

LEIT-2 ET SYSTEM

DIG's LEIT-2 ET system is much more than just a solar powered irrigation controller. It's an expandable, ambient light powered, wireless "smart" irrigation control system powered by DIG's exclusive photo-voltaic technology using an ambient light energy collection system. The technology allows the operator to remotely program up to 99 controllers with 198 valves, with one hand-held device.



The LEIT-2ET weather-based, wireless irrigation control system utilizes evapotranspiration (ET) data along with programmed site information to adjust daily irrigation programming according to real time, local weather information.

LEIT-2ET system is programmed to monitor, control and adjust irrigation schedules for each zone through the data that is received by the weather station and site information that is received from the LEIT RC2ET handset. The LEIT-2ET epitomizes a true wireless water-based control system. The system operates by using ambient light (solar) power that charges lead-free super capacitors, not batteries, making it one of the most environmentally friendly controllers on the market.



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LEIT-2 ET System



Features

- Environmentally friendly- RoHS compliant components
- Waterproof, IP68 compliance
- PVM and microelectronic management system fueled by ambient (solar) light.
- Operates up to 2 stations and a rain sensor
- Unique Client ID identity code for controller and handset
- If ET is activated, information provided by the handset and information transmitted from the weather station sensors are used to override or adjust daily scheduled irrigation programs

- Utilizes ISM band radio frequency band (915MHz NA, 866.5MHz Hong Kong, 868MHz International) CE, IC, FCC certified, Australia and Hong Kong compliant
- Non-volatile memory retains program and controller integrity
- Program stacking feature prevents hydraulic overload
- Custom station grouping allows controller to operate the two stations simultaneously if hydraulic limitations are not exceeded
- Available with 18" (45 cm) color-coded 16 gauge wires for each valve and rain sensor
- 3 mounting configurations including green, tan and purple valve box mounts, direct-to-valve clip mounting and column mounting with 25" (63 cm) or 50" (127 cm) mounting columns
- 3 year manufacturer warranty

Controller specifications

- Operating temperature: 32°F to 158°F (0°C to 70°C)
- Controller wire gauge: 16 AWG
- Wireless transmitter power and frequency specifications: -7 dBm @ 920 MHz / 7 dBm @ 868 MHz / -7 dBm @ 866 MHz
- Rain sensor connection: normally closed
- Input: 3,000 -100,000+ Lux
- Output: 9-volt DC pulse
- Controller station capacity: one 7-9 volt DC pulse, two-way magnetic latching solenoid per each set of red and white wires
- 3" W x 5.5" L including antenna (7.62 cm W x 13.97 cm L)

Remote control handset specifications

- Remote handset input: 12-volt DC
- Power supply: rechargeable 3.6V Ni/MH
- Wireless transmitter power and frequency specifications: -7 dBm @ 920 MHz / 7 dBm @ 868 MHz / -7 dBm @ 866 MHz
- 2.25" W x 5.5" L including antenna (5.72 cm W x 13.97 cm L)

Weather station specifications

- Input: 3,000 -100,000+ Lux
- Wireless transmitter power and frequency specifications: -7 dBm @ 920 MHz / 7 dBm @ 868 MHz / -7 dBm @ 866 MHz
- Operating temperature: 14°F to 140°F (-10°C to 60°C)• Humidity range and resolution: 1-99% (100% inches Hg)
- Relative humidity accuracy: +/- 2%
- Temperature resolution and accuracy: -40°F to +170°F (-40°C to +77°C) +/- 1%
- Wind speed resolution and accuracy: 0 MPH (KPH) to 30 MPH (49 KPH) +/- 1%
- Rainfall resolution and accuracy: .01 inches accuracy +/- 2% @ 2" per hour
- Weather station size: 6.07" W x 9.5" H x 13.65" D (15.42 cm W x 24.13 cm H x 34.67 cm D)
- Mounting connection: 1"x12" mounting column and integrated clamp with two screws

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The LEIT-2ET weather-based, wireless irrigation control system utilizes evapotranspiration (ET) data along with programmed site information to adjust daily irrigation programming according to real time, local weather information.

Handset Features

- Simple, icon-based programming
- Programs the LEIT-2ET controller, reviews status information, updates ET information, checks history reports, adjusts budgeting, programs rain delays and performs manual run or tests
- Environmentally friendly - RoHS compliant components

Programming Features

- 2 independent programs with 4 start times per program
- Scheduled watering times run from 1 minute to 5 hours and 59 minutes duration
- 365-day calendar with leap year
- Custom programming with 7-day calendar or intervals from 1-39 days, odd, even or every day rotation

- Rain delay of up to 99 days with auto-restart
- Monthly "Off" feature allows controller to be inactive any month of the year
- Permanent Event "Off" feature allows for 3 inactive days per year
- Water budgeting from 10-200% in 10% increments
- Site or zone information input into each valve when ET is active
- ET editing feature can be used to each value
- History Report provides information on valve run times, rain measurements for previous and current week and month, ET savings in percentage and total time saved
- Manual test and manual run performed via the RC2ET handset
- Global Stop command turns off all valves with the same Client ID within radio range
- Wind sensor setting can be set to shut down any controller within range if wind exceeds speeds of 8-25 miles per hour (12.9-40 Km/h) and using spray, rotor, or micro sprinkler irrigation

Weather Station Features

- Sensors included:
 - Thermometer
 - Hygrometer
 - Anemometer
 - Tipping rain gauge
 - Solar radiation meter
- Weather data transmitted is stored by the controllers and is reviewable by the LEIT RC2ET handsets
- Self-emptying tipping bucket rain gauge reads rainfall in 0.01 inch (.254 mm international) increments
- The weather stations can notify LEIT-2ET controllers to completely stop irrigation in extreme weather conditions

How to specify	
Model	Description
LEIT RC2ET remote control handset	
LEIT-RC2ET	USA, Canada & Japan
LEIT-RC2ET-I	Europe & South Korea (Black)
LEIT-RC2ET-H	Hong Kong, Singapore & Macau (Black)
LEIT-RC2ET-A	Australia
LEIT-2ET system controller	
LEIT-2ET	USA, Canada, Australia & Japan
LEIT-2ET-I	Europe & South Korea
LEIT-2ET-H	Hong Kong, Singapore & Macau
LEIT-2ET weather station	
LEIT WWS	USA, Canada, Australia & Japan
LEIT WWS-I	Europe & South Korea
LEIT WWS-H	Hong Kong, Singapore & Macau

Controller and Handset Accessories



Features

- Column mounting allows the controller to be above the ground using 25" or 50" galvanized mounting column
- Valve box mounting with three different colors: green, tan and purple



Features

- Easily keep a full charge out in the field with the convenient car charger
- Protect handset with nylon carrying case

Features

- The LEIT-2 ET has three mounting configurations to fit any application
- Valve clip mounting can attach the controller directly to the S-305DC solenoid
- Column mounting allows the controller to be above the ground using 25" or 50" galvanized mounting column
- Valve box mounting with three different colors: green, tan and purple

How to specify

Model	Description
For use with LEIT-2 controllers only	
30-830	LEIT-2 controller valve box dome attachment with 8 screws • green
30-831	LEIT-2 controller plastic column attachment
30-832	LEIT-2 controller valve clip attachment
30-835	LEIT-2 controller valve box dome attachment with 8 Screws • tan
30-836	LEIT-2 controller valve box dome attachment with 8 Screws • purple
MCOL2S	LEIT-2 controller 25" (63cm) mounting column
MCOL2L	LEIT-2 controller 50" (128cm) mounting column
For use with LEIT-2 ET handsets only	
30-850	LEIT RC2 handset power supply 120 VAC/60 H2, 12 VDC @ 150 mA
30-851	LEIT RC2 handset car charger • 4ft Cable
30-852	LEIT RC2 handset holder

S-305DC Solenoid



Features

- Adaptable to a wide range of valves using our valve adapters
- Potted technique for sealed construction
- Two color-coded wires
- Captured plunger and spring for reliable operation

Specifications

- Operating pressure: 10-150 PSI (.7-10.5 BAR)
- Weight: 4.3 oz (122 g)
- Temp. range: 38°F to 150°F (3°C to 65°C)
- Solenoid thread: 11/16"-12 UN
- Control orifice: .065 (1.7 mm)
- Diameter: 1.230" (3.12 cm)
- Materials: glass reinforced nylon and 430F stainless, inside plunger & spacer: 430F stainless, inside plunger & spacer: 430F stainless, plunger rubber cap: EPDM and O-ring: Buna-N

Electrical Specifications

- Two-way magnetic latching solenoid
- Coil operating data:
 - Coil resistance 4.7 +/- 0.3 Ohms, minimum pulse 10 mS duration at 7-9 volts
 - Red + and white - to latch open
 - Red - and white + to latch closed
- Control orifice: .065 (1.7 mm)
- Leads: 18" (45 cm) AWM 1007 / 1569 16 AWG 300V VW-1- red/white

How to specify

Model	Description
For use with LEIT-2 ET controllers only	
S-305DC	Solenoid with internal bleed and manual override • 9-volt DC

Valve/Solenoid Adapters



Features

- For use in conjunction with the S-305DC and 1600HE solenoids
- Use with most brand name valves
- Made of durable plastic
- Female thread: 11/16"-12 UN

Materials

- Adapter: nylon
- O-ring: Buna-N
- Sleeve: vinyl

How to specify

Model	Description
For use with LEMA 1600HE and S-305DC solenoids only	
30-920	BERMAD series 200, HIT series 500, DOROT series 80, GRISWOLD series 2000, DW and BUCKNER series VB valves
30-921	RAIN BIRD DV, DVF, PGA, PEB (1" only), GB, EFB-CP, BPE, PESB (1" only) and ASVF valves
30-922	HUNTER series ASV, HPV, ICV, PGV, SRV, IBV and ASVF valves
30-923	WEATHERMATIC series 12000, 21000, 8200CR valves
30-924	IRRITROL series 100, 200B, 205, 217B, 700, 2400, 2500, 2600 and TORO series 220, P220 valves
30-925	SUPERIOR series 950, HUNTER HBV and TORO series 252 valves (1.5" and larger)
30-926	RAIN BIRD series PEB and PESB (1 1/2" and 2" only) valves