**PROTOCOL CONVERTERS FOR DIMMING**

- For use with TILE Standard, TILE Plus, and LINE products for dimming control
- Allows the use of standalone DMX/DALI based dimmers or connection to a central DMX/DALI controller
- One DMX or DALI address (channel) converts to one 0-10V (0-10V) dimming channel
- One converter channel may operate a large number of LED drivers when all of the TILEs or LINEs are to be dimmed simultaneously as a group or zone

**IMPORTANT NOTES**

- Convert input control signals (DMX or DALI) to 0/1-10V signals to control LED drivers
- Have the capacity to control a large number of LED drivers (eg. 70 per channel)
- Are well suited for large areas where many Cooledge TILEs are controlled as a single illuminated surface
- May be used for dimming and/or tuning CCT for TILE Premium products
- Enable one-way communication from a DMX/DALI controller to the drivers. RDM or DALI diagnostics are not possible when converting these protocols to a 0/1-10V signal.
- Operate at 12-24 VDC through separate power supply (typ. Maximum power consumption = 6W)

**Fig. 1 Protocol Converter Used for Dimming**

**Example: Zone 1**

- Controller (Supplied by others)
- Protocol Converter (Contact Cooledge)
- Up to 8/16 channels
- 0/1-10V

**Fig. 2 LED Driver Dimming Schematic Using A Protocol Converter**

- Controller (Supplied by others)
- Protocol Converter
- Line: Black, White, Neutral, Earth
- Extension Cable (if required)
- Electrical Enclosure
- Dimmer: Optional - By Others
- Extension Cable (If Required)
- Connector Strip
- Earth

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For use with TILE Premium products for tunable white and dimming control
- Allows the use of standalone DMX/DALI based controllers or connection to a central DMX/DALI controller
- Two DMX/DALI channels are needed for each driver group or zone:
  - One DMX or DALI address (channel) converts to one 0-10V (1-10V) CCT tuning signal
  - One DMX or DALI address (channel) converts to one 0-10V (1-10V) dimming signal
- One converter channel may operate a large number of LED drivers when all of the Premium TileEs are to change CCTs or dim simultaneously