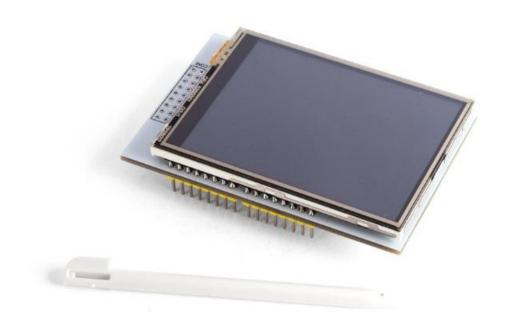


# **MAKEVMA412**

# 2.8 INCH TOUCH SCREEN FOR ARDUINO® UNO/MEGA





# **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

- Familiarise yourself with the functions of the device before actually using it.
- 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.
- 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.



- 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.

#### **MAKEVMA412**

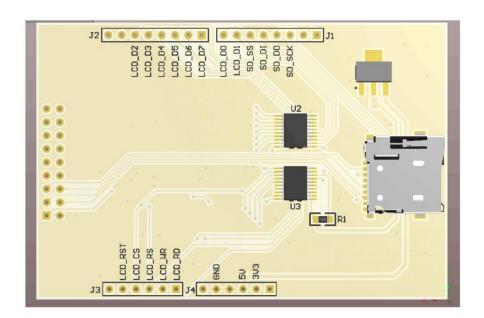
#### 4. What is Arduino®

Arduino<sup>®</sup> is an open-source prototyping platform based in easy-to-use hardware and software. Arduino<sup>®</sup> 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<sup>®</sup> software IDE (based on Processing).

Surf to <a href="www.arduino.org">www.arduino.org</a> for more information.

#### 5. Overview

Add a beautiful touch screen to your project with this 2.8" display and a microSD slot on a shield. The shield comes completely assembled, tested and ready-to-use. No cables, no soldering required. Just plug in the shield, load the library and your display will be up and running in less than 10 minutes!



pin	description
LCD_RST	LCD reset pin
LCD_CS	LCD chip select
LCD_RS	LCD register select
LCD_WR	LCD write
LCD_RD	LCD read
GND	ground
5V	5 V
3V3	3.3 V
LCD_D0	LCD data bit 0
LCD_D1	LCD data bit 1
LCD_D2	LCD data bit 2
LCD_D3	LCD data bit 3
LCD_D4	LCD data bit 4
LCD_D5	LCD data bit 5
LCD_D6	LCD data bit 6
LCD_D7	LCD data bit 7
SD_SS	SD card slave select
SD_DI	SD card serial data in
SD_DO	SD card serial data out
SD_SCK	SD card serial clock

#### MAKEVMA412

resolution	
colour depth	
system interface	
8-bits, 9-bits, 16-bits, 18-bits interface with 8080-I /8080-II series MCU	
6-bits, 16-bits, 18-bits RGB interface with graphic controller	
3-line / 4-line serial interface	
display mode	
full-colour mode (Idle mode OFF). 262 000 colour (selectable colour depth mode by software)	
reduced colour mode (Idle mode ON)8-colour	
operating temperature40 °C to +85 °C	

# © COPYRIGHT NOTICE

**All worldwide rights reserved.** No part of this manual may be copied, reproduced, translated or reduced to any electronic medium or otherwise without the prior written consent of the copyright holder.