

# Gym Assistant Access Control Setup

## June 2006



*Note: Please read this entire document before beginning your Door Controller installation.*

### 1. Locating the hardware

The **Slot Barcode Reader** can be mounted anywhere outside near the door to be controlled. It does not need to be mounted on the door frame itself since you can specify the amount of time that the door is unlocked after the member swipes his/her card. Place the barcode reader in a location that will be protected from the elements as much as possible. You might also consider placing it in a location that is not easily visible from passersby. If weather is a problem, then you might consider purchasing a hinged plastic cover from Bio-Logic.

We recommend placing the **Door Controller** near the computer (for example, mounted under the counter at the front desk). This will allow you to most easily diagnose any problems you may have.

### 2. Test the system before installing

We strongly recommend that you connect all of the hardware on the desktop or counter and test the system before installing. This will allow you to work out any technical glitches much more easily than after you have run wires and mounted the hardware outside.

### 3. Connect the Door Controller to your computer

Connect one end of the 9-pin serial cable to the Door Controller and the other to any available serial port on your computer. If you do not have any serial ports available, please see [Adding serial ports to your computer](#) above.

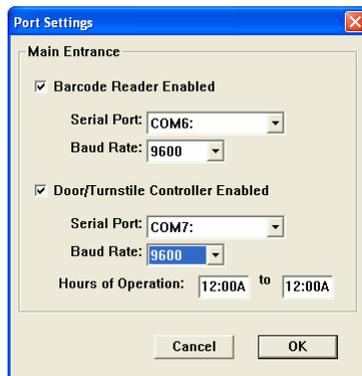
Connect the included power supply to the Door Controller. The green LED in the Door Controller should blink three times and then remain ON. **Note: Do not connect any other power supply to the Door Controller, as this can damage the electronics! The power supply should be labeled "Output: 12 VDC, 500ma".**

## 4. Configure Settings in GateKeeper

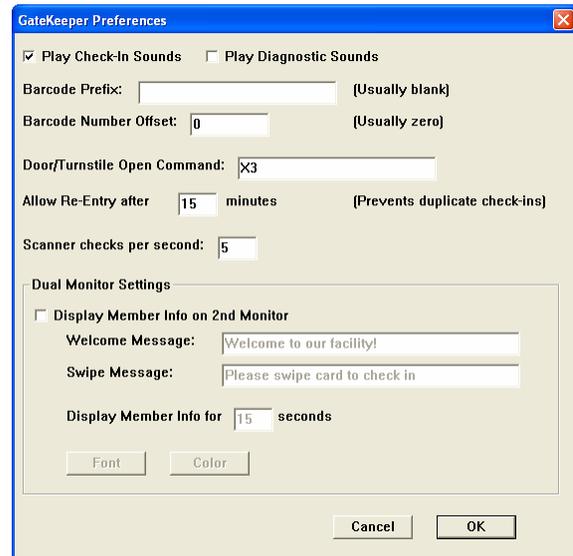
### Version 1.5 GateKeeper Configuration

Note: If you are using Gym Assistant Version 2.0, please skip down to the next section.

- Start the GateKeeper application.
- Select Ports from the Settings menu. (see below)
- If you are operating two entrances (one for the front-desk and another for the entrance door), then you should see two entrances in the window. If you need two entrances but see only one entrance, then please contact Bio-Logic for the code to activate the second entrance.
- Check the Door/Turnstile Controller Enabled box.
- Set the Serial Port to the correct port and the Baud Rate to 9600.
- Set the desired Hours of Operation for this entrance. If you want the entrance to be active whenever GateKeeper is running, then set the hours to 12am-12am.
- Click OK
- Select Preferences from the Settings menu. (see below)
- Set the Door/Turnstile Open Command to "X3" (without quotes) to have the door remain open for 30 seconds. Increase or decrease the number after the X as appropriate for your installation. The number after the X specifies that the door is open for seconds times the number. For example "X1" would indicate a 10-second delay.



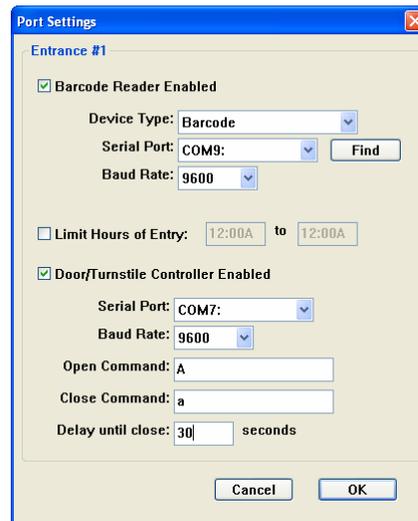
Version 1.5 Port Settings



Version 1.5 Preferences

### Version 2.0 GateKeeper Configuration

- Start the GateKeeper 2.0 application.
- Select **Ports** from the **Settings** menu. (see below)
- If you are operating two entrances (one for the front-desk and another for the entrance door), then you should see two entrances in the window. If you need two entrances but see only one entrance, then please contact Bio-Logic for the code to activate the second entrance.
- Check the **Door/Turnstile Controller Enabled** box.
- Set the **Serial Port** to the correct port and the **Baud Rate** to 9600.
- Set the **Open Command** to "A" (without quotes)
- Set the **Close Command** to "a" (without quotes)
- Set the **Delay until close** to the number of seconds
- If you want to limit the hours during which the entrance is active, then check the **Limit Hours of Entry** checkbox and set the desired hours.
- Click OK



Version 2.0 Port Settings

## 5. Test the Door Controller

In GateKeeper, click the **Open Gate** button. You should hear a click and the red LED in the Door Controller should turn ON. After the prescribed time you should hear another click and the red LED in the Door Controller should turn OFF again.

If nothing happens, then select **Ports** from the **Settings** menu. Then change the **Serial Port** selected under the **Door/Turnstile Controller Enabled** item and try again.

## 6. Confirm the Electronic Lock Operation

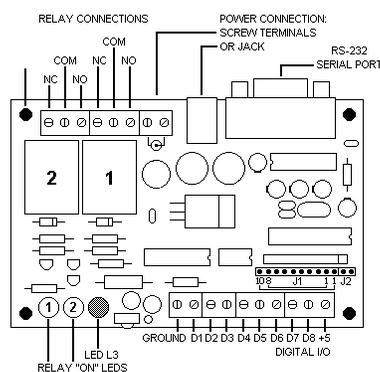
Most electromechanical locks and door strikes are unlocked by closing a circuit and applying a voltage to the lock. This is called a “Normally-Open” circuit. Most magnetic locks are held locked by maintaining a voltage to the magnet, and then unlocked when that voltage is interrupted. This is called a “Normally-Closed” circuit. The Door Controller can operate as either a normally-open or normally-closed relay.

Whether normally-closed or normally-open, the door lock circuit requires a separate power supply to provide voltage to the lock. To test a normally-open lock circuit, simply touch the two leads from the lock together and the lock should open.

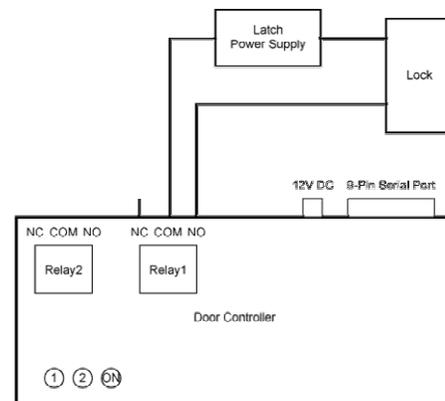
## 7. Connect the Lock to the Door Controller

For a normally-open circuit, connect the two leads from the lock to the COM and NO terminals for Relay1 (shown below-right). If you are wiring a manual override, connect the override button (simple doorbell buzzer) in parallel between the COM and NO terminals.

For a normally-closed circuit (e.g. magnetic lock), connect the two leads from the lock to the COM and NC terminals for Relay1. If you are wiring a manual override, connect the override button (a normally-closed switch) in series anywhere in the lock circuit.



Door Controller Connections



Normally-Open wiring circuit

## 8. Test the Door Controller with the Lock

In GateKeeper, click the **Open Gate** button. You should hear the Door Controller click and the red LED in the Door Controller should turn ON and the lock should open. After the prescribed time you should hear the Door Controller click again, and the red LED in the Door Controller should turn OFF again and the door should be locked again.

## 9. Other Topics

### Adding serial ports to your computer

You may need to add one or more serial ports to your computer. You can purchase and install a serial interface (RS-232) card into your computer to provide 2-4 additional serial ports. If you are unsure about installing hardware into your computer, then we recommend that you have a local computer shop install these cards for you.

You can easily add ports yourself, however, by purchasing one or more USB-to-Serial adapters. These adapters plug into a USB port and provide a connector to plug in a serial cable. Make sure that you install the software that came with the adapter before plugging the adapter into your computer.

### Windows Energy Settings

It is very important that you change your Windows energy settings to ensure that the entrance remains operating for long periods.

- Open the Control Panel (from the Start button).
- If the label Pick a Category appears, click on Performance and Maintenance.
- Open the Power Options icon.
- Set System Standby to Never.
- Click the Hibernate tab.
- Uncheck the Enable Hibernation checkbox.
- Click OK.
- Close the Control Panel.

### Backup power supply

You should purchase a battery backup (also called an Uninterruptible Power Supply or “UPS”) and power your computer through it. We recommend that you do not connect any devices other than your computer to the UPS in order to maximize the amount of time that the computer will run in the event of a power outage. Note that connecting your video monitor to the UPS will severely reduce the available battery time.

### Computer BIOS Settings

We recommend that you enlist the help of a computer-savvy person to access your computer’s low-level BIOS settings and set the configuration that will cause the computer to automatically restart in the event of a power failure. The BIOS settings can usually be accessed by pressing the DELETE or F2 key when your computer first powers on.

### Securing the Computer and your club

We recommend that you secure your computer in some way to prevent members from accessing your data or operating the computer. Consider one or more of the following methods to protect your equipment while you are away:

- Keep the computer CPU locked in a cabinet under the desk.
- Unplug the keyboard, mouse and monitor. Lock the keyboard and mouse in a secure place.
- Locate the CPU in a locked room and run a set of long cables (keyboard, mouse, video, speakers) to the front desk for daytime operation.
- Set a password on your system and set your screensaver to require the password.

- Install a video surveillance system to monitor activity at the facility while you are away.

If you have any questions about security, please call Bio-Logic.

### **Remote Access**

Remote access solutions allow you to connect to your computer remotely, which is a very good thing to have when you get a phone call at 5am from a disgruntled member who can't get into the club. GoToMyPC.com and LogMeIn.com both offer excellent solutions for remote access.