

STENTOFON GS-400 SYSTEM

A&E GUIDE SPECIFICATIONS

PART I: GENERAL

1.1 WORK INCLUDED

- A. Furnish and install a complete wired GS-400 One-to-One intercom as described herein and shown on the plans. The system shall include master station, substation, wire and cable, connectors, and accessories as required for an operational system.
- B. Scope of work shall include all GS-400 equipment.

1.2 CONTRACT DOCUMENTS

- A. All work in this section shall comply with all contract documents.

1.3 RELATED WORK

- A. Communications contractor shall coordinate all work with other contractors and trades where necessary.
- B. All conduit, raceways, pull boxes, standard boxes, shall be installed by the electrical contractor.
(Note to specifier: indicate scope and all related work)

1.4 QUALITY ASSURANCE

- A. Installation shall comply with all applicable codes.
- B. All equipment shall be new, in current production and the standard products of one acceptable audio manufacturer.
- C. The system shall be installed by a factory authorized and trained, communications contractor.

1.5 WARRANTY

- A. All GS400 equipment shall include a factory warranty that equipment is free from defects in design, material, manufacturing, and operation. Factory Warranty shall be for (36) months from date of shipment from the manufacturer.
- B. Installing contractor shall guarantee the equipment, wire, cable and installation for (1) year from date of acceptance.

1.6 SUBMITTALS

- A. Shall include all data necessary to evaluate the function, quality and suitability of the equipment and the configuration of the system.
(Note to specifier : Indicate submittal requirements)

PART II: PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. The one-to-one intercom system described herein are based on the GS-400 intercom system as manufactured by Zenitel USA, Kansas City, Missouri. The GS-400 system meets all requirements of the specifications and shall be considered the acceptable Base Bid.
- B. Any substitutions must meet all requirements of prior approval, as outlined in the contract documents. Substitutions that meet prior approval requirements must be listed as an alternate on the bid forms.

2.2 SYSTEM DESCRIPTION

- A. The purpose of the one-to-one intercom systems shall be to provide separate, quality audio monitoring and two-way communication between two areas or two rooms, as shown on the plans.
- B. Each basic system shall consist of a master, substation and power supply. Master and substation shall include a microphone, microphone preamplifier, speaker, and amplifier capable of up to (4) watts audio output.
- C. Each system shall be based on two-way balanced audio lines, capable of clean clear audio, free from hum, noise and distortion, up to 3000 feet between master and substation.
- D. The scope of each system shall include all features and functions described herein and all equipment shown on the plans. Each system shall be capable of adding optional features and components listed in the specifications, even if not initially included or shown on the plans.
- E. Complete and operational systems shall be provided.

2.3 SYSTEM CONFIGURATIONS

- A. Each system shall consist of the master, substation, power supply and options as required in each department and as shown on the plans.

(Note to specifier: Indicate configurations of various systems)

2.4 SYSTEM OPERATION AND FEATURES

- A. System shall be turned on by use of on/off slide switch on front of master. This shall illuminate red LED on master and allow immediate audio monitoring from remote substation. Audio monitoring through the master speaker shall be able to continue indefinitely. Volume control on the front of the master shall adjust sound level from master speaker.
- B. The operator shall be able to talk to people at the substation by use of a PTT (press-to-talk button), and microphone on the master. Operation shall be press-to-talk, release to listen. Use of optional foot switch shall duplicate PTT button on master. Footswitch may be simply plugged into back of master at any time.

- C. It shall be possible to plug in an audio headset/microphone on back of master at any time. Plugging in the headset, and toggling a switch on back of master shall allow operator to use headset in lieu of speaker and microphone on master.
- D. When the optional call-in kit is installed in the master, pushing a button at the substation shall momentarily sound buzzer in master.

2.5 EQUIPMENT AND PRODUCTS

- A. **STANDARD MASTER.** Master shall include the following controls: on/off switch; LED indicator; volume control; headset selector switch; and press-to-talk switch. Shall include a 3" round, 45 ohm, 1.5 watt speaker capable of 180-12 KHz, flush mounted, electret condenser microphone with 100/300 MV output, preamplifier with 600 ohm output and > 40 dB s/n ratio, and an amplifier capable of 2-4 watts output, over 400-5 KHz with less than .5% THD at rated output. Shall include screw terminals for substation and power, an RJ11 modular jack for a headset, and a .25" phone jack for a foot switch. Shall also include provision for optional call-in kit. Housing shall be heavy duty anodized aluminum, finished with black trim. Shall be suitable for both desk and surface wall mounting. Dimensions shall not exceed 2.25" H by 4" W by 10.25" D. Shall be STENTOFON #410.
- B. **POWER SUPPLY.** Shall provide 24 Volt, DC @ 400 MA. Shall be UL listed, and complete with AC plug-in and output cord. Shall be STENTOFON #1068.
- C. **HEADSET.** Shall be lightweight, single muff type with electret microphone and receiver, 8 foot coiled cord, quick disconnect, and RJ 11 modular plug-in jack. Shall be STENTOFON #412.
- D. **FOOTSWITCH.** Shall be light touch, momentary action, treadle type with normally open contact rated at 7 amps, 125-250 V AC. Shall include heavy duty, 8 foot cord with strain reliefs and 1/4" plug in jack. Housing shall be steel, finished in black matte, and shall include skid-proof base. Shall be STENTOFON #413.
- E. **STANDARD SUBSTATION.** Shall include a 2" x 3" oval, 45 ohm, 1 watt speaker, electret condenser microphone, and microphone preamplifier with 600 ohm output impedance capable of a frequency response of 400 to 5000 Hz, a better than 40 dB s/n ratio and THD of less than .5 percent @ 2 watts. The face plate shall be .1875 brushed aluminum, capable of mounting on a (3) gang electrical backbox which is provided by others. Shall be STENTOFON #420.
- F. **TAMPER RESISTANT SUBSTATION.** Shall be similar to the #420 standard substation described above, but shall include a 1" round, brass push button for call-in, and face plate shall be 11 gauge, #304 stainless steel. Shall be STENTOFON #421.
- G. **CEILING SUBSTATION.** Shall be similar to the #420 standard substation described above, but a 4" round speaker, condenser microphone and electronic board shall mount behind a round, metal speaker baffle. The baffle shall be 22 gauge steel, with hidden mounting studs, finished in white baked epoxy. Shall be approximately 8" round, and shall mount on a #1830 back box with a #1831 ceiling bridge. Shall be STENTOFON #426.