

# pi-top

Ignite your students'  
passion for STEAM



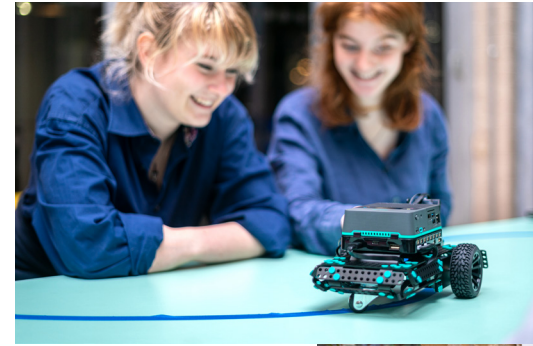
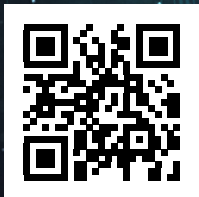
Product catalog



# pi-top helps to build skills for the future.

From coding basics to advanced AI concepts, pi-top provides educators with all the tools they need to make learning STEAM concepts fun and easy.

Find out more here!



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A photograph of two students in a classroom or computer lab. They are focused on a project involving a Raspberry Pi computer board connected to a breadboard and several LEDs. The student in the foreground is a young woman with dark hair, wearing a dark sweater over a white collared shirt. She is looking down at the hardware. The student in the background is partially visible, also looking at the project. In the background, there are computer monitors displaying various charts and data. The overall scene is one of collaborative learning and hands-on technical work.

## The importance of project based learning

Imagining and creating things is the most effective and engaging way to learn.

Project-based learning allows students to see the real-world applications of what they are learning, helping them understand concepts more quickly and retain more information.

pi-top computer science and robotics lessons build real world technical skills and important soft skills including...

- Creativity
- Leadership
- Collaboration
- Problem Solving

With project-based learning, students are more engaged, more independent, and more successful in becoming active, life-long learners.



# Everything you need to get started...

1

## pi-top [4]

This Raspberry Pi-based “brain” is a portable programmable computer that can power all of your projects. It is the fastest and simplest way to start teaching and learning.

2

## Project kits

Learn to code the basics using sensors, buttons and potentiometers in our Electronics Kit. Or build and program your own robot with our Robotics Kit!

3

## Step-by-step guides

Our online project library, [Further](#), contains over 100 hours of practical projects and engaging challenges. Perfect for any ability, beginner to advanced.

4

## Accessories

Connect your pi-top [4] into our FHD Touch Display and Bluetooth Keyboard to turn it into a tablet, add a visual display for your projects, or use it as a laptop.

5

## Support

Check out our Blog, Forum and Knowledge Base for help and inspiration! Powered by our experienced team of engineers and an active community of makers, you'll always have someone to talk to.





# Further

## Online project library

From beginner to advanced, Further offers over 100 hours of exciting Computer Science projects and activities using your pi-top products.



### Aligned to a range of standards

Filter content based on curriculum requirements, to ensure students have the skills and experience they need.

### Training sessions & facilitator guides

We provide training and professional development to help educators use pi-top's ecosystem within their classroom for better learning outcomes.

### Register with Clever or Google Classroom

Sync your classes and students with Further - no manual set-up. Talk with us about integrating with other cloud-based LMS.

### Engaging real-world projects.

Engaging, hands-on projects provide students with the tools to explore a wide range of computer science and physical computing skills.

From a rocket launch animation that is executed by the push of a button, to making their own musical instrument, students are inspired and engaged in learning the in-demand STEAM skills they will need in a rapidly changing world.

### Remote learning ready

Students working from home can program robots and experiments remotely!

### Collaborative workflow

Several students can work together on their submissions to learning challenges.

### PDF Downloads

Any of the projects in Further can be downloaded as a PDF for use as a printable handout.

### Customize your projects

Teachers can add or remove sections, and change them to reference items available in their school.

### Monitor your students' progress

Include tasks within projects that students need to complete. At any time, you can view student responses to tasks and give feedback using comments.



# pi-top [4]

## The simplest way to start with **Computer Science**

pi-top [4] is a portable brain that can be clipped from project to project without needing to rebuild.

The pi-top [4] powers project created with our Robotics and Electronics Kit, and also works with a range of products you might already have at school or home, like Arduino or micro:bit.



### Full access to Raspberry Pi's GPIO pins & ports

Female 40-pin connector with labeled ports puts an end to pesky bent pins.



### UPS-style soft shutdown system

This system includes soft shutdown & UPS to avoid SD card corruption.



### Integrated heat sink & centrifugal cooling fan

Make temperature regulation a breeze, even with overclocking.



### USB-C Power Delivery

specification at 15V for faster battery charging.



### 5-hour internal battery

Go anywhere & keep your projects running for longer.



### OLED screen & buttons

Fully programmable mini screen & buttons.

### Many ways to **connect**:



Code on your laptop, tablet or desktop computer



Code with a HDMI Monitor, Keyboard and Mouse



Code using our FHD Touch Display & Bluetooth Keyboard



**Want to install your own Raspberry Pi 4?**

Check out the pi-top [4] DIY Edition on page 21





# Electronics Superset

Learn to code

Replace passive screen time with active learning time by creating simple electronics projects, and learning to code them.

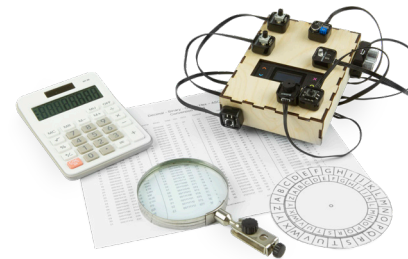
## Start making in minutes!

Control lights and sounds with sensors, buttons and potentiometers. Begin with a few lines of code to turn on an LED when a button is pressed. Progress with additional components and code.

## Beginner to advanced level

Implementing pi-top products in the classroom is easy! Our step by step guides walk you through setting up and getting started with projects that will excite and engage your students.

Over 100 hours of projects!



### WHAT'S INCLUDED?

**pi-top [4] Complete portable computer\***  
 Pre-installed Raspberry Pi 4 4GB  
 Power Supply Unit (PSU)  
 pi-top Display Cable - HDMI & USB adapters  
 pi-topOS on 16GB SD Card

### Electronics Kit\*

- 1x Foundation Plate
- 1x Ultrasonic Sensor
- 1x Buzzer
- 1x Light Sensor
- 1x Sound Sensor
- 2x Potentiometers
- 2x Green LEDs
- 2x Yellow LED
- 2x Red LEDs
- 2x Buttons
- 8x LEGO® Connectors
- Connecting cables

**Classroom packs**  
 See page 22

**Age:** 11-100

**Skill level:** Beginner - Intermediate

### Requirements:

You'll need to connect to your pi-top [4] to a monitor, keyboard & mouse, or a laptop, tablet or our FHD Touch Display and Bluetooth Keyboard. You will also require an internet connection to access our Further project library.

*\*The pi-top [4] & Electronics Kit are also available separately. See our price list on page 22 for full breakdown.*





# Robotics Superset

Build your own robot

Build skills in robotics, coding and engineering to be future-ready and boost your career opportunities.



Classroom packs  
See page 22

## Everything you need to build a robot

With 50+ metal build plates, servo motors, encoder motors, wheels, camera, ultrasonic sensor and more, the pi-top [4] Robotics Kit includes all the components you need.



### WHAT'S INCLUDED?

**pi-top [4] portable computer**  
Pre-installed Raspberry Pi 4 4GB  
Power Supply Unit (PSU)  
pi-top Display Cable -HDMI & USB adapters  
pi-topOS on 16GB SD Card

**Robotics Kit**

1x Expansion Plate	1x Chassis plate
50+ aluminium construction pieces	6x Coloured balls
x250 rivets	2x Tyres
2x Servo motors	1x Rivet removal tool
2x Encoder motors	2x Hex Allen keys
1x Ultrasonic sensor	1x Roll of blue line following tape
1x HD 720p Camera	
1x Castor wheel	
1x Phillips screwdriver	
2x 12mm Wheel connectors	

**Age:** 11-100

**Skill level:** Beginner - Advanced









**Requirements:**  
You'll need to connect to your pi-top [4] to a monitor, keyboard & mouse, or a laptop, tablet or our FHD Touch Display and Bluetooth Keyboard. You will also require an internet connection to access our Further project library.

*\*The pi-top [4] & Robotics Kit are also available separately. See our price list on page 22 for full breakdown.*

Engaging content in Further, provides easy-to-implement projects that combine technology with real life activities, keeping kids excited to learn.

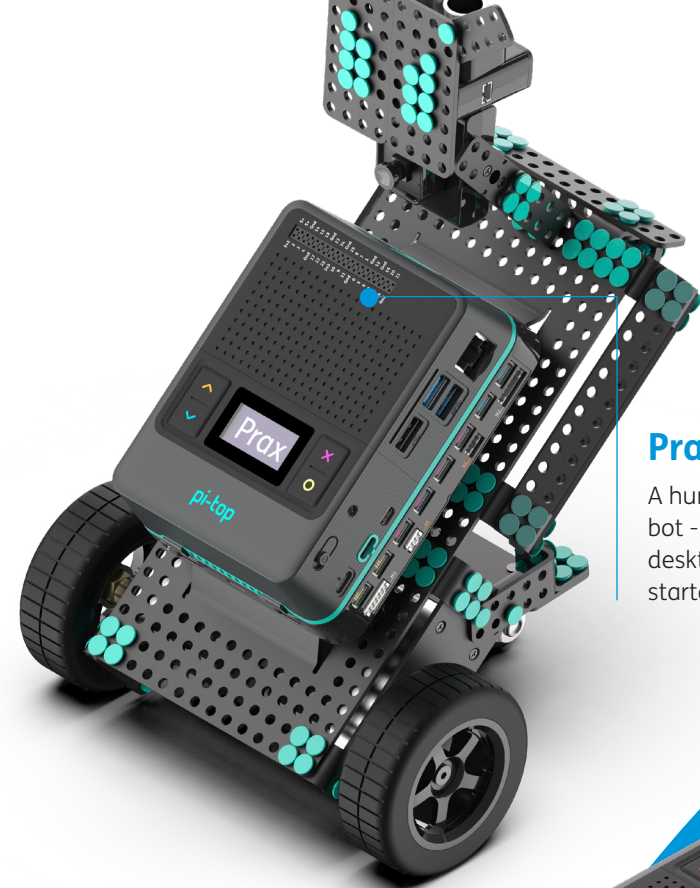
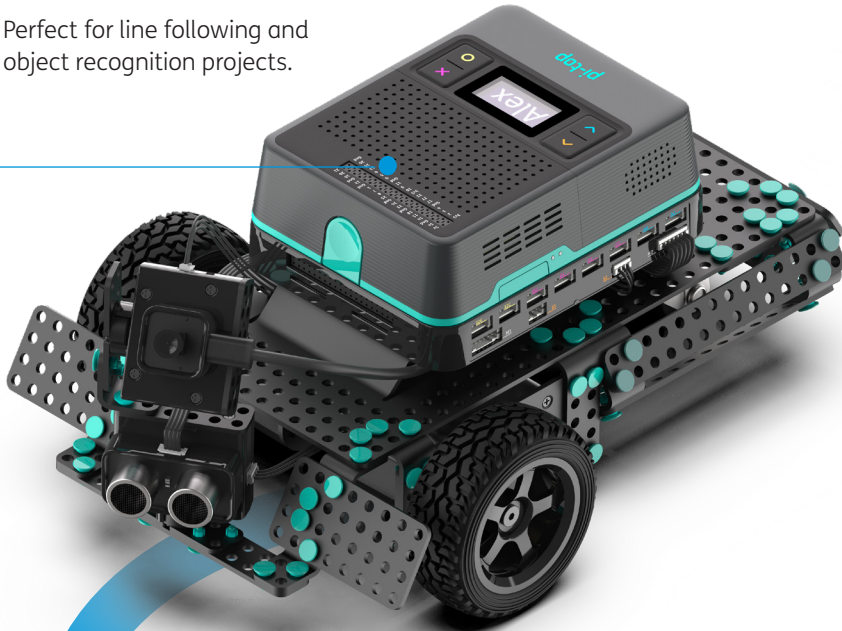


# Unlimited configurations

-   
Gesture Control
-   
Obstacle Avoidance
-   
Autonomous Driving
-   
Object Recognition
-   
Emotion Mapping
-   
Interaction
-   
Face Tracking
-   
Line Recognition

## Alex

Perfect for line following and object recognition projects.



## Prax

A human interaction bot - the perfect quirky desktop sidekick to get started with robotics.

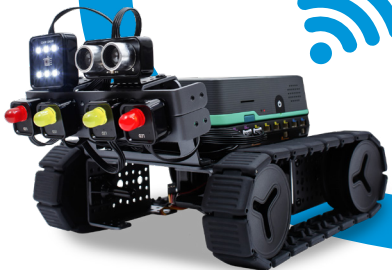
## Bobbie

Can be taught to fetch balls more reliably than your dog!



### Deploy code remotely

Further, our online project library can be accessed from any computer such as Chromebook, Mac, PC or a pi-top device. Our Code Runner boxes allow students to write code on their computers, send code to the pi-top [4] for execution, and interact with it in real-time. You can even control your robot from your phone!







Classroom packs  
See page 22

# Robotics and electronics Superset

## Perfect for the classroom

Build rovers and robots with additional components for more advanced projects. Engaging lessons include object recognition, autonomous driving, rapid prototyping and IoT.

### WHAT'S INCLUDED?

#### pi-top [4] portable computer

Pre-installed Raspberry Pi 4 4GB  
Power Supply Unit (PSU)  
pi-top Display Cable  
pi-topOS on 16GB SD Card

#### Electronics Kit

Control lights and sounds with sensors, buttons, potentiometers and more!  
(See page 14)

#### Robotics Kit

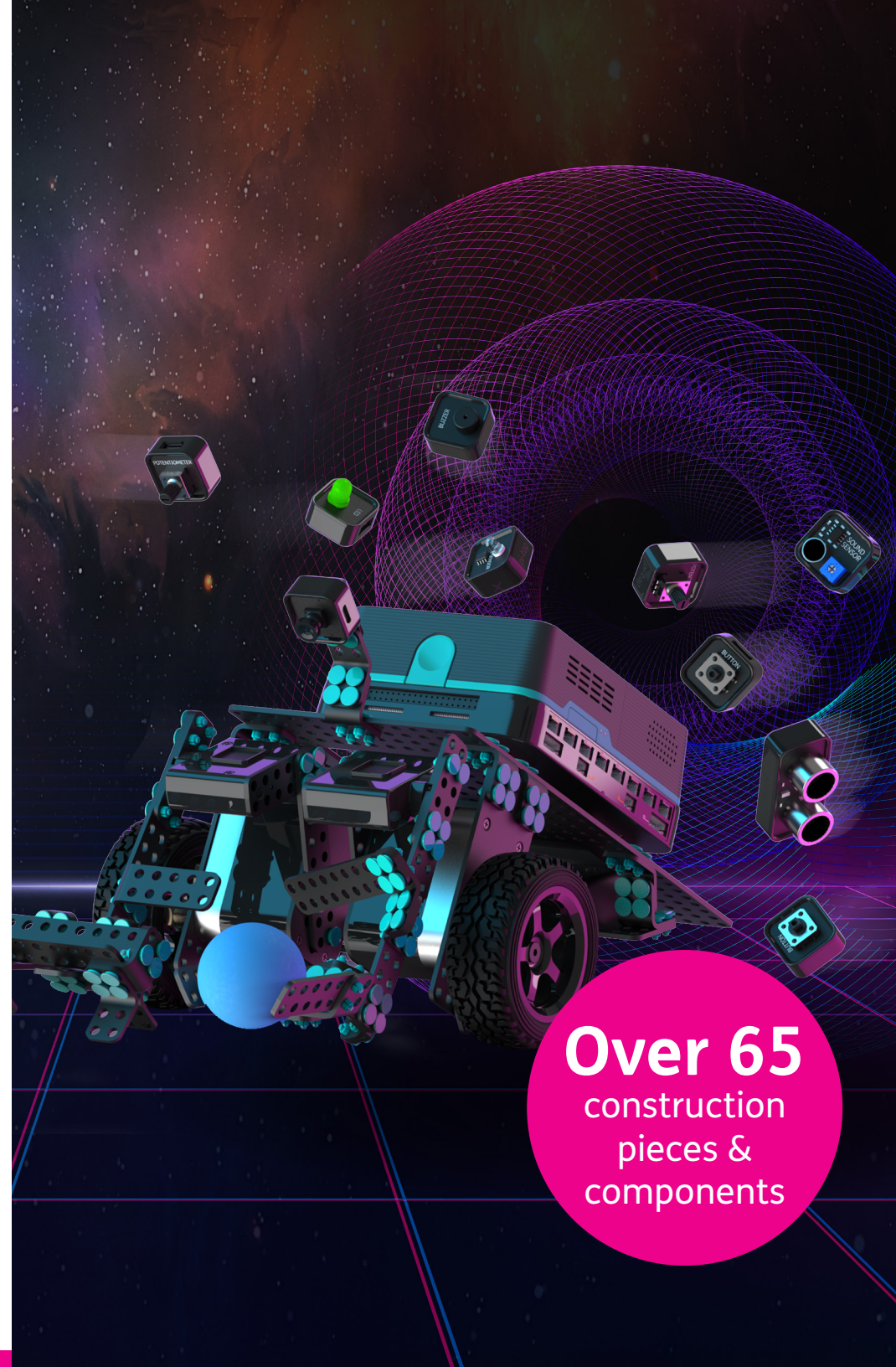
Build and code robots with 50+ build plates, motors, wheels, camera, ultrasonic sensor and more. (See page 16)

**Age:** 11-100

**Skill level:** Beginner - Advanced

#### Requirements:

You'll need to connect to your pi-top [4] to a monitor, keyboard & mouse, or a laptop, tablet or our FHD Touch Display and Bluetooth Keyboard. You will also require an internet connection to access our Further project library.



Over 65  
construction  
pieces &  
components



# Accessories



## Bluetooth Keyboard

The pi-top Bluetooth Keyboard works as a durable screen protector for your pi-top FHD Touch Display. It magnetically attaches to the base of the pi-top FHD Touch Display — no need for switches, plugs and pairing.



## FHD Touch Display

Code and create using the touch of your finger with the pi-top FHD Touch Display. Sleek and light, it is compatible with a wide array of devices, including the Raspberry Pi and pi-top [4].



## Protective Case

Add a splash of colour and protect your pi-top [4] from knocks and bumps.



# pi-top [4]

## DIY EDITION

pi-top [4] DIY Edition, at its core, has the same powerful features as pi-top [4] Complete, but we've stripped back all the accessories that you might already have. Simply install your own Raspberry Pi 4 in pi-top [4] DIY Edition's rugged case and start making portable or mobile projects.

From rovers to drones: the only limit is your imagination.

*(Raspberry Pi 4 & Accessory Bundle sold separately)*



# pi-top

We make the future.

pi-top is one of the fastest growing ed-tech companies and has a unique vision to increase access to coding and technical education through project-based learning. We want to inspire a generation of makers and give them the skills they need in a rapidly changing world.

[pi-top.com](https://pi-top.com)

