

## Overview

AirCare Automation's TCP/IP Control System incorporates a PC GUI (PC3) along with AirCare Control Consoles (ACC3/ACC4) to intelligently monitor and controls AC motor, DC motor and lighting networks. The AirCare TCP/IP Control System offers local, visible tracking and provides adjustment features from the PC3 GUI and the Console. The "PC3" is AirCare's Graphical User Interface (GUI) that allows access to the ACC3/ACC4's network through a remote PC via TCP/IP. The console provides communication (MODBUS-RTU platform), unit control, and system monitoring in one easy-to-use package. The PC3 software allows consolidation of large systems and provides central, PC control, of the customers' installation. The AirCare TCP/IP Control System requires no programming to install a network. The console automatically scans the network, simplifying configuration.

**500 units per Console** – ACC3/ACC4 has 1 to 4 zones and each zone can control up to 125 VariPhase/ACM addresses. The PC3 can consolidate 20+ Consoles, providing System configurations of 10,000 nodes or more easy to implement.



**ACC4**

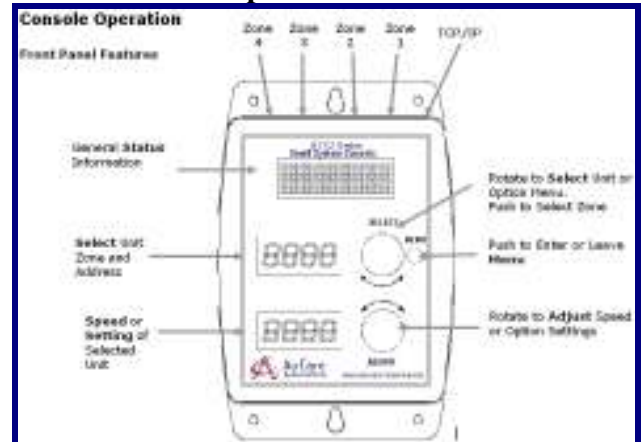


**ACC3**

## Installation

The AirCare Console™ can be mounted on any flat surface. The unit requires a DC source of power supplied through a plug-in converter powered through the network bus (ACM1008). Connections to the network are made through an RJ-45 connection using CAT5 cable/connections. A scan is required via the option menu or via the PC3 to locate and commission the installation.

## ACC4 Console Operation: Front Panel View



## Peripheral Options

The ACC3/ACC4 can have the AirCare ACM1007 Setback/Emergency Shutdown and AirCare ACM1009 Relay Driver added to its network to provide additional functionality to a system.

## Main Functions (ACC4 Console only)

- Individual speed adjustment
- Global speed adjustment
- Unique IP address for configuration with the PC3.
- Zone set-back speed adjustment
- Individual set-back 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 (ACC4 Console only)

- Easy wall-mount
- 4 access levels to control modifications
- Simple User Interface
  - 7-segment and Bitmapped LED displays
  - Dual rotary encoders for selection / adjustment
  - Menu Push Switch
    - Enter/Exit Menu
- Supports medium to large scale networks
  - RS485 (2 wire)
  - Up to 125 Motor Controls per Zone

## Specifications

- Supply Voltage : 8-13Vdc
- Typical Supply Current : 280mA
- 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
  - TCP/IP network: RJ45 socket

## Mechanical Dimensions

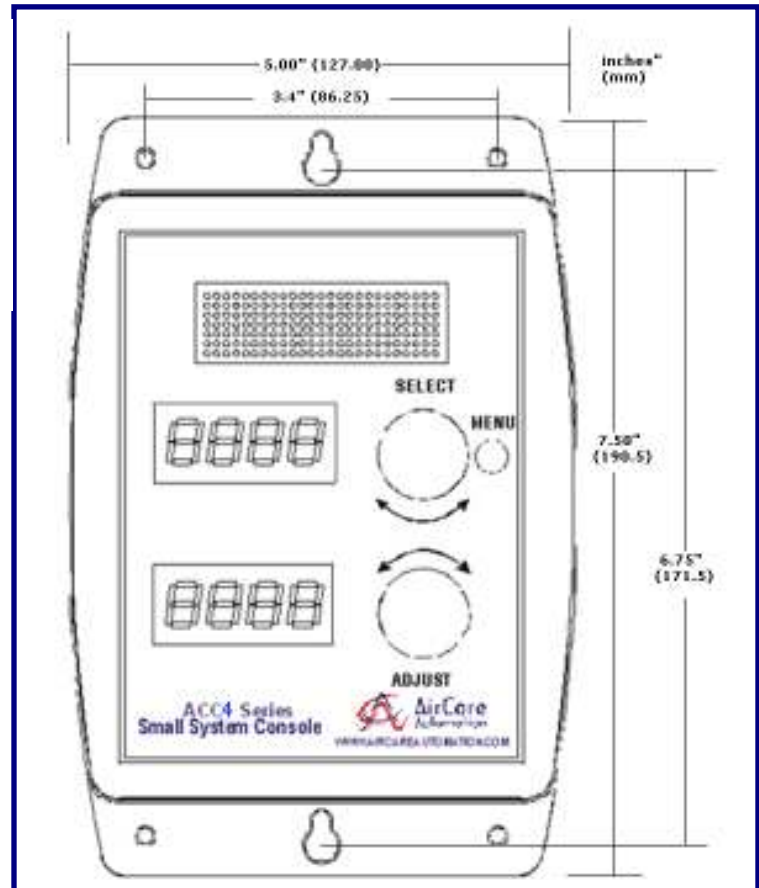
### Network Wiring

A network is constructed by simple daisy-chain between the ACC4-500 and the unit controls.

Network cable requirements should be:

- Distance between nodes: 75ft.
- Total network length: Approx. 2000ft

Please note that these requirements are a baseline and will vary due to noisy electrical environment, environmental conditions and mechanical issues.



### Mounting Instructions (2 options)

Using the 4 outer holes on the ACC3/ACC4 to permanently mount the Console to any desired location.

\*Please note that a wall outlet must be near the location mounted if the Console is powered through a wall adaptor. Alternate approach is to power the Console through the CAT5 cable using the ACM1008 power supply or equivalent\*

The key holes in the center of the ACC4 can be used to “hang” the ACC4 in any location desired.