**WARNINGs AND CAUTIONS**

- **WARNING: TO AVOID SERIOUS PERSONAL INJURY** never push objects of any kind into this product through openings, as they may touch dangerous voltages.
- **WARNING: TO AVOID SERIOUS PERSONAL INJURY** never touch uninsulated wires or terminals unless the wiring has been disconnected at the network interface.
- Read and understand all instructions. Follow all warnings and instructions marked on the product.

**DESCRIPTION**

Leviton Quantran™ mBus control stations are a flexible, easy to configure control interface to Quantran mBus load control devices. Offered in multiple scene configurations and finishes, a device is available to fit every lighting control need.

**POWER CONSIDERATIONS**

**Input:** mBus Stations Require 8-18VDC  
**Current draw:** 10mA

Standard dc Voltage Drop calculations should be used to ensure that your voltage is always greater than the minimum. If you’re using 18AWG Belden 1502R with a resistance of 0.0069ohms/foot, the following formula can be used:

\[ V_{drop} = \text{Total Load (Amps)} \times \text{Run Length (Feet)} \times 0.0069 \text{ Ohms/Foot} \]

**NOTE:** Assuming you’re using a 12Vdc Supply, and you’ll allow a voltage drop of 12V-8V=4V, the formula can be simplified to:  
\[ \text{Max Run (Feet)} = \frac{4}{(\text{Total Load (Amps)} \times 0.0069)} \]

**INSTALLATION**

- Product is designed to fit into a single gang 3” x 3” back box, not included.
- Follow best industry practices for installation.
- Product requires commissioning by a Leviton field commissioning agent after installation.

**NOTE:** The mounting surface must be flat to avoid distortion of the back plate, which may prevent the cover plate fitting correctly. For the same reason, do not over-tighten the fixing screws.

**TERMINATIONS**

Use RS485 compatible cable for communications. RS-485 requires a single Twisted Pair, 24 AWG minimum.

- Connect Data+, Data-, Common, +V, and shield at every station (see Table 1).
- Do not splice control wire.
- Shield shall be connected to ground at the dimmer rack and must only be connected to ground at one point in the system.
- Normal Impedance of wire shall be between 100-120 ohms.
- A second pair of stranded wire is required for the power.
- We strongly recommend the use of either Leviton #WIRLN-500, Belden 1502R, or equivalent be used for wire runs.

**OPERATION**

- Scene buttons are used to recall pre-programmed scenes. Reference dimmer modules installation instructions for details on programming.
- Raise/Lower buttons are used to raise or lower the last selected scene.
- Off turns the lights off.
- The IR Receiver can be used with the IR remote to execute the above functions.

**Table 1**

<table>
<thead>
<tr>
<th>Pin #</th>
<th>Function</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data +</td>
<td>Connect on every station, use one conductor of a twisted pair</td>
</tr>
<tr>
<td>2</td>
<td>Data -</td>
<td>Connect on every station, use the second conductor of a twisted pair</td>
</tr>
<tr>
<td>3</td>
<td>Common</td>
<td>Connect on every station – even if not using power</td>
</tr>
<tr>
<td>4</td>
<td>+V</td>
<td>+12-24Vdc</td>
</tr>
</tbody>
</table>

WEB VERSION
WIRING DIAGRAMS

Model 1143R1

Common (Belden 1502 Black)

Data + (Belden 1502 Blue)

Data - (Belden 1502 White)

Shield

+V (Belden 1502 Red)

Model 1113R1

Common (Belden 1502 Black)

Data + (Belden 1502 Blue)

Data - (Belden 1502 White)

Shield

+V (Belden 1502 Red)

Copyright and Trademark Information
This document and all its contents herein are subject to and protected by international copyright and other intellectual property rights and are the property of Leviton Manufacturing Co., Inc., its subsidiaries, affiliates and/or licensors. Use herein of third party trademarks, service marks, trade names, brand names and/or product names are for informational purposes only, are may be the trademarks of their respective owners; such use is not meant to imply affiliation, sponsorship, or endorsement.

No part of this document may be reproduced, transmitted or transcribed without the express written permission of Leviton Manufacturing Co., Inc.

Quantran is a registered trademark in Australia, Bahrain, China P.R., Great Britain, Hong Kong, India, Jordan, Kuwait, Malaysia, New Zealand, Oman, Qatar, Saudi Arabia, South Africa, Vietnam, and other countries pending.

LIMITED 2 YEAR WARRANTY AND EXCLUSIONS
Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for two years from the purchase date. Leviton’s only obligation is to correct such defects by repair or replacement, at its option. For details visit www.leviton.com or call 1-800-824-3005. This warranty excludes any there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to two years. Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

For Technical Assistance 1-800-959-6004
LESTechSupport@Leviton.com

www.leviton.com