

# PHM-100STV-A SAFETY SHUT OFF TIMER

USER'S MANUAL



**DOC-108**  
**Rev 1.1**

Copyright © 2006  
All Rights Reserved

MED Associates, Inc.  
P.O. Box 319  
St. Albans, Vermont 05478  
[www.med-associates.com](http://www.med-associates.com)



## INTRODUCTION

The PHM-100STV-A is a microprocessor based, digital timer that is capable of Timing Intervals between 1 and 99 seconds, in 1-second increments. Timing Interval is user selectable, via the front panel two-digit pushbutton switch. The Timing Interval is initiated by sending the PHM-100STV-A a MED output control signal. The output of the Safety Shut-Off Timer is a standard 28V output. At the end of the Timing Interval, the voltage output will deactivate and stay off until the Timer is reset.

Figure 1 – PHM-100STV-A Front Panel

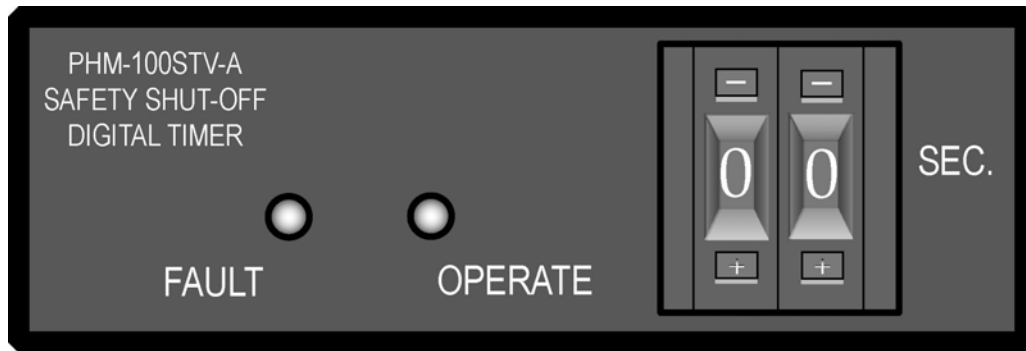
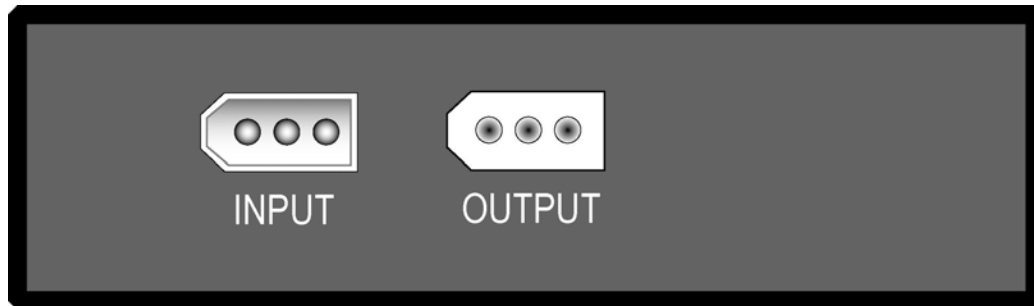


Figure 2 – PHM-100STV-A Back Panel



## OPERATING INSTRUCTIONS

The Timing Interval is set using the front panel pushbutton switches. The left-most digit on the pushbutton switches represents time in tens of seconds and the right-most digit represents seconds. For example, for the minimum Timing Interval of 1 second the pushbutton switches should be set to 0-1 (Figure 3) and for the maximum Timing Interval of 99 seconds they should be set to 9-9 (Figure 4).

*Figure 3– Timing Interval Set to 1 Second*



*Figure 4 – Timing Interval Set to 99 Seconds*



The green 'OPERATE' LED (Figure 1) indicates that the output is active. If the MED output is still on at the end of the Timing Interval, the PHM-100STV-A Safety Shut-Off Timer will turn it off. The 'FAULT' LED (Figure 1) will light up, indicating that there has been a timeout, and the Timer is now deactivated until it is reset (see DEVICE RESET).

### Timer Disable

To disable the PHM-100STV-A, set the Timing Interval to 0-0. With the timer disabled, the output will follow the input from the MED output control signal. When disabled, the 'FAULT' LED will blink, indicating that the safety circuit is inactive.

**Device Reset**

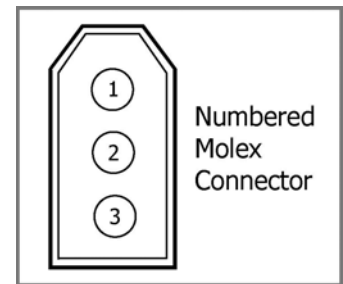
To reset the timer, the 28V power supplied to the PHM-100STV-A Input connector must be shut off or disconnected, then turned back on or reconnected.

**CONNECTORS**

**INPUT Connector**

This 3-pin Molex connector should be connected to any available Output on a standard MED Connection Panel. By turning the corresponding output bit "ON" the timer will start and timer output will activate.

Molex Pin #	Function	Wire Color
1	28V Ground	Black
2	Start Timer	White
3	+28 Volts	Red



**OUTPUT Connector**

The PHM-100STV-A Output is designed to be connected to MED syringe pumps, but any 28-Volt MED device, such as a house light or sonalert, can be connected to the 3-pin Molex connector. The output will be turned off at the end of the Timing Interval.

Molex Pin #	Function	Wire Color
1	28V Ground	Black
2	Operate Output	White
3	+28 Volts	Red

