

Dimplex

Quartz Heaters

700 - 7747
700 - 7759
700 7760

QXD Range

Passive Infra Red Detector Switch Model DX4130

- Compatible with Dimplex QXD1500 and QXD3000.
- Automatically switches the quartz heater on or off, depending on whether the area below the heater is occupied.
- Time delay adjustment.
- Full 180° coverage over 15m if required.
- Size of detection area can be reduced.
- Approved to VDE 0632 and IEC 669-2-1.
- Separate wall-box and plug-in detector-lead to simplify installation.

Fully adjustable head detector head and/or by using
Detector head is fully adjustable lens masking plates provided, to



in both vertical and horizontal planes to provide maximum flexibility.

Range and angle detection limiters

Range and angle of detection can be limited by adjusting

prevent accidental or unwanted triggering.

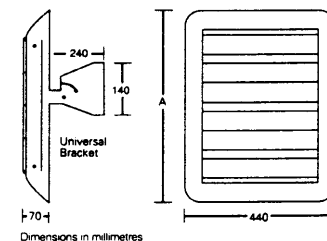
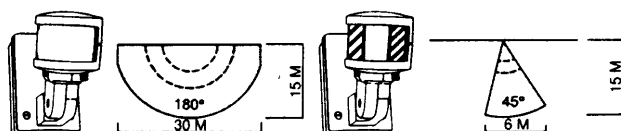
Operating Voltage
220V - 240V AC

Model DX4130

Technical Specification

Model	DX4130
Switching Capability	Up to 3kW Quartz Halogen
Operating Power	3W
Detection Range	15 metres max
Detection Angle	180°
Heater-on-time	Adjustable to 10 seconds, 20 seconds, 40 seconds, 1.25 minutes, 2.5 minutes, 5 minutes, 11 minutes or 21 minutes.
Dimensions	130mm(H) x 85mm(W) x 145mm(D)
Colour	Grey

Example of effect achieved by using masking plates



Mounting Heights

The following tables show the recommended mounting heights for three typical average intensity requirements

Average Radiant Intensities on Heated Area (W/m²)	QXD1500			QXD3000			QXD4500		
	Height	Throw	Spread	Height	Throw	Spread	Height	Throw	Spread
Angled 30° from vertical									
150	2.9m	2.5m	3.8m	3.7m	3.6m	5.4m	4.4m	4.4m	6.7m
200	2.7m	2.2m	3.3m	3.4m	3.1m	4.7m	3.9m	3.8m	5.8m
250	2.5m	2.0m	3.0m	3.1m	2.8m	4.2m	3.6m	3.4m	5.2m
Angled 45° from vertical									
150	2.3m	3.4m	2.9m	2.9m*	4.8m	4.2m	3.3m	5.6m	5.0m
200	2.1m*	2.9m	2.4m	2.6m*	4.1m	3.5m	3.0m*	5.2m	4.4m

- Note 1 Intensity in W/m² based on Wattage of heater and area covered and measured on a horizontal plane 1m above floor level.
2 Heater mounting heights are in metres and are above floor level. Those marked * are minimum mounting heights for the particular heater model.
3 Throw and spread figures are in metres.

Specifications and Dimensions

Model No.	Input	No. of lamps	Electrical	Dimension A (mm)	Weight	Minimum Height	Recommended Height
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- Ideal for heating large areas where it is not practicable to raise the overall ambient temperature.
- Provides warmth that is instant and highly directional
- The solution to heating areas which have, in the past, been considered 'unheatable' by electricity. Examples are factory work stations, warehouse loading bays, canteens, sports halls, milking parlours, community halls and churches.
- 80% - 90% of the output is delivered in the form of shortwave infra red radiant heat, similar to the wavelength of solar radiation, so the heat warms its target in exactly the same way as the sun's rays.
- Energy emitted at this wave-length passes through the air with very little heat loss, even if there is high humidity.
- The 'throw' from these lamps is considerable.
- QXD4500 can be wired on installation so the user can select how many lamps are turned on.

The advantages of Dimplex Quartz heating

Low capital cost -

In many cases much less than the cost of a boiler and wet radiator system.

Low running costs -

Because only people are heated and not the airspace around them.

Silent operation -

Especially important in situations such as churches and community halls.

Instant heat -

Lengthy pre-heating is avoided as warmth is instantly available. This is of particular value in intermittently-used buildings.

High level mounting -

Making Quartz suitable for situations such as squash courts or sports halls where a low level heating system could easily be damaged.

Heating performance -

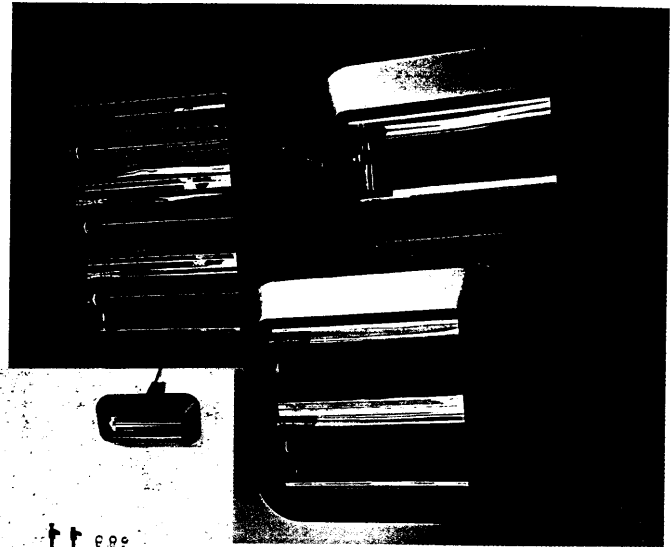
Hardly affected by humidity.

Flexibility -

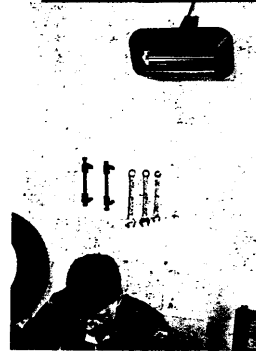
Each heater in a building can be switched independently so that only the occupied parts need to be heated.

Lamps

Halogen filled quartz linear lamp with a tungsten element. A ruby sleeve encloses the lamp to provide a warm red glow. The lamp operates at about



QXD Range



QXD 1500

2,200°C and emits shortwave infra-red radiant heat.

Reflector

Specular quality electrochemically brightened aluminium (purity; 99%+).

Body

Powder coated steel.

Lamp Guard

(Optional) chromium plated mild steel.

Hazardous areas

Quartz heaters must not be positioned within hazardous areas.

Wall Mounting

All Dimplex Quartz heaters are supplied with a universal mounting bracket that allows them to be swivelled in both horizontal and vertical planes. This is important, as Quartz heating is directional and must be sited so as to heat the target zone.

Electrical supply

QXD1500 and QXD3000 - single phase.
QXD4500 - single or 3 phase
All models can be installed in conjunction with zone and time controls as required.
If miniature circuit breakers are to be used, to avoid nuisance tripping due to the high in-rush at switch-on, a type 3 MCB with a tripping co-efficient of 7 - 10 times rated current should be used.

Coverage for Spot Heating Applications*

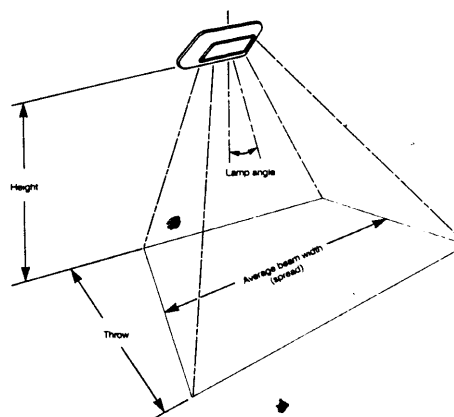
The area heated by a Quartz Halogen Heater depends on the height and the angle at which the heater is mounted.

For 30° Heater Mounting Angle:

Area Covered $= (\text{Height})^2 \times 2.66$
Average Width of Beam (spread) $= \text{Height} \times 2.0$
Throw of Beam $= \text{Height} \times 1.33$

For 45° Heater Mounting Angle:

Area Covered $= (\text{Height})^2 \times 5.72$
Average Width of Beam (spread) $= \text{Height} \times 2.2$
Throw of Beam $= \text{Height} \times 2.6$



* Note: Area covered, width and throw of beam are measured at floor level. The table on the opposite page indicates throw and spread measured 1M above floor level which may be a more appropriate measurement for some installations.