TORK
INSTRUCTION MANUAL

EW101B
EW103B
EW120B
DIGITAL TIME SWITCH

CLOCK OPERATED SWITCH
UL
LISTED 449D

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EW103B
EW120B
DIGITAL TIME SWITCH

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MLI-204 (C)
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation Instructions and Capabilities</td>
<td>1</td>
</tr>
<tr>
<td>Key Functions</td>
<td>2</td>
</tr>
<tr>
<td>1.0 To Set The Clock</td>
<td>3</td>
</tr>
<tr>
<td>1.1 To Modify Clock</td>
<td>3</td>
</tr>
<tr>
<td>(After previously Set)</td>
<td></td>
</tr>
<tr>
<td>2.0 To Set Date</td>
<td>3</td>
</tr>
<tr>
<td>2.1 To Modify Date</td>
<td>4</td>
</tr>
<tr>
<td>(After previously Set)</td>
<td></td>
</tr>
<tr>
<td>3.0 Daylight Saving Time</td>
<td>4</td>
</tr>
<tr>
<td>3.1 To Modify Daylight Saving Time</td>
<td>5</td>
</tr>
<tr>
<td>4.0 Scheduling ONs, OFFs</td>
<td>6</td>
</tr>
<tr>
<td>4.1 Setting Hours, Minutes and Days</td>
<td>6</td>
</tr>
<tr>
<td>5.0 Review, Modify, Delete Schedules</td>
<td>6</td>
</tr>
<tr>
<td>6.0 Manual Override</td>
<td>7</td>
</tr>
<tr>
<td>7.0 Update Status</td>
<td>7</td>
</tr>
<tr>
<td>8.0 Notes: Clear All Memory</td>
<td>7</td>
</tr>
<tr>
<td>Schedule Sheets</td>
<td>9-12</td>
</tr>
</tbody>
</table>
TORK MODELS EW101B / EW103B / EW120B
24 HOUR DIGITAL TIME SWITCH

READ INSTRUCTIONS CAREFULLY BEFORE
ATTEMPTING TO INSTALL TIME SWITCH. SEE
WARNING ON FRONT PANEL – Failure to comply with
instructions could result in personal injury and/or property
damage.

INSTALLATION:
UNIT IS TO BE INSTALLED BY A LICENSED ELECTRICIAN
1. To remove unit from enclosure: Push the tab on right to
swing unit the left and remove.
2. Mount the enclosure at eye level using screws or other
suitable fastening device. Bring supply and load wires
in through or side knockouts. DO NOT USE TOP.
3. Unit should be programmed with AC power only and
not while on super cap back up power.
4. Reinstall unit by reversing step #1 above and connect-
ing wires to units as per suggested wiring diagrams.
See illustration and warning on back page.
5. To reset the timer, insert a paperclip on the small hole
next to the EVENT key. This procedure will allow you to
reset the time but will not clear the memory.

CAPABILITIES:
• 7 Day scheduling.
• ON and OFF set points:
  Total number of events - 20 per day / week
• Minimum setting - 1 minute
• Capable of different schedules each day of the week

FEATURES:
Daylight Saving Automatic (can be adjusted).
Leap Year Automatic compensation.
Display LCD
Manual Override Until the next schedule ON or OFF.
Power Outage Automatic operation then resumes.
              Permanent schedule retention.
              Supercapacitor maintains real time
              up to 4 days.
KEY FUNCTIONS:
Unit should be programmed with AC power. Do not program on super cap back up power.
Mode: Press to go to the next mode.
Enter: Stores or saves current entry.

OVR:
a. Press to change the load status in the AUTO (automatic) and the MAN (manual) mode.

DEL/PREV:
a. Press to delete the displayed entry.
a. Decrement the last selected entry.

HOUR/MONTH:
a. Press to set hour in CLK (clock) mode and the SCH (schedule) mode.
b. Press to set month in the DATE mode and DST (Daylight Savings Time) mode.

MINUTE/DATE:
a. Press to set minutes in CLK (clock) mode and SCH (schedule) mode.
b. Press to set date in the DATE mode.
c. Press to select the week of the month in DST (Daylight Savings Time).

SEC/DAY/YEAR:
a. Press to set the YEAR in the DATE mode.
b. Selects the desired day of the week in the DST (Daylight Savings Time) mode.
c. Press to select the desired day or days in the SCH (schedule) mode.

EVENT:
a. Press to select ON/OFF in the schedule.
b. Press to update the load status in the AUTO (automatic) mode.
PROGRAMMING YOUR EW101B / EW103B / EW120B

NOTE: AFTER MAKING ANY CHANGES TO THE PROGRAM, PRESS MODE TO GO TO RUN MODE AND THEN PRESS EVENT TO UPDATE THE LOAD STATUS.

AT POWER UP:
When powering up the unit for the first time, allow 1-2 minutes to charge the supercap, then 12:00 AM will flash on the display. Press reset button after 2 minutes if screen is blank.

Press the MODE key to go to the CLK mode. After pressing the MODE key the display will show:

![Clock Display]

1.0 TO SET CLOCK
Press HOUR and MIN to advance to the present hour and mins. Check AM/PM, and press ENTER.

1.1 TO MODIFY CLOCK
Press MODE until the display shows: CLK. Press HOUR and MIN. to modify clock and press ENTER.

2.0 TO SET DATE
If you are setting for the first time, display will show:

![Date Display]

Press MONTH, DATE, and YEAR key to advance to the desired month, date and year, then press ENTER.
NOTE: The day of the week will automatically set once the date is set.
2.1 TO MODIFY DATE
Press **MODE** until the display shows DATE. Press **MONTH**, **DATE** and **YEAR** to modify present settings and then press **ENTER**.

3.0 DAYLIGHT SAVINGS TIME
After setting or modifying the date, display will show:

![ON DST]

a. For standard USA daylight savings (DST), press **MODE** and go to step 4.0.
b. For dates other than standard USA dates, press **MONTH** and go to step 3.1.
c. If daylight saving time (DST) is NOT required, press **DEL** and display will show:

![OFF DST]

Press **ENTER** then go to step 4.0.
3.1 TO MODIFY STANDARD USA DAYLIGHT SAVINGS TIME

NOTE: The first two digits represent the month and the second set of digits represents the week in the month. Choices for week are 01 (1st), 02 (2nd), 03 (3rd) or L (Last) week of the month. The default day is Sunday (SU). Once modified date is set, the unit will automatically calculate the correct start dates in the future.

Now press the MONTH and DATE buttons to modify the starting DST settings. Pressing DAY changes default day. EXAMPLE: A screen showing “04:01 SU S” represents April (04), the first week (01), Sunday (SU) and the Start (S) of daylight savings time.

Press ENTER to save and the display will show:

Now press MONTH and DATE buttons to modify the ending DST settings. Pressing DAY changes default day. EXAMPLE: A screen showing “10: L SU E” represents October (10), the last week (L), Sunday (SU), and the End (E) of daylight savings time.

Press ENTER to save and the display will show the modified DST starting date.

Press MODE twice to go to step 4.0.
4.0 SCHEDULE SET MODE
Press MODE until display shows:

![Display showing 01](image)

4.1 SETTING HOURS, MINUTES AND DAYS
a. Press HOUR and MIN to set desired time.
b. Press EVENT to set desired event (ON/OFF). Press DAY to select desired days and then press ENTER. The display will show:

![Display showing 02](image)

Follow the same procedures above to set more schedule entries.

5.0 REVIEW, MODIFY AND DELETE
Press MODE to advance to any of the following MODES:

1. CLOCK MODE: Press HOUR and MIN to modify existing settings. Press ENTER.

2. DATE MODE: Press MONTH, DATE, and YEAR to modify existing settings. Press ENTER. DAY is automatically adjusted.

3. DST (Daylight Saving Time): To review press ENTER. To change existing settings press MONTH, DAY and DATE, then press ENTER.

4. SCHEDULE MODE: Press HOUR, MIN and EVENT to modify time settings. Press DAY to modify days, and DEL to delete. Press ENTER after each modification.

5. RUN MODE: The time, day, seconds, the load status and AUTO is displayed.
6.0 OVERRIDE
OVR (Override) is effective in the AUTO mode and the MANUAL mode. OVR on the AUTO mode is effective until the next event. OVR on the MANUAL mode is effective indefinitely.

7.0 UPDATE STATUS
EVENT key (in the RUN mode) is used to update the load status. It will execute the last scheduled event. If there is no schedule programmed, the display will show --:--

8.0 NOTES
1. MAN MODE: Under this mode the unit disregards the settings in the schedule mode and remains in its manually set status ON or OFF. NOTE: To resume regular schedule execution press the mode key to return to AUTO mode.

2. Unit will go to RUN MODE automatically (except on the MAN mode) if no key is pressed for five minutes.

3. Clear all memory. All memory can be cleared using the following procedure: While in the RUN mode, press ENTER, and display will show:

   ![CLEAR AUTO OFF]

Use EVENT key to display:

   ![CLEAR AUTO ON]

Now press ENTER briefly and everything in the timer memory will be erased, including real time and date. NOTE: Unit has permanent memory and will not be erased unless done through procedure above.
4. Upon powering up your EW101B/103B/120B the display will show at what frequency the unit is operating. 50 will determine 50Hz or 60 for 60Hz. **NOTE:** While in the AUTO mode, if AC power is absent, the display will show a PF (power failure) instead of the seconds scrolling up.

5. A “Lo” on the display indicates that the super cap has run low and the unit needs to be powered with AC. A minimum of 8 hours is required to fully charge the super cap.
**NOTE:** AFTER MAKING ANY CHANGES TO THE PROGRAM, PRESS **MODE** TO GO TO RUN MODE AND THEN PRESS **EVENT** TO UPDATE THE LOAD STATUS.

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