# Brooder Specifications

| Type | Large Infrared Brooder | High-Pressure Brooder (Unit is shipped pre-assembled) | Small Infrared Brooder | Convection Brooder |
|---|---|---|---|---|
| **Unit Name** | **CHORE-TIME Ultra-Ray®** | **CHORE-TIME Ultra-Ray® HP** | **CHORE-TIME Ultra-Ray® LITE** | **CHORE-TIME ULTRA-VECTION™** |
| Heating area per unit | 800-1,000 sq. ft. (74.3-92.9 $m^2$) | 800-1,000 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 $m^2$) |
| **Capacity (Maximum Per Hour)** | | | | |
| Pilot Ignition – Note that brooder pilots burn at 2,000 BTUs (0.59 KwHr) per hour and can withstand 5 mph wind speed. | 42,000 BTU (12.31 KwHr) | Not Available | 25,000 BTU (7.33 KwHr) | 31,000 BTU (9.09 KwHr) |
| Direct Spark Ignition | 40,000 BTU (11.72 KwHr) | 40,000 BTU (11.72 KwHr) | 23,000 BTU (6.74 KwHr) | Not Available |
| **Modulation Range** | | | | |
| Range per Hour | Not Available | Not Available | 10,000-25,000 BTU (2.93-7.33 KwHr) | 17,000-31,000 BTU (4.98-9.09 KwHr) |
| **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) |
| 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) |
| **Gas Consumption (Maximum) Direct Spark Ignition** | | *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) |
| 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) |
| **Gas Pressure Requirements (Measured at Unit for CHORE-TIME Ultra-Ray® HP Model and at Pressure Tap on Valve with Unit Running for Other Models)** | | | | |
| LP | 11" WC (27.5 mbar) | 5 psi max (350 mbar max) | 11" WC (27.5 mbar) | 11" WC (27.5 mbar) |
| Natural Gas | 7" WC (17.5 mbar) | 5 psi max (350 mbar max)* | 7" WC (17.5 mbar) | 7" WC (17.5 mbar) |
| **Heater Size, Weight & Assembly Information** | | | | |
| Weight per Complete Unit | 18-26 lbs. (8.2-11.8 kg) | 18-26 lbs. (8.2-11.8 kg) | 18-28 lbs. (8.2-12.7 kg) | 15-32 lbs. (6.8-14.5 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 of 116.8 cm) |
| Height | 14 in. (35.6 cm) | 14 in. (35.6 cm) | 17.5 in. (44.5 cm) | 20.5 in. (52.1 cm) |
| **Operational Guidelines for Brooding Area (Adjust Up or Down Depending on Housing Construction/Condition and Climate)** | | | | |
| Height from Floor (Measure from Edge of Canopy) | 60-72 in. (152.4-182.9 cm) | 60-72 in. (152.4-182.9 cm) | 30-36 in. (76.2-91.4 cm) | 30-36 in. (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) |
| **Minimum Clearance to Combustibles** | | | | |
| Sides of Brooder/Heater | 36 in. (90 cm) | 36 in. (90 cm) | 30 in. (75 cm) | 26 in. (65 cm) |
| Above Brooder/Heater | 14 in. (35 cm) | 14 in. (35 cm) | 12 in. (30 cm) | 10 in. (25 cm) |
| Below Brooder/Heater | 48 in. (120 cm) | 48 in. (120 cm) | 30 in. (75 cm) | 30 in. (75 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 |
| On-Off Individual Control | Pilot | Not Applicable | Pilot | Pilot |
| Modulating Individual Control | Not Applicable | Not Applicable | Pilot | Pilot |
| Manifold Zone Control (Maximum Brooders per Zone – 20) | Not Applicable | Not Applicable | Not Applicable | Available |

The policy of Chore-Time is one of continuous product improvement. We reserve the right to alter specifications without prior notice. Heating products should be installed only in accordance with local laws, codes and regulations. These products are not for residential use. Gas pipe layout assistance available to customers through authorized distributors. CSA (Canadian Standards Association) approved models are available. All models meet stringent standards for low carbon monoxide.

# Reliable Control Options

**See Brooder Specification Chart above for which controls can be used with each style of brooder.**

| ZONE CONTROLS: Allow one thermostat or control to regulate all brooders in a specified area. | | | | 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)** |
| Mounted on each individual brooder with up to 40 brooders 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 |
| Includes 100% safety cut-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 |
| Can be powered by a battery back-up system or generator | Can be powered by a back-up generator | Can be powered by a back-up generator | Not applicable | Modulates between maximum and minimum BTU rates before snapping off at control setting | Snaps from high to off based on control setting |