

Solid State Timers and Controllers



4973

Countdown Timer Remote Start

The 4973 is an Artisan 4970 controller with a remote Start/Stop input. This highly flexible countdown interval timer with digital display controls a set of high current output contacts. The timing cycle range can be configured for the following: 00:01-99:59 Minutes:Seconds, 00:01-99:59 Hours:Minutes, 0001-9999 Seconds, and 00.01-99.99 Seconds. The two arrow buttons on the front panel are used to set the time, the Up button increases the time and the Down decreases it. The longer a button is held down the faster the rate at which the time value will change, the time value rolls around at both ends of the time range.

The remote Start/Stop input performs multiple functions. Closing the Start/Stop input while the timer is idle will energize the output power relay contacts and the

controller begins counting down the time on the display, once the display reaches 0 the contacts de-energize and the unit alarms per it's configuration option. Closing the Start/Stop input again while the controller is timing will pause the controller at the current time and de-energize the output relay contacts. Closing the Start/Stop input while in pause mode causes the output relay to energize and the controller continues timing from the point at which it was paused. Should the Start/Stop input be closed for longer than two seconds while in pause mode the controller will reset and the display will return to the original starting time.

Should power fail during a timing cycle the controller remembers the last time value and will recover upon restoration of power dependant on its configuration. The 4973 always remembers the last interval time programmed and when first powered up resets to that time. The LED above the 4 digit display flashes during the timing cycle to indicate timing and is on continuously when the cycle is ended. *The 4973 can be configured with a variety of time ranges, timing adjustment, alarming, power recovery, and power conservation options, see the second page for details. The 4 digit LED display is available in Red (standard), Green, and Blue.*

Specifications Operating Voltage: 12VDC -10/+20%, 115VAC ±15%, 230VAC ±15%, 24VAC ±10%, 50/60 Hz for AC. Current Consumption: See table for operating current at nominal input voltages; Idle = display on, Timing = display & relay on, Standby = display off (option LP:02 selected) Timing Accuracy: ±0.5% of set time. LED Digital Display: Four digit LED, 0.56" characters. Red = standard, green and blue available. Timing Cycle Memory: All data stored in non-volatile memory, 10 yr. min. retention with no power. Audible Alarm: Solid state alarm operating dependant on unit configuration. Output Contact Ratings: SPDT Power relay contacts. Rated for 12A inductive or resistive at 125 VAC, 10A at 277 VAC and 30 VDC Mounting: 2.63 sq. cutout accepts timer which is secured with supplied bracket & nut. Mounting nut must be tightened to 3 inch pounds maximum. Wiring: 0.25" Quick Connect terminals. Operating Temperature: 0°C to 70°C. Data Sheet Revision Date: December 18, 2014

Ordering Information

					Operating Current (mA)		
Model	- Voltage -	Display Color			Idle	Timing	Standby
	-1 = 12V DC -2 = 115V AC -3 = 230V AC	-R = Red -G = Green -B = Blue	12V	DC	55	135	20
4072			115V	/ AC	22	30	19
4975			230V	/ AC	10	15	8.0
	- 4 = 24V AC		24V .	AC	105	150	95

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Configuration

The 4973 controller provides many configuration options allowing the OEM to customize it's operation for their application. Holding the Start/Stop button when applying the input power places the controller into configuration mode. In this mode, the controller displays a two character code and a two digit value for each option. Closing the Start/Stop input advances to the next option. Press the Up or Down buttons to change the option code or time value according to the range of the item being configured. Once the options have been set, remove and re-apply power with no buttons pressed to operate the controller with its new configuration. *The 4973 is supplied from the factory configured with the italicized option codes below and all time values set to 0*.

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Timing	Cycle Range	Cycle En	d Notification
rA:00	Minutes:Seconds, 00:01 to 99:59	CE:00	Triple beep for 5 Seconds
rA:01	Hours: Minutes, 00:01 to 99:59	CE:01	Triple beep until key pressed
rA:02	Seconds 1 to 9999	CE:02	Continuous tone for 5 Seconds
rA:03	Seconds 0:01 to 99.99	CE:03	Continuous tone until key pressed
rA:04	Minutes 1 to 9999	CE:04 - CE	E:07 Same as above with display flash
rA:05	Hours 1 to 9999	End Noti	fication Length
Cycle T	ime Adjustment	EL:05	Length of notification, <i>default = 5 sec</i>
CA:00	Full time range available	LED)isplay Power
CA:01	Adjustable between limits	L P·00	
CA:02	Timing fixed	LP.00	Display dims after 1 minute in idle mode
Time A	diustment Increment	LP:02	Display OFF after 1 minute in idle mode
tl:XX	Time increment value. default = 1		
		Reco	Very from Power Interruption
Lower	imit or Fixed Time	Pr:00	Return to last time, output on, continue timi
	Disabled by code CA:00	Pr:01	Return to last time, output off, in pause mod
XXXX	Displays Lower Time Limit for CA:01	PT:02	Return to full cycle time, ready for new cycle
XXXX	Displays Fixed Time for CA:02	Alarm	ing Notification
Upper L	₋imit Time	AL:00	No alarming enabled
	Disabled by code CA:00 or CA:02	AL:01	Triple beeping
XXXX	Displays Upper Time Limit for CA:01	AL:02	Continuous tone
		AL:03	Triple beeping with display flash
Output	Туре	AL:04	Continuous tone with display flash
Ot:00	Output relay on during timing	Alarm	Duration
Ot:01	Relay on for end notification length	Ad:00	Disabled by code AL:00
Ot:02	Relay on for 1 second @ end	Ad:XX	Alarm length in seconds. 01 - 99
01:03	Relay always off		
		Alarm	lime Dischlad hu so da Al 200
			Disabled by code AL:00
		XXXX	Displays alarm time for AL:01-AL:04

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