SCM-4825
Sentinel V2 Control Panel (Head-end)

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Description: The SCM-4825 control panel, part of the *Sentinel V2 Emergency Communication System*, is designed to provide fully supervised, full duplex voice communication, between each connected Call Station and Base Station phone. An FXO Gateway (POTS-4800S), connected to an analog telephone line (not included), allows for the automated-timed dial-out capability to an alternate monitoring location (not Included). The system can support up to 500 stations using Expansion Switches (ES-4808S). The SCM-4825 Control Panel as well as each ES-4808 Expansion Switch can host 8 devices. The SCM-4825 unit has a 3U form factor and can mount in a network rack, in the BB-49S backbox, or on a wall (using included brackets). Requires primary 120VAC input power, and backup batteries are available (sold separately) to ensure the system remains operational when AC is lost (sold separately).

Operation: Calls initiated at a Call Station (4800VS-3) ring/display at all Base Station phone (A-4800BS) devices. Messages play at activated call station(s) to notify the caller about the status of their emergency request for help. The SCM-4825 control panel unit controls all of the system functions.

Call Off-Site Operation: The Sentinel V2 Emergency Communication System incorporates a programmable automatic dial feature to allow the system to connect to a 24/7 attended monitoring location. In the event that a call from a Call Station is not answered at any of the Base Station(s), after a preset amount of time, the system can automatically dial a programmed phone number. This allows the Call Station to be connected directly to the 24/7 monitoring location live with two-way voice communication. The system is compatible with either digital or analog phone lines, which must be provided by the end-user. Digital phone lines require a dedicated network connection as well as the telephone account username/password to utilize. Analog phone lines require the additional POTS-4800S modem and an analog phone line (not provided).

Mounting: Cornell recommends mounting the Sentinel V2 Main System (SCM-4825) inside a UL listed server rack. When this is not applicable, the SCM-4825 can be mounted in the BB-49S enclosure. It can also be wall mounted utilizing the same brackets for rack mounting (adjust brackets as needed). Refer to the manual for more details on mounting.
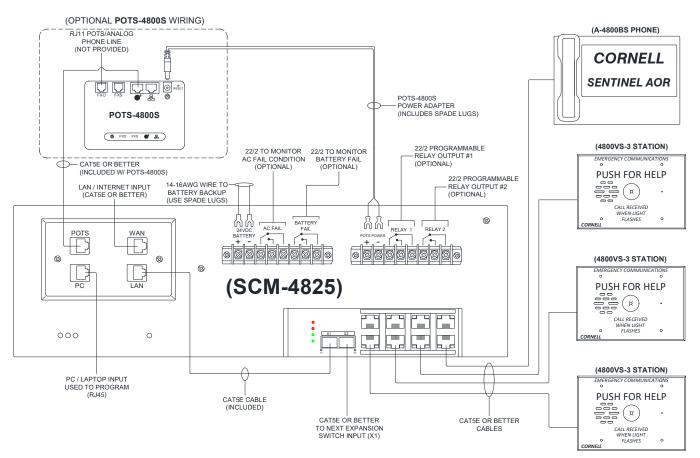
Engineering Specifications: The contractor shall furnish and install the CORNELL SCM-4825 as indicated on the plans. Systems shall be programmed to meet customer-provided-specifications – custom programming options are available at additional cost. Please contact Cornell for details and pricing.

SCM-4825 Technical Information:

- Power Requirements: 120V, 60Hz, 15A dedicated grounded circuit required.
- Operating Environment: 32-120°F Indoor Non-condensing; Humidity <80%
- Physical Dimensions: 17"W x 14"D x 5-1/8"H
  - Mounting Brackets add .97" to either side of the enclosure.
- Mounting: Rack, wall, or backbox can be used (follow instructions provided in installation manual).
- Wiring: Cat5e (or better) Ethernet cabling is required for network connections between the Main System, Base Station(s), Expansion Module(s) and Call Stations.
  - 14-18 AWG conductor recommended for 24VDC power connections.
- Supervision
  - AC fail supervision (form "C" contacts).
  - Low battery / battery fail supervision (form "C" contacts).
  - (2) Programmable relay outputs ("Relay 1" & "Relay 2" form "C" contacts)
    - Each can be programmed to trigger during 1 or more of the following faults:
      - Call Station, Master/Remote Phone(s), Trunk Phone Line, Network
- Temperature (the SCM-4825 control a built-in fan for cooling):
  - Operating Environment: 32-120°F Indoor / Relative Humidity 80%, Non-Condensing
  - BTU/Hr (approx.): 24VDC / 74 BTU/Hr.
  - System AC input VA requirement: 402.5VA
- Battery Backup ((Optional, recommended - additional equipment needed)
  - Built-in charger for sealed lead acid or gel type batteries (0.7A charge rate).
  - Automatic instantaneous switch over to backup battery power when AC fails.
- Battery Backup Options: (2) Battery backup options with the below part numbers:
- B-4825-7: offers approximately 3 hours of backup for the SCM-4825.
  - x(2) 12VDC, 7Ah batteries w/ backbox to mount adjacent to SCM-4825
- B-4865: offers approximately 28+ hours of backup for the SCM-4825 or other B-5243A power supply.
  - x(2) 12VDC, 55+Ah batteries

  Note: Cornell recommends using the same battery backup option throughout the entire system!