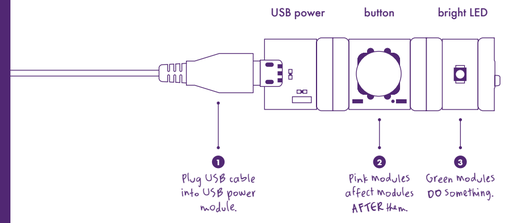
SNAP THE INTERNET TO ANYTHING.™

1 30 SECOND QUICK START GUIDE
TRY THIS SAMPLE CIRCUIT



no soldering
no programming
no wiring

2 LEARN LITTLEBITS BASICS
EVERYTHING YOU NEED TO KNOW TO GET STARTED

1 CIRCUITS IN SECONDS
Color-coded and instantaneous. What usually requires days to breadboard will only take seconds to make.

2 COLOR-CODED
Modules are grouped into four categories:
POWER (blue) is needed at the start of every circuit.
INPUT (pink) modules accept input from you or the environment and send signals to the modules that follow.
OUTPUT (green) modules DO something–light up, buzz, move...
WIRE (orange) modules expand your reach and change direction.

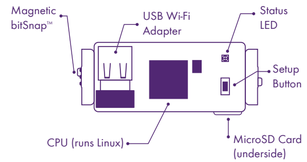
3 ORDER IS IMPORTANT
Power Modules always come first and **Input Modules** only affect the **Output Modules** that come after them.

4 MAGNET MAGIC
The magnets just snap, you can never make a mistake. No wiring, no soldering, no programming (unless you WANT to!).

3 SET UP YOUR CLOUDBIT™
CONNECT TO WI-FI

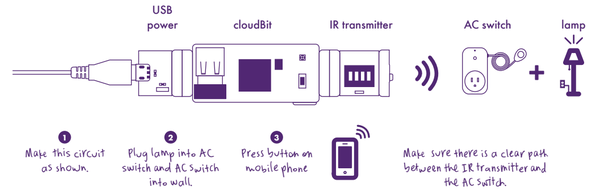
There is a quick, one-time set-up process where we'll guide you through connecting the cloudBit to the local Wi-Fi network via any smart phone or computer. Then you'll be ready to create your own internet-connected devices!

littleBits.cc/cloudstart



4 TRY THIS CLOUDBIT CIRCUIT
MAKE YOUR FIRST INTERNET-CONNECTED DEVICE

WIRELESS LIGHTING
Turn your home lighting on remotely from anywhere in the world!



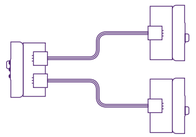
KNOW YOUR MODULES
QUICK QUEEK + SAMPLE CIRCUITS
ONLINE WWW.LITTLEBITS.CC/BITS

USB POWER p3

All your circuits need to start with this USB power module. Plug your USB power into the wall with the included micro USB cable and power adapter.

CLOUDBIT™ w20

The cloudBit is the easiest way to create internet-connected devices. Now you can Snap the Internet to Anything! Retrofit your thermostat to control it remotely, or invent a sound-triggered alarm system that texts you alerts–the possibilities are endless.

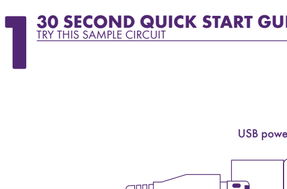


SPLIT w19

The split module sends a single signal along two paths to other modules. You can use it like a wire module if you ignore one of the output bitSnaps.™

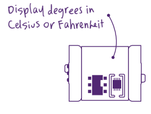
BUTTON i3

The button module is a classic: big, round, and springy for comfortable pressing! Push it to turn your creation on, and release it to turn it off. Use it with the cloudBit to make an SMS doorbell.



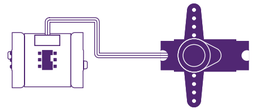
MP3 PLAYER i25

Add music and sound effects to your next project with the mp3 player! Just load your mp3 files onto the provided micro SD card. Sending a signal to the mp3 player can make it work as an audio player or sampler. Toggle between two volume levels by pressing both the forward and back buttons simultaneously. Audio guide with detailed info included on the microSD card.



TEMPERATURE SENSOR i12

The temperature sensor outputs a voltage between 0V and 5V based on the ambient temperature surrounding the module. Place it before the number module (in "value" mode) to see the current temperature. Note: It may take several minutes to calibrate to the accurate temperature.

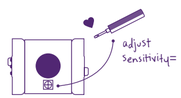


SERVO o11

The servo is an adjustable motor that can swing back and forth! It has two modes: in "turn" mode, the input from other modules determines the position of the arm. In "swing" mode, the servo will move back and forth on its own–the input controls the speed. Use it to open your curtains.

IR TRANSMITTER o18

The IR transmitter sends a short pulse of modulated infrared light. Use it to wirelessly activate the AC switch to turn appliances like a lamp or coffee maker on and off! Note: Make sure there is a clear path between the IR transmitter and the AC switch.

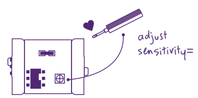


SOUND TRIGGER i20

The sound trigger listens to the noise level in your room, and sends an on signal when the volume goes over a certain threshold. You can make that target level louder or softer using the included screwdriver. Use it with the cloudBit to receive a notification every time your dog barks at home.

THRESHOLD i23

The threshold compares the signal coming into the modules' input connector to a voltage you set with the knob. If the input voltage is greater than the selected voltage, the output is set to 5V (high). Use it to make any sensor module into a trigger module.

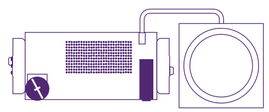


LIGHT SENSOR i13

The light sensor measures how much light is shining on it. It has two modes: "light" and "dark." In "light" mode, the more light the sensor receives, the higher the signal it sends out. In "dark" mode, it's just the opposite–the signal increases as light decreases.

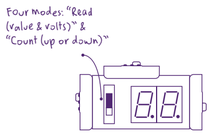
BRIGHT LED o14

The bright LED (or "light-emitting diode") puts out a lot of bright white light. Just like our other LED modules it's a great way to shed some light on your creations, or use it in your circuits for instant visual feedback.



SYNTH SPEAKER o24

The synth speaker amplifies your sonic explorations! You can control the volume with a dial at the front of the module. It also features an output jack that you can connect to headphones, an amplifier, or a computer.



NUMBER o21

The number module features a two-digit, seven-segment LED display. In the "read" modes, the module displays information about the signal it's receiving. In the "count" modes, the module counts up or down with each trigger. The counter can be reset by receiving a high signal at the reset bitSnap.™

ADHESIVE SHOES (6) a7

Secure your circuit with shoes! Simply press the feet of your circuit into the holes of the shoes and stick the shoes to a surface. Adhesive backing is one-time use only.

MOUNTING BOARDS (2) a9

The mounting board keeps your circuit intact so you can move it around with ease or mount it on your wall! Simply press the feet of your circuit into the holes.

AC SWITCH a3

The AC Switch is an IR controlled electrical socket. Use it with the IR transmitter to remotely turn on or off anything that plugs into a standard outlet. Note: works with devices that use up to 15A.

USB POWER ADAPTER a14

Connect your USB power module to the power adapter and cable to power permanent creations! The adapter is designed for US electrical outlets only.

littleBits ELECTRONICS

BRING YOUR HOME TO LIFE.

littleBits has always had the goal of making electronics into a material, the same way that wood, metal, and cardboard are materials that we use to build things. With the cloudBit, we've made the Internet into a concrete material that you can incorporate into any creation. The Internet of Things is now open and accessible to you. Prototype your ideas and create internet-connected devices to improve your home, your life, & change the world. Happy Making!

a fancy phrase for stuff that connects to the internet!

WIRELESS LIGHTING
Turn your home lighting on remotely from anywhere in the world!
INSTRUCTIONS AT littleBits.cc/wirelesslight

TOILET PAPER INVENTORY
When someone takes the last roll of toilet paper, everyone in your house gets a text to buy some more. To be extra sure, automatically add toilet paper to the next line of your grocery list in a spreadsheet.
INSTRUCTIONS AT littleBits.cc/toiletpaper

REAL-TIME WEATHER DASHBOARD
Monitor current and forecasted weather data with littleBits and a little coding.
INSTRUCTIONS AT littleBits.cc/weatherdashboard

LAUNDRY DONE ALERT
Get your laundry while it's hot! Receive a text message when your laundry dryer buzzes.
INSTRUCTIONS AT littleBits.cc/laundrydone

GOOD MORNING SUNSHINE
A double-duty alarm clock that wakes you up at sunrise by opening your curtains and playing your favorite song.
INSTRUCTIONS AT littleBits.cc/goodmorning

SMART FRIDGE
Get notified if your fridge door is left open for too long.
INSTRUCTIONS AT littleBits.cc/smartfridge

YOU'VE GOT MAIL
Every time you get an important email, a sound clip plays from the synth speaker (like AOL's nostalgic "you've got mail").
INSTRUCTIONS AT littleBits.cc/youvegotmail

COFFEE CONTROL
Use your phone to remotely turn your coffee maker on.
INSTRUCTIONS AT littleBits.cc/coffeecontrol

REMOTE CAT FEEDER
When away, show your cat you care with this Wi-Fi activated treat dispenser.
INSTRUCTIONS AT littleBits.cc/remotecatfeeder

SMART AC UNIT
Monitor and control the temperature of your home remotely.
INSTRUCTIONS AT littleBits.cc/smartac

UNDERCOVER ART
Protect your house! This decorative mask senses when someone crosses in front of it and alerts you through SMS. It simultaneously lets out a warning sound and turns on a nearby lamp, scaring the intruder away.
INSTRUCTIONS AT littleBits.cc/undercoverart

DOORBELL ANSWERING MACHINE
Receive a text notification when someone rings your doorbell! Then respond by sending a text back and playing a recording out on the mp3 player + speaker (e.g. "be right there!" or cheesy waiting music).
INSTRUCTIONS AT littleBits.cc/doorbellansweringmachine

GARAGE DOOR MONITOR
Use your smartphone to check if you left the garage door open.
INSTRUCTIONS AT littleBits.cc/garagedoor

BARK TRACKER
Know if Fido's barking is getting out of control. If he barks more than 10 times (or an amount you set), you'll get a text. To calm him, text back to play an audio clip of your voice.
INSTRUCTIONS AT littleBits.cc/barktracker

JOIN OUR COMMUNITY! We love making new friends. Meet other bitsters, share your work, and win prizes at littleBits.cc/projects **Psst**...We're very social. Come say hi and tag us! #littleBits @littleBits @littleBits /littleBitsElectronics

SNAP THE INTERNET TO ANYTHING.

Find more smart home projects at **LITTLEBITS.CC/PROJECTS**

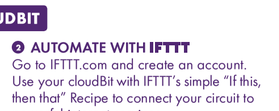
MORE INFO ABOUT THE CLOUDBIT

3 WAYS TO CONTROL YOUR CLOUDBIT

❶ LITTLEBITS CLOUD CONTROL
Cloud Control is a web app that allows you to trigger or read from your cloudBit circuit remotely from across the room or across the world! **littlebits.cc/cloudstart**

Press the button to activate the circuit. Remote readout.

❷ AUTOMATE WITH IFTTT
Go to IFTTT.com and create an account. Use your cloudBit with IFTTT's simple "If this, then that" Recipe to connect your circuit to powerful internet services.


Create connections between popular services & products with littleBits Recipes.

❸ CODE WITH OUR API
Know how to code? You can do amazing things with our powerful API like building your own Cloud Control. Get started at littleBits.cc/cloud-sdk

3 CLOUDBIT INTERACTIONS

❶ CLOUDBIT TO WEB
Use the cloudBit to communicate with web services and software. For example, a button can trigger web actions like SMS messages, tweets, or log sensor data in a spreadsheet, etc.

❷ WEB TO CLOUDBIT
Communicate events from the web to the cloudBit. For example, every new "like" on Instagram causes the number module to count up.

❸ CLOUDBIT TO CLOUDBIT
Communicate from module to module. With more than one cloudBit, you can control modules and communicate across any distance; push a button in New York and a bright LED lights up in Tokyo.

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