Rokoko

What is the Rokoko Suit?

The **Rokoko SmartSuit Pro** is a **wireless motion capture suit** that tracks full-body movement in real time. It's made up of sensors placed around the body, allowing you to **capture the motion of a performer** and translate it into digital animations.

What Can You Use It For?

The suit is designed for both **recording** and **live-streaming** motion data. This makes it ideal for:

- **Animation** – drive 3D characters in games, films, or visual effects
- **Performance** – use live body movement to control digital avatars or visuals (real-time)
- **Virtual production** – blend real-time motion with virtual environments
- **Research & art** – explore movement, embodiment, choreography, or interaction in new ways

It connects to the **Rokoko Studio software**, where you can see the motion data live, record takes, and export it to tools like **Blender, Unity, Unreal Engine**, or **TouchDesigner**.

- How to Rokoko

How to Rokoko

> important: NEVER firmware-update any part of the suit without prior contact with the Blackbox!

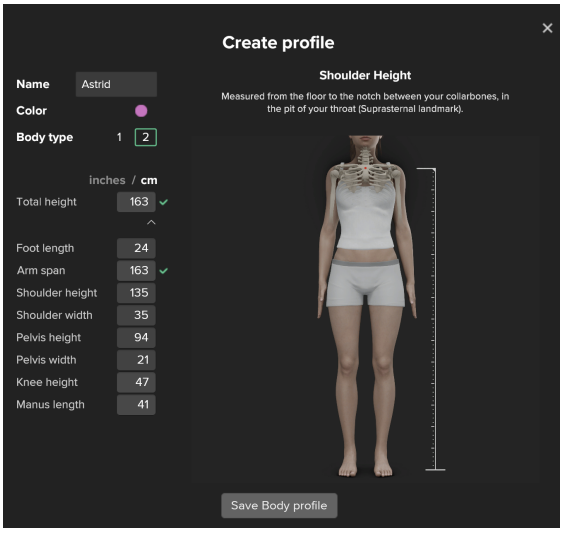
The **Rokoko SmartSuit Pro** is a **wireless motion capture suit** that tracks full-body movement in real time. It's made up of sensors placed around the body, allowing you to **capture the motion of a performer** and translate it into digital animations..

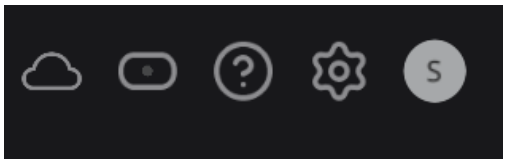
What do you need to use it?

- Rokoko suit (textile & sensors, check the Blackbox)
- powerbank
- advised: standalone router (remember: in HKU you can never plug a router into the LAN network, standalone use only!!!)
- computer (preferably with utp to the router & wifi for internet*)
- optional: Rokoko Gloves
- Rokoko studio software (windows & mac):

  https://www.rokoko.com/products/studio/download

How to setup (steps)



1. Open Rokoko studio
2. Create a Rokoko ID (in the studio, but directs youto the browser)
3. Create a Project & Scene
4. Create an Avatar, with your sizes (rough estimates can work measuring is better)
5. Connect the Smartsuit to the computer. Use the provided USB-C cable & connect to the sensor on the back of the suit.
6. 

   Select the second icon to connect to your device (smartsuit)

   (If the suit does not appear, check your firewalls)

7. Setup the wifi (preferably for the dedicated Router Specs**.)
   Use the 5ghz option if available.
8. Connect the powerbank & disconnect the Usb-pc cable
9. Connect the actor profile to the device
10. Wear the smartsuit (this step can be done earlier if you are working together)
11. When using the gloves follow steps 5-9 again for each glove. Although the powerbanks we use has 3 outputs, it is preferred to use separate powerbanks for the gloves.

How to record mocap (steps)

1. Callibrate
2. Record
3. Clean data
4. Export

How to live streaming

For real-time data streaming you need a license/paid seat.

Info & prices: https://www.rokoko.com/pricing (set it to per month instead of anual> 28,- euro per month)

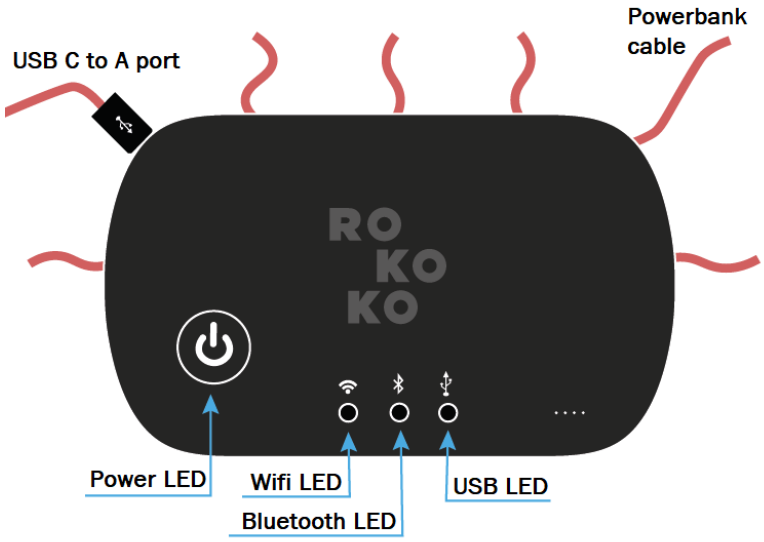
Loophole: Try it out for free: https://support.rokoko.com/hc/en-us/articles/4410424273169-How-can-I-access-the-free-7-day-trial-of-Studio-Plus-or-Pro

For this you need to set up a team (https://support.rokoko.com/hc/en-us/articles/4410409137297-Creating-a-Rokoko-Team-and-Selecting-a-Subscription-Plan)

** The HKU Rokoko's MacAdress has been added to streaming Vlan so the suit also works in all of HKU & connects to your computer if you place it in streaming Vlan too. Connect with your local Blackbox Employee for help with this ;)

HubLights:

The sensors light up blue/green before turning off. When your Smartsuit Pro II sensors are in a normal state they will not be lit when powered on. The only lights that will be on during use will be that of the HUB.



Power LED	What does it mean?
RED	There is a problem communicating with some of the sensors(possibly a broken wire or sensor)
YELLOW	Failed Redpine initialization

Power LED	What does it mean?
GREEN	The power is on! The Smartsuit Pro should be detected in Rokoko Studio in the Device Manager
OFF	Smartsuit is not connected to a battery

WIFI LED	**What does it mean?**
RED	A failure has occurred while trying to connect to the network. Please double check your WiFi settings(network/password/IP/Firewall etc) and reach out to support@rokoko.com if further assistance is required. This colour is normal if you have changed computer or network or if this is the first time connecting your Smartsuit Pro to your network
BLINKING GREEN	The Smartsuit Pro's Wifi function initializes. The Smartsuit Pro is also searching for WiFi
GREEN	The system is working properly and connected to an access point in the 5GHz band
BLUE	The system is working properly and connected to an access point in the 2.4GHz band
YELLOW	The system is working properly and connected to an access point in the Dual band mode
BLINKING PURPLE	The Smartsuit Pro's Hotspot is being initialized
PURPLE	The device is being connected to the PC via the Hub Hotspot

Issues & Troubleshooting

- **Suit not appearing in manager?**
  - check your firewalls
  - disableantivirus software
- **No legs?**
  - If part of the sensors stop working: Disconnect Batterypack, wait 30 secs & reconnect to wifi
- **Hub light off or red?**
  - Check the **charging cable and port**.
  - If the hub still doesn’t respond, try a **hard reset** by holding the power button for 10+ seconds.
- **Magnet interference?**
  - Avoid standing near **large metal objects** or **electronics** during calibration. (see if the sensors are green in the software)

useful links:

- video tutorials Rokoko: https://www.youtube.com/@RokokoMotion/playlists & https://www.rokoko.com/academy/tutorials
- compatible software & plugins for realtime intergration: https://www.rokoko.com/integrations
- * https://support.apple.com/en-gb/guide/mac-help/mchlp2711/mac prioritise the order of connection-service on mac