

# EASY RADIANT WORKS

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## Installation & Operating Instructions

“EZ DUZZIT” Models ED-25 S, ED-25 U, ED-40 S and ED-40 U  
ED-40 S-LTH and ED-40 U-LTH (2 stage heating)

Notify your carrier or Easy Radiant Distributor immediately of any damage or shortages in your shipment. Only licensed individuals or firms qualified in the installation of gas burning appliances shall install this equipment. All installations must be inspected upon completion by the enforcing agency. Easy Radiant Works accepts no responsibility for damage caused by improper installation of this appliance. Non-conformance with installation instructions will void warranty.

The installation must comply with local codes and CAN / CGA B 149 for gas burning appliances. Field wiring and units must be electrically grounded in accordance with the Canadian Electrical Code CSA Standard C22.1 Part 1. This is not an explosion – proof heater. Where there is the possibility of exposure to flammable vapours, consult the local fire marshal, the fire insurance carrier or other authorities for approval of the proposed installation.

**Warning: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions before installing or servicing this equipment.**

## RESPONSIBILITY OF INSTALLERS

EZ DUZZIT heaters are to be installed according to layout drawings together with these instructions, cited codes and regulations. All EZ DUZZIT heaters must be vented to the outside. These installation and operating instructions must be left with heater for future reference.

### FOR YOUR SAFETY

If you smell gas:

1. Open windows
2. Don't touch electrical switches
3. Extinguish any open flame
4. Immediately call your fuel supplier

### CONSIGNES DE SECURITE

Si vous sentez une odeur de gaz:

1. Ouvrez les fenetres
2. Ne touchez pas aux interrupteurs electriques
3. Eteignez toute flamme nue
4. Contactez immediatement compagnie de gaz

Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

Il est interdit d'utiliser des liquides inflammables ou degageant de vapeurs inflammables, a proximite de tout appareil fonctionnant au.

## SPECIFICATIONS

Input Ratings: 0-4500 ft. above sea level

ED-25S & ED-25U...25,000 BTU

ED-40S & ED-40U...40,000 BTU

ED-40SLTH & ED-40ULTH...40,000 BTU high input, 30,000 BTU low input

Manifold Gas Pressures:

Natural Gas 3.5" W.C. – L.P. (Propane) 11.0" W.C.

“LTH” models...Natural Gas 3.5" W.C. (high) & 2.2" W.C. (low)

“LTH” models...L.P. (Propane) 10.0" W.C. (high) & 6.4" W.C. (low)

Minimum Inlet Pressures:

Natural Gas 3.5" W.C. & L.P. (Propane) 10.0" W.C.

Maximum Inlet Pressures:

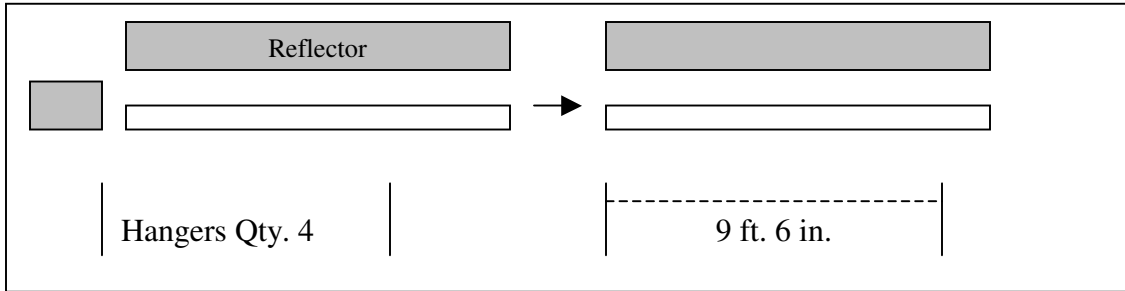
Natural Gas 7.0" W.C. & L.P. (Propane) 14.0" W.C.

Electrical: 120 volt, 60 cycle, 3 amp.

This appliance must be grounded in accordance with ANSI / NFPA 70

## Installation Instructions for Straight “S” Series Heater

“S” series straight heaters consist of burner, 2-10 ft. radiant tubes, 2-10 ft. reflectors and four chrome plated hangers. For access to controls, remove screw in center of doors and swing open.



The chrome-plated hangers included with the straight model “EZ DUZZIT” heater have two available suspension rings. If the reflector is to be flat the hangers should be suspended from the top ring. If the reflectors are to be angled, the hangers should be suspended from the side ring. Using the chain provided, suspend the four hangers from the ceiling ensuring that the radiant tube will be parallel to the floor, with strict adherence to the clearances to combustibles as listed in this manual and the rating plate on the burner. Suspend the hangers from either the top or side ring on the hanger as desired.

Once the hangers are suspended the radiant tubes can be placed in the hangers ensuring that the sight glass is pointing down. Ensure that the enlarged end of the primary tube, with the setscrew is at the desired location for the burner. Fit the primary tube into the enlarged end of the secondary tube. Install the screw provided through the predrilled hole in the secondary tube and into the primary tube in order to secure the two tubes together. With the tubes in place, the reflectors can now be laid into the hangers.

Remove the protective plastic cap from the nozzle of the burner and place the nozzle end of the burner into the enlarged end of the radiant tube. Tighten the setscrew so as to secure the burner into place.

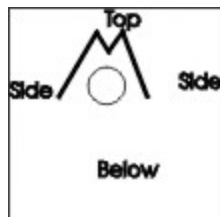
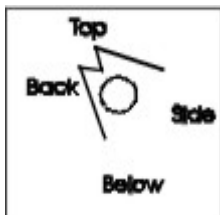
For installation instructions in the United States this appliance must not be installed less than 8 ft. above the floor. In Canada it cannot be installed less than 7 ft. from the floor. It must be installed with strict adherence to clearances to combustibles.

Install thermostat approximately 5’6” above floor and not located in the direct ray of the heater. Remove the jumper wire on the burner (marked 24 V thermostat) and using 24 Volt wiring connect from terminals on the burner to the thermostat.

### Minimum Clearances to Combustibles

Clearances to combustibles shall be measured from the top surface of the combustible floor, carpet or tile. This appliance must be located away from furniture and draperies. The heat exchanger will reach high temperatures and care must be taken to prevent burns. Children should be carefully supervised when in the same room as this heater. Clearances to combustibles must always be maintained. Do not touch heat exchanger while heater is in operation.

Clearances to combustibles from radiant tube	Top (Above Reflector)	Back (Back of angled reflector)	Sides	Below (Reflectors flat)	Below (Reflectors angled)
All Models	4”	4”	18”	36”	30”



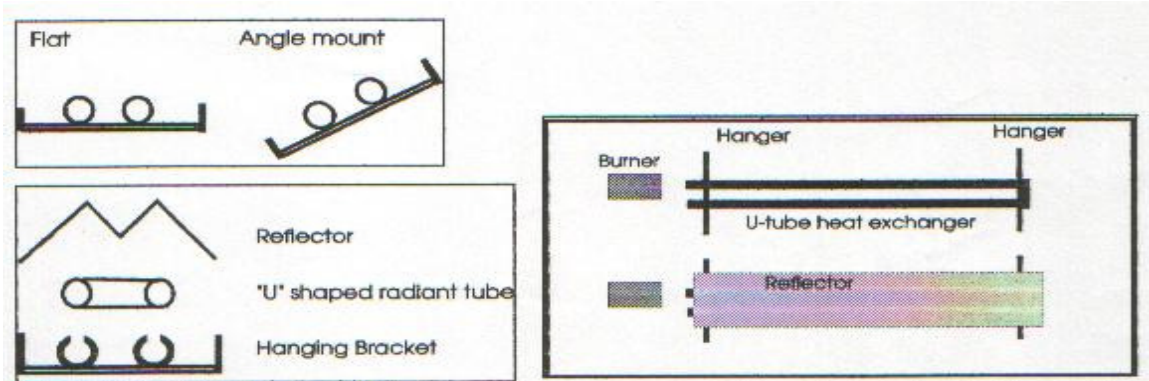
## General Installation Procedure

Thank you for purchasing the “EZ DUZZIT” residential garage heater. You have purchased either an “S” straight model or “U” U-shaped model. Follow the appropriate installation instructions for the model you are installing.

“EZ DUZZIT” residential garage heaters are self-contained heating appliances that require gas supply & 120 V electrical supply. Qualified individuals must do all gas and electrical connections with strict adherence to all applicable codes. The heaters must be vented to the outside (through the wall or roof). Ducting of combustion air from outside is optional, but may be necessary in certain applications (see combustion air venting).

### Installation Instructions for U-shaped “U” Models

“U” shaped models consist of burner, U-shaped radiant tube heat exchanger, 2 hanging brackets and reflectors. For access to controls, remove screw in center of doors and swing open.



“U” models must be suspended with the chain provided and suspended at each of the four suspension points. It should never be lifted or suspended by the burner or reflector. Using the chain provided suspend the radiant tube, so that it is parallel to the floor making sure to comply with necessary clearances to combustibles and clearances to the floor. The length of chain may be adjusted, so that the radiant tube is flat or angle mounted.

Once the radiant tube is hanging in place, slide the reflector into place, so that it is resting in the hanging brackets. Remove the plastic protective cover from the nozzle of the burner and slide the burner into the enlarged end of the U-shaped heat exchanger. Secure with setscrew provided.

For installation in the United States this appliance must not be installed less than 8 ft. above the floor unless equipped with optional protective grille (available from the manufacturer), in which case it can be installed as low as 6 ft. to the floor. In Canada it cannot be installed less than 7 ft. from the floor and the protective grille is not needed. It must be installed with strict adherence to clearances to combustibles.

Install thermostat approximately 5'6" above floor and not located in the direct ray of the heater. Remove the jumper wire on the burner (marked 24 V thermostat) and using 24 Volt wiring connect from terminals on the burner to the thermostat.

### Gas Connection

A qualified and licensed technician must do all gas piping and connections. All gas piping must be done in accordance with all local codes and CAN / CGA B 149 and ANSI standards Z223.1

A 1/8" NPT plugged tapping accessible for test gauge connection must be supplied immediately upstream of the gas supply connection to the heater. A drip leg must be installed in the gas line at the heater connection.



## Troubleshooting Guide

1. Check the system thermostat to make sure it is in an active call for heat. If the heater is malfunctioning, do not recycle the thermostat at this time. Do not interrupt the power to the heater at this time.
2. Gain access to the controls by removing the screw in the center of the doors and swing both doors to the open position.
3. Observe the LED indicator on the SV95 controller. Check and repair the system as noted in the following table.

LED STATUS	INDICATES	CHECK AND REPAIR
OFF	No power to system control	Check line voltage input power at L1 and L2. Check to see that system wiring harness is in good condition and securely connected at both ends
BRIGHT / DIM	Normal Operation This indication shows whatever the system is powered, unless some abnormal event has occurred.	Not applicable
2 Flashes	Airflow proving switch remains closed longer than 30 seconds after a call for heat begins. Combustion air blower is not energized until "open" air proving switch is detected.	Check to see if airflow proving switch is stuck closed. Check to see if airflow-proving switch is miswired or jumpered.
3 Flashes	Airflow proving switch remains open longer than 30 seconds after combustion air blower is energized. System goes into 5-minute delay period, with combustion air blower off. At the end of the 5-minute delay, another ignition cycle will begin.	Ignition system control switch must be in the ON position. Check airflow proving switch operation, tubing and wiring. Check for obstructions in appliance air intake or exhaust flue system.
4 Flashes	Limit string open.	Not applicable.
5 Flashes	Flame signal sensed out of proper sequence.	Not applicable.
6 Flashes	System Lockout  After 1-hour lockout reset delay, control will reset and initiate a new ignition sequence if the call for heat is still present.	Gas supply is turned off, or at too low a pressure to operate appliance. Damaged or broken HSI element. Appliance not properly earth grounded. Check to see that HSI wiring and flame sensor wiring is in good condition and properly connected.