

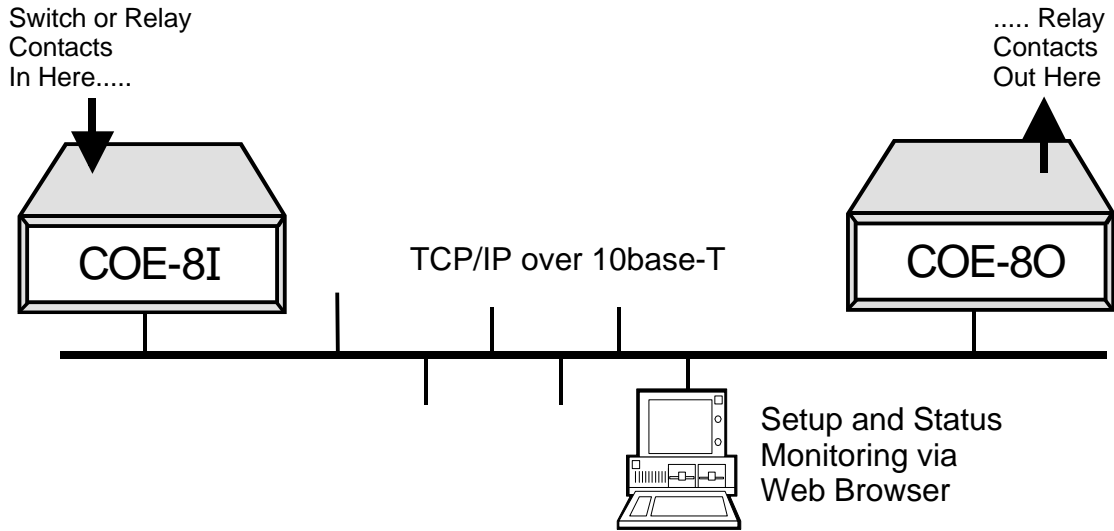


Contact Closure Over Ethernet

Models COE-8I, COE-8O

Overview

COE-8 is a system for transporting switch closure information over a TCP/IP network. The COE-8 consists of two devices, a Transmitter Unit (COE-8I) and a Receiver Unit (COE-8O). The COE-8I provides 8 inputs for switch contacts, relay closures or DC Voltage. Upon a change of state for any channel, it will transmit a message to one or more (up to 32) COE-8O units. The COE-8O has eight relays that will mirror the status of the eight inputs of the COE-8I. Each unit can be monitored and configured from a Web Browser.



REF: CTL\COE8_V2_050715e.DOC

Technical Support Hotline: (201) 967-8788



11 Park Place / Paramus, New Jersey 07652
TEL: 201-967-9300 FAX: 201-967-9090
Website: www.dataprobe.com Email: tech@dataprobe.com

Hardware Installation

Inputs (COE-8I)

Connect the inputs to the COE-8I using the screw terminals on the printed circuit card, as illustrated. Inputs can be either dry relay or switch contacts, or a +VDC voltage (3 to 30 V), referenced to a common ground.

Status	Dry Relay	DC Voltage
Open	Open	>3VDC
Closed	Closed	<=0VDC

Input Specification Dry Contact (common ground)
or Wet ±30VDC Max

Relays (COE-8O)

Connect the inputs to the COE-8I using the screw terminals on the printed circuit card, as illustrated. Relays are Form A.

Relay Specifications

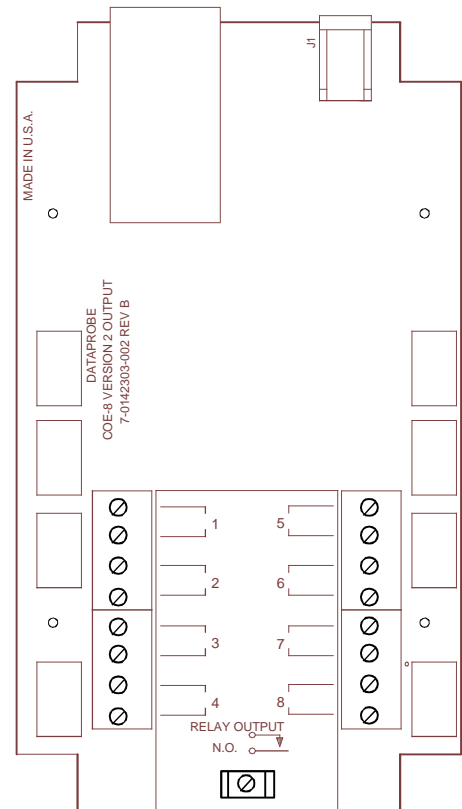
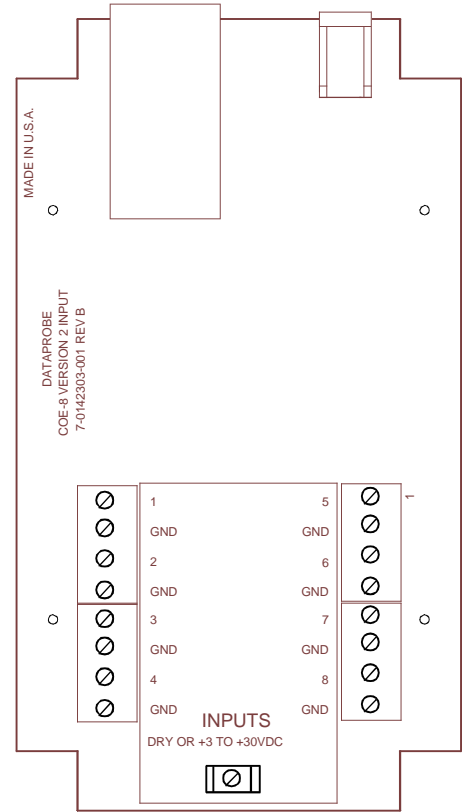
Rating (resistive)	0.5 A 120 VAC or 1 A 24 VDC
Maximum Carrying Current	2 A
Maximum Switching Power	60 AV, 24 W
Maximum Switching Voltage	120 VAC/60 VDC
Maximum Switching Current	1A
Life Expectancy:	5 Million Operations Mechanical 100K Operations at rated load

Network

Connect the network to the connector provided. A yellow LED indicates a successful connection to the network, a green LED data activity.

Power

Apply power only when the cover is secured onto the COE-8. Use only the wall mounted power supply provided. For applications outside the US use Dataprobe Power Supply 1930044.



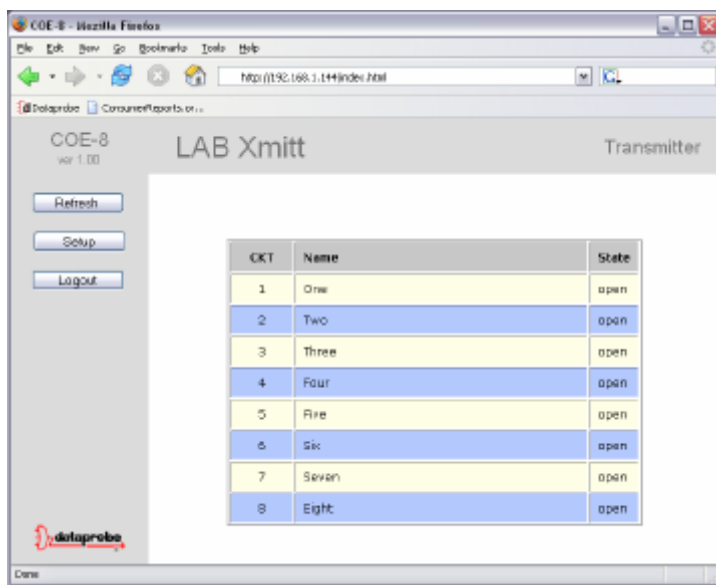
WEB Page Access

The web pages provide status information on the inputs and outputs of the COE-8, as well as provide configuration for the unit. Open a browser to the default or current IP address of the unit. Enter the default username and password:

Factory Defaults:

IP Address 192.168.1.254
Username admin
Password admin

The unit will display the current status of each of the channels and provide buttons for Refresh, Setup and Logout.



Configuration

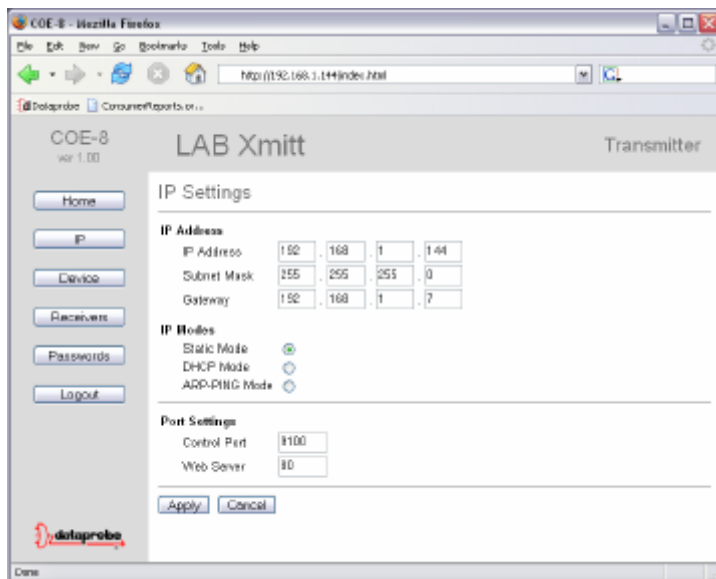
Setting I/P Address

The COE-8 units provide three methods for setting the IP Address

- 1) Static IP via the Web Page Setup
- 2) DHCP
- 3) ARP/Ping

WEB Page

Login to the COE-8 and access the Setup pages by clicking on the **Setup** button from the home page. Click on the IP button to bring up the IP Settings page:



Select Static Mode from the radio buttons and fill in the IP Address, Subnet Mask and Gateway as provided by your network administrator. Click Apply to save the changes. You will then be prompted to reboot the COE-8. Click on the Reboot button. The COE-8 will reboot and the new IP address will be ready to be accessed.

DHCP

Selecting DHCP from the IP Setup page allows a DHCP server to provide IP address information to the COE-8. Click Apply and then Reboot when prompted. The COE-8 will reboot and will have to be accessed with the IP address assigned by the DHCP server. If no IP address is assigned by a DHCP server, the original IP address will be retained.

ARP/Ping

Select ARP/Ping radio button. Click Apply and then Reboot when prompted. Follow the steps below. It is recommended that after a successful setting of the IP address using this method, that the Mode be changed back to Static. This will prevent malicious programs from altering the IP address.

To set the IP address, the hardware (MAC) address must be known. This address is located on a label on the bottom of the unit. The syntax for the MAC address is: nn-nn-nn-nn-nn-nn. To set the IP address using ARP, connect the 10Base-T connection to your local ethernet network and apply power to the unit. The computer used to set the IP address must be on the same subnet as the COE-8. ARP does not work across routed or switched networks.

Windows® (98 and later)

1. Open a Command Prompt window.

2. Type the following command:

arp -s <IP Address> <MAC Address>

Where <IP Address> is the desired IP address for the COE-8 and the <MAC address> is the MAC Address of the COE-8. The MAC Address of the COE-8 is located on the COE-8's serial number label. Windows 95 users see note below.

3. Ping the device to program the IP address by typing the following:

ping <IP Address>

If the ping command returns "host not responding" 4 times then the address has not been programmed properly, or the IP Address is incorrect. In either case redo step 2. If the problem persists contact the Dataprobe Tech Support Hot Line.

4. Delete the entry from the ARP cache by typing:

arp -d <IP Address>

5. Ping the device again (step 3) to confirm that the address has been programmed properly

Unix, Linux, other

Consult your systems administrator for information on setting an IP Address using ARP. The unit should be pinged after the IP Address has been set to confirm proper operation.

Setup

The Setup button from the Home page provides access to all the configuration of the COE-8. The Setup area is divided into several pages:

Device Page:

Basic setup of the COE-8, IP address and TCP/IP settings

Name Assign a name up to 20 characters to help identify the COE-8

IP Address Set the IP Address manually in the Static Mode (see below)

IP Modes Set the method to configure the IP address. See section above for details.

- Static: Manually entered IP address information
- DHCP: IP address obtained upon power up from DHCP server.
- ARP-Ping: IP address set from another computer

Port Settings The IP Setup page also allows for changing of the port assignment for both the Control communication and web page access. Dataprobe recommends changing the Web port for units that will be connected to the Internet. This will minimize the number of hacker attacks that the COE-8 will be subject to.

The Control Port for both the COE-8I and all COE-8Os that receive status from it must be set the same.

If a port other than the default Port 80 is used for web browser access, that port must specifically be used in the URL when accessing the COE-8. For example, if the Web Port is changed to 9090 then the URL for the unit would be `http://192.168.1.254:9090`

Receivers (COE-8I Only)

Transmission Frequency 0 to 9999 seconds

This sets the frequency that the COE-8I transmits its status to the receivers. When set to 0, transmission will only occur upon change of status.

Receiver IP Address Set up to 32 IP addresses of the COE-8O units that will have input status information set to them.

Inputs (COE-8I Only)

The COE-8 I can send individual input status to multiple COE-8O receivers, or other IP address. This page provides for selecting which output of the COE-8Os will be operated by each input of the COE-8I. Select the Input from the drop down box, then configure the Name for that input, along with the channel of each COE-8O unit to receive the status. Use Output 0 if no output of a given COE-8O is to be used for that channel. Configure each of the 8 inputs as necessary.

SNMP

The COE-8 can be monitored and configured via SNMP managers. Download the MIB at <http://dataprobe.com/files/mibs/coe8.mib>

Enter the IP addresses of up to 4 SNMP managers. Enable or Disable SNMP with the checkbox provided. Traps can be sent every time there is a change of state on any COE-8 channel. Check the box provided to enable this. If both the COE-8I and COE-8O are configured to send traps, two messages will be received by each SNMP manager for each event.

Passwords

Two username and password sets allow for two types of users:

User Type	Default Username / Password	Access
Administrator	admin / admin	Full view and setup
General User	user / user	View status only

Click Apply to save the new usernames and passwords.

TECHNICAL SUPPORT, RETURNS and WARRANTY

Dataprobe Technical Support is available 8:30AM to 5:30PM ET to assist you in the installation and operation of this product. To obtain Technical Support call our Tech Support Hotline at 201-967- 8788, or Email us at tech@dataprobe.com. Please have the following information available when you call:

- Model of Product
- Serial Number
- Date of Purchase
- Name of Seller (if other than Dataprobe)

If you purchased this product through an **Authorized Dataprobe Reseller**, you should contact them first, as they may have information about the application that can more quickly answer your questions.

WARRANTY

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in material and workmanship for a period of One Year from the date of initial purchase. If the product should prove defective within that period, Seller will repair or replace the product, at its sole discretion.

Service under this Warranty is obtained by shipping the product (with all charges prepaid) to the address below. Seller will pay return shipping charges. Call Dataprobe Technical Service at (201) 967-8788 to receive a Return Materials Authorization (RMA) Number prior to sending any equipment back for repair. Include all cables, power supplies and proof of purchase with shipment.

THIS WARRANTY DOES NOT APPLY TO NORMAL WEAR OR TO DAMAGE RESULTING FROM ACCIDENT, MISUSE, ABUSE OR NEGLIGENCE. SELLER MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY EXPRESSLY SET FORTH HEREIN. EXCEPT TO THE EXTENT PROHIBITED BY LAW, ALL IMPLIED WARRANTIES, INCLUDING ALL WARRANTIES OF MERCHANT ABILITY OR FITNESS FOR ANY PURPOSE ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE; AND THIS WARRANTY EXPRESSLY EXCLUDES ALL INCIDENTAL AND CONSEQUENTIAL DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from jurisdictions to jurisdiction.

WARNING: The individual user should take care to determine prior to use whether this device is suitable, adequate or safe for the use intended. Since individual applications are subject to great variation, the manufacturer makes no representation or warranty as to the suitability of fitness for any specific application.

**Dataprobe Inc.
11 Park Place
Paramus, NJ 07652**