Powerlouvre™ Window, Powerlouvre Apptivate® Control Unit and Powerlouvre App Troubleshooting

Breezway Technical Bulletin

20 October 2021

General Powerlouvre Window checks:
- Operate the Powerlouvre Windows for at least 10 seconds as the Powerlouvre Motors can turn fora few seconds before the window begins to open and, similarly, can continue to turn for a few seconds after the window is fully closed.
- Check that nothing is obstructing the movement of the blades.
- Ensure that there is no excessive grime or salt built up on the window. If so, the window should bewashed.
- In extreme cold conditions the blades may freeze together. Defrost the blades before trying to open the window.

General Apptivate Control Unit problem solving:
- Power cycling (turning the power to the Apptivate Control Unit off, and then waiting 60 seconds before turning the power back on) will re-start the processors in the Apptivate Control Unit andthereby resolve many problems.
- If power cycling does not resolve an issue, a factory reset will restore the Apptivate Control Unit to its original settings.

The Apptivate Control Unit is not responding when touched:

- Touch within the outlines of the buttons.
- Touch with bare skin (eg it will not sense touches from a gloved hand).
- Turn off power (unplug transformer or turn off at distribution board) wait 60 seconds for charge todissipate, then turn power on again (plug transformer back in) to make the Apptivate Control Unit re-calibrate its touch sensitivity.
- WARNING: THIS CHECK SHOULD ONLY BE PERFORMED BY QUALIFIED SERVICE PERSONNEL AND ONLY AFTER CONFIRMING THAT THE APPTIVATE CONTROL UNIT HAS NOT BEEN MISTAKENLY CONNECTED TO 240V AC POWER. Unscrew the Apptivate Control Unit from the wall and check whether all 5 diagnostic LED lights are lit or flashing. There are3 lights on the bottom (indicating touch sensors and the Bluetooth module) 2 of which should be flashing, and 2 lights on the side (indicating that 24v DC power is being supplied). Note: these LED lights may be red, blue, or green.

The Apptivate Control Unit is not responding (or responding erratically) when touched, but does respondto the Powerlouvre App:

- There is a known incompatibility between a particular range of AC to DC transformers from Meanwell. These models output a type of electronic 'noise' which interferes with the touch sensorson the Apptivate Control Unit.
- The Meanwell transformers (generally outputting 1.67 or 3.75 amps) should be replaced withdifferent transformers.
- Breezway supplies both a 2.9 amp and a 6.25 amp transformer which are fully compatible with the Apptivate Control Unit.
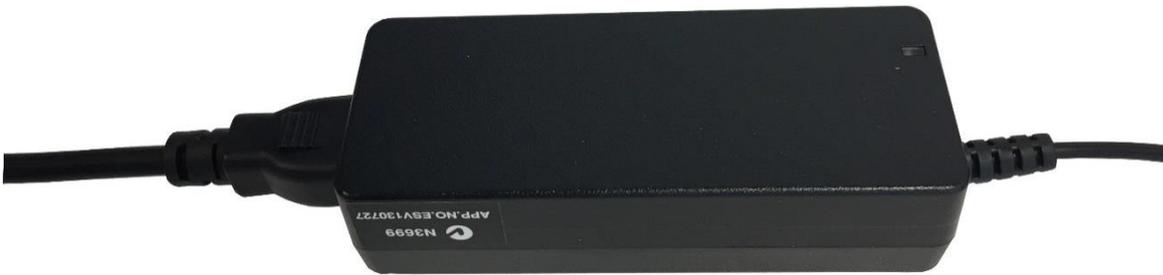
Meanwell 1.67 amp transformer – top view

Meanwell 1.67 amp transformer – bottom view

The Powerlouvre Windows open when I touch 'Close' and close when I touch 'Open':
- The wiring from the Apptivate Control Unit to the Powerlouvre windows has been incorrectlyconnected.
- After turning power off, swop the wires connected to the affected 'Motor Group' output from the Apptivate Control Unit (indicated below by the red and green arrows).


The Powerlouvre Windows do not open halfway when I touch 'Inter':
- The Apptivate Control Unit calibrates the 'Inter' position by timing how long it takes for theconnected Powerlouvre Motors to move from the fully open to the fully closed position.
- Perform a factory reset (see the end of this document for instructions on how to perform a factoryreset).
- Allow the Apptivate Control Unit to calibrate the 'Inter' position by fully opening and fully closing the connected Powerlouvre Windows a number of times:
  - o Touch 'Open' and allow the Apptivate Control Unit to fully open the connected Powerlouvre Windows.
  - o Touch 'Close' and allow the Apptivate Control Unit to fully close the connected Powerlouvre Windows.
  - o Touch 'Open' and again allow the Apptivate Control Unit to fully open the connected Powerlouvre Windows.
 - o Touch 'Close' and again allow the Apptivate Control Unit to fully close the connected Powerlouvre Windows.

The Powerlouvre Windows open or close without any buttons on the Apptivate Control Unit beingtouched:

- The Apptivate Control Unit may be operating the Powerlouvre Windows in response to pre-settimer events or in response to temperatures.
    - o If the LED lights on the 'Timer' or 'Temp' buttons are lit, then the Apptivate Control Unit isin a mode where it will operate the Powerlouvre Windows automatically.
    - o While automatically operating in response to a timer event or to a temperature reading, the'Timer' or 'Temp' LED light on the Apptivate Control Unit will flash. Eg: If a timer is set to open the Powerlouvre windows at 10:00am, the LED light on the 'Timer' button will be lit up until 10:00am at which point the 'Open' LED light will be lit and the 'Timer' LED will flash while the window opens. Once open, the 'Open' LED light will turn off and the 'Timer' LED light will stop flashing and will remain lit until the next timer event, or until the timer mode is turned off.
- Check the version of the firmware controlling the touch panel, newer firmware may resolve theissue.
    - o In the menu, touch the 'About' icon and then the 'Technical' button in the bottom rightcorner of the 'About' page.
    - o The version numbers of 4 parts of the hardware and firmware of each Apptivate ControlUnit are listed.
    - o Scroll to the Apptivate Control Unit which is operating without being touched and withoutbeing in an Auto Control mode and check the number in the 'STM8' line.
    - o If the STM8 number is lower than <00150902> for dual channel models, or lower than <00160607> for single channel models, the newer version of the STM8 firmware shouldresolve the problem. The Apptivate Control Unit should be returned to Breezway.

About icon   Technical button
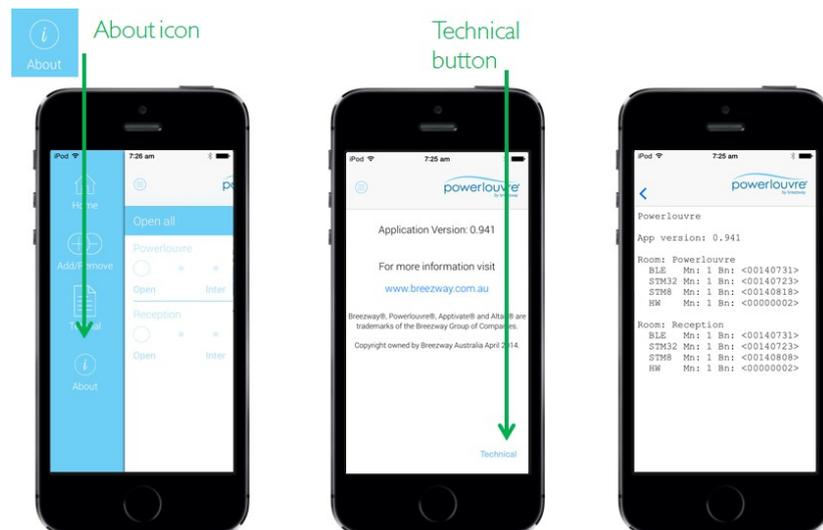
The Apptivate Control Unit is visible in the Powerlouvre App, but will not respond:

- Check that Bluetooth is switched on, on the smart device.
- Touch a button on the Apptivate Control Unit to confirm whether power is being delivered to theApptivate Control Unit. If power is being delivered the button light should light up when touched.
- Move closer to Apptivate Control Unit to bring smartphone within range.
- If multiple smartphones are associated to the Apptivate Control Unit, ensure that the PowerlouvreApp is not open on the other devices as a Bluetooth connection can only be maintained between the Apptivate Control Unit and a single Powerlouvre App at a given time.
- On the 'Home' screen of the Powerlouvre App, touch the screen and drag your finger down as ifscrolling through the Apptivate Control Units shown on the 'Home' screen. This will make the Powerlouvre App rescan for Apptivate Control Units associated to it.
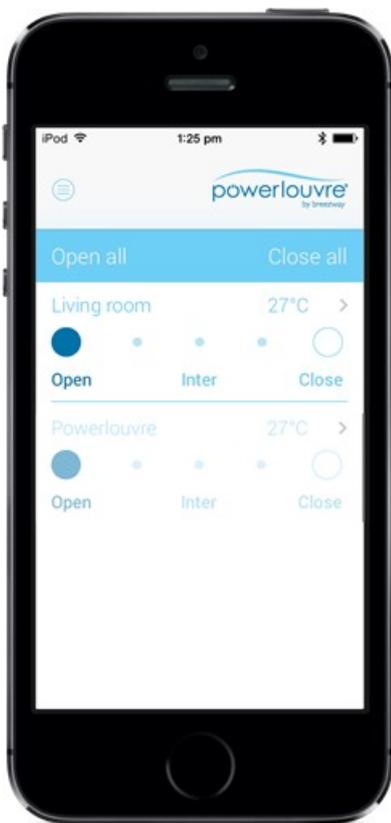
In range

Out of range

Home page

Bluetooth logo, normally visible near the top of the screen if turned on

I've forgotten the access code of an Apptivate Control Unit:

- From the 'Home' page of the Powerlouvre App, touch the name of the Powerlouvre Control Unitto get to the 'Detailed view', then touch the 'Settings' icon at the top of the screen. Re-set the Access Code.
- Perform a factory re-set (instructions provided later in this document).

Detailed view   Settings
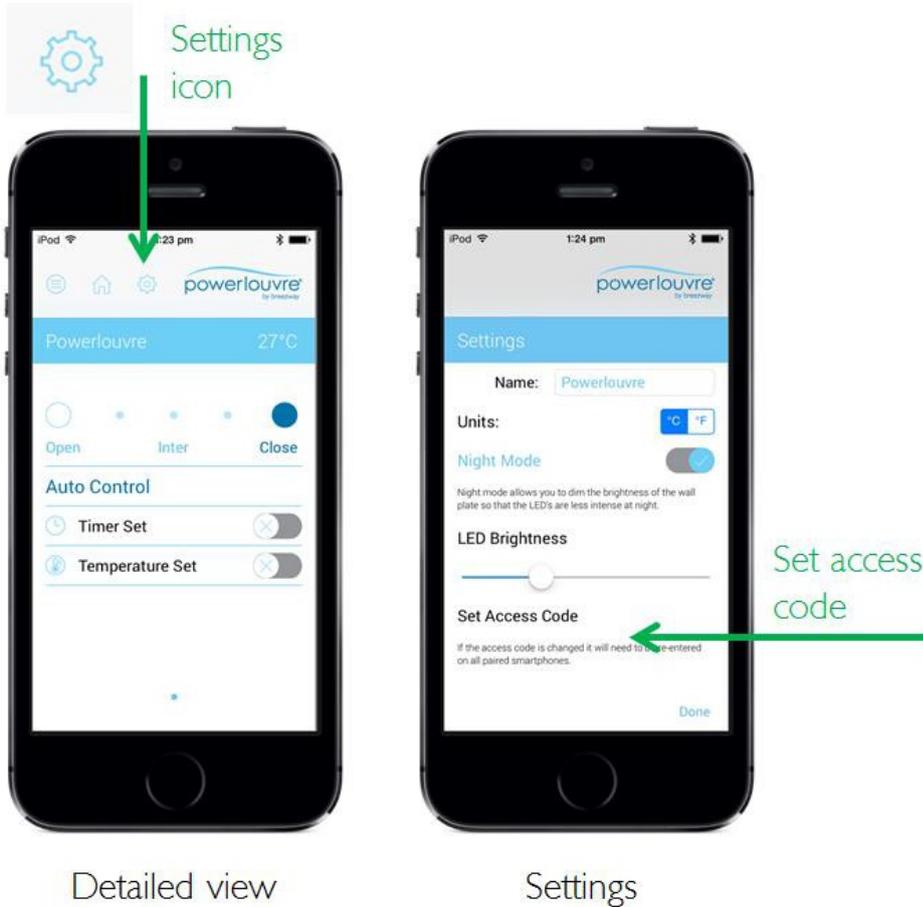
The Powerlouvre App crashes frequently:

- Ensure that the latest version of the Powerlouvre App is installed:
  - Visit the App Store (on Apple devices) or the Google Play Store (on Android devices) andcheck whether any updates are available.
  - On Android devices, an updated version of the Powerlouvre App was launched to theGoogle Play Store in June 2016, replacing the "Powerlouvre App". Ensure that the
   "Powerlouvre App 2.0" is installed.

The 'Timer' and/or 'Temp' LED lights on the Apptivate Control Unit are so bright that they interfere withmy sleep:

- From the 'Home' page, touch the name of the Apptivate Control Unit to get to the 'Detailed view',then touch the 'Settings' icon at the top of the screen. Turn the 'Sleep mode' on and use the slider to set the brightness of the LEDs. Night mode is automatically activated between 10pm and 7am.

Settings icon

Detailed view

Settings

Adjust LED brightness
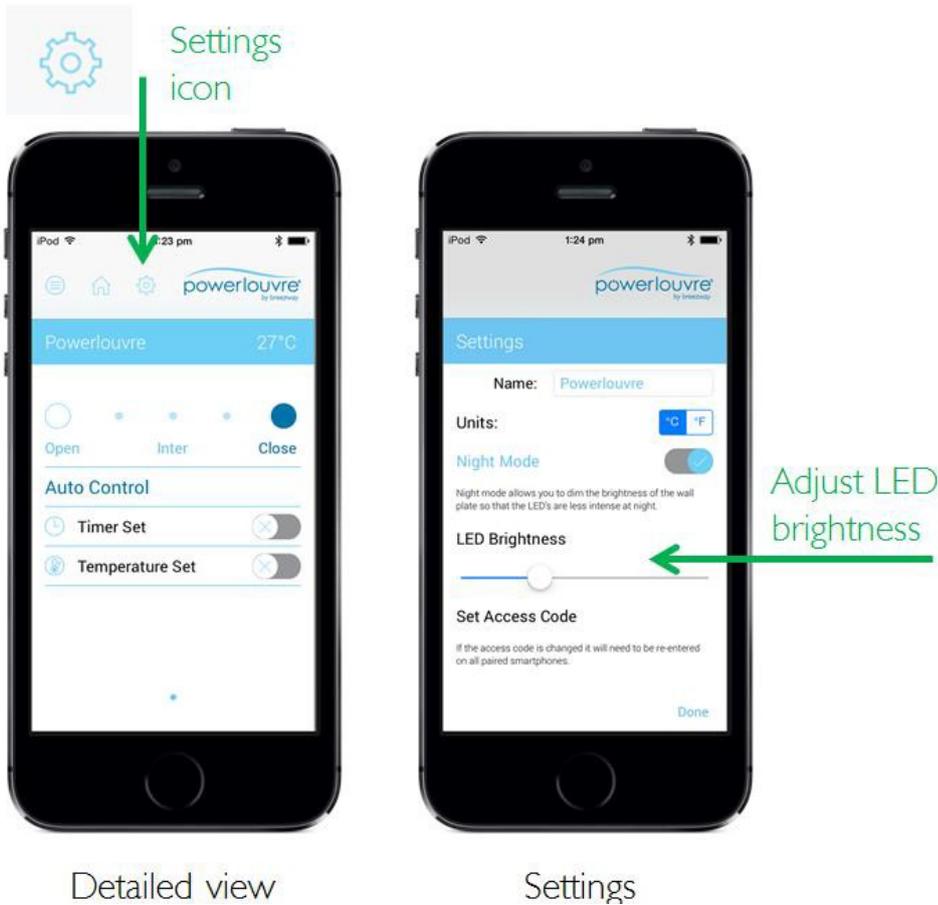
The window opens and closes frequently in the 'Temp' mode:
- From the 'Home' page, touch the name of the Apptivate Control Unit to get to the 'Detailed view', then touch the words 'Temperature Set' to set the temperature above which the windows will automatically be opened and the temperature below which the window will automatically be closed.When the windows open to allow cooling ventilation the indoor temp will drop by a few degrees, if the open and close temperatures are too close this will cause the windows to open and close frequently as the indoor temperature rises and falls and rises again. So ensure that the open and close temperatures are different by a few degrees.
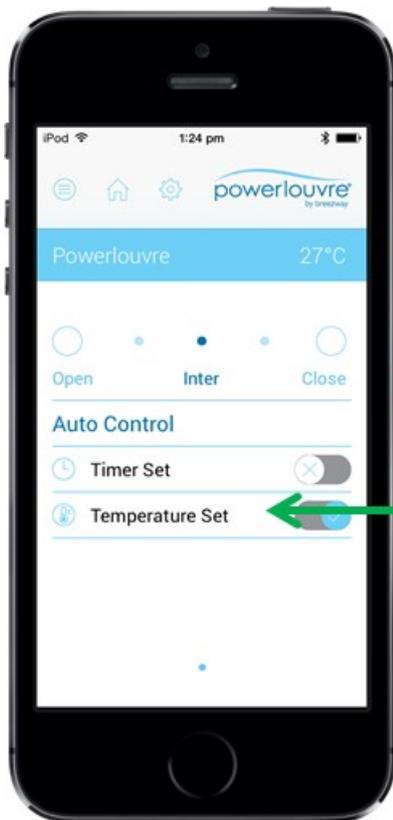
Detailed view

Temp settings

The timers are not operating at the times I set:

- If there has been an interruption to the power supplied to the Apptivate Control Unit (eg a powerfailure, or the safety switch on the distribution board has been tripped) the Apptivate Control Unit will be aware that its internal clock will not have been advancing during the period it had no powerand its timers will therefore be out of time.
- The Apptivate Control Unit will re-set its time from the first Powerlouvre App which connects to itand continue as normal.
- If the Apptivate Control Unit was in timer mode when power was lost, when power is restored thetimer mode will be deactivated. If the Timer button on the Apptivate Control Unit is touched it willflash to indicate that the Apptivate Control Unit's internal clock is out of time and will not allow Timer mode to be activated. Opening the Powerlouvre App to allow it to connect to the ApptivateControl Unit will re-set the time on the Apptivate Control Unit and return it to normal functioning.


The Apptivate Control Unit will not fully open (or fully close) the connected Powerlouvre Windows:

- The Apptivate Control Unit monitors the current being drawn by the connected Powerlouvre Windows. Every time the Powerlouvre Windows are opened or closed, the Apptivate Control Unitmeasures how long current is drawn for before the Powerlouvre Windows are stopped by touchinga button on the Apptivate Control Unit or by the Powerlouvre Windows reaching the fully open or fully closed position.
- If the Powerlouvre Windows are stopped before reaching the fully open or fully closed position (forexample by a physical obstruction), then the Apptivate Control Unit may stop the Powerlouvre Windows in the position in which it was previously stopped as it mistakenly believes that the Powerlouvre Window is fully open (or fully closed).
- A factory re-set must be performed.

Factory re-set:

- A factory reset will delete all associations with Powerlouvre Apps, timer events, customisedtemperature settings and customised naming of the Apptivate Control Unit.
- Remove the front cover of the Apptivate Control Unit, use straightened paperclip to push the re-setbutton (bottom left, near screw head). When pushed, the reset button will cause all lights on the Apptivate Control Unit to light up. Push and hold the reset button until all the LED lights on the ACU begin flashing to indicate that the factory reset has been completed. Snap the cover plate backon. Wait 60 seconds for the touch sensitivity re-calibration to be completed.
- If the Access hole to the factory reset button is blocked, the factory reset button can be accessed byremoving the Apptivate Control Unit from the wall. NOTE: THIS SHOULD ONLY BE PERFORMED BY QUALIFIED SERVICE PERSONNEL AND ONLY AFTER CONFIRMING THATTHE APPTIVATE CONTROL UNIT HAS NOT BEEN MISTAKENLY CONNECTED TO 240V AC POWER.
- After a factory reset has been performed the Powerlouvre Window should be fully opened and fullyclosed a number of times to re-calibrate the fully open, fully closed and intermediate open positions.

Access hole to factory re-set button

Factory re-set button
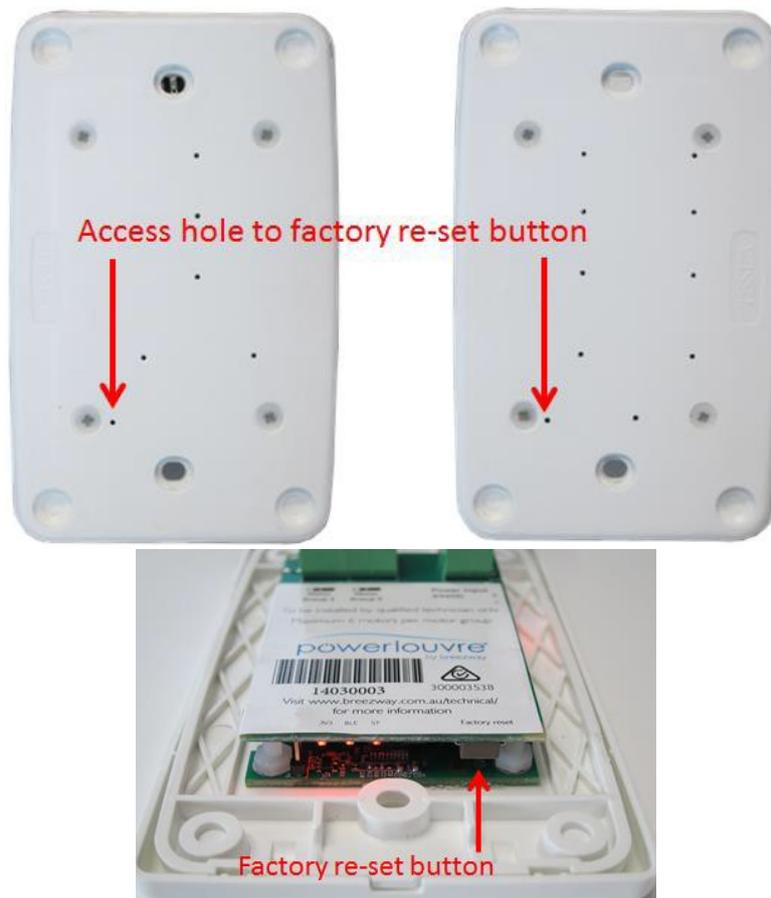
The Apptivate Control Unit seems fine, but the Powerlouvre Window does not operate:

- The Apptivate Control Unit distributes power to the attached Powerlouvre Windows.
- Check for breaks in the wiring between the Apptivate Control Unit and the attached PowerlouvreWindows.
- If some bays within a Powerlouvre Window operate and some do not, please contact the supplierof the window to check for faults in the internal wiring of the window.