

## Warranty

Robotics Technologies, Inc. (RTI) warrants its products to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase. Its obligation under this warranty is limited to repairing or replacing at its own sole option any such defective products. To obtain service under this warranty you must obtain a Return Material Authorization (RMA) number from RTI. Products must be returned to RTI with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment that has been damaged by accident, negligence or misapplication or has been altered or modified in any way. This warranty applies only to the original purchaser.

The Bus-Scan® Light Control is not a security or detection device. It is used as an aid for the driver to physically check seats.

It is the responsibility of the customer to ensure secure mounting and the continued maintenance thereof. Customer will indemnify RTI and hold it harmless from all actions or litigation arising from misuse of or improper mounting of the Bus-Scan® Light Control.

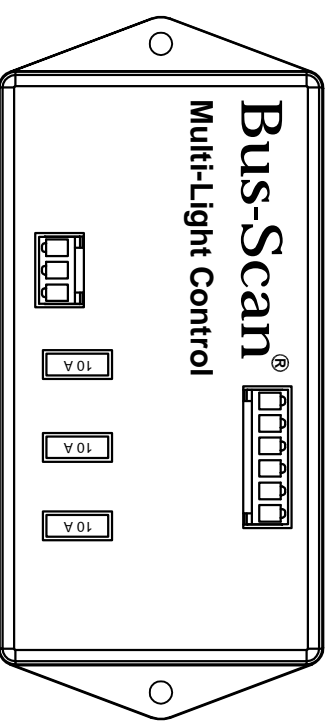
EXCEPT AS PROVIDED HEREIN RTI MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore the aforesaid limitation(s) or exclusion(s) may not apply to purchaser.

EXCEPT AS PROVIDED ABOVE, IN NO EVENT WILL RTI BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS PRODUCT EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. Specifically, RTI is not liable for any costs such as loss of profits or revenue, loss of service, loss of equipment, costs of substitutes, and claims by third parties or otherwise. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

**RTI** Robotics  
Technologies, Inc  
Joliet, IL Made in U.S.A

# BUS-SCAN®

## Multi-Light Control



## Installation Guide

### Operation Guide

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www.robotech.com

## ***Bus-Scan Multi-Light Control System Operation***

The Bus-Scan Light Control operates as follows:

When the Ignition is cycled from on to off, the Bus-Scan Light Control illuminates the interior lights for a period of 2 minutes, then releases control of the lights. Any time the ignition is "on", the Bus-Scan Light Control will release control of the lights and again wait for the ignition "off" state.

\* Other times are available upon request.

## ***Specifications***

Dimensions: 4.25 x 2.25 x 1.5

Weight : 4 Oz

Material: Flame retardant ABS plastic

Flame Rating: UL-94V-0 (ID-3420 rated UL94-5VA)

Each Lighting Circuit Fused At 10 Amps

## ***Return Policy***

For Warranty Service, call Robotics Technologies, Inc. Customer Service to obtain an RMA (Return Materials Authorization), and then return the product postage prepaid to Robotics Technologies, Inc. The RMA number should be written clearly on the outside of the box. Please enclose a brief explanation of the problem, so that we can more efficiently diagnose your item and ensure timely service.

## ***Contact Information***

For support, please contact Robotics Technologies, Inc. or a Robotics Technologies Authorized Dealer.

Robotics Technologies, Inc.

20655 Burl Court

Joliet, IL 60433

Phone (800) 995-6056

Fax (815) 722-7665

Website: [www.roboticstech.com](http://www.roboticstech.com)

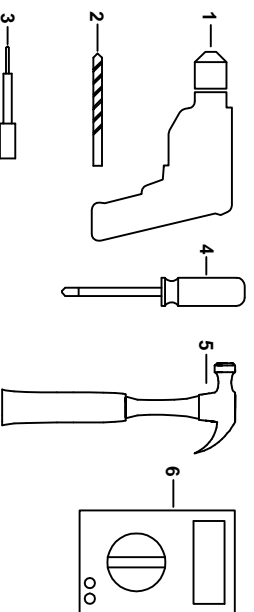
## ***System Testing***

- 1 Cycle Ignition on then off.
  - a) Interior lights should turn on.
  - b) After 2 minutes the lights will shut off.
- 2 Cycle Ignition on then off.
  - a) Interior lights should turn on.
  - b) Turn the Ignition back on.
  - c) Lights should turn off.
- 3 With the Ignition on.
  - a) Interior lights should operate normally with their individual switches.

## ***Trouble Shooting***

- 1 Lights will not operate automatically or with dome light switch
  - a) Improper wiring.  
Check wiring diagram.
  - b) Fuse is blown.  
Replace with 10 Amp Fuse.
- 2 Lights will operate with dome light switch only.
  - a) Multi-Light Control not powered up.  
Make sure the Red is connect to a constant 12V and the Black wire is connected to a good ground.
  - b) Questionable Ignition source.  
The brown wire should be 12V when the Ignition is on and 0V when the ignition is off.
  - c) The Solid and Striped wires are reversed.  
Check the wiring.

## Required Tools



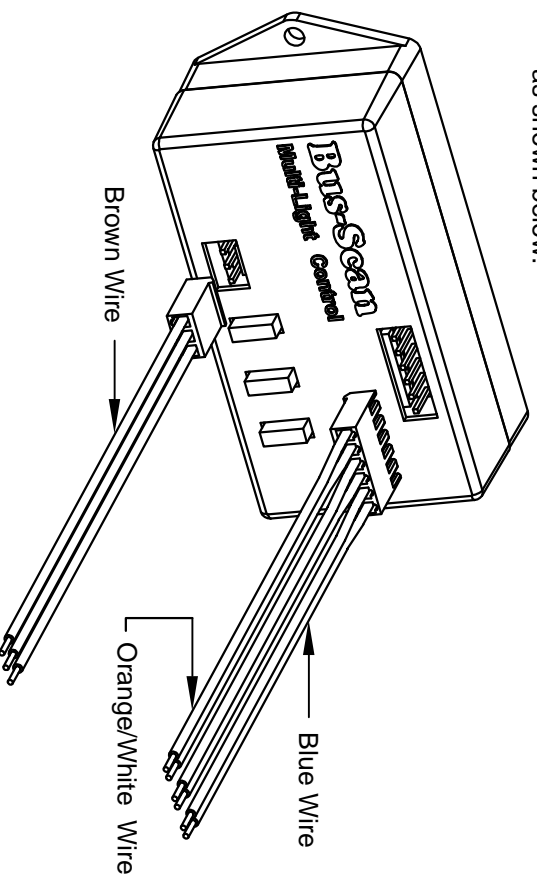
The following tools are required to install the BS 200

- 1 Electric drill
- 2 1/8" drill bit
- 3 Center punch
- 4 Phillips head screwdriver
- 5 Hammer
- 6 Multi meter

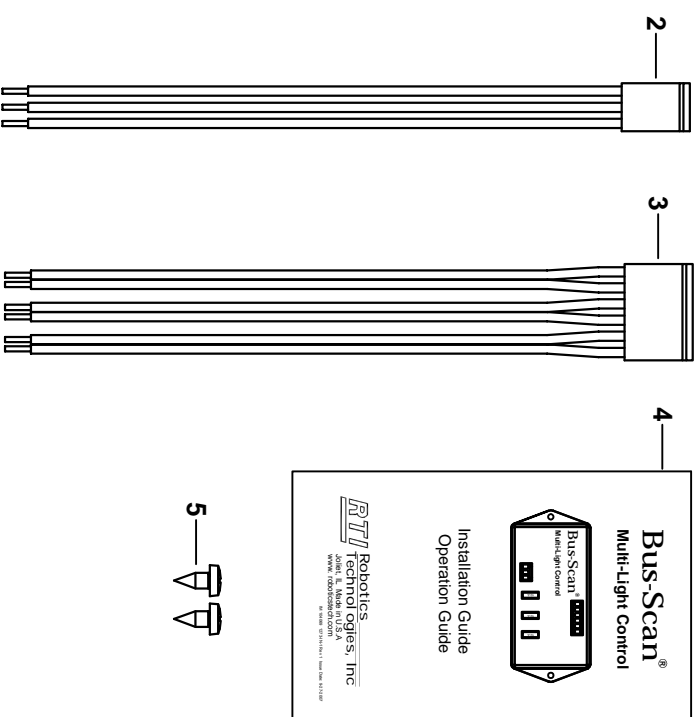
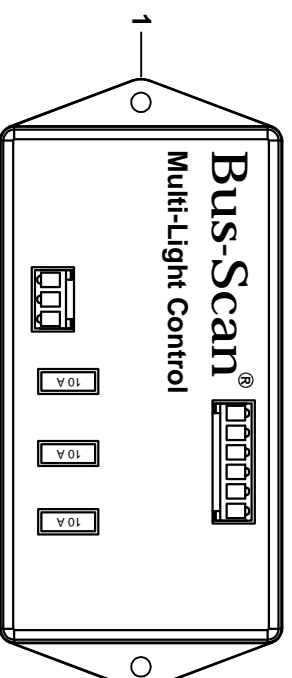
## Installation Instructions

### Mounting the Bus-Scan Multi-Light Control

- 1 Locate a suitable location near the light controls.
- 2 Center Punch and drill (2) 1/8" mounting holes.
- 5 Attach the Bus-Scan Multi-Light Control to the bus using (2) supplied #8 x 3/8" sheet metal screws.
- 3 Wire the Bus-Scan Multi-Light Control according to the wiring instructions.
- 4 Attach the wiring harnesses to the Bus-Scan Multi-Light Control as shown below.

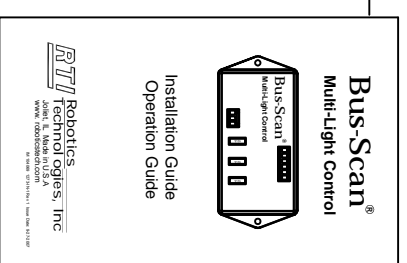


## Supplied Components

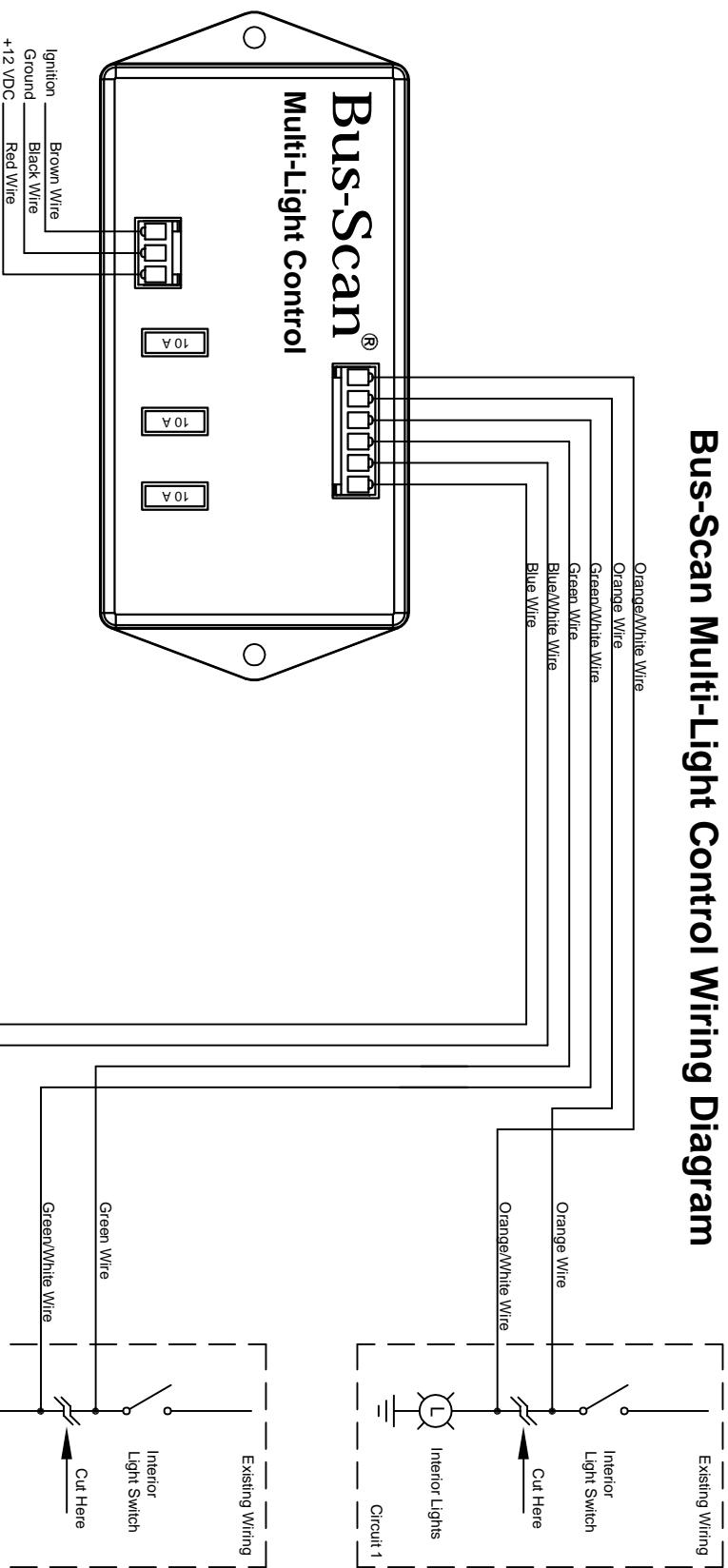


The following components are included with the Bus-Scan Multi-Light Control

- 1) Bus-Scan Multi-light Control (1)
- 2) Power Harness (1)
- 3) Light Harness (1)
- 4) Bus-Scan Multi-Light Installation and operations guide (1)
- 5) # 8 x 3/8" sheet metal screws (2)



# Bus-Scan Multi-Light Control Wiring Diagram



When activated, the Bus-Scan Light Control fully isolates and powers up to 3\* lighting circuits and then returns full functionality back to the bus .

The Wiring Steps are:

- 1) Connect the Red wire to a constant +12v.
- 2) Connect the Black wire to chassis ground.
- 3) Connect the Brown wire to the ignition circuit.
- 4) Cut the load (light) side of the Interior Light Switch wire.
- 5) Connect the Solid Color wire to the switch side of the cut wire.
- 6) Connect the Striped wire to the interior light side of cut the wire.
- 7) Follow steps 4-6 for each lighting circuit required.

\* If more than 3 circuits need to be controlled, a Light Control Slave Module Part #104078 is available.