UI Cleveland Software Release Notes

Product Name	UI For T1/Eclipse
Version	01.01.13
Date	20/10/2024
Author Name	Dina Jabay
Author Email	djabay@elreha.com
Executable Name	UiCleveland
Hardware Rev	Welbilt UI AG012002000367, IO board Version 1

Purpose:

The purpose of this software is to provide the graphical user interface (GUI) for the T1 and Eclipse model machines. This software acts as the master, sending commands to the slave IO board, which controls the pan, lid, water, and heating processes.

Intended Use:

Test software. As deemed by Cleveland.

Compatibility:

Heating process	T1 and Eclipse Model only

Features Added or Modified:

Heating Process:

- **Probe Heat Mode:** The command sent to the IO board while operating in this mode is updated to operate in Heat Mode 2 (Product Mode) rather than Heat Mode 1 (Pan Mode) as per the IO heat mode perspective.
  If Probe is the first step in recipe no pan preheat will occur.
- **Probe Time Heating Mode for Eclipse:** This new mode has been added to the UI. Users can add this mode in recipe creation by pressing the probe icon. The probe temperature keypad will contain a clock icon to insert the duration time for the step. If the user enters zero time, it acts as a Probe Heat step; if they enter an infinite duration, it will act as infinite cooking and prevent further step addition.
- **Auto Lid Open**: The UI will attempt to open the lid by 10% in two cases:
  1. When the user presses the run button with the lid closed to initiate the heating process.
  2. During the transition between convection and non-convection steps
- **Water in progress status page:** if water is already running and recipe next step is convection, UI will wait until water is completed or cancelled before asking user to close the lid.
- **Skip button**: Skip button is removed.
- **Pause Recipe:** If the user attempts to move the pan, a confirmation pop-up will appear. The recipe will be paused once the pan is lifted.
- **Resume Recipe:** If the recipe was paused and the pan is placed down again, the recipe will resume the heating process.
- **Stop Recipe:** When the user presses the stop button, a confirmation pop-up will ask for approval. If approved, the user will be redirected to the recipe creation page, and the heating process will be stopped.

Recipe Create:

- **Buttons for Control**: The page will include dedicated buttons for **Lid**, **Pan**, and **Water**.
- **Message Step Icon**: A message step icon has been added, allowing users to create a message step as the first action in the recipe.

- **Default values:** Default temperature and time values will be based on the unit model.
- **Maximum temperature**: Update the maximum temperature values for the pan and probe according to the model specifications.
- **Layout update**: The layout for the sous vide and fan icons has been updated to appear greyed out when not selected.
- **Review Feature**: Users can now press step numbers button to navigate to a dedicated recipe step review page, where they can:
    - View details for each step.
    - Edit or delete steps as needed.
    - Rearrange the order of steps for clarity.
    - Add new step.

Home page:

- The water button is removed.

Control buttons conditions (Eclipse only):

- **Lid Button:**
    - The lid button will be enabled if the pan is down (not tilted).
    - If water is running or non-convection process in progress the lid down button will be in position mode (not fully closing the lid open by 10%).
    - If the convection step is processed, the lid down button will be in down mode.
- **Pan Button:**
    - The pan is disabled if the lid is closed.
    - The pan is disabled if water is running
- **Water Button:**
    - The water button is enabled if the lid is open.
    - The water button is enabled if pan is down.
    - The water button is enabled if pan temperature is less than 212°F.

Layout update:

- Increase selectable area for recipe icon, images.

Error Handling:

Table show details about error for Eclipse Model

Error Code	Error Details	Error Source	Error Category
701	Jacket sensor	IO board	Abort
702	Product Sensor Error	IO board	Abort
102	Safety Switch error	IO board	Block
101	Heater error	IO board	Notification
202	Pan not down Error	IO board	Notification
201	Pan tilt error	IO board	Notification
11	IO to UI Communication error	IO board	Block
12	UI to IO Communication error	IO board	Block
10	I/O board Over temperature	IO board	Block
309	Cover not down error	UI	Notification
310	Cover not up error	UI	Notification
311	Cover down error	UI	Notification
308	High current actuator error	UI	Notification
302	Cover up limit error	UI	Notification
303	Cover down limit switch error	UI	Notification
307	Low current actuator error	UI	Notification
405	High pressure sensor error	UI	Block
404	High pressure safety error	UI	Block
401	Pressure sensor error	UI	Notification
601	Water dispense error	UI	Notification
501	Convection system error	UI	Notification
301	Cover actuator error	UI	Notification

Testing:

Testing using the IO board with a jacket and probe sensor in conjunction with the UI has been conducted. Signals being sent from the UI were tracked to ensure the right commands were transmitted.

To test water flow sensor PWM signal was used to simulate the flow sensor input.

To test the Lid actuator potentiometer was used.

Environment Description:

Qt creator	Version 4.10.2
Qt version	Version 5.12
Compiler arm-poky-linux-gnueabi-g++ (GCC)	Version 7.3.0
UI firmware Welbilt-mfgtools-production Image	Version DVT1.0.5-2023-04-29