Automated Hardware

Application & Commissioning

2024.03 v1.2

alspec®
EVERYTHING ALUMINIUM & HARDWARE

INSTALLATION IMPLEMENTATION GUIDE

"It's not my job" - so whose is it?

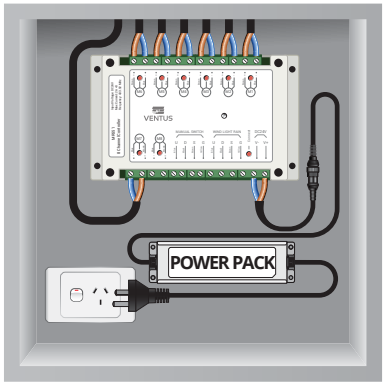
The Alspec plug & play system installation is divided into three parts:

1. Design and Specification (Electrical)

Responsibility: Architect, Designer, Draftsperson

In the planning, you need to consider cable lengths to the controller, window groups and zones.

The plans **should show the ideal central location** for the Access Point (via manhole or access panel) housing the Controller, Power Pack and GPO (***Figure 1.1***).



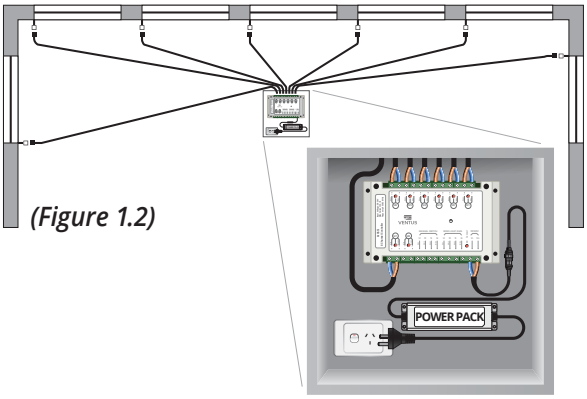
(Figure 1.1)

2. Construction Phase

Responsibility: Project Manager/Builder, Window Fabricator, Electrician

Each window/motor requires an individual 'plug & play' cable to be drawn through to an Access Point to be connected to a Controller ***(Figure 1.2)***.

This should be completed before plasterboard or similar is installed.



(Figure 1.2)

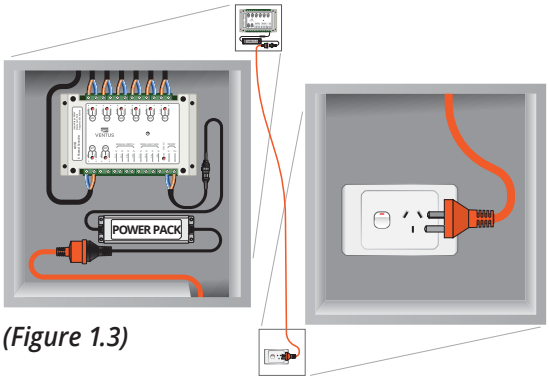
Where mains power has not been made available at the Access Point housing the Controller & Power Pack, an AC extension lead drawn to the Access Point location can become the GPO location ***(Figure 1.3)***.

The Access Point and Controller should be located in a central location close to the group of windows. ***(Figure 1.4)***.

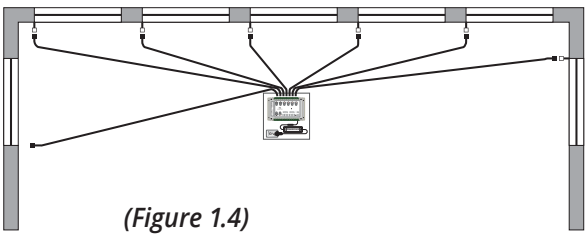
For extended distances between the window and the controller, plug & play extension cables are available if required ***(Figure 1.5)***.

NOTE:
All cable runs should be routed before the plasterboard is installed!!

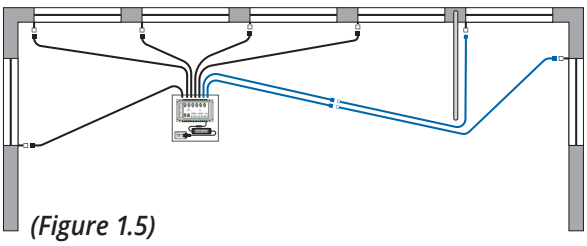
The transmitter and controller do not communicate through metal. For example, foil insulation or metal sheet will stop the remote signal. A clear path for the signal is required.



(Figure 1.3)



(Figure 1.4)

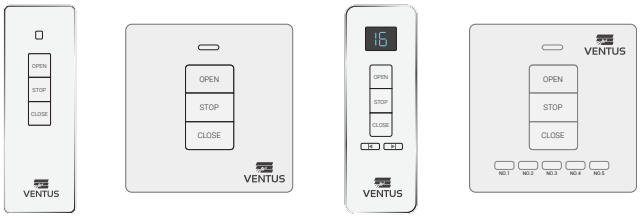


(Figure 1.5)

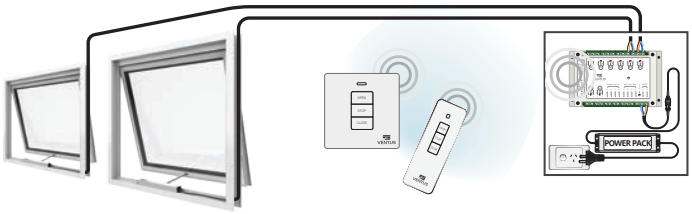
3. Commissioning

Responsibility: Either - Project Manager/Builder, Window Fabricator, Electrician

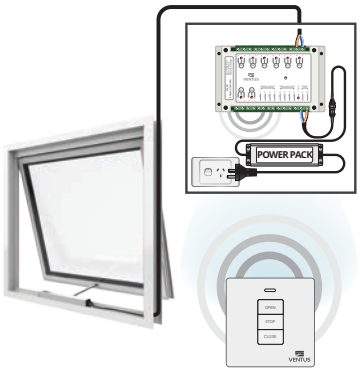
Once the system is connected, the pairing of one or more transmitters (remotes) to the controller needs to be completed.

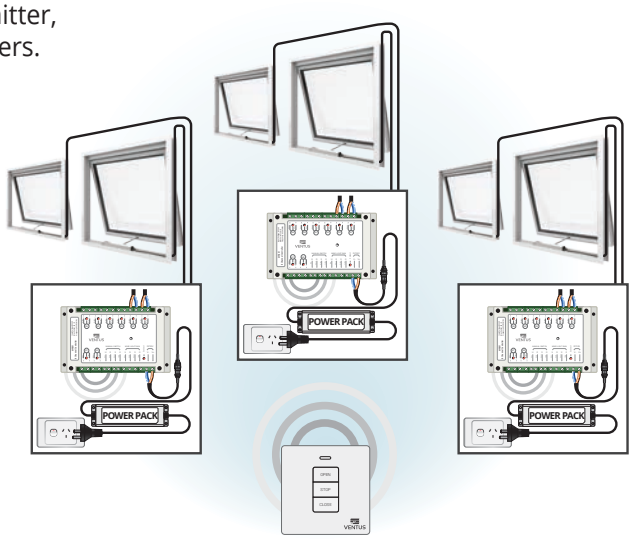


The pairing process allows control for individual windows or groups of windows from one or more transmitters.



The transmitter and controller can be configured in several ways: either via individual channel and individual transmitter, or groups of controllers paired to one or more transmitters.





See PAIRING & CONTROL for full instruction.

Ensure:

1. The access point for each group of windows containing the power supply and controller is located in the most central location.
2. An individual ‘plug & play’ cable is drawn from each window to the access point.
3. The automated windows can fully open with no interference. Example, external sunshade louvres.
4. The controller is not to be placed in a metal cabinet or electrical service box. Additionally, foil insulation and sheet metal can obstruct wireless transmitter signals.

PLANNING CONTROLLER, REMOTES & CABLING

Remember your cable lengths

On this page, we are looking at an example of a house plan and how different areas are broken into different zones operated from a controller.

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2. An individual 'plug & play' cable is drawn from each window to the access point.
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4. The controller is not to be placed in a metal cabinet or electrical service box. Additionally, foil insulation and sheet metal can obstruct wireless transmitter signals.

ZONE 1

Groups:

Master Bedroom

WT215 - 5-Channel wireless wall switch
RT1116 - 16-Channel wireless remote

Pairings:
- Channel 2 & 3
- Channel 4 & 5
- Channel 6
- Channels 2 - 5
- Channels 2 - 6

Bathroom

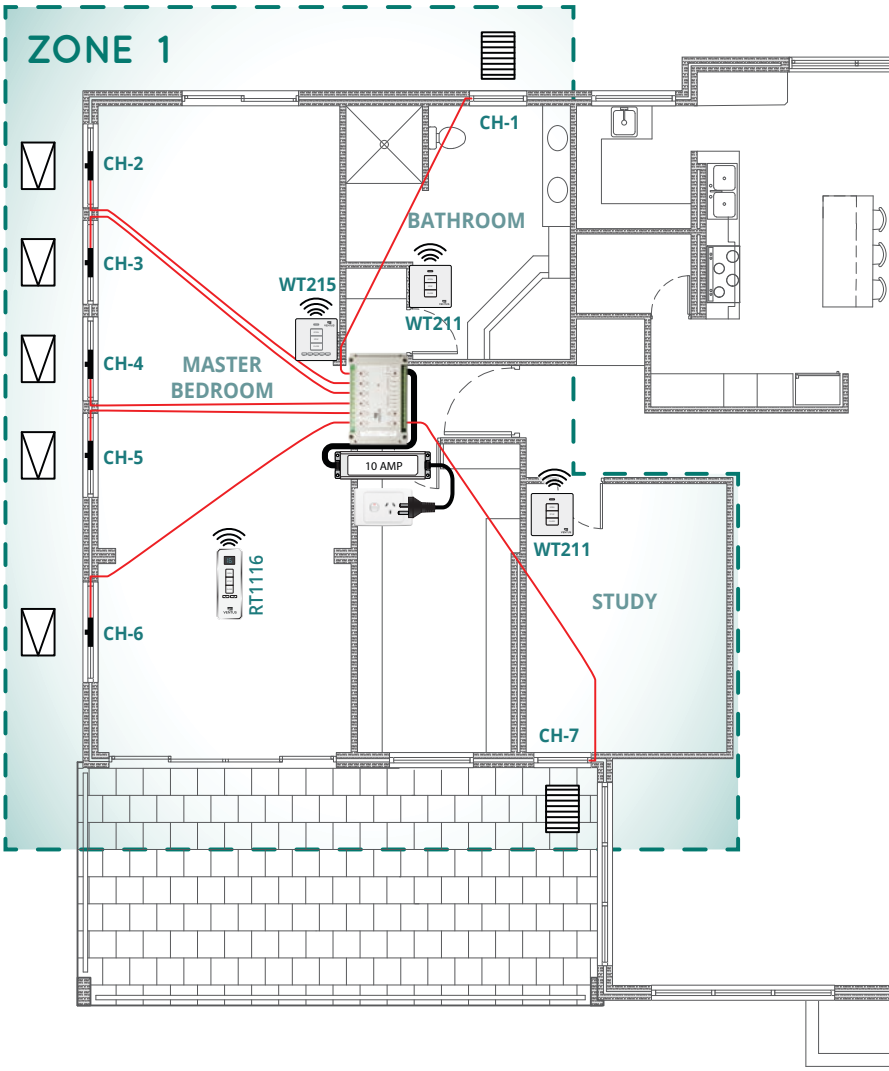
WT211 - 1-Channel wireless wall switch

Pairings: Channel 1

Study

WT211 - 1-Channel wireless wall switch

Pairings: Channel 7



ZONE 2

Groups:

WT215 - 5-Channel wireless wall switch
RT1116 - 16-Channel wireless remote

Living Room

Pairings:
- Channels 1 - 3
- Channel 4

Dining Room:

Pairings:
- Channel 5 & 6
- Channel 7

ZONE 3

Groups:

Bedroom 1

WT211 - 1-Channel wireless wall switch
RT111 - 1-Channel wireless remote
- Pairings: Channel 7 & 8 (Awning Chainwinders)

WT211 - 1-Channel wireless wall switch
- Pairings: Channel 3 (Louvre Window)

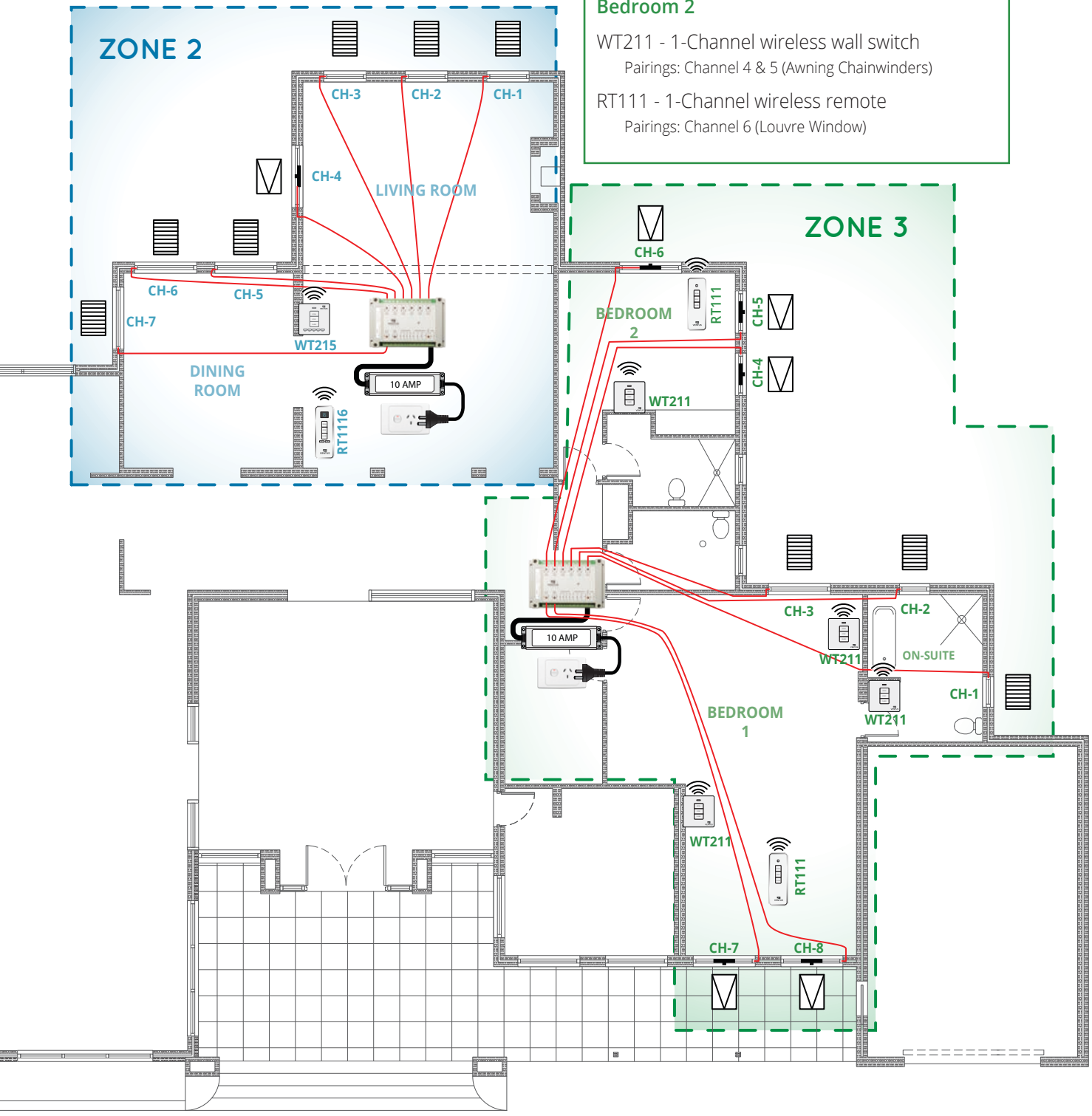
On-suite

WT211 - 1-Channel wireless wall switch
- Pairings: Channel 1 & 2 (Louvre Windows)

Bedroom 2

WT211 - 1-Channel wireless wall switch
- Pairings: Channel 4 & 5 (Awning Chainwinders)

RT111 - 1-Channel wireless remote
- Pairings: Channel 6 (Louvre Window)



COMMISSIONING GUIDE

Pairing, Signal Polarity

The following is a **simple quick start guide** for the basic functions between the MR551 8-Channel Controller and Transmitters.

When commencing the commissioning stage, first check that the transmitter has a battery. This can be observed by pressing any button and seeing a faint blue light on the face.

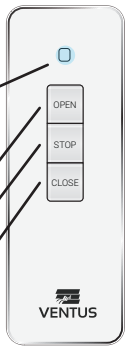
CONNECT COMMANDS:

Pair Channel

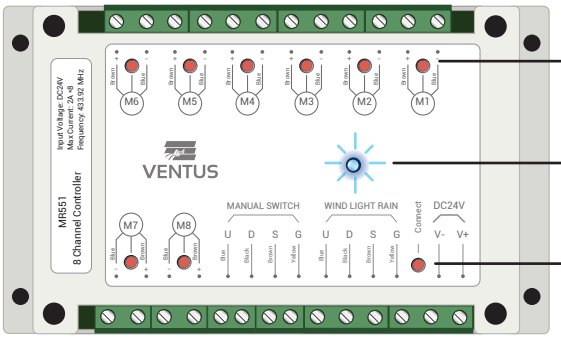
Reverse signal polarity

Clear Channel

Example Transmitter



MR551 - 8-Channel Controller



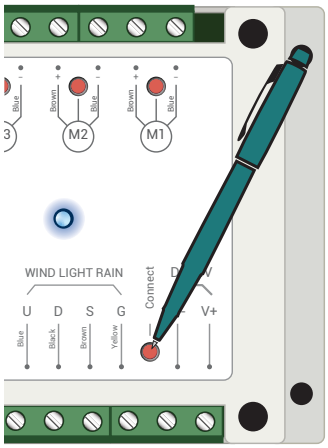
Individual channel connect. *(each channel has one)*

Blue LED

Master Connect *(all channels)*

PAIRING

How to pair all channels to (Master) a Transmitter

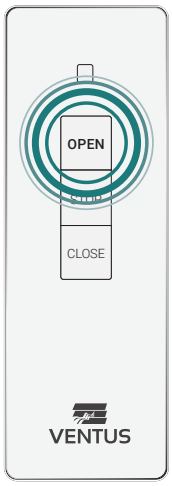


1. On the Controller, **press** the red "Connect" button for 5 seconds.

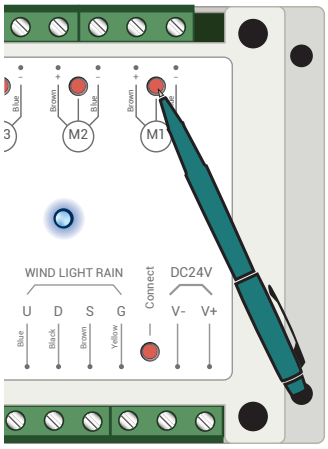
   A blue LED will blink to indicate it's ready to pair to a Transmitter.

2. On the Transmitter *(for multi-channel transmitters, select a channel first)*, **press** the OPEN button for 2 seconds.

   The controller's blue LED will flash x5 times in quick succession to acknowledge success.



How to pair individual channels to a Transmitter



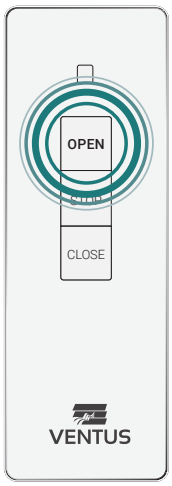
Complete this for each channel required.

1. On the Controller, **press** the individual channels red button for 5 seconds.

   A blue LED will blink to indicate it's ready to pair to a Transmitter.

2. On the Transmitter *(for multi-channel transmitters, select a channel first)*, **press** the OPEN button for 2 seconds.

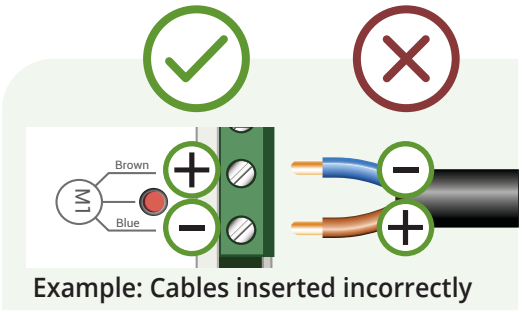
   The controller's blue LED will flash x5 times in quick succession to acknowledge success.



SIGNAL POLARITY

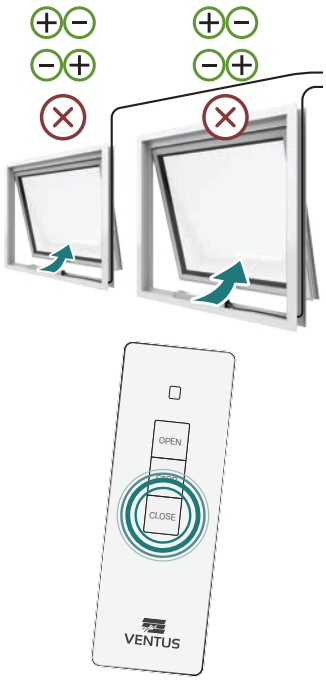
Or, 'my window opens when I press close'

The following is the basic function of reversing the signal polarity for when a window works opposite to a command. This happens if a motor cable has been installed incorrectly.



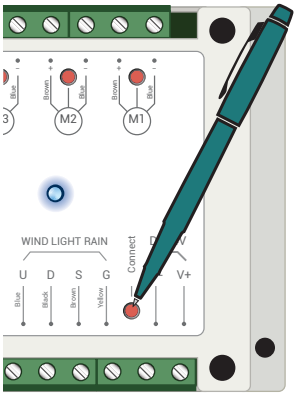
Example: Cables inserted incorrectly

How to reverse the direction of all windows



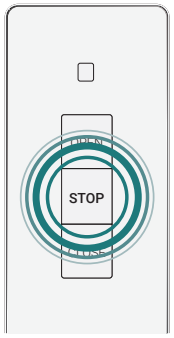
1. On the Controller, **press** the red "Connect" button for 5 seconds.

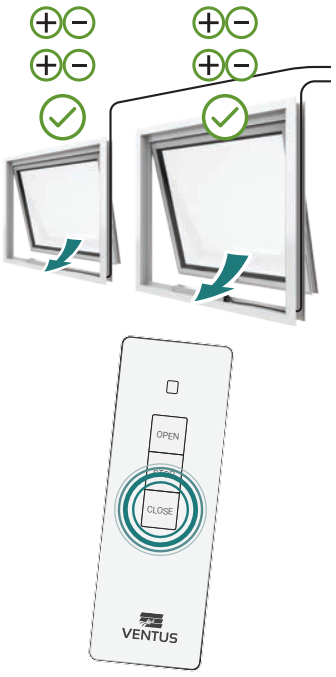
   A blue LED will blink to indicate it's ready to pair to a Transmitter.



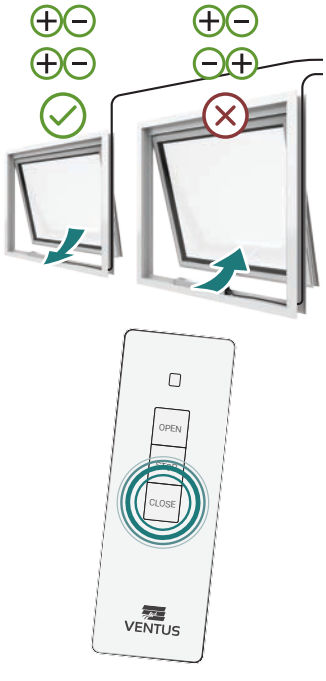
2. On the Transmitter *(for multi-channel transmitters, select a channel first)*, **press** the STOP button for 2 seconds.

   The controller's blue LED will flash x5 times in quick succession to acknowledge success.



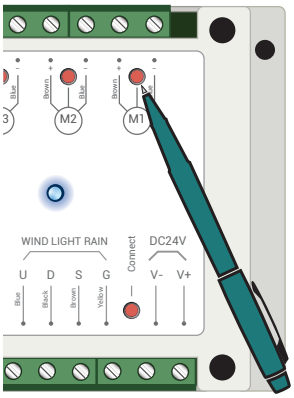


How to selectively reverse individual windows



1. On the Controller, **press** the individual channels red button for 5 seconds.

   A blue LED will blink to indicate it's ready to pair to a Transmitter.



2. On the Transmitter *(for multi-channel transmitters, select a channel first)*, **press** the STOP button for 2 seconds.

   The controller's blue LED will flash x5 times in quick succession to acknowledge success.

Established in 1974, Alspec is the market leaders in the design and distribution of innovative aluminium systems to the architectural, industrial and home improvement markets.

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