TORK ® **nsi** INDUSTRIES

INSTRUCTION MANUAL

CLOCK OPERATED SWITCH

c (UL) us
LISTED 469D

DIGITAL TIME SWITCH

E101B
E103B
E120B

TABLE OF CONTENTS

Section   **Page**

TORK MODELS E101B / E103B / E120B
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 connecting 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
- 24 Hour Day scheduling.
- ON and OFF set points
  Total # - 20 per day
- Minimum setting: 1 minute

FEATURES

Daylight Saving	Automatic (can be adjusted).
Leap Year	Automatic compensation.
Display	LCD
Manual Override	Until the next schedule ON or OFF. Automatic operation then resumes.
Power Outage	Permanent schedule retention. Supercapacitor maintains real time up to 4 days.

KEY FUNCTIONS:
Unit should be program 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.

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.

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.
b. 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).

ENTER:
a. Press to store the displayed information into memory**. Information will not be stored until the ENTER key is pressed.**
Note: During settings, each press of the key will advance one number. For rapid advance hold key in.

EVENT:
a. Press to select ON/OFF in the schedule.
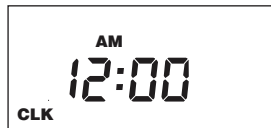**b.** Press to update the load status In the AUTO (automatic) mode.

2

PROGRAMMING YOUR E101B / E103B / E120B

> **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, 12:00 will flash on the display. **NOTE**: Allow 1-2 minutes for the supercap to charge before any display is shown.

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

```
    AM
  12:00
CLK
```

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:

```
MO
  01:01 07
    DATE
```

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 be 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 SAVING TIME
After setting or modifying the date, display will show:

```
d 5t    ON
```

For standard USA daylight savings (DSt), press **MODE** then go to step 4.0. For dates other than standard USA dates, press **MONTH** and go to step 3.1. If daylight saving time (DSt) is NOT required, press **DEL** display will show:
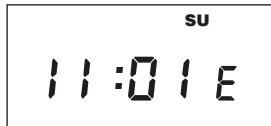
```
d 5t    OFF
```

Press **ENTER** then go to step 4.0.

4

3.1   TO MODIFY STANDARD USA
**   DAYLIGHT SAVINGS DATES**

```
                    SU
   03:02 s
```

Press **MONTH** and **DATE**, to modify S (starting) DST
settings. **NOTE**: **DATE** will choose the week of the month
to be assigned. Choices are 01 (1st), 02 (2nd), 03 (3rd)
or L (Last) week of the month. The default day in SU
(Sunday). Pressing **DAY** changes default day. EXAMPLE:
04:01 SU S represents the first Sunday in April.

Press **ENTER** and the display will show:

```
                    SU
   11:01 E
```
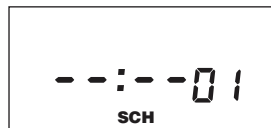
Press **MONTH** and **DATE**, to modify E (ending) DST
settings. **NOTE: DATE** will choose the week of the
month to be assigned. Choices are 01 (Ist), 02 (2nd),
03 (3rd) or L (Last) week of the month. The default day
is SU (Sunday). Pressing **DAY** changes default day.
EXAMPLE: 10:L SU E represents last Sunday in
October.

Press **ENTER** and the display will show the modified
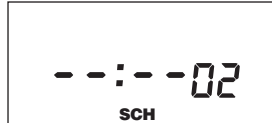DSt starting date.

Press **MODE** to go to step 4.0.

4.0   SCHEDULE SET MODE
        Press **MODE** until display shows:

```
   --:--01
     SCH
```

5

4.1   SETTING HOURS AND MINUTES
Press **HOUR** and **MIN** to set desired time. Press **EVENT** to set desired event (ON/OFF) and then press **ENTER.** The display will show:

```
- -:- -02
      SCH
```

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 modify press **MONTH, DATE** and **DAY** to change existing setting. Press **ENTER.**

4. SCHEDULE MODE: Press **HOUR**, **MIN** and **EVENT** to modify time settings. Press **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.

6

7.0 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**, display will show:

```
CL EAr   OFF
         AUTO
```

Use **EVENT** key to display:

```
CL EAr   ON
         AUTO
```
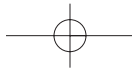
Now press **ENTER** briefly and everything in the timer memory will be erased, including real time and date. **NOTE:** Unit has permanent memory and will not be erased unless done through procedure above.

5. Upon powering up your E101B/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.

6. 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.

7

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

Sch.#	Load Description	Time	ON	OFF

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