

**USER MANUAL** 





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## 1. Overview

#### 1.1 What's $\pi$

Sport Assist Robot  $\pi$ , with its hip-assisted function, is a powerful sports assistant for outdoor climbing, hiking and jogging. Wearing  $\pi$ , whether walking, hiking or running, can reduce physical energy consumption, allowing you to climb higher, walk farther, and exercise longer with greater endurance. The built-in chip can keenly sense the movement and accurately deliver traction assistance to reduce the muscle burden on the hip and knee joints, reduce joint wear and tear during exercise, and protect your sports health.

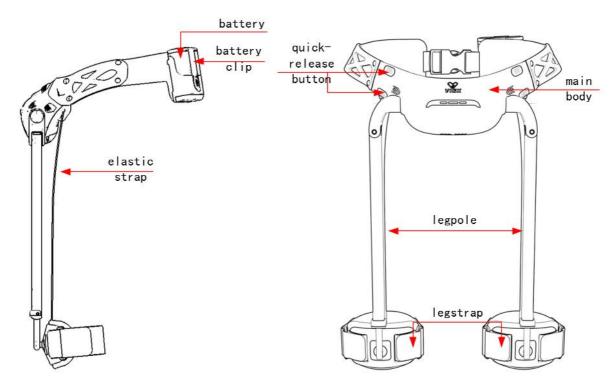
The images in this manual are for reference only; the final appearance shall be subject to the actual product.

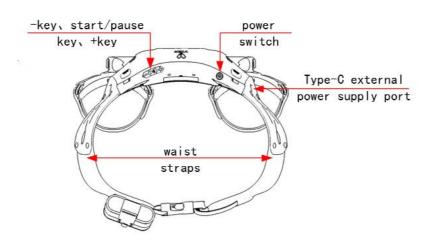
#### 1.2 Wearing





## 1. 3 Appearances and Structure





 $\pi$  Appearance Structure and Component Explanation Figure 2



## 1. 4 Accessory List

Serial	Name	Quantity	Notes	
Number				
1	Π equipment main unit	1 unit		
2	waist straps	1 set		
			2 pieces for the	
3	bottory	1 piece/2 pieces	Plus version, 1	
3	battery	i prece/z preces	piece for the	
			Basic version	
4	leg straps	1 set	Installed on	
			equipment	
5	shoulder strap	1 set		
6	battery charging seat	1 unit		
7		1 unit	Includes 1 metre	
	battery charger		of line	
8	product user manual	1 сору		
9	equipment organizer	1	Promotional gift,	
	bag		not fixed	
			accessories	





## 2. Assembly & Adjustment

### 2. 1 Battery Assembly / Disassembly

**Step 1:** Open the battery tab;

**Step 2:** Remove the battery and insert another battery;

**Step 3:** Cover the battery tab.



#### 2. 2 Waist Straps Assembly

**Step 1:** Attach the back buckle;



**Step 2:** Insertion of left and right side waist straps.





#### 2.3 Shoulder Straps Assembly

#### Step 1:

Hang the two side hooks on the hanging holes at the front and back of the waist straps respectively;





#### Step 2:

The elasticity of the shoulder straps is adjusted according to the height of the user, so that the device is just weightless on the waist.





## 3. Wearing and Using

## 3.1 Wearing

#### 3.1.1 Host Device Wearing

#### Step 1:

Grasp the host device, wrap the host waist around your waist and insert the loose waist straps;



Step 2: Adjust the host position about 3-4 fingers below the navel, then tighten the waist straps.







#### 3.1.2 Leg Straps

#### Step 1:

Adjust the length of the leg elastic band according to your height;



#### Step 2:

Thread the leather buckle on the front side of the leg straps;



# **Step 3:**Leg strap elasticity adjusted to fit.





#### Caution:

Loose leg straps can cause the leg bar to pop up and easily cause injury.

7



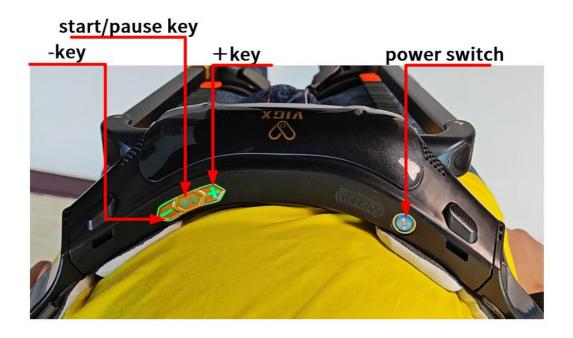
### 3.2 Wearing Standards

- The upper edge of the host device is 3-4 fingers under the navel;
- The host device is worn at the hip bone position;
- The waist straps are tightened and the person's waist has a corset-like feeling;
- Leg shells above the knee, leg straps properly tightened.





## 3. 3 Using 3.3.1 Key



#### 3.3.2 Power On/Off

Power on: Press the power switch \_\_\_\_, waiting for the device to start, start-pause key lights up;



\_\_\_Caution: Before powering on, please make sure the battery is installed and the switch is in the power off state\_\_\_\_.



Power off: Press the power switch \_\_\_\_ and the device shuts down. After shutting down the device, the light of start-pause key poes out.





#### Caution:

Make sure to turn off the machine before unloading the device, otherwise the leg bar may pop up and cause injury easily.



#### 3.3.3 Adjustment

## Power startup / pause:

Short press the start-pause key, the device startup and the light is always on; Short press the start-pause key, the robot pause and the light flash.



#### Assist adjustment:

With the power assist on, short press the plus key , minus key to increase or decrease the power assist, and the voice announces the power gear.



Weight (kg)	Assist level
≤50	4
50-60	5-6
60-70	6-8
≥70	≥8

\*\*For initial use, it is recommended to reduce the assist level by 1-2 gears from the recommended setting to adjust to the assistance effect.



#### **Battery level reminder:**

Long press the start-pause key, the device announces the current battery percentage;

#### lamp:

- Yellow light on at 20% battery.;
- Orange or red light on at 1%;



#### Scene Switching:

With the power assist on, press the plus and minus key briefly at the same time until the voice announces different scenes;



#### Mode switching:

With the power assist pause, press and hold the plus and minus key at the same time until the voice announces different modes;





## default configuration restored:

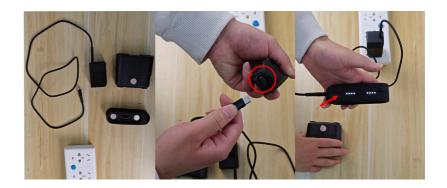
When assistive power is suspended, press and hold the plus + , minus - and start-pause keys simultaneously until the voice prompt announces "default configuration restored".



#### 3.3.4 Charging

#### Preparation:

As shown in the figure, connect the charging ports one by one, after power, the charging indicator is a slow running light.



#### Charging:

Operate as shown in the figure; the indicator light will blink when the battery is charging.;
A green indicator means the battery is full. A yellow indicator means the battery is damaged and should be replaced!





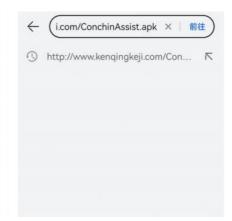
#### 3.3.5 App download

#### Android phones:

Method 1:please scan the QR code to download the App. Method 2:please use your mobile browser to input URL: https://www.kenqingkeji .com/VIGX/VIGXAPP/VI GX.apk



Android App Download



#### iPhone:

Method 1: In App Store directly searches for "VIGX".

Method 2:please scan the QR code to download the App.





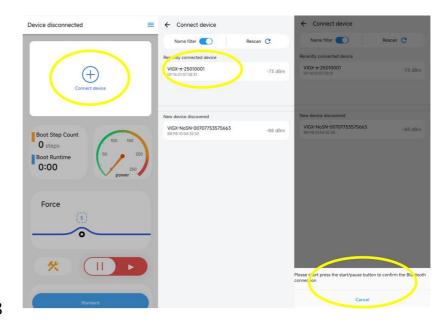
#### 3.3.6 Connect App

#### Step 1:

Click "Connect device";

#### Step 2:

Click on the serial number to connect the device (serial number available on the device label, last 8 digits);



#### Step 3:

The first time to connect the device, you need to press the start-pause key to confirm the connection.





#### 3.3.7 External Charging Support

The device supports a

Type-C interface with 5V

output, which can be used
to power external devices.



△ Caution: This Type-C port only supports power output to external devices and does not support charging the device itself. Please do not use this port for charging. To charge the device, use the provided charger to recharge the battery.

#### Caution:

- 1.  $\pi$  will be slightly heated during normal use, this is a normal phenomenon, please do not worry.
- 2 . Do not walk while adjusting settings (assist level, parameters, or mode) during operation to avoid imbalance and falls.



#### 3.4 Take Off the Device

#### Step 1:

Peel off the front side velcro and take off the leg straps.



△ Caution: Make sure the device is turned off before taking off the device, otherwise the leg bars may pop up easily causing injury.

#### Step 2:

Holding the host device, pull out the right waist straps while pressing the right release button.



Caution: After removing the device, ensure that it is prevented from falling and causing injury.



## 4. Maintenance

## 4.1 Storage

#### Step 1:

Remove the waist straps on both sides of the device;



#### Step 2:

Folding host device;



### Step 3:

Pack.





#### 4.2 Straps Assembly / Disassembly

#### Waist straps:

The waist straps are secured with Velcro fasteners. To remove and clean them, simply detach the Velcro.

#### Leg straps:

The leg straps are secured with Velcro fasteners. To remove and clean them, simply detach the Velcro.



#### 4.3 Cleaning

#### 4.3.1. Fabrics Cleaning

The image on the right shows the washable components. Use a laundry bag during washing to prevent damage to these parts.; Reinstall them after they are fully dried.





#### Caution:

- 1. Do not use water temperatures above 40°C for cleaning;
- 2. For longer-lasting linings, place them in a laundry bag before machine washing.

#### 4.3.2. External Surface Cleaning

Clean the device with a moist cloth to remove dust and dirt or disinfect it with an alcohol-based wipe.



## 5. Common Troubleshooting

Fault phenomenon	Analysis of possible	Fault resolution	
	causes		
Can't power on	1. The battery is not installed	1. Load battery	
	2. The emergency switch is	2. Close the emergency switch	
	not closed	3. Charge the battery	
	3. The battery is exhausted		
Wearing detection	1. Device not worn	Refer to chapter 3 for wearing	
failed	2. Incorrect device wearing		
No power output	key blinking, power pause	Press the key to activate	
		assistance.	
No power output and	detects falling	Please press function key to	
prompt "Falling detected"		start power output and walk	
detected		normally	
No power output and	detects over running speed	Please press function key to	
prompt "Over speed		start power output and run	
detected"		slowly	
No power output and	detects too high temperature	Please place the device in a	
prompt "Temperature	and shut down	proper temperature	
too high, device will		environment, wait for it to cool	
shut down soon"		down, and then restart.	
No power output and	key red indicator flashes	Please contact after-sales	
prompt "Device		services	
error"			
Other's failure		Please contact after-sales	
		services	

△ Caution: If the problems cannot be solved, please contact after-sales service and do not disassemble the machine by yourself.



## 6.Features

## 6.1 Main Parameters

model	π	π plus		
Weight	2.0kg (including the battery,	2.2kg (including the battery, waist		
	waist straps, and leg straps, the	straps, leg straps, the weight will vary		
	weight will vary due to different	due to different accessory		
	accessory configurations)	configurations)		
Size	415*330*175mm(Subject to	415*330*175mm(Subject to actual		
	actual packaging dimensions.)	packaging dimensions.)		
Battery	47.982Wh(The actual capacity	95.964Wh(The actual capacity shall		
Capacity	shall be as specified on the	be as specified on the battery label.)		
battery label.)				
Continuous Continuous walking for		Continuous walking for -4h(24000		
usage time -2h(12000 steps)@ medium		steps)@ medium speed @medium		
after a full speed @medium force		force		
charge Standby time: 24 hours		Standby time: 48 hours		
Maximum 10Nm		15Nm		
Torque				
Maximum	10.5km/h	15km/h		
Speed				
Bluetooth BLE: 2402-2480Mhz, EIRP:		BLE: 2402-2480Mhz, EIRP: 0 dBm		
	dBm(Max)	(Max)		



## 6.2 Target Audience

Host size	height (cm)
S	150-165
M	165-185
L	180-200

Waist strap size	Waist size one finger below the belly button (cm)	inch (in)
S 72-82		28-32
M 82-100		32-39
L 100-125		39-49

Leg strap size	Three fingers above the knee leg	inch (in)
	circumference size(cm)	
S 30-45		12-18
M 40-62		16-24

## 6. 3 Operating Environment

Operating ambient temperature: -10°C~ 45°C.

Charging ambient temperature: 0°C~45°C.

The device itself has a certain level of dust and rain resistance (not water immersion).



#### 6. 4 Names and Contents of Hazardous Substances in Products

Б . И		haza	ardous substa	nces or elem	nents	
Part Name	Pb	Hg	Cd	PBB	Cr (VI)	PBDE
PCBA	×	0	0	0	0	0
Components	×	0	0	0	0	0
(incl. modules)						
Battery	×	0	0	0	0	0
Charger	×	0	0	0	0	0
Metal Structural	0	0	0	0	0	0
Parts						
Plastic	0	0	0	0	0	0
Structural Parts						
Wrap	0	0	0	0	0	0

This form has been prepared in accordance with the provisions of SJ/T 11364.

- O: It means that the content of the hazardous substance in all homogeneous materials of the component is below the limit requirements stipulated in GB/T 26572.
- X: Indicates that the content of the hazardous substance in at least one homogeneous material of the component exceeds the limit requirements stipulated in GB/T 26572, and there is no mature alternative in the industry at present, which is in line with the environmental protection requirements of the EU RoHS Directive.
- The numbers in this logo indicate that the product has an environmental life span of 10 years under normal use. Certain parts may also be labelled with an environmental life expectancy, and the environmental life expectancy is based on the number in the logo.



#### 6.5 FCC Caution

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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

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

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.

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



#### 6.6 IC Caution

#### -English:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The digital apparatus complies with Canadian CAN ICES - 3 (B)/NMB - 3(B).

This device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.

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

#### -French:

Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux RSS exemptés de licence d'Innovation, Sciences et Développement économique Canada.

L'exploitation est soumise aux deux conditions suivantes :

- (1) Cet appareil ne doit pas provoquer d'interférences.
- (2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

l'appareil numérique du ciem conforme canadien peut - 3 (b) / nmb - 3 (b).



Cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 2.5 du cnr - 102 et conformité avec rss 102 de l'exposition aux rf, les utilisateurs peuvent obtenir des données canadiennes sur l'exposition aux champs rf et la conformité. Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé.

L'appareil a été évalué pour répondre aux exigences générales d'exposition aux radiofréquences. L'appareil peut être utilisé en condition d'exposition portable sans restriction.

## Service & Support



Android App Download



iOS App Download

Kenqing Technology official website and WeChat account are as below:



Official Website



WeChat Account

Addr: A1, Floor 1, Shanshui Bld., Nanshanyungu Park, Liuxian Ave., Nanshan District,

Shenzhen, P.R.C

Contact: 400-876-8873

Email:conchin@kenqingkeji.com Web: www.kenqingkeji.com