MINIBOT

A Modular Reconfigurable Intelligent Robot System



Kit Introduction

Basic module



G module



T module

Fixed base



I module

Orthogonal

module

F module

I Holder

P module







Ultrasonic

External equipment

LED

Sound sensor







Color sensor

Infrared module Control board





Camera module

Robot Controller

M module

Mecanum wheel

Flat wheel



Serpentine wheel

Bionic foot

module

Experimental Cases

















Implemented Experiments

Applicable Majors

Undergraduate education	Robotic Engineering Automation Mechatronic Engineering Mechanical , manufacturing and automation Intelligent Manufacturing Engineering Artificial intelligence Intelligent Science and Technology
Vocational education	Industrial robot Electrical automation Mechanical Manufacturing and Automation Mechatronics Computer Application Technology



Experiment List

Control	Control of mechanical arm
	Control of wheeled mobile robot
	Control of bionic multi legged
Al	Al vision - color recognition
	Al vision - QR code recognition
	Al Vision - Face Recognition
	Al Vision Speech Recognition
	Al vision voice control
	Al Visual Voice Conversation
ROS	ROS-Simulation MiniBot
	ROS-Autonomous navigation
	ROS-Autonomous positioning
	ROS-Follow autonomously
	ROS-Sports Planning



FCC Warnning:

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 againstharmful interference in a residential installation. This equipment generates, uses and can radiateradio frequency energy and, if not installed and used in accordance with the instructions, maycause harmful interference to radio communications. However, there is no guarantee thatinterference will not occur in a particular installation. If this equipment does cause harmfulinterference to radio or television reception, which can be determined by turning the equipmentoff and on, the user is encouraged to try to correct the interference by one or more of thefollowing 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 to this device not explicitly approved by manufacturer could void your authority to operate this 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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 0cm between the radiator and your body.