

# **TORK**

## **Lighting Reactivation Switch**

### **Model: LDSH, LDSH-A**

#### **INSTALLATION AND USER'S GUIDE**

##### **FUNCTION & DESCRIPTION**

The Lighting Delay Switch is an accessory to any TORK maintained contact time switch and is used to extend the time on of lighting, HVAC, and other main building loads after the time switch turns OFF. An auxiliary contact closes, turning on a user selected signal device (i.e. bell, horn, light, or other warning device), which turns off at the end of the user selected 4 second, 1 minute or 5 minute period.

Remote momentary ON/OFF push button switches can be connected to the designated terminal of the Lighting Delay Switch using low voltage #18 - 22 AWG twisted pair wires. Pressing the remote ON button momentarily during a 1 or 5 minute warning period will extend the time on (main load) for a user selectable 1/2 hour, 1 hour, 1-1/2 hour, 2 hours, 6 hours, 9 hours, or 12 hours. At the end of the extended time the user selected signal device will again turn on, allowing personnel to repeat another 1/2 - 12 hour extension of the main load if necessary. Pressing the remote OFF button for 3 to 4 seconds will terminate the extension of time for the main load, and turn on the auxiliary warning circuit. The warning circuit will turn OFF after the 4 second, 1 minute or 5 minute period. The main load will turn off after 1 or 5 minutes (user selectable).

When starting up after a power failure (if time switch is not ON), the main load will be turned ON for 10 minutes. At the end of the 10 minute period, the warning circuit will turn on. The main load will remain ON for the 1 or 5 minute warning period. If an extension of time is required for the main load, press the remote ON button momentarily. The auxiliary warning circuit will turn off, and the main load will remain on for an additional 1/2 - 12 hour extension of time.

This unit is ideally suited to meet Energy Conservation construction codes relative to con-

trolled lighting after hours and assures building loads will go OFF after personnel (i.e. cleaning-staff working after hours) leave the building.

**NOTE:**

1. Multiple remote momentary push buttons may be wired to the same terminals for access from different locations.
2. The Lighting Delay Switch can be operated as a stand alone control using remote ON/OFF momentary push-buttons.
3. If time of day control is also required, see wiring diagram for time switch interface.
  - A. Pressing the remote ON momentary push-button while the time switch is ON will start the internal timer of the Lighting Delay Switch, but will have no immediate impact on the main load. When the time switch turns OFF, the load will remain ON for the duration left on the LDSH.
  - B. Pressing the remote OFF push button for 3 to 4 seconds while the time switch is ON will terminate the internal timer of the Lighting Delay Switch, but will have no impact on the main load which will remain ON. When the time switch turns OFF, the load will turn OFF after the warning period.

## **INSTALLATION PROCEDURE**

Step 1:

***Model LDSH only.*** Remove the unit from the plastic track. Mount the plastic track with provided hardware only. Do not use other hardware. Snap the unit back into the track.

Step 2:

**Before wiring, power to this unit, the time switch, and the equipment it controls must be turned off at the main panel. Wire the unit according to the appropriate wiring diagrams provided. Be sure to follow local and all other codes.**

Step 3:

Set all switches #1, 2, 3, and 4 to the ON position for test. This will accelerate the complete operation of the unit to under 1 minute, allowing a check of the wiring and the functions.

Step 4:

Set the extended time delay for the main load to the appropriate time by adjusting switch #1, 2, and 3. See table for desired timing.

**Step 5:**

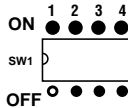
Set the warning period for 1 or 5 minutes using switch # 4. See table for desired timing.

**Step 6 (optional):**

If it is desirable to have the auxiliary load on momentarily only (4 seconds i.e. for bell or other warning signal) place the *special switch* down in the momentary position (see below).

**Step 7:**

Remote ON/OFF momentary push buttons can be connected at the remote input terminal between C & ON to activate extended time, and C & OFF to disable extended time.



**MAIN SWITCH CONFIGURATION**

TIME SET	1	2	3	4
1/2 HR	OFF	OFF	OFF	*
1 HR	OFF	OFF	ON	*
1-1/2 HR	OFF	ON	OFF	*
2 HR	OFF	ON	ON	*
6 HR	ON	OFF	OFF	*
9 HR	ON	OFF	ON	*
12 HR	ON	ON	OFF	*
TEST	ON	ON	ON	ON

\*Switch 4 (ON) – 5 Minute Warning Period

\*Switch 4 (OFF) – 1 Minute Warning Period

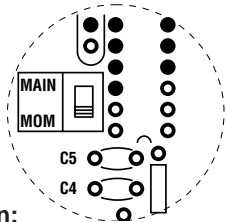
**SPECIAL SWITCH FOR AUXILIARY LOAD ONLY**

**UP (Main) Position:**

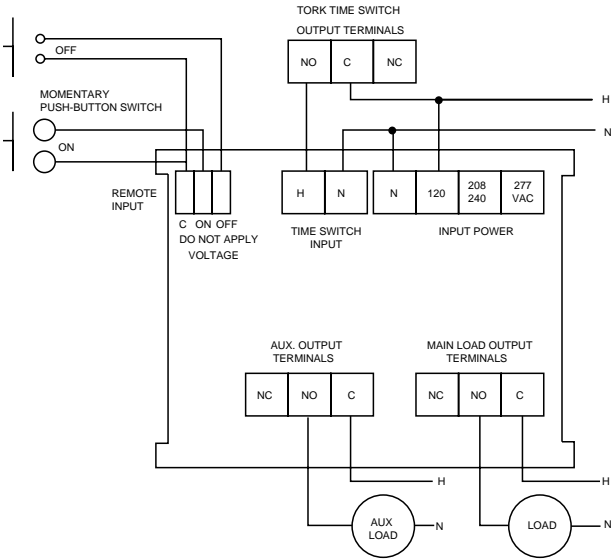
ON for same 1 or 5 minute period as set by main switch #4 (see above).

**DOWN (Momentary) Position:**

Auxiliary load is on for 4 seconds only, but main load is on for the warning period set by main switch #4 (see above).



## WIRING DIAGRAMS



**CAUTION:** Turn power off at main circuit prior to installation or when servicing this unit.

### Important Note:

When the Lighting Delay Switch is first activated –

- A. If a time switch is connected and is set to ON, the main load will remain ON.
- B. If no time switch is used or if one is connected but is set to OFF, the main load will turn ON for 10 minutes. At the end of the 10 minute period, the warning circuit turns on for 4 seconds, 1 minute, or 5 minutes. The main load will remain ON for the 1 or 5 minute warning period. If an extension of time is required for the main load, press the remote ON button momentarily, the warning circuit will turn off, and the main load will remain on for an additional 1/2 - 12 hour extension of time.

**TORK®**

MLI-142(B) 1 GROVE STREET, MT. VERNON, NY 10550 TEL: 914-664-3542  
FAX: 914-664-5052