



Smart Finger Trainer User Manual



OYMotion Technologies Co., Ltd.
www.oymotion.tech

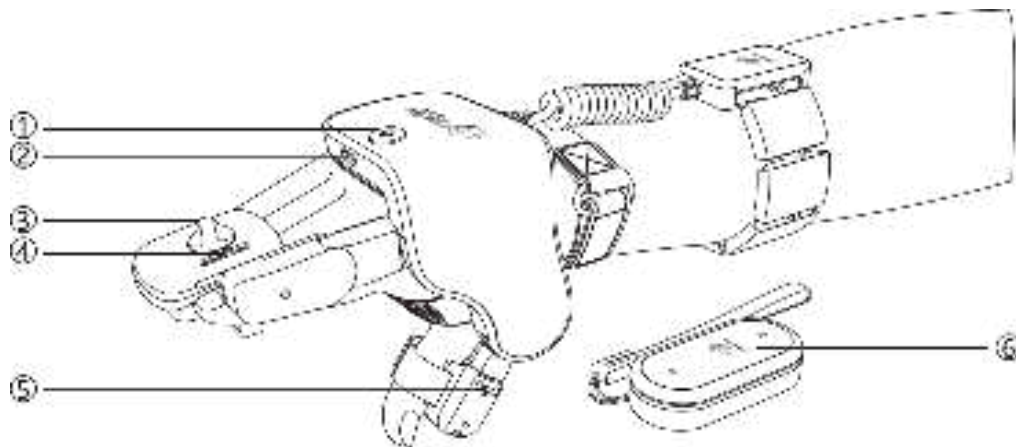
1. Product Introduction

The Smart Finger Trainer can output a given signal through APP and remote control, so that the patient's hand can be repeatedly passively flexed and stretched in the range of $0 \sim 70^{\circ}$, and promote the rehabilitation of patients with hand motor dysfunction. At the same time, OYFM-7000 can collect the patient's upper limb myoelectric signals through sensors, recognizes the characteristics of the patient's gestures, identifies the intention of hand movements, and drives the movement of components through the motor, so as to drive the patient's hand to complete the grasp, compensate for the hand function, and help the patient to take care of himself to a certain extent.

2. Model Difference

Model	Left/Right	Passive Mode	Remote Mode	EMG Mode
OYFM-7000-LMO	Left	√	√	√
OYFM-7000-RMO	Right	√	√	√
OYFM-1000-LMO	Left	√	√	×
OYFM-1000-RMO	Right	√	√	×

3. Product Components



①	Power Button	Long press to turn on/off the device, short press to lock the device
②	Stop Button	Emergency stop equipment operation
③	Up and down adjustment knob	Adjust the upper and lower distance of the finger drag area
④⑤	Front and rear adjustment knob	Adjust the front and back position of the finger drag
⑥	Remote Control	Control device activity

4. Packing List

Number	Name	Model/Specification	Quantity
1	Smart Finger Trainer	/	1
2	Remote Control	RC-001	1
3	User Manual	210 * 148mm (A5)	1
4	Certificate of conformity	/	1
5	Warranty Card	210 * 148mm (A5)	1
6	Internal hexagonal wrench	M2	1
7	Power Adapter	Input: 100-240V~50/60Hz 0.4A Output: DC 5.0V 2.0A	1
8	Charging Cable	Type-C USB	1
9	Finger rest for index and middle fingers	Little version	1

5. Instructions

5.1 Wearing Process



Step 1: Wearing an armband



Step 2: Wearing the host



Step 3: Overall fixation

5.2 Equipment Operation

App download link: <https://neucirflite-portal.oymotion.com>

The device supports three modes: Passive Mode, Remote Mode, and EMG mode.

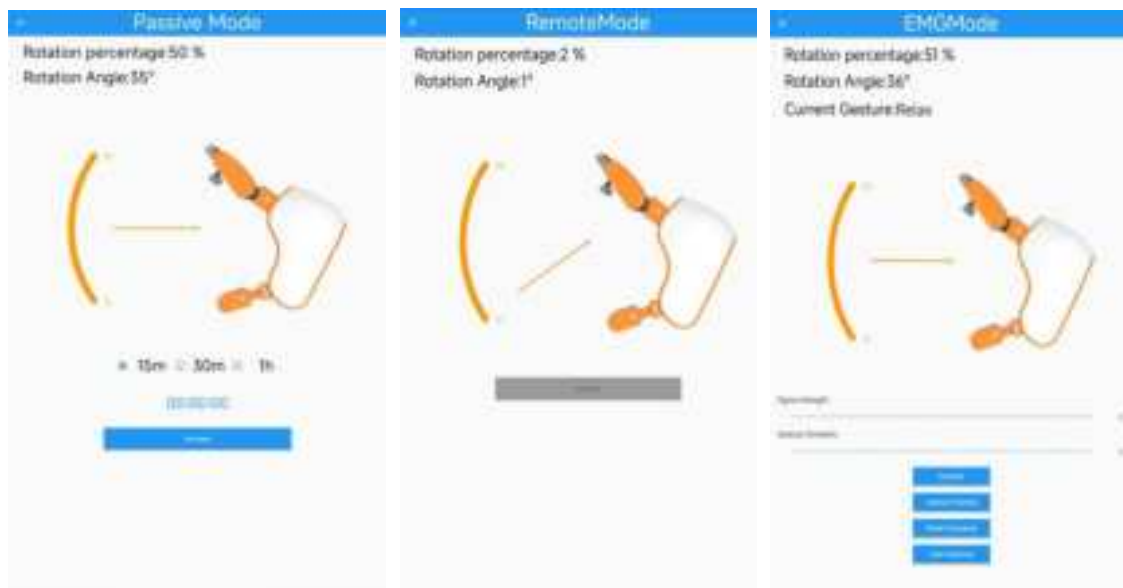
Passive Mode: In passive mode, the Smart Finger Trainer repeatedly passively grasps or stretches at a set duration and angle range (which can be set on the mobile

phone APP).



Remote Mode: In remote mode, the Smart Finger Trainer moves according to the signal of the remote control. Press the " \triangle " button of the remote control to stretch the device; press the " ∇ " button of the remote control to grasp the device.

EMG Mode: In EMG mode, the device recognizes gestures based on electromyographic signals (gesture training is required on the mobile phone APP) and converts gestures into action signals. In EMG mode, the remote control can still be used to control the movement of the device, and the remote control action commands take precedence over electromyographic signals.

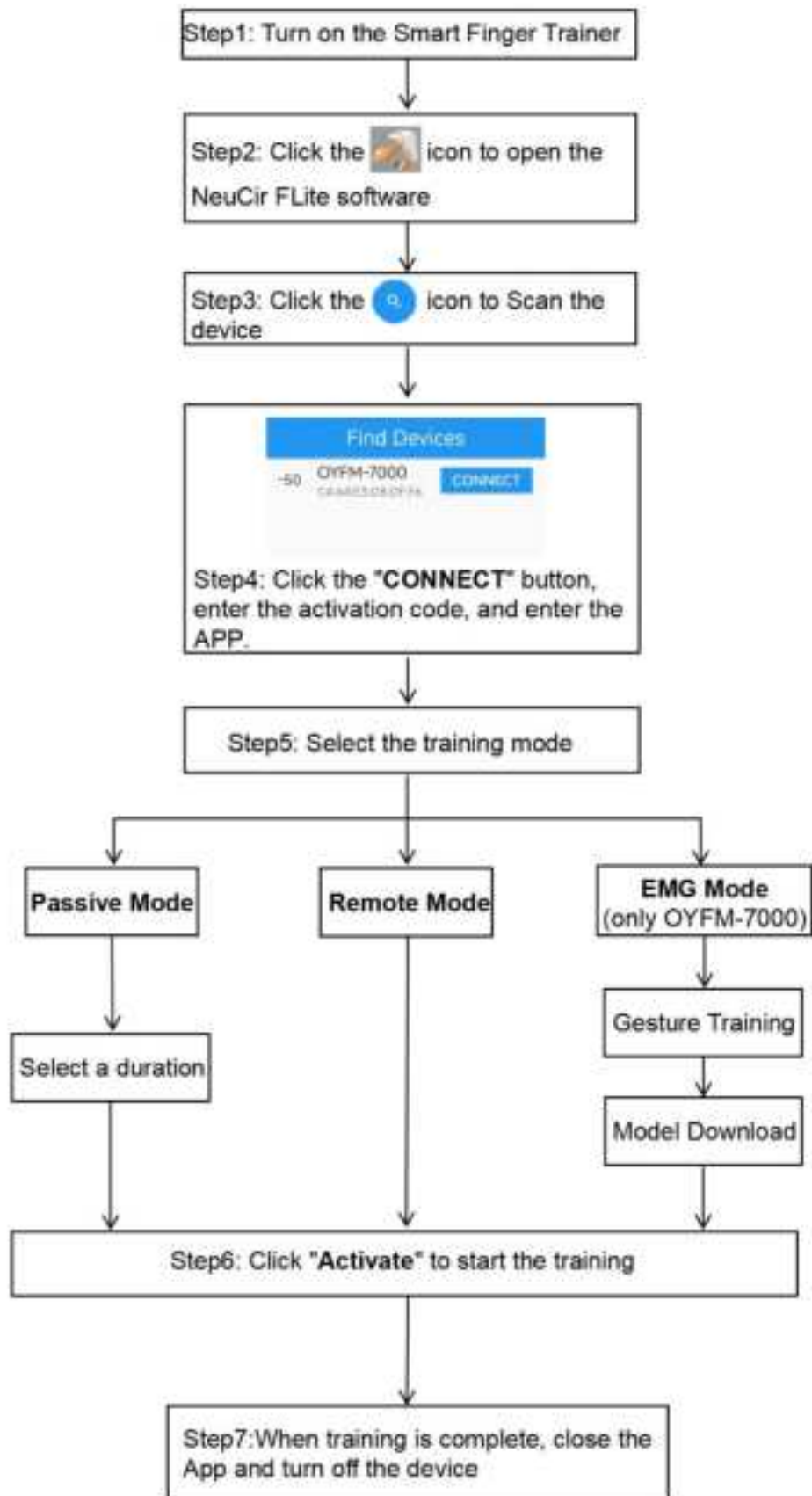


Passive Mode

Remote Mode

EMG Mode

The software operation process is shown in the following figure:



6. Technical Specifications

Category	Name	Indicator
Host	Battery Type	Rechargeable lithium battery 3.7V, 1000mAh Service life: 300 cycles
	Charing Time	2h
	Current Rating	200mA
	Communication	Bluetooth low energy BLE4.2
Remote Control	Battery Type	Rechargeable lithium battery 3.7V, 400mAh, 1.48Wh Service life: 300 cycles
	Communication	Bluetooth low energy BLE4.2
Runtime	Standby time	If the pause exceeds 15 minutes, the device will automatically shut down due to power saving
	Time of use	≥5h
Size	Armband	Diameter 91mm, Height: 55mm, Tolerance: ±5%
	Host	Length*width*height (mm) : 148*83*124 (mm) Tolerance: ±5%
	Remote Control	Length*width*height (mm) : 75*35*16.5 (mm) Tolerance: ±5%
	Front and rear adjustment knob	Adjust the knobs back and forth between the index and middle fingers (mm) : 0~14 (mm) Thumb back and forth adjustment knob (mm) : 0~12 (mm)
	Cable Length	Cable: 0.27m Charging cable: 1m
Weight	Host+Armband	345g, Tolerance: ±5%
	Remote Control	31 g ±5%
Armband	Channel	8
	Sample Rate	250Hz

	Sampling accuracy	24bit
	Electrode type	Dry electrodes
Angular range	/	0 ~70° Tolerance: ±10%
Duration	/	15min、30min、1h
Time	Stretch/grip time	1.5s Tolerance: ±10%
Material	Main Material	ABS+PC
Interaction Mode	/	APP, Remote Control

7. Precautions

7.1 Users need to perform appropriate warm-up and relax exercises before and after training to prevent muscle damage.

7.2 If you encounter a sudden increase in muscle tension during training, please stop training, stretch the muscles, and reduce the tension before continuing to train.

7.3 Training time and intensity should be determined according to individual conditions . Generally, training can be performed multiple times a day, as long as the patient does not feel tired after training.

7.4 This product needs to be used with the NeuCir FLite APP, and is only suitable for smart tablets and smartphones.

7.5 It can be used indoors and outdoors at room temperature. It is prohibited to use it in humid, watery, or electromagnetic-interference environments.

7.6 Replacing lithium batteries with inadequately trained personnel can lead to hazards (e.g., overheating, fire, or explosion).

8. FCC Warning

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.

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.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

9. Contact Us

The warranty period of the hardware products provided by the company is one year for the hardware products of the Smart Finger Trainer, and if there is a quality problem within one year from the date of sale, the company will be responsible for repairing the parts and solving the problems in all aspects such as equipment performance. The obligations under this undertaking do not include other charges such as shipping costs.



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Get more information

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