

# Echoflex Installation Guide

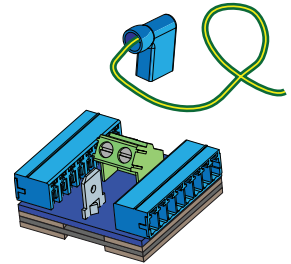
## Elaho EchoConnect Cat5 Panel Termination Kit

The EchoConnect Cat5 panel termination kit facilitates termination of Category 5 (or equivalent) cable on the EchoConnect communication bus for use with an Elaho panel. Contact Echoflex Professional Services for guidance when installing a topology-free system.

The total combined length of an EchoConnect wire run using Cat5 may not exceed 305 m (1,000 ft). The included Cat5 termination board includes a Cat5 input and optionally a Cat5 through connection, as well as a two-position screw terminal for connection between the Cat5 termination board and an Elaho panel.

This kit includes the following:

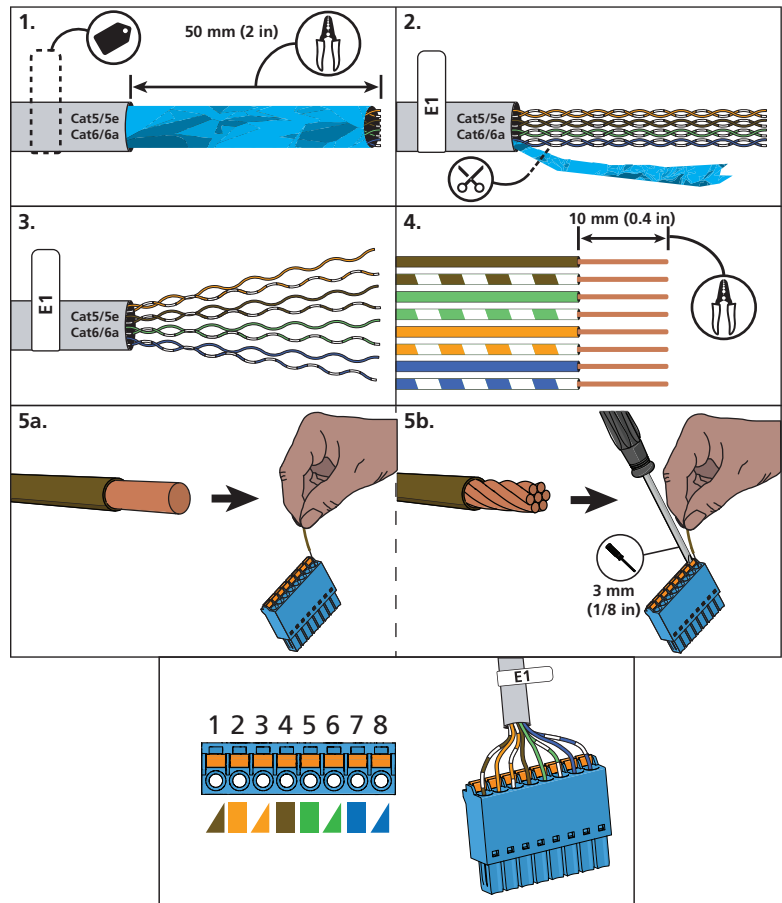
- Cat5 station termination board
- One ESD ground wire pigtail with a FASTON connector attached
- 2 each eight-position connectors (J30243)
- 3 each cable ties
- One 1.83 m (6 ft) length of Belden 8471 cable



## Installation

### Prepare Cat5 Cable for Termination

1. Label your cables (i.e. E1) and strip 50 mm (2 in) of the outer cable jacket.
2. Fold or cut the shield back to access the conductors.
3. Fan out the wires while maintaining the twisted pair as close to the connector as possible.
4. Strip the ends of each wire 10 mm (0.4 in).
5. Insert the conductors. Ensure that all eight conductors are terminated.
  - a. For solid core wire, simply insert the conductor.
  - b. For stranded wire, use a 3 mm (1/8 in) small flatblade screwdriver to press down the corresponding button.



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### Install the Termination Board

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**Note:** A back box (by others) with the Cat5 Panel Termination Kit must be mounted **outside** of the dimming or switching panel product.

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1. Connect the ESD ground wire pigtail.
  - a. Strip 9–10 mm (3/8 in) of insulation from the end of the ground wire pigtail and the incoming ground wire from the EchoConnect communication bus.
  - b. Use one WAGO connector (a spare was provided in the Elaho station installation kit) to connect the station ESD ground pigtail and the Cat5 termination board ESD ground pigtail. Open two terminal levers on the WAGO connector and insert each ground wire into a terminal.
  - c. Close the levers onto the wires.
  - d. Install the FASTON connector to the receptacle on the Cat5 termination board.
2. Connect EchoConnect wiring.
  - a. Locate the Belden 8471 cable provided.
  - b. Strip 12.7 cm (5 in) off the cable jacket and strip 9–10 mm (3/8 in) of insulation from each conductor (black and white wire pair).
  - c. Loosen the two-position screw terminals on the Cat5 termination board.
  - d. Insert the white wire (typical) into the terminal labeled "+" and the black wire (typical) into the terminal labeled "-".
  - e. Secure the screws firmly onto each wire.
  - f. The other end of the cable terminates to the EchoConnect station bus connector inside of the Elaho panel. Route the cable into the panel, follow local code requirements, and see the EchoConnect termination instructions provided with the related Elaho panel installation manual for complete termination details.
3. Insert the prepared connectors (input and optionally through) with the prepared Cat5 data cables into the appropriate receptacles on the Cat5 station termination board.
4. Remove the protective backing from the mounting tape and secure the termination board inside of a back box.