

USER MANUAL

POLO ‘E’ SERIES CONVECTION PANEL HEATERS

The POLO ‘E’ Series range of convection panel heaters consists of eight models – four with an electronic digital thermostat and timer and four without a timer using an electronic thermostat with an analogue display.

POLO Model ET (with digital timer)	POLO Model E (without digital timer)	Watts	Amps	Length (mm)	Height (mm)	Thickness (mm)	Weight (kg – approx)
ET100	E100	1000	4.2	455	440	85	4.5
ET150	E150	1500	6.3	615	440	85	5.3
ET200	E200	2000	8.3	775	440	85	6.4
ET240	E240	2400	10.0	1035	440	85	8.2

IMPORTANT SAFETY ADVICE

- (1) The wall bracket supplied with the heater must be used to attach the heater to a wall.
- (2) To locate the heater in a bathroom (ie containing a bath or shower) the heater must be located so that the controls cannot be operated by a person in the bath or shower. The heater must be located at least 600mm from a shower screen or bath surround. If in doubt, the services of a qualified electrician or licensed electrical contractor must be used to determine a suitable location in a bathroom.
- (3) Do not use outdoors – indoor use only.
- (4) Do not locate the heater immediately below a fixed socket outlet.
- (5) The heater may be installed in front of a fixed socket outlet concealing the power lead and plug.
- (6) Do not cover the heater or place material or garments on the heater.
- (7) The heater carries the warning “Do not cover” in order to avoid overheating, do not cover the heater. Do not place articles on or against any parts of this heater
- (8) If used with the supplied castors do not use the heater in the immediate surroundings of a bath, a shower or a swimming pool.
- (9) If used as a portable heater with the supplied castors do not move whilst it is turned on.
- (10) If the supply cord is damaged, it **MUST** be replaced by the manufacturer’s service agent or similarly qualified person to avoid a hazard.
- (11) When using models ET240/E240 – 2400 watts, do not share the power supply with other appliances. Do not connect to multiple power outlets on extension leads.
- (12) If any abnormal noise ever comes from the heater or control panel, switch off and contact Polo immediately for advice.
- (13) Do not use the heater to dry clothes
- (14) **WARNING – THE SURFACES OF THIS HEATER CAN BE HOT ESPECIALLY THE TOP OF THE HEATER AND THE SLOTTED TOP AIR OUTLET**

Momentarily contact with any part of the heater should not cause injury.

This heater is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the heater by a person responsible for their safety. Children should be supervised to ensure that they don’t play with the heater.

GENERAL

The POLO E series range of convection panel heaters are designed for fixed mounting on the wall bracket supplied with each heater, or for portability on supplied feet with castors. When used with the supplied castors, do not use this heater in the immediate surroundings of a bath, shower or indoor swimming pool. See next section on how to attach the feet with castors to the heater.

These heaters should only be operated in the upright position as shown in Fig 1 (see pg 3) with the outlet grill at the top and the control panel on the right hand side.

All are splash proof to IP24 and are suitable for use in bathrooms subject to the safety advice above.

The heater is fitted with a cable and plug and is designed to be connected to a standard 10 amp socket outlet located behind, at the side or below the heater.

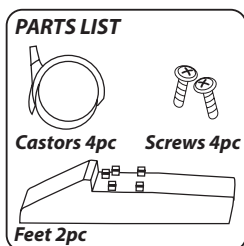
The heater is fitted with a cable approx 1.5metres long with a three pin plug.

For economical operation do not use the heaters 24 hours a day. We recommend you set the thermostat to between 18-21 degrees Celsius and switch off the heaters when the room is not in use.

HOW TO ATTACH THE SUPPLIED FEET WITH CASTORS TO THE HEATER FOR PORTABILITY

Note: The heater must not be used on the floor without the castors properly attached

In the cardboard box packed with each heater are the following parts: 2 plastic feet, 4 castors and 4 attaching screws



Step 1 – Push castor stem into the hole on each end of the foot – 2 castors in each foot

Step 2 – Castor installed correctly in foot

Step 3 – Turn heater upside down and locate the two castor holes situated about 30mm from the end of the back face of the heater

Step 4 – Angle the foot and push the plastic hooks in the feet into the metal slots in the base of the heater

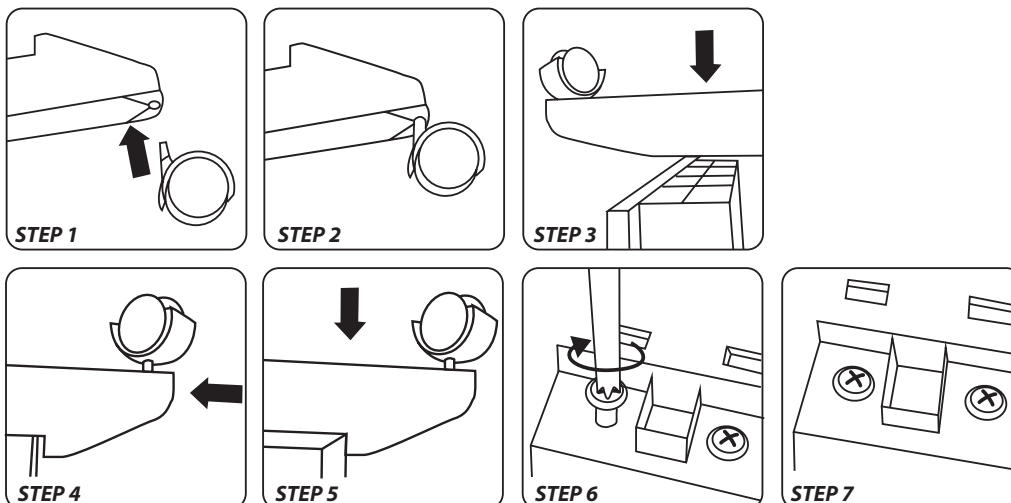
Step 5 – Align the holes in the feet with the castor holes in the base of the heater

Step 6 – Secure the feet with 2 screws per foot through these holes. Tighten each screw securely

Step 7 – Screws securely tightened completing installation

Step 8 – Repeat for second foot installation

Step 9 – Remove wall bracket as it is now not required (See page 3, point 2 on how to remove)



WALL MOUNTING

IMPORTANT – The wall bracket supplied with the heater must be used.

Minimum distances from objects

For objects of all types eg furniture, curtains, hangings or textiles or other flammable or non- flammable materials, the following minimum distances from the unit must be observed – see Fig 1

To the top air outlet grill	-	300mm
To the sides	-	100mm
To the front	-	100mm
To the underside	-	100mm

Air must be able to enter the bottom of the heater unobstructed and be able to escape unobstructed through the slotted top air outlet.

The heater can only be used as freestanding by using the supplied feet with castors.

Do not stand on the heater when it is mounted on a wall.

DO NOT locate the heater immediately below a fixed power point.

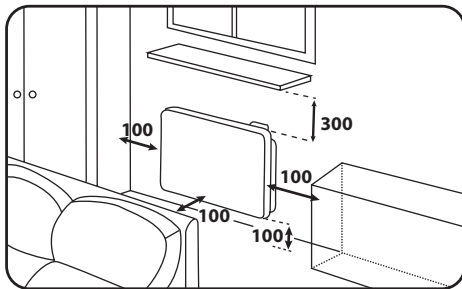


Fig 1 – Minimum distances from objects

INSTRUCTIONS FOR WALL MOUNTING

1. This heater may be mounted in front of a standard 10 amp socket outlet with the plug inserted. See Fig 2. Ensure the heater fully covers the socket outlet, plug and lead which results in a very clean looking installation.
2. Remove the wall bracket from the back of the heater by pressing down on the two metal tabs on the top of each end of the bracket and pulling it away from the heater. A long screw driver may be required to press the tab situated near the bottom of the plastic control housing. Lift the two bottom tabs of the wall bracket away from the heater through slots in the back of the heater.
3. Using the wall bracket as a template, and, keeping a minimum 200mm off floor level to the bottom holes in the wall bracket, carefully mark the position of the four plasterboard anchors or wallmates (locating a stud is not necessary), using the holes in the wall bracket as a guide. These anchors (not supplied) should be able to support a load of 5kg each. If a stud is accidentally located secure the bracket there using wood screws. See Fig 2. Keep the wall bracket level by placing a spirit level on the horizontal rail of the wall bracket.
4. Install the four self drilling plasterboard anchors. Insert 8 gauge zinc coated (corrosion protected) self tappers through the holes in the wall bracket and into the wall anchors. Tighten the self tappers securely. Check that the wall bracket is level by placing a spirit level on the horizontal rail of the wall bracket.

5. Re-attach the heater to the wall bracket by locating the slots in the bottom of the heater onto the wall bracket. Then locate top slots and push heater firmly into the metal tabs until it clicks securely into position. Use a long screw driver to press the two metal tabs down to remove the heater from the wall bracket in the future.

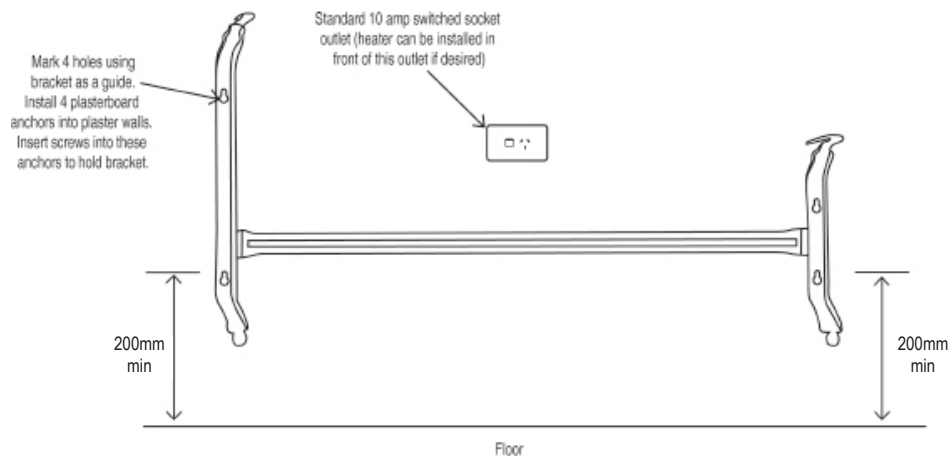


Fig 2 – Wall bracket showing how to attach to a wall

OPERATING THE HEATER

1) Controls and settings

a) Before Starting

i) Non timer E models

Plug the heater into a 240 volt power outlet and switch on. Switch the main power switch on the side of the control panel to the ON or I position

Set the thermostat temperature using the large wheel to 30 degrees on the dial.

The heater should come on with the red 'ON' indicator light illuminating when the heater element is operating.

Turn the thermostat wheel down to a recommended temperature of between 18-21 degrees celsius for economical operation of the heater.

Be sure the thermostat temperature is set higher than the room temperature or the red 'ON' indicator light will not be illuminated

ii) Timer ET models

Plug the heater into a 240 volt power outlet and switch on. Switch the main power switch on the side of the control panel to the ON or I position.





Next, press the white power button on the top of the control panel. This turns the heater ON and the LCD screen in the top control panel will illuminate displaying 'M' (Monday) and 12:00 as the default day and time setting.






Heating operation at 21 degrees Celsius is the default (factory) setting.

The red 'ON' indicator light illuminates when the heating element is operating

Upon first use, the heater may give off some fumes (this is normal) but these will quickly disappear as the element reaches normal operating temperature.

Be sure the room temperature is less than 21 degrees or the red 'ON' indicator light will not be illuminated

Pressing the  button enables the default temperature to be increased or decreased. Using the arrow keys,  increases temperature,  decreases temperature. Pressing the  button again completes the temperature setting and the heater resumes operation.

The heater will not operate manually unless it is in the CO (Constant Operation) mode. and the  temperature display is not flashing. To select the CO setting, press the mode  button. Use the  and  to select the CO program. Press the mode  button again and this CO mode is now active.

iii) Further information for Timer models

The timer can be used to program ON/OFF times 24 hours a day 7 days a week.

When the heater is switched OFF at the main power switch on the side of the control panel the LCD time display will be lost and will revert back to 12:00 when switched on again.

However a special memory inside the heater will retain all other programs. However the current time must be reset for these programs to operate normally. Turning the heater ON/Standby by the unit power button on the control panel will still retain the LCD time display and all programs.

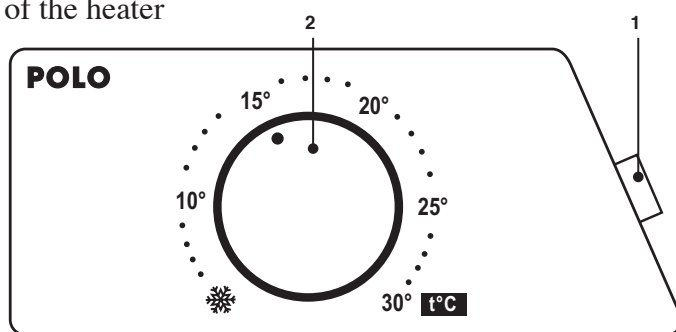
b) Setting of the thermostat

(i) Non timer E models

The control panel features an electronic thermostat and a thermostat wheel with an analogue display.

Turn the thermostat wheel situated on the top of the heater which can be adjusted to between 5 and 30 degrees celsius.

Set the temperature on this wheel to between 18-21 degrees celsius for economical operation of the heater



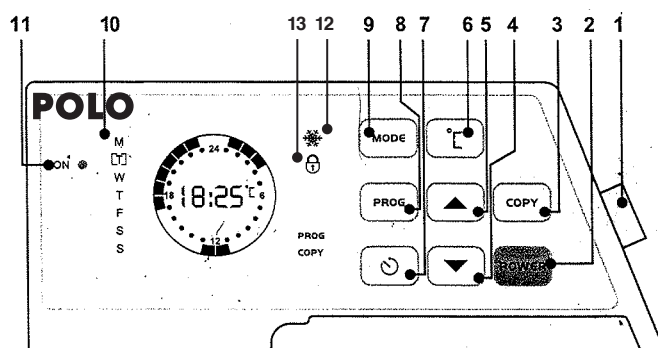
- 1 - Main Power Switch
(ON / OFF or I/O - Press I for ON, O for OFF)
- 2 - Thermostat Adjustment Knob

(ii) Timer ET models

The control panel features an electronic thermostat with digital display and a 7 day, 24 hour programmable timer

This timer has a heating operation (CO), frost protection operation (❄️) and a self set (SS) weekly operation program. See later section 'Setting and Programming the timer' for detailed information on how to use all functions of the timer.

Using the degrees C button the digital thermostat can be set between 5 and 30 degrees celsius in 1 degree increments.






- | | |
|--|---|
| 1 - Main Power Switch
(ON / OFF or I/O - Press I for ON, O for OFF) | 7 - Timer button |
| 2 - Unit Power button (ON / Standby) | 8 - Programming button |
| 3 - Copy button | 9 - Mode Selection button |
| 4 - Down button | 10 - LCD screen |
| 5 - Up button | 11 - Power On Indicator
(element energised when red) |
| 6 - Temperature button | 12 - Frost Protection symbol |
| | 13 - Control Panel Lock symbol |

SETTING AND PROGRAMMING THE TIMER

1) Setting the current time

Day Setting

Press timer  button. The “[]” brackets will flash around M (Monday). Use the up  and down  buttons to move the “[]” brackets to the current day.



Note: the “[]” brackets will flash when used for the first time, or after a lengthy absence of power, and the red “ON” light will glow.

M	Monday
T	Tuesday
W	Wednesday
T	Thursday
F	Friday
S	Saturday
S	Sunday

Hour Setting

Press timer  button. The hour number will flash. Use the up  and down  buttons to set the current hour.

Minute Setting

Press timer  button. The minute number will flash. Use the up  and down  buttons to set the current minute.

Press the timer  button again to complete the timer setting.

The control panel will show the current time and the unit will operate under the default program of “CO” (Constant Heating Operation).

2) Setting the temperature

Press the temperature setting  button. The set temperature, for example 21, will flash.





Use the up  and down  buttons to set the required temperature.

Note: the default temperature is 21 °C.

Press the temperature  button again to complete the temperature setting.

3) Selecting the Constant Heating (CO) Operation

The constant heating operation is the default setting of the heater, and this will run when the heater is used for the first time, or after a lengthy absence of power. The temperature setting may be altered as per point 2.

To select this setting, press the mode  button. Use the up  and down  buttons to select the CO program. The temperature setting may be altered as per point 2. Press the mode  button again to terminate the setting. The mode symbol will stop flashing. The mode is now active and will run “real time”.

4) Selecting the Constant Frost Protection Operation


To protect against freezing temperatures in cold climate areas you can program the heater for frost protection by reducing the set temperature to 5°C while the heater is in “CO” mode.

When the temperature is set to 5°C the symbol ❄️ will display on the screen and the heater will operate when the room temperature falls below 5°C.

5) Programming the Self-Set (SS) Weekly Operation


This function allows you to program ON/OFF times 24 hours a day, 7 days per week.


Press the mode  button. The mode symbol will flash.

Use the up  or down  button to select the PROG (program) mode of SS

Press the mode  button again to complete the setting. The mode symbol SS will stop flashing.





Day Programming

Press the program  button. The symbol “[]” will appear around the current day e.g. M (Monday). The time will show (00:00, midnight), and the symbol PROG is displayed.

If you want the program to start another weekday, for example Tuesday, press the timer button  consecutively, until the symbol “[]” surrounds T (Tuesday) on the screen.

Time Programming a Full 24 hour Day

Note: round the digital clock display, the black rectangles indicate “ON” times / zones, and the clear spaces are “OFF” zones.

The up button  is used for setting the “ON” zone, and the down button  is used for setting the “OFF” zone. The timer will start at 00:00, and each push of the  or  button will:


- a) advance the clock by one hour, and
- b) set the desired “ON” or “OFF” timer for that hour.


You must program the full 24 hour ON / OFF period (until the time reaches 00:00) for the timer to function correctly.

Finally, press the program  button to complete the setting for the day.


For example, if you would like to make the unit work from 1:00 to 4:00, 11:00-13:00, and 17:00 to 23:00:


Step 1: Press the button . The time will change from 00:00 to 1:00, and the zone between 24:00 to 1:00 will be clear (OFF).

Step 2: Press the button  three times until the time advances to 4:00, and the zone between 1:00 and 4:00 be black (ON).


Step 3: Press the button  seven times until the time advances to 11:00, and the zone between 4:00 to 11:00 be clear (OFF).

Step 4: Press the button  twice until the time advances to 13:00, and the zone between 11:00 to 13:00 will be black (ON).

Step 5: Press the button  four times until the time advances to 17:00, and the zone between 13:00 to 17:00 will be clear (OFF).

Step 6: Press the button  six times until the time advances to 23:00, and the zone between 17:00 to 23:00 will be black (ON).

Step 7: Press the button  once, the time advances to 00:00, and the zone between 23:00 to 24:00 will be clear (OFF).

Step 8: Press the program button  to complete the setting for the day. The control panel, will now show the current day. The program is now active and is running on ‘real time’.

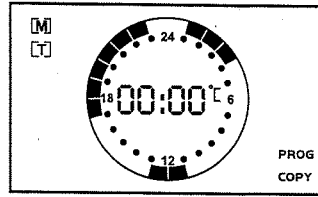
Note: You must program the full 24 hour ON / OFF period (until the time reaches 00:00) for the timer to function correctly. If you go past the 00:00 (and move to 01:00) you will need to program the 24 hour program for that day again.




6) Copy the 24-Hour Program


If you would like the same 24-hour program to work for another day or days in the week, the program can be copied onto the selected day.


For example, you have just created a 24 hour program for Monday, and you wish to copy this Monday program to Tuesday:



Step 1: Press the program button  and then press the  button to move the “[]” to M (Monday)

Step 2: Press the copy button . The symbol “COPY” will appear on the LCD screen. The “[]” around the M will flash. (If you would like to cancel the COPY order, please press the button again, the symbol “COPY” will disappear accordingly.)

Step 3: Press the timer button  to move the “[]” around T (Tuesday). The “[]” around the M will flash, the “[]” around the T will not flash.

Step 4: Press the copy button  to complete the operation. The “COPY” and [M] symbol will disappear.

To copy this same Monday program to another day, repeat from Step 3.

Press the program button  to terminate the “COPY” function. The control panel will now show the correct day. The program is now active and is running on ‘real time’.


7) Adjust the temperature of a Running Program

Press the temperature button . The temperature symbol will flash.

Use the up  or  down button to adjust the comfort temperature.

Finally, press the temperature button  again. The control panel will now show the current day. The program is now active.

8) Changing Time for Daylight Savings

Press the timer button  twice to make the hour display flash.

In Summer time, press the up  button to advance the timer clock one hour.

In Winter time, press the down  button to set the timer clock back one hour.

Terminate the operation again by pressing the timer  button twice so that the current program is displayed on the panel.

9) **Program Back-Up**

The time and all programs are retained if the unit is switched on or off using the 'Power' button in the control panel on the top of the heater.

If the main power switch on the side of the control panel is switched off the LCD time display will be lost and will revert back to 12:00 when switched on again. All other pre-set programs and default temperatures will be saved.

10) **Locking the Control Panel**

Press the program button  and the timer button  at the same time for around three (3) seconds. A padlock symbol  is displayed on the screen, indicating that all buttons are now locked.

To unlock the control panel, press the program button  and the timer button  at the same time for around three (3) seconds, and the padlock symbol will disappear.

The control panel can also be unlocked by switching the heater to the O or OFF position by the main power switch on the side of the control panel

SAFETY – OVERHEAT PROTECTION

For your safety, all models are fitted with a thermal cut out. In the event that the product overheats for some reason, the cut-out prevents excessive temperatures on the product by cutting power to the heater. This is generally something covering the front grill. Once the heater has cooled down, it will reset automatically. It is important that this grill is not covered. Also do not operate the heater whilst it is sitting upright on the ground (ie not on castors) – this blocks the air intake on the bottom of the heater – it must only be operated when installed on the wall bracket or on the standard castors.

SAFETY – TILT SWITCH

All heaters are equipped with a safety tilt switch. If the heater is knocked over or placed upside down, the safety tilt switch will cause it to switch off. The red indicator light will continue to be illuminated even though the element is not energised. When the heater is placed in the proper upright position it will then operate normally.










CLEANING

Before commencing cleaning switch off the heater to the O position using the main power switch on the side of the control panel. Switch off the power outlet, unplug the heater cord and allow the heater to cool. Release the heater from the wall bracket if desired.

The outside can be cleaned by wiping over with a soft, damp cloth and then dried using a soft dry cloth. Do not use abrasive cleaning powders as this can damage the powder coated surface finish.

TROUBLE SHOOTING

Before telephoning Polo on 1800 087 840 please check the following:

PROBLEM	CHECK	ACTION
Cannot turn heater on	Is heater plugged into power supply outlet?	Insert power plug securely into power supply outlet and turn power on.
	Is power supply outlet operating? (Has a circuit breaker tripped?)	Plug another appliance into the outlet and turn on. If this appliance operates correctly then power supply outlet is OK.
	Is main power switch on side of the heater in the I (ON) position?	Press switch on the I position
	Is the unit power button on the top of the control panel turned ON?	Press unit power button on top of the control panel. Panel will light up in blue colour. Press again to turn heater OFF.
	Is control panel in CO (constant operation) (timer ET models) position?	Press mode button  and use arrow keys  or  to select CO program which flashes on and off. Press mode button  to complete (when CO selected)
	Is set temperature higher than room temperature?	Press degrees C button  to select thermostat temperature which flashes on and off. Use arrow keys  or  to select correct temperature. Press degrees C button  to complete. If, after 60 seconds, no buttons are pressed the digits will stop flashing and the display will revert back to the current operating setting. Simply press the degrees C temperature button  to re-enter the temperature setting operation.
Programmed operation does not work	Ensure the clock has been correctly set	Set clock as per page 6 of the User manual. If the clock is not set when the heater is turned on the time will default to 00:00 (12 midnight) and will begin running from that time
Clock display disappears	Main power switch turned to O or OFF position	If the heater is turned off using the Unit power button on top of the control panel, the time will be saved. If the heater is turned off using the main power switch on the side of the heater then the time setting will be lost and will require resetting. All other set programs will be retained.

POLO 'E' Series panel heaters are designed, manufactured and distributed throughout Australasia by:

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