

# PYROCON12

## De-Ice controller

### Technician Operation Presentation

2013

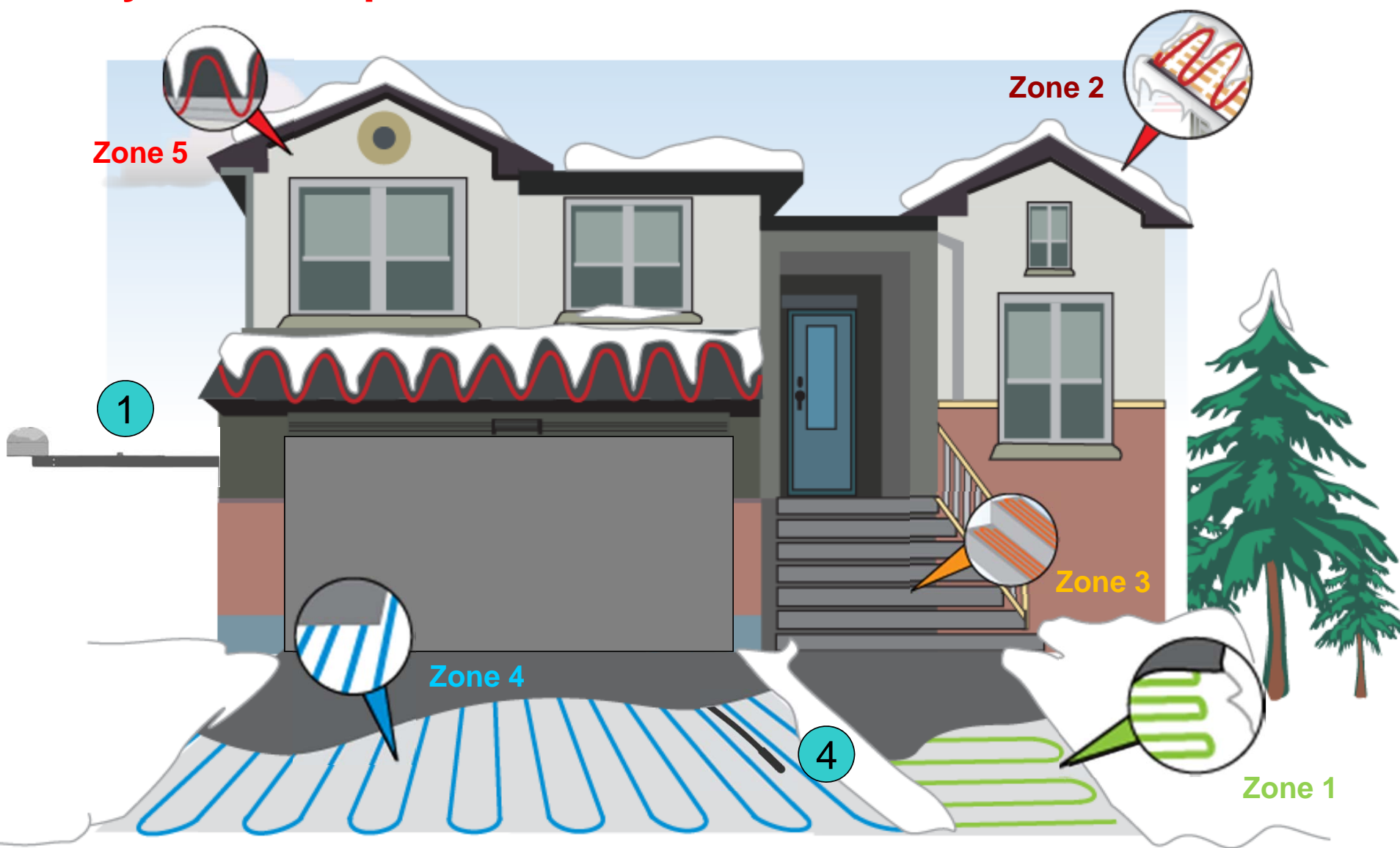
## Introduction

Meitav-tec is introducing a new concept of De-Icing control – **PYROCON12**

### Featuring:

- 24VAC controller and user interface panel “*All in One*”
- Fits into a 2x4 wall box
- Simple, Logical & accessible user Interface
- Sequencing between 5 zones allowing larger area coverage with limited power supply
- Easy and friendly technician access and operation
- Stylish Sensor and controller design
- Safe and reliable
- Energy saving algorithm
- UL certified

# System components



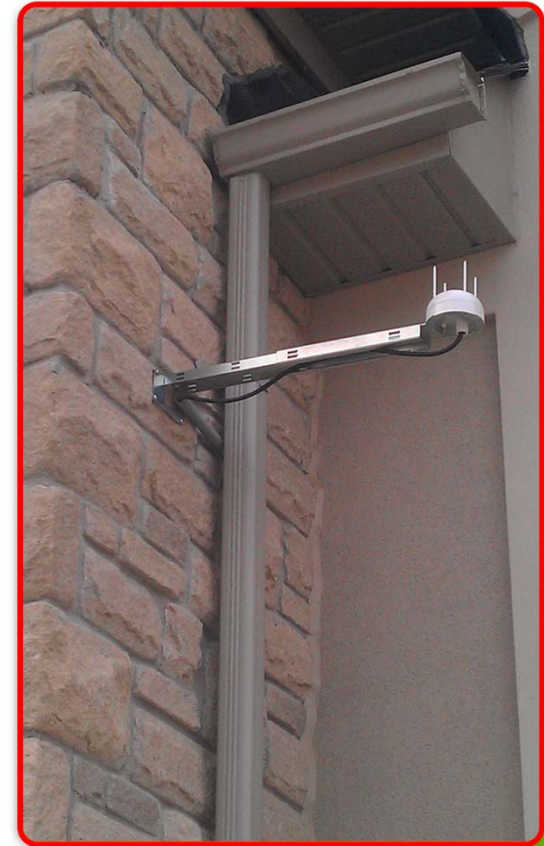
# System components

## Snow Sensor + mounting Fixture

- 24VAC supply from controller
- Igloo shape design
- Conduit connection
- Adjustable rust proof arm (optional) – up to 20 inches length
- Anti birds nesting solution
- 30 feet cable (supplied)

**PYROSENSE**

Snow Sensor



# System components

## Controller – PYROCON12

- 24VAC operated
- Inputs:
  - Meitav-tec Snow sensor (up to 4 sensors)
  - 3rd Party Snow sensor
  - Upper Limit Temperature sensor
- Outputs:
  - 4 Zones On/Off heaters control
  - 1 Gutter On/Off heater control
- [LCD](#) backlit display with operation indications
- User Friendly Technician Settings parameters





# System components

## UL Temperature input

- Isolated sensor
- Stops the operation when the heated surface reach a intended (Technician adjustable) temperature value
- Semi Rigid – can be pushed into conduit
- 10 meters (30 feet) cable length
- Installed in the surface plenum
- Temperature can be viewed by PYROCON12



# System components

## Power Box (optional)

- Single Door Wall mount Enclosure

Dimensions: Industrial box: (20.6H X 20.6W X 9.1D)  
(Inches) Residential box: (12.8H X 15.5W X 7D)

- Up to 600 VAC. 4x50 AMP 3 phases
- GFCI - Ground Fault Circuit Interrupter built-in
- Modular configuration
  - Allows installation of 1, 2, 3 or 4 zones + Gutter output
  - DIN Rail assembly for the terminals
- Output indication
- Industrial box – classic design
- IP66, NEMA 4 (before drilling for the LEDs and controller)



# PYROCON12 operation

## [ON]

Switch the system *On/Off*

## [SELECT]

Switch the system between *Auto mode* and *Manual On*

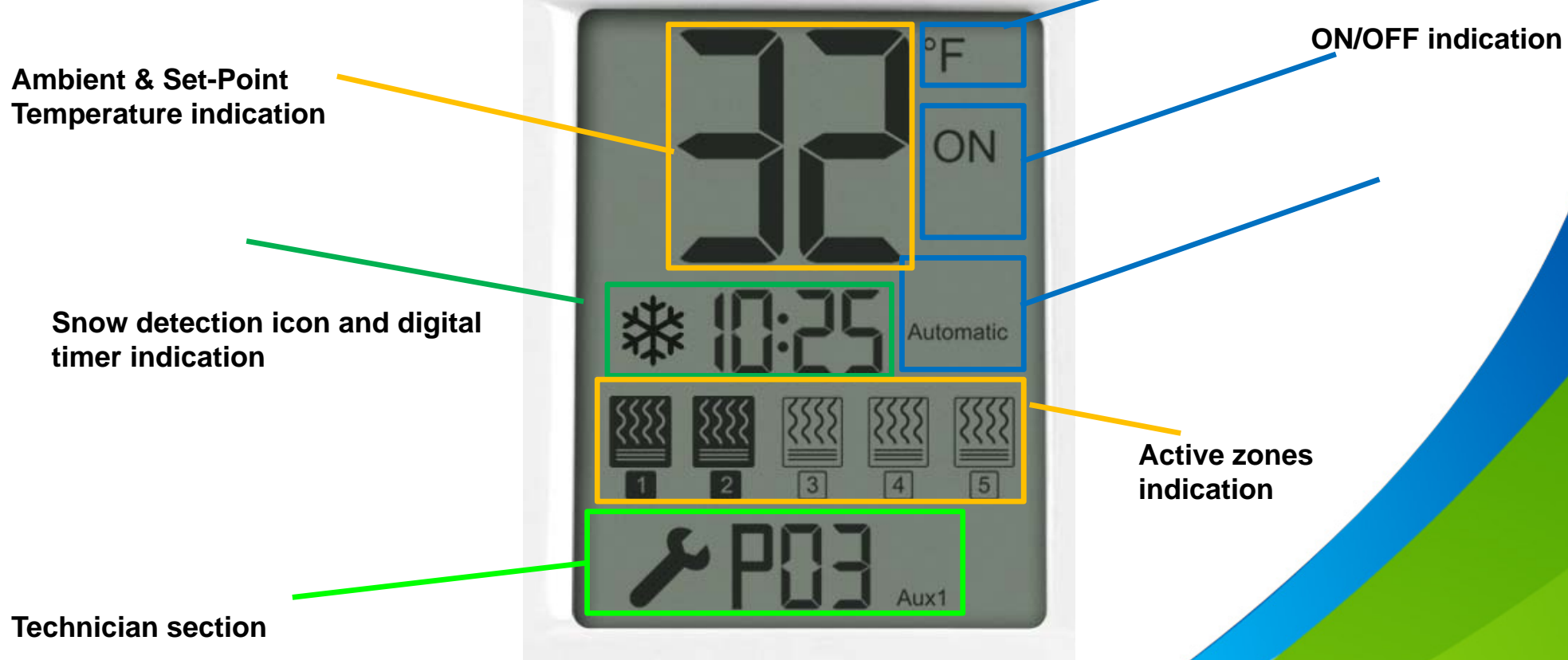
## [+] & [-]

Switch the display between Fahrenheit and Celsius display  
(while in *OFF* – enable/disable zones)





# PYROCON12 operation



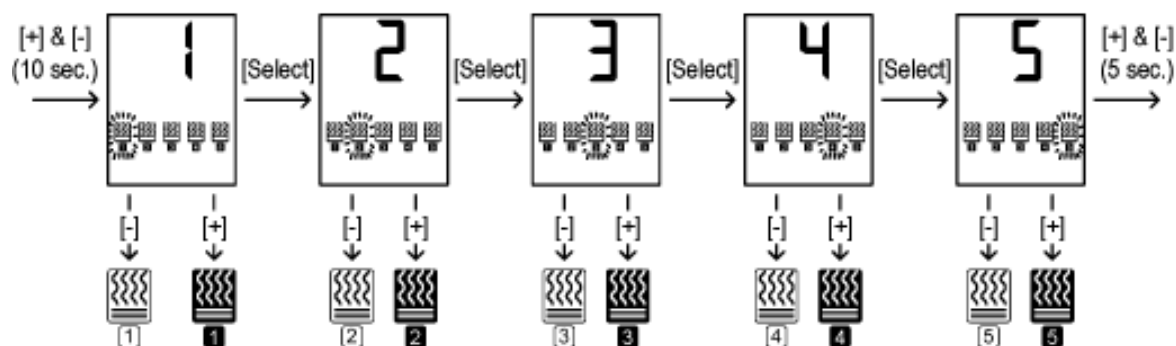
# PYROCON12 operation


## Enable/Disable zones


Follow the steps below to enable or disable each of the 5 zones.

By default, all zones are enabled.

1. Turn the thermostat OFF.
2. Press and hold both the [+] and the [-] buttons simultaneously for 10 seconds.
3. Choose the required zone using the [Select] button. Selected zone number will appear on display and the heater icon will flash.
4. Use the [+] button to enable the selected zone (black heater icon).
5. Use the [-] button to disable the selected zone (white heater icon).
6. Repeat steps above 3 to 5 for any required zone.
7. Press and hold both the [+] and the [-] buttons simultaneously again for 5 seconds to return to normal display.



 Black icon – Zone enabled

 White icon – Zone disabled

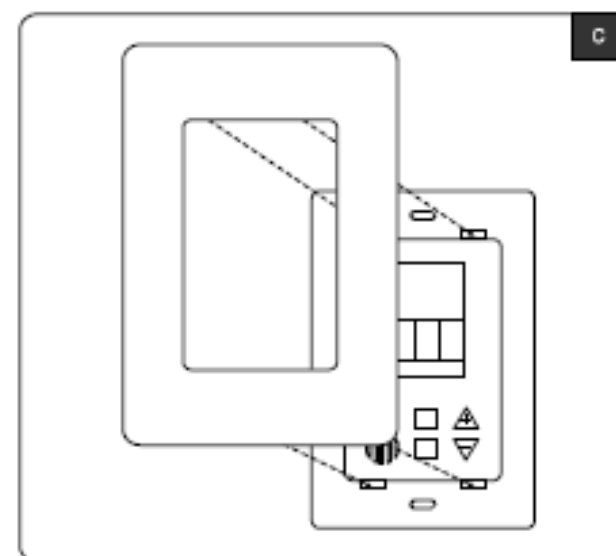
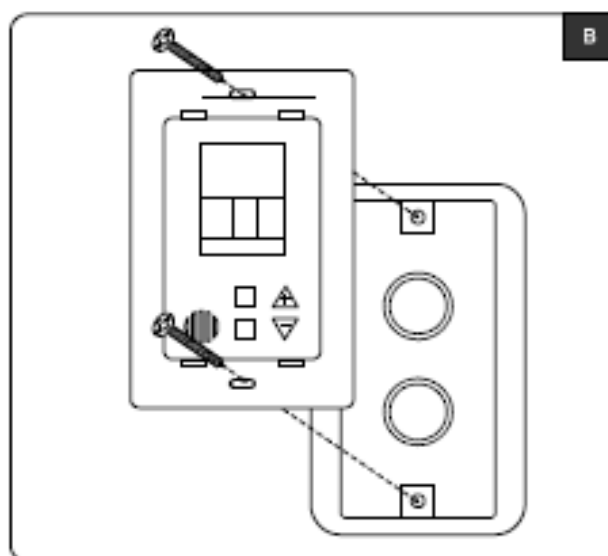
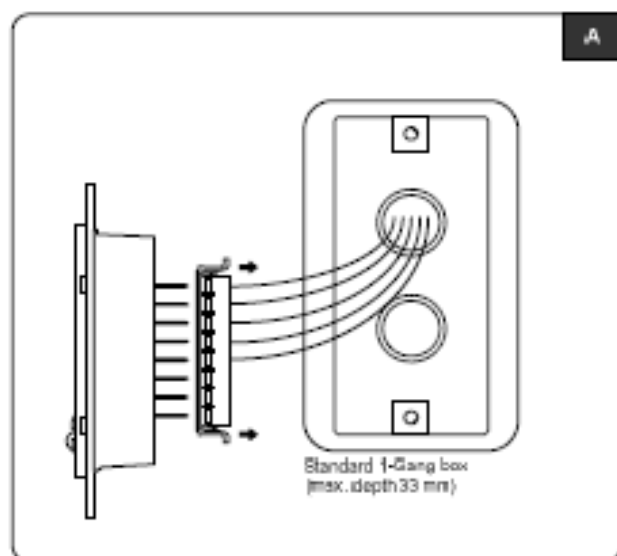
# PYROCON12 operation

## Wall mounted Installation:

The unit **MUST** be fitted into a standard electrical box (Carlon – B114R or similar)

### Installation procedure:

- Connect the wires as shown in the enclosed wiring diagram. All terminals accept  $1 \times 0.5 \text{ mm}^2$  / 24 AWG.
- Place the thermostat in the electrical box and tighten up the 2 screws.
- Adapt the front frame-panel into its place, by pushing it towards the wall.



# PYROCON12 Technician Settings

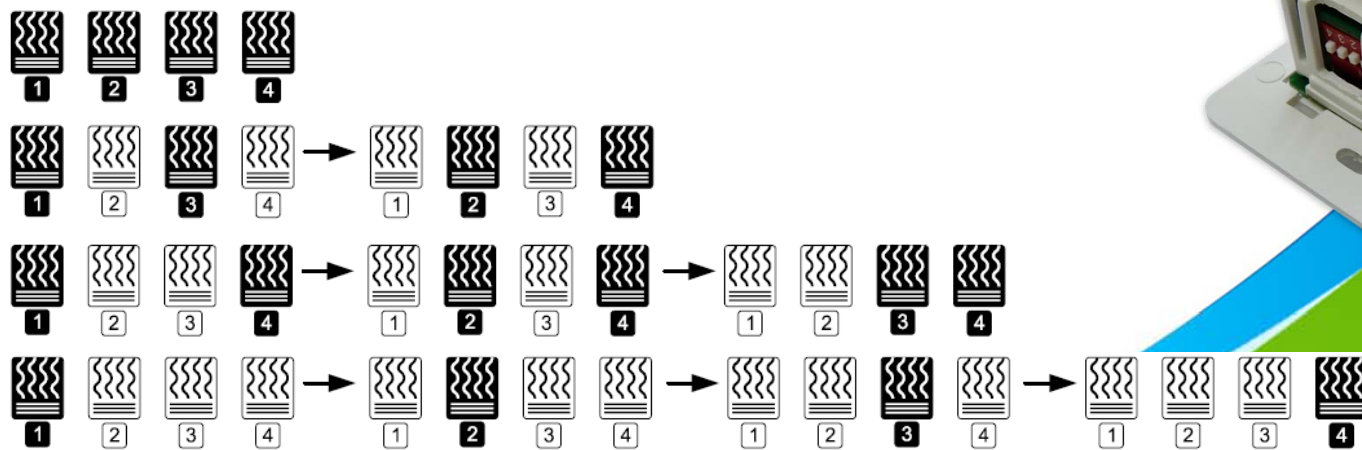
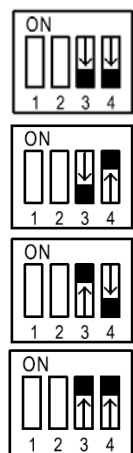
There are 4 **DIP Switches** for the technician use in the back of the PYROCON12

**DIP switch S1** – Switch the system to Technician mode

**DIP switch S2** – Short time configuration. 1 Min = 1 Sec.


for settings and field test procedures

**DIP switch S3 + S4** – Set the zones sequencing logic



# PYROCON12 Technician Settings

## DIP switch S1 – Switch the system to Technician mode

- A Wrench icon  and “P00” will be displayed on LCD
- Press **[SELECT]** and **[+]** or **[-]** (simultaneously) to move forward and backwards between the parameters



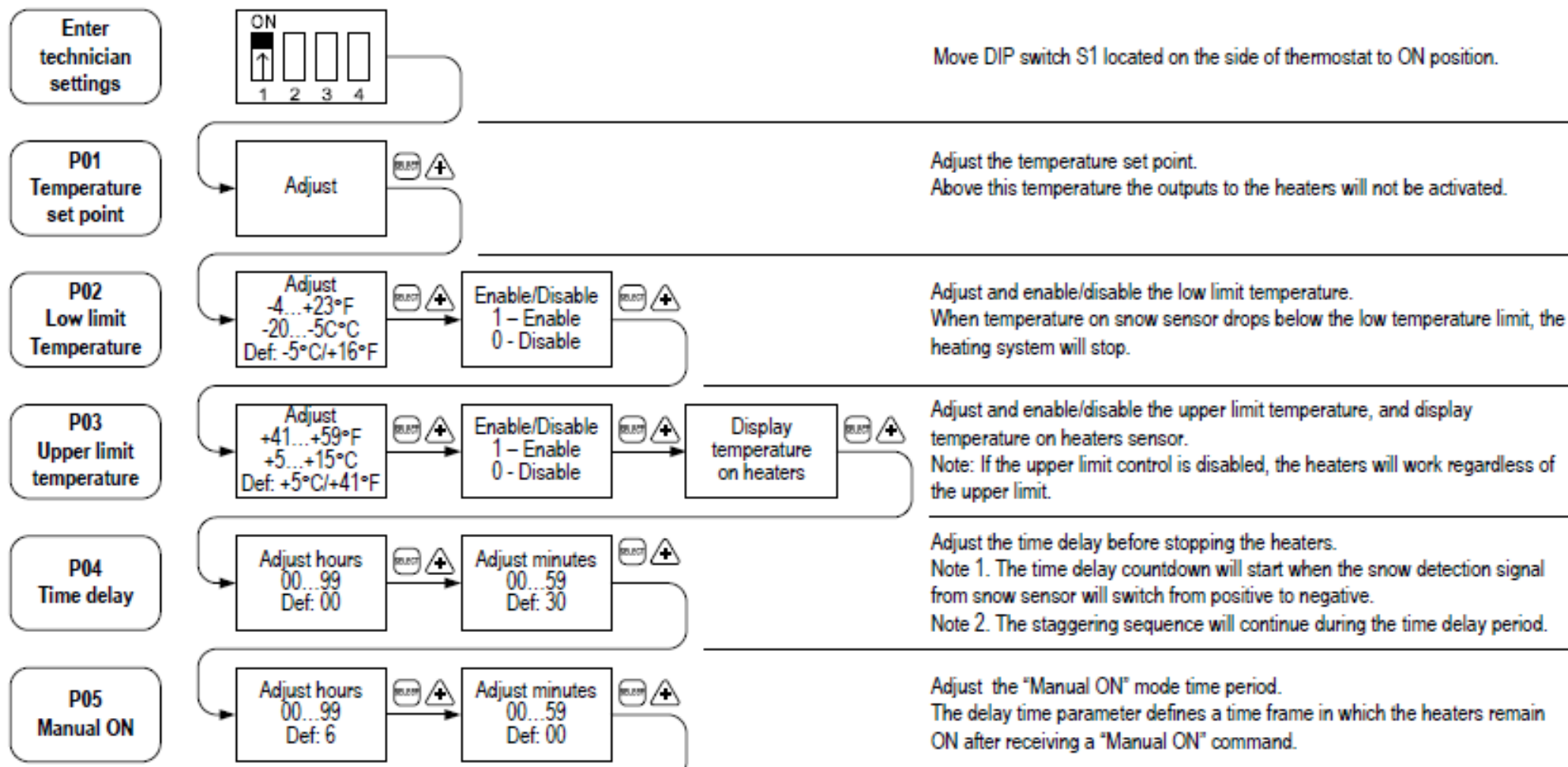
### Parameters list:

P01	Temperature set point	P05	ON time for manual mode
P02	Lower ambient temperature limit to stop heaters	P06	Heaters cycle time / Splitting time
P03	Energy saving, upper slab temperature limit to stop heaters	P07	Sensors and heaters control logic
P04	Time delay before stopping the heaters	P08	Snow sensor sensitivity
		P09	Number of snow sensors connected
		P10	Commissioning / Test mode
			Restore defaults



# PYROCON12 Technician Settings

## Parameters details 1



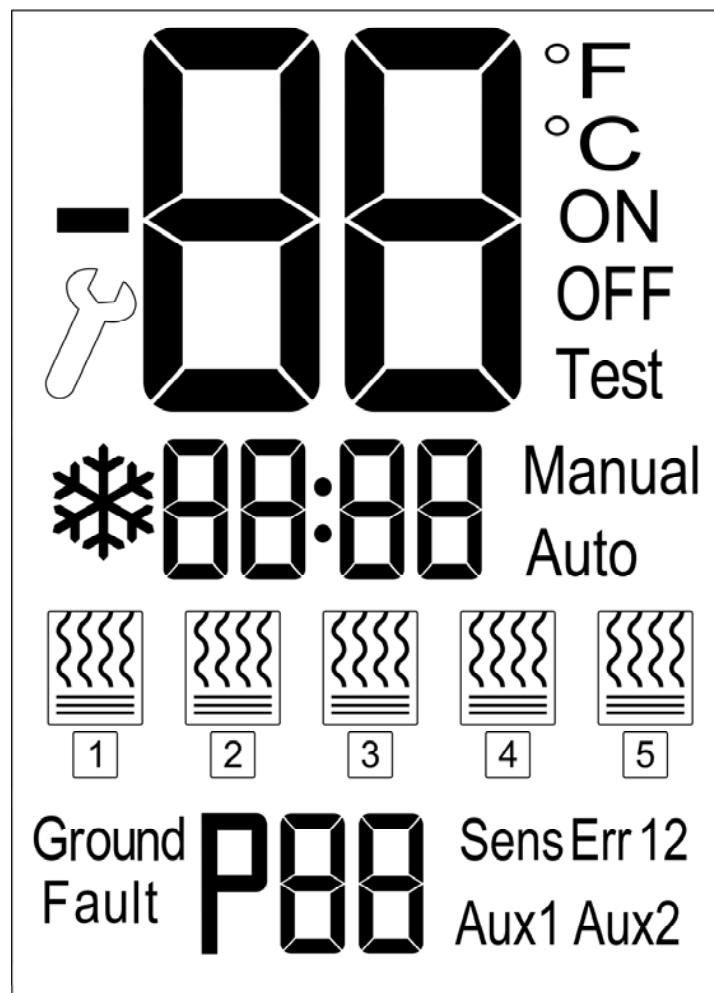
# PYROCON12 Technician Settings

## Parameters details 2



P06 Splitting time	Adjust minutes 10...1999 Def: 24	Adjust the splitting time. The heaters cycle / splitting time parameter defines the full cycle working time of all the heaters when working in sequence.
P07 Logic of sensors And outputs	Select 0...3 Def: 0	Define heaters control by PYROSENSE sensor or by 3 <sup>rd</sup> party sensor. "0" - 1-5 by PYROSENSE. 4 & 5 operate together. "1" - 1-4 by PYROSENSE. 5 by 3 <sup>rd</sup> party. "2" - 1-5 by 3 <sup>rd</sup> party. Temperature display blank. "3" - 1-3 by PYROSENSE. 4 & 5 by 3 <sup>rd</sup> party.
P08 Snow sensor threshold	Adjust 20...80% Def: 50%	Adjust the snow sensor sensitivity value (20% - Less sensitive, 80% - more sensitive)
P09 Number of snow sensors	Select 1,2,3 or 4 Def: 1	Select the number of PYROSENSE snow sensors connected.
P10 Test mode (commissioning)	Enable/Disable	Turn ON test conditions to check the functionality of the system regardless of sensors parameters. Use some water to wet the circuit on top of the snow sensor. Note: If the technician did not manually exit test/commissioning mode, the unit will automatically return to normal mode after 5 hours.
Exit technician settings	ON ↓ 1 2 3 4	Move DIP switch S1 located on the side of thermostat to OFF position.

# LCD Display



BACK

