



CALIBRATION INSTRUCTIONS

OF

RH ROTOR

RUDDER PEDALS

WHEN DO YOU NEED PEDAL CALIBRATION?

- When the calibration is broken or you need to change the calibration parameters.
- The electronics in the pedals remember the specific cam position present during calibration. After rearranging the cam (it touches the rudder axis of the RH Rotor rudder pedals), the position of the mechanics may change by several tenths or hundredths of a millimeter, since the bolted connection of the cam has some clearance. And that's okay. And precision electronics, in turn, will show this. Therefore, after each replacement of the cam (or simply after dismantling and mounting the cam), it is necessary to recalibrate the RZ axis. Calibration of the X and Y (left and right brake pedals) axes is similar.

CALIBRATION SEQUENCE.

• **Section A (Calibration)**

- Plug in the pedals and run the calibration program.
- Select the RZ axis. Calibration of the X and Y (left and right brake pedals) axes is similar. The differences will be listed below.
- Delete the axis calibration by clicking the "Restore" button, photo 1.

CONFIGURE AXES

Axis Select: Rz



Rz



Calibrated Minimum

Center Center

Maximum

Send to device...
Do not unplug device or disconnect power until the write is fully complete.

The configuration was sent to the device...
The calibration configuration of the selected axis has not changed.
Save the curve configuration of the selected axis: Complete (0.067s)

CONFIGURE AXIS RESPONSE

RESPONSE CURVE: Rz



Invert Axis

Dead Zone:

Lower

Center

Upper

Response Curve:


Curvature

- Press the "Calibrate" button, photo 2

ROTOR Rudder Pedals

CONFIGURE AXES

Axis Select: Rz



Rz

0 4228 8192

Calibrated

Center

Calibrate

Minimum 0

Center 4096


Maximum 8192

Restore default...
The selected axis is restored to the default: Complete (0.098s)
Read Device Configuration...
Read: Complete (0.232s)

Restore

CONFIGURE AXIS RESPONSE

RESPONSE CURVE: Rz



Invert Axis

Dead Zone:

Lower 0.00

Center 0.00

Upper 0.00

Response Curve:

Curvature 0.00

Save to device


Apply

- Press the left and right pedals alternately several times to the end (not very quickly), photo 3


ROTOR Rudder Pedals

CONFIGURE AXES

Axis Select: Rz



Rz



0 4224 8192

Calibrated Minimum 3237

Center Center 4228


Stop & Save Maximum 5220

Start calibration...

Restore

CONFIGURE AXIS RESPONSE

RESPONSE CURVE: Rz



Invert Axis

Dead Zone:

Lower: 0.00

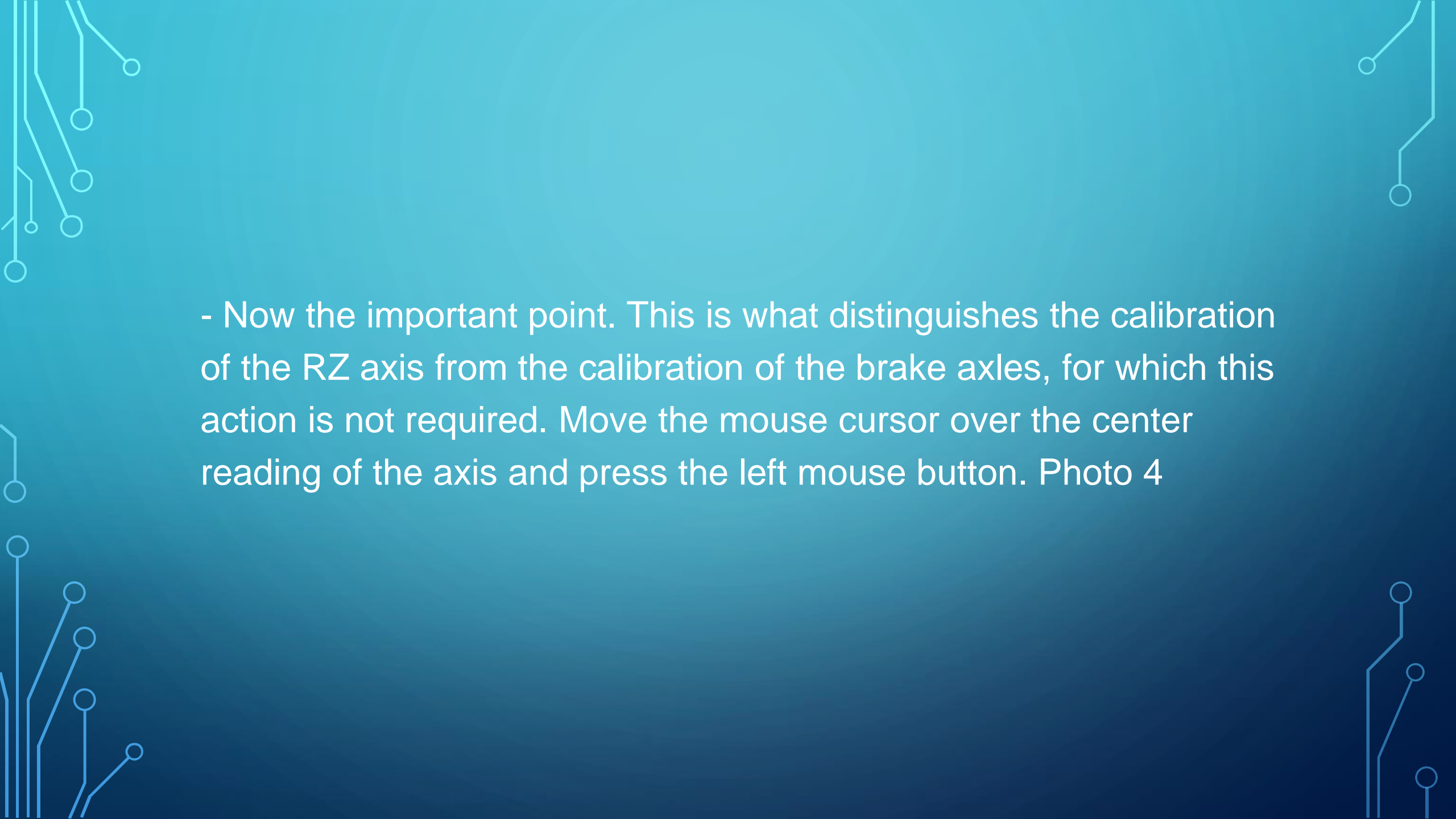
Center: 0.00

Upper: 0.00

Response Curve:

Curvature: 0.00

Save to device Apply


The background is a solid teal color. In the four corners, there are decorative white line-art patterns resembling circuit traces or a stylized tree structure. These patterns consist of vertical lines that branch out at various angles, ending in small circles.

- Now the important point. This is what distinguishes the calibration of the RZ axis from the calibration of the brake axles, for which this action is not required. Move the mouse cursor over the center reading of the axis and press the left mouse button. Photo 4

ROTOR Rudder Pedals

CONFIGURE AXES

Axis Select: Rz



Rz

0 4224 8192

Calibrated Minimum 3237

Center Center 4228

Maximum 5220


Stop & Save

Start calibration...

Restore

CONFIGURE AXIS RESPONSE

RESPONSE CURVE: Rz



Invert Axis

Dead Zone:

Lower: 0.00

Center: 0.00

Upper: 0.00

Response Curve:

Curvature: 0.00

Save to device Apply

- Use the keyboard arrow keys (left and right) to set the same number as the axis center position above. In my case, I changed from 4228 to 4224 using the left arrow. The difference in these values may be even greater, but it does not matter. Just set the same values. photo 5

The screenshot displays the 'ROTOR Rudder Pedals' software interface, divided into two main sections: 'CONFIGURE AXES' and 'CONFIGURE AXIS RESPONSE'.

CONFIGURE AXES: This section features a 3D model of the rudder pedals. Below the model, the 'Axis Select' dropdown is set to 'Rz'. A horizontal axis scale is shown with '0' on the left and '8192' on the right. A red triangle marker is positioned at '4224', which is highlighted with a green box. A red arrow points from this marker to the 'Center' input field, which also contains the value '4224' and is highlighted with a green box. The 'Minimum' input field contains '3237' and the 'Maximum' input field contains '5220'. There are checkboxes for 'Calibrated' (unchecked) and 'Center' (checked). A 'Stop & Save' button is located below the input fields. At the bottom of this section is a 'Start calibration...' button.


CONFIGURE AXIS RESPONSE: This section contains a graph titled 'RESPONSE CURVE: Rz'. The graph shows a linear relationship between the pedal position and the response value. Below the graph is an unchecked checkbox labeled 'Invert Axis'. Underneath the graph, there are three input fields for 'Dead Zone': 'Lower' (0.00), 'Center' (0.00), and 'Upper' (0.00). To the right, there is a 'Response Curve' section with a 'Curvature' slider set to 0.00. At the bottom right of the interface are 'Save to device' and 'Apply' buttons.

- Click "Stop and Save". You will get this result. photo 6
This completes the calibration!

ROTOR Rudder Pedals

CONFIGURE AXES

Axis Select: Rz



Rz

0 4096 8192

Calibrated 3237 Minimum

Center 4224 Center

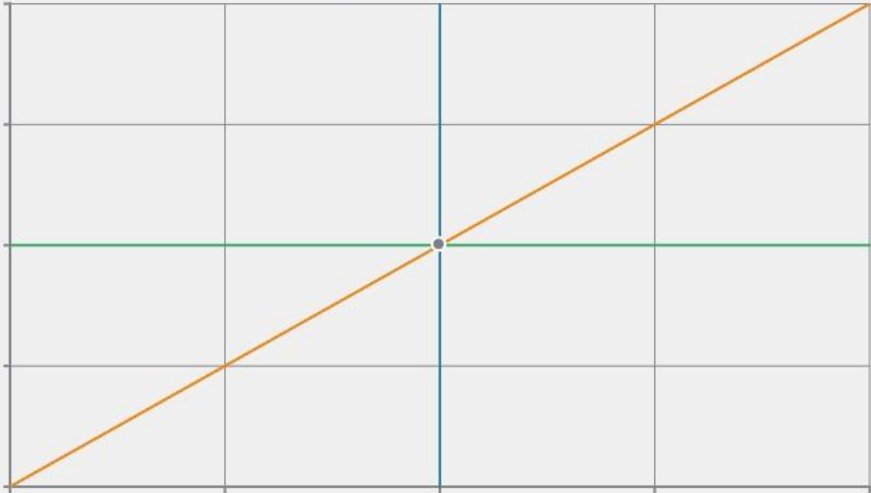
Calibrate 5220 Maximum

Save calibration...
Save Complete (0.058s)

Restore

CONFIGURE AXIS RESPONSE

RESPONSE CURVE: Rz



Invert Axis

Dead Zone:

Lower 0.00

Center 0.00

Upper 0.00

Response Curve:

Curvature 0.00

Save to device Apply

•SECTION B (SETTINGS)

- Next, you can set the axis dead zones and the response curve. In photo 7, my personal parameters for the RZ axis. Set the same dead zones and response curve value. (For the x and y axes, the response curve is set to "0.00")
- Click the "Apply" button. Check if these settings are OK for you.

CONFIGURE AXES

Axis Select: Rz



Rz



Calibrated

3237 Minimum

Center

4224 Center

Calibrate

5220 Maximum

Apply...

Do not unplug device or disconnect power until the write is fully complete.

Apply Configuration...

Applying the calibration configuration of the selected axis: Complete (0.053s)

Applying the curve configuration of the selected axis: Complete (0.021s)

Restore

CONFIGURE AXIS RESPONSE

RESPONSE CURVE: Rz



Invert Axis

Dead Zone:

Lower 1.00

Center 1.00

Upper 1.00

Response Curve:

Curvature 1.50

Save to device

Apply

- If these values suit you, click the "Save to device" button.
- Photo 8.

The screenshot displays the 'ROTOR Rudder Pedals' software interface, divided into two main sections: 'CONFIGURE AXES' and 'CONFIGURE AXIS RESPONSE'.

CONFIGURE AXES: This section features a top-down view of the rudder pedals. Below the image, the 'Axis Select' dropdown is set to 'Rz'. A horizontal scale for 'Rz' is shown with values 0, 4096, and 8192. Three calibration points are marked: Minimum at 3237, Center at 4224, and Maximum at 5220. Checkboxes for 'Calibrated' and 'Center' are both checked. A 'Calibrate' button is present. A status message at the bottom indicates: 'Send to device... Do not unplug device or disconnect power until the write is fully complete. The configuration was sent to the device... The calibration configuration of the selected axis has not changed. Save the curve configuration of the selected axis: Complete (0.12s)'. A 'Restore' button is located at the bottom left.

CONFIGURE AXIS RESPONSE: This section contains a graph titled 'RESPONSE CURVE: Rz'. The graph shows a smooth, upward-curving orange line on a grid. Below the graph is an unchecked checkbox labeled 'Invert Axis'. To the right of the graph are sliders for 'Dead Zone' (Lower, Center, Upper) and 'Response Curve: Curvature'. All three sliders are set to 1.00, and the Curvature slider is set to 1.50. A 'Save to device' button is highlighted with a red box at the bottom right, next to an 'Apply' button.

- If these values do not suit you, repeat **Section B** again. Change the dead zones or axis response values. Apply these values. Check axle movement. If you are satisfied with the values, "Save to device" button.

This completes the axis setup!