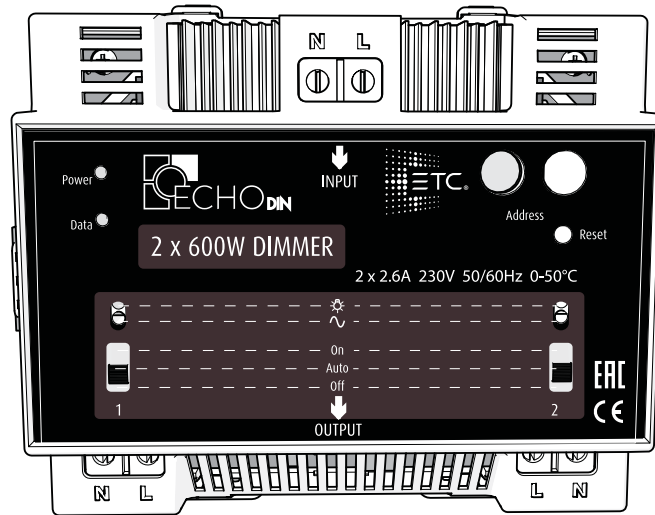


ETC Installation Guide

EchoDIN 600 W Dimmer

Overview

The EchoDIN 600 W Dimmer is a DIN rail mountable module supporting two line-voltage dimming circuits. This guide provides instructions for the installation and setup of a single DIN rail mountable module. A DIN rail enclosure is not included.



Parts and tools required

The following parts and tools are required but not supplied for installation:

- Small 3.5 mm flatblade screwdriver
- Insulation stripping tool

Cable specification

Purpose and Type	Wire Specification	Strip length	Torque (lb/in)
Load to dimmer output terminal	.50 mm ² –16 mm ²	12.7 mm	1.8 N-m
Circuit breaker to dimmer input terminal	6 mm ²	Breaker side: 10 mm Dimmer side: 12.7 mm	1.8 N-m
Load to Ground and Neutral	2.5 mm ² –25 mm ²	10 mm	14-10 AWG: 20 lb-in 8 AWG: 25 lb-in 6-4 AWG: 35 lb-in

Supported load types

- Tungsten
- 2-wire Fluorescent
- LED
- Electronic Low Voltage transformer



Note: ETC does not support the use of the EchoDIN 600 W Dimmer with magnetic loads.



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ETC Installation Guide

EchoDIN 600 W Dimmer

Branch circuit breakers

For each dimmer module that you install, you must also install a matching branch circuit breaker. Circuit breakers are available (sold separately) for field installation. To order breakers contact your ETC customer service representative and request the appropriate part number:

- 2 pole, 16A circuit breaker: CB743
- 2 pole, 10A circuit breaker: CB900
- 2 pole, 6A circuit breaker: CB899

Installation



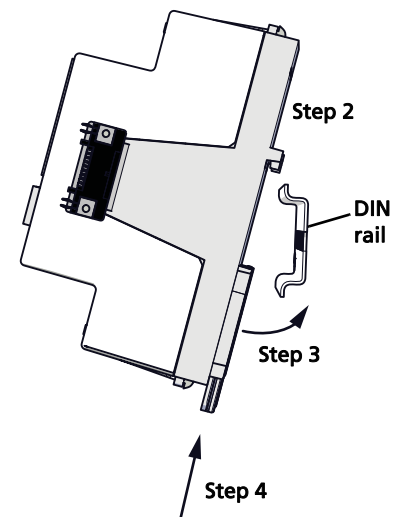
WARNING: RISK OF DEATH BY ELECTRIC SHOCK! Failure to disconnect all power to before working with the system could result in serious injury or death.

De-energize main feed system and follow appropriate Lockout/Tagout procedures as described in NFPA Standard 70E. It is important to note that electrical equipment can present an arc flash safety hazard if improperly serviced. This is due to available large short circuit currents on the feeders of the equipment. Any work on energized equipment must comply with OSHA Electrical Safe Working Practices.

Install the dimmer module

Dimmers are supplied in pairs. You must install a branch circuit breaker for every pair of dimmers.

- 1: Pull out the locking clip until it is fully extended.
- 2: Hook the top lip of the DIN rail mounting clip over the top edge of the DIN rail.
- 3: Rock the dimmer set downward so that it is pressed up against the DIN rail.
- 4: Push both locking clips up into place to secure the dimmer set onto the DIN rail.



Connect the wiring

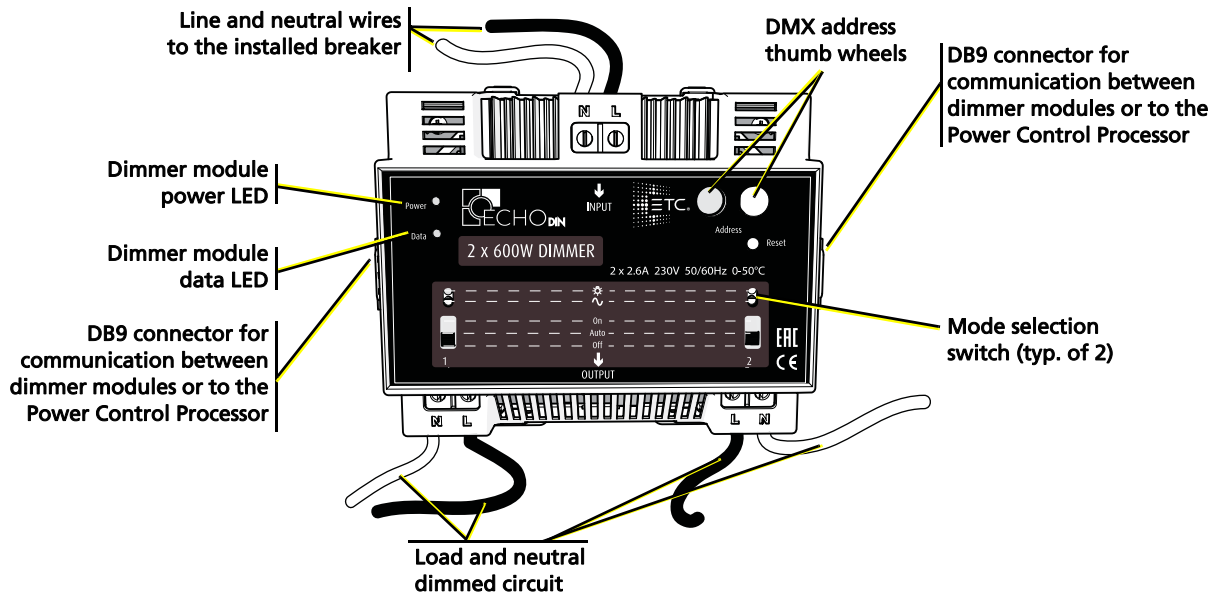
Each new dimmer installed into the panel requires a load connection (hot, ground, and neutral) as well as a 10 AWG wire connection between the related branch circuit breaker and the dimmer input terminal. See [Cable specification](#) on [page 1](#).



Note: *We suggest that you label each new wire designation to make servicing the dimmer easier.*

ETC Installation Guide

EchoDIN 600 W Dimmer



Connect between the branch circuit breaker and the dimmer

- 1: Pull a 6 mm² wire between the branch circuit breaker and the installed dimmer.
- 2: Strip 12.7 mm of insulation from dimmer end of the wire.
- 3: Use a flatblade screwdriver to loosen the screw terminals for both the line (L) and neutral (N) positions on both the dimmer and the breaker.
- 4: Insert the line wire into the terminals labeled (L) and use the flatblade screwdriver to tighten the screw, securing the wire in place.
 - Follow the torque specification indicated in the [Cable specification](#) table on [page 1](#).
- 5: Pull a 6 mm² neutral wire from the branch circuit breaker to the installed dimmer.
- 6: Strip 12.7 mm of insulation from the dimmer end of the wire.
- 7: Insert the neutral wire into the terminal labeled (N) and use the flatblade screwdriver to tighten the screw, securing the wire in place.
 - Follow the torque specification indicated in the [Cable specification](#) table on [page 1](#).

Connect load hot wires to the dimmer

- 1: Loosen the load hot screw terminal (L) using a flatblade screwdriver.
- 2: Strip 9–10 mm of insulation from the wire.
- 3: Insert the wire into the terminal and secure using the flatblade screwdriver.

Connect load neutral to the neutral bar

- 1: Loosen a neutral screw terminal (N) using a flatblade screwdriver.
- 2: Strip 9–10 mm of insulation from the wire.
- 3: Insert the wire into the terminal and secure using the flatblade screwdriver. Repeat this process for all remaining dimmer circuits.



CAUTION: *Dress the wire bundles neatly and remove all cuttings and debris before proceeding with the installation. Debris left in the DIN rail box may short the electronics at power up and void the factory warranty.*

ETC Installation Guide

EchoDIN 600 W Dimmer

Set override switches

Set the override switches to override the output of the dimmer.

- “On” forces the dimmer output on to full.
- “Off” forces the output to off.
- “Auto” allows control from the control processor.

Address each dimmer

There are two thumb wheels located on each dimmer module. The thumb wheels indicate the DMX start address of the dimmer module. For example, if the DMX address of the first dimmer in the module is 24, the first wheel should be set to “2” and the second wheel set to “4.”

In this example, the second dimmer assumes DMX address 25.



Note: *Do not overlap DMX addresses in a single system. Overlapping addresses leads to failed system communication and control.*

LED indicators

A power status LED and a data status LED are provided for each dimmer as well as the complete module.

- Blue power LED: The dimmer is receiving 24 V.
- Green blinking data LED: The dimmer is effectively transmitting and receiving data.

Verify installation

- Remove all metal shavings and debris from the unit.
- Check wiring:
 - Are all load wires terminated to the correct dimmer?
 - Are all load circuits free of short circuits?
- For each dimmer in the panel, check the factory wiring to ensure that all terminations are secure.
- Are all circuits properly labeled for identification by service personnel?
- Lower the dimmer override panel back to normal operating position.

Remove the dimmer module (if needed)

- 1: Using the flatblade screwdriver, pry down on the locking clips until they release.
- 2: Once the module is free, rock it gently off of the DIN rail.

