Introduction

This guide covers the basic installation and configuration of your IOLAN. It is intended for system administrators.

The following are the steps needed to setup the IOLAN.

1. Verify that you have all the required parts
2. Setup the hardware
3. Power on the IOLAN
4. Configure the IOLAN

For detailed information, please refer to the IOLAN User's Guide for your model.

Components

What's In the Box

- The IOLAN
- A Quick Start Guide (this document)
- Warranty Card
- Administration cable (consisting of an RJ45-->DB9F adapter and a 3' RJ45 cable)
- A CD-ROM containing documentation and firmware required to configure and operate the IOLAN

What You Need to Supply

- Serial cable(s) to connect your serial devices to the IOLAN
- An Ethernet 10/100/1000BASE-T cable to connect the IOLAN to the network
- Connection to power

Hardware Setup

Connecting Serial Devices

The following is the pinout information for the serial ports of your unit. Please refer to the next table for the console port pinout information

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Pin	EIA-232 Serial Ports	EIA-422	EIA-485 Full Duplex	EIA-485 Half Duplex
1	RTS (out)	TxD+	TxD+	DATA+
2	DTR (out)			
3	TxD (out)	TxD-	TxD-	DATA-
4	GND	GND	GND	GND
5	GND	GND	GND	GND
6	RxD (in)	RxD+	RxD+	
7	DSR (in)			
8	CTS (in)	RxD-	RxD-	

The following is the pinout information for the console port.

Pin	EIA-232 Admin Port
1	DCD (in)
2	RTS (out)
3	DSR (in)
4	TxD (out)
5	RxD (in)
6	GND
7	CTS (in)
8	DTR (out)

Connecting the LAN

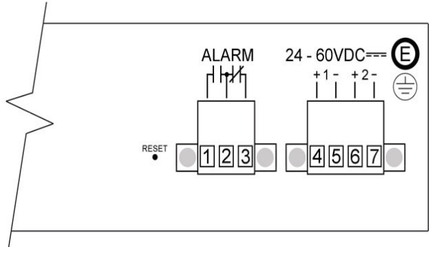
Connect the IOLAN to the HUB or Switch that will provide the network connectivity.

Connecting the Power

For your safety, before attempting to connect or modify any of the electrical connections to the unit, please be sure all wiring is disconnected from any live power source. Power should only be applied when you are sure that the wiring is correct and any safety covers are properly installed.

Low voltage LDC models

Terminal	Description	Usage
1	Normally Open	Fail safe relay connection.
2	Common	Fail safe relay connection.
3	Normally Closed	Fail safe relay connection.
4	Input 1+	DC + input source 1.
5	Input 1-	DC - input source 1.
6	Input 2+	DC + input source 2.
7	Input 2-	DC - input source 2.
E	Chassis Ground	Equipment ground can also be used for earth bonding

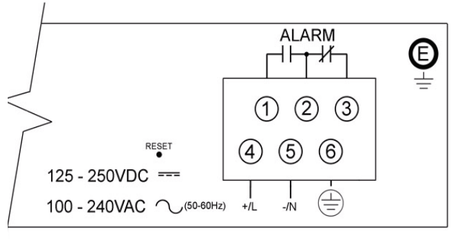


High voltage models

The IOLAN can be powered via AC (100-240V) or DC (125-250V). A readily accessible, appropriately rated circuit breaker must be installed externally to the equipment.

HV models;

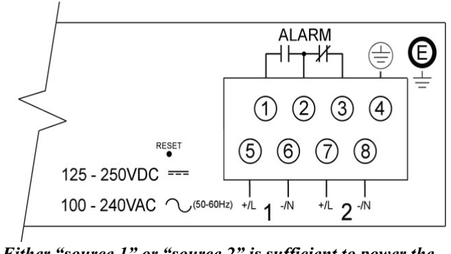
Terminal	Description	Usage
1	Normally Open	Fail safe relay connection.
2	Common	Fail safe relay connection.
3	Normally Closed	Fail safe relay connection.
4	+/L	AC live input. DC + input.
5	-/N	AC Neutral input.DC - input.
6	Chassis Ground	AC - Safety ground. DC - Equipment ground.
E	Earth Ground	Can be used for earth bonding



Be sure to replace the clear plastic electrical safety shield before applying power to the unit.

DHV models;

Terminal	Description	Usage
1	Normally Open	Fail safe relay connection.
2	Common	Fail safe relay connection.
3	Normally Closed	Fail safe relay connection.
4	Chassis Ground	AC - Safety ground. DC - Equipment ground.
5	+/L	AC live input. DC + input. Source 1.
6	-/N	AC Neutral input. DC - input. Source 1.
7	+/L	AC live input DC + input. Source 2.
8	-/N	AC Neutral input. DC - input. Source 2.
E	Earth Ground	Can be used for earth bonding



Either "source 1" or "source 2" is sufficient to power the unit. Make sure that both sources are disconnected before attempting to service the unit. For each power source, a separate, readily accessible, appropriately rated circuit breaker must be installed externally to the equipment.

Be sure to replace the clear plastic electrical safety shield before applying power to the unit.

WARNING:

The following applies to the HV and DHV models.

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This unit should be installed in a restricted access location where access can only be gained by service personnel or users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken; and access is through the use of a tool or lock and key, or other means of security, and is controlled by the authority responsible for the location.

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Power On Cycle

When the power is connected to the IOLAN, the Power/Ready LED will cycle through several sequences and will end in a solid green once the unit is fully booted and ready to be configured.

If the LED is not solid green after two minutes, refer to the User's Guide for help identifying the reason.

LED Guide

Power/Ready—(Green/Yellow/Red)

- **Green**
  - Solid = System Ready
  - Flashing = System is booting
- **Yellow**
  - Flashing = Booting
- **Red**
  - Error condition (refer to the User's Guide for details)

Link/10/100/1000

- **Green**—10 or 100 Mbits
- **Yellow**—Gigabit
- **Off**—No LAN connection

Activity—Flashes for LAN RX/TX activity

- **Tx**—Flashes with transmit serial activity
- **Rx**—Flashes with receive serial activity

Configuring the Unit

The CD_ROM provided with your IOLAN includes software for configuring the unit. This software is designed for use on a Windows Operating System. For other Operating Systems, please refer to the IOLAN User's Guide for methods of configuring the IOLAN.

1. Insert the CD-ROM into the PC.

   It should launch automatically. If it does not launch, open Windows Explorer and point to the CD-ROM Drive. Double click on the index file to launch the main page.

2. From the main page, select the Easy Config Wizard to launch the configuration wizard or alternatively, install the DeviceManager software and use it to configure the IOLAN.

Note:

To ensure you are using the most up to date firmware and utilities, please check the Perle support link on www.perle.com

Default admin Password

You will be prompted by the software for the **admin** user password before being allowed to configure the IOLAN.

The factory default password for the admin user is:

`superuser` (case sensitive)

You should change the admin password to restrict unauthorized access to the IOLAN.

For additional methods of configuring your IOLAN (i.e., HTTP, Telnet, SNMP), please refer to the IOLAN User's Guide.

You should register IOLAN online at:

http://www.perle.com/support_services/warranty_reg.asp

Perle offers free technical support to Perle Authorised Distributors and Registered Perle Resellers.

To access technical support, please visit the Perle website at www.perle.com/support_services

Here you will find:

- *latest drivers and firmware updates for download*
- *technical tips*
- *frequently asked questions*
- *documentation*
- *configuration support*
- *cabling information*
- *maintenance contract information*
- *and much more...*

If you are unable to find the information you require, please feel free to contact our technical support teams by email at:

USA
Email: ptac@perle.com
Europe
Email: ptacemea@perle.com
Asia
Email: ptacasia@perle.com
Internet
www.perle.com/support_services

IOLAN
Electric Utility Terminal Server Quick Start Guide
Part No: 5500212-11

IOLAN

Electric Utility Terminal Server

Quick Start Guide

- Meets EMC/EMI specifications for substations (IEC 61850-3, IEEE 1613)
- Advanced serial to Ethernet connectivity
- Universal, software selectable EIA-232/422/485 interface
- Gigabit Ethernet
- Next Generation IP support (IPV6)