User Manual

code

Code Reader 1000™

Manual Version 01
Release Date: January 2011

Statement of Agency Compliance

The Code Reader 1000 has been tested for compliance with FCC regulations and was found to be compliant with all applicable FCC Rules and Regulations.

IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, this device must not be co-located or operate in conjunction with any other antenna or transmitter.

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

The Code Reader 1000 has been tested for compliance to CE standards and guidelines and was found to conform to applicable CE standards, specifically the EMC requirements EN 55024, ESD EN 61000-4-2, Radiated RF Immunity EN 61000-4-3, ENV 50204, EFT EN 61000-4-4, Conducted RF Immunity EN 61000-4-6, EN 55022, Class B Radiated Emissions, and Class B Conducted Emissions.

Code voids product warranty if the hard case has been opened or tampered with in any way.

In addition, a CB Test Certificate has been issued by the National Certification Board (NCB) indicating CR1000 meets all safety and quality standards in accordance to IEC 60950-1:2001, First Edition.

Code Reader 1000 User Manual

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www.codecorp.com

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1.0 - Unpacking

Remove the CR1000 from its packing and inspect it for damage. If the reader was damaged during shipping, please call Code at (801) 495-2200.

The CR1000 is shipped with one of the following cables attached:

6' USB
Straight Cable

8' RS232 Coiled Cable
w/ Power Supply

2.0 - Powering On/Off the Reader

For USB: to power up the reader, simply plug the USB cable provided into the reader and USB port on the host device. After several seconds, the unit will beep twice, the LED will turn off and the CR1000 is ready for use.

For RS232: to power up the reader, simply plug the RS232 cable provided into the reader, plug the Power Supply into the AC outlet, plug the power supply cord into the barrel jack on the cable, and lastly connect the cable to the appropriate serial port on the host device.

After several seconds, the unit will beep twice, the LED will turn off and the CR1000 is ready for use.

3.0 - Detaching a Cable

To detach a cable, press a paper clip into the hole on the back of the CR1000, and gently pull the cable from the reader.

4.0 - Reading Ranges

CR1000 Performance		
Test Code	Min Inches (mm)	Max Inches (mm)
3 mil Code 39	3.9" (100 mm)	5.0" (125 mm)
7.5 mil Code 39	2.2" (55 mm)	8.0" (205 mm)
13 mil UPC	2.0" (50 mm)	10.8" (275 mm)
4.2 mil Data Matrix	3.7" (95 mm)	4.7" (120 mm)
5 mil Data Matrix	3.7" (95 mm)	5.5" (140 mm)
6.3 mil Data Matrix	3.1" (80 mm)	6.3" (160 mm)
10 mil Data Matrix	1.6" (40 mm)	7.9" (200 mm)
20.8 mil Data Matrix	1.6" (40 mm)	12.2" (310 mm)

Note: working ranges are a combination of both the wide and high density fields. All samples were high quality codes and were read along a physical center line at a 10° angle. Default AGC settings were used. Accuracy= +/- 10%.

5.0 - Targeting & Reading Distance

The blue bars are used for aiming, center the bars in the center of a bar code and press the LED button to scan. The optimal reading distance is approximately 4.0" (10 cm).

6.0 - Reader Feedback

Scenario	Top LED Button	Sound
CR1000 Successfully Powers Up	Green LED lights Up	1 Beep
CR1000 Successfully Enumerates with Host (via cable)	Once enumerated, the Green LED turns off	1 Beep
Attempting to Decode	Press the top button Green LED light is off	None
Successful Decode and Data Transfer via Cable	Green LED lights Up	1 Beep
Configuration Code Successfully Decoded and Processed	Press the top button the LED does not flash	2 Beeps
Configuration Code Successfully Decoded but wasn't Successfully Processed	Press the top button the LED does not flash	4 Beeps

7.0 - Symbologies Defaulted On

The following are symbologies that have a default of ON. To turn symbologies on or off, scan the symbology bar codes located in the CR1000 Configuration Guide located on our website at http://www.codecorp.com.

Aztec
Codabar
Codabar
Code 39
Code 39 Disable Checksum
Code 39 Short Margin
Code 93
Code 128
Code 128 Short Margin
Data Matrix
All GS1 DataBar
Interleaved 2 of 5
MSI Plessy
NEC 2 of 5
PDF417
Telepen
UPC
UPC Short Margin
UPC Extension

8.0 - Symbologies Defaulted Off

The following are symbologies that have a default of OFF. To turn symbologies on or off, scan the symbology bar codes located in the CR1000 Configuration Guide located on our website at http://www.codecorp.com.

Codablock F
Code 11
Code 39 Extended Full ASCII
Composite
Data Matrix Rectangle
Data Matrix Inverse
Interleaved 2 of 5, 2 Digits
Macro PDF417
Maxicode
Matrix 2 of 5
Micro PDF417
OCR
Postal Codes - All Postal Codes
QR Code

9.0 - 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 following code:

Reader ID and Firmware

M0148_01

You will see a text string indicating your firmware version and CR1000 ID number (see below):

Xap/iVVVVWWWWXXXXSSSSSSSSSSPXX-XX+XXX

Xap/i - Code Internal ID (not applicable)

VVVV is the application firmware version number

WWWW is the Core firmware version number

XXXX is not applicable

SSSSSSSSSS Reader's serial number (ten digits)

P is "A" if running firmware is the application

XXX-XX+XX - Internal ID (not applicable)

Example: Xap/i3000300006040010002363A06D-SD+SQ

Note: Code will periodically release new firmware for CR1000 readers. For information on latest firmware versions, call Code at (801) 495-2200. To upgrade firmware, please visit our website at **http://www.codecorp.com/codesupport.php** and follow instructions provided.

10.0 - CR1000 Hole Mounting Pattern

NOTE 1:
LOCATING HOLES ARE 2MM IN DIAMETER, HOLE DEPTH is 1.5 MM

NOTE 2:
MOUNTING INSERTS ARE M3-.5 INTERNAL THREAD, 3.8MM LENGTH

34.08
15.53
10.36
30.20
27.01
31.12
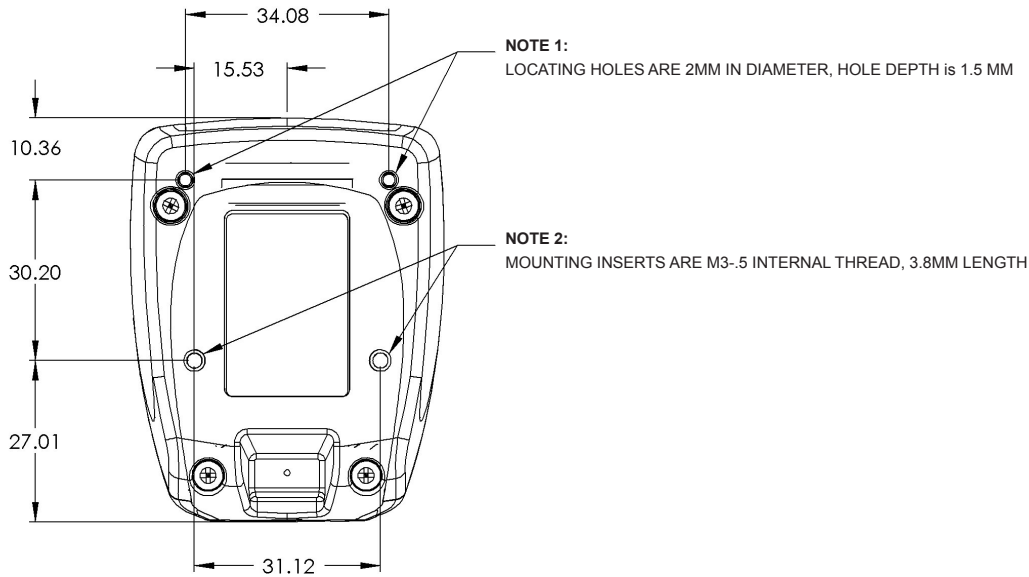
11.0 - CR1000 Overall Dimensions

(67.53)
(29.74)
(24.85)
(52.47)
34.08
30.20
26.88
31.12

INSERT M3-.5 INTERNAL
THREAD, 3.8MM LENGTH
(PERFERED SCREW M3X6)
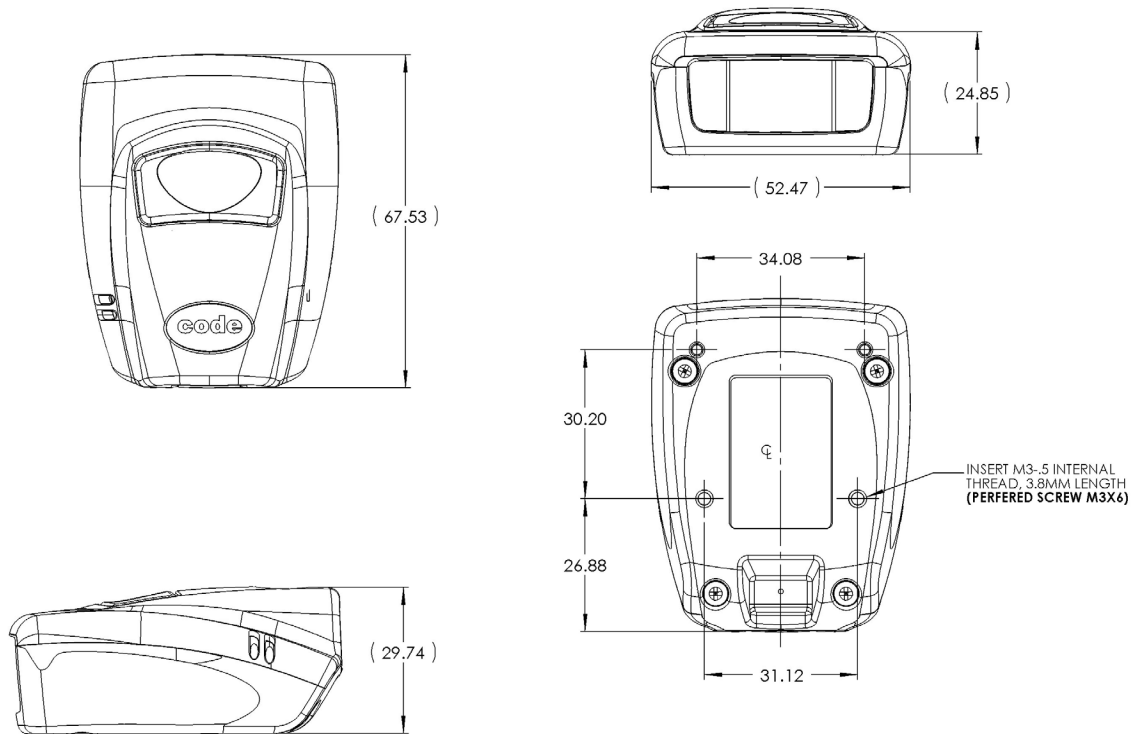
12.0 - CR1000 Maintentance

The CR1000 device operates efficiently and reliably and needs only a minimum of maintenance to operate.
A few tips are given below for maintenance suggestions.

Cleaning the CR1000 Window
The CR1000 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 CR1000 uses CMOS technology that is much like a digital camera. A dirty window may stop the CR1000 from reading bar codes.

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.

The CR1000 display screen and housing may be cleaned in the same way.

For applications that require cleaning with disinfectant, please use products with the following ingredients:
1) Isopropyl Alcohol
2) Ethyl Alcohol (Denatured Grade)

Code does not recommend using bleach.

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 **http://www.codecorp.com/codesupport.php** for more information.

13.0 - Warranty

General

EXCEPT FOR THE WARRANTIES STATED ABOVE, CODE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, ON PRODUCTS FURNISHED HEREUNDER, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

The stated express warranties are in lieu of all obligations or liabilities on part of Code for damages, including without limitation, special, indirect, or consequential damages arising out of or in connection with the use or performance of the product. Seller's liability for damages to buyer or others (regardless of the form of action, whether by contract, warranty, tort, malpractice, and/or otherwise) resulting from the use of any product, shall in no way exceed the purchase price of said product. In no event shall Code be liable for any consequential, special, indirect, incidental or punitive damages, or for any loss of profits, revenue or data, even if Code has been advised of the possibility thereof.

13.0 - Warranty (continued)

Code Corporation's CR1000 carries a two year limited warranty as described herein.

Customers may purchase a one or two year extension to this warranty. Please contact a Code representative for more information.

Limited Warranty

Code manufactures its hardware products in accordance with industry-standard practices. Code warrants its products will be free from defects in materials and workmanship, provided that the products are used under normal operating condition intended by the Manufacturer. This warranty is provided to the original owner only and is not transferable to any third party. This warranty is subject to any and all accompanying disclaimers, limitations and other terms of this section.

Terms of Warranty

CR1000 readers carry a warranty of two years. Other products with serial numbers, such as but not limited to, radios, CodeXML® modems, battery chargers, stands and power supplies are warranted for three years from date of shipment. Batteries and battery handles carry a two year warranty, or until battery capacity after recharge is less than sixty percent of new, whichever is shortest. Non-serialized items, such as but not limited to handles and cables, carry a 90-day limited warranty.

Exclusions

No warranty herein contained or set out shall apply to any product (i) which has been repaired, altered or tampered with unless done or approved by Code, (ii) which has not been maintained in accordance with any operating or handling instructions supplied by Code, (iii) which has been subjected to unusual physical or electrical stress, immersion in fluids, puncture, crushing, misuse, abuse, power shortage, improper power supply such as incorrect voltage or wrong polarity, negligence or accident, or (iv) which has been used other than in accordance with the product operating and handling instructions. Preventive maintenance is the responsibility of the customer and is not covered under this warranty.

Warranty Coverage and Procedure

During the warranty period, Code will repair or replace defective products returned to Code's service center in the US. For worldwide warranty service call Code Warranty Support at 1-801-495-2200 or email support@codecorp.com.

If warranty service is required, Code will issue a Return Material Authorization Number. Products must be shipped in the original or comparable packaging, with shipping and insurance charges prepaid. Code will pay for shipping and insurance of repaired or replacement products worldwide. Code will use new or refurbished parts at its discretion and will own all parts removed from repaired products. Customer will pay for any pre-shipped replacement product in case it does not return the replaced product to Code within 7 days of receipt of the replacement product. The process for return and customer's charges will be in accordance with Code's Exchange Policy in effect at the time of the exchange.

Customer accepts full responsibility for its software and data including the appropriate backup thereof. Repair or replacement of a product during warranty will not extend the original warranty term. Code's Customer Service organization offers an array of service plans, such as on-site, depot, or phone support, that can be implemented to meet customer's special operational requirements and are available at a substantial discount during warranty period.