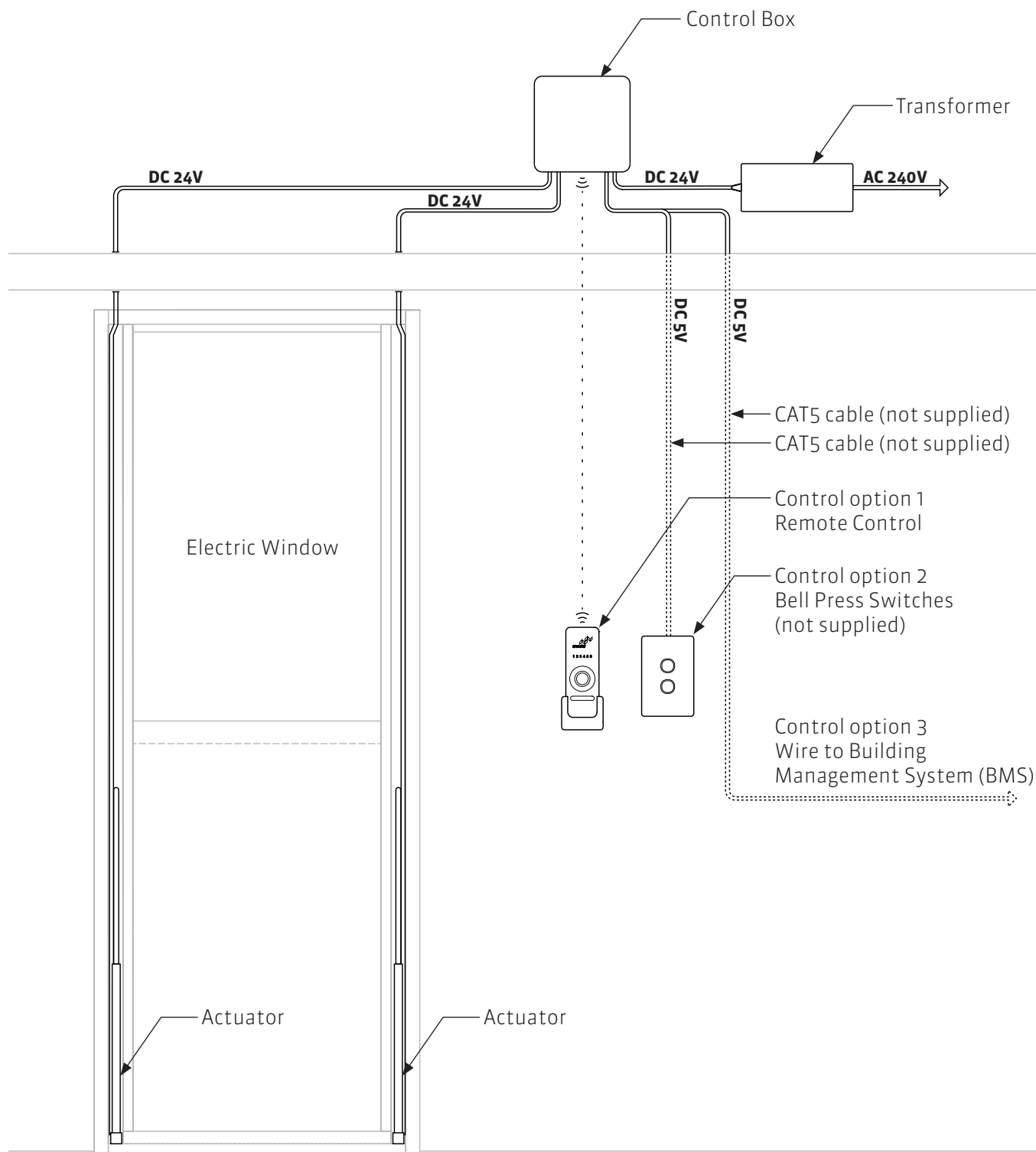
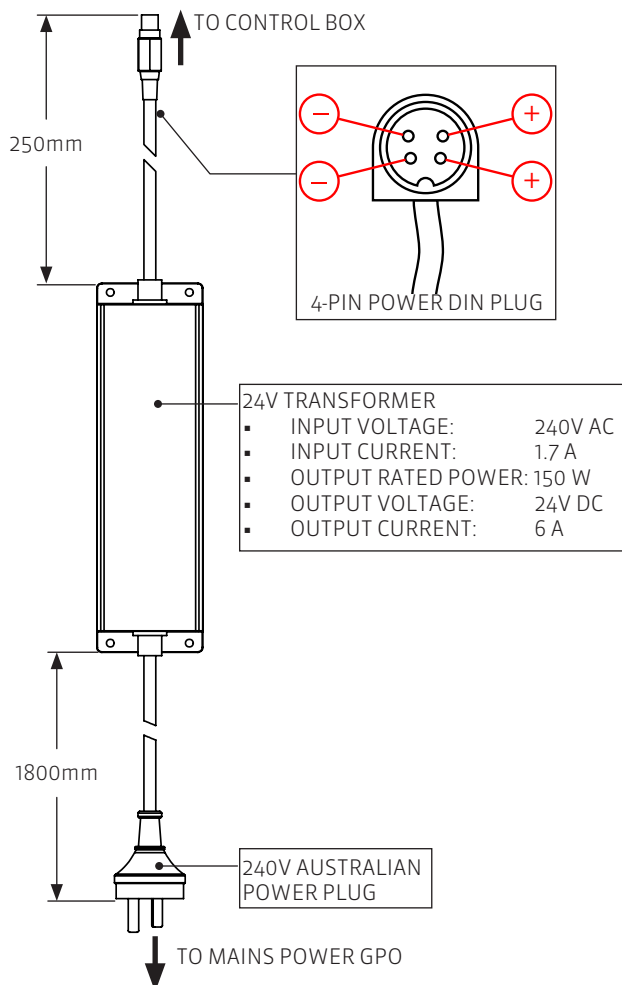
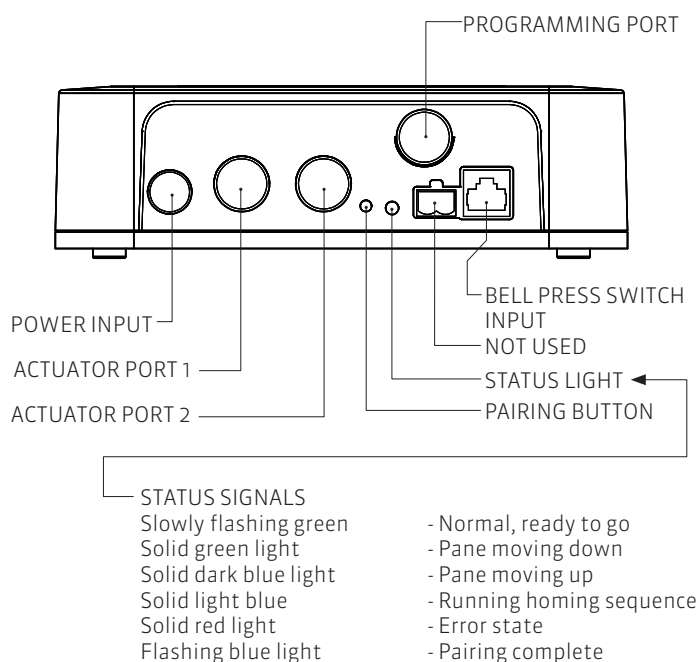


Aneeta Electric Sashless Window Electricians Guide





2.1



2.2

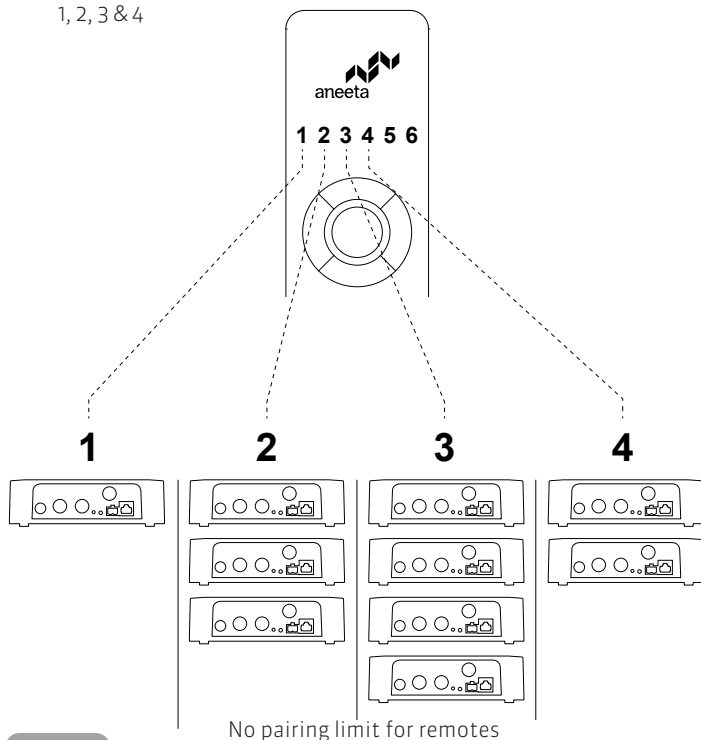
POWER REQUIREMENTS

- ❑ Aneeta Electric Sashless windows are supplied with a transformer to step down mains 240V AC to 24V DC to power the window
- ❑ The transformer comes with a 3 pin 240V/10A plug that needs to be connected to 240V. [2.1](#)
- ❑ The transformer 4-pin power DIN plug connects to the Control Box. **DO NOT APPLY 240V DIRECTLY TO THE CONTROL BOX**
- ❑ Each window requires a minimum 6A.

CONTROL BOX

- ❑ Each Aneeta Electric Sashless window is driven by one Control Box [2.2](#)
- ❑ The Control Box should be placed in a non-exposed area. If used with a Remote Control, the operating range can be affected by the placement of the Control Box. To prevent issues with Remote Control operating range, the Control Box should not be placed within or near large metallic or dense materials.
- ❑ Each Control Box is programmed for a specific window. Do not mix Control Boxes. The Label on the top of the Control Box will be marked with the order and specific window it has been programmed for.
- ❑ Control Boxes can be controlled with different methods as shown on following pages. Control options can be used in combination.

A Remote Control can be paired to many control boxes on each of the 6 channels.
Example below shows multiple Control Boxes paired to channels 1, 2, 3 & 4



No pairing limit for remotes

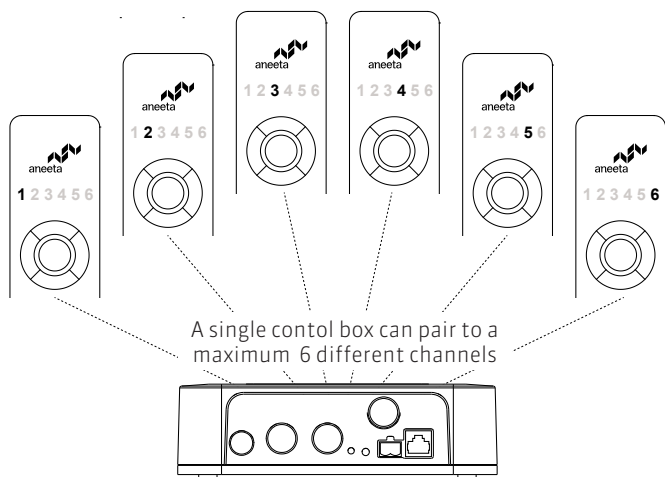
3.1

CONTROL OPTION 1: REMOTE CONTROL

- ❑ By default, each remote will be paired to only one window, on all channels 1 - 6.
- ❑ Expected operational range of the Remote Control: 50m (indoor)
- ❑ Remote pairing can be reconfigured in case of a remote being replaced or a change in pairing preferences. See 'PAIRING A REMOTE TO A WINDOW'.
- ❑ Each Remote Control has 6 different channels.
- ❑ A single Remote Control can be paired to any number of Control Boxes on each channel for simultaneous operation of multiple Control Boxes that are within range. 3.1
- ❑ A Control Box can be paired to a maximum of 6 Remote Control channels. 3.2
- ❑ The remote will remember its pairing configuration in the event of power loss to the Control Box, or if the remote battery is replaced.
- ❑ Remote Control comes with CR2032 battery included.

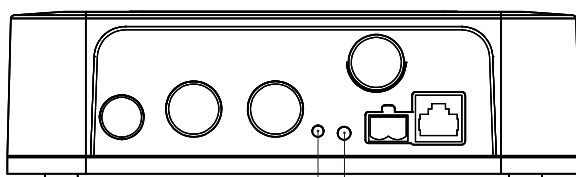
PAIRING A REMOTE TO A WINDOW

- ❑ On the remote, use the left/right arrow buttons to select the channel you want the window to be paired to.
- ❑ On the Control Box, press the remote pairing button. The light on the Status Indicator Light will blink to indicate it is ready for pairing 3.3
- ❑ On the remote, press the UP, DOWN, or STOP button. The Status Indicator Light will flash blue to confirm the remote has been paired.



A single control box can pair to a maximum 6 different channels

3.2



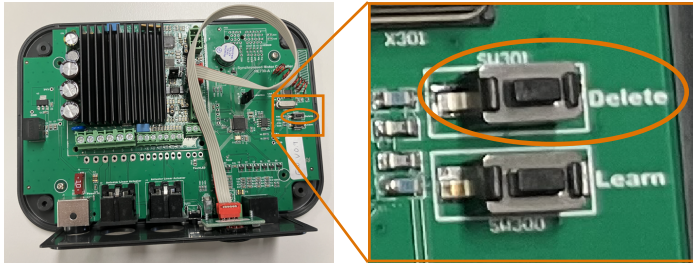
STATUS LIGHT
PAIRING BUTTON

3.3



REMOVE 4 FEET AND SCREWS TO OPEN CONTROL BOX

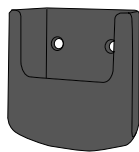
4.1



DELETING ALL PAIRED REMOTE CONTROLS

- ❑ **WARNING:** Should only be performed by a suitably trained technician. The Control Box contains sensitive electronic equipment. Avoid touching any of the components apart from the highlighted "Delete" switch. Touching or bridging components may damage or short the board.
- ❑ Remove the rubber feet and screws on the bottom of the Control Box to open 4.1
- ❑ Locate and press the "Delete" button inside the Control Box 4.2
- ❑ Status Indicator Light will light up blue. When the light turns off, all remotes have been deleted
- ❑ Close the Control Box and screw shut

4.2



4.3

MOUNTING REMOTE CONTROL HOLDER

- ❑ The Remote Control comes with a holder to mount on wall. 4.3
- ❑ Use the holder as a template to mark the location for holes.
- ❑ Use a 3mm drill bit to drill pilot holes in the wall in line with the markings.
- ❑ Screw holder in to place with CSK 6Gx5/8" screws.

REMOTE CONTROL FUNCTIONALITY

"UP" BUTTON

- MOMENTARY PRESS will operate the window AUTO UP
- PRESS AND HOLD for 2 seconds or more will operate the window until the button is released
- While pane is in motion, PRESS to stop pane motion

"STOP" BUTTON

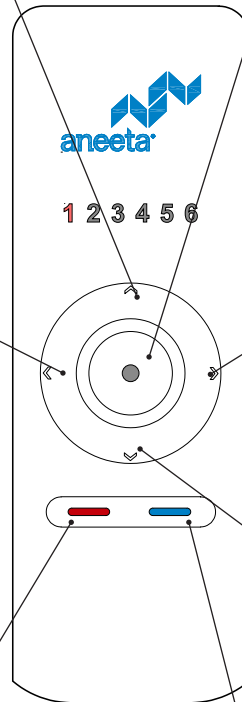
- MOMENTARY PRESS will stop motion of all panes on all channels at any time
- PRESS AND HOLD for 5 seconds to start the Homing Procedure, continue to HOLD the button for 3 seconds after pane stops moving to confirm the Homing Procedure has been completed.

"LEFT" BUTTON

- PRESS to select previous channel
- Changing channel doesn't stop motion on other channels

"RIGHT" BUTTON

- PRESS to select next channel
- Changing channel doesn't stop motion on other channels



"DOWN" BUTTON

- MOMENTARY PRESS will operate the window AUTO DOWN
- PRESS AND HOLD for 2 seconds or more will operate the window until the button is released
- While pane is in motion, PRESS to stop pane motion

"LEFT" BUTTON

- PRESS to select previous channel
- Changing channel doesn't stop motion on other channels

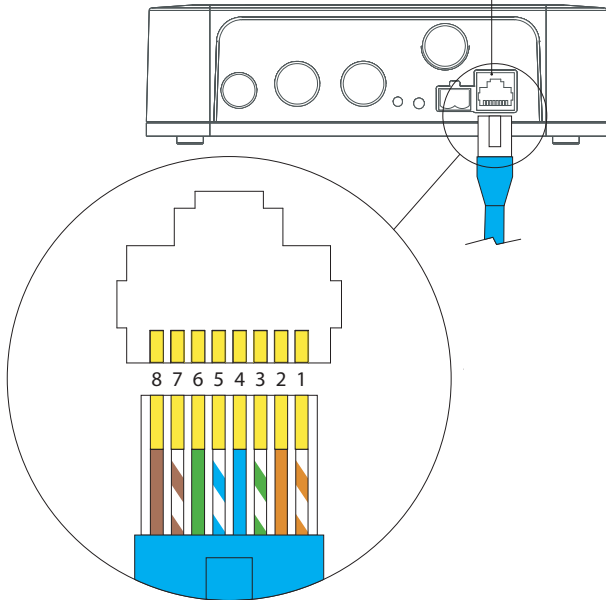
"RIGHT" BUTTON

- PRESS to select next channel
- Changing channel doesn't stop motion on other channels

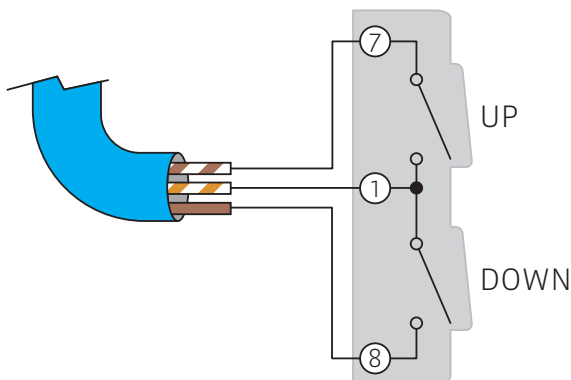
CONTROL OPTION 2: BELL PRESS SWITCHES

- ❑ Switches are not included with Aneeta Electric Windows. Aneeta recommends using two normally open bell press switches for operation, such as the below two examples:
 - Clipsal 30MBPR
 - HPM 770XM
- ❑ Bell press switches are connected to the Control Box via RJ45 connector and CAT5 cable (not supplied) and wired as shown 6.1 6.2
- ❑ Connect pin 7 to pin 1 to operate the moving pane UP
- ❑ Connect pin 8 to pin 1 to operate the moving pane DOWN

CONTROL SWITCH INPUT
RJ45 CONNECTOR

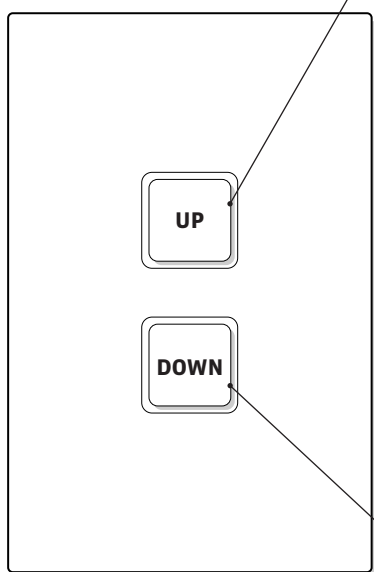


6.1



6.2

BELL PRESS SWITCH FUNCTIONALITY



"UP" BUTTON

- MOMENTARY PRESS will operate the window AUTO UP
- PRESS AND HOLD for 2 seconds or more will operate the window until the button is released
- While pane is in motion, PRESS to stop pane motion

HOMING PROCEDURE

- PRESS AND HOLD BOTH BUTTONS for 10 seconds to start the Homing Procedure, continue to HOLD the buttons for 3 seconds after pane stops moving to confirm the Homing Procedure has been completed

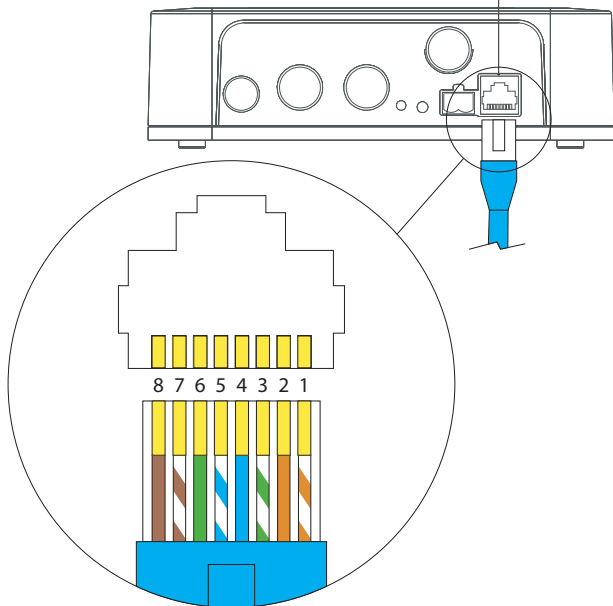
"DOWN" BUTTON

- MOMENTARY PRESS will operate the window AUTO DOWN
- PRESS AND HOLD for 2 seconds or more will operate the window until the button is released
- While pane is in motion, PRESS to stop pane motion

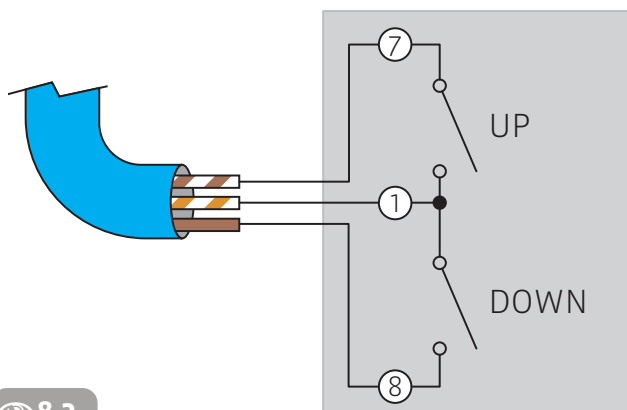
CONTROL OPTION 3: WIRING FOR COMPATIBILITY WITH BMS SYSTEMS

- ❑ Do not apply power to the control pins
- ❑ Up and down commands are sent to the window control box by bridging 2 wires for a period of time using a CAT5 cable via the RJ45 port.
- ❑ Up commands require pin 7 to be connected to pin 1. Down commands require pin 8 to be connected to pin 1.
- ❑ To initiate the window operation so that it moves fully, the selected control wires must be latched for 0.5-1.5 seconds.
- ❑ For incremental control of the window operation the control wires must be latched for a minimum of 2.5 seconds, keeping the control wires latched until the window is in the desired position. To determine how long to latch the wires to achieve the desired position the window will need to be installed and timed. The size of the window will affect the speed of the movement, and may be different for each window size.
- ❑ The control boxes can be programmed by Aneeta to have a specific limited opening at the time of order. Using this method would allow the BMS programming to latch for 0.5 to 1.5 seconds to move the pane to the desired restricted opening, however the window will not operate further than this point.
- ❑ The Aneeta Electric window cannot report it's open/closed status back to the BMS.
- ❑ BMS control can be used in conjunction with remote control, or bell press switching.
- ❑ Continuing to latch the control wires after the window has moved to its end position will not harm the window (ie keeping the UP control wires latched until the window needs to be operated DOWN), but will cause control conflicts if used in conjunction with other control methods.

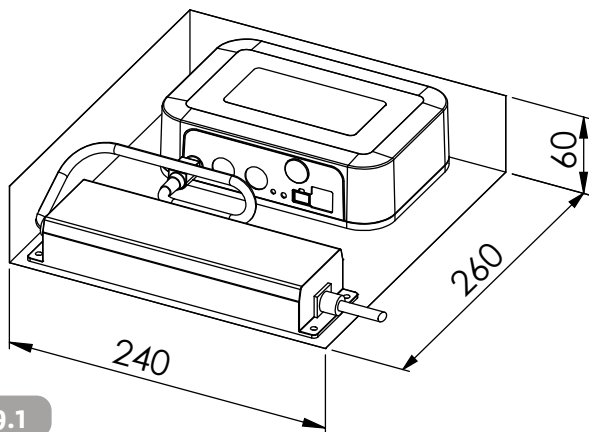
CONTROL INPUT
RJ45 CONNECTOR



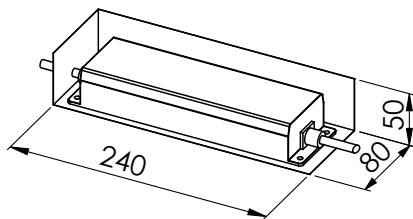
8.1



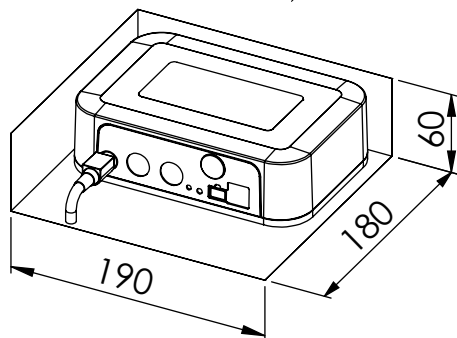
8.2



9.1



9.2



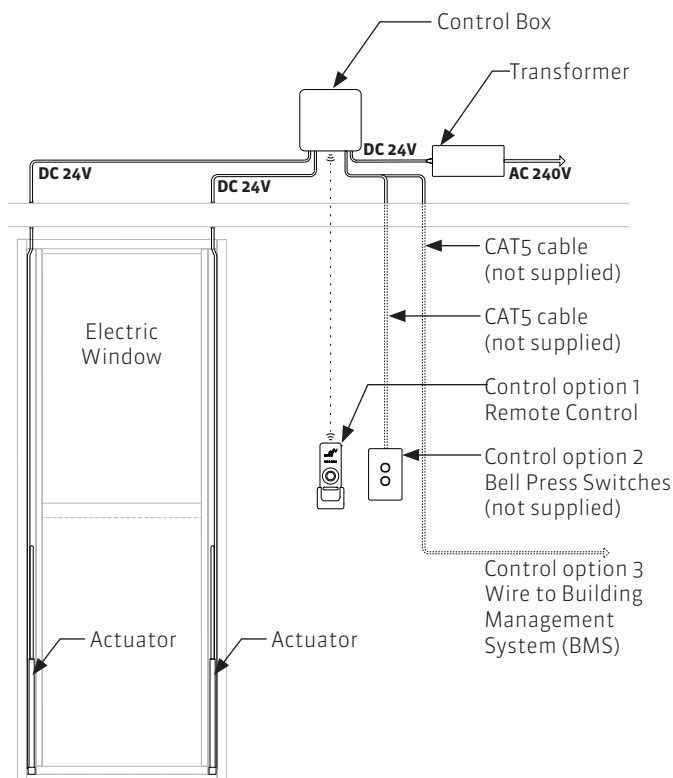
9.3

SPACE FOR INSTALLING COMPONENTS

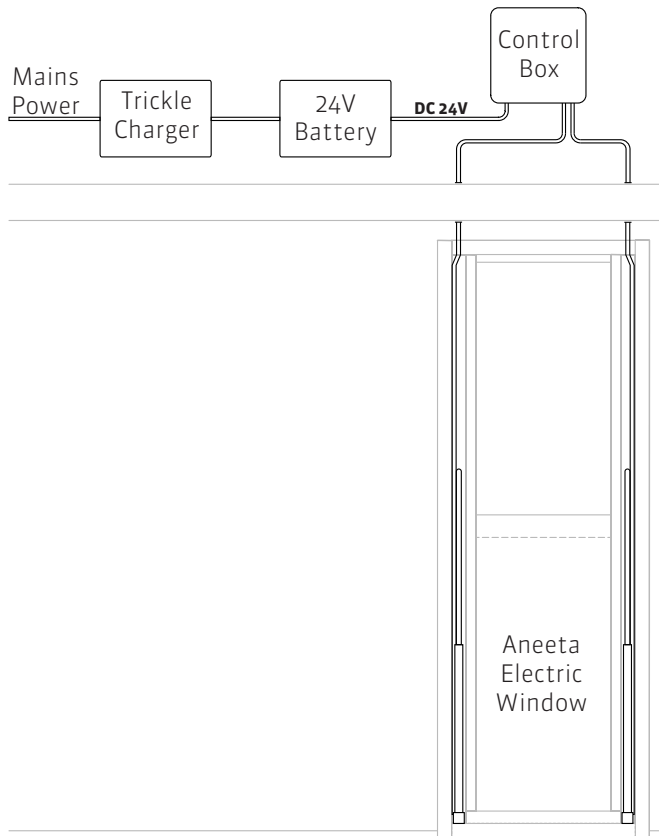
- ❑ Transformer and Control Box need to have space allocated where they can be installed.
- ❑ They can be installed together in a space of: 260 x 240 x 60mm, as shown 9.1
- ❑ They can also be installed in two separate places:
 - ❑ Transformer space: 240 x 80 x 50mm 9.2
 - ❑ Control Box space: 190 x 180 x 60mm 9.3

INSTALLATION

- ❑ Wiring emerges from the head of the Aneeta insert. (Check with the window fabricator for wire routing through their frames)
- ❑ DO NOT PULL ON WIRES EMERGING FROM WINDOW FRAME!
- ❑ Wire length can be adjusted by adding or subtracting supplied extension harnesses.
- ❑ Maximum recommended extension harness length is 15m to avoid voltage drops.
- ❑ When routing the cable, protect it from sharp edges and pinch points. After connecting all wires, confirm the cables are slack and no tension or force is exerted on the connectors.
- ❑ Consider the following for the Control Box and 24V Transformer installation:
 - Accessibility of both parts for servicing
 - Ability to power cycle the 24V Transformer.
 - Placement of Control Box to not impact remote control range
 - Distance of the Control Box to the installed window should not exceed 15m.



9.4



10.1

COMPATIBILITY WITH BATTERY BACKUP SYSTEMS

- ❑ Aneeta Electric Sashless Windows require power to be operated. If the window is powered by a transformer connected directly to mains power and the electricity grid fails then the windows cannot be opened or closed.
- ❑ Some buildings require that the windows are operable even when electricity is not available through the electricity grid.

Aneeta Electric Sashless Window power requirements:

- ❑ 24 Volts DC
- ❑ 6 Amps of operating current per window

Battery backup systems

- ❑ While the technology for battery backup systems is not complex, Aneeta does not supply battery backup systems.
- ❑ As batteries supply DC current, Aneeta Electric Sashless Windows can be operated directly from appropriately specified batteries.
- ❑ A simple battery backup system would involve batteries being trickle-charged from a mains power supplied battery charger.
- ❑ Each time the window is operated it draws power from the batteries and the trickle charge then re-charges the battery.
- ❑ If mains power is lost the window can be operated by drawing power from the batteries until the batteries run flat.
- ❑ When the mains power is restored the batteries will be re-charged.

MAINTENANCE

- ❑ Maintenance and replacement of some components can be readily carried out during the life of the window:
 - Remote Control
 - Extension Harnesses
 - Control Box
 - Transformer
- ❑ Replacement of actuators will require window disassembly by an Aneeta technician.
- ❑ See www.aneetawindows.com.au for care and maintenance instructions.

TROUBLESHOOTING

- ❑ In the event that the Aneeta Electric window actuators fall out of sync, the problem may be resolved by running the Homing Procedure. This will attempt to move the pane to a known position. Out of sync actuators may be identified by the following symptoms:
 - Pane is not hanging straight
 - Window is not operating with up/down buttons
 - Pane is not completely opening or closing to set limits