Rokoko Smartsuit Pro II & Smartgloves

Getting Started

Table of contents

1. Preparations

Items needed

- Smartsuit Pro II
- Smartgloves (if you need hand animations)
- Wifi router
- Fully charged powerbanks (USB-A able to output 5V/3A, 10000 mAh)
  - For the Smartsuit you need 1 USB-A output and for the Smartgloves you need 2 USB-A outputs. So 3 outputs in total
- Laptop with Rokoko installed
- Space to move around
- Measuring tape
- A actor/ actress

Other preparations

- Watch the tutorials provided by Rokoko studio

2. Smartsuit Pro II

What's in the box

- Smartsuit Pro II with a headsensor & headband
- A bag to carry your suit
- Long USB C to A cable connecting the suit's hub to the computer
- Not included: External powerbank to power up your gear
  (USB-A able to output 5V/3A, 10000 mAh)

Onwards to motion capture

1. **Rokoko Studio**
   Download and install Rokoko Studio by going to rokoko.com/studio
   Create an account.

2. **Create a scene**
   Create your first Project, then a new scene, and enter it.
   Now that you are inside a scene, hang your Smartsuit Pro close to your computer or place it carefully on a soft non-metal surface.

3. **Locate the hub on the suit**
   Open the zipper on the back of the suit to locate the hub.

4. **Connect your Smartsuit Pro**
   Connect your Smartsuit Pro to the computer using the USB-C to USB-A cable provided in the package. Make sure you hear the "clicking" sound to connect it properly. Connect your battery to the USB-A cable(can be seen in front-right pocket)

   A pop-up will appear in the upper right corner of Rokoko Studio. Click "Configure" to access the wifi settings automatically. If it doesn't show up, it means the USB-C to USB-A cable is not properly connected.

   You can access the Device Manager by clicking the button on the upper right as shown below. Read this article to learn more about all the Device Manager tabs.
   Click on your USB-connected device. Click on the Wifi Setup Tab, and enter your Wifi settings. Find your Wifi network from the drop-down list and enter its password
   Ensure that your computer is connected to the same WiFi that you wish to use your Smartsuit Pro with. Then, select the correct IP address from the drop down menu.
   Click "Apply settings"

If the WiFi settings are applied successfully, you will see a message saying " WiFi connection established - ready to start recording!". You can now disconnect the USB-C cable from the HUB and close the Device Manager.

At this point, you should see a grey avatar in the scene, with the LED's of the HUB being green for the power button and green ((if you are using a 5GHz router) or blue (if you are using a 2.4GHz router) for the WiFi LED.

If you are using a Glove-ready Smartsuit Pro, disconnect the powerbank from the Smartsuit Pro, connect the Smartgloves to the USB-C cables that come out of the last hand sensors of your Smartsuit before powering up and connect the Smartsuit Pro to the powerbank again. You need to plug in your gloves before you plug in your suit to the battery.

Magnetic interference: remove objects like phones to make sure it won't interfere with the data.

5. **Put the suit on**
   Wear your Smartsuit Pro 2 over underwear or tight garments.
   Your suit should sit close to your body. Having one too many layers or bunched up fabric under the suit can hinder your comfort - and the suit's performance.

   The headband is located in the back zipper of the suit.

   When plugging the cables into the hub, different levels of pressure might be required for different cables. Be as gentle as you can to avoid damaging the materials.

6. **Calibrate**
   Once paired, be sure to calibrate all actors. Make an actor profile and fill in the height measurements of the actor. It is good practice to do so once in a while in-between recordings as well.

7. **Record or livestream**
   When everything is set up and calibrated, start recording and see your motion capture in real-time. You can also instead choose
   to just livestream the data to another application like Blender, Unity, Unreal or Maya.

8. **Clean**
   Use the built-in filters and editing tools to clean up your mocap recordings and have it looking just right.

9. **Export**
   When you're done with your recordings, you can batch export using a range of export settings.

3. Smartgloves

What's in the box

- A pair of Smartgloves
- A case to store your gloves
- Two short USB C to A cables
- Two long USB C to A cables
- Not included: External powerbank to power up your gear (USB-A able to output 5V/3A, 10000 mAh)

How to connect your gloves

1. Download and install Rokoko Studio by going to rokoko.co/ studio
2. Use the USB C to A cable to connect the glove's hub to the computer: the C end connects to the hub, and the A end connects to the computer.
3. Go to Rokoko Studio and update the firmware from the device manager in the top right corner of the application.
4. Go to WiFi settings for the relevant device in the device manager, fill in the details for your WiFi and connect it to your Wifi network. If you get stuck go to rokoko.co/wifi
5. Once you see the message "WiFi device connected"; disconnect the A end of the cable connecting to the computer and use it to connect the glove to the powerbank.
6. Repeat for the second glove.

Onwards to Motion Capture

1. **Create a scene**
   Setup your motion capture scene with the relevant Actors and pair your Rokoko gear to them by dragging the connected gear on top of the actor profile.
2. **Calibrate**
   Once paired, be sure to calibrate all actors. It is good practice to do so once in a while in-between recordings as well.
3. **Record or livestream**
   When everything is set up and calibrated, start recording and see your motion capture in real-time. You can also instead choose to just livestream the data to another application like Blender, Unity, Unreal or Maya.
4. **Clean**
   Use the built-in filters and editing tools to clean up your mocap recordings and have it looking just right.
5. **Export**
   When you're done with your recordings, you can batch export using a range of export settings.

How to connect the gloves to Smartsuit Pro II

Smartgloves can be connected straight to your Smartsuit Pro 2. By doing so, your entire setup consisting of Smartsuit Pro 2 and Smartgloves are powered by a single powerbank. The powerbank must be able to deliver 5V/ 3A from one output with a suggested capacity of at least 10000 mAh.

1. Put on your Smartsuit Pro II (Glove-ready).
2. Put on your Smartgloves.
3. Connect the cable from the suit to the hub on the glove.
4. Repeat for the second glove.

4. Troubleshooting

If the suit or the glove(s) are not able to connect, check the IP address it is trying to connect to. If the IP address is orange in color, click on it to open a dropdown menu and select the IP address that is green. The connection should now be made without further issues.

Unplugging cables and plugging them back in again can help solve connectivity issues.

Fold over the sleeves of the Smartsuit Pro II when using the Smartgloves to prevent the underarm sensor and glove sensor from interfering with each other.