

How to Troubleshoot an Irrigation System Timer

Being able to check your system timer is a valuable skill that will help to keep your plants alive and save water. Many areas around the country have water restrictions and changes to irrigation schedules need to be done on a regular basis. There may be times when the automatic irrigation clock time malfunctions and you will need to be able to find and repair the problem.

1 Find the automatic irrigation timer box. It is usually located near the electric valves in a protected place. It may be inside of a building or in a weather proof box. Most boxes need a key to open them to prevent damage or tampering of the system.

2 Find the manual. If you don't have the manual you can usually refer to or download one from the Internet. Search using the manufacturing company's name and any other information printed on the irrigation system timer unit.

3 Ensure that the LCD lights up and shows the correct time of day. The system should be set to auto. If there is no power to the unit check the outlet that it is plugged into for current. If the outlet is ok but the timer is still off the unit transformer or a fuse may have blown.

4 Check that the clock shows the correct time and date. Power outages, daylight savings time and human errors or tampering can change the settings so it is a good idea to check it regularly.

5 Check the back-up battery. If the power has gone off for any reason the battery will keep the scheduled times on the clock, otherwise some timer clocks will revert to a default system of watering. If this happens you will need to reset the days and times for watering on the irrigation system.

6 Determine if the valve stations scheduled to turn on and off correctly. Depending on the irrigation system timer and the method of scheduling the valves need to be set to come on and go off at specific times, days and durations. Check each valve program from beginning to end to make sure there are no errors in the settings in the timer program. Most timers have instructions for this on the inside cover of the box. (to do this follow the steps used to set up a valve schedule, paying close attention to times (am-pm), duration (sec, min or hrs), and days of the week (on or off). Don't forget to check each program too, usually there are an A, B & C.

7 Check for a problem between the valves and the timer box. Turn on each valve using the manual setting on the timer - to do this set the timer to manual, turn on one valve at a time and go to the irrigation line for that valve to make sure that the water is flowing. (Some irrigation system timers have a setting that will run through the full program schedule for all the valves. If you have the time you can follow the system through a full watering cycle.)

8 Check wire connections. If a valve doesn't turn on then check the wires in the timer box and on each electric valve. The wires may have broken loose or corroded. Some wires may have been crossed accidentally or shorted out.

9 What if a valve clicks when turned on by the timer but the water doesn't flow? This means the timer is sending the message but the valve is malfunctioning (it could be the solenoid, wires, or diaphragm) or a problem with the water supply. To override the timer clock and test that the diaphragm opens and closes on a valve, go to the bank of valves and turn on the one not working using a manual switch on the valve. Most valves are equipped with a way to turn the water on or off without electricity. This method is used if there is no power or to override the timer to test a valve. Different valves are manufactured with different ways to do this. If you are not sure how your valves work you can do a search on the internet for a valve by the manufacturer's company name. You can also get information on how timers and valves work from your local nursery or irrigation parts dealers. Take a valve with you to get advice as there are many different kinds of valves and companies.

10 Leaking pipes or faulty timing that causes water to stay on is usually easier to catch than no water, especially when it is only one valve that isn't working. On a regular basis check the system when it is running during its scheduled irrigation period. This will help to catch problems before they go on too long. If your system runs at night or early mornings then you can check the ground in each valve area later to see that the water did come on as scheduled.

Tips & Warnings

- Set a regular weekly time to check on the system to catch problems in the system before they show up on your bill.
 - Check with the City of Irving for any water restrictions that may be in place.
 - Just because it says it is "automatic" doesn't mean that you can ignore it and it will take care of itself. Systems not properly maintained could pose large water consumptions in a small amount of time.
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