




**B) : Astro2**, when "Astro2" and "Start" icons blinking, you can choose the 2nd period ON time AM00:00-AM05:59 (DST AM01:00-AM06:59)

**Remark:** when in Astro1 time period, the "End" time is set at sunrise time, the Astro2 will show "OFF", means can not set in Astro2 mode, (press "Enter" to confirm the setting)

When "End"  and "+00" icons blinking, press  or  to choose  $\pm 10, \pm 20, \pm 30, \pm 40, \pm 50$  minutes before or later than the local sunrise time to TURN OFF the lights, Press "Enter" button to confirm the set.

**Remark:** When the Astro2 can not be set, the "Astro2" icon not shows on the LCD.

## LOCATIONS/CITY CODES;

USA			
Code	Area/City	Code	Area/City
01	Alabama North	23	Illinois South
02	Alabama South	24	Indiana (Eastern time zone)
03	Alaska	25	Indiana Southern (Central time zone)
04	Arizona (no DST)	26	Iowa East
05	Arkansas North	27	Iowa West
06	Arkansas South	28	Kansas East
07	California Central	29	Kansas West
08	California North	30	Kentucky East
09	California South	31	Kentucky West
10	Colorado North	32	Louisiana North
11	Colorado South	33	Louisiana South
12	Connecticut	34	Maine
13	Delaware	35	Maryland East
14	Florida North	36	Maryland West
15	Florida South	37	Massachusetts
16	Florida West	38	Michigan North
17	Georgia North	39	Michigan South
18	Georgia South	40	Minnesota North
19	Hawaii	41	Minnesota South
20	Idaho North	42	Mississippi North
21	Idaho South	43	Mississippi South
22	Illinois North	44	Missouri North
45	Missouri South	67	Pennsylvania West
46	Montana East	68	Rhode Island
47	Montana West	69	South Carolina
48	Nebraska East	70	South Dakota East
49	Nebraska West	71	South Dakota West
50	Nevada North	72	Tennessee West
51	Nevada South	73	Tennessee East
52	New Hampshire	74	Texas East
53	New Jersey	75	Texas North
54	New Mexico North	76	Texas South
55	New Mexico South	77	Texas West
56	New York South	78	Utah
57	New York Upstate	79	Vermont
58	North Carolina East	80	Virginia East
59	North Carolina West	81	Virginia West
60	North Dakota East	82	Washington
61	North Dakota West	83	West Virginia
62	Ohio	84	Wisconsin
63	Oklahoma	85	Wyoming
64	Oregon East		
65	Oregon West		
66	Pennsylvania East		
CANADA			
101	Whitehorse, Yukon	102	Montréal, Quebec
105	Ottawa, Ontario	106	Toronto
109	North Sydney, Nova Scotia	107	Barrie, Ontario
113	Vancouver	111	Calgary
117	Moncton	115	Winnipeg
		119	St. John's
		104	Charlottetown, Prince Edward Island
		108	Iqaluit, Nunavut
		112	Vancouver
		116	Brandon
		120	Yellowknife

## Model: DIGITAL ASTRO TIMER



-Input: 100-240V AC 50/60Hz (2-prong standard plug), - Output: 10A (max)

-Capacitor type load 10A (max) , - Induction type load 8.3A (max)

-Power consumption - Standby mode: Max 0.15W , Working mode: Max 0.7W

**WARNING!!** To avoid electric shock and/or fire hazard

- 1.Check that the electric outlet meets local electrical compliance
- 2.Plug into 3-pronged grounded outlet
- 3.Do not use this time for any application where a power failure could result in injury or death. (Example: medical equipment)

**ATTENTION!!**

The timer is built with American DST (daylight saving time) built in.

## 1. Product info

- A: LCD display
- B: Operating panel
- C: Input plug
- D: Output socket
- E: Photo sensor eye

## 2: Setting Buttons

Mode: Operation mode selection button

Enter: Confirm the setting/selecting button

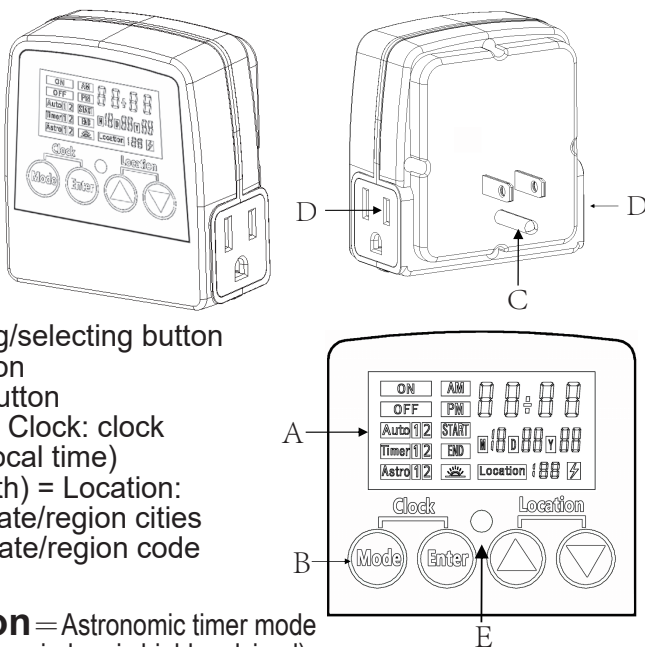
▲ : UP selection button

▼ : Down selection button

“Mode” + “Enter” button = Clock: clock setting (set your local time)

▲ + ▼ (press down both) = Location: Choose nearest state/region cities

Astronomic mode (See state/region code chart below)



## 3,Quick setup option = Astronomic timer mode

(Install this transformer/timer indoor is highly advised)

3.1: Check the clock time is right as your local time, if not, refer to **CLOCK TIME SETTING**

3.2: Press “▲ + ▼ =Location”, choose your city code; (remember your city code on the instruction manual)

3.3: Press “Mode” button for 3 sec, the “Location” icon will flash 3 times: default working mode set, i.e. Lights will be ON at your local sunset time and OFF at 11:00pm; then ON at 3:00am early next day, and OFF at sunrise time

## 4, Introduction of key features of this transformer;

4.1: This transformer is built with automatic DST; No need to set the clock from time to time.

4.2: The Astronomic sunrise/set time of 85 cities in USA and 20 cities in Canada are programmed in. Provide precision dusk to dawn working periods in your location.

4.3: Thanks to the Astro timer, this transformer can be installed indoor which prolong the lifetime than outdoor.

4.4: This transformer built with temporary ON/OFF/Photo sensor Mode set, which helps checking lights/ line's working and connection.

4.5: This transformer provided more energy saving working options for some hobby users. Refer to detail setting as below.

## 5. General set up

5.1: **CLOCK TIME SETTING** (Press **Mode** + **Enter** =Clock): Set your local time by press ▲ and ▼ with(Enter)button;

5.2: **ASTRO TIMER SETTING** (▲ + ▼ =Location) Press down “▲ + ▼” button, the “Location” icon flash, press ▲ or ▼ button to choose your city code (refer to attached city code sheet) and press (Enter) for confirm the set. e.g. you are in New York South, so choose location code 56.

5.3: Default working mode is Lights will be on at your local sunset time, and turn off at 11:00pm; Turn on at 3:00am again, switch off when sunrise. Press “Mode” button for 3 sec, the “Location” icon will flash 3 times which means default mode set.

## 6: Operation buttons introduction ;

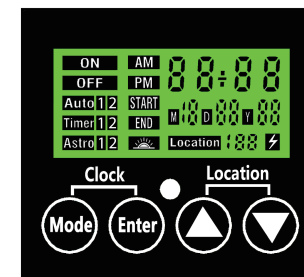
**Mode** : Modes choose button **Enter** : setting confirm button

▲ : up selecting button( hold down for quick selecting)

▼ : down selecting button( hold down for quick selecting)

“Mode+ Enter=Clock”: local clock time set buttons;

“▲ + ▼ =Location”: City code set buttons (Refer to the cities code sheet)



## 7; MODES SETTING in detail;

Press (Mode) button to select working mode, Always press (Enter) for confirm the mode set.

### 7.1: ON: Always working mode

### 7.2: OFF: Always closing mode

### 7.3: Auto: Photo sensor mode ( two periodsworking time options/Energy saving)

- A): **Mode Auto1**; “Auto 1” icon blinking, press enter to confirm the ON by sensor automatic. (START) The lights ON by sensor as default ON way, so only need to set the END time; (END) The END icon blinking, press ▲ or ▼ to choose the clock “(---)” and ☀ icons blinking, press the (Enter) for choosing the end time at Dawn with sensor.(END) Options end times, When END icon blinking, you may press “▲” or “▼” button to set the OFF time earlier than dawn time, optional close times are PM8:00-AM00:59 (DST are PM9:00-AM01:59)
- B): **Mode Auto2**: After “Auto1” set, it will turn to “Auto2” period set, the “Auto2” icon blinking after Auto1 first period working time set, there is a 2nd ON time option; The “Auto2 and “START” icon blinking, you can choose AM00:00-AM05:59 (DST are AM01:00-AM06:59) to open the lights again.The END time for 2nd period/Auto2 is by sensor at Dawn. Remark: When Auto1 end time is set at Dawn by sensor, the Auto2 will only show “OFF”, means NO 2nd working period can be set.(press “Enter” to confirm the setting) And the “Auto2” icon will not show on the LCD.

### 7.4: Timer mode; (set ON and OFF at any timefor testing and temporary using)

- A): **Timer1**, press “mode”, then press ▲ or ▼ button to choose Timer1, The “Time1 “ and “Start” icon blinking, ready to set the ON time by press ▲ or ▼ and Enter button to confirm. “End” icon blinking, ready to set the OFF time by press ▼ or ▲ and Enter button to confirm. You can set any time for working and OFF between 00:00-23:59; After Timer1 set, it will turn to Timer2 period working time set.
- B): **Timer2**, The “Timer 2” and “Start” icon blinking, ready to set the ON time by press ▲ or ▼ and Enter button to confirm. “End” icon blinking, ready to set the OFF time by press ▲ or ▼ and Enter button to confirm. You can set any time for working and OFF between 00:00-23:59
- Remark:** When there is same working time period in Timer 1 and Timer2 setting, it will be ignored by the system.

### 7.5: Astro =Astronomic timer: Automatically tack the sunset and sunrise timing by selecting your location/city code Astro1 /2 ( Astronomic timer two working periods, good to use when installed indoor and no light environment)

- A): **Astro1**, press “mode”, then press ▲ or ▼ button to choose “Astro1”, the “Astro 1 “/“Start” / ☀ and “+00 “ icons blinking, press ▲ or ▼ to choose ±10, ±20, ±30, ±40, ±50 minutes before or later than the local sunset time to TURN ON the lights, Press “Enter” button to confirm the set. “End” ☀ and “+00 “ icons blinking, Turn OFF at your local sunrise time, press “Enter” to confirm the set. Options for “End” time: when “End” icon blinking, you can choose PM8:00-AM00:59 (DST PM9:00-AM1:59) to OFF.