# Wyze Labs WLPP1 Smart Home Plug

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### Overview



Uses 15 amp relay. Awkward to open. Flat plastic back pops into plastic shell but is glued. Power prongs are also lightly glued to the flat plastic back.

Uses an edge mounted daughter board for the ESP8266EX. Flashing leads for 3.3V, GND, RX and TX can be soldered to the edge mounting. Used the test point landing for GPIO0 on the daughter board test points side.

LED will light when relay is engaged. Side button will toggle the relay state.

### GPIOs

GPIO	Component
GPIO05	Led1i
GPIO12	Relay1
GPIO14	Button1

### **Teardown Pictures**

Not required if flashing using the OTA (Over the Air) method.





# Register the Wyze Device

Before you can perform an over the air upgrade of the Wyze device, you will need to register it with Wyze. Download the Wyze app from the App store and connect the wyze device.

Screen captures of the setup:



Make sure to hit Cancel and not Upgrade.

## **OTA Hacking**

Based on https://github.com/elahd/wyze\_plug\_flasher

mkdir ~/wpf

```
cd ~/wpf
```

pip install requests

#### Clone the repo:

git clone https://github.com/HcIX/WyzeUpdater.git

#### Get the flasher:

wget https://github.com/elahd/wyze\_plug\_flasher/releases/download/v0.1-alpha/wyze\_plug\_flasher.bin

#### Get Tasmota binary v9.2.0

wget https://github.com/arendst/Tasmota/releases/download/v9.2.0/tasmota.bin

mv tasmota.bin thirdparty.bin

Use WyzeUpdater to get a list of your Wyze devices. You will have an account

cd WyzeUpdater

python3 wyze\_updater.py list

INFO:root:No saved credentials found, logging in with username/password...
Please enter the account name:xxxxx
Please enter the password:xxxxx
INFO:root:Credentials saved to .tokens
Device Type: Plug (WLPP1)
Device MAC: 2CAA8E7BC5BB
Firmware Version: 1.2.0.59
Device Name: Lights

sudo python3 wyze\_updater.py update -s -d 2CAA8E7BC5BB -f ../wyze\_plug\_flasher.bin

INFO:root:Using saved credentials from .tokens... INFO:root:Checking device, mac=2CAA8E7B302B

```
Device type: Plug (WLPP1)
Device name: Wyze2
Firmware version: 1.2.0.59
IP Address: 192.168.1.223
```

Pushing firmware to this device? [y/N]:y INFO:root:Serving firmware file '../wyze\_plug\_flasher.bin' as 'https://192.168.1.103/firmware.bin', md5=clcd336c04a3c74e315edac00afd117c 192.168.1.223 - - [31/Jan/2021 21:38:33] "GET /firmware.bin HTTP/1.1" 200 -Press Ctrl+C when all the updates are done... ....

Check for wyze\_plug\_flasher wifi network. Once it is active, you can hit CTRL-C.

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Settings	Wi-Fi	
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mehan3		a ♥ (])
Pennys Pa	alace	ê ≑ (j)
wyze_plu	g_flasher	÷ (j)
Other		
Ask to Join N	Networks	Notify >
Known network known network of available net	s will be joined auto s are available, you works.	matically. If no will be notified
Auto Inim Like	atenat /	ality takes 5

#### cd ~/wpf

sudo python3 -m http.server 8080

Serving HTTP on 0.0.0.0 port 8080 (http://0.0.0.0:8080/) ...

On your Mac, connect to the  ${\tt wyze\_plug\_flasher}$  Wi-Fi network.

### Navigate to http://10.0.0.1



Click on the link next to Flash Firmware to download and install Tasmota.



After a few minutes, you should hear a click and should see the Tasmota\_ wifi network.

64% ID	Sun 9:50 PM	John Mehan
Wi-Fi: Lookir	ng for Networks	8
Turn Wi-Fi O	nt	
Personal Ho	tspots	P
JohnPhone8		att LTE 💷 🔒
✓ mehan3		
BELL075		9 👳
BELL257		9
BELL304		
BELL974		
Billsmafia		
Brooks1		9
CGN3-2010	)	A 👳
DIRECT-Ihm	ehan-printer	9
LEDnetA1C1	IFA	-
line-guest		
mehan		
mehan3-5g		
mehan_5g		
Obfuscate		9
Pennys Pala	ce	
tasmota_B7	9C57-7255	ę
Join Other N	letwork	
Create Netw	ork	
Open Netwo	rk Preferences.	

Connect to the tasmota\_XXX network.

### Navigate to http://192.168.4.1/cs:



Enter Reset 3 in the command input field and hit Enter. The device will reboot.

After the device reboots, unplug it. That is, physically remove it from the electrical outlet for a few seconds.

Plug the device back in.

Set up Tasmota as you normally would.

### Navigate to http://192.168.4.1/



Setup WIFI and click Save.

You device will now be connected to your network if everything has worked out.

Connect to Wyze plug from your browser. You'll need to figure out it's new IP on your network. http://IP\_ADDRESS/

### At the Console screen:

Enter:

```
SetOption0 0; SetOption36 1
template {"NAME":"WyzePlugWLPP1","GPIO":[0,0,0,0,0,56,0,0,21,0,17,0,0],"FLAG":0,"BASE":18}
```

### Flashing Custom Firmware

If you have gotten this far, you can install some custom firmware.

Open your browser to the wyze plug and navigate to the "Firmware Upgrade" menu.

ON
Toggle
Configuration
Information
Firmware Upgrade
Console
Restart
Tasmota 9.1.0 by Theo Arends



From this screen, click the "Choose File" button and upload some custom firmware.

## References

Reference	URL
Redit Post	https://www.reddit.com/r/wyzecam/comments/I54d8b/instructions_and_software_install_tasmota_on_wyze/
Flasher	https://github.com/elahd/wyze_plug_flasher
Wyze WLPP1 Template	https://templates.blakadder.com/wyze_WLPP1.html
Teardown Video	https://www.youtube.com/watch?v=7p6VcA8Z5vM