



Timer Bar/Kitchen Minder compatibility

Prince Castle Timer version/Kitchen Minder compatibility Chart

The following Timer bar software versions are Kitchen Minder compatible. To check the version on the Timer Bar, press the Prince Castle and Down Arrow buttons simultaneously, the Version will appear in one of the Timer bar displays.

| | | |
|----------|---|-------------------------------------|
| 2x4 | 8 Channel | 4.49, 4.59, 4.5B |
| 2x3 | 6 Channel | 1.73, 1.83, 1.05, 1.15, 1.75 |
| 2x2, 4x2 | 4 Channel | 1.46, 1.56, 1.05, 1.15, 1.48 |
| 3x4 | Top Bar 4 Channel Bottom Bar 8 Channel | 9.B1 4.5B |

If the version number does not match, the Timer Bar must be flashed with the software in the chart – the **latest software is in bold**.

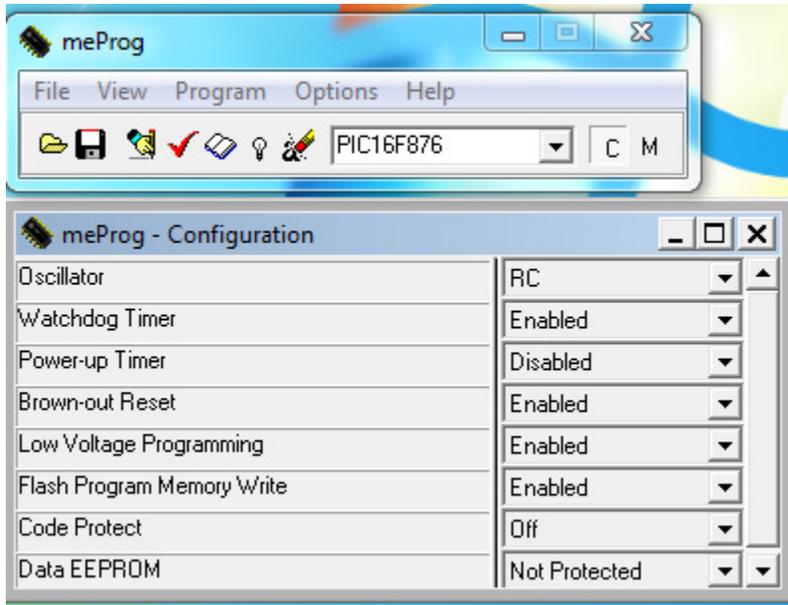
Required parts:

PC with melabs programmer software v 3.30 or higher installed
Latest hex software files (see Notes box below)
melabs USB programmer kit – PN 812276
Prince Castle PHU and Timer bar(s)

Timer Bar Flashing and re-address procedure:

1. Power OFF the PHU
2. Remove the Timer bar from the PHU (the wires will still be connected inside the PHU)
 - a. Remove the black rubber cover from the rear of the Timer bar
3. melabs programmer:
 - a. Connect the USB cable to the PC
 - b. Connect Pin-1 of the 5-pin ribbon cable to Pin-1 of the 5-pin header on the rear face of the Timer bar. Pin-1 on the Timer bar header which is designated by a square solder joint (closest to Timer bar wires), Pin-1 on the ribbon cable is marked with a white stripe and "1" on the ribbon cable 5-pin connector
4. Power ON the PHU
5. Unless already loaded, execute the melabs programmer PC software application
 - a. Select the Device **PIC16F876** from the pulldown list.
 - b. Check the Configuration Settings by clicking View, Configuration (or Ctrl-F)
 - i. Match each item on the Configuration page to the settings in the following picture.

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- c. Select Program, Get Target Device
 - i. If the message “Target device matches selected device” appears, click OK
 - ii. If the message “Target device does not match selected device” appears, Power OFF the PHU and repeat steps 5-6b
- d. Click File, Open, select the proper hex file for the Timer bar (see Notes 1. below)
- e. Click Program, Program
- f. The Task bar will display the programming status and “Program/Verify complete.” when programming is successful
- g. Click OK
6. Power OFF the PHU
7. Remove the programming cable from the Timer bar
 - a. Reattach the black rubber cover to the back of the timer bar
 - b. Reattach the Timer bar to the PHU
8. Power ON the PHU and Repeat Steps 1-10 for all FRONT(Main hex file) and BACK(Aux hex file) Timer bars to flash
9. If needed, please refer to the wiring diagram in the Kitchen Minder installation guide to check the cable configuration.
 - a. Only the WARMER1 port is used on the PC Translator Box
 - b. WARMER2 and WARMER3 ports are inactive.
 - c. The Prince Castle Timer PHU’s are daisy chained as follows:
 - i. PC Translator Box WARMER1 port → Level shifter
 - ii. Level shifter → 1st PHU IN port
 - iii. 1st PHU OUT port → 2nd PHU IN port
 - iv. 2nd PHU OUT port → 3rd PHU IN port
10. **Re-addressing the Timer Bars:**
 - a. Power off the PHU,
 - b. Power on the PHU, immediately press the Prince Castle Button and Down Arrow button simultaneously for 5 seconds

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- c. The far right display will show “Bar2”, “2” will be blinking. The Version# will be displayed in the 6th display from the left.
- d. Use the Arrow Up or Down keys to program the proper address.
 - i. The bars must have different addresses .It is not mandatory to address the bars as detailed below, but for consistency use the following scheme:
 - ii. Address the 1st PHU off the Translator box to Bar2
 - iii. Address the 2nd PHU to Bar3
 - iv. Address the 3rd PHU to Bar4
- 11. When the proper address is displayed, Press ENTER button on Timer Bar
- 12. Recycle Power on PHU
- 13. Repeat for all FRONT Timer Bars, the rear timers bars do not get addressed
- 14. **Check the “Bin” # on each PHU – ALL Bin#’s must be 2**
 - a. With the PHU powered ON, press the Actual Temp and Set Point keys on the PHU control simultaneously.
 - b. The current Bin# setting will display
 - i. If Bin2 is displayed, move on to the next PHU and repeat step 15a until all PHU’s have Bin2 assigned
 - ii. To change the Bin# to 2, Power OFF the PHU
 - iii. Hold down the Actual Temp and Set Point keys simultaneously while powering ON the PHU until the small prog led is illuminated (5 seconds)
 - iv. Press the Up or Down arrow until Bin2 is displayed.
 - v. Press the Prince Castle button on the PHU control
 - vi. Press the Actual Temp and Set Point keys on the PHU control simultaneously to double check that Bin2 is assigned.

Notes

PHU/Timer type & Software file naming conventions, latest versions as of 7/9/10

| | | |
|-----------------------------------|---|--|
| 8 Channel PHU Front Timer | = | 8ch_MAIN_v45B_TSMC_96407430 FDF7.hex |
| 8 Channel PHU Back Timer | = | 8ch_AUX_v45B_TSAC_96407431 B8E0.hex |
| 6 Channel PHU Front Timer | = | 6ch_MAIN_v175_TSM6MC_96407483 FC41.hex |
| 6 Channel PHU Back Timer | = | 6ch_AUX_v175_TSA6MC_96407484 B72A.hex |
| 4 Channel PHU Front Timer | = | 4ch_MAIN_v148_TSM4MC_96407487 0081.hex |
| 4 Channel PHU Back Timer | = | 4ch_AUX_v148_TSA4MC_96407488 BB6A.hex |
| 3x4 PHU Top 4-Channel Front Timer | = | 3x4top_MAIN_v9B1_BK3x4Top_964074148 001F.hex |
| 3x4 PHU Top 4 Channel Back Timer | = | 3x4top_AUX_v9B1_BK3x4Top_964074149 BB08.hex |

The Front Keyboard has a MENU/ENTER button and BKFT/REG led’s - The Back Keyboard does not