⚠ Note: It is important to select None if a master valve does not exist. Selecting Normally Open or Normally Closed when you do not have a master valve may cause a Valve alert that can prevent irrigation.

Assign Pump Start Output: Any station output may be selected. If a pump start is not required, leave this setting as Not Assigned.

Runtime Valve Test: Default setting is "No". See Chapter 9 in the Owner's Manual for more details.

Max Backup ET: Represents the worst-case weekly ET for your area for the month of July. If you are not sure what this number should be, call our Customer Service 800 number for help.

1.0 Activation or Help

Call Customer Service at 1-800-362-8774

The controller must be activated to receive daily ET information (local weather information). To speed up activation, complete the Activation card included with the manuals and other documentation before calling Customer Service.

CONTROLLER MUST BE ACTIVATED to use AUTOMATED BY WEATHERTRAK or USER WITH ET. See Owner's Manual online for full programming instructions at *www.weathertrak.com/support*.

2.0 Programming

Setup

2.1   The following Setup functions must be setup for the controller to operate properly. Turn the (M) knob to SETUP. Use the (U) knob to move to each function. Turn the (L) knob to change the underlined value.

Date: Year, Month, Day
Time: Hour (confirm am or pm), minutes
Time Zone: Select your local time zone
Auto Daylight Savings: Automatically updates controller twice a year, unless you turn to "No."
Maximum Active Stations: Number of stations physically wired into the controller.
Stack or Overlap: When Stack is selected, all programs operate one after another. The start time and water window for all programs is assigned to Program A. When Overlap is selected, each program can have its own start time and water window. See Chapter 9 in the Owners Guide for more detail.

2.2   The following **SETUP** functions are optional:
Master Valve: Select the type of Master Valve if used.

Days / Times

In this menu a start time, water window and a water day mode can be assigned to one of four available programs A-D. If a pump start has been assigned as a station output, any one of three programs can be excluded from a pump start but only in Stack mode.

⚠ Note: Check for **STACK** or **OVERLAP** (See **SETUP** for Stack or Overlap.): If Stack is set; programs B, C and D will have the same start time as program A. Programs will run sequentially starting with program A. If Overlap is set, different start times may be set for each program.

2.3   **Exclude a Program from a Pump Start (only when assigned)**
Any one of three programs can be excluded from a pump start when a station output has been assigned as a pump start. The factory default is all programs are assigned to a pump start unless otherwise selected. This feature might be used when drip emitters and rotor use the same mainline but only one sprinkler type needs the added delivery pressure.

2.4   **Set Start Times and Water Windows**
Turn the (M) knob to **DAYS/TIMES**. Turn the (L) knob to select program A, B, C or D. Turn the (U) knob to **SET STARTS/WINDOWS**. Turn the (L) knob to change from Skip to Edit. Turn the (U) knob to 1st **START/WINDOW**. Use the (U) & (L) knobs in sequence to set the start time and the water window. If a 2nd start time is needed turn the (U) knob to 2nd **START TYPE**. Use the (L) knob to set either High ET or Off. Repeat this procedure for each program used. 1st and 2nd start times cannot overlap and the maximum water window is 24 hrs.

2.5   **Selecting Water Day Mode**
Turn the (M) knob to **DAYS/TIMES**. Turn the (U) knob to **WATER DAY MODE** (for Program A, B, C or D). Turn the (L) knob to select one of the following seven water day modes:

Optimized by WeatherTRAK: ET and individual station settings determine watering days automatically. Use the (L) knob to exclude a day if needed. **DAY EXCLUSION** is available only for Optimized by WeatherTRAK.

Odd/Even: Waters based on Odd or Even calendar days. Use the (L) knob to select Odd or Even days.

Interval: When Interval is selected, turn the (U) knob to **WATER DAY INTERVAL**. Use the (L) knob to set the day interval. Day intervals can be set from 1 to 31 days.

Days of Week: Uses a 7-day calendar Sunday through Saturday. Use the (U) knob to move through each day of the week. Use the (L) knob to turn days off or on. (Off days shown as a dash "—").

Days of Week by Month: Uses a 7-day calendar Sunday through Saturday for each month of the year. Turn the (U) knob to Jan **OK TO WATER ON**. Use the (U) knob to move through each day of the week. Use the (L) knob to turn days off or on. Use the (U) knob to move to the next month. Follow the above procedure for each month of the year.

Off: When Off is selected, the controller will ignore programmed starts for the selected program until a different water-day mode is selected.

Stations

Individual stations are assigned to a program (start time(s), water window and water day mode), and station mode. There are four station modes to select from: Automated by WeatherTRAK, User w/ ET, User No ET and Off. Select the station mode based on the type of landscape (new vs. existing) to be irrigated.

⚠ Note: The same station cannot be assigned to different programs.

Programming for Existing Landscapes

2.5 **Automated by WeatherTRAK**

Automatically calculates run times, cycle and soaks for each zone based on zone-specific attributes. Daily ET updates then adjust the calculated run times to reflect current weather conditions. Run times will vary as weather changes.

⚠ Note: To navigate through the next several screens, use the (U) knob to move to each underlined heading and the (L) to select a choice within each function.

Select Station: Locate the station to be programmed.
Select Station Mode: Select **Automated by WeatherTRAK.**

⚠ Note: To Preview abbreviated Auto mode station settings for this specific station, press and hold the * button.

Select a Program: Assign the station to a program that has a start time and water day mode.
Use Water Window: If this station can irrigate outside of the water window, select "**No**".
Usable Rainfall: If a station is under a roof, heavy tree canopy or semi-porous roof, select either "**None**" or a percent of rainfall that is actually used. When "**None**" is selected, the specific station will water during Rain Pause.

Sprinkler Type: Select 1 of 13 industry-recognized sprinkler types. When a sprinkler type is selected, a default precipitation rate and sprinkler efficiency value is automatically assigned. Both values can be changed in the next two screens if different than the displayed default rates.

Precipitation Rate: Is how much is applied in Inches per Hour. Changing the precip rate will change run times. Lower Precip rates = high run times, Higher Precip rates = lower run times.

Sprinkler Efficiency: Every sprinkler applies water with a specific efficiency based on its design and performance and spacing. If head or row spacing is stretched, efficiency is less. (Higher = less water; Lower = more water).

Soil Type: Select 1 of 5 soil types determined by the USDA.

Plant Type: Select 1 of 17 plant types that best represents the valve zone being irrigated.

Root Depth: Turn the (U) knob to **ROOT DEPTH**. Turn the (L) knob to select root depth. (Shallow roots = more frequent watering; deep roots = less frequent watering.)

Sun Exposure: Select 1 of 4 levels of sun exposure of the valve zone being irrigated.

Slope: Select 1 of 5 slope gradients. The steeper the slope the higher number of cycles will be applied.

Sprinkler Location on Slope: Select 1 of 5 choices identifying sprinkler locations on a slope.

Next Station: Turn the (U) knob to go to the next station or use **COPY** to duplicate settings to like stations.

2.6 **User With ET**

Set run times, number of cycles and the soaks between cycles. It then automatically increases or decreases runtime based on the daily weather information defined as ET.

Select Station: Locate the station to be programmed.
Select Station Mode: Select User w/ ET
Select a Program: Assign station to a program (with a start time, water window and water day mode).
Use Water Window: If this station can irrigate outside of the water window, select "**No**".
Usable Rainfall: If a station is under a roof, heavy tree canopy or semi-porous roof, select either "**None**" or a percent of rainfall that is actually used. When "**None**" is selected, the specific station will water during Rain Pause.
Set Runtime: Set a desired run time.
Set Number of Cycles and the Soak Time: Select from 1-20 cycles and Soak times from 0 to 480 minutes in 10 minute increments.
Reference ET: Set a reference ET that is appropriate for the schedule just set. The number you see in parenthesis is ET for the past week and is the value to enter as Part 1 and 2. Alternately, you can set the program you would run in July and use a weekly reference ET that is normal for your area in July.
Other Stations: Repeat these steps for other stations assigned to this station mode.

Programming for New Landscapes

2.7 **User No ET**
User no ET is commonly used for plant establishment periods when overwatering is required to establish new roots. Run times, cycle and soak periods are all user defined in this station mode. User No ET sets up the same as User With ET except there is no reference ET. Activation is not required for User No ET.

Copy
This function lets you quickly copy all station settings from any particular station to any other station or to all stations. Turn the (M) knob to **COPY**. Use the (U) knob to select the station to copy from. Use the (L) knob to select the station to copy to. ("**All Stations**" is one of the choices.) Push the (*) button until **COPYING** is displayed. Repeat the process for each station to be copied.

3.1 Maintenance Tips

Manual Watering
3.1 Stations can be operated individually with specific run times or all stations with one run time. Turn the (M) knob to **MANUAL**. Select "**Specific Stations**" or "**All Stations**" using the (L) knob.

Manual Water Specific Stations: Turn the (U) knob to the first station you want to water. Turn the (L) knob to the minutes desired. The selected station will start immediately. To add more stations, turn the (U) knob to the next station desired.
Manual Water All Stations: Turn the (L) knob to the desired run time. Station 1 will start immediately, and all other stations will follow sequentially for the same run time.

⚠ Note: To stop a station that is operating manually turn the (M) knob to **OFF** for 5 seconds then back to **RUN**.

% Adjust - More or Less Water
3.2 **Adjust Water Amount**
Adjusts individual stations for more or less water. A 0% setting means there is no adjustment for that particular station.

Turn the (M) knob to **%ADJUST** if valve zone is too wet or too dry. Turn the (U) knob to **ADJ WATER AMOUNT**. Turn the (U) knob to select the station to adjust in 5% increments from -50% to +25%.

⚠ Note: Using either Adjust function adjusts ET or MAD which will adjust runtimes or frequency of irrigation.

3.3 **Adjust Day Frequency**
Increases or decreases the number of days of the week per station when water is applied and does not increase the amount being applied unless ET increases. A 0% setting means there is no adjustment for that particular station.

Turn the (L) knob to Day Frequency/Depletion. Turn the (U) knob to **ADJ DAYS (MAD)**. Turn the (U) knob to select the station to adjust.

Alerts - Controller Beeping
Why does a Controller Beep?
The controller will beep at 8:00am when communication has not be received for 5 consecutive days or WeatherTRAK ETE subscription is about to expire or has expired.

⚠ Note: Turning any knob in either direction will stop the beeping until 8:00am the next day. Beeping will stop when communication is restored or the subscription is renewed by calling WeatherTRAK Customer Service.

Alerts: There are six categories of alerts: **FL** (Flow), **VL** (Valve), **CM** (Communication), **WD** (Window), **DY** (Day), **HW** (Hardware) and **SB** (Subscription). "**ER**" indicates an alert exists for a particular station. "**- -**" indicates no alert exists.
View / Navigation: Turn the (M) knob to **ALERTS**. This summary will display the 7 major categories of alerts. Use the (U) knob to find the alert category. Use the (L) knob to change from "*Skip*" to "*View*". Use the (U) knob to scroll all data within that particular alert.
Clearing Alerts: The following Alerts can be cleared by pressing the * button while in the in the specific Alert screen:
  • All Flow Alerts
  • All Valve Alerts
The following Alerts must be cleared by changing programming parameters:
  • Water Day Alerts
  • Water Window Alerts
The following Alerts must be cleared by WeatherTRAK Customer Service:
  • Subscription Alerts
  • Communication Alerts
Hardware alerts may require a service call if it cannot be resolved over the phone w/ Customer Service.

Definition of Alerts:
Flow Alerts: The WeatherTRAK ET Pro2 series with 6.0 version software can continuously monitor for the following flow conditions MB (Mainline Break), HF (Station High Flow), NF (No Flow), LK (Leak Detect) and EX (Extended Leak Detect) when a flow meter is used. A Mainline Break alert generally means a mainline pipe or fitting has failed. A station High Flow alert is generally when a sprinkler head or lateral pipe is broken or leaking. A No Flow alert means an operating station is not recording any flow. A Leak Detect alert is when flow is observed during non-scheduled irrigation or during scheduled irrigation when no irrigation is operating. An Extended Leak Detect alert is if a leak exceeds a user-defined delay period with a normally open master as part of the irrigation system. For more details about Alerts definitions print the Owner's Manual for www. hydropoint.com. See the "Learned Flow" Reference Guide in the controller literature for an overview of this feature.

⚠ Note: If a Flow Alert is posted, confirm a flow meter is in use. If no Flow meter exists, turn the (M) to **FLOW** and turn the Flow Meter. Status to "**Off**". Remember to clear this alert.

Valve Alerts: There are two kinds of valve alerts: **SH** (Short), a failed solenoid and **NC** (No Connect), a broken wire.

⚠ Note: Not clearing valve alerts may cause stations with alerts to not operate.

Communication Alerts: A communication alert indicates the daily ET weather update was not received.
Water Window Alerts: The total runtime for a program is greater than the length of the water window. This problem will become worse as ET increases. Increase the water window or assign some stations to another program to remove this alert.

⚠ Note: Entering programs that exceed the water window may damage your landscape.

Day Alert: This alert occurs when station depletion is reached before the next scheduled water day. This happens when a restrictive day pattern is selected or a day is excluded for mowing. Not resolving this problem may cause damage to your landscape. Day alerts can only be cleared by removing the day restriction or by turning off-days to on. It is normal to have a day alert in the summer on a turf program where a day has been omitted for mowing. Removing the excluded day is optional.
Hardware Alert: Turn the (U) knob to **HARDWARE**. This alert indicates that the controller is seeing less available stations than are set in Max Active Stations. Common causes are a loose ribbon cable or a damaged output board. Call Customer Service for troubleshooting assistance.

⚠ Note: Hardware alerts can only be cleared by correcting the hardware problem. Call WeatherTRAK Customer Service for assistance.

Subscription Alert: This alert indicates that the WeatherTRAK ET Everywhere™ subscription has expired or is about to expire.

Rain Pause - Suspend Irrigation
Pause Controller: This feature is useful for major rain events, scheduled activities or any other event where watering must be suspended for a set period of time. Rain Pause stops all irrigation (except manual watering).

Turn the (M) knob to **RAIN OPTIONS**. Use the (L) knob to set the number of days to be paused (up to 200 days). Rain Pause can be reduced or eliminated by using the (L) knob to remove paused days.

⚠ Note: In versions before 6.8, the controller counts down the pause day at midnight.
In version 6.8 and later, the controller counts down the pause day at the Program A start time.

Preview
This menu Previews programming changes of individual station data or Flow parameters (if a flow sensor is used and setup).

Station Data: Turn the (U) knob to view station data. Use the (U) knob to change the station number and the (L) knob to view projected water days (based on current ET) in one week increments from 1-8 weeks. Displayed station data includes run time, cycle and soak periods, station mode, % adjustments, projected water days on a weekly basis.

Flow Data: Turn the (L) knob to view Flow Data. Use the (U) knob to view previously setup Flow parameters. (If a flow sensor is setup and used).

Manual Valve Test
Manual Valve Test Function: This feature confirms wire integrity between the controller and valves in the field. This test can quickly identify, on a station basis, where an electrical fault exists.

Run Manual Valve Test: Turn the (M) knob to **SERVICES**. Turn the (U) knob to **RUN VALVE TEST.** Turn the (L) knob to change from Skip to View. Press the (*) button to run the Manual Valve Test. You will hear the controller briefly send a signal to every station including the master valve. Turn the (U) knob to view the first eight valves. Turn the (U) knob to the right to view additional stations in groups of eight. "?" means the test has not been operated and "- -"means the station does not have an electrical fault. This test cannot be run if any valve is operating. The Controller will identify a (SH) "**Short**" (current draw exceeding 600 MA) or (NC) "**No Connect**" reflecting a broken wire.

⚠ Note: Valve alerts must be cleared in the **ALERT** menu to ensure stations will operate. Failure to clear an alert could suspend watering. If a relay is present, the controller will display an "SH" because the relay cannot open and close fast enough for the duration of this test.

Viewing Solenoid Current Draw: The controller will display the milliamp draw of any station solenoid in this test. Turn the (M) to Services and turn the (U) knob past the "**Field Service Only**" screen until you see "**DIAGNOSTIC MENU**". Turn the (L) knob until the second line in the displays says "**Misc**". Turn the (U) knob so the display shows "**MANUAL DIAGNOSTICS**". Turn the (L) to display the station number, turn the (U) knob to move to the right and turn the (L) to turn the station on manually. The display will show you the solenoid draw in milliamps. If the draw exceeds 600 Ma, an "**SH**" alert will be posted.

System Shutdown
This feature can be found in the OFF menu when a catastrophic event occurs. This feature is not intended for winterization but will stop scheduled irrigation until emergency repairs can be made. Turn the (M) knob to the OFF menu. Turn the (L) knob once to locate "System Shutdown". The controller will immediately stop all scheduled irrigation and close a normally open master valve until reset by pressing the (*) button in this submenu.