1. pi-top Overview

The **pi-top** is a Raspberry Pi laptop you build yourself! It is the perfect product to affordably and interactively learn about software and hardware. **pi-top** is shipped with a revolutionary learning platform to expand your computer science knowledge. Our massive multiplayer online role-playing game takes you through a world of fantasy grounded in computing reality. **pi-top** enables you to:

- Learn how to **Code** in a gamified environment
- **Build** circuits
- **Make** hardware (and apply it into our software)
- 3D print your own creations and make cool things!

The **pi-top** is a platform for a whole host of maker projects.

- An all-in-one Raspberry Pi powered laptop with 10+ hours of battery life
- Fun build-it-yourself laptop (comes with easy image-based manual)
- Fully equipped with a keyboard, trackpad, screen, battery, charger and an 8GB SD card pre-formatted with our unique OS based on Jessie.
- 13.3” inch HD LCD screen and 262K colours (wide range of viewing angles)
- Practical and functional design with easy access to the Raspberry Pi in front via slidable acrylic slice.
- Free educational (MMORP) game included - CEED Universe
- Works with most Raspberry Pi models*
- Designed for ages 8+

*compatible with most microcomputers currently on the market

1.1 pi-top software Features

CEED Universe

An enhanced learning platform for teaching computing through an approachable and gamified multi-layered learning portal. Learn how to build hardware, circuits, and code.

- teaches users practical computing and hardware skills
- free with all **pi-top** kits
- shaped around the UK IT curriculum (in over 40+ schools)
- ages 8+

pi-top OS

Each **pi-top** comes with an 8GB Class 10 SD card pre-loaded with **pi-top**OS, a customised 'flavour' of Raspbian Jessie (the Raspberry Pi Foundation's official supported operating system). Connects to integrated cloud-based **pi-top** services (Summer 2016) allowing users to connect to their files and settings from any **pi-top**

Directly interfaces with **pi-top** hardware for tasks such as:

- Battery life monitoring
- Screen brightness control
- Connecting to the internet in minutes
- Safe shutdown via power button
- Transferable unique user ID for easy data transfer

- Automatic cloud back-ups
- 3D Slash software for click ‘n’ create 3D printing

1.2 pi-top: built your own laptop

The Raspberry Pi powered laptop you build yourself! With our easy image-based Instruction manual you can build your own laptop in as little as 30 minutes.

Quotes

*“We came across **pi-top** and fell in love.”*	*RS Components*
“The entire system is a great experience for those wanting to learn.”	*The MagPi – The Official Raspberry Pi Magazine*
“This is pretty badass.”	*John Biggs, East Coast Editor, TechCrunch*
“We love this stuff!”	*Eben Upton, Founder, Raspberry Pi*

Social Media

Platform:	**ID / Handle**
Twitter	@GetPiTop
Facebook	/GetPiTop
Reddit	pi-top
YouTube	PiTopTeam
LinkedIn	pi-top

Link to pi-top Indiegogo campaign: https://www.indiegogo.com/projects/pi-top-a-raspberry-pi-laptop-you-build-yourself#/story

Pi-top Technical Specifications

Screen

- 13.3” HD TFT LCD screen
- Anti-glare
- 1366 x 768 resolution
- eDP 1.2 interface
- 262K colours
- 3W power consumption

PCB Rail

- pi-top Hub
  - Power Management
  - Battery Connection
  - Screen Driver
  - PCB Rail Circuitry
- Raspberry Pi 3 model B:
  - 1.2GHz quad-core ARM Cortex-A53
  - Bluetooth 4.1 Classic and Bluetooth LE (Low Energy)
  - 2.4GHz 802.11n WiFi
  - Cortex A7 CPU
  - 1 GB LPDDR2 RAM (900MHz)
  - Video CORE IV, 3D graphics core
  - Raspbian + **pi-topOS**.
- Available modular add-on boards (separate purchases):
  - pi-topPROTO
    - Raspberry Pi HAT compatible (full GPIO pin access)
    - Electronics prototyping area similar to strip board
  - pi-topSPEAKER
    - High quality SPDIF digital audio from HDMI
    - Stereo sound
    - 2x 2W speakers (40mm x 20mm drivers)
- Cables included:
  - HDMI Cable
  - Micro USB Cable
  - GPIO Breakout Cable
  - Power Control Cable
  - Keyboard USB Cable

Smart Battery:

- 43-watt-hour
- 10 hour run time
- Two-wire SMBus 2.0 Interface
- Advanced charge algorithms:
  - JEITA recommended profiles with variable current
  - Active cell balancing for extended lifetime
- Vast array of protection features: over-voltage, over-current, over-temperature, short-circuit and more.

Base/Chassis

- Injection moulded ABS
- Available in Grey or Green
- Keyboard: US/UK QWERTY, DE available end of April.
- Trackpad:
  - Right-aligned
  - Both Tap-To-Click and physical mouse buttons
  - 65mm x 49mm

- Acrylic slice allows easy access to internal hardware - black laser etched surface easy to customise to school emblem or just for fun.
- Rubberised anti-slip surface contact points
- Product dimensions:
    - 341mm x 209mm (WxD)
    - Front thickness: 10mm
    - Rear thickness: 47mm

Peripherals

- 8GB Class 10 SD card preloaded with **pi-topOS**
- 18V, 3A brick-type power supply - available with AU, BR, CN, EU, IN, ZA , CH, UK and US AC cables.
- Tool kit for assembly

FAQs

1. What is pi-top?

Everyone's do-it-yourself Raspberry Pi* powered laptop kit. The **pi-top** is designed for anyone with a hunger to learn. Express your creativity through technology by becoming a maker and inventor.

*compatible with most other micro-computers.

2. Who is pi-top for?

There are no boundaries - the **pi-top** is for anyone wanting a greater understanding of computing, learning to code, making hardware, or to play and create! However, we've found the recommended user age to be 8+.

3. What can you do with pi-top?

The list is exhaustive but here are some ideas:

- bring your own robot to life
- learn in-game coding techniques
- create cool 3D printable objects
- build different HATs now with pi-topPROTO
- build weather stations, radios, websites and more
- or even do your homework!

4. Does pi-top work like an actual computer?

Yes, it can do most anything other computers are capable of.

5. How do you code on pi-top?

Heard of Python or Java? No? That's fine - as **pi-top** gives you an introduction to these and more programming languages. You can dive into the Linux universe and you are guided through learning Python.

6. Is pi-top used in the classroom?

Yes. We have worked with 40+ schools on integrating CEED Universe, our MMORPG, with their IT curriculum and we expect the **pi-top** to be used in schools around the world.

7. Does pi-top have an Audio system?

Not yet but you can use any AUX speakers you've got and plug them into the Raspberry Pi.

8. How does pi-top connect to the internet?

The Raspberry Pi 3 Model B comes with on-board 2.4GHz 802.11n built-in WiFi. Simply click on the network you want to join and simply enter the proper credentials, that's it!