

DOUBLER²

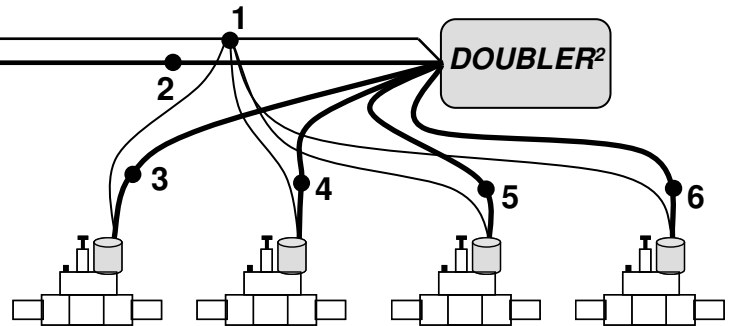
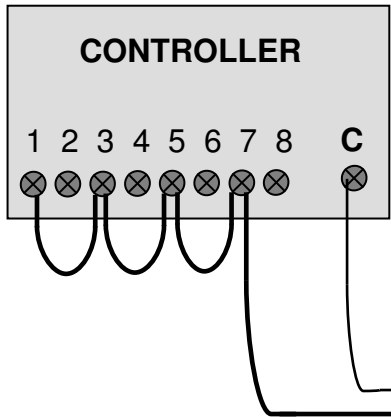
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INSTRUCTIONS FOR INSTALLING DOUBLER² COMPATIBLE WITH ALL 24VAC CONTROLLERS

STEP 1 - INSTALLATION IN THE VALVE BOX

IN THE VALVE BOX

1. Connect WHITE wire and one wire from each valve solenoid to your field COMMON wire.
 2. Connect STATION/HOT wire from the controller to BLACK wire
NOTE: Disconnect station/hot from any valves, if applicable.
 3. Connect the RED wire to the FIRST valve solenoid.
 4. Connect the YELLOW wire to the SECOND valve solenoid.
 5. Connect the BLUE wire to the THIRD valve solenoid.
 6. Connect the GRAY wire to the FOURTH valve solenoid.
- Be sure to WATERPROOF all wire connections.



Specifications

Input: 24VAC, 60Hz

Nom. Power: 33ma

Output: 24VAC up to 8A

Switch time: 7ms

1 year full replacement warranty against defects

STEP 2 - INSTALLATION AT THE CONTROLLER

AT THE CONTROLLER

1. Connect jumper wires between the four (4) stations in the controller you wish to use to control your valves. (On solid state controllers these stations should not be in sequence.) See Example A.
2. Set your watering times on each of the jumpered stations. Your valves will operate according to the time set on these stations.

You have now installed your DOUBLER².

IMPORTANT: Your DOUBLER² will need to be powered up four times to keep all valves in sequence. If you are only utilizing three of the DOUBLER²'s outputs, a fourth station with a minimum time set on it may be used to reset your unit back to its first output. Each time the DOUBLER² receives power it will cycle to the next output in the following order:
Red-Yellow-Blue-Gray, Red-Yellow-Blue-etc.

*****If you only need to run two valves on one hot wire, try our original DOUBLER*****

IMPORTANT!!

AFFIX THIS DECAL IN, ON OR NEAR CONTROLLER & FILL IN THE STATION NUMBER(S) YOUR DOUBLER² IS USING. THIS DECAL WILL PROVIDE FUTURE REFERENCE FOR USE IN PROGRAMMING & MAINTENANCE OF THIS SYSTEM.

CONTINUED ON REVERSE

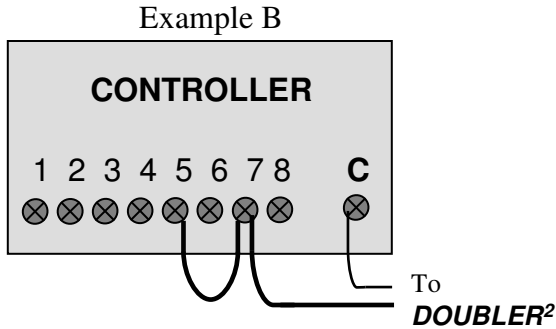


STEP 2 - INSTALLATION AT THE CONTROLLER - CONT'D

OR

(ALTERNATE METHOD OF WIRING AT CONTROLLER)

If you do not have four stations open in your controller **AND** your controller has multiple programs (i.e. A & B):



1. Connect a jumper wire between two (2) stations in your controller you wish to use to control your valves. **(On solid state controllers these stations should not be in sequence.)** See Example B.

2. Set time on these two stations on both program A and program B. Your valves will operate according to the time set on these stations.

You have now installed your DOUBLER².

PLEASE NOTE: Your DOUBLER² will water the valves in the following order: Red-Yellow-Blue-Gray. If the incorrect valve is watering on a station, switch the last DOUBLER²'s station (i.e. Example A station 7) on and off until the correct valve is watering. The next time the controller starts its cycle the correct valve will be watering.

Thank you for purchasing the DOUBLER²! At TSM, quality is our highest priority. We appreciate the trust that our customers have placed in our products and since 1985 have strived to provide the highest quality products that will continue to serve our customers well into the future. When we build a product, the utmost care goes into ensuring that it will work the first time...and every time. If you should have any questions about this product, or any of our other products, please contact us.

TO TEST: If necessary, you may perform an operational test on DOUBLER² to ensure it is functioning properly. To test this unit:

1. Apply 24VAC to the black and white wires of the DOUBLER².
2. With a meter, find the hot output by measuring between the white wire and each one of the output wires. You should read 24VAC out.
3. Switch the power to the DOUBLER² off and back on once and test between the white wire and the next output wire.
4. Repeat step 3 until you have cycled through all of the units outputs a few times to ensure it is working correctly.

After testing or servicing sprinkler systems, turn the last DOUBLER² station on and off until the correct valve is watering. The controller will then activate all valves in the order you chose.

ONE YEAR LIMITED WARRANTY

TRANSITIONAL SYSTEMS MANUFACTURING INC., hereinafter referred to as the manufacturer, warrants its products including, but not limited to, those manufactured to specifications supplied to it, for a period of one year from the date of delivery to (a) distributor's vendee, or (b) purchaser other than distributor buying directly from manufacturer, to be free from defects in workmanship and materials. Any defect appearing more than one year from the date of delivery to purchaser shall be deemed to be due to ordinary wear and tear. Manufacturer, however, assumes no risk or liability for results of the use of the products purchased from it, including but without limiting the generality of the foregoing: (1) the use in combination with any electrical or electronic components, circuits, systems, assemblies or any other materials or substances; (2) unsuitability of any product for use in any circuit or assembly or environment. Purchaser's rights under this warranty shall consist solely of requiring manufacturer to repair, or in manufacturer's sole discretion replace, free of charge, F.O.B. factory, any defective items received at said factory within said year and determined by manufacturer to be defective. The giving of or failure to give any advice or recommendation by manufacturer shall not constitute liability of the manufacturer, AND IS IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESSED, IMPLIED, OR STATUTORY AS TO MERCHANTABILITY, FITNESS FOR PURPOSE SOLD, DESCRIPTION, QUALITY, PRODUCTIVENESS, OR ANY OTHER MATTER. In no event shall manufacturer be liable for special or consequential damages or for delay in performance of this warranty. Some states do not allow the limitation or exclusion of incidental or consequential damages and some states do not allow limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.



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