

ESC 88XX DATALOGGER SETUP & MAINTENANCE SOP

Terminal Menu Navigation, Channel Flagging, and Diagnostic Zero Calibration

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1. OVERVIEW & NAVIGATION

This SOP details terminal menu navigation, channel configuration, and maintenance routines for ESC 88xx dataloggers deployed at ambient monitoring stations. Pressing <Esc> repeatedly returns the user to the main Home Menu screen.

2. KEY TERMINAL MENU STRUCTURE

- **Home Menu <L>**: Accesses Login Screen. Enter username and password to establish operator privileges.
- **Configuration Menu <C>**: Accesses System Parameters (S), Data Channels (D), Calibrations (C), Alarms (A), Analog Outputs (O), Math Constants (K), and Digital I/O (R).
- **Real-Time Display <D>**: Displays raw readings (V), readings with units (R), readings with flags (F), and analog outputs (A).

3. STATION MAINTENANCE & CALIBRATION PROCEDURES

- **Channel Offline Flagging**: Before servicing sensors (e.g., rain gauge tipping or gas calibration), navigate to Configuration Menu <C> -> Data Channels <D> and set channel offline to prevent data spikes.
- **Automated Zero Sequence**: Initiate a diagnostic zero check by pressing <C> -> Configure Calibrations <C> -> DIAGZERO.
- **Clock Synchronization**: Verify logger time against NIST UTC time standard. Logger clock drift must not exceed 2 minutes.

4. ESC MENU COMMAND SUMMARY

Command / Key	Menu Path & Function	Operational Requirement
<Esc>	Global Back / Escape key	Returns display to Home Menu
<C> -> <D>	Configuration -> Data Channels	Flag channels offline/online during service
<C> -> <C>	Configuration -> Calibrations	Execute DIAGZERO diagnostic zero sequence
<D> -> <F>	Real-Time Display -> Readings w/Flags	Verify active data flags ('M', 'C', 'P')
<C> -> <K>	Configuration -> Math Constants	Update sensor multipliers & zero offsets

DOCUMENT AUTHORIZATION & SIGN-OFF

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