

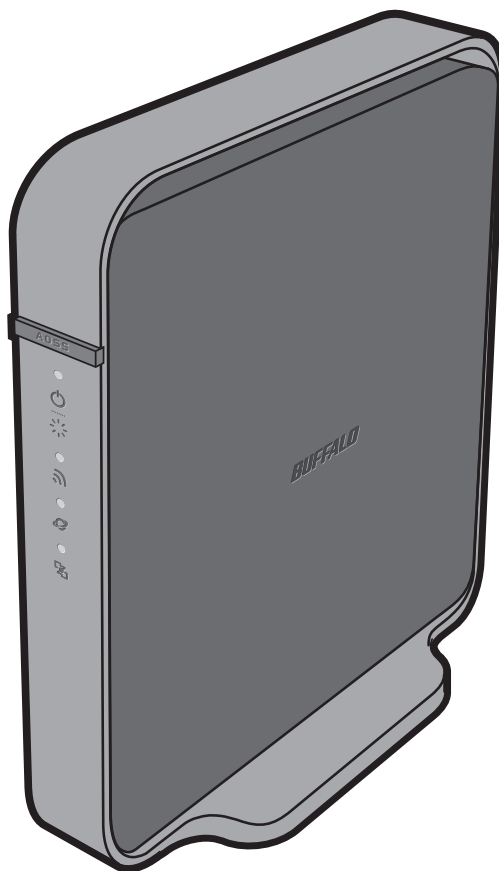
User Manual

AirStation

WHR-600D

AirStation

WHR-300HP2



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Chapter 1 - Product Overview

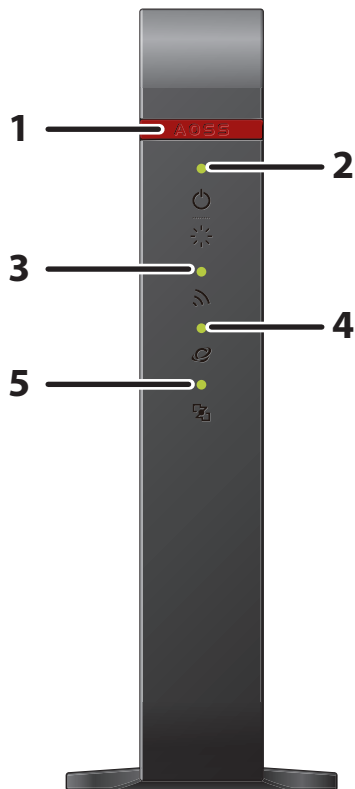
Package Contents

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

- AirStation 1
- AirStation Setup Card 1
- AC adapter 1
- Ethernet Cable 1
- Quick Setup Guide..... 1
- Warranty Statement..... 1

Hardware Overview

Front Panel LEDs



- 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. |
| Off: | Power is off. |
| On (Green)*1: | Booting. |
| 2 blinks (Red)*2: | Flash ROM error. |
| 3 blinks (Red)*2: | Wired Ethernet LAN error. |
| 4 blinks (Red)*2: | Wireless LAN error. |
| 5 blinks (Red)*3: | IP address setting error. |
| 9 blinks (Red)*2: | System error. |

Continuously blinking*1: Updating firmware, saving settings, or initializing settings.

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

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

*3 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 Orange)

On: Wireless LAN is enabled.

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:

Wireless LED is Green : Security settings have been made for the wireless LAN.

Wireless LED is Orange : Security settings have not been made for the wireless LAN.

4 Internet access LED (Green)

On: Internet access is available.

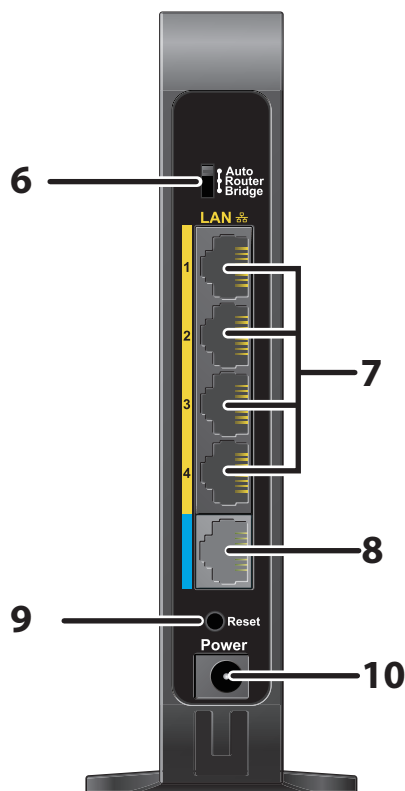
Off: Internet access is not available.
Router functionality is disabled.

5 Router LED (Green)

On: Router functionality is enabled.

Off: Router functionality is disabled.

Back Panel



6 Router Switch

- On: Router functionality is enabled (router mode).
Off: Router functionality is disabled (bridge/AP mode).
Auto: This switches between modes automatically based on whether or not another router is detected on the Internet port. The default setting for this switch is Auto.

7 LAN Port

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

8 Internet Port

10 Mbps and 100 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.

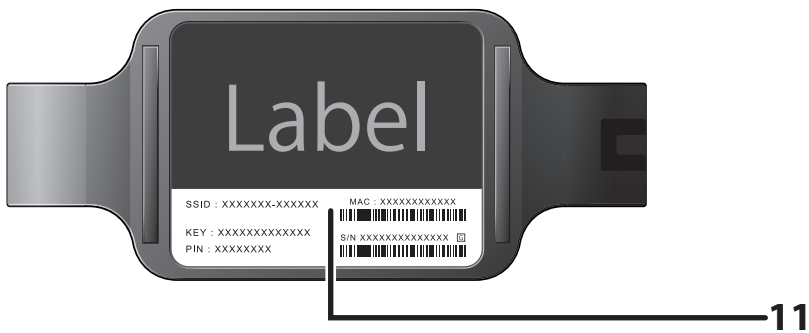
9 Reset button

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

10 DC connector

Connect the included AC adapter here.

Bottom



11 Setup card slot

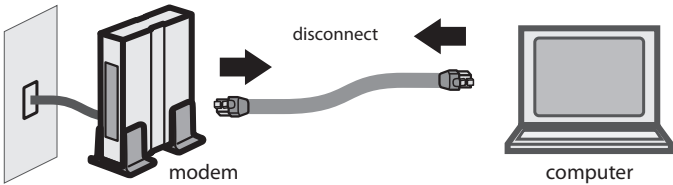
This is the slot where the AirStation setup card is stored. The initial settings for the username, password, SSID, and encryption type are provided on the card for logging into Settings.

Chapter 2 - Installation

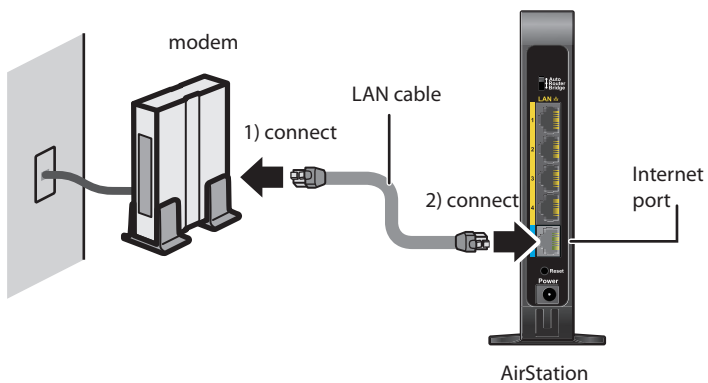
Initial Setup

To configure your AirStation, follow the procedure below.

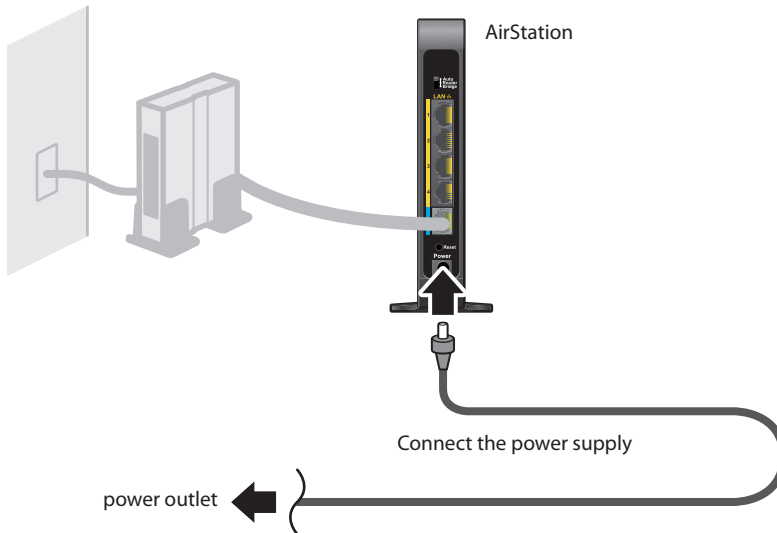
- 1 Verify that you can connect to the internet without the AirStation, then turn off your modem and computer.

- 2  Unplug the LAN cable which connects your computer and modem.

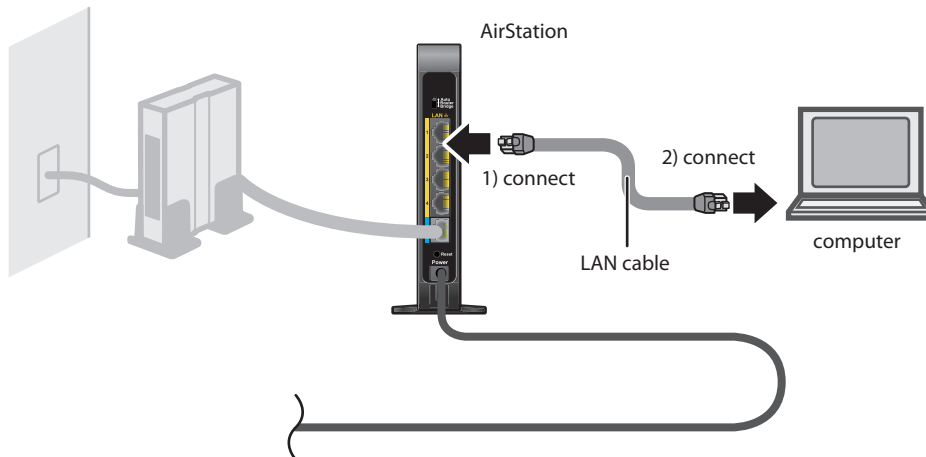
- 3 Plug one end of the LAN cable into your modem and the other end to the AirStation's Internet (WAN) port. Turn on the modem.



4 Turn on the AirStation, then wait one minute.



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.



6 Once your computer has booted, the AirStation's LEDs should be lit as described below:

Power	On.
Wireless	On.
Internet access	On.
Router	On.

For LED locations, refer to chapter 1.

Note: If the router LED is not lit, hold down the router button 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.

Appendix A - Specifications

WHR-600D

Wired LAN Interface	
Standard Compliance	IEEE802.3u (100BASE-TX), IEEE802.3 (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	4
LAN Port Connector	RJ-45
Wireless LAN Interface	
Standard Compliance	IEEE802.11n/a/g/b
Transmission Method	Direct Sequence Spread Spectrum (DSSS), OFDM, MIMO
Frequency Range	Available frequencies depend on the country of purchase. See the next page for details.
Transmission Rate 802.11n/a/b/g	802.11n: 20 MHz BW (Long GI) 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) 20 MHz BW (Short GI) 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) 40 MHz BW (Long GI) 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) 40 MHz BW (Short GI) 300, 270, 240, 180, 120, 90, 60, 30 Mbps (2 stream) 150, 135, 120, 90, 60, 45, 30, 15 Mbps (1 stream) 802.11a/g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11b: 11, 5.5, 2, 1 Mbps
Access Mode	Infrastructure Mode
Security	AOSS, WPA2-PSK (TKIP/AES), WPA/WPA2 mixed PSK, WPA-PSK (TKIP/AES), 64-bit or 128-bit WEP, Mac Address Filter

Other	
Power Supply	External AC 100-240 V Universal, 50/60 Hz
Power Consumption	About 20 W (Max)
Dimensions	TBD
Weight	TBD
Operating Environment	0 - 40° C (32 - 104° F), 10 - 85% (non-condensing)

802.11a Frequency Range	
USA Canada Mexico	5180-5240 MHz (Channels 36, 40, 44, 48) 5745-5825 MHz (Channels 149, 153, 157, 161, 165)
EU Russia	5180-5240 MHz (Channels 36, 40, 44, 48)
802.11g Frequency Range	
USA Canada Mexico	2412-2462 MHz (Channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)
EU Russia	2412-2462 MHz (Channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)

WHR-300HP2

Wired LAN Interface	
Standard Compliance	IEEE802.3u (100BASE-TX), IEEE802.3 (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	4
LAN Port Connector	RJ-45
Wireless LAN Interface	
Standard Compliance	IEEE802.11n/g/b
Transmission Method	Direct Sequence Spread Spectrum (DSSS), OFDM, MIMO
Frequency Range	Available frequencies depend on the country of purchase. See the next page for details.
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Access Mode	Infrastructure Mode
Security	AOSS, WPA2-PSK (TKIP/AES), WPA/WPA2 mixed PSK, WPA-PSK (TKIP/AES), 64-bit or 128-bit WEP, Mac Address Filter

Other	
Power Supply	External AC 100-240 V Universal, 50/60 Hz
Power Consumption	About 20 W (Max)
Dimensions	TBD
Weight	TBD
Operating Environment	0 - 40° C (32 - 104° F), 10 - 85% (non-condensing)

802.11g Frequency Range	
USA Canada Mexico	2412-2462 MHz (Channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)
EU Russia	2412-2462 MHz (Channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)

Appendix B - 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.

Appendix C - GPL Information

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