

Logic Plus S - 2 Wire Controller

FEATURES

- 42 station capability / 128 station capability.
- 8 programs / 16 programs.
- 8 start times per program / 16 start times per program.
- Looping feature on program 6 and remote sensor relay to activate program 6.
- 1 minute to 10 hr 59 minutes run time per station (all programs except 5 and 6 which are 1 second to 59 minutes 59 seconds)
- Water budget 0-250% (5% increments) increasing run times per station to over 24 hours.
- Semi automatic and programmable manual operations.
- Programmable pause between stations per program 0-59 seconds.
- Programmable rain delay up to 31 days.
- Programmable master valve.
- Fertigation control relays with fertigation programming.
- Date/leap year sensitive scheduling options weekly, 1-28 day interval.
- odd /even calendar day capabilities.
- Programmable test cycle.
- "Bounce back" technology allows programs to immediately continue on schedule after power outage.
- Radio remote ready.
- Program start input.
- Clear function for each independent program or entire controller.
- Displays real time operation.
- Up to 4 valves may operate simultaneously, same or different valve numbers.
- 4 field wire outputs, wire run lengths up to 12,000 feet each in four different directions.
- Field wires may be installed with tee, crosses and star wire configurations.
- Each valve has dedicated unique programmable receiver.
- Receivers can be programmed at controller or by way of portable programming unit, Model #LP-HHRP.
- Equipped with modular, replaceable surge protection package.
- Short wire and short valve sensing capabilities.
- Easy wire trouble shooting procedures.
- Locking stainless steel enclosure, wall mount or pedestal options.



LPI28S-C

1-128 Station, 16 Program, 15 Starts per program, 4 path two-wire output controller in stainless steel locking enclosure



Logic Plus 2 Wire Controller

FEATURE SPECIFICS

- Primary power input shall be 120 VAC 60 Hz or 240 VAC 50 Hz. Specify primary power when ordering LogicPLUS Controller. Secondary power output shall be 24 VAC. Non-volatile memory. Internal battery provides backup for time and date.
- When controller is not operating no power shall be delivered to field receivers. A 15 second "power up" delay shall occur when the controller initiates any activity to supply power to field receivers.
- Use only LogicPLUS Receivers (Gray color). Part number LP-RP.
- Maximum pressure of 100 PSI at solenoid valve. For higher operating pressure consult factory.
- Minimum wire size is 14 gauge Irrigation solid core copper direct burial wire. It is recommended to use two colors for field wire from the controller to valves. It is recommended to change colors at each tee, cross or wagon wheel connection. This will help with any possible future trouble shooting.
- Wire layout allows for Tees, Crosses and Wagon wheel layouts. Do not loop any wire layouts. Install all wire splices in valve boxes.
- Use only HIT/LogicPLUS DBC-BR splice kits, supplied with Receiver, to make all field wire connections from 2 wire path to Red wires on Receiver.
- Use only HIT/LogicPLUS DBC-BR or HIT/LogicPLUS DBC-Y splice kits to make receiver to solenoid connections. (use Black wires on receiver)
- Use only standard 24 VAC solenoid, do not use low power or diode bridge solenoids.
- In multiple controller installations, each controller shall have its' own dedicated ground rod (customer to supply) and grounding system. Do not connect multiple controller installations together in any way or share ground system.
- For lightning protection, install HIT/LogicPLUS Field Surge Protection, part number L-SPD-F, every 300-500 feet along two wire path, and attach to ground rod (customer supplied). Install Field Surge Protectors in valve box.

- Install LogicPLUS controllers at least 15 feet from all power source or high voltage power meters, magnetic starters, pumps, variable speed controllers, etc., to eliminate any possible EMI. This is a computer.
- Program all LogicPLUS Receivers at the controller or use LogicPLUS hand-held programmer (part number LP-HHRP) before installing Receivers at each valve location.
 - Maximum number of receivers per controller shall be 80 for LogicPLUS 42, and 128 for LogicPLUS 128.
 - A maximum of four (4) Receivers of the same or different number may be operated at one time.
 - Each controller shall have available four (4) field wire outputs. This allows for up to a maximum of four (4) field wire runs of 12,000 feet each in four directions from the controller.
 - Each controller shall have the capacity to be remote ready. Contact the factory for this option.
 - Each controller is pre-wired for a Pump Start/Master Valve Relay and a Fertigation relay. Use 24 VAC slave relay (maximum power 350 Ma in rush, 250 Ma holding) or HIT PS 200 or PS 500 pump start relays to activate pump starter and Fertigation pumps.
 - Each controller is pre-wired for a "Rain Off" function, designed for interfacing with a "Rain Sensor" (Normally closed).
 - LogicPLUS controllers have a modular surge protection board to protect the main controller board. In case of lightning strike or power surge this board is sacrificial.
 - LogicPLUS controllers are equipped with "short" sensing capability. Contact factory or consult Instruction/Installation manuals for directions of using "short" sensing capabilities.
 - LogicPLUS two-wire systems are compatible with certain wire tracing equipment. Consult Factory.
 - Stainless Steel Wall mount box measures 13.56" H, 10.25" W, 5" D.



LP-RP
Programmable Receiver for
LogicPlus and Universal 2



LP-HHRP
Hand-held battery operated
programming device for
LogicPlus receivers



DBC-BR
Logic receiver waterproof brass splice kit
with direct bury gel filled housing for
receiver to Two-wire path connection.

Included with every LP:-RP Receiver



Logic Plus 2 Wire Controller

ORDER SPECIFICATION GUIDE : Model

Model

LP42S-C = 1-42 Station, 8 Program, 8 Starts per Program, 4 path, two-wire output controller in stainless steel locking enclosure.
LP128S-C = 1-128 Station, 16 Program, 16 Starts per Program, 4 path, two-wire output controller in stainless steel locking enclosure.
LP-PED = Stainless steel pedestal for use with Controllers
LP-RP = Programmable receiver for LogicPlus Controllers
LP-HHRP = Hand-held batter operated device for programming LogicPlus receivers in the field.
LP-RP-ID = Extra programmable receiver identification kit
LP-SPD-F = Surge protection device for field wiring of two-wire path
DBC-R/Y = Water proof, direct bury, gel filled splice housings
LP-SPD-PAN-S = Replacement module for sacrificial surge protection panel in LogicPlus Controller
DBC-BR = Waterproof Logic receiver brass splice kit with direct bury gel filled housing for receiver to two-wire path connection.
DBC-SPL = Direct bury splice kit
LP-RPC = Replacement programming cables

Radio Remote Options

LP-RAD-SK = Sidekick radio remote compatible with Logic 2, 3, and LogicPlus 42 and 128
LP-RAD-COM = Commander radio remote to 128 stations included: case, radio remote transmitter, radio receiver, antennae with mounting bracket
LP-RAD-COM-T = Transmitter only
LP-RAD-COM-R = Receiver 128 station only

