

# IncuKit XL Advanced™ for cabinet incubators



**Ctrl Ofs:** Changes the temperature point where the heater will begin tapering down in power. Depending on your configuration, you may find that the temperature does not get to an average temperature that is close enough to the set point. This could be due to the size of your incubator or the insulation that is used in your incubator. By adjusting this value, it can help get the average closer to the set point.

**Ctrl Rng:** Changes the temperature range that the decreasing heater slope will be applied to.

**OSPslope:** This changes the percentage of total power that the heater will receive after the set point has been reached.

## Factory Reset:

To do a Factory Reset, unplug the unit and then press and hold the ENTER and DOWN (-) buttons while plugging back in. Release the buttons once the display reads "Loading Defaults".

**Tips:**  
*It is important to place the fan/heater units in a central location that allows for good airflow for consistent temperature throughout the incubator. If you find you have cool spots in your incubator, you may need to add an additional fan or two to better circulate the air. This is especially true for large or odd-shaped incubators.*

*Give your incubator plenty of time for the temperature to stabilize before placing eggs in the incubator. We recommend stabilizing for 24 hours to ensure everything is running properly. Be sure to include the water or HumidiKit™ during the stabilization process as humidity impacts temperature.*

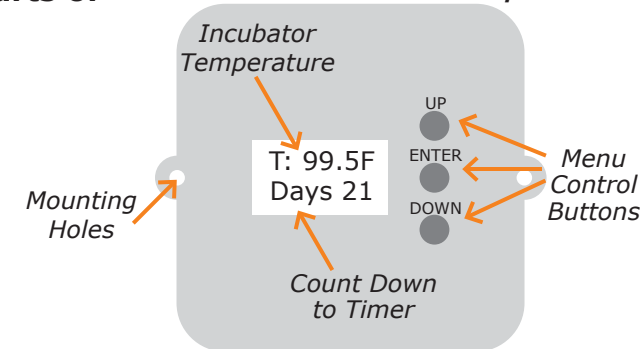
## Package Contents



There are two main parts of this IncuKit™:

1. The control module
2. The fan/heater unit(s)

Control Module Basic Components:



## Additional Resources

**Need additional help? Please feel free to contact us.**

Email: [service@incubatorwarehouse.com](mailto:service@incubatorwarehouse.com)

Phone: 208-740-1344

Facebook: [www.facebook.com/IncubatorWarehouse/](http://www.facebook.com/IncubatorWarehouse/)



## Installation

To see our online video for a simple demonstration of the entire installation process visit <http://youtu.be/OOONmR86X-c> or scan the QR Code.

Due to the nature of the IncuKit XL™ Advanced, the specific way to install will depend on your configuration. But here are some basic things to help you get started.



### 1. Determine where you will mount the thermostat.

The thermostat is designed to be mounted from the outside of the incubator container. Cut a hole in the side of the incubator just large enough to slide the blue box into the wall. The white mounting plate should then sit flat against the outside incubator wall, secure in place using mounting holes.

### 2. There are four sets of color-coded wires coming out of the back of the control module.

- Two black wires attached to power cord with red connectors: the power wires. Plug this into a 110/120V power outlet (or 220/240V if you purchased the 220/240V version).

- Two thick black sets with a white connector on each end: the white connector plugs into the white connector on the fan/heater module.
- Two black wires with the sensor on the end is the temperature sensor.
- Two white wires with white coverings on the end: used to control the egg turner motor (optional). More than one motor may be connected in parallel to the egg turner wires. It is not required to use these wires in your set-up. To connect to your egg turner motor, cut of the clear end wire caps, strip the ends of the wires and use wire nuts to connect to your egg turner motor wires.

**IMPORTANT NOTE:** *The thermostat is designed to work with the fan/heater units supplied in the IncuKit™. Using the control module with a different heat source will void the warranty.*

### 3. Get power to your unit.

Once the thermostat is mounted to the incubator, the power cord needs to be brought out of the incubator. You may feed it through the door or a window or disconnect the power cord at the red connectors, drill a hole in the wall of the incubator (13/16") to fit the black bushing that came with the kit. Press the bushing into the wall (from the outside) and feed the end of the power cord through it. Then reconnect the power wires to each other. See our online video for a simple demonstration of the entire installation process.

### 4. Installing fan/heater units:

1. Choose a location for the fan/heater unit(s). The ideal location for mounting is on the ceiling of your incubator equally spaced from the walls and each other. This will provide more even air circulation throughout your cabinet. If it isn't possible to mount from the ceiling, select a side wall that will provide the most un-obstructed path for air to circulate. Also consider where you want the thermostat mounted on the outside of your cabinet, taking into account the wire lengths.
2. Place each fan/heater unit with the blue mounting plate against the ceiling or wall and use the mounting screws to mount. There are four mounting holes, the one behind the power wires does not need to be used. **Note: DO NOT over-tighten the screws or the mounting tabs may crack or break. We recommend NOT using an electric drill as it is more likely to crack the mounting tabs.** There will be a small gap between the mounting plate and the wall due to the nuts on the face of the mounting plate. **Do not** try to eliminate this gap.
3. Plug the fan/heater unit(s) into the thermostat. Then plug the power cord into your wall outlet to turn on the control module. Position the temperature sensor in a location that will be as close as you can to the level of your eggs.

## Operation Instructions

### Basic Menu Options:

When first plugged in, the default display will show you the current temperature and the count down timer.

- Press the DOWN (-) button to see the set point (default is 99.5 degrees F).
- Press DOWN again to see the turner setting. Press the UP button twice to get back to the temperature setting.
- DOWN again to see the amount of power going to the heater.

### Setting Changes:

From any menu display, hold the ENTER button for three seconds. This will put the unit into "Change Settings" mode. Press ENTER again and you'll see an asterisk (\*) appear in front of the text. This means that if you press the UP or DOWN button, it will change the setting. Press ENTER again and it will remember the setting and you can move to the next menu option. To exit the "Change Settings" mode scroll to the bottom of the menu until "Exiting to main" appears on screen indicating it is exiting to main screen. **NOTE:** you must completely exit from the "Change Settings" mode for changes to go into effect.

This is the order you will see each setting option:

**HatchTmr:** This turns on the hatch timer so you can see how long it has been since you started hatching your eggs.

**Set Temp:** Moves the temperature up and down by 0.1 degree increments. Hold the UP or DOWN button down to change more rapidly. **NOTE:** *the temperature sensor is VERY sensitive and will adjust rapidly to tiny changes in temperature. You may see the temperature display moving by several 10ths of a degree above or below the set point and then go the other direction. The sensor is quickly communicating with the controller to adjust the amount of power that is sent to the heaters. The temperature variation that your eggs will experience is MUCH, MUCH less than the sensitive sensor is reading.*

**Trn On T:** If using a motor that should be cycled on and off, this allows you to control how many seconds the turner motor is on each cycle.

**TrnFullC:** If using a motor that should be cycled on and off, this allows you to control how many minutes between cycling the turner motor.

**Example:** *With a 1 RPM motor, if Turner is set to 100%, Trn On T is set to 15 and TrnFullC is set to 60 then your motor will receive power for 15 seconds every 1 hour. Every 4 hours the motor will make 1 rotation.*

**Turner:** Controls the amount of power going to the turner motor port so you can speed up or slow down the turner motor.

**Trn Auto Off?:** Controls if the turner will automatically turn off during the last three days. Y indicates that it will stop automatically. N indicates that it will continue turning.

**Degrees:** Changes the setting from Fahrenheit to Celsius.

**BK Light:** You can adjust the display backlight up and down.

**Temp Cal:** Allows the user to calibrate the temperature sensor if needed. If you have a trusted thermometer that is giving a different reading than the temperature reading from the sensor, you can calibrate the reading.