



H3C WA2110-AG WLAN Access Point Installation Guide

Abstract

This document details the installation procedures for the WA2110-AG WLAN access point.

Hangzhou H3C Technologies Co., Ltd.

<http://www.h3c.com>

Copyright © 2007-2010, Hangzhou H3C Technologies Co., Ltd. and its licensors

No part of this manual may be reproduced or transmitted in any form or by any means without the prior written consent of Hangzhou H3C Technologies Co., Ltd.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents. However, the statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied. Hangzhou H3C Technologies Co., Ltd. and its licensors shall not be liable for technical or editorial errors or omissions contained herein.

Acknowledgments

H3C, **H3C**, Aolynk,  , H3Care,  , TOP G,  , IRF, NetPilot, Neocean, NeoVTL, SecPro, SecPoint, SecEngine, SecPath, Comware, Secware, Storable, NQA, VVG, V2G, VnG, PSPT, XGbus, N-Bus, TiGem, InnoVision and HUASAN are trademarks of Hangzhou H3C Technologies Co., Ltd.

All other trademarks that may be mentioned in this guide are the property of their respective owners.

Environmental protection

This product has been designed to comply with the environmental protection requirements. The storage, use, and disposal of this product must meet the applicable national laws and regulations.

Contents

1	Product overview	2
	Introduction	2
2	Installation preparations	4
	Safety Precautions	4
	Unpacking and inspection	4
	Installation tools	5
	Checking the device before installation	5
3	Installation	6
	Attaching the antennas	6
	Connecting the Access Point to an Access Controller/Unified Switch	6
	Mounting the Access Point	6
	Wall or ceiling mounting	6
	Tabletop mounting	9
4	Support and other resources	11
	Related documentation	11
	Contacting H3C	11
	Obtaining documentation	11
	Obtaining documentation	11
	Technical support	12
	Documentation feedback	12
	Document conventions and symbols	12
	Conventions	12
	Symbols	13
A	Technical Specifications	14

1 Product overview

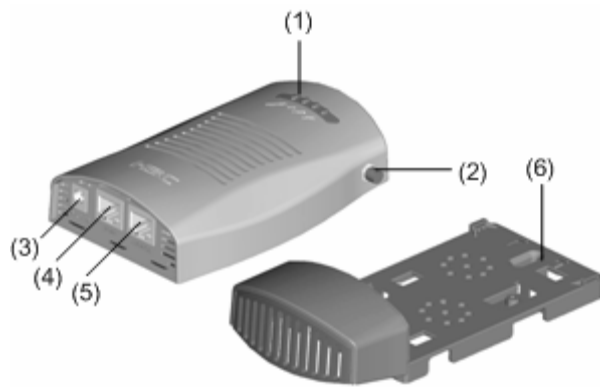
The H3C WA2110-AG is a managed wireless LAN access point designed for use with an H3C WX series access controller/unified switch and requires only hardware installation. All configurations for the access point take place on the access controller/unified switch.

Introduction

For details about the WA2110-AG technical specifications, see Appendix A Technical Specifications.

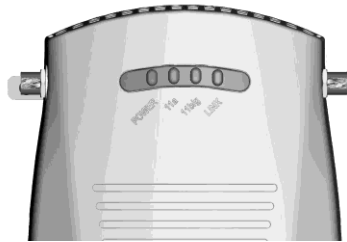
For a diagram and description of the WA2110-AG access point parts and LEDs, see Figure 2 and Table 1

Figure 1 Appearance of a WA2110-AG



(1) LED	(2) Antenna connector	(3) Power interface
(4) 10/100 Base-TX Ethernet interface		
(5) Console port	(6) Mounting bracket	

Figure 2 LEDs on a WA2110-AG



(1) POWER: Power LED	(2) 11a: 802.11a LED
(3) 11b/g: 802.11b/g LED	(4) LINK: Ethernet status LED

Table 1 LED Descriptions

LED	Meaning
POWER	<p>Indicates the working status of the power supply:</p> <p>On: The device is working properly.</p> <p>Off: The device is not powered on or is faulty.</p>
11a	<p>Indicates the status of the wireless link when the device works in the 11a mode:</p> <p>Off: The wireless link is not initialized or is faulty.</p> <p>Blinking slowly: A small amount of data is being transmitted or received through the wireless link.</p> <p>Blinking quickly: A large amount of data is being transmitted or received through the wireless link.</p>
11b/g	<p>Indicates the status of the wireless link when the device works in the 11b/g mode:</p> <p>Off: The wireless link is not initialized or is faulty.</p> <p>Blinking slowly: A small amount of data is being transmitted or received through the wireless link.</p> <p>Blinking quickly: A large amount of data is being transmitted or received through the wireless link.</p>
LINK	<p>Indicates the working status of the Ethernet port:</p> <p>On: A link is present.</p> <p>Off: No link is present.</p> <p>Blinking: Data is being transmitted or received through the Ethernet port.</p>

2 Installation preparations

This chapter describes the preparations for WA2110-AG enhanced series installation, including unpacking and inspection of the product, preparation of installation tools, and choosing the installation location.

H3C recommends that all installation and removal of the unit and its accessories be carried out by qualified personnel. Read all of the safety and installation instructions supplied with your device before installation and operation.

Safety Precautions

A WA2110-AG must be installed in compliance with related safety standards and specifications. For the safety of personnel and equipment, only professional network personnel should install the device.

CAUTION:

- To ensure that the access point complies with the related authentication domain regulations, configure the country code by executing the **wlan country-code** command on the access controller/unified switch before the access point begins to operate. For details about the **wlan country-code** command, refer to the WLAN Service Commands of the WLAN Volume in H3C WX Series Access Controllers User Manual.
- Check that the voltage range is compliant to the requirements before powering on the device, and be sure to use power supply devices that are in compliance with the related safety standards.

WARNING:

- Do not use or manipulate your WA2110-AG near any uncovered exploders or in any other explosive environments, unless otherwise authorized by related functionaries.

Unpacking and inspection

Before unpacking the AP, ensure that the package is not damaged and that it does not show signs of water damage. When unpacking the contents, avoid excessive force.

The accessories vary with the models. For the exact contents of the package, refer to the packing list. If the contents do not match the packing list, contact your H3C representative.

If the package is found to be rusted or water soaked, stop unpacking and contact your H3C representative immediately.

Installation tools

Collect the following tools before installation:

- Mounting bracket and screws that come with the device
- Electric screwdriver and Phillips screwdriver
- One electric drill and 5 mm (0.20) drill bit

Checking the device before installation

Before mounting the WA2110-AG, connect it to the power adapter (if applicable) and the Ethernet, and check the status of the LEDs to ensure that the WA2110-AG works properly. In addition, record the MAC address of the access point for future use.

3 Installation

Attaching the antennas

Attach the antennas on to the antenna connectors on the access point and hand-tighten them. After network startup, you may need to adjust the antennas to fine-tune the coverage in your area. For best results, adjust the antennas so that they are perpendicular with the floor or ceiling.

CAUTION:

- Do not handle the antenna tips, especially after they are connected to the access point. This can create electrostatic discharge (ESD) and damage the equipment.
- Do not touch or remove the access point when its antenna is receiving or transmitting radio frequency signals.

Connecting the Access Point to an Access Controller/Unified Switch

H3C recommends installing and configuring the access controller/unified switch before installing the access point. This is to ensure that you can verify whether the access point works normally immediately after you connect it. For instructions on configuring the access controller or unified switch, see *H3C WX Series Access Controllers Configuration Guides* and *H3C WX Series Access Controllers Command References*.

Connect the access point to an access controller/unified switch directly or indirectly through an intermediate Layer 2 or Layer 3 network. In either case, use a Category 5e cable for the connection.

Mounting the Access Point

Mount the access point on a wall, ceiling, or tabletop.

Wall or ceiling mounting

To mount the access point to a wall or ceiling:

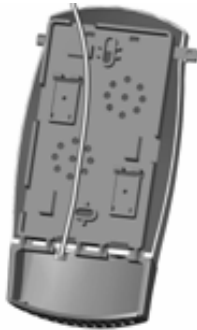
1. Remove the access point from the mounting bracket.

2. Route the Ethernet cable and, if you are using a power adapter, the power cable on the back of the mounting bracket (see Figure 3 .

△ CAUTION:

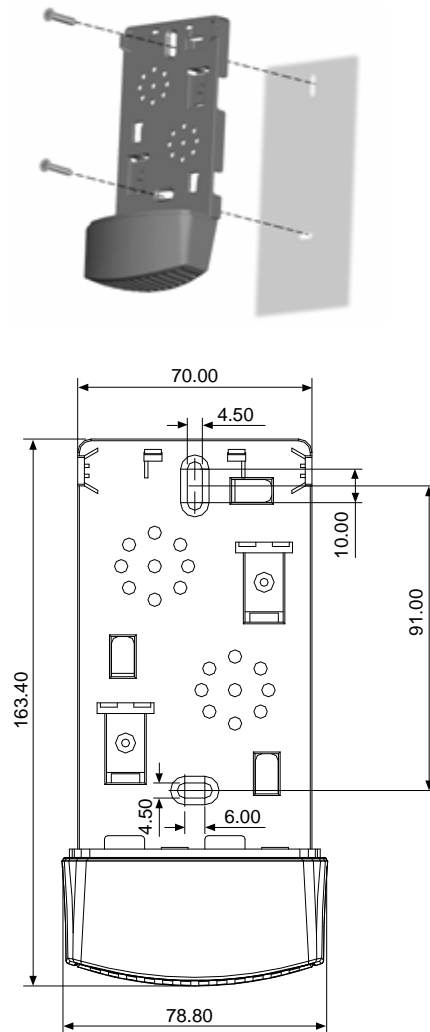
- For easy installation and removal of the access point from the mounting bracket, ensure that there is sufficient flexibility with the cable and that the cable is long enough. H3C recommends using flexible cables. If not enough cable is routed through the back of the mounting bracket, or the cable is inflexible, it can be difficult to install or remove the access point from the mounting bracket.

Figure 3 Cabling on the back of the bracket



3. Mount the bracket to a wall or ceiling (see Figure 4

Figure 4 Mount the bracket (unit: mm)



4. Connect the Ethernet cable and the power cable (if using a power adapter) to the corresponding port(s) on the access point.

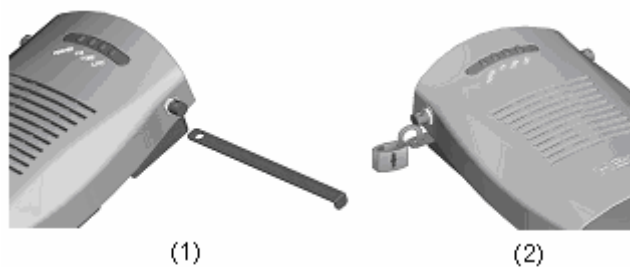
△ CAUTION:

- To avoid connection interference caused by dust, clean the pins of the cable connector before connecting the cable to the access point.
- Discharge the cable before connecting it to the access point.

⚠ WARNING:

- In case of lightning, do not plug/unplug the cable to/from the access point.
 - When the LEDs of the access point are blinking, do not plug/unplug the cable to/from the access point or perform any operation that may affect the normal running of the access point.
5. Align the bottom of the access point with the mounting bracket, and press against the access point until it is securely mounted in the mounting bracket. To avoid physical damage to the access point, do not use excessive force when mounting or unmounting the access point.
 6. To prevent theft of the access point, insert the locking bar (see Figure 5) into the opening at one side of the mounting bracket. Push the locking bar through the opening until the hole on the locking bar is exposed. Insert the shackle of a lock through the hole on the locking bar to lock the access point to the mounting bracket (see Figure 5)

Figure 5 Lock the access point to the mounting bracket



Tabletop mounting

To install the access point on a flat surface such as a table or desktop:

1. Remove the access point from the mounting bracket and place it on the table in a position with good signal coverage.

⚠ WARNING:

- When the RF antennas are transmitting data, keep the antennas away from your face, eyes, and other exposed parts of your body.
- Do not mount the access point on any metal surface.
- Do not use or manipulate the access point near explosives unless otherwise authorized by relevant authorities.

2. Connect the Ethernet cable and power cable (if you are using a power adapter) to the corresponding port(s) on the access point.

4 Support and other resources

Related documentation

Manual	Description
H3C WA Series WLAN Access Points User Guide	Provides a guide to the upgrade and operation of H3C WA series WLAN access points. It covers configurations of interface, VLAN, IP services, IP routing, multicast, security, system, QoS, wireless, and a command index.
H3C WA Series WLAN Access Points Web-Based Configuration Guide	Introduces the Web-based management function of the WA Series WLAN Access Points.
H3C WX Series Access Controllers User Guide	Provides a guide to the operation of H3C series access controller products (including access controllers, access controller modules, and the access controller engine of unified switches). It covers configurations of CLI, VLAN, system maintenance and debugging, WLAN, IPv4, IPv6, port basic configurations, multicast protocols, 802.1x, AAA, SSH, ACL, QoS, description of the acronyms used throughout the manual, and a command index.
H3C WX Series Access Controllers Web-Based Configuration Guide	Introduces the Web-based management function of the WX series access controllers.

Contacting H3C

Obtaining documentation

Obtaining documentation

You can access the most up-to-date H3C product documentation on the World Wide Web at <http://www.h3c.com>.

Click the links on the top navigation bar to obtain different categories of product documentation:

[Technical Support & Documents > Technical Documents](#) – Provides hardware installation, software upgrading, and software feature configuration and maintenance documentation.

[Products & Solutions](#) – Provides information about products and technologies, as well as solutions.

[Technical Support & Documents > Software Download](#)– Provides the documentation released with the software version.

Technical support

customer_service@h3c.com

<http://www.h3c.com>

Documentation feedback

You can e-mail your comments about product documentation to info@h3c.com.

We appreciate your comments.

Document conventions and symbols

Conventions

○ Convention	○ Element
○ Blue text: Table 24	○ Cross-reference links and email addresses
○ Blue underlined text: http://www.hp.com	○ Website addresses
○ Bold text	○ • Keys that are pressed ○ • Text entered into a GUI element, such as a box ○ • GUI elements that are clicked or selected, such as menu and list items, buttons, tabs, and check boxes
○ <i>Italic</i> text	○ Text emphasis
○ Monospace text	○ • File and directory names ○ • System output ○ • Code ○ • Commands, their arguments, and argument values

<ul style="list-style-type: none"> ○ <i>Monospace, italic text</i> 	<ul style="list-style-type: none"> ○ • Code variables ○ • Command variables
<ul style="list-style-type: none"> ○ Monospace, bold text 	<ul style="list-style-type: none"> ○ Emphasized monospace text
<ul style="list-style-type: none"> ○ ▪ ○ ▪ ○ ▪ 	<ul style="list-style-type: none"> ○ Indication that example continues

Symbols

WARNING!

Indicates that failure to follow directions could result in bodily harm or death.

CAUTION:

Indicates that failure to follow directions could result in damage to equipment or data.

IMPORTANT:

Provides clarifying information or specific instructions.

NOTE:

Provides additional information.

TIP:

Provides helpful hints and shortcuts.

A Technical Specifications

The WA2110-AG can be powered through 802.3af-compliant power over Ethernet (PoE). The WA2110-AG also can be powered through an external power adaptor. For details see 4Table 1

Table 1 Technical specifications


Index	Value
Maximum power consumption	6 W
Ethernet interface standard	802.3af
Wireless interface standard	802.11a, and 802.11b/g
Operating temperature	-10°C to 55°C (14°F to 131°F)
Operating humidity (noncondensing)	5% to 95%



NOTE:

- The power adaptor is not shipped with the device. You can purchase it separately. For details, contact your H3C representative.
- H3C recommends that, outside of China, this unit be PoE powered. See H3C/3Com product catalogs for a range of 802.3af compatible power sources.

Table 2 Descriptions of power source

Power Source	Connection Details	Ordering information
AC / DC Power Adapter	<p>The WA2110-AG access point can accept power from an AC / DC power adapter. Input specification is as follows:</p>  <p>+48V \approx , 0.52A min.</p> <p>Connect the adapter's power jack to the WA2110-AG power interface (3)</p>	<p>If you need an AC / DC power adapter for your WA2110-AG access point, you must use the FSP025-1AD207A adapter (part number 0231A0EQ) which is available from H3C / 3Com.</p>
Power over	The WA2110-AG access point	See the H3C / 3Com

Ethernet (PoE, IEEE 802.3af standard) power source	can accept power from a PoE power source. No DC power adapter is required. Connect the PoE cable directly to the 10/100 Base-TX Ethernet connector (4)	product catalogs for a range of 802.3af compatible power sources.
--	--	---
