

# Precision Flight Controls, Inc.

## Serial CAT I System and X-Plan 9 Setup Guide





## <u>Preface</u>

This setup guide will walk you through the necessary steps to setup your CAT I System with X-Plane 9.xx. For connection diagram please refer to the packet that you received with the CAT I System.

## CAT I System includes:

- Cirrus Yoke
- Throttle Quadrant Console
- Avionics Panel with Remote Instrument Controller
- Cirrus Rudder Pedals

This setup guide assumes that you have already installed the X-Plane 9.xx software. If you have not installed the X-Plane 9.xx software, please install it now and refer to this guide once installation is done. For reference on software installation, please refer to the software manual that you have received.

## Getting the COM Port information:

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

- 1. Is X-Plane running? If it is, please exit the X-Plane by moving your mouse to the top of the screen and click on FILE and then QUIT.
- 2. Go to Start then choose Control Panel.
- 3. If you are seeing **Pick a category**, choose **Performance & Maintenance** then choose **System**. If not just choose **System**.
- 4. From the Systems Window, choose Hardware then Device Manager
- 5. Expand the **Ports** list by clicking on the plus (+) sign
- 6. Make a note of the numbers on the Communications Port.
- 7. Close the Device Manager window, the System Window and the Control Panel Window.

## Setting Up CAT I in X-Plane

- 8. Start X-Plane.
- 9. At this point you should see an aircraft at the end of a runway, if you do, move the mouse all the way to the top and from the menu bar, choose **Settings**.
- 10. Choose Joystick & Equipment, then choose Equipment Tab
- 11. Enable the check boxes as shown in Figure 1.1
- 12. Once all the options pictured are enabled, **Change the com port number to the one that you noted** from Step 6.
- 13. Now that you have selected correct com port, close the Equipment Window by clicking on the (x) upper left hand corner.
- 14. Now move the mouse all the way to the top and from the menu bar choose File then choose Quit.
- 15. Once you are back in Windows Desktop start X-Plane again.



Figure 1.1

## Calibration:

- 16. Start X-Plane
- 17. Now move the mouse all the way to the top and from the menu bar, choose **Settings**.
- 18. From the Settings, choose Joystick & Equipment, and then choose Center.

## Power Quadrant Calibration:

- 19. 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.
- 20. Push all the levers full forward.
- 21. Click on SET MAX on Throt1, Throt2, Throt3, Throt4, Throt5, and Throt6.
- 22. Pull the levers all the way to aft position or bottom
- 23. Click on SET MIN on Throt1, Throt2, Throt3, Throt4, Throt5, and Throt6.

## Aileron Calibration:

- 24. Now turn and hold your yoke all the way to the LEFT and click on Set LEFT on ROLL
- 25. Now turn and hold your yoke all the way to the RIGHT and click on Set RIGHT on ROLL
- 26. Center the yoke now and click on SET CENTER on ROLL

#### **Elevator Calibration:**

- 27. Pull the and hold yoke all the way **out** and click on **SET UP** on **PITCH**
- 28. Push and hold the yoke all the way in and click on SET DOWN on PITCH
- 29. Center the yoke now and click on SET CENTER on PITCH

## **Rudder Trim Calibration:**

- **NOTE:** To assure proper Rudder trim function, you will need to make sure that your trim is a separate channel. To test, move your rudder trim while in Center tab and check if the rudder trim indicator (green shade) moves. If it does not move, skip this and go back to Step 11 and disable the PFC Rudder Trim check box.
  - 30. Make sure the **Rudder Trim** is turned all the way to the **left** and click on **SET LEFT** on **RUD TRIM**
  - 31. Make sure the Rudder Trim is turned all the way to the Right and click on SET RIGHT on RUD TRIM
  - 32. Now make sure that the **Rudder Trim** is **Centered** and click on **Set Center** on **RUD TRIM**

If you do not have Precision Flight Controls Cirrus Pedals please skip this step. Please also go back to Step 13 and **Disable** the **PFC Serial Port Rudder Pedals**.

- 33. Push the Right Pedal all the way to the Right and click on SET RIGHT on the RUDDER
- 34. Push the LEFT Pedal all the way to the Left and click on SET LEFT on the RUDDER
- 35. Center the **PEDALS** now and click on **SET CENTER** on **RUDDER**
- 36. We're almost done, step on both of your brakes at the same time and click on **SET MAX** on the **LEFT BRAKE** and **RIGHT BRAKE**
- 37. Release the brakes and click on  $\ensuremath{\text{SET MIN}}$
- 38. Click on X on the upper left hand corner.
- 39. Now move your mouse to the top of the screen and click on FILE and then QUIT
- 40. Start X-Plane again and all the controls should work now.