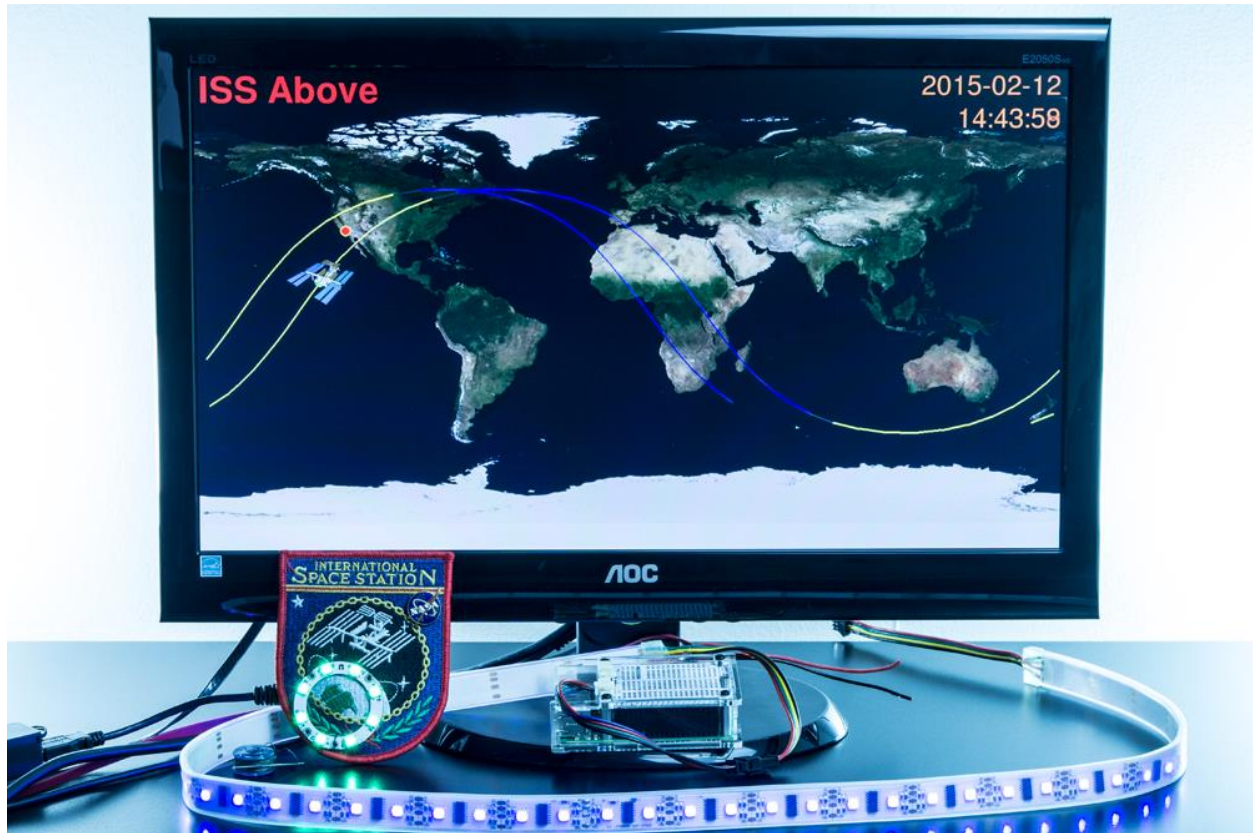


How to inform, educate and inspire the public, schoolchildren and future scientists through a unique connection to the International Space Station



Executive Summary

Over nearly 15 years, the ISS has been conducting breakthrough research in space with a continuous human presence “off” our planet. However, the public’s knowledge of the ISS is limited. Ask any passer-by and you may chance on someone who knows what the ISS is, why it’s up there and even that they can and have seen it in their skies. More typically, though, they may have heard of it, but have no idea of its purpose, longevity, value, or that there are humans up there.

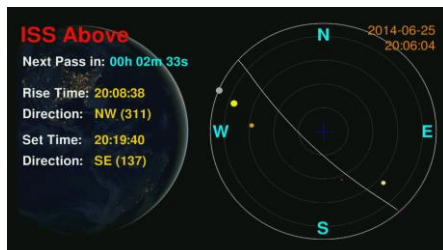
The ISS-Above was designed to transform this understanding and to inspire students in many STEM related areas.

Background

For many, the ISS is ever present, but for much of the public, including school children, this monumental human achievement is either unknown or little understood.

The ISS-Above

The ISS-Above HD allows ISS-Above students to see live views of the Earth from the ISS as it passes overhead. In itself an awe inspiring sight, the ISS-Above tells you which area of the Earth you are looking at and adds information about the crew onboard and quantitative data about the ISS location, distance from you and when/where it will next pass by. In an educational context, the ISS-Above can stimulate study of geography, gravity, orbital mechanics, astronomy, space experiments and much more. Below are examples of information displayed via an ISS-Above to an attached TV.



History of the ISS-Above

In November 2013, with a Raspberry Pi in hand and with a lifelong passion for astronomy, space flight and space research, Liam Kennedy used his skills in coding, video production, live video-streaming and amateur astronomy to create the first ISS-Above, a device that shows when the space station is in your skies. Version 1 used a PiGlow to display LED colors as the ISS approached your location. Through press coverage, social media, Maker Faires and presentations in schools, it became clear that the public, including schoolchildren, had scant knowledge of the ISS, how long it has been in orbit, how large it is, how frequently it orbits or even what it was for and that there were humans on board.

A successful Kickstarter in February 2014 followed by ongoing deployments saw 400 devices out in the world, mostly in the homes of enthusiasts. Following an interview in the Wall Street Journal in November 2014, where Bill Nye described the ISS-Above as “my latest obsession – I watch it all the time – it’s a beautiful thing”, another 400 devices were shipped worldwide in a little over one month.

There are now 850+ ISS-Aboves tracking the ISS, displaying the video from the HDEV cameras on board the ISS, tweeting and keeping their owners in touch with the ISS.

A device that lights up whenever the **International Space Station** is nearby

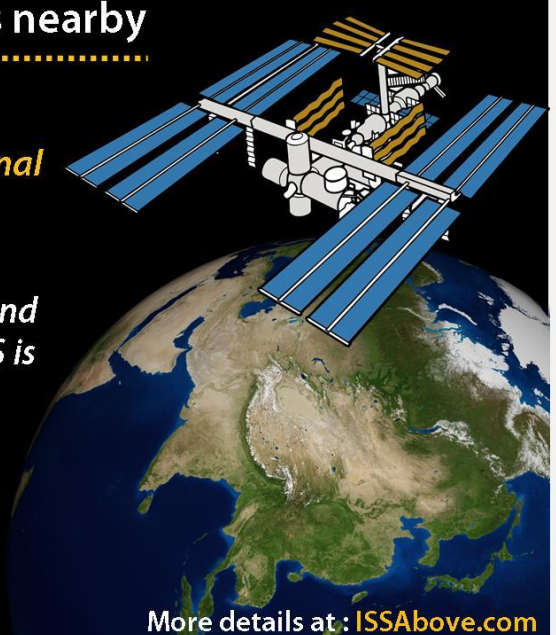
Now featuring **LIVE HD VIDEO** of the Earth broadcast from the **International Space Station**

Just connect your **ISS-Above** to your home router and an **HDMI monitor** and you will be amazed how often the ISS is in your skies

Also **Tweets** a message to **NASA** whenever the ISS is nearby

850+ of these gadgets are already in use **around the world**

More details at: ISSAbove.com



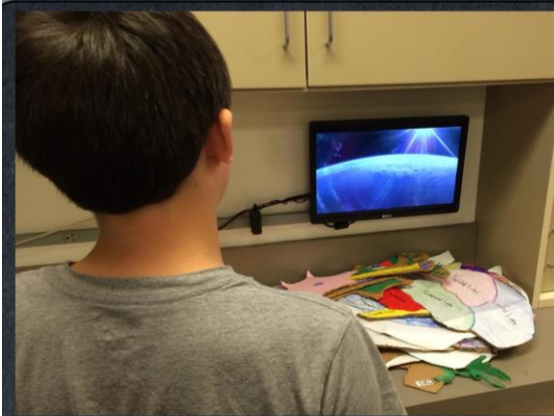
ISS-Above HD



ISS-Above HD COMPLETE with PiGlow, Includes SD Card, 5V 2A power supply, Raspberry Pi , Transparent Case

ISS-Above – used in an educational environment

Some testimonials and quotes about how the ISS-Above makes a difference.



"I am a Middle School teacher and have the ISS-Above attached to a LCD mounted on my wall. My students enjoy the perspective offered by the video and have even attempted to figure out what part of the Earth the camera is seeing. It's a great way to integrate science and geography. My 150+ students thank you for your efforts and look forward to future products from your team."

Matthew McCoy, Norman Public Schools, OK USA



"I get a thrill every time I see the view from your cameras, it is mind-blowing to have the ability to see the Earth from space as it is at that moment in time. Brilliant indeed! I just want to show everyone how incredible it is. Huge high-five from Madison, Wisconsin - Thank you for your efforts."

Sarah Swanson, University of Wisconsin, Madison WI USA

*"My most recent obsession is this gizmo called ISS-Above that tells you when the International Space Station is overhead. It's linked to the cameras aboard the ISS, so you can run an HDMI cable to your television and see the earth from space. I do it all day. I leave it on more than is reasonable. It's just a beautiful thing."**

Bill Nye The Science Guy

*Quote from The Wall Street Journal—Nov 22 2014



Bill Nye is an ardent supporter of NASA's HDEV and here he presents Liam Kennedy (inventor of the ISS-Above) with a \$5 Canadian Note (ISS on the back).