



AirStation

WZR-450HP2D

User Manual

www.buffalotech.com

35020xxx-01
2014-09

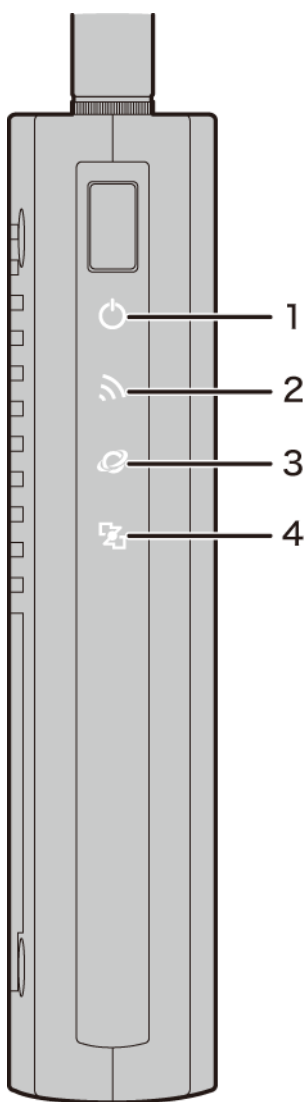
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Chapter 1 - Setup

Diagrams and Layout

Front Panel



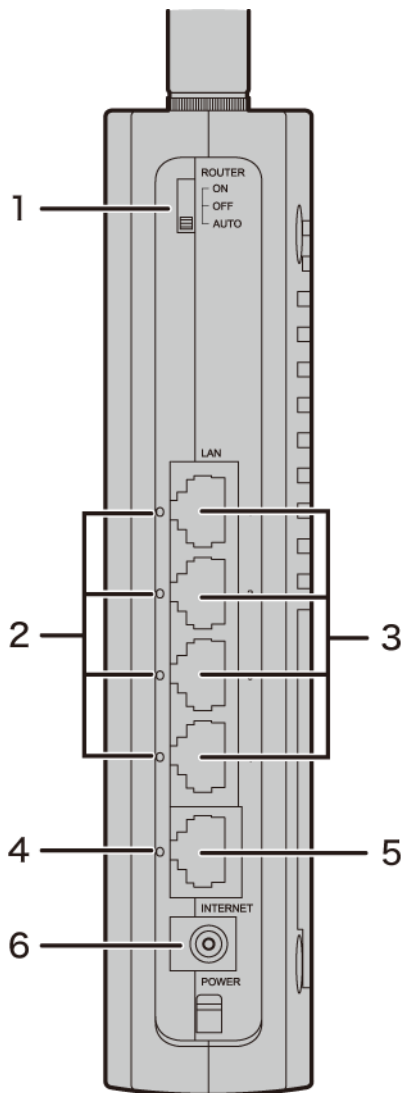
1 Power/Diag LED

2 Wireless LED

3 Internet LED

4 Router LED

Back Panel



1 Mode Switch

2 LAN LED

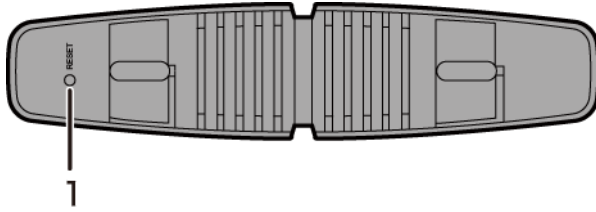
3 LAN Ports

4 Internet LED

5 Internet Port

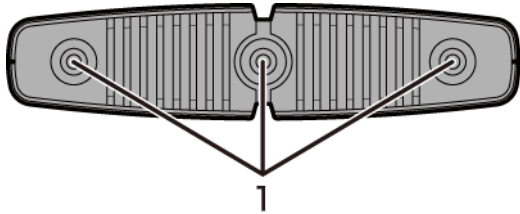
6 DC connector

Bottom



- 1** Reset button

Top

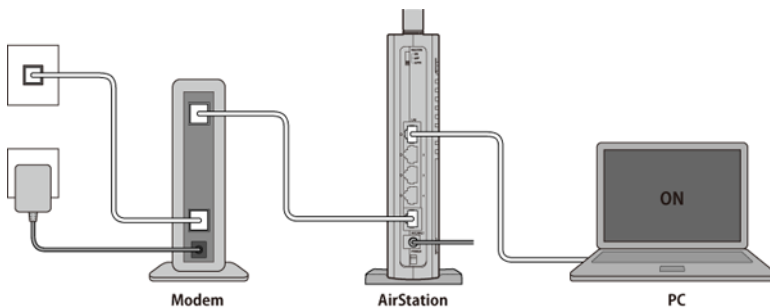


- 1** Antenna connector

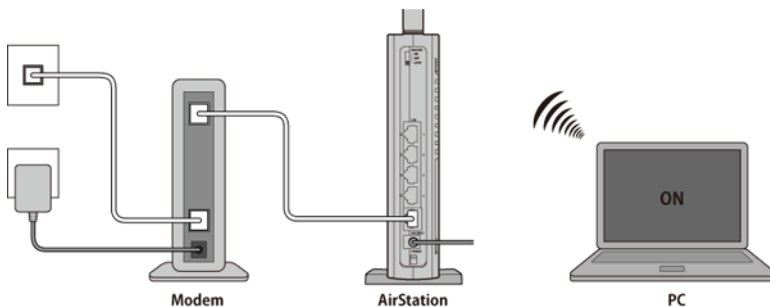
How to Set Up AirStation for the First Time

To configure your AirStation, follow the procedure below.

Wired



Wireless



Notes:

- On your device, search for available networks and find the AirStation. If a password is required, enter the AirStation's encryption key.
- Your AirStation's default SSID and encryption key are on the setup card.

Opening Settings

To configure the AirStation, log in to Settings as shown below.

- 1** Launch a web browser.
- 2** Enter the AirStation's LAN-side IP address in the address field and press the enter key. The status page will be displayed.
- 3** When you click on a tab, the login window will pop up. Enter the username and password you previously set.

Chapter 2 - Supplemental Information

Technical Specifications

Wireless 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>: 195/175.5/156/117/78/58.5/39/19.5 Mbps (3 streams) 130/117/104/78/52/39/26/13 Mbps (2 streams) 65/58.5/52/39/26/19.5/13/6.5 Mbps (1 stream) IEEE 802.11n 20 MHz BW <Short GI>: 216.7/195/173.3/130/86.7/65/43.3/21.7 Mbps (3 streams) 144.4/130/115.6/86.7/57.8/43.3/28.9/14.4 Mbps (2 streams) 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>: 405/364.5/324/243/162/121.5/81/40.5 Mbps (3 streams) 270/243/216/162/108/81/54/27 Mbps (2 streams) 135/121.5/108/81/54/40.5/27/13.5 Mbps (1 stream) IEEE 802.11n 40 MHz BW <Short GI>: 450/405/360/270/180/135/90/45 Mbps (3 streams) 300/270/240/180/120/90/60/30 Mbps (2 streams) 150/135/120/90/60/45/30/15 Mbps (1 stream) IEEE 802.11a/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), 64-bit or 128-bit WEP, MAC address filter
Wired Interface	
Standard Compliance	IEEE 802.3 ab (1000BASE-T) / IEEE 802.3u (100BASE-TX) / IEEE 802.3 (10BASE-T)
Transmission Rate	10 / 100 / 1000 Mbps
Transmission Encoding	1000BASE-T: 8B1Q4/PAM5 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 Ports	LAN: 4 WAN: 1

Other	
Power Supply	External AC 100-240 V Universal, 50/60 Hz AC Adapter Type: WA-12M12FU/R (Depends on the region) Manufacturer: Asian Power Devices Inc.
Power Consumption	5.65 W (Max)
Dimensions	158 x 165 x 35 mm (6.22 x 6.50 x 1.38 in.) (Exclude antennas and stand)
Weight	420 g (14.81 oz.) (Exclude stand)
Operating Environment	0 - 40° C (32 - 104° F), 10 - 85% (non-condensing)

Regulatory Compliance Information

The following notice is only for EU and Middle East region.

Only use the cables and accessories that are included in the package. Don't use other accessories or cables unless specifically instructed to in the documentation.

EU Declaration of Conformity

Buffalo Inc. hereby declares that this WZR-450HP2D is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

The declaration of conformity may be consulted at
www.buffalo-technology.com/declaration-of-conformity.

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 of 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.



AT	BE	DK	FI	CZ	MT	SI
FR	DE	GR	IE	EE	PL	BG
IT	LU	NL	PT	HU	LT	RO
ES	SE	GB	CY	LV	SK	HR
TR						

Note: This device is also authorized for use in the following EFTA member states: **CH, IS, NO, LI**



The following notice is only for US region.

Only use the cables and accessories that are included in the package. Don't use other accessories or cables unless specifically instructed to in the documentation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

FCC Statement

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.

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 or more 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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Company Information

Buffalo Americas, Inc.

11100 Metric Blvd., Suite 750, Austin, Texas 78758 USA

+1-512-349-1500

The following notice is only for Canada region.

IC Statement (IC déclaration)

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d’ Industrie Canada applicables aux appareils radio exempts de licence. L’ exploitation est autorisée aux deux conditions suivantes : (1) l’ appareil ne doit pas produire de brouillage, et (2) l’ utilisateur de l’ appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’ en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d’ Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d’ un type et d’ un gain maximal (ou inférieur) approuvé pour l’ émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l’ intention des autres utilisateurs, il faut choisir le type d’ antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l’ intensité nécessaire à l’ établissement d’ une communication satisfaisante.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d’ exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps. L’ antenne utilisée pour ce transmetteur ne doit pas être co-localisés en conjonction avec toute autre antenne ou transmetteur.

This radio transmitter (WZR-450HP2D) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that

type, are strictly prohibited for use with this device.

Le présent émetteur radio (WZR-450HP2D) a été approuvé par Industrie Canada pour fonctionner avec les types d’ antenne énumérés ci-dessous et ayant un gain admissible maximal et l’ impédance requise pour chaque type d’ antenne. Les types d’ antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l’ exploitation de l’ émetteur.

Antenna Type	Peak Gain	Required Impedance
Dipole antenna	5 dB	50 ohms

AC adapter
EU/Middle East: WA-12M12R (Asian Power Devices Inc.)
US/Canada: WA-12M12FU (Asian Power Devices Inc.)