

MAKEVMA304

SD CARD LOGGING SHIELD FOR ARDUINO®





USER MANUAL

1. 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.

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.

2. Safety Instructions

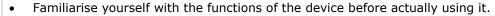


This device can be used by children aged from 8 years and above, and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the device in a safe way and understand the hazards involved.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

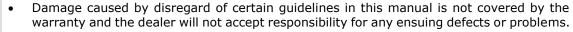


Indoor use only.
 Keep away from rain, moisture, splashing and dripping liquids.

3. General Guidelines



- 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 unauthorised way will
 void the warranty.





- The dealers cannot 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.
- Due to constant product improvements, the actual product appearance might differ from the shown images.
- Product images are for illustrative purposes only.
- Do not switch the device on immediately after it has been exposed to changes in temperature. Protect the device against damage by leaving it switched off until it has reached room temperature.
- · Keep this manual for future reference.

4. What is Arduino®

Arduino® is an open-source prototyping platform based in 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 it into an output – activating of a motor, turning on an LED, 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).

Surf to www.arduino.org for more information.

5. Overview

Most Arduino $^{\otimes}$ boards have limited onboard memory storage. The SD card logging shield allows expanding the storage to up to 2 GB.

If you have a project with any audio, video, graphics, data logging, etc. in it, you will find that having a removable storage option is essential. Most microcontrollers have extremely limited built-in storage. For example, even the Arduino® ATmega2560 has a mere 4k bytes of EEPROM storage. There is more flash (256k) but you cannot write to it as easily and you have to be careful if you want to store information in flash that you do not overwrite the programme itself!

Connection to Arduino® Uno

| Arduino [®] | | |
|----------------------|------|--|
| | 10 | |
| | 11 | |
| | 12 | |
| | 13 | |
| | GND | |
| | +5 V | |

| MAKEVMA304 | |
|------------|--|
| CS | |
| DI | |
| DO | |
| CLK | |
| GND | |
| 5 V | |

Connection to Arduino® Mega

| Arduino [®] |
|----------------------|
| 50 |
| 51 |
| 52 |
| 53 |
| GND |
| +5 V |
| |

| MAKEVMA304 | |
|------------|--|
| DO | |
| DI | |
| CLK | |
| CS | |
| GND | |
| 5 V | |

| voltage | 3.3-5 VDC |
|------------------|-----------------|
| dimensions | 52 x 30 x 12 mm |
| weight | 8 g |
| protocol | SPI |
| required library | |
| | |

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