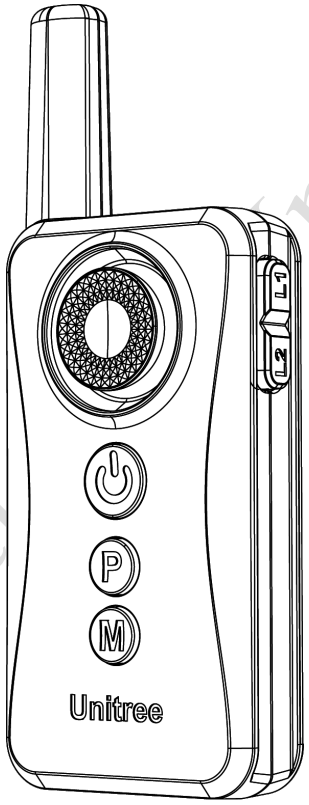
Go2 Companion Remote Control

User Manual V1.0



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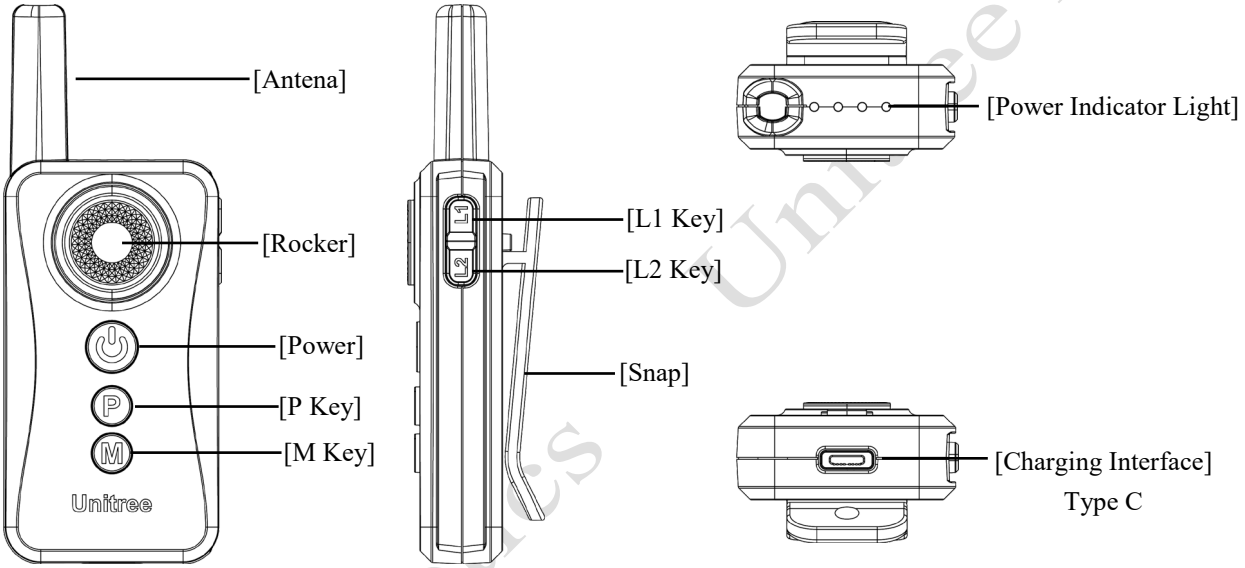
Introduction

The companion remote control is part of the Go2 remote control module, which can manipulate Go2 to achieve stable and full control of 3-axis posture and 3-axis position when standing. and to achieve forward and backward movements, turning in place, and other actions on flat ground. It can also activate the intelligent accompanying mode with one click, without the need for remote control, and enter the autonomous following state. During the forward process, it can intelligently avoid obstacles based on radar data, ensuring the safety of the robot dog and the surrounding environment. The companion remote control adopts a new buckle design that conforms to ergonomics, making it more secure and comfortable to touch.

Parts Name



Technical Specifications

Parameter	Specification	Remarks
Charging Voltage	DC 5.0V	Type-C Interface
Charging Current	600mA	
Lithium Battery Capacity	520mAh	
Standby Current	20uA	
Running Time	About 5h	
Remote Control Distance	Above 15m	Open Environment
Frequency	6489.6Mhz	
The height of the remote control allowed at any time on the side from the ground	0.2m ~ 1.2m	Wearing between the waist and neck

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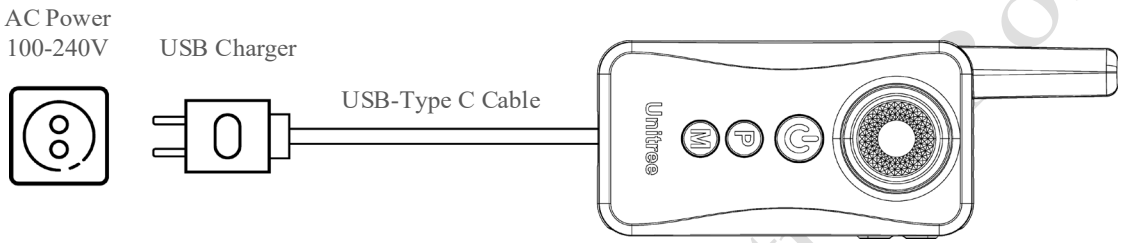
Companion Remote Control Turnon/Turnoff

Turn on/off the companion remote control: Short press the power button once to turn it on, and then long press for more than 2 seconds to turn it off.

Companion Remote Control Charging

When the battery indicator light of the companion remote control shows that the battery is low, you should connect the companion remote control to the charger as shown in the figure below:



a) We recommend you to use a 5V/1A USB charger which meets FCC/CE standard.

b) The power indicator light will flash at 1Hz (1 second/time) in charging status and indicate the current power level.

c) When the power indicator light is all off it means the battery pack is full, please remove the charger to finish charging.

Charging Indicator Light				
LED1	**LED2**	**LED3**	**LED4**	**Current Battery**
☼	○	○	○	0%-25%
☼	☼	○	○	25%-50%
☼	☼	☼	○	50%-75%
☼	☼	☼	☼	75%-100%
				Full Charged

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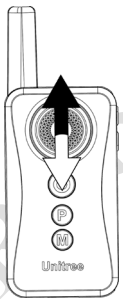
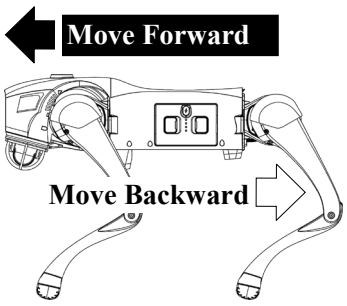
Remote Control Basic Operation

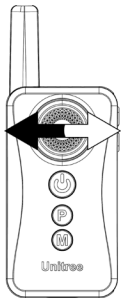
Key Description

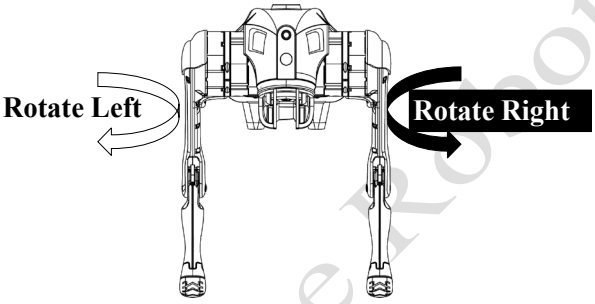
Key	Function	Specific instructions
Power Button	Turn on/off the power supply	a) Short press once to turn on the machine. b) Press and hold for more than 2 seconds to shut down.
P Key	System Reset	a) Short press twice continuously, and the robot dog will cycle between three modes: lying down, damping, and standing up. b) When the robotic dog rolls over, press and hold for 1 second to restore standing.
M Key	Mode Switching	a) Short press once to turn off the companion and enter the joystick control mode. b) Quickly press twice to activate the slow automatic companion mode, with a maximum speed of 1.5m/s. c) In the slow automatic following mode, quickly press twice again to enter the fast automatic following mode, with a maximum speed of 3.0m/s.
L2 Key	Enable/disable automatic obstacle avoidance function	a) Short press twice continuously to activate obstacle avoidance. b) Short press once to turn off obstacle avoidance.
L1 Key	robot dog orientation setting	a) Adjust counterclockwise. Short press the L1 key once (<1s), and the machine dog will default to turning counterclockwise by 0.1rad (approximately 5.7 degrees). b) Adjust clockwise. Press the L1 key twice in a row, and the machine dog will default to facing clockwise at 0.1rad (approximately 5.7 degrees).

Rocker Description:









App can not control the robot at the same time with the companion remote control, if you need to use the companion remote control, please do not use the app to control the robot.

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Instructions for use:

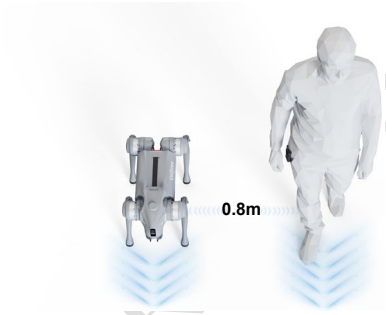
Before powering on Go2, the accompanying remote control should be fixed in the position shown in the figure. After successfully turning on Go2, it will stand up on its own, and the indicator light on the head will remain constant in green . This means that the accompanying remote control can be used to control Go2. The specific operating steps are as follows:

Step1: Turn on the ISS in the mobile phone App

a) Open Unitree Go App to connect Go2.

b) Open the manipulation interface -settings on upper right corner - motion status adjustment - side following.

c) Press OFF to turn on the side-following function.



Step2: Wear and start the companion remote control.

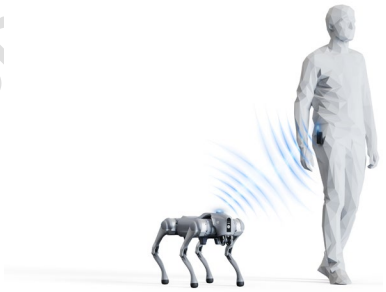
a) Buckle the remote control to the right side of the human body on the belt, stand on the left side of the robot, and keep your torso facing the same direction as the robot.

b) Short press the power button of the companion remote control, when the indicator light is on steadily the startup is finished, at this time the remote control is in rocker mode.

Step3: Start the side-following mode (Important step!)

a) Short press the M button twice to start the slow auto-following mode, the maximum speed at 1.5m/s.

b) In slow auto-following mode, short press M button twice to enter fast auto-following mode with maximum speed at 3.0m/s.



Step4: Turn on/off obstacle avoidance function

Short press L2 button twice to turn on the obstacle avoidance; short press once to turn off the obstacle avoidance.

Step5: Switch off the auto-following function

a) Short press M button once: stop following and enter the rocker control mode.

b) Switch on the rocker: Toggle the rocker to stop the follow mode immediately and enter the rocker mode.

c) Switch off: Long press the power button of the companion remote control for 2 seconds to switch off.

d) Horizontal Placement: Place the companion remote control horizontally.

Other operating instructions (For adjusting the machine)

a) Rocker control: When the companion remote control enters the rocker mode, the robot movement can be controlled by the rocker. Using the rocker control mode, the remote control can be taken off the belt for control. If you need to continue to use auto-follow after the remote control is taken off, you need to put the remote control on and then turn on the accompaniment.

b) Stand up, Down, Damped Mode:Short press P button 2 times consecutively, the robot switches cyclically between Down, Damped and Stand up modes.

c) Side roll: When the robot rolls over on its side, press P button and hold for 1 second to resume standing.

Auto following precautions:

a) Can not be too fast (less than 1.5m/s in slow mode, less than 3.0m/s in fast mode).

b) The companion remote control can not be placed too high (within about -10cm~120cm height difference from the robot's head).

c) When conditions allow, choose a more open route to minimise the triggering of the robot's own autonomous avoidance function.

d) App can not control the robot at the same time with the companion remote control, if you need to use the companion remote control, please do not use the app to control the robot.

e) When using, please keep the robot in the line of sight control, with make the robot to maintain a safe distance of at least 2 metres.

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Declarations and Warnings

1) The Go2-Companion Remote Control can use UWB Channel 5, 6489.6Mhz .

2) When using, please control the robot within sight, keep a certain safe distance from the robot, and do not touch the robot with your hands after the robot is powered on.

3) To reduce the risk of electric shock and possible radiation hazards, do not disassemble or modify this product without authorization. This product does not include user-repairable parts. If after-sales service is needed, please contact Unitree.

4) The Go2-Companion Remote Control, it is not dustproof or waterproof.

5) Please be sure to read this article carefully before using the product, understand how to use the product correctly and your legitimate rights, responsibilities, and safety instructions. Otherwise, it may bring property damage, safety accidents and personal safety hazards. Once used this product, you are deemed to have carefully read, understood, recognized, and accepted all the terms and contents of this article. Users untaken to be responsible for their actions and all consequences therefrom. Users undertake to use this product only for legitimate purposes and agree with these terms and any relevant policies or guidelines that United may establish.

6) Once you use this product, it is deemed that you have understood, recognized, and accepted all the terms and contents of this statement. You promise to take full responsibility for using this product and any possible consequences that may arise. You promise to use this product for legitimate purposes only and agree to this clause and any relevant policies or guidelines that Unitree may develop.

7) Unitree assumes no responsibility for any losses caused by users not using the product according to this document. Users should follow all safety guid elines mentioned in this document, including but not limited to them.

8) This product is strictly prohibited from unauthorized disassembly or modification, and unauthorized maintenance is prohibited. Unitree does not assume any responsibility for any malfunctions or damages caused by the above actions.

9) This product is strictly prohibited from being operated and used in unconventional environments (such as high temperature, extreme cold, chemical corrosion, large fire and water bubbles). Unitree does not assume any responsibility for any faults or damages caused by this.

10) The normal natural wear and tear of components and the failure and risk burden caused by battery aging of this product under normal use are considered as normal use risks of the product, and Unitree does not bear corresponding consequences and responsibilities.

11) The laws of some countries may prohibit the exemption of guarantee clauses, so your relevant rights may vary in different countries.

12) Subject to legal compliance, Unitree reserves the right of final interpretation of the above terms. Unitree has the right to update, amend or terminate this term without prior notice.

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FCC Statement

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

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.

RF Exposure Statement：

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

The Go2-Companion Remote Control may not be employed to operate toys. Operation on board an aircraft, a ship, or a satellite is prohibited