

The logo features a stylized black silhouette of a chicken's head with a comb, positioned above the letter 'C' of the word 'Chicken'.

Chicken Cooper

User Guide

chicken-cooper.com

Version 1.1.0 English - 2024-03-04

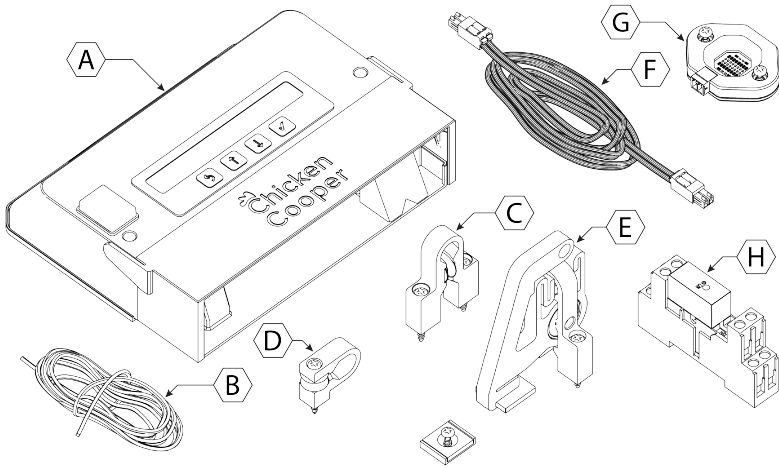


Figure 1

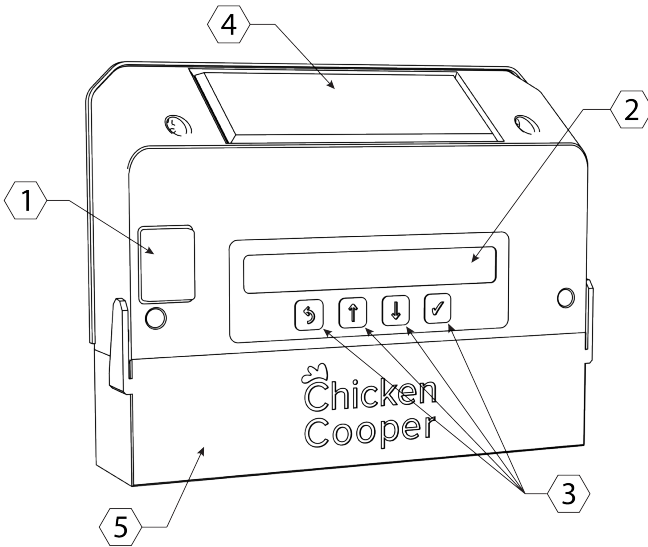


Figure 2

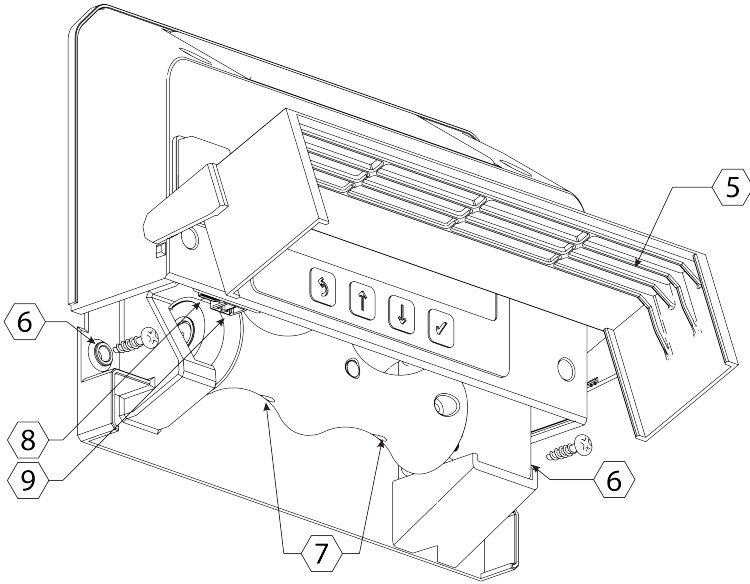


Figure 3

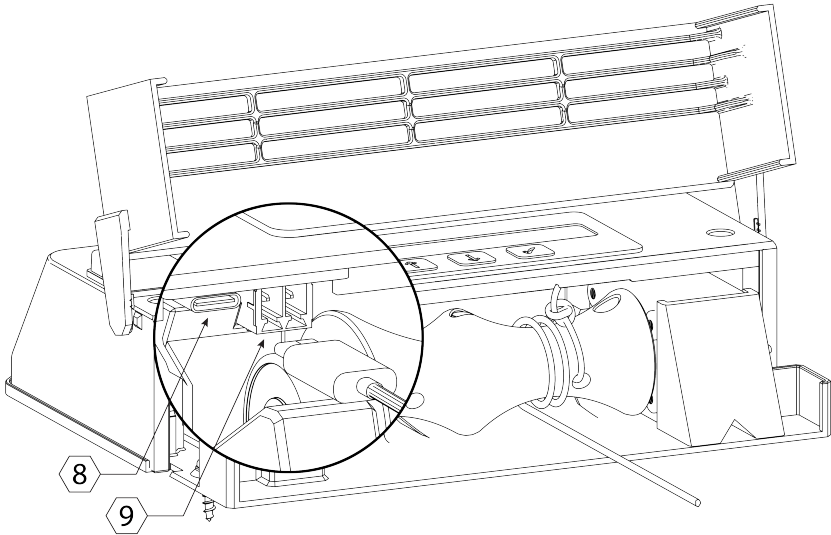


Figure 4

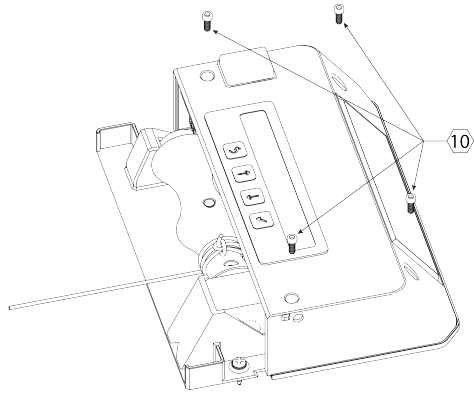


Figure 5

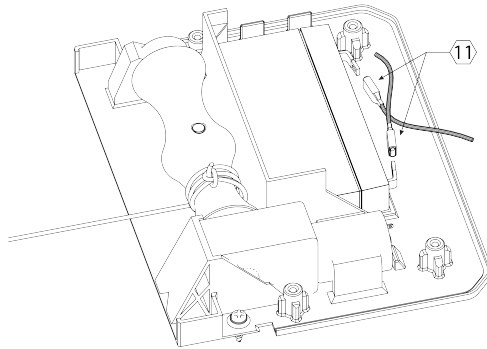


Figure 6

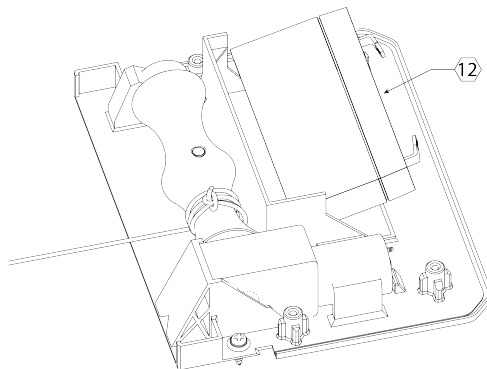


Figure 7

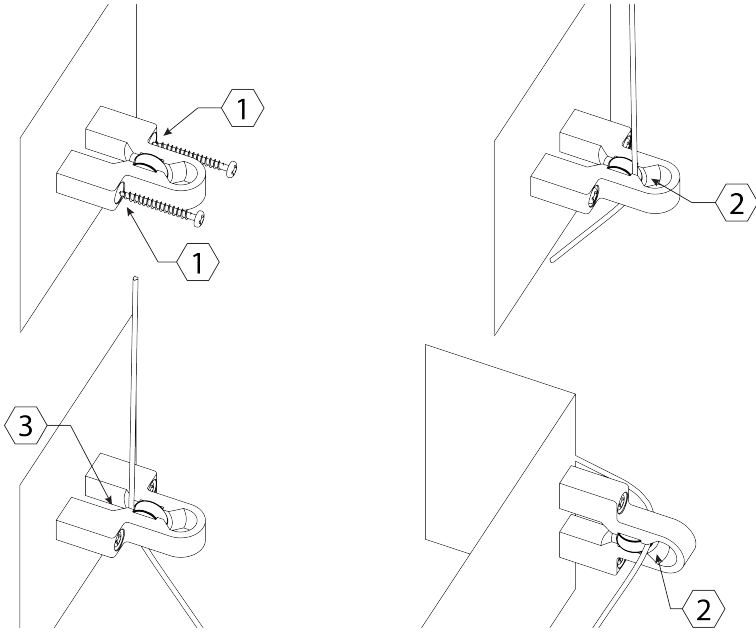


Figure 8

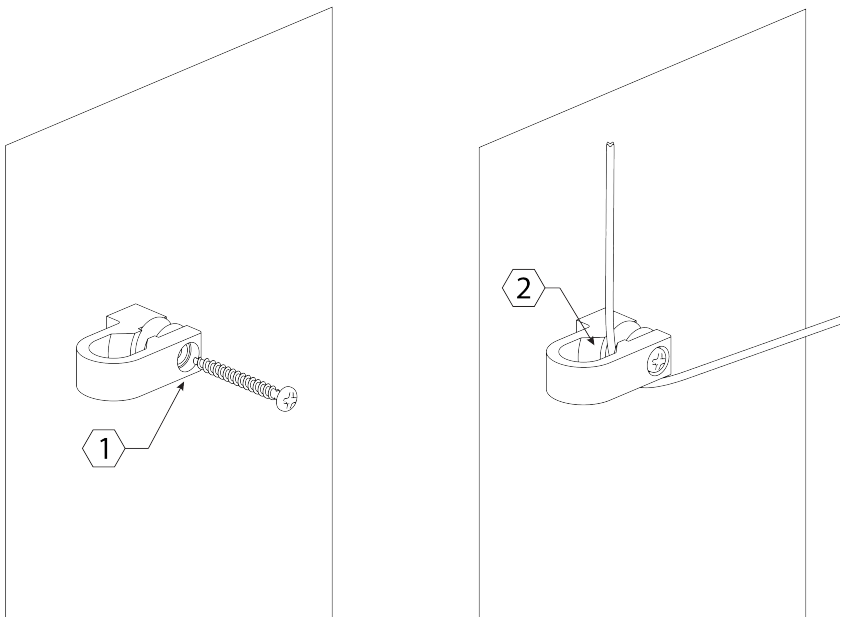


Figure 9

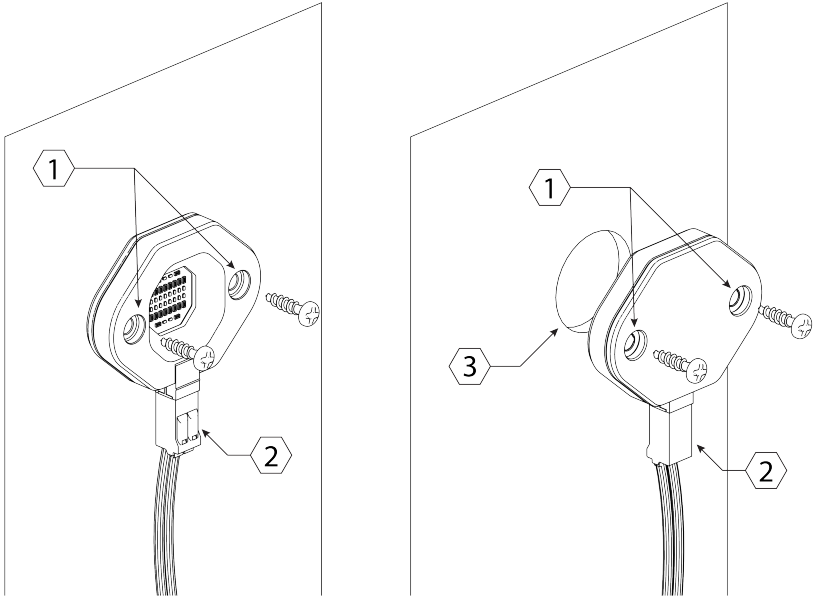


Figure 10

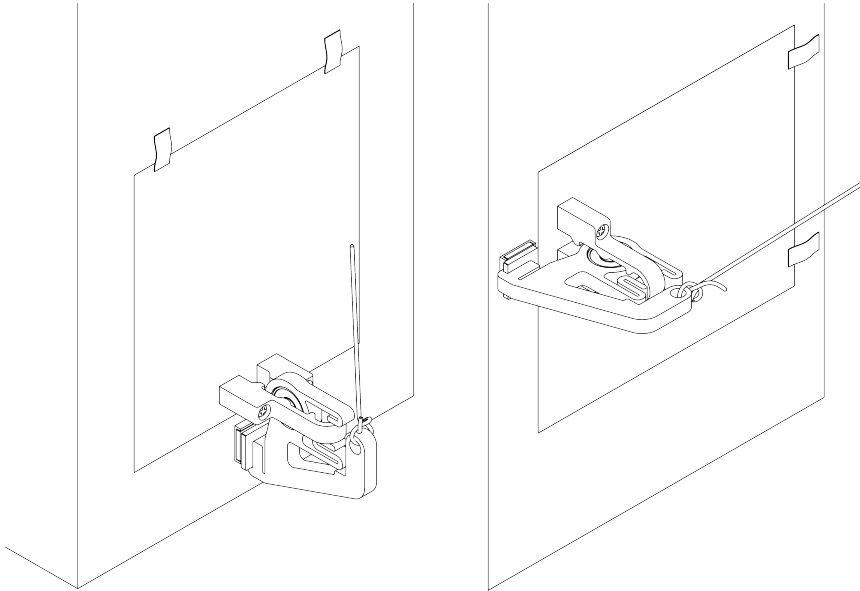


Figure 11

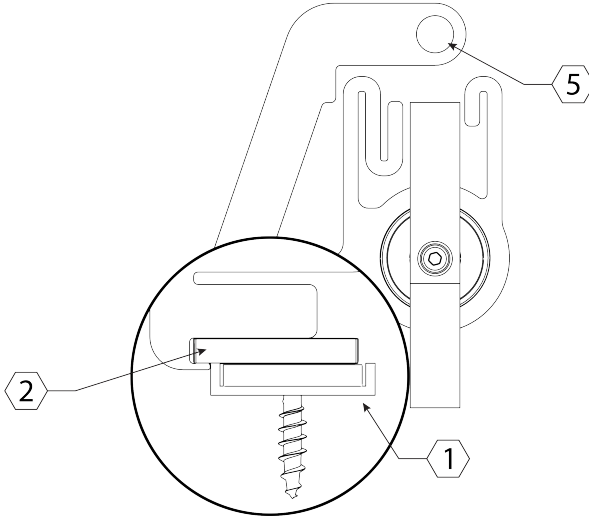


Figure 12

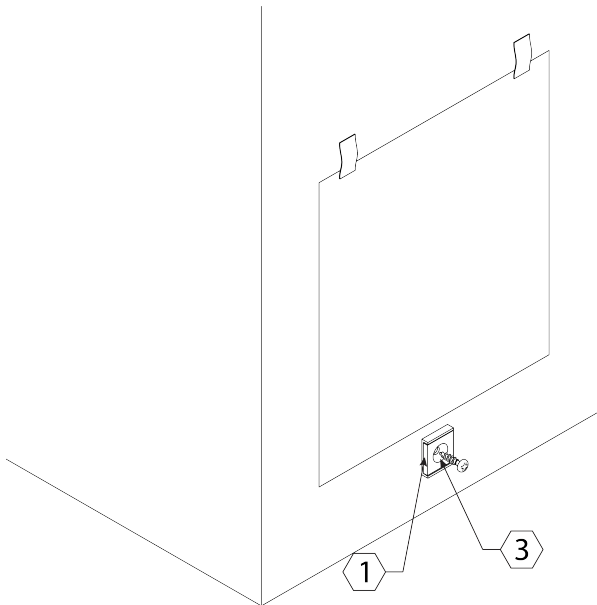


Figure 13

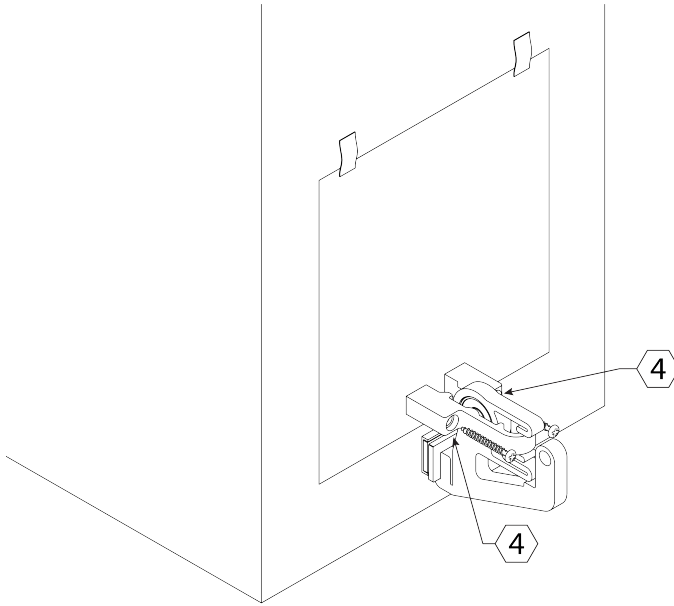


Figure 14

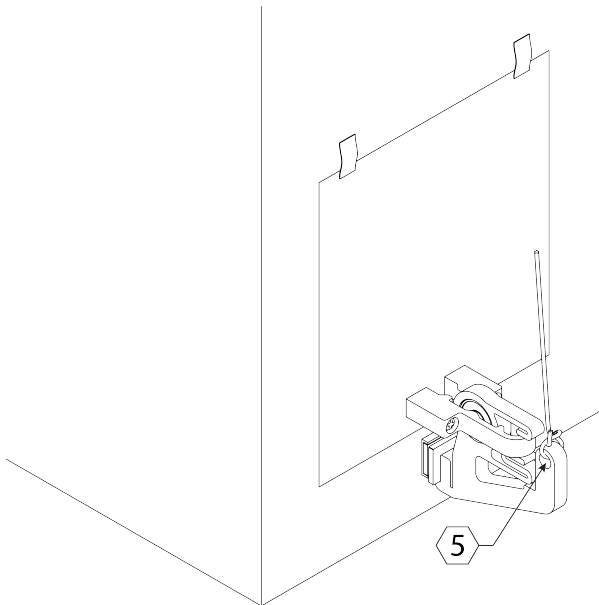


Figure 15

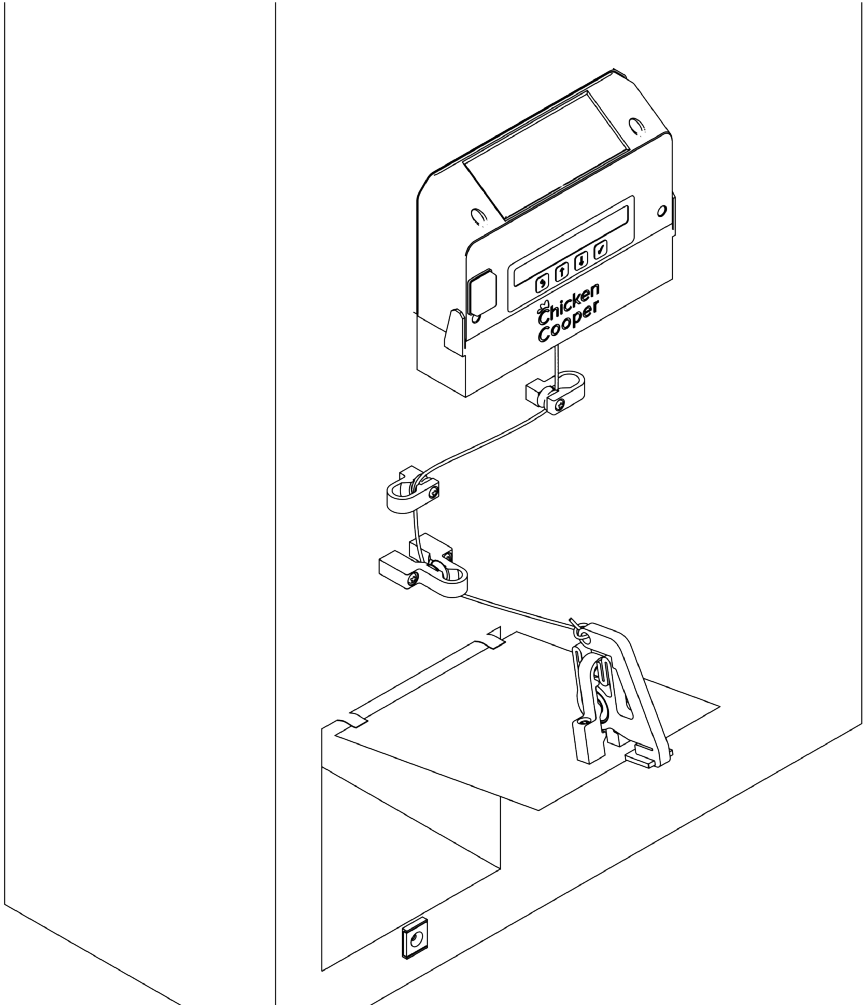


Figure 16



1. EU-Declaration of Conformity

according to 2006/42/EG, Appendix II, Letter A based on EN ISO/IEC 17050-1 & EN ISO/IEC 17050-2.

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hereby declares that the product with types HLK1-050, HLK1-100, HLK2-100, Packaging-Reg.-Nr: DE 3936729952499 and WEEE-Reg.-Nr: DE 79996282 and further described within this datasheet, does conform to the following applicable directives & regulations of the European Union:

2023/988 (General Safety)	1907/2006/EU (REACH)
2014/35/EU (Low Voltage)	(EU) 2019/1021 (POP)
2006/42/EG (Machine)	2006/66/EG & 2013/56/EU (Battery)
2014/30/EU (EMC)	94/62/EC & (EU) 2018/851 (Packaging)
2011/65/EU (RoHS)	2014/53/EU (Radio)
2012/19/EU (WEEE)	2000/14/EG (Accoustic Emissions)

The following harmonized standards of the European Union were applied:

DIN EN ISO 12100:2011-03 (Risk Analysis)
DIN EN 60335-1:2020-08; VDE 0700-1:2020-08 (Safety)
DIN EN IEC 62368-1:2021-05; VDE 0868-1:2021-05 (Safety)
DIN EN IEC 62368-1 Corrigendum 1:2022-12; VDE 0868-1 Corrigendum 1:2022-12 (Safety)
DIN EN IEC 62368-1 Corrigendum 2:2023-08; VDE 0868-1 Corrigendum 2:2023-08 (Safety)
DIN EN IEC 55014-1:2022-12; VDE 0875-14-1:2022-12 (EMC - Emission)
DIN EN IEC 55014-2:2022-10; VDE 0875-14-2:2022-10 (EMC - Immunity)

The signatory is authorized and responsible for compiling the technical documentation:



Robert Hochmair, Chief Executive CreyNox GmbH
Autokaderstraße 29/B II/1. Floor
1210 Vienna, Austria

Vienna, 2024-03-05



2. Safety

Devices and machines, as well as their installation and operation, involve numerous hazards of various kinds, some of which are difficult to recognize. These have been carefully analyzed for this product and described in these operating instructions. Always pay attention to your own safety and the safety of persons, objects and facilities in your environment.

<p>Warning</p> 	<p>Operating Manual</p> <p>Read and internalize these operating instructions carefully and completely before installing and operating the product for the first time. In case of improper handling or use, liability of the manufacturer for direct and indirect personal injury and property damage is excluded.</p>
<p>Notice</p> 	<p>Please note that these operating instructions may be corrected, supplemented or extended over time. Check regularly whether a more recent version is available. Regularly consult information sources according to chapter Information & Support.</p>

2.1. Definitions for Safety Warnings

This document uses instructions and safety warnings in accordance with EN ISO 7010. These are described below and must be particularly considered under all circumstances, since failure to do so may result in personal injury and damage to property.

2.1.1. Hazard Levels








Safety warnings are classified into one of the following categories based on their hazard potential.

Danger	Indicates situations or behavior that pose an immediate threat to life and limb. Related safety instructions must be heeded without exception in order to prevent serious or fatal injuries.
Warning	Indicates situations or behavior that may pose a threat to life and limb. Related safety instructions should be seriously taken into account in order to prevent serious or fatal injuries.
Caution	Indicates situations or behavior that may result in minor or moderate injury. Act in accordance with related safety instructions.
Notice	Indicates situations or behavior that are not directly associated with injury hazards, but can lead to property damage or permanent functional impairments if disregarded.







2.1.2. Hazard Types



In the following, identified hazard types are described in basic terms and referenced in individual cases in order to achieve the best possible understanding.

<p>Caution</p> 	<p>Crushing of Hands</p> <p>A machine includes an apparatus that has sufficient mechanical force capability to cause hand injury. Operate only with extreme caution.</p>
<p>Caution</p> 	<p>Automatic start-up</p> <p>A machine contains an apparatus which starts automatically and can thus set itself in motion. It must be ensured that no limbs or body parts of humans/animals or other objects are located in the hazardous area at any time.</p>
<p>Warning</p> 	<p>Battery Charging</p> <p>When charging rechargeable batteries (accumulators), a number of aspects must be taken into account to prevent damage that could result in injury.</p>
<p>Caution</p> 	<p>Magnetic field</p> <p>Magnets generate strong and far-reaching magnetic fields which attract other magnetic objects (e.g. keys, belt buckles, medical implants, magnetic cards & storage media, etc.) and eventually impair or destroy them. Endangered objects must be kept away from these fields at suitable distance.</p>
<p>Caution</p> 	<p>Hot surface</p> <p>Touching hot surfaces can be painful. In severe cases, it can also cause serious burns to skin and other parts of the body. Avoid contact with potentially hot surfaces to prevent pain or injury.</p>
<p>Warning</p> 	<p>Overhead obstacle</p> <p>Some environments pose the risk of objects in the head area, which can cause serious head injuries in case of impact. Always be aware of surrounding obstacles in the head area and avoid rapid and jerky movements to prevent collisions and resulting injuries.</p>
<p>Danger</p> 	<p>Overhead or suspended load</p> <p>Some environments involve the risk of existing suspended loads, which are held in the air by chains, ropes or other fixtures. It must always be ensured that these have sufficient holding capacity to support the loads permanently and safely, taking into account all relevant extrinsic influences (e.g.: wind/storm, aging, wear, etc.). Also note that suspended loads can swing, creating significant collision hazards in their vicinity. Avoid traversing and lingering below and in the vicinity of suspended loads to prevent injury.</p>









<p>Notice</p> 	<p>Keep out of the reach of children</p> <p>Children are potentially unable to recognize dangers and correctly assess the consequences of their actions. For this reason, children must be effectively protected from hazards. Avoid access to dangerous objects and substances, as well as access to dangerous environments, to prevent injury, damage and threatening circumstances.</p>
<p>Danger</p> 	<p>Heavy load</p> <p>Placing, suspending and attaching heavy loads to devices (e.g.: wall, rope, chain, etc) can lead to their mechanical overload and cause the device and the applied loads to topple over, fall down or undergo other dangerous changes in position. This may result in serious or fatal injuries.</p>
<p>Danger</p> 	<p>Metallic implants</p> <p>Some people or animals have metal implants, which pose additional hazards. In these cases, special care must be taken when handling devices and machines. For example, strong magnets can affect metal implants, possibly resulting in injury, damage or impairment.</p>
<p>Danger</p> 	<p>Active implanted cardiac devices</p> <p>Some people or animals have pacemakers or implanted defibrillators, which pose additional risks. In these cases, special care must be taken when handling devices and machines. For example, electromagnetic fields or electric shocks can impair the function and lead to life-threatening situations.</p>

2.2. Safe Handling of the Product

<p>Danger</p> 	<p>Handling, installation and control of the product exclusively by adults. Assembly and operation of the product exclusively out of the reach of children and persons with physical or mental disabilities.</p>
<p>Danger</p> 	<p>Never use the product in an unsuitable manner. Use it exclusively for its intended purpose. Consider all information in the Intended Use section. Any improper use of the product (even for a short period of time) involves unforeseeable risks and dangers and will result in the immediate loss of liability, warranty and guarantee.</p>











<p>Warning</p> 	<p>The product contains a rechargeable battery, which can store large amounts of energy. Incorrect handling or misuse (overloading, mechanical overstress, overheating, etc.) of the product can damage the battery. Damaged batteries pose numerous hazards to people, animals, goods and the environment. Possible undesirable consequences are:</p> <ul style="list-style-type: none"> • Injuries (e.g.: chemical burns, poisoning, burns, etc.) • Property damage (e.g.: fires, burns, etc.) • Environmental damage (e.g.: release of hazardous substances into the environment, etc.) <p>Therefore, consider the relevant information on correct handling (see chapter Integrated Rechargeable Battery Handling), especially the exclusive use of the permissible charging voltage of the product, and always handle the product with care.</p>
<p>Danger</p> 	<p>The product is equipped with an automatic control and a mechanical apparatus that can be used to pull loads in an automated manner. It should be noted that the product can therefore start up by itself and extreme caution should be exercised when operating in the area of any moving parts (e.g.: rope, spool, pulleys, doors, etc). Always set the off switch to position 0 to completely shut down the product before performing any work in these areas or on these parts. Otherwise, there is risk of serious injury to hands or other parts of the body.</p>
<p>Danger</p> 	<p>The product contains strong magnets which may influence or affect surrounding devices or persons with medical implants (e.g. pacemakers). In this case, keep sufficient distance from the product.</p>
<p>Warning</p> 	<p>Prevent objects, water and other liquids from entering the interior of the case through the openings.</p>
<p>Warning</p> 	<p>The product contains an electric motor which may produce small electric sparks during operation. For this reason, the product must never be brought into or operated in potentially explosive atmospheres.</p>
<p>Caution</p> 	<p>Especially in strong sunlight, individual parts of the product (especially metallic ones) can reach high surface temperatures. In such situations, avoid contact with parts and, if necessary, proceed carefully to prevent burns.</p>

**Notice**

The product and its accessories must be screwed on with appropriate torque limitation. The manufacturer excludes from the warranty any damage that occurs as a result of improper installation.

2.3. Safe Operation of the Product

<p>Warning</p> 	<p>Never operate the product outside the permissible temperature range. Observe the corresponding limit values in the technical data (see chapter Technical Specifications).</p>
<p>Warning</p> 	<p>Never operate the product at impermissible air pressure. In this context, the altitude of the operating location in relation to sea level is particularly important. Observe the corresponding limit values in the technical data (see chapter Technical Specifications).</p>
<p>Warning</p> 	<p>Only lift loads with a permissible total mass using this product. Observe the corresponding limit values in the technical data. Lifting loads that are too heavy can damage the product's motor and spool or overstress the load-bearing capacity of the rope used. Falling loads can cause injury or damage.</p>
<p>Warning</p> 	<p>Make sure that the rope can run unobstructed and without entanglement in both directions and that it runs exclusively within a suitable rope guide (via pulleys). Rope blockages can lead to overload of the motor or spool and result in injuries or damage.</p>
<p>Warning</p> 	<p>Make sure that the moving part (e.g.: hinged door) can be swiveled or pulled unhindered over the entire range of motion. Blocked doors can damage the motor and spool of the product or overstress the load-bearing capacity of the rope. Falling loads can cause injuries or damage.</p>
<p>Warning</p> 	<p>Always observe the surroundings of the product. Doors that open or swing open can be a source of danger to the head and other parts of the body. Rupturing ropes or bursting parts can cause doors to suddenly fall or flip over, causing injury or damage.</p>
<p>Notice</p> 	<p>Do not expose the product to strong magnetic fields and keep it away from strongly magnetic substances.</p>
<p>Notice</p> 	<p>Regularly check the proper state of the installation. Remove deposited dirt on the outside of the case and look out for excessive insect infestation.</p>

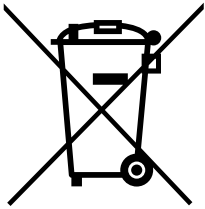


3. Warranty and Guarantee

The statutory warranty and guarantee regulations apply to this product. However, these expire prematurely in the event of improper use/handling or failure to observe the specifications in these operating instructions.

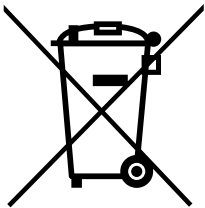
4. Environment

Electrical devices and machines must be disposed of and recycled in an environmentally friendly manner when they have reached the end of their service life. Consider the corresponding regulations and recommendations.



Waste separation

Products and parts thereof, which are marked with this symbol, must never be disposed of with normal household waste. Instead, according to local regulations, they must be taken to appropriate disposal points so that the valuable raw materials they contain can be reused. This relieves the environment and improves the use of scarce resources.



Disposal of the rechargeable battery

This product contains a rechargeable battery which must be removed during disposal (see chapter [Removing the Rechargeable Battery](#)) and disposed of in a suitable manner. Local authorities or special disposal companies can provide information on environmentally friendly disposal. In particular, it should be noted that the rechargeable battery must never be disposed of with normal household waste.



5. Intended Use

The Chicken Cooper product is designed to assist in the opening and closing of small doors according to defined time parameters. The application is mainly in the field of animal husbandry. The product is designed for permanent, but not fully autonomous operation and requires careful supervision by the operator. The service life of the traction apparatus and supply unit is designed for one opening and one closing operation per day.

Before purchasing the product, its suitability for the intended use should be carefully checked. In case of doubt, contact the manufacturer.


The following applications are explicitly not intended:

- Any use that could result in property damage or injury to people or animals
- The opening or closing of larger doors (entrance doors, garden gates, barn doors, driveway gates, etc.)
- Applications where lifting, lowering or moving loads is the main focus (cable winches, freight elevators, etc.)
- Applications which involve opening and closing several times a day.
- Applications where the reeling capacity of the spool is exceeded.
- Applications in environments outside the permissible operating parameters (see chapter [Technical Specifications](#)).

6. Product Description



6.1. Chicken Cooper

See [Figure 1](#) marker .






- Main switch ([Figure 2](#) marker ) - Used for general start-up and shutdown of the product. Switch position I turns the product on, switch position 0 turns it off. Switch position 0 can be used in emergency situation to put the product out of operation immediately.



The product can be charged via the solar cell and via USB port, only when powered on.



- Display ([Figure 2](#) marker ) - Indicates the current state of the product. Automatically turns off after some seconds to save energy. In this case, wake up your Chicken Cooper using the keypad.
- Keypad ([Figure 2](#) marker ) - Allows to control and configure the product using keys. To activate

the product the keys    can be used.

-  - Exits an active menu or sub menu. If no menu is active, the key switches off the display of the product.
-  - In normal operation, starts the motor to move to the **OPEN** position. This key can also be used to navigate up in menus or to set higher values.
-  - In normal operation, starts the motor to move to the **CLOSE** position. This key can also be used to navigate down in menus or to set lower values.
-  - Used in normal operation to enter a menu or confirm an action.
- Solar cell ([Figure 2](#) marker ) - Charges the product using sunlight. Therefore, make sure that it is at least periodically exposed to the sun.




To allow sufficient supply of the product, the solar cell must be kept free of dirt and coarse contamination.

- Flap ([Figure 2](#) marker ) - Can be opened upward for assembly or to check the rope. It snaps horizontally when opened to allow continued access to both the keys and the display during installation.
- Mounting points ([Figure 3](#) marker ) - Allow mounting with 2 screws 150mm apart.

Notice





Tighten screws with appropriate amount of force. When using machines (e.g.: cordless screwdrivers), ensure that the torque limit is appropriate to prevent damage.

- Spool with rope holes ([Figure 3](#) marker ) - Rolls the used rope up or down to move to the desired positions. Use the two holes to fasten the rope.

Notice



To prevent overstressing of the spool, ensure that the rope is always wound at least one turn when a force is applied. Also, ensure that the rope is sufficiently taut to prevent possible tangles.

- USB connector ([Figure 3](#) mark ) - Can be temporarily used to recharge the battery, but also to supply the product permanently with a USB cable.
- Module connector ([Figure 3](#) mark ) - Can be used to connect external extension modules (e.g. light module).
- Machine type marking - Provides information about the origin, manufacturer and exact type of the product.



6.2. Pulley (vertical)

See [Figure 1](#) marker [C](#).

- Rope guide pulley - Used to change the direction of the rope.
- Mounting points ([Figure 8](#) marker [1](#)) - Support mounting with 2 screws.
- Rope feedthrough ([Figure 8](#) markings [2](#) & [3](#)) - Prevents the rope from escaping the pulley.

Notice



Tighten screws with appropriate force. When using machines (e.g.: cordless screwdrivers), ensure that the torque limit is appropriate to prevent damage.

6.3. Pulley (horizontal)

See [Figure 1](#) marker [D](#).

- Rope guide pulley - Used to change the direction of the rope.
- Mounting points ([Figure 8](#) marker [1](#)) - Support mounting with 1 screw.
- Rope feedthrough ([Figure 8](#) marker [2](#)) - Prevents the rope from escaping the pulley.

Notice



Tighten screws with appropriate force. When using machines (e.g.: cordless screwdrivers), ensure that the torque limit is appropriate to prevent damage.

6.4. Magnetic Lock


See [Figure 1](#) marker [E](#).

- Magnet ([Figure 12](#) & [Figure 13](#) marker [1](#)) - Holds locking plate in closed position with magnetic force. Mounting with a single screw ([Figure 13](#) mark [3](#)).
- Metal plate ([Figure 12](#) marker [2](#)) - Counter element to magnet. Is held by the latter in the closed state by means of magnetic force.
- Mounting point ([Figure 14](#) marker [4](#)) - Support mounting with 2 screws.
- Rope feedthrough ([Figure 12](#) marker [5](#)) - Mounting point for the rope with which the lock can be pulled open.

**Notice**

Tighten screws with appropriate force. When using machines (e.g.: cordless screwdrivers), ensure that the torque limit is appropriate to prevent damage.

6.5. Module Cable

See [Figure 1](#) marker . Can be used to connect external modules to the product.




Warning

Never use the cable to connect modules or devices other than those described in this document to the product. Don't use the cable for any other purpose.

6.6. Light Module

See [Figure 1](#) marker .

The light module can be used for targeted lighting of independent locations. A light aperture is required for mounting to the wall (reverse). A round hole with a diameter of 28mm is recommended.

- Mounting point ([Figure 10](#) marker ) - Support mounting with 2 screws.
- Module connector ([Figure 10](#) marker ) - Used to connect the module cable to the light module.
- Light Outlet ([Figure 10](#) marker ) - Outlet on the mounting wall, which allows light to pass through.

6.7. Relay Module

See [Figure 1](#) marker .

The Relay Module can be used to switch external loads.



Danger

The relay module may only be used for its intended purpose and installed by qualified and authorized persons. Incorrect use or installation can result in numerous hazards.










7. Installation & Initial Operation

7.1. Chicken Cooper

- Tools
 - Screw driver (Phillips e.g. PH2)
 - Drill bit (usually not necessary in wood)
 - Scissors (for cutting the rope in case of excess length).
- Switching on - Switch on your Chicken Cooper via the main switch (switch position I). The display will show a greeting and an estimate of the current state of charge. If nothing is displayed, activate it via one of the   keys.













If your Chicken Cooper does not start and also does not respond to the pressing of keys, the rechargeable battery may be deeply discharged. In this case, observe the relevant information (see chapter [Manual Charging](#)).


- Chicken Cooper Mounting - Gently open the flap ([Figure 2](#) mark ) on the bottom until it snaps into place. Carefully screw the product to a sufficiently straight surface through the mounting points ([Figure 3](#) mark ) using the screws provided.
- Pulley Mounting - Depending on the type of door assembly, mount the pulley(s) in such a way that the rope runs in straight paths. For clarification, refer to the corresponding figures in [Figure 8](#) & [Figure 9](#).
- Rope Assembly ([Figure 4](#)) - Thread the rope ([Figure 1](#) mark B) through one of the holes in the spool ([Figure 3](#) marker ). Use the right half of the spool if possible. To facilitate threading, the   keys can be used to move the spool to a suitable position. After threading the rope through one of the holes, fix it with a knot. Then use the   keys to wind the rope at least 2 turns around the spool. Now thread the rope through the pulleys to the desired point of attack on your door and fasten it there in the same way.









When doing so, make sure that the rope is kept under tension during winding. Otherwise, there may be undesirable deviations in the opening and closing positions or the rope may become tangled.

- Language selection - If the display deactivated in the meantime, activate it with  . Use   to select the desired language and confirm with .
- Set position **CLOSE** - If the display has deactivated in the meantime, activate it with the   keys. It should now display the currently desired input (set position **CLOSE**). Now move to the desired **CLOSE** position using the   keys. When you are satisfied with the position, confirm it with the  key.



For an optimal result, before confirming with , minimally move the door in the direction of the later desired open position and back again, to prevent the rope from undesired sagging.

- Set position **OPEN** - The display now shows that the **OPEN** position is to be set. Use the   keys again to move to the desired **OPEN** position. Then confirm it with the  key.
- End - The initial setup is complete. The door can now be moved automatically to the corresponding **OPEN** / **CLOSE** positions by pressing  or . Intermediate positions can also be reached by pressing the  key in time.

During the search for time & date the display flashes with a dedicated symbol indicating reception. The more bars that can be seen continuously, the more time information has already been received. Do not cover the product until the current time is displayed. If this is not the case after more than 10 minutes, follow the instructions in this regard (see chapter [Automatic Time](#)).

7.2. Magnetic Lock

- Mounting variant - Determine the most suitable mounting variant for your application. Depending on the type of door, the magnetic lock is mounted either below or to the side of the door. In this context, refer to the illustrations in [Figure 11](#).




Notice



Make sure that rope guiding to the magnetic lock is directed in a straight way. Refer to figures in [Figure 11](#).



Note that the alignment of the magnet on the metal plate of the magnet lock after assembly must **NOT** be centric, but slightly offset from each other as shown in [Figure 12](#). If the alignment is centric, the holding force is significantly reduced.

- Magnet Mounting - Carefully screw the magnet plate through the mounting point ([Figure 13](#) mark ) with the supplied screw, in appropriate orientation for subsequent mounting of the magnet lock.
- Magnetic Lock Mounting - Place the magnetic lock as shown in [Figure 12](#) with the assembled metal plate on the previously mounted magnet in a suitable manner. Screw the magnetic lock as shown in [Figure 14](#) through the two mounting points (marker )
- Rope Attachment - Attach the rope to the rope mounting hole of the magnetic lock (marker ) as shown in [Figure 15](#).



8. Operation and Settings

8.1. Factory Reset

To restore factory default settings, press and hold the key for at least 5 seconds while the display is inactive. A message text will appear. If you are really sure, confirm the restoration with the key.

8.2. Settings

Your Chicken Cooper can be activated at any time by pressing one of the keys . It shows the current time, the estimated charge level and the approximate temperature (in C°). To check or adjust settings, the menu can be entered with the key. The keys can be used to navigate through it. To select the desired menu item, press the key. The keys can be used to manually move to one of the set positions. The light (see [Brightness Options](#)) can be activated manually for the selected period by holding down for a longer period and deactivated again by holding down again. To make settings, the menu can be entered by pressing . The keys can be used to navigate through the menus. To select the desired menu item, press . Each menu and sub menu can be escaped with . = Settings made must always be confirmed with . After applying a setting, the display shows "set".



When setting times or other values, larger values can be set more quickly (accelerating) by holding down one of the keys for a longer time.

8.3. Menu

The menu can be entered with the key whenever the display is active. You can then navigate between the following menu items with the keys.

- *1 Status info* - This menu item is helpful to check the most important settings for correctness.
 - Displays the currently scheduled times for movements to the **OPEN** / **CLOSE** positions.
 - Displays the currently scheduled times for light to be switched **ON** / **OFF**.
 - In case the operation is suspended, the next active weekday is displayed (see [Next Active Weekday](#) or [Interval Rule](#)).
 - Opening hours, which are bound to certain weekdays, are displayed with the respective days added (see [Weekday Rules](#)).
- *2 set Open Parameters* - Here the time for moving to position **OPEN** can be selected. The current setting *auto* or *manual* appears first. In this case, *manual* represents a time that can be freely determined by the user. In case of setting *auto*, the time of sunrise is used. The setting can be



changed with keys. The *auto* setting is not available if a manually set time is used.

Confirm selection with .

- *manual* - Set the desired time using the keys.
Confirm selection with .
- *auto* - Select the desired delay in relation to the time of sunrise with the keys. The value can be before (preceded by -) or after (preceded by +) sunrise.
Confirm selection with .
- *3 set Close Parameters* - Here the time for moving to position **CLOSE** can be selected. The current setting *auto* or *manual* appears first. In this case, *manual* stands for a time that can be freely determined by the user. In case of setting *auto*, the time of sunset is used. The setting can be changed by means of the keys. The *auto* setting is not available if a manually set time is used.
Confirm selection with .
- *manual* - Set the desired time using the keys.
Confirm selection with .
- *auto* - Select the desired delay in relation to the time of sunset with the keys. The value can be before (preceded by -) or after (preceded by +) sunset.
Confirm selection with .
- *4 set Motor Limit* - Use the keys to select the maximum force limit suitable for your application. The motor attempts to move to the **OPEN** / **CLOSE** positions with this force and stops when the defined limit value is exceeded.

Caution



This setting must be set to a value corresponding to the installation in order to prevent damage to property or personal injury.


- *5 set Next active Weekday* - Automatic movement to positions **OPEN** / **CLOSE** can be suspended once, until the selected weekday, without discarding the positions. Use this feature, for example, to temporarily suspend operation in the event of disruptive weather conditions and automatically restart with the selected day of the week. The *Today* selection represents daily normal operation. Further configuration options can be made in connection with the interval rule (see chapter [Interval Rule](#)).
- *6 set new Positions* - Redefine **OPEN** / **CLOSE** positions. Proceed in the same way as for the initial startup from the point Set position **CLOSE** (see chapter [Installation & Initial Operation](#)).
- *7 Light Options* - This submenu provides settings for several functionalities to control behavior related to light.
 - *7.1 set Close Light Parameters* - Configures the lights to switch on automatically before approaching the **CLOSE** position. First select *off* or *on* to activate this. Then select the desired time. The light is activated at the selected brightness before the next approach to the **CLOSE**

position.

- *7.2 set Morning Light Parameters* - Configures the light to switch on automatically depending on the time of sunrise. First select *off* or *on* to activate this. Then first select the offset for switching on and then the offset for switching off.
- *7.3 set Evening Light Parameters* - Configures the light to switch on automatically depending on the time of sunset. First select *off* or *on* to activate this. Then first select the offset for switching on and then the offset for switching off.
- *7.4 set Open Light Parameters* - Configures the lights to switch on automatically before approaching the **OPEN** position. First select *off* or *on* to activate this. Then select the desired time. The light is activated at the selected brightness before the next approach to the **OPEN** position.
- *7.5 set Light Manual Parameters* - Configures the light to switch on automatically at a freely selectable timespan. First select *off* or *on* to activate this. Then select the times at which it should be activated and deactivated.
- *8 Brightness Options* - This submenu provides settings related to brightness.



When estimating the battery life at different brightness settings (see [Table 1](#)), you will find the approximate number of days until a charge (USB, sunlight) should be made, depending on the brightness level (Level), the set operating time per day (min), in order to maintain the operation of the device without interruption.

- *8.1 set Connector Light Brightness* - Select desired brightness for the external light module connected to the dedicated terminal block ([Figure 1](#) marker .



If no switching occurs in relay mode or the relay itself vibrates audibly when switched, select the highest level.

- *8.2 set Rear Side Light Brightness* - Select the desired brightness of the internal light module on the rear side of the device.



Only use level 0 for devices without an internal light module.

- *8.3 set Front Light Brightness* - The display itself can also be used as a light source for illumination in front of the device. Select the desired brightness of the display while it is active in this illumination mode.
- *8.4 set Display Brightness* - Select the desired brightness of text shown on the display.
- *9 Open/Close Options* - This submenu provides extensive settings for special requirements



concerning opening and closing.



- **9.1 Open Weekday Rules** - Select specific times for some days of the week for movement to **OPEN** position. For example, you can continuously configure a later opening only on Sundays. To do this, first select the relevant weekday and then set a fixed deviating time for it.
- **9.2 Close Weekday Rules** - For selected days of the week, select specific times for movement to the **CLOSE** position. For example, you can continuously configure a later opening only on Sundays. To do this, first select the relevant weekday and then set the desired fixed time for it.
- **9.3 Daytime Close** - Configures an additional **CLOSE** in the daytime, after the initial **OPEN**. Before the final **CLOSE**, the **OPEN** position is approached again. Select *off* or *on* for activation. Then first select the delay time after moving to the **OPEN** position and then the lead time before moving to the * **CLOSE*** position.
- **9.4 set Repetition Delay** - If movement to positions **OPEN** / **CLOSE** fails, an automatic retry can be configured with this setting. To do this, select a suitable delay with the keys. After this delay has elapsed, a new attempt is made to move to the target position.
- **9.5 Interval Rule** - Specify a continuous interval (by day) for operation. For example, operation can be restricted to every third day only (set to *3 days*). Operation is then suspended for 2 days between each operating day.



To setup alternating operation with several Chicken Cooper, first set the desired interval and then the desired weekday for the start (see [Next Active Weekday](#)). Perform this on all Chicken Cooper, selecting equal intervals and different days of the week.









- **9.6 set Additional Position** - Configures an **ADDITIONAL POSITION** that can be approached in addition to **OPEN**/* **CLOSE***. Use the keys to move to this position. Confirm the position with . The **ADDITIONAL POSITION** can then be approached by pressing simultaneously, in the same way as position **OPEN** with or position **CLOSE** with .
- **9.7 set Additional Position Parameters** - Select the time for moving to the **ADDITIONAL POSITION** position. Here, *off* stands for deactivation, *manual* for a freely selectable time, *auto from OPEN* for a deviation depending on the time of **OPEN** and *auto from CLOSE* for a deviation depending on the time of **CLOSE**. The setting can be changed using the keys and is confirmed with .
 - *off* - Deactivates the automatic moving to **ADDITIONAL POSITION**.
 - *auto from Open* - Select the deviation with the keys. The value can be set before (preceded by -) or after (preceded by +) the time at which **OPEN** is run.
 - *auto from Close* - Select the deviation with the keys. The value can be set before (preceded by -) or after (preceded by +) the time at which **CLOSE** is run.
 - *manual* - Select the desired time using the keys and confirm your selection with .
- **10 Time Options** - This submenu contains advanced time settings.



- **10.1 set Time manual** - Set device time manually. It will never be deduced automatically. Set the time with the   keys. To use the automatic time, select the time *auto*.





Note that the *auto* mode is not available for moving to **OPEN** / **CLOSE** positions with manually set time.

- **10.2 set Timezone manual** - Here the desired time zone can be selected with the   keys. Please note that usually the product deduced the correct local timezone automatically. Use this function only if a different timezone is required.
- **10.3 set Summertime Rule manual** - The applied rule of time changes (daylight saving time) can be selected with the   keys.
 - *Europe* represents the rule common in continental Europe (daylight saving time from 02:00 on the last Sunday in March to 03:00 on the last Sunday in October).
 - *America* represents the rule commonly used in North America (daylight saving time from 02:00 on the second Sunday in March to 03:00 on the first Sunday in November).
- **11 Temperature Options** - his submenu contains advanced settings for ambient temperature.
 - **11.1 set Min Temperature Parameter** - Select the mode *off* for no special behavior, *closed* to wait until the minimum temperature has been reached before moving to the **OPEN** position, *light* to keep the light switched on below the minimum temperature. Then set the value of the minimum temperature using the   keys.
 - **11.2 set Max Temperature Parameter** - Select the mode *off* for no special behavior, *open* so that the **OPEN** position is approached when the maximum temperature is reached, *light* to keep the light switched on above the maximum temperature. Then set the value of the maximum temperature using the   keys.



Please note that the temperature is measured inside the device enclosure and that this value can be far higher than the outside ambient temperature, especially when the device is exposed to direct sunlight.


- **12 Extra Options** - Special advanced settings can be found in this submenu.
 - **12.1 set PIN** - Your Chicken Cooper can be protected against unauthorized access with a PIN. From this time on, the PIN must be entered whenever a setting is to be made. The desired PIN is set with the   keys. Repeat this PIN afterwards to verify your entries.

Preserve the selected PIN in a safe place!



If an existing PIN is to be deactivated, you will find the *off* setting under the PIN 0000 (.



The *set PIN* setting can be used to render your Chicken Cooper unusable in the event of theft, as no further settings can be made (even after a restart) without first entering the PIN.

- *12.2 Language setting* - Select the preferred language for the menu here. Select this using the  keys.
- *12.3 Support Info* - The serial number of the product and the version of the software can be determined here. Make a note of these when an error occurs to simplify troubleshooting.


8.4. Shutdown & Storage



<p>Warning</p> 	<p>The product contains a rechargeable battery, which can also supply it without a connected energy source. For this reason, the product must be switched off using the main switch (switch position 0) when it is taken out of service and in any case before longer storage.</p>
<p>Hinweis</p> 	<p>Longer storage periods of the product must be avoided, as deep discharges of the rechargeable battery may occur and it may be irreversibly damaged.</p>

9. Integrated Rechargeable Battery Handling

The product is equipped with a solar cell on the top, which automatically charges the integrated rechargeable battery when sufficient sunlight is available. Therefore, make sure that your Chicken Cooper is mounted in a way, that it is exposed to direct sunlight for a sufficient time period per day. Also check that the solar cell is not dirty or covered. Active charging process is indicated with a blinking + symbol. Regularly check the charging level of the rechargeable battery. To ensure smooth operation, it should always exceed 20%. It should be noted that the charging level may fluctuate seasonally, especially in the winter months due to the reduced light conditions.

9.1. Manual Charging

When the rechargeable battery is discharged, it can be manually recharged via the USB connector. It is located under the flap, directly above the spool ([Figure 3](#) marker ). Manual charging is indicated with a blinking + symbol, as during automatic charging via the solar cell. A full charge takes several hours.

<p>Warning</p> 	<p>Use only certified voltage sources (e.g.: power supplies, rechargeable battery packs, etc.) which can provide suitable and stable supply (see Technical Specifications) for charging the product.</p>
<p>Caution</p> 	<p>Make sure that the rope does not get tangled with the charging cable. This can be ensured with the help of the setting <i>set Next active Weekday</i> (see chapter Menu).</p>



The main switch must be switched on while charging.






In case of deep discharge, it may take some time (~15 minutes) until the rechargeable battery is charged to such an extent, that the display can be activated again.

9.2. Removing the Rechargeable Battery

Warning






Be careful not to cause a short circuit between the two poles of the rechargeable battery with tools or other electrically conductive objects.

- Remove Cover ([Figure 5](#)) - Loosen the mounting screws (marking ) using a 2.5mm Allen key and lift the cover off the case body. Be careful not to damage the internal connection cables.
- Disconnect Rechargeable Battery Terminals ([Figure 6](#)) - Carefully disconnect the cable lugs (marker ) from both poles of the rechargeable battery. Then protect the exposed poles with a suitable insulating element to avoid short circuits.
- Removing Rechargeable Battery ([Figure 7](#)) - Use a gentle tilting motion to remove the rechargeable battery (marker ) from its anchorage. Recycle the used rechargeable battery in an appropriate manner (see chapter [Environment](#)).



10. Faults

10.1. Automatic Time

While the display of your Chicken Cooper shows the antenna symbol, it tries to determine the current time. Do not cover the product during this time or try it indoor. If the time has not been detected automatically after more than 10 minutes, reactivate the display by pressing one of the keys    to start the search again.




Tips for problems with time & date acquisition:

- Provide direct view to the sky.
- Keep distance from large objects such as dense trees, buildings, walls, etc.
- Move yourself a few meters away from the product.
- Remove all running electrical devices (e.g. plug-in power supplies, LED lamps, radios, etc.) from the direct vicinity.
- If automatic acquisition of the time is still not possible, set the time manually if necessary (see chapter [Set Time Manual](#)).

10.2. Retry

In case of excessive resistance when moving to **OPEN** / **CLOSE** positions, your Chicken Cooper attempts to move to the desired position again after a brief relief. The display shows **retrying**. After several failed attempts, an error message appears and normal operation is suspended.

10.3. Error Messages

If your Chicken Cooper has registered an error, it must be acknowledged manually in order to return to normal operation. To do this, press the  key.

If an error occurs repeatedly, note the error code that occurred (e.g.: Error:10) to assist with troubleshooting.

- *Motor Force is limited*
 - The defined force limit of the motor has been reached. Check the rope and the door. If necessary, increase the force limit in the *set Motor Limit* menu item.
- *Motor movement too hard* - The tractive force limit of the motor has been reached. Check the rope and the door or reduce the required force.
- *Motor could not open/close* - Opening/closing finally failed after several unsuccessful attempts.
- *Charge level was too low* - An action could not be performed because the charge level was



insufficient. Charge your Chicken Cooper via the USB port (see chapter [Manual Charging](#)) or expose it to sufficient sunlight.

- *Motor Fault* - A fault occurred in the motor or the motor control unit. The product could possibly be frozen or heavily soiled.
- *Motor Magnet Fault* - An error occurred during magnetic measurement of the motor.
- *Motor Magnet Interference* - An external magnetic field affected motor control.
- *Motor Magnet not detected* - Motor control could not find the spool magnet.
- *Start Fault* - An internal error has occurred when powering on the electronics.
- *Software Fault* - Internal error detected by Software. Restart your Chicken Cooper.

10.4. Restart

A restart of your chicken cooper is triggered by switching off the main switch (switch position O), waiting 10 seconds and a subsequent switch-on (switch position I). If the product does not start with a greeting, proceed as follows.

- Power off main switch (switch position O).
- Remove an eventually connected power supply from the USB port.
- Cover the top of the solar cell completely with your hand or an opaque cloth to prevent direct supply from sunlight.
- Again assure correct position of the main switch (switch position I).
- If your Chicken Cooper does not start with a greeting, it may be deeply discharged. Follow the described procedure (see chapter [Manual Charging](#)).
- Then proceed as for an initial installation (see chapter [Installation & Initial Operation](#)).



Most settings are also preserved across restarts. If you want to reset them to the factory defaults, follow the procedure described in chapter [Factory Reset](#).



11. Technical Specifications

- Temperature Range (Operation & Storage): -15°C bis 40°C
- Air Pressure (Operation & Storage): 1,1bar (~ -400m sea level) to 0,8bar (~2000m sea level)

11.1. Chicken Cooper

- Geometry (H x B x D): 137mm x 175mm x 50mm
- Mass: 670g
- Fuse: 20mm x 5mm Fuse 0,75A Fast
- Pulling Capability (motor): 0,1kg - 5kg (8kg maximum for short time periods < 10 seconds)
- Maximum Tensile Load (stationary): 12kg
- Typical Sound Pressure: 35dB(A)
- Rechargeable Battery Type: SLA (Sealed Lead Acid)
- Charge Voltage (USB Connector): 4,5VDC - 5,5VDC
- Charge Current: 500mA max.
- Charge Duration (20% - 80%): 12 hours

11.2. Pulley (vertical)

- Geometry (H x B x D): 50mm x 38mm x 13mm
- Mass: 14g
- Maximum Tensile Load: 8kg

11.3. Pulley (horizontal)

- Geometry (H x B x D): 23mm x 32mm x 13mm
- Mass: 9g
- Maximum Tensile Load: 8kg

11.4. Magnetic Lock

- Geometry (H x B x D): 81mm x 65mm x 38mm
- Mass: 53g
- Maximum Tensile Load: 8kg
- Magnetic Force: ca. 10kg



12. Product Marking

12.1. Machine Type

The machine type is marked on the back of the product as follows.

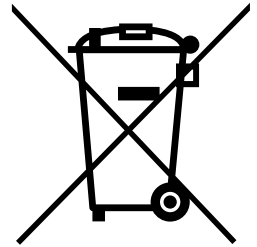
CreyNox GmbH

Autokaderstraße 29/BT II

1210 Vienna, Austria

creynox.com

Types: HLK1-050, HLK1-100, HLK2-100



12.2. Serial Number

The serial number for identifying a chicken cooper can be retrieved via the support menu (see chapter [Menu](#)).

13. Disclaimer

The information provided in this document has been compiled and prepared to the best of our knowledge and belief. However, the manufacturer accepts no responsibility for the topicality, correctness and completeness of the information provided in this document. Liability claims against the manufacturer, which are based on damages caused by the use or non-use of the information provided or by the use of incorrect and incomplete information, are generally excluded, provided that there is no demonstrable intentional or grossly negligent fault on the part of the manufacturer.



14. Information & Support

14.1. Website

For the latest information on news, similar or complementary products, as well as data sheets and all instructions, please visit the Chicken Cooper website.



chicken-cooper.com

14.2. Support

If you have any questions or problems regarding your Chicken Cooper, please contact us at one of the email addresses below:



info@chicken-cooper.com



support@chicken-cooper.com



Appendix

Table 1

Connector Light OR Rear Light	15 min	30 min	60 min
Level 5	35 d	17 d	8 d
Level 4	42 d	21 d	10 d
Level 3	58 d	29 d	14 d
Level 2	80 d	40 d	20 d
Level 1	150 d	90 d	37 d
Connector Light AND Rear Light	15 min	30 min	60 min
Level 5	17 d	8 d	4 d
Level 4	21 d	10 d	5 d
Level 3	29 d	14 d	7 d
Level 2	40 d	20 d	10 d
Level 1	75 d	37 d	18 d
Relais Module	15 min	30 min	60 min
Level 5	26 d	13 d	6 d
Front Light	15 min	30 min	60 min
Level 5	10 d	5 d	3 d
Level 4	15 d	8 d	4 d
Level 3	23 d	11 d	5 d
Level 2	35 d	17 d	8 d
Level 1	47 d	23 d	11 d