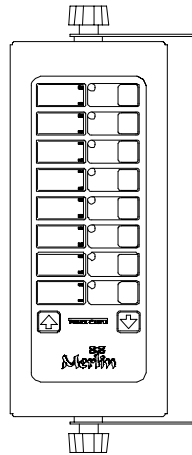


# OPERATING INSTRUCTIONS

## Merlin II

### Donato's Master Timer Model No. 740-T88D



Model	Description
740-T88D	Eight Channel

## ELECTRICAL

**740-T88D**  
120 Volts  
50-60 Hz

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### LIMITED WARRANTY

This product is warranted to be free from defects in material and/or workmanship for a period of two years from date of original installation, not to exceed 30 months from date of shipment from our factory.

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 or labor.

This warranty is subject to the following exceptions/conditions:

- This equipment is portable, charges for on location service (e.g. trip charges and mileage) are not included in the provisions of this warranty.
- Use of any non-genuine Prince Castle parts voids this warranty. All genuine Prince Castle replacement spare parts are warranted for ninety (90) days from date of purchase.
- All work must be performed by an authorized Prince Castle Service Agency. Failure to do so will void this warranty.
- 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.

## 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 purposes.
  - Contact your local dealer or, if purchased directly, the Prince Castle Customer Sales Department at 1-800-722-7853 to arrange for a replacement to be sent.
- 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.

## 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. RED = Stage 1, GREEN = Stage 2 YELLOW = Stage 3.

## CONTROLS

**Channel (Button)** Activates countdown sequence in the run mode.



**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.

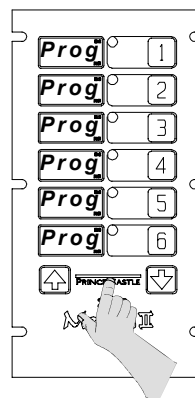
The timer currently supports 3 program stages or functions. Each program stage is independently programmed. The stages run in succession beginning with stage #1 and ending with stage #3.

Below Are The Pre-Set Stages Per Donato's specifications. These are pre-programmed times for channels 1-7. Channel 8 is a special Accelerate Mode. **Note: All times are in H:M Hours & Minutes.**

Stage	Time
RED	36:00
GREEN	42:00
YELLOW	14:00

## PROGRAMMING

- Press and hold the **PRINCE CASTLE** logo for six seconds. The **TIME** displays will change from "----" to "**Prog**" and a beep will sound.

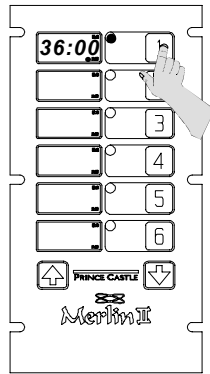


**IMPORTANT:** If a channel is not pressed within 30 seconds the display will change back to "--:--" and the timer will automatically go back to the run mode.

**NOTE:** While all displays are showing "**Prog**", pressing the **UP** or **DOWN ARROW** Button will increase or decrease, respectively, the display intensity level.

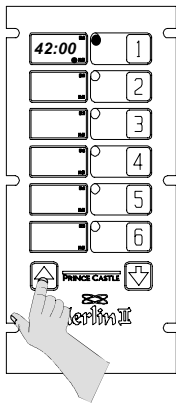
- Press the channel button for the particular timer channel you wish to program. The time window for the selected channel will show the current time for Red stage and the LED indicator will be red. This is the red stage program mode.

3. Press the **SCAN/UP Arrow** or the **SCAN/DOWN Arrow** button to change the program time for the selected channel.

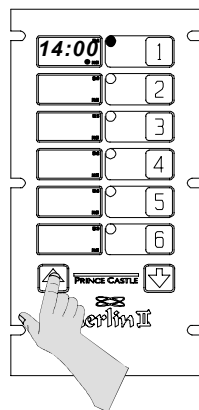


### RED STAGE

4. Press the selected channel button again. The time will show the current time for green stage and the LED indicator will change to yellow. This is the stage #2 program mode. Change the time using the **UP** and **DOWN ARROW** Buttons.



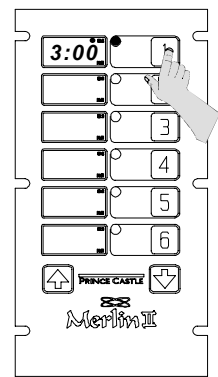
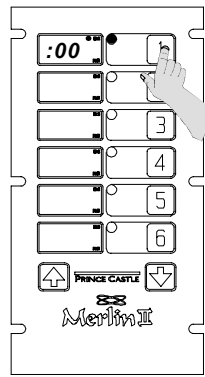
### GREEN STAGE



### YELLOW STAGE

5. Press the selected channel button again. The time window will show the current time for the yellow stage and the LED indicator will change to red. This is the stage #3 program mode. Change the time using **UP** and **DOWN ARROW** Buttons.

6. You may back up to a particular stage by pressing the channel button until the LED indicator cycles through stage red and rolls-over to stage yellow. Continue pressing the channel button until the desired program stage mode is selected.



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.
8. You can change the sound level of the alarm in **RUN MODE**. Press and hold the **PRINCE CASTLE** logo; then, within six seconds, press either the **SCAN UP** Arrow button or the **SCAN DOWN** Arrow button. The **SCAN UP** Arrow button adjusts the sound level to the louder alarm, the **SCAN DOWN** Arrow button adjusts the sound level to the lower alarm.

## OPERATION

### DAY CHANNELS 1-7

1. Press a channel button to activate a timing cycle. (All channels can be activated and running at the same time.) The time display will count down from the programmed time for each stage of the timer and the time value indicator will indicate either H:M or M:S.
2. When the programmed time is reached the alarm will beep twice, the LED will flutter during the beeping to indicate which channel is beeping, the display will reset to the next stage and begin counting down, and the LED will change to indicate the stage that the channels timer is in. The stages are RED, GREEN and YELLOW.
3. When the last stage counts out, the display will change to END, the LED will be flashing red and the alarm will continue to beep until the timer button is pressed to cancel the alarm. When the alarm is canceled the display will change to ----.
4. Press and hold the desired channel button for five seconds to cancel an active timing cycle.

## ACCELERATE CHANNEL 8

1. Accelerator mode 1=2.5 hours. LED is red during timing. After timed out, LED will be flashing green and alarm will have a two-tone beep until pressing the accelerator channel button cancels the timer alarm.
2. Accelerator mode 2=4 hours. LED is red during timing. After timed out, alarm will have a two-tone beep until pressing the accelerator channel button cancels the timer alarm. LED will be flashing yellow and the display will count down from 24 hours. After it counts down, the LED will change to a flashing red and alarm will have the regular single-tone beep. Pressing the accelerator channel button cancels the timer alarm.

**NOTE:** Accelerate 1 operation mode is selected by pressing the accelerate timer button (8). The display will show 2:30 when initially selected.

Accelerate 2 operation is selected by pressing the UP BUTTON within 3 seconds after releasing the accelerate timer button (8). The display changes to accelerate 2 mode by changing from 2:30 (Accelerate 1 mode start time) to 4:00 (accelerate 2 mode start time).

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## PART LIST

ITEM	PART NUMBER	DESCRIPTION
1	69-079S	Plastic Rivet (Pkg. Of 2)
2	740-034	Rear Cover
3	740-339S	Main P.C. Board
5	88-653-2-4S	Speaker Assy.
6	541-135	Speaker Shim
7	740-338S	Switch Panel Assy.
8	740-036	Front Cover
9	70-048S	Knob W/Hardware
10	72-292S	Power Supply (110 Volt)

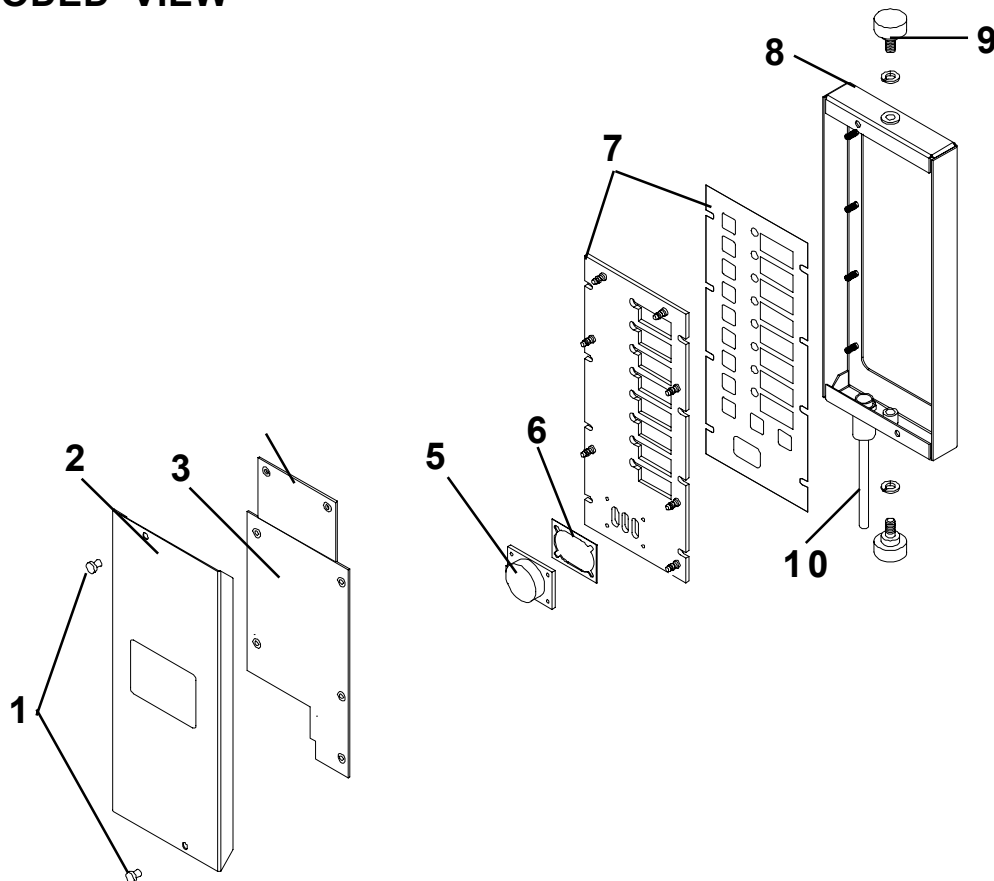
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## CLEANING

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.

## EXPLODED VIEW



## 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 Main Circuit Board. 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.

# WIRING DIAGRAM 740-T88D

