

## TOTAL CONTROL®-R SERIES

Automatic controller(s) shall be model Total Control-R Series with stations 6, 9 or 12 in the indoor (IN-R) or outdoor (EX-R) model or stations 15, 18, 24, 36 or 48 in the outdoor (EX-R) model as manufactured under the brand name of Irritrol to be installed or wired in accordance with manufacturer's published instructions and applicable codes.

Operation: Controller shall be electronically controlled and have 4 independent watering programs that can run concurrently with each station's watering time independently variable from 1 minute to 10 hours in 1-minute increments. Controller shall also have programmable watering calendar options of 7-day specific, odd/even date or day interval options of 1 to 30 days. Clock shall have 365-day calendar for true unattended odd/even date programming. Controller shall have 16 total start times assignable to any program(s). Controller shall have a water budgeting feature that changes all stations within a program by a percentage from 10 to 200% in 10% increments without permanently altering the program. Controller shall have a "Valve Test" terminal. Controller shall have a programmable "Rain Off" up to 7 days. Programs shall be held in non-volatile memory throughout power failures of any duration. Controller shall have real-time battery (alkaline) backup capable of keeping accurate time during power failures up to 90 continuous days. Controller shall have a self-diagnostic electronic circuit breaker with valve-short detection that identifies and overrides an electrical malfunction. Programming shall be available in automatic, semi-automatic, single station timed manual and true manual operation. All programming shall be accomplished by use of a simple programming dial and selection buttons with a large LCD for ease of programming. Controller shall have start time stacking within each program, a pump start, programmable master valve and sensor hook up. Controller shall have modular design/enclosed electronics and remote control compatibility.

Construction: Outdoor controllers shall be enclosed in a weather-resistant plastic case with lock and key. Indoor models shall be enclosed in a plastic cabinet with a 24-volt plug-in transformer. 36 and 48-station models shall be housed in metal lockable cabinets.

Electric: TC-6EX-R, TC-9EX-R, TC-12EX-R, TC-15EX-R, TC-18EX-R, TC-24EX-R, TC-36EX-R and TC-48EX-R, transformer input shall be 120 V ac, 60Hz (220/240 V ac, 50Hz). Transformer output shall be 24 V ac, 1.67 amps. TC-6IN-R, TC-9IN-R and TC-12IN-R transformer input shall be 120 V ac, 60Hz (220/240 V ac, 50Hz). Transformer output shall be 24 V ac, 1.25 amps. Electronic circuit breaker shall be 1.25 amps minimum holding. Maximum output per station shall be 24 V ac, .5 amp. Maximum operating output to all valves shall be 24 V ac, 1.25 amp (including master valve). Controller shall have two-stage primary and secondary surge protection to resist damage from power surges and electrical storms.