Precision Flight Controls, Inc.

Serial CAT III System and FS2004 Setup Guide

Preface

This setup guide will walk you through the necessary steps to setup your **CAT III System** with Microsoft Flight Simulator 2004. For connection diagram please refer to the packet that you received with the console.

This setup guide assumes that you have already installed the Microsoft Flight Simulator 2004 (FS2004). If you have not installed FS2004 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.

CAT III System includes:

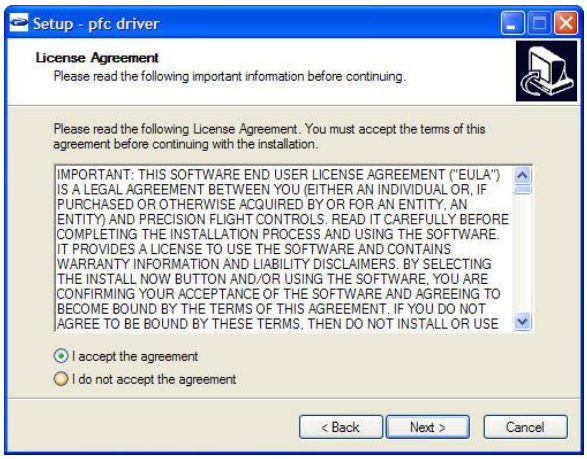
- **Cirrus II**
- **Avionics**
- **Cirrus Rudder Pedals**

INSTALLATION OF PFC DRIVER (DLL)

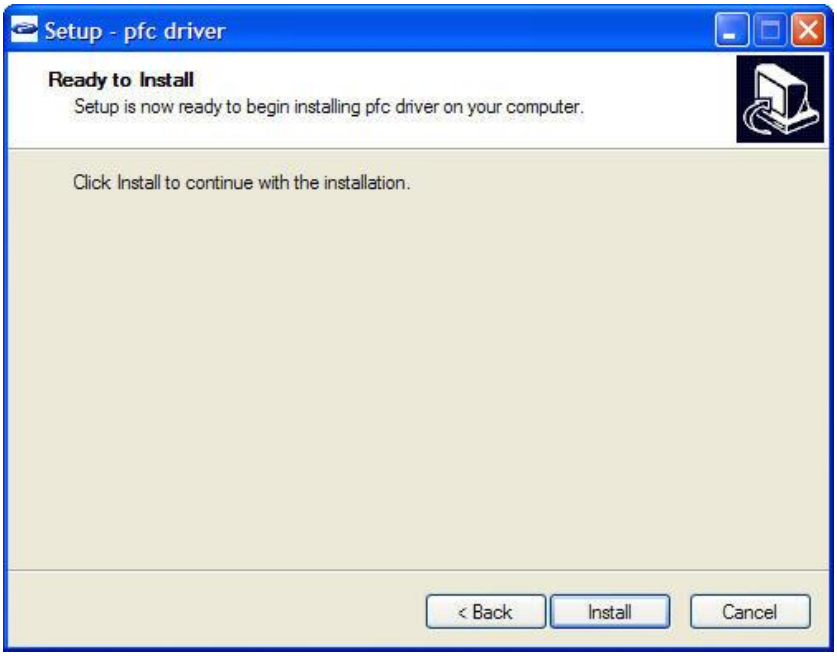
The PFC Driver, which includes the PFC.dll and FSUIPC.dll, is the software that allows serial Precision Flight Controls, Inc. devices to communicate and work with Microsoft Flight Simulator 2004 and Microsoft Flight Simulator X. Because of the internal difference between the softwares please make sure that you download the appropriate PFC Driver for the software that you are using.

1. Go to our webpage where you can Download the PFC driver from our site: http://www.flypfc.com/drivers.html
2. Choose the *PFC Driver for Microsoft Flight Simulator 2004*
3. When you click on the link it will ask where you want to save the file, make sure that you save it on your Desktop.
4. Now that you have downloaded the driver please close your browser.
5. On your desktop, please look for the **PFCFS2004.exe,** and double click on it.
6. Click on **Next.**

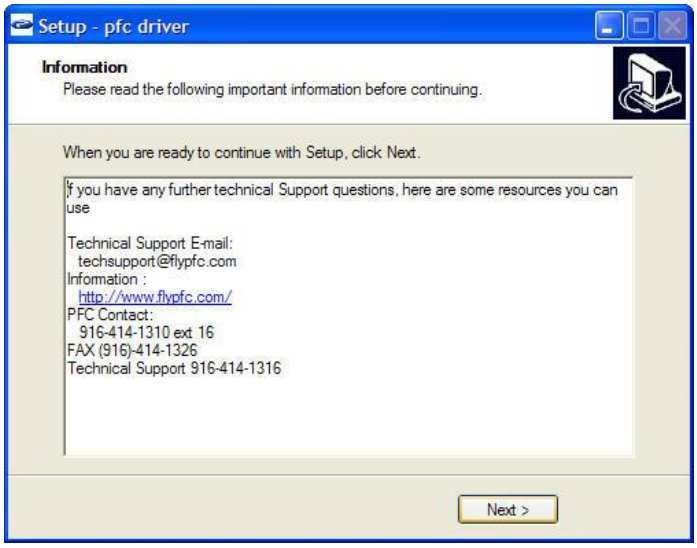
7. Read through the license agreement. You will need to **Accept the agreement** to be able to use the driver. Once you have agreed click on **Next**.

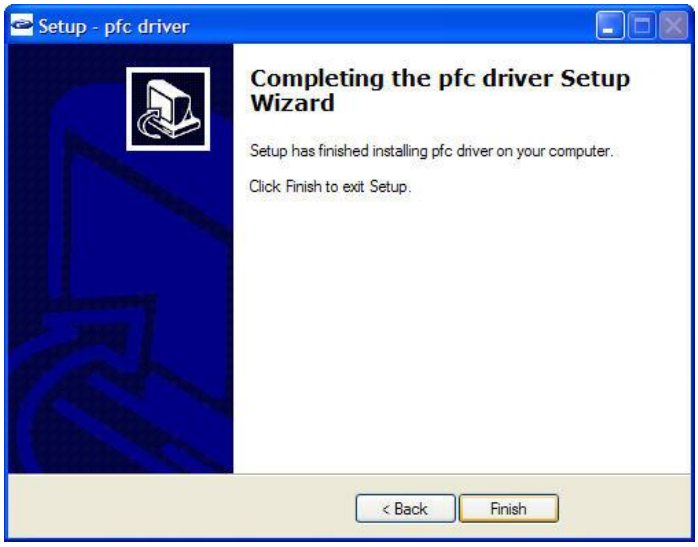


8. Now click on **Install**.



9. Now click on **Next** then **Finish**.





<u>Getting the COM Port information:</u>

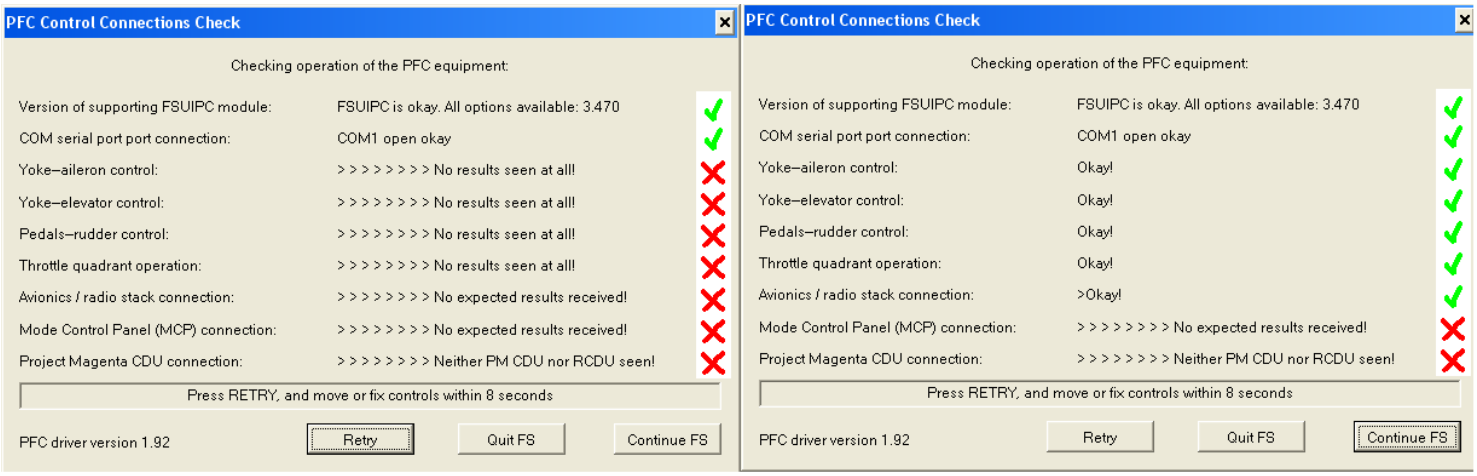
The COM port or serial port is a port used by the CAT III System to communicate to Microsoft Flight Simulator. It is important to know the correct COM port number that your Cirrus II is connected to. This information will be necessary for proper communication between Microsoft Flight Simulator and CAT III system. The steps below will guide you to find out the correct com port number.

1. Let's go to Start, Control Panel
2. Do you see ***Pick a Category*** or do you see icons such as A**ccessibility, Add/Remove Programs?**
3. If you are seeing **pick a category**, then choose **Performance & Maintenance** then choose **System**
4. If you are seeing icons such as **Accessibility, Add/Remove Programs,** choose System
5. From the **Systems Window**, choose **Hardware** then **Device Manager**

6. Expand the **Ports** list by clicking on the plus **(+)** sign
7. Make a note of the com port numbers as you will need this later in your setup.
    a. My COM Port number/s :_____ and _____
8. Go ahead and close the System Window as well as the Control Panel Window

Hardware Setup

10. Let's start Flight Simulator
11. Once it has completely started, choose **Create a Flight**.
12. Then click on **Fly Now!**
13. Once the flight sim should show a **PFC Control Connections Check** window.



14. Choose the com port which is Com port which is the port that your hardware is connected to.
15. It should say COM (x) open-okay. (If it does not say OK look at you notes and see what number the customer gave you. If there is more than one, they will need to select on the list and click on retry)
16. Please tell me if you are getting a green check on the **Yoke-aileron Control, Yoke-Elevator Control, Pedal-Rudder Control, Throttle Quadrant Operation, and Avionics/Radio Stack connection.**

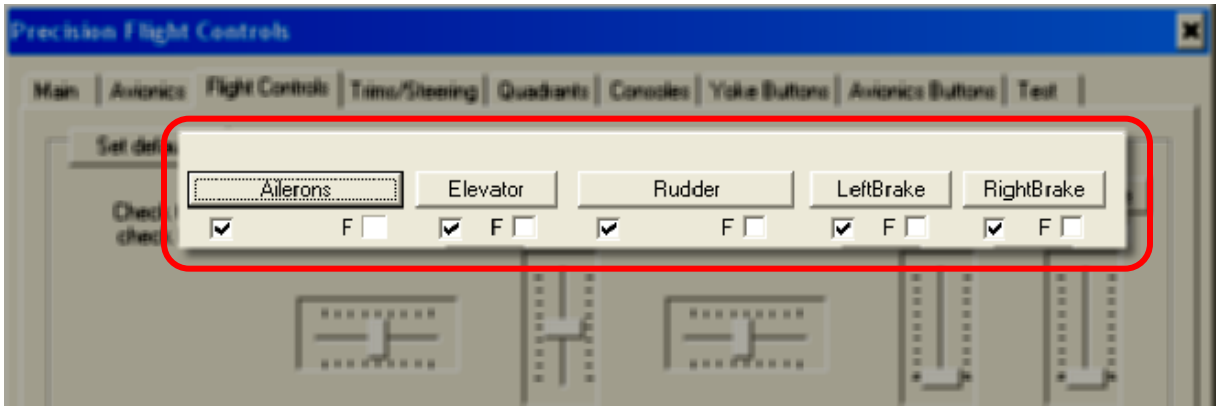
NOTE:

- If you do not have PFC Cirrus Rudder Pedals the Pedals-Rudder Control Connection will not turn green
- If you do not have avionics panel the Avionics /Radio Stack Connection will not turn green
- If you do not have The PFC Mode Control Panel (MCP) the Mode Control Panel (MCP) Connection will not turn green.
- If you do not have the Project Magenta CDU the Project Magenta CDU connection will not turn green.

17. Now that all the controls that are applicable to you have checked OK, click on **Continue FS**.
18. Now press the ALT key on your keyboard and choose PFC.
19. In the **Precision Flight Controls** window, choose **Flight Controls**.

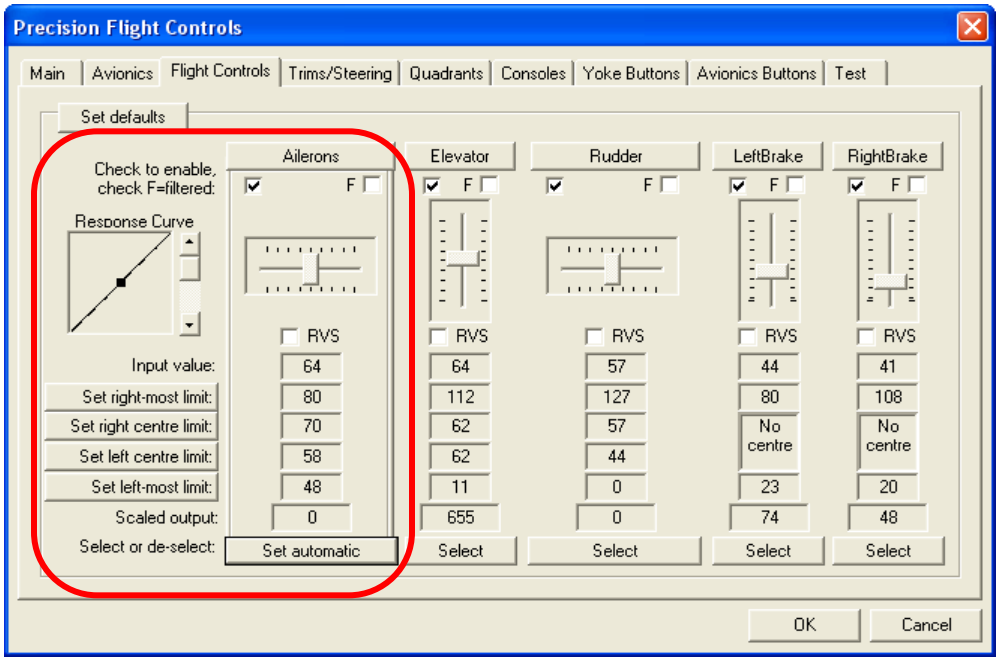
Enable Flight Controls

1. Now choose the **Flight Controls**.
2. Now enable the **Elevator** and **Aileron**, by clicking on the enable box which is opposite of the **F** for filter box.



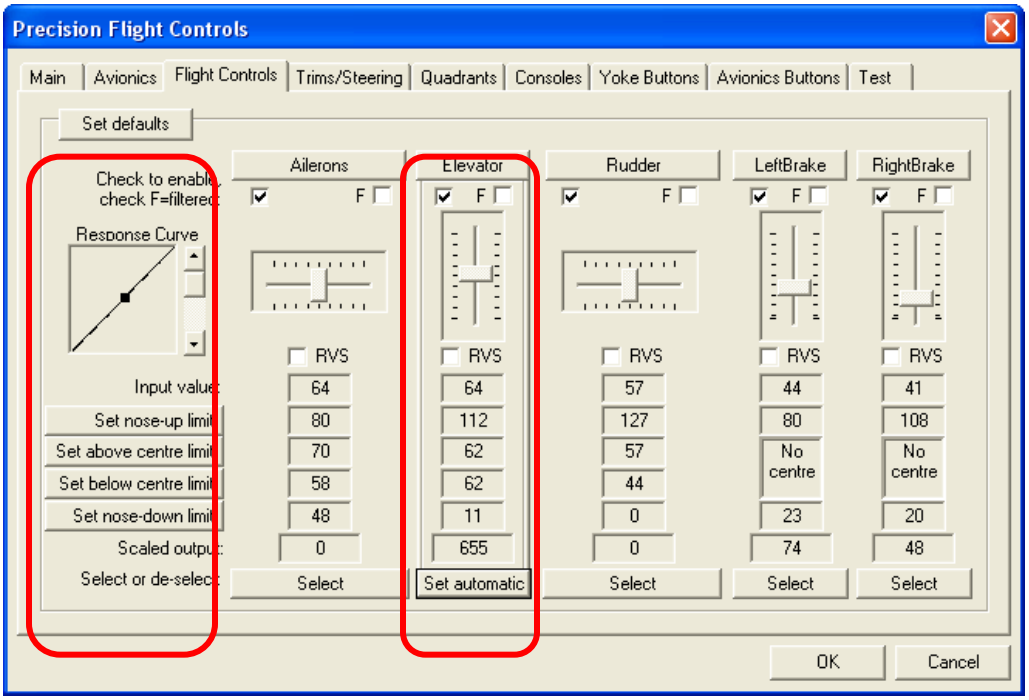
Aileron Calibration

3. Now click on **Select** button under the **Aileron Axis**. This should say **Set Automatic** now.
4. Turn your yoke all the way to the **Left** and hold it. Click on the **Set left most limit**.
5. Turn your yoke all the way to the **Right** and hold it. Click on the **Set right most limit**.



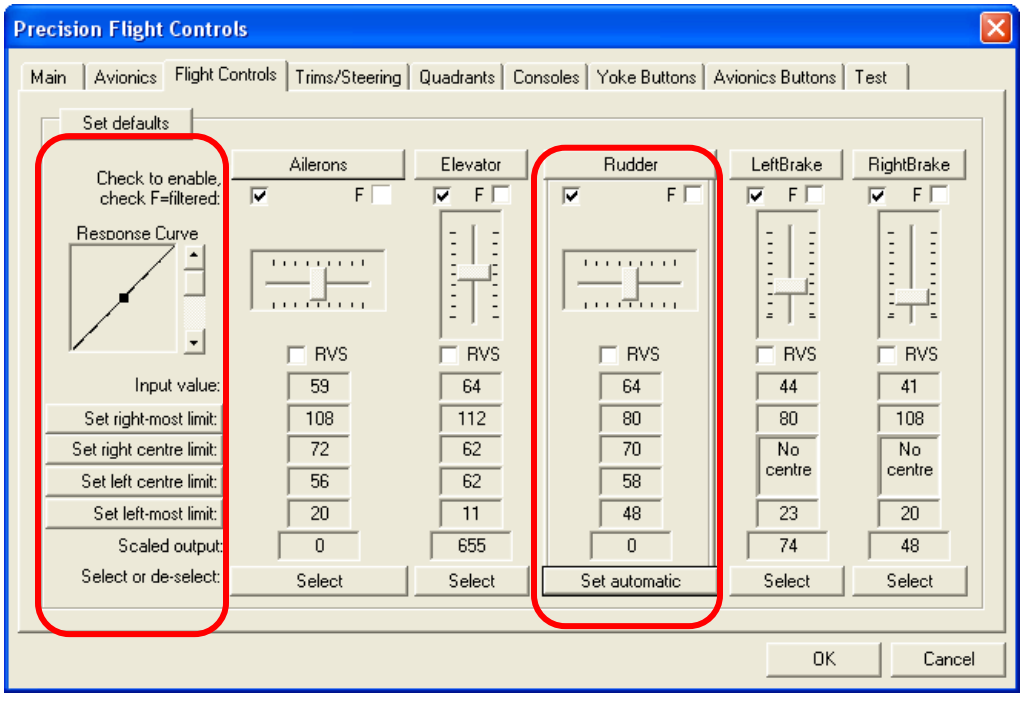
ELEVATOR CALIBRATION

6. Now click on **Select** button under the **Elevator Axis**. This should say **Set Automatic** now.
7. Pull your yoke all the way to the **out** and hold it. Click on the **Set nose up limit**.
8. Push your yoke all the way **forward** and hold it. Click on the **Set nose down limit**.



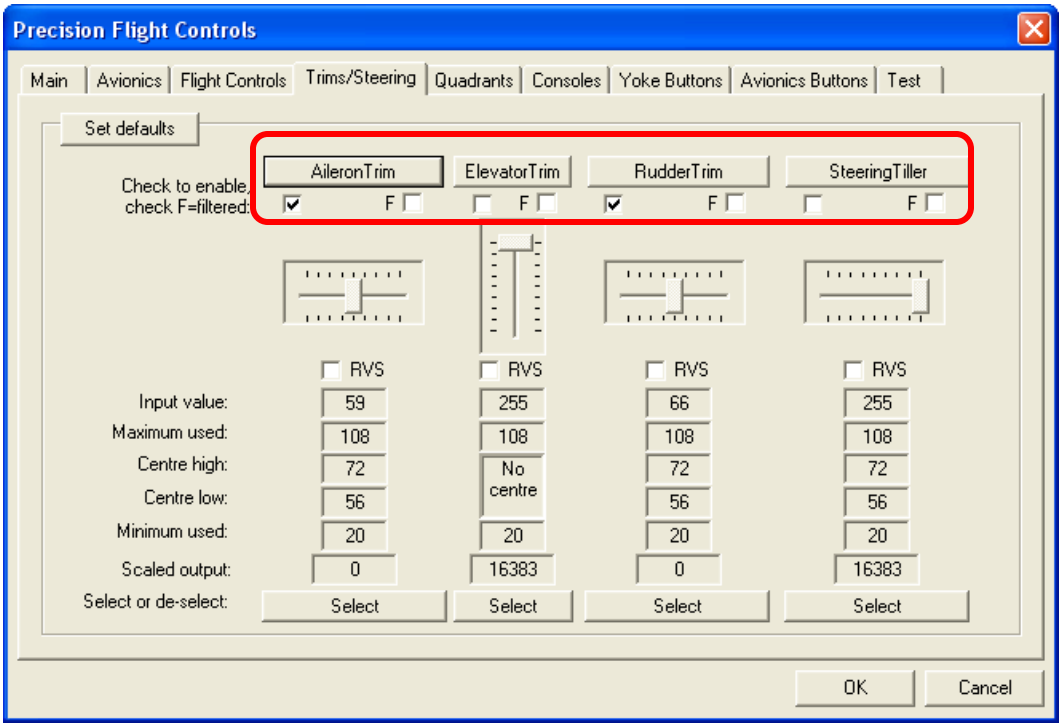
RUDDER CALIBRATION

9. If you have rudder pedals that those are enable now, but if you do not please uncheck
10. Now click on **Select** button under the **Rudder Axis**. This should say **Set Automatic** now.
11. Push your left pedals all the way to the **Left** and hold it. Click on the **Set left most limit**.
12. Push your right pedals all the way to the **Right** and hold it. Click on the **Set right most limit**.



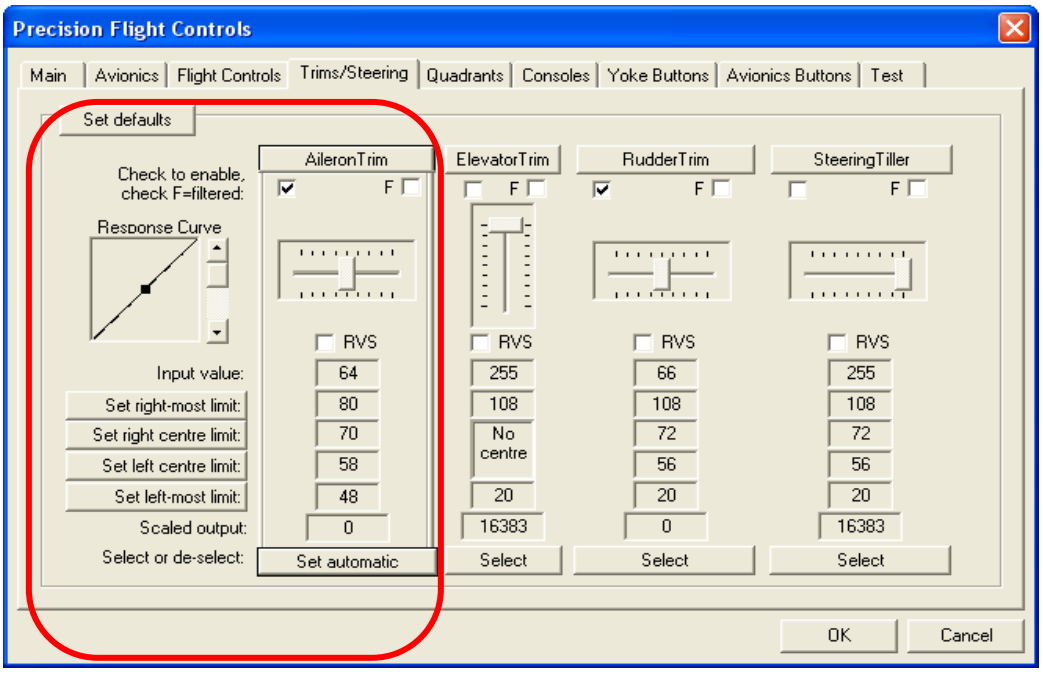
ENABLE TRIMS

1. Let us go to the **Trims & Steering tab**.
2. Enable the **Aileron Trim** and **Rudder Trim** and move them left to right and see if they are responding.



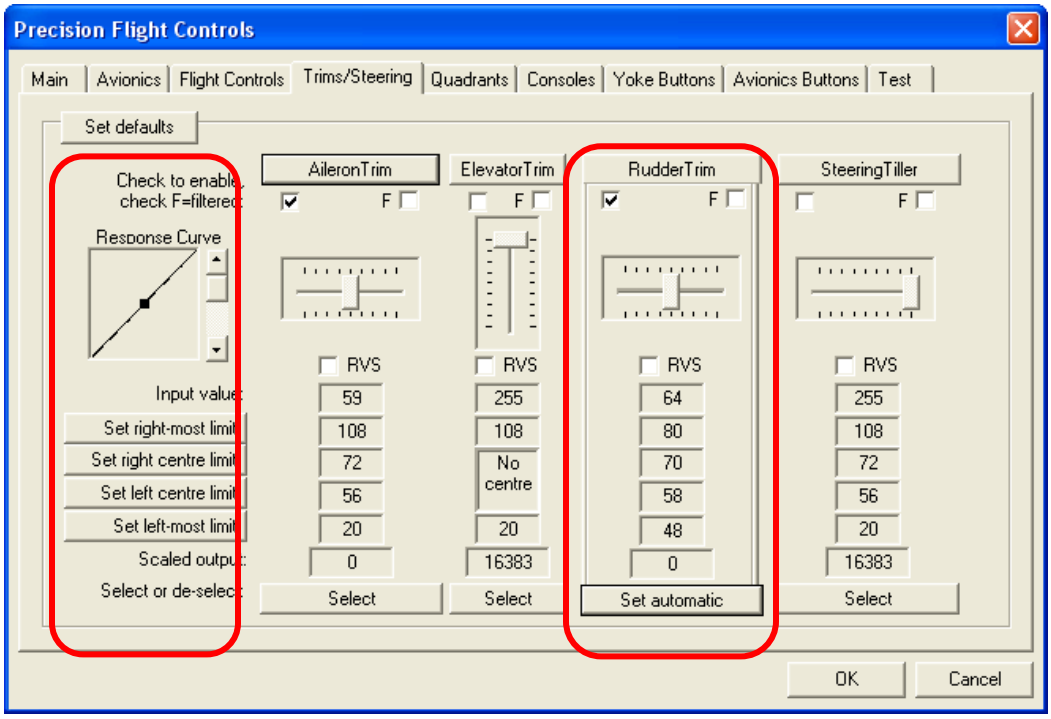
AILERON TRIM CALIBRATION

3. Now click on **Select** button under the **Aileron Trim Axis**. This should say **Set Automatic** now.
4. Turn your **Aileron Trim** knob the way to the **Left**. Click on the **Set left most limit**.
5. Turn your **Aileron Trim** knob all the way to the **Right**. Click on the **Set right most limit**.



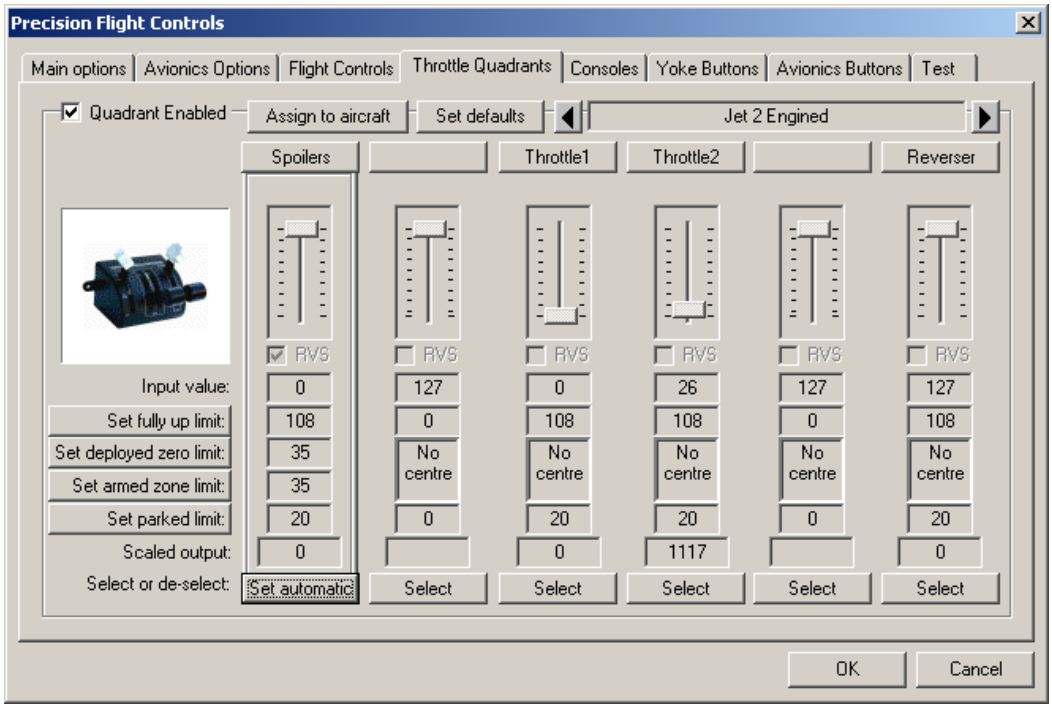
RUDDER TRIM CALIBRATION

6. Now click on **Select** button under the **Rudder Trim Axis**. This should say **Set Automatic** now.
7. Turn your **Aileron Trim** knob the way to the **Left**. Click on the **Set left most limit**.
8. Turn your **Aileron Trim** knob all the way to the **Right**. Click on the **Set right most limit**.



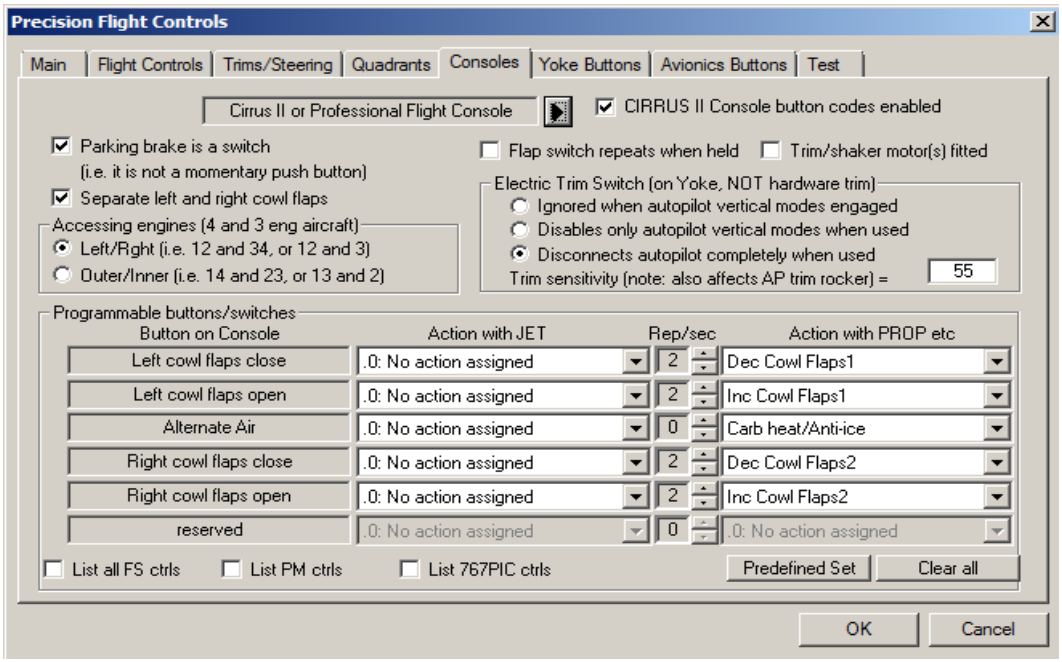
ENABLE QUADRANTS

1. Now the next tab is the **Quadrants**.
2. You can enable the levers that you have by clicking on the Quadrant Enabled check box
3. And you can scroll through the list by clicking on the arrow on the right next to the "Single Prop Non Carbureted."Please also disable the one that you do not have.



ADDITIONAL OPTIONS

1. On the **Consoles** page, please check the box for **Parking Brake is a switch.**
2. Also on the same **Consoles** page, please increase the **Trim Sensitivity** from 16 to 55. This box is located on the right hand side.
3. Check the box for the **Separate left and right cowl flaps**.
4. Click on the **predefined set**. This should have changed the **Action with PROP etc**



5. At this point, please click on OK.
6. Press the ALT key again and go to **Flight** and then **Exit**
7. Start Microsoft Flight Simulator again.
8. Start Flying!