Altronix® PT-724 Seven Day / 24 Hour Event Timer

Features:

The Altronix model PT-724 is a fully programmable, seven day/24 hour, multiple event timer. It is extremely versatile and may be used for a wide variety of applications. The PT-724 can perform up to 27 independent events. Each of these events may be programmed to occur at anytime, any day of the week. The block feature can be used to repeat the same event on Monday through Friday or Monday through Sunday.There are three (3) types of events to choose from:

RLY ON to energize the relay;
RLY OFF to de-energize the relay;
PULSE to pulse relay from one (1) to sixty four (64) seconds.

All events programmed are stored in the timer's permanent (EE-PROM) memory and will not be lost due to a power failure.

Timer clock is crystal controlled ("real time") with battery backup.The PT-724 is equipped with a manual relay test switch. When depressed this switch will energize the unit's relay. This enables the installer to test the equipment the timer is to operate.

The "first man in" feature is designed to delay the automatic disarming of a security system until the first person with authorized access arrives at the protected premises. If nobody arrives, as is the case during a holiday, the security system (burglar alarms, access controls, video cameras, etc.) will remain armed.

Specifications:

*   12 to 24 VOLT AC or DC operation.
*   Form "C" Relay is rated at 10AMP at 120VAC or 28VDC
*   10 MA current draw (standby),
    40 MA current draw (relay energized)
Dimensions: 6.75"L x 3"W x 1"H
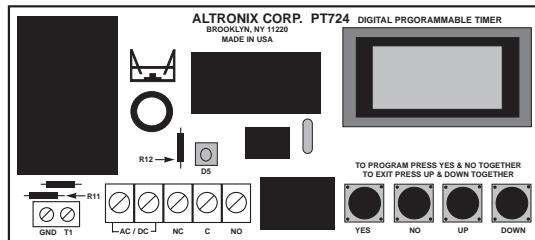
Installation Instructions:

See button definition table for description of functions
1. Connect AC or DC (polarity not observed) power from 12 volts to 24 volts to terminal block as indicated.

ALTRONIX PT-724-2   Will appear on the DISPLAY for a moment.

The DISPLAY will then change to: **ALTRONIX SU 0:00**

2. Place a general purpose 9VDC battery into the battery holder/connector. This battery will keep the clock running during a power failure. However, it will not continue to operate the PT-724 relay until the main power has been restored.
3. Next, depress "UP" and "DOWN" buttons simultaneously to start the clock. The DISPLAY will indicate the relay's current status:

RELAY OFF SU 0:00   OR   **RELAY ON SU 0:00**
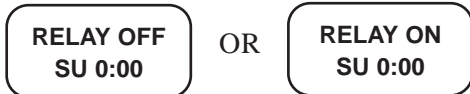
The Colon between hours and minutes will be blinking on and off. The DISPLAY will blink "LOW BAT" if battery has not yet been installed, is removed, or is in need of replacement.
Note: When using a DC power supply with battery backup the 9Volt battery is not needed.
To disable the low battery display cut resistor R11.

A. Setting Clock

This procedure should be followed when initially installing PT-724 or when making adjustments to correspond with daylight savings time.
Note: Time is denoted in military format (00:00 to 23:59).

A.1   Depress "YES" and "NO" buttons simultaneously and release. DISPLAY will show:

> **SET TIME**
> **Y / N**

A.2   Answer "YES". (Minutes will be blinking on the DISPLAY).
A.3   Set minutes using "UP" and "DOWN" buttons.
A.4   Depress "YES" when the desired number appears. (Hours will start blinking on the DISPLAY).
A.5   Set hours in the same manner as above and depress "YES" when done.
      (Day of the week will start blinking).
A.6   Set day in the same manner as above and depress "YES" to complete time programming.

B.   Programming Events

Note: To exit programming at anytime press UP and DOWN together.
This procedure should be followed when new events are to be added.
B.1   Depress "YES" and "NO" simultaneously and release.
      B.2 Answer "NO" to the question:

> **SET TIME**
> **Y / N**

B.3   Answer "YES" to the question:

> **SET EVENT**
> **Y / N**

The display will show:

> **NO EVENT**
> **PROCEED?**

B.4   Answer "YES" to program event or "NO" to exit.
B.5   Set time of the event (Follow steps A.3 through A.5. above)
B.6   Set day of the event by depressing "UP". You can choose an individual day of the week or set this
      event to take place every day Monday through Friday inclusive (block) features). Simply scroll
      through days until "M-F" appears on DISPLAY.
      Note: Cutting resistor R12 will repeat Monday through Sunday (display will still indicate M-F).
B.7   Answer "YES" to the question

> **RIGHT?**

Note: Day and time chosen
will appear under "RIGHT?"

B.8   Now select the type of event desired by depressing "NO" until your choice (RLY OFF or PULSE)
      appears on the DISPLAY. Ignore "DISABLE" selection, as it is used to cancel events. When
      choosing PULSE you can set its duration (length) using "UP" or "DOWN" buttons.
B.9   Depress "YES to accept the event.

> **<<WAIT>>**
> **<<WAIT>>**

Will appear on the DISPLAY indicating it has been stored in the memory.
After a short while the DISPLAY will change to:

> **NEXT**
> **Y / N**

B.10 Answer "YES" and repeat steps B.4 through B.9 if you choose to program the next event
      or answer "NO" to exit.

Note: The PT-724 will default to the relay OFF position on initial power up. To change relay state to ON,
set clock (see program instructions setting clock) to 1 minute before relay ON event time (eg. set clock to
5:59 a.m. if relay on time is programmed for 6:00 a.m.). When display changes to relay ON, then program
clock to correct time of day.

C. Modifying Events

This procedure should be followed, when it is desired to change the time or type of an existing event, or enable an event that has been previously cancelled.

C.1 Depress "YES" and "NO" buttons simultaneously and release.

C.2 Answer "NO" to the question:

> **SET TIME**
> **Y / N**

C.3 Answer "YES" to the question:

> **SET EVENT**
> **Y / N**

The DISPLAY will show:

> **EVENT 1**
> **Y / N**

C.4 Depress "YES" and perform steps B.5 through B.9 to change this event, or depress "NO" to scroll to the next consecutive event.

The DISPLAY will show:

> **NEXT**
> **Y / N**

D. Canceling Events

This procedure should be used when you wish to cancel one or more existing events.

D.1 Perform steps C.1 through C.3. Next scroll through the events answering"YES" to the question:

> **NEXT**
> **Y / N**

and "NO" to the event number displayed until that number corresponds to the event you wish to cancel and then depress "YES".

D.2 Skip the time setting by depressing "YES". Event type will appear on the DISPLAY. Depress "NO" until "DISABLE" is shown on the DISPLAY. Now Depress "YES".

D.3 Depress "YES" to go to the next event or "NO" to exit.

E. Erasing All Events

This procedure should by used to cancel all events programmed and clear the PT-724's memory.

E.1 Depress "NO" and "DOWN" together and release.

E.2 Answer "YES" to the question:

> **CLR ALL**
> **EVENTS?**

In order to erase memory, or "NO" to retain the existing program.

F. First Man In Terminals

When a contact closure is applied across the "GND" and "T1" terminals, the "First Man in" feature is enabled. All future events will now be ignored, even if the Clock signals a programmed event. When the contact closure is removed, the last Scheduled event type will take place, and the timer will resume normal operation.

G. Technical Notes:

When installing the PT-724 with any DC powered mag lock, electric strike or other electro mechanical device, it's a good idea to install a catch diode in order to reduce interference. Install the catch diode across the positive and negative terminals of the device, with the banded side of the diode connected to the positive terminal. Relay will energize for as long as D5 (test button) is depressed when relay is in OFF (de-energized) position.

Program Button Definition:

Program Button	Definition
YES	Function 1: Press to accept blinking option on display. Function 2: Press together with NO button to start programming mode.
NO	Function 1: Press to not accept blinking option on display Function 2: Press together with YES button to start programming mode. Function 3: Press NO & DOWN together to erase all previous program in memory.
UP	Function 1: Press to increment or change selection of blinking option on LCD display. Function 2: Press UP & DOWN together to exit programming.
DOWN	Function 1: Press to decrement or change selection of blinking option on LCD display. Function 2: Press UP & DOWN together to exit programming.

Terminal Identification:

Terminal Legend	Function/Description
AC/DC	Apply 12-24 volts AC or DC to these terminals to power timer (polarity does not need to be observed) current draw 10 mA relay OFF, 40 mA relay ON
NC, C, NO	Dry contact rated 10AMP , 115 VAC/28 VDC. Used to switch devices controlled by the PT724. NO/C will be closed when relay is ON and open when relay is OFF. NC/C will operate in a opposite manner.
GND T1 (First Man In)	Applying a contact closure across these two terminals will cause the PT724 to ignore all future events, when the contact closure is removed, the last scheduled event will take place, and the timer will resume normal operation.