

Technical Specification Document for Massage Chair Control Panel (KP05) V1.5

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Revision Record

Date	Edition	Author	Remarks
2025.04.03	V1.5	Luo Jinhai	New-built

1 Product Overview

This product series is an Android-based control panel for massage chairs, designed to facilitate human-machine interaction. It communicates with the main unit via a UART interface.

2 Product Features and Performance

This product has the following main functions:

- 1、The human-computer interaction with massage chair is realized.

Order number	Product model	Product features	Remarks
1	KP05		Ojiahua Custom

explain :

- (1) This article applies only to the models listed above.

2.1 Function Declaration

2.1.1 Hardware Configuration

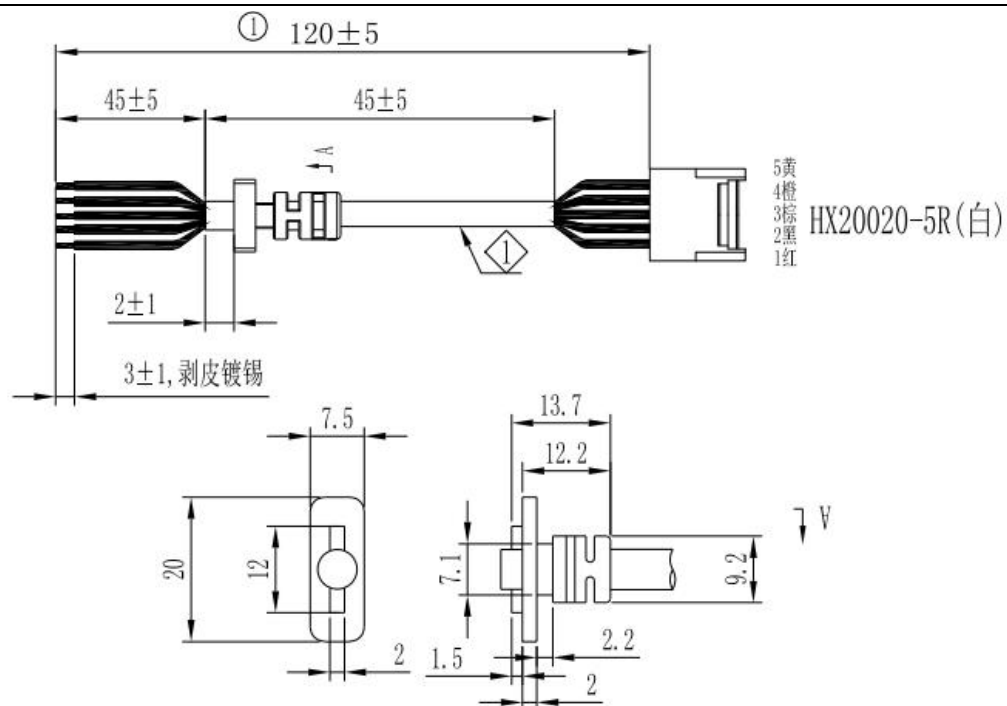
Function	Specification Description	KP05	Remarks
CPU	Quad-core 1.6GHz CPU with Cortex-A53 architecture	√	
FLASH	8GB	√	
SDRAM	1GB	√	
Serial communication	UART	√	
Display screen	10.1inch LCD , 1280RGBx800 pixels	√	
Touch screen	Capacitive touch screen	√	
Key	Power switch	√	
WIFI	2.4GHz	√	
	5GHz	√	
BT	2.4GHz	√	
Power Supply Voltage	DC24V (powered by the massage chair)	√	

2.1.2 Software :

Type	Description	KP05	Remarks
Operating system	Android 4.4.2	×	
	Android 10	√	
	Android 12	×	

2.2 System External Interface

2.2.1 Wiring Diagram:

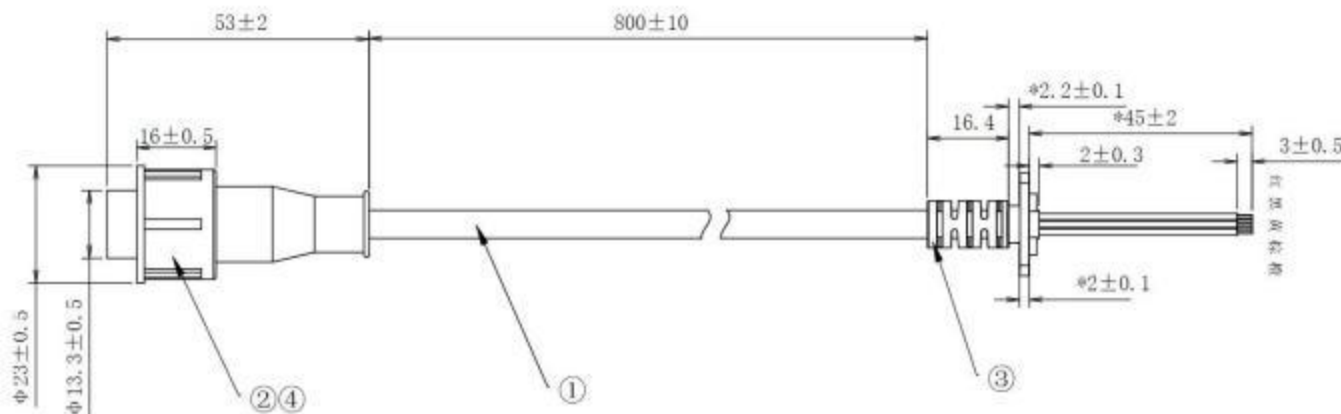


KP05-01 Wiring Diagram (unit: mm)

2.2.2 Definition of the interface pin

product model	The pin number	Feet name	functional description
KP05-01	1	Red	DC24V
	2	Black	GND
	3	Brown	TX
	4	Orange	RX
	5	Yellow	PWR-KEY

2.2.3 Wiring Diagram:

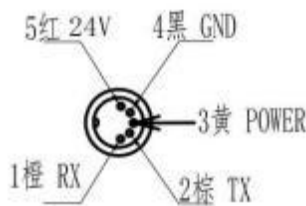


KP05-02 Wiring Diagram (unit: mm)

2.2.3 Interface Pin Definition

Product model	Pin number	Pin name	Functional description
KP05-02	1	Orange	RX
	2	Brown	TX
	3	Yellow	POWER (Power switch)
	4	Black	GND
	5	Red	DC24V

2.2.4 Interface Function Diagram



KP05-02 Interface Diagram

2.3 Performance Index

2.3.1 Product Performance Standard

Product specifications are detailed in the product manual.

2.3.2 Customer Performance Requirements

- (1) ESD: Air discharge $\pm 15\text{KV}$;
- (2) Certification requirements: SRRC certification;

2.4 Technical Parameter

2.4.1 Electrical Property

Order number	Product model	Rated voltage	Power rating	Standby power	Remarks
1	KP05	DC24V $\pm 10\%$	12W	5W	

2.4.2 Work Environment

Operating temperature: $-10^{\circ}\text{C}\sim+55^{\circ}\text{C}$

Storage temperature: $-10^{\circ}\text{C}\sim+60^{\circ}\text{C}$

Relative humidity: 20%~80%

2.5 FCC 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.

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 thise quipment 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.

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2.6 IC Statement:

This device complies with Innovation, Science and Economic Development Canada's licence - exempt RSSs. Operation is subject to the following two conditions:

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

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.