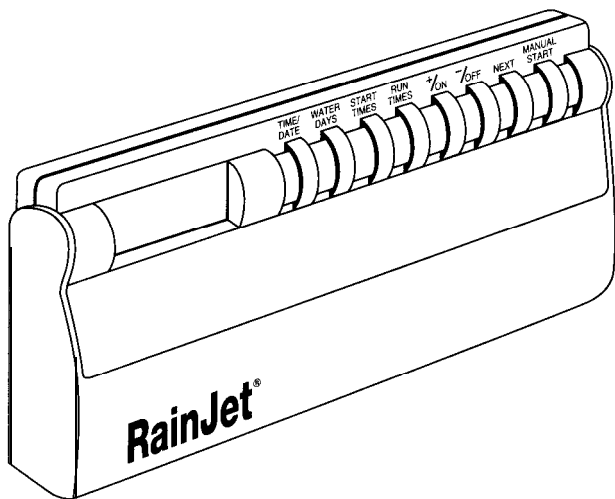


# 6 Zone Sprinkler Timer

RJ6

6 Zone, Single Program,  
Push-Button, Automatic  
Sprinkler Timer  
Installation and  
Operation Guide



Please read instructions completely before installation or operation.

**RainJet<sup>®</sup>**  
by Lawn Genie<sup>®</sup>

## Introduction

Thank you for choosing the RainJet® RJ6 Automatic Sprinkler Timer. The RJ6 is simple to operate and provides flexible programming capabilities to help meet your specific watering needs.

With the RJ6, you can set an automatic watering schedule and still activate a manual watering cycle without having to reprogram. You can also temporarily suspend your program, on rainy days for instance, again without affecting your original program.

Some of the other convenient features of the RJ6 include:

- \*One program, adaptable to individual watering requirements
- \*Three start times
- Six zone capacity
- \*Watering on specific days of the week or odd/even days
- \*Watering durations from 1 minute to 99 minutes
- Easy-to-use push-button programming with large, easy-to-read LCD display
- Quick reference programming guide on the inside of the terminal cover
- \*Programming capability before timer is mounted permanently, using just a 9 volt battery

If you have any questions about the installation or operation of your RJ6, call our Technical Service Hotline at 800-231-5171.

## Select A Location

Choose an eye-level spot in an indoor location, within six feet (1.8 m) of a standard 120 volt AC electrical outlet (or 240 volt outlet if timer is labeled as such). The location should be completely protected from moisture, direct sunlight and freezing temperatures.

- \*Do not use an outlet controlled by an on/off wall switch
- \*Do not use the same circuit as a garage door opener, washer, dryer, air conditioner, refrigerator or other high-powered equipment
- \*Do not place timer in a location where it can get wet
- \*Do not operate at temperatures exceeding 125°F (52°C)

**CAUTION:** This timer is designed for indoor installation only. Installing this timer outdoors will void the warranty and may result in an electric shock hazard.

## Mount Timer to Wall

Drive one of the two #8 Phillips screws provided into the stud or wall at eye level, leaving 1/8"-1/4" (3.2-6.4 mm) of the screw head extended from the wall. If mounting on drywall or masonry wall, plastic anchors may be required.

Hang the controller on the screw by placing the keyhole on the back of the timer over the extended screw head. (Figure 1)

Lift the terminal cover and drive the second screw through the bottom mounting hole into the wall.

**CAUTION:** Do not plug in the transformer until you have made *all* wiring connections.

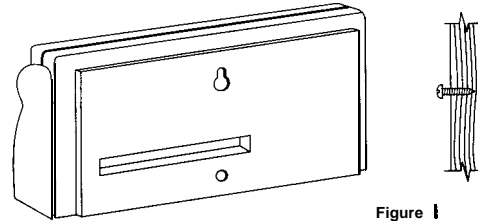


Figure 1

## Install Battery

Connect a 9 volt alkaline battery (not included) to the battery terminal and place in designated spot.

**CAUTION:** Do not use a rechargeable battery. Do not allow the battery to come in contact with the screws in *the* terminal strip.

The display will illuminate under normal conditions and 12:00 AM will appear. If any unexpected display characters show, simply disconnect and reconnect the battery. You can now program your timer, even before you plug it in. (You should not plug in the transformer until all valves have been connected.)

The battery operates as memory backup in the event of a power outage, preserving your schedules for up to 24 hours. However, the timer will not operate the valves while under battery power. Watering will occur only after power resumes.

Your timer also comes with a default mode. Should the battery fail during a power outage, the timer will automatically revert to a preset factory program, which will become active when the power comes back on, and will water every day at 4:00 a.m. for 10 minutes per valve, until a new schedule is programmed.

We suggest you replace the battery once a year. When replacing the battery, be sure not to unplug the transformer, or you will lose your programmed schedules.

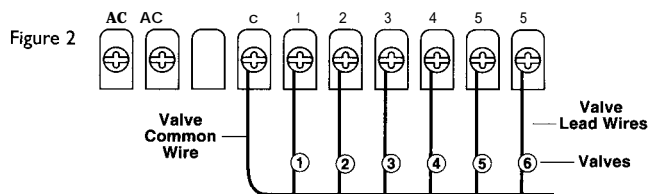
## Connect Valve Wires to Timer

**CAUTION:** Do not plug in the transformer until all valves have been connected.

Each valve has two wires. One wire is connected as the “common” wire. The common wire for all of the valves should be spliced together to become a single wire that will connect to the terminal screw labeled “C”. Back the terminal screw out until the head is 1/8” (3.2 mm) above the surface. Expose only 3/8” (10 mm) of bare copper from the end of the wire to reduce short-circuiting of two adjacent wires, slip under screw head, and tighten.

The second wire is the “lead” wire. Connect the lead wire from each valve to one of the terminal screws numbered 1-6, depending on the number of valves you’re using. Connect wire from valve 1 to terminal screw 1, from valve 2 to terminal screw 2, and so on. (Figure 2)

**CAUTION:** Wire only one valve to each terminal screw. Wiring more than one valve per terminal may result in damage to the timer. Do not use valves that exceed maximum output holding current (0.25 amps). Also, fusing more than one timer, do not share common wires. Run a separate common wire for each timer.



## Connect Transformer

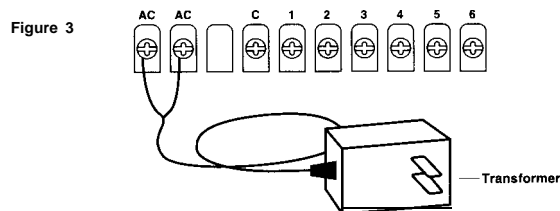
Lift the terminal cover and locate the two terminal screws labeled “AC”. Make sure the transformer is not plugged in.

Insert power leads from the transformer under each of the two terminal screws and tighten. (Figure 3)

Plug in transformer. 12:00 AM will be displayed.

**CAUTION:** Use with supplied transformer only. Do not plug in the transformer until you have completed and checked all wiring connections. Do *not* link two or more timers together with a single transformer.

Always check local plumbing and electrical codes for requirements when installing timer, transformer and sprinkling system. Use only with appropriate transformer that matches your household voltage and plug type.



## Programming

A program is simply your instructions to the timer, telling it which areas you want watered on which days, at what time and for how long.

In general, when programming the timer, numbers or text will be flashing on the display. The +/ON and -/OFF buttons will change the flashing item. Holding down the +/ON or -/OFF buttons for longer than one second will cause the timer to rapidly scroll through the digits. This allows for faster setting of all items.

Pushing the NEXT button will enter the flashing digit(s) and will move you to the next program step.

If a programming button (e.g., TIME/DATE, WATER DAYS, etc.) is pressed at any time during that programming sequence, the controller will take you back to the beginning of that sequence.

## Setting Clock Time and Date

1. Press TIME/DATE. The hour, minutes and AM or PM will flash.
2. Press +/ON or -/OFF to change to the current time. Press NEXT to enter the time.
3. Year will be flashing. Press +/ON or -/OFF to change to the current year. Press NEXT to enter the year.

4. Month will be flashing. Press +/ON or -/OFF to change to the current month. Press NEXT to enter the month.

5. Date will be flashing. Press +/ON or -/OFF to change to the current date. Press NEXT to enter the date.

6. Day of the week will be flashing. Press +/ON or -/OFF to change to the current day of the week. Press NEXT to enter the day of the week and move to the RUN mode.

The current time will now be displayed.

## Setting Watering Days

You have three choices in deciding on how often to water your lawn.

\*Specific days of the week, e.g., MON.WED and FRI

\*All ODD days

\*All EVEN days

Only one of the three, either specific days of the week, odd days or even days, will be valid at any one time. Selecting one option will disable the other two.

1. Press WATER DAYS. SUN On or SUN OF (abbreviation for off) will be displayed and either On or OF will flash. If SUN -- is displayed, either the ODD or EVEN days schedule is programmed, and you will not be able to program specific days of the week watering. If you want to program days of the week watering, turn off ODD or EVEN by following steps 2 through 8.

2. Press +/ON or -/OFF to turn watering for that day on or off. Press NEXT to enter the data and advance to the next day of the week.

3. Repeat step 2 to turn on or off the remainder of the days of the week for specific days of the week watering.

4. After SAT, ODD On or ODD OF will be displayed and either On or OF will flash.

5. Press +/ON or -/OFF to turn ODD watering on or off. In ODD days programming, the 31st of any month and the 29th of February in a leap year are considered as OFF

6. Press NEXT to enter data and advance to the next step. EVN On or EVN OF will be displayed and either On or OF will flash.

7. Press +/ON or -/OFF to turn EVEN watering on or off.

8. After pressing NEXT for the last time, the controller will move to the RUN mode.

The current time will be displayed.

## Setting Watering Start Times

Your RJ6 timer allows you to program up to three watering cycles per day. You can activate all three, or you can leave one or two OFF. Extra start times are needed only if you wish to water more than once a day, e.g., for a new lawn or in very hot weather.

1. Press START TIMES. Start time 1 (1) will be displayed and the start time currently set will be flashing. If there is no start time entered for Start 1, OFF will flash.

2. Press +/ON or -/OFF to set the first watering start time. Be sure to note AM or PM. The OFF position is between 11:59 p.m. and 12:00 a.m. Press NEXT to enter the start time and advance to Start 2.

3. Repeat step 2 for programming start times 2 and 3.

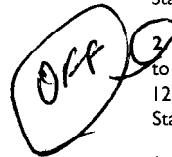
4. After pressing NEXT for the last time, the controller will move to the RUN mode.

The current time will be displayed

TIP: The recommended time to water your landscape is in the early morning hours (4 a.m. – 7 a.m.), when evaporation and wind factors are minimal and when water pressure may be better. Mid-morning through late afternoon hours usually have higher evaporation rates, and late evening hours can create a fungus or mildew problem.

## Setting Watering Run Times

Your RJ6 timer allows you to set the watering duration of each zone for a different length of time, from 1 minute to 99 minutes, in 1 minute increments. For example, you might program Zone 1 (e.g., your front lawn) to water for 10 minutes and Zone 2 (e.g., your flower bed) to water for 5 minutes at each start time.



1. Press RUN TIMES.Valve 1 (V1) will be displayed and its run time in minutes will flash. If there is no run time for valve 1, OF will flash.

2. Press +/ON or -/OFF to adjust the length of time in minutes that you want the valve to run. If you want to turn off the valve, set the time for 00 minutes.The valve number and OF will be displayed. Press NEXT to enter the data and advance to the next valve.

3. Repeat step 2 for valves 2 through 6

4. After pressing NEXT for the last time, the timer will move to the RUN mode.

The current time will be displayed.

## Operating in Run Mode

In the RUN mode, the timer will automatically water the programmed schedules.

During a watering cycle, the valve number and run time in minutes (e.g.,V1: 15 min) will be displayed until the watering time has counted down to 00. After the last valve has completed its watering cycle, the current time will once again be displayed.

During operation, you will notice a five-second delay between the time one valve shuts and the next valve opens.This is to prevent water pressure damage to your system.

## Turning Off Watering

You can turn off watering during rainy periods, or anytime watering is not required, without losing your programmed watering schedules. If you press -/OFF while watering is in progress, you will cancel the watering cycle in operation at that time only. Watering will resume at the next start time. If you press -/OFF a second time, you will then place the timer in the RAIN OFF mode and all programmed start times will be suspended.

To manually turn off watering when the timer is not running a watering cycle:

1. Press -/OFF. OFF will be flashing.

2. Press +/ON to return to RUN mode and resume your normal watering schedule.

The current time will be displayed

## Manually Turning On Watering

You can manually water any zone at any time when extra watering is required, e.g., during especially hot or dry weather.

1. Press MANUAL START. (VI : OF) will be displayed with the valve run time (OF) flashing.

2. Press +/ON or -/OFF to set the number of minutes you want the valve to water. If you don't want a valve to water, set the run time to 00 minutes. Press NEXT to enter the data and advance to the next valve.

3. Repeat step 2 to manually turn on valves 2 through 6 (valves will be turned on in sequence).

4. After valves have completed their watering run time, the controller will revert back to the RUN mode.

The current time will be displayed.

To stop MANUAL START during its cycle, press -/OFF.Watering will stop, and the timer will revert back to the RUN mode.

## Default Program

If there is a power outage and you have either no battery or a dead battery in the timer, the timer will automatically revert to the default program when power resumes.With the default program, each zone will be watered for 10 minutes every day, starting at 400 a.m., until a new schedule is programmed.

## Electronic Fuse

The RJ6 timer is equipped with an electronic fuse which will identify a shorted valve, turn off the valve control circuit on the shorted valve, and proceed with the next valve.At the end of the watering cycle, the display will not revert to showing the current time, but will display the word BAD, followed by the valve number of the shorted valve.

Once the valve has been repaired (be sure to unplug the transformer when repairing the valve), plug the transformer back in, press any key, and a normal display will reappear. If a scheduled watering time comes up before a bad valve can be repaired, your regular automatic program will start, and the timer will continue to bypass the shorted valve.

## Troubleshooting

### Problem

Display is blank.	*Transformer not plugged in. *Wall socket not supplying power.
Display is scrambled.	*Start-up problem. (Unplug transformer, remove battery and let sit for 30 seconds. Replace battery and plug transformer back in.)
One or more valves do not turn on.	*Faulty solenoid. *Wire broken or not connected. *Flow control stem screwed down, shutting off valve. -Programming incorrect. *Water source not supplying water.
Continuous loss of program	*Battery not hooked up. *Battery too weak to save program. *Electronic noise on power source.
Valves turn on when they're not supposed to.	*Water pressure too high. *More than one start time programmed.
One valve is stuck on and will not shut off.	*Faulty valve. *Particles of dirt or debris stuck in valve. -Faulty valve diaphragm.
None of the valves turn on.	*Transformer defective or not connected. *Programming incorrect.
Timer will not power up.	*Transformer defective or not connected.
Valves continue to turn on and off when they're not programmed to do so.	*More than one start time programmed with overlapping schedules. *Water pressure too high.

For additional assistance, call our Technical Service Hot Line at 800-231-5117.

## FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- \*Reorient or relocate the receiving antenna.
- \*Increase the separation between the equipment and receiver.
- \*Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- \*Consult the dealer or an experienced radio/TV technician for help.

This equipment has been verified to comply with the limits for a Class B computing device, pursuant to FCC rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of the manufacturer could void the user's authority to operate this equipment.

# One-year Limited Warranty



Lawn Genie warrants to the purchaser of its products for a period of one (1) year from the date of original purchase that any defective product proved to be caused by faulty workmanship or faulty materials, when installed per instructions and used in a normal manner, will be repaired or replaced at Lawn Genie's option at no charge, providing the product is received at the Lawn Genie factory, or authorized factory service center, with all transportation charges prepaid within three years of the date of original purchase. This warranty does not apply to damages or malfunctions resulting from accidents, misuse or neglect. Lawn Genie will not pay labor or other costs of removal or reinstallation of any so-called defective products.

NO IMPLIED WARRANTIES (INCLUDING, BUT NOT LIMITED TO) FITNESS FOR A PARTICULAR PURPOSE, WHERE APPLICABLE, AND MERCHANTABILITY SHALL EXTEND BEYOND THE PERIOD OF THE EXPRESS WARRANTY DESCRIBED ABOVE. IN NO EVENT SHALL LAWN GENIE BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES TO PROPERTY WHICH MAY ARISE FROM OR RELATE TO THE PURCHASE OF ANY LAWN GENIE PRODUCT

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so one or both of the above limitations may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

To exercise your warranty, send unit, with photocopy of dated receipt, postage prepaid to:



**RainJet®**  
by Lawn Genie®

In U.S.A.:



**James Hardie  
Irrigation**

A James Hardie Company  
2763 I La Paz Road  
Laguna Niguel, CA 92677-39 17

In Australia:

James Hardie Irrigation Pty Limited  
A.C.N. 007 0664 3 15  
53 Howards Road  
Beverley SA 5009  
PO. Box 40  
Kilkenny SA 5009  
Australia  
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