





ALL0237R

Wireless N 300Mbit
Access Point/Repeater





User's Manual

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About the Device

ALLNET ALL0237R is a Wall-plugged 300Mbps Wireless-N Repeater, which supports wireless 802.11b/g/n, and one 10/100 Base-T Ethernet port.

Repeat and Extend the WiFi Network

ALL0237R supports robust 802.11n technology with up to 300Mbps data transfer rate. The extender can take an existing 802.11n wireless signal, repeat and extend it to a longer range where it is too far away for the router or access point to reach. It eliminates the cable wires while providing the same reliable network connection. It can repeat and extend the wireless signal from virtually any 802.11n wireless router or access point that is launched on the market. It is backwards compatible with the 802.11b/g router or access point.

Make Wired Network WiFi Ready

The extender is equipped with 1 x 10/100M Auto MDI/MDIX LAN port that can be used to connect to an existing wired network to serve as a wireless interface. It can also be used to configure the extender via its web-based GUI, or upgrade the firmware.

MIMO Technology

The device is designed with MIMO technology, which successfully reduces “dead spot”, and extends network coverage within a home or in the building.

Advanced Security

ALL0237R features with 64/128-bit WEP encryption and WIFI Protected Access (WPA), WPA2 to ensure the network security and prevent unauthorized access to you network.

Portable without the Need of External Power Supply

The device is easy to setup. It is portable with no need of any external power adaptor. It comes with the embedded power supply and power plug, so that users can just plug the device into a power socket.

Minimum System Requirements

Your computer must meet the following minimum requirements.

- Any operating system can be used
- Web Browser
- 233MHz processor
- Ethernet network adapter
- Or Wireless network adapter

Package Contents

Package contents are listed below. For any missing items, please contact your dealer immediately. Product contents may vary for different models.

- ALL0237R
- Ethernet cable
- Easy Start Guide
- Resource CD



Device Overview

Front Panel

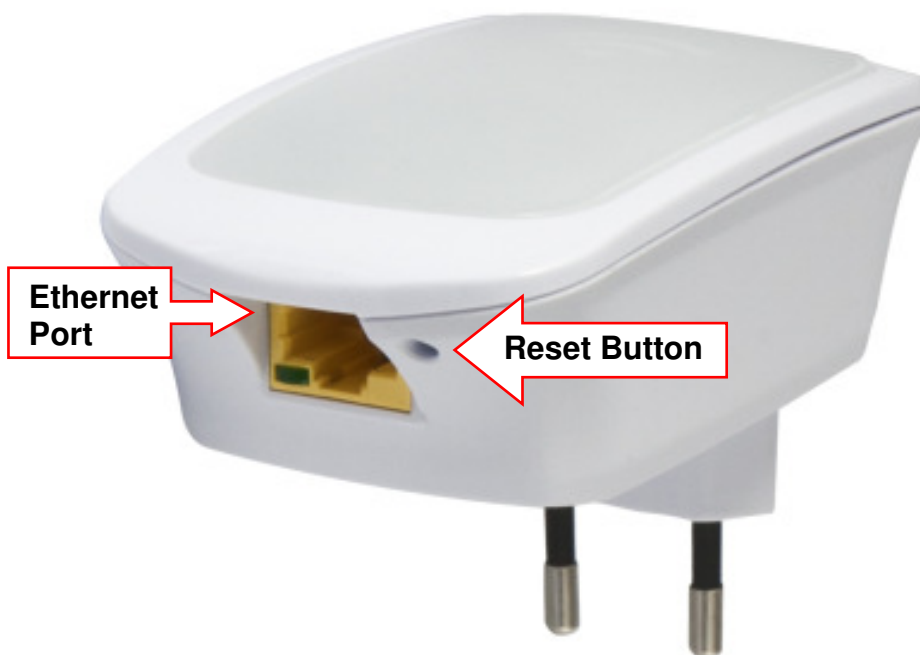
LABEL	STATE	DESCRIPTION
LED RRSI		
3 BARS	Connected	95% and above RSSI (Excellent)
2 BARS	Connected	55-94% RSSI (Recommended)
1 BAR	Connected	10-54% RSSI (Weak)

Top Panel



LABEL	DESCRIPTION
WPS BUTTON	Connect ALL0237R to any WPS capable devices

Bottom Panel



LABEL	DESCRIPTION
RESET	Press the Reset button for 5 seconds to restore the device to default factory settings
ETHERNET PORT	Connect to computers/Ethernet devices

Accessing the User Interface

To access the User Interface open a Web browser (Ex: Internet Explorer, Firefox or G.chrome) and type *http://192.168.1.1* in the address bar and press enter.



Quick Connect

Press *Quick Connect* icon to scan for available wireless within the area.

Setup

 ALLNET
ALL0237R 300Mbit Wireless Repeater
Reboot 

Wed Jan 30, 2013 09:01:27 AM





Setup for ALL0237R 300Mbit Wireless Repeater

Mode of Operation: Repeater Access Point Bridge

SSID:

MAC Address:

Broadcast SSID: ENABLED DISABLED

Security Mode: OPEN ↓

Channel: 2412MHz (Channel 1) ↓

Enhanced Compatibility: On Off

✔ Apply

Mode of Operation

Repeater

Configure your device as a wireless repeater to extend the wireless coverage of your wireless router.

Access Point

Configure your device as an access point to provide wireless network

Bridge

Configure your device as a Bridge to act as wireless client to your network device

SSID

Here you can set the name of your wireless network. Select the option Disable on Broadcast SSID allow you to hide the wireless network name.

Security Mode

Select from different encryption type on the list to be used to provide security to your wireless network from unauthorized users. Select

WEP

HEX

64bit – uses 10 characters length of password from A-F and numbers from 0-9

128bit- uses 26 characters length of password from A-F and numbers from 0-9

ASCII

64bit – uses 5 characters alpha numeric password (A-Z and 0-9)

128bit – uses 13 characters length of password from (A-Z and 0-9)

WPA

Uses strong encryption, some legacy devices may not be able to associate with this type of encryption

WPA2

Use this encryption for best security, some legacy device may not associate with this type of encryption

WPA/WPA2 PSK

Use a balance of strong security and best compatibility for new and legacy devices.

Wireless

Wireless Basic Settings



The image shows a screenshot of a web-based configuration interface for wireless settings. At the top, there are several icons representing various wireless technologies and devices. Below the icons is a navigation bar with three buttons: 'Wireless', 'Advanced', and 'System'. The main content area is titled 'Wireless Basic Settings' and contains the following configuration options:

- Enable Wireless:** A toggle switch with 'ENABLED' selected (highlighted in blue) and 'DISABLED' as an alternative.
- Broadcast SSID:** A toggle switch with 'ENABLED' selected (highlighted in blue) and 'DISABLED' as an alternative.
- SSID:** A text input field containing the value 'ALL0237r'.
- Wireless Mode:** A dropdown menu with '11b/g/n mixed mode' selected.
- Channel:** A dropdown menu with '2412MHz (Channel 1)' selected.
- HT Data Rate:** A dropdown menu with 'Auto' selected.
- HT Channel Bandwidth:** A radio button group with '20' and '20/40' options; '20/40' is selected and highlighted in blue.
- HT Guard Interval:** A radio button group with 'Long' and 'Auto' options; 'Auto' is selected and highlighted in blue.
- HT Channel Mode:** A text input field containing the value 'HT40+'.

At the bottom of the configuration area, there is a blue button with a checkmark icon and the text 'Apply'.

Enable Wireless

Enable or Disable wireless capability

Broadcast SSID

Set option to disable to hide your wireless network (Enable by default)

SSID

Here you can enter the name of your wifi network

Wireless Mode

This option allows you to select the type of wireless standard you want to allow to connect to your wireless network.

Channel

Change your wireless channel when you are getting poor reception. Choose the least channel used in your area for better performance (Only applicable for AP mode)

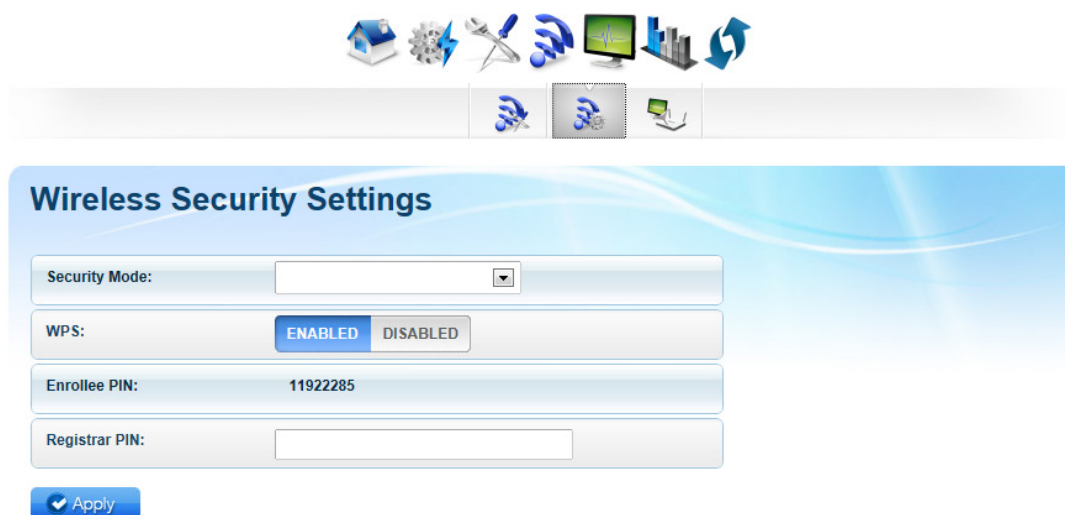
Channel Bandwidth

Here you can set your Channel Bandwidth to 20MHz and 20/40MHz(Auto)

HT Data Rate and HT Guard Interval

These options are recommended to be set to Auto for maximum efficiency.

Wireless Security Settings



The image shows a screenshot of the 'Wireless Security Settings' web interface. At the top, there is a navigation bar with several icons representing different network settings. Below the navigation bar, the main content area is titled 'Wireless Security Settings'. It contains four input fields: 'Security Mode' with a dropdown menu, 'WPS' with 'ENABLED' and 'DISABLED' buttons, 'Enrollee PIN' with the value '11922285', and 'Registrar PIN' with an empty text box. At the bottom left of the form, there is a blue 'Apply' button with a checkmark icon.

Security Mode

Select the type of encryption you want for your wireless network

WPS

Set this option to enable or disable WPS (Wifi Protected Setup) feature on this device

Enrollee PIN

Enter this PIN to wireless client that will be connecting to ALL0237R repeater to automatically configure the wireless device.

Registrar PIN

Here you can enter the WPS-PIN of wireless clients and click apply for the ALL0237R to allow access and configure your wireless client device automatically

Note: WPS will work only for WPA-PSK, WPA2-PSK and WPA/WPA2 encryption. Wireless client should support WPS feature to use this option.

MAC Filter Settings

This feature will provide additional protection to your wireless network. It allows or denies wireless clients from accessing through the ALL0237R with the use of the MAC address which is unique for every network devices.



The screenshot shows the MAC Filter Settings interface. At the top, there are several icons representing network-related functions. Below the icons, the title "MAC Filter Settings" is displayed. The interface includes a "Policy:" section with three radio buttons: "Disabled" (selected), "Allow", and "Deny", along with an "Apply" button. Below this is a "MAC Address:" section with a text input field and a green "+" button. At the bottom, there is a table with the following data:

S.No.	MAC Address	Rule	Remove
1	1a:2b:3c:4d:5c:6d	Disable	

Policy

Disable

Use this option to disable or disregard the list of MAC address from blocking or allowing access to the wireless network.

Allow

Allow the list of MAC address from accessing the wireless network


Deny

Deny the list of MAC address form accessing the wireless network

MAC Address

Type the MAC address of the wireless client here and press  to add on the list.

Removing MAC address from the list

Press this icon  to remove the MAC address from the list

Where can I find the MAC address of my wireless client?

On the Command Prompt type *ipconfig/all* to show all the network adapter(s) that are available.

```

Drahtlos-LAN-Adapter Drahtlosnetzwerkverbindung:
Verbindungsspezifisches DNS-Suffix:
Beschreibung. . . . . : 802.11n USB Wireless LAN Card
Physikalische Adresse . . . . . : 00-0F-C9-0A-EE-CA
DHCP aktiviert. . . . . : Ja
Autokonfiguration aktiviert . . . : Ja
Verbindungslokale IPv6-Adresse . . : fe80::880d:1405:2856:7591%14<Bevorzugt>
IPv4-Adresse . . . . . : 192.168.1.189<Bevorzugt>
Subnetzmaske . . . . . : 255.255.255.0
Lease erhalten. . . . . : Montag, 11. Februar 2013 17:56:58
Lease läuft ab. . . . . : Dienstag, 12. Februar 2013 17:57:12
Standardgateway . . . . . : 192.168.1.254
DHCP-Server . . . . . : 192.168.1.254
DHCPv6-IAID . . . . . : 385880009
DHCPv6-Client-DUID. . . . . : 00-01-00-01-17-B2-D2-26-00-08-54-55-95-4B

DNS-Server . . . . . : 192.168.1.254
NetBIOS über TCP/IP . . . . . : Aktiviert
    
```

System

Device Information



Device Information

Firmware Version:	262.23.1-002
Build Date:	Jul 16 2012
Serial Number:	2626110401577
ETH MAC Address:	00:0F:C9:08:36:93
Bridge MAC Address:	00:0F:C9:08:36:93
Wireless MAC Address:	00:0F:C9:08:36:94
Wireless Status:	Enabled

Firmware Version

Shows the current firmware version of the device

Build Date

Shows the date when firmware is created

Serial Number

Shows the device's serial no

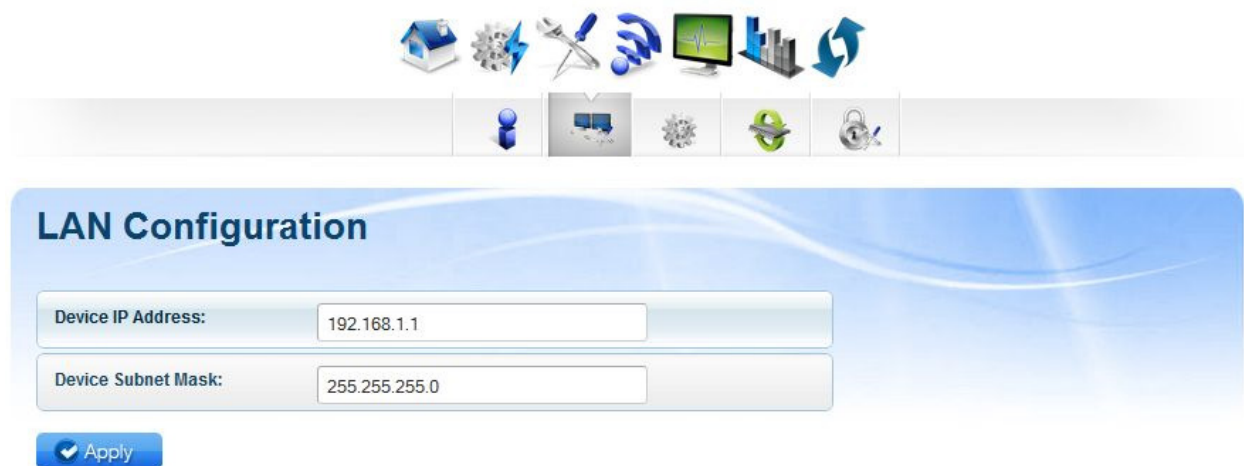
ETH/Bridge and Wireless MAC address

Shows the MAC address of the different Interface

Wireless Status

Shows the wireless device's wireless status

LAN Configuration



LAN Configuration

Device IP Address: 192.168.1.1

Device Subnet Mask: 255.255.255.0

Apply

Device IP address

Shows the device's current IP address

Note: Change this IP address if you are using two ALL0237R on the same network to avoid IP address conflict within your network. You may configure the 2nd unit with IP address ex: 192.168.1.2

Configuration Settings



Backup Settings

Allow you to save the current configuration of ALL0237R. Default file name for the backup file will be "RT2880_Settings.dat". Click **Apply** to start saving your configuration.

Update

Here you can load the saved configuration of your ALL0237R. Click browse and load the saved settings by clicking on the apply button.

Restore

Click on the apply button to reset the unit back to its factory settings. Unsaved information will be lost.

Firmware Upgrade

This option allows you to update the firmware of your device for future changes and enhancement. Download firmware only at <http://www.allnet.de/downloads.html> for future enhancement.

The screenshot displays the web interface for the ALLNET ALL0237R 300Mbit Wireless Repeater. The page title is "ALL0237R 300Mbit Wireless Repeater" and includes a "Reboot" button. The date and time are "Wed Jan 30, 2013 09:05:30 AM". The interface features a navigation bar with icons for Home, System, and other settings. The main content area is titled "Firmware Upgrade" and shows a progress bar with steps: "Steps", "Download Latest Firmware", "Click the browse button to locate the firmware", and "Click Apply to upload". Below the progress bar are input fields for "Firmware Version:", "Build Date:", and "Firmware File Name:". The "Firmware File Name" field includes a "Datei auswählen" button and the text "Keine Datei ausgewählt". A note states: "Note: The update process takes about 3 minutes to complete, and your ALL0237R 300Mbit Wireless Repeater will reboot." At the bottom of the section is an "Apply" button.

Updating the firmware

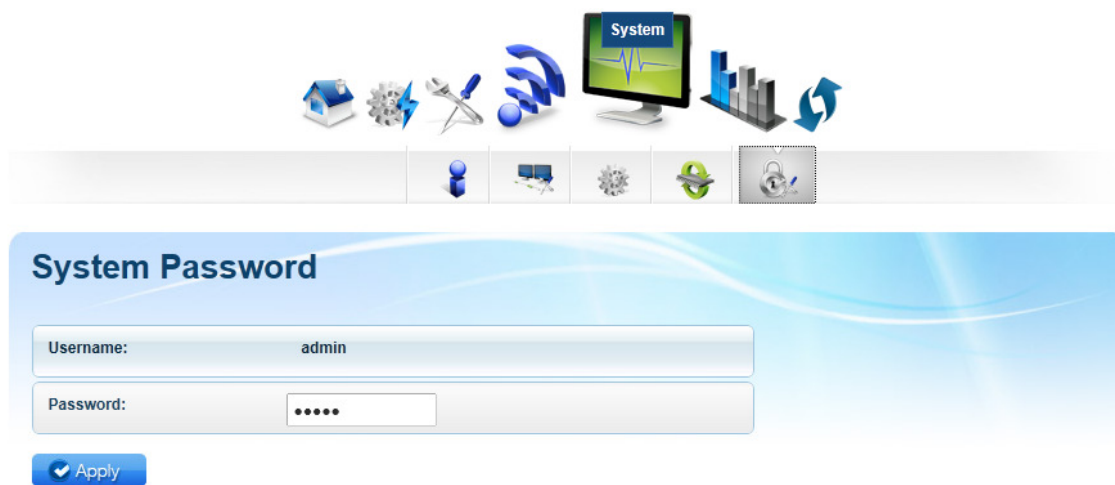
- Connect an Ethernet cable between ALL0237R and computer
- Open web browser and type `http://192.168.1.1` to access the user interface
- Click on Setup and select firmware under the sub menu

- d. Click on the **Browse** button and locate and open the firmware for ALL0237R and click **Apply** to start the update.

Note: It is recommended to only use firmware which is officially release by ALLNET, Using third party firmware will void the warranty of the device.

System Password

Set a password on web user interface to prevent other users from getting access to the web UI and avoid unwanted changes from your settings.



The screenshot shows a web interface for configuring the system password. At the top, there is a navigation bar with several icons: a house, a gear, a wrench, a blue sphere, a monitor labeled 'System', a bar chart, and a refresh arrow. Below the navigation bar is a horizontal menu with icons for user management, system settings, a gear, a green circular arrow, and a padlock. The main content area is titled 'System Password' and contains two input fields: 'Username:' with the value 'admin' and 'Password:' with masked characters '.....'. Below these fields is a blue 'Apply' button with a checkmark icon.

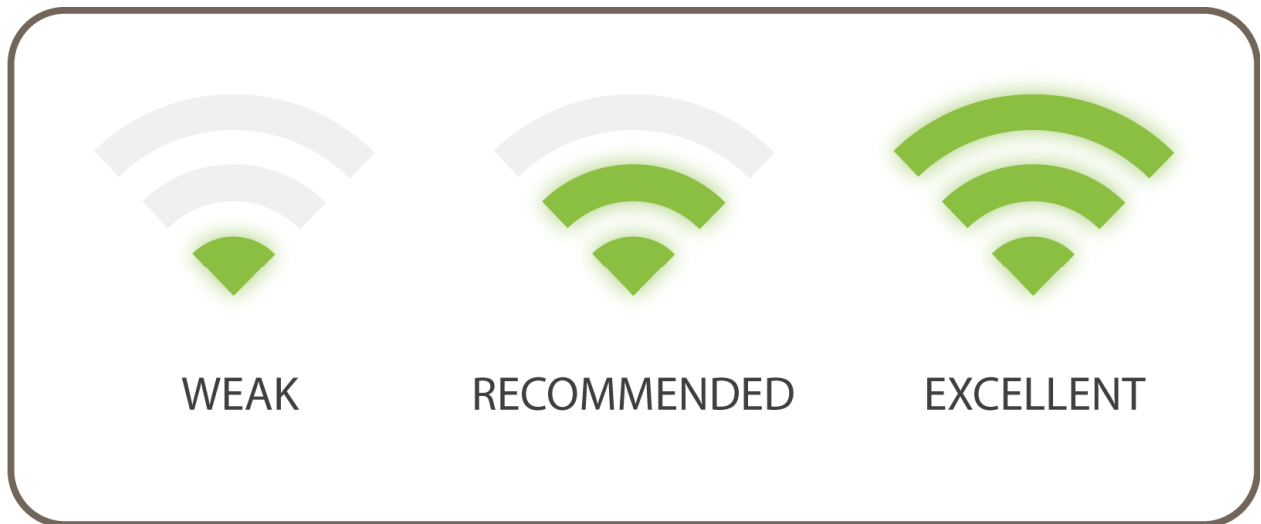
System Password

Type your password and click on apply to activate this feature. To disable, simply remove the password and click apply to save your settings.

Note: forgotten password will not be recovered. Reset the device pressing the reset button found beside the Ethernet port of ALL0237R.

Configuring the Device

Placement of the Wireless Repeater is crucial to get the best possible results for extending your existing wireless signal. It is ideal for the wireless repeater to be placed in a location where it can receive good wireless signal from the wireless router/AP so as to avoid disconnection and packet loss.




LED smart indicator determines the signal strength from your wireless router.

Wireless reception and throughput may vary according to the number of wireless clients that are in use at the same time, other nearby wireless devices, structure type, building materials and other interference present.

Wireless Repeater

- a. Plug your ALL0237R to a power outlet, switch it ON and connect the Ethernet cable between your ALL and Computer
- b. Launch web browser and you will be directed to the User Interface (In case it does not open type *192.168.1.1* and hit enter)



- c. Select your SSID (wireless network/wifi name) from the list and click connect 
- d. Type the password for the wireless network of your router and click apply. The ALL0237R will reboot and will redirect to the user interface with the following status.



Disconnect the Ethernet cable from ALL0237R and computer then place the device at the location, where it can get sufficient reception from your wireless router.

SETUP DIAGRAM (REPEATER)



Wireless Access Point

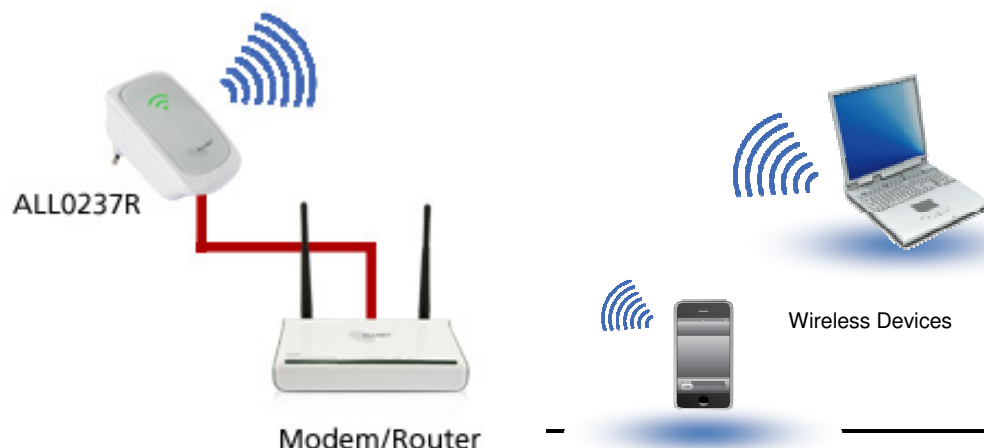
Setup your ALL0237R as an access point to provide wireless network to router that doesn't have wireless feature.

- a. Plug your ALL0237R to a power outlet
- b. Connect an Ethernet cable between the ALL0237R and Computer
- c. Launch web browser and you will be directed to the User Interface



- d. Go to Setup, set Mode of Operation to Access Point
- e. Type the name of your wireless network under SSID
- f. Type the password of the wireless network and click apply
- g. Connect the ALL0237R to router's LAN port after the settings have been saved.

SETUP DIAGRAM (AP)



Wireless Bridge

Connect wired devices to your wireless network by connecting an Ethernet cable from a wired device, such as a Desktop PC, Game Console or Internet-ready LCD TV, to the Ethernet port of the ALL0237R.

- a. Plug in and turn ON your ALL0237R
- b. Connect the Ethernet cable between your computer and ALL0237R
- c. Launch a web browser. You will be directed to the user interface

ALLNET[®] ALL0237R 300Mbit Wireless Repeater Reboot

Wed Jan 30, 2013 09:25:07 AM

Setup for ALL0237R 300Mbit Wireless Repeater

Mode of Operation: Repeater Access Point Bridge

SSID:

MAC Address:

Security Mode: OPEN

Channel: 2412MHz (Channel 1)

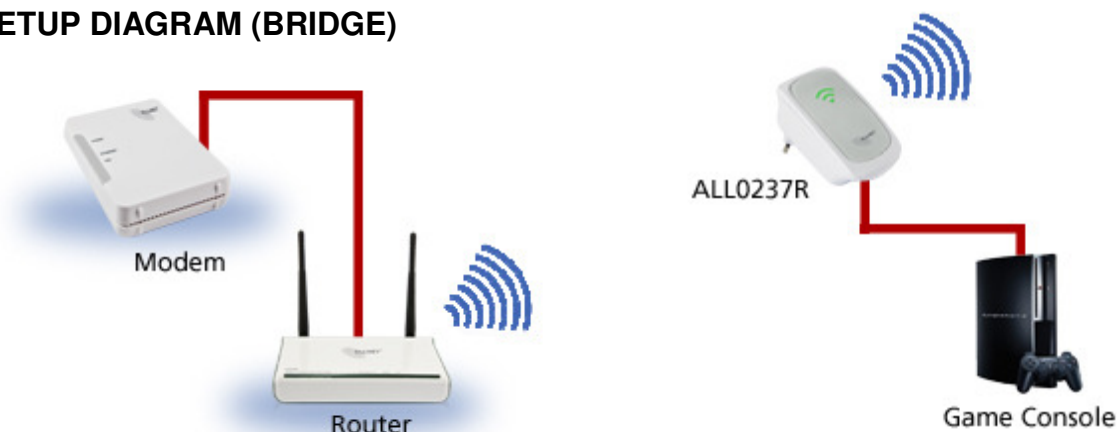
Enhanced Compatibility: On Off

Apply

- d. Click on **Setup** and set Mode of Operation to **Bridge**
- e. Type the name of your wireless network for the **SSID**
- f. Enter the channel and password of your wireless network and click apply

Note: SSID, Security mode, password/passphrase and wireless channel must match to router's wireless settings.

SETUP DIAGRAM (BRIDGE)

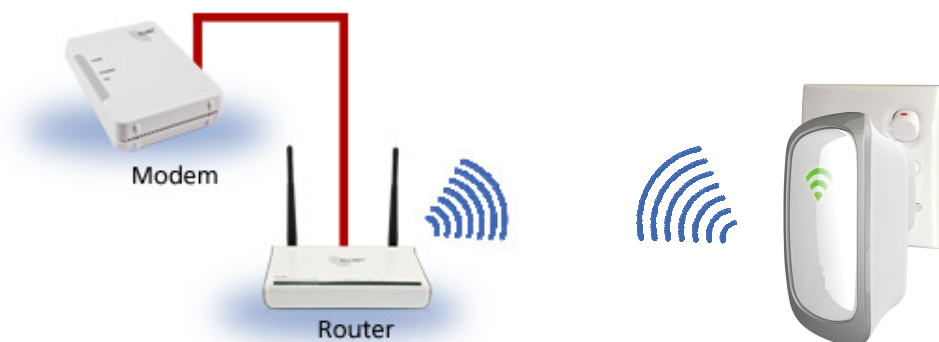


WPS

WPS or Wifi Protected Setup makes it easier for you to connect your ALL0237R to your wireless router and ALL0237R to your wireless devices with a push of a button. (WPS feature must be enabled and must be supported on the wireless router and wireless devices that will be connected to ALL0237R)

Configure ALL0237R to Wireless Router via WPS

- Press the WPS button of ALL0237R for 5 seconds
- Press the WPS button on your router for 2 seconds within 2 minutes time



Configure ALL0237R to Wireless client via WPS

- Press the WPS button of ALL0237R for 2 seconds
- Press the WPS button on the wireless client for 2 seconds within 2 minutes.

Safety Precautions

- Pluggable equipment must be installed near to an easily accessible socket outlet.
- Do not open, service, or change any component.
- Only qualified technical specialists are allowed to service the equipment.
- Observe safety precautions to avoid electric shock.
- Check voltage before connecting to the power supply. Connecting to the wrong voltage will damage the equipment.



CE-Declaration of Conformity

For the following equipment:

Germering, 7th of December, 2012

ALLNET Wireless N 300Mbit Access Point/Repeater

ALL0237R



The safety advice in the documentation accompanying the products shall be obeyed. The conformity to the above directive is indicated by the CE sign on the device.

Compliance to those standards are required for the following Directives;

Directive 1999/5/EC R&TTE

Application of the CE Mark is permitted only after all applicable requirements are met in accordance with the European Union Rules, including the manufacturer's issuance of a „Declaration of Conformity“.

Additional guidelines can be found at: R&TTE Directive website:

<http://ec.europa.eu/enterprise/rte/guide7.htm>. This attestation is specific to the standard(s) stated above and compliance with additional standards and / or directive may be required

This equipment meets the following conformance standards:

EN300328 V1.7.1 (2006-10)
EN301489-1 V1.9.2 (2011-09)
EN301489-17 V2.1.1 (2009-05)
EN62311.2008

This equipment is intended to be operated in all countries.

This declaration is made by
ALLNET Computersysteme GmbH
Maistraße 2
82110 Germering
Germany

Germering, 07.12.2012


Wolfgang Marcus Bauer
CEO