DIG CORPORATION 3 YEAR WARRANTY

DIG CORPORATION warrants these products to be free from defects in material and workmanship for a period of three years from date of purchase. This warranty does not cover damage resulting from accident, misuse, neglect, modification, improper installation or subjection to line pressure in excess of 150 lbs. per square inch. This warranty shall extend only to the original purchaser of the product for use by the purchaser. This warranty shall not cover batteries or any malfunction of the product due to battery failure. The obligation of DIG CORPORATION under this warranty is limited to repairing or replacing at its factory this product which shall be returned to the factory within three years after the original purchase and which on examination is found to contain defects in material and workmanship.

DIG CORPORATION SHALL IN NO EVENT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND; THE SOLE OBLIGATION OF DIG BEING LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Unattended use for prolonged periods without inspection to verify proper operation is beyond the intended use of this product, and any damage resulting from such use shall not be the responsibility of DIG CORPORATION. There are no warranties which extend beyond the description on the face hereof. In the case of purchase of the product for use other than, for irrigation purposes, DIG CORPORATION hereby disclaims any implied warranties including any warranties of merchantability and fitness for a particular purpose. In the case of the purchase of the product for personal, family or household purposes, DIG CORPORATION disclaims any such warranties to the extent permitted by law. To the extent that any such disclaimer or implied warranties shall be ineffectual, then any implied warranties shall be limited in duration to a period of three years from the date of the original purchase for use by the purchaser. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

In order to obtain performance under this warranty, the unit must be returned to the factory, along with proof of purchase indicating original date of purchase, shipping prepaid, addressed as follows:

DIG CORPORATION, 1210 Activity Drive, Vista, CA 92083. Repaired or replaced units will be shipped prepaid to the name and address supplied with the unit returned under warranty. Allow four weeks for repairs and shipping time. Repair of damaged units not otherwise within warranty may be refused or done at a reasonable cost or charge at the option of DIG CORPORATION.

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

CUSTOMER SERVICE:

1-800-322-9146 FAX: 760-727-0282

IRRIGATION PRODUCTS

1210 Activity Drive
Vista, CA 92083, USA

Website:
http://www.digcorp.com
e-mail: dig@digcorp.com

010102 DIG CORP 26-020
Printed in the USA

INSTRUCTION MANUAL

Model 7001
Battery Operated Irrigation Controller with Hose or Pipe Thread

Features

- Weekly or cyclical programming
- 4 operations per day in weekly program
- Irrigation duration – from 1 minute to 12 hours
- Irrigation frequency – from 8 times/day (every 3 hours) in weekly mode to once a month in cyclical programming mode
- Withstands harsh climatic conditions
- Simple, four-button programming
- Optional manual operation
- Operation requires one 9V alkaline battery

IRRIGATION PRODUCTS

TABLE OF CONTENTS

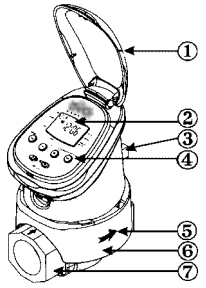
INTRODUCTION

Thank you for purchasing a DIG Controller.

Please take the time to read through the enclosed instructions and follow them step by step. If you have any questions, please call our customer service line 1-800-344-6641.

1. PARTS IDENTIFICATION

1) Top cover
2) Controller display
3) Mechanical operating handle
4) Programming & operating buttons
5) Water flow direction
6) Skirt
7) Hydraulic valve



2. SETTING UP THE IRRIGATION CONTROLLER

ASSEMBLY

Your 7001 controller has a 3/4" inlet and outlet with female pipe thread and can be installed in line directly to 3/4" PVC male pipe thread fittings as part of your sprinkler's valve manifold or as a stand-alone unit. (Fig. 1)

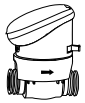


Figure 1

OR

The 7001 controller can be attached to a hose or faucet/spigot using the two adapters that are included with the controller. (Figure 2)

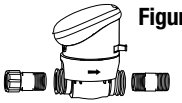


Figure 2

Warning: Wrap all fittings with Teflon tape! Do not use pipe cement on valve, this will damage the valve and void the warranty!

NOTE: The correct installation of the controller is where the orange handle is away from the faucet and the controller's digital display reading is facing the faucet.

IMPORTANT: Make sure that the flow direction arrow engraved on the side of the controller is pointed away from the water source.

3. INSTALLATION

3.1 IN-LINE INSTALLATION

1. Shut off main water supply.
2. Install a 3/4" ball or gate valve to a PVC pipe or to the valve manifold before installing the controller (Figure 1).
3. Turn water supply on to flush the line and then shut the water off using the ball or gate valve that you have installed.
4. Install the controller wrapping Teflon tape on all male thread fittings (Figure 1).
5. Turn water supply on to pressurize the system, the controller will open momentarily and then will shut off.
6. Program the controller. (See Section 4 for programming)

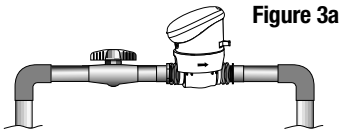


Figure 3a

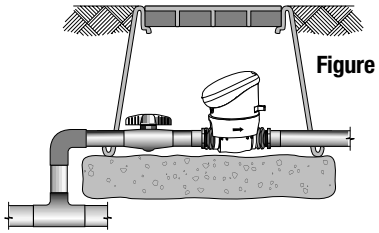


Figure 3b

3.2 FAUCET INSTALLATION

1. First attach the swivel female hose thread by male pipe thread adapter to the inlet side of the controller, by threading the male side of the adapter to the controller inlet, see arrow for water flow direction. (Figure 4)

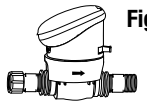


Figure 4

2. Attach the male hose thread by male pipe thread adapter to the outlet side of the controller by threading the male pipe thread side of the adapter to the controller (finer thread). (Figure 4)

   If vacuum breaker (antisiphon valve) is part of your faucet (new houses) do not install any other vacuum breaker (antisiphon valve) to the faucet. If vacuum breaker (antisiphon valve) is part of your city code and you have purchased a unit as part of your drip system, install the device with the female hose thread to the faucet and the male thread to the swivel adapter (see Figure 5a and 5b. For pipe thread outlet on the antisiphon, install the controller directly to the antisiphon.

3. Connect the controller to your faucet using the swivel adapter (Figure 5a) or to the vacuum breaker (antisiphon valve) with hose thread if installed (Figure 5b) DIG Model #10.

Figure 5a

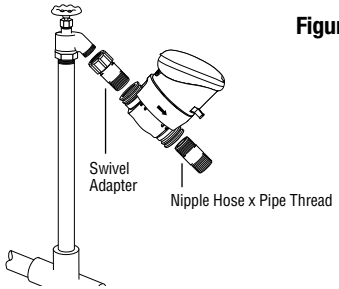
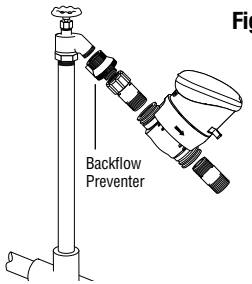


Figure 5b



4. After installation of the controller, if you use a drip system, first connect the pressure regulator with hose thread DIG Model #4 to lower the incoming pressure to your drip system and then the swivel adapter DIG Model #18 and then the drip line. See Figures 6a and 6b.

Figure 6a

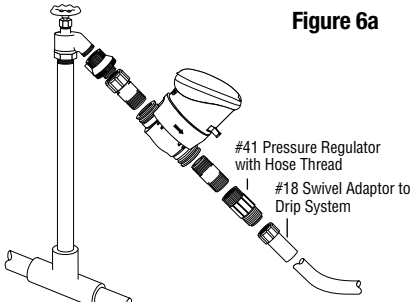
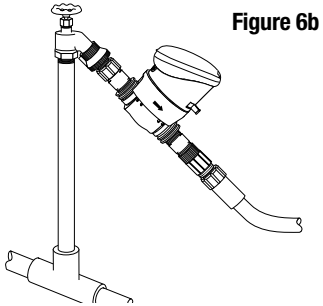


Figure 6b



Drip system installed with filter. See Figures 7a and 7B.

Figure 7a

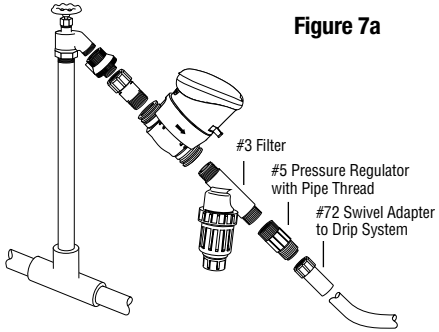
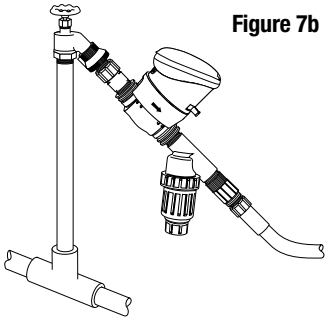
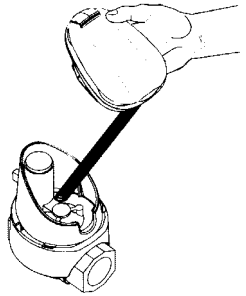


Figure 7b

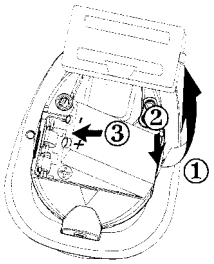


5. Turn the faucet on, the controller will open momentarily and then will shut off.
6. Program the controller. (See #4 – Irrigation Programming)

3.3 BATTERY INSTALLATION



1. Holding the upper section of the controller above the mechanical handle, use a firm upward twist to release the controller from the skirt.



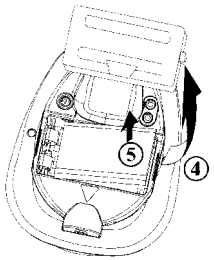
2. Invert the controller and use firm pressure to lift the battery compartment cover (1)
3. Insert the lower end of the battery (2) first, then press on the top end (3) to ensure the battery is firmly in place.

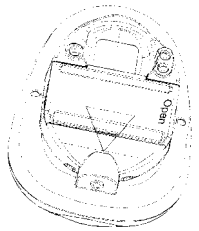
Battery Removal

1. Remove the battery compartment cover (4).
2. Lift the lower end of the battery (5) first. If necessary, use the flat end of a small screwdriver.

- ***Removing the batteries from the top end may damage the connections.***
- ***Use alkaline batteries only.***
- ***Note: battery polarity is marked in the battery compartment.***

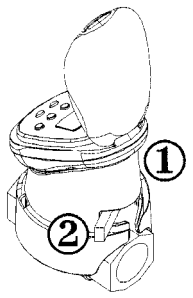
  Replace battery compartment cover in its proper place, ensuring a triangle is formed on the underside of the controller.





3.4 MANUAL MECHANICAL OPERATION

The irrigation valve can be opened and closed independent of controller operation. Manual operation is useful when irrigation is required immediately but there is inadequate time and/or knowledge for programming or the battery is unavailable. The manual operating handle is located in the back, lower section of the skirt. It has two settings: open (1) and automatic (2).



NOTE: The manual operating handle can only open the valve. It cannot close the valve if the irrigation controller program opened it.

REMEMBER: The manual operating handle must be on automatic (AUTO) for controller operated irrigation.

4. IRRIGATION PROGRAMMING

This section contains examples of weekly and cyclical irrigation programs.

There are two options for setting irrigation frequency: Cyclical Mode (see 4.4), where watering occurs after a pre-set interval, (one start time per day in this mode), or Weekly Schedule (see 4.3) Mode, where watering occurs on specific days of the week (up to four start times per day in this mode). You must select one or the other mode, not both.

Simply alter data in the example to adapt the program to meet your irrigation requirements.

4.1 PROGRAMMING METHOD

Programming step – used to select the appropriate programming mode (e.g.) clock setting mode.

Data decrement (decrease) – lowers the value of the selected parameter (e.g. deducts an hour).

Data increment (increase) – raises the value of the selected parameter (e.g. adds on an hour).

Parameter selection – used to select the parameter to be changed (e.g. hour, minute, etc.) To implement the change, the selected parameter must be blinking.

If no changes are implemented, the controller display will always revert to the main screen (clock).

Emergency Irrigation: If no buttons are pressed, the clock will blink continuously. After 10 minutes, the controller will implement 5-minute duration on a 24-hour cycle (default mode).

4.2 SETTING CURRENT TIME & DAY OF THE WEEK

To enable the irrigation controller to operate the irrigation system at the required times, the current time and day of the week must be set as shown below:

Setting the Clock:

1. Press ↳ several times until 🕐 appears.
2. Press ↔. The hour digits blink. Set the current hour with the aid of ⊕ and ⊖. (Note: AM and PM designations appear.)
   To display the American/European clock, press concurrently on ⊕ and ⊖ buttons once the hour digits stop blinking.
3. Press ↔. The minute digits blink. Set the current minute with the aid of ⊕ and ⊖.

Setting the Day of the Week

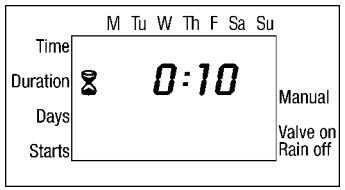
1. Press ↔. A blinking drop will appear at the top of the display. Set the blinking drop on the current day of the week by pressing ⊕ and ⊖.

■ Display digits will stop blinking after 10 seconds. If the last parameter stops blinking before you have completed your programming, press ↔ to continue the process.

4.3 PROGRAMMING A WEEKLY IRRIGATION SCHEDULE (Set Days of the Week)

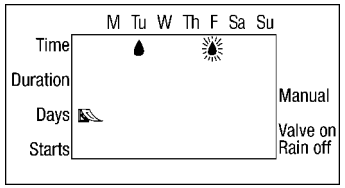
Let's assume that we want to program the irrigation controller to water three times a day, at 8:30 am, 1 pm and 7 pm for 10 minutes each time, on Tuesday and Friday.

Programming Duration of Irrigation



1. Press ↳ until ⌛ appears opposite "Duration".
2. The hour digit is blinking (0). Press ⊕ or ⊖ to set desired number of hours.
3. Press ↔. The minute digits will blink. Press ⊕ or ⊖ until the minute digits reach 10.

Programming Irrigation Days



1. Press ↳. ✎ will appear opposite the word "Days". If you are programming the controller for the first time, the word OFF will blink on the display.
2. Press ↔. A blinking 💧 will appear under Monday in the upper section of the display. Using ↔, position the blinking marker under Tuesday, and press ⊕. The marker under Tuesday will stop blinking and move to the right, positioning itself under Wednesday. Press ↔ twice more until the blinking marker reaches Friday. Press ⊕ again. Droplets should appear only under days you wish to irrigate.

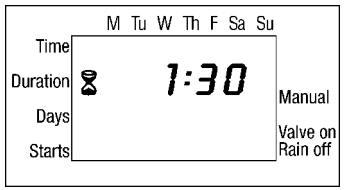
Setting Irrigation Start Time/Date:

1. Press ↳. START I and the blinking 12:00 am will appear on the display.
2. Using ⊕ or ⊖, set the start time at 8 AM (note the AM and PM indicators). Press ↔. Repeat and set the minutes to 30. Press ↳ and repeat this operation for the second irrigation period (START II) at 1:00 PM, and for the third irrigation period (START III) at 7:00 PM.
3. Press ↳ to continue to START IV and then program to the current time of the day and day of the week.
   To cancel one of the start times, select the start time by pressing ↳, the hour digit blinks, press ⊕ or ⊖ until the word OFF appears.

4.4 SETTING A CYCLICAL IRRIGATION PROGRAM

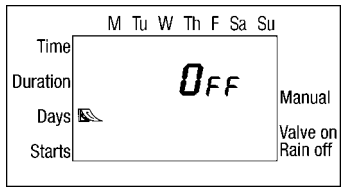
Let's assume that we want to program the irrigation controller to open the valve at 10:45 am for a period of 1.5 hours, once every three days, starting on Monday.

Setting Irrigation Duration

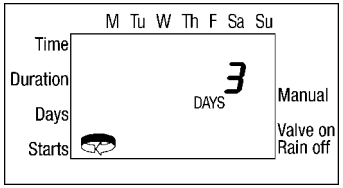


1. Press ↳ until ⌛ appears near "Duration".
2. Press ↔. The hour digits blink. Press ⊕ or ⊖ until the hour digit changes to 1. Press ↔. The minute digits blink. Press ⊕ or ⊖ until the minute digits change to 30.

Setting Irrigation Cycle

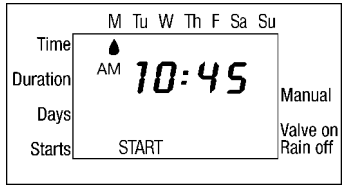


1. Press ↳ until ◿ appears.
2. Press ↔ a number of times (go through all the days of the week) until the word OFF blinks on the display.
3. Press ↳ as long as the display is blinking. 🚿 will appear on the display and the word OFF will blink.
4. Press ⊕ until the word DAYS appears on the display and the digit 3 is blinking.



NOTE: To return back to weekly cycle from cyclical hour or day, press ⊕ and ⊖ until the OFF appears blinking. Press the ↳ and current time and day will appear. Follow 4.3 for programming Weekly Irrigation Days.

Setting Irrigation Start Time:



1. Press ↳. START will appear and the start time will blink.
2. Press ⊕ or ⊖ until the hour displayed reads 10 AM.
3. Press ↔ once. The minute display will blink.
4. Press ⊕ or ⊖ until the minutes displayed reach 45.
5. Press ↔ once. The marker under Monday will blink.
6. Press ⊕ once. The blinking marker will blink on Tuesday and set Monday as the starting date.

NOTE: In a cyclical program, the irrigation days are liable to vary from week to week because of cycle length.

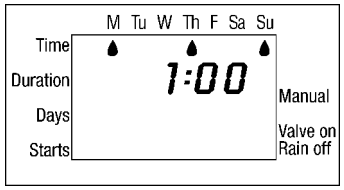
NOTE: To get out of cyclical mode, press ↳ button until 🚿 appears next to "starts". Press ⊖ button until "OFF" appears on the display, then press ↳ button again to return to current time screen.

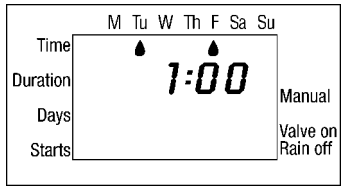
Example:

If the cyclical irrigation program in section 4.4 begins on Monday and operates every 3 days:

This would be the order of the cycle in one week.

Week 1

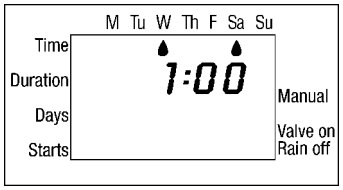


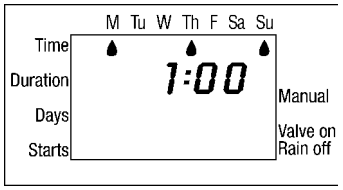


Week 2

But if the program starts on Tuesday:

Week 1





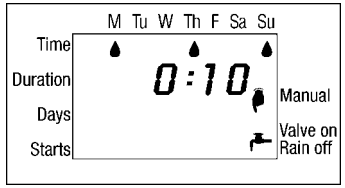
Week 2

4.5 COMPUTERIZED MANUAL OPERATION

This option operates the valve for the defined irrigation period. The valve will close automatically at the end of the irrigation period.

Note that the originally programmed irrigation schedule will continue to function at the set times. This setting cannot be implemented when the display is blinking.

4.6 MANUAL OPERATION:



Press ↳ until current time is displayed. Press MANUAL. 🚿 will appear next to the word "Manual", and 🚰 will appear underneath it and the valve will open.

The days of the week and the irrigation duration that you set in the program will appear on the display.

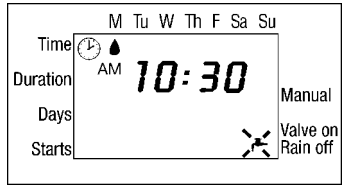
Canceling Operation:

Press MANUAL again. The 🚰 and 🚿 symbols will disappear from the display.

- If the irrigation duration is set at zero (0:00) in automatic mode, irrigation will not occur.
- Manual irrigation cannot be performed when the controller is set for programming (display is blinking).

4.7 IRRIGATION CONTROLLER SUSPENSION (Rain Off)

This option is used to temporarily suspend irrigation controller operation, for example, while it is raining. The irrigation operation schedule remains in the controller memory but is not implemented until the suspension is cancelled.



Suspension:

Press RAIN OFF for 3 consecutive seconds until the ☂ appears.

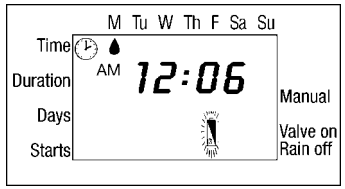
Cancel Suspension:

Press RAIN OFF for 3 consecutive seconds to return irrigation system control to the irrigation controller. The ☂ symbol will disappear.

■ During suspension, the MANUAL button will not function.

5. ADDITIONAL DISPLAYS

5.1 BLINKING LOW BATTERY WARNING



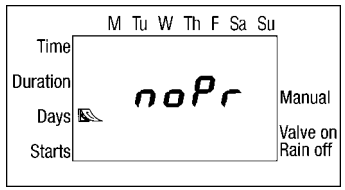
A blinking battery icon appears on the display when the batteries are weak. At this point, the battery still contains a limited amount of energy for valve operation. The battery should be replaced promptly.

If the battery is not replaced, the irrigation controller will continue to open the valve 8 additional times according to the program. It will then suspend the program and OFF will appear on the screen.

Program data will be retained for 30 seconds during battery changing.

An irrigation controller without a battery will not operate the valve.

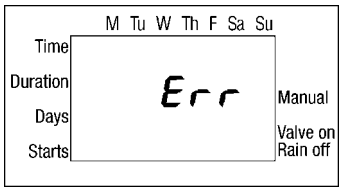
5.2 MISSING DEFINITION IN IRRIGATION PROGRAM



noPr will appear when programming irrigation days (see section 4.3 'Programming Irrigation Days'), if no irrigation days have been specified.

In this case, the valve cannot be opened during the computerized manual operation (see section 4.5).

5.3 PROGRAMMING ERROR



In the cyclical program (see section 4.4) if the irrigation duration programmed is equal to or longer than the irrigation cycle, the word **Err** will appear.

To cancel the error, press ⊕ or ⊖ to increase the irrigation cycle.

6. MAINTENANCE

1. Remove batteries if the irrigation controller will not be used for a prolonged period.
2. Under normal usage, the battery (alkaline) should last for at least one year.
3. Recommended water pressure – 10-135 psi.
4. Remove timer when temperature drops below 32°F.

7. HELPFUL HINTS AND ADDITIONAL INFORMATION

1. Keep cover closed after programming.
2. Test valve in manual mode after programming.
3. Minimum flow rate is 30 gph.

TO ORDER REPLACEMENT OR SPARE PARTS:

1-800-344-2281 FAX: 760-727-0282

We at DIG Corporation understand that most dealers do not carry spare parts. For your convenience, if you need one of these parts. SEND your order to DIG Corporation, 1210 Activity Drive, Vista, CA 92083.

Parts will be sent within 5 days.

For faster service, you may call DIG's customer service number 1-800-322-9146 and parts can be shipped immediately.

All non pre-paid phone orders over $20 will have an added COD charge.

Make checks payable to Dig Corporation.

Choose correct part and circle.

Add total dollar value $_____

Add $5.00 for shipping and handling $ 5.00

California residents add sales tax $_____

TOTAL $_____