

### IMPORTANT

These instructions should be read carefully and retained for future reference. Note also the information given on the appliance.

# XLN Ultra-Slim Storage Heaters

(96514 Iss. 13)

## IMPORTANT SAFETY INFORMATION

**WARNING - THE SURFACE OF THIS HEATER CAN BE HOT.** The surface temperatures of this heater are within the requirements of EN60335-2-61, the European Standard covering the safety requirements for Electric Storage Heaters, and momentary contact with any part of the heater should not cause injury. However, in order to be effective, heaters of any type do get hot, especially around the air outlet grille.

**Therefore, if aged or infirm persons, or young children, are likely to be left unsupervised in the vicinity of a heater precautions should be taken to ensure that prolonged contact with the heater cannot occur.** We recommend that a guard is fitted around the heater, as is normal with some types of heating appliances in similar circumstances. A range of guards specially designed for Dimplex storage heaters is available. If you require further information on these guards, please contact the Dimplex Help Desk on 0845 600 5111.

**CAUTION: DO NOT COVER SURFACES OF THE HEATER AND DO NOT OBSTRUCT AIR OUTLET GRILLES.** Surfaces of the heater should not be covered or obstructed as this can cause excessive temperatures that can be hazardous and may cause safety cut-outs to operate. For example, do not put clothes, fabrics or any combustible materials on the heater or allow curtains to come within 75mm (3") of the top and ends of the heater and do not allow furniture to be pushed up against the heater.

**PLEASE NOTE: YOUR STORAGE HEATER IS VERY HEAVY AND MUST BE SECURELY FIXED TO A SOUND WALL.**

**No attempt should be made to move the heater without first seeking specialist advice.** If you are not happy that the heater has been securely fixed, please inform your installer. If, during any reassembly of the heater, a part of the thermal insulation shows damaged or deterioration which may impair safety, it should be replaced by an identical part.

**UNDER NO CIRCUMSTANCES SHOULD THE WALL FIXINGS BE LOOSENED ON THIS HEATER BEFORE THE BRICKS HAVE BEEN REMOVED FROM ITS CORE.**

**DO NOT SIT OR STAND ON THE HEATER.**

**DO NOT PLACE OBJECTS IN CONTACT WITH THE HEATER.**

This appliance 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 for instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

## Models XL12N, XL18N and XL24N

Your Dimplex XLN storage heater stores heat using low tariff, off-peak electricity and discharges it when tariffs are normal. These operating instructions assume that the correct size of storage heaters have been selected to cater for the heating requirements of the room.

## Setting the Controls

The control knobs have been positioned so that they are clearly visible to an adult, but out of sight of young children. In this way it is hoped that they will not provide temptation to a child to alter the settings.

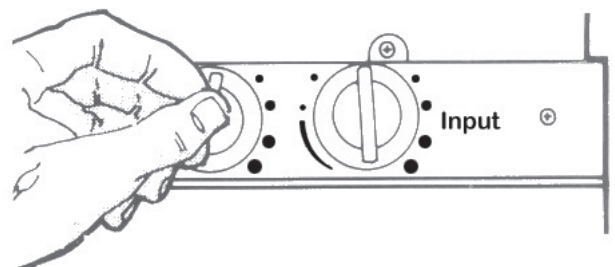
## Domestic Use

In cold weather set the right hand (INPUT) knob to maximum (fully clockwise). In milder weather set the control to a lower position.

Normally the left hand (OUTPUT) knob may be left on minimum (fully anticlockwise). This control may be moved to maximum in the evening if additional heat is required at that time. Return to minimum before retiring.

## Commercial Use

For normal commercial applications a setting of maximum on the output control will ensure maximum output during working hours. The input control should be set as described above for Domestic Use.

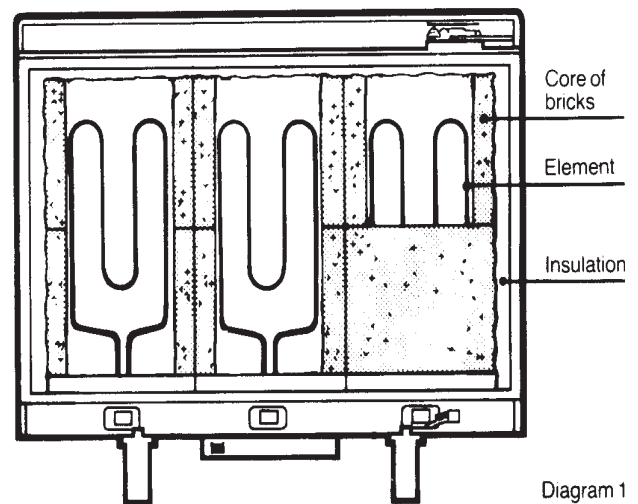


Should these settings not provide the comfort levels required, the more detailed instructions overleaf should be consulted.

## XLN Storage heater - Principle of operation

Your XLN heater consists of a core of high density heat storage bricks surrounded by a carefully designed insulating case. During the night time off-peak period elements within the brick core heat up the bricks to a temperature level determined by the setting you select using the input control knob.

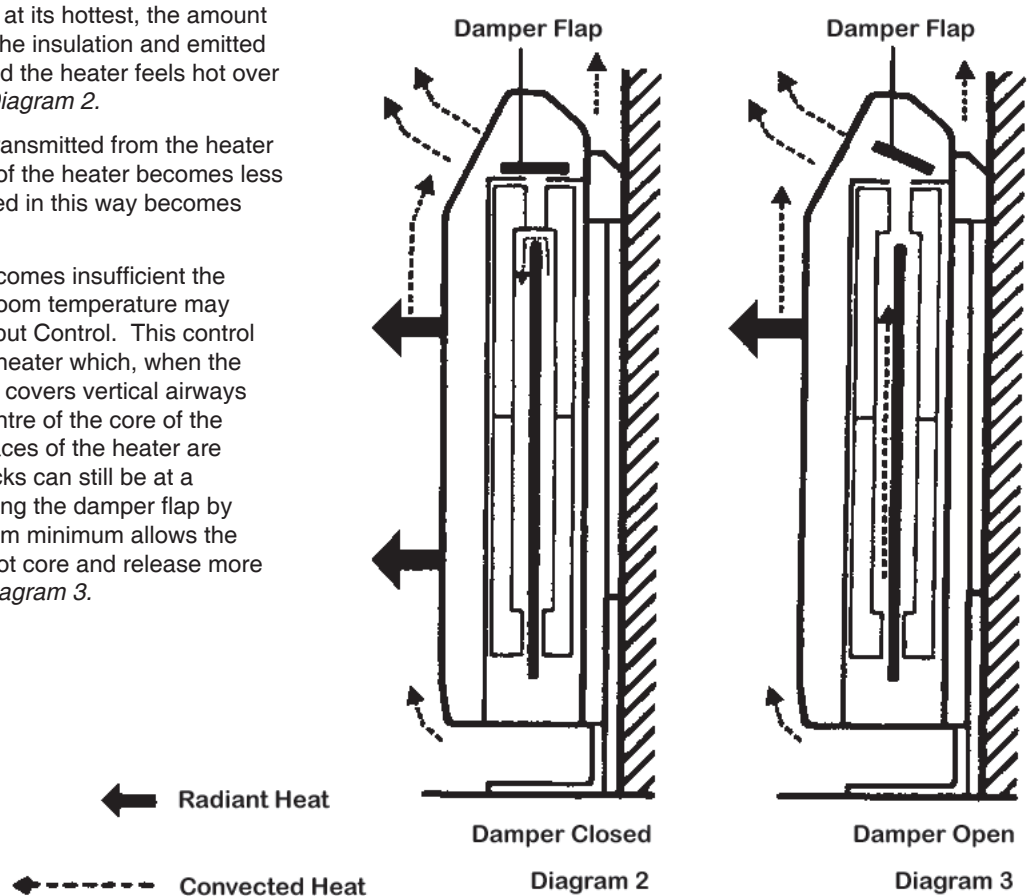
During the following day the heat stored in the brick core is gradually transmitted through the insulation and out of the heater case.



In the morning, when the core is at its hottest, the amount of heat being transmitted through the insulation and emitted as radiant heat is at its greatest and the heater feels hot over most of its upper outer surfaces. *Diagram 2.*

As the day progresses, heat is transmitted from the heater to the room and the outer surface of the heater becomes less hot and the amount of heat released in this way becomes less.

If the amount of emitted heat becomes insufficient the output of the heater and thus the room temperature may be increased by means of the Output Control. This control operates a damper flap within the heater which, when the output control knob is at minimum, covers vertical airways which pass directly through the centre of the core of the heater. Even when the outer surfaces of the heater are noticeably less hot, the core of bricks can still be at a relatively high temperature. Opening the damper flap by moving the output control away from minimum allows the room air to circulate through this hot core and release more heat to the room by convection. *Diagram 3.*



## Input Control

The setting of this control determines the amount of charge taken in by the heater, which in turn determines the temperature of the heater's storage core. The higher the charge taken the higher the core temperature.

In cold weather the heater should be set to take a high charge. Setting the control at maximum ensures the heater accepts a full charge.

In the Autumn and Spring a lower setting of the input control knob should be sufficient, the actual setting required being influenced by the prevailing weather conditions, the room size and insulation levels. The most suitable settings will be found by experience.

## Output Control

Depending upon the amount of charge accepted by the heater, the OUTPUT control allows the release of additional heat by means of a damper which can be opened to allow a greater air flow through the heater core, and therefore additional circulation of heat. By altering the setting of the Output control knob the damper may be opened and closed manually, or it may be made to open automatically.

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## Manual Operation

With the OUTPUT control on minimum the damper remains closed, and heat is released from the heater only by normal radiation and convection around the outer surfaces of the heater. This alone may provide sufficient heat on many occasions and therefore no alteration of the OUTPUT control is necessary. However, if a boost of heat is required in the evening period, then moving the OUTPUT control to maximum in the evening will immediately open the damper to allow more rapid release of any available stored heat. When the next charging period commences the damper will automatically close to prevent this release of extra heat during the charge period, but the OUTPUT control must be returned to minimum manually to obtain a similar operation the following day.

## Automatic Operation

The damper may be pre-set to open automatically each day if required. Setting the OUTPUT control at settings other than minimum results in an automatic boost of heat. A high setting on the output control knob causes the damper to open early afternoon/evening, conversely a lower setting causes it to open later.

Because the automatic opening of the damper is primarily dependent on core temperature then the setting of the INPUT control has a bearing on the time at which the damper opens. For a given setting of the OUTPUT control, the higher the setting of the INPUT control, the later the damper will open. Lower settings on the INPUT control will mean an earlier damper opening.

The most suitable settings of the OUTPUT control for different input settings will be found by experience.

Remember - a high setting of the OUTPUT control early in the day may leave too little heat stored in the heater for the evening, especially on low settings of the INPUT control.

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**IMPORTANT -** Due to the newness of the materials the heater will produce a slight smell for the first few days of operation. ROOMS MUST BE WELL VENTILATED AND YOUNG CHILDREN, CAGED BIRDS, OR PERSONS WITH RESPIRATORY COMPLAINTS MUST NOT REMAIN IN CLOSE PROXIMITY TO THE HEATER DURING THE FIRST 48 HOURS OF THE COMMISSIONING PERIOD.

**To commission the heater set both the input and output controls to maximum and leave for 48 hours, after this period the controls should be adjusted for everyday use - see 'SETTING THE CONTROLS' on the front cover of these instructions.**

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## Cleaning

To maintain the external appearance of the radiator it need only be wiped over occasionally with a dry duster. During the summer months, or at other times when the appliance is not in use and is completely cold, the opportunity should be taken to wipe over with a damp cloth. Do not use abrasive cleaning powders or furniture polish.

Discoloration of wall finishes can sometimes occur immediately above a storage heater due to the properties of some paints and decorating materials or the presence of environmental impurities in the air (such as soot or incense generated from the burning of candles, etc.) A suitable shelf (available from Dimplex) may be fitted to limit the extent of any wall discoloration.

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