

AEI[®] ECONOMICAL & COMPACT ALARM CONTROL MODULE

AC-876

AN INTEGRAL PART FOR BATTERY OPERATED SYSTEMS OPERATING INSTRUCTIONS AND SPECIFICATIONS

INTRODUCTION

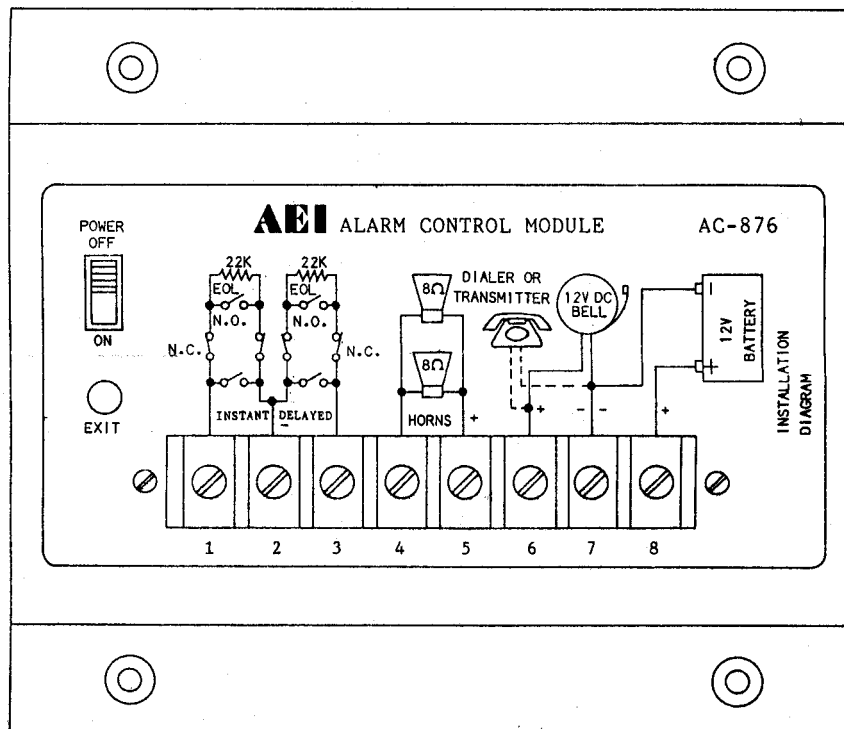
AC-876 is an economical and compact alarm control module designed for small residences, mobile homes and boat protection applications.

AC 876 has two independent protection loops, instant and delayed. Both the instant and delayed loops provide end of line (EOL) resistor supervision and are compatible with normally open (N.O.) and/or normally closed (N.C.) loop devices.

Siren drivers with the capability of driving two 8-ohm horn speakers and a 3-Amp contact rating output relay are built into the alarm control module. Other features include a fixed 30 second entry and 60 second exit delay, a 3 minute automatic cutoff siren timer and independent recycling of the instant and delayed protection loops.

AC-876 consumes very low standby power. It is ideal for use as an integral part of a battery operated security system.

THE CONTROL MODULE



CONNECTION TERMINALS

1-2: Instant Loop:

This protection loop offers INSTANT triggering to the alarm system. It is compatible with both normally open (N.O.) and normally closed (N.C.) loop devices.

Terminal 1 is the sensing terminal and terminal 2 is the common grounding point. Wire N.C. devices in series and N.O. devices in parallel.

A 22K ohm end-of-line (EOL) resistor is required to be connected in series with the circuit loop to seal the circuit.

Ideal for connection of heat/smoke sensors, panic buttons, pressure mats and switches for perimeter protections.

2-3: Delayed Loop:

This protection loop offers ENTRY DELAY to trigger the alarm system. It is most suitable for connecting motion sensors (e.g. passive infrared detector, Model: PIR-8612) and other devices for interior protection requiring entry delay. This circuit is compatible with both normally open (N.O.) and normally closed (N.C.) loop devices.

Terminal 3 is the sensing terminal and terminal 2 is the common grounding point. Wire N.C. devices in series and N.O. devices in parallel.

A 22K ohm end-of-line (EOL) resistor is required to be connected in series with the circuit loop to seal the circuit.

REMARKS:

- a. If any of the protection circuit does not use normally closed (N.C.) switch; a 22K ohm resistor must be connected across the circuit loop (the sensing terminal and the common grounding terminal).
- b. End-of-line (EOL) resistor is a termination resistor connected at the end of the normally closed circuit loop. It is recommended to connect it farthest away from the terminal. The EOL resistor can prevent the disabling of the N.C. loop by twisting (short-circuiting) the sensing wires up; as this sabotage will cause alarm activation).
- c. To ensure normal operation of the N.C. loops, the maximum resistance of each loop should be kept below 1K ohm.

4-5: Siren Driver Output:

Maximum two 8-ohm horn speakers can be connected in parallel to these terminals. Terminal 4 is the driver output point, and terminal 5 is the positive(+) common point of the alarm control module.

6: Normally Open Relay Contact:

Terminal 6 is connected to a normally open relay contact which will close and connect terminal 6 to positive(+) supply when the alarm is triggered. The contact will be released after time out of the siren duration. It is ideal for actuating other equipment when the alarm is triggered, such as DC bell, strobe light, telephone dialer, transmitter etc.. Connect the equipment with positive(+) supply wire to terminal 6, and negative(-) supply wire to terminal 7.

7-8: Power Supply Input:

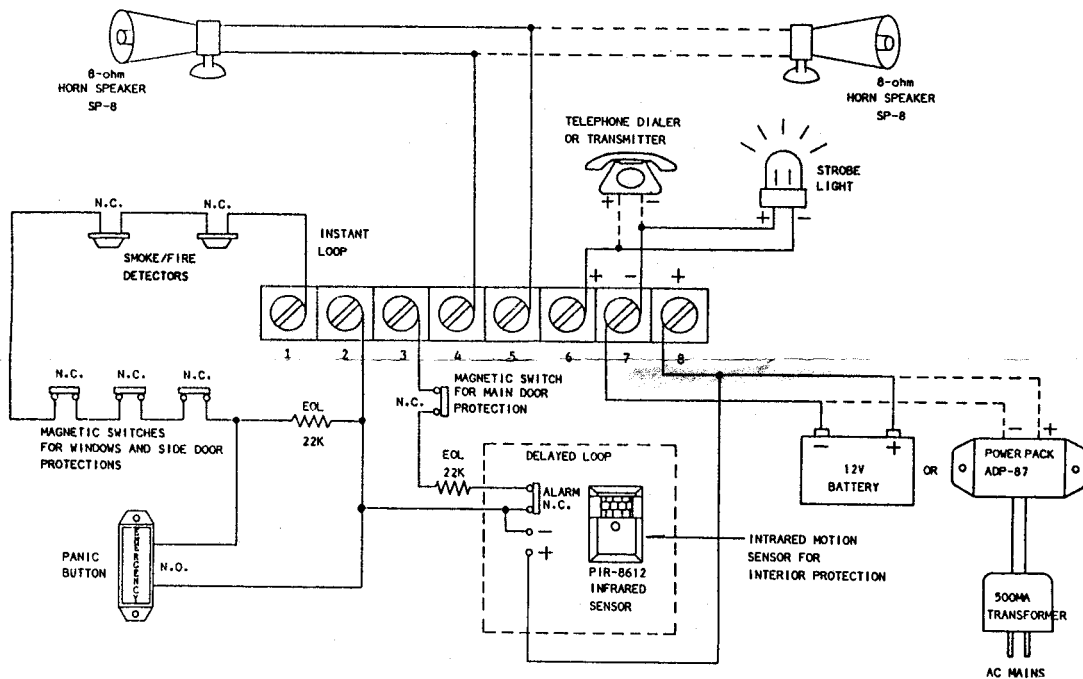
The alarm control module is designed to operate normally at the supply voltage of 12-16V DC. Connect the negative(-) supply wire to terminal 7 and positive(+) supply wire to terminal 8.

INSTALLATION

1. Select an inconspicuous but handy location for the alarm control module, this will allow you, the owner to readily disarm the alarm within the prescribed 30 second entry delay time.
2. Select the "TRAP ZONE" that required protection, usually areas well suited for trap zones are:
 - Doorways connecting one section of your home with another.
 - Rooms containing valuables.
 - Areas with exterior openings that offer possible entrance for burglars.
3. After determining the location for the alarm control module and the trap zones that required. You can start the wiring for the alarm system referring to the installation diagram. DO NOT apply power to the alarm control module while making wire connections.
4. After completion of wiring, make sure all connections are correct before applying power to the alarm control module.
Connect terminal 7 to the negative supply and terminal 8 to the positive supply.

TESTING AND OPERATION

1. Close all the doors and windows to make all the N.O. and N.C. loop devices in their normal position.
2. Switch "ON" the alarm by putting the power switch to "ON" position. Exit delay begins and the EXIT Indicator is lit. After approximate 60 second the alarm will be armed and the EXIT indicator will be "OFF".
3. Try to open the door where the delayed loop device is connected. The alarm will offer 30 second entry delay before triggering.
4. Try to open the door or window where the instant loop device is connected. The alarm will be triggered instantly.
5. After the alarm is triggered, the siren driver and the output relay will be operated. They will be reset automatically after time out, the duration is approximate 3 minute.
6. The alarm system can be shut off at anytime by putting power switch "OFF".



A SUGGESTED SYSTEM FOR HOME PROTECTION

SPECIFICATIONS

- * Exit Delay : 60 second.
- * Entry Delay : 30 second.
- * Siren Duration : 3 minute.
- * Siren Output (Terminal 4-5) : Drive two 8-ohm horn speakers maximum. Warble-tone.
- * Output Relay Contact (Terminal 6) : Normally open SPST 3-Amp relay contact. Terminal 6 connected to +12V when activated.
- * Sensing Terminals : One Delayed Loop and one Instant Loop - compatible with N.O. and N.C. loop devices and seal with end-of-line resistor.
- * Power Requirement : 12-16V DC.
- * Current Drain : 2.5mA
- * Dimensions : 38mm(H) x 133mm(W) x 114mm(D)
- * Net Weight : 170g.

SPECIFICATIONS ARE SUBJECT TO CHANGE FOR MODIFICATION WITHOUT NOTICE.