

IMPORTANT: During the time that the Toro Remote 3000's infrared receptor is active, the infrared receptor will be sensitive to strong sunlight, neon or other bright light sources. It is imperative to proceed with transferring data from the remote programmer to the unit itself in shade or subdued light.

* **Good Infrared Reception** - A successful transfer of infrared data is acknowledged by two flashes of the "Interval Light". If you do not see this acknowledgement, transfer the programming information again until the Toro Remote 3000 signals its reception.

* **Bad Infrared Reception** - If you see lights #5, #4 and #2 flash one after the other during programming by the TRCP 8+, you need to start the programming sequence again. This three-light flashing sequence either means you are trying to transfer a program to unit with a different address than the program number or that there is too much light.

E. Cancel the Irrigation but Retain the Program

If you decide not to water because of rain or any other reason, but you don't want to lose the program, simply remove the Toro Remote from the valve. When you're ready to resume watering, slide it over the valve adapter and irrigation resumes at its scheduled time.

IMPORTANT: Removing the battery for longer than 2 minutes erases the program in the Toro Remote. The battery can easily be changed in less than two minutes and all programming is retained.

E. TROUBLESHOOTING

Valve does not operate - Remove the Toro Remote from the automatic irrigation valve and operate the valve manually. If the valve does not open or close, disassemble valve and clean and repair.

Valve operates manually but not electrically - The problem may be a water pressure that is either too high or too low, a damaged valve adapter or bad battery. Check water pressure to insure you have between 1.4 and 10 Bars (10–150 PSI) of pressure. If pressure is okay, remove valve adapter and insure its parts are free and not damaged. Replace as necessary. If the valve adapter is good, change the battery.

F. TECHNICAL INFORMATION

- * Pressure limit: 10 Bars (150 PSI)
- * Operating temperature: 0°–50°C (32–122°F)
- * Dimensions: 76 x 63 x 38 mm (3" x 2-1/2" x 1-1/2")
- * Weight: Toro Remote, 150 g (5-1/4 ounces)
Battery Assembly, 40 g (1-1/2 ounce)

G. ACCESSORIES

These accessories are available through your Toro dealer. They will allow you to adapt the Toro Remote to different brands of automatic irrigation control valves.

- YA 12 - valve adapter for Irritrol, Hit, Galcon and Bermad valves.
- YA 15 - valve adapter for Rain Bird valves.
- YA 16 - valve adapter for Toro FloPro valve. (Supplied with Toro Remote 1500 model.)
- YA 18 - valve adapter for Toro 252 valves.
- YA 20 - valve adapter for Nelson valves.

H. WARRANTY INFORMATION

The Toro promise - Limited Two Year Warranty

The Toro Company warrants, to the owner, each new piece of equipment (featured in the current catalog at date of installation) against defects in material and workmanship provided they are used for irrigation purposes under manufacturers recommended specifications for the period described below. Product failure due to acts of God (i.e., lightning, flooding, etc.) are not covered by this warranty.

Toro is not liable for failure of products not manufactured by Toro even though such products may be sold or used in conjunction with Toro products.

During the warranty period, Toro will repair or replace, at its option, any part found to be defective. Toro's liability is limited solely to the replacement or repair of defective parts. All other express or implied warranties are specifically disclaimed.

Return the defective part to your local Toro distributor, who may be listed in your telephone directory Yellow Pages under "Irrigation Supplies" or "Sprinkler Systems", or contact the Customer Service Department at The Toro Company, P.O. Box 489, Riverside, California, 92502. Inside the USA, phone 1-800-664-4740 for the location of your nearest Toro distributor. Outside the USA, phone 1-909-688-9221.

This warranty does not apply where equipment is used, or installation is performed, in any manner contrary to Toro's specifications and instructions, nor where equipment is altered or modified.

Toro is not liable for indirect, incidental or consequential damages in connection with the use of equipment, including but not limited to: vegetation loss, the cost of substitute equipment or services required during periods of malfunction or resulting non-use, property damage or personal injury resulting from installer's actions, whether negligent or otherwise.

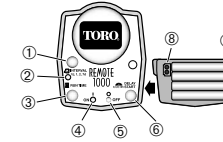
All implied warranties, including those of merchantability and fitness for use, are limited to the duration of this express warranty. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

TORO REMOTE 1000 / 3000 Individual Valve Controller

USER'S GUIDE

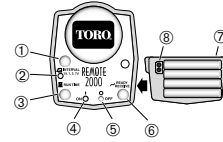
A. INTRODUCTION AND SET UP

Toro Remote 1000 Components



1. Interval Button
2. Interval Light
3. Run Time Button
4. On Light
5. Off Light
6. Delay Start Button
7. Battery Assembly
8. Connector Pin

Toro Remote 3000 Components



1. Interval Button
2. Interval Light
3. Run Time Button
4. On Light
5. Off Light
6. Ready Receive Button
7. Battery Assembly
8. Connector Pin

The following is a brief description of the Toro Remote components and display elements. All models share similar components. *The Toro Remote 3000 and have some different features. These features will be described in italics.* Each of these features is explained in further detail within this User's Guide.

1. Interval Button - Depressing this button sets the watering frequency (interval). You can set the watering frequency for 1/2 day, 1 day, 2 days or every 7th day.

- 1/2 Day = one watering cycle every 12 hours
- 1 Day = one watering cycle every day
- 2 Days = one watering cycle every other day
- 7 days = one watering cycle every 7th day

Each time this button is pressed, the interval is set to the next level. For example, press the Interval button four times to set the watering to occur once every 7 days.



2. Interval Light - This light has several functions. The first one is to acknowledge the input of the Interval Button use. If you press the interval button once for a 1/2-day interval, the light will flash once to acknowledge your input. It will flash twice for a 1-day delay, three times for a 2-day delay or four times for a 7-day delay.

3. Run Time Button - a) Depressing this button starts a watering cycle and electrically opens the valve. **b)** Depressing the button a second time ends the watering cycle and causes the valve to close. The time that occurs between **a** and **b** is stored as the run time of the valve.

4. On Light - This light has several functions. One function is to acknowledge the beginning of a run time by flashing once when the Run Time Button is pressed.

5. Off Light - This light has several functions also. One function is to acknowledge the end of a run time by flashing once when the Run Time Button is pressed a second time.

6. Delay Start Button (Toro Remote 1000 only) -Depressing this button will delay the start time of an irrigation sequence by 0, 4, 8 or 12 hours. The delay is acknowledged by all three lights (#2, #4 and #5) flashing, one sequence of flashing for 0 delay, 2 flashes for a 4-hour delay, three flashes for an 8-hour delay and four flashes for a 12-hour delay.

6. Ready Receive Button (Toro Remote 3000 only) -Depressing this button enables the Toro Remote 3000 to receive remote programming via the infrared signal from the TRCP 8+ Remote Programmer. Lights #2, #4 and #5 will flash once simultaneously to acknowledge that the Toro Remote 3000 is awake and ready to receive address information. After the Ready Receive button is pressed, the Toro Remote 3000 stays "awake" for one minute waiting for a signal from the remote programmer. If no signal is received during this period, the Toro Remote 3000 turns its infrared receptor off to conserve battery power.

Note: The Remote 3000 wakes up every second to look for a signal from the TRCP 8+. It is only necessary to depress the Ready Receive button to set an address.

7. Battery Assembly - A water-resistant, 6 VDC battery that powers the Toro Remote controller. The battery assembly mounts under the main controller unit with the 9 VDC battery adaptor that accepts a 9 VDC battery.

8. Connector Pin - This connector contains silicon grease to waterproof the battery connection. The battery assembly can only be connected to the Toro Remote in the correct position.

CAUTION: Only depress the Toro Remote controller buttons with the flat part of your finger. Using your fingernail can puncture the water-resistant membrane. Do not try to open either the controller unit or the battery assembly as the water-resistant membranes can be destroyed and you will void the warranty.

B. DESCRIPTION

The Toro Remote is a water-resistant automatic irrigation valve control module. The Toro Remote 1000 is programmed manually while the 3000 model can be programmed manually or remotely with the TRCP 8+ Plus infrared programmer. The Toro Remote can be mounted to the valve adapter of an automatic irrigation valve in the horizontal or vertical position. The program is stored in the Toro Remote memory for reliable operation. Battery life is one to two seasons of irrigation, depending upon the amount of irrigation during those seasons. Toro recommends replacing the battery annually to insure uninterrupted operation during the irrigation season. The Toro Remote monitors battery power and will not initiate a watering sequence if the battery power falls below the level required to close the valve. The program is stored in memory. The Toro Remote will resume the watering program when a fresh battery is installed.

C. SET UP

1. Install the valve. The valve is marked with an arrow that indicates the direction of water flow.

Note: Toro recommends that a manual valve be installed upstream of the automatic irrigation valve for ease of any future maintenance of the valve.

2. Install the valve adapter. Remove the automatic valve solenoid and install the valve adapter being careful not to cross-thread the plastic threads. If you purchased a Toro valve with a Toro Remote 1000 (Toro Remote 1500 model), it will have the valve adapter already installed. If you are using the Toro Remote with another brand of valve, purchase the correct valve adapter from your Toro dealer. (See Accessories section).

3. Check valve operation. Manually open and close the automatic control valve to insure correct operation and water pressure. Water pressure should be between 1.4 and 10 Bars (10–150 PSI).

4. With the valve in the closed position, slide the Toro Remote over the valve adapter, past the detent and into the "locked" position. The Toro Remote is now installed and ready to program.

D. PROGRAMMING THE TORO REMOTE

CAUTION: When programming the Toro Remote while it's attached to the valve, support the underside of the unit with your free hand or the force of your fingers pressing the buttons will likely damage the valve adapter. Toro recommends that you remove the unit from the control valve and program it in your hand.

Note: The Toro Remote comes from the factory with a preset back-up program. Installing the battery automatically starts a 15-minute run time beginning 24 hours later and repeats every 24 hours. Depressing the Run Time Button cancels the back-up program. Many users just modify the watering interval and use the 15-minute run time.

1. Set the Run Time

Since the Toro Remote is programmed in real time, try to start a watering sequence when you actually want the valve to operate. If that is not possible, start a watering sequence that can be delayed by 4, 8 or 12 hours to arrive at the time you want the watering to start (see "Delay Start" section).

* Depress the Run Time Button until the "On Light" (#4) flashes once to acknowledge the time. The valve will open about six seconds later.

* Depress the Run Time Button a second time when you want the irrigation to stop (this must be at least six seconds). The "Off Light" (#5) flashes once to acknowledge the end of irrigation and the valve will close about six seconds later. (If the valve fails to open or close, see "Troubleshooting" section).

Example: You depress the Run Time Button at 4 p.m. on a Saturday. The "On" light flashes to acknowledge the start. You depress the Run Time Button again at 4:30 p.m. The "Off" light flashes to acknowledge the end of irrigation. The run time is now set to start at 4 p.m. and run 30 minutes.

Note: When programming several Toro Remote's whose valves share a common water supply, stagger the start times so the valves do not turn on at the same time unless you have adequate water supply to run more than one valve at a time.

2. Set the Watering Interval

Depress the Interval Button the appropriate number of times to set the watering interval to every 1/2 day, every 24 hours, every 48 hours or once a week.

Example: The watering start time is 4 p.m. on Saturday and the run time is 30 minutes. You want to irrigate every other day.

After 4:30 p.m., depress the "Interval Button" three times for a 2-day operation. The "Interval Light" will flash three times to acknowledge 2-day operation. The next irrigation cycle will start on Monday at 4 p.m.

3. To Delay the Start

EXAMPLE: You decide that the irrigation should start at 4 a.m., not 4 p.m. After the irrigation has finished on Saturday (after 4:30 p.m.), depress the "Delay Start" button four times to delay the next start 12 hours. The three lights (#2, #4 and #5) will flash four times (once after each time you depress the "Delay Start Button") to acknowledge a 12-hour delay. The next irrigation will now be at 4 a.m. on Tuesday. The interval has been set to 2 days so the following irrigation will be at 4 a.m. on Thursday.

Note: The irrigation schedule can be amended at any time after an irrigation cycle has occurred.

To Add a second delay

EXAMPLE: You decide to have the irrigation start at 8 a.m. rather than 4 a.m. Sometime Tuesday after the irrigation cycle ends at 4:30 a.m., depress the "Delay Start Button" twice to delay the next irrigation by 4 hours. The lights (#2, #4 and #5) will flash twice to acknowledge a 4 hour delay. The next irrigation will now start at 8 a.m. Thursday and continue at that time every other day.

4. Programming by Remote Control.

Some advantages of remote control programming via the TRCP 8 + Remote Control Programmer are:

- 3 day start times per day available
- 7 time watering calendar
- Interval or Odd/Even day watering
- Complete remote programming instructions are included with the Model TRCP 8 + Remote Control Programmer

Activate the Toro Remote 3000's infrared receptor by depressing the Ready Receive Button (component #6). Lights #2, #4 and #5 will flash once simultaneously to acknowledge that the Toro Remote 3000 is awake and waiting to receive address information.

Note: You can set a manual irrigation at any time without altering the Toro Remote 3000 program that's stored in memory. A remote infrared transmitted program will override a manual program. Once the Toro Remote 3000 is programmed by remote control, the "Interval Light" and its manual function are deactivated.