# **Reference Manual**



# **RANGE FOR CANADA & USA**



DOUBLE (120V) & DOUBLE (208V / 240V)



TRIPLE (208V / 240V)



QUAD (208V / 240V)

INFRARED HEATERS FOR INDOOR USE RESIDENTIAL, COMMERCIAL AND INDUSTRIAL NON-HAZARDOUS LOCATIONS A &



### INFORESIGHT CONSUMER PRODUCTS INC.

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# **IMPORTANT INSTRUCTIONS**



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When using electrical INFRARED HEATERS, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

#### 1. Read all instructions before using this heater.

- 2. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may result in fire, electric shock, or injury to persons.
- 3. This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. If provided, use handles when moving this heater. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least 6 feet (1.8m) from the front of the heater and keep them away from the sides and rear.
- 4. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- 5. Always disconnect the supply to the permanently connected heater when not in use.
- 6. Do not operate any heater with a damaged cord after the heater malfunctions, has been dropped or damaged in any manner. Return heater to authorized distributor for examination, electrical or mechanical adjustment, or repair.
- 7. This heater is not intended for use in bathrooms, laundry areas and similar locations. Never locate heater where it may fall into a bathtub or other water container.
- 8. Do not insert or allow foreign objects to enter any opening as this may cause an electric shock or fire, or damage the heater.

- 9. To prevent a possible fire, do not block openings in any manner.
- 10. A heater has hot parts inside. Do not use it in areas where gasoline, paint, or flammable liquids are used or stored.
- 11. Do not cover or otherwise obstruct the heater.
- 12. Do not touch the heater during operation as the body becomes hot. Particular attention must be given where children and invalids are present.
- 13. For all outdoor installations the heater must be mounted under shelter.

# SAVE THESE INSTRUCTIONS

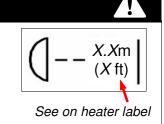
#### **GROUNDING INSTRUCTIONS**

The 120 volt heater and 208 / 240 volt heaters have  $6\frac{1}{2}$  feet (2 m) of cord from the terminal box which must be permanently connected.



# WARNING: RISK OF FIRE

Keep combustible material such as furniture, papers, clothes and curtains at least the distance shown on heater label from the front of the heater and away from the sides and rear.



#### INTRODUCTION

This range of Ziro heaters contain long-life ceramic emitters which are highly efficient and durable. The Ziro heaters are designed for indoor use and outdoor (under shelter use) only.

Please read the caution notes and following instructions carefully before use. The safety of this heater is guaranteed only by its correct usage in accordance with these instructions, therefore it is recommended that they are retained for future reference.

## CAUTION



Before using this appliance:

- 1. Check that the voltage indicated on the units rating label corresponds to the mains supply voltage.
- 2. Do not install the heaters less than the minimum height from the floor as specified below in the specification Table. 1.
- 3. WARNING This appliance must be grounded!
- 4. **WARNING** During installation ensure the mains cord does not touch the body of the heater or pass in front of the heater and secure in place as the heater will get hot during use.

#### INSTALLATION

The 120V heater and 208 / 240V versions of the heaters are fitted with a supply cord (no plug) measuring  $6\frac{1}{2}$  feet (2 m) for permanently connecting.

- **A WARNING:** Wiring procedures and connections should be in accordance with the National Electric Code (NEC) and local codes (Canada and USA).
- ▲ WARNING: If the supply cord becomes damaged, it must be immediately replaced by a certified electrician.
- ▲ CAUTION: Always disconnect electric power supply before working on the heater to prevent electric shock.
- **A**CAUTION: Please observe the minimum safe distance between the heater body and any inflammable surfaces.
- **NOTE:** Installation should be carried out by a qualified electrician to all local, state/ provincial and National Electrical Codes (NEC).

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ECI	le 1
SP	Tab

Ceramic Emitter Configuration 120V   Voltage 120V   Total Power 1300W	DOUBLE				)	ې ۲
			TRIPLE	ЫЕ	QUAD	AD
			208V /	208V / 240V		
	975W / 1300W	1200W / 1600W	1465W / 1950W	1800W / 2450W	1950W / 2600W	2405W / 3250W
Current 10.8A	4.7A / 5.4A	5.8A / 6.7A	7.0A / 8.1A	8.7A/ 10.2A	9.4A / 10.8A	11.6A / 13.5A
Min. mounting height from floor		26	79in (200cm)	_		
Min. distance from ceiling 🔺		7	11¾in (30cm)	~		
Min. distance from side wall		5	20in (50cm)			
37 in     Dimensions - W × H × D   (94 cm)	37 in × 4.3 in × 6.7 in 94 cm × 11 cm × 17 cm)	7 in 7 cm)	51in × 4.3in × 6.7in (130cm × 11cm × 17cm)	1in × 4.3in × 6.7in (130cm × 11cm × 17cm)	65in × 4.3in × 6.7in (166cm × 11cm × 17cm)	in × 6.7in < 11cm × :m)
Weight 11	11.4lbs (5.2kg)	(	15.7lbs (7.1kg)	(7.1kg)	19.6lbs (8.9kg)	(8.9kg)

#### MOUNTING

# CAUTION

Fully disconnect the heater from the mains electric power supply when mounting or adjusting the heater position.

#### WALL MOUNTING

- The Ziro heater should only be mounted in a horizontal manner (see Fig. A).
- Do not position the heater at an angle . more than 45° from the vertical mounting surface as shown in Fig. A.
- Do not attempt to adjust the heater while hot or switched on!
- Observe the minimum safe distance the heater body between and inflammable surfaces and objects when mounting.
- Refer to Table 1 for the recommended positioning of the heater.

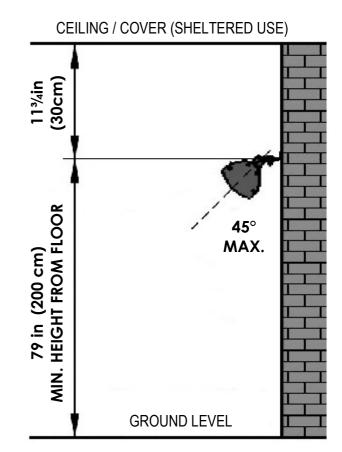


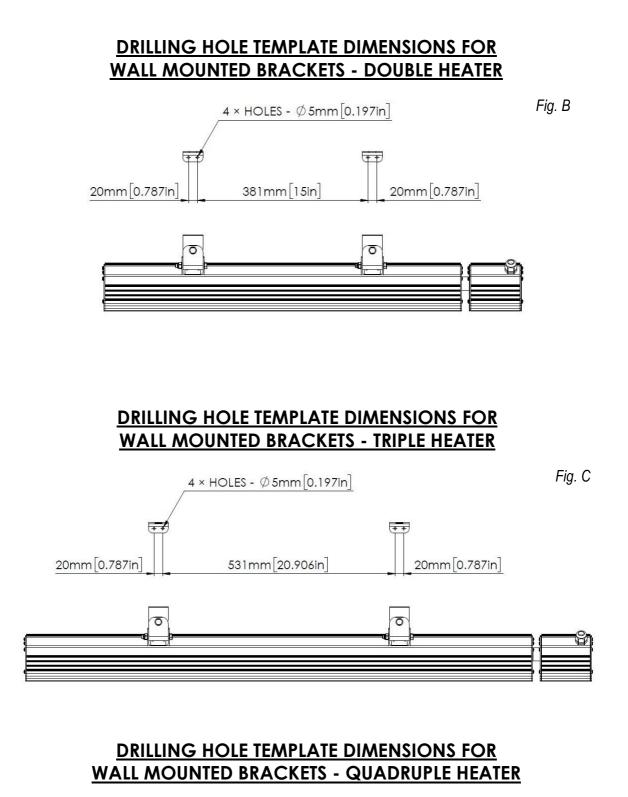
Fig. A

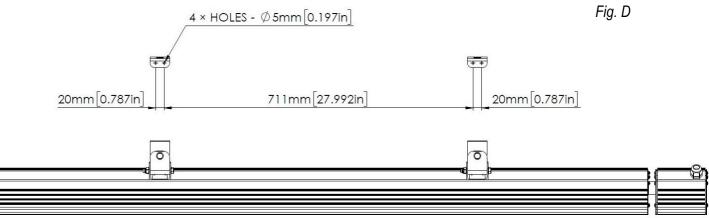
1. Securely fasten the Ziro heater brackets to the mounting surface using the fixing holes in the brackets. See Fig's B, C and D (page 7) for mounting hole centres of the brackets whereby a template can be made. Please refer to Table 1 for recommended positioning of the heater.

2. Set the angular position to 45° to the vertical wall by tightening the fixing bolts on the brackets at the rear of the heater.

3. Ensure the power cable is not resting on the heater body or mounting brackets. Also ensure it is away from the front of the heater.

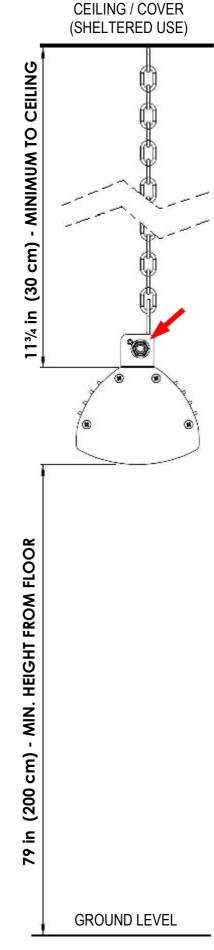
4. Ensure access is available to the side of heater for ceramic emitter replacement procedure to be safely carried out (see page 9).





#### **CEILING HANGING - ALL MODELS**

- The Ziro heaters can be ceiling hung with chains or cables measuring a minimum of 11<sup>3</sup>/<sub>4</sub> in (30 cm) long.
- When ceiling hanging the Ziro heater, ensure the minimum distance from the ceiling is adhered to as shown in Fig. E. and maintain the minimum distance to the floor.
- Please refer to Table 1 for the recommended positioning of the heater with regards to minimum distances.
- Always allow the heater to cool before attempting to reposition/move. Never attempt to move the heater while it is switched on!
- Observe the minimum safe distance between the heater body and inflammable surfaces and objects when mounting.
- Do not fix to a ceiling with the L-shaped wall brackets supplied.
- 1. Please refer to Table 1 for recommended positioning of the heater. When hanging from a ceiling, two chains or cables of equal length and gauge are required and should be used with fixings that are adequate to hold the weight of the heater.
- Attach the heater assembly to the chains/cables via the hole in the centre of the middle bracket (ensure L-shaped wall brackets are removed) as shown in Fig. E. and ensure the heater faces DIRECTLY DOWN when hanging.
- 3. Ensure the power cord is <u>not</u> resting on the heater body or mounting brackets. Also ensure it is away from the front of the heater.



#### MAINTENANCE

- **NOTE:** In the event of heater failure, or for spare parts or advice, please contact your distributor or place of original purchase.
- ▲ CAUTION: Disconnect electric power supply (120V, 208V or 240V) before commencing any maintenance procedure including cleaning. Cleaning should be done with a damp cloth only.

#### YOUR REPLACEMENT CERAMIC EMITTER

It is very important that your replacement ceramic emitter is exactly the same as the one it was supplied with. Fitting non-compatible ceramic emitters could cause the heater to become dangerous.

#### **REPLACING A CERAMIC EMITTER**



Disconnect the heater from the mains electric power supply (120V, 208V or 240V) before any attempts are made to replace the ceramic emitter. Contact your distributor for the correct replacement ceramic emitter quoting model type and rating from the rating label. It is important that you read through the ceramic emitter replacement procedure before commencing.

CAUTION

**1**. Disconnect the mains electric power supply to the heater and ensure the heater and ceramic emitters are cool.

**2**. Remove the  $4 \times$  Phillips head screws from the flat end plate (opposite end to the permanently connected mains cord), see Fig. P.

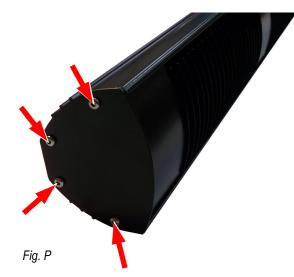




Fig. Q

**3**. Slide the front trim piece out of the body noting which channel it is contained within (for refitting). See Fig. Q.

**4**. Slide the guard out of the body noting it is contained within the same channel as the front trim piece. See Fig. R.

**5**. If multiple ceramic emitters have to be replaced, continue to slide the front trim pieces and guards out of the body until all ceramic emitters are accessible noting the order in which the trims and guards go. See Fig. S.

**6**. Locate the 2 × Phillips screws either side of the ceramic emitter and remove (ideally with a magnetic tipped screwdriver which will also aid refitting) and take care to retain the spring/split washers. See Fig. T.



Fig. R

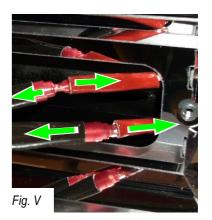


Fig. S



**7**. Pull the reflector holding the ceramic emitter down to expose the wiring (Fig. U). The ceramic emitter can be disconnected by first pulling the sleeving back to reveal the in-line connectors as shown in Fig. V.

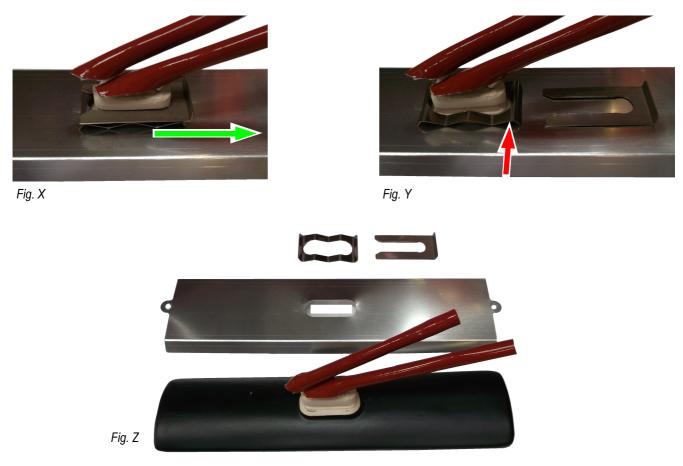




**8**. Carefully pull the in-line connectors apart to remove the ceramic emitter as shown in Fig. W. Note, when refitting, the connectors must be fully pushed together and you should feel a dull click and the sleeving should also be replaced back over the connectors. Also take note of the emitter wire colors and match.



**9**. Working on a flat surface, slide the ceramic emitter holding U-clip away from the ceramic emitter raised wiring boss as shown in Fig. X. *Note. the sleeving can be removed at this point before proceeding*. Remove the spring clip (note it's orientation as shown in Fig Y) from the reflector and lift the reflector off the ceramic emitter as shown in Fig. Z



**10**. Refit in reverse order and repeat for any other ceramic emitters that need to be replaced.

# Ziro Range



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TRIPLE (208V / 240V)



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# IMPORTANT - SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



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