

CiMUKA EGG INCUBATORS

CT60 / CT120 / CT180

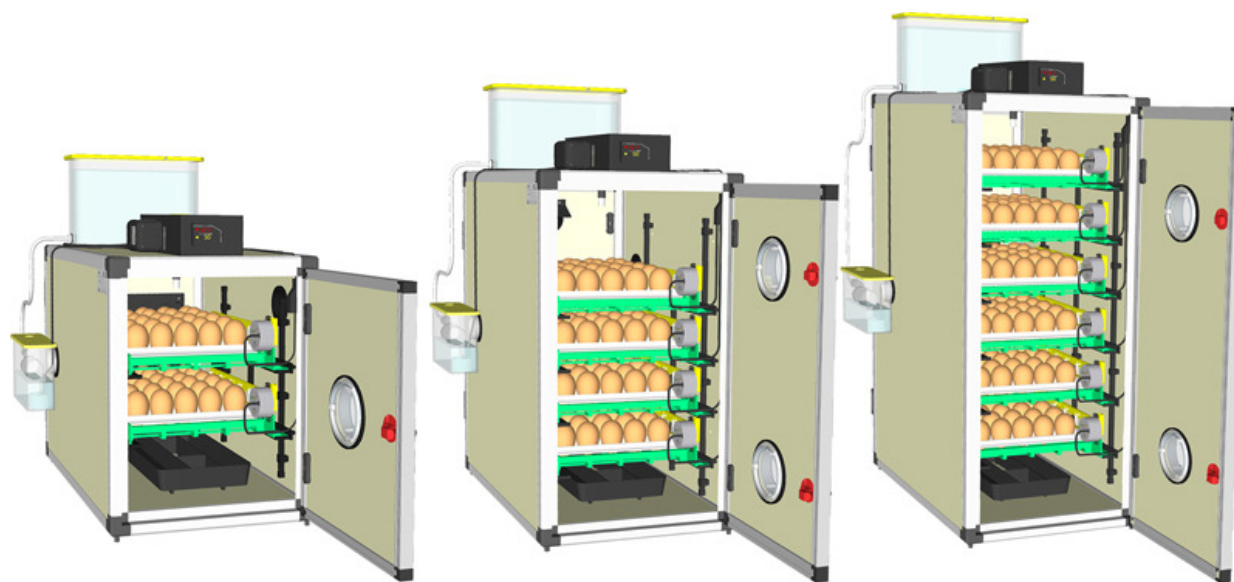
CT SERIES

Please read the following instruction manual carefully before use.

IMPORTANT! Keep this user manual safe for future reference.

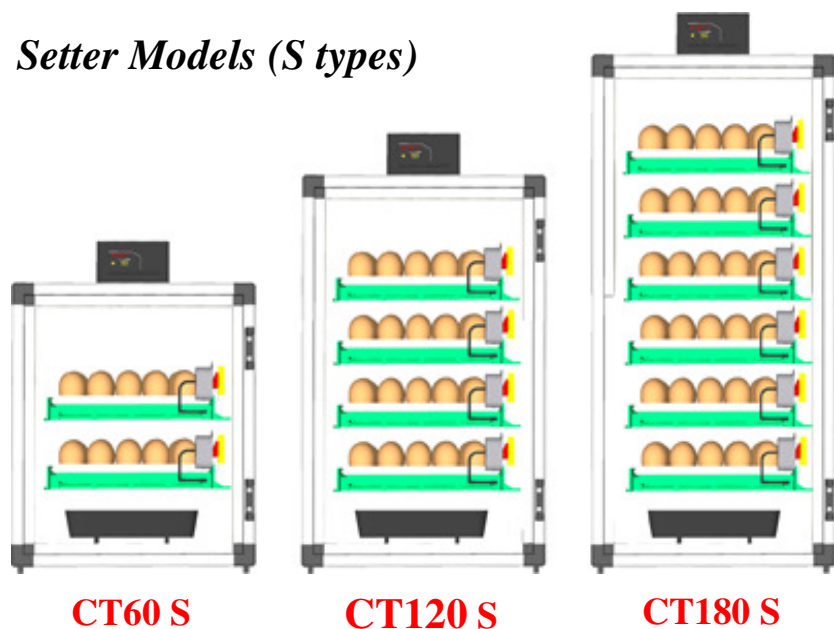
USER MANUAL

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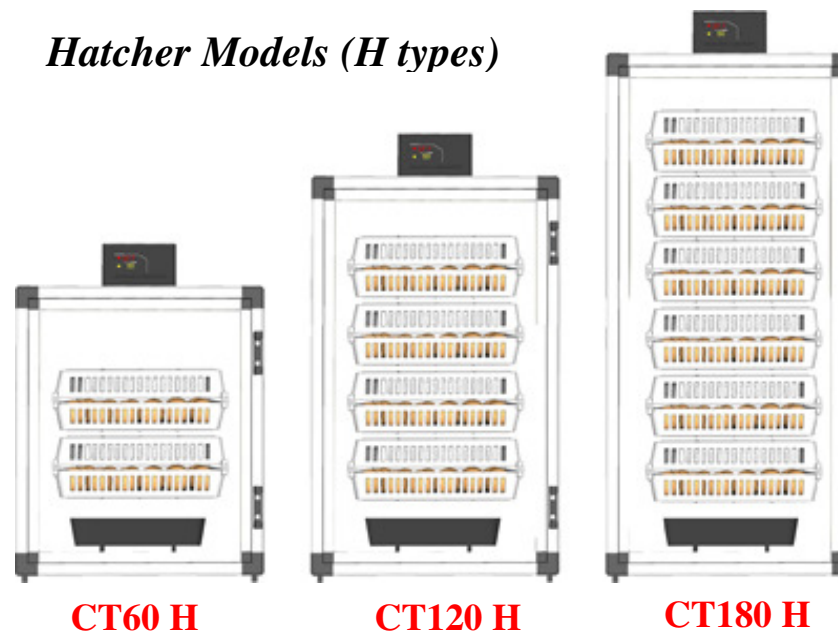


CT Series Models

Setter Models (S types)



Hatcher Models (H types)



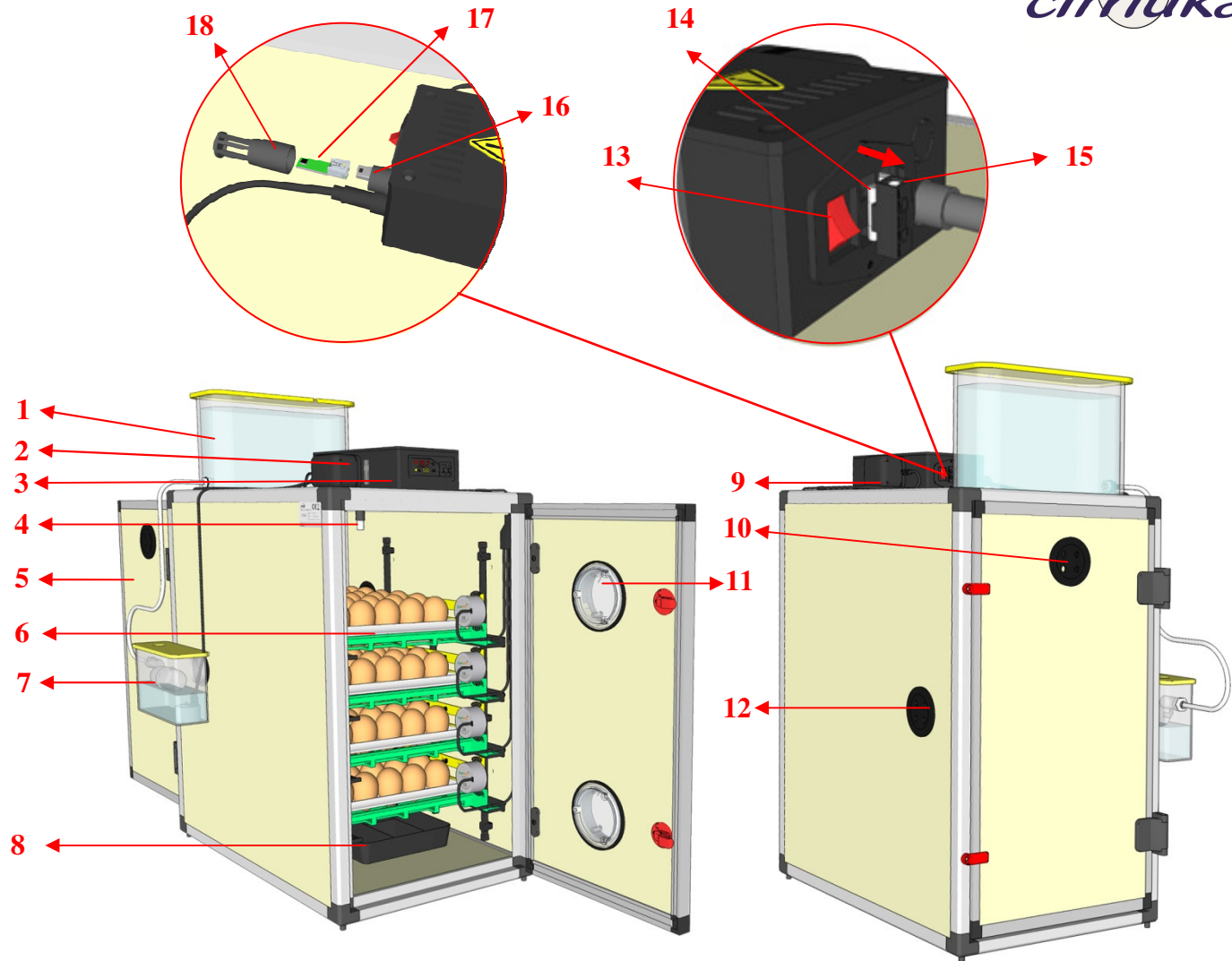
- *SH coded models include all turning and hatchery accessories.*

CT SERIES



Parts of Models

- 1 Water reservoir - 4lt (1 Gallon)
- 2 Humisonic™ Adapter
- 3 Control Panel
- 4 Temperature/Humidity sensor
- 5 Back Door for cleaning and service
- 6 Conturn™ 30 (SH and S types)
CS30 Hatchery Basket (SH and H types)
- 7 Humisonic™ reservoir
- 8 Humidity tray
- 9 Conturn™ Adapter
- 10 Adjustable Air-out holes
- 11 Observation windows
- 12 Adjustable air-in hole
- 13 Power inlet module (on/off button)
- 14 Protection fuse (F type)
- 15 Spare fuse (F type)
- 16 USB connection
- 17 Room sensor chip
- 18 Room sensor cover

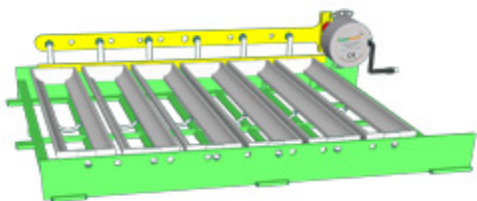


Showing CT120 Model

Accessories

	CT60			CT120			CT180		
	SH	S	H	SH	S	H	SH	S	H
Conturn™30	2 pc	2 pc	-	4 pc	4 pc	-	6 pc	6 pc	-
Conturn™ Adapter	1 pc	1 pc	-	1 pc	1 pc	-	1 pc	1 pc	-
Distribution cable	1 pc	1 pc	-	1 pc	1 pc	-	1 pc	1 pc	-
CS30	2 pc	-	2 pc	4 pc	-	4 pc	6 pc	-	6 pc
Humisonic™ System	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc
Power Cable	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc
Water tray WT01	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc
QT13- Quail Rack	optional	optional	optional	optional	optional	optional	optional	optional	optional
GT03- Goose Rack	optional	optional	optional	optional	optional	optional	optional	optional	optional
CS15	optional	optional	optional	optional	optional	optional	optional	optional	optional

Conturn™30



Conturn™ Adapter



Distribution cables



Power Cable



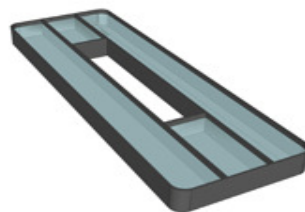
CS30



Humisonic™ Unit



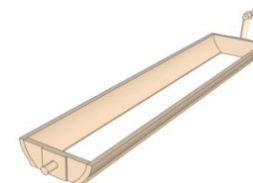
Humidity Tray WT01



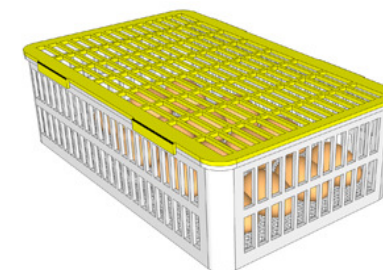
QT13- Quail Rack



GT03-Goose Rack



CS15



CAUTION! Any damaged part must not be used.

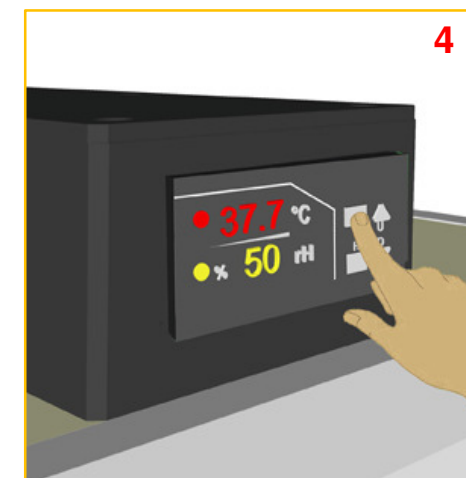
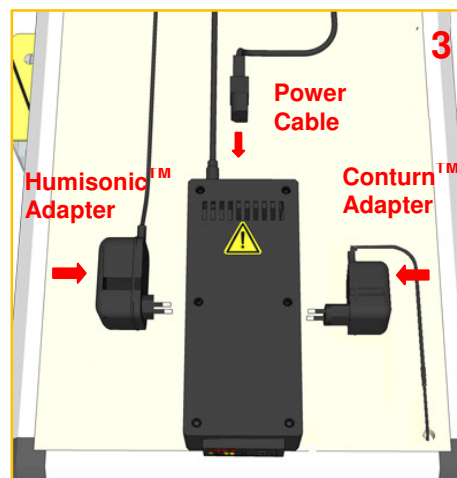
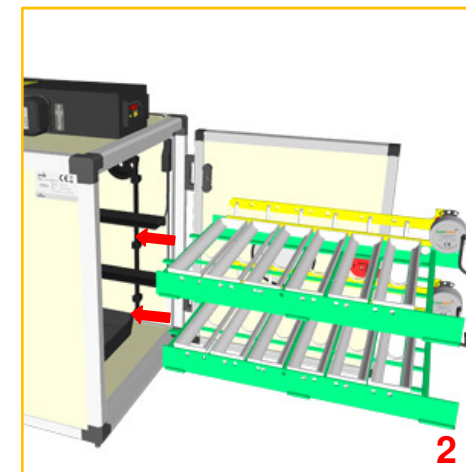
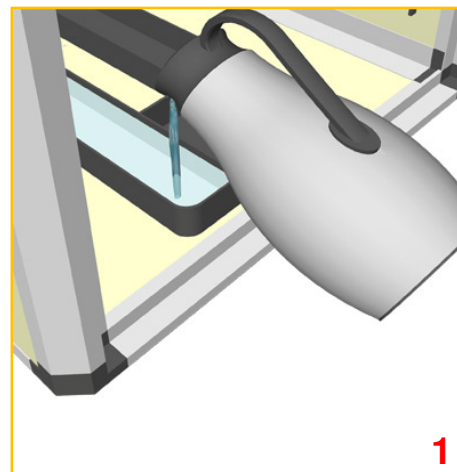
Quick Guide

- Remove all packing material carefully.
- Please identify and check all parts of model. (see page 2-4)
- Install Humisonic™ unit onto cabinet. (see page 12)
- Fill humidity tray with water (1 channel). **Picture 1**
- Insert Conturn™30 units and connect them to distribution cable. **Picture 2**
- Plug your Conturn™30 / Humisonic™ adapters to control the panel and plug your machine to electric supply. **Picture 3**

CAUTION! Do not use the equipments with high electric consumption in the same electrical line as your egg incubator.

CAUTION! Always use a grounded power line for your incubator.

- Press power button than set temperature and humidity. **Picture 4** (see page 8)
- The incubator must be worked for 3 - 4 hours to check all parts and functions before first setting.



Placement of Model

Your incubator must be located in an indoor area. The area must be clean and ventilated. **Ideal distance from walls are 50 cm (1,5 ft).** Do not place machine close to the walls of incubation room. The incubator should not be exposed to direct sunlight and not subject to splashes of water or high humid conditions.

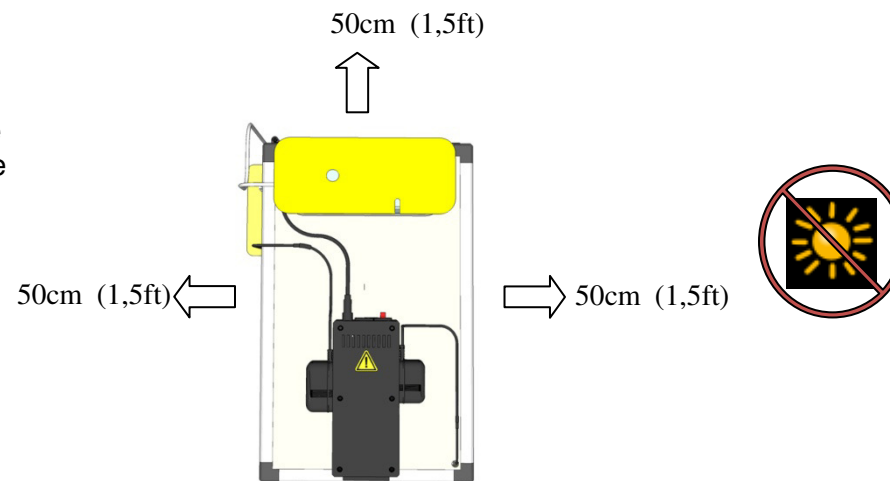
Place your incubator to a flat surface far from doors and windows.

Ideal incubation room temperature is 20–25 °C (68 – 77 F). Wide temperature variations in the room affect your incubation results. If your area is very cold or hot, use an air condition system in the room.

Caution! **Don't let room temperature below 15 °C (59 F) and above 30 °C (86 F)**

Caution! **Don't let reaching of animals and insects to the incubator.**

Caution! **Don't let accessing of children or person that has physically or mentally problems to the incubator.**



Ventilation

Embryo needs proper oxygen levels and produce carbon dioxide during incubation. To supply oxygen in proper level and remove carbon dioxide, ventilation is essential.

Ventilation is supplied automatically with fan and adjustable air-in / out holes.

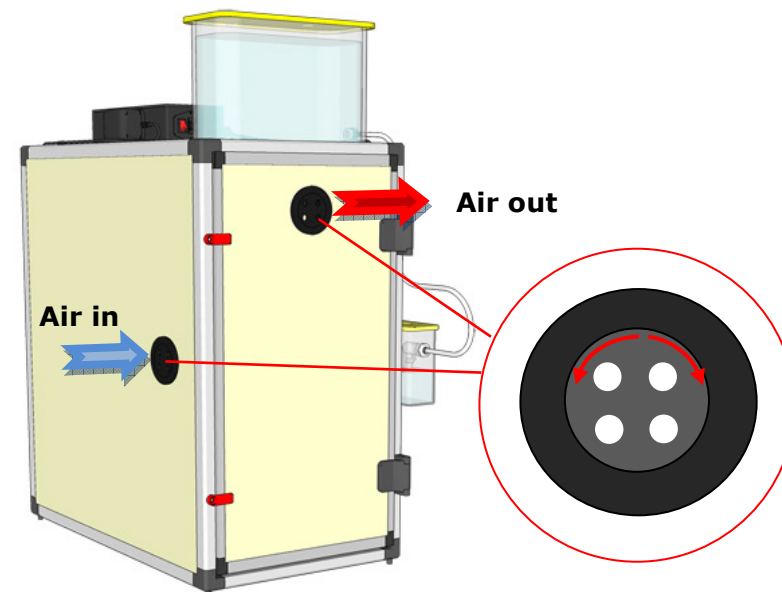
Air in/out can be adjusted by left/right turn to decrease air in/out by considering egg amount in your incubator.

Caution! **Never close air- in/out holes.**

Caution! **Always keep air- in/out holes fully open during hatching period.**

Caution! **Never make animals breeding in incubation room.**

Caution! **Be sure that the incubation room has adequate air intake.**



Egg Handling

Eggs should be collected carefully and stored in good conditions up to setting. Quality of eggs is very important for hatchery results. Sanitizing eggs before storage is an effective method for killing or decreasing the amount of microorganisms in egg surface. You must know that sanitation processes does not only kill the bacteria, but it can also kill the chick embryo in the egg. Use proper sanitary procedures.

Ideal egg storage temperature is 12–13 °C (53 -55 F). Store eggs in cool condition **between 10 – 20 °C (50 - 68 F)** and never let them be exposed to sunlight. Daily turning of eggs is suggested during storage to maintain hatchability.

CAUTION! Eggs never be stored in refrigerator. 4°C (39 F) is too low.

CAUTION! Improper storage of eggs and higher than 7 day storage decrease the egg quality and hatchability.

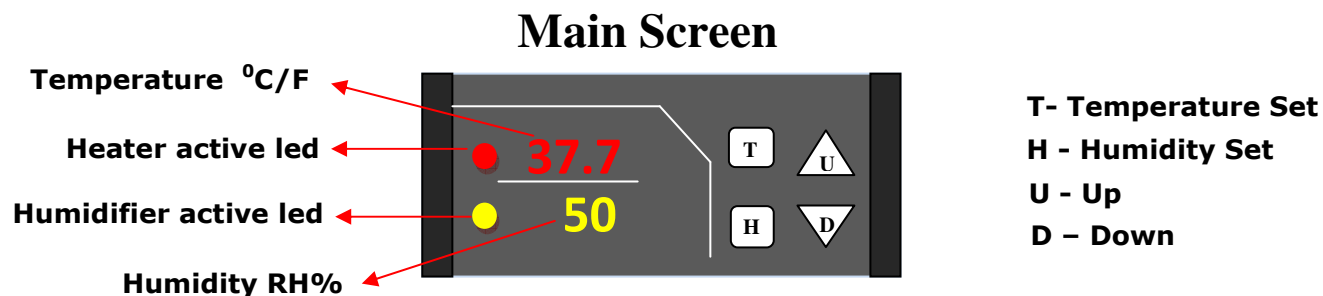
CAUTION! Eggs must be stored 1 day minimum before setting.

CAUTION! For dirty eggs, never use cloths to clean and improper washing procedures.

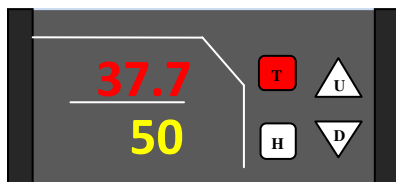
Temperature / Humidity Controller

In egg incubation, the most important factor is temperature. Temperature control is provided by electronic controller which manages heater unit with high precise electronic control system.

Embryos tolerate short term temperature drops, however higher temperatures than ideal affect embryos detrimentally. Be sure that your temperature setting is true and don't concern about short term cooling of eggs when open cover for water adding or inspections.



To check temperature set point



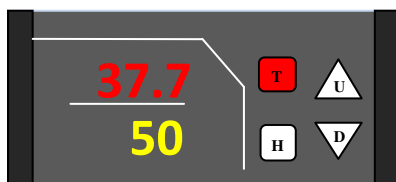
When main screen is active,

Press **T** button and release



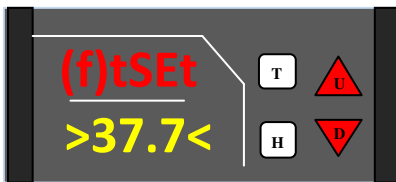
(f)tSEt – Temperature Set Screen will appear 2 s and turn back to main screen.
Down value is temperature set point.

To change temperature set point



When main screen is active,

Hold **T** button for 2 seconds



While temperature set value blinks

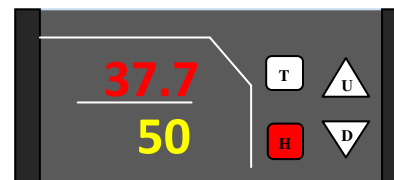
Press **U / D** buttons to adjust temperature set point

When finished adjusting,

Press **T** button to “save” set value.

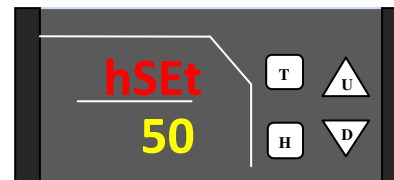


To check humidity set point



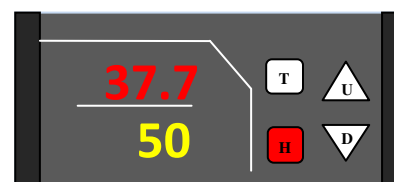
When main screen is active,

Press **H** button and release



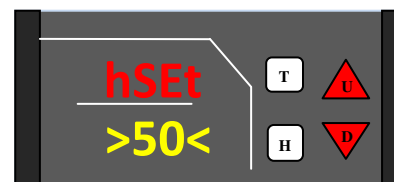
hSEt– Humidity Set Screen will appear 2 s and turn back to main screen.
Down value is humidity set point.

To change humidity set point



When main screen is active,

Hold **H** button for 2 seconds



While humidity Set value blinks

Use **U / D** buttons to adjust humidity set point

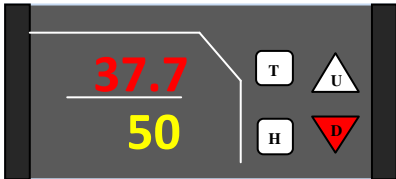
When finished adjusting,

Press **H** button to “save” set value.



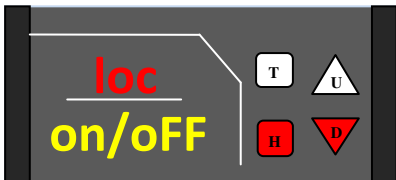
Recommended Temperature and Humidity values for different species are given at page 27

Turn Light On



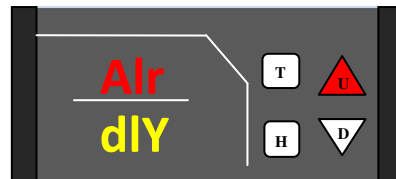
When main screen is active,
Press D button to light on and off.
Note: If you forget light on, controller will off bulb automatically after 3 minute.

To Lock Screen on/off



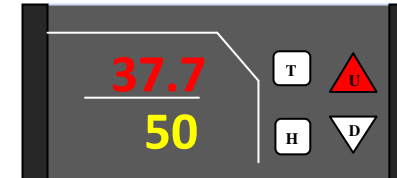
When main screen is active,
Hold H+D buttons together for 3 seconds to lock and unlock screen

Alarm delay

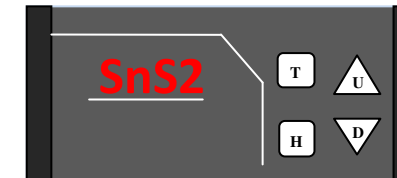


When main screen is active,
Hold U button for 3 seconds
Voice alarm will be delayed 15 minutes.

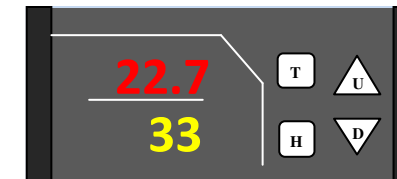
Second sensor / Remaining time until next cooling



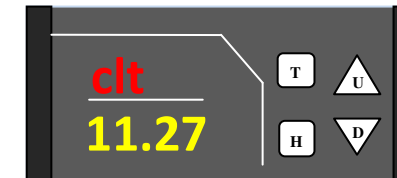
When main screen is active,
Press U button and release to check second sensor values and remaining time until next cooling.
Note: Second sensor value will appear if second sensor activated (pls check user menu parameters. (See page10)



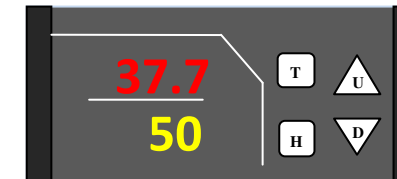
SnS2 will appear



Then, second sensor temperature and humidity values will appear.



Then remaining time until next periodic cooling appear.
Note: remaining time until next cooling will appear if periodic cooling function on (pls check APC menu. (See page 19)



Then, screen turns back to main screen.

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User Menu Parameters



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.
 Started : set value +10
 Delay time: 20 minutes
 Notification: Alr 5
 Voice alarm : 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 + 0,8
 Delay time: 2 minutes
 Notification: Alr 1/3
 Voice alarm : continuous

((f)tlo: low temperature alarm.
 Started : set value - 2.0
 Delay time: 30 minutes
 Notification: Alr 2/4
 Voice alarm : intermittently

tco: temperature calibration value.
CAUTION! tCo is a critical parameter . Changing this can results in chick looses. Please use qualified and calibrated glass or electronic thermometers for calibration purpose. Check temperature values regularly.

hco: humidity calibration value.
CAUTION! hCo is a critical parameter. Changing this can results in chick looses. Please use qualified and calibrated glass or electronic thermometers for calibration purpose. Check humidity values regularly.

US2: USB connected device
 no : no connected device
 th : second sensor connected (room/calibration)
 iot: iot module connected
 Notification: Alr 15 (usb 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 10
 Voice alarm : intermittently

((f)rth: second sensor high temperature alarm.
 Started : over 28 C / 83 F
 Delay time: no
 Notification: Alr 9
 Voice alarm : 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.
 Started : over 85 RH
 Delay time: no
 Notification: Alr 13
 Voice alarm : intermittently

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

rAh: second sensor humidity alarm activation.
 On: alarms activated
 Off: alarms deactivated

USB Connection / Room sensor

Your model is equipped with a USB connection at the back side of the control panel. It is connected to the main controller.

A second room sensor is installed to it with sensor protective cover. Room sensor measures the temperature and humidity conditions of the room.

Cimuka advanced temperature/ humidity controller provides best control of cabinet for room conditions and it has second sensor voice alarm function for high/low temperature/ humidity with user adjustable parameters. **(see page 10)**

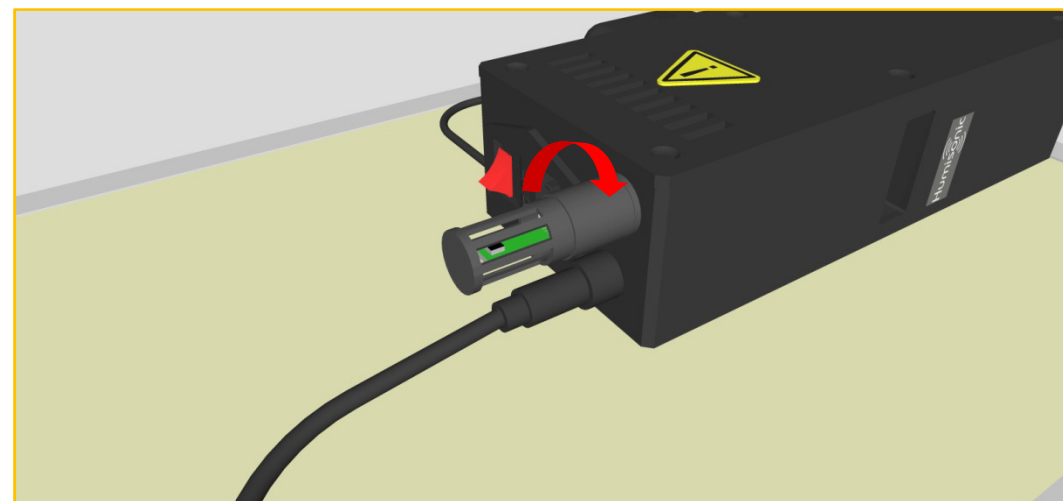
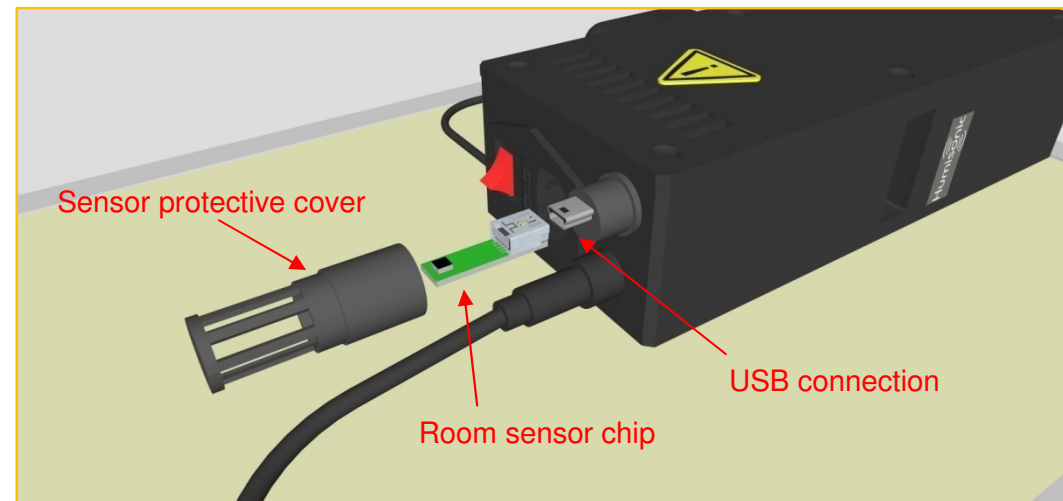
Room sensor chip is identical to the main sensor chip of the egg incubator. It can also be used as a spare sensor for emergency situations.

Usb connection can also be used for calibration sensors and lot module connections.

Connection device should be selected from user menu. Please check user menu parameters. **(see page 10)**

Contact with your vendor for optional devices and accessories that can be connected to USB connector

CAUTION! Always power of the incubator during any sensor or lot module installation.



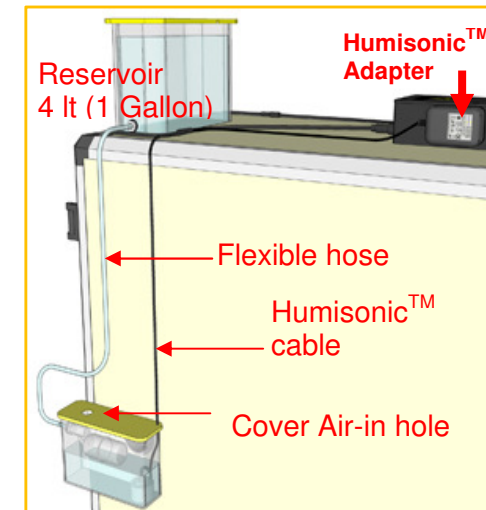
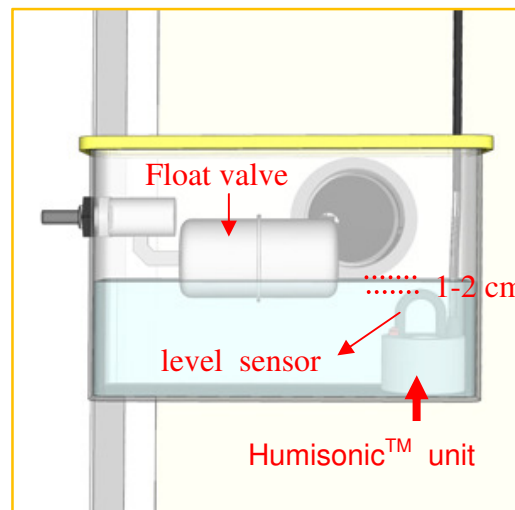
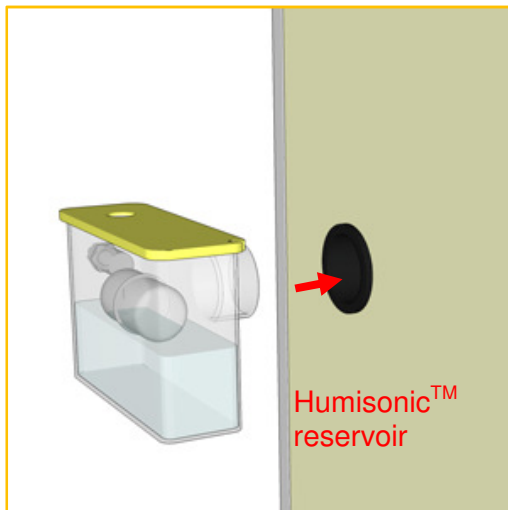
Humisonic™ Automatic Humidity Control

Humidity adjustment in incubators is for **providing adequate water loss from eggs**. Eggs need to lose between 13-16 % water depending on the species during incubation period. Weighing your eggs during incubation is the most reliable way to find proper humidity level for particular poultry species.

Different from temperature, short term humidity changes during incubation are not important. Keeping an average humidity (See Page 27) during all incubation period is enough to achieve good results. However, **high humidity levels during hatching period (last 2-3 day) are very important**. When the chicks start to hatch, inner membrane of egg dries quickly. This makes membranes harden and chick can stick to shell. To prevent drying of membranes, humidity must be adjusted to high levels depending on species for last 2-3 day of incubation.

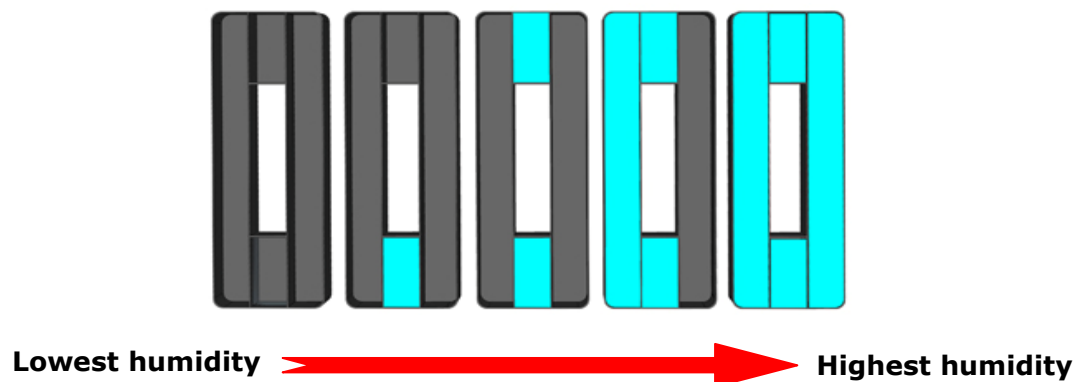
Installation

- Connect Humisonic™ reservoir right side of the incubator.
- Place stainless steel Humisonic™ unit into the bottom of the reservoir.
- Use flexible hose to connect Water tank and Humisonic™ reservoir
- Connect Humisonic™ cable to Humisonic™ adapter. Connect adapter to the control panel.
 - The float valve will keep water level 1 - 2 cm (.39-.79") above water level sensor.



CAUTION! Don't use hard and lime-enriched water for humidifier system and for humidity tray. Change humidifier disks regularly. Humisonic™ humidifier units designed for on – off use. Leaving the unit on for prolonged periods of time will decrease service life of unit and power adapter. Never attempt to close air-in hole on Humisonic™ reservoir cover.

Humidity Tray



CAUTION! Never fill humidity trays with cold water. Use warm water close to incubator set point. Ideally 25-30 °C (77-86°F)

CAUTION! Humidity tray is part of the incubator. Always keep it in bottom, even empty. Advisable to fill one section of humidity tray during setting period and keep full for hatching period last 2-3 day.

Keeping water in humidity tray gives many advantages to user and decrease the risk of incubation,

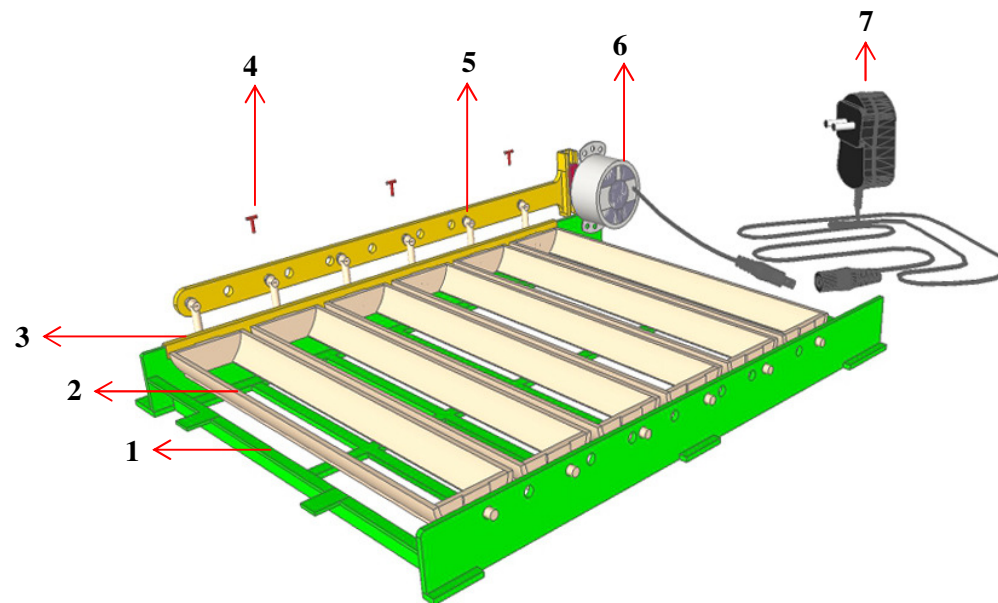
- Humidity tray is backup water supply in case your external water tank runs out of water or in case of unexpected system malfunction
- Humisonic™ Unit life will increase with low working and less power consumption with low energy costs.

Don't forget that humidity values depend on temperature values, always check humidity values at temperature set point.

You could not decrease humidity below a point and could not increase above a point. This low and up limits depend on humidity level of your incubation room.

Egg Turning / Conturn™ 30

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



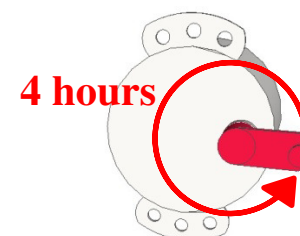
Conturn™30 Adjustment

Conturn™30 comes with 6 pre-installed racks, if you have bigger eggs than chicken eggs, racks must be adjusted.

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

CAUTION! Disconnect from power prior to adjusting egg racks.

CAUTION! Conturn™30 trays should be settled truly. Before connecting Conturn™30 to power, be sure that the racks are in same angle.



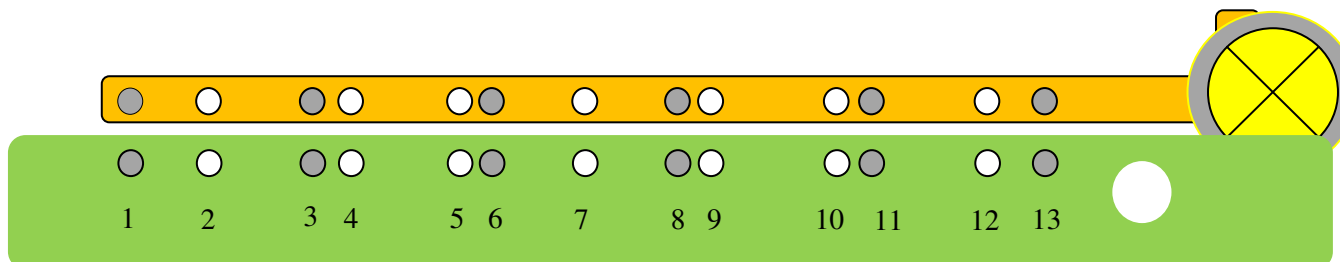
Conturn™ motor provides continuous turning,
 (1 turn per 4 hour) – 50 Hz Models
 (1 turn per 3.2 hour) – 60 Hz Models

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Conturn™30 base and main turner bar have holes for adjustments of racks. The standard unit includes 6 racks. The standard racks can be used for hens and smaller eggs without any change.

Conturn™30 has 13 holes shown below.

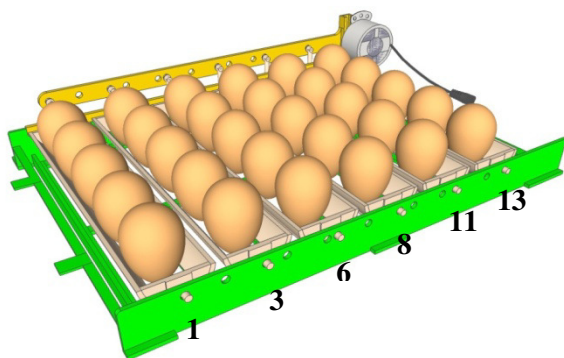


Use hole numbers given above to adjust tray for your egg size.

CAUTION ! Racks must be adjusted for biggest size egg that you will set.
Never set big eggs that can fall down during turning.

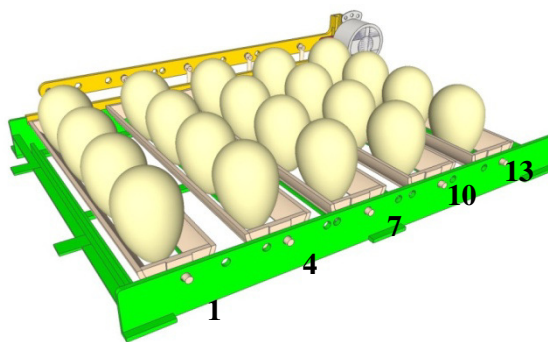
6 pc- Standard Rack

Chicken or smaller eggs
Hole #'s: 1-3-6-8-11-13



5 pc- Standard Rack

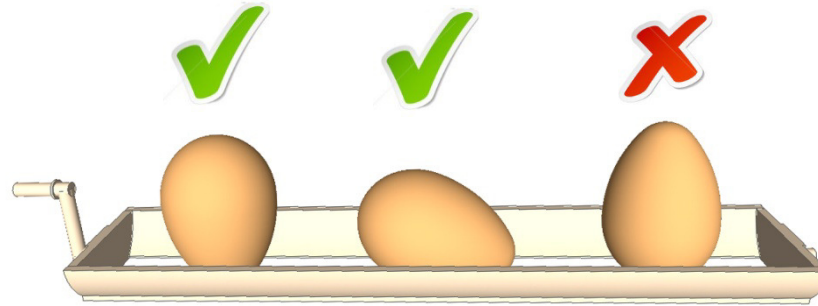
Big Duck / Turkey
Hole #'s: 1-4-7-10 -13



EGG CAPACITIES



CAUTION ! Never position eggs with the small end top. Eggs must be set small end down or horizontal.

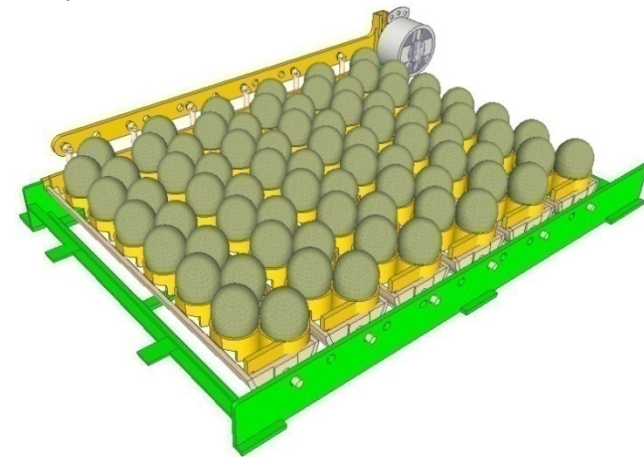
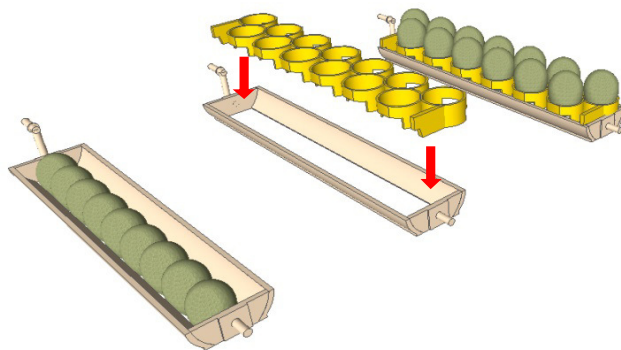


QT13



QT13- Quail Egg Tray (sold separately)

Standard egg rack holds 9 pc quail egg, QT13 quail rack is placed directly onto the standard rack and can hold 13 quail eggs. This can also be used for eggs smaller than an average quail egg. Each rack sold separately.



Standard Egg Rack

CT SERIES

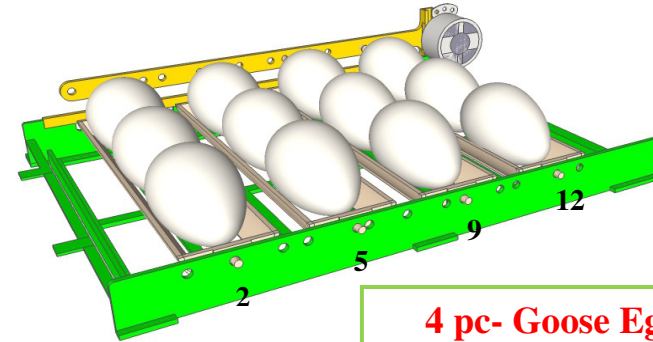
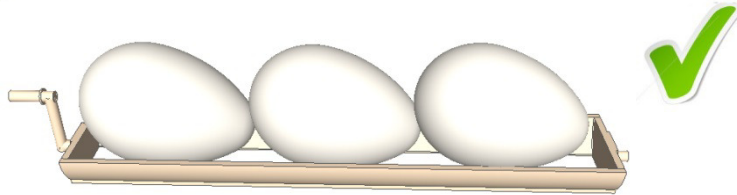


GT03 – Goose Egg Rack (sold separately)



GT03

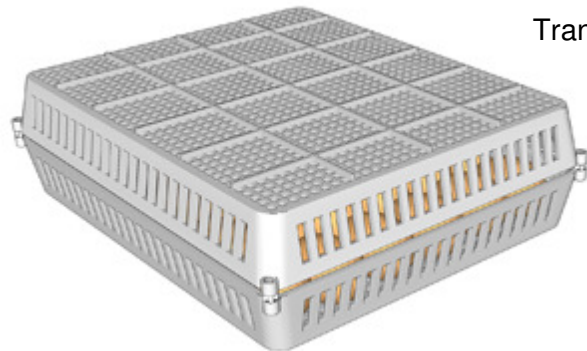
The Goose Egg Rack is designed for large goose and peacock eggs. Goose eggs must be set in a horizontal position with the small end a bit lower (10 degrees). Periodic cooling of goose eggs is advised.



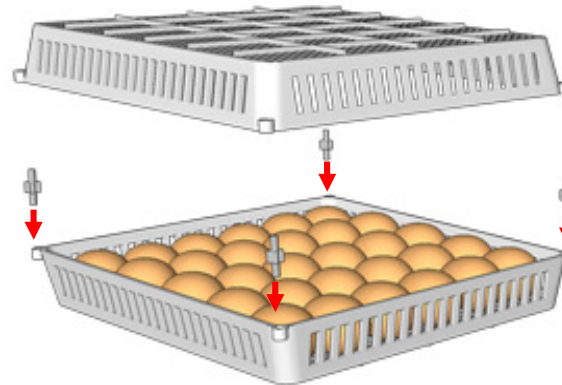
4 pc- Goose Egg Rack
Goose-peacock
Hole no: 2-5-9-12

CS30 – Hatchery Basket

Transfer eggs to CS30 hatchery baskets for last 2 -3 day of incubation



CS30



CS15



CS15 – Hatchery Basket (sold separately)

CS15 hatchery baskets allow you to separate different species for hatching.
2 units of the CS15 can be used in one shelf instead of CS30 hatchery basket.

Active Periodic Cooling (APC)

CAUTION! Active periodic cooling function is for professional users. If needed, please seek assistance from your vendor. Results can change for a variety of reasons including poultry species, egg size, and room conditions. Improper cooling can result in late hatching and chick loss.

In natural incubation, most birds leave the nest for a period of time at least one time after first week of the incubation. Eggs cool and dehumidify during this period. **Active periodic cooling (APC)** lets you mimic this natural behavior.

Researches show that periodic cooling of goose, duck and even chicken eggs during incubation has positive effects in hatch rates and chick quality. Periodic cooling is very important for most of goose types. Without periodic cooling, goose egg hatch rates can decrease up to 20-30%. Many breeders manually cool the eggs by taking them out of the incubator and letting them cool in hatchery room conditions and sprays eggs with warm water, then place eggs in the incubator again.

To automate the process, Cimuka uses **Active Periodic Cooling (APC)** with 2 different modes to simulate natural behavior. All alarms for temperature and humidity will be off during this time. After APC is complete, temperature and humidity will return to preset standards.

1. **(clt) Cooling for a time mode**

- System turns off heat and humidity (for models with humidifier) for an adjusted time.

2. **(cIS) Cooling for a set mode**

- System turns off heat and humidity (for models with humidifier) and drops temperature up to an adjusted temperature set point and keeps the temperature at this point for an adjusted time.

Models include 2 more modes:

1. **Humidification mode** (for models with humidifier) – before cooling period ends, high humidity is applied
2. **Fan assistant cooling mode** (for models with cooling fan) - reaches desired cooling temperature faster

Cimuka 's advanced incubator controller lets user to change all parameters with Active Periodic Cooling (APC) menu to try and achieve best hatch rates for different poultry specie's eggs.

CT SERIES

Active Periodic Cooling (APC) Menu



37.7
50

T U
H D

-Hold U + D together 3 seconds to enter menu

-Use T /H buttons to choose parameter.

-Use U/D buttons to change parameter values.

cIF
oFF

T U
H D

cIF: Active Periodic cooling(APC) function activation.

oFF: Active Periodic Cooling is deactivated.

cLt: “cooling for a time” mode. Stops heater and humidifier for “hct” time. (check hct parameter)

cLS: “cooling for a set ”mode. Stops heaters and humidifier up to a adjusted temperature set point and keep temperature at this point for an adjusted time. (check cSt/FSt)

cb
coF

T U
H D

cb: Active Periodic cooling Starting.

con: first cooling starts immediately after save the menu.

coF: first cooling starts after periodic cooling cycle (cPr)

cPr
24

T U
H D

cPr: Periodic cooling cycle time(hours)

6-8-12-24-48-72 hours selectable.

System repeats cooling in this cycle.

cSt
-8.0

T U
H D

cSt: cooling set point (for C display models)

cooling set value: temperature set point – cst (- 8 C)

note: cSt is only active in cLS mode on C display models

Example: for a system working on 37.7 C, system cools up to 29,7 C (37,7 – 8.0)

FSt
-15.0

T U
H D

FSt: cooling set point(for F display models)

cooling set value: temperature set point – FSt (-15 C)

note: FSt is only active in cLS mode on C display models

Example: for a system working on 99.8 F, system cools up to 84,8 F (99,8 – 15.0)

cth
30

T U
H D

cth: waiting time in cooling set point.(minute)

Waiting time of system in cooling set point

cth is only active in cLS mode

hct
180

T U
H D

hct: max cooling time (minute)

Heater /humidifier cut off time for clt mode.

Maximum cooling time for cLS mode.

chu
on

T U
H D

chu: humidification activation during cooling

(only for models equipped with humidifier)

on: humidification activated

oFF: humidification deactivated

cht
10

T U
H D

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 minute(30-10). (see page 21)

chh
80

T U
H D

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
on

T U
H D

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.

SAVE
done

T U
H D

Hold T+ H together for 3 seconds to save changes

>Cool<
42

T U
H D

During cooling, “cool” blinks on screen,

CAUTION! don't cut the power of incubator during cooling. Power cut will terminate cooling but the time for cooling period will continue.

The best hatch rates can be reached with which parameter combination is not known for different species yet. Cimuka Research Team is collecting data from our research center and customers for different APC applications. **The table below outlines the recommended parameters for cooling for a set (cIS) mode.**

Note: Cooling by a time (clt) mode is highly dependent on hatchery room conditions and the number of eggs in the model. It is only advisable to use for temperature controlled hatchery rooms to reach same hatching results.

Active Periodic Cooling (APC) Parameters	Display	Factory settings	Chicken	Duck	Goose
Cooling mode	cIF	oFF	cIS On at 8th day Off at 19th day	cIS On at 8th day Off at 25th day	cIS On at 8th day Off at 27th day
Cooling start time	cb	cof	con	con	con
Cooling cycle time	cPr	24 h	24	24	24
Cooling set point C (set –adjusted data)	cSt	-8.0 C	-8.0	-8.0	-8.0
Cooling set point F (set –adjusted data)	FSt	-15.0 F	-15.0	-15.0	-15.0
Waiting time in cooling set point	cth	20 min	10 minutes 8th to 13th 20 minutes 14th to 18th	10 minutes 8th to 15th 25 minutes 16th to 25th	10 min. 8th to 14th 20 minutes 15th to 21th 40 minutes 22th to 27th
Max cooling time	hct	120 min	120 minutes	150 minutes	180 minutes
Humidification*	chu	on	-/on	on	on
Humidification Time*	cht	10 min.	10	15	15
Max humidity during humidification*	chh	80 RH%	80	80	80
Cooling fan activation**	cFn	on	on	on	on

* only for models equipped with humidifier

**only for models equipped with cooling fan

CAUTION! Turn off Active Periodic Cooling (APC) function during hatching period - Last 2-3 days of incubation. Cooling in last 2-3 days of incubation results in bad hatching rates and chick loss.

CAUTION! Changing cooling mode (cIF) or cooling cycle time (cPr) parameters in APC menu resets periodic cooling cycle time (cPr).

CAUTION! In cIS mode, time to reach cooling set point cSt (Fst) is highly dependent on room temperature. For very low set points, system may not be able to reach cooling set point. For such situations, system finalizes cooling at max cooling time (hct).

CT SERIES



Active Periodic Cooling (APC) function behavior at “cooling for a set (cLS)” mode given in the graph for below parameters :

APC Parameters	Display	settings
Cooling mode	cIF	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

* only for models equipped with humidifier

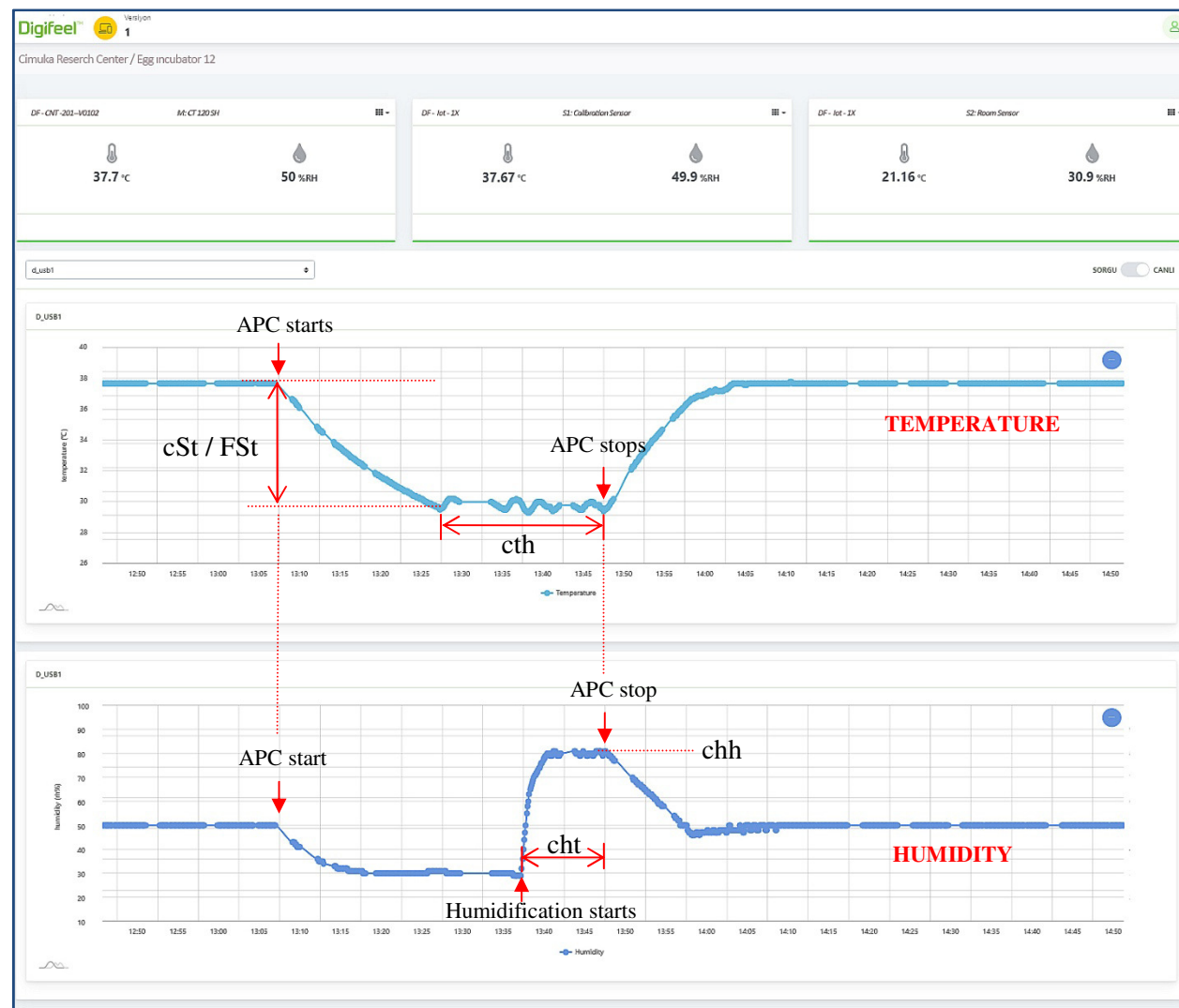
**only for models equipped with cooling fan

System repeats APC behavior every cPr time.

In a power outage, cooling cycle time cPr is not reset, It will continue from last recorded time.

Example: if there is an 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 9)



Setting and Hatching

All Set / All Hatch

Eggs are set to Conturn™30 automatic turning cradle and kept up to last 3 day of incubation, then transferred to CS30 hatchery baskets for last 3 days of incubation.

CT series also offers Setter (S) and Hatcher (H) models in 3 different capacities from 60 to 180 chicken egg. Using a separate hatcher gives users advantage to work with exact temperature and humidity values for embryo needs. And also a separate hatcher decreases microbial cross contamination risk between eggs in setter and hatcher.

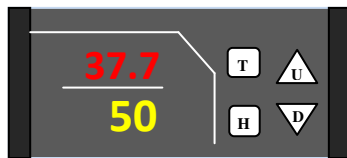
Eggs of different species which have different incubation time can set together by adjusting the transfer date to the same day.

Example : Chicken Egg (incubation time 21 day)

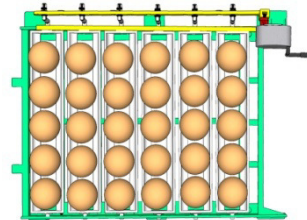
First 18 day

Temperature: 37.7 °C (99.8 F)

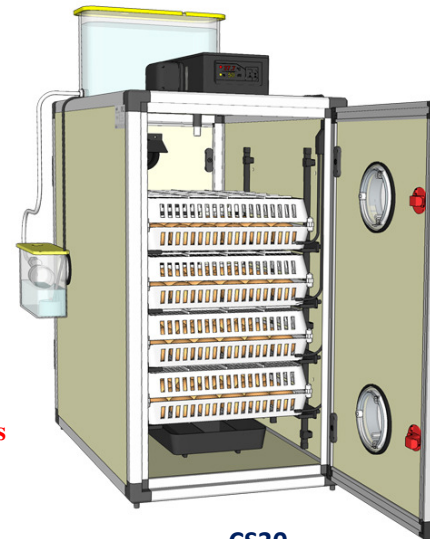
Humidity 50 % RH (50-55)



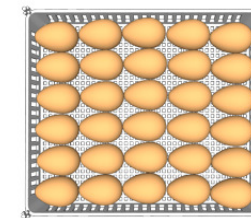
Conturn30™



19TH DAY
transfer eggs
To CS30
Hatchery
Baskets



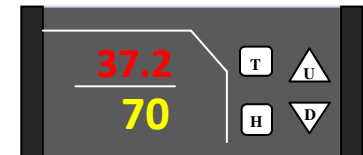
CS30



Last 3 day

Temperature: 37.2 °C (99.0 F)

Humidity 70 % RH (65-70)

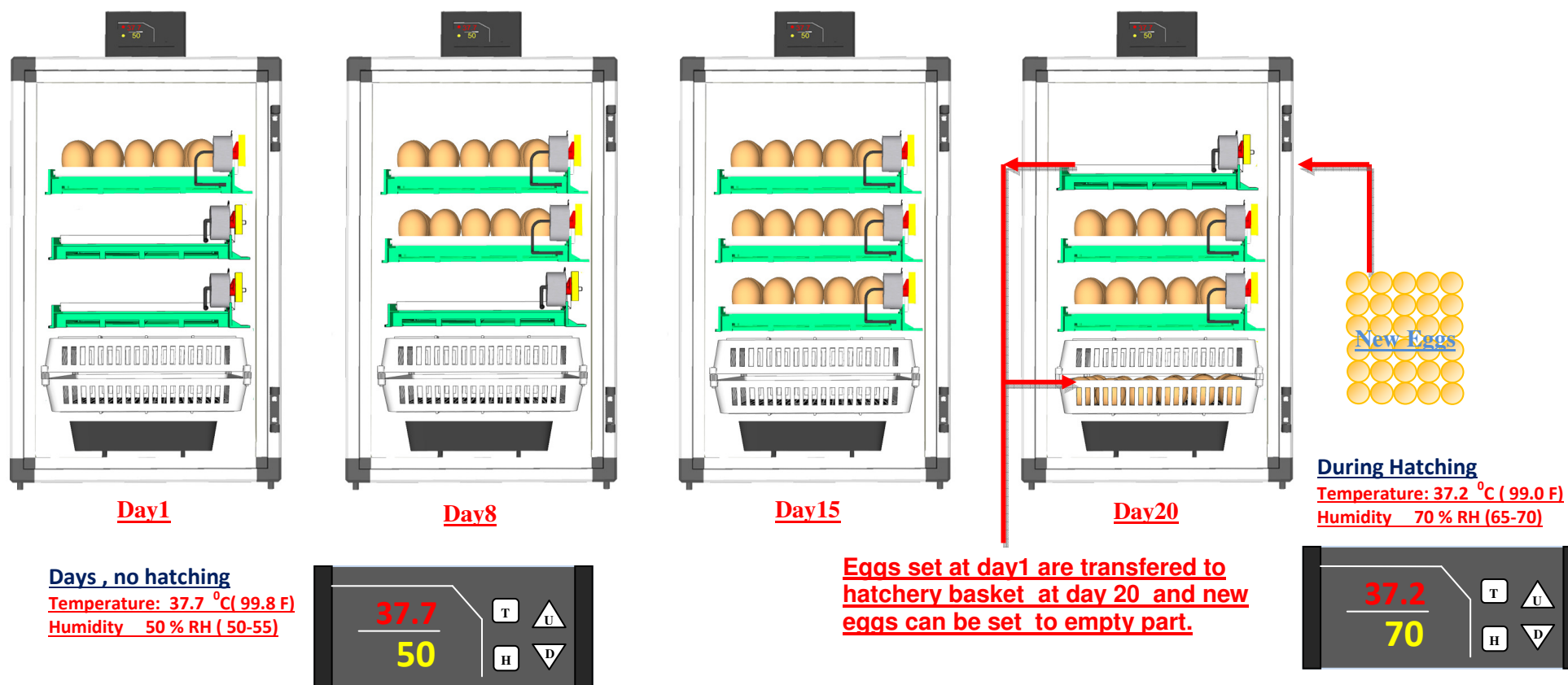


Partial Setting

SH type models can also be used by partial setting. To decrease egg storage times, eggs can be set partially and periodically for 5-7 days. Eggs must be transferred to hatchery baskets for last 2 days of incubation. During last 2-3 days of incubation, always keep temperature / humidity set values at hatching values even you have eggs in setting period.

CAUTION! In partial setting, the time between sets must be minimum 5 days.

Example : Model CT120 SH / setting 30 chicken egg per 7 days



Incubation Records

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 also suggest candling you eggs to check for infertility.

Hatchability rates can vary by species. Hatchability can be calculated by dividing number of chicks by the number of fertile eggs.

Sample table (Quail incubation time 17 days, chicken incubation time 21 days.)

Species	Date of			Number of			Hatchability %	Notes Hatching times, Early, middle and late death, problem in chicks
	Set	Transfer	Hatching	Eggs	Fertile Eggs	chicks		
Quail	1.1.2000	15.1.2000	18.1.2000	25	20	19	95	16-17 days hatch, 1 early death
Hen	5.1.2000	23.1.2000	26.1.2000	5	4	4	100	20-21 days hatch

Factors Affecting Hatchability

- Incorrect incubation settings.
- Turning problems.
- Very low or very high incubation room temperature.
- Inadequate room ventilation.
- High egg storage times.
- Electric cut offs.
- Inadequate or wrong sanitary procedures for eggs or machine.
- Very old or very young parents
- Improper or poor parent feeding
- General problems for health of parents
- Illnesses and genetic problems in parents
- Wrong male / female ratio.

Cleaning Up and Service

CAUTION! Disconnect the incubator from electric supply during cleaning or service.

CAUTION! Service and spare part changing's must be carried out only by a qualified person.

CAUTION! Never use water higher than 50° C(122 F) for cleaning. Electrical parts must be kept dry during cleaning.

Internal parts of cabinet and egg trays must be cleaned after every hatch with a proper sanitary solution. Apply recommended sanitation methods and chemicals for cleaning. If you are using your model seasonally, after egg season, clean your incubator and keep it on without humidifier unit to dry all parts for min 1 day. Use a dry soft brush or vacuum to clean control panel and fan panel.

Always check inside temperature and humidity of your model periodically with a high quality calibrated glass or electronic thermometer. If needed carry out a proper calibration procedure.

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 incubator are easily replacable. Always keep critical parts as spares. For spare parts and service needs, contact your vendor.

Safety Labeling



RISK OF ELECTRIC SHOCK!

ALWAYS OPERATE YOUR EGG INCUBATOR WITH GROUNDED POWER SOCKET. NEVER ATTEMPT TO TOUCH OR SERVICING UNLESS THE MACHINE IS DISCONNECTED FROM THE MAINS ELECTRICITY SUPPLY. Connections inside of control panel at main voltage.



RISK OF ELECTRIC SHOCK!

NEVER ATTEMPT ANY KIND OF SERVICING UNLESS THE MACHINE IS DISCONNECTED FROM THE MAINS ELECTRICITY SUPPLY. The cables, heater, fan and bulb are at main voltage.



RISK OF BURN! HOT SURFACE. DON'T TOUCH

NEVER ATTEMPT TO TOUCH THE HEATHER INSIDE OF VENTILATION PANEL. THE MACHINE MUST BE DISCONNECTED FROM THE MAINS ELECTRICITY SUPPLY AND WAIT MIN 5 MINUTES.



RISK OF INJURY! KEEP HANDS AND FINGERS AWAY.

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

Product Information

Typical Egg Capacities	CT60			CT120			CT180		
	SH	S	H	SH	S	H	SH	S	H
Quail	108-156*	108-156*	156	216-312*	216-312*	312	324-468*	324-468*	468
Partridge	84	84	84	168	168	168	252	252	252
Pheasant	72	72	72	144	144	144	216	216	216
Hen/ Duck	60	60	60	120	120	120	180	180	180
Turkey/ Big Duck	40	40	40	80	80	80	120	120	120
Goose-Peacock	24**	24**	24	48**	48**	48	72**	72**	72

* with optional QT13 - quail racks

** with optional GT03 - goose racks

Power (W)			
Max:	140	185	210
Average:	50	65	75
Electric Supply	230VAC 50 Hz / 110VAC 60Hz (as ordered)		



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.

Recommended Incubation Values

Typical incubation periods and recommended temperature / humidity values for the species are given below. *Incubation periods, temperature and humidity values can change for particular species. Please check literature or ask your dealer for information.*

Species	Incubation Period (Day)	Setting Temp.	Setting Humidity	Hatching Temp. (last 2-3 day)	Hatching Humidity (last 2-3 day)
Chicken	21	37.7 C ⁰ / 99,8 F	%RH 50 - 55	37.2 C ⁰ / 99,0 F	%RH 65 - 70
Turkey	28	37.5 C ⁰ / 99,5 F	%RH 50 - 55	37.0 C ⁰ / 98,6 F	%RH 65 - 70
Quail	17	37.7 C ⁰ / 99,8 F	%RH 50 - 55	37.3 C ⁰ / 99,1 F	%RH 65 - 70
Partridge	24	37.5 C ⁰ / 99,5 F	%RH 50 - 55	37.0 C ⁰ / 98,6 F	%RH 65 - 70
Pheasant	24	37.7 C ⁰ / 99,8 F	%RH 55 - 60	37.2 C ⁰ / 99,0 F	%RH 70 - 75
Duck	28	37.5 C ⁰ / 99,5 F	%RH 55 - 60	37.0 C ⁰ / 98,6 F	%RH 70 - 75
Goose	30	37.7 C ⁰ / 99,8 F	%RH 55 - 60	37.2 C ⁰ / 99,0 F	%RH 75 - 80

- During last 2-3 days of incubation, always keep temp / humidity set values at hatching values even you have eggs in setting period.

CT SERIES



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