Shepherd H^{2}S Monitoring System
Shepherd Personal Monitor Unit
Users Manual

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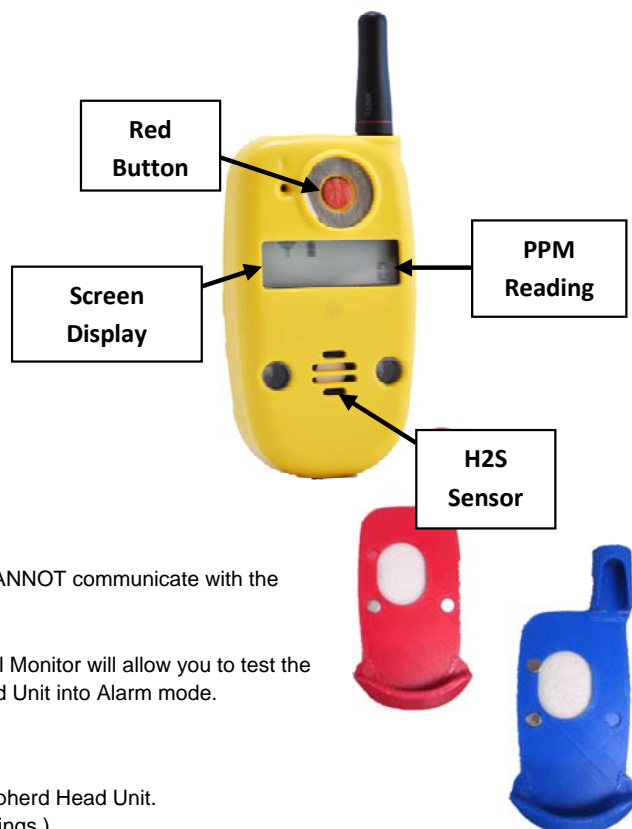
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Section 1   SHEPHERD PERSONAL MONITOR

A.   Components of the Personal Monitor:

- Red Button: See Personal Monitor Basic Operations below for functions of the Red Button.

- Battery Level indicator ▇: 3 bars indicate a full battery, 2 bars indicate a half full battery, and 1 bar indicates a low battery.

- Signal Strength indicator ⇧: Displays the level of strength of the signal between the Personal Monitor and the Head Unit. If blinking, there is no connection, see Troubleshooting the Personal Monitor below.

- PPM Reading: Displays the current H_2S reading.

- H2S Sensor: Measures the surrounding air for H_2S gas.

- Lockout/Tagout (Red) Device: Attaching this device to the Personal Monitor will disable frequencies from being transmitted from the Personal Monitor. If the Lockout/Tagout device is attached to the Personal Monitor it CANNOT communicate with the Shepherd Head Unit.

- Bump Test (Blue) Device: Attaching this device to the Personal Monitor will allow you to test the accuracy of the H_2S sensor without sending the Shepherd Head Unit into Alarm mode.

B.   Personal Monitor Basic Operations

- Single (1) click of the Red button: Transmit a signal to the Shepherd Head Unit. (Displays the Personal Monitor ID number and subsequent settings.)

- Double (2) clicking the Red button: Temporarily quiets an Alarm.

- Panic Mode: To activate PANIC mode press and hold the red button. Once monitor begins to flash and vibrate, PANIC mode has been activated. This will send an immediate signal to the emergency response call list.

C.   Shepherd Personal Monitor

Model Name: Shepherd Personal Monitor
Operating Frequency: 432.999893 MHz
Channel Bandwidth: 40KHz
Channel Spacing: 200KHz
Modulation format: 2-FSK
Duty Cycle: 14% in 100msec window
Crystal Frequencies: Micro 32.768KHz   Radio Reference 27.000MHz
Antenna Type: Molded ¼ wave whip (no connector) -2dBi Omni-directional
Antenna Model Number: Linx "ANT-433-PW-LP" Monopole

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Section 2   REGULATORY AGENCY CONSIDERATIONS

A.   Agency Identification Numbers

Compliance with the appropriate regulatory agencies is essential in the deployment of all transceiver devices. LDARtools is in the process of obtaining modular approval for this RF product such that an OEM need only meet a few basic requirements in order to utilize their end product under this approval.

Corresponding agency identification numbers are listed below:

H2S Base Part Number	US/FCC	CAN/IC
Shepherd Personal Monitor	ZJ2-PM001	9851A-PM001

B.   External Antennas

The Shepherd Personal Monitor is not approved for external antennas

C.   FCC/IC Notices

Any changes or modifications to the Shepherd Personal Monitor Unit printed circuit board could void the user's authority to operate the equipment. Operation of an unapproved antenna could void the user's authority to operate the equipment.

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 undesirable operation.

Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne peut pas provoquer
 d'interférences nuisibles, et (2) cet appareil doit accepter toute interférence reçue, y compris des interférences qui
peuvent provoquer opération indésirable.