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# PURPOSE

This document shall specify UI software requirements for the new Cleveland Range Common UI (Eclipse and T1). Models. Differences between models shall be annotated.

# SCOPE

Cleveland Range has provided a story board Power Point and Excel spreadsheet to describe basic functions and UI flow and error handling characteristics.



Using these documents, this specification shall provide screen shots of a PC simulation of the UI created by ELREHA with the power point document as a guide. The included simulation screenshots and/or visual representations depicted throughout this specification are used by the Software team as a guide for screen layouts and may not be the final layouts in the firmware.

This document shall further detail software requirements of the UI.

# REFERENCE DOCUMENTS

Project Eclipse Storyboard Master 1.23.24.pptx

T1 Skillet Storyboard Master 2.7.24.pptx

T1 (Gas) MODBUS parameter List(REV03).xlsx

# GLOSSARY

|  |  |
| --- | --- |
| Acronym | Definition |
| UI | User Interface |
| IO | Input Output (hardware control) |

# GENERAL UI REQUIREMENTS

## UI Button Functionality

A button action shall either be a press and release or a press and hold.

* A press and release button action shall be implemented on the release of the button. If applicable, any modBus command sent to the IO is sent upon release.
* A press and hold button action shall be implemented so long as the button is in hold state. If applicable, any modBus command sent to the IO is sent so long as the button is held.
* When any enabled button is depressed, the button shall be highlighted.
* For buttons that select an item such as a recipe, upon release the highlighted button shall remain on the screen.

## Recipe Stages

A Recipe stage shall utilize a cooking mode and perform until its defined conditions have been completed or it shall be a message where a user is prompted to perform some action before further advancing in the recipe process.

* There are several types of cooking modes that can be utilized by the user in a recipe stage (see [Section 7](#Section7)).
* A recipe stage with a message is a user created instruction that shall provide information to a user and require user acknowledgement prior to proceeding to the next stage.
* A recipe shall have a maximum of 8 stages.
* A recipe shall consist of any combination of cooking modes or messages up to the maximum.

## Numeric Keypad

Numeric user defined entry values shall require a numeric keypad for user data entry.

**TIME keypad**

The keypad displayed for user time data entry shall use the following or similar design:

A screenshot of a calculator

Description automatically generated

**Figure 1**

* Time information entered on the display area should be right shifted in as the user enters data.
* The Clear button would delete all data from the display.
* The --:-- key shall immediately display --:-- (used as Infinity time) in the display and no further entry other than Clear can be entered.
* The Green Check Mark confirms the user input.
* The “X” cancels the data entry and returns to previous screen.
* If an invalid value is entered and Check Mark pressed, the display shall show INVALID.
* Valid entries for time shall be 0 – 99 HRS : 0 – 59 MINS with a minimum time of 1 minute (00:01).

**Additional UI Keypads**

The keypad(s) for target temperature, probe temperature data entry or password entry shall use the following or similar design:

A screenshot of a calculator

Description automatically generated A screenshot of a calculator

Description automatically generated A screenshot of a password entry

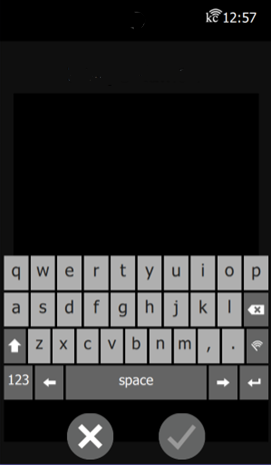
Description automatically generated

**Figure 2** **Figure 3** **Figure 10**

* The Clear button would delete all data from the display.
* The Green Check Mark confirms the user input.
* The “X” cancels the data entry and returns to previous screen.
* INVALID shall be displayed if TEMP values or Password entry is invalid.

## Alpha Numeric Keyboard

A keyboard to enter alpha-numeric data such as recipe name, stage message , service information, or password information shall use the following or similar design with additional characteristics based upon keyboard usage.



**Figure 4**

**Input Limitations**

* The input limitations for Recipe Name shall be 2 lines with maximum 10 characters per line.
* The input limitations for Message entry shall be 4 lines with maximum 20 characters per line.
* The input limitations for Password entries shall be 1 line with maximum 10 characters per line
* The input limitations for Serial Number entry shall be 1 line with maximum 20 characters per line.

# HOME SCREEN

At the top of the HOME screen, a display of Kitchen Connect (kc) status (TBD) and a real-time clock shall be displayed.

The HOME screen buttons shall provide the user access to various functions or features as described below.

Note: T1 models shall NOT display LID buttons or Water Fill button at bottom.

A black background with white text and icons

Description automatically generated

**Figure 5**

## Chef Hat

The button provides access to Manual Recipe creation screen(s). The following design shall be displayed upon a user pressing the Chef Hat button. [Section 7](#Section7) shall describe the functionality of the Manual Recipe creation feature.

Note: T1 models shall not display Lid(s) or Fan buttons.  
Non-Gas models shall not display the Gas High/Low Button.

A screenshot of a phone

Description automatically generated

**Figure 6**

## Press & Go

The button provides the user access to a limited list of Favorite recipes. The following or similar design shall be displayed upon the user pressing the Press & Go button. [Section 8](#Section8) shall describe the functionality of the Press & Go feature.

A black screen with squares

Description automatically generated  
**Figure 7**

## Settings

The Button provides the user access to Manager, Service and Cookbook functions ([Section 9](#Section9)).

A screenshot of a phone

Description automatically generated  
**Figure 8**

## Cookbook

The button provides the user access to Master List of recipes stored in UI memory. The following or similar design shall be displayed upon the user pressing the Cookbook button. [Section 10](#Section10) shall describe the functionality of the Cookbook feature.

A screenshot of a menu

Description automatically generated

**Figure 9**

## Pan Buttons

The two (2) lower left buttons shall provide the user with the ability to Level or Tilt the Pan.

**PAN button functionality**

While in the HOME screen, the UI shall monitor PAN status received from the IO board.

The user pressing and holding the PAN UP (tilt) button shall invoke the UI to send a modBus command to the IO board to Tilt the Pan. Upon pressing the PAN UP button the UI shall disable the Chef Hat, Press & Go, Settings, Cookbook and Water (if applicable) buttons for 3 seconds allowing time for the IO board to report status of the Pan.

Upon the IO board reporting the Pan is not at a Level position, the UI shall continue to disable all these buttons.

The user pressing and holding the PAN DOWN (level) button shall invoke the UI to send a modBus command to the IO board to Level the Pan.

Upon the IO board reporting the Pan is at the Level position, the UI shall Enable all Home buttons.

Upon a user releasing either button, the UI shall not send a modBus command to the IO board for PAN movement.

If a Pan is reported as not-Level via modBus from the IO board and user presses any of the disabled buttons, the UI shall display a Pop-Up message stating “Pan Must Be in Level Position” with a confirmation Check Mark to remove pop-up.

## Water Fill Button

**Eclipse models only**.

Selecting the Water Fill button on the Home screen provides user access to a page to configure and add water to the unit.

The page design shall provide a user the following:

* Arrow buttons to increase or decrease a value from 0 to (Unit Model number defines upper limit – 30 or 40 gallons)
* Start, pause, stop, and erase buttons
* Home button available only when water fill process is stopped
* Visual indication of water filling in progress or paused

The page shall be designed using a similar layout as below.

Up and Down arrows (press or press and hold) allow the user to configure gallons (0 – 40 G or 0 – 30 G) or liters (0 – 151 L or 0 – 113 L). The arrow buttons shall only be enabled when the fill process is not active (OFF).

The text area (FILL VALUE) to the right of the arrow buttons shall display the configured input.

The erase button to the right of the text area shall reset the configured input to 0 only if the fill process is not active (OFF).

Below the Arrow/text area, 3 buttons shall be displayed allowing user to control the Fill process.

The green Arrow start button shall be enabled if a valid fill value is in the text area. Upon user pressing this Start button an image below will be displayed indicating the fill process is active. The image shall be a clear indication that the process has started (green filled pan). The UI shall send the correct start and fill value to the IO board for activation.

The middle Pause button shall allow the user to Pause an active Fille process.

The UI shall send a stop command to the IO board but will not reset the fill value sent to the IO. The visual indication shall display a clear indication the fill process has paused (yellow filled pan). If the user presses the green ARROW start button the UI shall send a command to the IO board to resume the current process.

The right red Cancel button shall stop the fill process by sending a stop command and 0 fill value to the IO board. The UI shall remove any visual indication that a fill process is active.

The Home button at the bottom shall only be enabled if the fill process is not active.

A screenshot of a phone

Description automatically generated

## Lid Buttons

The two (2) lower right buttons shall provide the user with the ability to Close or Open the Lid and shall only be accessible on the Eclipse models.

**LID button functionality**

Upon the user pressing and holding a Lid button, the corresponding command shall be sent via modBus to the IO board.

# RECIPE CREATION (CHEF HAT)

The Recipe Creation screen (see [Figure 6](#Fig6)) shall be accessed by pressing the Home screen Chef Hat button.

**PLAY button**

* The Recipe Creation screen shall display a Greyed-out and disabled PLAY button with an undefined recipe.
* The enabled GREEN PLAY button shall be displayed when all recipe stages have valid defined values.

**SAVE button**

* The Recipe Creation screen shall display a Greyed-out and disabled SAVE button with an undefined recipe
* If a user presses the SAVE button with any stage not valid, the incorrect or undefined value shall have that text box outlined in RED.
* The enabled SAVE (non-greyed out) button shall be displayed when all recipe stages have valid values.
* Pressing the enabled SAVE button shall display a keyboard labeled “Recipe Name ?” with an X button to cancel and a greyed-out CKECK MARK.
* After a valid Recipe Name is entered the greyed-out CKECK MARK shall be replaced by a green CHECK MARK.
* User pressing the green CHECK MARK displays a screen with:   
  BACK Arrow  
  Greyed-out CHECK MARK  
  Available recipe images  
  or a USB icon button on the bottom to select an image from a USB stick.
* Upon the user selecting an image the CHECK MARK shall be green and enabled.
* Pressing the Green CHECK MARK saves the recipe to the Main Cookbook and displays the Last stage information.
* Any recipe that has been SAVED shall display the recipe name and icon at top of every recipe stage screen.
* Any recipe that has not been SAVED, shall not display any name or icon at the top of the recipe stage screens.

**TEMP button**

* Pressing the TEMP icon button or inside the temperature display area shall display a Target TEMP keypad (see [Figure 2](#Fig2)).

**CLOCK button**

* Pressing the CLOCK icon button shall display a Time keypad (see [Figure 1](#Fig1)).
* Pressing inside the display area located between the CLOCK and PROBE icons with the CLOCK icon highlighted shall open the Time keypad.

**PROBE button**

* Pressing the PROBE icon button shall open a Probe Temp keypad (see [Figure 3](#Fig3))
* Pressing inside the display area located between the CLOCK and PROBE icons with the PROBE icon highlighted shall open the Probe Temp keypad.

**FAN button (Eclipse models only)**

* Pressing the FAN icon button toggles the Fan operation (Convection cooking) ON LOW (FAN icon w/o Red Line) w/ one green light on next to Fan image, or ON HIGH (FAN icon w/o Red Line) w/ both green lights on next to Fan image or OFF (FAN icon w/ Red Line) and no green lights On for the currently displayed stage.
* The default for the Fan operation in a stage shall be Off (FAN icon w/ Red Line) and green lights Off

**GAS LOW / HIGH button (Gas models only)**

* Pressing the GAS button toggles the Low (1 green dot lit) and High (both green dots lit)
* The default for each stage shall be Low(1 dot lit).

**TRASH CAN button**

* Pressing the TRASH CAN icon button shall delete the current stage displayed with the exception of Stage 1 which cannot be deleted.

**< > buttons**

* Pressing the < icon button shall display the previous stage if UI is currently displaying a stage greater than the first stage.
* Pressing the > icon button shall create and display an additional stage if current stage is defined or an existing next stage if already defined up to the maximum allowable stages (see [5.2 Recipe Stages](#Section52))
* Located between icons < and > shall be “the current stage displayed / total of recipe stages” .

**+ button**

* The + icon button shall open a screen with 2 selectable buttons for adding a Cooking Step or Message Step as well as an X button to cancel the selected action.
* Pressing the add Cooking Step icon opens the Recipe Creation screen with a new Step requiring user input.
* Pressing the add Message Step icon opens a Message area and a keyboard for text instruction entry.

**HOME button**

* Pressing the HOME button displays the UI Home screen (see [Figure 5](#Fig5)) and deletes all unsaved recipe information.

**COOKBOOK button**

* Pressing the COOKBOOK button displays the Main Cookbook screen (see [Figure 9](#Fig9)) and deletes all unsaved recipe creation information.

**LID OPEN / LID CLOSE buttons (Eclipse model only)**

* Pressing the LID OPEN or LID CLOSE buttons shall invoke the UI to send the appropriate command to the IO board.
* The UI shall not monitor Lid status from the recipe creation screen commands.

## Timed Cooking

A user defined Timed cooking stage operates for a specified time and target temperature.

To create a valid Timed Cooking stage in the Recipe Creation screen, the user must:

* Press the Temperature button and enter a valid Target Temperature. (see [5.3 Temperature Keypads](#TempKeypad))
* Press the Clock button and enter a valid Time (see [5.3 Time Keypad](#TimeKeypad))

A Timed cooking stage shall run as either a standalone recipe or as one stage in a multiple stage recipe.

## Probe Cooking

A user defined Probe cooking stage operates at a target temperature until a Probe sensor reaches a user defined temperature value.

To create a valid Probe Cooking stage in the Manual Recipe creation screen, the user must:

* Press the Temperature button and enter a valid target temperature. (see [5.3 Temperature Keypads](#TempKeypad))
* Press the Probe button and enter a valid Probe temperature (see [5.3 Temperature Keypads](#TempKeypad))

A Probe cooking stage shall run as either a standalone recipe or as one stage in a multiple stage recipe.

## Infinity Mode Cooking

A user defined Infinity mode stage operates at a target temperature for an unlimited time.

To create a valid Infinity Cooking stage in the Manual Recipe creation screen, the user must:

* Press the Temperature button and enter a valid target temperature. (see [5.3 Temperature Keypads](#TempKeypad))
* Press the Clock button and select the --:-- button on the keypad (see [5.3 Time Keypad](#TimeKeypad))

An Infinity cooking stage shall run as either a standalone recipe or as the last stage in a multiple stage recipe

## Convection Cooking

**Eclipse models only**

A user defined Convection cooking stage can be either a timed, probe or infinity stage with the addition of a Convection fan being utilized.

To create a valid Convection Timed Cooking stage in the Manual Recipe creation screen, the user must:

* Press the Temperature button and enter a valid target temperature. (see [5.3 Temperature Keypads](#TempKeypad))
* Press the Clock button and select the --:-- button on the keypad (see [5.3 Time Keypad](#TimeKeypad))
* Press the Fan button ON Low or High (no red line)

To create a valid Convection Probe Cooking stage in the Manual Recipe creation screen, the user must:

* Press the Temperature button and enter a valid target temperature. (see [5.3 Temperature Keypads](#TempKeypad))
* Press the Probe button and enter a valid Probe temperature (see [5.3 Temperature Keypads](#TempKeypad))
* Press the Fan button ON Low or High (no red line)

To create a valid Convection Infinity Cooking stage in the Manual Recipe creation screen, the user must:

* Press the Temperature button and enter a valid target temperature. (see [5.3 Temperature Keypads](#TempKeypad))
* Press the Clock button and select the --:-- button on the keypad (see [5.3 Time Keypad](#TimeKeypad))
* Press the Fan button ON Low or High (no red line)

A Convection Timed or Probe cooking stage shall run as either a standalone recipe or as one stage in a multiple stage recipe.

A Convection Infinity cooking stage shall run as either a standalone recipe or as the last stage in a multiple stage recipe.

# RECIPE OPERATION PROCESS

An operational Recipe shall start either through

* Manual Creation of a recipe (Section 7) or
* Selecting a recipe from Main Cookbook or
* Selecting a recipe from Press&Go

Pressing the GREEN PLAY button shall start the recipe with a PREHEAT stage displayed on the UI with the following:

* A Progress wheel indication of the current temperature status towards the target temperature set point.
* SKIP button at the bottom shall allow user to bypass Preheat and start the recipe
* PAUSE button at the bottom shall pause preheat, a command shall be sent to the IO board to turn off heaters and the UI shall display the recipe stage 1 information.
* LID OPEN and CLOSE Buttons shall allow user access to open or close the Lid (Eclipse models only)

Upon Preheat completion or user skipping Preheat, the UI shall display a screen with the following:

* Text message “ADD INGREDIENTS”.
* An image depicted showing user to add ingredients into the Pan.
* The visual indication of the recipe stages with the first stage displayed in Yellow
* A Pause button allowing the user to see the recipe stage
* A green CHECK MARK to start the first stage of the recipe
* LID OPEN and CLOSE Buttons shall allow user access to open or close the Lid (Eclipse models only)

## Timed Cooking

When a Timed Cooking stage starts, the UI shall send a Target Temperature value to the IO Board via modBus.

A Timed Cooking stage when running shall display the following:

* In the upper left corner, a Temperature icon.
* To the right center justified, the current Target Temperature.
* To the far right a Gas Icon (Gas models Only)
* In the middle a large circular progress wheel represented with a yellow band depicting time progression.
* Inside the progress wheel a countdown timer of the stage time shall be displayed.
* To the upper left of the progress wheel is a Clock icon.
* Below the progress wheel the current recipe stages are displayed with the current active stage yellow-filled, completed stages green-filled (if applicable), and subsequent stages grey-filled (if applicable).

At bottom a Cancel button when pressed shall Pause the current timed stage and display the Recipe Creation screen for the current stage.

If recipe is Paused, on the Recipe Creation screen all buttons shall be disabled except for the buttons as follows:

* Green Play button (center) - when pressed resumes cooking stage at the paused time when Cancel button was pressed.
* Home button (bottom left) - when pressed shall cancel the recipe and the UI shall display the Home screen.
* Cookbook button (right of Home button) - when pressed shall cancel the recipe and the UI shall display the Main Cookbook screen.
* Lid Open and Close buttons (bottom right side) - when pressed shall send the appropriate command to IO board (Eclipse models only).

Upon the expiration of the timed stage, the UI shall automatically move to the next stage with this stage green-filled in any subsequent stage depictions.

If no additional stages are defined, the recipe Done screen shall be displayed as follows:

* In upper left corner The Temperature icon.
* To the right center justified, the current Target Temperature.
* To the far right a Gas Icon (Gas models Only)
* In the middle a large circular progress wheel represented with a full green band indicating the recipe has been completed.
* Inside the progress wheel a Green Check Mark time shall be displayed.
* Below the progress wheel all stages in the recipe shall be green filled.
* At the bottom center a Green Check Mark shall be available for acknowledgement of recipe completion by the user.
* Upon user acknowledgement the UI shall send a modBus command to the IO board to turn off heaters.
* Lid Open and Close buttons (bottom right side) when pressed shall send the appropriate command to IO board (Eclipse models only).

## Probe Cooking

When a Probe Cooking stage starts, the UI shall send a Target Temperature and Probe Temperature values to the IO Board via modBus.

A Probe Cooking stage when running shall display the following:

* In the upper left corner, a Temperature icon.
* To the right center justified, the current Target Temperature.
* To the far right a Gas Icon (Gas models Only)
* In the middle a large circular progress wheel represented with a yellow band depicting progression to target probe temperature.
* Inside the progress wheel the current Probe temperature shall be displayed.
* To the upper left of the progress wheel is a Probe icon.
* Below the progress wheel the current recipe stages are displayed with the current active stage yellow-filled, completed stages green-filled (if applicable), and subsequent stages grey-filled (if applicable).

At bottom far left a Cancel button when pressed shall Pause the current probe stage and display the Recipe Creation screen for the current stage.

On the Recipe Creation screen all buttons shall be disabled except for the buttons as follows:

* Green Play button (center) - when pressed resumes cooking stage with Probe temp displayed inside progress wheel.
* Home button (bottom left) - when pressed shall cancel the recipe and the UI shall display the Home screen.
* Cookbook button (right of Home button) - when pressed shall cancel the recipe and the UI shall display the Main Cookbook screen.
* Lid Open and Close buttons (bottom right side) - when pressed shall send the appropriate command to IO board (Eclipse models only).

Upon the probe temperature reaching the probe target temperature and the stage is not Paused, the UI shall automatically move to the next stage with this stage green-filled in any subsequent stage depictions.

If no additional stages are defined, the recipe Done screen shall be displayed as follows:

* In upper left corner The Temperature icon.
* To the right center justified, the current Target Temperature.
* To the far right a Gas Icon (Gas models Only)
* In the middle a large circular progress wheel represented with a full green band indicating the recipe has been completed.
* Inside the progress wheel a Green Check Mark time shall be displayed.
* Below the progress wheel all stages in the recipe shall be green filled.
* At the bottom center a Green Check Mark shall be available for acknowledgement of recipe completion by the user.
* Upon user acknowledgement the UI shall send a modBus command to the IO board to turn off heaters.
* Lid Open and Close buttons (bottom right side) when pressed shall send the appropriate command to IO board (Eclipse models only).

## Infinity Cooking

When an Infinity Cooking stage starts, the UI shall send a command to the IO Board for the Target Temperature.

An Infinity Cooking stage when running shall display the following:

* In the upper left corner, a Temperature icon.
* To the right center justified, the current Target Temperature.
* To the far right a Gas Icon (Gas models Only)
* In the middle a large circular progress wheel represented with a grey band depicting that the UI is not monitoring or displaying any recipe progress criteria.
* Inside the progress wheel a --:-- shall be displayed.
* To the upper left of the progress wheel is a Time icon.
* Below the progress wheel the current recipe stages are displayed with the current active stage yellow-filled, completed stages green-filled (if applicable) and no other stage is displayed after the current Infinity stage.

At bottom far left a Cancel button when pressed shall Pause the current stage and display the Recipe Creation screen for the current stage.

On the Recipe Creation screen all buttons shall be disabled except for the buttons as follows:

* Green Play button (center) - when pressed resumes cooking stage --:-- displayed inside progress wheel.
* Home button (bottom left) - when pressed shall cancel the recipe and the UI shall display the Home screen.
* Cookbook button (right of Home button) - when pressed shall cancel the recipe and the UI shall display the Main Cookbook screen.
* The UI shall not display a Recipe Done screen for an Infinity stage recipe therefore the Home and Main Cookbook buttons shall effectively Cancel an Infinity recipe.
* Lid Open and Close buttons (bottom right side) - when pressed shall send the appropriate command to IO board (Eclipse models only).

The Infinity stage shall always be the last defined stage in any recipe.

## Convection Cooking

**Eclipse models only**

A Convection Cooking stage shall operate the same as the Recipes described in sections 8.1 – 8.3 with the following differences and additions:

* Prior to a Convection Cooking stage, the UI shall display a pop-up screen with the instruction to “CLOSE AND LOCK COVER” along with an image of an open LID over Kettle and arrow pointing down.
* In addition to the instruction above the UI screen shall display a Cancel button on bottom far left, a greyed-out Check Mark (disabled), and the Lid Open and Close buttons (bottom right side) which when pressed shall send the appropriate command to IO board.
* The user shall be required to press the Close button (if not done already) to Close the Lid.
* Upon the IO board via modBus reporting the Lid is Closed, the UI shall display a pop-up screen with the message “COVER CLOSED AND LOCKED” along with an image of a closed LID over Pan.
* In addition to the message above the UI screen shall display a Cancel button on bottom far left and a green Check Mark to start the recipe.
* Upon a Convection Cooking stage start, the UI shall send an additional command to the IO board to turn the Fan On Low or High.
* Upon completion, the UI shall send an additional command to the IO board to turn the Fan Off
* In the progress wheel along with the other recipe stage depictions, a FAN icon shall be displayed in the upper segment of the wheel indicating convection cooking is also running.
* The only button displayed on the Convection cooking stage is the Cancel Button.
* User shall be able to use Cancel button to Pause the recipe if the need to open the Lid is required.
* All other button actions work the same as described above in sections 8.1-8.3.
* Upon Resume of stage, the UI shall not monitor the Lid status and user action is required if convection cooking (Fan ON) is desired, the user must Close the Lid prior to Resuming the stage.

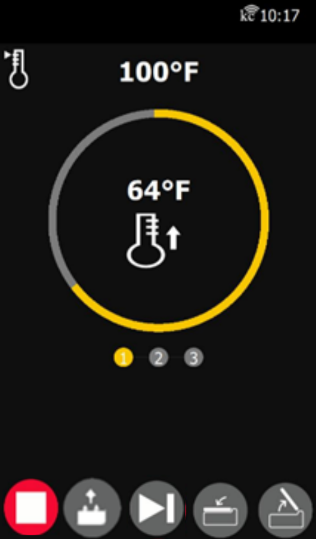
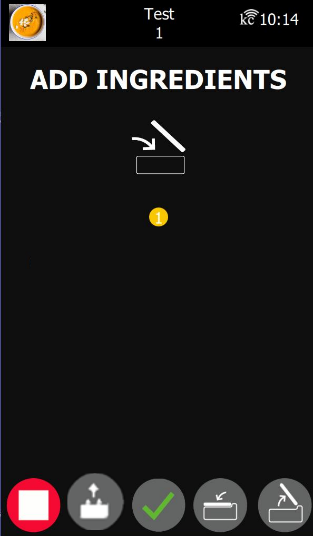
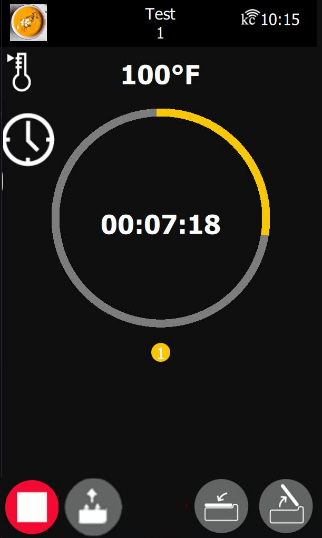
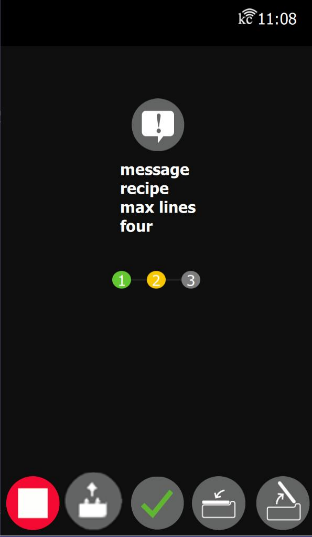
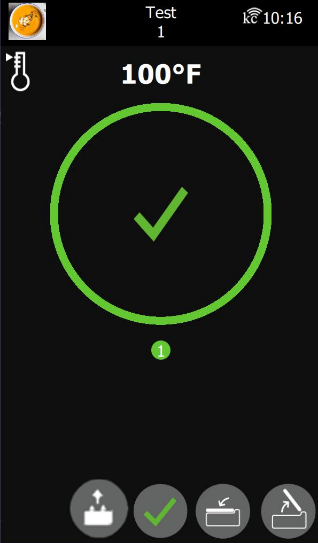
## Water Fill Operation

**Eclipse models only**

Two separate processes exist in Eclipse models to fill unit tanks with water. The process for filling the tank from the Home screen is described in section 6.6.

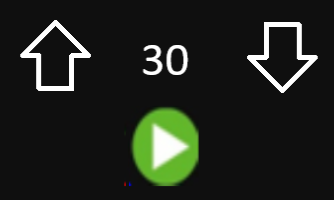
The second process shall require all active recipe screens to have their layouts adjusted upward to allow for new process.

Preheat Add Ingredients Timer / Probe / Infinity Message Done

The active recipe screens (shown above) shall provide an area above the current buttons on the bottom to display the Water Fill process and status.

The layout and button objects displayed above the bottom buttons and centered on the screen shall be similar to the following layout when the Water Fill button is pressed in any of the recipe active screens.



Pressing the Water Fill button again while the process has not started shall remove the water fill process buttons.

Upon a user pressing the arrow buttons and inputting a valid fill value the Green Start button shall be enabled.

The maximum fill value allowed is dependent upon the Unit Model number.

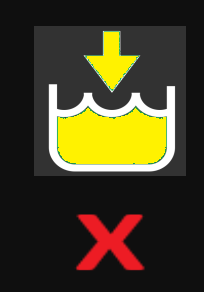
**Start Water Fill**

* When a user presses the green Start fill button, the Arrow buttons and fill value shall be removed and replaced with a filled-in green Kettle button displaying the water fill process is active.
* The UI shall send Modbus commands to the IO board to start the process and provide the requested fill value.
* In addition, the green Start fill button shall be replaced with a red X button to Cancel the process.



**Pause Water Fill**

* User pressing the filled-in green Kettle button shall Pause the Water fill process.
* The green filled-in Kettle button shall be replaced by a yellow filled-in Kettle button.
* The UI shall send Modbus commands to the IO board to stop the process and but does NOT reset the water fill value to indicate to the IO board process is only paused.



**Resume Water Fill**

* Pressing the yellow filled-in Kettle button shall resume the water fill process and once again display the green filled-in Kettle button.
* The UI shall send a modBus command to the IO board to start the process.

Pressing the Red X shall cancel the process, remove all water fill indications and send the IO board commands to Stop the process and a 0 fill value to indicate the process has been canceled.

The UI will monitor the IO board water process register and upon the IO reporting Filling is complete, remove all water fill process indications.

The water fill process indications shall be re-displayed should the recipe stage advance to another stage.

If the active recipe is paused, the UI shall send a modBus command to Stop the process but shall NOT reset the fill value. If the user then decides to cancel the recipe from pause, the Ui shall cancel the recipe and the water fill process along with appropriate modBus commands to the IO board.

Resumption of the recipe process shall also re-start the water fill process by sending a modBus command to start the water process.

Should a recipe complete and the water process is still active, the green Check mark in the DONE screen shall not be available until the water process is completed (IO reported) or the user cancels the water fill process.

# PRESS & GO COOKBOOK

The Press&Go screen (see [Figure 7](#Fig7)) shall be accessed by pressing the Home screen Press&Go button.

All Recipes Saved in the Press&Go screen are user saved and accessible only through this screen.

The Press&Go screen shall include the following:

* Top header shall display the text Press&Go
* Three (3) columns with three (3) rows allow a maximum of 9 recipes to be displayed and Saved in Press&Go.
* A Home button located on the far-left bottom of the screen when pressed shall display the Home screen.
* At bottom middle of screen shall be a Play Button;  
  Play button is greyed-out and disabled with no recipes saved or currently highlighted in the list.  
  Play button is Green and enabled when a saved recipe is highlighted (selected) allowing user to start a recipe.
* At bottom second from the right on screen shall be a Trash Can button.   
  Button is disabled unless a saved recipe is highlighted.  
  Button is enabled if a saved recipe is highlighted.  
  Pressing an enabled Trash Can button, displays a pop-up message “Are you sure you want to Delete Recipe?”.  
  If Yes is selected, the recipe is deleted from the Press&Go screen and replaced with a Grey-filled open slot.  
  If No is selected, the pop-up message is removed and no action is taken.
* At bottom right of screen shall be an Edit button.  
  Button is disabled unless a recipe slot is highlighted.  
  Pressing a recipe slot and then pressing the Edit button shall display a Select Favorite screen displaying all recipes saved on the unit.
* Select Favorite screen shall have an X button at bottom of screen and when pressed shall cancel the action and return UI to Press&Go screen.
* Select Favorite screen shall have a Check Mark at bottom of screen.  
  Check mark is greyed-out and disabled if no recipe is highlighted.  
  Check Mark is green and enabled if recipe is highlighted and when pressed shall save that recipe to the Press&Go slot selected.

# SETTINGS

**TBD (initial specification only – Phase 1)**

The Settings screen (see [Figure 8](#Fig8)) shall be accessed by pressing the Home screen Settings button.

On initial entry the following selections are displayed:

Update UI Software

Unit Details

General Settings

Network

Logbook

Legal information

In the upper left header area, a Chef image when pressed shall display a numerical Password screen. (see [Figure 10](#Fig10))

User entry of password “1234” and acknowledgement shall add an additional selection **Cookbook** at end of list.

User entry of password “5678” and acknowledgement shall add an additional selection **Service** at end of list.

An incorrect Password entry shall display INVALID in the password screen.

User exiting and re-entering Settings mode shall require user to re-enter password(s) to view additional Service or Cookbook selections.

## Update UI Software

Upon selecting Update UI Software a selection USB update shall be displayed.

If no USB is connected a pop-up window “No USB device detected!” shall be displayed.

If a USB is detected a pop-up window “USB device detected “ shall be displayed momentarily and then all valid UI firmware files shall be displayed for user to select the appropriate update file.

User selecting a file name shall display a confirmation pop-up window “Are you sure you want to update UI to “version file name” along with a Green check to start update or X button to cancel.

Upon confirming to start update a pop-up “Starting update to system” shall be displayed.

Upon system firmware update, UI shall restart and display a pop-up “The system has been updated successfully”

## Unit Detail

Upon selecting **Unit Details** an expanded window shall display the following:

Model Number --- (In Service mode Model number is selected and displayed here)

Serial Number --- (In Service mode Serial number is selected and displayed here)

Heating Method --- (Heating method determined from Model Number)  
UI software Version xx.xx.xx  
IO software Version xx.xx.xx

Recipe Name ---

Upon selecting **Unit Details** with the expanded window open shall minimize the expanded window.

## General Settings

Upon selecting **General Settings** an expanded window shall display the following:

Language

Units of Measure

Date / Time

Display

Sounds (TBD)

Upon selecting **General Settings** with the expanded window open shall minimize the expanded window.

### Language

Selecting **Language** shall open a new window listing all available languages with radio button selections as follows:

* English
* Español
* Français
* Deutsch

(TBD – currently only English is available)

Selecting BACK button shall return UI to Settings screen with all text displaying in selected Language and the expanded menu still open.

### Units of Measure

(TBD – currently only Imperial active)

Selecting **Units of Measure** shall open a new window displaying temperature / volume units with radio button selections as follows:

* Imperial (Fahrenheit / Gallons)
* Metric (Celsius / Liters)

Selecting BACK button shall return UI to Settings screen with the expanded menu still open.

### Date / Time

Upon selecting **Date / Time** an expanded window shall display the following:

Configure Date

Configure Time

**Configure Date** - Selecting Configure Date shall display a Calendar allowing user to update current date information. Upon saving date or exiting shall close the Calendar window and return the Ui to Expanded Date / Time window.

**Configure Time** - Selecting Configure Time shall display a Time window allowing user to enter current time, time zone and a check box for Daylight Saving. Upon saving time or exiting shall close the Time window and return the UI to Expanded Date / Time window.

### Display

(TBD)

## Network

Upon selecting **Network** an expanded window shall display the following:

(TBD - Phase 2)

Ethernet/LAN

Wifi

Kitchenconnect

Upon selecting **Network** with the expanded window open shall minimize the expanded window.

### Ethernet/LAN

(TBD - Phase 2)

### Wifi

(TBD - Phase 2)

### Kitchenconnect

(TBD - Phase 2)

## Logbook

(TBD - Phase 1 / Phase 2)

Upon selecting **Logbook** an expanded window shall display the following:

Error Logs

Event Logs

HACCP viewer (Phase 2)

Export HACCP Data (Phase 2)

Upon selecting **Logbook** with the expanded window open shall minimize the expanded window.

### Error Logs

Selecting **Error Logs** shall open a new screen to display the last 200 errors (newest to oldest). Each line shall contain Date, Time, and Error code with description.

Located at the bottom left of window shall be a Back button and when pressed displays the Logbook expanded window.

Located at the bottom middle of window shall be a USB icon, enabled if a USB stick is connected. When pressed s a pop-up message “Download Error Log to USB?” shall be displayed with a confirmation and cancel selections. (Phase 2)

The exported Error Log file shall be a text document saved on the USB stick as ErrorLog\_xxxx (where xxxx is the last 4 digits of the unit serial number). (Phase 2)

### Event Logs

(Phase 2)

Selecting **Event Logs** shall open a new screen to display the last 200 events (newest to oldest). Each line shall contain Date, Time, and Event description.

Located at the bottom left of window shall be a Back button and when pressed displays the Logbook expanded window.

Located at the bottom middle of window shall be a USB icon, enabled if a USB stick is connected. When pressed s a pop-up message “Download Event Log to USB?” shall be displayed with a confirmation and cancel selections.

The exported Event Log file shall be a text document saved on the USB stick as EventLog\_xxxx (where xxxx is the last 4 digits of the unit serial number).

### HACCP viewer

(TBD - Phase 2)

### Export HACCP Data

(TBD - Phase 2)

~~Diagnostics~~

~~Diagnostics shall display a log of all Error or events captured by the unit. Each entry shall consist of the date and time of the event and either a description or error code of the event.~~

## Legal Information

(TBD - Phase 2)

## Service

(**TBD**) – partial implementation for T1 model

Upon selecting **Service** an expanded window shall display the following:

Unit Model Number

Serial Number

### Unit Model Number

Upon selecting Unit Model Number, a drop-down list of the models shall be displayed allowing the correct model to be configured.

Current Models numbers in drop down list are

T1 models:

* SGL30T1
* SEL30T1
* SGL40T1
* SEL40T1

Eclipse models:

* SGL30TRC
* SEL30TRC
* SGL40TRC
* SEL40TRC

This Model number shall be displayed in Settings🡪Unit Details🡪Model Number

The designation SGL denotes Heating Method as Gas, and the designation SEL denotes the Heating Method as Electric.

This information shall be displayed in Settings🡪Unit Detail🡪Heating Method

The designation of 30 or 40 denotes the jacket tank volume of the Unit and will be used for the upper limit in the Water Fill process. (Eclipse models only)

Upon selecting a Unit Model, the drop-down list is closed, and the unit displays the expanded Service selections.

**Important!** Upon user selecting model type, the current Recipe file shall be deleted due to the possibility of incompatible recipes and processes.

### Serial Number

Upon selecting Serial Number a numeric keypad shall be displayed allowing a numeric serial number to be entered.

The UI shall validate that the entered serial number is 12 characters.

This Serial number shall be displayed in Settings🡪Unit Details🡪Serial Number

Upon Confirming the Serial Number is valid, the UI returns to the expanded Service selections.

## Cookbook

Upon selecting **Cookbook** an expanded window shall display the following:

Cookbook properties

Manage Cookbook

Import Cookbook

Export Cookbook

Upon selecting **Cookbook** with the expanded window open shall minimize the expanded window

### Cookbook properties

Upon selecting Cookbook properties and expanded window shall display the following:

Name Recipe File

**Name Recipe File** - Upon user selecting Name Recipe File a keyboard shall be displayed allowing a 10 alpha numeric value to be entered to name the current unit recipe file. If a current name exists a pop up shall be displayed requiring the user to CONFIRM OVERWRITE.

The Recipe file name shall be displayed in Unit Detail section next to Recipe Name.

### Manage Cookbook

(TBD)

Delete Recipe

Add Recipe Images

Delete Recipe Images

### Import Cookbook

If USB device is not connected and user selects Import cookbook a pop-up “No USB device detected” shall be displayed.

If USB device is connected and user selects Import cookbook a pop-up “USB device detected” shall be displayed momentarily followed by a list of json files.

Selecting an incompatible json file shall display “Invalid file, Import failed”.

Selecting a compatible json file shall display “Import status” and “Imported successfully”.

Compatibility of json file shall be defined as:

Recipe .json files saved on a T1 model shall only be compatible and importable to T1 models.

Recipe .json files saved on an Eclipse model shall only be compatible and importable to Eclipse models.

### Export Cookbook

If USB device is not connected and user selects Export cookbook a pop-up “No USB device detected” shall be displayed.

If USB device is connected and user selects Export cookbook a pop-up “USB device detected” shall be displayed momentarily followed by Keyboard allowing user to ENTER FILE NAME for json file. The Current File name, if available shall be displayed and allow user to delete and create new file name or use current file name.

Upon User selecting to Save File, a pop-up “Export status” and “Exported successfully”.

Note: the unit type shall be included in the json file for compatibility to import to like unit type only.

# MAIN COOKBOOK

The Main Cookbook screen (see [Figure 9](#Fig9)) shall be displayed by pressing the Home screen Cookbook button.

All Recipes displayed on the Cookbook screen are the master list of all recipes currently saved on the unit.

A maximum of 9 recipes can be displayed on a page (3 columns with 3 rows).

A maximum of 45 recipes can be saved on the unit.

A left and right arrow button shall provide the ability to display or select all available recipes.

At Bottom left the UI shall display a Home button to open the Home screen.

In middle bottom a Check Mark shall be displayed:

* Greyed-out and disabled if no recipe is selected.
* Green and enabled if a recipe has been selected.
* Pressing a green Check mark shall start the recipe selected.

At Bottom right the UI shall display an Edit button:

* Disabled if no recipe is selected.
* Enabled if a recipe has been selected.
* Pressing an enabled Edit shall open the Recipe Creation screen for this recipe where a user may edit, save, or run a recipe.

# ERRORS

For T1 model see **T1 (Gas) MODBUS parameter List(REV03)** attached spreadsheet in Section 2.0 for Error and Modbus information.

For Eclipse model (TBD)