

# NXT-1R/-3R/-5R Reader

## Installation Guide

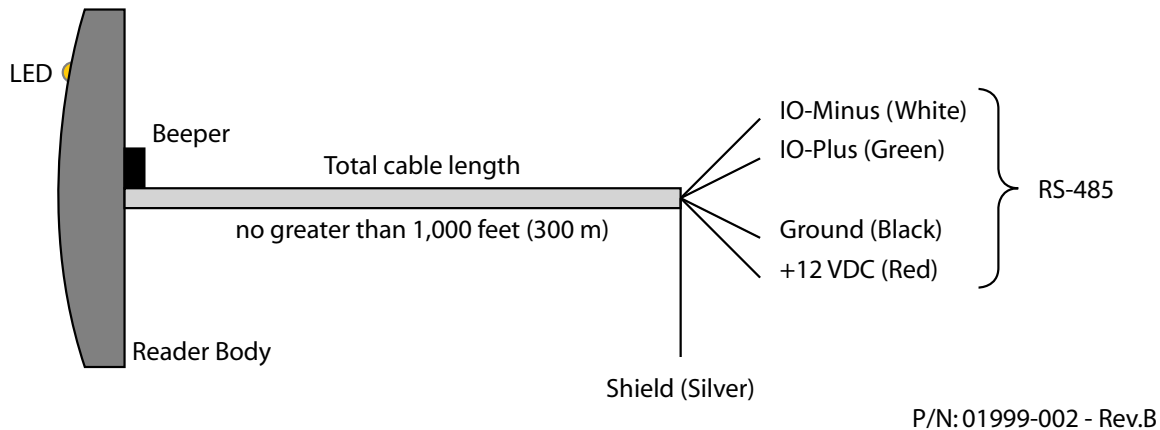
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## 1.0 Wiring and Layout Diagrams

### 1.1 NXT-1R/-3R/-5R Readers

#### NXT-1R/-3R/-5R Installation Drawing



- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
- Changes to this equipment not expressly approved by Keri Systems, Inc. may void FCC certification and the user's authority to operate this equipment.
- Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## 2.0 Specifications

### 2.1 NXT-Reader Dimensions

- NXT-1R Euro Mount Prox Reader
  - 3.25 inches tall by 3.25 inches wide by 0.5625 inches deep, not including wiring connectors
  - 8.25 cm by 8.25 cm by 1.43 cm
- NXT-3R Mullion Reader
  - 3.75 inches tall by 1.625 inches wide by 0.50 inches deep
  - 9.52 cm by 4.13 cm by 1.27 cm
- NXT-5R Wall Switch Reader
  - 4.50 inches tall by 3.00 inches wide by 0.625 inches deep, not including wiring connectors
  - 11.43 cm by 7.62 cm by 1.59 cm

### 2.2 Power/Current Requirements

- 10 to 14 VDC @ 120 mA (maximum current draw at 12 VDC)

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### 2.3 Operating Conditions

- 40°F to 150°F (-40°C to 65°C) – 0% to 90% Relative Humidity, non-condensing

### 2.4 Cable Requirements

RS-485 bus runs can daisy-chain together an NXT-4x4 and NXT-Reader on one line. The total distance for this cable run should be no greater than 500 feet from the NXT controller for runs with 4x4s and no greater than 1,000 feet for runs with Readers only.

*NOTE: On long cable runs, cable resistance causes a drop in voltage at the end of the cable run. Ensure the appropriate power and current for your device is available **at the device** at the end of the cable run.*

**Table 1: Cable Requirements**

Connection	Total Run Length	# of Conductors	Shielded	Stranded	Twisted -Pair	AWG <sup>a</sup>	Belden Equivalent
RS-485 bus from NXT-2D/-4D to NXT-4x4 (with or without 1R/-3R/-5R Readers)	up to 500 feet	4	Y	Y	Y	18 Pwr 22 Data	8723
RS-485 bus from NXT-2D/-4D to 1R/-3R/-5R Readers only	up to 1,000 feet	4	Y	Y	Y	22	8723

a. Heavier gauges than those listed are always acceptable.

### 3.0 Product Documentation

All Keri technical documentation can be found on the Keri CD in the Technical Documentation folder or online at <http://www.kerisys.com/pages/download/techdocs.asp>.

### 4.0 Contact Keri Systems

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