DIG
water matters

LEIT RC2ET
Two-Way
Weather Based
Radio Remote Control
Handset

INSTRUCTION MANUAL

Table of Contents

A. Introduction

Thank you for purchasing DIG's LEIT RC2ET weather based handset, which operates as a part of the LEIT-2ET wireless irrigation system. This manual describes how to get the LEIT RC2ET weather based handset up and running quickly. After reading this manual and familiarizing yourself with the basic functions of the handset, you can then reserve the manual to use as a reference for specific, less common tasks in the future.

B. About the DIG LEIT-2ET Weather Based Irrigation System

The LEIT-2ET weather based wireless irrigation control system comprises of the LEIT-2ET weather based two-station ambient light (solar) powered irrigation controller with a rain sensor connection, the LEIT RC2ET handset, and the LEIT WWS or LEIT WWSE ambient light (solar) powered weather stations.

The LEIT RC2ET handset is an advanced and cost effective wireless device that is used to communicate with up to 99 LEIT-2ET solar powered controllers, operating up to 198 valves, from a distance of up to 350 feet (100 m) line of sight. The LEIT RC2ET handset has a large LCD display and sophisticated, intuitive, icon-based software. Site information entered into the LEIT RC2ET handset is downloaded to the LEIT-2ET controller, and with hourly data received from the LEIT WWS or LEIT WWSE wireless solar powered weather stations, the LEIT-2ET controller calculates the daily local microclimate evapotranspiration (ET). The final result is used for a daily adjustment or override of the current scheduled irrigation program.

All LEIT-2ET controller functions are controlled and reviewed by the LEIT RC2ET handset. After installation, no further visits to the controller are required.

IMPORTANT: Communication between the LEIT RC2ET handset, the LEIT-2ET controllers, and the LEIT WWS or LEIT WWSE weather station is automatically limited to daylight hours when there is sufficient light energy. Longer bright light days will enable the user to communicate over longer parts of the day.

C. Technical Assistance

Should you encounter any problem(s) with this product or if you do not understand its many features, please refer to this operating manual first. If further assistance is required, DIG offers the following customer support:

Technical Service USA

DIG's Technical Service Team is available to answer questions from 8:00 AM to 5:00 PM (PST) Monday-Friday (except holidays) at 1-800-322-9146.

Questions can be e-mailed to questions@digcorp.com or faxed to 760-727-0282.

Specification documents and manuals are available for download at www.digcorp.com.

Customer Assistance Outside USA

Contact your local distributor.

D. Copyright and Compliance

FCC, IC and CE certified, Australia and Hong Kong compliance

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 instructions, it may cause interference to radio and television reception.

CONTROLLER FCC ID: UJV-LEIT01	IC: 6694A-LEIT01
HANDSET FCC ID: UJV-LEIT02	IC: 6694A-LEIT02
WEATHER STATION FCC ID: UJV-LEIT03	IC: 6694A-LEIT03

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. If not installed and used in accordance with the instructions, the remote 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 technician for help.

Warning: the user should make no field changes or modifications to the LEIT-2ET controller, LEIT RC2ET handset, LEIT WWS or LEIT WWSE weather station. All adjustments and changes must be made at DIG's facility under the specific guidelines suggested in our instruction manual. Any tampering or modification to the equipment will void the users authority to operate the unit, render the equipment in violation of FCC part 15 and will void the warranty.

E. LEIT RC2ET Features

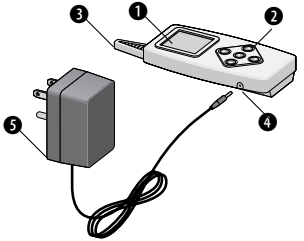
The LEIT RC2ET remote control handset is used to communicate with LEIT-2ET weather based, wireless irrigation controllers. The user can program the handset with daily scheduled irrigation programs and detailed information on the site zone, such as; planting, soil type, planting type, plants density, percentage of slope, microclimate, irrigation method, irrigation efficiency, flow rate and spacing used. This information is downloaded to the LEIT-2ET controller, which uses it to determine the plants water loss and the total irrigation rate per day needed. With this information along with other factors, including depth of irrigation, allowable depletion and basic intake rate, the LEIT-2ET controller calculates system or zone run time with number of cycles per day. This calculated run time replaces or overrides the program duration that the user set originally. The controller performs the daily calculations needed at midnight to override or adjust the scheduled irrigation program specifically for each zone, to compensate for evapotranspiration (ET). This information can be reviewed in the Report Menu.

- ET setting can be input to each valve when ET Setup is changed to active
- Sensitivity of the ET setting can be optimized using the editing feature without changing any of the ET settings
- Wind Stop setting can be programmed to shut off the system at wind speed from eight (8) to twenty-five (25) miles per hour (12.9-40 Km/h)
- The Rain Off feature can be accessed either via the weather station in a range of 1/8" to 1" (3 mm to 25 mm), or via a rain sensor
- ET features can be overridden at any time
- Report Menu screen provides various function information on the controller operation and program. Current Status report provides controller time and date, station open or short circuit, controller power level, any feature or device activity, alerts, if ET is active, sensor(s) information and the average for 24 hour ET. Program Status report provides controller program changes made along with the handset ID that made the changes. History report provides total run time, total rain amount, and ET saved in both time and percent, for the last two (2) months

- On connection to the controller the handset can review the controller ID #, the controller descriptive address, software version, valves' current status, alert flags, the last time of ET data received, along with date and how many times during the day the weather data was received if ET is active
- Global Stop command turns off all valves with the same Client ID within radio range
- Two (2) independent programs with four (4) start times per program
- Watering durations from one (1) minute to five (5) hours, fifty-nine (59) minutes, in one (1) minute increments
- Custom programming with seven (7) day calendar or intervals of one to thirty (1-30) days in odd/even or every day rotation utilizing a three-hundred-sixty-five (365) day calendar with leap year
- Individual monthly water budgeting from 10-200% in 10% increments
- Rain delay for up to ninety-nine (99) days with auto-restart
- Current Status provides various function information on the controller
- Monthly Off feature allows any month of the year to be inactive
- Permanent Events Off feature allows any three (3) days of the year to be inactive by overriding any programs that are operating on these days
- The LEIT RC2ET handset can perform many functions, such as review status, check history reports, adjust budgeting, program rain delays and perform a manual run and test valves
- Upload and change programs for up to ninety-nine (99) controllers
- Multilingual software in English, Spanish, Italian, French, German and Portuguese
- The LEIT RC2ET handset has a two-way radio with operating range of up to 350' (100 m) line of sight
- The LEIT RC2ET handset utilizes RoHS compliant components
- The LEIT RC2ET handset utilizes radio frequency in the ISM band 902-928 MHz (866 Hong Kong, 868 International) CE, IC, FCC certified, Australia and Hong Kong compliant
- CLIENT ID enables the user to have a unique identity code for the handset and controllers; this is a security feature that locks out unauthorized users
- Environmentally friendly; certified lead free, uses light as a source of energy

1. System

1.0 Parts Identification



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

1. LCD Display
   Displays the icon based applications stored in the handset.
2. Programming Buttons
   Use these five (5) buttons to program, modify, review and communicate with a LEIT-2 and LEIT-2ET controller.

   - Use to raise (increase) the value of the selected parameter or to unlock the secure password and controller ID
   - Use to lower (decrease) the value of the selected parameter
   - Use to accept and/or select the desired programming mode
   - Use to move the cursor to the right
   - Use to move the cursor to the left
3. Antenna
   See FCC compliance.
4. Battery Socket Outlet
   Plug the battery charger into the battery socket.
5. Battery Charger
   Plug the battery charger into the wall to power the LEIT RC2ET.

1.1 Battery charger outlets and recharging the battery

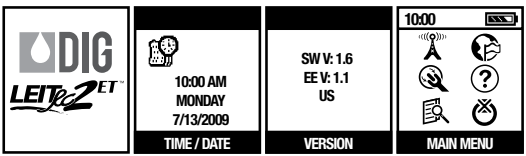
The LEIT RC2ET handset contains a cell battery pack that is rechargeable using the AC/DC wall mounting charger 120 or 220 VAC/60 h2, 12 VDC @150 mA. To charge the LEIT RC2ET handset, plug the wall mount charger into the wall and connect the power connector into the side of the LEIT RC2ET handset. The initial charge takes approximately 8 hours. Do not disconnect the handset during the initial charge. When in use, the handset should be charged daily for a few hours as needed. If the handset is charged, 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 is available, if needed. The LEIT RC2ET handset is ready for setup and communication.

2. Using the LEIT RC2ET Handset

After charging the handset, press to navigate through the initial screens. The initial screens will show the DIG logo, time/date, software version and the MAIN MENU. Check the bottom of display for menu title at any time.

2.0 Handset Main Menu (from left to right)

The LEIT RC2ET handset MAIN MENU screen has six (6) icons, each used to set or select an option. The first option, RADIO UPLINK, is used to connect to a LEIT-2ET controller. Next, SETUP is used to set the time, contrast and ID number for the handset. In LANGUAGE, select one (1) of the six (6) languages available. HELP provides contact information if any problem with the system is encountered, and FIND allows the user to connect to the last ten (10) controllers, if any were connected previously. The final icon, TURN OFF, is used to turn off the handset.

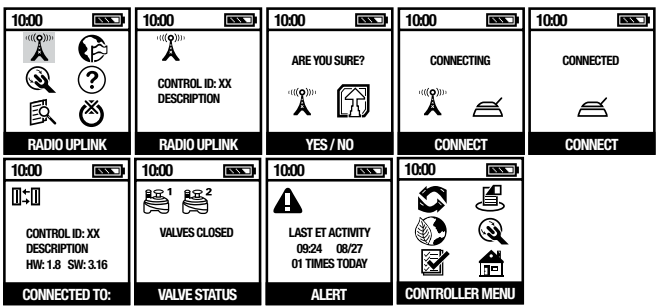


In order to connect to a LEIT-2ET controller, a few Setup steps must be implemented within the handset MAIN MENU screen. If setting the LEIT RC2ET handset for the first time, first make sure to set up the handset by selecting the SETUP icon (below RADIO UPLINK). In going through the steps, select the SET TIME AND DATE icon and set the time format (AM/PM or 24 hour) then, the time and date. In HANDSET SETUP, assign HANDSET ID and CLIENT ID for identification purposes for linking to a LEIT-2ET controller. After setup is complete, exit SETUP to the MAIN MENU. At this point the handset is ready for communication (see details of each step below).

2.1 Radio Uplink Communication

RADIO UPLINK allows the LEIT RC2ET handset to link to any LEIT-2ET or LEIT-2 controllers in the area with the same CLIENT ID. To link to a LEIT-2ET controller that has been installed and configured for communication, select the RADIO UPLINK icon.

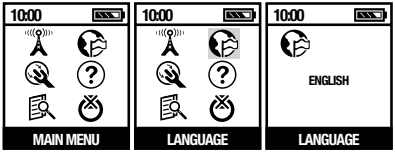
Press ◉ and RADIO UPLINK appears. Press the ◉ again and CONTROL ID appears with the first digit blinking. Select the first digit using the △ or ▽ button, then press ▷ and repeat for the second digit. After selecting CONTROL ID press ◉ to connect to a LEIT-2ET controller. After connecting to a LEIT-2ET controller, CONNECTED appears briefly, then CONTROL ID DESCRIPTION and CONTROLLER SOFTWARE VERSION appear. Press ◉ again, and controller activity, if any, can be reviewed, including the last weather data received from the weather station. Press ◉ and CONTROLLER MENU appears.



2.2 Language Selection

One of 6 languages can be selected: ENGLISH, FRENCH, ITALIAN, GERMAN, PORTUGUESE or SPANISH. English is the default language.

Press ▷ and select the LANGUAGE icon. Press ↵ to enter the LANGUAGE screen. The current language is blinking. To change the language press △ or ▽. Press ↵ to continue.



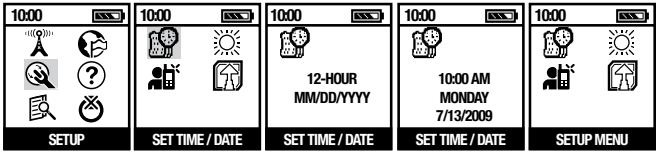
2.3 Setup

In the handset SETUP, set date and time, assign a HANDSET ID and CLIENT ID, and adjust the display contrast.

a. Setting Time and Date:

In SET TIME/DATE, first set the time format (AM/PM or 24 hour) then set the time. Set the date format (m-d-y to d-m-y), and then set day and date.

To set the time and date, press ↵ to select the SET TIME/DATE icon. Press the ↵ again, and the 12-HOUR AM/PM blinks. Press △ or ▽ to select the time format. Press ↵ and the hour digit blinks. Press △ or ▽ to set the hour and set AM/PM). Repeat the steps to set the minutes, day and date. When finished, Press ↵ to exit SET TIME/DATE.



IMPORTANT: Current date/time must be updated from the handset to the controller(s). See page 23-24 for details.

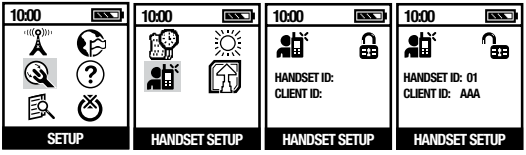
b. Setting HANDSET ID and CLIENT ID:

In order to establish 2-way communication between the LEIT RC2ET handset and the LEIT-2ET controllers, a simple setup process using HANDSET SETUP must be completed. The HANDSET ID is used as an individual address to identify the handset if more then one handset is used (the permissible ID is 0-99).

After assigning the HANDSET ID select and assign a CLIENT ID. CLIENT ID enables the user to have unique identity codes for the handsets as well as for the field controllers. This is a security feature that locks out unauthorized users (the permissible ID is any letter combination that follows this format of AAA-ZZZ with default CLIENT ID of AAA.

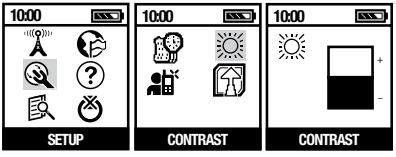
Press ▽ and navigate down to HANDSET SETUP. Press ↵ and enter HANDSET SETUP. HANDSET ID, CLIENT ID and a blinking lock appear. Press △ to unlock the lock, and the first CLIENT ID digit blinks. To enter a number (1-9), press △ or ▽. Press ▷ and repeat the steps with the second digit. Press ▷ to continue to the next step, setting a CLIENT ID. To select the first character, press △ or ▽ and repeat the steps for the second and third characters. When finished, press ↵ to exit HANDSET SETUP.

NOTE: *Please keep a record of this information.*



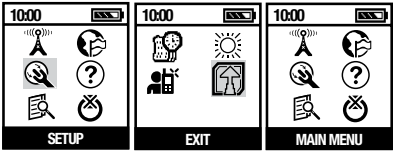
c. Adjusting Display Contrast:

The CONTRAST screen allows the user to adjust the contrast of the LCD display for better viewing. Press ◎ to enter SETUP MENU, press ▷ and highlight the CONTRAST icon. Press ◎ to enter CONTRAST. Press △ or ▽ to adjust to the desired contrast level. When finished, press ◎ to continue.



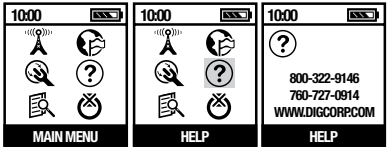
d. Exit Setup Menu:

To exit SETUP press ▷ and then ▽ to select EXIT icon. Press ◎ to return to the MAIN MENU screen.



2.4 Help

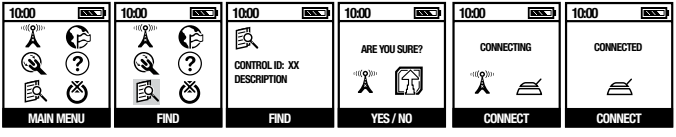
If help is needed, DIG's contact information is listed under the HELP icon. To navigate to the HELP icon, press ▷ and ▽. Press ◎ to enter HELP screen. DIG contact information is provided.



2.5 Connecting to a LEIT-2ET via FIND

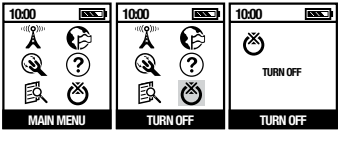
The FIND icon quickly connects to a LEIT-2ET controller that has been accessed with the handset previously. This option allows easy identification and connection to the last ten (10) controllers on the system that have been communicating with the handset. The FIND screen also provides an address or description (if entered in CONT. SETUP) making it easy to identify the controller location.

Press ▽ to navigate down to FIND icon and press ◴ to enter the FIND screen. In the FIND screen, the last connected controller ID is blinking. To select another controller ID to connect to, press △ or ▽ and scroll through the ten (10) saved CONTROL IDs (if available). After the CONTROL ID has been selected, press ◴ to connect. After linking to a LEIT-2ET controller, controller status information can be reviewed if available. Press ◴ to review until the Controller Menu appears for programming and reviewing.



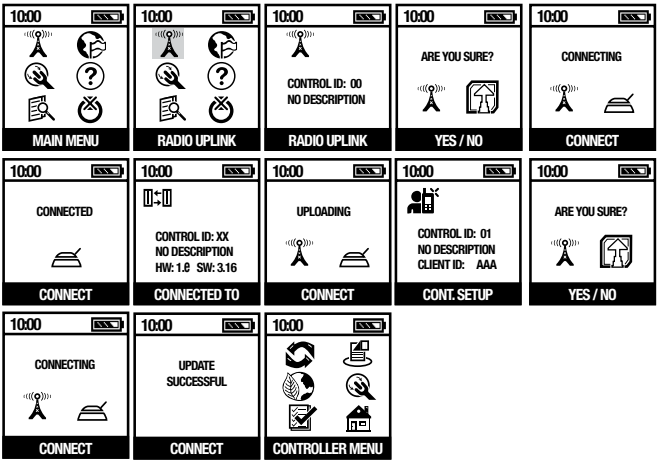
2.6 Turn Off Handset

Press the ▷ and then ▽ to select TURN OFF icon. When TURN OFF icon is highlighted, press ◴ to turn off the handset. If the handset is left on, it will turn off automatically after ten (10) minutes.



3. Initial LEIT-2ET Connection

In order to begin communication with a new LEIT-2ET controller using the handset, a series of initial setup steps must be undertaken. First, the user connects to the LEIT-2ET controller via CONTROL ID 00 DEFAULT SETUP. After connecting to a LEIT-2ET controller, the user must assign the controller a new CONTROL ID (recommended ID # 2-99). At this stage the user can also change the existing CLIENT ID of the controller (controller default CLIENT ID is AAA) as long as it is also changed on the handset after exiting the controller program. In addition a descriptive controller address or name can be assigned to the controller with up to fourteen (14) characters to uniquely identify the location of each LEIT-2ET controller on the system.



Step 1: Make sure the LEIT-2ET controller is out in bright light to harness light energy used to power the controller. It will take approximately thirty (30) minutes, or less, in direct sunlight. Do not connect sensor wires at this time. Wait until controller is charged and ready to be assigned an ID.

Step 2: Splice the two (2) yellow or yellow and black sensor wires together using waterproof connectors. This splice will distinguish that the controller is ready to communicate with a LEIT RC2ET handset.

Step 3: Connect via RADIO UPLINK screen:

a. On the LEIT RC2ET handset's MAIN MENU, press ◴ and highlight RADIO UPLINK icon. Press ◴ again, CONTROL ID: 00 DEFAULT SETUP with the first Ø blinking appears. Press ◴ again to connect. ARE YOU SURE? screen appears with RADIO UPLINK icon selected. Press ◴ again to connect, CONNECTED appears momentarily, then, CONTROL ID: 00, NO DESCRIPTION screen appears. Press ◴ again and CONTROL ID: 01, NO DESCRIPTION appears with Ø blinking. At this point the user can assign a new Controller ID.

b. To assign a Controller ID, press △ or ▽ and enter a number (1-9) for the first digit. Press ▷ and repeat the steps with the second digit **(we recommend changing the ID number to a number higher than 01)**. Next, assign description, name or address (recommended). The default is NO DESCRIPTION. Press ▷ and the first letter of NO DESCRIPTION is blinking. Press △ or ▽ and enter a letter for the first digit. Press ▷ and repeat the steps for each letter. After completion press ◴ to download the new information with the new ID number and address. Use the new ID number to connect to this controller and use the address or name to help identify the controller location.

NOTE: *Setting a new CLIENT ID (A-Z): The default ID is AAA (this is a security feature). If the controller CLIENT ID is changed from AAA to other letters, the user must update the handset to the same CLIENT ID after exiting the controller program.*

Repeat the steps to select a new ID. When finished, press to connect and upload the new information. ARE YOU SURE? screen appears. Press again to download the information. UPDATE SUCCESSFUL message will appear momentarily, confirming that the controller received the information and setup is updated and complete. After the update is completed the CONTROLLER MENU appears. The controller may now be programmed (section 4).

The user can now easily connect back to this controller using the newly assigned CONTROL ID and CLIENT ID. Repeat the steps to program additional controllers. Repeat the steps to program additional new controllers.

NOTE: *When connecting to a LEIT-2ET controller, the controller CLIENT ID must be the same as on the handset and controller.*

ATTENTION: *The two (2) yellow or yellow and black sensor wires are left connected, so the RAIN OFF alert will not appear. If a rain sensor needs to be added, see Sensor Installation in the LEIT-2ET controller instruction manual.*

NOTE: *Where multiple LEIT-2ET controllers are installed within range of the LEIT RC2ET, make sure to assign different CONTROLLER ID numbers, one at a time.*

4. Controller Menu

After connecting to a LEIT-2ET controller, press and review the Controller ID and available controller information until the CONTROLLER MENU appears. The CONTROLLER MENU screen is used to perform functions such as Manual Run or Manual Test, set a program for each valve, activate ET if a weather station is installed within range, check History Reports, review Controller Status information, adjust seasonal Budget, program Rain Delay, Wind Stop and Stop Irrigation for any specific month of the year, as needed.

4.0 Manual Run

The first option available in the controller menu is MANUAL RUN.

MANUAL RUN is useful for checking the proper operation of stations (especially after installation), for applying a temporary program for a defined time period and for repeat testing of a selected valve using MANUAL TEST. To shut off all controllers in range with the same CLIENT ID for a specified number of days use GLOBAL STOP.

MANUAL RUN has priority over a program and will suspend a program or valve watering schedule.

Note that at the completion of MANUAL RUN, any programmed irrigation schedule reverts back to normal operation.

Press ▽ and navigate to MANUAL RUN icon. Press ⏎ to enter MANUAL RUN MENU screen. Use the same procedures to select other icons as needed.

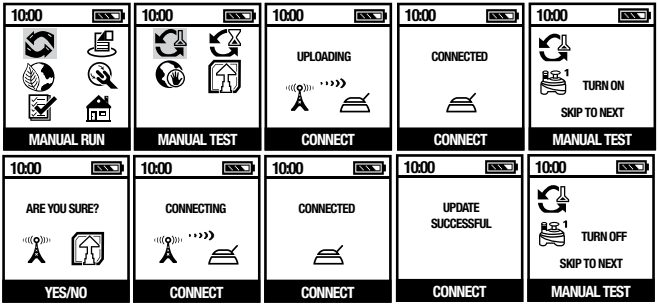
a. Manual Test

Manual Test operates each valve by turning the first valve on and off as many times as desired, then repeats for the second valve, if needed.

In the CONTROLLER MENU screen press ⏎ and highlight MANUAL RUN icon.

Press ⏎, MANUAL RUN MENU screen appears. Press ⏎ and highlight MANUAL TEST icon.

Press ⏎ to connect. (If the controller is active, a screen will display program is running. In order to use manual test, the running program must be suspended). If the program is suspended, CONNECTING appears briefly, then CONNECTED and then, the MANUAL TEST screen with the valve number, the words TURN ON blinking and SKIP TO NEXT appears. Press ⏎ to turn on valve #1, CONNECTING appears briefly, then CONNECTED, then UPDATE SUCCESSFUL and then Valve #1 with TURN ON blinking. To turn off Valve #1 press ▷. After turning Valve #1 off, repeat the steps to turn valve #1 ON or use SKIP TO NEXT, to skip to Valve #2 and then to exit. Repeat the steps for each valve as needed. If the valve is not turned off via the handset, it will turn off automatically after 3 minutes.



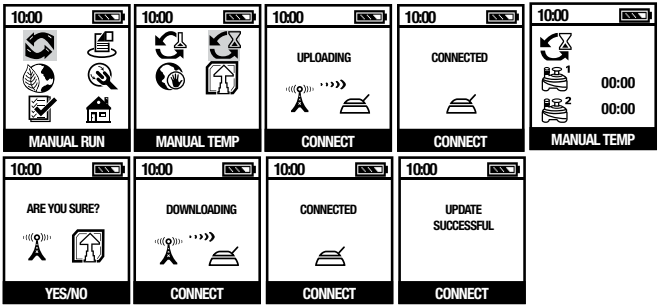
b. Manual Temp

Manual Temp is useful for applying additional water for a defined irrigation period.

In the CONTROLLER MENU screen press ⏎ and highlight MANUAL RUN icon.

Press ⏎ and MANUAL RUN MENU screen appears. Press ⏎ then ▷ and highlight MANUAL TEMP icon.

Press ⏎ to connect. (If the controller is active, a screen will display Program Running or Manual Run Active. In order to use Manual Temp, the running program must be suspended by pressing ⏎ again.) If the program is suspended CONNECTING appears briefly, then CONNECTED and then the MANUAL TEMP screen with the valve number, the hour digits blinking within valve # 1 appears. To set a defined irrigation period press △ or ▽ and set the hour digits, then press ▷ and set the minute digits. Repeat the steps for Valve #2. Press ⏎ to connect, ARE YOU SURE? screen appears. Press ⏎ again to initiate a temporary program. When finished select the EXIT icon by pressing △ or ▽. Press ⏎ to exit.



c. Global Stop

Stops irrigation of all controllers with the same CLIENT ID within range of the handset for a selected number of days.

In the CONTROLLER MENU screen press and highlight MANUAL RUN icon. Press and MANUAL RUN MENU screen appears. Press and highlight GLOBAL STOP icon. Press and the GLOBAL STOP screen with a STOP FOR 01 DAYS appears with 01 blinking. Press or to select the number of days to stop irrigation. Press to connect. ARE YOU SURE? screen appears with the RADIO UPLINK highlighted. Press , and CONNECTING will appear. The signal may take a few seconds. Within the handset range, all the LEIT-2ET controllers with the same CLIENT ID will stop for the number of days selected. Then the controller MANUAL RUN MENU will appear. Exit the screen to the CONTROLLER MENU.

4.1 Setting or Changing a Program

The Program feature allows the user to review, change or set a schedule with up to two (2) separate programs for each station. Each valve can be programmed with odd, even, or up to every thirty (30) days. Each program has up to four (4) individual start times per day with durations of up to five (5) hours and fifty-nine (59) minutes in one (1) minute increments for each valve. On each program the second valve can be attached to the first valve if hydraulic limitations are not exceeded. At the end of the program the handset also displays the next time a program will operate.

In CONTROLLER MENU screen press ▽ and highlight the PROGRAM icon. Press ↵ to enter PROGRAM MENU screen. To program, press ▽ then ▷ and highlight PROGRAM A icon. Press ↵ to connect. After establishing communication, CONNECTED appears momentarily and then, SELECT DAYS screen and PROGRAM A appears with SELECT DAYS blinking. Use the programming steps below to make any adjustments, as needed. Repeat the steps for PROGRAM B or exit the PROGRAM MENU.

SELECT DAYS: Set the day of the week.

In each of the two programs the following options are available:

MTWTFSS: Select specific day(s) of the week with a ▲ icon above the day.

EVERY: Enables the stations to operate from once a day to once every 30 days.

ODD: Every odd number of days.

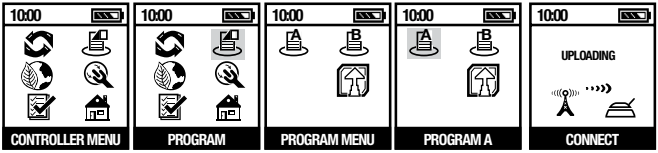
EVEN: Every even number of days.

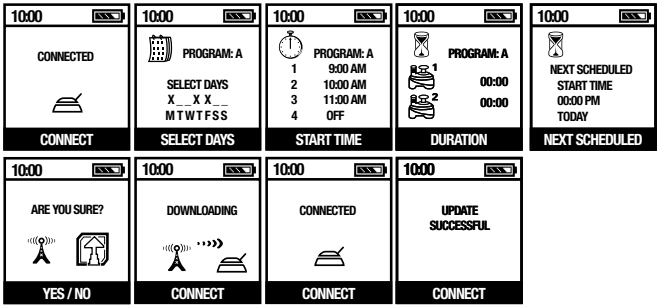
In SELECT DAYS screen, press △ or ▽ and select one of the options available. If ODD DAYS or EVEN DAYS are chosen, press ↵ to select. If cyclical days are required, press ▷. The 01 appears blinking. Press △ or ▽ to select the number of days needed. If SELECT DAYS (MTWTHSS) is chosen, press the ▷ to select. The underscore above (M) for Monday will

blink. Press ▲ and select Monday. A ♦ symbol appears blinking above M. To skip this day, press the ▶ again. Press ↵ to select (M) for Monday and to move to the next day. Press ▶ to repeat the steps for setting additional watering days. Press ↵ and the next screen appear with START TIME screen, PROGRAM A and OFF in start #1 blinking.

START TIME: Up to four (4) start times are available, including AM or PM.

To program the first start time, set the hour digit including AM or PM using ▲ or ▼. To select the minute digit, press ▶ and repeat the steps of setting the minute. Press ▶ again and repeat the steps for setting start times 2, 3 and 4 or press ↵ and the DURATION screen appears with PROGRAM A and DURATION Valve #1 with the hour digit blinking. Set from one (1) minute to up to five (5) hours and fifty-nine (59) minutes in one (1) minute increments. Use the same steps to set duration for Valve #1 and Valve #2. In programming Valve #2, the user has the additional option of attaching Valve #2 to Valve #1 if hydraulic limitation is not exceeded. Using this feature both valves will open and close at the same time. To set the Valve #2 to operate with Valve #1 in a group, in Valve #2 press ▲ or ▼ until GROUP appears blinking. Press ↵ to select and a screen will appear with information on the NEXT SCHEDULED START TIME. Press ↵ to download the new information. The ARE YOU SURE? screen appears. Press ↵ to connect and if successful the UPDATE SUCCESSFUL message appears, then the PROGRAM MENU screen appears. To exit, select EXIT icon and press ↵.





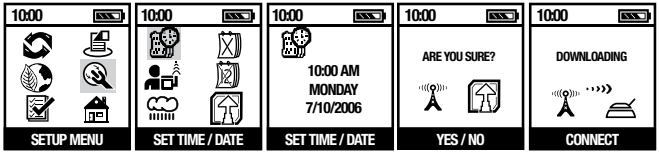
4.2 Controller Setup Options

Using the SETUP icon and entering the SETUP MENU screen, the user can select the TIME & DATE icon to update the handset time and date, or select CONT. SETUP icon to change CONTROL ID, CLIENT ID numbers and add an address or name for ID verification. Use the RAIN STOP icon to set a rain delay and select EVENT OFF or MONTH OFF icon to turn off any day or any month of the year. The information in SETUP MENU can be updated or changed as needed.

1. Set Controller Time and Date

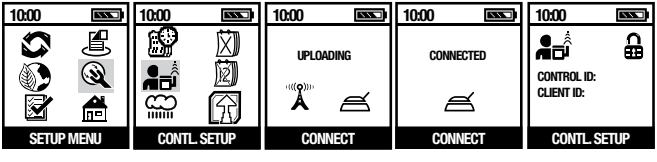
IMPORTANT: This screen must be used to download the handset time and date to the controller.

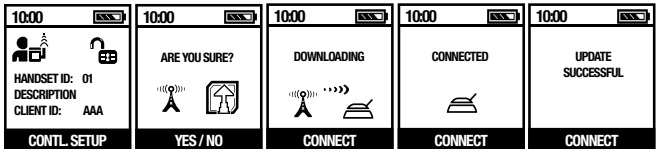
In the CONTROLLER MENU screen, press ▽ and ▷ to highlight the SETUP icon. Press ↵ to enter SETUP MENU screen. In the SETUP MENU screen highlight the SET TIME/DATE icon and press ↵ to enter the TIME/DATE screen. Press ↵ again, ARE YOU SURE? screen appears. Press ↵ again to download the information to the controller. If the time and date setup is completed the UPDATE SUCCESSFUL message appears. Then Setup Menu appears again.



2. Change the Controller ID, CLIENT ID and the Descriptive Address
(This step may have been carried out when the handset and controller were set for the first time). If controller CLIENT ID is changed, the user must update this information on the handset.

In the CONTROLLER MENU screen, select and highlight the SETUP icon. Press to enter the SETUP MENU screen. In the SETUP MENU screen, press and highlight CONT. SETUP icon. Press to enter the CONT. SETUP screen. The handset is connecting to the controller. After connection is established the CONT. SETUP screen appears with a lock on the right blinking. Press to unlock the lock. The CONTROL ID first digit is blinking. To enter a number (1-9) press or . Press and repeat the steps with the second digit (we recommend changing the ID number to a number higher than 01). Press to continue NO DESCRIPTION appears. The NO DESCRIPTION is used to set a controller name or address to locate a controller, if more then one controller is used. Repeat the steps setting controller address. Then if needed, change the CLIENT ID using the same steps. When finished, press to connect and download the new information. ARE YOU SURE? screen will appear. Press again to download the information. The UPDATE SUCCESSFUL message appears confirming that controller setup is updated and complete and then, Setup Menu appears again.

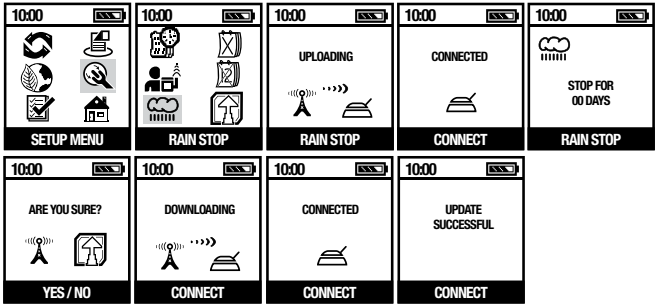




3. Set a Rain Stop

The Rain Stop option is used to temporarily suspend all irrigation programs. For example, during rainy weather regularly scheduled programs can be turned off. The Rain Stop feature allows the user to pause irrigation from one to ninety-nine (1-99) days. At the end of the designated period, regularly scheduled programming will resume automatically.

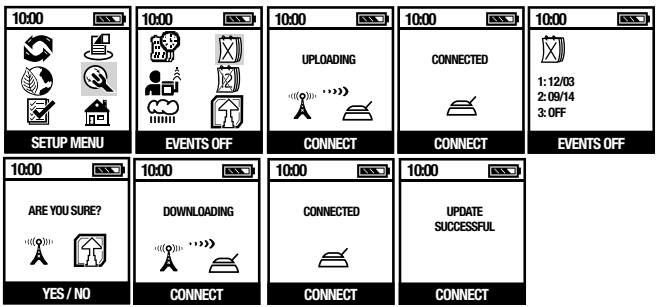
In the CONTROLLER MENU screen, press ▽ and ▷ to highlight the SETUP icon. Press ◉ to enter the SETUP MENU screen. In the SETUP MENU screen, press ▽ and highlight the RAIN STOP icon. Press ◉ to enter RAIN STOP screen. The handset will connect to the controller. After connection is established, the RAIN STOP screen appears with STOP FOR 00 DAYS, with the 00 blinking. To set the number of days to stop watering, press △ or ▽. When finished, press ◉ to connect and download the information. The ARE YOU SURE? screen appears. Press ◉ again to download the information. The UPDATE SUCCESSFUL message appears confirming that the controller accepted the new information and then Setup Menu appears. Rain Stop can be cancelled at any time by re-entering Rain Stop screen and changing the setting to 0.



4. Set Event Off

The Event Off option is used to suspend all irrigation programs for specific days of the year. For example, during the holiday time, regularly scheduled watering programs can be stopped. The Event Off feature allows the user to pause irrigation for up to 3 days. Regularly scheduled programming will resume automatically after Event Off interval has expired. Event off will remain active for years, unless changed by the user.

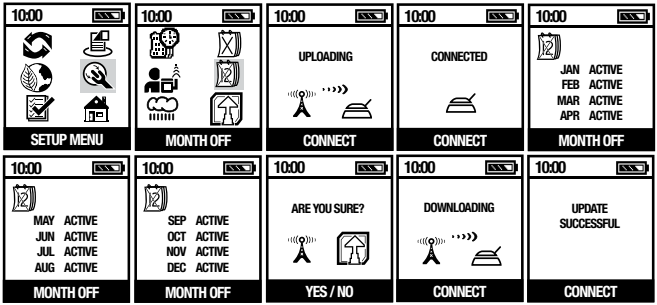
In the CONTROLLER MENU screen, press ▽ and ▷ to highlight the SETUP icon. Press ◴ to enter the SETUP MENU screen. In the SETUP MENU screen, press ▽ and ▷ to highlight the EVENTS OFF icon. Press ◴ to enter EVENTS OFF screen. The handset will connect to the controller. After connection is established, EVENTS OFF screen appears again, OFF is blinking on the first option. Adjust the month by pressing △ or ▽, then press ▷ to set the day in the same manner. Pressing ▷ again will allow you to adjust dates in the second and third options. When finished, press ◴ to connect and upload the information. ARE YOU SURE? screen will appear. Press ◴ again to download the information. The UPDATE SUCCESSFUL message appears confirming that the controller accepted the new information and then Setup Menu appears again.



5. Set a Month Off

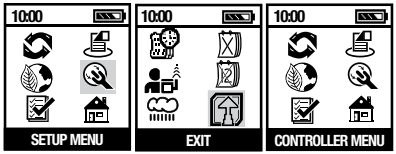
The Month Off feature is used to suspend all irrigation programs for any specific month of the year. For example, during the month of December, regularly scheduled watering programs can be stopped. Regularly scheduled programming will resume its normal operations in the active months.

In the CONTROLLER MENU screen, press ▽ and ▷ to highlight the SETUP icon. Press ↵ to enter the SETUP MENU screen. In the SETUP MENU screen, press ▽ then ▷ to highlight the MONTH OFF icon. Press ↵ to enter the MONTH OFF screen. The handset will connect to the controller. After connection is established, the MONTH OFF screen appears with the words ACTIVE blinking near the month of JAN. To deactivate the month press ▽, to reactivate press △. Press ▷ and repeat the steps with any other month. When finished, press ↵ to connect and download the information. ARE YOU SURE? screen will appear. Press ↵ again to download the information. The UPDATE SUCCESSFUL message appears confirming that the controller accepted the new information and then Setup Menu appears again.



6. Exit Setup Menu

In the SETUP MENU screen, press ▽ and ▷ to highlight the EXIT icon. Press ⏎ to exit SETUP MENU screen and return to CONTROLLER MENU. The handset will turn off. If the handset is left on, it will turn off automatically in 10 minutes.



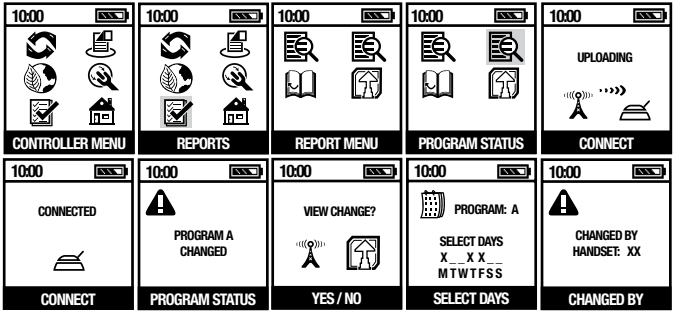
5. Report Menu Options

The Controller Report Menu screen is used to review the controller activity, valve activity, program activity, and operation activity of the last two (2) months. Using CURRENT STATUS icon the user can review time, date, open or short circuit alert in valve wiring, controller power level and valve activity. CURRENT STATUS also provides alerts if MANUAL RUN, RAIN OFF, SENSOR, EVENT OFF, MONTH OFF, PROGRAM or ET is active. If ET is active, information such as temperature, humidity, wind speed, rainfall and current ET is available. Selecting PROGRAM STATUS the user can see changes made to the programs, BUDGET, EVENT OFF, RAIN OFF or MONTH OFF settings, and the handset that made the changes. In selecting HISTORY, the user can review the time each valve has been open for the current and last month, rainfall amount for the current and last month and water saving using the ET feature in percent with time saving for the current and last month.

To review the Report Menu, press ▽ to highlight REPORTS icon. Press ⏎ to enter.

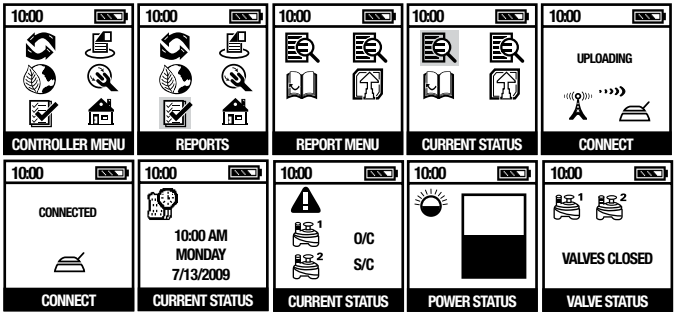
1. Program Status

In the CONTROLLER MENU screen, press ▽ and highlight the REPORTS icon. Press ↵ to enter the REPORT MENU screen. In the REPORT MENU screen, press ▽ then ▷ to highlight the PROGRAM STATUS icon. Press ↵ to enter the PROGRAM STATUS screen. The handset will connect to the controller. After connection is established, the PROGRAM STATUS screen appears with the first program change. Then the VIEW CHANGES screen appears. Press ↵ to view the changes. The next few screens will show the changes and the handset that made the changes. Repeat the same steps to view other changes. When finished the REPORT MENU screen appears again.

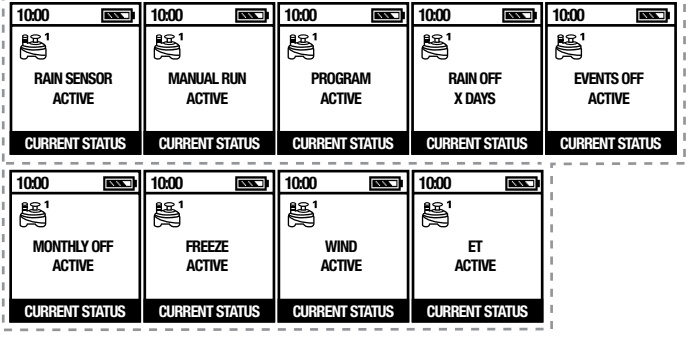


2. Current Status

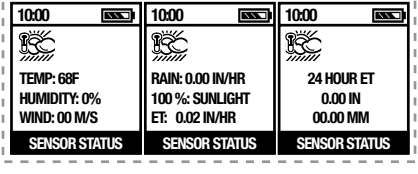
In the CONTROLLER MENU screen, press ▽ to highlight the REPORTS icon. Press ↵ to enter the REPORT MENU screen. In the REPORT MENU screen, press ▽ and highlight the CURRENT STATUS icon. Press ↵ to enter the CURRENT STATUS screen. The handset will connect to the controller. After connection is established, the CURRENT STATUS screen appears with the current time and the date. To continue viewing the current controller activity press ↵. When finished the REPORT MENU screen appears again.



IF ACTIVE

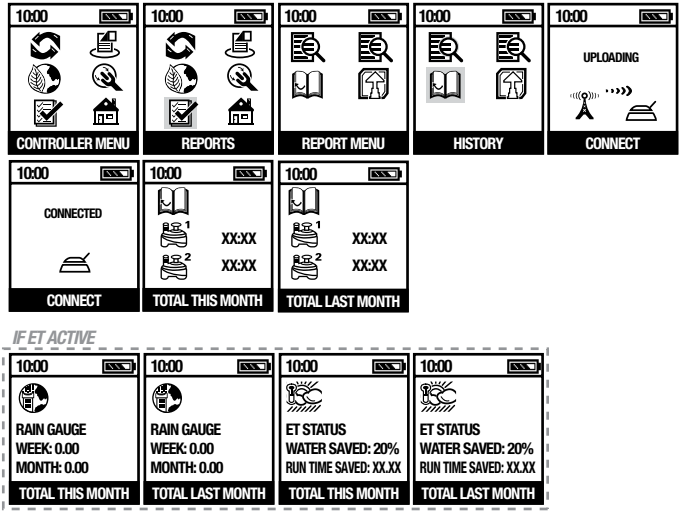


IF ET ACTIVE



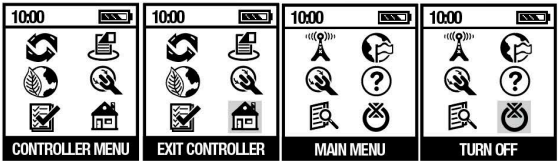
3. History

In the CONTROLLER MENU screen, press ▽ to highlight the REPORTS icon. Press ↵ to enter the REPORT MENU screen, press ▽ to highlight the HISTORY icon. Press ↵ to enter the HISTORY screen. The handset is connecting to the controller. After connection is established, the HISTORY screen appears with the TOTAL THIS MONTH for Valve #1 and #2. Press ↵ again to view the TOTAL LAST MONTH for Valve #1 and #2. Repeat the same steps to review rainfall information and water saving information if ET is active. When finished the REPORT MENU screen appears again.

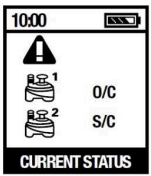


4. Exit Controller Menu

In the CONTROLLER MENU screen, press or and highlight the CONTROLLER EXIT icon. Press to exit CONTROLLER MENU screen and the CONTROLLER MENU screen appears. The handset will turn off. If the handset is left on, it will turn off automatically in 10 minutes.



Open Circuit Alert and Short Circuit Alert - Troubleshooting



If you see **O/C S/C** after using the "Check Status" feature, then the controller has determined you have either a **1. Open Circuit (O/C)** or a **2. Short Circuit (S/C)**.

1. O/C - Open Circuit Alert

1a. Solenoid is not connected to the controller - check wiring and splices, resplice if necessary.

2a. Bad splices - connection is poor, splices have gone bad, or corrosion is present inside wire nut. Inspect and resplice if necessary.

3a. Exceeds maximum wire run - refer to page 18, Section 2.3

2. S/C - Short Circuit Alert

2a. Faulty solenoid - coil is damaged or faulty. Test solenoid, replace if necessary.

2b. Wires are wired to solenoid backwards. Inspect wiring, verify red to red and white to white.

2c. Wires are crossed: e.g. One red wire connected to valve 2 while the common is connected to valve 1.

6. About the LEIT RC2ET Environment Features

Introduction

Today, irrigation use can be optimized through the use of our weather based irrigation control system developed for landscape irrigation. This can be achieved by monitoring the soil, temperature, humidity, radiation, rainfall, wind, and environmental conditions at the irrigation site. Both the plants water requirements and the amount available to the plant roots can be measured or estimated through a variety of techniques. These techniques include the feel method, which is an estimate based on the user's knowledge of the irrigation site, the more accurate method of utilizing tensiometers, or the use of weather sensors designed to monitor real time conditions including water demands influenced by the local environment, the irrigation method and the plant types.

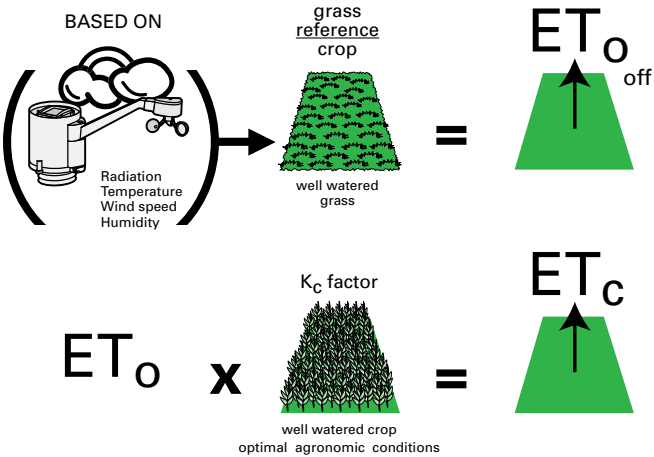
Water Requirements

To simplify the relationships between plants, water requirements and the environment, the term evapotranspiration is often used. Originally established for agriculture, where irrigation requirements are well documented, evapotranspiration measures the loss of water for various crops planted by farmers. Evapotranspiration takes into consideration the loss of water from the plant surface, the evaporation of water from the soil and the water lost through transpiration during a specific time period. Historical values for many crop types have been recorded and are made available through agricultural extension services.

Evapotranspiration (ET)

Several methods have been developed to estimate crop ET. Most methods use weather data to provide an estimate of reference, or potential, evapotranspiration (ETo). Often this estimate of reference is converted to "actual" ET using a factor known as a crop coefficient (Kc). In landscape irrigation, reference evapotranspiration (ETo) is established for well-watered turf grass, however most landscape species do not have values established. The turf and landscape industry's managers and users are not equipped to measure the plants' water loss. The feel method is not practical due to the large variety of

environmental and management conditions. Due to this inability to effectively measure and record water loss for landscape planting, formulas have been developed using reference evapotranspiration, plant coefficients, microclimate factors and landscape coefficients to estimate the water used. DIG's weather based irrigation controller system utilizes a version of these formulas as the baseline for estimating water use.



Water Saving

Knowledge of the environment, plants water requirements, and the tools to calculate how much water is available in the soil may help in reducing water use by increasing irrigation efficiency. By viewing the soil as a reservoir for the plant's water, and calculating the daily water needs of the plant using various factors and landscape coefficients, we can determine approximately how long plants can survive on the water available in the soil. When the water in the soil is close to depletion, a timed irrigation in the proper amount can refill the soil profile, restarting the cycle.

The Importance of Soil Texture in Setting ET

Before programming the LEIT RC2-ET handset and using the new ET features we recommend that the user read about soil texture. Knowing the soil type is important in setting the proper configuration on the LEIT RC2-ET. Most users can determine the soil type by reviewing the following:

A fine-textured soil is referred to as clay soil. Sandy soil is a coarse-textured soil. Numerous soil properties are influenced by texture, including drainage, water-holding capacity, aeration, susceptibility to erosion and organic matter content.

The soil texture determines the rate at which water drains through saturated soil. Water moves more freely through sandy soils than it does through clay soils. Once field capacity is reached, soil texture also influences how much water is available to the plants. Clay soils have a greater water-holding capacity than sandy soils. In addition, well-drained soils typically have good soil aeration meaning that the soil contains air that is similar to atmospheric air, which is conducive to healthy root growth, and thus, to healthy plants.

How to Determine Soil Texture and Type

- **Sandy soil:** Feels gritty and if formed into a ball when moist, falls apart easily.
- **Loamy soil:** Feels somewhat gritty, retains water easily and is easy to work with it. It has relatively even amounts of sand, silt, and clay. If formed into a ball when moist, will hold its shape, yet still will break apart easily when squeezed.
- **Clay soil:** Forms large, hard clods, and cracks form on the surface. Clay soils feel sticky and are bendable when moist. A ribbon can be formed when moist by pinching soil between fingers and thumb. A longer ribbon formed before it breaks indicates a higher amount of clay.

About the LEIT RC2-ET Environment Features (LEIT-2ET only)

The ENVIRONMENT menu is used to activate and set the ET feature, adjust budgets, and set wind and rain gauge sensors. The ET MONITOR screens are used to input site information for each zone which is then downloaded to the LEIT-2ET controller. With the ET data received from the weather station the LEIT-2ET controller calculates the hourly and daily local microclimate and adjusts or overrides the daily scheduled irrigation program.

ET Edit can be used to edit ET settings from 10% to 200%. The Budget feature is used to reflect seasonal changes by adjusting each month's irrigation schedule by percentages from 10% to 200%. The Rain Gauge setting is used to select rainfall amounts from 1/8" to 1" (3 mm to 25 mm). This data, coupled with information provided by the weather station, will adjust or override the irrigation program. Wind Speed information provided by the weather station overrides irrigation when wind speeds ranging from 8 to 25 MPH (3.5 - 11.1 m/s) are reached.

How DIG's Weather Based System Works

As daily ET accumulates, ET value, along with site information and microclimate coefficients are used to determine plant water requirements and allowable soil depletion rate. System run time is set and based upon the irrigation method along with application rate and site information water requirements. When ET is active, this calculated run time replaces or overrides the program duration that the user set originally.

In activating ET the user enters detailed information on each site zone to the LEIT RC2ET handset. This information includes mature or new planting, soil type, plant type, plant density, slope, microclimate type, irrigation method, irrigation efficiency, flow rate and spacing if available. Based on the user input and the information collected hourly from the weather station sensors, the controller performs the daily calculations needed to override or adjust the scheduled irrigation program specifically for each zone, to compensate for

evapotranspiration (ET). The result can be reviewed in the REPORTS MENU, STATUS REPORT and HISTORY REPORT.

NOTE: The controller can receive information from more than one weather station in the area if available.

7. How to Program and Activate ET

1. Setting and Activating ET:

Using the ET MONITOR feature in the ENVIRONMENT screen, the user can enter detailed site information to each zone (valve #) and download this information to the LEIT-2ET controller. The controller use the information received from the handset and the weather station to adjust the daily irrigation schedule. The effect on the daily scheduled irrigation programs based on weather data collected can be reviewed in the REPORTS MENU and HISTORY Report.

Activating ET: Using this feature the user enters detailed information for each valve or site zone.

Follow theses steps to configure each zone setting conditions using the handset ET MONITOR screens:

Step 1: Select plant stage of life (example: mature)
Step 2: Select soil type (example: clay)
Step 3: Select plant type (example: mix planting)
Step 4: Select plant density (example: 50-70%)
Step 5: Select percentage of slope (example: 0 to 4%)
Step 6: Select microclimate type (example: open space)
Step 7: Select irrigation method (example: spray)
Step 8: Select irrigation efficiency (example: 70%). This is the default setting that can be changed.
Step 9: Select irrigation method flow rates (example: 1 GPM (3.8 L/M)
Step 10: Select irrigation method spacing (example: 10' (3 m)

PLANTING	SOIL TYPE	PLANT TYPE	PLANT DENSITY	SLOPE
New Mature	Clay Clay Loam Loam Sandy Loam Sand	Mix Planting Groundcover Shrubs Cool Turf Grass Warm Turf Grass Trees Annuals	70 – 100% 50 – 70% 30 – 50% 10 – 30%	0 – 4% 5 – 8% 9 – 12% 13 – 20%

MICROCLIMATE	IRRIGATION METHOD	EFFICIENCY	FLOW RATE **	SPACING
Open Space Partial Shade Full Shade	Drip emitter Bubbler Spray Rotor Dripline Micro sprinkler	80%* 80%* 70%* 80%* 90%* 70%*	N/A .1 GPH & up	N/A 1 ft. & up

* Default setting can be adjusted to any specific distribution uniformity.

** The formulas assume that rotors and sprinklers are set for 360° coverage. If they are set of lower coverage, the Flow Rate must be adjusted upwards to the weighted average to compensate.

For example: If 6 rotors are installed in a rectangular pattern with 4 operating with 90° coverage and 2 operating with 180° coverage, the Flow Rate (FR) that should be entered should be:

((FR90*4)*4 + (FR180*2)*2) / 6 = (20/6)*FR = 3.3 * FR

Where FR90 and FR180 are the flow rates of the 90° rotors and 180° rotors repectively.

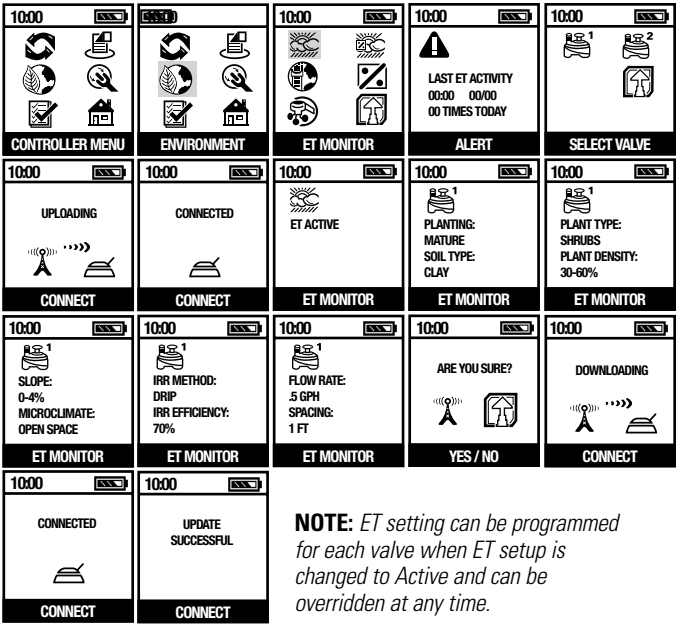
NOTE: In the event an audit of the site soil condition cannot be performed prior to initial setting of the LEIT ET System, we recommend soaking the soil thoroughly to ensure the soil is wet as a reference point for the system from which the LEIT-2ET starts calculating the site ET.

FINE-TUNING THE SYSTEM: We recommend monitoring both the plant health and the soil moisture level on a weekly basis. If the plants are showing signs of distress or the soil appears to be oversaturated, fine-tuning of the system can be accomplished utilizing the ET Edit feature. The system can be fine-tuned based on weather pattern, location and the ET zone setting. Either an upward or downward adjustment in percent can be made to adjust to the actual ET setting condition. Again, DIG strongly recommends a careful monitoring of the site for the first month of operation.

2. Setting the controller to operate with the weather station and to compensate for evapotranspiration (ET):

In the ENVIRONMENT Menu screen press and highlight ET MONITOR icon. Press again and the next screen appears with the valves number. Press , SELECT VALVE screen appears with valve 1 and 2. Press and select a valve. Press to connect, when connected, CONNECTED appear momentarily and then ET MONITOR screen appears with ET INACTIVE blinking. Press to change INACTIVE to ACTIVE. Press and ET MONITOR screen appears with NEW or MATURE blinking. Press or and select one of the plants appearance option. Next, select the soil type. Press to select SOIL TYPE. CLAY appears, blinking. Press or and select the soil type for the indicated valve, (refer to 'How to Determine Soil Texture' on page 35).

After selecting the SOIL TYPE, press to move to the next screen and repeat the steps for selecting PLANT TYPE and PLANT DENSITY. In PLANT TYPE, select from MIX PLANTING to ANNUALS and in PLANT DENSITY select from 10-30% to plant density of 70-100%. After selecting the setting press again to move to the next screen and repeat the steps for selecting MICROCLIMATE and SLOPE degrees. In MICROCLIMATE select from OPEN SPACE to FULL SHADE and in SLOPE % select from 0%–4% to 13%–20%. After selecting the setting press again to move to the next screen and repeat the steps for selecting IRRIGATION METHOD and IRRIGATION EFFICIENCY. Under IRRIGATION METHOD select from DRIP EMITTER to ROTOR and in IRRIGATION EFFICIENCY the preset default setting can be changed if needed. Press again to move to the last screen and repeat the steps, selecting FLOW RATE and SPACING (if no information is available for the flow and spacing, a PRESET setting is used). When finished, press to download the new information. ARE YOU SURE? screen appear with YES. Press again to download the information. The UPDATE SUCCESSFUL message appears confirming that the controller accepted the new information and the SELECT VALVE screen appears again. Repeat the steps for the second valve.



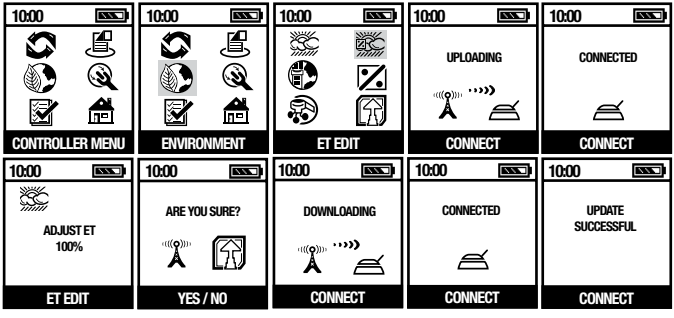
NOTE: *ET setting can be programmed for each valve when ET setup is changed to Active and can be overridden at any time.*

3. ET Edit Setup:

ET EDIT is used to optimize the ET setting. For example, the user can adjust ET setting by increasing the ET value up to 200% or decreasing the ET value to 10%.

In the ENVIRONMENT menu screen, navigate and highlight the ET EDIT icon. Press ◎ again to connect. CONNECTED will appear momentarily and then the ET EDIT screen appears with ADJUST ET: 100%. Press △ or ▽ to increase or decrease ET EDIT percentage (in increments of 10%) and when finished,

press to download the new information. ARE YOU SURE? screen will appear with YES. Press again to download the information. The UPDATE SUCCESSFUL message appears confirming that the controller accepted the new information and then, the ENVIRONMENT screen appears again.



4. Rain Gauge Setup:

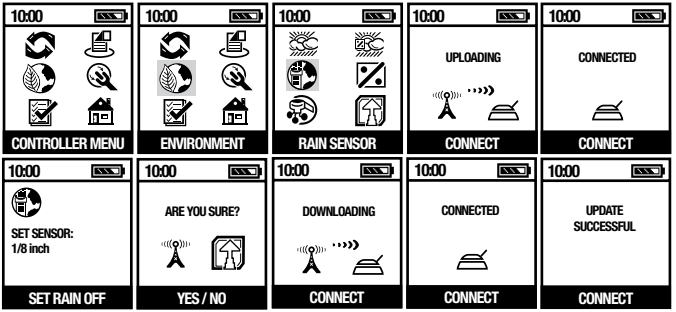
RAIN GAUGE can be programmed to shut down the irrigation system when it is rainy. The RAIN GAUGE is a self-emptying, tipping bucket that can read rainfall in 0.01 inch increments. This information is sent to the controller every hour. The user can set the controller via the handset to stop irrigation from 1/8", 1/4", 1/2", 3/4" and 1" of rainfall (3 mm, 6 mm, 13 mm, 19 mm and 25 mm).

If Rain Gauge is active, the following represents the number of days the scheduled programming will be off.

SOIL	1/8" (3 mm)	1/4" (6 mm)	1/2" (13 mm)	3/4" (19 mm)	1" (25 mm)
Clay	2	3	4	5	6
Loamy	1	2	3	4	5
Sandy	1	2	2	3	3

In the ENVIRONMENT menu screen highlight the RAIN GAUGE screen. Press again to connect. CONNECTED will appear momentarily and then the RAIN GAUGE screen appears with SET RAIN OFF: NOT ACTIVE, blinking. Press or to select the rainfall value to shut off irrigation.

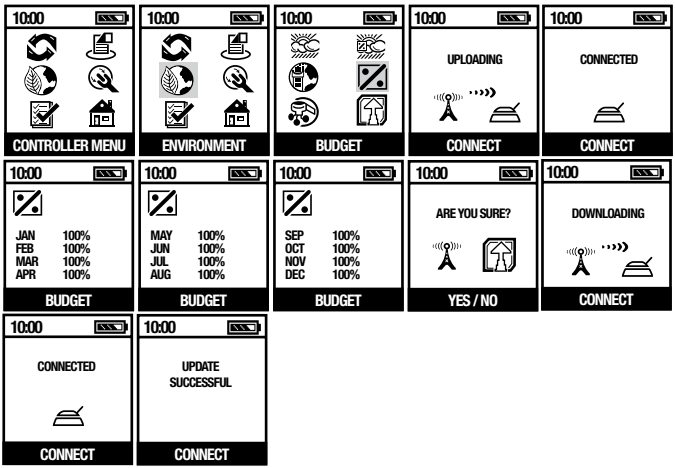
When finished, press to download the new information. ARE YOU SURE? screen will appear with YES. Press again to download the information. The UPDATE SUCCESSFUL message appears confirming that the controller accepted the new information and then the ENVIRONMENT screen appears again.



5. Setting a Monthly Budget:

The amount of irrigation water needed during seasonally dry or wet periods changes throughout the year. Instead of changing the duration for each program on a monthly basis, the Budget feature can be utilized to reflect the seasonal changes. Budgeting is programmed once to increase or decrease the irrigation on a monthly basis for an entire year. Budget adjustments can range from 10 -200% in 10% increments. The controller will automatically adjust the previously programmed durations according to the specified budget.

In the ENVIRONMENT menu screen highlight the BUDGET icon. Press again to enter the BUDGET screen. CONNECTED appears momentarily then, the BUDGET screen appears with the first 4 months of the year all set to 100% with JAN, 100% blinking. To increase or decrease the budget percentage (in increments of 10%), press or . Press and repeat the steps for the following month. Press to move to the next screen and repeat the steps. When finished, press to download the new information. ARE YOU SURE? screen will appear with YES. Press again to download the information. The UPDATE SUCCESSFUL message appears confirming that the controller accepted the new information and then, the ENVIRONMENT screen appears again.

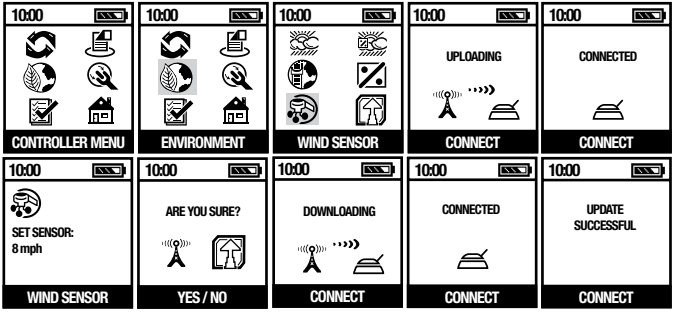


6. Wind Speed Setup:

Wind speed setting can be programmed to shut down the irrigation system at wind speeds from 8 to 25 miles per hour (3.5 - 11.1 m/s).

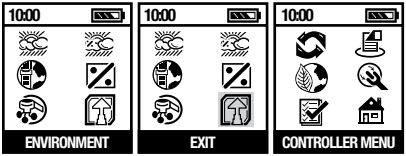
In the ENVIRONMENT menu screen navigate and highlight the WIND SENSOR icon. Press again to connect. CONNECTED will appear momentarily and then the WIND SENSOR screen appears with SET WIND OFF: NOT ACTIVE, blinking. Press or to select the wind speed value to shut off irrigation.

When finished, press to download the new information. ARE YOU SURE? screen will appear with YES. Press again to download the information. The UPDATE SUCCESSFUL message appears confirming that the controller accepted the new information and then the ENVIRONMENT screen appears again.



7. Exit Environment Menu:

In the ENVIRONMENT menu screen, highlight the EXIT icon. Press to exit ENVIRONMENT screen and the CONTROLLER MENU screen appears. If the handset is left on, it will turn off automatically in ten (10) minutes.



8. General Information for Handset and Controller

1) The LEIT-2ET wireless irrigation controller needs adequate light to maintain proper function. At low light levels the radio will periodically turn off to guarantee correct controller operation. When the radio is off, less power is used and the radio can turn itself on again when sufficient light has charged the controller to adequate levels.
2) The radio will function better if the controller is located at higher elevation. If there is a choice do not situate the controller in a hollow area.
3) To communicate, the controllers and handsets MUST have the same CLIENT ID Code. This is the user's unique identification code, which prevents interference from other users in the area.
4) If two controllers are set to the same ID, communication may be disrupted if both controllers are in range of the handset. The same occurs if two handsets are set to the same ID and are in use at the same time. All controllers and handsets in the same group must have a unique ID. (We recommend setting controller and handset starting from #2.)
5) The handset needs to be kept in a charged state. After 500-1,000 charge cycles the internal batteries may need replacement.

IMPORTANT: *Communication between the LEIT RC2ET handset and the LEIT-2ET controller is automatically limited to daylight hours between 8 AM to 5 PM, when there is sufficient light energy. Longer bright light days will enable the radio to operate automatically over longer parts of the day, into the evening.*

8.0 Programming Problems:

The valves will turn on using the MANUAL RUN feature but will not water automatically.

Check the following:

1. The RAIN STOP is active. To reactivate the program schedule, go into the SETUP MENU screen, select RAIN STOP setting to 00 and cancel RAIN STOP (see page 25).
2. Check the date and time for the controller in CURRENT STATUS to make sure that the time and date's are the same as the handset.
3. No programming schedules have been entered yet. In CONTROLLER MENU, select program and set up a schedule.
4. The programmed runtime of the station is set to "0" duration. Go into CONTROLLER MENU, select the program and set up a runtime.
5. A sensor is hooked up to the system and it is inhibiting irrigation.
6. If the valves operate correctly in a manual run but not in a scheduled program, check that the following settings are correct:
   a. Review the programs
   b. Month stop - turn off MONTH OFF and Month Selection screens
   c. Scheduled start times, runtimes per program set correctly
7. If a new program starts before the old program has completed it will be stacked to commence later.
8. Make sure there is enough time between the programs and/or start times to meet your watering time in Budget (up to 200% possible).

There is no communication between the handset and the controllers.

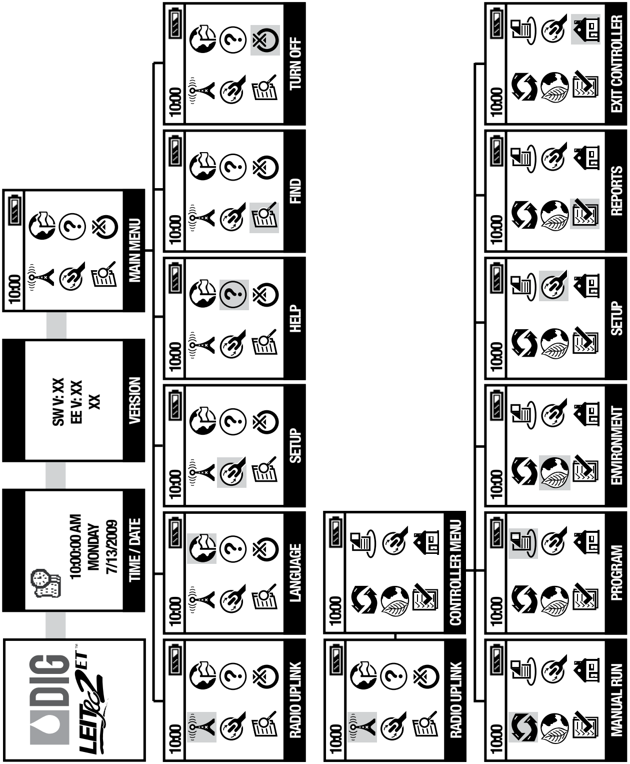
Solution:

1) Check that the controller PVM (solar) panel is not covered. If it has been covered for an extended period, the controller time will reset.

8.1 The Password has been changed or forgotten

Please call DIG Customer Service with the serial number of the controller and handset.

9. PROGRAMMING QUICK REFERENCE CHART



10. Warranty

DIG CORPORATION warrants these products to be free from defects in material and workmanship for a period of three years from date of purchase. This warranty does not cover damage resulting from accident, misuse, neglect, modification or improper installation. This warranty shall extend only to the original purchaser of the product for use by the purchaser. This warranty shall not cover batteries or any malfunction of the product due to battery failure. The obligation of DIG CORPORATION under this warranty is limited to repairing or replacing at its factory this product which shall be returned to the factory within three years after the original purchase and which on examination is found to contain defects in material and workmanship.

DIG CORPORATION SHALL IN NO EVENT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND; THE SOLE OBLIGATION OF DIG BEING LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Unattended use for prolonged periods without inspection to verify proper operation is beyond the intended use of this product, and any damage resulting from such use shall not be the responsibility of DIG CORPORATION. There are no warranties which extend beyond the description on the face hereof. In the case of purchase of the product for use other than, for irrigation purposes, DIG CORPORATION hereby disclaims any implied warranties including any warranties of merchantability and fitness for a particular purpose. In the case of the purchase of the product for personal, family or household purposes, DIG CORPORATION disclaims any such warranties to the extent permitted by law. To the extent that any such disclaimer or implied warranties shall be ineffectual, then any implied warranties shall be limited in duration to a period of three years from the date of the original purchase for use by the purchaser. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

In order to obtain performance under this warranty, the unit must be returned to the factory, along with proof of purchase indicating original date of purchase, shipping prepaid, addressed as follows: DIG CORPORATION, 1210 Activity Drive, Vista, CA 92081-8510. Repaired or replaced units will be shipped prepaid to the name and address supplied with the unit returned under warranty. Allow four weeks for repairs and shipping time. Repair of damaged units not otherwise within warranty may be refused or done at a reasonable cost or charge at the option of DIG CORPORATION.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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