



# CAREpoint™

## EMS Workstation



## INSTALLATION REQUIREMENTS

## **Overview**

The following sections provide installation requirements for site preparation. Unless specified otherwise, requirements listed are for GD supplied equipment only. It is responsibility of the customer and/or it's designees to insure that all installation requirements are met and all work is completed prior to GD installation and in accordance with the agreed upon project schedule.

It is suggested that this document be copied and distributed to the departments involved for review, and a subsequent telephone meeting be scheduled with General Devices.

- **Refer to the CAREpoint Network & IS/IT FAQs document (1838023\*) for network requirement details.**

## **REQUIREMENT!**

A completed and signed copy of the companion Pre-Installation Checklist (doc 1838008\*) must be faxed to General Devices (201) 313-5671 prior to setting an install date.

**IMPORTANT! Failure to assure all pre-installation requirements are met and are complete may result in: delayed installation, reduced functionality and/or additional installation charges of up to \$500.00 per day.**

## **1. Preliminary**

Review the supplied CAREpoint Site Installation Drawing and verify:

- Accuracy
- AC power outlet needs
- Telephone and Radio wiring connections
- Network (LAN) requirements & connections

## 2. Space Requirements

- Each CAREpoint Workstation requires space for:

Equipment	Location	Dimension	Notes
17" Touch Monitor	Desktop	23"W x 10"D x 19"H 21" H with KB garage	1
Keyboard/Mouse Optional KB Garage	Desktop/Slideout	Small KB/Mouse 16.3"W x 9"D x 2.5"H	2
Speakers (2)	Desktop	5"W x 5"D x 9"H each	
OPE / Expansion Module	Desktop/Under Counter	9"W x 20"D x 19"H 22.5" H w/wheeled cart 28" H w/wheeled cart and UPS bracket	3
UPS	Desk/Wall/Floor	12"W x 7"D x 6"H	
Punch Block	Wall	4"W x 3"D x 10"H	

### Notes:

- 1) CAREpoint is similar to a desktop PC with a 17" monitor, keyboard, mouse, speakers, UPS and CPU/Communication Operator Position Electronics (OPE).
- 2) The keyboard is used infrequently and the GD Keyboard garage (available from GD as part of optional Hardware Kit) or a (customer provided) under counter slide-out tray is **HIGHLY RECOMMENDED**.
- 3) The Operator Position Electronics (OPE) contains the CPU & Communication interfaces. Under counter installations are preferred, provided through counter holes are available. A cart or stand (wheeled cart available from GD as part of optional Hardware Kit) is recommended to keep the OPE off the floor. A UPS bracket is part of the optional hardware kit to locate/secure the UPS on top of the OPE.

### □ Additional considerations

- Adequate cable & wire hole or passageway to above/below counters & cabinets. A dedicated hole of at least 2-1/2" diameter is required for CAREpoint.
- Service access – make sure equipment is accessible for maintenance and service.
- Adequate air flow/ventilation – Enclosures or cabinets must provide space on all sides of the equipment to allow for adequate "fresh" airflow. **Forced air fans or vent holes may be required.**

**IMPORTANT! Make sure there is adequate space for air to freely flow around the equipment to prevent damage due to excessive heat buildup.**

- The GD Hardware Kit option is recommended and includes:
  - Keyboard Garage / Monitor Stand (provides for keyboard storage)
  - OPE cart (wheeled stand to keep OPE off the floor)
  - UPS bracket for securing UPS to top of OPE
- Wall Space for GD supplied punch block - A region of wall space located within 6 feet of the OPE location shall be allocated for mounting of one (1) M66 type punch block for telecomm. & radio connections. Additional telephone jacks may be required also. The customer shall provide this wall surface and any required fire coatings or painting shall be applied prior to GD's installation.

### 3. Electrical Power and Grounding Requirements

#### AC Power Requirements

- Review the supplied Site Installation Drawing for AC outlet needs.
- At least one generator back-up (RED) 115VAC power outlet within 5' of proposed equipment (UPS) location.
- All CAREpoint equipment operates on 115VAC (nominal), 60Hz, utilizing standard line cord plugs or wall adapter modules and a UPS.
- Power outlet should be generator backed-up
- Outlet and Current Draw is as follows:

	No. of Receptacles	Current Draw (maximum) (typical)	
CAREpoint Workstations	1 (for UPS)	5A	<2A

- Grounding and Lightning Protection

There are no special grounding or lightning protection requirements for GD equipment.

### 4. Telecomm / Network Wiring

#### Preparation Verification

- Verify the wiring matches the supplied Site Installation Drawing.
- **All radio and telephone lines must terminate in RJ11 jacks** with the center pair (red/green) used for TX/RX for phones and 2-wire radios, or TX for 4-wire radios. The outer pair (black/yellow) is used for RX for 4-wire radios.

- **If the supplied CAREpoint Site Installation Drawing shows a Remote Alarm AV Kit (Speaker and LED)**, this wiring needs to be completed. This wiring is a 2-pair (4-wire) connection between where the CAREpoint OPE will be located and where the Remote Speaker will be located. This wiring should terminate in RJ11 jacks on both ends with red/green on the center pair and black/yellow on the outer pair.
- **All telephone lines must be analog type**, but can be either a direct outside or inside (switch, DID) type.
- All existing telephone<sup>1,2</sup> or radio lines must be tested and known to be working properly. List the telephone numbers for these lines on the Pre-Installation Checklist.
- All new telephone<sup>1,2</sup> or radio lines must be installed (up to the CAREpoint location) AND TESTED prior to installation. List the telephone numbers for these lines on the Pre-Installation Checklist.
- All radio/phone line terminations<sup>2</sup> should be identified and marked (jack number, phone number, jack/cable location, etc).
- One analog telephone<sup>1,2</sup> line for the fax/modem is located/activated at the CAREpoint location. This line must be DID and long distance dial-out capable. **Note: This line is IN ADDITION to any incoming voice lines and is labeled as “Fax/Modem” on the supplied Site Installation Drawing.** List the telephone number for this line on the Pre-Installation Checklist in the section for the Fax/Modem, **NOT** the section for the Voice Lines.
- **If the supplied CAREpoint Site Installation Drawing shows any Tone Remote Adapters**, these must be installed by your 2-way radio service **PRIOR** to the CAREpoint installation. All Tone Remote Adapters must be hooked to a fixed level output that is independent of the volume knob on the front of the radio. Tone Remote Adapters should be configured for 4-wire operation and terminate in RJ11 jacks with the center pair (red/green) used for TX audio and the outer pair (black/yellow) used for RX audio.
- An active network 100/10 Base-T (Ethernet) RJ-45 jack must be located at the CAREpoint location, within 6 feet of equipment location. (300’ max. cable run, CAT-5 or better). List the Network Jack/Port or ID No. on the Pre-Installation Checklist.

**Note 1:** All telephone lines must be analog type, but can be either a direct outside or inside (switch, DID) type.

**Note 2:** All radio and telephone lines should terminate in RJ11 jacks with the center pair (red/green) used for TX/RX for phones and 2-wire radios or TX for 4-wire radios. The outer pair (black/yellow) is used for RX for 4-wire radios.

## 5. IS / IT / Desktop Services

**Note: Refer to the CAREpoint Network & IS/IT FAQs document (1838023\*) for requirement details**

- A STATIC Network IP address is required for each CAREpoint workstation.
- Network settings for accessing the Internet - required for Automatic Updates, CP e-mail, EMS/Disaster Management web sites.
  - a) “Static” IP Address (one for each CAREpoint)
  - b) Subnet Mask
  - c) Default Gateway
  - d) DNS Address
  - e) WINS Address
  - f) DNS Suffixes:
  - g) Proxy settings and/or any other network related settings:
    - E-mail account created (POP3 or IMAP server used for incoming E-mails. SMTP server used for outgoing E-mails) (**CANNOT** be SSL)
    - A VPN connection **must** be provided for vendor access to each CAREpoint Workstation. This is used for remote diagnostics, up/downloading of configurations and as well as remote updates. This connection must be configured and tested **prior** to installation of CAREpoint. General Devices can only accommodate client type VPN connections. Site to Site type VPN connections are not compatible.
    - The CAREpoint desktop applications may be installed on the supervisor’s computer(s). Administrator privileges are needed to install these programs.
      - Requires Windows 98 or later (Vista and Windows 7 **NOT** currently compatible) and a network connection.
      - Requires Admin user privileges to install

## 6. Other Equipment

- Make sure all other non-General Devices equipment (new radios, etc.) is installed and tested prior to the CAREpoint installation.

## 7. Environmental Requirements & Heat Load

- Recommended operating temperature range for GD equipment to be installed is 0 to +40 degrees C.
- Heat generated by each operator’s position is equivalent to that of a typical PC setup (approximately 250 Watts).

**8. Performance Specifications:**

Power Requirements.....	115 VAC, 50/60 Hz, Less than 5 Amps, surge protected, generator/UPS backed up.
Audio bandwidth .....	300 Hz to 3 kHz, +/- 3 dB
Speaker output .....	3 Watts @ 8 ohm
Radio Control	
Line Interface .....	External module with RX & TX level adj.
TX level .....	-20 to +10 dBm into 600 ohms, adjustable
RX sensitivity .....	-25 dBm (adjustable)
Line impedance .....	600 Ohm or >5K Ohm balanced
Control tone format .....	EIA standard radio control tones (650-2050 & 2175),
Notch filter .....	2175 Hz notch
Telephone Functions.....	DTMF keypad, Call hold, Conf, Redial, Auto-dial
Telemetry Features	
ECG Demodulator.....	Phase Locked Loop (PLL), 1.4 kHz FC, 50 Hz/mV deviation
CRT Display.....	17" diagonal, touch screen
SCR Type .....	40 mm, Front loading thermal array, with full annotation
Heart Rate Meter .....	30 to 200 bpm, 10% of heart rate, +/- 5 bpm
Storage Temperature.....	-30 TO +60 °C
Operating Temperature .....	0 TO +40 °C
Storage Humidity.....	20–80% wet bulb
Operating Humidity .....	30–70% wet bulb

Specifications are subject to change without notice.

**End**