



# ACP-Net Lighting Control System

- ◆ Networked lighting control panels
- ◆ Communicates with other panels and devices
- ◆ Controls any relay from any device
- ◆ Free topology network wiring
- ◆ Auto shut off with blink warning
- ◆ Virtually unlimited expandability
- ◆ LonWorks® based communications
- ◆ UL and CUL listed; One year warranty



## System Information

The ACP-Net automatic control system delivers centralized, low voltage switching control of lighting and electrical loads. It creates an intelligent lighting control system through seamless communication of automatic control panels, automatic relay packs, and other networked devices. It allows any switch, occupancy sensor, photocell, etc. to control any relay or group of relays in the system. This versatility makes the ACP-Net easy to use and allows it to change or expand with facility needs.

## Operation

Consisting of a tub enclosure, cover, power supply, and panel interior, an ACP-Net panel controls lighting and electrical loads through low voltage relays. These relays respond to on/off commands from switches, occupancy sensors and other devices. A switch or signal originating from any ACP-Net or networked product has the ability to operate any relay or group of relays in the networked system. Communication between networked automatic control panels and devices broadcast these signal commands over the entire lighting control system network. Relays can be commanded to turn on, turn off, lock on, lock off, etc., as desired. When the optional System Clock is included, relays can be assigned to operate by time schedule or by astronomic based commands.

## Networking

Using LonWorks networking protocol, the ACP-Net reliably shares information with other ACPs and devices over a twisted pair of wires. This enables you to use a PC with The Watt Stopper's LCS software package for local or remote dial-in control. Also, the SP-1 system programmer can be used for simple network administration. Network wiring uses a free topology wiring scheme, giving panels and devices the benefit of connecting at any point in the system. This adds flexibility to the lighting control system during installation and avoids the need to carefully daisy chain wiring from one device to another.

## Features & Applications

The ACP-Net accepts any type of switch or a DC voltage for simple integration with occupancy sensors, building automation or other similar control systems. After-hour control notifies occupants of an impending shut off by blinking the lights five minutes prior to turning the lights off. A simple toggle of the switch will cancel the shut off. Low voltage control relays are reliable and have pluggable wiring connectors for quick change out. The ACP-Nets are fully assembled and tested at the factory and are shipped complete for ease of installation and start-up.

The ACP-Net is designed for use in almost any lighting control application. A typical lighting control system can be created using one ACP-Net as the main panel and interconnecting remote expansion panels. Only the main panel requires a system time clock. Low voltage switch wiring simplifies installation, operation, and maintenance, while giving central panel control advantages to the user. Office buildings, warehouses, schools, department stores, manufacturing facilities, etc., benefit from the ACP-Net's flexibility and energy saving capabilities.

### The Watt Stopper®, Inc.

2800 De La Cruz Blvd.  
Santa Clara, CA 95050

Tel: (408) 988-5331  
Fax: (408) 988-5373

National Technical Support  
(800) 879-8585

# ACP-Net Technical Information

## Specifications

- ◆ Accepts any type of switch contact closure input (momentary on/off, maintained or push button) and accepts 3 - 24 VDC voltage input signals
- ◆ Network wiring distances up to 1500 feet for free topology, 8000 feet for linear topology
- ◆ System clock: 32 channel, 7 day, multi-year holiday scheduling, astronomic, automatic day-light savings, battery back up, non-volatile memory (system clock is optional)
- ◆ Pilot light voltage output for each relay (24 VAC rectified)
- ◆ On/off status LED and individual override switches for each relay
- ◆ Selectable, true override time period: 30 min., 1 hr., 2 hr., 4 hr. with blink warning
- ◆ Allows different switch input personality types (daylighting, after-hour, lock-on, lock-off, etc.)
- ◆ Works with LCS-Net software or SP-1 system programmer for network administration
- ◆ NEMA type 1 enclosure, surface mount or flush mount
- ◆ Dimensions: 24-relay panel is 30.5" x 24" x 4.5"; 48-relay panel is 44" x 24" x 4.5" (L x W x H)
- ◆ Control voltage: 115 or 277 VAC, 60 Hz
- ◆ Relays are single-pole, rated at 20 Amp tungsten and ballast load
- ◆ Contactors are electrically held, 4 pole, rated at 20 Amp tungsten or 30 Amp ballast load
- ◆ FCC compliant Part 15, sub-part J for commercial and residential
- ◆ UL and CUL listed; 1 year warranty

## Ordering Information

Catalog No.	Description	# of Relays	Dimensions (L x W x H)
ACP-Net-xx-yy-C-zzz-SL(FL)	24-relay size ACP-Net Panel, including tub, cover, interior with specified number of relays, contactor poles, and power supply	up to 24	30.5" x 24" x 4.5"
ACP-Net-xx-yy-C-zzz-SL(FL)	48-relay size ACP-Net Panel, including tub, cover, interior with specified number of relays, contactor poles, and power supply	25 - 48	44" x 24" x 4.5"

- xx = Number of relays (multiples of four).  
 yy = Number of contactor poles (up to 24 per panel, in multiples of four).  
 C = Specify C for SC-100 System Clock installed (blank if not).  
 zzz = Control power voltage (115 or 277V).  
 SL/FL = Specify SL for surface mount, FL for flush mount.

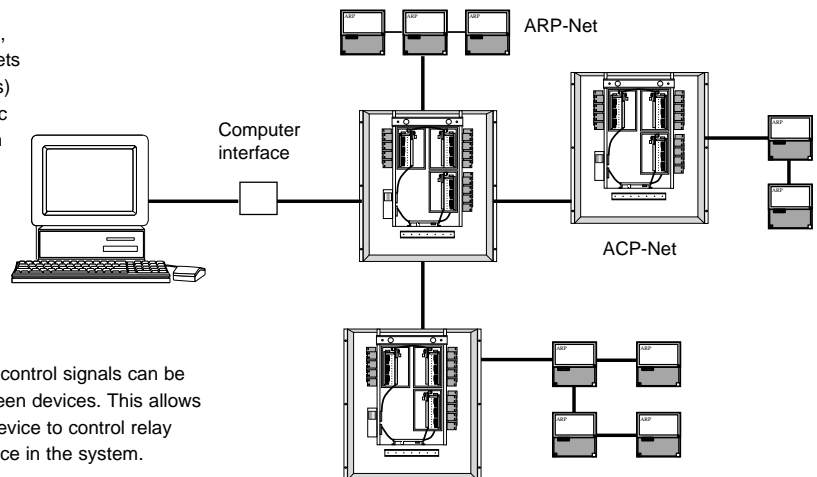
## ACP-Net System Accessories

Catalog No.	Description
SC-100	System Clock
SP-1	System programmer
LCS-Net	Lighting Control Software
CIM	Computer Interface Module

Catalog No.	Description
TSM-1	Telephone Switch Module
NR-110	Network Repeater
ER-10	Ethernet Router
HDLW2-ACP	Dataline wire

## Network Wiring Schematic

With free topology wiring, you can connect ACP-Nets (automatic control panels) and ARP-Nets (automatic relay packs) anywhere in the system to create a comprehensive lighting control system.



Through network wiring, control signals can be intelligently shared between devices. This allows switch inputs from any device to control relay outputs in any other device in the system.