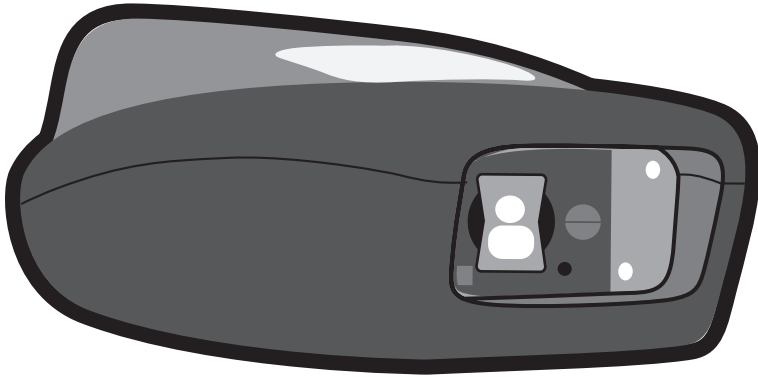


# USER MANUAL



# CR1100

MANUAL VERSION 01  
RELEASE DATE: JANUARY 2019



[www.codecorp.com](http://www.codecorp.com)



Configuration Guide

**code**<sup>®</sup>  
Expect More.

## Statement of Agency Compliance

NOTE: 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.
- Increase the separation between 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.

### Industry Canada (IC)

This device complies with Industry Canada licence-exempt RSS standard(s). 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.

### Industrie Canada (IC)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Code Reader™ CR1100 User Manual

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The Code Reader software uses the Mozilla SpiderMonkey JavaScript engine, which is distributed under the terms of the Mozilla Public License Version 1.1.

The Code Reader software is based in part on the work of the Independent JPEG Group.

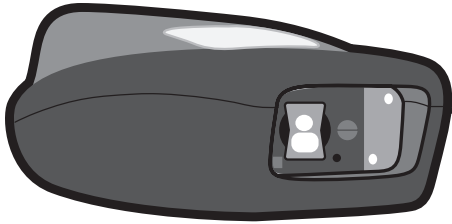
Code Corporation, 12393 S. Gateway Park Place, Ste. 600, Draper, Utah 84020

[www.codecorp.com](http://www.codecorp.com)

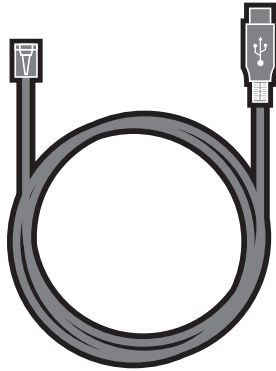
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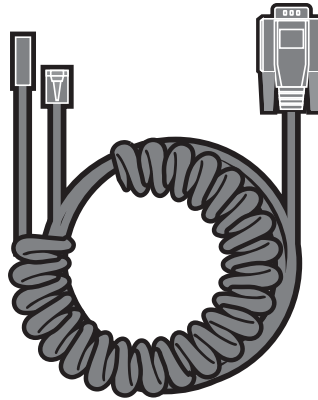
# 1.0 - Included Items if Ordered



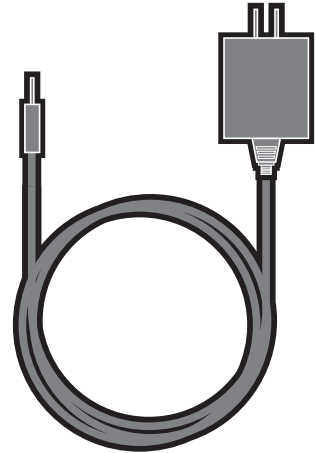
CR1100



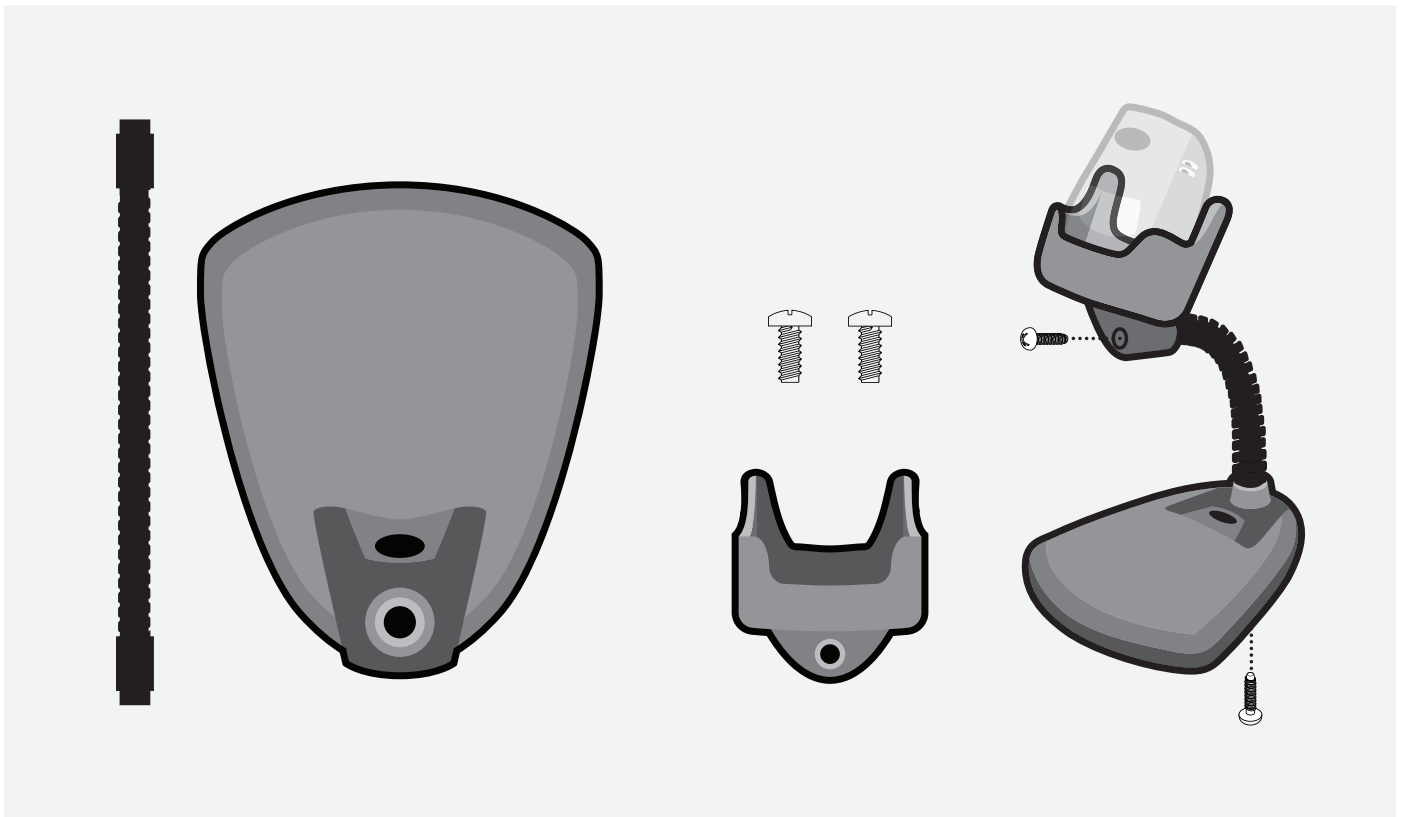
USB 2.0 Cable



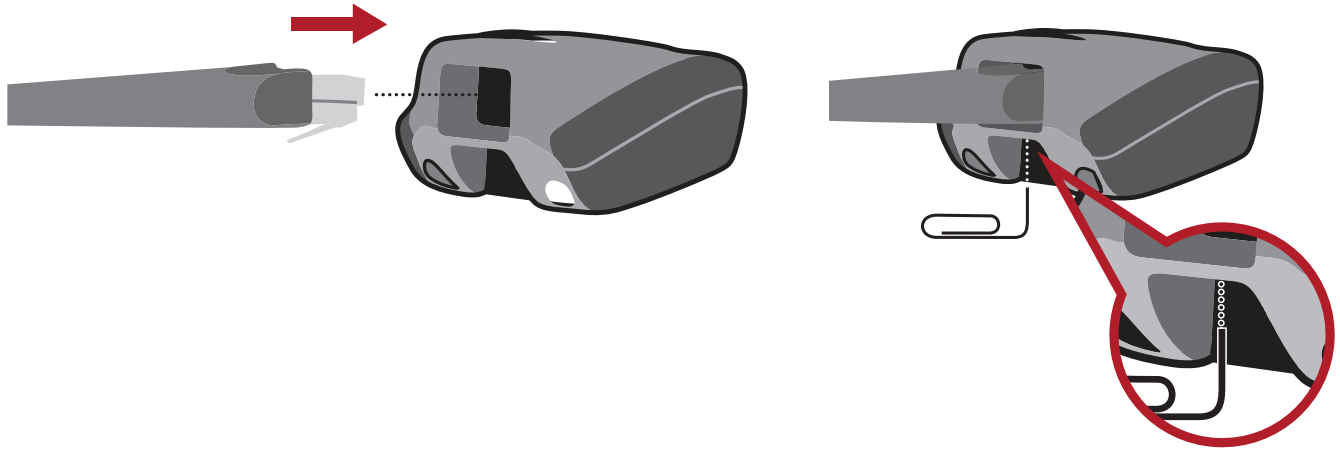
RS232 Cable



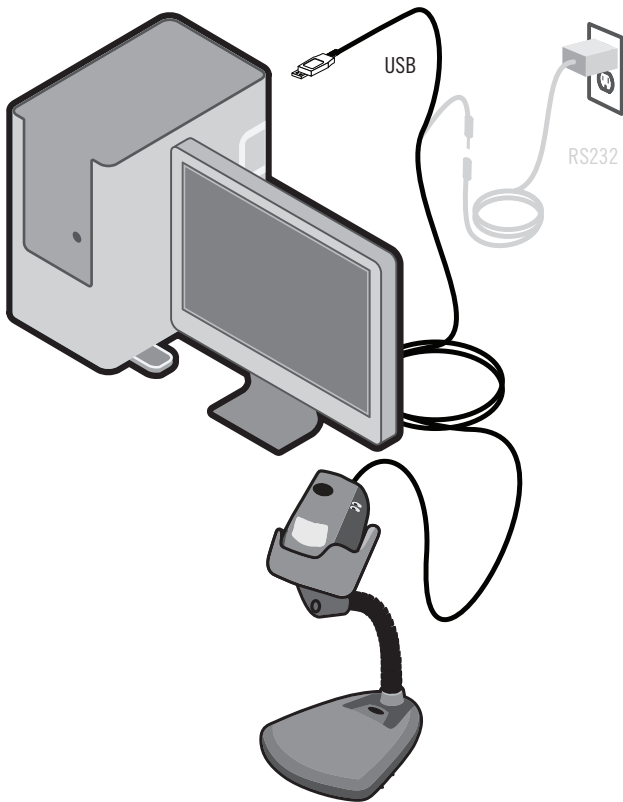
5VDC  
Power Supply







## 2.0 - Attaching and Detaching a Cable

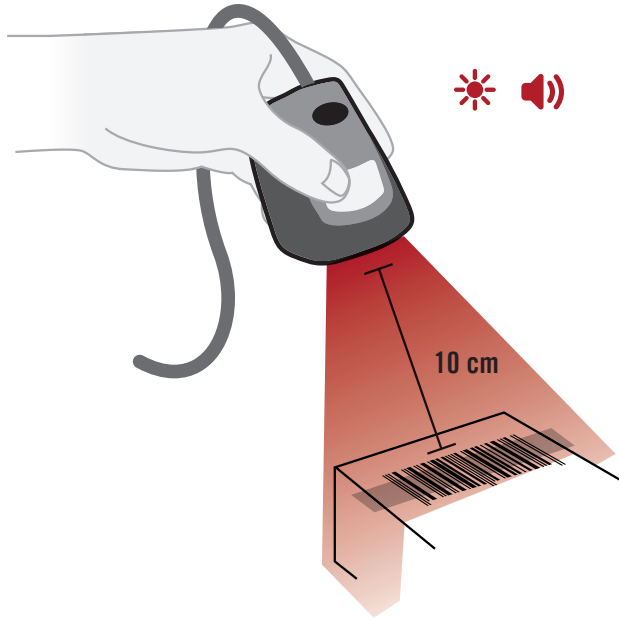


## 3.0 - Set Up

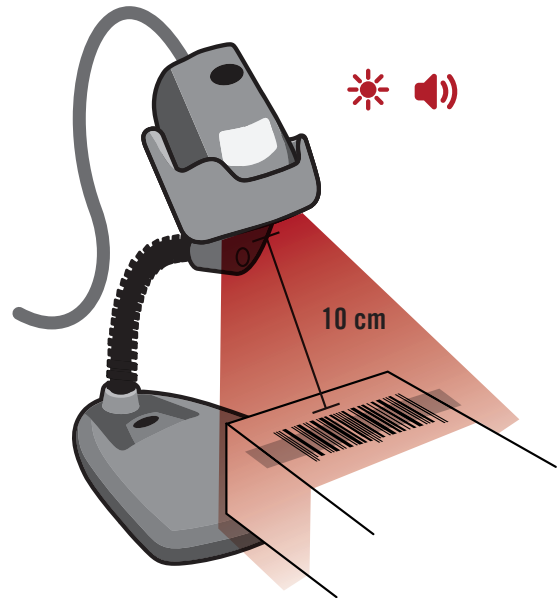


- ①  Plug in
- ②  Wait 2 seconds  
2 Sec.
- ③  LED will flash
- ④  Reader will beep  
2x

## 4.0 - Using a CR1100 Out of a Stand



## 5.0 - Using a CR1100 In a Stand



## 6.0 - Typical Reading Ranges

Test Barcode	Min Inches (mm)	Max Inches (mm)
3 mil Code 39	3.3" (84 mm)	4.3" (109 mm)
7.5 mil Code 39	1.9" (47 mm)	7.0" (177 mm)
10.5 mil GS1 DataBar	0.6" (16 mm)	7.7" (196 mm)
13 mil UPC	1.3" (33 mm)	11.3" (286 mm)
5 mil DM	1.9" (48 mm)	4.8" (121 mm)
6.3 mil DM	1.4" (35 mm)	5.6" (142 mm)
10 mil DM	0.6" (14 mm)	7.2" (182 mm)
20.8 mil DM	1.0" (25 mm)	12.6" (319 mm)

Note: Working ranges are a combination of both the wide and high density fields. All samples were high quality barcodes and were read along a physical center line at a 10° angle. Measured from the front of the reader with default settings. Testing conditions may impact reading ranges.

## 7.0 - Reader Feedback

Scenario	Top LED Light	Sound
CR1100 Successfully Powers Up	Green LED Flashes	1 Beep
CR1100 Successfully Enumerates with Host (via cable)	Once Enumerated, the Green LED turns Off	1 Beep
Attempting to Decode	Green LED Light is Off	None
Successful Decode and Data Transfer	Green LED Flashes	1 Beep
Configuration Code Successfully Decoded and Processed	Green LED Flashes	2 Beeps
Configuration Code successfully decoded but wasn't successfully processed	Green LED Flashes	4 Beeps
Downloading File/Firmware	Amber LED Flashes	None
Installing File/Firmware	Red LED is On	3-4 Beeps*

\*Depending on comm port configuration

## 8.0 - Symbologies Defaulted On

The following are symbologies that have a default of ON. To turn symbologies on or off, scan the symbology barcodes located in the CR1100 Configuration Guide located on our website at [www.codecorp.com/files.php](http://www.codecorp.com/files.php).

Aztec	Data Matrix Rectangle
Codabar	All GS1 DataBar
Code 39	Interleaved 2 of 5
Code 93	PDF417
Code 128	QR Code
Data Matrix	UPC/EAN/JAN

## 9.0 - Symbologies Defaulted Off

Code barcode readers can read a number of barcode symbologies that are not enabled by default. To turn symbologies on or off, scan the symbology barcodes located in the CR1100 Configuration Guide located on our website at [www.codecorp.com/files.php](http://www.codecorp.com/files.php).

Codablock F	Micro PDF417
Code 11	MSI Plessey
Code 32	NEC 2 of 5
Code 49	Pharmacode
Composite	Plessey
Grid Matrix	Postal Codes
Han Xin Code	Standard 2 of 5
Hong Kong 2 of 5	Telepen
IATA 2 of 5	Trioptic
Matrix 2 of 5	
Maxicode	

## 10.0 - Reader ID and Firmware Version

To find out the Reader ID and Firmware version, open a text editor program (i.e., Notepad, Microsoft Word, etc.) and read the Reader ID and Firmware configuration barcode.

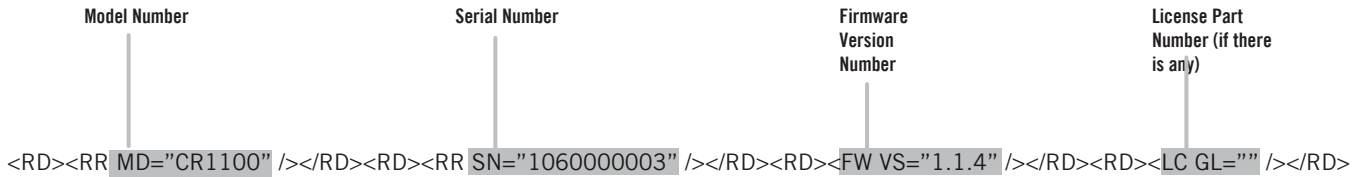
### Reader ID and Firmware



M20361\_01

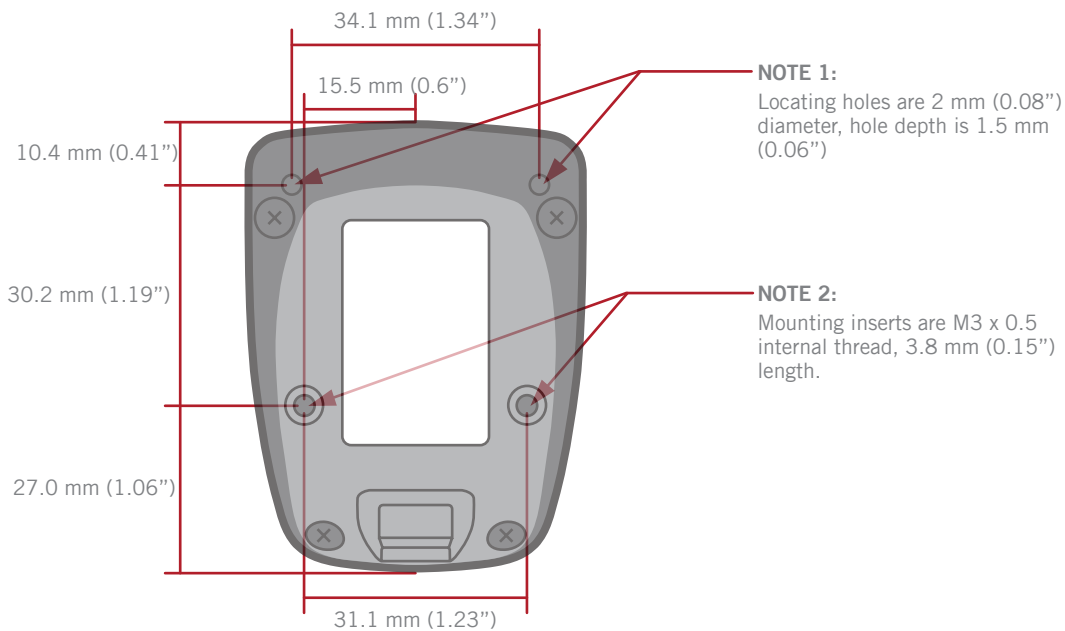
You will see a text string indicating your firmware version and CR1100 ID number.

example: `<RD><RR MD="CR1100" /></RD><RD><RR SN="1060000003" /></RD><RD><FW VS="1.1.4" /></RD><RD><LC GL="" /></RD>`



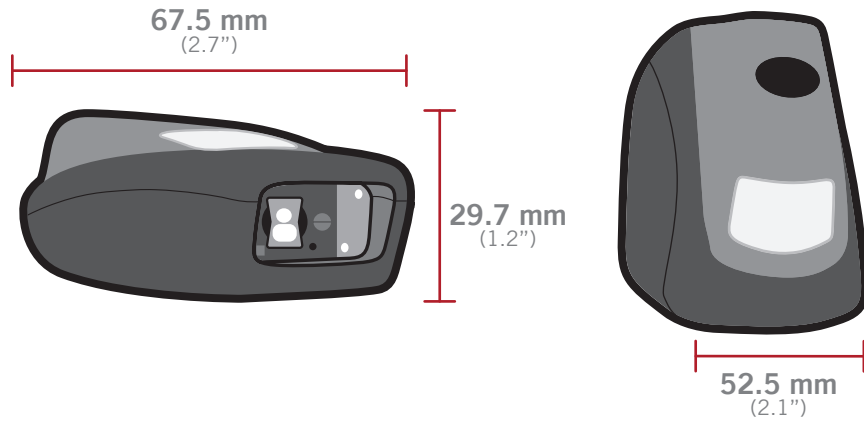
Note: Code will periodically release new firmware for CR1100, which requires CortexTools2 to update. There are also a number of drivers (VCOM, OPOS, JPOS) available on the website. For access to the latest drivers, firmware, and support software, please visit our website at [www.codecorp.com/files.php](http://www.codecorp.com/files.php)

## 11.0 - CR1100 Hole Mounting Pattern





## 12.0 - CR1100 Overall Dimensions



## 13.0 - USB Cable Example with Pinouts

**NOTES:**

1. Maximum Voltage Tolerance = 5V +/- 10%.
2. Caution: Exceeding the maximum voltage will void manufacturer warranty.

CONNECTOR A	NAME	CONNECTOR B
1	VIN	1
2	D-	2
3	D+	3
4	GND	10
SHELL	SHIELD	N/C

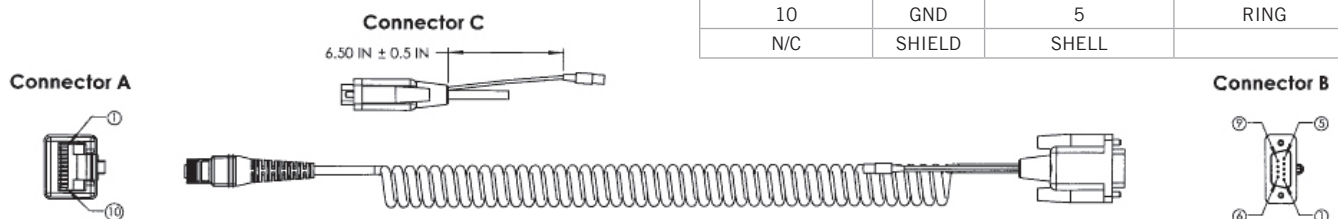


## 14.0 - RS232 Cable Example with Pinouts

**NOTES:**

1. Maximum Voltage Tolerance = 5V +/- 10%.
2. Caution: Exceeding the maximum voltage will void manufacturer warranty.

CONNECTOR A	NAME	CONNECTOR B	CONNECTOR C
1	VIN	1	TIP
4	TX	2	
5	RTS	8	
6	RX	3	
7	CTS	7	
10	GND	5	RING
N/C	SHIELD	SHELL	



## 15.0 - Reader Pinouts

The connector on the CR1100 is an RJ-50 (10P-10C). The pinouts are as follows:

Pin 1	+VIN (5v)
Pin 2	USB_D-
Pin 3	USB_D+
Pin 4	RS232 TX (output from reader)
Pin 5	RS232 RTS (output from reader)
Pin 6	RS232 RX (input to reader)
Pin 7	RS232 CTS (input to reader)
Pin 8	External Trigger (active low input to reader)
Pin 9	N/C
Pin 10	Ground

## 16.0 - CR1100 Maintenance

The CR1100 device needs only a minimum of maintenance to operate. A few tips are given below for maintenance suggestions.

### **Cleaning the CR1100 Window**

CR1100 window should be clean to allow the best performance of the device. The window is the clear plastic piece inside the head of the reader. Do not touch the window. Your CR1100 uses CMOS technology that is much like a digital camera. A dirty window may stop the CR1100 from reading barcodes.

If the window becomes dirty, clean it with a soft, non-abrasive cloth or a facial tissue (no lotions or additives) that has been moistened with water. A mild detergent may be used to clean the window, but the window should be wiped with a water moistened cloth or tissue after using the detergent.

### **Technical Support and Returns**

For returns or technical support call Code Technical Support at (801) 495-2200. For all returns Code will issue an RMA number which must be placed on the packing slip when the reader is returned. Visit [www.codecorp.com/codesupport.php](http://www.codecorp.com/codesupport.php) for more information.

## 17.0 - Warranty

The CR1100 carries a standard two year limited warranty as described herein. Extended warranty periods may be available with a CodeOne Service Plan. Stand and Cables have a 30 day warranty period.

**Limited Warranty.** Code warrants each Code product against defects in materials and workmanship under normal use for the Warranty Coverage Term applicable to the product as described at [www.codecorp.com/legal/warranty/term.php](http://www.codecorp.com/legal/warranty/term.php). If a hardware defect arises and a valid warranty claim is received by Code during the Warranty Coverage Term, Code will either: i) repair a hardware defect at no charge, using new parts or parts equivalent to new in performance and reliability; ii) replace the Code product with a product that is new or refurbished product with equivalent functionality and performance, which may include replacing a product that is no longer available with a newer model product; or iii) in the case of failure with any software, including embedded software included in any Code product, provide a patch, update, or other work around. All replaced products become the property of Code. All warranty claims must be made using Code's RMA process.

**Exclusions.** This warranty does not apply to: i) cosmetic damage, including but not limited to scratches, dents, and broken plastic; ii) damage resulting from use with non-Code products or peripherals, including batteries, power supplies, cables, and docking station/cradles; iii) damage resulting from accident, abuse, misuse, flood, fire or other external causes, including damage caused by unusual physical or electrical stress, immersion in fluids or exposure to cleaning products not approved by Code, puncture, crushing, and incorrect voltage or polarity; iv) damage resulting from services performed by anyone other than a Code authorized repair facility; v) any product that has been modified or altered; vi) any product on which the Code serial number has been removed or defaced. If a Code Product is returned under a warranty claim and Code determines, in Code's sole discretion, that the warranty remedies do not apply, Code will contact Customer to arrange either: i) repair or replace the Product; or ii) return the Product to Customer, in each case at Customer's expense.

**Non Warranty Repairs.** Code warrants its repair/replacement services for ninety (90) days from the date of shipment of the repaired/replacement product to the Customer. This warranty applies to repairs and replacements for: i) damage excluded from the limited warranty described above; and ii) Code Products on which the limited warranty described above has expired (or will expire within such ninety (90) day warranty period). For repaired product this warranty covers only the parts that were replaced during the repair and the labor associated with such parts.

**No Extension of Term of Coverage.** Product that is repaired or replaced, or for which a software patch, update, or other work around is provided, assumes the remaining warranty of the original Code Product and does not extend the duration of the original warranty period.

**Software and Data.** Code is not responsible for backing up or restoring any of software, data, or configuration settings, or reinstalling any of the foregoing on products repaired or replaced under this limited warranty.

**Shipping and Turn Around Time.** The estimated RMA turn-around time from receipt at Code's facility to shipment of the repaired or replaced product to Customer is ten (10) business days. An expedited turn-around time may apply to products covered under certain CodeOne Service Plans. Customer is responsible for shipping and insurance charges for shipping Code Product to Code's designated RMA facility and repaired or replaced product is returned with shipping and insurance paid by Code. Customer is responsible for all applicable taxes, duties, and similar charges.

**Transfer.** If a customer sells a covered Code Product during the Warranty Coverage Term, then that coverage may be transferred to the new owner by written notification from the original owner to Code Corporation at:

CodeOne Service Center  
12393 South Gateway Park Place, Suite 600  
Draper, UT 84020

**Limitation on Liability.** Code's performance as described herein shall be Code's entire liability, and the Customer's sole remedy, resulting from any defective Code product. Any claim that Code has failed to perform its warranty obligations as described herein must be made within six (6) months of the alleged failure. Code's maximum liability related to its performance, or failure to perform, as described herein shall be limited to the amount paid by Customer for the Code product that is subject to the claim. In no event will either party be liable for any lost profits, lost savings, incidental damage, or other economic consequential damages. This is true even if the other party is advised of the possibility of such damages.

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