BC9XX0-BT
Base Station/Charger

Quick Reference Guide

Datalogic USA, Inc.
959 Terry Street
Eugene, OR 97402
USA
Telephone: (541) 683-5700
Fax: (541) 345-7140

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See the Regulatory Addendum included with your product for additional regulatory, safety and legal information.

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Using the BCXX0-BT Base Station

The BC9XX0-BT base station, when paired with one or more PowerScan™ BT9X00 readers, builds a Cordless Reading System for the collection, decoding and transmission of bar code data. It can be connected to a Host PC via RS232, USB, or KBD Wedge, and is suited for single-cradle layouts. The BC91X0 models also provide a spare battery charger slot.

The label on the cradle contains LED indicators and a multi-function button. When the button is pressed for less than 5 seconds, the cradle will transmit a "broadcast" message. When the broadcast is sent, all properly configured scanners (Radio RX Timeout set to keep the radio "awake") that are linked to that base and within radio range coverage will emit a beep and blink within 5 seconds. This functionality is useful to:

- verify which scanners are linked to a certain base station
- detect a scanner forgotten somewhere

When the button is pressed for longer than 5 seconds, all paired scanners will be unpaired.

The LEDs signal the BC9XX0-BT status, as shown in the table below:

LED	STATUS
Aux	Yellow On = BC9XX0-BT is powered through an external power supply.
Host	Yellow On = BC9XX0-BT is powered by the Host.
Reader	Green On = the reader battery is completely charged. Red On = the reader battery is charging. Orange Blinking = reader battery fault - replace battery. Red / Green Alternatively Blinking = charging error - see PRG. Off = reader not in the cradle or not properly inserted.
Spare (BC91X0-BT models only)	Green On = the spare battery is completely charged. Orange Blinking = spare battery fault - replace spare battery. Red/Green Alternatively Blinking = charging error - see PRG. Off = no spare battery in the housing or battery not fully inserted.
Radio	Yellow Blinking = radio activity.
Ethernet (Ethernet models only)	Green Blinking = Ethernet activity.

Installation

To set up your BC9XX0-BT cradle you must:

1. Physically install the cradle.
2. Make all system connections.
3. Configure the BC9XX0-BT cradle.

Mounting the BC9XX0-BT Cradle

The cradle package contains the following items:

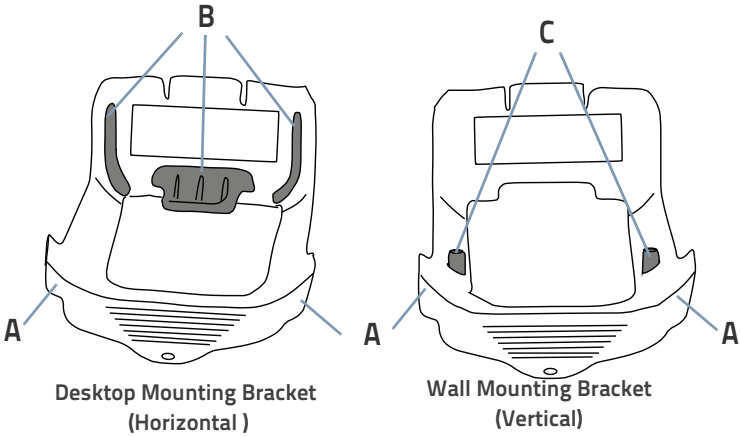
- BC9XX0-BT Base Station (with Desktop Mounting Bracket installed)
- BC9XX0-BT Quick Reference Guide (this manual)
- 1 Metal Mounting plate
- 1 Wall Mounting Bracket

The cradle can be either mounted on a flat surface for desktop usage or affixed vertically to a wall.

Mounting Brackets

The cradle comes with two different mounting brackets. The appropriate bracket is used depending on whether the cradle will be mounted on a horizontal or vertical surface. When shipped, the cradle has the Desktop Mounting Bracket installed. For vertical installation, the Wall Mounting Bracket must be attached instead.

Figure 1. Mounting Brackets



A	Tabs	B	Ribs	C	Bosses

- Desktop mount bracket has ribs to keep the scanner in place when the cradle is horizontal
- Wall mount bracket contains bosses to keep the scanner in place when the cradle is vertical.

To change the Bracket:

1. Remove the screw holding the Bracket in place. Retain the screw for re-use.
2. Carefully lift off the Bracket.
3. Install the other bracket by first slipping the end tab into place on the base station, then easing the tabs (shown in Figure 1 on page 2) into place on the sides.
4. Replace the screw to secure the Bracket to the Base Station.

Figure 2. Changing the Bracket

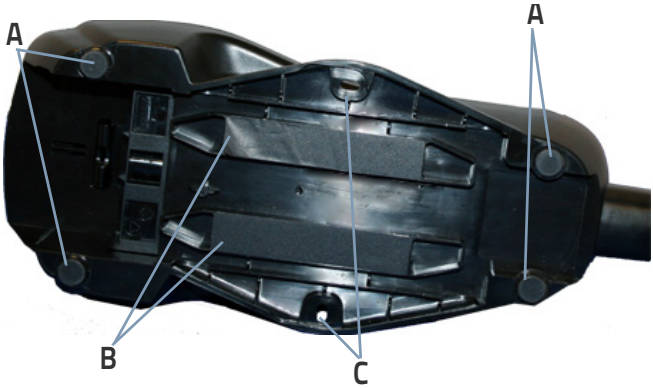
Permanent Mounting

For either desktop or wall mounting, the cradle can be fastened directly to a flat surface using screws (not included).

NOTE

When mounting on drywall, the base should be screwed to a wall stud or supporting beam for additional support.

Figure 3. Base Station Bottom



A	Rubber Feet	B	Protective adhesive strips	C	Mounting Holes

Mounting for Portable Use

If portability of the cradle is required, the metal plate must be used. There are two ways this can be done: (1) by first mounting the metal plate on a flat surface so the cradle can be slid off and on, or (2) mounting the metal plate onto the back of the base station and then screwing both to the desired surface.

NOTE

For additional security on wall mounting, it is strongly recommended that the cradle be secured into place using two auxiliary screws through the mounting holes on the side.

Mounting the Metal Plate

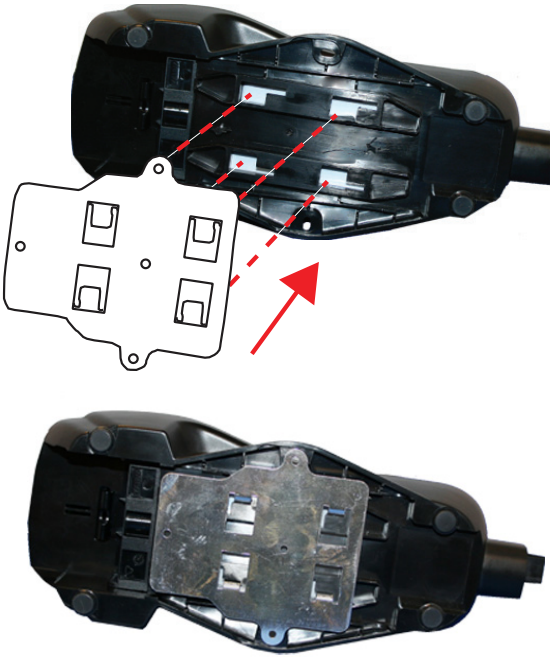
1. Affix the metal plate onto the desired mounting surface using the two center screw holes (see Figure 4 on page 5).
2. Remove the adhesive strips protecting the mounting tabs on the cradle, shown in Figure 3.
3. Slide the tabs on the back of the cradle onto the metal plate as shown in Figure 4.
4. After aligning the tabs, push up to lock into place.

Figure 4. Mounting Plate on wall

Attaching the Metal Plate to Base

Alternatively, the mount can be attached first to the base, then both can be mounted to a wall as described above.

Figure 5. Attaching Mounting plate to base



System Connections

Connections should always be made with power off!

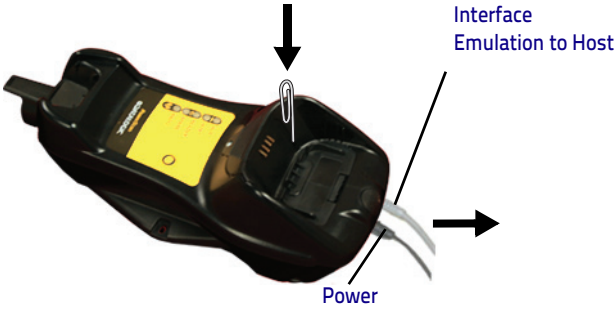
The BC9XX0-BT cradle provides a multi-interface connector and a power supply connector as shown:

Connecting and Disconnecting the Interface Cable

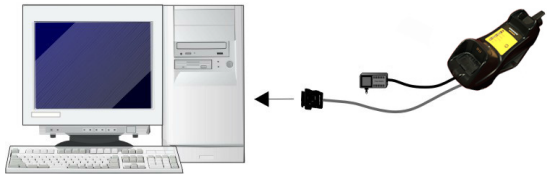
The BC9XX0-BT can be connected to a Host by means of a multi-interface cable, which must be simply plugged into the Host connector, visible on the front panel of the cradle.

To disconnect the cable, insert a paper clip or other similar object into the hole corresponding to the Host connector on the body of the cradle (shown below). Push down on the clip while unplugging the cable. Refer to the following figure:

Connecting/Disconnecting the Cable



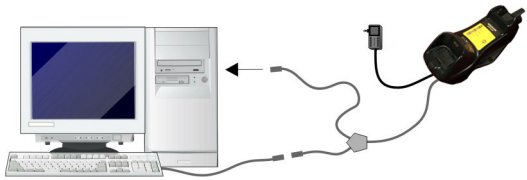
RS232



USB*

*The power supply is optional, the cradle can be powered by the USB port. In this case the full charging of an empty battery will take about 10 hours. For intense usage and/or when the system is shut down during the night, the use of an external power supply is recommended.

WEDGE



BC9XX0-BT Configuration

The BC9XX0-BT configuration can be performed in three ways: by using the Datalogic Aladdin™ software configuration program, by sending configuration strings from the Host PC via the RS232 or USB-COM interface or by reading configuration bar codes with the PowerScan™ BT9X00 reader.

Datalogic Aladdin™

Datalogic Aladdin™ is a multi-platform utility program that provides a quick and user-friendly configuration method via the RS232/USB-COM interface. It also allows upgrading the software of the connected device (see the Datalogic Aladdin™ Help On-Line for more details).

Serial Configuration

By connecting the BC9XX0-BT to a PC through an RS232 or USB-COM interface cable it is possible to send configuration strings from the PC to BC9XX0-BT.

Configuration Bar Codes

Link the cradle and the reader using the procedures described in the PowerScan™ BT9X00 Quick Reference. Once the pairing is complete, you can configure the BC9XX0-BT cradle by reading configuration bar codes in this manual.

To configure the BC9XX0-BT using the PowerScan™ BT9X00 reader (paired to the cradle with the Bind command), follow the procedure according to the interface selected.

Resetting Standard Product Defaults

Reference the PRG for a listing of standard factory settings. If you aren't sure what programming options are in your reader, or you've changed some options and want the factory settings restored, scan the **Standard Product Default Settings** bar code below to copy the factory configuration for the currently active interface to the current configuration.

NOTE

Factory defaults are based on the interface type. Configure the reader for the correct interface before scanning this label.

Standard Product Default Settings

CAUTION

Scanning this bar code will RESET all settings for the PowerScan™ BT9X00. Any customized settings that may have been applied to the reader will be lost.

To change the defaults refer to the PowerScan™ 9X00 PRG, or to the Datalogic Aladdin™ Configuration program, both downloadable from the Datalogic website.

Selecting the Interface Type

Upon completing the physical connection between the reader and its host, scan the appropriate bar code for your system's correct interface type.

Configuring the Interface

Scan the programming bar code which selects the appropriate interface type for the system the reader will be connected to.

NOTE

Unlike some other programming features and options, interface selections require that you scan only one programming bar code label. DO NOT scan an ENTER/EXIT bar code prior to scanning an interface selection bar code.

Some interfaces require the scanner to start in the disabled state when powered up. If additional scanner configuration is desired while in this state, pull the trigger and hold for 5 seconds. The scanner will change to a state that allows programming with bar codes.

RS232
RS232 standard interface Select RS232-STD
RS232 Wincor-Nixdorf Select RS232-WN
RS232 for use with OPOS/UPOS/JavaPOS Select RS232 OPOS

USB
USB COM to simulate RS232 standard interface USB-COM-STD[a]
USB-OEM (can be used for OPOS/UPOS/JavaPOS) USB-OEM
USB Keyboard with standard key encoding Select USB Keyboard
USB Keyboard with alternate key encoding USB Alternate Keyboard

a. Download the correct USB COM driver from www.datalogic.com

Keyboard Interface

Use the programming bar codes to select options for USB Keyboard and Wedge Interfaces.

KEYBOARD
AT, PS/2 25-286, 30-286, 50, 50Z, 60, 70, 80, 90 & 95 w/ Standard Key Encoding Select KBD-AT
Keyboard Wedge for IBM AT PS2 with standard key encoding but without external keyboard Select KBD-AT-NK
AT, PS/2 25-286, 30-286, 50, 50Z, 60, 70, 80, 90 & 95 w/Alternate Key Select KBD-AT-ALT
Keyboard Wedge for IBM AT PS2 with alternate key encoding but without external keyboard Select KBD-AT-ALT-NK

Country Mode

This feature specifies the country/language supported by the keyboard.

COUNTRY MODE
ENTER/EXIT PROGRAMMING MODE
Country Mode = U.S.
Country Mode = Belgium
Country Mode = Britain

COUNTRY MODE (continued)
Country Mode = Croatia
Country Mode = Czech Republic
Country Mode = Denmark
Country Mode = France
Country Mode = French Canadian
Country Mode = Germany

COUNTRY MODE (continued)
Country Mode = Hungary
Country Mode = Italy
Country Mode = Japanese 106-key
Country Mode = Lithuanian
Country Mode = Norway
Country Mode = Poland
Country Mode = Portugal

COUNTRY MODE (continued)
Country Mode = Romania
Country Mode = Spain
Country Mode = Sweden
Country Mode = Slovakia
Country Mode = Switzerland

Caps Lock State

This option specifies the format in which the reader sends character data. This applies to keyboard wedge interfaces. This does not apply when an alternate key encoding keyboard is selected.

It does not apply to USB keyboard

ENTER/EXIT PROGRAMMING MODE
Caps Lock State = Caps Lock OFF
Caps Lock State = Caps Lock ON
Caps Lock State = AUTO Caps Lock Enable

Numlock

This option specifies the setting of the Numbers Lock (Numlock) key while in keyboard wedge interface. This only applies to alternate key encoding interfaces. It does not apply to USB keyboard.

ENTER/EXIT PROGRAMMING MODE
Numlock = Numlock key unchanged
Numlock = Numlock key toggled

Technical Features

Electrical Features	
Supply Voltage External Power Host Power	 10 - 30 VDC 5 VDC ±10%
Power Consumption External Power Host Power	 max. 10 W (charging) * max. 500 mA (charging)
Indicators	Ext. Power/Data yellow LED Host Power/Data yellow LED Reader batt. state green/red LED Spare batt. state green/red LED Radio yellow LED Ethernet green LED (Ethernet models only)
Time of Recharge External Power Host Power	 max. 4 hours with 2150 mAh Li-Ion battery max. 10 hours with 2150 mAh Li-Ion battery
Bluetooth Features	
Protocol	Bluetooth 2.0; Class 1; SPP (Serial Port Profile) or HID (Human Interface Device) profile
Radio Frequency	2.40 to 2.48 GHz
Environmental Features	
Working Temperature Radio Battery Charging	 -20° to +50 °C / -4 to +122 °F 0° to +40 °C / +32° to +104 °F
Storage Temperature	-20° to +70 °C / -4 to +158 °F
Humidity	90% non condensing
Protection Class	IP40
Mechanical Features	
Weight without metal plate	about 390 g / 13.76 oz
Dimensions (without antenna)	235 x 108 x 80 mm
System Configuration	**BC9XX0-BT**
Max number of devices per base station	7

* Having a switching regulator inside, the BC9XX0-BT draws the same power, regardless of the supply voltage. i.e. as the input voltage increases the current drawn decreases

Datalogic Limited Factory Warranty

Warranty Coverage

Datalogic warranties this product against defects in workmanship and materials, for a period of 3 years from the date of shipment, provided that the product is operated under normal and proper conditions. Datalogic ('Datalogic") hardware products are warranted against defects in material and workmanship under normal and proper use. The liability of Datalogic under this warranty is limited to furnishing the labor and parts necessary to remedy any defect covered by this warranty and restore the product to its normal operating condition. Repair or replacement of product during the warranty does not extend the original warranty term. Products are sold on the basis of specifications applicable at the time of manufacture and Datalogic has no obligation to modify or update products once sold.

If Datalogic determines that a product has defects in material or workmanship, Datalogic shall, at its sole option repair or replace the product without additional charge for parts and labor, or credit or refund the defective products duly returned to Datalogic. To perform repairs, Datalogic may use new or reconditioned parts, components, subassemblies or products that have been tested as meeting applicable specifications for equivalent new material and products. Customer will allow Datalogic to scrap all parts removed from the repaired product. The warranty period shall extend from the date of shipment from Datalogic for the duration published by Datalogic for the product at the time of purchase (Warranty period). Datalogic warrants repaired hardware devices against defects in workmanship and materials on the repaired assembly for a 90 day period starting from the date of shipment of the repaired product from Datalogic or until the expiration of the original warranty period, whichever is longer. Datalogic does not guarantee, and it is not responsible for, the maintenance of, damage to, or loss of configurations, data, and applications on the repaired units and at its sole discretion can return the units in the 'factory default" configuration or with any software or firmware update available at the time of the repair (other than the firmware or software installed during the manufacture of the product). Customer accepts responsibility to maintain a back up copy of its software and data.

Warranty Claims Process

In order to obtain service under the Factory Warranty, Customer must notify Datalogic of the claimed defect before the expiration of the applicable Warranty period and obtain from Datalogic a return authorization number (RMA) for return of the product to a designated Datalogic service center. If Datalogic determines Customer's claim is valid, Datalogic will repair or replace product without additional charge for parts and labor. Customer shall be responsible for packaging and shipping the product to the designated Datalogic service center, with shipping charges prepaid. Datalogic shall pay for the return of the product to Customer if the shipment is to a location within the country in which the Datalogic service center is located. Customer shall be responsible for paying all shipping charges, duties, taxes, and any other charges for products returned to any other locations. Failure to follow the applicable RMA policy, may result in a processing fee. Customer shall be responsible for return shipment expenses for products which Datalogic, at its sole discretion, determines are not defective or eligible for warranty repair.

Warranty Exclusions

The Datalogic Factory Warranty shall not apply to:

(i) any product which has been damaged, modified, altered, repaired or upgraded by other than Datalogic service personnel or its authorized representatives;

(ii) any claimed defect, failure or damage which Datalogic determines was caused by faulty operations, improper use, abuse, misuse, wear and tear, negligence, improper storage or use of parts or accessories not approved or supplied by Datalogic;

(iii) any claimed defect or damage caused by the use of product with any other instrument, equipment or apparatus;

(iv) any claimed defect or damage caused by the failure to provide proper maintenance, including but not limited to cleaning the upper window in accordance with product manual;

(v) any defect or damage caused by natural or man-made disaster such as but not limited to fire, water damage, floods, other natural disasters, vandalism or abusive events that would cause internal and external component damage or destruction of the whole unit, consumable items;

(vi) any damage or malfunctioning caused by non-restoring action as for example firmware or software upgrades, software or hardware reconfigurations etc.;
(vii) the replacement of upper window/cartridge due to scratching, stains or other degradation and/or
(viii) any consumable or equivalent (e.g., cables, power supply, batteries, keypads, touch screen, triggers etc.).

No Assignment

Customer may not assign or otherwise transfer its rights or obligations under this warranty except to a purchaser or transferee of product. No attempted assignment or transfer in violation of this provision shall be valid or binding upon Datalogic.

DATALOGIC'S LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ORAL OR WRITTEN, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. DATALOGIC SHALL NOT BE LIABLE FOR ANY DAMAGES SUSTAINED BY CUSTOMER ARISING FROM DELAYS IN THE REPLACEMENT OR REPAIR OF PRODUCTS UNDER THE ABOVE. THE REMEDY SET FORTH IN THIS WARRANTY STATEMENT IS THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDY FOR WARRANTY CLAIMS. UNDER NO CIRCUMSTANCES WILL DATALOGIC BE LIABLE TO CUSTOMER OR ANY THIRD PARTY FOR ANY LOST PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL IN-DIRECT, SPECIAL OR CONTINGENT DAMAGES REGARDLESS OF WHETHER DATALOGIC HAD ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.

Risk of Loss

Customer shall bear risk of loss or damage for product in transit to Datalogic. Datalogic shall assume risk of loss or damage for product in Datalogic's possession. In the absence of specific written instructions for the return of product to Customer, Datalogic will select the carrier, but Datalogic shall not thereby assume any liability in connection with the return shipment.

Ergonomic Recommendations

CAUTION

In order to avoid or minimize the potential risk of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

- Reduce or eliminate repetitive motion
- Maintain a natural position
- Reduce or eliminate excessive force
- Keep objects that are used frequently within easy reach
- Perform tasks at correct heights
- Reduce or eliminate vibration
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- Provide adequate clearance
- Provide a suitable working environment
- Improve work procedures

Support Through the Website

Datalogic provides several services as well as technical support through its website.

Log on to www.datalogic.com and click on the **SUPPORT** > **Industrial Handheld Scanners** category link. From this page you can select your product model from the dropdown list which gives you access to:

Downloads including Data Sheets, Manuals, Software & Utilities, and Drawings;

Repair Program for On-Line Return Material Authorizations (RMAs) plus Repair Center contact information;

Service Program containing details about Maintenance Agreements;

Technical Support through email or phone.

NOTES

www.datalogic.com

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Datalogic USA, Inc.
959 Terry Street | Eugene, OR 97402 | USA
Telephone: (541) 683-5700 | Fax: (541) 345-7140

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