



Resistance Soldering Precision Timer Module

Model: 105PTM



Description

We have found that spending a little extra time and money ensuring that you have the absolute correct set-up makes all the difference in the world when you come up against difficult soldering jobs. American Beauty offers a wide array of accessories to our line of resistance soldering systems. Take a moment to learn just how one of these items may improve your current process.

Features and Benefits

Precision control of power application down to the 100th of a second ensures the tightest of process control.

Multi-function timer takes operator error completely out of the picture.

Technical Specifications

RoHS Compliant	Yes
IEC 60335-2-45, Edition 3.2, 2012-01	Yes
Available in a 220-240 VAC?	Yes, available upon request
Harmonization Code:	8515.11.0000
Country of Origin	US
Package Length	8.25 in / 20.96 cm
Package Width	8.25 in / 20.96 cm
Package Height	6.75 in / 17.15 cm
Shipping Weight	2.90 lbs / 1.32 kg
Warranty Policy	Details
User Manual	User Manual
WEEE Compliant	Yes
CE Certified	Yes
IEC 60335-1, Edition 5.1, 2013-12	Yes

End-Of-Life Instructions

In an effort to reduce waste and comply with WEEE directive, please do not dispose of product. All American Beauty Tools are serviceable and can be repaired and/or replaced. Please contact manufacturer to make arrangements.

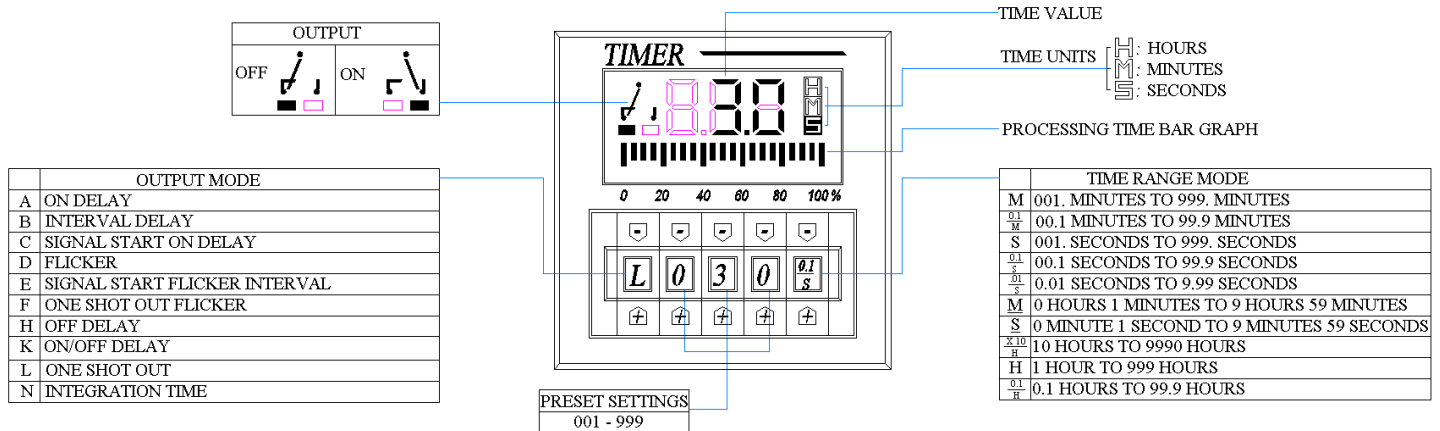
American Beauty® Resistance Soldering Systems

Timer Instruction Sheet

Manufacturers of American Beauty® Quality Soldering Tools.

Topic: Understanding the Available Functions and Specifications of the Model 105PTM Digital LCD Precision Timer Module.

Description: This Timer Module is a self contained, digital LCD, multiple functions precision timing control device, that has been specifically developed for use with many of the American Beauty® Resistance Soldering Systems and Power Units that are available.



Although there are several different functions available for use, the “L One Shot Out” function is recommended as the most appropriate type of operation for most of the standard Resistance Soldering applications that it is intended to be used on.

Functions: Choosing one of the available functions is achieved by setting the output mode selector to the appropriate letter designator as shown on the chart above. Each of the available functions of this unit is described in detail below. The functions that are shown as (*Continuous*) will require maintaining a continuous depression of the footswitch throughout the completion of their respective cycles. The functions that are shown as (*Momentary*) require only a momentary depression of the footswitch to initiate their respective cycles.

A On Delay = Time proceeds when the footswitch is depressed. The output is energized at the completion of the preset and remains on as long as footswitch remains depressed. Upon release of the footswitch the output is no longer energized and the counter returns to zero. (*Continuous*)

B Interval Delay = Time proceeds and the output is energized when the footswitch is depressed. The output is energized for the duration of the preset as long as the footswitch remains depressed. Upon release of the footswitch the output is no longer energized and the counter returns to zero. (*Continuous*)

C Signal Start On Delay = Time proceeds when the footswitch is depressed. The output is energized at the completion of the preset and remains on until the power is interrupted or the output mode is changed. (*Momentary*)

D Flicker = Time proceeds when the footswitch is depressed. The output becomes energized at the completion of the first preset cycle and remains energized from the beginning until the end of the second preset cycle. The output is off during the third cycle, then energized again during the fourth, etc. This OFF-ON-OFF timed cycling function will repeat as long as the footswitch remains depressed. Upon release of the footswitch the output is no longer energized and the counter returns to zero. (*Continuous*)

E Signal Start Flicker Interval = Time proceeds and the output is energized when the footswitch is depressed. The output is energized for the duration of the first preset cycle. It then turns off and remains off

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for the duration of the second preset cycle. The output is energized during the third cycle and off again during the fourth, etc. This ON-OFF-ON timed cycling function will repeat until the power is interrupted or the output mode is changed. (*Momentary*)

F One Shot Out Flicker = Time proceeds when the footswitch is depressed counting from zero to the preset value. The output energizes as one shot (0.3 Seconds) at the end of the preset cycle, then resets to zero and begins counting again. The cycle will repeat in this manner until the power is interrupted or the output mode is changed. (*Momentary*)

H Off Delay = The output is energized when the footswitch is depressed. The time proceeds when the footswitch is released and the output is energized for the duration of the preset. If the footswitch is depressed again during the cycle the output will remain energized and the counter will hold at zero. The time proceeds again upon release of the footswitch and the output is energized for the duration of the preset. (*Momentary*)

K On/Off Delay = Time proceeds and the output is energized when the footswitch is depressed. The output is energized for the duration of the preset as long as the footswitch remains depressed. Releasing the footswitch will reset the counter to zero and begin the energized cycle again. Each time the footswitch is either depressed or released the counter will reset to zero and the energized cycle will begin. (*Continuous*)

L One Shot Out = Time proceeds and the output is energized when the footswitch is depressed. The output is energized for the duration of the preset. Releasing the footswitch will not interrupt or interfere with the active cycle. After the completion of the preset cycle the footswitch can be depressed again to start the next cycle. The counter is returned to zero and a new energized cycle begins each time the footswitch is depressed. (*Momentary*)

N Integration Time = Time proceeds when the footswitch is depressed and held. The output is energized after the completion of the preset cycle and remains energized until power is interrupted. Releasing the footswitch during the preset cycle will interrupt the counter, which will resume when the footswitch is again depressed. Releasing the footswitch after the output is energized will have no effect on the output, which remains energized until the power is interrupted.

Specifications:

Output Device Operating Limits:	American Beauty® Resistance Soldering Power Units @ 0 to 1200watts.
Ambient Operating Temperature:	-10 to 55°C (at non-freezing status).
Ambient Operating Humidity:	35 to 85% Relative Humidity.
Insulation Resistance:	100 M ohms Min @ 500VDC between power input terminal and control output terminal.
Dielectric Strength:	2000VAC 50/60Hz for 1 minute between power input terminal and control output terminal.
Noise:	±2KV the square wave noise (pulse width : 1µs) by the noise simulator.
Mechanical Service Life:	Minimum rating is 10,000,000 operations.
Electrical Service Life:	Minimum rating is 100,000 operations @ 120VAC 10A (resistive load).

Setup: The Precision Timer Module may be plugged directly into a standard 110-120VAC three wire grounded 5-15Nema-type outlet.

The Footswitch should be plugged into the low voltage 3.5mm receptacle that is located on the lower front panel of the Timer Module.

The American Beauty® Resistance Soldering Power Unit that you intend to use should be plugged into the 5-15 receptacle located on the front of the Timer Module.

Be sure to verify the output mode selection before you begin operating the timer Module, remember that the exact output operation will be determined by the specific output mode that has been selected.