

WIRELESS CALL BOX – System in place at VAMC is Motorola - Must interface with Motorola Base Station

Must include VHF solar call box stanchion

Bold mount type pole

Emergency Reflective marking on all four sides of a powder coated pole

A. Radio frequency, General Radio System Specifications

- 1 Shall have the capability of signaling through any conventional or trunking two-way radio system.
- 2 Provide call boxes that operate through any analog or digital Land Mobile Radio (LMR) channel, repeater system, or special industry trunking protocol
- 3 Be monitored, controlled, and provide two-way communications through any existing console/base radio, mobile radio, and/or portable radio device.

B. Wireless Voice Communication & Call Box Signal Sequence

1. Contain at minimum a programmable "assistance needed", "emergency", etc. type prompt identifying the Call Type, a physical location ID, and a secured Call Box ID control Code number over the radio channel.
2. Provide a call box that automatically resets from talk mode to standby/idle mode after a customer specified programmable amount of time. In addition, Security shall have the ability to remotely reset/terminate a call box call and caller at any time.

C. Talk-Mode Access Programming

- 1 Provide box that enables security to (1) effectively manage caller communication response with respect to current channel status, (2) maintain positive security control of the radio channel, and (3) grants caller privacy during multiple call scenarios.
- 2 Provide call boxes that automatically transmit a programmable voice alert message to monitoring personnel over base, mobile, and/or portable radio.
- 3 Provide call boxes that automatically transmit a programmable tamper voice alert message when a vandalism or tampering episode is taking place to monitoring personnel over base, mobile and/or portable radio. This alert call message shall be locally silent and at minimum include a "tamper alert" type prompt, physical location ID, and a secured Call Box ID Code number over the radio channel being monitored.
- 4 Provide call boxes with a built-in Camera (CCTV) Alarm Circuitry that allows for a wireless alarm signal to be generated for pre-setable surveillance cameras.

D. Standard Remote Control Features

- 1 Once this remote control has been activated the caller will be given access to the channel and two-way communications enabled.
- 2 Provide call boxes that enable security to initiate a remote control hands-free listen mode

E. Optional Remote Control Features

While the call box is in any mode, including standby (idle) mode, the call box is to be enabled so security can remotely call any call boxes into a 25 watt PA Live Speaker Mode. This mode shall be programmable so security can either selectively activate individual call box PA units or ALL call box PA units. Additionally, each individual unit shall be volume adjustable, so volume settings can be made in consideration to each units environment. .

While the call box is in Talk mode or standby (idle) mode, the call box is to be enabled so security can remotely activate a switch relay(s) without the call box first having to be activated by a caller, this switch(es) can then be integrated into remotely opening a gate or for triggering other auxiliary security related devices.

F. Call Box Structural (and Meeting the Needs of the Disabled)

- 1 Have a rugged, vandal resistant, and weatherproof (all weather) enclosure made of stainless steel and tempered aluminum for optimal long-term corrosion resistance and material stability, non-deforming.
- 2 Call and then communicate shall be a one-step push button process.
- 3 The call box shall NOT have a door required to be open to access push button and caller instruction.
- 4 The call box shall not have any shield barriers to push button access. A full 180 degree push button accessibility, to include free-palm activation, must be maintained with push button being fully exposed. No portion of the call box will require the use of a caller to have to stick their finger through a slot or hole to initiate a push button for activation, or then to communicate to security.
- 5 Provide call boxes that have completely sealed call box audio ports and a perforated stainless steel protection shield built into the audio port of the call box to protect the speaker assembly, this also serves to keep a vandal from probing an object into call box.
- 6 Call Box shall have built-in, hands-on, front speaker volume adjustability.
- 7 Each call box enclosure shall self-contain all electrical, electronics, batteries, and all options that pertain to the call box.
- 8 Provide call boxes that allow for ease of access for authorized personnel if needing to access rechargeable battery and electronics through a tamper resistant stainless steel hinged front panel which is secured by special security screw fasteners.
- 9 Provide call boxes that have a tamper resistant antenna built on top of the call box.
- 10 Provide call boxes with audio port that is sealed from moisture and have waterproof covering.

G. Poles, Used for Free-Standing Stanchions

Provide aluminum 5”in. diameter round poles that are capped, with electrical hand hole access. Poles are to be a minimum of 12’ft above finished grade in either direct burial or anchor mounted style. When anchor mount pole is specified all anchor J-bolts, nuts, washers, and bolt head caps are to be included. Poles are to be powder coated with a smooth sandstone semi-gloss polyester powder-coat finish to match the color of the call box.

If mounting the call boxes to round poles, provide an aluminum powder-coated round pole mounting bracket of the same color as call box finish, that firmly secures the call box to ANY size round metal or wood pole, without the required use of banding. This bracket is to utilize a method of hiding all fastener hardware from being exposed from outside the call box for vandal resistance.

H. Electrical (Solar), Charging & Battery Performance

Solar Supply Voltage, DC Set-ups

- 1 On Solar or DC supply voltage, directly accommodate clean 12vDC supply voltage to power the call box.
- 2 On Solar or DC supply voltage have all call box wiring, power supplies, fuses, and regulator be self-contained within the call box enclosure.
- 3 On Solar or DC supply voltage provide a power supply system that maintains Battery Back-up power to the call box station. The self-contained system shall support all standard call box functions and all standard options.

Additonal Battery Specifications and Battery Maintenance Alert

- 1 Provide each call box with one 12vDc rechargeable Gel-Cell battery, with and expected life of approximately 2 to 3 years.
- 2 Provide call boxes that notify battery maintenance condition via a voice message alert that servicing of the power supply, charging circuit, or back-up battery is needed over base, mobile, and/or portable radio.
- 3 All power backup batteries shall be self-contained inside the call box enclosures low-voltage compartment protected by the tamper alarms.
- 4 The call box control board shall have reverse battery protection and buzzer to instantly notify the installer that they are attempting to reverse the connecting battery cables.
- 5 Call box shall remain operable for a minimum of 18 to 24 hours after sending the initial 1st battery maintenance alert. The control board is to enable a load shedding priority when in low-battery condition. *This type of alerting promotes timely, plan-and-schedule servicing upon alert notification.*

I. Highly Visible Reflective Identification

Provide call boxes that are clearly labeled with large easy to read reflective identification text. Easy to read text instructions shall not be blocked from open view (ex. from an enclosure door or shield). The security call box device shall be easily recognized using bold, highly reflective material.

Provide call box stanchions with a deluxe pole upgrade to include a baked enamel powder-coat smooth sandstone finish with large 46" long reflective pole markings to read either with bold Red text "EMERGENCY" or "ASSISTANCE on reflective, or to read in bold reflective text "EMERGENCY CALLBOX" on Red.

J. Base and Control Options

This device is not required for monitoring and conducting basic call box communications, however it is needed to access the advanced remote control features from a dispatch position which are listed in this wireless call box system specification.

The desk mounted base controller device shall not require security to simultaneously press the PTT (push to talk switch) on the base radio while sending call box control codes to the call boxes

Provide call boxes with a built-in Camera (CCTV) Alarm Circuitry that can produce a wireless alarm signal for pre-settable surveillance cameras. This wireless alarm signal shall be generated from all 7 Call Types, to include the “Push for Help” and “Tamper” alert Call Types.

The console shall have easy push button and switch activation and reset capability. As a convenience, the console shall also have built in field programmability for changing stored alert parameters with respect to campus emergency communication plans.

K. Call Box Programming and Setup

All call boxes shall be delivered with control board data and voice alarming parameters pre-programmed, and activated according to the customers remittance of the programming and order set-up forms. Radio frequencies are to pre-programmed for the ease in commissioning each call box in the field.

L. Third Party Testing Certification

Building Code, Electrical Code, and Alarm System Code

Provide a copy of the authentic certification of compliance is to be included in any IFB or RFP.

The certificate of compliance is to be supplied from a “recognized and authorized” 3rd party testing laboratory such as MetLab, ETL, UL. The certification of compliance must indicate that the call box model number(s) offered have been tested and are officially listed for use in the United States by the recognized third party testing laboratory. All applicable AC or Solar DC voltage call box models referred to in this specification must appear on the certification.