



SOLO AIRLINER

USER'S MANUAL

Rev. 2.1 - May 2024

For support, contact us at
support@virtual-fly.com



VirtualFly 
BY AIRCATGLOBAL

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1. IN THE BOX

A) SOLO Airliner Panel

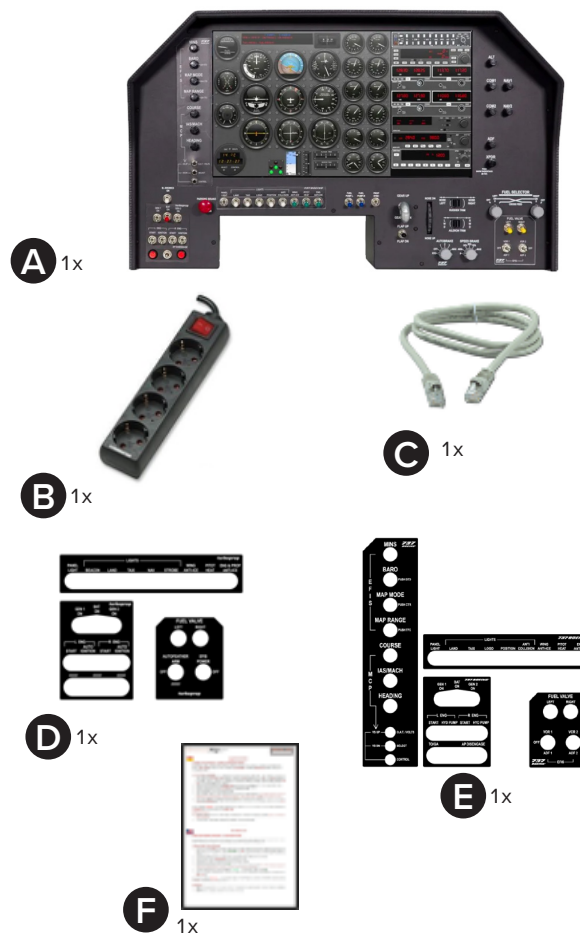
B) Power strip

C) Network cable (Ethernet)

D) Magnetic labels for Turboprop

E) Magnetic labels Boeing 737 pack

F) Quick Start Guide



It is important to save all parts you are not going to use in case you need them in the future.

2. HARDWARE SETUP

2.1 CONNECTING TO PC

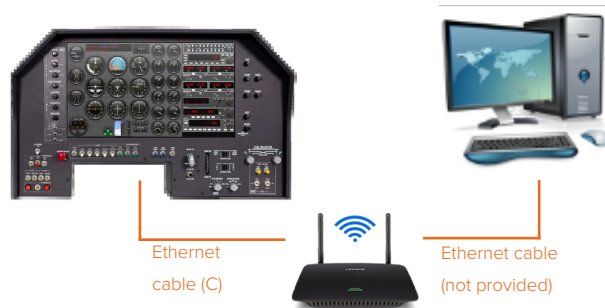
The SOLO AIRLINER has been developed to be pluggable to any standard Windows computer. After placing the panel on the surface it will rest, connect all the power plugs from the back of the SOLO AIRLINER to the provided multiple power socket (B). Now connect the multiple power socket (B) to a 115-230VAC outlet.

You now have two options to connect the SOLO AIRLINER to the computer running the flight simulation software; through direct or LAN network connection. Independently of the option you use, you will need to plug one end of the provided Ethernet cable (C) to the back of the SOLO AIRLINER. The LAN connector socket of the SOLO AIRLINER is found in the mini-computer within the device, displayed below.



OPTION A: LAN Network Connection (Recommended)

Connect an Ethernet cable between the SOLO AIRLINER and router, and another from your PC to the router as displayed below.

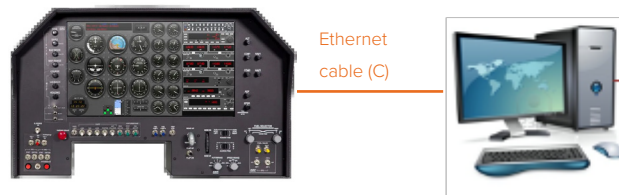


OPTION B: Direct Connection

Connect the Ethernet cable (C) between your SOLO AIRLINER and your PC as displayed in the next diagram.



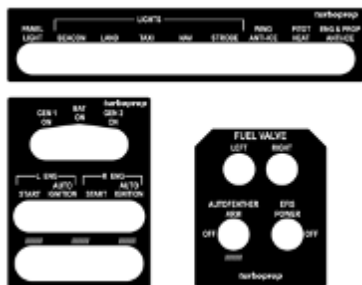
Remote Connection is not available through Direct Connection, given panel has no internet connection using this method.



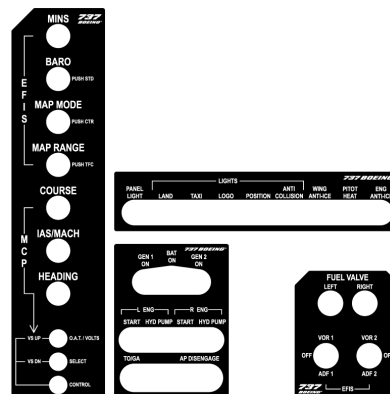
2.2 ADJUSTING MAGNETIC LABELS ACCORDING TO AIRCRAFT TYPE

The SOLO AIRLINER is a multifunction panel, and some switches change their function depending on whether the selected aircraft is a piston, turboprop or jet. The panel incorporates two sets of magnetic labels, shown in following images, which allow you to change the designation of each switch and rotary switch to match the correct functionality. The default designation of the switches and rotary switches (without the magnetic labels) is for piston engine aircraft.

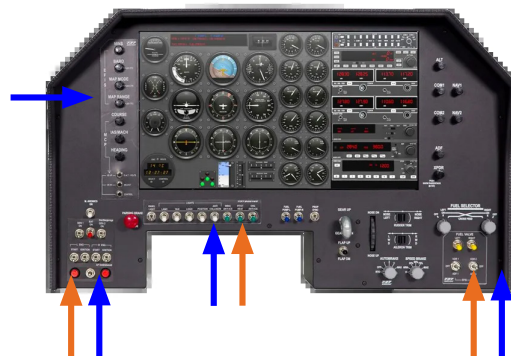
- Magnetic label pack for turboprop aircraft:



- Magnetic label pack for Boeing 737 aircraft:



To apply the **turboprop** or **Boeing 737** magnetic labels (D&E), simply place them over the SOLO AIRLINER in their correct location, as displayed in the image below.



3. SOFTWARE SETUP

3.1 INTERFACE WITH PC

To interact with your PC, the SOLO AIRLINER requires installing some additional software to your PC depending on the flight simulation software you use. The SOLO AIRLINER is compatible with MSFS, Prepar3D and X-Plane 11/12.

MSFS and Prepar3D

To set up the SOLO AIRLINER with MSFS or Prepar3D, you will need to install VFConnect, the software developed by Virtual Fly to enable interaction between our flight pannels and PCs, and FSUIPC. You can download these from the following links:

- **VFConnect:**

<https://downloads.virtual-fly.com/software/vfconnect/latest/vfconnect.exe>

- **FSUIPC:** <http://www.fsuiipc.com/>



Make sure you install the correct version depending on the flight simulation platform you use (MSFS or Prepar3D).

If you already have FSUIPC installed, skip this step. During the installation, a registration window will appear, which you must ignore by selecting "Not Now". Restart MSFS/Prepar3D after the installation is complete.

X-Plane 11/12

To set up the SOLO AIRLINER with X-Plane 11/12, you only need to install the VFConnect version suitable for X-Plane 11/12. You can download it from the following link:

- **VFConnect_XP:**

https://downloads.virtual-fly.com/software/vfconnect/latest/vfconnect_xp.exe



"VFConnect3-Xplane" might not work properly if DatRefTool plugin is installed and activated in X-Plane 11/12. If you are using this plugin, make sure to **deactivate it before using the SOLO AIRLINER.**

3.2 BOEING 737 (ONLY Prepar3D) ADD-ON

To run the SOLO AIRLINER with the B737 panel, you must install the server B-737 "aeroServer737" in the computer running Prepar3D. To do so, click on the following link and follow the steps for the installation:

http://www.aerosoft.com.au/aerosoft_australia/home.html.



The aerosystem737 avionics software license add-on for the SOLO AIRLINER costs 49\$. Without the license, you won't be able to fly the B737 in the SOLO AIRLINER.

4. START UP

4.1 ACTIVATING PROCEDURES

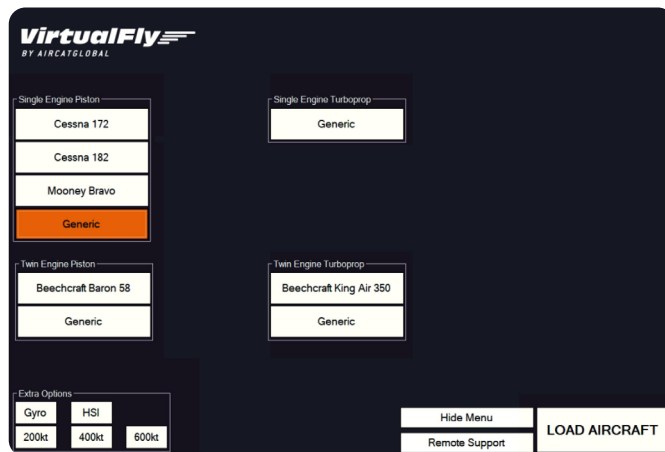
1. Start your preferred flight simulation software (MSFS, Prepar3D or X-Plane 11/12).

2. Press the push button (a) indicated below to start the "Windows" operating system of the SOLO AIRLINER' mini computer.



The SOLO AIRLINER must not be disconnected while the programs are loading. Doing so might cause problems with booting in the future.

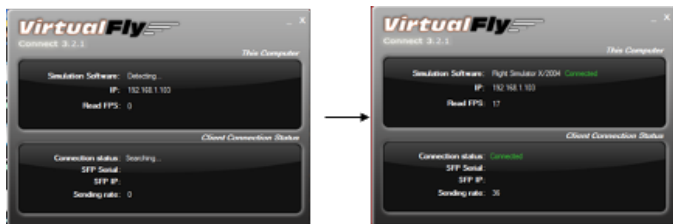
The device will be ready to operate after about 60 seconds, when you will see the "SELECT PANEL TYPE SCREEN" displayed in the next image picture. Follow "PANEL SELECTION (ACCORDING TO AIRCRAFT)" from section 5 to select the panel from the aircraft you wish to fly



3. Execute the VFConnect version that corresponds to the simulation software running. If the Windows firewall is activated, a warning permission to communicate with networks might appear. You must click "Allow Access" to enable the connection between the SOLO AIRLINER and the computer.

Depending on the flight simulation software you use, the connection time will vary.

The VFConnect software window will look like (a) below if it is not yet connected, and like (b) if a connection has been established successfully between computer and SOLO AIRLINER.



(a) The plugin is searching for MSFS/Prepar3D/X-Plane 11/12 and SOLO AIRLINER

(b) The plugin is connected to MSFS / Prepar3D / X-Plane and SOLO AIRLINER



If using X-Plane 11/12, VFConnect will not show a "Connected" status until a flight has been loaded.

The SOLO AIRLINER' screen also displays if the simulation software and panel are communicating successfully, as displayed below:



- **Connected:** Your device is ready to fly.
- **Searching...:** There is a communication failure between the MFS/P3D and the SOLO AIRLINER. Refer to Chapter 8 "Troubleshooting".

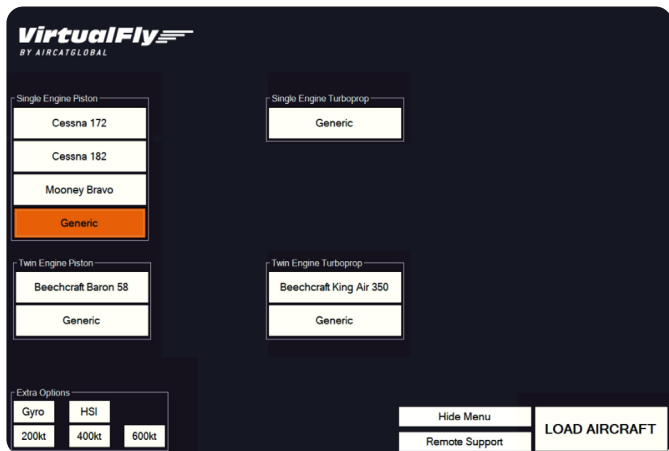
If you have issues establishing the connection between the SOLO AIRLINER and your computer, please contact Virtual Fly's Technical support at support@virtual-fly.com.

4.2 DEACTIVATING PROCEDURES

Press the push button (a) of the SOLO AIRLINER's mini computer to stop the "Windows" operating system. Wait until everything is stopped before unplugging the SOLO AIRLINER

5. PANEL SELECTION (ACCORDING TO AIRCRAFT)

The SOLO AIRLINER has been designed to operate and display instruments for single and twin engine planes of both piston, turboprop and turbofan aircraft. The following picture shows that some aircraft have their own customised panel, such as the C-172, Mooney, B-58. etc. There are also customizable panels labelled as "GENERIC" to simulate other aircraft.



The aircraft best suited to be flown using the SOLO AIRLINER are those that MSFS, Prepar3D or X-Plane 11/12 incorporates by default. However, planes from P3D CARENADO have been tested and have yielded good results.



The **Boeing 737** option is only compatible with **Prepar3D** flight simulation software.

In the previous image you can see the SOLO AIRLINER has a "GENERIC" option for each aircraft type (4 in total). On each "GENERIC" option, you can select the full scale of the speedometer "Airspeed Range" and the type of instrument indication of direction "Directional Indicator".

To set up the SOLO AIRLINER with the aircraft you wish to fly, you must:

- Select the corresponding Gauges Panel to desired aircraft
- Place the corresponding magnetic labels

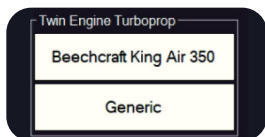


Before selecting the B737 panel, you must already have the Boeing 737 aircraft selected in Prepar3D with the flight loaded. Failing to do so will make some indicators work incorrectly.

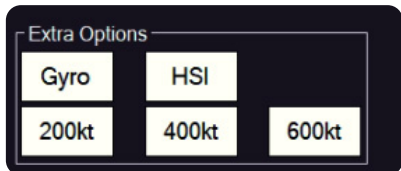
SELECTING INDICATORS PANEL

The SOLO AIRLINER incorporates a 24" touchscreen, so you must manage it with your fingers. Follow the steps described below:

1. Select the label that corresponds to the aircraft you wish to fly in the simulation software. If there isn't a customized label for the desired aircraft, select the "GENERIC" corresponding to the aircraft's engine type. For instance, if aircraft selected in simulation software is "Beechcraft King Air 350", you must select the "GENERIC" button from the "TURBOPROP- Twin Engine" menu.



2. If you have chosen a "GENERIC" panel, a "Generic panel OPTIONS" menu will automatically open and enable you to select your preferences regarding Airspeed Range and Directional Indicator, as seen in the following image.



3. Push the "Start selected panel" button shown below and the panel will automatically show the gauges and indicators corresponding to your selection.



6. ENGINE STARTING PROCEDURES

The following procedures are indicated by Virtual Fly to start the plane using the SOLO AIRLINER in the simplest fashion.



Never use these procedures for pilot training or for real aviation.

6.1 START & STOP FOR PISTON ENGINES

START PISTON ENGINES- MSFS

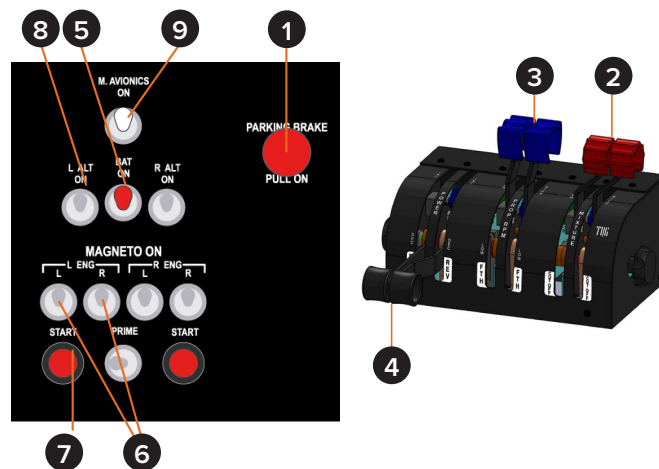
1. Pull on the **PARKING BRAKE**.
2. Move the **MIXTURE** lever to **RICH** position.
3. Move the **PROP RPM** lever to **HIGH** position.
4. Move the **POWER** lever to **IDLE** position.
5. Switch on the **BAT** switch.
6. Switch on the two **MAGNETO L ENG "L" and "R"** switches.
7. Push the red **START** button on the left to start the engine.
8. Once engine is running, switch on the left **L ALT** switch to charge the battery.
9. Switch on **M. AVIONICS** switch.

These procedures have started the engine if the selected aircraft is a single-engine, or the left engine if it is a twin-engine aircraft.



If you are flying a twin-engine aircraft, you must carry out indications 6, 7 and 8 again to start the right engine.

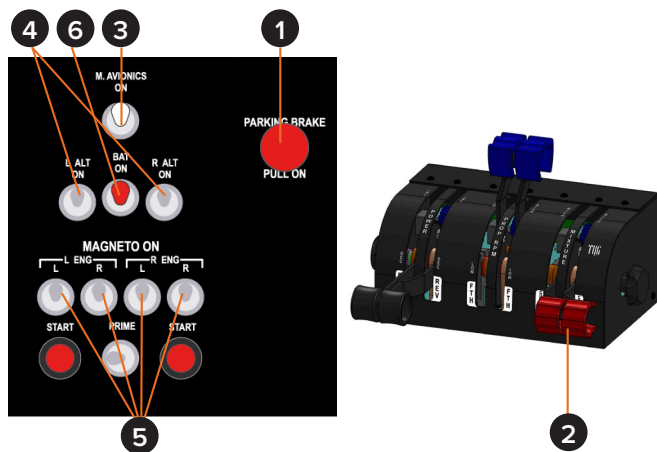
The diagram below shows the position of every switch in the SOLO AIRLINER along with the step that corresponds to their application when starting the piston engine.



STOP PISTON ENGINES- MSFS

1. Pull on the **PARKING BRAKE**.
2. Move the **MIXTURE** lever to **CUTOFF** position.
3. Switch off **M. AVIONICS** switch.
4. Switch off the **ALT** switch(es).
5. Switch off the **MAGNETO** switch(es).
6. Switch off the **BAT** switch.

The diagram below shows the position of every switch in the SOLO AIRLINER along with the step that corresponds to their application when stopping the piston engine.



START & STOP PISTON ENGINES- X-Plane 11/12

To start and stop a piston engine aircraft in X-Plane 11/12, please refer to the selected aircraft's Pilot Operating Manual. This can be found inside the corresponding aircraft's folder within: *X-Plane 11/12\Aircraft\Laminar Research*. Once the Pilot Operating Manual of the corresponding aircraft is open, locate the "Checklists" section and follow the detailed instructions for starting and stopping the engines.

6.2 START & STOP FOR TURBOPROP ENGINES

START PISTON ENGINES- MSFS

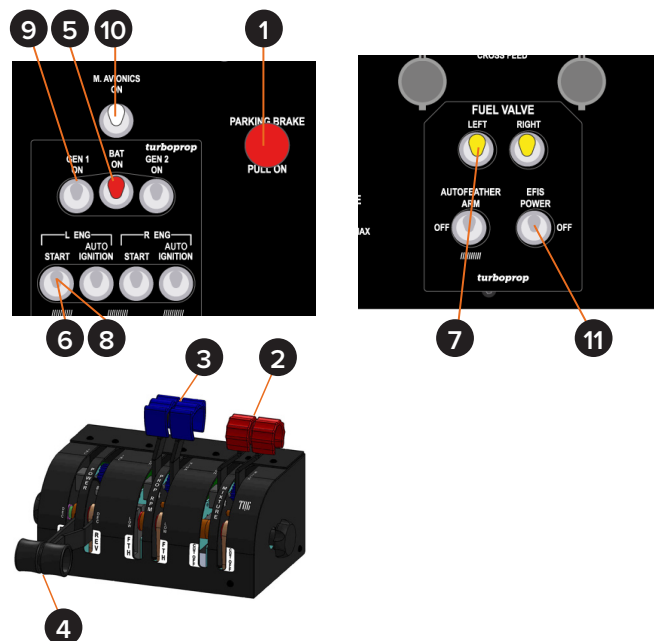
1. Pull on the **PARKING BRAKE**.
2. Move the **Mixture** lever to **RICH** position.
3. Move the **PROP RPM** lever to **HIGH** position.
4. Move the **POWER** lever to **IDLE** position.
5. Switch on the **BAT** switch.
6. Switch on the **L ENG START** switch.
7. The turbine will begin to rotate, after about 5-6 seconds activate **FUEL VALVE "LEFT"**.
8. Once the engine is running, switch off the **L ENG START** switch.
9. Switch on the **GEN 1** switch to charge the batteries.
10. Switch on **M. AVIONICS** switch.
11. Switch on **EFIS POWER**

These procedures have started the engine if the selected aircraft is a single-engine, or the left engine if it is a twin-engine aircraft.



Before activating GEN, do not forget to disable START. If you don't, the generator will not charge the batteries.

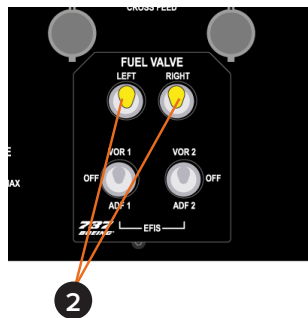
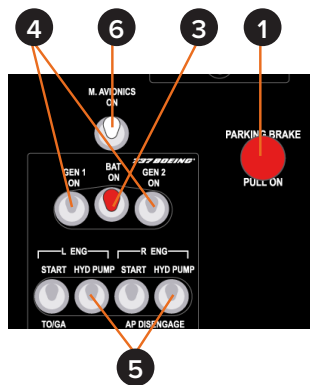
The diagram below shows the position of every switch in the **SOLO AIRLINER** along with the step that corresponds to their application when starting the turboprop engine.



STOP TURBOPROP ENGINES- MSFS

1. Pull on the **PARKING BRAKE**.
2. Switch off the **FUEL VALVES** switch.
3. Switch off the **M. AVIONICS** switch.
4. Switch off the **GEN** switch.
5. Switch off the **HYD. PUMP** switch.
6. Switch off the **BAT** switch.

The diagram below shows the position of every switch in the SOLO AIRLINER along with the step that corresponds to their application when stopping the turboprop engine.



START & STOP TURBOPROP ENGINES- X-Plane 11/12

To start and stop a turboprop engine aircraft in X-Plane 11/12, please refer to the selected aircraft's Pilot Operating Manual. This can be found inside the corresponding aircraft's folder within: *X-Plane 11/12\Aircraft\Laminar Research*. Once the Pilot Operating Manual of the corresponding aircraft is open, locate the "Checklists" section and follow the detailed instructions for starting and stopping the engines.

6.3 START & STOP FOR TURBOFAN (B-737) ENGINES- ONLY Prepar3D

Prepar3D: START TURBOFAN ENGINES

In this type of engine, **RPM** and **PROP** mixture levers are not used. However, MIXTURE lever must be outside of the **CUTOFF** area.

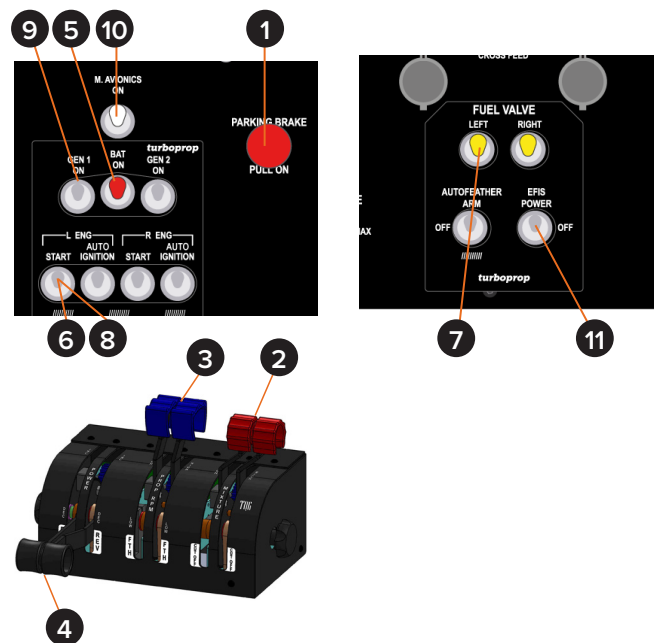
1. Pull on the **PARKING BRAKE**.
2. Move the **POWER** lever to **IDLE** position.
3. Switch on the **BAT** switch.
4. Switch on the **L ENG START** switch.
5. The left turbine will begin to rotate. When the N1 indicator reaches a value of 2.7, activate **FUEL VALVE "LEFT"**.
6. Once the engine is running, switch off the **L ENG START** switch.
7. Switch on the **GEN 1** switch to charge the batteries.
8. Switch on **L ENG "HYD PUMP"** to activate the hydraulic systems.
9. Switch on **M. AVIONICS** switch.

These procedures have started the engine if the selected aircraft is a single-engine, or the left engine if it is a twin-engine aircraft.



Before activating GEN, do not forget to disable START. If you don't, the generator will not charge the batteries.

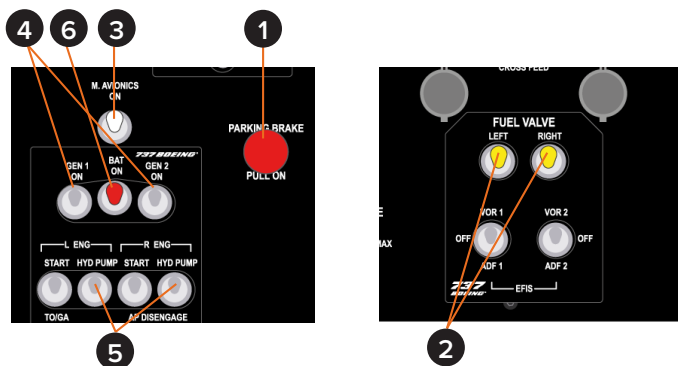
The diagram below shows the position of every switch in the **SOLO AIRLINER** along with the step that corresponds to their application when starting the turboprop engine.



Prepar3D: STOP TURBOFAN ENGINES

1. Pull on the **PARKING BRAKE**.
2. Switch off the **FUEL VALVES** switches.
3. Switch off the **M. AVIONICS** switch.
4. Switch off the **GEN** switch.
5. Switch off the **HYD PUMP** switch.
6. Switch off the **BAT** switch.

The diagram below shows the position of every switch in the SOLO AIRLINER along with the step that corresponds to their application when starting the turboprop engine.



7. AEROSOFT B-737 ADD-ON

If you have purchased the license and installed the Aerosoft B737 add-on for your SOLO AIRLINER, follow the link below to see several tutorials where you can learn how to get the most out of this software:

http://www.aerosoft.com.au/aerosoft_australia/home.html

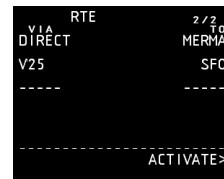
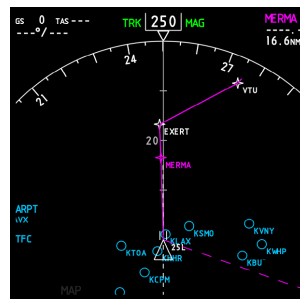
Below is basic information for you to generate a flight plan through the FMC-CDU of the B737 and fly it through the autopilot. Here we show a simple example of how to enter a flight plan from "Los Angeles, runway 25L" to "San Francisco":

Before beginning, place the plane in the 25L runway of the KLAX "Los Angeles" Airport.

- Press on **RTE** key, it appears the **RTE 1/2** screen like the figure.
- Type KLAX and place it in ORIGIN "1L".
- Type 25L and place it in RUNWAY "3L".
- Type KSFO and place it in DEST "1R".
- Press the "NEXT PAGE" key, it appears the **RTE 2/2** screen like the figure bellow-right.
- Type MERMA and place it in TO "1R".
- Type SFO and place it in TO "2R".
- Type V25 and replace DIRECT "2L".
- Press **ACTIVATE** "6R".
- Press on "EXEC" key.



A flight plan like below has to appear:



After the take-off, you can activate the AUTOPILOT by pressing "CMD" key and then "LNAV" to follow the route.

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https://downloads.virtual-fly.com/docs/vfhub/latest/radiostack_user's_manual_rev1.0.pdf



9. TROUBLESHOOTING

Anomaly	Possible Cause	Solution
INDICATOR PANEL DISPLAYS "FS STATUS: Searching..."	Network cable n° 3 is not connected.	Check connection of network cable n° 3 between SOLO and MFS / P3D / X-Plane computer.
	MFS / P3D / X-Plane is not running.	Execute MFS / P3D / X-Plane.
	FSUIPC is not installed (MFS/P3D).	Install FSUIPC. See Chapter 2.
	"VFConnect3.exe" or "VFConnect3-Xplane.exe" is not executed.	Execute "VFConnect3-Xplane.exe" on the MSF / P3D / X-Plane computer.
	"VFConnect3.exe" or "VFConnect3-Xplane.exe" started incorrectly.	Only one of "VFConnect" or "VFConnect-Xplane" can be executed at the same time, be sure that you are executed the version that corresponds on your simulation software. "VFConnect" will only work with MFS/P3D and VFConnect-Xplane will only work with X-Plane.
	Windows firewall does not allow communication with SOLO.	You will have to add an exception manually to allow communication. For that, follow the steps below: 1. Press combo key Windows + R. 2. Write "firewall.cpl" on the window that has appeared.

Anomaly	Possible Cause	Solution
INDICATOR DISPLAYS "FS Searching..."	PC has more than one network card.	<p>1. If you are trying to use one network card to connect to your router and another one to connect directly to SOLO and it does not work, try connecting SOLO directly to your router instead of connect to the pc.This way, connection will be established through the network LAN.</p> <p>2. If you have connected SOLO directly to your PC and your PC has the other network sockets free, try connecting SOLO to the PC using another network card.</p>
	Network problems.	If you have connected your PC and SOLO directly (without router), at the beginning you will have to wait some time, even more than a minute, because Windows set IP addresses automatically.
	Network Discovery disabled.	Check that in your current network profile (Public / Home or Work) Network discovery option is turned on. For that, go to: "Control Panel\All Control Panel Items\Network and Sharing Center\Advanced sharing settings" and turn Discovery Network option on for all profiles available.
	Antivirus software is blocking the connection.	Each Antivirus software has their own options and menus. To see if the problem comes from the antivirus, you can deactivate it completely just for the test. If the connection is stablished with the antivirus deactivated you should look for an option that allows any connection for VFConnect3.exe or VFConnect3-Xplane.exe

Anomaly	Possible Cause	Solution
Connection goes down, is intermitent or indicators move sharply.	Connection trough Wifi.	If you are using a PC which is connected to your network by Wifi, even SOLO is connected by cable, it is possible that due to interference, noise or other electromagnetic signal, connection will not be constant. It is so recommendable using always a network cable to connect SOLO to the router and your PC to the router also, or alternatively a direct cable between your PC and SOLO to enjoy completely of your SOLO.
	Your MFS / P3D / X-Plane PC is executing another program on the background that uses all the bandwidth of the network card.	To guarantee the best perform of the connection, it is recommendable during the session, to close programs which make an intensive use of the network connection or computer processor.
I don't know how to connect the flight director.		Push on the rotary "A.I. PUSH F/D" located above left of the panel.

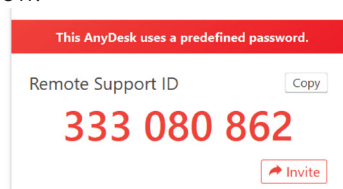
10. REMOTE SUPPORT

In case you need help from Virtual Fly's technical team, there is the possibility to schedule a remote connection to your flight simulator computer and SOLO AIRLINER. For that, you should:

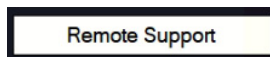
1. Ensure your flight simulator computer and SOLO AIRLINER are connected to the internet.
2. Download and run the following software for your PC running the flight simulation software:

https://downloads.virtual-fly.com/software/VirtualFly_Remote_Support_Tool.exe

3. Take note of the code that appears in your PC screen, as displayed below:



4. Turn on your SOLO and wait until the main screen “SELECT PANEL TYPE” appears.
5. Press on the “Remote Support” button displayed below. Anydesk will start 10 – 20 seconds later, from which you must take note of the ID that shows up in your screen.



6. Contact Virtual Fly's technical support team at support@virtual-fly.com to:

- Provide them with the Anydesk ID codes from your PC and SOLO AIRLINER.
- Schedule a remote session.

11. TECHNICAL SPECIFICATIONS

Power Supply: 110-220 VAC, mono, 50-60 Hz

Nominal intensity: 0,75 A

Weight: 20 kg

Height: 46.35 cm

Depth: 23.1 cm

Width: 77.1 cm

Compatibility: MSFS, Prepar3D and X-Plane 11/12

