

Inspire curiosity in STEAM.

“MESH is a toolkit that simplifies inventing and making to free students from the paralysis of technical challenges, and allow for more focus on creativity and discovery.”

- Takehiro Hagiwara, Co-Founder of MESH

It's no secret that educators and world-renowned companies like LEGO and Crayola, are embracing 21st Century skills (e.g., problem-solving and creativity) as a pathway to preparing children to thrive in our innovative, technology-driven world. At MESH, we're driven by a mission to unlock children's natural curiosity about technology and electronics to foster 21st Century Skills like computational thinking and creativity.

MESH is a one-of-a-kind block kit that allows children to jump into the world of technology through invention and making. Whether children are just beginning to learn about computer programming or already have the skills to code and prototype electronics, they can use MESH to follow their imagination with fun technology projects like building a smart gadget. At the heart of every project lies key learning areas like problem-solving, logical thinking, STEM skills, digital literacy, creativity, collaboration, and communication.



Problem Solving

Encourage critical thinking with a kit designed to turbocharge ideas and bring technology to life to solve problems, real and imaginary alike.



STEM Skills

Discover programming, electronics, engineering, and design in guided activities that explore hardware and internet technology to create interactive projects.



Creativity & Innovation

Unleash students' creativity with make-to-learn projects like creating a motion-activated, singing teddy bear, a smart light, or even a self-feeding pet bowl.

MESH puts technology in the hands of students to imagine and make.



MESH LED



Light Up & Firefly
Set the LED to light up or glow when the it is triggered.



Blink
Set the LED to blink when it is triggered.



Off
Set the LED to turn off when it is triggered.



MESH Button



Press
Trigger an action when the button is pressed once.



Hold
Trigger an action when the button is held.



Double Press
Trigger an action when the button is pressed twice.



MESH Motion



Detected
Trigger an action when motion is detected.



Undetected
Trigger an action when no motion is detected.



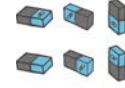
Check Motion
Use another action, like a click of MESH Button, to check for motion or for the absence of motion and then trigger another action.



MESH Move



Shake, Flip, or Tap
Trigger an action when the tag is shaken, flipped, or tapped.



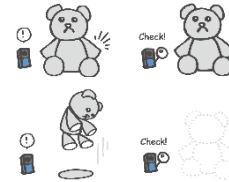
Orientation
Trigger an action when the tag is oriented with a certain side facing up. (Orientation is based on six settings: Front, Left, Top, Back, Right, Bottom.)



MESH Brightness



Detect change & check brightness
Trigger an action if there is a change in ambient light; or use another action, like a click of MESH Button, to check whether brightness is within a set range and then trigger another action.



Detect & check openness and closeness
Trigger an action if the tag is covered; or use an action, like a press of MESH Button, to check whether the tag is concealed from light to trigger another action.



MESH Temperature & Humidity



Detect change in temperature & humidity
Trigger an action when temperature or humidity reach a certain range.



Check temperature & humidity
Use another action, like a click of MESH Button, to check for temperature in a set range, and if temperature is within the set range then trigger another action.



MESH GPIO

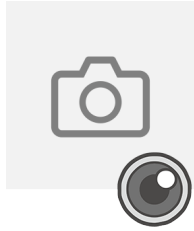


General Purpose Input Output (GPIO) Pins
Trigger an action in the MESH app when a signal is received in the following:

- Digital In
- Digital Out
- Analog In
- PWM Out
- VOut Supply

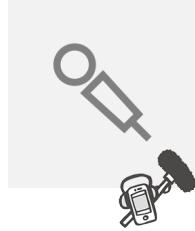
Bring everyday technology into projects with the MESH app.

Explore Device Functions



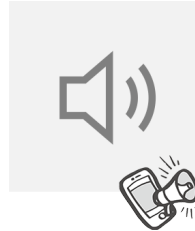
Camera

Take a photo using the camera on the device.



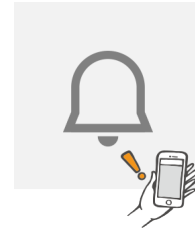
Mic

Use the microphone on the device.



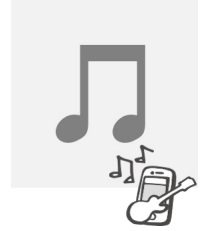
Speaker

Play audio from the device.



Speaker

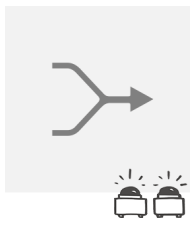
Display a notification on the device.



Music

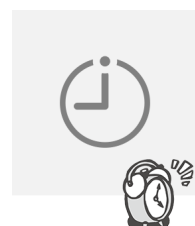
Play music from the device.

Discover Coding Logic



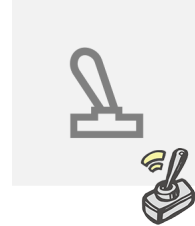
“AND”

Trigger an action using multiple signals.



Timer

Control the timing of signals.



Switch

Switch the output line.



Counter

Count the number of signals detected.

Build with Real Gadgets & Apps



Philips HUE

Customize Philips Hue smart light bulb.



Gmail

Connect to gmail to send and track emails.



IFTTT

Connect to hundreds of online services smart devices.



Olympus Air

Custom Olympus Air integration block.