Centry®

Model: IPVD01, IPVD02, IPVD03, IPVD04, IPVD05, IPVD06

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

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Table of Contents

2 Introduction

Thank you for choosing **Centry**® for your Code Blue application. **Centry**® is a compact Help Point® featuring a hands-free speakerphone, IP color camera and station identification light. It has full duplex capabilities and runs on PoE or 12V DC power. It is mounted with vandal resistant screws for security.

Other features include:

- Powered by EmerComm®
- Ring-lit piezoelectric buttons

| 1 Button Flush Mount | 2 Button Flush Mount | 1 Button Surface Mount | 2 Button Surface Mount |

Call Privacy Laws

Some states require all parties to be aware that they are being recorded. Code Blue phones offer the ability to play a message stating that the caller is being recorded and giving the caller the option to continue or end the recorded call.

3 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.

4 Getting Started

This guide contains information and a general overview for **Centry**®, including applications, installation and wiring.

Centry Series Features

- 1- and 2-button configurations
- SIP protocol support
- Station Beacon Light for visual identification
- 3 Ethernet ports
- 3 auxiliary N.O. input contact closures
- 3 auxiliary N.O. output contact closures
- NEMA 3S Compliant
- Peer-to-peer audio communication
- Contemporary faceplate design, with multiple ADA compliant lettering choices with Braille

Type	1 Button Flush	2 Button Flush	1 Button Surface	2 Button Surface
Width (in)	4.5	4.5	4.75	4.75
Height (in)	10	10	10.25	4.5
Depth (in)	3.125	3.125	2.875	2.875
Weight (lbs)	4	4	4	4
Op. Temp. (°F)	-40F - +158F (-40°C - +70°C)	-40F - +158F (-40°C - +70°C)	-40F - +158F (-40°C - +70°C)	-40F - +158F (-40°C - +70°C)

Flush Mount Drawing

CENTRY 1 BUTTON

4.50
4.00
.50

10.00
9.49

.50

EMERGENCY

3.12

BACK VIEW   FRONT VIEW   SIDE VIEW

Ø .88 (TYP)

2.88

.87

1.08   1.97
4.13

BOTTOM VIEW

CENTRY 2 BUTTON

ASSISTANCE

EMERGENCY
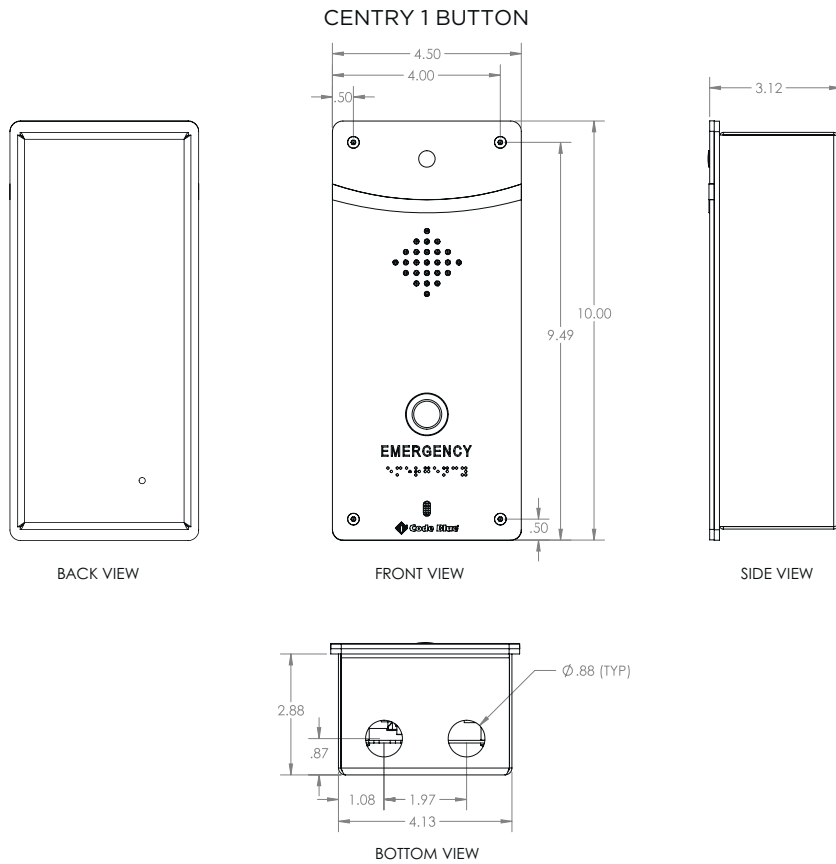
Surface Mount Drawing

CENTRY 1 BUTTON

BACK VIEW   FRONT VIEW   SIDE VIEW

BOTTOM VIEW
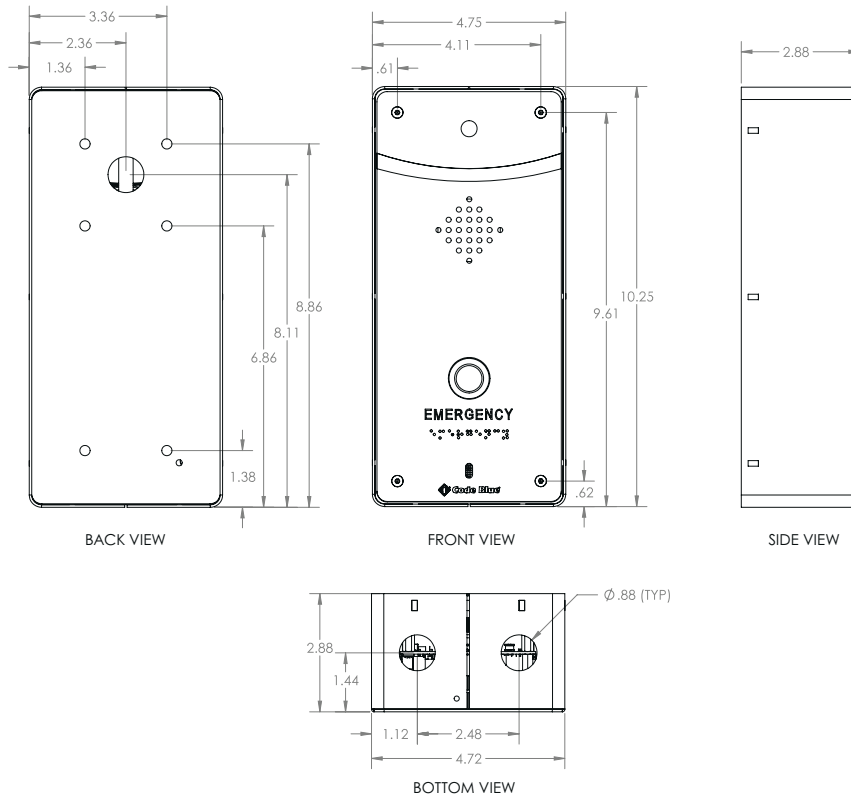
CENTRY 2 BUTTON

5 Power Requirements

The following table on pages 10-13 **includes Centry**® and ALL OTHER Code Blue Devices and 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

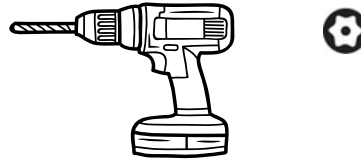| High Voltage AC Components	Voltage	Current	Watts	KWHrs
Multi-Tap Power Supply	120V AC	1.75A/210VAC	210	5.04
DIN Rail Power Supply	120V AC	1.2A/115VAC	115	2.76
Audio Paging Amp	12-24V DC	3.83	459.6	11.03

6 Installation Instructions

Tools Needed

Centry faceplate tools needed for installation:

- Drill and screws to mount unit to wall.
- T10 pin Torx driver.

Basic Flush Mount Installation Instructions:

1. The flush mount enclosure will come with no mounting holes. It can be mounted from the sides, top or bottom. Once your mounting needs have been determined, drill the holes needed for your specific installation requirements into the flush mount back box.
2. Mark the mounting holes onto the mounting surface. 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.)
3. Connect earth ground to the provided copper grounding lug using a minimum 14 gauge conductor.
4. Connect electrical and communications wiring using the wiring diagram below.
5. Follow all federal and local codes that apply.
6. Attach faceplate to enclosure using four security screws.

Basic Surface Mount Installation Instructions:

1. Open shipping box and remove Centry unit.
2. Remove four security screws with T10 Torx driver.
3. Separate Centry from enclosure and set aside carefully.
4. Mark the mounting holes onto the mounting surface. 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.)
5. Drill all marked holes.
6. Secure the housing to the wall – If you are securing to drywall, utilize drywall screws and anchors. If you are securing to metal, utilize sheet metal screws. If you are securing to brick, use Tapcon screws. Fasten all screws securely.
7. Connect earth ground to the provided copper grounding lug using a minimum 14 gauge conductor.
8. Connect electrical and communications wiring using the wiring diagram below.
9. Follow all federal and local codes that apply.
10. Attach faceplate to enclosure using four security screws.

Basic Installation Instructions:

Vertical Orientation

1. Find both the CAT cable location and stud/mounting structure in the wall. Mark it clearly.
2. Remove the four screws from the back box of the Centry faceplate.
3. At the mounting location, using the back box as a guide on the wall, mark the rough opening size.
4. Cut the required opening using available hand tools or an electric saw.
5. Drill the mounting holes needed into your back box and mount it to the structure.
6. Pull the CAT cable through the conduit hole in the back box.
7. Connect the CAT cable to the Ethernet port on the Centry PCB.
8. Re-attach the Centry faceplate to its back box.
9. Screw the four faceplate screws back in place.

7 Wiring Diagram
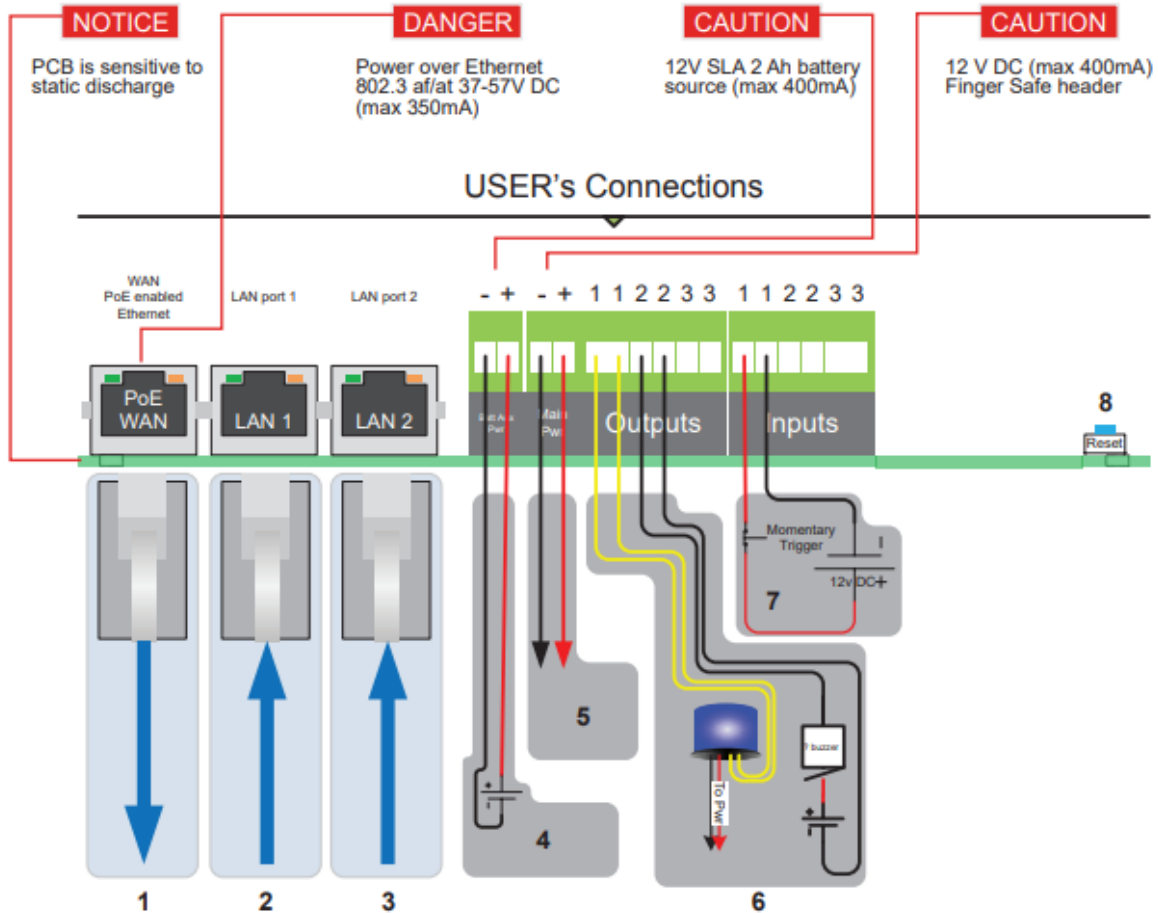
1. Ethernet Cable - Connect to Switch (100 Mb)
2. Ethernet Cable - Connect to Peripheral (100 Mb)
3. Ethernet Cable - Connect to Peripheral (100 Mb)
4. Optional 12V battery
5. 12V DC power
6. Aux outputs (3)
    a. The auxiliary outputs are Normally Open and can be triggered in your action script to close. Duration is defined in your action script.
7. Aux inputs (3)
    a. The auxiliary inputs are Normally Open and are triggered by voltage. The voltage range is 9 to 32V AC or DC with current protection of 1.25 Amps.
8. Factory Reset Switch
    a. With power connected to Centry, hold down this reset switch for 12 seconds and then release. The unit will reboot. All settings will be lost.
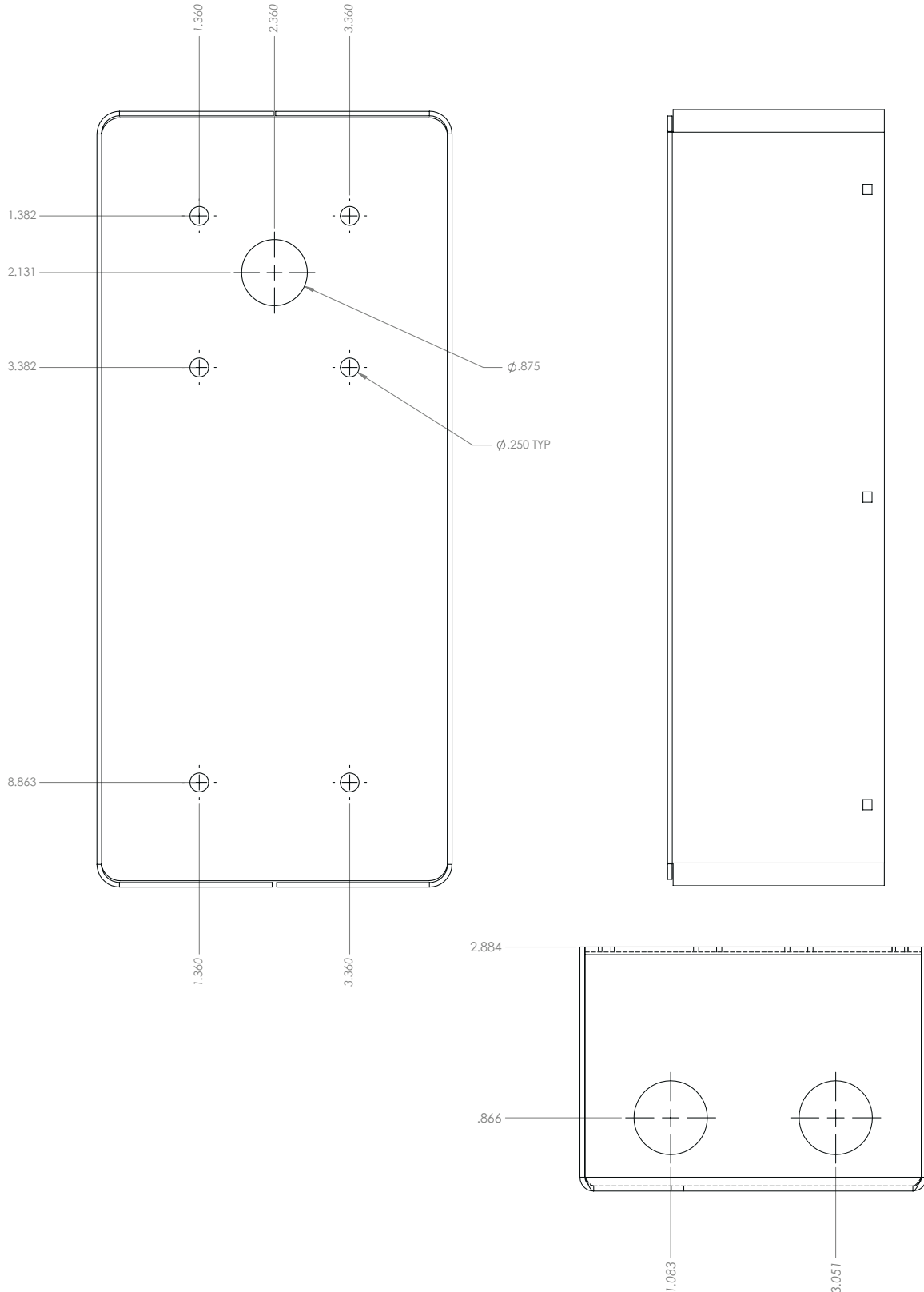
8 Schematics

Flush Mount Mounting Schematics
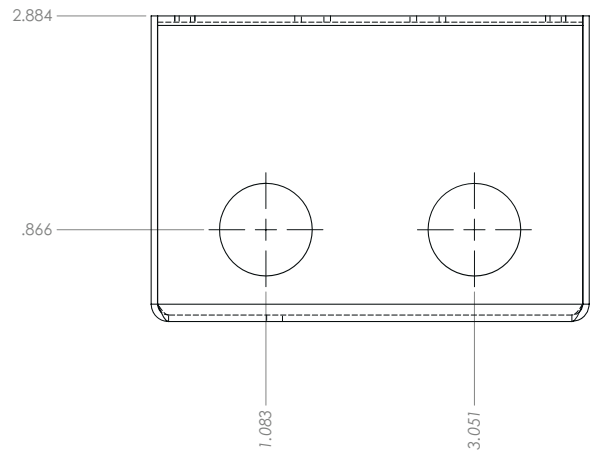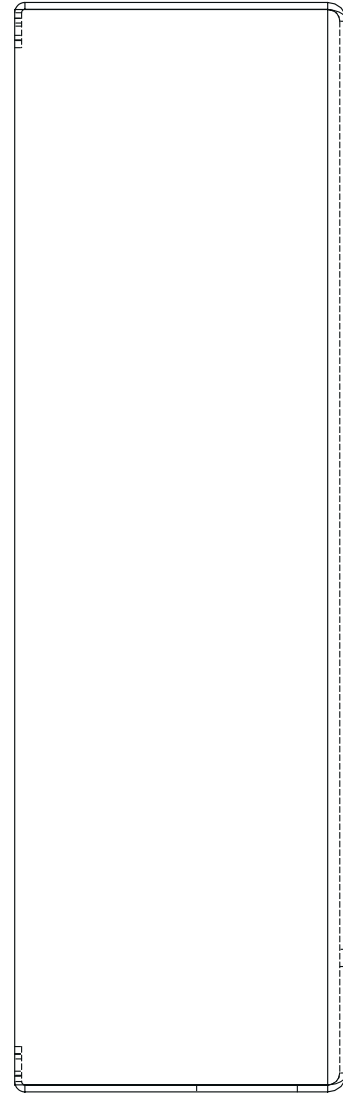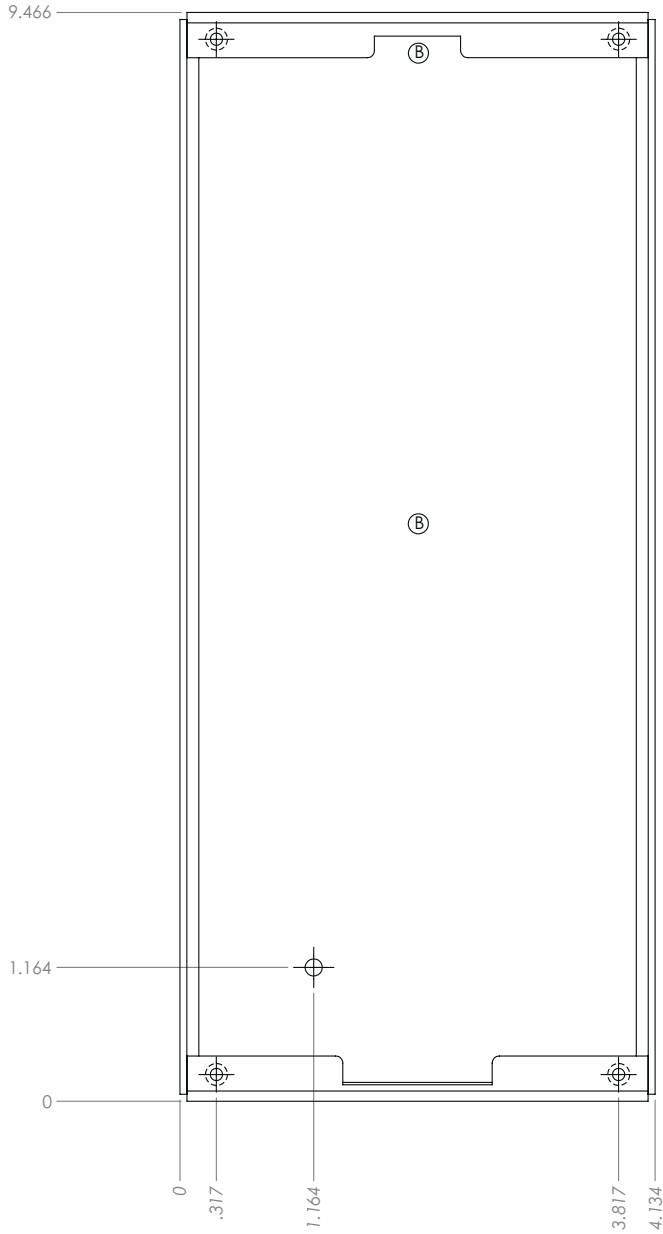
Surface Mount Mounting Schematics

9 Curb Mount Installation Instructions

Overview

These instructions are intended to assist in installing the curb mount on most concrete foundations, curbs or sidewalks.

Pre-Installation

Electrical Preparation

Depending on the model of unit being installed, the line communications and power wires will need to be run through the curb mount and at least 10 inches of wire exposed out of each opening.

Installation Procedures

Curb Mount should be mounted on concrete bases with a depth of 4-5 inches, using the correct mounting bolts for your application.

Mounting Holes

In order to comply with the Americans with Disabilities Act (ADA), 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 four locknuts, four rubber washers and eight steel washers are provided to securely fasten the housing to the curb mount. Connect communications and power wiring where applicable. Follow all federal and local codes that apply.
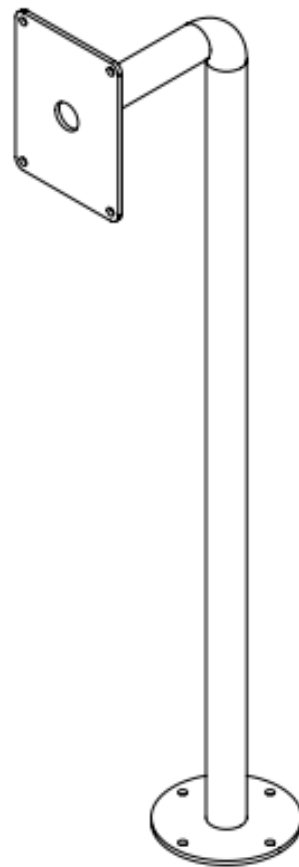
Recommended Base Mounting Bolt

This bolt is best suited for structural connections, i.e., column anchorage.
The bolt (SD6) is made from 316 stainless steel, which provides corrosion resistance.
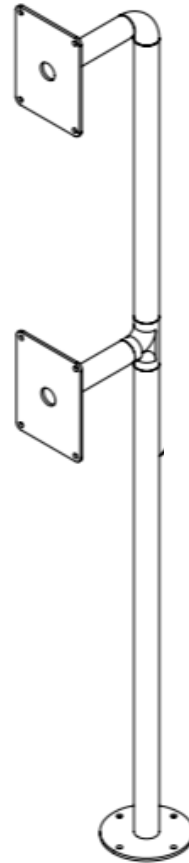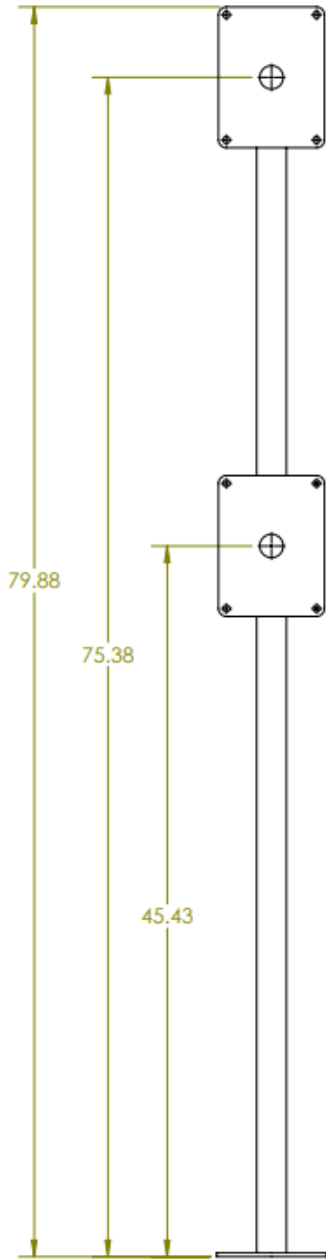
Curb Mount Option

6.75
3.38
50.00
45.50
41.00

Dual Curb Mount Option


79.88

75.38

45.43

10 Setting up your Centry® Help Point®

Centry will attempt to obtain an IP address via DHCP. If none is found the device will default to the IP address of 192.168.0.249 after one minute.

Determine the IP Address

- Centry is DHCP out of the box. Once you're able to browse into the device, you can switch to a static IP if desired. Please note it does not have a default static IP address.
- Connect Centry to your DHCP Network. The button LEDs will turn red during the boot process and blue when booted up. Centry will acquire its network settings from the DHCP server on the network.
- If the network is not running DHCP, then you will need a router to plug the Centry into, as well as your PC so you can get into the device.
- If you do not have network scanner software, you can download many free ones. "Advanced IP Scanner" is one example. Run a scan of the subnet the Centry device is plugged into, and your PC if plugged into the same network.
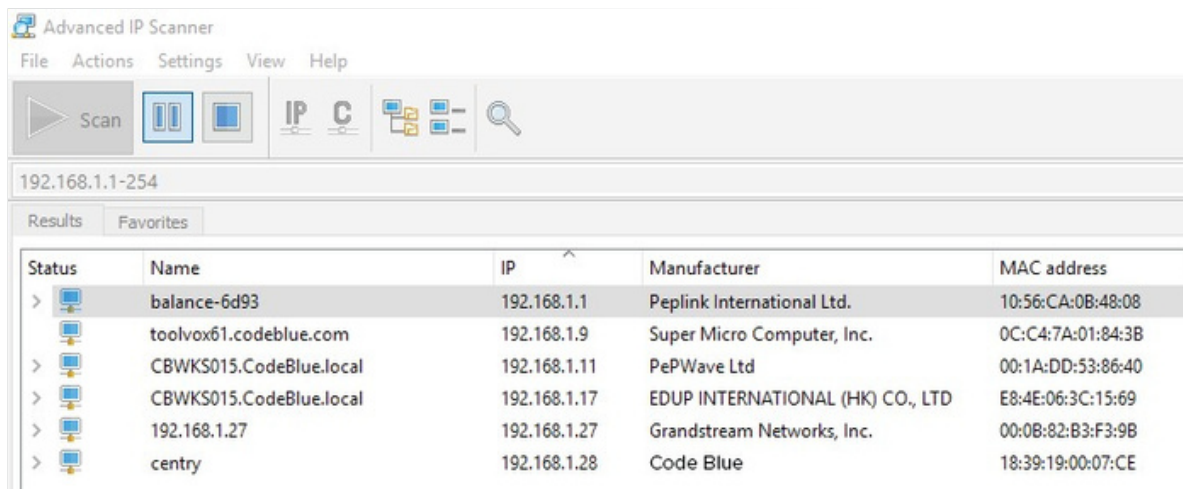
- You can find the IP address for your Centry speakerphone by matching its MAC address.
- You can then browse to the IP address of the device. The recommended web browser is Google Chrome. You may experience eratic behavior with other browsers.

Default login information is:
Username: admin
Password: admin

Network - General Settings

Once logged into the device, you can change the Network Settings in General Settings under Network if you want to switch over to a static IP address.

Generally, you can leave the Host and Domain fields empty.

SSH Port 22 is enabled by default. You can change the Port and disable it, if desired.

If limiting Network Ports, then the ports to have open are:

- tcp 22 SSH Secure Shell Protocol (Configurable)
- tcp 53 DNS Domain Name Service over TCP
- udp 53 DNS Domain Name Service over UDP
- tcp 80 HTTP Hyper Text Transfer Protocol
- tcp 161 SNMP Simple Network Management Protocol
- tcp 162 SNMP Trap Simple Network Management Protocol Trap
- tcp 443 SSL Secure Socket Layer (Deprecated)
- udp 554 RTSP Real Time Streaming Protocol
- udp 554 RTSP Real Time Streaming Protocol
- udp 5060 SIP Session Initiation Protocol
- tcp 5061 SIP Session Initiated Protocol
- rtp 16384-32767 Real Time Transport (Configurable)

Accounts

Add Account

These settings are usually provided by IP PBX, SIP server or SIP gateway personnel. When setting up a SIP or peer-to-peer account, make sure the correct Account Type is selected.

Account Name: Free form field to identify the account.

Username/Number: Phone number or extension for the Centry device. This is required for peer-to-peer. Any number value can be entered.

Speaker Volume: You can set the speaker volume gain here in the GUI, as well as from a touchtone phone using in-call commands. This becomes the default volume level.

Mic Volume: You can set the mic volume gain here in the GUI, as well as from a touch-tone phone using in-call commands. This becomes the default volume level.

Enable SIP Video: Select this option to allow Sip video packets to be transmitted. RTSP video will still be available but note that only one format will be available at a time.

SIP Video Resolution: Use drop down menu to select resolution for SIP video. This does not apply to RTSP video quality.

Force Resolution: Some desk phones will overwrite the resolution set in the Centry to their native resolution. Select this option to force the selected resolution.

SIP Server Settings

Server IP Address: You can use the domain name or IP address of your IP PBX, SIP Gateway, SBC or whatever you register SIP devices to.

Password: This is the shared SIP secret password that the phone and your SIP registration server share.

Server Port: 0 for auto detect. Commonly may be 5060. If necessary, you may have to specify a port here.

Advanced SIP Settings

Transport Protocol: IPv4 or IPv6.

Communication Protocol: UDP or TCP.

Registration Lifetime: Default is 600 seconds. This is the time the phone will attempt re-registration if not contacted by the SIP server.

Keep Alive: Check if you want keep-alive messages sent between the SIP server and the phone.

Use a Proxy Server: If using a proxy server in addition to a SIP server, then specify the IP Address or Domain, SIP Authentication ID and Outbound Proxy Port used.
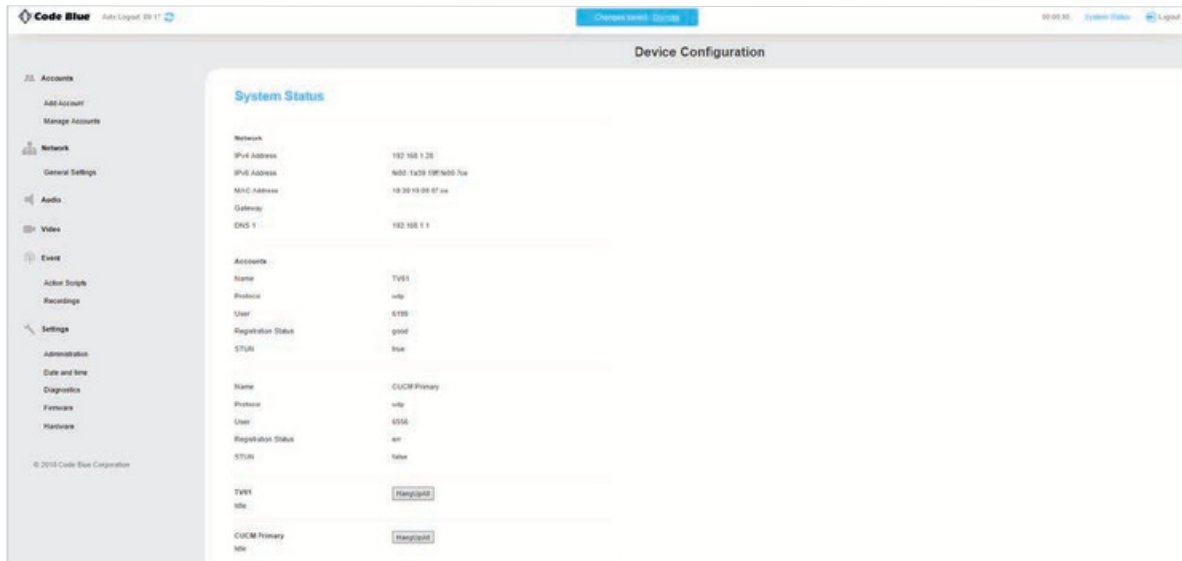
Manage Accounts
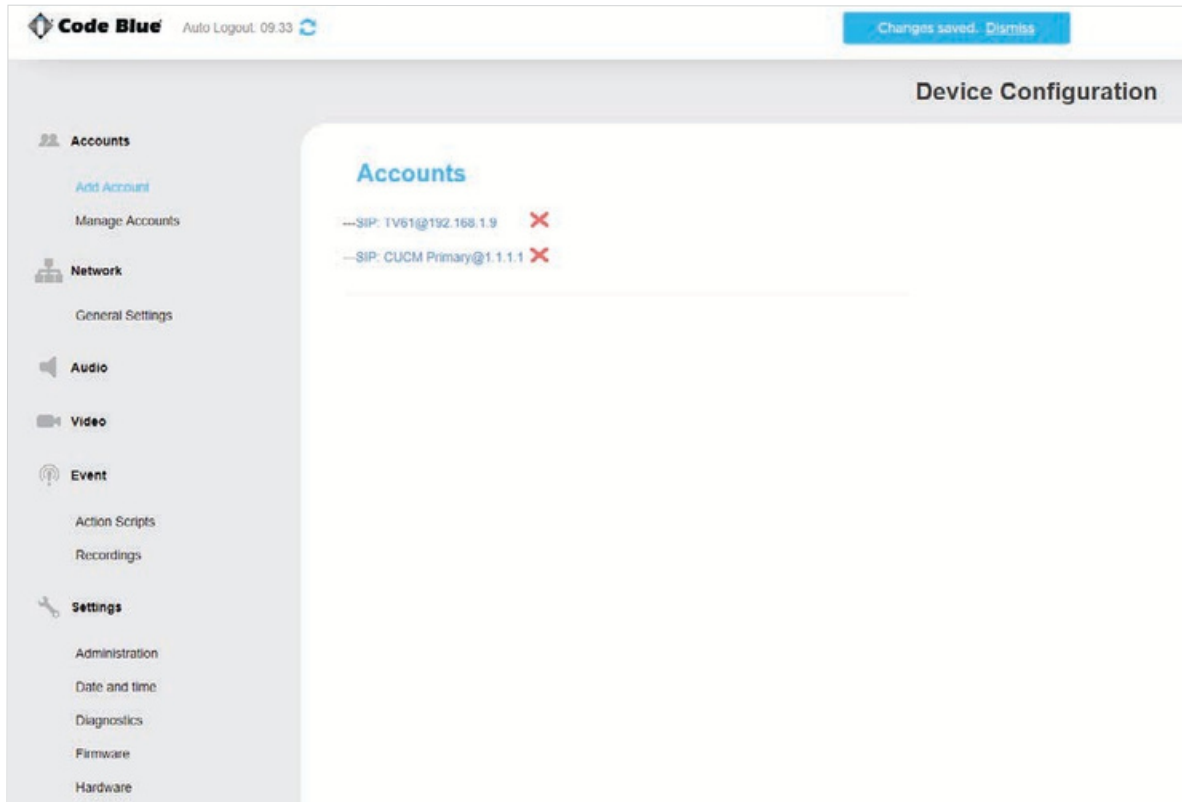
- After adding an account, you can manage the created accounts on this page.

Note: You can create up to 10 accounts to different SIP servers. Generally only one is used.

- Click onto an account to manage it for viewing or to make changes.

System Status

- After creating your account and providing the SIP server, check the registration status on the System Status page. This is located in the top right corner of the screen.

- In this screen, you can see the current IP address of the phone, which is the same for the camera.

- It also will display the current registration status of the configured accounts. Registration status of "good" is what you're looking for. If it is not, investigate the matching account settings configured in the SIP server and if the network has been opened in between.
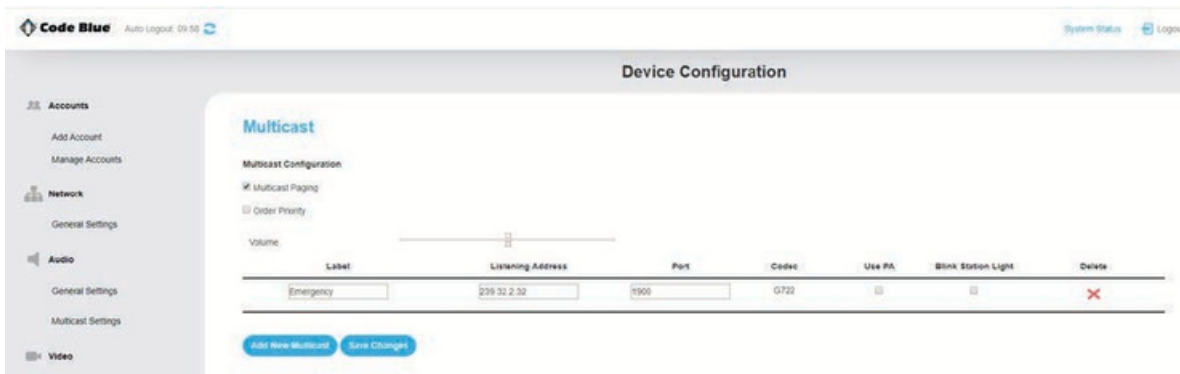
Audio
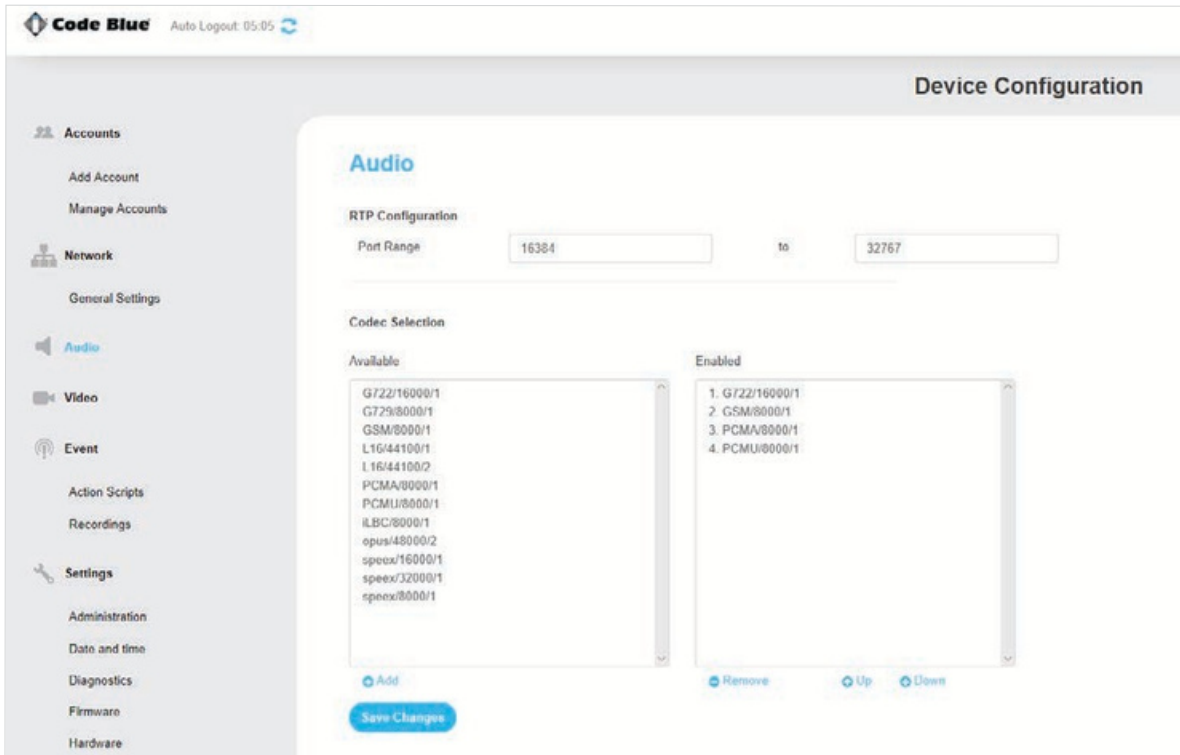
- Default RTP Ports are listed here. They can be changed.
- Default codecs are also listed and can be adjusted based upon the needs of the SIP server/PBX.
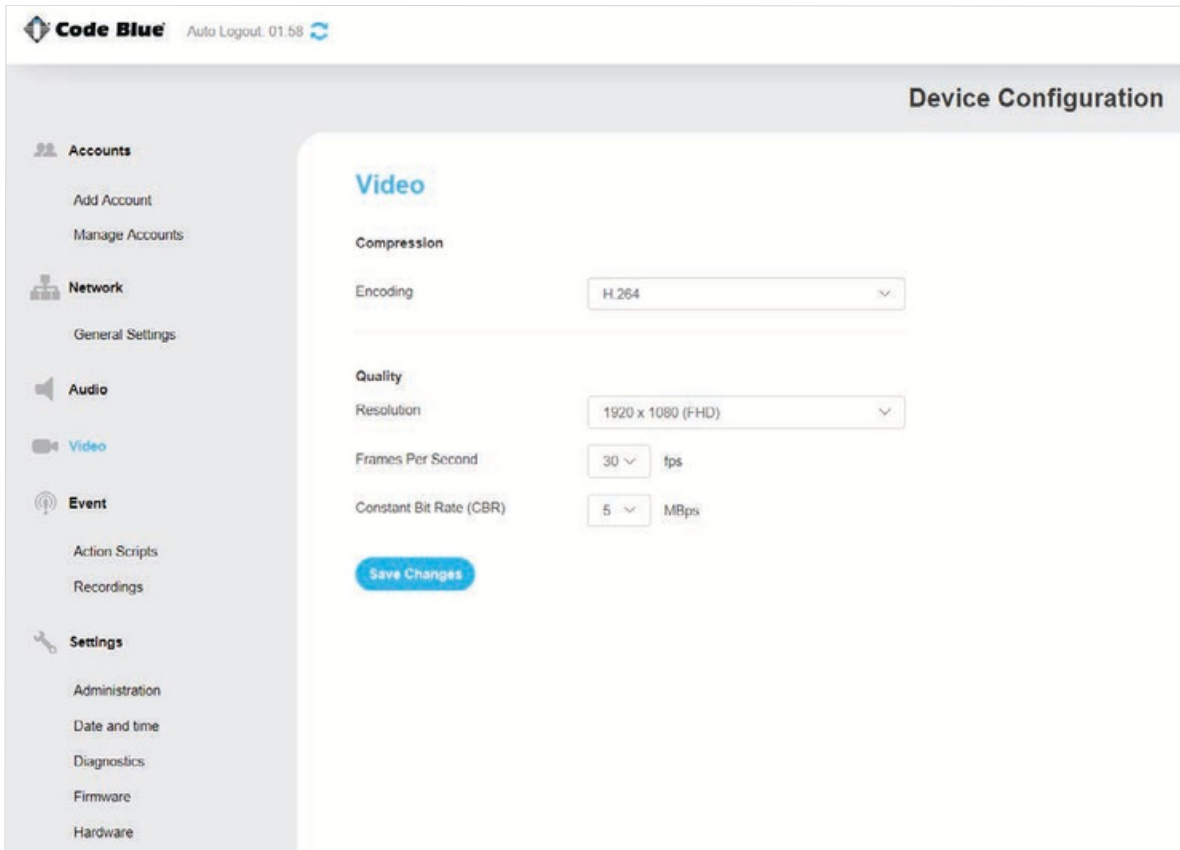
Multicast Audio

- To add a new multicast configuration, enter a Label, the Listening IP address and Port.

- To change the priority of the multicast, simply drag and drop. A phone call priority level also can be set with the Order Priority box checked. By default, the Phone Call Priority is set to 0.

RTSP Video

- The default settings of RTSP can be adjusted on this page (SIP Video is controlled in the Account settings).

- The camera and the phone share the same IP address.

- You can view the camera stream using either Code Blue Fusion Server with Blue Alert Motion, Code Blue ToolVox® with Blue Alert® EMS or your own VMS or video stream software. (Example: VLC Media Player.)

The RTSP Stream format is as follows:

rtsp://<Centry IP address>/codeblue

To determine the network bandwidth utilized with your compression and quality options, you can use an online bandwidth calculator such as www.cctvcalculator.net/en/calculations/bandwidth-calculator.
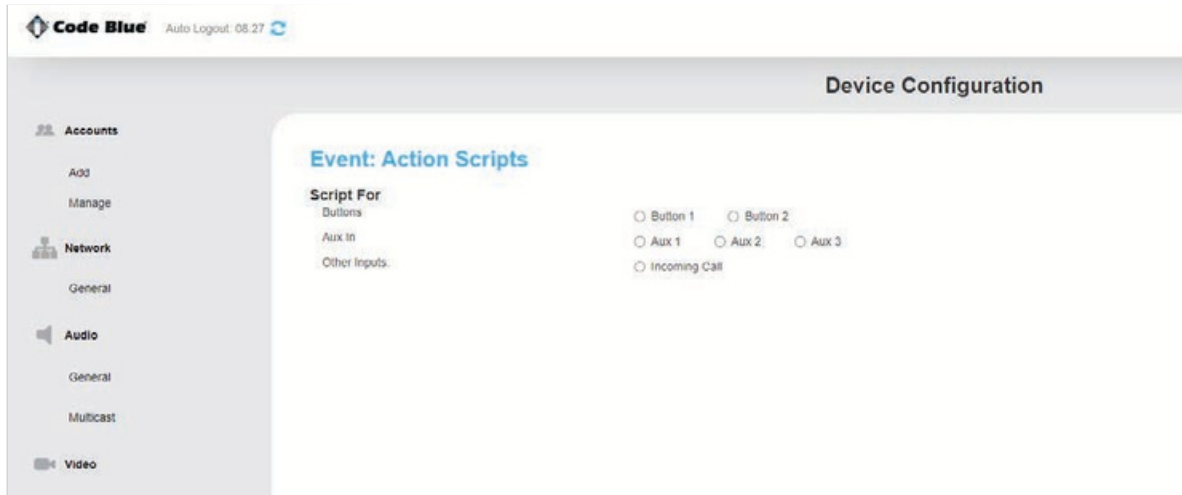
General Events

- In the General Events setting you can alter the outgoing call tone, apply a call ending warning, allow or disallow incoming calls and apply location recordings.

Action Scripts

- Action Scripts determine what happens when a button is pushed or aux input is activated. If you have a multi-button phone, the bottom button is button No. 1.

- Select the button or aux input.

- Choose "Add Action."
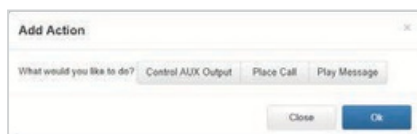
- You can choose to have an aux output triggered, place a call or simply play a message. You can also string multiple actions together.

Place Call Action

Select an account.

- Enter in the "To" field the number you would like Centry to dial. For peer-to-peer, enter the IP Address:Port the call is intended to go to.

- If that number does not answer, you can "Add Call" and select another account and phone number to dial. This is useful if you have the phone registering to multiple SIP servers/SIP PBXs. For example, you can have it call 911 from Account 1 and also call 911 from Account 2 if Account 1 is down. The phone will roll over to Account 2 and call out that account.

- Repeat for the number of times you want the call to rollover before answering.

- Each iteration of the rolled over call uses the "Dialing/Answer Timeout."

    Note: If voicemail answers, then that is considered an answered call.

- "Maximum Call Duration" is 600 seconds or 10 minutes. This is used as a timer in case the receiving party never hangs up the call. This timer is editable.

"While Dialing"

- You can select the audio of ring-back or use a custom recording that is uploaded into the phone in the Recordings page. A common recording script would be something like, "Security has been contacted; please stand by."

- This message will repeat just like ring-back would until the call is answered. This message will stop when the call is answered.

"When Answered"

- The default mode is two-way audio upon the call being answered.

- Additional options include playing a custom recording locally out of the Centry speaker and/or playing a custom recording remotely to the receiving party that identifies where this call is coming from.

   Note: This is a useful feature if the receiving party is not going to get a unique caller ID name/number for this location.

- Once the recording has played, two-way audio will commence.

Note: If playing a remote message but not a local message, then the person at the Centry will hear dead air until the remote message is done playing. It is advisable to play the same message to both parties in this case.

Note: It is advisable to keep your recordings short to help speed the connection to a two-way call.

"In-Call Commands"

- Default is to have the in-call commands available during the phone call. These can be disabled for this action. In-call commands are also available on an inbound call into Centry.

- See section on in-call commands for the full list.

Control AUX Output Action

- Choose the AUX output you wish to control.

- Choose enabled or disabled for this action. Enabled closes the normally open contact; disabled opens the normally open contact.

- Choose the duration you want the action to last. (0 seconds = indefinite.)

    Note: This is the most common setting for controlling an auxiliary, such as a blue light strobe, to stay activated for the duraction of the call if linked to a place call action.

Play Message Action

- Play a message when this step is reached as part of your greater action script or as the only action in your action script.

- Upload your recordings by going to the Recordings page. The message only plays out of the Centry speaker.

  Note: There are blue arrows that can move your action up and down in the action script.

    Note: You can string together many actions in the action script.

- A typical action script for a Centry may just have a Place Call Action, or if your Centry has a remote beacon/strobe light, then it would look like this to have the strobe linked to the duration of the call:

- At the bottom of the action script page, you can test your action script and it will launch through the script and place a call, play a message or trip auxiliaries.

Note: This will call whatever number you have entered in.

Recordings

- Upload recordings into the phone on this page.

- Recordings uploaded are then available in action scripts.

- The phone only can play uncompressed 16-bit PCM or compressed g.711 A-law/U-law format .wav files.

- If you upload unsupported audio file formats, they will not play in the action script.

Administration

- Upload a secure PEM certificate and PEM key.

- This page also allows for the default password to be changed. New passwords must be at least six characters long.

- This page also allows for the phone to be rebooted via the GUI.

Date and Time

- Adjust the date and time on this page or point the phone to a NTP server to have a permanent time source.

Diagnostics

- With SNMP Traps enabled, enter the SNMP server name, port number (162 by default) and Read/ Write Community Names.

- Each trap can be enabled or disabled to customize the output.

- The time interval for Power, Microphone and Speaker can be adjusted. By default, these are set to 900 seconds for Power Failure tests and 0 Seconds (Disabled) for Mic/Speaker tests.

- The volume of the Mic/Speaker test can be adjusted via a drop-down menu.

Firmware

- Upload new firmware into the phone from www.codeblue.com/resources. Once you download onto your PC, unzip the file. From the Centry firmware page, browse to the .bin file on your PC and upgrade your Centry.

Hardware Settings

- Hardware settings allow you to enable or disable the Station Light, adjust the brightness and blink rate.

Buttons

Button 1

Button Type

| Non-Emergency ▾ |

Idle Color

| Blue ▾ |

Button 2

Button Type

| Non-Emergency ▾ |

Idle Color

| Blue ▾ |

- Each button can be configured as a Non-Emergency Button, Emergency or Volume Control. The color of the ring LED around each button can be changed in the drop-down menu.

Peripherals

Hook Switch	☑ installed
Speaker	☑ installed
Handset	☐ installed
Keypad	☐ installed
Public Address	☐ installed

Save Changes

- Any additional peripherals attached to Centry must be marked as "Installed" to ensure functionality.

11 In-Call Commands

You can make adjustments during a live phone call with the Centry device. This can be done by calling into the Centry or by a button press from the Centry to the receiving party. The party with the touch-tone phone can use the keys on their keypad via DTMF tones to make adjustments.

In-Call Command	Function	Description
4	Aux 1 Output	Toggle contact closed/open
5	Aux 2 Output	Toggle contact closed/open
6	Increase Mic Gain	Small adjustments to Centry microphone
7	Decrease Mic Gain	Small adjustments to Centry microphone
8	Increase Speaker Gain	Small adjustments to Centry speaker
9	Decrease Speaker Gain	Small adjustments to Centry speaker

Note: These adjustments do not persist after the call has ended. The Centry phone will return to the default levels set in the account screen via the phone's web GUI. See the Accounts chapter for further information.

12 Compatibility

Centry is a SIP version 2.0 (RFC3261) device and is compatible with IP Gateways and PBXs that can register third party SIP devices.

You must verify that the IP PBX you are registering Centry to can handle third party SIP de- vices, whether through licensing and/or hardware add-ons. Please note that Centry currently does not work with a separate Proxy Server. SIP registration and calls must point to the same domain/IP Address SIP Server.

Examples of mainstream IP PBXs Centry has registered to as a third party SIP device include:

Avaya
Asterisk
Cisco Call Manager
Nortel

and many others...

13 Configuring for Cisco Unified Communications Manager

PREPARATION

1. Record the MAC address and determine the current IP address for each Centry device you wish to use with CUCM.
2. Determine which partition you will put the Centry directory numbers into.
3. Obtain one directory number for each Centry device.
   a. If you are going to use the Centry's dual account configuration to register to redundant CUCM servers, obtain a second directory number for each Centry device.
4. Determine which calling search space you will assign to the Centry.

CENTRY CONFIGURATION

Configure Account(s)

1. Log in to Centry via its web interface. The default username and password are admin and admin.

2. Select Account 1.

3. For VoIP Protocol, select SIP and RTP.

4. Under SIP Configuration, for Username/Number enter the directory number assigned in the CUCM.

5. For Display Name, enter caller ID text.

6. For Domain, enter the hostname or IP address of the CUCM subscriber you wish to register this account.

7. Insure Keep-Alive is enabled.

8. For Password, enter the password you entered into Digest Credentials under the CUCM end user.

9. Click Save.

10. Repeat steps 3-9 with Account 2 if you are using the second account.

Other Settings

Refer to Section 3 to complete the setup of the Centry, including Numbers, General Settings, Hardware Settings and Action Scripts. When finished, it should now register to CUCM and be able to place calls in the assigned calling search space as well as receive calls at the directory number it is configured with.

Note: If you are setting up the Centry with secondary account support, make sure that you create each failover number twice.

UCM CONFIGURATION

All UCM-side configuration is done within the Cisco Unified CM Administration web interface.

Create Phone Security Profile

1. Navigate to System > Security > Phone Security Profile.

2. Do a Find on "Third-party" to locate the Third-party SIP Device Basic - Standard SIP Non-Secure Profile. Click the Copy icon.

3. Check Enable Digest Authentication.

4. Change the Name and Description to Code Blue Centry Profile.

5. Click Save.

Configure End Users

For each Centry device, configure a new end user for SIP authentication.

- Navigate to User Management > End User.
- Click Add New.
- For the User ID, enter the Directory Number of the Centry phone.
- Fill in the Last Name field with the Directory Number.
  - The Directory Number, User ID, and Last Name fields must all be the same.

Create and record a secure SIP password and fill in the Digest Credentials and Confirm Digest Credentials fields with this password. You will be entering this password later into the Centry.

- Click Save.

Configuring End Users for Secondary Accounts

If you are going to use the Centry's secondary account functionality to register to a separate di- rectory number to a separate CUCM node for failover support, repeat the above process using a local-use-only MAC address. A local-use-only MAC address has the U/L bit set to 1 to indicate the address is locally administered.

Configure Phones and Directory Numbers

For each Centry device, configure a new Phone and associated directory number.

1. Navigate to Device > Phone.

2. Click Add New.

3. For Phone Type, select Third-party SIP Device (Basic).

4. Enter the MAC Address of the phone in hexadecimal format; e.g. 00:50:C2:17:7B:E8 would become 0050c2177be8.

5. For Device Pool, select Default (or some other locally-configured device pool).

6. For Phone Button Template, select Third-party SIP Device (Basic).

7. For Calling Search Space, select the calling search space the Centry is to use.

8. For Device Security Profile, select Code Blue Centry Profile.

9. For SIP Profile, select Standard SIP Profile.

10. For Digest User, select the end user matching the MAC address of the phone.

11. Click Save.

12. On the left side of the screen, click Line [1] - Add a new DN.

13. Fill in the Directory Number.

14. For Route Partition, select the partition the directory number resides in.

15. Under Line 1, for Display (Internal Caller ID), enter a descriptive name for Caller ID purposes.

16. If you wish to return a busy signal for silent monitoring if the Centry is in use, disable Call Waiting: under Multiple Call/Call Waiting Settings, For both Maximum Number of Calls and Busy Trigger, enter 1.

17. Click Save.

Configuring Phones and Directory Numbers for Secondary Accounts

If you are going to use the Centry's secondary account functionality, repeat the above process with a local-use-only MAC address as outlined in Configuring End Users for Secondary Accounts, and specify a distinct directory number.

Integrating InformaCast Utilizing Cisco Call Manager

- Access to the InformaCast emergency notification system produced by Singlewire Software frequently is included with Cisco Unified Communication Manager (CUCM). Code Blue's VoIP speakerphones (Centry) can be registered and configured with CUCM as SIP devices that are compatible with IP Gateways and PBXs that can register third-party SIP devices.

- To send audio pages from InformaCast to Code Blue speakerphones, select the Code Blue devices as end point phones for the messages. The Code Blue phones will have the ability to answer and play the audio by default.

14 Avaya IP Office Integration Guide

Introduction

This Avaya IP Office Integration Guide provides general instructions for integration of the Centry Series Phones with an IP Office installation. Read this instruction set completely before starting any installation. For detailed Centry setup instructions, please consult the Centry Guides.

Prerequisites

- Avaya IP Office Manager Version 9 pre-installed
- SIP Device Licensing for 3rd Party IP Endpoints
- Network access to the IP Office Manager, Centry Series Phones and all network services (SIP, HTTP, FTP, RTP/SRTP)

IP Office Manager Basic Configuration

Basic instructions for integrating Centry Series Phones with an Avaya IP Office R7 Manager are included. Advanced setup of IP Office Manager features is outside the scope of this document.

1. Using IP Office R7 Manager, connect to the IP Office Control Unit.
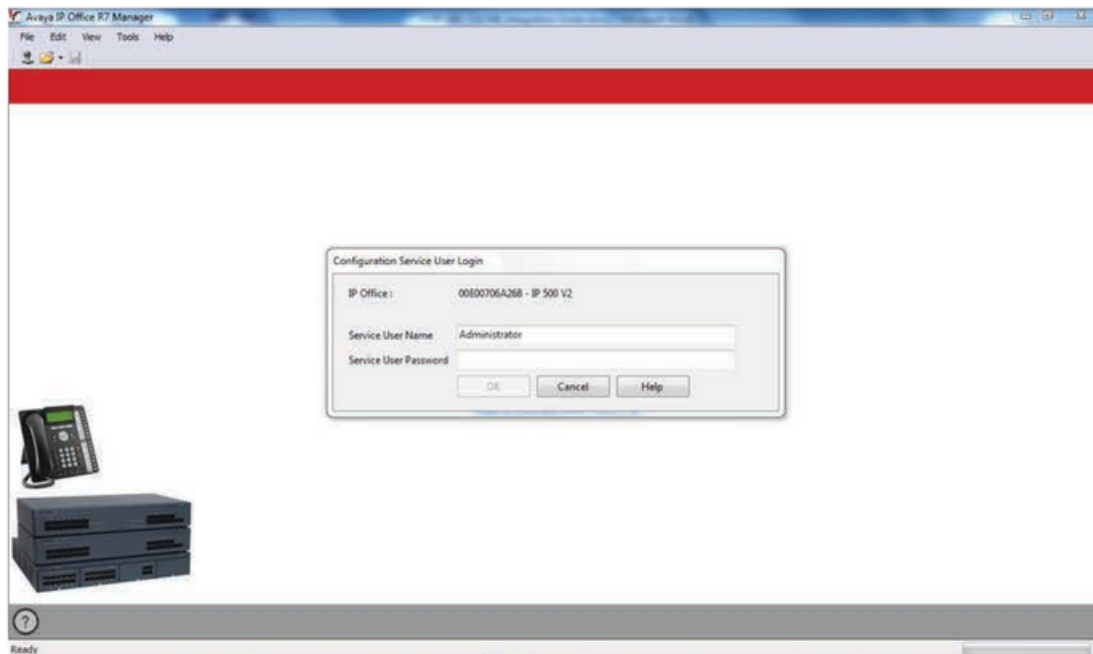
2. Log in to Avaya IP Office Manager:
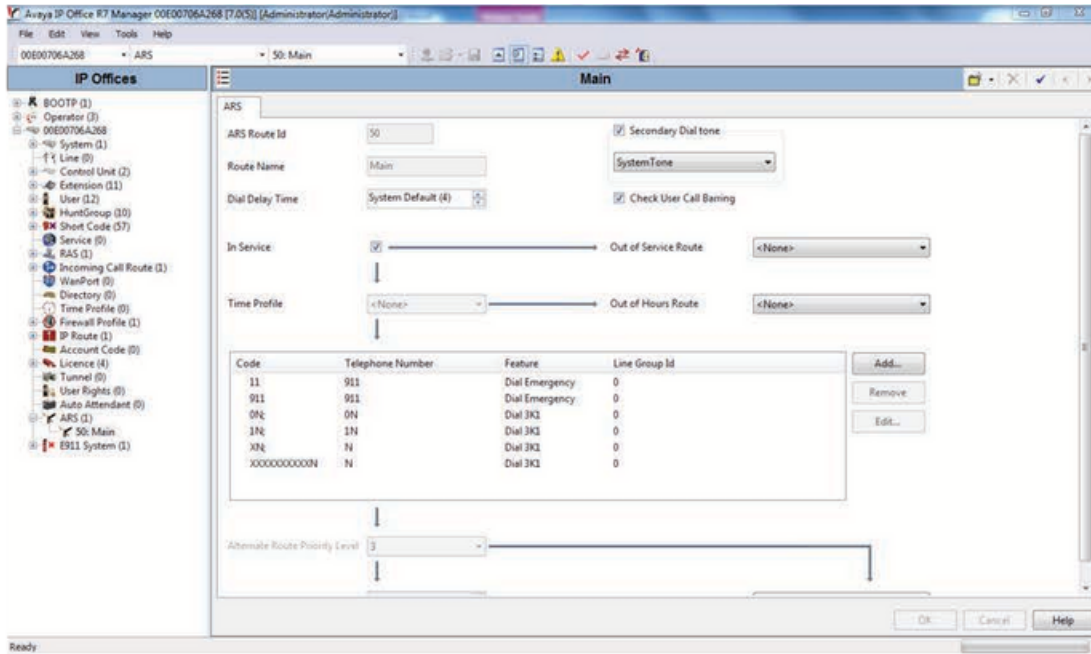
3. SIP Extension Support is required for Centry integration. Select System > LAN1 (or LAN2) > VoIP in IP Office Manager:
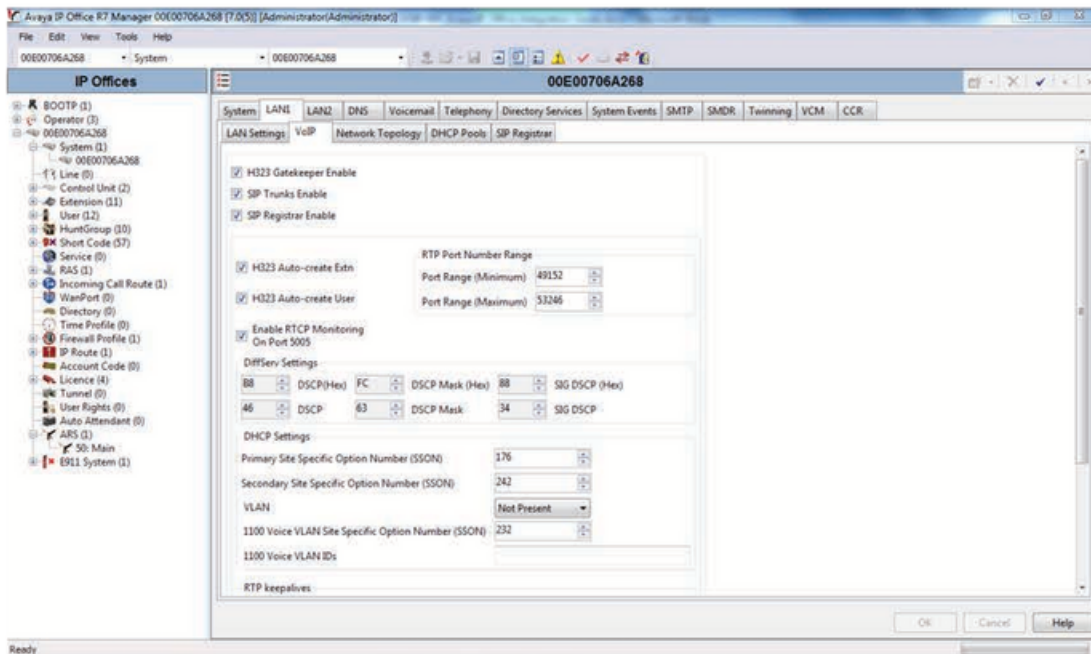
4. Check that SIP Registrar Enable is enabled.
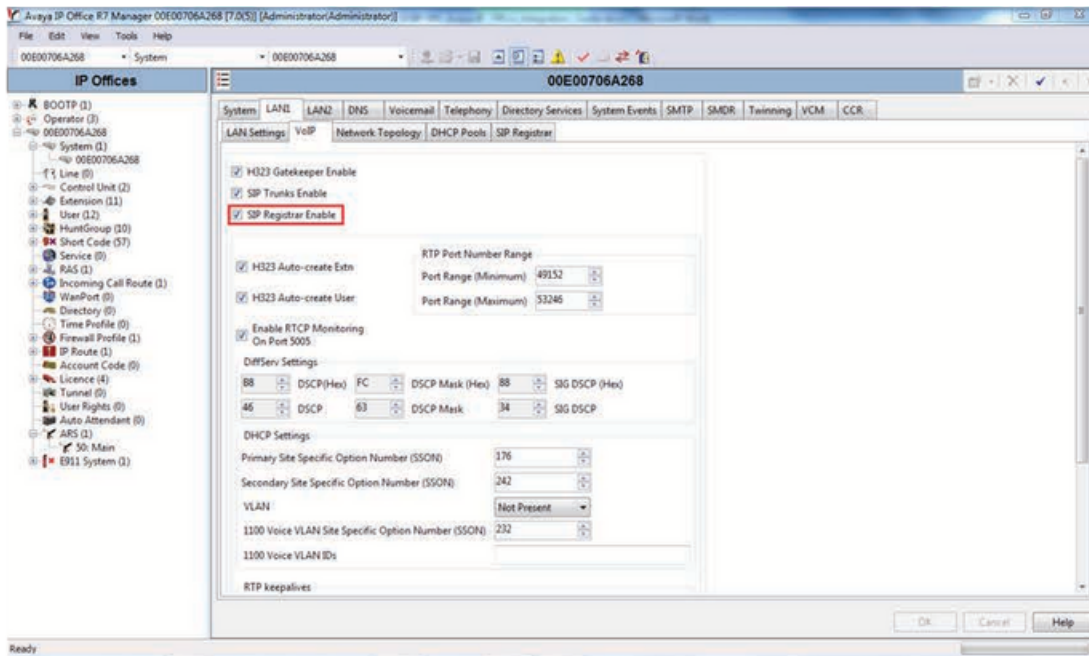
5. Select the SIP Registrar sub-tab.

6. In Domain Name, enter the Fully Qualified Domain Name (FQDN) or the IP address associated with the correct LAN port on the IP Office Control Unit. Deselect Auto-create Extn/User. Click OK.
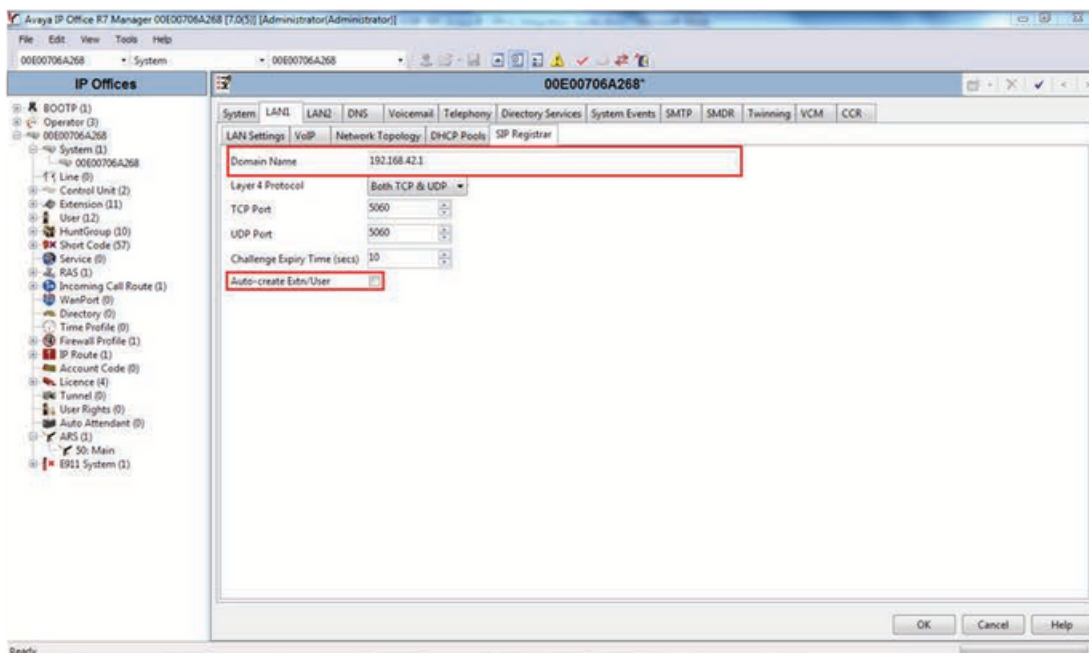
7. A SIP extension will need to be created for each Centry. Right click on Extension, select New and then click on SIP Extension.
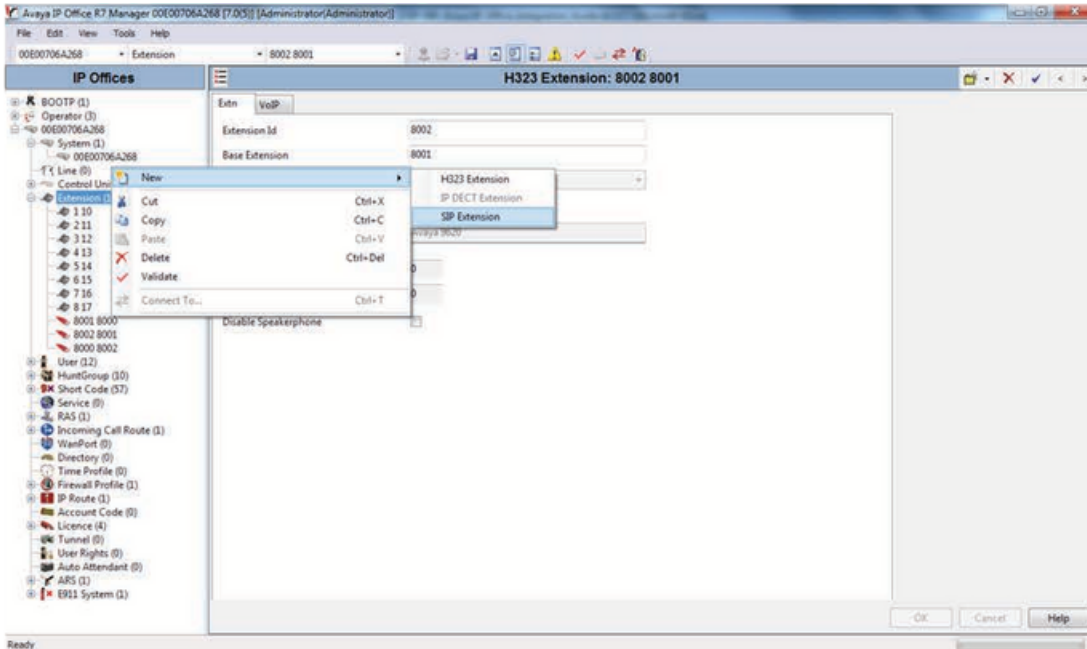
8. Enter the following fields to create a new extension:
  • Extension ID: A unique extension to identify the logical extension in IP Office. By default, IP extensions start at 8000.
  • Base Extension: This is the extension used to call Centry.
  • Force Authorization: Select to force authentication of Centry.
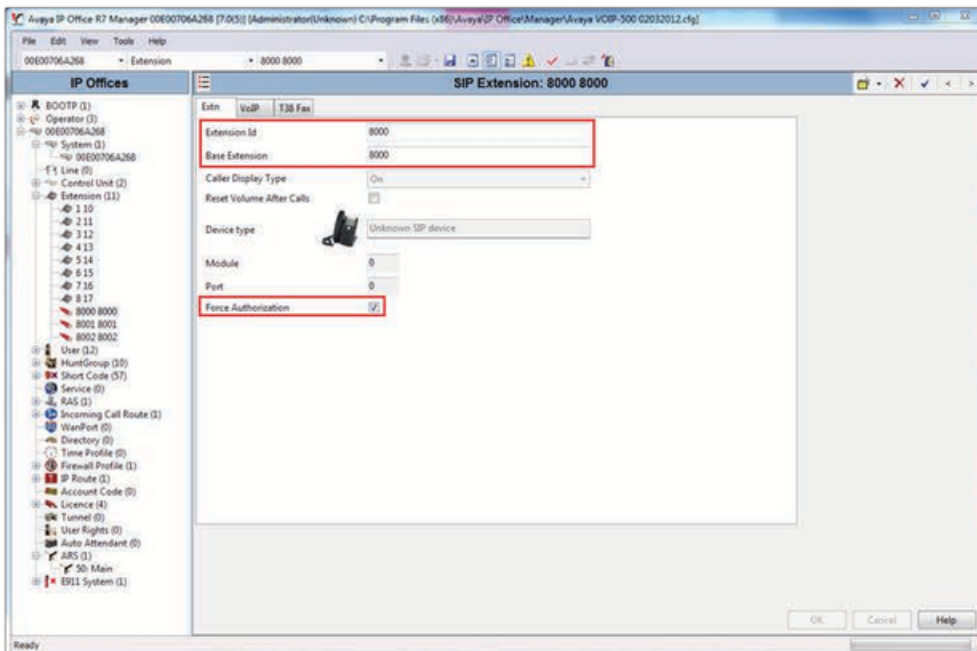
9. Select the VoIP tab and select the Compression Mode. The default of the Centry device is G.711 U-LAW and will work in most cases. More information on audio codecs can be found in the Centry device Guide. Set DTMF Support to RFC2833.
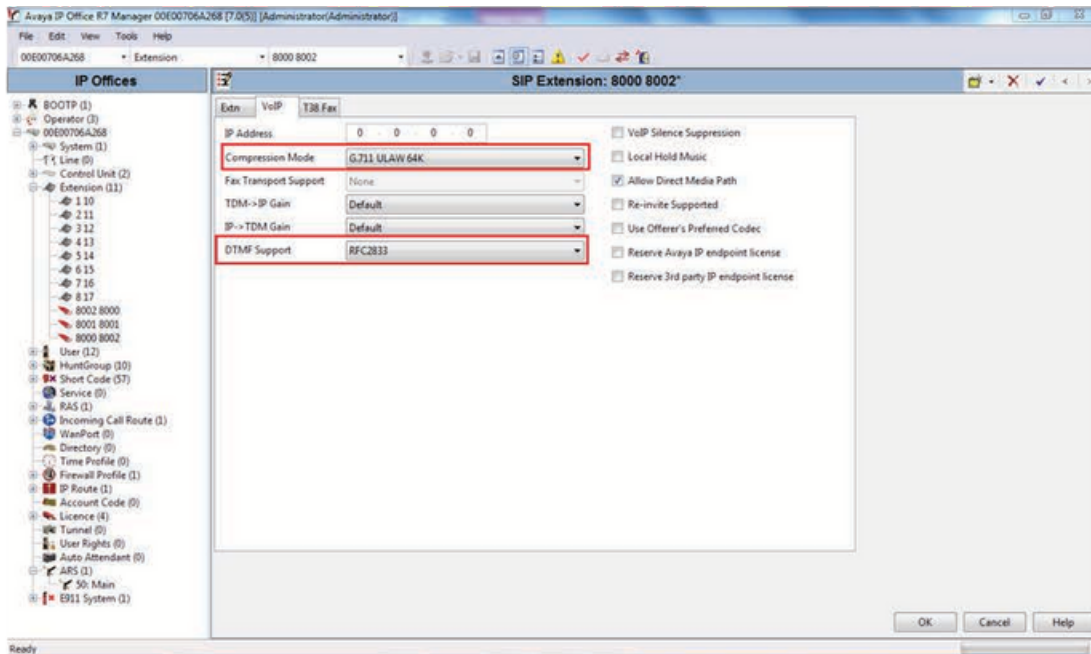
10. Each Centry device should have a unique User. Right click on User and select New.
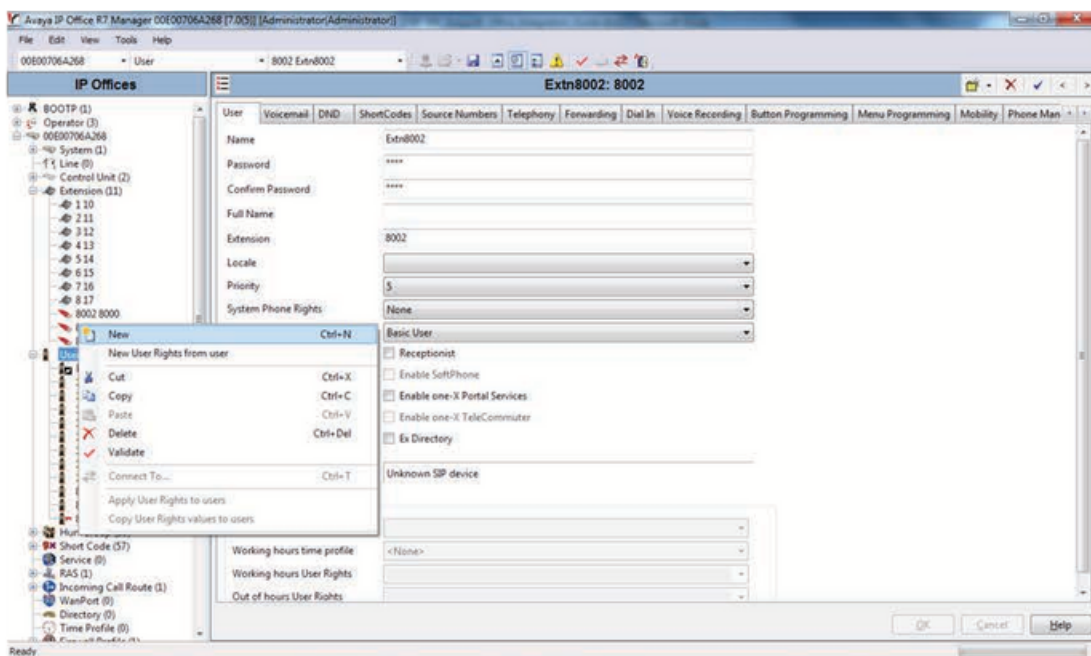
11. Enter the following fields to create a new user;
- Name: This will be displayed as the user's name in IP Office Manager, and is used as the username for SIP registration when configuring the Centry device.

- Extension: This should match the Base Extension configured for the SIP extension in Step 8. This is also used as the phone number when configuring the Centry device.
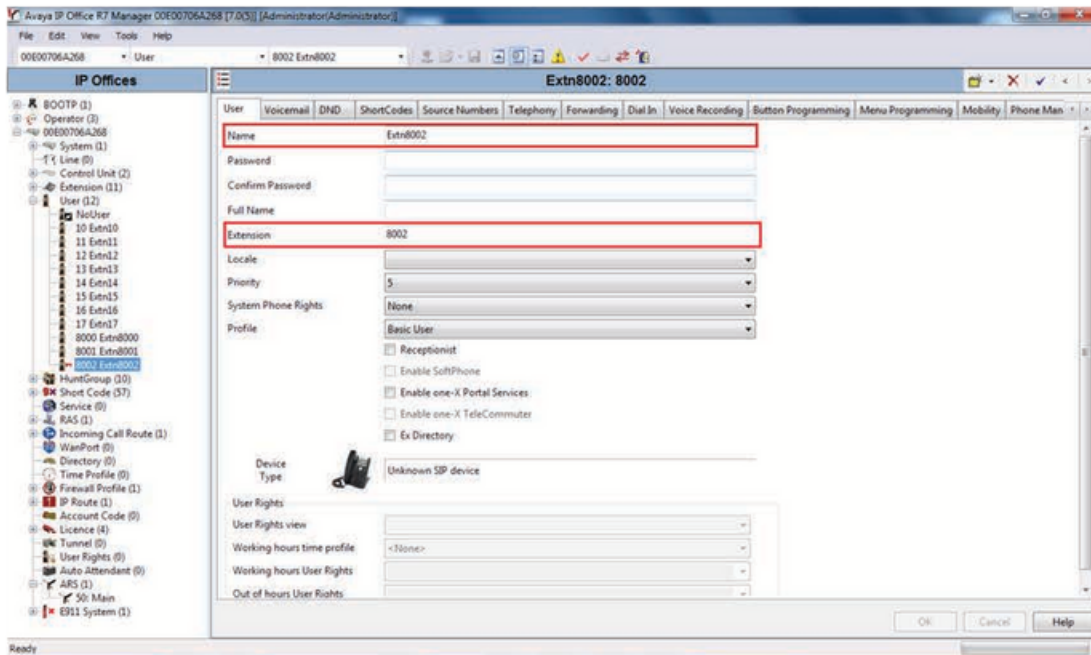
12. Select the Telephony tab and then the Call Settings sub-tab. Disable Call Waiting On and Answer Call Waiting on Hold. Call waiting is not supported on the Centry device.
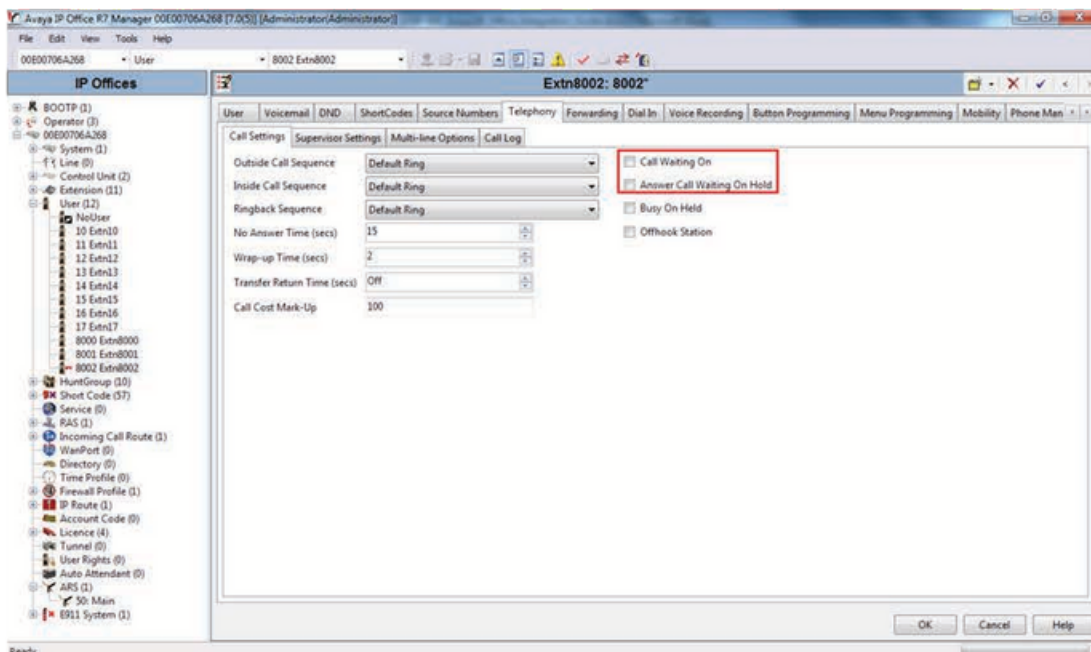
13. Select the Supervisor sub-tab. In the Login Code field enter a password to be used by the Centry device for authentication. Avaya IP Office will only accept numbers in this field.
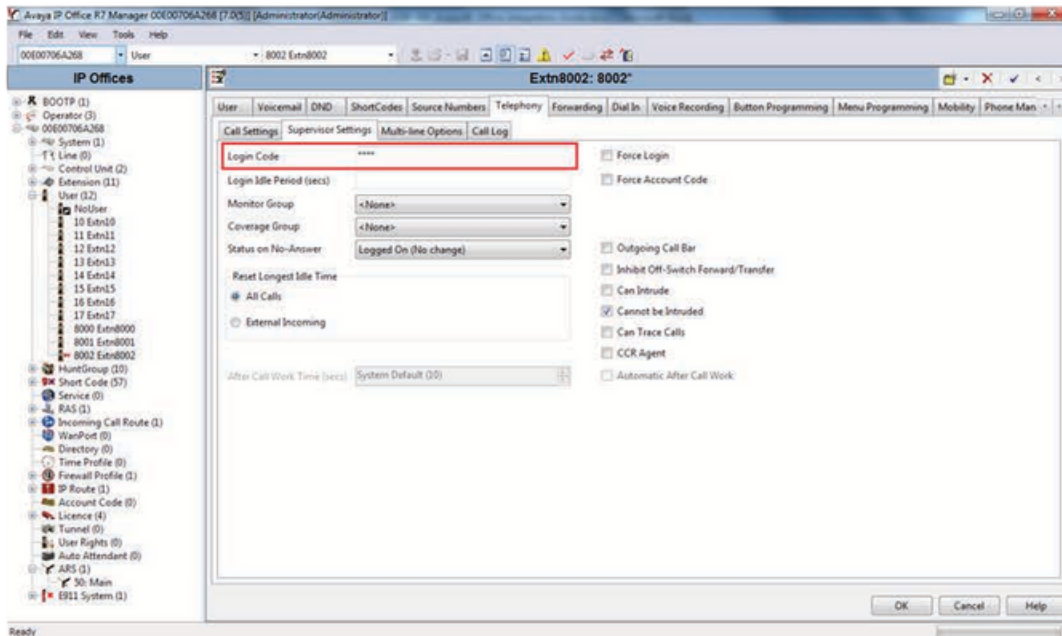
14. If adding multiple Centry devices, repeat steps 7-13 for each device.

15 Troubleshooting

Centry is a network device. The following are tips for troubleshooting:

Power - Ensure the power to your device is working and rated for 802.11af/at PoE specifications if using PoE. Centry should only have one source of power other than a backup battery. If not using PoE, then main power needs to fall into 12-24 Volts DC.

Ping Test - This determines connectivity and the packet loss and latency time to and from your destination and the quality of your network connection to Centry. If you receive no response and power is confirmed, contact your network administrator. You can also ping from within the phone towards your IP PBX to test that it can reach its IP PBX/SIP Gateway.

Network – If you're putting Centry on a network that restricts ports, then the following ports must be open for Centry to communicate to its appropriate IP PBX/SIP Gateway:

1. IAX2/UDP outgoing to port 4569 on IP PBX/SIP Gateway (only needed if using IAX2 instead of SIP on the accounts page).
2. SIP/UDP outgoing to port 5060 IP PBX/SIP Gateway.
3. RTP/UDP incoming from IP PBX/SIP Gateway to UDP ports 23456-23556 (configurable).

DHCP - Centry is set up for DHCP by default. If you cannot determine the IP address of your Centry, contact your network administrator.

Account - Ensure your SIP account is set up correctly. Account username and password must match the account credentials on your VoIP system. This is the most common mistake with setting up SIP accounts.

Codec - Ensure the codec settings on your VoIP system match the Centry codec settings.

Firewall - Firewalls commonly block or partially block VoIP calls. Check with your network administrator if you cannot communicate with your Centry from behind a firewall.

Note: If you do not have a DHCP server running, use a standard home/wireless router and plug your speakerphone and laptop into the same router. Once you know the IP Address, you can browse to it via a web browser.

16 Remote Mount Beacon Strobe Installation

1.0 ATTACH J-BOX TO THE POLE

1.1 Thread the banding (B) through the pole bracket (A) located on the backside of the J-box (C).

1.2 Wrap the banding around the pole. Cut the banding to desired length.

1.3 Using a screwdriver or nut driver, tighten the banding and make sure that the unit is in the desired location.

NOTE: J-box must be positioned so weep hole faces down.

2.0 ATTACH LIGHT TO BRACKET

3.1 Using the three M4 X 8 screws enclosed (K), fasten the strobe (J) to the round portion of the strobe bracket.

NOTE: If the beacon/strobe is mounted upside-down, a drain hole must be drilled into the lens to prevent it from filling with water.

3.0 ATTACH LIGHT AND BRACKET TO THE J-BOX

4.1 Connect all wiring from the strobe to the wiring from the unit inside of the J-box using wire nuts.

4.2 Attach strobe bracket to the J-box using four 6-32 X ½ screws as shown.
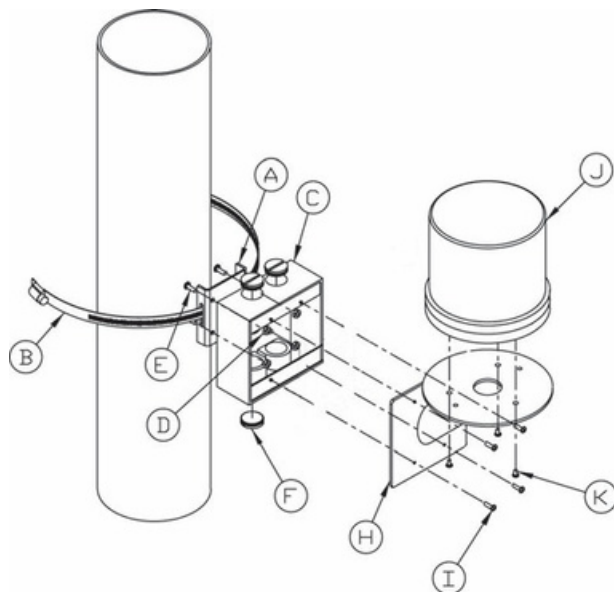
A - pole-bracket
B - banding
C - J-box
D - pole-bracket mount nut (4 each)
E - pole-bracket mount screw (4 each)
F - conduit plug
H - strobe-bracket
I - 6-32 X ½ screws (4 each)
J - strobe light
K - M4 X 8 screws (3 each) (Low voltage)
K - 10-24 X ¾ screws (2 each) (High voltage)

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.

17 S-1000/S-1050/S-2000 Installation Instructions

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

RED   POSITIVE (12-24V DC or AC)

BLACK   COMMON (GROUND)

YELLOW   (FLASH MODE)

DRY   CONTACT
CLOSED = "ON"

YELLOW   (FLASH MODE)
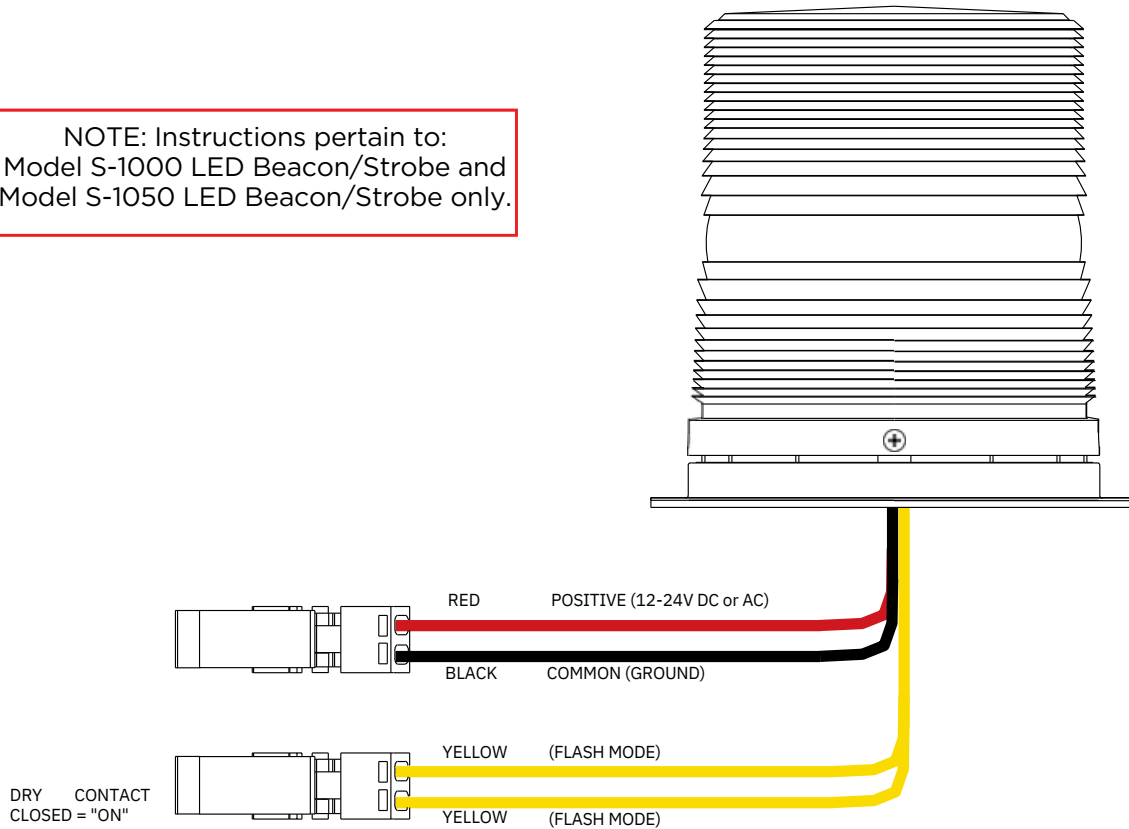
CAUTION ⚠️ **REMOVE ALL POWER FROM UNIT BEFORE SERVICING.**

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.		

18 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

Level	Stars
Low	★
Low/Moderate	★★
Moderate	★★★
Moderate/High	★★★★
High	★★★★★

SURFACE CARE FREQUENCY

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

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

AVERAGE COMPONENT LIFE

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

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

19 Locating Unit Serial and Part Numbers

Remove the Centry phone from the housing. The serial number and part number will be listed on the back plate that covers the Centry board.
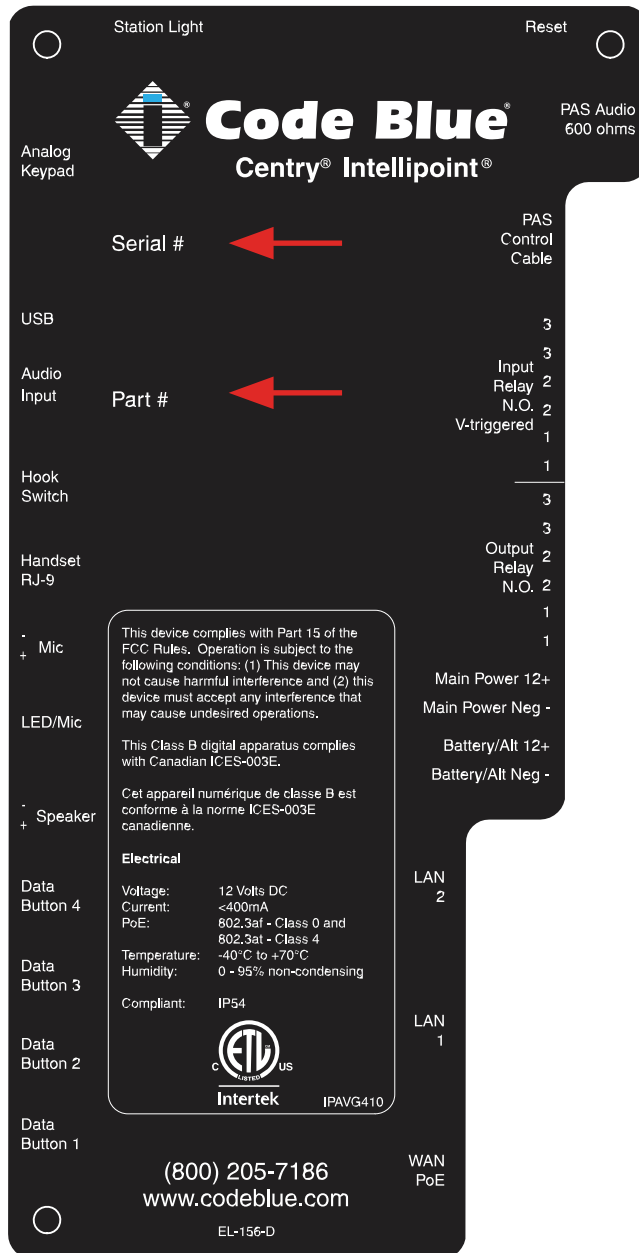
20 Warranty

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**.

21 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

For Legacy Product Information:
www.codeblue.com/legacy-products

These guides should contain all the information needed for your application. If further information is required, please contact **customerservice@codeblue.com**.

22 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**