



## WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA Warranty adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear are not warranted, including but not limited to contact points, fuses, and triacs.

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CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

## RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED.
2. Model and serial number of the product under warranty, an
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair or calibration,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

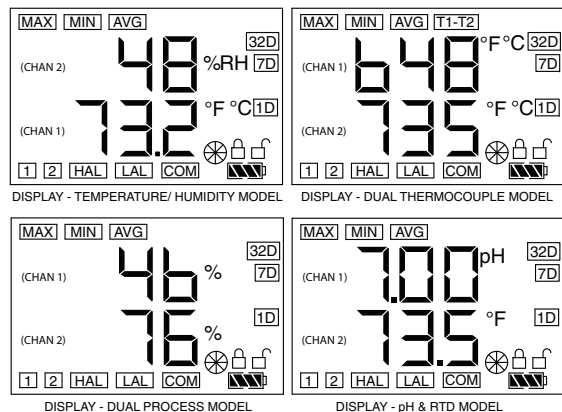
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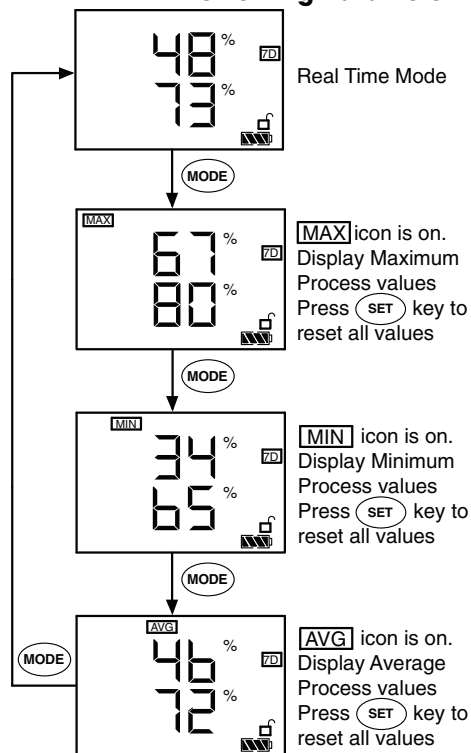
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## Membrane Keypad and Display Functions cont.



- MAX** Displays Maximum values of two channels
- MIN** Displays Minimum values of two channels
- AVG** Displays Average values of two channels
- 32D** Turns on when Chart Speed is set to 32 Days
- 7D** Turns on when Chart Speed is set to 7 Days
- 1D** Turns on when Chart Speed is set to 1 Day
- RH** Displays % Relative Humidity
- °F** Displays Temperature in °F
- °C** Displays Temperature in °C
- %** Displays percentage (0-100%) Dual Process Input Model
- Turns on when Chart is not set to standard scale  
Flashes when pens are jammed
- Turns on when Keypad functions are locked
- Turns on when Keypad functions are unlocked
- Displays Battery life status (Sec. 2-3)
- 1** Refers to Channel (1)
- 2** Refers to Channel (2)
- HAL** Turns on or flashes when in High alarm condition
- LAL** Turns on or flashes when in Low alarm condition
- COM** Turns on when communicating thru RS232
- T1-T2** Displays Differential temperature Dual Thermocouple Model only

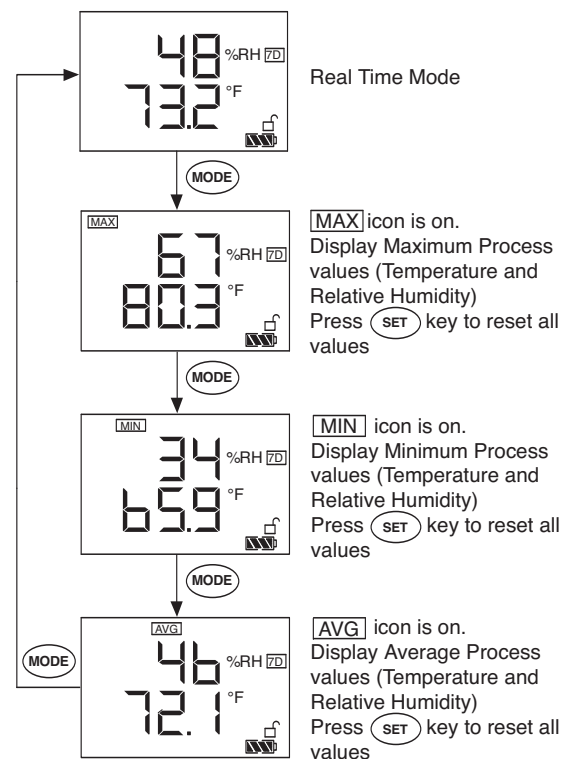
## Reviewing Parameter Values



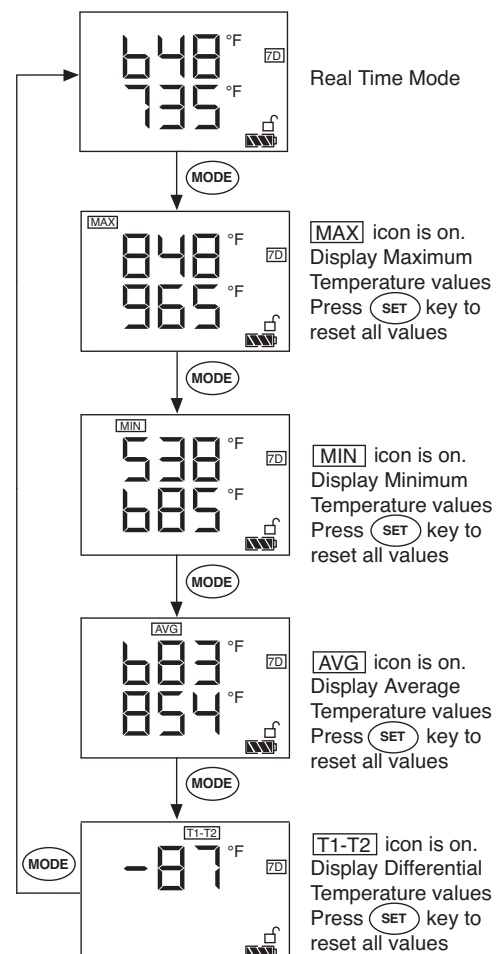
CTXL-DPR Model

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## Reviewing Parameter Values cont.



CTXL-TRH-Model



CTXL-DTC-Model

## QUICK START



## CTXL Series Universal Portable Circular Chart Superecorder™

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Ω OMEGA

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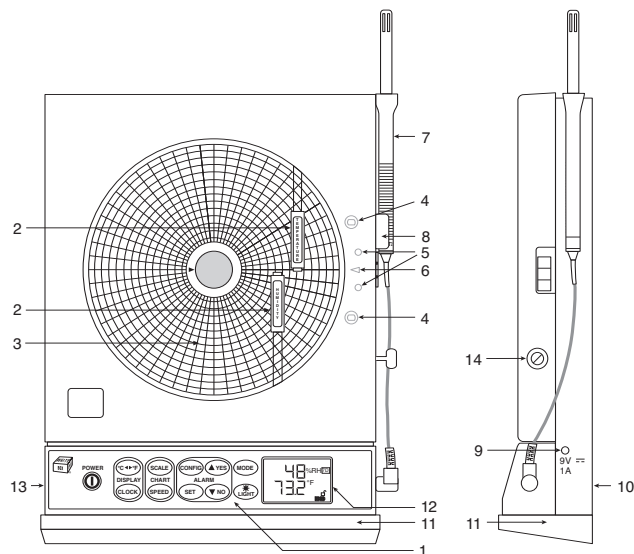
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## Using this Quick Start Manual

Use this Quick Start Manual with your CTXL Recorder to set it up and perform basic operations. For detailed information, refer to the User's Guide (Manual Number M4098).

## Parts of the CTXL

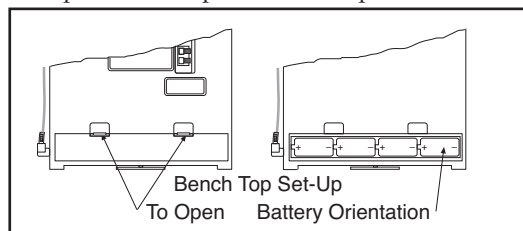


- 1 Control panel display and keyboard
- 2 Pens, upper CHAN 1 (temp), lower CHAN 2 (humidity)
- 3 Chart paper
- 4 Chart light bulbs (inside; on chart base)
- 5 Pen cap posts (inside; on chart base)
- 6 Time set arrow (inside; on chart base)
- 7 Temperature/humidity sensor probe
- 8 Sensor clip
- 9 dc power jack
- 10 Battery compartment (at the rear)
- 11 Decorative foot cover (stabilizing arm inside)
- 12 LCD display, backlight
- 13 RS232 port
- 14 Door lock

## Install the Batteries

1. Place the recorder on a soft surface front face down.
2. Insert the 4 "D" size batteries in the battery compartment as shown in Figure 2.

Batteries provide power if the ac adaptor is not used. Otherwise, they provide power backup in case of ac power failure.



Battery Placement

## Install the Chart Paper

Make sure the Sensor probe is plugged into the Recorder when power is on. The Factory set up is for 7 Day Chart Speed & °F Chart Scale.

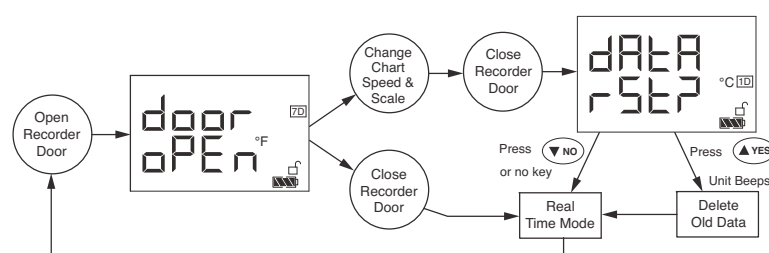
To install or change the same Chart paper:

- Open the Recorder door & remove the magnetic hub that holds the paper.
- Place the new Chart paper.
- Rotate the paper, until the present time lines up with the Time reference arrow as shown in the following figure.
- Place the magnetic hub over the paper & close the recorder door. This can be done with or without power turned on.

### 2.4.1 Changing Chart Speed & Scale

You can change the Chart speed & scale as follows:

- Make sure the unit is turned on by pressing the Power Key.
- Open the Recorder door. The pens will go to the Home position (Bottom of scale) and the display will show "door oPEn" as well as the existing Chart Speed (7 Days) and Chart scale (°F).
- Press the Chart Speed key **SPEED** to change to 1 or 32 day chart.
- Press the Chart Scale key **SCALE** to change to °C if needed.
- Install the new Chart paper as explained in the previous paragraph
- Close the Recorder door. The display will show "dAtA rSt?"
- Press **▲ YES** key to reset (erase) previous stored data in memory. The unit beeps for verification.
- Press **▼ NO** key to continue recording without resetting (erasing) previous stored data in memory.
- If no keys are pressed, the unit will resume recording after 5 seconds without erasing previous stored data in memory.



Changing Chart Speed and Scale Flow Diagram

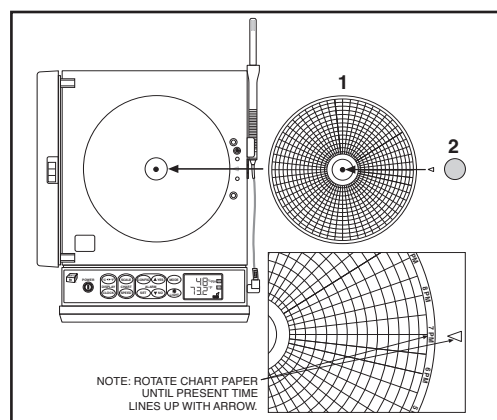
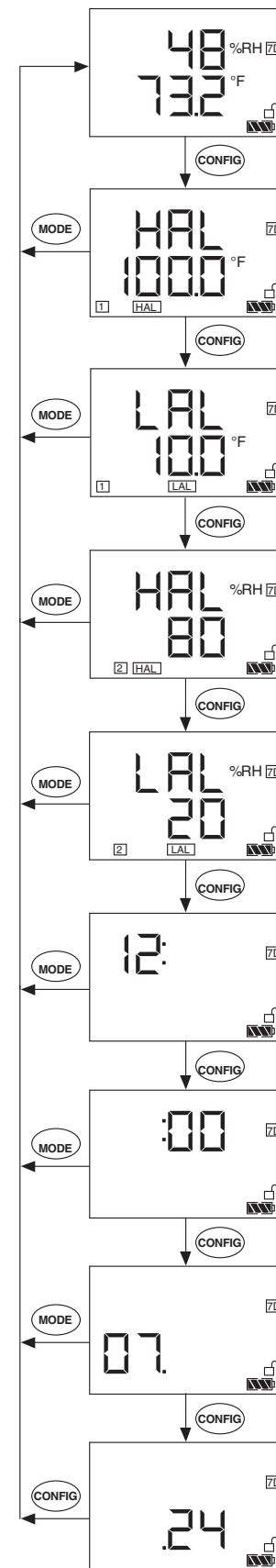


Chart Paper Installation

## Setting Alarms and Time Clock



Real Time Mode

High Alarm - Channel 1 (Temperature)  
Press **▲ YES** or **▼ NO** keys to set high alarm  
Press **SET** key to enable/disable alarm  
**HAL** icon is on when high alarm enabled

Low Alarm - Channel 1 (Temperature)  
Press **▲ YES** or **▼ NO** keys to set low alarm  
Press **SET** key to enable/disable alarm  
**LAL** icon is on when low alarm enabled

High Alarm - Channel 2 (Humidity)  
Press **▲ YES** or **▼ NO** keys to set high alarm  
Press **SET** key to enable/disable alarm  
**HAL** icon is on when high alarm enabled

Low Alarm - Channel 2 (Humidity)  
Press **▲ YES** or **▼ NO** keys to set low alarm  
Press **SET** key to enable/disable alarm  
**LAL** icon is on when low alarm enabled

Clock - Display Hour  
Press **▲ YES** or **▼ NO** keys to set the hour (Military time 0-23)

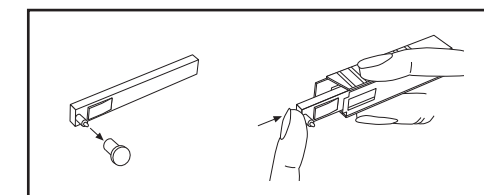
Clock - Display Minute  
Press **▲ YES** or **▼ NO** keys to set the minute (00-59)

Clock - Display Month  
Press **▲ YES** or **▼ NO** keys to set the month (1-12)

Clock - Display Day  
Press **▲ YES** or **▼ NO** keys to set the day (01-31)

## Install the Pens

1. Turn the recorder over (so it is front face up) and open the main door.
2. Remove the pen caps and place on the posts near the light bulbs. Install the pens as shown in Figure 4. The blue pen goes in the humidity pen arm and the red pen goes in the temperature pen arm.



How to Install the Pen

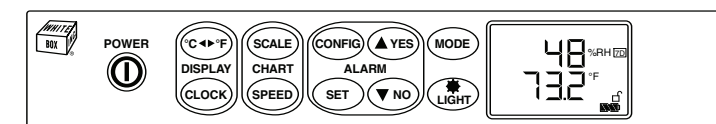
## Recorder Placement

As shipped, the recorder is set up for wall mounting (there is a decorative cover at the bottom of the recorder which remains in place for wall mounting - it comes off for bench top use).

### Mount the Recorder on the Wall

1. Use the template provided in the wall mounting kit to locate the mounting holes.
2. Drill the holes.
3. Place anchors and screws in the holes.

## Membrane Keypad and Display Functions



MEMBRANE KEYPAD

- |   |   |
|---|---|
| <b>POWER</b><br>Turns ON/OFF the recorder   | <b>SET</b><br>Enables/disables low & high alarms (Sec. 2-6)               |
| <b>°C/°F</b><br>Changes temperature display from °F to °C or vice versa - Not used on CTXL-DPR            | <b>▲ YES</b><br>Increments set values                                     |
| <b>CLOCK</b><br>Displays Real Time Clock for 3 seconds  | <b>▼ NO</b><br>Decrements set values                                      |
| <b>SCALE</b><br>Sets the Chart Scale to °F & RH or °C & RH (CTXL-TRH) - Not used on CTXL-DTC and CTXL-DPR | <b>MODE</b><br>Mode Menu- Displays Max, Min, Average values (Sec. 2-7)    |
| <b>SPEED</b><br>Sets the Chart Speed to 1, 7, or 32 Day chart   | <b>LIGHT</b><br>Turns on/off Chart Lights & Display backlight (Sec. 2-13) |
| <b>CONFIG</b><br>Configuration Menu - Sets Low, High Alarms & Time Clock (Sec. 2-6)                       | <b>WHITE BOX</b><br>Locks/unlocks the Keypad Functions (Sec. 2-14)        |