

AirStation WMR-300 User Manual



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Chapter 1 - Product Overview

Package Contents

The following items are included in your AirStation package. If any of the items are missing, please contact your vender.

AirStation	1
Case	1
Ethernet Cable	1
Quick Setup Guide	1
Warranty Statement	1

Diagrams and Layout







1 USB Cable

You can connect this cable to your PC or USB devices to supply the power.

2 Internet Access LED (Green)

On:

Router functionality is enabled and you can connect to the Internet.

Blinking:

Router functionality is enabled but you cannot connect to the Internet. **Off:**

Router functionality is disabled.

3 Power LED (Green or Red)

On (Green): Power is on and wireless LAN is enabled. Blinking (Green): Internal system is booting. Double blinks (Green): AirStation is waiting for an AOSS or WPS security key. Slow blinks (Green): Power is on but wireless LAN is disabled. Continuously blinking (Red): AOSS/WPS error; failed to exchange security keys. Blinking (Red): You can see the status as below:

Blinking	Status	Meaning				
Double*	Flash ROM error	Cannot read or write on the flash memory.				
Triple*	Wired LAN error Wired LAN controller has crashed.					
4 times*	Wireless LAN error	Wireless LAN controller has crashed.				
5 times	IP address setting error	Cannot communicate because WAN-side and LAN-side IP addresses are same. Change LAN-side IP address of the AirStation.				
Continuouslu**	Updating firmware	Updating firmware.				
Continuously**	Backing up or initializing settings	Backing up or initializing settings.				

Notes:

* Reconnect USB cable. If it blinks again, please contact your vender.

** Do not disconnect USB cable while continuously blinking (red).

4 AOSS Button

To initiate AOSS, hold down this button until the wireless LED flashes (about 1 second). Then, push or click the AOSS button on your wireless client device to complete the connection. Both devices must be powered on for this to work.

5 Reset Button

To reset all settings, hold down this button until the Buffalo LED turns red (about 3 seconds). The power must be on for this to work.

6 Internet Port

10 Mbps and 100 Mbps connections are supported.

7 Factory Default Label

Displays AirStation's SSID, encryption key, PIN and MAC address.

Chapter 2 - Installation

Initial Setup

To configure your AirStation, follow the procedure below.

1 Connect the LAN cable to the AirStation and LAN port in the hotel, then turn the power on. The AirStation power can be supplied from an USB port on your PC or from an outlet with an USB power adapter.



- 2 Connect your PC or smartphone to the AirStation wirelessly.
- **3** Open a browser and connect to the Internet.

Note: You may need to register information to connect to the Internet depending on the hotel. For more information, please contact a staff in the hotel.

Chapter 3 - Configuration

Configuration of the AirStation is done from Settings, the web-based configuration GUI.

Accessing Settings

To configure the AirStation's settings manually, log in to Settings as shown below.

- 1 Open a browser.
- 2 Enter the AirStation's LAN-side IP address in the address field and press the enter key.



Notes:

- The AirStation's default LAN-side IP address is 192.168.11.1.
- If you changed the IP address of the AirStation, then use the new IP address.
- **3** Enter "admin" for the username and "password" for the password, then click *OK*.



Note: If you forget your password, hold down the reset button to initialize all settings. Note that all other settings will also revert to their default values.

4 This is Settings, where most AirStation settings can be configured.

Help is always displayed on the right side of each screen. Refer to the help screens for more information on using Settings.



Setup

Setup is the home page of Settings. You can verify settings and the status of the AirStation here.



Parameter	Meaning
WAN / LAN	Displays the configuration screen for Internet-side and LAN-side settings.
Wireless	Displays the configuration screen for wireless settings.
Firewall	Displays the configuration screen for the firewall.
Games/Apps	Displays the configuration screen to open ports for games and applications.
Admin	Displays the configuration screen for administration settings.
Diagnostic	Displays the status of the AirStation.
Easy Setup	Enables you to easily configure the AirStation's network settings automatically.
Mode	This indicates the operation mode of the AirStation.
Internet	Displays Internet-side system information for the AirStation.
Check Connection	Click to check if the AirStation is connected to the Internet properly.
Refresh	Click to refresh the current screen.
Wireless	Displays the current wireless settings.
AOSS Setup	Click to display the AOSS configuration screen.
WPS Setup	Click to display the WPS configuration screen.
Language	Enables you to select the language you use.
Log Out	Log out of Settings. If the AirStation does not communicate for 5 minutes, it will log out automatically.

Internet (Router Mode only)

Configure the Internet-side port.

Setup WAN / L	AN	Wireless	Firew	/all	Games / Ap	ps	Admin Diagnosti		
Internet LAN DHCP I	ternet LAN DHCP NAT Routing Log out Manual					ut al			
							Internet Etherne	t Settings	ŕ
Method of Acquiring IP Add	ress O	Acquire an IP add Use this address Static IP Address Subnet Mask	ress automa	tically from a	DHCP server	r Configuring your <u>Internet</u> side port: Normally, you'll connect the <u>Internet</u> side port to an external network such as the internet.		H	
Advanced Settings						-	Method of Acqui Select one of the methods to acqui IP Address. Pleas Provider for any of about your line for sure which metho	ring IP Address following re an Internet port se ask your ther information mat. If you're not d to choese to	
DNS Name Server Address	Primary: Second:	ary:					sule which method to choose, try selecting Easy Setup. You can confirm the status of the current Internet side IP Address on the System Information screen.		
Internet MAC Address	Use Use	default MAC addre	ess (20:10:7A	(D2:7E:BC)			Note:		
MTU Size of Internet Port	1500	Bytes					 Auto line detection Setup' is effective on which PPI 	ermination 'Easy ctive only for a line PoE or DHCP is	
Apply used, such as a normal DS Cable high-speed internet connection. For other types internet connections, select Advanced Settions, and enti-				is a normal DSL or peed internet for other types of ections, select things and enter					

Parameter	Meaning
Method of Acquiring IP Address	Specify how the WAN-side IP address is obtained.
Default Gateway	Configure an IP address for the default gateway.
DNS Name Server Address	Specify an IP address for the DNS server.
Internet MAC Address	You may use the default MAC address or specify one manually. Note: Configuring an improper MAC address may make the AirStation unusable. Do not change the MAC address unless you know what you're doing!
MTU Size of Internet Port	Configure the MTU value of the Internet port. Values of 578 to 1500 bytes may be entered.

LAN

Configure LAN-side and DHCP Server settings.



Parameter	Meaning		
LAN-side IP Address	By default, the LAN-side IP address is 192.168.11.1 with subnet mask 255.255.255.0. You may change it here.		
DHCP Server	Enable or disable the DHCP server, which assigns LAN-side IP addresses automatically.		
DHCP IP Address PoolConfigure the range of IP addresses to be assigned by the DHCP server and IP addresses to be assigned by the DHCP server and IP addresses to be excluded from that range. Values from 1-256 may be entered.			
Advanced Settings	Check Display to display DHCP server advanced settings options.		
Lease Period	Set the effective period of an IP address assigned by the DHCP server. Up to 999 hours may be entered.		
Default Gateway	Set the default gateway IP address for the DHCP server to issue to clients.		
DNS Servers	Set the DNS server IP address for the DHCP server to issue to clients.		
WINS Server	Set the WINS server IP address for the DHCP server to issue to clients.		
Domain Name	Set the domain name for the DHCP server to issue to clients. You may enter up to 64 alphanumerical characters, hyphens, and periods.		

DHCP (Router Mode only)

Configure DHCP exceptions.



Parameter	Meaning
IP Address	Enter an IP address to lease manually. The IP address should be from the same subnet as the DHCP scope, but not be within the range that DHCP is assigning to other devices.
MAC Address	Enter the MAC address of the client.
Current DHCP Clients	Displays information for current leases. An IP address which is leased automatically can be changed to manual leasing by clicking <i>Manual Assignment</i> .

NAT (Router Mode only)

Configure network address translation settings. This enables LAN-side devices to communicate with the Internet.

Setup	WAN / LAN	Wireless	Firewall	Games / Apps	Admin	Diagnostic	
Internet L	AN DHCP NAT	Routing				Log out Manual	
Address Tra	anslation	Z Enable		N	etwork Address ettings	Translation	* H
Log Output	of Deleted Packets	Enable		Cicco	onfigure address t onnect the WAN s ternet.	translation to side to the	
Appry				A	ddress Translati	on	÷

Parameter	Meaning
Address Translation	Enable to use network address translation (NAT).
Log Output of Deleted Packets	Enable to log deleted packets (such as errors) during address translation.

Routing

Configure the AirStation's IP communication route.



Parameter	Meaning
Destination Address	Adds a destination IP address and subnet mask to a routing table.
Gateway	Adds a gateway address to a routing table.
Metric	The metric is the maximum number of router hops a packet may take on the way to its destination address. Values between 1 and 15 may be entered. The default value is 15.
Routing	Manual entries will appear here after being added.

Wireless

WPS

WPS status and settings.

Setup W	AN/LAN	Wireless	Firewall	Games	/ Apps	Admin	Diagnostic	
WPS AOSS B	asic(11n/g/b)	Advanced(11n	g/b) WMM(11n/g/b)	Guest	Account	Log ou Manual	E.
						WPS (Wi-Fi Prote	cted Setup)	^
WPS	Enable					WPS		1
External Registra	Request is rej	ected in AOSS Mode				WPS is Wi-Fi Prote	ected Setup	
Apply	Apply which corresponds to Windows Connect Now-NET (WCN-NET) WPS is also known as the WI-Fi							
AirStation PIN 21	I271663 Ge	nerate PIN				WPS function can	safely and	
Enrollee PIN	Enrollee PIN OK easily distribute wireless securit information from an access point							
WPS Security Se	(AirStation) to the WPS clients. WPS Security Settings WPS security information is called register						hich registers formation is	
WPS Status	Configured (AOSS)					The AirStation has registrar built-in it, I use an external reg	an internal but can also istrar.	
	SSID	Buffalo-G-7EBC-1				The WPS device w the wireless securit	hich receives	
11n/g/b	Security	WPAWPA2 mixedn	node - PSK AES			from the registrar is	called enrollee.	
	Encryption key	024nsecgympbm				Enabled by default.		
					_			Ŧ

Parameter	Meaning					
WPS	Enable to use WPS automatic configuration.					
External Registrar	Enable to accept configure requests from other WPS devices.					
	Note: Configure requests will not be accepted if AOSS is in use.					
AirStation PIN	Displays the PIN code of the AirStation. Clicking Generate PIN will generate a new PIN					
	code. This code can be entered into other wireless devices that support WPS.					
Enrollee PIN	Enter the PIN code for the other wireless device and click OK.					
WPS Status	Displays "configured" if all available wireless bands are configured. Displays					
	"unconfigured" if at least one wireless band is unconfigured.					

AOSS

AOSS status and settings.

Setup		WAN / LAN	Wireless	Firewa	all	Games / Apps	Ad	min	Diagnostic
WPS AOS	S Ba	isic(11n/g/b) Ad	lvanced(11n/g/b)	WMM(11n/	g/b) Gue	est Account			Log ou Manual
(I)) V							AOSS Secu	6 (AirStatio re System	on One-Touch)
							AOSS techni securi can se	is Buffalo ology for qu e wireless ee AOSS's	's unique uickly forming a connection. You configuration and
AOSS Sett	ings						status	from this :	screen.
Exclusive S	SID fo	r WEP	802.11n/g/b Stop	-				Start AOS	c
Dedicated	WEP S	SID Isolation	802.11n/g/b Disable When this is enabled from clients connecting	d 👻 , clients conne ng via more sec	ting via WE	P will be isolated ion methods.	Click The A router	this button OSS butto works the	to start AOSS. n on top of the same as this
AOSS Butte	on on t	he AirStation Unit	C Enable				for mo	n. Refer to pre details.	How to use AOSS
Current Se	ecurity	Information 802.	11n/g/b				N 20		
Encryption	WPAN	VPA2 mixedmode - PS	SK(AES) (Now in use)				This b	Disable AC outton appe	OSS ars when AOSS is
SSID	Buffal	o-G-7EBC-1					enable disabl	ed. Click th	is button to Connections to
Encryption	024h	ecgympbm					AOSS	s clients v Informatio	n removed, and reset to its default
Encountion	Tune	WED100					value, Inform	AES.Currenation will a	ent Encryption Iso be removed.
SSID	Type	Buffalo-G-7EBC-3		-			Secur	ity are enal	bled in Advanced OSS is disabled.
		d26bea5d2605d8f5d	17b118a76b	(Se	nding Kev)		Hov	v to use AO	SS
E	14-11-1	867ea4384b24c5b7	/3fea5816e8				Hov (1) F	How to use AOSS: (1) First	
Encryption	кеу	67a99de2fe053d3d3	3c93aa3e5f				Power on or reboot the AirS and a wireless client that s		client that supports
		e55eba145df5b5d42bb1edcb63					AOS (2)	IS. Press AOS	SButtons
Encryption	Туре	WEP64					proc	duct's AOSS	buttons, the
SSID		Buffalo-G-7EBC-4					AirS will	tation and the exchange s	he wireless client ecurity information
		bc51642e1e		(Se	nding Key)		to send	et up the mo ryption type ready to con	automatically and
Encryption	Kev	deb0797638					No	ter	innannoaro.
Encryption	racy.	3f1af561a4					•	Once the AC	OSS button is
Random	KEY	5a3989f3d4						pressed, ot be started u finished. If t find a wirele	her operations cant intil AOSS is he AirStation can't iss client after three
								minutes, the returns to its	e AirStation's status s previous state.
Apply							•	Up to 24 wir be connecte	eless clients may ed through AOSS.
AOSS Clie	nt Info	ormation					-	By default, A but does no connection manually by button, eithe	OSS is functional it initiate a unless started pushing the AOSS or here or on the top
Client Infor	mation	MAC Address	Encryption Type		Wireless	Connection Setting		of the router Use AirStati	on's System
SC-02B		b4:07:19:ef:38:41	WEP64/WEP128/WPA	-PSK-	802.11g/b	Allow		configure a doesn't sup	wireless client that port AOSS.
EC Devices / AOSS Device	Not s	9c:2a:70:4d:0d:d6			802.11n/g/b	Allow	•	When wirele configured, information	ess security is it's security is succeeded.
EC Devices / AOSS Device	Not s	10:68:38:59:01:83		1	802.11n/g/b	Allow	In the	following c	ases, the setting
Edit A	OSS C	lient Information					of wire succe error.	eded and A	AOSS returns
							•	Any blank is	contained in SSID

Parameter	Meaning
((·[])) 2055	Initiates AOSS automatic wireless configuration. Click this, then press or click the AOSS button on your AOSS-compatible wireless client. Repeat for additional AOSS clients.
(19)) .055	Click this button to disconnect AOSS connections. Note: If AOSS connections are disconnected, the SSID and encryption keys will be restored to their last settings from before AOSS was used.
Exclusive SSID for WEP	You may allow a separate SSID specifically for WEP connections. If "Disabled" is selected, then clients will not be able to connect with WEP.
Dedicated WEP SSID Isolation	Set a separate SSID and network segment specifically for WEP connections. Devices connected with WEP will not be able to communicate with devices connected using AES/TKIP. All connected devices will be able to communicate with the Internet.
AOSS Button on the AirStation Unit	Uncheck to disable the physical AOSS button on the AirStation.
Current Encryption Information	Displays the encryption type, SSID, and encryption key configured by AOSS.

Parameter	Meaning
Random	Click to enter random values for SSID, encryption key, and other settings.
KEY base	Click to return the SSID, encryption key, and other wireless settings to the values on the case sticker.
Reset	Click to return the SSID, encryption key, and other wireless settings to their previous values.
AOSS Client Information	Displays AOSS clients connected to the AirStation and information of the devices which are wirelessly communicated.

Basic

Configure basic wireless settings from here.

Setup	WAN / LAN	Wireless	Firewall	Games / Apps	Admin	Diagnostic			
WPS AOSS	Basic(11n/g/b)	Advanced(11n/	nced(11n/g/b) WMM(11n/g/b) Guest Account Lo						
		_			Basic Wireless S (11n/a/g/b)	etting			
Wireless Chan	iel Auto Channel (Current Channel: 3)								
High Speed Mo	Bandwidth: 20 Extension Cha	Bandwidth: 20 MHz You can set basic configuration e Extension Channel: Channel 2 * Used Channel 2 *							
Broadcast SSI	D 🛛 Allow				setup. Encryption recommended, ho	is highly wever.			
SSID1	V Use				Wireless Channe	я			
SSID Isolation	🔲 Use				You may specify a	a channel			
SSID	 Use AirStation Enter: 	's MAC address (Bufl	alo-G-7EBC)		communication. If wireless clients ne AirStation,you mai interference. Chan	there are other ear the y get ge to a different			
Authentication	WPA/WPA2 mix	ed mode - PSK 💌			(and preferably nor channel in this case	n-overlapping) se Available			
Encryption	AES -				channels vary with standard you're us	which wireless			
WPA-PSK (Pre-shared Key)	•••••				channel is selected, a vacant channel is selected automatically. 11n/a : Auto, 36, 40, 44, 48 Channel (Default value : Auto				
SSID2	🖾 Use				11n/g/b : Auto, 1-1	11 Channel			
SSID Isolation	Use				Web Creed Med	to channely			
SSID	 Use AirStation Enter. 	's MAC address (Buf	alo-G-7EBC-1)		Wireless commun commonly uses 20 channel.	e ication 0 MHz per			
Authentication	WPA2-PSK	Ť			High Speed mode increase wireless	is a method to transmission			
Encryption	AES -				throughput to 40 N When High Speed	MHz per channel. mode is used.			
WPA-PSK (Pre-shared Key)	•••••				the channel displa client is likely goin the channel displa The wireless client may not display th	y on the wireless of to differ from y on the AP. t channel display te control			
SSID3:WEP	🖾 Use				channel but the ce In this case, the cl	enter frequency. hannel between			
SSID Isolation	Use				the wireless channel extension channel	is displayed.			
SSID	Use A Enter:	irStation's MAC addr	ess (Buffalo-G-7EB	C-3)	Example: When channel 3 is selected as wireless channel, and channel 7 is selected as the				
Setup WEP	Characte	er Input : 13 charact	characters (WEP128)						
енстурион кеу	© 3: © 4:				40 MHz (High Spe used for wireless of Default value is 20	ed mode) are communication. MHz			
Key Renewal II	nterval 60	minutes			Extension Chann	el			
Apply					under "Bandwidth" are used. A contro extension channel	, two channels of channel and an			

Parameter	Meaning
Wireless Channel	Sets a channel (a range of frequencies) for wireless connections. When "Auto Channel" is selected, the AirStation will automatically use the best available channel.
High Speed Mode	High-speed mode uses double the normal frequency range, 40 MHz instead of 20 MHz. In uncongested areas this can increase performance. To use high speed mode, set the bandwidth to 40 MHz.

Parameter	Meaning
Broadcast SSID	If <i>Allow</i> is checked, then the AirStation will respond to SSID searches from wireless devices by broadcasting its SSID. If <i>Allow</i> is unchecked, then the AirStation ignores SSID searches from wireless devices.
SSID 1	The multi-security SSID 1 can use no authentication, WPA-PSK, WPA2-PSK, or WPA/WPA2- mixed mode - PSK for wireless security.
SSID 2	The multi-security SSID 2 can use no authentication, WPA-PSK, WPA2-PSK, or WPA/WPA2- mixed mode - PSK for wireless security.
SSID 3	The multi-security SSID 3 can use the WEP for wireless security.
SSID Isolation	When enabled, wireless devices connected to the AirStation can communicate only with the Internet side, not with each other.
SSID	Set SSID using 1 - 32 alphanumeric characters.
Authentication	Specifies the authentication method used when connecting to a wireless device.
	You may use any of the following types of encryption:
	No encryption
	Data is transmitted without encryption. With this setting, anyone within range can connect to your wireless network and might be able to access data on the network. Not recommended for anyone with private data that needs to be kept secure. <i>No encryption</i> can be selected only when <i>No authentication</i> is selected for wireless authentication. WEP
Encryption	WEP is a common encryption method supported by most devices. WEP can only be selected when wireless authentication is set to <i>No authentication</i> . Note that WEP's encryption is weak, and networks protected with WEP are not much more secure than those with no encryption at all. Not recommended for anyone with private data that needs to be kept secure.
	AES
	AES is more secure than TKIP, and faster. Use a pre-shared key to communicate with a wireless device. AES can be selected only when WPA-PSK or WPA2-PSK is selected for wireless authentication.
WPA-PSK (Pre-Shared Key)	A pre-shared key or passphrase is the password for your wireless connections. There are two different formats for a pre-shared key. Use 8 to 63 alphanumeric characters (case- sensitive) for an ASCII passphrase, or use 64 alphanumeric characters (0 to 9 and a to f, not case-sensitive) for a hexadecimal passphrase.
Setup WEP encryption key	A WEP encryption key (passphrase) may have any of four different formats. An ASCII passphrase may use either 5 or 13 alphanumeric characters (case-sensitive). A hexadecimal passphrase may use either 10 or 26 alphanumeric characters (0 to 9 and a to f, not case-sensitive).
Key Renewal Interval	Set the update interval for the encryption key between 0 and 1440 (minutes).

Advanced

Configure advanced wireless settings.



Parameter	Meaning
Multicast Rate	Set the communication speed of multi-cast packets.
DTIM Period	Set the beacon responding interval (1 -255) for which the AirStation responds to a wireless device. This setting is effective only when power management is enabled for the wireless device.
Wireless Client Isolation	If enabled, the wireless client isolation blocks communication between wireless devices connected to the AirStation. Wireless devices will be able to connect to the Internet but not with each other. Devices that are connected to the AirStation with wired connections will still be able to connect to wireless devices normally.

<u>WMM</u>

Set priorities for specific communications.

Setup	WAN / LA	N V	Vireless	Fire	ewall	Games	s / App	s	Admin	Diagnosti	с
NPS AOSS	Basic(11n/	(g/b) A	dvanced(11	n/g/b)	WMM(11n/g/b)	Gues	t Account Log ou Manua			ut
WMM-EDCA P	arameters							WMM	Settings (11 zed AirStatio	In/a/11n/g/b)	
Priority	Parameter							comm transa	unication for ctions. This	specific settings	
AC_BK(Low)	CWmin: CWmax:	For AP 15 1023	For STA 15 1023					provide comm improv other s	s some real unication, where the quality streaming pro-	time nich can help of VOIP or otocols.	1
	AIFSN: TXOP Limit:	7	7					WMM	EDCA Para	meters	
AC_BE(Normal)	CWmin: CWmax: AIFSN:	For AP 15 63 3	For STA 15 1023 3					It is us change Priorit The pri (High)	ually not nee e this value. y iority is rank : (Normal)2	cessary to ed (Highest)8 : : : (Low)1 for	
AC_VI(High)	CWmin: CWmax:	For AP 7 15	For STA 7 15					Paran CWn The	neter nin, CWmax maximum an	d minimum value	
	AIFSN: TXOP Limit:	1 94 For AP	2 94 For STA					contr contr avoid Valu 3276	for the frame dance system es that can be	wis used to collision in IEEE802.11. e inputted: 1-	
AC VO(Highest)	CWmin: CWmax:	3 7	3 7					AIFS	N val of the sen	ding frame. The	
AC_VO(Highest)	AIFSN: TXOP Limit:	1 47	2 47					unit the v CWr high	defines a time vindow value nax). Lower v er priority as t	e-slot (similar to of CWmin, alues define a the back-off	
Apply								aigo can l TXO	pe inputted: 1	amer. values that -15.	

Parameter	Meaning
	You don't usually need to change these settings. Using the default settings is recommended.
	Priority
	The following priorities may be applied to individual transmission packets: (Highest) 8, (High) 4, (Normal) 2, and (Low) 1. From the queue, these packets are processed in order of priority.
	CWmin, CWmax
	The maximum and minimum value of the contention window. The contention window is used in the frame collision avoidance structure performed in IEEE 802.11, and generally, the smaller the value in the window, the higher the probability that the queue obtains the right to send.
Parameters	AIFSN
i ulullicici y	The interval to send frames. The unit of the AIFSN is a slot, just as the window defined by CWmin and CWmax is. The smaller the interval of sending frames, the faster the algorithm can restart. As a result, the priority of the queue is higher.
	TXOP Limit
	The period of time that the queue can use after obtaining the right to send. The unit is 32 ms. The longer this time, the more frames can be sent per right to send. However, the queue may interfere with other packet transmissions. If TXOP limit is set to 0 (zero), only one frame can be sent per right to send.

Guest Account

Configure the AirStation's guest account.

Setup WAN	I/LAN	Wireless	Firewall	Games	/ App	s Admin	Diagnostic		
WPS AOSS Basi	c(11n/g/b)	Advanced(11n/	g/b) WMM	(11n/g/b)	Guest	t Account	Log ou Manual	t.	
Guest Account Set	tings					Guest Account Se	ottings	Â	
Guest Account		Enable				Enabling the guest provides a separate	account Internet		
Guest User Authenti	cation	Enable				maintaining the sec	curity of your		
Guest Account LAN IP Address						Wireless client devices connected to the guest account can connect to the Internet, but they cannot access other wireless on			
Wireless						the network.			
11n/g/b	🔲 Use	Use					at account in		
	O Use Airs	Station's MAC address	s(Guest-7EBC)			disabled.			
SSID	O Enter:					Guest User Auther	ntication		
Authentication	No authent	ication		If enabled, only regi will be allowed to us	istered users se the quest				
Encryption	No encrypt	ion 👻				account. Register g The maximum conr	uests below. nection time for		
Apply						guest users is 24 h hours have passed,	ours. After 24 , the guest must		
Show Guests						If authenticated wire devices are disconr reauthentication is	eless client nected, required after 1		
Username Connection MAC Address Connection Status Operation						hour(s) has elapsed Disabled by default	d.		
Edit Guest User						Guest Account LA	N IP Address		
Refresh	Refresh						P address for		

Parameter	Meaning
Guest Account	This sets whether the guest account is enabled.
Guest User Authentication	This sets whether authentication is performed for users who use the guest account.
Guest Account LAN IP Address	This sets the LAN-side IP address for the guest account.
Guest Account DHCP Server	This sets whether IP addresses are automatically assigned for devices connected to the guest account.
11n/g/b	This sets 11n/g/b for the guest account.
SSID	This sets the SSID for the guest account.
Authentication	This sets whether wireless authentication is performed for the guest account.
Encryption	This sets the wireless encryption system for the guest account.
WPA-PSK (Pre-shared Key)	This sets the wireless encryption key for the guest account.
Edit Guest User	Click to register a user who is using the guest account.
Username	This sets the name of the user using the guest account.
Password	This sets the password of the user using the guest account.

Guest User Settings

To enable guest users, configure the AirStation with the settings below, then click Apply.

Guest Account: Enabled

Guest User Authentication: Disabled

Guest Account LAN IP Address: Auto

SSID: Guest

Authentication: No authentication

Encryption: No encryption

Notes:

Wireless clients connected to the guest SSID can connect to the Internet only. Communication with other devices on the LAN is not allowed.

To allow only registered guests to connect, enable guest user authentication, click *Edit Guest User*, and register the user.

Firewall (Router Mode only)

Configure the AirStation's firewall.

Setup	WAN / LAN Wirele	ss Firev	vall	Games / App	s Admin	Diagnostic	
Firewall	VPN Passthrough			Log ou Manua	t		
					Firewall		Â
Log Out	tput Enable	Number of D			Limits the type of p to pass between th LAN. When packet	ackets allowed e Internet and s reach the	=
Enable	Basic Rules Number of Pack				the packets, and fo that don't match an	rwards packets	
	Reject ident requests				destination. The fire unnecessary packet	wall blocks ts from the	
V	Block ping from Internet		0		WAN side and prev secure information	ents leaking from the LAN	
Apply					Log Output Checking this box v	will record	

Parameter	Meaning
Log Output	Enable to output a log of firewall activity.
	Enable to use any of the quick filters. Preconfigured quick filters include:
	Prohibit NBT and Microsoft-DS routing
	Enabling this blocks communication using these protocols from the WAN side to the LAN side or from the LAN side to the Internet. You can configure this with PPPoE if you select <i>Use PPPoE Client</i> or <i>Use IP Unnumbered</i> from the method of acquiring IP address, or if Easy Setup identified a PPPoE connection during setup.
	Reject ident requests
Basic Rules	Enabling this option will answer ident requests from the Internet side with corresponding rejection packets. Enable this option if you experienced slow transfer speeds for network applications such as mail, FTP or web browsing. If you have configured transfer of ident requests to the LAN side computer in the address translation settings (DMZ or TCP port 113), then 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 WAN side. You can configure this with PPPoE if you select <i>Use PPPoE Client</i> or <i>Use IP Unnumbered</i> from the method of acquiring IP address, or if Easy Setup identified a PPPoE connection during setup.

VPN Passthrough (Router Mode only)

Configure IPv6 passthrough, PPPoE passthrough, and PPTP passthrough.



Parameter	Meaning
IPv6 Passthrough	Enable to use IPv6 passthrough for address translation.
PPTP Passthrough	Enable to use PPTP passthrough for address translation.

Port Forwarding (Router Mode only)

Configure port translation.

Setup	W	AN/LAN	Wireless	Firewall	Games /	Apps	Admin	Diagnostic	
Port Forw	arding	DMZ UPn	2					Log out Manual	
Forward	a Port					Po	ort Forwarding		
Group New Group Group				c -		So rec let:	Some games and applications require port forwarding. This page lets you set port forwarding rules.		
Internet-s	ide IP	AirStation's I	nternet-side IP A	ddress 👻	Up	to 32 rules can	be registered.		
		© All	ress:			Fo	rward a Port		
		◎ ICMP				Yo	u can add a new	port to forward	
Protocol		🔘 Manual	Protocol Numbe	r.		or	edit an existing e	entry.	
		TCP/UDP	Set TCP port manually Specification Method				Group You can give a name (group n		
			Port Number:			tog	a rule group and jether. u can turn a grou	manage them	
LAN-side Address	IP	192.168.11.2				off.	You can also ed ividual rules.	dit or delete	
LAN-side	Port	TCP/UDP Port	:			sel	hen making rules lect a group from	, you can the drop-down	
Add						na Gr alp	me into the 'New oup name may h hanumeric chara	Group' field. ave up to 16 acters.	
							llemo		
Forwarde	d Ports						f the Group Name name in the form (Group's'Number)	is left blank, a of (for example	
Group	Internet-	side IP Addres IP Address	s Proto	side Port Cus	tomize	Ċ	Group02) is given	automatically.	
Group01	AirStation 192.168.1	s Internet-side IF 1.2	Address TCP I	Port:909 Port:909	F Edit Delete	Sp po ma	AN-Side IP add ecify the IP addr rts from. Althoug anually enter an I	ress ess to forward h you can P address, we	
						hig	hly recommend Station's Internet	using t-side IP	

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 characters.
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.
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.
Forwarded Ports	Displays current entries in the port translation table.

DMZ (Router Mode only)

Configure a destination for packets that don't have a LAN-side destination.

Setup	WAN / LAN	Wireless	Firewall	Games / Apps	Admin	Diagnostic				
Port Forwarding DMZ UPnP Log Mar										
					DM7 Sottings		^			
			Dinz Settings							
IP Address of	of DMZ				IP Address of DM	Z	1			
* The IP addr Apply	ess of this compute	r is 192.168.11.2.			Specify the address network device to v communication pac transferred. When a entered for the DM	s of a LAN-side which rejected ckets are to be an IP address is Z, it becomes	Ŧ			
	Copyright © 2000-2012 Buffalo Inc.									

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.

<u>UPnP (Router Mode only)</u>

Configure UPnP (universal plug and play).

Setup	WAN/LAN	Wireless	Firewall	Games / Apps	Admin	Diagnostic		
Port Forwar	Port Forwarding DMZ UPnP Log out Manual							
UD-D ===				1	JPnP Settings		•	
	nable				JPnP (Universal Pl allows network app support UPnP to co orwarding automat disabled, you will	ug and Play) lications that onfigure port ically. If ave to manually	Ŧ	

Parameter	Meaning
UPnP	Enable or disable universal plug and play (UPnP) functionality.

Admin

<u>Name</u>

Configure AirStation name.

Setup	WAN / LAN	Wireless	Firewall	Games / Apps	Admin	Diagnostic		
Name Pass Initialize/Res	Name Password Time and Date NTP Access Syslog Settings Save/Restore Log out Initialize/Restart Update Manual							
			_		AirStation Name		A 10	
AirStation Na	AP20107AD2	7EBC			AirStation Name Assign a name to t	he AirStation.	ľ	
					The AirStation nam	e may include		

Parameter	Meaning
AirStation Name	Enter a name for the AirStation. Names may include up to 64 alphanumeric characters and hyphens (-).

Password

Configure the password to log in Settings.

Setup	w	AN/LAN	Wireless	Firewal	I Games /	Apps	Admin	Diagnostic	D
Name Pase Initialize/Res	swor start	d Time and Update	Date NTP A	ccess Sys	slog Settings	Save/R	lestore	Log ou Manua	ut al
Administrator Password						Â			
Admin Name admin (fixed)						g-		=	
Admin Dace	word	••••				A	dmin Name		
Authin Passi	word	••••		(Confirm)		Ti	he admin usernan hanged.	ne cannot be	
Apply	Apply Admin Password								
						C	onfigure the admin	nistrator	-

Parameter	Meaning
Admin Name	The name of the administrator account is "admin".
Admin Password	The administrator password may contain up to 8 alphanumeric characters and underscores (_).

Time/Date

Configure the AirStation's internal clock.

Setup	WAN / LAN	Wireless	Firewall	Games / App	s Admin	Diagnostic			
Name Pas Initialize/Re	Name Password Time and Date NTP Access Syslog Settings Save/Restore Log out Initialize/Restart Update Manual								
					Time and Date	ń			
NTP is enab overwritten	NTP is enabled. Changes made to time and date settings may be overwritten by the NTP server when it syncs. Set the AirStation's internal clock.								
Date	2010 Year 1	Month 1	Day		Note:				
Local Time	0 Hour 27	Minute 27 s	Seconds		The AirStation's in reset to its default whenever power in	ternal clock is setting			
Time Zone	(GMT+00:00) Gree	nwich Mean Time	, London	•	However, the AirSl configured to adju	ation may be			
Apply Ref	resh Get C	urrent Time from 1	Your PC		automatically ever by connecting it to You may also rese manually.	when rebooted a NTP server. et its time			

Parameter	Meaning
Date	Configure the date of the AirStation's internal clock.
Local Time	Configure 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.

<u>NTP</u>

Configure an NTP server to automatically synchronize the AirStation's internal clock.



Parameter	Meaning
NTP	Enable to use an NTP server. Enabled by default.
NTP Server	Enter the name of the NTP server as a hostname, hostname with domain name, or IP address. Up to 255 alphanumeric characters, hyphens (-), and underscores (_) may be used. The default is "time.nist.gov".
Update Interval	How often shall the AirStation check the NTP server for the correct time? Intervals of 1 - 24 hours may be set. The default is 24 hours.

Access

Restrict access to Settings.



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

Syslog Settings

Transfer the AirStation's logs to a syslog server.

Setup	WAN / LAN Wir	eless Fire	wall Gam	ies / Apps	Admin	Diagnostic
Name Passwo Initialize/Resta	ord Time and Date	NTP Access	Syslog Settin	gs Save/	Restore	Log out Manual
					Syslog Setup	ŕ
Transfer Logs	Enable				Transfers the AirSt	ation's loos to a
Syslog Server					syslog server.	
Logs	Address Translation DHCP Client AOSS Authentication System Boot Wired	 Firewall DHCP Server Wireless Setting Change NTP Client 	÷S		Transfer Logs Enable to have the transmit logs to a \$ Syslog Server Specify the name of Server by hostnam with domain or IP a	AirStation Syslog server. of your Syslog e, hostname iddress.
Apply Select	Clear All				Alphanumeric char -', and periods '.' m The Syslog server start or end with a	acters, hyphens ay be used. name should not hyphen '-' or

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

Save/Restore

Save AirStation settings as a file and restore from them later.

Setup Name Passi Initialize/Rest	WAN / LAN word Time and tart Update	Wireless Date <u>NTP</u>	Firewall Access Syslog	Games / Settings	Apps Save/R	Admin estore	Diagnostio Log ou Manua	c ut al
	Back Up				S	ave/Restore Air: ettings	Station	•
Back Up Setti	ngs Encrypt the	configuration file	with a password		S	ave Current Set	tings	
					Ye co	ou may save the onfiguration of the ackup file on the f	current AirStation to a PC.	
Doctoro Cottir	Backup File		Browse			Note:		
Restore Settin	Open file w	ith password				The AirStation will restore configurat saved file if it was later version of the you are currently n	not be able to ions from the created with a a firmware than unning, or	

Parameter	Meaning
Back Up Settings	Clicking <i>Back Up</i> will save the current configuration of the AirStation to a file. If the <i>Encrypt the configuration file with a password</i> option is checked, then the configuration file will be password protected with the password.
Restore Settings	Restore the configuration of the AirStation from a saved configuration file by clicking <i>Browse</i> , navigating to the configuration file, and clicking <i>Restore</i> . If the configuration file was password protected, then put a check next to <i>Open file with password</i> , enter the password, and click <i>Restore</i> .

Initialize/Restart

Initialize or restart the AirStation.

Setup	WAN / LAN	Wireless	Firewall	Games / J	Apps	Admin	Diagnostic	
Name Pas Initialize/Re	sword Time and	Date NTP	Access Syslog	Settings	Save/R	estore	Log out Manual	
					In	itialize/Restart		Â
Restart	s reboots your AirStatic Restart Now	on.			Re	estart		н
					Th	is reboots your A	irStation.	
						Note: Restarting will res	et the clock to its	
Initialize	is will restore your AirS Initialize Now	tation to the factor	y default settings.			default time.		
								-

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

<u>Update</u>

Update the AirStation's firmware.



Parameter	Meaning
Firmware Version	Displays the current firmware version of the AirStation.
Update Method	<i>Select a file on your PC</i> updates from a firmware update file that you've downloaded to your computer. <i>Automatic update</i> will search the Internet for updated firmware and update your firmware automatically when new firmware is available.
Firmware File Name	Click <i>Browse</i> to navigate to the firmware file on your computer if <i>Select a file on your PC</i> was selected. You don't need to specify the firmware location if you're using <i>Automatic update</i> . Click <i>Update Firmware</i> to update the firmware.

Diagnostic

System Info

View system information for the AirStation.

Setup	WAN /	I / LAN Wireless Firewall Games / Ap		s	Admin	Diagnostic	;		
System Info	Logs	Packet Info	client Mo	nitor				Log ou	ıt
Ping								Mailua	
						Sj	stem Informatio	on	
Model		WMR-300 Ver.1.0	00(R2.72/B	3.00)		Di	splay the AirStati	on's main	
AirStation Nar	ne	AP20107AD27E	BC			se	ttings.		
Mode		Router mode				Di	odel solavs the model	name and	
		Method of Acquir IP Address	ing DH	ICP		fin	mware version of	the AirStation.	
						Ai	rStation Name		
		Constantion Otat		1 Connected		Di	splays the AirSta stname.	tion's	
Internet		Operation		Release Renew	1	0	perational Mode	,	
						Di op	splays the curren eration.	t mode of	
		Wired Link	Dis	sconnected		In	ternet		
		IP Address	19	2.168.11.1		Ai	Station's Internet	port side	
LAN		Subnet Mask	25	5.255.255.0			Method of Acquiri	na ID Address	
		MAC Address	20	:10:7A:D2:7E:BC			Acquiring an Interr	et IP address.	
		Wireless Status	En	abled			Name of the Conn	ection	
		SSID1	Bu	ffalo-G-7EBC			The name of the P connection specifi configuration.	PPoE ed in the	
		Authentication	WE	PAWPA2 mixed mod	le - PSK		Connection Status	5	
				~			Displays the curre	nt WAN-side	
Wireless/902	440(0/b)	SSID2	Bu	ffalo-G-7EBC-1	denote DOV		Onesational Made		
wireless(ouz.	(unig/b)	Encryption	AU	ISS WPAVWPA2 mixe ISS AES	idmode - PSK		The Operational Mode	ode will show if	
							any DHCP or PPP is active. If DHCP i	oE configuration s in use, the	
		Broadcast SSID	En Isolation Dir	abled			following comman executed.	ids can be	
		Wireless Chann	el 4(/	Auto)			Release': Rele	eases the IP	
		High Speed Mod	le 20	MHz			DHCP server.	neu by the	
Guest Accourt	nt	Guest Account	20 Dis	sabled			 'Renew': Rene address from t server. 	ws the IP he DHCP	
Pofrach							The following com executed when us	mands can be ing PPPoE.	
Reliesh							Start: Start cor PPPoE Server	necting to a	
			Con	wight @ 2000.2012 (uffala las		THE DE DEIVER	nonniore/stop.	

Parameter	Meaning			
Model	Displays the product name of the AirStation and the firmware version.			
AirStation Name	Displays the name of the AirStation.			
Mode	Displays the AirStation's current operational mode.			
Internet	Displays the status of the Internet port.			
LAN	Displays the status of the LAN port.			
Wireless	Displays the wireless status.			
Guest Account	Displays the status of the Guest Account.			

Logs

The AirStation's logs are recorded here.

Setup	WAN / LA	N W	ireless	Firew	all	Games / A	۱pp	s	Admin	Diagnostic	C
System Info Ping	Logs Pac	cket Info	Client Mo	nitor						Log ou Manua	ut al
							Â	Log	5		Â
Display Logs	Address Address DHCP Cl AOSS Authentic System E Wired	Translation lient ation Boot	 Firewal DHCP Wireles Setting NTP Cl 	l Server ss Client Changes ient			ш	Disp the A The over Disp Sele	olay log informat AirStation. oldest informati written by new l olay log info oct the types of	ion recorded in on is ogs.	в
Display Se	elect All	Clear All						sho The item	uld be logged by default is All. The s can be select	/ the AirStation. he following red:	
Logs Save Log as	s File					Delete		:	Address Trans Firewall(Includ Masquerade pa DHCP Client	slation les discarded IP ackets)	
Date Time	Туре	Logs							(WAN Side)	ANI Olda)	
Jan 1 00:05:36	DHCPS	Sending INI	FORM to 0.0.0	0.0				:	AOSS	LAIN SIDE)	
Jan 1 00:05:36	DHCPS	Received INFORM						•	Wireless Clien	t(Start/stop and	
Jan 1 00:00:36	DHCPS	Sending IN	FORM to 0.0.0	0.0			Ŧ		Authentication	on)	-

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

Packet Info

View packet transfer information.



Parameter	Meaning
Sent	Displays the number of packets sent to the WAN, the LAN, and the wireless LAN.
Received	Displays the number of packets received from the WAN, the LAN, and the wireless LAN.

Client Monitor

This screen shows devices that are connected to the AirStation.



Parameter	Meaning
Client Monitor	Displays information (MAC address, lease IP address, hostname, 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.

Setup	WAN/LAN	Wireless	Firewall	Games / Apps	Admin	Diagnostic	;
System Info Ping	Logs Packet In	fo Client Moni	tor			Log ou Manua	it il
					Ping		Â
Destination Address Execute Result					A Ping test can be the AirStation. Wit you can determine AirStation can con specific network d	e performed from th a ping test, e whether the nmunicate with a evice.	H
Destination Result	Not entered Not executed				Destination Addr Enter the network you want to ping; 192.168.11.3 or www.buffalotech.c	ress IP address that e.g. om.	Ŧ

Parameter	Meaning
Doctination Addross	Enter the IP address or hostname of the device that you are testing communication with,
Destination Address	then click <i>Execute</i> . The result will be displayed below.

Chapter 4 - Connect to a Wireless Network

Automatic Secure Setup (AOSS / WPS)

AOSS and WPS are systems that enable you to automatically configure wireless LAN settings. Just pressing the buttons will connect wireless devices and complete security settings. Use them to automatically connect 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 or WPS to connect the Buffalo wireless client to the computer, download Client Manager or AOSS Assistant from the Buffalo website and install it.
- 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 8, Windows 7 or Windows Vista (Client Manager V)

If you are using Windows 8, Windows 7 or Windows Vista, use Client Manager V to connect wirelessly with AOSS or WPS.

1 Launch Client Manager V.

2 Click Create Profile.



- **3** If the "User Account Control" screen opens, click Yes or Continue.
- 4 Click WPS AOSS.

6	Create profile		×
	Perform setup of wireless	connection to the AirStation	
	Wireless Adapter	BUFFALO WLI-UC-G300N	•
	Select the Setup Method		
	Automatic Secure Setup		
	Perform connection and	security configuration automatically.	
	Advanced Setup		
	Select a Network Name (SSID then connect manually. Otherwise connect with WPS-f) or enter the SSID, PIN method.	<i>p</i>
	Option (Expert only)	Client Manager V	Ver.1.4.4 BUFFALO

When the wireless LED on the front of the AirStation stops flashing and glows steadily, the connection is ready to use.

Windows XP (Client Manager 3)

If you are using Windows XP, use Client Manager 3 to connect wirelessly with AOSS or WPS.

- 1 Right-click the **?** icon in the system tray and select *Profile*.
- 2 Click WPS AOSS.

BUFFAL	.0					×
(\mathcal{M}	Status	Q Scar	n 🛛 🔳	Profiles	
AirStation		Create	profile and displ	ay priority lev	rel.	Help
			Profile N	ame		
Conne	ct	Add	Edit			

It will take several seconds for your wireless connection to be configured. When the wireless LED on the front of the AirStation stops flashing and glows steadily, the connection is ready to use.

Mac OS (AOSS Assistant)

If you are using OS X 10.8, 10.7, 10.6, 10.5 or 10.4, use AOSS Assistant to connect wirelessly with AOSS.

- **1** Download AOSS Assistant from Buffalo's website.
- **2** Open the AOSS Assistant software. Click *Agree* to proceed.

3 Click Start AOSS.



4 Enter the Mac's username and password and click OK.

	Type your password to allow AOSS6 to make changes.		
	Name: BUFFALO		
	Password: •••••		
▶ Details			
?	Cancel OK		

It will take several seconds for your wireless connection to be configured. When the wireless LED on the front of the AirStation stops flashing and glows steadily, the connection is ready to use.

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 or WPS. When instructed, hold down the AOSS button on the AirStation for 1 second.

When the wireless LED on the front of the AirStation stops flashing and glows steadily, the connection is ready to use.

Manual Setup

You can also connect to the AirStation without installing Client Manager V or Client Manager 3 by using the utility builtin to the operating system. The procedure varies depending on which operating system you are using.

Windows 8 (WLAN AutoConfig)

With Windows 8, use WLAN AutoConfig to connect to the AirStation.

- **1** Switch Windows 8 to desktop mode.
- 2 Click the network icon in the system tray.
- **3** Select the target AirStation's name and click *Connect*. If you will be connecting to this device again, check *Connect automatically*.



4 Enter the encryption key and click *Next*.



5 Click No, don't turn on sharing or connect to devices.



Windows 7 (WLAN AutoConfig)

With Windows 7, use WLAN AutoConfig to connect to the AirStation.

- 1 Click the network icon an in the system tray.
- 2 Select the target AirStation and click *Connect*. If you will be connecting to this device in the future, checking *Connect automatically* is recommended.



3 Enter the encryption key and click *OK*.



Windows Vista (WLAN AutoConfig)

With Vista, use WLAN AutoConfig to connect to the AirStation.

- 1 Right-click the wireless network icon in the system tray.
- **2** Click Connect to a network.
- **3** When this screen is displayed, select your network and click *Connect*.

⊙ 😵 Con Select	nect to a network a network to cor	nnect to	
Sh	Iow All	•	47
2	001D73B991D4	Security-enabled network	e llee
2	001D732991D4	Security-enabled network	llte.
<u>Set up a</u> Open Ne	connection or netwo etwork and Sharing C	r <u>k</u> enter	
			Connect Cancel

If the screen below is displayed, click *I want to enter the network key or passphrase instead*. Otherwise,go to step 4.

🖞 Connect to a network	
Press the configuration button on your access point	
Press the configuration button on the	
access point before continuing.	
I can't find the configuration button. I want to enter the network key or passphrase instead	
	<u>N</u> ext Cancel
	<u>N</u> ext Cancel
	Next Cancel
Connect to a network	Next Cance
P Connect to a network	Next Cancel
Connect to a network Enter the PIN for BUFFALO INC. WHR-G300N on 001D73B	Next Cancel
Connect to a network Enter the PIN for BUFFALO INC. WHR-G300N on 001D73B You can find this PIN displayed on the BUFFALO INC. WHR-G300N.	Next Cancel
Connect to a network Enter the PIN for BUFFALO INC. WHR-G300N on 001D73B You can find this PIN displayed on the BUFFALO INC. WHR-G300N. PIN:	991D4
Connect to a network Enter the PIN for BUFFALO INC. WHR-G300N on 001D73B You can find this PIN displayed on the BUFFALO INC. WHR-G300N. PIN:	Next Cancel
Connect to a network Enter the PIN for BUFFALO INC. WHR-G300N on 001D73B You can find this PIN displayed on the BUFFALO INC. WHR-G300N. PIN: Display characters	991D4
Connect to a network Enter the PIN for BUFFALO INC. WHR-G300N on 001D73B You can find this PIN displayed on the BUFFALO INC. WHR-G300N. PIN: Display characters	<u>Next</u> Cancel
Connect to a network Enter the PIN for BUFFALO INC. WHR-G300N on 001D73B You can find this PIN displayed on the BUFFALO INC. WHR-G300N. PIN: Display characters	991D4
Connect to a network Enter the PIN for BUFFALO INC. WHR-G300N on 001D73B You can find this PIN displayed on the BUFFALO INC. WHR-G300N. PIN: Display characters I don't have the PIN. Lucet to entropy the period.	991D4
Connect to a network Enter the PIN for BUFFALO INC. WHR-G300N on 001D73B You can find this PIN displayed on the BUFFALO INC. WHR-G300N. PIN: Display characters I don't have the PIN. I want to enter the network key or passphrase instead	991D4

4 Enter the encryption key and click *Connect*.



Step through the wizard to finish configuration.

If the "Set Network Location" screen is displayed, select *Home*, *Work*, or *Public location* depending on where you're using the AirStation.

Windows XP (Wireless Zero Configuration)

Windows XP includes Wireless Zero Config, a built-in utility to connect to your AirStation.

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

1 Right-click the image wireless network icon 述 in the system tray.

2 Click View Available Wireless Networks.

3 Select the network to connect to and click *Connect*.



4 Enter the encryption key (twice) and click *Connect*.

Wireless Network Conne	Wireless Network Connection			
The network '001D73B991D4' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.				
Type the key, and then click Connect.				
Network <u>k</u> ey:				
Confirm network key:	Confirm network key:			
	<u>C</u> onnect Cancel			

It will take several seconds for configuration to complete.

Mac OS (Wi-Fi)

Use Wi-Fi on a Mac to connect to the AirStation.

Note: In Mac OS 10.6 and earlier, "Wi-Fi" appears as "AirPort".





2 Find the SSID from step 1 on the list. Click it to highlight it.



3 Enter your encryption key in the password field, check *Remember this network*, and click *Join*.

	The Wi-Fi network "BUFFALO-0F13F1" requires a WPA2 password.	
	Password:]
	☐ Show password ✔ Remember this network	
?	Cancel)

It will take several seconds for configuration to complete.

Chapter 5 - Troubleshooting

Cannot Access Settings.

- See chapter 3 for instructions to open Settings.
- Enter the correct username and password to log in to Settings. If you are using AirStation with factory default settings, enter "admin" for the username and "password" for the password.
- Verify that your web browser is not set to use proxies.
- Make sure that your computer is configured to "obtain an IP address automatically from DHCP".
- Restart your AirStation.

Cannot Connect to the Network Wirelessly.

• Configure your wireless client with the same SSID, encryption type, and encryption key as set on the AirStation. The factory defaults are:

SSID (11n/g/b) - Buffalo-G-XXXX (the last 4 digits of the AirStation's MAC address).

Encryption Type - WPA2 - PSK AES, or none.

Encryption Key - Printed on the label.

- Note: For details, refer to the label.
- Place your AirStation and wireless devices 2 10 feet apart.
- Restart your AirStation.

Forgot AirStation's SSID, Encryption Key, or Password.

Hold down the reset button on the base of your AirStation for 3 seconds to initialize its settings. All settings, including your password, SSID, and encryption key will be initialized to their defaults.



With the AirStation powered on, hold down this button for 3 seconds to return it to factory default settings.

How to Configure TCP/IP

Windows 8

To configure TCP/IP in Windows 8, follow the procedure below.

- **1** Open Control Panel.
- 2 Click Network and Internet.
- **3** Click Network and Sharing Center.
- 4 Click *Change Adapter Settings* on the left side menu.
- **5** Right-click the network adapter, then click *Properties*.
- **6** If the "User Account Control" screen opens, click Yes or Continue.
- **7** Select Internet Protocol Version 4 (TCP/IPv4) then click Properties.

8 To have DHCP set your IP address settings automatically, check Obtain an IP address automatically and Obtain DNS server address automatically. Alternately, you can configure the settings manually. Example: If the router's IP address is 192.168.11.1, IP address: 192.168.11.80 Subnet mask: 255.255.255.0 Default gateway: 192.168.11.1 Preferred DNS server: 192.168.11.1 Alternate DNS server: blank

9 Click OK.

Windows 7

To configure TCP/IP in Windows 7, follow the procedure below.

- **1** Open Control Panel.
- **2** Click Network and Sharing Center.
- **3** Click Change Adapter Settings on the left side menu.
- **4** Right-click the network adapter, then click *Properties*.
- 5 If the "User Account Control" screen opens, click Yes or Continue.
- **6** Select Internet Protocol Version 4 (TCP/IPv4) then click Properties.

To have DHCP set your IP address settings automatically, check Obtain an IP address automatically and Obtain DNS server address automatically.
 Alternately, you can configure the settings manually. Example:
 If the router's IP address is 192.168.11.1,
 IP address: 192.168.11.80
 Subnet mask: 255.255.255.0
 Default gateway: 192.168.11.1
 Preferred DNS server: 192.168.11.1
 Alternate DNS server: 192.168.11.1

8 Click OK.

Windows Vista

To configure TCP/IP in Windows Vista, follow the procedure below.

1 Open Control Panel.

- **2** Click Network and Sharing Center.
- **3** Click *Manage network connections* on the left side menu.
- **4** Right-click the network adapter, then click *Properties*.
- 5 If the "User Account Control" screen opens, click Yes or Continue.
- **6** Select Internet Protocol Version 4 (TCP/IPv4) then click Properties.

To have DHCP set your IP address settings automatically, check Obtain an IP address automatically and Obtain DNS server address automatically.
 Alternately, you can configure the settings manually. Example:
 If the router's IP address is 192.168.11.1,
 IP address: 192.168.11.80
 Subnet mask: 255.255.255.0
 Default gateway: 192.168.11.1
 Preferred DNS server: 192.168.11.1
 Alternate DNS server: 192.168.11.1

8 Click OK.

Windows XP

To configure TCP/IP in Windows XP, follow the procedure below.

- **1** Open Control Panel.
- **2** Double-click *Network*.
- **3** Right-click the network adapter, then click *Properties*.
- **4** Select Internet Protocol (TCP/IP) then click Properties.
- 5 To have DHCP set your IP address settings automatically, check Obtain an IP address automatically and Obtain DNS server address automatically. Alternately, you can configure the settings manually. Example: If the router's IP address is 192.168.11.1, IP address: 192.168.11.80 Subnet mask: 255.255.255.0 Default gateway: 192.168.11.1 Preferred DNS server: 192.168.11.1 Alternate DNS server: blank
- 6 Click OK.

Mac OS

To configure TCP/IP in Mac OS, follow the procedure below.

- 1 Click Apple menu > System Preferences....
- **2** Click Network.
- **3** Click the network adapter.
- 4 To have DHCP set your IP address settings automatically, select Using DHCP in the "Configure IPv4" field. Alternately, you can configure the settings manually. Example: If the router's IP address is 192.168.11.1, IP address: 192.168.11.80 Subnet mask: 255.255.255.0 Default gateway: 192.168.11.1 Preferred DNS server: 192.168.11.1 Alternate DNS server: blank
- **5** Click Apply.

Other Tips

Issue:

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

Answer:

Open your browser, enter 192.168.11.1 as the browser address, and hit the enter key. You will be prompted to log in. Enter "admin" for the username and "password" for the password. Click *OK* to log in. 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 Settings and navigate to *Internet Games (Port Forwarding)* on *Setup* page. 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 Settings and navigate to *Wireless Encryption* on *Setup* page. Buffalo recommends the use of WPA2-PSK AES for wireless encryption. The passphrase or 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 Settings and navigate to *Wireless - Basic*. Find the SSID setting. Select *Use* and enter the new name for your network. Click *Apply*. Once the wireless router has rebooted, you will need reconnect any wireless clients to the AirStation using the new network name. The encryption key will still be the same.

Issue:

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

Answer:

There are many environmental factors that may cause this. First, ensure the issue is not range related by moving the wireless router and the client device closer together. If the connection drops continue, then range is probably not the issue.

Other 2.4 GHz devices such as microwaves, other wireless networks, and 2.4 GHz wireless phones may impact performance. Try a different wireless channel for your wireless router. Log in Settings and navigate to *Basic Wireless Setup* on *Setup* page. Wireless channels from 1 - 11 may be selected. Try "Auto Channel" option if available. Otherwise, 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, press the router button on the AirStation to switch to router mode. The router LED on the AirStation turns on, and after about one minute, turn off the cable or DSL modem, AirStation, and your computer. Verify that the modem is connected to the Internet port on the AirStation with a Ethernet cable. 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

Chapter 6 - Default Configuration Settings

Feature	Parameter	Default Setting		
	Method of Acquiring IP Address	Acquire an IP address automatically from a DHCP server		
	Default Gateway	-		
Internet	DNS Name Server Address	-		
	Internet MAC Address	Use default MAC address		
	MTU Size of Internet Port	1500 Bytes		
		Router mode (Router On):		
		192.168.11.1 (255.255.255.0)		
	LAN-side IP Address	Bridge mode (Router Off):		
		192.168.11.100 (255.255.255.0)		
	DHCP Server	Enabled		
LAN	DHCP IP Address Pool	192.168.11.2 for up to 64 Addresses		
	Lease Period	48 Hours		
	Default Gateway	AirStation's IP address		
	DNS Servers	AirStation's IP address		
	WINS Server	Assigned IP address		
	Domain Name	Assigned domain name		
DHCP	Current DHCP Clients	-		
NAT	Address Translation	Enabled		
NAI	Log Output of Deleted Packets	Disabled		
Routing	Routing	No routes are registered.		
	WPS	Enabled		
	External Registrar	Enabled		
	AirStation PIN	An 8-digit random value (Printed on the label of the		
		MPS status:		
		Configured		
WPS				
		address)		
	WPS Security Settings	Security:		
		WPA2 - PSK AES		
		Encryption key:		
		Either a 8-digit random value or disabled. Printed on the		
		setup card.		
	Exclusive SSID for WEP	AOSS is not in use.		
AOSS	Dedicated WEP SSID Isolation	Disabled		
	AOSS Button on the AirStation Unit	Enabled		

Feature	Parameter	Default Setti	ng		
	Wireless Channel	Auto Channel			
	High Speed Mode	Bandwidth: 20 MHz			
	Broadcast SSID	Allow			
	SSID1	Enabled			
	SSID Isolation	Disabled			
	SSID	Use AirStation's MAC address			
		SSID1: WPA/WPA2 mixed mode - PSK			
Basic	Authentication	SSID2: WPA2 - PSK			
	Encryption	AES			
		An 8-digit ran	dom value		
	WPA-PSK (Pre-Shared Key)	(Printed on th	e factory de	efault label.)	
	SSID2	Enabled	, , , , , , , , , , , , , , , , , , , ,		
	SSID3:WEP	Disabled			
	Rekey Interval	60 minutes			
	Multicast Rate	1 Mbps			
Advanced	DTIM Period	1			
	Wireless Client Isolation	Disabled			
			For AP	For STA	
		CWmin	15	15	
	WMM-EDCA Parameters (Priority AC_BK (Low))	CWmax	1023	1023	
		AIFSN	7	7	
		TXOP Limit	0	0	
			For AP	For STA	
		CWmin	15	15	
	WMM-EDCA Parameters (Priority	CWmax	63	1023	
		AIFSN	3	3	
10/0.0.0		TXOP Limit	0	0	
			For AP	For STA	
		CWmin	7	7	
	WMIM-EDCA Parameters (Priority	CWmax	15	15	
	AC_VI(IIIgII))	AIFSN	1	2	
		TXOP Limit	94	94	
			For AP	For STA	
		CWmin	3	3	
	$\Delta C VO (Highest))$	CWmax	7	7	
	AC_VO (Highest))	AIFSN	1	2	
		TXOP Limit	47	47	
	Guest Account	Disabled			
	Guest User Authorization	Disabled			
	Guest Account LAN IP Address	Auto			
Guest Account	11n/g/b	Disabled			
	SSID	Use AirStation's MAC address			
	Authentication	No authentica	ation		
	Encryption	No encryption			

Feature	Parameter	Default Setting		
	Log Output	Disabled		
F ¹		Prohibit NBT and Microsoft-DS routing: Disabled		
Firewall	Basic Rules	Reject ident requests: Enabled		
		Block ping from Internet: Enabled		
VPN	IPv6 Passthrough	Disabled		
Passthrough	PPTP Passthrough	Disabled		
Port Forwarding	Forwarded Ports	Port forwarding has not been configured yet.		
DMZ	IP Address of DMZ	-		
UPnP	UPnP	Enabled		
Name	AirStation Name	AP + AirStation's MAC Address		
Password	Admin Name	admin (fixed)		
rassworu	Admin Password	password		
	Date	2010 Year 1 Month 1 Day		
Time/Date	Local Time	0 Hour 0 Minute 0 Seconds		
	Time Zone	(GMT+00:00) Greenwich Mean Time, London		
	NTP Functionality	Enabled		
NTP	NTP Server	time.nist.gov		
	Update Interval	24 hours		
	Log Output	Disabled		
		Prohibit configuration from wireless LAN:		
Access	Management Access	Disabled		
	Management Access	Permit configuration from wired WAN:		
		Disabled		
	Transfer Logs	Disabled		
	Syslog Server	-		
Syslog Settings	Logs	Address Translation, Firewall, DHCP Client, DHCP Server, AOSS, Wireless, Authentication, Setting Changes, System Boot, NTP Client and Wired		
Update	Update Method	Select a file on your PC		

Appendix A - Supplemental Information

Technical Specifications

Wireless LAN Interface	
Standard Compliance	IEEE 802.11n / IEEE 802.11g / IEEE 802.11b
Transmission Method	Direct Sequence Spread Spectrum (DSSS), OFDM, MIMO
Frequency Range	Available frequencies depend on the country of purchase.
Transmission Rate	IEEE 802.11n 20 MHz BW <long gi="">:</long>
	130/117/104/78/52/39/26/13 Mbps (2 stream)
	65/58.5/52/39/26/19.5/13/6.5 Mbps (1 stream)
	IEEE 802.11n 20 MHz BW <short gi="">:</short>
	144.4/130/115.6/86.7/57.8/43.3/28.9/14.4 Mbps (2 stream)
	72.2/65/57.8/43.3/28.9/21.7/14.4/7.2 Mbps (1 stream)
	IEEE 802.11n 40 MHz BW <long gi="">:</long>
	270/243/216/162/108/81/54/27 Mbps (2 stream)
	135/121.5/108/81/54/40.5/27/13.5 Mbps (1 stream)
	IEEE 802.11n 40 MHz BW <short gi="">:</short>
	300/270/240/180/120/90/60/30 Mbps (2 stream)
	150/135/120/90/60/45/30/15 Mbps (1 stream)
	IEEE 802.11g:
	54/48/36/24/18/12/9/6 Mbps
	IEEE 802.11b:
	11/5.5/2/1 Mbps
Access Mode	Infrastructure Mode
Security	AOSS, WPA/WPA2 mixed PSK, WPA2-PSK (AES), WPA-PSK (AES), 64-bit or 128-bit WEP
Wired Interface	
Standard Compliance	IEEE 802.3u (100BASE-TX) / IEEE 802.3 (10BASE-T)
Transmission Rate	10 / 100 Mbps
Transmission Encoding	100BASE-TX 4B5B/MLT-3, 10BASE-T Manchester Coding
Access Method	CSMA/CD
Speed and Flow Control	10 / 100 Mbps, Auto Sensing, Auto MDIX
Number of LAN Ports	1
Other	
Power Supply	5V
Power Consumption	About 2.5 W (Max)
Dimensions	58 x 58 x 20 mm (2.28 x 2.28 x 0.79 in.)
Weight	51 g (1.8 oz.)
Operating Environment	0 - 40° C (32 - 104° F), 10 - 85% (non-condensing)

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 collection, reuse, and recycling systems, please contact your local or regional waste administration.

GPL Information

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