

# Superheat/Subcooling Calculator with Thermometer and P/T Chart (69196)



## OPERATING STEPS

1. Press the power button

2. Use the ▲ and ▼ to display the  
desired refrigerant

3. Press ENTER

### For SuperHeat or Low Side PT Data

Suction Line

Match low side manifold gauge  
reading (suction pressure)

“Super Heat”

### For SubCool or High Side PT Data

Liquid Line

Match high side manifold gauge  
reading (discharge pressure)

“Sub Cool”

4. Ensure proper temperature  
clamp location

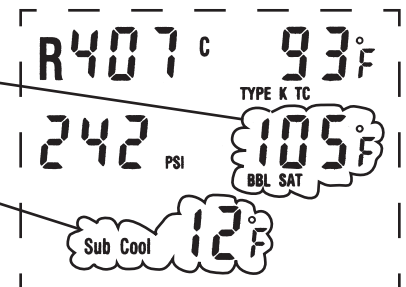
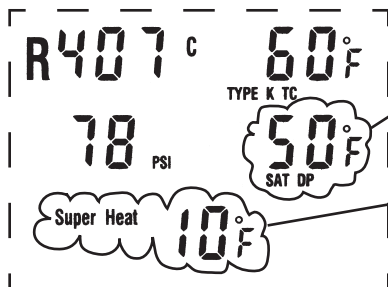
5. Enter the pressure value (▲▼).  
Press and hold for fast scrolling.

6. Set the mode - press (SH/SC)  
to change

7. Read the PT value result

8. Read the calculated SH or SC  
result

9. Return to Step 5 as the  
manifold gauge reading changes



**Note:** The unit will not display a negative superheat or subcool temperature. “--” will display instead. Make sure you have the proper temperature clamp location (Step 4) and the proper pressure value (Step 5).

## ADDITIONAL FUNCTIONS

### Hold Function

To freeze the thermocouple temperature reading, press HOLD. HOLD will blink under the thermocouple temperature reading. The pressure values can still be changed and the superheat or subcool values will update. The thermocouple can be unplugged from the unit and the temperature reading will remain. To unfreeze the thermocouple temperature, press HOLD again or turn the unit off.

### To Change Units

1. With the Superheat/Subcool Calculator off, press the POWER button.
2. Press and hold the UNITS button for two to three seconds until the current temperature unit is displayed.
3. Use ▲ or ▼ to select the desired temperature unit.
4. Press ENTER to save. The current pressure unit will be displayed.
5. Use ▲ or ▼ to select the desired pressure unit.

## **THERMOCOUPLE CALIBRATION PROCEDURE**

This procedure requires an accurate room temperature and an accurate reference temperature for the thermocouple.

1. Turn the unit on. When the "R" starts blinking, press ENTER and one of the arrow buttons.
2. Hold down the POWER button and the UP ARROW (▲) button at the same time. The whole display will be shown.
3. Press ENTER twice until the number 2 is displayed along with a temperature reading.
4. This is the circuit board reference temperature. After you are sure the temperatures have stabilized to room temperature, use the arrows to adjust the temperature reading to match your room temperature reference.
5. Press ENTER. The number 3 will be displayed along with two temperatures. One will be the previously adjusted room temperature and the other will be the thermocouple reading. With the thermocouple at a known reference temperature (place the thermocouple clamp in a slush of crushed ice and water or place the clamp on a thick copper tube with a calibrated temperature gauge clamped to it as well.) Adjust the temperature to match the reference temperature.
6. Press ENTER. The unit will shut-off.
7. The next time you press the POWER button, the unit will return to normal operation.

### **Refrigerant List**

The 69196 is pre-loaded with the most common R-22 replacement refrigerants as well as other refrigerants commonly used in air conditioning and refrigeration.

### **Replacement parts/accessories**

- 69214 – 3' clamp thermocouple probe
- 69217 – 10' clamp thermocouple probe

Covered by a one year warranty from the date of sale.

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