

1 Applications

The TI034-3W switch can be used in a single-pole or 3-way installation with the following types of lighting:

- Incandescent
- Halogen
- Low-voltage halogen with transformer
- Fluorescent

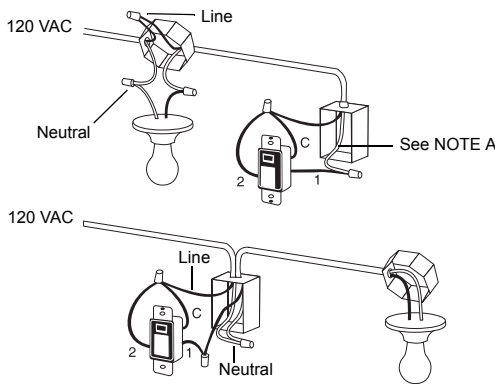
The TI034-3W switch cannot be used with a load below 40 W or above 500 W.

2 Installation

- 1 Cut power at the circuit breaker to avoid electric shock.
- 2 Remove the existing switch. (For a 3-way installation, identify and label the wire that is connected to the "common" screw.)
- 3 Install the new switch (refer to the appropriate section below).
- 4 Apply power at the circuit breaker.

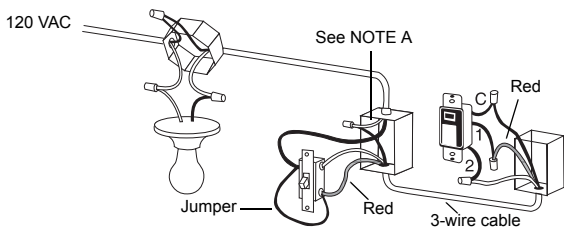
NOTE A: The white wire is not the neutral wire but the wire going to the load.

SINGLE-POLE INSTALLATION



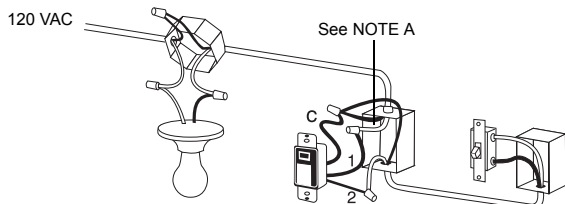
Connect wires "2" and "C" of TI034-3W to the line (120 V) wire.

EXISTING 3-WAY INSTALLATION



Connect wire "C" on the TI034-3W to the "common" wire, identified when removing the old switch. Connect the other two TI034-3W wires to the two remaining wires. At the other 3-way switch, connect the jumper wire between the "common" screw and the screw where wire "1" of the TI034-3W is connected.

NEW 3-WAY INSTALLATION



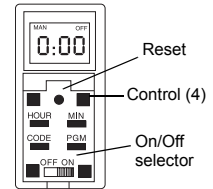
The jumper wire is not required in this installation. A single-pole switch can be used as the other switch in a 3-way installation.

3 Power-on

- 1 Pry the switch door open from the bottom using a small screwdriver.
- 2 Ensure the ON/OFF selector is set to ON.
- 3 Reset the switch using a paper clip. 0:00 will flash.

If the display is blank:

- Ensure the ON/OFF selector is properly engaged in the ON position. Push it to the right using a small screwdriver.
- If the programmable switch controls a lamp equipped with a built-in On/Off switch, ensure the lamp switch is set to On.
- Ensure the light bulb is not burned out and is tightly screwed in its socket.



EXISTING 3-WAY INSTALLATION

If either switch does not work properly, rewire the jumper between the "common" screw and the other screw.

WARNING: Before replacing the light bulb, place the ON/OFF selector in the OFF position. Failure to do so might damage the switch.

4 Selecting the Operating Mode

The programmable switch has 2 operating modes: manual (MAN) and automatic (AUTO). To switch mode, press the switch for 3 seconds.

Manual Mode

The programmable switch operates as a regular switch. Briefly press the switch door to turn the lights On or Off. The mode (MAN) and state (ON or OFF) are displayed.



Automatic Mode

The programmable switch follows the programmed schedule. The mode (AUTO), state (ON or OFF) and current program number are displayed.



To temporarily override the programmed schedule, briefly press the switch door. The new state (ON or OFF) will flash to show that the state is temporary. The override remains in effect until you press the switch door again or until the beginning of the next program.

5 Setting the Clock

NOTE: The switch displays the time in 24-hour format by default or following a reset.

- 1 To switch between 12-hour format and 24-hour format, proceed as follows:
 - a) Press one of the control buttons to ensure the MAN or AUTO indicator is displayed.
 - b) Press the MIN and HOUR buttons simultaneously and briefly (0:00 display = 24-hour; 12:00 display = 12-hour).
- 2 Set the time using the HOUR and MIN buttons. For the 12-hour time format, if you are setting an afternoon time, ensure PM appears on the screen.
- 3 Press one of the control buttons or close the switch door to return to normal operation.

6 Daylight Savings Time

This procedure configures the switch in daylight savings time or in normal/standard time.

- 1 Press the CODE button four times.
- 2 Press the MIN button to switch between nor and Ad.

nor	Standard time / Normal time / Winter time
Ad	Daylight savings time / Advanced time / Summer time

- 3 Press one of the control buttons or close the switch door to return to normal operation.

7 Sunset/Sunrise Program

NOTE: By default, once you have programmed the sunset/sunrise parameters, the timer will follow the sunrise/sunset program when placed in Automatic mode. To set your own schedule, see section 8.

7.1 Determining the sunset/sunrise parameters

Fill out the following table:

Latitude	Longitude	Day #	nor/Ad	Lc

1) **LATITUDE & LONGITUDE:** Enter the coordinates of your city or the nearest city using the supplied table. If none of the cities in the table is applicable, this information is usually available on the internet.

NOTE: Add a minus sign when entering a south latitude coordinate or a west longitude coordinate.

2) **DAY #:** Enter the day #. (Add the code of the current month to the current date.)

For example: For June 24th, the day # = 151 + 24 = 175

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

3) **nor/Ad:** If your country has daylight savings time, select the appropriate period.

nor	Standard time / Normal time / Winter time
Ad	Daylight savings time / Advanced time / Summer time

4) **Lc:** If your city's time zone is based on political or economic boundaries instead of its coordinates, your lights might switch On/Off too early or too late with respect to sunrise and sunset. Therefore, apply a correction factor (+1 or -1). Otherwise, leave it at 0.

7.2 Programming the sunset/sunrise parameters

Once you have completed section 7.1, proceed as follows:

1 Press the **CODE** button until the desired parameter appears. The parameters appear in the following order.

Parameter	Default setting	Possible settings	Buttons used
Latitude (LAT)	00	-65 to 65	HOUR & MIN
Longitude (LONG)	000	-180 to 180	HOUR & MIN
Day number (DAY #)	000	1 to 365	HOUR & MIN
Daylight savings time	nor	nor / Ad	MIN
Local correction factor (Lc)	0	-1, 0, 1	MIN

2 Press the **HOUR** or **MIN** button to modify the value (see table above for the buttons to use).

3 Press one of the control buttons or close the switch door to return to normal operation.

8 Programming the Schedule

NOTE: This section allows you to set your own schedule.

The switch can hold 2 programs which are repeated every day. When you place the timer in Automatic mode, it will activate the load at the start of each program and deactivate it at the end of the program. You need to set the following parameters:

- P1 ON** : Start time of program 1
- P1 OFF** : End time of program 1
- P2 ON** : Start time of program 2
- P2 OFF** : End time of program 2

1 Press the **PGM** button until the desired parameter is displayed.

If you have entered your city's parameters (see section 7), the parameters **P1 ON** and **P2 OFF** show the sunset time and sunrise time for this time of the year. If the timer is used for lighting, when placed in **AUTO** mode, it will turn the light ON at sunset and will turn it Off at sunrise. For example:

- P1 ON** : 20:38 (sunset)
- P1 OFF** : --:-- (blank)
- P2 ON** : --:-- (blank)
- P2 OFF** : 6:10 (sunrise)

2 Press the **HOUR** and **MIN** buttons to set the time.

Example: If you want your lights to turn On at sunset and to turn Off at 10:00 PM, set **P1 OFF** to **22:00**. If you also want your lights to turn back On at 5:00 AM then turn Off at sunrise, set **P2 ON** to **5:00**.

- P1 ON** : 20:38 (sunset)
- P1 OFF** : 22:00 (programmed)
- P2 ON** : 5:00 (programmed)
- P2 OFF** : 6:10 (sunrise)

NOTE: P1 OFF and P2 OFF have priority over P1 ON and P2 ON respectively. For example, if sunrise is at 4:58 and P2 ON is set to 5:00, the lights will not turn on.

You can replace the sunrise and sunset times by fixed times. Select program **P1 ON** or **P2 OFF** and enter the desired time using the **HOUR** and **MIN** buttons.

3 Press one of the control buttons or close the switch door to return to normal operation.

Clearing a programmed time

1 Press the **PGM** button to display the programmed time.

2 Press the **CODE** button. The time will be erased and --:-- will be displayed.
NOTE: For **P1 ON** and **P2 OFF**, if you have programmed the city parameters, the programmed time will be replaced by sunset time and sunrise time respectively.

3 Press one of the control buttons or close the switch door to return to normal operation.

9 Troubleshooting

Blank display	<ul style="list-style-type: none"> • Verify circuit breaker at main panel. • Verify if light bulb is burned out • Ensure the ON/OFF selector is at ON. • Reset the switch using a paper clip.
Faded or irregular display	<ul style="list-style-type: none"> • Load is less than 40 W • Ambient temperature is below freezing point
Cannot switch between 24-hour format and 12-hour format	First, press a control button so that MAN or AUTO appears on display.
Programs do not run as expected	<ul style="list-style-type: none"> • Make sure the switch is properly programmed. • Note that - - - indicates an inactive program. • If the switch has been configured for 12-hour format, check that PM appears on the left side of the screen when an afternoon time is displayed.
The metal plate is hot	This is normal with high loads (maximum of 500 W).
After I have bypassed the program to turn the light Off, it turns back On at midnight.	Any temporary bypass is cancelled at midnight. Thus, the light has turned back On, the state the light should be at midnight according to the program. If you often bypass programming before midnight, you should program P1 OFF to midnight or earlier. This ensures that the light will remain Off when you bypass programming.

10 Technical Specifications

Supply: 120 VAC, 50 / 60 Hz

Minimum load: 40 watts

Maximum load: 500 watts

Operating temperature range: 5°F to 122°F (-15°C to 50°C)

Storage temperature range: -4°F to 122°F (-20°C to 50°C)

Power outage: The programs are protected by a rechargeable battery. The screen is blank during the power outage.

Solar table precision: +/- 11 min. (max error around poles)

Certifications: CSA & UL



TIO34-3W / TIO35

Addendum

CANADA			
CITY	LAT	LONG	Lc
BANFF	51	-115	1
BURNABY	49	-122	0
CALGARY	51	-114	1
CAPE - DORSET	64	-76	0
CHICOUTIMI	48	-71	0
DAWSON	64	-139	1
EASTMAIN	52	-78	0
EDMONTON	53	-113	1
FORT SEVERN	56	-87	1
HALIFAX	44	-63	0
IGALUIT	63	-68	0
INUKJUAK	58	-78	0
KITCHENER	43	-80	0
LONDON	42	-81	0
MISTASSINI	50	-73	0
MONTREAL	45	-73	0
OSHAWA	43	-78	0
OTTAWA	45	-75	0
QUEBEC	46	-71	0
REGINA	50	-104	1
RICHMOND	49	-123	0
SASKATOON	52	-106	1
SEPT-ILES	50	-66	-1
SHERBROOKE	45	-71	0
ST. ANTHONY	51	-55	0
SAINT JOHN (NB)	45	-66	0
ST. JOHN'S (NFLD)	47	-52	0
SUDBURY	46	-81	0
THUNDER BAY	48	-89	1
TORONTO	43	-79	0
TROIS-RIVIÈRES	46	-72	0
URANIUM CITY	59	-108	0
VANCOUVER	49	-123	0
WINDSOR	42	-83	1
WINNIPEG	49	-97	0

USA			
CITY	LAT	LONG	Lc
ABILENE	32	-99	1
ALBUQUERQUE	35	-106	0
ALLENTOWN	40	-75	0
AMARILLO	35	-101	1
ANCHORAGE	61	-149	1
ATLANTA	33	-84	1
AUSTIN	30	-97	0
BAKERSFIELD	35	-119	0
BALTIMORE	39	-76	0
BATON ROUGE	30	-91	0
BEAUMONT	30	-94	0
BILLINGS	45	-108	0
BIRMINGHAM	33	-86	0
BOISE	43	-116	1
BOISE CITY	36	-102	1
BOSTON	42	-71	0
BROWNSVILLE	25	-97	0
BUFFALO	42	-78	0
CEDAR RAPIDS	41	-91	0
CHARLOTTE	35	-80	0
CHATTANOOGA	35	-85	1
CHEYENNE	41	-104	0
CHICAGO	41	-87	0
CINCINNATI	39	-84	1
CLEVELAND	41	-81	0
COLOMBUS	39	-82	0
COLORADO SPRINGS	38	-104	0
CORPUS CHRISTI	27	-97	0
DALLAS	32	-96	0
DENVER	39	-104	0
DES MOINES	41	-93	0
DETROIT	42	-83	1
DULUTH	46	-92	0
EL PASO	31	-106	0
ERIE	42	-80	0
EUGENE	44	-123	0
EVANSVILLE	37	-87	0
FLINT	43	-83	1
FORT LAUDERDALE	26	-80	0
FORT WAYNE	41	-85	1
FRESNO	36	-119	0
GRAND RAPIDS	42	-85	1
GREAT FALLS	47	-111	0
GREENSBORO	36	-79	0
HAMPTON	37	-76	0
HARTFORD	41	-72	0
HONOLULU	21	-157	0
HOUSTON	29	-95	0
HUNTSVILLE	34	-86	0
INDIANAPOLIS	39	-86	1
JACKSON	32	-90	0
JACKSONVILLE	30	-81	0
KANSAS CITY	39	-94	0
KNOXVILLE	35	-83	1
LAKEWOOD	39	-105	0

USA			
CITY	LAT	LONG	Lc
LANSING	42	-84	1
LAREDO	27	-99	1
LAS VEGAS	36	-115	0
LEXINGTON	38	-84	1
LINCOLN	40	-96	0
LITTLE ROCK	34	-92	0
LONG BEACH	33	-118	0
LOS ANGELES	34	-118	0
LOUISVILLE	38	-85	1
LUBBOCK	33	-101	1
MACON	32	-83	1
MADISON	43	-89	0
MEMPHIS	35	-90	0
MIAMI	25	-80	0
MILWAUKEE	43	-87	0
MINNEAPOLIS	44	-93	0
MOBILE	30	-88	0
MODESTO	37	-120	0
MONTGOMERY	32	-86	0
NASHVILLE	36	-86	0
NEW ORLEANS	29	-90	0
NEW YORK	40	-74	0
NORFOLK	36	-76	0
OKLAHOMA CITY	35	-97	0
OMAHA	41	-95	0
ORLANDO	28	-81	0
OVERLAND PARK	38	-94	0
OXNARD	34	-119	0
PEORIA	40	-89	0
PHILADELPHIA	40	-75	0
PHOENIX	33	-112	0
PITTSBURG	40	-79	0
PLANO	33	-96	0
PORTLAND	45	-122	0
PROVIDENCE	41	-71	0
RALEIGH	35	-78	0
RAPID CITY	44	-103	1
RENO	39	-119	0
RICHMOND	37	-77	0
ROANOKE	37	-79	0
ROCHESTER	43	-77	0
ROCKFORD	42	-89	0
SACRAMENTO	38	-121	0
SALT LAKE CITY	40	-111	0
SAN ANTONIO	29	-98	1
SAN DIEGO	32	-117	0
SAN FRANCISCO	37	-122	0
SANTA ROSA	38	-122	0
SAVANNAH	32	-81	0
SEATTLE	47	-122	0
SHREVEPORT	32	-93	0
SOUTH BEND	41	-86	0
SPOKANE	47	-117	0
SPRINGFIELD (IL)	39	-89	0
SPRINGFIELD (MA)	42	-72	0

USA			
CITY	LAT	LONG	Lc
SPRINGFIELD (MO)	37	-93	0
ST. LOUIS	38	-90	0
SYRACUSE	43	-76	0
TALLAHASSEE	30	-84	1
TAMPA	27	-82	0
TOLEDO	41	-83	1
TOPEKA	39	-95	0
TUCSON	32	-110	0
TULSA	36	-95	0
VIRGINIA BEACH	36	-75	0
WACO	31	-97	0
WASHINGTON DC	38	-77	0
WICHITA	37	-97	0
WINSTON-SALEM	36	-80	0
YONKERS	40	-73	0
YOUNGSTOWN	41	-80	0

MÉXICO			
CIUDAD	LAT	LONG	Lc
TIJUANA	32	-117	0
NOGALES	31	-111	0
CIUDAD JUAREZ	31	-106	0
MATAMOROS	26	-97	0
NUEVO LAREDO	27	-99	1
MONTERREY	25	-100	1
CHIHUAHUA	28	-106	0
MAZATLÁN	23	-106	0
TAMPICO	22	-98	1
ZACATECAS	22	-102	1
LÉON	21	-101	1
LA PAZ	24	-110	0
MEXICO CITY	19	-99	1
PUEBLA	19	-98	1
GUADALAJARA	20	-103	1
OAXACA	17	-96	0
ACAPULCO	16	-100	1
CANCUN	21	-86	0
MERIDA	21	-89	0

PUERTO RICO			
CIUDAD	LAT	LONG	Lc
SAN JUAN	18	-66	0

REPÚBLICA DOMINICANA			
CIUDAD	LAT	LONG	Lc
SANTO DOMINGO	18	-70	1

Warranty

AUBE warrants this product, excluding battery, to be free from defects in the workmanship or materials, under normal use and service, for a period of three (3) years from the date of purchase by the consumer. If at any time during the warranty period the product is determined to be defective or malfunctions, AUBE shall repair or replace it (at AUBE's option).

If the product is defective,

- (i) return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it, or
- (ii) contact AUBE. AUBE will make the determination whether the product should be returned, or whether a replacement product can be sent to you.

This warranty does not cover removal or reinstallation costs. This warranty shall not apply if it is shown by AUBE that the defect or malfunction was caused by damage which occurred while the product was in the possession of a consumer.

AUBE's sole responsibility shall be to repair or replace the product within the terms stated above. AUBE SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. Some provinces, states or regions do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY AUBE MAKES ON THIS PRODUCT. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS HEREBY LIMITED TO THE THREE-YEAR DURATION OF THIS WARRANTY. Some provinces, states or regions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may have other rights which vary from one province, state or region to another.

Customer Assistance

If you have any questions on the product installation or operation, contact us at:

705 Montrichard Avenue
Saint-Jean-sur-Richelieu, Quebec
J2X 5K8
Canada
Tel.: (450) 358-4600
Toll-free: 1-800-831-AUBE
Fax: (450) 358-4650
Email: aube.service@honeywell.com

For more information on our products, go to
www.aubetech.com

Garantie

AUBE garantit ce produit, à l'exception des piles, contre tout vice de fabrication ou de matière dans la mesure où il en est fait une utilisation et un entretien convenables, et ce, pour trois (3) ans à partir de la date d'achat par le consommateur. En cas de défectuosité ou de mauvais fonctionnement pendant la période de garantie, AUBE remplacera ou réparera le produit (au gré de AUBE).

Si le produit est défectueux,

- (i) le retourner, accompagné d'une preuve d'achat indiquant la date d'achat, à l'endroit où il a été acheté, ou
- (ii) contacter AUBE. AUBE déterminera alors si le produit doit être retourné ou si un produit de remplacement peut vous être expédié.

La présente garantie ne couvre pas les frais de retrait ou de réinstallation. La présente garantie ne s'appliquera pas s'il est démontré que la défectuosité ou le mauvais fonctionnement est dû à un endommagement du produit alors que le consommateur l'avait en sa possession.

La responsabilité de AUBE se limite à réparer ou à remplacer le produit conformément aux modalités susmentionnées. AUBE N'EST EN AUCUN CAS RESPONSABLE DES PERTES OU DOMMAGES, Y COMPRIS LES DOMMAGES INDIRECTS OU ACCESSOIRES DÉCOULANT DIRECTEMENT OU INDIRECTEMENT D'UNE VIOLATION QUELCONQUE D'UNE GARANTIE, EXPRESSE OU TACITE, APPLICABLE AU PRÉSENT PRODUIT NI DE TOUTE AUTRE DÉFECTUOSITÉ DU PRÉSENT PRODUIT. Certaines provinces ou régions ne permettent pas l'exclusion ou la restriction des dommages indirects et, par conséquent, la présente restriction peut ne pas s'appliquer.

LA PRÉSENTE GARANTIE TIENT LIEU DE TOUTES LES AUTRES GARANTIES, EXPRESSES OU TACITES, ET LES GARANTIES DE VALEUR MARCHANDE ET DE CONFORMITÉ À UNE FIN PARTICULIÈRE SONT PAR LES PRÉSENTES EXCLUES APRÈS LA PÉRIODE DE TROIS ANS DE LA PRÉSENTE GARANTIE. Certaines provinces ou régions ne permettent pas de limiter la durée des garanties tacites et, par conséquent, la présente limitation peut ne pas s'appliquer.

La présente garantie donne au consommateur des droits légaux spécifiques et peut-être certains autres droits qui peuvent varier d'une province ou région à une autre.

Service à la clientèle

Si vous avez des questions sur ce produit, prière de nous joindre à :

705, avenue Montrichard
Saint-Jean-sur-Richelieu (Québec) J2X 5K8
Canada
Tél. : (450) 358-4600
Sans frais : 1 800 831-AUBE
Télé : (450) 358-4650
Courriel : aube.service@honeywell.com

Pour de plus amples informations sur nos produits, visiter le

www.aubetech.com

Garantía

AUBE garantiza que este producto, sin incluir las baterías, no presentará defectos en los materiales ni en lo referente a la mano de obra, en condiciones normales de uso y de servicio, por un período de tres (3) años a partir de la fecha de compra por el consumidor. Si en cualquier momento, durante el período de vigencia de la garantía, se determina que el producto es defectuoso o que funciona mal, AUBE lo reparará o lo reemplazará (a elección de AUBE).

Si el producto es defectuoso:

- I. Devuélvalo al lugar donde lo compró, acompañado por la factura de compra o de otra prueba de compra que incluya la fecha.
- II. Comuníquese con AUBE. AUBE determinará si deberá devolver el producto o si se le enviará un producto de reemplazo.

Esta garantía no cubre los costos de desinstalación y reinstalación. Esta garantía no será válida si se demuestra que el defecto o el mal funcionamiento se deben a un daño que ocurrió cuando el producto estaba en posesión del consumidor.

La única responsabilidad de AUBE será la de reparar o reemplazar el producto de acuerdo con los términos aquí establecidos. AUBE NO SERA RESPONSABLE DE NINGUNA PÉRDIDA NI DE NINGÚN DAÑO DE NINGÚN TIPO, INCLUIDOS LOS DAÑOS IMPREVISTOS O DERIVADOS QUE RESULTEN, DIRECTA O INDIRECTAMENTE, DEL INCUMPLIMIENTO DE CUALQUIER GARANTÍA, EXPRESA O IMPLÍCITA, O DE CUALQUIER OTRA FALLA DE ESTE PRODUCTO. Algunos estados, provincias o regiones no permiten la exclusión o la limitación de los daños imprevistos o derivados, por lo que es posible que la limitación no se aplique.

ÉSTA ES LA ÚNICA GARANTÍA EXPRESA QUE AUBE OTORGA SOBRE ESTE PRODUCTO. LA DURACIÓN DE CUALQUIER GARANTÍA IMPLÍCITA, INCLUIDAS LAS GARANTÍAS DE APTITUD E IDONEIDAD PARA UN FIN DETERMINADO, QUEDA, POR EL PRESENTE, LIMITADA A LA DURACIÓN DE TRES AÑOS DE ESTA GARANTÍA. Algunos estados, provincias o regiones no permiten limitaciones en cuanto a la duración de las garantías implícitas. Por lo tanto, es posible que la limitación anterior no se aplique en su caso.

Esta garantía le brinda derechos legales específicos y usted podría tener otros derechos que varían para cada estado, provincia o región.

Service à la clientèle

Si tiene preguntas sobre el producto, sírvase comunicarse con nosotros a la siguiente dirección:

705, Montrichard
Saint-Jean-sur-Richelieu, Quebec
J2X 5K8
Canada
Tel: (450) 358-4600
Línea sin cargo: 1-800-831-AUBE
Fax: (450) 358-4650
Correo electrónico: aube.service@honeywell.com

Para mayor información sobre nuestros productos, visítenos en:

www.aubetech.com