Abstract for SKIBA Reignition System

A method that enables an operator to wirelessly operate the menu and selection controls or reignite the flame (after a flame-out) of a VOC detector/analyzer by means of a customized protocol that involves the delivery of a series of ground or negative voltage pulses.

Description of Invention

The VOC detector/analyzer (1), while in operation, flames out. This VOC detector generates and sends an error message to be communicated through port (1a) along a copper cable 3 to a wireless Bluetooth transceiver. The wireless communication device (2) forwards this “error” signal (12) to a handheld PC (9) being used by the operator. The operator notes the “error” message and sends a signal (13) to the transceiver (2) that instructs the wireless communication device (2) to send a data stream containing a set of command instructions along cable 4 to a custom processor (10).

The custom processor (10) decodes these instructions and outputs a positive 5v signal along cable 5 to the Skiba Signaling Protocol device (11). The Skiba Signaling Protocol device (11) inverts the signal from a positive voltage to a signal ground potential and relays that signal along cable 7. At port 1b this signal ground (from 1d ground) causes the VOC detector/analyzer to advance to the next menu feature of the VOC detector/analyzer (1).

The operator then uses the handheld PC (9) to send another signal (13) to the wireless communication device (2) to send another data stream containing a set of command instructions along cable 4. The custom processor (10) decodes these instructions and outputs a positive 5v signal along cable 6. The Skiba Signaling Protocol device (11) inverts the signal from a positive voltage to a signal ground potential and relays that signal along cable 8. At port 1c this signal ground (from 1d ground) causes the VOC detector/analyzer to selects the reignite feature of the VOC detector/analyzer.