

16×2 Green Serial LCD

User's Guide 2760283



Thank you for purchasing your 16×2 Green Serial LCD from **RadioShack**. Please read this user's guide before using your new shield.

Note: This serial LCD is shipped in protective anti-static packaging. To avoid high electrostatic potentials, a grounding strap or similar protective device should be used when handling the LCD.

Package Contents

• 16×2 Serial LCD • User's Guide

Features

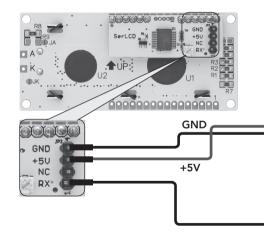
- Controls a parallel based LCD over a singlewire serial interface
- Adjustable contrast

Power Requirements

The Serial LCD requires stable 5 V power supply.

Connect to the Board

 Connect the connector end of the jumper wires (not included) into the pin header on the back of the serial LCD board.

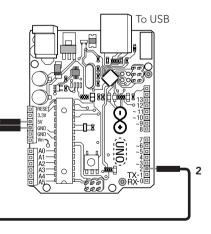


2. Connect the pins:

+5V to +5V

RX to 2

GND to **GND**



Programming the LCD

The Serial LCD interface uses the Arduino LiquidCrystal library. For library information, refer to your Arduino documentation.

RadioShack provides online support files and an example program for download.

- **1.** For schematics and example programs, go to http://Shack.net/LCD0283.
- At the end of the blog post, click RadioShack Serial LCD Support Files and save the folder to your computer. The example program is called 16x2_SerialLCD_example.ino.

Adjusting the Contrast

The Serial LCD includes a potentiometer to adjust the contrast.



FCC Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Separate the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Limited Warranty

RadioShack warrants this product against defects in materials and workmanship under normal use by the original purchaser for ninety (90) days after the date of purchase from a RadioShack-owned store or an authorized RadioShack franchisee or dealer. RADIOSHACK MAKES NO OTHER EXPRESS WARRANTIES

This warranty does not cover: (a) damage or failure caused by or attributable to abuse, misuse, failure to follow instructions, improper installation or maintenance, alteration, accident, Acts of God (such as floods or lightning), or excess voltage or current; (b) improper or incorrectly performed repairs by persons who are not a **RadioShack** Authorized Service Facility; (c) consumables such as fuses or batteries; (d) ordinary wear and tear or cosmetic damage; (e) transportation, shipping or insurance costs; (f) costs of product removal, installation, set-up service, adjustment or reinstallation; and (g) claims by persons other than the original purchaser.

Should a problem occur that is covered by this warranty, take the product and the *RadioShack* sales receipt as proof of purchase date to any *RadioShack* store in the U.S. *RadioShack* will, at its option, unless otherwise provided by law: (a) repair the product without charge for parts and labor; (b) replace the product with the same or a comparable product; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of *RadioShack*.

New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

RADIOSHACK EXPRESSLY DISCLAIMS ALL WARRANTIES AND CONDITIONS NOT STATED IN THIS LIMITED WARRANTY. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND, IF APPLICABLE, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, SHALL EXPIRE ON THE EXPIRATION OF THE STATED WARRANTY PERIOD.

EXCEPT AS DESCRIBED ABOVE, RADIOSHACK SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO THE PURCHASER OF THE PRODUCT OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE AND ANY LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT AND ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RADIOSHACK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. You may contact *RadioShack* at:

RadioShack Customer Relations 300 RadioShack Circle Fort Worth, TX 76102 04/08

www.RadioShack.com

©2013. *RadioShack* Corporation. All rights reserved. *RadioShack* is a trademark used by *RadioShack* Corporation.

Printed 05A13 in China 2760283