

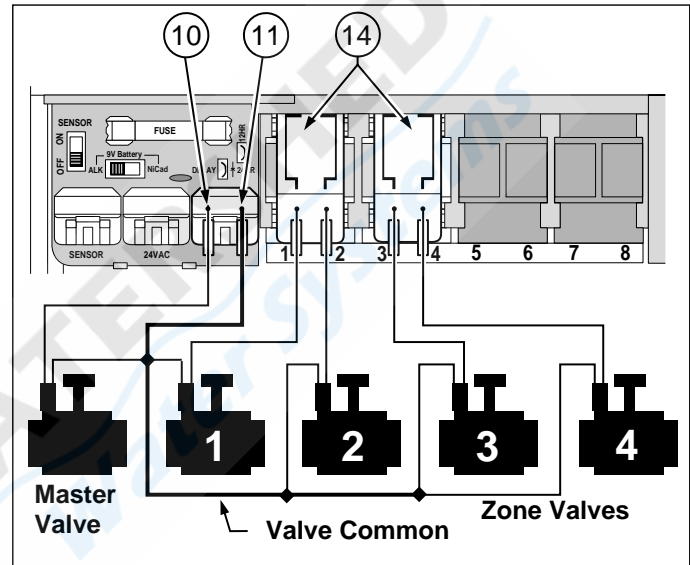
Connecting The Valves

1. Route the valve control wires between the valves and the timer.

Note: Using 18 AWG (0.75 mm²) multi-wire sprinkler valve connection cable is recommended. This cable is insulated for direct burial and is color-coded to simplify installation.

2. Attach the white color-coded wire from the cable to one wire from each valve solenoid. (Either solenoid wire can be used for this connection.) This is called the **valve common** wire.
3. Attach a separate cable wire to the remaining wire from each valve solenoid. Make a note of the wire color code used for each valve and the watering zone it controls. You will need to have this information when connecting the valve wires to the timer.
4. Use screw-on wire fasteners to secure each wire connection. Waterproof all connections with grease caps or similar insulation method.
5. Route the wire cable into the timer. Strip insulation back 1/2" (13mm) from all cable wires.

Note: The ECx has snap-in wire terminals. To attach wires, simply raise the lever, insert the stripped wire, and press the lever down to secure.



6. Referring to the Timer Components on page 5 and the diagram above, secure the valve common wire to the terminal labeled COM (11). Connect the individual zone valve wires to the appropriate zone module terminals (14). Connect the master valve wire (if applicable) to the terminal labeled PUMP/MV (10).

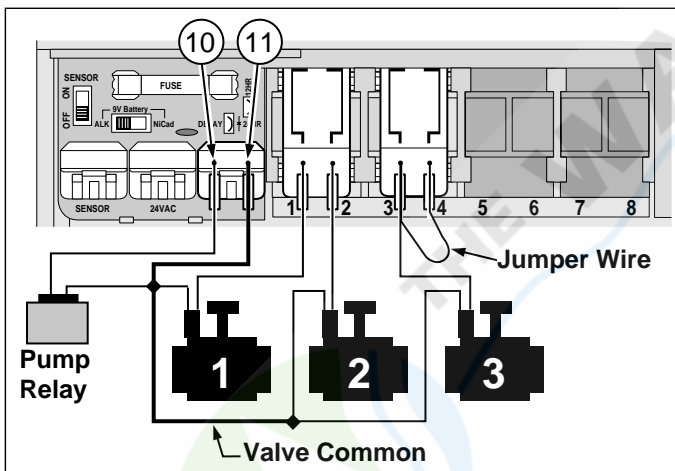
Note: Connecting a master valve (or pump relay) is optional and may not be required in your sprinkler system.

Connecting A Pump Start Relay

(Optional)

Caution: To prevent timer damage, ensure the relay current draw does not exceed 0.35 Amps. Do not connect the timer directly to the pump starter.

1. Route a wire pair from the pump relay into the timer housing
2. Connect one wire to the terminal labeled COM (11). Connect the remaining wire to the terminal labeled PUMP/MV (10) as shown below.

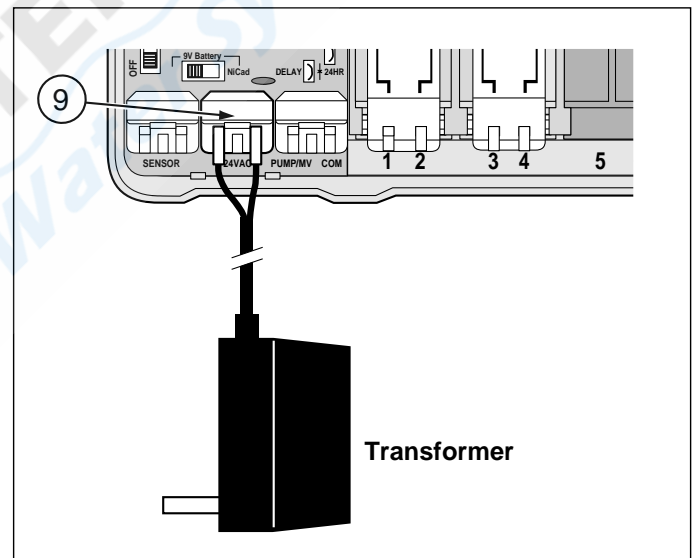


Caution: To prevent pump damage due to “dead-heading”, connect a jumper wire from any unused zone terminal to a zone terminal with a valve connected.

Connecting The Transformer

Caution: Do not plug the transformer into an electrical outlet until all of the wiring procedures have been completed.

1. Ensure the transformer is unplugged.
2. Connect one transformer cable wire to each terminal labeled 24 VAC (9). The wires can be connected to either terminal.




Connecting A Toro Rain Switch

(Optional)

The Toro Rain Switch (model # 53221) is a remote rain sensing device which can be connected directly to your ECx to automatically interrupt watering during rain.

A sensor bypass switch is provided in the ECx which enables the Rain Switch operation to be turned On and Off.

When the Rain Switch absorbs rain water it automatically signals the ECx to suspend all watering operations. The “No Watering” symbol  will appear in the upper right corner of the display until the Rain Switch dries out and automatically resets. The “No Watering” symbol will disappear and timer operation will resume as programmed.

1. Route the wire cable from Toro Rain Switch into the timer housing with the valve wires.
2. The Rain Switch cable has four wires: two copper wires and two silver wires. Only two of the wires are used. Connect the heavier 18 AWG (0.75mm²) copper wire and the thin 24 AWG (0.50mm²) silver wire to the terminals labeled SENSOR (8). Trim off the remaining two cable wires.
3. Set Sensor Switch (6) as required: ON allows the Rain Switch to interrupt watering; OFF bypasses the Rain Switch input.

