

COOP CONTROLLER 1.0

Wi-Fi Enabled Coop Controller

Manual Version 1.7
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1

Table of Contents

INTRODUCTION.....	2
WARRANTY & PRIVACY.....	4
DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY.....	5
FEATURES.....	6
SAFETY PAGE.....	7
HARDWARE OVERVIEW.....	8
INSTALLATION.....	10
CONNECTING TO INTERNAL WEB SERVER.....	11
WEB INTERFACE.....	12
MENU.....	13
EVENTS.....	18
MAIL SETUP.....	19
BATTERY MODE.....	21
ADJUSTING THE OPEN/CLOSE POSITIONS.....	22
AMAZON ECHO USAGE.....	23
REPLACING THE INTERNAL CLOCK BATTERY.....	24
PORT USAGE.....	25
COMMON DOOR TO CONTROLLER ATTACHMENT.....	26
TYPICAL WIRING.....	27
TROUBLESHOOTING.....	28
TROUBLESHOOTING.....	29
UPDATING THE FIRMWARE.....	31
UPDATING THE FIRMWARE CONTINUED.....	32
UPDATING THE FIRMWARE CONTINUED.....	33

INTRODUCTION

Thank you for purchasing the Winsor Computing Coop Controller!

PLEASE READ THE MANUAL COMPLETELY BEFORE USE.

USE OF THE CONTROLLER IS CONTINGENT ON THE OWNER READING ALL SAFETY NOTICES ON THE SAFETY PAGE.

THIS CONTROLLER USES POWERFUL MOTORS WHICH CAN CAUSE BODILY INJURY IF ALL SUGGESTED PRECAUTIONS ARE NOT FOLLOWED.

**All Warnings and Suggestions will be marked in RED.
Thank you!**

The Coop Controller represents the easiest way to control doors, lights and any other devices you may need which makes having chickens easier and more enjoyable to you and your family.

This product represents seven years of software development & circuit design. Every effort has been made to make running a coop safe & easy.

The controller runs on 12 volts from either a 12V battery or a 12V wall adapter (which is included.) A solar panel and solar charge controller can also be used if installing in areas with no a/c power.

Should you need to contact technical support for any issues or have any suggestions to make this product even better, just send us an email: support@winsorcomputing.com

COOP CONTROLLER 1.0

Thank you again for your purchase!

WARRANTY & PRIVACY



Winsor Computing hopes you find this product useful. If, in the first 60 days of owning the device, you find that it does not work as expected, just return the product and we will refund you the full purchase price. We really want you to be happy. Instead, you can also choose to send us an email explaining what you would like changed and we will look into the issue.

Either way, we want you to be happy.

Your privacy is very important. This device does not use/sell any information you enter into the device. No personal information is every sent to Winsor Computing or our affilitates.

In fact, we only connect to our web site to check firmware version of your device. That's it!
Period.

DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY

And now for some legal mumbo jumbo...

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PRODUCT DESCRIPTIONS

Winsor Computing attempts to be as accurate as possible. However, Winsor Computing does not warrant that product descriptions or other content of any product is accurate, complete, reliable, current, or error-free. If a product offered by Winsor Computing itself is not as described, your sole remedy is to return it in an undamaged condition within the time specified by section "WARRANTY & PRIVACY" of this document.

Winsor Computing Support
support@winsorcomputing.com

FEATURES

The Winsor Computing Coop Controller contains an impressive list of hardware and software features not found on any other coop door controller sold today!

- Runs on a powerful 32 bit Dual-Core RISC CPU running @ 80 mhz.
- It supports a WiFi connection of 802.11 b/g/n with WEP or WPA2 authentication. (WPA2 is recommended)
- It contains an internal web server for easy setup and control. The web server uses 1024 bit encryption. It would take a computer 10^{32} years to crack the web password.
The web server can be accessed at <http://192.168.4.1:8080>
Default account: User: admin Password: coop1234
- Two relays for controlling 12V devices up to 1.2 amps.
- Two user controllable flashing LEDs to simulate a predator blinking and scare other predators away from your coop.
- No external door mounted sensors are required. Uses door position and weight to determine if the door is open or closed.
- Can be controlled via your amazon echo devices if the coop controller is connected to your home WiFi. (This feature is still in beta testing but is currently fully functional)
- The Coop Controller has a 1.2 amp re-settable circuit breaker on the power supply and both relays.
If the current ever goes over 1.2 amps, the controller will shut down until the coop power is removed and coop is allowed to rest for a minute. This is a safety feature.

SAFETY PAGE

Before using the controller please read the following items for safe operation of the coop controller.

Failure to follow these safety precautions may cause INJURY TO YOU OR INJURY TO YOUR CHICKENS OR DAMAGE TO YOUR COOP.

- Always keep all body parts away from the cord and door when in motion. The motor is very powerful and can tightly pull on the kevlar cord.
- Wear eye protection when standing less than 3 feet from the cord when in motion.
- Turn off all power to the controller and any other connected devices during setup and while making wiring changes.
- To avoid any fire hazard, keep all coop bedding and other flammable material away from the controller, batteries, power adapters and wiring.
- Do not use incandescent lighting with the controller or inside a coop. A fire may occur. Instead, 12V LED lighting device is a recommended alternative.
- If a 12V Battery or solar panel is used to power the controller, insert a 1A fuse inline to the controller.
- If replacing the cord, use only kevlar or nylon line. Other materials can stretch and break due to weather and sun exposure.
- If mounting the controller externally on your coop, please provide cover to keep water from freezing on the line which will cause the controller to act erratically.
- It is your responsibility to ensure all electrical connections are kept from shorting in inclement weather conditions.
- If you are unsure about wiring external devices to the coop, consult an electrician.
- The provided 120-240 AC power adapter is rated for indoor use only. Please purchase an outdoor 12V adapter if the controller will be exposed to rain and/or snow.
- Use of doors over 20 lbs is not recommended. Although the controller can open and close door of this size, overheating or over current stop conditions may occur when opening the door. Extended testing of doors in this size range has not been performed by Winsor Computing and we do not warranty the controller or any parts when operating doors of this size.

Coop controllers will run safely and reliably for years if all precautions are followed. Winsor Computing always wants you and your chickens to be safe. If for any reason you feel you are unsure on how to use the controller, Winsor Computing would rather you return the controller within 30 days for a full refund instead of using or wiring the controller inappropriately.

HARDWARE OVERVIEW

The heart of the controller is a 32 bit Dual-Core RISC CPU running @ 80 mhz.
It supports a WiFi connection of 802.11 b/g/n Wi-Fi with WEP or WPA2 authentication.
(WPA2 is recommended)

It contains an internal web server for easy setup and control. (**web server is at port 8080**)
There are 2 Relays rated at 1.2 amps @ 12V DC MAX. Please adhere to these limits.
An OLED monitoring display which shows the controller and door status.

And finally, the system only uses ~40ma when idle. Only 128ma when all relays are on!
If you don't require WiFi and disable it via the menu, current use is only 18ma.

A 12V 100 amp hour marine battery would run for:
~83 days with WiFi on
~32 days with WiFi and both relays on 24/7.
> 1 Year with WiFi off and relays off in Low Power Mode.
(Assuming one open and close event per day)

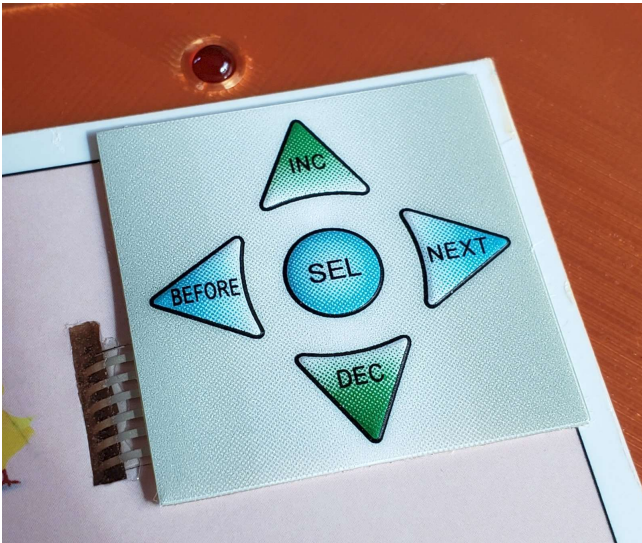
Using a \$50 solar panel and solar charge controller will allow the battery to run constantly for years!

WARNINGS:

When wiring a 12V battery to the coop controller it is a good idea to include a 1 amp fuse in-line.

12V run times are only estimates as battery technology and temperature can affect run times.
Hardware and firmware may not match the documentation as of the print date.
Winsor Computing may make hardware changes not reflected in this manual.

KEYPAD OPERATION



INC	Moves door up
DEC	Moves door down
BEFORE	Shows previous display screen
NEXT	Show next display screen
SEL	Select the current menu item.

Some keys can be held to perform other functions:

INC & DEC	Held for 15 seconds will perform a factory reset. All custom settings will be lost. All passwords will be reset.
BEFORE & NEXT	Held for 5 seconds will reboot the controller.

INSTALLATION

The Coop Controller package contains the following items:

- The Coop Controller.
- A 12V AC adapter.
- Two RCA to terminal connector adapters.

Contact Winsor Computing if any items are missing or damaged.

Carefully remove the controller from the box. Be careful not to drop the controller as the internal parts are fragile and damage may occur.

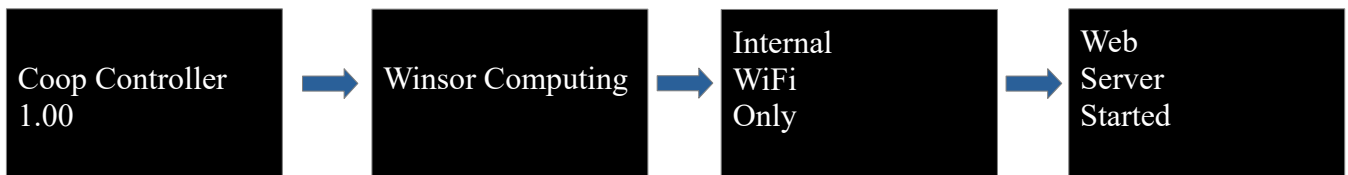
The controller ships with the door cord retracted into the box so it does not become tangled during shipment and until the product is installed.

To let more cord out, pull down on the cord until you hear a click while simultaneously pushing the down button. You can also put a two pound weight on the carabiner and push the down button.

It is recommended that before you install on your coop controller on your coop, you should configure the controller from the comfort of your home.

First, Plug AC adapter into the bottom of the controller.

The two top red LEDs will illuminate and the following screens will appear in this order.



At this point the two red LEDs will start to blink off then on every 5 seconds. This is normal and it is intended to simulate a predator blinking its eyes. This has been shown to keep other predators away from the device. This feature can be disabled via the web and menu system.

The display will now start cycling between the following status screens:

- Door State, IP Address & Version, Sunrise/Sunset Time,
- Internal Controller Temperature, Current Time & Date.

CONNECTING TO INTERNAL WEB SERVER

Using a PC/Mac or phone connect the wifi to the controller's internal access point. It will show up as CoopControllerNNNNNN (Where NNNNNN will be a unique series of letters)

The default security password is **coop1234. It is recommended that you change this password before installing the controller on your coop.**

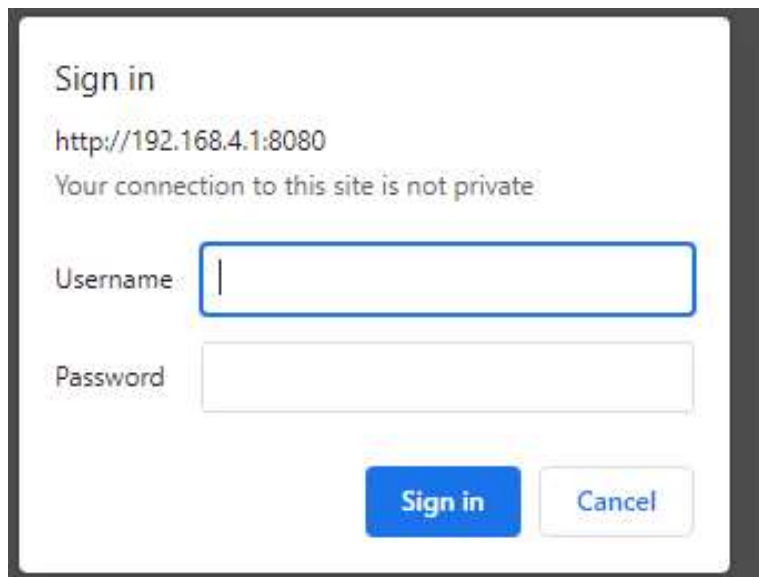
Once your PC is connected to the controller, go to your web browser and enter the following web address:

<http://192.168.4.1:8080>

(If you have any issues connecting, try switching the PC/Phone wifi off then back on. Also try rebooting the coop controller. This may help get a better connection. When connecting to the internal access point, try to be at least 25 feet or closer to get a good connection.)

The following login form will appear:

The default login account is:
Username: admin Password: coop1234



Sign in

http://192.168.4.1:8080

Your connection to this site is not private

Username:

Password:

It is a good idea to rename the controller and change the web password via the MAIN SETUP.

WEB INTERFACE



Every web page inside the internal web server starts with the layout shown above.

The menu system is comprised of 7 sections:

- **STATUS** – This page shows a snapshot of the door, wifi, time, sunrise/sunset & user events.
- **MANUAL CONTROL** – Allow manually opening and closing the door, turning relays on and off, turning LEDs on/off, rebooting, and factory reset.
Note: factory reset does not confirm. Be very careful and do not inadvertently click this button.
- **MAIN SETUP** - Name controller, relays, set wifi settings, change date/time, enable LEDs, Enable amazon echo support, set controller location.
- **EVENTS** – Set door open/close times. Control relay on/off times.
- **MAIL SETUP** – Configure SMTP server information for controller mail notifications.
- **UPDATE SOFTWARE** – Apply updates downloaded from web site.
- **HELP** – Online help. (Note: Must be connect to wifi)

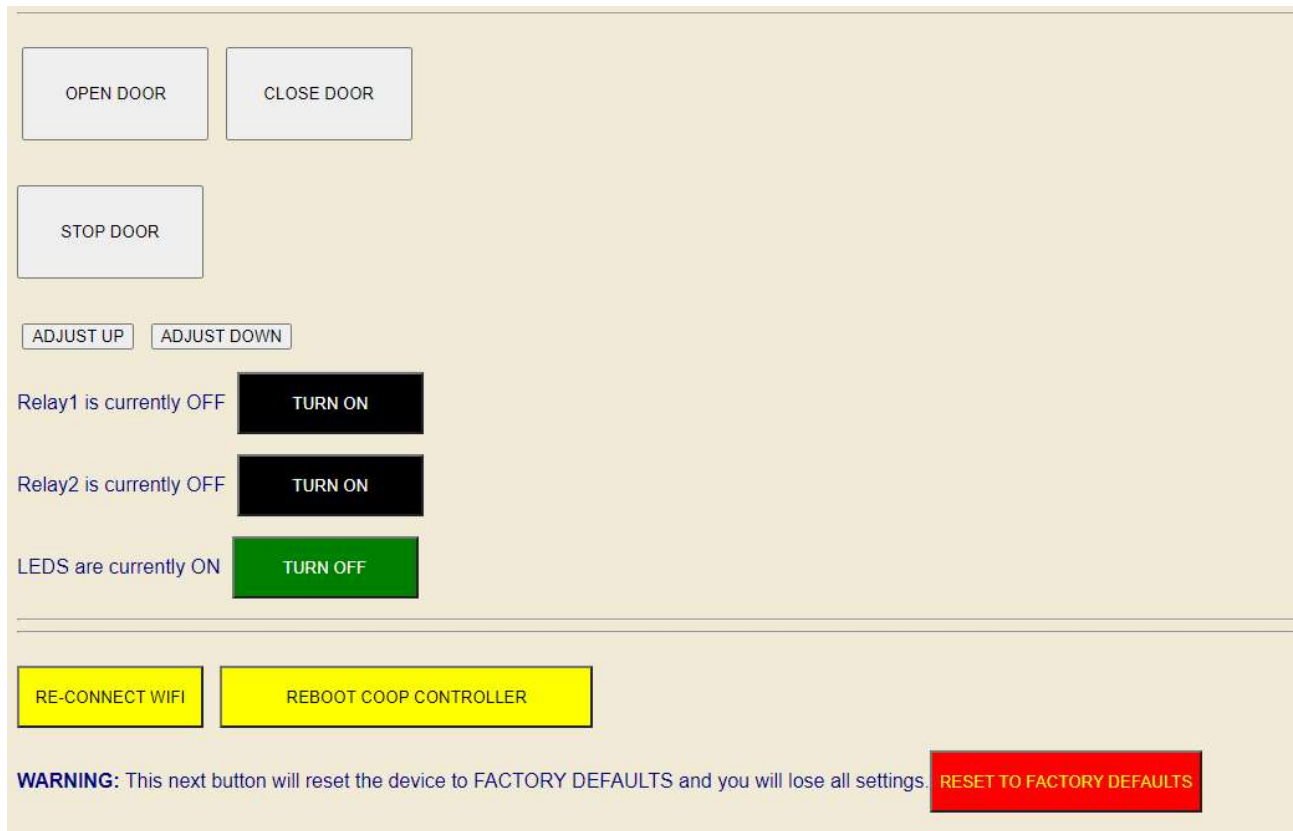
MENU

STATUS PAGE

The screenshot shows the status page of the COOP CONTROLLER. At the top, it says "COOP CONTROLLER - Winsor Computing, Copyright 2022-. All Rights Reserved." Below this is a small image of a chick and an egg. A callout box labeled "Controller name." points to the text "Device Name: MyCoopController". Below the device name is the version "VERSION1.00-B162". A menu bar contains buttons for STATUS, MANUAL CONTROL, MAIN SETUP, EVENTS, MAIL SETUP, UPDATE SOFTWARE, and HELP. Below the menu, it says "Page auto updates every 5 seconds". The main status is "DOOR STATE is CLOSED" in green. Below this, it lists sensor states and relay statuses. A list of events follows, starting with "EVENT 1 Open DOOR at 05:12:00 AM". At the bottom, several callout boxes point to specific data: "Wifi IP address and signal strength." points to "IP address: 192.168.5.111 (Signal: Perfect!)"; "Date & Time" points to "LOCAL Date : 06/02/2022"; "How long has controller been powered ?" points to "UpTime:00:00:31"; "Location and sunrise/sunset times." points to "YOUR CITY FOUND: BOSTON", "Sunrise : 05:12:00 AM", and "Sunset : 08:15:00 PM"; and "Temperature in controller" points to "Temperature : 77.5F 25.2C".

Parts of status page

MANUAL CONTROL PAGE



<u>BUTTON</u>	<u>DESCRIPTION</u>
OPEN DOOR	Opens the coop door
CLOSE DOOR	Closes the coop door
STOP DOOR	Will stop the door if moving. (may be delayed due to web/wifi speed.
RELAY1/2	Turns on/off the relays. You can connect device up to 1.2 amps.
LEDS	Turns LEDs on front of controller on/off
RECONNECT WIFI	Disconnects then reconnects to current wifi.
REBOOT CONTROLLER	Reboots the controller.
RESET TO FACTORY	Resets the controller configuration to initial factory setup.

Be very careful not to click the RED button. It will reset the controller back to factory values.

MAIN SETUP

Device Name: Demo Controller

VERSION1.00-B180

MENU: [STATUS](#) [MANUAL CONTROL](#) [MAIN SETUP](#) [EVENTS](#) [MAIL SETUP](#) [UPDATE SOFTWARE](#) [HELP](#)

If no SSID or PASSWORD are set, the system will start with only the internal Access Point running on 192.168.4.1

Change settings and then click SAVE SETTINGS button below

SAVE SETTINGS

SET NEW DEVICE NAME :

WEB LOGIN PASSWORD :

VERIFY WEB LOGIN PASSWORD :

SET RELAY1 NAME :

SET RELAY2 NAME :

SSID:

PASSWORD:

VERIFY PASSWORD :

Use static IP Address (WiFi only)
If not connected to wifi, only the internal WiFi access point at 192.168.4.1:8080 will be available.

STATIC IP:

STATIC SUBNET MASK:

STATIC GATEWAY:

STATIC DNS1:

STATIC DNS2:

MAC: E0:E2:E6:9C:4C:E8

LOCAL Date : 08/07/2022
LOCAL Time : 02:58:09 PM

SET NEW DATE :

SET NEW TIME :

LOCAL TIMEZONE HOUR ADJUST (enter +1, 0, -1 etc...):

Daylight Savings Active

Enable LEDs

Enable screen saver

Enable Amazon Echo control. (reboot after changing)

Low Power Mode - When checked controller will enter sleep in 5 mins. Use any menu button to wake up controller.

COOP CONTROLLER 1.0

<u>SECTION</u>	<u>DESCRIPTION</u>
NEW DEVICE NAME	Sets a custom controller name as seen on network and at the top of each web page.
WEB LOGIN PASSWORD	Sets the password for web login and for internal access point.
SET RELAY1&2 NAME	Sets a custom name for relays. Example: Name it Camera is a camera is connected to the relay. Used with amazon echo as well.
SSID & PASSWORD	Sets the access to your home wifi access point.
USE STATIC IP ADDRESS	The default IP address for the controller is assigned by your home wifi access point. If you want an IP address to remain the same over reboots of your coop controller, you'll need to set the IP address to be static. Make sure your home wifi also reserves the IP address so it doesn't get user with another device over DHCP. This will cause an IP address conflict.
SUBNET MASK	Used by static IP assignment. Usually 255.255.255.0
GATEWAY	should be the IP address of your home wifi router.
DNS1 & DNS2	can be the same as GATEWAY.

DNS Alternatives: (Winsor Computing has no affiliation with any of these providers)

Google	8.8.8.8	8.8.4.4
Quad9	9.9.9.9	149.112.112.112
OpenDNS Home	208.67.222.222	208.67.220.220
Cloudflare	1.1.1.1	1.0.0.1
CleanBrowsing	185.228.168.9	185.228.169.9
Alternate DNS	76.76.19.19	76.223.122.150
AdGuard DNS	94.140.14.14	94.140.15.15

LOCAL DATE & TIME	Current date and time read from real time clock. When connected to wifi, the time will be read from a remote server and the real time clock will be updated.
SET NEW DATE & TIME	If you are never connected to wifi, tyou may want to set your time and date using these items.
LOCAL TIME ZONE:	When connected to wifi, the time zone will be displayed here.

COOP CONTROLLER 1.0

ENABLE LEDs	Turns front two LED flashing on/off
ENABLE AMAZON ECHO	Allows amazon echo to open close door, turn relays on/off. Follow your amazon echo instructions for adding a new device.
LOW POWER MODE	<p>In this mode, after 5 mins of no activity (web or keypad input), the controller will enter low power mode.</p> <p>This mode uses only ~2ma of power.</p> <p>Door Open & Close will still function as usual. Since holding relays on takes additoinal power, when a relay turns on, the controller will leave low power mode until the relay shuts off.</p> <p>IMPORTANT: Wifi is also disabled when in low power mode. Pressing the SEL key on the keypad will wake the controller for 5 mins and allow web access.</p> <p>Sleep mode will not start if you are on the status page.</p> <p>Any web page access will reset the sleep timer back to 5 mins.</p>
LATITUDE LONGITUDE	<p>This setting configures the location where the controller will be used. This is the unique feature of our coop door controller compared to other controllers. Our controller can be used indoors or outdoors. It does not require a light sensor. Instead, it uses your location and the precise path the sun travels across the sky to calculate when sunrise and sunset is. It doesn't care about daylight savings!</p> <p>Your coop controller will be pre-configured before shipment to your location.</p> <p>To change the location, the easy way is to clear the longitude and latitude, connect the controller to your home wifi and let the controller figure out where it is. Easy.</p> <p>Another way is to use an online tool such as: https://iplocation.com</p> <p>Just copy and paste the Latitude & Longitude to the appropriate fields at the bottom of the MAIN SETUP controller web page, click the save button and then reboot the controller.</p>

EVENTS

USER EVENTS:

If using sunrise/sunset, the OFFSET represents an offset from the start of sunrise or sunset.
Example: -01:30 would turn on 1 hour and 30 minutes before sunrise or sunset.
and +02:15 would turn on 2 hours and 15 minutes after sunrise or sunset.

Change settings and then click SAVE SETTINGS button below

SAVE SETTINGS

EVENT #1

DISABLE OPEN DOOR CLOSE DOOR RELAY 1 RELAY 2

Reference from Sunrise
 Reference from Sunset

Offset (+-HH:MM) :

EVENT #2

DISABLE OPEN DOOR CLOSE DOOR RELAY 1 RELAY 2

Reference from Sunrise
 Reference from Sunset

Offset (+-HH:MM) :

EVENT #3

DISABLE OPEN DOOR CLOSE DOOR RELAY 1 RELAY 2

Reference from Sunrise
 Reference from Sunset
 relay shuts off on door event

Time : Duration (Hours) : (Mins) : (Secs) :

The Events page allows you to set the door and relay on/off times.

By default, event #1 and event #2 are used to set the open and close events for doors. You can assign these events to relay as well. Any event can be set to doors or relays.

MAIL SETUP

Mail server and email addresses configuration

SMTP URL:

Email account:

Password:

SMTP port:

Use TLS (Transport Layer Security)

Send mail when:

Controller is rebooted.

User logs into controller

Sensor is not tripped during door move

Door is opened or closed

Which email addresses should notification be sent to:

Email address 1 for notifications:

Email address 2 for notifications:

Email address 3 for notifications:

After making changes to values above, click SAVE SETTINGS button below to save settings.

CLICK HERE TO TEST SETTINGS :

NOTE : Mail providers vary in response time. Please wait.

Here, you can set a SMTP server so the controller can alert you via email messages to events happening to the controller.

- | | |
|----------------|---|
| SMTP URL: | The server location where you send you email. |
| EMAIL ACCOUNT: | Your login name for the SMTP server. |
| PASSWORD: | Password for your SMTP server. |
| SMTP PORT | Port on the SMTP server for mail. This will vary server to server. Check with your SMTP provider for security and port information. |
| USE TLS | Unused. |

COOP CONTROLLER 1.0

The checkboxes on the mail setup page are type of alerts that mail messages will be generated.

Messages will contain a report on how the specified event executed. Every message contain a link you can click to the controller that sent the report email.

CONTROLLER IS REBOOTED

MESSAGE SENT: Controller TEST just rebooted.
Web page for controller: <http://192.168.5.NNN:8080>

USER LOGS IN

MESSAGE SENT: User connected to login prompt on coop controller TEST
Web page for controller: <http://192.168.5.NNN:8080>

SENSOR IS NOT TRIPPED DURING DOOR MOVE

Coop controller was told to move the door and sensor was not detected.
Re-run the TEST SENSORS function from controller menu to test sensors
Web page for controller: <http://192.168.5.NNN:8080>

DOOR IS OPENED OR CLOSED

Controller was requested to open.OPEN Sensor was detected successfully.
Web page for controller: <http://192.168.5.NNN:8080>

You can leave "Door is open or closed" unchecked if you wish to receive less emails.
You will then only receive messages if a door fails to open or close.

BATTERY MODE

Important note: Holding SEL button will wake up a controller in sleep.

Battery mode is a special mode which has the following features:

- Current use of battery is only 264 micro amps.
- Wifi will be disabled.
- LEDs (if enabled) will blink for only 100ms to conserve power.
- Once every minute, the controller will check for events to be processed.
- If a relay is turned on, the controller will remain in higher power mode to maintain relay connection. Therefore, use relays for brief moments and then shut them off to conserve power.
- Any web server activity will reset the sleep timer. Connecting a web browser to the web server status page will inhibit sleep while on that page.
- Low voltage is when the battery reaches 9v.

ADJUSTING THE OPEN/CLOSE POSITIONS

Adjusting the door open and close locations is very simple. (As it should be!)



To adjust the location the door will stop when opening, just push in the button on the black cord adjustment, then slide the black device up/down on the cord. When the magnet gets close to the bottom of the box during an open event, the motor will stop.

There is no need to adjust the close position. When the door reaches the bottom, the loose will cause the motor to automatically stop.

AMAZON ECHO USAGE

After checking the "Enable amazon echo" checkbox and then rebooting, you can ask alexa to discover devices. Just say "Alexa, discover devices"

After 1 minute, alexa will say that 3 devices were found.

They will be named:

CoopControllerXXXX-Door

CoopControllerXXXX-Relay1

CoopControllerXXXX-Relay2

The names will vary if you renamed your coop controller or renamed the relays.

Amazon echo command usage:

(Assuming your coop controller is named MyCoopController)

"Alexa, turn on MyCoopController Door."
(This will open door)

"Alexa, turn off MyCoopController Door."
(This will close door)

"Alexa, turn on MyCoopController Relay1"
(This will turn on relay1)

"Alexa, turn off MyCoopController Relay1"
(This will turn off relay1)

Note: Door & Relays will show as a light bulb in echo app.

REPLACING THE INTERNAL CLOCK BATTERY

To replace the battery you will need the following:

- A small flathead screw driver
- An 8mm hex wrench
- A new CR2032 battery.

Using the hex wrench, remove the 4 screws holding the cover to the controller box.

Important: When removing the cover keep the right side close so that the ribbon cable attached to the keypad does not detach.

Using the flathead screwdriver, carefully remove the battery.

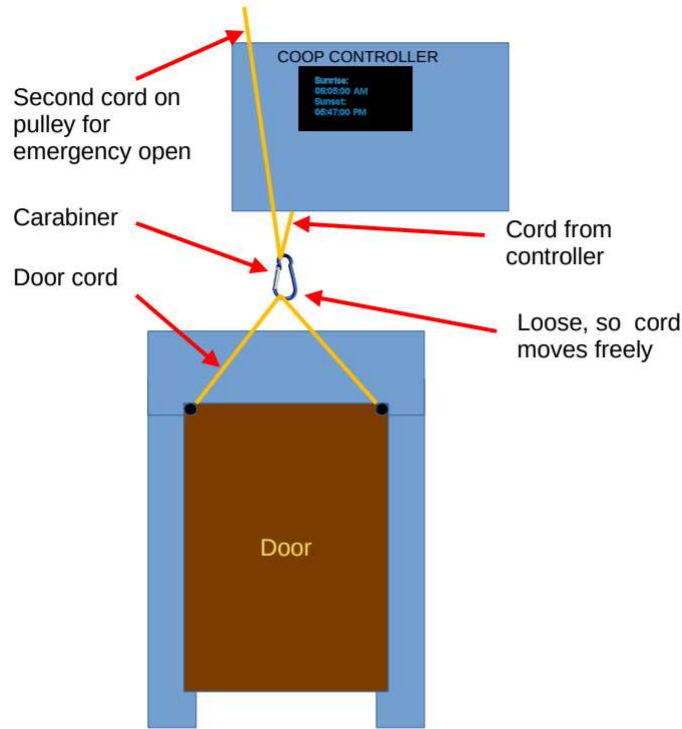
A new CR2032 should maintain the clock for many years.

PORT USAGE

The controller communicates via the following ports over ethernet. If you have any issues with the PC or PHONE application, check that these ports are not being blocked.

<u>PORT</u>	<u>USE</u>
80	Used by alexa discovery.
8080	Used by internal web server.
4444	Controller listens for commands from applications on this port.

COMMON DOOR TO CONTROLLER ATTACHMENT



Common door to controller attachment

When mounting the controller, try to keep the center of the cord aligned with the center of the door. This will make the door move smoothly up/down.

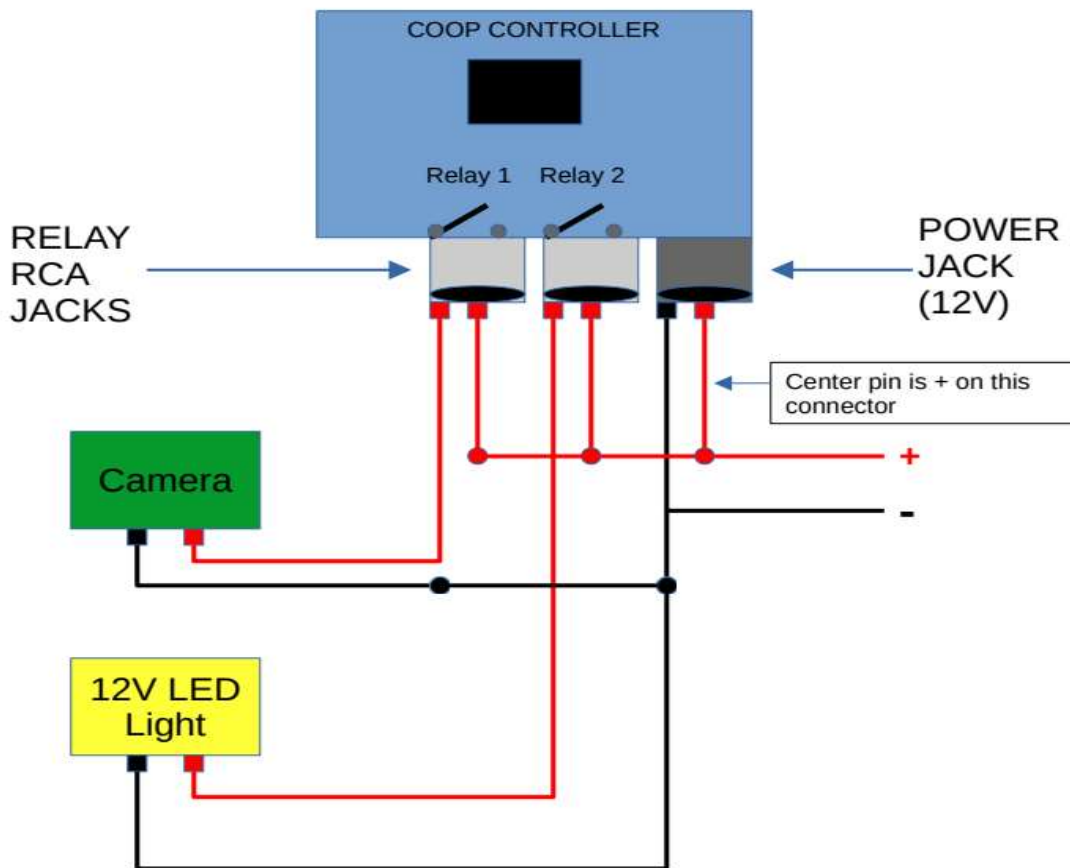
The second cord is optional, but recommended. In case of a power failure, the second cord can be pulled to let your birds out. If the power goes out and the door is in the UP position, you can unclip the carabiner and close the door manually. Reconnect the cord when the power comes back.

TYPICAL WIRING

Shown below is the typical wiring to power on/off a light and a camera. Remember, relays are each limited to 1.2 amps max.

Coop Controller Typical Wiring

Consult an electrician if you are unsure on how to wire electrical circuits. **Incorrect wiring can cause fires.** Be sure of all connections before applying power.



Camera on relay1 and 12V LED light on relay 2

TROUBLESHOOTING

I forgot my controller password.

If you forget the password to your controller, you can reset it via the menu system. Go to MAIN MENU / RESET / Reset Password

Also, a factory reset of all settings can be initiated if you hold up and down for 15 seconds. **You will need to set all door times again.**

The password will also be reset to coop1234.

Message BOTH SENSORS ACTIVE. CHECK DOOR in web server

This means the up magnetic sensor is detecting the magnet at the top AND there is no weight on the cord. It's possible the door detached from the coord. If the cord has no weight, then the controller believes the door at the closed position. Check that the magnet is not stuck to the bottom of the controller as well. After checking the coord and magnet, rerun MAIN MENU / TEST / Sensor Test

Any keypad press will stop the test.

Message DOOR POSITION UNKNOWN shows on display

There is no weight detected on the coord and the magnet is not detected on the controller.

Check that the coord is still connected to the door.

After a power cycle, the clock does not show the correct time

This is probably due to a expired battery. See section "Replacing battery" page 25

TROUBLESHOOTING

How do I let more coord out to connect to my coop door?

To let more coord out, pull down lightly on the cord until you hear a click while simultaneously pushing the down button. You can also put a two pound weight on the carabiner and push the down button. The motor senses if the coord is loose and stops the motor at that position.

Pushing the down button causes message "Already Closed"

This will happen if there is no weight pulling down on the coord. When the door reaches the closed position, the cord becomes loose and the controller will stop all down movement.

Moving door causes message "Current Limit Door Stopped"

The door you are trying to move is heavier than the setting allows or the door is hitting an obstruction while opening. If there is any obstruction, clear it.

If it stopped due to a heavy door, you will need to go into menu TUNE / Dr Size.

VLGHT	=	Very light door
LGHT	=	Light door
MED	=	Medium size door.
HVY	=	Heavy door
VHVY	=	Very heavy door.

The value you choose should not be too high. Just high enough so the door will function. If the door ever gets stuck, this value will shut off the motor to avoid any potential safety issues.

Message "Already Open"

Check that the magnet on the coord is not stuck to the bottom of the controller.

When the door opens, the magnet get close to the bottom of the controller and triggers a door open event. If the magnet sticks to the bottom of the controller this message will occur.

"Current Sensor Not Functional"

The internal current sensor has failed. The controller needs to be sent back to Winsor Computing. If this is within the 2 year warranty, the controller will be replaced at no charge.

"Door took too long" and the door stops.

Is there something in the way of the door which inhibits movement?

If the motor is not moving at all, then the controller may need to be sent back to Winsor Computing for repair. If this is within the 2 year warranty, the controller will be replaced at no charge.

If using batteries, are they low?

Message "Warning door not in opened pos"

If the door has been moved and not to the full top or bottom of travel, then the door will report that it is not in position. Move door to full extent of travel.

Message "Warning door not in closed pos"

If the door has been moved and not to the full top or bottom of travel, then the door will report that it is not in position. Move door to full extent of travel. TROUBLESHOOTING

On startup, message "Internal Wifi Only" is displayed.

Verify on the MAIN SETUP page of the web server that your home router ssid and password are set correctly.

Follow the instructions on page: 12 "CONNECTING TO INTERNAL WEB SERVER"

Controller starts, shows title display then reboots.

Your power supply voltage may be low.

Controller starts to open or close door then reboots

Your power supply voltage may be low.

UPDATING THE FIRMWARE

Periodically, Winsor Computing will update the firmware of the coop controller.

At the top of every page of the internal web server, the current firmware version is displayed.



First, go to the coop controller product page:

<https://winsorcomputing.com/wordpress/downloads/coop-controller-door/>

Near the bottom of the page is a link to the latest firmware. Also, there is a link to the release notes.

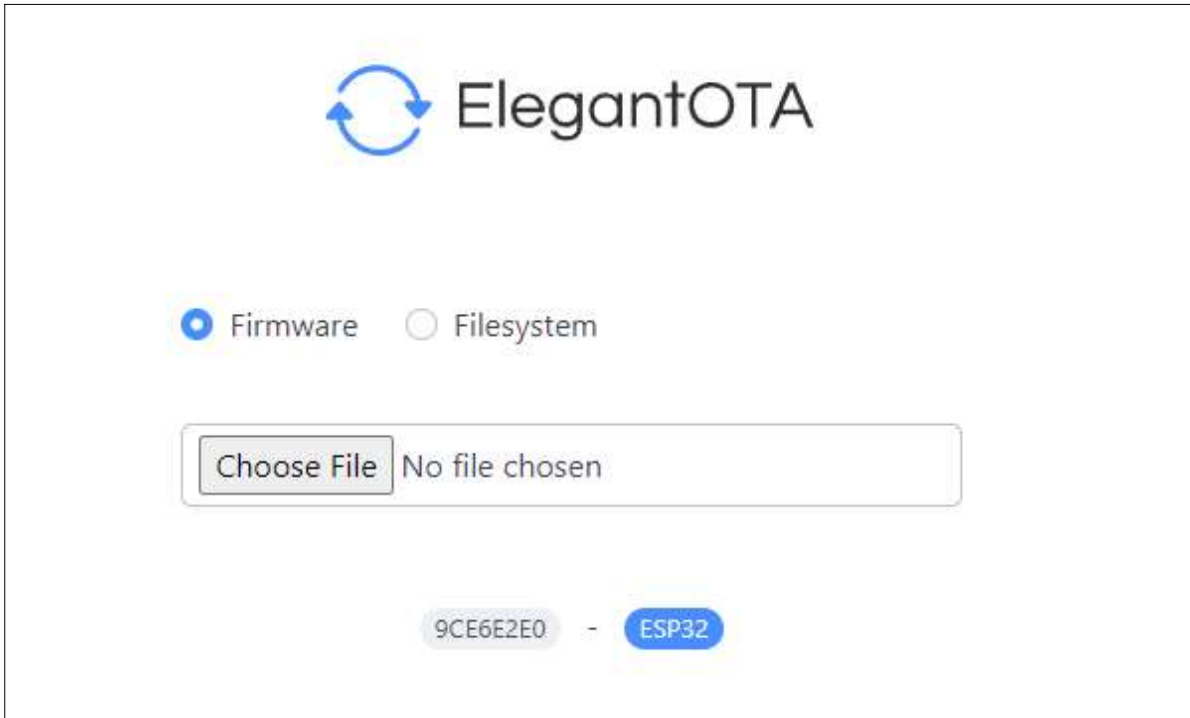
Download the firmware. (The file will have the name firmwareNNN.bin) (NNN is the version)

Next, click the update software button on the controller web page menu.



UPDATING THE FIRMWARE CONTINUED

The page will appear as shown below:



Click "Choose File" and browse to where you download the firmware .BIN file.

The download will start immediately. A progress bar will move from 0 to 100 %
If you are using a weak wifi link, the download could take a few minutes.



UPDATING THE FIRMWARE CONTINUED

The firmware update is complete when you see this message:



Your coop controller will reboot automatically when firmware update is complete.