

# VIER IM POTT A320 Software Setup

# **OVERVIEW**

This document describes in detail how to set-up a software environment for your VIER IM POTT A320 cockpit using Prepar3D and ProSimA320.

Please note that projection setup with warping and edge blending is covered by a separate document that can be found in our download area.

# PRECONDITIONS

Before you start make sure that your computers have an up-to-date Windows 10 installed and you did all necessary wiring of displays and USB connections (see according instructions).

You will also need a stable internet connection.

Ideally you have all computers be placed at its final position in the room, so you do not need to unplug cables any later again.

# STRATEGY

Firstly, we do the basic software installation. Then we configure all software components and at last we calibrate necessary components like flight controls.



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# **BASIC SOFTWARE INSTALLATION**

# **DISPLAY SETUP**

#### MIP-PC (Avionics)

Configure display positions according to the screen below. Note that if you want to add a separate maintenance display please do it now (or never). An additional display may mix your display settings.

Einstellungen	– 🗆 X
命 Startseite	Anzeige
Einstellung suchen	Bildschirme auswählen und neu ordnen
System	Wähle unten eine Anzeige aus, um ihre Einstellungen zu ändern. Einige Einstellungen gelten für alle Anzeigen.
☐ Anzeige	
다》 Sound	
D Benachrichtigungen und Aktionen	
D Benachrichtigungsassistent	
🕐 Netzbetrieb und Energiesparen	
📼 Speicher	Identifizieren Erkennen
다 Tablet-Modus	Farbe
甘 Multitasking	Nachtmodus
Projizieren auf diesen PC	Aus Einstellungen für den Nachtmodus

Steps:

- a) Display 3, 2, 4, 1 and 6 are for the displays.
- b) Display 5 is the maintenance display.
- c) Make display 5 your main display.
- d) Move taskbar to display 5.

Note: the numbers of the screens do not matter.



#### Main-PC (Visual)

Configure display positions according to the screen below. Note that if you want to add a separate maintenance display please do it now (or never). An additional display may mix your display settings.

Einstellungen	— 🗆 X
ŵ Startseite	Anzeige
Einstellung suchen	Bildschirme auswählen und neu ordnen
System	Wähle unten eine Anzeige aus, um ihre Einstellungen zu ändern. Einige Einstellungen gelten für alle Anzeigen
☐ Anzeige	
4》 Sound	
💭 Benachrichtigungen und Aktionen	
🕐 Netzbetrieb und Energiesparen	
📼 Speicher	
문 Tablet-Modus	ldentifizieren Erkennen
북 Multitasking	Farbe
Projizieren auf diesen PC	Nachtmodus
X Gemeinsame Nutzung	Aus Aus
✓ Remotedesktop	Einstellungen für den Nachtmodus
① Info	Skalierung und Anordnung
	Größe von Text, Apps und anderen Elementen ändern

Steps:

- e) Display 1, 2 and 3 are for the projectors,
- f) Display 4 is the maintenance display.
- g) Make display 4 your main display.
- h) Move taskbar to display 4.



### PREPAR3D

Download the latest version and install it. Please do not change default installation path.



# SIMCONNECT

SimConnect is an interface between third party applications and Prepar3D. It's used to enable communication between Prepar3D and ProSimA320 as well as several other modern applications.

You can find the installer package here:

```
C:\Program Files\Lockheed Martin\Prepar3D v4\redist\Interface\FSX-SP2-
XPACK\retail\lib
```



→ * ↑ • «	FSX-SP2-XPACK > retail > lib >	~ 0	"lib" durchsu	chen	j,
<ul> <li>Chnellzugriff</li> <li>OneDrive</li> <li>Dieser PC</li> <li>Netzwerk</li> </ul>	Name	Änder 16.07. 24.05. 24.05.	ungsdatum 2017 20:47 2017 22:00 2017 22:00	Typ Dateiordner LIB-Datei Windows Inst	aller.

Don't worry – SimConnect does not have any dialog. Simply start the installer and the software installation will be executed.

### SKALARKI PROFILER

The Skalarki Profiler Software is the interface between your cockpit hardware and software components like ProSimA320. Download profiler software from here:

https://www.skalarki-electronics.eu/



Run the installer and select the components according to our screenshot:



Custom Setup Select the way you	u want features to be insta	alled.		
Click the icons in the second	alarkiIO Profiler ProSim A320 JeeHell FMGS AST Airbus AcrosoftX	e way features wil SkalarkiIO configurati A320 This featur hard drive.	be installed. SDK compone on for use wit e requires 0KB	nts and h ProSim 3 on your
	Wilco Airbus MD80 Leonardo alarkiIO SDK	•		\$

(Please note that JeeHell FMGS is only necessary of you plan to use this software instead of ProSimA320.)

If you run Skalarki Profiler software, please note that it starts minimized in the task bar. You can show it by using a right click on the tray symbol.



If installation was successful you will find a screen approx. like this:



onnected Software	Profiles								
SIMULATION	Flun Profile	e		Set Da	sfault Profile		About	St	op SDK Mode
Not Connected	Jlfmgs_Pa	ndP							
SIM INTERFACE									
Not Connected									
AIRCRAFT									
P. C. 1999									
ProSim A320									
AIRCRAFT Interface									
AIRCRAFT Interface SDK : Not connected	Edit Profile	Add Pro	dile Delet	te Profile					mware Update
AIRCRAFT Interface SDK : Not connected	Edit Profile P&P Hardware	Add Pro	dware	te Profile				Fin	mware Update
AIRCRAFT Interface	Edit Profile P&P Hardware GLARE	Non P&P Har	dile Defet dware OVHD	te Profile CLOCK	MCDU1	RMP1	RMP2	Emp3	mware Update REFUEL
AIRCRAFT Interface	Edit Profile P&P Hardware GLARE NO	Add Pro	dware OVHD NO	CLOCK	MCDU1	RMP1 NO	RMP2 NO	RMP3 NO	nware Update REFUEL NO
AIRCRAFT Interface	Edt Profile P&P Hardware GLARE NO ECAM	Add Pro	dware OVHD NO ATC	CLOCK	MCDU1 NO MCDU2	RMP1 NO ACP1	RMP2 NO ACP2	RMP3 NO ACP3	REFUEL NO PWR CTF

#### **SKALARKI DRIVERS**

In the next step you need to install drivers for the Skalarki hardware. To do so you will need to disable driver signature verification first via the command line.

This is a mandatory procedure – otherwise Skalarki hardware will not work!

Open command line as administrator:



Type in the following commands and press enter:



bcdedit.exe -set loadoptions DDISABLE\_INTEGRITY\_CHECKS bcdedit.exe -set TESTSIGNING ON

Reboot your PC.

#### Now you can install hardware drivers.

Go to device manager:



And select "update driver software" for every unknown device:



Network adapters		
Network Infrastructur	e Devices	
Other devices		
🐚 Unknown device		
Devices	Update Driver Software	1
Ports (COM & LP	Disable	
Print queues	Uninstall	
Processors		-
Software devices	Scan for hardware changes	
🛛 🖣 Sound, video and 📩	Descention	ā.
Storage controller	Properties	
🖌 👰 System devices		

Now select "search computer for driver software" and select "C:\Program Files

(x86)\SkalarkiIO Profiler 5\USB Drivers"

Press "Forward" and accept any red alert message (no worries, this is fine).

Repeat this for any Skalarki hardware you have connected. After installing all drivers your device manager should look like this:



📇 Geräte-Manager	– 🗆 X	(
<u>D</u> atei Ak <u>t</u> ion <u>A</u> nsicht <u>?</u>		
🔶 🔿 🔽 🖬 💯		
VIERIMPOTT01		-
> 🖬 Audio, Video und Gamecontroller		1
> 🖬 Audioeingänge und -ausgänge		
> 🛄 Computer		
V 🖣 Custom USB Devices		
🖗 REFUEL		
SKALARKI A320 CLOCK		
SKALARKI A320 TQ		
SKALARKI I/O ACP1		
SKALARKI I/O ACP2		
SKALARKI I/O ECAM		
🖗 SKALARKI I/O EXPANDER		
🖗 SKALARKI I/O GLARE		
🖗 SKALARKI I/O LOWER PEDESTAL		
🖗 SKALARKI I/O MIP		
SKALARKI I/O OVERHEAD		
SKALARKI I/O RMP1		
SKALARKI I/O RMP2		1
🖗 SKALARKI MCDU 1		
SKALARKI MCDU 2		
> 🚍 Druckwarteschlangen		
> 🛲 Eingabegeräte (Human Interface Devices)		
> M Firmware		
> 🔙 Grafikkarten		
DE ATA/ATAPI-Controller		
s Laufwerke		~

You can double check success by opening Skalarki Profiler. Main screen should now look like this:

onnected Software	Profiles								
SIMULATION	Flum Profile			Set De	fault, Profile		About	. St	op SDK Mode
Not Connected	Jlfmgs Par	ndP							
SIM INTERFACE									
Not Connected								-	
AIRCRAFT									
ProSim A320									
ProSim A320 AIRCRAFT Interface									
ProSim A320 AIRCRAFT Interface SDK : Not connected	Edit Profile	Add Pro	tie Dele	te Profile				Fin	
ProSim A320 AIRCRAFT Interface SDK : Not connected	Edit Profile P&P Hardware	Add Pro	dware	te Profile				Fin	
ProSim A320 AIRCRAFT Interface SDK : Not connected	Edit Profile P&P Hardware GLARE	Non P&P Har MIP	dware OVHD	te Profile CLOCK	MCDU1	RMP1	RMP2	Emp3	nware Update REFUEL
ProSim A320 AIRCRAFT Interface SDK : Not connected	Edit Profile P&P Hardware GLARE YES	Add Pro Non P&P Har MIP YES	dware OVHD YES	CLOCK YES	MCDU1 YES	RMP1 YES	RMP2 YES	RMP3	mware Update REFUEL YES
ProSim A320 AIRCRAFT Interface SDK : Not connected	Edit Profile P&P Hardware GLARE YES ECAM	Add Pro Non P&P Har MIP YES L.PED	dware OVHD YES ATC	te Profile CLOCK YES TQ	MCDU1 YES MCDU2	RMP1 YES ACP1	RMP2 YES ACP2	RMP3 NO ACP3	REFUEL YES PWR CTF

If it does not show green "Yes" for a hardware component, you have connected please double check the procedures above.

### PROSIM A320

The next step is to install ProSimA320 software.



ProSimA320™ Install Program	<u>(197</u> )		×
Module Selection		ſ	
Please select only one combination of the ProSim modu	les to install		
Please select the modules to install			
ProSimA320 for the Primary PC - System / Display	/ MCDU / Audio		
O ProSimA320 for the Secondary PC - Display / MCDU /	Audio / Hardware	Connecto	r
O ProSimA320 Display additional module - Display modul	le, for Primary or S	Secondary	PC
O ProSimA320 MCDU additional module - MCDU module	, for Primary or Se	econdary i	PC
O ProSimA320 Audio additional module - Audio module	for SecondaryPC		
Click "Next" to continue.			
< <u>B</u> ack	<u>N</u> ext >	Ex	tit

Please note:

- Install the software on <u>both</u> computers
- Select "Primary PC" for the Main-PC
- Select "Secondary PC" for the MIP-PC
- Add other modules according to the list below.

#### Main-PC

1 x System

1 x Audio

📕   🛃 📕 🛨   ProSi	imA320	- 25 - 272725 -				- 0	×
Catei Start Fri	eigeben Diese	Ansicht	roSimA320 > ProSimA320	ٽ ~	"ProSimA32	0" durchsuchen	× (
		Name	Änderungsdatum	Тур	Größe		
Schnellzugriff		ProsimA320-Audio	23.09.2018 14:47	Dateiordner			
WARP000	7 7	ProSimA320-System	11.10.2018 18:54	Dateiordner			
Desktop	*						
👃 Downloads	*						
🖾 Dokumente	-						



#### MIP-PC

- 3 x Display
- 2 x MCDU

Datei Start	ProSimA32 Freigeb	20 en Ansicht						- 0	× ^ 0
An Schnellzugriff Ka anheften	opieren Eir Zwisch	hfügen Kerknüpfung einfügen henablage	Verschieben Kopieren nach * Organisie	schen Umbenennen	Neuer Element •	Eigenschaften ve Offnen	ffnen + earbeiten rlauf	Alles auswählen Nichts auswählen Auswahl umkehren Auswählen	1
← → • ↑	> Die	ser PC > Lokaler Datenträger (C:)	> ProSimA320 > ProSimA	320		✓ <sup>™</sup>	"ProSin	nA320" durchsuchen	Q
<b>.</b>		Name	Änderungs	datum Typ	Größe				
Schnellzugri	m a	ProSimA320-Display	11.10.2018	18:52 Dateiordr	er				
Desktop	Я	ProSimA320-Display_2	11.10.2018 1	18:52 Dateiordr	er				
🕹 Downloads	1	ProSimA320-Display_3	11.10.2018 1	18:52 Dateiordr	er				
📄 Dokument	e 📌	ProSimA320-MCDU	11.10.2018 1	18:52 Dateiordr	er				
📰 Bilder	*	ProSimA320-MCDU_2	11.10.2018 1	18:52 Dateiordr	er				
ProSimA32	.0 🖈								
Flightplans	*								
B Dokument	ation								

In all folders you will find an executable application. After the installation procedure please add shortcuts of each module to your taskbar for quick access.



### **UPDATE PROSIMA320**

You can update ProSimA320 to the latest version by selecting Help > Updates. Then select the lastest version and press install. The software will be centrally updated including displays and MCDU on the MIP-PC.

Releases	Add and Pro mission			
Version	Release date	Release notes	Actions	^
1.15	Thursday, September 27, 2018	release notes	install	
1.14	Friday, August 31, 2018	release notes	install	
1.13	Thursday, August 2, 2018	release notes	install	
1.12	Thursday, July 5, 2018	release notes	install	
1.11	Thursday, June 7, 2018	release notes	install	
1 10	Wednesday May 16 2018	release notes	install	
1 10 Manual up You can u by manua	Wednesdav May 16 2018 odating update ProSim320 and all of the con ly downloading a release file and us	nected modules ing this function.	install	



### FLIGHTMODEL

The Flight Model is delivered via the version manager within ProSimA320 System. Start ProSim A320 systems software. The version manager is accessed by clicking Help > Updates. The Flight Model is listed under the "add-ons" tab.

Click 'download' for version selected.

Name	Version	Release date	Release notes	Actions	-
Standard Flight Model	1.06	Thursday, October 19, 2017	release notes	download	
Standard Flight Model	1.05	Tuesday, August 22, 2017	release notes	download	
Standard Flight Model	1.04	Thursday, July 13, 2017	release notes	download	
Standard Flight Model	1.03	Tuesday, June 20, 2017	release notes	download	
Standard Flight Model	1.02	Monday, March 20, 2017	release notes	download	
ProSimA320 Liverv Pack	1.00	Monday, March 20, 2017	release notes	download	

After the download has completed, execute the program and follow the installer instructions.



# SET USER RIGHTS

In order to ensure proper function of all software components, you will need to add full user rights to the following folders:

- C:\ProSimA320
- C:\Program Files\Lockheed Martin
- C:\Program Files (x86)\ImmersiveDisplayPRO
- C:\Program Files (x86)\SkalarkiIO Profiler 5



Do set full user rights make a right click on the **folder > properties > security** and select full access for your user (admin).

Ilgemein Fre	eigabe	Sicherheit	Vorgängerve	ersionen	Anpasser
Objektname: <u>G</u> ruppen-ode	C:\ er Benu	Program Files tzernamen:	(x86)\Lockh	eed Mar	tin
SYSTE	LLER-E	IESITZER			^
Administ	ratoren	(VIERIMPO	TT01\Adminis	tratoren	) 🔰 🗸
Klicken Sie a	uf "Bea	umportais	die	De	>
Klicken Sie a Berechtigung Berechtigung	uf "Bea jen zu ä jen für '	arbeiten", um indem. 'Administrato	die ren" Zulas	Be	> arbeiten Verweigern
Klicken Sie a Berechtigung Berechtigung	er AVIEE Jen zu ä Jen für '	umportan arbeiten", um indem. 'Administrato	die ren" Zulas	Be	> arbeiten Verweigern
Klicken Sie a Berechtigung Berechtigung Vollzugriff Ändem	uf "Bea jen zu ä jen für '	imeorran indem. 'Administrato	die ren" Zulas	Be	arbeiten Verweigern
Klicken Sie a Berechtigung Berechtigung Vollzugriff Ändem Lesen, Au	uf "Bea len zu ä len für '	IMPOTTAN arbeiten", um indem. 'Administrato	die ren" Zulas	Be	> arbeiten Verweigern
Klicken Sie a Berechtigung Berechtigung Vollzugriff Ändem Lesen, Aus Ordnerinha	uf "Bea len zu ä len für ' sführen	IMPOTTAN indem. 'Administrato	die ren "Zulas	Be	arbeiten Verweigem
Klicken Sie a Berechtigung Berechtigung Vollzugriff Ändem Lesen, Au: Ordnerinha Lesen	sführen alt anze	imPOTTATS arbeiten", um indem. 'Administrato	die ren <sup>11</sup> Zulas	Be	arbeiten Verweigem
Klicken Sie a Berechtigung Berechtigung Vollzugriff Ändem Lesen, Au: Ordnerinha Lesen Schreiben	of "Bea len zu å len für ' sführen alt anze	imeorran indem. 'Administrato	die ren" Zulas	Be	> arbeiten Verweigem

# **CONFIGURE P3D**

### **REMOVE AXIS AND BUTTONS**

Do avoid that P3D is interfering with the fly-by-wire system of the A320 you need to remove axis and buttons. Start P3D and select:

- Options > Controls > Key Assignments
- Options > Controls > Axes Assignments
- Options > Controls > Other

- Remove all button assignments.
- Remove all axes assignments

Deselect "Enable Controller(s)".



	Options - Key	y Assignments	
General	Controller VIER	IM POTT SIDESTICK 2.0   Show Name	-
Application	Note: J	oystick Controllers are currently DISABLED.	
Information	Flight Mode Normal	ent Category All Events    Search	×
Sound	EVENT	ASSIGNMENT REPEAT	ON RELEASE
Traffic	Brake failure - right (on/off)		
Realism	Brake failure (on/off)		
The second se	Brakes (apply left)	(ZEHNERTASTATUR)	
Graphics	Brakes (apply right)	- (ZEHNERTASTATUR)	
oraphics	Brakes (apply/release)		
Display	Brakes (apply/release)	Button 1	
World	Brakes (set parking)	Ctrl + .	
Lighting	Brakes anti-skid (on/off)		
Lighting	Cabin alert - No Smoking (on/off)		
Weather	Cabin alert - Seatbelts (on/off)		
	Capture Screenshot		
	Capture Video		
Controls	Carb heat/eng anti-ice (on/off)		
	Center Buoyancy value	Shift + Ctrl + F9	
Key Assignments	Chase distance (decrease)	Ctrl + -	
Axis Assignments	Chase distance (increase)	Ctrl + +	
Calibration	Chat window (display/hide)	Shift + Ctrl + AKUT	
Other	Export Import Reset	Defaults New	Delete Change
		Can	cel OK
	Option	s - Other	
General	INPUT METHOD		
Application	Raw Input O DirectInput		
Information			
Sound	ENABLE FORCE FEEDBACK		
Sound	Control surfaces		
Iraffic	Stick shaker		
Realism	Crashes		

Traffic	Control surfaces		
Realism	Stick shaker		
	Crashes		
Graphics	Ground surfaces     Retractable landing gear		
Display	Firing Machineguns		
World	тоисн		
Lighting	Use Gestures Use Multi-touch		
Weather	USE CONTROLLERS		
	Enable Controller(s)		
Controls			
Key Assignments			
Axis Assignments			
Calibration			
Other			
			01
		Cancel	OK



	Options	- Realisr	n
General	Realism Current Settings: Custom •		CRASHES AND DAMAGE
Application	FLIGHT MODEL		Detect crashes and damage
Information	Ceneral	100 %	Vehicle stress causes damage
Sound	General	<b>_</b> _	Allow collisions with other vehicles
Traffic	P-factor	100 %	Ignore avatar collision
Realism	Torque	100 %	ENGINES
Graphics	буго	100 %	Enable automixture
Display	Crash tolerance	100 %	Unlimited fuel
World		0	Engine stress damages engine
Lighting	Lasy	Redistic	SPECIAL EFFECTS
Weather	INSTRUMENTS AND LIGHTS		Visualize G-effects
	Pilot controls aircraft lights		Visualize Momentum Effects
Controls	O Display true airspeed		FLIGHT CONTROLS
	Display indicated airspeed		Use Autorudder
Key Assignments			ATTACHMENTS
Axis Assignments			
Calibration			
Other			- more torces
			Cancel OK

Also select World > Realism > Special effects and disable "G-effect".

For the landing lights to work click right into the projection **Cockpit** and select "virtual cockpit".





### SET YOUR STANDARD SCENERY

Press ESC.



Select aircraft and location.

	Prepar3D@	Scenario	
VEHICLE	Prosim Airbus A320 Lufthansa	LOCATION	Hamburg Finkenwerder (EDHI)
Chang	e Vehicle	Change Airport	Change Location
WEATHER	ActiveSky weather theme	TIME AND SEASON	10/17/2018 12:08:41 PM
Clear Skies ActiveSky weather theme Building Storms Cold Fronts Fair Weather Fogged In Gray and Rainy Heavy Snows Major Thunderstorm Orbx Weather 1	Weather Themes O User-defined	17.10.2018 Season Time of Day Fall Day Hour Minute Second 12 + 8 + 41 + - UTC Time Reset to System Time	
Load Save Fligh	t Planner Scenery Add-ons	Options Show on Startup	Cancel OK



Then save the scenery as standard scenery.

			Sa	ve Scena	nrio				>
E Over	erwrite Exis	ting Scenario	File Name: File Directory: Title: Description:	2018-10-17 Finkee	werder 2 \Documents\Prep werder 2 Clea	ar3D v4 Files	Рори	late With Curren	
					Sea	rch			×
TYPE	FAVORITE	SCENARIO TITLE			CATEGORY	SCENARIO FILI	NAME	DATE / TIME	- A
٠	*	2018-10-17 Finkenwerder			My Saved Scenarios	2018-10-17 Finke	nwerder 2	2018/10/17 18:2	
3	*	2018-10-17 Finkenwerder			My Saved Scenarios	2018-10-17 Finke	nwerder	2018/10/17 18:2	5
•	*	Finkenwerder 2			My Saved Scenarios	Finkenwerder 2		2018/10/16 18:3	7
3	*	2019-09-23 Finkenwerder			My Saved Scenarios	2019-09-23 Finke	nwerder	2018/09/23 16:0	
63	*	2018-09-20 Finkenwerder			My Saved Scenarios	2018-09-20 Finke	nwerder	2018/09/20 21:3	3
63	*	2018-09-18 Friedrichshafe	en		My Saved Scenarios	2018-09-18 Fried	richshafen	2018/09/18 21:3	5
53	*	2018-09-17 Graz			My Saved Scenarios	2018-09-17 Graz		2018/09/17 21:4	; 🔻
🛧 Show C	Only Favorites								
						6	Cancel	ок	

# **CONFIGURE SKALARKI**

# CHECK PROFILER SETUP

Open profile from the taskbar.

onnected Software	Profiles								
SIMULATION	Run Profi	e		Set De	stault, Profile		About	. St	top SDK Mode
Not Connected	Jlfmgs_Pa	ndP							
SIM INTERFACE									
Not Connected									
AIRCRAFT									
ProSim A320									
ProSim A320 AIRCRAFT Interface									
ProSim A320 AIRCRAFT Interface SDK : Not connected	Edit Profile	Add Pro	ofile Delet	te Profile				Fin	mware Update
ProSim A320 AIRCRAFT Interface SDK : Not connected	Edit Profile P&P Hardware	Add Pro	dware	te Profile				Fin	mware Update
ProSim A320 AIRCRAFT Interface SDK : Not connected	Edit Profile P&P Hardware GLARE	Add Pro	dile Delet dware OVHD	te Profile CLOCK	MCDU1	RMP1	RMP2	Fin RMP3	mware Update REFUEL
ProSim A320 AIRCRAFT Interface SDK : Not connected	Edit Profile P&P Hardware GLARE YES	Non P&P Han MIP YES	dware OVHD YES	CLOCK YES	MCDU1 YES	RMP1 YES	RMP2 YES	RMP3 NO	mware Update REFUEL YES
ProSim A320 AIRCRAFT Interface SDK : Not connected	Edit Profile P&P Hardware GLARE YES ECAM	Add Pro Non P&P Han MIP YES L.PED	dware OVHD YES ATC	te Pittile CLOCK YES TQ	MCDU1 YES MCDU2	RMP1 YES ACP1	RMP2 YES ACP2	RMP3 NO ACP3	REFUEL YES PWR CTR



### CALIBRATE T-GAUGE

Press "Stop SDK Mode" and select "Settings".

Updates	Aircraft Type		SKALARKI Server Setting	38.
Check for Updates A	utomatically	) A340 🔘 MD80	Server IP: 127 . 0	. 0 . 10
Simulator Version			Server Port: 2525	i3
	Aircraft Developer			
Lockheed Martin Prepa	3d V4 V	🔿 Anmont Aibur	V Extended	
Default settings	U Seenen Tivid.		A Exteribed Of Project Magerica	
] Run Default Profile a	Start   Pro Sim A320	<ul> <li>WILCO/WILCO</li> </ul>	0 Evolution () AST	
] Cold And Dark Startu	P			
Use Default Profile in	Legacy Mode			
	Extensions PEDESTAL Extensions	OVERHEAD Extensions	TQ Settings	
Connected Panels	DIMMERS ANALOG	Tripple Gauge (Testi	ing and Calibration panel)	
EFIS controls CS	PFD - CS WX-RADAR - CS	Left Brak	te Value: 73	
EFIS controls FO	ND - CS	102 🜲		248 🚖
🗹 ISIS	LOUD SPEAKER - CS	Min	area a	Max
Terrain on ND CS		Accu Pre	ess Value: 61	
	ND - FO WX-RADAR - FO	117 🔶		239 🚖
	PFD - FO	Min	i inter	Max
	LOUD SPEAKER - FO	Right Bra	ake Value: 62	
		93 🔹		217 ≑
	- DIMMERS DIGITAL	Min		Max
		( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )		
Kony's Dimmer	0 🜩 PFD-CS 0 🌩 PFD-FC	SUBURDA DISTRU		
Korry's Dimmer	0 ¢ PFD-CS 0 ¢ PFD-FC	DIMMERS DIGITAL		

#### Go through the section and select the appropriate modules.

To calibrate the Triple Gauge use the slider and Min and Max settings to set values to its end positions.

### ACTIVATE MAINT PANEL

Go through the section and select the appropriate modules.



If you have the aft overhead section please select MAINT.

dates	Aircraft Type	~0	SKALARKI Server	Settings
Check for Updates Automatically	● A320/A330 ○ A340 ○ M	1D80	Server IP; 127	0.0.10
nulator Version			Server Port:	25253
	Aircraft Developer			
ght Simulator X / Prepar3d V3 🛛 🗸	O JeeHell FMGS O Aer	osoft Airbus X Extended	O Project Ma	oenta
fault settings			0	
Run Default Profile at Start	Pro Sim A320     WII	.CO/WILCO Evolution	O AST	
Cold And Dark Startup				
Use Default Profile in Legacy Mode				
ARE Extensions MIP Extensions P	EDESTAL Extensions OVERHEAD Ex	tensions TQ Settings		
OVERHEAD IO Version	Extensions	ADC		
2010-2014	Additional INPUTS	Cockpit Temp	🗹 Ldg Elev	
2015 #2	Additional OUTPUTS	Cabin AFT Temp Cargo AFT Temp		
─ 2017 #3	Tripple Gauge	Cabin FWD Ter	mp 🗹 Cargo FWD 1	Temp
Kony's DIM value	Refuel Panel			
DimmerValue: 15	ADC ACP3			
			2 🗌 ILS	ADF2
	VHF2 HF2	CAB MKR	MLS	D PA
TEST - All Outputs ON	VHF3	VOR1	ADF1	
	Overhead Plug and Play acti	ve panels		
Back light Test		✓ LIGHTS	ADIRS	
BACK LIGHT - ON		ND 🛛 🗹 LEFT		

# CALIBRATION OF FLIGHT CONTROLS

Joystick input is a generic hardware device which requires to configure all IO element manually. Joysticks should be listed in the Windows Game controllers. (Windows search: game controller).

For flight controls (analogue inputs) the first step is to calibrate the joystick in Windows Game Controller, select properties > settings > calibrate.

Follow the steps described in the calibration tool:



Gamecontroller	X	Einstellungen Testen Gamecontrollerkalibrierung Falls der Gamecontroller auf der Testseite nicht richtig funktioniert, muss er eventuell kalibriert werden. Klicken Sie auf "Kalibrieren", und folgen
Konfiguriert einstellungen konnen installin konfiguriert werden.	erte Gamecontroller	Auf Standard zurücksetzen Kalibrieren
Controller	Status	1
VIER IM POTT SIDESTICK 2.0	OK	
VIER IM POTT 320 Rudders	OK	
BU0836A Interface	ок	
<u>E</u> rweitert	Eigenschaften	
	ок	
		OK Abbrechen Obernehr

# **CONFIGURE PROSIM**

Start ProSimA320 System. The interface always displays a horizontal top navigation with the items "File", "Config" and "Help". Below is a horizontal navigation bar dividing the screen in tabs.

### **GENERAL SETTINGS**





The main tab displays an overview of connected cockpit hardware and software, the other tabs display the current state of cockpit switches, indicators, gauges, gates, etc. **These tabs are not used for making configuration changes**, they are only used to display the current state of elements or to change the value of a switch in the software if no hardware switch for that function is connected.

### **BUILD NAVIGATION DATABASE**

ProSimA320 System requires the installation of navigational data to function correctly. Start by downloading the Navigraph database package from the download page of the ProSimAR website and install. <u>http://prosimar.com/downloads/</u>

Open the config > database screen in ProSimA320 System. Verify that the Navigraph database is loaded, by restarting ProSimA320 System.

Select the path to the installation directory from your backend simulator (Lockheed Martin Prepar3D®) under 'Scenery Database' to start extracting scenery navigation data from Prepar3D® to ProSimA320 System. Remember to repeat this step after making changes to your installed scenery.

Database	×
Navigraph database Navigraph databases loaded. AIRAC cycle 1808	
Scenery database Airports: 24549 Positions: 135374	
Path to simulator C:\Program Files\Lockheed Martin\Prepar3D v4\	Simulator Detected: Prepar3D v4
	Build database
Terrain data Terrain database available.	
	Download
	Ok



#### Note:

You don't need a subscription from Navigraph. Without a subscription the Navdata will be outdated which you need to consider when calculating flight plans with external software.

If you install third-party scenery you will need to rebuild the database after installation to ensure that nav data is synchronized.

### DOWNLOAD TERRAIN

In the terrain data section click download to start and install. Once installed, verify that the terrain database is available by restarting ProSimA320 System.

### SETUP JOYSTICK SUPPORT AND SKALARKI HARDWARE SUPPORT

After the Joystick is calibrated in Windows open ProSimA320 System and open the driver tab, "**ProSimA320 System > Config > Configuration > Drivers**".

To enable your flight controls being used by ProSimA320 System you will need to enable "Direct input support for joysticks" and enable "Skalarki hardware support"

Now restart ProSimA320 System.



	Cockpit Concept hardware support	Enabled	
	CPFlight hardware support	[Not installed]	
	Directinput support for joysticks	Enabled	
	EHID Server	Advanced	
	FDS hardware support	Enabled Advanced	
1	Flight Illusion support	[Not installed] V Advanced	
	FSCockpit hardware support	Enabled Advanced	
	FSUIPC support	Enabled	
	Generic COM port/TCP driver	Enabled Advanced	
1	IOCP Server		
	Phidgets support	Enabled Advanced	
	PoKeys USB and Ethemet support	Enabled Advanced	
	Poldragonet ethernet hardware		
	Pololu support	Enabled	
	SimASPAirSpace	Enabled	
	Skalarki hardware support	localhost 53000	
	TRC hardware	Enabled	



# SETTING AND CALIBRATION OF FLIGHT CONTROLS

Important: You must have done Windows game controller calibration for all flight controls first!

### Select Config > Configuration > Combined Config > Flight Controls > Lever

Col	nfigura	ation	3 <u>00</u> 9		×
Main	Driv	ere Combined config Switch tunes Hardware ontions			
	Cart				
Later	st input	directinput VIER IM POTT 320 Rudders#86171a0-6965-T1e7-8001-444553540000[X-Achse]			
Jean					
•	Thr	rottle/MCP [50]			
	Circ	cuit Breakers [105]			
•	Flig	Int Controls [52]			_
					2
					2
		I EVERI17			
		Brake pedal capt left			-
		Configuration			
		Analog input A VIER IM POTT 320 Rudders & 6171a0· V Y-Achse V			
		Calibration			
		Move hardware to set the various calibration positions.			
		T <sub>Min</sub> MaxT			
		Set Min Set Max			
		Design and all send with			
		Brake pedal capt right			
		Configuration -			
		Analog input A VIER IM POTT 320 Rudders &6171a0- V Z-Achse V			
		Calibration Move hardware to set the various calibration positions.			
					~
<				,	
				C	
			JK	Cano	81

Now select calibrate step by step all axis by selecting the correct analogue input and axis and to the calibration.



Analog input	A Skalarki	✓ Flap	~	
Calibration				
Move hardware to	set the various calibration positions.			
1.00	12 13 14			
-op -1				

Do not forget to set a medium null zone to ensure that neutral position or detent is correctly detected:

Analog input A VIER IN	/I POTT 320 Rudders &f6171a0- V X-Rotation	~
Calibration		
Calibration		
Move hardware to set the various calibra	ation positions	
Move hardware to set the various calibra	ation positions.	
Move hardware to set the various calibra	ation positions.	
Move hardware to set the various calibra	Center	Right

# To configure buttons, select Flight Controls > Switch

Rudder trim reset Normal	A	[INOT CONNECTED]		
Rudder trim reset Pushed	A	[Not connected] ~		
Sidestick captain priority takeover Normal	Α	[Not connected] ~		
Sidestick captain priority takeover Pushed	Α	BU0836A Interface 7db8be90-4920-11 $\epsilon$ $\vee$	Button 29 🗸 🗸	
Sidestick f/o priority takeover Normal	Α	[Not connected] V		
Sidestick f/o priority takeover Pushed	A	VIER IM POTT SIDESTICK 2.0 e8ff553 $ \smallsetminus $	Button 15 🗸	
Speedbrake armed Off	Α	[Not connected] ~		
Speedbrake armed Armed	Α	[Not connected] ~		
				>



# SWITCH TYPES

lain Drivers Combin	ed config Switch types	Hardware options			
Name	Switch type	My hardware type	:	Quick setup	
AC Ess Feed	Momentary	Latched	O Momentary	Reset to default	1
ADR1	Momentary	O Latched	Momentary	OII Management	ê
ADR2	Momentary	O Latched	Momentary	Ai Womentary	511
ADR3	Momentary	O Latched	Momentary	All Latched	
APU Auto Exting Test	Momentary	◯ Latched	Momentary		
APU bleed	Latched	<ul> <li>Latched</li> </ul>	O Momentary		
PU Generator	Latched	<ul> <li>Latched</li> </ul>	O Momentary		
APU Master	Latched	Latched	O Momentary		
VPU Start	Momentary	O Latched	Momentary		
uto/brk LO	Momentary	O Latched	Momentary		
uto/brk MAX	Momentary	O Latched	Momentary		
uto/brk MED	Momentary	O Latched	Momentary		
attery 1	Latched	<ul> <li>Latched</li> </ul>	O Momentary		
attery 2	Latched	<ul> <li>Latched</li> </ul>	O Momentary		
lue pump override	Latched	Latched	O Momentary		

In case you notice unnormal behaviour of push buttons go to **Config > Configuration > Switch types**.



# SETTING OF PROSIM MODULES

# SETTINGS OF DISPLAYS

On first start of each ProSimA320 Display module instance first enter the IP address of the primary computer in the configuration.

Open ProSimA320 Display, by default a black screen is displayed. For the ease of configuration, it's recommended to select Ground Power in the IOS and set the overhead Ground Power switch to on. If no hardware overhead is present, use **ProSimA320 Display > right mouse click > display > overhead** and select **ground power switch**. Close the display overhead by **right mouse click > close overhead**.

When ground power is selected the captain PFD and ND will be visible. Hit F12 to enter the display setup mode. The display setup mode is only used during configuration, not for normal operation. In display setup mode, a blue background colour is shown, when selecting F12 once more display background colour changes back to black.







Several configuration options are available, mainly regarding performance, open **ProSimA320 Display >** right mouse click and select config.

- General Options are options for higher graphical quality, these can be selected based on the computer performance.
- Standby instruments are offered with or without frames around them and as photorealistic.
- Interface stay on top is used to keep the ProSimA320 user interface visible.
- Tuning allows to adjust the data rate and frame rates. Default data rate is **10**, default frame rate is **30**.
- Multicore optimization is used to increase the display performance.
- Show load in title bar is used to constantly display the display load parameters in the Windows title bar.
- 'Allow remote computer shutdown' is used to remotely shut the computer down using the IOS.



Pro Sim 320 serv	er	
Server 127.0	.0.1	
General options		
Detailed tem	ain	
🔄 High quality	text	
Standby instrum	ent options	
🖉 Draw frame :	around instruments	
🕅 Photorealisti	c instruments	
Interface		
Stay on top		
Tuning		
Data rate	10	
Frame rate	30	
Multicore op	limisation	
Show load in	i titlebar	
Allen and	computer shutdown	

When closing ProSimA320 Display automatically all setting is saved. The information is all stored in a file called config.xml.

### SETTINGS OF MCDU

The ProSimA320 MCDU module simulates a full MCDU / FMS system, including an accurate LNAV / VNAV implementation. The configuration of MCDU hardware also is done using the ProSimA320 MCDU module.





#### <u>Fonts</u>

Font type and size can be adjusted based on own preference. In general, the default setting should be used. To reset to the original font size and type select "**Reset to default**". Fonts can only be adjusted for video cable connected MCDUs.

#### <u>Options</u>

Start minimized option is used to automatically minimize the ProSimA320 MCDU on startup. This should not be used for VGA/DVI connected MCDUs. Start full screen is used when a full screen is required, most VGA/DVI connected MCDUs require a full screen setup to align all line select switches.

Stay on top is used to keep ProSimA320 MCDU on top on the desktop, even when other programs are running the MCDU will always remain visible.

'Allow remote computer shutdown' is used to remotely shut the computer down using the IOS.

Show frame is an option to toggle between displaying the complete MCDU or the display only. Showing the display only is used for VGA / DVI connected MCDUs.

Show border is an option to remove the Windows border around the MCDU display. Additional option "do not move window when border is off" is available to lock the window position.

The use color option by default is on. ProSimA320 MCDU is using multiple colours to identify the function of specific areas in the MCDU.



Doubleclick to resize option can be deselected when a static display is required. When this option is selected and select doubleclick in the MCDU display the display changed to full screen.

Screen layout for VGA / DVI connected MCDUs When using a VGA / DVI connected MCDU it may be required to align the screen display with the Line Select Keys (LSK).

Before opening the line select option first select a MCDU page which contains a lot of information, see example image. To start aligning the different lines open the line select mode (open ProSimA320 MCDU > right mouse click > line select mode).



The first line (LSKR1) should be lighted in a yellow square box. Align the line by using the following commands:

- Up and Down (computer keyboard entry "U" and "D")
- Left and right (computer keyboard entry "L" and "R")
- Wides and Shorten (computer keyboard entry "W" and "S")

When the first line is configure select the next LSK to perform the configuration again, all until all lines are aligned correctly.



To configure individual screen layout, right click in the main window and select "Line Setup mode". Next, use LSKL1 to LSKL6 to select a line, or LSKR1 to select Menu line or LSKR6 to select scratchpad. Use the following keys to modify:	
- U/D: Up/Down - L/R: Left/Right - W/S: Widen/Shorten	
To reset all layout to default, press the button below.	

### SETTINGS OF SOUND

The ProSimA320 Audio module is managing all in cockpit sounds. The first step is to configure the network settings. When the ProSimA320 Audio module is connected you can use the available cockpit audio sounds. The different sounds can be turned on or off and the individual volume can be adjusted.

For audio channel separation multiple instances of ProSimA320 Audio can be used across multiple computers. No more than one instance of ProSimA320 Audio is used per computer.

Volume control can be adjusted by changing the volume value, default 100(%) is selected. To lower the specific sound, change a different value, for example 70%.

File						
Select	all Tog Enabled	Igle selected	Test	Volume	Status	
		50	Test	100		1
		500	Test	100		h
	S.	Audio addon Test Audio	Test	100	Enabl	T
		C chord	Test	100		
		Cabin call aft	Teat	100		1
	1999	Cabin call fwd	Test	100		1

# ACCESS TO INSTRUCTOR STATION

Ensure that ProSimA320 is running.

You can access the instructor station with a simple web browser by any computer that is connected in the router network. If you did no change the IP-address of the main computer (Visual PC) you can access the instructor station here:



#### http://192.168.10.10:8080

	Main Service	Approach P	arameters			
Main	Position					
Мар	Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	
Failures	Store	Store	Store	Store	Store	
Hazards		152				
	Visibility		Time			
Weight	Normal Cat I	Cat II Cat III	Day I Current	Night Dusk D	awn	
weather Weight Position	Normal Cat I	Cat II Cat III	Day I Current	Night Dusk D	awn	
Weight Position Route	Normal         Cat I           Check items         AC Bus Fault AC bus 1           Switch ADR2 to Or         Switch ADR2 to Or	Cat II Cat III unpowered AC Bus F Switch A	Current	Night Dusk D Switch ADR1 to On Switch Fuel mode s	el to Off	

In case you cannot access instructor station please go to A320 system and select **Help > Web Access**. Here you can find the URL.

	×
d to access	
Base URL	
SIOC stub script	
Log	
	Ok
	d to access Base URL SIOC stub script Log

You will find further details around the installation also here: <u>https://prosim-ar.com/download/ProSimA320 user manual 1.0.pdf</u>



# TIPPS

In case you cannot successfully start the engines please set focus on P3D and press E+1 and E+2.

# FURTHER QUESTIONS?

In case you need further help with assembly please write an email with a clear explanation and descriptive photos to our support desk: **support@vier-im-pott.com**