

PROGRAMMING

Program the ET90000-series electronic timer using the navigation keys (see Figure 4). Some of the inputs you program are simple choices: yes/no, enable/disable, etc.; others involve inputting variables in alpha-numeric characters.

INITIAL SETUP

From the STATUS screen, press ENTER. Use the navigation keys to:

1. Choose INITIAL SETUP.
2. Input the current date.
3. Input the correct time (choose 12-HOUR, example: 2:20 PM; or 24-HOUR, example: 14 hours, 20 minutes).
4. Choose whether you would like the ET90000-series timer to update the time automatically for daylight saving time.
5. Select your time zone.

STATUS	TIMESWITCH
01E 02E	
7/14/11	2:20 PM

PROGRAMMING EVENTS

After you have set up the ET90000-series timer initially, you can program an "event." An event is something you would like the device to control, such as turning ON lights or turning OFF an alarm.

1. CHOOSE SPECIFIC OR RELATIVE DATE

To program an event, first choose whether you would like your event to occur on a specific or relative date. Program a specific date by choosing the month and day; program a relative date by choosing a date such as the 2nd week of January, or the 10th day of each month.

Available Options:

1st-31st	Mon-Sun	Jan-Dec
Each	Week	Year
Last	Weekday	Month
First	Weekend	
	Day	

2. SPECIFY TIME

Choose a time when you want your event to occur. Or choose astronomic time, which is sunrise or sunset, plus or minus a variable number of minutes (up to ± 120), per your requirements.

EVENT 1	
TIME TYPE:	ASTRO
	SUNRISE
ADJUSTMENT	+33 MINS

3. CIRCUIT TYPE

For your event, choose whether you would like the ET90000-series electronic timer to turn your application ON or OFF, then choose whether the circuit will have a fixed ON or a pulse ON.

Fixed means a steady current. Pulse means a steady current which is ON for a specified time (input hours, minutes, and seconds of pulse) and then turns OFF.

EVENT 1
TYPE: PULSE
HH:MM:SS
00:01:00

4. NAME YOUR EVENT

You can choose to give your event a name, such as S LIGHTS or PUMP 1. Enter the name (up to 10 characters) using the alpha-numeric display. The ET90000 system chooses a name for you if you do not name your event, for example Event 1.

NAME: EVENT 1	
ABCDEFGHIJKLM	
NOPQRSTUVWXYZ	
012345678 /-:	
DEL	ACCEPT

5. DETERMINE CIRCUIT CONTROL

After naming your event, select which circuit(s) the event controls. Select as few as one circuit, or as many as 16 circuits on the large capacity device. (Note: Up to 32 external circuits will be available in the future.)

6. PROGRAM HOLIDAYS

If your event runs during times where there are one or more holidays, which may supplant normal event times and dates, you must program this information into the device.

Similar to programming an event, you name the holiday, set up date and time (in this case, choose the beginning and end of the holiday), then program events into the holiday. Also similar to programming primary event(s), select your circuits and what they do: turn ON with a fixed or pulse duration or turn OFF.

7. SELECT ASTRO(NOMIC) ZONES

If you have previously programmed an event or a holiday based on astronomic time, you must select an astronomic zone after you have programmed in all of your variables, events, and holidays. Select from the following regions:

- USA STATES
- MEXICO
- CANADA
- USA TERRITORIES

Then select the appropriate COUNTRY LOCATION and LOCATION QUADRANT.

SELECT ASTRO ZONE	
COUNTRY	UNITED STATES
COUNTRY LOCATION	ILLINOIS
LOCATION QUADRANT	CENTER

8. REVIEW YOUR EVENT

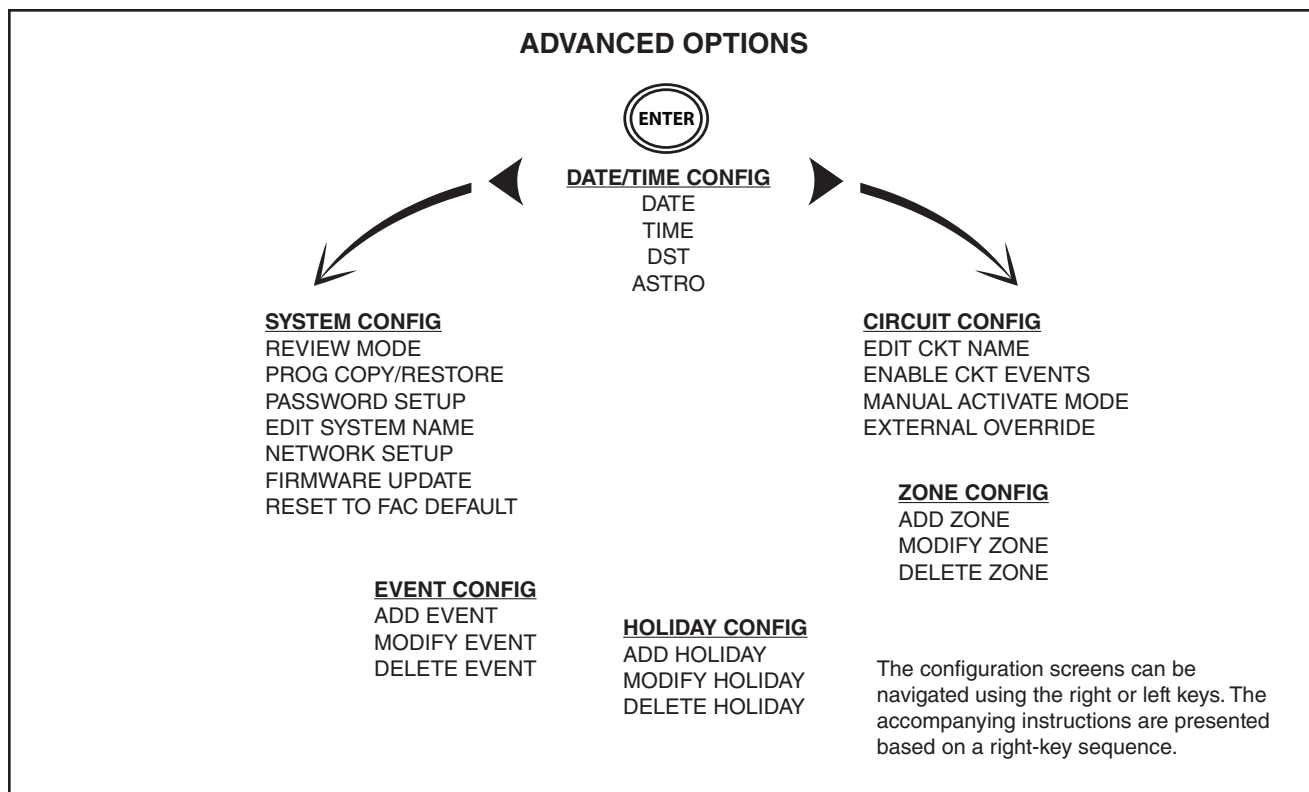
After you finish programming your events, you can choose YES to review it. Review the program by circuit, by event (ALL, HOLIDAY, or RELATIVE) and by specific date. If the event requires changes, press ENTER with the event highlighted to proceed directly to Advanced Options. You can also edit or change your event from ADVANCED OPTIONS on the SETUP screen.

TIPS ON PLANNING EVENTS

Depending on how complex your circuits are, you may prefer to plan your events before programming using a table similar to the one at the right.

EVENTS				
Circuit(s)	Event Name	Effective Days	Start Time	Type: ON/OFF FIXED/PULSE

HOLIDAYS				
Circuit(s)	Name of Holiday	Begin Date	End Date	Type: ON/OFF FIXED/PULSE



ADVANCED OPTIONS

Use Advanced Options to edit already-existing programming, configure circuits and zones, and set up your system.

From the STATUS screen, press ENTER and navigate to ADVANCED OPTIONS. Press ENTER to access DATE, TIME, DST, or ASTRO on the DATE/TIME CONFIG screen.

DATE

Press ENTER to correct the date.

TIME

Press ENTER to change the current time (hours, minutes, AM or PM) or the display mode for the time (12 HOUR AM/PM or 24 HOUR).

DST (DAYLIGHT SAVING TIME)

Press ENTER to enable/disable DST, set the DST time zone, and set up effective dates (start and end date of DST).

```
DT.DST.EFF-DATES

START DATE (SUN) :
FOURTH WK OF FEB
END DATE (SUN) :
FIRST WK OF OCT
```

ASTRO

From ASTRO, you can define an Astronomic zone (country, location in country, and quadrant location).

Also, if you need to adjust the time of the astronomic zone, you can do so against the "calculated time" from the ASTRO ADJUSTMENT screen.

```
DT.ASTRO .ADJUSTMENT
CALCULATED TIME
SUNRISE      SUNSET
5:26 AM      5:29 PM
ENTER NEW TIME
SUNRISE      SUNSET
5:26 AM      5:29 PM
```

CIRCUIT CONFIG(URATION)

When you press the right key from TIME, DATE, DST, or ASTRO, you have the following options under CIRCUIT CONFIG:

- EDIT CKT (circuit) NAME
- ENABLE CKT EVENTS
- MANUAL ACTIVATE MODE
- EXTERNAL OVERRIDE

Each relay or output is defined as a circuit. Each circuit can be independently configured using the following options.

1. EDIT CKT NAME

Enter or change the name of the circuit(s). First select the circuit you wish to change, then use the keypad to enter or change the name (up to 10 characters; default name is CIRCUIT 1, CIRCUIT 2, etc.).

2. ENABLE CKT EVENTS

When you enable a circuit, it adheres to the scheduled events. However, events do not turn a disabled circuit ON or OFF but you can still control disabled circuits manually via pushbuttons or overrides. Add or remove the checkmark to enable/disable the circuit.

```
CIRCUIT . ENABLE
  ENABLE/DISABLE CKTS
  NONE
✓ 1: CIRCUIT 1
  2: CIRCUIT 2
  DONE
```

3. MANUAL ACTIVATE MODE

This determines how the relays are controlled. If FIXED, a pushbutton toggles the circuit ON and OFF normally. If PULSE, after you turn the circuit on manually, the circuit automatically turns OFF when the pulse duration expires. (Note: You can always control circuits manually via the pushbuttons.) To activate:

- Select the circuit you would like to control.
- Choose FIXED or PULSE.
- If PULSE, input duration.

4. EXTERNAL OVERRIDE

You can use external remote override switches to control circuits. 1 and 2 circuit models have two overrides; 4 to 16 circuit units have up to eight overrides. Select which circuits you will override, which zones, and whether the override will be fixed or pulse. If pulse, set duration.

```
CIRCUIT . OVERRIDE
  OVERRIDE 1
  SELECT OVERRIDE
  ACTIVATE MODE

  FIXED
  PULSE  HH: MM: SS
          00: 01: 00
```

ZONE CONFIG(URATION)

You will use these options to establish and define zones. You can set up a zone and use it to control one or more circuits, including the circuit's associated events and holidays. For example, you may create Zone A, which is comprised of circuits 1, 3 and 6 that have four events and three holidays, including each event's and each holiday's variables such as the dates, times, etc., associated with them.

If events control zones instead of circuits, you can modify the circuits in a zone without changing any events. To configure, press the right key from CIRCUIT CONFIG to land on ZONE CONFIG where your options are:

- ADD ZONE
- MODIFY ZONE
- DELETE ZONE

1. ADD ZONE

To add a zone, press ENTER from ADD ZONE where your choices are:

- ENABLE A ZONE – You establish a zone by enabling it. Disabling a zone causes it to ignore the programmed schedule.
- EDIT ZONE NAME – Here you can give the zone a name (up to 10 characters; default names are ZONE 1, ZONE 2, etc.).
- EDIT ZONE CIRCUIT LIST – Choose the circuit(s) you wish to include in the zone by placing a checkmark next to the circuit(s).

2. MODIFY ZONE

Select the zone you would like to modify, then choose:

- ENABLE – Choose YES or NO.
- EDIT ZONE NAME – Edit the zone's name (up to 10 characters; default names are ZONE 1, ZONE 2, etc.).
- EDIT ZONE CIRCUIT LIST– Choose the circuit(s) you wish to include in the zone by placing a checkmark next to the circuit(s).

3. DELETE ZONE

Select the zone you would like to delete, then press ENTER.



HOLIDAY CONFIG(URATION)

Press the right key again from ZONE CONFIG to land on HOLIDAY CONFIG where your options are:

- ADD HOLIDAY
- MODIFY HOLIDAY
- DELETE HOLIDAY

1. ADD HOLIDAY

You create a holiday when you:

- ENABLE A HOLIDAY – Establish the holiday by choosing YES or NO.
- EDIT HOLIDAY NAME – Give the holiday a name (up to 10 characters; default names are HOLIDAY 1, HOLIDAY 2, etc.).
- EDIT HOLIDAY DATES – Choose from FIXED or RELATIVE holiday, where fixed is exact first and last days of the holiday (month and day); relative for example, is 1st day = July 4th, length = 3 days.

2. MODIFY HOLIDAY

Select the holiday you would like to enable, change/add name, and/or edit the holiday's dates (same as above).

3. DELETE HOLIDAY

Choose any holiday(s) you would like to delete from the zone.



EVENT CONFIG(URATION)

Press the right key again from HOLIDAY CONFIG to land on EVENT CONFIG where your options are:

- ADD EVENT
- MODIFY EVENT
- DELETE EVENT

1. ADD EVENT

You add an event when you:

- ENABLE EVENT – Establish an event by choosing YES or NO.
- EDIT EVENT NAME – Give the event a name (up to 10 characters; default names are EVENT 1, EVENT 2, etc.).
- EDIT EVENT TYPE – Choose whether this event turns a circuit ON or OFF.

- EDIT EVENT DATE/TIME – Input a fixed date (month and day) or a relative date (example, 1st day of each month); input a fixed time (hour and minute) or an astro time (sunrise or sunset, up to ± 120 minutes allowable adjustment).
- CKT/ZONE/HOL LISTS – Select circuit(s), zone(s) and holiday(s) for this event by placing checkmarks.
- EDIT ACTIVATION TYPE – Select activation mode, either FIXED or PULSE. If PULSE, enter duration in hours, minutes, and seconds.

2. MODIFY EVENT

To modify an event, first select the event to modify then change or edit the event under ENABLE EVENT, EDIT EVENT NAME, EDIT EVENT TYPE, EDIT EVENT DATE/TIME, CKT/ZONE/HOL LISTS, and/or EDIT ACTIVATION TYPE (see above).

3. DELETE EVENT

Choose the event you would like to delete.



SYSTEM CONFIGURATION OPTIONS

Press the right key again from EVENT CONFIG to land on SYSTEM CONFIG. Note: From the STATUS screen, you can also press ENTER; navigate to ADVANCED OPTIONS, press ENTER again, then press the left key once.

Your options are:

- REVIEW MODE
- PROG COPY/RESTORE
- PASSWORD SETUP
- EDIT SYSTEM NAME
- NETWORK SETUP
- FIRMWARE UPDATE
- RESET TO FAC DEFAULT

IMPORTANT: Use the ESC key to return to the SYSTEM CONFIG screen after entering these options.

1. REVIEW MODE

In REVIEW MODE, you can examine the parameters for all your events by circuit and date.

A) PROGRAMMED SCHEDULE

From REVIEW MODE, you land on PROGRAMMED SCHEDULE. After you choose which circuit's schedule you would like to review, you land on SELECT EVENT TYPE. From this screen, select from the following:

```
SYS. REVIEW-MODE
      CIRCUIT 1
      SELECT EVENT TYPE
      ALL EVENTS
      HOLIDAY EVENTS ONLY
      RELATIVE EVENTS ONLY
```

- ALL EVENTS
- HOLIDAY EVENTS ONLY
- RELATIVE EVENTS ONLY

Select the date of the event you would like to review and press enter. The screen shows any event scheduled.

B) EVENT LOG

You can also view an EVENT LOG, such as this example. The event log stores the most recent 1,000+ events and can be saved to USB.

```
EVENT LOG
PARKING L1 12/31/12
ON          5:00 PM
-MANUAL-   12/31/12
OFF        2:00 PM
-SERIAL-   12/31/12
ON         10:00 AM
```

2. PROG COPY/RESTORE

Under this function, you can copy or restore a program into the ET90000-series timer from the USB port. To copy a program, insert a USB drive into the port and follow the prompts. To restore a program, select which program you would like to restore from the list on the screen; press ENTER to delete the current schedule and replace it with the saved USB schedule. Note: Backup your schedule to USB in case it is unintentionally modified, reset, etc.

3. PASSWORD SETUP

On this screen, your choices are:

- ENABLE PASSWORD
- CHANGE PASSWORD

In ENABLE PASSWORD, your choices are ENABLED and DISABLED. When you select ENABLED, it means screens are viewable but you must enter the password to change or add information. Choosing DISABLED means no password is necessary to view, change or add information.

To change the password, press CHANGE PASSWORD. After you land on the SYS PSWORD CHANGE screen, key in up to 10 alphanumeric characters; key in again to confirm. Write down password!

Note: If the password is enabled, you can still reset the device to factory defaults.

IMPORTANT: You can reset to factory defaults even if you do not know the password; in fact, this is the only way to start "from scratch," and enter a new password, if the password is permanently lost. Always copy the schedule to USB prior to resetting the timer.

4. EDIT SYSTEM NAME

Use this for identification purposes to name your system when networking multiple timers together. Change or edit the system's name using up to 10 alpha/numeric characters, then press ACCEPT.

5. NETWORK SETUP

In NETWORK SETUP, you can:

- CONFIGURE NETWORK ADDRESS – If you would like to connect to a network, you must configure the network address. ENTER the IP (internet protocol) address, the subnet mask, and the default gateway.
- CONFIGURE REMOTE ADDRESS – To configure a remote address, you must first connect to an Ethernet device (see page 7). Then you can program up to 16 IP addresses.
- REMOTE CONNECT – Follow the prompts to connect to another Ethernet device.
- REMOTE DISCONNECT – First connect to an Ethernet device, then follow prompts.
- TIME SYNC – Sends the time information from the current timer to all timers, so clocks are synchronized. To synchronize timers, first connect to an Ethernet device, then follow the prompts.

6. FIRMWARE UPDATE

Firmware updates are available at <http://www.intermatic.com>. To install an update from a flash drive, insert drive into the USB port, then follow the prompts.

7. RESET FACTORY DEFAULTS

Choose NO or YES. Be certain you want to do this!

IMPORTANT: Copy the schedule to USB prior to resetting the timer. If you reset factory defaults, you lose all custom programming.

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