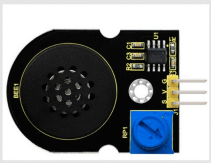
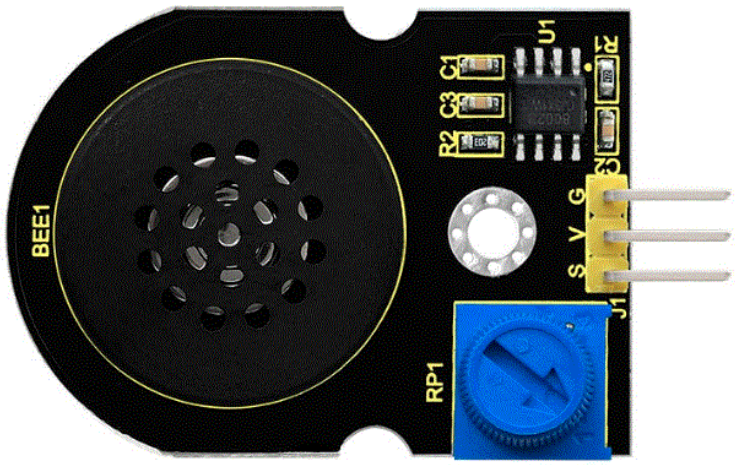


WHADDA WPM457 Digital Speaker Module User Manual

Contents

WHADDA

WHADDA WPM457 Digital Speaker Module



Introduction

To all residents of the European Union Important environmental information about this product
This symbol on the device or the package indicates that disposal of the device after its lifecycle could harm the environment. Do not dispose of the unit (or batteries) as unsorted municipal waste; it should be taken to a specialized company for recycling. This device should be returned to your distributor or to a local recycling service. Respect the local environmental rules.
If in doubt, contact your local waste disposal authorities.
Thank you for choosing Whadda! Please read the manual thoroughly before bringing this device into service. If the device was damaged in transit, do not install or use it and contact your dealer.

Safety Instructions

- Read and understand this manual and all safety signs before using this appliance.

For indoor use only.

- This device can be used by children aged 8 years and above, and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the device in a safe way and understand the hazards involved. Children shall not play with the device. Cleaning and user maintenance shall not be made by children without supervision.

General Guidelines

- Refer to the Velleman® Service and Quality Warranty on the last pages of this manual.
- All modifications of the device are forbidden for safety reasons. Damage caused by user modifications to the device is not covered by the warranty.
- Only use the device for its intended purpose. Using the device in an unauthorized way will void the warranty.
- Damage caused by disregard of certain guidelines in this manual is not covered by the warranty and the dealer will not accept responsibility for any ensuing defects or problems.
- Nor Velleman NV nor its dealers can be held responsible for any damage (extraordinary, incidental, or indirect) – of any nature (financial, physical…) arising from the possession, use, or failure of this product.
- Keep this manual for future reference.

What is Arduino

Arduino® is an open-source prototyping platform based on easy-to-use hardware and software. Arduino® boards are able to read inputs – light-on sensor, a finger on a button, or a Twitter message –and turn them into an output – activating a motor, turning on an LED, or publishing something online. You can tell your board what to do by sending a set of instructions to the microcontroller on the board. To do so, you use the Arduino programming language (based on Wiring) and the Arduino® software IDE (based on Processing). Additional shields/modules/components are required for reading a Twitter message or publishing online. Surf to **www.Arduino.cc** for more information

Product Overview

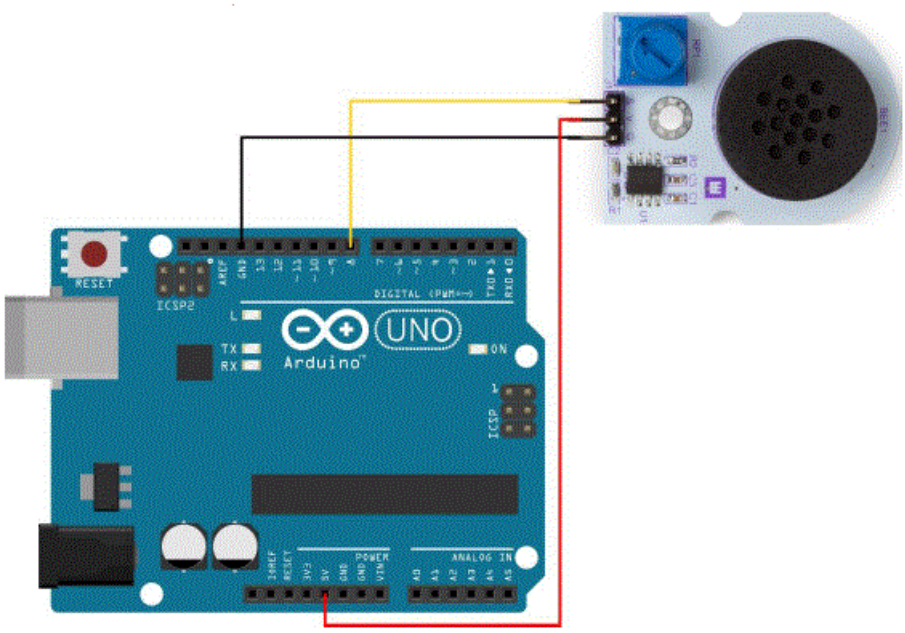
The Whadda digital speaker module integrates an adjustable volume potentiometer, a speaker, a 2W audio amplifier chip and a 3pin header interface. It can easily amplify small audio signals by providing a max. 8.5 times amplification and play the amplified signal through the speaker.

Specifications:

Supply voltage: 5 V DC Operating current Max. 500 mA Maximum power: 2 W Max. speaker volume: 80 dB Amplifier chip: SC8002B Weight: 8.4 g Dimensions (W x L x H): 47 x 30 x 13 mm

Wiring description

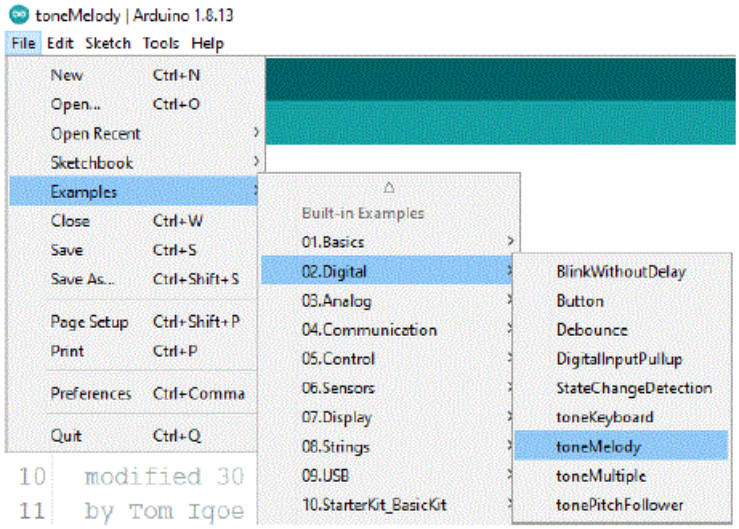
Pin	Name	Arduino® connection
S	Audio signal input	Digital Pin (e.g. D8)
V	Supply voltage (5 V DC)	5V
G	Ground	GND



Example program

1. Open the built-in example toneMelody in the Arduino IDE by going to

File > Examples > 02. Digital > toneMelody



1. Connect your Arduino-compatible board, make sure the correct Board and connection port are set in the tools menu and hit Upload Your speaker module should now play a recognizable tune. If you don't hear anything, try turning the volume potentiometer, and checking your connections.

Documents / Resources

	WHADDA WPM457 Digital Speaker Module [pdf] User Manual WPM457, Digital Speaker Module, Speaker Module, Digital Module, WPM457, Module
	WHADDA WPM457 Digital Speaker Module [pdf] Instruction Manual WPM457, Digital Speaker Module, WPM457 Digital Speaker Module, Speaker Module
	WHADDA WPM457 Digital Speaker Module [pdf] User Manual WPM457 Digital Speaker Module, WPM457, Digital Speaker Module, Speaker Module, Module

References

- Whadda - Exciting Electronics
- Arduino - Home
- Arduino - Home