



LIR BAKE-OUT CONTROLLER SYSTEM

The Frontier TVAC LACO Infrared (LIR) Bake-out Controller System gives you control of your vacuum chamber bake-out process. This system controls the power to the heat source and uses thermocouple feedback to regulate the temperature of the vacuum chamber. The heaters are small, high power quartz lamps that operate inside of the vacuum chamber. These heaters harness the radiant heat emitted by the IR lamps, enabling them to swiftly achieve surface bake-out temperatures compared to alternative surface heating methods.

FEATURES

- Controls one or two infrared bulb heater assemblies
- Variable control of output voltage in manual or auto mode with PID control
- Thermocouple-regulated temperature controller
- Independent over-temperature controller
- Available in 120 VAC or 240 VAC
- Use as a stand-alone or integrate with the Frontier HVC-3500 TVAC controller
- Each IR bulb assembly includes one IR bulb, a CF 2.75" flange feedthrough, and cable to connect to the controller



IR bulb inside chamber



CF 2.75" flange feedthrough

BENEFITS

An IR bakeout lamp serves as a crucial tool in the preparation of a vacuum chamber, playing a pivotal role in eliminating environmental contaminants. The IR bake-out system helps to:

- Accelerate the outgassing process by heating the chamber components
- Reduce the presence of volatile substances, ensuring a cleaner vacuum environment
- Decrease the amount of time required for the vacuum system to reach the desired vacuum level
- Uniformly heat the chamber components and avoid thermal stresses

IR BAKE-OUT CONTROLLER KIT SPECS

	LIR-2000-2	LIR-2000-1	LIR-1000-2	LIR-1000-1
POWER REQUIREMENTS	240 V 20 amp 50/60 hz	240 V 10 amp 50/60 hz	120 V 20 amp 50/60 hz	120 V 10 amp 50/60 hz
BULB ASSEMBLIES/WATTAGE	2ea 2000 watt bulbs	1ea 2000 watt bulbs	2ea 1000 watt bulbs	1ea 1000 watt bulbs
CONTROLLER INPUTS	x2 - Type K thermocouple			
CONTROLLER DIMENSIONS	12" W x 9.5" H x 12" D			