DRAFT

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LEIT RC 2, 2-Way Radio Remote Control Handset Instruction Manual

HANDSET & CONTROLLER FEATURES:

- LEIT RC2 handset can perform many functions, such as review status, check history reports, adjust budgeting from 10-200% in 10% increments, program rain delays and perform manual run
- All power is provided by an internal photovoltaic module and microelectronic energy management system fueled by ambient light
- Upload and change programs for up to 99 controllers
- Multilingual software in English, Spanish, Italian, French, German and Portuguese
- Large liquid crystal display with user friendly icons for easy programming
- Both handset and controllers have a two-way radio with operating range of up to 350 ft (100 meters) line of sight.
- Radio frequency is in the ISM band 902-928 MHz (868 international). CE and FCC certified
- Can reconnect via 99 saved addresses using the Find icon
- Default program if controller is not programmed: defaults to 5 minutes per day
- When programs are changed the user can review the changes, identifying the handset that made the changes
- Manual run, to test or skip any valve
- Provides controller status on connection
- Client ID enables the user to have a unique identity code for their handset and controllers; This is a security feature, which locks out unauthorized users
- Diagnostic setting alerts the user when communicating with a controller that has a short or open valve and continues operating the second valve
- Program stacking feature prevents hydraulic overload
- Reports the controller's power level, alerts the user to low power via the status report
- The LEIT2 controller operates up to 2 Unimax S-305 solenoids that can be installed on most brand name valves using valve adaptors
- Dedicated sensor input allows for a sensor connection promoting better water efficiency
- Electrical protection for up to 50 volts; resistant to damage from lightning and currents from power lines
- Non-volatile memory retains program and controller integrity forever (excludes time)
- Built from tough, rugged material resistant to harsh environmental conditions
- Environmentally friendly: Certified lead free, uses light as a source of energy
- Waterproof controller housing (not the handset)
- 3 mounting configurations include valve mounting, valve box mounting and column mounting

PROGRAMMING FEATURES:

- 2 programs with 4 start times per program
- Run times from 1 minute and up to 5:59 hours in 1 minute increments
- 365 day calendar with leap year
- Custom programming with 7 day calendar or intervals of 1-30 days in odd/even or every day rotation
- Individual monthly water budgeting from 10-200% in 10% increments
- Programmable rain delay up to 99 days with auto restart
- Status report provides various function information on the controller
- History report for each valve verifies operating time for past and current month
- Monthly Off feature allows any month of the year to be inactive

- Permanent Events Off feature allows any 3 days of the year to be inactive, will override any programs that enter that time frame
- Global Stop command will turn off all valves within radio range

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Patent pending

FCC compliance

Important Note: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter is installed to provide a separation distance of at least 8 inches (20 cm) from all persons (not including hands, wrist, feet and ankles) and must not be colocated or operating in conjunction with any other antenna or transmitter.

This device is required to comply with FCC RF exposure requirements for mobile and fixed transmitting devices. This model transceiver generates and uses radio frequency energy. If not installed and used in accordance with the manufacturer's instruction, it may cause interference to radio and television reception.

HANDSET FCC ID: UJV-LEIT02 IC: 6694A-LEIT02

CONTROLLER FCC ID: UJV-LEIT01 IC: 6694A-LEIT01



This device has been tested and found to comply with the specification in part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and, (2) This device must accept any interference received including interference that may cause undesired operation.

CAUTION: the user should make no field changes or modifications to the LEIT RC2 Handset or the LEIT2 Controller. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult DIG or an experienced radio/TV technician for help.

All adjustments and changes must be made at DIG's facility under the specific guidelines set forth in our manufacturing process. Any change or modification to the equipment will void the users authority to operate the unit, and render the equipment in violation of FCC part 15. Any tampering with this product will void the warranty.

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Thank you for purchasing DIG's LEIT RC2 Remote Control Handset. This manual will describe how to use the LEIT RC2 handset and get the LEIT RC2 handset up and running quickly. After reading this manual and have after you familiarized yourself with the basic functionality of this device, the manual can be used as a reference for less common tasks in the future.

The LEIT RC2 Series Remote Control Handset is an advanced wireless device that communicates with up to 99 LEIT2 ambient light (solar) powered irrigation controllers. The RC2 has a large LCD display and sophisticated, intuitive icon base software to communicate with a LEIT2 controller. A compact photovoltaic module powers the LEIT2 controller to harnesses light energy, generating electricity to power the controller day and night in any kind of weather. The handset and the controllers have an operating range via a two-way radio of up to 350 ft (100 m), line of sight.

The LEIT2 controller requires daily exposure to light levels at a minimum of 3000 lux, which is equivalent to daylight around 7-8 AM on a cloudy day. On very cloudy days the controller requires more time to charge up and to operate with the radio.

<u>IMPORTANT:</u> Communication between the LEIT RC2 and the LEIT 2 controllers are automatically limited to daylight hours when there is sufficient light energy. Longer bright light days will enable the radio to operate automatically over longer part of day.

Page 5 Introduction to your LEIT RC2 Handset

LEIT Link Handset Components

- 1. LCD Display
- 2. Programming Buttons
- 3. Antenna
- 4. Battery Socket Outlet



Picture

1. LCD Display

Displays the icon base application stored in the handset.

2. Programming Buttons

Use these 5 buttons to program, modify, review and communicate with the LEIT2 controller.

Use to raise (increase) the value of the selected parameter.

Use to lower (decrease) the value of the selected parameter or de-select a check mark.

Use to accept and/or, select the desired programming mode.

Use to move the cursor to left.

Use to move the cursor to right.

3. Antenna

See FCC compliance.

4. Battery Charge Outlets and Recharging the Battery

The LEIT RC2 contains a cell battery pack that is rechargeable using the AC/DC wall mounting charger 120 or 220 VAC/60 h2, 12 VDC @150 mA. To charge the LEIT RC 2 Handset, plug the wall mount charger into the wall and connect the power connector to the side of the LEIT RC 2 handset for approximately 8 hours for an initial charge before using it. Then charge it daily for a few hours as needed. If the handset is off, you will see a charging icon and a battery appear. The battery repeats a filling action, indicating that the battery is charging. Once the battery is charged, it will stop the filling motion, and the wording CHARGED will appear. A car charger model 30-851 can be purchased if needed.

The LEIT RC2 handset is ready for communication

For a first time user in order to have communication establish between a LEIT RC2 handset and LEIT controller a few steps must be taken

- 1. Charge the handset
- 2. Install the controller following the installation instruction
- 3. Set the handset following handset setup instruction
- 4. Connect to a LEIT 2 controller via the uplink icon
- 5. Set the controller following controller setup instruction

The handset and controller are available for communication