INSTRUCTION MANUAL

Telephone Controller

MODEL CT240-01

CT240-01

Vacation Button

aube

Power

Hook

Ring

Default

• 1 • 2 • 3
V   C

Auxiliary Output

A   B   C

Thermostat Output

9 VAC

LINE
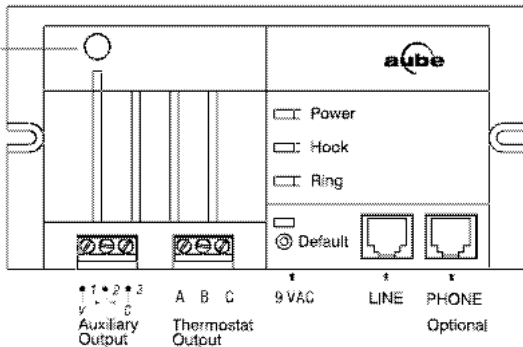
PHONE

Optional

SUMMARY

This telephone controller was designed to be used with most thermostats equipped with a telephone interface.

A special output provides unidirectional control (to the thermostat) control with Energy's TH140-28 or TH141-HC-28 thermostats. An auxiliary output allows the simultaneous control of an additional load such as water heater, lighting, etc.

1. INSTALLATION

Any device connected to a telephone line must conform to the country's regulations. The CT240-01 model meets the FCC68 standard for installation on the North-American network.

To install a telephone controller in another country, please contact our Customer Service Department for advice on the appropriate model.

MATERIAL PROVIDED

- One CT240-01
- One 120 V power transformer
- One 5-meter telephone cable
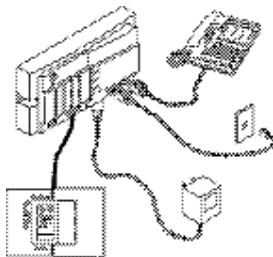
1. Mount the CT240 on a wall close to a telephone outlet.
2. Insert one end of the telephone cable in the "Line" connector on the CT240 and the other end into a telephone outlet in your home.
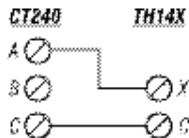3. Connect the CT240 to your thermostat following the diagram below.

1.1 CONNECTION TO Energy Automation Inc THERMOSTATS

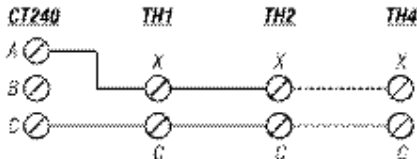The A-B-C terminals provide a direct connection to Energy's thermostats.
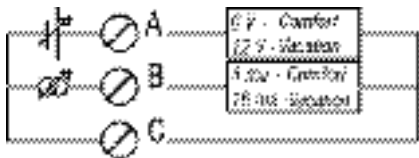
1.1.1 Connection to the TH140-28 or TH141-HC-28 Thermostat

You can activate or deactivate the Vacation function from the telephone or the CT240.

It is possible to hook up in parallel up to ten TH11X-COM or TH10X-COM thermostats on the AC outlet of the CT240.

1.2 CONNECTION TO ANOTHER COMPANY'S THERMOSTATS

It is possible to use the auxiliary outlet (terminals 1-2-3) to connect another manufacturer's thermostat. The outlet for Energy's thermostats (terminals A-B-C) and the auxiliary outlet answer the commands simultaneously. For connection, refer to your thermostat manufacturer's instruction manual.

"Vacation" mode (DEL On):   Contacts 1-2 closed
                              Contacts 2-3 opened
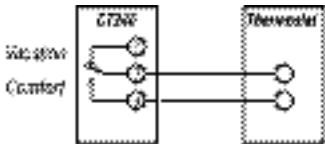
1.3 CONNECTION TO AN AUTOMATIC DEVICE

The auxiliary output allows you, for example, to activate the entry lighting, reactivate the water heater and set the thermostat of your secondary residence to the comfort mode with a single command.

The capacity of the auxiliary outlet (1-2-3) relay is 250 V/10A. However, to avoid electrical shocks, the direct connection of a load with a voltage higher than 30 VAC is not permitted, unless the CT240 is installed inside an electrical box certified by the standard setting body of the country.
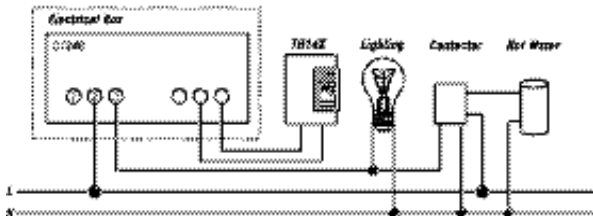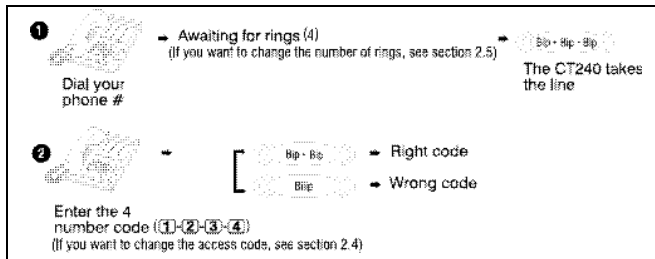
2. USING WITH A TELEPHONE

It is possible to change the status of the CT240 output relay and to switch your thermostat mode via the telephone or by using the Vacation button on the CT240. In all cases, the control light under the Vacation button goes on to indicate that the telephone remote control is in "Vacation" mode (contacts 1-2 of the auxiliary relay are closed, contacts 2-3 are opened and the thermostat is in "Vacation" mode).
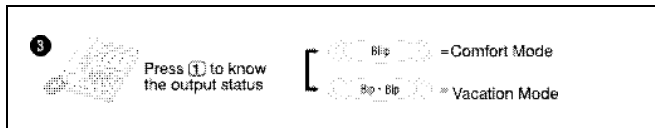
By default, the CT240 is configured to answer after four telephone rings and to accept the access code "1234". These settings are programmable. You can modify them by referring to sections 2.4 and 2.5.

Note that the CT240 will automatically hang up if no keys are touched for 30 seconds.

2.1 ACCESSING THE TELEPHONE CONTROLLER WITH THE ACCESS CODE

❶ Dial your phone # → Awaiting for rings (4)
(If you want to change the number of rings, see section 2.5) → Bip · Bip · Bip
The CT240 takes the line

❷ Enter the 4 number code (①-②-③-④)
(If you want to change the access code, see section 2.4)

- Bip · Bip → Right code
- Biip → Wrong code

2.2 CURRENT OUTPUT STATUS (①)

❸ Press ① to know the output status

- Bip = Comfort Mode
- Bip · Bip = Vacation Mode

2.3 CHANGING THE OUTPUT STATUS ($\star$)

| ❸ | If you want to change the output status, press $\star$ | Biip = Comfort Mode |
| | | Bip · Bip = Vacation Mode |
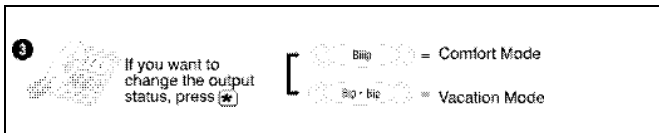
2.4 CHANGING THE ACCESS CODE ($\#$ 8)

| ❸ Press $\#$ 8 | → | Bip · Bip | → | ❹ Enter your new 4 number personnal code | → | Bip · Bip | → |

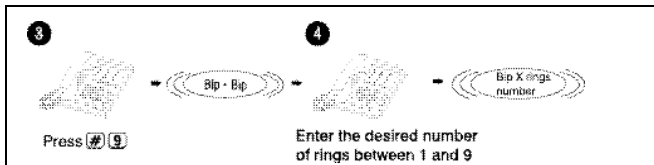| ❺ Enter your new code again to confirm | Bip · Bip → Your new code is accepted |
| | Biip → Error in the access code confirmation. Go back to step 3. |
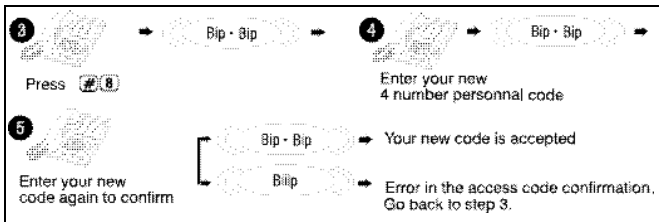
* If you enter the wrong access code more than 3 times, the communication will stop and you will have to go back to step 3.

2.5 CHANGING THE NUMBER OF RINGS (#9

3 Press #9 → Bip · Bip → **4** Enter the desired number of rings between 1 and 9 → Bip X rings number

2.6 LOGGING OFF (#0)

When you have finished, press #0 to end the session with the CT240. You can also simply hang up the handset. The CT240 will then disconnect within 30 seconds.

3 To end the session, press #0
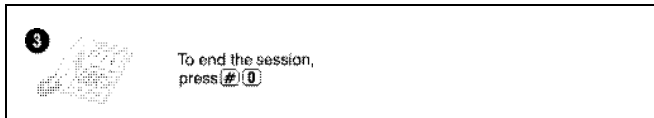
3. CHANGING THE STATUS FROM THE CT240

You can switch the relay status and the thermostat mode by pressing on the CT240 Vacation button. This function is not accessible while the CT240 is answering a telephone communication.
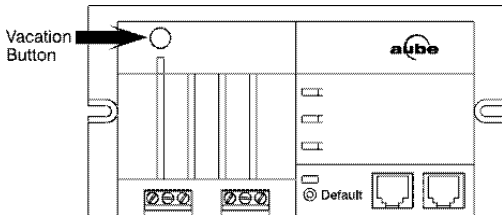
"Vacation" mode (DEL On):   Contacts 1-2 closed
                                         Contacts 2-3 opened
                                         Thermostat mode = Vacation

4. RESETTING TO THE DEFAULT VALUES

It is possible to return to the default values by using a paper clip to press the Default button located to the left side of the telephone line outlet.

The indicator light located above the button will flash 3 times to signal that the remote control has been reset to the following values:

1) Number of rings: 4
2) Access code: 1234
3) Output status:
   - Thermostat mode = comfort
   - Relay contacts 1-2 opened
   - Relay contacts 2-3 closed

5. USING A TELEPHONE ANSWERING MACHINE

If you own a telephone answering machine as well as the telephone controller, follow this procedure to access the controller by telephone:

1- Make sure the answering machine is set to answer after 4 rings.

2- Set the number of rings for the CT240 at more than 6

3- Call the home where the CT240 has been installed and let it ring once and

   then hang up

4- Wait ten seconds and call back.

5- The CT240 will answer on the first ring, however your call must be between 10 and 30 seconds

Note that programming a certain number of rings before the CT240 is activated has no effect when it is used with an answering machine.

6. LIGHT INDICATORS

The CT240's five light indicators allow you to diagnose your installation.
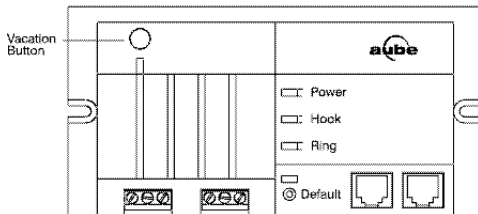
Power: Indicates that the circuit has power.
Ring: Flashes during ringing.
Hook: Indicates that the remote control has opened the line.
Default: Flashes 3 times to indicate that the reset has been accepted.
Vacation: Indicates the CT240 output status. It is on when the CT240 is in "Vacation" mode.

7. TECHNICAL SPECIFICATIONS

- Power supply of 9 VAC/50 Hz or 12 Vcc, 200 ma
- 1 SPDT output contact with the following capacity:
    - 10 A/30 VAC resistive
    - 5 A/30 VAC inductive F.P.O.4
    - 10 A/250 V resistive (if the CT240 is installed inside a certified electrical box)
    - 1 hp/250 V motor (if the CT240 is installed inside a certified electrical box)
    - 1/2 hp/120 V (if the CT240 is installed inside a certified electrical box)
- Class 2 insulation
- Manual selection of the output contact status
- Programmable access code
- In case of power failure, the output status and the access code are memorized
- Viewing the output status
- Connects directly to the telephone line
- Compatible with a telephone answering machine
- FCC68 certified for connection to the North-American telephone network

WARRANTY

This product is guaranteed against workmanship defects for a two-year period following the initial date of purchase in an authorized retail store. During this period, Energy Automation Inc. will repair or replace, at its option and without charge, any defective product which has been used under normal conditions.

The warranty does not cover delivery costs and does not apply to products badly installed or damaged by accident.

This warranty cancels and replaces any other manufacturer's express or tacit warranty as well as any other company commitment. Energy Automation Inc. cannot be held liable for related or random damages following the installation of this product.

The defective product as well as the purchase invoice must be returned to the place of purchase or mailed, prepaid and insured, to the following address:

Energy Automation Inc. 7 First St. Orangeville, ON Canada L9W 1H7