Wall or Ceiling

Plastic Anchors

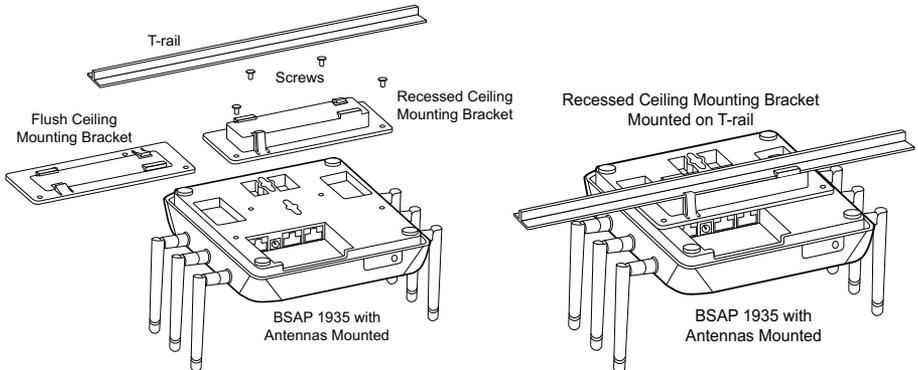Mounting Screws

Keyed Slots

BSAP 1935 with
Anetnnas Mounted

MOUNTING THE BSAP TO A DROPPED CEILING

BSAPs should be positioned for maximum throughput and range between other APs and wireless client devices.The BSAP 1930/1935 ships with plastic flush and recessed ceiling mounting brackets (T-rail kits) to mount the BSAP on the ceiling tile separators of standard and recessed dropped ceilings. Following these instructions to mount the BSAP to a dropped ceiling:

1. Attach either the flush or recessed ceiling mounting bracket to the back of the BSAP using the included mounting screws.

T-rail

Screws

Flush Ceiling
Mounting Bracket

Recessed Ceiling
Mounting Bracket

BSAP 1935 with
Antennas Mounted

Recessed Ceiling Mounting Bracket
Mounted on T-rail

BSAP 1935 with
Antennas Mounted

2. For the BASP 1935 only: Install the antennas (sold separately) onto the appropriate antenna ports. The antenna ports are labeled **2.4G** and **5G.**
3. Once the mounting bracket is attached to the BSAP, align the mounting bracket at a slight angle to the T-rail. Slide the long bracket tabs onto the T-rail and rotate slightly until the flexible bracket tabs snap into place.
4. Optionally protect your BSAP with a Kensington cable lock (not provided) inserted in the security slot.

SUPPLYING POWER TO THE BSAP

The BSAP 1930/1935 does not have a power switch. It is powered when connected to a network device that supplies PoE based on the IEEE 802.3af standard, an optional external PoE injector (P/N 1700923F1), or by an optional external 2 amp DC power adapter (P/N 1700928F1) connected to an AC power source. Although the BSAP 1930/1935 is fully functional using 802.3af PoE, it also supports 802.3at. To use the external DC power adapter, connect the adapter to the **12V DC** port on the

back of the unit. The DC power adapter automatically adjusts to any voltage between 100 and 240 VAC at 50 or 60 Hz. No voltage range settings are required.

> **CAUTION**
> - *If the BSAP is used in a medical environment, it must use an IEC/EN 60601-1 compliant power adapter.*
> - *Ethernet and PoE cables are intended for intrabuilding use only. Connecting this device directly to cables that run outside the building in which the unit is housed will void the user's warranty and could create a fire or shock hazard.*

If the BSAP is to be powered using a network device such as a switch, connect the Ethernet port of the BSAP to the appropriate switchport. Obtain the IP address of the BSAP from the Dynamic Host Control Protocol (DHCP) server (based on the MAC address of the BSAP). DHCP is enabled by default. You can then use a Secure Shell (SSH) client to connect to the BSAP based on the instructions below.

If the BSAP is powered using a PoE injector, connect the Ethernet port of the BSAP to the **OUT** port of the PoE injector and connect the Ethernet port of the computer to the **IN** port on the PoE injector. Then proceed to SSH to the default IP address of the BSAP as instructed below.

If the BSAP is powered using the optional DC power adapter, connect the Ethernet port of the BSAP to the Ethernet port of the computer. Then proceed to SSH to the default IP address of the BSAP as instructed below.

CONFIGURING THE BSAP WITH VWLAN AND AP DISCOVERY

The BSAP 1930/1935 can be configured for use with the Bluesocket virtual wireless local area network (vWLAN). If you have installed vWLAN, and want to use AP discovery to configure the BSAP, follow these steps. For more information on the vWLAN and AP discover, refer to the *vWLAN AP Discovery* configuration guide available online at https://supportforums.adtran.com.

1. After powering the BSAP and connecting it to the network, allow the BSAP to discover the vWLAN appliance to receive its configuration information. This AP discovery process uses an algorithm that attempts discovery methods in this order: static configuration, Dynamic Host Control Protocol (DHCP) vendor option (43), Domain Naming System (DNS) discovery, and cached vWLAN information. If no response to the discovery request is received, the algorithm moves to the next method in the list (except when using static configuration, which never queries the other discovery methods).

2. There are two additional network components that can be configured to facilitate AP discovery. First, an external DHCP server can be configured to assign IP addresses to APs associated with the vWLAN. When configuring the DHCP server, make sure to configure the Bluesocket DHCP Vendor option (**43**) on the server. Second, you can configure an external DNS server to resolve the name **apdiscovery** to the IP address of the vWLAN in the network environment.

CONFIGURING THE BSAP'S IP ADDRESS USING THE CLI

By default, DHCP is enabled on the BSAP 1930/1935. However, if you need to statically configure the IP address or statically configure AP discovery for the BSAP, you can access the AP's CLI using either a VT100 terminal emulation program or an SSH client.

To access the AP CLI using a VT100 terminal emulation program, follow these steps:

1. Connect a DB-9 to RJ-45 serial cable (rollover cable) to the AP's **CONSOLE** port, and connect the other end of the serial cable to the PC.

2. Open a VT100 terminal emulation program with the following settings: **115,200** data rate, **8** data bits, no parity bits, and **1** stop bit (no flow control). Select **<Enter>** to access the CLI.

3. At the prompt, enter the user name **adm1n** and the password **blue1socket**.

To access the AP CLI using an SSH client, follow these steps:

1. Ensure that the BSAP is connected to a controlling computer (using the provided RJ-45 Ethernet cable).

2. Specify that the computer's TCP/IP setting is **On** or **Enabled** by navigating to **Control Panel** > **Network Connections** and double-clicking the connection of your network interface card. Select **Internet Protocol (TCP/IP)** and select **Properties**. Then specify that the TCP/IP setting is enabled.

3. Set your PC to a static IP address of **192.168.190.2** with a subnet mask of **255.255.255.0**.

4. Next, access the BSAP's command line interface (CLI) using an SSH client. Open an SSH connection using the unit's default IP address (**192.168.190.1**) and port 2335 connected to the **LAN1** port on the BSAP. To access the unit using vWLAN, and for more instructions about CLI configuration, refer to the *Bluesocket vWLAN Administrator's Guide*, available online at https://supportforums.adtran.com.

> **NOTE**
> *The BSAP 1930/1935 also includes a LAN2 port. In the initial release of the BSAP 1930/1935, this port is disabled, but it will be enabled in a future release. Check the BSAP 1930/1935 release notes for the current state of this port.*

CONFIGURING THE APPLICATION

More detailed documentation for configuring the BSAP 1930/1935 is provided in the *vWLAN Administrator's Guide*, available online at https://supportforums.adtran.com.

BSAP 1930/1935 LED DESCRIPTION

BSAP State	Status ⏻	Ethernet 1	Ethernet 2	Radio 2.4G	Radio 5G
Boot Loader Initialization	Off	Off	Off	Solid Green	Solid Green
Operating System Initialization	Solid Green	Off	Off	Off	Off
LAN Initialization	Flashing Green	Flashing Orange	Off	Off	Off
Discovering vWLAN	Flashing Green	Flashing Green	Off	Off	Off
Firmware Upgrade (Download)	Flashing Orange (Slow)	Flashing Green	Off	N/A	N/A
Firmware Upgrade (writing or verifying)	Flashing Orange (Fast)	Flashing Green	Off	N/A	N/A
Firmware Upgrade Complete	Solid Orange	Flashing Green	Off	N/A	N/A
Operational with No Activity on Radios	Solid Green	Flashing Green	Off	Solid Green	Solid Green
Operational with Activity on Radios	Solid Green	Flashing Green	Off	Flashing Green*	Flashing Green*

> **NOTE**
> *Flashing occurs on the radio LED that detects the activity. For example, if traffic is detected on the 2.4 GHz band, the **2.4G** LED flashes, but the **5G** LED does not.*

FCC RADIO FREQUENCY INTERFERENCE

This device complies with Part 15 of the Federal Communications Commission (FCC) rules. The operation of this device is subject to the following two conditions:
1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

THIRD-PARTY SOFTWARE

The software included in the Bluesocket 1920/1925 contains copyrighted software that is licensed under the GNU General Public License (GPL). For a list of third-party software and their licenses, go to http://www.adtran.com/software/EULA. You can obtain the complete corresponding source code of such software components from ADTRAN for a period of three years after our last shipment of this product by sending a money order or check for $5 to:

ADTRAN, Inc, P.O. Box 933638, Atlanta, GA 31193-3638

Please write *GPL Source for product Bluesocket 1930/1935* in the memo line of your payment.

This offer is valid to anyone in receipt of this information.