

Electronic Demand Regeneration System

THE NEXT GENERATION EDR II™

The EDR II™ consists of a meter designed to initiate regeneration of water softeners based on “demand” or quantity of water treated. The unit measures and totalizes the amount of water treated by the softener. The data collected is stored in the controller. At some preset volume, based on softener size and capacity, the controller sends a signal to the softener to initiate regeneration.

FEATURES OF THE EDR II™

- One button manual regeneration
- Microprocessor controlled
- NEMA 4 type enclosure
- Heavy duty commercial/industrial design - LED readout, ½” square push buttons
- Electrical rating – 115VAC 60 Hz. or 240VAC 50 Hz.
- Designed to U.L., C.S.A. and V.D.E. requirements.
- Wall or pipe mount
- Surge protector
- Power outage protection - In the event of a power outage, the unit stores the volume remaining, the regeneration status, and all programmed information in a NOVRAM memory. This allows the unit to resume operation, when power returns, exactly where it was when power went out.



OPERATING MODES FOR THE EDR II™

- **SINGLE UNITS.** An EDR II™ Controller, one meter, and the ARC can operate a single unit in demand mode.
- **TWIN ALTERNATING SYSTEMS.** A single EDR II™, a single meter and two ARCs, one on each unit, allow one tank in service and one tank on stand-by. Softened water supply is continuous.
- **TWIN/ PARALLEL SYSTEMS.** When two units are operated in parallel, each tank requires an EDR II™, meter, and ARC.
- **TRIPLEX SYSTEMS.** When three units are operated in parallel, each tank requires an EDR II, meter, and ARC. A relay and interconnecting wiring provides a regeneration lockout to prevent simultaneous regeneration.
- **QUAD SYSTEM.** When four units are operated in parallel, each tank requires an EDR II, meter and ARC. A relay and interconnecting wiring provides a regeneration lockout to prevent simultaneous regeneration.
- **APPLICABLE FLOW METERS.** The EDR II has built in presets for the PW075, PW150, and PW300 paddle wheel flow meters manufactured by Water King. The EDR II also allows setting of the K factors for other meters. If the “K – factor” function is used, the display for total

CAT410.2

gallons is limited to 99,999 gallons. For larger softeners, this maximum set point is a problem. For example, a 1200 Kilograin softener operating on 10 grain per gallon water would treat up to 120,000 gallons between regenerations. As a practical matter then, systems with flow meters over 4" in diameter and systems over 1000 kilograins will probably not be a good application for the EDR II.

- **USING EDR II WITH TURBINE (TM SERIES) METERS.** Water King employs a 1" and a 2" turbine meter with the EDR II. The K factors are set by the user and demand set points up to 99,999 gallons are allowed.
- **DELAYED REGENERATION CONTROLLER.** This control box houses a timer that delays regeneration to a set time of day, typically in off peak hours.

Water King's EDR II - Electronic Demand Regeneration Systems	
EDR II Electronic Control	800130
EDR II (Rebuilt)	800130-1
EDR II Controller w/ 3/4 Meter	800130-3/4
EDR II Controller w/ 1" Meter	800130-10
EDR II Controller w/ 1 1/2 Meter	800130-1 1/2
EDR II Controller w/ 2 Meter	800130-2
EDR II Controller with 3 Meter	800130-3
EDR-II™ Delayed Regeneration Controller	600300
Triplex Regeneration Selector	720093