

QUICK SETUP GUIDE

FOR

ALLNET POWERLINE ETHERNET ADAPTER

ALL 1685

PREFACE

This document describes the installation of the ALLNET ALL1685 Powerline adapter

TO THE INSTALLER

This publication contains the following sections:

- Important safety instructions
- The first thing you need to know before you begin to install
- Product installation guide
- Specification

IMPORTANT SAFETY INSTRUCTIONS

This product is intended for connection to the AC power line. For installation instructions, refer to the installation section. For removing the device, refer to the unplug section. The following precautions should be taken when using this product.

- Please read all instructions before installing and operating this product.
- Please keep all instructions for later reference.
- Please follow all warnings and instructions marked on the product.
- Unplug the AC coupler from the wall outlet before cleaning. Use a damp cloth for cleaning. DO NOT use liquid cleaners or aerosol cleaners.
- **DO NOT** operate this product near water.
- This product should never be placed near or over a radiator, or heat register.
- This product relies on the building's electrical installation for short-circuit (over current) protection.
- Ensure that a fuse or circuit breaker no larger than 120 VAC 15A or 240 VAC 6A is used .
- **DO NOT** allow anything to rest on the product interconnect cords.
- **DO NOT** locate this product where people may walk on the cords.
- Because the ALL1685 product sends data over the powerline, it is recommended that you plug it directly into a power outlet. Do not plug the device into a UPS or power strip with surge protection. The ALL1685 product has

its own power filter for protection against surges.

- **Only** a qualified technician should service this product. Opening or removing covers may result in exposure to dangerous voltage points or other risks.
- Unplug the Adapter from the wall outlet and refer the product to qualified personnel for the following conditions:
 - When the interconnect cords are damaged or frayed.
 - If liquid has been spilled into the product or if the product has been exposed to rain or water.
 - If the product does not operate normally when the operating instructions are followed.
 - If the product exhibits a distinct change in performance.

THE FIRST THING YOU NEED TO KNOW BEFORE YOU BEGIN TO INSTALL...

- 1. Before installing, make sure your PC meets these requirements for hardware installation:
- Microsoft Windows* 98SE, ME, 2000 or XP OS
- Pentium® 166 MHz processor, equivalent or higher
- Resource on your PC
 - At least one free Ethernet port for the ALLNET ALL1685 Ethernet Powerline Adapter.
- 2. Your PC must not be configured for another network. This means that:
- No network clients except for Microsoft Network*, Client for Netware* Networks, or Microsoft Family Logon* are installed
- No network services except file and printer sharing for Microsoft Networks or Personal Web Server* are installed
- No network protocols except Microsoft's TCP/IP, IPX/SPX, NetBEUI, or Net BIOS support for IPX/SPX are installed

3. Network installation requires two steps:

- 1. Install the ALL1685
- 2. For each PC to be added to the network, repeat the process

4. Check that you have the following parts for each PC on the network:

Product installation guide for ALL1685

- 1. Hardware ALL1685 Powerline Adapter
- 2. Ethernet Cable (CAT 5)



5. Familiarize yourself with the ALLNET ALL1685 connections:



6. Limitation of the PLC device:

To meet the safety regulation, the longest distance between powerline carrier devices will be limited at 100 meter and for in-house use only. More than 100 meter will cause the signal reduction or data loss.

Product installation guide

Important:

Do not plug the device into a power strip or surge protector because these devices may consist of filter and impair signal. Also avoid plugging the device right next to noisy sources such as cell phone charger, halogen light, noisy desktop computer, vacuum cleaner, etc. Both cases result in poor transmission speed.

To install for the PC local Powerline network

- 1. Use the supplied Category 5 Ethernet cable to connect the ALL1685 and your PC's Ethernet port.
- 2. Plug the Ethernet Bridge ALL1685 to outlet.
- 3. You can repeat steps 1 and 2 for connecting many other links depending on your needs.
- 4. The LINK and LINK/ACT LED indicator light up when you complete the above connection.
- 5. The ACT LED indicator starts blinking when the data communication proceeds on power line.
- 6. The COL LED indicator flashes when there is a Powerline communication collision.

To share a xDSL or cable modem with Internet access service

- 1. Connect one ALL1685 to the broadband router
 - Plug the ALL1685 into an AC outlet.
 - Plug the provided Ethernet cable into the RJ45 connector of the ALL1685 and plug the other end of the cable into an available Ethernet port of the Router.
- 2. Connect the other ALL1685s to the PC(s) to share the Internet access
 - Plug the Bridge ALL1685 into an AC outlet.
 - Plug the provided Ethernet cable into the RJ45 connector of the bridge ALL1685 and plug the other end of the cable into Ethernet port on the PC.

As wireless AP (Access Point) Extender

- 1. Connect one Ethernet Bridge ALL1685 to the broadband router
 - Plug the ALL1685 into an AC outlet.
 - Plug the provided Ethernet cable into the RJ45 connector of the Bridge ALL1685 and plug the other end of the cable into an available Ethernet port of the router.
- 2. Connect the other Ethernet Bridge ALL1685 to the AP
 - Plug the BridgeALL1685 into an AC outlet.
 - Plug the provided Ethernet cable into the RJ45 connector of the bridge ALL1685 and plug the other end of the cable into the Ethernet port on the AP.

Specification

Items		Description
Line Rate	85Mbps	
Effect Data Rate	Up to 25Mbps effective throughput	
Frequency Band	4.3~20.9 MHz	
Access Methods	CSMA/CA	
Qos	4 Levels	
Modulation	OFDM (QAM 256/64/16, DBPSK, DQPSK)	
Port	One Ethernet po	ort
Standards	IEEE 802.3, IEE	E 802.3U, HomePlug 1.0.1
Operating System	Window 98 SE, Me, NT, 2000, XP, MAC, Linux	
Nodes	Supports up to 15 nodes per network	
Encryption	56 bit DES Link Encryption with key management	
LEDs	LINK/ACT, LINK, ACT, COL	
Environment	Temperature	Operating : 0~40°C
		Storage : -20~60°C
	Relative	Operating : 10~85% Non-Condensing
	Humidity	Storage : 5~90% Non-Condensing
Power Source	100~240 VAC, 50/60 Hz	
Certification	FCC, CE, HomePlug 1.0.1	

LEDs

LINK/ACT	On: Ethernet device linked
	Off: No Ethernet device linked
	Blinking: Ethernet traffic detected
LINK	On: Powerline adapter detected
	Off: No Powerline adapter detected
ACT	Blinking: Powerline traffic detected
	Off: No Powerline traffic detected
COL	Blinking: Powerline collision detected
	Off: No Powerline collision detected