



## Puzzle Box with Arduino IoT Bundle

### *Components and Supplies*

- [Arduino IoT Bundle](#)
- 9V battery (generic)
- [9V Battery Clip](#)

### *Apps and Online Services*

- [Arduino IoT Cloud](#)
- [Arduino IoT Cloud Remote app](#)

### **Create a Puzzle Box with the help of the Arduino IoT Cloud!**

Keeping your valuable items away from prying eyes can be hard sometimes, unless you put it in a big safe or something similar... but who has room for that? Instead, create your own puzzle box using the components from the IoT Bundle and some cardboard! We can't guarantee the safety of your belongings, but at least it will be a fun deterrent for potential thieves. Of course, we advise you to stash your candy in there... not actual valuables.

#### In a Nutshell

In order to open the box, which is held closed with a servo motor, you will have to turn the potentiometers until you get the right combination. The combination can be set through the dashboard on the Arduino IoT Cloud. An LED will help you guess, giving you colour feedbacks: the closer you are, the warmer the color. When the right combination is guessed, the box will open and a victorious melody will start playing, revealing whatever you have locked inside. In order to create our puzzle box we will need the following components:

- Buzzer
- RGB LED
- 3 potentiometers
- Servo motor



### Learning Goals

- Introducing the Arduino IoT Cloud
- Introducing the Arduino IoT Remote app
- Playing a melody with the piezo buzzer
- Creating an Arduino IoT Cloud Dashboard