

**Note: We received this from a client and found it to be extremely valuable and wanted to pass it along to our clients. We would appreciate any feed back or ways of improving the information. Thanks, NLS.**

## Rain Bird E\_c Controller - Programming 101

By Clark Anderson

Most of our 'Water Every Day' Permits have expired. Our grass roots have grown down into the soil, so the sod does not lift off. I have been told that over-watering, besides turning lawns into rice paddies and running off, wasted, down the gutter can turn the grass an unhealthy yellow.

The initial settings are no longer appropriate. The sod installation company probably set the controllers for 7-Day Cycle, Water Days (Monday, Tuesday, Wednesday, Thursday, Saturday and Sunday), Program Start Times (e.g.: 2:00am, 5:00am, 2:00pm) and Station Run Times (e.g.: 10 minutes for Sod Stations and 20 minutes for Drip Stations)

We leave our dial at the Auto position most of the time to continue the watering program, but Mother Nature was really nice to us and gave us some rainy days, so we turned our sprinkling program off by setting the dial to the Off position. With Mother Nature's help, our grass roots had grown into the soil base before our permit had expired.

I adjusted the programming of our Controller. The manual is good and the Quick Reference Card is a handy reference. I turned the dial to the Day Cycle position. The display indicated a 7 for Seven Day Cycle for program A. Pressing the (+) or (-) buttons changes the Day Cycle (7, Ev, Od, Od31, 1-6). I left it at 7 because you can pick which days of the week to water and that fits in with the watering restrictions in this part of Colorado.

Next, I turned the dial to Water Day. The display indicated program A, The number and abbreviation for the current day of the week (e.g.: 5 FRI) and across the bottom the day numbers 1 through 7. The initial settings probably show boxes around each day number and number 1 (Monday) blinking. When you press the Enter Button (with the arrow looping back), the blinking advances to the next Day Number. Pressing the (-) button turns the blinking day off by hiding the box. Pressing the (+) button turns the blinking day on by showing the box. Your sprinkler system will water on the days with boxes around the day number. The first week we cut back on watering, we set this for three days (e.g.: 2 Tuesday, 4 Thursday and 7 Sunday). The following week we cut back to the two days appropriate for our street number, according to the watering restrictions.

I. then, turned the dial to Program Start Time. The display may indicate Program A, Start Time 1, AM, 2:00. Pressing the (Enter) button advances to Start Time 2 (e.g.: 2 AM 5:00). Pressing the (Enter) button again advances to Start Time 3 (e.g.: 3 PM 2:00). Pressing the (Enter) button again advances to Start Time 4 (e.g.: 4 --:--). This indicates that there is no fourth start time. Pressing the (Enter) button again advances back to Start Time 1. Pressing or holding down the (+) or (-) buttons changes the selected Start Time. You can clear a Start Time by advancing one step past midnight (e.g.: PM 11:59 press the (+) button once) or (e.g.: AM 12:00 press the (-) button once). This is handy if you want to have two start times instead of three.

Finally, I turned the dial to Station Run Time. The display may indicate Program A, Station 1 0 hours 10 minutes. A Station is a group of Sod Sprinkler Heads that spray together at the same time or a group of Drip Irrigation Emitters that drip at the same time. There is a solenoid control valve in the control box(es) for each station. Initially, all stations that are plumbed and wired are probably all programmed to operate in Program A (e.g.: Station 1 (Sod) 10 minutes, Station 2 (Sod) 10 minutes, Station 3 (Sod) 10 minutes and Station 4 (Drip - Shrubs) 20 minutes)). Pressing the (Enter) button advances from one station to the next and ultimately back to Station 1. Pressing the (+) or (-) increases or decreases the selected Station Run Time. A Station Run Time of 0 00 will cause that Station to not run during that Program.

When I have finished programming, I turn the dial clockwise to the Auto position. I am not certain the 'clockwise' is necessary to 'finalize' a program or not, but I do it any way.

It is a good idea to add up the Station Run Times to assure that you have allowed enough time between the Program Start Times for the full cycle to finish before it is called upon to start again.

With any of the above programming dial positions, the (ABC) button can be pressed to advance to the next of the three programs (A, B or C). Since we prefer to use the Drip Irrigation station once or twice a week for a good long soak (30 – 45 minutes), we use program B for that. Program B would have only one Start Time and a longer Station Run Time. In program B, the other (Sod) stations would have 0 Station Run Time, while in Program A, The Drip Irrigation Station would have 0 Station Run Time.

The dial's Water Budget position is handy for a not so sunny week that does not require all of the watering. The default would be 100%. Pressing the (+) or (-) increases or decreases the percentage of Station Run Time for all stations and all programs.

Here's to Greener Lawns!