

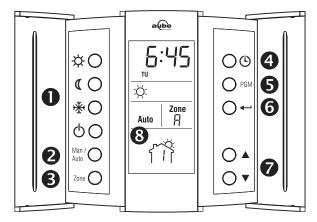
TH134

Pilot-wire Programmer

Installation and User Guide

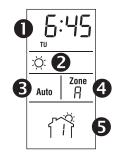
TH134 is an electronic six-order pilot-wire programmer that allows separate temperature control of three zones using four programs per day. The TH134 programmer has three pilot-wire outputs can be connected to thermostats or controller that accept pilot-wire signals.

The TH134 programmer has a remote input to which a telephone controller (such as Aube's CT240), a home automation system (HAS) or an energy manager can be connected. When a signal is received from any of these devices, TH134 forwards the order to the heating units.



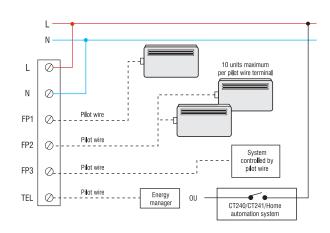
- Order buttons
- 2 Mode selection button
- 3 Zone selection button
- Time/day setting button
- Program button
- 6 Return button
- Selection button
- 8 Display

Display



- 1 Time
- 2 Heating modes
 - ☆ :Comfort mode
 - (: Setback modes (icon is steady in 3,5k setback; flashes in 1k and 2k setbacks)
 - *: Frost protection
 - ტ: Off
- Operating modes
 - Manual mode
 - Auto mode
- Zone selected (the letter A appears when all 3 zones are selected)
- **S** Current program (applicable to automatic mode only)

Connections



The following table shows the different means of initiating an order.

TH134 buttons	Energy manager	CT240/CT241 or HAS	Pilot wire order	Signals
*			Maintain temperature at setpoint (Comfort)	No signal
(V	V	Maintain temperature at setpoint minus 3,5°C (3,5k setback)	
*	V		Maintain temperature at 7°C (frost protection)	
Ф	V		Turn heating Off (Off)	
	V		Maintain temperature at setpoint minus 1°C (1k setback)	
	√		Maintain temperature at setpoint minus 2°C (2k setback)	

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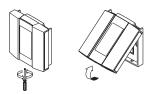
Installation

ATTENTION: BEFORE PROCEEDING WITH THE INSTALLATION, CUT POWER TO THE HEATING SYSTEM TO AVOID ANY RISK OF ELECTRIC SHOCK.

The installation must be performed by an electrician. The programmer must be installed on an electrical box.

1) Remove the faceplate

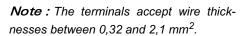
- Loosen the locking screw (the screw is captive and cannot be completely removed).
- Pull and lift the bottom of the faceplate to remove it from its mounting plate.

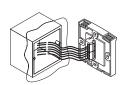


2) Connect the programmer

Connect power to terminals L (line) and N (neutral).

Connect the pilot wire inputs of the thermostats to terminals FP1, FP2 and FP3.





3) Connect the remote input (optional)

3.1) CT240 telephone controller

Connect terminals 2 and 1 of the CT240 to terminals L and TEL of the programmer respectively.

3.1 CT241 telephone controller

Connect the terminals of one of the outputs of CT241 to terminals L and TEL of the programmer .

3.2) Home automation system

Connect the normally-open relay of the home automation system terminals L and TEL of the programmer.

3.3) Energy manager

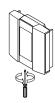
Connect the pilot wire output of the energy manager to the TEL input of the programmer.

4) Complete the installation

- Fix the mounting plate to the wall.
- Install the faceplate on the mounting plate and lock them together using the locking screw.



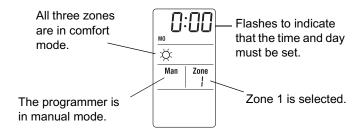




5) Apply power to the programmer

Power-up

During power-up, the TH134 perform a series of test for approximately 5 seconds. Afterwards, the programmer displays the following:



Time and day setting

- Press •. The hours display flashes.
- 2 Set the hours using the ▲▼ buttons.
- 3 Press (). The minutes display flashes.
- Set the minutes using the ▲▼ buttons.
- **5** Press (3). The day display flashes.
- 6 Set the day using the ▲▼ buttons.

Operation

Note: If the "setback" and "off' orders received by a heating unit are reversed, reverse the "Ph" and the "N" wires on the heating unit.

Manual mode

Transmits the order selected via one of the order buttons. To use this mode:

- Select the zone by pressing the Zone button. (Press for 3 seconds to select all 3 zones.)
- Select the manual (Man) mode by pressing the Man/Auto button.
- Select the order by pressing the appropriate order button.

Zone R S: 15 Man Zone Auto R Man Zone R

Automatic mode

The orders are sent to each zone according to the schedule programmed for that zone. To use this mode:

- Select the zone by pressing the Zone button. (Press for 3 seconds to select all 3 zones.)
- Select the Auto mode by pressing the Man/Auto button.





Bypass

You can bypass the automatic mode for 2 hours. At the end of the 2 hours, the programmer returns to the automatic mode.

Select the zone using the Zone button. (Press for 3 seconds to select all 3 zones.)



Press the desired order button.



The auto mode icon flashes during the bypass.

Remote input

Whenever an order is received via the remote input, it becomes the active order for all 3 zones. To know which orders can be initiated by the energy manager, the phone controller or the home automation system, see the table on page 1. The is displayed when signals are received via the remote input.

Bypass

Orders received via the remote input have priority over orders initiated via the TH134 programmer. However, you can bypass the remote input order for each zone for 2 hours. At the end of the 2 hours, the remote input order becomes active again.

• Select the zone using the Zone button. (Press for 3 seconds to select all 3 zones.)

Zone

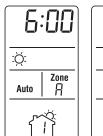
Press the desired order button.

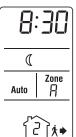
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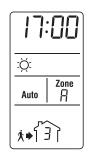
The icon flashes during the bypass.

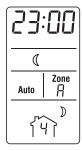
Preprogrammed Schedule

The same schedule is used by default for all 3 zones as shown below.









Wake-up time

Every day

Leave for work

Monday to

Friday

Return home

Monday to

Friday

Sleep time

Every day

Zone	pgm	Time	Order ¹	Mon	Tue	Wed	Thu	Fri	Sat	Sun
А	1	6:00	С	1	1	√	1	1	1	V
	2	8:30	S	1	√	1	V	V		
	3	17:00	С	V	1	V	V	V		
	4	23:00	S	V	1	√	V	V	V	√
Number of programs per day :			4	4	4	4	4	2	2	

1. Comfort (C), 3.5°C setback (S)

Schedule customization

Use the following procedure to select the order and the start time for each of the 4 programs for each zone. The settings of each program will be the same for each day. However, you can then select which programs to be executed for each day and for each zone.

Press the PGM to start programming.



- 2 Select the zone using the Zone button. (Press for 3 seconds to select all 3 zones.)
- 3 Select the program using the PGM button.
- Set the program start time.
- **5** Select the mode by pressing the corresponding button.
- Repeat steps 3 to 5 for the remaining programs for the selected zone
- Go to step 2 if you wish to select another zone.

Note: TH134 will automatically exit programming if no button is pressed for the last 60 seconds.

When selecting the number of programs,

- Press the MAN/AUTO button for 3 seconds until PPd is displayed.
 - auto \$\frac{1}{N} \\ \frac{1}{N} \\

Ч

- 2 Select the zone using the ZONE button. (Press for 3 sec. to select all 3 zones.)
- Press MAN/AUTO until the desired day is displayed.
- Man / Auto
- Set the number of programs for the selected day using the ▲▼ buttons. The options are:
 - 4 (to select all 4 programs)
 - 2 (to select program 1 and 4 only)
 - · 0 (no program is selected for that day)

Note: If no program is selected for a particular day, TH134 uses the order of the last program until the start of the next program.

- **5** Repeat steps 3 and 4 for the each remaining day.
- **6** Go to step 2 if you wish to select another zone.
- Press ← to exit.

Enter your settings in the following table.

Zone	pgm	Time	Order ¹	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1									
	2									
	3									
	4									
Numb	per of pr	ograms	per day:							
2	1									
	2									
	3									
	4									
Number of programs per day:										
3	1									
	2									
	3									
	4									
Numb	Number of programs per day:									

1. Comfort (C), 3.5°C setback (S), Frost protection (FP), Off (O)

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Technical Specifications

Model: TH134

Power supply: 230 VCA / 50 Hz Consumption: 25 mA maximum

Pilot wire output: 60 mA per output / 230 VCA Maximum load: 10 units per pilot wire output (FP)

Operating Temperature: 0 - 50°C Storage temperature: -20 - 50°C

Protection: class 2
Protection index: IP20
Automatic action: 1Y type
Environment: normally polluted

Software: class A

Memory type: program settings are permanently saved

time settings are saved for 4 hours during power

outage

Remote input: universal relay (230 VCA / 500 µA) or pilot wire

Wire thickness: 0,32 - 2,1 mm².

Warranty

AUBE TECHNOLOGIES INC. THREE (3) YEAR LIMITED WARRANTY

This product is guaranteed against workmanship defects for a three-year period following the initial date of purchase. During this period, AUBE Technologies Inc. will repair or replace, at our 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 poorly installed or randomly damaged following installation. This warranty cancels and replaces any other manufacturer's express or implied warranty as well as any other company commitment. AUBE Technologies 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.

Technical Support

For any questions regarding the product installation or operation, contact our technical support team at:

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