

TEMPERATURE RECORDERS HCL #8251, #8252, #8248, #8249, #8263



Sales & Distribution by Health Care Logistics, Inc.

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Temperature Recorder

Your recorder is shipped with the following items:

1. One box of 60 recording charts.
2. One Point National Institute of Standards & Technology Traceable certification of calibration
3. One "AA" alkaline battery
4. One operation manual
5. One red recording pen.

Statement of Accuracy

The pens and/or digital display on your HCL #8252, #8251, #8248, #8249, and the pens on the #8263 have independent temperature sensing systems. The temperature sensor for the display has an accuracy of $\pm 2^{\circ}\text{F}$ ($+ 1^{\circ}\text{C}$). The temperature sensor for the pen has an accuracy of $\pm 2\%$ full scale range of the recorder.

Because of this independence it is possible for a properly calibrated #8252 to have up to a $+5^{\circ}\text{F}$ ($+3^{\circ}\text{C}$) the display and the reading of the pen. For greater accuracy we recommend adjusting the pen to match the display. The adjustment should be made at the average temperature that you will be recording.

Installation

Your portable recorder can be placed almost anywhere. Be sure the recorder is vertical and level on a vibration-free surface. For best performance and longevity, location should be in a clean environment – free from dust and corrosive fumes. Do not exceed temperature and humidity specifications.

Specifications

Temperature Sensor:

Precise spiral-wound bi-metallic strip transducer

Pen Accuracy:

$\pm 2\%$ full scale

Display Accuracy:

(#8252 only) $\pm 2^{\circ}\text{F}$ ($\pm 1^{\circ}\text{C}$)

Recording Time:

(8251, 8252, 8248, 8249) 7-day
(8263) 24 hour

Average Response Time:

11 minutes to move 63% of full scale

Chart size:

4" (102 mm) diameter

Ambient Operating Range:

-22 to $+122^{\circ}\text{F}$, -30 to $+50^{\circ}\text{C}$
0 to 90% relative humidity
(non-condensing)

Power Supply:

One "AA" alkaline battery

Dimensions:

7"H x 5.5"W x 2.5"D
(175mm x 135mm x 70mm)

Weight:

1 lb., 1 oz. (482g)

Chart Movement:

Battery operated

Battery Life:

One full year

#8252, #8249, #8263:

- Display sensor: Thermistor
- Display accuracy: $\pm 2^{\circ}\text{F}$ ($\pm 1^{\circ}\text{C}$)

Calibration/Pen Adjustment

Your recorder was carefully tested and calibrated to factory specifications before being shipped. However, if your recorder indicates an obviously incorrect temperature, you may wish to readjust it by following these steps:

1. Turn on the recorder and allow the temperature of the recorder to stabilize—usually about 15 minutes, or longer, depending on ambient temperature.
2. Turn the pen adjust screw (A) (Fig. 1) with a small screwdriver until the tip of the pen is directly over the correct temperature mark on the chart. Your chart recorder is now accurately set.

Should recalibration become necessary, contact Dickson, 930 South Westwood Avenue Addison, IL 60101, Phone: 630-543-3747 and fax: 630-543-0498 for a Return Authorization Number and further instructions on returning the unit. The Dickson model number is

required for proper calibration. HCL #8251 is Dickson model # SK4 and HCL #8252 is Dickson model # SL4. Include the completed Certificate of Instrument Calibration and Testing form when you send your recorder in for calibration.

Operation and Maintenance

Recording Times: Self-contained temperature recorders are available in 7-day or 24-hour configuration. We carry both models.

Chart Installation: If necessary, refer to section on "Paper Chart Installation" on page 4.

Locking Door: To open the door, simply press down the push button to release the latch. To permanently lock the door, remove the button and store it elsewhere. To remove it, grasp with thumb and forefinger and pull it up; it has a snug fit to prevent it from falling out.

Recording: Place your Temperature Recorder where you want to record the temperature. Set time by inserting a

coin into the chart hub and turning clockwise to the correct time (and day for 7 day units) relative to the time index clip at the middle right of your recorder. Remove pen cap from pen tip and place it on the pen cap holder on the lower left side of your recorder. Activate On/Off switch.

Optional Tie-Down Cable: At the bottom rear of the case you will see holes (B) on either side of the case; these form the channel for the tie-down cable accessory. If you have purchased the cable, simply pinch the loop on one end of the cable (C) to give it clearance into the channel, then thread it through the other end. Now you are able to lock or bolt down the unit. See figure 2.

Power Source: Battery drives are designed to run approximately one year between battery changes. Replace with "AA" size alkaline battery.

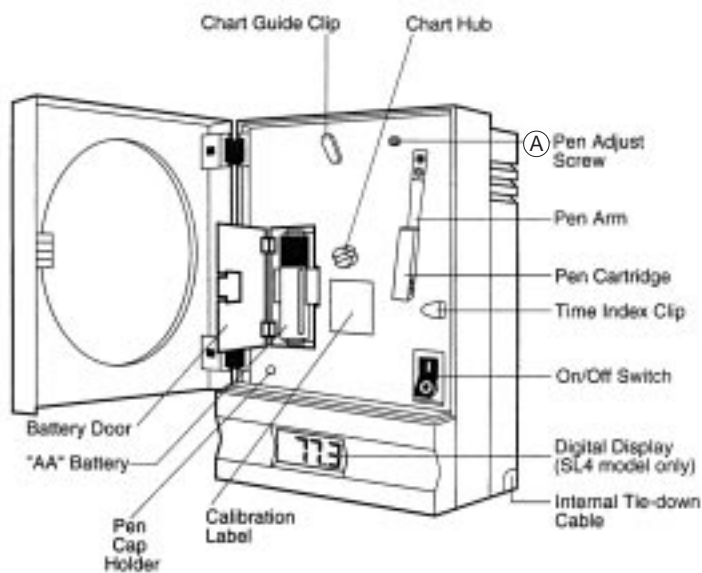


Figure 1

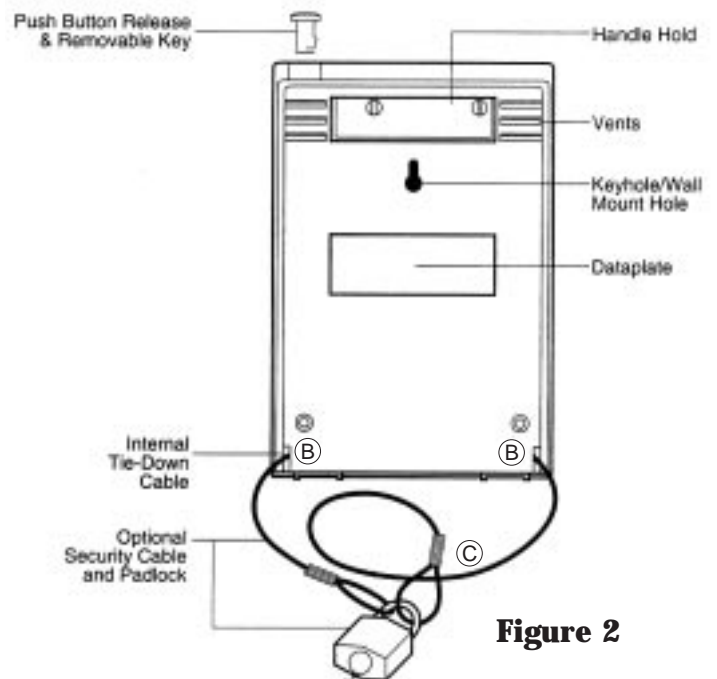


Figure 2

Paper Chart Installation

Use the following procedure to install or replace a chart in the recorder.

1. Open door of recorder case by pressing the push button release (located on top of case) to release lock.
2. Replace pen cap on pen. Remove the recorded chart if present.
3. Place a new chart on the chart hub—being certain that the edge of the chart slides under the chart guide clips located at the outside of the chart.
4. Set time by inserting a coin into the chart hub and turning clockwise to the correct time (and day for 7-day units) relative to the time index clip on the middle right hand side.
5. Remove pen cap from pen and put it on pen cap holder at the lower left of the recorder.
 - 5a. Turn unit ON. (if it was turned off)
6. Close door

At the end of one cycle (24 hours or 7 days, depending on your recorder), simply repeat steps 1-6, replacing the used chart with a new one.

Pen Installation

Disposable fiber-tipped pens are installed in this recorder. The pens have a self-contained ink supply and are housed in a replaceable cartridge.

Normally, a new cartridge pen will give many months of recording, depending on usage. When replacement becomes necessary, use the following procedure.

1. Carefully lift the pen arm.
2. While holding the pen arm, use your thumb and forefinger to grasp the pen cartridge by the finger grips near the tip of the pen.
3. Gently slide pen cartridge straight off pen arm.
4. With the pen tip facing the chart, thread a new pen cartridge onto the pen arm. Slide the pen cartridge back until you feel the notch in the pen arm seat securely around the plastic cartridge of the pen tip.
5. Lower the pen on the chart.
6. If the pen arm is bent in the process, carefully bend the arm back so the pen contacts the paper.
7. Remove the pen cap and store on the pen cap holder on the unit.

Note: Replace pen cap when recorder is not in use.

HCL NO.

- A. 8206** Replacement Charts for #8251 and #8252 Temperature Recorder, Fahrenheit reading, 60/pkg.
- B. 8272** Replacement Charts for #8248 and #8249 Temperature Recorder, Celsius reading, 60/pkg.
- C. 8273** Replacement Charts for #8259 Temperature Recorder, Fahrenheit reading, 60/pkg.
- D. 8261** Replacement Charts for #8263 Temperature Recorder, Celsius recording, 24 hour 60/pkg.
- E. 8203** Replacement Pen Pack, 6 red recording pens