

# OPERATING INSTRUCTIONS

## Merlin II Hand-Washing Timer 740-T2HW



Model 740-T2HW

Prince Castle's second generation of Merlin Timers feature a new slim design which gives you mounting flexibility. The Prince Castle 740-T2HW Handwashing Timer is pre-programmed to help start handwashing procedures as soon as it is plugged in. Each channel is set for one hour cycle, but can be easily programmed to fit specific operational standards. Once started, the timer will continue to reset itself after sounding an alarm. There is no need to cancel and restart.

### ELECTRICAL

**740-T2HW**  
120 Volts  
60 Hz  
10 Watts  
Single Phase

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### LIMITED WARRANTY

This product is warranted to be free from defects in material and/or workmanship for a period of 1 year from date of original installation, not to exceed 18 months from the date of manufacture.

Any component which proves to be faulty in material and/or workmanship will be replaced or repaired (at the option of Prince Castle, Inc.) without cost to the customer for parts and labor. This equipment is portable; charges for on-location service (e.g., trip charges, mileage) are not included in the provisions of this warranty.

This warranty is subject to the following exceptions/conditions:

- Use of any non-genuine Prince Castle parts voids this warranty.
- All labor to be performed during regular work hours. Overtime premium (the incremental amount) will be charged to the customer.
- Damage caused by carelessness, neglect and/or abuse (e.g., dropping, tampering or altering parts, equipment damaged in shipment, by fire, flood or an act of God) is not covered under this warranty.
- All problems due to operation at voltages other than that specified on equipment nameplates are not covered by this warranty. Conversion to correct voltage is the customer's responsibility.
- This equipment must be serviced by Prince Castle Authorized Service Agency or a Prince Castle Service Technician during the warranty period.

## INSTALLATION

- After you have removed the timer from the carton, inspect the unit for signs of damage. If there is damage to the unit:
  - Notify carrier within 24 hours after delivery.
  - Save carton and packing materials for inspection reasons.
  - Contact your Prince Castle dealer or the Prince Castle Customer Sales Department at 1-800-722-7853 if purchased directly.
- Verify that all parts have been received. Mounting brackets and hardware provided
- To mount the timer, place mounting brackets in desired location. Scribe location of mounting holes, center punch, and drill holes. Attach timer to mounting brackets placing star washer between bracket and timer.

**Note:** Timers should be plugged into a dedicated outlet. No other equipment should be operating on this line (i.e. fryers, refrigerators, cash registers, etc.).

**CAUTION:** Solid state components in this timer are designed to operate reliably in a temperature range up to 150°F (65.6°C). When installing this timer, it should be confirmed that the ambient temperatures at the mounting site do not exceed 150°F (65.6°C).

## DISPLAYS AND INDICATORS

<b>TIME Display</b>	Shows the time for the selected channel number.
<b>H:M</b>	Indicates the time value is in <b>H</b> ours and <b>M</b> inutes.
<b>M:S</b>	Indicates that the time value is in <b>M</b> inutes and <b>S</b> econds.
<b>LED Indicators</b>	Located above each channel timer button, these lights change color depending on the stage of the countdown. Green = countdown cycle, Red = auto reset cycle.

## CONTROLS

### SCAN/UP ARROW



In the program mode, it increases time values for each channel. In the Run Mode, it is used in conjunction with logo button to increase the volume.

### SCAN/DOWN ARROW



In the program mode, it decreases time values for each channel. In the run mode, it is used in conjunction with logo button to decrease the volume.

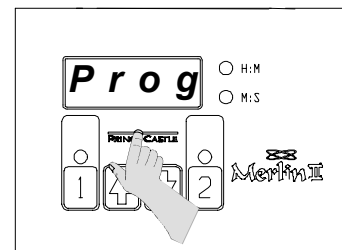
### PRINCE CASTLE Logo

Activates Program Mode and used to adjust the alarm sound level.

## PROGRAMMING

- To program, press and hold the **PRINCE CASTLE** logo for six seconds. The **TIME** display changes from ---- to **Prog**, and a beep will sound.

figure 1

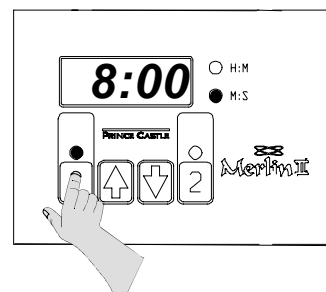


See figure 1.

**Note:** The timer leaves the factory preset at 60:00 minutes.

- Select and press the timer channel to be programmed. The LED indicator for the selected button will turn green and a beep will sound. The current programmed time for that channel will be

figure 2



displayed in the **TIME** display, and the time value will indicate either **H:M** OR **M:S**. See figure 2.

- To change the program time for the selected channel, use the **SCAN/UP Arrow** or the **SCAN/DOWN Arrow** button.

**IMPORTANT:** To change from Minutes and Seconds **M:S** to Hours and Minutes **H:M**. Press and hold the SCAN/UP Button. When the display reaches 59:59 it will automatically change to 1:00 Hour and the LED will switch from M:S to H:M. The program value for the **H:M** indicator is from 1:00 hour to 17 hours: 59 minutes.

4. Press the timer button again. The current audio alarm length will appear in the display. Note: It is reset in seconds.
5. Press the SCAN/UP or SCAN/DOWN Arrow to adjust the length of the audio alarm.

figure 3

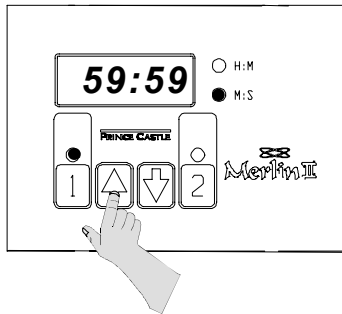
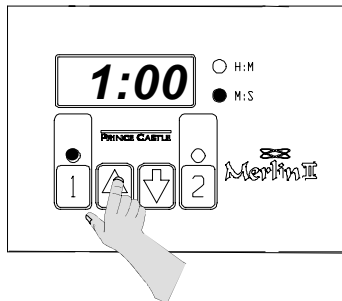
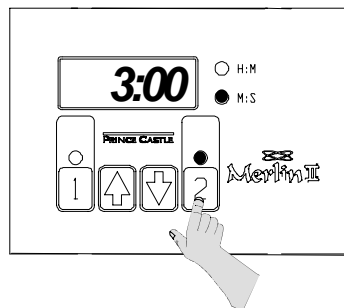


figure 4



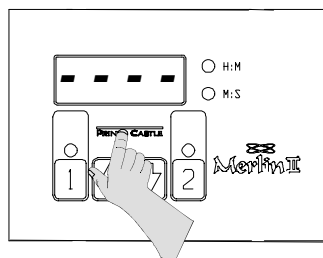
6. To program another channel, press the desired channel button. Repeat programming procedures in steps 2 thru 5 above. See figure 5.

figure 5



7. When finished programming each desired channel, momentarily press the **PRINCE CASTLE** logo to end the Program Mode. This saves the program changes you have made for all channels.

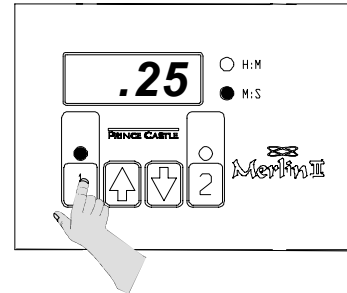
figure 6



## OPERATION

1. Press a channel button to activate a timing cycle. (Both channels can be activated and running at the same time.) The time channel number with the least amount of time remaining will be displayed in the **CHANNEL** display, its time remaining will countdown in the **TIME** display, and the time value **M:S** or **H:M** will be illuminated.

figure 8



2. Press the desired channel button three times within five seconds to cancel an active timing cycle and start another timing cycle. Press four times to deactivate the channel timer completely.

**IMPORTANT:** The channel timer button's multi-colored LED indicator shows the status of the timer. The indicator has two colors: green and red. The LED will be green during the countdown. It will be red during the auto reset cycle.

3. The timer will countdown from the programmed value to 0:00. At 0:00, the display alternates between "CLN" and "HAND", indicating it is time to clean hands, the timer channel indicator will flash red, and the audio alarm will sound for its preset time. To manually cancel the audio alarm, press the timer channel button once.
4. There are two audio alarm levels, high and low. To select the high level, press the Prince Castle Button and the SCAN/UP Arrow at the same time. To select the low level, press the Prince Castle Button and the SCAN/Down Arrow at the same time.

## CLEANING

1. Do not allow grease to build up on the timer, wipe it down daily with clean damp cloth.

**IMPORTANT:** Do not use abrasive or chemical cleaners on your timer, this may cause damage to the overlay.

# PART LIST

ITEM	PARTNUMBER	DESCRIPTION
1	69-079S	Rivet Plastic Push Pin
2	69-080	Self Retaining Nut
3	73-014	Hex Nut #4-40 S.S.
4	73-021	Hex Nut #8-32 S.S.
5	88-653-2-4S	Speaker Assy.
6	735-240S	Switch Panel Assy.
7	735-237	Front Bezel (740-T2)
8	735-238	Rear Cover (740-T2)
9	740-086S	Main P.C.Board
11	70-048	Knob
12	79-154	Washer
13	72-292S	Power Supply Assy.
	735-242	Table Mounting Bracket (Not Shown)
	735-241	Wall Mounting Bracket (Not Shown)

# TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
A. No displays or indicators lit.	Unit unplugged. Store's circuit breaker blown. Defective transformer. Circuit inoperable.	Plug unit in. Reset breaker. Replace Power Cord. Replace Main Circuit Board.
B. Absence of Audio Alarm.	Speaker inoperable. Circuit inoperable.	Replace Speaker. Replace Main Circuit Board.
C. Unit will not enter program mode. Display does not show " <b>Prog</b> ".	All channels are still counting. Logo Switch inoperable.	Wait until channels are in stop mode. Replace Switch Panel.
D. Unit enters program mode. Display shows " <b>Prog</b> ", but cannot change times.	The channel is still counting. Arrow Switch inoperable. Circuit inoperable.	Wait until channel is in stop mode. Replace Switch Panel. Replace Main Circuit Board.
E. Unable to start, stop, or store timer presets in program mode. Missing or abnormal characters in displays.	Circuit inoperable.	Replace Switch Panel. If problem persists, replace Main Circuit Board.
F. "88:88" flashes and beeps in display	Timer is in test mode	Unplug, hold up and down arrows while plugging in, display will change to "----", indicating timer is in operate mode.

# EXPLODED VIEW

