Irritrol®

Addendum: Rain Dial® Installation and Programming Guide Update

Your Rain Dial controller has been updated with several **new features** making it faster to program, easier to maintain, compliant with water conservation restrictions and compatible with pressure pump and well water recovery systems. Best of all, it programs just like the original Rain Dial that professional installers and homeowners alike have become accustomed to over the years.

The Installation and Programming Guide provided with your Rain Dial does not currently include the information needed to utilize these new features. As an overview, read through the features and brief explanations listed below. Refer to "New Rain Dial Programming and Operating Procedures" starting on page 2 for step-by step programming procedures.

New Rain Dial Features

- **Programs like previous Rain Dial controllers**
  When using the standard features, programming is the same. The new features are behind current dial positions.
- **Odd/Even Date Watering Schedule**
  Municipalities or water purveyors will sometimes mandate Odd/Even date watering as a water conservation measure.
- **Day Exclusion Option from Odd/Even and Skip Days Watering Schedules**
  Enables select days to be restricted in Odd/Even and Skip Days watering schedules.
- **Water Budget by Program**
  Enables the run time of all stations in a program to be simultaneously adjusted up or down by percentage from 0 to 200% in 10% increments.
- **Well Recovery Delay**
  Enables an adjustable delay period from 1 second to 2 hours to be inserted between consecutive stations during a watering cycle – facilitates slow closing valves or well water recovery.
- **Pump/Master Valve On/Off during Well Recovery Delay**
  Allows the Pump/Master Valve circuit to be automatically switched on or off during a Well Recovery delay period. For example, a system supplied by a pump with slow closing valves would require the pump to be active during a delay between stations; a well water recovery system would not.
- **Pump/Master Valve Control by Station**
  Allows automatic Pump/Master Valve circuit operation to be selected for each station as needed.
- **Program Stack/Overlap Option**
  Enables watering operation to be restricted to one program at a time (stacked) or allowed to run up to 3 programs concurrently.
- **Rain Delay up to 9 Days**
  The Rain Dial can now be set to delay watering up to nine (9) days and then automatically resume its schedule.
  Added Program Start Time Removal Options
  Enables Program start time(s) to be turned off at four clock time increments provided between 11:59 p.m./12:00 a.m., 11:59 a.m./12:00 p.m., 5:59 a.m./ 6:00 a.m. and 5:59 p.m./ 6:00 p.m.
- **Station Test Program**
  A new semi-auto mode that enables all stations to be automatically operated in sequence using a temporary run time from 1 to 10 minutes. Perfect for system check during installation or servicing.
- **Manual Station Advance**
  Enables manual advance through the station sequence during test, manual, semi-auto or automatic start mode.
- **Clear Program Memory**
  Enables all watering program information of a selected Program to be quickly erased.
- **Diagnostic Circuit Breaker**
  Enables the controller to detect any station with excessive current draw, e.g., a faulty solenoid or short circuit. The affected station is automatically bypassed and identified on the display.
- **Default Reset**
  Enables the user to reset the controller back to factory settings.

New Rain Dial Programming and Operating Procedures
Odd/Even Date Watering Schedule
Start with the FUNCTION switch in the SET PROGRAMS position. Select Program A, B or C with the PROGRAM switch.

1. Set the Dial to the SKIP DAYS position.
2. Press the MANUAL button repeatedly until "---" (Off) appears in the display.

   ` -- -- -- `

3. Press the **+** /— buttons to select "Odd" or "EVn."

   `Odd`   `EVn`

4. Press the MANUAL button. The Month setting will be displayed, e.g., "JA " (January).

   `JA`

5. Press the **+** or— button to select the current month.
6. Press the MANUAL button. The Day setting will be displayed, e.g., "J:01" (January 1st)

   `J:01`

7. Press the **+** or — button to select the current day.
8. Press the MANUAL button. The Year setting will be displayed, e.g., "06" (2006).

   `06`

9. Press the **+** or — buttons to select the current year.
10. Set the FUNCTION switch back to RUN and set the Dial back to current time.
    Note:
    • If an Odd/Even schedule is used in any program, the current day of the week cannot be changed in the TODAY dial position.
    • When an Odd/Even or Skip Days schedule has been selected for a Program, it must first be turned off to enable an optional watering schedule type to be selected.

Day Exclusion Option for Odd/Even Date Schedule
1. Start with the FUNCTION switch in the SET PROGRAMS position. Select Program A, B or C with the PROGRAM switch.
2. Turn the Dial to select the day to be excluded.
3. The display shows the "Odd" or "EVn."

   `Odd`   `EVn`

4. Press the **+** or — button to select "OFF."

   `OFF`

5. To exclude other days, repeat this procedure.
6. Set the FUNCTION switch back to RUN and set the Dial back to current time.

Day Exclusion Option for Skip Days Schedule

1. Start with the FUNCTION switch in the SET PROGRAMS position. Select Program A, B or C with the PROGRAM switch.

2. Turn the Dial to select the day to be excluded.

3. The display shows the icon "SKIP MODE" and "---"

```
SKIP     •• •• ••
MODE
```

4. Press the **+** or **—** button to select "OFF."
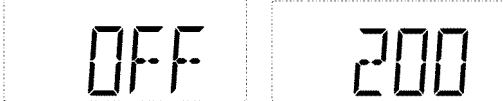
```
SKIP     OFF
MODE
```

5. To exclude other days, repeat this procedure.

6. Set the FUNCTION switch back to RUN and set the Dial back to current time.

Water Budget by Program

1. Start with the FUNCTION switch in the SET PROGRAMS position. Select Program A, B or C with the PROGRAM switch.

2. Turn the Dial to SKIP DAYS position.

3. Press the MANUAL button repeatedly until "100" appears in the display.

```
100
```

4. Press the **+** or **—** button to set the Water Budget from OFF to 200% in 10% increments.

```
OFF          200
```

5. Set the FUNCTION switch back to RUN and set the Dial back to current time.

Well Recovery Delay (timed delay between sequential stations)

1. Start with the FUNCTION switch in the SET PROGRAMS position. Select Program A, B or C with the PROGRAM switch.

2. Turn the Dial to the SKIP DAYS position.

3. Press the MANUAL button repeatedly until "W:00" (Well Recovery-Off) appears.

```
W:00
```

4. Press the **+** or **—** button to set the Well Recovery period from 0 to 59 seconds, 1 to 59 minutes, or 1.0 to 2.0 hours as shown in the following examples.

```
W:59        W:01 MIN        W:2.0 HR
```

5. Set the FUNCTION switch back to RUN and set the Dial back to current time.

Pump/Master Valve On/Off During Well Recovery

1. Start with the FUNCTION switch in the SET PROGRAMS position. Select Program A, B or C with the PROGRAM switch.
2. Turn the Dial to the SKIP DAYS position.
3. Press the MANUAL button repeatedly until "P:OF" (Pump Off) appears.

4. Press the **+** /— buttons to select "P:On" (Pump On) or "P:OF" (Pump Off) during Well Recovery delay period.

5. Set the FUNCTION switch back to RUN and set the Dial back to current time.

Pump/Master Valve On/Off by Station

1. Start with the FUNCTION switch in the SET PROGRAMS position. Select Program A, B or C with the PROGRAM switch.
2. Turn the Dial to the station number. "OFF" or the current run time will be displayed.

3. Press the MANUAL button to display "P:OF" (Pump Off) appears.
4. Press the **+** /— buttons to select "P:On" (Pump On).
5. Repeat the procedure for each station as needed.
6. Set the FUNCTION switch back to RUN and set the Dial back to current time.

Program Stack/Overlap Control

1. Start with the FUNCTION switch in the SET PROGRAMS position. Select Program A, B or C with the PROGRAM switch.
2. Turn the Dial to the SKIP DAYS position.
3. Press the MANUAL repeatedly until "3:On" appears in the display (3 Programs can overlap).

4. Press the **+** /— buttons to select "1:On" (stacking) or "3:On" (Up to 3 Programs can overlap).

5. Set the FUNCTION switch back to RUN and set the Dial back to current time.

Rain Delay

1. Start with the FUNCTION switch in the OFF position and the Dial set to CURRENT TIME.
2. Press the **+** or — button to select the number days (1 to 9) to delay watering. The selected delay day number and the current time displays will begin alternating.

3. Set the FUNCTION switch in the RUN position.
   Note: The delay day number will decrease as each day elapses.

Station Test Program

1. Turn the Dial to the SKIP DAYS position. Leave the FUNCTION switch in the RUN position.
2. Press the MANUAL button to display "T:02 MIN." All station numbers with an assigned run time will be displayed.

1 2 3 4 5 6 7 8 9 10 11 12

T:02 MIN

3. Press the **+** or **—** button to set a test run time for all displayed stations at once from 1 to 10 minutes.
4. Press the SEMI-AUTO button. The first station in sequence will turn on and run for the set time.

1

T:02 MIN

5. Turn the Dial to the CURRENT TIME position. The display will show the time of day and the currently operating station number.

   Note: During the Station Test procedure or automatic/semi-automatic program operation, press the MANUAL button to advance to the next station number in sequence.

Clear Program Memory

IMPORTANT: This function permanently erases all current settings of a selected Program (remaining Programs are not affected by this procedure). All settings of the selected Program, e.g., day schedule, start time and station run time will be turned off.

1. Start with the FUNCTION switch in the SET PROGRAMS position. Select Program A, B or C with the PROGRAM switch.
2. Turn the Dial to the SKIP DAYS position.
3. Press the MANUAL button repeatedly to display "CLr" (clear).

CLr

4. Press the **+** button one time. A question mark will be displayed as a warning prompt.
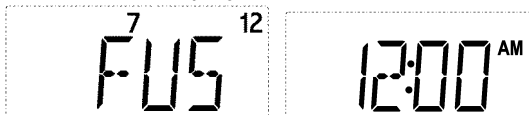
CL?

5. Press the **+** button again to clear the Program memory. The prompt "ENd" will be displayed.

ENd

6. Set the FUNCTION switch back to RUN and set the Dial back to current time.

Diagnostic Circuit Breaker

The message "FUS" and the affected station number will be displayed if a short circuit is detected. The station will be bypassed during the watering cycle and the next station is sequence will run. The display will alternate with the time of day and the currently operating station number.

7   12

FUS   12:00 AM

After fixing the shorted wire or solenoid, press any button to clear the message.

Default Reset

To reset the controller back to the factory default settings, use the following procedures.

1. While the controller is powered-up, disconnect the ribbon cable from the socket on the terminal board.
2. Disconnect the battery.
3. Set the PROGRAM switch to "B".
4. Set the MODE switch to Set Program.
5. Hold down the MANUAL button while reconnecting the ribbon cable.
6. Reprogram the controller.