

# TIME SWITCHES

AP21LV SERIES

## LOW VOLTAGE TIME SWITCH

*RING BELLS.. CONTROL LIGHTING AND SECURITY EQUIPMENT.*



UP TO 30 POWERFUL PROGRAM STEPS - 210 EVENTS PER WEEK.

UP TO 10 ANNUAL SKIP PLANS FOR SKIPPING HOLIDAYS AND SPECIAL EVENTS.

EASY - AUTOPROMPT PROGRAMMING

POWER FAIL BACK-UP. KEEPS TIME AND PROGRAM FOR 48 HOURS.  
NO BATTERIES REQUIRED!

PROGRAMMABLE, AUTOMATIC DAYLIGHT SAVINGS TIME, AND LEAP YEAR ADJUSTMENT.

RELAY OUTPUT - 15 AMP SPDT LATCHED or 0-99 SEC. MOMENTARY OPERATION.

DUAL POWER - 24 VAC, 60 HZ or 12 VDC (POWER MODULE IS INCLUDED). SEPARATE MODELS ARE NOT REQUIRED. 50 HZ OPTIONAL.

LOW POWER - IDEAL FOR SOLAR APPLICATIONS.

PROGRAM TRANSFER - AP21T

## TWO YEAR WARRANTY



**APPLIED  
TECHNICAL  
SYSTEMS**

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## **DESCRIPTION**

The AP21LV SERIES Time Switch is a Low Voltage version of the popular AP21 Series Time Switch. They are used for switching low voltage electric circuits according to a pre-set time and date program. They are designed to ring bells, control lighting, heating, ventilating, air conditioning and security systems where holiday skip operation is desired.

The AP21LV has an AUTO PROMPTING, alpha-numeric display and a 16 key, positive action keyboard that makes programming fast and simple. The AP21LVT is the identical except it has a Transfer Port. This port allows programs to be transferred from one AP21LVT to another, or to an AP21TR. Programs can be transferred from a computer with the optional AP21COMP Software and Adapter kit. The AP21TR is a plug-in relay module that is programmed from an AP21LVT, or a computer, using the AP21COMP Software. Once programmed, the AP21TR will provide the very same switching functions as the AP21LVT.

## **SPECIFICATIONS**

### **PROGRAMMING CAPABILITIES**

**EASY TO USE** - 16 character alphanumeric, LCD display and "Auto Prompt" software provides display information to guide the operator during programming.

**UP TO 30 POWERFUL PROGRAM STEPS** - Select either a 16 step or 30 step program size from the keyboard. Each program step can be programmed for any day of the week, or for all 5 weekdays, or for both weekend days, or for everyday of the week providing up to 105 ON's and 105 OFF's, for a total of 210 events per week.

**UP TO 10 SKIP PLANS** - A 16 step program has 10 skip plans, a 30 step program has 3. Each skip plan has a starting and ending date during which all events are skipped.

**PROGRAMMABLE DST ADJUSTMENT** - The AP21 Series Time Switches can be programmed to automatically adjust their time for Daylight Savings Time changes according to U. S. law, even if the law changes.

### **AUTOMATIC LEAP YEAR ADJUSTMENT**

**MANUAL OVERRIDE** - The output relay can be manually energized or de-energized from the keyboard.

**PULSED / MOMENTARY OUTPUT** - The output can be programmed to operate as a momentary contact, programmable from 1 to 99 seconds.

### **ELECTRICAL / PHYSICAL**

**Dual Power:** 24 VAC, 60 HZ (20 to 28 VAC)  
A Power Module is provided for 120 VAC operation. (50HZ Optional).  
Or 10.5 -15 VDC. Less than 1Watt.

**Output:** SPDT relay rated at 15 A resistive at 48 VAC or 24 VDC.

**Wiring:** Terminal block - can accommodate wire sizes from 14 to 24 AWG.

**POWER FAIL BACKUP** - Program and time keeping are maintained for 48 hours on a rechargeable capacitive backup system in the event of a power failure. The relay output and the display are disabled during backup.

**TIME KEEPING** - Synchronous with the AC power line. During a power failure it is quartz crystal controlled with an accuracy of +/- .003% throughout its full temperature range.

**PROGRAMMED EVENTS** - On/Off events are programmable with a one minute resolution and occur at the zero second of that minute.

**Size:** AP21LV - 3.7" W x 7.6" H x 1.6" D.  
AP21LVT - 3.7" W x 8" H x 1.6" D.

**Weight** - Approximately 2 lbs.

**Mounting** - Mounting holes provided.

**Operating Temperature Range:** -30 to +74 C.

## **ORDERING INFORMATION**

**AP21LV** Time Switch, 1 SPDT Output, 30 Events Per Day, Dual Power - 24 VAC 60 HZ or 12 VDC.

**AP21LVT** AP21LV with program transfer port.

### **OPTIONS and ACCESSORIES**

9100-1021 Connector and 48" Mating Wiring Harness.

9110-0041 Transfer Cable, 6 feet long.

AP21COMP Software is also available for programming AP21LVT's and AP21TR's from a Windows computer. Contact the factory for all other versions.



**FOR ASSISTANCE CALL 800-444-7161**