DOMAILLE ENGINEERING

TECHNOLOGY FOR TOMORROW

CO-6700/CO-6800

Ferrule Curing Oven

User's Guide

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CO-6700/CO-6800
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User's Guide

Important Safeguards

Before using this electrical equipment, the following basic precautions should always be followed:

1. Read all instructions.

2. Keep oven out of reach of children.

3. Before use, check that the voltage of wall outlet corresponds to the one shown on the rating.

4. Do not operate equipment with a damaged cord or plug. If the oven malfunctions, avoid dropping or damaging in any manner. Return oven to the nearest authorized service center in order to avoid a hazard.

5. Do not let cord hang over the edge of a table or hot surface.

6. Do not immerse plug, cord or oven in water due to risk of electric shock.

7. This oven is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or with lack of experience and knowledge, unless they have proper training by a person responsible for their safety.

8. Always wear protective, insulated oven mitts or gloves when removing ferrules or handling the unit. THE OVEN GETS VERY HOT!

9. Do not touch hot surfaces on oven.

10. Place ferrules or connectors in the tray before putting into the oven to avoid injury.

11. Do not operate the oven for any other purpose than its intended use.

12. Always move "Power" switch to "OFF" position before removing the plug from the wall outlet.

13. Do not place paper, cardboard, plastic or other flammable materials inside the oven.

14. Unplug from main power socket when not in use.

15. Service and repair should only be conducted by an authorized technician.

16. If oven is used in any manner not specified in this manual, the protection provided by the equipment may be impaired.

CAUTION: DO NOT USE THIS PRODUCT IN ENVIRONMENTS WHERE FLAMMABLE OR EXPLOSIVE GASSES MAY BE PRESENT.

WARNING: ACCESS TO THE POWER SWITCH AND PLUG SHOULD BE MAINTAINED FOR EMERGENCY DISCONNECT.

WARNING: CAUTION HOT SURFACES: This oven generates high temperatures during use. Proper precautions must be taken to prevent the risk of burns, fires, or other injury to persons or damage to property.

WARNING: OVEN CORD MUST BE ROUTED AWAY FROM ALL HOT SURFACES.

CAUTION: This oven is hot during operation and retains heat for some time after turning off. Always use oven mitts when handling hot materials and allow metal parts to cool before cleaning.

- Position the oven so that it is never against a wall or in a corner.
- When operating the oven on a work surface, keep the surrounding areas clear and free from clutter. Ensure adequate air space surrounding the oven for circulation.
- Do not place anything on top of the oven while it is operating or while it is hot.
- Do not operate this oven with other major equipment plugged into the same power socket - there is a risk of blowing the fuse.
- Do not touch the hot oven surfaces while the unit is on or while cooling.
- All users of this oven must read and understand this User's Guide before operating this equipment.
- If the oven begins to malfunction during use, immediately unplug the cord. Do not use or attempt to repair the malfunctioning oven.
- Do not leave oven unattended during use.

Welcome

Congratulations on selecting the Domaille Engineering Ferrule Curing Oven.

This User's Guide will assist you with the operation and maintenance of the Cure Oven to maximize the use and life of this precision equipment.

Introduction

The Domaille Engineering Ferrule Curing Oven is specifically designed for 3 types of curing trays:

1. Twenty-four (24) MT and MT-RJ type ferrules at a time.

2. Forty-eight (48) of the popular single fiber connector designs, including FC, SC, ST, and LC with the single fiber connector curing block.

3. Twelve (12) PRIZM® type connectors.

A touchscreen controller is conveniently located on the front panel allowing for easy operation. The oven allows for three (3) modes of curing operations to be set at the Main Menu screen: Temperature Hold mode, Timed mode and Step & Ramp mode. In addition, "Timed" mode can be run in either "Single Timer" or "Twin Timer" modes of operation.

The Timer mode allows the oven to gradually increase to a selected temperature, maintain the temperature for a selected operating time, and then gradually decrease to room temperature by shutting off power to the heating element.

The "Temperature Hold" mode maintains the curing oven at a constant selected temperature indefinitely.

"Step & Ramp" mode allows the user to program up to a 7 step program for more advanced heating profile requirements.

The oven can be ordered in either 120 volt (Model# CO-6700) or 240 volt (Model # CO-6800).

Overview

CAUTION: DO NOT USE THIS PRODUCT IN ENVIRONMENTS WHERE FLAMMABLE OR EXPLOSIVE GASSES MAY BE PRESENT.

Operating Environment

Do not subject the unit to the following conditions:

- Dramatic temperature fluctuations
- High humidity or condensation
- Water, oil, chemicals, or corrosive gasses
- Dusty environments
- Severe shock or vibration
- Improperly grounded electrical outlets

Operating Location

The unit should be placed on a hard, flat surface that is sturdy enough to support the weight of the oven, jumpers and any accessories. A lab table or workbench is recommended.

- Proper handling must be maintained in order for the unit to operate correctly
- Do not drop the unit
- Do not shake the unit
- Always ship the unit in the original shipping carton, using the original packing materials

Cleaning

The oven exterior may be cleaned using a slightly dampened cloth and a gentle cleaner. The touchscreen controller should never be exposed to such items as paint thinners, benzene compounds, or strong acids or alkalis.

If cured epoxy builds up on the oven heat plate (or curing block), it may be removed by gently scraping the block with a CO15016, Epoxy Removal Tool.

Screen protectors are available to protect the touchscreen from scratches, epoxy, and dirt. Contact Domaille Engineering for availability and pricing.

Cure Oven Set Up

Place the curing oven on a hard, flat surface that is sturdy enough to support the weight of the oven, jumpers, and any accessories. A lab table or workbench is recommend.

Connect the curing oven to the power supply.

- Attach the female end of the supplied power cord to the curing oven power cord outlet (item#3) located on the back panel of the unit.

- Attach the male end of the supplied power cord to the power supply (wall outlet).

WARNING! TO PROVIDE PROTECTION AGAISNT RISK OF ELECTRIC SHOCK, CONNECT ONLY TO A PROPERLY GROUNDED OUTLET.

Turn the curing oven power "ON/OFF" switch/circuit breaker (item #2) located on the back panel of the unit to the "ON" position.

Other Connections

The cure oven is equipped with two external data ports: USB and ethernet.

These ports are for use as follows:

USB (left port in photo):
This port is used to load new software on the cure oven. As Domaille Engineering comes out with new software features for the oven, the user will be able to load new software onto the oven using this port. WARNING: THIS PORT SHOULD NOT BE PLUGGED INTO ANY DEVICE OTHER THAN A DOMAILLE ENGINEEING SUPPLIED USB THUMB DRIVE. The USB port is not for use as a connection to an external PC or server.

Ethernet (right port in photo): This port is used to connect the oven to external data collection devices such as DE DataLink™. Current software is not available for collecting data from the oven, but the port is provided for future upgraded versions of software.

Equipment connected to the data ports shown above must provide double or reinforced isolation from hazardous voltages according to IEC 61010-1 or IEC 60950-1. Failure to connect approved devices to the ports is not recommended by Domaille Engineering.

Cure Oven Software Instructions

Main Menu

The Main Menu screen [Fig. 1] displays at the startup of the cure oven.

This menu allows for selection of entry into one of the three modes of use that the cure oven will operate; or, the user can enter into a setup screen for selecting equipment parameters.

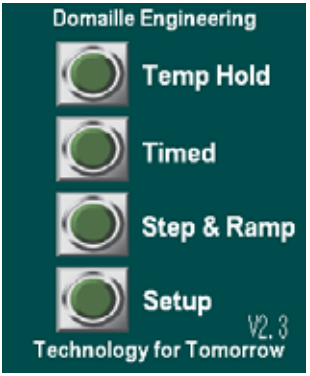

FIG 1. Main Menu

Press the GREEN button to the left of the mode to enter that mode. *Note: If any of the GREEN touch buttons to the left of the mode description labels are not visible they have been disabled in the setup menu [Fig. 8].

Setup Menu

The Setup Menu [Fig. 2] is used to set the parameters of the cure oven. By pressing the GREEN setup button on the Main Menu the user will see the password entry screen to enter into setup as shown to the right:

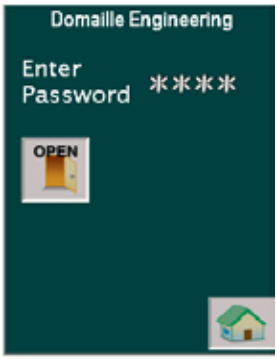

FIG 2. Password Entry Screen

The initial password to get into the setup screens when shipping from Domaille Engineering will be blank. Pressing the OPEN button without entering a password will allow the first user into the setup.

If a previous password has been setup the user must enter this password by pressing the **** field and entering the 4 digit number through a numeric keypad [Fig. 3].

FIG 3. Numeric keypad to enter password

After entering the password, press the OPEN button to verify if the password is correct. If a correct password has been entered the first setup screen will be displayed. If the password is incorrect, a RED text alert will display "Incorrect Password" [Fig. 4].

If the memory is not retained in the cure oven controller the password will reset to "0" and no password is needed to enter the setup screens. By pressing OPEN, the user will be allowed to enter the setup screen. This is abnormal and should not happen under normal conditions.

Once the user is inside the setup menu the first setup screen is displayed [Fig. 5].

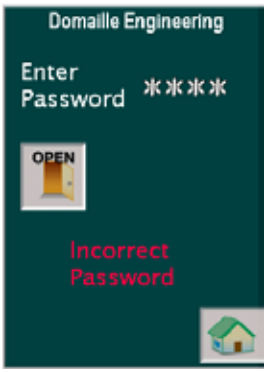

FIG 4. Incorrect Password entered

On Setup Screen #1 the user can adjust the following setup parameters:

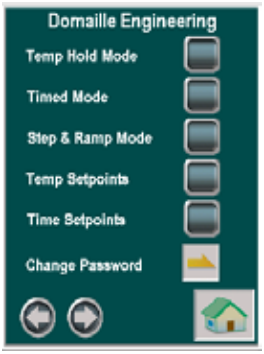

FIG 5. Setup Screen

- "Temp Hold" Mode (Turns GREEN button on Main Menu ON or OFF).
- "Timed" Mode (Turns GREEN button on Main Menu ON or OFF).
- "Step & Ramp" Mode (Turns GREEN button on Main Menu ON or OFF).
- "Temp Setpoints" (ENABLES and DISABLES users ability to change).
- "Time Setpoints" (ENABLES and DISABLES users ability to change).

The CHANGE PASSWORD option brings the user to the CHANGE PASSWORD Screen [Fig. 6] which allows the user to enter a new master setup menu password or select which language they want the user interface to operate in. The numeric value for each of the languages is as follows:

FIG 6. Change Password Screen

1. English
2. Spanish
3. German
4. Polish

Press the BACK ARROW button to leave this screen. Always be sure to write down the masterpassword and put it in a safe and secure location.Without it, the master user will not be able to re-enter the setup menus.Press the box next to the desired parameter to toggle the setting on or off. Once these parameters are set, the controller memory should maintain settings under normal operations.

- The ARROW buttons in the lower left of the screen will navigate the user to the next setup screen.
- The HOME button in the bottom right will return the user to the Main Menu.

By pressing the right ARROW button, the user will be taken to Setup Screen #2 [Fig. 7].

By pressing the yellow ARROW by CHANGE PASSWORD the user enters the password and language change screen. See FIGURE 5 on the page before.

FIG 7. Setup Screen #2

On this screen the user has the option to choose the following parameters:

- Units of Temperature (Fahrenheit or Celsius).
- "Twin Timer" mode (ON or OFF).
- "Timed" mode, "Wait for Set Point" (checked) or "Start Timer IMMEDIATELY" (unchecked).
- "Timed" mode, heater operation after time done (TURN OFF HEATER (checked) or LEAVE ON (unchecked)).
- Audible Alarm after timing (ON or OFF).

Press the box next to the desired parameter to toggle the setting on or off. Once these parameters are set, the controller memory should maintain settings under normal operations.

- The ARROW buttons in the lower left of the screen will navigate the user to the next setup screen.
- The HOME button in the bottom right will return the user to the Main Menu.

By pressing the right ARROW button, the user will be taken to Setup Screen #3 [Fig. 8].

On Setup Screen #3 the user can adjust the following setup parameters:

FIG 8. Setup Screen #3

- "Log Temp" Mode (Turns on Temp Logging within DE DataLink™ software).
- "Enable DE DataLink™ " Mode (Enables communications and menus for use of DE DataLink™ software).
- "Set Batchsize from Barcode" This is a feature that will use the 14th thru 16th characters in

the barcode scan as a batchsize setting (allowed values are 1-999.) For users running mixed batchsizes and tracking the data in the DE DataLink™ software this feature reduces the amount of manual batch size changes needed.

- "Enable Recipe Key" Mode (Enables menus for user to recall stored RECIPES).

When the Enable boxes are checked for DE DataLink™ and/or Recipe Key Modes, it will bring up a special icon on the normal operation mode screens for TEMP MODE, TIME MODE, STEP AND RAMP MODE as follows:

Pressing these buttons will take the user to the special screen they represent. (See the sections on DE DataLink™ and Recipe management later in this manual).

By pressing the right ARROW button, the user will be taken to Setup Screen #4 [Fig. 9].

On Setup Screen #4 the user can adjust the following setup parameters:

FIG 9. Setup Screen #4

- "Cold Tray Timer Start Delay" Mode (This is used when cold trays will be put into the already heated oven. This delay time is the amount of time it takes for the oven to stabilize at the SETPOINT temperature after a cold tray has been inserted. The timers in timer mode will not start until after this delay time.)
- "Reset Timer when temp drops below tolerance" Mode (This parameter is used to force the timers to reset if the temperature of the oven drops below temperature tolerances when a cold tray is put in the oven.)

By pressing the right ARROW button, the user will be taken to Setup Screen #5 [Fig. 10].

The following parameters are available to be setup:

- "Upper Temp Limit" – maximum temperature allowed to be entered as a set point (0 thru 999).
- "Lower Temp Limit" – minimum temperature

FIG 10. Setup Screen #5

allowed as a set point (0 thru 999).

- "Temp Alarm Tolerance" – tolerance +/- around the set point temp for determining the RED or GREEN color of the actual temp display on the "Temp Hold" mode and "Timed" mode.

- "Temp Offset Correction" – This is an offset value that is added to the thermocouple reading. Use this parameter during oven temperature calibration to get the Type K thermocouple to read similar to a calibrated thermocouple standard.

- "Ramp/Hold Temp tolerance to Start Hold Time" – This parameter is used as a temperature tolerance to determine when the hold time will start in the "Step & Ramp" mode. The hold time will start when the actual temp equals the desired temp minus the tolerance. Due to PID control slowing gain when approaching programmed set point (to avoid overshoot when ramping towards a temperature set point), a user can set this tolerance to begin the hold time when the actual temp is below the desired hold temperature.

By pressing the right ARROW button, the user will be taken to Setup Screen #6 [Fig. 11].

On Setup Screen #6 [Fig. 11] the user can adjust the PID parameters of the oven temperature controller either manually (not recommended) or through auto tune algorithms built into the electronics. To manually adjust the P, I, or D values, press the numeric value next to the letter and enter a new number. The range of allowed values is 0 thru 99.9 for each parameter. For a typical oven configured to use the standard Domaille Engineering MT curing tray, the values should be approximately P=8, I=4, and D=1, respectively.

FIG 11. Setup Screen #6

To perform an AUTO TUNE of the PID parameters of the oven the user should follow these steps:

- Place the object and tray to be heated in the cure oven while the oven is at the normal start temperature.

- Set the temperature set point of the oven to the desired final set point.

- Once the setup is ready, press the RUN/STOP button to turn the oven on [Fig. 8].

- Immediately press the AUTO TUNE button to put the oven in AUTO TUNE mode (Turn it ON) [Fig. 8].

Allow the oven to ramp to the set point temperature without manual intervention.

After the oven reaches the set point temperature the AUTO TUNE button will automatically turn itself off and the user will notice that the PID parameters will be changed to new numbers maximizing efficiency in heating the object between the start temp and end set point temp.

By pressing the right ARROW button, the user will be taken to Recipe Storage Screens [Fig. 12].

On Recipe Storage Screens #1 and #2 [Fig. 12] the user can store current settings to one of eight unique recipes. Press the green button and all current parameters in the cure oven are saved to that recipe number.

Also, the user can name the individual recipe by pressing the area below the words "Save Recipe #."

After the setup has been completed, return to the Main Menu screen to begin using the cure oven. See Fig. 1 Main Menu.

FIG 12. Setup Screen #1

FIG 12. Setup Screen #2

Temp Hold

The "Temp Hold" screen [Fig. 13] will be displayed after entering the "Temp Hold" mode of the cure oven.

This mode allows for the user to select a temperature set point and to operate the oven at that constant temperature indefinitely. To select the desired temperature, the user should press the set point numeric value and enter the

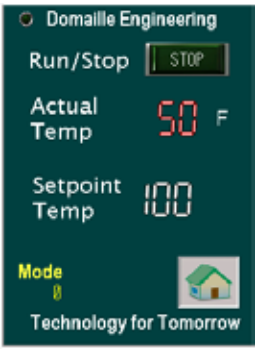

FIG 13. Temp Hold Mode Screen

desired set point value on the pop-up numeric keypad [Fig 14].

Once the set point temperature has been selected, the user should press the GREEN "RUN/STOP" button to put the oven in RUN mode. Once in RUN mode the oven will attempt to reach the programmed temperature and then hold. As the oven rises in temperature to reach the set point, the actual temperature display will turn GREEN once temperature is actually within the alarm tolerance of the set point [Fig 15]. Refer back to the set up instructions for details on setting the "Temp Alarm Tolerance".

FIG 14. Numeric Data entry keypad

The GREEN LED at the top left of the screen will indicate when the oven is running or stopped.

The YELLOW mode indicates when the temperature controller is in PID control mode (0) or manual mode (2). This mode is not user selectable and normally should be (0).

The HOME button at the bottom right of the screen will always return the user to the Main Menu and stop the oven heating operation.

FIG 15. Actual Temp turns GREEN when within alarm tolerance of set point.

Timed Mode

The "Timed" mode screen [Fig. 16] will be displayed after entering the "Timed" mode of the cure oven.

"Timed" mode allows for the user to select a temperature set point and operation time for the oven cure cycle. Depending on the parameters set in the setup menu, the user can select the following options:

- Start timer immediately
- Start timer after temperature set point is reached.

FIG 16. Timed Mode Screen

- After timer is done, turn ON or OFF audible alarm.

- After timer is done, turn oven heater ON or OFF.

FIG 17. Numeric Data Entry Pad

Text indicators on the "Timed" mode screen will notify operator of mode options, once selected in the setup menu.

To select the desired temperature, the user should press the set point numeric value and enter the set point value on the pop-up numeric keypad [Fig. 17].

To select the desired minutes or seconds on the timer, the user should press the MINUTES or SECONDS field and enter the value on the pop-up numeric keypad [Fig. 18 and Fig. 19].

FIG 18. Numeric Entry for Minutes

FIG 19. Numeric Entry for Seconds

The maximum MINUTES that can be entered are 999 and SECONDS are 59.

To start the time cycle the user will press the GREEN "Start Timer" button in the lower left corner. This will initiate the oven to start heating and begin the timer immediately. If in immediate mode or if in "wait for set point" mode, the timer will wait until the set point

FIG 20. Time Cycle Complete Screen

temperature is reached after which the timer will start. The "Reset Timer" button can be pressed at any time to stop the time cycle and return to settings prior to starting the time cycle.

After the time cycle has run its course the time cycle end screen will appear and an audible alarm will sound (if activated). An example of this screen is shown below in [Fig 20].

The operator should press the yellow button to stop the alarm and return to the "Timed" mode screen.

Twin Time Mode

The cure oven is also capable of running in a "Twin Time" mode [Fig. 21]. The "Twin Time" mode can be selected in the setup menu.

"Twin Time" mode allows the user to select a temperature set point and two (2) times for the oven cure cycle. "Twin Time" is similar to "Timed" mode except the oven will execute "Time 1" first and then a text box pops up, alerting the user "Time Period 1 Complete. Press Start to Continue" [Fig. 22]. Once the user presses the "Start Timer" button "Time 2" will begin.

To re-start the oven and initiate the second time period the user should press the GREEN "Start Timer" button, in the bottom left of the screen. After "Time 2" has elapsed the "Time Cycle Complete" screen [Fig. 20] will appear. Press the YELLOW button to return to "Twin Time" mode.

FIG 21. Twin Time Mode

FIG 22. "Time 1" done indicator

The HOME button at the bottom right of the "Timed" mode screen will return the user to the Main Menu and stop the oven heating operation. While the timed operation is running the HOME button is not active. Pressing "Reset," will stop the timed operation and the HOME button will re-appear.

Step & Ramp Mode

The "Step & Ramp" mode screen [Fig. 23] will be displayed after entering the step and ramp mode of the cure oven.

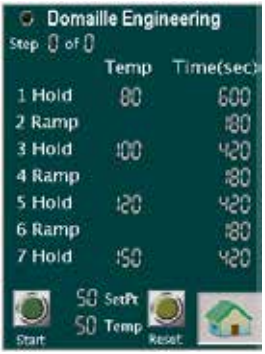

FIG 23. Step and Ramp Mode Screen

This mode lets the user select up to four (4) temperature set points followed by time values with linear ramp settings allowing the oven to operate in a programmable mode over an extended period of time (each step can be 65535 seconds long). A text indicator in the top left will allow the user to identify the current step of the overall process. In addition, once a step has started or is completed the text of thestep will change to YELLOW [Fig 24].

The "Step & Ramp" mode can accommodate exposure to multiple temperature levels for various times. It allows for easier processing versus manual intervention with timers and temperature changes.

FIG 24. Step & Ramp Step Indicators

To setup a "Step & Ramp" profile, select the desired temperature(s) and/or times by pressing the numeric value displayed on the screen and enter the desired set point value on the pop-up numeric keypad as was done in other modes [Fig. 25].

Figure 26 is a graph comparing temperature and time, displaying the ideal desired curve that can be programmed into the cure oven with the "Step and Ramp" mode. Each parameter from the step and ramp screen is a point in the graph. The graph demonstrates four temperature and seven cycle times. The initial time to rise from the starting temperature to the first set point is handled by the standard PID control parameters of the oven temp controller. The final cooling step is through ambient convection cooling.

FIG 25. Numeric Entry Keypad

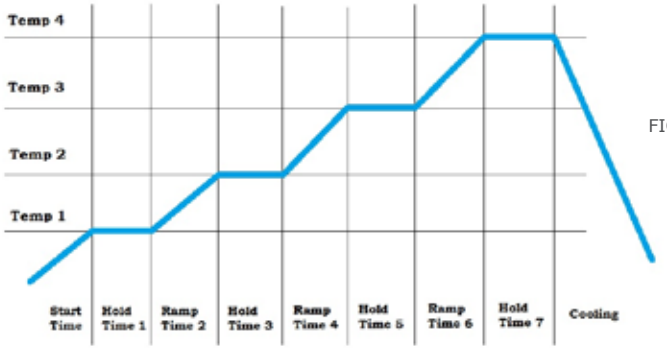

FIG 26. Ideal Step & Ramp curve

The ramp times entered into the oven are linearized by the controller; the dynamic set point changes are made based on time in the ramp. The maximum ramp that can be entered is 10º C/minute or 50º F/min. If a user attempts to enter a faster ramp, the "Start" button disappears and an alert message is displayed in place of the GREEN "Start" button [Fig. 27].

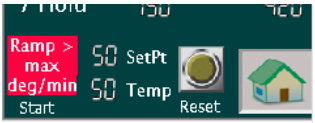

FIG 27. Ramp > Max. Degree/Min.

In a similar alert type mode, the four (4) entered temperatures must increase in value (i.e. the temperature of "Temp 2" has to be greater than "Temp 1"). If a user tries to enter a lower temperature than any of the previous, an alert message will replace the "Start" button [Fig. 28].

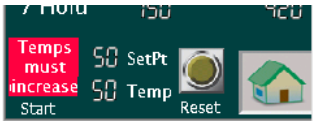

FIG 28. Temperatures must increase

After the parameters have been set, the user can start the oven into the "Step & Ramp" heating profile using the GREEN "Start" at the lower left of the screen. If the current temperature of the oven is higher than the first temperature set point, an alert message will prevent the user from starting the operation [Fig. 29].

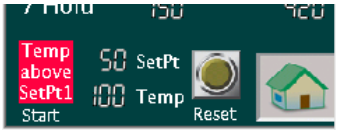

FIG 29. Temperature above Set point 1

Once the oven cools through convection, the alert message will disappear and the oven can be started.

Another alert message used on the oven is the "INIT TEMP" alert. This alert is displayed when the oven is ramping at the beginning of the cycle to the "Temp 1" parameter [Fig. 30].

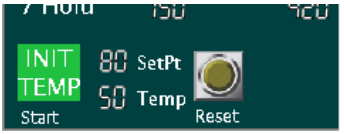

FIG 30. Initial temperature from current temp to "Temp 1"

The "Reset" button can be used at any time to cancel the current temperature profile process.

After the temperature profile has completed its cycle, the "Time Cycle Complete" screen will be displayed [Fig. 31].

FIG 31. Time Cycle Complete

DE DataLink™ Screens

By pressing the barcode icon on the normal operation screens the user will be directed to the screen for entering DE DataLink™ information. See FIGURE 32.

On this screen the user can enter information that will be sent to the DE DataLink™ system during operation. This information allows the user to track what is happening with the oven.

First, the user will select if they want to scan single connector barcodes or batches of connectors/cables. This is changed by pressing the Single button.

The Load button is used to track the LOAD or UNLOAD times of the connectors going into the oven. Thus, a user can scan connectors/cables/batches both when they go into the oven and when they come out of the oven.

FIG 32. DE DataLink™ barcode scanning

This data is all stored on the
DE DataLink™ server database as barcodes are scanned.

The Tray SN is used to track the trays being used during the oven processes.

The Operator ID is used to track who is operating the cure oven.

The Load ID is a number that is generated by DE DataLink™ when "GetLoadID" is pressed. This unique number can be used as identification of all loads processed.

The Batch Size is used when running in "batch mode" to give the DE DataLink™ system visibility to the quantity of parts in the batch.

When the user has the correct data entered on the screen they should scan the batch/connector/cable barcode and this will initiate data transfer and storage with the DE DataLink™ system.

Press the back arrow button to return to the screen you left off at.

Recall Recipe Screens

By pressing the key icon on the normal operation screens the user will be directed to the screen for recalling stored recipes. See FIGURE 33.

After pressing the key icon, find the recipe you'd like to recall and press the green button. This will pull parameters from memory and reset the oven to the new settings selected.

Press the back arrow button to return to the screen you left off at.

FIG 33.

Maintenance and Repair

Maintenance of internal electrical parts is not required. Do not disassemble, modify, or attempt to repair the product.

All repairs must be done by Domaille Engineering at our Rochester, MN location. Any attempt to modify or repair the unit will void all warranties, either expressed or implied.

Simple Troubleshooting

Simple troubleshooting of the oven for minor issues is possible by using the following guide:

No power to the curing oven:

- Ensure the power cord is securely attached to both the power supply (wall outlet) and the curing oven Power Cord Outlet (item #3) located on the back panel of the unit.

- Ensure the curing oven Power "ON/OFF" switch/circuit breaker (item #2) located on the back panel of the unit is in the "ON" position.

NOTE: When the circuit breaker trips, the switch reverts back to the "OFF" position.

No Power to the heating element:

- Ensure the thermal overheat switch, located on the right end of the heating element under the protective cover, is not tripped.

- REMOVE POWER TO THE OVEN BY DISCONNECTING AC POWER CORD BEFORE ACCESSING THERMAL OVERHEAT SWITCH.

- Access the switch by removing the two screws on the right side of the oven body and lifting the cover off.

- If the thermal overheat switch is tripped, reset it by pressing the WHITE button in the center of the switch. See images below.

Service & Support

Technical Specifications

Machine Height	8.1” (206 mm)
Machine Width	8.25” (210 mm)
Machine Length	21.00” (533 mm)
Power Requirements	1.7 amps; 220-240VAC; 50/60 Hz.
Machine Weight	16.5 lbs (7.48 kg)
Shipping Weight	19.0 lbs (8.61 kg)

Environmental Operating Specifications

Altitude	Up to 2000m
Temperature	5-40º C
Humidity	40-80%
Voltage Fluctuation	+/- 10%
Voltage Transients	To 2500V
Pollution Degree	2 or as restricted or extended conditions apply

In the event of malfunction, or when other maintenance is required beyond the steps documented in this manual, service must be done by a qualified Domaille Engineering technician. There are no user serviceable parts inside the machine. Do not remove sealed screws. Evidence of tampering will void warranty. For assistance, contact Domaille Engineering, LLC, USA.

CE Notice (European Union)

Marking by the symbol CE indicates compliance of the Ferrule Cure Oven Model # CO-6800 to the following directives of the European Union:

2004/108/EEC EMC Directive
EN 61010-1:2010
EN 61010-2-010:2010
EN 61326-1:2013
EN55011:2009+A1:2010

Year of CE Marking: 2014

EMC test report: NC1405660.1, NC1405660.2, NC1405660.3

Safety test report: 092-1405559-000

Limited Warranty

Domaille Engineering, LLC ("Domaille") products are warranted by Domaille to be free from defects in workmanship and materials for a period of one-year from the original purchase date. This warranty covers defects in materials or workmanship only and does not include damage due to abuse, misuse, problems with electrical power, problems with compressed air supply, servicing not authorized by Domaille, failure to properly care for and maintain the products, or normal wear and tear. In addition, use of parts, components, or accessories not supplied or approved by Domaille will void this warranty.

Domaille's sole liability arising from any use of its products and this warranty is to repair or, at Domaille's sole discretion, replacement of defective products or defective component parts thereof. To request warranty service, you must contact Domaille at 7100 Dresser Dr. N.E., Rochester, MN 55906, USA. If warranty service is required, Domaille will issue a Return Material Authorization Number (RMA#).
You must ship the products back to Domaille in their original or equialent packaging, pre-pay shipping charges, and insure the shipment or accept the risk of loss or damage during shipment. Along with your RMA # include your name, telephone number, return address, proof of original purchase date, and an escription of the claimed defect. If the defect is covered by this limited warranty, Domaille will repair or replace (at its option) the product or the defective component part(s) and ship them freight prepaid to an address in the continental U.S. Shipments to locations outside of the U.S. that are not the original shipped-to location will be made freight collect or will be shipped to the original shipped-to location, at the discretion of Domaille.

NO WARRANTY OTHER THAN THE ABOVE LIMITED WARRANTY IS MADE, EITHER EXPRESSED OR IMPLIED. ALL EXPRESSED AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE ONE YEAR LIMITED WARRANTY PERIOD. DOMAILLE SHALL HAVE NO LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RELATING TO ITS PRODUCTS.

SOME STATES (OR JURISDICTIONS) DO NOT ALLOW LIMITATIONS ON THE DURATION OF IMPLIED WARRANTIES, OR EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR CERTAIN PURCHASERS. THEREFORE, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE ADDITIONAL RIGHTS WHICH VARY FROM STATE TO STATE (OR JURISDICTION TO JURISDICTION).

Company Information:

Domaille Engineering, LLC is a precision manufacturer distinguished by the accuracy of our products and services. One of our critical goals is to provide excellent customer service. Please contact us for service, support or input on how we can improve our service to you.

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