

# TH-0472 Two-Channel Programmer (With Temperature Control) – Installation Instruction

This 2-channel programmer is made to provide ON/OFF control up to 2-zone, with value-added application of temperature-control function, for either Heating or /Cooling. To Reset this programmer

**Prior to starting setting program-period, to complete all required setting described in this section is necessary.**



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\*\*\*

Temperature-Control-function effects in channel  
“CH “ only.

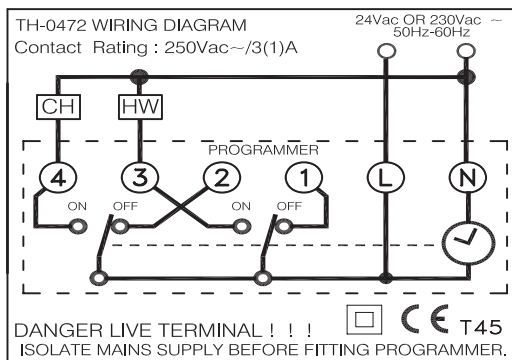
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## Special feature \*\*By factory default upon production

- 12H/24H Clock Format.
- Day-Light Saving. – LCD shall indicate “+1hour”.
- Temperature control for both Heating/Cooling.
- LED ON/OFF status indicator.

## Specs & Wiring

- Power Supply: 1- 24 Vac 2- 230 Vac
- Ambient Temperature : 0~35°C
- Contact Rating: Voltage-Output 3A(1A)
- Program Memory backup: 3Vdc Lithium CR 2032 (Memory sustains 30 days after power out)
- Blue Backlight.
- Cabinet Protection Class: IP 20.
- Standard British system wiring back-plate.



## P or G mode selection

- P–To program each of 2-Channel independently (HW , CH )
- G–Programming of Channel HW commanded by Channel CH

**Recommended :** To select P in use of this programmer

## Day-programming mode selection

This 2-channel programmer is able to provide 3- ON/OFF (program-period ) per day and **THREE** day-programming-mode available for selection:

- 24 H – All 7-day in same programming-block.
- 5/2d – 5-weekday in same programming-block, weekend in same block
- 7d – each day of weekday can be programmed independently, 3 ON/OFF per day.

\*\*\*To slide selection switch to choose preferred mode upon installation.

## Frost Protection– selectable range 5~20°C

This Function is set to protect pipes against freezing or to prevent room from low temperature, when programmer is being programmed OFF or manual OFF.

Taking “jumper” which is included in package of this 2-channel programmer, to jumper the position on back of plastic housing.

To reset programmer after.

Flashing sign on LCD ( ) indicates this function is activated.

Frost protection temperature setpoint can be changed at using this programmer. Following procedure below;

- Slide selection switch to “RUN”
- Press all two channels (zones) programming buttons to select manual “OFF”.
- Pressing both & for 3 second, to enter selection mode.
- Pressing either or to set desired frost protection setpoint.
- Press to activate.

## Temperature Control– selectable range 5~35°C

This is function is made for the purpose of extent application of this 2-channel programmer. With Temperature control, it can function as programmable thermostat. To reset programmer after “TEMP was” jumpered”

**Reminder:** After Temperature-Control activated, temperature setpoint shall take part in commanding programmer’s Relay output. After room temperature reached setpoint, Relay output shall be turned off, original ON/OFF programs overrided.

Following procedure below to set setpoint;

- Slide selection switch to “RUN”.
- Pressing all two channels (zones) selection buttons to select any of “ON “.
- Pressing both & for 3 seconds, to enter selection mode.
- Pressing either or to set desired setpoint.
- Press to activate.

## Replacing Battery

Using Flat-head screw-driver to take used battery out from slot, and replacing. Follow procedure description from FIG.1 to 3



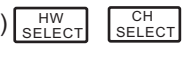
FIG-1



FIG-2



FIG-3



# TH-0472 Two-Channel Programmer (With Temperature Control) – Programming Instruction

In standard production & delivery of this programmer, Jumpers on back of housing which are for adding temperature-control are left open.

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## Resetting the programmer 1

It is necessary to press the RESET button prior to initial programming. This button is located beneath the cover on the front of the unit.

## Setting Date & Time 2

Beneath the cover on the front of unit, move selector switch to **TIME SET** position.

- Press the **+** **-** buttons to select the **year**. Press **ok**.
- Press the **+** **-** buttons to select the **month**. Press **ok**.
- Press the **+** **-** buttons to select the **day**. Press **ok**.
- Press the **+** **-** buttons to select the **hour**. Press **ok**.
- Press the **+** **-** buttons to select the **minute**. Press **ok**.
- The Date & Time are now set. Move selector switch to "RUN" to run the program, or to "PROG SET" to change program setting.

## Program Setting – Factory Default Setting 3

		7 d					
All 7 days		P1 ON	P1 OFF	P2 ON	P2 OFF	P3 ON	P3 OFF
		6:30	8:30	12:00	14:00	16:30	22:30
		5/2 d					
Mon~ Fri		P1 ON	P1 OFF	P2 ON	P2 OFF	P3 ON	P3 OFF
		6:30	8:30	12:00	14:00	16:30	22:30
Sat~Sun		P1 ON	P1 OFF	P2 ON	P2 OFF	P3 ON	P3 OFF
		7:30	10:00	12:00	14:00	17:00	23:00
		24 H					
		P1 ON	P1 OFF	P2 ON	P2 OFF	P3 ON	P3 OFF
		6:30	8:30	12:00	14:00	16:30	22:30

## ON/OFF Period Selection 4

There are 5 modes available on this programmer for users to choose to actual application demand.

- ON 3 2 1 OFF** - The programmer is permanently on.
- ON 3 2 1 OFF** - The programmer operates 3-ON/OFF periods per day. **AUTO**
- ON 3 2 1 OFF** - The programmer operates 2-ON/OFF periods per day. This operates the first ON/OFF time and the third ON/OFF time, ignoring the second ON/OFF time. This is factory default setting. **AUTO**
- ON 3 2 1 OFF** - The programmer operates 1-ON/OFF period per day. This operates from the first ON time to the third OFF time. **All Day**
- ON 3 2 1 OFF** - The programmer is permanently off.

Move selection switch to "RUN"



Beneath the cover on the front of the unit, by pressing the **HW SELECT**, you can change between "ON 3 2 1 OFF" for

**HW** channel. Repeat this process for **CH** channels

by pressing **CH SELECT**.

## Adjusting The Program 5

Beneath the cover on the front of the unit, slide the selector switch to **PROG SET**.



LCD will flash as shown. You can now program **HW** channel.

- Press the **+** **-** buttons to adjust **P1 ON** time. Press **ok**.
- Press the **+** **-** buttons to adjust **P1 OFF** time. Press **ok**.
- Repeat this process to adjust **ON & OFF** time for **P2 & P3**.

- Press **CH SELECT** and repeat the above process to adjust **ON & OFF** time for **CH** channel.

- Slide selector switch to **RUN**.



The program adjusting is now completed.

## Reviewing Program Setting 6

Slide selector switch to **RUN**.



Press **HW SELECT** to review **HW** channel, pressing **ok**

to review each of ON/OFF time of P1 to P3. Repeat this

process and Pressing **CH SELECT** for reviewing

**CH** channel.

## Holiday Mode 7

Beneath the cover on the front of the unit.



- Ensure selector switch is in the **RUN** position.
- Press the **Holiday**. Display will flash as shown on LCD screen.
- Press **+** **-** to adjust the holiday period required. Press **ok**.

Programmer is now "off" for the selected number of days.

Press **ok** again will cancel Holiday Mode executing, programmer will return to normal setting.

## Boost Function 8

If the channel that you wish to BOOST is already switched ON, you have the facility to extend the ON period for 1,2,3 hours.

If the channel that you wish to BOOST is already switched OFF, you have the facility to switch it ON for 1,2,3 hours.

Press **BOOST** for **HW** channel, **BOOST** for **CH** channel,

## Advance Function 9

This function allows the user to reverse currently output status until next opposite setpoint. If the output is currently switched off and the ADVANCE is pressed, the output will be switched on until the time that the following program calls for "off". Vice versa.

Keep to press ADVANCE, output status will alternate between on & off status.

Press **ADVANCE** for **HW** channel, **ADVANCE** for **CH** channel

## Backlight Mode Selection 10

Two mode for selection, **1. AUTO**: Backlight lit on for 10seconds after pressing any functional key. **2. ON**: Backlight Permanent on.

- Slide selector switch to **RUN**



- Press **ok** for 5 seconds.
- Press **+** or **-** to select.
- Press **ok** again.

Now Backlight Mode Selection is completed.