CB1 Series

Models: ENTM02, ENTM03, ENTM04, ENTM05

Admin Guide

Installation | Configuration | Support | Maintenance | Use

Code Blue®
800.205.7186 • 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.

NOTICE TO USERS

Table of Contents

2 Introduction

Thank you for choosing the **CB 1 Series** for your Code Blue application.

The **CB 1 Series** of products are the original Code Blue pedestal units that set the industry standard for rugged construction, full feature availability and high visibility. The **CB 1 Series** is easily recognized throughout a full 360-degree area. The user friendly lighted faceplate and the integral area light ensure rapid location in an open environment. The high output strobe is easily identifiable by security when activated.

The **CB 1 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 LS1000 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 1 Series** units have a rugged steel construction, shatterproof Lexan Lens, industrial engineering grade reflective graphics and weather, UV and graffiti resistant paint. They are illuminated by a high-powered, 270 lumens/92 candela LED blue beacon/strobe.

Other options include:

- IP and analog phones
- Low power consumption LED faceplate light
- Long-life LED area light
- NightCharge® & PoE power options
- 360° Audio Paging Speaker
- Custom colors and graphics
- Second Opening for camera, card reader, directory, & other customizable options
- Overhead Camera Mounts
- Mounting Rings

This guide contains a general overview of the CB 1 Series options, including the CB 1-e & CB 1-s models, their application, installation and wiring.

CB 1-e

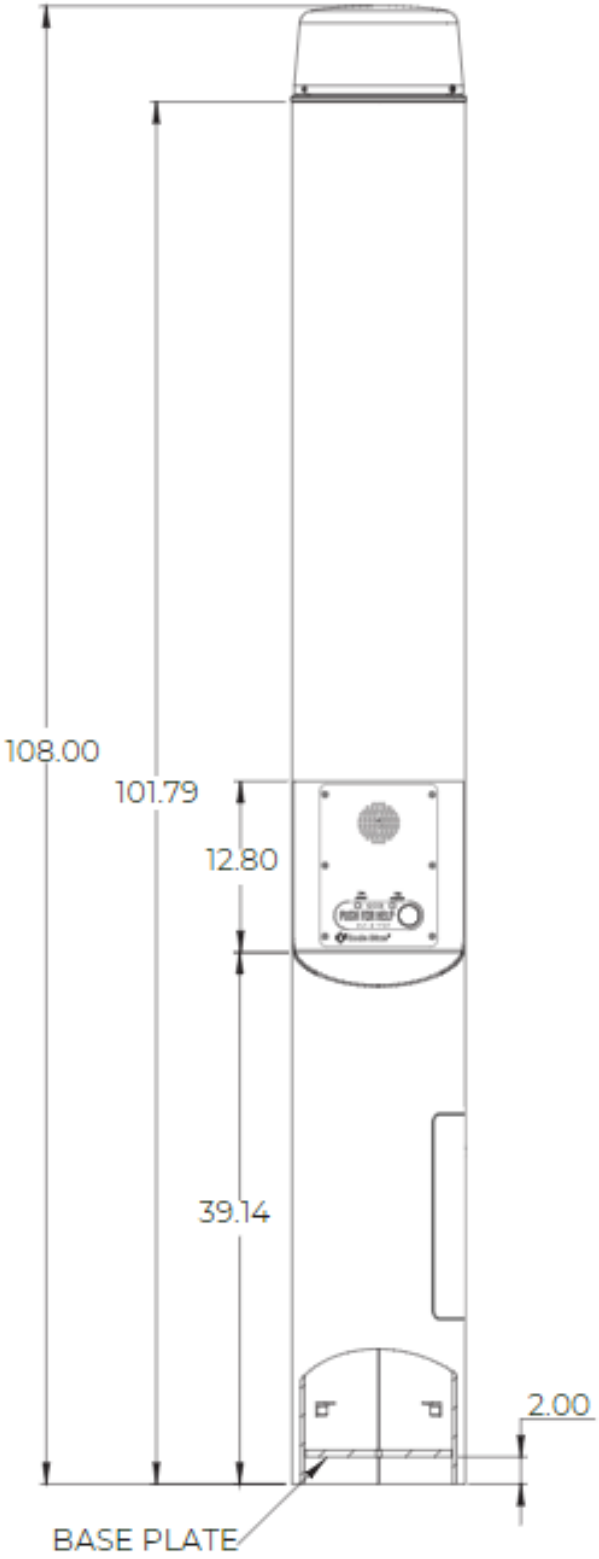
CB 1-e with Dual Faceplate

CB 1-s

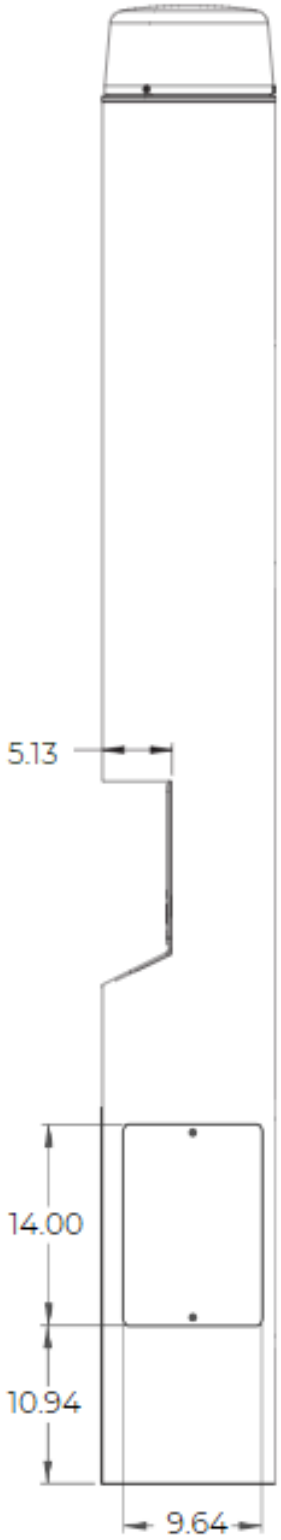
CB 1-s with Dual Faceplate

3 Dimensions

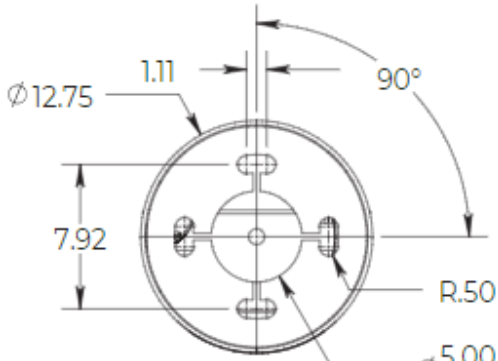
CB 1-e



FRONT VIEW

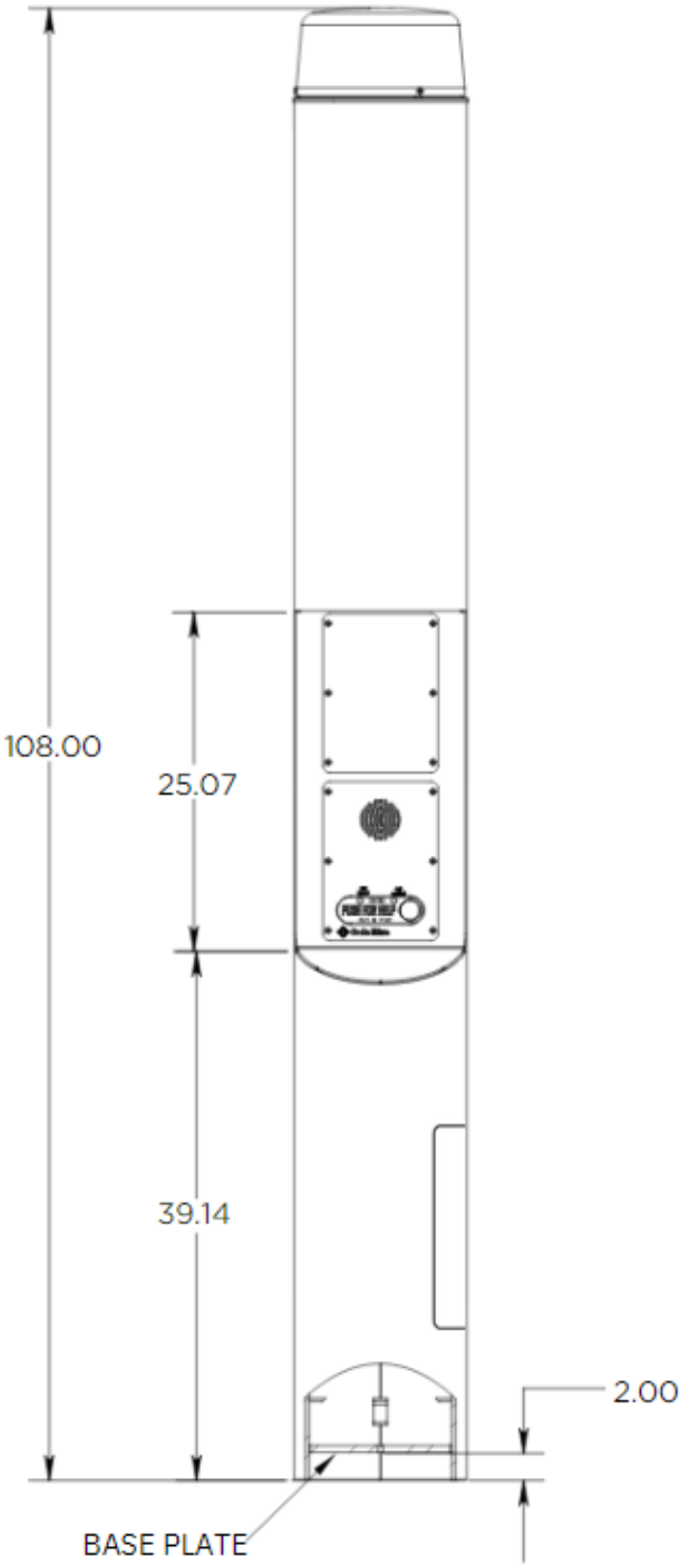


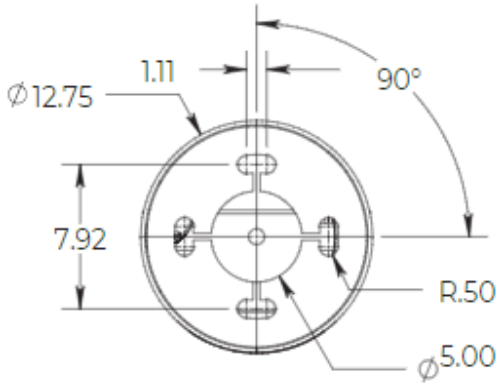
SIDE VIEW



BASE PLATE DETAIL

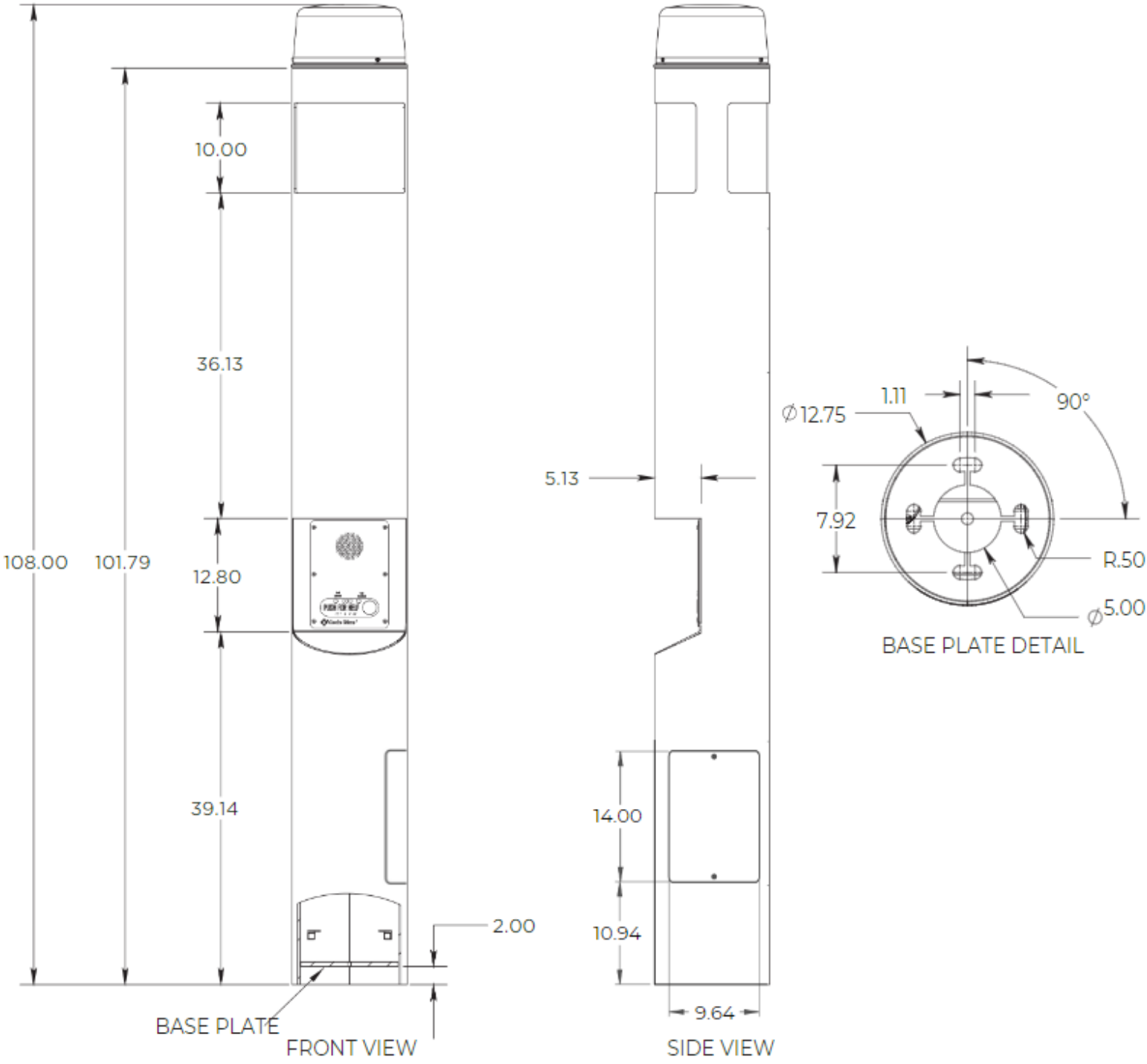
CB 1-e with Dual Opening





BASE PLATE DETAIL

CB 1-s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36.13
108.00
101.79
12.80
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BASE PLATE
FRONT VIEW
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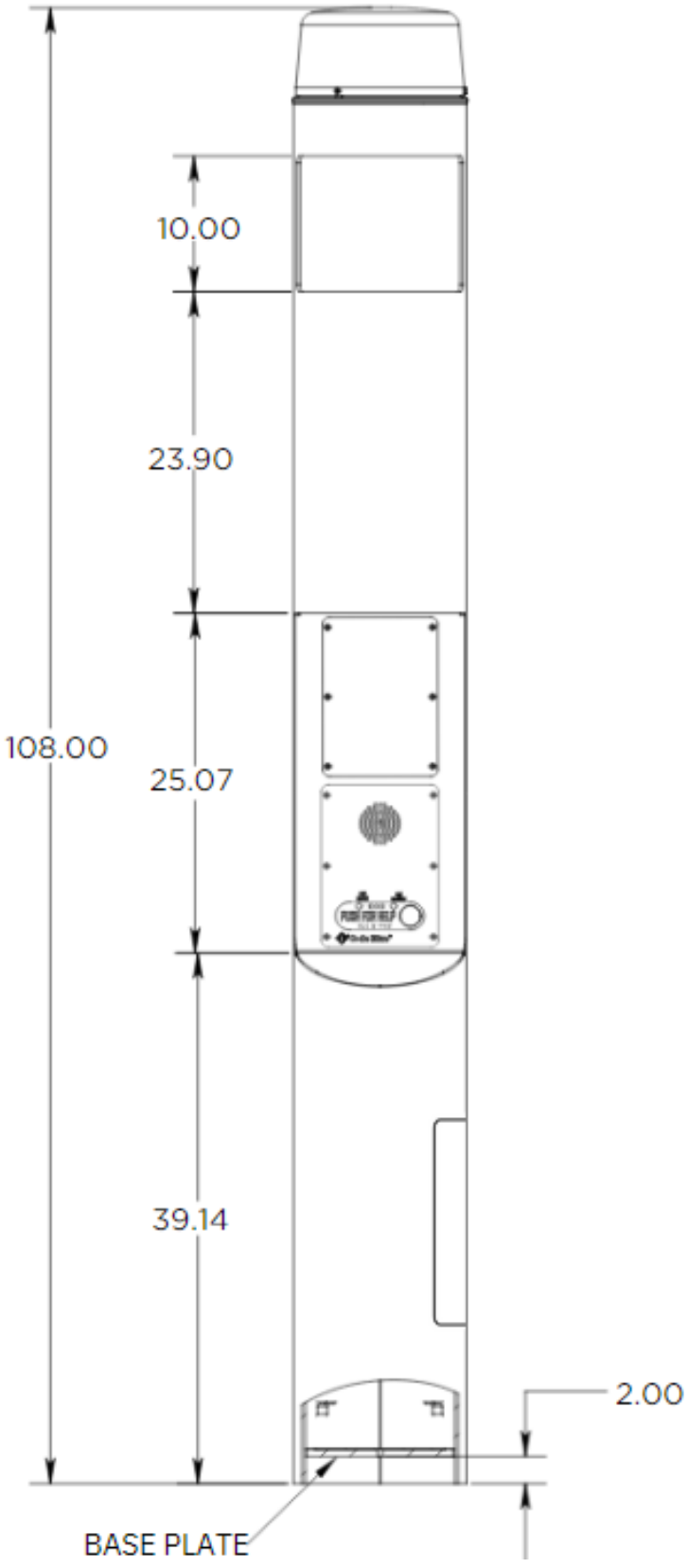
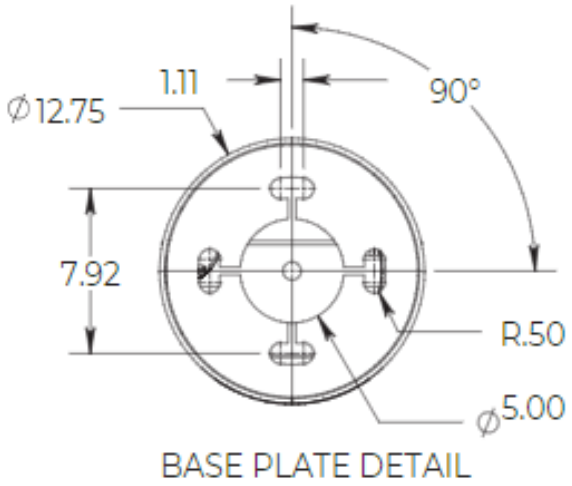
14.00
10.94
9.64
SIDE VIEW
Ø12.75
1.11
90°
7.92
R.50
Ø5.00
BASE PLATE DETAIL

CB 1-s with Dual Opening





BASE PLATE DETAIL

4 Safety Information

HAZARD LEVELS LEGEND

DANGER	Indicates a hazardous situation which, if not avoided, *will* result in death or serious injury.
WARNING	Indicates a hazardous situation which, if not avoided, *could* result in death or serious injury.
CAUTION ⚠	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates a situation which, if not avoided, could result in damage to property.
IMPORTANT	Indicates significant information that is essential for proper product functionality.
NOTE	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

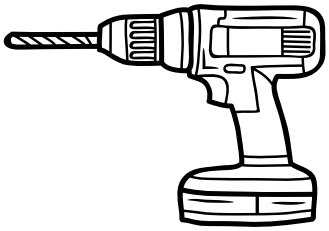
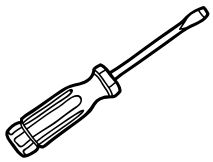
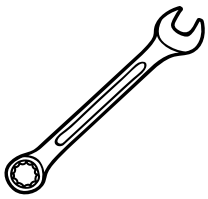
Tools Needed

All CB1 Units Require:

• Ladder to reach the top of the unit.
• Drill & Security Bit for removing & inserting security screws on phone, dome top, & access door.
• 1-1/8” Socket set & extension
• Phillips and flat head screwdrivers

CB1 Units w/ NightCharge® Require:

• ½” wrench for NightCharge® batteries.

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.

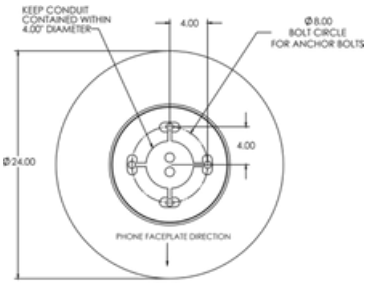
- Speakerphones require programming before operation. Consult the speakerphone's Administrator Guide for instructions.

- 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.

Anchor Bolt Kit Instructions

1. FOUNDATION

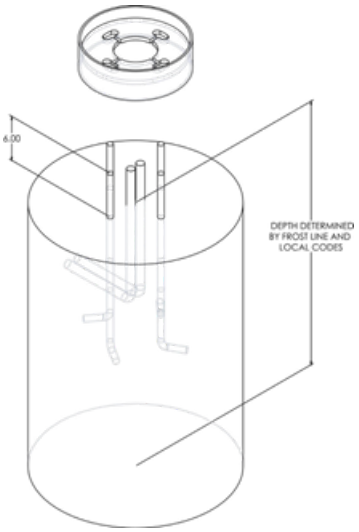


USE PROVIDED TEMPLATE TO LOCATE ANCHOR BOLTS

1.1 Run Conduit

Electrical and telephone line conduit, with a maximum combined diameter of four 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 ½-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 24 inches in diameter and to the correct depth for the frost line in your area, with a mini- mum depth of at least three feet (follow local building codes for foundations).

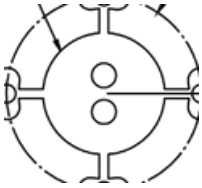
1.3 Set the Anchor Bolts in the Wet Foundation

Four 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 in such a way that the phone faceplate on the unit face in the desired direction.

2. PULL WIRING

IMPORTANT:

- *Wire gauge must be selected to meet code for voltage/current required for the product to operate correctly: Minimum 14 AWG.*
- *Conduit used must comply to National Electrical Standards as observed locally.*



2.1 Pull Power and Phone Line up through Conduits

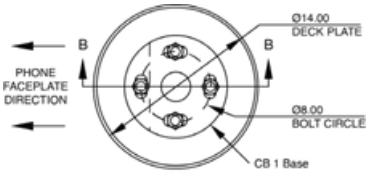
A minimum of two feet of wire must be available from the con- duit for electrical and communications wiring.

NOTE: Communications wire must be shielded phone line. The phone line must be pulled into the unit using a separate conduit from the power. Along with a service loop of wire, as noted by the NEC standards.

Deck Mount Kit Instructions

SKIP if installation does not include a Deck Mount Kit

1. DECK FOUNDATION

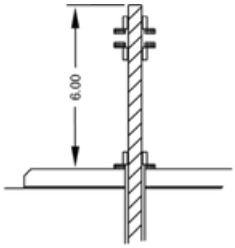


1.1 Drill Deck Holes

Drill four holes through the deck or floor for the four 3/4" threaded rods. The holes should be aligned, using the tem- plate provided in such a way that the phone faceplate on the unit will face in the desired direction.

1.2 Drill Conduit Hole

Drill a fifth hole in the center to accommodate the conduit.



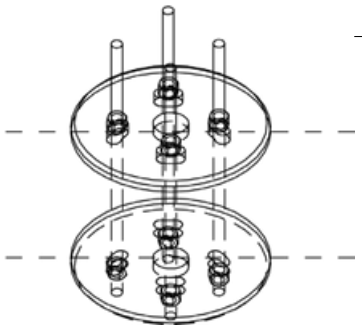
1.3 Position Upper Deck Plate

Position the first plate working from above the deck.

1.3.1 Thread a nut and washer on the end of each rod so that approximately six inches extends beyond the base of the washer.

1.3.2 Insert each rod through the top side of the plate, plate gasket, and down through the four holes in the deck.

NOTE: The top of the plate is the side with the tapered edge.



1.4 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.

1.4.1 Place the second plate gasket and then the second plate over the threaded rods.

1.4.2 Secure the second plate with nuts and washers pro-

vided. If required, readjust the nuts so that six inches of the rods are above the top of the upper plate.

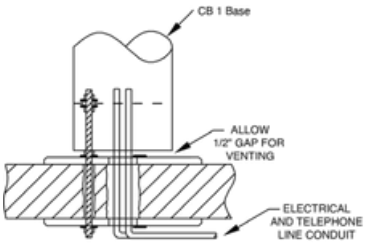
1.5 Secure Lower Nuts

To prevent tampering, it is advisable to tack weld the lower nuts to the threaded rod.

2. PULL WIRING

IMPORTANT:

Wire gauge must be selected to meet code for voltage/current required for the product to operate correctly: Minimum 14 AWG. Conduit used must comply to National Electrical Standards as ob- served locally.



2.1 Pull Power and Phone Line up 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 is required.

NOTE: Communications wire must be shielded phone line. The phone line must be pulled into the unit using a separate conduit from the power. Along with a service loop of wire, as noted by the NEC standards.

Base Gasket Instructions

1. SET THE NUTS AND WASHERS

IMPORTANT: Leveling the bottom nuts is crucial to leveling the unit.
A small error will be magnified after installation.

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 so the lowest washer is about 2½ inches above the concrete at an even height.

To accomplish this, use a small level and check from front to back, side to side, & diagonally. These nuts are NOT adjustable after the unit is in place.

The bottom edge of the Code Blue unit will be 1/2" above the concrete when in stalled.

2. SET UNIT UPRIGHT ON ANCHOR BOLTS

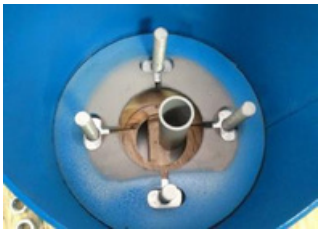
IMPORTANT: A ½-inch minimum air gap is required between the foundation and the unit to prevent moisture problems.

Set the Code Blue unit on the anchor bolts:

Align the phone plate in the desired direction and lift the Code Blue unit over the anchor bolts. The unit may be lifted using the bracket on the inside of the unit.

Note that the unit weighs approximately 200-400 pounds. Use appropriate lifting materials and methods to avoid possible injury and/or damage.

3. SECURE THE UNIT



Use Access Door to reach mounting studs

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

Place the base gasket

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 the unit.

*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.

Fasten

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.

360° Audio Paging Top Installation

SKIP if installation does not include an Audio Paging Top.

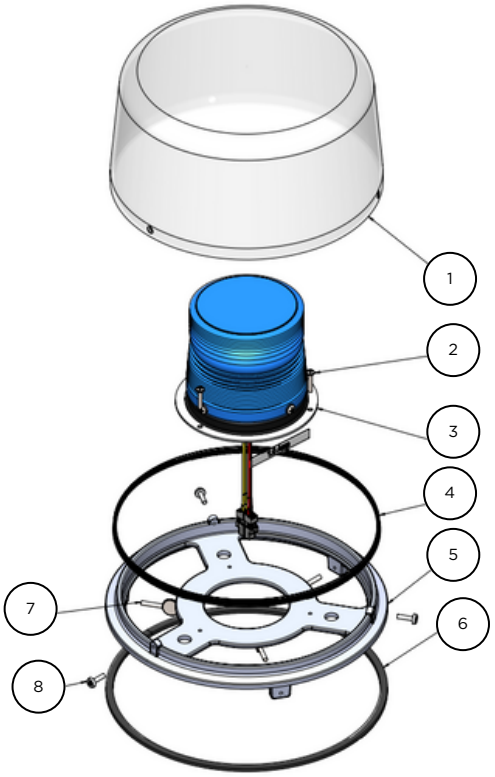
- **The following models are covered in the installation instructions for CB 1 Series with Audio Paging or the Current 360° Audio Paging Retrofit Kit:**
  - CB 1-e
  - CB 1-s

- **Tools Required**
  - Ladder – to reach the top of the unit.
  - Security bit – to secure the Audio Paging top to the adapter ring.
  - 6mm Allen wrench – to secure the Audio Paging adapter ring to the top of the unit.

Before You Begin: Remove power from the unit.

- **Existing Dome Top Removal** (See Figure 1 below for referenced components)
  - Remove the 3 security screws securing the dome top lens to the dome top casting.
  - Locate and remove the 3 thumb screws securing the dome top casting to the tower unit.
  - Raise the dome top assembly upwards & disconnect the red/black and yellow/yellow wiring harnesses connected to the beacon/strobe mounted in the dome top assembly.

Dome Top Assembly Components



#	Component	Qty
1	Dome Top Lens	1
2	Strobe Assembly Mounting Screws	3
3	Beacon Strobe Assembly	1
4	Dome Top Tech Brush	1
5	Dome Top Casting	1
6	Dome Top Assembly Gasket	1
7	Thumb Screws	3
8	Security Screws	3

Figure 1

(Continued on next page)

- **Install 360° Audio Paging Top** (See Figure 2 below for component references).
  - Insert the Audio Paging Top Housing into the CB 1 Tower.
  - Ensure the paging top is aligned properly and level. Reach through the housing, tighten the 3 set screws into the side wall of the tower using the required Allen wrench.
  - Connect all amp and lighting wiring harnesses as detailed in the Wiring Diagrams section of this guide.
  - 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.

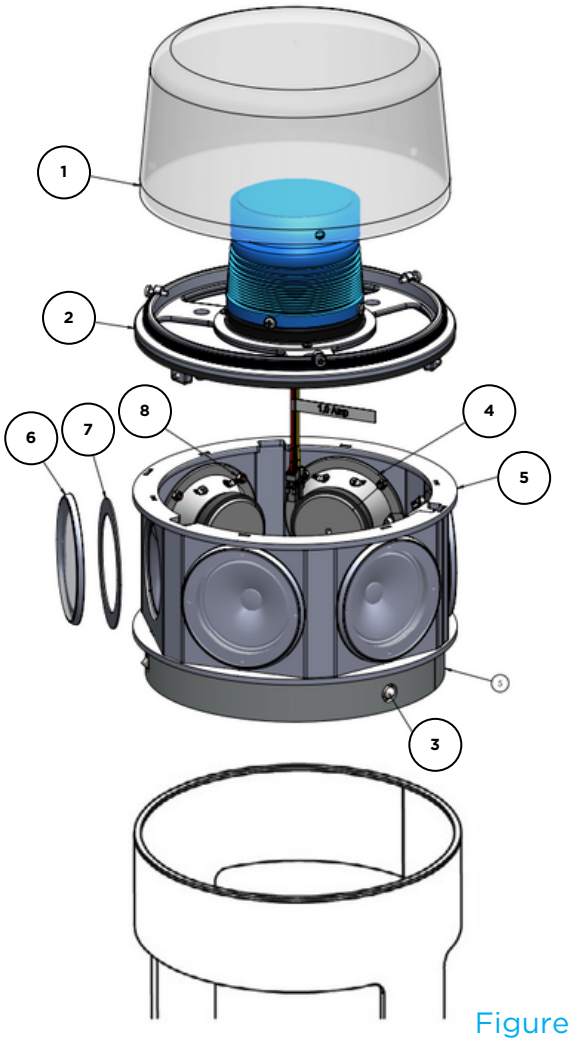


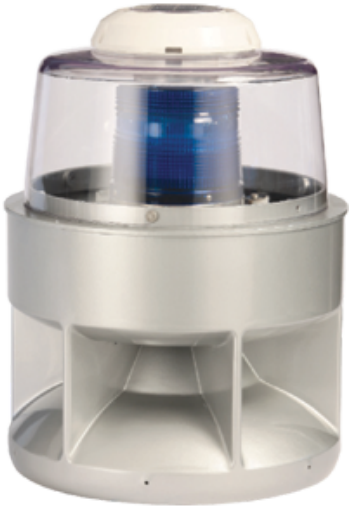
Figure 2

#	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

Important Update: 360° Audio Paging Speaker Array for CB1 Towers

In August 2023, due to changes in the global supply chain market impacting component availability, Code Blue discontinued it's 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 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.

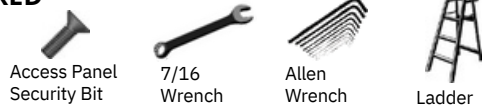
	Current 360° Audio Paging System	Legacy 360° Audio Paging System
Required Incoming Voltage	12V DC @ 4 Amp	120V AC @ 4 Amp
Speaker Array Material	Carbon Steel	ABS Plastic
Impedance	8 Ohms	5.3 Ohms
Frequency Range	450 Hz - 8000 Hz	450 Hz - 7000 Hz

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

Overhead Camera Mount Accessory

SKIP if installation does not include an Overhead Camera Mount accessory.

TOOLS REQUIRED



1.0 RETRO-FITTING EXISTING UNIT

1.1 If applicable, remove dome top assembly prior to installation.

New style dome top assembly is required to access installation screws on Overhead Camera Mount.

2.0 INSTALL CAMERA MOUNT

2.1 Locate and install the three ½ x 1-inch hex Allen screws from the inside of the mounting ring. Be sure the Allen screws do not extend beyond the outside of the ring.

2.2 Install the camera mount on top of the unit. Rotate to desired position.

NOTE: *If retrofitting existing unit with three countersunk holes near the top of the bollard, the Overhead Camera Mount may be rotated to align the clearance holes with holes in the unit. The three counter- sunk screws and nuts provided may be used to cover these holes.*

The three Allen screws MUST be used to secure the Overhead Camera Mount to the unit.

2.3 Verify camera mount is evenly positioned to ensure gasket seal is seated appropriately 360 degrees.

2.4 Apply downward pressure while simultaneously tightening the three 1/2" set screws until snug against the inside of the pedestal.

3.0 INSTALL CAMERA

3.1 Camera and wiring is installed into the male 1 ½ NPT.

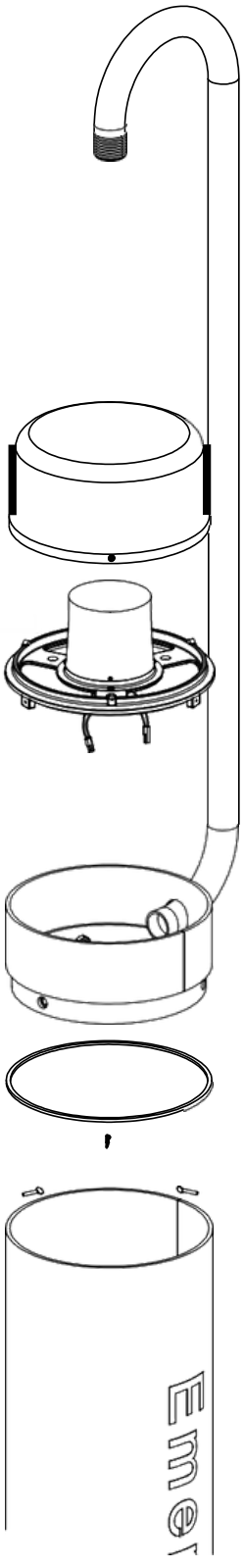
4.0 INSTALL THE DOME TOP ASSEMBLY

4.1 Remove the clear Lexan dome from the black metal casting.

4.2 The casting, complete with strobe, should be brought to the top of the unit (Overhead Camera Mount) where the wiring will be connected (see wiring instructions).

4.3 After the wiring is complete, set the casting on top of the unit and fasten the casting to the Overhead Camera Mount by reaching through the casting openings and tightening the three 10-24 X 1-inch stainless steel thumbscrews against the inner wall.

4.4 Finally, reattach the clear Lexan dome to the black metal casting with the security screws provided.



Equipment Ring Accessory

SKIP if installation does not include an Equipment Ring accessory.

Code Blue has blank Mounting Rings as optional features for its 1 Series Pedestal Help Points®. Designed in three varieties, these rings allow a customer to internally and externally mount third party communication and security equipment to their unit to enhance connectivity and functionality.

INSTALLATION FOR:

All Rings: CB 1-e and CB 1-s

5.25" Mounting Ring

5.25" Mounting Ring w/ Antenna Post

TOOLS REQUIRED:

• Allen wrenches • Security bit • Ladder(if retrofitting) • Mounting Ring with screws

INSTRUCTIONS:

- If applicable, remove dome top assembly using security bit prior to installation. New style dome top assembly (part #40259) is required to access installation screws on Mounting Ring. Locate and install the three ½ x 1-inch hex Allen screws from the inside of the Mounting Ring using the Allen wrench. Be sure the Allen screws do not extend beyond the outside of the ring.

- Install the mounting ring on top of the unit. Rotate to desired position.
  - *NOTE: If retrofitting existing unit with three countersunk holes near the top of the unit, the Mounting Ring may be rotated to align the clearance holes with holes in the unit. The three countersunk screws and nuts provided may be used to cover these holes. The three Allen screws MUST be used to secure the mounting ring to the unit.*
  - *NOTE: If installed on a unit with an Overhead Camera Mount, the Mounting Ring should be mounted on top of the Overhead Camera Mount ring.*

- Verify Mounting Ring is evenly positioned to ensure gasket deal is seated appropriately 360 degrees.

- Apply downward pressure while simultaneously tightening the three 1/2" set screws until Mounting Ring is snug against the inside of the unit.

- Install Beacon/Strobe dome top assembly.

POWER:

- The 1 Series power configuration is only intended to support the electronics Code Blue installs as standard equipment.

***IF A CUSTOMER INSTALLS THEIR OWN POWER SOURCE, IT WILL VOID THE ENCLOSURE'S UL LISTING.**

Dome Top

1. REMOVE THE PACKAGING

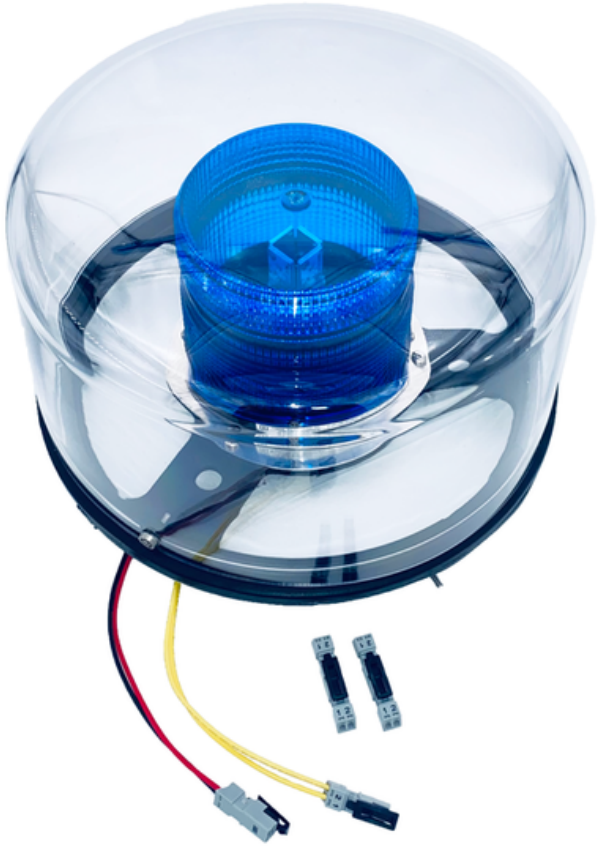
Remove the clear Lexan dome from the black metal casting. The casting complete with strobe should be brought to the top of the unit (pedestal) where the wiring will be connected.

2. INSTALL THE LIGHT FIXTURE

Match black and red wire connectors (match yellow to yellow connectors).

3. CONNECT THE CORD

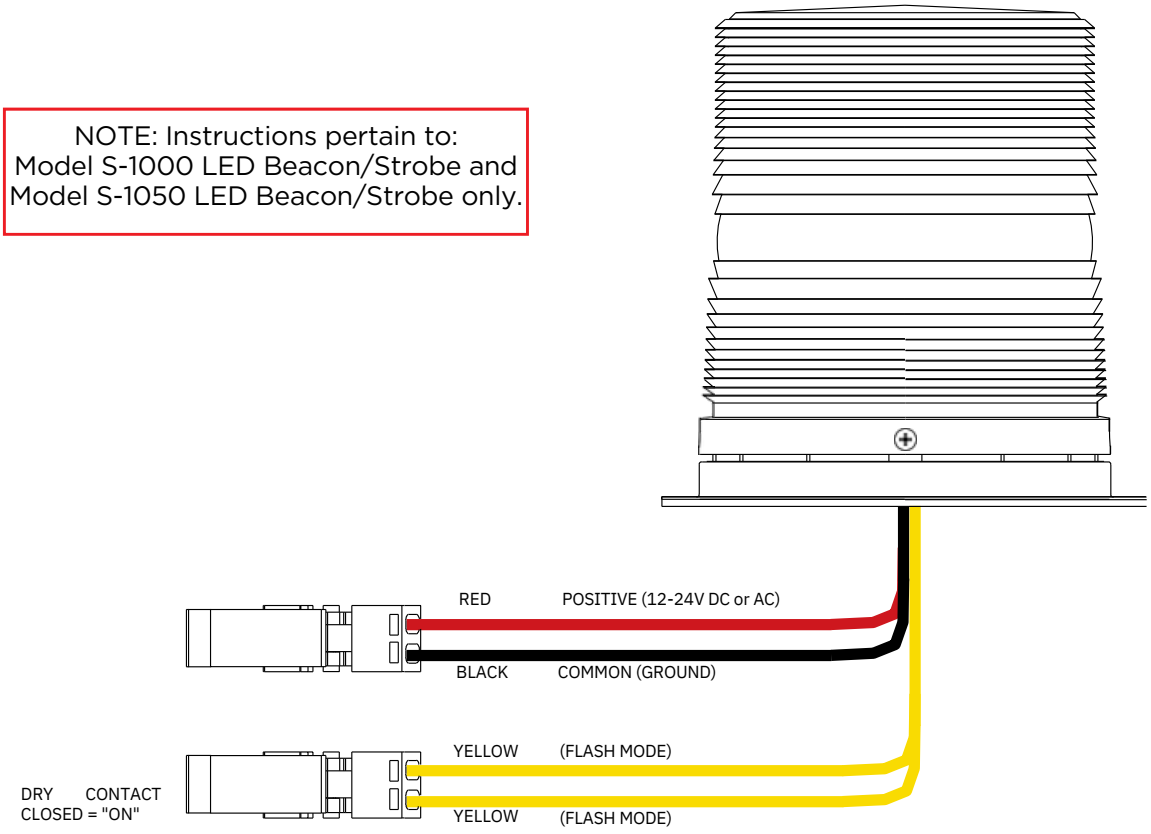
After the wiring is complete, set the white disc on top of the lens located inside the unit (CB1-s only). Set the casting on top of the pedestal and fasten the casting to the bollard by reaching through the openings and tightening the three 10-24 x 1-inch stainless steel thumbscrews against the inner wall.



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.

INPUT VOLTAGE RANGE: 12-24V AC or DC		
TEMPERATURE RATING: -40°C to +65°C (-40°F to 149°F)		
TYPICAL POWER CONSUMPTION AT 25°C		
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

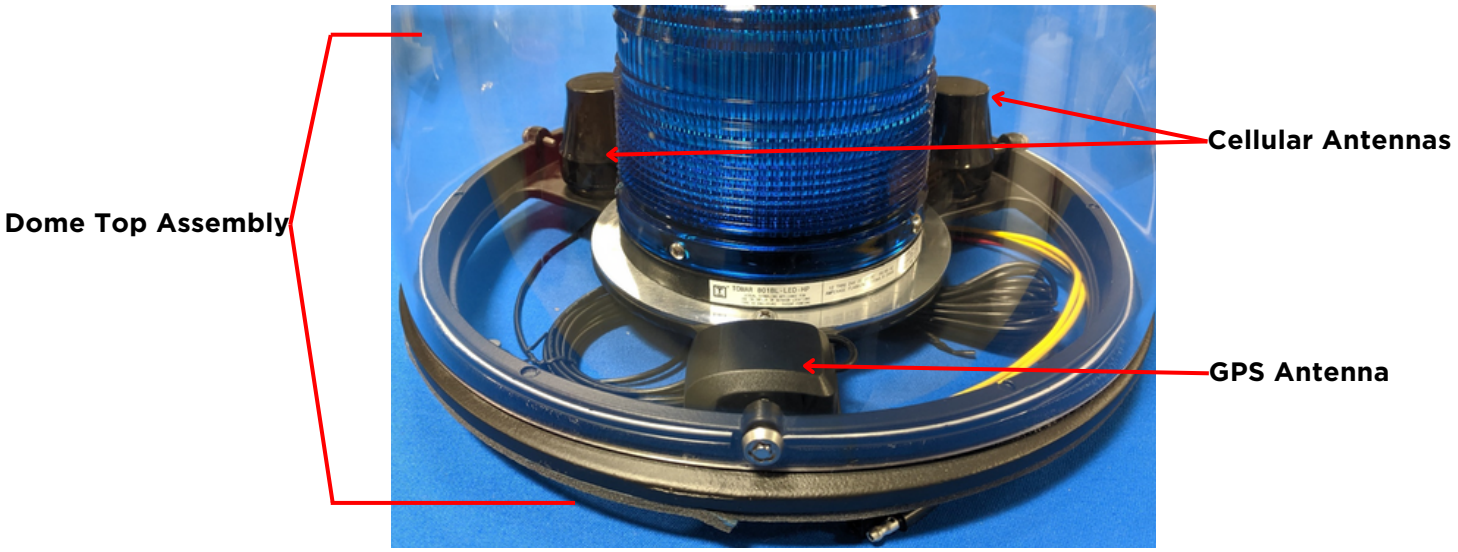
Code Blue offers Cellular Communication kits that are compatible with the **CB1-e** & **CB1-s** models. Whether you are retrofitting an existing tower or installing a new unit, the instructions below will assist in the proper placement and setup of these components.

Cellular Kit Contents

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

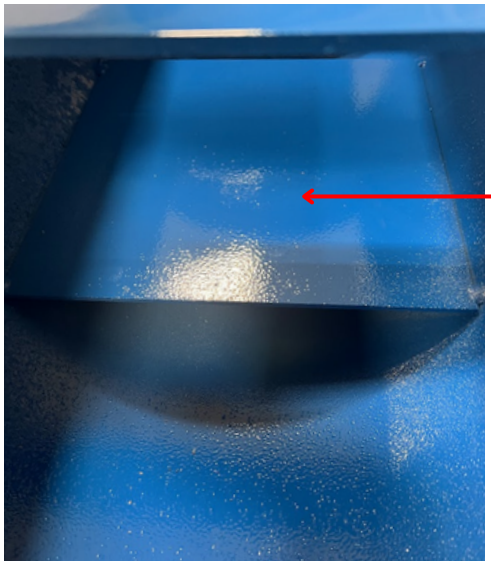
Note: *Some components of the cellular kit components are installed inside the dome top assembly. This does not interfere with the operation or performance of the beacon strobe. Other components are installed inside the tower, requiring the removal of the faceplate speakerphone for access.*

- **Antenna Installation**
  - The antennas are installed on the spokes of the Dome Top Assembly Casting.
    - The GPS antenna sticks to the surface of one of the spokes using the pre-installed double back tape.
    - The LTE antenna(s) is bolted to the casting spoke, through one of the pre-existing holes and using the attached bolts.
  - The antenna wires are routed down into the tower and will be connected to the Cellular Router in upcoming steps. Properly separate or label the wires to ensure they are connected correctly to the router.



(Continues on next page)

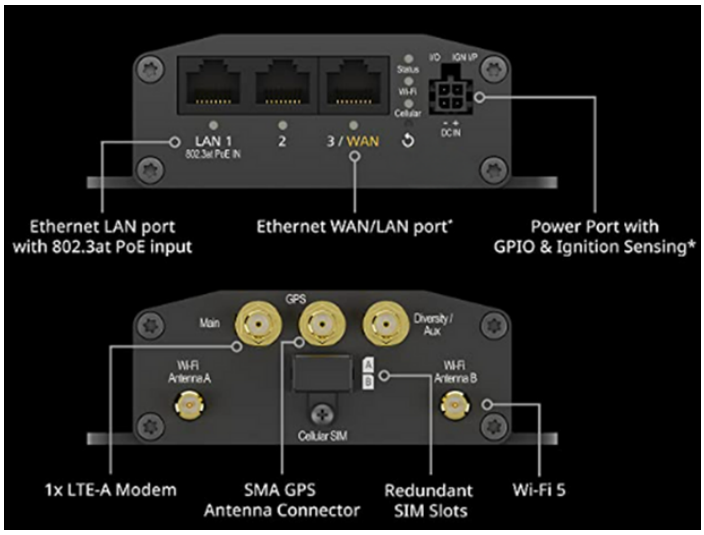
- **Cellular Router Installation**
  - The cellular router is mounted to the included hanger plate via double sided industrial hook & loop material or by drilling & tapping screw holes in the plate. Once attached to the hanger plate, the hanger plate is installed inside the tower, by hanging it on the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



Router & Hanger Plate Installed on Communication Plate

(Continues on next page)

- **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.

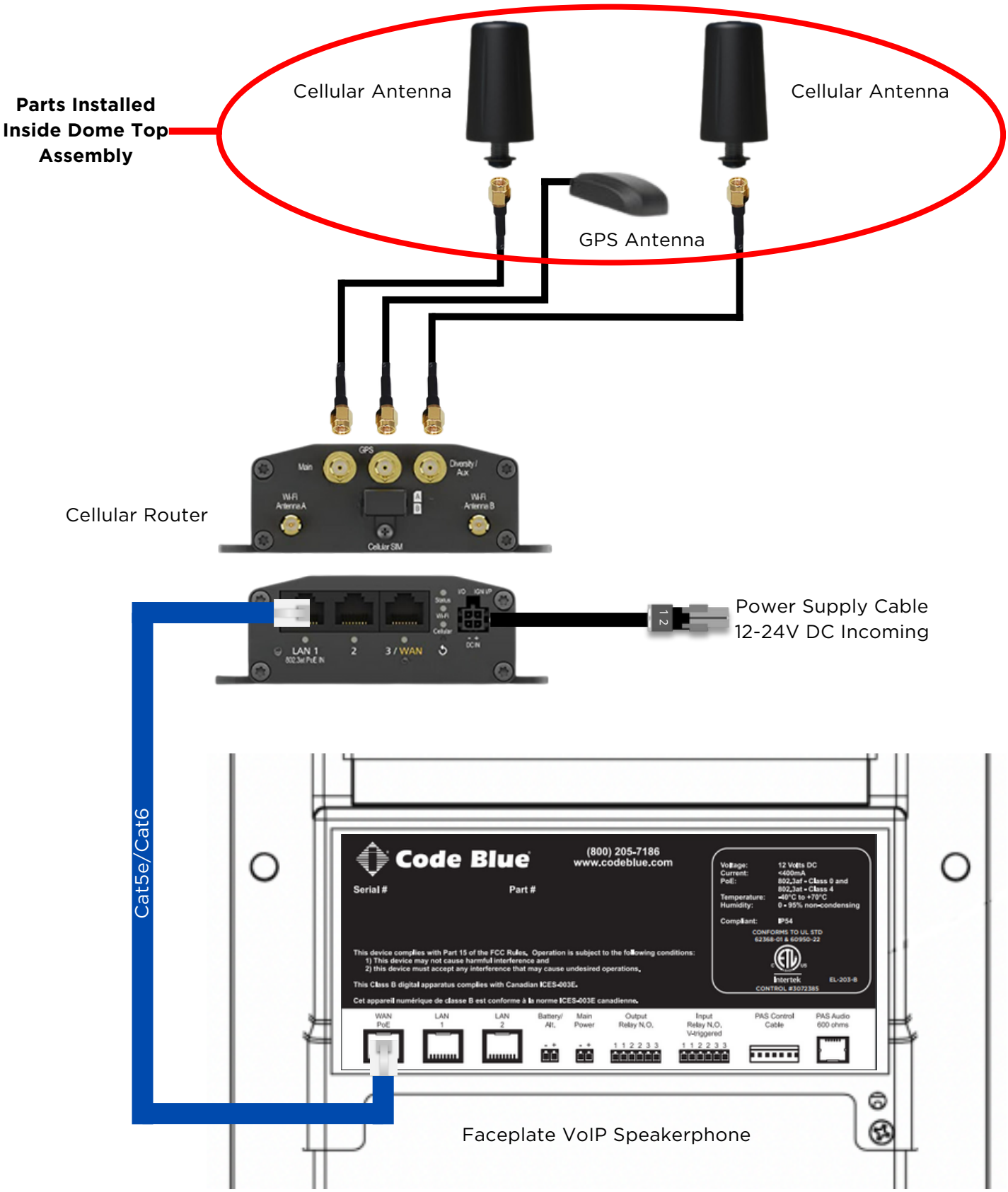
- **Connection to Faceplate Speakerphone**

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.

- **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.


Parts Installed Inside Dome Top Assembly
Cellular Antenna
Cellular Antenna
GPS Antenna
Cellular Router
Power Supply Cable
12-24V DC Incoming
Cat5e/Cat6
Code Blue
(800) 205-7186
www.codeblue.com
Serial #
Part #
Faceplate VoIP Speakerphone

8 Power Requirements

The following tables on pages 28-31 include **CB1** and ALL OTHER Code Blue devices & enclosures for reference.

Faceplates	Voltage	Max Current	Max Watts	Norm Current	Norm Watts	KWHrs
IA4100	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
IP5000	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
Centry	12VDC	0.50	6.00	0.38	4.56	0.11
LS1000/LS2000	12V DC	0.50	3.60	0.40	4.80	0.12
Lights	**Voltage**	**Max Current**	**Max Watts**	**Norm Current**	**Norm Watts**	**KWHrs**
s-1000/S-2000 LED Strobe	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
A-700 Area Light	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
S-1050 LED Strobe W/ Photocell	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
LED Light Bar	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
WM180 PAS With LED Strobe	12-24V DC	7.30	175.20	2.10	50.40	1.21

Models With IA4100 Faceplate	Voltage	Current	Watts	KWHrs
CB 1-e	24V AC	0.48	11.52	0.28
	12VDC	0.67	8.04	0.19
	24V DC	0.67	16.08	0.39
CB 1-s	24V AC	1.31	31.44	0.75
	12V DC	1.05	12.60	0.30
	24V DC	1.05	25.20	0.60
CB 5-s	24V AC	0.48	11.52	0.28
	12V DC	0.67	8.04	0.19
	24V DC	0.67	16.08	0.39
CB 9-s	24V AC	0.26	6.24	0.15
	12V DC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
CB 2-e	24V AC	0.44	10.56	0.25
	12VDC	0.63	7.56	0.18
	24V DC	0.63	15.12	0.36
CB 2-a	24V AC	0.48	11.52	0.28
	12V DC	0.67	8.04	0.19
	24V DC	0.67	16.08	0.39
CB 2-s	24V AC	1.31	31.44	0.75
	12V DC	1.05	12.60	0.30
	24V DC	1.05	25.20	0.60
CB 2 w/ Audio Paging	12-24V DC	6.44	154.56	3.71
CB 4-s	24V AC	0.22	5.28	0.13
	12V DC	0.39	4.68	0.11
	24V DC	0.39	9.36	0.22
CB 4-r	24V AC	0.26	6.24	0.15
	12V DC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
CB 4-u	24V AC	0.26	6.24	0.15
	12V DC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
CB 6-F & CB 6-S	24V AC	0.22	5.28	0.13
	12V DC	0.39	4.68	0.11
	24V DC	0.39	9.36	0.22
CB RT	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
CB 1-e	24V AC	0.33	7.92	0.19
	12VDC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
CB 1-s	24V AC	1.16	27.84	0.67
	12V DC	0.81	9.72	0.23
	24V DC	0.81	19.44	0.47
CB 5-s	24V AC	0.33	792.00	0.19
	12V DC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
CB 5-s	24V AC	0.11	2.64	0.06
	12VDC	0.19	2.28	0.05
	24V DC	0.19	4.56	0.11
CB 2-e	24V AC	0.29	6.96	0.17
	12V DC	0.39	4.68	0.11
	24V DC	0.39	9.36	0.22
CB 2-a	24V AC	0.33	7.92	0.19
	12VDC	0.43	5.16	0.12
	24V DC	0.43	10.32	0.25
CB 2-s	24V AC	1.16	27.84	0.67
	12V DC	0.81	9.72	0.23
	24VDC	0.81	19.44	0.47
CB 2 w/ Audio Paging	12-24V DC	6.44	154.56	3.71
CB 4-S	24V AC	0.07	1.68	0.04
	12V DC	0.15	1.80	0.04
	24V DC	0.15	3.60	0.09
CB 4-r	24V AC	0.11	2.64	0.06
	12VDC	0.19	2.28	0.05
	24V DC	0.19	4.56	0.11
CB 4-u	2av AC	0.11	2.64	0.06
	12VDC	0.19	2.28	0.05
	24V DC	0.19	4.56	0.11
CB 6-F & CB 6-S	24VAC	0.07	1.68	0.04
	12V DC	0.15	1.80	0.04
	24V DC	0.15	3.60	0.09
CB RT	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

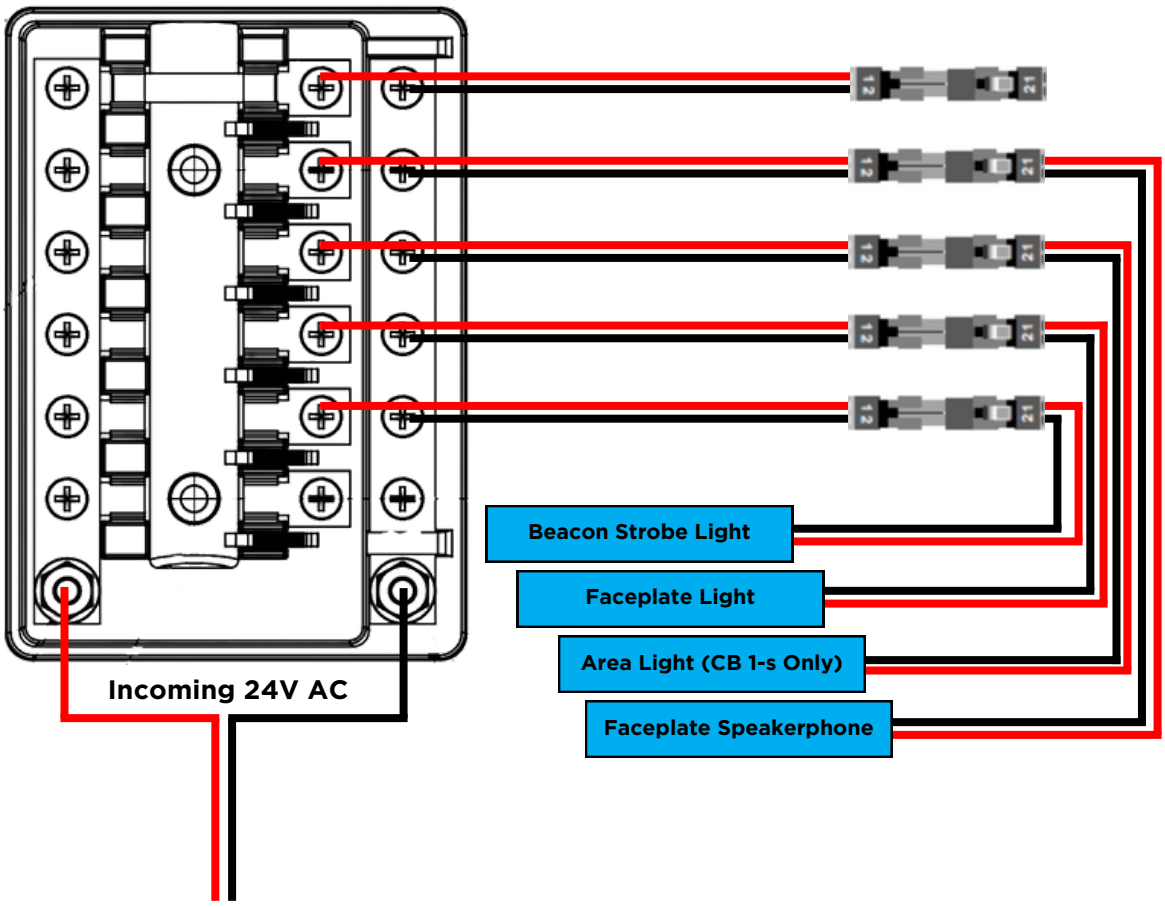
9 Wiring Diagrams

CB 1-e & CB 1-s 24V AC Standard Wiring

For installations with 24V AC incoming power on site.

Used in the following configurations:

- **Standard CB 1-e - No Cellular or Audio Paging Options**
- **Standard CB 1-s - No Cellular or Audio Paging Options**



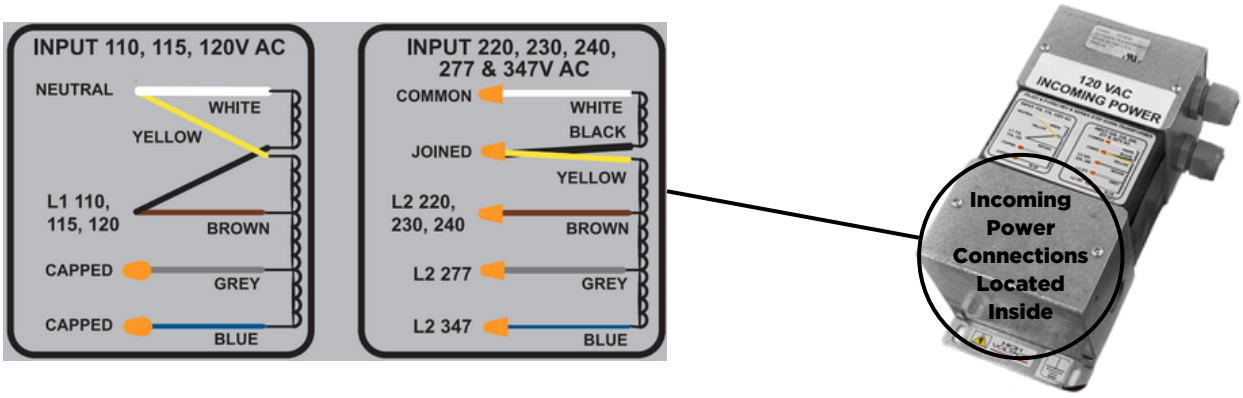
CB 1-e & CB 1-s 110-347V AC Standard Wiring with Multi-Tap Transformer (Power Brick)

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

Used in the following configurations:

- Standard CB 1-e - No Cellular or Audio Paging Options
- Standard CB 1-s - No Cellular or Audio Paging Options
- CB 1-e w/ Cellular Communication
- CB 1-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**
- **Area Light (CB 1-s Only)**

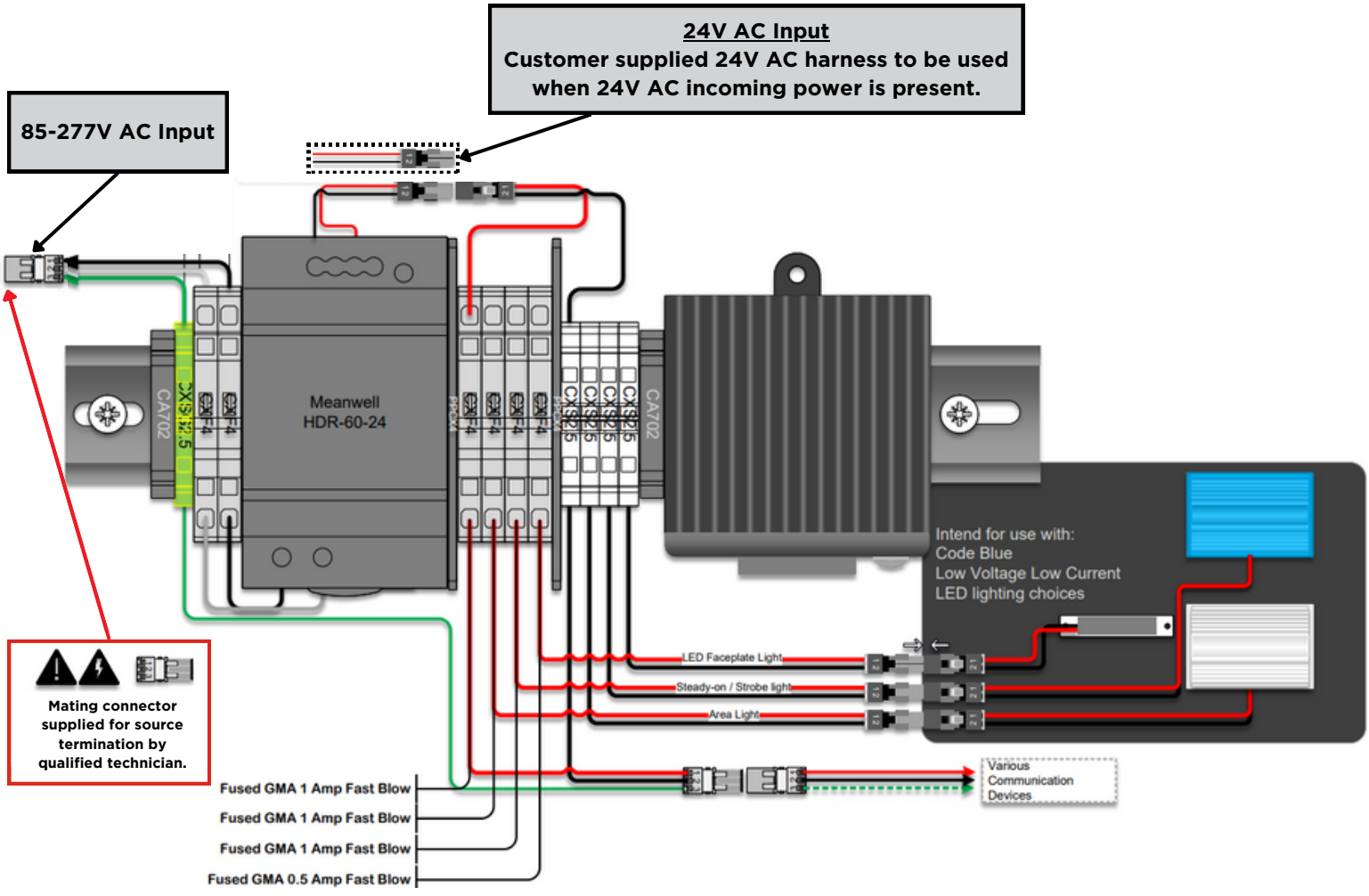
Remaining outputs can be used for accessory equipment selected at time of ordering.

CB 1-e & CB 1-s 24-277V AC DIN Rail Power System

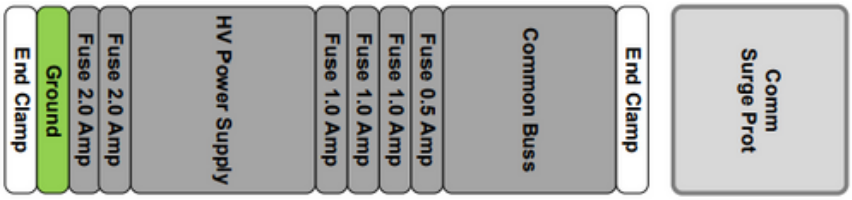
For installations with 24-277V AC incoming power on site. Provides flexibility for future power updates compared to the 24V AC only option detailed on page 25.

Used in the following configurations:

- Standard CB 1-e - No Cellular or Audio Paging Options
- Standard CB 1-s - No Cellular or Audio Paging Options
- CB 1-e w/ Cellular Communication
- CB 1-s w/ Cellular Communication



DIN Rail Layout

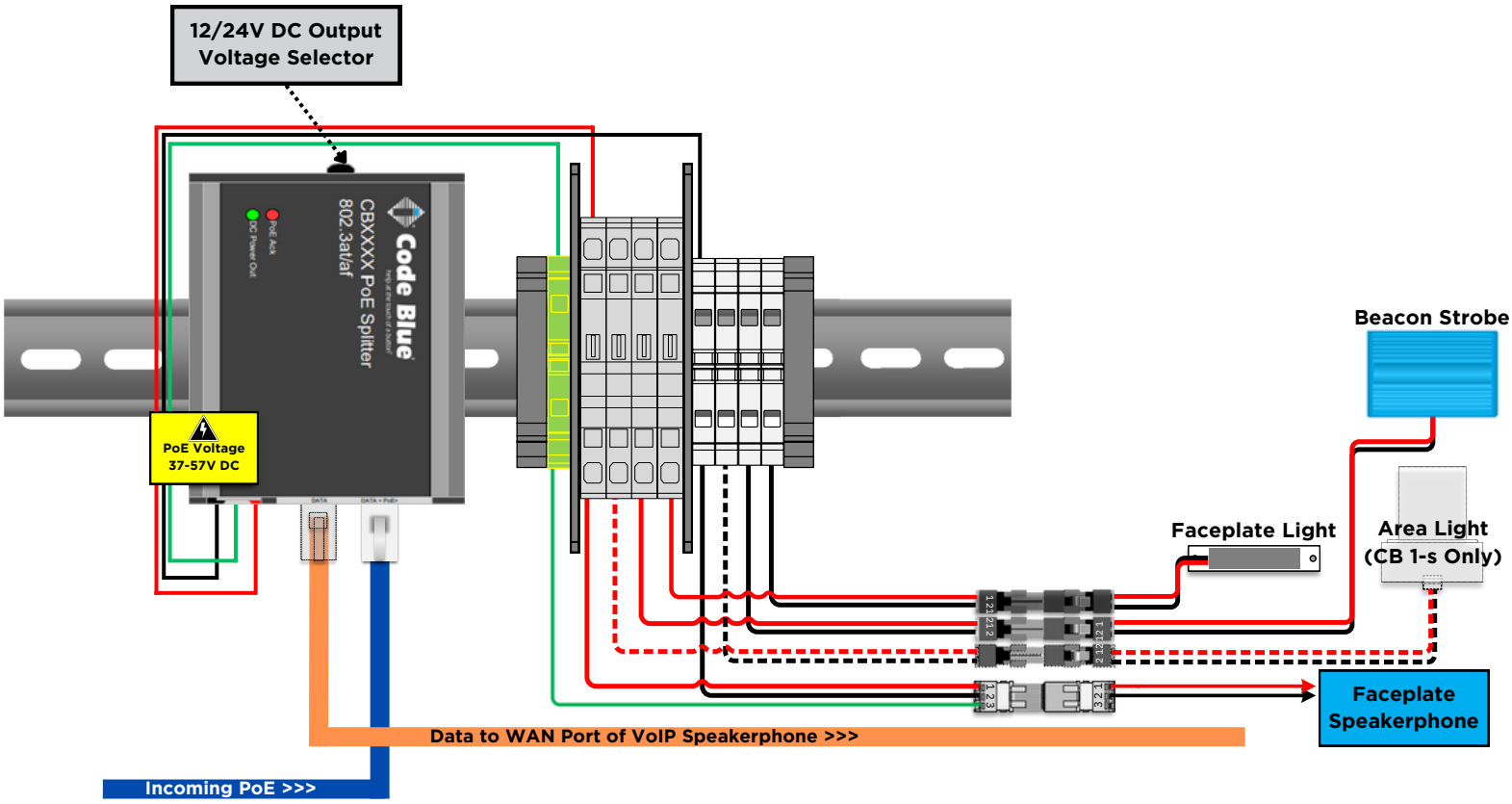


CB 1-e & CB 1-s PoE DIN Rail Power System

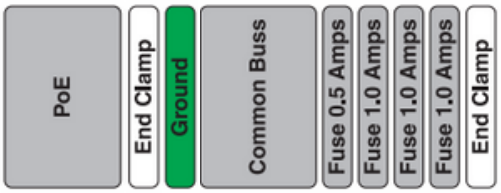
For installations with PoE incoming power on site.

Used in the following configurations:

- **Standard CB 1-e - No Cellular or Audio Paging Options**
- **Standard CB 1-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.**

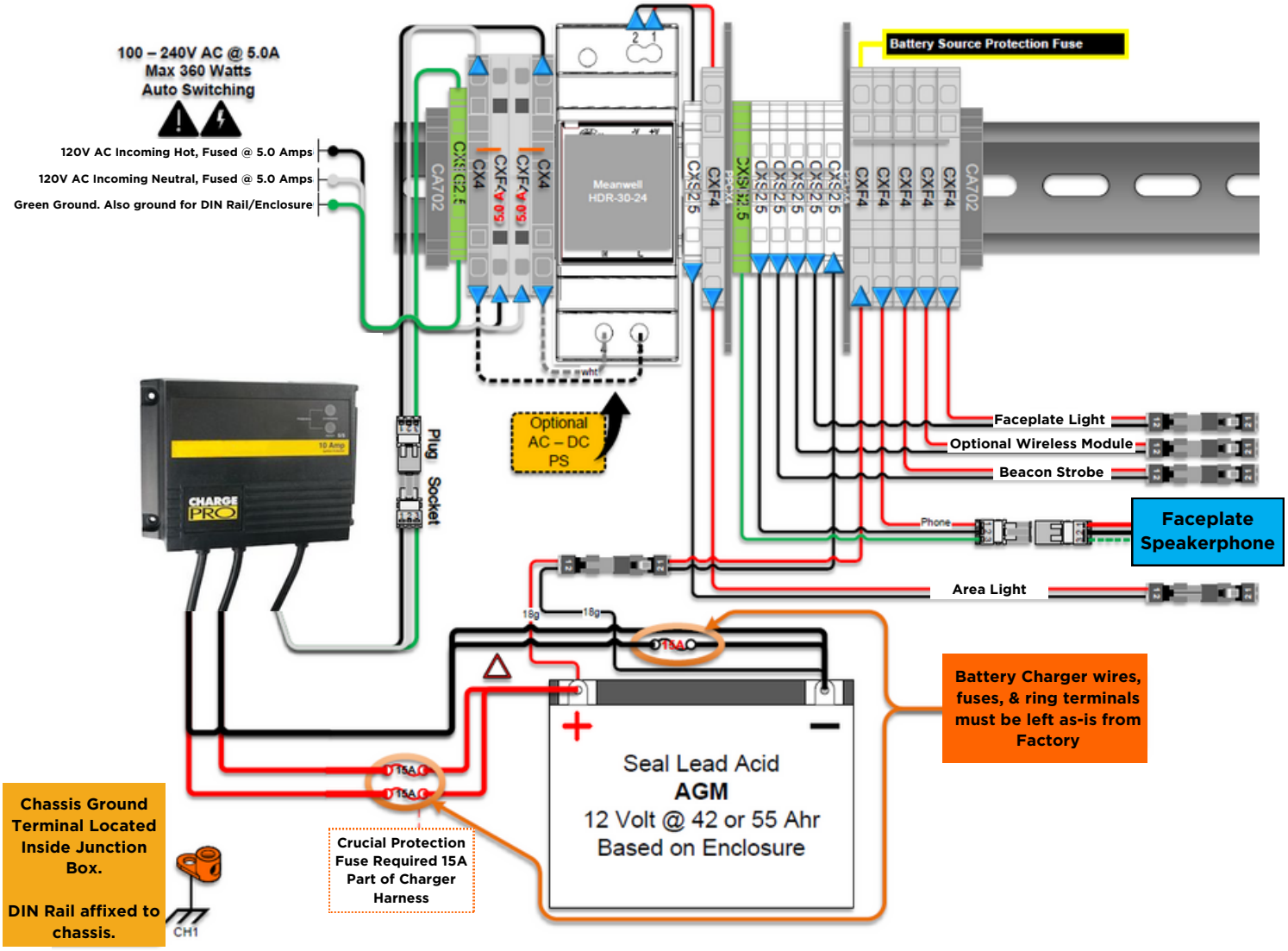
IMPORTANT NOTE: **LS1000 speakerphones operate on 12V DC only. If the 24V DC output is selected on the PoE splitter, the use of a 24V to 12V DC step-down transformer must be installed prior to connecting the power system to the speakerphone.**

CB 1-s with NightCharge® DIN Rail Power System

For installations with 100-240V AC incoming power, utilizing the NightCharge® switch-grid power system.

Used in the following configurations:

- **Standard CB 1-s - No Cellular or Audio Paging Options**
- **CB 1-s w/ Cellular Communication**



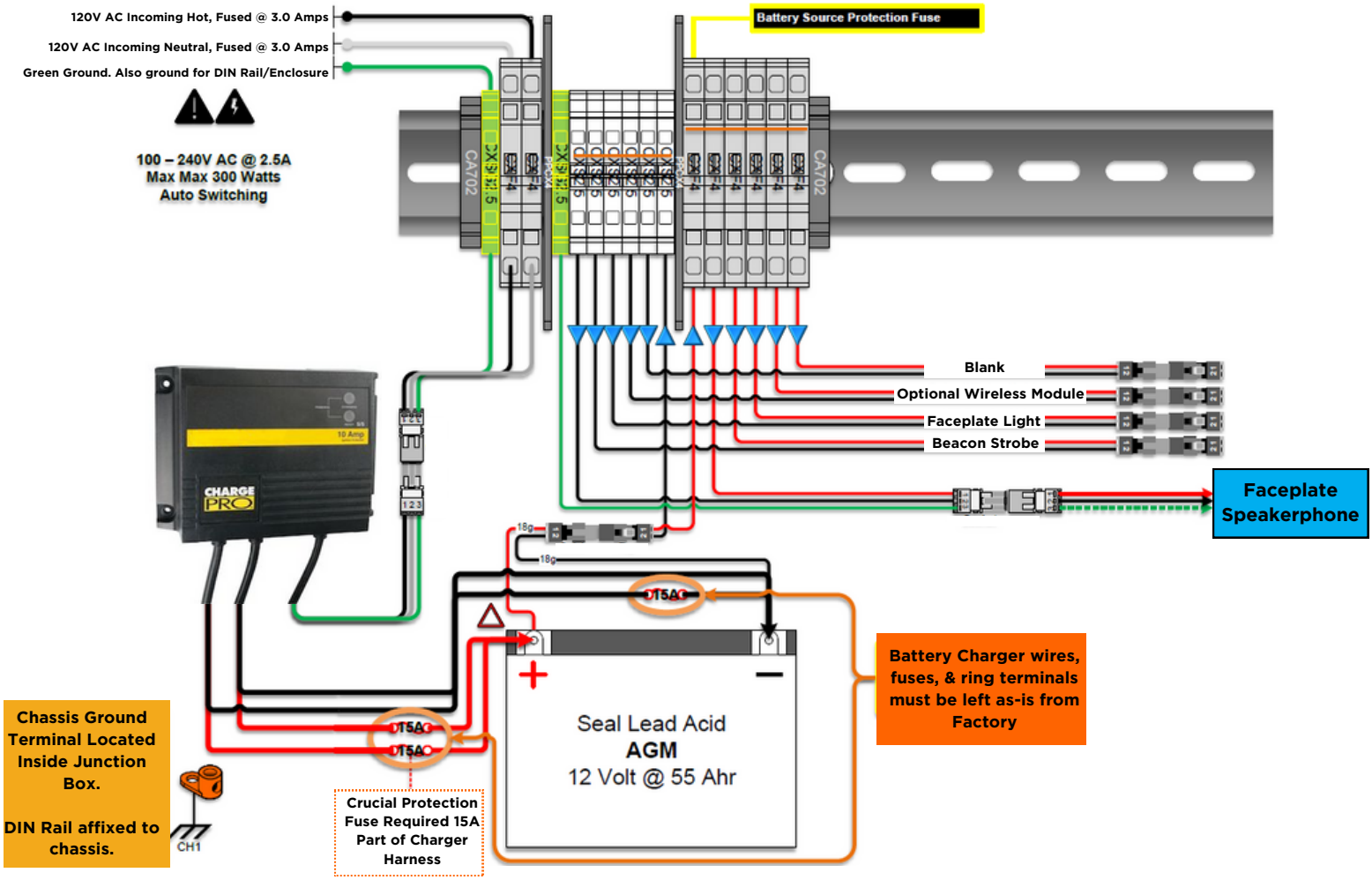
DIN Rail Layout

CB 1-e with NightCharge® DIN Rail Power System

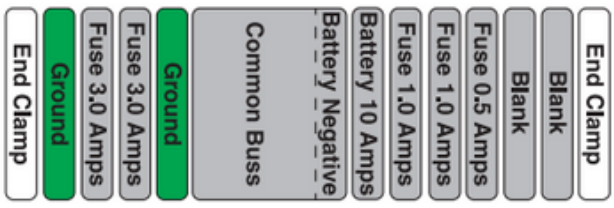
For installations with 100-240V AC incoming power, utilizing the NightCharge® switch-grid power system.

Used in the following configurations:

- **Standard CB 1-e - No Cellular or Audio Paging Options**
- **CB 1-e w/ Cellular Communication**



DIN Rail Layout

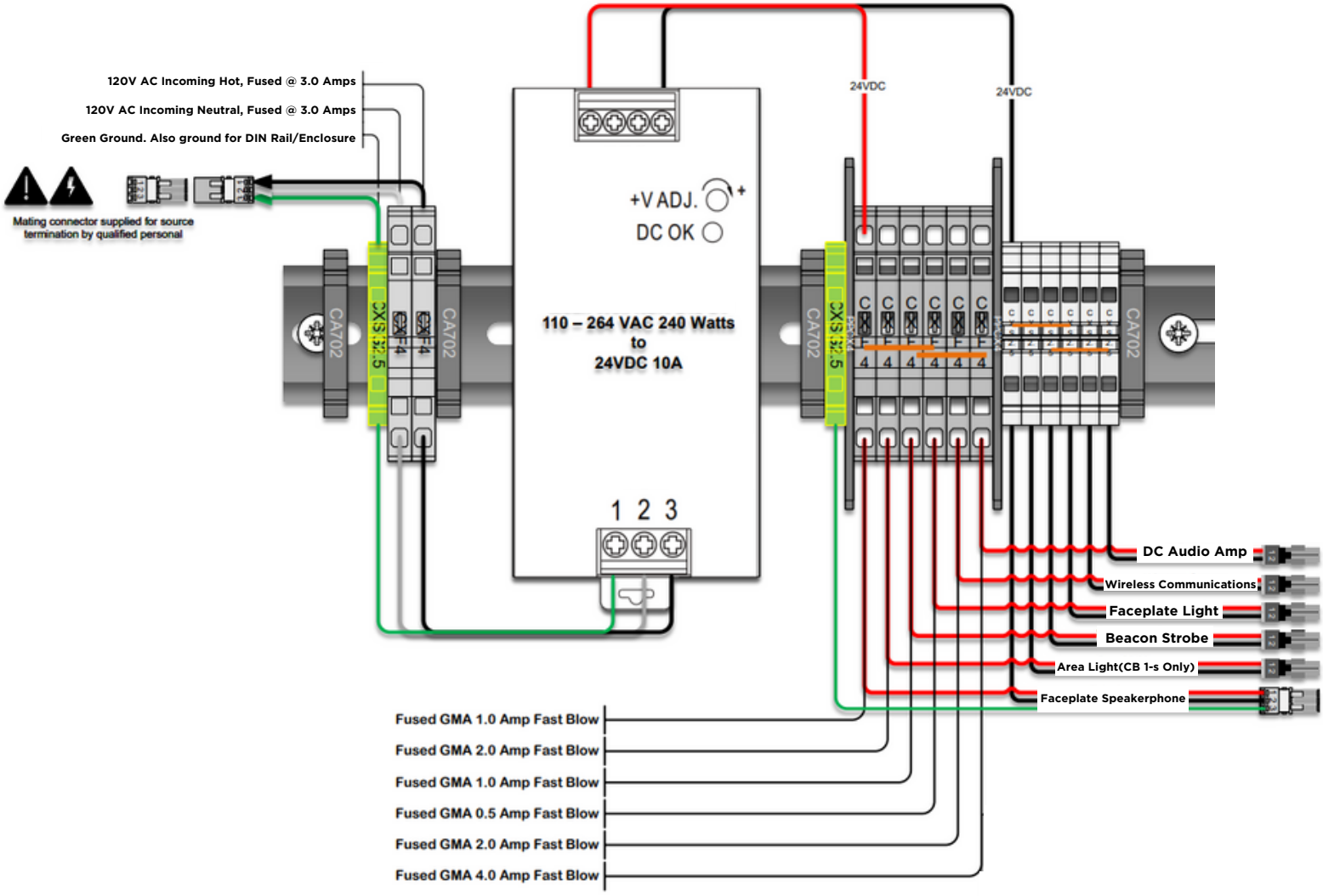


CB 1-e & CB 1-s with Audio Paging DIN Rail Power System

For installations with 100-240V AC incoming power, utilizing 360° Audio Paging speaker array.

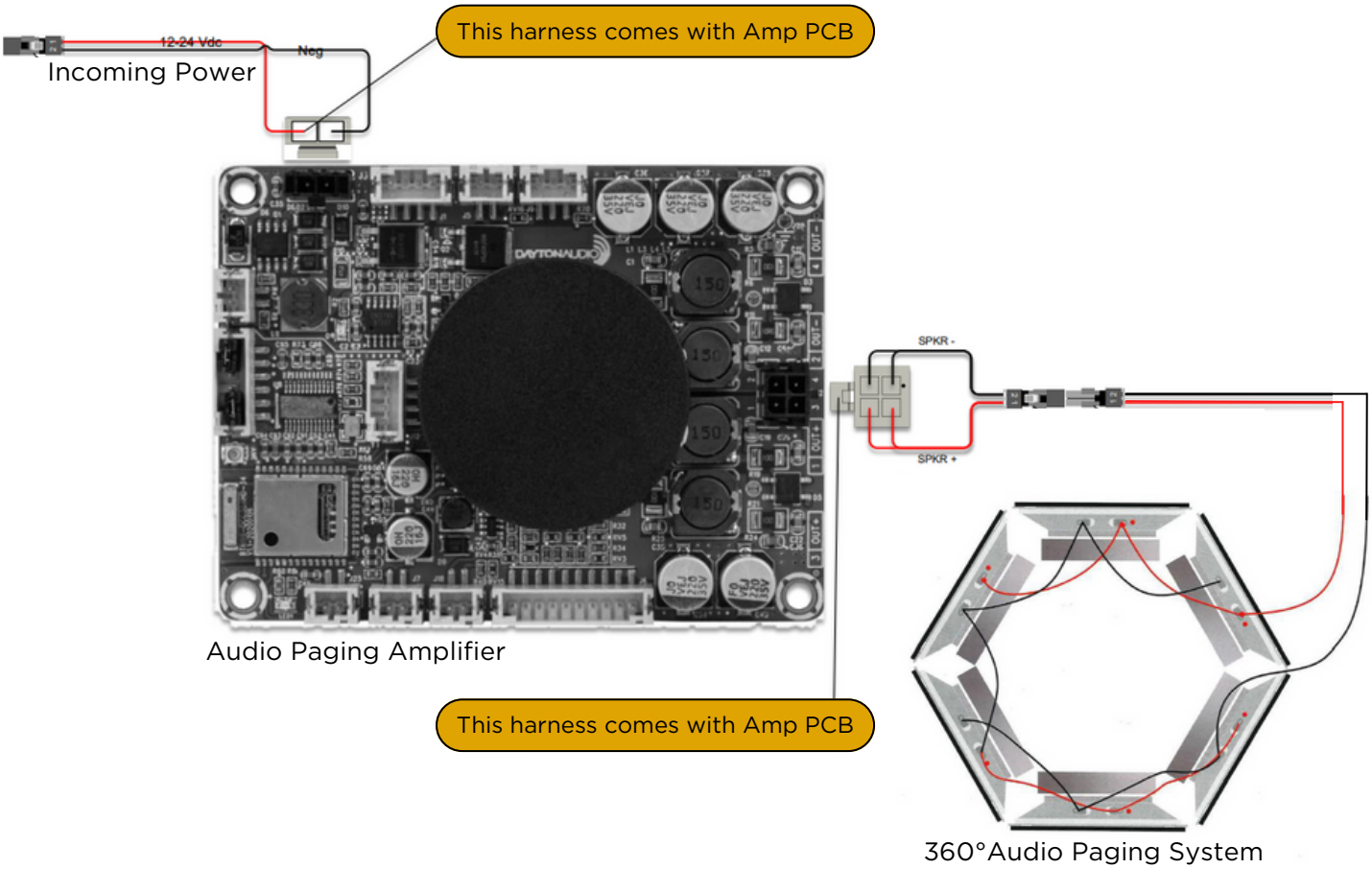
Used in the following configurations:

- **CB 1-e with 360° Audio Paging Top (With or without cellular communication)**
- **CB 1-s with 360° Audio Paging Top (With or without cellular communication)**

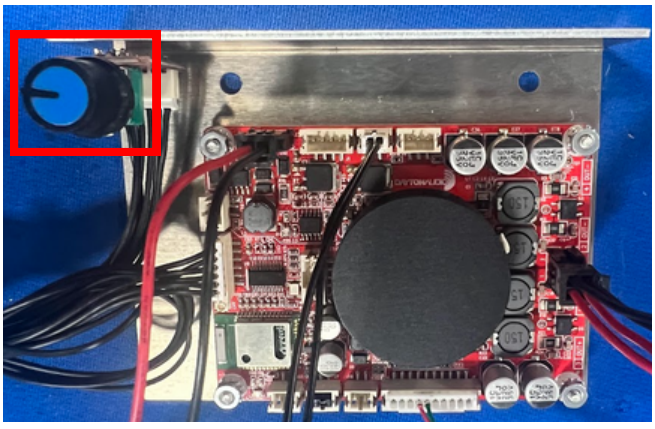


DIN Rail Layout

360°Audio Paging Amplifier Wiring & Volume Control



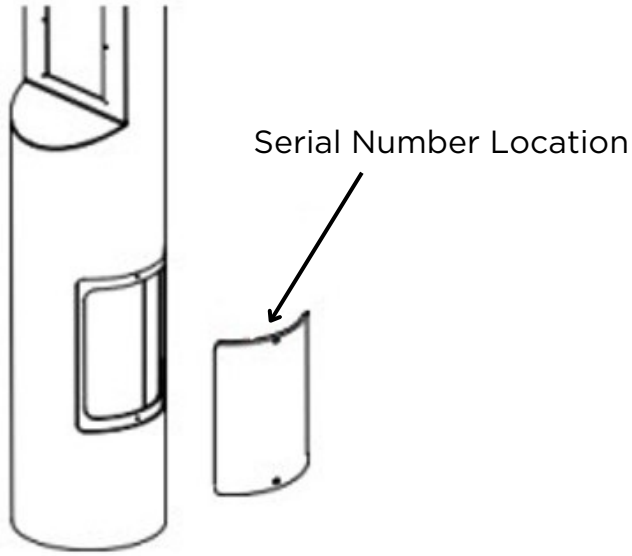
- **Locate Volume Adjustment Knob on Paging Amp** - See location in below photo



- **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.

10 Locating Unit Serial Number

Remove the access door with the special security bit. The serial number will be listed on the manufacturer's label located on the backside of the access door.



11 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 bloacking view of base station)**

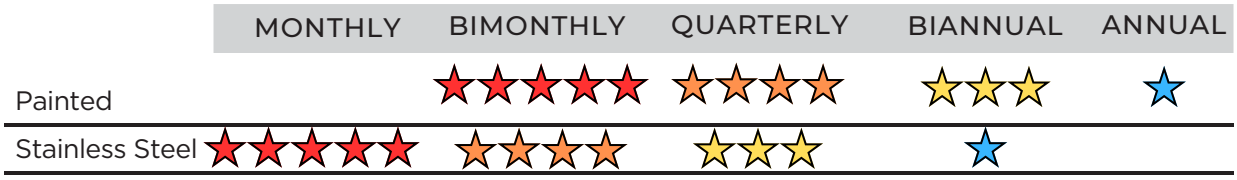
UNIT SURFACE MAINTENANCE

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 airborn 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



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.

12 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**

In Case of Breakdown

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

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 or call **800-205-7186, option 2**.

13 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
Frimware: www.codeblue.com/resources/firmware
Maintenance Tips: www.codeblue.com/support
Product Sheets: www.codeblue.com/resources/sheets
Specifications: 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**.

14 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.**

Support

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

Visit **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 or **800-205-7186**