CB4 Series

Model: ENBS02, ENBS03, ENBS04, & ENBS05

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.

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2 Introduction

Thank you for choosing the **CB 4 Series** for your Code Blue application.

The **CB 4 Series** is our basic communication unit designed for wall or pole installations in interior and exterior applications. The all-steel housing and Code Blue's speakerphone system meet the need for a highly vandal resistant unit, while providing a cost-effective and reliable solution.

The **CB 4 Series** is a good choice for dorm and building entrances, hallways and transit centers. The exclusive analog InterAct and VoIP speakerphones are designed for maximum reliability, vandal resistance, auxiliary functions, mass notification control, and fault monitoring and reporting capabilities. (see IA4100 or LS1000 guides for more information on our speakerphones)

Our unmistakable craftsmanship makes our enclosures the most rugged on the market, withstanding the punishment of natural and man-made disasters. **CB 4 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
- Low power consumption LED faceplate light
- 180° Audio Paging Speaker
- Remote Mount Beacon/Strobe
- Cellular Communication – CB 4-u only
- NightCharge® – CB 4-u only
- Directory Plate
- Color IP Camera – CB 4-s with Dual Faceplates only
- Custom Cut-out Stainless Steel Plate – CB 4-u only

This guide contains all of the Code Blue **CB 4 Series** information for the **CB 4-s**, **CB 4-u**, and **CB 4-r**. This guide contains a general overview of the **CB 4 Series** options and its application, installation and wiring.

CB 4-s

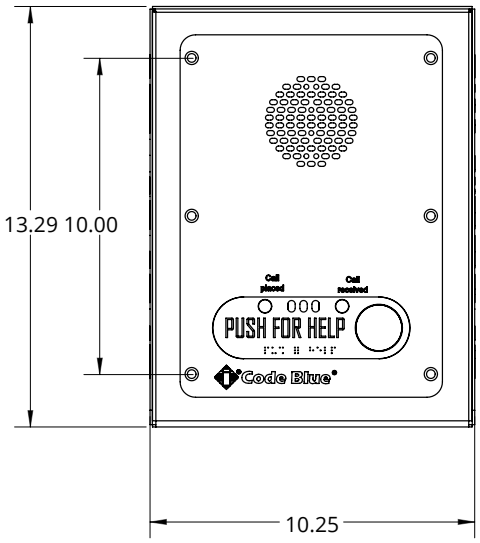
CB 4-r

CB 4-s with
Dual Faceplates

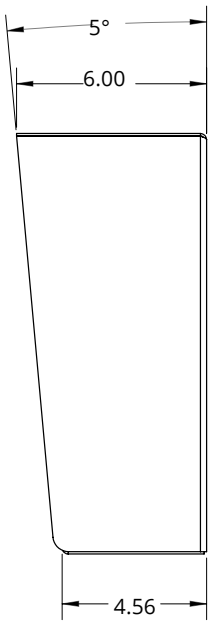
CB 4-u

3 Dimensions

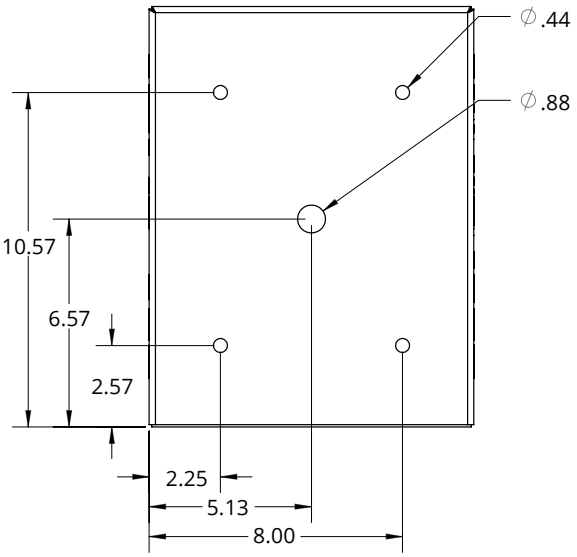
CB 4-s



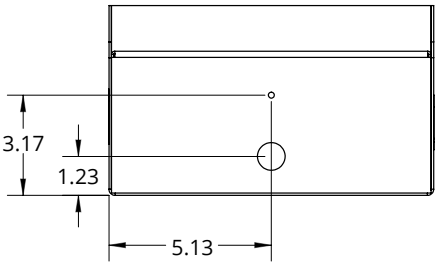
FRONT VIEW



SIDE VIEW

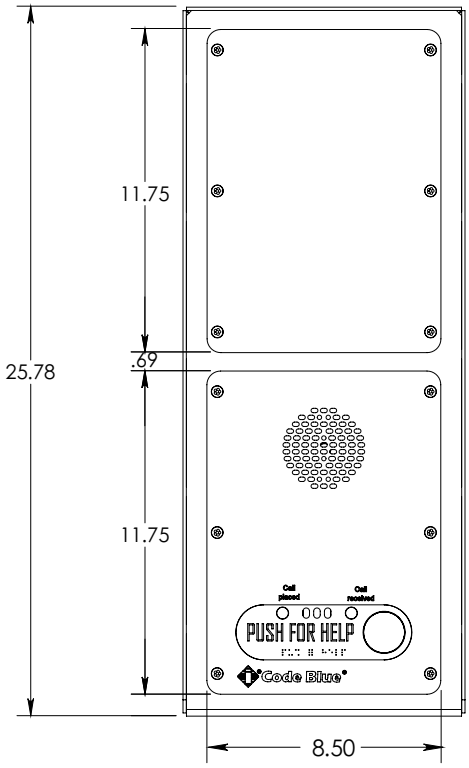


BACK VIEW

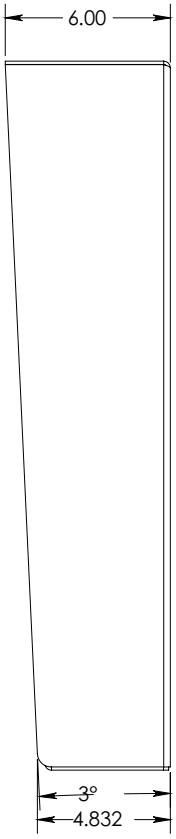


BOTTOM VIEW

CB 4-s with Dual Faceplates



FRONT VIEW



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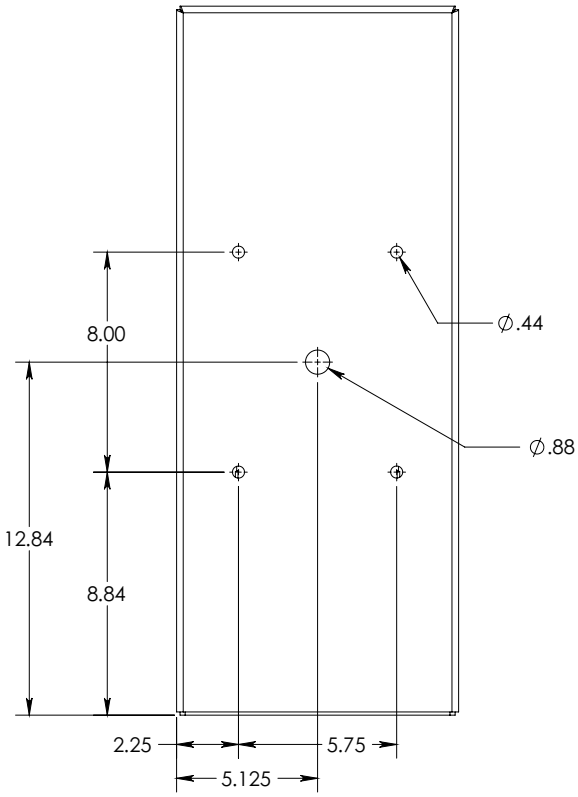
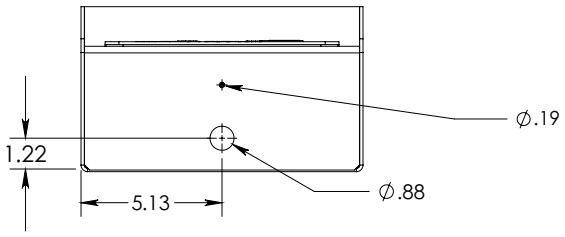
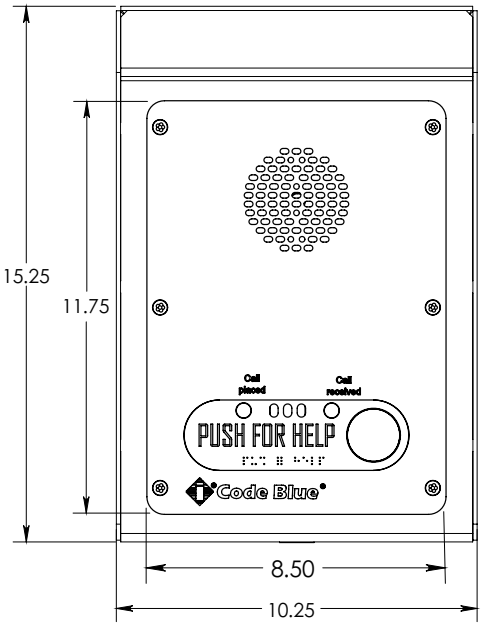


BACK VIEW

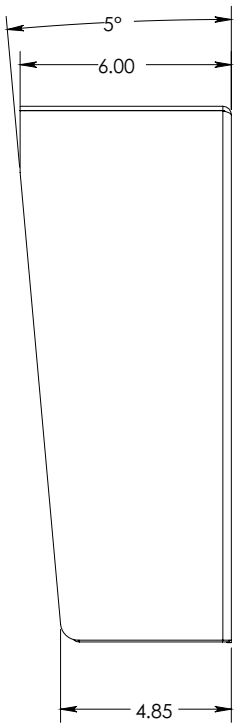


BOTTOM VIEW

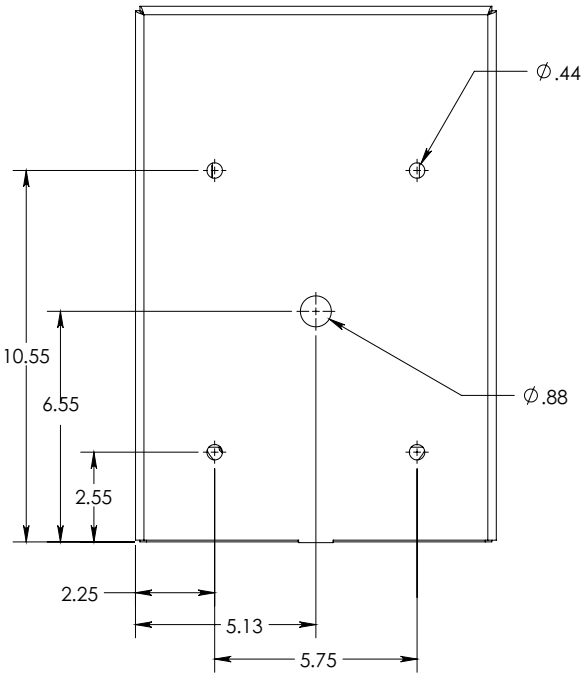
CB 4-r



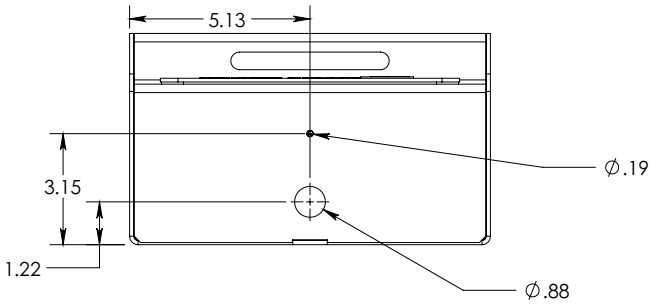
FRONT VIEW



SIDE VIEW

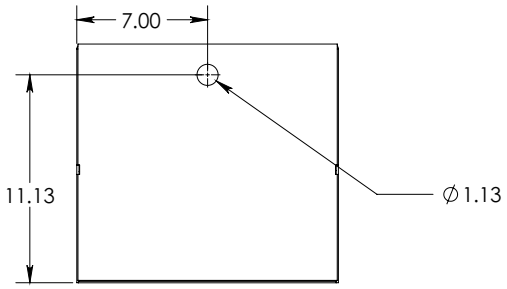


BACK VIEW

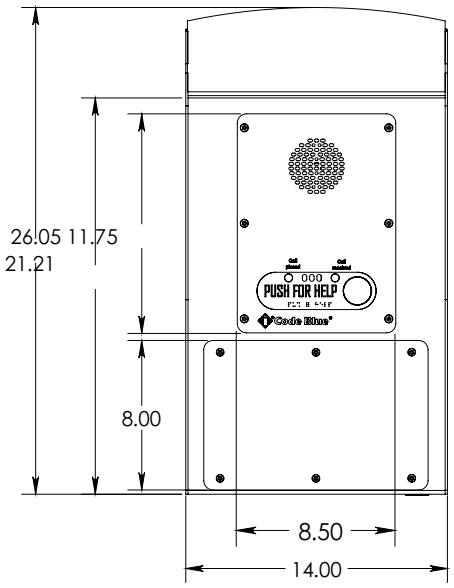


BOTTOM VIEW

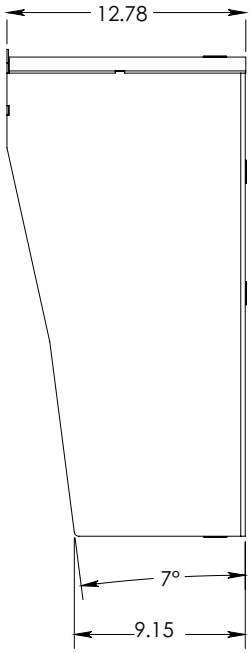
CB 4-u



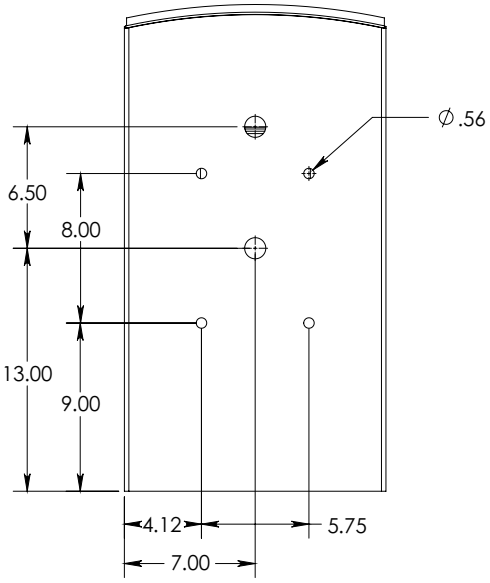
TOP VIEW



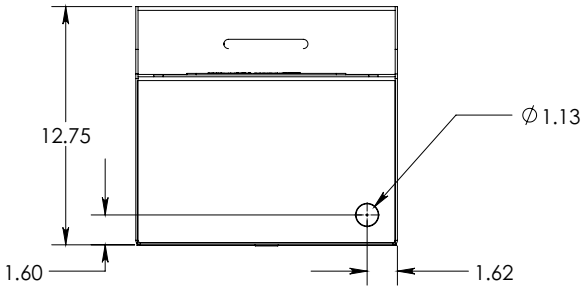
FRONT VIEW



SIDE VIEW



BACK VIEW



BOTTOM VIEW

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

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.

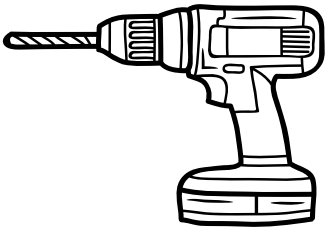
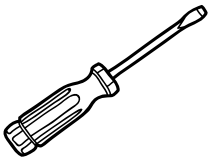
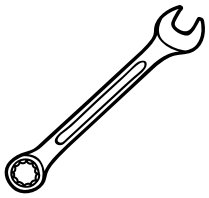
Tools Needed

CB 4-s & CB 4-r Units:

- Ladder to reach above unit - For Remote Beacon/Strobe Only
- Drill & Security Bit for removing & inserting security screws on phone.
- 3/8” Socket set & extension to mount unit onto wall
- Banding Tool if using Pole Mount kit

CB 4-u Units:

- Drill & Security Bit for removing & inserting security screws on phone & access plate.
- 3/8” Socket set & extension to mount unit onto wall
- Banding Tool if using Pole Mount kit

CB 4-s Installation Instructions

- **PRE-INSTALLATION**
  - **Electrical preparation** – The unit may have supply wires run from either A) behind the unit through the wall, or B) below the unit using an external conduit through the bottom of the unit's back plate. Holes in the back and bottom of the unit have been provided for this purpose.

- **INSTALLATION PROCEDURES**
  - **Mark the mounting holes** – In order to comply with the Americans with Disabilities Act (ADA) of 1990, the speakerphone button(s) should be positioned between 34 and 48 inches from grade level. (Consult an ADA specialist in your area to verify local and federal guidelines.)
  - **Drill all marked holes.**
  - **Secure the housing to the wall** – Four anchors of appropriate size and type should be used to securely fasten the housing to the wall or pole mount.

IMPORTANT: If wiring is coming in from the back, ensure that the conduit is aligned at this time.

  - **Connect electrical and communications wiring.** Follow all federal and local codes that apply.

- **CONNECT THE POWER WIRING**
  - **Wiring**
    - **Grounding** - One input power connector has been provided for power source termination
    - **Low Voltage** - 12-24V AC or DC source voltage, choice is limited to the most restricted voltage and type of voltage (ac or dc) required for the configuration selected. See label with voltage and type inside the enclosure.
    - **Maximum wattage** - 12.96 watts
      - Pin 1 = Hot or Positive
      - Pin 2 = Neutral or Negative
      - Pin 3 = Ground

  - **PoE Power Option**

WARNING PoE is considered HIGH VOLTAGE (NEC) (range is 37-57v DC)

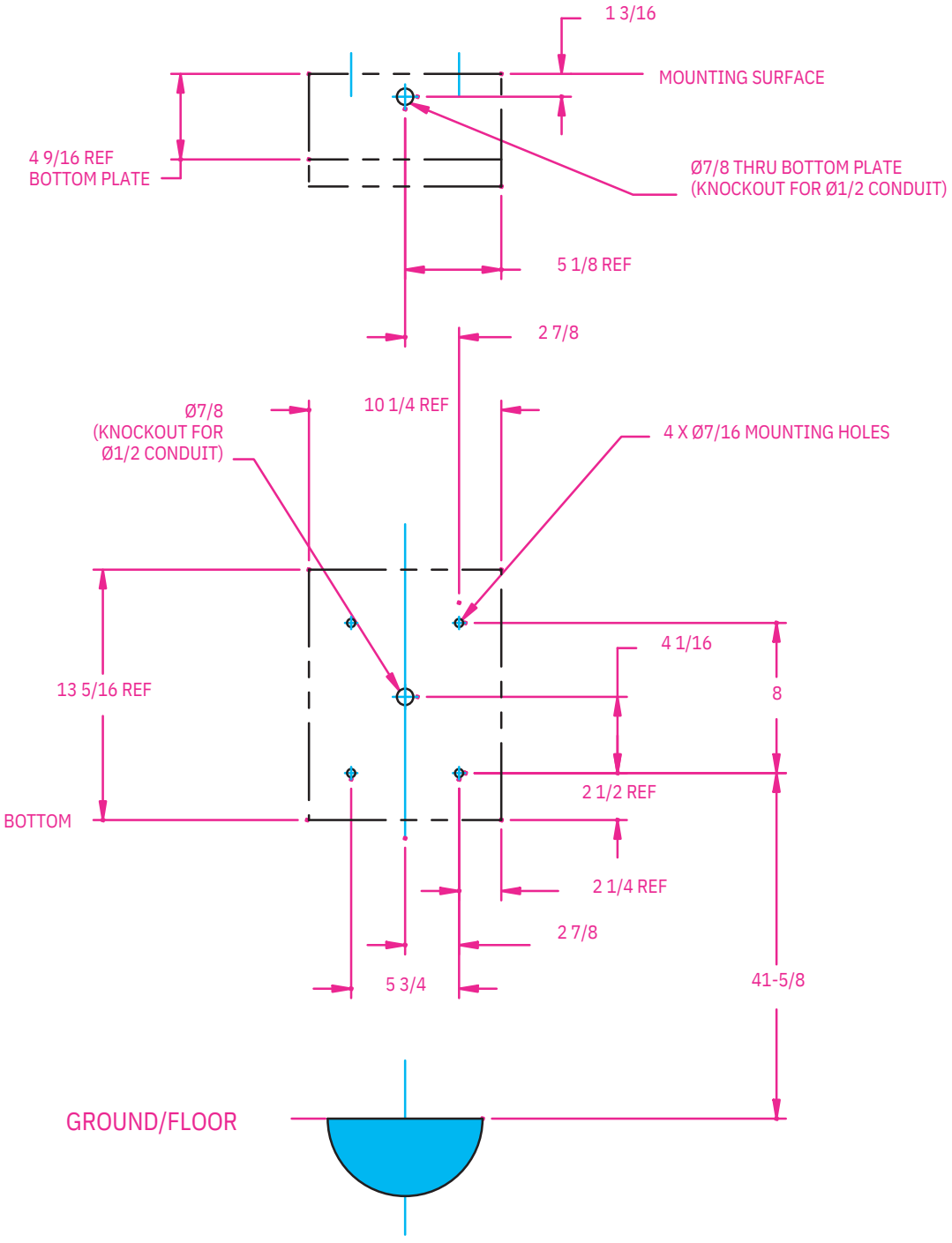
    - PoE cable must be terminated using a RJ-45 configured EIA/TIA T568b configuration
    - **Grounding** - Depending on the facilities PoE deployment, grounding may be terminated in the enclosure, or at the PoE source.

CAUTION ⚠ - When PoE is grounded back at the switch/injector, use a shielded PoE surge protector to eliminate ground loop potential, which can create data signal corruption issues, as well as create a safety issue for users.

  - **Connect the Phone Line** (if required) - See phone installation instructions
  - **Apply Power** - The enclosure should become operational immediately after the PoE Ethernet cable has been connected.

See diagrams next page

CB 4-s Wall Mounting Diagram



Suggested installation dimensions shown from ground to lower right mounting hole are for single button faceplates.

- For dual button faceplate, deduct 3.25 inches.
- For keypad faceplate, deduct 4.5 inches.
- For wheelchair direct facing access only, deduct 6 inches.

DISCLAIMER: The dimensions above are intended as guidelines only. For specific installation requirements, reference your local codes.

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.

CB 4-s with Dual Faceplates Installation Instructions

- **PRE-INSTALLATION**
  - **Electrical preparation** – The unit may have supply wires run from either A) behind the unit through the wall, or B) below the unit using an external conduit through the bottom of the unit's back plate. Holes in the back and bottom of the unit have been provided for this purpose.

- **INSTALLATION PROCEDURES**
  - **Mark the mounting holes** – In order to comply with the Americans with Disabilities Act (ADA) of 1990, the speakerphone button(s) should be positioned between 34 and 48 inches from grade level. (Consult an ADA specialist in your area to verify local and federal guidelines.)
  - **Drill all marked holes**.
  - **Secure the housing to the wall** – Four anchors of appropriate size and type should be used to securely fasten the housing to the wall or pole mount.

IMPORTANT: If wiring is coming in from the back, ensure that the conduit is aligned at this time.

  - **Connect electrical and communications wiring**. Follow all federal and local codes that apply.

- **CONNECT THE POWER WIRING**
  - **Wiring**
    - **Grounding** - One input power connector has been provided for power source termination
    - **Low Voltage** 12-24V AC or DC source voltage, choice is limited to the most restricted voltage and type of voltage (ac or dc) required for the configuration selected. See label with voltage and type inside the enclosure.
    - **Maximum wattage** - 12.96 watts
      - Pin 1 = Hot or Positive
      - Pin 2 = Neutral or Negative
      - Pin 3 = Ground

  - **PoE Power Option**

    WARNING PoE is considered HIGH VOLTAGE (NEC) (range is 37-57v DC)

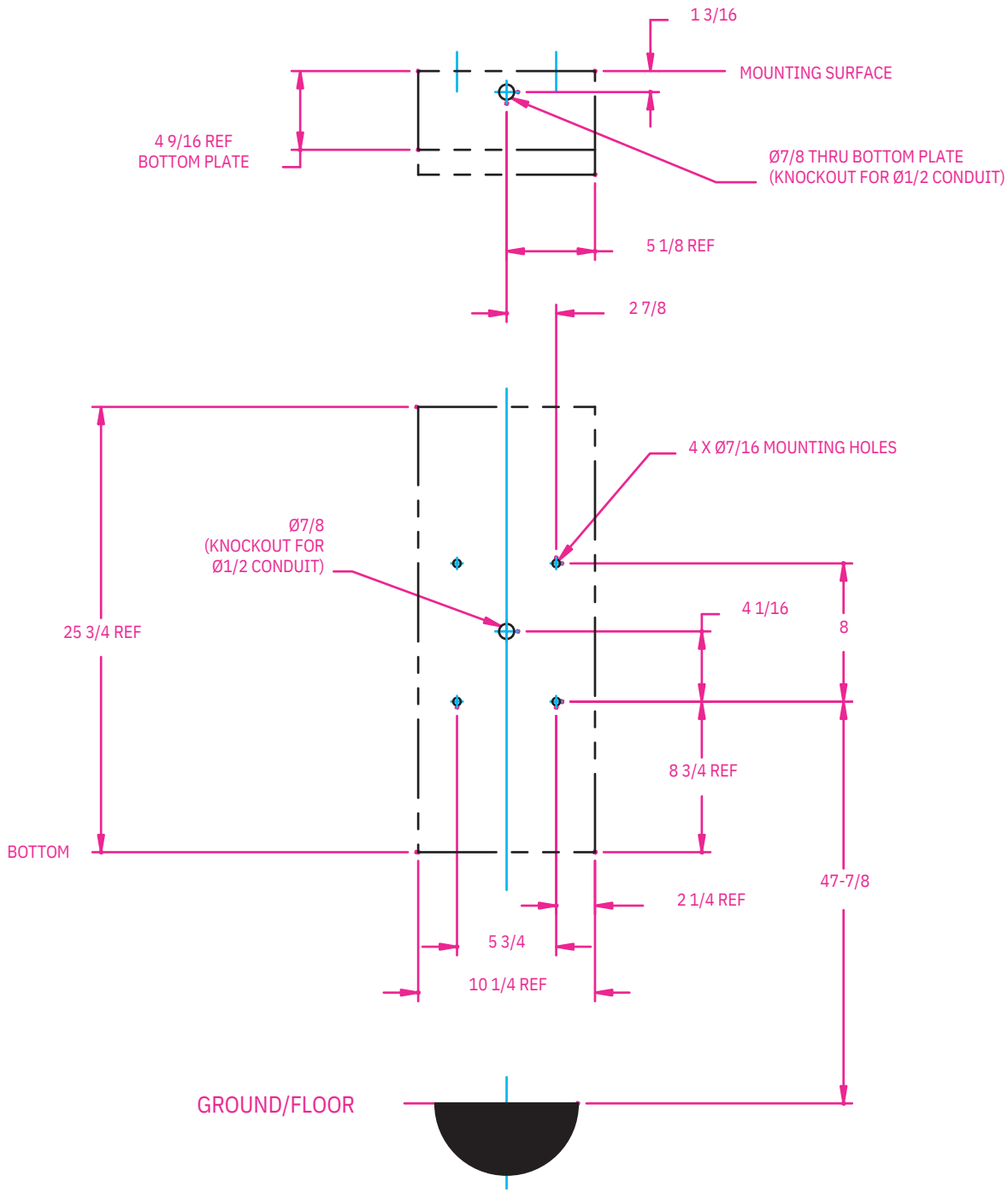
    - PoE cable must be terminated using a RJ-45 configured EIA/TIA T568b configuration
    - **Gounding** - Depending on the facilities PoE deployment, grounding may be terminated in the enclosure, or at the PoE source.

CAUTION - When PoE is grounded back at the switch/injector, use a shielded PoE surge protector to eliminate ground loop potential, which can create data signal corruption issues, as well as create a safety issue for users.

  - **Connect the Phone Line** (if required) - See phone installation instructions
  - **Apply Power** - The enclosure should become operational immediately after the PoE Ethernet cable has been connected.

See diagrams next page

CB 4-s w/ Dual Faceplates Wall Mounting Diagram



Suggested installation dimensions shown from ground to lower right mounting hole are for single button faceplates.

- For dual button faceplate, deduct 3.25 inches.
- For keypad faceplate, deduct 4.5 inches.
- For wheelchair direct facing access only, deduct 6 inches.

DISCLAIMER: The dimensions above are intended as guidelines only. For specific installation requirements, reference your local codes.

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.

CB 4-r Installation Instructions

- **PRE-INSTALLATION**
  - **Electrical preparation** – The unit may have supply wires run from either A) behind the unit through the wall, or B) below the unit using an external conduit through the bottom of the unit. Holes in the back and bottom of the unit have been provided for this purpose.
- **INSTALLATION PROCEDURES**
  - **Mark the mounting holes** – In order to comply with the Americans with Disabilities Act (ADA)of 1990, the speakerphone button(s) should 15-1/4 be positioned between 34 and 48 inches from grade level (Consult an ADA specialist in your area to verify local and federal guidelines).
  - **Drill all marked holes.**
  - **Secure the housing to the wal**l – Four anchors of appropriate size and type should be used to securely fasten the housing to the wall or pole mount.

IMPORTANT: If wiring is coming in from the back, ensure that the conduit is aligned at this time.

  - **Connect electrical and communications wiring.** Follow all federal and local codes that apply.

- **CONNECT THE POWER WIRING**
  - **Wiring**
  - **Grounding** - One input power connector has been provided for power source termination
  - **Low Voltage** 12-24V AC or DC source voltage, choice is limited to the most restricted voltage and type of voltage (ac or dc) required for the configuration selected. See label with voltage and type inside the enclosure.
  - **Maximum wattage** - 12.96 watts
    - Pin 1 = Hot or Positive
    - Pin 2 = Neutral or Negative
    - Pin 3 = Ground

  - **PoE Power Option**

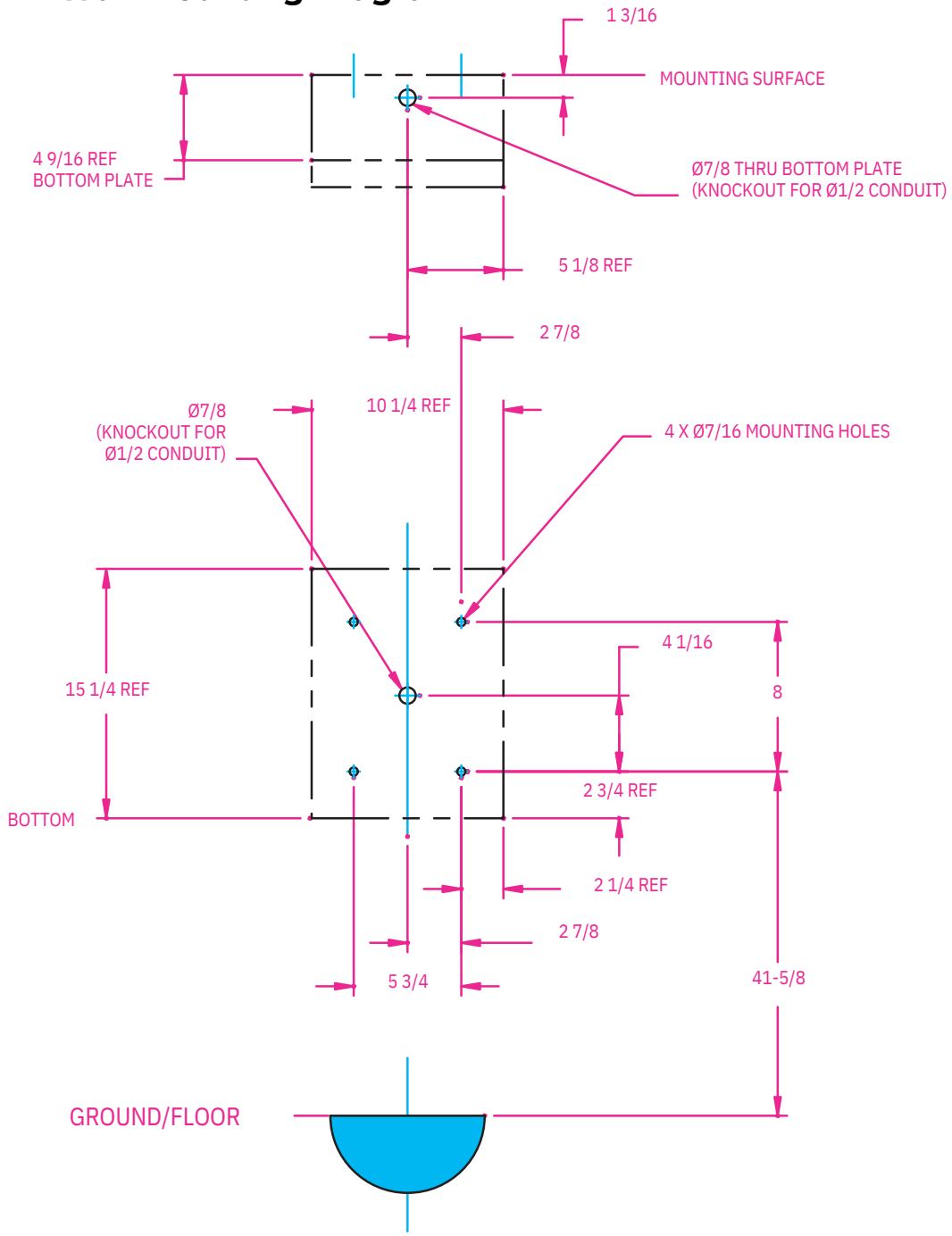
WARNING PoE is considered HIGH VOLTAGE (NEC) (range is 37-57v DC)

    - PoE cable must be terminated using a RJ-45 configured EIA/TIA T568b configuration
    - Grounding - Depending on the facilities PoE deployment, grounding may be terminated in the enclosure, or at the PoE source.

CAUTION ⚠ - When PoE is grounded back at the switch/injector, use a shielded PoE surge protector to eliminate ground loop potential, which can create data signal corruption issues, as well as create a safety issue for users.

  - **Connect the Phone Line** (if required) - See phone installation instructions
  - **Apply Power** - The enclosure should become operational immediately after the PoE Ethernet cable has been connected.

CB 4-r Wall Mounting Diagram



Suggested installation dimensions shown from ground to lower right mounting hole are for single button faceplates.

- For dual button faceplate, deduct 3.25 inches.
- For keypad faceplate, deduct 4.5 inches.
- For wheelchair direct facing access only, deduct 6 inches.

DISCLAIMER: The dimensions above are intended as guidelines only. For specific installation requirements, reference your local codes.

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.

CB 4-u Installation Instructions

- **PRE-INSTALLATION**
  - **Electrical preparation** – The unit may have supply wires run from either (a) behind the unit through the wall, or (b) below the unit using an external conduit through the bottom of the unit's back plate. Holes in the bottom of the unit have been provided for this purpose. Holes in the back of the unit must be provided by others.
- **INSTALLATION PROCEDURES**
  - **Mark the mounting holes** – In order to comply with the Americans with Disabilities Act (ADA) of 1990, the speakerphone button(s) should be positioned between 34 and 48 inches from grade level. (Consult an ADA specialist in your area to verify local and federal guidelines.)
  - **Drill all marked holes**.
  - **Secure the housing to the wall** – Four anchors of appropriate size and type should be used to securely fasten the housing to the wall or pole mount.

IMPORTANT: If wiring is being supplied from the back, ensure that the conduit is aligned at this time.

  - **Connect electrical and communications wiring** (see wiring instructions). Follow all national and local codes that apply.

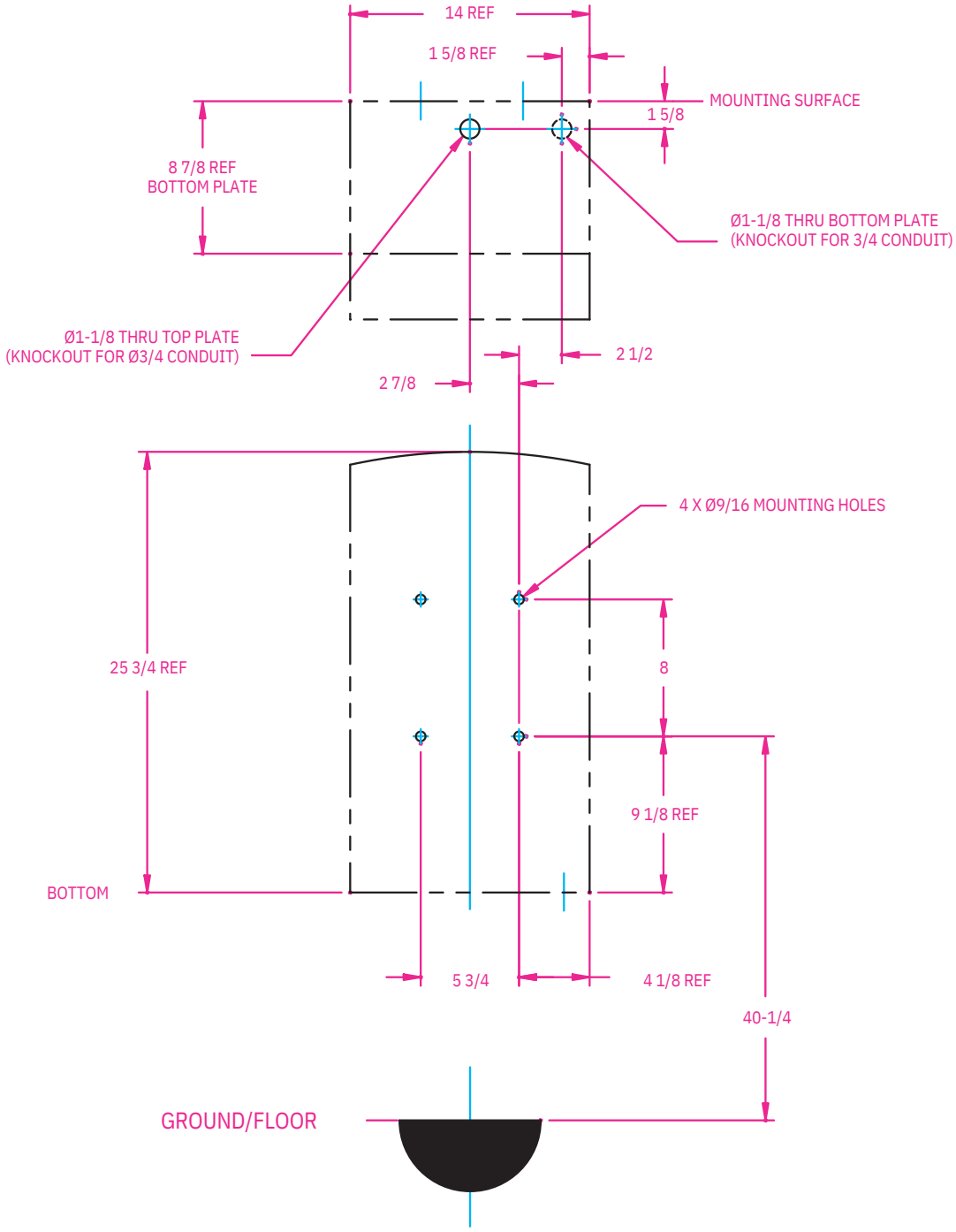
- **CONNECT THE POWER WIRING**
  - **Wiring**
    - **Grounding** - One input power connector has been provided for power source termination
    - **Low Voltage** 12-24V AC or DC source voltage, choice is limited to the most restricted voltage and type of voltage (ac or dc) required for the configuration selected. See label with voltage and type inside the enclosure.
    - **Maximum wattage** - 12.96 watts
      - Pin 1 = Hot or Positive
      - Pin 2 = Neutral or Negative
      - Pin 3 = Ground

  - **PoE Power Option** (range is 37-57v DC)
    - PoE cable must be terminated using a RJ-45 configured EIA/TIA T568b configuration
    - Grounding - Depending on the facilities PoE deployment, grounding may be terminated in the enclosure, or at the PoE source.

CAUTION - When PoE is grounded back at the switch/injector, use a shielded PoE surge protector to eliminate ground loop potential, which can create data signal corruption issues, as well as create a safety issue for users.

  - **NightCharge Option** (voltage range 110 – 220 Max wattage of 600w)
    - See diagram and instructions on page 25
  - **Power Brick Option** (voltage range 110 - 347 210 watts)
    - See diagram and instructions on page 27
  - **Connect the Phone Line** (if required) - See phone installation instructions
  - **Apply Power** - The enclosure should become operational immediately after the PoE Ethernet cable has been connected.

CB 4-u Wall Mounting Diagram

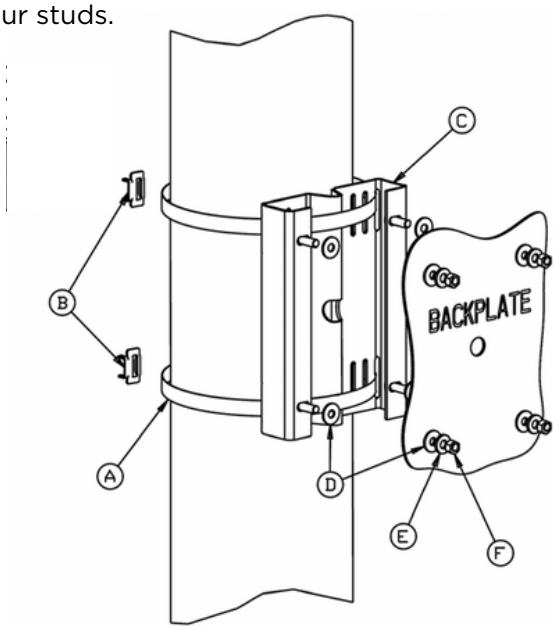


All wiring must be installed and connected by experienced and certified personnel to meet local and national electrical codes, and will include a service disconnect.

6 Alternative Mounting Instructions

CB 4 Series Pole Mount Installation Instructions

- **THREAD MOUNTING STRAPS THROUGH SLOTS**
  - Use outside slots for larger poles and inside slots for smaller poles.
- **HOLD BRACKET TO POLE**
  - Set the height of the bracket (C) so that the speakerphone push button(s) on the unit will be at desired height (please check with local codes for ADA compliance).
- **BAND THE BRACKET TO THE POLE AT DESIRED HEIGHT**
  - To eliminate waste, pull band (A) from carton as needed. With ears of buckle (B) away from operator, slide the buckle on the banding. Lace banding around the object being clamped and again through buckle.
  - Bend end of band under buckle.
  - Slide band in tool nose slot. Press down on gripper with thumb and tension clamp by turning the handle. Maximum tension has been reached when the band stops moving through the buckle.
  - When maximum tension has been reached, roll tool over buckle, at same time reversing handle carefully at approximately three-quarters turn to avoid breakage. The band that is released will be used in the bend and therefore there is no loss of tension.
  - Lift cutter lever and the band will be cut to correct length. While holding the stub of the band with your thumb, hammer flat over bridge of buckle.
  - Complete application by hammering the buckle ears over the stub.
- **ATTACH ENCLOSURE TO BRACKET**
  - Place a rubber washer (D) on each of the four studs.
  - Align and place the back plate of the unit over the four studs.
  - Place a second set of rubber washers on each of the four studs (inside the unit).
  - Place a steel washer (E) on each of the four studs.
  - Turn a nut (F) on each of the four studs.



Banding tool sold separately.
See Parts Order Form, part #41441.

CB 4 Series Curb Mount Installation

- **PRE-INSTALLATION** – Use outside slots for larger poles and inside slots for smaller poles.

    - **Electrical Preparation** – The unit will need phone and electrical wires running through the curb mount with at least 16 inches of wire coming out of the top of the curb mount to connect to the Code Blue phone. A 7/8 inch conduit hole in the back of the unit has been provided.

- **INSTALLATION PROCEDURES** – Curb Mounts should be mounted on concrete bases with a minimum depth of 4 inches, using the correct mounting bolts for your application.

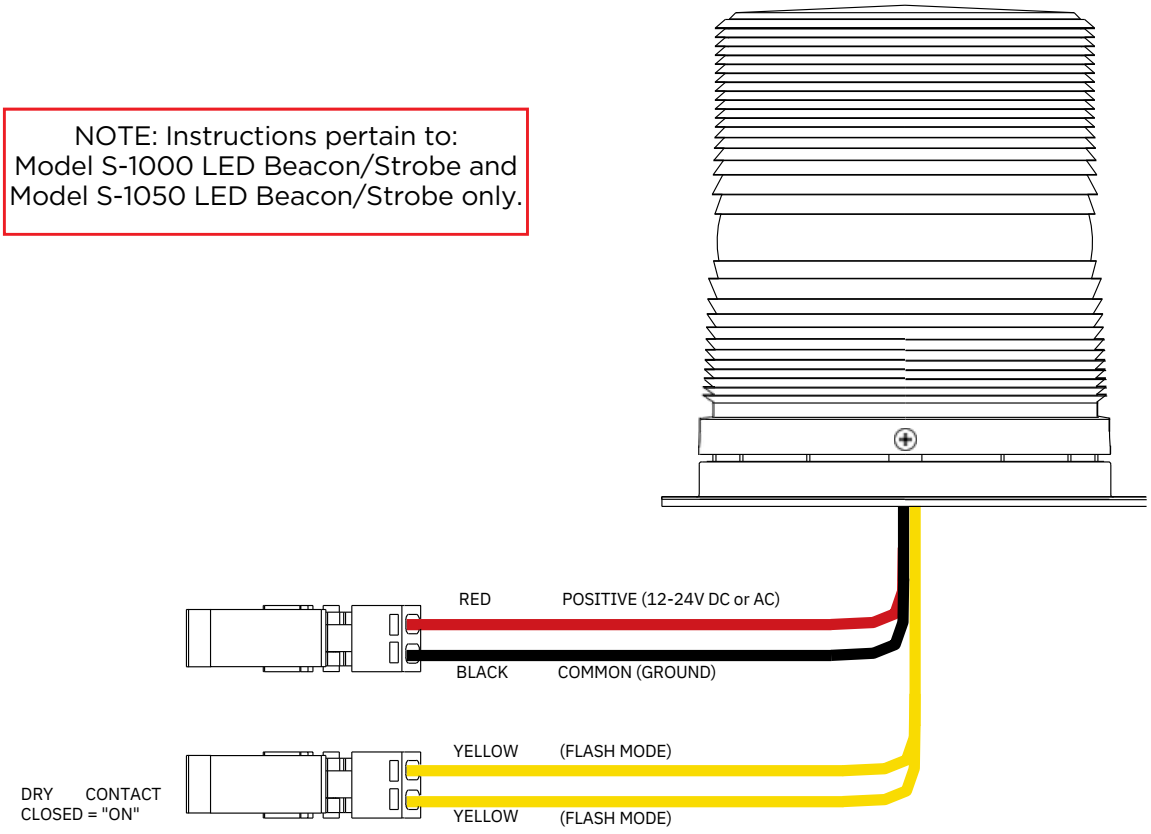
    - **Mounting Holes** – In order to comply with the Americans with Disabilities Act (ADA) of 1990, the speakerphone button(s) should be positioned between 34 and 48 inches from grade level (consult an ADA specialist in your area to verify local and federal guidelines).

    - **Secure the housing to the Curb Mount** – Four bolts with 4 lock nuts, 4 rubber washers and 8 steel washers are provided to securely fasten the housing to the curb mount. Connect electrical and communications wiring. Follow all federal and local codes that apply.

7 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.		

8 Power Requirements

The following tables on pages 25-28 include **CB4** 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

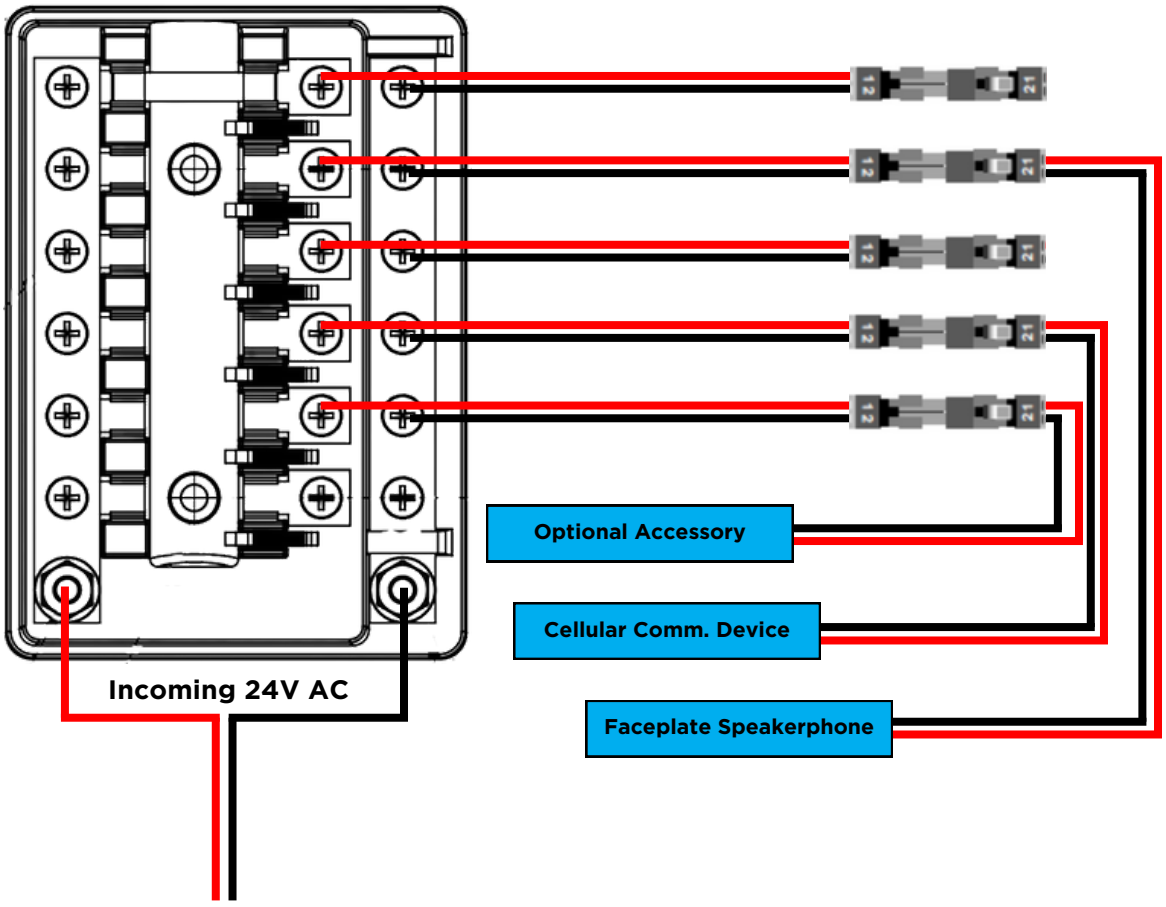
9 Wiring Diagrams

CB 4 Series AC Standard Wiring

For installations with 24V AC incoming power on site.

Used in the following configurations:

- Standard CB 4-r - No Cellular Communication
- Standard CB 4-s(Single or Dual Faceplate) - No Cellular Communication
- Standard CB 4-u - No Cellular Communication
- CB 4-r with Cellular Communication
- CB 4-s(Single or Dual Faceplate) with Cellular Communication
- CB 4-u with Cellular Communication



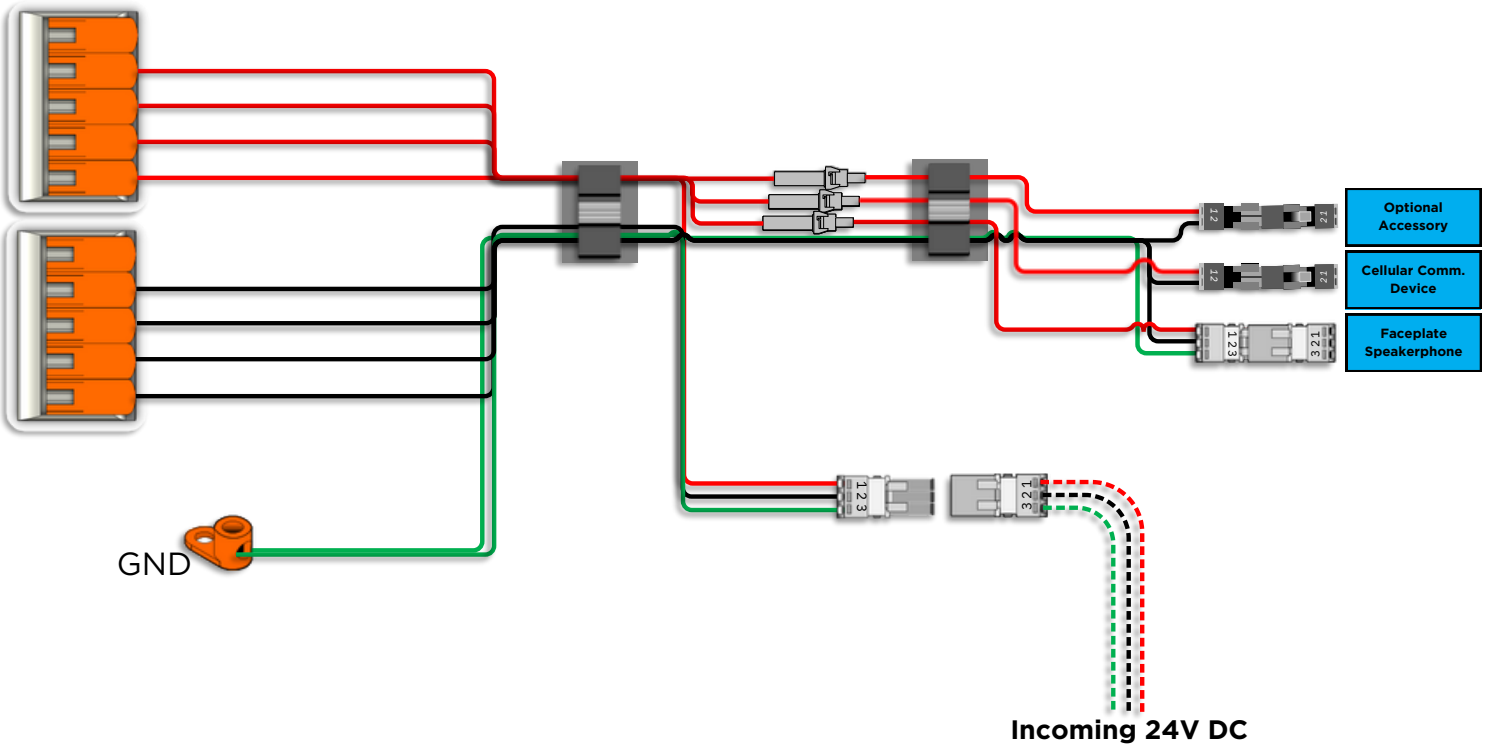
Product wiring diagram shown reasonably represents current offering and is intended to assist in component identification and service. Earlier product production may have different components and wiring connections. Reference the model and serial number from the unit ID tag and contact manufacturer to confirm replacement part version and availability.

CB 4 Series 24V DC Standard Wiring

For installations with 24V DC incoming power on site.

Used in the following configurations:

- **Standard CB 4-r - No Cellular Communication**
- **Standard CB 4-s(Single or Dual Faceplate) - No Cellular Communication**
- **Standard CB 4-u - No Cellular Communication**
- **CB 4-r with Cellular Communication**
- **CB 4-s(Single or Dual Faceplate) with Cellular Communication**
- **CB 4-u with Cellular Communication**



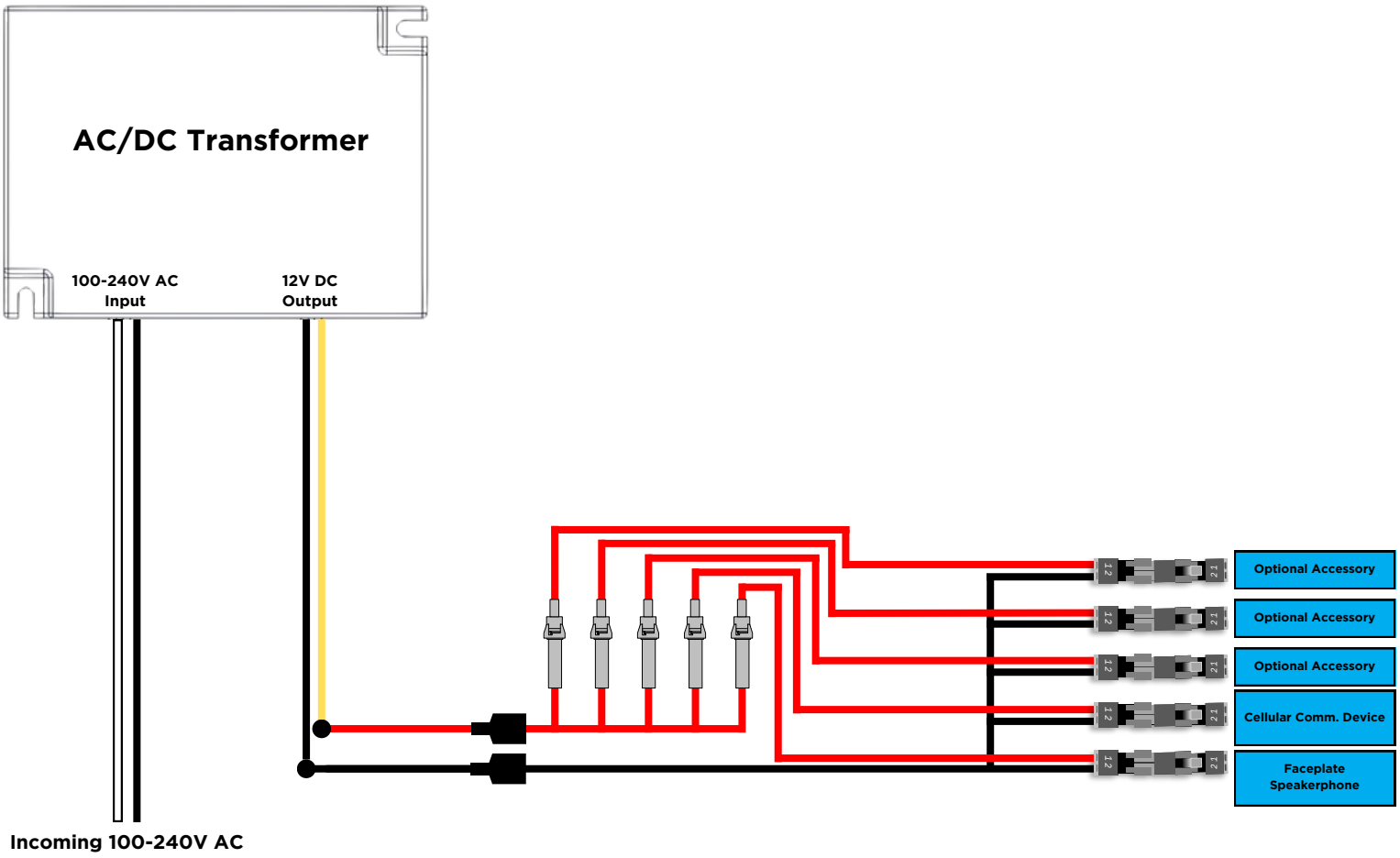
Product wiring diagram shown reasonably represents current offering and is intended to assist in component identification and service. Earlier product production may have different components and wiring connections. Reference the model and serial number from the unit ID tag and contact manufacturer to confirm replacement part version and availability.

CB 4-r & CB 4-s 100-240V AC Standard Wiring

For installations with 100-240V AC incoming power on site.

Used in the following configurations:

- **Standard CB 4-r - No Cellular Communication**
- **Standard CB 4-s - No Cellular Communication**
- **CB 4-r with Cellular Communication**
- **CB 4-s with Cellular Communication**



Product wiring diagram shown reasonably represents current offering and is intended to assist in component identification and service. Earlier product production may have different components and wiring connections. Reference the model and serial number from the unit ID tag and contact manufacturer to confirm replacement part version and availability.

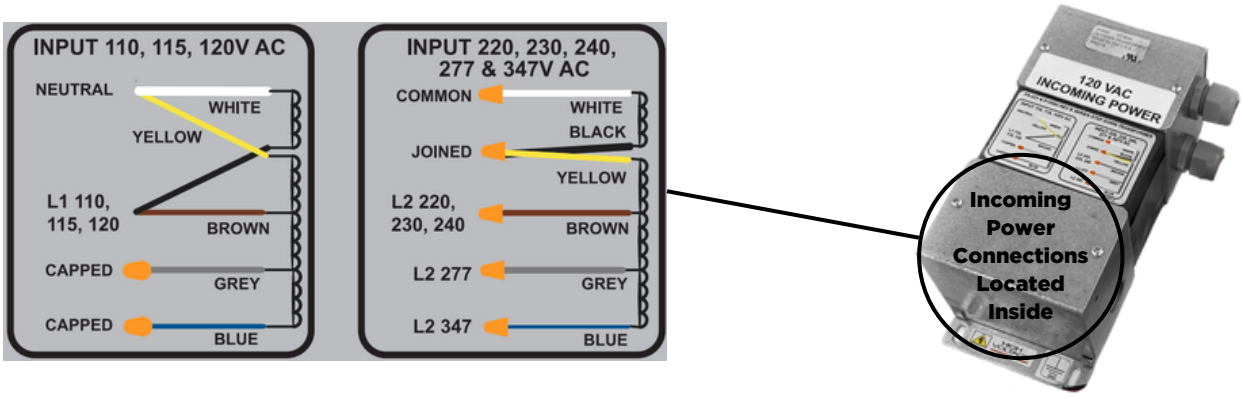
CB 4-u 110-347V AC Standard Wiring with Multi-Tap Transformer (Power Brick)

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

Used in the following configurations:

- **Standard CB 4-u - No Cellular Communication**
- **CB 4-u with 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**
- **Optional Beacon Strobe**

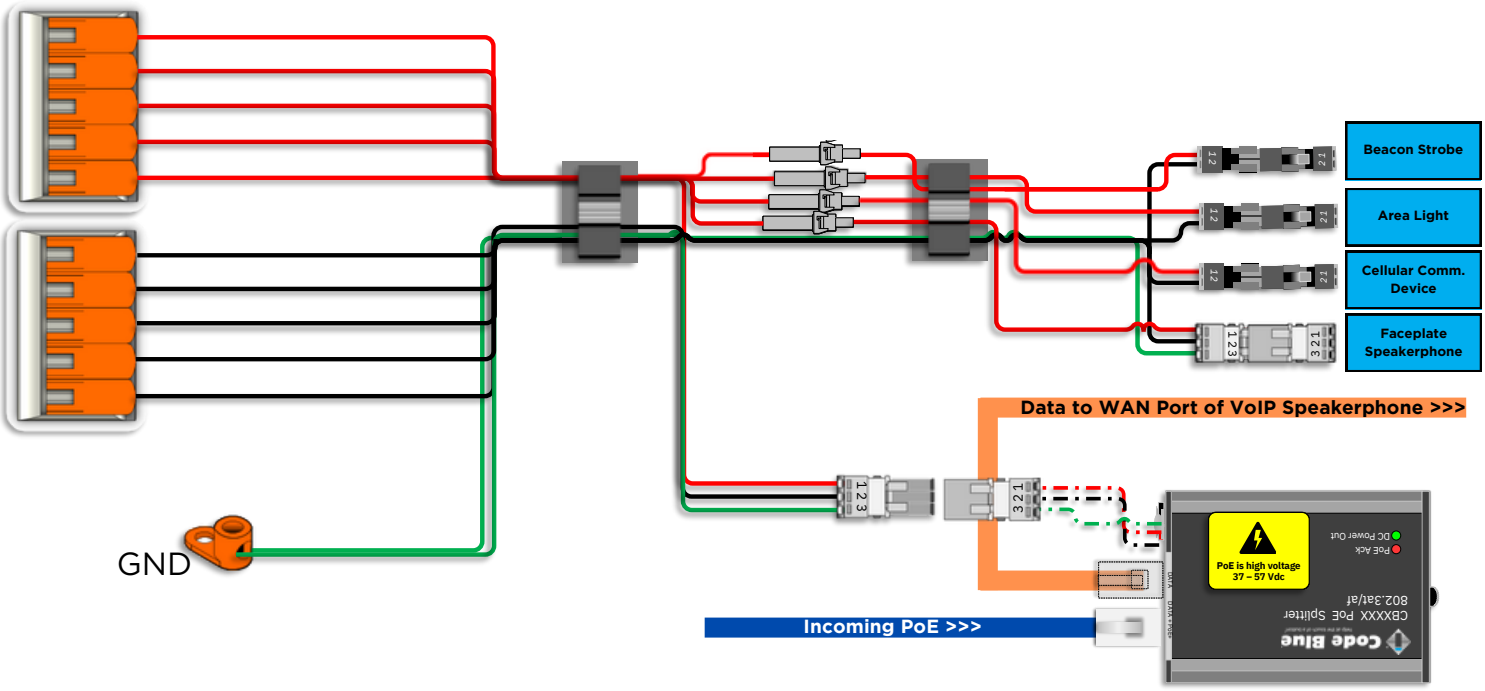
Remaining outputs can be used for accessory equipment selected at time of ordering.

CB 2-s PoE Standard Wiring

For installations with PoE incoming power on site.

Used in the following configurations:

- **Standard CB 2-s - No Cellular Communication**
- **CB 2-s with Cellular Communication**



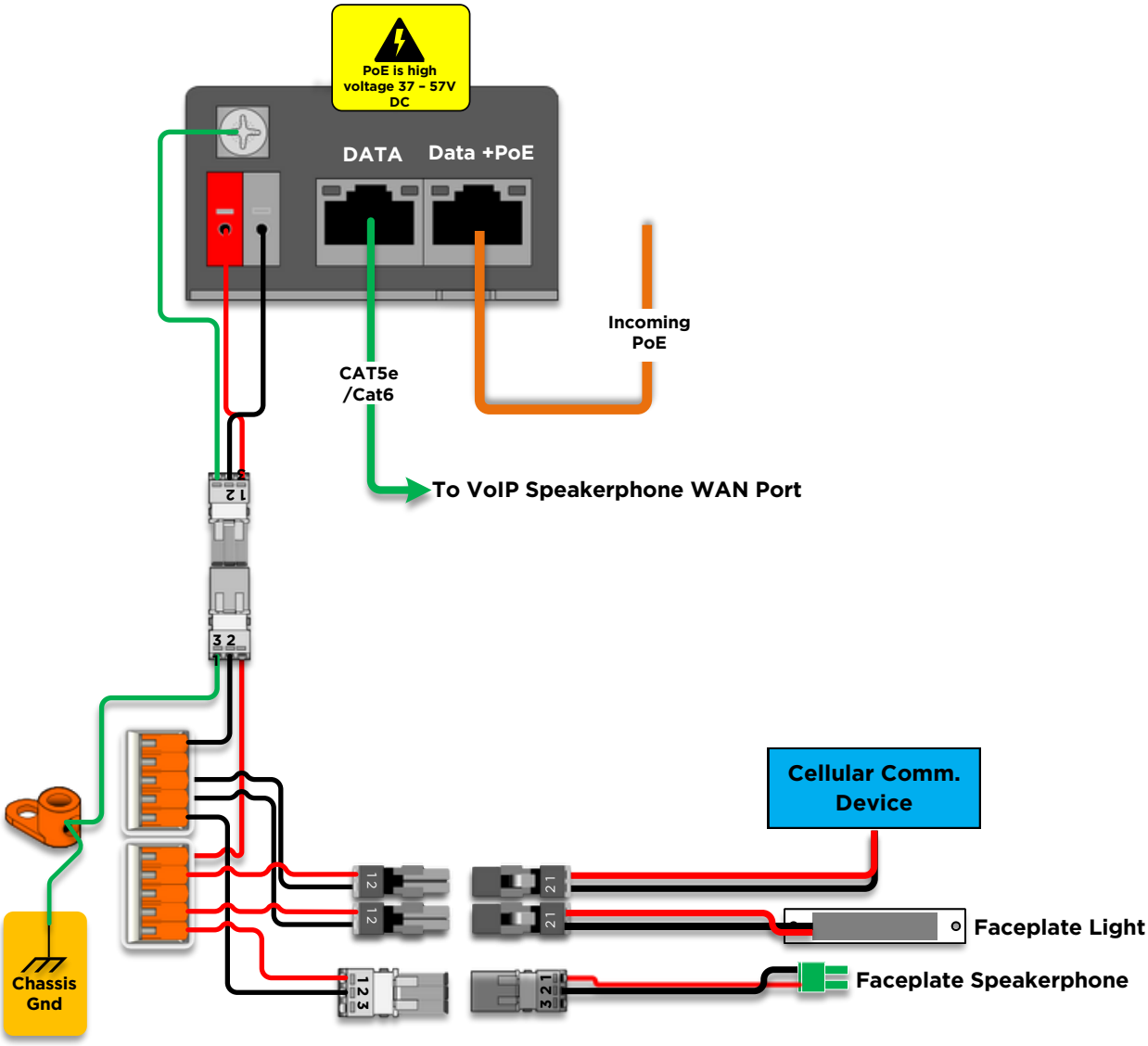
Product wiring diagram shown reasonably represents current offering and is intended to assist in component identification and service. Earlier product production may have different components and wiring connections. Reference the model and serial number from the unit ID tag and contact manufacturer to confirm replacement part version and availability.

CB 4-u PoE Standard Wiring

For installations with PoE incoming power on site.

Used in the following configurations:

- **Standard CB 4-u - No Cellular Communication**
- **Standard CB 4-u with Cellular Communication**



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.**

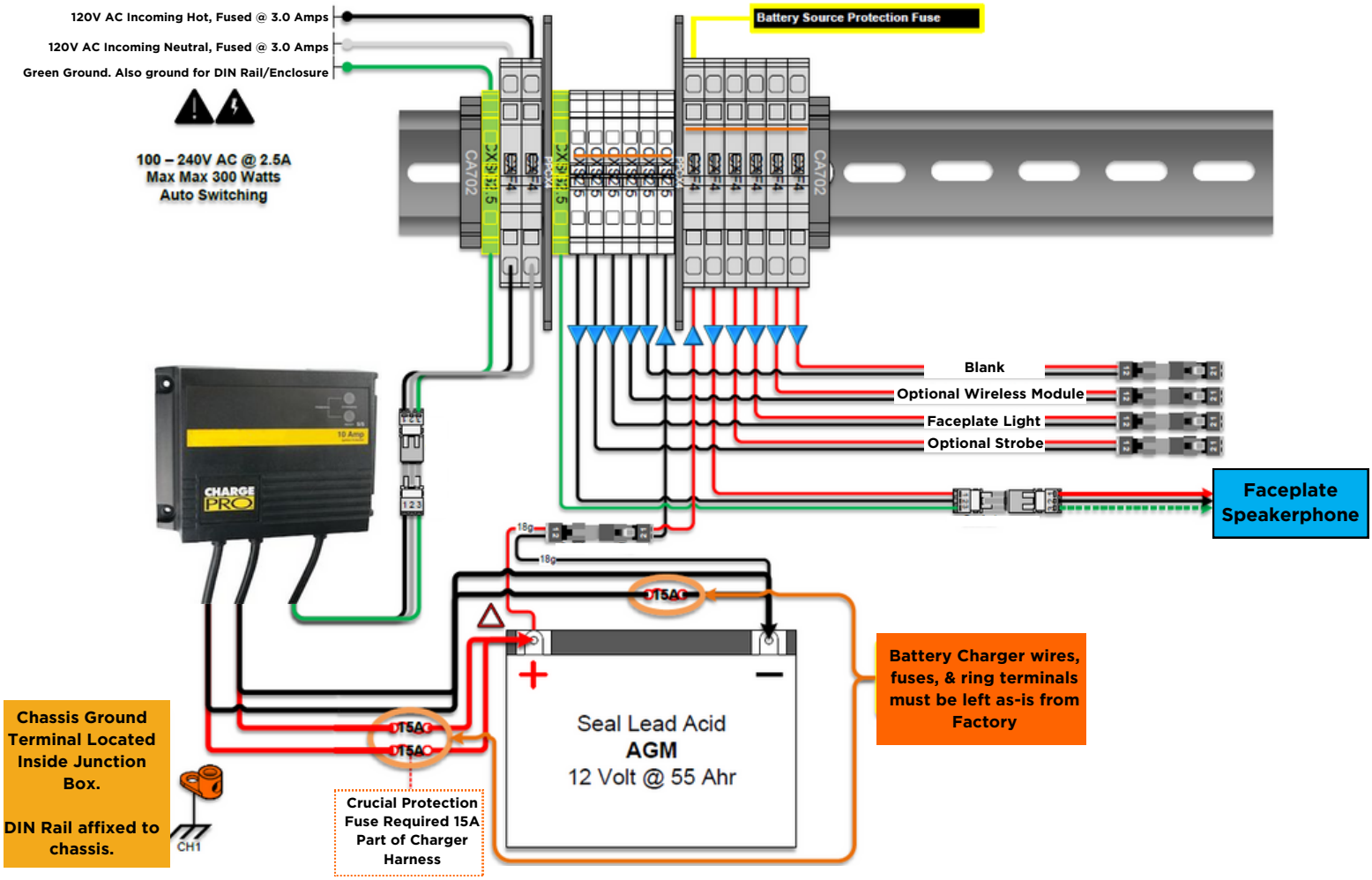
IMPORTANT NOTE: **LS1000 speakerphones operate on 12V DC only. If the 24V DC output is selected on the PoE splitter, the use of a 24V to 12V DC step-down transformer must be installed prior to connecting the power system to the speakerphone.**

CB 4-u with NightCharge® DIN Rail Power System

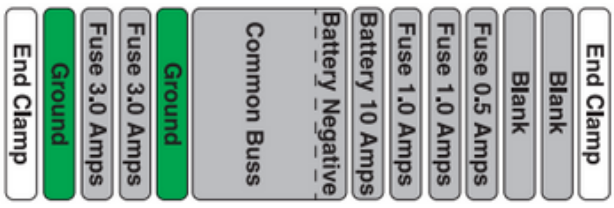
For installations with 100-240V AC incoming power, utilizing the NightCharge® switch-grid power system.

Used in the following configurations:

- **Standard CB 4-u - No Cellular or Audio Paging Options**
- **CB 4-u with Cellular Communication**

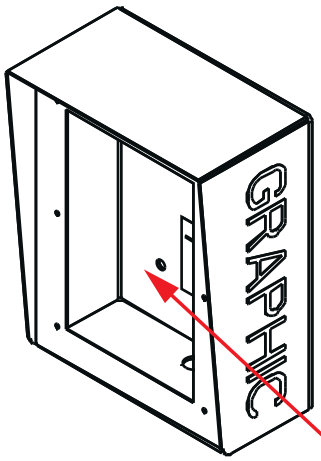


DIN Rail Layout

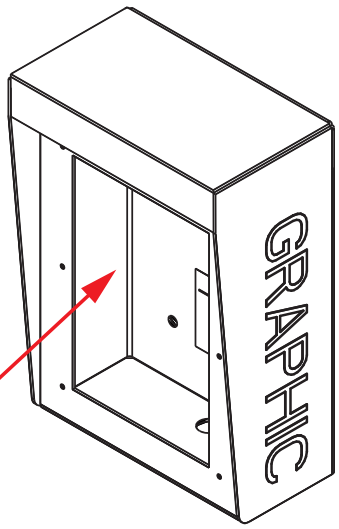


10 Locating Unit Serial Numbers

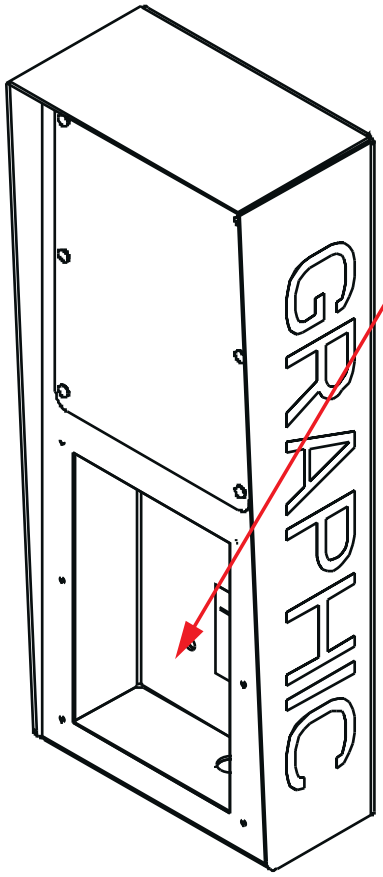
CB 4-s



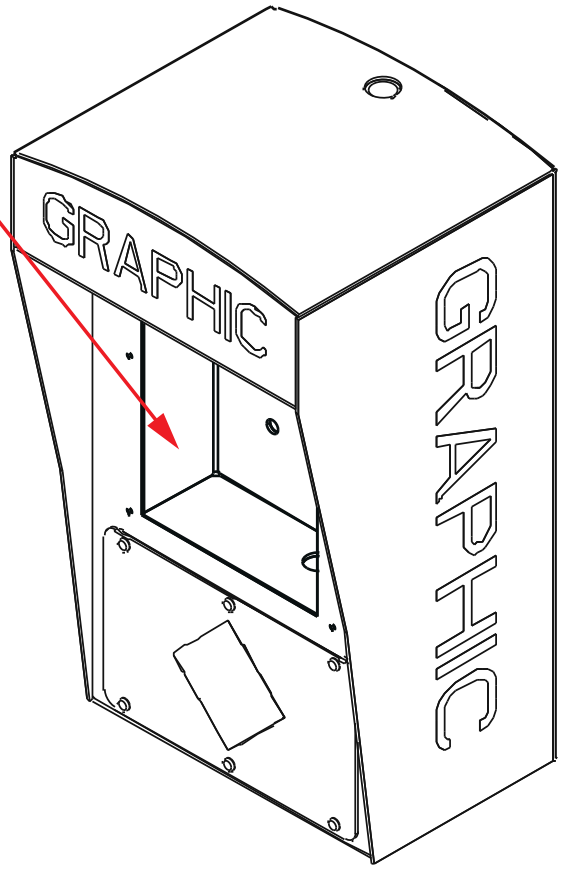
CB 4-r



SERIAL NUMBER LOCATION



CB 4-s with Dual Faceplates



CB 4-u

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)**

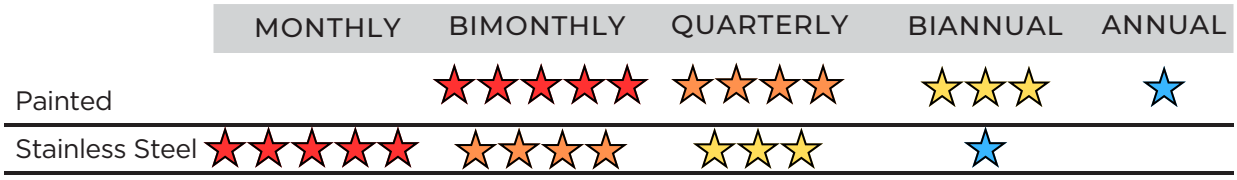
UNIT SURFACE MAINTENANCE

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**