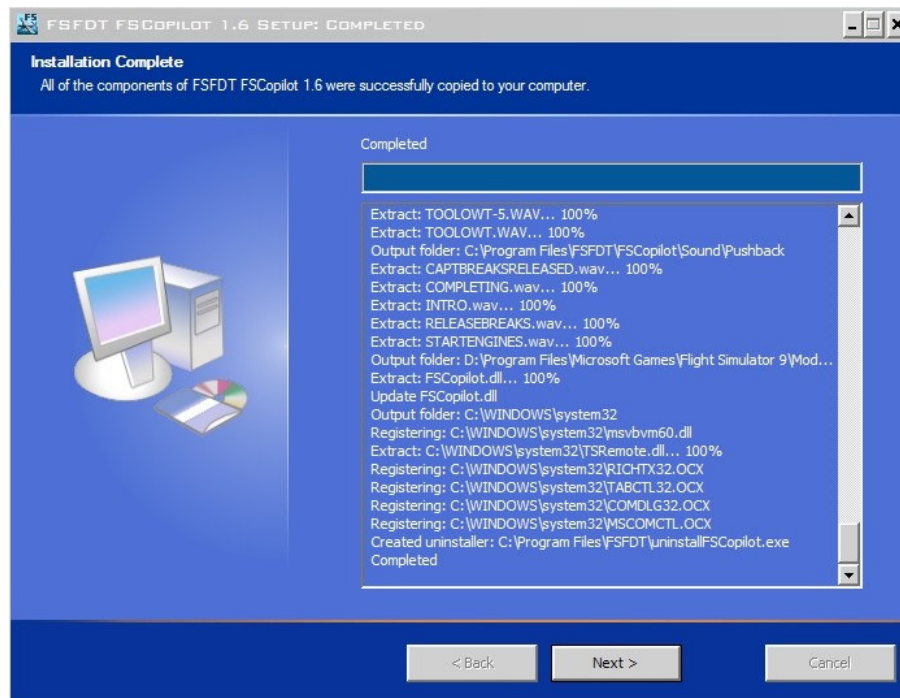
You can go back to change this data by clicking on 'Back'.

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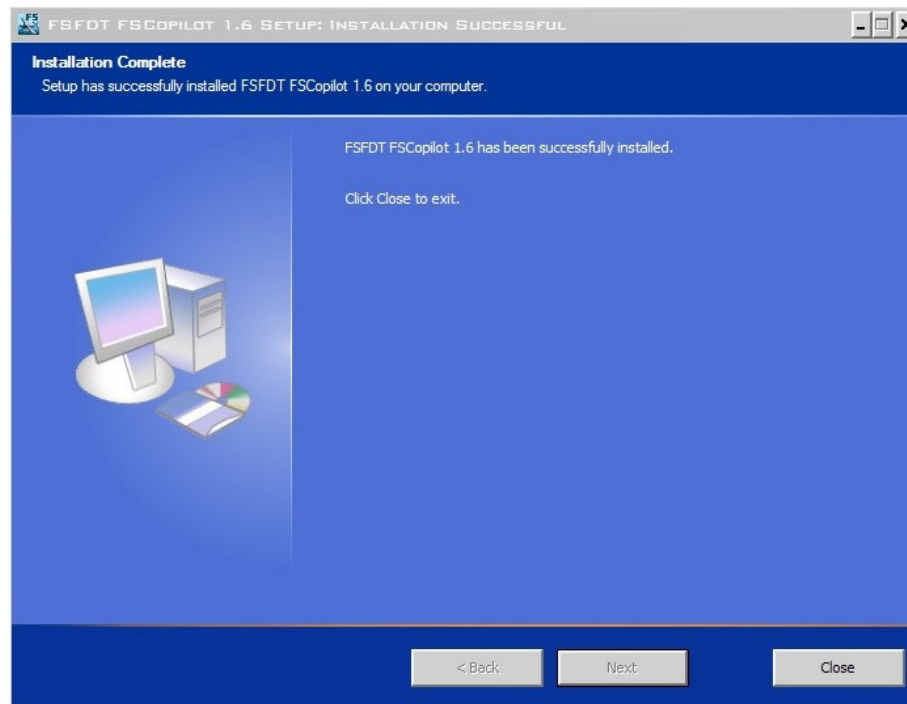
If you are satisfied with your choice, click the 'Install' button, which will launch the install process.

Once the install process is completed, the 'details' window will give a list of all what was installed on your system.



Click on 'Next'.

This window confirms that FSCopilot was successfully installed:

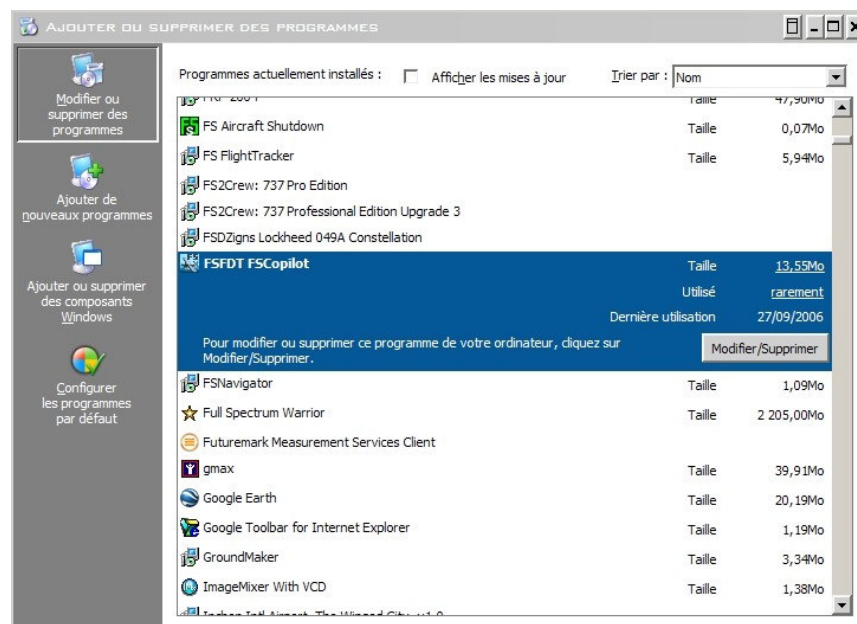


Click on 'Close' to exit the install process.

2. UNINSTALL.

There are 3 possibilities to uninstall FSCopilot.

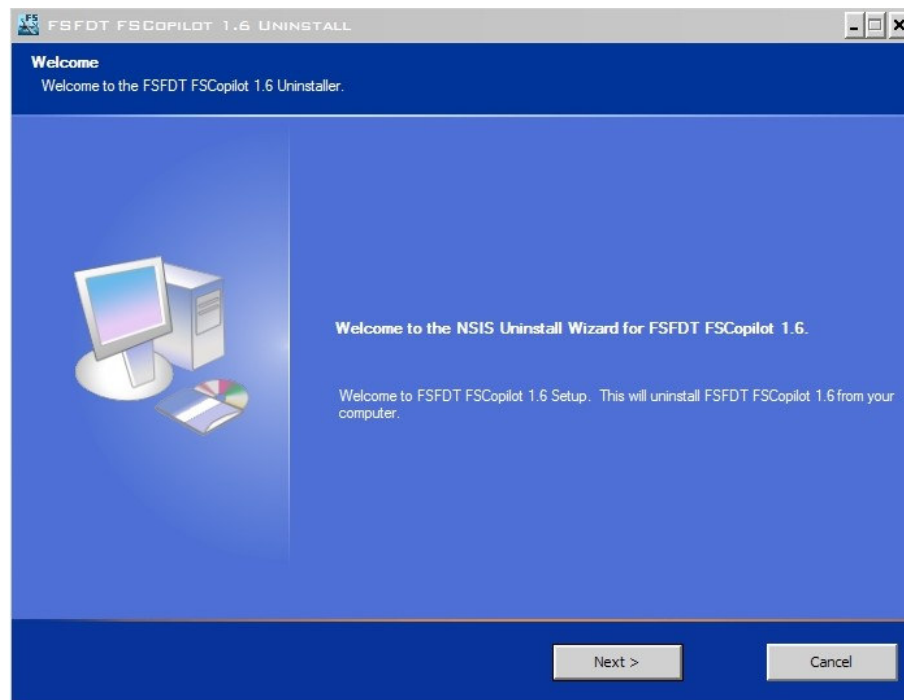
2.1 In the Windows Control Panel.



Select 'Add / Remove Programs'.
Choose 'FSFDT FSCopilot' and click on 'Modify / Remove'.
Confirm the full uninstall of the software.

2.2 By mean of the FSCopilot install file.

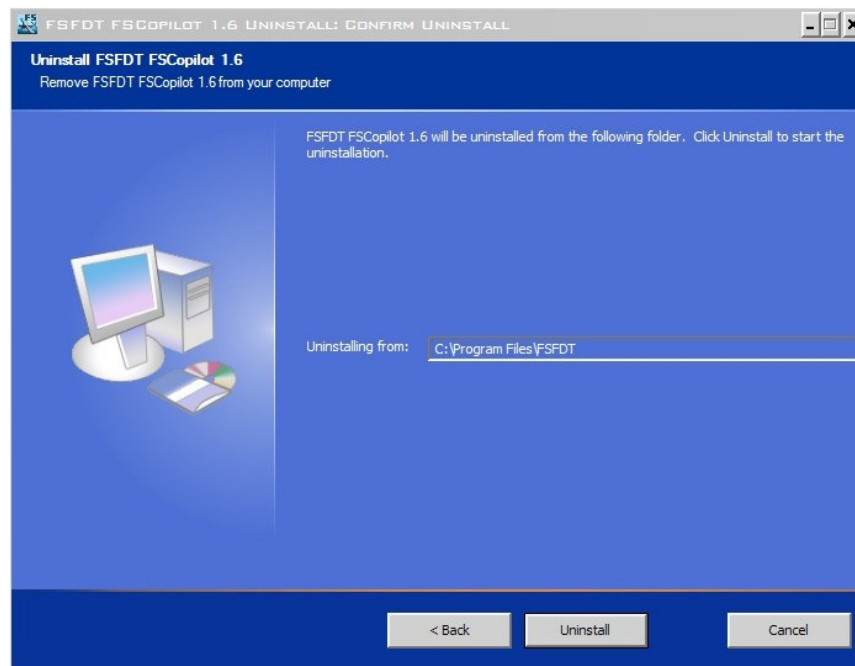
Run the FSCopilot install file; it will detect that FSCopilot is already installed, so you'll have the choice to select 'Uninstall'.



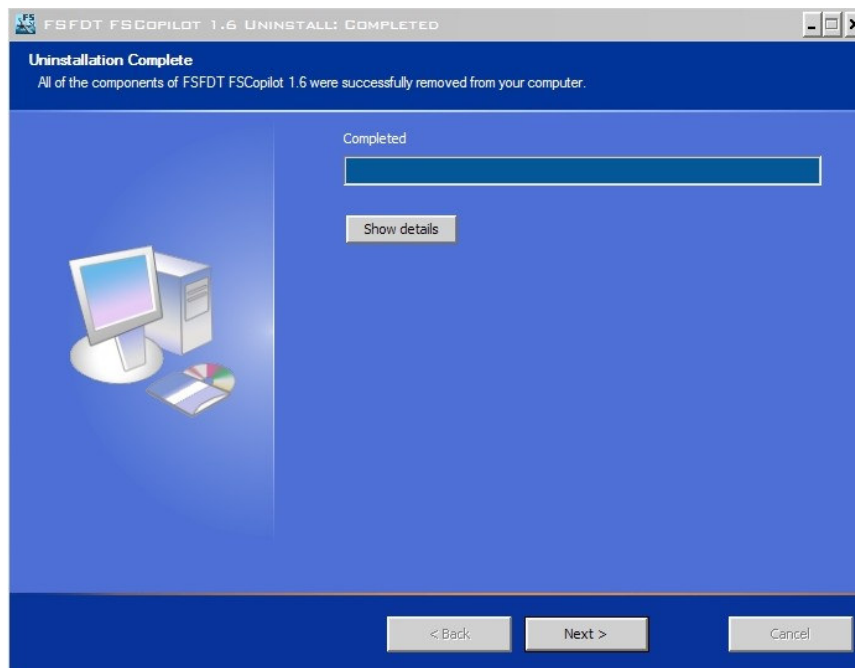
Click on 'Next'.

Then confirm the path from where FSCopilot has to be uninstalled.

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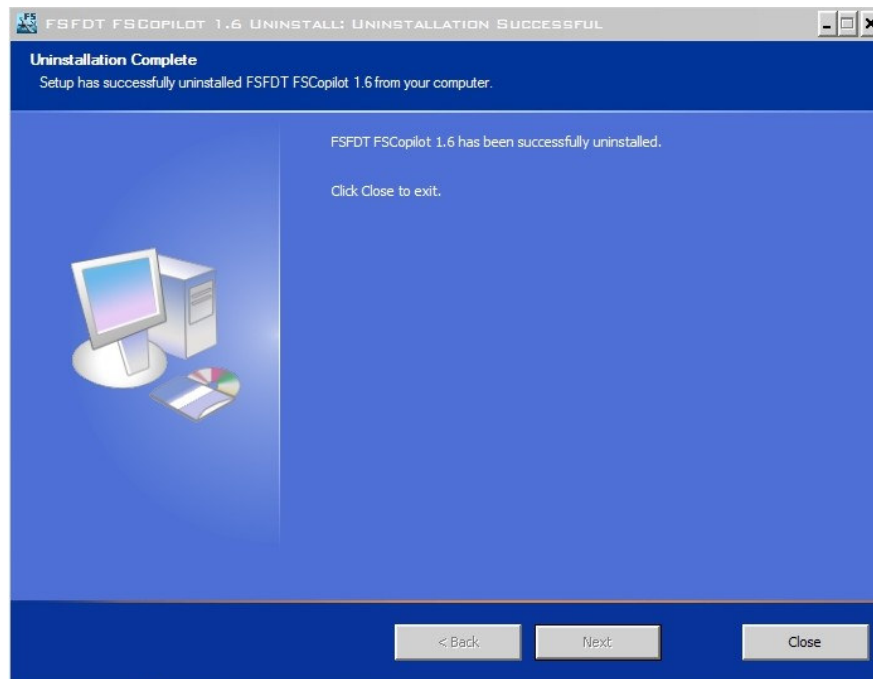


Click on 'Next'; this will start the uninstall process.



FSCopilot and all its components are uninstalled, click on 'Next'.

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Click on 'Close' to exit the process.

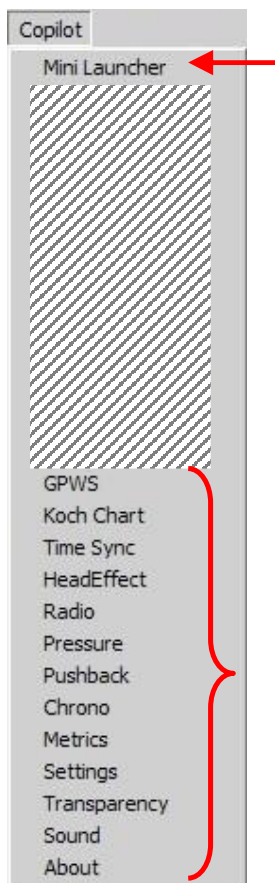
2.3 By the main Windows 'Start' menu.



Select: 'Start' → 'All programs' → 'FSFDT' → 'Uninstall FSCopilot', that will run the install file (same as 2.2 above).

3. FSCopilot operation.

3.1 Access.



All add-ons are directly reachable from the main Flight Simulator menu, in the FSCopilot tab.

Note: all sub-menu beginning by 'Inn' is linked to FSInn (if installed).
See the related documentation.

3.2 The 'Mini Launcher'.

It allows a quick access to some of the add-ons included in FSCopilot. When opened, you don't have to use the FS main menu.

You can open:

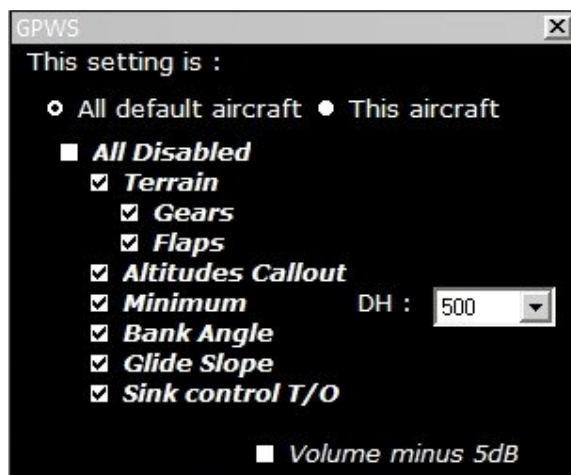
- the Koch Chart
- the radio panel
- the pressure panel
- the pushback panel
- the chronometer
- the 'metrics' panel.



3.3 GPWS.

‘Ground Proximity Warning System’.

In flight, mainly during takeoff and approach phases, this tool gives an aural announcement related to your height from the ground and the aircraft configuration.



First, you can choose to set these parameters to all aircraft, or only to the one you are actually flying.

If you choose ‘All disabled’, all aural announcement will be deactivated.

Then select the aural messages you want to hear during takeoff / approach, and set the desired decision height.

The last choice is to decrease the volume of the announcement (-5 dB).

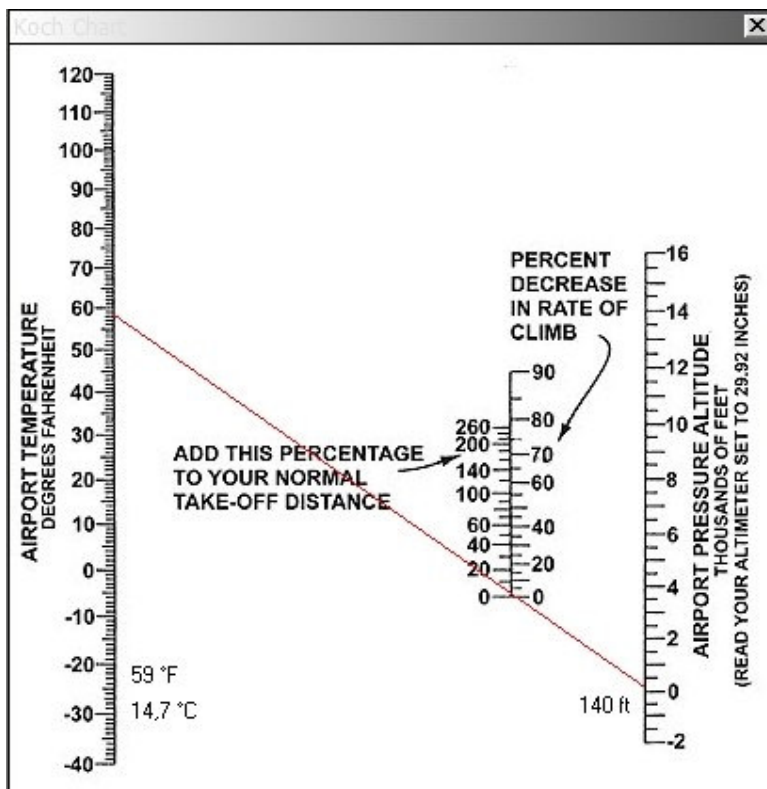
3.4 Koch Chart.

This is an add-on which displays an interactive diagram to appreciate the applicable constraints for your takeoff, according to the pressure-altitude of the runway and the outside air temperature.

Remember: the higher the altitude is, the less dense the air is; the warmer the air is, the less dense the air is.

Left scale: ground air temperature (°F)

Right scale: altitude-pressure of the airport (thousands of feet).

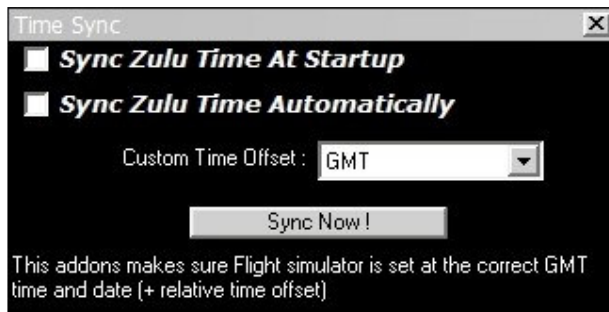


Center left scale: gives, in percent, the length to add to the normal takeoff length.

Center right scale: gives, in percent, the decrease to apply in relation to the normal rate of climb.

3.5 Time Sync.

Flight Simulator tends to never retain the correct date and time. This add-on allows you to always stay in time.

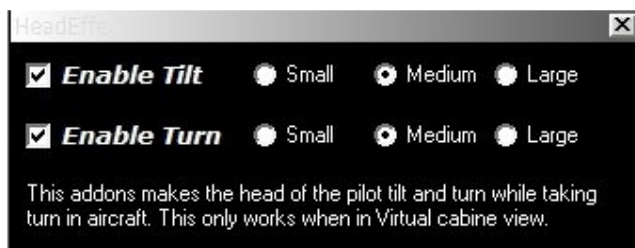


- Sync Zulu Time at Startup: each time FS starts...
- Sync Zulu Time Automatically: synchronization will be done every minute, but only if there are more than 3 minutes difference regarding the UTC hour in your computer.

Custom Time Offset: allows offsetting the time from the Greenwich Mean Time (+ or -) according to your location.

'Sync Now!' button: to synchronize immediately.

3.6 Head Effect.

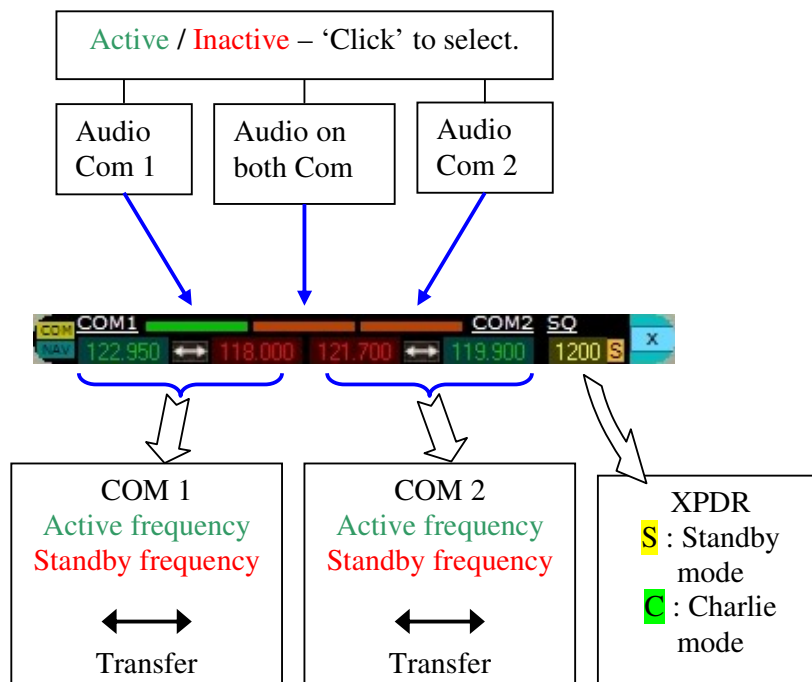


This add-on reproduces the movements of the pilot's head during turns, but only in the virtual cockpit view. Thus the visibility is improved during the turns.

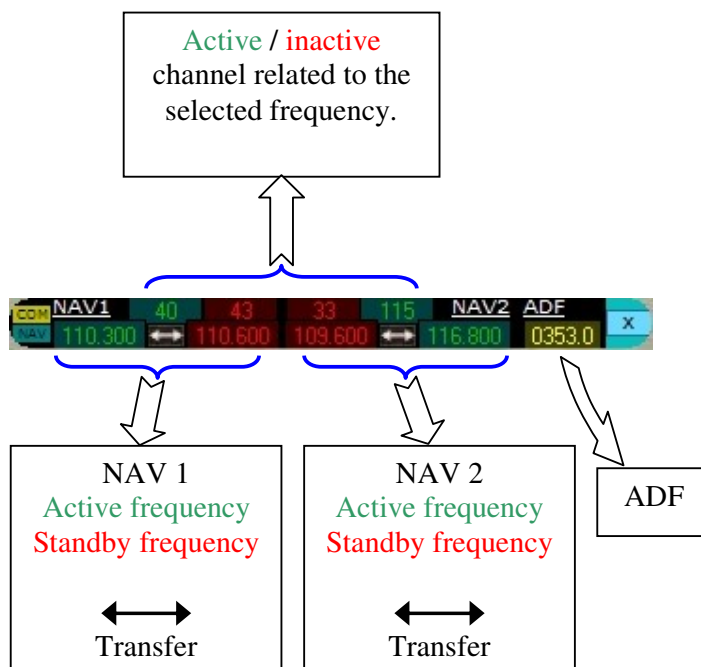
- Enable tilt: for the pitch attitude
- Enable turn: for the left / right effects
- Small / medium / large: 3 levels of effects.

3.7 Radio.

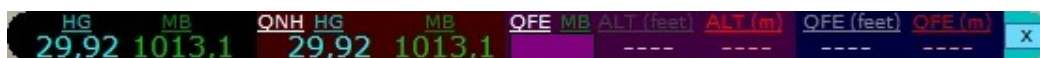
Selection of the frequency range **COM** / **NAV** by clicking on the left buttons.



You can click every area with numbers to directly enter the frequencies on the numeric keyboard.
They are a reproduction of the aircraft radio stack.

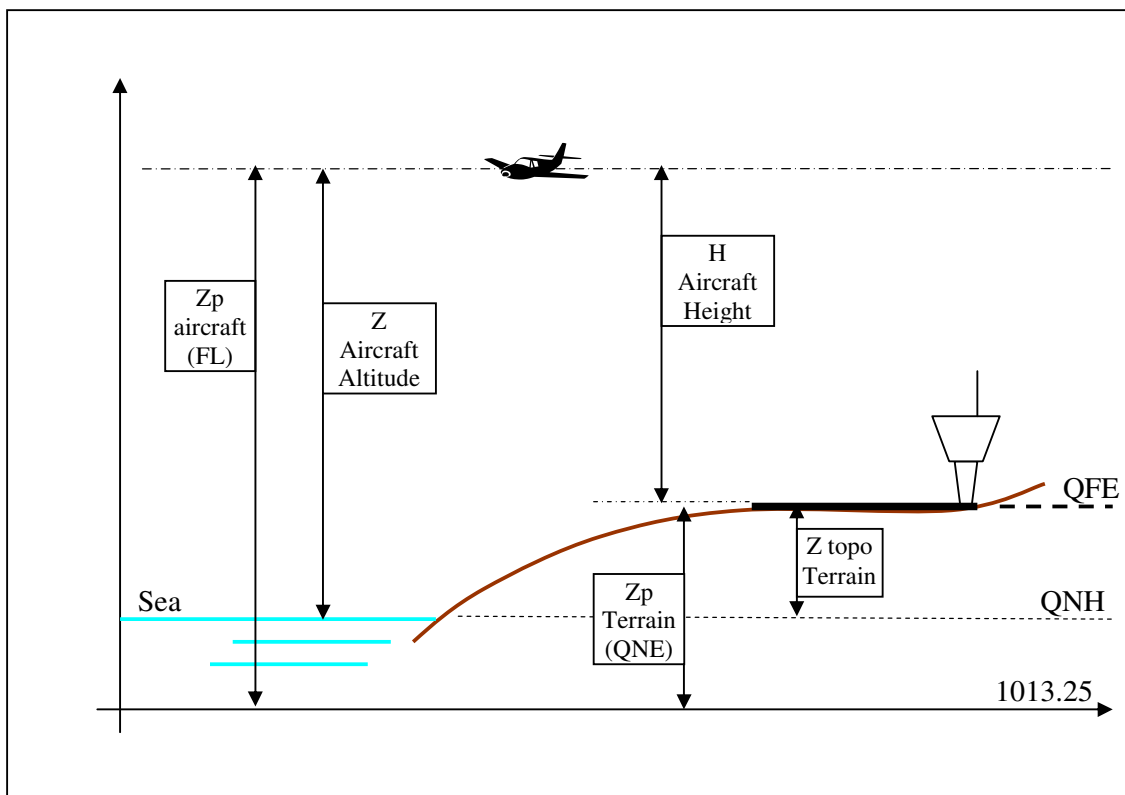


3.8 Pressure.



This document is not a navigation course, and as we know, a drawing is often better than a long speech. So, here is a summary of the altitudes and altimeter settings used in the aeronautical world.

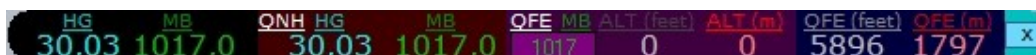
Note: in Flight Simulator, with this add-on opened and moving your mouse cursor over the windows, you will see a brief description of what is indicated.



Reminder:

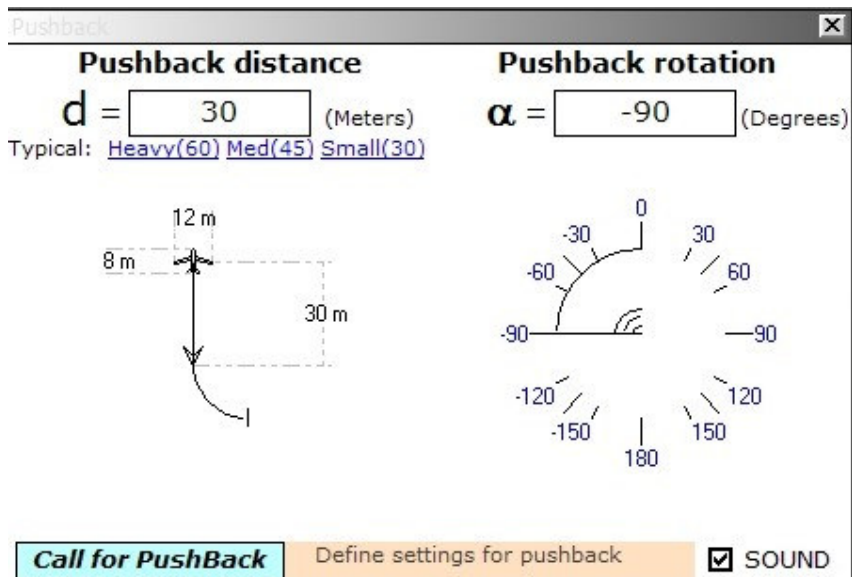
- 1) When the altimeter setting is 'QFE', we set the ambient pressure at the field elevation.
 - on ground, the pointer shows 0
 - in flight, the indication is a height.
- 2) When the altimeter setting is 'QNH', we set the pressure that should be at the sea level, if the static pressure follows the standard atmosphere since the sea level to the field elevation.
 - on the ground, the pointer shows the topographical altitude of the airfield
 - in flight, the indication of the altimeter is an altitude, because the pressure setting is relative to the sea level
 - although this pressure is theoretical, this indication is the closest to the reality.
- 3) The '1013.25 hPa' or '29.92 InHg' setting is when you set 1013.25, mean sea level in standard atmosphere.
 - on the ground, the pointer shows the pressure altitude of the field
 - in flight, the indication of the altimeter is a pressure altitude called flight level
 - this setting is used for the air traffic because it is not relative to a pressure by dead reckoning, and allows an accurate vertical separation between aircraft flying the same airway.

Example:



Click and enter the value on the numerical keyboard.

3.9 Pushback.



First of all, it gives, in the left part of the screen, the size of your aircraft.

3 distance of pushback are pre-defined, but you can manually enter this value, previously calculated.

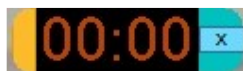
Then define the rotation angle for the end of the pushback.

A diagram is created in the left part of the window to improve the visualization.

Choose in the lower right corner if you want to ear the aural announcement during the pushback.

Click on 'Call for pushback' to call the ground handling, and follow the instructions (parking brake...)

3.10 Chrono.



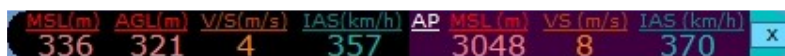
No comment...

Click on the yellow part for reset.

3.11 Metrics.

The left part of the window gives altitude (Mean Sea Level – Above Ground Level), Vertical Speed and Indicated Air Speed, transposed to the metric system. The right part displays the autopilot settings, in the metric system.

Note: in Flight Simulator, with this add-on opened and moving your mouse cursor over the windows, you will see a brief description of what is indicated.

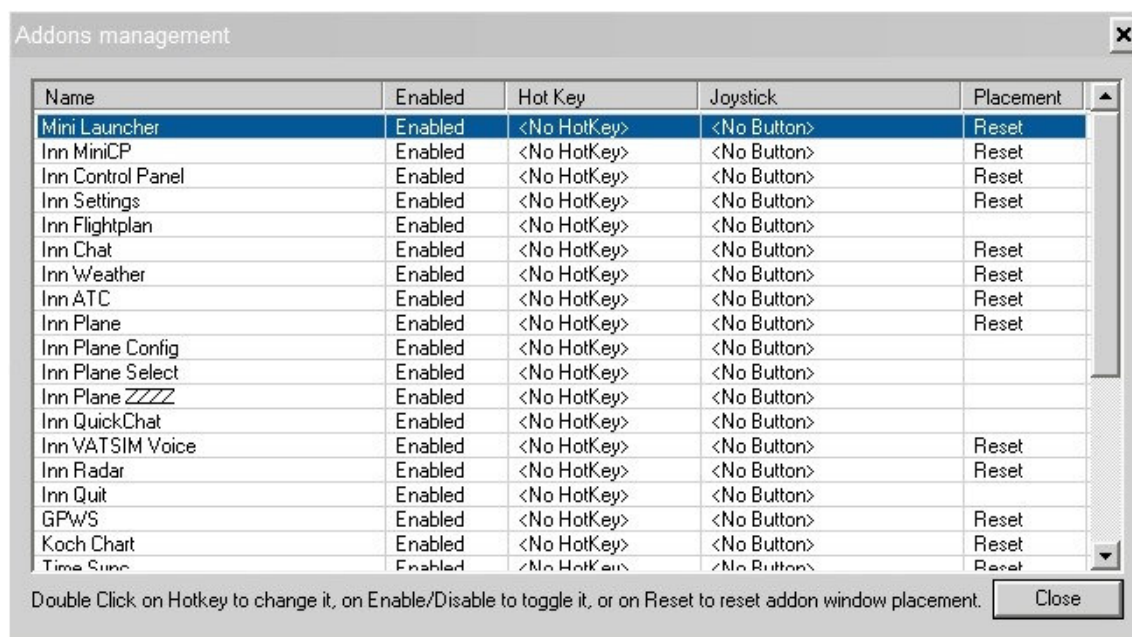


Actual parameters of the aircraft, in the metric system.

- MSL : Mean Sea Level
- AGL : Above Ground Level
- V/S : Vertical Speed
- IAS : Indicated AirSpeed –



3.12 Settings.



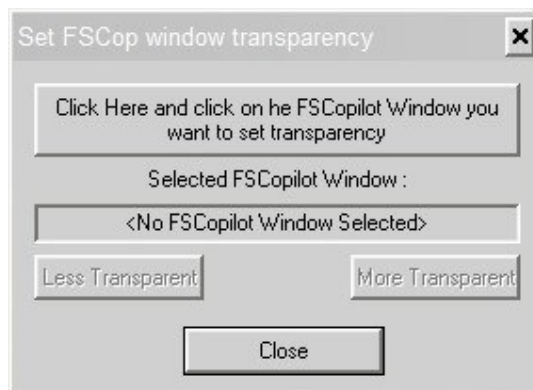
Add-ons management for FSCopilot and FSInn.

- Enabled / disabled: allows deactivating an add-on. It will disappear from the FSCopilot menu.
- Hot Key / joystick: allows to allocate a hot key on the keyboard and/or a button of the joystick for a quick access to each add-on.
- Placement: it can happen that an add-on is moved outside the limits of your monitor. The 'Reset' selection will give back the window on the upper left corner of your FS window.

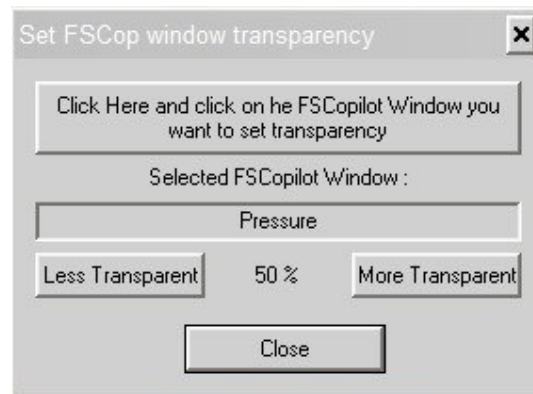
Access to modify a setting by double clicking in the applicable window.

3.13 Transparency.

Allows to set the transparency of each window of the add-ons.

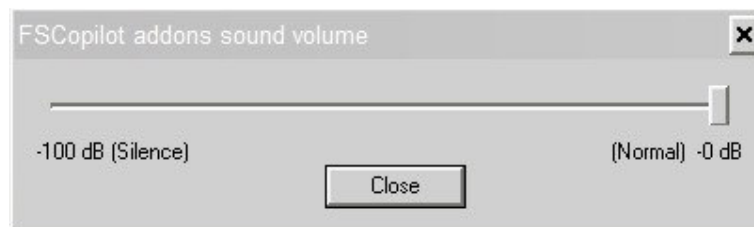


Click on the upper button, and then on the window of an add-on:



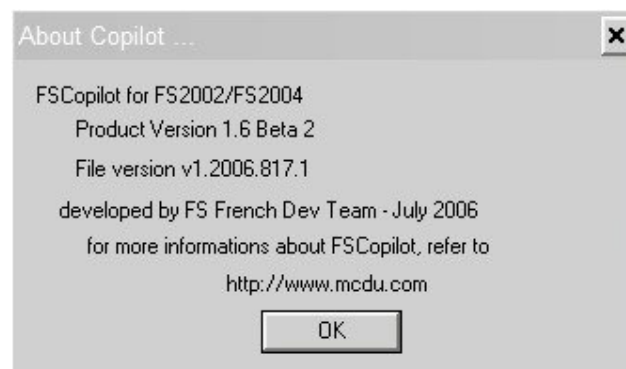
Then set the transparency of the selected window.

3.14 Sound.



For the add-ons using sound effects, you can set the audio volume, from 'Normal' to '-100 dB' (silence).

3.15 About...



Summary of the data about FSCopilot...