

ELC-800r Water Level Controller



For the past 15 years the model ELC-800 Water Level Controller has been accurately and reliably controlling water to precise levels in swimming pools, spas, fountains and water features. As part of a new and growing line of innovative technology we have added the model ELC-800r. This newly revised version of the ELC-800 adds enhanced features and functionality with the same degree of accuracy you have come to know and expect. The 800r has an easy to program menu; along with the ability to sense dangerously low water conditions and deactivate circulation pumps, protecting them from damage. Still taking advantage of proximity sensing technology, the ELC-800r stands apart from other water level controllers that use floats, or introduce electrical currents into the water. AquatiControl has also made it easy to adapt our ELC technology to all bodies of water with special sensing configurations depicted below. Rely on AquatiControl's 15 years of proven experience to work for you.



Standard Well

The standard well is designed for mounting at static water levels, usually in a pump pit in the equipment room. For bodies of water with skimmers.



Sight Glass

The sight glass is typically utilized on a balance tank configuration. For bodies of water with balance tanks.



Surge Tank

The surge tank application allows mounting in a surge tank to control pool and spa levels. For bodies of water with overflow gutters.



Wet Well

The wet well design allows water level sensing in a 2" static well, usually in the equipment room. For bodies of water with skimmers.



Deck Well

Installed in the deck on applications where mechanical equipment is above or below the water level. For bodies of water with skimmers.

INPUTS

Sensors

One or Two switch sensors sensitive to within +/- 1/8 in. (4mm) of nominal water level
Supply voltage to sensor(s): 12 VDC
Current consumption ≤ 10mA per sensor
Sensor operation temperature 0° C to 60° C
Operating humidity 0% RH to 95% RH

Power

Controller: 115 VAC, 1 phase, 60 Hz
Fused at 2 amps with a user-protected 5 x 20mm fuse
Controller has a 40VA, 24VAC transformer protected with a 2.0 A polyfuse to external loads, allowing the system to power a 30VA valve and the internal electronics
Power switch located on side of controller with LED indicator

OUTPUTS

Single solenoid application for water make-up. Controller interlocks with auto water make-up valve and provides adjustable time delay for increasing level.
1 SSR output solenoid valve at 24VAC, 1.85 A max. with blue LED indicator
Low Water Shutoff Relay: C, NO, and NC contact are available and rated at 16A, 250VAC or 30 VDC.
Annunciation of 4 alarm conditions
Information in the display defines the specific fault

USER INTERFACE

Menu-Driven Operating System

3-switch user interface with up and down arrows and select key with short, audible click with each key press for easy menu setup
All menu settings are capable of password protection
All users may view settings. Use select key to step through menu.

Face Panel

LCD display with black-on-grey-green, 2-line x 16-character alpha/numeric display
Display backlight powers down after a 15 minute period of no key entries and comes back on by pressing any key
Overlay is embossed polycarbonate

USER INTERFACE

Indicators

Power (Green LED on power rocker switch) on left side of controller indicates power supplies are working
Alarm (flashing red LED and audible beeping, if activated) for the fill time and low water level alarms
Filling (blue LED)
Normal Level (yellow LED)
Low Level (yellow LED)

AMBIENT CONDITIONS

Works in conditions of 0° C to 60° C Sealed case enables use in very humid environments provided case seal is intact

CONTROLS

Timings

Fill On Delay: Adjustable from 10 seconds to 99 seconds (Blue LED flashes when timing)
Fill Off Delay: Adjustable from 10 seconds to 99 seconds
Maximum Fill Time: Adjustable from 20 to 240 minutes; adjustment above or below limits = unlimited filling.
Low Water Delay: Adjustable from 10 seconds to 99 seconds

Alarm Conditions

Any of the following four conditions initiates an alarm condition with flashing red LED and audible alarm, if enabled:

1. Maximum Fill Time has been reached; normal functions disabled until reset
2. Low Water Condition; Water level drops below the low level sensor; relay is open, pump shut off; programmable to auto restore
3. Sensor not working properly; auto restore
4. Low Water Sensor not working properly; auto restore

SAFETY SYSTEMS

All settings are capable of password protection and are saved in a nonvolatile memory so they are preserved during a power outage
Controller provides separation of high and low voltage
All cordage features watertight strain reliefs

PHYSICAL SPECIFICATIONS

Dimensions (HxWxD) and Weight

7.88 in. x 4.75 in. x 3.5 in.; 3.4 lbs.

Materials and Mounting

Housing: Watertight NEMA 4X UL94 5V UL flammability rated polycarbonate enclosure (meets IP66 and NEMA 4, 4X, 12 & 13 ratings); enclosure and connections designed to eliminate the possibility of corrosion and/or damage to internal components of the controller
Mounting: User mounts unit using four mounting holes located under the lid and outside the gasket seal

MODELS AVAILABLE

ELC-800r-XX-ST-000 (Surge Tank)
ELC-800r-XX-SW-000 (Standard Well)
ELC-800r-XX-DW-000 (Deck Well)
ELC-800r-XX-SG-000 (Sight Glass)
ELC-800r-XX-WW-000 (Wet Well)
Replace XX with SS (Single Sensing) or DS (Dual Sensing) and 000 with Length of Cable

WARRANTY

AquatiControl Technology (ACT) warrants equipment of its manufacture and bearing its identification to be free of defects in workmanship and material. ACT's liability under this warranty extends for a period of one year from date of delivery from our factory or authorized distributor. It is limited to repairing or replacing any device or part which is returned, transportation prepaid, to the factory within one year of delivery to the original purchaser, and which is proven defective upon examination.

ACT disclaims all liability for damage during transportation, for consequential damage of any nature, for damage due to handling, installation or improper operation, and for determining suitability for the use intended by the purchaser.

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