# GENERAL DESCRIPTION

* 1. The unit shall be a powerful 360-degree, six-speaker Public Address System located at the top of 1 and 5 series model Help Points® from Code Blue Corporation, no substitutions. It shall include a powerful LED beacon/strobe light that serves to easily identify it from a distance.

# CONSTRUCTION

* 1. The Public Address Speaker (PAS) assembly that seals the top of the pedestal unit shall consist of a mounting ring, gasket, speaker array, LED beacon/strobe, UV-rated polycarbonate dome and required fasteners.
  2. The speaker array shall be constructed of ABS plastic.
  3. The assembly shall be 19.36” H x 14.05” W and weigh approximately 25 lbs.
  4. Tamper resistant proprietary fasteners manufactured for Code Blue Corporation shall be used. It shall not be possible to acquire the custom-designed bit from any other source.

# MOUNTING

* 1. The mounting ring shall be made of ASTM A500 carbon steel structural tube and have a weather-resistant gasket. There shall be an inner ring welded to the mounting ring that contains three 0.50” x 13” nuts for pinch bolts. The mounting ring shall have six .31” diameter through holes to allow for mounting of the speaker array.
  2. A cylindrical, transparent, UV-rated polycarbonate dome that is a minimum of 6” tall with a 12.5” outer diameter shall be attached to the speaker array. A blue LED Beacon/Strobe shall be attached below the dome.

# ELECTRICAL

* 1. Requires 4 ampere at 120V AC.

# LIGHTS

* 1. LED Beacon/Strobe: Located in the dome top assembly with a rating of no less than 270 Lumens/92 candela, it shall have a factory-set flash rate of up to 375 flashes per minute and be programmable. A deep blue UV-rated polycarbonate prismatic refractor shall surround the LED Beacon/Strobe and be used to distribute the light in a horizontal pattern for maximum brightness and visibility.
     1. The communication device shall be factory programmed to activate the LED Beacon/Strobe for the duration of a call.
     2. The LED Beacon/Strobe shall be 5.10” tall and 5.50” in diameter.

# COMMUNICATIONS

* 1. The unit shall be a cylindrical 360°, six-speaker PAS assembly for mass notification capabilities:
     1. The amplifier shall have the following specifications:

| Parameters | Symbols | Test Condition/ Comment | Min | Typ | Max | Unit |
| --- | --- | --- | --- | --- | --- | --- |
| Load Resistance: | RL |  | 2.5 | - | - | Ohms |
| Max Output Power: | Pmax | f=20Hz-20KHz (1% THD) | - | 500 | - | W |
| Output Power: | Po | f=20Hz-20kHz (0.1% THD) | - | 400 | - | W |
| Sensitivity: | Vsen | Input Signal to Po | - | 3.5 | - | Vrms |
| Gain: | A |  | 20.5 | 21 | 21.5 | dB |
| Mute Gain: | Amute | Disable Pin pulled low. | -45 | - | - | dB |
| Distortion: | THD+N | 10Hz< f <20kHz, 100mW< Pout< Po |  | 0.03 | 0.05 | % |
| Freq. Response: | f | 20Hz-20kHz | - | +/-0.5 | - | dB |
| Noise Floor: | VNF | Input Shorted, A-weighted | - | 70 | 80 | uV |
| Maximum Current: | Imax |  | 23 | 26 | 29 | A |
| Damping Factor: | DF | RL = 4 ohms @ 100 Hz | - | 375 | - | Ohms |
| Power Bandwidth: | BWpw | Output Power: Pmax | - | 60k | - | Hz |
| Small Signal Bandwidth: | BWsm | Output Power: 1Watt | - | 90k | - | Hz |
| Signal to Noise: | SNR |  | 117 | - | - | dB |

* + 1. The 360-degree speaker array shall have the following specifications:

|  |  |
| --- | --- |
| Parameters | Unit |
| Impedance: | 5.3 Ohms |
| Frequency Range: | 450 Hz to 7000 Hz |
| Power Capacity: | 420 Watts Continuous Program |

* + 1. The amplifier shall have the following additional features:
* Patented One-Cycle Sound™ Control
* Synchronized Switching Frequencies
* Output Feedback
* THD+N < 0.05%, 0.1W to 500W per channel
* Full range 20 to 20kHz Bandwidth
* Efficiency: Amp > 95%
* DC offset < 25mV
* Remote Disable
* Silent Turn-On
* Full Protection and Reporting: Over Current Speaker Short, Over Current Short to Chassis Ground, Over Temperature Protection, Power Supply Under Voltage Lockout and Excessive Clipping
* Monitor Outputs: Output Current Monitor, Temperature Monitor and Protect and Power On
* Internal and remote volume adjustment
  + 1. No additional infrastructure cabling or wireless shall be needed.
  1. The unit shall be capable of communicating via third party IP wireless and cellular devices, which can be housed within the unit.
  2. EIA/TIA, ANSI, CSA and BICSI cabling or similar standards shall be adhered to for proper operation of devices connected to copper or fiber infrastructure.

# FINISH

* 1. Four-coat paint process, with zinc-rich primer for corrosion resistance and baked-on polyurethane enamel for maximum gloss and shine.
     1. Optional clear coating process available to provide additional environmental protection.
  2. Substrate preparation shall be as required to comply with applicable ASTM impact and adhesion standards: D2794 Direct and Reverse Impact, D523 Gloss @ 60 Degrees, D3359B Cross hatch Adhesion, D1654 Corrosion Creep, D714 Scribe Blisters and D714 Field Blisters.
  3. The finish shall available in 7 standard colors: Safety Blue, Safety Red, Safety Yellow, Gloss White, Gloss Black, Dark Bronze and Bright Silver. Custom colors shall be available.
  4. Minimum coverage thickness of 2.0 mils.

# COMPLIANCE

* 1. NFPA 72 Chapter 24 (2010) compliant

# WARRANTY

* 1. The 360-degree, six-speaker Public Address System shall be warrantied against any defects in material and workmanship, under normal use, for a period of 2 years from date of installation. If system is found by manufacturer to be defective within the warranty period, manufacturer shall repair and/or replace any defective parts, provided the equipment is returned to manufacturer.

# MANUFACTURER

* 1. The Manufacturer shall be Code Blue Corporation. 800-205-7186, 259 Hedcor Street, Holland, Michigan 49423. www.codeblue.com. THERE ARE NO EQUIVALENTS.