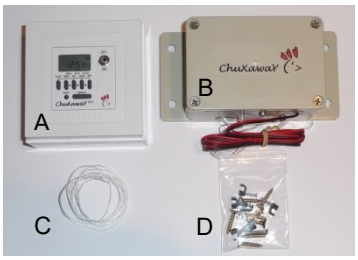
Chuxaway-SCX Chicken Door Opener Kit Installation and Operating Instructions

Thank you for purchasing this Chuxaway kit which has been designed to enable you to adapt and automate the timed opening and closing of your chicken house door. The kit comprises of the following components:

A) 1 x Control Unit **B) 1 x Motor Assembly** **C) 2 x spare cords** **D) 1 x bag of hardware**	You will need **3 x AA** cell batteries. **DO NOT USE RECHARGEABLE BATTERIES.** Alkaline or lithium batteries should be used.

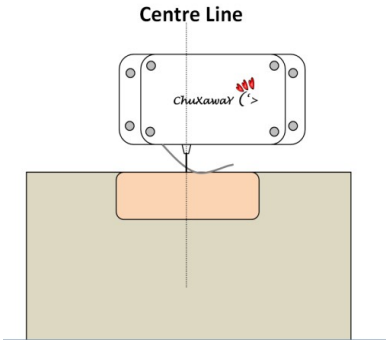


Step 1 – Check/Adapt Door

The kit depends upon gravity to assist the closing of the door, so if your door currently slides horizontally then it will be necessary to convert it such that it opens and closes vertically. We would not recommend a door in excess of 750g weight. (We do sell an Aluminium Door conversion kit at www.chuxaway.com). The door must drop vertically without obstruction, and should move freely. If it catches during movement, then take time to establish where and why. Sand down rough edges that are catching and consider waxing any guides; e.g. with a candle. You will need to drill a hole in the top of the door directly above the centre of gravity of the door - typically dissecting the centreline of the door width and depth, (i.e. at the centre of the top of the door). We will suspend the door from this hole, so it is important that when it is suspended by the cord, the door hangs vertical and straight.

Step 2 – Install Motor Assembly

Position the Motor Assembly above the door such that when fully open the door pushes against the metal lever on the underside of the Motor Assembly. This lever activates a switch that stops the motor lifting so it is important to ensure the top of the door makes contact with it. We use gravity to assist the closure of the door, so **it's very important that the point at which the cord emerges from the Motor Assembly is directly above the hole you made in the door,** both with respect to horizontal and depth positioning.

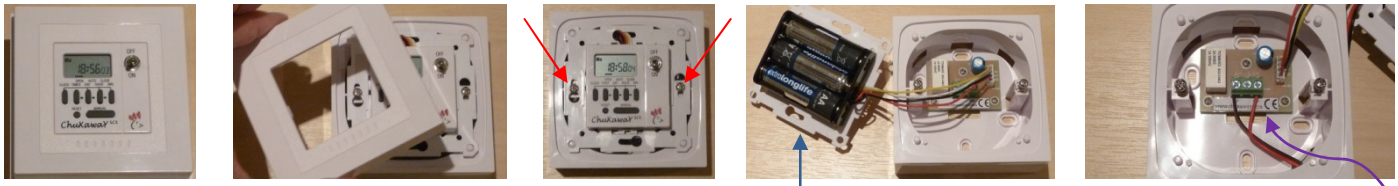


If you have positioned the door and Motor Assembly correctly then if you loop the cord through the hole and pull the cord vertically then the door should be suspended within the door guides without tipping either to the left or right, or excessively falling forwards or backwards within the guides. It's important that there is no "snagging" either when being lifted or lowered. Push the door fully up to check that it will activate the stop lever on the underside of the Motor Assembly. Do be sure to make any positioning adjustments to ensure that the point at which the cord emerges from the Motor Assembly is directly above the point that the cord attaches to the door.

Use the 4 screws provided to screw the Motor Assembly in place. If mounted in exposed environment, apply sealant along the upper rear edge of the assembly. With the door closed, tie the cord to the door **ensuring that there is about one inch of slack in the cord**. Either tie a large knot at the base of the hole or tie the cord back on itself just above the hole.

Step 3 – Install Control Unit

Disassemble the Control Unit. Pull the timer front surround off by gripping either side and pulling it forward. Undo the two screws (see red arrows below), and lift forward the timer unit.



Insert the three AA cells in the underside of the timer module. Polarity is shown underneath the batteries. The Control Unit is not weather proof so afford consideration when determining where to site it. If mounting in a location that is not sheltered then consider a simple housing or cover. Alternatively, if accessible, you could mount inside the chicken house itself. Determine the routing of the cable from the Motor Assembly. Thread the wire from the motor through into the rear of the control unit housing. Fix the control unit housing in place using two of the screws (supplied). **IMPORTANT: Please ensure that the toggle switch is in the OFF position.** The red and black wires should be inserted in the marked terminal blocks as shown, and then tighten the terminal blocks with a small screwdriver. Do not overtighten them! Fix the control unit back onto the base using the two threaded machine screws, then re-position the frame over the front. Now tidy up your cabling. We have included some cable clips, though use of a glue gun can also provide a very tidy result.

SETTING THE TIME: First press the reset button. Then press the "CLOCK" button and whilst holding it down press the "DAY" button to select the current day of the week marked at the top of the display, then the "HOUR" button to advance to the current hour using the 24 hour clock, then "MIN" to complete the time setting. Then release the "CLOCK" button.

Step 4 – Understand and Test Operation

Now it's time to understand a little more about how the Control Unit works. It contains a timer that triggers door open and door close instructions.

Ensure that the toggle switch remains in the OFF position. Now, we'll switch the system from CLOSE to OPEN states manually using the "MANUAL" button. Try it! The door will not move because the toggle switch is in the off position, but press the "MANUAL" button repeatedly and you will see that the timer steps through modes from "CLOSE" to "AUTO", then "OPEN" and then back through "AUTO" to "CLOSE"; (the current status is shown by the horizontal black bar on the LCD display beneath the time. If this bar does not show, please press the reset button). You should hear a click inside the Control Unit when it advances to "CLOSE" or "OPEN". PLEASE NOTE: THE UNIT WILL NOT CLICK IF YOU PRESS THE "MANUAL" BUTTON REPEATEDLY TOO FAST – THIS IS NORMAL OPERATION AND NOT A FAULT. If this happens, please wait a couple of seconds and then try pressing the button again.

Now use the "MANUAL" button to advance to the "OPEN" state. Turn on the silver toggle switch.....the motor should slowly lift the door and it will stop when it hits the stop lever on the underside of the Motor Assembly. Now press the "MANUAL" button (twice) to advance to the "CLOSE" state.....the door will lower and stop when fully closed, (when the cord becomes loose).

Step 5 – Programme Timer

Programme the unit deciding what time of the day you want the door to open and close. Assuming this is the same for each day of the week then we will only use one of the 6 programme events. Press the "TIMER" button on the Control Unit once. The display will show "1ON" on the left, indicating we are programming the time to open the door. Pressing the "DAY" button will advance the DAY that is being programmed from all days (Mo,Tu,We,Th,Fr,Sa,Su) to a particular day (e.g. Mo through Su), or other variations such as every weekday (Mo,Tu,We,Th,Fr), or weekend (Sa,Su). For our example to programme the same times every day, we want to display (Mo,Tu,We,Th,Fr,Sa,Su). Press the "HOUR" and "MIN" buttons to advance the time to the time you want the door to open. Then press the "TIMER" key once again. The display will show "1OFF" on the left. Now repeat the sequence to select the desired close time; (ensure all days are displayed across the top, and then press the "HOUR" and "MIN" buttons to select the desired close time). Then press the "CLOCK" button once to complete the programming, or alternatively if you wish to programme another sequence, e.g. if you initially programmed every weekday (Mo,Tu,We,Th,Fr) and now want to programme the weekend (Sa,Su), then press the "TIMER" button again and programme the open and close times for the next programme, (e.g. "2ON" and "2OFF"). To exit the programming mode when done, press the "CLOCK" button.

The MANUAL button should be used to OPEN or CLOSE the door as required between the programmed events, and thereafter the mode should be advanced to "AUTO" such that the programmed open and close events are successfully conducted. (Remember to leave the motor power switch on).

Congratulations – your Chuxaway is up and running!

Those Necessary Warnings

We supply the Chuxaway as a kit for self installation. We cannot accept any liability for losses resulting from its use.

Please be aware that frost and ice can make any chicken house door seize. Do not rely on operation of any automated opener during very hard winter conditions, nor would we advocate leaving your chickens for an extended period without checking on them.

Troubleshooting (Please also check **WWW.CHUXAWAY.COM/SUPPORT**)

If you have any problems, please check the support tab on our website first (www.chuxaway.com). If still experiencing problems then do let us know at support@chuxaway.com. Some potential problems and their resolutions are shown below:

A) Door jams open – door hard against motor unit.

If the control unit is in "CLOSE" mode, then it will try and close the door. The motor stops running when the cord goes slack. If the cord never goes slack (e.g. because the cord is not long enough) or is pulled tight when in closed position, the motor will spin till the cord unwinds fully inside the motor control unit and then winds the cord the other way around the motor pulley (like a yo-yo) and lift the door. As the unit thinks it's closing the door, the upper limit switch has no effect, and the door jams open. (If left unattended in this condition, the batteries will become prematurely exhausted). To correct the condition perform the following:

1. ***Turn off the power (toggle switch up)***
2. ***Gently but firmly push the door down until the upper limit switch is released (it will be stiff due to the motor gearing)***
3. ***Advance the Control Unit mode to "OPEN" using the MANUAL button***
4. ***Turn on the power, (toggle switch down)***

The door should lower. At the end of its travel maintain tension on the cord (pulling it down) such that the unit still senses that it is supporting the weight of the door, then the unit will start to wind the cord back in. As it takes the weight of the door release the tension on the cord allowing the motor to lift the door again till it reaches the upper stop switch.

B) Door fails to either open or close.

If the batteries in the control unit are weak, then there may be insufficient power to switch from the open to close states. Listen for the "click" from the Control Unit as you advance the state from OPEN to CLOSE. If there is no click audible then replace the batteries. DO NOT USE RECHARGEABLE BATTERIES – alkaline or lithium batteries should be used.

C) Timer unit fails to display correct time.

Try re-setting the time. If this fails, push a pen/pin on the "RESET" button as this resets the timer. You will then need to re-set the Day, Time and re-programme the open and close times. If this fails, try changing the batteries.

D) Replacing Cord.

Should the cord break or become detached from the motor, please follow the instructions to replace at **WWW.CHUXAWAY.COM/SUPPORT**
(Always ensure that the cord is routed ***behind*** *the horizontal metal lever near the cord outlet, as this should activate the microswitch when the cord is under tension).*