



# **DIGITAL TIME SWITCH**

E201B



FOR TECHNICAL SUPPORT: 888.500.4598

TORK<sup>®</sup> nsi

888.500.4598 • www.nsiindustries.com

MLI-210(C)

## 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:

Follow the same procedures above to set more schedule entries for CH1. Press CH1/CH2 key to program schedule for CH2.

# 5.0 REVIEW, MODIFY AND DELETE

Press **MODE** to advance to any of the following MODES:

- CLOCK MODE: Press HOUR and MIN to modify existing settings. Press ENTER.
- DATE MODE: Press MONTH, DATE and YEAR to modify existing settings. Press ENTER. DAY is automatically adjusted.
- DST Daylight Saving Time: To review press ENTER. To modify press MONTH, DATE and DAY to change existing setting. Press ENTER.
- 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

**OVR1/OVR2** 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.

#### **PROGRAMMING YOUR E201B**

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 reset button after 2 minutes if screen is blank.



#### 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:





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.

#### CH1/CH2/OVR1:

- a. Press to change the load status in the AUTO (automatic) and the MAN (manual) mode for CH1.
- Press to select the channel during schedule programming.

#### DEL/PREV/OVR2:

- a. Press to delete the displayed entry.
- b. Decrement the last selected entry.
- c. Press to change the load status in the AUTO and manual mode for CH2.

#### 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.

#### **7.0 NOTES:**

- 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.
- 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:



Use **EVENT** key to display:



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 E201B the display will at what frequency the unit is operating, 50 will determine 50Hz or 60 for 60 Hz. 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.
- 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.
- 8.0 USE AS MOMENTARTY UNIT. This unit can also be field converted to be used as momentary unit. To make this conversion, remove jumper in back of the unit. Reset the unit by inserting a small pin or paper clip into the small hole next to the EVENT key and re-setting the clock and 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:



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:



Press ENTER then go to step 4.0.

# 3.1 TO MODIFY STANDARD USA DAYLIGHT SAVINGS DATES

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:



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 (lst), 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:

**4.1** Press **CH1/CH2** key to select the channel. Do not press CH1/CH2 if you are programming for CH1.

- Upon removing the jumper and re-setting the unit, CH1 will be configured as momentary ON and OFF. ONLY CH1 will need to be programmed. CH2 can still be viewed and programmed but will not take effect.
- 2. 2 Second closure between terminals 3 and 4 at ON event and 2 second closure between terminals 5 and 6 at OFF event.

**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.#	CH#	Load Description	Time	ON	OFF

# TORK MODEL E201B 2 CHANNEL, 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.
- 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.
- Reinstall unit by reversing step #1 above and connecting wires to units as per suggested wiring diagrams. See illustration and warning on back page.
- 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 SavingAutomatic (can be adjusted).Leap YearAutomatic 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.

# **TABLE OF CONTENTS**

Section				
		Installation Instructions and		
		Capabilities	1	
		Key Functions	2	
	1.0	To Set The Clock	3	
	1.1	To Modify Clock	3	
		(After previously Set)		
	2.0	To Set Date	3	
	2.1	To Modify Date	4	
		(After previously Set)		
	3.0	Daylight Saving Time	4	
	3.1	Modify Daylight Saving Time	5	
	4.0	Scheduling ONs, OFFs	5	
	5.0	Review, Modify, Delete schedules	6	
	6.0	Manual Override	6	
	7.0	Clear All Memory	7	
	8.0	Use As Momentary Unit	8	
		Blank Schedule sheets	8	