



## THE SMARTLINE® ELEVEN

**SL1600** Consider 11 Reasons why a SmartLine Controller is the Smart Solution!

### 1 MODULAR

Provide expandability for every job and evolving landscapes with the SL1600 4-zone base model – expandable to 16 zones using slide-in SLM4 modules. For larger jobs, choose models SL1620 or SL1624, with permanently-mounted modules. Push-in wiring makes installation quick and easy!



SLM4 MODULE

THE IRRIGATION ASSOCIATION  
INTERNATIONAL  
IRRIGATION SHOW

2004  
Winner

EXHIBITOR  
NEW PRODUCT CONTEST  
TURF / LANDSCAPE

### 9 BACKLIT LCD / REAL TIME CLOCK / CALENDAR & NON-VOLATILE PROGRAM MEMORY

No flashlight required in dark basements and garages. No battery required! On board memory chip retains time, date and program information even during a power outage

### 2 MANUAL TEST SETTINGS IN SECONDS

Complete a walk-thru in a fraction of the normal time by running a manual test from 10 sec. – 10 min. in 10 sec. increments



SL1600 SERIES

### 10 OMIT TIMES / DAYS / DATES

Automatically comply with local water restrictions; eliminate irrigated water lost to evaporation in the heat of the day; stop irrigation on lawn maintenance days; never water on the date of an annual event (ex: July 4th)

INDUSTRY  
1<sup>ST</sup>

### 3 WEATHER BASED WATERING WITH OPTIONAL ON-SITE WEATHER STATION

SmartLine controllers are really two controllers in one; operate in Standard mode or switch to Auto Adjust mode by simply adding any SLW Series On-Site Weather Station for weather based watering schedules and rain/freeze sensing.

SLW15 WIRELESS  
ON-SITE  
WEATHER STATION

(US Patent No. 6,314,340)

### 11 SEASONAL % ADJUST BY MONTH

A monthly watering budget % can be set up by program to automatically adjust zone run times for seasonal changes

DOWNLOAD TECH SPECS AT:  
[www.weathermatic.com](http://www.weathermatic.com)

### 4 BUILT-IN VALVE LOCATOR

Locate hidden valves by simply listening for the audible chatter of the solenoid created by a unique electrical frequency

(US Patent No. 7,406,363)

INDUSTRY  
1<sup>ST</sup>

### 5 ON-BOARD MULTI-METER

Displays the electrical current reading of each zone for quick troubleshooting and a proactive approach to maintenance

INDUSTRY  
1<sup>ST</sup>

### 6 MASTER VALVE / PUMP SETTINGS

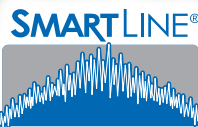
Achieve hydraulic control with settings for zone-to-zone delays, master valve timing, and master valve On/Off by zone

### 7 RUNOFF ELIMINATOR

Eliminate run off by setting the maximum allowable run time and minimum soak time by program

### 8 BACKTRACK STORED PROGRAM™ FEATURE

Allows contractor to easily store a default program and retrieve the saved program in the event a customer improperly reprograms the SL1600



## SMARTLINE® CONTROLLER – SL1600

## MODEL DESCRIPTIONS

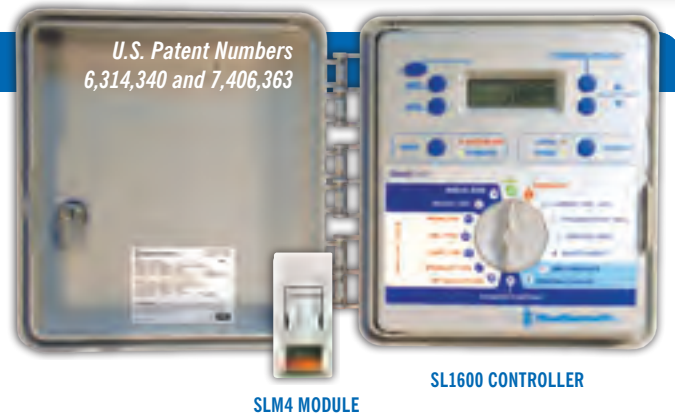
<b>SL1600</b>	4-zone base model, expandable to 16 zones
<b>SL1620</b>	20-zone model, permanently-mounted modules
<b>SL1624</b>	24-zone model, permanently-mounted modules
<b>SLM4</b>	4-zone module for SL1600

## FEATURES

- 4-zone base model, expandable to 16 zones using slide-in SLM4 4-zone hot-swappable modules (Indoor/outdoor rated)
- Internal 120VAC/230VAC transformer with plug and play pre-installed 6' line cord (removable for conduit-wired installations)
- Large backlit LCD display
- 2 run modes: Standard mode runs user input zone run times; Auto Adjust mode requires SLW Series On-Site Weather Station to calculate weather based run times that override user input zone run times
- Rain/Freeze sensor bypass/active button located on face panel displays sensor status with tri-color LEDs (red indicates sensor is prohibiting irrigation; orange indicates an extended rain delay after weather station rain sensor permits irrigation; green indicates normal operation)
- 4 programs: A, B, C; program D can operate concurrently
- 8 start times per program
- Nonvolatile memory and real time clock/calendar circuit to retain programs as well as correct date and time – with no battery required
- Zone run times settable from 1 min. to 9 hrs. 55 min. with operation countdown displayed in hours, minutes, and seconds (zone run times overridden by weather based calculated values in Auto Adjust mode)
- Watering day selections of custom days of the week, odd/even, or interval days
- Omit settings: omit time of day window, omit day(s) of week, and omit up to 7 calendar dates
- Seasonal % adjust by program, by month for simple year round water budgeting (monthly percentages overridden in Auto Adjust mode)

## ADVANCED FUNCTIONS

- Fault review displays all faults, including open and shorted zones
- Diagnostic test function using on-board multi-meter displays transformer voltage; milliamp measurement for each zone
- Built-in valve locator function for locating hidden valves by simply listening for the audible chatter of the solenoid created by a unique electrical frequency (U.S. Patent No. 7,406,363)
- Review menu displays accumulated ET deficits by zone (in inches) and corresponding zone run times for the next available watering day
- Review menu displays maximum run time and minimum soak time used during Auto Adjust mode
- Review menu displays temperature readings (daily high/low) for previous 5 days
- Review menu accumulates total run times by zone from the last reset date
- Review menu provides the ability to clear deficits for all zones
- Rain delay of 1 – 7 days may be selected (to pause and automatically resume operation)
- SLW weather station extended rain delay programmable from 0 – 99 hours
- Run/Soak cycles allow setting of maximum run time and minimum soak time by program for use in Standard mode only
- Zone-to-zone delay programmable for 1 min. – 3 hrs. to accommodate slow closing valves and recharging of water supply



SLM4 MODULE

SL1600 CONTROLLER

- Master valve timing sequence with zone valve programmable by “On Delay” (1 sec. – 1 min.; 2 sec. default) and “Off Delay” (1 sec. – 3 min.; 5 sec. default) to allow for line fill and slow closing valves
- Master valve/pump start operation assignable On/Off by zone
- Clear program function to selectively delete an individual program
- Clear All function to delete all programs
- Backtrack Stored Program™ feature allows contractor to easily store a default program and retrieve the saved program in the event a customer improperly reprograms the SL1600

## AUTO ADJUST FEATURES

- ZIP Code input (5 digit) or Latitude input ( $\pm 60^\circ$  from EQUATOR) establish location of site for solar radiation calculation
- Sprinkler type input allows selection for zone sprinkler type (SPRAY, ROTOR, DRIP, BUBBLER) with preset precipitation rate or specific input of the zone precipitation rate (.2 – 3.0" per hour)
- Plant type input allows selection for zone plant type (COOL TURF, WARM TURF, SHRUBS, ANNUALS, TREES, NATIVE) with preset crop factors or specific input of the zone crop factor (10 – 300%)
- Soil type input allows selection for the soil type (CLAY, SAND, LOAM) and slope (0 – 25°) for the purpose of automatically calculating a run/soak period to virtually eliminate run off
- More/Less is settable by zone (-50% to +25%) for the purpose of fine tuning Auto Adjust run times to accommodate factors like shade, wind, and sprinkler inefficiencies

## MANUAL OPERATION

- Manual test runs each zone with zone run times from 10 sec. – 10 min.
- Manual zone operation of a single zone (1 min. to 9 hrs. 55 min.)
- Push button manual start of a program from control panel

## OPTIONS

- SLM4 4-Zone Module • Pedestal (see page 33)
- SLW Series On-Site Weather Stations (see page 34-35)
- SLRC and Sidekick Remote Controls (see page 33)
- Rain Brain Universal Sensors (see page 35)

## ELECTRICAL FOR SL1600

Input: 120VAC/60Hz @ 400mA for 3 valves  
 Output: 28VAC, 1.0A maximum  
 Fuse: 1.0A, slow blow

## EXPORT

E-SL1600 (EU Plug) 230VAC/50Hz  
 E-SL1600A (Australia plug) 230VAC/50Hz

## DIMENSIONS

9 1/8" W x 10 1/2" H x 4" D  
 23,2 cm x 25,7 cm x 10,2 cm

