elite controls

Operation Manual
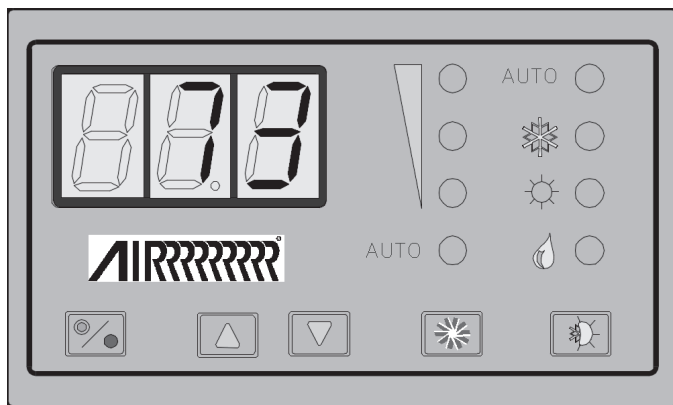
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1.0 Elite Controls • Introduction

The Elite Control is designed for use with direct expansion air conditioning systems.

1.01 Standard Features

- User friendly five button display panel requires no manual for basic operation
- Five volt logic and micro controller located in the display
- Three-digit, seven-segment display panel indicates degrees Fahrenheit or degrees Celsius
- Automatic and three programmable manual fan speeds
- 17 programmable parameters for custom installations
- High and low Freon pressure sensor inputs
- Moisture Mode for controlling relative humidity
- De-Icing cycle to prevent evaporator coil icing
- Programmable compressor staging delays
- Universal AC power supply
- Nonvolatile memory retains settings without batteries
- Programmable display brightness control
- Programmable failsafe modes
- Fits Vimar® switch bezels

1.02 Optional Features

- Outside air temperature sensor
- Alternate air temperature sensor
- Pump Sentry water sensor
- Electric heating control capabilities
- Air Filter Cleaning or Replacement Timer (available in software revision A15 or newer)
- Low Voltage Monitor (available in software revision A15 or newer)

This manual is intended to provide information necessary to insure proper installation and operation of the Elite. Poor installation and misunderstood operating parameters will result in unsatisfactory performance and possible premature failure of the Elite.

Read This Manual Completely Before Proceeding !

If you have questions, or require assistance with your Elite control, contact Dometic Environmental Corporation (Dometic).

The Elite is covered under existing Marine Air Systems Warranty Policy. Incorrect installation, neglect and system abuse are not covered under Marine Air Systems warranty policy.

1.03 System Overview

Elite is a user friendly, easy to operate, programmable temperature control.

Press the Power Button once to engage the system. The Display indicates room temperature when the system is on and the Display is blank when the system is off.

Press and release the Mode Button until the desired Mode LED is illuminated.

Set the desired room temperature by pressing the Up or Down Button. The set point can be viewed by momentarily pressing and releasing the Up or Down Button.

Fan speed operation is automatic allowing fan speed to decrease as room temperature is approached in the Cool Mode. The fan will operate at low speed when set point is satisfied. Manual fan speeds can be selected by pressing and releasing the Fan Button to select the desired manual fan speed. The fan will operate at the speed selected and will not change speeds with room temperature.

The fan can be programmed to cycle on and off with demand, allowing the fan to run only when cooling or heating is required. Normally the automatic fan speed operation is reversed in the Heating Mode, however, the fan can be programmed to operate the same as in the Cooling Mode.

Memory: Elite has nonvolatile memory which requires no batteries or any form of backup power. When power is lost the operating parameters are retained indefinitely. When power is restored, the unit resumes operating as last programmed.

IMPORTANT NOTE TO END USER:

If your air conditioning unit is a 24,000 BTU model, or if it has a High Velocity blower, then you MUST reprogram parameter P-14 prior to operating equipment. A 24K unit is identifiable by the "24" in the model number (i.e., VCD24K). A High Velocity blower does not have a blower motor overhang, the motor is inside the blower, and there is an "HV" in the model number. See the Programming section P-14 for instructions.

1.04 Normal Heating or Cooling Cycle

Select Cool Mode and cooling only will be supplied. The cabin temperature will be maintained within 2°F (1.1°C) of the set point. Select Heat Mode and only heating will be supplied. The cabin temperature will be maintained within 2°F (1.1°C) of the set point.

Select Automatic and both heating and cooling will be supplied as required. While in the Automatic Mode, Elite will maintain a 2°F (1.1°C) temperature variation. A 4°F (2.2°C) change in temperature is required to cause the unit to shift to the opposite mode. Once in a given mode, heating or cooling, Elite will maintain a 2°F (1.1°C) differential.

When the heating or cooling demand is satisfied, the compressor cycles off and the fan returns to low speed if the Automatic Fan Speed is set. The fan speed will remain constant if Manual Fan Mode has been programmed.

IMPORTANT NOTE TO END USER:

If your air conditioning unit is Cool Only - if it does not have a reversing valve - then Cool Mode MUST be selected. DO NOT set to Automatic Mode for a Cool Only unit. If Automatic Mode is selected and the thermostat calls for heat, the compressor will run. Since there is no reversing valve, the air conditioning unit will supply cool air when heating is desired. Cool Only units do not heat.

1.05 Reversing valve operation

The reversing valve is toggled to the opposite mode when heating or cooling is required to reduce the compressor starting surge. The valve will only toggle to the opposite mode when a cooling or heating cycle is called for and if the system has been off for less than 75 seconds. The valve will also toggle if a cycle is interrupted from the display panel by pressing the power button, or changing the set point. Unnecessary valve toggling has been limited to reduce reversing valve noise. Valve toggling can be totally eliminated by programming the minimum compressor staging delay at 75 seconds or greater.

Power On Reset, which occurs when the system is powered up, will always initiate a valve toggle.

2.0 Elite Controls • Basic Operation

2.01 Operator Controls and Display Panel

1-POWER BUTTON The Power Button is used to toggle between the On and Off Modes. Press the Power Button once to toggle the unit to the On Mode.

2-UP BUTTON Momentarily press and the set point will appear in the display. Press and hold the Up Button the set point will scroll to the upper limit. The set point increases one degree each time the Up Button is pressed and released.

3-DOWN BUTTON Momentarily press and release to display the set point. The set point is decreased one degree each time the Down Button is pressed and released. Press and hold the Down Button and the set point will scroll to the lower limit.

4-FAN BUTTON Press and release the Fan Button to advance from auto fan to manual fan. Press and release the Fan Button to advance the manual fan speeds, from low to high. Press and release again to return to the automatic Fan Mode. The selected Fan Mode is indicated by the Auto and Manual Fan LEDs. The fan operating mode can be changed from continuous ("con") to cycle-on-demand ("CYC") by pressing and holding the fan button for 5 seconds.

5-MODE BUTTON The Mode Button is used to select one of the four operating modes. Press and release the Mode Button and the Elite will advance to the next mode. Continue to press and release the Mode Button until the desired operating mode is reached. The mode selected is indicated by the Mode LED, i.e., Cool, Heat, Automatic or Moisture Mode.

6-THREE DIGIT SEVEN SEGMENT DISPLAY The inside air temperature is displayed in the window whenever the control is turned on.

The display also indicates program information, fault codes and outside air temperature when the optional outside air sensor is installed.

The display momentarily indicates the set point when the Up or Down Button is pressed.

When the control resumes operation after a power interruption all the Display LEDs will turn on for one second. This is a normal operating condition and is referred to as Power On Reset.

7-MANUAL INDICATION One of the three fan LEDs will be lit when manual fan operation is selected.

8-AUTO FAN LED The Auto Fan LED is illuminated when automatic fan speed operation has been selected.

9-AUTO MODE LED When the Auto LED is lit the unit will automatically switch to heating or cooling when required.

10-COOL MODE LED The Cool Mode LED will be lit when Cool Mode is selected or the unit is in a cooling cycle.

11-HEAT MODE LED The Heat Mode LED will be lit when Heat Mode is selected or the unit is in a heating cycle.

6-Display   7-Manual Fan LEDs (high, medium, low)   8-Auto Fan LED

9-Auto Mode LED

10-Cool Mode LED

11-Heat Mode LED

12-Moisture Mode LED

1-Power   2-Up   3-Down   4-Fan   5-Mode
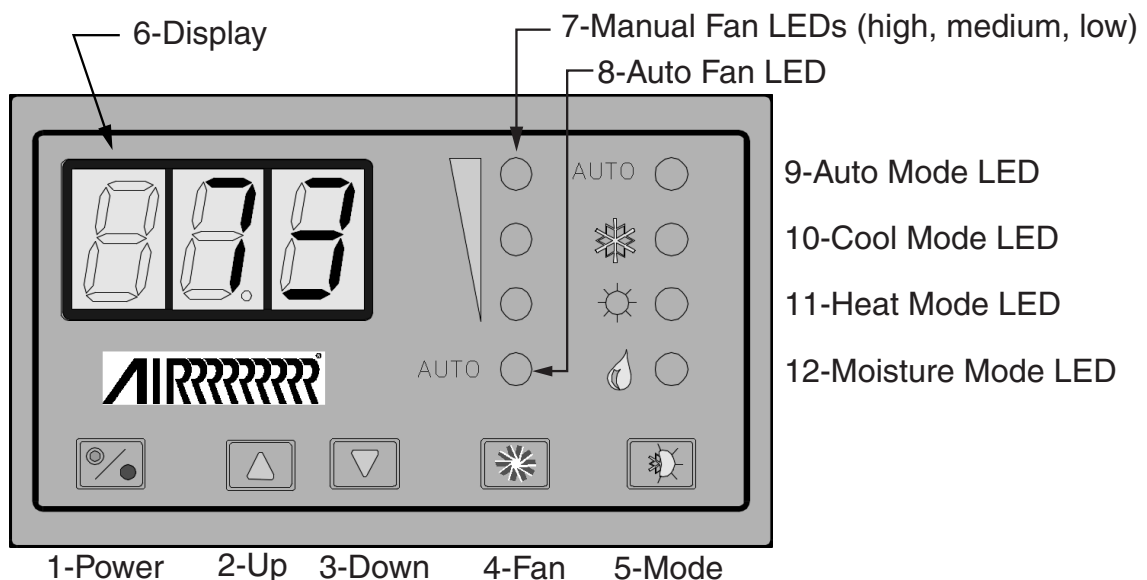
12-MOISTURE MODE LED The Moisture Mode LED is lit when the Moisture Mode has been selected. This mode is used to control humidity during periods when the vessel is unoccupied.

2.02 Special Button Functions

Service History Log… View the service history log by pressing the Mode Button immediately after turning on the AC power, and while all LEDs are illuminated. Exit the service history log by pressing the Power Button once. Simultaneously pressing the Power and Down Buttons while viewing the Service History Log clears the Service History Log. See the Service History Log section.

Self Test Program… Press the Power Button immediately after AC power is applied, and while all LEDs are illuminated, to enter the self test program. The self test program is used to diagnose problems and test the air conditioning system. For complete details see the Automated Factory Self Test Program section in this manual.

View Hour Meter… To view the compressor hour meter, press the Down Button immediately after applying AC power, and while all LEDs are illuminated. Maximum recorded time is 65,535 hours. The hour meter functions are described fully in the Service Tools section of this manual.

2.03 Dual Button Functions

Up & Down Buttons… Press the Up and Down Button together and the outside air temperature will be displayed, providing the optional outside air temperature ("OAT") sensor has been installed. No programming is required.

Press the Up & Down Buttons simultaneously, while in the Program mode, to set new custom programming defaults.

Press the Power & Up Buttons to view the service sensor temperature. P-8 must be turned on.

2.04 Modes of Operation

Off Mode

When the Elite is in the Off Mode, all control outputs are turned off. Program parameters and user settings are saved in nonvolatile memory. The Program Mode can only be accessed from the Off Mode.

On Mode

When the control is in the On Mode, power will be supplied to the appropriate control outputs and the display will indicate the current state of operation. The operating and program parameters resume based on those stored the last time the unit was operating.

Cool Mode

When the Cool LED is lit, only the cooling systems are selected and operated as required. When the temperature drops below the set point, the system will not automatically switch to the Heat Mode.

IMPORTANT NOTE TO END USER:

If your air conditioning unit is Cool Only - if it does not have a reversing valve - then Cool Mode MUST be selected. DO NOT set to Automatic Mode for a Cool Only unit. If Automatic Mode is selected and the thermostat calls for heat, the compressor will run. Since there is no reversing valve, the air conditioning unit will supply cool air when heating is desired. Cool Only units do not heat.

Heat Mode

When the Heat LED is on, only the heating systems are selected and operated as required. Should the temperature rise above the set point, the system will not automatically switch to the Cool Mode.

Automatic Mode

When the Automatic LED is on, both heating and cooling is supplied as required. The Heat or Cool LEDs will be lit when the unit is heating or cooling.

Temperature in a given mode will be maintained within 2°F (1.1°C), however, a 4°F (2.2°C) difference is required to allow the control to change modes. Once in a new mode, the temperature will remain within 2°F (1.1°C) of the set point.

Do not select Automatic Mode if air conditioning unit is Cool Only (see above).

Moisture Mode

While in the On Mode, press the Mode Button until the Moisture Mode LED is illuminated. Every four hours, the fan is started and air circulated for thirty minutes. During this time the air temperature is sampled and entered into memory. The cooling cycle is started and continues until the temperature is lowered 2°F (1.1°C). The compressor is allowed a maximum of one hour running time to reach the desired temperature. Four hours after the temperature is satisfied, or the compressor times out, the cycle will be repeated.

2.05 Fan Modes

Automatic Fan Speeds

Elite has three automatic fan speeds available: high, medium and low. Automatic Fan Mode allows the Elite to determine the required fan speed based on temperature differential. This permits a balance between the most efficient temperature control and slower, quieter fan speeds.

Manual Fan Mode

There are three fan speeds available: low, medium and high. Manual Fan Mode allows the user to select and maintain the desired fan speed manually. When a manual fan speed has been selected, the speed is indicated by one of the 3 LEDs above the AUTO fan LED. The top LED represents the fastest speed.

Fan Only Mode

The Fan Only Mode can be operated for air circulation when no cooling or heating is desired. From the Off Mode press and release the Fan Button to start fan speed one. Press and release again to select speed two. Press and release a third time for speed three. Press and release a fourth time to turn off the fan. Starting a cycle will revert the fan to the Automatic Mode or the last selected manual fan setting.

Cycle Fan With Compressor

Press and hold the Fan Button for five seconds. The mnemonic "CYC" followed by "con" will appear in the display. Release the button with "CYC" in the window and the fan will cycle on and off with the compressor. Release the button with "con" in the window and the fan will run whenever the system is on.

2.06 Program Mode

The Program Mode is used to adjust the systems operating parameters to suit the particular needs of individual users. The Program Mode is also used to tailor the air conditioning system for the most efficient operation within an installation. Installation variables such as, ducting, sensor location and system layout affect the perceived operation of the overall system. Elite is shipped with factory programmable default settings which are stored in memory and can be recalled. However, reprogrammed settings can be saved as the new default, thus overwriting the factory defaults (see programmable parameter P-15).

Entering Program Mode

The Program Mode can only be entered from the Off Mode. From the Off Mode and in the following order, press the Mode, Up, Down and the Mode buttons. These buttons have to be pressed and released in the order given. The numerals "85" which represent the high fan limit, appears in the display. The "85" is followed by the characters "P 1" followed again by the parameter setting "85". "P 1" represents the first programmable parameter. The Elite control is now in the Program Mode.

Restore Default Settings

IMPORTANT ! The default settings can be restored by entering the Program Mode and setting P-15 to "rSt". Exit the Program Mode and the software version number appears in the display. The default settings are restored and the Elite control returns to the Off Mode. The software version number is always displayed when you exit the Program Mode.

Using the Program Mode

Increment from one parameter to the next by pressing and releasing the Mode Button while in the program mode. Decrement from one program parameter to the previous one by pressing the Fan Button. Use the Up and Down Buttons to change the program parameter values. The programmable parameters range from P-1 through P-19. See the Programmable Parameters Table.

Up and Down Buttons

The Up and Down Buttons are used to select the data or set the desired limits for the parameter being programmed. This method is followed throughout the Program Mode, however, special instructions are included for individual functions as required.

Exiting the Program Mode

There are two methods to exit the Program Mode. Press the Power Button and the Elite control will return to the Off Mode. Not pressing any buttons or attempting any program changes for 50 seconds will allow the control to exit the Program Mode to the Off Mode. Any programming changes that were made while in the Program Mode will be memorized, set as the new default, and put into operation when the Program Mode is exited and the control is returned to the On Mode.

Software Identification

The software version of the control is identified for one second prior to the exit from Program Mode. The software identification number (i.e. "A13") will appear in the display for one second, then the control will return to the Off Mode.

NOTE: Should there be any reason to contact Dometic about the system or programming the Elite, be sure to

Programmable Parameters Table

Program Number	Description	Default	New Default*	Range
P-1	High Fan Speed Limit (arbitrary units)	95		56 - 95
P-2	Low Fan Speed Limit (arbitrary units)	50		30 - 55
P-3	Compressor Staging Time Delay	15		5 - 135 seconds
P-4	Temperature Sensor Calibration	Ambient		Ambient ± 10° F
P-5	FAILSAFE LEVEL	3		0 1 = Continuous No Display 2 = Continuous W / Display 3 = 4 Failures Reset Required
P-6	Low Voltage Monitor[1]	OFF		OFF 95=95VAC for115VAC Input Power 195=195VAC for 230VAC Input Power
P-7	De-Icing Cycle[2]	1		OFF 1=On w/ 5°F Display Sensor Differential 2=On w/ 7°F Display Sensor Differential
P-8	Pump Sentry… Protects Pump and Compressor From Loss of Sea Water.	OFF		OFF On = Select 100°F to150°F
P-9	Display Brightness Control	15		4 = Low 18 = Maximum
P-10	Display ° Fahrenheit or ° Celsius	°F		°F = Fahrenheit Displayed °C = Celsius Displayed
P-11	Cycle Pump With Compressor or Continuous Pump	CYC		CYC = Cycle with Compressor con = Continuous Pump
P-12	Reverse Fan Speeds During Heating Mode	rEF		nor = Normal Fan Operation rEF = Reversed Fan In Heating
P-13	Reverse Cycle Heating or Electric Heat Only Option Installed (cooling only units)	nor		nor = Reverse Cycle Heating ELE = Electric Heater Installed
P-14	Fan motor type selection. Shaded pole or split capacitor.	SP		SP = Shaded Pole Fan Motor SC = Split Cap. Fan Motor
P-15	Reset Memorized Programming Defaults	nor		rSt = Reset Defaults
P-18	Air Filter Cleaning/Replacement Timer Setting[1]	0		100-2500 hours (displayed in hours/10) 0=Timer Disabled
P-19	Air Filter Cleaning/Replacement Timer Value & Reset[1]	0		Displays the elapsed time (in hours/10) since the timer was started or reset. Pressing Up or Down resets the value to 0, restarts the timer, and clears the "FIL" reminder.

[1] This feature is only available in software revision A15 and newer.
[2] This feature's setting and behavior were modified in software revision A15 and newer. See feature description in text for more details.

*** Default parameter settings may be reprogrammed by user, enter new default settings in this column. Should any programming problems or confusion occur, reset the Default Settings by entering the program mode and setting P-15 to "rSt".**

have the software identification number and the air conditioning unit serial number available. The serial number may be found on the dataplate label.

2.07 Programmable Parameters

There are 17 programmable parameters with their Factory Default Settings listed in this section. The table below indicates what these parameters are, along with the permitted values and the original Factory Default Settings.

P-1: High Fan Limit

The upper fan speed limit can be adjusted for various motors. The high fan limit is adjusted with the system installed and operating. The values range from 56 through 95 arbitrary units. Set a higher number for a higher fan speed. Set lower number to lower the fan speed. Use the Up and Down Buttons to select the desired speed.

P-2: Low Fan Limit

The low fan limit determines the lowest output allowed for the low fan speed. The values from 30 through 55, arbitrary units. Use the Up and Down Buttons to select the low fan limit. Set a higher number, for higher fan speed. Setting lower numbers lowers the fan speed.

IMPORTANT ! Once the high and low fan speed limits are set, the unit will automatically readjust the remaining speeds to produce three equally spaced fan speeds in both Automatic and Manual Fan Modes.

P-3: Compressor Staging Time Delay

The compressor staging delay is provided for installations where more than one system is being operated from the same power source. Setting the staging delays at different intervals allows only one compressor to start at a time. The units should be staged at least five seconds apart. The minimum delay is five seconds and the maximum is 135 seconds.

P-4: Temperature Calibration

Use this feature to calibrate the air sensor within a range of ±10°F. Enter the Program Mode and the ambient temperature appears in the display. Use the Up and Down Buttons to select the desired offset. The temperature in the display will increase or decrease according to the offset programmed. Note that setting increments are in °F even when the control is set to display °C.

P-5: Failsafe Level

See Failsafe and Fault Handling Codes section.

P-6: Low Voltage Monitor

The Elite has a built-in voltmeter circuit that monitors the AC input voltage. Depending on whether the input power supply is 115VAC or 230VAC, this parameter can be set to "OFF", to "95" (for 115VAC input power) or to "195" (for 230VAC input power). The factory default setting is OFF.

When this parameter is set to 95/195, the Elite will check the AC input voltage prior to beginning every cooling or heating cycle and will prevent the compressor from starting if the voltage is less than 95VAC/195VAC. This provides extra protection for the compressor and components within the system during low voltage (brownout) conditions. If this low voltage condition occurs, the fault code "LAC" will show on the LED display. The fault will continue until the AC input voltage rises above 95VAC/195VAC, at which time the LAC fault code will clear automatically and the cooling or heating cycle will commence.

After the compressor is started, the low voltage monitor will not interfere with operation and the LAC fault will not be displayed even if the voltage does drop below 95VAC/195VAC. Similarly, whenever the Elite is not running a cooling or heating cycle and the voltage drops below 95VAC/195VAC, the LAC fault will not be displayed.

P-7: De-Icing Cycle

Elite is equipped with a de-icing cycle to prevent ice build up on the evaporator coil during extended periods of cooling operation. Installation variables such as grille sizes, length of ducting, insulation R factors and ambient temperatures determine the cooling run time required to achieve set point. Customer usage may substantially increase run times by operating the system with the hatches and doors open. Programming an unrealistic set point (e.g. 65°F/18.3°C) and leaving the salon door open will usually cause the evaporator to ice up on warm humid days.

For Elite software revision A13 and older, de-icing is accomplished by switching the reversing valve into the Heat Mode while the system is cooling. The valve will remain energized for the programmed cycle time. The cycle is programmable to "OFF" or to a period of one, two, or three minutes.

For Elite software revision A15 and newer, de-icing is accomplished using a more sophisticated algorithm that closely monitors the room air temperature in repeating 10-minute intervals during a cooling cycle. Depending on the value and change in room temperature during these monitoring intervals, the Elite will perform various actions to prevent ice from forming and/or melt ice that may have already formed. This is accomplished by short compressor shutdown periods combined with a one-speed increase in fan speed, and by periodic Heat Mode cycles with the fan turned off.

This de-icing feature is turned ON by default with programming parameter P-7 set to "1". The behavior of the feature is always the same whenever an optional alternate air temperature sensor is installed . However, the feature has two different, selectable behavior modes when it is used in conjunction with the Elite display's built-in room air temperature sensor. It attempts to compensate for any temperature discrepancy that the display sensor may experience. Although this discrepancy is not typical, installation variables such as where the Elite display is placed inside the room (e.g. near an open door or in direct sunlight) can affect how accurately it can read the actual room temperature.

By default with P-7 set to "1", the algorithm is applied assuming the display sensor may be reading the room temperature as much as 5°F (2.8°C) greater than the actual evaporator temperature. With programmable parameter P-7 set to "2", the temperature differential that is applied to the display sensor reading is increased to 7°F (3.9°C) for even more extreme installations. Setting P-7 to "2" should only be used if a setting of "1" does not prevent evaporator ice from forming. Alternately, the installation of an optional alternate air temperature sensor (located in the return air path) will greatly increase the effectiveness of the de-icing feature, and this option should be considered whenever the display sensor cannot read the room temperature accurately.

P-8: Optional Pump Sentry

Elite can be equipped with an optional temperature sensor that is used to monitor the condenser coil temperature. The sensor is plugged into the "SERVICE/ H20" sensor jack and parameter P-8 programmed for a temperature between 100 and 150° F (37.8 and 65.6° C), depending on seawater temperature and the system type. When the coil temperature rises above the programmed value the pump and compressor are shut down and **"PLF"** is flashed in the display. Connect the water sensor to the condenser coil outlet and insulate it. Note that setting increments are in °F even when the control is set to display °C.

P-9: Display Brightness Control

The display brightness can be adjusted to suit ambient cabin lighting conditions. The allowed settings are 4 to 18, with 4 being the dimmest and 18 the brightest. Typically a dark cabin will require a setting of 4 or 5. A very bright cabin will require a setting of 12 to 18.

P-10: Fahrenheit or Celsius Selection

The unit can be programmed to display either Fahrenheit or Celsius. Programming °F selects degrees Fahrenheit and programming °C displays degrees Celsius. The factory default setting is °F. When degrees Celsius (°C) is selected the readings are displayed in tenths, i.e. 22.2°.

P-11: Cycle Pump With Compressor

To increase pump life and conserve electricity the pump can be programmed to cycle on and off with the compressor. The pump can also be programmed to operate continuously whenever the system is on. To program the pump for continuous operation, set P-11 to "con".

P-12: Reverse Automatic Fan Speeds During Heating

The automatic fan speeds can be reversed during the Heat Mode to improve heat output in cooler climates. The fan speed is decreased as the temperature spread increases. The fan will speed up as the set point is approached. Lowering the fan speed when the cabin is cold increases head pressure and raises the supply air temperature. Increasing the fan speed as the set point is approached also reduces unnecessary high pressure faults. The fan switches to low speed when the set point is satisfied and the compressor cycles off. The fan can be programmed to operate the same as in cooling by programming P-12 "nor" which represents normal fan operation during reverse cycle heating.

P-13: Reverse Cycle or Electric Heat

Units not equipped with reverse cycle heat may have electric heater added. Program parameter to "ELE" for the electric heat option.

NOTE: For Elite software revision A13 and older, when this parameter is programmed for electric heat, only the electric heat relay located towards the middle of the Passport I/O circuit board is energized during a heating cycle (see Sample Wiring Diagram at the back of this manual). For Elite software revision A15 and newer, when programmed for electric heat, both the electric heater relay and the valve relay are energized. This change was made to support the future elimination of the electric heater relay. Therefore, Passport I/O circuit boards that do not have electric heater relays will require an Elite display with software revision A15 or newer to properly energize the valve relay. Also, since the valve relay output can only support a maximum of 10 amps of resistive load, when installing an optional electric heater that exceeds this load, it will be necessary to also install an additional contactor that is rated to handle the full load of the electric heater. Please consult with Dometic Customer Service or with an authorized service technician for assistance.

P-14: Fan Motor Selection

IMPORTANT NOTE TO END USER:

Standard units have a Shaded Pole (SP) fan motor; the factory default parameter "SP" is correct for standard units. However, 24,000 BTU/Hr (24K) models and units with High Velocity (HV) blowers have Split Capacitor (SC) fan motors. **This program must be changed if you**

have a 24K or an HV unit. A 24K unit is identifiable by the "24" in the model number (i.e., VCD24K). A High Velocity unit does not have a blower motor overhang, the motor is inside the blower, and there is an "HV" in the model number. **If your air conditioner is one of these two models then you must change parameter P-14 to "SC" prior to operating the equipment.** Save this change as a new default by simultaneously pressing and releasing the Up and Down Buttons prior to exiting the program mode. Make note of new default in the Programmable Parameters table.

P-15: Reset Memorized Defaults

The default programming parameters can be reset by entering the Program Mode and selecting "rSt". This restores the programmable parameters to the default values. The default parameters listed in the Programmable Parameters table may be altered by the installing dealer or end user. Once new defaults are entered and memorized, the factory defaults will be over written. The original factory program parameters as listed in the Programmable Parameters table may be restored manually.

P-18: Air Filter Cleaning/Replacement Timer Setting

(available only in software revision A15 and newer)

The Elite can be programmed to display a reminder to clean or replace the evaporator air filter on a regular basis. This is especially beneficial when using Dometic's Breathe Easy® Micro-Particle and Anti-Allergenic Air Filters. By default, this timer is disabled (P-18=0). The allowed settings are 10-250 in multiples of 10, which correspond to 100-2500 hours.

NOTE: How often the air filter must be checked will depend on the air quality. Dometic recommends that you check the air filter at least every 500 hours of operation.

Once set, the timer keeps track of the total amount of run hours that the fan accumulates (see P-19). Once the timer setting is reached, "FIL" will briefly flash on the LED display every 10 seconds until it is cleared. The room temperature will continue to be displayed and the normal operation of the system will not be affected. The "FIL" reminder can only be cleared and the timer reset via programmable parameter P-19. See below for instructions.

P-19: Filter Cleaning/Replacement Timer Value & Reset

(available only in software revision A15 and newer)

This parameter displays the current elapsed time (in hours/ 10) since the timer was started or reset. For example, if the value of P-19 is "30", then somewhere between 300-399 hours have elapsed since the timer was started or reset. Once the value of P-19 reaches the value set in P-18 (explained above), "FIL" will flash on the LED display every 10 seconds until it is cleared. To clear the "FIL" reminder, press either the Up or Down button while viewing the P-19 parameter. This will reset P-19 to 0 and restart the timer.

Why Memorize New Defaults?

Once the desired programming changes have been made and the system tests satisfactorily, your work can be saved as the new defaults. Your new defaults are initiated by simultaneously pressing and releasing the Up and Down Buttons prior to exiting the Program Mode.

Software Identification

The software version of the control is identified for one second prior to the exit from the Program Mode. The software identification number, i.e. ("A10") will appear in the display for one second, then the control will return to the Off Mode.

Should there be any reason to contact Dometic Corporation about the system or programming the Elite, be sure to have the software identification number and serial number of the system available.

2.08 Failsafe, Fault Handling Codes, and Reminders

When a fault is detected Elite will display one of the following Mnemonic fault codes:

"HPF" .... indicates high Freon pressure.*

"LPF" .... Indicates low Freon pressure.*

"ASF" .... Indicates failed air sensor.

"PLF" .... Indicates the seawater FLOW has failed.

"LAC: ..... Indicates the AC input voltage is less than 95VAC/195VAC

"FIL" ...... Indicates that the air filter requires cleaning or replacement.

*** NOTE:**

- **"HPF"** is not indicated and does not cause lockout in Heat Mode.
- **"LPF"** has a ten minute shut down delay.

Failsafe Level 0

Only "ASF" detected and displayed. The control will shut down and will not restart until the fault is repaired. Once repaired the control will restart after a two minute delay.

Failsafe Level 1

All actions in level 0 plus all other faults detected but not indicated. The system shuts down for two minutes or until the fault is cleared whatever is longer. The system will restart if the fault is cleared.

Failsafe Level 2

All actions same as level 0 and 1. Faults are indicated. The system shuts down for two minutes or until the fault is cleared whatever is longer.

Failsafe Level 3

All actions the same as level 0, 1 and 2. The system shuts down for 2 minutes or until the fault is cleared whatever is longer. The system will lockout after four consecutive "HPF", "LPF" or "PLF" faults. Press the Power Button once to Off Mode, pressing it again to the On Mode clears the lockout.

2.09 Quick Start Operations Checklist

❑ Ensure seawater intake ball valve (sea cock) is open.

❑ Turn on the air conditioner's circuit breaker. If the seawater pump has its own circuit breaker, turn that on.

❑ Turn the system on.

❑ Set the desired cabin temperature (set point).

❑ Check for a steady solid stream of water from the overboard discharge.

❑ Verify that there is steady airflow out of the supply air grille.

❑ If the unit does not appear to be operating properly, refer to troubleshooting guidelines.

Note: Do not turn the unit off and immediately turn it back on. Allow at least 30 seconds for refrigerant pressure equalization.

3.0 Elite Controls • Troubleshooting

3.01 General Troubleshooting

Also see specific digital or mechanical control troubleshooting sections following these general guidelines.

Fault: Will not start.

Possible Reason/Correction

1. **Air conditioner's circuit breaker is off.**

   Turn circuit breaker on at ship's panel.

2. **Control is not turned on.**

   See section 2.0 in this manual.

3. **Wrong wiring at terminal strip.**

   Check wiring diagram and correct if necessary.

4. **Push-on butt connectors became disconnected during installation.**

   Disconnect power supply and open electric box, check wiring diagram, correct if necessary.

5. **Input line voltage is insufficient.**

   Check power source (shore/generator) for proper voltage. Check wiring and terminals for proper sizes and connections. Verify with a volt-meter that the power at the unit is the same as the power source.

Fault: Fan is not running.

Check specific control troubleshooting section

Fault: No cooling or heating.

Possible Reason/Correction

1. **Temperature set point is satisfied.**

   Lower or raise set point.

2. **Obstructed seawater flow.**

   Clean seawater strainer. Check for obstructions at speed scoop thru-hull inlet. Check for a good steady flow from the overboard discharge.

3. **Seawater pump may be air-locked.**

   Remove hose from pump discharge to purge air from line.

4. **Loss refrigerant gas.**

   Check air conditioning unit for refrigerant oil leakage, call service technician.

5. **Seawater temperature too high for cooling or too low for heating.**

   Seawater temperature will directly affect air conditioning unit's efficiency. This air conditioning unit can effectively cool your boat in water temperature up to 90°F (32.2°C) and heat (if reverse cycle option is installed) in water as low as 40°F (4.4°C).

6. **Fan coil is iced (in cooling).**

   Check your specific control troubleshooting section.

7. **Fan is not running.**

   Check your specific control troubleshooting section.

8. **Seawater plumbing is air-locked.**

   Ensure that seawater plumbing is installed per the guidelines in this manual.

9. **Digital control is programmed for Cool or Heat only, or mechanical control thermostat is rotated to far towards either Cooler or Warmer setting.**

   See digital control manual for reprogramming or see mechanical control operation section in this manual.

10. **High pressure switch open (in cooling) due to improper seawater flow.**

    Strainer or intake may be plugged, sea cock may be closed, check seawater hose for kinks or collapses. Verify pump operation. Check pump circuit breaker if applicable

11. **High pressure switch open (in heating) due to improper airflow.**

    Remove any obstructions in return air stream. Clean return air filter and grille. Check for crushed or restricted ducting, ducting must be as straight, smooth and taut as possible.

12. **High-pressure switch is open in heating mode.**

    System may cycle on high-pressure if seawater temperature is above 55°F (12.8°C).

13. **Compressor's thermal overload is open due to either of the above reasons.**

    Compressor needs to cool down. Turn system off for a while (it may take up to three hours to reset thermal overload).

Fault: No heating.

Possible Reason/Correction

1. **Unit is cool only, or if reverse cycle, reversing valve may be stuck.**

   Tap reversing valve lightly with rubber mallet while unit is in Heat Mode. Call for service if that does not correct the problem.

Fault: Low airflow.

Possible Reason/Correction

1. **Airflow is blocked.**

   Remove any obstructions in return air stream. Clean return air filter and grille. Check for crushed or restricted ducting, ducting must be as straight, smooth and taut as possible.

2. **Fan Coil is iced.**

   See below.

Fault: Fan coil is iced.

Possible Reason/Correction

1. **Thermostat set point is too low.**

   Raise set point.

2. **Improper airflow.**

   Remove any obstructions in return air stream. Clean return air filter and grille. Check for crushed or restricted ducting, must be as straight, smooth and taut as possible. See the Digital Controls Troubleshooting section below for reprogramming options.

3. **Supply air is short-cycling.**

   Redirect supply air so that is not blowing into the return air stream. Seal any air leaks on duct.

4. **Humidity level too high.**

   Close hatches and doors.

5. **When all else fails.**

   Switch air conditioning to heat until ice melts or use hair dryer to melt.

Fault: Water coil is iced in the heating mode.

1. **Seawater temperature is below 40°F (4.4°C).**

   Shut down system to prevent damage to condenser. Allow coil to defrost.

Fault: System runs continuously.

Possible Reason/Correction

1. **Set point temperature is improperly set: too low for cooling or too high for heating.**

   Raise or lower set point.

2. **Porthole or hatches open.**

   Close all port holes and hatches.

3. **Seawater temperature too high for cooling or to low for heating.**

   Seawater temperature will directly affect the air conditioning unit's efficiency. This air conditioning unit can effectively cool your boat in water temperatures up to 90°F (32.2°C) and heat (if reverse cycle option is installed) in water as low as 40°F (4.4°C).

4. **Improper air sensor location.**

   Check your specific control troubleshooting section.

3.02 Digital Controls Troubleshooting

Fault: Digital display panel is not lit.

Possible Reason/Correction

1. **8-pin display cable plugs are not making contact (unplugged, dirty, bent, or broken pins).**

   With POWER OFF at the circuit breaker, remove connector and inspect. If damaged, replace connector or entire display cable.

Fault: Fan is not running or runs continuously.

Possible Reason/Correction

1. **Digital control is programmed for either fan cycling with compressor or continuous fan operation.**

   Press and hold the Fan Button for five seconds to change to "con" so fan will stay on continuously or to "CYC" so the fan cycles with the compressor.

   Note: After the compressor cycles off, the fan will continue to run for two minutes in cool mode and four minutes in Heat Mode regardless of parameter setting.

Fault: Fan is not running but the compressor is.

Possible Reason/Correction

1. **Failed triac on Passport I/O circuit board.**

   Send for repair or call local service technician.

Fault: Fan runs continuously although it is set to cycle with compressor.

Possible Reason/Correction

1. **Failed triac on Passport I/O circuit board.**

   Send for repair or call local service technician.

Fault: No cooling or heating.

Possible Reason/Correction

1. **Digital control programmed for heat or cool only.**

   Press and release the Mode Button (bottom right corner of display) until the desired mode LED is lit.

2. **"HPF" or "LPF" is displayed.**

   See below.

Fault: No heat.

Possible Reason/Correction

1. **Digital Control may be set to Electric Heat, not Reverse Cycle.**

   Reprogram parameter P-13

Fault: Unit switches to heat while in cool mode.

Possible Reason/Correction

1. **De-icing feature enabled due to coil icing up.**

   Reprogram parameter P-7

Fault: Fan coil is iced.

Possible Reason/Correction

1. **Improper airflow.**

   See the General Troubleshooting section above first, before reprogramming digital control.

   Reprogram parameter P-7 to enable de-icing. If de-icing cycle does not melt ice, switch air conditioning unit to heat until ice melts or use hair dryer to melt ice.

   If problem persists, reprogram Low Fan Speed Limit for maximum value. Set P-2 to 55.

Fault: System runs continuously.

Possible Reason/Correction

1. **Improper air sensor location.**

   Verify display head location with criteria found in the control manual. Install alternate air sensor if necessary.

Fault: "HPF" is displayed.

Possible Reason/Correction

1. **High-pressure switch is open (in cooling) due to improper seawater flow.**

   Strainer or intake may be plugged, seacock may be closed, check seawater hose for kinks or collapses. Verify pump operation; check pump circuit breaker if applicable.

2. **High-pressure switch open (in heating) due to improper airflow.**

   Remove obstructions in return air stream. Clean air filter and grille. Check for crushed or restricted ducting, ducting must be as straight, smooth and taut as possible.

   If problem persists, reprogram Low Fan Speed Limit for maximum value. Set P-2 to 55. And, set the Reverse Fan Speeds During Heating Mode parameter to "rEF" (P-12), or manually set fan speed to high.

Fault: "LPF" is displayed.

Possible Reason/Correction

1. **Low-pressure switch is open due to low seawater and/or low return air temperatures.**

   Try restarting the air conditioning unit, the optional low pressure switch has a ten minute shutdown time delay that may be in affect.

2. **Low pressure switch is open due to loss of refrigerant.**

   Check air conditioning unit for refrigerant oil leakage, call service technician.

Fault: "ASF" is displayed.

Possible Reason/Correction

1. **Indicates failed face plate air sensor, alternate air sensor or display cable.**

   Unplug alternate air sensor if installed or plug in alternate air sensor if not installed. Try another display cable.

2. **Damaged jack/socket in display head or on circuit board.**

   Visually check to see that pins inside socket are not bent or corroded. Repair or replace display or circuit board if needed.

Fault: "PLF" is displayed.

Possible Reason/Correction

1. **Indicates that seawater flow through the condenser coil is insufficient.**

   Check for adequate seawater flow. Verify pump operation. Inspect the condenser coil, it may need cleaning (see Maintenance section). Sensor may be faulty, replaced if necessary. Call for service technician.

Fault: "LAC" is displayed

Possible Reason/Correction

1. **Indicates the AC input voltage is less than 95VAC (for 115VAC input power) or 195VAC (for 230VAC input power).**

   Check the AC input power supply source (generator or shore power) and the wiring connections to the system. Using a voltmeter, measure the voltage at the L1 and L2 terminals of the Passport I/O Circuit Board to verify that the problem has been corrected. Once the proper voltage has been restored (exceeds 95VAC or 195VAC), the fault will clear automatically and the system will resume normal operation.

Fault: "FIL" is displayed.

Possible Reason/Correction

1. **Indicates that it is time to clean or replace the systems air filter.**

   Inspect the air filter. If it is the plastic mesh type, clean and replace. If it is a Dometic Breathe Easy® micro-particle anti-allergenic type, replace with the same size and model. Reset and clear the air filter cleaning/replacement reminder by setting programmable parameter P-19 to 0.

4.0 Elite Controls • Maintenance

Reversing Valves

Reverse cycle units have a reversing valve; the valve must be energized periodically to keep the internal parts moving freely. To do this, switch the a/c unit into heat for a few seconds once a month.

Seawater Strainer

Insure that your pump receives adequate seawater flow by regularly cleaning the strainer basket. Periodically check the overboard discharge for a steady stream of water. Check seawater intake speed scoop for obstructions. Make sure hoses are not looped, kinked or crushed.

Condenser Coil Cleaning

1. With the system turned off at the circuit breaker on the ship's panel, disconnect the inlet and outlet connections of the condenser coil.

2. Use chemical resistant hoses (MAS white PVC 5/8" I.D., etc.) to connect the inlet of the condenser coil to the outlet of a chemical resistant, submersible pump (MAS P-500 pump, etc.) and let the hose connected to the coil outlet flow freely into the container mentioned below.

3. Place a strainer or piece of screen over the inlet of the pump and submerse the pump into a container filled with a 5% solution of muriatic or hydrochloric acid and fresh water or use a premixed over-the-counter solution. Use a large container as possible to hold the solution (5-25 gallons).

   CAUTION: Avoid spilling or splashing the solution. Follow all warnings and recommendations given by the manufacturer of any acids or premixed solutions.

4. Power the pump and circulate the solution through the condenser coil for 15-45 minutes depending upon the size of the coils and the extent of the contamination. Visual inspection of the solution in the container should indicate when the contamination removal has stopped.

5. Circulate fresh water through the coil to flush any residual acid from the system.

6. Restart the system and check operational parameters to ensure thorough cleaning has taken place. Additional cleaning may be necessary with extreme contamination.

   WARNING: For the purpose of protecting the environment, dispose of any contaminated acid solutions in accordance with federal, state and/or local regulations.

Return Air Filters

Check the return air filter about once a month and clean as necessary. To clean the filter, remove it from the unit, rinse with water, air dry and reinstall.

Winterization

There are several methods of winterization, some of which work better than others. The four various methods employed using a 50/50 nonpolluting biodegradable antifreeze/water solution are:

1. Pumping of antifreeze solution into the overboard thru-hull fitting, and discharging through the intake thru-hull fitting.

2. Use of the seawater pump to pump antifreeze solution through the system and discharging through the overboard thru-hull fitting. Close sea cock, remove hose from strainer discharge, raise hose above pump (so pump does not lose its prime) and pour in antifreeze solution. Pump solution through system. The strainer and hose to sea cock will also need to be drained of water.

3. Use of pressurized air injected at the overboard discharge fitting and the water being discharged through the seawater intake fitting.

4. Use of pressurized air to force water from the intake through the overboard discharge.

Any method that causes the antifreeze solution to flow downward is the method of choice. By this means, the antifreeze solution will displace any water trapped and eliminate the possibility of freezing in hidden areas. In addition, since the seawater pump utilizes a magnetically driven impeller, the impeller should be removed from the wet end assembly, wiped with an alcohol solution, and stored in a warm, dry area until commissioning takes place.

Note: Collect all discharged liquids and recycle or dispose of in a proper manner.

5.0 Elite Controls • Manufacturers Limited Warranty Agreement

The following warranty is extended to cover marine air conditioners manufactured or supplied by Dometic Environmental Corporation, and is subject to qualifications indicated. Dometic warrants for the periods set forth below that products manufactured or supplied by it will be free from defects in workmanship and material, provided such products are installed, operated, and maintained in accordance with Dometic's written instruction.

ALL IMPLIED WARRANTIES INCLUDING MERCHANT-ABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE TERMS AND PERIODS OF WARRANTY SET FORTH BELOW AND, TO THE EXTENT PERMITTED BY LAW, ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED.

Warranty with the Elite or Passport I/O digital controls (Coverage applies to units manufactured on or after 03/01/03 and applies only to units equipped with Elite or Passport I/O digital controls at the Dometic factory.): Components comprising of the Passport I/O circuit boards, Elite or Passport I/O digital displays, and associated cables are warranted for a period of three (3) years from the date of installation, but not to exceed four (4) years from the date of manufacture at the Dometic factory. All other components comprising a complete system (excluding pumps and pump relay panels) on a new installation are warranted for a period of two (2) years from the date of installation, but not to exceed three (3) years from the date of manufacture at the Dometic factory. Pumps and pump relay panels are warranted for a period of one (1) year from the date of installation, but not to exceed two (2) years from the date of purchase. OEM installed equipment warranties begin with the purchase of the vessel, not from the date of installation.

Warranty with MCP (Mechanical Control Panel) control: Components comprising a complete system on a new installation are warranted for a period of one (1) year from the date of installation, but not to exceed two (2) years from the date of manufacture at the Dometic factory. OEM installed equipment warranties begin with the purchase of the vessel, not from the date of installation.

In addition, Dometic will pay labor costs and travel as outlined in its **Schedule of Limited Warranty Allowances** for removal and reinstallation of such components for a period of one (1) year from the date of installation, but not to exceed two (2) years from the date of manufacture at the Dometic factory. OEM installed equipment warranties begin with the purchase of the vessel, not from the date of installation. Warranty will be paid in accordance with our established schedule of allowances. Compensation for warranty repairs is only made to Dometic authorized service companies.

Dometic will repair, or replace at its option, components found to be defective due to faulty materials or workmanship, when such components, examined by an authorized service dealer or a factory service representative, are found to have a defect for which the company is responsible. **Refer to Manufacturer's Limited Warranty Policy** for complete coverage and exclusions. Replacement components are warranted for the duration of the remaining warranty period in effect on the original component. In the event that a unit has to be returned to the factory, it must be properly packaged to prevent shipping damages. If packaging is not available, Dometic will provide it at no charge. The warranty may be voided on any piece of equipment or component that is damaged due to improper packaging.

This limited warranty is extended in lieu of all other warranties, agreements or obligations, expressed or implied, concerning Dometic's components. This warranty is extended only to the original purchaser and is not transferable. This warranty shall be governed by the laws of the State of Florida and gives the original first end user definite legal rights.

This warranty does not cover damages incidental and/or consequential to the failure of Dometic's equipment including but not limited to; normal wear, accident, misuse, abuse, negligence, improper installation, lack of reasonable and necessary maintenance, alteration, civil disturbance or acts of God.

No person or dealer is authorized to extend any other warranties or to assume any other liabilities on Dometic's behalf, unless made or assumed in writing by an officer of Dometic.

6.0 Elite Controls • Specifications

Set Point Operating Range .... 65°F to 85°F (18.3°C to 29.4°C)
Ambient Temperature Operating Range Displayed .... 5°F to 150°F (-15°C to 65.6°C)
Sensor Accuracy .... ± 2°F @ 77°F (±1.1°C @ 25°C)
Low Voltage Limit 115 Volt Units.. 75 VAC
Low Voltage Limit 220 Volt Units.. 175 VAC
Low Voltage Processor Reset .... 50 VAC
Line Voltage .... 115 Through 240 VAC
Frequency .... 50 or 60 Hz
Fan Output .... 6 Amps @ 115 VAC and 6 Amps @ 230 VAC
Valve Output .... 1/4 Amps @ 115/230 VAC
Pump Output .... 1/4 HP @ 115 VAC and 1/2 HP @ 230 VAC
Compressor Output .... 1 HP @ 115 VAC and 2 HP @ 230 VAC
Minimum Operating Temperature ....0°F (-17.8°C)
Maximum Ambient Operating Temperature .... 180°F (82.2°C)
Maximum Rh Conditions .... 99% Non Condensing
Power Consumption .... Less Than 5 Watts
Electric Heater Output .... 30 Amps @ 115 VAC and 20 Amps @ 230 VAC

Dimensions
Display Panel ....4.41" (11.20 cm) X 2.96" (7.52 cm)
Panel Cut Out.. 3 $^5/_{16}$" (3.31"/8.41 cm) X 2 $^3/_{16}$"" (2.19"/5.56 cm)
Bezel Size ....4.85" (12.32 cm) X 3.25" (8.26 cm)

Cable Lengths
Display Cable Self Contained.. 15' (4.6m) Standard
Display Cable Central System... 30' (9.1m) Standard
Alternate Air Sensor .... 7' (2.1m) Standard
Alternate Air Sensor Central System... 30' (9.1m) Standard
Outside Air Sensor .... 15' (4.6m) Standard
All custom cable lengths supplied in standard 5' (1.5m) increments............. 75' (22.9m) Maximum

NOTES: Maximum length of display and sensor cables is 75 feet (22.9m). The **outside air sensor**
and **alternate air sensors** are optional items and are **not** included with the standard control package.

System Inputs
Ambient or Inside Air Temperature 1
High Freon Pressure 1
Low Freon Pressure 1
Alternate Inside Air Temperature Sensor (Optional) 1
Outside Air Temperature Sensor (Optional).. 1
Pump Sentry Condenser Coil Sensor (Optional) 1

Automated Factory Self Test Program

The Elite software contains a self test program to facilitate factory testing of the entire air conditioning system. Once the self test program is activated, the test cycle will continue until the AC power is interrupted or the Power Button is pressed once.

Activate the self test program by pressing the Power Button after turning on the AC power, while the display indicates "888" and all LEDs are lit. Elite is now in the self test program.

"tSt" appears in the display while in the self test program.

Once activated the self test software will continuously execute the following procedure:

1. Turn on in the Heat Mode and supply heating for ten minutes.

2. Stop heating and run the fan only for five minutes.

3. Switch to Cool Mode and continue cooling for ten minutes.

4. Stop cooling and run the fan only for five minutes.

5. Return to step one and continue until interrupted.

The self test program will continue until the power is interrupted or the test is halted by pressing the Power Button once.

Service Tools

Hour Meter

Total compressor cycle time is saved in EEPROM every six minutes of continuous compressor running time. Cycles less than six minutes will be discarded to conserve memory and allow the most flexible hour-meter possible.

To view the hour meter, turn off AC power supply circuit breaker and then turn it back on. Immediately after restoring power, while the display indicates **"888"** and all LEDs are lit, press the Down Button. The following will appear in the display:

1. The hour meter mnemonic "Hr" is displayed for one second.

2. The display blanks out for one second and then displays the thousands of hours for three seconds.

3. The display blanks out for one second and then displays the hours for three seconds.

4. The unit returns to the last operating state before power was removed.

Maximum recorded time is 65,536 hours, the meter stops and can only be reset by a service technician.

Service History Log

Elite will record and remember the last eight service problems or service faults detected. Each time a fault is detected, a one hour timer is started. During that hour the same recurring fault will not be recorded. Should a different fault be detected during that hour, it will be entered into the service history log.

The following events are entered into the service history log:

1. High Freon Pressure Fault - "HPF"

2. Low Freon Pressure Fault - "LPF"

3. Air Sensor Fault - "ASF"

4. Pump or Loss of Seawater Fault - "PLF"

To view the service log, turn off AC power supply circuit breaker and then turn it back on. Immediately after restoring power, while the display indicates "888" and all LEDs are lit, press the Mode Button. The display will flash the most recent mnemonic for the fault detected, followed by the event number. To view the other events detected press either the Up or Down Buttons.

The service history log can be cleared by simultaneously pressing the Power and Down Buttons.

Exit the service history log by pressing either the Power or Mode Buttons or wait thirty seconds without pressing any button.

Display Location
IMPORTANT!

The system's air sensor is located in the Display Panel. The display MUST be located on an inside wall at eye level. It must NOT be located in direct sunlight or inside a cabinet.
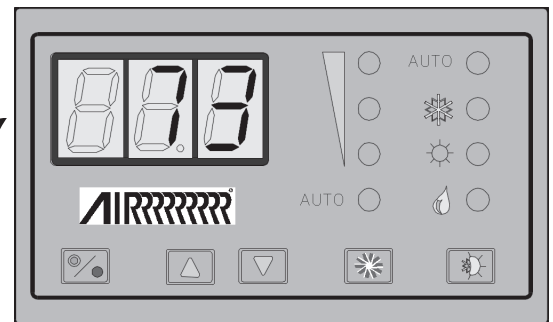
Face plate sensor location

If these conditions cannot be met, the Optional Remote Air Sensor must be purchased and installed in the return air stream.

Display Panel Installation

Before mounting the Elite or AH-Elite digital display panel touch pad, consider the location. The air sensor built into the display panel will provide excellent room air temperature sensing given a proper installation. The display panel should be mounted on an inside wall, slightly higher than mid-height of the cabin, in a location with freely circulating air where it can best sense average temperature. The cut out size for the display panel is 3-5/16" (3.31"/8.41cm) wide by 2-3/16" (2.19"/5.56cm) high. Do not mount the display in direct sunlight, near any heat producing appliances or in a bulkhead where temperatures radiating from behind the panel may affect performance. **Do not mount the display in the supply air stream.** Do not mount the display above or below a supply or return air grille. Do not mount the display behind a door, in a corner, under a stairwell or any place where there is no freely circulating air.
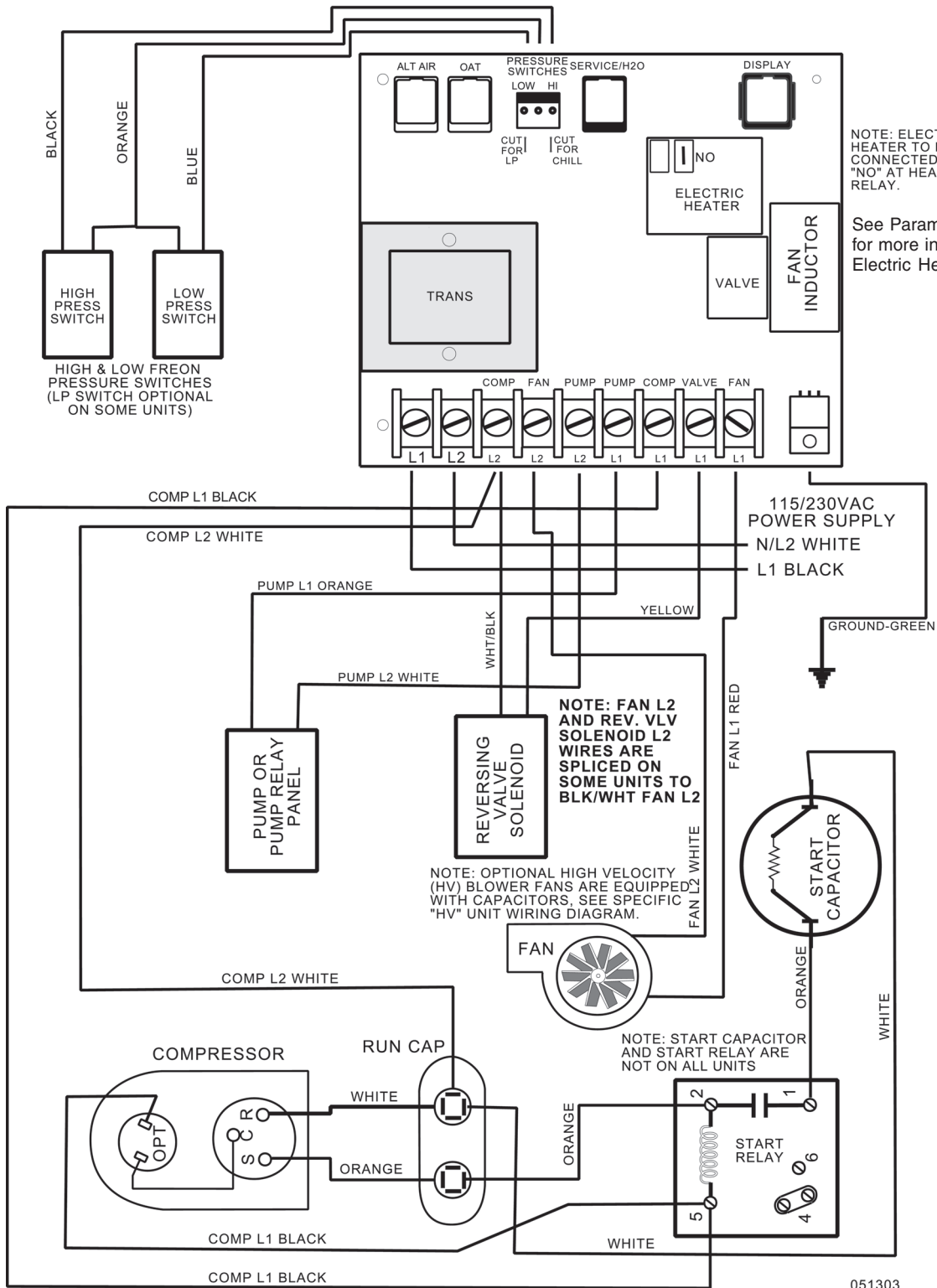
Mount the display within display cable length (custom lengths available) of the air conditioner. Plug one end of the display cable (8-pin connector) into the upper right-hand socket on the circuit board in the electric box and the other end into the back of the display panel. Secure the display panel to the bulkhead using the four screws provided. Do not use a screw gun and do not over-tighten screws when mounting, because either method my damage the display. Once the display is securely mounted, then mount the bezel over the display frame until it snaps into place.

If a proper location for room temperature sensing cannot be found for the display, an optional remote air sensor may be used. Mount the remote air sensor in the return air stream behind the return air grille/opening and plug its cable (6-pin connector) into the "ALT AIR" socket #J4 in the upper left-hand corner of the circuit board. Installing the remote air sensor will override the faceplate sensor. An optional outside air temperature sensor and cable may also be used. Plug that cable into the "OAT" socket #J3 (next to #J4). Mount the sensor outside but not in direct sunlight. Air sensor cables are available in various lengths. Do not staple any cables when mounting.

When using the AH-Elite with a chilled water airhandler, plug the water inlet sensor cable into the "SERVICE/H2O" socket #J5.

Sample Wiring Diagram

NOTE: THIS IS A SAMPLE DIAGRAM. WIRE COLORS MAY VARY. SEE UNIT
SPECIFIC DIAGRAM LOCATED IN ELECTRICAL BOX OR IN AIR CONDITIONING UNIT MANUAL.
TURN POWER OFF BEFORE OPENING ELECTRICAL BOX.

ALT AIR OAT PRESSURE SWITCHES SERVICE/H2O DISPLAY
LOW HI
CUT FOR LP CUT FOR CHILL

NOTE: ELECTRIC HEATER TO BE CONNECTED TO "NO" AT HEATER RELAY.

See Parameter P-13 for more information on Electric Heat

ELECTRIC HEATER

VALVE

FAN INDUCTOR

TRANS

BLACK ORANGE BLUE

HIGH PRESS SWITCH LOW PRESS SWITCH

HIGH & LOW FREON PRESSURE SWITCHES (LP SWITCH OPTIONAL ON SOME UNITS)

COMP FAN PUMP PUMP COMP VALVE FAN

L1 L2 L2 L2 L2 L1 L1 L1 L1

COMP L1 BLACK

COMP L2 WHITE

115/230VAC POWER SUPPLY
N/L2 WHITE
L1 BLACK

PUMP L1 ORANGE

YELLOW

GROUND-GREEN

WHT/BLK

PUMP L2 WHITE

NOTE: FAN L2 AND REV. VLV SOLENOID L2 WIRES ARE SPLICED ON SOME UNITS TO BLK/WHT FAN L2

FAN L1 RED

PUMP OR PUMP RELAY PANEL

REVERSING VALVE SOLENOID

START CAPACITOR

FAN L2 WHITE

NOTE: OPTIONAL HIGH VELOCITY (HV) BLOWER FANS ARE EQUIPPED WITH CAPACITORS, SEE SPECIFIC "HV" UNIT WIRING DIAGRAM.

FAN

ORANGE

WHITE

COMP L2 WHITE

NOTE: START CAPACITOR AND START RELAY ARE NOT ON ALL UNITS

COMPRESSOR RUN CAP

WHITE

ORANGE

OPT

R C S

START RELAY

2 1

6

5 4

COMP L1 BLACK

WHITE

COMP L1 BLACK

051303

Marine Air Worldwide Service Dealer Locator

The majority of the service listings displayed for the United States are key members of the national Marine Air distributor network. If you need service, please contact the closest company shown. In most cases they will direct you to a local dealer or service port. We have over 500 Marine Air dealers in the national Marine Air network, and one should be convenient to you.

The **international** companies listed are, in many cases, distributors and are capable of managing the majority of service requests for the countries listed. In some cases they will refer you to a local dealer.

You may also contact us directly via the web site or call us in the US at (954) 973-2477.

For a complete and up-to-date Dealer locator list, please visit our website at http://www.marineair.com/locator/index.html

USA

Alabama

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Alaska

American Marine Contractors

Location: Seattle, WA, USA
Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Arizona

Southern California Marine Enterprises

Location: San Diego, CA, USA
Phone: 619-224-2869
Fax: 619-226-0496
E-mail: sales@southerncalmarine.com
Web: www.southerncalmarine.com

Arkansas

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

California

Southern California Marine Enterprises

Location: San Diego, CA, USA
Phone: 619-224-2869
Fax: 619-226-0496
E-mail: sales@southerncalmarine.com
Web: www.southerncalmarine.com

Colorado

AER Marine Supply

Location: Seabrook, TX, USA
Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Connecticut

Ocean Options

Location: Tiverton, RI, USA
Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Delaware

Ocean Options - Mid Atlantic

Location: Annapolis, MD, USA
Phone: (410) 268-9365
Fax: (410) 268-8199
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Florida (North)

Beard Marine Savannah - Distributor

Location: Savannah, GA, USA
Phone: (912) 356-5222
Fax: (912) 692-1006
E-mail: beardsav@aol.com
Web: www.beardmarine.com

Florida (South)

ARW Maritime - Dealer

Location: Ft. Lauderdale, Florida, USA
Territory: Fort Lauderdale
Phone: (954) 463-0110
Fax: (954) 522-1139
E-mail: arwgroup@earthlink.net

Beard Marine - Ft. Lauderdale - Dealer

Location: Ft. Lauderdale, Florida, USA
Territory: Fort Lauderdale
Phone: (954) 463-2288
Fax: (954) 527-0362
E-mail: info@beardmarine.com
Web: www.beardmarine.com

Beard Marine of the Palm Beaches - Dealer

Location: Riviera Beach, Florida, USA
Territory: Riviera Beach
Phone: (561) 881-9598
Fax: (561) 881-9599
E-mail: bmpb@beardmarine.com

Cable Marine - Dealer

Location: Ft. Lauderdale, Florida, USA
Territory: Fort Lauderdale
Phone: (954) 462-2840
Fax: (954) 523-3686
Web: www.cablemarine.com

Comfort Marine - Dealer

Location: Ft. Lauderdale, FL, USA
Territory: Ft. Lauderdale
Phone: (954) 257-9848
Fax: (954) 689-7332

Cowherd Marine - Dealer

Location: Lake Park, Florida, USA
Territory: West Palm Beach
Phone: (561) 844-1666
Fax: (561) 844-1628

Dometic Corporation-Environmental Systems, Distributor

Location: Pompano Beach, FL, USA
Territory: South Florida
Phone: (954) 973-2477
Fax: (954) 979-4414
E-mail: sales@dometicenviro.com
Web: www.dometicenviro.com

Edd Helms Marine Air Conditioning - Dealer

Location: Miami, Florida, USA
Territory: Ft. Lauderdale, Miami
Phone: 954 522 2520
Fax: 954 522 1331
E-mail: srogers@eddhelms.com

Florida (South)

IYS Marine - Dealer

Location: Pinellas Park, Florida, USA
Territory: Tampa-St Petersburg
Phone: (727) 521-6650
Fax: (727) 520-0844
E-mail: iysmarine2002@aol.com

Jim's Marine A/C - Dealer

Location: Port Charlotte, Florida, USA
Territory: Port Charlotte
Phone: (941) 629-8788

Marine Air Conditioning - Dealer

Location: Ft. Pierce, Florida, USA
Territory: Port St. Lucie
Phone: (772) 464-7896
Fax: (772) 464-8697

Masters Marine Center, Inc. - Dealer

Location: Miami, Florida, USA
Territory: Miami
Phone: (305) 891-1236
Fax: (305) 891-8700

Neptune Air Corporation - Dealer

Location: Ft. Lauderdale, Florida, USA
Territory: Fort Lauderdale
Phone: (954) 792-6550
Fax: (954) 792-6551

Palm Beach Aqua Air - Dealer

Location: West Palm Beach, Florida, USA
Territory: West Palm Beach
Phone: (561) 832-8820
Fax: (561) 659-7918

Sea Air Land Technologies - Dealer

Location: Marathon, Florida, USA
Territory: Florida Keys
Phone: (305) 289-1150
Fax: (305) 359-5272
E-mail: saltmail@salt-systems.com
Web: www.salt-systems.com

Sea Breeze Marine - Dealer

Location: Lighthouse Point, Florida, USA
Territory: Lighthouse Point
Phone: (954) 427-3843
Fax: (561) 368-0463

Tropica Boats & Marine, Inc. - Dealer

Location: Fort Myers, Florida, USA
Territory: Fort Myers
Phone: (239) 694-5259
Fax: (239) 694-5243
E-mail: info@tropica.net
Web: www.tropica.net

Ty Cobb Services, Inc. - Dealer

Location: Sebastian, Florida, USA
Territory: Sebastian
Phone: (772) 388-5966
Fax: (772) 581-0056

Georgia

Beard Marine Savannah - Distributor

Location: Savannah, GA, USA

Phone: (912) 356-5222
Fax: (912) 692-1006
E-mail: beardsav@aol.com
Web: www.beardmarine.com

Hawaii

Southern California Marine Enterprises

Location: San Diego, CA, USA

Phone: 619-224-2869
Fax: 619-226-0496
E-mail: sales@southerncalmarine.com
Web: www.southerncalmarine.com

Idaho

American Marine Contractors

Location: Seattle, WA, USA

Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Illinois

Midwest Marine Supply

Location: St. Clair Shores, MI, USA

Phone: (586) 778-8950
Fax: (586) 778-6108

Indiana

Midwest Marine Supply

Location: St. Clair Shores, MI, USA

Phone: (586) 778-8950
Fax: (586) 778-6108

Iowa

Midwest Marine Supply

Location: St. Clair Shores, MI, USA

Phone: (586) 778-8950
Fax: (586) 778-6108

Kansas

AER Marine Supply

Location: Seabrook, TX, USA

Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Kentucky

Midwest Marine Supply

Location: St. Clair Shores, MI, USA

Phone: (586) 778-8950
Fax: (586) 778-6108

Louisiana

AER Marine Supply

Location: Seabrook, TX, USA

Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Maine

Ocean Options

Location: Tiverton, RI, USA

Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Maryland

Ocean Options - Mid Atlantic

Location: Annapolis, MD, USA

Phone: (410) 268-9365
Fax: (410) 268-8199
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Massachusetts

Ocean Options

Location: Tiverton, RI, USA

Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Michigan

Midwest Marine Supply

Location: St. Clair Shores, MI, USA

Phone: (586) 778-8950
Fax: (586) 778-6108

Minnesota

Midwest Marine Supply

Location: St. Clair Shores, MI, USA

Phone: (586) 778-8950
Fax: (586) 778-6108

Mississippi

AER Marine Supply

Location: Seabrook, TX, USA

Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Missouri

AER Marine Supply

Location: Seabrook, TX, USA

Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Montana

American Marine Contractors

Location: Seattle, WA, USA

Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Nevada

AER Marine Supply

Location: Seabrook, TX, USA

Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

New Hampshire

Ocean Options

Location: Tiverton, RI, USA

Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

New Jersey

Marine Specialists

Location: Ronkonkoma, NY, USA
Territory: New York, New Jersey

Phone: (631) 580-0545
Fax: (631) 580-0551
E-mail: Sales@marinespecialists.com
Web: www.marinespecialists.com

New Mexico

AER Marine Supply

Location: Seabrook, TX, USA

Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

New York

Marine Specialists

Location: Ronkonkoma, NY, USA
Territory: New York, New Jersey

Phone: (631) 580-0545
Fax: (631) 580-0551
E-mail: Sales@marinespecialists.com
Web: www.marinespecialists.com

North Carolina

Beard Marine Savannah - Distributor

Location: Savannah, GA, USA

Phone: (912) 356-5222
Fax: (912) 692-1006
E-mail: beardsav@aol.com
Web: www.beardmarine.com

North Dakota

Midwest Marine Supply

Location: St. Clair Shores, MI, USA

Phone: (586) 778-8950
Fax: (586) 778-6108

Ohio

Midwest Marine Supply

Location: St. Clair Shores, MI, USA

Phone: (586) 778-8950
Fax: (586) 778-6108

Oklahoma

AER Marine Supply

Location: Seabrook, TX, USA

Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Oregon

American Marine Contractors

Location: Seattle, WA, USA

Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Pennsylvania

Ocean Options - Mid Atlantic

Location: Annapolis, MD, USA

Phone: (410) 268-9365
Fax: (410) 268-8199
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Rhode Island

Ocean Options

Location: Tiverton, RI, USA

Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

South Carolina

Beard Marine Savannah - Distributor

Location: Savannah, GA, USA

Phone: (912) 356-5222
Fax: (912) 692-1006
E-mail: beardsav@aol.com
Web: www.beardmarine.com

South Dakota

Midwest Marine Supply

Location: St. Clair Shores, MI, USA

Phone: (586) 778-8950
Fax: (586) 778-6108

Tennessee

Beard Marine Savannah - Distributor

Location: Savannah, GA, USA

Phone: (912) 356-5222
Fax: (912) 692-1006
E-mail: beardsav@aol.com
Web: www.beardmarine.com

Texas

AER Marine Supply

Location: Seabrook, TX, USA

Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

AER Marine Supply
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Phone: (281) 474-3276
Fax: (281) 474-2714
E-mail: rsmiller@aersupply.com

Vermont

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Location: Tiverton, RI, USA
Phone: (401) 624-7334
Fax: (401) 624-8050
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Virginia

Ocean Options - Mid Atlantic
Location: Annapolis, MD, USA
Phone: (410) 268-9365
Fax: (410) 268-8199
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Washington

American Marine Contractors
Location: Seattle, WA, USA
Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

West Virginia

Ocean Options - Mid Atlantic
Location: Annapolis, MD, USA
Phone: (410) 268-9365
Fax: (410) 268-8199
E-mail: Sales@oceanoptions.com
Web: www.oceanoptions.com

Wisconsin

Midwest Marine Supply
Location: St. Clair Shores, MI, USA
Phone: (586) 778-8950
Fax: (586) 778-6108

Wyoming

American Marine Contractors
Location: Seattle, WA, USA
Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Antigua

Aboard Refrigeration
Location: , Antigua, West Indies
Phone: (268) 460-1690
Fax: (419) 858-0544
E-mail: aboardrf@candw.ag
Web: www.aboardrefrigeration.com

Argentina

Baron SRL
Location: San Fernando, Buenos Aires, Argentina
Phone: (54) 11-4-580-5556
Fax: (54) 11-4-746-1696
E-mail: rosito@baron.com.ar
Web: www.baron.com.ar

Australia

Seairland Systems, Inc.
Location: Brisbane, Queensland, Australia
Phone: (61) 7-3268-7511
Fax: (61) 7-3268-1445
E-mail: hadyn@seairland.com.au

Austria

Dometic Marine – Italy, Sales Company
Location: Milano, Italy
Phone: 390 26172583
Fax: 390 266010223
E-mail: marine.info@dometic.it
Web: www.dometic.com

Bahamas

Freezing Point, Ltd.
Location: Nassau, Bahamas
Territory: Nassau
Phone: (242) 325-3589
Fax: (242) 356-5271
E-mail: rolandknowles@bahamas.net.bs

Bahrain

International Agencies Co.
Location: Manama, Bahrain
Phone: 973-17728691
Fax: 973-17728412

Mantech
Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649

Brazil

Marine Express
Location: Sao Paulo, Brazil
Phone: 55-11-5182-7166
Fax: 55-11-5183-3636
E-mail: fabrizio@marinexpress.com.br
Web: www.marinexpress.com.br

British Virgin Islands

BVI Marine Management
Location: Roadtown, Tortola, British Virgin Islands
Phone: (284) 494-2938
Fax: (284) 494-5006

C & G Refrigeration
Location: , Tortola, British Virgin Islands
Phone: (284) 776-0038

Canada

British Columbia

American Marine Contractors
Location: Seattle, WA, USA
Phone: (206) 660-2240
Fax: (206) 548-5008
E-mail: gene@nwmarineair.com

Ontario

Northland Supply Company
Location: Queensville, Ontario, Canada
Territory: Queensville
Phone: (905) 478-2244
Fax: (905) 478-2295
E-mail: norsupco@aol.com
Web: www.norsupco.com

Woodard and Company - Manufacturer's Rep.
Location: Concord, Ontario, Canada
Territory: All Canadian Provinces except BC
Phone: (905)760-0245
Fax: (905)760-0250
E-mail: john.reid@woodardcompany.com

Quebec

Kimpex, Inc.
Location: Drummondville, Quebec, Canada
Territory: Drummondville, Quebec
Phone: (705) 721-0947
Fax: (705) 721-1704
E-mail: scott.pipher@kpx-kimpex.com
Web: http://www.kpx-kimpex.com

Caribbean Islands

Aboard Refrigeration
Location: , Antigua, West Indies
Phone: (268) 460-1690
Fax: (419) 858-0544
E-mail: aboardrf@candw.ag
Web: www.aboardrefrigeration.com

BVI Marine Management
Location: Roadtown, Tortola, British Virgin Islands
Phone: (284) 494-2938
Fax: (284) 494-5006

C & G Refrigeration
Location: , Tortola, British Virgin Islands
Phone: (284) 776-0038

Centro Cruisair de Puerto Rico
Location: San Turce, Puerto Rico
Phone: 787-727-3637
Fax: 787-727-3637
E-mail: fernan_moreno@hotmail.com

Cool-Tech Air Condition
Location: Fajardo, Puerto Rico
Phone: (787) 860-2615
Fax: (787) 801-2050
E-mail: cooltech@isppr.com
Web: www.isppr.net/cooltech

Enertech N.V.
Location: Simpson Bay, St. Maarten/St. Martin, Netherland Antilles
Phone: 599-551-2145
Fax: 305-675-5857 (USA)
E-mail: service@entertechnv.com

Freezing Point, Ltd.
Location: Nassau, Bahamas
Territory: Nassau
Phone: (242) 325-3589
Fax: (242) 356-5271
E-mail: rolandknowles@bahamas.net.bs

May Day Marine
Location: San Juan, Puerto Rico
Phone: 787-751-0490
Fax: 787-790-2551

Nau-T-Kol Marine Refrigeration
Location: Chaguaramas, Trinidad
Phone: 868-634-2174
Fax: 868-634-2174
E-mail: nautkol@cablenett.net
Web: www.nautkol.com

Reefco, Inc.
Location: , St. Thomas, US Virgin Islands
Phone: (340) 776-0038
Fax: (340) 776-0038
E-mail: denny@reefco.net
Web: www.reefco.net

Regis Electronics (St Lucia) LTD.
Location: St. Lucia, West Indies
Phone: 758-452-0205
Fax: 758-452-0206
E-mail: stlucia@regiselectronics.com

Sun Cool Air Conditioning
Location: Carolina, Puerto Rico, Puerto Rico
Territory: Carolin
Phone: (787) 791-6971
Fax: (787) 791-3885
E-mail: suncool1@coqui.net

China

Flash Marine Trading Pte.Ltd.
Location: Shanghai, China
Phone: (86 21) 509 04120
Fax: (86 21) 509 04789
E-mail: fmtmasb@online.sh.cn

Costa Rica

Gato Frío

Location: Playa Jaco, Costa Rica
Territory: Costa Rica, Panama
Phone: 506-637-7181
Fax: 506-637-7180
E-mail: eric@yachtshare.net

Croatia

Dometic Marine – Italy, Sales Company

Location: Milano, Italy
Phone: 390 26172583
Fax: 390 266010223
E-mail: marine.info@dometic.it
Web: www.dometic.com

Cyprus

Dometic Marine - United Kingdom, Sales Company

Location: Poole, Dorset, England
Phone: 44 (0) 870 3306101
Fax: 44 (0) 870 3306102
E-mail: sales@dometicmarine.com
Web: www.dometic.com

Dominican Republic

May Day Marine

Location: San Juan, Puerto Rico
Phone: 787-751-0490
Fax: 787-790-2551

Ecuador

Quasar Nautica, S.A.

Location: P.O. Box 17-01-0069, Quito, Ecuador
Phone: (593) 2-446-996/997
Fax: (593) 2-436-625

Egypt

Engineering Air

Location: Abasia, Cairo, Eygpt
Phone: 202 4829341
Fax: 202 4829341

France

Dometic Marine – France, Sales Company

Location: Plailly, France
Phone: Cell: 0033 (0)680 415 543
Fax: 0033 (0)344 633 518
E-mail: marine.sales@dometic.fr
Web: www.dometic.com

PolyMarine Distribution (C/O Occas Marine)

Location: Le Cannet, Rocheville, France
Phone: 0033 493463634
Fax: 0033 493463634
E-mail: polymarine.bayle@free.fr

Greece

Dometic Marine - United Kingdom, Sales Company

Location: Poole, Dorset, England
Phone: 44 (0) 870 3306101
Fax: 44 (0) 870 3306102
E-mail: sales@dometicmarine.com
Web: www.dometic.com

Athens

Aegean Diesel Electric Ltd.

Location: Athens, Piraeus, Greece
Territory: Athens
Phone: 0030-1-4222484
Fax: 0030-1-4175201
E-mail: info@ade-marine.gr

Hong Kong

Piercey Marine Limited

Location: Sai Kung, NT, Hong Kong
Phone: (852) 2791-4106
Fax: (852) 2791-4124
E-mail: pmltd@attglobal.net

Italy

Condaria 87 SRL

Location: Nova Milanese (MI), Italy
Phone: 39 0362 44182
Fax: 39 0362 452226

Dometic Marine – Italy, Sales Company

Location: Milano, Italy
Phone: 390 26172583
Fax: 390 266010223
E-mail: marine.info@dometic.it
Web: www.dometic.com

Japan

Tominaga & Company, Ltd.

Location: Osaka, Japan
Phone: 816.6365.5010
Fax: 816.6365.6294
E-mail: nishi@mail.tomco.co.jp

Kuwait

Mantech

Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649

Sammari Marine Trading

Location: Al-Shawikh, Kuwait
Phone: 965-5740408
Fax: 965-5715655

Malta

Dometic Marine - United Kingdom, Sales Company

Location: Poole, Dorset, England
Phone: 44 (0) 870 3306101
Fax: 44 (0) 870 3306102
E-mail: sales@dometicmarine.com
Web: www.dometic.com

Inmartech Ltd.

Location: Swieqi, STJ 04, Malta
Phone: 00356 21376476
Fax: 00356 21376476

Mexico

Southern California Marine Enterprises

Location: San Diego, CA, USA
Phone: 619-224-2869
Fax: 619-226-0496
E-mail: sales@southerncalmarine.com
Web: www.southerncalmarine.com

Netherlands

Eberca

Location: , Netherlands
Phone: 31 1866 21955
Fax: 31 1866 21818
E-mail: info@eberca.nl

Heinen & Hopman Eng. Bv.

Location: Spakenburg, Netherlands
Phone: (31) (0) 33 2992500
Fax: (31) (0) 33 299 2599
E-mail: info@heinenhopman.com
Web: www.heinenhopman.com

Netherlands Antilles

Enertech N.V.

Location: Simpson Bay, St. Maarten/St. Martin, Netherland Antilles
Phone: 599-551-2145
Fax: 305-675-5857 (USA)
E-mail: service@entertechnv.com

New Zealand

Whiting Power Systems

Location: 192 Herne Bay, Auckland, New Zealand
Phone: 649.358.2050
Fax: 649.358.0285
E-mail: sales@whiting.co.nz
Web: www.whiting.co.nz

Oman

Mantech

Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649

OHI Marine LLC

Location: Muscat, Oman
Phone: 968-712240
Fax: 968-712085

Panama

Gato Frío

Location: Playa Jaco, Costa Rica
Territory: Costa Rica, Panama
Phone: 506-637-7181
Fax: 506-637-7180
E-mail: eric@yachtshare.net

Productos Marine Air

Location: La Chorrea, Panama
Territory: Panama
Phone: 507-232-5406
Fax: 507-232-7648
E-mail: masters@sinfo.net

Portugal

PowerCool Lda

Location: Portimao, Portugal
Territory: Portugal
Phone: 351 91 786 63 73
Fax: 351 282 461 818
E-mail: info@powercool.org
Web: www.powercool.org

Puerto Rico

Centro Cruisair de Puerto Rico

Location: San Turce, Puerto Rico
Phone: 787-727-3637
Fax: 787-727-3637
E-mail: fernan_moreno@hotmail.com

Cool-Tech Air Condition

Location: Fajardo, Puerto Rico
Phone: (787) 860-2615
Fax: (787) 801-2050
E-mail: cooltech@isppr.com
Web: www.isppr.net/cooltech

May Day Marine

Location: San Juan, Puerto Rico
Phone: 787-751-0490
Fax: 787-790-2551

Sun Cool Air Conditioning

Location: Carolina, Puerto Rico, Puerto Rico
Territory: Carolin
Phone: (787) 791-6971
Fax: (787) 791-3885
E-mail: suncool1@coqui.net

Qatar

Al-Badi Trading Co.

Location: Doha, Qatar
Phone: 974-4320715
Fax: 974-4442888

Mantech

Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649

Russia

Standarte

Location: Starbeevo, Moscow region, Russia
Phone: 7 095 575 67 23
Fax: 7 095 575 39 77
E-mail: info@standarte.ru
Web: www.standarte.ru

Saudi Arabia

Mantech

Location: Dubai, United Arab Emirates
Phone: (971) 4-3332-542
Fax: (971) 4-3330-649

Samaco Marine Division

Location: Alnahdah dis Jeddah, Saudi Arabia
Territory: Saudi Arabia
Phone: (966) 2-699-2300
Fax: (966) 2-699-1024

Scandinavia

Dometic Marine – Nordic Sales, Sales Company

Location: Halmstad, Sweden
Phone: 46 35165700
Fax: 46 35165710
E-mail: marine.info@dometic.se
Web: www.dometic.com

Singapore

Tritex Equipment PTE, Ltd.

Location: , Singapore
Territory: Singapore
Phone: (65) 6861-1188
Fax: (65) 6861-4263
E-mail: angilene@tritex.com.sg

Slovenia

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Location: Milano, Italy
Phone: 390 26172583
Fax: 390 266010223
E-mail: marine.info@dometic.it
Web: www.dometic.com

South Africa

C-Dynamics cc

Location: Cape Town, South Africa
Phone: 27 21 555 3232
Fax: 27 21 555 3230
E-mail: info@c-dynamics.co.za
Web: www.c-dynamics.co.za

Spain

Acastimar

Location: Tarragona, Spain
Phone: 349-77-362118
Fax: 349-77-362687
E-mail: acastimar@acastimar.com

Dometic Marine – France, Sales Company

Location: Plailly, France
Phone: Cell: 0033 (0)680 415 543
Fax: 0033 (0)344 633 518
E-mail: marine.sales@dometic.fr
Web: www.dometic.com

Techno Electronica Naval, S.A.

Location: Barcelona, Spain
Phone: 34 (93) 664-49-70
Fax: 34 (93) 665-76-26
E-mail: ten@ten-sa.com
Web: www.ten-sa.com

Sri Lanka

G&M Enterprises

Location: Borella-Colombo 8, Sri Lanka
Phone: 94 11 2691966
Fax: 94 11 2691751
E-mail: gandM@sltnet.lk

Sweden

Dometic Marine – Nordic Sales, Sales Company

Location: Halmstad, Sweden
Phone: 46 35165700
Fax: 46 35165710
E-mail: marine.info@dometic.se
Web: www.dometic.com

Thailand

Thai Kolon Co. Ltd.

Location: Bangkok, Thailand
Phone: 66-2-745-6468-77 (10 lines)
Fax: 66-2-745-6152
E-mail: thkolon@ji-net.com

Trinidad & Tobago

Nau-T-Kol Marine Refrigeration

Location: Chaguaramas, Trinidad
Phone: 868-634-2174
Fax: 868-634-2174
E-mail: nautkol@cablenett.net
Web: www.nautkol.com

Turkey

Dometic Marine - United Kingdom, Sales Company

Location: Poole, Dorset, England
Phone: 44 (0) 870 3306101
Fax: 44 (0) 870 3306102
E-mail: sales@dometicmarine.com
Web: www.dometic.com

Egemar Muhendiscik Ltd.

Location: Tuzla, Istanbul, Turkey
Phone: 90 216 494 2168
Fax: 90 216 494 2218
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Web: www.egemar.com.tr

U.S. Virgin Islands

Reefco, Inc.

Location: , St. Thomas, US Virgin Islands
Phone: (340) 776-0038
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Web: www.reefco.net

Ukraine

Standarte

Location: Starbeevo, Moscow region, Russia
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Web: www.standarte.ru

United Arab Emirates

Mantech

Location: Dubai, United Arab Emirates
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Fax: (971) 4-3330-649

United Kingdom

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Uruguay

Baron SRL

Location: San Fernando, Buenos Aires, Argentina
Phone: (54) 11-4-580-5556
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Venezuela

Rich Marine Center

Location: Complejo Turistico El Morro, Venezuela, South America
Phone: (58) 281 2181630
Fax: (58) 281-2811630
E-mail: richmarine@telcel.net.ve
Web: www.tuyate.net

West Indies

Aboard Refrigeration

Location: , Antigua, West Indies
Phone: (268) 460-1690
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Web: www.aboardrefrigeration.com

Regis Electronics (St Lucia) LTD.

Location: St. Lucia, West Indies
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Mantech

Location: Dubai, United Arab Emirates
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