

4980

Configurable On/Off Cycling Timer

The 4980 is a highly configurable on/off cycling timer which provides a high current relay contact output. It provides 6 different timing ranges for the ON and OFF times in addition to multiple settings for cycle time adjustment (full, limited, fixed) and the timing adjustment increment. The ON and OFF timing configurations are *independent from each other*, allowing for such configurations as a fixed ON time in 0.01 second increments and adjustable OFF times up to 9999 hours.

With the timer configured as from the factory, upon application of power the timer displays rdY and is in an idle state. Pressing the [RUN] button starts the ON cycle which turns the relay contacts on and counts the on time down on the LED display. Once the ON cycle is complete the timer turns the output relay off and starts counting down the OFF cycle. Pressing the [PAUSE/STOP] button at any time will turn the output relay off (if it is on) and the display flashes the current time. Pressing the [PAUSE/STOP] again continues the timing cycle from when it was paused. Press and holding the [PAUSE/STOP] button for 2 seconds resets the timer back to the idle state.

The timing values are set in the idle state, pressing and holding the [ONTIME] button displays the current on time which can then be adjusted with the up and down buttons. Holding the up and down buttons cause the values to scroll at increasing rates. Use the [OFF TIME] button in a similar manner to change that time.

The timer always saves its current state when power is removed, and can be configured to power up into various states: the state it was powered down in, always to the ON cycle, always to the OFF cycle, into the paused state, or into the idle state. The user can also configure which state the controller starts in when the [RUN] button is pressed, either the ON state or the OFF state.

Italics below indicate the factory defaults, ON and OFF timing configurations are both at default values:

| Timing Cycle Range | | |
|--------------------|---------------------------------|--|
| rA:00 | Minutes:Seconds, 00:01 to 99:59 | |
| rA:01 | Hours:Minutes, 00:01 to 99:59 | |
| rA:02 | Seconds 1 to 9999 | |
| rA:03 | Seconds 0.01 to 99.99 | |
| rA:04 | Minutes 1 to 9999 | |
| rA:05 | Hours 1 to 9999 | |

| Cycle Time Adjustment | | |
|-----------------------|---------------------------|--|
| CA:00 | Full time range available | |
| CA:01 | Adjustable between limits | |
| CA:02 | Timing fixed | |

| Time Adjustment Value | | |
|-----------------------|---------------------|--|
| tl:01 | 1 – 99, 1 = default | |

| Lower Limit or Fixed Time | | |
|---------------------------|-------------------------------------|--|
| | Disabled by code CA:00 | |
| XXXX | Displays Lower Time Limit for CA:01 | |
| XXXX | Displays Fixed Time for CA:02 | |

| LED Display Power | | |
|-------------------|------------------------------------------|--|
| LP:00 | LED display always on | |
| LP:01 | Display dims after 1 minute in idle mode | |
| LP:02 | Display OFF after 1 minute in idle mode | |

| Recovery from Power Interruption | | |
|----------------------------------|---------------------------------------------|--|
| Pr:00 | Return to power loss state, continue timing | |
| Pr:01 | Return to new ON cycle | |
| Pr:02 | Return to new OFF cycle | |
| Pr:03 | Return to power loss state, in hold mode | |
| Pr:04 | Return to IDLE state, ready to run | |

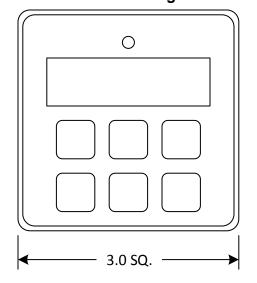
| Cycle Start Mode | | |
|------------------|---------------------|--|
| St:00 | Starts in ON cycle | |
| St:01 | Starts in OFF cycle | |

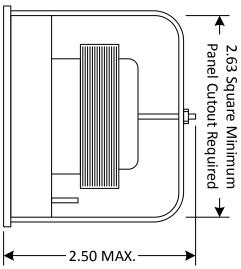
| Upper Limit Time | | |
|------------------|-------------------------------------|--|
| | Disabled by code CA:00 or CA:02 | |
| XXXX | Displays Upper Time Limit for CA:01 | |

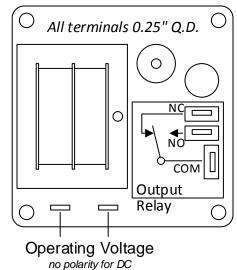
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Dimensions & Wiring







Specifications

Operating Voltage: 12VDC -10/+20%, 115VAC ±15%, 230VAC ±15%, 24VAC ±10%, 50/60 Hz for AC.

Operating Current: See Chart **Timing Accuracy:** ±0.5%

Storage: All information stored in nonvolatile memory, 10 year life minimum.

Output Relay: 20A SPDT contacts, see chart for ratings. **LED Display:** 0.56" tall high brightness red display.

Beeper: Integral beeper used to indicate button presses.

Operating Temperature: 0°C to 70°C.

Mounting: 2.63 sq. cutout accepts timer which is secured with supplied bracket & nut. Mounting nut tightened to 3 inch pounds max

Wiring: 18GA wires for power, 0.25" QD terminals on relay.

Safety: The 4980 is identical in construction to the Artisan Model 4970 except for 3 additional buttons and software The 4970 is UL Listed in file E47858: Appliance Controls

ATNZ2 (US), ATNZ8 (Can).

| | Operating Current (mA) | | |
|---------|------------------------|--------|---------|
| | ldle | Timing | Standby |
| 12V DC | 55 | 135 | 20 |
| 115V AC | 22 | 30 | 19 |
| 230V AC | 10 | 15 | 8.0 |
| 24V AC | 105 | 150 | 95 |

Output Contact Ratings

Data Sheet Revision Date: January 12, 2016

Ordering

| Model | - Voltage |
|-------|------------------------------------------------------------|
| 4980 | -1 = 12V DC -2 = 115V AC -3 = 230V AC -4 = 24V AC |

| | NO Contacts | NC Contacts |
|------------------------|----------------------------------------|----------------------------------------|
| Resistive Inductive | 20A @ 125/240VAC, 30VDC 6A @ 277VAC | 10A @ 125/240VAC, 30VDC 3A @ 277VAC |
| Motor | 2HP @ 240VAC 1HP @ 125VAC | ½HP @ 240VAC ¼HP @ 125VAC |
| LRA/FLA | 60A LRA @ 240VAC 20A FLA @ 240VAC | 33A LRA @ 240VAC 10A FLA @ 240VAC |
| Ballast | 6A @ 125/277VAC | 3A @ 125/277VAC |

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