Universal 2 (Two Wire Converter)

FEATURES
- Converts any controller to two wire output system
- Individual Logic Plus Receiver installed at each valve
- Each Universal Plus 2 has capacity for 40 valve inputs from controller
- Locking stainless steel enclosure wall mount with transformer
- Field wires may be installed with tees, crosses and star configurations
- Optional receiver programmer to program receiver on job site. Use part # LP-HHRP programmer
- Short sensing capability
- Easy wire trouble shooting capabilities

FEATURE SPECIFICS
- Primary power input shall be 120 VAC 60 Hz or 240 VAC 50 Hz. Specify primary power when ordering Universal Controller. Secondary power output shall be 24 VAC. Non-volatile memory. Battery 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 Universal Receivers (Gray color). Part number LP-RP.
- Maximum total wire length from controller to any Receiver at end of the wire length is 12,000 feet. 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 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/Universal 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/Universal DBC-BR or HIT/Universal 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 Universal 2 installations, each Universal 2 shall have its own dedicated ground rod (customer to supply) and grounding system. Do not connect multiple Universal 2 installations together in any way or share ground system.
- For lightning protection, install HIT/Universal 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 Universal 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 Universal Receivers at the controller or use Universal hand-held programmer (part number LP-HHRP) before installing Receivers at each valve location.
- Maximum number of receivers per controller shall be 80 for Universal 42, and 128 for Universal 128.

• A maximum of four (4) Receivers of the same or different number may be operated at one time.
• Each Universal 2 shall have available 2 field wire outputs. This allows for up to a maximum of 2 field wire runs of 12,000 feet each in two directions from the controller.
• Universal 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.
• Universal controllers are equipped with ‘short’ sensing capability. Contact factory or consult Instruction/Instruction manuals for directions of using ‘short’ sensing capabilities.
• Universal 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-UNI-2
Universal 2 - Two Wire Converter
Universal 2 (Two Wire Converter)

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

LP-RP
Programmable Reciever for LogicPlus and Universal 2

ORDER SPECIFICATION GUIDE: Model

Model
LP-UNI-2 = Universal 2 Plus, 1 to 40 station Two-Wire system converter with dual output in stainless steel enclosure
LP-RP = Programmable reciever for LogicPlus Controllers
LP-RP-ID = Extra programmable reciever 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
DBC-BR = Waterproof Logic reciever 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