

# CT240 Telephone Controller

Installation Instructions and User Manual

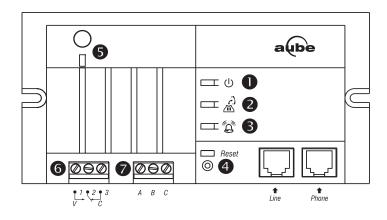
### 1. Introduction

The CT240 telephone controller is designed to remotely control your home's thermostat. It is possible to command a temperature decrease (Unoccupied) during a prolonged absence or a temperature increase (Comfort) before you return home.

Depending on your thermostat's operating characteristics, it either connects to the Aube output (for most Aube models) or to the auxiliary output.

When the auxiliary output is not used to control a thermostat, it can be used to simultaneously control a load such as a water heater, lighting, etc.

Figure 1: Product Overview



- 1 **Power Indicator.** Indicates the CT240 is powered on. To turn it off, unplug the power transformer.
- **Communication Indicator.** Indicates the CT240 has answered and is awaiting a command.
- 3 Ring Indicator. This indicator flashes when the phone rings.
- **Reset.** This button can be used to reset the CT240 to its default values. See section 3.3.
- 5 Manual Output Activation Button. Can be used to manually switch the relay status.
- 6 Auxiliary Output. See section 2.
- 7 12 VDC Output. See section 2.

#### 2. Installation

Any device connected to a telephone line must conform to the country's standards. The CT240 telephone controller meets:

- FCC68 standards for installation on the North American network.
- FDTBR21 standards for installation on the European network.

#### 2.1 Included Parts

- One CT240 telephone controller
- One power transformer 120 V (North America) or 250 V (Europe)
- One 5 m (16 foot) telephone cable

**NOTE:** If you are using an answering machine, position the answering machine switch to ON before installing the CT240.

Make sure that your answering machine answers after a minimum of 4 rings.

Figure 2: Answering Machine Switch

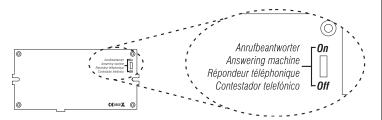
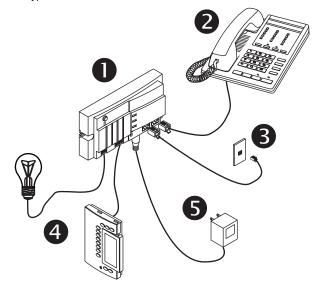


Figure 3: Typical Installation



• Mount the CT240 near a telephone outlet.

**NOTE:** If you plan to connect a load having more that 30 volts on the auxiliary output, the CT240 must be installed inside a certified electrical box.

- **OPTIONAL.** Connect your phone (or answering machine) to the PHONE connector of the CT240.
- 3 Connect one end of the telephone cable to the LINE connector of the CT240 and the other end to the telephone outlet in your home.
- Connect the thermostat and load. Both outputs work simultaneously.

**NOTE:** Refer to your thermostat's electrical specifications (telephone interface) for the connection requirements.

- If your thermostat requires a 12 VDC signal to switch to Vacation setpoint, use the ABC output (FIGURE 4):
   A and C terminals:
  - 0 VDC in Comfort mode
  - 12 VDC in Vacation mode

NOTE: 50 mA max. for parallel connection of Aube thermostats.

- If your thermostat requires a dry contact to switch to the Vacation setpoint, use the 123 output (FIGURE 5):
  - Load = terminals 2 and 3 (NC) (open = Vacation)
  - Thermostat = terminals 1 and 2 (NO) (closed = Vacation)
- When all connections have been made, connect the power transformer to the 9 V outlet of the CT240 and the other end to the wall electrical outlet. The power indicator light ψ is ON when the circuit is powered.

Figure 4: 12 VDC Signal to thermostat

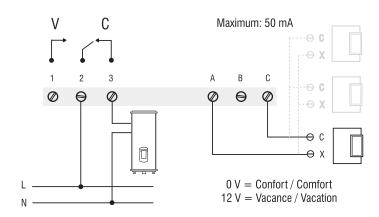
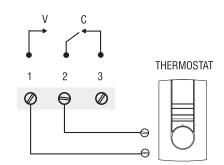


Figure 5: Dry contact to thermostat



# 3. Operation

**NOTE:** The CT240 will automatically hang up if no key is pressed during the 30 seconds following the CT240 answering a call.

Default values:

- Access code = 1234
- Number of rings = 4

#### 3.1 With or Without an Answering Machine

Dial your phone number

Wait for the number of rings...

CT240 answers

BEGIN A SESSION (with an answering machine)

Dial your phone number

Let it ring once and hang up

Wait 10 seconds...

Dial your phone number again within the next 30 seconds

CT240 answers (1st ring)

 $\bigcirc$  Beep • Beep • Beep

2 ENTER YOUR ACCESS CODE

Enter your 4-digit access code (default: 1234)

⊗ Beep • Beep 
 Seep 
 Seep 

Accepted

**⊘**Beeeep

Error

**3** OUTPUT STATUS/MODIFY STATUS

Press 1 for output status

(Beeeep)

Comfort

Press \* to change status

 $\qquad \qquad \mathbb{B}\mathsf{eep} \cdot \mathbb{B}\mathsf{eep} \bigcirc$ 

Vacation

MODIFY THE ACCESS CODE

MODIFY THE NUMBER OF RINGS (phone only)

Press # 9

⊗ Beep • Beep 
 Seep 
 Seep 

Enter the number of rings after which the CT240 will answer (between 1 and 9)

(Beeeep) x the number of selected rings

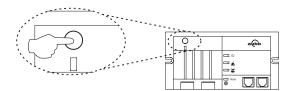
4 END SESSION

Press # 0 to end the session

#### 3.2 Manual Output Activation Button

The button, located on the upper-left corner of the CT240, can be used to manually switch the relay status. This option is not available while the CT240 is answering a telephone call.

The light is ON when the auxiliary output is in Vacation mode (terminals 1 and 2 closed)



#### 3.3 Reset to default values

Insert a pointed object (e.g. paper clip) in the hole located under the Reset light. The light will flash 3 times to indicate that the CT240 has been reset:

☐ Reset

(

number of rings: 4

access code: 1234

Output status:

ABC: Terminals A and C: Comfort

123: Terminals 1 and 2: opened, Terminals 2 and 3: closed

# 4. Technical Specifications

Power supply: 9 VAC / 60 Hz (50 Hz Europe)

Output (ABC): 0 VDC = Comfort mode / 12 VDC = Vacation mode Maximum load for parallel connection of Aube thermostats: 50 mA Auxiliary output (123): SPDT with following capacity:

Auxiliary output (123). SPDT with following capacity

- 5 A / 30 VAC inductive / Power Factor: 0.4
- 10 A / 30 VAC resistive (if installed in a certified electrical box)
- 10 A / 240 VAC resistive (if installed in a certified electrical box)
- 1/2 HP / 120 VAC motor (if installed in a certified electrical box)
- 1 HP / 240 VAC motor (if installed in a certified electrical box)

Protection: Class II

Access code (default): 1234

Number of rings (default): 4 rings

**Memory protection**: In case of power failure, access code and output status are protected.

Phone certification standard:

- FDTBR21: European telephone network
- FCC68: North American telephone network

#### Approvals:

- c UL us (North America)
- CE (Europe)

**Dimensions (H W D)**: 2.7 x 5.4 x 1.2 in. (69 x 137 x 31 mm)

## 5. Warranty

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

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(i) return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it; or

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