

# **CT** Series Incubator User Manual



### MODELS INCLUDE BOTH SETTER TRAYS & HATCHING BASKETS

www.hatchingtime.com



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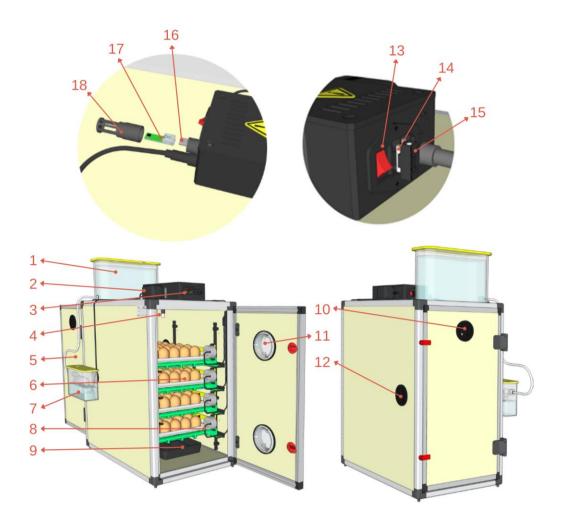
2	Cleanup / Servicing
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# Parts List

# CT Series Components

1	Water Tank - 1 Gallon	10	Adjustable Exhaust
2	Humisonic Adapter	11	Window
3	Display	12	Adjustable Air Intake
4	Temp / Humidity Sensor	13	Power Switch
5	Back Door	14	Fuse
6	Egg Turner & Basket Section	15	Spare Fuse
7	Humisonic Reservoir	16	USB Connection Module
8	Egg Turner Adapter	17	Room Sensor
9	Humidity Tray	18	Room Sensor Cover







# Parts List by Model

	CT60SH	CT120SH	CT180SH		
Conturn <sup>™</sup> 30 Egg Racks	2	4	6		
Conturn™30 Adapter	1	1	1		
Distribution Cable	1	1	1		
Power Cable	1	1	1		
Hatching Basket - CS30	2	4	6		
Humisonic™ Unit	1	1	1		
Humidity Tray - WT01	1	1	1		
Quail Rack - QT13	Sold Separately (See Page 5)				
Goose Rack - GT03	Sold Separately (See Page 5)				
Hatching Basket - CS15	Sold Separately (See Page 5)				

Conturn<sup>™</sup> 30

Conturn™ Adapter

Distribution Cable



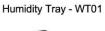




Hatching Basket - CS30

Humisonic™ Unit







Quail Rack - QT13

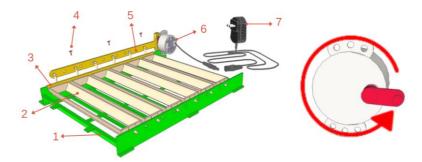


Goose Rack - GT03



# Egg Turner - ConturnTM30

1	Conturn <sup>™</sup> 30 Base	4	Rack Fixing Pins
2	Conturn <sup>™</sup> 30 Egg Racks	5	Main Turner Bar
3	Rack Fixing Bar	6	Conturn <sup>™</sup> 30 Motor
	1	7	Conturn <sup>™</sup> 30 Adapter



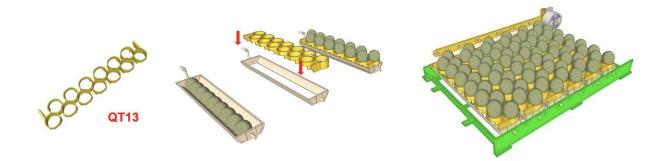
Every 3.2 hours, eggs turn a full 90 degrees (45 degrees on each side)

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# Egg Turner Accessories (Sold Separately)

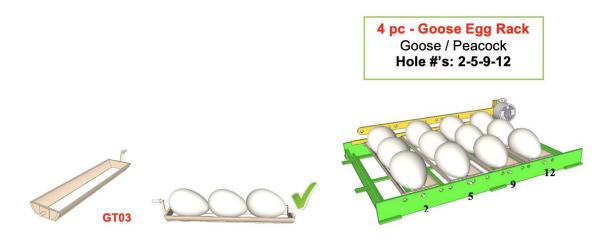
### Quail Egg Tray - QT13

Increase each rack capacity from 9 eggs to 13 eggs with the QT13 accessory. Attach the accessory on top of the existing rack to increase each egg turning layer from 56 to 78 eggs!



Goose Egg Rack - GT03

Set up to 3 goose eggs per rack with the GT03. The Goose Egg Rack is designed for large goose eggs. Goose eggs must be set in a horizontal position with the small end a bit lower (10 degrees). Periodic cooling of goose eggs is advised to mimic natural incubation.



# **Capacity Chart**

	CT60SH	CT120SH	CT180SH
Quail	108 - 156*	216 - 312*	324 - 468*
Partridge	84	168	252
Pheasant	72	144	216
Chicken / Duck	60	120	180
Turkey / Large Duck	40	80	120
Goose / Peacock	24*	48*	72*

\*Must purchase separate egg racks to reach max capacity

# **Pre-Incubation Tasks**

# Egg Storage

In the days leading up to the incubator, make sure to keep your eggs between 50-68°F (10-20°C). For the best results, store within a controlled environment between 53.6-55.4°F (12-13°C). It is best not to store eggs past 7 days. Eggs must be collected at least 1 day prior to loading the incubator. Don't forget to turn your eggs during storage.

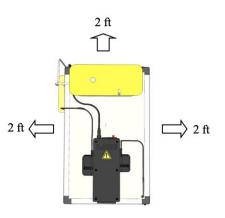
### **Caution!** Never store fertile eggs in conditions colder than 50°F (10°C) (ie: refrigerator)

# **Incubator Placement**

Keep in a clean, well-ventilated indoor space. Place on a flat surface away from doors and windows. Place 2 feet away from any structure/wall. Keep out of direct sunlight. Avoid high humidity. Large temperature fluctuations may affect incubation results. \* Ideal room temperature: 64.5-82.4°F (18-28°C)

### Caution! KEEP AT LEAST 2 FT AWAY FROM WALL

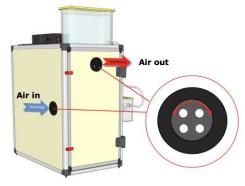
**Caution!** Room temperature must be between 59-86°F (15-30°C) **Caution!** Don't let children use without parental assistance.





# Ventilation

Carbon dioxide is produced during incubation and needs to be removed through proper ventilation. Good ventilation in your incubation room will enrich your eggs with oxygen rich air and remove excess carbon dioxide. In CT series models, ventilation within the unit is adjustable through exhaust and intake fans. Twist intake and exhaust holes to increase or decrease air flow within the incubator. Keep at least 2 ft away from any walls.



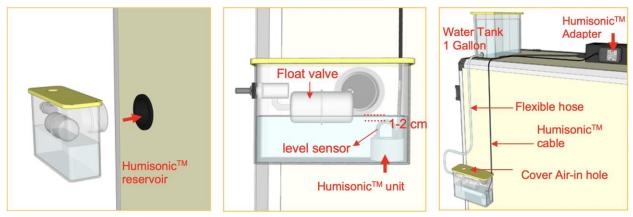
Caution! Make sure room is well ventilated.
Caution! Keep vent holes at least ¼ open at all times.
Caution! Keep vent holes fully open during hatching period.
Caution! Never breed birds in incubation room due to carbon dioxide release

# **Incubator Setup**

# Out of the Box Setup Guide

## Step 1) Attach Humisonic Reservoir

- 1. Place Humisonic<sup>™</sup> reservoir into hole
- 2. Place stainless steel Humisonic<sup>™</sup> unit into the bottom of the reservoir
- 3. Connect Water Tank 1 Gallon and Humisonic<sup>™</sup> reservoir with Flexible hose
- 4. Connect Humisonic<sup>™</sup> cable to Humisonic<sup>™</sup> Adapter.
- 5. Connect adapter to the control panel.



Caution! Do not use hard or lime-enriched water & change humidifier disks regularly.
 Caution! We do not advise leaving the unit on for prolonged periods of time.
 Caution! Never attempt to close the air-in hole on the Humisonic<sup>™</sup> reservoir cover.





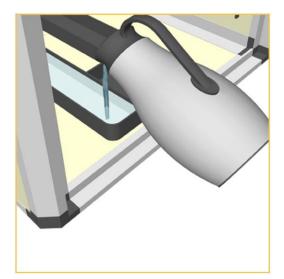
## Step 2) Fill first channel of humidity tray

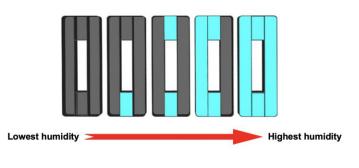
- Check room humidity levels with a hygrometer before incubation
  - If room is below 50%, always keep at least 1 channel on the humidity tray filled
  - If room is over 50%, do not fill humidity tray but leave within the incubator

### **Caution! NEVER REMOVE HUMIDITY TRAY - will affect calibration**

Caution! Never fill humidity tray with cold water, must be room temperature: 77-86°F (25-30°C) **Caution!** Always keep the tray at the bottom, even when empty

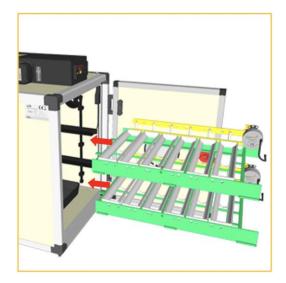
Caution! Keep full during the last 2-3 days.





# Step 3) Install Conturn<sup>™</sup>30 Egg Trays

- 1. Adjust egg rack, if necessary (See Page 9)
- 2. Slide egg turner into incubator
- 3. Plug in distribution cords





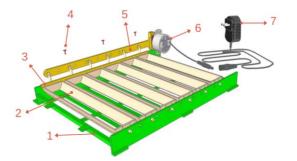


## Step 4) Adjust Egg Racks

Conturn<sup>™</sup> 30 comes with 6 pre-installed racks. If your eggs are bigger than chicken eggs, racks must be adjusted.

To adjust,

- 1. Remove the rack fixing bar (3) and pins (4)
- 2. Remove main turner bar (5) from motor
- Adjust the egg racks (2) for your egg size
   Attach main turning bar (5) to motor arm
- and racks
- 5. Attach the rack fixing bar (3) and pins (4)

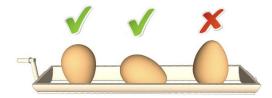


Contu	rn™ 30 ∣	has ′	13 hol	es shown b	elow					
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		$\bigcirc$	0	$\bigcirc \bigcirc$	00	0	$\bigcirc \bigcirc$	$\bigcirc \bigcirc$	0 0	
		1	2	3 4	56	7	89	10 11	12 13	

### Adjust trays using above guide



Racks must be adjusted for larger eggs. If the egg is too large, it may fall down during turning.







# Step 5) Plug in Cords



**Caution!** Do not use equipment with high electric consumption in the same electrical line. **Caution!** Always use a <u>grounded power line</u> for your incubator.

Step 6) Turn unit on & set parameters, if necessary (See Pages 11-13)



• Incubator comes preset for chicken eggs.

NOTE: Test incubator for 3-4 hours before egg loading



## Set Parameters - Incubators arrive preset for chicken eggs

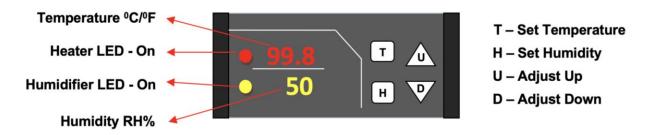
### Use the chart below to set your eggs to the necessary parameters

Reference pages 11-12 for how to edit parameter menu

Species	Incubation Period			Hatching Days	s (Last 3 Days)
Openies	(Days)	Temperature	Humidity	Temperature	Humidity
Chicken	21	99.8°F (37.7°C)	%RH 50 - 55	98.9°F (37.2°C)	%RH 65 - 70
Turkey	28	99.5°F (37.5°C)	%RH 50 - 55	98.6°F (37°C)	%RH 65 - 70
Quail	17	99.8°F (37.7°C)	%RH 50 - 55	98.1°F (37.3°C)	%RH 65 - 70
Partridge	24	99.5°F (37.5°C)	%RH 50 - 55	98.6F (37°C)	%RH 65 - 70
Pheasant	24	99.8°F (37.7°C)	%RH 55 - 60	98.9°F (37.2°C)	%RH 70 - 75
Duck	28	99.5°F (37.5°C)	%RH 55 - 60	98.6°F (37°C)	%RH 70 - 75
Goose	30	99.8°F (37.7°C)	%RH 55 - 60	98.9°F (37.2°C)	%RH 75 - 80

\*These are general, **suggested** parameters. Further research will be needed if what you are hatching is not listed or for specific breeds.

# Parameter Display Screen

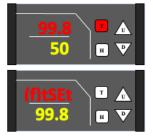


Factory Reset - Press & hold "H" + "U" for 10 seconds



# Adjust Parameters for Your Eggs

### To check temperature set point



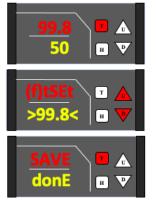
When main screen is active,

Press T button and release

(f)tSEt – Temperature Set Screen will appear 2 s and turn back to main scree

Bottom value is temperature set point

### To change temperature set point

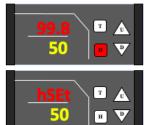


When main screen is active, Hold T button for 2 seconds

While temperature set value blinks Press U/D buttons to adjust temperature set point

When finished adjusting, Press T button to "save" set value

### To check humidity set point



When main screen is active,

Press H button and release

hSEt-Humidity Set Screen will appear 2 s and turn back to main screen

Down value is humidity set point

## To change humidity set point



When main screen is active, Hold H button for 2 seconds



donE

While humidity Set value blinks Use U/D buttons to adjust humidity set point

When finished adjusting, Press H button to "save" set value.

## Second sensor / Remaining time until next cooling



When main screen is active,

Press U button and release to check second sensor values and remaining time until next coolina.



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Note: Second sensor value will appear if second sensor activated (Check user menu parameters - Page 13)

SnS2 will appear

Then, second sensor temperature and humidity values will appear.

Then remaining time until next periodic cooling appears (hour.minute)

Note: Remaining time until next cooling will appear if periodic cooling function on (Check APC menu)

Then, screen turns back to main screen.

#### т Λu н

Turn Light On

When main screen is active, Press D button to light on and off

Note: Controller will turn off bulb automatically after 3 minutes

### To Lock Screen on/off



When main screen is active, Hold H+D buttons together for 3 seconds to lock and unlock screen

### Alarm delay



When main screen is active, Hold U button for 3 seconds Voice alarm will be delayed 15 minutes





# Changing Advanced Parameters (Technical Users Only)



Hold T + H together for 3 seconds to enter menu. - Use T /H buttons to choose parameter

Use U/D buttons to change parameter values
 Hold T + H together for 3 seconds to save changes

hhi: high humidity alarm <u>Started:</u> set value +10 <u>Delay time:</u> 20 minutes <u>Notification:</u> Alr 5 <u>Voice alarm:</u> continuous

hlo: low humidity alarm Started: set value -10 Delay time: 20 minutes Notification: Alr 6 Voice alarm: intermittently

(f)thi: high temperature alarm Started: set value + 1,5 F Delay time: 2 minutes Notification: Alr 1/3 Voice alarm: continuous

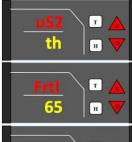
(fftio: low temperature alarm Started: set value - 4.0 F Delay time: 30 minutes Notification: Alr 2/4 Voice alarm: intermittently

(f)tco: temperature calibration value

CAUTIONI too is a critical parameter. Changing this can results in chick lose. Please use gualified and calibrated glass or electronic thermometers for calibration purpose. Check temperature values regularly

#### hco: humidity calibration value.

CAUTIONI hoo is a critical parameter. Changing this can results in chick lose. <u>Please use qualified and calibrated</u> glass or electronic thermometers for calibration purpose. Check humidity values regularly











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#### US2: USB connected device

<u>no:</u> no connected device <u>th</u>: second sensor connected (room/calibration) <u>tot</u>: iot module connected <u>Notification</u>: Alr 15 (ubs connection error)

#### below parameters active if Us2 is selected "th"

(f)rtl: second sensor low temperature alarm Started: below 18 C / 65 F Delay time: no Notification: Alr 12 Voice alarm: intermittently

(f)rth: second sensor high temperature alarm <u>Started</u>: over 28 C / 83 F <u>Delay time</u>: no <u>Notification</u>: Alr 11 <u>Voice alarm</u>: intermittently

rhl: second sensor low humidity alarm Started; below 10 RH Delay time: no Notification; Alr 14 Voice alarm: intermittently

rhh: second sensor high humidity alarm <u>Started</u>: over 85 RH <u>Delay time</u>: no <u>Notification</u>: Alr 13 <u>Voice alarm</u>: intermittently

rAt: second sensor temperature alarm activation On: alarms activated Off: alarms deactivated

rAt: second sensor humidity alarm activation On: alarms activated Off: alarms deactivated



# Alarms

## Set Internal Sensor Alarm

To enter main menu:

- 1. Press & hold "H" + "T" for 3 seconds.
- 2. Choose parameter: Press "T" or "H"
- 3. Edit parameter: Press "U" or "D"
- 4. Save changes: Press & hold "T" or "H" for 3 seconds.

	Symbol	Start Value	Delay Time	Notification	Voice Alarm
High Humidity	hhi	10	20 min.	Alr 5	Continuous
Low Humidity	hlo	-10	20 min.	Alr 6	Intermittently
High Temperature	(f)thi	0,8	2 min.	Alr1/3	Intermittently
Low Temperature	(f)tlo	-2	30 min.	Alr2/4	Intermittently

## Set External Room Sensor Alarm

To adjust:

- 1. Choose parameter: uS2
- 2. Select "th" option
  - If Alr15 appears, USB Connection error





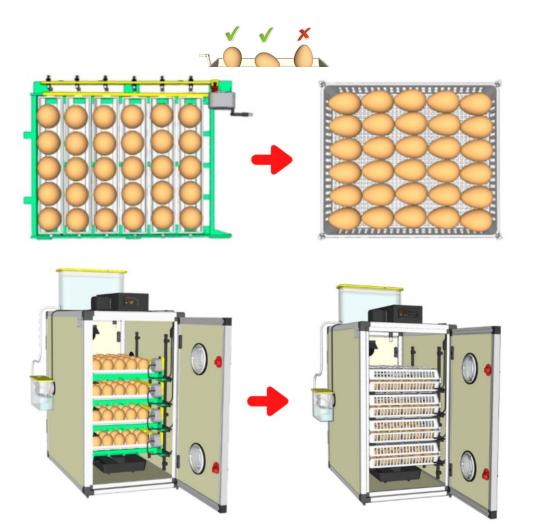
	Symbol	Start Value	Delay Time	Notification	Voice Alarm
Low Temperature	(f)rtl	Below 65°F (18°C)	no	Alr12	Intermittently
High Temperature	(f)rth	Over 83°F (28°C)	no	Alr11	Intermittently
Low Humidity	rhl	below 10RH	no	Alr14	Intermittently
High Humidity	rhh	over 85 RH	no	Alr13	Intermittently
Alarm Activation - Temperature	rAt			on / off	
Alarm Activation - Humidity	rAh			on / off	

# Loading Eggs

Example: Chicken (Typically hatches on 21st day)

Day 1-18	Day 19-21 (Last 3 Days)
1. Place eggs, larger side up, on turning rack (Conturn <sup>™</sup> 30)	1. Move eggs from turning racks to hatching baskets (CS30)
2. Make start temperature: 99.8°F (37.7°C)	2. Change temperature to: 98.9°F (37.2°C)
3. Change humidity to: 50% (50-55)	3. Change humidity to: 70% (65-70)







# Partial Loading (Every Week)

If you follow the procedure below, eggs can be loaded every 5-7 days. 2-3 days before you are about to have a layer hatch, change temperature / humidity to the 'hatching" parameter values, even if you have eggs in the setting period.

Day 1	Day 8	Day 15	Day 20
••••••••••••••••••••••••••••••••••••••	• <b>•••••</b> ••		
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### Example: CT Series Model: CT120SH - Setting 30 eggs a week

Day 1	Day 8	Day 15	Day 20	
Load top layer	Add new layer	Add new layer	Transfer first layer to hatching baskets	

	Setting Days	Hatching Days
Temp	99.8°F (37.7°C)	98.9°F (37.2°C)
Humidity	50% (50-55)	70% (65-70)



# Technology

# Active Periodic Cooling (APC) - Advanced Users Only

In natural incubation, birds leave the nest for a period of time at least once after the first week of the incubation. Eggs cool and dehumidify during this period. Active periodic cooling (APC) lets you mimic this natural behavior and increases chick quality (not hatchability). *Mainly used for goose eggs* 

### (clt) Cooling for time (Controlled Hatching Environments Only)

- System turns off completely for a set period of time
- Temperature and humidity alarms will be off during this time. It is only advisable to use temperature-controlled hatchery rooms, around 77-86°F (25-30°C), to reach high hatching results. After APC is complete, temperature and humidity will return to presets.

### (cIS) Cooling for a set of values (Recommended)

- The humidity and temperature are adjusted to the set values
- When cIS is turned on, factory settings are automatically enabled

Parameters	Symbol	Factory Settings	Chicken	Duck	Goose	
Cooling mode	cIF	oFF	On at 8th day Off at 19th day	On at 8th day Off at 25th day	On at 8th day Off at 27th day	
Cooling start time	cb	cof	con	con	con	
Cooling cycle	cPr	24 h	24	24	24	
Cooling set point °C (set–adjusted data)	cSt	-8.0°C	-8°C	-8°C	-8°C	
Cooling set point °F (set–adjusted data)	FSt	-15°F	-14.4°F	-14.4°F	-14.4°F	
Waiting time in cooling set point	cth	20 min	10 min - 8th to 13th 20 min - 14th to 18th	10 min - 8th to 15th 25 min - 16th to 25th	10 min - 8th to 14th 20 min - 15th to 21th 40 min - 22th to 27th	
Max cooling time	hct	120 min	120 min	150 min	180 min	
Humidification*	chu	on	-/on	on	on	
Humidification Time*	cht	10 min	10	15	15	
Max humidity during humidification*	chh	80 RH%	80 RH%	80 RH%	80 RH%	
Cooling fan activation**	ation** cFn on on		on	on	on	

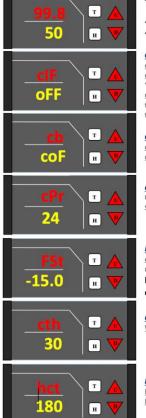
### cIS Suggested Values

\*Humidification mode - Once APC ends, high humidity is applied

\*\*Cooling fan activation - Fans push cool air through incubator during cooling process



# Active Periodic Cooling (APC) Parameter Menu



-Hold U + D together 3 seconds to enter menu

-Use T /H buttons to choose parameter -Use U/D buttons to change parameter values

#### <u>clF: Active Periodic cooling (APC) function activation.</u> <u>oFF:</u> Active Periodic Cooling is deactivated.

<u>cLt:</u> "cooling for a time" mode - Stops heater and humidifier for "hct" time. (check hct parameter) <u>cL5:</u> "cooling for a set" mode - Stops heaters and humidifier up

to an adjusted temperature set point and keep temperature at this point for an adjusted time. (check cSt/FSt)

#### cb: Active Periodic cooling Starting.

<u>con:</u> first cooling starts immediately after save the menu. <u>coF:</u> first cooling starts after periodic cooling cycle (cPr)

*cPr: Periodic cooling cycle time (hours)* 6-8-12-24-48-72 hour selectable System repeats cooling in this cycle

<u>FSt: cooling set point (for F display models)</u> <u>cooling set value</u>: temperature set point – FSt (-15C) note: FSt is only active in clS mode on C display models **Example: for a system working on 99.8F, system** cools up to 84,8F (99.8 – 15.0)

<u>cth: waiting time in cooling set point. (minute)</u> Waiting time of system in cooling set point cth is only active in cIS mode

hct: max cooling time (minute) Heater /humidifier cut off time for clt mode. Maximum cooling time for clS mode.









chu: humidification activation during cooling (Only for models equipped with humidifier) on: humidification activated oFF: humidification deactivated

#### cht: Humidification time in cooling (minute) (Only for models equipped with humidifier) Humidification will start before cooling finished for cht

time. Example. If cooling will finish within 30 minutes.

Humidification starts after 20 minutes (30-10) - Page 18 chh: max humidification set in cooling (RH%) (Only for models equipped with humidifier)

Humidifier works up to this set and keeps incubator in this point during humidification period.

#### cFn: cooling fan activation

(Only for models equipped with cooling fan) On: cooling fan is activated during cooling OFF: cooling fan is deactivated during cooling

#### Hold T+ H together for 3 seconds to save changes

During cooling, "cool" blinks on screen

CAUTION! Do not cut the power of incubator during cooling. Power cut will terminate cooling but the time for cooling period will continue.

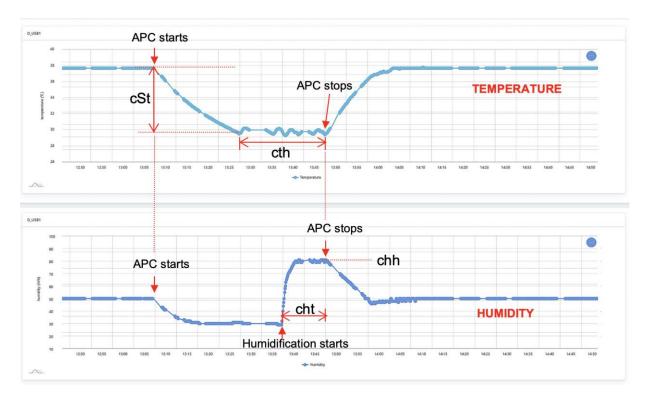


# APC (clS Mode) Technical Analysis

System repeats APC every cooling cycle time (cPr). In a power outage, (cPr) will continue from the last recorded time. Example: If there is a 1 hour power cut, the next cooling time will delay about 1 hour. Remaining time to next cooling can be checked by the controller **(See Page 12).** 

	1	
APC Parameter	Symbol	Set Value
Cooling mode	clF	clS
Cooling start time	cb	on
Cooling cycle	cPr	24 h
Cooling set point °C (set - adjusted data)	cSt	-8.0 C
Cooling set point °F (set - adjusted data)	FSt	-15 F
Waiting time in cooling set point	cth	20 min
Max cooling time	hct	120 min
Humidification*	chu	on
Humidification Time*	cht	10 min
Max humidity during humidification*	chh	80 RH%
Cooling fan activation**	cFn	on

"Cooling for a set (clS)" mode parameters





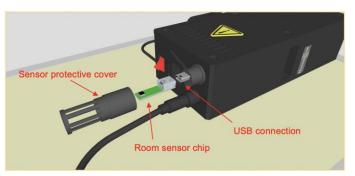


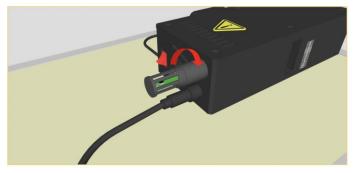
# Room Sensor

Your CT model is equipped with a room sensor installed through USB connection. Room sensor measures the temperature and humidity conditions of the room. The room sensor is identical to the main sensor inside the egg incubator. It can be used as a spare sensor in emergency situations. The incubator is complete with alarms to help you monitor high/low temperature and humidity.

USB connection can also be used for calibration sensors. Connection device should be selected from the user menu on the display. Additional USB accessories for your incubator coming soon!

**Caution!** Always power off the incubator during any sensor installation.





# Safety



#### **RISK OF ELECTRIC SHOCK!**

ALWAYS OPERATE YOUR EGG INCUBATOR WITH GROUNDED POWER SOCKET. NEVER ATTEMPT TO TOUCH OR SERVICE UNLESS THE MACHINE IS DISCONNECTED FROM THE MAIN ELECTRICITY SUPPLY.

Connections inside of control panel are at main voltage.



RISK OF BURN! HOT SURFACE. DON'T TOUCH NEVER ATTEMPT TO TOUCH THE HEATER INSIDE OF VENTILATION PANEL. THE MACHINE MUST BE DISCONNECTED FROM THE MAIN ELECTRICITY SUPPLY -WAIT AT LEAST 5 MINUTES



#### RISK OF ELECTRIC SHOCKI NEVER ATTEMPT TO SERVICE THE UNIT UNLESS THE MACHINE IS DISCONNECTED FROM THE MAIN ELECTRICITY SUPPLY. The cables, heater, fan and bulb are at main voltage.



#### RISK OF INJURY! KEEP HANDS AND FINGERS AWAY.

NEVER ATTEMPT TO TOUCH OR SERVICE FAN UNIT UNLESS THE MACHINE IS DISCONNECTED FROM THE MAIN ELECTRICITY SUPPLY.

# Power

• 110V / 60Hz - Plug directly into the wall without using extension cords

	CT60SH	CT120SH	CT180SH
Watts	140	185	210
Average	50	65	70



# Helpful Tips & Tricks

### Record Keeping

- Keeping personal records is important for identifying performance issues or problems in incubation.
- Name of species, setting date, transfer date, first and last hatching date, number of eggs set, number of fertile eggs, number of chicks, and % hatchability should be recorded for future reference.
- We suggest candling you eggs to check for infertility.
- Hatchability % can vary by species. Hatchability can be calculated by dividing the number of chicks by the number of fertile eggs.
- Example Table
  - NOTE: Incubation time for quail: 17 days, chicken: 21 days

		Date of		Number of		Hatchability	Notes	
Species	Set	Transfer	Hatching	Eggs	Fertile Eggs	chicks	%	Hatching times, Early, middle and late death, problem in chicks
Quail	1/1/2021	1/15/2021	1/18/2021	25	20	19	95	16-17 days hatch, 1 early death
Hen	1/5/2021	1/23/2021	1/26/2021	5	4	4	100	20-21 days hatch

### Humidity

- Never fill the humidity tray with cold water. Use warm water (close to incubator starting temperature) 77-86°F (25-30°C).
- The humidity tray is part of the incubator. Keep the tray inside the unit at all times, even when it is empty.
- Humidity tray is the backup water supply in case your external water tank runs out of water or in case of unexpected system malfunction.

**Caution!** Never fill humidity tray with cold water. Use room temperature water 77-86<sup>o</sup>F **Caution!** The humidity tray is part of the incubator. Keep in bottom, even when empty.

## Egg Turners

- Disconnect from power prior to adjusting egg racks.
- Before connecting Conturn<sup>™</sup>30 to power, be sure that channels are at the same angle.



## Active Periodic Cooling (APC)

• Results may vary based on different conditions: poultry species, egg size, and room conditions. Improper cooling can result in late hatching and chick loss.

**Caution!** Turn off Active Periodic Cooling (APC) function during hatching period (Last 2-3 days of incubation). Cooling during the last 2-3 days results in bad hatching rates and chick loss. **Caution!** Any parameter changes in the APC menu will reset the periodic cooling cycle (cPr). **Caution!** In clS mode, time to reach the cooling set point cSt (Fst) is highly dependent on room temperature. For very low set points, the system may not be able to reach the cooling set point. For such situations, the system finalizes cooling at max cooling time (hct).

### Independent Factors that could Affect Hatch Rates

- Incorrect incubation settings
- Turning problems
- Very low or very high incubation room temperature
- Inadequate room ventilation
- Long egg storage times prior to incubation
- Electrical failures
- Inadequate or wrong sanitary procedures for eggs or machine
- Very old or very young parents
- Improper / poor parent feeding
- Illnesses and genetic problems in parents
- Incorrect male / female ratio

## Cleanup / Servicing

- Never clean with water hotter than 122°F (50°C).
- Electrical parts must be kept dry during cleaning.
- Internal parts of the cabinet and egg trays must be cleaned after every hatch with an incubator sanitizer. Thoroughly clean your incubator after every season and leave it open for at least 1 day to dry before storing. Use a dry soft brush or vacuum to clean the control panel and fan panel.
- Regularly check the temperature and humidity of your model with a spare thermometer. Perform a re-calibration if necessary.
- Egg incubation requires dedication and oversight. Cimuka, or it's distributors will not be held responsible for loss of eggs or chicks under any circumstances. Most components of the egg incubator are easily replaceable. Always keep critical parts as spares. For spare parts and service needs, contact your vendor.

**Caution!** Disconnect incubator from electric supply before cleaning or servicing.





Used electrical and electronic equipment (WEEE) should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product(s) to designated collection points where it will be accepted free of charge.

Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.

Please contact your local authority for further details of your nearest designated collection point. Penalties may be applicable for incorrect disposal of this waste, in accordance with your national legislation.

For questions or concerns, please contact Hatching Time by phone: (800) 511-1369 or email: <a href="mailto:support@hatchingtime.com">support@hatchingtime.com</a>. Cimuka and Hatching Time are here to provide you with the best incubators on the market!