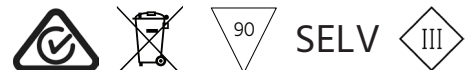


User Manual



The PosiTouch is a capacitive touch sensitive DALI controller on a standard Clipsal Saturn wall plate. It provides simple touch to dim and colour temperature control of DALI luminaires and can be configured to use address units by broadcast, group or short address.

The PosiTouch is a lighting control system that provides users with full DALI control of multiple luminaires through a stylish wall-mounted panel. A single device is capable of issuing electronic commands to luminaires individually or in groups, allowing them to be set to certain scenes, turned on/off and dimmed up/down. Designed under the premise that advanced functionality is only as useful as it is usable, Digilin developed the touch controller to be as intuitive and user-friendly as possible.

The PosiTouch uses only DALI 1 commands. This makes it compatible with DALI 1 and DALI 2 drive gear.

Features

- Intuitive Interface
- Pre-programmed or User programmable on site
- Full DALI Universe - accepts DT8 commands
- Designed & Manufactured in Australia
- 5 year Warranty

Overview

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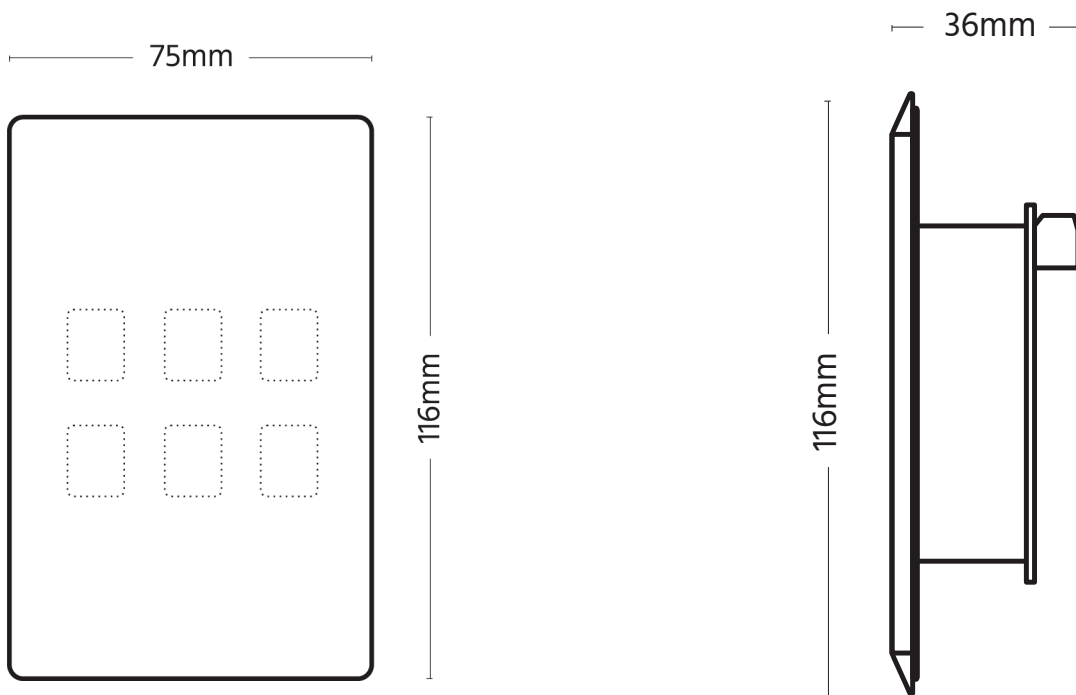
CAUTION

- Install in a dry sheltered position.
- Interior use only.
- Do not install where water or high humidity may be present without further protection.
- Ensure adequate ventilation.
- Installation should only be performed by a qualified professional.
- Install in accordance with all appropriate wiring standards.
- Never connect a LED luminaire to a driver that is powered. Doing so may result in damage to the LED.
- Always make sure the output voltage range and output current of the LED driver match the requirements of the LED luminaire. Failure to do so may result in damage to both the driver and the luminaire.
- Always turn off power before working on luminaire and driver.
- For optimal EMC performance, keep wiring as short as possible.
- Installation should make provision for accessibility and maintenance.
- DALI is not SELV and installation must therefore follow appropriate standards.

Specifications

Physical

Dimensions	75mm x 116mm x 36mm
Protrusion into Wall	26mm
Weight	105g



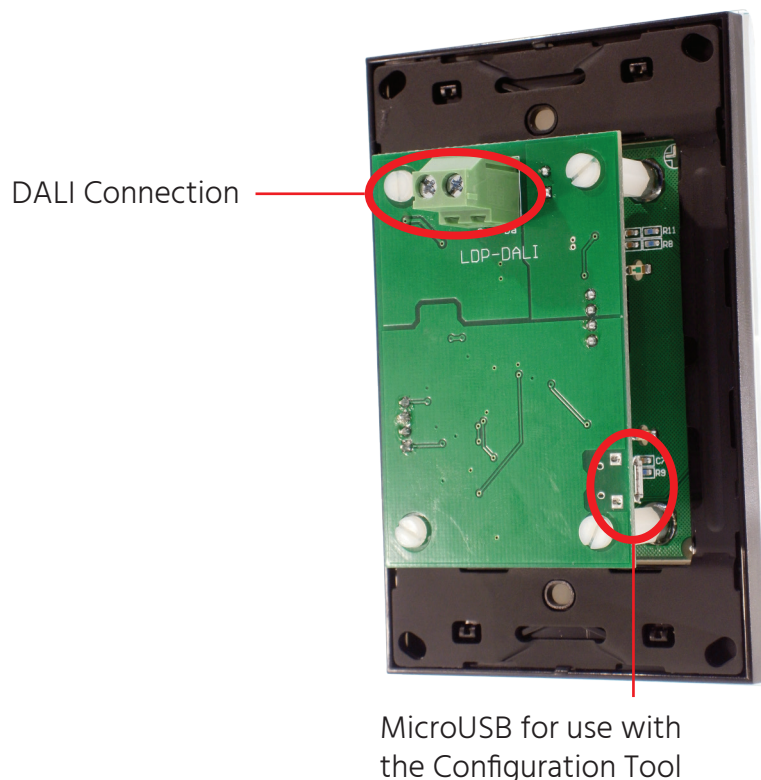
Inputs

Voltage (as per IEC62386)	9-22.5V
Current	10mA
Communications	DALI (IEC62386)

Installation

Prior to installation of the PosiTouch, it should be configured using the PosiTouch Configuration Tool. This configures the DALI commands associated with each button.

Installation merely requires the connection of the 2 DALI wires. The PosiTouch draws power from the DALI bus (note that a DALI installation requires that there be a DALI bus power supply installed on the network), so there is nothing further to connect. Refer to Appendix B. DALI Networking Basics for further information regarding DALI wiring.



Operation

The PosiTouch is operated simply by touching the buttons marked on the wall plate. When a button is active, its corresponding LED will turn on and the associated action will trigger accordingly.

Action	Description
Short Press	A short press action occurs when a button is pressed and released in under 0.3s.
Long Press	A long press action occurs when a button is pressed for longer than 0.3s. When some DALI commands are assigned to a long press they are repeated until the button is released.
Release	A release action occurs when the button is released following a long press.
Alternate Functions	Each button can have an alternate function set for each action. When set, each activity on the button will swap between the primary and alternate functions.

Default Configuration

The PosiTouch comes configured by default for basic on/off and dimming control, with the configuration of fade rate and fade time disabled.

Button	Address	Default Action					
		Short Press	Long Press	Release	Short Press Alternate	Long Press Alternate	Release Alternate
1	Broadcast	Go to 100%	Go to 100%	Stop Dim	Disabled	Disabled	Disabled
2	Broadcast	Go to 75%	Go to 75%	Disabled	Disabled	Disabled	Disabled
3	Broadcast	Go to 50%	Go to 50%	Disabled	Disabled	Disabled	Disabled
4	Broadcast	Go to 0%	Go to 0%	Stop Dim	Disabled	Disabled	Disabled
5	Broadcast	Go to 25%	Go to 25%	Disabled	Disabled	Disabled	Disabled
6	Broadcast	Go to 10%	Go to 10%	Disabled	Disabled	Disabled	Disabled

Fade Configuration

The PosiTouch can be configured to program the fade times of all units on the bus. To do this, press buttons 1 and 6 (top left and bottom right) simultaneously.

Once the lights turn off and back on, the fades have been configured to the set values.

Inactive State

The inactive state of the indicator LEDs can be swapped between off (default) and dimmed (25%).

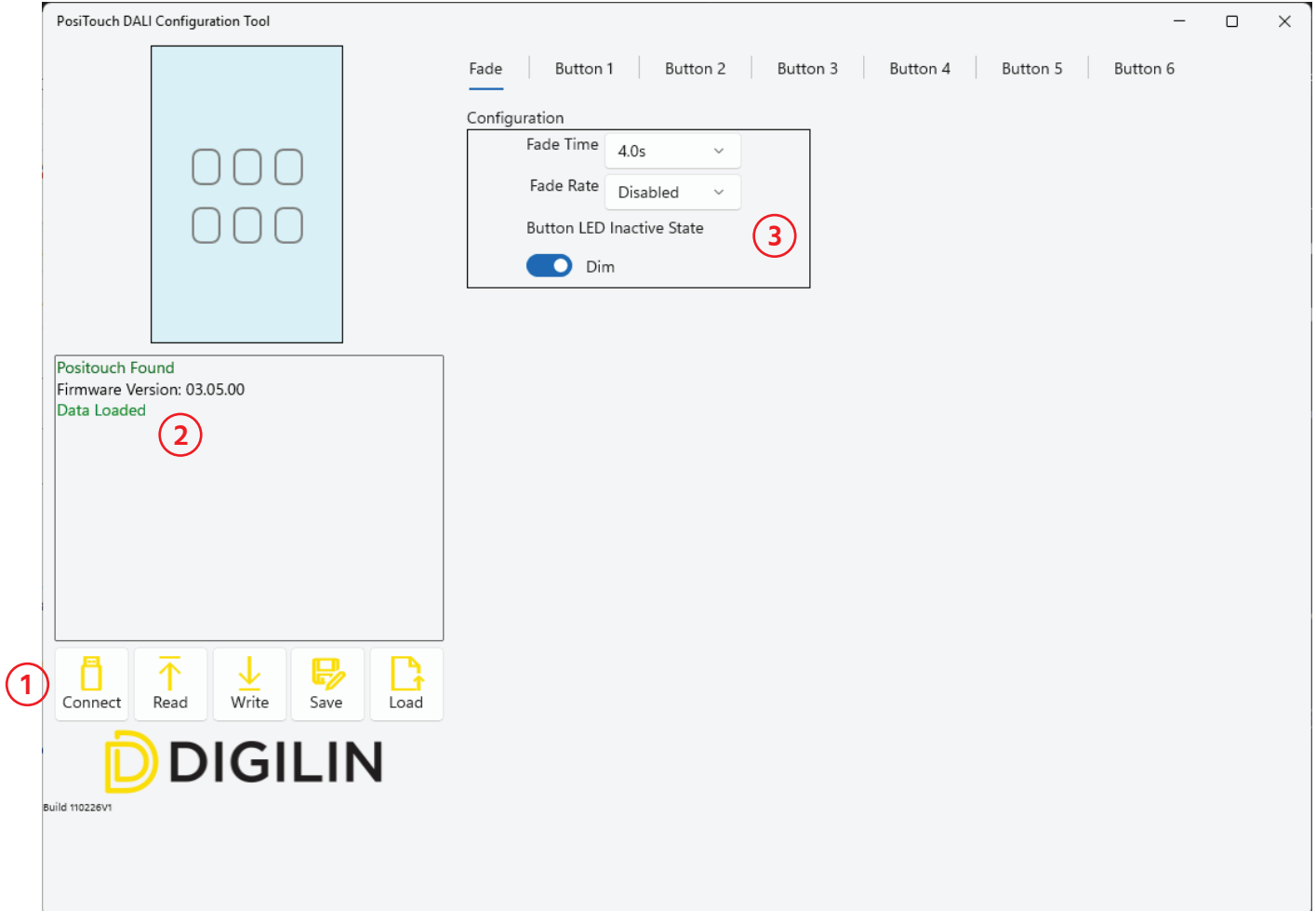
Multi-Master

The PosiTouch can operate in what is referred to as Multi-Master, meaning there can be more than one controller on the DALI network (so long as they also operate in Multi-Master).

Note: The multi-master operation is not compatible with the DALI 2 Application Controller.

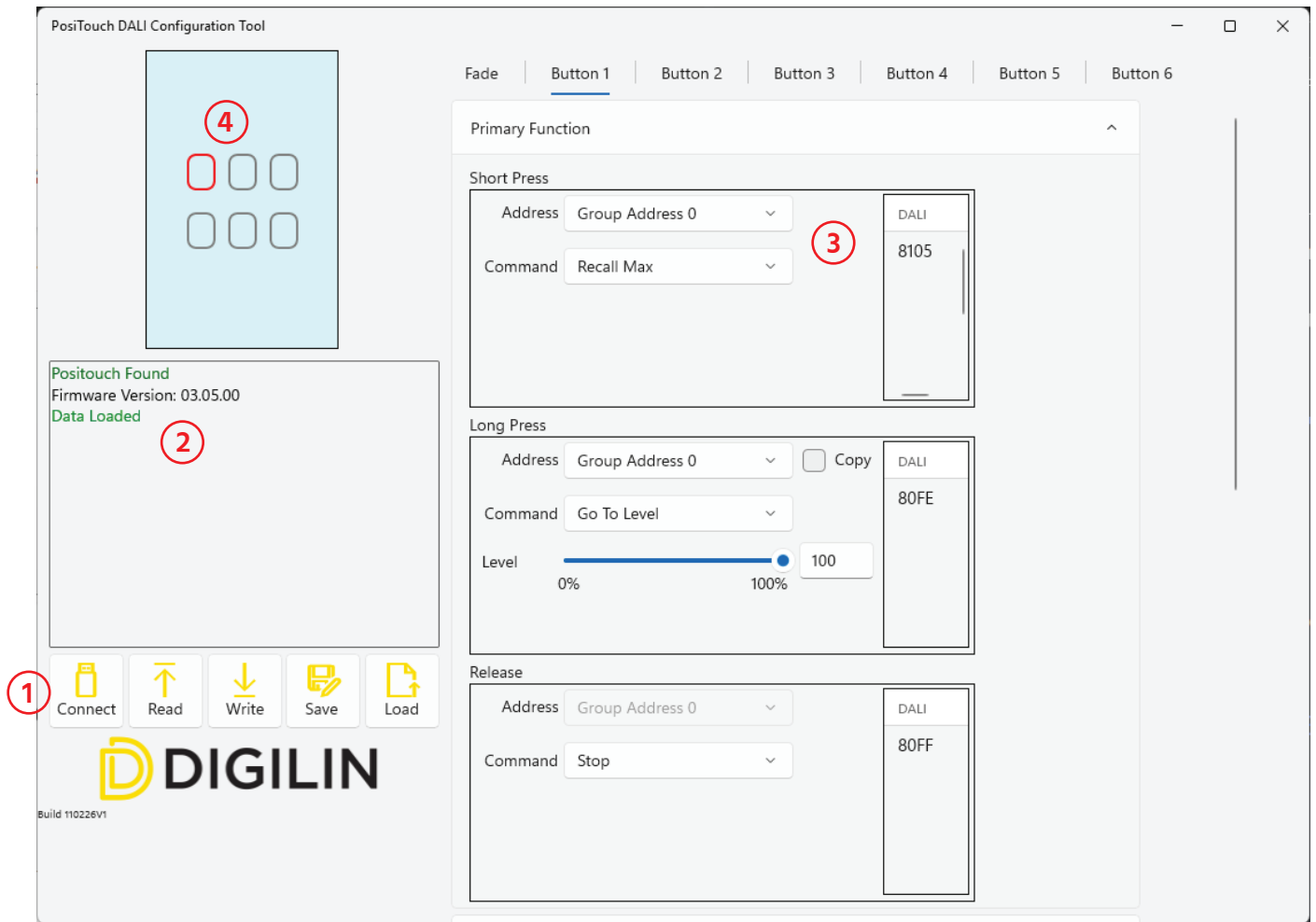
Appendix A - Using the PosiTouch Configuration Tool

Fade



1	Operation Buttons	<p>Connect - Detects a connected PosiTouch</p> <p>Read - Reads settings from the connected PosiTouch</p> <p>Write - Writes the settings to the connected PosiTouch</p> <p>Save - Saves the configuration files for use at a later point</p> <p>Load - Opens a previously saved configuration file</p>
2	Status Window	Displays messages during operation
3	Settings Window	Displays the possible settings for the selected action

The Interface



1	Operation Buttons	<p>Connect - Detects a connected PosiTouch</p> <p>Read - Reads settings from the connected PosiTouch</p> <p>Write - Writes the settings to the connected PosiTouch</p> <p>Save - Saves the configuration files for use at a later point</p> <p>Load - Opens a previously saved configuration file</p>
2	Status Window	Displays messages during operation
3	Settings Window	Displays the possible settings for the selected action
4	Selected Button	Shows the button that is currently being configured. You can also click on the button to select it.

Configuring the PosiTouch

1. Connect the PosiTouch to the computer using the MicroUSB cable. No other connections are required; the PosiTouch will be powered via the USB.
2. Open the PosiTouch Configuration Tool.
3. Press the Connect button. It should detect the connected PosiTouch. If it fails to, check the USB cable is connected at both ends and press the Connect button again.
4. Press the Read button (optional). This will read the settings currently stored on the PosiTouch.
5. Change the action for each of the buttons to the desired setup.
6. Press the Write button.

Button

Each button allows for the separate configuration of 6 actions (short press, long press, release and alternate). Depending on the selected command, different options become available. The command list is shown below.

- Disabled
- Off
- Go to Level
- Dim Up
- Dim Down
- Step Up
- Step Down
- Recall Scene
- Recall Max
- Recall Min
- Set Colour Temperature
- Colour Temperature Warmer
- Colour Temperature Cooler
- Stop

Alternatively, if the command is set to “Custom Sequence”, the command list can then be edited to a required sequence.

DALI Addressing

The Configuration Tool allows you to set an address that the commands are set to for each button. By default, each button is set to Broadcast, which means all units on the network will respond.

To use any of the other addresses you will need to commission the units to have the addresses and groups programmed.

Fade

This section allows the configuration of the DALI fade rate and fade time. The PosiTouch will allow setting these to the options available in the DALI 1 standard. To transmit the setting, long press buttons 1 and 6 simultaneously.

Dimming Options

Within the DALI standard there are 3 possible methods to dim a luminaire.

Stop Dim

Any dimming command can be halted through the use of this command. By using it in combination with the Go to Level Command (which uses DALI Fade Time), a reliable fade can be achieved.

Button Action	To Dim Up	To Dim Down
Long Press	Go to Level	Go to Level
Level	100%	0%
Release	Stop Dim	Stop Dim

Dim Up/Down

These commands will dim the level for a period of 200ms at the rate specified in DALI Fade Rate. They cannot dim to off, nor can they dim from off. When these commands are assigned to a long press, the PosiTouch will repeat them every 200ms while the button is pressed.

Button Action	To Dim Up	To Dim Down
Long Press	Dim Up	Dim Down

Step Up/Down

These commands will cause the output to change by a single step. When these commands are assigned to a long press, the PosiTouch will repeat them every 40ms. The dimming rate is not adjustable.

Button Action	To Dim Up	To Dim Down
Long Press	Step Up	Step Down

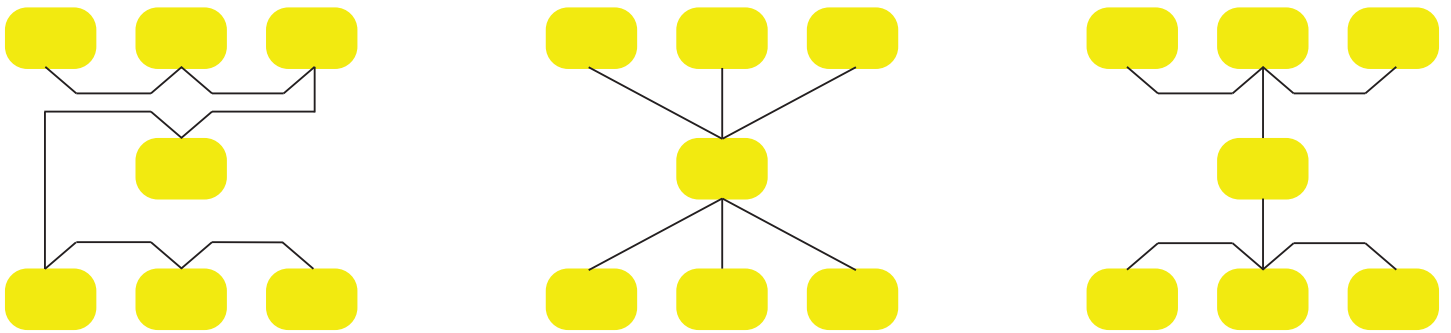
Appendix B - DALI Networking Basics

DALI is very flexible in its network configuration, to the point that DALI control lines and mains voltage supply lines can be wired together.

A DALI control line input to a ballast is polarity insensitive, meaning there is no + or -.

A DALI network can consist of up to 64 ballasts.

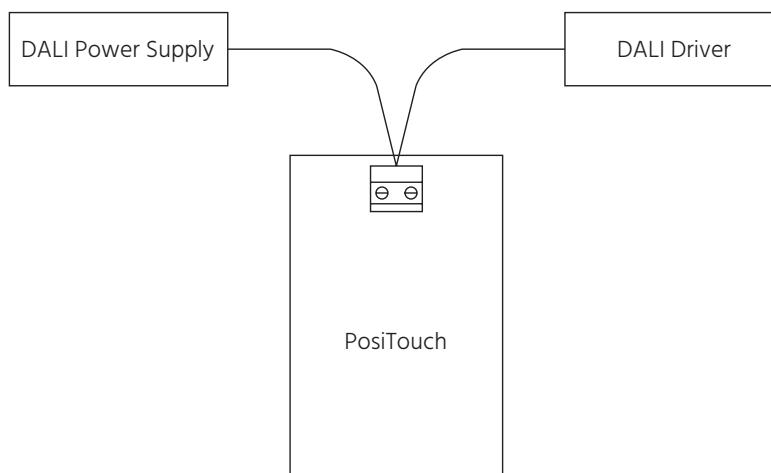
Wiring of the DALI network can be almost any fashion, be it daisy chain, star or branch, as per the below figure.



Cable sizes should follow the guide given in the table below.

Lead Length	Minimum Lead Diameter
Up to 100m	0.5mm ²
100 - 150m	0.75mm ²
150 - 300m	1.5mm ²

Appendix B - Wiring Diagram



For technical information or support, call us on +617 3899 1267 or refer to www.digilin.com.au.