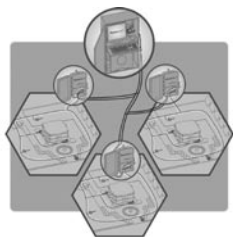**IRRIGATION**

BASE·LINE

BaseStation™ 6000 Controller

Primary Application

The BaseStation™ 6000 is a comprehensive campus and multi-site irrigation management solution that incorporates powerful, user friendly software, robust two-wire communications, and advanced soil moisture sensing to simplify installation and management of large, complex, and distributed landscapes. The BaseStation™ 6000 includes a PC Controller with the Baseline irrigation management software. One PC can control up to 4000 zones at up to 20 remote sites. The Controller can be accessed by any remote PC or telephone and can be entirely managed remotely if desired. The system can send status reports to managers and maintenance personnel via e-mail.

Features:
- Controls all irrigation management functions
- Graphical map based user interface with up to 20 maps
- Support for over 4000 zones
- Support for biSensor™ soil moisture sensors
- Remote Site Access (via pcAnywhere™)
- Cellular Phone Control with voice menu system
- Advanced two-wire operation compatible with all biCoders™ and biSensors™
- Flow meter sensing and advanced flow control
- 100 independent programs with concurrent operation
- Multiple radio and remote communications options
- Advanced self-test and diagnostics

Operating Specifications:
- Can control over 4000 zones per PC Controller, expandable to unlimited zones with multiple PC Controllers.
- Capable of operating 100 concurrent 24VAC 7VA solenoid valves; 6 concurrent valves per Remote Base unit.
- Capable of supporting up to 400 biSensor™ soil moisture sensors.
- PC Based Controller: 800 MHz or higher, 64 MB or higher, 10+ GB hard drive, 1.4MB floppy, CD ROM, 56K modem, 17 in XVGA monitor, (1) serial & (1) parallel port.

Operating System Software:
- Windows 2000™ Service Pack 4 or Windows XP™ Service Pack 2 operating systems

ITEM	DESCRIPTION
55000600	BL-6000X SITE CONTROLLER
55000610	BL-6000XE SITE CNTRL W/ENC

BaseStation™ 5000 Controller

Primary Application

The BaseStation™ 5000 is a comprehensive site irrigation management solution that incorporates user-friendly software, robust two-wire communications, and advanced soil moisture sensing technology to simplify installation and management of large site irrigation. The BaseStation 5000 includes a PC Controller with the Baseline irrigation management software which is located at each irrigated site. One PC can control over 200 zones. The Controller can be accessed by any remote PC or telephone and can be entirely managed remotely if desired. The system can send status reports to managers and maintenance personnel via e-mail.

Features:
- Controls all irrigation management functions
- Graphical map based user interface
- Support for over 200 zones
- Support for biSensor™ soil moisture sensors
- Advanced two-wire operation compatible with all biCoders™ and biSensors™
- 10 independent programs with concurrent operation
- Remote access from any PC via modem and remote control software
- Multiple radio and remote communications options
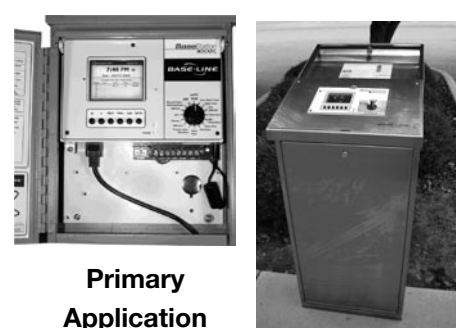- Advanced self-test and diagnostics

Operating Specifications:
- Can control over 200 zones per PC Controller, expandable to unlimited zones with multiple PC Controllers.
- Capable of operating 6 concurrent 24VAC 7VA solenoid valves
- PC Based Controller: 800 MHz or higher, 64 MB or higher, 10+ GB hard drive, 1.4MB floppy, CD ROM, 56K modem, 15 in. VGA monitor, (1) serial & (1) parallel port.

Operating System Software:
- Windows 2000™ Service Pack 4 or Windows XP™ Service Pack 2 operating systems releases.

ITEM	DESCRIPTION
55000500	BL-5000C SITE CONTROLLER
55000510	BL-5000E SITE CONTROLER W/ENCL

BaseStation™ 3000 Controller

Primary Application

The most advanced stand alone two-wire irrigation controller available. The BaseStation™ 3000 is designed for small to medium sized commercial sites and supports Baseline's robust and scalable biLine™ two-wire communication system. Easy to install and use, the system eliminates the overhead and complexity normally associated with advanced irrigation control systems. The controller has all the features of advanced controllers plus the capability of using soil moisture to control watering. Self-adjusting watering technology using patented soil-moisture sensors saves you management time, water and money while improving your landscape. BaseStation™ 2000 and 3000 controllers can be managed remotely using Baseline's ultra-friendly BaseVision™ Remote Management software designed specifically for irrigation managers.

Features:
- Advanced programming including whole year watering calendar
- Remote access and management with multiple communications options
- Large built-in color LCD display
- Support for Baseline's robust and scalable biLine™ two-wire communication system
- Support for up to 6 biSensor™ soil moisture sensors
- Flow meter connection, external pause button connection, rain sensor connection
- Self-test diagnostics for testing valves and moisture sensors
- Metal interior/exterior wall mount or stainless steel exterior enclosures
- Dual master valve/pump start (one can be program specific)
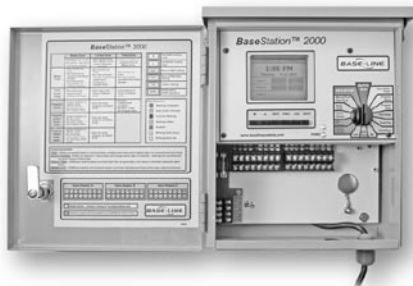
Operating Specifications:
- 117 VAC±10% 60hz power service
- Capable of operating up to 5 concurrent 24 VAC, 7VA solenoid valves
- Support for up to 48 zones. (Additional zones with future software upgrade.)

ITEM	DESCRIPTION
55000300	BL-3048C 48STA SITE CONTROLLER
55000310	BL-3048P 48STA CNTRL W/SS PED

BASE·LINE

BaseStation™ 2000 Controller

Primary Application

The most advanced stand alone irrigation controller available. The BaseStation™ 2000 is designed for small to medium sized commercial and residential sites and uses standard wire-per-valve connections. Easy to install and use, the system eliminates the overhead and complexity normally associated with advanced irrigation control systems. The controller has all the features of advanced controllers plus the capability of using soil moisture to control watering. Self-adjusting watering technology using patented soil-moisture sensors saves you management time, water and money while improving your landscape. BaseStation™ 2000 and 3000 controllers can be managed remotely using Baseline's ultra-friendly BaseVision™ Remote Management software designed specifically for irrigation managers.

Features:

- Advanced programming including whole year watering calendar
- Remote access and management with multiple communications options
- Support for up to 6 biSensor™ soil moisture sensors
- Uses existing valve wires without modification
- Modular design: basic controller supports up to 16 zones plus moisture sensors. Support for up to 48 zones using add-in valve control modules
- Flow meter connection, external pause button connection, rain sensor connection
- Self-test diagnostics for testing valves and moisture sensors
- Metal interior/exterior wall mount or stainless steel exterior enclosures
- Dual master valve/pump start (one can be program specific)

Operating Specifications:

- 117 VAC±10% 60hz power service
- Capable of operating up to 5 concurrent 24 VAC, 7VA solenoid valves

ITEM	DESCRIPTION
55000200	BL-2016C 16STA SITE CONTROLLER
55000210	BL-2016P 16STA CTRLR W/SS PED
55000220	BL-2008M 8 STA EXP MODULE
55000230	BL-2016M 16 STA EXP MODULE
55000240	BL-2000CM CELL PHONE MODEM
55000250	BL-2000PM PHONE MODEM
55000260	BL-2000RM PHONE MODULE
55000270	BL-2000SW REMOTE SOFTWARE
55000280	BL-2000W/ETHERNET LAN MODEM

biCoder™ Valve Decoder

Primary Application

Baseline's patent-pending two-wire system, biLine™, is the most powerful and reliable two-wire irrigation control solution available. The biLine™ system has no required configuration patterns, such as a complete loop. The only requirement is that every device (biCoder™, biSensor™, etc.) be connected to the two-wire system. Loop configurations add additional reliability – all devices will remain accessible even if the loop is cut. Baseline biLine™ devices are compatible with existing wiring for upgrade installations. Because no wiring pattern is required, additional devices can be connected at any time just by "hooking up" to the wiring at the closest location. All Baseline biCoders™ have LED indicators, support advanced diagnostics features such as current and voltage measurement, and include bi-directional communications with status and self-test reports. Depending on wire gauge and connection topology, linear wire runs of 3700 ft and loop configurations with 7400 ft can be supported. One, two and four valve biCoders™ are designed for direct burial. 12 and 24 valve biCoders™ are suitable for wall mounting.

ITEM	DESCRIPTION
55000701	BL-5201 1 VALVE BICODER
55000702	BL-5202 2 VALVE BICODER
55000704	BL-5204 4 VALVE BICODER
55000712	BL-5212 12 VALVE BICODER
55000724	BL-5224 24 VALVE BICODER
55000800	BL-5201MV MASTER VALVE BICODER

biSensor™ Soil Moisture Sensor

Primary Application

Baseline's unique and patented biSensor™ Soil Moisture Sensors accurately and reliably measure the moisture and temperature of the soil and digitally communicate this information to the irrigation controller. Baseline biSensors™ operate reliably in all soil conditions and are not affected by temperature or soil composition. Baseline biSensors™ are durable and maintenance free, and are tolerant of all typical salts and fertilizer levels. All sensor electronics are isolated from the soil, including the actual sensing elements.

ITEM	DESCRIPTION
55000830	BL-5305 5FT SOIL MOIST SENSOR
55000840	BL-5310 10FT SOIL MOIST SENSOR
55000850	BL-5315 1.5FT SOIL MOIST SENSR

biLine™ Air Temperature Sensor

Primary Application

The Air Temperature Sensor for the BaseStation™ 5000/6000 systems provides a convenient way to halt watering when the outside temperature drops below 38 degrees F. This Air Temperature Sensor can be installed at any location where easy access to the biLine™ can be used for a connection. A single sensor per BaseStation™ 5000/6000 system is all that is needed.

ITEM	DESCRIPTION
55000810	BL-5303 AIR TEMPERATURE SENSOR

biLine™ Water Flow Sensor Adapter

Primary Application

The Water Flow/Sensor Adapter allows a Data Industrial IR Series flow sensor to be attached to a BaseStation™ 5000/6000 system. A Data Industrial IR-Series flow sensor must be purchased separately.

ITEM	DESCRIPTION
55000820	BL-5304 FLOW SENSOR BICODER

biLine™ Rain Pause Adapter

Primary Application

The Rain Pause Adapter for the BaseStation™ 5000/6000 systems is compatible with all standard "click" type rain sensors (normally closed). This adapter can be installed at any location where easy access to the biLine™ can be used for a connection.

ITEM	DESCRIPTION
55000870	BL-5401 RAIN PAUSE BICODER

biLine™ Outside Pause Button

Primary Application

The Outside Pause Button for the BaseStation™ 5000/6000 systems provides a convenient way to pause watering, or to invoke a walk-around test from a field location that is remote from the computer. This button can be installed at any location where easy access to the biLine™ can be used for a connection. Up to five buttons can be installed on a single BaseStation™ 5000/6000 system to allow convenient access from multiple locations around large sites.

ITEM	DESCRIPTION
55000860	BL-5401 OUTSIDE PAUSE BUTTON

biLine™ Lightning Arrestor

Primary Application

An inexpensive way to protect your biLine™ components from proximity lightning strikes. The Baseline Lightning Arrestor attaches directly to the biLine™ two-wire system and helps dissipate voltage surges generated by a nearby lightning strike. While all biLine™ components have optical isolators and other lightning arresting features, the Lightning Arrestor provides an extra measure of protection.

ITEM	DESCRIPTION
55000880	BL-LA01 LIGHTNING ARRESTOR

Sensor Kits

Primary Application

The WaterTec™ S100 and S200 monitors are the easiest way to add an accurate soil moisture sensor to an existing irrigation controller, resulting in a healthier landscape with less water by watering only when needed. The advanced soil moisture sensor works with an existing controller and valve wires to maximize convenience and water savings with minimum installation effort and cost. The WaterTec™ S200 allows users to specify watering windows when timed watering is allowed – allowing additional flexibility to support timed schedules for drip irrigation and flower zones.

ITEM	DESCRIPTION
55001100	BL-WTS100KIT RES WATERTEC KIT
55001105	WTS100EKIT EXT RES WATERTEC
55001110	BL-WTS100M RES MONITOR ONLY
55001120	BL-WTS100S RES SENSOR ONLY
55001200	BL-WTS200KIT WATERTEC KIT
55001210	BL-WTS200M MONITOR ONLY
55001220	BL-WTS200S SENSOR ONLY
55000890	BL-WIRE TESTER KIT

IR Series Tee Sensors

Primary Application

The Data Industrial IR Series flow sensors are "environmentally hardened" versions of the standard DI flow sensors. These IR versions are specifically designed for installation in underground vaults that might be subjected to flooding. The IR series feature a six bladed impeller design with a proprietary, non magnetic sensing mechanism. The impeller shape coupled with the absence of magnetic drag provides accuracy and repeatability throughout the flow range of the sensor. As the liquid flow turns the impeller, a low impedance 8 VDC square wave signal is transmitted with a frequency proportional to the flow rate. This signal can travel up to 2000 feet between the sensor and the display unit without the need for amplification.

ITEM	DESCRIPTION
55102250	IR220P-1.5 PPS S/80 TEE SENSOR
55102260	IR220P-2.0 PPS S/80 TEE SENSOR
55102280	IR220P-3.0 PPS S/80 TEE SENSOR
55102290	IR220P-4.0 PPS S/80 TEE SENSOR
55102530	IR250B-1.0 PPS BRZ TEE SENSOR
55102550	IR250B-1.5 PPS BRZ TEE SENSOR
55102660	IR228CB-2.0 BRZ SNSR W/GAL TEE
55102770	IR220B 2.5+ PPS BRS SLV SENSOR

1500 Series Flow Monitor

Primary Application

The Data Industrial Series 1500 Flow Monitor is an economical, full featured, digital flow monitor. The two line x 8 character alphanumeric display can be configured by the user to display flow rate and flow total separately or simultaneously. The panel meter has a NEMA 4X rated front panel and conforms to DIN Standard dimensions, 96 mm X 96 mm, for meter sizes and panel cutouts. Like all Data Industrial flow monitors, the Series 1500 may be field calibrated by the user. The Series 1500 accepts pulse, sine wave, or an optional 4-20 mA analog input signal.

Operating Specifications:
- Power supply:12-24 VDC
- 8 characters x two lines, alphanumeric, dot matrix LCD display
- Wall Mount: 4.80"W x 4.72"H x 3.62"D

ITEM	DESCRIPTION
55105010	1500-011 FLOW MONITOR WALL/MT

Line Surge Supressor

ITEM	DESCRIPTION
55106050	A1017 SNSR LINE SURGE SUPRESOR

AC Power Adapter

ITEM	DESCRIPTION
55106060	A1026 AC PWR ADPT 120VAC/12VDC

Sensor Assembly

ITEM	DESCRIPTION
55107010	711464IR SENSOR ASSY 220P/250B

220PVC Repair Kit

ITEM	DESCRIPTION
55107015	230PRK DATA 220PVC REPAIR KIT

Model 710 Solenoid-Controlled Valve

Primary Application

The Model 710 Solenoid-Controlled Valve is a hydraulically-operated, diaphragm-actuated, control valve that either opens fully or shuts-off in response to electric signals.

Features:
- Line-pressure driven
- Independent operation
- No motor required
- Low power consumption
- Low cost wiring
- Wide ranges of pressures and voltages
- Normally Open, Normally Closed or Last Position
- In-line serviceable – easy maintenance
- Double chamber
- Non-slam closing characteristic

ITEM	DESCRIPTION
55300760	2IN 710 BERMAD 24VAC N/C FLG
55300770	2.5 710 BERMAD 24VAC N/C FLG
55300780	3 710 BERMAD 24VAC FLG N/C
55300790	4 710 BERMAD 24VAC FLG N/C
55300800	6 710 BERMAD 24VAC FLG N/C

Model 910 Electric Remote-Control Hydrometer

Primary Application

The Electric Remote-Control Hydrometer Model 910 integrates a vertical turbine Woltman-type water meter and a solenoid-controlled diaphragm-actuated control valve. The Model 910 functions as a fully open or tightly closed valve in response to an electric signal. When fully open, the Model 910 provides the metering data and functions associated with the control head used.

ITEM	DESCRIPTION
55300950	1-1/2 910-P BERMAD 24VAC TH NO
55300960	2 910-P BERMAD 24VAC THD N/O
55300980	3 910-P BERMAD 24VAC FLG N/O
55300990	4 910-P BERMAD 24VAC FLG N/O
55301000	6 910-P BERMAD 24VAC FLG N/O

AR Series Air/Vacuum Release Valve

Primary Application

The AR Series valves are unique products that offer outstanding advantages owing to their simple design and patented operation. This small and dependable valve supports high flow capacity while being able to seal 'drip-tight' under system pressures as low as 0.1 bar (1.5 psi). It features a pressure-balanced float, freedom from distortion or collapse, and its exclusive kinetic design prevents the float from being blown shut.

Pressure range:
- 0.1-10 bar/1.5-150 psi for plastic body models
- 0.1-16 bar/1.5-225 psi for iron models

Working temperature:
- 4 - 80°C (40-176°F)
- End connections: Female- and male-threaded (NPT or BSP)

ITEM	DESCRIPTION
55301230	4405-1 BERMAD AIR RELEASE VALVE
55301235	4405M-1 BERMAD AIR RELEASE VALVE
55301260	4420-2 BERMAD AIR/VAC RELS VALVE
55301265	4420M-2 BERMAD AIR/VAC REL VALVE
55301270	4415-2 BERMAD DUAL PUR AIR/VAC

AL Series Air/Vacuum Release Valve

Primary Application

The Crispin Air and Vacuum Unit, with its orifice the same diameter as its inlet, allows large quantities of air to be vented from systems being filled with liquid. The same holds true in reverse for vacuum conditions when the system is drained. Its design is such that the velocity of air passing through the valve will not blow the float shut at normal design volumes. It will not close until the arrival of liquid in the valve, and will not open to vent accumulating air as long as the system is under pressure and in operation.

Features:
• Meets AWWA C-512
• Peripheral guide system for unobstructed closure
• Drip tight closure
• Standard Buna-N seating material

ITEM	DESCRIPTION
55400010	AL-10 CRISPIN AIR/VAC REL VALVE
55400020	AL-20 CRISPIN AIR/VAC REL VALVE

PL Series Pressure/Air Release Valve

Primary Application

Systems under pressure can be vented of accumulating air with the use of Pressure Air Release Valves. These should be mounted on the system at all high points, and downstream from these points where the velocity of the liquid carries the air or gas slightly beyond the crest. On lines with little gradient, valves should be placed every half mile or so, at the discretion of the engineer. Crispin Type "N" is for normal use in water below 150° F, and features a PVC seat. Crispin Type "P" is for use with all types of fluid, and is supplied with a steel seat. Both are supplied with a Buna-N rubber plunger.

Features:
• Meets AWWA C-512 Standards
• Adjustable Buna-N rubber plunger
• Compound lever system

ITEM	DESCRIPTION
55401010	PL-10 CRISPIN PRES/AIR REL VLV
55401020	PL-10A 2IN CRISPIN PRES/AR REL

IC Series Air/Vacuum Release Valve

Primary Application

The Crispin Irrigation Combination Air Release Valve is designed to exhaust quantities of air from an irrigation pipeline when the line is being filled and allows air to re-enter the pipeline when the line is being emptied or drained. The valve will also vent accumulating air while the pipeline is iin service and under pressure.

Features:
• Meets AWWA C-512
• Standard Buna-N seating material

ITEM	DESCRIPTION
55401110	IC-10-1 CRISPIN AIR/VAC VALVE
55401120	IC-10A-2 CRISPIN AIR/VAC VALVE

PL Series Pressure/Air Release Valve

Primary Application

The Universal Air Valve is designed to permit the automatic escape of large quantities of air from a pipeline when the line is being filled, and to permit air to enter the pipeline when the line is being emptied. It also allows accumulating air to escape while the line is in operation and under pressure. This is accomplished with a compound lever system functioning in conjunction with a large and small orifice in one integral body casting. As the liquid rises into the valve, air escapes through the large orifice to the atmosphere. Liquid entering the valve raises the float and lever system, carrying with it the pressure plunger and the main valve.

Features:
• Meets AWWA C-512 Standards
• NPT screwed or ANSI class flanges
• Compound lever system

ITEM	DESCRIPTION
55401210	UL10.1 1IN CRISPIN UNIV/AIR RE
55401220	UL20.1 2IN CRISPIN UNIV/AIR RE

IRRIGATION

GOLF

INDUSTRIAL