level® one

500Mbps Powerline Gigabit Adapter

PLI-4051

H/W Version: 1

Product Overview

The LevelOne PLI-4051 500Mbps Powerline Gigabit Adapter is a cost-effective Ethernet adapter which allows home and office users to build-up a speedy data network over exiting electrical wiring. It is ideal for users when it comes down to device placement in the workspace either home or office.
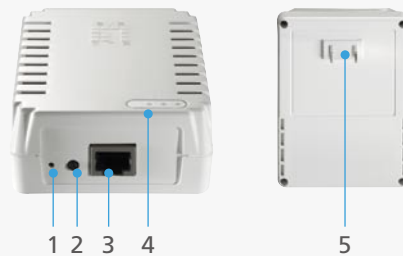
Utilizing the home power line infrastructure

Transmit data by using the existing electrical wiring in the building. Simply plug the PLI-4051 into an AC outlet. This is a fast, simple, and cost-effective alternative instead of installing expensive Ethernet cables throughout entire home or office. For this purpose the dual-pack starter kit of PLI-4051 is also available for a quick setup of a powerline network.

Built-in QoS for fast network speeds

The PLI-4051 is featured with Quality of Service (QoS) to ensures a sufficient bandwidth for delivering high-quality multimedia streams over powerline network. Complies with the HomePlug AV standard, users can enjoy 500Mbps data transfer rates for all bandwidth-hungry applications, such as VoIP, video/audio streams, gaming consoles, or any other applications which requires a high-speed Internet connectivity.

The PLI-4051 also provides 128-bit AES encryption with one-push button for easy achievements of network protection and secured data transmission.

1. Reset Button
2. Security Push Button
3. RJ-45 Ethernet Port
4. LED Indicators
5. Power Plug

Key Features

- Gigabit Ethernet capability
  (IEEE 802.3ab, 1000BASE-T)
- Designed for High-Definition multimedia streaming
- Built-in QoS engine for prioritized audio and video streaming
- Data rate of up to 500Mbps over existing electrical wiring
- 128-bit AES encryption for network protection enhancement
- Simple Plug-and-Play installation
- Easy-to-use utility for powerline network management

Related Products

PLI-3411
200Mbps Powerline Wireless Access Point

PLI-3510
200Mbps Powerline Adapter with Mains Pass-Through

Technical Specification

Computer Interface
IEEE802.3; IEEE802.3u; IEEE802.3ab

Standards
IEEE1901/ HomePlug AV

Network Interface
One RJ-45 (10/100/1000Base-T Ethernet) support 500Mbps
Power Line Port

Security
128-bit AES Link Encryption with Key Management

Software
Utility for Microsoft Windows 98 SE, ME, 2000, XP, and 32-bit
Vista, 7

Data Transfer Rate
500 Mbps over Powerline and 10/100/1000Mbps over Ethernet

Modulation Schemes
OFDM Symbol Modulation on Line synchronization
1024/256/64/16/8 - QAM, QPSK, BPSK, ROBO Carrier Modulation

Frequency Band
2 ~ 50 MHz

Additional Protocols
Mix of TDMA and CSMA/CA channel access scheme; CO device
generates a periodic beacon carrier for channel access scheme

Operation Range
Estimated range of 300m in wall power lines

Cabling
100Base-T Cat. 5e or above UTP cable

Operating Temperature
0°C to 40°C

Storage Temperature
-20°C to 70°C

Humidity
10% to 90% (non-condensing)

Power Input
100 ~ 240V @ 50/60Hz Internal

Power Save
Standby Mode <1W

Housing
Plastic (99mm x 73mm x 34mm)

Software Utility
Device Detect/Diagnostic, NEK Password Setup for Local and
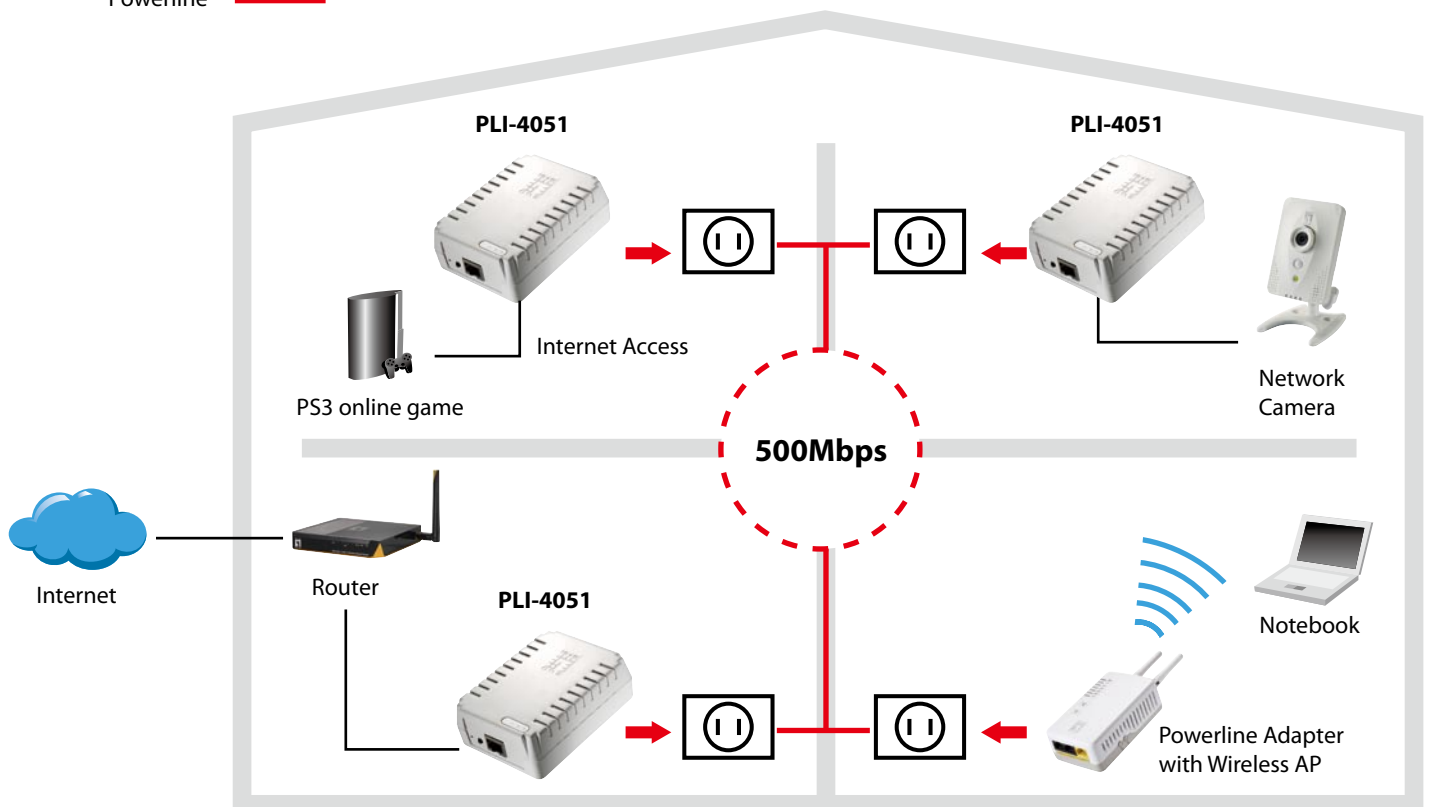Remote Device Windows 2000, ME, NT, XP, or Vista, 7 for Initial
Setup

LED
PL – Link/Act; Traffic–Link/Act; ETH – Link/Act

Certifications
HomePlug AV PowerLine Specification
FCC Class B / CE Mark / HomePlug Certification

Product Diagram

Ethernet Cable (RJ-45) ————
Powerline ————

Order Information	**PLI-4051:** 500Mbps Powerline Gigabit Adapter
Package Contents	PLI-4051
	RJ-45 Ethernet LAN Cable
	Quick Installation Guide
	CD Manual / Utility