**Congratulations on the purchase of your new underground sprinkler system! Here are some tips and FAQ we've put together so you can get the most out of your new investment.**

## Assign someone to manage your system

We recommended that someone be assigned to make periodic adjustments to the sprinkler system to account for temperature and rainfall changes. Adjustments may be necessary to individual zones that may be too wet or dry.

## How often should the system come on?

As a general guideline, we recommended that watering be done every other day during hot/dry periods and every third or fourth day during cooler periods.

## How long should each zone run?

We recommend that zones with "spray" or "mist" type heads be run for approximately 8-20 minutes every other day or every third or fourth day. Rotor sprinklers should run from 40-100 minutes every 2nd, 3rd or 4th day. Drip zones should run for 1 – 2 hrs. every 2$^{nd}$ day. Run times for each zone will depend on several conditions (soil type, plant type, slope, sunlight, etc.) For more detailed information, check the Rainbird website at **www.rainbird.com/homeowner/education**

## What time should irrigation start and stop?

We recommend that you avoid running your system during daylight hours in order to reduce unnecessary evaporation. In fact the effectiveness of the sprinkler heads is significantly reduced by wind. We recommend that the system run during the morning hours with the system shutting off by 7:00 A.M. In the case of residential systems the start time can be calculated by taking the total of the run times of the various zones and subtracting from the time you wish the system to stop running.

> ***Important note about vandalism*** To reduce the chance of vandalism, we recommend that sprinkler heads located near the street or public thoroughfares **should not run before 3:00 AM** According to police, as most vandalism occurs at night and the early morning between dusk and 3:00 AM.

## When to use Manual mode

The controller can be set to manual when testing that your systems components are working properly, or to check coverage. ***Only one zone should be turned on at a time***, Otherwise damage to the controller may occur.

> ***Note:*** Manual mode will be unavailable after a significant rainfall if your system has a rain sensor. Some controllers are equipped with a rain sensor override switch, which will allow you to operate the system.

## General operation procedures

### Controller

For complete instructions on your controller please refer to the controller operations manual. Your manual is left with the controller upon installation. You can also visit the Rainbird website for a tutorials, tips and manual downloads. www.Rainbird.com/homeownerl

> ***A note about start times:*** Remember that a start time of 2:00 A.M. will start the ***first*** zone of the system and it will operate for the programmed run time of that zone (i.e. 45 min). After zone 1 finishes, the ***second*** zone will automatically come on and run for its prescribed time after which the third zone will automatically come on, etc.

Unless otherwise noted, the controller comes with a battery backup, which saves your program in the event of a power loss. ***The battery will not run the solenoid valves*** but will ensure that the system runs on schedule when the power resumes.

During the winter, the controller can remain connected to the power source. If, however, it is unplugged from its power source, you should disconnect the battery, otherwise a new battery will be required for the spring startup.

### Sprinkler heads: Rotors

Directions for adjustment of the rotary sprinklers are included as a separate document with this package. You can also visit the Rainbird website for a tutorials, tips and manual downloads. www.Rainbird.com/homeownerl

> ***A note about adjustment:*** If you attempt adjustments, ***avoid*** forcing the sprinkler head in a direction contrary to its normal movement. The sprinkler will turn freely within its arc (from one side of the arc to the other side and back again). Forcing it to go in another direction can break the sprinkler and void its warranty.

**Sprinkler heads; Sprays**

Spray heads require few adjustments. Various nozzles with different spray patterns can be screwed into the sprinkler head. The neck of the sprinkler will ratchet if the spray pattern is needs adjustment. To adjust, simply pull the neck up and out of the casing, grasp firmly at the base, and turn until the desired direction is reached. You can also visit the Rainbird website for a tutorials, tips and manual downloads. www.Rainbird.com/homeownerl

**Solenoid Valves;**

The solenoid valves require little maintenance except for fall winterization. Should you find water in the valve box, ***it will not affect operation of the valve***. However, if the valve box has water in it during dry periods, a small leak may have developed which should be repaired as soon as possible. We do not recommend that valve boxes be buried by sod, mulch or stone unless they are subject to possible vandalism.

> ***A note about buried valve boxes*** A buried valve box can cause delays during service work and during winterization, which will add unnecessary labour the cost to the service.

## SPRING OPENING OF THE SYSTEM

Yates Custom Lawn Sprinklers can provide spring opening service for your sprinkler system. The spring opening usually includes an inspection of the system to ensure that all sprinklers are working properly and any sprinklers that need straightening, lowering, or raising are dealt with accordingly. It is not always possible to check for coverage because of wind conditions. Usually, unless a sprinkler has been damaged by snowplows over the winter, the sprinkler will not need readjustment if it has worked properly in the previous year

## WINTERIZATION OF THE SPRINKLER SYSTEM

The best way to ensure that your sprinkler system is winterized properly and ensure that the life of the system is extended to the maximum, is to winterize it with a compressor using a minimum of 85 cfm (cubic feet per minute) for residential systems and 150 minimum for commercial systems. Yates Custom Lawn Sprinklers can provide this service for you.

**Warranty of your Yates Custom Lawn Sprinkler Irrigation system will be voided if the above equipment is not used for winterization by a Yates employee.**

## MAINTENANCE OF THE SYSTEM

Little maintenance of the system is required except for winterization mentioned above. Over time (years), it may be necessary to move sprinkler heads because of growth of trees, shrubs, etc. Also in bedding areas, extensions may have to be placed to raise sprinklers above foliage. These changes can be made to your Yates Custom Lawn Sprinkler system, usually with little difficulty.

## REPAIRS TO THE SYSTEM

The most common repair to the system involves damage to the pipes during llandscaping. Yates Custom Lawn Sprinklers provides 'As-Built Plans', which provide an outline of where the pipes run. If damage is done to the pipes, it can be easily repaired by your Yates Custom Lawn Sprinklers service technician.

The major components (controller, valves and sprinklers), should provide many years of trouble-free service. However, they can be replaced or in some cases repaired without major difficulty.

## Common Problems:

- ***Lawn Aerator Damage***. Make sure to flag all sprinklers and valve boxes prior to aeration as the impact of the machine can damage sprinklers. **Impact damage is not covered under warranty**.
- ***Overwatering.*** This is the most common misuse of sprinkler systems. Sprinklers rarely need to be used before mid May or after mid September. Turf should be watered thoroughly and allowed to dry out before the next watering cycle. This cycle helps promotes deep root growth and a healthy lawn. Regular daily or frequent watering does not encourage roots to ‘go down’ seeking water and consequently shallow root systems develop. Such plants are more susceptible to insect damage and should there be a lack of watering for any reason, these lawns suffer more than deep-rooted lawn systems.
- ***Underwatering.*** This is most common during periods of dry hot weather. Monitoring on an ongoing basis and increasing run times and/or frequency can correct this problem. They need to be used more frequently and/or run longer during hot dry weather than during wet periods or cooler temperatures.