

Central Control Solutions

Baseline provides a complete suite of central control applications within the AppManager™ framework. AppManager runs on the cloud-based Baseline server. Baseline irrigation controllers connect to the server and users access AppManager in a web browser.

Access, Connectivity, and Compatibility Features

- End users sign into their AppManager account, and then they have access to the applications that they have subscribed to.
 - BaseManager™
 - WeatherAccess™
 - LiveView™
 - Mobile Access™
 - PipeView™
 - FlowStation App™
- Compatible with all BaseStation 3200 and BaseStation 1000 controllers and the FlowStation.
 - Controllers connect with any of the following communication options: Ethernet connection, GPRS cellular modem, Wi-Fi, or Ethernet radio.
- BaseManager communicates with a controller via a secure WebSocket over an Internet connection with the most current version of the following web browsers:
 - Mozilla Firefox
 - Google Chrome
 - Safari

AppManager Applications

BaseManager™

BaseManager™ is a central control application within the AppManager framework. BaseManager enables any BaseStation 3200™ or BaseStation 1000™ irrigation controller to be fully programmed and operated remotely from a computer or other mobile device. BaseManager also allows the user to add zone descriptions, automate text message and email alerts, and generate reports.

BaseManager is available as a cloud-based application over the Internet or on a self-hosted server.

BaseManager Subscriptions

A subscription determines what BaseManager and Mobile Access features a controller has access to.

The subscription is associated with a controller and all controllers belonging to a company will be set to the same subscription level.

New BaseStation 3200 controllers receive a free BaseManager Plus subscription for 1 year. If a paid subscription is not set up following the trial period, the first controller added to a company's account will be assigned a LiveView™ subscription and only the first authorized user will have access. All other controllers on the company's account will be set to inactive.

BaseStation 1000 controllers come with a free LiveView subscription.

Subscription Term and Renewal

When you purchase a subscription, it is valid for one year.

If you add a controller to an existing company, the new controller subscription renewal fee will be prorated in order to put all controllers on the same renewal schedule.

The renewal date determines when you will be charged for your subscription.

If all the controllers' subscriptions expire in an account, the first controller in the list will be set to LiveView, and all other controllers will be set to inactive.

End User Features Available in BaseManager Plus

- A map-based interface provides the following functionality:
 - Check the status of any controller, device, or zone
 - Find the location of your controllers, devices, and zones
 - Start/stop a zone
 - Test devices and zones
 - Display a graph for devices and zones
 - Set a rain delay
 - Zoom in/out and move the map view
 - Switch between a street map view, satellite view, and terrain view
 - Set geo-location for any controller, zone, or other device
- Three levels of user access
 - Company Admin
 - Site Manager
 - Operator

- A quick view of the status of all zones with color-coded statuses and descriptions, including:
 - Real-time color-coded status for all zones and programs
 - Complete list of current alarms and messages
 - Ability to delete/clear any current alarm or message
 - Current status and value for all sensing devices
- View soil moisture and run-time graphs for any/all zones and soil moisture sensors
- Schedule rain delays and pause events
- Clear rain delays and pause conditions
- Update controller firmware
- Add and fully configure all zones and programs, including:
 - Enable/disable zones
 - Change zone type
 - Assign a program
 - Adjust water time
 - Adjust cycle and soak times
 - Program soil moisture sensors
 - Program master valves
 - Program flow sensors
 - Program pressure sensors
 - Configure mainlines
 - Set all program schedules
 - Set all program configurations including per-program configuration of:
 - Program stop/start conditions
 - Smart watering based on soil moisture sensors
 - Water sources
 - Master valves
 - Water days
 - Water windows

- Add textual descriptions for all controllers, zones, sensors, flow devices, master valves, points of connection, and mainlines.
 - All descriptions that are set through BaseManager are saved and displayed in the controller.
 - These descriptions are visible in all appropriate displays and reports, including on the front panel of controllers.
- Perform the following manual operations:
 - Learn flow
 - Calibrate soil moisture sensors
 - Run zones and programs
 - Test devices

BaseManager Plus users have access to the following WeatherAccess™ features:

- Connect a weather station and assign it to a controller
- Configure hydrozone properties
- Enable zones on the BaseStation 3200 to use weather-based watering
- Configure programs on the BaseStation 1000 to use weather-based watering
- Check the calculated ETo amount in Quick View
- Display weather station information from the map

Alerts, Alarms, & Reports

Generates the following alerts/reports as an email or in PDF format for any date range:

- Water Usage
- Zones Activity
- Zone Run Time
- Moisture Levels
- Flow Meter Totals

Alerts, alarms, and reports are available by subscription.

- Users can have alerts, alarms, and reports sent by text message, email, or both.
- Users can subscribe on a priority basis.
- Users can configure what time(s) of day the alerts are received.
- The company admin can configure subscriptions for all users.

LiveView™

LiveView provides a virtual view of the BaseStation controller and enables the user to operate the controller just as if he/she were standing in front of it. LiveView is available through BaseManager.

- LiveView matches the controller's display screen in real-time or near real-time as supported by the controller's connection speed.
- LiveView supports all buttons and/or dial positions available at the controller.
- LiveView honors controller PIN security as if the user were at the controller.
- Multiple simultaneous LiveView users to the same controller are supported.
- LiveView supports Baseline access to any controller when authorized by the customer for customer support purposes.

WeatherAccess™

With a BaseManager Plus account, you can operate your Baseline irrigation controllers using WeatherAccess™. WeatherAccess applies real-time weather data from a weather station in your area (available in Weather Underground's weather station network), and configurable zone properties to a standardized evapotranspiration (ET) equation. This calculation estimates the loss of moisture from the root zone, and then the irrigation controller uses the calculated value to adjust the runtime in order to apply just enough water to replace that lost moisture.

Mobile Access™

- Allows any web-enabled mobile phone or other mobile device to function as a remote control
- Perform manual operations including turning zones on and off, starting and stopping programs, and initiating rain delays
- Provides real-time access to soil moisture and flow sensor readings
- Perform valve diagnostics
- Geo-locate all devices
- Uses SSL/TSL security encryption

PipeView™

PipeView, the cloud-based hydraulic system management software gives users the ability to view and manage their irrigation hydraulic systems from any location over an Internet connection. Users have the ability to see all water sources, control points, mainlines, and zones in their irrigation systems.

PipeView is compatible with BaseStation 3200 irrigation controllers and shared flow groups that are managed by a FlowStation.

PipeView Functionality

PipeView displays a tree-diagram that shows the connections between all of the components in the hydraulic system. The diagram also shows the real-time, color-coded status details for the following hydraulic system components:

- **Water Sources**
 - Whether the water source is watering and which downstream control point or control points it is connected to
 - The water source status, such as watering, done, or waiting
 - The controller the water source is assigned to
 - The FlowStation the water source is assigned to if applicable
 - The description of the water source
- **Control Points**
 - Whether the control point is watering and which downstream mainline or mainlines it is connected to
 - The control point status, such as watering, learning flow, or done
 - The controller that the control point is assigned to
 - The FlowStation that the control point is assigned to if applicable
 - The description of the control point
 - Real-time values for:
 - Flow sensors measured in GPM
 - Pressure sensors measured in PSI
 - Real-time status for:
 - Master valves indicated by an open or closed value
 - Pumps indicated by on or off value

- **Mainlines**
 - Whether the mainline is watering and which downstream control points, mainlines, or zones the mainline is assigned to
 - The mainline status, such as watering, done, or waiting
 - The controller that the mainline is assigned to
 - The FlowStation that the mainline is assigned to if applicable
 - The description of the mainline
- **Zones**
 - Whether the zone is watering and which mainline the zone is assigned to.
 - The zone status, such as watering, learning flow, or done

When a user clicks on one of the hydraulic system components, PipeView displays a slide-out screen. This screen shows messages, graphs, and other details for the component. The user can navigate to the edit screen to make changes to the settings.

Changes made in PipeView are copied to the controllers and to BaseManager (if the controller has an active subscription).

FlowStation App™

The FlowStation App, the cloud-based shared flow central control software gives users the ability to view and manage their FlowStations from any location over an Internet connection.

FlowStation App Functionality

The FlowStation App displays all FlowStations on a site.

On the detail screen, the user can see the controllers that are assigned to that FlowStation and the status of that controller's water sources, control points, and mainlines. The user can edit details for these hydraulic system components.

The user can see and edit details on the following screens:

- **Water Source Screen**
 - The description of the water source
 - Whether the water source is enabled or disabled
 - The water source priority level
 - The monthly water budget
 - Whether the water source will shut down if it meets or exceeds the water budget
 - Empty conditions for the water source

- **Control Point Screen**
 - The control point description
 - Whether the control point is enabled or disabled
 - Enable and define the control point group for that control point which allows the FlowStation to activate the control point with the smallest GPM in that group to supply water for downstream zones based on their requested GPM
 - The target flow of the control point
 - Limits for flow and pressure and whether to shut down if the limit is exceeded
- **Mainline Screen**
 - The mainline description
 - Whether the mainline is enabled or disabled
 - Define the design flow value for that mainline
 - Choose either time or pressure as the type of flow stabilization management for that mainline
 - Define the flow stabilization value as either a unit of time or a measure of psi
 - Define whether the mainline is managed by flow
 - Define the flow variance percentage
 - Define whether or not to shut down if the flow variance percentage is exceeded
 - Choose either time or pressure as the type of mainline delay option for that mainline
 - Define the delay before the first zone either by time or psi
 - Define the delay between zones either by time or psi
 - Define the delay after the last zone either by time or psi
 - Define the number of zones to run between delays
 - Whether or not to enable or disable advanced flow variance
 - Define the values for each advanced flow variance range
 - Define whether or not to shut down if a flow variance is exceeded

The app also shows the hydraulic system assignments and enables the user to change the assignments and/or add new assignments.

AdminManager™

The AdminManager app in AppManager enable users to perform the following functions:

- Add BaseStation 3200 and BaseStation 1000 irrigation controllers and FlowStations to AppManager
- Remove BaseStation 3200 and BaseStation 1000 irrigation controllers and FlowStations from AppManager
- Remotely update the general information and geographical settings on BaseStation 3200 and BaseStation 1000 irrigation controllers and FlowStations that are connected to AppManager
- Remotely update the firmware on BaseStation 3200 and BaseStation 1000 irrigation controllers and FlowStations that are connected to AppManager
- Manage connections between BaseStation 3200 irrigation controllers and FlowStations

Information Security Controls

Each of Baseline’s central control products includes information security controls that enable secure networking with other Baseline products.

To learn more about the security controls, refer to the Baseline Security Controls Technical Specification available on the Baseline website.

How to Specify

Part Number	Description
BL-APPMGR	Access to the AppManager Framework
BL-BMW2-PLUS	1 year of BaseManager Plus service for 1 controller, includes WeatherAccess and Mobile Access Advanced service Note: PipeView is included in BaseManager Plus subscriptions for BaseStation 3200 controllers
BL-APPMGR-FLOW	1 year of the FlowStation App service for 1 site

Note: For information about Baseline’s Mobile Access that turns your phone into the ultimate remote control, refer to the Mobile Access product information on Baseline’s website.