

## Welcome to Roto

Please see our step-by-step [instructional videos](#) on our website. Please contact us at [customersupport@rotovr.com](mailto:customersupport@rotovr.com) if you have any questions regarding set-up.



**Tip:** Start charging the Headtracker now. It is located in a small brown box inside Box 1.

### **Contents:**

Page 1 – Contents and Box contents  
Page 2 - Information on Roto  
Pages 3 – 4 - Box Contents  
Page 5 - PCB installation  
Pages 6 – 8 - Assembly Instructions  
Pages 9 – 11 - Cable Setup  
Page 12 – Control Box Information  
Pages 13 – 14 - Headset Setup  
Page 15 - Headtracker Setup and Information  
Pages 16 – 17 - Accessories Setup & Recommended  
Accessories Page 18 - Operating the Roto  
Page 19 - Troubleshooting  
Pages 20 – 23 - Roto VR Desktop Mode  
Page 24 - Contact Us  
Pages 25 – 26 - Safety Information



### **Box Contents**

#### **Box 1 – Base**

- Roto Base
- Foot Pedals
- Metal Bracket
- Power Supply & Cables

#### **Box 2 – Chair**

- Chair Backrest & Rumble (Cable B)
- Chair Seat, Arms & Rumble (Cable C)
- Chair Headrest
- Chair Seat Cushion
- Base Column
- Left Hinge
- Right Hinge
- Left Hinge Upper Cover



- Right Hinge Upper Cover
- Left Hinge Lower Cover
- Right Hinge Lower Cover
- 4x M5 Screws
- M8, M6, M5 & M3 Hex Key

Also included in Box 2 are the cables, which can be seen below:

- Cable **A** – Short Power Cable
- Cable **D** – Micro USB to USB
- Cable **E** – Micro USB to USB
- Cable **F** – Micro USB to USB
- Cable **G** – Audio Splitter Cable
- Cable **H** – Aux cable
- Cable **I** – USB type C (printer type) to USB type B
- Cable **K** – HDMI – HDMI
- Cable **L** – USB to USB
- Cable **M** – to be used with HTC Vive
- Cable **O** – Long Power Cable

### **Box 3 – Accessories**

- Left Side Table
- Right Side Table
- Desktop Table
- Desktop Table Leg
- Arm/Leg Connector
- Racing Wheel Table Support
- Racing Wheel Pedal Support
- Racing Pack Footrest
- Short Extension Arm
- Long Extension Arm

### **Box 4 – Extras**

(Please note that Box 4 is included inside Box 1 – it is one of the smaller brown boxes included. The other small brown box includes the power supply)

- Headtracker
- Main PCB Box
- Emergency Button and Cable (**N**)
- 10 x Velcro Straps
- USB Extension Cable
- USB Soundcard
- HDMI Repeater



## Assembly Instructions

Please see our step-by-step [instructional videos](#) on our website.

Tip! Start charging the Headtracker now. It is in a small brown box inside Box 1.



1. Turn Chair Seat upside down and remove the 4 screws, mini-springs and washers



2. Place Bracket onto Chair Seat with the longer side facing the rumble



3. Screw Metal Bracket into place with the 4 screws, with washer and mini-spring in between screw and bracket



4. Place Column into Metal Bracket



5. Remove the bolt on the Central Tube located opposite the Cable Magazine sockets



6. Place the Touch Pedal Tube (footrest) over the Base Central Tube



7. Align the Touch Pedal (footrest) window with the Cable Magazine sockets



8. Screw the bolt back into the Central Tube to secure in place





9. Place the Seat into the Base Central Tube



10. Align and screw the side bolts into the Central Tube and secure in place (tip: wiggle the chair slightly as you screw them in)



11. Align and screw the Right Hinge into **bottom** right side of Chair Seat



12. Align and screw the Left Hinge into **bottom** left side of Chair Seat



13. Screw the Right Hinge into the **top** right side of Chair Backrest



14. Screw the Left Hinge into **top** left side of Chair Backrest



15. Screw the Bottom Right Hinge **Cover** into place (tip: the screw isn't very long, so please press firmly whilst doing so)



16. Screw the Bottom Left Hinge **Cover** into place (tip: the screw isn't very long, so please press firmly whilst doing so)

***Tip:** Aligning and screwing in the parts can be a bit fiddly. We highly recommend two people to do this task. Also loosely screw in each of the 4 screws before tightening.*





17. Screw Top Right Hinge Cover over Right Hinge



18. Screw Top Left Hinge Cover over Left Hinge



19. Push Headrest into the top of the Chair Backrest (tip: press and hold the button 'in' on the top of the chair whilst inserting the headrest)

## WARNING

- Any wired device must be connected through the stem and base of the Roto chair.
- NEVER hold or mount a wired device that isn't connected through the stem of the Roto chair. Make sure there are no loose wires anywhere on or near Roto.
- Please use the Velcro strips provided to secure all wires.
- Accidental misuse can be dangerous and result in serious injury or death.





## Connecting the cables

Roto supports many devices and set ups. Only connect what you need.

**Cable A** – This is the power cable for the control box. Connects the control box (middle socket on the back side) to the top right socket on the connections panel on stem of the chair.

**Cable B** – Connects rumble pack on the back of the seat to the control box (Rum 1 socket).

**Cable C** – Connects the rumble pack on the bottom of the seat to the control box (Rum 2 socket).

**Cable D** – (**Tip:** Not required for Quest 2 compatibility). Activate side A of the control box. Connect the micro-USB cable from the central socket on Side A of the control box to USB socket ‘A’ on the connections panel on the stem of the chair.

**Cable E** - (**Tip:** Not required for Quest 2 compatibility). Activate side B of the control box. Connect the micro-USB cable from the central socket on Side A of the control box to USB socket ‘A’ on the connections panel on the stem of the chair.

**Cable F** - (**Tip:** Not required for Quest 2 compatibility). Connect the pedals (back of pedals) to side A of the control box (labelled ‘Pedal/Emergency’). We recommend to only connect the pedals when you intend to use them (less cables is best).

**Cable G** – Splits the audio from the VR headset to the chair (for rumble) AND the headphones (for sound).

**Cable H** – Audio cable connects into the front of the control box for rumble.

**Cable I** – (**Tip:** Not required for Quest 2 compatibility). This data cable connects Roto to the PC.

**Cable J** – Roto Power cable attaches to the mains wall socket.

**Cable K** – (**Tip:** Not required for Quest 2 compatibility). HDMI cable provides a passthrough signal through the chair for use with Oculus CV1 and HTC Vive.

**Cable L** – (**Tip:** Not required for Quest 2 compatibility). USB2 cable provides a passthrough signal through the chair for use with PC devices (headsets and accessories).

**Cable M** – (**Tip:** Not required for Quest 2 compatibility). Passthrough power cable for HTC Vive.

**Cable N** – (**Tip:** Not required for Quest 2 compatibility). Connects the emergency button to side A of the control box.

**Cable O** - (**Tip:** Not required for Quest 2 compatibility). Cable O is used to power force



feedback steering wheels. We recommend the Thrustmaster T150 Asia edition.

### **RUMBLE with Oculus Quest 2**

#### **Rumble**

The audio out from the Quest 2 needs to go the control box (front) AND your headphones using the splitter (G) and audio cable (H).

Rotate the silver dial on the front of the control box to set the amplitude of the vibration.

TIP: Turn UP your Quest 2 volume to maximum otherwise Roto won't rumble.

**Note** - Quest 2 USB-C to PC function is not yet supported.

### **RUMBLE with Oculus CV1**

Oculus CV1 requires the USB sound card to be connected to side A of the control box – then run an audio cable from the sound card 'speakers out' to the front of the control box socket (just left of the silver dial).

TIP: Set your PC audio output to mirror both the USB Sound Card and the Oculus headset.

## **Headtracking**

### **Pairing**

Headtrackers are mostly paired as they leave the factory. Check by turning the power on the Roto chair, then power on the Headtracker (circular button on the top):

- If Headtracker is flashing GREEN, it means it is paired.
- If Headtracker is flashing BLUE, it means it is trying to pair. To complete pairing, locate the 'Headtracker' button on the Roto base AND the side button on the Headtracker – then press both buttons simultaneously. Roto will beep and the Headtracker will start flashing Green.

### **Hidden safety sensor**

**Tip:** There's a hidden safety sensor (black colour) on the back of the Headtracker.  
**Headtracking Mode will not initiate unless it senses your head (or hand).**



### **To enter Headtracking Mode:**

Check the Headtracker is flashing green, then clip the Headtracker your VR headset and press side mode button. Roto will beep twice as it calibrates.



Tip: Look straight ahead whilst calibrating otherwise Roto will not line up properly throughout your gaming experience.

**Exit Headtracking Mode** by pressing the side mode button again.

Tip: The safety sensor on the back of the Headtracker should automatically exit Headtracking Mode and cut off the motor if you remove your headset but please don't rely on this! Please routinely exit headtracking mode by pressing the side mode button.

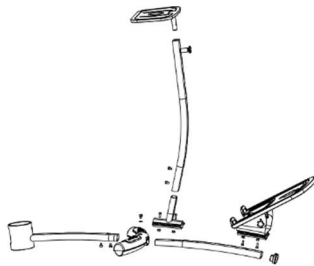
### Headtracker colours

- Flashing green – ready for action
- Flashing red – battery low
- Solid green – fully charged
- Solid blue – it's frozen (!). Don't worry, charge it for a few seconds and it will reset.

## Accessories

Box 3 accessories: these are tables for wheels, joysticks and keyboards. We supply the table mounts, not the actual devices.

**Side tables** slide into the chair arms. Pull the locking spring-loaded screw down to ease the tables in and out.



**Racing Rack** mounts supports most wheels and joysticks.

**Desktop** installation is very similar to the racing rack. Use the longer upright and shorter footrest bar as you see fit.

## Contact Us

### Helpline Information

The team can be contacted from 9am – 5:30pm Monday – Friday.

**Telephone:** +44 (0) 208 736 5671.



©Roto VR is a UK Ltd company. Companies House: 9473421. VAT Reg: 241423444.  
Devonshire House, Manor Way, Borehamwood, Herts, WD6 1QQ, United Kingdom



**Email:** [customersupport@rotovr.com](mailto:customersupport@rotovr.com)

**Live chat:** @rotovr.com

If you would like access to our SDK please contact us at [developersupport@rotovr.com](mailto:developersupport@rotovr.com).

## **Safety Information**

### **Before Operating Roto**

The socket-outlet shall be installed near the equipment and shall be easily accessible.



Roto shall be used with the included adaptor model GST280A24 only (Mean Well).

### **Safety of Head Tracker Lithium Rechargeable Battery**

CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

### **FCC and IC Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. CAN ICES-3(B)/NMB-3(B)

### **FCC/IC Radiation Exposure Statement**

This equipment complies with FCC/IC RSS-102 radiation exposure limits set forth for an uncontrolled environment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

