FMX/MCX Peripheral Calibration Process

1. **Opening the Windows ‘Game Controllers’ window**

   A: Plug the USB keyboard into the Pilot Key USB slot in the cabin.

   B: Hold the **Windows (Esc)** key and tap the **R** key to open the Windows **Run** Command.

   C: Type **joy.cpl** into the window.

   D: Click **OK**.

2. **Calibrating the Throttle Quadrant(s)**

   A: Select the Throttle Quadrant from the list of available game controllers.

   *If Sim has multiple throttle quadrants, the calibration process will need to be completed for each of them prior to use in the Sim.*

   B: Click **Properties**.
C: Navigate to the **Settings** Tab up in the top left corner of the **Throttle Properties** window.

D: First click the **Reset to default** button, and then click the **Calibrate** button.
E: Follow the instructions in the **Game Device Calibration Wizard** that pops up.

i. At the **Find Center Point** screen, adjust your throttle/prop/mixture lever(s)/vernier(s) to approximately the center of their range of motion, and when all lever(s)/vernier(s) are centered click “Next”.

ii. At the **Axis Calibration** page, move the Throttle lever(s)/vernier(s) all the way open, and then all the way closed (repeat 2x).

Click **Next** when finished.

*If you are calibrating a Twin Engine quadrant, the crosshair should move from the **top left** corner to the **bottom right** corner of the white box when you move both levers.*

**If you are calibrating a Single Engine quadrant, you will see an ‘axis slider’ at the **Axis Calibration** page instead of the white box & crosshair, but the instructions are the same.*
iii. The next screen is another **Find Center Point** screen; ensure that your prop/mixture lever(s)/vernier(s) are approximately centered, and then click **Next**.

iv. The next few pages will calibrate the Prop. and Mixture Lever(s)/Vernier(s). For each **Axis** find the corresponding lever/vernier, and then move it all the way open and all the way closed (repeat 2x), then click **Next** to progress to the next Axis.

*There will be an axis for each lever/vernier; repeat step iv for each axis.

**Twin Engine quadrants will also have a **Slider** axis page that is bound to the **Rudder Trim** on the quadrant. Rudder Trim will only function normally if properly calibrated.

v. Click **Finish** on the final page of the **Game Device Calibration Wizard** to close the wizard.
vi. Back at the **Throttle Properties** Window;

- First click **Apply**.

- Then click **OK**.

*If **Apply** is not clicked first, Windows may not apply your calibration settings properly.*
3. **Calibrating the Yoke(s)**

A: Select the Yoke from the list of available game controllers.

*If Sim has multiple yoke quadrants, the calibration process will need to be completed for each of them prior to use in the Sim.*

B: Click Properties.

C: Navigate to the **Settings** Tab up in the top left corner of the **Throttle Properties** window.
D: First click the **Reset to default** button, and then click the **Calibrate** button.

E: Follow the instructions in the **Game Device Calibration Wizard** that pops up.

i. At the **Find Center Point** screen, ensure that your yoke is approximately centered and at rest (*i.e. leave your hands off the yoke handle while clicking next*).
i. At the **Axis Calibration** page, move the yoke to the corners of its range of motion:
   a. Push yoke full forward, and full right.
   b. While holding full right, pull yoke full back.
   c. While holding full back, turn the yoke full left.
   d. While holding full left, push the yoke full forward.
   e. While holding full forward, turn the yoke full right.
   f. Repeat steps b through e (1x).
   g. Release the yoke handle.
   
   *Ensure that the crosshair hits all 4 corners of the white box, otherwise your yoke will not perform properly in flight.*

ii. After step i., ensure that your yoke is at rest (*i.e. leave your hands off the yoke handle while clicking next)*.

   *The crosshair may not be in the center of the box when the yoke handle is released; this is normal behavior, and the yoke will still calibrate properly.*
iii. At the **Find Center Point** screen, ensure that your yoke is approximately centered and at rest (i.e. *leave your hands off the yoke handle while clicking next*).

iv. Click **Finish** on the final page of the **Game Device Calibration Wizard** to close the wizard.
v. Back at the **Yoke Properties** Window;

- First click **Apply**.

- Then click **OK**.

*If **Apply** is not clicked first, Windows may not apply your calibration settings properly.*
4. **Calibrating the Rudder Pedals**

A: Select the Rudder Pedals from the list of available game controllers.

*If on an MCX Sim, the Toe-Brake calibration process (step vi) will need to be completed for both Pilot and Copilot rudder pedals prior to using the Sim, however the “Rudder Axis” (step viii) for the Copilot Side will be skipped because of the rudder link.*

B: Click **Properties**.

C: Navigate to the **Settings** Tab up in the top left corner of the **Rudder Properties** window.
D: First click the **Reset to default** button, and then click the **Calibrate** button.

E: Follow the instructions in the **Game Device Calibration Wizard** that pops up.

   ii. At the first **Find Center Point** screen, ensure that your rudders are at rest (*i.e.* *leave your feet off the pedals while clicking next*).
vi. At the first **Axis Calibration** page, move the toe-brakes to the corners of their range of motion:
   a. Apply full right toe-brake.
   b. While holding full right, apply full left toe-brake.
   c. While holding full left, release the right toe-brake.
   d. Release the left toe-brake.
   e. Repeat steps **a through d** (1x).
   f. Center the crosshair in approximately the middle of the white box, and while holding it there, click next.

*(Steps a. through d.) ensure that the crosshair hits all 4 corners of the white box, otherwise your toe-brakes will not perform properly.*

**For step f.** the crosshair must be approximately in the center of the white box while clicking next (this isn’t easy, but it’s a necessary step for proper toe-brake functionality).

***Keep holding the toe-brakes at their “center point” while clicking Next at the **Find Center Point** screen.*
vii. At the next **Find Center Point** screen, ensure that your toe-brakes are still at their ‘center point’ *(from step f above)* while clicking next.

viii. The next **Axis Calibration** page will be for your Rudder axis.

a. Apply full left and right rudder (2x), and ensure that the rudder axis hits both ends of its range of motion.

*Note that if you are at this step on a Co-Pilot Rudder Pedal quadrant, the “Z Axis” bar will not move when you shift the Rudder Pedals (due to the rudder link). Click next to progress to the final step.*
ix. Click **Finish** on the final page of the **Game Device Calibration Wizard** to close the wizard.

x. Back at the **Rudder Properties** Window:

- First click **Apply**.

- Then click **OK**.

*If** **Apply** **is not clicked first**, **Windows may not apply your calibration settings properly.**