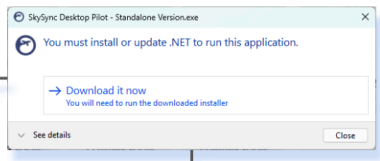
HOW TO USE SKYSYNC COMPATIBLE WITH XPLN SOFTWARE

SKYSYNC COMPATIBLE WITH XPLN is a software control tool used to connect the Desktop Pilot device (listed below) with X-Plane flight simulation software.

To fully enjoy the benefits of the listed products, follow the instructions to properly install and use the **Desktop Pilot SkySync** software.

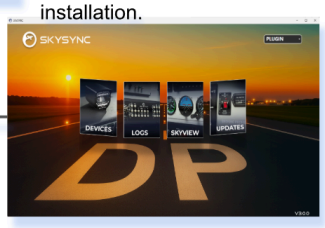
1. Download and install the Skysync compatible with XPLN

Download it at **https://www.desktoppilot.com/software/**



1.1 a prompt may appear indicating that the **.NET Desktop Runtime** is required. Select “Download it now”

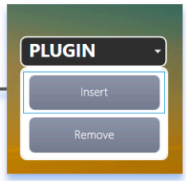
1.2 Once the download is complete, **run the installer** and follow the on-screen instructions to complete the runtime installation.



1.3 Run the Skysync Software

2. After the initial installation, open **SkySync.**.

PLUGIN - The necessary file needs to be plugged on the folder of X-Plane can be found here.



SKYVIEW – Contains all graphical display settings related to Skysync.

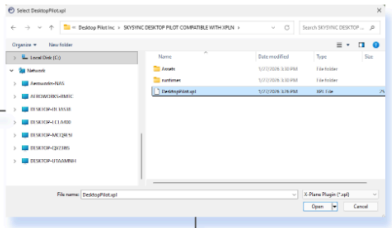
DEVICES - All full flight simulator controls and functions are located here.

UPDATES – The latest and previous updates and adjustments can be found here.

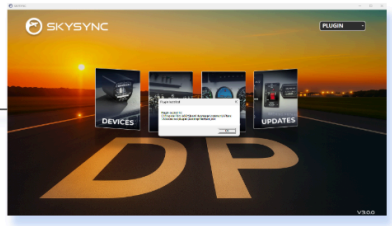
LOGS – Lists all Desktop Pilot Skysync-related devices connected to the PC.

3. Ensure that the X-plane 12 is closed then insert the plugin.

3.1 Choose PLUGIN then select INSERT



3.2 Select **Desktoppilot.xpl** located at X:**\Program Files (x86)\Desktop Pilot Inc\SKYSYNC DESKTOP PILOT COMPATIBLE WITH XPLN**



3.3 A pop-up message will appear to confirm that the file has been successfully copied to **X-Plane 12\Resources\plugins\DesktopPilot\ win_x64**.

3.4 Once **DesktopPilot.xpl** is saved to the folder, perform a software refresh by doing the following:

Close Skysync → Open X-Plane → Open Skysync .

4. Setting up the **X-plane**.

4.1 Open **X-plane** (**X-Plane version 12.3.0 is highly recommended**).

4.2 Start a **"NEW FLIGHT"** and select **Cessna Skyhawk (G1000)** as the aircraft.

4.3 **(Optional) Customize** the aircraft by selecting '**Customize**' located under the selected aircraft.

4.3.1 Uncheck **Start with engines running**.

4.3.2 Select **Weight, Balance & Fuel**, adjust values as needed

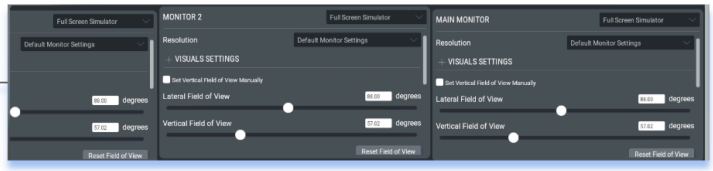
4.3.3 select **Done** → **Start Flight** and wait for X-Plane to load

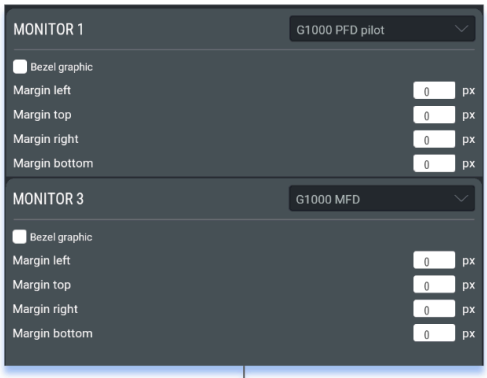
5. During the flight, move the cursor to the top edge of the main monitor to display the X-Plane taskbar. From the right corner of the X-Plane taskbar, select the **Settings icon**. 

5.1 Select the **Graphics tab**. Adjust the settings as shown below (Highly recommended).

5.2 Under **Graphics tab - Monitor Configuration.** Set the TV monitor views as shown below (recommended for a three setup monitor) **Important Notice:** It is required to set up the **Windows display settings** to match the following under Monitor Configuration (see Monitor Screen Setup under Hardware Setup).

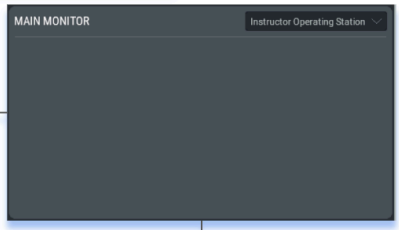
Left to Right	Monitor 1	Monitor 2	Monitor 3
Screen type	Full Screen Simulator	Full Screen Simulator	Full Screen Simulator
Resolution	Default	Default	Default
Lateral Field of View	88	88	88
Vertical Field of View	57.02	57.02	57.02
Lateral Rotation Offset	-90	0	90



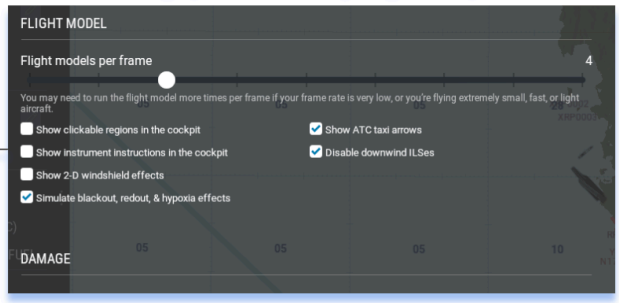


5.3 Set up the two XFD screens as shown. **(see instruction 7 if this is not available for display purpose)**

5.4 **(Optional) -** In the extra monitor located at the right most, set it as shown below:(this will serve as an Instructor Operating Station(IOS)).



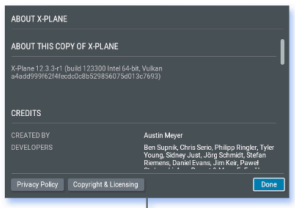
5.5 Under **Settings** → **General Tab** → **Flight Model**, set the **Flight Model** to **4**. This increases flight stability by running the physics calculations faster than the graphics. After everything is set up, select 'Done'.



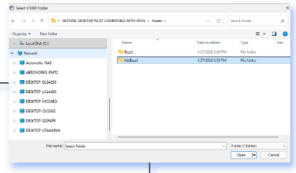
6. Open **Skyview** under Skysync Software then select "**Identify**".

6.1 This will display the assigned number for each monitor, as shown below.

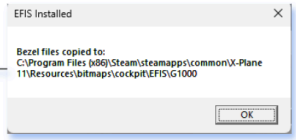
6.2 In SkyView, fill in the MIP box with the assigned physical number of the MIP display. Then select **Set Screen** → **Pop Out MIP**. Then verify that the display is properly assigned to the correct physical monitor.



7. Below X-plane 12.3.0 version (Optional for X-plane 12.3.0 and above).To verify the version of the X-Plane Go to “X-Plane Settings - General Tab - select About X-Plane” **. (the process shown in instruction #6 will be ignored by doing the instruction #7).**



7.1 **Close** X-Plane→ **Open Skysync → go to Skyview → Select “INSERT EFIS” → Select “Bezel” → Select “Open”** the bezel folder is located on this path X:**\Program Files (x86)\Desktop Pilot Inc\SKYSYNC DESKTOP PILOT COMPATIBLE WITH XPLN\Assets**



7.2 **Close the Skysync → Open X-Plane → Open Skysync**

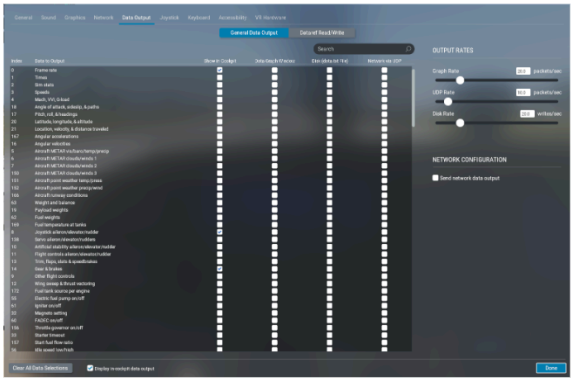
7.3 Open **Skyview** under Skysync Software then select “**Identify**”.

7.4 This will display the assigned number for each monitor, as shown below.

7.5 In SkyView, fill in the PFD, MFD and MIP box with the assigned physical number on each respective physical display. Then select **Set Screen → Pop Out MIP → Pop Out PFD → Pop Out MFD**. Then verify that the display is properly assigned to the correct physical monitors.

DESKTOP PILOT

Desktop Pilot Cessna 172 Skyhawk G1000 Full Flight Simulator



8. Flight Calibration.

Go to **X-Plane→ Settings → Data Output →** Select the following in **"Show in Cockpit"**

0	Frame rate :	☑
8	Joystick aileron/elevator/rudder :	☑
14	Gear & Brakes :	☑

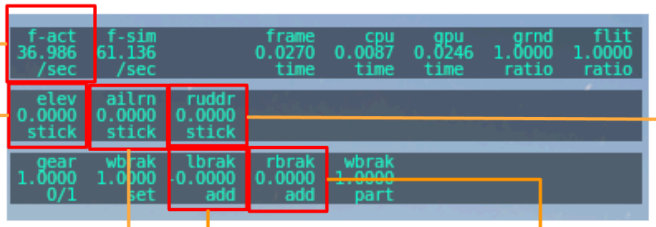
8.1 Then select '**Done**.' The following will be displayed at the upper left of the main monitor, as shown below:

These data indicate whether the calibration has achieved the MAX, MIN, and CENTER values for the Yoke and Rudder setup.

Graphics Frame Rate: Recommended value **(30 and above)**. (If below the recommended adjust data on Graphic Settings of X-plane)

Push and Pull of Yoke: -1 for Maximum **push**, approximately **0** at center and **1** for Maximum **pull**

Left and Right of Yoke: -1 for Maximum **Left**, approximately **0** at center and **1** for Maximum **Right**



Rudder: -1 for Maximum **Left**, approximately **0** at center and **1** for Maximum **Right**

Right Brake: 0 for rest position, **1** for Maximum position

Left Brake: 0 for rest position, **1** for Maximum position

DESKTOP PILOT

RUDDER

Under Devices **select** Rudder.

Under **FLIGHT CALIBRATION** set the following values by adjusting the sliders:

Max Left Rudder :	**100**
Max Right Rudder :	**100**
Rudder Trim :	**50**
Max Left and Right Rudder :	**100**
Rudder Trim :	**50**

then select **CALIBRATE**

Under **HARDWARE CALIBRATION**, fill in the **Y value (Yaw)** by physically moving the rudder through its minimum and maximum positions. Do the same for the **L value (Left Brake)** and the **R value (Right Brake)**. Then select **"SAVE"**

Inverted output - when a reverse output is detected, in the X-Plane Rudder vs the physical rudder, use the buttons under the "**CONTROLLER INVERSION**", for inverted YAW select **"SWAP YAW"** → **select "SAVE"** under HARDWARE CALIBRATION, do the same if inversion is detected on Brakes.

Inflight Calibration

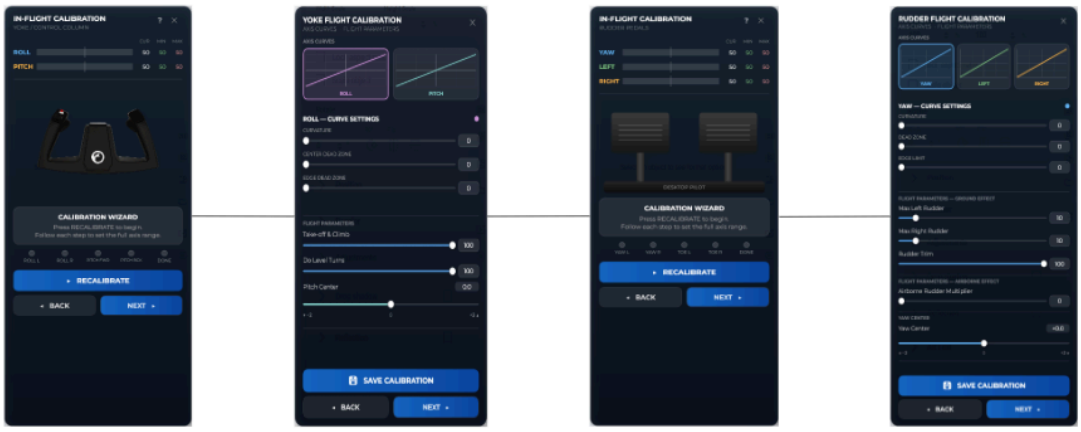
Locate and click the **"In-Flight Calibration"** button on the main interface.
An overlay window will appear on the screen.
Carefully read the instructions displayed in the overlay window.
Follow each step as instructed to complete the calibration process.
Wait for the confirmation message indicating that calibration is successful before resuming normal operation. You can check the process in the window.

Rudder Axis Curve and Deadzone Calibration

To adjust and customize the rudder response settings according to user preference. Navigate to the **Rudder Device** window. Locate the **Settings** option at the upper-right corner of the window. Click the **Settings** button to open the configuration panel. Adjust your preferred **Curve** settings to modify rudder response sensitivity. Set the desired **Deadzone** level to eliminate unwanted minor input movements for minimum, maximum and center. Then **Save Settings**

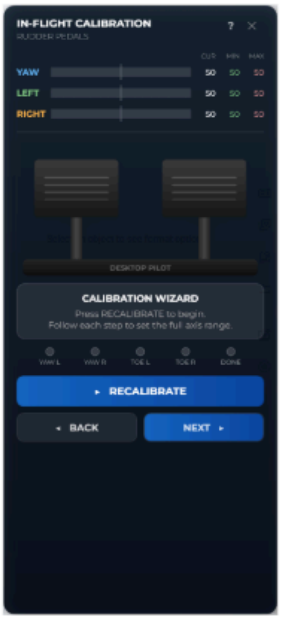
CALIBRATION OVERLAY

Click **CALIBRATION**



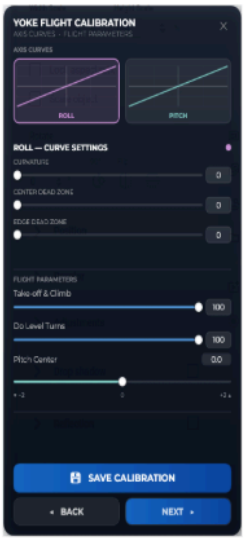
A total of four overlay panels must be completed to calibrate the Yoke and Rudder controllers. Click **Back/Next** for navigation.

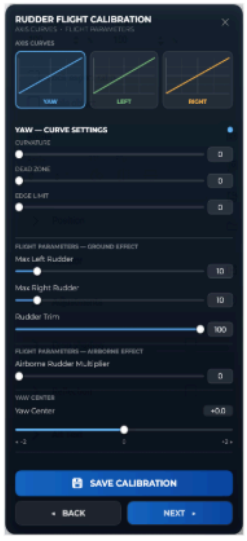
A **3-second** countdown will be applied to each calibration step for the **Yoke** and **Rudder.** The user will be asked to hold the controllers in position during calibration. Once all steps are completed, the procedure will proceed to the **Flight Calibration** panels.



In the **Yoke and Rudder In-Flight Calibration panel**, first-time users are guided through both **first-pass and second-pass procedures** to complete the calibration.

The user must follow all procedures to progress through the **five calibration phases**, and all indicator dots must turn **fully green** once the process is complete. A **flashing green indication** will appear to confirm that the calibration was successful.





In the **Yoke and Rudder Flight Calibration panel**, users can adjust the **sensitivity**, **center deadzone**, and **maximum output resolution**. Additional **flight parameters** are also available to improve the overall flight experience.

Yoke Settings:

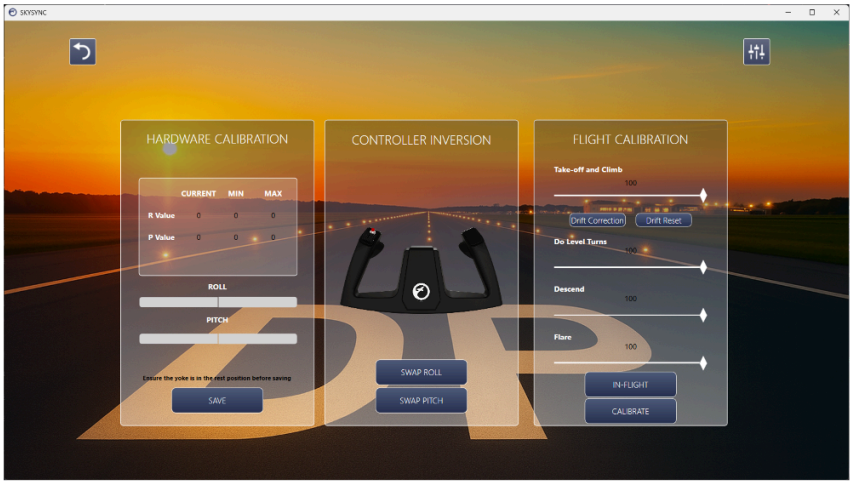
- **Take-off & Climb:** Adjusts the **pitch trim** during take-off and climb.
- **Level Turns:** Adjusts the **roll trim** of the yoke.
- **Pitch Center:** Adjusts the **neutral pitch output**.

Rudder Settings:

- **Max Left/Right Rudder:** Adjusts the **yaw trim for each side of the rudder**.
- **Max Rudder:** Adjusts the **overall yaw trim for both sides**.
- **Airborne Rudder Multiplier:** Adjusts the **rudder response while the aircraft is airborne**.
- **Yaw Center:** Adjusts the **neutral yaw output**.

YOKE

Under Devices **select** Yoke



Under **FLIGHT CALIBRATION** set the following values by adjusting the sliders:

Take-off and Climb :	**100**
Do Level Turns :	**100**
Descend :	**100**
Flare :	**100**

Under **HARDWARE CALIBRATION,** fill in the **R value (ROLL)** by physically moving the Roll Control through its minimum and maximum position. Do the same with **P value (Pitch).** Then select "**SAVE".**

Inverted output - when a reverse output is detected, in the X-Plane Yoke vs the physical Yoke, use the buttons under the "**CONTROLLER INVERSION**", for inverted ROLL select **"SWAP ROLL"** → **select "SAVE"** under **HARDWARE CALIBRATION**, do the same if inversion is detected on PITCH.

MISALIGNED ROLL CENTER - To resolve this move the physical yoke (ROLL) until the **"ailrn"** value reach almost equal to 0 (see instruction 5.1), while holding this position, select "Drift Correction" → select "CALIBRATE" then release the yoke and verify that the "**ailrn**" value remains close to 0. Repeat this process until the best resting position of the yoke is achieved.

TRIMWHEEL

Under Devices **select** Trim Wheel

To adjust the **sensitivity** of the trim wheel, use the sensitivity knob located on the physical trim wheel. Turn it **counterclockwise** to decrease the sensitivity, and **clockwise** to increase the sensitivity. After adjusting the sensitivity, select "**LOCK icon**" to prevent accidental adjustment during flight.

To reverse the function of the trim when the pitch direction is incorrect, click **SWAP TRIM**.To adjust the **physical trim indicator** when the center is not aligned, move the slider until the trim indicator aligns with the panel's center indicator, then select 'SAVE'.

G1000-XFD

Under Devices **select** XFD

Verify that the softkeys and encoders trigger the correct XFD. If the input is switched to a different XFD display, select “SWITCH PFD/MFD” .

If choosing an aircraft with **six pack instrument**, then select “**SIX PACK MODE”** partner this with Skyview under PFD select “**POP OUT SICK PACK**”. (It is highly recommended to use “XFD MODE” on the Desktop Pilot Cessna 172 Skyhawk G1000 Full Flight Simulator).

In **Six Pack Mode**, these encoder are the usable:

NAV , HDG, COM, and CRS-BARO.

If a button failure is detected in either mode, press the ‘Calibrate’ button.

THROTTLE

Under Devices **select** Throttle

Under HARDWARE CALIBRATION, fill in the **T Value (THROTTLE)** by physically moving the throttle control through its minimum and maximum position.Do the same with **M Value (MIXTURE).** Then select "**SAVE".**

COMPASS

Under Devices **select** Compass

Use the “LEFT” or “RIGHT” button to adjust the compass alignment until it reaches the exact position.

FLAPS PANEL

Under Devices **select** the FLAPS PANEL

If the indicator does not align properly with the 10° or 20° markings on the physical panel, adjust the slider values as needed, then select **"SAVE."**

MULTI-INSTRUMENT PANEL

Under Devices **select** the Multi-Instrument Panel.

Select the appropriate button “Swap Altimeter Rotation”, “Swap Airspeed Rotation”, or “Swap Attitude Rotation” for any encoder with reversed rotation to correct the encoder’s physical rotation.

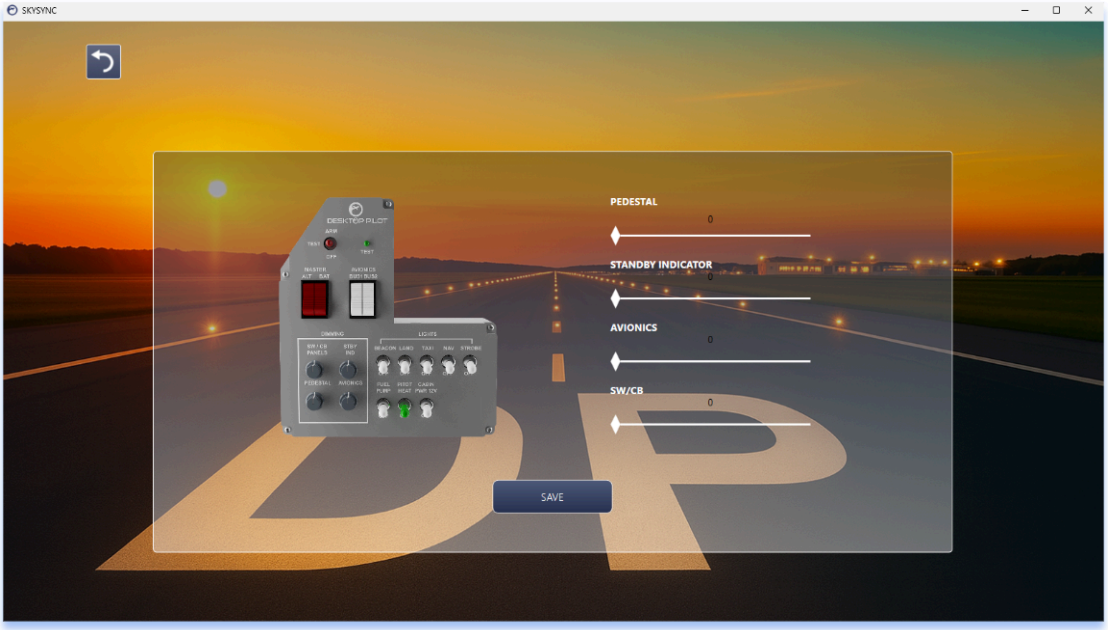
HOBBSMETER

Under Devices **select** Hobbs meter.

X-Plane has a built-in Hobbs meter function. To match the X-Plane data with the physical Hobbs meter, adjust the **slider** until the X-Plane built-in Hobbs meter displays a value equivalent to the physical Hobbs meter. Then select “SAVE”.

SWITCH PANEL

Under Devices **select** Switch Panel.



To adjust the maximum brightness of each dimming controller located on the physical switch panel, use the sliders listed below.

Pedestal :	can be set to 0 -100
Standby Indicator :	can be set to 0 - 100
Avionics :	can be set to 0 - 100
SW/CB :	can be set to 0 - 100

CIRCUIT BREAKER PANEL

Under Devices **select**

Circuit Breaker Panel

Use only if the Lighted Ignition panel will be used for flight . To switch on Ignition Panel mode select “IGP MODE” , to return on Lighted Circuit Breaker mode select “CBK MODE” .