



AI and Smart Diverse Careers

Artificial Intelligence Education Robotics Courses



Emoji



Audio Play



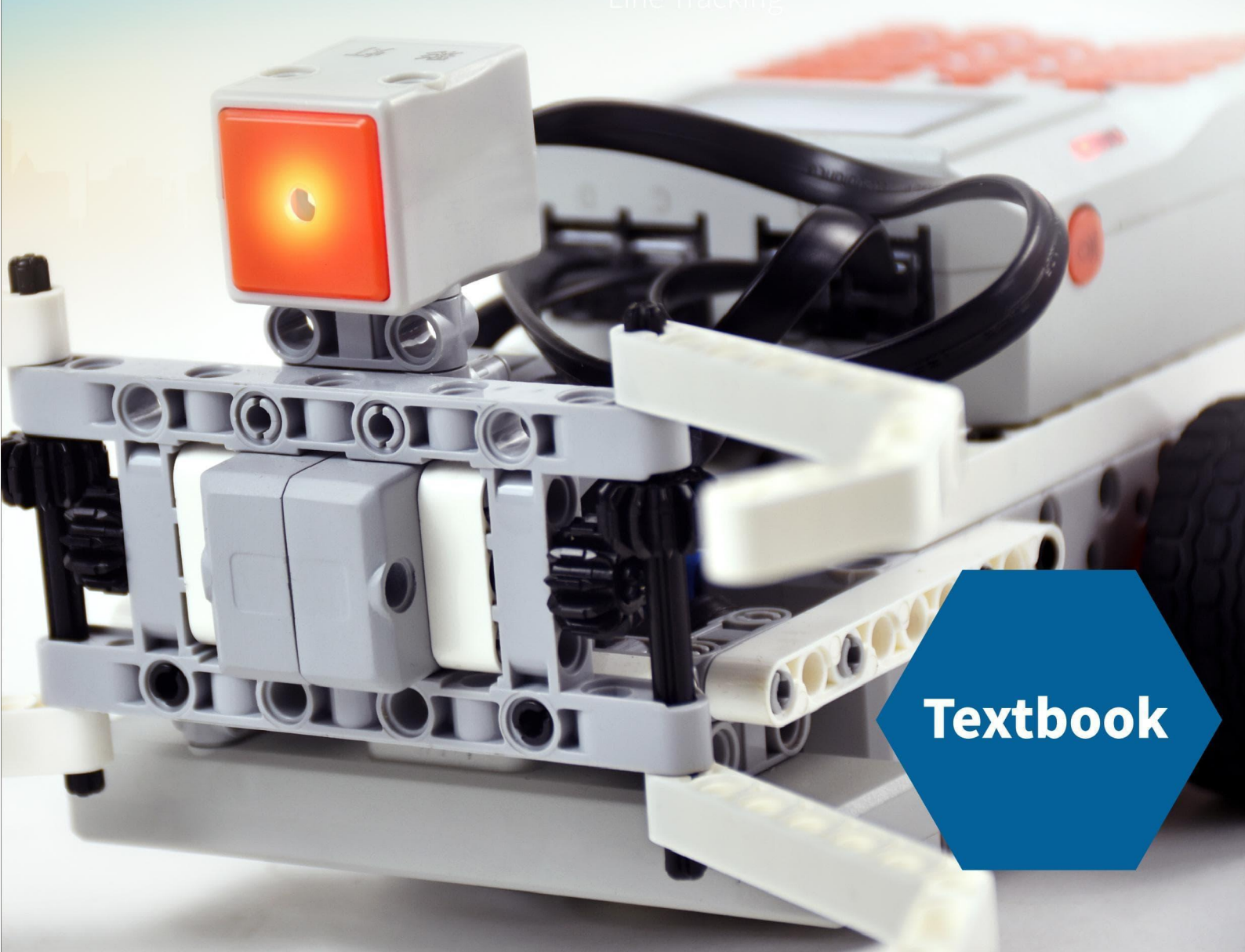
Recording



Rotation



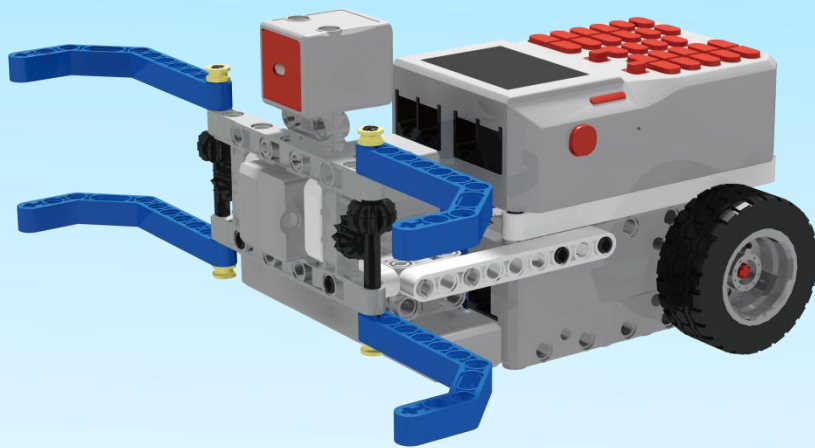
Line Tracking



Textbook

Artificial Intelligence Education

Robot Course



Suitable kit: MPBOT S2

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Huzhou Research Institute, Zhejiang University

Contents

| | |
|-------------------------------------|----|
| 01 Recording Sound..... | 01 |
| 02 Violinist..... | 08 |
| 03 Orderly Traffic..... | 15 |
| 04 Path Planning..... | 22 |
| 05 Express Delivery to My Home..... | 31 |

01 Recording Sound

Knowledge points

How to record sound

Recording engineer

Use of recording module

Course tasks

Little sound engineer

Recording sound

Build

Time Phonograph

Course duration

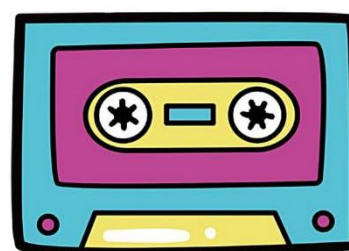
60-90 minutes

Scenario introduction(10 min)

1. How to record sound

Children, we can neither see nor touch sound, we can only listen to it with our ears.

How to record sound has always been a question worth thinking about. The teacher has prepared several pictures, let us understand the changes in the way of recording sound.



If you observe carefully, you will find that with the development of the times, there are more and more ways to record sounds, and the recorded sounds are becoming clearer and clearer.

2. Recording engineer

In the 1920s, recording technology achieved greater breakthroughs, more sounds could be recorded, and the recording effect also had a qualitative leap. At the same time, a group of great figures emerged - recording engineers. In the following hundred years of history, the profession of recording engineer has appeared widely

in the fields of radio, film, stage, audio and video, advertising, etc., playing a vital role in sound recording and dissemination.



Analysis and production (25 minutes)

Build: Time Phonograph (For detailed construction, refer to the building manual)



First challenge: Little sound engineer

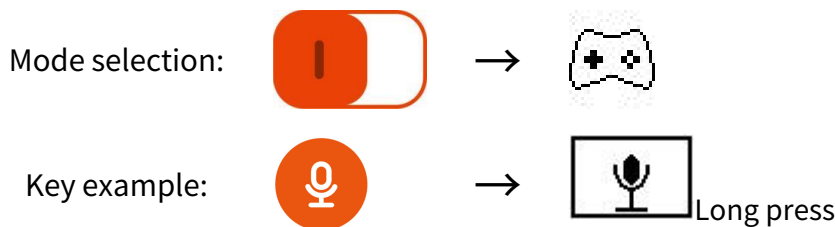
Situation: Children, we have just learned about the development of recording equipment and the profession of recording engineer. In real life, there are many places where recording is needed. Then, please try to use the controller in your hand to record a piece of audio.



Task: Record audio in real-time mode.

Programming knowledge: Understanding of recording module

The recording module is one of the important components of the controller, integrating recording and broadcasting functions. The working principle of the recording module is to convert sound into signals and store them, and transmit the stored signals to the speakers for playback during broadcasting. Press the recording button on the left side of the controller. When the recording icon is displayed on the screen, you can start recording. After the recording is completed, the audio will be automatically played once.



Reflection & Optimization (15 minutes)

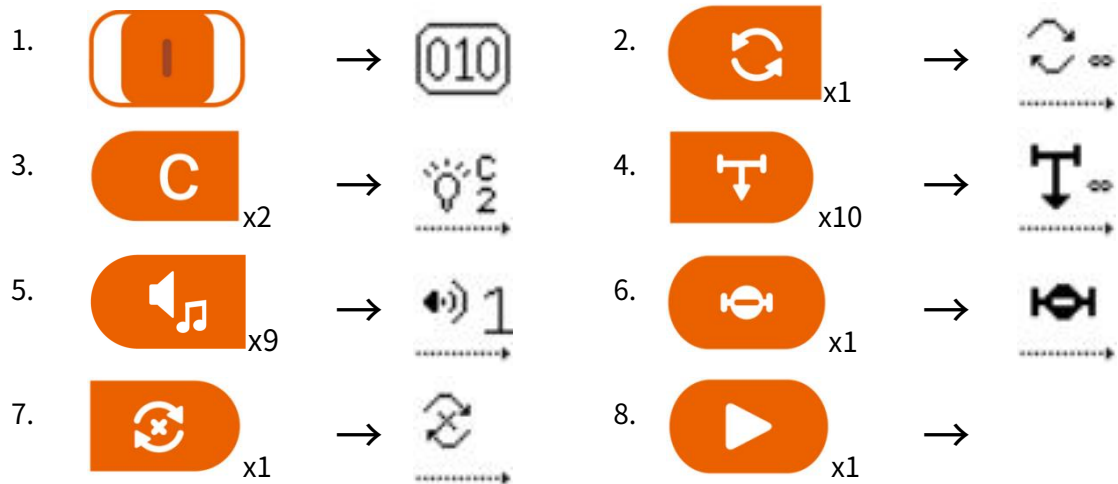
Second challenge: Recording sound

Situation: You have just recorded the sound, so please try to use the key programming mode to trigger the sound playback, and the motor drives the recorder gear to start rotating. Play the recorded sound.

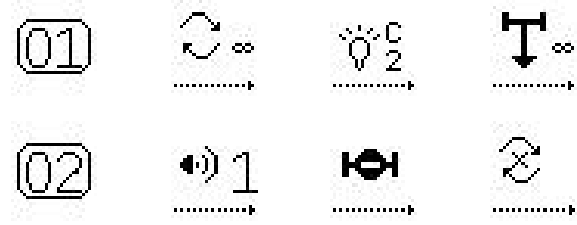


Task: Program the control sensor to play the recorded audio after recognition.

Key example:



Programming Example:



Extension (10 minutes)

In real life, besides recorders, what other devices can record and play audio?

Mobile phones, computers, voice recorders, etc.