FSUIPC voor MSFS een handige applikatie

Harm Meertens

LaMaMa 30 september 2024





harm.meertens@home.nl

Indeling presentatie

□ Inleiding

Controls en Controllers in MSFS

□ Knoppen, schakelaars, rotaries en assen

UWaarom FSUIPC gebruiken

Acties koppelen aan controllers m.b.v. FSUIPC

Praktijkvoorbeelden

Minimale configuratie FSX en MSFS



laptop of desktop





toetsenbord en muis

Controls en Controllers

MSFS Control	Action	Command	Controller /Controlling Device
Autopilot Reference Altitude bijvoorbeeld 1500 ft	Increase bv 1000 ft	CTRL + PAGE UP	keyboard
	Decrease	CTRL + PAGE DOWN	keyboard
Autopilot Altitude hold	Toggle		keyboard
Autopilot Master	Toggle		keyboard

De verbinding tussen Control en Controller wordt wel Binding genoemd

Commands via Keryboard

MSFS Action

Foggle Yaw Damper	CTRL + D
Foggle Flight Director	CTRL + F
Foggle Avionics Master	PAGE UP
Foggle Autopilot Wing Leveler	CTRL + V
Foggle Autopilot Master	Z
Foggle Autopilot Mach Hold	CTRL + M
Foggle Autopilot Localizer Hold	CTRL + O
Foggle Autopilot Altitude Hold	CTRL + T
Foggle Autopilot Approach Hold	CTRL + A
Increase Autopilot Reference VS	CTRL + HOME
Increase Autopilot Reference Altitude	CTRL + PAGE U
Increase Autopilot Reference Airspeed	SHIFT + CTRL -
Increase Autopilot N1 Reference	CTRL + HOME

KEYBOARD COMMAND

Decrease Autopilot Reference VS	CTRL + END
Decrease Autopilot Reference Altitude	CTRL + PAGE DOWN
Decrease Autopilot Reference Airspeed	SHIFT + CTRL + DEL
Decrease Autopilot N1 Reference	CTRL + END
Autopilot ON	ALT + Z
Autopilot OFF	SHIFT + ALT + Z
Autopilot NAV1 Hold	CTRL + N
Autopilot N1 Hold	CTRL + S
Autopilot Airspeed Hold	ALT + R
Auto Throttle TO/GA	SHIFT + CTRL + G
Arm Auto Throttle	SHIFT + R
	Decrease Autopilot Reference VS Decrease Autopilot Reference Altitude Decrease Autopilot Reference Airspeed Decrease Autopilot N1 Reference Autopilot ON Autopilot OFF Autopilot NAV1 Hold Autopilot N1 Hold Autopilot Airspeed Hold Auto Throttle TO/GA Arm Auto Throttle

Totaal zijn er 395 MSFS Controls

MSFS Assignments Dialogue or Profile Editing



CONTROLS OPTIONS

KEYBOARD		_	MOUSE		
DEFAULT		<	DEFAULT		
SENSITIVITY	✓ CAMER/	A			
SEARCH	✓ MENU				
SEARCH BY NAME	∽ VR				
SEARCH BY INPUT	✓ RADIO				
	✓ MISCELLANEOUS				
	✓ DEVELOPER MODE				
FILTER	✓ INSTRUMENTS AND SYSTEMS				
ALL 🔀	✓ FLIGHT	CONTROL	SURFACES		
EXPAND / COLLAPSE ALL	✓ LIGHTS				
	✓ BRAKES	5			
	~ AUTOPILOT				
	✓ POWER	MANAGE	MENT		
	✓ LANDIN	G GEAR			

✓ MULTIPLAYER

Naam van de Controller

Naam van het Profiel

14 categorieën

MSFS Assignments Dialogue or Profile Editing

> CONTROLS OPTIONS						
KEYBOARD		MOUSE	BU0836X INTER	FACE	BU0836X INTERFACE	
DEFAULT		DEFAULT	EMPTY		ЕМРТҮ	
SENSITIVITY	^ CAMERA					
SEARCH	 COCKPIT C/ 	AMERA			Toets	
SEARCH BY NAME	ZOOM COCK	PIT VIEW	=		of	
SEARCH BY INPUT	VFR PILOT V	IEW SAVE	CTRL + F10		combinatie van toetsen	
Select an input	VFR PILOT V	IEW RESET	SHIFT + F10			
	UNZOOM CO	CKPIT VIEW				
FILTER	TRANSLATE	COCKPIT VIEW RIGHT	RIGHT			
ASSIGNED	TRANSLATE	COCKPIT VIEW LEFT	LEFT			
EXPAND / COLLAPSE ALL	TRANSLATE	COCKPIT VIEW FORWARD	ALT + UP			
	TRANSLATE	COCKPIT VIEW BACKWARD	ALT + DOWN		EEE	
	TOGGLE VFR	COCKPIT MODE	F10			
	TOGGLE SM	ART CAMERA	S			
	TOGGLE LAN	IDING COCKPIT MODE	F11			
			F9			

Control action

Binding

Controler

CONTROLS OPTIONS						
KEYBOARD	MOUSE		BU0836X INTE	RFACE	BU0836X INTERFACE	
DEFAULT	default		EMPTY		EMPTY	
SENSITIVITY	^ CAMERA					
SEARCH	~ COCKPIT CAMERA					
SEARCH BY NAME	ZOOM COCKPIT VIEW		MOUSE WHEEL UP			
SEARCH BY INPUT	UNZOOM COCKPIT VIEW		MOUSE WHEEL DOWN			
Select an input	TOGGLE COCKPIT VIEW FREELOOK (HO	DLD)	0			
	TOGGLE COCKPIT FREELOOK		MID-CLICK			
FILTER	TOGGLE COCKPIT FOCUS MODE					
ASSIGNED >	COCKPIT LOOK UP (LOCKABLE)		AXIS Y-			
EXPAND / COLLAPSE ALL	COCKPIT LOOK RIGHT (LOCKABLE)		AXIS X+			
Drofilo Editor	COCKPIT LOOK LEFT (LOCKABLE)	/	AXIS X-			
	COCKPIT LOOK DOWN (LOCKABLE)		AXIS Y+			
	EXTERNAL CAMERA					
	INSTRUMENT VIEWS					
	VR - COCKPIT FOCUS		•			

Control action

Binding

Controler

> CONTROLS OPTIONS					
KEYBOARD		MOUSE	BU0836X INTE	RFACE	BU0836X INTERFACE
DEFAULT		DEFAULT	> EMPTY		EMPTY 🗾
SENSITIVITY	^ CAMERA				DESCRIPTION
SEARCH	▲ COCKPIT CA	MERA			
SEARCH BY NAME	ZOOM COCKI	PIT VIEW	MOUSE WHEEL UP		
SEARCH BY INPLIT	UNZOOM CO		MOUSE WHEEL DOWN		
Select an input	TOGGLE COC	KPIT VIEW FREELOOK (HOLD)			
	TOGGLE COC	KPIT FREELOOK	MID-CLICK		
FILTER	TOGGLE COC	KPIT FOCUS MODE			
ASSIGNED >	COCKPIT LOC	OK UP (LOCKABLE)	AXIS Y-		
EXPAND / COLLAPSE ALL	COCKPIT LOC	OK RIGHT (LOCKABLE)	AXIS X+		
100	COCKPIT LOC	OK LEFT (LOCKABLE)	AXIS X-		
Profile Editor	COCKPIT LOC	OK DOWN (LOCKABLE)	AXIS Y+		
	✓ EXTERNAL C	AMERA			23
	✓ INSTRUMEN	T VIEWS			
	VR - COCKPIT F	ocus			

The location for MSFS controller profiles

C:\Users\Gebruiker\AppData\Local\Packages\Microsoft.FlightSimulator_8wekyb3d8bbwe\SystemAppData\wgs

CONTROLS OPTIONS



Control action

Binding

Controler

Controllers



In Windows: Human Interface Device (HID)

In Windows Control Panel: weergave knoppen en assen en calibratie assen

Knoppen Schakelaars en Rotaries





Knoppen Schakelaars en Rotaries



WIN 10 USB Game Controlers

Staat geheel los van MSFS

Assen



Assen



Staat geheel los van MSFS



Knoppen Schakelaars Rotaries en potentiometers

Bodnar HID



Bravo Throttle Quadrant



Hall effect sensors

Alpha Flight Controls XPC comes with new high-end 12-bit Hall Effect Sensors. Honeycomb mentions, in the product specifications, that these sensors come with 400% increased resolution.



CONTROLS OPTIONS

	BU0836X INTERFACE BU0836X INTERFACE BODNAR5 EMPTY BODNAR4 EMPTY		BU0836X INTERFACE	BF	AVO THROTTLE QUAD	RANT	BUTTON BOX INTERFACE
			<	DEFAULT		BUTTONBOX1 EMPTY	
SEN	ISITIVITY	∧ INSTRU	MENTS AND SYSTEMS				DESCRIPTION
SEA		^ FLIGI SELE	HT INSTRUMENTS CT VSI BUG	G	OYSTICK BUTTON 20		
SE/	ARCH BY INPUT	SELE	CT HEADING BUG CT ALTITUDE BUG		OYSTICK BUTTON 19		
Sel FILT	ect an input	SELE	CT AIRSPEED BUG		OYSTICK BUTTON 17		
<	ASSIGNED	AVIO	NICS MASTER 1 OFF		OYSTICK BUTTON 47		
EXP	PAND / COLLAPSE ALL	 ANTI FLIGHT CONT SECC LIGHTS 	ICE CONTROL SURFACES TROL TRIMMING SURFACES ONDARY CONTROL SURFACES				
		- AUTOP	ILOT				\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

Control action

Binding

Controler

CONTROLS OPTIONS

1	BU0836X INTERFACE	BU0836X INTERFACE	В	RAVO THROTTLE QUADR	ANT	BUTTON BOX INTERFACE
	BODNAR5 EMPTY	BODNAR4 EMPTY	<	DEFAULT	>	BUTTONBOX1 EMPTY
SEN		ΓΟΡΙΙ.ΟΤ				DESCRIPTION
SEA	ARCH TOO	GGLE AUTOPILOT VS HOLD	[JOYSTICK BUTTON 6		
SE	EARCH BY NAME	GGLE AUTOPILOT MASTER		JOYSTICK BUTTON 8		
SE		GGLE AUTOPILOT HEADING HOLD		JOYSTICK BUTTON 1		
Se	elect an input 🛛 💙 TOO	GGLE AUTOPILOT FLIGHT LEVEL CHANGE		JOYSTICK BUTTON 7		
FILT	TER TOO	GGLE AUTOPILOT BACKCOURSE HOLD		JOYSTICK BUTTON 4		a 0030560 0
<	ASSIGNED > TOO	GGLE AUTOPILOT APPROACH HOLD		JOYSTICK BUTTON 3		8
EVI		GGLE AUTOPILOT ALTITUDE HOLD		JOYSTICK BUTTON 5		0
LAT	SET	AUTOPILOT AIRSPEED HOLD		JOYSTICK BUTTON 17		
	TUA	TOPILOT NAV1 HOLD		JOYSTICK BUTTON 2		
	AUT	TO THROTTLE TO GA		JOYSTICK BUTTON 29		
	- POV	WER MANAGEMENT				<u> </u>
	~ LAN	DING GEAR				³⁹ ³⁹ ³⁰ ³⁰ ³⁰ ³⁰ ³⁰ ³⁰ ³⁰ ³⁰

Control action

Binding

Controler

Flight Controls



Pause / Menu / Sim Rate

Toggle Pause (Main Menu <> Fly)
 Close Menu (hides without closing)
 Toggle Cursor & Menu
 R Pause Set On [Cstm Cmd]
 Pause Release [Cstm Cmd Unmap B]
 Sim Rate Increase / Decrease [Cstm Cm



Brakes & Lights

😣 Brakes

- 中 Brakes Parking Toggle
- 中 Landing Gear Toggle
- 🕂 Toggle Landing Lights / Nav Lights [Cstm Cmd
- Toggle Cabin Lights / Flashlight [Cstm Cmd]

Throttle

- Y Autopilot Master Toggle
- **POWER:** Mixture Decrease / Increase (small)
- 8 POWER: Propeller Pitch Lo / High
- or 🧧 POWER: Throttle Decrease / Increase
 - **POWER:** Throttle Cut
- 📱 中 Engine Auto Stop [Cstm Cmd]
- 📧 🜓 Engine Auto Start [Cstm Cmd]

4 Controlers





- Toetsenbord
- Muis
- Alpha Flight Controls
- Bravo Throttle Quadrant
- ASOBE vliegtuigen met MSFS Controls
- MSFS Profiles





Controllers en Profiles

Aircraft	Controls	Controllers	Profile	
ASOBE	MSFS standard	Keyboard	MSFS default	
		Mouse	MSFS default	
		Alpha	MSFS aircraft	HonyComb
		Bravo	MSFS aircraft	Honycomb
PMDG	MSFS standard	Keyboard	MSFS default	
	FSUIPC	Mouse	MSFS default	
	MobiFlight	Alpha	FSUIPC aircraft	Honycomb
		Bravo		Honycomb
		MCP Combo		VRInsight
		RP8,		GoFlight
		ButtonBox		Bodnar

FSUIPC7

Flight Simulator Universal Inter-Process Communication by John Dowson, © October 2022

An application interfacing module for MSFS 2020

Support Forum: John Dowson's FSUIPC7 Support Forum





For Versions 7.3.13 and later of FSUIPC

Note: All our Windows based software is always available in the latest versions from from the **Download Links** subforum in our Support Forum (link above), and normally also from

http://www.fsuipc.com

What is FSUIPC?

What you get if you don't pay:

• The ability to run all FSUIPC-dependent application programs.

What you get if you pay:

- Facilities for joystick calibration, assignment capabilities, and button programming, all with aircraftspecific assignment capabilities so that you can do different things with the same controls on different aircraft.
- Key press programming facilities, also aircraft-specific if desired.
- A few frills like facilities to load Flights or Plans from *any* folder in reach of Explorer, keeping the MSFS time in sync with the system clock, pausing automatically after the flight is restored following a crash, extending battery life, throttle syncing, allowing intervening actions during pushback without losing direction selection, and others.
- AutoSave options—to save a Flight regularly, as a background task so you can resume from a few minutes before in the event of a crash or a need to reproduce some problem.
- GPSout facilities: optional output of NMEA or AV400 sentences to mapping programs either via a serial port (COM) connection, or via WideFS.
- Full adaptability of Macro files and Lua plug-ins. Lua is a very capable scripting language. Many things can be done very efficiently with Macros and Plug-ins which would otherwise necessitate full external application programs to achieve.
- Support (via the Support Forum) for any queries or problems arising from the use of FSUIPC, or identifiable as FSUIPC even when using an application.

Description

FSUIPC7: Flight Simulator Universal Inter-Process Communication FSPC

FSUIPC7 is a utility program for MSFS which provides an interface for other programs to read and write all sorts of data relating to the simulation, and in many ways even to control the actual process itself.







FSPC7 File Menu

Ê7	FSUIPC7: Simulator is available: Cor	nected	-		×
File	MSFS Assignments Options	Log Add-ons			Help
	Load Flight Load Flight & Data Load Plan Open Installation Folder Reload Presets	17 s & 16557 pre	esets a	vailabl	e
	Close				\vee
	Exit				

FSPC7 MSFS Menu



FSPC7 Assignments Menu



FSPC7 Options Menu



FSPC7 Log Menu



```
FY FSUIPC7 Console Log
    1281 -----
    1546 N.B. "DirectAxesToCalibs" is enabled!
    1546 LogOptions=40000000 000000F
    1546 Auto-started via EXE.xml with Detect oConnectDelavAuto=30, InitialStallTime=15
    1562 Using "C:\FSUIPC7\GFDEV64.DLL", version 2.2.8.0
    1562 GoFlight GFP8 detected: 1 device
    1562 GoFlight GFT8 detected: 1 device
    1562 GoFlight GF166 detected: 1 device
    1562 GoFlight GFRP48 detected: 2 devices
    3203 Simulator detected
    3203 Run: "C:\Program Files (x86)\Navigraph\Simlink\NavigraphSimlink.exe"
    3953 FSUIPC couldn't run: "E:\Program Files (x86)\JoyToKey\JoyToKey.exe" in folder "E:" [Error=740]
   33953 Trying to connect...
   34140 SimConnect Open succeeded
   34156 Running in "KittyHawk", Version: 11.0.282174.999 (SimConnect: 11.0.62651.3)
   34156 MSFS version = 11.0.282174.999
   34156 Generating controls file list: 'C:\Users\Gebruiker\DropboxApart\Documents\FSUIPC7\Controls List for MSFS
Build 999.txt'
```

FSPC7 Add-ons Menu



MSFS Controls

Commands via Keryboard MSFS Action	KEYBOARD COMMAND		Select for FS control Include Project Magenta Select for Preset Select for Input Event
Toggle Yaw Damper	CTRL + D	Decrease Autopilot Reference VS	CTRL + END
Toggle Flight Director	CTRL + F	Decrease Autopilot Reference Altitude	CTRL + PAGE DOWN
Toggle Avionics Master	PAGE UP	Decrease Autopilot Reference Airspeed	SHIFT + CTRL + DEL
Toggle Autopilot Wing Leveler	CTRL + V	Decrease Autopilot N1 Reference	CTRL + END
Toggle Autopilot Master	Z	Autopilot ON	ALT + Z
Toggle Autopilot Mach Hold	CTRL + M	Autopilot OFF	SHIFT + ALT + Z
Toggle Autopilot Localizer Hold	CTRL + O	Autopilot NAV1 Hold	CTRL + N
Toggle Autopilot Altitude Hold	CTRL + T	Autopilot N1 Hold	CTRL + S
Toggle Autopilot Approach Hold	CTRL + A	Autopilot Airspeed Hold	ALT + R
Increase Autopilot Reference VS	CTRL + HOME	Auto Throttle TO/GA	SHIFT + CTRL + G
Increase Autopilot Reference Altitude	CTRL + PAGE UP	Arm Auto Throttle	SHIFT + R
Increase Autopilot Reference Airspeed	SHIFT + CTRL + INSERT		
Increase Autopilot N1 Reference	CTRL + HOME	Totaal ziin er momente	el 395 MSFS Controls

NUMERIC LIST OF CURRENT MSFS CONTROLS

65537 DEMO_STOP 65538 SELECT 1 65539 SELECT 2 65540 SELECT 3 65541 SELECT 4 65543 DEMO_RECORD_1_SEC 65544 DEMO_RECORD_5_SEC 65548 MINUS 65549 PLUS 65550 ZOOM 1X 65552 SOUND TOGGLE 65554 ENGINE 65555 SIM_RATE 65556 XPNDR 65557 SLEW TOGGLE 65558 EGT 65559 SMOKE_TOGGLE 65560 STROBES_TOGGLE 65561 PAUSE TOGGLE 65562 REFRESH SCENERY 65564 ATC 65566 ADF

Select for FS control Include Project Magenta Select for Preset Select for Input Event

Totaal zijn er momenteel 395 MSFS Controls

Additional "MFS" Controls added by FSUIPC

All the true MFS controls are represented by numbers above 65536.

FSUIPC has augmented these with its own set, programmable for both Button and Keys, and these utilise lower numbers, currently in the 1000–3000 range. Examples of these are:

1016 Ap Alt Var Dec Fast (-1000)1017 Ap Alt Var Inc Fast (+1000) 1018 Ap Mach Var Dec Fast (-.10) 1019 Ap Mach Var Inc Fast (+.10) 1020 Ap Spd Var Dec Fast (-10) 1021 Ap Spd Var Inc Fast (+10) 1022 Ap Vs Var Dec Fast (-1000) 1023 Ap Vs Var Inc Fast (+1000) 1024 Heading Bug Dec Fast (-10) 1025 Heading Bug Inc Fast (+10)

Select for FS control Include Project Magenta Select for Preset Select for Input Event

Totaal zijn er momenteel meer dan 150 FSUIPC Controls

Additional "MSFS" Controls added by MobiFlight



Totaal zijn er momenteel meer dan 16557 aanvullende Presets

Select for FS control





Textron Aviation Kenmore

Cruise Speed	230 Km/h
Max Altitude	14 Ft
Endurance	5 Hr
Range	1 km
	Cruise Speed Max Altitude Endurance Range

Cessna 172 Skyhawk (G1000)

	D PH-KEC
STAN STAN	2
VIE .	1000
	S
	10
KLM Flight Acade	mv
⑦ Cruise Speed	352 Km/h
Max Altitude	18 Ft
O Endurance	9 Hr
🙃 Range	2 km
COM	/S
	14





DC6-B



737-700





Cessna Citation



Max Altitude 15 Ft **O** Endurance 3 Hr · · Range 732 km

> DHC-2 **Beaver Amph**

Verschillende typen vliegtuigen

MSFS profiles: in Controls handmatig per vliegtuig selecteren voor elke Controler FSPC profiles: automatische selectie bij kiezen van vliegtuig





Profile Cessna 172 G1000







 Cows KLM Flight Academy
 Cruise Speed 352 Km/h
 Max Altitude 18 Ft
 Endurance 9 Hr
 Range 2 km

> COWS DA42 VI

Profile Diamond DA42







 Douglas

 KLM Royal Dutch Airlines (PH-D)

\bigcirc	Cruise Speed	478 Km/h
\sim	Max Altitude	25 Ft
Ò	Endurance	13 Hr
27%	Range	7 km

Douglas DC6-B PMDG DC6 4 motorig propeller vliegtuig

Profile DC6



Profile DC6



PMDG DC9

- Ramp Manager
- Fuel/Load Manager
- Maintenance Manager
- **Engine Stress Visualiser**
- **Options**



Profile Cessna Citation









Uniforme benadering van controls





Verschillende fabrikanten

- Saitek
- VFR Insight

.

• GoFlight



Universele benadering

Geen verschillende applikatie/driver programma's





Keeping track of multiple control devices

Pmdg 737



VRinzight MCP combo papel



MobiFlight Presets

^

V

TFDi

WB Sim

Working Title





Select

Cancel

Х

MobiFlight Presets





2 voorbeelden Non Profile Specific

Lctl+9

Button & Switch Assignments	3	× 🖌
Set up or review the ad	Select for FS control 9 Btn# Select for Proset Select for Input Event	Lua IpcVrMouse
Press the key(s) to be sent when you press this button Set Clear	Control sent when button pressed	Button & Switch Assignments
 Key press not to be held Key press to repeat while held Press the key(s) to be sent when you release this button Set 	Parameter Clear	Set up of review the action you want for this button Clear Select for FS control
		Key press not to be held Parameter 0 Key press to repeat while held Control to repeat while held 0 Press the key(s) to be sent when you release this button Set Clear Set Clear Clear Parameter O O
		• OK Cancel

2 voorbeelden PMDG B737



voorbeeld PMDG DC6

G1000 Mfd Flightplan Button

Button & Switch Assignments - PMDG DC6 X Choose the action for this button: either keypress or FS control? Clear Select for FS control 🗸 Include Project Magenta 109 3 Btn# Joy# Select for key press Select for Preset ProfileSpecific ~ Reload all buttons Select for Input Event Press the key(s) to be Control sent when button pressed sent when you press this button Set Clear G Limiter On G Limiter Set Key press not to be held G Limiter Toggle G1000 Mfd Clear Button G1000 Mfd Cursor Button Key press to repeat while held G1000 Mfd Directto Button G1000 Mfd Enter Button Press the key(s) to be G1000 Mfd Flightplan Button sent when you release G1000 Mfd Group Knob Dec this button G1000 Mfd Group Knob Inc Clear Set G1000 Mfd Menu Button G1000 Mfd Page Knob Dec G1000 Mfd Page Knob Inc G1000 Mfd Procedure Button G1000 Mfd Softkey1 G1000 Mfd Softkey 10 G1000 Mfd Softkey11 G1000 Mfd Softkey 12 G1000 Mfd Softkey2 G1000 Mfd Softkey3 G1000 Mfd Softkey4 G1000 Mfd Softkey5 G1000 Mfd Softkey6 G1000 Mfd Softkey7 G1000 Mfd Softkey8 G1000 Mfd Softkey9 G1000 Mfd Zoomin Button G1000 Mfd Zoomout Button G1000 Pfd Clear Button G1000 Pfd Cursor Button

2 voorbeelden PMDG DC6



MobiFlight Presets



voorbeeld PMDG DC6

MobiFlight Presets



	Set up or rev	iew the actio	on you wa	ant for this but	ton	Clear
Select for key press Reload all buttons	Joy‡	≠ L ProfileSp	19 Decific	Btn#	Select for Include Project Select for I	FS control
ress the key(s) to be				Contr	ol sent when button pre	ssed
ent when you press this utton	Set	Clear	PMD	GDC6 GUST LO	ICK ON	
			Fir	nd Preset		Clear
Key press not to be hel	d				Parameter	0
Key press to repeat wh	ile held			Control to repe Contr	at while held rol sent when button rele	ased
ress the key(s) to be						
his button	Set	Clear	Fir	nd Preset		Clear
					Parameter	

Voorbeeld PMDG B737 Axes Assignments Throttle1

es Assignments Joystick Calibration							
Rescan Clear	Joy#	U	R	Axis#	Ignore Axis	Clr Ignores	
This side to send axis values		ProfileS	pecific		This side to s	end button control Select for Preset [
Set minimum change here. Press	-	Raw			Select for Input Eve		
"Delta", move axis a little, press	Delta	In	-16384	Set up to 10 ranges for action			
Deita again,	256	Out	-16191		From	To Up	
Type of action required				1		Down	
Send direct to FSUIPC Calibra	tion			Control			
 Send to FS as normal axis 				Control	sent when range	entered	
 Send to FSUIPC Offset 						×.	
Send Preset to FS					Parameter		
-		1000		ontrol to rep	eat whilst in range		
Throttle1		~		Contro	l sent when range	evited	
		~		Contro	Serie When runge	CARCO	
		~			Parameter		
		Y				1	
					Delete this	Deleterall	

Voorbeeld PMDG B737 Joystick Calibration Throttle1

No revers	se	<	3 of 11: Separate	throttles per engine
Throttle	1 (direct!	Min)	Max	Reverse Idle Ma
Reset		Set	Set	Set
16384	In	-15935	16287	-16384 In Axis not processed
16384	Out	Rev	Slope	-16384 Out Map 1->12, 2->3
Throttle 2	2 (direct!)		Throttle 4
Reset	Filter	Set	Set	Set
- <mark>163</mark> 84	In	-15551	16320	-16384 In Axis not processed
-16384	Out	Rev	Slope	-16384 Out Map 1->12, 2->34
	Re	load all settings	Sync	Pos Exclude THROTTLEn_SET

Controllers en Profiles

Aircraft	Controls	Controllers	Profile	
ASOBE	MSFS standard	Keyboard	MSFS default	
		Mouse	MSFS default	
		Alpha	MSFS aircraft	HonyComb
		Bravo	MSFS aircraft	Honycomb
PMDG	MSFS standard	Keyboard	MSFS default	
	FSUIPC	Mouse	MSFS default	
	MobiFlight	Alpha	FSUIPC aircraft	Honycomb
		Bravo		Honycomb
		MCP Combo		VRInsight
		RP8,		GoFlight
		ButtonBox		Bodnar

FSPC gebruiken bij veel verschillende hardware add-ons

- Meer MSFS acties benaderbaar
- Gebruik van profielen
- Uniforme benadering van controllers
- Meer mogelijkheden voor knoppen/schakelaars
- Meer mogelijkheden voor assen

File Menu

• Load Flight...

allows loading of Flights (.FLT files) from anywhere within reach of a standard Explorer file selection dialogue. It is only available (i.e. active) when connected to the FS.

• Load Flight & Data...

loading of Flights and FSUIPC offset data (when saved/available) This option is only available in a registered version of FSUIPC7. It is only available (i.e. active) when

connected to the FS.

• Load Plan...

loading of Plans (.PLN files) from anywhere within reach of a standard Explorer file selection dialogue. Not that in previous versions of FSUIPC, this menu entry was added to the flight Sumulator's Add-on menu.

option is only available in a registered version of FSUIPC7. It is only available (i.e. active) when connected to the FS.

Open Installation Folder...

option opens a standard Explorer file selection dialogue on the folder where FSUIPC7 was installed (and where your FSUIPC7.log, FSUIPC7.ini and FSUIPC7.JoyScan.csv files are located).

• Close

option closes the FSUIPC7main window. It does not close FSUIPC7 completely – it will still be available from the system tray.

• Exit

option exits FSUIPC7.

MSFS Menu

The **MSFS** menu contains options to **Connect**, **Disconnect** and **Exit** MSFS. The options available depend on the current state of MSFS and whether FSUIPC7 has an active connection. Unavailable options are present but disabled. Note that to use the **Save Previous Flight** functionality (which is active by default), then the **Exit** option in this menu must be used. If you exit MSFS from within MSFS itself, a **Previous Flight** file will not be saved. Note also that if you quit MSFS with this **Exit** menu and you also have the **Exit with FS** option set (which is the default), then FSUIPC7 will also exit once MSFS has closed.

Assignments Menu

This menu is only available to registered/licensed versions of FSUIPC7, and contains access to the assignment features of FSUIPC:

• Axes... : use to assign your joystick device axes to MSFS nad FSUIPC's axes controls, and also to calibrate axes assigned both in FSUIPC7 and in MSFS

- **Buttons & Switches...**: use to assign your joystick device' buttons/switches to either MSFS or FSUIPC added controls, or to send key presses to MSFS
- Key Presses: use to assign your keyboard keys to MSFS or FSUIPC added controlled

All these options are described in detail in the following sections.

Options Menu

This menu provides access to the following features:

• AutoSave...

Provides access to a UI panel to configure the **AutoSave** functionality. The **AutoSave** panel is described in the next section. • **GPS Out...**

Provides access to a UI panel to configure the **GPS Out** facilities provided by FSUIPC, which allow MSFS to look like a GPS device emitting positional and other interesting information to any program (or device) equipped to have a real GPS connected via the standard type of NMEA serial port connection.

• Miscellaneous...

Provides access to various assorted facilities that don't fit in else where.

• Auto-Connect to FS

A checkbox that when selected (i.e. checked) will instruct FSUIPC7 to automatically connect to MSFS when it is started. If this is checked, then the **Start** menu entry will be disabled.

• Exit with FS

A checkbox that when selected (i.e. checked) will instruct FSUIPC7 to automatically exit when MSFS exits. Note that this option is only available when manually starting FSUIPC7. If FSUIPC7 is auto-started by MSFS, then this option is unavailable and FSUIPC7 will automatically exit with the FS.

• Open on Start

A checkbox that when selected (i.e. checked) will keep the FSUIPC7 main window open when FSUIPC7 is started and not in the system tray.

• Reset to Defaults

This changes all FSUIPC7 options back to there default values. This does not affect your assignments or calibration, (and is equivalent to the '**Normal Defaults**' option in previous FSUIPC versions).

Log Menu

The **Log** menu allows access to FSUIPC's logging facilities. You shouldn't need to use these unless you run into problems with an application and want to help the author sort it out. The text files produced by the logging facility are called FSUIPC7.LOG (or FSUIPC7.n.LOG files where 'n' is a sequence number) and are located in the installation folder. The following logging options are available:

- Weather: to log a complete history of weather changes. However, please note, as there are currently no facilities provided by MSFS to read or update the weather, this option does not currently work.
- IPC Reads: to log reading of offset data from FSUIPC external/3rd part clients
- IPC Writes: to log writes to offsets from FSUIPC external/3rd part clients
- **Buttons & Keys**: to log button and key events. This will be primarily of use to those of you who make good use of the comprehensive key and (especially) button programming facilities available in FSUIPC, especially when editing the FSUIPC7.INI file for more powerful and conditional options. The logging will help you understand exactly what is going on.
- Events: to log events or controls (all MSFS controls other than those from Axes). Use if you are interested in seeing the results of pressing buttons or keys, to see how MSFS is interpreting these actions. Also, many of the more complex Panels do send a lot of controls very frequently, for reasons which, when you look at what is sent, seem pretty obscure.
- Axis Controls: to log all events related to axes controls
- Lua Plugins: to enable logging of Lua plug-in operations. More information about Lua plug-ins is provided in separate documents you will find installed in your Documents "FSUIPC7" folder.

• Log Lua Separately: checking this option will log lua operations (see previous option) in its own separate log file. These are cumulative (each time the same plug-in is run it adds new entries to any existing log file it has), so you don't get a huge proliferation of files.

• Extras: check for additional 'extra' logging. This logs things not

The following logging options are available:

• Weather: to log a complete history of weather changes. However, please note, as there are currently no facilities provided by MSFS to read or update the weather, this option does not currently work.

- IPC Reads: to log reading of offset data from FSUIPC external/3rd part clients
- **IPC Writes**: to log writes to offsets from FSUIPC external/3rd part clients

• **Buttons & Keys**: to log button and key events. This will be primarily of use to those of you who make good use of the comprehensive key and (especially) button programming facilities available in FSUIPC, especially when editing the FSUIPC7.INI file for more powerful and conditional options. The logging will help you understand exactly what is going on.

• Events: to log events or controls (all MSFS controls other than those from Axes). Use if you are interested in seeing the results of pressing buttons or keys, to see how MSFS is interpreting these actions. Also, many of the more complex Panels do send a lot of controls very frequently, for reasons which, when you look at what is sent, seem pretty obscure.

• Axis Controls: to log all events related to axes controls

• Lua Plugins: to enable logging of Lua plug-in operations. *More information about Lua plug-ins is provided in separate documents you will find installed in your Documents "FSUIPC7" folder.*

• Log Lua Separately: checking this option will log lua operations (see previous option) in its own separate log file. These are cumulative (each time the same plug-in is run it adds new entries to any existing log file it has), so you don't get a huge proliferation of files.

• Extras: check for additional 'extra' logging. This logs things not

• Extras: check for additional 'extra' logging. This logs things not covered by the other options (such as the threads used and the thread of each message). You would normally activate this when asked to provide further information for a support request.

• Offsets...: this option allows logging of specific offsets. This is a more technical developer-oriented logging facility, and is described in the Advanced Users document.

• **Custom...**: this is for more detailed custom logging and should be used as and when instructed by us to help track down issues raised in support requests.

• **Open Console**: this option allows you to see what is being written to the log in real time - provided you run MSFS in Windowed mode. The log is updated in a "console window", which you can size to suit your needs. Note that when selected and the console is open, this menu entry will change to **Close Console**.

WARNING: Do not attempt to close the console window directly! To remove it, just go back to the Log options and select 'Close Console'.

• Force Console to Top: when selected/checked, this will attempt to keep the console window on top of other windows.

• **New Log**: this will close the current log file and start a new one. The current (latest) log file is always called "FSUIPC7.LOG", previous ones being renamed "FSUIPC7.n.LOG" where 'n' is a sequence number. Although this will have a repeat of some of the initialisation data as the original, starting a New Log is not advised if you intend to supply the log for support to help with a problem, as some vital information will by then be missing.

Add-ons WASM Menu

FSUIPC7 WASM module installed and enabled in FSUIPC7 if you wish to use either lvarsm hvars and calculator code, including presets (such as those provided by MobiFlight).

The remaining menu items will only be enabled once you have an aircraft loaded and ready-to-fly, and provided access to test functions for helping to discover and use lvars and hvars:

List Lvars: this lists the lvars currently available lvars to FSUIPC in the main window as well as the log file. Note that this lists the lvars currently known by FSUIPC, and not necessarily all that may have been created by the aircraft. Reload & List Lvars: as the above List Lvars option but a reload command is first issued so that all lvars currently created by the aircraft will be listed.

List Hvars: this lists the currently available hvars to the main FSUIPC window as well as the log file. Note that there is no automatic discovery of lvars – you need to provide an aircraft-specific hvar file to make these known to FSUIPC – see the the FSUIPC WASM section in the Advanced User guide for more details.

Set Lvar...: shows a panel where you can select and set a value for an lvar

Set Hvar...: shows a panel where you can select and activate an hvar

Execute Calculator Code...: allows any code to be executed in the FS using the execute_calculator_code function **Reload**: instructs FSUIPC to tell the WASM to re-scan for lvars and reload the hvar file for the current aircraft

WebAssembly (soms afgekort tot Wasm)

definieert een <u>draagbaar binair</u> codeformaat en een overeenkomstig tekstformaat voor <u>uitvoerbare programma's</u>, evenals <u>software</u>-interfaces om interacties tussen dergelijke programma's en hun hostomgeving te vergemakkelijken

WideFS menu

The **WideFS** menu will only be available if you have registered your WideFS license during the FSUIPC7 installation process, It contains a menu entry to Enable or Disable WideServer (the WideFS component embedded into FSUIPC7), as well as a menu item to view your WideFS registration details.

Note that WideServer will be enabled/started automatically once connected to MSFS and 'ready to fly'. You can only manually enable the WideServer component if it has been manually disabled.

When WideFS is registered, its status will be displayed in the title bar of MSFS itself.

Help menu

The **Help** menu contains two menu items:

• About...: this will display the version and build number of your installed FSUIPC7, together with your registration status.

• **Registration Details...**: this displays your registration status and details.

AutoSave

AutoSave saves flights ("FLT", "FLT.FSSAVE" and "SPB" files, plus optional "IPCBIN" files) at regular intervals, so you can retry that crashed landing or quickly recover from other problems.

By default, when enabled, AutoSave saves a flight every 60 seconds, and keeps the last 10 files. These files are placed in the standard user data folder selected by MSFS. They are named **AutoSave day hhmmss,** where 'day' is day of the week. The time is the computer's local system time, NOT the one on the MSFS clock. This format allows you to easily select a suitable file to restart from. With 10 files at one minute intervals you have the last 10 minutes covered. Note that AutoSave does not normally save these files whilst the aircraft is on the ground (EXCEPT maybe in

Add-ons Menu

The **Add-ons** menu item will only be displayed when one or more compatible add-ons are found when FSUIPC7 is started. This menu can include (amongst others) a menu entry to access the PFCcom64 user interface (when the PFCcom64.dll is located in the FSUIPC7 installation folder), and a menu entry for the WebSocket server (provided by Paul Henty and included in the FSUIPC7 installer).