

Serial Cirrus II Console, Serial PFC Digital Avionics and Cirrus Pedals

X-Plane 9 Setup Guide





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1.1 Installation of X-Plane 9.70

Prior to using this guide X-Plane 9.70 must be already installed on your computer. This guide will walk you through the necessary steps to configure X-Plane and calibrate your controls for proper operation with X-Plane 9.70

1.2 Change the protocol switch of Serial Cirrus II

For proper operation of the Cirrus II with the X-Plane 9.70, the output protocol of the console will need to be changed. Changing the position of the protocol switch will change the output data protocol of the console to that of X-Plane will understand.



Landing Gear Switch (latching)

Note: This is a picture of the PFC THROTTLE QUADRANT CONSOLE but the location of the switch is the same, behind the throttle quadrant lever.

To remove throttle quadrant you must:

- 1. Pull all the levers down (towards you). This will release the pressure from the push rods
- 2. Loosen the thumb screw by turning it counter clockwise

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1.3 Changing Connections

If you are using an ELITE UCI box you will need to disconnect it when using the any Precision Flight Controls hardware with Microsoft Flight Simulator or X-Plane. Please see the diagram below for the necessary connections.

Additionally if you are using an ELITE AP1000, AP2000 or AP3000 these are not compatible with any version of X-Plane, including X-Plane 9



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1.4 Getting the COM Port Information

The COM port or serial port is the port used by the System to communicate to X-Plane 9.70. It is important to know the correct COM port number that your System is connected to, as this information will be necessary for proper communication and operation between X-Plane and System. The steps below will guide you to find out the correct com port number.

- 1. Make sure that X-Plane is not running.
- 2. Go to Start orb.
- 3. Choose Control Panel.
- 4. On the upper right wide of the window, change the View By option to Large Icons.
- 5. Click on the System Icon.
- 6. On the links on the left side, click on Device Manager.
- 7. In the device manager window, expand the Ports list by clicking on the (>) symbol.
- 8. Make a note of the numbers on the Communications Port.
- 9. Close any open window.

1.5 Configure X-Plane 9.70 and System communication.

- 1. Start X-Plane.
- 2. At this point you should see an aircraft at the end of a runway, move the mouse all the way to the top and from the menu bar, choose Settings.
- 3. Choose Joystick & Equipment, then choose Equipment Tab



Caution: If you have aileron trim and anti-ice switch please enable checkboxes as shown in the Figure 1.1. If not enable checkboxes as shown on the Figure 1.2

- 4. Enable the check boxes as shown in Figure 1.1 or Figure 1.2
- 5. Once all the options pictured are enabled, Change the com port number to the one that you noted from Step 6.
- Now that you have selected correct com port, close the Equipment Window by clicking on the (x) upper left hand corner.
- 7. Now move the mouse all the way to the top and from the menu bar choose File then choose Quit.

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8. Once you are back in Windows Desktop start X-Plane again.

1.5.1 Settings for Cirrus II with Aileron Trim and Anti-Ice

X Joystick & Equipment	×
Axis Center Buttons: Basic Buttons: Adv Keys Equipment	
Accessories	Precision Flight Controls (PFC) Hardware
	PFC serial-port hardware (cat-2 or above)
	*
	PFC serial com-port COM 1 + for serial out
	PFC serial-port
	PFC throttle 🗹 quadrant 2 throttle prop mixture 🔹
	PFC serial-port
	P.F.C. 😿
	P.F.C. 🗹 rudder trim
Real Avionics	PFC electric trim wheel
MMEA GPS-driven device com-port COM 1 for serial out to NMEA device per second	PFC parking brake
AA	P.F.C. prop
Garmin GPS-3 Pilot or Garmin Com-port COM1 + for serial out to 01 transmissions 196-296-396-496 Moving Map	PFC cowl flaps
	P.F.C. cowl-flaps are dual-sliders
(real) Garmin 430-530 Com-port COM 1 To Garmin 430 Simulation Unit Nav-Com #1	PFC fuel selectors
	P.F.C. C-90B E
(real) Garmin 430-530 Com-port COM 1 ➡ for serial out Simulation Unit Nav-Com #2 com-port COM 1 ➡ to Garmin 430	P.F.C. 3-position Constraint (Cessna) flap switch
	P.F.C. 4-position Constraint (Cessna) flap switch
(real) Garmin 1000 PFD com-port COM 1 F Baron B58 G1000 Software 6.00 F	P.F.C. pitot 🐱
	P.F.C. inlet
	P.F.C. full de 😿
	P.F.C. fuel 3+cut-off
	1

Figure 1.1

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1.5.2 Settings for Cirrus II without Aileron Trim and Anti-Ice

X Joystick & Equipment	×
Axis Center Buttons: Basic Buttons: Adv Keys Equipment	
Accessories	Precision Flight Controls (PFC) Hardware
	PFC serial-port hardware
	frank of paralel
	PFC serial com-port COM 1 for serial out
	PFC serial-port
	PFC throttle quadrant 2 throttle prop mixture
	PFC serial-port
	aileron trim
	rudder trim
Real Avionics	PFC electric trim wheel
MEA GPS-driven device com-port COM1 for serial out to NMEA device 02 per second	PFC parking brake 🗹 is toggle-switch
00	P.F.C. prop sync switch
Garmin GPS-3 Pilot or Garmin Com-port COM1 for serial out to Garmin GPS-3 Pilot O1 transmissions per second	PFC cowl flaps are dual-toggles
	P.F.C. cowl-flaps are dual-sliders
(real) Garmin 430-530 com-port COM 1 for serial out Simulation Unit Nav-Com #1 com-port	PFC fuel selectors
	P.F.C. C-908 E
(real) Garmin 430-530 com-port COM 1 To Garmin 430	P.F.C. 3-position (Cessna) flap switch
	P.F.C. 4-position (Cessna) flap switch
(real) Garmin 1000 PFD com-port COM 1 Baron B58 G1000 Software 6.00	P.F.C. pitot
	P.F.C. inlet
	P.F.C. full de E
	P.F.C. fuel 3+cut-off

Figure 1.2

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1.6 Calibration of Cirrus II Console and Cirrus Pedals

- 1. Start X-Plane
- 2. Now move the mouse all the way to the top and from the menu bar, choose Settings.
- 3. From the Settings, choose Joystick & Equipment, and then choose Center.

1.6.1 Trim Calibration:



Caution: If you **do not** have aileron trim and anti-ice switch, skip steps 19 to 24 and proceed to step 25.

- 4. Make sure the Aileron Trim is turned all the way to the left and click on Set Left on Ail Trim
- 5. Make sure the Aileron Trim is turned all the way to the Right and click on Set Right on Ail Trim
- 6. Now make sure that the Aileron Trim is Centered and click on Set Center
- 7. Make sure the Rudder Trim is turned all the way to the Left and click on Set Left on Rud Trim
- 8. Make sure the Rudder Trim is turned all the way to the Right and click on Set Right on Rud Trim
- 9. Now make sure that the Rudder Trim is Centered and click on Set Center on Rud Trim

1.6.2 Power Quadrant Calibration:

- 10. Make sure a lever is installed on the console. A 6-lever or twin-prop is preferred for calibration purposes, if you do not have one you can use what you have.
- 11. Push all the levers full forward.
- 12. Click on SET MAX on Throt1, Throt2, Throt3, Throt4, Throt5, and Throt6.
- 13. Pull the levers all the way to aft position or bottom
- 14. Click on SET MIN on Throt1, Throt2, Throt3, Throt4, Throt5, and Throt6.

1.6.3 Aileron Calibration:

- 15. Now turn and hold your yoke all the way to the Left and click on Set Left on roll.
- 16. Now turn and hold your yoke all the way to the Right and click on Set Right on Roll.
- 17. Center the yoke now and click on Set Center on Roll.

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1.6.4 Elevator Calibration:

- 18. Pull the and hold yoke all the way out and click on Set Up on Pitch.
- 19. Push and hold the yoke all the way in and click on Set Down on Pitch.
- 20. Center the yoke now and click on Set Center on Pitch.



Warning: If you do not have, the Precision Flight Controls Cirrus Pedals please skip the steps below then go back to Figure 1.1 or Figure 1.2 and Disable the PFC Serial Port Rudder Pedals.

1.6.5 Rudder and Brake Calibration:

- 21. Push the Right pedal all the way to the right and click on Set Right on Rudder.
- 22. Push the Left Pedal all the way to the Left and click on Set Left on Rudder
- 23. Center the pedals now and click on Set Center on Rudder.
- 24. Apply full braking force on both of your brakes at the same time and click on Set Max on the Left Brake and Right Brake.
- 25. Release the brakes and click on Set Min
- 26. Click on X on the upper left hand corner.
- 27. Now move your mouse to the top of the screen and click on File and then Quit
- 28. Start X-Plane again and all the controls should work now.

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