

USER GUIDE

AC1900 | 24x8 CABLE MODEM ROUTER

Model CG7500

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# **Product Overview**

# **Front view**



From top to bottom

**Power**—Lights up green when the modem router is powered on.

**Receive**— Light blinks green while the modem router is searching for a connection over the cable network. Light is solid green when the modem router is receiving data from the cable network. Light is solid blue during multichannel bonding.

**Send**—Light blinks green while the modem router is searching for a connection over the cable network. Light is solid green when the modem router is sending data to the cable network. Light is solid blue during multichannel bonding.

**Status**— Lights up green when the modem router has an Internet connection. Flashes green while the modem router is establishing the Internet connection.

**Ethernet**—Light is solid green when the modem router is connected to a device through the LAN port.

**2.4 GHz Wi-Fi**—Light is solid green when broadcasting 2.4 GHz signal. Light blinks when the modem router is actively sending or receiving data over the network.

**5** GHz Wi-Fi—Light is solid green when broadcasting 5 GHz signal. Light blinks when the modem router is actively sending or receiving data over the network.

**USB**—Light is solid green when the modem router is connected to a device through the USB port.

**WPS**—Light is solid green when a Wi-Fi Protected Setup<sup>™</sup> connection is successfully established. Light blinks slowly while WPS is setting up a connection, and blinks rapidly if an error occurs. Light is off when WPS is idle.

# Back



From top to bottom

**USB port**—Connect and share a USB drive on your network or on the internet.

**Reset button**—Press and hold for about five seconds to reset the modem router to factory defaults.

**Ethernet ports**— Connect the modem router to computers and other devices with ethernet cables (also called network cables).

**Cable port**—Connect the modem router to an active cable signal with a coaxial cable.

**Power port**—Connect to the included power adapter.

# Installation

# Setup

Disconnect any modems or modem routers before setting up your new modem router.

1. Connect the provided coaxial cable to the cable port on the modem router and a wall jack.



2. Connect the power adapter to the modem router and plug into a power source.



- 3. Connect to the secure Wi-Fi name on the sticker in the Quick Start Guide that came with your modem router. There is also a sticker on the bottom of the modem router. (You can change these details later.) Select the option to automatically connect to this network in the future. You will not have internet access until you complete modem router setup.
- 4. Open a web browser and type <u>http://192.168.1.1</u> in the address bar.



5. In the pop-up window, enter "admin" in the Password field. Click Log in. The webbased setup page of your modem router will appear.

L	LINKS	<b>Y5</b> 900 Cable M	Modern Router	
	AUTHENT	ICATION RE	QUIRED	
	Password:			
			Log in	

6. Make sure you are on the *Quick Start* tab. Click Begin to start the setup wizard.



7. When your modem router is ready, the top four lights (power, receive, send, status) will be solid.



Advanced users can select "I want to skip the Setup and configure the router manually."

# Let's get started

Setup will guide you through activating your modem router and customizing its settings.

I have read and accepted the License Terms for using this software

I want to skip the Setup and configure the modem router manually

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If you choose to manually set up the modem router, you will need to have the following information available for activation:

- Account number of your broadband subscription
- Phone number linked with your account
- Serial number of the modem router (on the back of the unit)
- MAC address of the modem router (on the back of the unit)

## To activate:

Open a web browser from a computer that's connected directly to the modem router. This is where you will need the information above (account number of your broadband service, phone number and new modem router device identifiers). Some service providers have additional setup steps that will automatically appear in the browser – if not, visit the appropriate link below. Follow the steps for your internet provider or call them if you are unable to get online.

Note—The modem router may reboot several times during this process and activation can take up to five minutes.

After activation, you should be able to connect to the internet wirelessly via your modem router or a wired connection between your computer and the modem router.

Helpful links:

- https://install.charter.com/
- https://activation.cox.net
- www.xfinity.com/activate

# **Browser-Based Utility**

If you would like to change the modem router's advanced settings, use the browser-based utility. For more help with the utility, click the *Help* link in the upper-right corner of the screen or go to our support website www.linksys.com/support/cg7500.

INKSYS			AC1900 Wi-Fi C	Cable Modern Router of
System Status	Quick Start	Configuration	Parental Controls	Trouble choosing
onnectivity	Wi-Fi Settings			
VLEI Settore	2.4 GHz Network			
MAC Filtering	Wi-Fi Name	Linksys00049		/
Wi-Fi Protected Setup Guest Access	Broadcast SSID	Enabled	He	Ip link
Advanced Settings	Network Mode	802.11 b/g/n mixed	1	
Security	Bandwidth	Auto	1	
Administration	Channel	Auto(6)	1	
	Security Mode	WPA2 Personal	1	
	Password	19710D94600049		
	5 GHz Network			
	Wi-Fi Name	Linksys00049_5G		

# How to access the browser-based utility

1. Launch the web browser on your computer, and enter the router's default Internet Protocol (IP) address, 192.168.1.1, in the address field. Press Enter.



- 2. In the *Password* field, enter the password created during setup. If you did not change the password, the default is "admin".
- 3. Click Log in to continue.

# How to use the browser-based utility

Navigate the utility by using the tabs along the top of the screen and the corresponding specific menus down the left side of the screen.

System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
nectivity	Wi-Fi Settings			
£i	2.4 GHz Network			
MC Filtering	Wi-Fi Name	Linksys00049		
M-Fi Protected Setup Juest Access	Broadcast SSID	Enabled		
Idvanced Settings formal Storage	Network Mode	802.11 b/g/n mixed	E	
curity /	Bandwidth	Auto	E	
Vestration	Channel	Auto(6)	B	
	Security Mode	WPA2 Personal	8	
	Password	19710D9A600049		
	5 GHz Network			
	Wi-Fi Name	Linksys00049_5G		

If you change any settings on a screen, you must click the **Save** button at the bottom of the screen to apply your changes. Likewise, click **Cancel** to clear your changes.

**Note**—To learn more about any field, click the Help link in the upper-right corner of the screen.

# System Status

# Status

# Status > Overview



Overview tells you how long the router has been working since its last restart (Router Uptime), and how long it has been connected to the internet (Internet Uptime) in that period. This screen also shows your Wi-Fi name and password, and some details on any Wi-Fi devices managed by Parental Controls.

LINKSYS			AC1900 Wi-Fi C	O Log Out O Help Ferminale Version: 1.0.00.010 able Modern Router corsoo
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
- Stahn Orgenitee System Homation Wo-Fi	System System Information Handware Version Software Version Cable Modern Router Serial Number HI'C MAC Address System Time Time Zone WAN IP Address WAN IP Address (Pvt)	0A 1.0.00.010 1971009A600049 6038-e0 fabase0 Tue: 31 Jan 2017 14:01:39 UTC-08:00 Pacific Time (UT 192:168.66 40	5 & Canada)	
	WAN Receiving	2.26M Bytes		
	WAN Sending	751.76K Bytes		
	Internet Uptime	001 days 02h:22m:43s		
	LAN IP Address	192.168.1.1/24		
		0 2017 0	labin triangland, inc. and/or its subsidiaries and affiliate	a including Enkeye LEC. All rights tokerved

# Status > System Information

System Information page shows basic information such as the MAC address, software version, and the time that has elapsed since the last restart etc.

# Status > Wi-Fi

The Wi-Fi screen provides detail about all Wi-Fi bands, including Guest Wi-Fi. Clicking the Wireless Clients button displays details about any connected Wi-Fi devices.

LINKSYS				AC1900 Wi-Fi Cable	O Log Out O Help Firmware Version: 1.0.00.010 Modern Router coarso
System Status	Quick Start	Configuration	Parenta	I Controls	Troubleshooting
+ Status Overview	Wi-Fi Status				
System Information	Wi-Fi Status (2.4 GHz)	Enabled			
	Network Mode (2.4 GHz)	802.11 b/g/n I	fixed		
	Channel (2.4 GHz)	Auto(6)			
	Wi-Fi Status (5 GHz)	Enabled			
	Network Mode (5 GHz)	802.11 a/n/ac	Mixed		
	Channel (5 GHz)	Auto(153)			
	WI-Fi Overview				
	Wi-Fi Name:	Status	Password:	Security 1	Mode
	Linksys00049	Enabled	19710D9A600049	WPA2 Per	sonal
	Linksys00049_5G	Enabled	19710094600049	WPA2 Per	sonal
	Guest SSID Overview				

# Configuration

# Connectivity

# Connectivity > Local Network



Your router ships with the most common settings, and several settings are configured during setup. You may never have to change these settings.

## LAN IP Address

The router's IP address on your Wi-Fi. If you change this address, you'll have to reconnect your devices to your router.

## Subnet Mask

The router's subnet mask on your Wi-Fi. It is used to divide a network into subnets so information can be routed correctly to computers and devices.

## **DHCP Server**

DHCP (Dynamic Host Configuration Protocol) is enabled by default. DHCP assigns IP addresses as needed to devices connected to your Wi-Fi.

## **DHCP Starting Address**

The value that the DHCP server starts with when issuing IP addresses.

## DHCP Ending Address

The value that the DHCP server ends with when issuing IP addresses.

## **DHCP Lease Time**

The amount of time a Wi-Fi user is allowed connection to the router with her current IP address. When the time has expired, the user will be automatically assigned a new IP address, or the lease will be renewed.

# Static DNS 1-3

Domain Name System (DNS) is how the internet translates a domain or website name into an internet address, or URL, that you can access. Your ISP will provide at least one DNS server IP address. You can enter up to three.

#### WINS

Windows Internet Naming Services manages each computer's interaction with the internet. If you use WINS a server, enter the server's IP address. Otherwise, leave it blank.

## **DHCP Reservations**

Click to add or change the DHCP reservations used on your Wi-Fi. DHCP reservations allow you to assign a unique, fixed IP address to a specific device on your Wi-Fi. This is helpful when managing devices such as print servers, cameras, printers or game consoles. A fixed IP address is also recommended if you want to use port forwarding for devices that need to receive inbound date from the internet. To assign an IP address and MAC address to a device, click **Add** and then enter the device name, IP address, and MAC address. When finished, click **Apply**.

# Connectivity > WAN Setup

LINKSYS			AC1900 Wi-Fi C	O Log Diz      O Help Firmetee Version: 1.0.0.010 able Modern Router cs/rsoo
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
Connectivity Local Network WNN Setup Ansancted Routing Connected Devices     V/LF1     Educated Distinge     Security     Adventisationon	WAN Setup Waki Internation Automatic Configuratio Static IP Demain Name Server(DK) G Get Automatically from Use These DK3 Server Option	n - DHCP 1) Address 18P		
	MTU Gize Save Co	Enabled		

## **WAN Information**

Select your internet connection type. If you don't know, call your ISP.

Automatic Configuration - DHCP—Select if your ISP assigns IP addresses dynamically, meaning you get different IP addresses each time you start your computer.

**Static IP**—Select this if you use the same IP address each time you connect to the internet. Enter your internet address, subnet mask, default gateway, and DNS entries. You can get this information from your ISP.

## **Domain Name Server Address**

Most users get a Domain Name Server address automatically from their ISP. If you subscribe to your own DNS server, select Use These DNS Servers and complete the field(s).

# Option

This section is for advanced users.

# Connectivity > Advanced Routing

Connectivity Advanced Routing Local Network WAN Setup Static Routing Table Advanced Routing Connected Devices Add ViFi Sternal Storage Recurity Same Cance	Connectivity Local Network WAN Setup	Advanced	Routing				8
Advanced Routing Name Destination IP Address Subnet Mask Default Gateway Status Action Connected Devices Add Wi-Fi External Storage Security Save Cancer	in the second seco		uting Table				
Connected Devices Add MS-Fi External Storage Becurity Save Cancer	Advanced Routing	Name	Destination IP Address	Subnet Mask	Default Gateway	Status	Action
External Storage Security Cancer	Connected Devices	Add					
Security Save Cancer	External Storage						
	Security	Save	Cancel				
Administration	Administration						

Click **Add** to assign a specific IP address, subnet mask, and gateway address to a specific device. Click **Apply**.

# Connectivity > Connected Devices

LINKSYS			AC1900 Wi-	F Fi Cable Mo	Cog Out irmware Version: 1 dem Router	<ul> <li>Help</li> <li>0.00.010</li> <li>CG7500</li> </ul>
System Status	Quick Start	Configuration	Parental Cont	rois	Troubleshoot	ing
Connectivity     Local Network	Connected Devices					
WAN Setup	Device	IP Address	MAC Address	Туре	Interface	
Advanced Routing	ProductmentsMBP	192.168.1.101	00:25:00:4b:28:24	DHCP-IP	WiFi-5G	
Connected Devices						
• Wi-Fi						
External Storage	Refresh					
Security						
Administration						
	l.					

Information about devices connected to your Wi-Fi.

# Wi-Fi

# Wi-Fi > Wi-Fi Settings

LINKSYS			AC1900 Wi-Fi Cable	C Log Out O Help Firmware Version: 1.0.00.010 Modern Router CG7500
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
Connectivity	Wi-Fi Settings 2.4 GHz Network			
MAC Filtering	Wi-Fi Name	CG7500GUI		
Wi-Fi Protected Setup Guest Access	Broadcast SSID	Z Enabled		
Advanced Settings	Network Mode	802.11 b/g/n mixed	0	
External Storage				
Security	Bandwidth	Auto	÷	
Administration	Channel	Auto(6)	E	
	Security Mode	WPA2 Personal	0	
	Password	1111111		
	5 GHz Network			
	Wi-Fi Name	CG7500GUI		
		J. 7977 Bable International A	or satisfy in subsidiction and efficient includ	and internal \$1.7. Million to second

## Wi-Fi Name

Personalize the Wi-Fi name that appears in the list of available networks.

## **Broadcast Wi-Fi Name**

Allows Wi-Fi devices to detect your Wi-Fi name when they survey the local area for available Wi-Fi. Not broadcasting your Wi-Fi name does not improve your Wi-Fi security.

## **Network Mode**

Select the standard your Wi-Fi supports.

## Bandwidth

The Auto setting provides the best performance with Wireless-B, Wireless G, and Wireless N (2.4 GHz), Wireless-A, Wireless-N, Wireless-AC (5 GHz) devices. For a channel width of 20 MHz, select 20 MHz only.

## Channel

Select the channel for Wireless-B, Wireless-G, Wireless-N, Wireless-A, or Wireless-AC networking. If you're not sure which one to use, choose *Auto*.

## **Security Mode**

Each device on your Wi-Fi must use the same security mode.

#### Password

Wi-Fi devices must enter this password, sometimes called a security key, to connect to your Wi-Fi.

# Wi-Fi > MAC Filtering

LINKSYS				AC1900 V	/i-Fi Cabl	C Log Out Firmware Version: 1.0 e Modem Router	Help 0.00.010 CG7500
System Status	Quick Start	Config	uration	Parental C	ontrols	Troubleshootir	ng
Connectivity Wi-Fi Wi-Fi Wi-Fi Settings MAC Elitering	Wi-Fi MAC Filters MAC Filters		Enabled				
Wi-Fi Protected Setup	Connected Devices	Refresh					
Guest Access Advanced Settings	Device ProductmentsMBP	IP Address 192.168.1.101	MAC Address	Type DHCP-IP	Interface WiFi-5G	Action Manage	
<ul> <li>► External Storage</li> <li>► Security</li> </ul>	Managed Wi-Fi MAC	Filters					
► Administration	Filter Options		w Access List	<ul> <li>Deny Access List</li> </ul>			
	Device	MAC A	ddress	Action			
	Add MAC Add Save	ress	I				

MAC filtering is a way to allow or deny access to your network by identifying specific MAC addresses. It is not a good substitute for a secure Wi-Fi password. If you enable MAC Filtering, Wi-Fi Protected Setup will be disabled automatically.

## **MAC Filters**

Select Enabled to begin filtering Wi-Fi devices by MAC address.

## **Filter Options**

Allow Access List limits access to devices whose MAC addresses are listed. All other devices will be denied. *Deny Access List* allows you to create a list of MAC addresses that cannot access your network. All devices not on that list will be able to connect to your network.

# Add MAC Address

Add a MAC address to your list.

# Wi-Fi > Wi-Fi Protected Setup

LINKSYS			AC1900 Wi-Fi Cable I	Log Out  Help Firmware Version: 1.0.00.010 Modem Router CG7500
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
▶ Connectivity ✔ Wi-Fi	Wi-Fi Protected Se	etup <sup>TM</sup>		
Wi-Fi Settings MAC Filtering	WPS Enabled	ON		
Wi-Fi Protected Setup Guest Access Advanced Settings	Wi-Fi Protected Se WPA2 Enterprise of security mode or s network mode (2.4	etup cannot be used with WEP, or WPA/WPA2 Enterprise Mixed setting broadcast SSID or 4G or 5G) disable or MAC	J	
<ul> <li>External Storage</li> <li>Security</li> </ul>	Filtering. To use W your Wi-Fi security network mode and	/i-Fi Protected Setup, change y mode, broadcast SSID, d/or disable MAC Filtering.		
<ul> <li>Administration</li> </ul>	Push Button			
	If your client device button, click or pre the button.	e has a Wi-Fi Protected Setup ess that button and then click	6	
	Router PIN			
		© 2017 Belkin International.	Inc. and/or its subsidiaries and affiliates, including	g Linksys, LLC. All rights reserved.

Wi-Fi Protected Setup makes it easy to add devices to your Wi-Fi without having to enter a Wi-Fi name and password. To use Wi-Fi Protected Setup, the device you want to connect must support it.

## **WPS Enabled**

If you uncheck this box, you can't use Wi-Fi Protected Setup to connect devices to your Wi-Fi, and the Wi-Fi Protected Setup push button on your router will also be disabled.

## **Push Button**

Use this if your device has a Wi-Fi Protected Setup button or prompts you to press the Wi-Fi Protected Setup button on your router. Press or click the Wi-Fi Protected Setup button on the device you want to connect to Wi-Fi, and then click the button on this page.

## **Router PIN**

Use this if the device you're connecting asks for the router PIN (Personal Identification Number). The router PIN is also listed on the bottom of the modem router.

## **Device PIN**

Use this if your device has a Wi-Fi Protected Setup PIN. Enter the PIN from the device into the PIN field and then click **Register**.

# Wi-Fi > Guest Access

System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
Connectivity	Guest Wi-Fi Settings	16		
Wi-Fi Wi-Fi Settings	Guest Wi-Fi 2.4 GHz	Enabled		
MAC Filtering	2.4 GHz SSID	Linksys00049-Guest		
Guest Access	Guest WI-FI 5 GHz	Enabled		
Advanced Settings External Storage	5 GHz SSID	Linksys00049-Guest-5G	1	
Security	Guest Wi-Fi Password	BeMyGuest		
Administration	Max Guest Allowed	5 Guests	8	
	Save Ci	ancel		

Guest Access is a way to share internet access. Guests can get online, but they can't see or access other connected devices. You can turn guest access on and off, give it a name and password, and set the number of guest devices allowed.

When you set up your router, a secure guest network was created automatically on the router's 2.4 GHz/5 GHz band. Guest access is available on these two bands. Be sure to keep this in mind if you're connecting other networking devices, such as an extender. It should be configured to use the 2.4 GHz/5 GHz band as well if you plan to use guest access.



# Wi-Fi > Advanced Settings

IGMP Snooping is turned on by default. Only advanced users should turn off this setting.

# **External Storage**

# External Storage > Status

LINKSYS	19		AC1900 WI-FI C	C Log Out O Help Ferminare Version: 1.0.00.010 able Modern Router co7500
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
• Connectivity • Ws Fi • External Storage	Status External Storage Drive			_
Status Folder Access FTP Server Media Server	Action No. Volume Name Folder Access	Ruteurs Space Used	Details	
Account Security	Folder Access	Enabled		
Administration	Secure Folder Access PC Access (File explorer)	Disabled		
	MAC Access (Finder)	smb://192.168.1.1		
	FTP Server			
	Server Name	CG7500		
	FTP Server	Disabled		
	Server LAN IP Address	ftp://192.168.1.1:21		

Click **Eject** before physically disconnecting a USB disk from the modem router. This prevents the possible loss of data, which may occur if you remove the disk while it is transferring data.

# External Storage > Folder Access

LINKSYS			A	C1900 WI-FI C	O Log Out O Help Ferriedre Version: 1.0.00.010 able Modem Router consce
System Status	Quick Start	Configuration	Parental (	Controls	Troubleshooting
Connectivity WS-Fi • External Storage	Folder Access Setup	and the second of			
Status Folder Access FTP Server	Secure Folder Access	Enabled			
Media Server Account • Security • Administration	Folder Manago Server Name Add Semba Folder	Partition	Folder	Edit	Delete
	Brie Dano	4			
			0 2017 Bakin International, Inc. and	r in admittative and afflare	na, Analading Lindaya, LLC, All vigita uniannast

You can decide who has access to external storage connected by USB to your modem router. When Shared Status is disabled, anyone on your network can access all content on your storage device. If it is enabled, you can specify which users can see which content.

Click **Eject** before physically disconnecting a USB disk from the modem router. This prevents the possible loss of data, which may occur if you remove the disk while it is transferring data.

# External Storage > FTP Server

	NERTIN NET C	3			
System Status	Quick Start	Configuration	Parental C	ontrols	Troubleshooting
Connectivity	FTP Server				
	Setup				
External Storage     Status	Server Name	CG7500			
Folder Access	FTP Server	Enabled			
FTP Server	Internet Assess	( French and			
Media Server	internet Access	C) Enabled			
Security	FTP Port	21			
Administration	Folder Manage				
	Server Name	Partition	Folder	Edit	Delete
	Add FTP Folder				
		424			

You can access the folders on your storage device remotely from anywhere you have an internet connection using an FTP (File Transfer Protocol) server. You can access the content using a web browser or FTP software.

Server Name - Personalized the name of your FTP server.

## **FTP Server**

Select to enable the FTP server, and make content available remotely.

#### **Internet Access**

Select to allow access to your storage device with a web browser.

#### FTP Port

The default port, 21, will work for most users. Advanced users may change to a different port to serve their needs.

#### Add FTP Folder

To add a FTP folder, enter the server name and the information to use.

# External Storage > Media Server

LINKSYS				AC1900 Wi-F	T Cable M	C Log Dut Fernivare Version, 1 odem Router	<ul> <li>Heip</li> <li>0.00.010</li> <li>007500</li> </ul>
System Status	Quick Start	Configuration	Par	ental Controls		Troubleshooting	
Connectivity Wi-Fi	Media Server						
<ul> <li>External Storage</li> <li>Status</li> </ul>	Media Server	S Enabled					
Folder Access FTP Server	Server Name	CG7500					
Media Server	Scan Interval	2 Hours	E		Soan Now		
• Security	Shared Media Folders	1					
Administration	Share Name And How Folder	Folder Location	Share Type	Status	Edit	Delete	
	tiave	Cancel					

A media server lets you share across your network content on an attached external storage device. You can share media with devices that are UPnP AV (Audio and Video)enabled or DLNA (Digital Living Network Alliance)-certified devices in your home. These include digital media players, gaming consoles with a built-in media player, and digital picture frames.

You can specify which folders are used by the media server, add and disabled/delete folders, and specify how often the folders are scanned for new content.

## **Media Server**

Select to share media.

## Server Name

Personalize the display name of your UPnP media server.

## **Scan Interval**

Specify how often the modem router scans folders on the external storage device for new content. Scanning can take several hours, especially the first time the device is scanned, or if you add a lot of new content. Subsequent scans should take less time. To scan the folders immediately, click **Scan Now**.

Click **Add New Folder** to add a new shared media folder. Select the folder on the attached external storage device that contains the content you want to share.

# External Storage > Account

VALUE AND A DESCRIPTION OF A	2010	1.000				
System Status	Quick Start	Configur	abon	Parential Controls	Troubleshooting	
onnectivity	Account					
	Group Management					
demal Storage Status Folder Access FTP Server Media Server	Group Name admin guest Create New Group	Acc reat	ess I and write I only	Edit	Delete	
Account	User Management					
ecumy	User Name	Group	Edit		Delete	
dministration	admin	admin	Mena	ige		
	guest Create New User	guest	Mana	600)/		

Two user accounts are preset for the modem router: admin and guest. The password for the admin user is the modem router's admin password. The password for the guest user is "guest".

## **Group Management**

If you want to add to the default groups, click **Create New Group** and enter the name, description and the type of permission the group will have. Select *Read and Write* to allow the group to view, edit, or delete content. Select *Read Only* to limit the group to viewing content.

## **User Management**

If you want to add a user to one of your groups, click **Create New User** and enter a user name, description, and password, and assign the user to a group.

# Security

# Security > Firewall

LINKSYS			AC1900 Wi-Fi C	C Log Out O Help Firminge Version: 1.0.00.010 able Modern Router corsoo
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
• Connectivity • Wi-Fi	Firewall Settings			
External Storage     Interfet     Prevail     DA2     DON3     Single Port Forenating     Port Range Forenating     Port Range Forenating     Port Range Forenation     Advertise/article	Preval  Block ICMP Prog (MAN)  DS Enabled  Filter IDENT (Port 113) E  Save Cancel	v Enabled		
		6.28	7 Debis International. Inc. and to its subscitation and addied	en including Lakaya LLC. Al rights inverved.

The firewall, which protects your Wi-Fi from internet threats, is enabled by default.

System Status         Duick Statut         Configuration         Parental Configuration           • Connectivity • W.F.I • Extend Storage         DMZ Settings	LINKSYS			AC1900 WI-FI C	C Log Out O Help Firmware Version: 1.0.00.010 Cable Modern Router corsco
Connectivity     OMZ Settings     Connectivity     OMZ Settings     DMZ Enabled     DMZ Enabled     DMZ     Destination IP Address     Oestination IP Address     Vew ChildP Char      Prevail     CMA     Single Forwarding     Port Rays Forwarding     Port Rays Forwarding     Address	System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
Accurate     Persent     Conso     Single Port Forwarding     Port Range Triggering     * Administration	• Connectivity • WS-Fi • External Streams	DMZ Settings	Enabled		
	Entrol charge     Entrol      Entr	Destination IP Address	Construction IP Address	- Yes (HDP Clarit Take	

The Demilitarized Zone (DMZ) feature can be used to expose a web server, mail server, or web camera to the internet so anyone can access it. This feature is not recommended because it presents significant security risks to the device that you designate for the DMZ. The device will not be protected by the built-in firewalls, internet filters, or modem router web filters.

With DMZ enabled, use the *Destination IP Address* to identify the device you wish to be in the DMZ. Click **View DHCP Client Table** to see a list of connected devices. Select the IP address of the desired device and it will automatically populate the *Destination IP Address* field.

# Security > DMZ

# Security > DDNS

LINKSYS			AC1900 WI-FI C	O Los Out O Hele Famware Verson: 1.0.00.010 able Modern Router corsco
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
• Connectivity • WI-Fi	DDNS Settings			
External Storage	Select a Provider	Disabled	0	
Stourty     Frewnit DMZ DMZ DMS Single Port Forwarding Port Range Triggering	Save Cano			
<ul> <li>Administration</li> </ul>				

The DDNS feature lets you configure a domain name for your home network, which you can use to easily find your network on the internet. This is useful if you want to remotely access a USB drive or web camera over the internet.

Select your DDNS service and complete the fields with information provided to you by your DDNS provider.

# Security > Single Port Forwarding

LINKSYS					AC1900 WI-FI Ca	rime ble Moden	Log Cut ire Version 1.0 n Router	<ul> <li>Help</li> <li>CO7500</li> </ul>
System Status	Quick Start	Confi	iguration	Pare	intal Controls	Trout	Heshooting	
• Connectivity • Wi-Fi	Single Port Forward	ting						
External Storage	Application Name	External Port	Internal Port	Protocol	Device IP Address	Status	Action	
Security	Add a New Sing	e Port Forwarding						
Frewall	-							
DMZ	-							
DONS	Save	Concol						
Single Port Forwarding								
Port Range Forwarding								
Port Kange Inggering								
Administration								
			6.WV	Ballin International In	e asthe in a building and efficient	Industry Links of W	A 40 - 44	_

Single Port Forwarding directs inbound traffic from the internet on a specific port to a single device on your Wi-Fi. For example, forwarding inbound web requests, typically on port 80, to a web server. To forward to multiple ports, create additional entries to forward additional ports to the same IP address. Click **Add a New Single Port Forwarding**.

## **Application name**

The application or device name using port forwarding. Refer to your device's documentation for recommendations if needed.

## **External Port**

Enter the external port number.

#### **Internal Port**

Enter the internal port number.

## Protocol

Select the protocol to use.

#### **Device IP Address**

Enter the IP address you have reserved for the computer you want to forward internet traffic to.

#### Status

Select to use the port forwarding. If you don't want to use port forwarding but want to keep the information in the table, unselect the checkbox.

# Security > Port Range Forwarding

LINKSYS				AC1900 Wi-F	Firm I Cable Mode	O Log Out O Help ware Version: 1.0.00.010 em Router carsoo
System Status	Quick Start	Configuration		Parental Controls	Tre	ubleshooting
• Connectivity • W-Fi	Port Range Forwarding					
External Storage	Application Name	Start-End Port	Protocol	Device IP Address	Status	Action
Security     Frewall     DM2     DM2     DM3     Single Post Enversion     Post Range Transacting     Post Range Transacting     Post Range Transaction     Administration	Add a how Port Range	newarding ne				
			0 2007 Robin to	temptanet, inc. and is in substitution and a	Minist including Critical	LLC: All rights reserved.

Port forwarding directs inbound traffic from the internet on range of ports to a specific device on your Wi-Fi. For example, some applications can use a range of ports so that if one port is busy, they can try another one. Click **Add a New Port Range Forwarding**.

## **Application name**

The application or device name using port forwarding.

## Start-End Port

The port number or range of ports used by the application or device for port forwarding. To specify a range of ports, separate the first and last port numbers with a dash, for example, 5800-5900.

## Protocol

Select the protocol to use, typically TCP.

## **Device IP Address**

Enter the last three digits of the IP address of the computer running the software that requires port forwarding.

#### Status

Select to use port range forwarding. If you don't want to use port forwarding but want to keep the information in the table, unselect the checkbox.

# Security > Port Range Triggering

LINKSYS				AC1900 WI-FI	Fe Cable Mod	Lop Dut
System Status	Quick Start	Configuration		Parental Controls	1	roubleshooting
• Connectivity • Wi-Fi	Port Range Triggering	Trioner Ranna	Forward Bano	e Protocol	Status	Action
Edienal Storage     Security     Prevail     DU2     DDNS     Single Powering     Pert Range Trageming     Pent Range Trageming     exchange trageming     exchange trageming	Add a New Port Fange	Trigoving tel				

Port range triggering allows the modem router to watch outgoing data for specific port numbers. The cable modem remembers the IP address of the device that sends the data so returning data is routed back to the proper device. This is useful when using a USB or Bluetooth headset for online chat and gaming. Click Add a New Port Range Triggering.

#### **Application name**

The application or device using port triggering.

## Trigger Port Range/Forward Port Range

The port number or range of ports used by the application or device for port triggering.

#### Status

Select to use port range triggering. If you don't want to use port range triggering for that entry, but want to keep the information in the table, unselect the checkbox.

# Administration

# Administration > Password



Allows you to change the modem router password. Use it to access modem router settings and features such as Guest Access and Parental Controls. To change the password, first enter the old password, then type a new password and confirm it. Click **Save**. Be sure to write down this password and keep it somewhere safe.

# Conception Cardination Cardination Cardination Conception Cardination Cardination

# Administration > Time Zone

Set the current time zone for your area and adjust the time for daylight savings time changes.

# Administration > Remote Management

LINKSYS			AC1900 WI-FI C	O Log Cur O Help Firmane Version: 1.0.00.010 Cable Modern Router cc/500
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
• Connectivity • Wi-Fi • External Storage • Security	Remote Managerr If you enable Remote admin pataword for t	nent a Management, we recommend changing your security purposes.	G	
Administration	Management Access			
Password Time Zone Remote Management Gateway Function Backup	Protocol HTTP HTTPS Remote Access IP A	On/Off Enabled Enabled Mddress Range	Port 5080 5181	
Device Reset	Allow Any Host to Acce	os the Device Remotely Central	Enabled	

Select a remote access protocol and identify a port to use when accessing your modem router settings when away from home and not connected to your Wi-Fi.

#### Protocol

Select the protocol for remote access.

## On/Off

Enabled/Disabled the remote access.

#### Port

Enter the port number that will be open to remote access.

Allow Any Host to Access the Device Remotely

Select to allow remote access to the modem router from any external IP address. Deselect to specify an external IP address or range of IP addresses allowed to remotely access your modem router.

1000 C 2000	and the second	Contraction .	State State State	3
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
Connectivity	Gateway Function			
wi-Fi				
External Storage	CPAP	Enabled		
	SIP ALG	S Enabled		
Administration				
Pasaword				
Time Zone	own can			
Gateway Function				
Backup				
Device Reset	1. C.			

# Administration > Gateway Function

UPnP (Universal Plug and Play) allows devices connected to Wi-Fi to discover each other and automatically create working configurations. Examples of UPnP-capable devices include web cameras, online gaming applications, and VoIP devices. UPnP is enabled by default.

Select to allow users to change router settings or disable your local internet connection while using UPnP.

SIP ALG (Session Initiation Protocol Application Layer Gateway) is a feature that allows certain VOIP service providers to get through your modem router's firewall. Select to use this feature.

# Administration > Backup



## **Backup Your Configurations**

Back up your modem router's settings to a file on your computer. You can use the file later if you need to restore the settings. To create a backup file of the current settings.

## **Restore Your Configurations**

Click **Choose File** and navigate to the backup file you want to restore. Click **Restore**.

# Administration > Device Reset

LINKSYS			AC1900 WI-FI (	O Lop Cut O Help Femalere Version: 1.0.00.010 Cable Modern Router corsoo
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
Connectivity     W-F1     External Stronge     Security     Administration     Passord     Time Zore     Rendel Management	Device Reset Restart the Modern Router Reset to Factory Default Settings	Flestart Factory Reset		
Galerey Function Backup Device Reset	i - 1			

#### **Restart the Modem Router**

Restarts your modem router by turning it off and then on again. All devices connected to your modem router will be disconnected. They will reconnect automatically when the restart finishes.

#### **Reset to Factory Default Settings**

Resets all modem router settings to how they were before you set it up. A reset changes the modem router name, password, security settings, parental control settings, and all other settings you have changed. After a reset, you can customize your settings again.

# **Parental Controls**

INKSYS					100 Wi-Fi Cable N	Permane Version: 1.0.00. Iodem Router cor
System Status	Quick Start		Configuration	Earental Cont	rota	Troubleshooting
Access Policy Parental Controls	Parental Control Parental Control Connected Day	rols s	Enabled			
	Device	M/ mentsMBP	AC Address 00:25:00:4b:28:24	Action	Block Internet Access	
	Manage Device	Table				4
	Device	MAC Address	Manaj	ped Days	Edit	Delete
	Add a Ne	Cance				

Use Parental Controls to manage internet use by blocking access per device. You also can block specific sites per device. Once you turn on Parental Controls, click **Block Internet Access** next to a device in the Connected Devices table. Select Never, Always or Specific Times. If you choose Specific Times, you will have to select the days and times you want to block the internet on that device.

Click *Add* next to *Block Specific Sites* and Choose Block Sites and enter the URL of the sites you want to block from that device. Click **Apply**. Click *Add* again to block another site.

Use the *Manage Device Table* to change parental control settings. Click **Manage** to make changes and Delete to undo all parental controls on a device.

Click **Add a New Device** to assign parental controls to a new device on your Wi-Fi. Enter a device name and the device's MAC address, then choose when to block the internet to that device.

Click **Save** before leaving the page.

# Troubleshooting

# **DOCSIS** Provisioning

INKSY5		Firmulare Version: 1.0.001 AC1900 WI-Fi Cable Modern Router core			
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting	
InsMeshoding [ DOCISS Provisioning Diagnotics DOCISS WW N DOCISS Event Report	DOCSIS Provisioning Stat System Information	us			
	HW int Find Downstream	Success Success			
	Ranging DHCP	Success Success			
	Time of Day Download CM Config File	Success Success			
	Registration EAE status	Success Disable			
	BPI status	AUTH:start, TEK:start			

This screen provides details on the provisioning of your modem router.

# Diagnostics

LINKSYS			AC1900 WHFI C	C Log Dz. Heip Fernivare Version: 1.0.00.010 Cable Modern Router corsoo
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
Troubleshooting     DOCSIS Previsioning	Diagnostics			
Diagnostics	Wi-Fi Site Survey	WI-Fi Survey		
DOCSIS Event	Destination (IP or domain)	Destination (P or comar	Fing Traceroute	Abort
Report	Result (Ping or Traceroute)			

Use diagnostics to aid in troubleshooting your modem router's connectivity.

## Ping

Check whether a destination IP/URL is available.

## Traceroute

Trace the routing path to the destination IP/URL.

## Abort

Stop ping test or traceroute test.

# **DOCSIS WAN**

LINKSYS							C1900 WI-FI	r i Cable Mo	Clog Out O He makene Version 10.000 dem Router corso
System Status	Quic	k Start		Configuration		Parental	Controls		roubleshooting
Troubleshooting     DOCSIS Provisioning     Disgnostes	DOCS	S WAN							
DOCSIS WAN DOCSIS Event Report	IP Ad	rk Access Iress Iress (IPv6)		Fermitted 192 168.55.33					
	Subre	t Mask It Gateway		255.255.255.0 192.168.55.1					
	Down	Lease Time stream Overvie	*	D: 01 H: 00 M: 00 S:	00				
	Port	Frequency (Hz)	Modulation	Signal Strength (dBmV)	Channel	SNR (dB)	Octets	Correcteds	Uncorrectables
	1 2	549000000 555000000	255QAM 255QAM	-16.100 -15.500	1 2	35.084 35.084	3932514499 3932516908	175 188	0
	3 4 5	561000000 567000000 573000000	255QAM 255QAM 255QAM	-14.900 -14.600 -14.800	3 4 5	35.084 35.595 34.926	3932517781 3932518102 3932519505	238 225 175	0 0

The DOCSIS WAN screen shows a DOCSIS overview, and downstream/upstream activity overview. Click **Reset FEC Counters** to start counting new errors (Correcteds/Uncorrectables).

# **DOCSIS Event**

System Status	٩	uick Start		Cont	liguration	Parental Controls	Troubleshooting
sieshooting CSIS Providening	DOC	SIS Even	Ú.				
grostics	NO.	Time	Туре	Priority	Event		
OCSIS WAN OCSIS Event	1	01/01/70 00:01:54	82000200	oritical	No Ranging Resp MAC+00:17:10:0	onse received - T3 time-out;CM-MAC+60 4:53:82:CM-QOS+1.1;CM-VER+3.0;	38.e0:1a/baxe0;CMTS-
Report	2	01/30/17 11;38:21	90000000	warning	MIMO Event MIMO: Stored MIMO=-1 post clg file MIMO=-1;CM- MAC=60:38:e0:1a:ba:e0;CMTS-MAC=00:17:10:04:83:82;CM-QOS=1.1;CM-VER=3.0;		
	3	01/30/17 11:38:22	69020500	enor	Improper Configu	ration File CVC Format	
	Α.	01/30/17 11:38:25	82000200	oritical	No Ranging Resp MAC+00:17:10:0	onse received - T3 time-out;CM-MAC+60 6.63:62;CM-QOS+1.1;CM-VER+3.0;	38:e0:1a:ba:e0;CMTS-
		Retream	Cie	w			

The DOCSIS event log chronicles DOCSIS errors that generated log entries.

# Report

LINKSYS			AC1900 Wi-Fi C	O Log Out O Help Fernadee Version: 1.0.00.010 able Modern Router corsoo
System Status	Quick Start	Configuration	Parental Controls	Troubleshooting
Taskéréhodský DOCSIS Phonisoning DoCSIS Phonisoning DOCSIS Phone DOCSIS Phone Report	Reater information Firmware Version Serial Number Carrier Booker Time Informer MAC Access Informer MAC Access Informer Access (Information Science Mask Defruit Gateware) Science Mask Defruit Gateware Defruit Gateware Definit Gateware Definit Gateware Definit Gateware Definit Gateware Definit Gateware Definit Gateware Definit Gateware Information Inform	10.00.010 197/005A400049 Wed. 01 Frig. 2017 13:56:59 Wed. 01 Frig. 2017 13:56:59 Wed. 01 Frig. 2017 13:56:50 MMT 60:38 w0 tables at 120:168.61.0 102:168.61.1 102:168.2.10 1000 00:38 w0 tables at 126:20.55:55.0 1000		

The report shows details about your router and its current network settings. This information can be very helpful if you have to call your ISP or Linksys Support for help with your Internet connection or router.

The following buttons are available for both the Devices and Report pages:

## Refresh

Redisplays the most current information.

#### Print

Prints the information currently displayed.

# Specifications

# Linksys GG7500

Model Name	AC1900   24x8 Cable Modem Router
Model Number	CG7500
Switch Port Speed	10/100/1000 Mbps (Gigabit Ethernet)
Radio Frequency	2.4 GHz and 5 GHz
# of Antennas	6 internal
Ports	Cable, Power, USB 2.0, Ethernet (1-4)
Buttons	Reset
Lights	Ethernet, WPS, Wi-Fi, Internet (Send/Receive/Status) Power, Ethernet
UPnP	Supported
Security Features	WEP, WPA-Enterprise, WPA2-Personal
Security Key Bits	Up to 128-bit encryption
Storage File System Support	FAT, NTFS, and HFS+

# Environmental

Dimensions	30 mm x 185mm x 240 mm
Unit Weight	TBD
Power	12V, 3A
Certifications	FCC, UL, Wi-Fi (IEEE 802 .11ac/a/b/g/n), RoHS
Operating Temperature	0 to 40°C (32 to 104°F)
Storage Temperature	-20 to 60°C, (-4 to 140°F)
Operating Humidity	10% to 80% relative humidity, non-condensing
Storage Humidity	5% to 90% non-condensing

Specifications are subject to change without notice.

## NOTES

For regulatory, warranty, and safety information, see the CD that came with your modem router or go to Linksys.com/support.

Maximum performance derived from IEEE Standard 802.11 specifications. Actual performance can vary, including lower wireless network capacity, data throughput rate, range and coverage. Performance depends on many factors, conditions and variables, including distance from the access point, volume of network traffic, building materials and construction, operating system used, mix of wireless products used, interference and other adverse conditions.

Visit linksys.com/support/ for award-winning technical support.

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