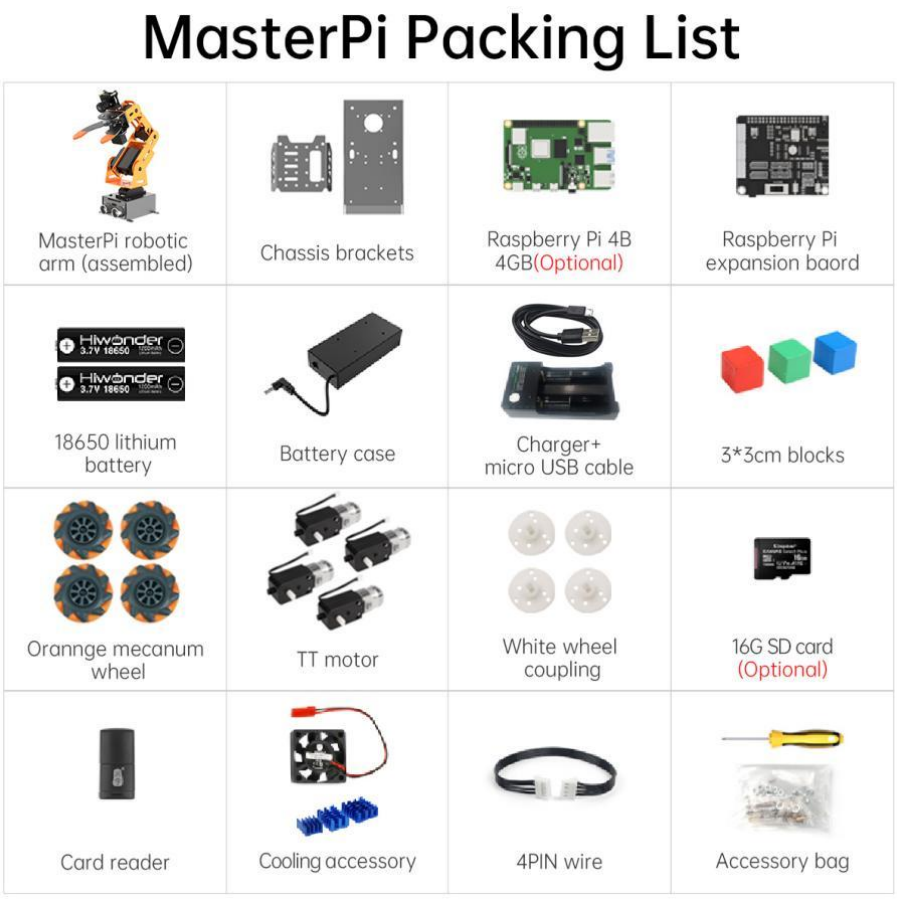
Lesson 1 MasterPi Introduction

1. Product Introduction

MasterPi Intelligent robot is developed on Raspberry Pi. Equipped with mecanum chassis, 5-DOF robot and high definition camera, it is able to implement color sorting, object tracking, line follow, Intelligent transport and etc by OpenCV.

Combining with RGB glowing ultrasonic sensor, MasterPi can control light color and perform automatic obstacle avoidance. In addition, various sensor can be installed on MasterPi for more perception functions.

2. Packing List



3. Overview

Step 1: MasterPi Introduction

Please go to folder “1.Getting Ready/ 1.Preparation/Lesson1 MasterPi introduction” to have a brief understanding of MasterPi.

Step 2: Learn MasterPi structure and Deviation Adjustment

Learn MasterPi structure and adjustment method in “Lesson Assembly” and “Lesson 3 Deviation Adjustment” under the folder “1.Getting Ready/1.Preparation”

Step 3: Quick User Experience

Please go to folder “1.Getting Ready/1.Preparation/2.Quick User Experience” to learn App control and experience AI vision games.

Step 4: Basic Lesson

Please go to folder “2.Basic Lesson” to learn about the motion principle of mecanum wheel car and master the motion method of mecanum wheel car.

Step 5: Advanced Lessons

Please go to folder “2.MasterPi PC Software/3.Advanced Lesson” to learn how to call built-in action, program and integrate action through PC software.

Step 6: Expanded Lesson

Expanded lesson is for reference only.

1.MasterPi Network Configuration Lesson

Learn MasterPi WLAN mode setting and how to modify Wi-Fi.

2.Raspberry Pi Basic Lesson

Have a basic understanding of Raspberry Pi and master its basic operation.

3.Raspberry Pi Expansion Board Lesson

Combining with Raspberry Pi expansion board, this section is to learn hardware operation by controlling digital servo, buzzer, RGB light, etc.

4. OpenCV basic lesson

Learn about OpenCV basic knowledge and color space.