

H2.0

BUILD IT



1 BILLION Number of people, worldwide, expected to own one smartphone or tablet computer in 2016.

TIME 1 hour
COST \$100 OR LESS
DIFFICULTY ●●○○○

1 SET UP A WEBCAM

Aim a webcam at the welcome mat (wireless models are the easiest to install). Configure the camera to constantly refresh an image to a dedicated Web host.

2 GIVE THE BELL A BRAIN

To imbue your doorbell with artificial intelligence, set up an Ethernet-enabled Arduino microcontroller nearby. Then grab the source code from pushingbox.com/api (Storck and two friends made the service specifically for this and other home-to-Web hacks).

3 CREATE WEB NOTIFICATIONS

Navigate to My Scenarios on PushingBox.com, click Add a Scenario, and configure the entry to e-mail yourself photos. Be sure to include the webcam's URL, click Test to verify the configuration, and copy the 16-character DeviceID.

4 PROGRAM THE ARDUINO

Paste the DeviceID into the downloaded Arduino code in the quotation marks after the line "charDEVICE1," and then upload the compiled code to the microcontroller.

5 HACK YOUR DOORBELL

Dismantle the doorbell and solder a piece of wire to each of two terminals behind the button. Attach one wire to the 5-volt pin and the other to the input connector pin on the Arduino. Add a 10K resistor between the ground pin and input pin to reduce electrical noise.

6 TEST YOUR SPY CAM

Every push of the doorbell completes an electrical circuit, which tells the Arduino to download the latest webcam image and send it to your chosen e-mail address. Your doorstep self-portrait should arrive in a few seconds.

Doorbell Spy Cam

A simple surveillance rig that e-mails photos of visitors

The mother of invention may be necessity, but French telecom engineer Clément Storck learned his father can play that role too. To remind his forgetful dad to close the garage door, Storck rigged it with a switch that triggers an iPhone alert—a home-automation hack that joined his repertoire of self-closing shutters and a tweeting cat door (see @PepitoTheCat). But Storck's greatest hack yet is a webcam that e-mails a photo of anyone who rings the doorbell. Follow these steps to build your own—and end speculation over whether it's UPS at the door or a prankster with a flaming paper bag.

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