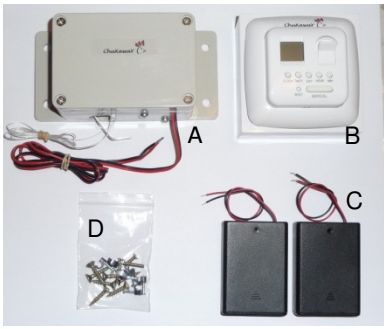
Chuxaway-SC Chicken Door Opener Kit
Installation and Operating Instructions

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:

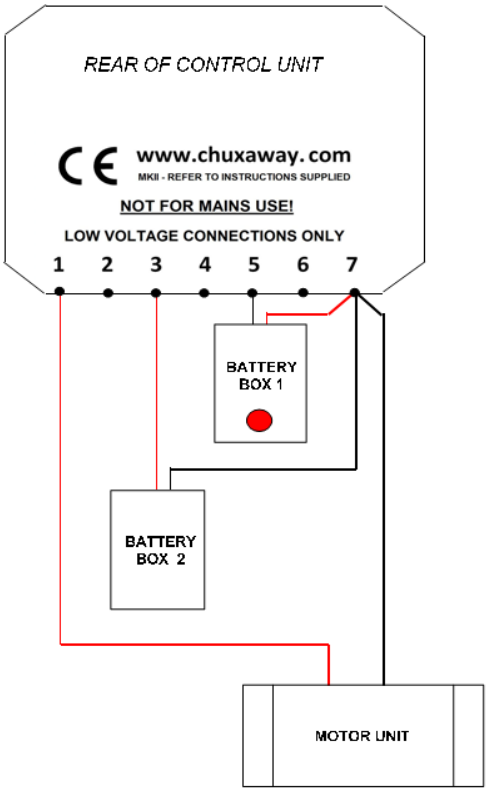


A) 1 x Motor Assembly
B) 1 x Control Unit
C) 2 x triple AA cell battery housings
D) 1 x bag of hardware including:
6 x cable clips, 6 x large wood screws,
2 x machined screws, 2 self adhesive pads, spare cord

**** PLUS ALUMINIUM DOOR KIT ** (door, 2 vertical runners, 1 base plinth, 12 screws)**

You will need **2 x AAA** cell batteries for the Control Unit and **6 x AA** cell batteries to drive the motor, (not included). **DO NOT USE RECHARGEABLE BATTERIES.** Alkaline or lithium batteries should be used.

The following schematic shows how the components are connected together:



Chuxaway

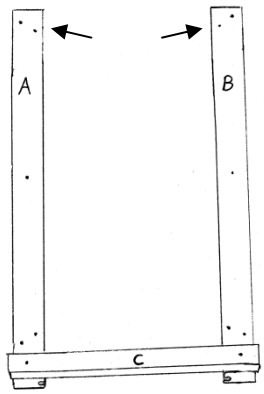
Terminal	Wire
1	RED wire from the motor unit
3	RED wire from Battery Box 2
5	BLACK wire from Battery Box 1
7	BLACK wire from Battery Box 2 and RED wire from Battery Box 1 and BLACK wire from motor unit

Detailed instructions follow. We strongly recommend reading these instructions in full before starting installation. This will help you understand what's in store and how the kit operates.

We are selling the Chuxaway kit as just that – a kit for self installation. We cannot accept any liability for losses resulting from its use. That said, we do genuinely want to try and ensure a high level of customer satisfaction. If you have any problems, please do let us know at support@chuxaway.com. Also, please contact us if you need any spare parts. We genuinely endeavour to secure high levels of customer satisfaction.

Step 1

The first step is to check fit the Aluminium door and runners. The vertical runners (A and B) are as show in the diagram. Please ensure that the drilled holes that are nearest the ends are at the top (see arrows), and that the grooves are facing inwards. (The door runs inside these grooves).



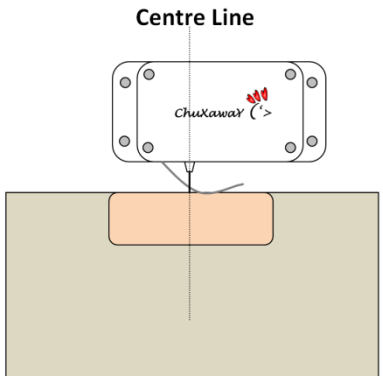
Fit one side runner using 5 of the black screws provided, then similarly fit the second runner with the door in place, ensuring that the fit is not too tight and there is sufficient horizontal gap to ensure that the door can drop vertically without snagging or obstruction. (Make sure you use a spirit level to ensure that the rails are truly vertical).

Finally fit the horizontal bar (C) on top of the side runners as shown using 2 black screws. The door will then slide behind this bar when fully closed.

Step 2

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 in the handle of 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 to get this right as we rely on gravity to close the door and we don't want its movement "snagging" either when being lifted or lowered. Also at this stage pull the cord to lift 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.



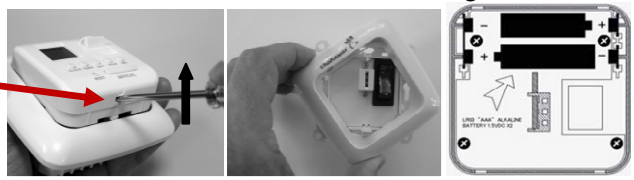
Once satisfied that the positioning is correct, use 4 of the large screws provided to screw the Motor Assembly in place. If mounted in exposed environment, apply sealant along the upper rear edge of the assembly. With the door closed, tie the cord to the door **ensuring that there is about one to two inches of slack in the cord**. It is very important that there is 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

Now consider where you want to mount the Control Unit. The Control Unit is not weather proof so do afford consideration to this. If you are mounting in a location that is not sheltered then you may want to consider a simple housing or cover. Alternatively, if you have good access, you could mount inside the chicken house itself. We suggest mounting the battery packs either side (left and right) of the Control Unit, so afford this consideration when deciding on its location, as you will require access to change the batteries.

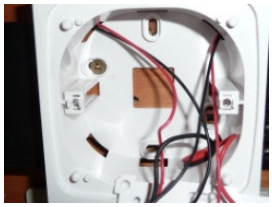
Now disassemble the Control Unit, (remembering how it is constructed as you will need to reassemble)! Using a small screwdriver blade, push the lug at the bottom of the front of the timer unit taking care not to insert screwdriver too far!

DO NOT PUSH SCREWDRIVER TOO FAR AS IT IS POSSIBLE TO DAMAGE INTERNAL COMPONENTS.



Hinge the timer unit upwards and carefully detach, (note – there is also a lug at the top). Then lift the timer surround and rotate slightly so that it can be removed (see picture). At this stage **insert the two AAA cells** in the timer module. The polarity is shown underneath the batteries – it is easiest to insert the outermost battery first, then the inner one – note that the two batteries are installed in opposite directions!

SET THE DAY AND TIME. To do this press the "CLOCK" button and whilst holding it down press the "DAY" button to advance to the current day of the week marked 1 through 7 (Monday through Sunday) at the top of the display, or "HOUR" button to advance to the current hour using the 24 hour clock, or "MIN" to complete the time setting process. (Then release the "CLOCK" button once setting is complete).



Having determined where you want to place the Control Unit, identify the routing of the cable from the Motor Assembly. First mount the battery packs next to the Control Unit. Use the double sided sticky pads to mount either side of the Control Unit housing, taking care to ensure they are the right way up and that the sticky pad is fixed on the rear of each pack and not the lid. The lid should slide up to enable battery access. Battery pack 1 has a red dot on top of it for ease of identification.

Thread the wires from the motor and battery packs through into the control unit housing. Either feed the cables though holes in the rear of the control unit housing, or from the side as shown in the picture. Fix the control unit housing in place using two of the large screws (supplied).

Do **not** install the AA batteries yet! This follows in Step 4.

It is important to now **loosen the connection screws** at terminals 1, 3, 5, and 7 on the rear of the Control Unit, as we are about to make the wiring connections. Connect the wires from the battery packs and Motor Assembly into the numbered connections at the base of the control unit as shown on the schematic on Page 1 of these Instructions.

Fix the rear of the control unit onto the base using the two threaded machine screws. Do not overtighten them!

Then position the frame over the front (Chuxaway label uppermost) rotating it slightly to clear the upper and lower retaining lugs. When the surround is flush against the faceplate, carefully push the timer module into place, hinging slightly backwards as you push it into place (so that the top lug clicks into place just before the bottom). If you struggle with this step then it may help to slightly loosen the two threaded screws, as the base can warp if these are over tightened.

Now tidy up your cabling. We have included some cable clips, though use of a glue gun can provide a very tidy result.

Step 4

Now it's time to understand a little more about how the Control Unit actually works. It contains a timer that triggers door open and door close instructions. When we want the door open, then we need the timer to switch "ON", and when we want it to close then we want it to switch "OFF".

Do **not** install the AA batteries until instructed!

To begin with we'll setup the system by switching the timer OFF and ON manually using the "MANUAL" button. Try it! Press it repeatedly and you will see that the timer steps through modes from "OFF" to "AUTO", then "ON" and then back through "AUTO" to "OFF". The current status is shown on the LCD display beneath the time. You should hear a click inside the Control Unit when it advances to "ON" or "OFF". If you don't then it is most likely that the innermost AAA battery is not installed the correct way or the front of the timer is not properly in place, so please revisit Step 3.

Ensure the main power switch (the white lever switch to the right of the Control Unit) is up, (off). Now install the AA batteries observing polarity as etched at the back of the battery packs, (negative against the springs). Now use the "MANUAL" button to advance to the "ON" state. Turn on the main power switch (push it down).....the motor should 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 "OFF" state.....the door will lower and stop when fully closed, (when the cord becomes loose).

Step 5

Finally programme the unit deciding what time of the day you want the door to open and what time you want it to close. Assuming this is the same for each day of the week then we will only use one of the 6 programme events that the timer is capable of controlling. Press the "TIMER" button on the Control Unit once. The display will show "1**ON**" on the left, indicating we are programming the time to switch on (open the door) within programme setting 1. (Pressing the "DAY" button will advance the DAY that is being programmed from 1 through 7 then every weekday (1,2,3,4,5) and then weekend (6,7), but leaving it alone will display 1,2,3,4,5,6,7...i.e. every day). 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 "1**OFF**" 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 (1,2,3,4,5) and now want to programme the weekend (6,7), then press the "TIMER" button again and programme the open and close times for the next programme, (e.g. "2**ON**" and "2**OFF**"). To exit the programming mode when done, press the "CLOCK" button.

The MANUAL button should be used to open ("ON") or close ("OFF") 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!

Please remember that depending upon the weight of your door, there is a risk that chickens may be injured by the lowering door. In our experience the chickens will associate the motor noise with the door closing, but the learning process may take a little time! We started by closing the door for the first few nights using the MANUAL button (setting to "Off") whilst we were present, i.e. so that we could ensure that the chickens were not in the way. **Do remember to advance the mode to "AUTO" thereafter otherwise the door will not open automatically in the morning!**

Troubleshooting

(Please also check **WWW.CHUXAWAY.COM/HELPME.ASPX**)

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

If the control unit is in "OFF" 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 in Battery Box 2 will become prematurely exhausted). To correct the condition perform the following:

1)Turn off the power pushing the white lever 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 "ON" using the MANUAL button
4)Turn on the power, pushing the white lever switch down

The door should lower and then rise again as the cord winds itself back around the motor spindle in the correct manner.

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 OFF to ON. If there is no click audible then replace the (AAA) batteries in the control unit. DO NOT USE RECHARGEABLE BATTERIES – alkaline or lithium batteries should be used. Also check the AA cell motor batteries. The battery pack with the red dot on top (Battery Box 1) powers the door when lifted, whereas the one without the dot powers the descent.

C) Timer unit fails to display correct time.

Try re-setting the time. If this fails, insert a pen/pin in the "RESET" hole 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 (AAA) batteries inside the timer.

D) Replacing Cord.

Should the cord break or become detached from the motor, please follow the instructions to replace at **WWW.CHUXAWAY.COM/HELPME.ASPX** *(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).*

Those Necessary Warnings!

Take care to ensure that the door is not too heavy, the cord is firmly attached to the door, and the motor is secure in place. Failure in any of these areas may result in the door falling rapidly and potentially injuring a chicken.

Please be aware that frost and ice can make any chicken house door seize. We would not recommend relying on operation of any automated opener during very hard winter conditions.

We would not advocate leaving your chickens for an extended period without checking on them.