Overview

Envirco’s Small System Console intelligently monitors and controls an Envirco VariPhase or ACM control network. The console provides communication (MODBUS-RTU platform), unit control, and system monitoring in one easy-to-use package.

With the Envirco Console no programming is necessary to install a network. The console will automatically scan the network and the units/system can be configured through a simple menu driven format.

The single zone Envirco Console has 4 models that can control up to 10, 25, 50, or 125 VariPhase/ACM addresses.

Main Functions

- Self-configuring upon power up
- Individual speed adjustment
- Global speed adjustment
- Global set-back speed adjustment
- Central monitoring of fault sensors (pressure drop on AC, RPM drop on EC type)
- Menu driven configuration options
- Monitors units and identifies error modes

Features

- Easy wall-mount
- 4 access levels to control modifications
- Simple User Interface
  - 7-segment LED display
  - Dual rotary encoders for selection and adjustment
- Supports small to medium scale networks
  - RS485 (2 wire)
  - Up to 125 slave nodes

Specifications

- Supply Voltage : 8-13Vdc
- Typical Supply Current : 90mA
- Batteries : 4 x AA size Alkaline (option)
  - Battery Life : 30 hours
- Network transceivers : 2-wire 1/8” unit load type
- Operating Temperature : 0-40degC
- Electrical Connections
  - DC Power Connector : 2.1mm DC power jack
  - MODBUS network : RJ45 socket

Installation

The Envirco Console can be mounted on a wall or any other surface requiring a DC source of power from a plug-in source (supplied) or from the network bus (ACM1008). Connections to the network are made through an RJ-45 connection using CAT5 cable/connections. Power should be cycled after installation as the ACC1-xxx scans the network upon powering.

Console Operation: Front Panel View

Network Wiring

A network is constructed by simple daisy-chain between the ACC1-xxx and the unit controls.

Network cable requirements should be specified based on:

- Distance between nodes
- Total network length
- Noisy electrical environment
- Environmental conditions
- Mechanical issues

Pre-molded patch cables and customized plenum-rated cables are available from Envirco. Upon power-up the console will automatically scan the network for VariPhase/ECM controls.
**Mounting Instructions ( 2 options)**

**Permanent Installation:** Using the 4 outer holes on the ACC1 to permanently mount the ACC1 to any desired location. *Please note that a wall outlet must be near the location mounted if the ACC1 is powered through a wall adaptor. Alternate approach is to power the ACC1-xxx through the CAT5 cable.*

**Removable Installation:** The key holes in the center of the ACC1 can be used to “hang” the ACC1 in any location desired.

**NOTE:** Most Envirco controllers have memory of the set-point and provide local control of their motor/fan. Disconnecting the ACC1-xxx from the network will not shut down the system. System will continue to run at last set-points until ACC1-xxx is reconnected and set-point modified**