# WNHD3004 User Manual

NETGEAR, Inc.

350 East Plumeria Drive San Jose, CA 95134, USA

 $\ensuremath{\textcircled{}}$  2010 by NETGEAR, Inc. All rights reserved.

#### **Product Registration, Support, and Documentation**

Register your product at *http://www.netgear.com/register*. Registration is required before you can use our telephone support service. Product updates and Web support are always available at *http://www.netgear.com/support*. Setup documentation is available on the support website, and on the documentation website. When the wireless bridge is connected to the Internet, click the Knowledge Base or the Documentation link under Web Support on the main menu to view support information.

#### Trademarks

NETGEAR and the NETGEAR logo are registered trademarks of NETGEAR Inc. in the United States and/or other countries. Microsoft, Windows, and Windows NT are registered trademarks and Windows Vista is a trademark of Microsoft Corporation. Other brand and product names are registered trademarks or trademarks of their respective holders.

#### **Statement of Conditions**

In the interest of improving internal design, operational function, and/or reliability, NETGEAR reserves the right to make changes to the products described in this document without notice.

NETGEAR does not assume any liability that may occur due to the use or application of the product(s) or circuit layout(s) described herein.

#### Certificate of the Manufacturer/Importer

It is hereby certified that the 5 GHz Wireless-N HD Access Point/Bridge WNHD3004 has been suppressed in accordance with the conditions set out in the BMPT-AmtsblVfg 243/1991 and Vfg 46/1992. The operation of some equipment (for example, test transmitters) in accordance with the regulations may, however, be subject to certain restrictions. Please refer to the notes in the operating instructions.

Federal Office for Telecommunications Approvals has been notified of the placing of this equipment on the market and has been granted the right to test the series for compliance with the regulations.

#### Bestätigung des Herstellers/Importeurs

Es wird hiermit bestätigt, daß das 5 GHz Wireless-N HD Access Point/Bridge WNHDE111 gemäß der im BMPTAmtsblVfg 243/1991 und Vfg 46/1992 aufgeführten Bestimmungen entstört ist. Das vorschriftsmäßige Betreiben einiger Geräte (z.B. Testsender) kann jedoch gewissen Beschränkungen unterliegen. Lesen Sie dazu bitte die Anmerkungen in der Betriebsanleitung.as Bundesamt für Zulassungen in der Telekommunikation wurde davon unterrichtet, daß dieses Gerät auf den Markt gebracht wurde und es ist berechtigt, die Serie auf die Erfüllung der Vorschriften hin zu überprüfen.

#### **Regulatory Compliance Information**

This section includes user requirements for operating this product in accordance with National laws for usage of radio spectrum and operation of radio devices. Failure of the end-user to comply with the applicable requirements may result

in unlawful operation and adverse action against the end-user by the applicable National regulatory authority.

#### **Europe – EU Declaration of Conformity**

Marking by the above symbol indicates compliance with the Essential Requirements of the R&TTE Directive of the European Union (1999/5/EC). This equipment meets the following conformance standards: EN300 328, EN301 489-17, EN60950

A printed copy of the EU Declaration of Conformity certificate for this product is provided in the WNHD3004 product package.

Europe E	colaration of comorning in Eanguages of the European community
Cesky	NETGEAR Inc. tímto prohlašuje, že tento Radiolan je ve shode se základními
[Czech]	požadavky a dalšími príslušnými ustanoveními smernice 1999/5/ES.
Dansk	Undertegnede NETGEAR Inc. erklærer herved, at følgende udstyr Radiolan overholder
[Danish]	de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch	Hiermit erklärt NETGEAR Inc., dass sich das Gerät Radiolan in Übereinstimmung mit
[German]	den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der
_	Richtlinie 1999/5/EG befindet.

#### Europe – Declaration of Conformity in Languages of the European Community

Eesti	Käesolevaga kinnitab NETGEAR Inc. seadme Radiolan vastavust direktiivi 1999/5/EÜ
[Estonian]	põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
	English Hereby, NETGEAR Inc., declares that this Radiolan is in compliance with the essential
	requirements and other relevant provisions of Directive 1999/5/EC.
Español	Por medio de la presente NETGEAR Inc. declara que el Radiolan cumple con los
[Spanish]	requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la
	Directiva 1999/5/CE.
English	Hereby, NETGEAR Inc., declares that this Radiolan is in compliance with the essential
	requirements and other relevant provisions of Directive 1999/5/EC.
Ελληνική	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ <i>ΝΕΤGEAR Inc.</i> ΔΗΛΩΝΕΙ ΟΤΙ Radiolan ΣΥΜΜΟΡΦΩΝΕΤΑΙ
[Greek]	ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ
	ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
Français	Par la présente NETGEAR Inc. déclare que l'appareil Radiolan est conforme aux
[French]	exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
	Italiano [Italian] Con la presente NETGEAR Inc. dichiara che questo Radiolan è conforme ai
	requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Italiano	Con la presente NETGEAR Inc. dichiara che questo Radiolan è conforme ai requisiti
[Italian]	essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski	Ar šo NETGEAR Inc. deklarē, ka Radiolan atbilst Direktīvas 1999/5/EK būtiskajām
[Latvian]	prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių	Šiuo NETGEAR Inc. deklaruoja, kad šis Radiolan atitinka esminius reikalavimus ir kitas
[Lithuanian]	1999/5/EB Direktyvos nuostatas.
Nederlands	Hierbij verklaart NETGEAR Inc. dat het toestel Radiolan in overeenstemming is met de
[Dutch]	essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
	Malti [Maltese] Hawnhekk, NETGEAR Inc., jiddikjara li dan Radiolan jikkonforma mal-htigijiet
	essenzjali u ma provvedimenti ohrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar	Alulírott, NETGEAR Inc. nyilatkozom, hogy a Radiolan megfelel a vonatkozó alapvető
[Hungarian]	követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
	Polski [Polish] Niniejszym NETGEAR Inc. oświadcza, że Radiolan jest zgodny z zasadniczymi
	wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
	Português
Português	NETGEAR Inc. declara que este Radiolan está conforme com os requisitos essenciais
[Portuguese]	e outras disposições da Directiva 1999/5/CE.
Slovensko	NE I GEAR Inc. izjavlja, da je ta Radiolan v skladu z bistvenimi zahtevami in ostalimi
[Slovenian]	relevantnimi določili direktive 1999/5/ES.
Slovensky	NE I GEAR Inc. tymto vyniasuje, _e Radiolan spina zakladne po_ladavky a vsetky
[Slovak]	prisiusne ustanovenia Smernice 1999/5/ES.
Suomi	NETGEAR Inc. vakuuttaa taten etta Radiolan tyyppinen laite on direktiivin 1999/5/EY
	oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska	Harmed intygar NETGEAR Inc. att denna Radiolan star Toverensstammelse med de
[Swedish]	vasentliga egenskapskrav och ovriga relevanta bestammelser som framgar av direktiv
	1999/5/EG.
Islenska	Hér með lýsir NETGEAR Inc. yfir því að Radiolan er í samræmi við grunnkröfur og aðrar
[Icelandic]	kröfur, sem gerðar eru í tilskipun 1999/5/EC.
Norsk	NETGEAR Inc. erklærer herved at utstyret Radiolan er i samsvar med de
[Norwegian]	grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

#### FCC Requirements for Operation in the United States FCC Information to User

This product does not contain any user serviceable components and is to be used with approved antennas only. Any product changes or modifications will invalidate all applicable regulatory certifications and approvals.

#### FCC Guidelines for Human Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### FCC Declaration Of Conformity

We NETGEAR, Inc., 4500 Great America Parkway, Santa Clara, CA 95054, declare under our sole responsibility that the model WNHDE111 5 GHz Wireless-N HD Access Point/Bridge WNHDE111 complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

• This device may not cause harmful interference, and

• This device must accept any interference received, including interference that may cause undesired operation.

#### FCC Radio Frequency Interference Warnings & Instructions

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and the receiver.

• Connect the equipment into an electrical outlet on a circuit different from that which the radio receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

Modifications made to the product, unless expressly approved by NETGEAR, Inc., could void the user's right to operate the equipment.

#### **Caution to Canada users**

High power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LELAN devices.

Operation is subject to the following two conditions:

1) This device may not cause interference and

2) This device must accept any interference, including interference that may cause undesired operation of the device.

#### **IMPORTANT NOTE:**

#### **IC Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### Maximum Wireless Signal Rate Derived from IEEE Standard 802.11 Specifications

Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate.

## TABLE OF CONTENTS

OPERATION OVERVIEW	5
LED DEFINITION	5
3-WAY SWITCH ON THE BACK PANEL	6
GUI FUNCTIONS	7
TROUBLESHOOTING TIPS	21
APPENDIX A	22
TECHNICAL SPECIFICATIONS	22
INDEX	22

## **Operation Overview**

The AP/Bridge by default runs "Auto" mode, in this mode, it will detect if it's wired connected to a router (with DHCP server), if so, it will automatically set itself to "Access Point" (the GUI will show AP banner), this will take about 30~60 seconds. If no DHCP is detected through wired connection, it will set itself to "Bridge" (Station) mode (the GUI will show Bridge banner), this takes about 60~90 seconds.

In Auto mode, if no DHCP server is detected, it runs in Bridge mode, but if DHCP server is later detected, and this bridge is not connected to any Access Point, it will automatically switch to Access Point mode.

By default, the units run in DHCP client mode, that means AP and Bridge (if connected to the AP) will both get DHCP IPs from the router.

The device has a built-in web server, accessible through PC browsers.

If the PC is directly connected to the device, the PC can access <u>http://www.mywifiext.net</u> to access the device GUI.

If the PC is directly connected to the router, then the user needs to log in the router's configuration GUI, finds out what DHCP IPs the devices (both AP and STA) get, then connect to their GUIs by browsing to their IP addresses.

# **LED Definition**

There are 3 LEDs on the front of the unit, from top to bottom:

Power LED

Wireless Speed LED

WPS LED

Their behaviors are:

## Power LED:

- flashing green(quick, 0.2 sec) > unit booting with normal firmware
- flashing green(slow, 0.8 sec) > unit ready, but no STA associated for AP, or STA not associated with AP
- Solid green: AP and STA associated.

## Wireless Speed LED:

AP:

- Solid green: At least 1 client is associated with the AP
- OFF if AP has no STA associated with it.

## STA:

- solid red when strength is very weak
- solid orange when speed is less than 50Mbps
- solid green when speed is more than 50Mbps
- OFF if STA is not associated with any AP

## WPS LED:

Blinking: WPS in progress

## 3-way Switch on the back panel

Auto/Access Point/Station

In Auto mode, it will set itself dynamically to AP or Station mode, depending on if it's wired to a DHCP server/Router.

If set to "Access Point" or "Station", the unit will only run always as AP or STA mode then.

## **GUI** Functions

## "Setup Wizard"

On AP side, it includes two functions: Method to add a new wireless client (either WPS, or manually), and method to set AP's wireless settings.



"Setup Wizard" for STA/Bridge only has one function, to setup its wireless settings to match it on AP side, either through WPS, or through manual settings.



## **Basic Wireless Settings**

This page allows the user to set the following parameters:

SSID: By default, it's "WNHD3004"

Region: USA is the region selected, user can't change it.

Channel: By default, it's "100".

Mode: By default, it's "Up to 145Mbps" (20MHz channel is required by WiFi alliance by default), the other modes are "Up to 54Mbps" (11a), and "Up to 300Mbps" (40MHz channel)

Security: By default, WPA/WPA2-PSK mixed mode is enabled.

Default passphrase is a device Serial Number.

C NETGEAR WNHD3	004 Access Point	- Windows Internet Explorer					×
💽 🗸 🖉 http://192.1	.68.1.9/		v +1	X	Live Search	٩	•
File * Google G-	🖌 Go 🔶 🏹	🛿 🚰 👻 👽 👻 👷 Bookmarks 🗸 👰 1452 blocked	💞 Check 👻 🗧	💊 Au	toLink 👻 📔 AutoFill >	Setting	js <del>▼</del>
🚖 🏘 🔠 🗸 🌈 NETGEAI	R Router	EAR WNHD300 × 🔗 NETGEAR WNHD3004 W			- 🔄 - 🖶 - 🕞	Page 🔻 🍈 T <u>o</u> ol	s 🕶
							_
NETGE	A D'			-			
SMART				-			
SMART	o 5 GH	z Wireless-N HD Access Point/Bridge model WNHD30	04		OAT		
Sotup Wizard				^	Wireless		^
	Device Operating Mode:	Auto 🗸			The wireless section is	upodito	
Basic	Name (SSID) :	WNHD3004			configure the wireless	settings for your	
Wireless Settings	Region :	USA 🗸			access point. Note that in this section may also	changes made need to be	
Network Settings	Channel :	5.500 GHz - CH 100 💌			duplicated on wireless	clients that you wireless	
Advanced	Mode :	Up to 145Mbps 💌			network.	Wifeless	
MAC Address	Security Options				To protect your privacy.	use the	
Filter E					wireless security option	is to configure	
Wireless	O None				the wheless security lea	atures.	
Tools	O WEP				Device Operating Mode	e	
Admin	O WPA-PSK [TKIP]			=	Auto: If the device detec DHCP server existed, it	ts there is a set itself to	
• Time	WPA2-PSK [AES]				Access Point mode, if th	here is no	
<ul> <li>System</li> </ul>	WPA-PSK [TKIP] + WPA	A2-PSK [AES]			Station mode.	Sectionito	
Firmware					Access Point: The devic	ce set itself to	
Status	Security Options (WF	A-PSK + WPA2-PSK)			Station: The device set	itself to Station	
Device Info	PassPhrase :	TTX1824804C1D (8-63 characters or	64 hexdigits)		mode.		
Wireless					Name (SSID)	, for quailable	
■ Logs					wireless networks, this	is the name	
		Apply Cancel		~	that will appear in the lis	st (unless Invisible, see	~
				🕘 In	ternet	🔍 100% 🔻	

On the Bridge/STA side, the GUI looks very similar, except there is no channel selection but only "Auto", it will scan all channels and associate with AP on the channel the AP is running.

## **Network Settings**

By default, the devices will run in "DHCP" mode, which means they will get DHCP IPs from the router.



You can change the default type to "Static" IP, by default, AP has default IP 192.168.1.240, and Bridge/STA has default IP 192.168.1.241, you can change the default IPs through this page (a factory default reset will reset them back to .240 and .241).

## **MAC Address Filtering**

This function is only available on Access Point side, by default, it's disabled. If enabled, it allows to filter out wireless clients if not on the allowed MAC list, for tightened security.



## **Advanced Wireless Settings**

This page has the following options

- Enable SSID Broadcast
- Enable WMM
- WPS PIN: AP or STA's WPS PIN, that can be used by other wireless client or AP that support WPS PIN.
- "Keep Existing Wireless Settings": By default, this is enabled, that means the AP when running WPS, will simply use existing SSID and WPA/WPA2 Passphrase, without generating random SSID and Passphrase. If this is unchecked, AP will generate random SSID and 64-hex-digit Passphrase.
- "Wireless Access List" links to "MAC Address Filtering" page.

C NETGEAR WNHD3	3004 Access Point - Windows Internet Explorer			
💽 🗸 🖉 http://192.1	168.1.9/	47 X	Live Search	<b>P</b> -
Eile * Google G-	💌 Go 🗄 🚳 😓 👻 💬 👻 🛣 Bookmarks 🕶 👰 1452 blocked 🛛 🍄 Check 🖛	🐔 Au	utoLink 🔻 📔 AutoFill ≫	○ Settings
🚖 🕸 😁 🗸 🏀 NETGEAI	R Router 🖉 NETGEAR WNHD300 × 🍘 NETGEAR WNHD3004 W		• 🔄 • 🖶 • 🕞 <u>P</u> age	• ۞ T <u>o</u> ols •
NETGE	A R WIZARD access point manager o 5 GHz Wireless-N HD Access Point/Bridge model WNHD3004		N.	
Setup Wizard	Advanced Wireless Settings	^	Advanced Wireless Enable SSID Broadcast	<u>^</u>
Wireless Settings	Wireless Advanced Setting       Image: Contract of the set o	-	If Enabled, the Wireless Rout will broadcast its name (SSIE Wireless Stations, Stations w no SSID (or a "null" value) car	erSSID )) to all hich have h then
Advanced	Enable WMM		adopt the correct SSID for cor to this Access Point.	nections
MAC Address Filter	Fragmentation Length (256-2346) 2346		WMM (Wi-Fi Multimedia) is a component of the IEEE 802.1	1e
Wireless Tools	Preamble Mode Automatic		wireless LAN standard for qu service (QoS). It specifically s priority tagging and queuing.	ality of upports
<ul> <li>Admin</li> <li>Time</li> </ul>	WPS Settings	- 1	Threshold, Preamble Mode	
<ul><li>System</li><li>Firmware</li></ul>	Router's PIN : 10195666		vireless testings are reserved to wireless testing and advance configuration only. Do not cha	or d inge these
Status <ul> <li>Device Info</li> </ul>	Disable Router's PIN     Keep Existing Wireless Settings		WPS Settings	
Wireless     Logs	Wireless Card Access List Setup Access List	-	Router's PIN This is the PIN number you u registrar (e.g. from the Netwo	se on a rk
Done		😜 Ir	nternet 🗨	100% •

Bridge/STA side also has Advanced Wireless Settings page, it just does not have the 3 functions relevant to AP:

- No "SSID Broadcast" option
- No "Keep existing settings" option
- No "Wireless Access List", instead, it adds a link to "Setup Wireless Wizard"

C NETGEAR WNHD3	004 Wireless Bridge - Windows Internet Explorer	
💽 🗸 🔊 🖉 http://192.1	68.1.10/	Live Search
Eile * Google G-	🔽 Go 🖗 🧔 🗸 🔍 🔻 🔯 🖌 😨 🗸 🚱 Bookmarks 🗸 👰 1452 blocked 🛛  🍄 Check 👻 🔦 A	autoLink 🔻 📔 AutoFill 🌺 🔘 Settings+
🚖 🏟 😁 🗸 🏀 NETGEAU	R Router 🔗 NETGEAR WNHD3004 A 🏈 NETGEAR WNHD300 🗙	▼ 🔐 ▼ 🖶 ▼ 📴 <u>P</u> age ▼ ۞ T <u>o</u> ols ▼
NETOE		
SMART	WIZARD 5 GHz Wireless-N HD Access Point/Bridge model WNHD3004	S ONE
<ul> <li>Setup Wizard</li> </ul>	Advanced Wireless Settings	Advanced Wireless
Basic		Enable WMM
Wireless Settings	Wireless Advanced Setting	WMM (Wi-Fi Multimedia) is a component of the IEEE 802.11e wireless LAN standard for quality of
Network Settings	Enable WMM	service (QoS). It specifically supports
Advanced	Fragmentation Length (256-2346) 2346	Fragmentation Length, CTS/RTS
Advanced Wireless	CTS/RTS Threshold (1-2347) 2346	Threshold, Preamble Mode
Tools	Preamble Made	wireless testing and advanced
Admin	Automatic V	settings.
• Time	WPS Settings	MDS Softings
System	Router's PIN : 10195666	WF3 Settings
Firmware     Status	✓ Disable Router's PIN	Router's PIN
Device Info		This is the PIN number you use on a registrar (e.g. from the Network
• Wireless	Wireless Network Setup Wizard Wireless Setup Wizard	Explorer on a Vista Windows PC) to configure the router's wireless settings
Logs		through WPS.
<ul> <li>Statistics</li> </ul>	Apply Cancel	router's product label too.
Web Support		Disable Router's PIN
< >		Internet
Second		internet 100% • ":

## "Admin" page

User can change web GUI login password (username "admin" is not changeable), and the login session time-out value (By default, it's 5 minutes, meaning the GUI will auto log out the session if idle for 5 minutes)

The device name is used to show up in Vista/Win7 network map.

C NETGEAR WNHD	3004 Access Point	- Windows Internet Explorer		
💽 🗸 🔊 🗸	168.1.9/		v + >	Live Search
File * Google G-	💙 Go 🔶 🍕	👂 🌄 👻 👳 👻 Bookmarks 🗸 👰 1452 blocker	d 🧳 Check 👻 🐴 A	utoLink 🔻 📔 AutoFill 🌺 🔘 Settings <del>v</del>
🚖 🏘 🔠 🗸 🌈 NETGEA	R Router	SEAR WNHD300 × 🖉 NETGEAR WNHD3004 W		▼ 🏠 ▼ 🖶 ▼ 📴 <u>P</u> age ▼ ۞ T <u>o</u> ols ▼
NETGE	A D'			
NEIGE	AK			N
SMAKI	O 5 GH	ss point manager Iz Wireless-N HD Access Point/Bridge model WNHD3	3004	3 GHz
<u>^</u>			~	Admin
Setup Wizard	Administrator Settin	gs		
Basic				The Admin option is used to set a password for access to the Web-based
Wireless Settings	Admin Password			management. By default there is no
Network Settings	Please enter the same pass	sword into both boxes, for confirmation.		recommended that you create a
Advanced				password to keep your new access point secure.
MAC Address	Old password :	•••••		A desire Deservoired
Filter	Password :			Admin Password
Advanced Wireless	Verify Password :			who will have full access to the Web-
Tools	System Name			System Name
Admin	System nume			Device Name
• Time	Device Name :	WNHD3004_Access_Point		The name of the access point
System	Web Idle Timeout :	5		Inactivity Time Out
• Firmware				If the router does not detect
Status		Apply Cancel		any administrative activity during this number of minutes.
Device Info				it logs the adminstrator off.
Wireless				Time
• Logs				Time
< ··· ··· >			~	The Time Configuration option allows 🗸 🗸
Done			G 😜 1	Internet 🔍 100% 🔹 📰

## "Time" page

By default, the time zone is set to GMT+1, and uses NTP servers (NETGEAR servers)

C NETGEAR WNHD	3004 Access Point	- Windows Internet Explorer			
💽 🗸 🖉 http://192.1	168.1.9/		v 47 X	Live Search	<b>P</b> -
File * Google G-	💙 Go 🔶 8	🗊 🌄 👻 👽 🗸 👷 Bookmarks 🗸 👰 1452 blocked 🛛 🧩 Cheo	ck 👻 🐔 Ai	utoLink 👻 🗑 AutoFill ≫	Settings
	R Router 🏾 🄏 NET			- 👌 - 🖶 - 🕞 Pao	je 🔻 🙆 Tools 🔻
		WILLIGEAK WINDSOUT W			· · · · ·
NETCE	A D'				
NEIGE	AK			N	
SMART		ess point manager Hz Wireless-N HD Access Point/Bridge model WNHD3004		5 GH2	
	Time Configuration		^	Time	^
Setup Wizard	Current Time :	Monday, April 12, 2010 11:56:48 PM			
Basic	Time Zone :	(GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm		The Time Configuration op you to configure update a	tion allows
Wireless	Enable Daylight Saving :			the correct time on the acc	ess point's
Settings	Daylight Saving Offset :	+1:00 😒		you can set the time zone t	that you are
<ul> <li>Network Settings</li> </ul>	Daylight Saving Dates :	Month Week Day of Week Time		in and set the Time Server	. Daylight
Advanced		DST Start Mar V 5th V Sun V 2 am V		automatically adjust the tin	ne when
Filter		DST End Oct Y 5th Y Sun Y 3 am Y		needed.	
Advanced				Time Configuration	
Wireless	Automatic Time Config	uration		Current Time	
Tools				Displays the time cur maintained by the ac	rently cess point If
Admin	Enable NTP Server :			this is not correct, us	e the
• Time	NTP Server Used :	time-g.netgear.com		following options to o time correctly	configure the
<ul> <li>System</li> </ul>		time-h.netgear.com		Time Zone	
Firmware	Set the Date and Time	Manually		Select your local time	zone from
Status				pull down menu.	20
Device Info	Date And Time :	Year 2010 V Month Apr V Day 12 V		Check this option if v	our location
Wireless		Hour 11 V Minute 56 V Second 02 V PM V		observes daylight sa	ving time.
• Logs				Daylight Saving Offs	et
<>		Copy Your Computers Time Settings	~	Select the time offset location observes da	, if your ylight saving 🛛 🐣
Done			😜 Iı	nternet	€ 100% ·

## "System" page

In this page, user can save the configuration of the device, restore the configuration from a previously-saved file, reset device to factory default (Default to "Auto" mode, default to DHCP mode, default to default IPs, etc), or reboot the device.

C NETGEAR WNHD	3004 Access Point - Windows Internet Explorer		×
💽 🗸 🔊 http://192.1	168.1.9/	🗙 Live Search	-
File * Google G-	💽 Go 🗄 🍻 🛃 👻 👽 👻 🏠 Bookmarks 🕶 👰 1452 blocked 🛛 🦓 Check 👻 🐴	🕻 AutoLink 👻 📔 AutoFill 🎽 🔘 Setting	js∓
🚖 🏟 😁 🖌 🏈 NETGEA	R Router R NETGEAR WNHD300 X R NETGEAR WNHD3004 W	🛜 - 🏠 - 🖶 - 🕞 <u>P</u> age - 🎯 T <u>o</u> ol	s 🕶
NETCE	A D'	<b>m</b>	
		IN	
SMART	o 5 GHz Wireless-N HD Access Point/Bridge model WNHD3004	3 OHr	
Sotup Wizord		System	^
	System Settings	This section allows you to manage the	
Basic		access point's configuration settings,	
Settings	System Settings	the access point to the factory default	
Network Settings	Save To Local Hard Drive: Save Configuration	settings. Restoring the unit to the factory default settings will erase all	
Advanced		settings, including any rules that you've	
MAC Address	Load From Local Hard Browse		
Advanced	Drive:	Save To Local Hard Drive	
Wireless	Restore Configuration from File	access point's configuration to a file on	
Tools		your computer. Be sure to save the configuration before performing a	
• Admin	Restore To Factory Default: Restore Factory Defaults	firmware upgrade.	
• Time	Restore all settings to the factory defaults.	Use this option to restore previously	
• System		saved access point configuration	
Status	Reboot The Device: Reboot the Device	Restore To Factory Default	
Device Info		This option restores all configuration	
• Wireless		in effect at the time the access point	
• Logs		was shipped from the factory. Any settings that have not been saved will	
<		be lost. If you want to save your access point configuration settings, use the	~
		🐌 Internet 🔍 100% 🝷	

## "Firmware" page

In this page, user can find out the firmware version, released date, and can manually upload a downloaded firmware, or to auto-check if there is any newer firmware available. When click "Check", the device connects to NETGEAR server to see if there is a newer firmware.

C NETGEAR WNHD	3004 Access Point - Windows Internet Explorer	
🚱 🗸 🙋 http://192.:	168.1.9/	Live Search
Eile * Google G-	💽 Go 🗄 🌍 😓 👻 👽 👻 🏠 Bookmarks+ 🔕 1452 blocked 🛛 🍄 Check 🖛 🔦	AutoLink 👻 📔 AutoFill 🌺 🔘 Settings-
	R Router @ NETGEAR WNHD300 × O Connecting	😪 - 🏠 - 🖶 - 📴 <u>P</u> age - ۞ T <u>o</u> ols -
NETGE SMART	A R' W I Z A R D o 5 GHz Wireless-N HD Access Point/Bridge model WNHD3004	<b>N</b> 5 0 M t
Advanced MAC Address Filter Advanced Wireless	Firmware Upgrade Firmware Information	Firmware The Firmware Upgrade section can be used to update to the latest firmware code to improve functionality and performance.
Tools	Current Firmware Version : V1.0.0.0 Current Firmware Date : April 10 2010	To upgrade the firmware, follow these steps:
<ul> <li>Time</li> <li>System</li> </ul>	Check for New Version from the Internet Check	1. Click the Browsel button to locate the upgrade file on your computer
Firmware Status     Device Info     Wireless     Logs     Statistics Web Support     Knowledge Base     Documentation     Logout	Firmware Upgrade         Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration from the <u>Tools</u> → <u>System</u> screen.         To upgrade the firmware, your PC must have a wired connection to the bridge. Enter the name of the firmware upgrade file, and click on the Upload button.         Upload :	<ol> <li>Computer.</li> <li>Once you have found the file to be used, click the <u>Upload</u> button below to start the firmware upgrade process. This can take a minute or more.</li> <li>Wait for the access point to rebot. This can take another minute or more.</li> <li>Confirm updated firmware revision on status page.</li> </ol> Firmware Information Here are displayed the version numbers of the firmware currently installed in your access point and the most cenest uncaceds the fir a will below
< · · · · · · · · · · · · · · · · · · ·		Vinternet
NETGEX SMART		<ul> <li>Firmware Upgrade section can bused to update to the latest firmware code to improve functionality and performance.</li> <li>To upgrade the firmware, follow these steps:</li> <li>Click the Browse button to locate the upgrade file on you computer.</li> <li>Once you have found the file the used, click the Upload button below to start the firmware upgrade process. The can take a minute or more.</li> <li>Wait for the access point to revision on status page.</li> <li>Firmware Information</li> <li>Here are displayed the version numbers of the firmware upgrade that is available most recent upgrade that is available</li> <li>Internet</li> </ul>

## "Device Info" page

This page lists the following information:

- System Up time
- Firmware information
- IP information: Default IP, or the DHCP IP got from router
- Wireless LAN: On AP side, it lists the wireless settings the AP is running. On STA side, it will list whether it's associated with any AP, if so, which AP, which channel, which mode.

## "Wireless" page in Status category

On the AP side, this page lists the information of each client associated with this AP.

On the Bridge/Station side, this page lists the Access Points the Bridge/Station can see/scan.



## "Logs" page

In the "Logs" page, user can find entries for events like NTP server contact, wireless client association/dissociation, etc.

## "Statistics" page

User can check the amount of packets sent by the device's Ethernet interface or wireless interface. The "Errors", "Dropped", "Conflicts" number will be hintful if seeing connection issues.

```
\ensuremath{\mathbb{C}} 2010 by NETGEAR, Inc. All rights reserved.
```

**"Knowledge Base"** and **"Documentation"** are two links, the first one links to NETGEAR support web site, the 2<sup>nd</sup> one links to the online Reference Manual of the product (it will be published before the product hits the market.).



C NETGEAR WNHD3	004 A	ccess Point	- Windows Internet Explorer			
💽 🗸 🖉 http://192.10	68.1.9/		~	47 ×	Live Search	<b>P</b> -
<u>F</u> ile <sup>≫</sup> Google G.		🤟 Go 🚸 🦏	≶ ػ 👻 👽 🖌 🏠 Bookmarks 🗸 👰 1452 blocked 🛛   Check 🕚	- 🐔 Ai	utoLink 🔻 📔 AutoFill ≫	🔘 Settings <del>-</del>
🚖 🕸 🔡 🗸 🏉 NETGEAR	R Router	🏉 NET (	GEAR WNHD300 × 💽 NETGEAR WNHD3004 W	8	• 🔄 • 🖶 • 🕞 <u>P</u> age •	• 🔘 T <u>o</u> ols •
NETGE	A R'	ARD acce o 5 GH	ess point manager Iz Wireless-N HD Access Point/Bridge medel WNHD3004		N.	
• Network Settings 🔶	Log Op	otions		^	Logs	<u>^</u>
Advanced MAC Address Filter	What t View L	o View : evels :	♥ System ♥ Status ♥ Critical ♥ Warning ♥ Informational		The access point automatical (records) events of possible i its internal memory. If there is	lly logs nterest in
Advanced Wireless			Apply Log Settings Now		enough internal memory for a logs of older events are delete logs of the latest events are re-	ill events, ed, but etained.
Tools	Log De	etails		-	The Logs option allows you to the level of events to view.	define
• Time			Refresh Clear Save Log 86 Log Entries:		View Levels	
System	Priority	Time	Message		Select the level of events that to view.	you want
Status	[info]	Thu Jan 1 01:00:21 1970	ntpd: send out NTP request to time-g.netgear.com		Critical     Warning     Informational	
<ul><li>Device Info</li><li>Wireless</li></ul>	[info]	Mon Apr 12 17:49:19 2010	ntpd: receive NTP reply from time-g.netgear.com		Apply Log Settings Now	a Loo
Logs	[info]	Mon Apr 12 17:52:22 2010	hostapd: wifi0: STA 00:c0:02:ff:d3:89 IEEE 802.11: associated		Options to make them effectiv permanent.	e and
Web Support	[info]	Mon Apr 12 17:52:22 2010	hostapd: wifi0: STA 00:c0:02:ff:d3:89 WPA: received EAPOL-Key 2/4 Pairwise with unexpected replay counter		Refresh Clicking this button refreshes	the
Knowledge Base	[info]	Mon Apr 12 17:52:22 2010	hostapd: wifi0: STA 00:c0:02:ff:d3:89 RADIUS: starting accounting session 4BC34F16-00000000		display of log entries. There n new events since the last time	nay be e you
Documentation	[info]	Mon Apr 12 17:52:22 2010	hostapd: wifi0: STA 00:c0:02:ff:d3:89 WPA: pairwise key handshake completed (RSN)		Clear	
< >	finfa1	Mon Apr 12	hostopd: wif0: CTA 00:00:00:#d2:Ed IEEE 000 11: connected		Clicking this button erases al	i log 🗸 🗸
Done				🛛 😝 Ir	nternet 🔍	100% 🔹 🛒

C NETGEAR WNHD3	004 Access Point	- Windows Internet Explorer			
💽 🗸 🖉 http://192.10	68.1.9/		✓ + ×	Live Search	<b>P</b> -
Eile * Google G-	💙 Go 🔶 🦿	🖇 🛃 👻 👽 👻 👷 Bookmarks 🕶 👰 1452 blocked 🛛 🍄 C	Check 👻 🐴 Au	utoLink 👻 🗑 AutoFill 🌺 🔘	Settings <del>*</del>
🚖 🏟 🔡 🗸 🏉 NETGEAF	R Router 🏾 🏉 NET C	EAR WNHD300 × 🌈 NETGEAR WNHD3004 W		▪ 🏠 ▪ 🖶 ▪ 🔂 Page ▼ (	🔅 T <u>o</u> ols 🔻
	)-				
NETGE	A D'				
SMART	WIZAPD		-		
SMART	o 5 GH	z Wireless-N HD Access Point/Bridge model WNHD3004		3 GHz	
<ul> <li>Network Settings</li> </ul>	Time	Turesdey: April 42, 2040 40:08:40 AM	^	Device Info	^
Advanced	Lime : System up-time :	Fuesday, April 13, 2010 12:06:40 AM 6 hours 17 minutes			
MAC Address	Firmware Version :	V1.0.0.0, April 10 2010		All of your network connection de are displayed on the Device Info	tails page. =
Filter	LAN			The firmware version is also dis	played
Advanced Wireless	LAN			nere.	
Tools	Connection Type :	DHCP Client		Wireless LAN	
Admin	MAC Address :	00:C0:02:FF:D3:8C		This area of the screen reflects configuration settings from the	
• Time	IP Address :			<u>Setup <math>\rightarrow</math> Wireless Settings</u> p	age.
System	Subnet Mask :			assigned identifier of the wireles	s card.
Firmware	Default Gateway : Brimony DNS Server :			LAN Computers	
Status	Secondary DNS Server			This area of the screen continua	lly
Device Info	DHCP Server :	Disabled		computers and devices connected	ed to
Wireless	Wireless LAN			the LAN side of your access poin detection "range" is limited to the	it. The
Logs				address range as configured in	рнср
Statistics	Wireless Radio :	Enabled		Server. Computers that have an address outside of this range wi	ll not
Web Support	MAC Address :	00:C0:02:FF:D3:8D		show. If the DHCP Client (i.e. a	tically
Knowledge Base	Network Name (SSID) :	WNHD3004		obtain an address") supplies a H	Host
Documentation	Channel :	100		Name then that will also be show	vn. Any atic IP
	Security Mode : Wi-Fi Protected Setup :	Disabled		address that lies within the deter	ction
<			<b>~</b>	"range" may show, however its h	ost 🗸
Done			😜 Ir	nternet 🔍 10	0% 🔹 🤃

## **Troubleshooting Tips**

Q: STAs get the default IP 192.168.1.241. What in case of more than 1 STA? A: In case of more than 1 STA, all STAs will have default 192.168.1.241. If the AP is connected to a router, all STAs will get DHCP IPs from the router therefore there will be no IP conflict. The IP conflict only affects your access to the STA GUI, it does not impact traffic from devices behind the STAs, as they are just bridges.

Q: How does the access to the UI work in case that the devices are not connected to a DHCP server?

A: Through default IP. So in case you have two STAs or more, you need to manually change STAs to use different IPs. This is the same for Quantenna reference firmware you previously tested.

# **Appendix A Technical Specifications**

This appendix provides factory default settings and technical specifications for the 5 GHz High-Performance Wireless-N HD Home Theater Adapter WNHD3004.

Table A-1. Wireless-N AccessPoint/Bridge Default	<b>Configuration Settings</b>
Feature Default Setting	

Login         Intp://www.mywifiext.net           Login Name         admin           Login Password         password           Local Network         password           Local Network         AP mode: 192.168.1.240           Bridge mode: 192.168.1.241         Bridge mode: 192.168.1.241           Subnet         255.255.0           DHCP Server         disabled           Time-zone         GMT-8 Pacific Time           Time Zone Enabled for Daylight         Enabled           Saving         Time           Time         VNHD3004           Security         WPAWPA2-PSK           Broadcast SSID         Enabled           Transmission Speed         Auto           Outry/Region         United States in the U.S., otherwise varies by region           RF Channel         Auto           Output Power         Full           Physical Specifications         175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)           Dimensions         175 x 140.40 E0	Features		Default Setting
Login URL     http://www.mywifiext.net or http://www.mywifiext.com       Login Name     admin       Login Password     password       Login Password     password       Local Network     Prode: 192.168.1.240       Bridge mode: 192.168.1.241     Bridge mode: 192.168.1.241       Subnet     255.255.0       DHCP Server     disabled       Time-zone     GMT-8 Pacific Time       Saving     Enabled       Time     Enabled for Daylight       Saving     Enabled       Time     Enabled       SSID     WNHD3004       Wireless     Enabled       SSID     WNAWPA2-PSK       Broadcast SSID     Enabled       Country/Region     United States in the U.S., otherwise varies by region       Auto     Operating Mode     802.11 n/a mixed mode       Data Rate     Best       Output Power     Full       Physical Specifications     175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)       Weight     0.35 kg	Login		
Login Name         admin           Login Password         password           Local Network         Password           Local Network         AP mode: 192.168.1.240           Bridge mode: 192.168.1.241         Bridge mode: 192.168.1.241           Subnet         255.255.25.0           DHCP Server         disabled           Time-zone         GMT-8 Pacific Time           Saving Time         Fine Zone Enabled for Daylight Saving Time         Enabled           SSID         WNHD3004           Scurity         WPA/WPA2-PSK           Broadcast SSID         Enabled           Transmission Speed         Auto           Country/Region         United States in the U.S., otherwise varies by region           RF Channel         Auto           Operating Mode         802.11 n/a mixed mode           Data Rate         Best           Dimensions         Full           Physical Specifications         -           Weight         0.35 kg           Environmertal         Specifications		Login URL	http://www.mywifiext.net or http://www.mywifiext.com
Login Password     password       Local Network     Default LAN IP Address     AP mode: 192.168.1.240       Bridge mode: 192.168.1.241     Bridge mode: 192.168.1.241       Subnet     255.255.05       DHCP Server     disabled       Time-zone     GMT-8 Pacific Time       Time Zone Enabled for Daylight Saving Time     Enabled       Wireless     V       SSID     WNHD3004       Security     WPA/WPA2-PSK       Broadcast SSID     Enabled       Transmission Speed     Auto       Country/Region     United States in the U.S., otherwise varies by region       RF Channel     Auto       Operating Mode     802.11 n/a mixed mode       Output Power     Fuil       Physical Specifications     Tots x 130 x 35 mm(6.9 x 5.1 x 1.4 in)       Dimensions     0.95 kg		Login Name	admin
Local Network         Default LAN IP Address         AP mode: 192.168.1.240           Bridge mode: 192.168.1.241         Bridge mode: 192.168.1.241           Subnet         255.255.255.0           DHCP Server         disabled           Time-zone         GMT-8 Pacific Time           Saving Time         Enabled           Time Zone Enabled for Daylight Saving Time         Enabled           Vireless         Enabled           SSID         WNHD3004           Security         WPAWPA2-PSK           Broadcast SSID         Enabled           Transmission Speed         Auto           Country/Region         United States in the U.S., otherwise varies by region           RF Channel         Auto           Operating Mode         802.11 n/a mixed mode           Output Power         Full           Physical Spe-tifications         175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)           Dimensions         0.35 kg		Login Password	password
Default LAN IP Address     AP mode: 192.168.1.240 Bridge mode: 192.168.1.241       Subnet     255.255.0       DHCP Server     disabled       Time-zone     GMT-8 Pacific Time       Time Zone Enabled for Daylight Saving Time     Enabled       SSID     WNHD3004       Security     WPAWPA2-PSK       Broadcast SSID     Enabled       Transmission Speed     Auto       Country/Region     United States in the U.S., otherwise varies by region       RF Channel     Auto       Operating Mode     802.11 n/a mixed mode       Data Rate     Best       Output Power     Full       Physical Specifications     175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)       Weight     0.35 kg	Local Netwo	rk	
Bridge mode: 192.168.1.241         Subnet       255.255.0         DHCP Server       disabled         Time-zone       GMT-8 Pacific Time         Time Zone Enabled for Daylight       Enabled         Saving       Enabled         Time       Wireless         SSID       WNHD3004         Security       WPAWPA2-PSK         Broadcast SSID       Enabled         Transmission Speed       Auto         Country/Region       United States in the U.S., otherwise varies by region         RF Channel       Auto         Operating Mode       802.11 n/a mixed mode         Data Rate       Best         Output Power       Full         Physical Specifications       175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)         Weight       0.35 kg         Environmental Specifications       08 to 408 0 (200 to 408 0 5)		Default LAN IP Address	AP mode: 192.168.1.240
Subnet     255.255.0       DHCP Server     disabled       Time-zone     GMT-8 Pacific Time       Time Zone Enabled for Daylight Saving Time     Enabled       Wireless     Enabled       SSID     WNHD3004       Security     WPAWPA2-PSK       Broadcast SSID     Enabled       Transmission Speed     Auto       Country/Region     United States in the U.S., otherwise varies by region       RF Channel     Auto       Operating Mode     802.11 n/a mixed mode       Data Rate     Best       Output Power     Full       Physical Specifications     175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)       Weight     0.35 kg       Environmental Specifications     0% ta 40% C (200 ta 4040 E)			Bridge mode: 192.168.1.241
DHCP Server     disabled       Time-zone     GMT-8 Pacific Time       Time Zone Enabled for Daylight Saving Time     Enabled       Wireless     Enabled       SSID     WNHD3004       Security     WPAWPA2-PSK       Broadcast SSID     Enabled       Transmission Speed     Auto       Country/Region     United States in the U.S., otherwise varies by region       RF Channel     Auto       Operating Mode     802.11 n/a mixed mode       Data Rate     Best       Output Power     Full       Physical Specifications     175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)       Weight     0.35 kg		Subnet	255.255.255.0
Time-zone       GMT-8 Pacific Time         Time Zone Enabled for Daylight Saving Time       Enabled         Wireless       Enabled         SSID       WNHD3004         Security       WPAWPA2-PSK         Broadcast SSID       Enabled         Transmission Speed       Auto         Country/Region       United States in the U.S., otherwise varies by region         RF Channel       Auto         Operating Mode       802.11 n/a mixed mode         Data Rate       Best         Output Power       Full         Physical Specifications       175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)         Weight       0.35 kg         Environmental Specifications       09 to 4040 C (200 to 4040 E)		DHCP Server	disabled
Time Zone Enabled for Daylight Saving Time       Enabled         Wireless       VWHD3004         SSID       WNHD3004         Security       WPA/WPA2-PSK         Broadcast SSID       Enabled         Transmission Speed       Auto         Country/Region       United States in the U.S., otherwise varies by region         RF Channel       Auto         Operating Mode       802.11 n/a mixed mode         Data Rate       Best         Output Power       Full         Physical Specifications       175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)         Weight       0.35 kg         Environmental Specifications       08 to 408 G (200 to 4040 E)		Time-zone	GMT-8 Pacific Time
Saving Time       Saving Time         Wireless       SSID         SSID       WNHD3004         Security       WPAWPA2-PSK         Broadcast SSID       Enabled         Transmission Speed       Auto         Country/Region       United States in the U.S., otherwise varies by region         RF Channel       Auto         Operating Mode       802.11 n/a mixed mode         Data Rate       Best         Output Power       Full         Physical Specifications       175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)         Weight       0.35 kg         Environmental Specifications       04 to 408 C (2014to 404 R) E)		Time Zone Enabled for Daylight	Enabled
Time       Filter         Wireless       SSID       WNHD3004         Security       WPAWPA2-PSK         Broadcast SSID       Enabled         Transmission Speed       Auto         Country/Region       United States in the U.S., otherwise varies by region         RF Channel       Auto         Operating Mode       802.11 n/a mixed mode         Data Rate       Best         Output Power       Full         Physical Specifications       175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)         Weight       0.35 kg		Saving	
Wireless       SSID       WNHD3004         Security       WPA/WPA2-PSK         Broadcast SSID       Enabled         Transmission Speed       Auto         Country/Region       United States in the U.S., otherwise varies by region         RF Channel       Auto         Operating Mode       802.11 n/a mixed mode         Data Rate       Best         Output Power       Full         Physical Specifications       175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)         Weight       0.35 kg         Environmental Specifications       0% to 40% C (200 to 4040 E)		Time	
SSID       WNHD3004         Security       WPA/WPA2-PSK         Broadcast SSID       Enabled         Transmission Speed       Auto         Country/Region       United States in the U.S., otherwise varies by region         RF Channel       Auto         Operating Mode       802.11 n/a mixed mode         Data Rate       Best         Output Power       Full         Physical Specifications       175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)         Weight       0.35 kg         Environmental Specifications       04 to 40% C (20% to 40% E)	Wireless		
Security       WPA/WPA2-PSK         Broadcast SSID       Enabled         Transmission Speed       Auto         Country/Region       United States in the U.S., otherwise varies by region         RF Channel       Auto         Operating Mode       802.11 n/a mixed mode         Data Rate       Best         Output Power       Full         Physical Specifications       175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)         Weight       0.35 kg         Environmental Specifications       04 to 40% C (20% to 40% E)		SSID	WNHD3004
Broadcast SSID     Enabled       Transmission Speed     Auto       Country/Region     United States in the U.S., otherwise varies by region       RF Channel     Auto       Operating Mode     802.11 n/a mixed mode       Data Rate     Best       Output Power     Full       Physical Specifications     175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)       Weight     0.35 kg       Environmental Specifications     04 to 40% C (20% to 40% E)		Security	WPA/WPA2-PSK
Transmission Speed       Auto         Country/Region       United States in the U.S., otherwise varies by region         RF Channel       Auto         Operating Mode       802.11 n/a mixed mode         Data Rate       Best         Output Power       Full         Physical Specifications       175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)         Weight       0.35 kg         Environmental Specifications       0/200 tr 4040 E)		Broadcast SSID	Enabled
Country/Region       United States in the U.S., otherwise varies by region         RF Channel       Auto         Operating Mode       802.11 n/a mixed mode         Data Rate       Best         Output Power       Full         Physical Specifications       175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)         Weight       0.35 kg         Environmental Specifications       08 to 40% C (20% to 40% E)		Transmission Speed	Auto
RF Channel     Auto       Operating Mode     802.11 n/a mixed mode       Data Rate     Best       Output Power     Full       Physical Specifications     175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)       Weight     0.35 kg       Environmental Specifications     08 to 40% C (20% to 40% E)		Country/Region	United States in the U.S., otherwise varies by region
Operating Mode     802.11 n/a mixed mode       Data Rate     Best       Output Power     Full       Physical Specifications     175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)       Weight     0.35 kg       Environmental Specifications     08 to 40% C (20% to 40% E)		RF Channel	Auto
Data Rate     Best       Output Power     Full       Physical Specifications     175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)       Weight     0.35 kg       Environmental Specifications     0% to 40% C (20% to 40% E)		Operating Mode	802.11 n/a mixed mode
Output Power     Full       Physical Specifications     Image: Comparison of the state of t		Data Rate	Best
Physical Specifications       Dimensions       Weight       0.35 kg		Output Power	Full
Dimensions         175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)           Weight         0.35 kg           Environmental Specifications         0% to 40% C (20% to 40% E)	Physical Specifications		
Weight     0.35 kg       Environmental Specifications     08 to 40% C (220 to 10.40 E)		Dimensions	175 x 130 x 35 mm(6.9 x 5.1 x 1.4 in)
Environmental Specifications		Weight	0.35 kg
	Environment	Environmental Specifications	
Operating temperature $0^{\circ}$ to $40^{\circ}$ C (32° to $104^{\circ}$ F)		Operating temperature	0° to 40° C (32° to 104° F)
Operating humidity 90% maximum relative humidity, non-condensing		Operating humidity	90% maximum relative humidity, non-condensing

## Index

Access Point2, 3, 4, 7loginBridge2LogsDHCP2MAC Address FilteringDocumentation15Passphrase	3-way Switch2, 3	LED2, 3
Bridge	Access Point2, 3, 4, 7	login10
DHCP       2       MAC Address Filtering       7         Documentation       15       Passphrase       7	3ridge2	Logs15
Documentation	DHCP2	MAC Address Filtering7, 8
	Documentation15	Passphrase 8
Knowledge Base	Knowledge Base15	password10, 19

 $\ensuremath{\mathbb{C}}$  2010 by NETGEAR, Inc. All rights reserved.

Setup Wizard		4
SSID5, 8, 9	Э,	19
Troubleshooting	2,	18

Wireless	2,	З,	5,	8,	9,	14,	19
WPS						.3, 4	I, 8