

Emergency Communication System

Series 4800 Site Programming Guide



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Cautions and Warnings

The following Manual is to be used as a guide to install the 4800 Emergency Communication System. Consult your local “Authority Having Jurisdiction” for required code compliance and installation standards. The **Caution** and **Warning** symbols are placed throughout this manual to identify critical requirements for a safe and proper installation.



- 1. Caution** - The 4800 Digital Emergency Communication System requires installation by factory trained authorized dealers/distributors, in accordance with ANSI/NFPA 70 National Electrical Code.
- 2. Caution** - Properly trained personnel, familiar with Telecommunications Industry Associations 568 TIA/EIA standard, are required for proper installation. Failure to terminate the wiring correctly will cause damage to the system and void the warranty.
- 3. Caution** - The 4800 Digital Emergency Communication System shall be installed in a controlled, indoor dry environment, with temperatures maintained between 55°F and 95°F.
- 4. Caution** - The 4800 Digital Emergency Communication System requires a dedicated, **Analog “POTS”** telephone line for “Offsite” modem communication.

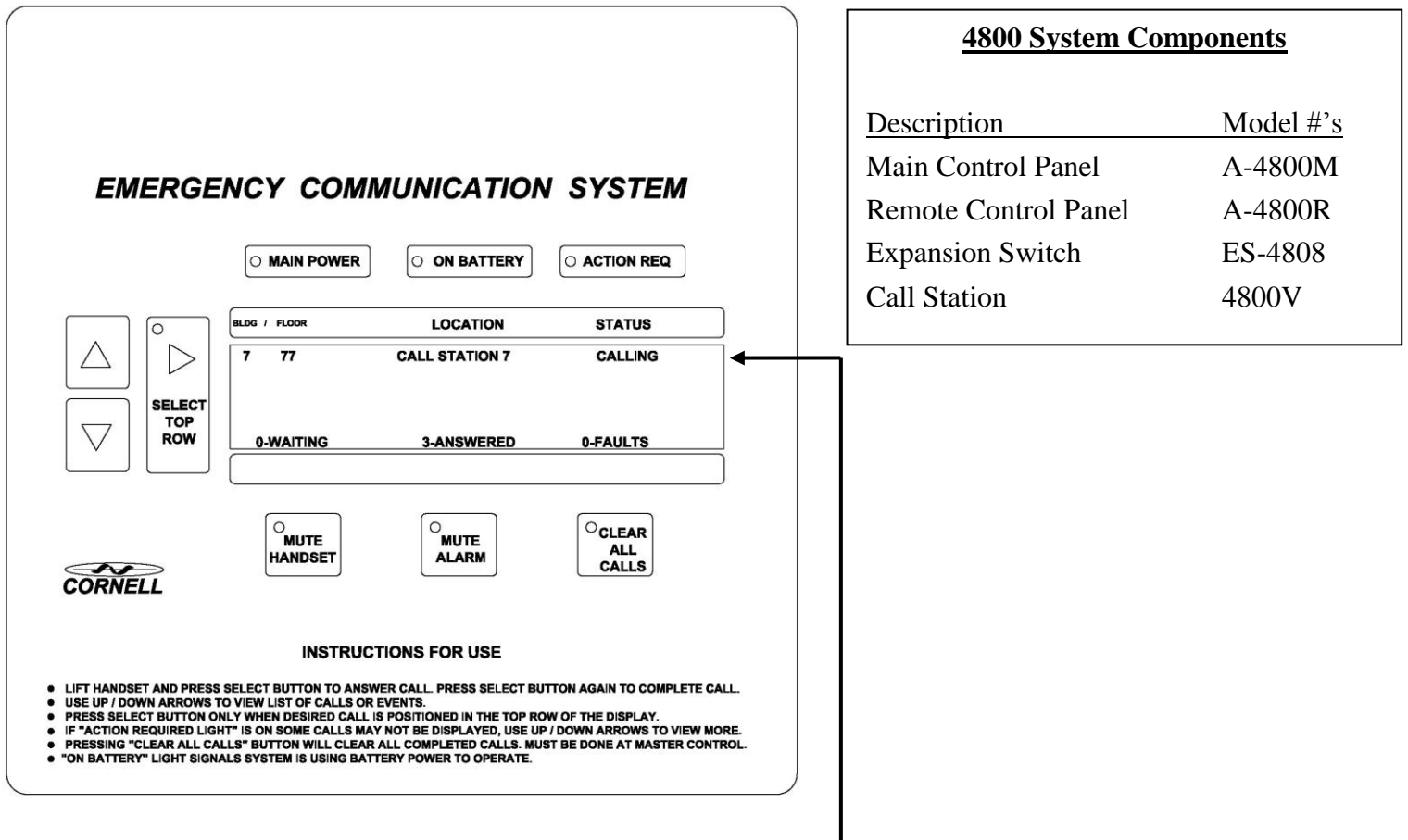
WARNING

- 1. Warning** – Cornell Communications manufactures proprietary Control Panels and Switches that have 8 available RJ45 ports to connect to additional Remote Control Panels, Switches and Call Stations. These devices connect using the straight-thru, TIA/EIA 568A or TIA/EIA 568B, wiring standard. Any attempt to connect an “Off the Shelf” Ethernet switch will damage the system and void all warranty!
- 2. Warning** – The 4800 Digital Emergency Communication System requires installation by factory trained authorized dealers/distributors, in accordance with NFPA 70 National Electrical Code, by qualified electricians. The 4800 System meets FCC 15, Subpart A, Section A (Commercial Use) emissions and is ICES-003 (Canada) compliant, when installed according to the installation instructions and the state/local electrical codes. Component or device substitutions such as Power Supplies, Switches or required cabling types are not permissible.
- 3. Warning** - Failure to comply with the installation instructions, the NEC, NFPA and local building code will void all agency listings and warranty coverage.
- 4. Warning** - Control Panels, Expansion Switches, Call Stations and Power Supplies require EMI suppression filters, to be added to the field wire connections during installation, for FCC compliance. Refer to page 16 of the 4800 Installation Manual.
- 5. Warning** - To ensure proper operation, the 4800 system should be tested on a regular basis by qualified personnel.

Programmed Information

The 4800 System is factory programmed, with the local site information that is provided by the local Cornell Dealer or Distributor. Once the Emergency Communication System is configured, the program is stored in the Main Control Panel and on a Cornell supplied USB drive, which is attached to the Main Control Panel.

The location information is displayed in the diagram below.



The header directly above the display screen provides information regarding the System Component locations and their status. The BLDG, FLOOR and LOCATION information is required to program the 4800 system.

BLDG: A single digit alphanumeric character space that represents a building number in a complex or large campus.
 (This is an optional field that may be left blank).

FLOOR: A two digit alphanumeric character space that ranges from 0-99.
 (This is an optional field that may be left blank).

LOCATION: Up to (24) digit alphanumeric character space for Call Station location information.

** Building and floor information is available as an option and is not required.

Programming “Automatic Dial”

[1] The 4800 Digital Emergency Communication System incorporates a programmable automatic dial feature to connect to **Analog “POTS”** telephone line. In the event that an incoming call is not answered at any of the Control Panel(s), in a preset amount of time, the 4800 system will dial a pre-programmed phone number to directly connect the 4800V Call Station to a monitoring or ECC (Emergency Call Center) location. This feature is “**Optional**” and not required to be programmed.

ECC, Call Station, and System Fault Messages

ECC Message

[2] A pre-recorded voice message can be played, when the Modem is connected to a monitoring location. The message has a maximum time limit of (1) minute and should identify the specific building location. The “Default” message is below.

Default ECC Message

“Please stand by. A request for help has been activated. You will be connected to the calling party in just a moment. This call is originating from the **(Building name and address)**. When you have completed your conversation with the calling party, you must press the pound (#) key to disconnect the call. You will now be connected to the calling party.” **At this point the optional call station message will play, example:** “Call Station Location, 2nd Floor Elevator Lobby.”

Optionally

[3] It is not necessary to have a pre-recorded message play automatically, prior to connecting to a 4800V Call Station. The 4800 system can direct dial to a monitoring location and immediately connect to the calling station. The ECC message can be played at any time by pressing the (*) key.

Call Station Message (Optional)

[4] A pre-recorded voice message can be played, identifying the specific call station location, when the Modem is connected to a monitoring location. This message will play after the ECC Message.

System Fault Message (Optional)

[5] A pre-recorded voice message can be played, identifying a 4800 system fault, when the Modem is connected to a monitoring location. The specific building location and a brief fault description will be played.

PLEASE NOTE: The pre-recorded system fault message will play automatically. Consult your local “Authority Having Jurisdiction” and the monitoring or ECC location to see if this is acceptable.

Default System Fault Message

“Please stand by. A system fault, for area of rescue assistance, has been detected. This call is originating from the **(Building name and address)**. When you have completed noting the following system fault number for the service provider, you must press the pound (#) key to disconnect the call.” **At this point the fault description will play, example:** “Fault 1, Emergency Power On.”

Proper procedure of disconnecting a call from the 4800 system must be provided to the “Monitoring” location. (See page 12)

Pending Message

Station Activation

[6] Once a call station is activated, a default “Pending” voice message is played at the call station, until a local connection is made. This message is programmable, and is part of the Required Site Programming, starting on the next page.

Default Pending Message

“Please stand by; your request for assistance has been forwarded”

In the event that an incoming call is not answered at any of the Control Panel(s) in a preset amount of time, the 4800 system will dial a pre-programmed phone number to directly connect the 4800V Call Station to a monitoring location. As the system attempts to contact the monitoring location or ECC, the dialing tones and ring tones can be heard, providing positive feedback to the user.

Please fill in the form on the following pages and return it to your Cornell Communication’s sales representative.

REQUIRED SITE PROGRAMMING INFORMATION FORM

Descriptions for items on this form can be found on pages 4, 5, and 6.

Cornell Use Only		
SO#	Dealer Name	End User Site Name

Automatic Dial Feature

[1] The 4800 system will dial a “pre-programmed phone number”: Yes No
 If “No”, skip to “Pending Message”, below. [6]

[1] Phone # of Monitoring (ECC) Location: _____

[1] Wait Time (5-999 Seconds): _____

The “Wait Time” is the amount of time in seconds that the “Calling 4800V Station” can be active, and unanswered at the Control Panel(s), prior to dialing the “Monitoring” or ECC location.

ECC, Call Station, and System Fault Messages

[2] Use “ECC Message”: Yes (Provide message info below) No “ECC Message” is not required.

[2] Use Default “ECC Message” w/Building Address Below:

[2] Use Custom “ECC Message” Below:

[3] Play “ECC Message” automatically: [3] Play message only if ECC operator presses the (*) key:

[4] Use “Call Station Message”: Yes No “Call Station Message” is not required.

[5] Use “System Fault Message”: Yes No “System Fault Message” is not required.
 If “Yes”, provide message info. See “ECC Message w/Building Address”, above. [2]

Pending Message

[6] Use “Pending Message”: Yes No “Pending Message” is not required.

[6] Use Default “Pending Message” Yes No ← Use Custom “Pending Message” below.

Main Control Panel Location (A-4800M)

(Location has a maximum of 24 characters, including spaces.)

1 digit 2 digit

1. Bldg: _____ Floor: _____ Location: _____

Remote Control Panel Locations (A-4800R)

(Location has a maximum of 24 characters, including spaces.)

1 digit 2 digit

1. Bldg: _____ Floor: _____ Location: _____

2. Bldg: _____ Floor: _____ Location: _____

3. Bldg: _____ Floor: _____ Location: _____

4. Bldg: _____ Floor: _____ Location: _____

Expansion Switch Locations (ES-4808)

(Location has a maximum of 24 characters, including spaces.)

1 digit 2 digit

1. Bldg: _____ Floor: _____ Location: _____

2. Bldg: _____ Floor: _____ Location: _____

3. Bldg: _____ Floor: _____ Location: _____

4. Bldg: _____ Floor: _____ Location: _____

5. Bldg: _____ Floor: _____ Location: _____

6. Bldg: _____ Floor: _____ Location: _____

7. Bldg: _____ Floor: _____ Location: _____

8. Bldg: _____ Floor: _____ Location: _____

9. Bldg: _____ Floor: _____ Location: _____

10. Bldg: _____ Floor: _____ Location: _____

11. Bldg: _____ Floor: _____ Location: _____

12. Bldg: _____ Floor: _____ Location: _____

13. Bldg: _____ Floor: _____ Location: _____

Expansion Switch Locations (ES-4808). Cont.
(Location has a maximum of 24 characters, including spaces.)

1 digit 2 digit

- 14. Bldg: _____ Floor: _____ Location: _____
- 15. Bldg: _____ Floor: _____ Location: _____
- 16. Bldg: _____ Floor: _____ Location: _____
- 17. Bldg: _____ Floor: _____ Location: _____
- 18. Bldg: _____ Floor: _____ Location: _____
- 19. Bldg: _____ Floor: _____ Location: _____
- 20. Bldg: _____ Floor: _____ Location: _____
- 21. Bldg: _____ Floor: _____ Location: _____
- 22. Bldg: _____ Floor: _____ Location: _____
- 23. Bldg: _____ Floor: _____ Location: _____
- 24. Bldg: _____ Floor: _____ Location: _____
- 25. Bldg: _____ Floor: _____ Location: _____
- 26. Bldg: _____ Floor: _____ Location: _____
- 27. Bldg: _____ Floor: _____ Location: _____
- 28. Bldg: _____ Floor: _____ Location: _____
- 29. Bldg: _____ Floor: _____ Location: _____
- 30. Bldg: _____ Floor: _____ Location: _____
- 31. Bldg: _____ Floor: _____ Location: _____
- 32. Bldg: _____ Floor: _____ Location: _____
- 33. Bldg: _____ Floor: _____ Location: _____
- 34. Bldg: _____ Floor: _____ Location: _____
- 35. Bldg: _____ Floor: _____ Location: _____

Call Station Locations (4800V)

(Location has a maximum of 24 characters, including spaces.)

1 digit

2 digit

1. Bldg: _____ Floor: _____ Location: _____
2. Bldg: _____ Floor: _____ Location: _____
3. Bldg: _____ Floor: _____ Location: _____
4. Bldg: _____ Floor: _____ Location: _____
5. Bldg: _____ Floor: _____ Location: _____
6. Bldg: _____ Floor: _____ Location: _____
7. Bldg: _____ Floor: _____ Location: _____
8. Bldg: _____ Floor: _____ Location: _____
9. Bldg: _____ Floor: _____ Location: _____
10. Bldg: _____ Floor: _____ Location: _____
11. Bldg: _____ Floor: _____ Location: _____
12. Bldg: _____ Floor: _____ Location: _____
13. Bldg: _____ Floor: _____ Location: _____
14. Bldg: _____ Floor: _____ Location: _____
15. Bldg: _____ Floor: _____ Location: _____
16. Bldg: _____ Floor: _____ Location: _____
17. Bldg: _____ Floor: _____ Location: _____
18. Bldg: _____ Floor: _____ Location: _____
19. Bldg: _____ Floor: _____ Location: _____
20. Bldg: _____ Floor: _____ Location: _____
21. Bldg: _____ Floor: _____ Location: _____
22. Bldg: _____ Floor: _____ Location: _____

** An additional Call Station/Expansion Switch form is included on the next page.

Call Station (4800V)/Expansion Switch Locations (ES-4808)

(Location has a maximum of 24 characters, including spaces.)

1 digit 2 digit

#_____. Bldg: _____ Floor: _____ Location: _____

#_____. Bldg: _____ Floor: _____ Location: _____

#_____. Bldg: _____ Floor: _____ Location: _____

#_____. Bldg: _____ Floor: _____ Location: _____

#_____. Bldg: _____ Floor: _____ Location: _____

#_____. Bldg: _____ Floor: _____ Location: _____

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#_____. Bldg: _____ Floor: _____ Location: _____

#_____. Bldg: _____ Floor: _____ Location: _____

#_____. Bldg: _____ Floor: _____ Location: _____

#_____. Bldg: _____ Floor: _____ Location: _____

#_____. Bldg: _____ Floor: _____ Location: _____

#_____. Bldg: _____ Floor: _____ Location: _____

ECC - Emergency Call Center, Procedures

General:

An automated call system will dial a pre-programmed telephone number and play a pre-recorded message (Optional) that will contain information such as building address, and other relevant instructions as required. The operator will then be connected “live” to the calling station, “opening a direct audio path” between the person requesting help and the call center operator.

A few basic key strokes will help the operator manage calls as additional telephone calls may arrive during an emergency. The ECC operator’s voice has priority during the live conversation so please allow the caller to speak, understanding they may be under duress. At any time, local authorities may take control on site, abruptly disconnecting your call.

It will be important to learn as much information from the caller as to the type of emergency, and their exact location in side the building, such as the floor # and or surroundings, garage, stairwell, number of persons at the location, etc.

The ECC should then contact the local emergency response authority with details and stand-by for additional calls from the same building. Each facility may also request that additional persons be notified.

Do not respond to or forward the actual caller ID telephone number as this may be a dedicated phone line and would tie up additional calls from processing.

Control:

If a pre-recorded message is provided, it should contain important site information. The message can be replayed several times by momentarily pushing the [*] button, allowing the operator to take detailed notes before talking live with the caller.

When all the information from the live conversation has been documented, it is critical to properly disconnect the telephone call by momentarily pushing the [#] button. Failure to use press the [#] button will delay additional calls from being processed. It may be necessary to push the [#] button more then once if the phone will not disconnect.

DO NOT HANG UP THE PHONE WITH OUT FIRST PUSHING [#] BUTTON !

Typical Message:

Please stand by! A request for help has been activated. A call originating from _ _ _ _ has been activated. You will be connected live in just a moment. Special instructions may vary from each facility.

This Call Center Procedures sample will vary from each location and is just a guideline.

Please contact your Cornell Regional Account Manager for assistance.

Maintenance

Periodic Maintenance

In general, the 4800 system will provide system fault information at the Control Panel(s) display. The “ACTION REQUIRED” LED represents an active call or a fault in the system that needs to be corrected.

The phone line circuit is checked every 24 hours for proper operation. A notification of a fault will be shown on the Control Panel(s) display, in the event of a failure.

The power supply is monitored at the Control Panel(s) for AC Fail, and Low Battery/Fail. The “ON BATTERY” LED will illuminate if the AC power has failed and the system is powered by batteries.

WARNING

Warning – To ensure proper operation, the 4800 system should be tested on a regular basis by qualified personnel.

Power Supply Maintenance

Each Unit should be tested at least once a year for the proper operation as follows:

- **Output Voltage Test:** Under normal load conditions, the DC output voltage should be checked for proper voltage level. (24VDC)
- **Battery Test:** Under normal load conditions check that the battery is fully charged, check specified voltage both at battery terminal and at the board terminals marked [+ BAT -] to insure there is no break in the battery connection wires.

Note: Expected battery life is 5 years. However, it is recommended changing batteries in 4 years or less if needed. (See install documentation provided with each Power Supply)

Service

It is recommended that all defective units be returned to the manufacturer for repair. The 4800 system does not have any field serviceable parts or components.

Warranty>Returns

Warranty:

CORNELL warrants its products to be free from defects in materials and workmanship for one hundred twenty (120) months from the date of manufacture, under normal use and service.* Obligation of *CORNELL* is limited to repairing or replacing at its option, any part, which, in its opinion, shall be proved defective in materials or workmanship, under normal use and service. This warranty is void if the product is altered, damaged by lightning or repaired by anyone other than *CORNELL* personnel. No other warranty, expressed or implied, will be allowed unless agreed to in writing by the factory.

***120 month Warranty does not apply to 3rd Party OEM products which carry the original manufacturer's warranty. Please verify OEM warranty with your Cornell Regional Account Manager if you have any questions. (120 month warranty is activated upon receipt of the returned warranty card)**

Returns:

Warranty returns will be accepted with RMA# for no cost. Defective materials will be repaired for a minimum of \$100 and cost of the repair will be for time and materials not to exceed the cost of a new unit. Returns of unused, unmarked boxed equipment are subject to a MANDATORY 25% restocking charge when returned within 90 days of purchase. **ABSOLUTELY NO RETURNS WILL BE ACCEPTED AFTER 90 DAYS.** Returns of used equipment or custom equipment will not be accepted. All returns/repairs must be adequately packaged for shipment.

For an RMA #, (Return Materials Authorization) please call Cornell at 1-800-558-8957.

Agency Approvals



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.