DROP Notification	Meaning	Correction	Event Level	DROP Hub	DROP Valve	DROP HPS	DROP PC	DROP Accs.
AC Input Voltage Invalid	The voltage is outside of the range 187V-265V for a 230V Pump Con- troller or 100V-135V for a 120 Pump Controller	Electrician should check the wiring, breaker and electrical service.	EVENT				x	
AC Input Voltage Invalid, Pump Disabled	This notification is sent when the AC input voltage supplied to the device is out of range.	Either the supply voltage is much too high or low, or the device needs to be serviced	NOTIFICATION				х	
AC Input Voltage Is Normal	Voltage for the Pump Controller is within operating standards.	N/A	EVENT				Х	
Addition of Device Component	A device was added to the DROP System.	N/A	EVENT	Х				
App Pairing Key Was Reset	The app pairing key on the DROP Hub has been reset by holding the button on the Hub for 15-17 seconds and release while the light is green.	N/A	NOTIFICATION	х				
Bypass Motor Failure	When a valve cannot detect bypass motor current, it typically means one of the bypass motors is unplugged or has failed.	Check to see if bypass is plugged in and if it is, replace bypass.	VALVE ERROR		х			
Bypass Motor Timeout	This notification indicates that the bypass motor position could not be con- firmed. This can be because one of the bypass motor is disconnected or has failed, or because the gear drive.	Check to see if motor is plugged in and if it is, replace motor.	VALVE ERROR		х			
Component Communication Lost	A device has lost communication with the Hub	Either the device has moved out of range of the Hub or the device has lost power and will give an- other error if that's the case.	NOTIFICATION		х	х	х	х
Component Communication Normal	Unplug the valve for a while, you'll get communication lost. Plug it back in and you should get communication normal.	If you see this frequently, update your Hub to past 1.64.	EVENT	x				
Continuous Flow Detected	Water has been flowing for longer than specified time.	Adjust the length of time that water can flow or check for leaks. This is configured using the Protect Mode Feature.	NOTIFICATION		х	х	х	
Continuous Flow Detected; Water Supply Shut Off	Water has been flowing for longer than specified time and has been shut off.	Adjust the length of time that water can flow or check for leaks. This is configured using the Protect Mode Feature.	NOTIFICATION		х	х	х	

EVENT: any notification found in the event log with WHITE text. NOTIFICATION: any notification found in the event log with YELLOW text. These notifications will be pushed to users phone/email if setting is enabled. VALVE ERROR: these NOTIFICATIONS specify which valve (commercial, residential, or protection) has an issue and identifies what the issue is.

DROP Notification	Meaning	Correction	Event Level	DROP Hub	DROP Valve	DROP HPS	DROP PC	DROP Accs.
Current Sensor Error	This notification indicates that there is a problem with the current sensing circuit and the unit may require service.	If this happens, the Pump Con- troller board was damaged and needs to be replaced.	NOTIFICATION				х	
Device Battery Low	DROP devices can use a battery to maintain service while utility power is off. A low battery notification indicates that it is time to replace the battery.	Replace 9V battery.	NOTIFICATION		х	х	х	х
Device Power Lost	A device other than the Hub has lost power.	Check power supply, check actual outlet, and also check the power connection of the board.	EVENT		х	х	х	
Device Power Lost	This notification is sent when a device has lost its main power supply and is running on a backup battery.	Check that the device is plugged into a working electrical outlet.	NOTIFICATION		х	х	х	
Device Power Restored	Power on the device has been restored.	N/A	EVENT		Х	Х	Х	Х
DROP Hub Battery Low	The DROP Hub uses a battery to main- tain service while utility power is off. A low battery notification indicates that it is time to replace the battery.	Replace 9V battery.	NOTIFICATION	х				
End of Aeration Process	Aeration process has ended.	N/A	EVENT		Х			
End of Regeneration Process	Regeneration process has ended.	N/A	EVENT		Х			
Filter Cartridge Has Been Depleted	This notification is sent when the car- tridge in your DROP Filter is depleted and must be replaced.	Replace Cartridge	NOTIFICATION		х			
Filter Cartridge Has Been Depleted; Water Supply Shut Off	This notification is sent when the car- tridge in your DROP Filter is depleted and must be replaced. Your filter is configured to automatically shut off the water when the cartridge is depleted and unable to continue to treat your water.	Replace Cartridge	NOTIFICATION		Х			
Filter Cartridge Is Nearing End Of Life	This notification is sent when the cartridge in your DROP Filter is nearing the end of its useful lifetime. The amount of cartridge life remaining is visible on the DASHBOARD.	Replace Cartridge Soon	NOTIFICATION		Х			
Hard Water Breakthrough	System used all of the reserve capacity and is now using hard water.	Increase reserve capacity or check that settings are correct for capacity.	EVENT		х			



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DROP Notification	Meaning	Correction	Event Level	DROP Hub	DROP Valve	DROP HPS	DROP PC	DROP Accs.
High Pressure Exceeded; Pump Disabled	Pressure went over the max pressure indicated on the app and shut off the pump.	Raise to the maximum pressure or ignore.	NOTIFICATION				х	
High Temperature Detected	This notification is sent when the system detects a temperature outside of the normal range defined for this device.	The temperature set points can be configured for each applicable device under DEVICES.	NOTIFICATION			х	х	х
Injection Port Motor Failure	When a valve cannot detect injection port motor current, it typically means the injection port motor is unplugged or has failed.	Check to see if motor is plugged in and if it is, replace motor.	VALVE ERROR		Х			
Injection Port Motor Timeout	This notification indicates that the injection port motor position could not be confirmed. This can be because the injection port motor has failed, or because the proof switch on the front of the valve has come unplugged or has failed.	Verify that the micro switch on the front of the valve is plugged in and works. If it doesn't work replace, if it does work, replace motor	VALVE ERROR		х			
Internal Communication Error	A notification is sent when the radio board in a HPS or Pump Controller can't talk to the host board.	Verify the ribbon cable is plugged into both the boards and that none of the boards are "dead".	NOTIFICATION			х	х	
Invalid System Configuration	The most common cause would be a case where you have both a filter and a softener on the system with the same device ID, or two units in a softener using incompatible valves (e.g. residential and commercial)	If you see that notification, 99% of the time it will be that one of the valves needs removed, the device number needs changed to not conflict with something else on the system, and then it needs added back to the Hub	NOTIFICATION	х				
Leak Cleared	Issue that was causing a leak to be detected hes been cleared.	N/A	EVENT			Х	х	Х
Leak Detected	A leak was detected but shut off was disabled for this device so only a notifi- cation will be sent.	Find the source of the leak and fix it.	NOTIFICATION			х	х	x
Leak Detected; Water Supply Shut Off	A leak was detected and will shut off the water as long as a shutoff device was installed.	Find the source of the leak and fix it.	NOTIFICATION			х	х	х
Leaky Toilet Detected	A flow rate that matches a leaky toilet flapper has been detected.	Change the toilet flapper.	NOTIFICATION		Х	Х	Х	



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DROP Notification	Meaning	Correction	Event Level	DROP Hub	DROP Valve	DROP HPS	DROP PC	DROP Accs.
Lost Home Position	This notification indicates that the valve detected the main gear was out of position. Typically, the valve will auto- matically find its home slot and restore normal operation	Let valve return to home.	VALVE ERROR		Х			
Low Salt	Salt in brine tank is low.	Straighten paddle and fill tank with salt.	NOTIFICATION					х
Low Temperature Detected	This notification is sent when the system detects a temperature outside of the normal range defined for this device.	The temperature set points can be configured for each applicable device under DEVICES.	NOTIFICATION			х	х	х
Low Temperature Detected; Water Supply Shut Off	This notification is sent when the sys- tem detects a temperature outside of the normal range defined for this device and shut off the water.	The temperature set points can be configured for each applicable device under DEVICES	NOTIFICATION			х	х	х
Motor Overload	When the valve detects a motor current overload, it typically means that the valve piston is jammed or the main piston motor has failed.	Check piston for debris and try to run again. If still fails, replace motor	VALVE ERROR		х			
No Encoder Slots Detected	When a valve cannot detect encoder slots, it typically means that the main piston gear is jammed or the optical sensor on the valve is obstructed.	Unplug the power (and backup battery) and plug the power back in, if the main gear doesn't run at all, change the piston and seal and spacers. If the system runs but still gives this error, the control board will need to be replaced.	VALVE ERROR		x			
Notification Acknowledgment	Acknowledge a notification by dismiss- ing it or solving the issue that cause it.	N/A	EVENT	Х				
Ozone Generator Turned Off	Ozone generator has turned off.	N/A	EVENT					Х
Ozone Generator Turned On	Ozone generator was turned on and is running.	N/A	EVENT					Х
Piston Motor Failure	When a valve cannot detect main piston motor current, it typically means the main piston motor is unplugged or has failed.	Check to see if motor is plugged in and if it is, replace motor	VALVE ERROR		х			



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DROP Notification	Meaning	Correction	Event Level	DROP Hub	DROP Valve	DROP HPS	DROP PC	DROP Accs.
Possible Defective Check Valve	This notification is sent when more than 10 pump cycles have been recorded with very little water usage. This can happen when the check valve between the pump and the pressure tank has failed, which allows water to run back- wards back down into the well.	If this condition persists, you should have your pump system serviced.	NOTIFICATION				х	
Power Failed	This notification is sent when the DROP Hub has lost its main power supply and is running on a backup battery.	Check that the device is plugged into a working electrical outlet.	NOTIFICATION	х				
Power Restored	This notification is sent when the DROP Hub resumes normal operation after losing its main power supply.	Verify that the system is plugged into a stable electrical current.	NOTIFICATION	х				
Pressure Sensor Error	This notification indicates that there is an electrical problem with the pressure sensor.	This could be because it is mis-wired, disconnected or damaged.	NOTIFICATION			х	х	
Pressure Tank Precharge Too High	This notification is sent when the precharge pressure in your pressure tank is higher than the pump low pressure start setting. This will cause significant water pressure loss just before the pump starts.	To solve this problem, either raise the pump low pressure start setting, or decrease the pressure of the precharge air in the pressure tank.	NOTIFICATION				х	
Pump Disabled Due To No Pressure; Requires User Restart	This notification is sent when the pump has run continuously, but did not increase the system pressure. As a result, the pump has been disabled.	Re-enable the pump using the app. Pump can also be re-enabled by touching the button on the Pump Controller.	NOTIFICATION				х	
Pump Disabled Due To No Pressure; Will Retry	This event is logged when the pump has run continuously but did not increase the system pressure. As a result, the pump has been temporarily disabled. The Pump Controller will au- tomatically restart the pump in a couple of minutes.	N/A	NOTIFICATION				х	
Pump Is Short Cycling	This notification is sent when the pump is cycling shorter than the short cycle threshold setting.	This could be caused by a water- logged pressure tank or by high and low pressure settings that are too close together.	NOTIFICATION				х	
Pump Motor No Current	This notification is sent when the pump should be running but is not drawing any current.	This could indicate that there is a wiring problem with the pump.	NOTIFICATION				х	



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DROP Notification	Meaning	Correction	Event Level	DROP Hub	DROP Valve	DROP HPS	DROP PC	DROP Accs.
Pump Motor Overload; Requires User Restart	This notification is sent when the well pump motor has repeatedly entered a thermal overload condition and has been shut down to protect the motor	Re-enable the pump using the app. Pump can also be re-enabled by touching the button on the Pump Controller.	NOTIFICATION				х	
Pump Motor Overload; Will Retry	This event is logged when the well pump motor has entered a thermal overload condition and has been tem- porarily shut down to protect the motor. The motor will automatically restart after it has cooled down.	N/A	NOTIFICATION				х	
Pump Ran Dry; Requires User Restart	This notification is sent when the pump has been disabled because the motor current indicates that it is not pumping water.	Re-enable the pump using the app. Pump can also be re-enabled by touching the button on the Pump Controller.	NOTIFICATION				х	
Pump Ran Dry; Will Retry	This event is logged when the pump has been disabled because the motor current indicates that it is not pumping water. The Pump Controller will auto- matically restart the pump in a couple of minutes.	N/A	NOTIFICATION				х	
Removal Of Device Component	A device was removed from the DROP system.	N/A	EVENT	Х				
Repeated Startup Failures Detected; System Configuration Reset	Some of the configuration data stored in flash memory was somehow cor- rupted	If the Hub crashes and reboots 5 times in a row without running for at least 5 seconds, it automat- ically performs a factory reset and logs that entry.	EVENT	х				
Salt Added	The Salt Sensor has changed positions to where it reads that salt ahs been added.	N/A	EVENT					х
Slow Leak Test Deferred	Slow leak test was started but couldn't complete.	Most often, the water was used during the test. It will also defer if the pressure is too low	EVENT			х		
Slow Leak Test Failed	This notification is sent when a slow leak test has failed. If the pressure falls more than the set threshold before the test is finished, it is deemed as a failed test.	Fix the leak or disable the test and ignore notification.	NOTIFICATION			х		
Slow Leak Test Passed	Slow leak test has finished its task successfully.	N/A	EVENT			Х		
Slow Leak Test Started	Indicates that the leak test has begun	N/A	EVENT			Х		
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DROP Notification	Meaning	Correction	Event Level	DROP Hub	DROP Valve	DROP HPS	DROP PC	DROP Accs.
Softener Reserve Reached	The softener has used all of its capacity and is now using the reserve capacity	Reserve capacity is set as a percentage of daily water usage over the past two weeks. If daily water usage has changed recently (added another person to the household, perhaps) the system will readjust over time.	EVENT		Х			
Start Of Aeration Process	Aeration process has begun	N/A	EVENT		Х			
Start Of Regeneration Process	Regeneration process has begun	N/A	EVENT		Х			
System Pressure High	This notification is sent when the system detects water pressure outside of the normal range defined for this device.	The pressure notification set points can be configured for each protection valve device.	NOTIFICATION			х	х	
System Pressure Low	This notification is sent when the sys- tem detects water pressure outside of the normal range defined for this device	The pressure notification set points can be configured for each protection valve device.	NOTIFICATION			х	х	
System Reset To Factory Defaults	A factory reset has been initiated.	N/A	EVENT	Х				
System Started	System has booted on successfully.	N/A	EVENT	Х				
Unit State Changed By User	Logged when user advances a regen- eration step before the countdown time is finished.	N/A	EVENT		х			
Valve Finding Home Slot	Valve is running and will stop at home position.	Let valve return to home.	EVENT		Х			
Valve Motor Failure	When a valve cannot detect valve mo- tor current, it typically means the valve motors is unplugged or has failed.	Check to see if motor is plugged in and if it is, replace motor.	VALVE ERROR		х	х		
Valve Motor Overload	When the valve detects a motor current overload, it typically means that the valve piston is jammed or the main piston motor has failed.	Check piston for debris and try to run again. If still fails, replace motor	VALVE ERROR		х	Х		
Valve Motor Timeout	This notification indicates that the valve motor position could not be confirmed. This can be because the valve motor has failed, or because the proof switch on the front of the valve has come unplugged or has failed.	Check to see if motor is plugged in and if it is, replace motor.	VALVE ERROR		х	х		



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DROP Notification	Meaning	Correction	Event Level	DROP Hub	DROP Valve	DROP HPS	DROP PC	DROP Accs.
Valve Moving To Water Bypass	Logged when the valve is moving to a bypass state.	If unintended, make sure the power didn't turn off during a regeneration cycle. The valve will move to bypass if it loses connection with the Hub during a regeneration but this event won't be logged because the Hub is offline.	EVENT		х			
Valve Moving To Water Shutoff	Logged when the valve is moving to a shutoff state.	The Hub will command it to go to shutoff only when the user changes the water state, the water state is changed due to long or high flow, or there is a leak detected.	EVENT		х	х		
Valve Returning To Service	Logged when the valve is moving to service.	N/A	EVENT		Х	Х		
Water Flow During Regeneration	Water was used during a regeneration.	This notification is designed to let the homeowner know that the selected system regeneration time might not fit their usage pattern. If they don't care about using bypassed water during a regeneration, they can disable this notification.	NOTIFICATION		х			
Water Flow Rate Surpassed Setpoint	A large amount of flow was detected but only sent a notification.	Adjust max flow rate or check for leaks.	NOTIFICATION		Х	Х	Х	
Water Flow Rate Surpassed Setpoint; Water Supply Shut Off	A large amount of flow was detected and shut off water.	This is designed to shut the water off in case of a burst pipe. The maximum flow rate should be set a little higher than the highest peak flow rate seen on the history graphs.	NOTIFICATION		х	х	х	
Water Usage Surpassed Setpoint	Maximum flow per day has been exceeded.	Increase the amount of water per day or look for a leak causing more gallons to be used.	NOTIFICATION		х	х	х	
WiFi Network Connection Failed	Hub could not connect to WiFi.	Move Hub closer to router, restart Hub, restart router, verify that the name of the router has not changed. Range extenders can complicate connection.	EVENT	х				



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