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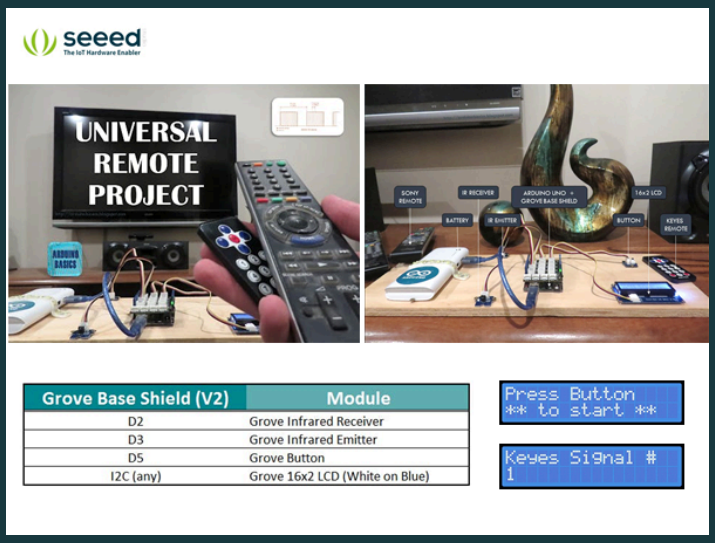
INDUSTRIAL PRODUCT DATASHEET

Programmable Universal IR Remote Control Kit with Arduino UNO

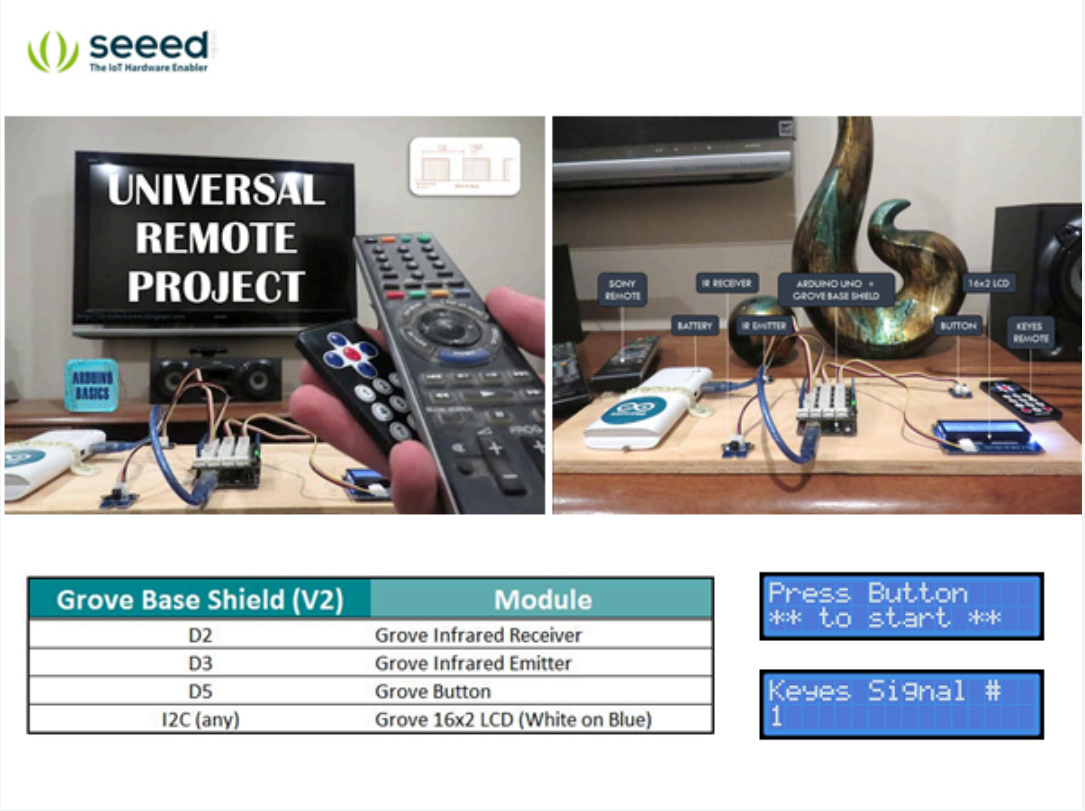
Programmable universal IR remote control kit using Arduino UNO and Keyes remote to control multiple IR devices with one press.

SKU
E21011011

UPDATED
2025-09-02 05:55:09



Overview



Grove Base Shield (V2)	Module
D2	Grove Infrared Receiver
D3	Grove Infrared Emitter
D5	Grove Button
I2C (any)	Grove 16x2 LCD (White on Blue)

This kit, built around the Arduino UNO, transforms a standard Keyes IR remote into a programmable universal remote capable of issuing multiple Sony IR signal combinations with a single button press. It can be extended to control various IR devices such as smart TVs, audio systems, lighting, air conditioners, and other smart home IR equipment.

Key Features

Description

ScottC provided us with a tutorial on how to create a programmable universal IR remote control. This project will convert an ordinary Keyes infra-red (IR) remote into a programmable universal remote. It can realize multiple precise Sony IR signal combination control by pressing a single button on the Keyes.. This project can be customised for other IR methodologies, however, you may have to modify the Arduino code to accommodate them.

Before officially starting this project, you should prepare the listed Arduino UNO development board, a Seeed Base Shield, Seeedstudio Grove modules, Keyes, jumpers and other components. In addition, the KEYES IR Remote Control is not included in the component purchase link provided by us, you can click **here** to purchase it. After preparing these things, we can start building our programmable universal IR remote control!

The setup of the system is easy to get started. You can connect all components according to the provided Connection Instructions. After the hardware connection is completed, connect the power supply through the USB cable to power the Arduino UNO. Before that, you should download the latest Arduino IDE and install related library files. You can download and burn the code through the web page. For specific operations and codes, please refer to **Grove IR Universal Remote Project**.

- Programmable universal IR remote control
- Operate multiple devices with a single press of a Keyes IR remote
- Extend the application to the control of multiple other IR devices

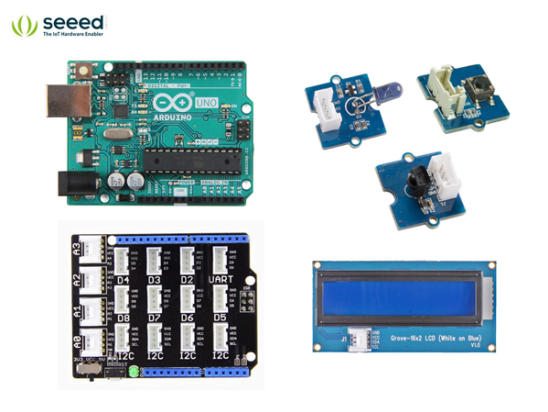
Application

- Smart TV remote control
- Smart audio & lighting remote control
- Smart air conditioner remote control
- Smart home - Remote control of IR equipment

Documentations

- **Grove IR Universal Remote Project- Hackster.io**- Credits to **ScottC**

Product Gallery



Applications

- **Smart TV remote control**
- **Smart audio & lighting remote control**
- **Smart air conditioner remote control**
- **Smart home:** Remote control of IR equipment

Resource Links

- https://www.seeedstudio.com/Programmable-Universal-IR-Remote-Control-Kit-with-Arduino-UNO-p-5202.html

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