



# March/ April 2005 Newsletter Tips & Suggestions:

Meet some Smart  
Timers

*Weatherset*



*Aqua Conserve*



*WeatherTrak Plus*



## The SmartTimer Rebate Program Has Arrived

Looking at the benefits and considerations of switching technologies

There are a few companies out there manufacturing what have come to be known as "smart timers," or "ET controllers." These timers automatically adjust the irrigation schedule based on recent weather patterns, which are tracked by local evapotranspiration (ET) readings. While most existing timers require the user to make irrigation scheduling changes by reprogramming the timer, smart timers, once the initial programming is complete, automatically adjust the irrigation schedule daily or weekly without attention from the user.

Since the approaches vary between manufacturers, we want to provide you with an overview of the two main technologies currently available - historical weather-based and real-time weather-based. We are not trying to cover all the features and advantages of each technology; you'll have to contact the individual manufacturers to get the specifics of each model. But, let's explore the two main differences between these technologies:

### Historical Timers

These have an "average" weather curve, also known as "historical curve," for the Orange County region programmed into the memory of the timer. Historical timers also come coupled with a sensor that measures either solar radiation or temperature at the site. The readings from the sensor are factored into the timer's historical weather computation of the irrigation schedule. Therefore, for any given day the number of minutes scheduled could be "X," according to "historical" data. However, if the day happens to be cold and wet, the timer would schedule a percentage (fraction) of "X." The opposite would occur if it happens to be a hot and dry day.

### Real-Time Timers

These controllers are equipped with a receiving device to accept a signal from a central computer, which captures local ET or weather readings from a variety of local weather stations. These signals are sent via satellite, radio, or wireless telephone technology, and the controller receives the signal once, twice, or more times per week. Some of these timers allow you to program a number of variables per each valve or station, such as soil type, plant type, sprinkler type, sun exposure, slope, etc. The timer then computes an adequate irrigation schedule using the programmed variables and the signal received from the central computer. In addition, some models also allow two-way communication so that you can see what the controller is doing and reprogram it remotely, if needed.

**RainMaster Eagle****What do YOU want to know?**

Send questions related to landscape water use and runoff reduction to:

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**Master-Controlled Systems**

These controllers have been around for a while and are being used by some master-planned communities or large homeowners associations. The price tag for these systems can be high, but they are an economical solution when there are a large number of controllers that need to be maintained. Typically, these timers are managed by a local computer, which sends information to each controller via a radio signal. Some models have an add-on module that receives local ET readings and incorporates them into the scheduling engine, allowing all the controllers to irrigate according to weather conditions.

**Other Factors to Consider****Runoff Reduction**

The scheduling software on some timers allows for the programming of multiple start times - part of the cure for runoff. By allowing the total watering time in your irrigation cycle to be applied in small segments, the controller can reduce the amount of water running into the gutter. These shorter watering periods, separated by a soaking-in period of 20-30 minutes each, are not available in most conventional timers.

**Added Features**

Depending on the brand and model, there are several additional features that you or your landscaper may find useful, such as rain shut-off, remote programming, time saved from re-programming the schedule due to

weather changes, customer support from the manufacturer, etc.

**Monthly Fees**

Some timer models require a monthly signal fee. However, by switching to one of these timers, a potential savings of 10%-30% can be achieved on your water bill. This savings should more than cover the cost of any 'irrigation management' fee. In addition, the landscaper will save valuable time, which can then be used to repair and better maintain your sprinkler system.

**The Role of the User**

Landscape professionals need to be part of the decision-making process. Ultimately, they are the end-users and need to feel that the new timer will make their jobs easier. Manufacturers know this and have very good training programs to ease the transition for you and your landscaper. Be aware that once the new controllers are installed, there may be an adjustment period for the landscaper and the plant material. This period is useful because it will highlight inefficiencies in your sprinkler system. If you address those problems, your system will become even more water efficient and, most likely, will provide you with long-lasting water savings.

For more information about how to apply for a rebate and links to manufacturers, go to <http://www.utilityrebates.com/mwdoc/>