

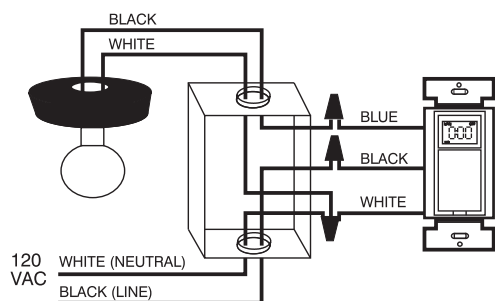
PROGRAMMABLE WALL SWITCH MODEL TI035A - SINGLE POLE FOR LIGHTS AND MOTORS

THE MAXIMUM LOAD MUST NOT EXCEED :

Resistive	20 A	Incandescent or halogen lighting, block heater, etc.
Inductive	20 A	Ballast equipped installations as : fluorescent, sodium lamp, etc.
Motor	1 HP	Pool filter, fan, etc.
Under 120 VAC, 50/60Hz		

INSTALLATION

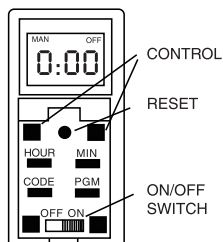
WIRING DIAGRAM



- 1- Turn off the power at the circuit breaker to avoid electrical shock.
- 2- Remove and disconnect the existing switch.
- 3- Connect each wall switch lead to each circuit conductor as shown in above diagram.
- 4- Restore power at circuit breaker.

POWER-ON

- 1- Open the wall switch door using a small screwdriver.
- 2- Ensure that the ON/OFF switch is set to ON.
- 3- Press on the RESET button using a paper clip.
- 4- On the display, " 0:00 " should flash.



If there is nothing on the display, check the following points :

- a) Maybe the ON/OFF switch located at lower part of the unit is not properly engaged in "ON" position. Push it to the right using a small screwdriver.
- b) If the wall switch controls a lamp equipped with an ON/OFF switch, care must be taken to keep the lamp switch in "ON" position.

OPERATING MODES

This wall switch has 2 operating modes : the MANUAL and AUTOMATIC modes.

In the MANUAL mode, the wall switch works as a single pole switch. By pressing on the door, the user turns on or turns off the light. The display shows the MAN indicator as well as light state (ON or OFF).

In the AUTOMATIC mode, the wall switch executes the recorded programs. To activate this mode, press on the door (about 3 seconds) until AUTO appears on the display. The display shows the active program number and the light state (ON or OFF).

To temporarily overpass the programming, press on the door. AUTO and programmed light state indicator remain on and the overpassed light state indicator will flash. To return in manual mode, hold the door pressed in for 3 seconds until MAN indicator is shown on display.

DEFINING THE PARAMETERS OF YOUR CITY (LOCALITY)

Before programming your wall switch, fill in this board by answering the following questions:

Latitude	Longitude	Day #	nor/Ad	Lc

1) LATITUDE & LONGITUDE : What is the latitude and longitude positions of your residence? Identify the city nearest to you in the table at the back of this guide. If none of the described cities in the table are close enough, those informations are generally available on a road map (latitude : horizontal lines and longitude : vertical lines).

Ex: Montreal 45, -073 means latitude 45° N and longitude 73° W.

Note: All latitudes SOUTH and longitudes WEST are identified with a negative mark. The maximum latitude is +/- 65°.

2) DAY # : What is the day of the year?

Add the code of the month (see following table) to the date of the day.

Ex: Today is June 24.

Day # = 151 + 24 = 175

January	0	July	181
February	31	August	212
March	59	September	243
April	90	October	273
May	120	November	304
June	151	December	334

3) nor/Ad: Does your country have a daylight saving time? If so, in what time period are you now?

nor	- Standard time - Normal time - Winter time	Ex: In Canada, June 24 is at DST (Ad). nor/Ad = Ad
Ad	- Daylight saving time - Advanced time - Summer time	

4) Lc: Does your country respect the Greenwich convention or does it follow a more practical time zone ?

As the wall switch can be installed everywhere in the world, it is based on the universal time (24 time zones gradually increasing of one hour towards the EAST starting from Greenwich).

For practical reasons, some time zones have been redefined (for instance, to follow a political border, a natural boundary or for an economical reason). In these cases, to remain compatible with the universal time, you have to enter a local correction factor.

Ex: In North America, the west limit of the Rockies time zone follows the natural boundary of the mountain range instead of being at a longitude of 112.5 W. For the cities of Calgary (114W) and Edmonton (113W), their local correction factor is Lc=1.

For our example, Montreal, the correction factor is Lc=0.

TIME ADJUSTMENT

Before starting programming, you have to set the hour format (12 or 24).

- 1- You can change the time format by pressing and holding the MIN button down as the HOUR button is pressed and released. Then, release MIN button.
- 2- Set the time by using the HOUR and MIN keys (For the 12 hour format, if you are setting an afternoon or evening time, make sure that the PM indicator appears at left side of the screen).
- 3- Close the door or press on one of the CONTROL buttons to return to normal operation.

RECORDING THE PARAMETERS

You must now program the wall switch with the defined parameters.

Note : If you make a mistake, just reselect the parameter using the CODE key and make the correction.

- 1- Press once on CODE key.
 - The display shows LAT 00.
 - Use HOUR and MIN keys to enter your latitude.
- 2- Press CODE key again.
 - The display shows LONG 000.
 - Use HOUR and MIN keys to enter your longitude.
- 3- Press CODE key again.
 - The display shows DAY # 000
 - Use HOUR and MIN keys to enter the day of the year.
- 4- Press CODE key again.
 - The display shows " nor " (standard).
 - Use MIN key to go from standard time " nor " to daylight saving time " Ad ".
- 5- Press CODE key again.
 - The display shows Lc 0 .
 - Use MIN key to enter the local correction factor.

Your parameters are set. Press on one of the CONTROL keys or simply close the door to return to either MANUAL or AUTOMATIC operating mode.

DEFINING YOUR PROGRAMS

1- This wall switch can hold 2 programs ON/OFF which will be repeated everyday.

If you have entered the parameters of your city, the programs P1 ON and P2 OFF show the sunset and sunrise times. Our example gives these results.

P1	ON	20:38	Sunset
P1	OFF	--:--	free
P2	ON	--:--	free
P2	OFF	5:10	Sunrise

By placing your wall switch in AUTO mode, your lights will turn on at sunset and off at sunrise.

2- If you want your lights to turn on at sunset but to turn off at 10:00 PM, enter program P1 OFF = 22:00.

If you also want your lights to turn on at 5:00 AM then turn off at sunrise, enter program P2 ON = 5:00.

P1	ON	20:38	Sunset
P1	OFF	22:00	
P2	ON	5:00	
P2	OFF	5:10	Sunrise

Take note that the programs P1 OFF and P2 OFF respectively have priority over programs P1 ON and P2 ON.

As an example, on one given day the sunrise time is 4:58 and P2 ON is programmed to turn on the lights at 5:00, the lights will not turn on that morning.

3- You can replace the sunrise and sunset programs by set times. Select programs P1 ON or P2 OFF and enter new times by using HOUR and MIN keys.

RECORDING OR MODIFYING YOUR PROGRAMS

- 1- Press PGM key to select program.
- 2- Use HOUR and MIN keys to modify the program.
- 3- Press on the CODE key to reset to initial value.

P1 ON = sunset P1 OFF = --:--
P2 ON = --:-- P2 OFF = sunrise

4- To return to operating mode MANUAL or AUTOMATIC, simply close the door.

CHANGING FROM STANDARD TIME TO DAYLIGHT TIME

If your country uses daylight savings time, use the following procedure:

- 1- Press four times on the CODE key to select mode " nor/Ad ".
- 2- Use the MIN key to go from either " nor " (winter) to " Ad " (summer).
- 3- Close the door to return to operating mode MANUAL or AUTOMATIC.

The wall switch will automatically adjust the clock and the sunrise, sunset table for the chosen time period. **You do not have to reset the time.**

MEMORY BACKUP

This programmable wall switch is equipped with a rechargeable battery which will protect your programming during a power outage.

Note that the display is blank during a power failure.

CHARACTERISTICS

Model: TI035A - SINGLE POLE
Supply: 120 VAC, 50 / 60 Hz
LOAD: 2400 watts resistive or inductive, 1 HP motor
Approvals: CSA & UL
Storage temperature range: -20 to 50 °C
Operating temperature range: 0 to 50 °C
Maximum latitude: +/- 65°
Solar table precision: +/- 11 min. (max error around poles)

WARRANTY

AUBE TECHNOLOGIES INC. ONE YEAR LIMITED WARRANTY

This product is under warranty against defects in material and workmanship in normal use for a period of one year, from the date of the original purchase from authorized dealers. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage. This limited warranty is in lieu of all other warranties, obligations or liabilities expressed or implied by the company.

In no event shall AUBE technologies inc. be liable for consequential or incidental damages resulting from installation of this product. Within this period, any product proven defective in normal use will be repaired or replaced, at AUBE's option, without charge for either parts or labour, provided that the defective product with the original sale receipt is returned to the original dealer or is shipped prepaid, insured and addressed to :

AUBE technologies inc., 705 avenue Montrichard, Iberville (Quebec), Canada J2X 5K8
service@aubetech.com
www.aubetech.com

If you have any questions concerning the installation or the programming of the wall switch, please call for technical assistance at (450) 358-4600 for the Montreal area or **1-800-831-AUBE** for outside area from Monday to Friday between 8:30 AM and 5:00 PM, eastern time.

CANADA

CITY	LAT	LONG	LC	CITY	LAT	LONG	LC
BANF	51	-115	1	OTTAWA	45	-75	0
BURNABY	49	-122	0	QUÉBEC	46	-71	0
CALGARY	51	-114	1	REGINA	50	-104	1
CAPE DORSET	64	-76	0	RICHMOND	49	-123	0
CHICOUTIMI	48	-71	0	SASKATOON	52	-106	1
DAWSON	64	-139	1	SHERBROOKE	45	-71	0
EASTMAIN	52	-78	0	ST-ANTHONY	51	-55	0
EDMONTON	53	-113	1	ST-JONH	45	-66	0
FORT SEVERN	56	-87	1	ST-JONH'S	47	-52	0
HALIFAX	44	-63	0	SUDBURY	46	-81	0
IGALUIT	63	-68	0	THUNDER BAY	48	-89	1
INUUKJUAQ	58	-78	0	TORONTO	43	-79	0
KITCHENER	43	-80	0	TROIS-RIVIÈRES	46	-72	0
LONDON	42	-81	0	URANIUM CITY	59	-108	0
MISTASSINI	50	-73	0	VANCOUVER	49	-123	0
MONTRÉAL	45	-73	0	WINDSOR	42	-83	1
OSHAWA	43	-78	0	WINNIPEG	49	-97	0

USA

CITY	LAT	LONG	LC	CITY	LAT	LONG	LC
ABILENE	32	-99	1	LOUISEVILLE	38	-85	1
ALBUQUERQUE	35	-106	0	LUBBOCK	33	-101	1
ALLENTOWN	40	-75	0	MACON	32	-83	1
AMARILLO	35	-101	1	MADISON	43	-89	0
ANCHORAGE	61	-149	1	MEMPHIS	35	-90	0
ATLANTA	33	-84	1	MIAMI	25	-80	0
AUSTIN	30	-97	0	MILWAUKEE	43	-87	0
BAKERSFIELS	35	-119	0	MINNEAPOLIS	44	-93	0
BALTIMORE	39	-76	0	MOBILE	30	-88	0
BATON ROUGE	30	-91	0	MODESTO	37	-120	0
BEAUMONT	30	-94	0	MONTGOMERY	32	-86	0
BILLING	45	-108	0	NASHVILLE	36	-86	0
BIRMINGHAM	33	-86	0	NEW ORLEANS	29	-90	0
BOISE	43	-116	1	NEW YORK	40	-74	0
BOISE CITY	36	-102	1	NORFOLK	36	-76	0
BOSTON	42	-71	0	OKLAHOMA CITY	35	-97	0
BROWNVILLE	25	-97	0	OMAHA	41	-95	0
BUFFALO	42	-78	0	ORLANDO	28	-81	0
CEDAR REPIDS	41	-91	0	OVERLAND PARK	38	-94	0
CHARLOTTE	35	-80	0	OXNARD	34	-119	0
CHATTANOOGA	35	-85	1	PEORIA	40	-89	0
CHEYENNE	41	-104	0	PHILADELPHIA	40	-75	0
CHICAGO	41	-87	0	PHOENIX	33	-112	0
CINCINNATI	39	-84	1	PITTSBURG	40	-79	0
CLEVELAND	41	-81	0	PLANO	33	-96	0
COLOMBUS	39	-82	0	PORTLAND	45	-122	0
COLORADO SPRINGS	38	-104	0	PROVIDENCE	41	-71	0
CORPUS CHRISTI	27	-97	0	RELEIGH	35	-78	0
DALLAS	32	-96	0	RAPID CITY	44	-103	1
DENVERS	39	-104	0	RENO	39	-119	0
DES MOINES	41	-93	0	RICHMOND	37	-77	0
DETROIT	42	-83	1	ROANOKE	37	-79	0
DULUTH	46	-92	0	ROCHESTER	43	-77	0
EL PASO	31	-106	0	ROCKFORD	42	-89	0
ERIE	42	-80	0	SACRAMENTO	38	-121	0
EUGENE	44	-123	0	SALT LAKE CITY	40	-111	0
EVANSVILLE	37	-87	0	SAN ANTONIO	29	-98	1
FLINT	43	-83	1	SAN DIEGO	32	-117	0
FORT LAUDERDALE	26	-80	0	SAN FRANCISCO	37	-122	0
FORT WAYNE	41	-85	1	SANTA ROSA	38	-122	0
FRESNO	36	-119	0	SAVANNAH	32	-81	0
GRAND RAPIDS	42	-85	1	SEATTLE	47	-122	0
GREAT FALLS	47	-111	0	SHREVEPORT	32	-93	0
GREENSBORO	36	-79	0	SOUTH BEND	41	-86	0
HAMPTON	37	-76	0	SPOKANE	47	-117	0
HARTFORD	41	-72	0	SPRINGFIELD (IL)	39	-89	0
HONOLULU	21	-157	0	SPRINGFIELD (MA)	42	-72	0
HOUSTON	29	-95	0	SPRINGFIELD (MO)	37	-93	0
HUNTSVILLE	34	-86	0	ST-LOUIS	38	-90	0
INDIANAPOLIS	39	-86	1	SYRACUSE	43	-76	0
JACKSON	32	-90	0	TALLAHASSEE	30	-84	1
JACKSONVILLE	30	-81	0	TAMPA	27	-82	0
KANSAS CITY (KS)	39	-94	0	TOLEDO	41	-83	1
KNOXVILLE	35	-83	1	TOPEKA	39	-95	0
LAKEWOOD (CO)	39	-105	0	TUCSON	32	-110	0
LANSING	42	-84	1	TULSA	36	-95	0
LAREDO	27	-99	1	VIRGINIA BEACH	36	-75	0
LAS VAGAS	36	-115	0	WACO	31	-97	0
LXINGTON	38	-84	1	WASHINGTON (DC)	38	-77	0
LINCLON	40	-96	0	WICHITA	37	-97	0
LITTLE ROCK	34	-92	0	WINSTON-SALEM	36	-80	0
LONG BEACH	33	-118	0	YONKER	40	-73	0
LOS ANGELES	34	-118	0	YOUNGSTOWN	41	-80	0