VirtualFly YOKOneo Control Stiffness Low Flight Sim User Manual

VirtualFly
BY AIRCATGLOBAL

YOKOneo

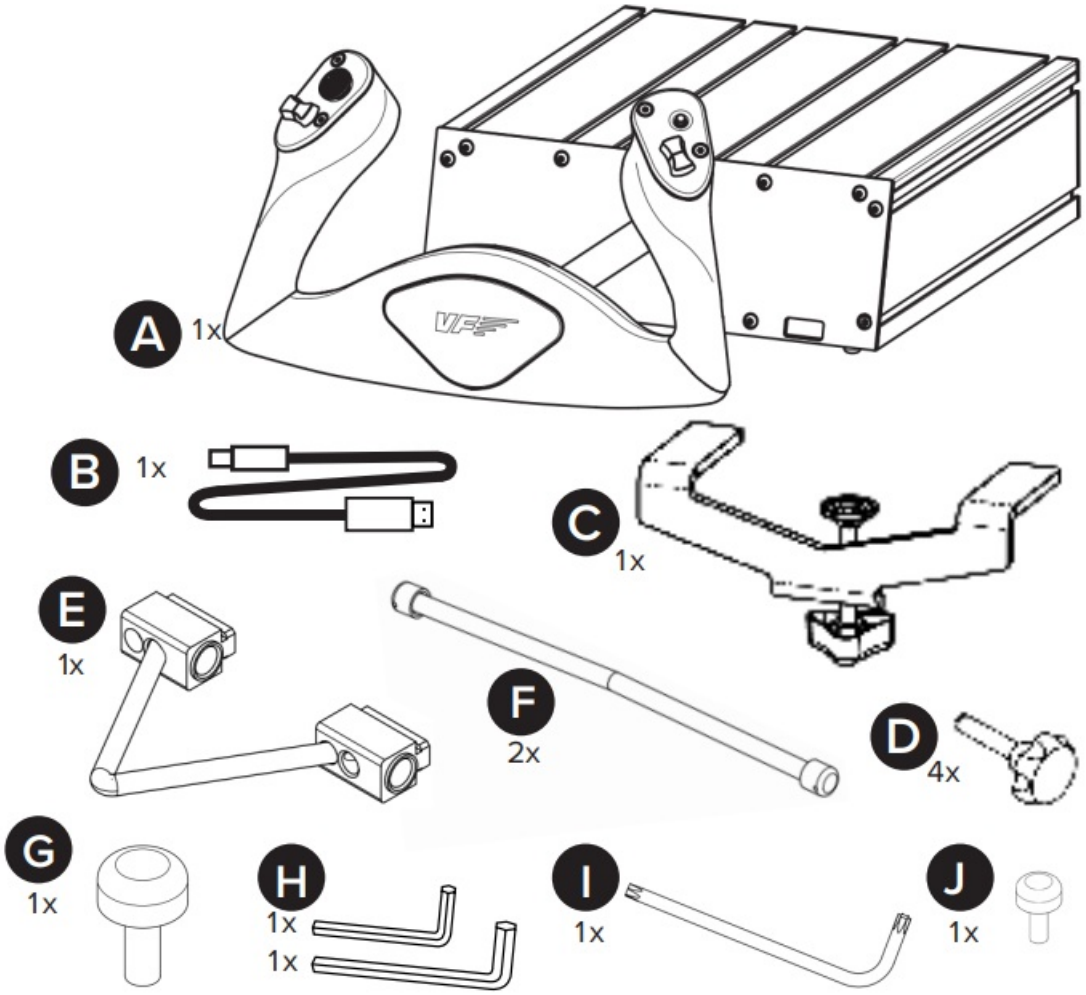
USER'S MANUAL
Rev. 1.0 – September 2023

Contents

IN THE BOX

A) YOKOneo
B) USB-A to USB-B Cable
C/D) Clamp & Clamping Knobs

E) Elevator Control Elastic Rope
F) Aileron Control Elastic Rope
G) Rubber Feet
H) Allen Keys (n5 & n4)
I) T20 Torx Key
J) M4X15 Screw



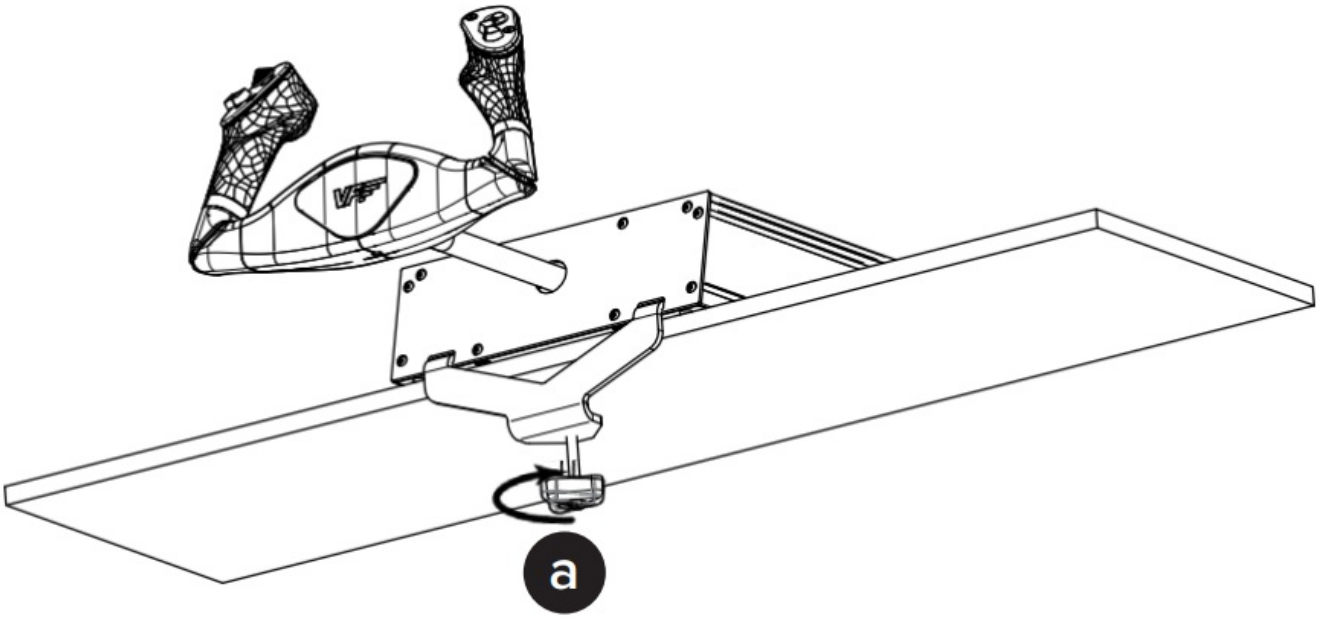
For support, contact us at
support@virtual-fly.com

HARDWARE SETUP

2.1 ATTACHING TO DESKTOP/HOME COCKPIT SETUP

OPTION A: Using a Clamp

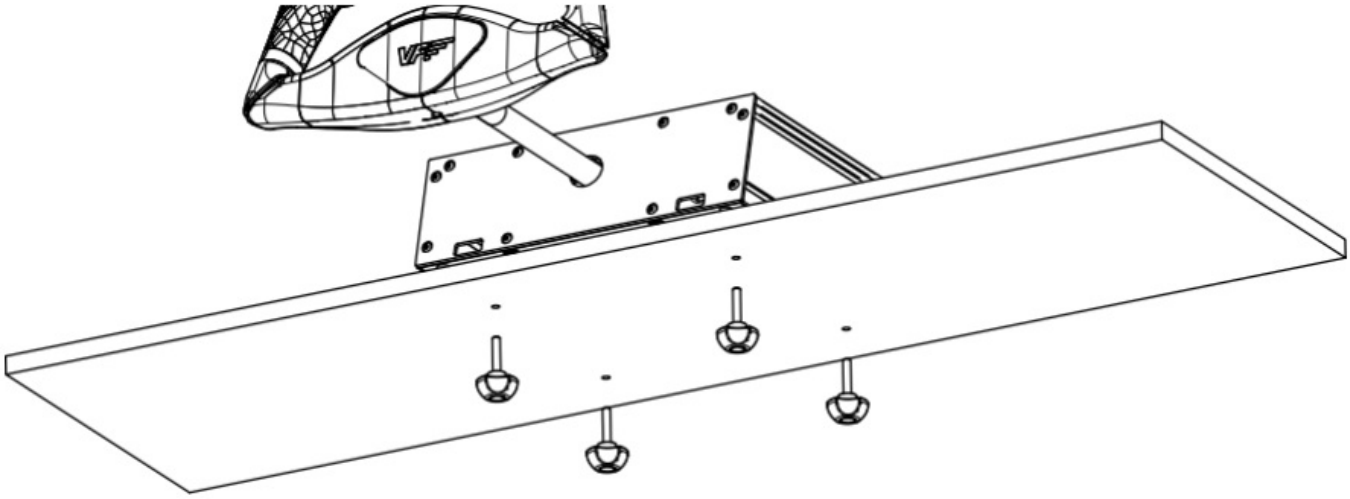
Secure your YOKO^neo to your desk with the included clamp (C). Place the YOKO^neo on the surface it will rest and tighten the knob (a) until you feel strong resistance. A diagram of the procedure is shown below:



If your desk is thicker than 50mm (about 2 inches), we recommend using the “Extra Clamp” for the YOKO^{neo} . This item is sold separately in our website at: **https://www.virtualfly.com/shop/controls/yoko-neo#accessories**.

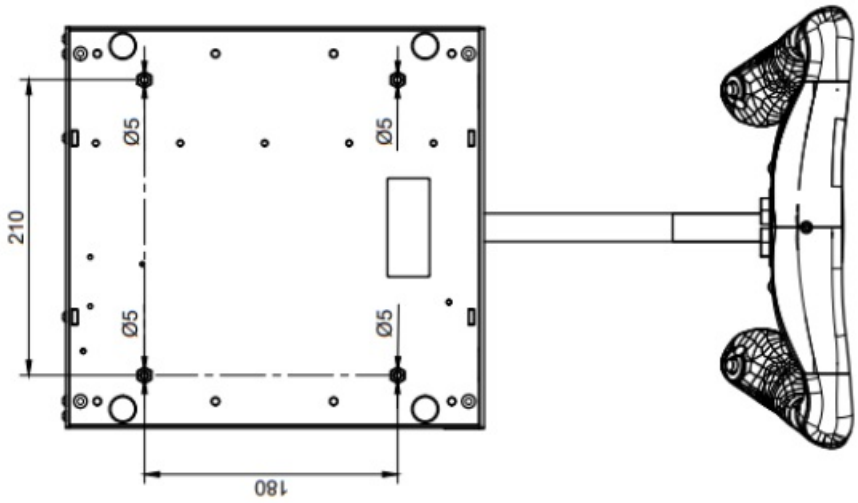
OPTION B: Using Clamping Knobs

Set up your YOKO^{neo} in your custom home cockpit using the included clamping knobs (D) to screw it into your support base.



To screw in the clamping knobs (D), you will need a cutout that matches the measurements depicted in the blueprint below.

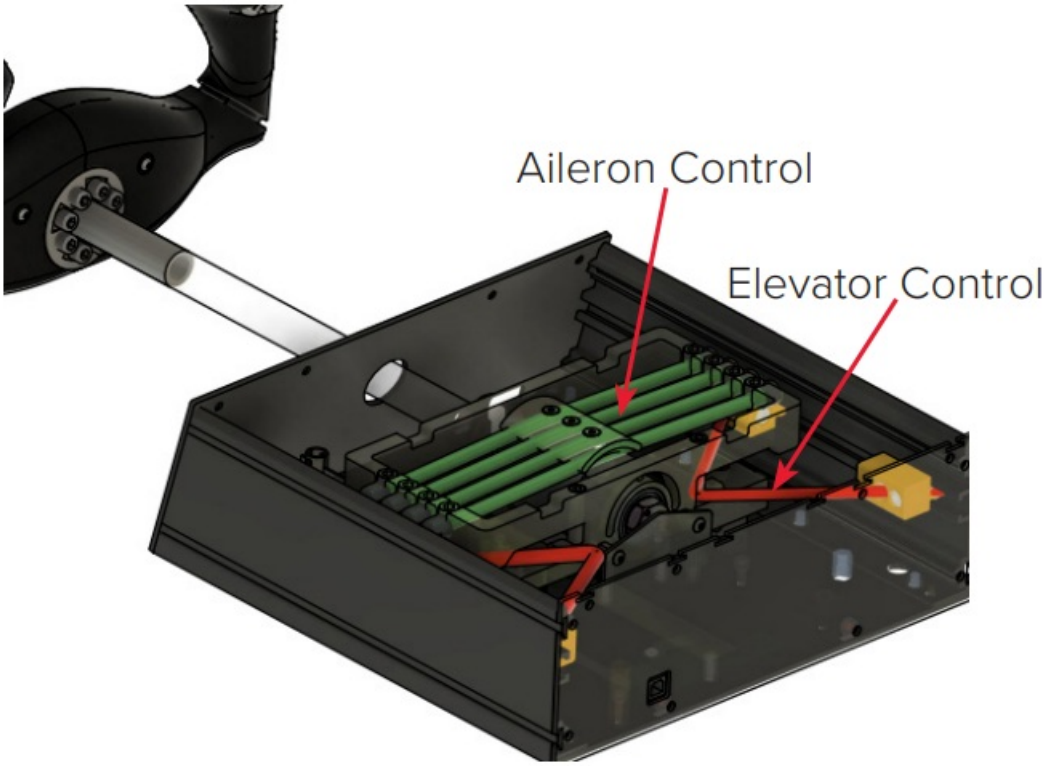
All measurements displayed are in millimeters.



For more detailed measurements and customized setups, download the blueprints from the following link: **https://downloads.virtual-fly.com/docs/yoko-neo/latest/yoko-neo_blueprint.zip**.

2.2 CHANGING ELEVATOR AND AILERON CONTROL STIFFNESS

Your YOKO^{neo} offers the possibility to adapt the elevator and aileron control stiffness to match your preference. As you can see in the diagram below, the YOKO^{neo} interior contains several elastic ropes that offer resistance to the elevator and aileron control stiffness.



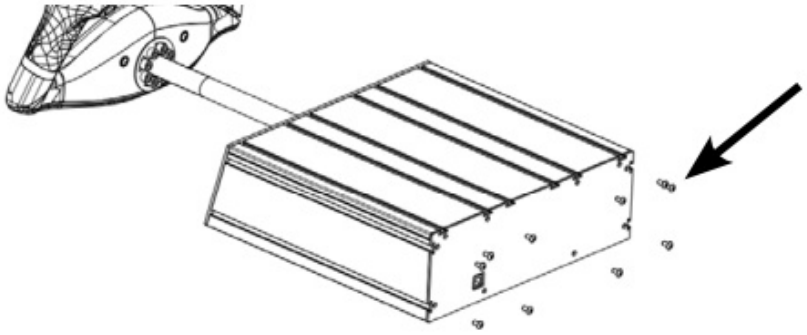
By default, the YOKO^{neo} comes with 2 aileron control elastic ropes and one 6 mm elevator control elastic ropes installed. The user can choose between the three stiffness options depicted in Table 2.2.

Stiffness	Elevator Control Resistances	Aileron Control Resistances
Low (default)	6 mm	2
Medium	8 mm	3
Hard	6 mm & 8 mm	4

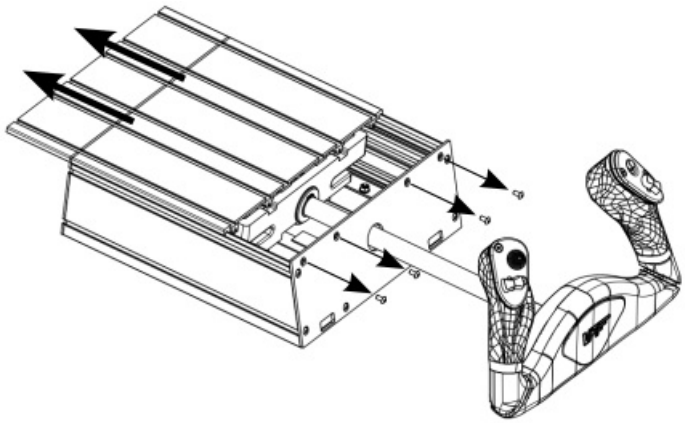
Table 2.2. Stiffness options

Before configuring the elevator/aileron control stiffness, you must access the interior of the YOKO^{neo} as follows:

1. Unscrew the 10 screws located at the back of the YOKO^{neo} and remove the back plate as indicated below.



2. Unscrew the 4 screws from the front plate of the YOKO^{neo} indicated below and slide the upper plate out, exposing the interior of the YOKO^{neo} .



Once the interior of the YOKO^{neo} is exposed, you can modify the Elevator or Ailerons control stiffness by following the next steps.

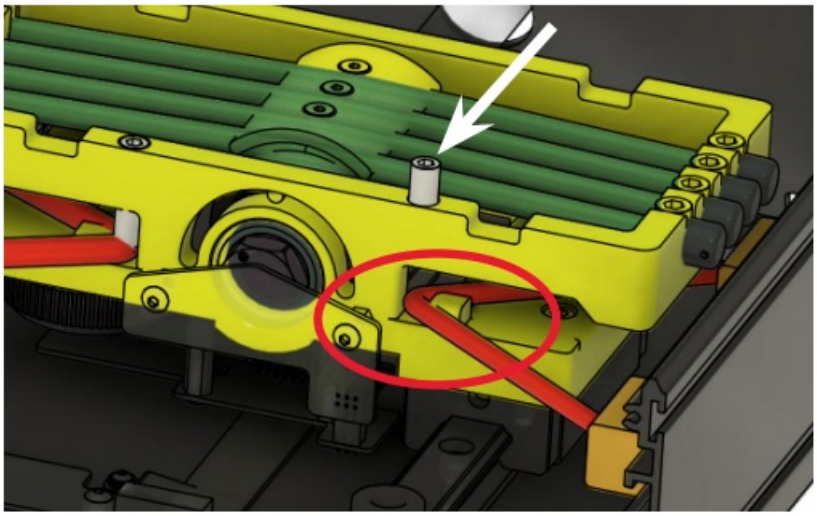
2.2.1 Elevator stiffness

The elevator control stiffness has three options, as shown in Table 2.2. Note that each elastic rope support has a predefined slot which matches its color, so each elastic rope support must always reside in the position marked with a strip of its same color. For the 6mm elevator control resistance this is Red, whilst for the 8mm elevator control resistance it is Green.

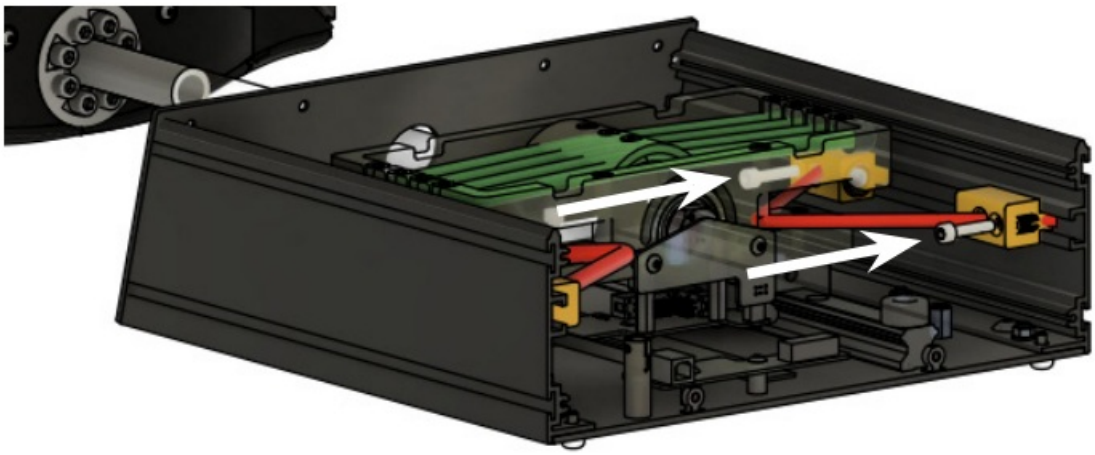
To increase/decrease the elevator control stiffness, you can add/remove one elastic rope as follows. For this operation, the interior of the YOKO^{neo} must be accessible.

2.2.1.1 REMOVING AN ELASTIC ROPE

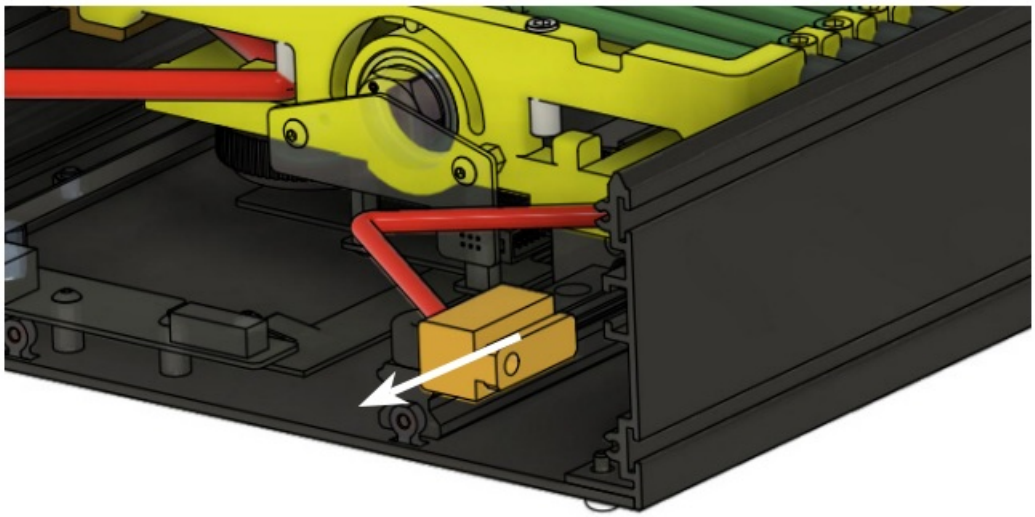
1. **Loosen the indicated screw** and remove the elastic rope from its initial position indicated below.



2. **Unscrew the 2 indicated screws** with the n5 allen key.

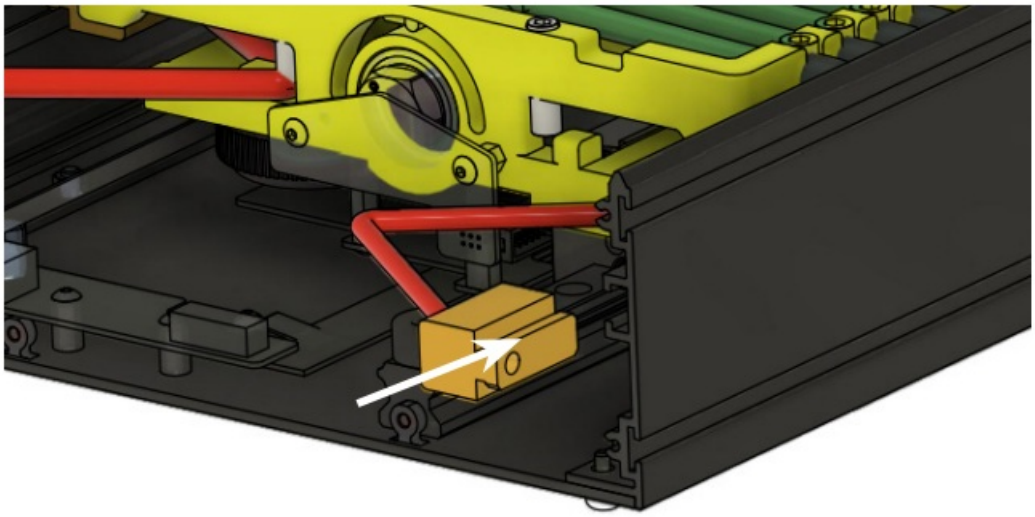


3. Slide out the elastic rope from its slot until as shown below to remove it from the YOKO^{neo} .

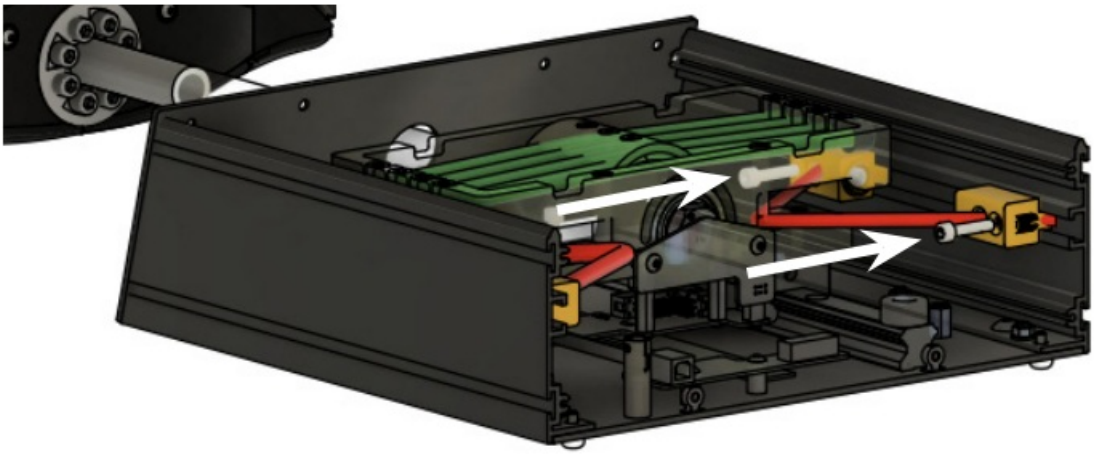


2.2.1.2 ADDING AN ELASTIC ROPE

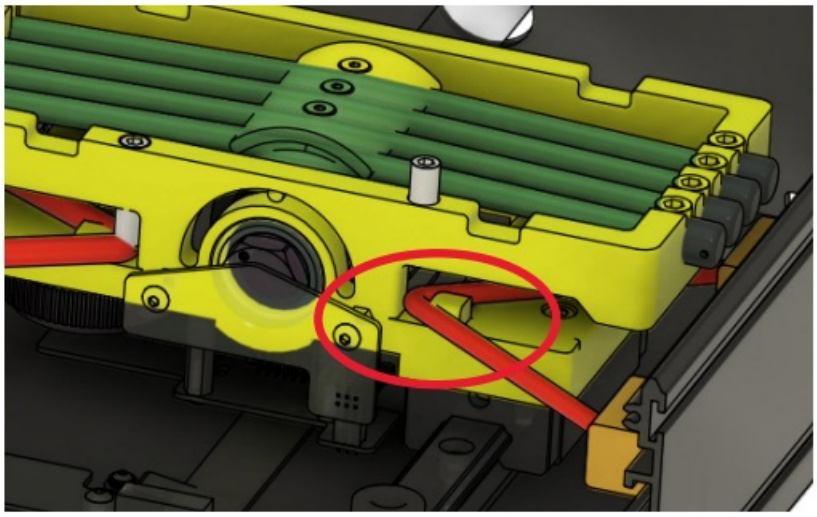
1. Slide the elastic rope supports along the rails on the side plate of the YOKO^{neo} as indicated below. Make sure the color of the ‘support’ sliding inward matches the color stripe on the side of the YOKO^{neo} .



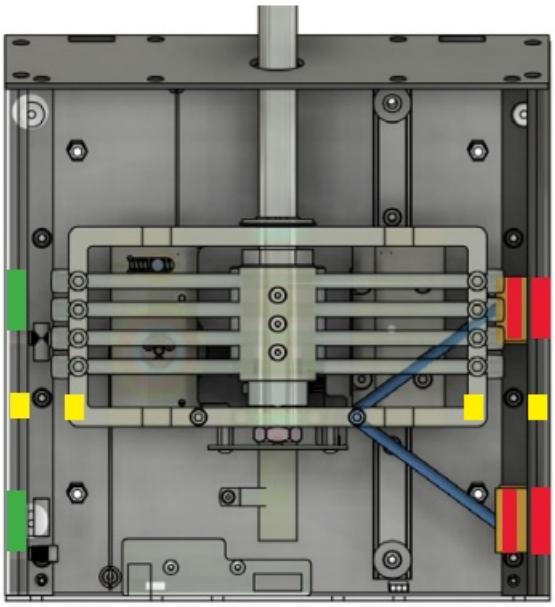
2. Secure the 2 elastic rope supports by screwing in the two indicated screws below



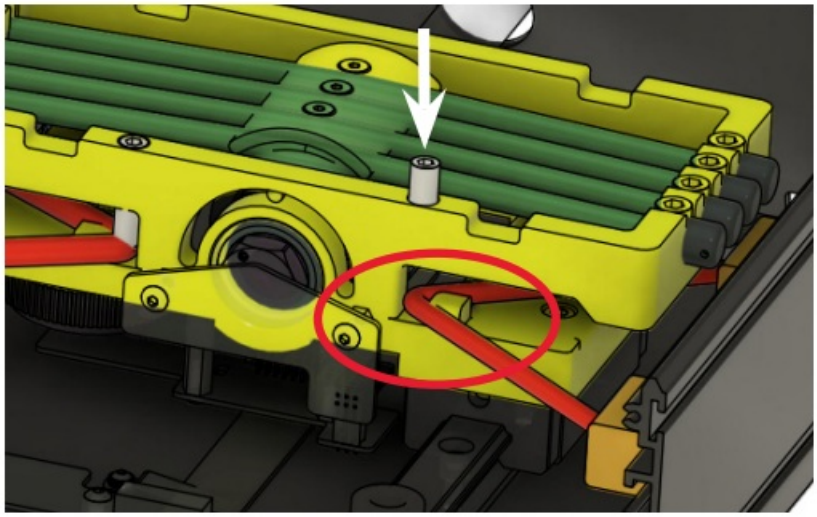
3. Reinsert the elastic rope into the slot, beginning with the 8mm one (if applicable).



4. Slide the center of the elastic rope into the slot to ensure that the YOKO^{neo} is completely centered in its pitch range of motion. For the pitch axis to be centered properly, the two marks indicated in amber color must align, as shown below.



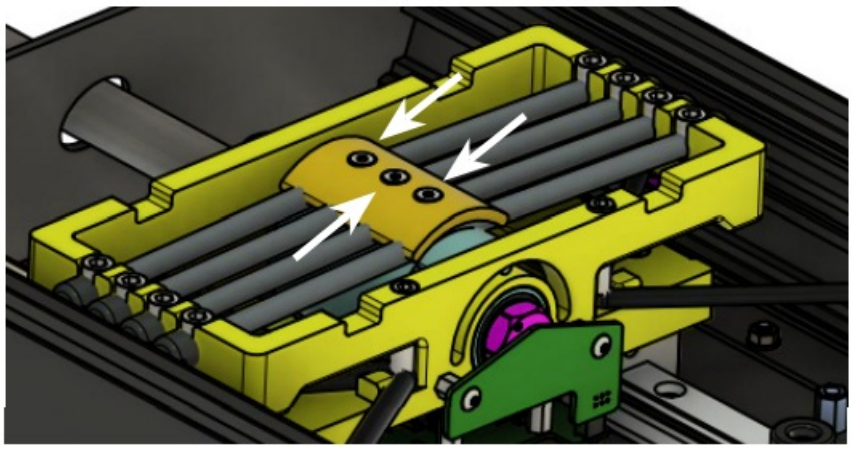
5. Screw in the indicated screw until you feel strong resistance.



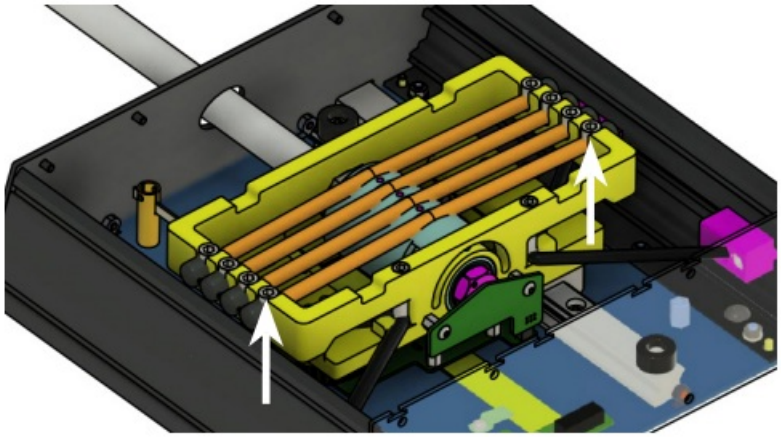
2.2.2 Aileron stiffness

The aileron control offers three stiffness options, as detailed in Table 2.2.
To increase/decrease the aileron control stiffness, you can add/remove elastic ropes respectively as follows. For this operation, the interior of the YOKO^{neo} must be accessible.

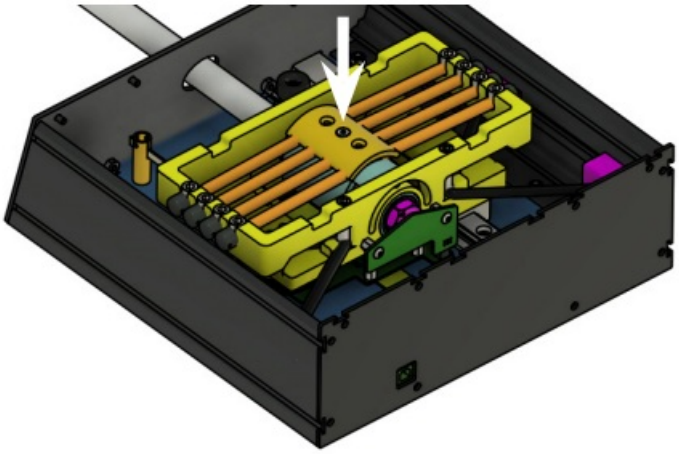
1. Unscrew the three screws indicated below to remove the cover constraint of the elastic ropes.



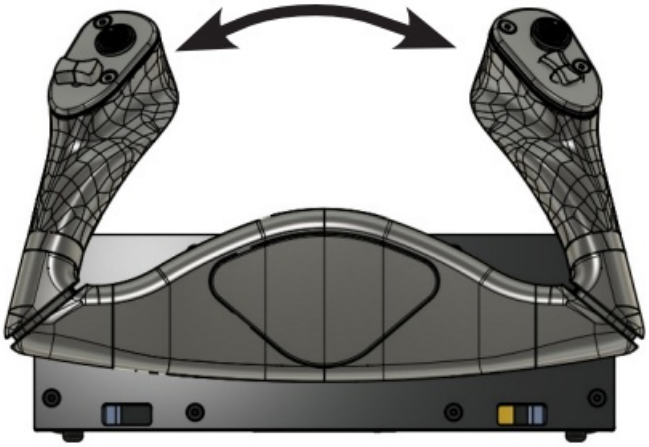
2. Add/remove the necessary elastic ropes according to the desired resistance following the Table 2.2. To do this, you will need to screw/unscrew the indicated screws of the elastic rope you wish to add/remove.



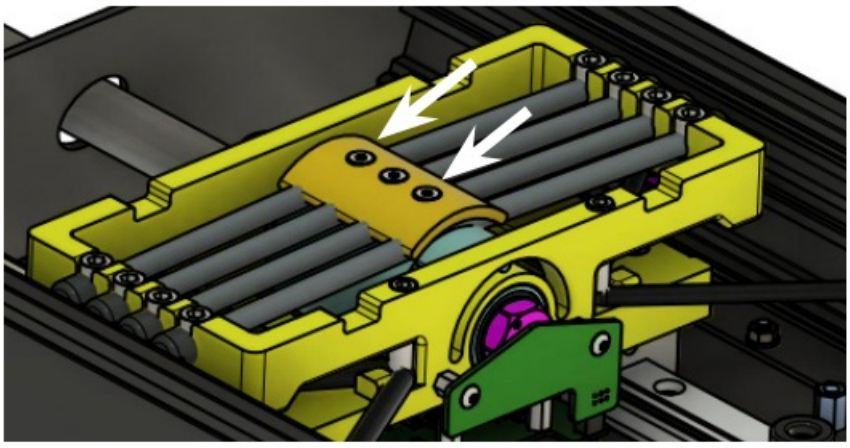
3. Place the cover back into position and screw in only the central indicated screw, making sure it is not tight. For ease, it's better to use the longer J screw (M4x15).



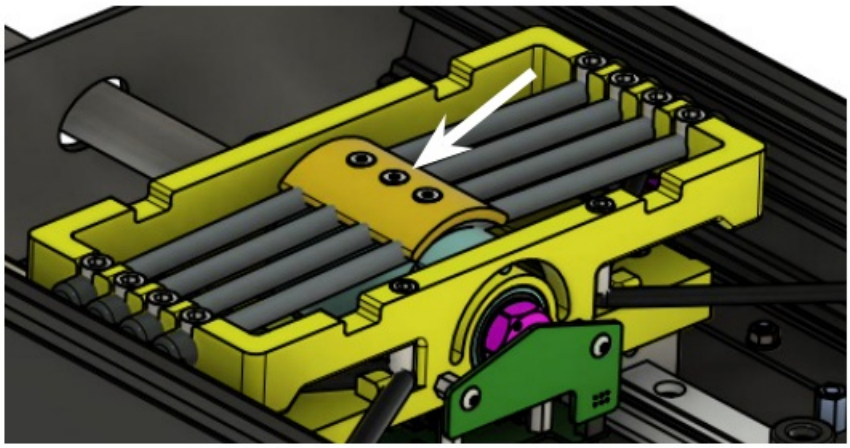
4. Center the dumbbell by rotating the yoke in both directions until the dummbell is level when at its neutral position.



5. Screw in the two indicated screws from the center cover and tighten them until you feel strong resistance.

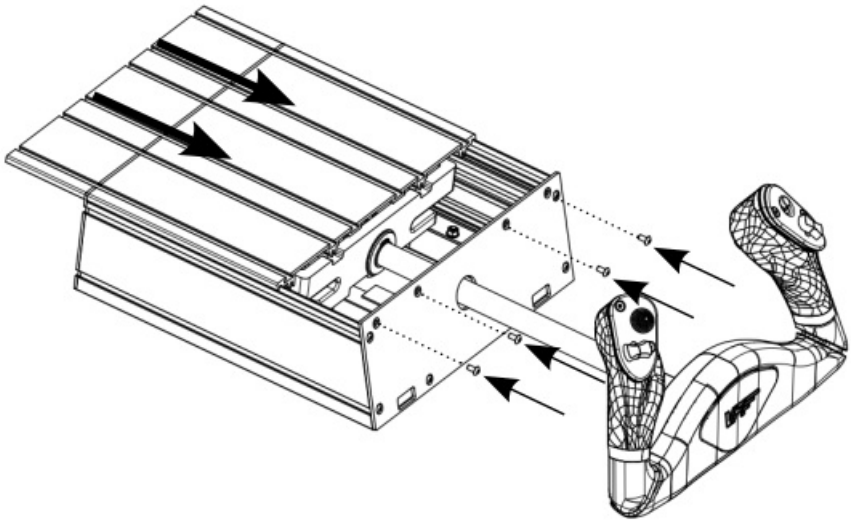


6. Replace the central M4x15 screw (J) with the original (shorter) screw in the center.



After adding/removing the elastic ropes to your liking, you must cover the yoke by reversing the process you did to access the interior:

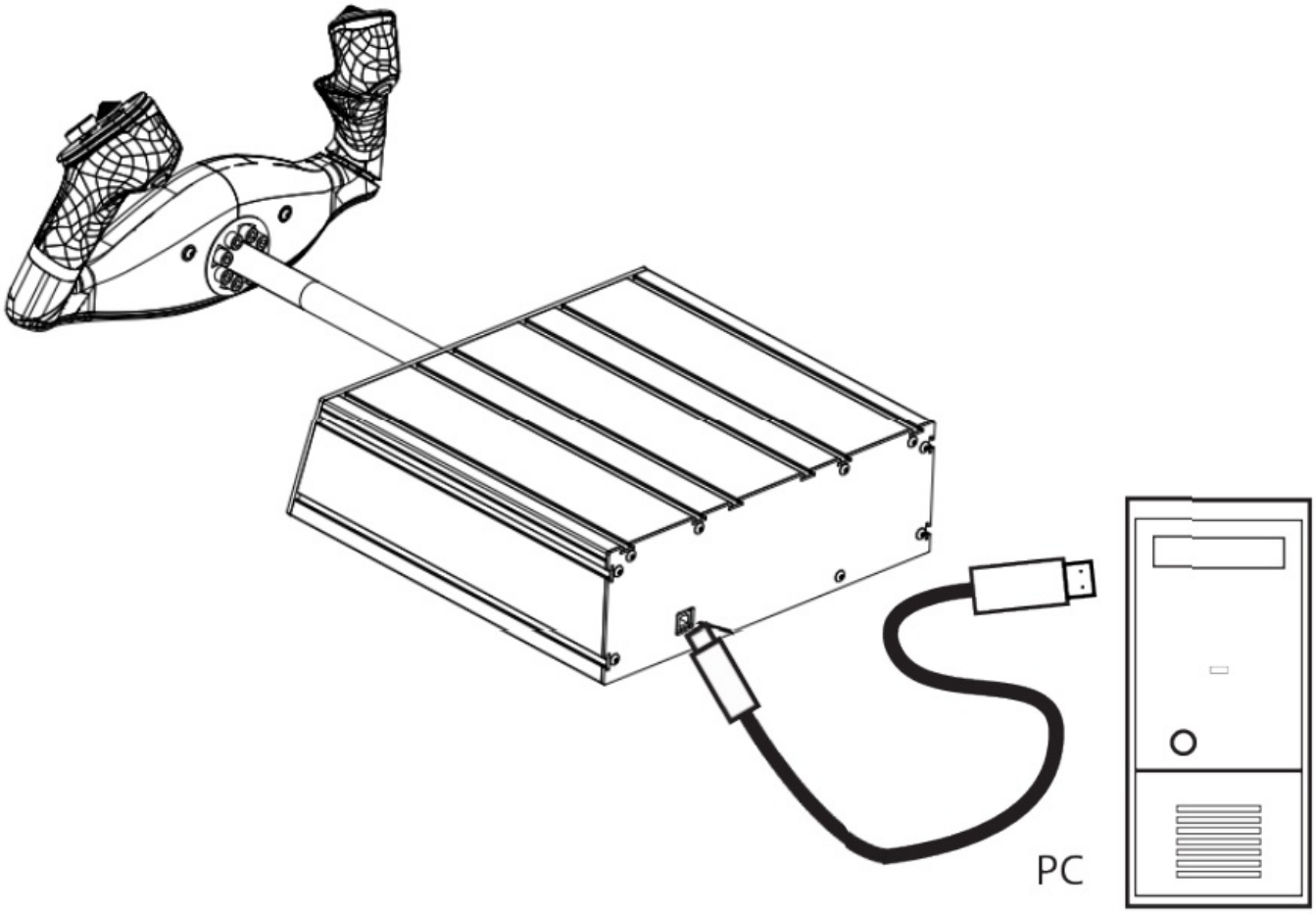
1. Slide the upper plate in and screw the 4 screws from the front plate of the YOKO^{neo} indicated below.



2. Place the back plate and screw in the 10 screws located at the back of the YOKO^{neo} using the n4 Allen Key.

2.3 CONNECTING TO PC

Connect the USB cable (B) to the back of the YOKO^{neo} and the computer where the flight simulation software is running.

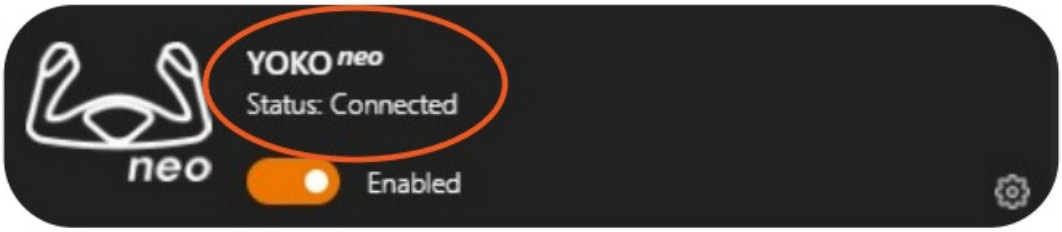


SOFTWARE SETUP

The YOKO^{neo} interacts with any computer as a joystick (HID), so it is compatible with any flight simulation software. Below,you have 2 options for setting up your YOKO^{neo} with the most popular flight simulation software: MSFS, Prepar3D v4, v5 & v6, and X-Plane 11/12.

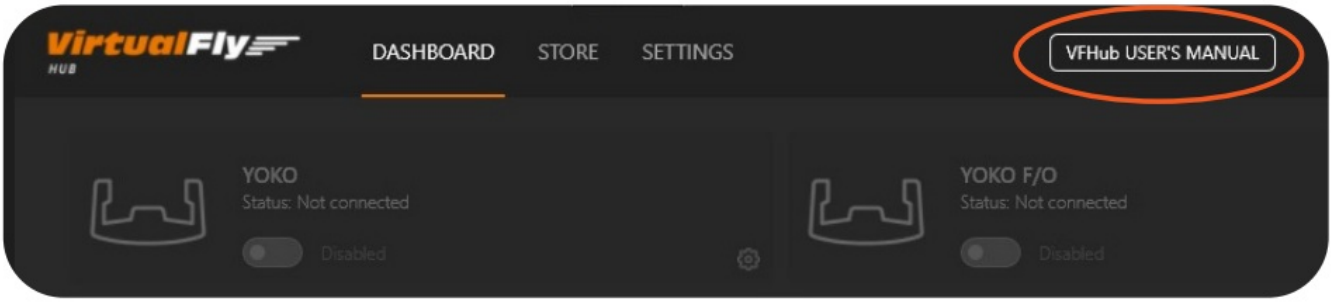
1. OPTION A: Using VFHub (Windows Only) – Recommended

VFHub is the software developed by Virtual Fly to simplify setting up our products. Thus, it is the recommended software to set up your YOKO^{neo} . With VFHub, you can fly your favorite flight simulation software without worrying about configuring your Virtual Fly flight controls.
You can download the latest VFHub version from this link: **https://www.virtual-fly.com/setup-support**. The VFHub installer takes care of installing VFHub and all the required modules. VFHub is compatible with MSFS, Prepar3D and X-Plane 11/12.
After installing VFHub, make sure your YOKO^{neo} is connected to your computer. Run VFHub, and verify that the YOKO^{neo} status displayed in the Dashboard is “Connected”:



VFHub takes care of making your YOKO neo work with MSFS, Prepar3D and X-Plane 11/12, so it must always be running when you use the YOKO neo .

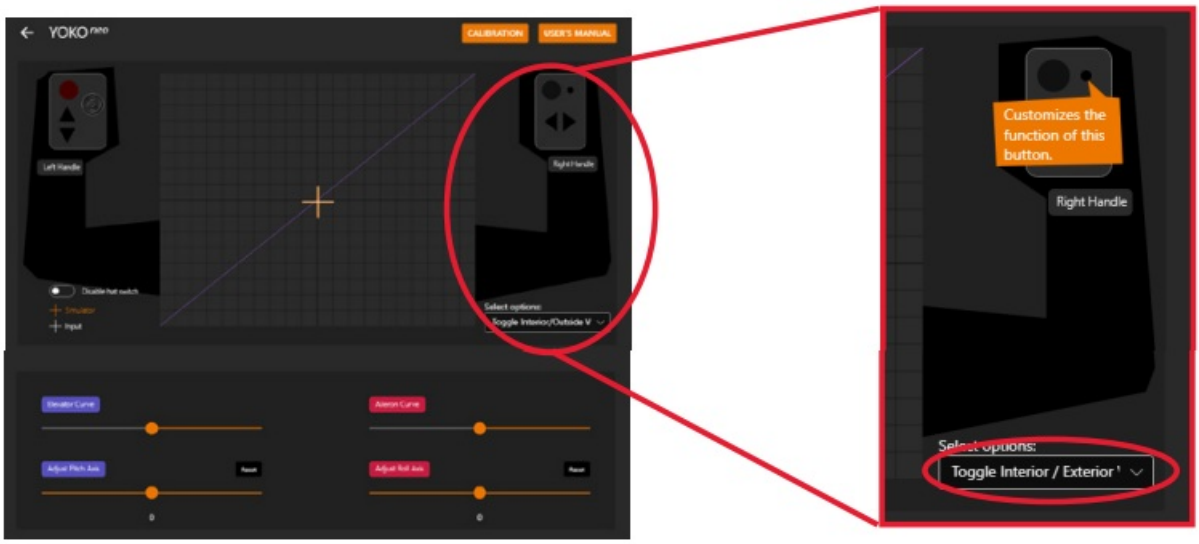
If you want to customize how your YOKO neo works, select the device's options button ( ) in VFHub's Dashboard. For detailed instructions on all the tuning and customization possibilities, check the USER's MANUAL button in the VFHub software.



Make sure to use set up a blank profile to the YOKO neo in the controls or joystick menu of the simulation software you are using. You can find the detailed steps in: **https://downloads.virtual-fly.com/docs/vfhub/latest/setting_up_a_blank_profile.pdf**.

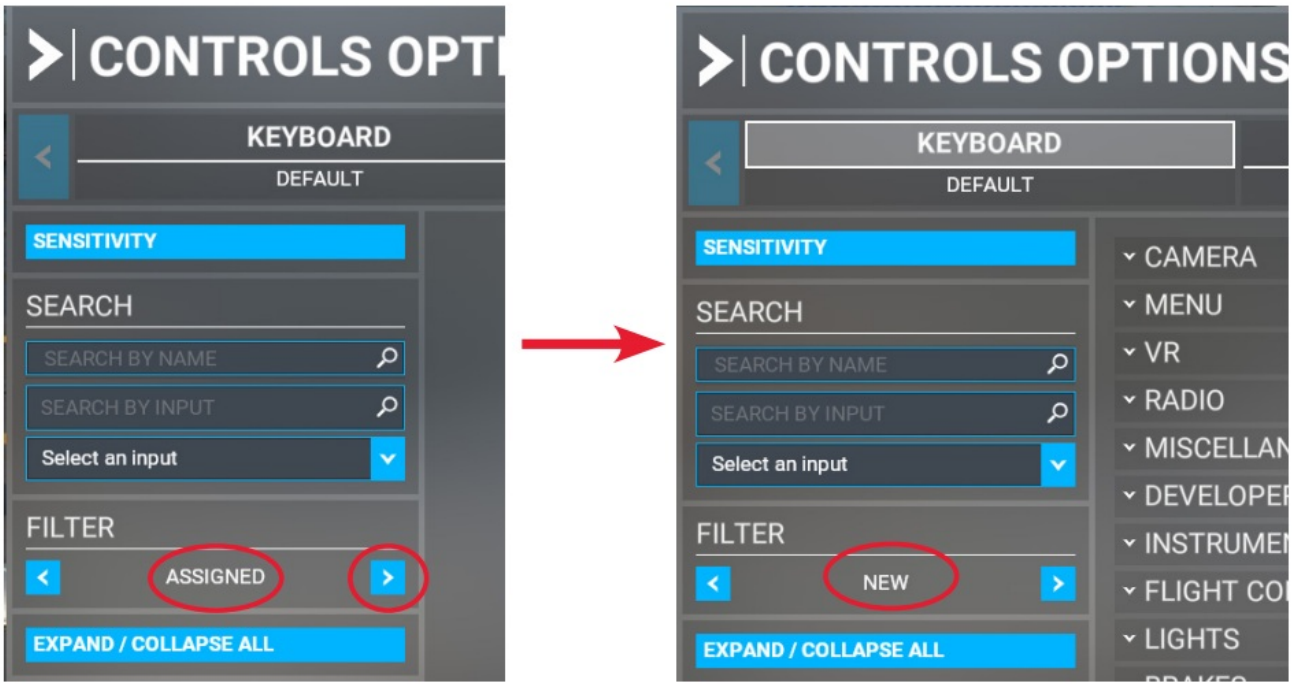
Buttons Functionality using VFHub
Within the customization menu of the device, you will be able to see all the associated buttons and axes. You can modify the function of one of the indicated buttons by clicking on the drop-down menu shown in the image below and select the option you prefer.

- Toggle Interior/Exterior View
- Pause Flight



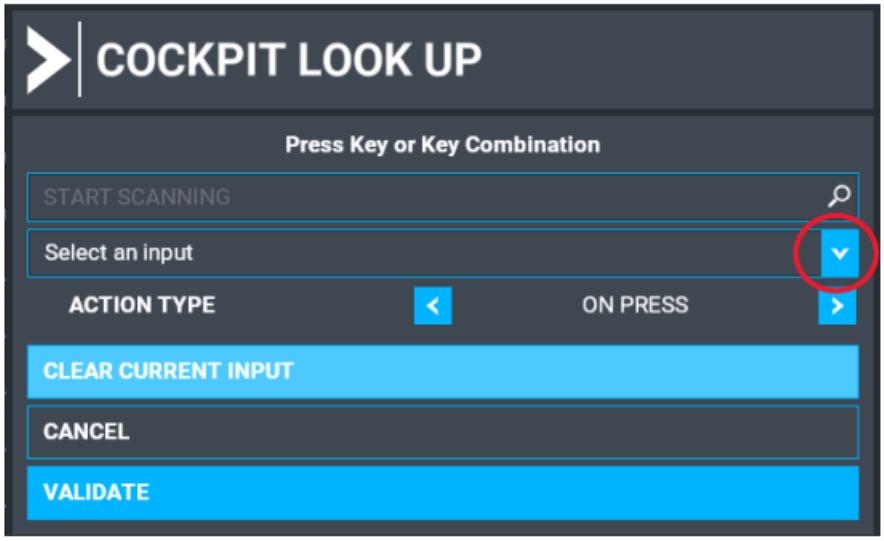
If you are running MSFS you must manually configure the analogue-progressive hat switch. Go to CONTROLS OPTIONS, select the YOKO^{neo} device and follow the steps below:

1. Press the arrow in the “FILTER” section indicated below to go from the “ASSIGNED” tab to the “NEW”, so that the full list of functions is displayed.

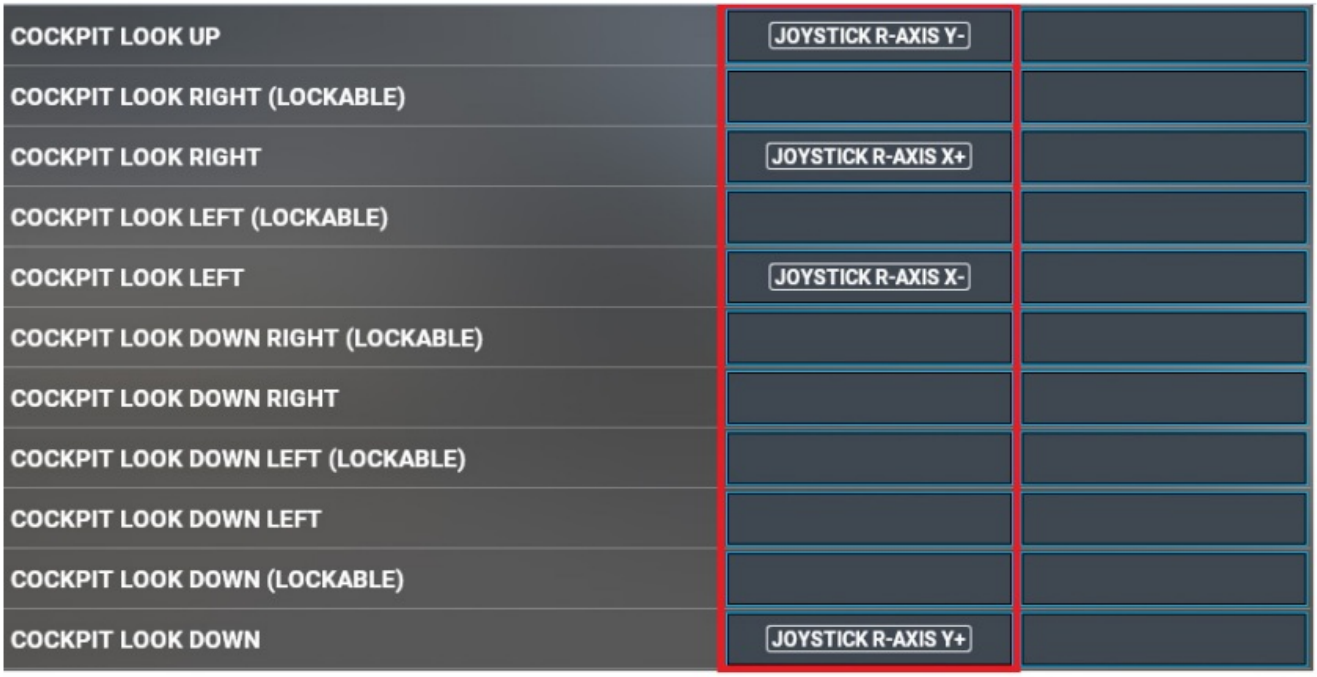


2. Pull down the CAMERA – COCKPIT CAMERA sub-menu.

3. Scroll down in the COCKPIT CAMERA submenu until you find the COCKPIT LOOK UP option and click the box in the right.
4. The “COCKPIT LOOK UP” menu will appear and you must press the “select an input”.



5. Scroll down in the dropdown list and select JOYSTICK R-AXIS Y-.
6. Press the VALIDATE button.
7. Repeat the previous steps for the other 3 directions, assigning the function to the axes shown below
   • COCKPIT LOOK RIGHT → JOYSTICK R-AXIS X+
   • COCKPIT LOOK LEFT → JOYSTICK R-AXIS X-
   • COCKPIT LOOK DOWN → JOYSTICK R-AXIS Y+
   When the hat switch is configured correctly, you should see



Press APPLY AND SAVE (menu below) to save the changes done.

If your Hat Switch behaves incorrectly in MSFS after this procedure, you must calibrate the YOKO^{neo} in the Windows Calibration Page.

2. OPTION B: In-game Configuration

Below, you have a general scheme to set up your YOKO^{neo} with the most popular flight simulation software: MSFS, Prepar3D, and X-Plane 11/12.

If you own a YOKO^{neo} , you must calibrate your device using Windows Calibration.

MSFS

Open MSFS and go to the options menu. Select controls menu and choose the YOKO^{neo} device from the list that appears.

Once selected you can assign the button and axes as you wish.

Prepar3D v4, v5 & v6

Open Prepar3D and go to the “Options” menu. Locate the “Key Assignments” and “Axis Assignments” and select the “YOKO^{neo} ” from the Controller list. Assign the buttons and axes as you please. Calibrate the device following the instructions inside “Control Calibration”.

Make sure the “Enable Controllers” option inside Options/Controls is enabled.

X-Plane 11/12

You will only need to calibrate your YOKO^{neo} inside X-Plane 11/12, since Roll/Pitch axes and buttons are automatically assigned. Open X-Plane and go to the Settings\Joystick sub-

In order to actuate electric trims of the yoke (NOSE UP/ Dn & L/R), both buttons must be moved at the same time to transmit the desired trim movement to the game.

Documents / Resources

	VirtualFly YOKOneo Control Stiffness Low Flight Sim [pdf] User Manual YOKOneo, YOKOneo Control Stiffness Low Flight Sim, Control Stiffness Low Flight Sim, Stiffness Low Flight Sim, Low Flight Sim, Flight Sim, Sim

References

- Cheap Flights: Flights Tickets, Airline Tickets, Search Flights | Fly.com us
- Virtual Fly | Professional Flight Simulators and Controls
- Virtual Fly | Professional Flight Simulators and Controls
- Flight Simulation Setup & Support | Virtual Fly