

**Brandco Connected** 

# V2.2/2.3 FIRMWARE RELEASE NOTES

## DISPLAY

- Battery Level Press right on joystick to see battery level for display and connected nodes.
- Test recordings have been relabeled and no longer have a static or residual label. They are labeled Record# 1 to 5. Depending on the sender unit type, the results will be labeled as PSI or GPM.
- Display will auto recognize a Pressure or Flow sender and display information accordingly. The node address and type will be shown immediately above the current PSI or GPM for multi-node displays.
  - Pressure senders will show current PSI in large font, with the current recording record in a box. Advance to the next recording slot by double clicking. The last recording will be shown at the top, and the current recording below it.
  - Flow Senders will show current GPM in large font with corresponding PSI in the top line for multi nodes. For a single Flow Sender it will display next to the GPM reading. The current recording slot will be shown in a box.
- User Preferences Menu: Joystick left press accesses user preference setting menu.
  - Usage: With joystick press right to scroll through settings, up/down to change values. Settings are applied instantly. Press left to exit menu without saving applied settings. Press center to Save and exit menu.

#### > Settings:

- Backlight mode: off, on or auto. Off will result in longest battery life if backlight is not needed.
- Screen contrast: darken or lighten the screen print
- <u>Radio range setting</u>: added user menu to set longer range settings for radio
  - Settings:
    - Normal: 1000' line of sight, transmits 4x/sec
    - + Long: 1400' line of sight (or 1000' through 16 houses), transmits 3/x sec
    - ++ I wouldn't: 2000' line of sight, transmits 1x every 2sec
    - +++ I got all day: 4000' line of sight, transmits 1x every 3sec
  - Important Note: Display unit and sender MUST have the same setting to communicate
- <u>Group Number</u>: a user selectable group number can be set to prevent the display from receiving information from other senders.
  - Default setting is 1 use the joystick to select any number up to 125.
  - Important Note: Display unit and sender MUST have the same setting to communicate
- <u>Target PSI alert</u>: display will show a visual alert if the current node pressure is 25% less than the last recorded pressure
  - Notes:
  - A single node will display an alarm bell icon left of the PSI display
  - Multiple nodes will invert the PSI display area PSI will show as white in black box when target pressure drop is reached
  - Only pressure senders will trigger the alert setting has no effect on flow senders
  - Alert is based on last recorded pressure that is shown at top of node readings advancing to a different test recording slot will base alert on that pressure if it is not zero
- Button Double Click Speed: lower or increase the speed required for a double click to advance tests.
- <u>Button Long Press time</u>: lower or increase the amount of time the button must be held to record the current pressures.
- <u>Menu Lock</u>: A menu lock code can be set to prevent access to menu settings. Once set to enabled, press right on the joystick to access the set screen. Use the joystick up/down to select a letter, right to move to the next space. Just like setting your initials on a classic arcade game.

- Diagnostics screen: Center press the joystick to access diagnostics screen for node count, light level reading, node radio signal strength (SNR & RSSI) and packet count received. (*Tip: remove the rubber joystick* cap by pulling it straight up if the center press is hard to achieve.)
  - SNR and RSSI explained:
    - Signal Noise Ratio (SNR): ratio between the received power signal and the surrounding interfering signal sources. Values range from -10 to +13. Below 0 some packets will be missed possibly resulting in temporary LOST COMM displays.
    - Received Signal Strength Indicator (RSSI): is a measurement of how well your device can hear a signal. Values range from -50 to -130, -50 to -90 is very good. At values from -120 to -130 some packets will be missed possibly resulting in temporary LOST COMM displays.

## **PRESSURE SENDER**

- Address zero should not be used. If Address Selector dip switch 1 & 2 are both down (off) the node will not show on the display. Move selector 1 to up position for address 1.
- User Preferences Menu: Joystick center press now accesses user preference settings. (*Tip: remove the rubber joystick cap by pulling it straight up if the center press is hard to achieve.*)
  - > Note: sender does not transmit while in the menu
  - Usage: With joystick press right to scroll through settings, up/down to change values. Settings are applied instantly. Press left to exit menu without saving applied settings. Press center to Save and exit menu.
  - > Settings:
    - Backlight mode: off, on or auto. Off will result in longest battery life if backlight is not needed.
    - Screen contrast: darken or lighten the screen print
    - <u>Radio range setting</u>: added user menu to set longer range settings for radio
      - Settings:
        - Normal: 1000' line of sight, transmits 4x/sec
        - + Long: 1400' line of sight (or 1000' through 16 houses), transmits 3/x sec
        - ++ I wouldn't: 2000' line of sight, transmits 1x every 2sec
        - +++ I got all day: 4000' line of sight, transmits 1x every 3sec
      - Important Note: Display unit and sender MUST have the same setting to communicate
    - <u>Group Number</u>: a user selectable group number can be set to prevent the display from receiving information from other senders.
      - Default setting is 1 use the joystick to select any number up to 125.
    - <u>Menu Lock</u>: A menu lock code can be set to prevent access to menu settings. Once set to enabled, press right on the joystick to access the set screen. Use the joystick up/down to select a letter, right to move to the next space. Just like setting your initials on a classic arcade game.

### **FLOW SENDER**

- Overview: Flow (GPM) is calculated using standard velocity pressure formulas found in NFPA291. GPM is calculated based on velocity pressure from a gauge port, outlet diameter and coefficient /or k-factor.
- Based on manufacture and diameter, large outlet (4" up) correction factor is applied automatically.
- The flow sender will measure PSI and calculate flow in GPM if flow device parameters are entered. The flow outlet diameter and coefficient (or k-factor) must be set to calculate GPM. If either are zero, the Flow Sender will show like a normal Pressure Sender on the Display unit.
- Address zero should not be used. If Address Selector dip switch 1 & 2 are both down (off) the node will not show on the display. Move selector 1 to up position for address 1.
- User Preferences Menu: Joystick center press now accesses user preference settings. (*Tip: remove the rubber joystick cap by pulling it straight up if the center press is hard to achieve.*)
  - > Note: sender does not transmit while in the menu
  - Usage: With joystick press right to scroll through settings, up/down to change values. Settings are applied instantly. Press left to exit menu without saving applied settings. Press center to Save and exit menu.
  - > Settings:

- Backlight mode: off, on or auto
- Screen contrast: darken or lighten the screen print
- <u>Flow device manufacture:</u> Selection list of common manufactures for discharge devices. Select other if manufacture not listed.
- <u>Diameter</u>: enter the diameter of the outlet being flowed
- <u>Coefficient</u>: enter the coefficient from manufacture data sheets for the flow device
- <u>K-factor</u>: some manufactures (ex. Hose Monster) provide coefficient and k-factor information. K-factor if entered will take precedence over coefficient and be used in GPM calculations. If K-factor is unknown, leave setting at 0.00
- <u>Radio range setting</u>: added user menu to set longer range settings for radio
  - Settings:
    - Normal: 1000' line of sight, transmits 4x/sec
    - + Long: 1400' line of sight (or 1000' through 16 houses), transmits 3/x sec
    - ++ I wouldn't: 2000' line of sight, transmits 1x every 2sec
    - ◆ +++ I got all day: 4000' line of sight, transmits 1x every 3sec
- Important Note: Display unit and sender MUST have the same setting to communicate
  <u>Group Number</u>: a user selectable group number can be set to prevent the display from receiving information from other senders.
  - Default setting is 1 use the joystick to select any number up to 125.
- <u>Menu Lock</u>: A menu lock code can be set to prevent access to menu settings. Once set to enabled, press right on the joystick to access the set screen. Use the joystick up/down to select a letter, right to move to the next space. Just like setting your initials on a classic arcade game.