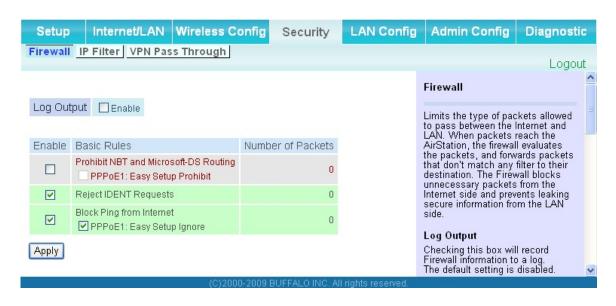
Security (Router Mode only)

Firewall (Router Mode only)

The screen to configure firewall features of the AirStation.



Parameter	Meaning
Log Output	Enable to output a log of firewall activity.
Basic Rules	Enable to use any of the quick filters. Preconfigured quick filters include:
	Prohibit NBT and Microsoft-DS Routing When this is enabled, you cannot use the Microsoft network feature from the Internet side to the LAN side and from the LAN side to the Internet. You can configure this with PPPoE if you select "Use PPPoE Client" or "Use IP Unnumbered" in Method of Acquiring IP address (on page 25), or if Easy Setup identified a PPPoE connection during setup.

Parameter Meaning

Reject IDENT Requests

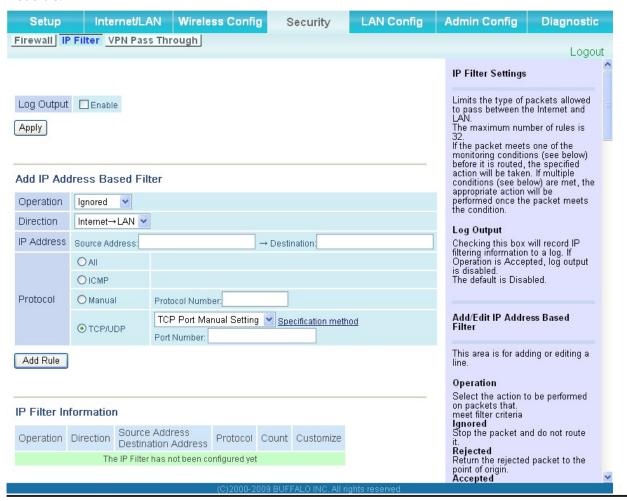
Enabling this option will answer IDENT requests from the Internet side with corresponding rejection packets. Enable this option if you experienced slower transfer speed for network application such as sending mail, using ftp or displaying on browser. If you have configured transfer of IDENT requests to the LAN side computer in the address translation settings (DMZ or TCP port:113), that setting has higher priority, and overrides this setting.

Block Ping from Internet

If this is enabled, the AirStation will not respond to pings from the Internet side. You can configure this with PPPoE if you select "Use PPPoE Client" or "Use IP Unnumbered" in Method of Acquiring IP address (page 26), or if Easy Setup identified a PPPoE connection during setup.

IP Filter (Router Mode only)

The screen to edit IP filters which relates to the packets passing through the LAN side and the Internet side.



Parameter	Meaning
Log Output	If enabled, IP filter activity is saved to a log.
Operation	Specify how to process target packets.
Direction	Specify the transmission direction of target packets.
IP Address	Specify the sender's IP address and receiver's IP address of the target packets.
Protocol	Select a protocol for target transmission packet.
IP Filter Information	Display the list of IP filters which have been registered.

VPN Pass Through (Router Mode only)

The screen to configure IPv6 pass through, PPPoE pass through, and PPTP pass through.

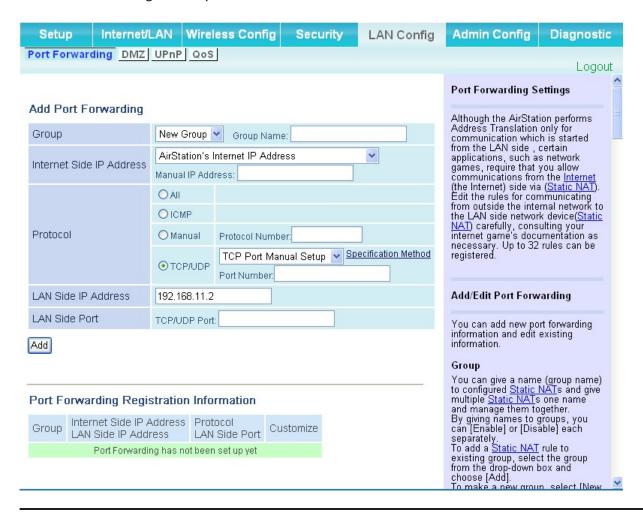


Parameter	Meaning
IPv6 Pass Through	Enable to use IPv6 Pass Through for address translation.
PPPoE Pass Through	Enable to use PPPoE bridge. Using PPPoE bridge lets you automatically obtain an IP address from your provider using the PPPoE protocol from your computer connected to the LAN side because all PPPoE packets can pass through between the Internet and LAN.
PPTP Pass Through	Enable to use the PPTP Pass Through for address translation.

LAN Config (Router Mode only)

Port Forwarding (Router Mode only)

The screen to configure the port translation.



Parameter	Meaning
Group	Specify a group name for a new rule to belong to. Select " <i>New Group</i> " and enter the new group name in the Group Name field to create a new group. A group name can include up to 16 alphanumeric letters.
Internet Side IP Address	Enter the Internet side IP address (before translation) for the port translation table entry.
Protocol	Select the Internet side protocol (before translation) for the port translation table entry.

Parameter	Meaning
LAN Side IP Address	Enter the LAN side IP address (after translation) for the port translation table entry.
LAN Side Port	Select the LAN side (after translation) port number (1 - 65535) for the port translation table entry.
Port Forwarding Registration Information	Shows current entries in the port translation table.

DMZ (Router Mode only)

The screen to configure a destination to transfer communication packets without a LAN side destination.



Parameter	Meaning
IP Address of DMZ	Enter the IP address of the destination to which packets which are not routed by a port translation table are forwarded. Note: RIP protocol packets (UDP port number 520) will not be forwarded.

UPnP (Router Mode only)

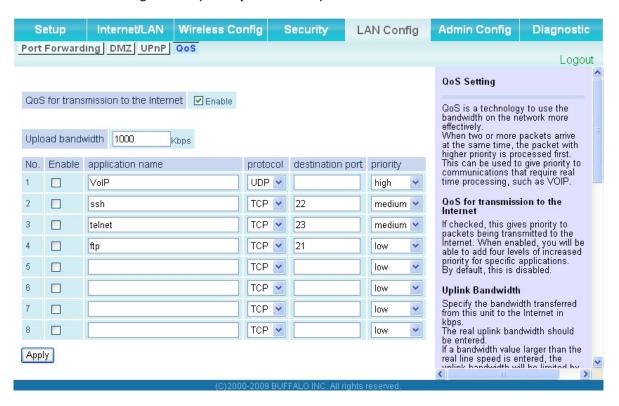
The screen to configure UPnP (Universal Plug and Play).



Parameter	Meaning
UPnP	Enable or disable Universal Plug and Play (UPnP) functionality.

QoS (Router Mode only)

The screen to configure the priority control of packets sent to the Internet.



Parameter	Meaning
QoS for transmission to the Internet	Determine whether or not control the priority of packets to send to the Internet. Check this box to enable QoS.
Upload bandwidth	Specify the upstream bandwidth in kbps from the AirStation to the internet side. * Set the actual value for the upstream bandwidth.
Enable	Enable or disable this entry.
application name	Enter an application name. Names may use up to 32 alpha numerical characters, double or single tick marks ("'), quotation marks ("), and semicolons (;).
protocol	Select either TCP or UDP.

Parameter	Meaning
destination port	Specify a destination port with the value of 1 - 65535. If this field is empty, a random port is selected.
priority	Select high, medium or low. * If packets do not qualify for classification as a type on the list, then their priority is treated as a level between medium and low.

Admin Config

Name

The screen to configure the AirStation's name.



Parameter	Meaning
AirStation Name	Enter a name for the AirStation. Names may include up to 64 alphanumeric characters and hyphens (-).
List Network Services	Enable or disable this item to display the computers and devices on your network with their supported services

Password

The screen to configure the password to login to the configuration screen of the AirStation.



Parameter	Meaning
Administrator Name	The user name to log in to the configuration screen of the AirStation. This name is fixed as "root".
Administrator Password	The password to log in to the configuration screen of the AirStation. The password may contain up to 8 alphanumeric characters and underscores (_).

Time/Date

The screen to configure the internal clock in the AirStation.



Parameter	Meaning
Local Date	You may manually set the date of the AirStation's internal clock.
Local Time	You may manually set the time of the AirStation's internal clock.
Time Zone	Specify the time zone (offset of Greenwich Mean Time) of the AirStation's internal clock.

NTP

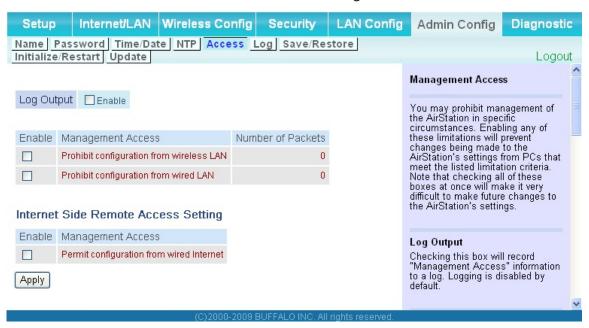
The screen to configure an NTP server to automatically synchronise the AirStation's internal clock.



Parameter	Meaning
NTP Functionality	Enable to use an NTP server to automatically set the AirStation's internal clock.
NTP Server	Enter the name of the NTP server as a host name, host name with domain name, or IP address. Up to 255 alphanumeric characters, hyphens (-), and underscores (_) may be used.
Update Interval	How often should the AirStation submit a time request to the NTP server? Intervals of 1 - 24 hours may be set.

Access

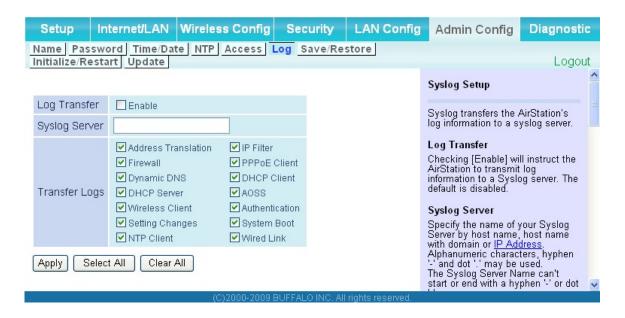
The screen to restrict access to the AirStation's settings screens.



Parameter	Meaning
Log Output	Enabling outputs a log of changes to access settings.
Prohibit configuration from wireless LAN	If enabled, prevents access to settings screens from wirelessly connected devices (only wired devices may configure).
Prohibit configuration from wired LAN	If enabled, prevents access to settings screens from wired devices (only wirelessly connected devices may configure).
Permit configuration from wired Internet	If enabled, allows access to settings screens from network devices on the Internet side.
Permitted IP address	Displayed only if Internet side configuration is enabled. Enter the IP address of the device that is permitted to configure the AirStation remotely from the Internet side.
Permitted Port	Displayed only if Internet side configuration is enabled. Set a port number (1 - 65535) if configuring the AirStation from the Internet side.

Log

The screen to transfer the log information of the AirStation by the syslog.



Parameter	Meaning
Log Transfer	Enable to send logs to a syslog server.
Syslog Server	Indentify the syslog server by host name, host name with domain name, or IP address. You may enter up to 255 alphanumeric characters, hyphens (-), and underscores (_).
Transfer Logs	Choose which logs will be transferred to the syslog server.

Save/Restore

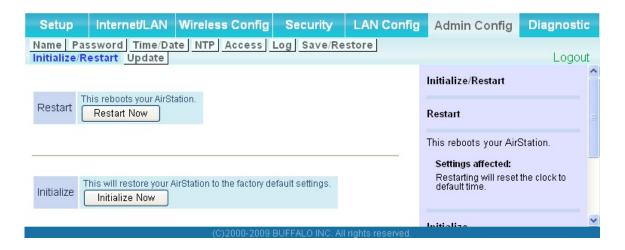
The screen to save to or restore from an AirStation configuration file.



Parameter	Meaning
Save current settings	Clicking "Save" will save the current configuration of the AirStation to a file. If the "Encrypt the configuration file with a password" option is checked, then the configuration file will be password protected with the current Administrator Password (page 60).
Restore Configuration from Backup File	Restore the configuration of the AirStation from a saved configuration file by clicking the "Browse" button, navigating to the configuration file, and then clicking Restore. If the configuration file was password protected, then put a check next to "To restore from the file you need the password", enter the password, and click "Open".

Initialize/Restart

The screen to initialize and restore the AirStation.



Parameter	Meaning
Restart	Click "Restart Now" to restart the AirStation.
Initialize	Click "Initialize Now" to initialize and restart the AirStation.

Update

The screen to update the AirStation's firmware.

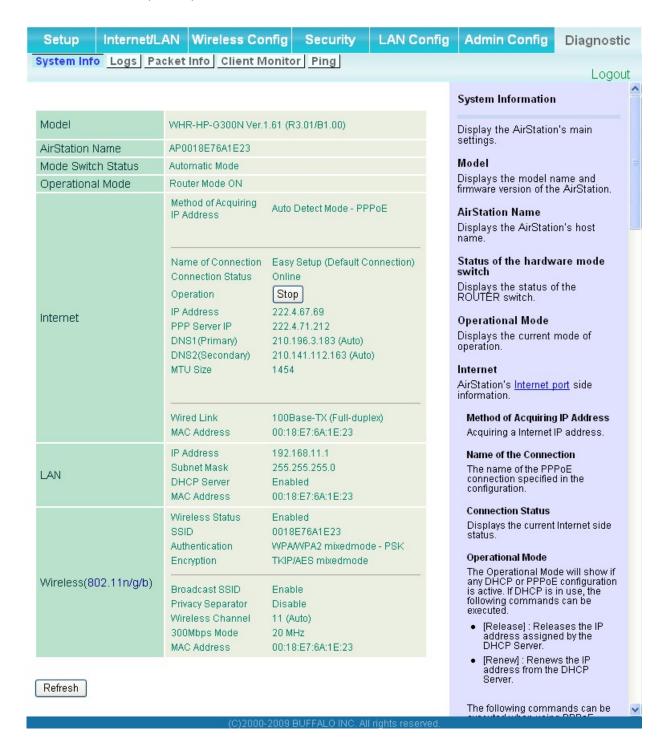


Parameter	Meaning
Firmware Version	Displays the current firmware version of the AirStation.
Firmware File Name	Click "Browse" to specify a firmware file and click "Update Firmware." This will update the firmware.

Diagnostic

System Info

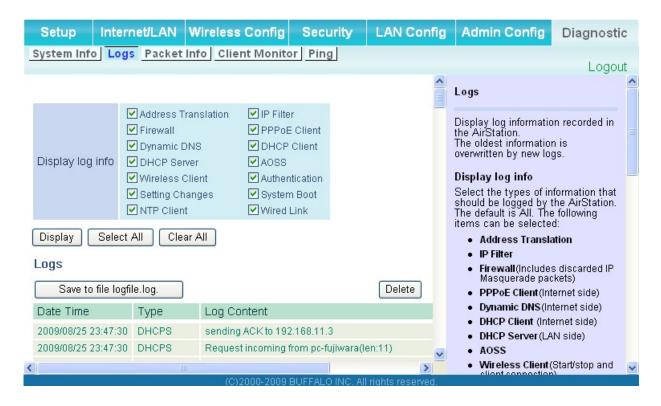
The screen to verify the system information of the AirStation.



Parameter	Meaning
Model	Displays the product name of the AirStation and the firmware version.
AirStation Name	Displays AirStation Name (refer to page 59).
Mode Switch Status	Displays the status of the mode switch on the back of the AirStation.
Operational Mode	Displays the current operational mode of the AirStation.
Internet	Displays the information about the Internet port.
LAN	Displays the information about the LAN port.
Wireless	Displays the wireless status.

Logs

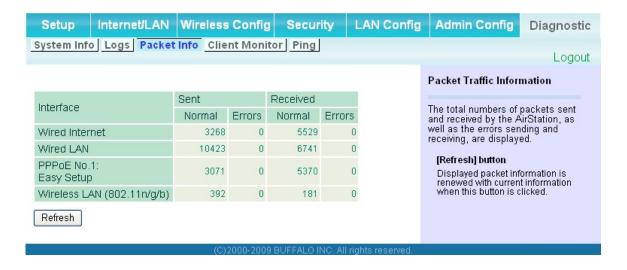
The screen to check log information recorded by the AirStation.



Parameter	Meaning
Display log info	Choose the types of log information to display.
Logs	Displays the log information recorded in the AirStation.

Packet Info

The screen to verify the total amount of packets the AirStation transfers.



Parameter	Meaning
Sent	Displays the number of packets sent to the Internet side of Ethernet, the LAN side of the Ethernet, and the LAN side of the wireless connection.
Received	Displays the number of packet received from the Internet side of Ethernet, the LAN side of the Ethernet, and the LAN side of the wireless connection.

Client Monitor

This screen shows devices that are connected to the AirStation.



Parameter	Meaning
Client Monitor	Displays information (MAC address, lease IP address, host name, communication method, wireless authentication and 802.11n) for devices that are connected to the AirStation.

Ping

A Ping test checks whether the AirStation can communicate with a specific network device.



Parameter	Meaning
Destination Address	Enter an IP address or a host name of the device for which you try to verify the connection, and click " <i>Execute</i> ". The result will be displayed in the " <i>Result</i> " field.

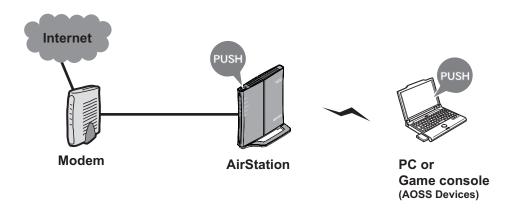
Chapter 5 Connect to a Wireless Network

Automatic Secure Setup (AOSS/WPS)

AOSS and WPS are systems which enables you to automatically configure wireless LAN settings. Just pressing the buttons will connect wireless devices and complete security settings. Utilize this system to connect to wireless devices, computers, or game machines which support AOSS or WPS.



AOSS (AirStation One-Touch Secure System) is technology developed by BUFFALO. WPS was created by the Wi-Fi Alliance.



- Before using AOSS/WPS to connect to a Buffalo wireless client, install Client Manager software from the included AirNavigator CD. Consult your wireless client's documentation for more information.
- Buffalo's Client Manager software can be used with the wireless LAN devices built into your computer. However, it is not guaranteed to work with all wireless LAN devices available.

Windows Vista (Client Manager V)

If you are using Windows Vista, use the included Client Manager V software to connect wirelessly with AOSS/WPS.

1 Click the icon in the system tray.





When the screen at left is displayed, click "Create Profile".

3 When the message "A Program needs your permission to continue" appears, click "Continue".





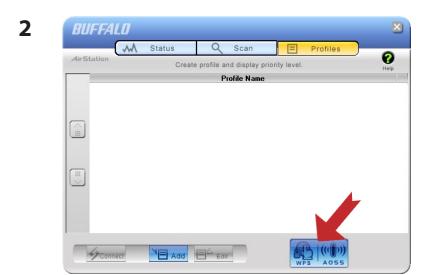
When the screen shown at left is displayed, click the "WPS AOSS" button.

Follow the instructions displayed on the screen. After you configure the settings and the Security LED (page 8) stops flashing and is lit, the AOSS/WPS connection is completed.

Windows XP (Client Manager 3)

If you are using Windows XP, use the included Client Manager 3 software to connect wirelessly with AOSS/WPS.

1 Right click on the icon displayed in the system tray, and select "Profile".



When the screen shown at left is displayed, click "WPS AOSS" button.

Follow the instructions displayed on the screen. After you configure the settings and the SECURITY LED (on page 8) stops flashing and is lit, the AOSS/WPS connection is completed.

Other Devices (e.g. Game Console)

If you are using a game machine which supports AOSS or WPS, refer to that device's manual to initiate AOSS/WPS. When instructed, hold down the AOSS button (page 11) on the AirStation for 1 second.

After you configure the settings and the SECURITY LED (on page 8) stops blinking and is lit, the AOSS/WPS connection is completed.

Manual Setup

You can also connect to the AirStation without installing Client Manager V or Client Manager 3 by using Windows standard utility.

The procedure varies depending on which version of Windows you are using.

Windows 7 (WLAN AutoConfig)

Use Windows standard utility (WLAN AutoConfig) to connect to the AirStation.

1 Click on the network icon in the system tray.





Select the target AirStation's name and click "Connect". For future use, checking "Connect automatically" is recommended.

3

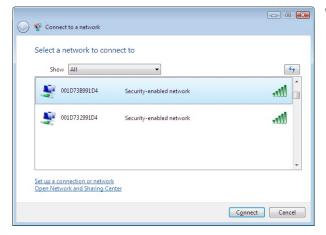


Enter the encryption key (such as WEP key or pre-shared key) and click "OK".

Windows Vista (WLAN AutoConfig)

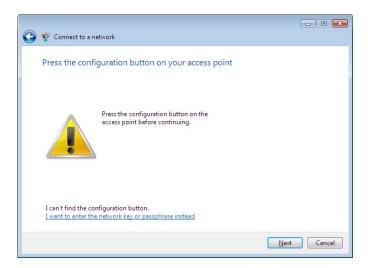
Use Windows standard utility (WLAN AutoConfig) to connect to the following AirStation.

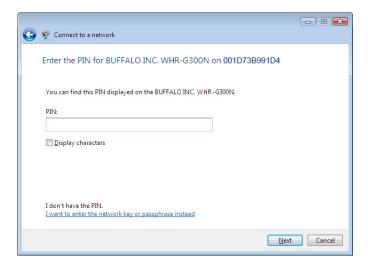
- 1 Right click on the wireless network icon in the system tray.
- **2** Click "Connect to a network".
- 3



When the screen at left is displayed, select the network to connect to and click "Connect".

If the screen below is displayed, click "I want to enter the network key or passphrase instead". (If this screen is not displayed, go to step 4)









When the screen at left is displayed, enter an encryption key (such as WEP key or pre-shared key) and click "Connect".

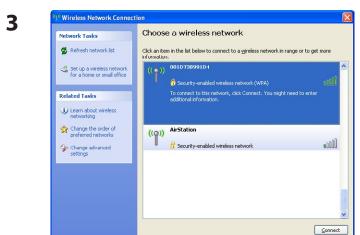
Follow the instructions displayed on the screen to finish configuration. (If the Set Network Location screen is displayed, select "Home", "Work", or "Public location" depending where you're using the AirStation.

Windows XP (Wireless Zero Configuration)

Windows XP includes a built-in utility to connect to your AirStation.

Note: If Client Manager 3 is installed on your computer, Wireless Zero Configuration is disabled. Uninstall Client Manager 3 to use Wireless Zero Configuration, or just use Client Manager 3 to connect to the AirStation.

- 1 Right click on the wireless network icon displayed in the system tray.
- **2** Click "View Available Wireless Networks".



When the screen at left is displayed, select the network to connect to and click "Connect".



When the screen at left is displayed, enter the encryption key (such as WEP key or pre-shared key) and click "Connect".

Follow the instructions displayed on the screen to finish configuration.

Chapter 6 Trouble Shooting

Cannot connect to the Internet over wired connection.

- Make sure that your AirStation is plugged in!
- Check that the status LEDs of your AirStation are lit as below:

POWER Green light is ON SECURITY Amber light is ON

WIRELESS Green light is ON or flashing

ROUTER Green light is ON or OFF (the status varies depending on your environment)

DIAG OFF

LAN Green light is ON or flashing INTERNET Green light is ON or flashing

- Make sure that your computer is set to "obtain an IP address automatically". (Refer to page 94)
- Restart your AirStation.

Cannot access the web-based configuration utility.

- Display the configuration screen by following the procedure on page 18.
- Enter the correct user name and password to login to the configuration screen.

 If you are using AirStation in factory default settings, enter "root" (in lower case) for the user name and leave the password blank (enter nothing)
- Verify that your web browser is not set to use proxies.
- Make sure that your computer is configured to "Obtain an IP Address Automatically." (page 94)
- Restart your AirStation.

Cannot connect to the network wirelessly.

 Configure your wireless device with the same SSID, encryption type, and encryption key as used for your AirStation.

The following are the factory default settings of the AirStation:

SSID - Printed on the label of the AirStation

Encryption Method - WPA/WPA2 mixedmode-PSK(*)

* Connect to the network using a wireless connection with WPA-PSK TKIP or WPA2-PSK AES. WPA2-PSK AES is most recommended.

Encryption Key - Printed on the label of the AirStation (if not, the AirStation is not encrypted in default configuration.)

- Place your AirStation and wireless devices 2 10 feet apart.
- Restart your AirStation.

You forgot AirStation's SSID, Encryption Key, or Password.

Hold down the RESET button (page 97) on your AirStation for 5 seconds to initialize its settings. All settings, including your password, SSID, and encryption key will be initialized to their defaults. The followings are the factory default settings of the AirStation.

SSID - Printed on the label of the AirStation

Encryption Method - WPA/WPA2 mixedmode-PSK(*)

* Connect to the network using a wireless connection with WPA-PSK

TKIP or WPA2-PSK AES, WPA2-PSK AES is most recommended.

Encryption Key - Printed on the label of the AirStation (if not, the AirStation is not

encrypted in default configuration.)

The link speed is slower than 150 Mbps (Maximum link speed is only 72Mbps).

By default, the AirStation's 150 Mbps mode is not enabled. To enable it, use the following procedure:

- 1. Open the configuration screen of your AirStation (page 18).
- 2. Click "Wireless SSID & Channel (11n 150Mbps Mode)" in Easy Setup.
- 3. Change the value in "150 Mbps Mode" "Band Width" to 40 MHz and click "Apply".

If you still cannot connect at 150 Mbps, check the settings of your wireless client device.

Other Tips

Issue:

I reset my wireless router to factory settings and forgot how to log in.

Answer:

Open your browser and enter 192.168.11.1 as the browser address and hit Enter. You will be prompted to log in. Enter the user name as root and the password box is left empty (no password). Click "OK" to complete the login and the option to reset your password will be available on the first page.

Issue:

How do I forward ports on my wireless router for my gaming console?

Answer:

Log in to the router. From the home page, go to the Internet Game/ Port Mapping section. Enter the port that needs to be forwarded, and the IP address of the gaming console.

Issue:

How do I enable or modify security encryption settings on the wireless router?

Answer:

Log in to the wireless router with your browser. Go to the Wireless Config tab and then select the Security tab. Buffalo recommends the use of WPA for wireless encryption. The passphrase/key should be at least 8 characters in length.

Issue:

How do I change my wireless router's broadcasted network name (SSID)?

Answer:

Log in to the wireless router with your browser. Go to the Wireless Config tab and then select the Basic tab if necessary. Find the settings area called SSID. Select the "*Use*" radio button and enter the name you wish to use for your network in the text field provided. Click "*Apply*" to save the settings. Once the wireless router has rebooted, you will need to manually select the new network name for all wireless devices and enter your encryption key if necessary.

Issue:

What can I do if my wireless connection drops randomly or seems slow?

Answer:

There are many environmental factors that may affect this behavior. First, ensure the issue is not range related by locating the wireless router and the device dropping connection in closer proximity and check whether the connection drops continue.

In some cases, interference from other wireless networks or sources such as 2.4 GHz wireless phones may impact performance. To work around this scenario, change the wireless channel used by your wireless router.

Log in to the wireless router with your browser. Click on the Wireless Config tab and then the Basic tab. The Wireless Channel setting can be selected from channels 1 to 11. If an Auto-Channel option is available, attempt to use this option to remedy the problem. If Auto-Channel is unavailable, manually select an alternate channel and click "Apply".

Issue:

Though I am able to successfully make a connection with my wireless router, I am unable to access the Internet with my web browser.

Answer:

First, power off the Cable or DSL modem, the wireless router, and your computer. Move the router's

mode switch to the *on* position. Verify that the modem is connected to the wireless router with an Ethernet cable to the WAN port. Power on the modem and wait one minute. Power on the wireless router and wait another minute. Power on the computer. Open a browser on the computer and navigate to a familiar website to verify whether the Internet connection is functioning normally. If after these steps, an Internet connection is still unavailable, power off the Cable or DSL modem and computer again and directly connect your computer to the Cable or DSL modem with a cable between the computer and the port on the modem. Power on the modem and wait one minute. Power on the computer and again check for an Internet connection.

If an Internet connection IS NOT available with a direct connection to the computer, please call the Internet Service Provider who installed the modem.

If an Internet connection IS available with a direct connection to the computer, please call our customer support.

Issue:

Where can I download the latest drivers, firmware and instructions for my Buffalo wireless products?

Answer:

The latest drivers and firmware are available online at **www.buffalotech.com**

Appendix A Specifications

Wireless LAN Interface		
Standard Compliance	IEEE802.11b / IEEE802.11g / IEEE802.11n technology	
Transmission Method	Direct Sequence Spread Spectrum (DSSS), OFDM, SISO	
Frequency Range	2,412 - 2,462MHz (Channels 1 - 11)	
Transmission Rate	802.11b/g 54, 48, 36, 24, 18, 12, 9, 6, 11, 5.5, 2, 1Mbps 802.11n 20MHz Channel (LongGl)65,58.5,52,39,26,19.5,13,6.5(1stream) (ShortGl)72.2,65.57.8,43.3,28.9,21.7,14.4,7.2(1steam) 40MHz Channel (LongGl)135,121.5,108,61,54,40.5,27,13.5(1stream) (ShortGl)150,135,120,90,60,45,30,15(1stream)	
Access Mode	Infrastructure Mode	
Security	AOSS, WPA2-PSK (TKIP/AES), WPA/WPA2 mixed PSK, WPA-PSK (TKIP/AES) 128/64bit WEP, Mac Address Filter	
Wired LAN Interface		
Standard Compliance	IEEE802.3u (100BASE-TX), IEEE802.3 (10BASE-T)	
Transmission Rate	10 / 100Mbps	
Transmission Encoding	100BASE-TX 4B5B/MLT-3, 10BASE-T Manchester Cording	
Access Method	CSMA/CD	
Speed and Flow Control	10/100, Auto Sensing, Auto MDIX	
Number of LAN Ports	4	
LAN Port Connector	RJ-45	
Other		
Power Supply	External AC 100-240V Universal, 50/60Hz	
Power Consumption	Approx. 6.0W (Max)	
Dimensions	110mm x 105mm x 24mm (4.3 x 4.1 x 0.9 in.)	
Weight	150g (4.8 oz.) *stand not included	
Operating Environment	0-40°C (32-104°F), 20-80% (non-condensing)	

Appendix B Default Configuration Settings

Feature	Parameter	Default Setting	
Internet (Router Mode only)	Method of Acquiring IP Address	Perform Easy Setup (Internet Connection Wizard)	
	Default Gateway	none	
	Address of DNS Name Server	none	
	Internet MAC Address	Use Default MAC Address	
	MTU Size of Internet Port	1500 Bytes	
PPPoE	Default PPPoE Connection	No Active Session	
(Router Mode only)	IP Unnumbered PPPoE Connection	No Active Session	
	PPPoE Connection List	none	
	Preferred Connections	none	
DDNS	Dynamic DNS Service	Disable	
(Router Mode only)	Current Dynamic DNS Information	none	
VPN Server	LAN Side IP Address	192.168.11.1(255.255.255.0)	
(Router Mode only)	DHCP Server Function	Enable	
	DHCP IP Address Pool	192.168.11.2 for up to 64 Address(es)	
	PPTP Server Function	Disable	
	Authorization Type	MS-CHAPv2 (40/128-bit Encryption)	
	Server IP Address	Auto	
	Client IP Address	Auto	
	DNS Server IP Address	LAN IP address of the AirStation	
	WINS Server IP Address	None	
	PPTP User List	None	
LAN	LAN Side IP Address	Router Mode: 192.168.11.1 (255.255.255.0)	
		Bridge Mode (Router Switch OFF): 192.168.11.100 (255.255.255.0)	
		Bridge Mode (Router Switch AUTO): Obtain automatically from DHCP Server	

Feature	Parameter	Default Setting		
	DHCP Server Function (Router Mode only)	Enable		
	DHCP IP Address Pool (Router Mode only)	192.168.11.2 for up to 64 Addresses		
	LAN Side IP Address (IP Unnumbered) (Router Mode only)	none		
	Lease Period (Router Mode only)	48Hours		
	Default Gateway (Router Mode only)	AirStation's IP Address		
	DNS Servers (Router Mode only)	AirStation's IP Address		
	WINZ Server (Router Mode only)	Do Not Specify		
	Domain Name (Router Mode only)	Assigned Domain Name		
	Default Gateway (Bridge Mode only)	none		
	DNS Server Address (Bridge Mode only)	none		
DHCP Lease (Router Mode only)	Current DHCP Client Information	none		
NAT	Address Translation	Enable		
(Router Mode only)	Log Output of Deleted Packets	Disable		
Route	Routing Information	none		
WPS	WPS	Enable		
	External Registrar	Enable		
	AirStation PIN	An 8-digit random value (Printed on the label of the AirStation)		
	WPS Security Information	WPS status: configured SSID: AirStation's MAC Address Security: WPA-PSK AES Encryption key: A 13-digit random value or disabled.		

Feature	Parameter	Default Setting		
AOSS	Encryption level expansion function	Enable		
	Dedicated WEP SSID isolation	Disable		
	AOSS Button on the AirStation Unit	Enable		
Basic	Wireless Radio	Enable		
	Wireless Channel	Auto Channel		
	150Mbps Mode	Band Width: 20MHz Extension Channel: -		
	Broadcast SSID	Allow		
	Separate feature	not used		
	SSID	Configure AirStation's MAC address		
	Wireless authentication	WPA/WPA2 mixedmode-PSK		
	Wireless encryption	TKIP/AES mixedmode		
	WPA-PSK (Pre-Shared Key)	A 13-digit random value (Printed on the label of the AirStation)		
	Rekey interval	60 minutes		
Advanced	Multicast Rate	Auto		
	DTIM Period	1		
	Privacy Separator	Disable		
WMM	WMM-EDCA Parameters		For AP	For STA
	(Priority AC_BK (Low))	CWmin	15	15
		CWmax	1023	1023
		AIFSN	7	7
		TXOP Limit	0	0
		Admission Control		Disable
	WMM-EDCA Parameters (Priority AC_BE (Normal))		For AP	For STA
		CWmin	15	15
		CWmax	63	1023
		AIFSN	3	3
		TXOP Limit	0	0
		Admission Control		Disable

Feature	Parameter	Default Setting		
	WMM-EDCA Parameters (Priority AC_VI (High))		For AP	For STA
		CWmin	7	7
		CWmax	15	15
		AIFSN	1	2
		TXOP Limit	94	94
		Admission Control		Disable
	WMM-EDCA Parameters		For AP	For STA
	(Priority AC_VO (Highest))	CWmin	3	3
		CWmax	7	7
		AIFSN	1	2
		TXOP Limit	47	47
		Admission Control		Disable
MAC Filter	Enforce MAC Filter	Disable		
Registration List none				
Multicast	Snooping	Enable		
Control	Multicast Aging Time	300 Sec.		
Firewall	Log Output	Disable		
(Router Mode only)	Basic Rules	Prohibit NBT and Microsoft-DS Routing Disable Reject IDENT Requests Enable Block Ping from Internet Enable		
IP Filter	Log Output	Disable		
(Router Mode only)	IP Filter Information	none		
VPN Pass	IPv6 Pass Through	Enable		
Through (Router Mode only)	PPPoE Pass Through	Disable		
(Nouter Mode offly)	PPTP Pass Through	Disable		
Port Forwarding (Router Mode only)	Port Forwarding Registration Information	none		
DMZ (Router Mode only)	IP Address of DMZ	none		
UPnP (Router Mode only)	UPnP	Enable		
QoS (Router Mode only)	QoS for transmission to the Internet	Disable		

Feature	Parameter	Default Setting		
Name	AirStation Name	AP + AirStation's MAC Address		
	List Network Services	Enable		
Password	Administrator Name	root (fixed)		
	Administrator Password	none		
Time/Date	Local Date	2009 Year 1 Month 1 Day		
	Local Time	0 Hour 0 Minute 0 Seconds		
	Time Zone	(GMT-06:00) Central Standard Time: CST		
NTP	NTP Functionality	Enable		
	NTP Server	time.nist.gov		
	Update Interval	24 hours		
Access	Log Output	Disable		
	Limitation Item	Prohibit configuration from wireless LAN Disable Prohibit configuration from wired LAN Enable Permit configuration from wired Internet Enable		
Log	Log Transfer	Disable		
	Syslog Server	none		
	Transfer Logs	Router Mode: Address Translation, IP Filter, Firewall, PPPoE Client, Dynamic DNS, DHCP Client, DHCP Server, AOSS, Wireless Client, Authentication, Setting Changes, System Boot, NTP Client, and Wired Link		
		Bridge Mode: IP Filter, DHCP Client, AOSS, Wireless Client, Authentication, Setting Changes, System Boot, NTP Client, and Wired Link		

Appendix C TCP/IP Settings in Windows

Windows 7

To perform the settings for Windows 7, follow the procedure below.

- **1** Click Start > Control Panel > Network and Internet.
- **2** Double click "Network and Sharing Center".
- **3** Click "Change Adapter Settings" on the left side menu.
- 4 Right click on "Local Area Connection", then click "Properties".
- **5** If the message "Windows needs your permission to continue" appears, click "Continue".
- **6** Select "Internet Protocol Version 4 (TCP/IPv4)" then click "Properties".
- **7** Select "Obtain an IP address automatically" and "Obtain DNS server address automatically", then click "OK".
- 8 Click "OK".

Windows Vista

To perform the settings for Windows Vista, follow the procedure below.

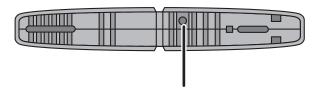
- 1 Click Start > Settings > Control Panel.
- **2** Double click "Network and Sharing Center".
- **3** Click "Manage network connections" on the left side menu.
- 4 Right click on "Local Area Connection", then click "Properties".
- **5** When the message "Windows needs your permission to continue" appears, click "Continue".
- **6** Select "Internet Protocol Version 4 (TCP/IPv4)" then click "Properties".
- **7** Select "Obtain an IP address automatically" and "Obtain DNS server address automatically", then click "OK".
- **8** Click "Close".

Windows XP

To perform the settings for Windows XP, follow the procedure below.

- **1** Click Start > Settings > Control Panel.
- **2** Double click "Network".
- **3** Right click on "Local Area Connection", then click "Properties".
- **4** Select "Internet Protocol (TCP/IP)", then click "Properties".
- **5** Select "Obtain an IP address automatically" and "Obtain DNS server address automatically", and then click "OK".
- 6 Click "Close".

Appendix D Restoring the Default Configuration



Hold down this button for 5 seconds. The AirStation will be initialized.

Appendix E Regulatory Compliance Information

Federal Communication Commission Interference Statement

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 generates, 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 of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC ID:

WCR-GN: FDI-09101676-0

Important Note - FCC Radiation Exposure Statement:

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

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

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

European Union Notice:

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

- EN60950-1:
 2006 Safety of Information Technology Equipment
- EN 50385: 2002

Product standard to demonstrate the compliance of radio base stations and fixed terminal stations for wireless telecommunication systems with the basic restrictions or the reference levels related to human exposure to radio frequency electromagnetic fields (110MHz - 40 GHz) - General public

• EN 300 328 V1.7.1 (2006-10)

Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

• EN 301 489-1 V1.8.1 (2008-04)

Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

•EN 301 489-17 V1.3.2 (2008-04)

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

C€ 0560 **①**

Česky[Czech]

Buffalo Technology Inc. tímto prohlašuje, že tento AirStation WCR-GN je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.

Dansk[Danish]

Undertegnede Buffalo Technology Inc. erklærer herved, at følgende udstyr AirStation WCR-GN overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.

Deutsch[German]

Hiermit erklärt Buffalo Technology Inc. dass sich das Gerät AirStation WCR-GN in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.

Eesti[Estonian]

Käesolevaga kinnitab Buffalo Technology Inc. seadme AirStation WCR-GN vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.

English

Hereby, Buffalo Technology Inc. declares that this AirStation WCR-GN is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Español[Spanish]

Por medio de la presente Buffalo Technology Inc. declara que el AirStation WCR-GN cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.

Ελληνική[Greek]

ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Buffalo Technology Inc. ΔΗΛΩΝΕΙ ΟΤΙ AirStation WCR-GN ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.

Français[French]

Par la présente Buffalo Technology Inc. déclare que l'appareil AirStation WCR-GN est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.

Italiano[Italian]

Con la presente Buffalo Technology Inc. dichiara che questo AirStation WCR-GN è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Latviski[Latvian]

Ar šo Buffalo Technology Inc. deklarē, ka AirStation WCR-GN atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

Lietuvių[Lithuanian]

Šiuo Buffalo Technology Inc. deklaruoja, kad šis AirStation WCR-GN atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.

Nederlands[Dutch]

Hierbij verklaart Buffalo Technology Inc. dat het toestel AirStation WCR-GN in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

Malti[Maltese]

Hawnhekk, Buffalo Technology Inc., jiddikjara li dan AirStation WCR-GN jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.

Magyar[Hungarian]

Alulírott, Buffalo Technology Inc. nyilatkozom, hogy a AirStation WCR-GN megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.

Polski[Polish]

Niniejszym, Buffalo Technology Inc., deklaruję, że AirStation WCR-GN spełnia wymagania zasadnicze oraz stosowne postanowienia zawarte Dyrektywie 1999/5/EC.

Português[Portuguese]

Buffalo Technology Inc. declara que este AirStation WCR-GN está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

Slovensko[Slovenian]

Buffalo Technology Inc. izjavlja, da je ta AirStation WCR-GN v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.

Slovensky[Slovak]

Buffalo Technology Inc. týmto vyhlasuje, že AirStation WCR-GN spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.

Suomi[Finnish]

Buffalo Technology Inc. vakuuttaa täten että AirStation WCR-GN tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Svensk[Swedish]

Härmed intygar Buffalo Technology Inc. att denna AirStation WCR-GN står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

For Taiwan 警語

經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加 大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用, 並改善至無干擾時方得繼續使用。前項合法通信,指依電信法規定作業之無線電通信。低功率 射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Appendix F Environmental Information

- The equipment that you have purchased has required the extraction and use of natural resources for its production.
- The equipment may contain hazardous substances that could impact health and the environment.
- In order to avoid the dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems.
- The take-back systems will reuse or recycle most of the materials of your end life equipment in a sound way.
- The crossed-out wheeled bin symbol invites you to use those systems.



• If you need more information on the collection, reuse and recycling systems, please contact your local or regional waste administration.

Appendix G GPL Information

The source code for Buffalo products that use GPL code is available at http://opensource.buffalo.jp/.

Appendix H Warranty Information

Buffalo Technology (Buffalo Inc.) products come with a two-year limited warranty from the date of purchase. Buffalo Technology (Buffalo Inc.) warrants to the original purchaser the product; good operating condition for the warranty period. This warranty does not include non-Buffalo Technology (Buffalo Inc.) installed components. If the Buffalo product malfunctions during the warranty period, Buffalo Technology/(Buffalo Inc.) will, replace the unit, provided the unit has not been subjected to misuse, abuse, or non-Buffalo Technology/(Buffalo Inc.) authorized alteration, modifications or repair.

All expressed and implied warranties for the Buffalo Technology (Buffalo Inc) product line including, but not limited to, the warranties of merchantability and fitness of a particular purpose are limited in duration to the above period.

Under no circumstances shall Buffalo Technology/(Buffalo Inc.) be liable in any way to the user for damages, including any lost profits, lost savings or other incidental or consequential damages arising out of the use of, or inability to use the Buffalo products.

In no event shall Buffalo Technology/(Buffalo Inc.) liability exceed the price paid for the product from direct, indirect, special, incidental, or consequential damages resulting from the use of the product, its accompanying software, or its documentation. Buffalo Technology (Buffalo Inc.) does not offer refunds for any product.

@ 2003-2009 Buffalo Technology (Buffalo, Inc.)

Appendix I Contact Information

North America

North American Technical Support by phone is available 24 hours a day, 7 days a week. (USA and Canada).

Toll-free: (866) 752-6210 | Email: info@buffalotech.com

Europe

Buffalo Technology provides technical support in English, German, French, Italian, and Spanish.

UK 0845 3511005

Austria 08101 0251552

Belgium 0787 99917

Denmark 70150919

Finland 010802812

France 0811 650220

Germany 01801 003757

Ireland 1890 719901

Italy 848 782113

Netherlands 09000401256

Norway 81000050

Spain 9018 10750

Sweden 0771404105

Switzerland 0848 560374

For all other regions please contact +353 61 704617

www.buffalo-technology.com/contact

Asia Pacific

Australia TEL: 1300 761 310

China TEL: 86-800-820-8262

e-mail: support@buffalo-china.com

Hong Kong TEL: 852-2345-0005

e-mail: support@hornington.com

India TEL: 1-8004256210

e-mail: csbuffalo@accelfrontline.in

Indonesia TEL: 021-6231-2893

Malaysia TEL: 03-5032-0138

e-mail: buffalo@ecsm.com.my

Philippines TEL: 2-688-3999

e-mail: digisupport@msi-ecs.com.ph

Republic of Korea TEL: 02-2057-2095

e-mail: support@buffalotech.co.kr

Singapore TEL: 65-6297-2085

e-mail: buffalo@blumm.com

Taiwan TEL: 0800-660-886

e-mail: support@buffalo-tech.com.tw

Thailand TEL: 02-716-6669

Other Areas Please contact the shop or distributor where you purchased the unit, re-

ferring to the attached warranty card issued by the distributor.