# GENERAL DESCRIPTION

* 1. The unit shall be a powerful integrated public address speaker for 2 series model Help Points® from Code Blue Corporation, no substitutions.

# CONSTRUCTION

* 1. A Public Address Speaker (PAS) will be placed approximately 13.41” below the top of the 2 series housing to the center.
	2. The housing front shall be constructed of 12 gauge stainless steel brushed to a number 4B finish and a thickness of 0.105”.

# ELECTRICAL

* 1. Requires at least 4 ampere at 24V AC standard.
	2. The unit shall have the option of a Multi-Tap Transformer for connectivity to 120V AC, 240V AC and 277V AC primary power.

# COMMUNICATIONS

* 1. The unit shall be a PAS assembly for mass notification capabilities:
		1. The PAS assembly shall be equipped with an amplifier with 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)  |  | 160 | - | W  |
| Output Power: | Po  | f=20Hz-20kHz (0.1% THD)  | - | 150 | - | W  |
| Sensitivity: | Vsen  | Input Signal to Po  |  | 3.5 |  | Vrms  |
| Gain: | A |  | 16.5 | 17 | 17.5 | dB |
| Distortion: | THD+N | 10Hz<f<20kHz100mW<Pout<Po | - | 0.03 | 0.08 | %  |
| Freq. Response: | f  | 20Hz-20kHz |  - | +/-0.5 | - | dB  |
| Noise Floor: | VNF |  Input Shorted, A-weighted | - | 25 | 35 | uV |
| Maximum Current: | Imax  |  | 18 | 20 | 25 | 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: 1 Watt | - | 90k | - | Hz |
| Signal to Noise: | SNR  |  | 117 | - | - | dB |

* + 1. The PAS assembly shall be equipped with a 90-degree speaker with the following specifications:

|  |  |
| --- | --- |
| Parameters Impedance: | Unit 5.3 Ohms |
| Frequency Range: | 650 Hz to 6500 Hz |
| Power Capacity: | 50 Watts Continuous Program |

* + 1. The amplifier shall have the following additional features:
* Patented One-Cycle Sound™ Control
* Synchronized Switching Frequencies
* Output Feedback
* Full range 20 to 20kHz Bandwidth
* Efficiency: Amp > 95%
* DC offset < 25mV
* Remote Disable
* Silent Turn-On
* Full Protection:
* Over Current Speaker Short
* Over Current Short to Chassis Ground
* Over Temperature Protection
* Power Supply Under Voltage Lockout
* Monitor Outputs:
* Output Current Monitor
* Temperature Monitor
* Protect and Power On
* Internal and remote gain adjustment
	+ 1. No additional infrastructure cabling or wireless shall be needed for PAS communications.
	1. 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.

# COMPLIANCE

* 1. NFPA 72 Chapter 24 (2010)

# WARRANTY

* 1. The public address speaker for 2 series models 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.