ETC Installation Guide

Echo EchoConnect Cat5 Termination Kit

Overview

The EchoConnect Cat5 station termination kit facilitates termination of Category 5 (or equivalent) cable on the EchoConnect communication bus. ETC recommends using Belden 1583A (or approved equal) wire. The total combined length of an EchoConnect wire run using Cat5 may not exceed 305 m (1,000 ft). Contact ETC Professional Services for guidance when installing a topology-free system.

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 Echo control station.

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)

Installation

1. Refer to the provided *Cat5 Cable Preparation for IDC Termination Setup Guide* to prepare the Cat5 cable 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 9-10 mm (3/8 in) of insulation from the end of the ground wire pigtail and the Echo control station ground wire.
 - Use one WAGO connector, provided in the Echo 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.
- 3. Connect EchoConnect wiring.
 - a. Strip 9-10 mm (3/8 in) of insulation from the end of the EchoConnect power pigtail (provided with the station).
 - b. Loosen the two-position screw terminals on the Cat5 termination board.
 - c. Insert the white wire (typical) into terminal 1 (identified with a + symbol and an arrow on the board) and the black wire into the remaining terminal.
 - Secure the screws firmly onto each wire.
 - e. Connect the other end of the EchoConnect pigtail (two-position connector) to the two-pin receptacle on the Echo station.
- 4. Connect the Cat5 input connector (and optionally the output connector) to the Cat5 termination board.
 - a. Connect the IDC connector with prepared data input cable from the station bus to the receptacle on the Cat5 termination board.
 - b. Connect the IDC connector with prepared output cable to the remaining Cat5 receptacle on the Cat5 termination board.
- 5. Remove the protective backing from the mounting tape and secure the termination board to the inside of the station back box.

