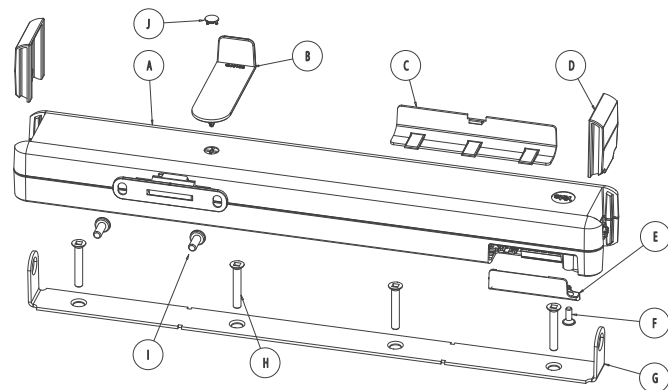


Aeron® Window Control System - Window Actuator Installation Instructions

Yale



Items Supplied

- A Actuator
- B Chain release tool
- C Chain adjuster and module cover
- D Actuator end caps (x2)
- E Wire cover
- F Wire cover screw
- G Pivot bracket
- H Pivot bracket screws (x4)
- I Sash bracket screws (x2)
- J Chain release cover
- K Power loom cable

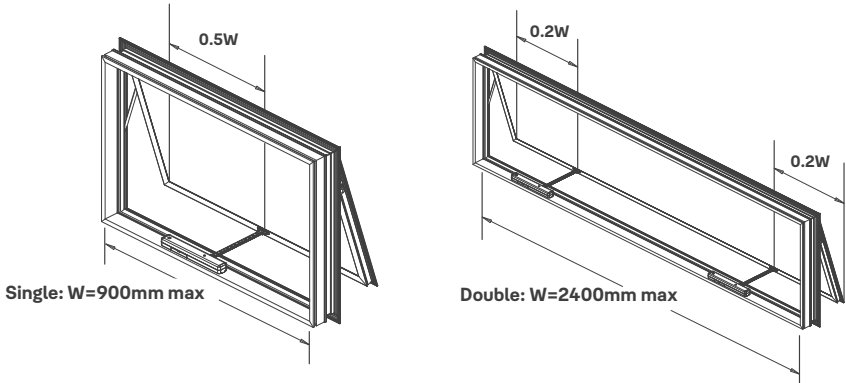
Purchased Separately

- Synchronisation loom (1.8m)
- Rain sensor (cable length 2m)
- Rain sensor adaptor

Tools Required

- Marker
- #2 Phillips screwdriver
- #1 SQ driver bit
- #2 SQ driver bit
- Power drill
- 3.2mm drill bit
- Small flat screwdriver
- Silicon (If IP rating required)

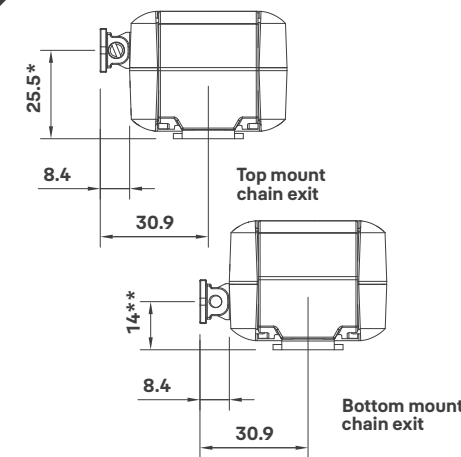
1 Select Single or Double Actuators Per Window



Recommended dimensions only, for further information on chain restriction opening see QR code on the reverse page.

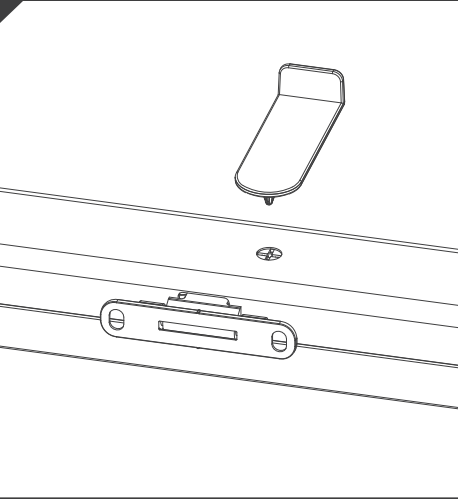
Double actuators require 1 x synchronisation loom

2 Mounting Type



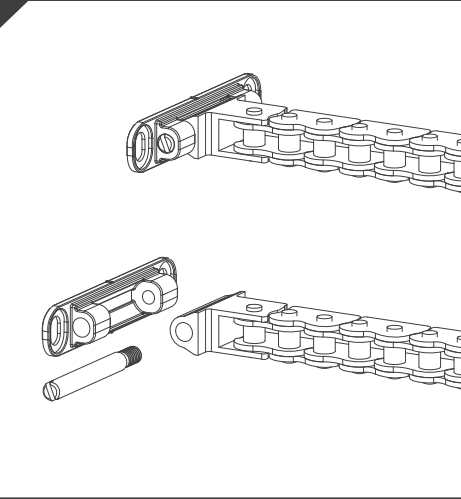
Alternative bracket available YAR/SWAA/2/PVT
*=30.2mm **=18.6mm

3 Retracting Chain



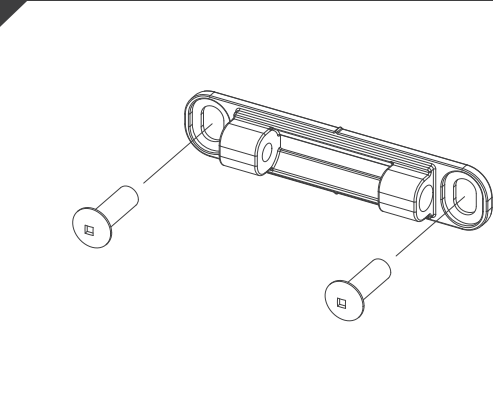
Use chain release tool to extend chain to comfortable working length.

4 Removal of Sash Bracket



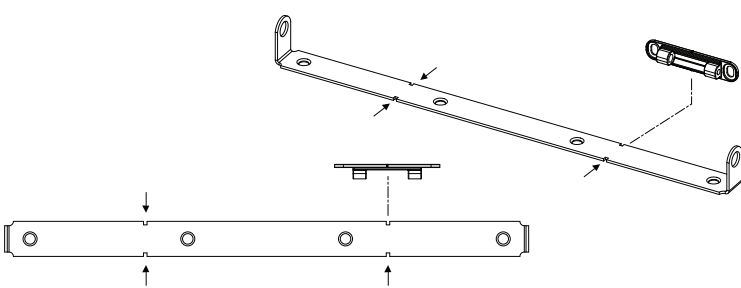
Use a small flat screwdriver to remove sash bracket.

5 Secure Sash Bracket



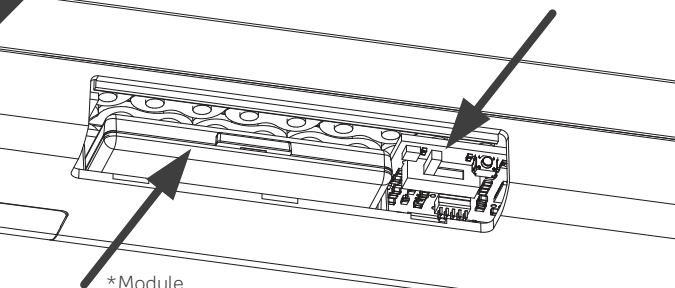
If the sash bracket has not been removed from the chain, secure the sash bracket to the window sash with the screws supplied. Use the clutch tool to extend the chain if required. The chain can rotate at the sash bracket for ease of access to the fixing screws.

6 Position and Fix Pivot Bracket



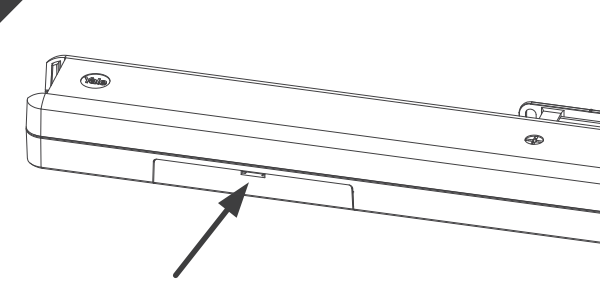
Align pivot bracket with sash bracket. **Note:** notches in pivot bracket needs to align with centre of sash bracket. Once aligned, mark fixing screw locations for bracket and pivot. Use fixing screws provided.

7 Set Chain Length and Module Removal



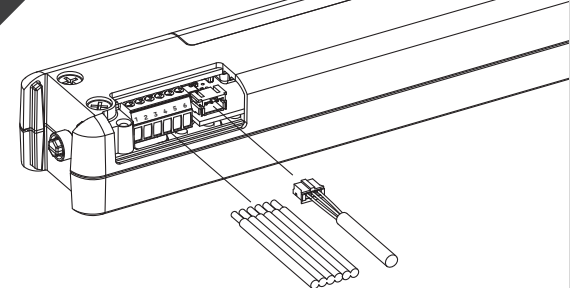
Use slide switch to select desired chain extension. **Note:** preset chain extensions are printed on the circuit board. *for a double actuator installation the module must be removed from the slave actuator. For further information on chain restriction, refer to the website.

8 Access to Chain Length Switch and Module



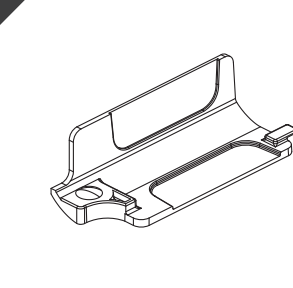
Clip the module cover in place. Ensure cover is located correctly and sits flush with actuator body.

9 Connect Cables



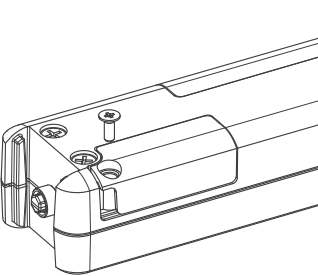
Insert wiring into connector block and firmly push into place. Connect sync loom for a double actuator installation.

10 Cut Cover



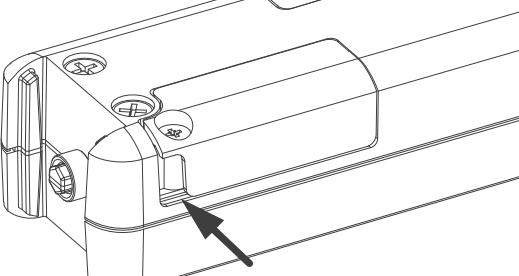
If a different cable exit is desired, the wire cover can be cut to suit.

11 Wire Cover



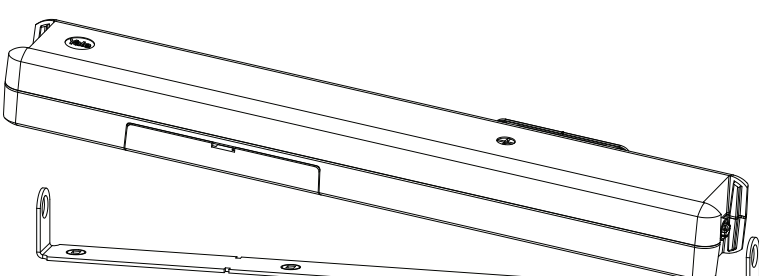
Install wire cover and secure in place with screw provided.

12 IP30 Rating



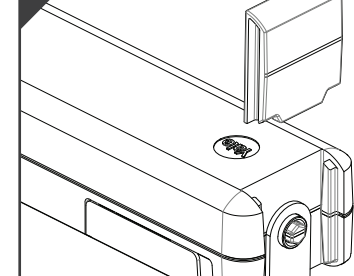
To achieve IP30 rating, seal wire exit points with silicon.

13 Mount Actuator to Pivot Bracket



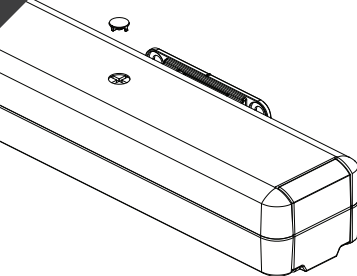
Tilt actuator body and insert pivot post into the slotted upstand at one end of the pivot bracket. Once in place, repeat at the other end.

14 Install Actuator End Caps



Ensure the tops of the caps are flush with the actuator body.

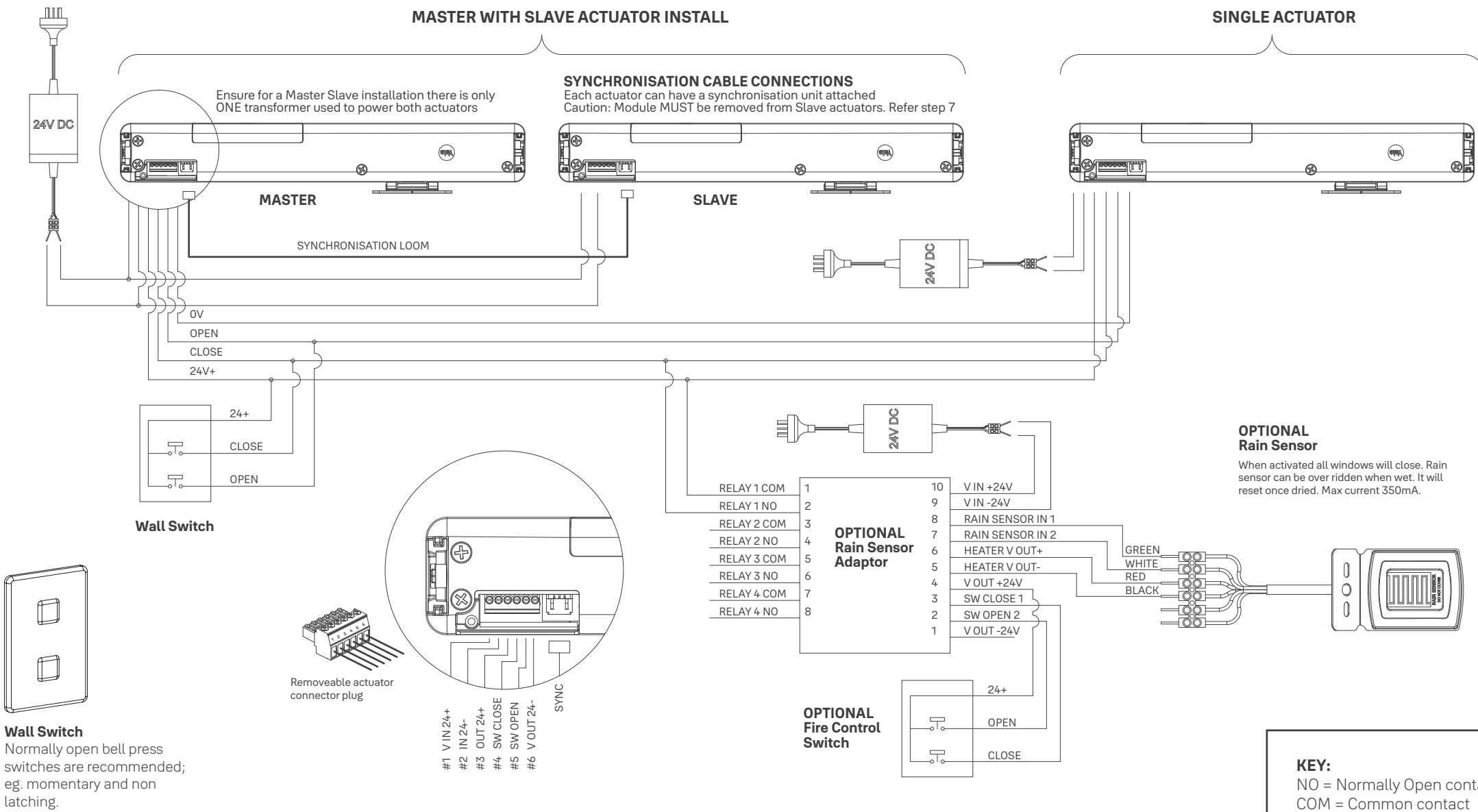
15 Fit Chain Release Cover



Push the chain release cover into place.



WALL SWITCH CIRCUIT DIAGRAM



FREQUENTLY ASKED QUESTIONS

- **How many windows can I have in a system?**
Hard wired/wall switch: 10
Wireless: 30
- **Can I use two actuators on one window?**
Yes, windows wider than 900mm must use double actuators connected by a synchronisation loom.
- **Can I restrict the window opening?**
Yes. See Step 7 "Set Chain Length and Module Removal" on opposite page.
- **How do I know which power lead goes where?**
Refer to wiring diagram. **Note:** The actuators are not polarity sensitive.
- **What is the largest sash size for one actuator?**
We recommend a maximum sash width of 900mm for a single actuator. For other sash constraints refer to "the selector chart" available on the website.
- **Can a Rain Sensor control individual windows?**
A rain sensor will control all the windows on the hard wired system it is connected to.
- **Will my windows re-open automatically once the rain has stopped?**
No. You will need to press the open button to reopen the windows.
- **Can I override a Rain Sensor that has closed the windows?**
Yes. However the rain sensor will not reactivate until it has dried and reset.

GENERAL NOTES

- A wall switch can operate a maximum of 10 actuators per circuit. For optimal performance, AWG26 cable is recommended with 30m maximum run lengths. A maximum of 1 rain sensor and Adaptor can be connected per system.
- **Smart Home Application:**
"Smart Home" applications are NON-STANDARD and require particular features to operate with this system. Replace wall switch connections with two relays. Follow basic function steps to activate and control the system. Ensure activation time is at least two seconds.
- **Aeron Window Actuators should always be installed by a qualified professional.**
- **Only to be used on out of reach windows**

IMPORTANT NOTES

Calibration:
The system must be calibrated before use. Power up the system, after 10 seconds press the open/close switch. The windows will open 50mm and then close. **Wait at least 10 seconds once the window is closed, then operate the unit to one full open and close cycle to complete the calibration. The above calibration steps need to be performed every time the actuator/s loses power.**

Note: If a window stops during calibration, it means that it has 'safety' stopped due to too much load. Press the close switch. Remove the obstruction. Then press the open switch to continue.

Wall Switch Basic Function:

Press the open switch for at least 2 seconds to open the windows. Press the close switch for at least 2 seconds to close the windows. Press any switch for at least 2 seconds to stop the windows.

POWER CABLE REQUIREMENTS

Length (m)	Wire Ø Min	AWG
12	0.7mm	22
19	0.8mm	20
29	1.0mm	18
47	1.3mm	16
74	1.6mm	14
119	2.0mm	12

LED OPERATIONAL INDICATOR

LED Indicator	
Fault	LED display
Actuator not calibrated	LED blink RED (0.1s ON 1.9s OFF)
Obstruction detected	LED shines RED
Voltage out of range	LED flashes RED @1Hz
Motor unresponsive	LED flashes RED twice @1Hz, dwell for 1s
Slide switch not read	LED flashes RED three times @1Hz, dwell for 1s
Zigbee COMM	LED flashes RED four times @1Hz, dwell for 1s

TECHNICAL SPECIFICATION

Input Voltage	24-32V DC
Maximum Current	600mA per Actuator
Opening Time (full ext)	Approx 30 sec
Overall Dimensions	310mm x 45mm x 36mm
Operating Temperature	0° - 50°C
Humidity	0% - 95%
Wall Switch Cable Length	30m Max

