Slo Op Door Bot User Guide

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# Installation

1. Mount the transmitter and receiver at about waist height on each side of the door. Make sure that the lasers and the photodetectors are facing each other.
2. Use a standard straight-through Ethernet cable to connect the transmitter and receiver.
3. Power the system by connecting the micro-USB connector on the Pi to either a regular USB port on a computer, or to any USB wall charger with at least 1A of current.
4. Align the lasers by adjusting the bolts on the transmitter. To check if the lasers are aligned, the receiver has an LED for each photodetector that will turn on when the laser is hitting it. Make sure both lasers are aligned and both LED’s are on.
5. For the members door, attach a 3.5mm audio cable to the Raspberry Pi. Connect the other end of the cable to the speaker system using a 3.5mm to RCA splitter. Ensure that the volume is turn up on the speakers.
6. Test the system by walking into the main door and listening for the doorbell. The doorbell will only ring if someone walks into the main door. For 30 seconds after the ring, anyone that walks in will not ring the doorbell.
7. Check the twitter feed at twitter.com/sloopdoorbot. It will post to twitter every 5 minutes if someone has gone in or out of the gym in the 5 minutes period since that last twitter post. If nobody has gone in or out in that 5 minutes, it will not post until the next person goes in or out.

# Troubleshooting

## The doorbell in not playing

Check that the member’s door Raspberry Pi audio is plugged into the sound system. Make sure the speakers are on and the volume is turned up.

Check that both of the lasers are aligned on the maindoor by checking if both LED’s are on.

Check that the wireless network is functioning properly and the network name is Slo-op and the password is sloopbomb

Unplug the wireless router, wait 30 seconds, and plug it back in.

Unplug the membersdoor system, wait 30 seconds, and plug it back in. Then do the same for the maindoor system.

## Twitter is not updating

Check that both of the lasers are aligned on both doors by checking if both LED’s are on.

Check that the wireless network is functioning properly and the network name is Slo-op and the password is sloopbomb

Unplug the wireless router, wait 30 seconds, and plug it back in.

Unplug the membersdoor system, wait 30 seconds, and plug it back in. Then do the same for the maindoor system.

## The Count is Wrong

Check that both of the lasers are aligned on both doors by checking if both LED’s are on.

Check that the wireless network is functioning properly and the network name is Slo-op and the password is sloopbomb

Unplug the wireless router, wait 30 seconds, and plug it back in.

Unplug the membersdoor system, wait 30 seconds, and plug it back in. Then do the same for the maindoor system.

# Changing the Doorbell Sound

Download and install [ssh file transfer and follow the instructions on the page](http://sils.unc.edu/it-services/servers/using-ssh). Use 192.168.1.74 for the Hostname, pi for the Username, and sloopbomb as the Password.

Navigate the folder /home/pi/ and look for a file named doorbell.mp3

Rename or replace this file with the new sound. Name the new file doorbell.mp3  
The system will play any mp3 named doorbell.mp3

Be sure not to delete any other files on the device.

Close SSH file transfer and test the new doorbell sound by walking in the main door.