



**CHR Inc.  
Custom Heaters & Research  
Bulk Materials Digital Heating Jacket  
Instruction Manual**

54 Elizabeth Street  
Building #10  
Red Hook NY 12571

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## **Cautions and Warnings**

Although this Heating Jacket is designed for outdoor operation, as with all electrical devices there is a risk of electric shock which can result in injury or death. Be sure the plug connection is not in standing water or use caution when handling the plug during wet weather.

DO NOT use the Heating Jacket if there are any visible signs of damage.

This product is intended for the heating of the bulk materials while the heater is installed on the supplied frame; no other use is approved.

Bunching, folding or over-lapping heated areas of the Heating Jacket will result in over-heating. This can result in damage to the Heating Jacket. Read the section on How to Install for specific information.

Be sure to use the proper electrical voltage as your power supply.

This product is designed and constructed as follows:

- 120v, single phase power
- 1700 watts of power, consuming 14.17 amps

## **How to Install**

1. Fit the Heating Jacket around the frame and draw snug possible to ensure the heater is not bunched up. Attach via the Velcro closures & supplied straps.
2. Once properly installed energize the Heating Jacket by plugging it into the proper power supply (120v, single phase).
3. Set the Digital Thermostat to the desired temperature.

### **SETTING THE DESIRED TEMPERATURE (SETPOINT)**

To view and adjust the set point, follow these steps:

Allow the controller to go through the start up procedure (about 10 seconds). Then press and hold the MENU button until the display changes to flashing SP.

Press the MENU button again. The current set point is displayed.

Press the Up or Down button to adjust the set point temperature (max. 212 Fahrenheit or 100 Celsius).

Press the MENU button to save.

The display then returns to the sensor reading temperature (Process Value)

The Digital Control is set at the factory in Celsius temperature at 85F. To convert to Fahrenheit, press the Up and Down buttons simultaneously. Press them again simultaneously to return to Fahrenheit.

The Heating Jacket has a NEMA4X (water tight) high-impact plastic enclosure. It does not require any additional internal wiring, it is pre-wired.

High voltages may be present at AMP electrical terminals and other exposed internal metal surfaces. DO NOT open the Digital Controller for any reason, high voltage is present inside the case. Being a Solid State design no repairs will be possible outside the Factory. Should a malfunction occur, the entire unit needs to be returned to be evaluated/repaired.

## **SETTING OTHER FUNCTIONS**

It is not recommended to change Factory Settings of other functions since it will cause significantly lesser accuracy of controlling of a given set point.

These other functions are:

Differential - displayed on the LCD as diF	(factory setting "1")
Anti-short Cycle Delay - displayed on the LCD as ASd	(factory setting "0")
Temperature Offset - displayed on the LCD as OFS	(factory setting "0")
Sensor Failure Operation- displayed on the LCD as SF	(factory setting "0")

Press and hold the MENU button until the display changes to flashing SP. This will take about 2 seconds.

Press the Up or Down button repeatedly until the desired function is displayed.  
(SP,dIF,Asd,OFS,SF)

Press the MENU button to display the function's current value

Press Up or Down button until desired value is displayed.

Press the MENU button to save the new value. The display then returns to the sensor temperature.

## **How to Store**

CHR Heating Jackets are built tough to handle life in the field, however if they are cared for they will last longer. We suggest the life expectancy of the product to be 5 years or more, but have seen many last much longer!

Store the Heating Jackets flat or rolled up loosely, but try not to fold over and make hard crease.

Do NOT crush the Heating Jackets placing something heavy on top of them

## Troubleshooting

### ELECTRICAL / HEATING PROBLEMS

**NOT HOT ENOUGH:** If the Heating Jacket seems not be getting hot enough, check it with an infrared temperature sensor. If it is determined to be operating low, try to ensure that the adequate Amps or Watts are available and that voltage is correct. If less than proper 115 Volts the heater will operate at less than their potential. Extra long extension cords should not be used, whereas voltage will drop over the length of the cord. A proper heavy duty extension cord should be used.

**TOO HOT:** If it is thought the heater is too hot, check with infrared temperature sensor. If it is determined that it is actually running too hot send the Heating Jacket in to us for calibration or repair .

**POWER CORD PULLED OUT:** This should ONLY be done by a CHR technician. More damage is usually done by someone trying to make a "quick-fix".

**MELTED THROUGH:** If the Heating Jacket is melted, this is a sign of either improper installation or a malfunction with the warmer and should be taken seriously.

You should not use the Heating Jacket at all until it can be checked by a technician at CHR Inc.

## Warranty Information

All CHR products come with one year warranty from date of purchase.

Warranty cards should be filled out and sent in to our physical address within 30 days of purchase.

CHR will, at their option, repair or replace defective products free of charge during the warranty period, including standard UPS shipping within the USA to the customer. This includes ANY flaw during the manufacturing process including normal heat-up, temperature accuracy or failure.

The warranty only excludes mis-use or abuse to the product, such as:

- Leaving the Heating Jacket plugged in or energized while NOT mounted on a tank.
- Bunching or folding the Heating Jacket over during operation.
- Using to heat an incorrect object, over-lapping the Heating Jacket.
- Stepping on, driving over or crushing the Heating Jacket.

### REPAIRS AND WARRANTY CLAIMS

The physical address of CHR is:

54 Elizabeth Street  
Bldg #10  
Red Hook, NY 12571

Warmers should be sent via UPS or Federal Express and have the following information included in the box:

Name:

Date:

Mailing Address:

Day-time telephone:

Problem or symptom:

Date product is needed back (we will make best efforts):

Method of payment: Credit Card or COD

**WARRANTY CARD:**

Fill both out and return to our office,  
54 Elizabeth Street, Building #10, Red Hook NY 12571

PRINT LEGIBLY OR TYPE

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

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MODEL: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_ (located on power-cord)

PURCHASED FROM: \_\_\_\_\_