

ARBORTRONICS Inc.

1520 Lodestar Road, Unit 20,
Downsview, Ontario M3J 3C1
Tel.: (416) 638-6112 Fax: (416) 638-0007
E-mail: sales@arbortronics.com
Web: www.Arbortronics.com

December, 2006

24 Event Controller

Model EC-24

Description

The EVENT CONTROLLER (EC) is designed to activate a valve. The EC will activate the valve whenever one of the user-defined events occurs. There may be up to 24 events over a 24-hour period and each event may be from 1 to 15 minutes in duration. At the beginning of an event, the EC sends a pulse to the valve causing it to open. At the end of the cycle, the EC pulses the valve again, which closes it. The EC controls event timing, to the second, using its built in real time clock. All Events and the real time clock can easily be programmed using the six buttons on the PCB and any messages can be viewed on the LCD, when the EC is in the active state.

Not Exactly as Shown



Features

The EC can be powered from five 'D' type batteries because of its low power consumption. These batteries can power the EC for around one year without replacement. This is accomplished by an energy saving mode, while in energy saving mode the display is blanked to reduce power consumption. The EC will return to normal mode at the touch of any button. The EC also has a back up battery for the real time clock and the nonvolatile RAM. In case of power interruption, all settings will be saved automatically for when power is restored and the EC will begin the next scheduled event automatically. When the supply voltage drops below a set level, the EC will detect the low voltage and a "Low Battery" message will appear on the LCD. Whenever a new event is added, the EC will sort the events by activation time, check for timing overlaps and display messages detailing the problems, if any are found.

Hardware Specification

Dimensions - Height	200mm
Width	180mm
Depth	90mm
Weight	2 kg (4.2 lb.)
Power Supply	5 'D' Batteries providing 7.5V DC
Current Consumption	3 to 5mA
Display	2 line by 8 character LCD
Interface	6 small push buttons

Event Controller Programming Instructions

1. If the LCD is in energy saving mode (display is blank), press any button to activate the display
2. To change the real time clock, press "TIME". The cursor should be blinking in the position to be updated first (hours). To change the time press the 'UP' or 'DOWN' keys and when finished, press the 'ENTER' key and repeat for the minutes.
3. To enter programming mode, press the 'PROG' key.
The first message will show how many events are currently programmed. Then it will display all of the programmed events sequentially. While the message "EVENT xx" (where xx is an event number) is displayed, you can scroll through the events using the 'UP' and 'DOWN' keys. If an event is blank, "NEW" will be displayed after 3 seconds. While "NEW" is on the display press up to create a new event.
4. To delete an event press the 'DEL' key while "EVENT xx" is displayed. To delete all events press the 'DEL' button while the message "EVENT 01" is displayed.
5. To update an event, first delete the event that you wish to update and add a new event with the new settings to the end of the list.
6. To view an event's settings wait 3 seconds after the "EVENT xx" is displayed and the settings will appear.
7. To exit the programming mode press the 'PROG' button when the message "EVENT xx" is displayed.

WARNING !!! DISCONNECT THE POWER PLUG FROM THE BOARD BEFORE SERVICING VALVE