# **OpusFSX**

# Flight Simulator Interface for FSX & Prepar3D User Guide



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# **OpusFSX - Flight Simulator Interface for FSX and Prepar3D**

Thank you for downloading our OpusFSX Flight Simulator Interface.

The **OpusFSX** Flight Simulator Interface for the Microsoft Flight Simulator X (FSX) and Lockheed Martin Prepar3D (P3D) incorporates the **Live View** synchronized multi-screen networked display, **Live Camera** view control and docking software supporting multiple windowed views, **Opus weather themes** for FSX, and device drivers for the CPFlight MCP737/EFIS737 PRO/EL panels.



The **OpusFSX** interface is ideally suited for both **standalone** (single PC) and **networked** (multi-PC/Laptop) systems.

On standalone systems, OpusFSX incorporates two superb functions through its Live Weather Engine and Live Camera interfaces.

The **Live Weather Engine** makes use of our unique **Dynamic Weather** update to provide the most advanced weather updating software in the marketplace. The **Live Weather Engine** has set new standards for weather updating for the FSX and Prepar3D flight simulators. **OpusFSX** provides the most detailed, realistic and efficient weather updating service.

The **Live Weather Engine** allows you to create and name your own themes based on the current dynamic weather created from the live METAR reports. In addition you can load historic weather for the previous 24 hour period or import your own custom METARs.

Live Camera provides excellent camera creation, control and docking facilities through its user friendly interface, totally eliminating the need to alter any of the simulator's controls. The Live Camera interface also includes support for Windowed Views and provides an ultra-realistic Dynamic Head Movement option (virtual cockpit camera shake) utilising actual 'real-life' capture 3D accelerometer data and Automatic Head Movements to assist the pilot whilst taxiing and banking in a turn.

On networked systems, irrespective of the size and complexity of your system, whether your system consists of a main 'flying' PC with a single networked laptop client, or a more elaborate multi-computer networked system; the Live View interface, with its ultra high-performance IPC communications, unique Client Side Smoothing software, and perfect synchronization of aircraft status, weather and cloud formations, will provide you with the highest possible networking performance. Whether you simply want an additional controllable display to provide further scenic or external view options, or wish to create a multi-screened panorama for your FSX or Prepar3D experience, Live View offers you the ideal hassle free user-friendly solution.

Your main 'flying' **OpusFSX** server is the machine through which you control the aircraft. The networked client **OpusFSX** systems are synchronised to the server through multiple ultra high-performance IPC links, the client systems are used primarily as view controllers. The networked systems allow you to create a multi-screened simulator system without placing the full workload

and burden on your main system.

From this set up it therefore follows that all in-cockpit or instrument panel views used to control the aircraft must be displayed on the main server. All other views (scenic or external) can be offloaded onto the client systems. You can create wide panoramic vistas this way, or additional external aircraft views, without draining the resources on your main system or degrading its performance.

On networked systems you must install FSX and the **OpusFSX** software on each of your client computer systems (laptops or PCs), along with all the scenery and airport addon packages. If you wish to display external aircraft views on the client computers you will also need to install all relevant aircraft addons. The **OpusFSX** software does not need to be licensed on the client systems, the purchased license is only required for your main 'flying' server system. You may either copy or install the **OpusFSX** software on each of your client systems, the **FSXCLIENT** program that you will run on the client computers does not check for any licensing information. It simply connects to and receives all necessary data from your main server system.

**Live View** allows you to easily create multi-screen networked displays for your FSX system. **Live Camera** provides a user-friendly interface for creating and controlling any number of virtual cockpit, 2D cockpit and external aircraft views on both standalone and networked systems. All camera views are created and controlled centrally from the server. Both features are described in more detail below.

The software includes device drivers for the **CPFlight MCP737/EFIS737 PRO/EL** panels and the driver interfaces for the **PMDG 737NGX** aircraft simulation.

**OpusFSX** is fully compatible with Windows (XP/ Vista/ 7/ 8) operating systems, both 32 and 64-bit versions. **OpusFSX** does not require the Windows Server operating system to create or maintain the local area network links, and different operating systems may be utilized throughout the local area network.



Figure 1 - Live View Multi-Screen Networked Displays with CPFlight MCP and EFIS Panels

The unlicensed version of the FSXSERVER program will operate in a **Demonstration Mode** for 15 minutes allowing you to evaluate the software and ensure full compatibility with your system. You can download the unlicensed version (**OpusFSX.msi**) of the product directly from our website.

# **System Requirements**

- Microsoft Flight Simulator X with SP2 or Acceleration Pack, or Lockheed Martin Prepar3D simulator.
- Windows 8/7/XP/ Vista (32 or 64-bit version) operating systems.
- Microsoft .NET Framework Version 2.
- FSUIPC4 (see below).
- 90 MB hard disk space.

You need .NET version 2, SimConnect and FSUIPC4 to be installed on your server system (and optional client systems) for OpusFSX to work.

# Microsoft.NET

You can check what versions of .NET you have installed by checking your c:\Windows\Microsoft.NET\Framework or Framework64 folders. You should see a v2.0.xxxxx folder in addition to the v4.0.xxxxx folder.

# **SimConnect**

In the case of SimConnect, first make sure you have installed FSX or P3D along with its SP2 or installed the FSX Acceleration version, SimConnect is usually installed automatically with it. If you have mislaid or corrupted your SimConnect then you can try re-installing it using the SimConnect.msi file within your c:\OpusFSX folder.

#### FSUIPC4

FSUIPC4 is not required on the FSXSERVER system unless you intend to run FSX at increased simulation rates or enable the CPFlight MCP737/EFIS device driver. FSUIPC4 is required on Live View clients that are used to display camera views.

You can download a free copy from <a href="http://www.schiratti.com/dowson.html">http://www.schiratti.com/dowson.html</a>

#### **Software Installation**

Please refer to our **OpusFSX\_Getting\_Started\_Single\_PC** document located in the **c:\OpusFSX** install folder, also available from our download page.

#### Setting up the Network

Please refer to our **OpusFSX\_Getting\_Started\_Networked\_PCs** documents located in the **c:\OpusFSX** install folder, also available from our download page.

#### **General Operation**

#### Standalone systems

If you have a standalone system then simply run the **FSXSERVER** program on your FSX/Prepar3D computer system, the program should be run after FSX/Prepar3D, you may configure your system to run the server program automatically each time you start FSX/Prepar3D (see Recommended Start Up Procedures in the **OpusFSX\_Getting\_Started\_Networked\_PCs.pdf** document).

#### Networked systems

The **OpusFSX** network is created by running the **FSXSERVER** program on the main (host) Flight Simulator PC, and running the **FSXCLIENT** program on each client PC. Each of your computers must be able to 'see' each other over the local area network (refer to our **OpusFSX\_Getting\_Started\_Networked\_PCs.pdf** document). The **OpusFSX** software will make efficient use of any speed of network, but the faster the better.

You must install FSX/Prepar3D and the **OpusFSX** software on each of your client computer systems (laptops or PCs), along with all the scenery and airport addon packages. If you wish to display external aircraft views on the client computers you will also need to install all relevant aircraft addons. The **OpusFSX** software does not need to be licensed on the client systems, the purchased license is only required for your main 'flying' server system. You may either copy or install the

**OpusFSX** software on each of your client systems, the **FSXCLIENT** program that you will run on the client computers does not check for any licensing information. It simply connects to and receives all necessary data from your main server system.

The recommended start up procedure for the FSXSERVER and FSXCLIENT programs are detailed in our **OpusFSX\_Getting\_Started\_Networked\_PCs.pdf** document. You can monitor the connection status on the main form displays of the FSXSERVER program and each of the FSXCLIENT programs. In each case, the Application Links will turn green when a connection is made. Note, the server will allocate two or three links for each 'Live View' client, one link for each of the possible 'Live View' Position & Attitude, Weather and Traffic connections.

To ensure optimum performance, the settings within FSX/Prepar3D on each client FSX system should be configured in accordance with the instructions in the **FSX Computer System Settings** section of our **OpusFSX\_Getting\_Started\_Single\_PC.pdf** document. Please adjust your settings before using **Live View**.

# Setting Up OpusFSX

Please refer to our **OpusFSX\_Getting\_Started\_Single\_PC.pdf** document located in the **OpusFSX** installation folder, also available from our download page.

# Starting the OpusFSX Software Automatically with FSX

Please refer to our **OpusFSX\_Getting\_Started\_Single\_PC.pdf** document located in the **OpusFSX** installation folder, also available from our download page.

# **Live Weather**

For a detailed description of **Live Weather** please refer to the **OpusFSX\_Live\_Weather.pdf** guide which can be found in the OpusFSX installation folder and on our website.

# General Dynamic Head Movements and Bump Aircraft Turbulence

To experience turbulence effects you must either,

- enable General DHM Options in the Server's Configure dialog or
- enable Live Camera and create and display a camera view.

The **General DHM Options** are not associated with Live Camera views but are configured in an identical fashion so please refer to the **OpusFSX\_Live\_Camera.pfd** guide for a description of the configuration options.

#### Live Camera

For a detailed description of **Live Camera** please refer to the **OpusFSX\_Live\_Camera.pfd** guide which can be found in the OpusFSX installation folder and on our website.

#### **Live Camera Control**

		Client App Link	s 2	No. Cor	nected	2	Spy	Config	jure	Save Win
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	OPUSW7F	RO			192.168	137.15	5			эру
3	Not Allocat	ed								Spy
4	Not Allocat	ed								Spy
	Last	Group	Next G	roup			Vie	w Device D	river Link	s
General	Overview									
1	2 3	4 5	6	7 8	9	10	11 12	13	14	15 16
17	18 19	20 21	22 2	3 24	25	26	27 28	29	30	31 32

Live Camera Control (LCC) is selected via the main server form's **Control** button and can be used to adjust the eye point for any VC, 2D, or Custom view types. The LCC is for making temporary adjustments to the eye point or simply having a wonder around the cockpit or aircraft.

If you suffer from the FSX anomaly (bug) that shifts the aircraft axis for certain aircraft (e.g. the new PMDG 777) at certain locations then try using the LCC to correct this before flight. First correct the anomaly by shifting the VC view using the LCC functions, then use the LCC Set Camera function which saves the view offset and associates it with the camera view.

LCC does not require Live Camera to be enabled.

The eye point can be adjusted either using a game controller (refer to the **Shortcuts** section for setup), the arrow keys in the small LCC dialog, or any assigned joystick button (including the POV or Hat Switches) or key sequences specified via the Shortcuts dialog (see Shortcuts section below).



When using Shortcut Controls in flight the movement will be either Continuous or Stepped according to what setting was last selected in the Live Camera Control dialog.

If Continuous movement is selected then to stop movement,

- use one of the red Stop buttons (or other direction arrows) in the LCC dialog or
- use the assigned Stop shortcut control key/button or
- you don't necessarily need a Stop button/key assignment just move back in the opposite direction.

Multiple arrow/key/button presses speed up or slow down the movement.

Do not use FSX controls (key commands or panning) to adjust the eye point whilst using LCC since OpusFSX will not be aware of these changes and the view will reset back to its original position.

There is an FSX limitation for pitch control. Unlike bank and yaw motions, the pitch angle can only be adjusted between +90 and -90 degrees up and down. The bank and yaw movements wrap around.

The **Set Camera** option temporarily saves the current eye point offsets and assigns them to the currently selected camera view so that you don't have to keep moving the eye point back after changing camera views. This is handy for changing seat position or general adjustments to overcome any changes to the usual reference axis for the aircraft within FSX. However it is a temporary set of offsets, only valid whilst the program is running or until you clear them using the Reset functions. If you want a permanent alteration to the camera view then use the Cameras dialog, edit and Save the camera view that way.

The **Reset All** option is used to reset all temporary offsets for the currently selected camera view.

Currently Live Camera Control is only available in the server program.

# Shortcut Controls

**Shortcut Controls** enable you to assign joystick button and keyboard keys to common actions or controls within the FSXSERVER program. All shortcut controls are defined using the Shortcut Controls dialog accessed via the FSXSERVER program's main form.

Offware       Operating Mode       UNLIMITED OPERATION       Assistant       Control       Open Willing         ient Application Links       Maps       Shortcuts       Cose Willing         1       Networked - Position Updates       CONNECTED to Client Application       Spy         2       Networked - General Updates       CONNECTED to Client Application       Spy         2       Networked - General Updates       CONNECTED to Client Application       Spy         3       Not Allocated       Spy       Spy         4       Not Allocated       Spy       Last Group       Next Group	D	Client App Links	2 No. Co	onnected 2	Spy	Configure	Save Win
Maps       Shortcuts       Close Will         1       Networked - Position Updates       CONNECTED to Client Application       Spy         2       Networked - General Updates       CONNECTED to Client Application       Spy         3       Not Allocated       Spy       192.168.137.155       Spy         4       Not Allocated       Spy       Last Group       Next Group       View Device Driver Links		Device Drivers	0 No. Co	onnected 0	Weather	Cameras	Restore W
lient Application Links	οπι	Nare Operating Mode	UNLIMITED (	OPERATION	Assistant	Control	Open Wir
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OPUSW7PRO     192.168.137.155     Spv       2     Networked - General Updates     CONNECTED to Client Application     Spv       3     Not Allocated     Spv       4     Not Allocated     Spv       Last Group     Next Group     Vew Device Driver Links	lient App	vlication Links					
OPUSW7PRO     192.168.137.155       2     Networked - General Updates     CONNECTED to Client Application       OPUSW7PRO     192.168.137.155       3     Not Allocated       4     Not Allocated       Last Group     Next Group       View Device Driver Links	1	Networked - Position Updates		CONNECTED	to Client Applicatio	n	Sov
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OPUSW7PRO     192.168.137.155       3     Not Allocated       4     Not Allocated       5     Spy       Last Group     Next Group       View Device Driver Links	2	Networked - General Updates		CONNECTED	to Client Applicatio	on	
A     Not Allocated     Spy     Last Group     Next Group     View Device Driver Links General Overview		OPUSW7PRO		192.168.137.1	55		spy
Last Group     Next Group     View Device Driver Links       General Overview	3	Not Allocated					Spy
Last Group         Next Group         View Device Driver Links           General Overview	4	Not Allocated					Spy
General Overview					1052		
		Last Group	Next Group	]	View	Device Driver Lin	iks
	Ganaral	Overview					

At present, you can assign buttons and keys to,

- update the weather
- toggle weather update ON/OFF
- toggle the Opus weather report window ON/OFF display
- cycle to the next weather report
- cycle backwards to the previous weather report
- toggle the large Weather Assistant Map on and off the screen
- toggle the first small Weather Map on and off the screen
- toggle the DHM and AHM effects ON/OFF
- toggle the ButtKicker effects ON/OFF
- toggle windowed views ON/OFF
- restore window sizes and positions
- cycle the camera views forward (next) between identical view modes (virtual cockpit, 2D cockpit, or External Aircraft camera views for the currently selected aircraft)
- cycle the camera views backward (last) between identical view modes (virtual cockpit, 2D cockpit, or External Aircraft camera views for the currently selected aircraft)

	Assigned Button	Assigned Key
Update Weather	No Button	U
Toggle Weather Update On/Off	No Button	shift+U
Toggle Weather Report On/Off	No Button	W
Cycle Next Weather Report	No Button	N
Cycle Last Weather Report	No Button	shift+N
Toggle LW Assistant On/Off	No Button	shift+W
Toggle Weather Map On/Off	No Button	ctrl+W
Toggle DHM/AHM On/Off	No Button	shift+D
Toggle ButtKicker On/Off	No Button	ctrl+B
oggle Windowed Views On/Off	No Button	Т
Restore Window Positions	No Button	shift+T
Cycle Next Camera View	No Button	V
Cycle Last Camera View	No Button	shift+V
Live Camera Control	Cance	el Save

Only relevant weather reports can be displayed using these controls. The Local Area weather report is always considered active and relevant. The Lower and Upper Atmosphere weather reports are only active if the GRIB data is enabled. The Destination and Alternate weather reports are only considered active if the relevant Destination or Alternate site has been specified in the Weather dialog.

All windowed views must be docked/undocked manually.

I have U (Update weather), shift-U (toggle weather update on/off), W (Weather report), N (cycle Next), and shift-N (cycle last), D (toggle DHM on/off), Q (toggle windowed views on/off), V (cycle next camera view) and shift-V (cycle last camera view) configured and operating on my system.

# Available Key Assignments

Each keyboard assignment may consist of a combination of up to two modifier keys (Alt, Ctrl, or Shift) with a normal keyboard key. The entry is not case sensitive. The numeric pad keys 0 to 9 can be used but they must be assigned with the Num Lock ON (for recognition), and used with the Num Lock OFF within FSX/P3D. This is a quirk of the simulator and not the OpusFSX software.

The Insert, Delete, Home, End, Page Up, Page Down, Left, Right, Up, and Down keys cannot be assigned.

It is up to you to make sure any assignments are not in use elsewhere on your system (FSX, FSUIPC etc). Certain FSX key sequences cannot be assigned, this will always be indicated within the main Spy window. Invalid key sequences will normally result in a non-fatal SimConnect error when they are registered. If your assigned key is working it will be displayed as an event in the Spy window when you press it (only after it has been assigned and specified to FSX via OpusFSX though).

# **Live Camera Control**

You can assign buttons and keys to move the eye point during flight within any VC, 2D, or Custom view.

The Ctrl+Shift keys work fine (e.g. Ctrl+Shift +U for Up, Ctrl+Shift +D for Down etc.).

## **POV and Hat Switches**

Joysticks or controllers with POV (Point Of View or 8-Position Hat switches) can be assigned to the LCC functions. Up to four POV or Hat switches are supported. Any POV or Hat switch assigned for use by the LCC should be removed from the FSX SETTINGS.

#### **Game Controllers**

Shutdown OpusFSX and FSX.

Plug in your controller, install the windows driver if necessary. Start up FSX and the OpusFSX FSXSERVER program.

Edit the FSX SETTINGs and Delete all button and axes assignments (automatically made by FSX) to your new PS3 controller, save the changes. The controller should be enabled but control nothing. Similarly for FSUIPC the controller should control nothing.

Open the Opus Spy window, you should see the controller listed there. Check your list of devices when you open Spy, it should match the list in FSX Settings.

Open the Shortcuts dialog and click on Live Camera Control (LCC).

Select the controller type from the Controller list box. Click on Left and then operate the left-hand X axis on the controller. Click on Up and operate the left-hand Y axis on the controller. Repeat for Forward and Yaw Left using the right-hand axes. The LCC left/right, up/down, forward/backward, pitch up/down, bank left/right, and yaw left/right movement controls are highlighted in yellow. The axes are read directly by the LCC software however, you can adjust the sensitivity (speed) for cockpit and external views, and dead zone (default 10%) for the axes in the LCC dialog. Now assign your buttons. I use the left-hand buttons for motion, the right-hand for stop and resets, then central buttons for changing mode and the PS centre button for the Set Camera LCC function.

Click Save a couple of times and you are done.

A **Reverse Axis** option is available for the LCC Shortcuts Left/Right, Up,Down, Forward/Backward, Pitch Up/Down, Bank Left/Right, and Yaw Left/Right controller axes. When ticked, the GamePad Controller axes will be reversed for the associated control movement.

In flight when you press one of these assigned keys/buttons the movement will be either Continuous or Stepped according to what setting is selected in the Live Camera Control dialog. If Continuous movement is selected then to stop movement use either one of the red Stop buttons in the Live Camera Control dialog or the assigned Stop shortcut control key/button.

Remember FSX only allows eye point (6DOF) control in VC, 2D, and the Opus 'custom' external aircraft view.

If the view drifts or stutters then calibrate your controller, alter the dead zone, usually between 0 to 15%.

	Assigned Button	Assigned Key		Assigned Button	Assigned Key	
Stop	Joystick 2 Btn 15	ctrl+shift+S	Left	Controller X Axis	ctrl+shift+L	📄 Reverse Axi
C+1 C+++++	Louis 1, 2 Dec 17	ctrl+shift+C	Right	Controller X Axis	ctrl+shift+R	
Set Camera	Joystick 2 Btn 17	Ctrl+shift+C	Up	Controller Y Axis	ctrl+shift+U	Reverse Axi
Reset All	Joystick 2 Btn 13	ctrl+shift+V	Down	Controller Y Axis	ctrl+shift+D	
Reset Position	Joystick 2 Btn 16	No Key	Forward	Controller Rz Axis	ctrl+shift+F	📄 Reverse Axi
Reset Rotation	Joystick 2 Btn 14	No Key	Backward	Controller Rz Axis	ctrl+shift+B	I.
Speed Up	No Button	No Key	Pitch Up	Joystick 2 Btn 5	No Key	Reverse Axi
Slow Down	No Button	No Key	Pitch Down	Joystick 2 Btn 7	No Key	
Continuous	Joystick 2 Btn 4	No Key	Bank Left	Joystick 2 Btn 8	No Key	Reverse Axi
Stepped	Joystick 2 Btn 1	No Key	Bank Right	Joystick 2 Btn 6	No Key	
			Yaw Left	Controller Z Axis	No Key	Reverse Axi
Controller	PLAYSTATION(R) 3 Cor	itroller 🗸	Yaw Right	Controllier Z Axis	No Key	1
Sanativity	Cockpit 5 💠 I	External 5 🚖				

The shortcut controls are backed up into a date stamped file (e.g. FSXSERVER\_30082013.CMD) each time the shortcut controls are saved via the Shortcuts dialog's OK button. To revert to a backup delete or rename FSXSERVER.CMD and rename the backup file to FSXSERVER.CMD.

# **Live View**

**Live View** is a standard feature within the **OpusFSX** Flight Simulator Interface; this feature provides a multi-screen networked display option for FSX by synchronizing multiple networked PCs running copies of either the Microsoft FSX or Lockheed Martin Prepar3D simulator.

With **Live View**, Opus Software have used their 25 year experience of developing highperformance real-time networked telemetry and data acquisition systems, to provide the networking software you need to create a multi-screened experience for FSX. No matter what complexity of system you intend to create, Live View will provide the ideal solution.

**Live View** is ideally suited to home cockpit builders and general enthusiasts alike. The **Live Camera** control feature included within **OpusFSX** also simplifies the Live View set up, allowing you to customize and automate the Live View displays on each of your client PCs (see below for details).

The **Live View** multi-screen networked display feature allows FSX to be synchronized across multiple networked computer systems, including laptops. Live View can be used to create a variety of panoramic views or to simply provide additional fixed spot plane, fly-by, tower, or map views on separate 'client' computers.

A networked **Live View** system is created by activating the **FSXSERVER** program on your main 'flying' computer, and running the **FSXCLIENT** program on each of your connecting client systems (PCs or laptops). The programs can be activated in any order, with or without FSX, which greatly simplifies the set up of your system.

The configuration of the **Live View** system is simple to the extreme, just tell the main 'flying' server how many Live View clients you wish to support, and configure the server's computer name or IP address into each of the client systems, and away you go. You can sit back and watch your client systems connect and start communicating with the server. **Spy** buttons help you monitor the activity over all the networked links, or monitor the overall activity and operation of the **FSXSERVER** and **FSXCLIENT** programs.

The **OpusFSX Getting Started Networked PCs** guide explains how to set up the OpusFSX network and also includes some Live View FAQs.

The set up and configuration of your system is further simplified using the in-built Live Camera interface.



Figure 2 - Live View Multi-Screen Display

The main features of Live View are,

- Live View synchronizes the aircraft's current position, attitude, landing gear, wheel movement, lighting, ailerons, elevator, rudder, flaps, spoilers (speed brakes), engine throttles, reversers and parking brake.
- Live View synchronizes the simulator's date and time, with either weather themes or full METAR weather updates for the aircraft's surrounding area.
- Live View employs and optimizes multiple dedicated high-performance network links to provide the highest level of performance and the smoothest possible operation.
- Live View requires minimal set up and configuration to get up and running.
- Live View on the demo version of **OpusFSX** will run for 15 minutes allowing you to evaluate the software and ensure full compatibility with your system.

In order to achieve the highest possible performance and smoothest operation the Flight Simulator settings should be adjusted on each **Live View** client computer. Please refer to the section called **FSX Computer Systems** in the **OpusFSX\_Getting\_Started\_Networked\_PCs** guide for details.

N.B. In order to see the full synchronized effects of Live View users must save a default flight with all engines running on each client system to ensure the aircraft is powered up correctly and ready to fly.

To ensure consistent views you should also have the same scenery, textures, and airport Add-ons installed on each FSX system.

# Live View Weather Synchronization

The current version of the software supports synchronization of either Weather Themes or the surrounding area's METAR data.

#### **Demonstration Mode**

The unlicensed (freeware) version of the FSXSERVER program can operate in a demonstration mode for 15 **minutes** to allow the user to evaluate the software and ensure compatibility with their system. The demo mode is activated as soon as one of the licensed options (e.g. Live View or Live Camera) is enabled via the 'Configuration' dialog. At the end of the evaluation period all FSXCLIENT programs and network links will be aborted and the configured payware options will be reset. A minimum of a **2 minute interval** is required between demonstration runs. Demonstration mode also restricts the LWE to 160km (100 miles) in all directions and weather updating only whilst your aircraft is on the ground. You can download the unlicensed version of the product directly from the **OpusFSX** website.

#### TrackIR

Please refer to our **OpusFSX\_Getting\_Started\_Single\_PC.pdf** document located in the **OpusFSX** installation folder, also available from our download page.

To set up TrackIR cockpit limits refer to the **OpusFSX\_Live\_Camera.pdf** document.

# GPS Output (including SkyDemon)

# Using The OpusFSX GPS Output Option

#### Step One:

Download and install the **HW Group Virtual Serial Port** - **HW VSP3** software from the HW Group website <u>www.HW-group.com</u>.

Create a desktop icon for the HW Virtual Serial Port.

Run the VSP3 program, open the Settings tab and turn OFF all options except for,

TCP Server Mode

Connect to Device even if Virtual COM is closed

Save your settings to the INI file using the button.

Open the [v]Virtual Serial Port tab and specify your general parameters for the VSP. I have mine set up as follows,

Port Name: COM7 IP Address: 127.1.1.0 Port: 23

Click on the **Create COM** button.

The VSP Status will change to Creating.. then finally Created. The LAN Status will then go to Listen.

# Step Two:

In the Opus FSXSERVER program's form click on the **View Device Driver Links** button to display the Device Driver Links on the form.

Now Open the FSXSERVER program's **Configure** dialog, tick the **Enable GPS Output** option and specify the configured IP address (e.g. 127.1.1.0) and Port number (e.g. 23) in the fields provided. Click **OK** to close the Configure dialog.

A Device Driver Link should become coloured showing the GPS Simulation Networked TCP/IP Socket link, this link will turn green when it connects to the VSP.

The VSP LAN Status should now change to **Connected**.

# Step Three:

After running and loading the flight in FSX or Prepar3D you are now ready to run the SkyDemon (or other 3rd party) package.

You will now have to set up your SkyDemon package.

Setup - > Device Connectivity Options ...

I have a Garmin handheld device

Port: COM7

ОК

Setup -> GPS Navigation Options ... General tab, GPS Hardware, Port: COM7 Baud: 9600 (I have my COM7 mode set to 9600,N,8,1) OK

You are now ready to click on the **Start GPS** option in the top RH corner of the SkyDemon screen.

#### ButtKicker

Please refer to our **OpusFSX\_ButtKicker.pdf** document located in the **OpusFSX** installation folder, also available from our downloads page.

#### **Device Drivers**

The device drivers provide an interface to the popular panels and Addon hardware for FSX. Each device driver will interface to the relevant aircraft simulation thereby eliminating the need to install separate drivers dedicated to each aircraft.





Figure 3 - Drivers Included for CPFlight MCP737 and EFIS737 Panels

All device drivers are aware of any new aircraft selections even if the aircraft is changed in midflight. The appropriate interface (SimConnect, FSUIPC4 or the manufacturer's SDK) will be initialised and employed automatically whenever necessary.

#### CPFlight MCP737/EFIS737 PRO/EL Panel Driver

0 Number of Client Computers	Live Vew Test
Enable Live Traffic Updates	12 🚔 Live View Scan Rate (ma
💟 Enable Live Weather Engine	
V Enable Live Weather Maps	General DHM Options
V Enable Live Camera	[☑] Enable DHM - VC Views
Play Sound on View Change	DHM - VC Views
V Enable Live Camera Control	Enable DHM - 2D Views
Enable TrackIR Device	DHM - 2D Views
🔲 Run TrackIR High Priority	Enable DHM - Custom Views
18 💠 Scan Speed (ms)	DHM - Custom Views
1.00 + XYZ Scaling	· · · · · · · · · · · · · · · · · · ·
1.00 + PBY Scaling	📝 Enable ButtKicker Audio Contro
	ButtKicker Devices
CPRight MCP737/EFIS Device	Enable GPS Output
4 COM Port	
4 COMPOR	IP 127.1.1.0 Port 23
elect Simulator Type and Installation Folder	
Microsoft FSX	Browse
\FSX	N
1 I BLOOD 52	[
) Lockheed Martin Prepar3D	Browse
E\Prepar3D v2	

Simply enable the CPFlight driver in the Server Configuration dialog and set the COM port as appropriate.

#### **TOGA button**

The TOGA button has been added to the CPFlight MCP737/EFIS737 PRO/EL panel driver on auxiliary input K121.

# A/T Arm switch

The A/T Arm switch on the CPFlight MCP737 is automatically disengaged 2 to 3 seconds after landing.

#### Error Message - Unable to Open COMn serial port !

Have you configured the wrong serial port number or forgot to connect power to the panel?

# If CPFlight MCP controls have stopped working with PMDG 737 NGX

There is a problem with PMDG's FSXPMDG.EXE software when you open an FSX dialog. If you have paused the sim then you must unpause it before any MCP changes will be effective.

Also if you stop OpusFSX and restart it, then after the panel is initialised you must make a change on the sim's MCP to kick the PMDG connection back into life.

# **Future Development Plans**

The Live Traffic option is planned to be a standard feature within OpusFSX; this feature will upgrade the Live View software by providing the means to synchronize the flight simulator's AI traffic. The Live Traffic option will be available as a free upgrade to all licensed users.

Further upgrades and enhancements are also planned, see our website for details. All upgrades will be freely available from our web site. The OpusFSX\_Release\_Notes.txt file in the OpusFSX folder details all upgrades and releases.

If you have any comments or requests for added features we will be pleased to hear from you. All the above planned features will be included as standard within the licensed version of **OpusFSX**. These features will all be made available as free upgrades to the payware product. The 15 minute demonstration mode will also be available for each of the payware features allowing users to test the suitability of the product for their own use.

# **Contact Details**

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# **FAQ and Troubleshooting**

Please refer to our website FAQ page, OpusFSX\_Getting\_Started\_Single\_PC, OpusFSX\_Getting\_Started\_Networked\_PCs, OpusFSX\_Live\_Weather and OpusFSX\_Live\_Camera guides.