

## LOW-VOLTAGE LED LIGHTING

Modern LEDs are soft in tone and capable of providing gorgeous, natural-looking light. LEDs are also extremely efficient so the impact on your power bill will be much less and much of the ongoing cost associated with changing bulbs will be eliminated. The average life span of LEDs is 40,000 hours, which should give you 18 to 20 years of run time from a single bulb.

Maintenance for LEDs is needed less frequently than Halogen bulbs. We recommend retrofitting old Halogen or incandescent fixtures with LEDs as well as regularly keeping the lenses and fixtures clean. Moisture or exposure to salt or other corrosive contaminants can also damage your fixtures and compromise their working mechanisms.



### Replacements for Non-LED Systems

When a lamp burns out replace it with the proper bulb - a lamp of higher wattage may overload your transformer and cause voltage drops (lights will dim) or may tax the entire system.

Replacement lamps may be purchased through:

- · Lighting Specialties (Portland)
- Horizon Irrigation (several locations)
- Pacific Lamp (Beaverton)

# SIMPLE PROBLEMS & POSSIBLE SOLUTIONS

### If a single light doesn't come on ...

· bulb may be burned out

#### If all lights don't come on ...

- · check to see if the transformer is plugged in
- · check for a burnt fuse in the transformer
- · check the timer on the transformer for the correct setting

#### Caution:

Please be careful when digging around night lighting. While there is no chance of electrocution from cutting a wire, low-voltage wiring may be just 2-3 inches below the surface.

