Before You Read This User Manual

Carefully read the instructions before using the incubator. ANITEC is not liable for damage caused by non-compliance with regulations, instructions or improper use. In these cases, all warranty expires.

Photos and drawings in this user manual may differ from the delivered incubator.

Icons used in this guide:

 : Warning for the prevention of problems.

 : Hint or advice.

In case of ambiguities, questions or comments, please contact ANITEC.

Production & customer service:

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1. Safety regulations

Misuse or failure to comply with warnings or instructions may result in personal injury, productive or personal physical harm.

To ensure a safe installation, read the *'Installation'* section carefully.

It is not permitted to make changes to the incubator, as well as using non-original parts. ANITEC is not liable for damage or malfunctions resulting from this.

Work that is not described in the operating instructions may only be carried out by competent personnel.

The incubator is always switched off and the power cord is removed before cleaning, moving or opening the side panel.

CE

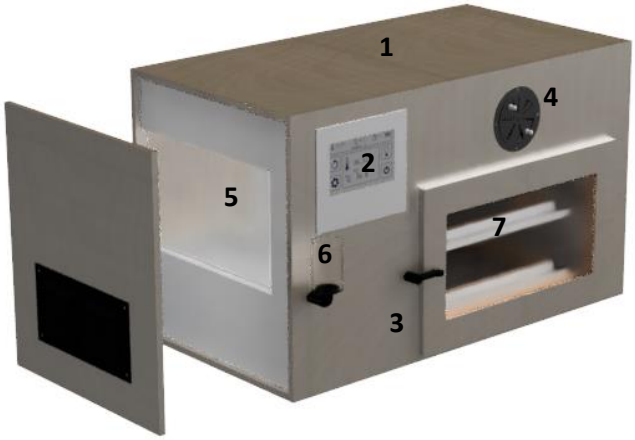
This machine is CE-marked. This means that the Incubator Pro complies with the European directives.

2. Parts & functions

2.1 Parts

The incubator consists of some standard functional components. The visible wooden frame forms a first outer layer, provides a warm appearance and provides a first layer of insulation. To monitor and set up the incubator, there is a 5.2 inch large LCD touch screen present. The incubator door can be opened and closed with the help of a latch. To provide sufficient ventilation, there is a ventilation grille at the top and bottom at the frontside of which the size of both openings can manually be regulated. There is one waterreservoir with a volume of approximately 2L for automatic moisture control. Filling of the reservoir can be done via the fill opening at the front of the machine. Finally, at the internal of the machine the egg trays can be found. These egg trays can be inserted or removed in a user-friendly way.

1. Wooden cladding
2. Touchscreen
3. Door
4. Ventilation grille
5. Water tank
6. Filling opening water tank
7. Egg trays



2.2 General functions

2.2.1 Temperature control

The internal air is heated via an electric heating element. The temperature is controlled via a robust control circuit. This optimal control algorithm, together with a highly accurate temperature sensor, ensures a maximum deviation of 0.1 °C compared to the set value. Internal air circulation ensures that the temperature is evenly distributed throughout the entire internal chamber.

The temperature sensor is calibrated using high-precision thermometers. A thermometer can always be placed in the inner cabinet to check the accuracy of the temperature.

If the temperature becomes too low or too high due to external factors, this can be reported via an alarm signal. To enable this alarm, see *'Setting the alarms'.*

The incubator is software protected with a switch-off temperature at 40 °C. If the temperature rises above 40 °C, the system automatically shuts down and an alarm signal is triggered. Afterwards, it is therefore required to completely restart the system.

In addition, the incubator is also hardware protected with a built-in heat fuse. This provides an extra safety in case the temperature exceeds above 60 °C in the internal heating chamber.

2.2.2 Humidity control

The relative humidity inside the incubator is automatically controlled by means of a ventilator and a water heating element. The water heater is only switched on if necessary to avoid unnecessary energy costs.

2.2.3 Turning of the eggs

The eggs are rotated by means of a linear displacement. The eggs are turned from one extreme position to the other. ANITEC provides some standard sizes of egg trays to accommodate all sizes of eggs.

Always fill the drawers from the middle outwards to obtain optimal air circulation.

The turning can be carried out manually or automatically. In automatic mode, the daily rotation frequency can be set. The rotation frequency is the number of times the eggs are turned per day. See "*Settings*" section for operation.

To easily place or remove the egg trays, you can rotate the egg trays until they are in a straight position. See section *'Turning to middle position'*.

2.2.4 Air ventilation

As the incubation process progresses more and the development in the egg grows, more CO_2 is repelled. That is why it is recommended to allow more fresh air into the system. The amount of fresh air that is let into the system can be controlled by the slider at the bottom of the door.

The more the system is ventilated, the more the system consumes power. The fresh air must be heated and possibly supplemented with water vapor.

If you notice that the humidity setpoint is not reached, it is possible that too much moisture-rich air leaves the system. It is therefore recommended to limit ventilation to the outside environment at very high humidity levels.

2.2.5 Cooling-off schedule

For the breeding of some bird species, a cooling schedule is desired. Here, the heating element is switched off for a set period of time. As a result, the air temperature drops steadily throughout the set period. The daily frequency of cooling as well as the time per cooling period can be set, see section *'Settings'*.

2.3 Material

The outside of the incubator is made of high-quality wood finished with a durable lacquer layer. The material on the inside has the properties that it is easy to clean, water-repellent and hygienic. The inner finish is also a good thermal insulator

2.4 Filling the water tank

The water tank is located on the left side of the incubator. Filling the water reservoir is done at the front of the incubator through the filling opening. When the water level is too low, an alarm signal can be triggered. To enable this setting, see section *'Setting the alarms'*.

The water tank has a capacity of approximately 2 liters. With normal use, in an optimal room, the water tank must be refilled every 1 to 2 weeks.

Always fill the reservoir with demineralised water of about 30 °C.

2.5 Checklist before each breeding cycle

To ensure an optimal breeding period, it is recommended to go through the following checklist:

- Check the temperature
- Check the humidity
- Check the water level in the water tank
- Check the settings
- Check the turn system
- Check the measurements of the sensors

To ensure that the relative humidity of the internal air is already at its setting value, it is recommended to turn on the incubator for 2 hours before breeding.

3. Installation

3.1 Transport

Always transport the incubator perfectly horizontally. Never transport the system when it is in operation.

When you move the incubator, unplug the power cord from the power outlet and remove the water from the reservoir.

3.2 Optimal ambient space

Make sure that the incubator is in a vibration-free, stable place at a minimum height of 50 cm. The incubator is placed in a hygienic room with a temperature between 15 to 22 °C and a constant humidity. It is important that both the room and the incubator are regularly disinfected to prevent fungi, bacteria and viruses.

3.3 Electrical connection

Connect the incubator to the electrical grid using the power cord. Before connecting, make sure that the power cord is free of damage.

Permissible mains voltage: 230 V, 50 Hz

3.4 Wifi network

To be able to follow your breeding process at any time, you can monitor the system online via your favorite web browser. To do this, the system must be connected to your local Wi-Fi network (which is connected to the Internet). To prevent any data loss, it is recommended that your breeding system is placed where there is sufficient network coverage!

To connect your Wi-Fi you can look under section *'Setup Wi-Fi connection'*.

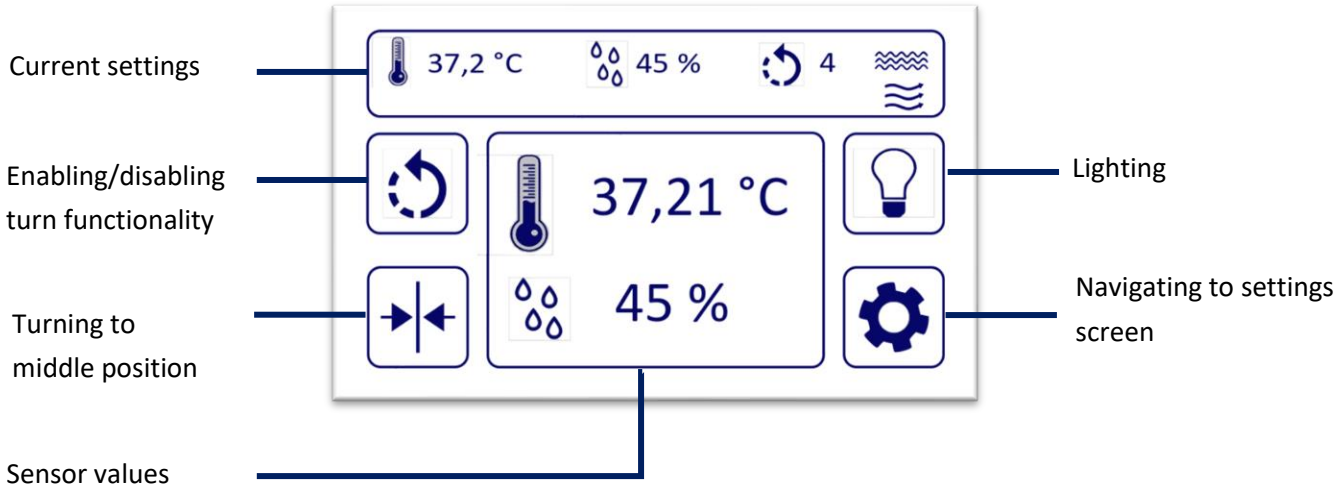
4. Operation & control

4.1 Switching the system on and off

The incubator can be switched on and off with a switch at the back of the cabinet. The system start-up takes about 5 seconds.

4.2 Main screen

The main screen is the starting point for accessing the various setting options.



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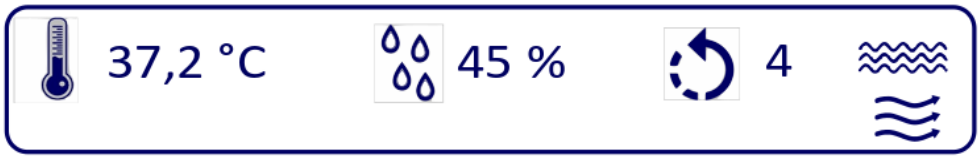
4.2.1 Reading current temperature & humidity

In the middle of the main screen you can read the sensor values. The temperature can be displayed both in degrees Celsius (°C) and in degrees Fahrenheit (°F). To adjust these, see section *'Fahrenheit – Celsius change'*. The relative humidity is expressed in %RH. The sensor values are updated every three seconds.

4.2.2 Reading current settings

At the top of the main screen you can read the current setting values for temperature and humidity. In addition, one can also see the daily set rotation frequency. The rightmost icons indicate the status of the water level and cooling schedule.



Water level: Blinks red in case of water shortage!

Cooling schedule: Icon visible when schedule is inserted.
Flashes at the current moment of cooling.

4.2.3 Switching lights on and off

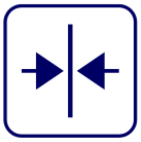
The internal lighting can be switched on and off by briefly pressing the lighting button. When the lighting is on, you will see the lamp icon turn yellow.

 Lighting off

 Lighting on

The lighting can also be switched on automatically when the door opens. To activate this, you can look at section '*Door settings'.*

4.2.4 Turning to middle position



Via this icon, you can activate the turning system to place the egg trays perfect vertically, which facilitates the replacement of the drawers.

4.2.5 Enabling and disabling turn functionality

Turning the eggs can be turned off in two different ways.

1. The turn functionality can be switched off by pressing the turn button. When the turning is turned off, the icon becomes red.

 Enabled

 Turned off

2. The turning functionality can be switched off by setting the daily turn frequency to zero via the setting screen. When it is set to zero, you will no longer see the turning icon visible on the main screen.

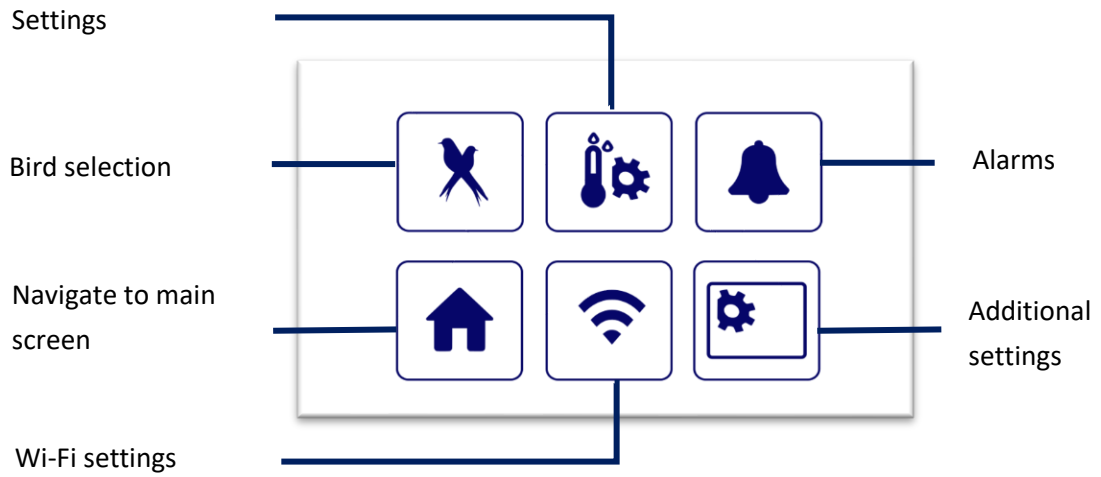
4.2.6 Navigating to the settings screen

To go to the settings screen, press the gear icon.

4.3 Screen settings

From the settings screen you can navigate to the different settings.

- Bird selection: Select, save settings and rename
- Settings: Set temperature, humidity, rotation frequency, cooling schedule
- Alarm settings: Too high or too low temperature, door open, low water level
- Additional settings: Display screen & door settings
- Wi-Fi settings



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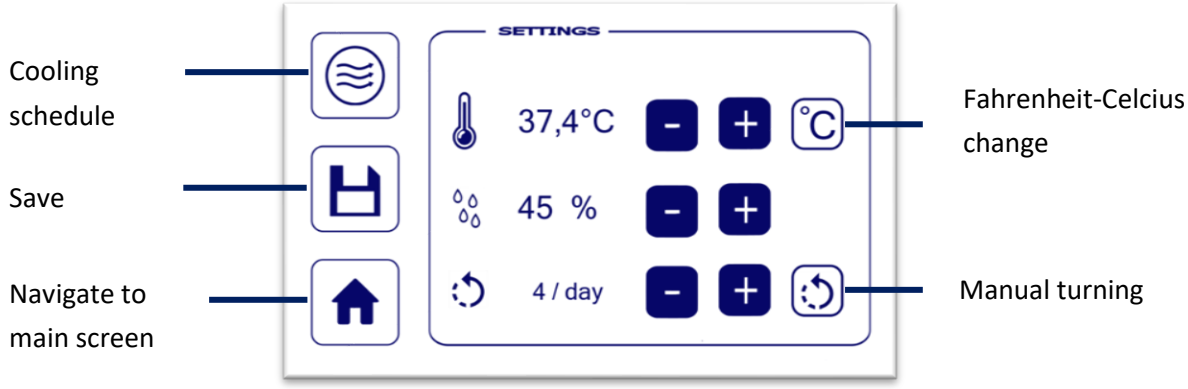
4.3.1 Settings

In the settings screen you can adjust the set temperature, relative humidity and daily reversal frequency via the '*minus'* and *'plus'* icons. When you have come to the settings via the bird selection screen, you also have the option to save the settings.



3: settings screen

4.3.1.1 Fahrenheit – Celsius change

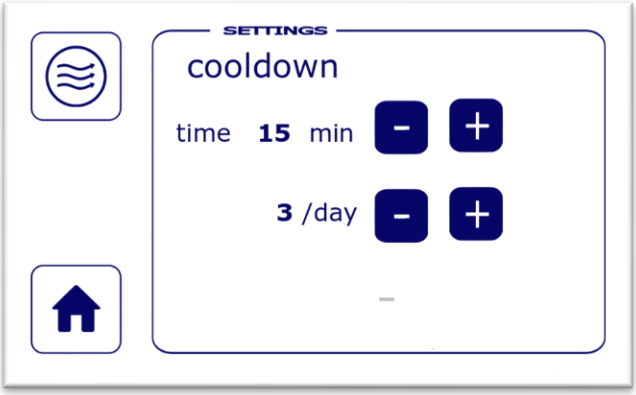
The air temperature can be expressed in degrees Celsius (°C) (SI system) or in Fahrenheit (°F). The temperature can be displayed in both ways. By activating the buttons below, you can change each the unit system.

Set fahrenheit degrees

Set degrees Celcius

4.3.1.2 Setting cooling schedule

To set a cooling schedule, press the cool icon. Here, one can set the daily cooling frequency, as well as the cooling time per cooling period. For more information about these parameters, see *'Cooling-off schedule'*.



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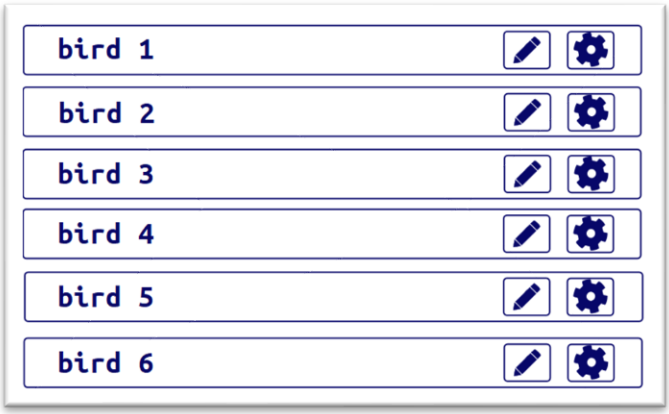
4.3.1.3 Manual turning

Via this icon you can turn the eggs once.

4.3.2 Saving and setting fixed bird settings

To easily keep track of fixed setting values for breeding processes of different birds , you can use the fixed bird settings functionality.

The functionality allows you to store a fixed set of setting values for 6 different bird species. To use the setting values under one of these 6 sets, just press the respectively correct bird name under which it is stored. It automatically returns to the main screen and displays the bird settings of the selected bird and below it the bird name.



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Change the name of the bird selection. A keypad will appear.

Adjust settings of specific bird. (Temperature, relative humidity, daily reversal frequency)

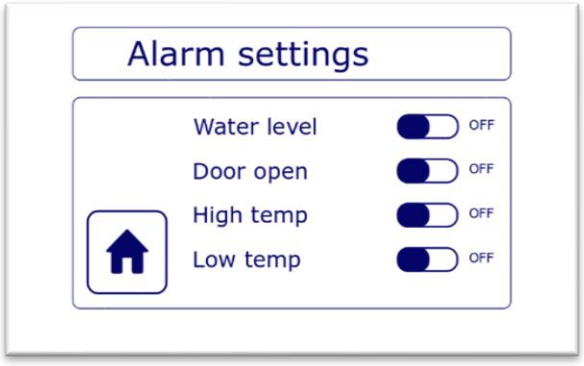
When the incubator has restarted, it will automatically activate the settings of the last chosen bird.

4.3.3 Navigating to the main screen

To return to the main screen, press the house icon.

4.3.4 Setting the alarms

Via the settings screen you can navigate to the alarm screen.



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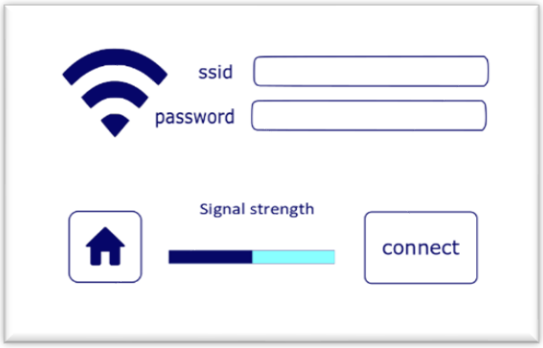
Through this screen, 4 different alarms can be activated or deactivated. When an alarm is triggered, a loud buzzer goes off. An alarm is triggered if one of the following active conditions has not been met for 30 seconds:

- Too high temperature: temperature above 1.5 °C of the set point
- Too low temperature: temperature below 1.5 °C of the set point
- Water level: insufficient water in the water tank
- Door: when the door is open for a long time

4.3.5 Setup Wi-Fi connection

Via the Wi-Fi module, you have the possibility to follow up the breeding process in real time. This can be done via the following URL: *www.anitec data.be*. Instructions for this can be found in the separate manual *'Data Monitoring'*.

You can enter the SSID and the corresponding password of the network to which you want to connect the incubator on the Wi-Fi screen. After you have filled in everything correctly, press the 'connect' button. After this you will receive the following message: *'Data send! Please Wait'*.



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After a few minutes, the status will change to one of the following:

- *Connected*

➔ Incubator is successfully connected.

- *Disconnected*

➔ Incubator is disconnected .

- *Attempting to connect*

➔ Connecting

- *No SSID available*

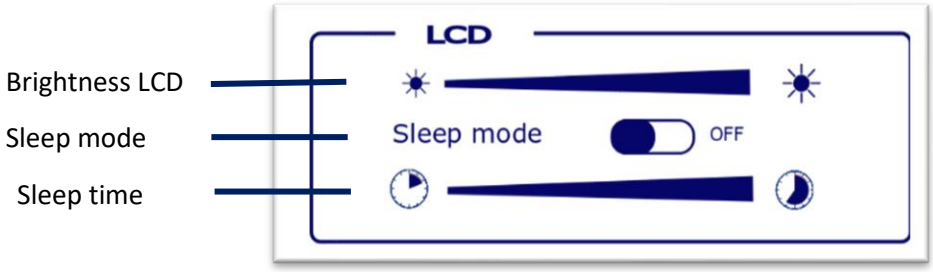
➔ Wi-Fi network name not available

When the connection status is set to 'Connected' and therefore the incubator is successfully connected, you can also view the signal strength of the network. The higher, the more stable your connection and the more stable the data collection.

4.3.6 Additional settings

4.3.6.1 Display settings

The brightness of the LCD screen can be adjusted via a sliding bar. To save energy, it is best to turn on the sleep mode of the screen. The screen will then become inactive after a certain time. You can switch on sleep mode via the slider. The relative time after which the screen becomes inactive, is adjustable with the lower sliding bar.



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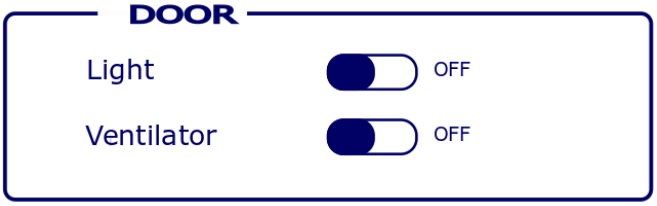
4.3.6.2 Door settings

Via the 'Light' slider, you can automatically activate the light when opening the door.

Via the 'Fan' slider, you can turn off the fan when opening the door. This will also turn off the heating. If the fan is in an 'ON' state, the air heating will operate at a lower power and the fan will still remain active.



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5. Troubleshooting

PROBLEM	CAUSE
The incubator does not start up	• Power cord is poorly connected • Switch at the back is off • Fuse is broken at mains connection
Heating is not possible	• Door is open • System crashed -> restart the system! • Temperature sensor is contaminated or damaged
Relative humidity value strongly below set value	• Ventilation grille is too open • Water level in tank too low • Poor or disconnected water heating
Relative humidity value strongly above set value	• Ventilation rose is closed too much • Ambient humidity is too high
Moisture drops rapidly when filling water reservoir	• Filled with cold water
Water level drops rapidly	• Leak at water tank or pipes
Water level icon keeps flashing	• Water level too low
The eggs do not turn	• Egg trays are not well positioned • Auto-turning is turned off • Engine is blocked
Door cannot be closed completely	• Egg trays are not well positioned • Object is between the door

6. Maintenance and cleaning

6.1 Annual maintenance

After each breeding season, the incubator must be completely cleaned and disinfected. ANITEC advises to have your incubator checked and maintained annually. Control of the following components is crucial:

- Ventilation system
- Heating element
- Electrical cabling
- Calibration temperature and humidity
- Turn system

An annual maintenance contract can be requested via our customer service.

6.2 Cleaning & disinfection

Unplug the power cord from the wall outlet before you start maintenance. After each breeding cycle, it is recommended to completely disinfect and clean the incubator.

6.2.1 Cleaning of the water tank

The removal of the water reservoir is done by opening the hatch on the side. You slide the reservoir forward and disconnect the heating element and the sensor.

After emptying the reservoir, it is best to clean it thoroughly with a soap solution and disinfectant.

6.2.2 Cleaning of the breeding area

Remove the breeding racks and unscrew the sides. Gently slide it forward. Remove the dirt with a vacuum cleaner and wet cloth. Put the sides back in place and screw them on. Also clean the breeding racks.

7. Policy

7.1 Return & repair

Requesting a repair or ordering repair parts is possible via the contact form on the website contact@ANITEC.be. You will receive an answer to your request within two working days.

7.2 Warranty

Determining the settings and obtained measurement results are the sole responsibility of the user. The manufacturer is under no circumstances liable for the damage that can be caused by this. There is no guarantee of the accuracy of the temperature measurement.

Your product comes with a warranty that covers manufacturing defects in workmanship and materials. Our warranty does not cover repairs resulting from damage caused by misuse or inadequate maintenance of the product, normal wear and tear or repairs beyond the warranty period.

For repair under warranty, it is necessary that your product is inspected by the ANITEC service department . Our service department will make the final decision about the status of your product upon receipt.

Since ANITEC has no control over the correct placement and commissioning of the incubator, only the warranty of this product will contain the product itself. The warranty period of this product is 2 years.