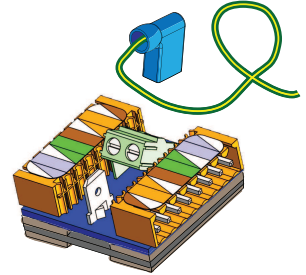# Echoflex Installation Guide
EchoConnect Cat5 Panel Termination Kit

The EchoConnect® Cat5 panel termination kit facilitates termination of Category 5 (or equivalent) cable on the Elaho EchoConnect communication bus for use with an Elaho panel.

The total combined length of an EchoConnect wire run using Cat5 may not exceed 1,000 ft (305 m). The included Cat5 termination board includes a Cat5 input and optionally a Cat5 through connection, as well as a two pin 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 female IDC connectors (J3409-F)
- 3 each cable ties
- *Cat5 Cable Preparation for IDC Termination Setup Guide* (4100M2202)
- One 6 ft (1.83 m) length of Belden 8471 cable

Installation

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

1. Refer to the provided *Cat5 Cable Preparation for IDC Termination Setup Guide* to prepare the Cat5 cable(s) (input and optionally through) for termination to the Cat5 station termination board.

> **Note:** *The connector referenced in Step 4 of the Cat5 Cable Preparation for IDC Termination Setup Guide is the eight position connector (J3409-F) provided in this termination kit.*

2. Connect the ESD ground wire pigtail.
   a. Strip 3/8" (9–10 mm) 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 station termination board.
3. Connect EchoConnect wiring.
   a. Locate the 6 ft (1.83 m) Belden 8471 cable provided.
   b. Strip 5" (12.7 cm) off the cable jacket and strip 3/8" (9–10 mm) of insulation from each conductor (black and white wire pair).
   c. Loosen the two screw terminals on the Cat5 station 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 refer to the EchoConnect termination instructions provided with the related Elaho panel installation manual for complete termination details.
4. Connect the prepared IDC connectors (input and optionally through) with the prepared Cat5 data cables to the appropriate receptacles on the Cat5 station termination board.
5. Remove the protective backing from the mounting tape and secure the termination board inside of a back box.