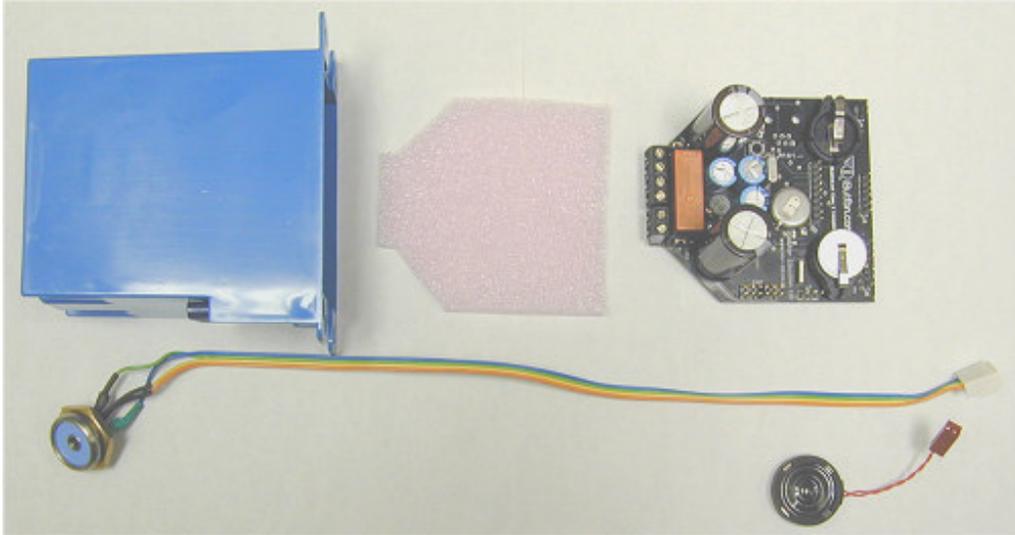




# Installation Instructions for the Blue Dot Lock Door Controller

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## Ordering

U-7001-001	Controller with 3 second “on” time (standard access control)
U-7001-002	Controller with 0.5 second “on” time (simulated push button)

## Kit Contents

Single-gang Retrofit Outlet Box	Speaker (Beeper)
Controller Board	Pink Foam pad
Blue Dot Receptor	Instructions

## Additional Parts Needed

RTV or silicon caulk	Momentary push button switch (optional)
Utility box face plate	12V – 24V AC/DC power supply (optional)
Doorbell or Thermostat wire (18 AWG twisted pair)	iButton Keys (Black) (optional)
	Sync iButton (Blue) (optional)

## Tools Required for Installation

Pencil	Power Drill
Dry Wall Saw	1” & ½” Drill Bits
Phillips Screwdriver	Utility Knife
Small Standard Screwdriver	Tape Measure

## **SPECIFICATIONS**

### ***Power Supplies***

Door / Gate and Garage Door Installation: Always use a constant power supply as the power source of the controller. This voltage can be from 12V to 24V (AC or DC) transformer or regulated power supply.

### ***Controller/ Blue Dot Distance***

The distance between the Blue Dot Receptor and the controller board can be no more than 10 ft.

### ***Environmental Conditions***

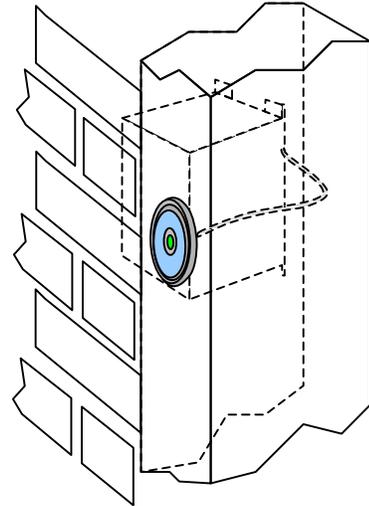
The Blue Dot Gate controller will operate from  $-4^{\circ}\text{F}$  to  $+185^{\circ}\text{F}$  ( $-20^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ ).

## INSTALLATION

### *Mounting Considerations*

In order to pick the best location for installing the controller board and the Blue Dot Receptor, one should take into account ease of use and the distance between the controller and the receptor. The optimum location for the receptor is near the door at a height of 48" from the ground, more or less as the user requires. The Blue Dot should be securely mounted on a firm vertical surface such as a doorframe or fence post. For security reasons, the Blue Dot and the Controller board should not be installed in the same electrical box.

Choose a location on the secure side of the fence or wall that is as close to the Blue Dot Receptor as possible. Ideally, the Blue Dot should be no more than 12" away from the controller (this is the length of the Blue Dot cable assembly). For door applications, just inside the door near the strike or latch is preferred. For garage door applications, the box should be mounted just outside of the garage door tracks.

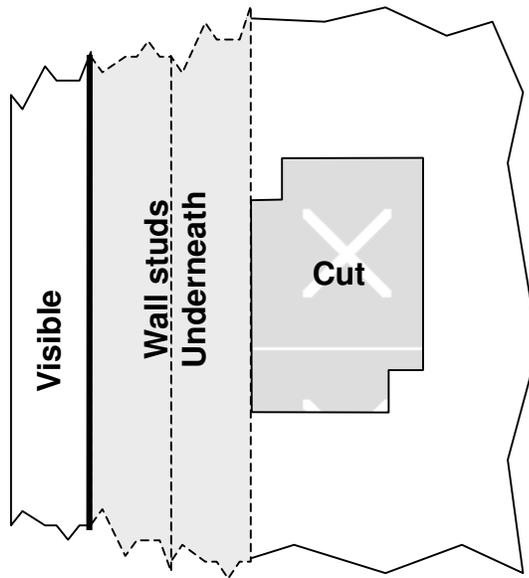


**Fig. 1**  
**Typical Box and Blue Dot Receptor Installation**

### *Marking and Cutting the Wall*

In Appendix D of these instructions there is a cut out template for the blue wall box. Using the utility knife cut out the marked section from the template.

1. On the secure side of the door, locate the outside edge of wall stud nearest the door.
2. Make a mark with the pencil on the wall showing the location of this edge.
3. Using the tape measure, measure up 46 1/2" from the ground. Make a mark with the pencil showing this height.
4. Using the template, draw the outline for the hole.
5. Using the drywall saw, place the blade inside this outline about 1/2" away from the stud. With the saw teeth pointed toward the stud, push the saw blade into the wall until it either hits the stud or bottoms out. This will confirm the location of the stud.
6. Adjust the markings for the template so that the edge of the box is against the stud.
7. Cut out the rest of the hole using the saw.



**Fig. 2**  
**Detail of cut out placement**

### ***Installing the Box***

Push the box in the hole, to check the fit. The box should fit snugly into the hole, but not so tight as to break the wallboard upon insertion. If the hole is too small, remove the box and shave a little more wallboard away in the necessary locations.

When the box fits properly, insert it into the hole and use the phillips head screwdriver to tighten the screws in the upper right-hand and lower left-hand corners of the box until a mild resistance indicates clamps are set and snug. This will draw the box firmly against the wall.

### ***Mounting the Blue Dot Receptor***

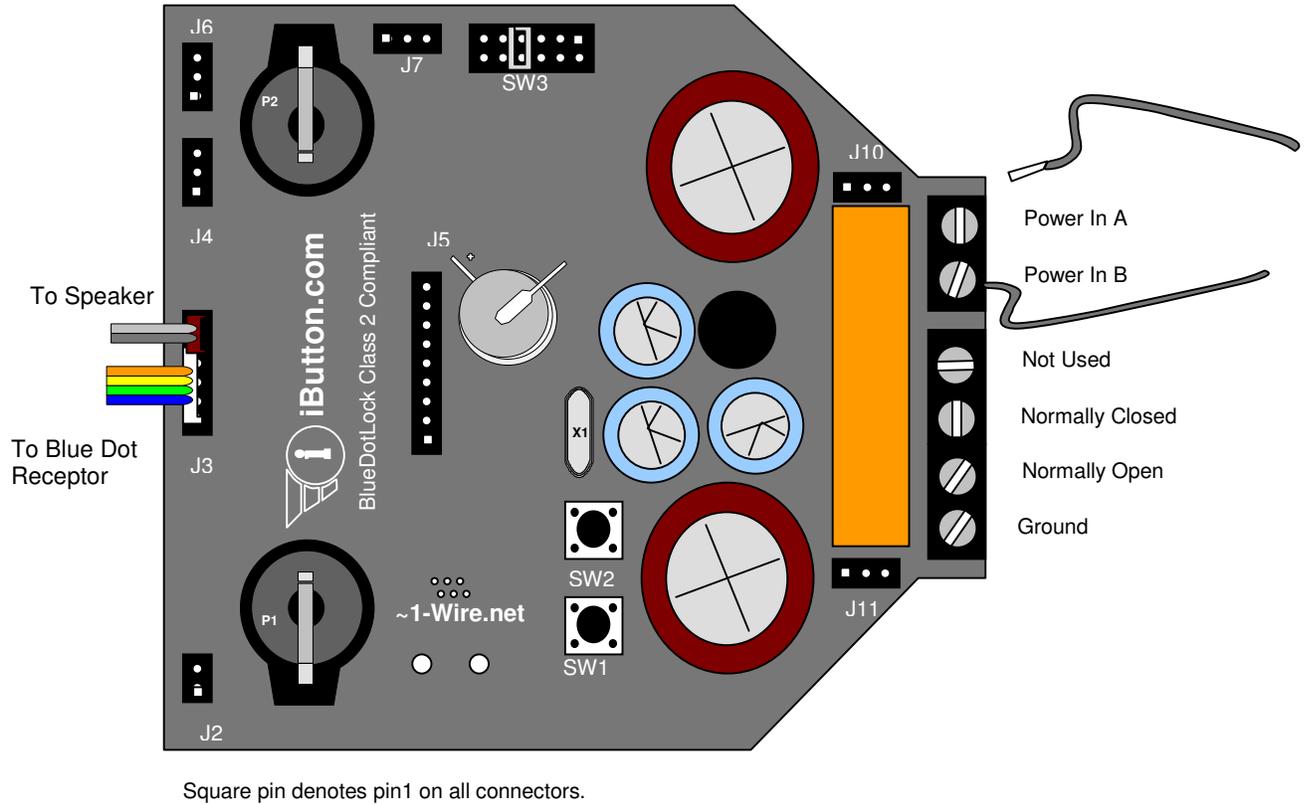
On the doorframe mark a location 48" up from the ground. At this height, locate the center of the doorframe and mark the location for the center of the receptor. Using the 1" drill bit, drill a hole 1/2" deep. Change out the drill bit to the 1/2" bit. Continue drilling the center of the hole until it goes through the wall.

From the outside, feed the white connector through the hole in the wall. Before pressing the Blue Dot completely into the hole, apply a 1/2" ring of RTV (or silicon caulk) into the outer hole (apply evenly). Press the Blue Dot the remainder of the way into the hole while gently pulling the remainder of the Blue Dot's cable through the hole from the inside.

## CONNECTING UP THE CONTROLLER

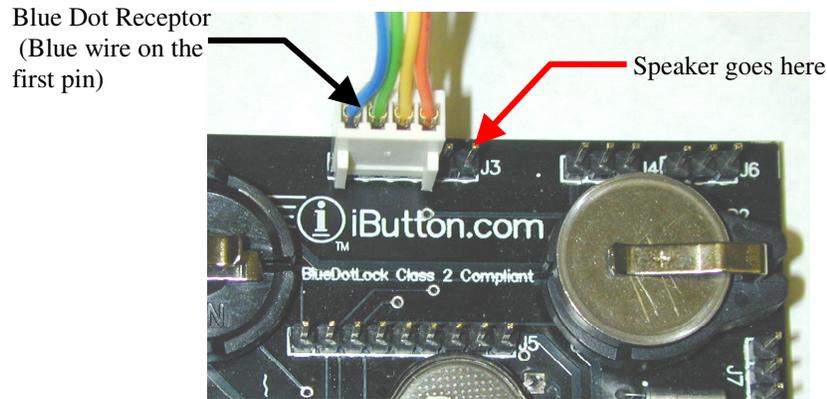
### *Bench Test*

Before you install the controller on the wall, you should follow the steps below, power up the controller and test it (See Figure 3).



**Fig. 3**  
**Wiring Connections for the Garage Door Application**

1. Connect the receptor cable to J3 as shown in figure 4. Note the blue wire is on the out side.
2. Connect the speaker to J3 next to the receptor.
3. Connect the power supply to power in terminal A and B.
4. Separate power supply for the door controller and garage door opener is required.



**Fig. 4**  
**Connection of Blue Dot and Speaker**

***System Checkout***

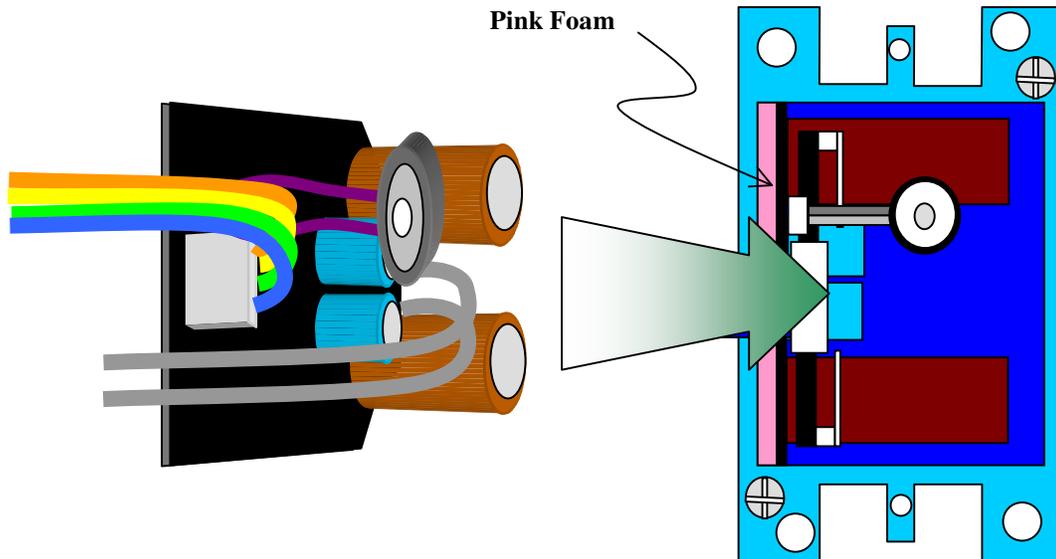
1. With power applied the LED in the Blue Dot should be pulsing like a heart beat.
2. Press the Reset button SW1 (see Figure 5 for location). The LED should turn on solid and the beeper should emit three tones followed by a few clicks and then the controller will go to sleep.
3. Press a valid iButton key that you have added in the controller to the Blue Dot, the LED will turn on solid for 1 second and the controller will activate the garage door opener. (Please go to Appendix A for key operation instruction.)
4. If the controller did not activate see the table in Appendix B “In case of difficulty”.
5. Proceed to “Completing the Installation”



**Fig. 5**  
**Location of the Reset Switch**

## COMPLETING THE INSTALLATION

When the controller is operating properly, place the pink foam pad between the bottom side of the controller and wall box as you slide the tapered end of the controller into the box.



**Fig. 6**  
**Installing the controller into the wall box**

### ***Mount Options: Pushbutton Switch***

An optional door opener switch can be added in the garage door application. This switch (Trine model #544 or equivalent) can be used as a secondary door actuation button. Simply connect this switch across Input Power A and B along with the doorbell wire. When the button is pressed, it will provide an open signal to the door opener just like the standard button.

## EXPANING MEMORY

1. Insert a DS1996 iButton into an open button holder face down.
2. Press the Reset button on the controller (See Figure 5).
3. The controller will be quiet for up to 10 seconds and will then emit 3 beeps followed by clicking.
4. When the clicking stops and the LED goes back to blinking, the memory expansion process will be complete.

## **Appendix A**

### ***Manually Key management***

#### *Enrolling a Sync iButton into the controller*

1. Verify the green LED in the center of the Blue Dot is blinking. This indicates the controller is operational.
2. Press and release the reset button (see Figure 5), the controller will emit 3 beeps followed by slow clicking for 5 seconds.
3. While the controller is emitting the clicking sound, press and hold the Sync iButton (DS1996) to the Blue Dot Receptor.
4. The controller will emit a single beep followed by clicking for 3 seconds as the Sync iButton is being enrolled. When the controller has completed this process it will emit 2 beeps. If the controller emits a long beep, it means the enrolling process was interrupted and must be attempted again starting at step 2.

#### *Adding a Key*

1. Press the Sync iButton to the Blue Dot Receptor. The controller will emit a single beep and green LED is light.
2. Remove the Sync iButton and (within 3 seconds) press the new iButton Key to the Blue Dot Receptor. The controller will emit two beeps confirming the addition of the key. If the controller emits a long beep, it means the enrolling process was interrupted and must be attempted again. NOTE: After the process of adding a key, the LED beacon in the controller may not be blinking. The beacon will start up again after the use an iButton Key.

#### *Erasing All Keys*

1. Verify the green LED in the center of the Blue Dot Receptor is blinking. This indicates the controller is operational.
2. Press and hold the Sync iButton to the Blue Dot Receptor for 25 seconds. When the erasure is complete the controller will emit two beeps. (This is a long process and during this procedure the controller will emit fast clicking followed by a beep, 3 seconds of silence then slow clicking and finally two beeps.) If the controller emits a long beep, it means the erasing process was interrupted and must be attempted again.
3. Now only the Sync iButton is enrolled in the controller. After erasing all the keys, the controller's LED beacon may not be blinking. The beacon will restart after an iButton Key is used. iButton Keys can now be added to the controller as described above.

#### ***Download and install MyLocksmith for PC***

To perform normal operations on the Blue Dot Door Controller, Mylocksmith for PC software is required. You either download the software from UCA, Inc. web site or require a CD from your vendor.

1. Install the adapter and Blue Dot Receptor on the PC.

2. Access the Internet through your local ISP.
3. Go to <http://www.ibuttonlock.com/document/index.htm>
4. Download the MyLocksmith application.
5. Save download file to your hard disk, in case you need it to install again.
6. Extract the zip file to a known location on your hard disk (e.g. My Document folder).
7. Double click on the setup.exe file and follow the instructions.
8. Start the program from Start menu \ Programs \ Mylocksmith PC version 2.03.
9. At login window, use “admin” as the user name and “dallas” as password. Please do not modify the default system administrator (admin) user name. You can change the password to your preference.

Note: To utilize the timetable function, a DS1996 iButton and proper programming are required.

## Appendix B

### *In Case of Difficulty*

**The LED does not pulse when power is applied.**

- Verify the voltage on the input power terminals is between 12V and 24Volts.

**The LED does not turn on solid when switch SW1 is pressed.**

- Verify that the white connector is on the correct pins of the J3 connector of the circuit board.

**The beeper does not emit sound when switch SW1 is pressed.**

- Verify that the speaker connector is completely slid down on the mating connector.

**When power is applied, the LED comes on and the beeper emits four high tones, but then the circuit dies out and acts like power was just reapplied.**

- The current supplied to the circuit board is insufficient. Move the jumpers on SW3 to a lower value of resistance. (Refer to the schematic in the appendix for resistance values.)

**When an iButton key is pressed nothing happens.**

- Verify the connection of the white connector.
- Verify that a voltage (between 3.5V and 6V) is present across the center contact of the Blue Dot and the outer contact. (Zero volts may indicate a broken wire.)

### *Schematic*

The schematic for this controller can be obtained by contact UCA tech support at 972-437-4696 or send email to [tech@ibuttonlock.com](mailto:tech@ibuttonlock.com).

### *Ordering more Keys*

Additional iButton keys can be purchased from the [iButtonlock.com](http://iButtonlock.com) web site.

## Appendix C

### *RETURN POLICY*

Notwithstanding the provisions contained herein including but not limited to the Limited Warranty provisions an UCA, Inc. product shall be free from defects in material and workmanship. If an UCA, Inc. product fails operate to the published specifications within one (1) year from the date of purchase, please return the product for either repair or replacement. At UCA's sole discretion any product found not to operate within published specifications shall either be repaired or replaced free of charge. Within the warranty period, replacement or repaired product shall be shipped back to the purchaser free of charge.

For warranty service, the customer must return the defective product at the owner's expense, complete with all operating parts including iButton™ keys (if supplied), to UCA, Inc. at:

RMA # \_\_\_\_\_  
UCA, Inc.  
Customer Service  
610 Old Campbell Road  
Suite 100  
Richardson, TX 75080  
U.S.A.

A copy of the sales receipt with the date of purchase must also be included, along with a brief statement of the defect. **Please contact the UCA, Inc. Customer Service Department to receive a Return Material Authorization (RMA) number prior to returning the unit to UCA, Inc.**

This warranty does not apply in the event of improper installation or use outside of the published specifications of the product, or as a result of unauthorized alterations or repairs.

**WHAT IS COVERED DURING WARRANTY PERIOD:** All replacement parts, labor and return transportation charges from UCA, Inc. to the user by standard shipping.

**WHAT IS NOT COVERED:** Damages caused by abuse, improper installation or handling, transportation charges from the user to UCA, Inc., special delivery charges and cost to replace missing parts and/or iButton keys.

**LIMITED WARRANTY.**

**UCA, INC. HEREIN EXPRESSLY DISCLAIMS ANY WARRANTY FOR THE UCA, INC. PRODUCT OR SUPPORT SERVICES OTHER THAN REPAIR OR REPLACEMENT OF A RETURNED DEFECTIVE PRODUCT UNDER UCA, INC. RETURN POLICY. THE UCA, INC. PRODUCT, THE SUPPORT SERVICES AND ANY RELATED DOCUMENTATION IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. THE ENTIRE RISK ARISING OUT OF USE OR PERFORMANCE OF THE UCA, INC. PRODUCT AND SUPPORT SERVICES REMAINS WITH YOU.**

**LIMITATION OF LIABILITY.**

**IN NO EVENT SHALL UCA, INC. BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER MONETARY LOSS) ARISING OUT OF THE USE, INSTALLATION OF OR INABILITY TO USE THE PRODUCT OR THE PROVISION OF OR FAILURE TO PROVIDE SUPPORT SERVICES, OR DAMAGES INCLUDING BODILY INJURY OR DEATH RESULTING FROM USE OR FAILURE OF PRODUCT EVEN IF UCA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY CASE, UCA, INC.'S ENTIRE LIABILITY UNDER ANY PROVISION OF THIS AGREEMENT SHALL BE LIMITED TO THE AMOUNT PAID FOR THE PRODUCT OR \$4.00 WHICHEVER IS GREATER.**

**Appendix D**

***WALL BOX CUT OUT TEMPLATE***

