Important Safety Warnings

Load replacement

- When changing any failed lamps, mains power to the lighting circuits shall be isolated at the circuit breaker, to reduce the potential risk of electrocution; relying on the adjacent switch being in the OFF position is not considered sufficient isolation.

Low Reading During Insulation breakdown test

- Must be carried out by an electrician – the dimmer is a solid-state device, and a low reading may be observed when conducting insulation breakdown testing on the lighting circuit.

Cleaning

- Clean the face of the dimmer with only a damp cloth - do not use solvent or abrasive cleaners.

Troubleshooting

Dimmers and lights do not turn on

- Ensure that the circuit has power by checking the lighting circuit breaker
- Ensure the lamp(s) are not damaged or broken
- Check that the dimmer is turned up from minimum

Note: the indicator LED can be used to verify that the circuit has power. If the indicator LED is illuminated but the load does not illuminate, it may indicate there is a fault with the load, the dimmer is incorrectly wired, or the load is incompatible.

Lights don't turn on, or turn off by themselves

- The DM250X will automatically reduce the load brightness setting if it is overloaded or an incompatible load is connected to protect itself.
- Check that the lamp(s) are dimmable.

Lights Flicker at random/change brightness

- Poor Mains stability, interference from inductive loads - fans, heaters etc.
- Utility ripple signals injected onto the mains.

Lights stay on at full brightness or continuously flicker

- The lamps may not be dimmable, check with manufacturer.

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INSTALLATION GUIDE

Trailing Edge Dimmer (Externally switched)
DM250X
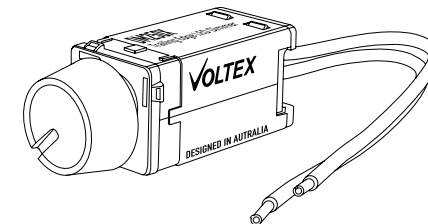

STOP — This product should only be installed by a licenced electrician in accordance with all the requirements of AS/NZS 3000 (current edition) and other relevant Standards and Regulations.

Technical specifications

Operating Voltage	230 Vac 50 Hz
Ambient Temperature Range	0-50˚ C
Maximum Load	250W
Minimum Load	2W
Switching	Requires an external switch for on/off operation
Compatible loads	See table below
Non-compatible loads	See table below
Dimmer Protection	Thermal Overload protection (conduction angle wind-back) Over Current (short circuit) protection (resettable) Over Voltage protection (resettable)
Certified Standards	AS/NZS 60669.2.1, CISPR15

Load Compatibility

Load Type	Load Symbol	Maximum Load
Dimmable LED downlights / lamps[1]		250W
Incandescent / 240V Halogen Lamps		250W
Low Voltage Halogen (Dichroic) Lighting with Iron-core Transformers[2]		250W
Low Voltage Halogen (Dichroic) Lighting with Electronic Transformers[2]		250W
Dimmable Compact Fluorescent Lamps[3]		150W
Motors / Fans		Not Compatible
Non-dimmable Fluorescent / Compact Fluorescent Lamps		Not Compatible

1. Different brands of dimmable LED lamps/drivers have different dimming capabilities. The DM250X dimmer has been designed to adapt to a wide range of dimmable LED lamps/drivers. However, Voltex cannot guarantee compatibility with all LED lamps/drivers marketed as being compatible with trailing edge dimmers.
2. Compatible with Atco & Clipsal transformers when loaded to at least 75% of their rated output.
3. Refer to lamp manufacturer's guidelines.

De-rating

In high ambient temperatures, the maximum load rating is reduced according to the table below.

AMBIENT TEMPERATURE	MAXIMUM LOAD
25°C	100%
50°C	75%

If multiple dimmers are installed in a wall plate, the maximum load rating is reduced according to the table below.

NUMBER OF DIMMERS	MAXIMUM LOAD PER DIMMER
1	100%
2	75%
3	55%
4	40%
5	35%

Ripple Signals

Some electricity utilities use communication signals injected onto power lines to remotely control devices such as off-peak water services. These signals are commonly found in parts of NSW and South East QLD. In areas where these 'ripple signals' are injected onto the mains supply, they may cause LED lights connected to dimmers to flicker intermittently.

Voltex dimmers have been designed to compensate for a nominal level of ripple signals. However, in areas where a high ripple signal amplitude is present, they can impact on the dimmer's ability to remove these signals.
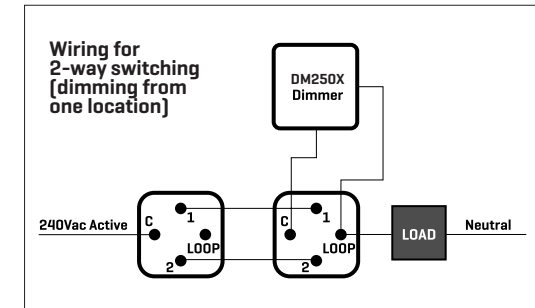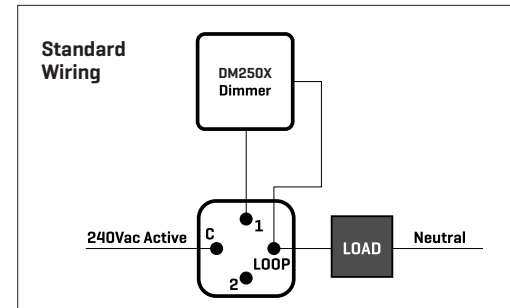
For more information regarding ripple signals, please contact the local electricity supplier.

Warranty

Voltex will not accept any warranty claims when the Voltex DM250X dimmer is used with non-Voltex branded lighting products. The DM250X dimmer is compatible with many leading brands of dimmable lighting products, however Voltex recommends checking compatibility between the dimmer and all 3rd party lamps/lights or contact the Voltex technical support team to discuss suitability.

Installation

- The DM250X must be installed as part of a fixed wiring installation
- Only one dimmer can be connected to the lighting load
- The dimmer is not polarised
- The dimmer must be mounted in a compliant face plate and in conjunction with an approved wall switch with terminals
- The dimmer must comply with standard requirements of end product when installed

1. Disconnect power to the circuit
2. Fit the DM250X Dimmer and a separate switch mechanism into a switch plate
3. Connect the dimmer in the required mode (see below)
4. Reconnect power and confirm operation
5. Change minimum dimming level setting if required (see below)

Standard Wiring

DM250X Dimmer

240Vac Active — C 1 LOOP 2 — LOAD — Neutral

Wiring for 2-way switching (dimming from one location)

DM250X Dimmer

240Vac Active — C 1 LOOP 2 — C 1 LOOP 2 — LOAD — Neutral

Setting the Minimum Dimming Level

To set the full dimming range

- Remove the knob from dimmer shaft
- Turn the dimmer shaft fully anti-clockwise
- Replace the dimmer knob, aligning the dimming level marker on the knob with the small red mark on the dimmer (see diagram)

To set a custom minimum dimming level

- Turn the dimmer on
- Remove the knob from the dimmer shaft
- Turn the dimmer shaft fully anti-clockwise
- Slowly turn the dimmer shaft clockwise until the required minimum dimming level is achieved.
- Replace the dimmer knob, aligning the level marker on the knob with the small red mark on the dimmer (see diagram)

Switch Mechanism

Dimmer mounted in wall plate

Dimmer knob

Align