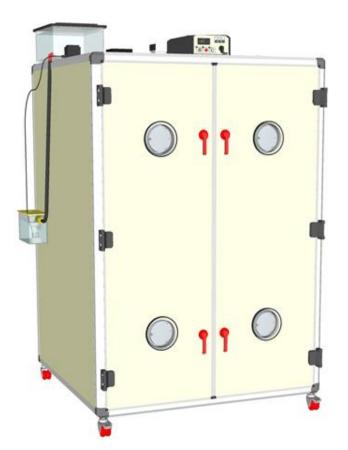
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CIMUKA EGG INCUBATORS T640 / T960 / T1280 / T1600 / T2400 / T3200 / T4800

Please read the instructions in this user manual carefully before using your incubator. *IMPORTANT!* Keep this user manual safe for future reference.



USER MANUAL

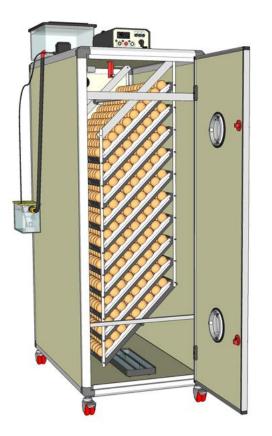
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Models

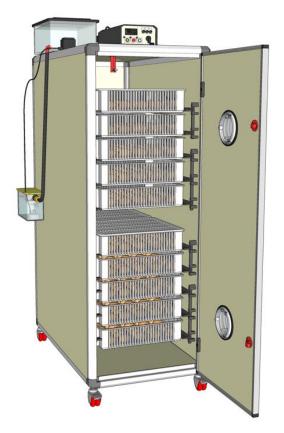
Setter Models (S)



Setter Models (S types) are used up to the last 3 day of the incubation period.



Hatcher Models (H)

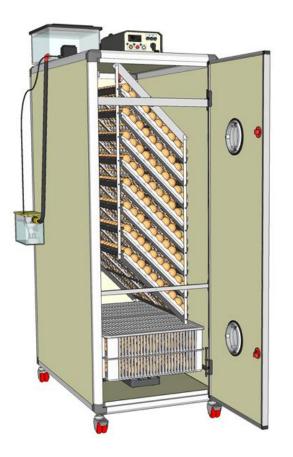


Hatcher Models (H Type) are used for the last 3 day of the incubation period.





Combined Models (C)



Combined Models (C types) have internal hatchery part and can be used only by partial setting.

All Set / All Hatch Models (SH)



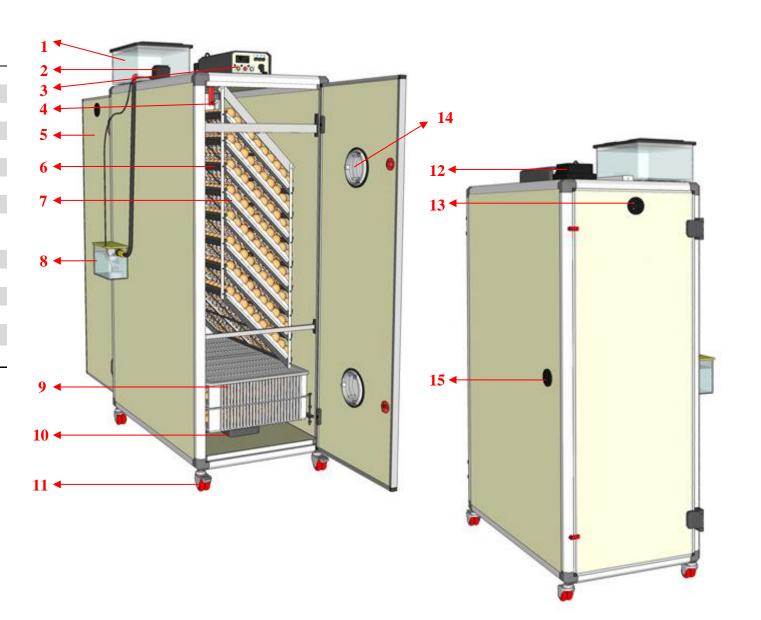
All Set / All Hatch Models (SH types) have setter and hatcher trolleys.





Parts of Models

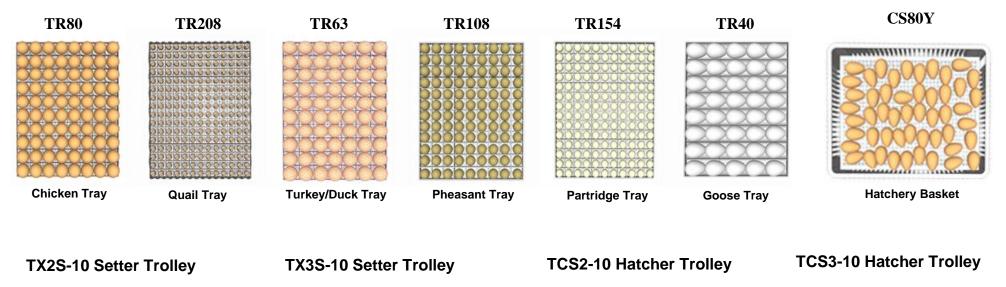
- 1 Water Tank 5 Gallon
- 2 Humisonic[™] Device
- 3 Control Panel
- 4 Temperature / Humidity Sensor
- 5 Back Door (For Cleaning & Service)
- **6** TurnX[™] Turners (C / S / SH types)
- 7 TR Setter Trays (C / S / SH types)
- 8 Humisonic[™] Reservoir
- 9 CS80Y Hatchery Baskets (C / H / SH types)
- **10** Humidity Tray
- 11 Lockable Wheels (C / S / H types)
- 12 Fan
- **13** Adjustable Air-out Hole(s)
- 14 Observation Windows
- 15 Adjustable Air-in Hole

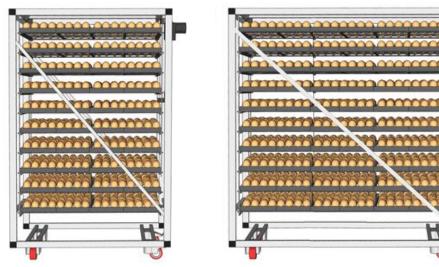


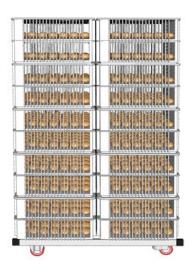




Setter Trays / Hatching Baskets and Trolleys







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Accessories

	TR Setter Trays*	CS80Y Hatchery Baskets	TurnX™ Adapter	Humisonic™ System	Setter Trolley TX2S-10	Setter Trolley TX3S-10	Hatcher Trolley TCS2-10	Hatcher Trolley TCS3- 10
Setters								
T960 S	12	-	1	1	-	-	-	-
T1280 S	16	-	1	1	-	-	-	-
T1600 S	20	-	1	1	-	-	-	-
T2400 S	30	-	1	1	-	-	-	-
T3200 S	40	-	2	1	-	-	-	-
T4800 S	60	-	2	1	-	-	-	-
Hatchers								
T640 H	-	-	-	1	-	-	-	-
T960 H	-	12	-	1	-	-	-	-
T1280 H	-	16	-	1	-	-	-	-
T1600 H	-	20	-	1	-	-	-	-
T2400 H	-	30	-	1	-	-	-	-
T3200 H	-	40	-	1	-	-	-	-
T4800 H	-	60	-	1	-	-	-	-
Combined Types								
T1280 C	12	4	1	1	-	-	-	-
T1600 C	16	4	1	1	-	-	-	-
T2400 C	24	6	1	1	-	-	-	-
T3200 C	32	8	2	1	-	-	-	-
T4800 C	48	12	2	1	-	-	-	-
All Set / All Hatch Types								
T1600 SH	20	20	1	1	1	-	1	-
T2400 SH	30	30	1	1	-	1	-	1
T3200 SH	40	40	2	1	2	-	2	-
T4800 SH	60	60	2	1	-	2	-	2

*All models come standard with TR80 Chicken Egg Trays. Optional setter trays should be chosen for requested poultry types in order. (See Page 5)



Placement of Model

Your incubator must be placed in an indoor area. The area must be clean and well ventilated. Ideal distance from walls is at least 2 feet. Don't place machine close to the walls of incubation room. The incubator must not be exposed to direct sunlight and should not be subject to splashes of water or high humid conditions.

Place your incubator on a flat surface far from doors and windows. **The ideal incubation room temperature is 68-77°F (20–25°C)**. Wide temperature variations in the room may affect your incubation results. If the room is very cold or hot, we recommend using an air conditioning system.

Make sure that the room is well ventilated for adequate fresh air intake.

Caution!Don't letthe room temperature gobelow 59°F (15°C) or above 86°F (30°C)Caution!Don't letanimals and insects near the incubator.Caution!Don't let children play with the incubator.

Ventilation

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

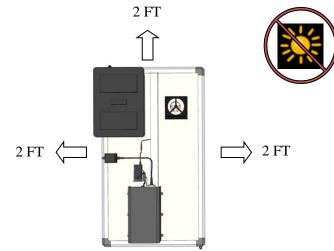
In T series models, ventilation is supplied automatically with a fan and adjustable air-in / air out holes.

Air in / out vents can be adjusted (by turning left or right) to adjust air flow by considering the number of eggs in your incubator.

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

Caution! Always keeps the air- in / out holes fully open during the hatching period.

Caution! Make sure the incubation room has an adequate amount of fresh air coming in.







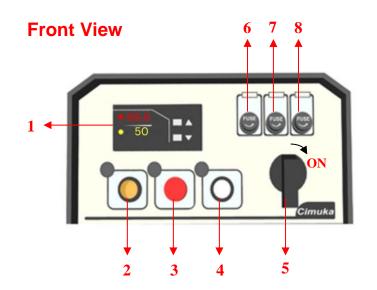
Egg Handling

Eggs should be collected and stored in proper conditions prior to setting. Good quality eggs are important for positive hatchery results. Sanitizing eggs before storage is an effective method for killing or decreasing the number of microorganisms on the egg's surface. Be sure to use proper sanitary procedures, the sanitation process kills bacteria on the egg but it can also kill the chick embryo in the egg.

Ideal egg storage temperature is 53-55°F (12-13°C) but can be stored in **conditions between 50-68°F (10-20°C)** as necessary, never expose eggs to sunlight. Daily turning of eggs is suggested during storage to maintain hatchability.

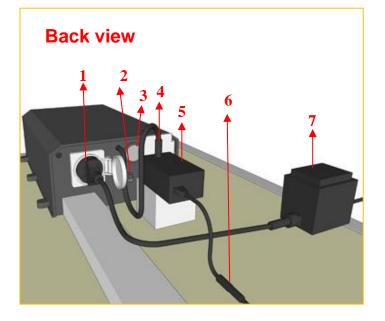
Caution! Never store eggs in refrigerator -39°F (4°C) is too cold Caution! Do not store eggs for more than 7 days as this decreases the egg quality and hatchability. Caution! Eggs must be stored for at least 1 day before setting. Caution! Use proper cleaning methods to clean dirty eggs, never use a cloth to clean eggs.

Control Panel



- **1** *Temperature/ Humidity Controller*
- 2 Light Button
- 3 High Temp Alarm Signal
- **4** Turning Button (C/S/SH types)
- **5** Power Switch (On / Off)
- 6 Protection Fuse-Turning
- 7 Protection Fuse-Humidifier
- 8 Protection Fuse-Heater





1 Humisonic[™] Power Plug

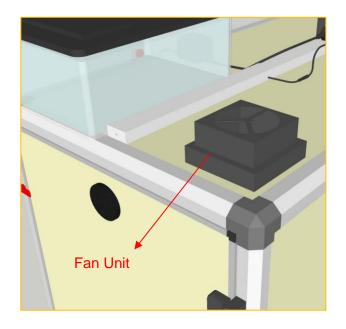
- 2 Main Protection Fuse
- **3** High Temp Alarm Buzzer
- 4 Turning Signal Connection (C/S/SH types)
- 5 TurnXTM Adapter (C / S / SH types)
- 6 TurnXTM Connector (C / S / SH types)
- 7 Humisonic[™] Adapter

Fan Unit

Your model has an exhaust fan unit on top of the cabinet.

Fan unit is activated automatically at high temperature and high humidity situations for safety. Thresholds for high temperature and high humidity values can be adjusted in the user menu parameters. (See page 13)

Fan unit is also a part of Active Periodic Cooling (APC). If APC function is in action and fan assistance is activated in the APC menu, the fan starts automatically when cooling starts. **(See page 18-19)**





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 room sensor is installed and has a sensor protective cover. The room sensor measures the temperature and humidity conditions of the room.

Cimuka's advanced temperature / humidity controller provides the best internal control of the cabinet for fluctuating room conditions and it has second sensor voice alarm function for high/low temperature/ humidity with user adjustable parameters. (See page 13)

Room sensor chip is identical to the main sensor of the egg incubator. It can also be used as a spare sensor for emergency situations. USB connection can also be used for <u>calibration</u> <u>sensors</u> and <u>lot module</u> connection.

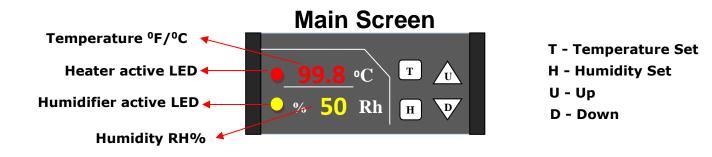
Connection device should be selected from user menu parameters. **(See page 13)** Contact with your dealer for optional devices and accessories that can be connected to USB.

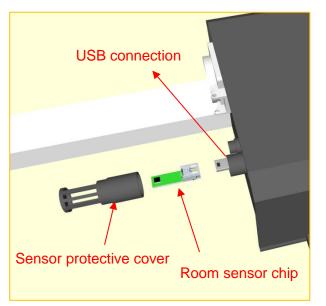
CAUTION! Always power off the incubator during any sensor installation.

Temperature / Humidity Controller

The most important factor for successful egg incubation is temperature. Temperature is preset for chicken eggs but can be manually adjusted for all other eggs.

Embryos tolerate short term temperature drops but higher than ideal temperatures can be detrimental. Validate your temperature setting is accurate with a second thermometer. Do not be concerned about short term cooling of eggs when opening door for water or inspections



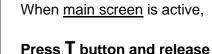






To check temperature set point







(f)tSEt – Temperature Set Screen will appear for 2 second and turn back to main screen.

Lower value is temperature set point.

To change temperature set point

/ U \ 50 D н Т

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



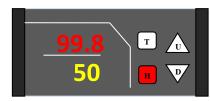
While temperature set value blinks
Use U / D buttons to adjust
temperature set point



When finished adjusting,

Press **T** button to "save" chosen value.

To check humidity set point





When main screen is active,

Press **H** button and release

hSEt- Humidity Set Screen will appear for 2 seconds and turn

back to main screen.

Lower 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

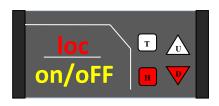
When finished adjusting, press **H** button to "save" chosen value.

Recommended temperature and humidity values for different species are on page 27





To Lock Screen on/off



When main screen is active,

Press **H+D** buttons together for 3 seconds to lock and unlock screen

Alarm Delay



When <u>main screen</u> is active, Press U button for 3 seconds

Voice alarm will be delayed for 15 minutes.

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<u>SnS2</u> [™] <u>↓</u> [₩] [₩] When main screen is active,

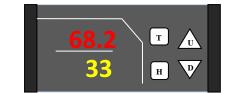
Second Sensor / Remaining Time for Next Cooling

Press **U** button and release to check second sensor values and remaining time for next cooling

Note: Second sensor value will only appear if second sensor is activated.

Check user menu parameters (See page 13)

SnS2 appear in up screen



Then, second sensor temperature and humidity values will appear.



Then remaining time until next periodic cooling will appear.

Note: Remaining time to next cooling will appear if periodic cooling function is on Check APC menu (**See page 19**)



Then, screen turns back to main screen.



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User Menu Parameters



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 65°F (18°C) Delay time: no Notification: Alr 12 Alarm: intermittent

(f)rth: second sensor high temperature alarm

Started: over 83°F (28°C) Delay time: no Notification: Alr 11 Alarm: intermittent

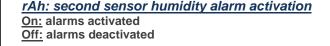
rhl: second sensor low humidity alarm

Started : below 10 RH Delay time: no Notification: Alr 14 Alarm: intermittent

rhh: second sensor high humidity alarm

Started: over 85 RH Delay time: no Notification: Alr 13 Alarm: intermittent





Hold T + H together for 3 seconds to enter menu

- Use T/H buttons to pass next/before parameter.
- Use U/D buttons to change set 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 Alarm: continuous

hlo: low humidity alarm Т -10

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Started: set value -10 Delay time: 20 minutes Notification: Alr 6 Alarm: intermittent

(f)thi: high temperature alarm

Started: set value + 1.5 Delay time: 2 minutes Notification: Alr 1/3 Alarm: continuous

(f)tlo: low temperature alarm Started: set value - 4.0

Delay time: 30 minutes Notification: Alr 2/4 Alarm: intermittent

tco: temperature calibration value.

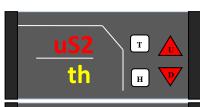
CAUTION! tCo is a very critical parameter. Changing this can results in chick loss. Use qualified and calibrated glass or electronic thermometers for calibrating.

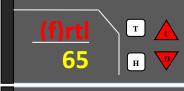
Check temperature values regularly.

hco: humidity calibration value.

CAUTION! hCo is a very critical parameter. Changing this can result in chick loss. Use qualified and calibrated glass or electronic thermometers for calibrating.

Check humidity values regularly.

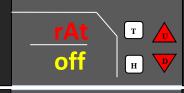
















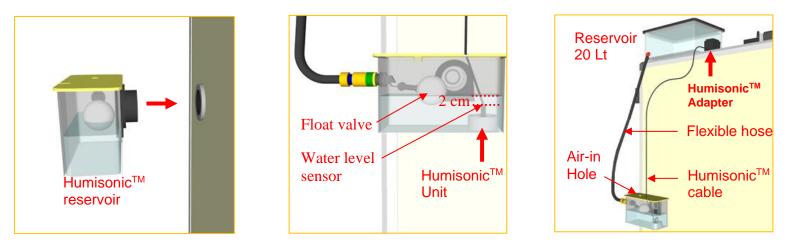
Humisonic[™] Automatic Humidity Control

Humidity adjustments are required to provide adequate water loss from eggs. Eggs need to lose between 13-16% of water depending on the species. Weighing your eggs during incubation is the most reliable way to ensure you have reached proper humidity levels for your eggs.

Short term humidity changes during incubation are not impactful. Keeping an average humidity (See Page 27) during the entire incubation period is enough to achieve good results. However, **high humidity levels during the hatching period (last 2-3 days) are very important.** When the chicks start to hatch, the inner membranes of the eggs dry quickly. This causes membranes to harden, and chicks can stick to their shell. To prevent the drying of the membranes, humidity must be adjusted to high levels for the last 2-3 days of incubation

Installation

- Connect HumisonicTM reservoir to the incubator.
- Place stainless Humisonic[™] unit into the bottom of reservoir.
- Use flexible hose to connect water tank and HumisonicTM reservoir.
- Connect HumisonicTM cable to HumisonicTM adapter. Connect adapter to the control panel. Never close air-in hole at reservoir cover.
- The float valve will keep water level 1-2cm (.4-.8") above water level sensor.



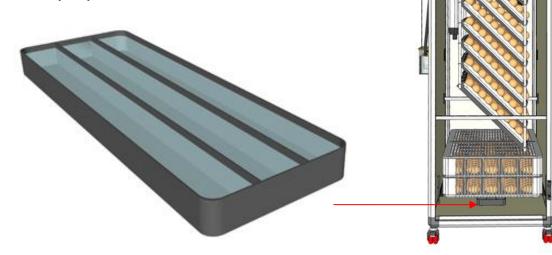
CAUTION! Do not use hard or lime-enriched water for either the humidifier system or humidity tray. Change humidifier disks regularly. Humisonic[™] humidifier units are designed for on / off use. Leaving the unit on for prolonged periods of time will decrease the life of the unit. Never cover the air-in hole on Humisonic[™] reservoir cover.





Humidity Tray

Always keep the humidity tray with water at the bottom of incubator.



Keeping water in humidity tray offers many advantages:

- Acts as a backup water supply in case your external water tank runs out of water or if there is an unexpected malfunction.

- Prolongs the life of your HumisonicTM unit.
- Less power consumption resulting in lower energy costs.

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

Low and high limits depend on your incubator room's humidity level.



TurnX[™] Automatic Turning System

TurnX[™] Automatic turning system provides 900 (45 degrees in each direction) turning every hour. TurnX[™] linear actuator is controlled by TurnX[™] control adapter. The "Turner button" allows you to manually adjust the position of the egg racks.

CAUTION! Only use the "Turner button" to reset the setter trays in a horizontal position.

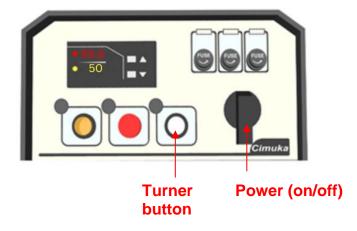
Turning button turns the trays clockwise or counterclockwise. To set the trays into the machine or to take them out, the trays must in the horizontal position.

CAUTION! Do not try to set or take trays before getting them in a horizontal position.

To get setter trays in the horizontal position,

- Push the "Turner button" to start turning.
- When the trays become horizontal, switch the incubator off by using the "Power" switch.
- Turn incubator on after inserting or removing racks/baskets

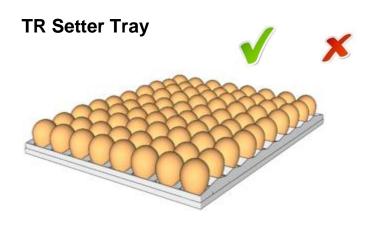
CAUTION! It is important that setter trays are adjusted correctly. Before switching on the incubator, check all trays are level. Otherwise, the trays or turning mechanism could be damaged.



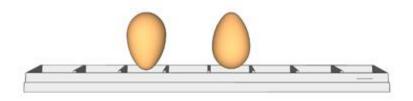




Setter Trays and Hatchery Baskets



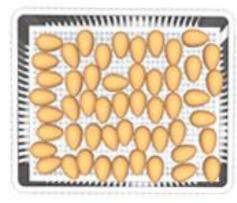
CAUTION! Never set eggs with the small end up. Eggs must be set with small end down or horizontal.



Goose and peacock eggs must be set horizontally with small end facing down.



CS80Y Hatchery Basket



Eggs are transferred to hatching baskets for last 2-3 day of incubation.

Flexy35 Typical Hatching Capacities

Chicken/Duck	80
Quail	208
Partridge	154
Pheasant	108
Turkey / Big Duck	63
Goose- Peacock	40



Active Periodic Cooling (APC)

CAUTION! Active periodic cooling function is for professional users only. 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 once after the first week of incubation. Eggs cool and dehumidify during this period. Active periodic cooling (APC) lets you mimic this natural behavior.

Research shows that periodic cooling of goose, duck and even chicken eggs during incubation has positive effects on hatch rates and chick quality. Periodic cooling is very important for most goose types. Without periodic cooling, goose egg hatch rates can decrease by up to 20-30%. Many breeders manually cool the eggs by taking them out of the incubator, let them cool in hatchery room conditions, and spray the eggs with warm water before placing them back 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 parameters.

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 to an adjusted temperature set point and keeps the temperature at this point for a set amount of time.

Models include 2 more modes:

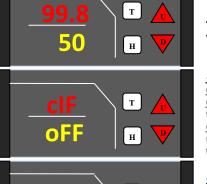
- 1. Humidification mode (for models with humidifier) before cooling period ends, high humidity is applied
- 2. Fan assistant cooling mode (for models with cooling fan) reaches desired cooling temperature faster

Cimuka 's advanced incubator controller allows users to change all parameters with Active Periodic Cooling (APC) menu. Now experienced breeders can work outside of preset parameters to achieve the best hatch rates for their eggs.



Active Periodic Cooling (APC)

hatchingtime[™] cirnuka



Hold U + D together for 3 seconds to enter menu

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

cIF: Active Periodic Cooling (APC) funciton activation

oFF: Active Periodic Cooling is deactivated. <u>cLt:</u> "cooling for a time" mode - Stops heater and humidifier for "hct" time. (check hct parameter) <u>cLS:</u> "cooling for a set "mode. Stops heaters and humidifier up to an adjusted temperature set point and keeps 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)

<u>cPr: Periodic cooling cycle time (hours)</u> 6-8-12-24-48-72 hours selectable. System repeats cooling in this cycle.

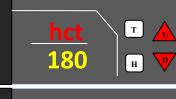
cSt: cooling set point (for C display models)

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°C - 8.0°C = 29.7°C)

FSt: cooling set point F (if F display models)

cooling set value: temperature set point – FSt (-15°C) note: FSt is only active in cIS mode on C display models Example: for a system working on 99.8°F, system cools up to 84.8°F (99.8°F - 15.0°C = 84.8°F)

<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







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hct: max cooling time (minute)

Heater/humidifier cut off time for clt mode. Maximum cooling time for clS mode.

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

<u>cht :Humidification time in cooling (minute)</u> (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=20). (Page 21)

<u>chh: max humidification set in cooling (RH%)</u> (Only for models equipped with humidifier)

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

<u>cFn: cooling fan activation</u> (Only for models equipped with cooling fan)

<u>On:</u> 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 failure will terminate cooling but the time for cooling period will continue.

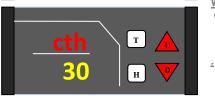


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Cimuka's research team is collecting data from their research center and from customers for different APC applications. The table below outlines the recommended parameters for cooling for a set (cIS) mode.

<u>Note</u>: Cooling by a time (clt) mode is highly dependent on hatchery room conditions and the number of eggs in the incubator. It is advisable to use a temperature-controlled hatchery room to reach optimal hatching results.

Active Periodic Cooling (APC) Parameters	Display	Factory settings	Chicken	Duck	Goose
Cooling mode	clF	off	cIS On at 8th day Off at 19th day	cIS On at 8th day Off at 25th day	clS 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 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 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 the last 2-3 days of incubation results in bad hatch 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).





Active Periodic Cooling (APC) function behavior at <u>"cooling for a set (clS)" mode given in the graph for below parameters</u> <u>-</u>

APC Parameters	Display	settings
Cooling mode	clF	clS
Cooling start time	cb	on
Cooling cycle	cPr	24 h
Cooling set point $^{\circ}$ C (set - adjusted data)	cSt	-8.0 C
Cooling set point $^{\circ}$ 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

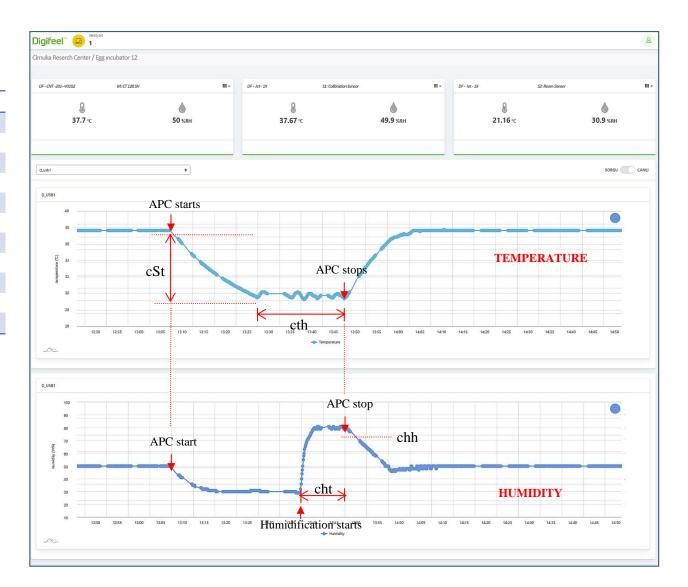
*Only for models equipped with humidifier

**Only for models equipped with cooling fan

System repeats APC behavior every cooling cycle time (cPr).

In a power outage, cooling cycle time (cPr) is not reset. It will continue from last recorded time. Example: if there is a 1-hour power outage, the next cooling time will delay about 1 hour.

Remaining time to next cooling can be checked on the controller (See Page 12)







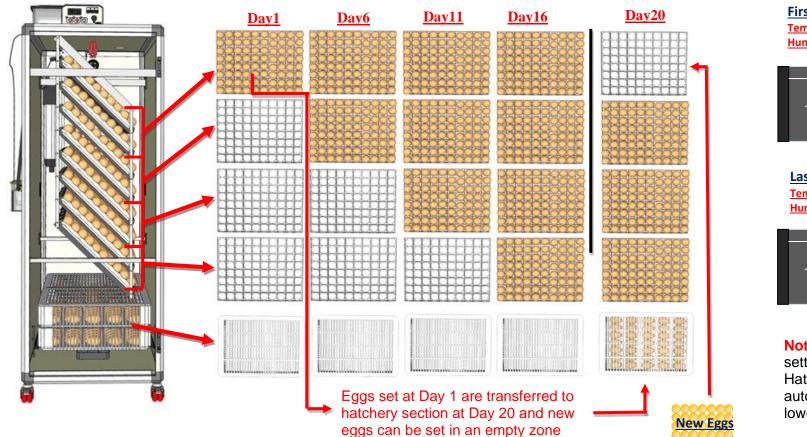
Setting and Hatching

Combine Models (C types) – Partial Setting

To decrease egg storage times, in Combined (C) Models, eggs are set partially and periodically every 4-5 days. Eggs must be transferred to the hatchery section for last 2 days of incubation.

CAUTION! Never set more eggs than the hatchery section has capacity for. Allow at least 5 days between settings.

Example: Model: T1600C - 320 chicken egg partial setting every 5 day (incubation time = 21 days) For first 19 day, eggs must be set in the TurnX mechanism. They are transferred to the hatchery section for last 2 days.



 First 19 Days

 Temperature:
 99.8°F (37.7°C

 Humidity:
 50% RH (50-55)



 Last 2 Days

 Temperature:
 99.8°F (37.7°C

 Humidity:
 70% RH (65-70)



Note: Keep temperature value at setting value during hatching period. Hatchery section temperature is automatically .8-.9°F (0.4-0.5°C) lower





Setting and Hatching

Setters / Hatchers (S and H types)

Using a separate hatcher gives users advantages when trying to achieve optimal temperature and humidity values for embryo needs. A separate hatcher also decreases microbial cross contamination risk between eggs in setter and hatcher.

Example: Chicken Egg (Incubation Time = 21 Days)







Setting and Hatching

All Set / All Hatch (SH types)

CAUTION! Setter trolleys should be in a parallel position to get in / out from cabinet.

First 18 Days Last 3 Days Temperature: 99.8°F (37.7°C 99°F (37.2°C Temperature: 0 50% RH (50-55) Humidity: **Humidity:** 70% RH (65-70) 0 **On Day 19,** transfer to (TYPE) hatcher Т Т U trolley 50 D Н 70 н D/ (0) 0

Example: Chicken Egg (Incubation Time = 21 Days)

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T SERIES

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 day.)

	Date of			Number of			Hatchability	
Species	Set	Transfer	Hatching	Eggs	fertile eggs	chicks	%	Notes (Examples)
Quail	1.1.2000	15.1.2000	18.1.2000	2800	2500	2375	95	16-17 days hatch, 1 early death
Hen	5.1.2000	23.1.2000	26.1.2000	320	300	270	90	20-21 day hatch

Factors Affecting Hatchability

- Incorrect incubation settings
- Turning problems
- Very low / high incubation room temperatures
- Inadequate room ventilation
- Prolong egg storage times
- Electric outages.
- 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.

NOTE: Egg incubation requires dedication and oversight. Cimuka, or its distributors will not be held responsible for loss of eggs or chicks under any circumstances.



Cleaning Up and Service

Caution! Disconnect the incubator from electric supply during cleaning or service.
 Caution! Servicing and spare part changes must be carried out by a qualified person.
 Caution! Never use water higher than 122°F (50°C) 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. Clean your model thoroughly after each season by keeping it on without humidifier unit to dry all parts for at least 1 day. Use a dry soft brush or vacuum to clean control panel and fan panel.

Most components of the incubator are easily replaceable. 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 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 YOU MUST WAIT AT LEAST 5 MINUTES BEFORE SERVICING.



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 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

		Egg Ca	Power (W)	Electric supply				
	Quail	Partridge	Pheasant	Hen/ Duck	Turkey/ Big Duck	Goose/ Peacock	Average	Max	
Setters									
T960 S T1280 S T1600 S T2400 S T3200 S T4800 S	2496 3328 4160 6240 8320 12480	1848 2464 3080 4620 6160 9240	1296 1728 2160 3240 4320 6480	960 1280 1600 2400 3200 4800	756 1008 1260 1890 2520 3780	480 640 800 1200 1600 2400	400 425 450 550 700 850	1200 1200 1200 1250 1600 1900	110V AC 60 Hz / 220-240V AC 50 Hz
Hatchers									
T640 H T960 H T1280 H T1600 H T2400 H T3200 H T4800 H	1664 2496 3328 4160 6240 8320 12480	1232 1848 2464 3080 4620 6160 9240	864 1296 1728 2160 3240 4320 6480	640 960 1280 1600 2400 3200 4800	504 756 1008 1260 1890 2520 3780	320 480 640 800 1200 1600 2400	200 350 400 425 500 600 750	700 1200 1200 1200 1250 1600 1900	110V AC 60 Hz / 220-240V AC 50 Hz
Combined Types				,		,			
T1280 C T1600 C T2400 C T3200 C T4800 C	2496+832* 3328+832* 4992+1248* 6656+1664* 9984+2469*	1848+616* 2464+616* 3696+924* 4928+1232* 7392+1848*	1296+432* 1728+432* 2592+648* 3456+864* 5184+1296*	960+320* 1280+320* 1920+480* 2560+640* 3840+960*	756+252* 1008+252* 1512+378* 2016+504* 3024+756*	480+160* 640+160* 960+240* 1280+320* 1920+480*	425 450 550 700 850	1200 1200 1250 1600 1900	110V AC 60 Hz / 220-240V AC 50 Hz
All Set / All Hatch T	ypes								
T1600 SH T2400 SH T3200 SH T4800 SH	4160 6240 8320 12480	3080 4620 6160 9240	2160 3240 4320 6480	1600 2400 3200 4800	1260 1890 2520 3780	800 1200 1600 2400	500 600 750 900	1200 1250 1600 1900	110V AC 60 Hz / 220-240V AC 50 Hz

*Setter Part + Hatcher Part



Used electrical and electronic equipment should not be mixed with general household waste. For proper disposal 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 or visit https://www.epa.gov.



Recommended Incubation Values

Typical incubation periods and recommended temperature / humidity values for the species are given below. Incubation periods, temperature and humidity values vary by species. Please check manual or ask your vendor for information.

	Incubation Period (Days)	Setting Temperature	Setting Humidity	Hatching Temperature (Last 2-3 Days)	Hatching Humidity (Last 2-3 Days)
Chicken	21	99.8°F (37.7°C)	%RH 50-55	99.0°F (37.2°C)	%RH 65 - 70
Turkey	28	99.5°F (37.5°C)	%RH 50 - 55	98.6°F (37.0°C)	%RH 65 - 70
Quail	17	99.8°F (37.7°C)	%RH 50 - 55	99.1°F (37.3°C)	%RH 65 - 70
Partridge	24	99.5°F (37.5°C)	%RH 50 - 55	98.6°F (37.0°C)	%RH 65 - 70
Pheasant	24	99.8°F (37.7°C)	%RH 55 - 60	99.0°F (37.2°C)	%RH 70 - 75
Duck	28	99.5°F (37.5°C)	%RH 55 - 60	98.6°F (37.0°C)	%RH 70 - 75
Goose	30	99.8°F (37.7°C)	%RH 55 - 60	99.0°F (37.2°C)	%RH 75 - 80

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

- For Combined (C) Models, always keep temperature at setting temperature value.

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

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