

pi-top [4]

**INSPIRING A
GENERATION OF
MAKERS.**



ASK YOURSELF ONE QUESTION: WHAT PROBLEM CAN YOU AND YOUR CLASS SOLVE?

Meet pi-top [4], powered by the Raspberry Pi this modular computer works with all your existing equipment to take your lessons out of this world.

Attach it to a drone or balloon for a bird's eye view, connect moisture sensors to record environmental changes, wear it to measure movement and motion and use it to control everything from robotic vehicles to stage lights.

With pi-top [4] you've instant access to thousands of free projects, components and resources supported by a global community of teachers, learners and makers, so you can get started with engaging, fun and stimulating learning immediately. Think more design time, less down time.



TEAM PLAYER

Powered by the hugely successful Raspberry Pi computer, pi-top [4] easily connects to your other PCs such as Windows, Macs and Chromebooks (as well as the rest of the pi-top family), making deploying code and retrieving results easy. It also works out of the box with your existing screens, keyboards and mice, as well as our brand new wireless keyboard and HD touch screen.



CONNECT [4]

pi-top [4] comes with Raspberry Pi's GPIO connectivity as standard, meaning you've instant access to thousands of free projects, components, resources and support. We've made getting connected even easier with pi-top's GPIO Node extension cable, which brings the interface front and centre and handily clips into third party products such as LEGO.



SHOW IT THE DOOR

With its internal battery and sturdy construction, pi-top [4] loves nothing more than taking the learning experience out of the classroom and into the real world. Attach it to a drone, control hydroponic systems or record environmental changes. It's so small and light you can even wear it, and command LEDs or record data from actors to athletes.

PLUG, PROGRAM, PLAY

With pi-top [4], we're introducing the pi-top Makers Architecture (PMA), a game-changing range of accessories that take maker connectivity to the next level. PMA offers 'plug, program and play' options for a wide variety of sensors, cameras, motors and other off-the-shelf components.

MINI SCREEN, BIG DATA

As well as connecting to a regular computer screen or video projector, pi-top [4] also has a built-in mini OLED screen. This can be programmed to display information on projects you're running, such as data and readings from attached sensors, to system information like battery life and CPU usage. The four buttons either side are also fully programmable with a wide range of commands.

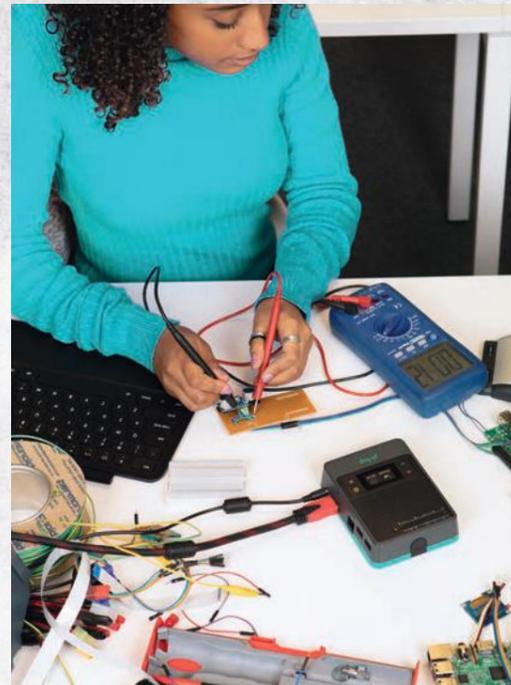


WHAT IS LEARNING BY MAKING?

In many classrooms today, teachers deliver information to learners who memorise it and repeat it back later in some sort of test. This isn't learning, it's remembering, and it's useless for equipping people with the practical skills and experiences they need in order to face an ever-changing world.

Learning by Making is different. It prioritises designing, making and iterating real-life projects in a social, collaborative way. Before society industrialised education, everyone learned by doing, making or building something.

Ironically, these skills from the past are exactly the ones we need for the future. In getting hands-on, students directly observe and understand what is happening – they



are truly learning, not just recalling. What's more, making actually reinforces knowledge learned in traditional classrooms by applying it to relevant, practical projects that learners are passionate about. The result of this is a deeper understanding and improved recall grounded in practical experience, because students can understand and relate to what they are doing.



FROM AFTER SCHOOL CLUB TO WHAT AFTER SCHOOL?

How we work has transformed over the past 20 years. Work is now faster, more technical and a lot more complicated. Consequently, things 'learned' in school are increasingly irrelevant not just in decades, but in years. What then, is the purpose of school? Is it about absorbing content and testing that memorisation, or could it be about something more useful for the future?

The jobs of tomorrow aren't going to be in accountancy, management or manufacturing because we're already automating those jobs. What we need as a society are creative problem-solvers with the experience, knowledge and new skills to face real-world practical challenges and the ability to work across disciplines. We need designers, inventors, risk takers and makers; all the things machines can't do. And that starts now, with you. Because without these skills, the students of today might struggle to find the work of tomorrow, and eventually, maybe even any work at all.

PRODUCT CREDENTIALS.

CALL OFF THE SEARCH

pi-top [4]'s new operating system comes with Search Portal built-in. Type what you're looking for and instantly find thousands of the best educational projects, articles and research papers selected by pi-top's world class education team. With Search Portal, you're never stuck for support, advice or ideas.



WHAT'S IN THE BOX?

Every pi-top [4] comes with the following in the box.

Raspberry Pi 3B+
16GB SD card
Power pack
Multi-tool
Foundation Project Kit

FOUNDATION PROJECT KIT

The Foundation Kit comes with every pi-top [4] and means you can get making and creating straight away. Create anything from robotic systems to musical instruments to light and sound shows! Here's what's inside:

1 x PMA's Foundation Plate
8 x wrappers (small/large)
1 x buzzer
6 x LEDs
2 x rotary angle sensors
1 x ethernet cable
1 x ultrasonic sensor
1 x loudness sensor
2 x buttons
1 x light sensor
3 x male to male extension GPIOs

INSPIRING A GENERATION OF MAKERS.

LEARNING ABOUT US.

SUPPORT AND SHARE

As a learning company, we've put as much effort into designing our learning materials and projects as we have the product itself, meaning you can start making straight away. And remember, with Raspberry Pi at the heart of pi-top [4], you're instantly part of a global community of makers, educators and enthusiasts.



pi-top [4] is designed to be integrated into school curricula at every level, schools can also leverage professional development and teacher training from certified members of our community. pi-top also offers cheat sheets, training videos and Forum/FAQs means you're fully supported in everything you do on your Learning by Making journey.

FROM WORKBENCH TO WORLD-CLASS

It started with an idea, and a piece of timber. In 2014 pi-top's two founders set out to design and make the world's first 3D printed laptop. But with no maker space they first they had to figure out how to make a workbench to build it on. You see learning, designing and making are in our DNA. It's how we grew from that single prototype to the 75-strong creative learning company we are today.

At pi-top, we've brought together a world-class team of educators, teachers and academic researchers with over 100 years' of collective pedagogical experience between them. Their expertise in learning theory is backed up by their hands-on teaching experience, meaning we understand teachers' needs and challenges.

Our sales and community teams meanwhile ensure you're always fully supported as you embark on your own learning by making journey. Finally in pi-top [4] our award-winning design, software and engineering teams have changed not only what computers can look like, but more importantly what they can do.

But it takes more than just great teams to make great products; it's about how these teams are empowered to work together. Everyone of our products and services is built on a sound learning theory, using detailed research and practical experience. We've come a long way since that first 3D printed laptop, but we've never stopped learning, listening and making. And, yes, we still have the bench.



pi-top
[4]

BE A MAKER.



pi-top [4] is so much more than a new piece of technology. It is the beating heart of our mission to inspire a generation of makers.

In the hands of learners, teachers and makers of all levels it becomes a powerful instrument that kindles the imagination for people to play, explore and collaborate on new ideas and solutions to real world challenges.

By buying a pi-top [4] you're helping change the world for the better, because together...

WE MAKE THE FUTURE.

RESELLER'S DETAILS:

OFFICE LOCATIONS

Mill House,
8 Mill Street,
London, SE1 2BA
United Kingdom.

3636 Executive Center Drive,
Suite 100, Austin,
Texas, 78731
USA.

Room 213, Tower A,
FuAn Tech Building,
No.013 Gaoxin South 1st Ave,
Nanshan District, Shenzhen,
Guangdong Province,
(518057), PRC