

HK - BAT

chicken coop door opener

Battery operated

- Serial number: 11/2021
- Year of construction: 2022
- Software version: V5.5.100



Original instruction manual and description

Solo - unit



Set with flap



Frame unit



Assembly instructions

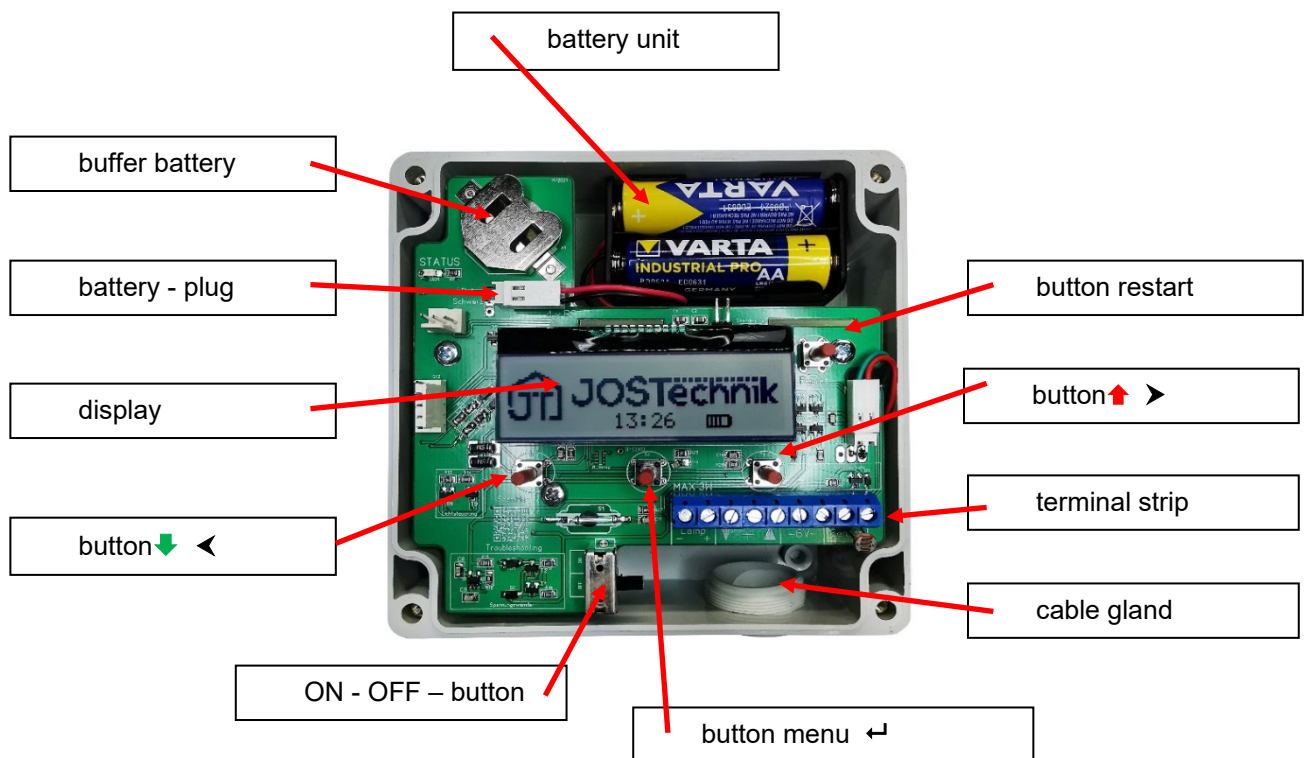


Operating instructions



Troubleshooting

Components for commissioning and adjustments



All connections and components that are not mentioned in this manual are not intended for adjustment and operation by the end user. Changes to it can affect the correct functioning of the device.

Each time you connect a power supply, such as B. with the included power supply unit or solar modules, the correct polarity of the connections must be ensured.

The description of operation and use can be found in the respective sections of this user manual.

Fasten the housing only at the designated points **next to** the cover fastening in the housing. Do not drill any holes in the housing, otherwise moisture can get into the device.

attachment points



power supply

- Operating voltage 6V 4xAA batteries.
With inserted batteries in mains or solar operation, these serve as a backup. Should the power supply used fail, this original JOS Technik flap actuator switches over to battery operation ! If the batteries are too weak, the motor for opening the flaps will no longer be started.
- Plug-in power supply 230V / 6V
- Solar set with integrated Li battery pack 6V

function

1. Flap function

Opening times can only be set between 3:00 a.m. and 2:59 p.m. Closing times can only be set between 3:00 p.m. and 10:59 p.m.

Open		Conclude	
time & light	eg 7 o'clock and light	time & light	eg 7pm and dark
time o light	eg set at 7 o'clock but possible earlier if the set % value of the light sensor is reached.	time o light	eg set at 7 p.m. but possible earlier if the set % value of the light sensor is reached.
		time o light + delay	As above, only if it is dark before 7 p.m., the delay starts. So closes when the delay expires or the closing time is reached.
Just time	eg reached 7 o'clock. Lighting conditions are ignored.	Just time	eg reached 7 p.m. Lighting conditions are ignored.
only light	It must be the one set % value of the light sensor be reached.	only light	The set % value of the light sensor must be reached.
		Only light + delay	The set % value of the light sensor must be reached. Then the delay starts.
Manual operation only	No automatic	Manual operation only	No automatic

2. Extras

Switchable emergency stop and emergency opening function

- Emergency stop and emergency opening functions can be switched on and off
- Default: YES (Enabled)

Attracting light 1x maximum 6V/3W - LED bar,

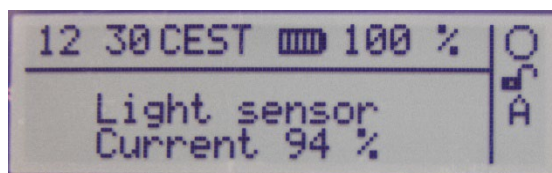
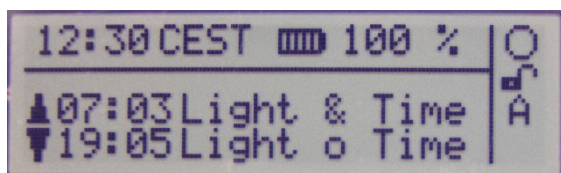
- adjustable and switchable
- only in connection with mains operation or solar set

automatic setting of Central European Summer Time


- adjustable and switchable

operation and displays

1. Display module - Meaning of symbols in the display



Light sensor bright detected 

Light sensor dark detected 

Flap closed 


flap open 


Automatic / Manual A / M

and / or & / o

Bait light allowed but inactive 

Attract light active 

Current battery level 
(Bars every 25%, flashes when below 20%)

Set closing time, evenings / closed 

Set opening time, morning / up 

2. button



These three buttons each have two functions. The buttons on the symbols in the black circle are pressed. The symbols below the circles indicate the second function of these buttons in the menu.


meaning of the keys

button	hand control	in the menu
MENU	Start input menu	
➤	Increase display value	Next menu item
◀	Decrease display value	Previous menu item
↵	Accept display value	open menu
↓	Close slider	
↑	Open slider	
Ⓜ	reboot, reboot	

operation of the buttons

Left button 

- Hold down for 3 seconds to close the door
- Move left in the menu or decrease the value, previous menu item

Right button 

- Hold down for 3 seconds to open the flap
- Move to the right in the menu or increase the value, next menu item

Middle button (MENU)

- Outside the menu - mode, open menu
- In Menu mode, select the displayed top menu item
- Confirm value, jump to next value

button 

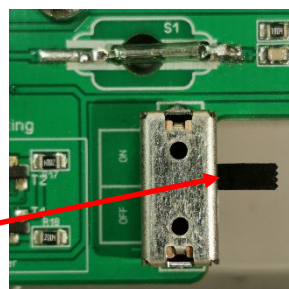
- Restart the device (restart / restart)

Installation and commissioning

frame device	solo device
Remove the transport lock (adhesive strip) on the back.	Mount the device at least 10 cm above the open flap.
assemble the frame. Lower holes in the rails serve as the touchdown point for the flap.	Hang the flap with a connecting cord (not included) in the nut on the pull cord. <u>Do not connect the nut directly to the flap.</u>

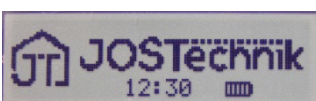
- unscrew the cover
- Insert batteries if included separately. Usually already inserted, as the devices are tested before delivery. Connect battery box.
- In addition, a 230V / 6V DC power pack or a solar module with a 6V battery pack can be connected as a power supply.
Observe polarity! If the power supply unit is included, red cable to + (plus)
- Set switch to ON.

Switch ON = switch on the device
Switch OFF = switch off the device



- Screw the cover back on

After switching on, the JOS Technik logo is shown on the display.



Then the text "Have you read the instructions?" and the reference to the Internet address "<www.anleitung-jt.de>" appear. There you can view all instructions for the devices from JOSTechnik. The QR code on the device also takes you to the homepage for our operating instructions.



The last line of the display shows 3 choices. Use the respective buttons under YES, DE and NO to make your selection.

Choice: Yes

- If Yes is selected (</↓) the device starts commissioning
- **Do not start this process without the hinged flap**

Selection: DE (language)

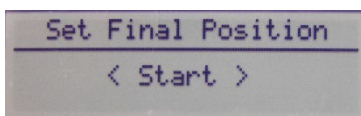
- Language selection DE (German) / EN (English) / FR (French)
- (MENU / ↵)

Selection: no

- If you select No (>/↑) the text "Please read the instructions" appears. Familiarize yourself with the operating instructions before using the device. After a few seconds, the question "Have you read the instructions?" appears again. Make your choice.

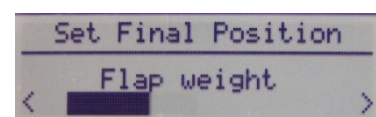
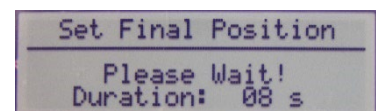
Only when reading the instructions is activated does the initialization of the flap actuator start.

The motor starts and moves to the open position. Once the upper point has been detected, the motor stops and you see the message "Start" for determining the end position, the lowest point.



Press the middle button (MENU / ↵). The flap begins to close and automatically determines the end position. Make sure there are no obstacles under the flap. The travel time is shown in seconds on the display.

During initialization / travel path setting, a load bar is displayed when the flap is opened. The larger the bar, the more force the motor has to use to open the flap.



The route has now been set. The device knows the top and bottom point.

If you make changes to the positions of the flap or flap actuator on solo devices, the travel path must be determined again. The same applies when the length of the traction cable changes. The menu item for this (end position determination) is described below in the text.

First – Settings

You can use the flap with the default basic settings immediately. However, it is advisable to check these settings and possibly adapt them to your own requirements.

Now make the required settings. The menu automatically guides you through the respective points.

- Current time
- Current date
- opening time
- closing time
- operating mode

After these initial settings, the device is in automatic mode with your personal settings and is immediately ready for use.

The menu structure - a graphic overview can be found in Appendix 2

flap actuator

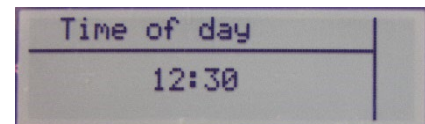
Opening time	→	Set the time for the morning
Closing time	→	Setting the time for the evening
Operating mode	→	Selection of the operating mode for morning and evening
Delay (for Light Only mode)	→	Set the desired delay time
Light Sensor	→	Set Light Percentages
Overrun	→	switch on and off the overrun time for self-locking Flaps on Solo devices
emergency stop	→	Switching the emergency stop or emergency opening function on and off

Time date

time

Menu item is called up

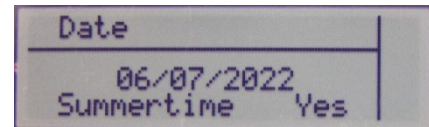
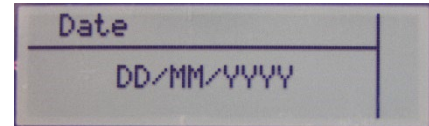
- Press the middle button, the cursor flashes on the hour
- The value is reduced with the left button
- The value is increased with the right button
- Press the middle button, the cursor flashes on the minute
- The value is reduced with the left button
- The value is increased with the right button
- The time is saved with the middle button and the menu item is exited



date

Menu item is called up

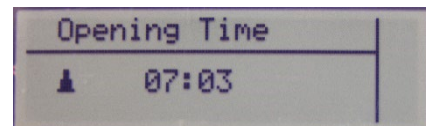
- The date format is displayed for 5 seconds DD/MM/YYYY
- Leap year is taken into account
- Press the middle button, the cursor flashes on the day
- The value is reduced with the left button
- The value is increased with the right button
- Press the middle button, the cursor flashes on the month
- The value is reduced with the left button
- The value is increased with the right button
- Press the middle button, the cursor flashes on the year
- The value is reduced with the left button
- The value is increased with the right button
- The time is saved with the middle button
- Use the left or right button to switch between YES / NO for daylight saving time
- The value for daylight saving time is saved with the middle button and the menu item is exited



opening time

Menu item is called up

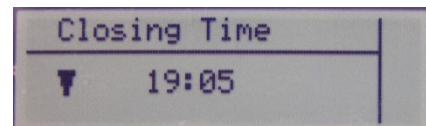
- Press the middle button, the cursor flashes on the hour
- The value is reduced with the left button
- The value is increased with the right button
- Press the middle button, the cursor flashes on the minute
- The value is reduced with the left button
- The value is increased with the right button
- The time is saved with the middle button and the menu item is exited



closing time

Menu item is called up

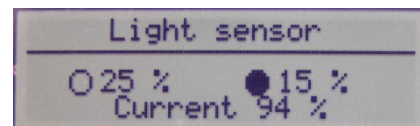
- Press the middle button, the cursor flashes on the hour
- The value is reduced with the left button
- The value is increased with the right button
- Press the middle button, the cursor flashes on the minute
- The value is reduced with the left button
- The value is increased with the right button
- The time is saved with the middle button and the menu item is exited



light sensor

Menu item is called up

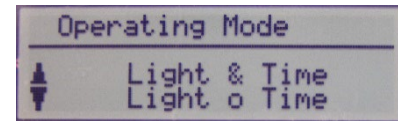
- Press the middle button, the cursor flashes on the percentage value in the morning for up:
- With the left button, the value is reduced to a maximum of 25%
- With the right button, the value is increased to a maximum of 80%
- Press the middle button, the cursor flashes on the percentage value in the evening for closed:
- With the left button, the value is reduced to a maximum of 5%
- The value is increased with the right button
 - the highest possible value that can be set is always 10% less than the morning value (in this case 15%)
- The middle button is used to save and exit the menu item



Operating mode / mode

Different operating modes:

- Light and (&) time Both values must be reached
- Light or (o) Time One of the two values must be reached
 - only time The time must be reached
 - only light The light conditions must be achieved
- Press the middle button, the cursor flashes on the morning operating mode
- The operating mode can be changed with the left and right button and confirmed with the middle button
- Cursor flashes on the evening mode
- The operating mode can be changed with the left and right button
- The middle button is used to confirm and save the setting



delay

Delay only when used with the "Only light" or "Time o light" operating mode for evenings.

Function:

- Adjustable from 0-90 minutes in 5 minute increments

Attitude:

- Press middle button, cursor flashes on "Delay Active"
- Selectable YES / NO
- Press middle button, cursor flashes on "Delay time"
- Adjustable 0 – 90 minutes
- Press the middle button, the values are saved and the menu item is exited

caster / trailing

EXCLUSIVELY for the use of self-locking flaps with a Solo unit. Switching the run-on time for self-locking on and off.

Function:

- If the run-on is active, the motor runs on until the lever locks (5 seconds)

Attitude:

- Middle button, cursor flashes on "Follow-up active"
- Selectable YES / NO
- Middle button, values are saved

Emergency stop or emergency opening function

Emergency stop is triggered a maximum of 3 times, with the 4th closing process, the door is finally closed.

Function:

- YES: Flap stops in case of resistance and opens again for next attempt
- NO: If there is resistance, the flap moves on and stops at the end position

Attitude:

- Middle button, cursor flashes on "Emergency stop active"
- Selectable YES / NO
- Middle button, values are saved

extras

luring light

Can only be used with a 230V / 6V DC power pack or 6V solar module! Otherwise this error message appears.

Function:

- Set light value + 15% and between 3 p.m. and 11 p.m
- Before closing: 30min fixed time + set delay
- After closing: 30min with mains operation
15min with solar operation

Attitude:

- Left button decreases the value
- Right button increases the value
- Press the middle button, the cursor flashes on "Attraction light active"
- Selectable YES / NO
- Press the middle button, the cursor flashes on "Operation:"
- Selectable power supply / solar
- Press middle button, values are saved. Exit menu item

Example:

1. The currently detected light sensor value of the environment is shown in the main display, alternating with other values. Bottom line in the picture.
2. A light value for Closed: in the Light sensor menu item was set to **15% for closing** . When it is only "15% light" outside, the flap should close.
3. Our software always automatically adds **15%** of the light value for the attracting light to this 15%, so that the attracting light comes on before the flap is closed. So the attract light will be turned on at the light sensor value around **30%** .
4. After **30 minutes** plus the possibly adjusted delay time **closes** the flap
5. When the flap is closed, the attracting light stays on for 30 minutes in mains operation.

```
Attraction light
-----
No external
power supply
```

```
Attraction light
-----
Attr. Light   Yes
Supply       AC
```

```
Attraction light
-----
Attr. Light   No
Supply       Solar
```

```
Light sensor
-----
○ 25 %   ● 15 %
Current 94 %
```

Help

Explanation of the individual symbols

Attitude:

- Left button, down one line
- Right button, one line up
- Middle button, exit menu item

```
○ / ● > Light sensor b
☒ / ☒ Flap open / cl
A / M Operation Auto
⏸ / ⏸ Attraction lig
```

The description of the symbols is displayed as scrolling text in the currently active line.

language

Selection → German, English, French, Český, Italiano, Svenske

end position determination

Resetting the end positions , new route determination

Factory setting / RESET

Factory reset of the device

Connection of optional modules / sensors

module / sensor	connection to	cable color
power adapter	Terminal 6V	red on + , black on -
Solar set	Terminal 6V	red on + , black on -
External button	clamp ↓ + ↑	green on ↓, white on +, brown on ↑
External light sensor	clamp sensor	no matter
luring light	clamp lamp	red on + , black on -

battery change

Changing the battery itself can be done without using any tools. To open the flap, you need a **PH2 screwdriver**.

The device is not designed for operation with rechargeable batteries. Do not use rechargeable batteries.

Switch off the device at the switch. Disconnect the power pack or solar module from the device.

Disconnect the battery compartment connector. Insert the batteries 4xAA (R6) as marked on the symbols in the battery holder. battery compartment again plug in and place in the upper free area of the device.

Replace CR-2032 button cell. note the polarity. The positive pole is on the top



General

power saving mode

The device is mostly in sleep mode, the sensor values are checked every 60 seconds, which is not shown on the display. The JOS Technik logo is displayed in power-saving mode. To "wake up" press one of the 3 buttons on the device. After "waking up" the display is shown for 30 seconds. After 30 seconds of inactivity, the device returns to power-saving mode. For greater efficiency, the display switches off completely between 11 p.m. and 3 a.m.

Manual closing and opening

For manual operation, e.g. closing a flap, the left button must be pressed for at least 3 seconds, after which the movement is carried out. The same when opening with the right button.

After manual operation, automatic operation is only activated again at 11 p.m. or when driving in the opposite direction.

If it was closed manually, it must also be opened again manually.

Troubleshooting and Service

Something isn't working. I have followed the instructions. What now?

Please check two things first.

- 1. In the case of a set with a flap or frame, make sure that all transport locks, mostly stickers, have been removed before you use the set for the first time.**
- 2. If the batteries are too weak, the menu is still displayed but the flap no longer opens. Note the flashing battery symbol on the display.**

Call the service (you can find the phone number on the invoice/delivery note). Have your invoice ready and a list of the set values. Before the call, make notes on the following questions:

- which device do I have?
- when and where did I buy it?
- detailed error description?
- what have I already tried?

If you send the device to the service for checking, please note the following and enclose the specified documents:

- Turn off device
- Remove batteries, do not send
- Send us the device cleaned and securely packaged
- a copy of your invoice/delivery note
- a description of the error and what you have already tried yourself
- a phone number / Personal e-mail address where you can be reached for questions

* no eBay or Amazon email address

This ensures that the check/repair can be processed quickly and you get your device back quickly.

If the inspection/repair is subject to a charge (e.g. outside the warranty period), you will first receive a cost estimate. Only after you have agreed to this (transferred the amount) will the repair be carried out.

Danger! No warranty is possible without proof of purchase.

specifications

- Operating voltage battery 6V type R6 (AA)
- Battery voltage button cell 3V type CR-2032
- Operating voltage power pack 6V / solar 6V
- Power consumption idle ~ 0.3 – 0.4mA
- Power consumption flap opening 40 - 160mA
- Attracting light maximum 500mA at 6V
- Maximum flap weight 2 kg

disposal

Sales packaging is packaging that is used by the end consumer (§ 3 Para. 1 No. 2 Packaging Ordinance). Manufacturers or distributors of the products are obliged either to take back the packaging waste in the shop or in the immediate vicinity free of charge (§ 6 Para. 1) or to participate in a nationwide system that collects the packaging waste from private end consumers or in their vicinity (so-called dual systems).

Information obligation according to the battery regulation

In connection with the sale of batteries or the delivery of devices that contain batteries, we are obliged to draw your attention to the following:

As an end user, you are legally obliged to return used batteries. You can return old batteries that we have or have had in our range as new batteries to our shipping warehouse (shipping address) free of charge.

The symbols shown on the batteries have the following meaning:

- Pb = battery contains more than 0.004% lead by mass
- Cd = battery contains more than 0.002 percent by mass of cadmium
- Hg = battery contains more than 0.0005 percent by mass of mercury.

The symbol of the crossed-out wheeled bin means that the battery must not be disposed of with household waste.

WEEE Directive 2002/96/EC

According to the European WEEE Directive, electrical and electronic devices may not be disposed of with household waste. Their components must be recycled or disposed of separately, because toxic and dangerous components can cause lasting damage to the environment if they are improperly disposed of. As a consumer, you are obliged under the Electrical and Electronic Equipment Act (ElektroG) to return electrical and electronic devices at the end of their service life to the manufacturer, the point of sale or to public collection points set up for this purpose free of charge. Details are regulated by the respective state law. The symbol on the product, the operating instructions and/or the packaging refers to these provisions.

WEEE Reg. No.: DE58973207

Extended information obligations according to § 18 ElektroG

In connection with the sale of electrical and electronic equipment, we are obliged to draw your attention to the following:

1. All electronic devices that can be used in private households are marked with the symbol of the crossed-out wheeled bin. The symbol of the crossed-out wheeled bin according to Appendix 3 of the Electrical and Electronic Equipment Act means that unsorted municipal waste from electrical and electronic equipment must be collected separately.
2. The owners of old devices must collect them separately from unsorted municipal waste. Old devices must not be disposed of with household waste.
3. Old batteries and accumulators that are not enclosed by the old device, as well as lamps that can be removed from the old device without destroying them, must be separated from the old device in a non-destructive manner before being handed over to a collection point.
4. According to §17 ElektroG, JOSTechnik is **not** obliged to take back old devices.
For reference to the text of the law:



Distributors according to § 17 ElektroG, these are those with a sales area for electrical and electronic equipment of at least 400 square meters and distributors of food with a total sales area of at least 800 square meters, who offer electrical and electronic equipment several times a calendar year or permanently and on the market provide.

However, you can formally send us a request to return an old device.

5. For private households, it is possible to return them to the municipal collection points in your city or municipality. Under the following link you can display an online directory of the collection and return points in your area:
<https://www.ear-system.de/ear-verzeichnis/sammlung-und-ruecknahmestellen>
6. We would like to expressly point out that end users themselves are responsible for deleting personal data on the old devices to be disposed of.
7. We are also obliged to inform you about the annual information regarding the fulfillment of the quantitative targets according to § 10 paragraph 3 and § 22 paragraph 1 of the Electrical and Electronic Equipment Act. You can view these here: <https://www.bmu.de/themen/wasser-RESOURCES-Waste/Circulation Economy/Statistics/Elektro-und-elektronikaltgeraete>

An overview of the device categories and the devices recorded in each case can be found at:
https://www.gesetze-im-internet.de/elektrog_2015/anlage_1.html

EC Declaration of Conformity



We hereby declare that the design and construction of the devices listed below, as well as the version we marketed, comply with the basic health and safety requirements of the **EC Directive 2006/42/EC**. This declaration loses its validity if the machine is modified without our agreement.

Subject of the declaration: HK Bat
HK3
HK3AE
HKM
HKM module
PHB2 and PHB3
PHB2AE and PHB3AE
PLM

Construction year: 2022

Manufacturer: JOSTechnology
Martha-Brauttsch-Str. 26a
04838 Doberschütz

The subject of the declaration described above meets the requirements of the following legislation:

- Machinery Directive (2006/42/EC) of May 17, 2006
- EMC Directive (2014/30/EU) of February 26, 2014
- RoHS Directive (2011/65/EU) of June 8, 2011

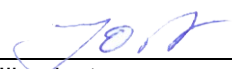
The following harmonized standards and technical specifications have been applied:

- EN ISO 12100:2010: Safety of machinery - General principles for design - Risk assessment and risk reduction
- EN 60204-1:2006: Safety of machinery - Electrical equipment of machines - Part 1: General requirements

Person authorized to compile the technical documentation:

Gerd Jost

Doberschütz, 01.03.2022
Place and date


Ilka Jost
(Managing directors)

Annex 1

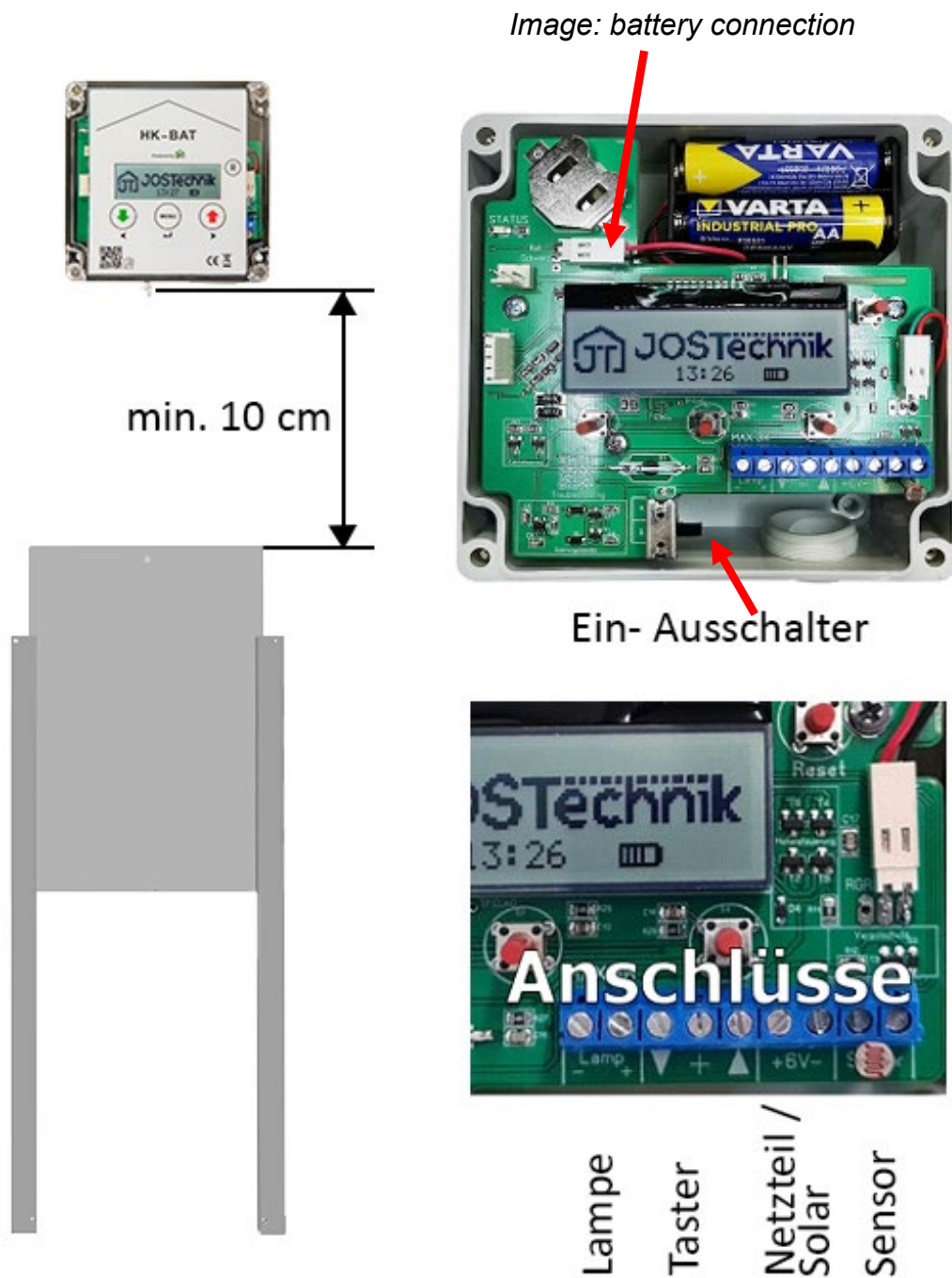


Image: Mounting Solo - Device

Image: Connections

Annex 2

Menu - graphical overview

You navigate through the menu according to this principle.

- The middle button confirms the top line and opens the menu item.
- Right button confirms line 2 and switches to this menu item.
- Left button confirms line 3 and switches to this menu item.

