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INSTRUCTIONS

GARDCO DISTRIBUTED PRODUCTS



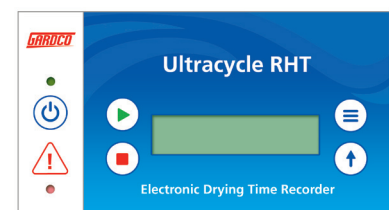
Gardco Electronic Ultracycle RHT Circular Drying Time Recorder

With Relative Humidity & Temperature Measurement

Ultracycle RHT Operating Instructions

The unit has been designed to control a motor so that its shaft driven 3/8" teflon stylus will complete one rotation in a period which can be programmed from 1 minute to 99 hours, 59 minutes. The temperature can be displayed in Centigrade or Fahrenheit.

CONFORMS TO ASTM D5895



Controls

On/Off Button

This button operates from any mode. When pressed, the unit will display the temperature or, "Press Start" and the Green LED power indicator will light. Pressing the button again will turn the unit off and interrupt any test in progress, including any changes being made to the configuration data.

Menu Button

Pressing this button will take you into the configuration menus. This can only be done with the unit on and no test running. The new configuration will be stored in memory when this button is pressed so that the display returns to the start test screen.

Start Button

This starts the test. The motor will continue to run and the elapsed time will be displayed until the stop or on/off button is pressed. The Red LED Motor Run indicator will also light. When the Unit is first powered up, the display will show "Drying Time Recorder" for 5 seconds and then show "Unit Off Press Start".

Scroll Button

In configuration mode pressing this button will advance through the hour range. In the operation mode, pressing this button will display relative humidity with min max values of current test.

Stop Button

This stops the test. The motor will stop and the LED will go out. The elapsed time of the test will be reset.

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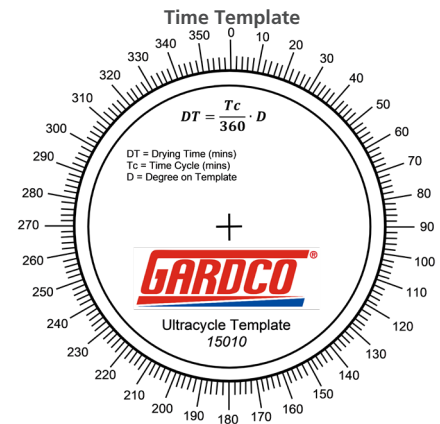
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Instruction for Use

1. Center timer on test panel making sure the arm is counter-rotated eliminating any play in the clockwise motion of the arm. Make sure the Teflon® ball stylus touches the painted surface. This is done by adjusting the counter weight at rear of stylus arm to a balanced position.
2. The 12 gram weight is then mounted on the stylus spindle extending above the rotating arm to give a calibrated weight load. Weight load on the ball can be adjusted by operator so that results will closely coincide with the finger touch method of determining drying time.
3. Program the desired cycle in minutes via the scroll menu.

Program Cycle

- 1) Press On, the Green LED will illuminate
- 2) Press Menu key to enter
- 3) Set hours by pressing the Scroll key
- 4) Press Menu key to enter
- 5) Set Minutes by pressing the Scroll key
- 6) Press Menu key to enter
- 7) Select F° or C° with the Scroll key
- 8) Press Menu key to enter
- 9) Press Start
- 10) Stops upon completion of time cycle



Ambient Operating Conditions: 32°F to 120°F (0-50°C), 5 to 95% humidity (non condensing)

4. Calculate the drying time using the below formula.

$$DT = (Tc/360)(D)$$

DT = Drying time in minutes

Tc = Time cycle in minutes

D = Degree on template

5. After drying stage is completed, place the clear, plastic template provided over the circular area scribed by stylus and note appropriate scale number degree required for the film to cure hard dry. The character of the marks by the ball stylus relate to the drying of the film.

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6. Attach the arm and ball assembly to the motor shaft by way of the hex screw. Once tightened to the desired position do not forcefully move the arm and ball position without loosening as this can cause damage to the gearbox assembly.
7. Apply the coating to your test panel using a Gardco Microm Film applicator or other wet film applicator. Immediately place the drying time recorder on your test panel and lower the clean 3/8 in. weighted Teflon stylus gently into position.
8. Select the desired drying time and the stylus will then begin to be drawn along the test panel. After the selected time cycle is complete the drying time recorder will automatically stop.
9. Evaluate the test panel using the supplied Time Template to determine the stages of drying time.
10. Place the clear Time Template over the circular area scribed by stylus and note appropriate scale number of minutes or hours required for the film to cure, the character of the track by the 3/8 in. Teflon ball stylus relate to the drying of the film (Reference ASTM D5895).
11. Record the results and if desired, record the temperature, humidity and the wet film thickness as these factors are important in considering the drying time of films.



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