BROODERS and HEATERS

Chore-Time Brings Your Birds the Warmth and Comfort of the Sun



- floor heat
- Greater temperature control

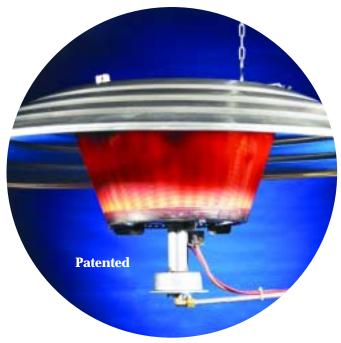
clean and hang

Easy to

- features
- **New ignition** options

Chore-Time's 42,000 and 40,000 BTU Infrared Brooders The Ultimate in Reliable, Efficient Radiant Heat

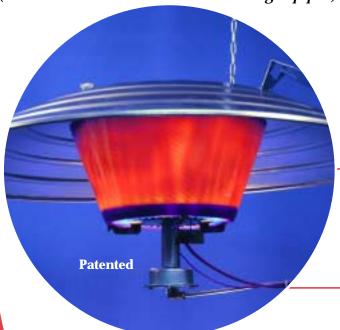
CHORE-TIME Ultra-Ray® HI-BEAM Infrared Brooder



Heats an average of 800 to 1000 square feet (74.3 to 92.9 square meters) per brooder.

CHORE-TIME ULTRA-HP™ PLUS High-Capacity High-Pressure Brooder

(For installations with small diameter gas pipes.)



Heats an average of 800 to 1000 square feet (74.3 to 92.9 square meters) per brooder.

Spreads the Heat



Broad Comfort Zone –

Variable and Reliable Heat Distribution

- * Variable Heat is most intense directly under brooder with concentric rings of diminishing heat so birds can choose where they are most comfortable.
- * Reliable Our new heating systems are backed by 80 years of experience in heater innovation and design.

Broad Heat Pattern and Volume of Heat

- * Provides a broad comfort zone with a high volume of heat to the floor and a wide pattern of heat distribution.
- * Design of emitter and canopy work together to distribute heat to a larger area.

Maximum Fuel Efficiency

* Infrared transmission of heat efficiently warms floors and birds without the need to "superheat" the air – uses less fuel.

Easy to Clean and Maintain

- Removable air intake, drop-down orifice and patented horizontal pilot are designed for easy cleaning and maintenance with no tools and minimal hardware removal.
- * Stainless steel emitter and inner cone protect internal fiber insulator during power washing (be sure to cover the control before power washing). Units may also be cleaned using compressed air.
- * Stainless steel burner is corrosion-resistant and stays clean.

* No air inlet filter needed.

- * Operate with higher gas pressures to save piping costs.
- * Ideal for retrofit in houses with small gas piping.



BROODER SPECIFICATIONS

Туре	Large Infrared Brooder	High-Capacity High-Pressure Brooder (Unit is shipped pre-assembled)	Small Infrared Brooder	Convection Brooder	High-Pressure Brooder (Unit is match lit and does not have a pilot)			
Unit Name	ULTRA-RAY® HI-BEAM	ULTRA-HP™ PLUS	ULTRA-RAY® LITE-BEAM	ULTRA-VECTION™	ULTRA-HP™			
Heating area per unit	800-1000 sq. ft. (74.3-92.9 m ²)	800-1000 sq. ft. (74.3-92.9 m ²)	250-400 sq. ft. (23.2-37.2 m ²)	250-400 sq. ft. (23.2-37.2 m ²)	200-350 sq. ft. (18.6-32.5 m²)			
Capacity (maximum per hour)								
Pilot Ignition (Note: Brooder pilots burn at 2,000 BTUs per hour and can withstand 5 mph wind speed.)	42,000 BTU (10,584 Kcal)	Not Available	25,000 BTU (6,300 Kcal)	31,000 BTU (7,811 Kcal)	17,000 BTU (4,284 Kcal)			
Direct Spark Ignition	40,000 BTU (10,080 Kcal)	40,000 BTU (10,080 Kcal)	23,000 BTU (5,796 Kcal)	29,000 BTU (7,308 Kcal)	Not Available			
Modulation Range								
Range per Hour	Not Available	Not Available	10,000-25,000 BTU (2,520-6,300 Kcal)	Not Available	5,000-17,000 BTU (1,261-4,284 Kcal)			
Gas Consumption (maximum) Pilot Ignition								
LP	0.46 gph (1.74 l/h)	Not Available	0.27 gph (1.02 l/h)	0.34 gph (1.29 l/h)	0.19 gph (0.72 l/h)			
Natural Gas	39.9 cfh (1.13 m ³ /h)	Not Available	23.8 cfh (0.67 m ³ /h)	29.3 cfh (0.83 m ³ /h)	16.2 cfh (0.46 m ³ /h)			
Gas Consumption (maximum) Direct Spark Igni	tion	*LP Brooder with	Natural Gas Conversion Kit					
LP	0.44 gph (1.67 l/h)	0.44 gph (1.67 l/h)	0.25 gph (0.95 l/h)	0.32 gph (1.21 l/h)	Not Available			
Natural Gas	37.8 cfh (1.07 m ³ /h)	37.8 cfh (1.07 m ³ /h)*	21.9 cfh (0.62 m ³ /h)	27.4 cfh (0.78 m ³ /h)	Not Available			
Gas Pressure Requirements (measured at pressu			Natural Gas Conversion Kit					
LP	11" WC (27.5 Mbar)	5 PSI Max. (350 Mbar Max.)	11" WC (27.5 Mbar)	11" WC (27.5 Mbar)	5 PSI Max. (350 Mbar Max.)			
Natural Gas	7" WC (17.5 Mbar)	5 PSI Max.* (350 Mbar Max.)	7" WC (17.5 Mbar)	7" WC (17.5 Mbar)	5 PSI Max. (350 Mbar Max.)			
Heater Size, Weight & Assembly Information	,	,	,	, , , , , , , , , , , , , , , , , , , ,	,			
William Combat Hea	18-26 lbs.	18-26 lbs.	18-28 lbs.	15-32 lbs.	15-19 lbs.			
Weight per Complete Unit	(9.1-11.8 kg)	(9.1-11.8 kg)	(8.2-12.7 kg)	(6.8-14.5 kg)	(6.8-8.6 kg)			
Canopy Width Options (Aluminum or Galvanized)	34 in. (86.4 cm)	34 in. (86.4 cm) Heavy-Duty Aluminum Only	34 or 46 in. (86.4 or 116.8 cm)	34 or 46 in. (86.4 or 116.8 cm)	24 in. (61.0 cm)			
Height	14 in. (35.6 cm)	14 in. (35.6 cm)	17.5 in. (44.5 cm)	20.5 in. (52.1 cm)	13.5 in. (34.3 cm)			
Operational Guidelines for Brooding Area (adjus								
	60-72 in.	60-72 in.	30-36 in.	30-36 in.	30-36 in.			
Height from floor (measure from edge of canopy)	(152.4-182.9 cm)	(152.4-182.9 cm)	(76.2-91.4 cm)	(76.2-91.4 cm)	(76.2-91.4 cm)			
Space between brooders/side	25-40 ft. (7.6-12.2 m)	25-40 ft. (7.6-12.2 m)	15-25 ft. (4.6-7.6 m)	10-20 ft. (3.0-6.1 m)	10-20 ft. (3.0-6.1 m)			
Minimum Clearance to Combustibles	· · · · · · · · · · · · · · · · · · ·	, ,	, ,	, ,	, ,			
Sides of brooder/heater	36 in. (90 cm)	36 in. (90 cm)	30 in. (75 cm)	26 in. (65 cm)	36 in. (90 cm)			
Above brooder/heater	14 in. (35 cm)	14 in. (35 cm)	12 in. (30 cm)	10 in. (25 cm)	14 in. (35 cm)			
Below brooder/heater	48 in. (120 cm)	48 in. (120 cm)	30 in. (75 cm)	30 in. (75 cm)	26 in. (65 cm)			
	Control Options (Electrical Requirements - Direct Spark Zone Control 24 VAC - Pilot Zone Control 24 VAC)							
Electronic Zone Control (Maximum brooders per zone - 40 pilot or 18 direct spark)	Pilot or Direct Spark	Direct Spark (120 volts)	Pilot or Direct Spark	Pilot or Direct Spark	Not Applicable			
On-Off Individual Control	Pilot	Not Applicable	Pilot	Pilot	Not Applicable			
Modulating Individual Control	Not Applicable	Not Applicable	Pilot	Pilot	Not Applicable			
Manifold Zone Control (Maximum brooders per zone - 20)	Not Applicable	Not Applicable	Not Applicable	Available	Available			

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CSA (Canadian Standards Association) approved models available.
All models meet CSA standards for low carbon monoxide.

RELIABLE CONTROL OPTIONS

		ZONE CONT Allow one thermosta regulate all brooders in	INDIVIDUAL CONTROLS Allow control of each individual brooder independently of the others.			
	Electronic (Pilot)	Electronic (Direct Spark)	Electronic High-Pressure (Direct Spark)	Manifold	Modulating (Pilot)	On-Off (Pilot)
bro	ounted on each individual poder with up to 40 poders per zone	Mounted on each individual brooder with up to 18 brooders per zone	Mounted on each individual brooder with maximum per zone determined by thermostat or control used	One manifold per zone with up to 20 brooders per zone	Mounted on each individual brooder	Mounted on each individual brooder
	cludes 100% safety t-off valve	Reliable ignition uses less fuel with no pilot and gives three tries before lockout	Reliable ignition uses less fuel with no pilot and gives three tries before lockout	Available with step rate control or modulating	Combines a snap-action thermostat with 100% safety cut-off valve	Combines a snap-action thermostat with 100% safety cut-off valve
24	V AC	24 V AC	120 V AC	120 V AC	No electricity needed	No electricity needed
bat	n be powered by a ttery back up system generator	Can be powered by a back-up generator	Can be powered by a back-up generator		Modulates between maximum and minimum BTU rates before snapping off at control setting	Snaps from high to off based on control setting

Chore-Time's 17,000 to 31,000 BTU Brooders

Backed by 80 Years of Heater Innovation and Design Experience

CHORE-TIME ULTRA-VECTION™ Convection Brooder

Convection Heating with Unique Spiral Ceramic Radiant for Added Efficiency

Reliable Heat Distribution

* Two canopy size options for a heat area that is broad or more focused.

Fuel-Efficient Spiral Ceramic Radiant

- * Fuel-efficient, spiral ceramic radiant gets more heat down to the birds quickly (compared to smooth ceramic radiants). A fiber radiant option is also available.
- * Jet burner burns cleanly and efficiently.

Easy to Clean and Maintain

* Easy access to orifice in jet burner and patented horizontal pilot for easy cleaning and maintenance with no tools. Compressed air cleaning is recommended - do not power wash.

CHORE-TIME Ultra-Ray® **LITE-BEAM Infrared Brooder**

An Efficient and Reliable Mid-Range Radiant Heater

Reliable Heat Distribution

* Two canopy size options for a heat area that is broad or more focused.

Maximum Fuel Efficiency

* Efficient infrared heating uses less fuel because the floor stays warm at cooler room temperatures.

Easy to Clean and Maintain

* Removable air intake, drop-down orifice and patented horizontal pilot are designed for easy cleaning and maintenance with no tools and minimal hardware removal. Compressed air cleaning is recommended - do not power wash.

CHORE-TIME ULTRA-HP™ **High Pressure Brooder**

Reliable, Efficient Radiant Heat for Installations with Small Diameter Gas Pipes

Reliable Heat Distribution

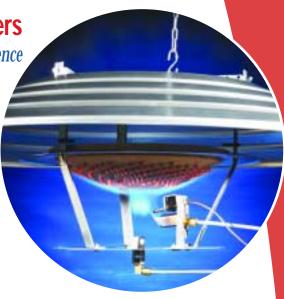
* Operate with higher gas pressures to save piping costs - ideal for retrofit in houses with small gas piping.

Maximum Fuel Efficiency

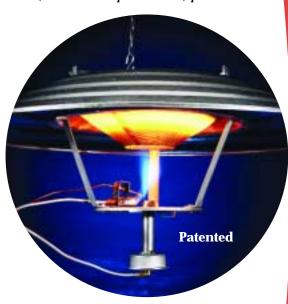
☀ Efficient infrared heating uses less fuel because the floor stays warm at cooler room temperatures.

Easy to Clean and Maintain

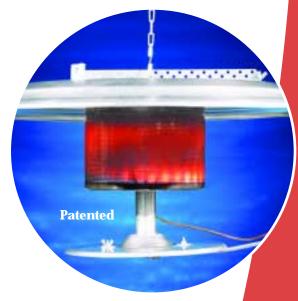
- * Designed for easy cleaning and maintenance with no tools and minimal hardware removal. Drop-down orifice for cleaning, and no air inlet filter or pilot to maintain.
- * Stainless steel emitter and inner cone protect internal fiber insulator during power washing (be sure to cover the control before Heats an average of 200 to 350 square feet power washing). Units may also be cleaned using compressed air.



Heats an average of 250 to 400 square feet (23.2 to 37.2 square meters) per brooder.



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(18.6 to 32.5 square meters) per brooder.

Made to Work. Built to Last.®

Advantages of Chore-Time Brooders Compared to Tube-Style Heaters

- * Losing one brooder reduces overall heating capacity only a small amount compared to tube heaters.
- * Easily move one or more brooders to another location in the house in just a few minutes if needed. (Assumes gas supply is already in place.)
- Some Chore-Time brooder models operate without electricity – keeps your birds warm even during power interruptions.
- * Chore-Time's brooder hanging height makes units easily accessible for routine maintenance.

Reasons to Consider a New Heating System

- * Install reliable, fuel-efficient Chore-Time heaters in new houses.
- * Replace worn-out brooders and space heaters.
- * Upgrade your BTU output and fuel efficiency with newer models.
- Gain control of your heat with reliable CHORE-TRONICS® Whole-House Electronic Controls

About Heat

There are two main types of heat used in poultry and livestock facilities – radiant (infrared heat) and convection (hot-air heat).

Radiant heat is like the sun's heat and is transferred

Radiant Heat



Warms floor

by infrared heat waves. It is very efficient because it does not heat the building's air in order to heat the objects in the building. Instead, infrared waves heat the objects they are directed toward. In the case of a radiant brooder, the heat waves emitting from the heater's glowing surface heat

the birds and the litter. A small amount of convection heat is also produced.

With convection heat, the majority of the brooder's BTU input is transferred to the air through convection.

This means that most of the air in the building must be warmed to obtain the desired temperature at bird level. A space heater is an example of a 100 percent convection heater. The heater blows heated air into the house, and the birds and litter will not be warmed until the majority of the air volume in the house has been heated.

Convection Heat



Warms room

Key Chore-Time Brooder Features



Patented Space-Saver Hanging Bracket

Low-profile "T"-hanger suspension is designed for easy field installation and easy brooder leveling adjustment.

Multi-Location Sensing Bulb Placement

Multi-location bracket for heat sensing bulb allows flexibility in positioning for more precise floor temperature management.

Mount the sensor on top of or under the bracket, in various positions from very close to the brooder to farther away from the brooder, or extend the sensor position beyond the bracket.



Three-Layer Emitter Assembly

Standard on 42,000; 40,000 and 17,000 BTU brooders, the assembly consists of a stainless steel emitter, stainless steel inner cone, and fiber insulator. The inner cone completely shields the insulator, making power washing possible.

Patented Horizontal Pilot

Our patented horizontal pilot improves reliability, maintenance, and combustion. The horizontal pilot position is less prone to clogging from dust and dirt. The pilot shield that protects the orifice is easily removed without tools for standard maintenance.



Sturdy Canopy Design

Spun aluminum or steel canopies feature a beaded, "U"-channel structure for strength and durability.

Heat Shield

(Popular for use with turkey poults.) The heat shield is standard on all brooders 31,000 BTUs and under and is available as an option on our higher BTU brooders. Use of the heat shield reduces the intensity of the heat directly under the brooder and spreads the brooder's warmth further. The temperature sensing bulb may be located under the heat shield in turkey applications.





CHORE-TIME DURA-THERM™ Space Heater

High-BTU Output Convection Heating

Reliable Heat Distribution

- Design is backed by 80 years of experience in heater innovation and design.
- * Durable galvanized steel cabinet with stainless steel option and heat-resistant aluminized burn chamber.

Maximum Fuel Efficiency

- * High-performance cast-iron burner provides efficient combustion.
- * Multiple ignition and fuel source options.

Easy to Clean and Maintain

* Removable panels and controls compartment are designed for easy cleaning and maintenance. Compressed air cleaning is recommended – do not power wash.



Heats an average of 2500 to 4000 square feet (232.3 to 371.6 square meters) per heater.



Outside Mount Kit permits unit to be mounted outside the house – draws in more fresh air, uses less space in house and adds less inhouse humidity. An air deflector is also available for layer applications to direct air along walls instead of blowing directly on birds.

SPACE HEATER SPECIFICATIONS

Unit Name	DURA-THERM™		
Heating area per unit	2500-4000 sq. ft. (232.3-371.6 m ²)		
Capacity (maximum per hour)			
	225,000 BTU (56,700 Kcal) - LP		
Pilot, Direct Spark or Hot Surface Ignition	200,000 BTU (50,400 Kcal) - Nat. Gas		
Gas Consumption (maximum) - LP			
Pilot Ignition	2.48 gph (9.39 l/h)		
Direct Spark or Hot Surface Ignition	2.46 gph (9.31 l/h)		
Gas Consumption (maximum) - Natural Gas			
Pilot Ignition	215.7 cfh (6.11 m ³ /h)		
Direct Spark or Hot Surface Ignition	213.8 cfh (6.05 m ³ /h)		
Gas Pressure Requirements (measured at inlet)			
LP	11" WC (27.5 Mbar)		
Natural Gas	7" WC (17.5 Mbar)		
Heater Size, Weight & Assembly Information			
Weight per Complete Unit	125 lbs. (56.7 kg)		
Height x Length x Width	30 x 24.5 x 19 inches		
	(76.2 x 62.2 x 48.3 cm)		
Minimum Clearance to Combustibles			
Above, below and beside unit	20 in. (50 cm)		
Exhaust outlet	120 in. (305 cm)		
Electrical Requirements: 120 VAC (220/240 VAC	50 or 60 Hz)		

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Poultry Production Systems Chore-Time Brock International

Divisions of CTB, Inc.

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