littleBits™ ELECTRONICS — Cloud Bit

The littleBits cloudbit is a fast and easy way to create Internet-enabled inventions.
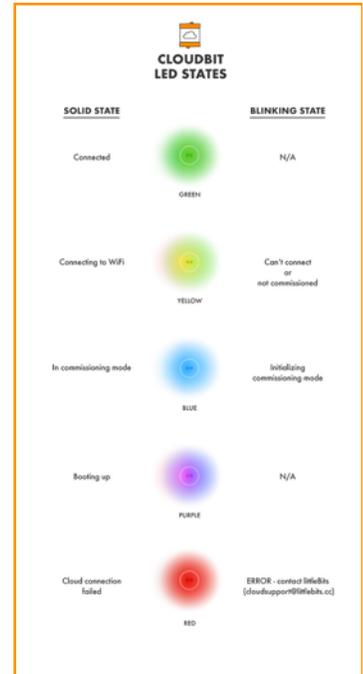
Start at littleBits.cc/cloudstart

1. Claim the cloudbit - create a login and give your cloudbit a name.
2. Follow the directions to setup and initialize the cloudbit. The cloud bit will create its own network - you need your computer to be able to select that network.
3. The setup process takes a few minutes; be patient with each step.
4. Follow the online tutorial with the simple button circuit and LED output.

Next, change the cloudbit input from the button to a slider or switch. Test to see if the cloudbit browser dashboard is still working. When you change the circuit, it will take time to reset. Wait for the cloudbit LED to return to a steady green.
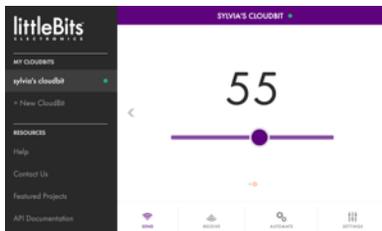
Classroom tips

✳ If your students don't have email addresses, setup the cloudbits ahead of time with generic email addresses. Store the cloudbits labeled with the email and password.
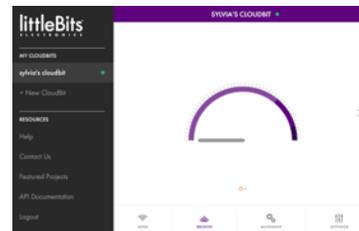
✳ Give the cloudbits distinct names, not "my cloudbit".

CloudBits Dashboard

When you log in to the Cloudbits account, you will see the Cloudbits Dashboard.

Send: Use a virtual button or slider to send values to the cloudbit. Any littleBits output module attached to the cloud bit will turn on, or respond to the slider.

Receive: Any littleBits input device, meaning buttons, sensors, dials, etc. attached to the left side of the cloudbit will send data to the dial and number display.

Automate: Automation requires an **If This Then That (IFTT)** account. IFTT is a website where you can create "recipes" that automate cloudbit inputs and outputs. See the next page for more information.

Tips

✳ Use the USB power LittleBit instead of the battery littleBit. Plug it into the wall outlet, not your computer.

✳ You can use your phone or tablet to set up and use the cloud bit (over wireless)

✳ MORE TIPS AND TRICKS at http://littlebits.cc/tips-tricks/tips-tricks-cloud-module
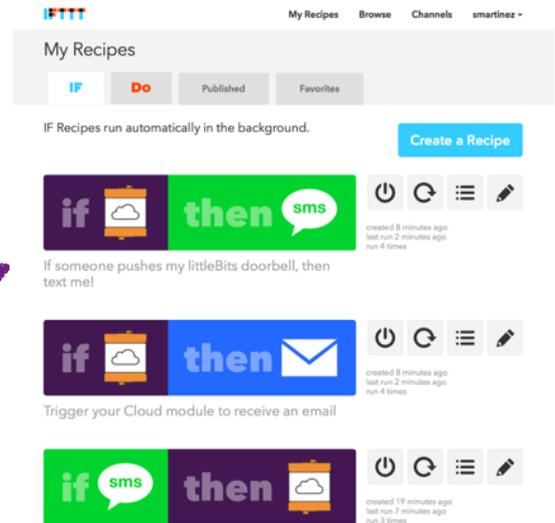
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ELECTRONICS

Automate your littleBits inventions through the Internet

If This Then That (IFTT.com) allows you to create recipes that connect services, like your email, text messages (SMS), Twitter, Google docs, and many others. You define a simple trigger (If this…) and decide what to do when that happens (…then that.) For example, the first recipe in this list represents:

"If the cloudbit gets an input, then send a text message."

You can name the recipe anything you like, "If someone pushes my littleBits doorbell, then text me!" However, IFTT doesn't really know whether you have put a button littleBit in the circuit or any other input. It's just waiting for the cloudbit to get ANY signal from ANY input (pink) littleBit.

Sign up for an IFTT account, then search for cloudbit recipes, or make your own.

IFTT & Multiple Cloudbit Tips

✳ The cloudbit and cloudbit Dashboard were not designed for multiple cloudbits and multiple computers. It does work if you are careful.

✳ Be sure to use the cloudbit Dashboard to access IFTT, this will force a reauthorization of the cloudbit when necessary.

✳ The cloudbit initialization process will break the connection to IFTT.

✳ If you reinitialize or change a cloudbit, edit the IFTT recipe to select the new cloudbit name, then click the update button to save the new recipe.

✳ If you are reinitializing a cloudbit, the setup process it may trigger IFTT recipes connected to the old cloudbit.

✳ The recipes in your IFTT account will remain active even when you put your bits away. Turn them off if there is a chance of them triggering from unintended inputs.

Example

This IFTT recipe…

Plus this littleBits circuit…

Sends this email when the button is pushed.

> **IFTTT Action <action@ifttt.com>**
> To: Sylvia Martinez <sylvia@inventtolearn.com>
> 'sylvia's cloudbit' input received May 12, 2015 at 05:28PM
>
> 'sylvia's cloudbit' input received May 12, 2015 at 05:28PM
> 100% power
>
> via littleBits
>
> **IFTTT**
>
> Put the internet to work for you.