



April 29, 2011



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Tri-Timers

Our Tri-Timers provide 3 distinct formats in just 1 unit. They measure time in 24-hour, 7-day, and 365-day increments. These models have the same timekeeping capabilities as our Quad Controls without the **AstroDial SunTracker™** feature. Tri-Timers . . . the logical solution when precision really matters.

Immediate Modification of Set Program

Toggle override using a keyboard allows fast and easy alteration of set program.

Easy Holiday Programming Timers provide anywhere from 11 to 96 holiday durations for added convenience.

Protection Against Power Outages Units offer a wide range of carry-over options for backup power.

To-the-Second Programming Clocks can be synchronized to the second for use with multiple timekeeping devices and precise switching of loads.



LEARN ABOUT MOMENTARY, DURATION, AND DUTY CYCLE FEATURES

Before selecting your Paragon time control, it's helpful to understand the many features that are available to you. Please take a moment to review these 3 key features:

- **Momentary** sends a short electrical pulse to latch a relay into the ON position. The timer transmits another short electrical pulse to unlatch a relay into the OFF position. Momentary is most often used with a latching contactor for lighting control. Paragon time controls with momentary are featured in Quad Controls on pages 4-6, Tri-Timers on pages 8-11 and 24-Hour Timers on pages 16-20.

- **Duration** refers to the amount of time a load will be activated. The timer powers the load throughout both the ON and OFF events. Duration uses a single event to run applications for fixed and repeated time periods. It simplifies programming and is most often used to control events that operate less than 1 minute. Paragon time controls with duration are included in Tri-Timers on pages 8-11, Double Duty Clocks on pages 12-13 and 24-Hour Timers on pages 16-20.

A high school may use this feature to ring bells for 5 seconds to signal class changes. The 5-second duration can be scheduled at irregular intervals and requires only 1 event rather than an ON and OFF event. A factory can schedule fans to turn ON for a 15-minute duration several times a day to exhaust a work area. Duration is used in varied applications including irrigation systems, livestock cooling systems, recorded messages in airports and public areas as well as to exercise backup systems in public buildings.

- **Duty Cycling** is a single sequence of repeated ON/OFF events. With this feature, a single event controls the entire duty cycle. You can schedule the duty cycle to run for a specific time period and don't have to program repeated ON/OFF events. If you are using a traditional 24-hour timer to activate processes, you may want to consider our controls with duty cycling. Paragon time controls with duty cycling can be found in Quad Controls on pages 4-6.

Water pumps utilize Paragon's duty cycling feature when 10-minute ON time is needed every 4 hours. It's also used in horticulture when greenhouse plants need to be misted 30 seconds every hour. Duty cycling is further used to control oil wells, livestock watering systems, and process equipment.

EL7200

- 2 SPDT relays supporting 1-2 independent schedules
- Schedule to 1-minute minimum between an on and off time
- Up to 128 ON/OFF events can be scheduled to accommodate your programming needs
- 96 hours of battery-free carry-over protection
- Time intervals can be configured for maintained constant or momentary operation
- 90 definable holidays and 6 pre-programmed holidays offer flexibility from set schedule
- Automatic daylight savings time adjustment accounts for seasonal variations
- Latching relay is easy to install and energy efficient
- Equipped with advanced switch to handle today's heavier loads
- Available in NEMA 1 drawn steel and NEMA 3R non-metallic enclosure with clear-view cover for indoor and outdoor use
- Title 24 certified
- NEMA 1 unit dimensions are 4-1/4" W x 8-1/8" H x 3" D



EL7100

- 2 SPDT relays supporting 1-2 independent schedules
- Schedule to 1-minute minimum between an on and off time
- Up to 128 ON/OFF events can be scheduled to meet a wide range of programming requirements
- 96-hour carry-over protection without the hassle of batteries
- 90 definable holidays and 6 pre-programmed holidays allow easy deviation from set schedule
- Timer adjusts automatically to daylight savings time
- Advanced switch is durable for heavy loads
- Available in NEMA 1 drawn steel and NEMA 3R non-metallic enclosure with clear-view cover for indoor and outdoor use
- Title 24 certified
- NEMA 1 unit dimensions are 4-1/4" W x 8-1/8" H x 3" D
- NEMA 3R unit dimensions are 6-9/16" W x 9" H x 3-7/8" D



[VIEW SPECIFICATION & MANUAL]

[\[VIEW SPECIFICATION & MANUAL\]](#)

EC72D

- 2 SPDT relays supporting 1-2 independent schedules
- Schedule to 1-minute minimum between an on and off time
- Up to 16 ON/OFF events can be scheduled daily for a total capacity of 112 ON/OFF events per week per channel
- Timers can be set for constant or momentary operation
- 275 hours of carry-over available with a 9-volt battery
- 12 single-day holidays and 2 multiple-day holiday durations may be programmed into set schedule
- Wide variety of voltages ensures unit is compatible with equipment
- 15 amp model exceeds basic switch rating
- Available in DIN rail for surface or sub-panel mounting
- Unit dimensions are 4-1/2" W x 4" H x 3" D



[\[VIEW MANUAL\]](#)

EC74/50S

- 4 SPDT relays supporting 1-4 independent schedules
- Schedule to 1-minute minimum between an on and off time
- Up to 50 ON/OFF events can be assigned across 1 to 4 channels
- Momentary intervals of 1 to 59 seconds can be programmed for each channel
- Minimum 100 hours of backup protection with a 9-volt battery
- 16 holiday durations common to all 4 channels may be programmed by date
- Automatic daylight savings time feature adjusts for seasonal variations
- Stagger-up feature turns loads ON separately in 3-minute intervals after power outage to guard against power surges
- Basic switch rating of 10 amps compatible with existing equipment



[\[VIEW MANUAL\]](#)

EC71D/18S

- 1 SPDT relays supporting 1 independent schedules
- Schedule to 1-minute minimum between an on and off time
- Up to 18 ON/OFF events can be assigned to a time of day on any specific day or combination of days
- Momentary intervals of 1 to 59 seconds provide additional programming precision
- 100 hours of carry-over with a 9-volt NiCad battery or 275 hours of backup with a 9-volt lithium battery
- 11 holiday durations can be set by date for worry-free programming
- Automatic daylight savings time and leap year adjustment account for seasonal and calendar variations
- 15 amp model surpasses basic switch rating
- Available as shown for DIN rail mounting
- Title 24 certified



[\[VIEW MANUAL\]](#)

TECHNICAL INFORMATION

HOW TO SPECIFY

Installer shall furnish and install . . .

EL7200 with 2 SPDT
EL7100 with 1 SPDT

Timekeeping Capabilities

The control shall have 3 distinct programming capabilities and be utilized as a 24-hour, 7-day, and 365-day time control.

Programming Attributes and Capabilities

Events/Set Points

HOW TO SPECIFY

Installer shall furnish and install . . .

EC72D with 2 SPDT
EC74/50S with 2 SPDT
EC71D/18S with 2 SPDT

Timekeeping Capabilities

The control shall have 3 distinct programming capabilities and be utilized as a 24-hour, 7-day, and 365-day time control.

Programming Attributes and Capabilities

Hardware Attributes

Carry-over
The control shall provide a minimum of 100 hours carry-over with a 9-volt alkaline battery or 275 hours with a 9-volt lithium battery.

Display
The clock format shall be selectable 12-hour (civilian) or 24-hour (military) format on a 3-16" x 3/4" display.

Interface
N/A

*Enclosure**

The control shall provide for 128 user-defined events.	<i>Events/Set Points</i> The control shall provide for ...	Control shall be housed in a ...
<i>Holidays</i> The control shall have 90 user-defined holidays and 6 pre-programmed holidays.	Up to 16 events per day (EC72D per channel) 50 events (EC74/50S) 18 events (EC71D/18S)	NEMA 3R non-metallic lockable tamper resistant enclosure with clear-view cover (EC74/50S) DIN rail mountable non-metallic enclosure (EC72D, EC71D/18S)
<i>Override</i> The control shall provide keyboard toggle override.	<i>Momentary Contacts</i> The control shall provide ...	* See product comparison table for specific variations.
<i>Sensory Inputs</i> N/A	Fixed momentary of 2 seconds for each channel (EC72D) Multiple momentary from 1 to 59 seconds (EC74/50S) 1 momentary from 1-59 seconds (EC71D/18S)	
Hardware Attributes		
<i>Carry-over</i> The control shall provide a minimum of 96 hours carry-over without a battery.	<i>Holidays</i> The control shall have ...	
<i>Display</i> The clock format shall be selectable 12-hour (cicilian) or 24-hour (military) format on a 2-5/8" x 3/4" display.	12 single-day and 2 multiple-holiday durations (EC72D) 16 holiday durations by date (EC74/50S) 11 holiday durations by date (EC71D/18S)	
<i>Enclosure*</i> Control shall be housed in a ...	<i>Override</i> The control shall provide keyboard toggle override that begins immediately and remains in effect until overridden again or until next programmed event.	
NEMA 1, NEMA 3 steel or NEMA3R non-metallic lockable tamper resistant enclosure with clear-view cover		
* See product comparison table for specific variations.	<i>Sensory Inputs</i> N/A	

Model No.	Switch Type	Hp	Amp	Wiring Diag. #	AC Line Volts	Enclosure Material	Enclosure Type	Type of Mount	Dimensions			Shipping Wgt.	
									W	H	D	Lb.	Kg.
TRI-TIMERS - EL7200 SERIES													
EL7200/120V	2-SPDT	1/2-1/4	20	3, 4	120	Metal (indoor)	NEMA 1	Enclosure mount	4-1/4"	8-1/8"	3"	2	0.9
EL7200/208-240V	2-SPDT	1/2-1/4	20	3, 4	208-240	Metal (indoor)	NEMA 1	Enclosure mount	4-1/4"	8-1/8"	3"	2	0.9
EL7200PC/120V	2-SPDT	1/2-1/4	20	3, 4	120	Non-metallic with clear-view cover (indoor/outdoor)	NEMA 3R	Enclosure mount	6-9/16"	9"	3-7/8"	2-1/2	1.1
EL7200PC/208-240V1-SPDT	1/2-1/4	20	3, 4	208-240	Non-metallic with clear-view cover (indoor/outdoor)	NEMA 3R	Enclosure mount	6-9/16"	9"	3-7/8"	2-1/2	1.1	
TRI-TIMERS - EL7100 SERIES													
EL7100/120V	1-SPDT	1/2-1/4	20	9	120	Metal (indoor)	NEMA 1	Enclosure mount	4-1/4"	8-1/8"	3"	2	0.9
EL7100/208-240V	1-SPDT	1/2-1/4	20	9	208-240	Metal (indoor)	NEMA 1	Enclosure mount	4-1/4"	8-1/8"	3"	2	0.9
EL7100PC/120V	1-SPDT	1/2-1/4	20	9	120	Non-metallic with clear-view cover (indoor/outdoor)	NEMA 3R	Enclosure mount	6-9/16"	9"	3-7/8"	2-1/2	1.1
EL7100PC/208-240V1-SPDT	1/2-1/4	20	9	208-240	Non-metallic with clear-view cover (indoor/outdoor)	NEMA 3R	Enclosure mount	6-9/16"	9"	3-7/8"	2-1/2	1.1	
TRI-TIMERS - EC72D SERIES													
EC72D/12Vdc*	2-SPDT	-	.1-15	10	12Vdc	Non-metallic	N/A	DIN rail mount	4-1/2"	4"	3"	1-1/8	0.5
EC72D/24V*	2-SPDT	1/10	15	10	24	Non-metallic	N/A	DIN rail mount	4-1/2"	4"	3"	1-1/8	0.5
EC72D/120V	2-SPDT	1/3	15	10	100-120	Non-metallic	N/A	DIN rail mount	4-1/2"	4"	3"	1-1/8	0.5
EC72D/240V	2-SPDT	1/2	10	10	200-240	Non-metallic	N/A	DIN rail mount	4-1/2"	4"	3"	1-1/8	0.5
TRI-TIMERS - EC74/50S SERIES													
EC74/50S/24V*	4-SPDT	-	7.5	11	24	Non-metallic with clear-view cover (indoor/outdoor)	NEMA 3R	Enclosure mount	6-5/16"	8-1/2"	3-13/16"	1-5/8	0.7
EC74/50S/120V	4-SPDT	1/3	7.5	11	100-120	Non-metallic with clear-view cover (indoor/outdoor)	NEMA 3R	Enclosure mount	6-5/16"	8-1/2"	3-13/16"	1-5/8	0.7
EC74/50S/240V	4-SPDT	1/3	10	11	200-240	Non-metallic with clear-view cover (indoor/outdoor)	NEMA 3R	Enclosure mount	6-5/16"	8-1/2"	3-13/16"	1-5/8	0.7
TRI-TIMERS - EC71D/18S SERIES													

EC71D/18S/24V	1-SPDT	-	15	12	24	Non-metallic	N/A	DIN rail mount	4-1/2"	4"	3"	1-1/8	0.5
EC71D/18S/120V	1-SPDT	1/3	15	12	120	Non-metallic	N/A	DIN rail mount	4-1/2"	4"	3"	1-1/8	0.5
EC71D/18S/240V	1-SPDT	1/2	10	12	208-240	Non-metallic	N/A	DIN rail mount	4-1/2"	4"	3"	1-1/8	0.5

* Low voltage devices are not able to be listed by UL or CSA

Frequency: 50/60 Hz Power consumption: 4VA

Wiring terminals: Power input and relay contact terminals can accommodate 10-16 AWG on EL7200 series and EL7100 series



Industry first



Paragon exclusive



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