

AirStation

## **WZR-900DHP User Manual**



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# Chapter 1 - Product Overview

## Package Contents

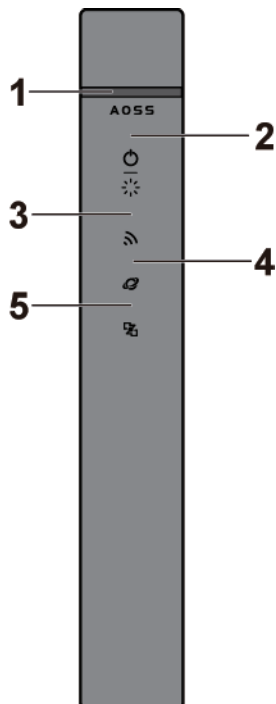
The following items are included in your AirStation package. If any of the items are missing, please contact your vendor.

AirStation.....	1
AirStation Setup Card.....	1
AC adapter.....	1
Stands.....	1
Ethernet Cable.....	1
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## Diagrams and Layout

### Front Panel

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**1** 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.

**2** Power / Diag LED (Green or Red)

**On (Green):**

Power is on.

**Blinking (Green):**

Booting.

**Off:**

Power is off.

**2 blinks (Red)\*\*:**

Flash ROM error.

**3 blinks (Red)\*\*:**

Wired Ethernet LAN error.

**4 blinks (Red)\*\*:**

Wireless LAN error.

**5 blinks (Red)\*\*\*:**

IP address setting error.

**Continuously blinking\*:**

Updating firmware, saving settings, or initializing settings.

\* Never unplug the AC adapter while the LED is blinking continuously.

\*\* Turn off AirStation first, wait for a few seconds, then turn it back on.

\*\*\* Because the network addresses of both the Internet port (WAN port) and the LAN port are the same, it is not possible to establish communication. Change the LAN-side IP address of the AirStation.

**3** Wireless LED (Green or Amber)

**On:**

Wireless LAN is enabled or transmitting.

**Double blinks:**

AirStation is waiting for an AOSS or WPS security key.

**Continuously blinking:**

AOSS/WPS error; failed to exchange security keys.

**Off:**

Wireless LAN is disabled.

Note: The wireless LED will be green if security is enabled or amber if it is disabled.

**4** Internet access LED (Green)

**On:**

The WAN port is connected.

**Off:**

No Internet access.

**5** Router LED (Green or Amber)

**On (Green):**

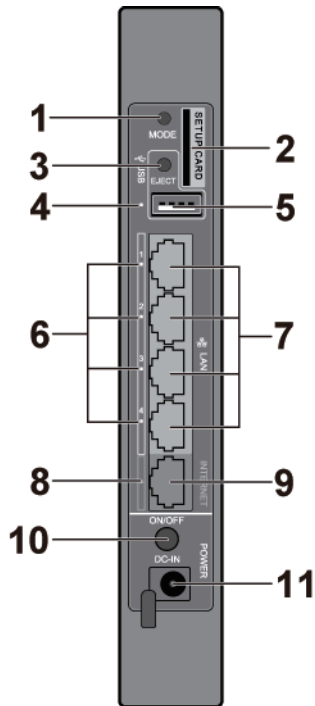
Router functionality is enabled.

**Off:**

Router functionality is disabled.

# Back Panel

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- 1** Mode button  
This button switches between router mode and bridge mode.
- 2** Setup card slot  
This is the slot where the AirStation setup card is stored. The initial settings for the username, password, SSID, and encryption type are provided on the card for logging into Settings.
- 3** USB Eject button  
To dismount a USB hard drive, hold down this button about 3 seconds. The USB drive can then be unplugged safely.
- 4** USB LED (Green)  
**On:**  
A USB drive is connected.  
**Fast blinking:**  
The USB drive is transmitting data.  
**Blinking:**  
The USB drive has been dismantled and can safely be unplugged.  
**Off:**  
No USB drive is connected  
**Note:**  
Do not remove the USB drive or turn off the AirStation while data is being transmitted.
- 5** USB Port  
You can connect any USB drive.

**Notes:**

- WZR-900DHP has an USB 3.0 port and WZR-600DHP2 has an USB 2.0 port.
- USB 3.0 hubs are not supported. Use USB 2.0 hubs only.

**6** LAN LED (Green)

**On:**

An Ethernet device is connected.

**Blinking:**

An Ethernet device is communicating.

**7** LAN Port

Connect your computer, hub, or other Ethernet devices to these ports. This switching hub supports 10 Mbps, 100 Mbps, and 1000 Mbps connections.

**8** Internet LED (Green)

**On:**

The Internet port is connected.

**Blinking:**

The Internet port is transmitting data.

**9** Internet Port

10 Mbps, 100 Mbps, and 1000 Mbps connections are supported.

**Note:**

In bridge/AP mode (router off), the Internet port becomes a regular LAN port, for a total of 5 usable LAN ports.

**10** Power button

This button turns the power on and off.

**11** DC connector

Connect the included AC adapter here.

## Bottom

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**1** Reset button

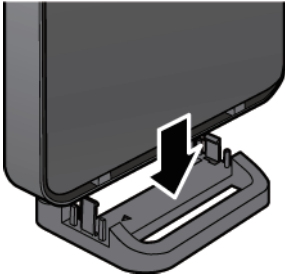
To reset all settings, hold down this button until the Buffalo LED turns red (about 3 seconds). The power must be on for this to work.

# Installation

## Vertical Placement

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Attach the stand as shown in the figure below.

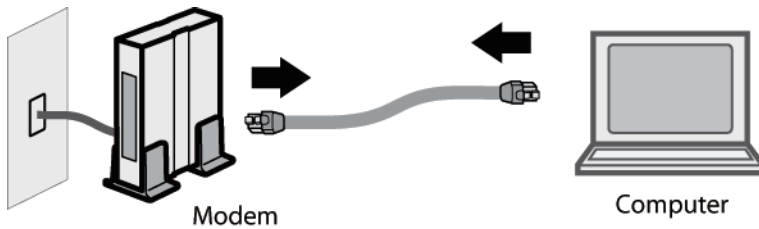


# Chapter 2 - Installation

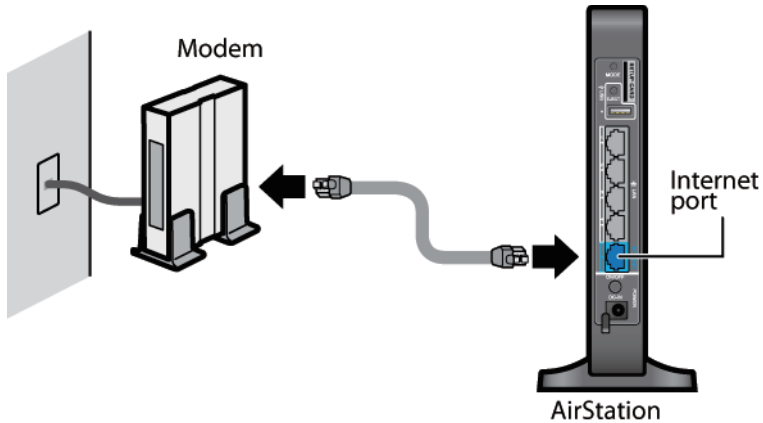
## Initial Setup

To configure your AirStation, follow the procedure below.

- 1** Verify that you can connect to the internet without the AirStation, then turn off your modem and computer.
- 2** Unplug the LAN cable which connects your computer and modem.

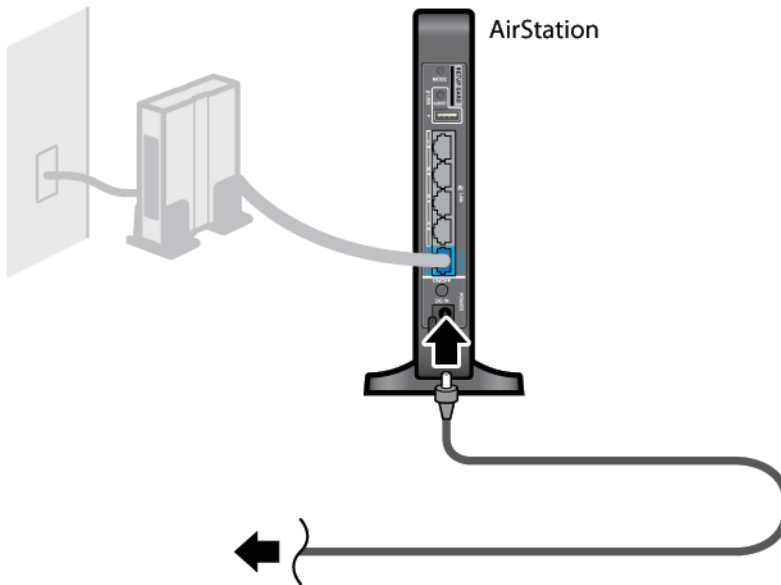


- 3** Plug one end of the LAN cable into your modem and the other end to the AirStation's Internet (WAN) port. Turn on the modem.





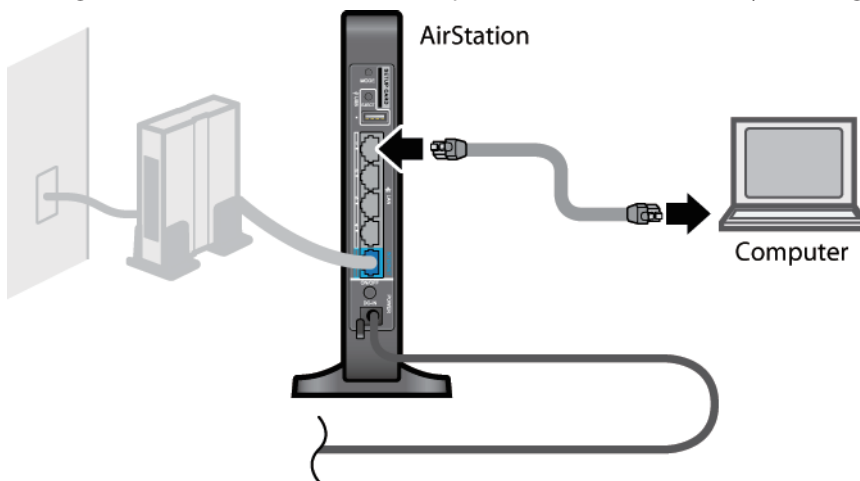
- 4** Turn on the AirStation, then wait one minute.



**Note:**

If the power does not turn on even when the AC adapter is connected, press the power button on the rear of the AirStation.

- 5** If using a wired LAN, connect the AirStation LAN port and computer using a LAN cable. If using a wireless LAN, connect the computer to the wireless LAN by referring to Chapter 4.



- 6** Once your computer has booted, the AirStation's LEDs should be lit as described below:
- Power/Diag: Green LED on.
  - Wireless: Green LED on.
  - Internet access: Green LED on.
  - Router: Green LED on.
  - LAN: Green LED on or blinking.
  - Internet: Green LED on or blinking.

For LED locations, refer to chapter 1.

**Note:**

If the router LED is not lit, hold down the router button for about 3 seconds to switch to router mode.

- 7** Launch a web browser. If the home screen is displayed, setup is complete. If username and password fields are displayed, enter “admin” for the username and “password” for the password, then click [OK]. Step through the wizard to complete setup.

You’ve completed the initial setup of your AirStation. Refer to Chapter 3 for advanced settings.

# Appendix A - Supplemental Information

## Technical Specifications

Wireless LAN Interface	
Standard Compliance	IEEE 802.11n / IEEE 802.11a / 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	<p><b>IEEE 802.11n 20 MHz BW &lt;Long GI&gt;:</b>            195/175.5/156/117/78/58.5/39/19.5 Mbps (3 stream)            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)</p> <p><b>IEEE 802.11n 20 MHz BW &lt;Short GI&gt;:</b>            216.7/195/173.3/130/86.7/65/43.3/21.7 Mbps (3 stream)            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)</p> <p><b>IEEE 802.11n 40 MHz BW &lt;Long GI&gt;:</b>            405/364.5/324/243/162/121.5/81/40.5 Mbps (3 stream)            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)</p> <p><b>IEEE 802.11n 40 MHz BW &lt;Short GI&gt;:</b>            450/405/360/270/180/135/90/45 Mbps (3 stream)            300/270/240/180/120/90/60/30 Mbps (2 stream)            150/135/120/90/60/45/30/15 Mbps (1 stream)</p> <p><b>IEEE 802.11a / IEEE 802.11g:</b>            54/48/36/24/18/12/9/6 Mbps</p> <p><b>IEEE 802.11b:</b>            11/5.5/2/1 Mbps</p>
Access Mode	Infrastructure Mode
Security	AOSS, WPA/WPA2 mixed PSK, WPA2-PSK (AES), WPA-PSK (AES), 64-bit or 128-bit WEP, Mac Address Filter
Wired LAN Interface	
Standard Compliance	IEEE 802.3ab (1000BASE-T) / IEEE 802.3u (100BASE-TX) / IEEE 802.3 (10BASE-T)
Transmission Rate	10 / 100 / 1000 Mbps
Transmission Encoding	1000BASE-T 4DPAM5, 100BASE-TX 4B5B/MLT-3, 10BASE-T Manchester Coding
Access Method	CSMA/CD
Speed and Flow Control	10 / 100 / 1000 Mbps, Auto Sensing, Auto MDIX
Number of LAN Ports	4
USB Interface	
Interface	USB 3.0
Connector Type	USB 3.0 x 1

Other	
Power Supply	External AC 100-240 V Universal, 50/60 Hz
Power Consumption	About 23 W (Max)
Dimensions	196 x 185 x 28 mm (7.72 x 7.28 x 1.1 in.)
Weight	520 g (18.34 oz.)
Operating Environment	0 - 40° C (32 - 104° F), 10 - 85% (non-condensing)
802.11 a Frequency Range	
USA Canada Mexico Brazil	5180-5240 MHz (Channels 36, 40, 44, 48) 5745-5825 MHz (Channels 149, 153, 157, 161, 165)
EU Russia Middle East	5180-5240 MHz (Channels 36, 40, 44, 48)
India Australia Hong Kong Philippines Thailand Vietnam Singapore Malaysia South Korea	5180-5240 MHz (Channels 36, 40, 44, 48) 5745-5825 MHz (Channels 149, 153, 157, 161, 165)
China Taiwan	5745-5825 MHz (Channels 149, 153, 157, 161, 165)
802.11 g Frequency Range	
USA Canada Mexico Brazil	2412-2462 MHz (Channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)
EU Russia Middle East	2412-2462 MHz (Channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)
India Australia Hong Kong Philippines Thailand Vietnam Singapore Malaysia South Korea	2412-2462 MHz (Channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)
China Taiwan	2412-2462 MHz (Channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)

## 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/>.