BlueSecure™ Access Point 1700 Installation Guide

bluesocket

Contents

Contents

Overview

The BlueSecure Access Point 1700 is a next-generation, "thin" access point that works in conjunction with BlueSecure Controllers (BSCs) for enterprise wireless LAN (WLAN) deployments. The BlueSecure Access Point 1700 features dual radios supporting 802.11a and 802.11b/g in a plenum-rated housing, with an embedded MIMO antenna panel under the top cover of the AP.

BSAPs are simple to configure and require only minimal provisioning to make them fully operational on a WLAN secured and managed by a BlueSecure Controller

BSAPs can be directly attached to any existing Layer-2 or Layer-3 Ethernet switch and communicate with the BSC across any subnet boundary. Once the BSAP has discovered and established Layer-2 or Layer-3 communication with its home (i.e., host) BlueSecure Controller, advanced configuration and provisioning may be applied either to individual BSAPs or globally across the entire WLAN using the BSC's web-based Administrator Console.
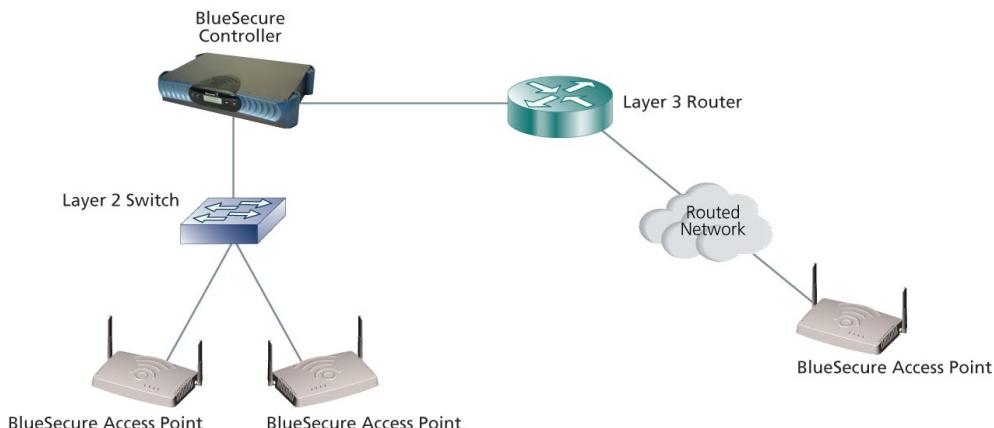
Figure 1: BSAPs Automatically Discover BSCs Across L2/L3 Networks

Once a BlueSecure Access Point has downloaded its configuration from its home BlueSecure Controller, the BSAP and the BSC will establish a tunnel through which all wireless client traffic received by the BSAP will pass for the application of policy by the BSC.

This guide provides complete installation procedures for your BSAP including:

- familiarizing yourself with the BSAP hardware
- provisioning your Bluesocket WLAN for BSAPs
- selecting a BSAP installation location
- connecting and powering the BSAP
- using the BSAP command line interface (CLI)

Familiarizing Yourself with the BSAP Hardware

Figure 2 illustrates the BSAP hardware. Familiarize yourself with the labeled components before attempting to install the BSAP.
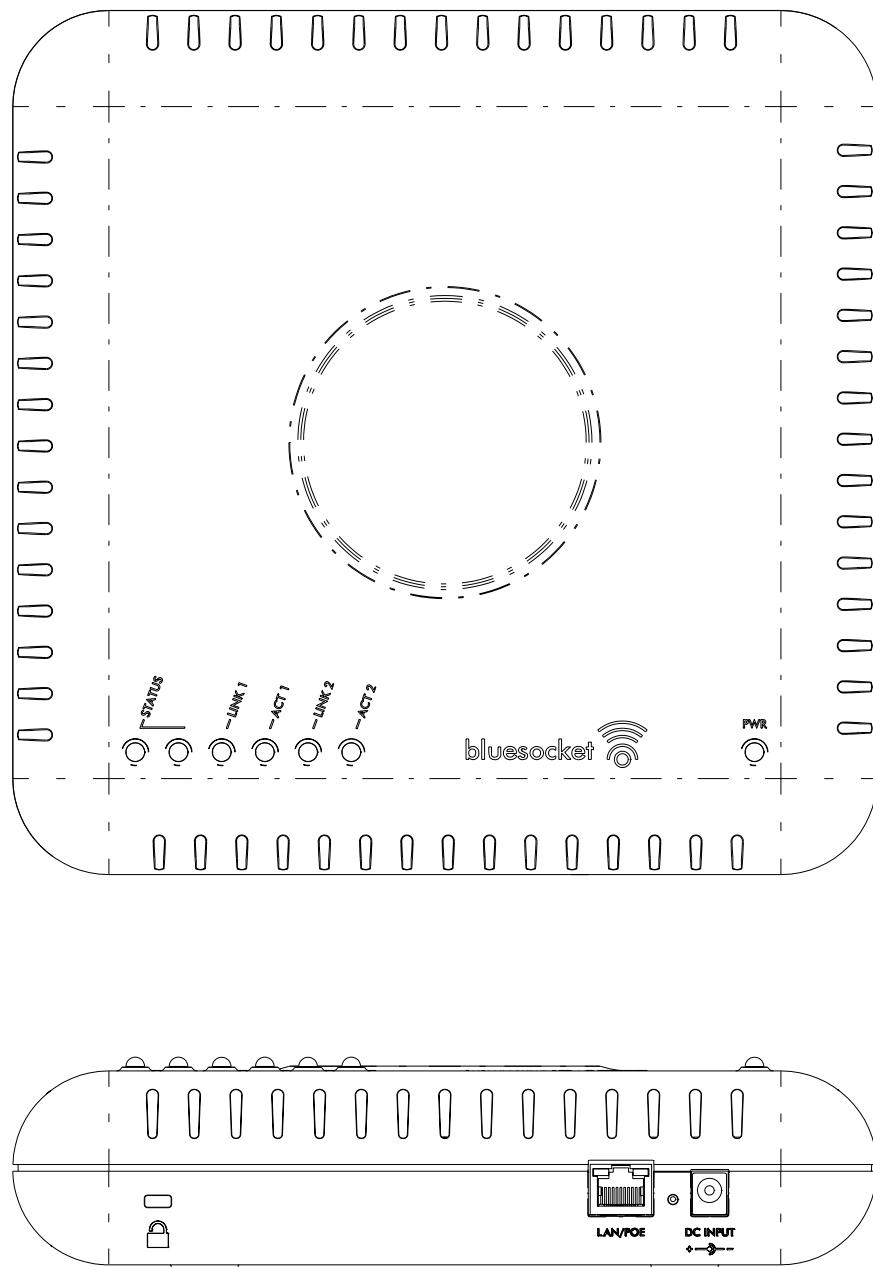
Figure 2: BSAP Hardware Components

Fixed Antennas

The BSAP-1700 utilizes an embedded MIMO antenna panel under the top cover of the AP for wireless communications. There are three elements for each band. Two elements are used for transmit and receive and the third element is used for receiving only. The BSAP-1700 also leverages the embedded Airgo TrueMIMO radios and antenna panel to support high-throughput communications with mobile devices that also use Airgo TrueMIMO chipsets.

LED Indicators

The following grouping of LED indicators is located on the top of the BSAP-1700 housing:.
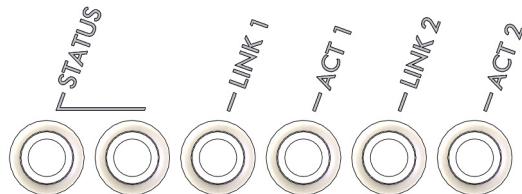
The two status LEDs together indicate the following software operational modes, depending on whether each LED is off, on, or blinking:

Table 1: BSAP Status LEDs

Left Status LED	Right Status LED	Indicates
Off	Off	Failure
On	Off	Waiting for IP Address
Blinking	Off	BSC discovery in progress
On	On	System is operational
Blinking	Blinking	Software download in progress

Link1 refers to the 802.11b/g Link and Link 2 refers to the 802.11a Link. When the LED is on, it indicates that the unit is on and the radio active (note that when unit is booting, the LED defaults to on even though the radio is disabled).

Activity 1refers to 802.11b/g Activity and Activity 2 refers to 802.11a Activity. When the LED is on, it indicates data activity on the Ethernet link.

Power Supply Connector

The BSAP does not have a power switch. It is powered on when connected to the supplied AC power adapter, and the power adapter is connected to a power source. The BSAP automatically adjusts to any voltage between 100-240 volts at 50 or 60 Hz. No voltage range settings are required.

The BSAP may also receive Power over Ethernet (PoE) from a model BSC-400 Controller, switch or other network device that supplies power over the network cable based on the IEEE 802.3af standard.

Ethernet/PoE Connector

The BSAP-1700 has one auto-sensing 10BASE-T/100BASE-TX/1000BaseT RJ-45 connector that can be attached directly to 10BASE-T/100BASE-TX/1000BaseT switches to provide a full-duplex link. These segments must conform to the IEEE 802.3 or 802.3u specifications.

This connector uses an MDI (i.e., internal straight-through) pin configuration. You can use straight-through twisted-pair cable to connect this port to most network interconnection devices such as a switch or router that provide MDI-X ports.

However, when connecting the BSAP to a workstation or other device that does not have MDI-X ports, you must use crossover twisted-pair cable.

The BSAP appears as an Ethernet node and performs a bridging function by moving packets from the wired LAN to remote workstations on the wireless infrastructure.

The Ethernet/PoE RJ-45 connector also supports Power over Ethernet (PoE) based on the IEEE 802.3af standard. Note that if the BSAP is connected to a PoE source device and also connected to a local power source through the AC power adapter, PoE will be disabled. If the AC power source is removed, the unit begins to take power from POE.

802.3af specifies Power over Ethernet for "mid-span", where PoE inserters are located in the path between the network and the AP, as well as "DCE", where the power is supplied by the network switch the AP is attached to. Mid-span devices typically provide power on the unused pairs (4+5 & 7+8), where a PoE LAN switch will most likely provide power to the AP on the data pairs (1+2 & 3+6).

If the BSAP-1700 is connected to a PoE LAN switch at either 10BaseT, 100BaseT, or 1000BaseT, and the switch is configured to supply 802.3af standard PoE, the BSAP-1700 will power on and operate correctly. If the BSAP-1700 Ethernet interface is running in either 10BaseT or 100BaseT mode, any standard-based 802.3af mid-span power inserter will work properly, including Bluesocket's BSAP-POE-000-00-0 Mid-Span PoE Inserter.

A complication may arise when using the BSAP-1700 with the Ethernet interface running in 1000BaseT mode. If a mid-span device is used, the device must be compatible with 1000BaseT, such as the Bluesocket model POE-001-00-0, 1000BaseT Mid-Span PoE Inserter. 1000BaseT Ethernet uses all 4 pairs, therefore, 10BaseT / 100BaseT mid-span power inserters incompatible, and will break the communications path between the BSAP-1700 and the network.

Reset Button

Use this button to reset the BSAP or restore its factory default configuration. If you hold down the button for less than 5 seconds, the BSAP will perform a hardware reset. If you hold down the button for 5 seconds or more, any configuration

bluesocket

changes you may have made are removed, and the factory default configuration is restored to the BSAP.

Console Port

The BSAP-1700's console port is available through the Ethernet interface.

Kensington Security Slot

The BSAP includes a Kensington security slot on the side panel. You can prevent unauthorized removal of the BSAP by wrapping a Kensington security cable (not provided) around an unmovable object, inserting the lock into the slot, and turning the key.

Provisioning Your Bluesocket WLAN for BSAPs

There are prerequisites that must be met before deploying BSAPs in a live network environment. These prerequisites ensure that the BSAPs are able to discover and connect to a host BlueSecure Controller. Implementing these prerequisites also relieves you from the need to manually configure each deployed BSAP.

The deployment prerequisites for BSAPs are:

- **BSAP IP Address** - Each BSAP requires a unique IP address.
- **Host BlueSecure Controller IP Address** - Each BSAP also needs the IP address of the host BSC to which it will connect and from which it will obtain its software image and configuration.

This section describes how to provision your Bluesocket WLAN when deploying BSAPs:

- on the same Layer-2 subnet as the BSC
- across a routed network with Layer-3 connectivity to the BSC

Deploying BSAPs on the Same Layer-2 Subnet as the BSC

If the BSAPs are on the same subnet as the home BlueSecure Controller as shown in Figure 3, you can run a DHCP server on the BSC to manage IP address assignment to BSAPs. In this scenario, the BlueSecure Controller must be the only DHCP server for the subnet.

Alternatively, you can configure the BlueSecure Controller to run a DHCP relay agent to relay DHCP communications between the BSAPs and a DHCP server on your network.

When you run a DHCP server or a DHCP relay agent on the BSC to assign IP addresses to BSAPs on the managed side, the BSC will also pass its IP address to the BSAPs automatically using vendor-specific option 43. The BSAP will then connect to the IP provided by the DHCP vendor option as its host BSC.

See the *BlueSecure Controller Setup and Administration Guide* for detailed DHCP server and DHCP relay agent configuration procedures.
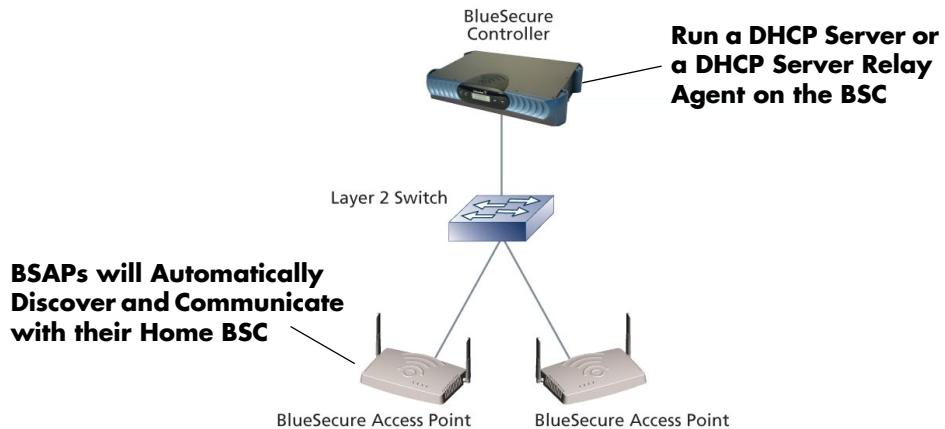
Figure 3: Deploying BSAPs on the Same Layer-2 Subnet as the BSC

In this deployment scenario, simply connect and power on the BSAPs. They will automatically discover and communicate with their home BSC.

Deploying BSAPs with Layer-3 Connectivity to the BSC

You can also deploy BSAPs on a routed network with Layer-3 connectivity to the BSC as shown in Figure 4.
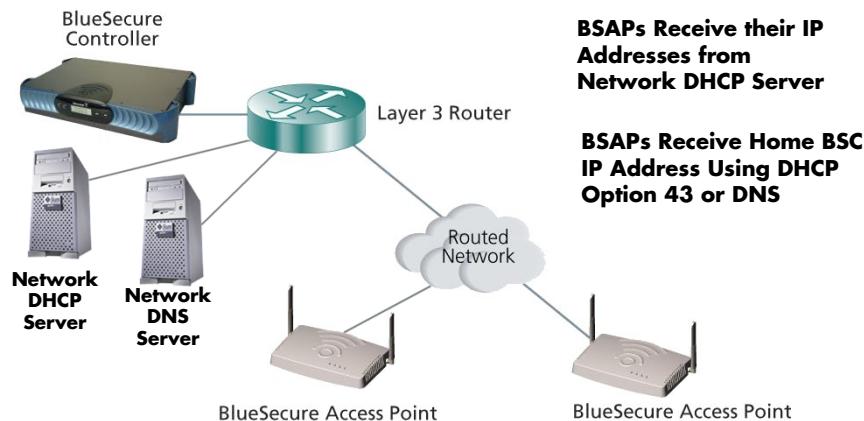
Figure 4: Deploying BSAPs Across a Routed Network

In this deployment scenario, you must ensure that each BSAP is able to communicate with the BSC across the routed network by verifying that:

• there are no NAT devices between the BSAPs and the BSC
• Protocol 97, UDP Port 53, and TCP/UDP Port 33333 traffic is allowed between the BSAPs and the BSC

Each BSAP will receive its IP address from your existing network DHCP server. An exception case is if the BSAP is beyond a managed side router, running IP helper. Then the BSAP will receive its IP address from the BSC, and be able to discover it without any additional configuration.

bluesocket

The BSAP also needs the IP address of the home BSC to which it will connect and from which it will obtain its software image and configuration. Again, this is not needed if the BSAP is on the managed side getting a relayed IP address from the BSC. You can provide the home BSC IP address to a BSAP using one of the following methods:

- **DHCP Server Option 43** - You can manually configure the DHCP server on your network to send BSC IP addresses to BSAPs using DHCP vendor-specific option 43.

  In DHCP requests sent from the BSAP, the BSAP uses option 60 Vendor class identifier with a value of **BlueSecure.AP1500** to identify itself to the DHCP server (Note that all BSAPs —1500,1540,1700 —identify as AP1500 for option 43).

  Refer to the documentation supplied with your DHCP server when configuring vendor-specific option 43

- **DNS Server Configuration** - BSAPs are factory configured with **apdiscovery** as the DNS hostname. You can configure a DNS server on your network with an entry for apdiscovery with the home BSC Controller IP address as the resolution.

  To configure this, add a NAME record to the DNS server for apdiscovery (at the domain server that the BAP will receive). Point this name to one or more BSC IP addresses (managed, protected or VLAN depending on the network configuration).

  So for example, if there are two BSCs (192.168.100.23 and 192.168.100.28), and the domain is customer.com, add two NAME records to customer.com, for the name apdiscovery.customer.com. One should resolve to 192.168.100.23 and one to 192.168.100.28. PTR (i.e., pointer) records are not needed for this portion of discovery.

Selecting a BSAP Installation Location

BlueSecure Access Points should be positioned for maximum throughput and range between other BSAPs and wireless client devices. Normally, you should locate the BSAP on the ceiling away from obstructions.

Range and performance are dictated by the distance between the BSAP and client radios, and by obstacles that may be present in a specific building or office environment. The following positioning guidelines are suggested:

- Document all the BSAPs and client devices you wish to include in your wireless network. Record the MAC address, serial number, and placement of each BSAP.

- Wired LAN and power connections must be available for each BSAP at the desired installation location. If a power outlet is not available near the access point, mid-span power inserters are recommended.

- If building blueprints or floor plans are available, use them to define potential client device locations and likely roaming areas.

- Identify possible obstacles or sources of interference that could affect signal strength (for example, walls, metal objects).

- Install the BSAP in an area where large steel structures such as beams, pillars, shelving units, bookcases, and filing cabinets do not obstruct radio signals to and from the BSAP.

- Determine optimal AP placement using Bluesocket's Wireless LANPlanner software. LANPlanner enables network planners to import a map of the facility, note the contents and construction materials, designate user regions and applications to be used and place equipment. The designer then interactively simulates how the wireless signals will propagate and fine-tunes the network design with "what if" analysis to determine optimum performance. Please consult Bluesocket's web site for additional information, and to download free trial software.

- Once BSAPs have been installed and configured, use site survey and monitoring utilities supplied with the client adapters to test signal strength at various locations. Modify the positioning of the BSAPs and client stations as required for optimum performance.

Mounting the BSAP

The BSAP1700 contains a panel antenna that was designed to accommodate either ceiling or wall mount installations. The panel antenna's radiation pattern is focused completely in front of the antenna rather than behind the unit.

In order to provide even coverage of an area similar to an omni-directional antenna, it is recommended that the antenna is installed in the ceiling where the energy is pushed in all directions toward the horizon and below the unit.

If the BSAP1700 is installed on a wall, the antenna is more directional than omni-directional. The energy is mainly pushed in the direction that the antenna is facing and very little energy (if any) is pushed behind the unit. In this orientation, more BSAP1700s are required to provide a uniform coverage area similar to deployments of sector antennas.

Dropped Ceiling Tool requirements

1. Utility Knife
2. Phillips Screwdriver
3. Masking Tape
4. Tile Cut-Out Template (provided)
5. Metal Ruler or Straight-Edge.

Conventional Ceiling Tool requirements

1. Phillips Screwdriver
2. Drill
3. 3/16" Drill Bit
4. Hammer
5. Masking Tape
6. Hole location Template (provided)

bluesocket

7. Pencil

Mounting Kit Contents

The following figure depicts the contents of the mounting kit. Refer to the table below the figure for a description of each numbered item shown in the figure.
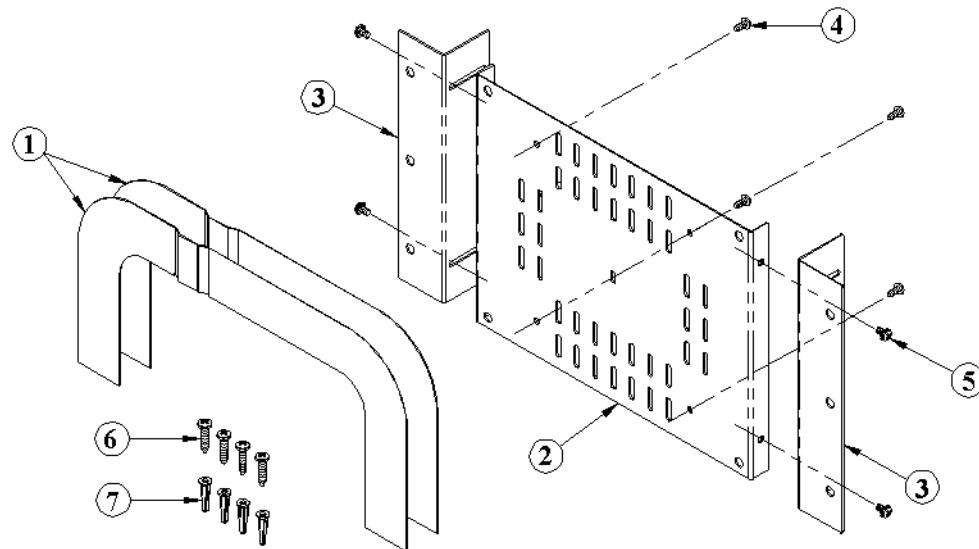
Figure 5: Mounting Kit Contents

Item	Description	Qty.
1	Ceiling Tile, Trim Plate	2
2	Rear Mounting Plate	1
3	Side Mounting Bracket	2
4	#6 x 5/16" Screw, Phillips Pan Hd	4
5	#6-32x1/4" Screw, w/Ext Tooth Washer (Used only when mounting directly to ceiling)	4
6	#8x3/4" Sheet Metal Screws	4
7	Plastic Anchors	4

Dropped Ceiling Kit Installation

1. Remove tile from suspended ceiling. Turn tile so you are looking at the back side. Position the template provided, and tape it to the back of the ceiling tile. Using a utility knife and a metal ruler, cut out the hole needed for the BSAP-1700 unit. The cut-out tile should look like the picture below.
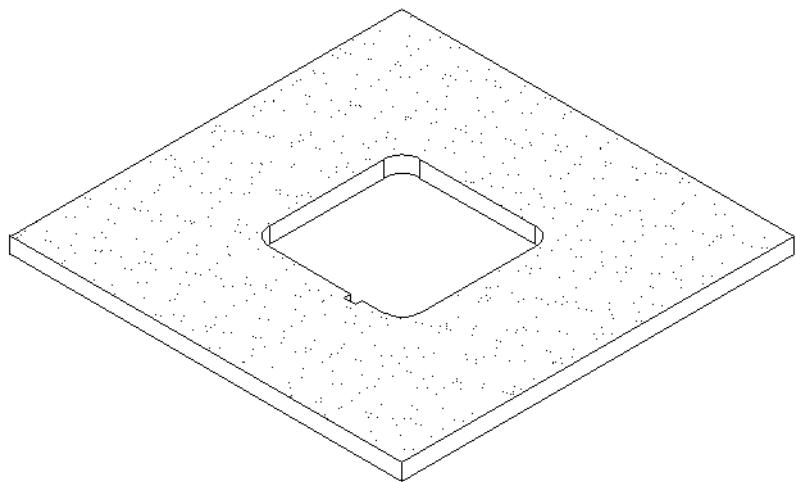
Figure 6: Finished Side of Tile

2. Fasten the Rear Mounting Plate to the bottom of the BSAP-1700 unit using the 4 #6x5/16" screws provided. Over-tightening of screws will cause stripping of threads formed in plastic (see Figure 7).
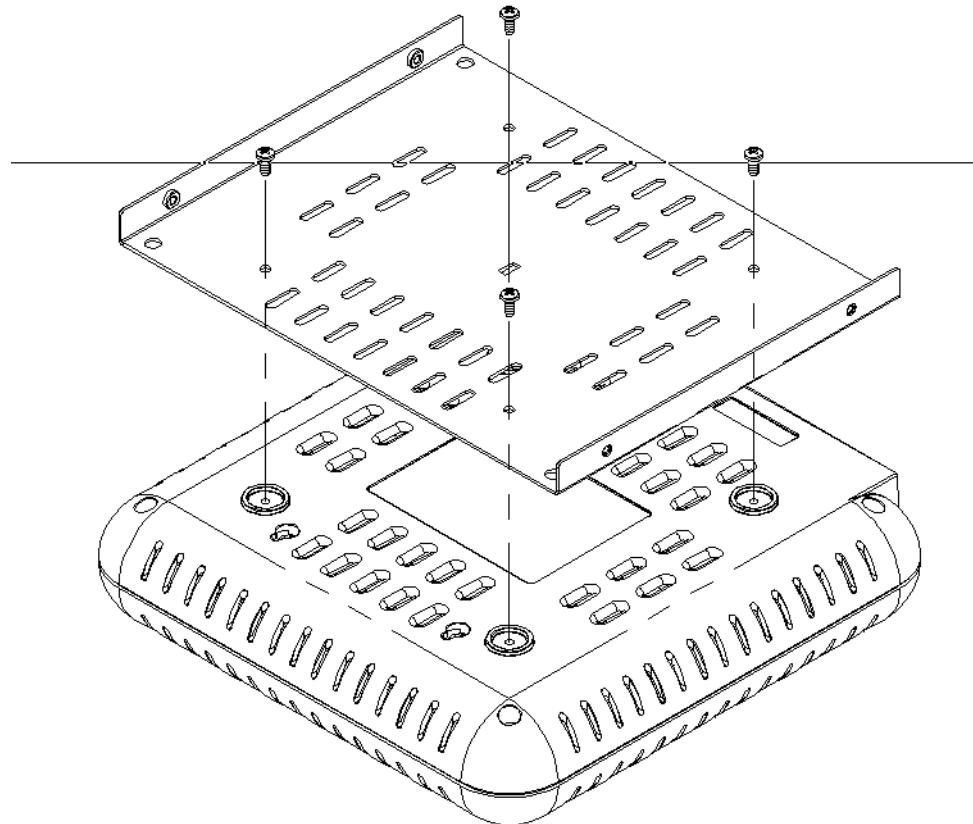
Figure 7: Installing Rear Mounting Plate

bluesocket

3. Slide the Trim Plates into the grooves of the BSAP-1700 unit as shown in Figure 8. Slide each half of the trim plate until the halves click into place.
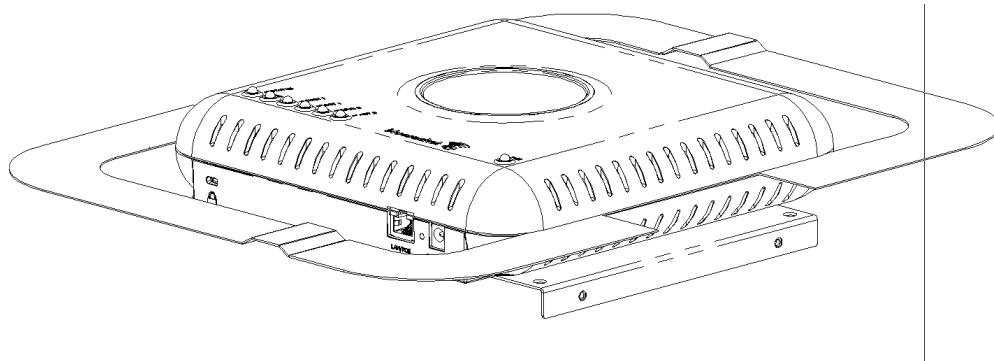
Figure 8: Trim Plate Installation

4. Turn BSAP-1700 unit over and place ceiling tile over the unit as shown in Figure 9. The Trim Plates will aide in tiles correct position. Next attach the Side Mounting Brackets to the Rear Mounting Plate using the 6-32 screws with the external tooth washers attached.
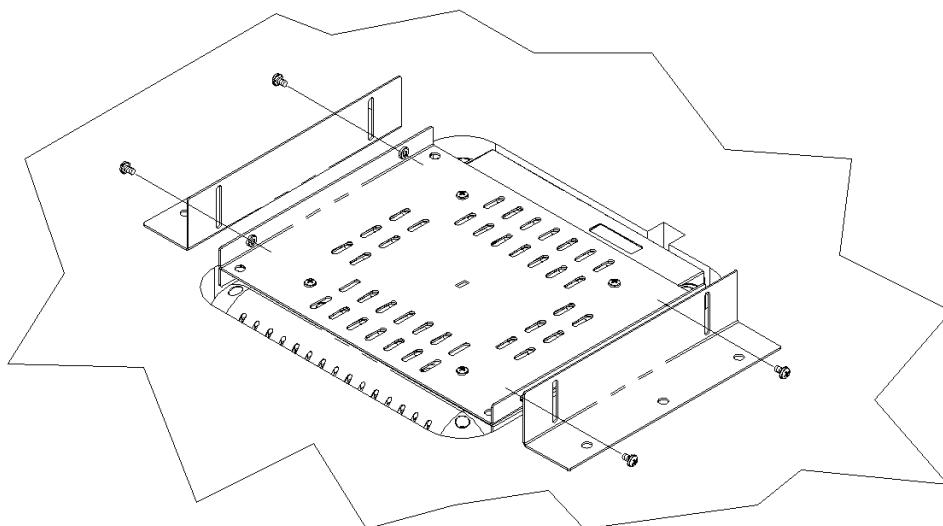
Figure 9: Side Mounting Bracket Installation

5. Bring entire assembled kit (including tile) to suspended ceiling and attach LAN cable into BSAP-1700 unit as shown in Figure 10. If cable is tight, shift unit until cable has enough relief. After cable is wired in, place ceiling tile back to desired location. The assembly may need to shift so trim plate will cover all openings in the ceiling tile.
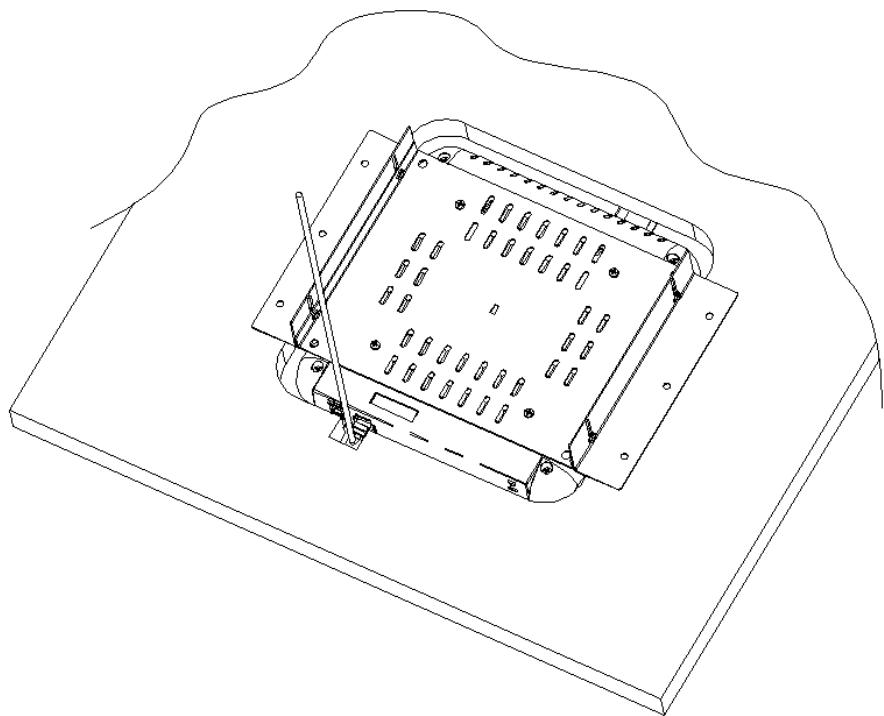
Figure 10: Finished Side of Tile
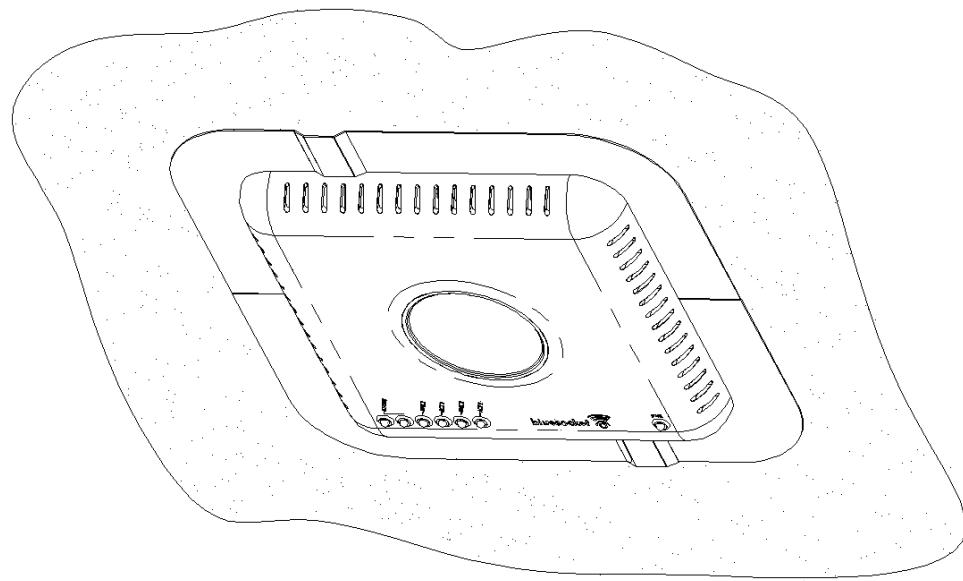
Figure 11: BSAP-1700 Installed

Ceiling Kit Installation

1. To install plastic anchors, mark the ceiling using the template provided. Next drill 4 pilot holes for the plastic anchors.
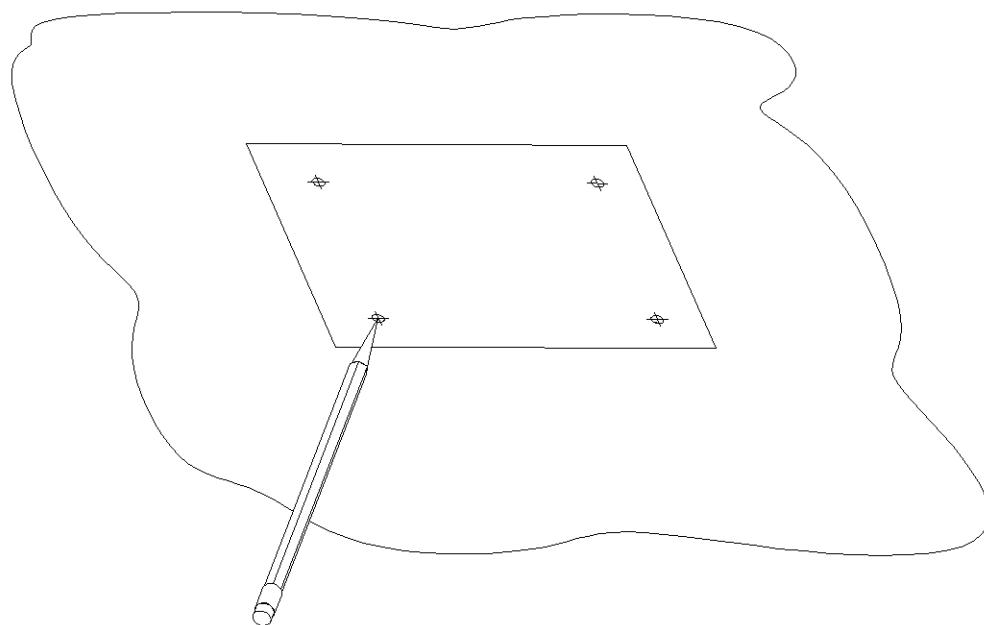
Figure 12: Plastic Anchor holes

2. Figure 13Push Anchors into holes until they are flush. Attach the side brackets to the ceiling using the 1" sheet metal screws. Check the alignment of the side brackets by sliding the rear plate between the two brackets. Once a good fit has been established, tighten side brackets to ceiling.

Use this plate to check fit
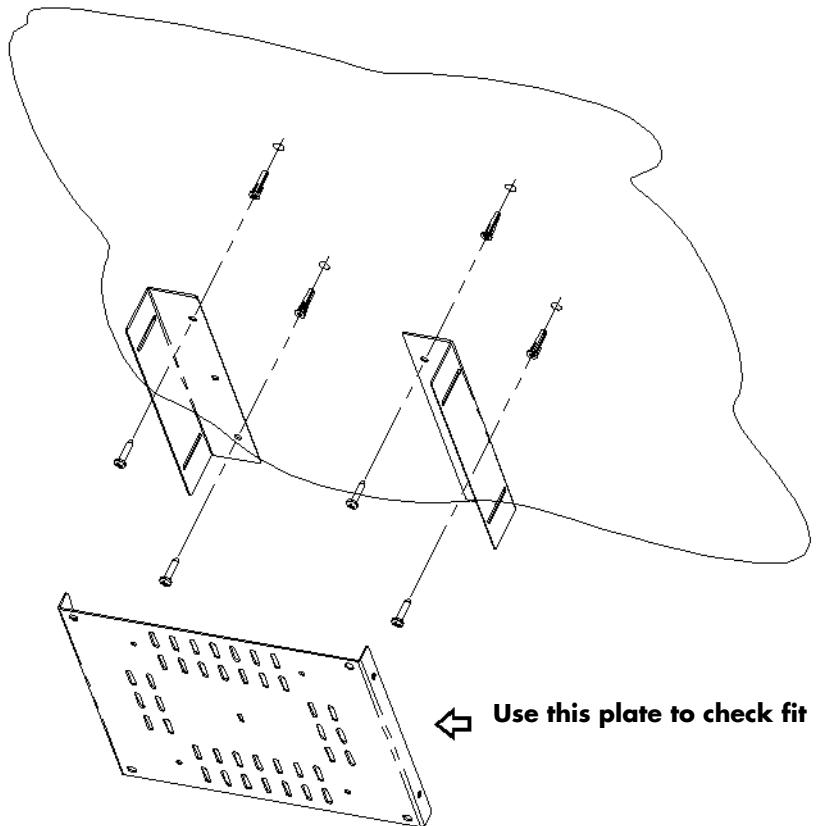
Figure 13: Side Bracket Installation

bluesocket

3. Fasten the Rear Mounting Plate to the bottom of the BSAP-1700 unit using the 4 #6x5/16" screws provided as shown in Figure 14. Over-tightening of screws, will cause stripping of threads formed in plastic.
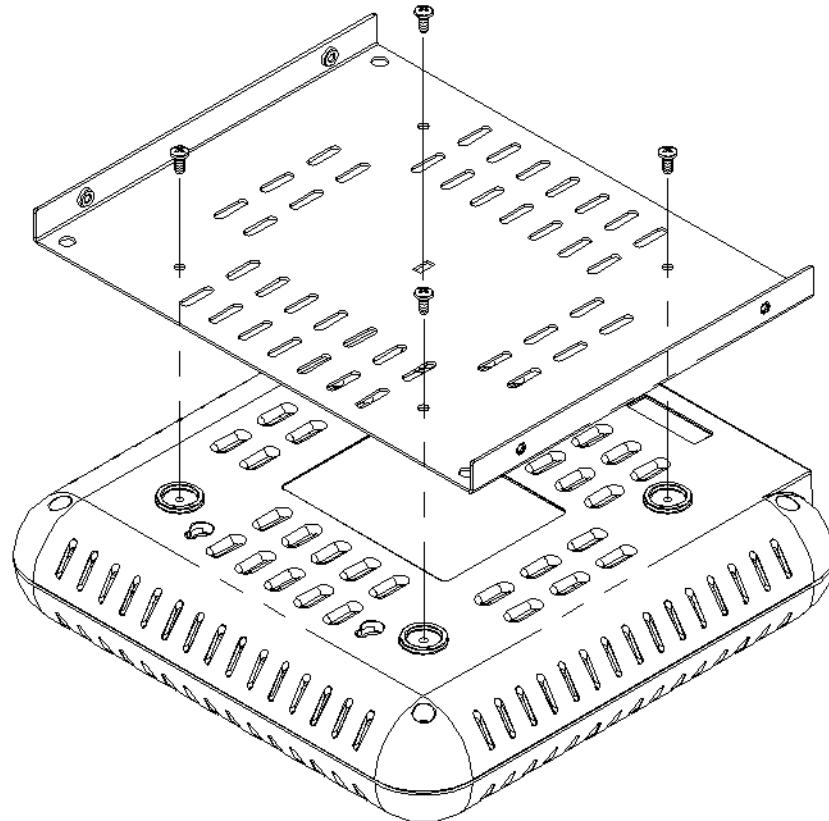
Figure 14: Installing Rear Mounting Plate

4. Attach BSAP-1700, with rear plate installed, to the side plates as shown in Figure 15. Secure the assembly using #6x1/4" screws with tooth washers.
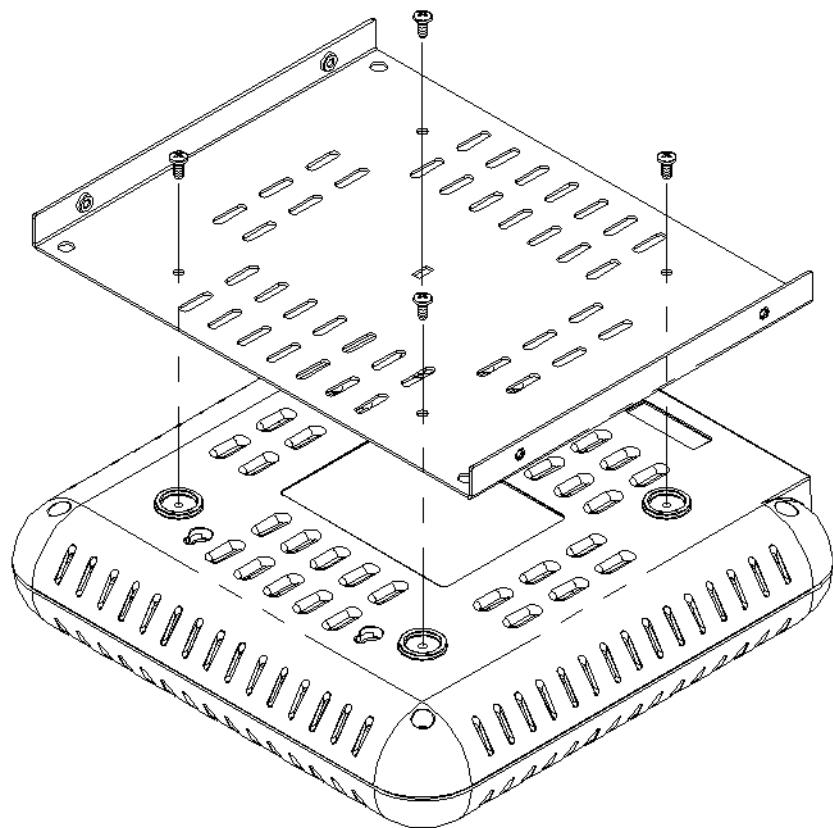
Figure 15: Attaching Rear Plate to Side Brackets

bluesocket

Mounting on a Wall

1. Using Bracket provided, mark wall for anchor placement. Drill a 6mm pilot hole for the plastic anchor (see Figure 16).
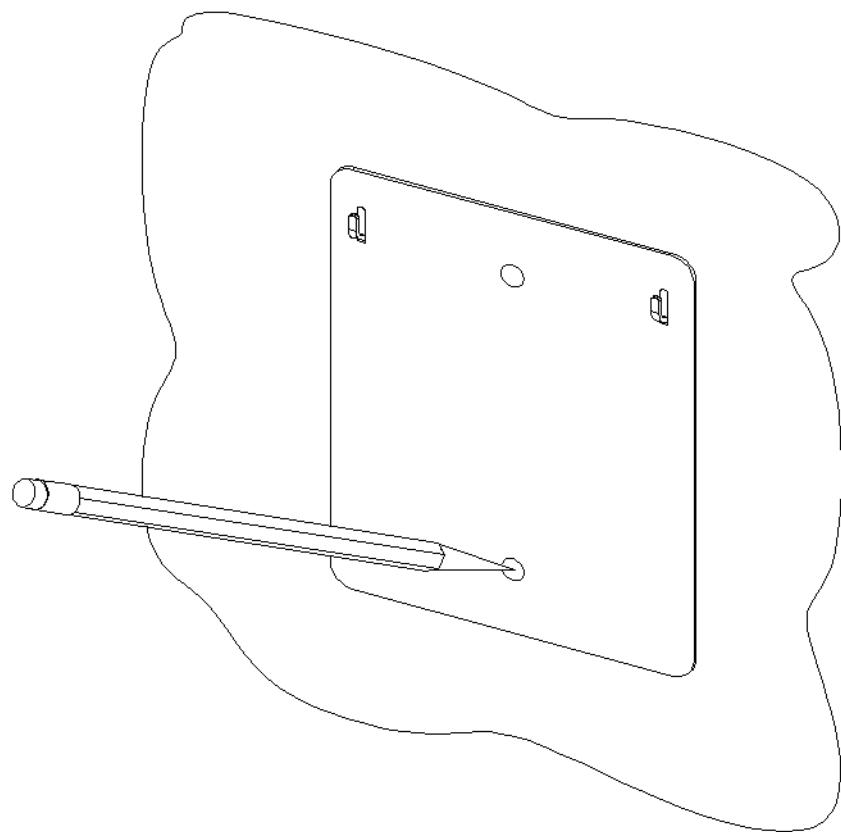
Figure 16: Marking Wall and Drilling Pilot Hole

2. Tap anchors into holes until they are flush to the wall. Using Flat-head screws provided, mount bracket to the wall as shown above. Do not fully tighten screws until both have been installed (see Figure 17).
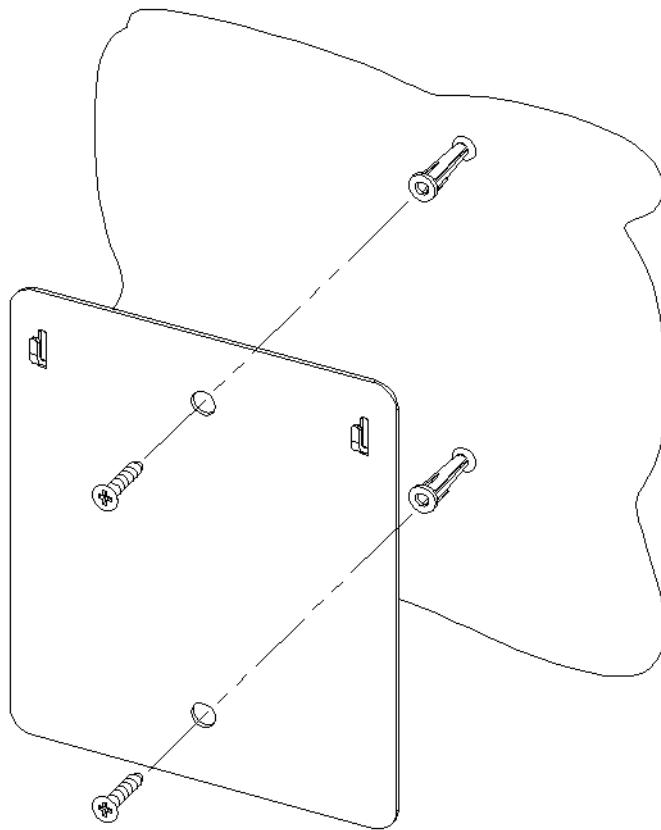
Figure 17: Mounting Wall Bracket

bluesocket

3. Using hooks provided on bracket, position BSAP-1700. Notice the wall mount grooves on the back of the BSAP-1700 (see Figure 18).
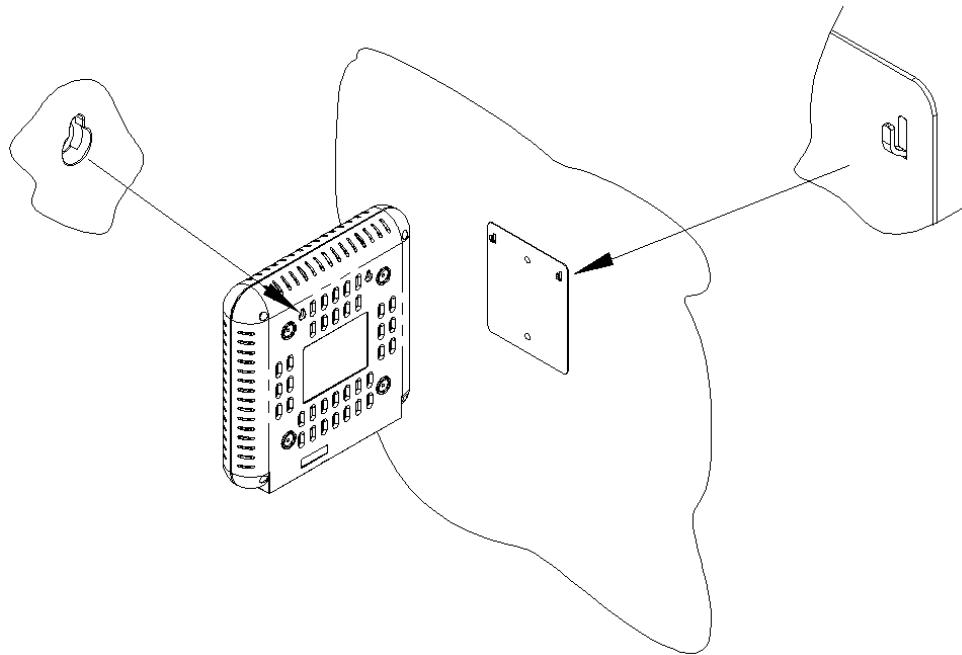
Figure 18: Positioning BSAP-1700 on Hooks

Connecting and Powering the BSAP

Follow these instructions to connect your BlueSecure BSAP to your Bluesocket WLAN and then power it up:

1. Make a note of the 12-character MAC address and the serial number listed on the bottom of the BSAP before mounting the BSAP to a wall or other surface. You will need this information during configuration.

2. Position the BSAP-1700 for best radio performance.

   The BSAP-1700 utilizes a 6-element MIMO antenna panel under the top cover of the unit. This antenna panel is made up of a combination of horizontally and vertically polarized antenna elements, which should give excellent performance regardless of the orientation of the AP. The BSAP-1700 should, however, be place where it has the best unobstructed view of the coverage area. If possible, mounting the BSAP-1700 on the ceiling will provide the best performance in a typical office environment. An optional ceiling tile mounting kit is available for the BSAP-1700, which provides for a very esthetically pleasing and professional looking installation. For more information, please refer to Bluesocket's web site.

3. The BSAP derives its operating power directly from the RJ-45 connector when connected to a device that provides IEEE 802.3af compliant Power over Ethernet (PoE).

⚠ **Caution:** If the BSAP is used in a medical environment, it must use an IEC/EN60601-1 compliant power adapter. See page 24 for a description of the IEC/EN60601-1 compliant power adapter available from Bluesocket.

4. Verify that the PWR LED stops flashing and remains on, and that the other status LEDs start functioning as described in the section entitled "LED Indicators" on page 3.

5. Connect the BSAP to your Bluesocket WLAN.

   You can connect the BSAP-1700 to a 10/100 Mbps Ethernet through a network device such as a hub or a switch, or to a 1000BaseT Gigabit Ethernet interlace. Connect the RJ-45 Ethernet connector on the BSAP's back panel to your network using category 3, 4, or 5 UTP Ethernet cable. When the BSAP and the connected device are powered on, the BSAP's Ethernet Link LED should light indicating a valid network connection.

☞ **Note:** The RJ-45 port on the BSAP provides a full-duplex Ethernet connection using an MDI pin configuration, so you must use a straight-through cable for network connections to hubs or switches that only have MDI-X ports, and a crossover cable for direct network connections to BSC-400s, PCs, servers or other end nodes that only have MDI ports. However, if the device to which you are connecting supports auto-MDI/MDI-X operation, you can use either a straight-through or crossover cable.

Using the BSAP Command Line Interface (CLI)

☞ **Note:** Normally you will not need to access the BSAP CLI. In a properly provisioned Bluesocket WLAN, the BSAP will automatically discover and communicate with its home BSC. We recommend that you use the CLI to configure the BSAP only in a lab or test environment, or where a pre-defined static IP address is desired.

You can connect a console to the BSAP's Ethernet port to perform local configuration of the BSAP using its command line interface (CLI).You can use the BSAP's CLI to manually configure:

- the BSAP's IP address
- the IP address of the home BSC from which the BSAP will download its configuration and software image
- Site survey mode

Accessing the BSAP CLI

Access the BSAP CLI using an SSH client (the example uses putty) For example:

1. The default management IP address for the AP-1700 is 192.168.190.1. Configure your laptop computer to have a static IP address in this same subnet, for example 192.168.190.2.

2. Ping the AP from the laptop to make sure it can be seen.

3. Configure putty to use SSH and then connect to the IP address of the AP (by default 192.168.190.1) on port 2335.

bluesocket 📶

4. Enter the following username and password in lowercase at the displayed CLI login prompts:

```
BlueAP login: adm1n    (i.e., adm "one" n)
Password: blue1socket    (i.e., blue "one" socket).
```
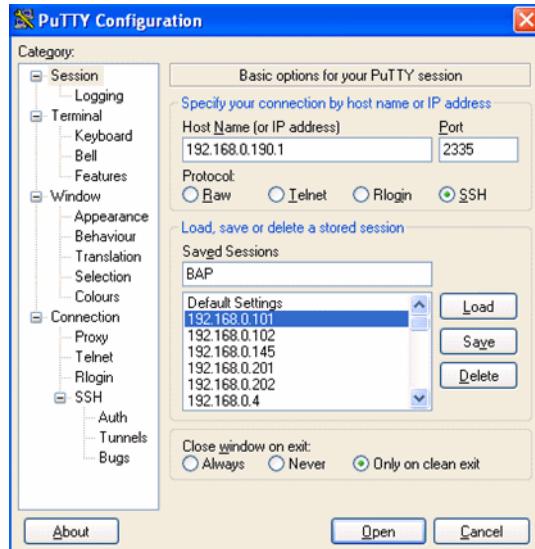

Figure 19: PuTTY Configuration

Navigating the BSAP CLI

The BSAP CLI main menu provides access to these options:

*   **Network Configuration** - Configure the BSAP's network settings including its IP address and the IP address of the BSC to which it will connect.
*   **Save/Apply Configuration** - After you have configured the BSAP's network settings, you must apply them before they become active.
*   **Restore Defaults** - Restore the BSAP to its default settings.
*   **Show Version Information -** Display BSAP version information.
*   **Reboot AP** - After applying the BSAP's configuration settings, you must reboot the BSAP to effect the new configuration.
*   **Site Survey Configuration** - In site survey mode, the BSAP beacons known SSIDs on its 802.11a and 802.11 b/g radios operating at a configurable power level and channel to facilitate a WLAN site survey. Rebooting the BSAP following a site survey, restores the BSAP's existing configuration. See page 23 for details on using the BSAP's site survey mode.

When operating in a submenu, press **h** to return directly to the main menu (or home menu). Press **p** to return to the previous menu.

BSAP Default Configuration

The BSAP is shipped with the following default configuration.

```
IP_ADDR_MODE:      DHCP (0)
```

```
IP_ADDR            0.0.0.0
NETMASK            0.0.0.0
GW_ADDR            0.0.0.0
DNS_ADDR           0.0.0.0
WG_ADDR_MODE       Discover BSC (0)
WG_ADDR            0.0.0.0
MNGMT_IP_ADDR      192.168.190.1
```

The two options for IP address mode are:

- (0) DHCP - The BSAP runs a DHCP client and receives its IP address from a DHCP server.
- (1) Static IP - You assign the BSAP a static IP address via its CLI.

The two options for WG address mode are:

- (0) Discover - The BSAP automatically discovers the IP address of the BSC to which it is to connect.
- (1) Static Configuration - Using the BSAP CLI, you will configure the IP address of the BSC to which the BSAP is to connect.

Setting the BSAP and Home BSC IP Addresses Using the CLI

To set the BSAP and Home BSC IP addresses using the CLI:

1. Enter **1** at the BSAP CLI main menu command prompt.

    The BSAP CLI network configuration menu appears:
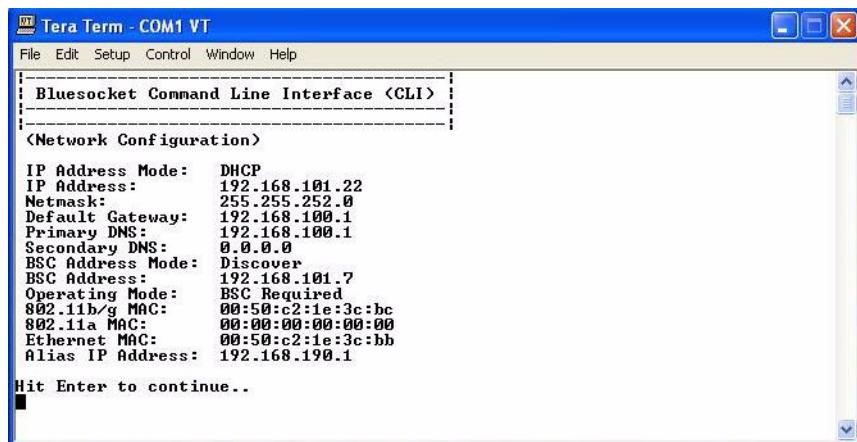
Figure 20: BSAP CLI Network Configuration Menu

2. Enter **1** at the Network Cfg prompt to set the IP address mode.

    Enter 1 to set the BSAP IP address mode to **static**.

3. Enter **2** at the Network Cfg prompt to set the BSAP's IP address.

    Enter the BSAP IP address and subnet mask using the format:

    ```
    <address> netmask <netmask>
    ```

4. Enter **3** at the Network Cfg prompt to specify the BSAP's default IP gateway.

5. Enter **4** at the Network Cfg prompt to specify the IP address of the BSAP's primary DNS server.

6. Enter **5** at the Network Cfg prompt to specify the BSC mode, i.e. how the BSAP is to obtain the IP address of its home BSC.

   You can set the BSC mode to either **Discover** or **Static BSC**.

   Enter 1 to set the BSC mode to Static BSC.

7. Enter **6** at the Network Cfg prompt to specify the IP address of the BSAP's home BSC.

8. Enter **8** at the Network Cfg prompt to review the BSAP network configuration settings you have made.

   The network summary includes the MAC addresses of the BSAP's Ethernet and wireless interfaces.

9. Enter **p** at the CLI prompt to return to the main menu.

   Enter **2** at the main menu to apply your configuration changes, reboot the BSAP, and put the new configuration settings into effect.

   When the BSAP completes its reboot, it will connect to and download its configuration from the home BSC you have configured via the CLI.

Using the BSAP's Site Survey Mode

The BSAP provides a site survey mode that is useful when you are conducting a site survey to determine optimal RF coverage for your facility.

In site survey mode, the BSAP continually beacons the SSID "site_survey_chn#_pwr#" from its 802.11a and 802.11 b/g radios at a rate of 100 milliseconds. Here are the options to configure site survey mode:

1. Select Option "a" from the main menu to enter the site survey sub-menu.

2. Select the Interface (11b/g or 11a) to configure. All the radio settings that are configured after this interface is setup will apply to the configured interface.

3. Set Antenna Type (Doesn't apply to the 1700).

4. Set Channel - channel to transmit the beacons.

5. Set Transmit Power - transmit power of the beacons – levels 0-10.

6. Enable Site Survey Mode – Once you setup the channel and transmit power, the settings are applied once you enable it with this option.

7. Site Survey Summary – View your current site survey settings.

Rebooting the BSAP following a site survey, restores the BSAP's existing configuration.
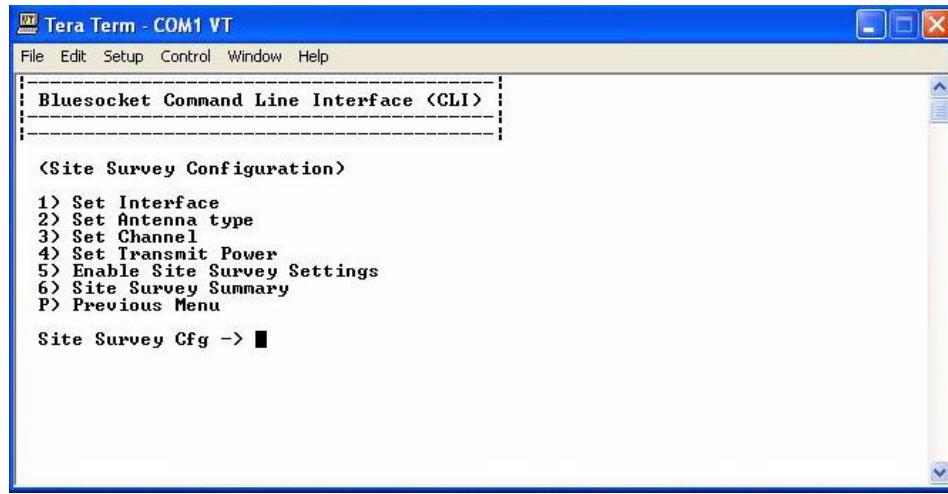
Figure 21: BSAP CLI Network Configuration Menu

General Specifications

Power Supply

<u>Standard</u>

Input: AC100-240V~, 50-60Hz, 0.5A

Output: DC48V, 0.31A

Input: +48VDC via wall adapter (BSAP-PWR-000-00-0) or Power Over Ethernet (POE).

Max power consumption: 250 mA @ 48 VDC, 12 Watts

Note: If the wall adapter applies power to the BSAP-1700 before the Power Sourcing Equipment (PSE), it prevents the PSE from detecting the BSAP-1700. If the PSE is already powering the BSAP-1700 when the wall adapter is plugged in, priority is given to the higher supply voltage.

<u>European Medical Environment</u>

If you require compliance with EN60601-1 (European Medical Device Standard), either use Power over Ethernet (PoE) or the following power adapter that complies with IEC/EN60601-1 and is available from Bluesocket.

Manufacturer/Model: MEAN WELL/MES30A-8P1J
Input: 100-240VAC, 50-60Hz, 0.8-0.4A
Output: 48VDC, 0.62A

PoE (DC)

Input voltage: 48 volts, 0.25 A, 12 watts

☞ **Note:** Power can also be provided to the access point through the Ethernet port based on IEEE 802.3af Power over Ethernet (PoE) specifications. When both PoE is provided and the adapter is plugged in, PoE will be turned off.

Dimensions

Length: 9 in. (22.9 cm)
Width: 9in. (22.9 cm)
Height: 2 in. (5.1 cm)

Weight

2 lbs. (0.907 kilograms)

LED Indicators

PWR (Power), Ethernet Link (Ethernet Link/Activity), 802.11a wireless link and activity, 802.11b/g wireless link and activity, and (2) status indicators.

Network Management

The BSAP-1700 can be managed by any of the BlueSecure Controllers, BlueView Management System (BVMS), or through the BSAP-1700's local console interface.

Temperature

Operating: 0 to 55 °C (32 to 131 °F)

Storage: 0 to 70 °C (32 to 158 °F)

Wireless Communications

Wireless Speeds:
  802.11b
  1/2/5.5/11Mb/s
  802.11g
  1/2/5.5/6/9/11/12/18/24/36/48/54 Mb/s
  802.11a
  6/9/12/18/24/36/48/54
  2.4 GHz MIMO
  24/36/40/42/48/72/80/84/96/108/120/126
  2.4 GHz MIMO utilizing Adaptive Channel Expansion
  48/72/80/84/96/144/160/168/192/216/240
  5 GHz MIMO
  24/36/40/42/48/72/80/84/96/108/120/126

Modulation Type: DSSS, OFDM,BPSK, QPSK, CCK, 16QAM, 64QAM

Operating Frequency: 2.400~2.4835GHz, 5.15~5.25GHz & 5.725~5.850GHz

Channel Numbers: 11 (for 2.4GHz Band); 8 for normal mode (for 5GHz Band)

Transmitter Output Power:
+22dBm (for 2.4GHz Band)
+20dBm (for 5.15~5.25GHz Band)
+20dBm (for 5.725~5.850GHz Band)

Compliance

Safety

  UL 60950

  CAN/CSA C22.2 No. 60950

  IEC 60950

  EN 60950

  UL 2043

EMI & Susceptibility Class B

  FCC Part 15.107 and 15.109

  ICES-003 (Canada)

  EN 301.489-1 and -17 (Europe)

  EN60601-1-2

  EN5502 & EN55024

  EN6100-3-2, -3-3,

Radio Approvals

  FCC Part 15.247 and 15.407

  FCC ID Registration and ID Number

  EN 300.328, EN 301.893 (Europe)

  RSS-210 (Canada)

  EU Notification Body Letter

Safety Warnings for BlueSecure™ Access Point 1700

This section provides translations of the following safety warnings for the BlueSecure™ Access Point 1700:

- Warning Definition
- Explosive Device Proximity Warning
- Antenna Installation Warning
- Power Source Warning
- Work During Lightning Activity Warning
- Installation Instructions Warning
- Circuit Breaker (20A) Warning

Warning Definition

⚠ Warning	IMPORTANT SAFETY INSTRUCTIONS
	This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.
	SAVE THESE INSTRUCTIONS

bluesocket

Waarschuwing	BELANGRIJKE VEILIGHEIDSINSTRUCTIES
	Dit waarschuwingssymbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij elektrische schakelingen betrokken risico's en dient u op de hoogte te zijn van de standaard praktijken om ongelukken te voorkomen. Gebruik het nummer van de verklaring onderaan de waarschuwing als u een vertaling van de waarschuwing die bij het apparaat wordt geleverd, wilt raadplegen.
	BEWAAR DEZE INSTRUCTIES
Varoitus	TÄRKEITÄ TURVALLISUUSOHJEITA
	Tämä varoitusmerkki merkitsee vaaraa. Tilanne voi aiheuttaa ruumiillisia vammoja. Ennen kuin käsittelet laitteistoa, huomioi sähköpiirien käsittelemiseen liittyvät riskit ja tutustu onnettomuuksien yleisiin ehkäisytapoihin. Turvallisuusvaroitusten käännökset löytyvät laitteen mukana toimitettujen käännettyjen turvallisuusvaroitusten joukosta varoitusten lopussa näkyvien lausuntonumeroiden avulla.
	SÄILYTÄ NÄMÄ OHJEET
Attention	IMPORTANTES INFORMATIONS DE SÉCURITÉ
	Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant entraîner des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers liés aux circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions des avertissements figurant dans les consignes de sécurité traduites qui accompagnent cet appareil, référez-vous au numéro de l'instruction situé à la fin de chaque avertissement.
	CONSERVEZ CES INFORMATIONS
Warnung	WICHTIGE SICHERHEITSHINWEISE
	DiesesWarnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu Verletzungen führen kann. Machen Sie sich vor der Arbeit mit Geräten mit den Gefahren elektrischer Schaltungen und den üblichen Verfahren zur Vorbeugung vor Unfällen vertraut. Suchen Sie mit der am Ende jeder Warnung angegebenen Anweisungsnummer nach der jeweiligen Übersetzung in den übersetzten Sicherheitshinweisen, die zusammen mit diesem Gerät ausgeliefert wurden.
	BEWAHREN SIE DIESE HINWEISE GUT AUF.
Avvertenza	IMPORTANTI ISTRUZIONI SULLA SICUREZZA
	Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di intervenire su qualsiasi apparecchiatura, occorre essere al corrente dei pericoli relativi ai circuiti elettrici e conoscere le procedure standard per la prevenzione di incidenti. Utilizzare il numero di istruzione presente alla fine di ciascuna avvertenza per individuare le traduzioni delle avvertenze riportate in questo documento.
	CONSERVARE QUESTE ISTRUZIONI

Advarsel	VIKTIGE SIKKERHETSINSTRUKSJONER
	Dette advarselssymbolet betyr fare. Du er i en situasjon som kan føre til skade på person. Før du begynner å arbeide med noe av utstyret, må du være oppmerksom på farene forbundet med elektriske kretser, og kjenne til standardprosedyrer for å forhindre ulykker. Bruk nummeret i slutten av hver advarsel for å finne oversettelsen i de oversatte sikkerhetsadvarslene som fulgte med denne enheten.
	TA VARE PÅ DISSE INSTRUKSJONENE
Aviso	INSTRUÇÕES IMPORTANTES DE SEGURANÇA
	Este símbolo de aviso significa perigo. Você está em uma situação que poderá ser causadora de lesões corporais. Antes de iniciar a utilização de qualquer equipamento, tenha conhecimento dos perigos envolvidos no manuseio de circuitos elétricos e familiarize-se com as práticas habituais de prevenção de acidentes. Utilize o número da instrução fornecido ao final de cada aviso para localizar sua tradução nos avisos de segurança traduzidos que acompanham este dispositivo.
	GUARDE ESTAS INSTRUÇÕES
¡Advertencia!	INSTRUCCIONES IMPORTANTES DE SEGURIDAD
	Este símbolo de aviso indica peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considere los riesgos de la corriente eléctrica y familiarícese con los procedimientos estándar de prevención de accidentes. Al final de cada advertencia encontrará el número que le ayudará a encontrar el texto traducido en el apartado de traducciones que acompaña a este dispositivo.
	GUARDE ESTAS INSTRUCCIONES
Varning!	VIKTIGA SÄKERHETSANVISNINGAR
	Denna varningssignal signalerar fara. Du befinner dig i en situation som kan leda till personskada. Innan du utför arbete på någon utrustning måste du vara medveten om farorna med elkretsar och känna till vanliga förfaranden för att förebygga olyckor. Använd det nummer som finns i slutet av varje varning för att hitta dess översättning i de översatta säkerhetsvarningar som medföljer denna anordning.
	SPARA DESSA ANVISNINGAR
Figyelem	FONTOS BIZTONSÁGI ELOÍRÁSOK
	Ez a figyelmezeto jel veszélyre utal. Sérülésveszélyt rejto helyzetben van. Mielott bármely berendezésen munkát végezte, legyen figyelemmel az elektromos áramkörök okozta kockázatokra, és ismerkedjen meg a szokásos balesetvédelmi eljárásokkal. A kiadványban szereplo figyelmeztetések fordítása a készülékhez mellékelt biztonsági figyelmeztetések között található; a fordítás az egyes figyelmeztetések végén látható szám alapján keresheto meg.
	ORIZZE MEG EZEKET AZ UTASÍTÁSOKAT!
Предупреждение	ВАЖНЫЕ ИНСТРУКЦИИ ПО СОБЛЮДЕНИЮ ТЕХНИКИ БЕЗОПАСНОСТИ
	Этот символ предупреждения обозначает опасность. То есть имеет место ситуация, в которой следует опасаться телесных повреждений. Перед эксплуатацией оборудования выясните, каким опасностям может подвергаться пользователь при использовании электрических цепей, и ознакомьтесь с правилами техники безопасности для предотвращения возможных несчастных случаев. Воспользуйтесь номером заявления, приведенным в конце каждого предупреждения, чтобы найти его переведенный вариант в переводе предупреждений по безопасности, прилагаемом к данному устройству.
	СОХРАНИТЕ ЭТИ ИНСТРУКЦИИ

bluesocket

警告	重要的安全性说明 此警告符号代表危险。您正处于可能受到严重伤害的工作环境中。在您使用设备开始工作之前，必须充分意识到触电的危险，并熟练掌握防止事故发生的标准工作程序。请根据每项警告结尾提供的声明号码来找到此设备的安全性警告说明的翻译文本。 请保存这些安全性说明
警告	安全上の重要な注意事項 「危険」の意味です。人身事故を予防するための注意事項が記述されています。装置の取り扱い作業を行うときは、電気回路の危険性に注意し、一般的な事故防止策に留意してください。警告の各国語版は、各注意事項の番号を基に、装置に付属の「Translated Safety Warnings」を参照してください。 これらの注意事項を保管しておいてください。
주의	중요 안전 지침 이 경고 기호는 위험을 나타냅니다. 작업자가 신체 부상을 일으킬 수 있는 위험한 환경에 있습니다. 장비에 작업을 수행하기 전에 전기 회로와 관련된 위험을 숙지하고 표준 작업 관례를 숙지하여 사고를 방지하십시오. 각 경고의 마지막 부분에 있는 경고문 번호를 참조하여 이 장치와 함께 제공되는 번역된 안전 경고문에서 해당 번역문을 찾으십시오. 이 지시 사항을 보관하십시오.
Aviso	INSTRUÇÕES IMPORTANTES DE SEGURANÇA Este símbolo de aviso significa perigo. Você se encontra em uma situação em que há risco de lesões corporais. Antes de trabalhar com qualquer equipamento, esteja ciente dos riscos que envolvem os circuitos elétricos e familiarize-se com as práticas padrão de prevenção de acidentes. Use o número da declaração fornecido ao final de cada aviso para localizar sua tradução nos avisos de segurança traduzidos que acompanham o dispositivo. GUARDE ESTAS INSTRUÇÕES
Advarsel	VIGTIGE SIKKERHEDSANVISNINGER Dette advarselssymbol betyder fare. Du befinder dig i en situation med risiko for legemesbeskadigelse. Før du begynder arbejde på udstyr, skal du være opmærksom på de involverede risici, der er ved elektriske kredsløb, og du skal sætte dig ind i standardprocedurer til undgåelse af ulykker. Brug erklæringsnummeret efter hver advarsel for at finde oversættelsen i de oversatte advarsler, der fulgte med denne enhed. GEM DISSE ANVISNINGER
تحذير	إرشادات الأمان الهامة يوضح رمز التحذير هذا وجود خطر. وهذا يعني أنك متواجد في مكان قد ينتج عنه التعرض لإصابات. قبل بدء العمل، احذر مخاطر التعرض للصدمات الكهربائية وكن على علم بالإجراءات القياسية للحيلولة دون وقوع أي حوادث. استخدم رقم البيان الموجود في أخر كل تحذير لتحديد مكان ترجمته داخل تحذيرات الأمان المترجمة التي تأتي مع الجهاز. قم بحفظ هذه الإرشادات
Upozorenje	VAŽNE SIGURNOSNE NAPOMENE Ovaj simbol upozorenja predstavlja opasnost. Nalazite se u situaciji koja može prouzročiti tjelesne ozljede. Prije rada s bilo kojim uređajem, morate razumjeti opasnosti vezane uz električne sklopove, te biti upoznati sa standardnim načinima izbjegavanja nesreća. U prevedenim sigurnosnim upozorenjima, priloženima uz uređaj, možete prema broju koji se nalazi uz pojedino upozorenje pronaći i njegov prijevod. SAČUVAJTE OVE UPUTE

Upozornění	DŮLEŽITÉ BEZPEČNOSTNÍ POKYNY Tento upozorňující symbol označuje nebezpečí. Jste v situaci, která by mohla způsobit nebezpečí úrazu. Před prací na jakémkoliv vybavení si uvědomte nebezpečí související s elektrickými obvody a seznamte se se standardními opatřeními pro předcházení úrazům. Podle čísla na konci každého upozornění vyhledejte jeho překlad v přeložených bezpečnostních upozorněních, která jsou přiložena k zařízení. USCHOVEJTE TYTO POKYNY
Προειδοποίηση	ΣΗΜΑΝΤΙΚΕΣ ΟΔΗΓΙΕΣ ΑΣΦΑΛΕΙΑΣ Αυτό το προειδοποιητικό σύμβολο σημαίνει κίνδυνο. Βρίσκεστε σε κατάσταση που μπορεί να προκαλέσει τραυματισμό. Πριν εργαστείτε σε οποιοδήποτε εξοπλισμό, να έχετε υπόψη σας τους κινδύνους που σχετίζονται με τα ηλεκτρικά κυκλώματα και να έχετε εξοικειωθεί με τις συνήθεις πρακτικές για την αποφυγή ατυχημάτων. Χρησιμοποιήστε τον αριθμό δήλωσης που παρέχεται στο τέλος κάθε προειδοποίησης, για να εντοπίσετε τη μετάφρασή της στις μεταφρασμένες προειδοποιήσεις ασφαλείας που συνοδεύουν τη συσκευή. ΦΥΛΑΞΤΕ ΑΥΤΕΣ ΤΙΣ ΟΔΗΓΙΕΣ
אזהרה	הוראות בטיחות חשובות סימן אזהרה זה מסמל סכנה. אתה נמצא במצב העלול לגרום לפציעה. לפני שתעבוד עם ציוד כלשהו, עליך להיות מודע לסכנות הכרוכות במעגלים חשמליים ולהכיר את הנהלים המקובלים למניעת תאונות. השתמש במספר ההוראה המסופק בסופה של כל אזהרה כד לאתר את התרגום באזהרות הבטיחות המתורגמות שמצורפות להתקן. שמור הוראות אלה
Opomena	постои кај електричните кола и треба да ги познавате стандардните постапки за спречување на несреќни случаи. Искористете го бројот на изјавата што се наоѓа на крајот на секое предупредување за да го најдете неговиот период во преведените безбедносни предупредувања што се испорачани со уредот. ЧУВАЈТЕ ГИ ОВИЕ НАПАТСТВИЈА
Ostrzeżenie	WAŻNE INSTRUKCJE DOTYCZĄCE BEZPIECZEŃSTWA Ten symbol ostrzeżenia oznacza niebezpieczeństwo. Zachodzi sytuacja, która może powodować obrażenia ciała. Przed przystąpieniem do prac przy urządzeniach należy zapoznać się z zagrożeniami związanymi z układami elektrycznymi oraz ze standardowymi środkami zapobiegania wypadkom. Na końcu każdego ostrzeżenia podano numer, na podstawie którego można odszukać tłumaczenie tego ostrzeżenia w dołączonym do urządzenia dokumencie z tłumaczeniami ostrzeżeń. NINIEJSZE INSTRUKCJE NALEŻY ZACHOWAĆ
Upozornenie	DÔLEŽITÉ BEZPEČNOSTNÉ POKYNY Tento varovný symbol označuje nebezpečenstvo. Nachádzate sa v situácii s nebezpečenstvom úrazu. Pred prácou na akomkoľvek vybavení si uvedomte nebezpečenstvo súvisiace s elektrickými obvodmi a oboznámte sa so štandardnými opatreniami na predchádzanie úrazom. Podľa čísla na konci každého upozornenia vyhľadajte jeho preklad v preložených bezpečnostných upozorneniach, ktoré sú priložené k zariadeniu. USCHOVAJTE SI TENTO NÁVOD

Explosive Device Proximity

⚠️ Warning	Do not operate your wireless network device near unshielded blasting caps or in an explosive environment unless the device has been modified to be especially qualified for such use.
Waarschuwing	Gebruik dit draadloos netwerkapparaat alleen in de buurt van onbeschermde ontstekers of in een omgeving met explosieven indien het apparaat speciaal is aangepast om aan de eisen voor een dergelijk gebruik te voldoen.
Varoitus	Älä käytä johdotonta verkkolaitetta suojaamattomien räjäytysnallien läheisyydessä tai räjäytysalueella, jos laitetta ei ole erityisesti muunnettu sopivaksi sellaiseen käyttöön.

bluesocket

Attention	Ne jamais utiliser un équipement de réseau sans fil à proximité d'un détonateur non blindé ou dans un lieu présentant des risques d'explosion, sauf si l'équipement a été modifié à cet effet
Warnung	Benutzen Sie Ihr drahtloses Netzwerkgerät nicht in der Nähe ungeschützter Sprengkapseln oder anderer explosiver Stoffe, es sei denn, Ihr Gerät wurde eigens für diesen Gebrauch modifiziert und bestimmt.
Avvertenza	Non utilizzare la periferica di rete senza fili in prossimità di un detonatore non protetto o di esplosivi a meno che la periferica non sia stata modificata a tale proposito.
Advarsel	Ikke bruk den trådløse nettverksenheten nært inntil uisolerte fenghetter eller i et eksplosivt miljø med mindre enheten er modifisert slik at den tåler slik bruk.
Aviso	Não opere o dispositivo de rede sem fios perto de cápsulas explosivas não protegidas ou num ambiente explosivo, a não ser que o dispositivo tenha sido modificado para se qualificar especialmente para essa utilização.
¡Advertencia!	No utilizar un aparato de la red sin cable cerca de un detonador que no esté protegido ni tampoco en un entorno explosivo a menos que el aparato haya sido modificado con ese fin.
Varning!	Använd inte den trådlösa nätverksenheten i närheten av oskyddade tändhattar eller i en explosiv miljö om inte enheten modifierats för att kunna användas i sådana sammanhang.

Antenna Installation Warning

⚠ Warning	In order to comply with FCC radio frequency (RF) exposure limits, antennas should be located at a minimum of 7.9 inches (20 cm) or more from the body of all persons.
Waarschuwing	Om te voldoen aan de FCC radiofrequentie (RF) blootstellingslimieten dienen antennes zich minstens 20 cm of meer van de lichamen van alle personen bevinden.
Varoitus	FCC:n antamien radiotaajuuksille altistumista koskevien rajoitusten mukaan antennien on sijaittava vähintään 20 cm:n päässä kaikista henkilöistä.
Attention	Pour se conformer aux limites d'exposition à la fréquence radio préconisées par la FCC (Federal Communications Commission), les antennes doivent se situer à un minimum de 20 cm de toute personne.
Warnung	Um die in den FCC-Richtlinien festgelegten Expositionshöchstgrenzen für Radiofrequenzen (RF) nicht zu überschreiten, sollten Antennen mindestens 20 cm entfernt von Personen aufgestellt werden.
Avvertenza	Per conformarsi ai limiti FCC di esposizione a radiofrequenza (RF), le antenne devono stare ad una distanza minima di 20 cm dal corpo di ogni persona.
Advarsel	I henhold til eksponeringsgrensene for radiofrekvenser (RF), skal antenner befinne seg på en avstand av minst 20 cm eller mer fra mennesker.
Aviso	Para estar de acordo com as normas FCC de limites de exposição para freqüência de rádio (RF), as antenas devem estar distantes no mínimo 20 cm (7,9 pol) do corpo de qualquer pessoa.

¡Advertencia!	Para cumplir con los límites de exposición de radio frecuencia (RF) de la Comisión Federal de Comunicaciones (FCC) es preciso ubicar las antenas a un mínimo de 20 cm (7,9 pulgadas) o más del cuerpo de las personas.
Varning!	För att följa FCC-exponeringsgränserna för radiofrekvens (RF), bör antenner placeras på minst 20 cm avstånd från alla människor.

Power Source Warning

⚠ **Warning**	This product must be connected to a Power over Ethernet (PoE) IEEE 802.3af compliant power source or an IEC60950 compliant limited power source.
Waarschuwing	Dit product moet worden verbonden met een stroomvoorziening die compatibel is met PoE (Power over Ethernet) IEEE 802.3af of een beperkte stroomvoorziening die compatibel is met IEC60950.
Varoitus	Tämä tuote on liitettävä PoE (Power over Ethernet) IEEE 802.3af - yhteensopivaan virtalähteeseen tai IEC60950-yhteensopivaan rajoitettuun virtalähteeseen.
Attention	Ce produit doit être connecté à une source d'alimentation électrique par câble Ethernet (PoE) conforme à la norme IEEE 802.3af ou à une source d'alimentation limitée conforme à la norme IEC60950.
Warnung	Dieses Produkt muss entweder an eine Stromquelle angeschlossen sein, die mit dem IEEE 802.3af-Standard Power over Ethernet (PoE) kompatibel ist oder an eine Stromquelle für geringe Leistungen, die IEC60950-kompatibel ist.
Avvertenza	Questo prodotto deve essere connesso a una fonte di alimentazione di tipo PoE (Power over Ethernet) conforme a IEEE 802.3af o a una fonte di alimentazione conforme a IEC60950.
Advarsel	Dette produktet må være koblet til en Power over Ethernet (PoE) IEEE 802.3af-kompatibel strømkilde eller en IEC60950-kompatibel begrenset strømkilde.
Aviso	Este produto tem de estar ligado a uma fonte de alimentação compatível com a norma IEEE 802.3af, também conhecida pela sigla Power over Ethernet (PoE), ou a uma fonte de alimentação limitada compatível com a norma IEC60950.
¡Advertencia!	Debe conectar este producto a una fuente de alimentación sobre ethernet (PoE) conforme con el estándar IEEE 802.3af, o a una fuente limitada conforme con el estándar IEC60950.
Varning!	Denna produkt måste vara ansluten till en PoE IEEE 802.3af-kompatibel strömkälla eller en IEC60950-kompatibel begränsad strömkälla.
Figyelem	Ezt a készüléket vagy az IEEE 802.3af szabványnak megfelelő, a tápellátást Etherneten keresztül kapó (power-over-ethernet, PoE) tápforráshoz, vagy az IEC60950 szabványnak megfelelő, korlátozott tápforráshoz kell csatlakoztatni.
Предупреждение	Это устройство может быть подключено к источнику питания для подачи питания по сети Ethernet (PoE), удовлетворяющему требованиям стандарта IEEE 802.3af, или источнику питания ограниченного применения, удовлетворяющему требованиям стандарта IEC60950.
警告	本产品必须连接到以太网供电型（Power-Over-Ethernet，简称PoE）IEEE802.3af 电源或 IEC60950 限制型电源。

bluesocket 🔊

警告	この製品はPoE方式のIEEE 802.3af対応の電源またはIEC60950対応の制限電源に接続してください。

Work During Lightning Activity Warning

Warning	Do not work on the system or connect or disconnect cables during periods of lightning activity.
Waarschuwing	Tijdens onweer dat gepaard gaat met bliksem, dient u niet aan het systeem te werken of kabels aan te sluiten of te ontkoppelen.
Varoitus	Älä työskentele järjestelmän parissa äläkä yhdistä tai irrota kaapeleita ukkosilmalla.
Attention	Ne pas travailler sur le système ni brancher ou débrancher les câbles pendant un orage.
Warnung	Arbeiten Sie nicht am System und schließen Sie keine Kabel an bzw. trennen Sie keine ab, wennes gewittert.
Avvertenza	Non lavorare sul sistema o collegare oppure scollegare i cavi durante un temporale con fulmini.
Advarsel	Utfør aldri arbeid på systemet, eller koble kabler til eller fra systemet når det tordner eller lyner.
Aviso	Não trabalhe no sistema ou ligue e desligue cabos durante períodos de mau tempo (trovoada).
¡Advertencia!	No operar el sistema ni conectar o desconectar cables durante el transcurso de descargas eléctricas en la atmósfera.
Varning!	Vid åska skall du aldrig utföra arbete på systemet eller ansluta eller koppla loss kablar.
Figyelem	Villámlás közben ne dolgozzon a rendszeren, valamint ne csatlakoztasson és ne húzzon ki kábeleket!
Предупреждение	Не следует работать с устройством, а также подключать или отключать кабели во время грозы.
警告	请勿在发生雷电时操作系统，也不要在此期间连接或断开电缆。
警告	雷が発生しているときは、システムに手を加えたり、ケーブルの接続や取り外しを行わないでください。

Installation Instruction Warning

Warning	Read the installation instructions before connecting the system to the power source.
Waarschuwing	Raadpleeg de installatie-instructies voordat u het systeem op de voedingsbron aansluit.
Varoitus	Lue asennusohjeet ennen järjestelmän yhdistämistä virtalähteeseen.
Attention	Avant de brancher le système sur la source d'alimentation, consulter les directives d'installation.

Warnung	Vor dem Anschließen des Systems an die Stromquelle die Installationsanweisungen lesen.
Avvertenza	Consultare le istruzioni di installazione prima di collegare il sistema all'alimentatore.
Advarsel	Les installasjonsinstruksjonene før systemet kobles til strømkilden.
Aviso	Leia as instruções de instalação antes de ligar o sistema à fonte de energia.
¡Advertencia!	Lea las instrucciones de instalación antes de conectar el sistema a la red de alimentación.
Varning!	Läs installationsanvisningarna innan du kopplar systemet till strömförsörjningsenheten.
Figyelem	Mielőtt áramforráshoz csatlakoztatná a rendszert, olvassa el az üzembe helyezési útmutatót!
Предупреждение	Перед подключением устройства к источнику электропитания ознакомьтесь с данной инструкцией по установке.
警告	在将系统与电源连接之前，请仔细阅读安装说明。
警告	必ず設置手順を読んでから、システムを電源に接続してください。

Circuit Breaker (20A) Warning

⚠ Warning	This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 20A.
Waarschuwing	Dit product is afhankelijk van de installatie van het gebouw voor beveiliging tegen kortsluiting (overstroom). Controleer of de beschermingsinrichting niet meer dan: 20A is.
Varoitus	Tämä tuote on riippuvainen rakennukseen asennetusta oikosulkusuojauksesta (ylivirtasuojauksesta). Varmista, että suojalaitteen mitoitus ei ole yli: 20A.
Attention	Pour ce qui est de la protection contre les courts-circuits (surtension), ce produit dépend de l'installation électrique du local. Vérifiez que le courant nominal du dispositif de protection n'est pas supérieur à : 20A.
Warnung	Dieses Produkt ist darauf angewiesen, dass im Gebäude ein Kurzschluss- bzw. Überstromschutz installiert ist. Stellen Sie sicher, dass der Nennwert der Schutzvorrichtung nicht mehr als: 20A beträgt.
Avvertenza	Questo prodotto dipende dall'impianto dell'edificio per quanto riguarda la protezione contro cortocircuiti (sovracorrente). Assicurarsi che il dispositivo di protezione non abbia un rating superiore a: 20A.
Advarsel	Dette produktet er avhengig av bygningens installasjoner av kortslutnings (overstrøm)-beskyttelse. Påse at verneenheten ikke er merket høyere enn: 20A.
Aviso	Este produto depende das instalações existentes para proteção contra curto-circuito (sobrecarga). Assegure-se de que o fusível ou disjuntor não seja superior a: 20A.

bluesocket

¡Advertencia!	Este equipo utiliza el sistema de protección contra cortocircuitos (o sobrecorrientes) del edificio. Asegúrese de que el dispositivo de protección no sea superior a: 20A.
Varning!	Denna produkt är beroende av i byggnaden installerat kortslutningsskydd (överströmsskydd). Kontrollera att skyddsanordningen inte har högre märkvärde än: 20A.
Figyelem	**A termék védelmi rendszerének része az épület kábelezésébe épített rövidzárlat (túláram) elleni védelem is. Gondoskodjon róla, hogy a készüléket védő eszköz legfeljebb a következő áramerősségre legyen méretezve:** **20A**
Предупреждение	Защита устройства от короткого замыкания (перегрузки) осуществляется с помощью оборудования, являющегося частью электропроводки здания. Убедитесь, что номинал защитного устройства не превышает: 20A
警告	此产品的短路（过载电流）保护由建筑物的供电系统提供。确保短路保护设备的额定电流不大于： 20A
警告	この製品は、設置する建物にショート（過電流）保護機構が備わっていることを前提に設計されています。保護装置の定格が以下の値を超えないことを確認してください。 20A