LEITLINK®

Central Control System

DIG®
water matters

INSTRUCTION MANUAL

A. Introduction

Thank you for purchasing a DIG LEITLINK® Series Controller. This manual describes how to install, configure, and operate the LEITLINK controller. After reading through this manual and becoming familiar with the basic functionality of the controller, it can be used as a reference for less common tasks in the future.

This manual is organized for two primary audiences:

- Installers and technicians will find installation, wiring, and full programming instructions in Sections 1–5.
- End users and site operators will find daily operation, remote access, and reporting guidance in Sections 6–8.
- For LEITLINK FS models, references in this manual to 4G connectivity, cloud features, and www.leitlink.com do not apply and may be disregarded.

B. About the LEITLINK Controller

The LEITLINK Series Controller is an advanced ambient-light-powered, LTE-M capable central irrigation controller designed for commercial irrigation systems. The controller is powered entirely by an onboard photovoltaic module (PVM) that harvests ambient light energy and stores it internally, eliminating the need for AC power hookups or batteries. Communication is handled via LTE-M, enabling two-way remote monitoring and programming through the LEITLINK web portal at www.LEITLINK.com.

The controller is operated locally through an LCD display and 5-button interface, which is activated by inserting a LEITLINK key into the USB-B port on the LCD module. Full remote operation is available through the LEITLINK web portal once the unit has been registered to an account.

> **IMPORTANT:** To maintain LTE-M communications, the LEITLINK requires daily exposure to a minimum of 10,000 lux (equivalent to overcast daylight conditions around 8:00–10:00 AM). When power levels drop below operational thresholds, the controller will automatically disable LTE-M to conserve energy and prioritize valve control. Install the unit in an open, unshaded location to maximize available energy.

C. Technical Assistance

Should you encounter any problems with this product or require clarification of any features, please refer to this manual first. If further assistance is required, DIG offers the following support options:

Technical Service — USA

- DIG's Technical Service Team is available Monday–Friday, 8:00 AM–5:00 PM PST (excluding holidays)
- Phone: 800-322-9146
- Email: questions@digcorp.com
- Fax: 760-727-0282
- Documentation: www.digcorp.com/professional-resources/

Customer Assistance Outside the USA
Contact your local distributor.

D. Copyright and Compliance

Copyright © 2026 DIG Corporation.
All rights reserved. LEIT and LEITLINK are registered trademarks of DIG Corporation.
Patent #: 5,229,649 and 5,661,349

FCC, EC, Canada, and Australia Compliance

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to pro-vide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1) L'appareil ne doit pas produire de brouillage;

2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be located or operating in conjunction with any other antenna or transmitter.

> **WARNING:** The user should make no field changes or modifications to the LEITLINK controller. All adjustments and changes must be made at DIG's facility under the specific guidelines set forth in DIG's manufacturing process. Any change or modification to the equipment will void the user's authority to operate the unit and render the equipment in violation of FCC, EC, Canada, and Australia compliance directives.

E. Features

- Operates 8–32 stations plus 2 master valve/pump start outputs; no AC power, batteries, or conventional solar panels required
- 4 independent programs (A, B, C, D) with up to 8 start times per program
- Three watering schedule modes: specific days of the week, even/odd days, or cyclical (every 1–99 days)
- Monthly budget adjustment (0–200%) for seasonal watering management
- Up to 8 scheduled-off dates per controller
- Flow sensing via DIG FLOWLINK sensors; supports run-by-flow (gallons or liters) or run-by-time per valve
- Solenoid integrity detection with open and short circuit monitoring
- ET-based watering optimization using downloaded weather data (requires LEITLINK.com registration)
- Rain, temperature/humidity, and soil moisture sensor support
- Fertilizer applicator control (2 applicators, percentage-based dosing)
- Master valve and pump start support (2 MV/P outputs)
- 16 valve grouping options for synchronized run times
- Historical reporting: daily, monthly, and yearly run time; flow data; ET savings; manual run history
- 365-day calendar with leap year support and non-volatile program memory
- 2-way LTE-M MQTT communication with www.LEITLINK.com
- LCD display with 5-button navigation; password protection available
- Selectable imperial or metric units; English and Spanish language support

1. System

This section explains the components of the LEITLINK controller. The LEITLINK must be installed according to the manufacturer's recommendations; failure to do so will void the manufacturer's warranty. Please refer to the Installation Guide for all physical installation instructions.

1.1 Models Available

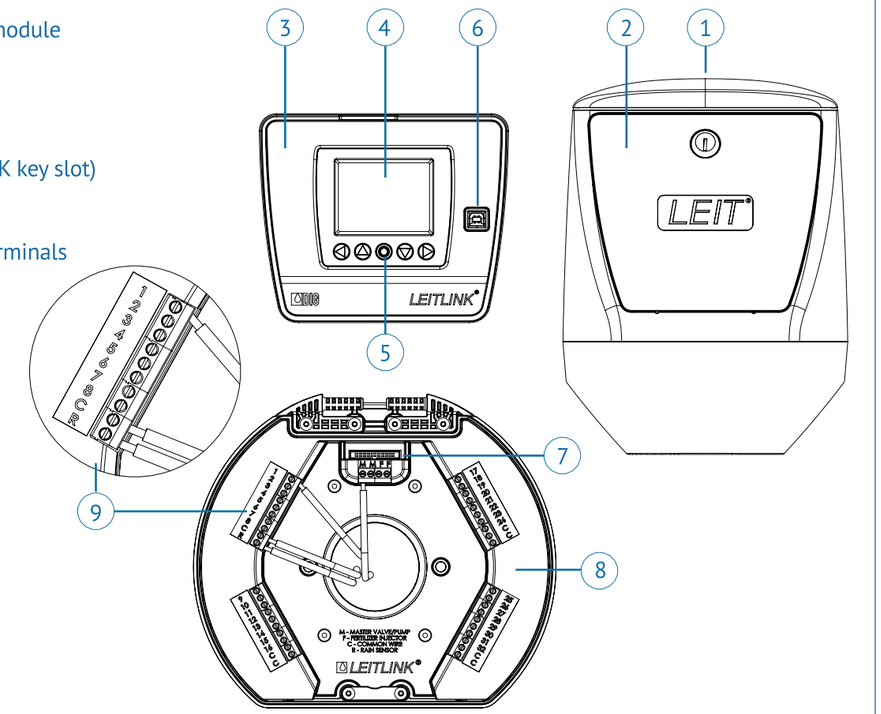
Model Number	Stations	MV/P Outputs
LEITLINK 4GF-08	8	2
LEITLINK 4GF-16	16	2
LEITLINK 4GF-24	24	2
LEITLINK 4GF-32	32	2
LEITLINK FS-08	8	2
LEITLINK FS-16	16	2
LEITLINK FS-24	24	2
LEITLINK FS-32	32	2

1.2 Parts Identification

Key components:

- PVM (Photovoltaic Module) – Collects and harnesses ambient light to generate and store power for the controller.
- Door and Camlock – The door protects the controller interior. The camlock is used to open the controller for installation and maintenance.
- LCD Module – Contains the display, buttons, USB-B port, PVM power port, antenna port, and terminals port. Can be disconnected and removed if necessary.
  - LCD Display – Used for local programming and status review.
  - Buttons – Five-button interface for navigating menus and entering values.
  - USB-B Port – Used to insert the LEITLINK key to activate the display.
  - PVM Power Port – Connects the PVM to the LCD module.
  - Antenna Port – Connects the LTE-M antenna.
  - Terminals Port – Connects the LCD module to the terminal module.
- Terminal Module – Contains all station and MV/P wiring terminals. Can be disconnected and removed if necessary. Up to 32 station terminals are available depending on model.

(1) PVM - Photovoltaic module
(2) Door and Camlock
(3) LCD Module
(4) LCD Display
(5) Buttons
(6) USB-B Port (LEITLINK key slot)
(7) Terminals Port
(8) Terminal Module
(9) Station and MV/P Terminals



2. Installation

This section provides instructions for mounting, wiring, and connecting the LEITLINK controller. Proper installation is critical to ensure reliable operation, sufficient power generation, and consistent LTE-M communication.

Failure to follow these guidelines may result in reduced performance or loss of functionality.

2.1 Site Selection

The LEITLINK controller is powered entirely by ambient light via the integrated photovoltaic module (PVM). Proper placement is essential.

- Install the controller in an open, unshaded location
- Ensure exposure to a minimum of 10,000 lux daily (equivalent to overcast daylight)
- Avoid installation:
  - Under dense tree canopies
  - Inside covered cabinets or enclosures
  - On north-facing walls (in the northern hemisphere)
- Mount at a height that allows:
  - Easy access to the LCD module
  - Clear visibility for maintenance and programming

> **NOTE:** Insufficient light exposure will reduce available power and may disable LTE-M communication.

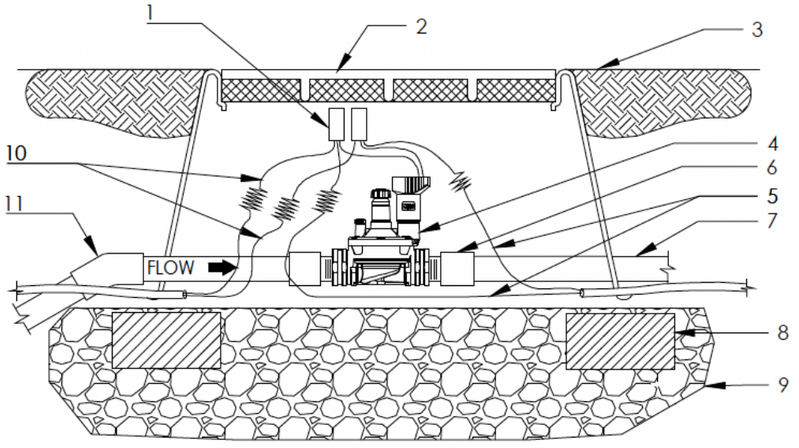
2.2 Valve Installation

The recommended configuration is a complete valve assembly consisting of a LEMA 1700S solenoid actuator with a plastic inline (globe) valve, available in sizes from ¾″ to 2″.

Maximum static operating pressure: 150 PSI.

Installation Steps

1. Shut off the mainline water supply to the valve location.
2. Install the valve assembly (Series 170S-XXX with solenoid actuator) in accordance with standard valve installation practices. Refer to [FIGURE A] for typical installation layout.
3. Pressurize the system: Turn the water supply back on to pressurize the mainline. The valve should open momentarily and then close.
4. Manually test the valve by rotating the solenoid left to right to open and right to left to close. The valve should open momentarily and then shut off.
5. Splice the red (hot) solenoid wires to one of the color-coded station wires. Splice the white solenoid wire to the global common (white) wire. Use two waterproof dry-splice connectors for all connections and leave 1′ to 2′ of slack in the wiring to allow for future servicing. Do not exceed the maximum recommend wire run distance (see section 2.5)



REMOTE CONTROL VALVE DETAIL FOR LEIT CONTROLLER AND SENSORS

LEMA170S-075 3/4" AND 170S-100 1"

FIGURE A

2.3 LEMA Solenoid Actuator Installation – Model 1700S

Select the appropriate adapter for the valve(s) that will be used [FIGURE B]. The LEMA solenoid actuator is compatible only with 2-way normally closed valves.

Maximum static operating pressure: 150 PSI

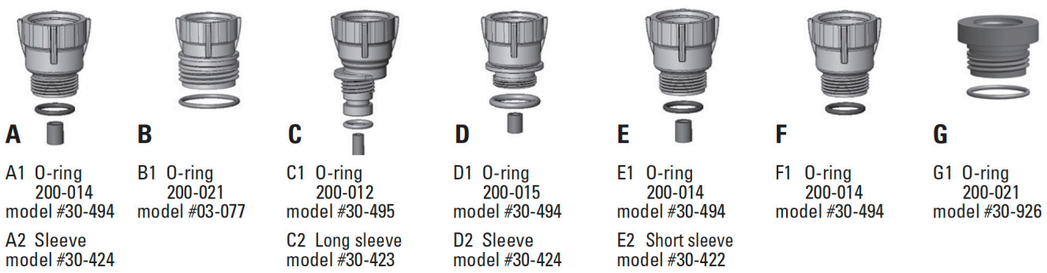


FIGURE B

Installation Steps

1. Shut off the mainline water supply to the valve.
2. Unscrew the conventional solenoid from the valve and remove the solenoid housing, solenoid stem, plunger, spring, and O-ring (if necessary). For BUCKNER and SUPERIOR valves, do not remove the existing O-ring.
3. Select the appropriate conversion adapter for the valve and thread it clockwise into the compatible valve port, hand tight. Finish tightening ¼ to ½ turn with a wrench or pliers. Do not overtighten.
4. Flashes during operation are normal and indicate background LTE-M radio activity.

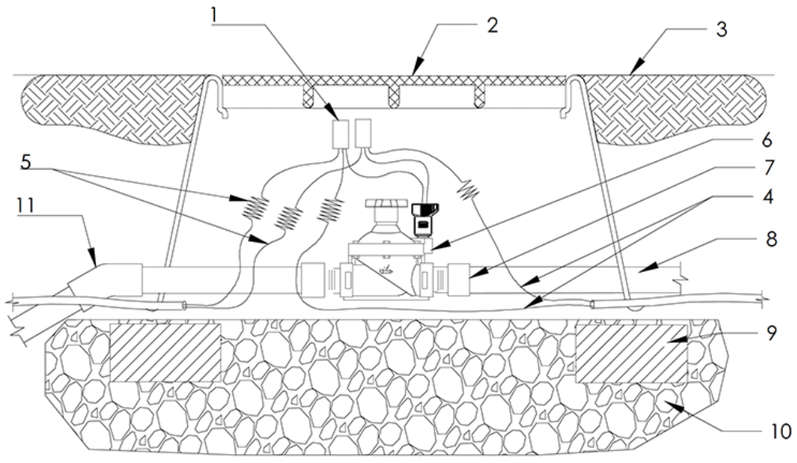
> **NOTE:** When installing the adapter on BUCKNER and SUPERIOR valves, remove the adapter sleeve (model 30-424) before installation.

5. Screw the LEMA 1700S into the correct adapter. Firmly tighten the solenoid by hand, but do not overtighten. Positioning the solenoid at a 40–45° angle towards the valve creates a manual lever, helpful for manual on/off.
6. After installation is completed, turn the water supply on and pressurize the mainline. The valve will open momentarily and then shut off.
7. Manually test the valve by rotating the solenoid left to right to open and right to left to close. The valve should open momentarily and then shut off. If the valve remains open in manual operation, examine the adapter and the sleeve to confirm correct installation and securely tighten the adapter. Do not overtighten the LEMA solenoid actuator to the valve and do not cross thread the adapter into the solenoid cavity.

> **NOTE:** For all brand name valves with an internal manual bleed lever, make sure the lever is in closed position. Do not move the lever after installing the solenoid and valve adapter. If the manual lever is used, it may damage the adapter or the sleeve causing the valve to stay open.

8. Splice the red (hot) solenoid wires to one of the color-coded station wires. Splice the white solenoid wire to the global common (white) wire. Use two waterproof dry-splice connectors for all connections and leave 1′ to 2′ of slack in the wiring to allow for future servicing. Do not exceed the maximum recommended wire run distance (see section 2.5).

> **WARNING:** The LEMA solenoid actuator must not be tested with any AC valve tester or any over 9-volt DC valve tester. If done, it will cause irreparable damage to the LEMA solenoid actuator and the controller unit and void the warranty.



LEGEND

1. DRY SPLICE WATERPROOF WIRE CONNECTORS
2. 12" VALVE BOX WITH COVER
3. FINISH GRADE
4. HOT (RED) AND COMMON (WHITE) COILED WIRES TO SENSORS INCLUDING FLOW SENSOR CONNECTION
5. HOT (RED) AND COMMON (WHITE) COILED WIRE TO LEMA 170 S AND CONTROLLER
6. DIG REMOTE CONTROL VALVE WITH FLOW CONTROL AND LEMA 170S DC DIGITAL SOLENOID ACTUATOR
   - 6.1. MODEL LEMA 170S-150 1 ½"
   - 6.2. MODEL LEMA 170S-200 2"
7. PVC SCHEDULE 40 MALE ADAPTER
8. PVC MAIN LINE
9. BRICK SUPPORT AT EACH CORNER
10. PEA GRAVEL SUMP MINIMUM 3"
11. PVC SCH 40 - 45 0R 90 DEGREE ELBOW

REMOTE CONTROL VALVE FOR LEITLINK CONTROLLER AND SENSORS

LEMA170S-150 1-1/2" AND LEMA170S-200 2"

2.4 Flow Sensor Installation – Model FST-XXX

The FST-XXX Flowlink flow sensor allows for installation on the same wiring of the solenoid, only limited additional wiring is required.

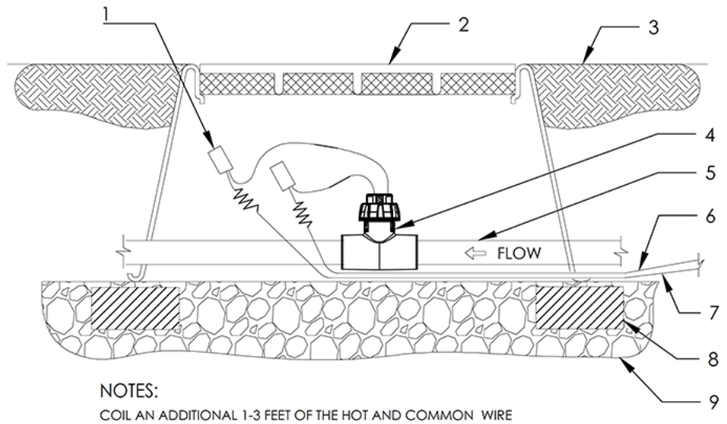
Select the appropriate model that will be used based on valve size.

Model	Size
FST-075	3/4″
FST-100	1″
FST-150	1 ½″
FST-200	2″

Installation steps:

1. Shut off the mainline water supply to the valve location.
2. Allow at least 5 times the diameter downstream of the pipe in distance between the valve and the flow sensor installation and install the flow sensor assembly in accordance with standard flow sensor installation practices. Refer to [4. flow sensor installation] for typical installation layout.

1. Splice the red (hot) solenoid wires to the color-coded station wires of the desired solenoid station. Splice the white solenoid wire to the global common (white) wire. Use two waterproof dry-splice connectors for all connections and leave 1′ to 2′ slack in the wiring to allow for future servicing.
2. Pressurize the system and open the accompanying solenoid station to confirm there are no leaks. Further setup will be described in the System Setup section below.



LEGEND

1. DRY SPLICE WATERPROOF WIRE CONNECTORS
2. 12" VALVE BOX WITH COVER
3. FINISH GRADE
4. DIG FLOWLINK SENSOR T ASSEMBLY
   - 4.1. MODEL FST-075 $\frac{3}{4}$"
   - 4.2. MODEL FST-100 1"
   - 4.3. MODEL FST-150 1 $\frac{1}{2}$"
   - 4.4. MODEL FST-200 2"
5. PVC MAIN LINE
6. SENSOR HOT (RED) COILED WIRE TO THE 170S-XXX REMOTE CONTROL VALVE OR MASTER VALVE
7. SENSOR COMMON (WHITE) COILED WIRE TO THE 170S-XXX REMOTE CONTROL VALVE OR MASTER VALVE
8. BRICK SUPPORT AT EACH CORNER
9. PEA GRAVEL SUMP MINIMUM 3"

FLOW SENSOR PVC SLIP T ASSEMBLY MOUNTING FOR LEITLINK CONTROLLER
FST-075 3/4" , FST-100 1", FST-150 1-1/2" AND FST-200 2"

2.5 Wire Installation and Distance

Run all direct burial wires along their respective trenches from each valve box to the controller location. Use color-coded direct burial wires to connect to each solenoid red (hot) wire. Use white (common) wire to connect to the solenoid's white (common) wire. Make sure to label each color-coded wire inside the irrigation box with the designated station number.

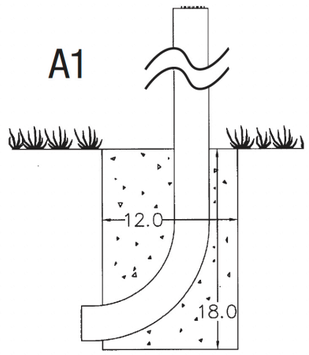
Maximum Wire Distance	
Recommended Wire Gauge	LEMA 1700S Solenoid / FST-XXX
14 AWG (2.5mm^2)	4,500 feet (1,372 m)
12 AWG (4 mm^2)	7,500 feet (2,286 m)

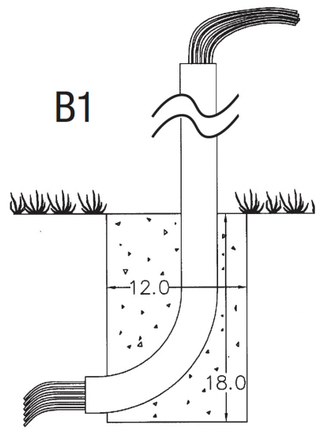
2.6 Controller Installation

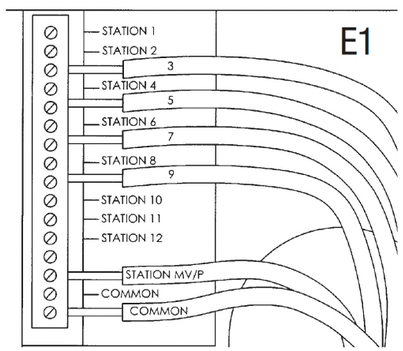
1. To install the mounting column, set the curved bottom of the mounting column in a 12″ x 18″ x 12″ (30cm x 45cm x 30cm) frame and pour in the three 90 lb (40 kg) sacks of cement (see Figure A). Make sure the column is vertical and the opening in the curved bottom is accessible and unclogged. All wires should route to the controller through the bottom of the mounting column (see A1).

> **NOTE:** Make sure the cement pad is dry before continuing with the installation.

2. Run the field wires along their respective trenches from the valve box up to the bottom end of the mounting column. Make sure not to exceed the maximum recommended wire distances (see above). Push the wires up through the column until at least 12″ (30 cm) of wire extends from the top of the mounting column (see B1).
3. Remove the door from the LEITLINK controller using the door key and unscrew the 18-8 ¼″-20 socket head screws from the Bottom Terminal Housing to release the Bracket Assembly.
4. Loosen the ¼″-20 socket head screws from the Bracket Assembly and place it on the desired pole. Tighten the socket head screws until the Bracket Assembly is tight on the pole.
5. Slide the LEITLINK over the Bracket Assembly and reattach the ¼″-20 socket head screws through the Bottom Terminal Housing into the Bracket Assembly. Make sure it does not twist or turn and cannot be pulled off of the pole mount.
6. Connect the station wires to the controller using a standard wire stripper. Strip 3/10″ of insulation from the tip of each of the station colored (labeled) wires. Connect the color-coded (hot) wires into the connector strip labeled with the station number and tighten the connector screw using a screwdriver. Connect the white (common) wire into any of the common wire connectors labeled "common" located at the lower part of the connector strip and tighten the connector screw using a screwdriver. If using a master valve, connect the red (hot) wire from the master valve into the station labeled "MV/P" (see Figure E1). For pump or other electrical equipment, see detailed installations below.







2.7 Normally Closed Sensor Installation

The LEITLINK has an available "sensor" port on the top left connector strip and is compatible with any normally closed, switch type sensor. Install the sensor per the installation instructions and connect it to the sensor port. Further setup is described in the System Setup section.

2.8 Pump or Electrical Equipment Installation

If it is required to switch ON a pump, fountain, or light, installation is available by using the RKIT 8810S relay interface module.

The RKIT 8810S units are used to switch 10 amp electrical circuits up to a voltage of 240V AC or 30V DC.

Installation steps:

1. Run a red (hot) wire from the RKIT to any of the controller station terminals.
2. Run a white (common) wire from the RKIT to the common terminal connector, or, if not available, splice it to the common field wire using a waterproof connector.
3. Run the two black wires from the RKIT to the AC/DC equipment and connect them to the corresponding circuit to be switched (e.g. pump start relay).
   Use waterproof dry-splice connectors for all connections.

> **NOTE:** If the RKIT is connected to any circuit higher than 24 volts, it must be located in its own high voltage junction box in accordance with local electrical code. The RKIT cannot be housed in the same box with any low voltage equipment. Do not connect the RKIT to a circuit higher than 380 volts.

3. Programming

This section explains how to use the LCD display and 5-button interface to review, configure, and program the controller, or to perform a manual run. For remote programming via www.LEITLINK.com, complete Section 3.1 first, then refer to the LEITLINK Web Portal User Manual.

> https://www.digcorp.com/professional-resources/LEITLINK-Web-Portal-Manual

To activate the display, insert the LEITLINK key into the USB-B port on the LCD module. If the unit is at a low power level, it may take 30–60 seconds for the display to turn on. The controller will cycle through status and version information screens before settling on the Main Menu. Occasional brief display flashes during operation are normal and indicate background LTE-M radio activity.

> **NOTE:** The LEITLINK key is not included with the controller and must be obtained separately.

3.1 Button Reference

The 5-button interface is used throughout all menus. The general navigation pattern is: move the cursor to the desired item, press Select to enter edit mode (the value will flash), use the directional buttons to make changes, then press Select again to confirm. To exit any screen, navigate to Back in the bottom left of the screen and press Select.

Button	Function
◄ Left	Move cursor left
▲ Up	Move cursor up
● Select	Select / confirm / enter edit mode on the item under the cursor
▼ Down	Move cursor down
► Right	Move cursor right

3.2 Cursor Types

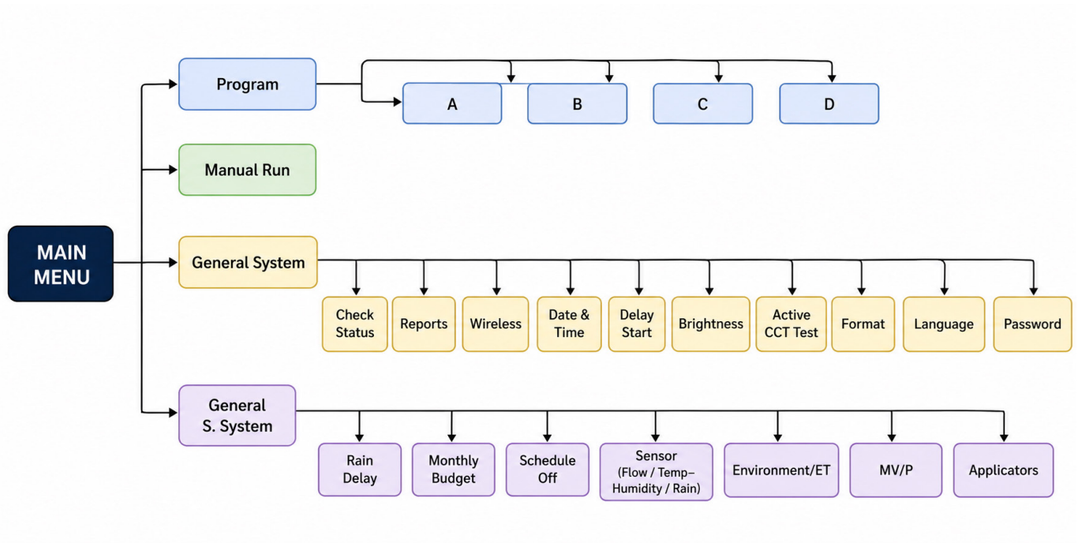
Two cursor styles are used depending on the screen:

- Icon-based navigation screens: The cursor appears as a dark blue highlighted box.
- All other screens: The cursor appears as a yellow box around the selected item.

3.3 Menu Hierarchy

The hierarchy below summarizes where each setting is located for quick reference:

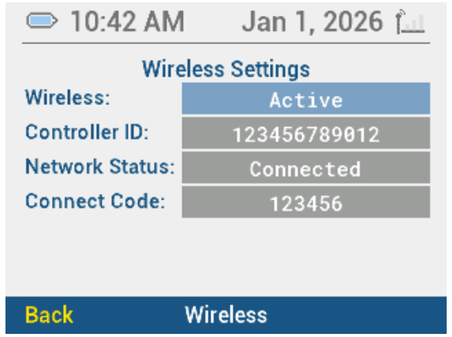
- Main Menu
  - Program (A, B, C, D)
  - Manual Run
  - General → System: Check Status, Reports, Wireless, Date & Time, Delay Start, Brightness, Active CCT Test, Format, Language, Password
  - General → S. System: Rain Delay, Monthly Budget, Schedule Off, Sensor (Flow / Temp–Humidity / Rain), Environment/ET, MV/P, Applicators



3.4 Setting up a Wireless Connection

This function is not available for LEITLINK FS models. If the controller will be managed remotely through www.LEITLINK.com, configure the wireless connection first. This step generates the 6-digit registration code needed to link the unit to an account.

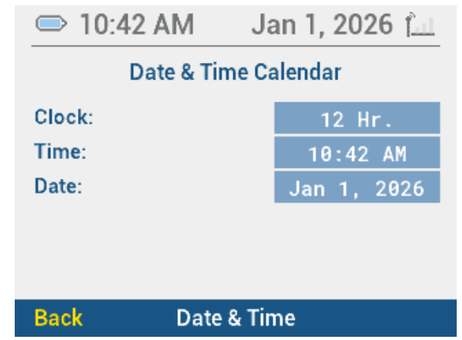
1. From the Main Menu, navigate to General and press • Select.
2. Navigate to System and press • Select.
3. Navigate to Wireless and press • Select.
4. The wireless information screen will display. Locate the 6-digit code and record it — this code is required to register the controller on www.LEITLINK.com.
5. Refer to the LEITLINK Web Portal User Manual to complete registration.
6. When finished, navigate to Back and press • Select to return to the System menu.
7. Select Back twice more to return to the Main Menu.



3.5 Setting the Date and Time

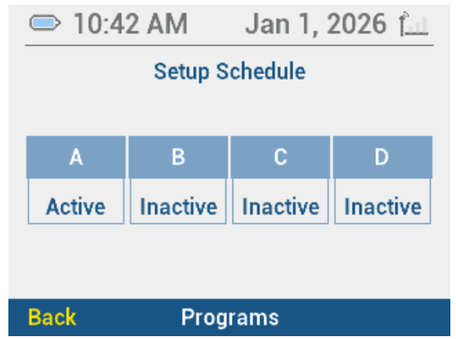
If the controller has an active wireless connection, time and date are automatically synchronized from the nearest cell tower and this step can be skipped. For units without wireless connectivity, set the time and date manually as follows:

1. From the Main Menu, navigate to General and press • Select.
2. Navigate to System and press • Select.
3. Navigate to Date & Time and press • Select.
4. To switch between 12-hour and 24-hour time format, navigate to the 24-Hr option and press • Select to toggle it.
5. Navigate to the time field and press • Select — the hours digit will begin flashing.
6. Use ◄ / ► to move between hours and minutes, and ▲ / ▼ to change the values.
7. Press • Select to confirm (digits will stop flashing).
8. Navigate to the date field and press • Select — the month digit will begin flashing.
9. Use ◄ / ► to move between month, day, and year, and ▲ / ▼ to change the values.
10. Press • Select to confirm (digits will stop flashing).
11. Navigate to Back and press • Select. Select Back twice more to return to the Main Menu.



4. Setting Up a Program

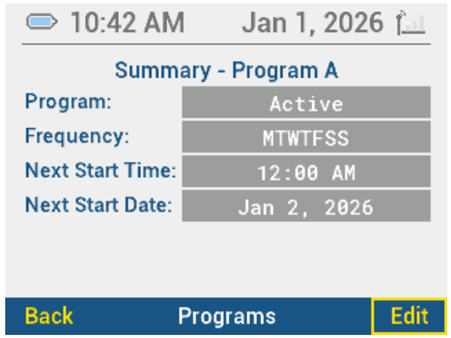
The LEITLINK supports 4 independent programs — A, B, C, and D — each with its own schedule, start times, and per-valve durations. Setting up a program involves three steps in sequence: frequency, start times, and durations.



NOTE: If you are using flow sensors and intend to run valves by flow volume (gallons or liters) rather than by time, complete Section 5.6 (Flow Sensor Setup) before setting up programs to avoid re-entering valve settings.

4.1 Selecting and Activating a Program

1. From the Main Menu, navigate to Program and press • Select.
2. The program screen displays programs A through D and their current active/inactive status. To toggle a program on or off, navigate to the Active or Inactive label beneath the program and press • Select.
3. Navigate to the program to configure and press • Select.
4. The program summary screen will appear. Navigate to Edit in the bottom right and press • Select to proceed.



4.2 Setting a Frequency

This determines which days the program will run. Three modes are available:

Option 1 – Specific Days of the Week (default)

1. Navigate to MTWTFSS and press • Select to activate this mode (it will highlight dark blue).
2. Press • Select and use ◄ / ► to move between days of the week.
3. Press • Select on each day to toggle it on or off. Days highlighted dark blue are scheduled to water.
4. Navigate to Next and press • Select to proceed to Start Times.

Option 2 – Even or Odd Days of the Month

1. Navigate to Even/Odd and press • Select to activate this mode.
2. Navigate to Even or Odd and press • Select to choose which.
3. Navigate to Next and press • Select to proceed to Start Times.

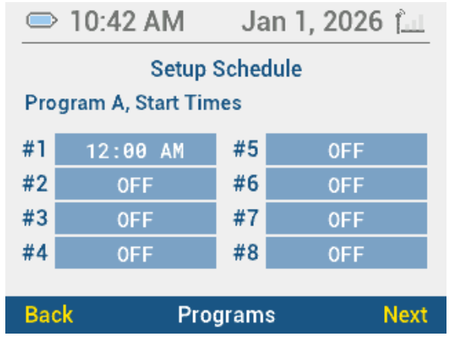
Option 3 – Cyclical (Every X Days)

1. Navigate to Cyclical and press • Select to activate this mode.
2. Navigate to the days box and press • Select — the number will flash.
3. Use ▼ / ▲ to set the cycle frequency (1–99 days), then press • Select to confirm.
4. Navigate to the start date field and press • Select — the month digit will flash.
5. Use ◄ / ► to move between month, day, and year, and ▲ / ▼ to change values.
6. Press • Select to confirm. If a past date is entered, the controller will calculate forward from that date to determine the next scheduled run.
7. Navigate to Next and press • Select to proceed to Start Times.

4.3 Setting Start Times

Up to 8 start times can be configured per program, determining how many times the program runs on each of its scheduled days. OFF is located between 11:00 PM and 12:00 AM when cycling through time values.
Navigate to any start time slot currently showing OFF that you wish to use and press • Select — the field will flash.

1. Use ▲ / ▼ to set the desired start time.
2. Press • Select to confirm.
3. Repeat for each additional start time needed.
4. Navigate to Next and press • Select to proceed to Durations.



4.4 Setting Durations

This determines how long each valve runs during each start time, subject to the monthly budget setting (Section 5.5). Eight valves are shown per page; on 16, 24, and 32 station models, use Next to page through all valves.

> **NOTE:** If a flow sensor has been configured for a valve and set to run by flow, that valve's field will display gallons or liters rather than a duration.

> **NOTE:** If a valve has an active alert, it will be indicated in red next to the duration. A green OK indicates no issues.

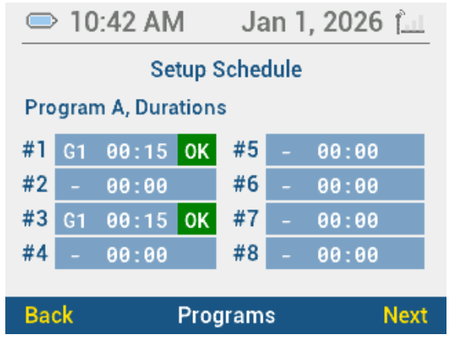
Optional – Assigning a Valve to a Group

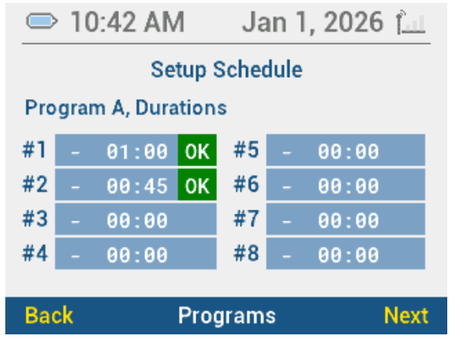
Grouped valves run simultaneously using the duration assigned to the first valve in the group on the Duration screen. Ensure that hydraulic limitations are not exceeded before grouping valves.
Up to 16 groups are available. Valves in the same group always share the same duration; updating one valve's duration updates **all valves** in that group automatically.

1. Navigate to the – (group field) next to the valve and press • Select — it will flash.
2. Use ▲ / ▼ to select a group (1–16), then press • Select to confirm.

Setting a Valve Duration

1. Navigate to the duration or flow field for the valve and press • Select — it will flash.
2. Use ▲ / ▼ to set the duration or flow volume.
3. Press • Select to confirm. Repeat for each valve.
4. On models with more than 8 stations, navigate to Next to continue to the next page of valves.
5. When all valves are set, navigate to Next and press • Select to finalize the program. A summary will display briefly before returning to the Programs screen.
6. Repeat this entire process for each additional program as needed. When finished, navigate to Back to return to the Main Menu.





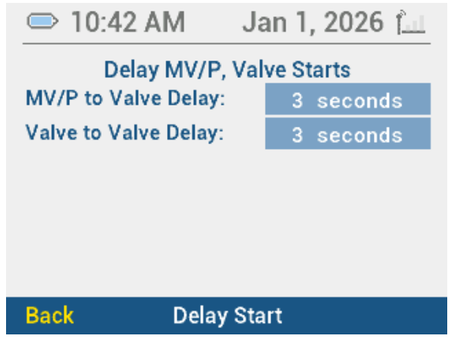
5. System Setup

The following sections cover configuration options that control how the LEITLINK executes programming. These settings are configured by the installer during commissioning but may be adjusted by the site operator as needed.

5.1 Delay Start

Adds a configurable delay between the master valve/pump activating and the first valve opening, and between successive valve openings.

1. From the Main Menu, navigate to General and press • Select.
2. Navigate to System and press • Select.
3. Navigate to Delay Start and press • Select.
4. Navigate to MV/P to Valve Delay or Valve to Valve Delay as needed and press • Select.
5. Use ▲ / ▼ to set the delay time, then press • Select to confirm.
6. Navigate to Back and press • Select when finished.

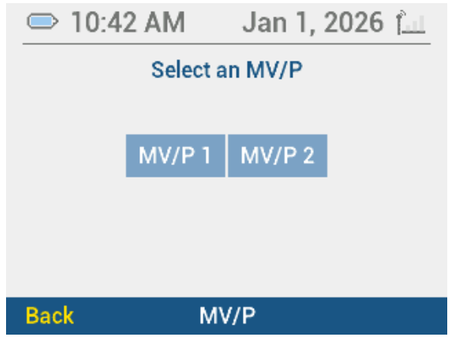


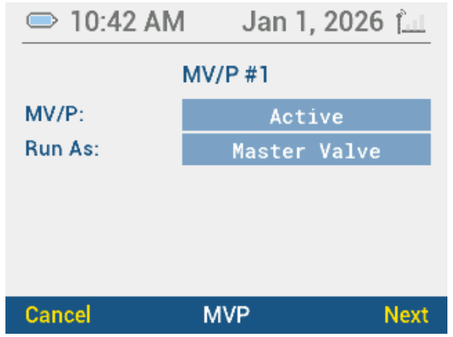
5.2 Master Valve / Pump Start (MV/P)

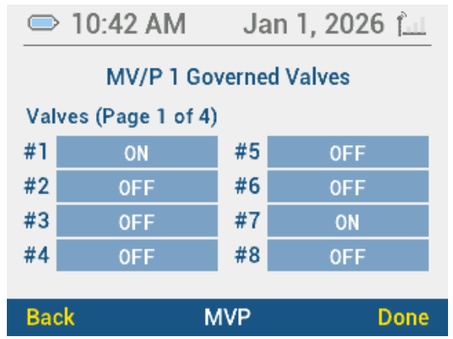
Configures the two MV/P outputs and assigns which station valves each one controls.

> **NOTE:** If connecting a pump rather than a master valve, an RKIT8810S or equivalent relay kit is required.

1. From the Main Menu, navigate to General and press • Select.
2. Navigate to S. System and press • Select.
3. Navigate to MV/P and press • Select.
4. Navigate to MV/P 1 or MV/P 2 and press • Select.
5. Navigate to Active/Inactive to enable or disable the output, and Master Valve/Pump to set the output type. Press • Select on the desired option (selected option will highlight dark blue).
6. Navigate to Next and press • Select.
7. Navigate to each valve that this MV/P output should control and press • Select to toggle it on (selected valves will highlight dark blue and show ON).
8. On models with more than 8 stations, navigate to Next to continue assigning valves. Navigate to Next and press • Select when finished.



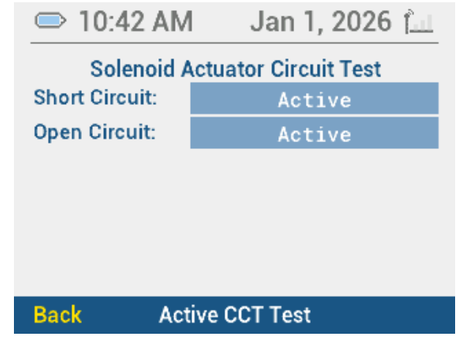




5.3 Active CCT Test

Enables or disables open and short circuit monitoring on station outputs. Both can be active simultaneously.

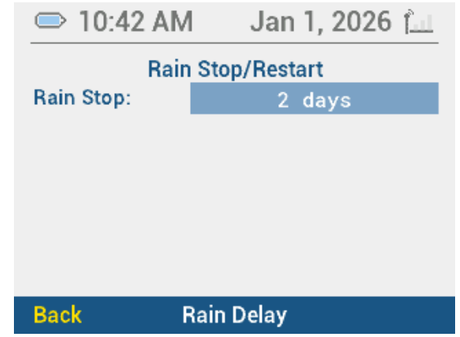
1. From the Main Menu, navigate to General and press • Select.
2. Navigate to System and press • Select.
3. Navigate to Active CCT Test and press • Select.
4. Navigate to Short Circuit or Open Circuit and press • Select to toggle each between active and inactive.
5. Navigate to Back and press • Select when finished.



5.4 Rain Delay

Entering a rain delay will prevent the controller from watering for the number of days entered. Normal watering will resume automatically when the delay expires.

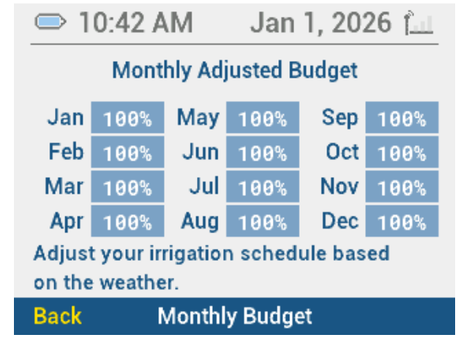
1. From the Main Menu, navigate to General and press • Select.
2. Navigate to S. System and press • Select.
3. Navigate to Rain Delay and press • Select.
4. Navigate to the Rain Stop field and press • Select — it will flash.
5. Use ▲ / ▼ to set the number of days to suspend watering, then press • Select to confirm.
6. Navigate to Back and press • Select when finished.



5.5 Monthly Budget

Scales watering durations up or down by a percentage for each month of the year, allowing seasonal adjustment without reprogramming individual valve durations. A value of 100% runs valves at their programmed duration; values below reduce run time and values above increase it. The range is 0–200%. Values changed from 100% will appear in dark blue on the screen.

1. From the Main Menu, navigate to General and press • Select.
2. Navigate to S. System and press • Select.
3. Navigate to Monthly Budget and press • Select.
4. Navigate to the field next to the month to adjust and press • Select — it will flash.
5. Use ▲ / ▼ to set the percentage, then press • Select to confirm.
6. Repeat for each month as needed. Navigate to Back and press • Select when finished.

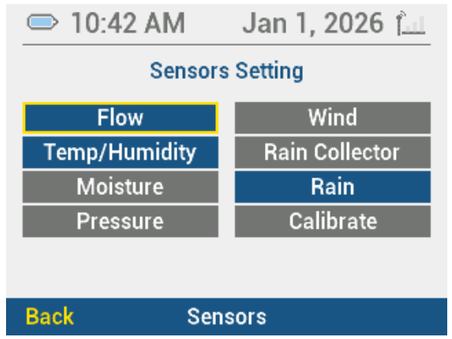


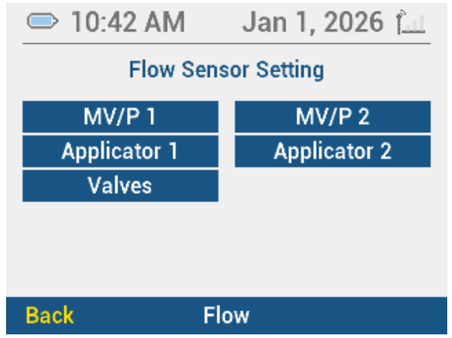
5.6 Flow Sensor Setup

The LEITLINK supports DIG FLOWLINK flow sensors installed inline with a valve or on a master valve/pump output. Flow sensors can detect leaks or run valves by flow volume instead of time. Refer to the Installation section for physical installation instructions before completing this section.

1. From the Main Menu, navigate to General and press • Select.
2. Navigate to S. System and press • Select.
3. Navigate to Sensor and press • Select.
4. Navigate to Flow and press • Select.
5. Navigate to the location where the sensor is installed (MV/P 1, MV/P 2, Applicator 1, Applicator 2, or Valves) and press • Select.
    - If Valves is selected, navigate to the Active/Inactive field next to the target valve and press • Select to activate
6. Navigate to Edit and press • Select. Navigate to Active and press • Select to enable the sensor.
7. Navigate to the Sensor Size field and press • Select. Use ▲ / ▼ to select the installed FLOWLINK model, then press • Select to confirm.

> **IMPORTANT:** The Sensor Size setting must match the physically installed FLOWLINK sensor model for accurate flow measurement.

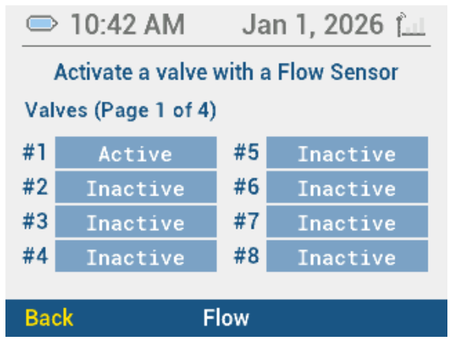


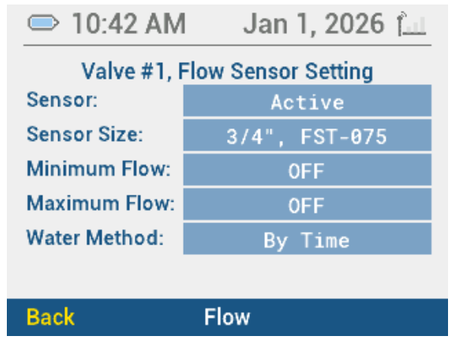


8. Navigate to the Minimum Flow field and press • Select. Use ▲ / ▼ to set the low-flow alert threshold (0–20%). Press • Select to confirm.
9. Navigate to the Maximum Flow field and press • Select. Use ▲ / ▼ to set the high-flow alert threshold (0–20%). Press • Select to confirm.
10. Navigate to Time or Flow under Programming Method to select whether this valve runs by duration or by flow volume. The selected option will highlight dark blue.

> **NOTE:** If Flow is selected, return to Section 4 to enter gallons or liters in the valve duration fields for any programs that include this valve. This does not apply to applicator outputs.

11. Navigate to Back and press • Select when finished.

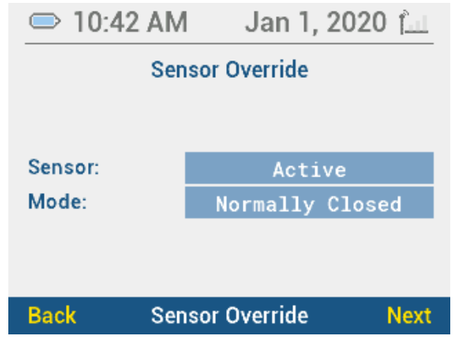




5.7 Rain Sensor

Most normally-closed rain or soil moisture sensors are compatible with the LEITLINK. When active, the sensor prevents scheduled programs from running during or after excessive rainfall or when soil moisture is sufficient.

1. From the Main Menu, navigate to General and press • Select.
2. Navigate to S. System and press • Select.
3. Navigate to Sensor and press • Select.
4. Navigate to Rain and press • Select.
5. Navigate to the Rain Sensor field and press • Select to toggle between active and inactive.

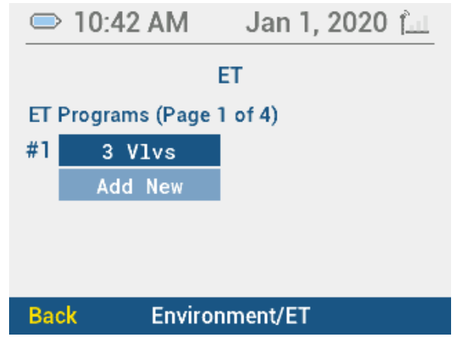


5.8 Environment / ET

This function is not available for LEITLINK FS models. ET (evapotranspiration) programming allows the controller to automatically adjust watering based on daily weather data downloaded via the LTE-M connection. Up to 32 ET programs can be configured. ET valves operate based on the scheduled programs configured in Section 4. A valve must have a non-zero runtime in at least one program for ET to water — the program determines when watering occurs, while ET replaces the programmed duration with the calculated ET-based runtime.

> **NOTE:** If connecting a pump rather than a master valve, an RKIT8810S or equivalent relay kit is required.

1. From the Main Menu, navigate to General and press • Select.
2. Navigate to S. System and press • Select.
3. Navigate to Environment/ET and press • Select.
4. A list of ET programs will appear. Previously configured programs will show their assigned valve count and highlight dark blue. Navigate to the ET program to configure and press • Select.
5. Navigate to Edit and press • Select.
6. To rename the program, navigate to the Name field and press • Select. Use ◄ / ► to move between characters and ▲ / ▼ to change each character. Press • Select to confirm.
7. Navigate to Active or Inactive and press • Select to set the program status. Navigate to Next and press • Select.
8. The valve list will appear. Valves already assigned to another ET program will be greyed out. Navigate to the Active/Inactive field next to each valve to include and press • Select to toggle it.



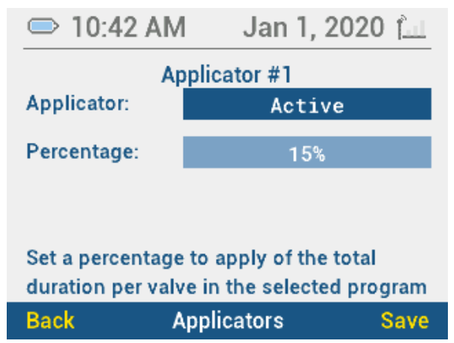
9. On 16, 24, and 32 station models, navigate to Next to continue through all valves. Navigate to Next and press • Select when all valves are assigned.
10. Enter the ET settings to match real-world site conditions. For each field, navigate to the value box, press • Select, use ▲ / ▼ to adjust, and press • Select to confirm. Navigate to Next and press • Select and repeat for remaining ET parameters.
11. Navigate to Save and press • Select to finish.

> **NOTE:** If ET data has not been received for 2 consecutive days, all valves using ET will fall back to their original programmed durations (Section 4) until ET data is received again, at which point ET-based watering will automatically resume. While ET data remains unavailable, an alert will appear on the startup screens and in Check Status (Section 6.4) indicating the number of days since ET data was last received.

5.9 Applicators

The LEITLINK supports 2 fertilizer applicator outputs. Applicators run once per selected month, per selected program. The dosing duration is expressed as a percentage of the valve's run time (or flow volume, if the valve is configured to run by flow).

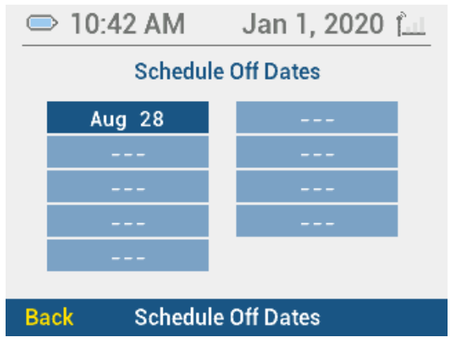
1. From the Main Menu, navigate to General and press • Select.
2. Navigate to S. System and press • Select.
3. Navigate to Applicators and press • Select.
4. Navigate to the Active/Inactive label under the applicator to configure and press • Select to toggle it. Navigate to the applicator to configure and press • Select.
5. Navigate to each month the applicator should dose and press • Select to toggle it on (selected months highlight dark blue and show YES). Navigate to Next and press • Select.
6. Navigate to each program the applicator should run with and press • Select to toggle it on. Navigate to Next and press • Select.
7. Navigate to the Percentage field and press • Select. Use ▲ / ▼ to set the dosing percentage (0–90% of the valve's run time or flow). Press • Select to confirm.
8. Navigate to Next and press • Select to finish. The controller will return to the S. System menu.



5.10 Schedule Off

Up to 8 specific dates can be entered on which the controller will suspend all watering. A value of – – – indicates no date has been set for that slot (located between December and January when cycling through options).

1. From the Main Menu, navigate to General and press • Select.
2. Navigate to S. System and press • Select.
3. Navigate to Schedule Off and press • Select.
4. Navigate to any slot to be configured and press • Select — it will flash.
5. Use ◄ / ► to move between day and month, and ▲ / ▼ to change the values. Press • Select to confirm.
6. Repeat for each date to be added. Navigate to Back and press • Select when finished.



5.11 Additional System Settings

Brightness
Adjusts the LCD backlight brightness. Navigate to General → System → Brightness. Navigate to the brightness value, press • Select, use ▲ / ▼ to adjust, press • Select to confirm. Navigate to Back when finished.

Format
Switches between imperial (gallons, °F) and metric (liters, °C) units. Navigate to General → System → Format. Navigate to Imperial or Metric and press • Select (selected option highlights dark blue). Navigate to Back when finished.

Language
Selects the display language. English and Spanish are available by default; additional languages may be made available via future updates. Navigate to General → System → Language. Navigate to the desired language and press • Select. Navigate to Back when finished.

Password
Sets a numeric access password. When active, any user inserting a LEITLINK key will be required to enter the password before accessing the controller.

> **WARNING:** If the password is lost, the unit will require a full factory reset to clear it. Record the password and store it in a secure location.

1. Navigate to General → System → Password.
2. Navigate to Active or Inactive and press • Select to toggle password protection.
3. If active, navigate to the Password field and press • Select.
4. Use ◄ / ► to move between digits and ▲ / ▼ to change each digit. Press • Select to confirm.
5. Navigate to Back when finished.

6. Daily Operation

This section is intended primarily for site operators and end users. It covers the tasks most commonly needed after the controller has been installed and programmed. For changes to the underlying irrigation programs, refer to Sections 4 and 5.

6.1 Activating the Display

To wake the controller's LCD display, insert the LEITLINK key into the USB-B port on the LCD module. The controller will cycle through status and version screens before arriving at the Main Menu.

> **NOTE:** If the unit is at a low power level, the display may take 30–60 seconds to turn on. Occasional brief flashes during normal operation are not a fault — they indicate background LTE-M radio activity.

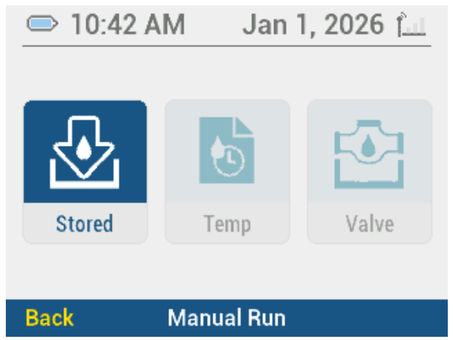
6.2 Manual Run

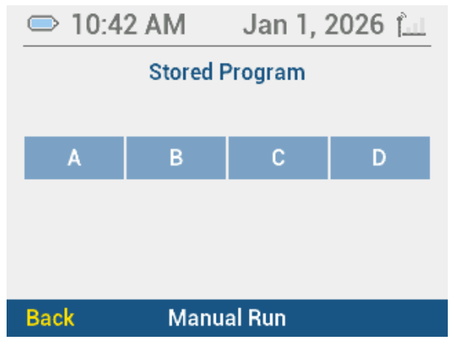
The Manual Run feature allows the user to run the irrigation system on demand outside of its scheduled programming. At the end of any manual run, the controller will automatically close all valves.

To access Manual Run, navigate to Manual Run from the Main Menu and press • Select. Three modes are available:

Option 1 – Stored
Runs a previously configured program as-is. Only available if at least one program has been set up with valve durations assigned. Programs with no valve durations will appear greyed out and cannot be selected.

1. Navigate to Stored and press • Select.
2. Navigate to the program to run and press • Select. Available programs appear in blue; unavailable programs appear in grey.
3. The valve list will display for review. Durations are not editable in this mode. Use Next to page through valves, then press • Select on Next on the final page to proceed to the Start screen.
4. On the Start screen, set a delay if desired: navigate to the Start In field and press • Select. Use ◄ / ► to move between hours and minutes and ▲ / ▼ to set the time. Press • Select to confirm. If left at 00:00 the program will start immediately.
5. Navigate to Start and press • Select to begin the run. See Section 6.3 for options available during a run.



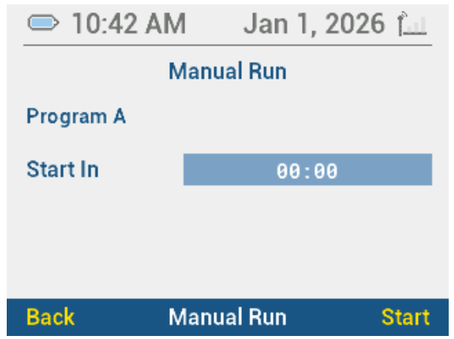


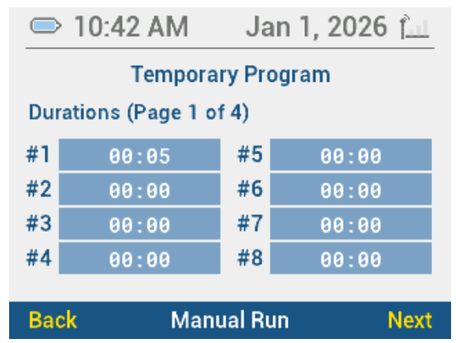
Option 2 – Temp
Allows the user to set custom durations for each valve and run them immediately without modifying the stored programs.

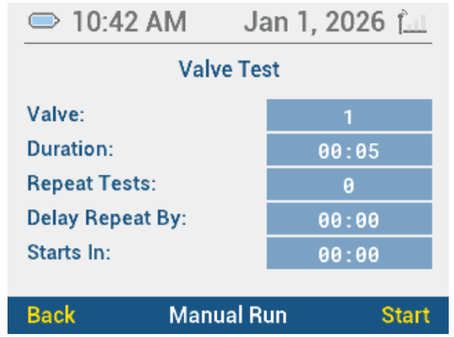
1. Navigate to Temp and press • Select.
2. Navigate to the duration field for the first valve to run and press • Select — it will flash.
3. Use ▲ / ▼ to set the duration, then press • Select to confirm. Repeat for each valve to be run. Valves left at zero will not run.
4. On models with more than 8 stations, navigate to Next to continue through all valves.
5. When all durations are set, navigate to Next and press • Select to proceed to the Start screen.
6. Set a delay if desired (see Option 1, step 4). Navigate to Start and press • Select to begin. See Section 6.3 for options available during a run.

Option 3 – Valve Test
Runs a single valve a specified number of times with an optional delay between repetitions. Useful for testing individual valves during commissioning or troubleshooting.

1. Navigate to Valve and press • Select.
2. Navigate to the Valve # field and press • Select. Use ▲ / ▼ to select the valve to test, then press • Select to confirm.
3. Navigate to the Duration field and press • Select. Use ◄ / ► to move between hours and minutes and ▲ / ▼ to set the duration. Press • Select to confirm.
4. (Optional) Navigate to the Repeat Tests field and press • Select. Use ▲ / ▼ to set the number of repetitions, then press • Select to confirm.
5. (Optional) Navigate to the Delay Repeat By field and press • Select. Use ◄ / ► to move between hours and minutes and ▲ / ▼ to set the delay. Press • Select to confirm.
6. Navigate to Next and press • Select to proceed to the Start screen.
7. Set a delay if desired (see Option 1, step 4). Navigate to Start and press • Select to begin. See Section 6.3 for options available during a run.







6.3 Running Screen

The Running Screen appears automatically whenever a valve is active, and also when a Manual Run is initiated while a program is already running. It displays the currently running program and valve, the remaining duration, and the following control options:

Skip to Next Valve
Closes the current valve and advances immediately to the next valve in the sequence.

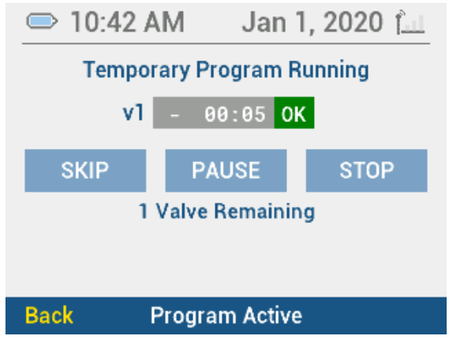
1. Navigate to SKIP and press • Select. Allow a moment for the controller to process — the screen will update to reflect the next valve.

Pause
Closes the current valve and holds the remaining duration until resumed.

1. Navigate to PAUSE and press • Select. The remaining duration will begin blinking.
2. When ready to continue, navigate to RESUME and press • Select.

Stop
Closes the current valve and cancels all remaining valves in the run sequence.

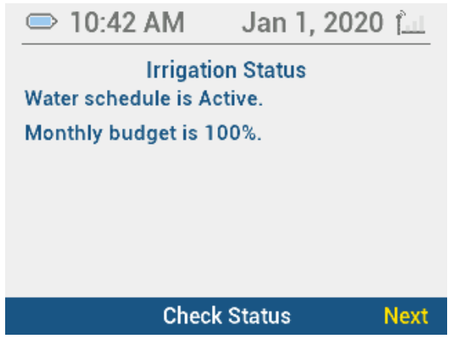
1. Navigate to STOP and press • Select. Allow a moment to process — the Running Screen will close and return to the Main Menu.



6.4 Checking System Status

The status screens provide a snapshot of the controller's current condition, including any active alerts such as valve wiring faults or flow issues. These screens are read-only and are also displayed on startup when the LEITLINK key is inserted.

1. From the Main Menu, navigate to General and press • Select.
2. Navigate to System and press • Select.
3. Navigate to Check Status and press • Select.
4. Use Next and Back to page through the available status information.

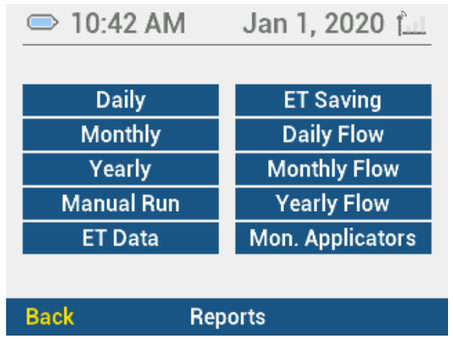


NOTE: If a wiring fault or flow issue has been resolved in the field, no action is needed on the controller itself. The next time the affected valve runs, the controller will recheck it automatically and clear the alert if the issue is resolved.

6.5 Reports

The Reports section provides historical data on system activity. All reports are read-only. Available reports include daily, monthly, and yearly valve run time; manual run history; average Monthly ET and ET Savings; daily, monthly, and yearly flow by valve; and fertilizer application history by month.

1. From the Main Menu, navigate to General and press • Select.
2. Navigate to System and press • Select.
3. Navigate to Reports and press • Select.
4. Navigate to the desired report type and press • Select.
5. Use Next and Back to page through the data.



6.6 Remote Access via LEITLINK.com

This function is not available for LEITLINK FS models. Once the controller has been registered on www.LEITLINK.com, the full programming and monitoring capabilities of the controller are accessible remotely through the web portal. This includes reviewing reports, adjusting programs, setting rain delays, and monitoring system alerts without needing physical access to the controller.

For full instructions on using the web portal, refer to the LEITLINK Web Portal User Manual.

https://www.digcorp.com/professional-resources/LEITLINK-Web-Portal-Manual

NOTE: Remote access requires the controller to maintain sufficient power for LTE-M communication. See the power note in Section B regarding minimum light exposure requirements.

7. Troubleshooting

This section covers common issues that may be encountered during operation, along with recommended corrective actions. For issues not covered here, contact DIG Technical Support (see Section C).

7.1 Power and Display

The display does not turn on when the LEITLINK key is inserted.

- The unit may be at a low power level. Wait 30–60 seconds after inserting the key before concluding there is a fault.
- Verify the LEITLINK key is fully seated in the USB-B port.
- Check that the PVM is properly connected to the PVM power port on the LCD module.
- Confirm the unit has been exposed to adequate light levels recently. If the unit has been in storage or in a shaded location for an extended period, allow several hours of light exposure to recover sufficient charge.

The display flashes intermittently during operation.
This is normal behavior. Brief display flashes indicate background LTE-M radio activity and do not indicate a fault.

The LTE-M connection has dropped or is unavailable.

- The controller automatically disables LTE-M when power levels are insufficient. This is by design and not a fault.
- Verify the unit is installed in an open, unshaded location receiving a minimum of 10,000 lux of ambient light daily.
- Check that the antenna is fully connected to the antenna port on the LCD module.
- If the issue persists after confirming adequate light exposure, contact DIG Technical Support.

7.2 Valve and Wiring Faults

A valve alert is showing on the duration screen or status screen.
- Navigate to General → System → Check Status to review the nature of the alert.
- Wiring faults (open or short circuit) are detected if Active CCT Test is enabled (Section 5.3). Inspect wiring to the affected valve for damage, loose connections, or shorts.
- Flow-related alerts indicate the valve's measured flow has fallen outside the configured thresholds (Section 5.6). Inspect the valve and pipework for blockages, leaks, or component failure.

A valve alert has been resolved but the alert is still showing.
No manual clearing is required. The controller will recheck the valve automatically the next time it runs and clear the alert if the issue is resolved.

A valve is not opening or closing as expected.
- Confirm the valve is assigned to the correct station terminal.
- Confirm the program or manual run includes the valve with a non-zero duration.
- Use the Valve Test option in Manual Run (Section 6.2, Option 3) to isolate and test the individual valve.
- Check for wiring faults via General → System → Check Status.
- Inspect the solenoid and valve body for mechanical failure or debris.

7.3 Scheduling Issues

The controller is not watering on the expected days.
- Confirm the program is set to Active on the Programs screen.
- Verify the frequency setting is configured as intended (Section 4.2).
- Check whether a Rain Delay is currently active (Section 5.4).
- Check whether today's date falls on a Schedule Off date (Section 5.11).
- If a monthly budget of 0% has been set for the current month, valves will have an effective run time of zero. Review the Monthly Budget settings (Section 5.5).
- Confirm the current date and time are set correctly (Section 3.5).

The controller is watering at unexpected times.
- Review all active programs and their start times for unintended entries.
- Check whether a Manual Run is in progress via the Running Screen.
- Confirm the time and date are set correctly (Section 3.5). An incorrect time setting is the most common cause of unexpected watering times.

A program is greyed out and cannot be selected for a Manual Run.
The program has no valves with non-zero durations assigned. Return to Section 4.4 to configure valve durations for that program.

7.4 Flow Sensor Issues

The flow sensor is not registering flow.
- Confirm the sensor is set to Active in the flow sensor setup screen (Section 5.6).
- Verify the Sensor Size setting matches the physically installed FLOWLINK sensor model.
- Check the sensor wiring connections at the terminal module.
- Confirm the valve associated with the sensor is opening correctly.

Flow alerts are triggering unexpectedly.
- The minimum and maximum flow thresholds may be set too tightly. Review and adjust the thresholds in Section 5.6.
- A newly installed flow sensor will use default nominal flow values until the controller has logged enough run data to establish a baseline. Some initial false alerts may occur during this period.

7.5 Remote Access and LTE-M Issues

The controller is not appearing on LEITLINK.com after registration.
- Confirm the 6-digit wireless code was entered correctly during registration. Retrieve the code via General → System → Wireless.
- Verify the unit has LTE-M connectivity (see Section 7.1).
- Allow up to several minutes after registration for the controller to appear in the portal.
- If the issue persists, contact DIG Technical Support.

Changes made on LEITLINK.com are not reflected on the controller.
- The controller must have an active LTE-M connection to receive updates. See Section 7.1 for power and connectivity checks.
- Allow a few minutes for the update to propagate after saving changes on the portal.

7.6 Password Recovery

Please contact DIG customer service for password recovery. If data retention is unnecessary, you can perform a factory reset on the unit. To perform a factory reset on the unit, insert the LEITLINK key and hold the ◄ button and ► button for 10 seconds or until the screen resets.

> **WARNING:** A factory reset will erase all programs and settings. Ensure all programming is documented before performing a reset, or retrieve it from LEITLINK.com if the unit was registered and synced prior to the lockout.

8. Maintenance

8.1 General

The LEITLINK is designed for outdoor commercial use. Periodic inspection of the enclosure, door seal, and camlock is recommended to ensure weatherproofing integrity is maintained. Keep the PVM surface clean and free of dirt, debris, and shading — a dirty or obstructed PVM will reduce energy harvesting and may affect controller uptime and LTE-M availability.

8.2 PVM Care

- Clean the PVM surface periodically using a soft, damp cloth. Do not use abrasive cleaners or solvents.
- Inspect the PVM cable and connector for damage at each site visit.

8.3 Firmware Updates

Firmware updates will happen automatically for bug fixes and minor application fixes. Major firmware updates will have instructions as they are released.

8.4 Field Modifications

No field modifications or adjustments to the internal electronics of the LEITLINK are permitted. All hardware changes must be performed at DIG's facility under DIG's manufacturing process guidelines. Unauthorized modifications void the warranty and FCC/regulatory compliance.

9. Warranty

DIG Corp. warrants to its customers who have purchased LEIT products, from an authorized DIG distributor, that its products will be free from original defects in material and workmanship for a period of three (3) years, from the date of original purchase. If any apparent defect arises under normal use and service in the LEIT product within the warranty period, DIG at its sole discretion, shall have the option to repair or replace part or all of the original product free of charge after return of such product at user expense, authorized in writing by DIG Corp. If a product is replaced, the replacement product will be covered for the remainder of the warranty period dating from the original purchase.

This warranty applies only to the DIG LEIT product line, which are installed as specified and used for irrigation purposes. This warranty applies only to products, which have not been altered, modified, damaged, misused or misapplied. This warranty does not cover products adversely affected by the system into which the products are incorporated, including improperly designed, installed, operated, or maintained systems. This warranty does not apply to blockage of solenoids due to use of water containing corrosive chemicals, electrolytes, sand, dirt, silt, rust, scale, algae, bacterial slime or other organic contaminants.

Tampering with a product (including, but not limited to attempting to disassembly) will void any warranty the product might otherwise be eligible for. In no event shall DIG's liability exceed the selling price of the product. DIG is not liable for consequential, incidental, indirect or special damages, including but not limited to the labor to inspect, remove or replace products, vegetation loss, loss of energy or water, cost of substitute equipment or services, property damage, loss of use or loss of profits; nor is DIG liable for economic losses, consequential damages or damage to property arising out of installer's negligence or based on strict liability in tort. The user and/ or trade customer agrees to the limitations and exclusions of liability of this warranty by purchase or use of DIG products. . No representative, agent, distributor or other person has the authority to waive, alter, or add to the printed provisions of this warranty, or to make any representation of warranty not contained here.

Some states do not permit the exclusion or limitation of incidental or consequential damages or of implied warranties. Therefore, some of the above exclusions or limitations may not apply to you.

This warranty on LEIT products is given expressly and in place of all other expressed or implied warranties of merchantability and fitness for particular purpose, and this warranty is the only warranty on LEIT products line made by DIG Corp.

NOTES

Get in Touch

water matters

DIG CORPORATION
1210 Activity Drive • Vista, California 92081
800.322.9146 • 760.727.0914 • fax 760.727.0282
www.digcorp.com

©2026 All Rights Reserved. Printed in USA | 26-414 LEITLINK Instruction Manual
We at DIG strongly believe in recycling. Please recycle.