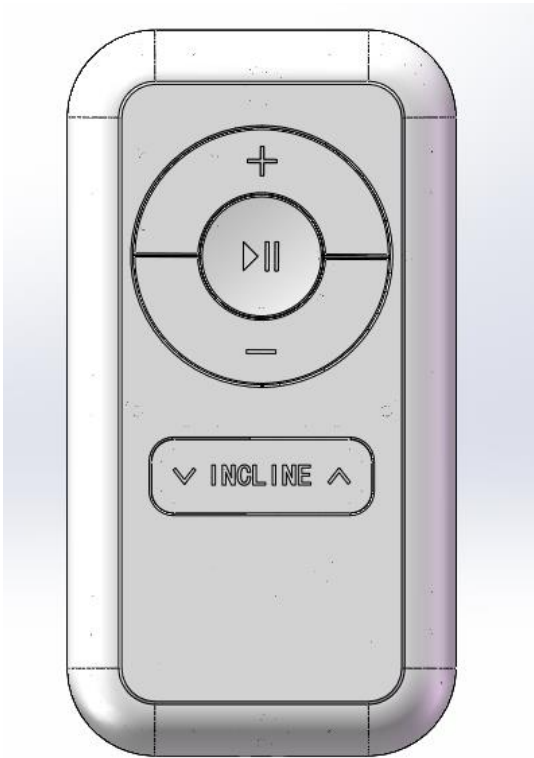# YKO3-433M remote controller

Jiangxi Zhongyang Electric Appliance Co., Ltd

operation instructions

Version update instructions

Date	Version	Update remarks
2024/7/9	1.0	Initial version

一、Overview of Remote Control

1. 433MHZ Introduction to Wireless Remote Control Functions

Part A: RF Frequency transmission section

WT06 is a 433MHz frequency modulation transmitter chip, with a working frequency set at 13.560MHz. When the main control MCU WT6208 sends a protocol to WT06B through the data pin based on the key values of the key, it then emits RF through the high-frequency matching circuit.

Part B: Key recognition section

When a button is pressed, it will cause a corresponding change in the MCU port level, and the main control MCU will identify the corresponding button based on the corresponding port level change.

Part C: Main control chip section

When there are no buttons generated, the main control MCU WT6208 will enter sleep mode to achieve power-saving effect. When a button is pressed, the MCU will immediately wake up, recognize the corresponding key value, send RF command protocol, and enter sleep mode when the button is released.

2. Carrier protocol

NEC protocol software engineers can modify their functions based on key value codes custom code：0x61d6

Single key code value：
1. Speed increase：0x88
2. Start：   0x48
3. Speed reduction：0xc8
4. Incline increase：0x28
5. Incline reduction：0xa8

Combination key code value：
1. Combination 1(Speed+、Speed-)：0x18
2. Combination 3(Speed-、Start)： 0x98
3. Combination 4(Incline+、Incline-)： 0x58

transmitting waveform：standard NEC，BOOT CODE +16BIT custom code+8BIT data+8BIT Data inversion+STOP.
A, BOOT CODE：9mS(LOW)/4.5mS(HI).
Data 0:560US(LOW)/560US(HI),
Data 1:560US(LOW)/1680US(HI),STOP:560US(LOW).

3. Remote control controls treadmill button instructions (common functions)

If the remote control does not respond or you have replaced it, you need to pair it again; Pairing method: Short press the start/pause button on the remote control within 5 seconds after power on to pair.

1、" ▶‖ " start/pause/stop key: When the power is turned on and the safety lock is placed in standby mode, press this button to enter a 3-second countdown. The treadmill starts running at the lowest speed. Short press this button to pause the treadmill during operation, and long press this button to stop the treadmill and bring it to the standby interface.

2、" ➕ " Speed " ➖ " Speed＋－: Pressing the deceleration key will reduce the running speed of the treadmill, while pressing the acceleration key will increase the running speed of the treadmill; Its adjustment amplitude value is 0.1 kilometers (miles) per time, and it automatically increases or decreases continuously when held down for more than 0.5 seconds.

3、" ︽ " Incline " ︾ " Incline＋－: Pressing the slope decrease key will lower the running slope of the treadmill, while pressing the slope increase key will increase the running slope of the treadmill; The adjustment amplitude value is (1/6 slope)%/time. When continuously held down for more than 0.5 seconds, it will automatically increase or decrease continuously. When in standby mode, pressing the slope key can select three types of countdown: time, distance, and calories.

Combination key function:

1. Combination keys "Speed ➕ " and Speed " ➖ " Total mileage function:
Pressing and holding two keys while in standby mode will enter the view total mileage interface, Long press " ▶‖ " Will clear the current accumulated mileage. Short press " ▶‖ " Exit the total mileage interface without clearing it.

2. Combination keys "Speed ➖ " and Start " ▶‖ " Driver parameter setting function:
When pressing the speed down and start keys while in standby mode to enter the driver parameter settings, the displayed items will be displayed "d01", press "Speed ➕ "and Speed " ➖ " Enter and adjust the sub projects of the current "d01", Press" ︽ "or " ︾ " Switch to the next project "d02". Drive parameter

setting status pressed " " Exit and write current drive parameters.

3. Combination keys "Incline " and Incline " " Slope learning function: Press and hold for standby timeIncline + -Drive begins to learn the number of lifting stages。

二、 Hardware information

1. Electrical characteristics of remote control
    1. Rated voltage : 3V(2032 button battery power supply)
    2. Rated current : ＜15mA
    3. Rated power: ＜45MW
    4. Static current : ≤0.1uA
    5. Working current : make an appointment 4—6mA
    6. Launch distance : ≥10M

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.
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