

GETTING STARTED



CHAPTER

1

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Manual Overview

Overview of this Publication

The EZ-Ethernet Installation and User Manual describes the installation and configuration of the EZ-Ethernet Card. Refer also to the EZ-Touch software and Hardware manuals, the PLC manual, and the Ethernet Communications Module manual.

Technical Support

By Telephone: 770-844-4200

(Mon.-Fri., 9:00 a.m.-6:00 p.m. E.T.)

On the Web: www.automationdirect.com

Our technical support group is glad to work with you in answering your questions. If you cannot find the solution to your particular application, or, if for any reason you need additional technical assistance, please call technical support at 770-844-4200. We are available weekdays from 9:00 a.m. to 6:00 p.m. Eastern Time.

We also encourage you to visit our web site where you can find technical and non-technical information about our products and our company. Visit us at www.automationdirect.com.

Special Symbols



When you see the “notepad” icon in the left-hand margin, the paragraph to its immediate right will be a special note.



When you see the “exclamation mark” icon in the left-hand margin, the paragraph to its immediate right will be a WARNING. This information could prevent injury, loss of property, or even death (in extreme cases).

Overview of the EZ-Ethernet Card

The EZ-Ethernet Option Card provides a low-cost, high performance Ethernet link between one or more EZTouch control panels and corresponding Koyo DL205 or DL405 systems. The EZEthernet Option Card installs directly inside the EZTouch panel.

Ethernet communications requires one or more Ethernet Communications Modules (ECOM) be installed in the local base of the PLC system. When connected to a live 10BaseT network, the EZEthernet Option Card acts as a conduit to pass control packets between the EZTouch Panel and PLC system(s).

The EZ-Ethernet Option Card allows a single panel to communicate with up to ten unique with up to ten unique DirectLogic or Modbus TCP/IP devices. Furthermore, the ECOM can be on a local network, or on a remote network accessed through a gateway.

The Card has a Hitachi SH1 central processor clocked at 10 Mhz., a Crystal Semiconductor CS8900 Ethernet Controller chip, 48K of RAM and 128K of EEPROM Memory and associated hardware.

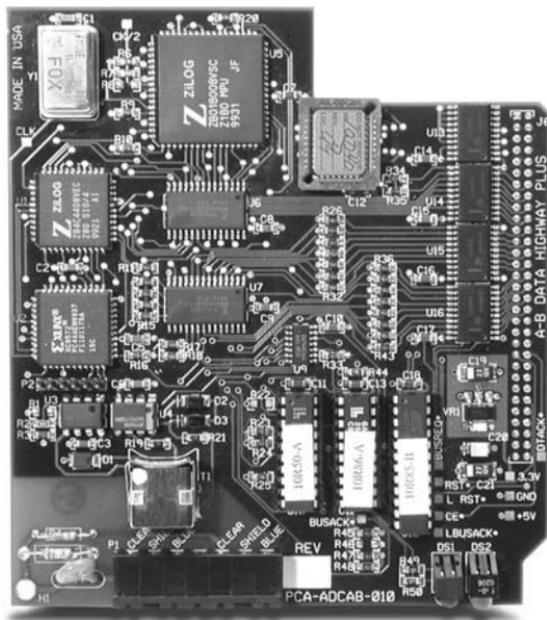
Operating System

The EZ-Ethernet operating system is comprised of two layers: a low level boot loader and a primary operating system. The boot loader provides basic intelligence to do minimal Ethernet communications used for initial link establishment and downloading a new primary operating system. Upon power-up, if the boot loader finds a valid primary operating system, the loader will pass control to the primary operating system. Both the loader and the primary operating system are located in EEPROM.

Packing List

Included in your EZ-Ethernet Card package are the following:

1. EZ-Ethernet Card
2. Instructions for installing the Card inside your EZ-Touch Panel.
3. This EZ-ETHERNET-M manual.



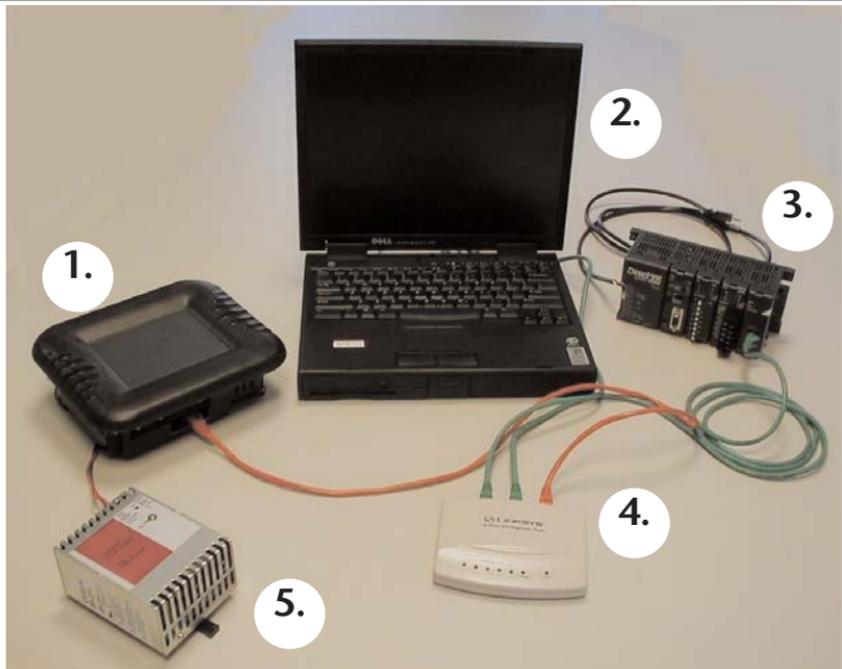
Minimum Required Hardware

- EZTouch panel with EZ-Ethernet Card installed. Note: Panel must have “-F” in part number and have firmware C.4 or higher. See EZTouch software manual for firmware upgrade instructions.
- DL205 or DL405 PLC with H24-ECOM module installed.
- Standard ethernet workgroup hub and at least three CAT-5 ethernet patch cables.
- Personal computer with an ethernet network interface card installed (10BaseT or 10BaseFL).
- 24VDC (1.2 Amp minimum) Power Supply for EZTouch panel

Minimum Required Software/Firmware

- Windows 98 (or higher)
- EZTouch programming software, version 2.2 or higher
- H2/H4-ECOMs must have firmware V1.0.197 or later to communicate with EZ-Ethernet, Ethernet PLUS panels. To get future firmware updates, go to www.hosteng.com, under Support. Instructions are available for upgrading firmware.
- EZTouch panel Firmware C.4 or higher





Typical EZ-Ethernet System

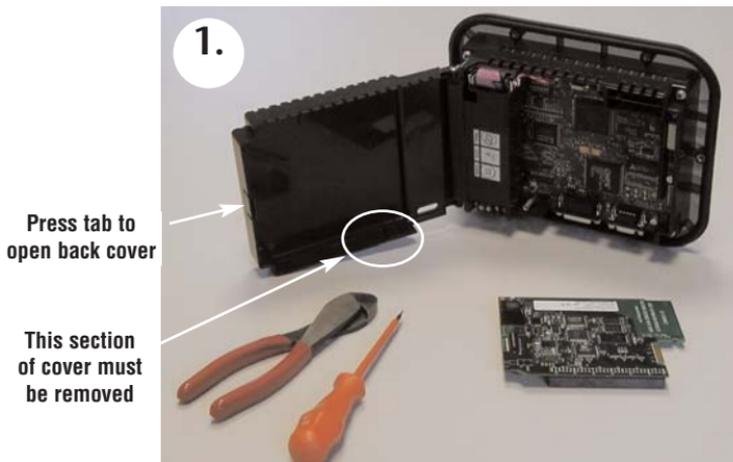
To begin designing and configuring your EZTouch panel with EZ-Ethernet card, you will likely be using the following shown above:

1. EZTouch panel with EZ-Ethernet Card installed. Note: Panel must have “-F” in part number and have firmware C.4 or higher. See EZTouch software manual for firmware upgrade instructions.
2. Personal computer with the following installed:
 - EZTouch panel software (version 2.2 or higher)
 - Ethernet network interface card (10BaseT or 10BaseFL)
 - DirectSoft programming software
3. DL205 or DL405 PLC with H24-ECOM module installed. Note: H2/H4-ECOMs must have firmware V1.0.197 or later to communicate with EZ -Ethernet, Ethernet PLUS panels. To get future firmware updates, go to www.hosteng.com, under Support. Instructions are available for upgrading firmware.
4. Standard ethernet workgroup hub and at least three CAT-5 ethernet patch cables. (Hub shown is **Automationdirect.com** P/N: RT-CNFGKIT, and includes 4 CAT-5 patch cables and one CAT-5 crossover cable. All cables are 5 feet long.)
5. 24VDC power supply for EZTouch panel. (Power supply shown is 50W, 2.0A **Automationdirect.com** P/N: PS24-050D.)

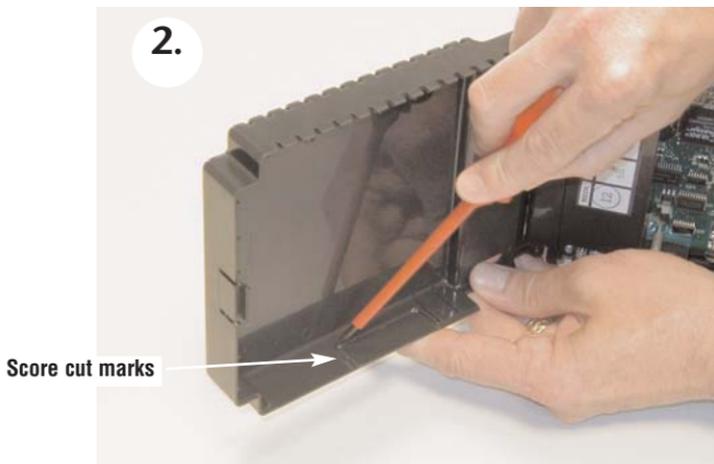
Installing the EZ-Ethernet Card



Warning: Disconnect input power to the EZTouch panel before installing the EZ-Ethernet Card.



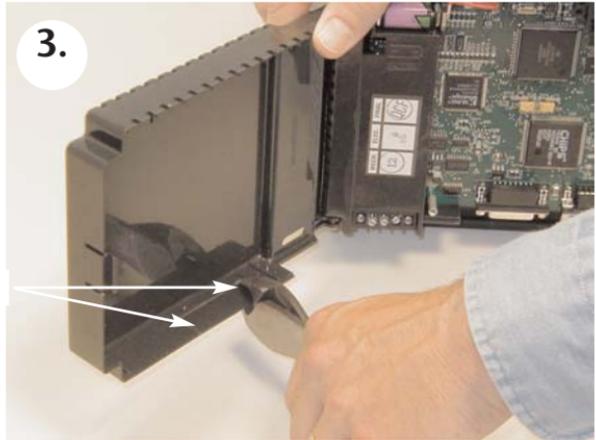
The bottom of the back plastic cover has a section that must be removed to allow access to the cable connector on the EZTouch panel.



The plastic piece to be removed has cut marks, but use a screwdriver to carefully score the cuts a little deeper so it breaks off easily.

3.

Make two cuts



Use a sharp side cutter to carefully make the two cuts along the edge.

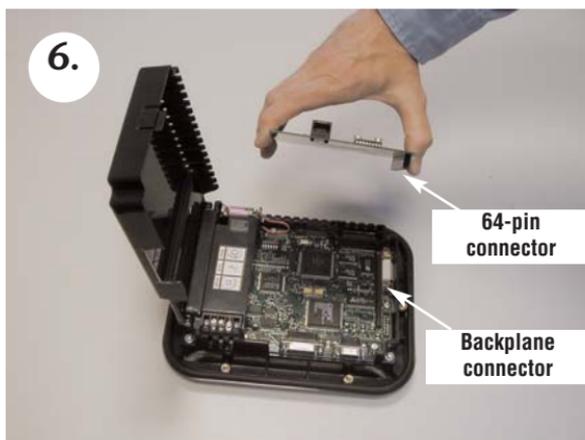
4.



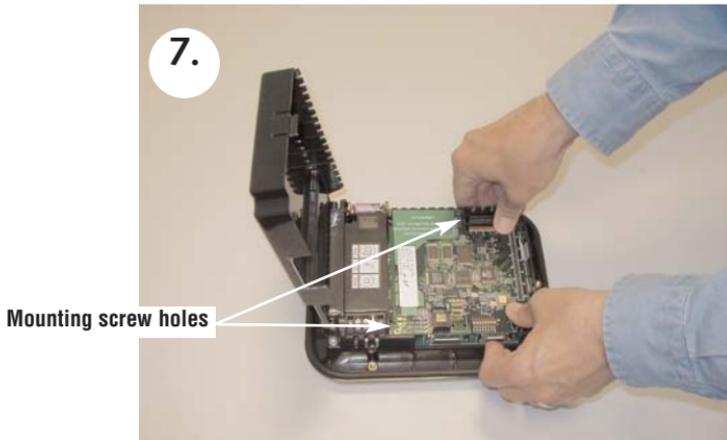
Carefully break off the piece.



The EZ-Ethernet Card is now ready to be installed inside the EZTouch Panel.



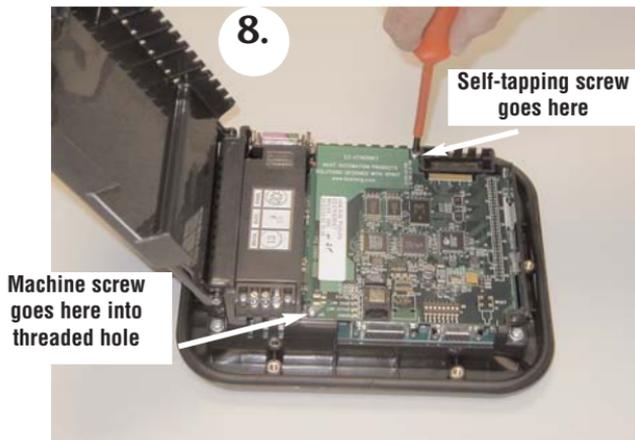
The EZ-Ethernet Card installs directly above the existing EZtouch PC board so that the 64-pin connector on the EZ-Ethernet Card connects to the matching EZTouch backplane connector.



Position the EZ-Ethernet Card so the two mounting screw holes align.



DO NOT FORCE THE CARD CONNECTOR into the backplane. Doing this may bend or break the pins and permanently damage the Card. First, make sure that the pins are aligned properly, and then press firmly into place.



Secure Card using the two supplied screws. Do not overtighten.

9.



Close the back cover and press so it snaps back into place. Connect the ethernet cable as shown.