



## OPERATORS MANUAL

### **TECHNOCURE DIGITAL DELUXE REMOTE CONTROL PANEL FOR BANANZA SPRAY-CURE™ B-SERIES HEATERS**







## TECHNOCURE DELUXE DIGITAL REMOTE CONTROL PANEL

Consists of:

- 1) 1 – Combination Digital Discharge Temperature Display with Temperature Selection Dials for control of the discharge air temperature in Spray Mode (60 – 90 °F) “SPRAY” & Dry Mode (80 – 180 °F) “DRY”
- 2) 1 – “ON-OFF” Selector Switch for control of “FAN” Operation w/ Pilot Light.
- 3) 1 – “ON-OFF” Selector Switch for control of “BURNER” Operation w/ Pilot Light (aka Winter – Summer Switch).
- 4) 1 – “SPRAY-CURE” Selector Switch (aka Spray – Bake or Spray – Dry Switch)
- 5) 1 – “ON-OFF-AUTO” Selector Switch for control of “LIGHTS” w/ Pilot Light.
- 6) 1 – “COOL” Down Pilot Light.
- 7) 1 – “CHECK FILTER” Pilot Light (Optional).
- 8) 1 – Burner Remote “ALARM RESET” Button w/ “ALARM” Pilot Light. (Optional).
- 9) 1 – “PURGE MINUTES” Digital Count Down Timer (0 – 999 Sec.)(Optional)
- 10) 1 – “MAGNEHELIC” “BOOTH PRESSURE” Gauge (-1.0 – 0 – + 1.0 Inches of Water).
- 11) 1 – “CURE MINUTES” Digital Count Down Timer (0 – 999 Min.).
- 12) 1 – “SPRAY” Exhaust Fan Speed Control Knob.
- 13) 1 – “CURE” Exhaust Fan Speed Control Knob.

WITH THE MAIN FUSED DISCONNECT (located on the Air Make-up Unit (AMU) Door) IN THE "ON" POSITION, POWER IS SUPPLIED TO THE HEATER AND TO THE REMOTE CONTROL PANEL.

## SEQUENCE OF OPERATION

### **SPRAY MODE OF OPERATION**

With the "FAN" Selector Switch in the "ON" Position and the "SPRAY-CURE" Selector Switch in the "SPRAY" Position, the following things happen simultaneously:

- 1) The exhaust fan(s) are energized and increase in speed to desired setting (see 4)).
- 2) The Heater's Blower Motor is energized (After a slight delay) ("FAN" on Pilot Light illuminates).
- 3) The Profile Bypass Door in AMU remains open 100%.
- 4) With the "SPRAY" Exhaust Fan Speed Control Knob. You can increase or decrease the booth pressure by decreasing or increasing the exhaust fan(s) speed.
- 5) Observe the "BOOTH PRESSURE" with the "MAGNEHELIC" and set accordingly (it is strongly suggested to set the booth pressure to a slightly positive state. On the gauge it should be 1 to 2 tick lines to the right of zero or about +.05 to +.10 inches of water. This will give the optimum environment for painting by keeping out the dust and contamination from the surrounding shop and not pushing paint overspray out around cracks in the doors and seals.

**NOTE:** Increasing the fan(s) speed will decrease the booth pressure and vice versa.

With the "BURNER" Selector Switch in the "ON" Position and the "SPRAY-CURE" Selector Switch in the "SPRAY" Position, the burner will ignite and produce heat whenever the Blower is on. The burner will then modulate to maintain the Discharge Temperature of the Heater as selected on the "SPRAY" Temperature Selection Dial.

**NOTE:** When the "BURNER" Switch is turned on, the pilot light above it will take about 10 to 20 seconds to light. This is due to the pilot light only illuminating when the burner is lit. This will help with burner trouble shooting should you have any heat problems at a later date. Also, If the pilot light does not light after 20 Seconds and you feel no heat in the booth the pilot was unsuccessful at lighting off and may have gone into a 'lock out condition'. This will illuminate the "ALARM" Pilot Light and pushing the "ALARM RESET" Button will reset the burner flame control and relight the burner.

If this option is not installed, you will have to push the reset button on the Blue Honeywell Flame Controller in the AMU Control Cabinet.

If you need to continually press the ALARM RESET button, or pressing it will not keep the ALARM reset. You will need to call for service.

### **CURE OR DRY MODE OF OPERATION**

With the "FAN" and "BURNER" switches In the "ON" Position, and the Heater operating in the "SPRAY" Mode, the operator turns the "SPRAY-CURE" Selector to the "CURE" Position and the following things happen: (Note: The heater will not go into "CURE" mode unless the "BURNER" switch is in the on position)

- 1) The "PURGE MINUTES" Digital Count Down Timer (Optional) (If not installed, go to 2)) is energized and purges the booth for the adjusted period of time. (i.e. heater remains in the Spray Mode at the set spray temperature)
- 2) The "CURE MINUTES" Digital Count Down Timer is also energized.

WHEN THE PURGE TIMER (Optional) TIMES OUT, THE FOLLOWING THINGS HAPPEN:

- 1) If the "LIGHTS" Selector Switch is in the "AUTO" position the booth lights will turn off and the Pilot Light will go out.
- 2) The Profile Bypass Door closes 100% (Located next to burner in the AMU).
- 3) When the Bypass Door closes 100% it opens the control circuit and automatically switches to the setting of the "CURE" Exhaust Fan Speed Control Knob. You can increase or decrease the booth pressure by increasing or decreasing the exhaust fan speed with the control knob on the "CURE" side.
- 4) A relay switches the Discharge Temperature Control to the dial setting on the "DRY" side.

THIS REDUCES THE AIRFLOW THROUGH THE BOOTH BY ABOUT HALF.

The Heater will now modulate to maintain the Discharge Temperature of the Heater as selected on the "DRY" Temperature Selection Dial.

## **COOL DOWN MODE OF OPERATION**

Once the Curing is completed, (The "CURE MINUTES" Digital Count Down Timer has timed out.) the Heater will:

- 1) Automatically switch back to the Spray Mode and maintain the setting on the "SPRAY" Temperature Selection Dial (See: "Spray Mode Of Operation")
- 2) The "COOL" Down Pilot Light will illuminate.
- 3) If the "LIGHTS" Selector Switch is in the "AUTO" position the booth lights will turn on and the Pilot Light will illuminate.

When the Cool Down Timer has timed out (About 5-8 Min.). The system shuts off.

When this happens the Remote Control Panel will have the "FAN" & "BURNER" Selector Switches in the "ON" position, but the fans will be de-energized (Not running) and all pilot lights will be off except for the "COOL" Down Pilot Light and the "LIGHTS" Pilot Light along with the booth lights if the Selector Switch is in the "ON" or "AUTO" positions.

To start the process over, simply switch the "SPRAY-CURE" Selector Switch to the "SPRAY" Position and the fans will energize.

### **NOTES:**

The Cure Cycle will only work when the "BURNER" switch is in the "ON" position

It is suggested to turn the "LIGHTS" switch to the "OFF" position if you intend to leave the booth unattended in the "CURE" Cycle. This is especially true if you leave for the weekend, and let the booth cure the last job of the week. If not the Lights will come on at the end of the Cure Cycle and stay on all weekend long.

It is suggested that you turn the booth on to the Spray mode to load and unload the booth or any time the main door is open. This is to keep the inside of the booth as contaminant free as possible. The heat may or may not be on at your discretion.

**NEVER** turn "OFF" the "FAN" switch during the "CURE" mode, always switch back to the "SPRAY" mode for about 30 seconds before turning the "FAN" switch off. This is to reduce the possibility of tripping the High Temperature Limit Switch located in the AMU on the Blower on very hot days.

If the "BURNER" Switch is in the "ON" position and the Pilot Light is not lit after 20 Seconds (with the fans running, "FAN" switch "ON") this means that the burner is not on and trouble shooting will be required. Consult the Trouble Shooting Section in the Bananza Manual or contact Technocure for assistance.

It is suggested that any ducting supplied to the inlet of the Heater, or from the Heater to the booth have as few elbows as possible.

#### **Installation Code and Annual Inspections:**

All installations and service of BANANZA® / Technocure equipment must be performed by a contractor qualified in the installation and service of equipment sold and supplied by Bananza/ Technocure and conform to all requirements set forth in the BANANZA® / Technocure manuals and all applicable governmental authorities pertaining to the installation, service and operation of the equipment. To help facilitate optimum performance and safety, Bananza/ Technocure recommends that a qualified contractor annually inspect your BANANZA® / Technocure equipment and perform service where necessary, using only replacement parts sold and supplied by Bananza/ Technocure.

**Further Information:** Applications, engineering and detailed guidance on systems design, installation and equipment performance is available through BANANZA® / Technocure representatives. Please contact us for any further information you may require, including the Installation, Operation and Service Manual

**This product is not for residential use.**

**This document is intended to assist licensed professionals in the exercise of their professional judgment.**

**BANANZA**

1100 Seven Mile Road NW  
Comstock Park, MI 49321  
Telephone: 616.726.8800  
Fax: 616.726.8807  
Toll Free: 800.255.3416  
[www.bananza.com](http://www.bananza.com)

***Pro Tools & Equipment, Inc.***

23529 Eagle's Nest Road  
Antioch, Illinois 60002  
Telephone 847.838.6666  
Fax 847.838.2222  
Toll Free: 800.989.3747  
[www.protools.ws](http://www.protools.ws)