



CS400™

Commercial Backwash Controller

- Aquatics Facilities
- Competition Pools
- Resorts
- Hotels & Motels
- Municipal Pools



Easy, Clean Recreation Water

The CS400™ Backwash Controller, by Paragon Aquatics®, has simplified the backwash cycle of Stark™ and THS Series® filtration systems equipped with diaphragm-valve face piping kits. This semi-automatic programmable controller, with Acu-Trol® Intelligence, can backwash up to six (6) filters in sequence via the integral multi-port pressure distribution valve. A backwash can be initiated in three ways: true semi-automatic backwash at the single touch of a button, via an external signal from a master filter room controller such as the Acu-Trol® AK600™ or by a signal from an optional differential pressure switch for basic, automatic backwash functionality. Features include user-configurable settings, alarms, automatic calculated backwash cycle time and valve control to ensure pump and heater protection prior to the start of the backwash cycle. The enhanced efficiency and economy makes the CS400 one the most eco-friendly commercial backwash controllers on the market.

Standard Features

- Compatible with Stark™ and THS Series® filters with diaphragm-style backwash valves
- "Advance" feature saves water and energy
- Multi-port pressure distribution valve actuate diaphragm-style backwash valves using city water pressure or compressed air
- Calculated backwash cycle time
- Stored backwash data and history
- Alarms
- Heater cool-down (Fireman's delay)
- Compatible with Acu-Trol® AK600™ multi-body water chemistry and pump room controller
- Connect to networks using the Acu-Trol AcuPort™
- LCD Display



CS400™

Commercial Backwash Controller



Specifications

- **Power Source:** Class II, 24VAC transformer, 50/60 Hz, 100VA, 4 amp max. Optional: 120/24VAC 50/60Hz Class II transformer
- **Safety Approval:** UL/cUL Listed Enclosure Type 4x, IP66
- **Dimensions:** 18"H x 11.75"W x 9.75"D
- **Weight:** 15 lbs
- **Operating Environment:** 32°F to 118°F, 5 to 95% RH non-condensing Shaded from direct sunlight
- **Communication Ports** Serial Port 1: RS-232, DB9 Female
Optional Serial Port 2: RS-485, 2 Wire Half Duplex
- **3 Output Relay Modules:** Independently configured to be sourced from either internal 24VAC or external 12-24VAC.
(1) Master Status (1) Pump Control
(1) Auxiliary Control: Auxiliary can be used for priority valve or heater control
- **Maximum Output Drive:** Maximum 0.5 Amps at 24VAC when sourced from internal supply. Pump motor or other heavy load requires external contactor. Maximum 3.0 amps when sourced from external supply.
- **Internally Fused:** Input protected by 5 amp fuse
Each output protected by 4 amp fuse
- **Computer Control:** Field upgradable firmware
- **Eight-Button Keypad:** For configuration menu, Advance, Start and Stop
- **LCD Display:** Includes a 20x4 character display with status screen with process information and backlight
- **Eight LED Indicators:** Power, Alarm, Auto, Filter, Pump, Auxiliary, Backwash, and Advance

Features

- **Configuration Menu Options:**
 1. Auto or Manual mode
 2. Backwash duration
 3. Number of tanks (up to six)
 4. Advance mode on and off
 5. Auxiliary relay for priority valve or heater
 6. Delay after pump is turned off
 7. Valve shift duration
 8. Inter-filter delay
 9. Priority valve delay
 10. Fireman's delay
 11. Keypad lock-out for security
- **Advance:** This push-button feature allows the user to advance to the next process within the backwash cycle, to save energy and conserve water. Processes that include the Advance feature are: backwash duration, valve shift duration, inter-filter delay and priority valve delay.
- **Manual Backwash:** The backwash cycle can be manually initiated from the keypad start button.
- **Auto Backwash:** Requires an external input signal from a master pool controller or optional differential pressure switch. Accepts normally-open dry contact or input signal either 10-32VDC or 12-32VAC.
- **Security:** Keypad lockout and padlock compatible door latch.

The CS400™ Commercial Backwash Controller is compatible with the Stark™ and THS Series® filter systems. The Acu-Trol® AK600™ multi-body water chemistry interfaces with the backwash controller with master control capability.

Stark™ Series Filter with Clear Valve



Acu-Trol® AK600™ Multi-functional
Equipment Room Controller



THS Series®



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