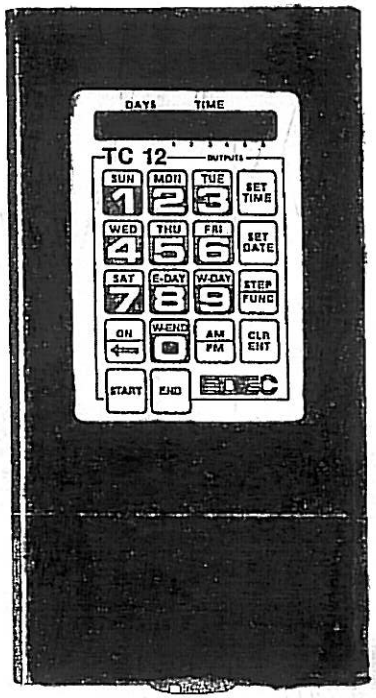
ELTEC

OPERATING INSTRUCTIONS



MAXIM 2 AND ELTEC TC12 SOLID STATE TIME SWITCH

OPERATING INSTRUCTIONS FOR ELTEC MAXIM 2 AND TC12 SOLID STATE TIME SWITCHES

ELTEC MAXIM 2 DESCRIPTION

The MAXIM 2 is a solid state time switch designed to operate relay outputs on a repeating 7 day program. More than 100 relay operations per week may be programmed using 16 programmable steps. Additionally, the unit may be programmed to skip operations during 12 skip periods that can range from 1 day to years in length.

ELTEC TC12 DESCRIPTION

The TC12 is a solid state time switch designed to operate relay outputs on a repeating 7 day program. More than 400 relay operations per week may be programmed using 64 programmable steps. Additionally the unit may be programmed to skip operations during 20 skip periods that can range from 1 day to years in length.

WARNING: THE OUTPUT RELAYS MAY BE ENERGIZED BY A PROGRAM STEP. BE SURE AC POWER SOURCE IS DISCONNECTED BEFORE WORKING ON ANY LOAD CONNECTED TO THE OUTPUT RELAYS.

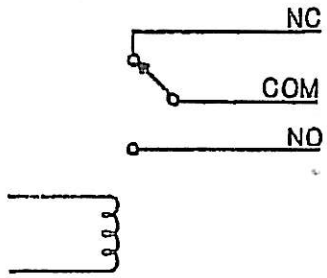
READ ALL INSTRUCTIONS BEFORE OPERATING

OUTPUT RELAYS: Output from the units is from SPDT (form C) 10a relays brought out to a barrier strip mounted on the lower PCB of the **MAXIM 2,** and through a quick disconnect, circular plastic connector (CPC) with a 48" wiring harness for the **TC12.**

NOTE: Quick disconnect CPC's and 48" or 96" wiring harness are available for the **MAXIM 2.** See OPTIONS below.

NOTE: Replacement of the **TC12** 48" wiring harness with a 96" wiring harness is available. See OPTIONS below.

A Single Pole Double Throw relay, also known as a form C relay is shown below.



All relays are de-energized during power outages.

INSTALLATION INSTRUCTIONS: Secure the unit in the desired location, internal connections are as follows:

MAXIM 2 BARRIER STRIP CONNECTOR CHART

TERMINALS
(from bottom)

1 .....2 NO
2 .....2 COM
3 .....2 NC
4 .....1 NO
5 .....1 COM
6 .....1 NC
7 .....Line
8 .....Neutral
9 .....Chassis Ground

NOTE: Terminals are labled on barrier strip within the **MAXIM 2.**

PIN CONNECTOR CHART:

MAXIM 2 (WITH CPC)			TC12		
PIN #	COLOR		PIN #	COLOR	
1	Black	Line	1	Black	Line
2	White	Neutral	2	White	Neutral
3	Green	Chassis Gnd	3	Green	Chassis Gnd
4	Red	1 COM	4	Red	1 COM
5	Yellow	1 NC	5	Yellow	1 NC
6	Wht/Brn	2 COM	6	Wht/Brn	2 COM
7	Wht/Vio	2 NO	7	Wht/Vio	2 NO
10	Wht/Ye	1 NO	9	Brown	4 COM
16	Violet	2 NC	10	Wht/Yel	1 NO
			11	Gray	3 COM
			12	Blue	3 NC
			13	Wht/blu	3 NO
			14	Orange	4 NC
			15	Wht/Org	4 NO
			16	Violet	2 NC

GENERAL: In this instruction sheet keys are identified by an ID set in square brackets.

EXAMPLE: The SET TIME key will be referred to in the following manner: [SET TIME].

Display or read out messages are designated by quotation marks.

EXAMPLE: An ERROR message will be referred to in the following manner: "E r r o r".

Some messages displayed on the **TC12** read out may be cryptic.

EXAMPLE: The message STEP will be displayed as S t P .

Press the [SET TIME] key to clear any E r r o r messages from the display or to return to the current time display.

All keys will repeat when pressed and held.

DISPLAY: When in the Current Time Mode the display will show a number under the heading DAYS. This number represents the day of the week and corresponds to a (day key) on the control pad. For instance, the number "5" means Thursday (See: KEY PAD, below).

The next 4 numbers represent the time and will be followed by an "A" or "P", signifying AM or PM. Relay state is indicated by decimal points above the numbers across the lower edge of the display. If a decimal point is visible, the relay corresponding to that number is energized.

Pressing the [SET TIME] key will cause incrementing seconds to appear instead of an "A" or "P". Pressing the [SET TIME] key a second time will return the display to the current time mode.

Pressing the [SET DATE] key will cause the date to appear as; the day of the week expressed using the key pad number as described in KEY PAD below, then the month, the day, and year in the MMDDYY format. The date information will appear for approximately 5 seconds each time the [SET DATE] key is pressed, and then the display will return to the current time mode.

Using the display to review programming, and the meaning of other messages will be explained later.

KEY PAD: The key pad is used to enter all information into the unit. Keys with numbers also serve to indicate days of the week, and in the case of 8, 9, and 0, indicate everyday, weekdays, and weekends respectively.

The number keys are as follows:

1=SUN	2=MON	3=TUE
4=WED	5=THU	6=FRI
7=SAT	8=E-DAY(everyday)	9=W-DAY(weekdays)
0=W-END(weekend)		

The programming keys are:

[SET TIME] Used when programming current time, to clear **"Error"** messages, and to return to the current time display when necessary.

[SET DATE] Used when entering date during programming and to view the current date.

[STEP/FUNC] Used when entering program steps, to view steps and programmed instructions, and to operate the Special Functions.

[ON/<—] Used when programming steps to energize one or more relays and to view steps in reverse order.

[AM/PM] Used to enter AM or PM during programming.

[CLR ENT] Used to correct entry errors, or to delete steps and skip periods.

[START] Used when entering and to view, start dates for skip periods.

[END] Used when entering and to view, end dates for skip skip periods.

Other specific uses of the various keys will be explained in later instructions.

READ EACH SECTION COMPLETELY BEFORE DOING EXAMPLES

SETTING CURRENT TIME: If the display shows anything but a current time mode display, as described in DISPLAY above, press the [SET TIME] key until the current time mode is displayed.

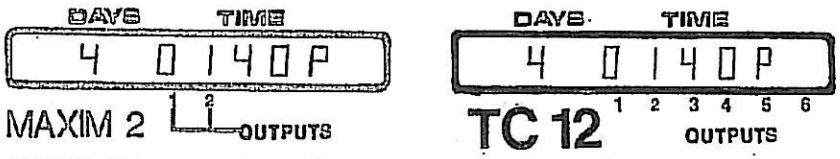
Current time will be entered in the four digit hour/minute format, HHMM, followed by either AM or PM and the [SET TIME] key.

NOTE: The [AM/PM] key works like a toggle switch and alternates between AM and PM each time it is pressed.

EXAMPLE: To set the time at 1:40 in the afternoon enter the following sequence of commands.

[0] [1] [4] [0] [am/PM] [SET TIME]

After entering the above sequence the display should look like this:



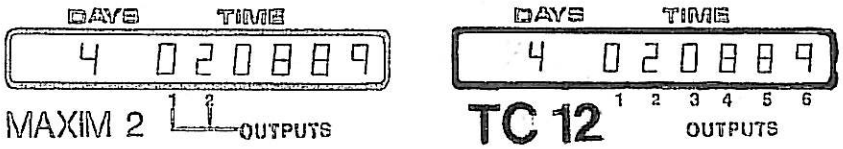
NOTE: There may be a different, or no, number under the DAYS heading at this point.

SET DATE: THE CORRECT DATE MUST BE SET FOR PROPER OPERATION OF THIS DEVICE. The date will be entered in a Month, Day, Year configuration, MMDDYY, followed by the current day of the week and the [SET DATE] key.

EXAMPLE: To enter the date of February 8, 1989, a Wednesday, enter the following sequence of commands.

[0] [2] [0] [8] [8] [9] [WED/4]

After pressing the [WED/4] key the display should look like this:



Now press the [SET DATE] key, the display will return to the current time mode.

NOTE: To view current date press the [SET DATE] key.

GENERAL PROGRAMMING: Programming is accomplished by entering, into the unit, the times each day and the day(s) each week that it is desired to turn the relays on or off. Each specific action is called a program step and is automatically assigned a step number as it is entered. The MAXIM 2 has 16 time sets (steps), numbered 00 through 15. The TC12 has 64 time sets (steps), numbered 00 through 63. The program steps may be entered in any order, the units will sort and execute them in a chronological sequence.

NOTE: If two steps are programmed for the same time the MAXIM 2 and the TC12 will ONLY PERFORM THE LOWEST NUMBERED STEP. In other words, if step number 02 and step number 10 are both programmed for 7:30AM, only step 02 will be perfommed.

NOTE: The MAXIM 2 and the TC12 will perform each programmed step at the time that has been set in its memory. If a step is programmed into the unit after the time it was due to start, the unit will not energize or de-energize the specified relay(s) until the next programmed step. If a relay is required to be energized each weekday from 7:25AM to 4:55PM, and the step is programmed after 7:25AM on a weekday, the relay will not energize until the following morning. If it is necessary to begin operation the same day, the relay must be energized manually. See: MANUAL RELAY CONTROL.

PROGRAMMING REVIEW: Pressing the [STEP/FUNC] key will cause the display to show the step number 00. Pressing the [STEP/FUNC] key a second time will display the instructions contained in the step. A **"CLEAR"** message indicates that no instructions have been saved for that step. Pressing the [STEP/FUNC] key repeatedly allows the steps to be viewed in ascending order. Pressing the [ON/<—] key allows the steps to be viewed in reverse order. Regardless of the order steps are viewed, the step number will always be displayed before the programmed instructions for that step.

PROGRAMMING ERRORS: If an error is made while entering commands, the [CLR ENT] key may be used to delete one digit at a time from the display.

ERASING PROGRAMMED STEPS: The [CLR ENT] key is also used to erase an entire step by first using the [STEP] or [ON/<—] keys to view the step and then pushing the [CLR ENT] key. The display will then show the step as **"CLEAR"**.

NOTE: A STEP MUST BE ERASED BEFORE REPROGRAMMING.

PROGRAMMING DOCUMENTATION: Two program records are included with each **MAXIM 2** and the **TC12**, both records should be filled out completely before programming the unit. One program record is part of this manual and we suggest it be kept at the office or shop in a master file. The other is designed to be kept with the unit at all times. All entries should be made in pencil, in case of error or future program changes.

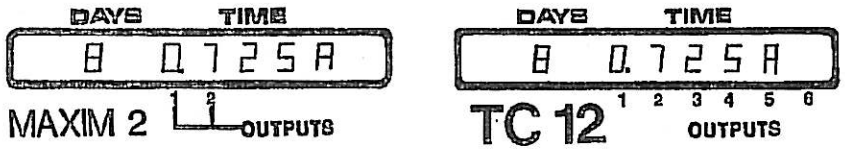
ENTERING STEP PROGRAMMING: Programmable steps are used to set the times and days to energize or de-energize the relays. Any desired relay must be addressed in each programmed step to be, or to remain energized. If relay number 1 is energized at 7:00 AM and relay number 2 is energized at 8:00, relay number 1 must be readdressed in the 8:00 AM step for it to remain energized. If relay number 1 is not addressed in the 8:00 AM step it will be de-energized. To de-energize all relays at one time simply enter the step programming omitting the relay numbers and the ON command.

NOTE: The [AM/PM] key works like a toggle switch and alternates between AM and PM each time it is pressed.

EXAMPLE: To turn on relay #1 at 7:25 every morning enter the following sequence of commands.

[1] [ON] [0] [7] [2] [5] [AM/pm] [E-DAY/8]

After pressing the [E-DAY/8] key the display should look like this:



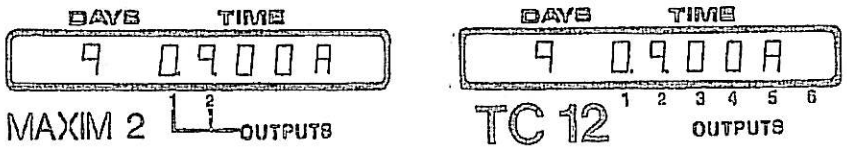
NOTE: The 8 under the days heading means this step will be executed every day. The time of execution each day will be 7:25 AM as shown by the **"0725A"**. The decimal point above the number 1 indicates that relay #1 will be energized.

Now press the [STEP/FUNC] key, the step will be entered into memory and the display will return to the current time mode.

EXAMPLE: To turn on relay number 2 at 9:00 every weekday morning and to keep relay number 1 on after that time, enter the following sequence of commands:

[1] [2] [ON] [0] [9] [0] [0] [AM/pm] [W-DAY/9]

After pressing the [W-DAY/9] key the display should look like this:

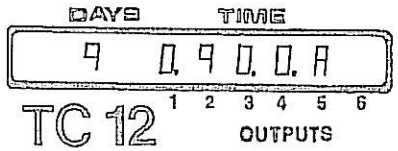


Now press the [STEP/FUNC] key, the display will return to the current time mode.

EXAMPLE: To turn on relays number 3 and 4 on the **TC12** at 9:00 every weekday morning and to keep relay number 1 on after that time, enter the following sequence of commands.

[1] [3] [4] [ON] [0] [9] [0] [0] [AM/pm] [W-DAY/9]

After pressing the [W-DAY/9] key the display should look like this:



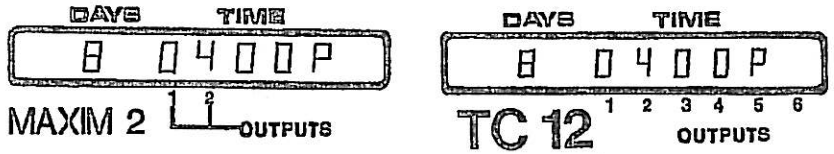
NOTE: The decimal points above the 1,3 and 4 indicate that relay 1 will remain on and relays 3 and 4 will be turned on at 9:00 AM.

Now press the [STEP/FUNC] key, the display will return to the current time mode.

EXAMPLE: To turn all relays off at 4:00 every afternoon enter the following sequence of commands.

[0] [4] [0 [0] [am/PM] [E-DAY/8]

After pressing the [E-DAY/8] key the display should look like this:



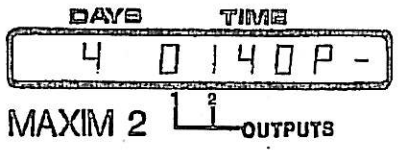
NOTE: The absence of decimal points on the display means that all relays will be turned off at 4:00 PM and the **"8"** under the days heading means this will be accomplished every day.

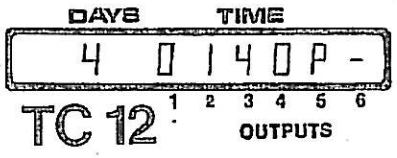
Now press the [STEP/FUNC] key, the display will return to the current time mode.

SKIP PERIOD PROGRAM: The **MAXIM 2** has 12 programmable skip periods, and the **TC12** has 20 programmable skip periods. These periods affect relay number 1 only. The skip periods suspend all functions on relay #1 and are most often used to skip normal operations on holidays or during summer vacation when the **MAXIM 2** or the **TC12** is used in a school zone application. The skip period begins on the first instant of the start day and ends on the last instant of the end day. The skip period can be from 1 day to years in length.

When the skip period begins relay number 1 is frozen and remains in the same position until the skip period ends. When the skip period ends the unit will automatically enter the programmed schedule for that time and date.

When a skip period begins a dash "-" will appear at the far right of the display. At 1:40 in the afternoon on a Wednesday if a skip period was in effect the display would look like this:





NOTE: The date will be entered in the month, day, year format, MMDDYY.

NOTE: The skip periods are numbered 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 00, 10 for the **MAXIM 2** and 0, 1, 2,...8, 9, and 00, 10, 20,...80, 90 for the **TC12**. These numbers are assigned during programming by you, the operator, and are the last numbers entered before the [START] or [END] keys.(The skip period numbers 00 and 10 are displayed as **"0."** and **"1."**). (The skip period numbers between 00 and 90 are displayed on the **TC12** as **"0."**, **"1."**, **"2."**, **"3."**, **"4."** and so on to **"9."**).

EXAMPLE: To program a skip period for summer vacation from June 2nd through August 29, 1989 enter the following sequence of commands.

[0] [6] [0] [2] [8] [9] [0] [START]
[0] [8] [2] [9] [8] [9] [0] [END]

EXAMPLE: To program a skip period for one day, such as November 8, 1988, enter the following sequence of commands.

[1] [1] [0] [8] [8] [8] [1] [0] [START]

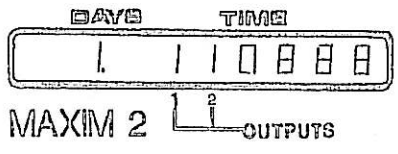
NOTE: For a 1 day skip no end date is required. Notice in the first example the skip period is designated as 0, the display shows "0" and in the second example the skip period is designated as 10 but the display will show "1.".

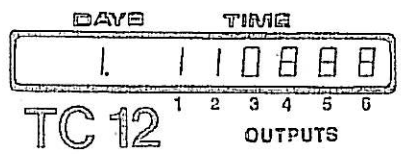
SKIP PERIOD REVIEW: To view the skip period start dates press the [START] key, and to view the skip period end dates press the [END] key. The display will show the skip period number "0" under the days heading and the start or end date, depending on which key was pressed, under the time heading. Pressing the [START] or [END] keys repeatedly will display the skip periods in ascending order.

A "CLEAR" display indicates that there is no date programmed for that skip period number.

EXAMPLE: To view the November 8th example above press the [START] key until the display shows the **"1."** under the heading DAYS.

The display should look like this:





NOTE: The "1."(10) under the days heading is the number assigned to this skip period.

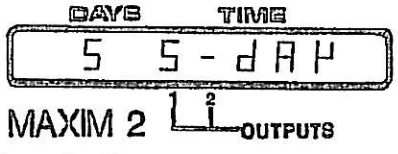
ADVANCE SINGLE DAY SKIP: This capability allows for unexpected skip periods of one day in length to be programmed into the MAXIM 2 and the TC12. These skip days can be programmed up to 7 days in advance and are automatically erased after use. These skip days are programmed by pushing the [9] key followed by the [STEP/FUNC] key and the appropriate (day) key.

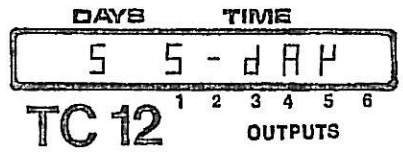
NOTE: The skip day function suspends operation on relay #1 only.

EXAMPLE: To skip next Thursday enter the following sequence of commands.

[9] [STEP/FUNC] [THU/5]

After pressing the [THU/5] key the display should look like this:





Press the [SET TIME] key to return to the current time mode.

NOTE: To view skip day programming press the [9] key followed by the [STEP/FUNC] key.

POWER FAILURE: The **MAXIM 2** and the **TC12** have a built in capacitor back-up power source that will continue to keep time and save all programming for 48 hours when the capacitor is fully charged.

During a power failure the relays are de-energized and the display is blanked. If the power failure is less than 48 hours long, when power is restored the display will show the message **"ELTEC"**. During this time the unit is engaged in a memory search which can last up to 45 seconds. At the end of the memory search the current time will be displayed and the **MAXIM 2** and the **TC12** will automatically enter the proper program step for the time and date.

If the power failure is longer than 48 hours, when power is restored the display will show the message **"P. FAIL"**, press the [SET TIME] key to return to the current time mode. POWER FAILURES LONGER THAN 48 HOURS CAN CAUSE LOSS OF PROGRAMMED DATA.

It is possible some programming may have been retained after power failures as long as 100 hours or more. All programming, step and skip, should be checked against the program record. Reprogram time, date, steps, and skips as necessary using the procedures outlined above.

NOTE: Re-enter any functions such as daylight savings time override, all functions will reset to default settings any time power is interrupted for more than 48 hours.

PROGRAM TRANSFER: It is possible to transfer current time and date, and all programming from one unit to another. ELTEC recommends that a 'master' unit be connected to AC power, programmed and kept on line at the office or shop, and that programming be transferred from it to other units as required.

To accomplish transfer, both **MAXIM 2**'s or **TC12**'s must be connected to AC power and operating. Next, connect the units to each other using a transfer cable (See: Options) and the transfer ports on the front of each unit. When the two units are connected enter the following sequence of commands into the master unit:

[8] [8] [STEP/FUNC]

During the transfer the sending unit will display "SEndnG" and the receiving unit will display "rEAdnG".
If the transfer is successfully completed both clocks will display the current time. The transfer will not normally take more than 60 seconds. If the transfer fails an **"Error"** message will be displayed on both units. Use the [SET TIME] key to clear **"Error"** messages.

NOTE: Transfering information between unlike units is not possible. Programming cannot be transfered from a **TC12** to a **MAXIM 2** or vice versa.

MANUAL RELAY CONTROL: When it becomes necessary to energize one or more relays manually the relay number (or numbers) will be entered followed by the [ON/<—], [1], and [STEP/FUNC] keys.

EXAMPLE: To energize relays 1 and 2 when no relays are currently energized, enter the following sequence of commands:

[1] [2] [ON/<—] [1] [STEP/FUNC]

The display will return to the current time mode and the decimal points will remain on above the 1 and 2 across the lower edge of the display, signifying that relays 1 and 2 are energized.

EXAMPLE: To energize relay 2 and de-energize relay 1 when relay 1 is energized, enter the following sequence of commands:

[2] [ON] [1] [STEP/FUNC]

The display will return to the current time mode and the decimal point will appear above the 2 across the lower edge of the display, signifying that relay 2 is energized.

EXAMPLE: To energize relays 2 and 3, and de-energize relays 1 and 4 on the TC12 when relays 1, 2, and 4 are energized, enter the following sequence of commands:

[2] [3] [ON] [1] [STEP/FUNC]

The display will return to the current time mode and the decimal points will remain above the 2 and 3 across the lower edge of the display, signifying that relays 2 and 3 are energized.

EXAMPLE: All relays can be de-energized by entering the following sequence of commands:

[0] [STEP/FUNC]

The display will return to the current time mode and no decimal points will light, signifying that no relays are energized.
NOTE: After energizing or de-energizing the relay(s) manually the **MAXIM 2** and the **TC12** will resume normal operation at the time of the next programmed step, and the relay status may be changed at that time.

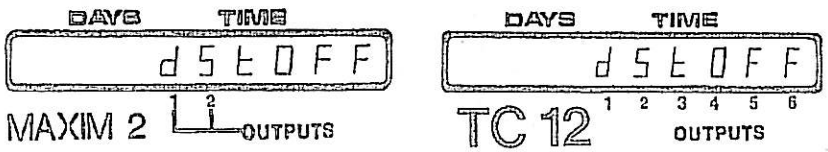
DAYLIGHT SAVINGS TIME OVERRIDE: The Daylight Savings Time(DST) compensation feature can be overridden from the keyboard of **MAXIM 2** with sofrware version 1.0 or higher and **TC12** with software version 3.3 or higher. (See: Other functions, function 99 to determine software version).

NOTE: The **MAXIM 2** and the **TC12** will reset to the default setting, DST ON, when the unit is initially powered up or any time power is interrupted for more than 48 hours.

EXAMPLE: To turn the DST compensation feature off, enter the following sequence of commands:

[7] [1] [STEP/FUNC]

After pressing the [STEP/FUNC] key the display should look like this:

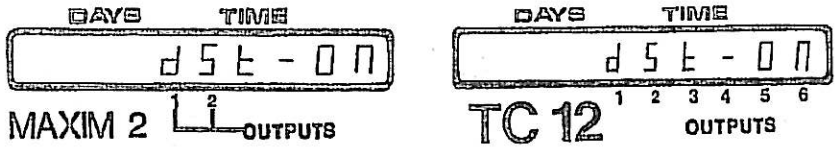


Press the [SET TIME] key to return to the current time mode.

EXAMPLE: To turn the DST compensation feature on enter the following sequence of commands:

[7] [0] [STEP/FUNC]

After pressing the [STEP/FUNC] key the display should look like this:



Press the [SET TIME] key to return to the current time mode.

OTHER FUNCTIONS:

[8] [1] [STEP/FUNC].....CLEARS ALL PROGRAMMED STEPS WITHOUT AFFECTING CURRENT TIME OR DATE. When the display shows **"1=ALL"** press [1] to clear all steps or any other key to abort the function.

[8] [2] [STEP/FUNC].....CLEARS ALL PROGRAMMED SKIP PERIODS WITHOUT AFFECTING CURRENT TIME OR DATE. When the display shows **"2=ALL"** press [2] to clear all skip periods or any other key to abort the function.

[8] [4] [STEP/FUNC].....SHOWS ENERGIZED RELAYS AS **"1"**'S AND DE-ENERGIZED RELAYS AS **"0"**'S ON THE DISPLAY.

[9] [9] [STEP/FUNC].....SOFTWARE IDENTIFICATION (useful when talking to your distributor or the factory about the unit).

MAXIM 2 OPTIONS:

PART #	DESCRIPTION
860335	CPC and 48" Wiring Harness
860336	CPC and 96" Wiring Harness
860391	Data Transfer Cable
760750	Mounting Adapter Plate

TC12 OPTIONS:

PART #	DESCRIPTION
860346	Substitute 8' for 4' cable 4 relay
860391	Data Transfer Cable
760750	Mounting Adapter Plate

MAXIM 2 FEATURES:

* Automatic Daylight Savings Time/Leap Year Compensation (Key board defeatable)

* 48-Hour Battery-less Capacitive back up - Memory and time keeping are maintained for 48 hours in the event of a power loss.

* 16 Powerful Program Steps and 12 "Skip Periods" - These periods are used to suspend relay operations during holidays or vacations.

* Program Transfer - Used to copy current time, date and all programming from one **MAXIM 2** to another.

* 2 Relays Standard

* 7 digit LED Display visible in direct sunlight.

* Compact, Rugged All Steel Enclosure measuring 7 1/2"h X 4 1/4"w X 3 1/4"d

TC12 FEATURES:

* Automatic Daylight Savings Time/Leap Year Compensation (Key board defeatable)

* 48-Hour Battery-less Capacitive backup - Memory and time keeping are maintained for 48 hours in the event of a power loss.

* 64 Powerful Program Steps and 20 "Skip Periods" - These periods are used to suspend relay operations during holidays or vacations.

* Program Transfer - Used to copy current time, date and all programming from one TC12 to another.

* CPC Connector with 4' External Wiring Harness.

* 4 Relays Standard

* 7 digit LED Display visible in direct sunlight.

* Compact, Rugged All Steel Enclosure measuring 7 1/2"h X 4 1/4"w X 3 1/4"d

MAXIM 2 SPECIFICATIONS:

Size ..... 7 1/2"h X 4 1/4"w X 3 1/4"d
Line Voltage ..... 95-135 VAC, 60 Hz
Power Required ..... 6 Watts
Temperature Range ..... -30c to +74c
Time Base ..... Power Line (AC Powered
+/- .005% Crystal (back up) at 26 degrees C
Crystal Temperature Coefficient ..... -0.035 PPM/degree C^2
Back-Up Power ..... Capacitive, 48 hour
Display ..... 7 digit, 7 Segment LED
Key Pad ..... 4 Column X 5 Row Matrix
16/18 Key Tactile
Output ..... 2 SPDT Relays Rated 10 Amp
115 VAC Resistive Load
Electrical Connection ..... Terminal Block
#26 - #14 AWG Wire Size

TC12 SPECIFICATIONS:

Size ..... 7 1/2"h X 4 1/4"w X 3 1/4"d
Line Voltage ..... 95-135 VAC, 60 Hz
Power Required ..... 6 Watts
Temperature Range ..... -30c to +74c
Time Base ..... Power Line (AC Powered
+/- .005% Crystal (back up) at 26 degrees C
Crystal Temperature Coefficient ..... -0.035 PPM/degree C^2
Back-Up Power ..... Capacitive, 48 hour
Display ..... 7 digit, 7 Segment LED
Key Pad ..... 4 Column X 5 Row Matrix
16/18 Key Tactile
Output ..... 4 SPDT Relays Rated 10 Amp
115 VAC Resistive Load
Electrical Connection ..... CPC Connector with 4'
External Harness

ELTEC

PROGRAM RECORD
MAXIM 2
TC 12

NOTE: STEP NUMBERS ARE ASSIGNED AUTOMATICALLY BY THE MAXIM 2 AND THE TC 12. IT IS NOT NECESSARY TO ENTER STEP NUMBERS DURING PROGRAMMING.

WEEKLY PROGRAM

STEP #	ENTER RELAY #'S TO BE ENGAGED PRESS [ON] KEY	ENTER TIME HHMM	AM OR PM	ENTER DAY(S) OF WEEK	PRESS THE [STEP FUNC] KEY
00	[ON]				[STEP/FUNC]
01	[ON]				[STEP/FUNC]
02	[ON]				[STEP/FUNC]
03	[ON]				[STEP/FUNC]
04	[ON]				[STEP/FUNC]
05	[ON]				[STEP/FUNC]
06	[ON]				[STEP/FUNC]
07	[ON]				[STEP/FUNC]
08	[ON]				[STEP/FUNC]
09	[ON]				[STEP/FUNC]
10	[ON]				[STEP/FUNC]
11	[ON]				[STEP/FUNC]
12	[ON]				[STEP/FUNC]
13	[ON]				[STEP/FUNC]
14	[ON]				[STEP/FUNC]
15	[ON]				[STEP/FUNC]

16 maximum program steps available with the MAXIM 2

ELTEC

PROGRAM RECORD
TC 12

NOTE: STEP NUMBERS ARE ASSIGNED AUTOMATICALLY BY THE TC 12. IT IS NOT NECESSARY TO ENTER STEP NUMBERS DURING PROGRAMMING.

WEEKLY PROGRAM

STEP #	ENTER RELAY #'S TO BE ENGAGED PRESS [ON] KEY	ENTER TIME HHMM	AM OR PM	ENTER DAY(S) OF WEEK	PRESS THE [STEP FUNC] KEY
16	[ON]				[STEP/FUNC]
17	[ON]				[STEP/FUNC]
18	[ON]				[STEP/FUNC]
19	[ON]				[STEP/FUNC]
20	[ON]				[STEP/FUNC]
21	[ON]				[STEP/FUNC]
22	[ON]				[STEP/FUNC]
23	[ON]				[STEP/FUNC]
24	[ON]				[STEP/FUNC]
25	[ON]				[STEP/FUNC]
26	[ON]				[STEP/FUNC]
27	[ON]				[STEP/FUNC]
28	[ON]				[STEP/FUNC]
29	[ON]				[STEP/FUNC]
30	[ON]				[STEP/FUNC]
31	[ON]				[STEP/FUNC]

ELTEC

PROGRAM RECORD
TC 12

NOTE: STEP NUMBERS ARE ASSIGNED AUTOMATICALLY BY THE TC 12. IT IS NOT NECESSARY TO ENTER STEP NUMBERS DURING PROGRAMMING.

WEEKLY PROGRAM

STEP #	ENTER RELAY #'S TO BE ENGAGED PRESS [ON] KEY	ENTER TIME HHMM	AM OR PM	ENTER DAY(S) OF WEEK	PRESS THE [STEP FUNC] KEY
32	[ON]				[STEP/FUNC]
33	[ON]				[STEP/FUNC]
34	[ON]				[STEP/FUNC]
35	[ON]				[STEP/FUNC]
36	[ON]				[STEP/FUNC]
37	[ON]				[STEP/FUNC]
38	[ON]				[STEP/FUNC]
39	[ON]				[STEP/FUNC]
40	[ON]				[STEP/FUNC]
41	[ON]				[STEP/FUNC]
42	[ON]				[STEP/FUNC]
43	[ON]				[STEP/FUNC]
44	[ON]				[STEP/FUNC]
45	[ON]				[STEP/FUNC]
46	[ON]				[STEP/FUNC]
47	[ON]				[STEP/FUNC]

ELTEC

PROGRAM RECORD
TC 12

NOTE: STEP NUMBERS ARE ASSIGNED AUTOMATICALLY BY THE TC 12. IT IS NOT NECESSARY TO ENTER STEP NUMBERS DURING PROGRAMMING.

WEEKLY PROGRAM

STEP #	ENTER RELAY #'S TO BE ENGAGED PRESS [ON] KEY	ENTER TIME HHMM	AM OR PM	ENTER DAY(S) OF WEEK	PRESS THE [STEP FUNC] KEY
48	[ON]				[STEP/FUNC]
49	[ON]				[STEP/FUNC]
50	[ON]				[STEP/FUNC]
51	[ON]				[STEP/FUNC]
52	[ON]				[STEP/FUNC]
53	[ON]				[STEP/FUNC]
54	[ON]				[STEP/FUNC]
55	[ON]				[STEP/FUNC]
56	[ON]				[STEP/FUNC]
57	[ON]				[STEP/FUNC]
58	[ON]				[STEP/FUNC]
59	[ON]				[STEP/FUNC]
60	[ON]				[STEP/FUNC]
61	[ON]				[STEP/FUNC]
62	[ON]				[STEP/FUNC]
63	[ON]				[STEP/FUNC]

64 maximum program steps available with the TC 12

SKIP PERIOD PROGRAMS

ENTER DATE MM	DD	YY	PRESS START OR END KEY	NOTES
			0 [START]	
			0 [END]	
			1 [START]	
			1 [END]	
			2 [START]	
			2 [END]	
			3 [START]	
			3 [END]	
			4 [START]	
			4 [END]	
			5 [START]	
			5 [END]	
			6 [START]	
			6 [END]	
			7 [START]	
			7 [END]	
			8 [START]	
			8 [END]	
			9 [START]	
			9 [END]	
			00 [START]	
			00 [END]	
			10 [START]	
			10 [END]	

12 maximum skip periods available with the MAXIM 2

SKIP PERIOD PROGRAMS

ENTER DATE MM	DD	YY	PRESS START OR END KEY	NOTES
			20 [START]	
			20 [END]	
			30 [START]	
			30 [END]	
			40 [START]	
			40 [END]	
			50 [START]	
			50 [END]	
			60 [START]	
			60 [END]	
			70 [START]	
			70 [END]	
			80 [START]	
			80 [END]	
			90 [START]	
			90 [END]	

20 maximum skip periods available with the TC12

This time switch installed at:_____

* * * NOTICE * * *

This equipment generates, used and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to subpart J of part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference. The user, at his own expense, will be required to correct such a problem.

* * * COPYRIGHTS * * *

LIMITED WARRANTY

Electrotechnics Corporation (ELTEC) warrants this device to be free of defects in material and workmanship for a period of 12 months from date of purchase by the original purchaser or for a period of 15 months from date of manufacture, whichever comes first.

Additionally the capacitor device utilized in the MAXIM 1&1+, MAXIM 2, TC12 and TC14 time switches for back-up power requirements is warranted for a total of 5 years.

ELTEC will repair or replace any unit returned prepaid to us within the qualifications above so long as there is no evidence that the unit has been misused, abused, damaged by input overvoltage, output overloads, lightning or water or altered in any manner without the expressed written permission of ELTEC.

ELTEC disclaims any warranties expressed or implied, including warranties of merchantability and/or fitness for a particular purpose.

In no event shall ELTEC be held liable for incidental or consiquential damages.

Warranty repairs will be handled during normal working hours and returned prepaid by surface transportation.

Units requiring warranty service may be shipped prepaid to:

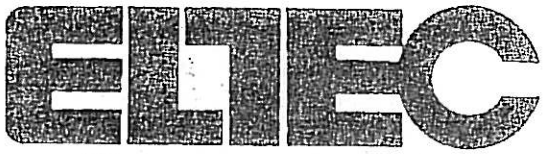
ELECTROTECHNICS CORP.
CUSTOMER SERVICE DEPARTMENT
5400 JEWELLA AVE.
SHREVEPORT, LA 71109
Phone 1-800-227-1734

Be sure to include the following information:

1) Description of problem
2) Evidence of warranty (date of purchase)
3) Return address
4) Telephone number and name of contact person

FN:0M2/T12-10
1 APR 89

ELECTROTECHNICS CORP.
1310 COMMERCE ST.
MARSHALL, TX 75670 USA
PHONE (800) 227-1734
FAX (903) 938-1977



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