

## 5416CS H/G

### GLOBALCOM® 5400 Series Digital Communication Station



#### General Description

The 5416CS H/G digital communications station is a fully programmable 16 button interface device for initiating audio / visual announcements with the 5400 Series Announcement Control Systems. Each model utilizes an electret condenser cartridge that is positioned in the housing such that its frequency response is enhanced. The microphone element location provides the mechanism for good acoustical coupling to provide a full-bodied, highly intelligible voice signal.

The 5416CS has an auxiliary line level audio input which may be used as a (local) background music source. The station also has a line level audio output which may be used as a zone out.

The 5416CS is a network appliance in which each station may obtain its IP address automatically or be assigned a unique IP address which simplifies installation and configuration.

#### Features

- Fully programmable 16 button interface with dual color capability to indicate announcement / action statuses
- Provides unlimited selection and initiation of announcements and messages in a GLOBALCOM 5400 Series System
- Fully supervised from the microphone element
- Handheld, Gooseneck, Surface (flat) or Desktop (free standing) versions
- Redundant Ethernet ports
- PoE powered
- Suitable for use as the emergency microphone paging station in EN54-16 systems

#### Front Panel Features

- 16 fully programmable action buttons
- Alarm Indicator LED (red)
- Fault Indicator LED (yellow)
- Busy Indicator LED (yellow)
- Ready Indicator LED (green)

#### Handheld Microphone

The handheld microphone assembly contains an omnidirectional electret condenser microphone cartridge integrated with a microphone preamplifier and an audio line driver. The microphone element and preamplifier are mounted in a teardrop shaped molded black textured Cyclolac™ housing. The use of an omnidirectional element eliminates the proximity effect which creates a boomy sound when a user speaks close to a microphone.

It utilizes a magnet for attachment to the microphone station base assembly and is supplied with a circular coiled cable which is built into the housing assembly. A strain relief is built into the housing end of the cable and locks into the housing. The terminations at each end are molded, 6 wire, RJ25 connectors which provide extra strength and resistance to failure by pull-out.

The cartridge features include a highly efficient electrical specification, pressure type operating principle, low impedance (2.2 kΩ), and high reliability under adverse shock, vibration and other environmental conditions.

# Gooseneck Microphone

The gooseneck microphone contains an omnidirectional electret condenser microphone cartridge integrated with a microphone preamplifier and an audio line driver. The microphone element is mounted in the metal windscreen portion of the gooseneck. The preamplifier and line driver are on a PC board mounted inside the base of the gooseneck on an XLR connector. The microphone assembly is a 12" gooseneck with a hard metal windscreen at the top and a 5-pin XLR connector in the base for mounting.

## Environmental

### Operating Temperature Range

32°F – +104°F (0°C – +40°C)

### Storage Temperature Range

–40°F to +158°F (–40°C to +70°C)

## Connectors

### Auxiliary Power

2-pin Phoenix, 3.81 mm spacing  
with locking screws

### Auxiliary Audio In/Out (2)

3-pin Phoenix, 3.81 mm Pitch

## Specifications

### Electrical

**Auxiliary Supply Voltage** 20 to 58 Volts AC or DC

**PoE Supply Voltage (IEEE 802.3af)** 48 Volt

### Auxiliary Input

**Frequency Response** ±0.5 dB

**22 Hz - 22 kHz, Input Level = 0 dBu**

**Total Harmonic Distortion, THD** <0.2%

**22 Hz - 22 kHz, Input Level = 0 dBu**

**Signal-to-Noise Ratio, S/N** >85 dB

**22 Hz - 22 kHz, Input Level = 0 dBu**

### Auxiliary Output

**Frequency Response** ±0.5 dB

**22 Hz - 22 kHz, Input Level = 0 dBu**

**Total Harmonic Distortion, THD** <1.5%

**22 Hz - 22 kHz, Input Level = 0 dBu**

**Signal-to-Noise Ratio, S/N** >85 dB

**22 Hz - 22 kHz, Input Level = 0 dBu**

### Microphone Input

**Frequency Response** ±0.5 dB

**22 Hz - 22 kHz, Input Level = 0 dBu**

**Total Harmonic Distortion, THD** <0.03%

**22 Hz - 22 kHz, Input Level = 0 dBu**

**Signal-to-Noise Ratio, S/N** >85 dB

**22 Hz - 22 kHz, Input Level = 0 dBu**

### Compressor

**Compression Threshold** –15 dBu

**Ratio** 5:1

**Attack Time** 22 mSec

**Release Time** 1 Sec

**Maximum Output (Line Output)** +4 dBu

**Analog-to-Digital Converter, A/D** 24 bit

**Internal Processing** 32 bit, Floating Point

**Sample Rate** 48 kHz

**Network Latency (Dante)** 2 mSec

### Mechanical

**Desktop Size** 11.82" W x 6.19" H x 6.08" D  
(30,02 cm x 15,72 cm x 15,44 cm)

**Wall Mount Size** 11.82" W x 6.26" H x 2.01" D  
(30,02 cm x 15,90 cm x 5,11 cm)