

02/19

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# Installation and Operating Instructions PCT2





Leaders in water measurement and control

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## **INSTALLATIONS INSTRUCTIONS:**

- 1 Install the control in the desired location, noting accessibility to power outlets. Mount and keep unit in an area free from dust, moisture, and extreme temperatures. (Do not plug in at this time). Remove dust cover with the thumb screws. Then use the same holes to mount unit to the wall with 4 screws. (SCREWS NOT PROVIDED)
- 2 Connect the gray meter input signal wires from the PCT2 controller to the terminal screws on the water meter register OR to the reed switch wires from the meter's register.
- 3 Connect the female output pigtail receptacles to the devices to be supplied with 120 VAC.
- 4 Plug the male power cord into a 120 volt, 60 cycle, **GFI outlet.**
- 5 Determine the water volume required prior to the timer energizing the output receptacles. Divide the water volume by the pulse output signal coming from the water meter.

Example: 100 gallons needed  $\div$  10 GPC = 10 Set 10 on the counter for the respective channel.

6 Select RUN mode and press the 'Start' button. When the controller receives the number of counts that were pre-set in the register, it will energize the output channels for the length of time set.

# **SPECIFICATIONS**

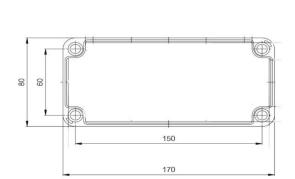
Input Contacts: Up to 9,999

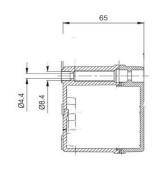
Housing: NEMA 4
Display: Backlit LCD

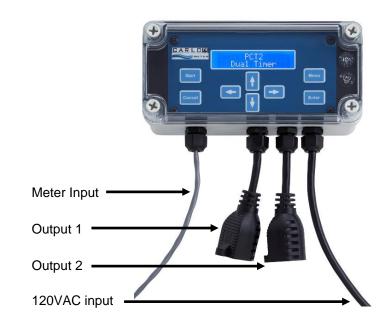
Input Power: 120 VAC via **GFI**Output Signal: 120 VAC, 3Amp Max, resistive

Counting Speed: 10 Contacts/Second - 10 Hz

Memory: non-volatile

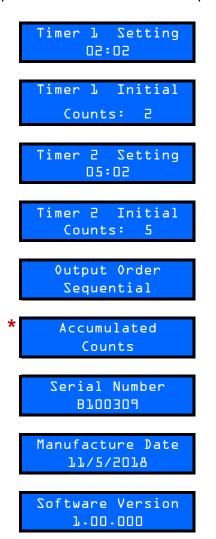






# STORED VALUES MODE

Current stored values are displayed with the selection of Stored values. Use the Up/Down arrows to advance display.



\* Total volume: To calculate the total accumulated volume, multiply the accumulated number of signals by the meter's pulse output (GPC/LPC).

Example: 243 accumulated counts X 10 GPC = 2,430 gallons

## PROGRAMMING/OPERATION INSTRUCTIONS:

Connect the power plug to the 120VAC GFI. The display shows the initial screen.

PCT2

Dual Timer

Pressing the MENU key allows selection of one of three modes:

- 1. Setup
- 2. Run
- 3. Stored Values



Use the Up/Down keys to position the Enter Key prompt. Pressing 'Enter' activates the selected mode.

#### **FACTORY SETTING:**

For setting timers, each timer requires two entries; one for number of pulses received before activated and the other for the amount of time it is to stay on.

The factory sets both timers to receive 1 (one) pulse before activating and the time is set for 10 (ten) seconds each.

If Timer 1 or Timer 2 is set for 0 (zero) signals from the meter, the timer will run continuously. ALWAYS have at least 1 (one) count on each timer. Pulse counts and run time will need to be changed to meet your project requirements.

Simultaneous operation requires each timer to have the same pulse count number. The run times may be different on each timer. The first timer to finish will not operate again until the second timer is finished. When both timers are finished, the unit is ready to start with the next signal.

**Sequential operation differs from simultaneous.** Timer 1 starts first. When Timer 1 finishes its cycle, then Timer 2 begins. When Timer 2 is finished, the unit is ready to start when the next signal(s) are received.

#### **POWER LOSS:**

- 1. When power is re-stored, the PCT2 will automatically reset waiting for the signal(s) to arrive and will return to the programmed settings.
- 2. An \_ (underline) will appear next to the time number.

  Press the down arrow key to remove the underline.

### **SETUP MODE**

Choose with Sequential or Simultaneous operation of the timers using the Up/Down arrow keys to select either, then press the Enter button to store setting in non-volatile memory.

Sequential ... Simultaneous

The time setting for Timer 1 is next displayed. Use the Up/Down, Left/Right arrow keys to set the amount of time to be ON in minutes and seconds for output channel 1. Pressing Enter saves the setting.

Timer l Set 02:02

Timer 1 - Pulse count is next. Set up similar to the time setting.

Timer 1 Initial Counts: 2

Timer 2 - Repeat procedure as outlined on Timer 1.

Values saved with each press of the Enter button and are retained. Pressing the Cancel button at any time returns to the main Menu.

## **RUN MODE**

From the main Menu, selecting Run displays briefly the output order (simultaneous/sequential). Press 'Start' to begin operation.



The initial counts set up previously are displayed and count down begins with each input pulse from the water meter. Outputs are OFF at this time.



When the input count reaches zero, the output for the corresponding channel receptacle is energized with 120VAC and the timer for that channel begins decrementing from the set value. Upon reaching zero, the output is turned OFF removing 120VAC.

The display shown is for sequential operation where channel 1 cycles first and then channel two.



When both channels reach zero (either sequentially or simultaneously), the cycle repeats without pressing the Start button again.