HOW TO USE ISD1820 VOICE RECORDER AND PLAYER
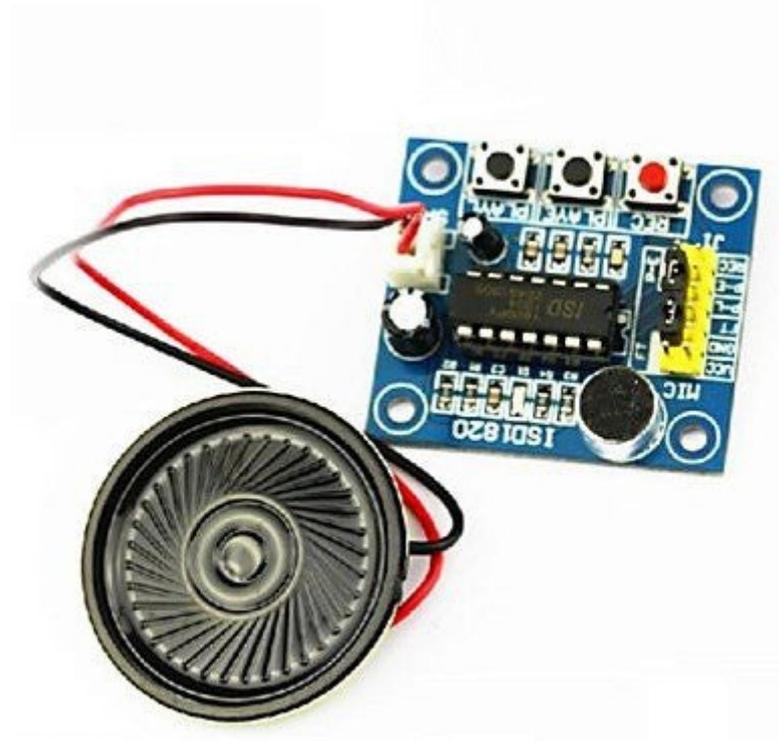
By [mybotic](#) in [CircuitsArduino](#)

Introduction: HOW TO USE ISD1820 VOICE RECORDER AND PLAYER

INTRODUCTION

Voice Record Module is base on ISD1820, which a multiple-message record/playback device.It can offers true single-chip voice recording, no-volatile storage, and playback capability around 10 seconds. This module is easy to use which you could direct control by push button on board or by Microcontroller such as Arduino, STM32, ChipKit etc. From these, you can easy control record , playback and repeat and so on.

SPECIFICATION

1. Push-button interface, playback can be edge or level activated

2.Automatic power-down mode

3.On-chip 8Ω speaker driver

4. Signal 3.3V Power Supply

5.Can be controlled both manually or by MCU

6.Record up to around 10 seconds of audio

7. Dimensions: 37 x 54 mm
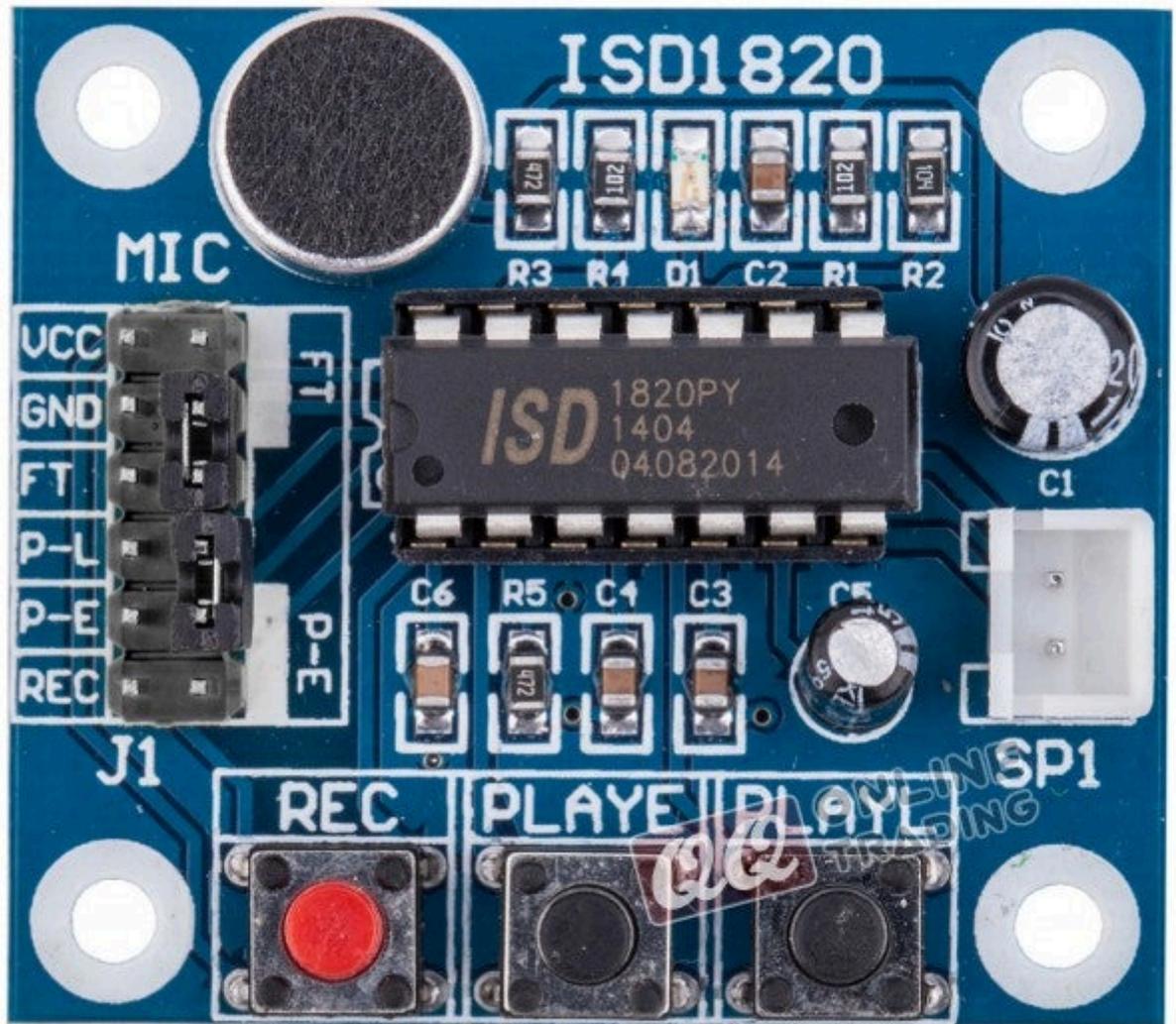
Step 1: STEP 1:MATERIAL PREPARATION

In this tutorial, you will need as following below:

1 ISD1820-Voice Recorder Module

2.Speaker 8Ω 0.5W

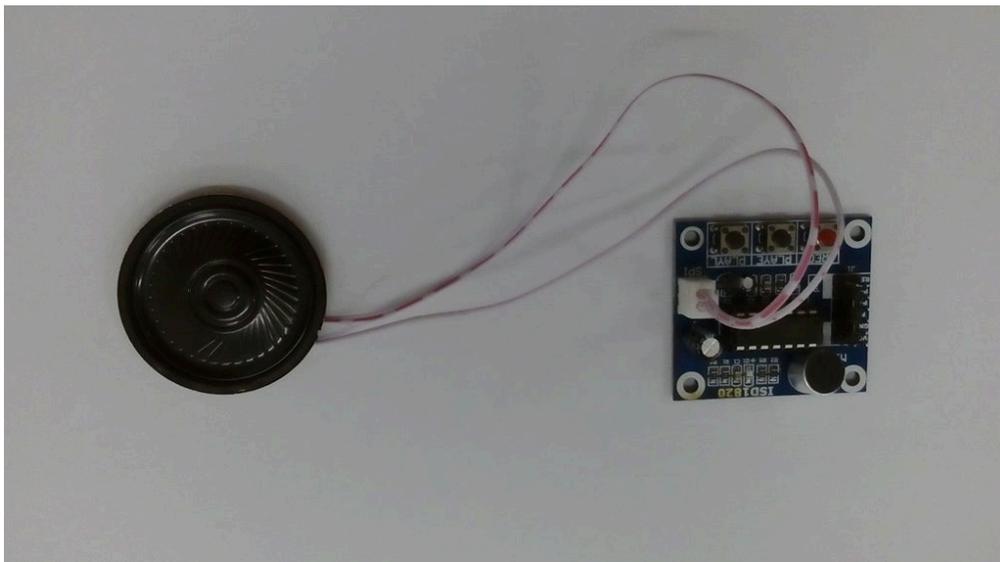3.Connector

Step 2: STEP2:PINOUT DETAILS

1. **VCC**– 3.3V power supply

2. **GND**– Power ground

3. **REC** – The REC input is an active-HIGH record signal. The module starts recording whenever REC is HIGH. This pin must remain HIGH for the duration of the recording. REC takes precedence over either playback (PLAYL or PLAYE) signal.

4. **PLAYE** – Playback, Edge-activated: When a HIGH-going transition is detected on continues until an End-of-Message (EOM) marker is encountered or the end of the memory space is reached.

5. **PLAYL** – Playback, Level-activated, when this input pin level transits for LOW to HIGH, a playback cycle is initiated.

6. Speaker Outputs – The SP+ and SP- pins provide direct drive for loudspeakers with impedances as low as 8Ω.

7. **MIC** – Microphone Input, the microphone input transfers its signals to the on-chip preamplifier.

8. **FT** – Feed Through: By connecting the mini jumper, this mode enable the Microphone to drive the speaker directly.

9. **P-E** – By connecting the mini jumper, Play the records endlessly.

Step 3: STEP3:CONNECT THE SPEAKER TO THE ISD1820

Connect the speaker 8Ω 0.5W to the SP1 pin.

Step 4: STEP4:PIN CONNECTION
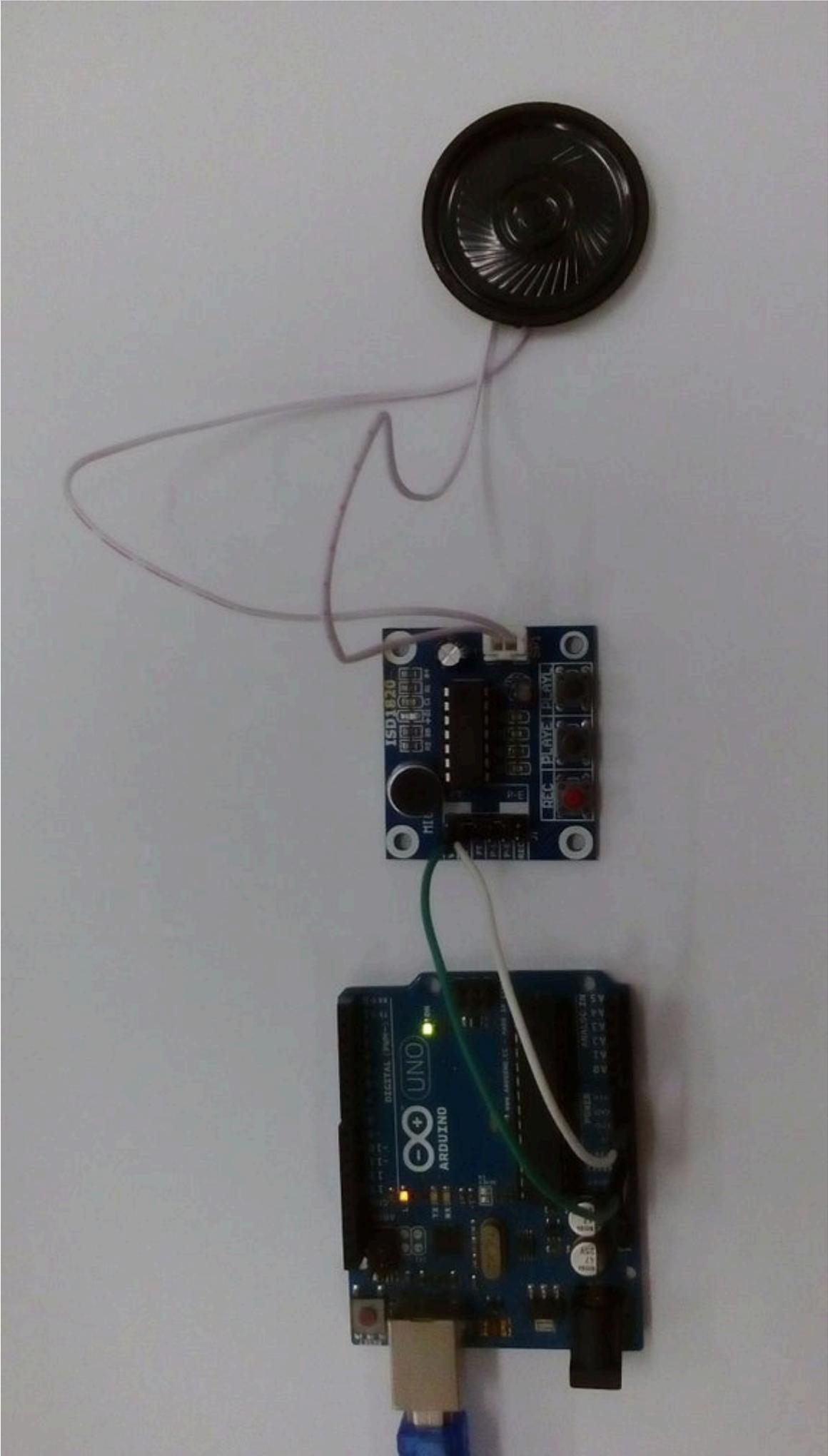
In this tutorial, arduino uno is used to give power supply to the module.

1.Connect Vcc to 3.3V on Arduino Board.

2.Connect GND to GND on Arduino Board.

3.Connect USB to Arduino Board.

Step 5: STEP5:START TO REC,PLAYE AND PLAYL

Record Operate Guide

1. Push **REC** button then the **RECLED** will light and keep push until record end.

2. Release the **REC** button

3. Select Playback mode: **PLAYE**, just need push one time, and will playback all of the record and until the pre-record sound end ; **PLAYL**, you need always push this button until you want to stop playback record or end ; When short **P-E** jumper the record will playback repeatedly until jumper off or power down.

4. **FT** mode, when short FT jumper, that means all of you speak to MIC will direct playback to Speaker.