

# **APERO**

7359 BB



# Installation, Operating Instructions & Warranty Registration

**IMPORTANT**: to be read and kept by the user

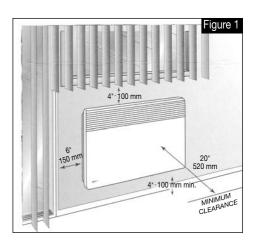
# Introduction

Dear owner,

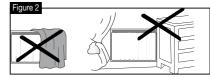
- Congratulations on the purchase of this new premium electric heater from CONVECTAIR, manufacturer of the highest quality heating product in the electrical industry.
- To obtain the best results and the ultimate in performance and comfort please carefully read the installation and maintenance instructions shown in this manual.

# Planning the installation

- Choose the location where the CONVECTAIR will be installed.
- 2- Check that nothing such as drapes or furniture interferes with the airflow to and from the CONVECTAIR; see required clearances (Figure 1).
- 3- Make a note of the minimum required clearances for this heater and ensure that there are no restrictions before choosing the location.(see Figure 1).







- The above logo warns of a risk : do not cover.
- Do not cover or obstruct the air intake or outlet on the unit as this could cause overheating and damage the heater.

# R

2000

2KW/208V

740

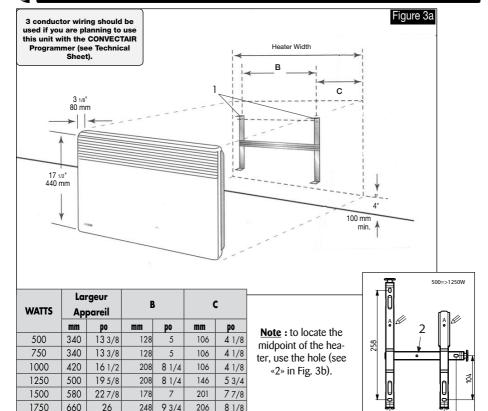
820

29 1/8

32 1/4

320 12 5/8

### Installation



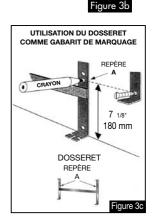
**1-** Free mounting bracket by pressing and pulling both locking brackets.

210

8 1/4

8 1/8

- **2-** Use the mounting bracket as a template by holding it against the wall flush to the floor. Use the hole shown on fig. 3b to locate the bottom fasteners. With the template the unit will be installed at 6 " (15 cm) from the floor (Figure 3a & 3b). Note that the minimum installation height is 4" (10cm).
- **3-** Relocate the mounting bracket to match the marks with the holes for the bottom fasteners.
- **4-** Check horizontality of the mounting bracket then mark and pierce the 4 holes for fastening.
- 5- Replace mounting bracket and fasten it with screws



# 4

### **Electrical Connection**

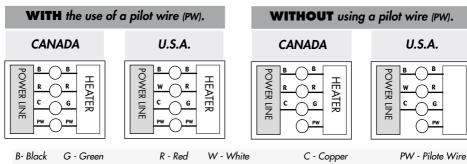
CONVECTAIR recommends that this heater be installed in accordance with national and local codes.

- A rectangular junction box must be installed in the wall, prior to electrical hookup (Figure 3a). The box must be of appropriate size to receive the necessary electrical connections and the  $2\ 3/4'' \times 4\ 1/2''$  (70mmx115mm) cover that is supplied with the unit cable.
- To prevent short circuits and electrical shocks turn the power off at the main panel before attempting the installation or any repairs.
- If the power cable is damaged it must be replaced by the manufacturer, an approved service depot or a technician with similar qualifications.

**CAUTION:** This unit must be connected to a 240 volts or 208 volts circuit, 60 cycles. Disconnect power supply before making wiring connections to prevent electrical shock or equipment damage.

The unit must be hooked up with the rectangular junction box already installed in the wall.

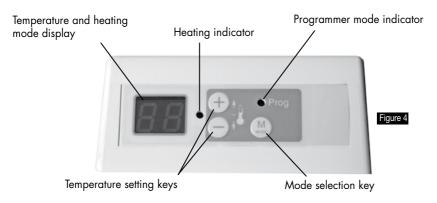
- 1- Connect the ground wire (C) to the green wire (G) inside the connection box.
- 2- Connect the black (B) and red (R) leads from the heater to the electrical supply wires (see diagrams below).
- 3- You will find, on the supply cord, a fourth purple wire (PW) with a sealed end. This wire must not be used for the electrical connection. This wire will be used only if the unit is connected to a CONVECTAIR "Programmer" central control system.
- 4- Carefully put back all wires inside the box, close and screw the cover.
- 5- Hook the CONVECTAIR unit onto the mounting bracket tabs with the unit slightly angled towards you. Push the CONVECTAIR towards the wall until it is engaged on both locking brackets.





### How to use your heater

CONVECTAIR heaters operate in short cycles. The red indicator light tells you when heat is on. The CONVECTAIR will always remain warm and ambient temperature will remain constant. It is normal in very cold temperatures for the unit to become hot. Caution is advised when young children are present.



### The following 5 settings can accessed with the Mode selection key:

| COMFORT           | Shows the temperature setting                                   | The heater maintains the desired comfort temperature.   |  |
|-------------------|---|---|--|
| ECONOMY           | EC  | The temperature is lowered to the desired setting without changing the comfort setting (night setback, unused rooms, temporary absence. |  |
| FROST PROTECTION  | HG  | The temperature is set at 45°F (7°C) for long term absence.   |  |
| STAMDBY (NO HEAT) |   | The heater stops heating  |  |
| PROGRAMMER        | Any of the above,<br>with the Programmer<br>indicator light on. | Allows the heater to respond to signals sent<br>by a Programmer (CONVECTAIR 7392,<br>sold separately).                                  |  |

### 1- Turning the power ON or OFF:

Place the sliding switch located on the right side of the thermostat to "1" position to turn the heater ON.

To turn the heater completely OFF, place the switch in the "0" position.



### 2- Turning the thermostat ON or OFF (standby):

To start the heater press the Mode key once. The display will show the current thermostat setting (factory default is 19°C).

To place the heater on Standby (no heat), press the Mode key repeatedly until the display shows "-".



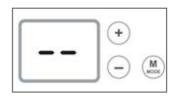
Note: current temperature settings are kept in memory.

### 3- Displaying the temperature in Fahrenheit or Celsius:

With the power ON, and the Mode selector on Standby ("-"), press the Mode and + keys at the same time and hold for 3 seconds.

The display flashes the temperature in the new scale and reverts to Standby ("-").

Press the Mode key to display the temperature in the new scale.





### 4- Setting the desired temperature:

Turn the heating on. The display shows 19.0°C (or 66.0°F if set in Fahrenheit). Using the + and – keys, you can raise or lower the setting as you wish by 1° each time the key is pressed.

This is how you can adjust the thermostat to your desired temperature (see example).

To confirm this comfort level, you may follow the following procedure, preferably in the evening (no sun influence): close the doors to the room where the heater is located; wait about one hour to allow for the temperature to stabilize, then adjust the setting up or down (+ or – keys) until the temperature feels right.

Allow another hour to verify that the temperature has stabilized at the correct level.





### 5- SETBACK (ECONOMY) MODE:

When the heater is in EC Mode, it will maintain the temperature at a lower value. This setting is useful to reduce energy consumption at night or when a room is temporarily unused.

To select the EC mode:

Press the Mode key briefly until the letters EC appears on the display.

To display the EC temperature setting:

While in EC mode, press the + or - key. The EC temperature setting will appear on the display (the default setting is 3°C or 5°F below the Comfort temperature).



To change the EC temperature :

When the display is in Ec mode, press and maintain the Mode key until the temperature value starts to blink. Release the Mode key and adjust the temperature up or down in  $1^{\circ}$  steps using the + or – keys. Press Mode to confirm the setting.

**Note**: the EC temperature is relative to the Comfort temperature. If the Comfort setting is changed, the EC temperature will change automatically to maintain the same difference between the two values.

### **Exceptions to the EC Mode:**

if the heater is connected to a Programming system, it will still respond to a Frost Protection instruction.

### 6- FROST PROTECTION MODE: HG:

In case of longer term absence (24hrs or more), the HG mode will maintain the room temperature at 7°C (45°F). You can reduce your energy consumption while maintaining a minimum safe temperature.

To select the HG mode:

Press the Mode key until the display shows : HG.



### 7- LOCKING THE HEATER CONTROLS:

The control pad can be locked from any Mode selection to prevent tampering.

To lock the control: From any Mode setting, press both the + and the - key at the same time and hold for about 3 seconds. The display will blink to show that the keyboard is locked.

Pressing any key when the keyboard is locked will cause the screen to display «FF» and the heater will not respond.

To unlock the keyboard, repeat the same procedure

press and hold both + and - keys at the same time for about 3 seconds.





### 8- PROGRAM MODE

This mode allows the heater to respond to instructions from a central Programmer system or from an individual Programmer module.

The thermostat display will show what instruction is being received (see summary table below).



| Programmer<br>signal | Display   | Heater operation   |
|----------------------|-----------|--|
| Heat OFF             | Prog      | Heater goes on standby (no heat)   |
| Setback              | FC Prog   | Temperature is lowered by 3°C (5°F) from the comfort setting (or as selected). |
| Frost protection     | H5 * Prog | Maintains the room temperature at 7°C (45°F).                                  |

### Note:

Frost Protection instructions from a Programming system will override all other settings even if a heater is not set in the Program Mode.

In that case, the heater screen will display the appropriate symbol (see table above) but the Programmer indicator light will be flashing.

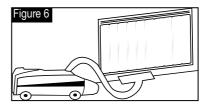
| Current Mode                            | SIGNAL FROM PROGRAMMER OR<br>OTHER CENTRAL PROGRAMMING SYSTEM |                   |  |
|---|---|-------------------|--|
|   | Frost protection  | Standby (no heat) |  |
| 19 - Comfort (temperature is displayed) | HG Prog   | Prog              |  |
| EC                                      | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,                         |                   |  |
| HG                                      |   |                   |  |

### **Temperature limiting control:**

This heater is equipped with a manual reset control. In case of a malfunction of the unit (blocked air output or intake, for example) the heater will stop heating automatically. After correcting the malfunction the heater can be reset. To restart the heater, push the button on the upper back panel of the heater.

# **Maintenance**

To keep your CONVECTAIR unit clean, regular maintenance is suggested. To remove dust, use a soft cloth. To remove a stain, use a damp cloth. For a better performance and a maximum efficiency, it is suggested that dust and lint be regularly removed from the protective grille situated at the base of your Convectair (Figure 6).



NEVER USE ABRASIVE OR ACETONE-BASED PRODUCTS TO CLEAN THE HEATER AS THIS MAY CAUSE DETERIORATION OF THE EPOXY FINISH.

ANY REPAIR ON YOUR CONVECTAIR HEATER SHOULD ONLY BE DONE BY A QUALIFIED TECHNICIAN AFTER DISCONNECTING THE HEATER.

### **Operation and Maintenance TIPS**

Your CONVECTAIR heater will become hot when in use. Caution is advised when young children are present.

Do not insert small objects through the front louvers : this could cause electrical short-circuit, fire or damage to the inner components.

Any use or modifications not approved by CONVECTAIR may cause electrical short-circuits, fire or injuries to the users.

In certain cases, it is possible for yellowing of the grille to occur over time. This is not due to a manufacturing defect. This is caused by surrounding air, which contains smoke or dust, being heated and released through grille.

**Prevention:** it is suggested that grilles be frequently cleaned especially with units installed in locations where cigarette smoke is present or in the kitchen. Never use this heater during construction work or other activities that generate a lot of dust.

**Note:** The first time your CONVECTAIR heats, a light smoke could be released. This is normal and should disappear after about 2 to 3 minutes.



### **Diagnostics**

### IF YOUR CONVECTAIR DOES NOT HEAT:

Before calling your electrician, please go through these simple checks:

- 1- Make sure the breaker in the distribution panel is in the "ON" position.
- **2-** Check that the function selector switch is on  $\Rightarrow$ . Turn the setting dial to position 9.
- **3-** Check the overheat protection: first remove any obstruction from the inlet and outlet grilles; then reset the overheat button (see: Temperature limiting controls).
- **4-** If the light is still off, and no heat is generated, call your electrician or the nearest CONVECTAIR repair center.



- 2 years against all defects
- 5 years on heating element

All CONVECTAIR units are subject to a double warranty: 2 years on all parts and manufacturing defects and 5 years on the heating element itself.

Warranty is applicable from date of purchase by the customer and under certain specific conditions. All details furnished with each unit. Please keep your invoice (purchase and/or installation).

### **REPAIR CENTERS:**

Contact CONVECTAIR for information regarding your closest repair center.

Toll-free: 1-800-463-6478



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