



### ASSEMBLING YOUR NEW SYSTEM

**Unpack Your System:** Check for visible damage and notify freight carrier if any exists. Carefully remove all packing, bubble pack, and cardboard boxes on the bottom of the pallet.

**Secure Arm:** The arm is pre-assembled and wired, ready to insert into the vertical posts of the main stand assembly. The brackets are designed to accept the arm and hold it in place while you use the same bolts that held the wooden shipping brackets in place to secure the arm.

**Assemble Hardware:** Unbolt the stand from the wooden shipping pallet and remove the system. Open the small cardboard box and remove the casters and hardware.

Attach casters in the four holes provided using the lock washers and nuts provided.

**Install Elements:** To prevent breakage, unit is shipped without the element installed. Open the long cardboard box and remove the quartz tubes. Remove the end reflectors and guard from each heater. There is a wire with ring terminal on each end of the heater (under the reflector). Connect the wires to the elements, taking care to get a tight connection. Insert the two elements into the two heaters on the arm assembly.

**First Use:** Refer to operating instructions before using the heater. For technical assistance, please call toll-free (800) 421-9455.

### ELEMENT REPLACEMENT INSTRUCTIONS

**Step 1:** Check U/L label on heater for proper voltage.

**Step 2:** Remove end and center plate covers.

**Step 3:** Remove the grill guards by gently pulling down then out on the center post section. Then lift the bottom center position post of the guard until it comes out of its

positioning hole. Slide the guard either left or right until the end comes out of its holes then slide out the other end.

**Step 4:** Remove the old element by loosening existing connections and safely dispose of the old element.

**Step 5:** To install the new element(s), carefully unwrap the element. Open element clips at each end of the heater and carefully install quartz tube. Remove one nut from end of element. Slip on wire over element screw and replace nut. NOTE: Hold element ceramic firmly while tightening nut to prevent damage to element. Nut should be snug as loose connection could cause element to fail. Connect other side of element in like manner. Close element clips over tube, replace end plate and grill.

**Step 6:** Snap on provided grill.

**IMPORTANT NOTE:** If you should touch the elements with your fingers, it will be necessary to clean them with denatured alcohol and cotton swabs. Oil from your fingers will cause a focused hot spot on the element and burn them out very rapidly. This type of premature failure is not covered under the systems warranty.

## BASIC OPERATING INSTRUCTIONS

**Setup:** Plug unit into appropriate power source.

**To Adjust Systems Operational Height:** Support the control panel handle and extension arms, then loosen the slide lock knob on the mast slide assembly. With one foot on stand base, lift or lower the entire assembly as needed. Normal operating position for most jobs is 1/2 way up the mast. Be sure to adequately re-tighten the slide lock knob after you have repositioned the slider to prevent system control assembly from moving.

**Using the Extension Arm:** To raise or lower the extension arm, simply depress the control handle located on the extension arms to the rubber stop and push up or down on the extension arms as required for positioning. Release the handle to lock in the desired position.

**Heater Cassette Assembly:** Can be swiveled 270° around extension arm. This makes a narrow foot print so the unit can work in tight locations. The heater head can also tilt

down 90° by loosen the locking knob and moving head down to the desired location.

**Adjusting Heater Cassette:** Each heater cassette can be individually adjusted to “clam shell” heat around corners or for door jambs. When heaters are rotated outward, the unit heats a larger area and requires a little more time to cure. When heaters are swiveled in, the cure time and area is reduced. Consider using at a lower temperature when heaters are swiveled in to prevent vehicle damage.

**Heater Positioning:** Position system so that the heater’s cassettes are from 18" to 36" away from the panel. **IMPORTANT NOTE: NEVER POSITION HEATERS CLOSER THAN 18" FROM TARGET AREA.** You should start out with the systems heater cassettes positioned out at 36" away from the surface until you get a feeling for the power of the system and how to use the controls. Then you can move in closer as required.

## SYSTEM MAINTENANCE

With proper maintenance, your new Infratech system should give you years of reliable, productive service.

1. Every 4-6 months, unplug the system and remove end reflectors from heaters and re-check connection of lead wires to the elements.
2. Oil from your hands damages elements. If you touch the elements, clean them with denatured alcohol and clean cotton swabs (make sure the elements are cool first).
3. The reflectors on the heaters should be kept free of dust or over spray. Use a damp cloth or, if necessary, some fine steel wool or a Scotch-Brite® pad to clean residue.
4. Blow off IR sensor and dust with a cotton swab weekly. Do not over spray sensor.

## CURING TIME

PAINT TYPE	DISTANCE FROM SURFACE	HEATED AREA (S-2002)	HEATED AREA (S-2002-IR)	POWER INTENSITY SETTING (S-2002)	DIGITAL TEMP. SETTING (S-2002-IR)	CURING TIME (S-2002)	CURING TIME (S-2002-IR)
Water Based Primer	24"	4' x 4'	4' x 4'	80%	180°	6 min.	6 min.
Water Based Primer	36"	5' x 6'	4' x 6'	100%	140°	10 min.	10 min.
Solvent Based Primer	24"	4' x 4'	4' x 4'	80%	180°	15 min.	10 min.
Solvent Based Primer	36"	4' x 6'	4' x 6'	100%	140°	15 min.	15 min.
Lacquer	36"	4' x 6'	4' x 6'	100%	140°	15 min.	20 min.

High Solids Clear Topcoat	24"	4' x 4'	4' x 4'	80%	180°	18 min.	18 min.
High Solids Clear Topcoat	36"	4' x 6'	4' x 6'	100%	140°	20 min.	20 min.
Urethane Clear Coat	36"	4' x 6'	4' x 6'	100%	140°	20 min.	20 min.
Polyurethane Clear Coat	36"	4' x 6'	4' x 5'	100%	140°	20 min.	20 min.
Acrylic Enamel	36"	4' x 6'	4' x 6'	100%	140°	20 min.	20 min.

## WORKING WITH INFRARED & PAINT

Every coating system, applicator and shop have many variables (type of material, thickness applied, type of reducer, air temperature, and ambient moisture content) that come into play when applying and curing coating systems. All these variables must be taken into consideration when setting curing time settings and power intensity settings. The following is our recommendation to establish the correct setting for your shop:

1. Mix paint for the current weather conditions in your area as recommended by manufacturer.
2. Start with an intensity setting of 75% power (default setting).
3. Set cure time according to product being cured (refer to curing time chart).
4. If the job is not cured, add more time at the same intensity to complete the job.
5. For the next job using the same materials, increase intensity 5% (or 10% max.) and use the same recommended time.
6. At the first sign of solvent pop, back the intensity down 5% and use that setting down 5%.

### WARNINGS:

- NEVER block front of heater
- DO NOT operate within 25' of flammable materials
- DANGER: Do not use within 10' when spraying operations are in progress
- NEVER service heater without disconnecting from power
- Source of possible shock
- Use only with grounded power source
- Only use grounded extension cords that are rated for the amp load of these units

## DIGITAL CONTROL SYSTEM SETUP



### CONTROL BOX FUNCTIONS

5-2002 PROGRAMMABLE DIGITAL CONTROL

#### CONTROL SYSTEM FACTORY PRESETS:

**Flash Time:** 3 Min.  
**Cure Time:** 30 Min.  
**Intensity:** 75%

### Modifying Control Settings

With system plugged in to power and "Ready" light on but prior to starting system you can change the factory pre-sets.

**To Change Flash Time:** Press program button until flash time LED flashes, use arrow up or down buttons to increase or decrease time displayed. When light stops flashing, new time is locked into memory.

**To Change Cure Time:** Press program button until cure time LED flashes then use exact same procedure as described above to adjust cure time.

**To Change Intensity Setting:** Press program button until

intensity LED flashes, use arrow up or down buttons to increase or decrease percent of power output displayed. When light stops flashing, new setting is locked into memory. Changes made prior to starting the system will be locked into memory until you change settings using the above procedures.

**Changes During Operation:** With system operating, you can change any setting by using the above instructions. However, any changes made when the system is operating will not be held in memory after the current operating cycle.



## CONTROL BOX FUNCTIONS

S-2002-IR PROGRAMMABLE  
DIGITAL TEMPERATURE CONTROL

IR CONTROL SYSTEM/AUTO-TEMP  
CONTROL FACTORY PRESETS:

**Flash Time:** 3 Min.  
**Cure Time:** 30 Min.  
**Temperature:** 130° F

## Modifying Control Settings

With system plugged in to power and “Ready” light on but prior to starting system you can change the factory pre-sets.

**To Change Flash Time:** Press program button until flash time LED flashes, use arrow up or down buttons to increase or decrease time displayed. When light stops flashing, new time is locked into memory.

**To Change Cure Time:** Press program button until cure time LED flashes then use exact same procedure as described above to adjust cure time.

**To Change Temperature Setting:** Press program button until cure temperature led flashes, use arrow up or down buttons to increase or decrease temp displayed. When light stops flashing, new setting is locked into memory.

Changes made prior to starting the system will be locked into memory until you change settings using the above procedures.

**Changes During Operation:** With system operating, you can change any setting by using the above instructions. However, any changes made when the system is operating will not be held in memory after the current operating cycle.

**Change Temperature Calibration:** The infrared sensor controller is factory calibrated to +/- 3° F. If you wish to re-calibrate the control, press the program button until the calibrate LED flashes. Use the arrow up/down buttons to change the setting to match your measuring instrument.

## SPECIFICATIONS

PART NUMBER	MODEL	LENGTH	WATTS	VOLTS	AMPS	SHIPPING WEIGHT (LBS)
16-1020	S-2002	39"	4,000	240 - 1 PH	17	180
16-1035	S-2002-IR	39"	4,000	240 - 1 PH	17	180

**Need help?** To order replacement elements for your Infratech heating system, please contact us via phone or visit the automotive section of our website.