

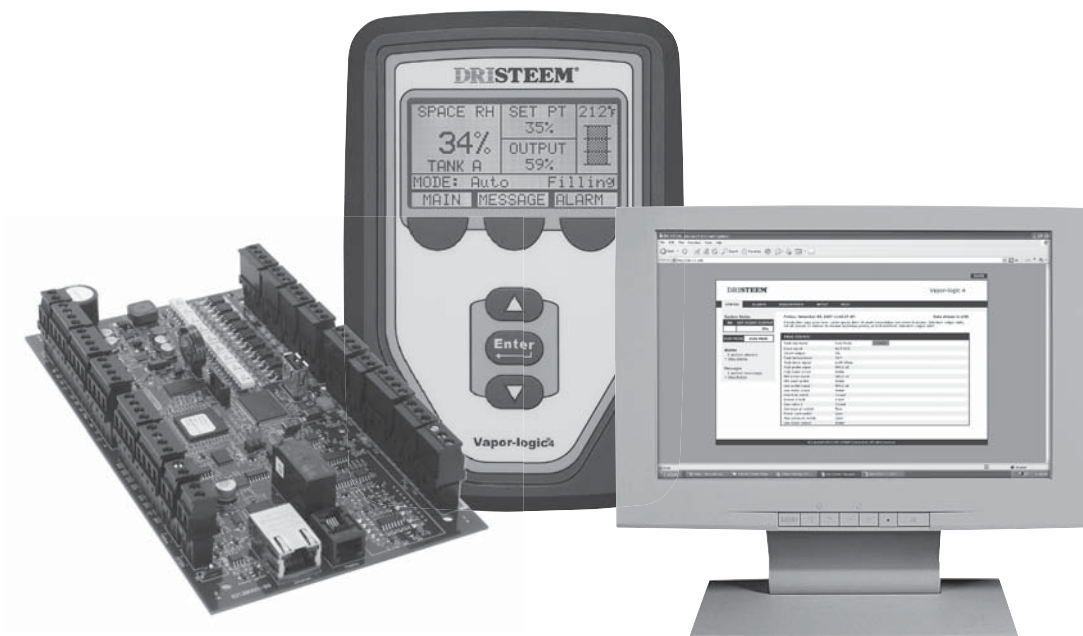
Important: Read and save these instructions.

DRISTEEM[®]
The humidification experts

Vapor-logic[®]4
Humidifier Control System

**Installation and
Operation Manual**

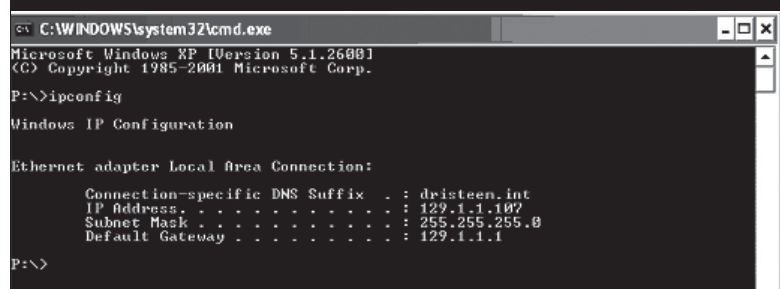
UPDATE



Field wiring: Communication connections

After a system prompt appears, type in **ipconfig** and then hit Enter. The current IP address of the computer should appear. If the first three segments of that IP address are different than the first three segments of the humidifier's default IP (192.168.1.xxx), you must change either your computer or Vapor-logic4's IP address such that they match each other.

**Figure 2-1:
Checking your IP address**



```
ex C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

P:\>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix . : dristeen.int
    IP Address . . . . . : 129.1.1.107
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 129.1.1.1

P:\>
```

3. Change the IP address of your humidifier or computer if necessary.

a. Change the IP address of the humidifier to match your computer.

The most straightforward way to change the IP address of the humidifier using Vapor-logic4 is to use the keypad/display. Go to Setup/Communications/Network IP address on the keypad/display and change the IP address such that the first three segments of the computer's settings match the network address. Make sure the last digit of the IP address is different between the humidifier and the computer. Cycle power of Vapor-logic4 board for address change to take effect.

b. Change the IP address of your computer to match the humidifier.

Changing the IP address of the computer being used will likely require administrative privileges for your company's network. Please consult your IT department for this task.

The Diagnostics screen

**Table 3-1:
Diagnostics menu**

Menu item	Minimum value	Maximum value	Notes
Download data			
Alarm history	--	--	Download system data here. Select individual data sets or select "Download all" to download all data sets.
RH history	--	--	
Temperature history	--	--	
RH and temp history	--	--	
Message history	--	--	
Water converted	--	--	
Energy used	--	--	
Download all data	--	--	
USB backup/restore			
Back up settings	No	Yes	Humidifier settings can be backed up to or restored from a USB flash drive.
Restore settings	No	Yes	
Humidifier info			
Factory string	--	--	Displays as-shipped configuration string
Current string	--	--	Displays current configuration string
Serial number	--	--	Displays humidifier serial number
Firmware version	--	--	Displays current firmware version of Vapor-logic4 control board
Test outputs			
Fill valve	--	--	Cycles output to verify operation.
Drain valve	--	--	
Fan control	--	--	
Programmable triac	--	--	
Dry contact relay	--	--	
Note: Your system may not have all of these parameters.			More on the next page >

The Alarms screen

**Table 4-1:
Alarms menu**

Alarm label	Description	Does alarm auto-clear?
Tank temp sensor failed	Tank temp sensor has failed.	No
RH signal out of range	RH signal is out of range.	Yes
Dew point sig. out of range	Dew point signal is out of range.	Yes
Demand signal	Demand signal is out of range.	Yes
Duct RH signal out of range	Duct RH signal is out of range. Sensor may be faulty.	Yes
Aux temp sens out of range	Auxiliary temp sensor signal is out of range.	Yes
Water probe miswired	Water probe head is miswired or faulty.	Yes
Faulty water probe	Water probe readings are suspect, likely caused by scale on probe.	No
Excess fill time	Fill valve has been on too long during initial tank fill. Bottom probe is not in contact with water.	Yes
Excess refill time	Re-filling is taking too long. Top probe is not in contact with water.	Yes
Tank not draining	Drain valve has been open for the prescribed amount of time based on the humidifier model, and water is still touching the low water probe.	Yes
Tank overtemp	Fault occurs at boiling temperature plus 25 °F (13 °C). All units are put into a keep-cool state where fill and drain cycles operate to keep tank cool. Note: Resolve issue, then clear alarm, shut down humidifier, and restart.	No
Excess water no demand	Humidifier continues to add water when there is no demand, signifying unit continues to make steam. All units are put into a keep-cool state where fill and drain cycles operate to keep tank water from boiling. Note: Resolve issue, then clear alarm, shut down humidifier, and restart.	No
No SDU airflow	Airflow proving switch in the SDU (space distribution unit, a fan-based dispersion assembly) indicates no airflow. No steam is produced while alarm is active.	Yes
No power vent airflow	Pressure switch indicates there is no airflow at the power venter.	Yes
No combustion airflow	Switch indicates the combustion air damper is closed.	Yes
Blocked flue	Flue pressure switch indicates positive pressure in flue. GTS will not ignite when this fault is active.	Yes
Burner 1, 2, 3, or 4 fault	Burner tried one or more times to light and did not succeed. Once this fault is active, Vapor-logic4 locks out the burner and does not try to light it again until fault is cleared. Other burners can run.	No
Ignition mod. 1, 2, 3, or 4 fault	Ignition module has not opened the gas valve. Once this fault is active, Vapor-logic4 locks out the ignition module and does not try to start it again until fault is cleared. Other ignition modules can run.	No
Blower 1, 2, 3, or 4 fault	Blower is turning at less than the specified minimum RPM. Unit not allowed to run.	Yes
Gas valve 1, 2, 3, or 4 fault	Gas valve is on when it should be off. Unit not allowed to run.	Yes
Low water	Low water probe is in contact with water and low water sensor is not in contact with water.	Yes
Low input signal current	Demand signal by others current is below minimum threshold.	Yes
Notes: <ul style="list-style-type: none"> • See the troubleshooting section in this manual for alarm possible causes and recommended actions. • The Alarms Log displays alarm name, date and time of occurrence, plus "Active," "Cleared" or "Auto-cleared." • Active alarms display first in the Alarms Log, followed by cleared alarms (auto-cleared and/or manually-cleared) listed in order of occurrence. • The Alarms Log displays maximum 30 alarms. Cleared alarms leave the log first. • If an alarm event occurs and is not manually or auto-cleared during unit operation, the alarm will stay there until there is demand and the unit is running. 		

Security, downloading data, and data backup and restore

Security/password

To control who can change Vapor-logic4 settings, enable the security function and define a password in the Setup menu. Enter four digits, numbers only, and define the time-out period (minutes of inactivity before Vapor-logic4 reverts to read-only mode). The Web interface and the keypad/display can have separate passwords.

Important: Write down this password and keep in a secure location.

Downloading historical data

Vapor-logic4 retains the following data sets:

- RH history (seven rolling days of data acquired at one-minute intervals)
- Temperature history (seven rolling days of data acquired at one-minute intervals)
- RH and temperature history (seven rolling days of data acquired at one-minute intervals)
- Water converted (pounds/kilograms of water converted to steam since last reset)
- Energy used (kW hours or therms used since last reset)

To download data, go to the download data section of the Diagnostic screen.

Data backup and restore

Vapor-logic4 data can be backed up to a USB flash drive. The backup file contains all information relative to the humidifier, including firmware, user settings, model number, serial number, and the configuration string.

Backup files use the serial number in the backup file name so that the file is easily matched to a particular humidifier.

To create a backup file:

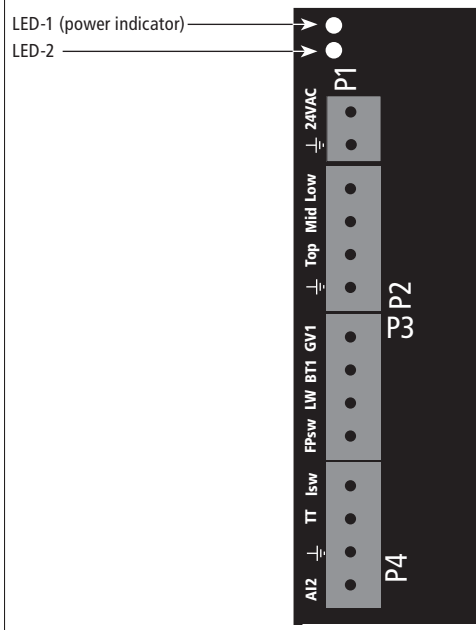
1. Insert a USB flash drive into the USB port on the Vapor-logic4 board.
2. Go to Diagnostics/USB backup-restore/Back up settings
3. Select Yes. The backup process is complete when LED-2 (see Figure 61-1) illuminates.

To restore from a backup file:

1. Insert the USB flash drive with that humidifier's backup file into the USB port on the Vapor-logic4 board.
2. Go to Diagnostics/USB backup-restore/Restore settings
3. Select Yes. Note that the serial number of the humidifier and backup file must match to complete the restore process.

Firmware updates

Figure 6-1:
LED-2 location on Vapor-logic4 board



How to unzip a file

If you are using Windows XP, then your operating system has built-in support for Zip files, and the instructions above should work for unzipping a file. If the above instructions do not work for opening the VL4_update.zip file, then you may need to install a special application. One application that has a free download is available at http://www.winzip.com/prod_down.htm

Firmware updates

1. Obtain the firmware update file from your DRI-STEEM representative or distributor. The update file will be titled VL4_update.zip or similar. Save this file and note the location where you have saved the file.
2. Locate the file just saved and double click on the file (VL4_update.zip); Windows Explorer should unzip the file and open a window that has the firmware update folder titled VL4_update or similar.

Note: If Windows Explorer does not open when you double-click on the file named VL4_update.zip, see instructions below about unzipping files.

Important: Do not change the name of this folder.

3. Copy the unzipped folder (VL4_update) to the root directory of a USB flash drive (do not place within another folder).

Important: If the USB flash drive already has a folder named VL4_update, either delete the folder or rename it prior to saving the latest update folder on the USB. Do not overwrite its contents.

4. Place the humidifier system in Standby mode.
5. Insert the USB flash drive loaded with the firmware update folder into the USB port on the Vapor-logic4 board.
6. Disconnect power to the Vapor-logic4 board.
7. Reconnect power to the Vapor-logic4 board.
8. Wait for LED-2 (the LED light closest to P1 on the Vapor-logic4 board) or the display to illuminate on and off, and then remove the USB flash drive. The update has now been loaded on to the Vapor-logic4 board.

CAUTION! DO NOT REMOVE THE USB FLASH DRIVE BEFORE LED-2 OR THE DISPLAY ILLUMINATES ON AND OFF. Doing so can corrupt the update and may render the control board useless. If in doubt, check the version number on the display (when available) or wait five (5) minutes from when the power was turned on to remove the USB flash drive.

Important: Remove the USB flash drive after LED-2 or the display illuminates on and off. If power is cycled again while the USB is inserted, the upgrade process repeats and must be allowed to complete before the USB is removed.

9. Verify the firmware update is complete by going to the Humidifier info section of the Diagnostics screen on the keypad/display or Web interface. Firmware version should now be 1.1.0
10. Update the clock/calendar to today's date.

Modbus, BACnet, LonTalk interoperability

**Table 7-1:
Interoperability variable and object names**

Variable name and BACnet object name	Read Only (RO) or Read Write (RW)	Modbus register number	BACnet Object Type and Instance	LonTalk variable names	Description	Units		Range	
						I-P units	SI units	I-P units	SI units
Read-only analog variables									
Space_RH	RO	IR-1	AI-01	nvoSpaceRH	Read the relative humidity content of the air in the space being humidified.	%	%	0 to 100	0 to 100
Space_dew_point	RO	IR-2	AI-02	nvoSpaceDewPoint	Read the dew point of the air in the space being humidified.	°F	°C	20 to 80	-6 to 26
Duct_RH	RO	IR-3	AI-03	nvoDuctRH	Read the relative humidity content of the air in the duct.	%	%	0 to 100	0 to 100
Steam_demand_mass	RO	IR-4	AI-04	nvoSteamDmndMass	Read the steam demand in pounds or kilograms per hour.	lbs/hr	kg/h	0 to 100,000	0 to 100,000
Steam_demand_percent	RO	IR-5	AI-05	nvoSteamDemand%	Read the steam demand as a percentage of the humidifier's total capacity.	%	%	0 to 100	0 to 100
Aux_temp	RO	IR-6	AI-06	nvoAuxTemp	Read the temperature of the auxiliary temperature sensor.	°F	°C	-20 to 160	-29 to 170
Tank_temp	RO	IR-7	AI-07	nvoTankTemp	Read the temperature of the water in the humidifier's evaporating chamber.	°F	°C	-240 to 265	-151 to 129
Steam_output_mass	RO	IR-8	AV-1	nvoSteamOutMass	Read the estimated amount of steam the humidifier is producing in pounds or kilograms per hour.	lbs/hr	kg/h	0 to 100,000	0 to 100,000
Steam_output_percent	RO	IR-9	AV-2	nvoSteamOutput%	Read the estimated amount of steam the humidifier is producing as a percentage of the humidifier's total capacity.	%	&	0 to 100	0 to 100
Water_until_ADS	RO	IR-10	AV-3	nvoWaterUntilADS	Read the pounds or kilograms of water remaining to be converted to steam before the next automatic drain sequence (ADS) cycle.	lbs	kg	0 to 2,200,000	0 to 1,000,000
Water_until_service	RO	IR-11	AV-4	nvoWaterTilSrv	Read the pounds or kilograms of water remaining to be converted to steam before the next service cycle.	lbs	kg	0 to 2,200,000	0 to 1,000,000

More on the next page >

Modbus, BACnet, LonTalk interoperability

**Table 8-1:
Interoperability variable and object names**

Variable name and BACnet object name	Read Only (RO) or Read Write (RW)	Modbus register number	BACnet Object Type and Instance	LonTalk variable names	Description	Units		Range	
						I-P units	SI units	I-P units	SI units
Setup variables									
Run_mode	Write	HR-1	MSV-01	nviRunMode	Set the current mode of the unit or system. The defined options are: 1 Auto 2 Local standby 3 System standby 4 Manual drain	--	--	1 to 4	1 to 4
	Read	HR-1	MSV-01	nvoRunMode	Read the current mode of the unit or system. The defined options are: 1 Auto 2 Local standby 3 System standby 4 Manual drain 5 Test outputs 6 Test run	--	--	1 to 6	1 to 6
Space_RH_set_point	Write	HR-2	AV-05	nviSpaceRHsetPt	Set or read the humidity set point for the space being humidified.	%	%	0 to 100	0 to 100
	Read	HR-2	AV-05	nvoSpaceRHsetPt		%	%	0 to 100	0 to 100
Space_dew_point_set_point	Write	HR-3	AV-06	nviSpaceDewPtSP	Set or read the dew point set point for the space being humidified.	°F	°C	20 to 80	-6 to 26
	Read	HR-3	AV-06	nvoSpaceDewPtSP		°F	°C	20 to 80	-6 to 26
Duct_high_limit_set_point	Write	HR-4	AV-07	nviDuctHLsetPt	Set or read the duct high limit set point.	%	%	0 to 100	0 to 100
	Read	HR-4	AV-07	nvoDuctHLsetPt		%	%	0 to 100	0 to 100
Fieldbus_demand_mass	Write Only	HR-5	AV-08	nviFbusDemndMass	Set the steam output (as demanded via the fieldbus) as a percentage of the humidifier's total capacity.	lbs/hr	kg/h	0 to 100,000	0 to 100,000
Fieldbus_demand_%	Write Only	HR-6	AV-09	nviFldBusDemand%	Set the steam output (as demanded via fieldbus) in pounds or kilograms per hour. If the request exceeds the unit's capacity, the unit will run at 100% capacity.	%	%	0 to 100	0 to 100
PID_band	RW	HR-7	AV-10	nciPIDband	Set the PID band.	%	%	0 to 50	0 to 50
PID-Kp	RW	HR-8	AV-11	nciPIDkp	Set the PID-Kp (proportional gain) factor.	--	--	0 to 1000	0 to 1000
PID-Ki	RW	HR-9	AV-12	nciPIDki	Set the PID-Ki (integral gain) factor.	--	--	0 to 1000	0 to 1000
PID-Kd	RW	HR-10	AV-13	nciPIDkd	Set the PID-Kp (derivative gain) factor.	--	--	0 to 1000	0 to 1000

More on the next page >

Modbus, BACnet, LonTalk interoperability

**Table 9-1:
Interoperability variable and object names**

Variable name and BACnet object name	Read Only (RO) or Read Write (RW)	Modbus register number	BACnet Object Type and Instance	LonTalk variable names*	Description	Units		Range	
						I-P units	SI units	I-P units	SI units
Read-only digital I/O									
Airflow_proving_switch	RO	DI-1	BI-01	nvoAirflowSwitch	0=Open; 1=Closed	--	--	--	--
Duct_HL_switch	RO	DI-2	BI-02	nvoDuctHLswitch	0=Open; 1=Closed	--	--	--	--
Safety_interlock	RO	DI-3	BI-03	nvoSafetyI-lock	0=Open; 1=Closed	--	--	--	--
Combustion_air_damper_(GTS)	RO	DI-4	BI-04	nvoCombustAirDmp	0=Damper Closed; 1=Damper Open	--	--	--	--
Flue_pressure_switch_(GTS)	RO	DI-5	BI-05	nvoFluePressurSw	0=Open; 1=Closed	--	--	--	--
Power_vent_switch_(GTS)	RO	DI-6	BI-06	nvoPowerVentSwch	0=Vent Off; 1=Vent On	--	--	--	--
Low_water_sensor_(GTS)	RO	DI-7	BI-07	nvoLowWaterSensr	0=No Water; 1=Water	--	--	--	--
Fill_valve	RO	DI-8	BO-01	nvoFillValve	0=Closed; 1=Open	--	--	--	--
Drain_valve	RO	DI-9	BO-02	nvoDrainValve	0=Not Draining; 1=Draining	--	--	--	--
Faults and alarms									
Active_messages_exist	RO	DV-1	BV-01	nvoMessages	Flags all active messages	--	--	--	--
Active_auto_cleared_alarms_exist	RO	DV-2	BV-02	nvoAlarms1	Flags all auto-cleared alarms	--	--	--	--
Active_manually_cleared_alarms_exist	RO	DV-3	BV-03	nvoAlarms2	Flags all manually cleared alarms	--	--	--	--
Clear_all_faults	RW	DV-4	BV-04	nviClearAllFaults	When set will clear all active faults	--	--	--	--
Alarm_tank_temp_sensor_failed	RW	DV-5	BV-05	nvoAlrmTnkTmpSen	See Alarms menu.	--	--	--	--
Alarm_tank_overtemp	RW	DV-6	BV-06	nvoAlrmOvertemp	See Alarms menu.	--	--	--	--
Alarm_RH_signal_out_of_range	RW	DV-7	BV-07	nvoAlrmRHsignal	See Alarms menu.	--	--	--	--
Alarm_dew_pt_sig_out_of_range				nvoAlrmDewPtSgnl	See Alarms menu.	--	--	--	--
Alarm_demand_sig_out_of_range				nvoAlrmDemndSgnl	See Alarms menu.	--	--	--	--
Alarm_duct_RH_sig_out_of_range	RW	DV-8	BV-08	nvoAlrmDuctRHsig	See Alarms menu.	--	--	--	--
Alarm_aux_temp_sens_out_of_rnge	RW	DV-9	BV-09	nvoAlrmAuxTemp	See Alarms menu.	--	--	--	--
Alarm_water_probe_miswired	RW	DV-10	BV-10	nvoAlrmProbeWire	See Alarms menu.	--	--	--	--
Alarm_water_probe_failed	RW	DV-11	BV-11	nvoAlrmProbeFail	See Alarms menu.	--	--	--	--
Note: * nvi LonTalk SNVT's are write-only; nvo are read-only									
More on the next page >									

Modbus, BACnet, LonTalk interoperability

**Table 10-1:
Interoperability variable and object names**

Variable name and BACnet object name	Read Only (RO) or Read Write (RW)	Modbus register number	BACnet Object Type and Instance	LonTalk variable names*	Description	Units		Range	
						I-P units	SI units	I-P units	SI units
Faults and alarms (cont.)									
Alarm_excess_fill_time	RW	DV-12	BV-12	nvoAlrmFillTime	See Alarms menu.	--	--	--	--
Alarm_excess_refill_time	RW	DV-13	BV-13	nvoAlrmRefilTime	See Alarms menu.	--	--	--	--
Alarm_tank_not_draining	RW	DV-14	BV-14	nvoAlrmNoDrain	See Alarms menu.	--	--	--	--
Alarm_excess_water_no_demand	RW	DV-15	BV-15	nvoAlrmXessWater	See Alarms menu.	--	--	--	--
Alarm_no_SDU_airflow	RW	DV-16	BV-16	nvoAlrmNoSDUair	See Alarms menu.	--	--	--	--
Alarm_no_power_vent_airflow	RW	DV-17	BV-17	nvoAlrmPrVentAir	See Alarms menu.	--	--	--	--
Alarm_no_combustion_airflow	RW	DV-18	BV-18	nvoAlrmNoCombAir	See Alarms menu.	--	--	--	--
Alarm_blocked_flue	RW	DV-19	BV-19	nvoAlrmBlockdFlu	See Alarms menu.	--	--	--	--
Alarm_burner_1_failed	RW	DV-20	BV-20	nvoAlrmBurner1	See Alarms menu.	--	--	--	--
Alarm_burner_2_failed	RW	DV-21	BV-21	nvoAlrmBurner2	See Alarms menu.	--	--	--	--
Alarm_burner_3_failed	RW	DV-22	BV-22	nvoAlrmBurner3	See Alarms menu.	--	--	--	--
Alarm_burner_4_failed	RW	DV-23	BV-23	nvoAlrmBurner4	See Alarms menu.	--	--	--	--
Alarm_ignition_module_1_failed	RW	DV-24	BV-24	nvoAlrmIgnitMod1	See Alarms menu.	--	--	--	--
Alarm_ignition_module_2_failed	RW	DV-25	BV-25	nvoAlrmIgnitMod2	See Alarms menu.	--	--	--	--
Alarm_ignition_module_3_failed	RW	DV-26	BV-26	nvoAlrmIgnitMod3	See Alarms menu.	--	--	--	--
Alarm_ignition_module_4_failed	RW	DV-27	BV-27	nvoAlrmIgnitMod4	See Alarms menu.	--	--	--	--
Alarm_blower_1_failed	RW	DV-28	BV-28	nvoAlrmBlower1	See Alarms menu.	--	--	--	--
Alarm_blower_2_failed	RW	DV-29	BV-29	nvoAlrmBlower2	See Alarms menu.	--	--	--	--
Alarm_blower_3_failed	RW	DV-30	BV-30	nvoAlrmBlower3	See Alarms menu.	--	--	--	--
Alarm_blower_4_failed	RW	DV-31	BV-31	nvoAlrmBlower4	See Alarms menu.	--	--	--	--
Alarm_gas_valve_1_failed	RW	DV-32	BV-32	nvoAlrmGasValve1	See Alarms menu.	--	--	--	--
Alarm_gas_valve_2_failed	RW	DV-33	BV-33	nvoAlrmGasValve2	See Alarms menu.	--	--	--	--
Alarm_gas_valve_3_failed	RW	DV-34	BV-34	nvoAlrmGasValve3	See Alarms menu.	--	--	--	--
Alarm_gas_valve_4_failed	RW	DV-35	BV-35	nvoAlrmGasValve4	See Alarms menu.	--	--	--	--
Alarm_low_water	RW	DV-36	BV-36	nvoAlrmLowWater	See Alarms menu.	--	--	--	--
Alarm_low_signal_current	RW	DV-37	BV-37	nvoAlrmDrivemA	See Alarms menu.	--	--	--	--

Note:

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More on the next page >

Modbus, BACnet, LonTalk interoperability

**Table 11-1:
Interoperability variable and object names**

Variable name and BACnet object name	Read Only (RO) or Read Write (RW)	Modbus register number	BACnet Object Type and Instance	LonTalk variable names*	Description	Units		Range	
						I-P units	SI units	I-P units	SI units
Messages									
Message_replace_contactors	RW	DV-38	BV-38	nvoMsgReplCntctr	See Messages menu.	--	--	--	--
Message_service_unit	RW	DV-39	BV-39	nvoMsgSrvceUnit	See Messages menu.	--	--	--	--
Message_drain_pending	RW	DV-40	BV-40	nvoMsgDrainPend	See Messages menu.	--	--	--	--
Message_no_duct_airflow	RW	DV-41	BV-41	nvoMsgNoDuctAir	See Messages menu.	--	--	--	--
Message_interlock_open	RW	DV-42	BV-42	nvoMsgllockOpen	See Messages menu.	--	--	--	--
Message_freeze_prevent_draining	RW	DV-43	BV-43	nvoMsgFreezDrain	See Messages menu.				
Message_end-of-season_active	RW	DV-44	BV-44	nvoMsgEOSactive	See Messages menu.	--	--	--	--
Message_temp_comp_on	RW	DV-45	BV-45	nvoMsgTempCompOn	See Messages menu.	--	--	--	--
Message_clean_probes	RW	DV-46	BV-46	nvoMsgCleanProbe	See Messages menu.	--	--	--	--
Message_duct_HL_trip	RW	DV-47	BV-47	nvoMsgDuctHLtrip	See Messages menu.	--	--	--	--
Message_duct_HL_span	RW	DV-48	BV-48	nvoMsgDuctHLspan	See Messages menu.	--	--	--	--
Message_insufficient_water	RW	DV-49	BV-49	nvoMsgH2Ocutout	See Messages menu.	--	--	--	--
Message_boiling_temp_calibrated	RW	DV-50	BV-50	nvoMsgBoilTempCl	See Messages menu.	--	--	--	--

Note:

* nvi LonTalk SNVT's are write-only; nvo are read-only

Expect quality from the industry leader

For over 40 years, DRI-STEEM has been leading the industry with creative and reliable humidification solutions. Our focus on quality is evident in the construction of the Vapor-logic4, which has a two year warranty that covers all parts.

For more information

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Technical support
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For the most current product information, visit our Web site: www.dristeem.com

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Continuous product improvement is a policy of DRI-STEEM Corporation; therefore, product features and specifications are subject to change without notice.

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Software Version 1.1.0
Form No. VL4-IOM-Update-1008
Part No. 890000-713-1

Two-year Limited Warranty

DRI-STEEM Corporation ("DRI-STEEM") warrants to the original user that its products will be free from defects in materials and workmanship for a period of two (2) years after installation or twenty-seven (27) months from the date DRI-STEEM ships such product, whichever date is the earlier.

If any DRI-STEEM product is found to be defective in material or workmanship during the applicable warranty period, DRI-STEEM's entire liability, and the purchaser's sole and exclusive remedy, shall be the repair or replacement of the defective product, or the refund of the purchase price, at DRI-STEEM's election. DRI-STEEM shall not be liable for any costs or expenses, whether direct or indirect, associated with the installation, removal or reinstallation of any defective product. The Limited Warranty does not include cylinder replacement for electrode steam humidifiers.

DRI-STEEM's Limited Warranty shall not be effective or actionable unless there is compliance with all installation and operating instructions furnished by DRI-STEEM, or if the products have been modified or altered without the written consent of DRI-STEEM, or if such products have been subject to accident, misuse, mishandling, tampering, negligence or improper maintenance. Any warranty claim must be submitted to DRI-STEEM in writing within the stated warranty period. Defective parts may be required to be returned to DRI-STEEM.

DRI-STEEM's Limited Warranty is made in lieu of, and DRI-STEEM disclaims all other warranties, whether express or implied, including but not limited to any IMPLIED WARRANTY OF MERCHANTABILITY, ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, any implied warranty arising out of a course of dealing or of performance, custom or usage of trade.

DRI-STEEM SHALL NOT, UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, REVENUE OR BUSINESS) OR DAMAGE OR INJURY TO PERSONS OR PROPERTY IN ANY WAY RELATED TO THE MANUFACTURE OR THE USE OF ITS PRODUCTS. The exclusion applies regardless of whether such damages are sought based on breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory, even if DRI-STEEM has notice of the possibility of such damages.

By purchasing DRI-STEEM's products, the purchaser agrees to the terms and conditions of this Limited Warranty.

Extended warranty

The original user may extend the term of the DRI-STEEM Limited Warranty for a limited number of months past the initial applicable warranty period and term provided in the first paragraph of this Limited Warranty. All the terms and conditions of the Limited Warranty during the initial applicable warranty period and term shall apply during any extended term. An extended warranty term of an additional twelve (12) months or twenty four (24) months of coverage may be purchased. The extended warranty term may be purchased until eighteen (18) months after the product is shipped, after which time no extended warranties are available.

Any extension of the Limited Warranty under this program must be in writing, signed by DRI-STEEM, and paid for in full by the purchaser.

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