



# CB5 Series

Model: ENTS01, ENTS02, ENTS03, ENTS04

## Admin Guide

Installation | Configuration | Support | Maintenance | Use



**Code Blue**<sup>®</sup>

800.205.7186 • [www.codeblue.com](http://www.codeblue.com)



## WARNING

ONLY QUALIFIED PERSONNEL SHOULD INSTALL THESE UNITS. THE INSTALLATION SHOULD CONFORM TO ALL LOCAL CODES. IN SOME COUNTRIES, A CERTIFIED ELECTRICIAN MAY BE REQUIRED.

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## 2 Introduction

Thank you for choosing the **CB 5 Series** for your Code Blue application.

The **CB 5 Series** Help Points® are the original Code Blue pedestal units that set the industry standard for rugged construction, full feature availability and high visibility. The **CB 5 Series** is easily recognized throughout a full 360-degree area. The high output strobe is easily identifiable by security when activated.

The **CB 5 Series** is an excellent choice for walkways, parks, college and commercial campus areas, open landscape areas and anywhere a freestanding pedestal unit is required.

The exclusive analog InterAct and VoIP speakerphones are designed for maximum reliability, vandal resistance, auxiliary functions, mass notification control, and fault monitoring and reporting capability. (See IA4100 or IP5000 guides for more information.)

Our unmistakable craftsmanship makes our Help Points® the most rugged on the market, withstanding the punishment of natural and man-made disasters. With durable construction, our pedestal units can meet any requirement or purpose. **CB 5 Series** units have a rugged steel construction, industrial engineering grade reflective graphics and weather, UV and graffiti resistant paint.

Other options include:

- IP and analog phones
- 360° Audio Paging Speaker
- Overhead Camera Mount
- Strobe Cage
- Custom colors and graphics
- Second Opening for camera, card reader, directory, & other customizable options



#### CB5 Series Model Photos

This guide contains all of the **CB 5 Series** information. This guide contains a general overview of the **CB 5 Series** options and its applications, installation and wiring.



CB 5-s



CB 5-s  
with  
Dual Opening

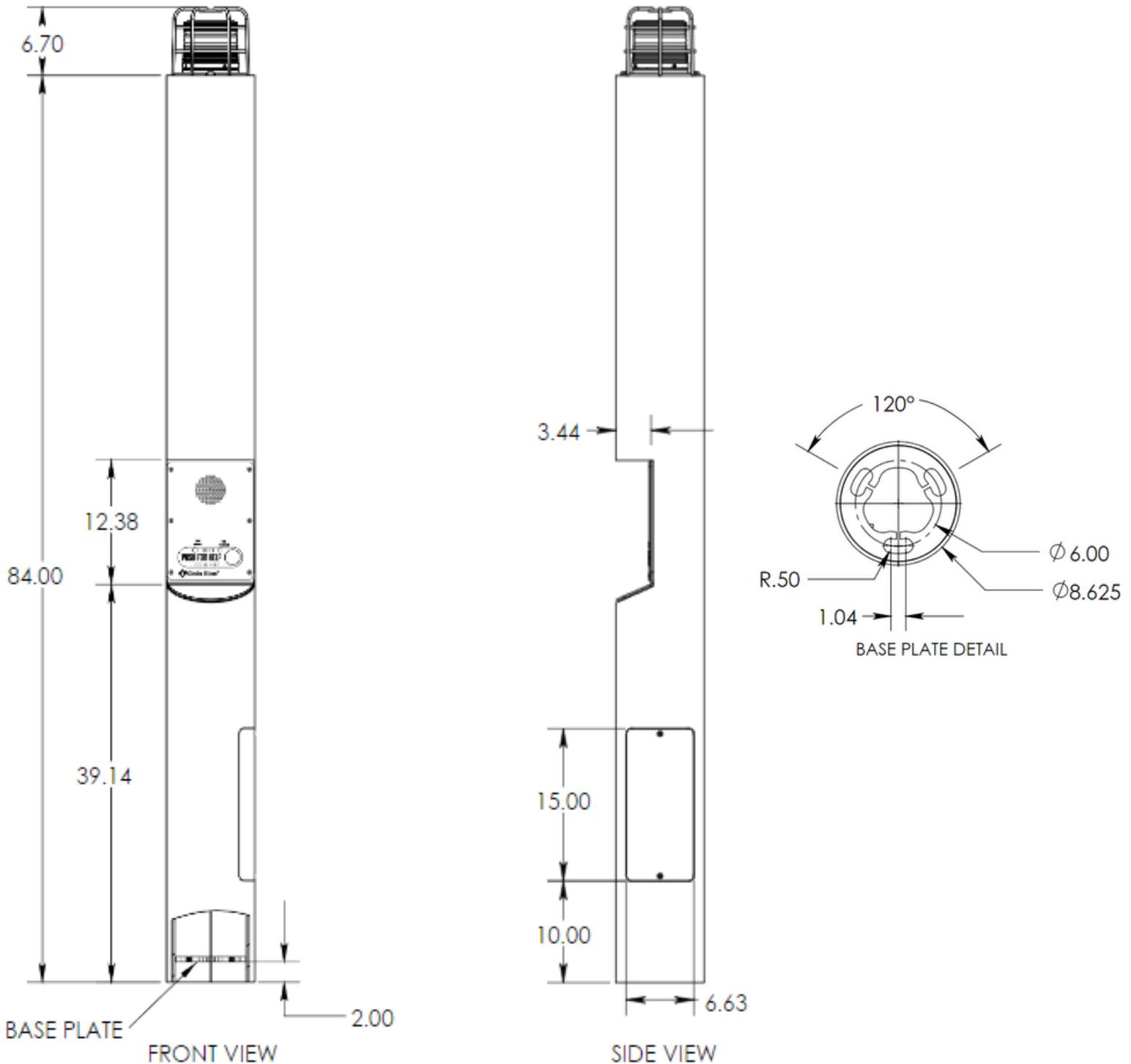


CB 5-p



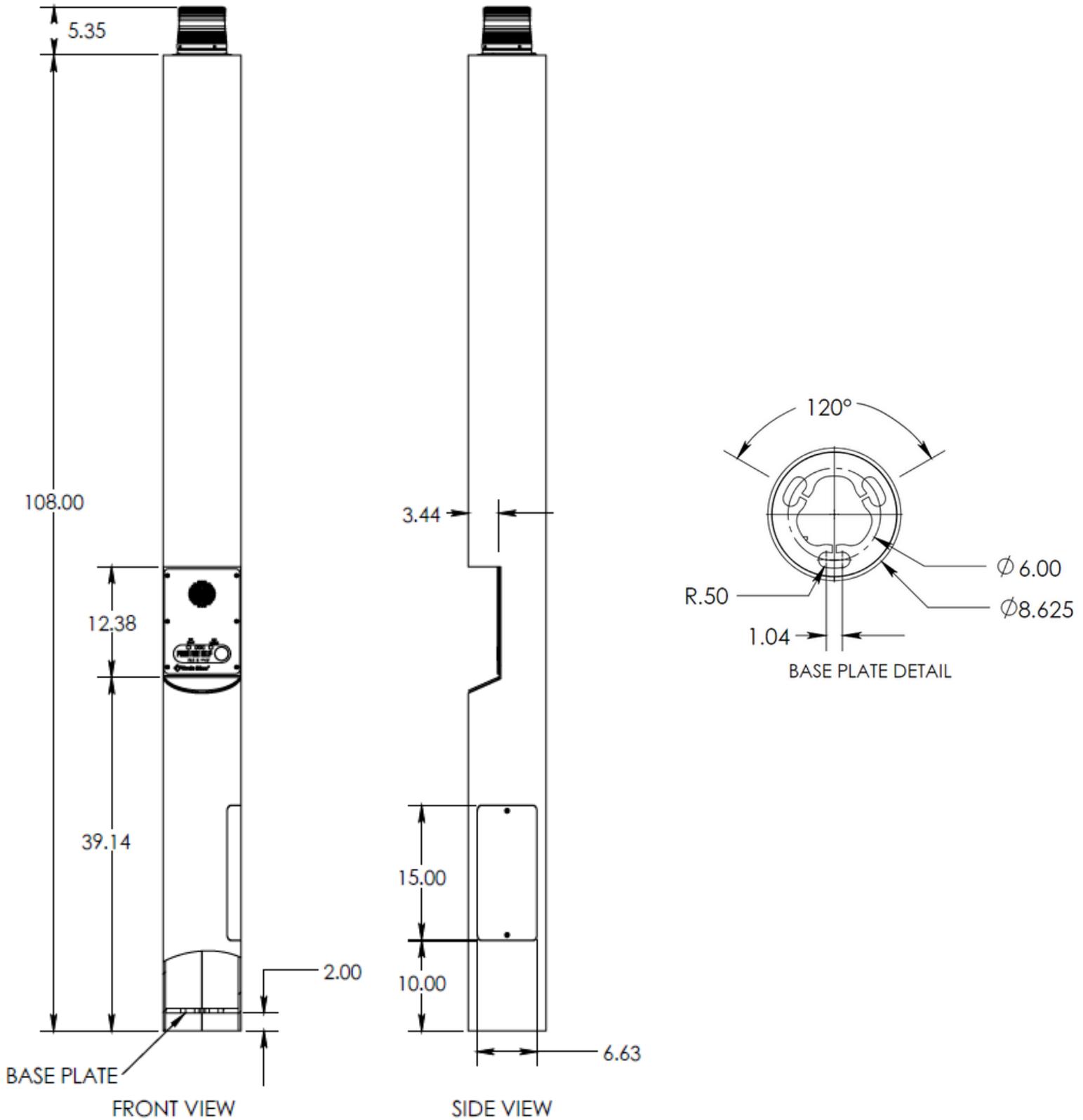
### 3 Dimensions

#### CB 5-p



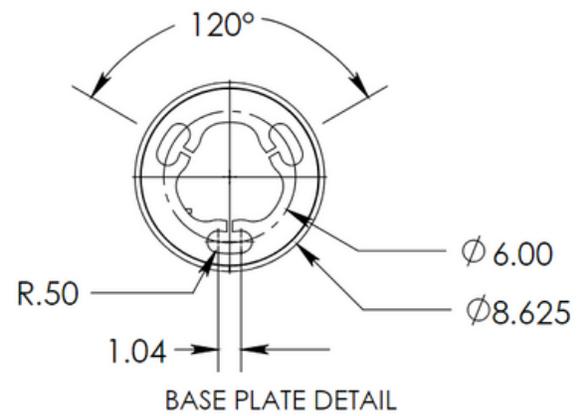
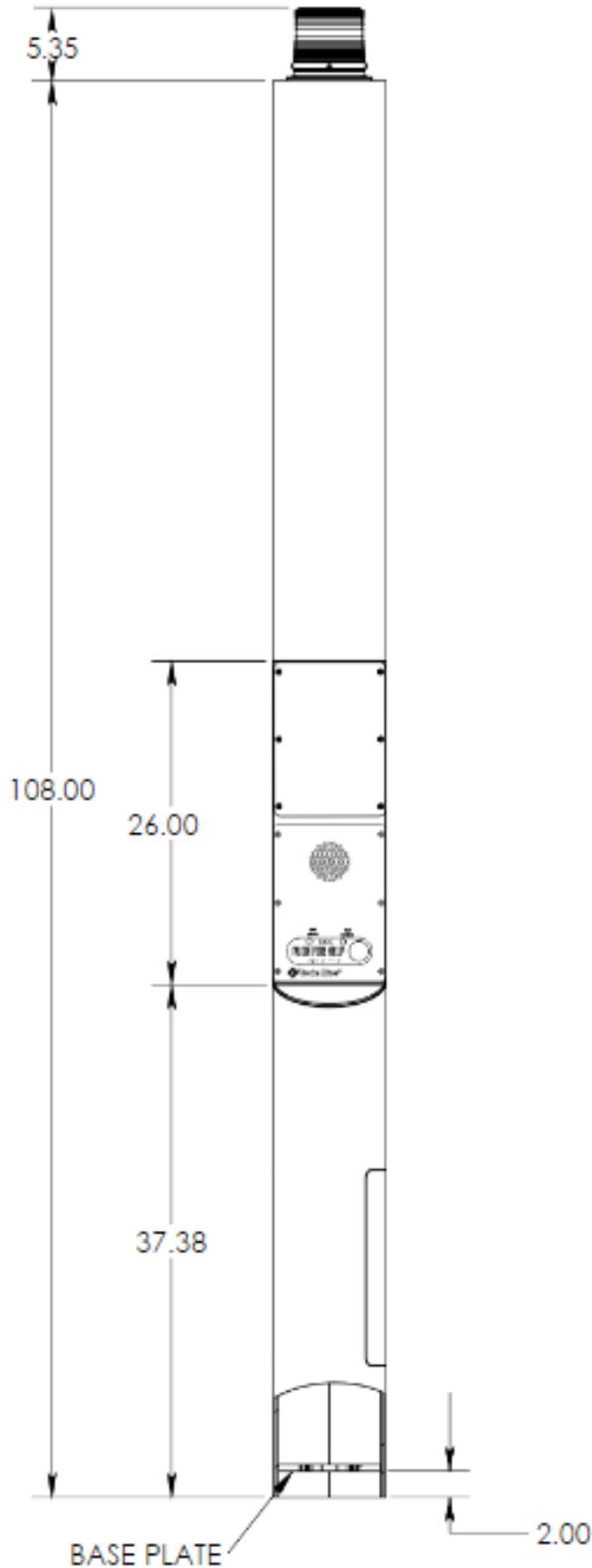


### CB 5-s





### CB 5-s with Dual Opening





## 4 Safety Information

### HAZARD LEVELS LEGEND

<b>DANGER</b>	Indicates a hazardous situation which, if not avoided, <i>will</i> result in death or serious injury.
<b>WARNING</b>	Indicates a hazardous situation which, if not avoided, <i>could</i> result in death or serious injury.
CAUTION 	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
<b>NOTICE</b>	Indicates a situation which, if not avoided, could result in damage to property.
<b>IMPORTANT</b>	Indicates significant information that is essential for proper product functionality.
<b>NOTE</b>	Indicates useful information that helps get the most out of a product.

### Safety Instructions

**WARNING** • Code Blue products shall be installed by trained professionals. The installation should conform to all local codes. In some countries, a certified electrician may be required.

- NOTICE** • When transporting a Code Blue product, use the original packaging or equivalent to prevent damage to the product.
- Code Blue products shall be used in compliance with local laws and regulations.
  - Store the Code Blue product in a dry and ventilated environment.
  - Do not install the product on unstable brackets, surfaces or walls.
  - Use only applicable tools when installing Code Blue products.
  - Do not use chemicals, caustic agents, steel wool or aerosol cleaners other than those tested and recommended by Code Blue.
  - Use only accessories that comply with technical specifications of the product. These can be provided by Code Blue or a third party.
  - Use only spare/replacement parts provided by or recommended by Code Blue.

### Transportation

**NOTICE** • When transporting a Code Blue product, use the original packaging or equivalent to prevent damage to the product.



## 5 Installation Instructions

### Getting Started

#### Important Notes:

- EIA/TIA, ANSI, CSA and BICSI cabling or similar standards shall be adhered to for proper operation of Code Blue communication devices connected to copper or fiber infrastructures communications cable and electrical cable in the same conduit is not an acceptable installation and shall not be supported. Analog phones require a minimum of 23mA for proper operation (26-29mA recommended).
- Each analog speakerphone requires its own phone line or PBX extension. Multiple units shall not be supported.
- Speakerphones require programming before operation. Consult the speakerphone's Administrator Guide for instructions.
- If you are installing IP speakerphones, please read the appropriate manuals and consult with your Network Administrator.
- Size electrical wiring based on length of run.



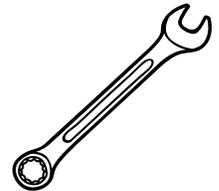
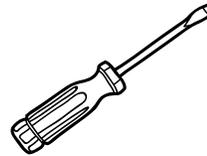
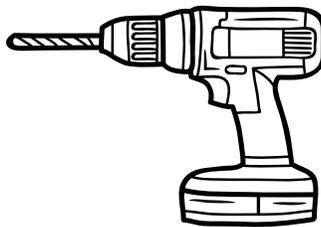
## Tools Needed

### CB 5-s & CB 5-p Tools Required

- Ladder to reach the top of the units
- Drill and security bit for removing and inserting security screws on phone, dome top and access door
- 1-1/8" socket set and extension for installing anchor bolts or Deck Mount Kits
- Phillips head screwdriver and flat head screwdriver

### CB 5-s with Audio Paging and/or Overhead Camera Mount Tools Required

- Ladder to reach the top of the units
- Drill and security bit for removing and inserting security screws on phone and access door
- 1-1/8 socket set and extension for installing anchor bolts
- Phillips head screwdriver and flat head screwdriver
- 3/8" socket set to mount the mounting plate containing the new toroid transformer
- 6mm Allen Wrench small black for adapter ring
- 9/16" inch Wrench for painted ring bolts





### Anchor Bolt Installation Instructions

#### 1.0 FOUNDATION

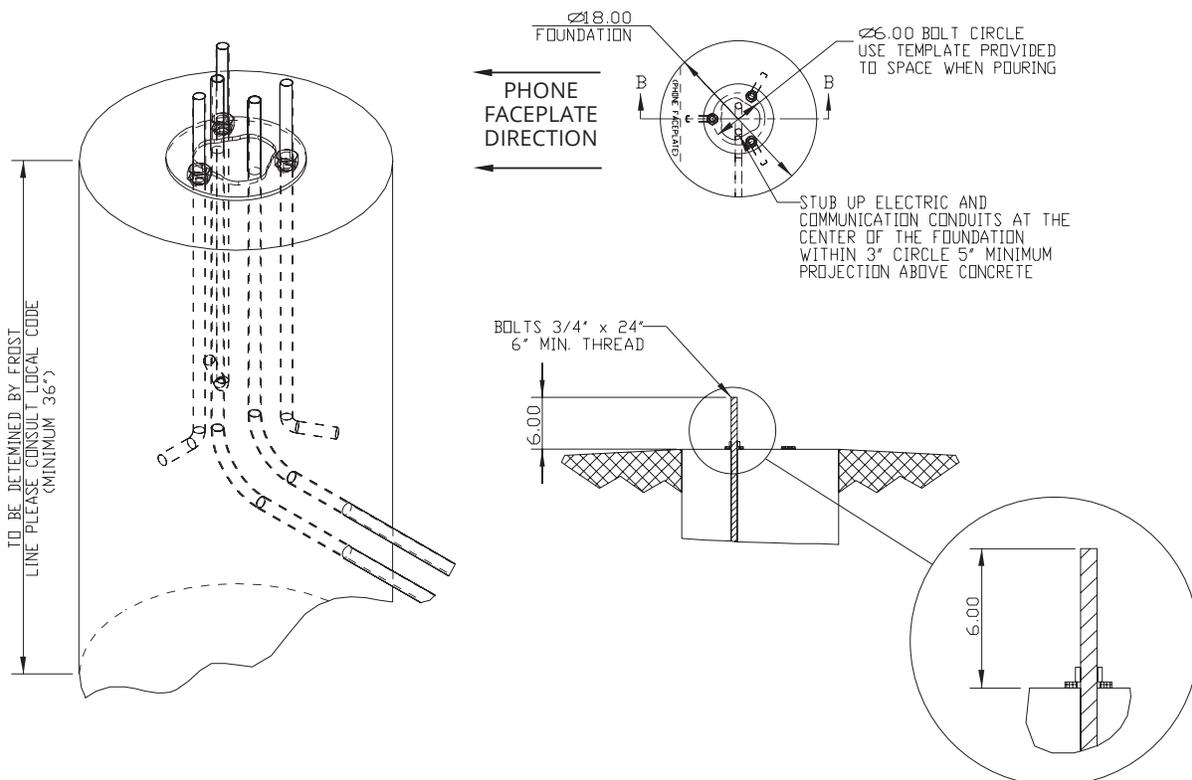
**1.1 Conduit** - Electrical and telephone line conduit, with a maximum combined diameter of three inches, should be run up through the center of the foundation hole. A minimum of four inches and a maximum of six inches of conduit above the finished grade level is required. To ensure proper grounding, a 1/2-inch x 8-foot copper rod should be inserted in the center of the foundation and tied to the steel pedestal. (NOTE: Follow all national and local codes governing this installation.)

**1.2 Pour the Foundation** - The foundation should be at least 18 inches in diameter and to the correct depth for the frost line in your area, with a minimum depth of at least three feet. (Follow your local building codes for foundations.)

**1.3 Set the Anchor Bolts in the Wet Foundation** - Three 24-inch L-shaped anchor bolts and an aligning template are supplied for anchoring the Code Blue unit. The bolts should be set into the foundation so that six inches are left showing above the finished grade level. The anchor bolts should be aligned, using the supplied template, so the phone faceplate on the unit will face in the desired direction.

#### 2.0 WIRING

**2.1 Pull power and phone line up through the conduits** - A minimum of two feet of wire must be available from the conduit for electrical and communications wiring.



**All wiring must be installed and connected by experienced and certified personnel to meet local and national electrical codes, and will include a service disconnect.**



### Deck Mount Kit Installation Instructions

*SKIP if installation does not include a Deck Mount Kit*

#### 1.0 DECK MOUNT FOUNDATION

**1.1 Drill Deck Holes**– Drill three holes through the deck or floor for the three 3/4” threaded rods. The holes should be aligned, using the template provided, so the phone faceplate on the unit will face in the desired direction (see figure below). Drill a fourth hole in the center to accommodate the conduit.

**1.2 Position Upper Deck Plate** – Position the first plate working from above the deck. Thread a nut and washer on the end of each rod so that approximately six inches extends beyond the base of the washer. Insert each rod through the top side of the plate, plate gasket, and down through the three holes in the deck. (NOTE: The top of the plate is the side with the tapered edge.)

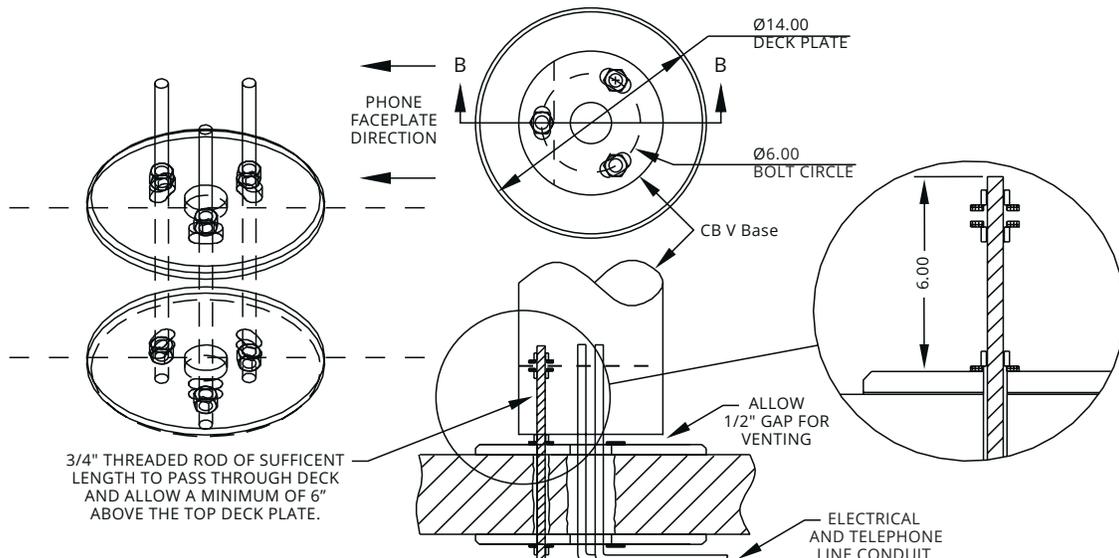
**1.3 Position Lower Deck Plate** – Position the second plate working from below the deck. Have another worker hold the upper plate and rods in place from above the deck. Place the second plate gasket and then the second plate over the threaded rods. Secure the second plate with nuts and washers provided. If required, readjust the nuts so that six inches of the rods are above the top of the upper plate. (see figure below)

**1.4 Secure Lower Nuts** – To prevent tampering, it is advisable to tack weld the lower nuts to the threaded rod.

#### 2.0 WIRING

**2.1 Pull power and phone line through conduits** – A minimum of two feet of wire must be available from the conduit for electrical and communications wiring.

**2.2 Conduit** – Electrical and telephone line conduit is run through the deck and the center openings (two inch diameter) of the upper and lower deck plates. A minimum of four inches and a maximum of six inches of conduit above the upper plate are required.



**All wiring must be installed and connected by experienced and certified personnel to meet local and national electrical codes, and will include a service disconnect.**



#### Base Gasket Installation Instructions

- Access the mounting studs through the access door on the side of the unit.



- Set the gasket on the bolts and cut a small hole where the conduit is located.
- Stretch the screen tightly around the conduit pipe. Slide the gasket over the bolts to the base of unit.



- Place the second washer on the anchor bolt and place the nut on top.
- Tighten the mounting nuts onto the anchor bolts. This may be more convenient if a long socket, extension and universal joint is used to tighten the hardware.



**\*For an extra-strong seal, a bead of silicone caulk can be put on the gasket from bolt hole to bolt hole before setting the gasket into place and around the conduit.**



## CB 5 Series Installation Instructions

### 1.0 FOUNDATION - (see Anchor Bolt Installation Instructions)

#### 2.0 SET THE UNIT

**2.1 Screw one set of nuts and washers onto the anchor bolts-** After the foundation has set, screw one set of nuts followed by one set of washers onto the anchor bolts. Set the nuts such that the lowest washer is about 2½ inches above the concrete at an even height. To accomplish this, use a small level and check all three directions. These nuts are not adjustable after the unit is in place. The bottom edge of the Code Blue unit will be ½-inch above the concrete when installed.

***IMPORTANT:** The leveling of the bottom nuts is crucial to the leveling of the unit. A small error in the adjustment of these will be magnified after installation.*

***IMPORTANT:** A ½-inch air gap is required between the foundation and the unit. Moisture problems may result if this condition is not complied with.*

**2.2 Set the Code Blue unit on the anchor bolts** - Align the phone plate in the desired direction, then lift the Code Blue unit over the anchor bolts. Note that the unit weighs 180-220 pounds. Use appropriate lifting materials and methods to avoid possible injury and/or damage.

**2.3 Secure the Code Blue unit** - Access the mounting studs through the door on the side of the unit and tighten the mounting nuts onto the anchor bolts. This may be more convenient if a long socket, extension and universal joint is used to tighten the hardware.

#### 3.0 INSTALL COMBINATION BEACON/STROBE

**3.1 Gasket** - Place the strobe gasket on top of the pedestal.

**3.2 Connect the Cables** - Plug the wires from the beacon/strobe into the mating plug at the top of the pedestal.

**3.3 Fasten the beacon/strobe** - Using the supplied screws, fasten the beacon/strobe to the top of the pedestal (If a beacon/strobe guard is being used, it should be installed at this time).

**NOTE:** The screw threads for the beacon/strobe (and strobe guard) are factory treated to be water tight. If these screws are removed, they must be retreated before being reinstalled.

#### 4.0 WIRING

**4.1 Ground** - The ground (green) wire should be stripped and fastened to the supplied grounding lug.

**4.2 24V AC supply** - Bring the power connection into the bollard and, using the proper crimping tool, attach the incoming power wires to the appropriate black and red manifold wires or 24V fuse block.

**4.3 120, 240 & 277 AC supply** - Bring the incoming power into the junction box on the multi-voltage power supply. Using the proper crimping process, attach and fasten each of the incoming power wires to the appropriate wires in the junction box following the voltage schematic shown on the power supply.

*See diagrams next page*

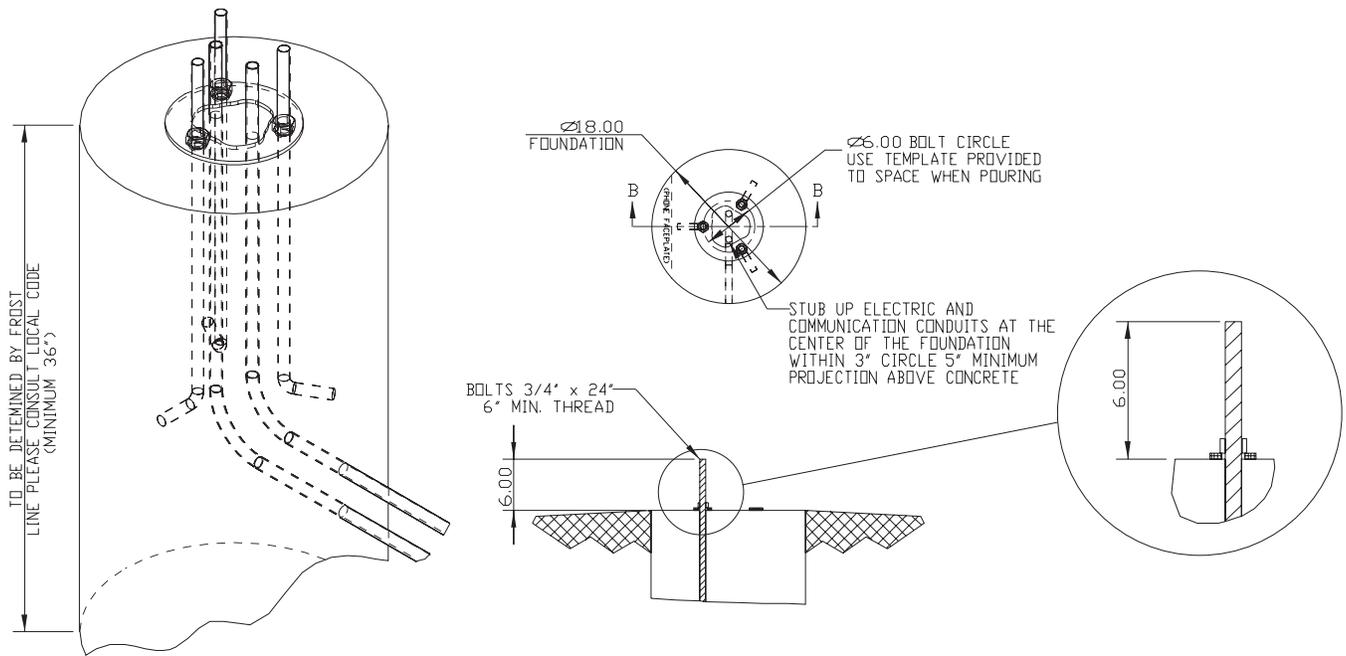


Figure 1

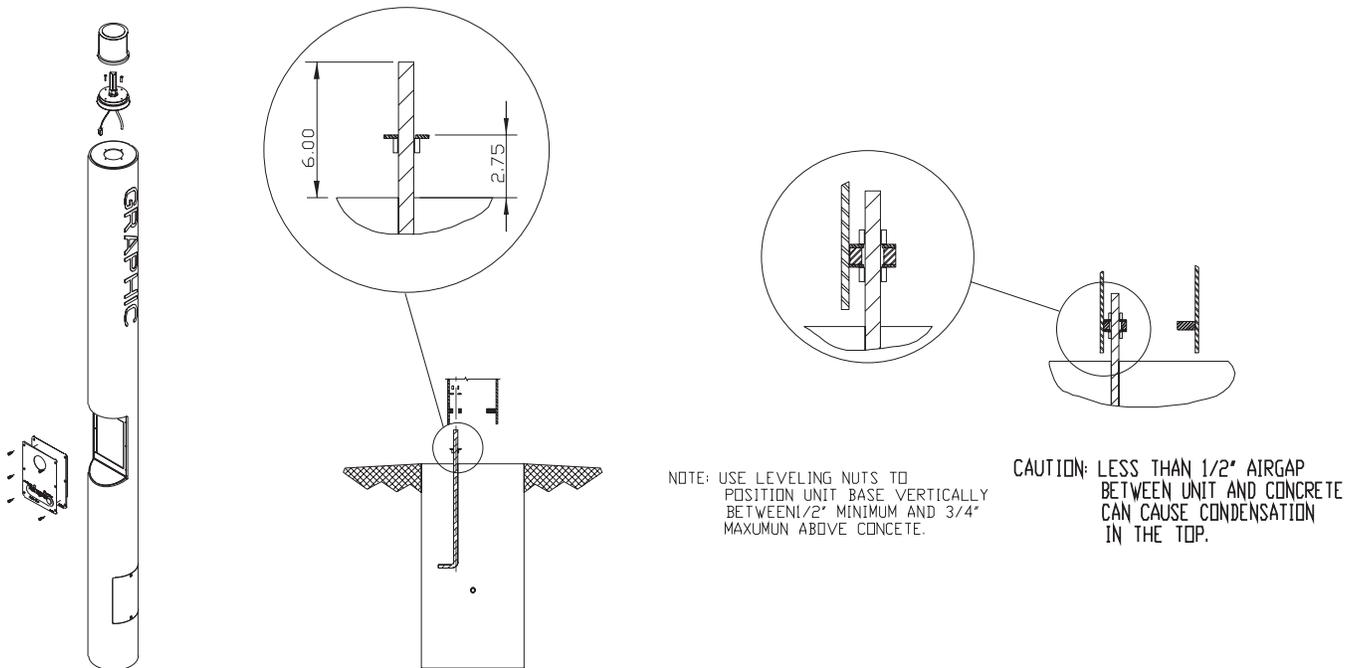


Figure 2

**All wiring must be installed and connected by experienced and certified personnel to meet local and national electrical codes, and will include a service disconnect.**



## Overhead Camera Mount Installation Instructions

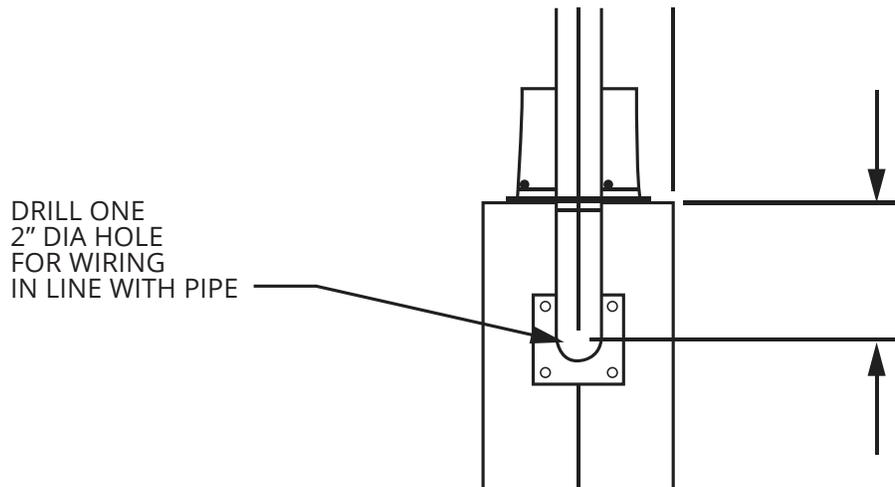
### INSTALLING THE OVERHEAD CAMERA MOUNT

The camera mount will come with a gasket already mounted to the bracket on the arm. Place the bracket over the mounting holes and insert the four 3/8-16 X 1 stainless bolts. (The 3/8" stainless steel bolts should have one stainless steel washer and one rubber washer.) Verify the camera mount is evenly positioned to ensure the gasket seal is properly seated. Tighten the bolts with your 3/8" wrench in a crisscross pattern to ensure even pressure until it is snug against the outside of the pedestal.

### INSTALLING THE CAMERA

Camera and wiring (supplied by others) is installed into the male 1½ NPT.

**NOTE:** If you are retrofitting an existing unit, the Overhead Camera Mount must be set in the desired position on the side of the bollard with the four holes marked for drilling and tapping. Once the holes are marked, they will need to be drilled and tapped to receive the 3/8" course thread stainless steel bolts. A 2" hole will need to be drilled out of the center of the four holes for the camera wiring. (Mount bracket on the opposite side of the phone opening, lining up with the center of the phone opening.)





## 360° Audio Paging Speaker Installation Instructions

- **Tools Required**

- Ladder - to reach the top of the unit.
- Security bit - to secure the Audio Paging top to the adapter ring.
- 3/8" socket set - to secure the Audio Paging adapter base to the top of the unit.
- 6mm Allen wrench - to secure the Audio Paging adapter ring to the top of the Audio Paging adapter base.

**Before You Begin: Remove 120V AC power from the unit.**

- **Existing Beacon Strobe Removal**(See [Figure 6](#) below for referenced components)

- Remove the 3 beacon strobe mounting screws from the top of the unit.
- Raise the beacon strobe assembly upwards & disconnect the red/black and yellow/yellow wiring harnesses connected to the beacon/strobe.

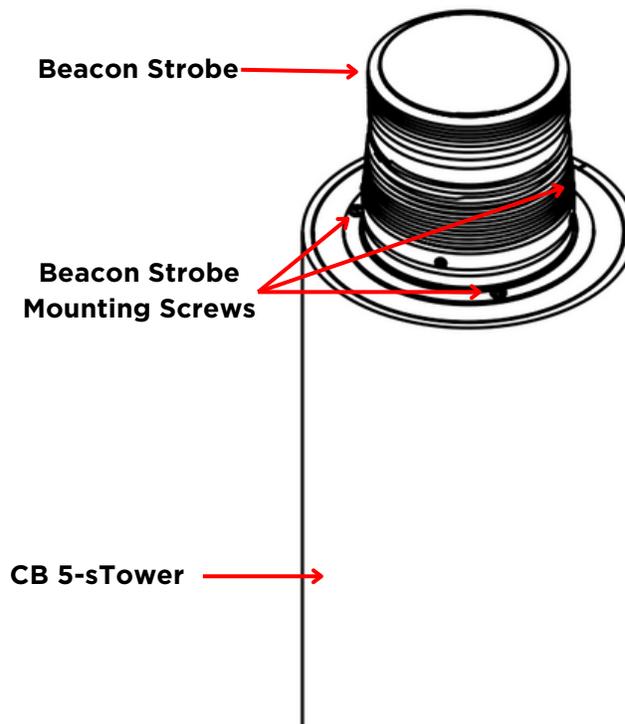


Figure 6

(Continued on next page)



- **Install CB5 Series Audio Paging Top Adapter Ring** (See [Figure 7](#) below for component references)
  - Place foam gasket on top of the CB5 unit.
  - Align the Audio Paging Adapter Ring over the gasket, matching up the holes with the the threaded holes in the tower.
  - Insert and tighten the three 3/8" bolts to secure the Adapter Ring to the CB5 Tower.

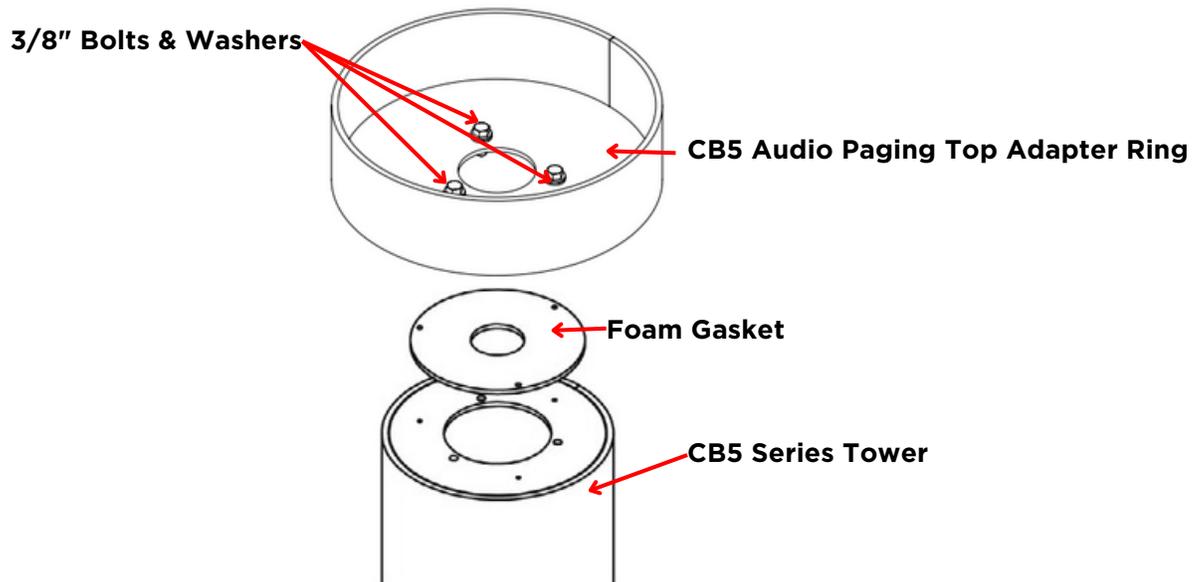
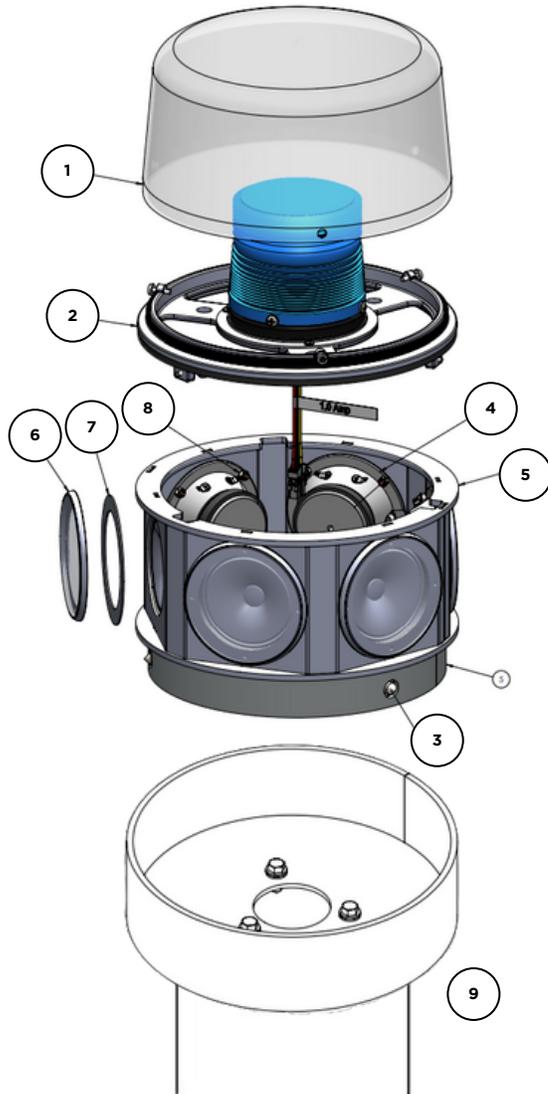


Figure 7

- **Install 360° Audio Paging Top** (See [Figure 8](#) on the following page for component references)
  - Insert the Audio Paging Top Housing into the CB 5 Audio Paging Adapter Ring.
  - Ensure the paging top is aligned properly and level. Reach through the housing, tighten the 3 set screws into the side wall of the adapter ring using the required Allen wrench.
  - Connect all amp and lighting wiring harnesses as detailed in the Wiring Diagrams section of this Guide and the CB5 Admin Guide, based on your product's configuration.
  - After all wiring is properly and securely connected, place the beacon strobe assembly on top of the audio paging housing, making sure to properly align the dome top casting with the coordinating notches in the paging housing. Once in place, secure the beacon strobe assembly to the paging housing using the 3 thumb screws provided.
  - Place the dome top lens over the beacon strobe assembly, aligning the holes with the threaded screw holes located on the dome top casting.
  - Secure the dome top lens into place, using the 3 provided security screws.
  - Reapply power to the unit.



#	Component	Qty
1	Dome Top Lens	1
2	Beacon Strobe Assembly	1
3	Set Screws	3
4	Speaker	6
5	Audio Paging Top Speaker Housing	1
6	Speaker Grille	6
7	Nylock Nut	24
8	Speaker Gasket	6
9	CB5 Tower w/ AP Adapter Ring	1

Figure 8

## Important Update: 360° Audio Paging Speaker Array for CB5 Towers

In August 2023, due to changes in the global supply chain market impacting component availability, Code Blue discontinued its use of the 360° Audio Paging Speaker Array that had been in place since 2017 and installed on CB1 & CB5 tower units. This change comes with not only cosmetic differences, but technical specifications as well. For additional questions regarding this new speaker array configuration, please contact Code Blue Technical Support at [technicalsupport@codeblue.com](mailto:technicalsupport@codeblue.com) or call 800-205-7186, Opt. 3.



**Current 360° Audio Paging System**  
for CB1 & CB5 Series - Produced after August, 2023.



**Legacy 360° Audio Paging System**  
for CB1 & CB5 Series - Produced prior to August 2023.

	<b>Current 360° Audio Paging System</b>	<b>Legacy 360° Audio Paging System</b>
<b>Required Incoming Voltage</b>	12V DC @ 4 Amp	120V AC @ 4 Amp
<b>Speaker Array Material</b>	Carbon Steel	ABS Plastic
<b>Impedance</b>	8 Ohms	5.3 Ohms
<b>Frequency Range</b>	450 Hz - 8000 Hz	450 Hz - 7000 Hz

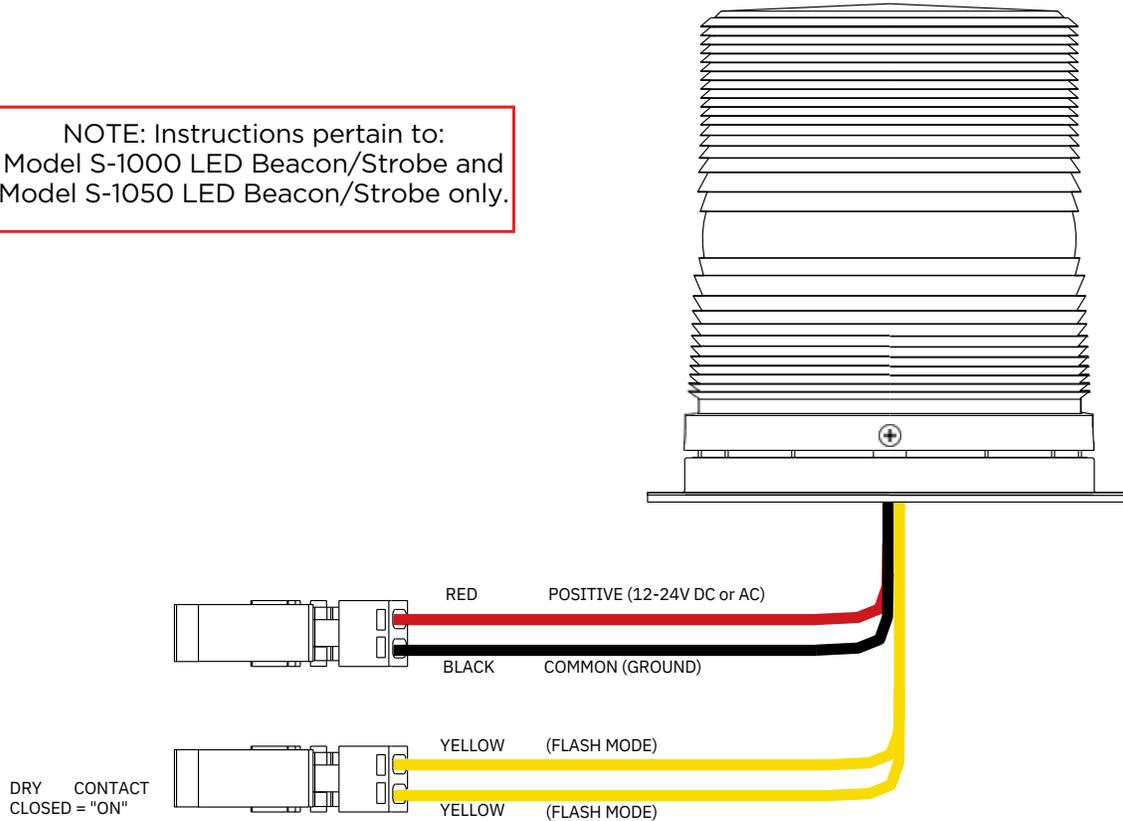
For full product specifications, see A&E Specifications Sheet #AE-0126.



## 6 Beacon Strobe Operation & Programming

### S-1000 & S-1050 Strobe Operation

NOTE: Instructions pertain to:  
Model S-1000 LED Beacon/Strobe and  
Model S-1050 LED Beacon/Strobe only.



**CAUTION** ⚠️ **REMOVE ALL POWER FROM UNIT BEFORE SERVICING.**

#### OPERATION

To activate the LEDs in the PRIMARY-STEADYBURN MODE, connect the BLACK and RED wires to 12-24 volts AC or DC.

When in PRIMARY-STEADYBURN MODE, to change the LEDs to SECONDARY-FLASH MODE, connect both YELLOW control wires together (i.e., CLOSED = ON).

#### PHOTOCELL FEATURE (S-1050 MODEL)

The Steadyburn Mode will be ON in dark or night ambient environments and OFF in bright or daylight ambient environments. The S-1050 LED Beacon/Strobe has two built-in photo response features: (a) dawn/dusk transition delay of 15-30 minutes and (b) transient light acknowledgement delay of at least 3 minutes.



### PROGRAMMING PRIMARY & SECONDARY MODES

1. Remove power from unit.
2. Short the Yellow wires together.
3. Restore power to the unit and wait until the unit begins to flash. Once the unit begins to flash, remove the short. The unit will alternately demonstrate the Secondary-Flash Mode and Primary-Steadyburn Mode that will be displayed during operation. For approximately 4 seconds the Secondary-Flash Mode will be demonstrated, followed by the Primary-Steadyburn Mode.
4. To select the next mode of operation, momentarily short the yellow wires. The unit will cycle to the next mode in the list above.

Mode Number	Primary-Steadyburn Mode	Secondary-Flash Mode
1	High	Single - 60 FPM
2	OFF	Single - 60 FPM
3	Low	Single - 60 FPM
4	High	Single - 150 FPM
5	OFF	Single - 150 FPM
6	Low	Single - 150 FPM
7	High	Single - 375 FPM
8	OFF	Single - 375 FPM
9	Low	Single - 375 FPM
10	High	Neobe - 75
11	OFF	Neobe - 75
12	Low	Neobe - 75
13	High	Neobe - 150
14	OFF	Neobe - 150
15	Low	Neobe - 150
16	High	Double - 125
17	OFF	Double - 125
18	Low	Double - 125
19	High	Double - 250
20	OFF	Double - 250
21	Low	Double - 250

5. There are seven Flash Modes and three Steadyburn Modes combinations to choose from.
6. When you reach the desired mode of operation, remove power from the unit. You MUST leave power disconnected for 20 seconds BEFORE reapplying. When power is reapplied, the unit will operate as programmed above.

**NOTE: If you do not leave power disconnected for 20 seconds before reapplying power, the light will default to Program Mode.**

<b>INPUT VOLTAGE RANGE: 12-24V AC or DC</b>		
<b>TEMPERATURE RATING: -40°C to +65°C (-40°F to 149°F)</b>		
<b>TYPICAL POWER CONSUMPTION AT 25°C</b>		
Voltage Flash Mode		Steady Mode - High
12V DC	0.24 A Max	0.24 A
24V DC	0.12 A Max	0.12 A
12V AC	1.1 A rms Max	0.53 A rms
24V AC	0.22 A rms Max	0.22 A rms
NOTE: Average current draw in Flash Mode will vary by selected Flash mode. The above maximum amperage draw is stated at Single 60 FPM.		



## 7 Cellular Router & Antenna Installation

Code Blue offers Cellular Communication kits that are compatible with the **CB 5-p** & **CB 5-s** models. Whether you are retrofitting an existing tower or installing a new unit, the instructions below will assist in the proper placement and setup of these components.

### Cellular Kit Contents

- Cellular Router
- 4G/LTE or 5G/LTE Antenna
- Hanger Plate
- Power Supply

### Antenna Installation

- CB5 Series units ordered with a cellular antenna will come with the antenna pre-installed. If retrofitting an existing CB5 Series unit, drilling a 7/8" hole into the Overhead Camera Mount Cap or into the side of the tower will be required.



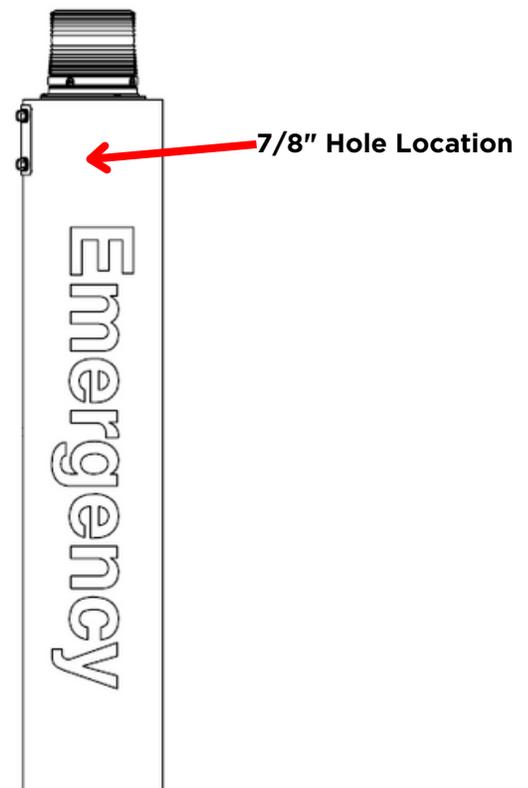
Cellular Antenna

### Overhead Camera Mount Plate Location



7/8" Hole Location

### Side of CB 5 Tower Location

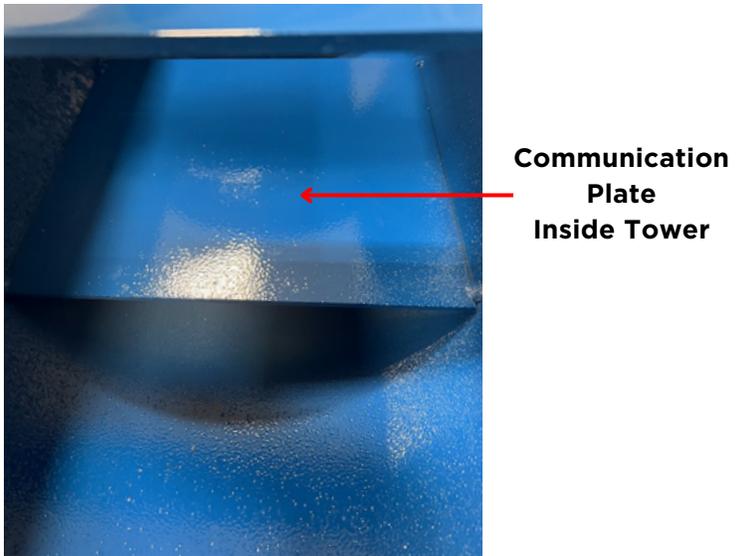
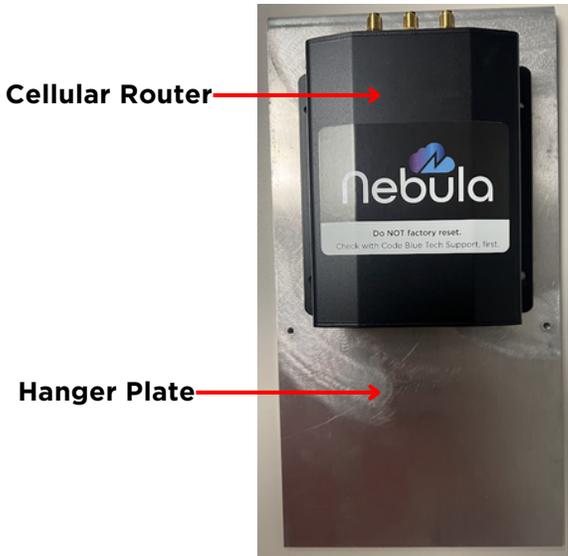


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- **Cellular Router Installation**

- The cellular router is mounted to the included hanger plate via double sided industrial hook & loop material or by drilling & tapping screw holes in the plate. Once attached to the hanger plate, the hanger plate is installed inside the tower, by hanging it on the pre-installed communication plate located across from the speakerphone opening.



**Router & Hanger Plate Installed on Communication Plate**

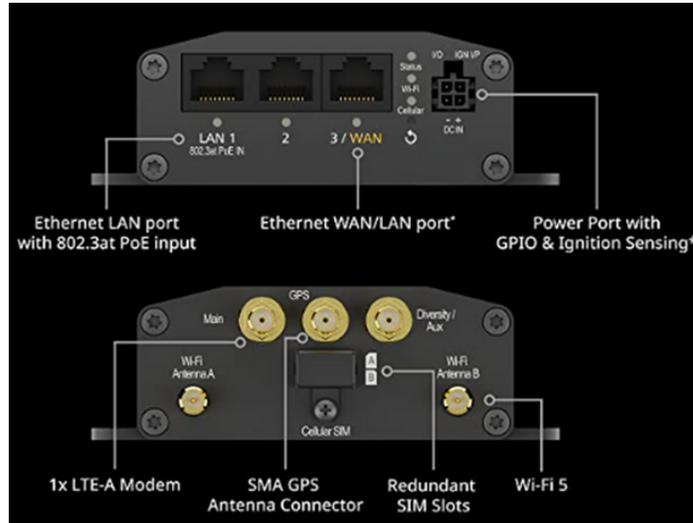


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#### • Antenna Wiring

- Connect the GPS Antenna to the GPS SMA port on the Cellular Router.
- Connect the LTE Antennas to the “Main” SMA port and the “Diversity/AUX” SMA port on the Cellular Router.



#### • Cellular Router Power

- The Cellular Router requires 12-24V DC to operate. Connect the supplied power supply cable to the “DC IN” port on the router. Connect the opposite end of the power supply cable to the proper incoming voltage.

#### • Connection to Faceplate Speakerphone

*Note: Disconnect power from the Faceplate Speakerphone before proceeding with the following steps.*

- Using a Cat5e or higher rated ethernet patch cable, connect the LAN 1 port on the router to the WAN/PoE port of your VoIP Faceplate Speakerphone.
- Prior to reconnecting power to the speakerphone, ensure that the Cellular Router has fully booted up, which is indicated by a solid green “status” LED on the router.
- Reapply power to the Faceplate Speakerphone.



**Cellular Router Status Light**

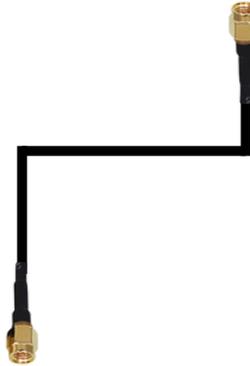
- If all steps are followed and components are installed correctly, the system would appear as pictured in the wiring diagram on the following page.

**IMPORTANT NOTE:** Once installation and connections are completed, please call Code Blue Technical Support at 800-205-7186, Option 3 to complete the configuration of your cellular services. This step **MUST** be taken to properly activate and utilize your services as the unit will not be fully functional until then.



### Cellular Antenna

(Installed on Overhead Camera Mount Plate or on the side of the tower)



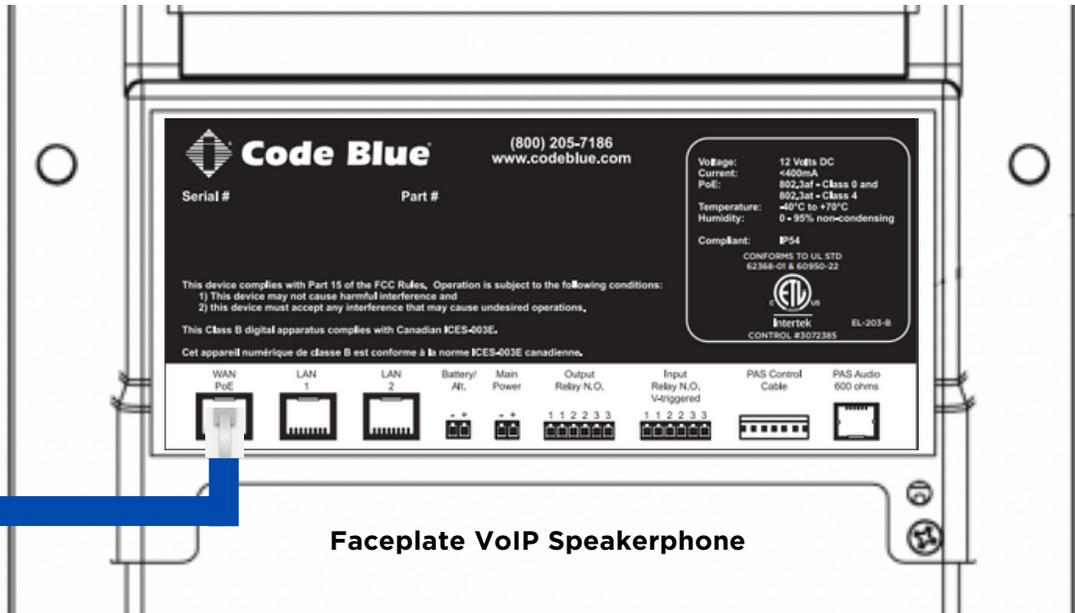
### Cellular Router



### Power Supply Cable 12-24V DC Incoming



Cat5e/Cat6



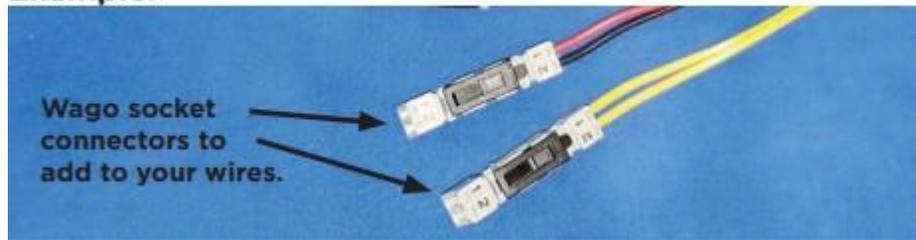
### Faceplate VoIP Speakerphone



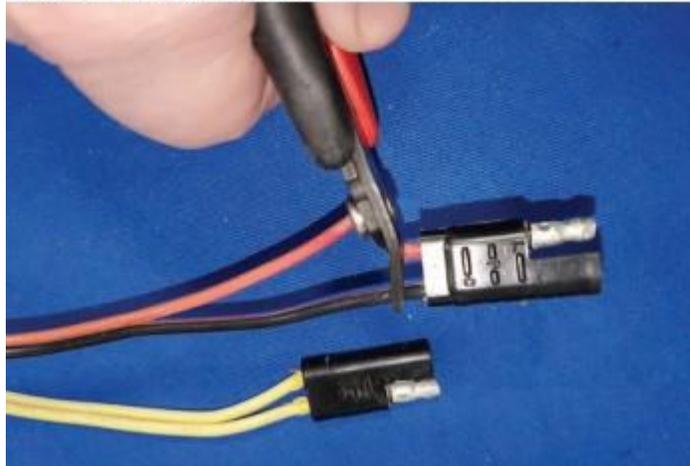
## 8 How to Update Connectors

As of 2020, many Code Blue products come with Wago connectors. These connectors provide ease of use and a much stronger connection. Below are the steps needed to change to the new connectors.

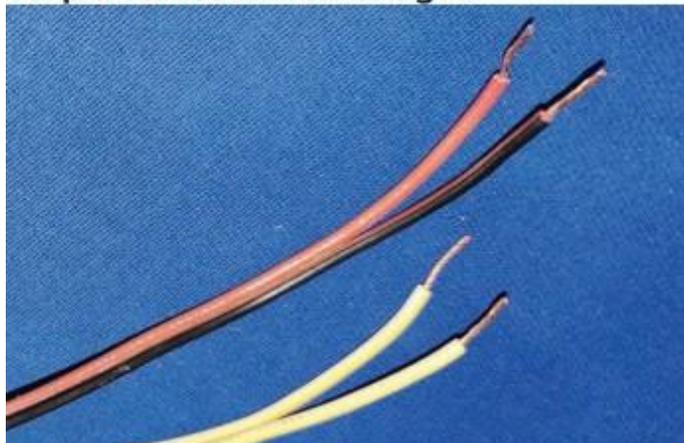
### Example:



### Cut off both wires.



### Strip all wires and twist tight.





**Place small screwdriver into square hole and push down. Insert cut wire into round hole and remove screwdriver. Repeat on the rest of the connectors.**



**Once all connectors have been switched, you are ready to apply power.**





## 9 Power Requirements

The following tables on pages 30-33 include **CB5** and ALL OTHER Code Blue devices & enclosures for reference.

Faceplates	Voltage	Max Current	Max Watts	Norm Current	Norm Watts	KWHrs
<b>IA4100</b>	24V AC	0.40	9.60	0.22	5.28	0.13
	12V DC	0.90	10.80	0.39	4.68	0.11
	24V DC	0.90	21.60	0.39	9.36	0.22
<b>IP5000</b>	24V AC	0.10	2.40	0.07	1.68	0.04
	12V DC	0.19	2.28	0.15	1.80	0.04
	24V DC	0.19	4.56	0.15	3.60	0.09
<b>Centry</b>	12VDC	0.50	6.00	0.38	4.56	0.11
<b>LS1000/LS2000</b>	12V DC	0.50	3.60	0.40	4.80	0.12
Lights	Voltage	Max Current	Max Watts	Norm Current	Norm Watts	KWHrs
<b>s-1000/S-2000 LED Strobe</b>	24V AC	0.28	6.72	0.22	5.28	0.13
	12V DC	0.26	3.12	0.24	2.88	0.07
	24V DC	0.26	6.24	0.24	5.76	0.14
<b>A-700 Area Light</b>	24V AC	1.80	43.20	0.83	19.92	0.48
	12V DC	2.68	32.16	0.38	4.56	0.11
	24V DC	2.68	64.32	0.38	9.12	0.22
<b>S-1050 LED Strobe W/ Photocell</b>	24V AC	0.28	6.72	0.22	5.28	0.13
	12V DC	0.27	3.22	0.24	2.88	0.07
	24V DC	0.27	6.43	0.24	5.76	0.14
<b>LED Light Bar</b>	24V AC	0.04	0.96	0.04	0.96	0.02
	12VDC	0.04	0.48	0.04	0.48	0.01
	24V DC	0.04	0.96	0.04	0.96	0.02
<b>WM180 PAS With LED Strobe</b>	12-24V DC	7.30	175.20	2.10	50.40	1.21



Models With IA4100 Faceplate	Voltage	Current	Watts	KWHrs
<b>CB 1-e</b>	24V AC	0.48	11.52	0.28
	12VDC	0.67	8.04	0.19
	24V DC	0.67	16.08	0.39
<b>CB 1-s</b>	24V AC	1.31	31.44	0.75
	12V DC	1.05	12.60	0.30
	24V DC	1.05	25.20	0.60
<b>CB 5-s</b>	24V AC	0.48	11.52	0.28
	12V DC	0.67	8.04	0.19
	24V DC	0.67	16.08	0.39
<b>CB 9-s</b>	24V AC	0.26	6.24	0.15
	12V DC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
<b>CB 2-e</b>	24V AC	0.44	10.56	0.25
	12VDC	0.63	7.56	0.18
	24V DC	0.63	15.12	0.36
<b>CB 2-a</b>	24V AC	0.48	11.52	0.28
	12V DC	0.67	8.04	0.19
	24V DC	0.67	16.08	0.39
<b>CB 2-s</b>	24V AC	1.31	31.44	0.75
	12V DC	1.05	12.60	0.30
	24V DC	1.05	25.20	0.60
<b>CB 2 w/ Audio Paging</b>	12-24V DC	6.44	154.56	3.71
<b>CB 4-s</b>	24V AC	0.22	5.28	0.13
	12V DC	0.39	4.68	0.11
	24V DC	0.39	9.36	0.22
<b>CB 4-r</b>	24V AC	0.26	6.24	0.15
	12V DC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
<b>CB 4-u</b>	24V AC	0.26	6.24	0.15
	12V DC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
<b>CB 6-F &amp; CB 6-S</b>	24V AC	0.22	5.28	0.13
	12V DC	0.39	4.68	0.11
	24V DC	0.39	9.36	0.22
<b>CB RT</b>	24V AC	0.48	11.52	0.28
	12V DC	0.67	8.04	0.19
	24V DC	0.67	16.08	0.39



Models With IP5000 Faceplate	Voltage	Current	Watts	KWHrs
<b>CB 1-e</b>	24V AC	0.33	7.92	0.19
	12VDC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
<b>CB 1-s</b>	24V AC	1.16	27.84	0.67
	12V DC	0.81	9.72	0.23
	24V DC	0.81	19.44	0.47
<b>CB 5-s</b>	24V AC	0.33	792.00	0.19
	12V DC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
<b>CB 5-s</b>	24V AC	0.11	2.64	0.06
	12VDC	0.19	2.28	0.05
	24V DC	0.19	4.56	0.11
<b>CB 2-e</b>	24V AC	0.29	6.96	0.17
	12V DC	0.39	4.68	0.11
	24V DC	0.39	9.36	0.22
<b>CB 2-a</b>	24V AC	0.33	7.92	0.19
	12VDC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
<b>CB 2-s</b>	24V AC	1.16	27.84	0.67
	12V DC	0.81	9.72	0.23
	24VDC	0.81	19.44	0.47
<b>CB 2 w/ Audio Paging</b>	12-24V DC	6.44	154.56	3.71
<b>CB 4-S</b>	24V AC	0.07	1.68	0.04
	12V DC	0.15	1.80	0.04
	24V DC	0.15	3.60	0.09
<b>CB 4-r</b>	24V AC	0.11	2.64	0.06
	12VDC	0.19	2.28	0.05
	24V DC	0.19	4.56	0.11
<b>CB 4-u</b>	2av AC	0.11	2.64	0.06
	12VDC	0.19	2.28	0.05
	24V DC	0.19	4.56	0.11
<b>CB 6-F &amp; CB 6-S</b>	24VAC	0.07	1.68	0.04
	12V DC	0.15	1.80	0.04
	24V DC	0.15	3.60	0.09
<b>CB RT</b>	24V AC	0.33	7.92	0.19
	12V DC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25



Models with LS1000/LS2000	Voltage	Current	Watts	KWHrs
CB 1-e	12V DC	0.68	8.16	0.20
CB 1-s	12V DC	1.06	12.72	0.31
CB 5-s	12V DC	0.68	8.16	0.20
CB 9-S	12V DC	0.44	5.28	0.13
CB 2-e	12V DC	0.64	7.68	0.18
CB 2-a	12V DC	0.68	8.16	0.20
CB 2-s	12V DC	1.06	12.72	0.31
CB 4-s	12V DC	0.40	4.80	0.12
CB 4-r	12V DC	0.44	5.28	0.13
CB 4-U	12V DC	0.44	5.28	0.13
CB 6-F & CB 6-S	12V DC	0.40	4.80	0.12
CB RT	12V DC	0.68	8.16	0.20

High Voltage Models	Voltage	Current	Watts	KWHrs
CB 1 w/ Audio Paging	12-24V DC	3.83	460	11
CB 5 w/ Audio Paging	12-24V DC	3.33	400	9.6
CB 1 w/ NightCharge	120V AC	2.5	300	2.4
CB 4-U w/ NightCharge	120V AC	2.5	300	2.4

High Voltage AC Components	Voltage	Current	Watts	KWHrs
Multi-Tap Power Supply	120V AC	1.75A/210VAC	210	5.04
DIN Rail Power Supply	120V AC	1.2A/115VAC	115	2.76
Audio Paging Amp	12-24V DC	3.83	459.6	11.03



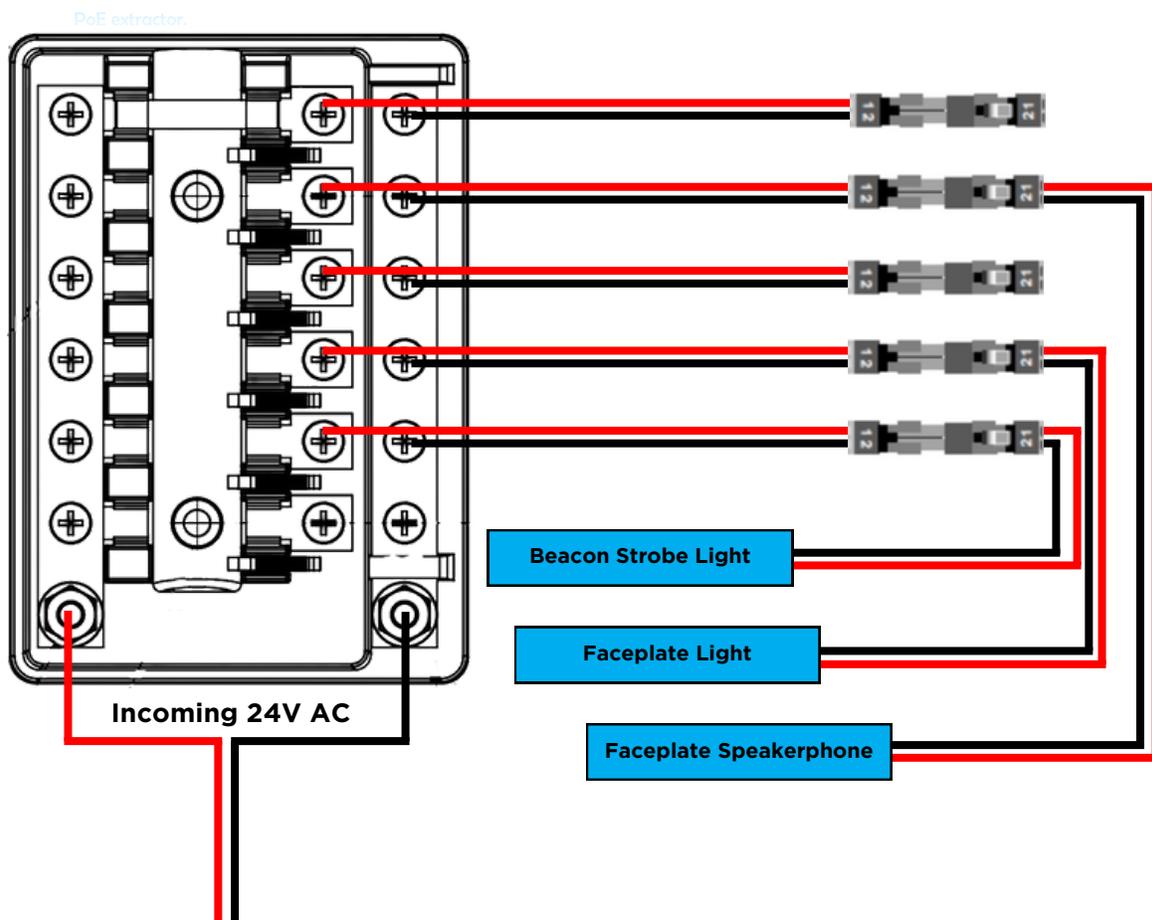
## 10 Wiring Diagrams

### CB 5-p & CB 5-s 24V AC Standard Wiring

For installations with 24V AC incoming power on site.

Used in the following configurations:

- Standard CB 5-p - No Cellular or Audio Paging Options
- Standard CB 5-s - No Cellular or Audio Paging Options





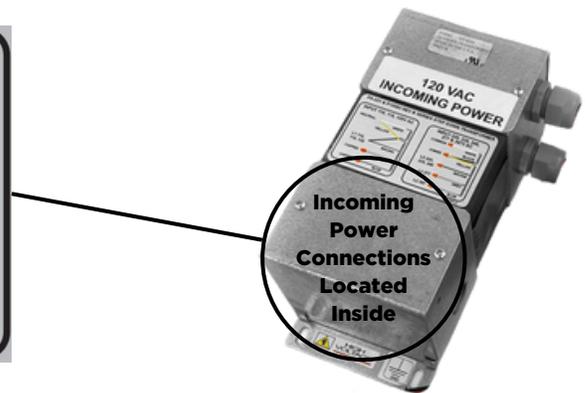
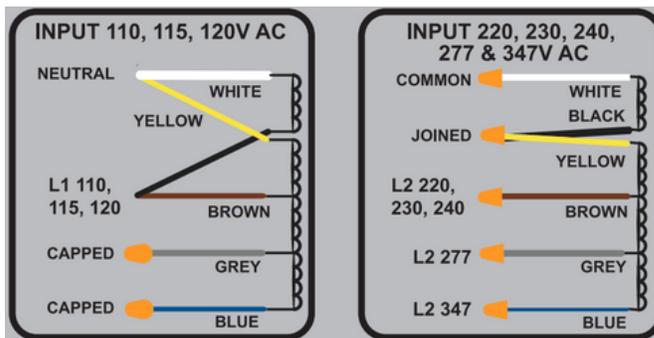
### CB 5-p & CB 5-s 110-347V AC Standard Wiring with Multi-Tap Transformer (Power Brick)

For installations with 110-347V AC incoming power on site.

Used in the following configurations:

- Standard CB 5-p - No Cellular or Audio Paging Options
- Standard CB 5-s - No Cellular or Audio Paging Options
- CB 5-p w/ Cellular Communication
- CB 5-s w/ Cellular Communication

### Incoming power connection configurations:



### Output Options:



**Red/Black Wires - 24V AC @ 5 Amps  
5 x Fused Outputs**

**Red/White Wires - 12V DC @ 5 Amps  
5 x Fused Outputs**

Fused outputs come pre-labeled to assist in connecting the following equipment:

- Faceplate speakerphone (12V DC ONLY)
- Faceplate Light
- Beacon Strobe

Remaining outputs can be used for accessory equipment selected at time of ordering.

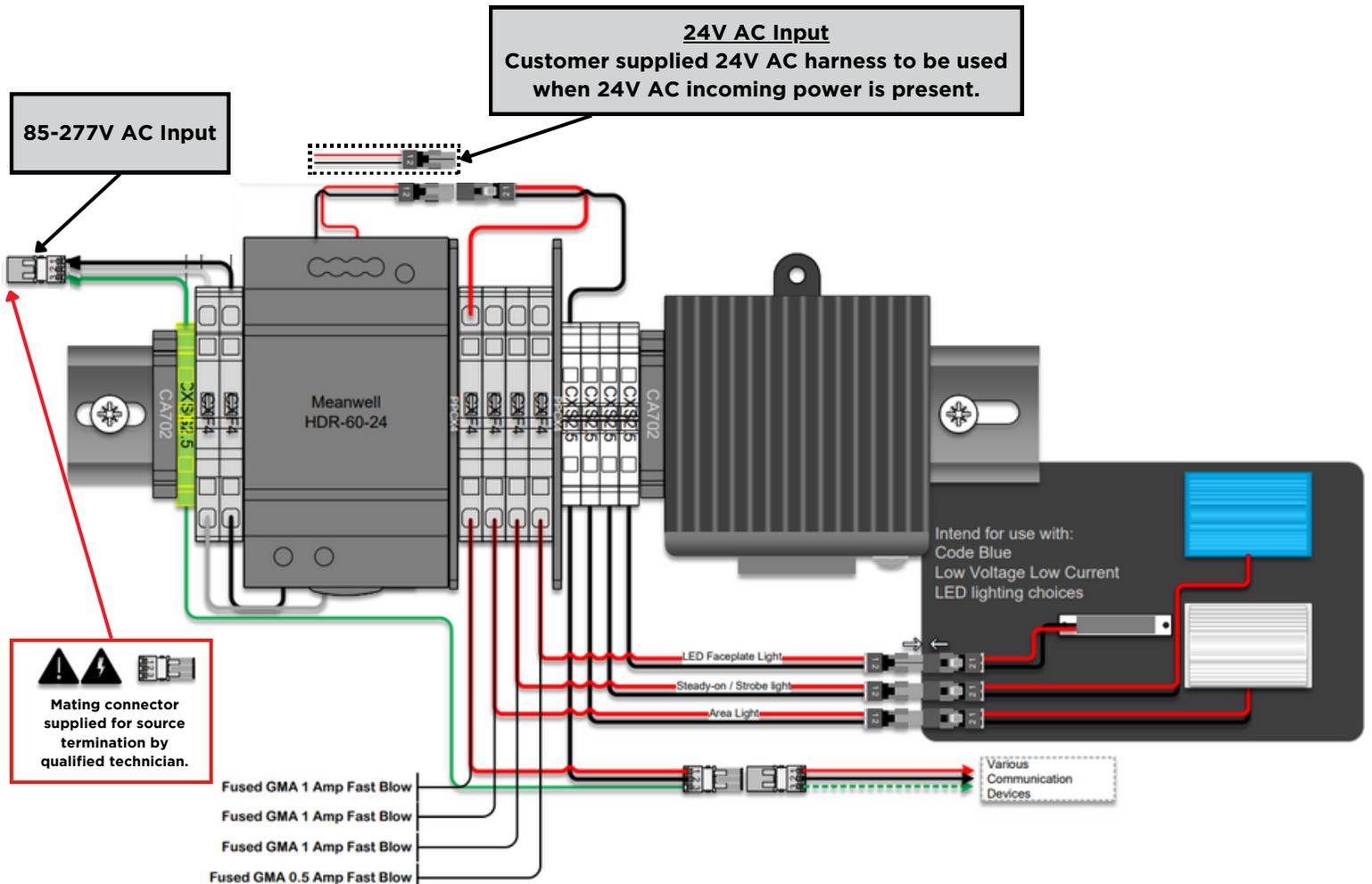


### CB 5-p & CB 5-s 24-277V AC DIN Rail Power System

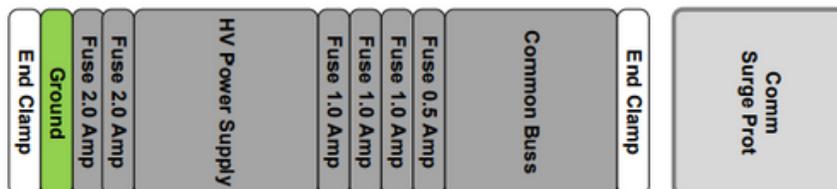
For installations with 24-277V AC incoming power on site. Provides flexibility for future power updates compared to the 24V AC only option detailed on page 25.

Used in the following configurations:

- Standard CB 5-p - No Cellular or Audio Paging Options
- Standard CB 5-s - No Cellular or Audio Paging Options
- CB 5-p w/ Cellular Communication
- CB 5-s w/ Cellular Communication



### DIN Rail Layout



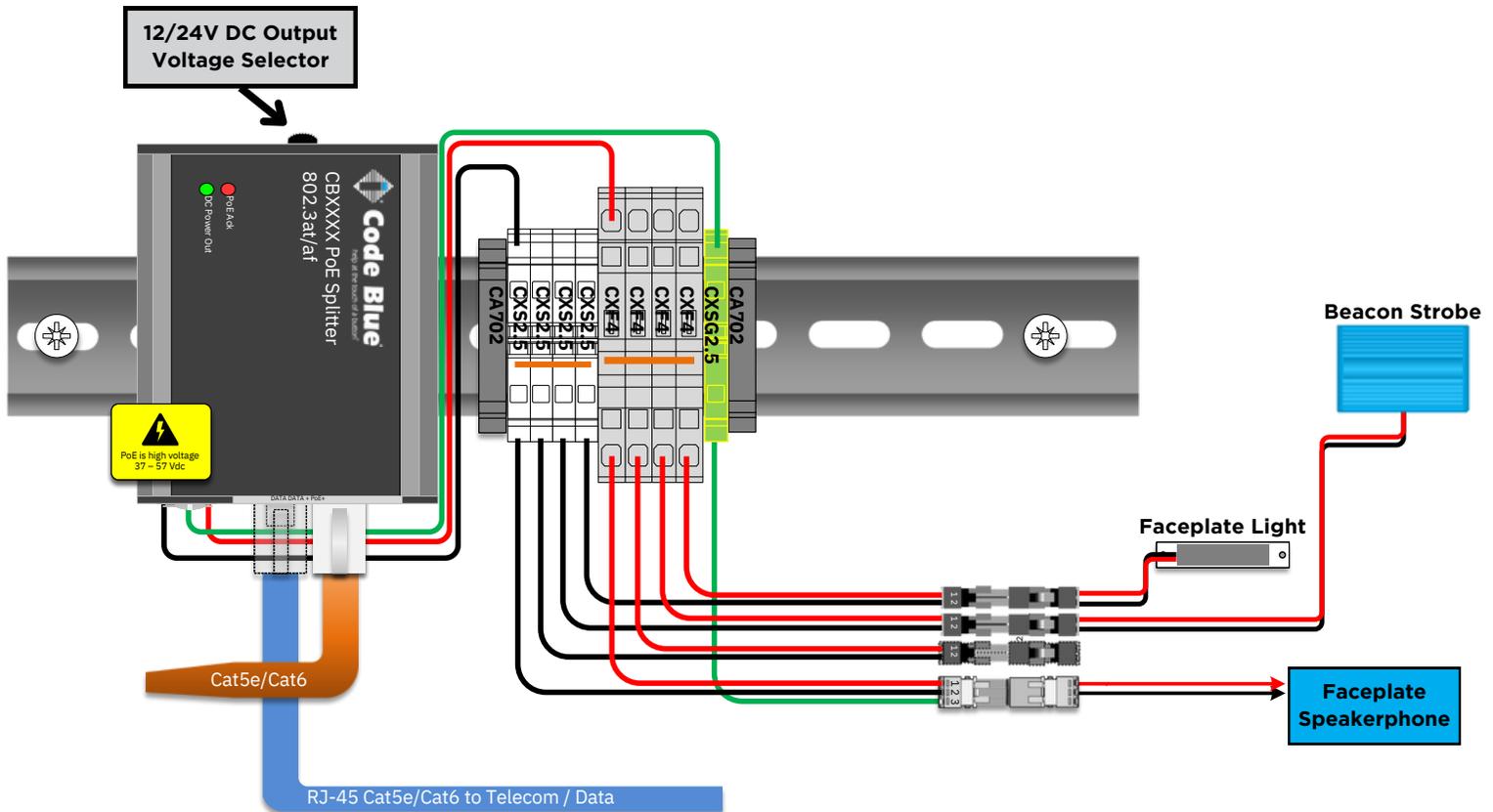


### CB 5-p & CB 5-s PoE DIN Rail Power System

For installations with PoE incoming power on site.

Used in the following configurations:

- Standard CB 5-p - No Cellular or Audio Paging Options
- Standard CB 5-s - No Cellular or Audio Paging Options



DIN Rail Layout



#### Order of Connection

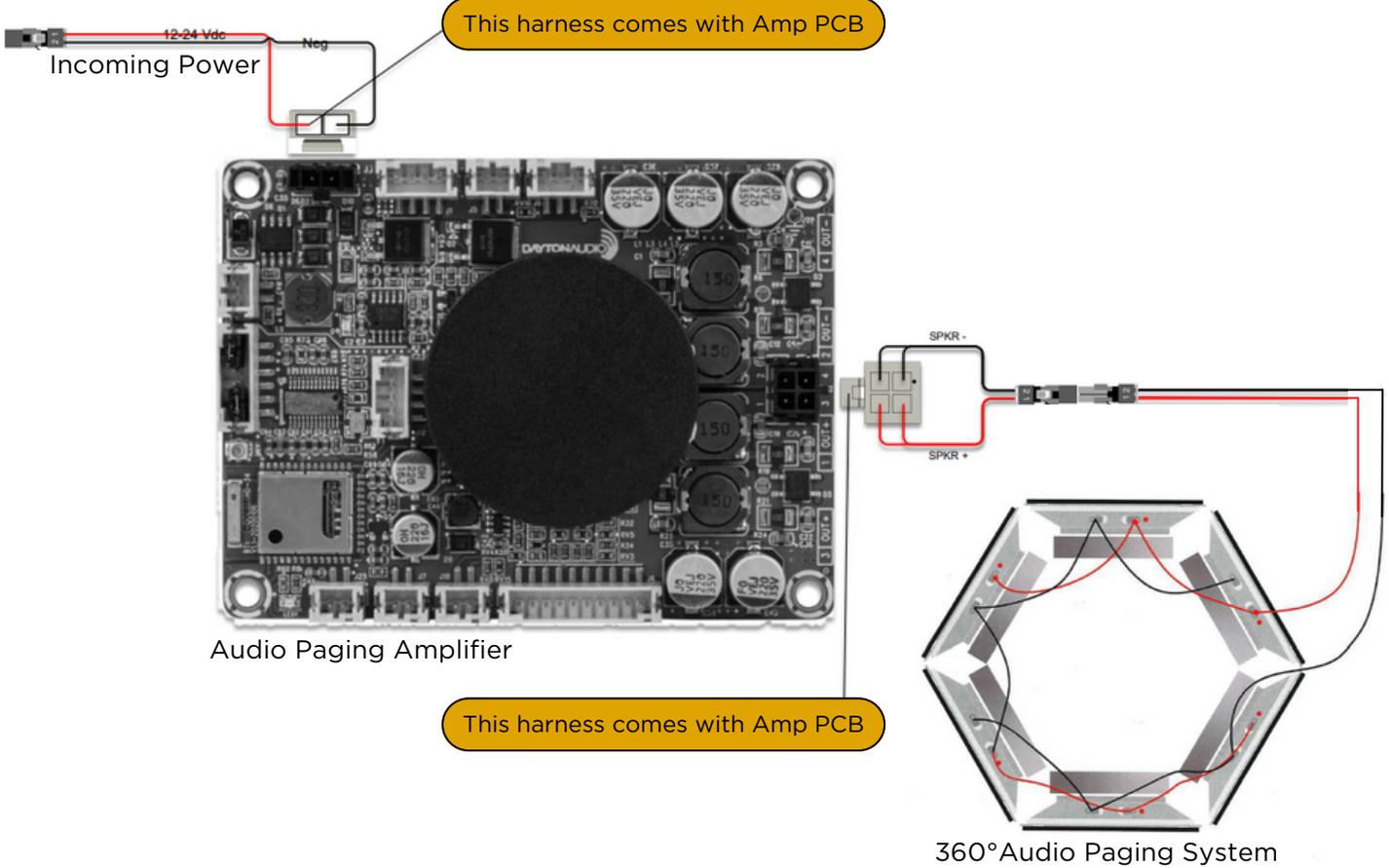
1. Connect Lighting & Communication devices to power system via Wago plug & socket connectors.
2. Connect RJ45 ethernet cable (Cat5e or Cat6) from “Data” port on PoE splitter to the WAN port of the VoIP speakerphone.
3. Plug incoming PoE ethernet RJ45 cable (Cat5e or Cat6) into “Data + PoE” port on PoE splitter. Splitter will light up accordingly indicating passing of DC voltage.

**IMPORTANT NOTE:** LS1000 speakerphones operate on 12V DC only. If the 24V DC output is selected on the PoE splitter, the use of a 24V to 12V DC step-down transformer must be installed prior to connecting the power system to the speakerphone.

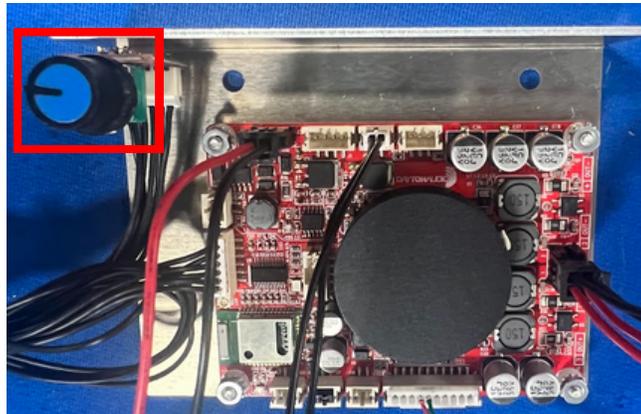




### 360° Audio Paging Amplifier Wiring & Volume Control



- **Locate Volume Adjustment Knob on Paging Amp** - See location in below photo

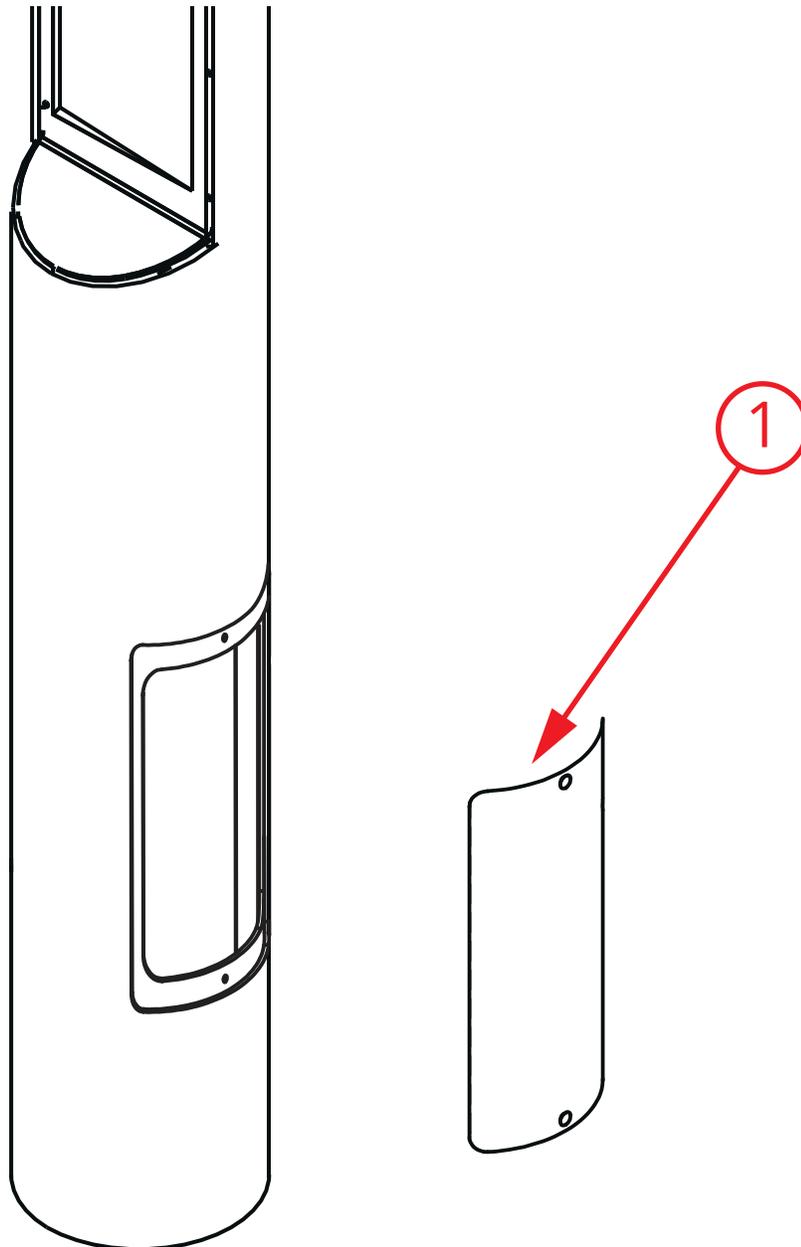


- **Adjust Volume to Desired Level** - By turning the knob clockwise or counter clockwise, this will increase or decrease the volume level of the Audio Paging Speaker Array.



## 11 Locating Unit Serial Numbers

Remove the access plate cover with the special security bit. The serial number will be listed on the manufacturer's label located on the backside of the access plate cover (1).





## 12 Maintenance Schedule

### LEGEND

**G** Guard Tasks

**T** Technician Tasks

#### DAILY OR WEEKLY

**G** Perform functional communications check.

- Action: Press Red Button
  - Strobe activates
  - Red LED "Call Placed" light turns on
  - Message plays
  - Call connects, green LED "Call Received" light turns on
  - Confirm conversation clarity with dispatch

#### MONTHLY OR QUARTERLY

**G** Visually check lighting functions:

- Faceplate light
- Beacon/Strobe

**G** Visually inspect unit for damage to:

- Faceplate
- Piezo Button
- Microphone
- Speaker

**T** Check Batteries:

- Functioning with full charge.
- Recharging fully, including NightCharge®/Solar Units (Note: Mid-to-late afternoon inspection is recommended)

**IMPORTANT NOTE:** Depending on the environment in which the batteries are installed, it is recommended that batteries for Solar & NightCharge® products are fully replaced every 2-3 years.

#### BIANNUALLY

**T** Remove access door and faceplate assembly to inspect the following:

- Ensure all electrical connections are secure
- Check all phone connections for corrosion (*If corroded, clean and coat with dielectric gel or replace*)
- Ensure all battery connections are tight and clean
- Verify no stains exist around gasket areas (stains indicate leaking & gasket should be replaced)
- Verify moisture weep hole on cabinet bottom is open and unobstructed
- Verify bottom of bollards are at least 1/2 inch above footing and free of obstructions (only applies to CB1, CB5, CB9, & CBRT units)

**G** Apply automotive paint sealant to unit exterior for protecting finish against environmental pollutants (Suggested products include Black Magic Wet Shine Liquid Wax, Nu Finish NFP-80, and 5 Star Shine)

**G** Clean & coat exterior stainless steel cabinets with cleaner/polish (Suggested products include Chase Products' Champion Spray-on Stainless Steel Cleaner to help protect finish against environmental pollutants)

**T** Visually confirm line-of-sight is still clear to base station (i.e., confirm that new tree growth, new building construction or other obstructions are not blocking view of base station)

**UNIT SURFACE MAINTENANCE**

The painted and stainless steel Code Blue models require periodic care to sustain their aesthetic appearance. Units located outdoors are vulnerable to harsh environmental conditions, including UV rays, acid rain, diesel fumes and airborne iron particles (i.e., dust) which over time may cause unit discoloring. To prevent pollutants developing harmful chemical reactions on Code Blue units, an appropriate surface maintenance schedule should be adhered to. The Surface Care Frequency table below provides general guidelines to assist in configuring a schedule. Please note that the frequency of care required to guard the Code Blue unit's surface from damage will also be dictated by local environmental characteristics.

**LEGEND: POLLUTANTS LEVEL**

Low	★
Low/Moderate	★★
Moderate	★★★
Moderate/High	★★★★
High	★★★★★

**SURFACE CARE FREQUENCY**

	MONTHLY	BIMONTHLY	QUARTERLY	BIANNUAL	ANNUAL
Painted		★★★★★	★★★★	★★★	★
Stainless Steel	★★★★★	★★★★	★★★	★	

See scheduled tasks under Biannually for suggested paint sealants or stainless steel cleaners.

**AVERAGE COMPONENT LIFE**

Component life is based on various mechanical, operational and environmental factors. Your local Code Blue reseller can assist you with a regularly scheduled maintenance program customized to your individual site requirements.

*Code Blue strongly recommends contacting a local CB reseller to establish a proactive maintenance schedule.*



## 13 Warranty

Code Blue Corporation provides a limited warranty on this product. Refer to your sales agreement to establish the terms. In addition, Code Blue's standard warranty language, as well as information regarding support for this product while under warranty, is available at

[www.codeblue.com/support](http://www.codeblue.com/support)

### **In Case of Breakdown**

In case of system breakdown, discontinue use and contact Tech Support at:

[technicalsupport@codeblue.com](mailto:technicalsupport@codeblue.com) or call **800-205-7186, option 3.**

### **In Case of Abnormal Operation**

If the unit emits smoke or an unusual smell, if water or other foreign material enters the enclosure, or if you drop the unit or damage the enclosure, power off the unit immediately and contact Code Blue Customer Service at:

[customerservice@codeblue.com](mailto:customerservice@codeblue.com) or call **800-205-7186, option 2.**



## 14 Download Information

Code Blue now has a centralized location where you can find installation, setup, information, configuration and operation instructions.

Admin Guides: [www.codeblue.com/resources/guides](http://www.codeblue.com/resources/guides)

Firmware: [www.codeblue.com/resources/firmware](http://www.codeblue.com/resources/firmware)

Maintenance Tips: [www.codeblue.com/support](http://www.codeblue.com/support)

Product Sheets: [www.codeblue.com/resources/sheets](http://www.codeblue.com/resources/sheets)

Specifications: [www.codeblue.com/resources/specifications](http://www.codeblue.com/resources/specifications)

These guides should contain all the information needed for your application. If further information is required, please contact [customerservice@codeblue.com](mailto:customerservice@codeblue.com).



## 15 Legal & Regulatory Information

### Legal Considerations

Video and audio surveillance can be regulated by laws that vary from country to country. Check the laws in your local region before using this product for surveillance purposes.

### Liability

Every care has been taken in the preparation of this document. Please inform Code Blue Corporation of any inaccuracies or omissions. Code Blue cannot be held responsible for any technical or typographical errors and reserves the right to make changes to the product and manuals without prior notice. Code Blue makes no warranty of any kind with regard to the material contained within this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Code Blue shall not be liable or responsible for incidental or consequential damages in connection with the furnishing, performance or use of this material. This product is only to be used for its intended purpose.

### Intellectual Property Rights

Code Blue Corporation has intellectual property rights relating to technology embodied in the product described in this document. This product contains open source code that also contains additional open source libraries.

### Equipment Modifications

This equipment must be installed and used in strict accordance with the instructions given in the user documentation. This equipment contains no user-serviceable components. Unauthorized equipment changes or modifications will invalidate all applicable regulatory certifications and approvals.

### Trademark Acknowledgments

Code Blue and Centry products are registered trademarks or trademark applications of Code Blue Corporation in various jurisdictions. All other company names and products are trademarks or registered trademarks of their respective companies.

### Regulatory Information

Electromagnetic Compatibility (EMC)

This equipment has been designed and tested to fulfill applicable standards for:

- Radio Frequency emission when installed according to the instruction and used in the intended environment.
- Immunity to electrical and electromagnetic phenomenon when installed according to the instructions and used in its intended environments.

### USA

This equipment has been tested using a shielded network cable (STP) and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense. The product shall be connected using a shielded network cable (STP) that is properly grounded.

### Canada

This digital apparatus complies with CAN ICES-3 (Class A). The product shall be connected using a shielded network cable (STP) that is properly grounded.

Cet appareil numérique est conforme à la norme NMB ICES-3 (classe A). Le produit doit être connecté à l'aide d'un câble réseau blindé (STP) qui est correctement mis à la terre.

### Disposal and Recycling

When this product has reached the end of its useful life, dispose of it according to local laws and regulations. For information about your nearest designated collection point, contact your local authority responsible for waste disposal. In accordance with local legislation, penalties may be applicable for incorrect disposal of this waste.

This guide should contain all the information needed for your application. If any further information is needed, please contact [customerservice@codeblue.com](mailto:customerservice@codeblue.com).

### Support

Should you require any technical assistance, please contact Code Blue.

Visit [codeblue.com](http://codeblue.com) to:

- Download user documentation and software.
- Find answers to resolved problems in the FAQ database.

Report problems to Code Blue Technical Support via email at:

[technicalsupport@codeblue.com](mailto:technicalsupport@codeblue.com) or **800-205-7186**