

TORK DGM100 DIGITAL TIME SWITCH SEVEN DAY

READ INSTRUCTIONS CAREFULLY BEFORE SETTING UNIT

FEATURES

Single channel controller

7 day scheduling

Special day scheduling

32 set points

2 second momentary output for use with low voltage latching relays, mechanically held contactors, electrically (magnetically) held contactors.

Battery back-up uses standard 9 volt non-rechargeable (not supplied). Lithium averages 450 hours of power outage; Alkaline averages 175 hours

Manual override to the next scheduled event

Automatic daylight saving - user selectable

Automatic leap year compensation

AM/PM or 24 hour format - user selectable

INSTALLATION

UNIT IS TO BE INSTALLED BY A LICENSED ELECTRICIAN

Unit contains 2 SPDT relays. Left relay will close for 2 seconds between C & NO when an ON pulse is scheduled. Right relay will close for 2 seconds between C & NO when an OFF pulse is scheduled.

NOTE: C & NC of right relay is used to OPEN electrically held contactors.

1. To remove unit from enclosure: Push tab on right to swing unit to 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 bottom or side knockouts. **DO NOT USE TOP.**

Input wires to controller must be dedicated i.e. no other loads connected to the same circuit.

3. Install a standard 9 volt lithium or alkaline battery (not supplied) by gently squeezing the right side of the battery cover on the front of the unit and pull to open. Pull out the battery connector and connect the battery. Reinstall battery cover. Lithium should be replaced every 3-5 years, Alkaline every year.

NOTE: Unit can be fully programmed using battery power only.

4. Reinstall unit by reversing step #1 above and connect wires to unit as per suggested wiring diagrams. See illustration on enclosure label.

KEY FUNCTIONS

DAY MONTH	HOUR DATE	MIN YEAR	OVER- RIDE
MODE	SP DAY	ON/ OFF	ENTER

DAY/MONTH: Press to advance the day in the CLK mode. Press to advance the Month in the DATE mode.

HOUR/DATE: Press to set the Hours in the CLK mode and in the Schedule SET mode. Press to advance Date in the DATE mode.

MIN/YEAR: Press to set the Minute in the CLK mode and in the Schedule SET mode. Press to advance Year in the DATE mode.

OVERRIDE: Press to alter the Load status and/or to Override scheduled event.

MODE: Press to advance to next mode without affecting the scheduled memory information. Sequence is: RUN, CLK, DATE, schedule SET. **In the SET mode, unit automatically reverts to the RUN mode if no entries are made for 5 minutes.**

SP DAY: Press during RUN mode to execute the "SPECIAL DAY" schedule everyday. LCD will display D in upper right corner. Pressing SP DAY again will toggle the unit back to normal 7 day program operation.

ON/OFF: Pressing each time will select ON or OFF pulse. Multiple OFF pulses may be scheduled to cancel override ON pulses.

ENTER: Press to store the displayed information into memory. **Information will not be stored until ENTER is pressed.**

NOTE: During settings, each press of the key will advance one number. For rapid advance, hold key in.

SETTING THE UNIT

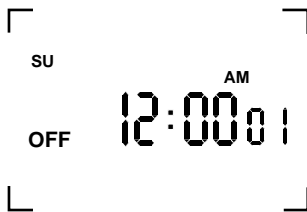
SELECT AM/PM OR 24 HOUR MILITARY FORMAT

Upon powering up the unit, model number 100P appears on the screen. The LCD will next display 12H which is an automatic (AM/PM) format.



Press ENTER to keep AM/PM format or press HOUR key to alter 24 hour (Military) format and then press ENTER.

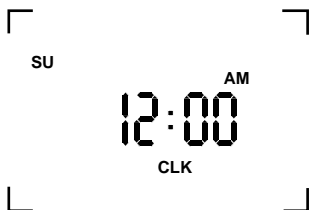
Once the ENTER is pressed, unit goes to RUN mode. You can recognize that the unit is in the RUN mode when the real time (including seconds) is displayed.



NOTE: Once you select and ENTER the above format (either AM/PM or 24 hour military), you can not alter it without removing all power to the unit by disconnecting the battery and line power.

TO SET CLOCK

Press MODE key; display shows CLK.



Press DAY/MONTH key to select today's day. Press HOUR key to set present hour (check AM/PM). Press MIN key to set present minutes. Press ENTER key. Unit now stores present time. Seconds are set to zero.

DAYLIGHT SAVING

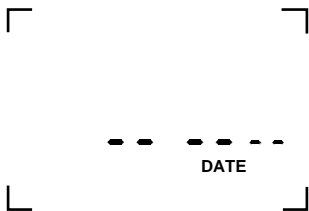
The user may select either standard U.S. option or no daylight saving at all.

1. U.S. OPTION: Daylight saving is automatically set when entering the current month/date/year. The unit will add one hour on the first Sunday in April, and subtract one hour on the last Sunday in October. You never need to look up the tables, or enter the spring and fall correction dates yourself.
2. NO DAYLIGHT SAVING: The unit will not be configured for daylight saving time correction by not entering the month/date/year.

TO SET DATE

NOTE: ENTER ONLY IF AUTOMATIC DAYLIGHT SAVING IS DESIRED. IF NOT REQUIRED, DO NOT SET DATE. INSTEAD, SKIP THE FOLLOWING SECTION AND PRESS MODE KEY UNTIL DISPLAY SHOWS SET.

Press mode key until display shows DATE.

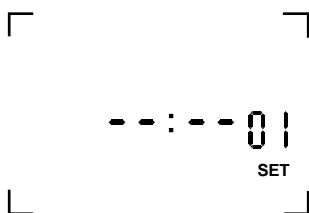


Press MONTH key to set present month. Press DATE key to set today's date. Press YEAR key to set present year. Press ENTER key. Unit now stores present date.

Note: If unit has correct entry for the calendar, then the unit will go into the SET mode. If the calendar has an incorrect entry, then the unit will stay in the DATE mode, with MM--YY displayed, signifying that the date does not correspond with the month, and/or year, i.e. Feb. 31,1989. If this occurs, set the correct date, and then press ENTER.

TO SET SCHEDULE

For convenience, write out your desired schedule on a separate piece of paper. If display does not show SET then press MODE key until display shows SET. The display will show --:-- 01, with the "01" signifying first entry for either an ON or OFF pulse.



1. Press DAY/MONTH key to set day(s).

NOTE: The following is a listing of the sets of days which can be set:

MO to FR (MO, TU, WE, TH, FR)

SA and SU (SA, SU only)

MO to SA (MO, TU, WE, TH, FR, SA)

SU to SA (SU, MO, TU, WE, TH, FR, SA)

Individual days: SU, MO, TU, WE, TH, FR, SA, and D for Special Day (usually a holiday).

A special holiday schedule can be entered if you want to be able to repeat this particular schedule on holidays only.

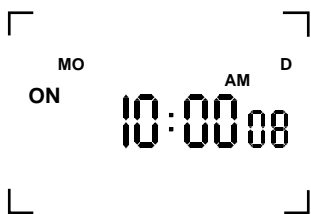
2. Press HOUR key to set hour {check AM/PM}.
3. Press MIN key to set minutes.
4. Once desired days are set, press ON/OFF key to set ON or OFF pulse. If all of the information you entered is correct, press ENTER key to store the event.

Display will now show —:—02. This tells you that the first event has been entered, and that the unit is ready to accept the second entry. Repeat above steps 1 to 4 to set more schedule events

Note: When the unit is returned to the run mode, check the load status of the current setting. If it is showing OFF but should be ON, press the override key since the unit does not “look back” to the setting just entered. However, the unit will correct itself at the next scheduled event and no further alteration will be necessary.

SPECIAL DAY (HOLIDAY)

To execute this schedule at any time, simply press the SP DAY key while the unit is in the RUN mode. A letter “D” will appear in the upper right corner and the Special Day schedule (previously set) will repeat for as many days as you want. If no schedule was entered, the last event (ON or OFF) will remain active.



To return to normal 7 day program operation, press the SP DAY key again and the letter “D” will disappear, indicating regular program operation.

REVIEW/MODIFY/ADD/DELETE

REVIEW: Reviewing is done in the set mode. Press mode key until first setting appears. Pressing the ENTER button will advance the counter (which appears in the two digits on the right) and shows you the next schedule event entered. Events are numbered based on the order with which they were entered, and not on when they will be executed, so the first event you set will be #01, the second #02, etc...

MODIFY: During the review process, the DAY HOUR, MIN. and ON/OFF keys can all be used to modify the settings. You can use the first three keys to modify when the event will take place, and the ON/OFF key to change an ON pulse to an OFF pulse, or visa-versa. **ONCE YOU HAVE MADE THE NECESSARY CHANGE, YOU MUST PRESS THE ENTER KEY TO STORE THEM.**

ADD: You may add events at any time by pressing the mode key until the unit is in the set mode. Then press ENTER key to advance to the next open set point. Enter new schedule as indicated in section "To Set Schedule".

DELETE: If you choose to delete a schedule, simply modify the HOURS and MINUTES, until the time display reads --:--. This will occur after scrolling past 11 P.M. with the HOUR key and "59" with the MIN key. Then press ENTER to delete the event.

OVERRIDE

In order to temporarily change the current ON or OFF status of a load, simply press the override key. This can only be done when the unit is in the RUN mode. The load status will flash indicating that this is a change from a scheduled event.

In order to cancel the override, press override key again.