



BaseStation
3200
Advanced
Irrigation
Controller
Quick Start Guide

Firmware Version 17.0
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Introduction

Congratulations on choosing the most capable commercial grade smart irrigation controller in the world! You will find that the BaseStation 3200 is capable of dramatically reducing your water use while improving the health and quality of your landscape. Fully central control compatible, the BaseStation 3200 controller will typically pay for itself in one to two seasons based on water waste reduction alone.

This quick start guide helps you get familiar with the BaseStation 3200 interface, the dial positions, and the buttons on the front panel. It walks you through the basic steps for getting your controller configured for watering. Keep in mind that this guide is intended as a basic overview of the setup. You will find complete instructions for all of the controller's features in the User Manual.

Smart Watering Modes

In addition to time-based watering, the BaseStation 3200 can also be operated in the following smart watering modes:

Soil Moisture Sensor-Based Watering

If you have a Baseline soil moisture sensor (biSensor™) installed in your landscaping and connected to your BaseStation 3200 irrigation controller, you can program the controller to water based on the moisture levels in the soil.

Refer to the following documents on the Baseline website (www.baselinesystems.com):

[Configuring Lower Threshold Moisture Sensor-Based Watering in the BaseStation 3200](#)

[Configuring Upper Threshold Moisture Sensor-Based Watering in the BaseStation 3200](#)

Weather-Based Watering

When operated in WeatherAccess™ mode with an active BaseManager™ Plus subscription, the BaseStation 3200 irrigation controller meets the EPA WaterSense program's water-efficiency and performance criteria.

You need to have your BaseStation 3200 controller installed and connected to your communication module, and your BaseManager Plus account activated before you can configure the WeatherAccess settings.

Refer to the following document on the Baseline website:

[WeatherAccess User Manual](#)

On the BaseStation 3200, you can combine Baseline's soil moisture sensor-based intelligent watering technology with the industry's best practices for weather-based irrigation.

Controller Front Panel Layout



(1) USB Port – The USB port is used for doing Backup and Restore operations using a USB drive (also known as a “thumb drive” or a “flash drive”). The USB port is also used for doing firmware updates and exporting operation log files.

(2) Display – The color display indicates the current state of the controller and is used to display programming. This display uses thin-film transistor (TFT) technology to improve image quality in outdoor conditions including direct sunlight and low light.

(3) Dial – The dial is used to select the operation or programming mode of the controller.

(4) Buttons – The buttons are used to select programming elements, change their values, and initiate operations like testing a zone.

- + Increases the value of the highlighted field or sequences through the available options in the selected field
- Decreases the value of the selected field, or sequences through the available options in the selected field

Next Moves the highlighted selection to the next field on the display

Previous Moves the highlighted selection to the previously selected field on the display

Back Moves back to the previous menu and can sometimes be used to stop an operation

Enter Applies the current selection and moves to the next item, or begins the operation

(5) Status LEDs – These two LEDs indicate the power status of the controller and the internal status of the controller hardware. The upper light is normally ON, but it may blink when internal diagnostics are run.

RUN Main Screen

When the controller dial is in the **RUN** position, the main screen displays the **Zone Status** report.

Messages are indicated here.
 BUSY displays to indicate that the controller is performing watering calculations and communicating with devices.

The controller's current state

The controller's time and date

Status overview of master valves and programs in groups of 50 zones.
 Press the Previous or Next button to see detailed status by program.

BaseMgr: Connected
Two-wire: 0.14 Amps
00W0268: 0.00 GPM

Indicates the status of the BaseManager connection.

Indicates the status of the two-wire.

Indicates the total flow measured by the reporting device.

Press the Enter button to display the online help.

The screenshot shows a screen with a yellow header '2 Message(s)' and a green header 'RUN'. Below the headers, it displays '11:45:02 AM Thu - 12/18/2014'. A 'Pump/MV Status' table is visible with columns for '1-10', '11-20', '21-30', '31-40', and '41-50'. A 'BaseMgr' status box shows 'Connected', 'Two-wire: 0.14 Amps', and '00W0268: 0.00 GPM'. Navigation buttons include '<-Previous', 'ENTR For Help', and 'Next-->'.

Detailed Status by Program Screen

When the controller dial is in the **RUN** position and the main Zone Status screen is displayed, press the **Next** button twice to display the Detailed Status By Program screen.

Press the + or – button to cycle through the controller’s programs.

The colored box on the left indicates the program status. Refer to the Status Colors topic on page 6 for an explanation of the colors.

The following information is available in the fields:

Last Start: The date and time when the program was started for any condition including manual starts. The field also indicates what caused the last start.

Last Pause: The date and time of the most recent pause. The pause information shows until the program is started again. The field also indicates what caused the last pause.

Last Stop: The date and time when the program last completed watering. When a program is watering, this field is blank. The field also indicates what caused the last stop.

The screenshot shows a screen with a yellow header '5 Message(s)' and a green header 'RUN'. Below the headers, it displays '12:30:14 PM Mon - 1/22/2018'. A 'BaseMgr' status box shows 'Connected', 'Two-wire: 0.84 Amps', and 'WF01098: 0.0 GPM'. A green box on the left indicates 'Program 1: {10 oclock program}'. Below this, it lists: 'Last Start: 01/22/18 10:00 - Schedule', 'Last Pause:', 'Last Stop: 01/22/18 10:13 - Schedule', 'Next Start: 01/23/18 10:00 - Schedule', 'Avg Time: 0:13 (last three)', and 'Avg Water: 0.0 gallons (last three)'. Navigation buttons include '<-Previous', 'Enter for Help', and 'Next-->'.

Next Start: The estimated next start date and time for the program. In some cases, the start condition for a program makes it difficult to accurately estimate when the next start will occur. Consider the information in this field as helpful, but remember that it might not be perfectly accurate depending on the program settings.

Avg Time: An average of the last 3 runtimes.

Avg Water: An average of the amount of water used during the last 3 runtimes.

If you leave the Detailed Status By Program screen displayed, it will continue to display when the controller dial is in the **RUN** position until the controller is reset. At that point, the Zone Status screen redispays.

When the Detailed Status By Program screen is displayed, press the **Previous** button to return to the All Zones & Programs Status screen, or press the **Next** button to go to the Water Source Status screen.

Water Source Status Screen

When the controller dial is in the **RUN** position and the main Zone Status screen is displayed, press the **Next** button three times to display the Water Source Status screen.

Press the + or – button to cycle through the water sources on the controller.

The colored box on the left indicates the water source status. Refer to the Status Colors topic on page 6 for an explanation of the colors.

The following information is available in the fields:

Month Used: The cumulative total used from this water source during the month.

Budget: The amount of water that can be taken from this water source during the month.

Empty: If an empty condition has been set up for this water source, this field shows OK or EM for empty. If no empty condition exists, the field shows DS for disabled.

Flow Path: This field shows the control point and mainline that are connected to this water source.

When the Water Source Status screen is displayed, press the **Previous** button three times to return to the Zone Status screen, or press the **Next** button to go to the Control Point Status screen.

| | | |
|-----------------|--------------------------|---------|
| 6 Message(s) | RUN | |
| {Aspen Park} | Merged: 16.1.614 | |
| 3:34:31 PM | FlowStn: Connected | |
| Tue - 5/29/2018 | BaseMgr: Connected | |
| | Two-wire: 0.84 Amps | |
| | WF01098: 0.0 GPM | |
| ■ | WS 1: {Well} | |
| | Month Used: na | |
| | Budget: 100.0 | |
| | Empty: DS | |
| | Flow Path: [WS1/FlowStn] | |
| <--Previous | Enter for Help | Next--> |

Control Point Status Screen

When the controller dial is in the **RUN** position and the main Zone Status screen is displayed, press the **Next** button four times to display the Control Point Status screen.

Press the **+** or **-** button to cycle through the control points on the controller.

The colored box on the left indicates the control point status. Refer to the Status Colors topic on page 6 for an explanation of the colors.

The following information is available in the fields:

MV: The status of the master valve associated with this control point.

Flow: The status of water flowing through this control point.

Pump: If the control point has an assigned pump, this field shows the status. If no pump is assigned, the field shows None.

Pressure: If the control point has an assigned pressure sensor, this field shows the status. If no pressure sensor is assigned, the field shows None.

Month Used: The cumulative total used from this control point during the month.

Flow Path: This field shows the water source and mainline that are connected to this control point.

When the Control Point Status screen is displayed, press the **Previous** button four times to return to the Zone Status screen, or press the **Next** button to go to the Mainline Status screen.

| 6 Message(s) | RUN |
|---|---------------------|
| {Aspen Park} | Merged 16.1.614 |
| 12:54:00 PM | FlowStn: Connected |
| Tue - 5/29/2018 | BaseMgr: Connected |
| | Two-wire: 0.84 Amps |
| | WF00884: 0.0 GPM |
| <div style="border: 1px solid black; padding: 5px;"> CP 1: {Control Point 1} <p style="margin-left: 20px;"> MV: Off Flow: OK Pump: None Pressure: OK Month Used: 0.0 Flow Path: [CP1/FlowStn] </p> </div> | |
| <--Previous | Next--> |

Enter for Help

Mainline Status Screen

When the controller dial is in the **RUN** position and the main Zone Status screen is displayed, press the **Next** button five times to display the Mainline Status screen.

Press the **+** or **-** button to cycle through the mainlines on the controller.

The colored box on the left indicates the mainline status. Refer to the Status Colors topic on page 6 for an explanation of the colors.

The following information is available in the fields:

Zones On: The zones that are associated with this mainline.

CPs On: The control points that are associated with this mainline.

| 6 Message(s) | RUN |
|--|---------------------|
| {Aspen Park} | Merged 16.1.614 |
| 12:54:28 PM | FlowStn: Connected |
| Tue - 5/29/2018 | BaseMgr: Connected |
| | Two-wire: 0.84 Amps |
| | WF00884: 0.0 GPM |
| <div style="border: 1px solid black; padding: 5px;"> Mainline 1: {Mainline 1} <p style="margin-left: 20px;"> Zones On: CPs On: Flow: 0.0 Month Used: 0.0 Flow Path: [ML1/FlowStn] </p> </div> | |
| <--Previous | Next--> |

Enter for Help

Flow: The amount of water in this mainline.











Month Used: The cumulative total used from this mainline during the month.

Flow Path: This field shows the mainline connections.

When the Mainline Status screen is displayed, press the **Next** button to return to the Zone Status screen.

Status Colors

The following colors display on the RUN screen to indicate the status of programs, master valves, flow meters, and zones.

| | | | |
|---|----------------------|---|--|
|  | Idle (watering done) |  | Disabled |
|  | Active (watering) |  | Paused |
|  | Waiting to water |  | Error, Over Budget, Flow/Pressure Faults |
|  | Soaking |  | Unassigned |
|  | Learn Flow |  | Off, Rain Delay, Rain jumper activated |

Online Help

At the bottom of every screen, there is a Help option that displays the Online Help. The Online Help describes how to use the buttons to change the functions associated with that screen.

To display the help, press the **Next** or **Previous** button to highlight the **Help** option at the bottom of a screen, and then press the **Enter** button.

Press the **Next** button to move through the pages of the Online Help.

Press the **Previous** button to back up.

Press the **Back** button to return to the controller screen.

The help can be displayed in Spanish. Refer to Selecting the Language for Online Help in the User Manual.

| Online Help | Programs |
|---|----------|
| Program Setup | |
| Program Start Days Setup | |
| <p>1. Verify that the number displayed in the Program field matches the program that you want to set start days for. If you want to select a different program, press the + or - button to change the program number.</p> | |
| <i>Press NEXT/PREV for more help, BACK to exit</i> | |

Quick Start Your Controller

These instructions walk you through the basic steps for getting your controller configured for watering. Refer to the User Manual for complete instructions for all of the controller's features.

STEP 1 – Install and Connect Devices

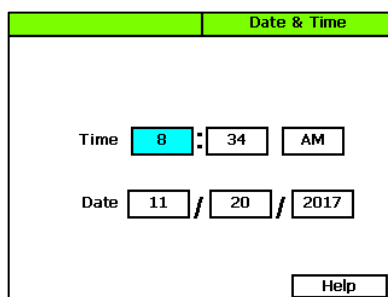
Install all of your irrigation devices and connect them to the controller according to the instructions that came with the devices.

STEP 2 – Set the Date and Time on the Controller

Set or change the controller date and time to match the current time and date. An inaccurate date and time can cause watering events to be missed.

Note: When the controller is connected to BaseManager, the date and time are automatically set.

1. Turn the dial to the **Time & Date** position.
2. In the **Time** field, the hours place is highlighted.
3. Press the + or – button to change the value.
4. Press the **Next** button to move to the minutes place, and then press the + or – button to change the value.
5. Press **Next** to continue moving through the fields, and then press the + or – button to change the value.

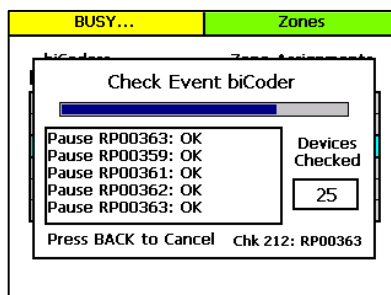


Note: If you made a change to the time or date and you want to revert to the previous entries, press the Back button.

STEP 3 – Search For and Assign Devices

Searching For Devices

1. Turn the dial to the **Assign** position.
2. Press the **Next** or **Previous** button to move to the option for the type of device that you want to search for, and then press the **Enter** button.
3. Press the + or – button to select **Search** in the left column of the Assign screen.
4. Press the **Enter** button to search for devices. The search may take several minutes to complete. You will see a status screen like the one shown here while the search is in progress.



The display shows the number of devices found and the number of ports or addresses available.

Note: To cancel a search in progress, press the Back button.

- After the search has finished and the device serial numbers display in the left column, press the + or – button to select any unassigned device serial number.
- Press the **Next** or **Previous** button to move to the **Assignments** column and select an available number.
- Press the **Enter** button to assign the selected device to that number.
- When you have finished making changes, turn the dial to the **RUN** position.

| Assign | Zones |
|---------------------------|--------------------------------------|
| biCoders [minus][plus] | Zone Assignments [previous][next] |
| Search | 1 D033979 |
| Unassign | 2 E163431 |
| E163432 | 3 - |
| - | 4 - |
| - | 5 - |
| - | 6 - |
| biCoder 1 of 1 | |

Press ENTR
----->
To Assign

STEP 4 – Set Up Time-based Watering

IMPORTANT NOTE! Zones that are intended for irrigation will not water until they are assigned to their appropriate mainlines. Refer to Assigning Zones to Mainlines in the User Manual.

- Turn the dial to the **Zones** position. The Zones screen displays for the first zone.

- In the **Zone** field, press the + or – button to select the zone that you want to set up as timed.
- Press the **Next** button to move to the **Zone Mode** field, and then press the + or – button until **Timed** displays in the field.
- Press the **Next** button to move to the **Water Time** field.

- To change the value in the hours place, press the + button.
- To change the value in the minutes place, press the **Next** button, and then press the + or – button.

| Zones | |
|----------------------------|------------------|
| {Turf Sprays North} | Zone [VB00009] 2 |
| 1 Program | {South Park MPs} |
| Zone Mode | Timed |
| Water Time (h:mm) | 0:45 |
| Cycle Time (h:mm) | 0:15 |
| Soak Time (h:mm) | 0:30 |
| Enabled | YES |
| Use ET Deficit Water Times | NO |
| Programs: 1 | Help |

Tip: Let the controller calculate the cycle time and soak time settings for you. Press the Next button to move to the minutes placeholder in the Soak Time field, and then press the Back button. The controller divides the time in the Water Time field by 3. This value is used for the cycle time and the default soak time is 30 minutes.

- Press the **Next** button to move to the **Cycle Time** field. If you are using soak cycles for this zone, the cycle time defines the duration of each watering cycle interspersed with soak times.

Note: You cannot change the cycle time setting for a linked zone.

6. Press the **Next** button to move to the **Soak Time** field. If you are using soak cycles for this zone, the soak time defines the duration of each soaking cycle interspersed with watering times.
7. Press the **Next** button to move to the **Enabled** field. Press the + or – button to display **YES** in the field.
8. Press the **Next** button to move to the **Use ET Deficit Water Times** field. Press the + or – button to toggle the value in the field between **YES** and **NO**.

IMPORTANT NOTE! You can enable ET in the BaseStation 3200 controller, but you must also have a weather-station connected to BaseManager and assigned to the controller in BaseManager. Selecting this option in the controller has no effect unless you complete these additional steps in BaseManager. Also be aware that when you enable a zone to use WeatherAccess in BaseManager, the Use ET Deficit Water Times option is automatically selected in the controller.

9. Verify that the number displayed in the **Program** field in the upper-left corner of the screen matches the program in which you want to set up the timed zone.
 - If you want to set up the timed zone in a different program, press the **Next** button to move to the **Program** field, and then press the + or – button to change the program number.
 - To remove the zone from the current program, press the **Previous** button to return to the **Water Time** field, and then press the – button to remove the watering time in the field.
10. After you have configured the settings for the current zone, perform one of the following options:
 - To configure another zone, press the **Enter** button until the number of the zone that you want to configure displays in the **Zone** field at the top of the screen. Repeat steps 3 – 10.
 - When you have finished making changes, turn the dial to the **RUN** position.

STEP 5 – Set Up Programs

Setting Up the Start Times for a Program

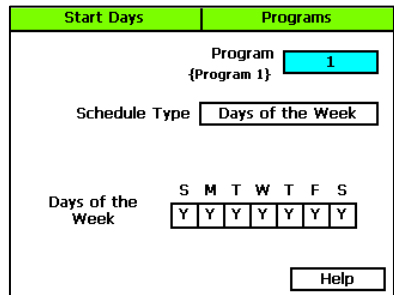
1. Turn the dial to the **Programs** position.
2. The **Program Start Times Setup** option should be highlighted. If it is not highlighted, press the **Next** button to highlight it.
3. Press the **Enter** button. The Start Times screen displays.
4. Verify that the number displayed in the **Program** field matches the program that you want to set start times for. If you want to select a different program, press the + or – button to change the program number.

| Start Times | Programs | | |
|---|----------|---|---|
| Program {Program 1} <input style="width: 50px;" type="text" value="1"/> | | | |
| 1:00A | - | - | - |
| - | - | - | - |
| <input style="width: 50px;" type="button" value="Help"/> | | | |

5. Press the **Next** button to move to the start times grid.
6. Press the + or – button to set the time in the first cell.
7. Press the **Next** button to move to the next cell in the start times grid, and then press the + or – button to set additional start times as needed.
8. After you have configured the start times for the current program, perform one of the following actions:
 - To configure start times for another program, press the **Enter** button until the number of the program that you want to configure displays in the **Program** field at the top of the screen. Repeat steps 5 – 7.
 - When you have finished making changes, turn the dial to the **RUN** position.

Setting Up the Start Days for a Program

1. Turn the dial to the **Programs** position.
2. Press the **Next** button to highlight the **Program Start Days Setup** option, and then press the **Enter** button. The Start Days screen displays.
3. Verify that the number displayed in the **Program** field matches the program that you want to set start days for. If you want to select a different program, press the + or – button to change the program number.
4. Press the **Next** button to move to the **Schedule Type** field. For the purpose of this quick start, select **Days of the Week**.
5. Press the **Next** button to set up the weekdays when you want the program to start. By default, the boxes for the days of the week are marked with a Y (Yes), which indicates that the program will start every day. If you want to change a start day, press the **Next** button to select the day, and then press the + or – button to change the setting.



Note: Refer to the User Manual for information about the other schedule type options that are available on this screen.

Setting Up the Water Windows for a Program

Water windows tell the controller when watering is allowed and not allowed. You can set water windows for either Weekly (shown on illustration below) or daily – when moving from weekly to daily, the weekly settings are copied to each day of the week.

Selecting daily water windows gives you hourly control of watering for each day of the week, and for each program. A white square will pause watering for that hour, or keep a start time from starting a program.

1. Turn the dial to the **Programs** position.
2. Press the **Next** button to select the **Program Water Windows Setup** option. The Water Windows screen displays.

3. Press the + or – button to select the program that you want to set up water windows for.
4. Press the **Next** button to move to the **Water Window Type** field, and then press the + or – button to select either Weekly or Daily.

Note: If you use “Weekly” to set up the water windows and then you decide to convert to “Daily,” the weekly settings are copied to each day of the week.

Selecting daily water windows gives you hourly control of watering for each day of the week and for each program.

| Water Windows | | Programs | |
|--------------------------|--------------------------|-----------------------|--------------------------|
| Program | | 1 | |
| {Program 1} | | | |
| Water Window Type | | Weekly | |
| Day of the Week | | All Week | |
| ENTR to set All hours to | | OFF | |
| Allow Watering | <input type="checkbox"/> | Do Not Allow Watering | <input type="checkbox"/> |
| AM | 12 | 1 | 2 |
| | 3 | 4 | 5 |
| | 6 | 7 | 8 |
| | 9 | 10 | 11 |
| PM | 12 | 1 | 2 |
| | 3 | 4 | 5 |
| | 6 | 7 | 8 |
| | 9 | 10 | 11 |
| Help | | | |

5. Press the **Next** button to move to the **Day of the Week** field. If you are using the “Weekly” Water Window Type, you cannot change the setting in this field, but if you are using “Daily,” press the + or – button to display the day of the week that you want to set up water windows for.
6. Press the **Next** button to move to the **ON/OFF** field.
 - If the boxes in the grid are blue (allow watering), the field displays **OFF**. Press the **Enter** button to turn all the water windows off.
 - If the boxes in the grid are white (do not allow watering), the field displays **ON**. Press the **Enter** button to turn all the water windows on.
7. To make changes to the individual boxes in the grid, press the **Next** button. The color of the number in the first box of the grid changes to red (indicating that you can change the setting in that box).
 - To change the water setting for the time/day represented by that grid, press the + button.
 - To move to next box in the grid, press the **Next** button.

Note: If you want to set up daily water windows, start by setting a basic profile in weekly mode, and then change to daily mode to modify specific days (like a mow day). Pressing the Enter button will maintain the current selected field and advance through the days of the week.

STEP 6 – Set the Controller to RUN

Turn the dial to the **RUN** position. Watering will start when the next start day and time is reached.

Forcing a Program to Start

1. Turn the dial to the **Manual** position.
2. Press the **Next** button to select the **Start or Stop Program(s)** option.
3. Press the **Enter** button. The Prog Start/Stop screen displays.

4. In the **Program/Status** column, press the **+** button to select an idle or paused program that you want to start.

Note: The zones in the selected program display under the Program/Status column and any conditions that affect the manual run also display.

5. Press the **Next** button to move to the **Start/Stop** column. The field in this column displays **Start**.
6. Press the **+** button. The field in the Start/Stop column displays **Stop**, and the program's status changes to **Watering**.
7. To start the manual run, turn the dial to the **RUN** position.

| Prog Start/Stop | | Manual | |
|------------------------------------|----------------|--------|------------|
| | Program/Status | | Start/Stop |
| - | - | - | - |
| 1 | Watering | Stop | |
| 2 | Idle | Start | |
| 3 | Idle | Start | |
| 4 | Idle | Start | |
| 5 | Idle | Start | |
| Prog 2 Zones: 5,6,7,8 | | | |
| *** Active Pause: Water Window *** | | | |
| Turn Dial to RUN to Start | | | Help |