

Certified under Title 24,
Part 6, Section 131(D) of
the California Code of
Regulation

UL916



E76987
C22.2-177



LR3730

**Y2K (Year 2000)
Compliant**

**With Astro and
Momentary Feature
for All Circuits**



120/208/240/277 V
50/60 Hz Operation or
24V 60 Hz. Operation



156ET9403A

Full Year or 7-Day 8 & 16 Circuit Electronic Time Switches

These electronic time switches provide to-the-minute programming for 7-day or full year load control and reduced energy costs. A user selectable clock format for 12 hour AM/PM or 24 hour is provided for programming a minimum of 400 set points. Each ON and OFF switching function uses a set point. Full year control features include up to 99 different "holidays" each of which can be programmed for any duration. Any holiday or holiday duration can be left for "no load activity" or programmed for a unique load activity. Fully automatic daylight saving time adjustment, with user selectable override, and automatic leap year adjustment are also standard on the ET70000C series. Weekly programming provides single step weekday and weekend programming to simplify typical 5/2 day load control. An automatic review feature enables quick easy review of all programmed data.

Flexible load control is enhanced by Astro, Pulse and Interval options as required for outdoor lighting control, bell ringing and after hours temporary override respectively. These options can be combined, for example, to provide Astro switching with a Pulse output for outdoor lighting using a latching contactor. Each of these options is selected and programmed by the installer using a unique "self-prompting" display with LED indicators dedicated to each option. The Interval option provides the ability to program loads independently for override times (up to 6 days, 23 hours, 59 minutes). All models are standard in a NEMA 3R steel enclosure and include input terminals for wired remote 4 circuit override. Accessory #156ET9402A expands 8 circuit models to 8 circuits of override; accessory #156ET9403A expands 16 circuit models to 16 circuits of override. The loads can be independently overridden using a remote (up to 1,000 feet) momentary or maintained switch connected to the time switch or override accessory with bell wire.

A non-volatile memory maintains all programmed switching times for the life of the time switch. A factory installed field replaceable lithium battery maintains accurate time keeping and calendar information for a minimum of 8 years. The self contained logic board is shielded and utilizes advanced circuit board layout techniques and state of the art micro components to eliminate problems related to electrical noise interference. Transient protection for up to 6,000 volts is provided by the power board.

Applications

- Schools
 - Offices
 - Airports
 - Stores
 - Hotels
 - Car Lots
 - Restaurants
 - Parks
 - Apartments
 - Hospitals
 - Factories
 - Farms
- For Controlling.....
- Water Heaters
 - Commercial Ovens
 - Lighting
 - Air Conditioners
 - Process Equipment
 - Fans/Blowers/Pumps
 - Livestock Feeders
 - Poultry Equipment
 - Bells and Signals
 - Heating / Ventilating Equipment

Specifications

Case - 8 Circuit NEMA 3R - Heavy duty .048" steel in gray finish; 10-3/4" (27.3 cm) high, 11-1/2" (29.2 cm) wide, 4-3/4" (12.1 cm) deep with lockable hasp. **16 Circuit NEMA 3R** - Heavy duty .060" steel in gray finish; 20-5/8" (52.4 cm) high, 13-1/4" (33.7 cm) wide, 5-1/8" (13.0 cm) deep with lockable hasp.

Knockouts - 8 Circuit - 1/2"-3/4" four on bottom, plus two 1" on bottom. **16 Circuit** - 1/2"-3/4", two on each side of case, six on bottom plus one 1" on each side of case, four 1" on bottom.

Optional Override for 8 and 16 Circuit Time Switches - Provides override capability for maximum available circuits; #156ET9402A for 8 circuit time switches or #156ET9403A for 16 circuit time switches.

Optional Enclosures - NEMA 3R only.

Special Voltages and Cycles - Line voltage models 50 or 60 Hz. and field selectable for 120 (factory shipped), 208, 240, 277 volts or low voltage models 60 Hz. 24 volts

Switch Rating, Normally Open Contacts - Each Pole.

20 amp resistive/general purpose, 12-277 volts A.C.

20 amp resistive/general purpose, 28 Volts D.C.

20 amp ballast, 120-277 volts A.C.

1 Hp, 120 volts A.C. 60 Hz.; 98 LRA; 22 FLA

2 Hp, 240 volts A.C. 60 Hz.; 80 LRA; 30 FLA

5 amp tungsten, 120-240 volts A.C.

470 VA pilot duty, 12-240 volts A.C.

TV-5, 120-240 volts A.C.

Normally Closed Contacts -

10 amp resistive/general purpose, 12-277 volts A.C.

10 amp resistive/general purpose, 28 Volts D.C.

3 amp ballast, 120-277 volts A.C.

1/4 Hp, 120 volts A.C. 60 Hz.

1/2 Hp, 240 volts A.C. 60 Hz.; 30 LRA; 12 FLA

275 VA pilot duty, 12-240 volts A.C.

Carry-over - Non volatile memory requires no backup. Time keeping and calendar data maintained within 0.01% accuracy for minimum of 8 years with one factory installed, field replaceable lithium coin cell.

Operating Temperature Range - -40° F (-40° C) to 122° F (50° C).

Shipping Weight - (8 Circuit) 12.5 lbs. (5.67 Kg)

(16 Circuit) 25.0 lbs. (11.34 Kg)

Model Number	Circuits	Switch	Clock Supply Volts 50/60 Hz.	Amps. (per pole)	Ballast	H.P. 120-240
ET70815CR	8	SPDT	120/208/240/277	20*	20*	1-2
ET70815CR24	8	SPDT	24V 60 Hz.	20*	20*	1-2
ET71615CR	16	SPDT	120/208/240/277	20*	20*	1-2
ET71615CR24	16	SPDT	24V 60 Hz.	20*	20*	1-2

* 120/277 VAC Normally Open Contact Ratings (see specifications for complete ratings), per pole for multi-circuit models.