

P200W Series Dehydrator



User's Guide

Models covered:

P200W

P208W

P200WA



1. Welcome & Congratulations

Congratulations on your purchase of a new PUREGAS P200W Series Dehydrator! We here at PUREGAS are very proud of our products and we are committed to providing you with the best value and service possible.

We are sure that you will be satisfied with your new Dehydrator and would like to thank you for choosing PUREGAS for your Dehydrator requirements. We also hope that you will continue to choose us for your future air pressure and related product purchases.

For information about this and other PUREGAS products, please visit us on the web at:

www.puregas.com

2. Introduction

PLEASE READ THIS USER'S GUIDE THOROUGHLY AND SAVE FOR FUTURE REFERENCE.

This User's Guide is provided for the benefit of our customers and contains information and direction specific to the PUREGAS P200W Series Dehydrator. Models covered include P200W, P208W, and P200WA. This guide will cover topics including: safety, specifications, installation, registration, operation, testing, service, and troubleshooting issues. Observation and compliance with this User's Guide will ensure the maximum life and efficiency of your Dehydrator.

This User's Guide should be read thoroughly prior to installing or operating the Dehydrator in order to become familiar with the recommended procedures. This will minimize the possibility of personal injury or damage to the unit due to improper operation or handling.

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4. Safety & Warning Information

This section contains general information about safety and warning points to consider and adhere to during installation, and operation of your Dehydrator. PLEASE READ THIS SECTION BEFORE PERFORMING ANY OPERATION OR PROCEDURE ON YOUR DEHYDRATOR.

Additional warnings specific to an operation or procedure will also be presented throughout the following sections. These will include the  symbol as well as a label of “**WARNING!**”, “**CAUTION!**”, or “**IMPORTANT!**”. Please be sure to pay close attention for these warnings and read them as you encounter them.



WARNING!

For your safety, all the information in this User's Guide must be followed to minimize the risk of electrical shock, and prevent property damage or personal injury.



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, and testing of this Dehydrator require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



WARNING!

DO NOT CONNECT THE DEHYDRATOR TO THE SUPPLY LINE UNTIL THE HUMIDITY READING IS 5% OR LESS.

**CAUTION!**

Proper Installation as outlined in this User's Guide is extremely important to ensure the reliability and longevity of the equipment as well as prevent damage or personal injury.

**CAUTION!**

Incoming power to Dehydrator must be:

- 10 amp service recommended
- 24 VDC for P200W model (7 Amp slow blow fuse)
- 48 VDC for P208W model (7 amp slow blow fuse)
- 85 - 264 VAC, 1 Phase for P200WA model
(5 amp slow blow fuse)

**CAUTION!**

Using the internal pressure relief valve equipped with this unit as the only means of over pressurization protection for the connected system is not advised.

**IMPORTANT!**

Removing the cover or performing procedures not described in this User's Guide WILL VOID THE WARRANTY.

5. Overview & Specifications

5.1 Product Description

The P200W Series Dehydrator from PUREGAS is designed to intake wet ambient air and remove the moisture for delivery to applications requiring an on-demand source of dry, pressurized air. This process is fully automatic and will remain consistent with no required periodic maintenance. This Dehydrator is designed specifically for indoor use.

The P200W Series Dehydrator employs a fully digital operating platform offering the most accurate readings of Dehydrator variables.

5.2 Key Features

- The most advanced Waveguide Dehydrator
- SNMP communication compatible
- Programmable pressure range from 0.10 – 8.00 PSIG
- Maintenance free
- Ultra quiet compressor
- Compact and lightweight
- Available in AC and DC models
- Remote alarm reset capabilities
- Programmable duty cycle alarm
- Remote access through HTML interface
- Digital display of operating parameters
- Available in metric version
- Air delivery up to 200 SCFD @ 8.00 PSIG
- Versatile bench top, rack, or wall installation
- Installation mounting hardware standard

5.3 P200W Series Dehydrator Models

Model	Description
P200W	24 VDC (22 – 26 VDC)
P208W	48 VDC (36 – 72 VDC)
P200WA	85 – 264 VAC, 1 Phase

5.4 Technical Specifications

	P200W	P208W	P200WA
Power Requirements	24 VDC (22 – 26 VDC) (10 amp service with a 7 amp slow blow fuse recommended)	48 VDC (36 – 72 VDC) (10 amp service with a 7 amp slow blow fuse recommended)	85 – 264 VAC 1 Phase (10 amp service with a 5 amp slow blow fuse recommended)
Power Consumption	170 Watts (w/ Compressor running)		
Outlet Pressure Range	0.10 – 8.00 PSI (adjustable)		
Output Capacity	Up to 200 SCFD continuous (@ 8.00 PSIG)		
Outlet Air Humidity	Less than 2% RH to a dew point of -40°F		
Compressor Type	One-cylinder, DC voltage		
Dehydrating Method	Heated Desiccant		
Operating Temperature Range	40° to 85° F (optimal)		
Noise Level	<52 dBA at 10'		
Alarms	6 displayed alarms, LED indicator. Power fail and 2 common alarm connections		
Monitoring	Web Browser and SNMP compatible communications via Network IP		
Outlet Connection	1/4" or 3/8" Press-to-lock tube fitting		
Dimensions	17.25" D x 17.5" W x 6.75" H		
Net / Shipping Weight	23 lbs / 29 lbs		

6. Installing Your Dehydrator

6.1 Safety & Warning Information



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, and testing of this Dehydrator require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



CAUTION!

Proper Installation as outlined in this User's Guide is extremely important to ensure the reliability and longevity of the equipment as well as prevent damage or personal injury.



CAUTION!

Incoming power to Dehydrator must be:

- 10 amp service recommended
- 24 VDC for P200W model (7 Amp slow blow fuse)
- 48 VDC for P208W model (7 amp slow blow fuse)
- 85 - 264 VAC, 1 Phase for P200WA model
(5 amp slow blow fuse)



CAUTION!

Using the internal pressure relief valve equipped with this unit as the only means of over pressurization protection for the connected system is not advised.



IMPORTANT!

Removing the cover or performing procedures not described in this User's Guide WILL VOID THE WARRANTY.

6.2 Before You Begin

6.2.1 Carefully inspect the unit, including the shipping box as well as the Dehydrator for **ANY DAMAGE CAUSED BY SHIPPING**. If any shipping damage is detected, it is important to file a claim with the shipping company prior to continuing the installation procedures.

6.2.2 Read the entire *Installing Your Dehydrator* Section to familiarize yourself with the components and procedures before performing the Dehydrator installation.

6.2.3 Verify the installation location of the Dehydrator:

6.2.3.1 Well ventilated and free from abrasive dust or chemicals.

6.2.3.2 Ambient temperature is between 40° and 85° F (optimal).

NOTE: Higher temperatures will decrease component lifespan.

6.2.3.3 Meets the following power requirements:

- 10 amp service recommended
- 24 VDC for P200W model (7 Amp slow blow fuse)
- 48 VDC for P208W model (7 amp slow blow fuse)
- 85 - 264 VAC, 1 Phase for P200WA model
(5 amp slow blow fuse)

6.2.4 Notify the alarm center of the installation and potential for alarms during the process (if applicable).

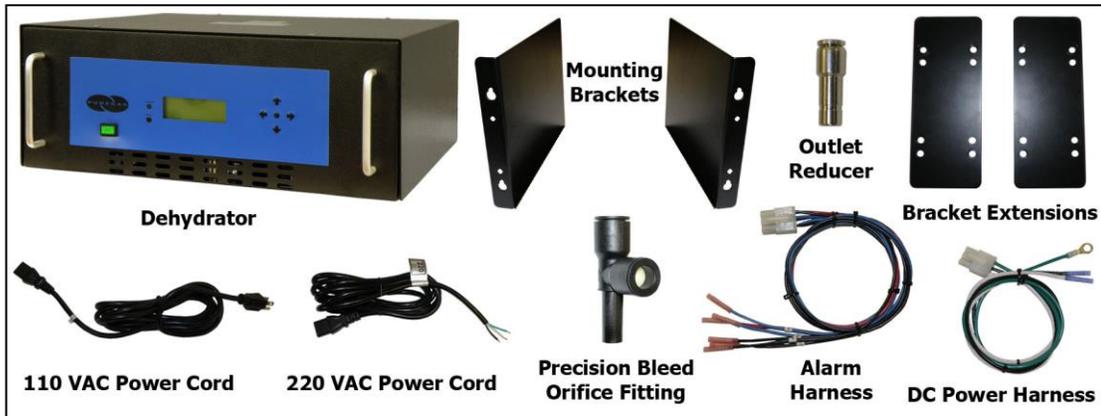
6.2.5 If you are unable to complete any of the installation steps as described, please refer to the Troubleshooting Your Dehydrator Section 11 for further guidance.



WARNING!

DO NOT CONNECT THE DEHYDRATOR TO THE SUPPLY LINE UNTIL THE HUMIDITY READING IS 5% OR LESS.

6.3 Included Contents



- (1) P200W Series Dehydrator
- (1) Installation Guide (not shown)
- (1) User's Guide (not shown)
- (2) Mounting Brackets
- (1) Package containing (for P200WA model):
 - Power Cord – (1)110 VAC and (1) 220 VAC
- (1) Package containing:
 - (2) Bracket Extensions (for 23" rack)
 - (1) Outlet Reducer (for 1/4" air supply line)
 - (1) DC Power Harness (for P200W and P208W models)
 - (1) Alarm Harness
 - (1) Precision Bleed Orifice Fitting
 - (1) Package of mounting hardware (not shown)

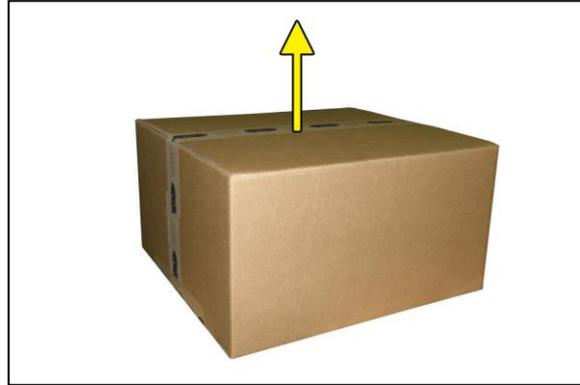
6.4 Required Tools and Materials

- Medium Phillips screwdriver
- 7/16" wrench
- Terminal crimpers
- Box cutting knife

6.5 Installation Steps

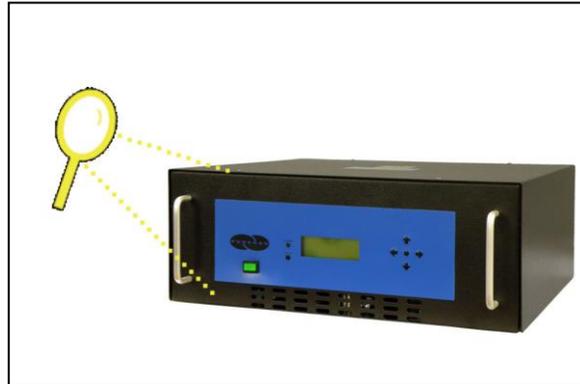
- 6.5.1** Use a Box Cutting Knife to open and remove the Dehydrator and all contents from packaging.

NOTE: If ANY SHIPPING DAMAGE is detected, file a claim with the shipping company prior to continuing the installation procedures.



- 6.5.2** Inspect the Dehydrator for any damage and verify included contents (Section 6.3).

NOTE: If ANY SHIPPING DAMAGE is detected, file a claim with the shipping company prior to continuing the installation procedures.



- 6.5.3** Place the Dehydrator at the operating location:

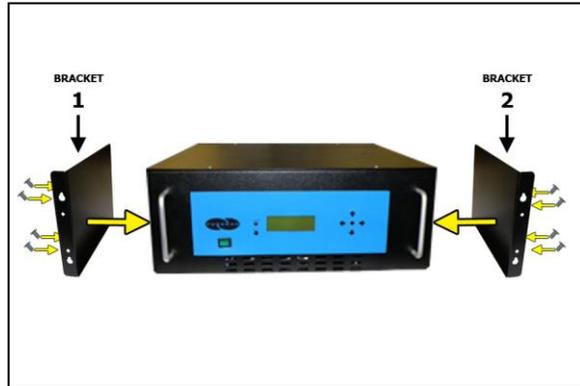
For Bench Top Installation:

- a.** Place the Dehydrator on a level surface.



For Rack Mounted Installation:

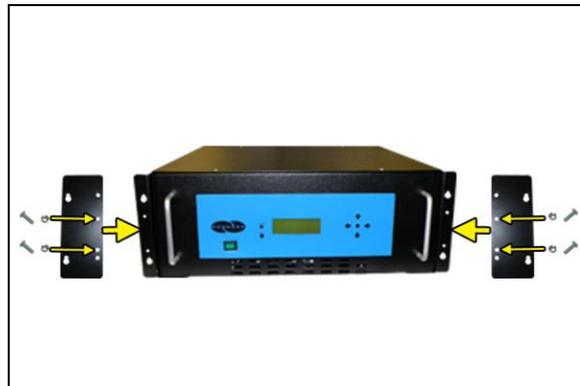
- a. Attach Mounting Brackets to the Dehydrator with mounting flanges facing forward as shown. Use **Hardware A** and Phillips Head Screwdriver.



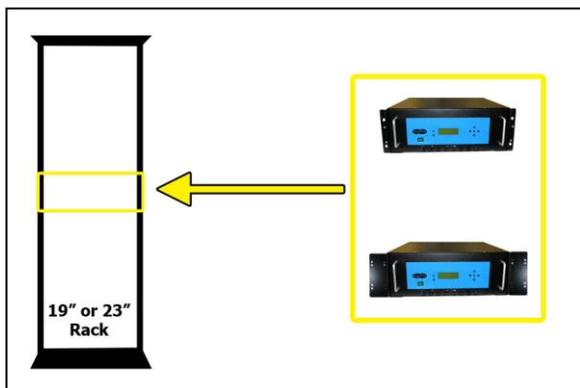
NOTE: Mounting Brackets

can be attached in a number of positions; front-to-back. Choose the mounting position that meets your rack mounting requirement.

- b. For installation on a 23" rack, attach the Bracket Extensions to the Mounting Brackets as shown. Use **Hardware B**, Phillips Head Screwdriver, and 7/16" Wrench.



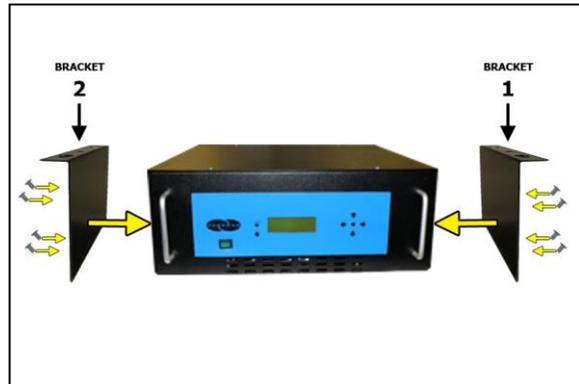
- c. Install the Dehydrator on a 19" or 23" Rack. Use **Hardware C** and Phillips Head Screwdriver.



For Vertical / Wall Mounted Installation:**IMPORTANT!**

PUREGAS recommends keeping the area beneath a vertical mounted dehydrator clear.

- a. Attach Mounting Brackets to the Dehydrator with mounting flanges facing UP as shown. Use **Hardware A** and Phillips Head Screwdriver.



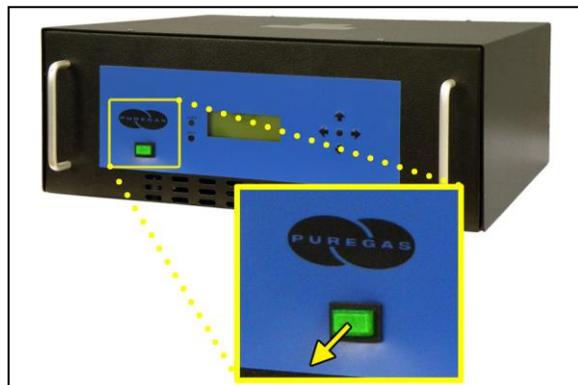
NOTE: Make sure the Mounting Brackets are attached in the forward-most mounting position.

- b. Install the Dehydrator on a wall with the Display Panel facing UP. (Wall mounting hardware not supplied)

NOTE: To pre-drill a set of holes, horizontal spacing between bracket holes is 18-3/8" on center.

- 6.5.4** Verify the Dehydrator is powered **OFF**.

NOTE: **POWER** Button will be in the Out position and **WILL NOT** be illuminated when power is **OFF**.

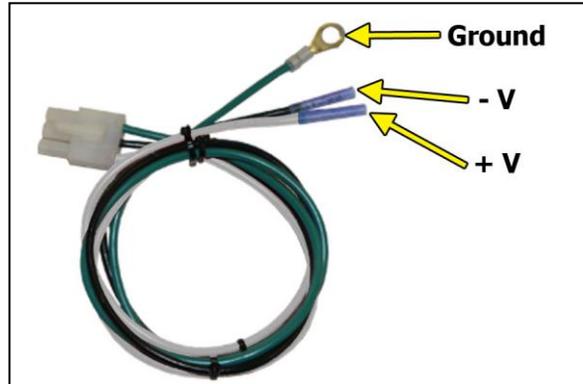


6.5.5 Connect Power to the Dehydrator:

For 24 VDC and 48 VDC Dehydrators:

- a. Using Terminal Crimpers, wire the DC Power Harness to power supply:

WHITE: Positive Voltage
BLACK: Negative Voltage
GREEN: Ground (Frame or Power Supply Ground)



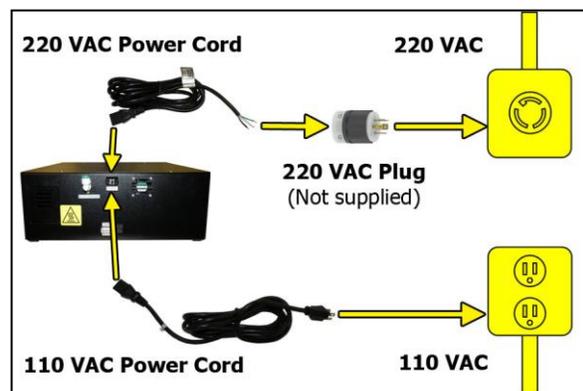
- b. Connect the DC Power Harness to the Power Port on the back of the Dehydrator.



For AC Dehydrators:

- a. Plug in or wire the AC Power Cord to power supply:

BLACK: Line
WHITE: Neutral
GREEN: Ground



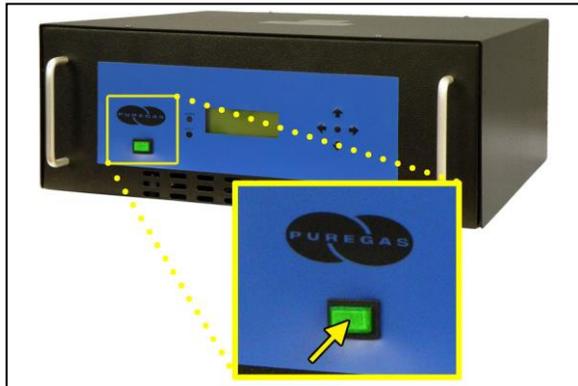
- b. Connect the AC Power Cord (110 VAC or 220 VAC) to the Power Port on the back of the Dehydrator.



6.5.6 Power the Dehydrator ON.

NOTE: **POWER** Button and Display Screen **WILL** be illuminated when power is ON. Otherwise, verify wiring (Section 6.5.5).

NOTE: Compressor should run briefly.

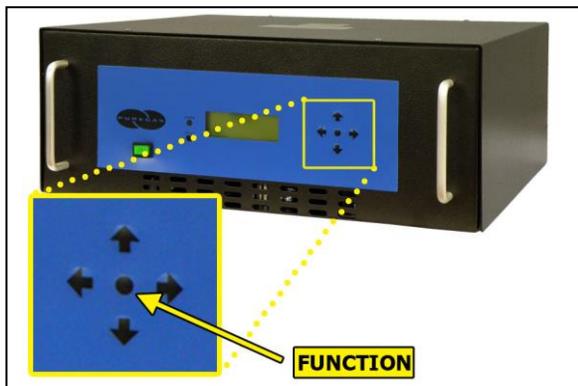


6.5.7 Remove the Outlet Port Plug.

NOTE: Compressor should run continuously once this plug is removed.



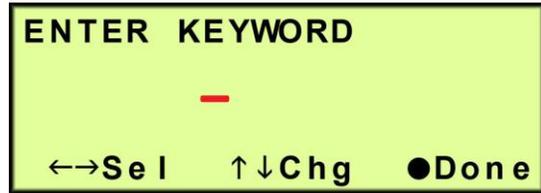
6.5.8 Locate and familiarize yourself with the Dehydrator Control Buttons.



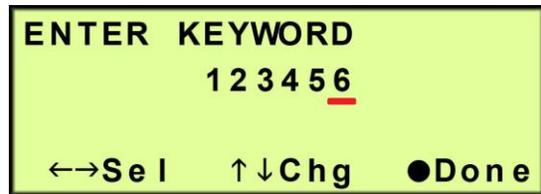
6.5.9 Press the Up (↑) Arrow Button to access the Set Up Menu.

6.5.10 Enter the Keyword (default Keyword is 123456) –

6.5.10.1 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



6.5.10.2 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.



6.5.10.3 Press the Function (●) Button when Done.

6.5.11 Press the Up (↑) & Down (↓) Arrow Buttons to move the underscore beneath the “S” in System Operations.



6.5.12 Press the Function (●) Button to Enter System Operations.

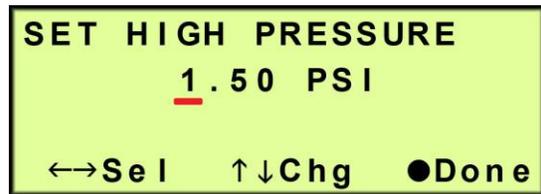
The System Operations Section is used to set the range for the system pressure. When the system pressure reaches the High Pressure setting, the compressor will turn OFF. When the system pressure reaches the Low Pressure setting, the compressor will turn ON.

6.5.13 Set High Pressure (default setting is 1.50 PSI) –

6.5.13.1 Press the Function (●) Button to Set.



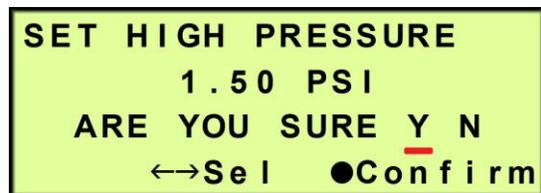
6.5.13.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



6.5.13.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

6.5.13.4 Press the Function (●) Button when Done.

6.5.13.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).

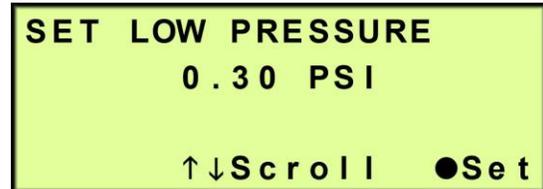


6.5.13.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

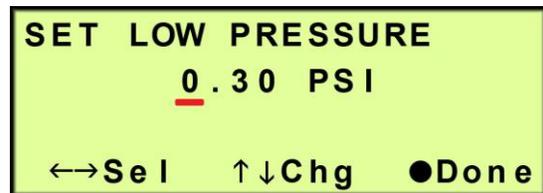
6.5.14 Press the Up (↑) Arrow Button to access the Set Low Pressure screen.

6.5.15 Set Low Pressure (default setting is 0.30 PSI) –

6.5.15.1 Press the Function (●) Button to Set.



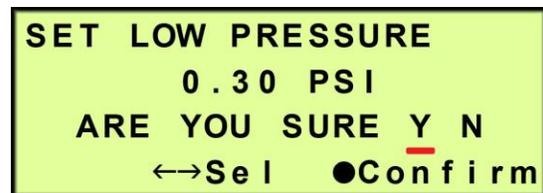
6.5.15.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



6.5.15.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit

6.5.15.4 Press the Function (●) Button when Done.

6.5.15.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).



6.5.15.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

6.5.16 Press the Up (↑) Arrow Button to access the Set Up Menu screen.

6.5.17 Set Network Configuration (if applicable) -

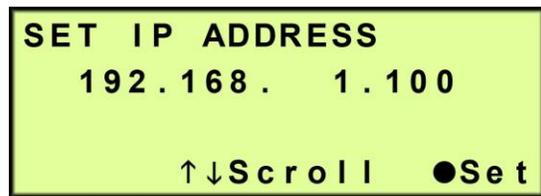
6.5.17.1 Press the Up (↑) & Down (↓) Arrow Buttons to move the underscore beneath the “N” in Network Setup.



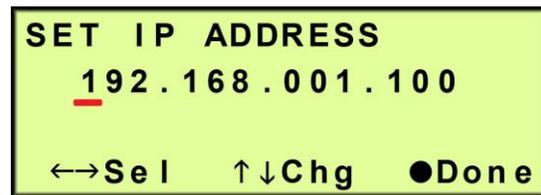
6.5.17.2 Press the Function (●) Button to Enter Network Setup.

6.5.17.3 Set IP Address (default is 192.168.1.100) -

6.5.17.3.1 Press the Function (●) Button to set the IP Address.



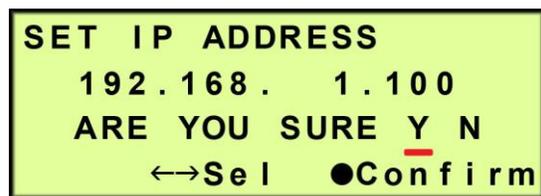
6.5.17.3.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



6.5.17.3.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

6.5.17.3.4 Press the Function (●) Button when Done.

6.5.17.3.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).



6.5.17.3.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

6.5.17.4 Press the Up (↑) Arrow Button to scroll to the Set Subnet Mask screen.

6.5.17.5 Set Subnet Mask (default is 255.255.255.000) -

6.5.17.5.1 Press the Function (●) Button to Set the Subnet Mask.



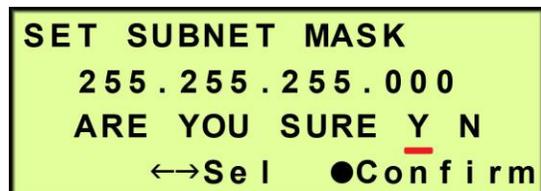
6.5.17.5.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



6.5.17.5.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

6.5.17.5.4 Press the Function (●) Button when Done.

6.5.17.5.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).

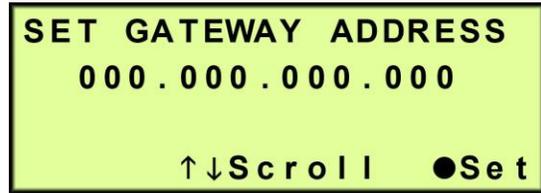


6.5.17.5.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

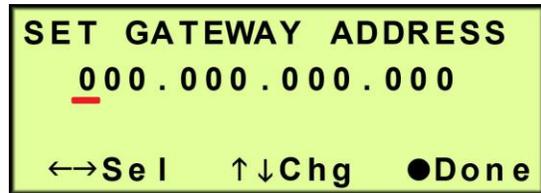
6.5.17.6 Press the Up (↑) Arrow Button to scroll to the Set Gateway Address screen.

6.5.17.7 Set Gateway Address (default is 000.000.000.000) -

6.5.17.7.1 Press the Function (●) Button to Set the Gateway Address.



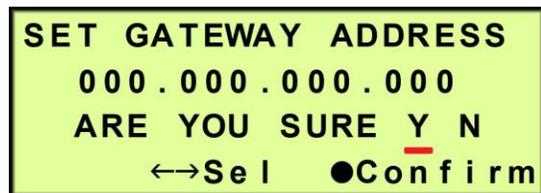
6.5.17.7.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



6.5.17.7.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

6.5.17.7.4 Press the Function (●) Button when Done.

6.5.17.7.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).

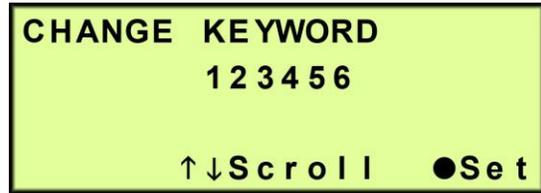


6.5.17.7.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

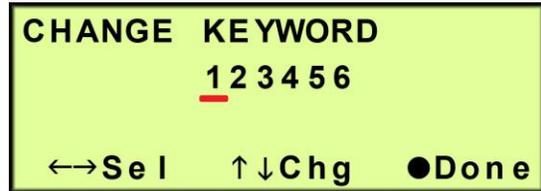
6.5.17.8 Press the Up (↑) Arrow Button to scroll to the Change Keyword screen.

6.5.17.9 Change Keyword (default is 123456)

6.5.17.9.1 Press the Function (●) Button to change the Keyword.



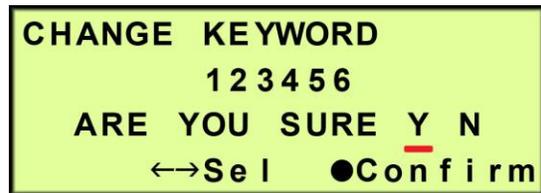
6.5.17.9.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



6.5.17.9.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

6.5.17.9.4 Press the Function (●) Button when Done.

6.5.17.9.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).



6.5.17.9.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

6.5.17.10 Press the Up (↑) Arrow Button to scroll to the Set Up Menu screen.

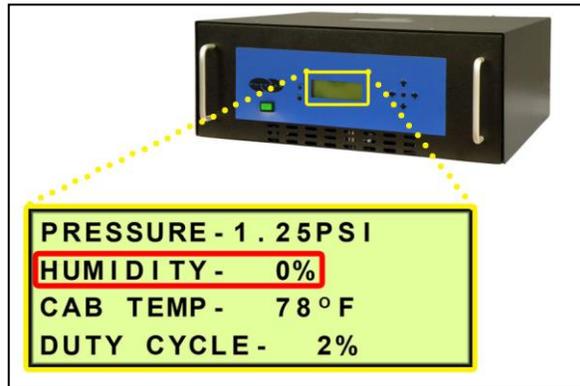
6.5.18 Press the Left (←) Arrow Button to Escape from Set Up Menu and return to the information screens.



6.5.19 Connect a Network IP cable to the UTP Port on the back of the Dehydrator (if applicable).



6.5.20 Let Dehydrator run until the Humidity is **5%** or below. (May take 15 – 20 minutes).
NOTE: Press the **RESET** Button if Dehydrator goes into **SHUTDOWN**.



WARNING!

DO NOT CONNECT THE DEHYDRATOR TO THE SUPPLY LINE UNTIL THE HUMIDITY READING IS 5% OR LESS.

6.5.21 Connect the Precision Bleed Orifice Fitting to the Dehydrator Outlet Port Fitting.

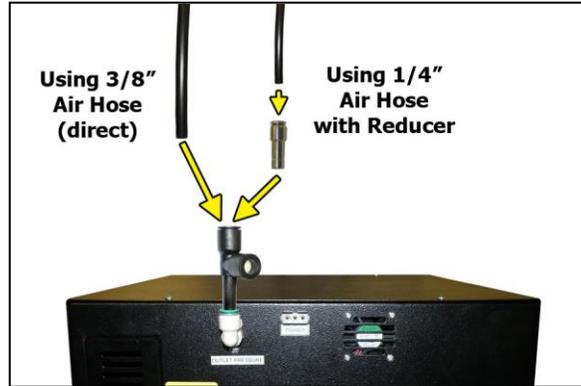


IMPORTANT!

Installing the Precision Bleed Orifice Fitting will allow Dehydrator to have a constant flow preventing high humidity.

6.5.22 Connect the air supply line to the Dehydrator. (Use 1/4" Reducer as required.)

NOTE: Compressor should run until the High Pressure setting (Section 6.5.13) is reached.



6.5.23 Press the **RESET** Button to clear any alarms triggered during installation.



6.5.24 Connect the Dehydrator to Alarm Monitoring (if applicable) –

6.5.24.1 Wire the Alarm Harness to monitoring device using the table below for reference.

	Wire #	Wire Color	Function
Power Fail Alarm	1	RED	SHORT on Alarm
	4	BLACK	
Common Alarm	2	BLACK	SHORT on Alarm
	5	BLUE	
Common Alarm	3	BLUE	OPEN on Alarm
	6	BLACK	

- 6.5.24.2** Connect the Alarm Harness to the Alarm Port on the back of the Dehydrator.



- 6.5.25 REGISTER YOUR DEHYDRATOR.** *See Section 7. for details.*

6.6 Installation Checklist

- No shipping damage was detected.
- Dehydrator location meets the following requirements:
 - Well ventilated
 - Free from abrasive dust or chemicals
 - Ambient temperature is between 40° and 85° F (optimal)
- High & Low Pressure was set.
- Network IP, Subnet, and Gateway Addresses were set (if applicable).
- Keyword changed (if applicable).
- Network IP Cable connected to Dehydrator (if applicable).
- Dehydrator connected to alarm monitoring (if applicable).
- No alarms are present on the Display Panel.

7. Registering Your Dehydrator

Please take a moment to register your PUREGAS P200W Series Dehydrator. Registering is necessary to activate the Limited Warranty on your product. Once you register, you are eligible to receive free technical support, as well as updates concerning your PUREGAS products.

Register Online at www.puregas.com/registration

Or by Phone 1-800-521-5351 (option 2)

Have the following information available:

Model #: _____ **Serial #:** _____

Company Name: _____ **Location Name:** _____

Shipping Address: _____

City: _____ **State:** _____ **Zip Code:** _____

Contact Name: _____ **Phone #:** () - ext. _____

Email: _____

8. Operating Your Dehydrator

8.1 Safety & Warning Information



WARNING!

For your safety, all the information in this User's Guide must be followed to minimize the risk of electrical shock, and prevent property damage or personal injury.



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, and testing of this Dehydrator require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



IMPORTANT!

Removing the cover or performing procedures not described in this User's Guide WILL VOID THE WARRANTY.

8.2 Connecting an Air Supply Line



WARNING!

DO NOT CONNECT THE DEHYDRATOR TO THE SUPPLY LINE UNTIL THE HUMIDITY READING IS 5% OR LESS.

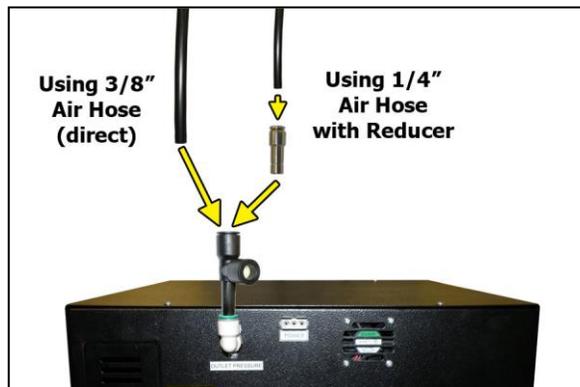
- 8.2.1** Connect the Precision Bleed Orifice Fitting to the Dehydrator Outlet Port Fitting.



IMPORTANT!

Installing the Precision Bleed Orifice Fitting will allow Dehydrator to have a constant flow preventing high humidity.

- 8.2.2** Connect the air supply line to the Dehydrator. (Use 1/4" Reducer as required.)



8.3 Powering the Dehydrator ON & OFF



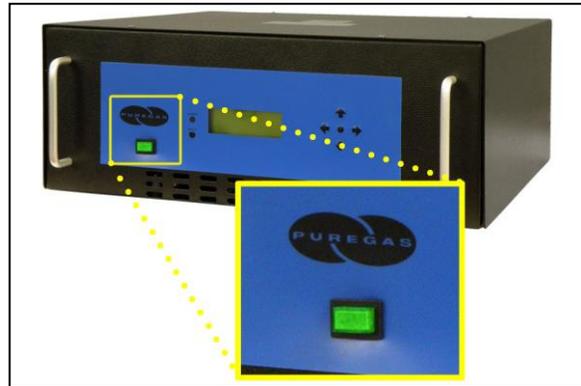
CAUTION!

Incoming power to Dehydrator must be:

- 10 amp service recommended
- 24 VDC for P200W model (7 Amp slow blow fuse)
- 48 VDC for P208W model (7 amp slow blow fuse)
- 85 - 264 VAC, 1 Phase for P200WA model
(5 amp slow blow fuse)

8.3.1 Press the **POWER** Button.

NOTE: **POWER** Button and Display Screen **WILL** be illuminated when power is **ON**.

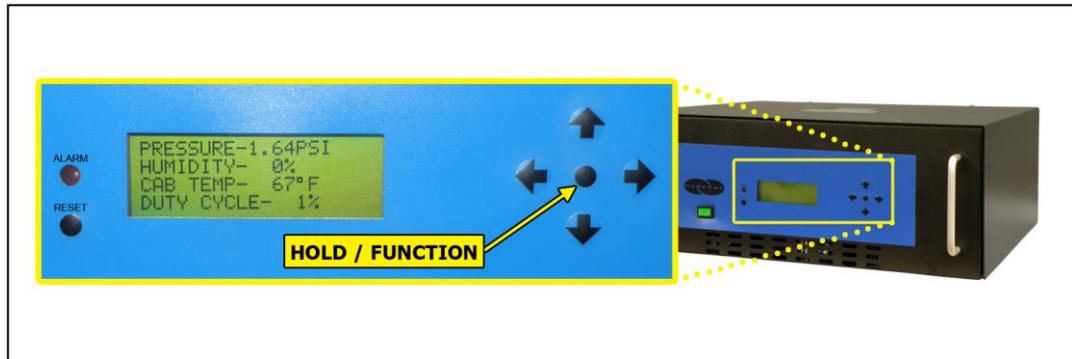


8.4 Using the Front Panel Display



CAUTION!

The Display Screen is covered by a clear protective layer that guards against Electrostatic Discharge (ESD). **DO NOT REMOVE THIS LAYER.**



8.4.1 ALARM LED – Indicates an alarm is present.

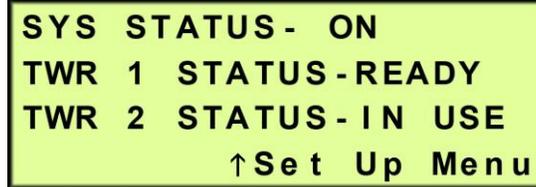
8.4.2 RESET Button – Clears an alarm and allows the system to continue operating.

8.4.3 HOLD / FUNCTION Button – Freezes the current information screen on the display. When pressed again, it will allow the information screens to begin cycling again. Also used as a Function Button in the Set Up Menu screens.

8.4.4 Arrow Buttons – Used to access, navigate, and change values in the Set Up Menu screens.

8.4.5 Display Screen - Shows the current Dehydrator readings and status. Will cycle between the following information screens (unless the **HOLD** Button has been pressed):

8.4.5.1 SYS STATUS Screen



The screenshot shows a green rectangular display area with black text. The text is as follows:

```

SYS STATUS - ON
TWR 1 STATUS - READY
TWR 2 STATUS - IN USE
      ↑ Set Up Menu
  
```

SYS STATUS - Running Status of the system:

- **ON** – System is online and drying air.
- **SHUTDOWN** – System is shutdown as a result of a critical alarm condition.
- **OPN CRCT** – There is a disconnected or faulty wire. The system will continue to operate.

TWR 1 – The current operating status of Tower 1:

TWR 2 – The current operating status of Tower 2:

- **IN USE** – Tower is dry and being used to supply air.
- **READY** – Tower is dry but not currently supplying air.
- **REGEN** – Tower is in regeneration mode.
- **INITIAL** – Tower is not determined to be dry or wet, but is being used to supply air.
- **WAITING** – Tower is not determined to be dry or wet, and is not currently supplying air.
- **SVC RQD** – Tower requires service as a result of a tower fail alarm condition:
 - Heater failure
 - Overheating
 - Fail to cool

8.4.5.2 PRESSURE Screen

PRESSURE - 1 . 25 PSI
HUMIDITY - 0%
CAB TEMP - 78 ° F
DUTY CYCLE - 2%

PRESSURE – Current pressure of the system (will fluctuate between the Set Low Pressure and Set High Pressure values).

HUMIDITY – Humidity level of the Dehydrator.

CAB TEMP – Temperature of the Dehydrator cabinet compartment.

DUTY CYCLE – The percentage of time the compressor is ON versus time it is OFF in a given period of time.

8.5 Identifying Dehydrator Alarms

8.5.1 High Pressure Alarm -

Occurs when the **PRESSURE** rises above the alarm set point for more than one (1) minute. (Default setting is 3.00 PSI)

PRESSURE - 3 . 25 PSI	HALR
HUMIDITY - 0%	
CAB TEMP - 78 ° F	
DUTY CYCLE - 2%	

See Section 11.5 for troubleshooting information.

8.5.2 Low Pressure Alarm -

Occurs when the **PRESSURE** drops below the alarm set point for more than one (1) minute. (Default setting is 0.15 PSI)

PRESSURE - 0 . 10 PSI	LALR
HUMIDITY - 0%	
CAB TEMP - 78 ° F	
DUTY CYCLE - 2%	

See Section 11.7 for troubleshooting information.

8.5.3 High Humidity Alarm –

Occurs when the **HUMIDITY** level rises above the alarm set point. (Default setting is 7.0%)

PRESSURE - 1 . 25 PSI	
HUMIDITY - 11%	ALR
CAB TEMP - 78 ° F	
DUTY CYCLE - 2%	

If the humidity level exceeds the alarm set point for a period of time, the Dehydrator will go into **SHUTDOWN** to prevent the output of wet air.

See Section 11.9 for troubleshooting information.

8.5.4 High Cabinet Temperature Alarm -

Occurs when the **CAB TEMP** rises above the alarm set point for more than one (1) minute. (Default setting is 120° F)

PRESSURE - 1 . 25 PSI	
HUMIDITY - 0%	
CAB TEMP - 125 ° F	HALR
DUTY CYCLE - 2%	

If the cabinet temperature increases to 140° F or higher, the Dehydrator will go into **SHUTDOWN** to protect against damage due to overheating.

See Section 11.10 for troubleshooting information.

8.5.5 Low Cabinet Temperature Alarm -

Occurs when the **CAB TEMP** drops below the alarm set point for more than one (1) minute. (Default setting is 34° F)

PRESSURE - 1 . 25 PSI	
HUMIDITY - 0%	
CAB TEMP - 33 ° F	LALR
DUTY CYCLE - 2%	

If the cabinet temperature decreases to 34° F or lower, the Dehydrator will go into **SHUTDOWN** to protect against damage due to freezing.

See Section 11.11 for troubleshooting information.

8.5.6 Duty Cycle Alarm -

Occurs when the Duty Cycle rises above the alarm set point. (Default setting is 50%)

PRESSURE - 1 . 25 PSI	
HUMIDITY - 0%	
CAB TEMP - 78 ° F	
DUTY CYCLE - 52%	ALR

See Section 11.12 for troubleshooting information.

8.6 Accessing the Set Up Menu

The Dehydrator has three (3) Set Up Sections:

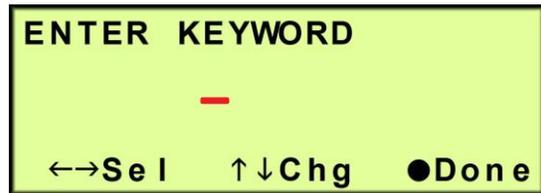
- **System Operations** – Used to set the range for the system pressure. When the system pressure reaches the High Pressure setting, the compressor will turn OFF. When the system pressure reaches the Low Pressure setting, the compressor will turn ON.
- **Alarm Set Points** – Used to set the alarm limits for specific readings. Once the limit is reached (or exceeded) this results in an alarm.
- **Network Setup** – Used to configure network settings including the IP Address, Subnet Mask, Gateway Address, and Keyword.

NOTE: Reference Appendix Section 12.1 for Limits, Defaults, and Formats.

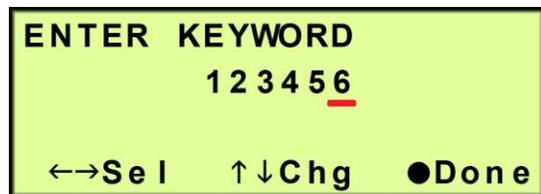
8.6.1 Press the Up (↑) Arrow Button to access the Set Up Menu.

8.6.2 Enter Keyword (default Keyword is 123456) –

8.6.2.1 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.

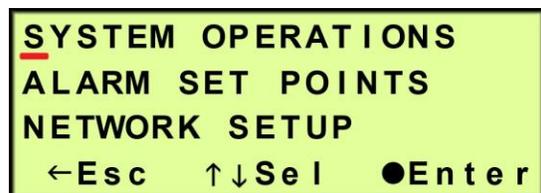


8.6.2.2 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.



8.6.2.3 Press the Function (●) Button when Done.

8.6.2.4 Press the Up (↑) & Down (↓) Arrow Buttons to move the underscore beneath the required menu option.



8.6.2.5 Press the Function (●) Button to Enter the menu selected or press the Left (←) Arrow Button to Escape to the information screens.

8.7 Using the System Operations Menu

In the Set Up Menu:

8.7.1 Press the Up (↑) & Down (↓)

Arrow Buttons to move the underscore beneath the “S” in System Operations.

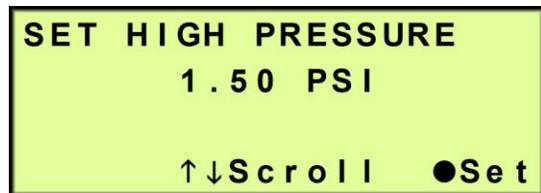


8.7.2 Press the Function (●) Button to Enter System Operations.

8.7.3 Set High Pressure (default setting is 1.50 PSI) –

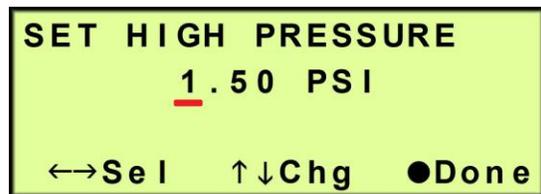
8.7.3.1 Press the Function (●)

Button to Set.



8.7.3.2 Press the Left (←) &

Right (→) Arrow Buttons to move the underscore beneath the digit to change.

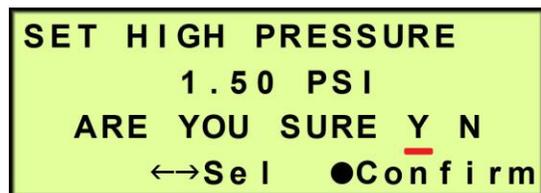


8.7.3.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

8.7.3.4 Press the Function (●) Button when Done.

8.7.3.5 Press the Left (←) &

Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).

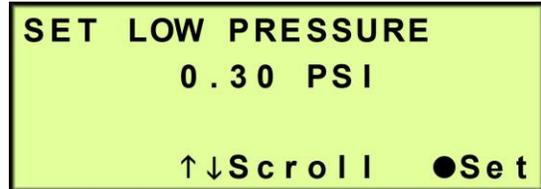


8.7.3.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

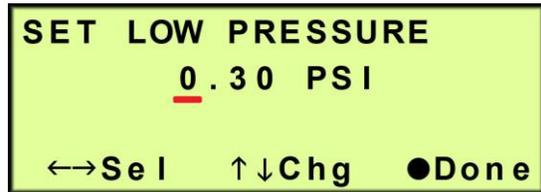
8.7.4 Press the Up (↑) Arrow Button to access the next screen.

8.7.5 Set Low Pressure (default setting is 0.30 PSI) –

8.7.5.1 Press the Function (●) Button to Set.



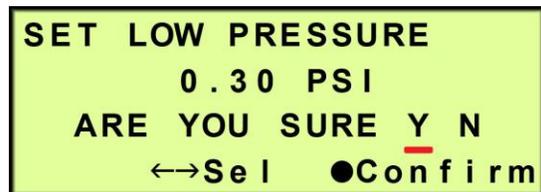
8.7.5.2 Press the Right (→) & Left (←) Arrow Buttons to move the underscore beneath the digit to change.



8.7.5.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

8.7.5.4 Press the Function (●) Button when Done.

8.7.5.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).



8.7.5.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

8.7.5.7 Press the Up (↑) Arrow Button to access the next screen.

8.8 Using the Alarm Set Points Menu

In the Set Up Menu:

8.8.1 Press the Up (↑) & Down (↓) Arrow Buttons to move the underscore beneath the “A” in Alarm Set Points.



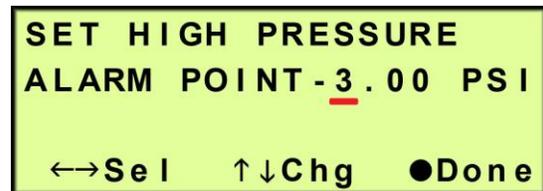
8.8.1.1 Press the Function (●) Button to Enter Alarm Set Points.

8.8.2 Set High Pressure Alarm Point (default setting is 3.00 PSI) -

8.8.2.1 Press the Function (●) Button to Set.



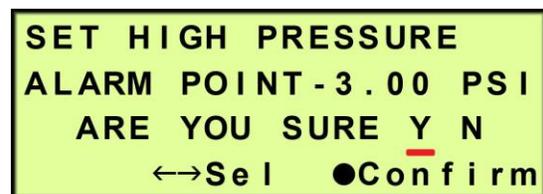
8.8.2.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



8.8.2.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

8.8.2.4 Press the Function (●) Button when Done.

8.8.2.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).

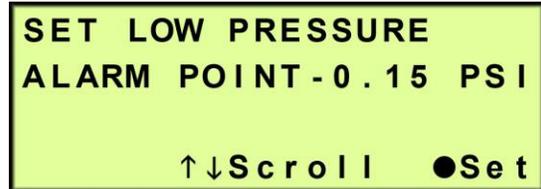


8.8.2.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

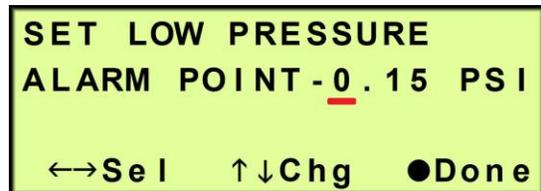
8.8.3 Press the Up (↑) Arrow Button to access the next screen.

8.8.4 Set Low Pressure Alarm Point (default setting is 0.15 PSI) -

8.8.4.1 Press the Function (●) Button to Set.



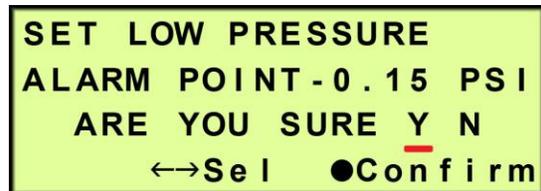
8.8.4.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



8.8.4.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

8.8.4.4 Press the Function (●) Button when Done.

8.8.4.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).

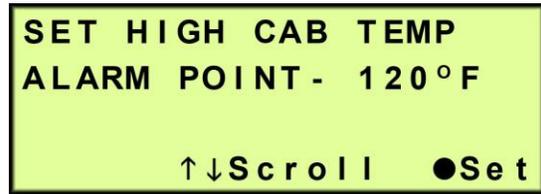


8.8.4.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

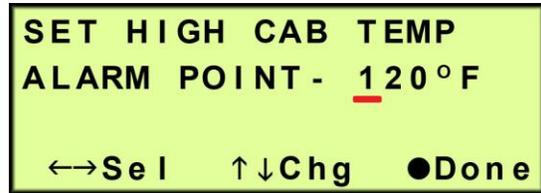
8.8.5 Press the Up (↑) Arrow Button to access the next screen.

8.8.6 Set High Cabinet Temperature Alarm Point (default setting is 120° F)

8.8.6.1 Press the Function (●) Button to Set.



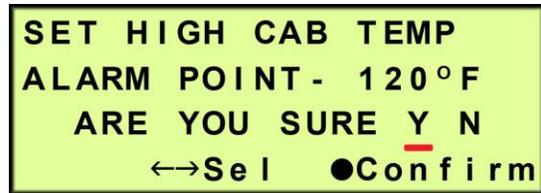
8.8.6.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



8.8.6.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

8.8.6.4 Press the Function (●) Button when Done.

8.8.6.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).

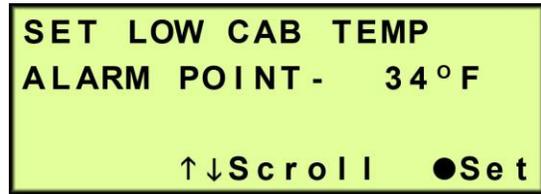


8.8.6.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

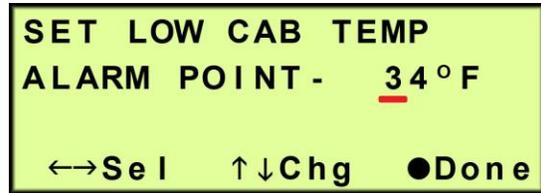
8.8.7 Press the Up (↑) Arrow Button to access the next screen.

8.8.8 Set Low Cabinet Temperature Alarm Point (default setting is 34° F)

8.8.8.1 Press the Function (●) Button to Set.



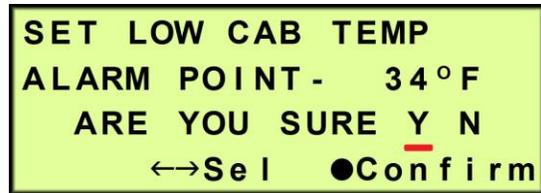
8.8.8.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



8.8.8.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

8.8.8.4 Press the Function (●) Button when Done.

8.8.8.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).



8.8.8.6 Press the Function (●) Button to confirm. This will lock in the new setting value.

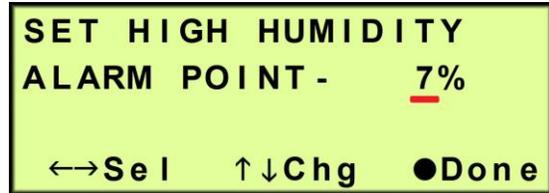
8.8.9 Press the Up (↑) Arrow Button to access the next screen.

8.8.10 Set High Humidity Alarm Point (default setting is 7%) –

8.8.10.1 Press the Function (●) Button to Set.



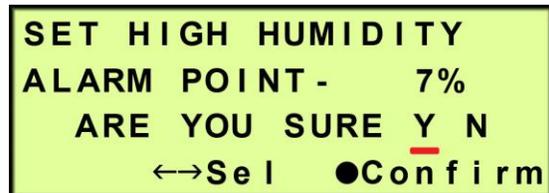
8.8.10.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



8.8.10.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

8.8.10.4 Press the Function (●) Button when Done.

8.8.10.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).



8.8.10.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

8.8.11 Press the Up (↑) Arrow Button to access the next screen.

8.8.12 Set High Duty Cycle Alarm Point (default setting is 50%) -

8.8.12.1 Press the Function (●) Button to Set.



8.8.12.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



8.8.12.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

8.8.12.4 Press the Function (●) Button when Done.

8.8.12.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).



8.8.12.6 Press the Function (●) Button to confirm. This will lock in the new setting value.

8.8.13 Press the Up (↑) Arrow Button to access the Set Up Menu screen.

8.9 Using the Network Setup Menu

In the Set Up Menu:

8.9.1 Press the Up (↑) & Down (↓)

Arrow Buttons to move the underscore under the "N" in Network Setup.

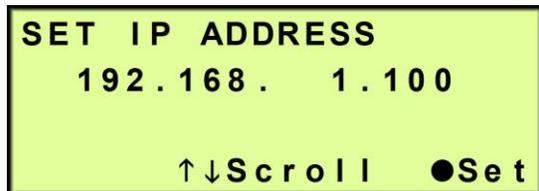


8.9.1.1 Press the Function (●) Button to Enter Network Setup.

8.9.2 Set IP Address (default is 192.168.1.100) -

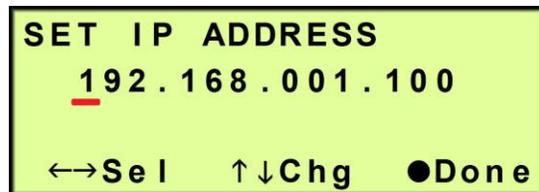
8.9.2.1 Press the Function (●)

Button to Set the IP Address.



8.9.2.2 Press the Left (←) &

Right (→) Arrow Buttons to move the underscore beneath the digit to change.



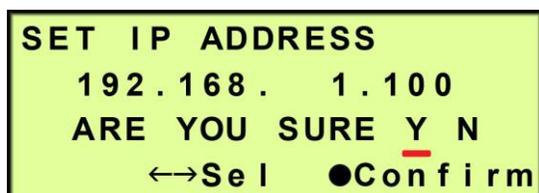
8.9.2.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

8.9.2.4 Press the Function (●) Button when Done.

8.9.2.5 Press the Left (←) &

Right (→) Arrow Buttons to move the underscore beneath the correct

confirmation choice (Yes or No).



8.9.2.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

8.9.3 Press the Up (↑) Arrow Button to access the next screen.

8.9.4 Set Subnet Mask (default is 255.255.255.000) -

8.9.4.1 Press the Function (●) Button to Set the Subnet Mask.



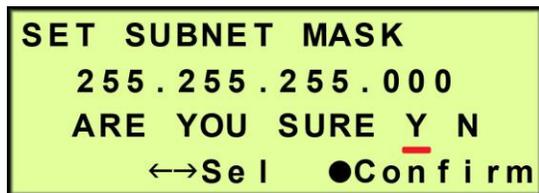
8.9.4.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



8.9.4.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

8.9.4.4 Press the Function (●) Button when Done.

8.9.4.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).

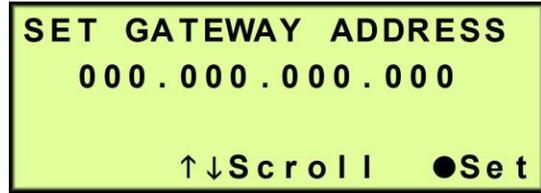


8.9.4.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

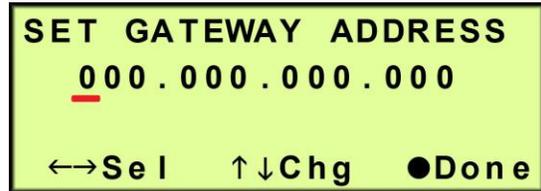
8.9.5 Press the Up (↑) Arrow Button to access the next screen.

8.9.6 Set Gateway Address (default is 000.000.000.000) -

8.9.6.1 Press the Function (●) Button to Set the Gateway Address.



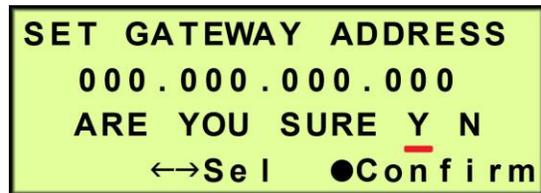
8.9.6.2 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the digit to change.



8.9.6.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

8.9.6.4 Press the Function (●) Button when Done.

8.9.6.5 Press the Left (←) & Right (→) Arrow Buttons to move the underscore beneath the correct confirmation choice (Yes or No).



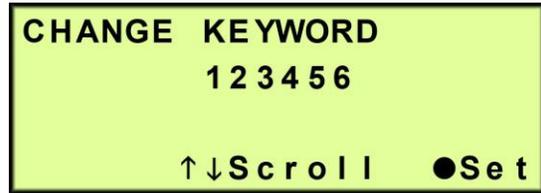
8.9.6.6 Press the Function (●) Button to Confirm. This will lock in the new setting value.

8.9.7 Press the Up (↑) Arrow Button to access the next screen.

8.9.8 Change Keyword (default is 123456)

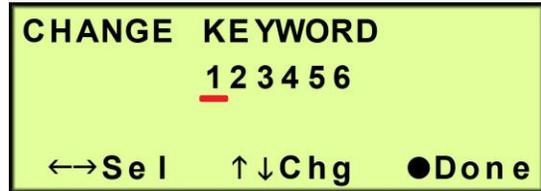
8.9.8.1 Press the Function (●)

Button to change the
Keyword.



8.9.8.2 Press the Left (←) &

Right (→) Arrow Buttons
to move the underscore
beneath the digit to change.

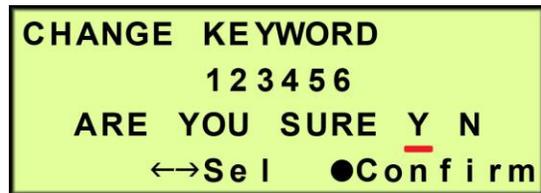


8.9.8.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of
the selected digit.

8.9.8.4 Press the Function (●) Button when Done.

8.9.8.5 Press the Left (←) &

Right (→) Arrow Buttons
to move the underscore
beneath the correct
confirmation choice (Yes or No).



8.9.8.6 Press the Function (●) Button to Confirm. This will lock in the new
setting value.

8.9.9 Press the Up (↑) Arrow Button to access the Set Up Menu screen.

8.10 Connecting Alarms

8.10.1 Wire the Alarm Harness to monitoring device using the table below for reference.

	Wire #	Wire Color	Function
Power Fail Alarm	1	RED	SHORT on Alarm
	4	BLACK	
Common Alarm	2	BLACK	SHORT on Alarm
	5	BLUE	
Common Alarm	3	BLUE	OPEN on Alarm
	6	BLACK	

8.10.2 Connect the Alarm Harness to the Alarm Port on the back of the Dehydrator.



8.11 Connecting an IP Cable

8.11.1 Connect an IP cable to the UTP Port on the back of the Dehydrator.



8.12 Connecting via Web Browser

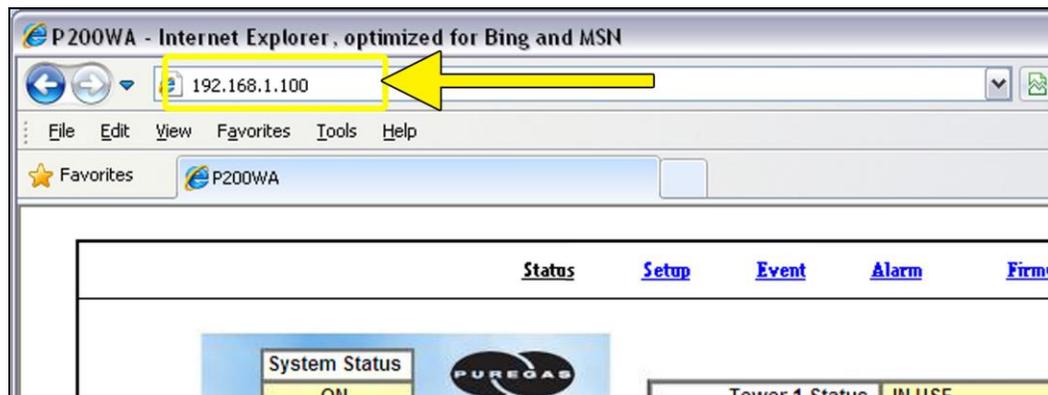
If the Dehydrator IS connected to an IP network:

- The Dehydrator must be configured with a valid IP Address, Subnet Mask, and Gateway Address for the network.
- An IP cable is connecting the Dehydrator to the network.
- Use a computer that is on the same network as the Dehydrator.
- Use Internet Explorer (6.0 or newer) or Mozilla Firefox Web Browser.

If the Dehydrator IS NOT connected to an IP network and has not been configured with IP information (Section 8.9) :

- Use the default IP Address (*192.168.1.100*) of the dehydrator to connect.
- Use a Cross-over IP Cable plugged directly into a Laptop/PC and the other end plugged into the UTP Port on the back of the Dehydrator.
- Configure the network card on the Laptop/PC to use the IP Address *192.168.1.101*. This will make the Laptop/PC compatible with the Dehydrator.
- Use Internet Explorer (6.0 or newer) or Mozilla Firefox Web Browser.

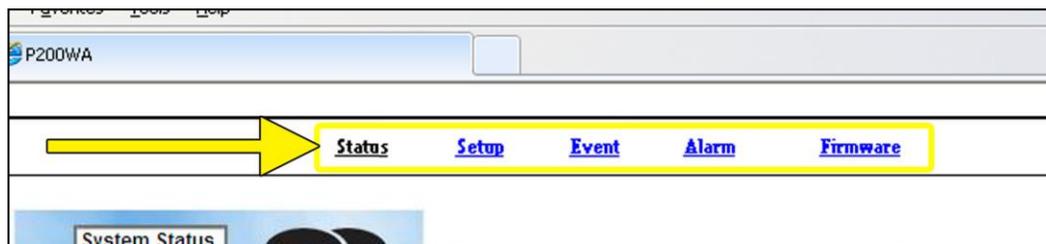
8.12.1 Type the IP Address of the P200W Series Dehydrator in the Address text box of the web browser.



The Web Browser connection offers five (5) screens to the user:

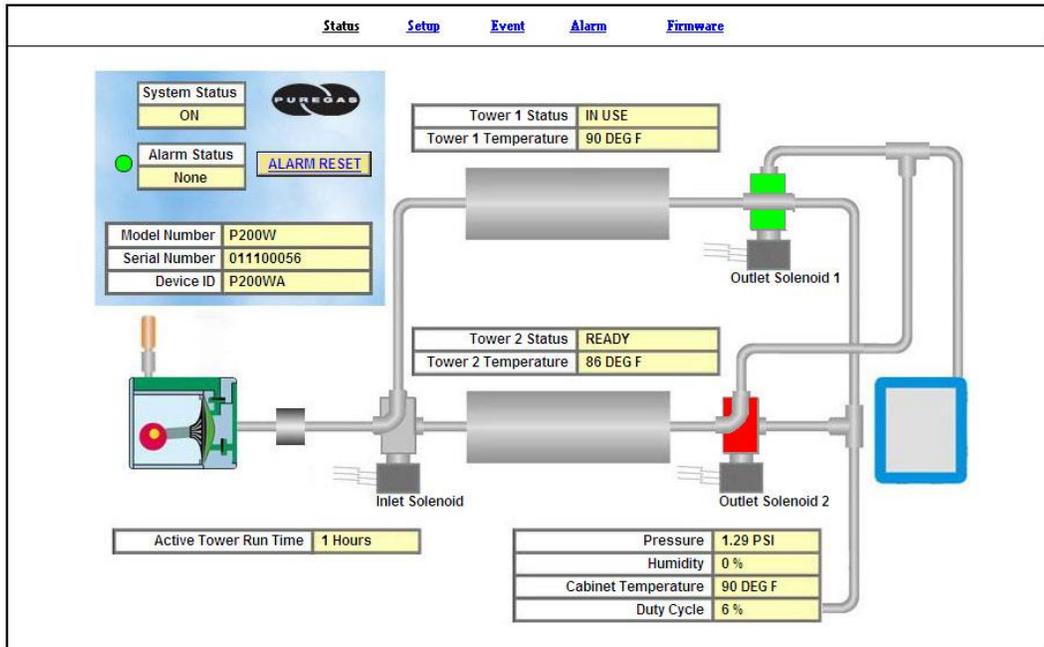
- **Status Screen** - Displays the readings and alarms monitored in the P200W Series Dehydrator. Provides remote ALARM RESET.
- **Setup Screen** - All configurations of Set Points, Setups, and Keyword can be made in this screen.
- **Event Screen** - Displays all events such as alarms, changes made, and alarm resets registered by the P200W Series Dehydrator. This screen is informational only.
- **Alarm Screen** - Displays all the Alarms registered by the P200W Series Dehydrator. This screen is informational only.
- **Firmware Screen** – Allows the user to upload any software updates or upgrades to the P200W Series Dehydrator.

8.12.2 Click on the Menu Bar selection to access a specific screen.

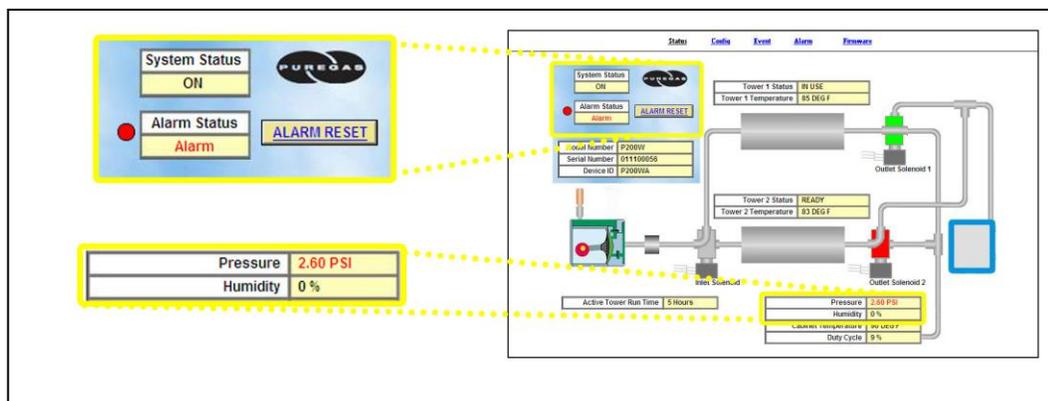


8.13 Using the Status Screen

Displays the readings and alarms monitored in the P200W Series Dehydrator.
Provides remote ALARM RESET.



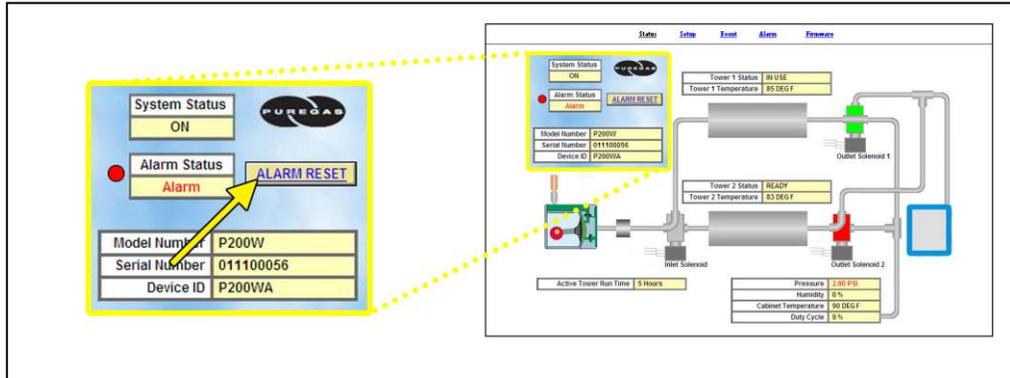
- Readings are displayed in **BLACK** unless an alarm is present.
- Alarms are displayed in **RED** next to the parameter in alarm.



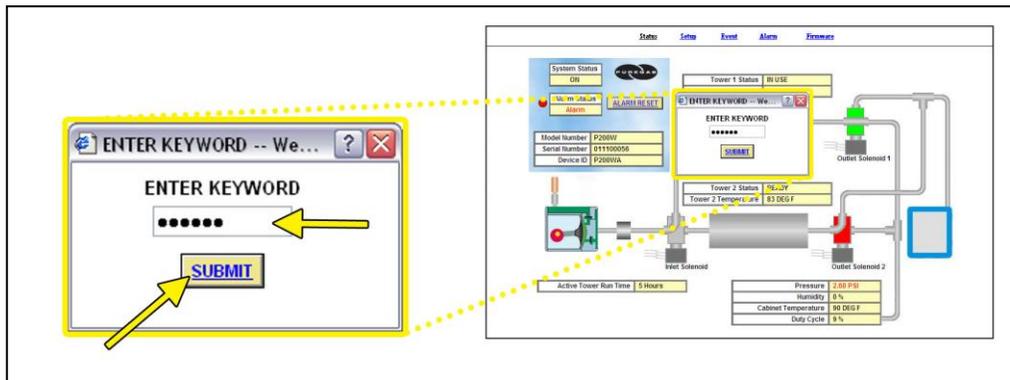
- Alarm Status will display **Alarm** if any alarms are present.
- Keyword validation is required for ALARM RESET.

8.13.1 Resetting an Alarm

8.13.1.1 Click on the **ALARM RESET** Button to remotely reset Dehydrator alarms displayed on Status Screen.



8.13.1.2 Enter Keyword (default is 123456)

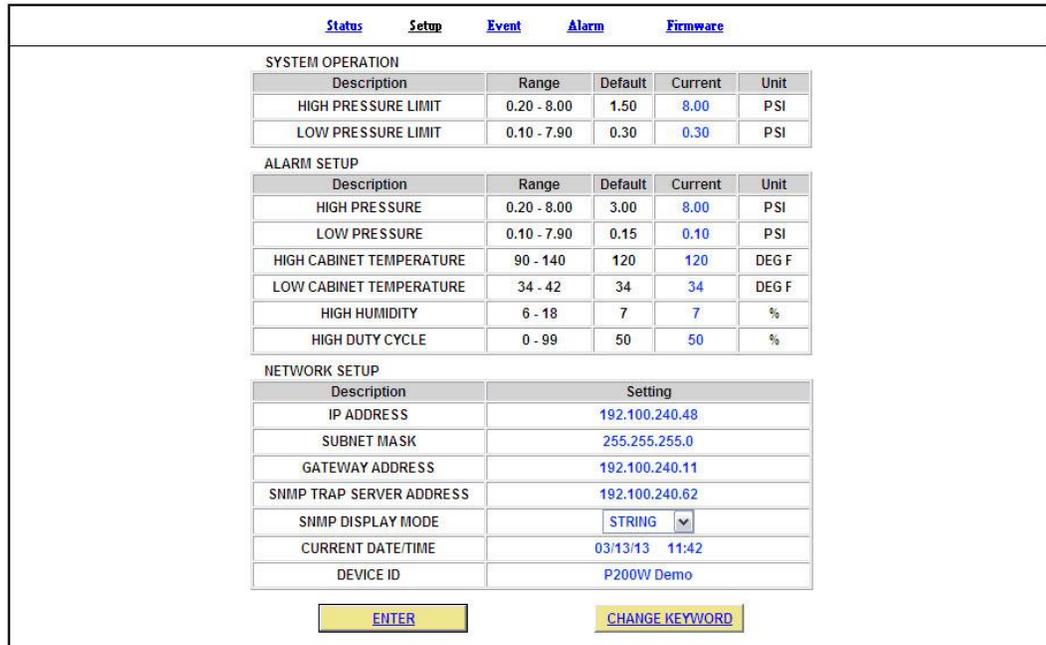


8.13.1.3 Click on **SUBMIT** Button when done.

8.14 Using the Setup Screen

All configurations of Set Points, Setups, and Keyword can be made in this screen.

NOTE: Reference Appendix Section 12.1 for Limits, Defaults, and Formats.

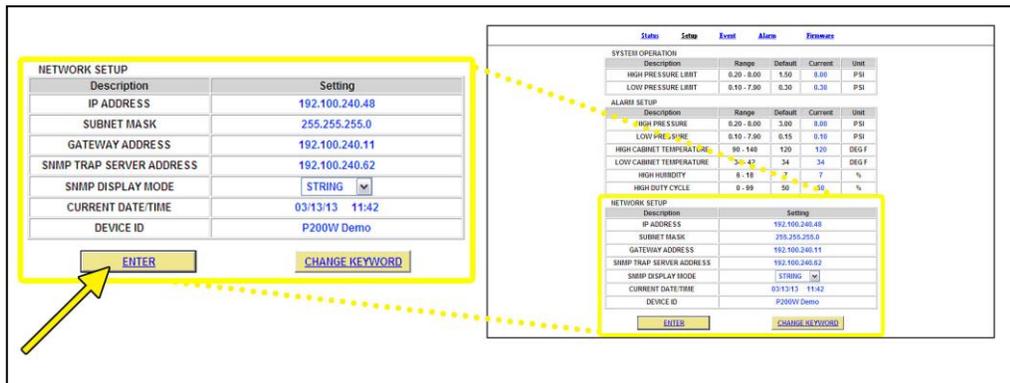


- Values in **BLUE** represent the current setting.
- The **ENTER** Button is used to change values.
- The **CHANGE KEYWORD** Button allows you to configure a new Keyword.
- Keyword validation is required for the following:
 - Changing a Set Point value
 - Changing the Keyword

8.14.1 Changing a Set Point or Setup value:

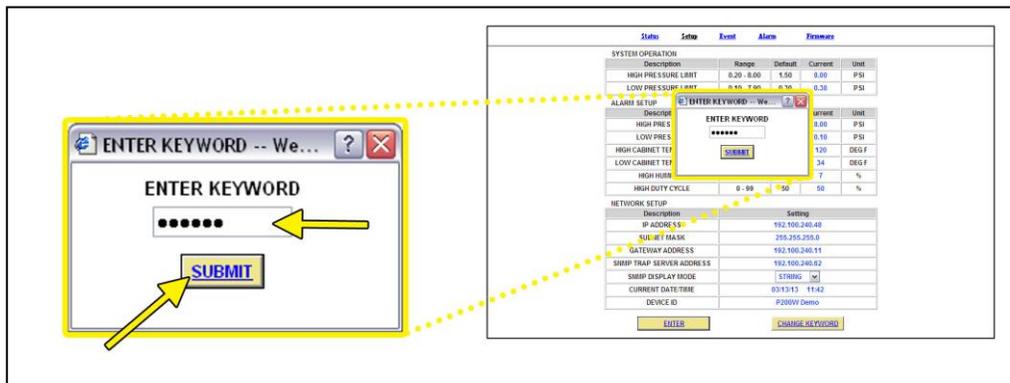
8.14.1.1 Click on the value to change (in **BLUE**).

8.14.1.2 Type in the new value.



8.14.1.3 Click the **ENTER** Button when done.

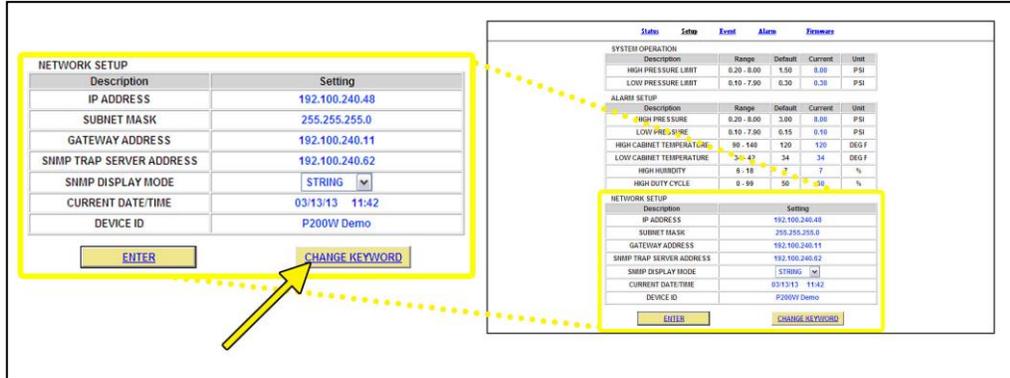
8.14.1.4 Enter Keyword (default is 123456)



8.14.1.5 Click on **SUBMIT** Button when done. This will lock in the new setting value.

8.14.2 Changing the Keyword

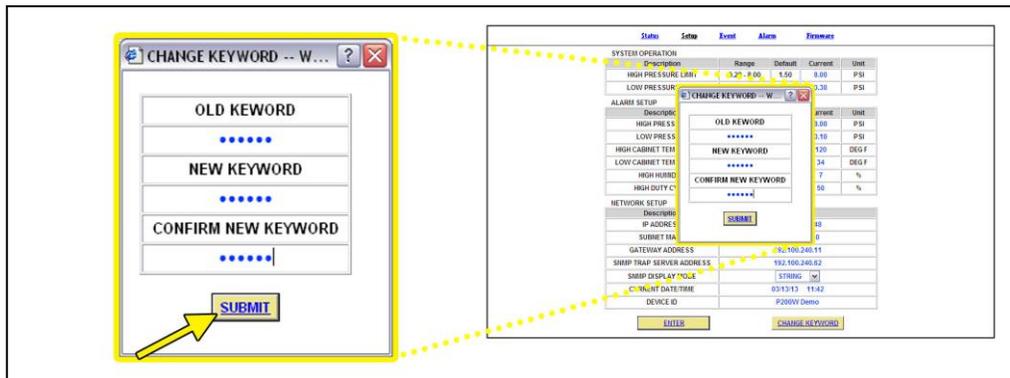
8.14.2.1 Click on **CHANGE KEYWORD** Button to change the keyword.



8.14.2.2 Type the Old Keyword.

8.14.2.3 Type the New Keyword.

8.14.2.4 Type the Confirm New Keyword.



8.14.2.5 Click on **SUBMIT** Button to confirm. This will lock in the new setting value.

8.15 Using the Event Screen

Displays all events such as alarms, changes made, and alarm resets registered by the P200W Series Dehydrator. This screen is informational only.

Status Setup Event Alarm Firmware					
No.	Event	Description	Remark	Date	Time
1	Alarm Reset		SRC:IE	05/18/2012	13:47:02
2	Set Parameter	High Pressure Limit - Turn Compressor OFF	SRC:IE	05/18/2012	13:46:00
3	Set Parameter	High Pressure Alarm Set Point	SRC:IE	05/18/2012	13:42:00
4	Set Parameter	High Pressure Limit - Turn Compressor OFF	SRC:IE	05/18/2012	13:42:00
5	Set Parameter	Low Pressure Limit - Turn Compressor ON	SRC:Key	05/18/2012	13:39:24
6	Device Restart		DownLoad	05/18/2012	12:35:26
7	Device Restart		DownLoad	05/18/2012	12:34:21
8	Set Parameter		TWR2RGN-HM	05/17/2012	20:38:34
9	Alarm Reset		SRC:Key	05/15/2012	09:51:14
10	Alarm Reset		SRC:Key	05/15/2012	09:50:11
11	Set Parameter	High Pressure Limit - Turn Compressor OFF	SRC:Key	05/15/2012	09:49:40
12	Set Parameter	Low Pressure Limit - Turn Compressor ON	SRC:Key	05/15/2012	09:49:05
13	Set Parameter	Low Pressure Limit - Turn Compressor ON	SRC:Key	05/15/2012	09:48:29
14	Set Parameter	High Pressure Limit - Turn Compressor OFF	SRC:Key	05/15/2012	09:47:48
15	Set Parameter	High Pressure Limit - Turn Compressor OFF	SRC:Key	05/15/2012	09:47:40
16	Set Parameter	High Pressure Limit - Turn Compressor OFF	SRC:Key	05/15/2012	09:47:12
17	Set Parameter	High Pressure Limit - Turn Compressor OFF	SRC:Key	05/15/2012	09:47:02
18	Set Parameter	High Pressure Limit - Turn Compressor OFF	SRC:Key	05/15/2012	09:46:50

<< < > >> 1 of 14

- Click on the column headings to sort data according to that column.
- Click the Arrow Buttons to navigate through all the event log pages.

8.16 Using the Alarm Screen

Displays all the Alarms registered by the P200W Series Dehydrator. This screen is informational only.

Status Setup Event Alarm Firmware				
No.	Description	Alarm Read	Date	Time
1	High Duty Cycle Reading	50.10	05/18/2012	13:45:41
2	High Pressure Reading	31.48	05/15/2012	09:51:11
3	High Pressure Reading	36.27	05/15/2012	09:50:01
4	High Pressure Reading	2.19	05/10/2012	13:08:46
5	High Humidity Reading	8.90	05/04/2012	11:33:05
6	Low Pressure Reading	0.02	05/04/2012	11:16:40
7	Low Pressure Reading	0.07	05/04/2012	09:50:06
8	High Humidity Reading	9.23	05/04/2012	09:42:34
9	Low Pressure Reading	0.07	05/04/2012	09:35:23
10	High Humidity Reading	9.74	05/04/2012	09:31:18
11	High Duty Cycle Reading	54.70	05/04/2012	09:27:27
12	High Duty Cycle Reading	50.60	05/04/2012	09:27:20
13	Low Pressure Reading	0.07	05/04/2012	08:22:19
14	High Humidity Reading	12.41	05/04/2012	08:16:24
15	Low Pressure Reading	0.07	05/03/2012	19:23:34
16	High Humidity Reading	10.25	05/03/2012	19:19:31
17	High Pressure Reading	0.40	02/21/2012	12:33:59
18	High Duty Cycle Reading	92.30	01/11/2012	14:12:50

<< < > >> 1 of 8

- Click on the column headings to sort data according to that column.
- Click the Arrow Buttons to navigate through all the event log pages.

8.17 Using the Firmware Screen

Displays the current firmware version and date of the P200W Series Dehydrators.

The screenshot shows a web-based control interface with a navigation bar at the top containing the following tabs: [Status](#), [Setup](#), [Event](#), [Alarm](#), and [Firmware](#). The [Firmware](#) tab is currently selected. Below the navigation bar, the main content area displays the following information:

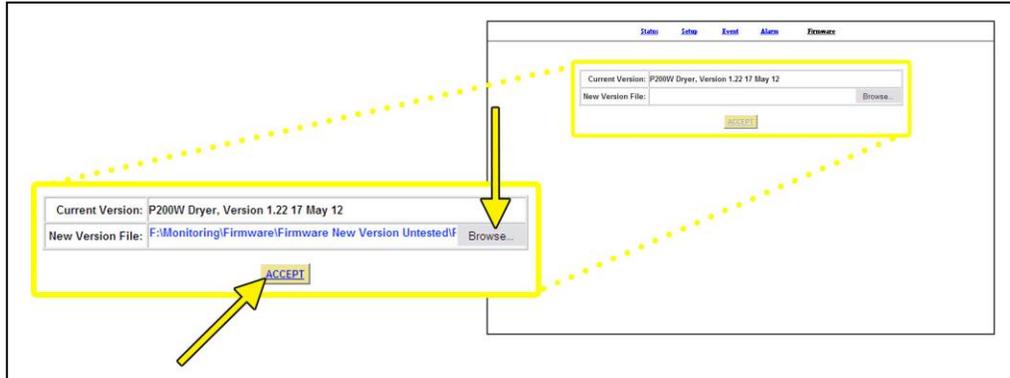
Current Version:	P200W Dryer, Version 1.22 17 May 12	
New Version File:	<input type="text"/>	<input type="button" value="Browse..."/>

Below the input fields, there is a yellow button labeled **ACCEPT**.

- **Current Version:** Displays the current firmware version of the P200W Series Dehydrator.
- **New Version File:** Displays the new location and new firmware version chosen.
- The **BROWSE** Button allows you to locate the new firmware file.
- The **ACCEPT** Button is used to change values.
- Keyword validation is required to update firmware.

8.17.1 Updating the Firmware:

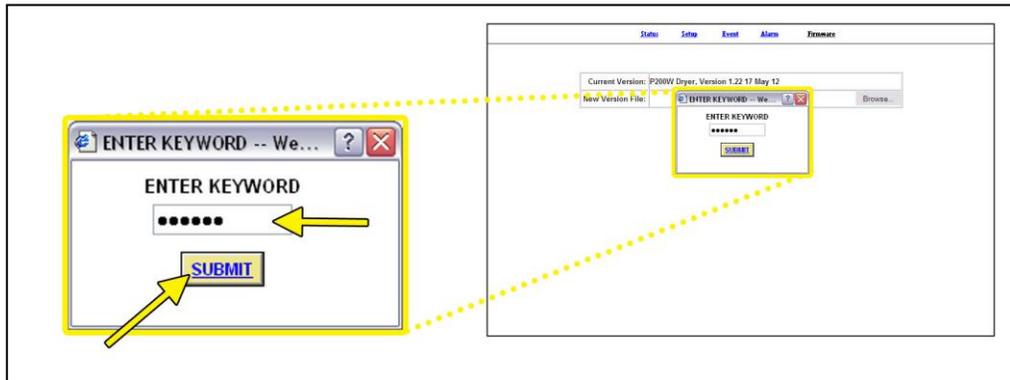
8.17.1.1 Click on **BROWSE** Button to locate the firmware file.



8.17.1.2 Navigate and Select the correct .bin file. Press the **OK** Button.

8.17.1.3 Click the **ACCEPT** Button when done

8.17.1.4 Enter Keyword (default is 123456)



8.17.1.5 Click on **SUBMIT** Button when done. This will lock in the new firmware version.

8.18 Connecting via SNMP

Using SNMP to connect and communicate with the P200W Series Dehydrator is dependent upon the specific SNMP Management software used on your network. This software requires a SNMP Definition & Configuration File (MIB file) in order to properly communicate with the Dehydrator.

The files for the P200W Series Air Dryers can be downloaded from our website (Puregas.com) under the Product Support section SNMP Files link. It is necessary to import this file into your SNMP operating software.

NOTE: Reference Appendix Section 12.2 for a list of SNMP Parameters including Limits, Defaults, and Formats.

9. Testing Your Dehydrator

9.1 Safety & Warning Information



WARNING!

For your safety, all the information in this User's Guide must be followed to minimize the risk of electrical shock, and prevent property damage or personal injury.



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, and testing of this Dehydrator require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



CAUTION!

Incoming power to Dehydrator must be:

- 10 amp service recommended
- 24 VDC for P200W model (7 Amp slow blow fuse)
- 48 VDC for P208W model (7 amp slow blow fuse)
- 85 - 264 VAC, 1 Phase for P200WA model (5 amp slow blow fuse)



IMPORTANT!

Removing the cover or performing procedures not described in this User's Guide WILL VOID THE WARRANTY.

9.2 Measuring Incoming Voltage



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. It is highly recommended that you remove all jewelry before performing any procedures.

9.2.1 Power the Dehydrator **OFF** (Section 8.3).

9.2.2 For **P200W** and **P208W** models:

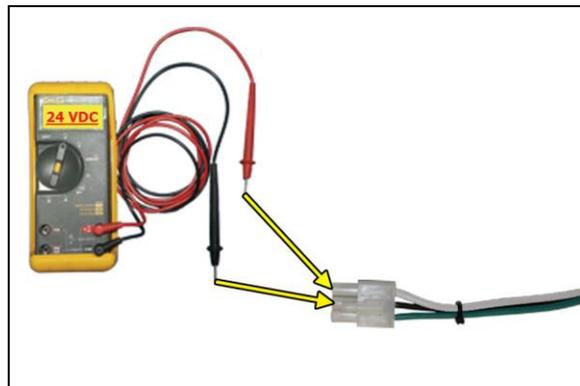
9.2.2.1 Disconnect the DC

Power Harness from the Power Port on the back of the Dehydrator.



9.2.2.2 Place Voltmeter probes inside the DC Power Harness connector socket:

RED probe to
WHITE wire
BLACK probe to
BLACK wire



The voltage should measure **24 VDC** for the P200W model and **48 VDC** for the P208W model.

9.2.2.3 Re-connect the DC Power Harness to the Power Port on the back of the Dehydrator.

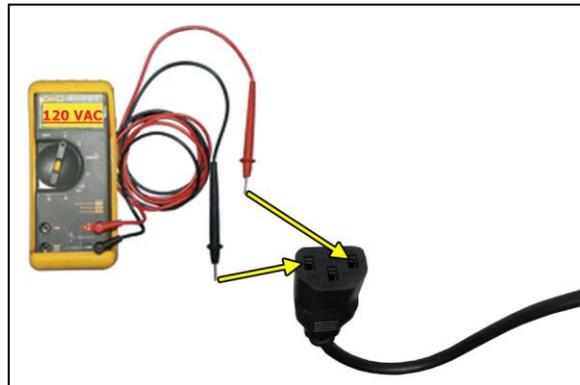
9.2.3 For P200WA model:**WARNING!**

Extreme care should be exercised to avoid contact with live electrical circuits. If unsure about performing the following procedure, contact an electrician.

- 9.2.3.1** Disconnect the AC Power Cord from the Power Port on the back of the Dehydrator.



- 9.2.3.2** Using a Voltmeter, place the probes inside the AC Power Cord **LINE & NEUTRAL** plug openings. (Not GROUND)



The voltage should measure **85 - 264 VAC**.

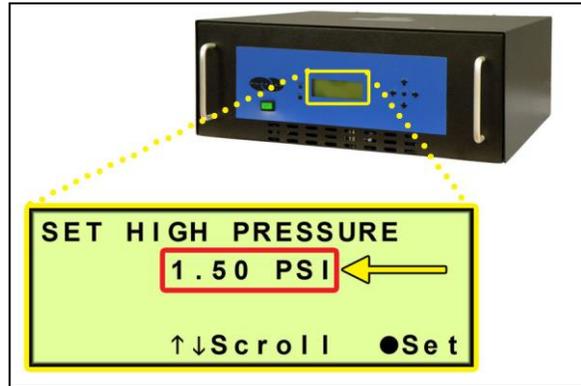
- 9.2.3.3** Re-connect the AC Power Cord to the Power Port on the back of the Dehydrator.

- 9.2.4** Power the Dehydrator **ON** (Section 8.3).

9.3 Testing High Pressure Alarm

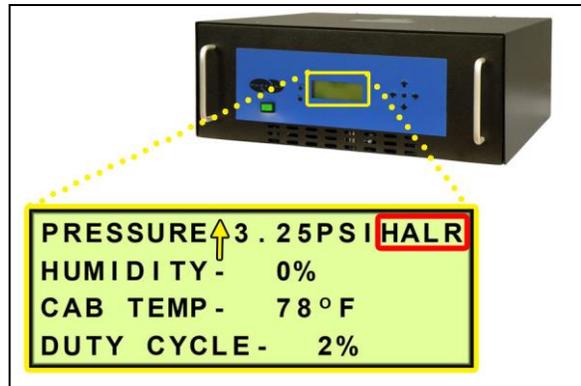
NOTE: All testing values are based on default Dehydrator settings, if settings have been changed, adjust testing values accordingly.

9.3.1 Make note of the current High Pressure setting.
(Section 8.4.5.2)

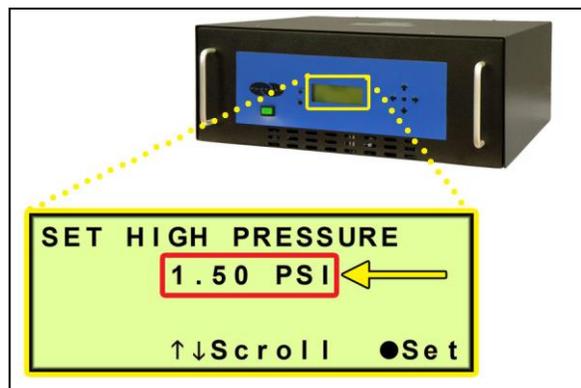


9.3.2 Set High Pressure (Section 8.7.3) **over 3.0 PSI.**

After one (1) minute, the High Pressure Alarm should appear on the display.



9.3.3 Set High Pressure back to setting recorded in step 9.3.1



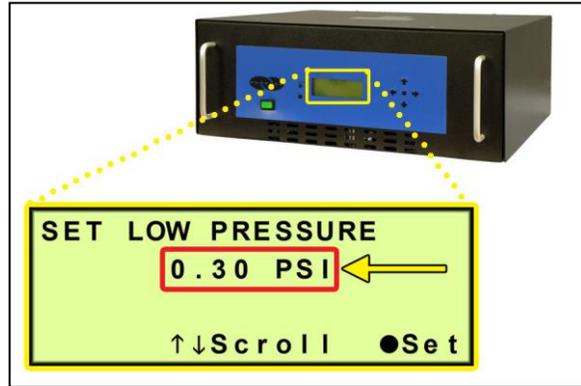
9.3.4 Press the **RESET** Button to clear the alarm.

If you are unable to create a High Pressure Alarm as described, see Section 11.6 for troubleshooting information.

9.4 Testing Low Pressure Alarm

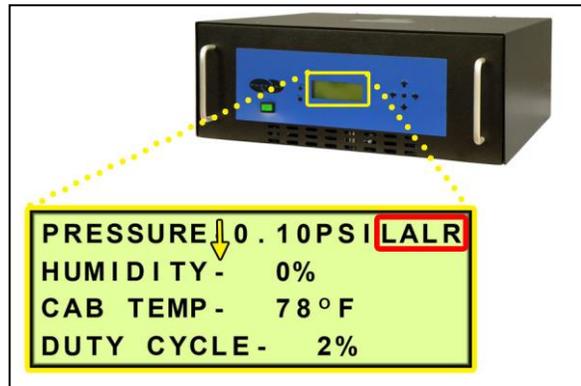
NOTE: All testing values are based on default Dehydrator settings, if settings have been changed, adjust testing values accordingly.

9.4.1 Make note of the current Low Pressure setting.
(Section 8.4.5.1)

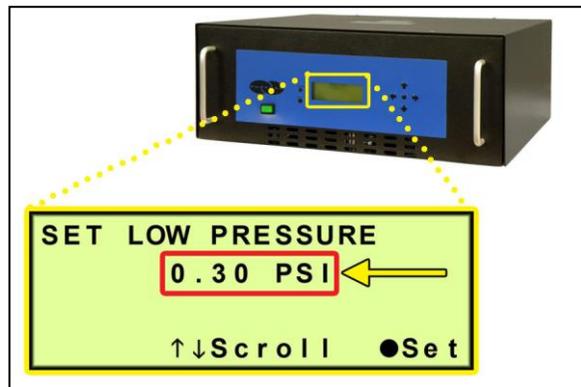


9.4.2 Set Low Pressure (Section 8.7.5) **below 0.15 PSI.**

After one (1) minute, the Low Pressure Alarm should appear on the display.



9.4.3 Set Low Pressure back to setting recorded in step 9.4.1



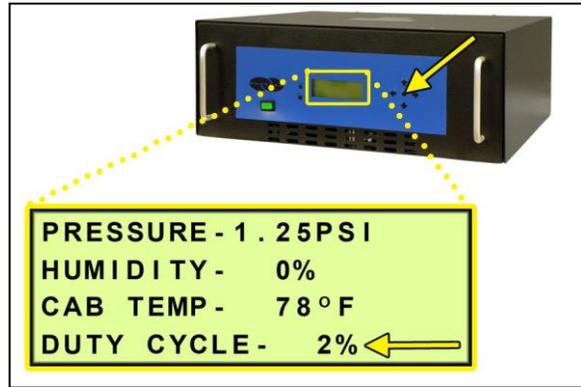
9.4.4 Press the **RESET** Button to clear the alarm.

If you are unable to create a Low Pressure Alarm as described, see Section 11.8 for troubleshooting information.

9.5 Testing High Duty Cycle Alarm

NOTE: All testing values are based on default Dehydrator settings, if settings have been changed, adjust testing values accordingly.

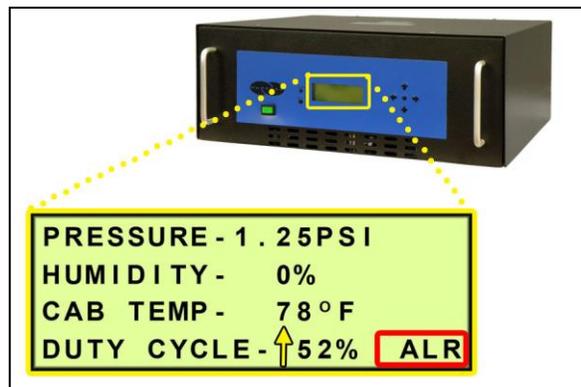
9.5.1 Press the **HOLD** Button on **PRESSURE** Screen.



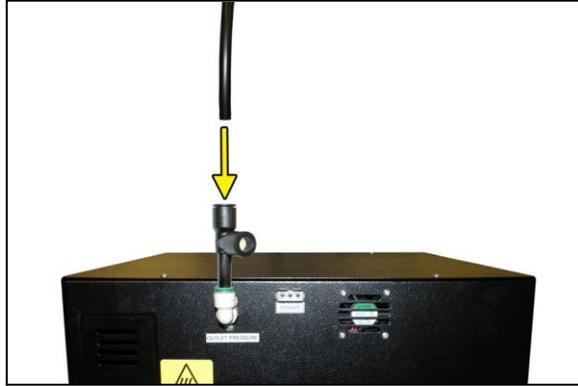
9.5.2 Disconnect air supply line from Dehydrator.



9.5.3 Verify the Duty Cycle alarm appears on the display after 20 - 60 seconds.



- 9.5.4** Reconnect air supply line to Dehydrator.



- 9.5.5** Press the **RESET** Button to clear the alarm.

If you are unable to create a Duty Cycle Alarm as described, see Section 11.13 for troubleshooting information.

10. Service & Repair

Only PUREGAS can offer factory direct rebuilds backed by a 6 month factory warranty.

- 2 week turnaround time
- Estimates available upon request
- Minimum service charge fee applies

10.1 Services Offered

- **Piston Compressor Rebuild**
 - Replace motor bearings, piston rod assemblies, and install a complete compressor maintenance kit.
 - Test air flow, air pressure, and electrical performance
- **Heatless Dryer Rebuild**
 - Replace desiccant, o-rings, check valves, springs, and complete solenoid assembly
 - Test proper component operation
- **Desiccant Tower Repack**
 - Clean out tower and replace desiccant, filter, and o-ring
- **Circuit Board Repair** (Limited to current model boards only)
- **Complete Dehydrator Repair**

10.2 Initiating a Service Transaction

- Contact our Parts & Service Department at **1-800-521-5351 (option 3)** to obtain a Return Authorization (RA) number.
- Carefully package the item(s) to be returned.
- Mark the Return Authorization (RA) number on the outside of the shipping container.
- Include the main address and phone number of the individual to contact for related inquiry and follow-up information.
- Include the purchase order number.

11. Troubleshooting Your Dehydrator

11.1 Before You Call PUREGAS

PLEASE READ THIS SECTION FIRST. It is important that you use the following sections in order to diagnose and attempt to fix the problem with your Dehydrator before placing a call to PUREGAS Technical Support.

This troubleshooting guide is intended to simplify the isolation of problems, present possible causes, provide test procedures for verification, and suggest corrective actions to restore the Dehydrator back to normal operation. Each section begins with the most likely cause(s) of the issue. Otherwise, they start from the simplest possibilities and progress to more complicated ones.

This troubleshooting guide is designed to be easy to follow and very effective when used properly. It is suggested to always start at the beginning of the specific problem section and continue in sequence, following the procedures indicated.

11.2 Safety & Warning Information



WARNING!

For your safety, all the information in this User's Guide must be followed to minimize the risk of electrical shock, and prevent property damage or personal injury.



IMPORTANT!

Removing the cover or performing procedures not described in this User's Guide **WILL VOID THE WARRANTY.**

**WARNING!**

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, and testing of this Dehydrator require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.

**CAUTION!**

Incoming power to Dehydrator must be:

- 10 amp service recommended
- 24 VDC for P200W model (7 Amp slow blow fuse)
- 48 VDC for P208W model (7 amp slow blow fuse)
- 85 - 264 VAC, 1 Phase for P200WA model
(5 amp slow blow fuse)

**CAUTION!**

Using the pressure relief valve equipped with this unit as the only means of over pressurization protection for the connected system is not advised.

11.3 Dehydrator Won’t Power ON

Possible Cause	Check	Corrective Action
POWER Button in OFF position	Verify POWER Button is in ON position (Section 8.3)	Move POWER Button to ON position (Section 8.3)
No incoming voltage to Dehydrator	Measure incoming voltage (Section 9.2)	Troubleshoot facility power supply to Dehydrator
For DC models: Incoming voltage is wired for Negative voltage	Verify incoming voltage is wired as Positive voltage (Section 9.2)	Swap the WHITE and BLACK power leads on the DC Power Harness
Defective Dehydrator (if incoming voltage is present and correct)	Verify incoming voltage (Section 9.2)	Contact PUREGAS Technical Support (Section 11.16)

11.4 Display Screen Not Functioning

Possible Cause	Check	Corrective Action
Dehydrator experienced a power spike		Power the Dehydrator OFF for 15+ seconds. Power the Dehydrator ON .
For DC models: Incoming voltage is wired for Negative voltage	Verify incoming voltage is wired as Positive voltage (Section 9.2)	Swap the WHITE and BLACK power leads on the DC Power Harness
Defective Dehydrator (if incoming voltage is present and correct)	Verify incoming voltage (Section 9.2)	Contact PUREGAS Technical Support (Section 11.16)

11.5 High Pressure Alarm

Possible Cause	Check	Corrective Action
Pressure set too high	Verify PRESSURE reading (Section 8.4.5.2)	Adjust High Pressure Setting (Section 8.7.3)
High Pressure Alarm set point too low	Verify High Pressure Alarm set point (Section 8.8.2)	Raise High Pressure Alarm set point (Section 8.8.2)

11.6 Can't Create a High Pressure Alarm

Possible Cause	Check	Corrective Action
High Pressure Alarm set point higher than default setting of 3.0 PSI	Verify High Pressure Alarm set point (Section 8.8.2)	Adjust High Pressure Setting so that the PRESSURE reading climbs over verified set point (Section 8.7.3)
Defective Pressure control	Verify that the Pressure cannot be adjusted (Section 8.7.3)	Contact PUREGAS Technical Support (Section 11.16)
Defective Dehydrator	Verify PRESSURE reading is higher than the High Pressure Alarm set point (Sections 8.4.5.2 & 8.8.2)	Contact PUREGAS Technical Support (Section 11.16)

11.7 Low Pressure Alarm

Possible Cause	Check	Corrective Action
Pressure set too low	Verify PRESSURE Reading (Section 8.4.5.2)	Adjust Low Pressure Setting (Section 8.7.5)
Air Leak	Check for leaks between the Dehydrator and the connected system.	Reconnect, repair, or replace leaking fitting / hose
Low Pressure Alarm set point too high	Verify Low Pressure Alarm set point (Section 8.8.4)	Lower the Low Pressure Alarm set point (Section 8.8.4)
Defective Dehydrator	Verify system will build pressure (Section 8.4.5.2)	Contact PUREGAS Technical Support (Section 11.16)

11.8 Can’t Create a Low Pressure Alarm

Possible Cause	Check	Corrective Action
Low Pressure Alarm set point lower than default setting of 0.15 PSI	Verify Low Pressure Alarm set point (Section 8.8.4)	Adjust Low Pressure Setting so that the PRESSURE reading drops below verified set point (Section 8.7.5)
Defective Pressure control	Verify that the Pressure cannot be adjusted (Section 8.7.5)	Contact PUREGAS Technical Support (Section 11.16)
Defective Dehydrator	Verify PRESSURE reading is lower than the Low Pressure Alarm set point (Sections 8.4.5.2 & 8.8.4)	Contact PUREGAS Technical Support (Section 11.16)

11.9 High Humidity

Possible Cause	Check	Corrective Action
High Humidity Alarm set point too low	Verify High Humidity Alarm set point (Section 8.8.10)	Raise Humidity Alarm set point (Section 8.8.10) Over 10% not recommended
Defective Dehydrator	Humidity Alarm does not clear within 8 hours of first appearing	Contact PUREGAS Technical Support (Section 11.16)

11.10 High Cabinet Temperature Alarm

Possible Cause	Check	Corrective Action
High Ambient Temperature	Verify temperature of Dehydrator operating location. Recommended ambient temperature is 40°-85°F.	Lower ambient temperature of Dehydrator operating location

11.11 Low Cabinet Temperature Alarm

Possible Cause	Check	Corrective Action
Low Ambient Temperature	Verify temperature of Dehydrator operating location. Recommended ambient temperature is 40°-85°F.	Raise ambient temperature of Dehydrator operating location

11.12 Duty Cycle Alarm

Possible Cause	Check	Corrective Action
Air leaks in pressurized system	Verify that air supply line and waveguide have no leaks.	Repair or seal all air leaks.

11.13 Can't Create a Duty Cycle Alarm

Possible Cause	Check	Corrective Action
Duty Cycle Alarm set point higher than default setting of 50%	Verify Duty Cycle Alarm set point (Section 8.8.12)	Adjust Duty Cycle Alarm set point to 50% (Section 8.8.12)
Defective Dehydrator	Verify DUTY CYCLE reading is higher than the Duty Cycle Alarm set point (Sections 8.4.5.2 & 8.8.12)	Contact PUREGAS Technical Support (Section 11.16)

11.14 Unable to connect via Web Browser

Possible Cause	Check	Corrective Action
Dehydrator is powered OFF		Power the Dehydrator ON (Section 8.3)
Loose or defective IP Cable	Verify IP Cable connections (Section 8.11)	Replace or reconnect IP Cable (Section 8.11)
Incorrect Network Settings	Verify Network Settings on front panel display (Section 8.9)	Use current Network Settings or change Network Settings locally at the front panel display (Section 8.9)
Using incompatible web browser		Use Internet Explorer (6.0 or newer) or Mozilla Firefox Web Browser
Computer is not on the same network as the Dehydrator	Verify the computer network	Connect computer to same network as Dehydrator

11.15 Invalid Data via Web Browser

Possible Cause	Check	Corrective Action
Using incompatible web browser		Use Internet Explorer (6.0 or newer) or Mozilla Firefox Web Browser
Defective Dehydrator	Verify Dehydrator readings on front panel display (Section 8.4.5)	Contact PUREGAS Technical Support (Section 11.16)

11.16 Contacting PUREGAS Technical Support

Please read the *Before You Call PUREGAS* Section 11.1

Once you have exhausted all of the potential problems and solutions covered in the *Troubleshooting Your Dehydrator* Section, and you still require further assistance to correct a problem, contact PUREGAS Technical Support:

(800) 521-5351 (**option 1**)

Have the following information available:

Trouble Ticket # (if following-up on a previous call): _____
Technician Name: _____ **Phone #:** _____
Model #: _____ **Serial #:** _____
Company Name: _____ **Location Name:** _____
City: _____ **State:** _____

12. Appendix

12.1 Set Point Limits and Defaults

12.1.1 System Operations

Description	Minimum Value	Maximum Value	Default Value	Unit of Measurement
High Pressure Limit – Turn Compressor OFF	0.20	8.00	1.50	PSI
Low Pressure Limit – Turn Compressor ON	0.10	7.90	0.30	PSI

12.1.2 Alarm Set Points

Description	Minimum Value	Maximum Value	Default Value	Unit of Measurement	Shutdown
High Pressure Alarm	0.20	8.00	3.00	PSI	
Low Pressure Alarm	0.10	7.90	0.15	PSI	
High Cabinet Temperature Alarm	90	140	120	Deg F	YES
Low Cabinet Temperature Alarm	34	42	34	Deg F	YES
High Humidity Alarm	6	18	7	%	YES
High Duty Cycle Alarm	0	99	50	%	

12.1.3 Network Setup

Description	Format	Example
IP Address	Numeric (xxx.xxx.xxx.xxx)	192.168.001.100
Subnet Mask	Numeric (xxx.xxx.xxx.xxx)	255.255.255.000
Gateway Address	Numeric (xxx.xxx.xxx.xxx)	192.168.001.001
SNMP Trap Server Address	Numeric (xxx.xxx.xxx.xxx)	192.168.001.255
Current Date/Time	Numeric (mm/dd/yy hh:mm)	01/27/11 10:02
Device ID	Alphanumeric (10 digits)	ABCD 12345
Keyword	Numeric (6 digits)	123456 (default)

12.2 SNMP Parameters

Device Configuration Information

Device ID	Alphanumeric (Defined by Customer)
Device Model	Alphanumeric (Factory Preset)
Device Firmware Version	Numeric (Factory Preset)
Current Date/Time	Numeric (mm/dd/yy hh:mm)
IP Address	Numeric (xxx.xxx.xxx.xxx)
Subnet Mask	Numeric (xxx.xxx.xxx.xxx)
Gateway Address	Numeric (xxx.xxx.xxx.xxx)
SNMP Trap Server Address	Numeric (xxx.xxx.xxx.xxx)
SNMP Read Community String (also sets SNMP Trap Community String)	Alphanumeric (6-14 digits, Default = public)
SNMP Write Community String	Alphanumeric (6-14 digits, Default = 123456)

Status Readings (Read-Only)

Pressure Reading	Numeric (PSI)
Humidity Reading	Numeric (%)
Cabinet Temperature Reading	Numeric (Deg F)
Tower 1 Temperature Reading	Numeric (Deg F)
Tower 2 Temperature Reading	Numeric (Deg F)
Duty Cycle Reading	Numeric (%)
Active Tower Run Time Reading	Numeric (Hours)
System Status - ON	Yes / No
SHUTDOWN	Yes / No
OPEN CIRCUIT	Yes / No
Humidity Transducer Status - DISCONNECTED	Yes / No
Tower 1 Temp Transducer Status - DISCONNECTED	Yes / No
Tower 2 Temp Transducer Status - DISCONNECTED	Yes / No
Compressor Status - ON	Yes / No
Inlet Solenoid Status - ON	Yes / No
Outlet Solenoid 1 Status - ON	Yes / No
Outlet Solenoid 2 Status - ON	Yes / No
Evaporator Heater Status - ON	Yes / No
Tower 1 Heater Status - ON	Yes / No
Tower 2 Heater Status - ON	Yes / No
Tower 1 Status - IN USE	Yes / No
READY	Yes / No
REGENERATING	Yes / No
INITIALIZING	Yes / No
WAITING	Yes / No
HEATER FAILURE	Yes / No
OVERHEATING	Yes / No
FAIL TO COOL	Yes / No
Tower 2 Status - IN USE	Yes / No
READY	Yes / No
REGENERATING	Yes / No
INITIALIZING	Yes / No
WAITING	Yes / No

Status Readings (Read-Only) cont.

HEATER FAILURE	Yes / No
OVERHEATING	Yes / No
FAIL TO COOL	Yes / No

Alarm Readings (Read-Only)

High Pressure Alarm	OK / Alarm
Low Pressure Alarm	OK / Alarm
High Cabinet Temperature Alarm	OK / Alarm
Low Cabinet Temperature Alarm	OK / Alarm
High Humidity Alarm	OK / Alarm
High Duty Cycle Alarm	OK / Alarm
Total Alarm	OK / Alarm

Alarm Settings (Read-Write)

High Pressure Threshold	Numeric (PSI)
Low Pressure Threshold	Numeric (PSI)
High Cabinet Temperature Threshold	Numeric (Deg F)
Low Cabinet Temperature Threshold	Numeric (Deg F)
High Humidity Threshold	Numeric (%)
High Duty Cycle Threshold	Numeric (%)
Low Pressure Limit - Turn Compressor ON	Numeric (PSI)
High Pressure Limit - Turn Compressor OFF	Numeric (PSI)
Alarm Reset	RESET

Alarm Traps Sent to SNMP Server

High Pressure
Low Pressure
High Cabinet Temperature
Low Cabinet Temperature
High Humidity
High Duty Cycle
Total Alarm

NOTE: The Trap Community is the same as the Read Community (Default = public).

13. Limited Warranty Agreement

PUREGAS products carry a one (1) year warranty against defective workmanship and material. This period starts at date of shipment. Not included are the components subject to normal replacement during a year's operating time.

No claims for labor in replacing defective parts or for consequential damages will be allowed. Replacement parts will be invoiced in the regular way, with invoices subject to adjustment after the parts claimed defective are examined at our factory. In addition, no material or parts will be accepted at our factory for in-warranty repairs or credit without previous authorization from PUREGAS.

Responsibility for damages incurred in transit will be borne by the user and the user in turn should file any damage claim against the carrier. All warranty items are F.O.B. Broomfield, Colorado. Freight charges are the responsibility of the user.

This warranty shall not apply to any PUREGAS product which shall have been repaired or altered in any way by anyone other than PUREGAS or authorized personnel so as to affect, in our judgment, its proper functioning or reliability, neither will it apply to any product which has been subject to misuse, negligence, or accident. The installation of unauthorized non PUREGAS parts will void the warranty on those PUREGAS products.

Registration Reminder

If you haven't already done so, please take a moment to register your PUREGAS P200W Series Dehydrator. **Registering is necessary to activate this Limited Warranty on your product.** Once you register, you are eligible to receive free technical support, as well as updates concerning your PUREGAS products.

See Section 7 for details on Registering Your Dehydrator.

14. Contacting PUREGAS

14.1 General

PUREGAS, LLC
226A Commerce Street
Broomfield, Colorado 80020

(800) 521-5351

(303) 427-3700

Fax – (303) 657-2233

info@puregas.com

www.puregas.com

14.2 Sales

(800) 521-5351 (**option 2**)

Fax – (303) 657-2205

sales@puregas.com

parts@puregas.com

14.3 Service

(800) 521-5351 (**option 3**)

Fax – (303) 657-2205

14.4 Technical Support

(800) 521-5351 (**option 1**)

DON'T FORGET TO REGISTER YOUR DEHYDRATOR!

See Section 7 for details on Registering Your Dehydrator.

