



# 8-Port GigE Switch w/4-Port PoE Injector (P/N DA1458)

Owner's Manual

1308145 REV. C



## FCC Certifications

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the instructions provided with the equipment, may cause interference to radio and TV communication. The equipment has been tested and found to comply with the limits for a Class A digital device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If you suspect this equipment is causing interference, turn your DA1458 on and off while your radio or TV is showing interference, if the interference disappears when you turn your DA1458 off and reappears when you turn it back on, there is interference being caused by the DA1458.

You can try to correct the interference by one or more of the following measures:

- ◆ Reorient the receiving radio or TV antenna where this may be done safely.
- ◆ To the extent possible, relocate the radio, TV or other receiver away from the DA1458.
- ◆ Plug the DA1458 into a different power outlet so that the DA1458 and any POE receiver are on different branch circuits.

If necessary, you should consult the place of purchase or an experienced radio/television technician for additional suggestions.

## CE Mark Warning

This is a class A device, In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

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Specifications are subject to change without prior notification.

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# 1.0 Introduction

The Legrand DA1458 8-Port GigE Switch w/4-Port PoE Injector (see **Figure 1**) provides eight ports of 10/100/1000Mbps switching capability, and at the same time on four of its ports, full 48VDC power for any remote IEEE 802.3af powered device, such as a third party Wireless Access Point, IP Phone, or IP Camera over Cat 5/6 wiring. The DA1458 has four RJ45 jacks labeled “Data” and four labeled “Data + Power”. The unit’s power is supplied by a P/N PW1248 48VDC 60W AC adapter (sold separately), and supports up to 15.4 Watts of PoE power on each of the four PoE ports.

The DA1458 is designed as a standard two-bay module, so that it may be easily mounted to the included bracket in an On-Q style enclosure.

The DA1458 complies with IEEE 802.3 (Ethernet), IEEE 802.3u (Fast Ethernet), IEEE 802.3ab (Gigabit Ethernet), IEEE 802.3x (Flow Control) and IEEE 802.3af (Power over Ethernet) standards.

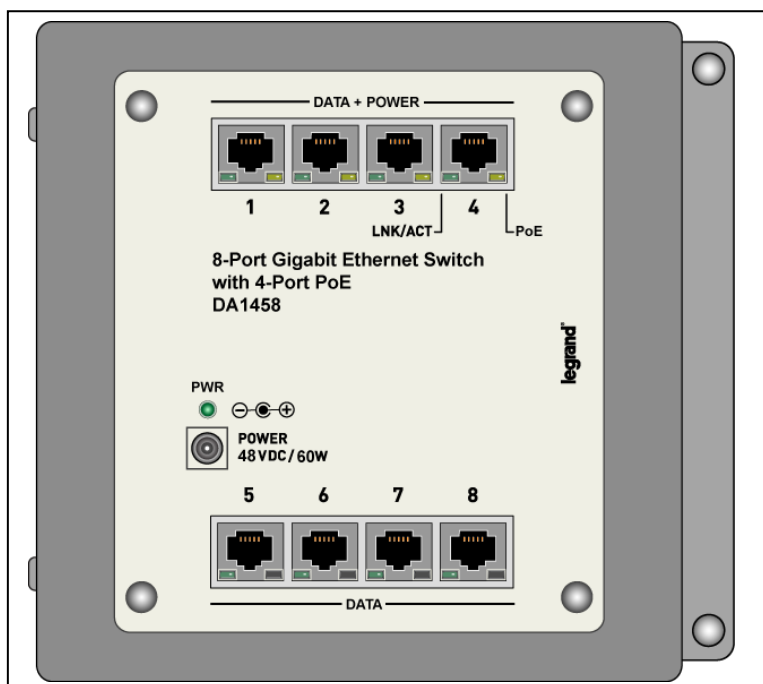


Figure 1

# 1.1 Detailed Physical Description

## DA1458 Connection Area

**Figure 2** shows the DA1458 connection area including:

Eight RJ-45 jacks for 10/100/1000Mbps Ethernet switching support

48VDC Power Input jack

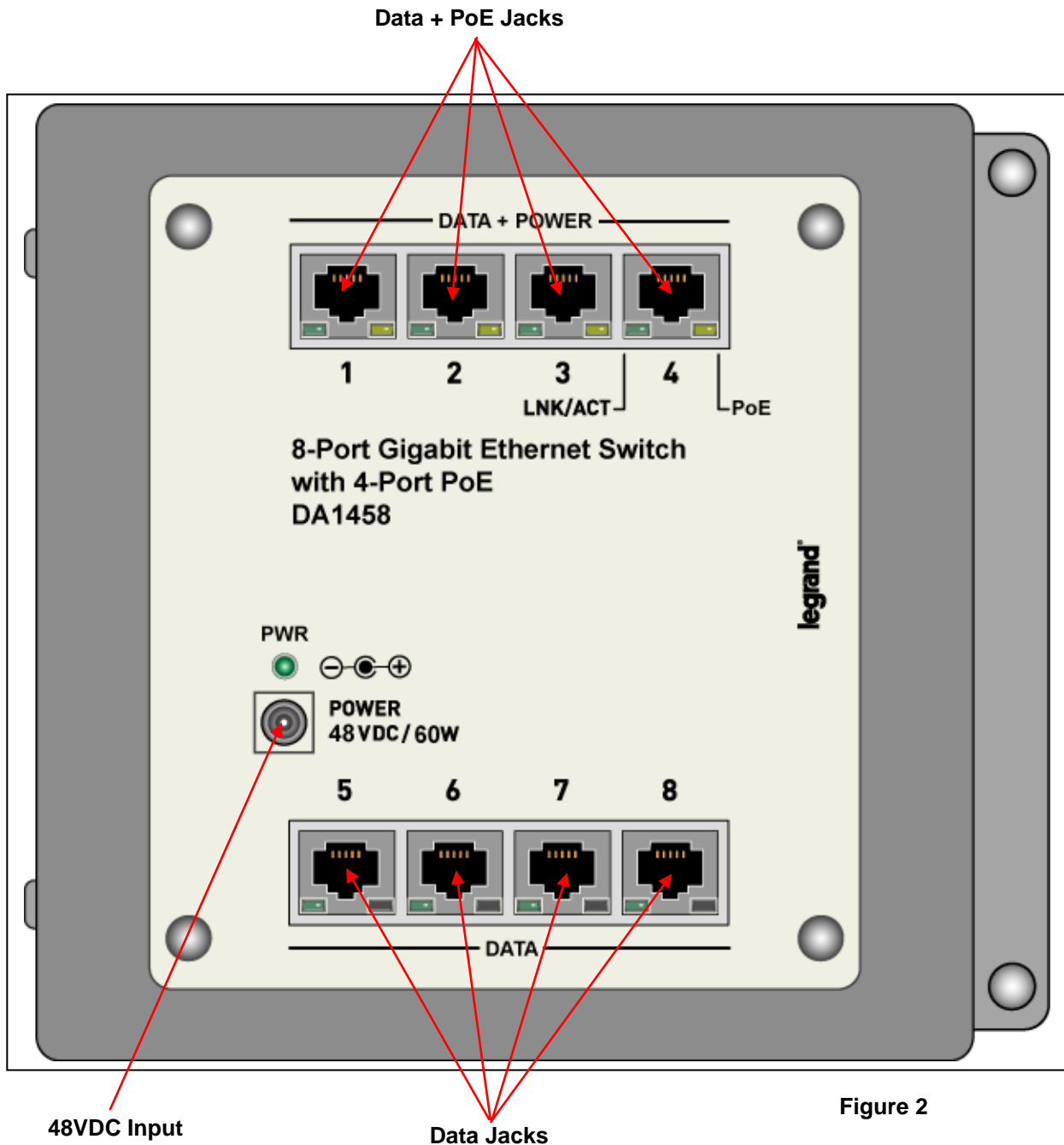
Four of the Gigabit Ethernet ports are also Power Over Ethernet ports for PoE powered devices

Power LED – indicates DA1458 has input 48VDC power

Eight Port LNK/ACT LEDs – indicates that port is actively supporting Ethernet data

Four PoE LEDs – indicate 48VDC power is being provided on those ports

**NOTE: 48VDC Power is provided on pins 4 and 5 of the connected Cat 5/6 cable, and ground is provided on pins 7 and 8 of the connected Cat 5/6 cable.**



**Figure 2**

48VDC Input

Data Jacks

## 1.2 Installation

The DA1458 8-Port GigE Switch + 4 Port PoE Injector is best installed during new construction in two steps; at “rough-in” after the Electricians are done, but prior to drywall being installed, and at “trim-out” after the drywall is installed and painted. These steps are detailed below:

### A. “Rough-in” steps:

1. A single dedicated Cat 5/6 should be run in the walls from the structured wiring enclosure location in the home where the DA1458 will be installed to each location in the home where an Ethernet networking interface is needed and/or an IEEE 802.3af device will be installed (leave extra cable at both ends).

**NOTE: Run the Cat 5/6 cable at least 12” from electrical cabling (preferably in a separate stud cavity) and cross electrical cables at a 90° angle. Use loose Velcro-style cable ties for bundling. If stapling is required, use specialty staples to avoid compressing the cable.**

2. At the selected locations, refer to the installation instructions provided with the Ethernet interface device or IEEE 802.3af device for recommended use of electrical gang boxes or low voltage brackets, with the extra Cat 5/6 cable in the box, or attached in such a way that it may be fished out after the drywall is installed.

### B. “Trim-out” steps:

1. The Cat 5/6 cable that was secured at each of the locations should be pulled out and terminated with an RJ45 plug (or insert as required) following standard TIA 568A recommendations and if PoE is required, attached with a Cat 5/6 jumper to the IEEE 802.3af device which is then installed.
2. In the structured wiring enclosure the Cat 5/6 cables from the remote locations are terminated with RJ45 plugs for direct connection to the DA1458 “Data or Data +Power” RJ45 jacks once the DA1458 is installed.
3. The DA1458 is attached to the two-bay bracket with push pins in each corner, and then the bracket is installed in the structured wiring enclosure by slipping the tabs into the square holes, and using the push pins in round holes to secure the DA1458 assembly.
4. If a router is installed in the enclosure, use a Cat 5/6 patch cable (available separately) to connect from a router port to one of the “Data or Data + Power” ports on the DA1458 (see **Figure 3**).
5. The DA1458 is powered with an AC to DC adapter which also needs to be plugged in to an AC source.

