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# Customer Documentation Simple Oven Control



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# 1 UI of Simple Oven Control

# 1.1 General Description

## 1.1.1 Overview

Simple Oven Control provides the following modes and functions:

- OFF MODE
  - shows TIME of DAY
  - all heating elements are switched OFF
- HEATING OPERATION
  - oven is heating with set HEATING FUNCTION and HEATING TEMPERATURE / GRILL LEVEL
- FAST PREHEAT
  - can be added at the beginning of a HEATING FUNCTION to decrease the heat-up time of the oven
  - FAST PREHEAT heats up the oven with a specific set of heating elements
  - oven is supposed to be empty/unloaded during FAST PREHAT
  - can only be used together with a regular heating operation
  - cannot be selected if DELAYED COOKING has been selected before
- MINUTE MINDER
  - egg timer with ACOUSTIC SIGNAL for general use
  - no impact on running HEATING OPERATION
  - can be used with and without HEATING OPERATION
- COOKING TIME
  - countdown timer with ACOUSTIC SIGNAL and final termination of current HEATING OPERATION
  - cannot be used without HEATING OPERATION
  - needs user confirmation to start counting down if COOKING TIME is combined with FAST PREHEAT
- END of COOKING TIME
  - adjustable end of COOKING TIME function
  - cannot be used without HEATING OPERATION
  - if used without explicit COOKING time, the oven starts immediately with HEATING OPERATION
- DELAYED COOKING
  - Combination of COOKING TIME and END of COOKING TIME to start HEATING OPERATION at a later point of time
  - cannot be used without HEATING OPERATION
  - cannot be set if FAST PREHEAT has been selected before
- CHILD LOCK
  - keeps unit in OFF MODE and prevents unintended activation of the unit by locking the keys
  - can only be activated in OFF MODE.



- BTLE wireless connection
  - allows the pairing or uncoupling of the unit with a Bluetooth device
  - communication can only be established or terminated in OFF MODE
- EXHIBITION MODE
  - Allows the operation of the complete range of functions with light and fans but without activating any heating elements
  - Entering or quitting EXHIBITION MODE is only possible directly after connecting the unit to the mains

## 1.1.2 State Diagram







#### 1.1.3 Menu Diagram

The unit is working with dynamic menus. The selectable functions depend on the current state of the unit. The logic of the dynamic menus is illustrated in the menu diagram below:





## **1.2 Symbols and Touchpad Functionality**

## 1.2.1 Display, Symbols and Touchpad Description



| Symbol         | Description  |
|----------------|--|
| 4              | MINUTE MINDER symbol   |
| Ť              | COOKING TIME symbol  |
| $\rightarrow$  | END of COOKING TIME symbol   |
|                | TIME of DAY symbol   |
| °C             | Temperature symbol   |
| himin          | Time symbol  |
| ( <b>1</b> 20) | BTLE connection symbol   |
|                | AUTO COOK symbol   |
| 88:88          | 7-segment display:<br>1:59 maximum adjustable MINUTE MINDER<br>23:59 maximum adjustable COOKING TIME |

| Touchpad Position | Function                   |
|-------------------|----------------------------|
| 1                 | ADDITIONAL FUNCTION SELECT |
| 2                 | MINUS                      |
| 3                 | HEATING FUNCTION SELECT    |
| 4                 | PLUS                       |
| 5                 | OFF                        |

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## 1.2.2 Touchpad 1 (ADDITIONAL FUNCTION SELECT)

Using ADDITIONAL FUNCTION SELECT allows stepping through the sequence of additional functions. The key behaves in the following manner:

| Key action                 | Configuration  |
|----------------------------|--|
| Touching key once          | The next following function is chosen                        |
| Touching key permanently   | This causes no automatic change                              |
| Touching key for more than | ACOUSTIC SIGNAL No.4 according to chapter 1.5 occurs and the |
| 10 seconds                 | ADDITIONAL FUNCTION SELECT mode terminates automatically     |

The unit is working with dynamic menus. It depends on the current state of the unit, which functions are selectable by touchpad ADDITIONAL FUNCTION SELECT. The logic of the dynamic menus is illustrated in the menu diagram of chapter 1.1.3.

The scope of possible functions, which can be selected by ADDITIONAL FUNCTION SELECT, and the order of their appearance are shown in the next picture:

## ADDITIONAL FUNCTION SELECT in OFF MODE:



Note: The next display mode after the last menu point is the OFF MODE again.

## ADDITIONAL FUNCTION SELECT in HEATING OPERATION:



Note: The next display mode after the last menu point is HEATING OPERATION again.

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## 1.2.3 Touchpad 2 (MINUS) and Touchpad 4 (PLUS)

MINUS and PLUS are used to change values of time and temperature.

| Key action               | Configuration   |
|--------------------------|---|
| Touching key once        | Decrements or increments time by one minute and temperature by the smallest increment   |
| Touching key permanently | Decrements or increments time and temperature with increasing rate.<br>Rate of change:<br>Permanent actuation for 2.5 s $\rightarrow$ Time: 3 min/s: Tomp: 3 increments/s |
|                          | Permanent actuation for $> 5 \text{ s} \rightarrow$ Time: 20 min/s; Temp: 7 increments/s.   |

#### 1.2.4 Touchpad 3 (HEATING FUNCTION SELECT)

HEATING FUNCTION SELECT allows sequentially stepping through the HEATING FUNCTIONS. The key behaves in the following manner:

| Key action               | Configuration                                 |
|--------------------------|---|
| Touching key once        | The next following HEATING FUNCTION is chosen |
| Touching key permanently | This causes no automatic change               |

The scope of HEATING FUNCTIONS, which can be selected by HEATING FUNCTION SELECT, and the order of their appearance in the select menu are shown in the next picture:



Note: The next HEATING FUNCTION after "Defrost" is "Oven Light" again.

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## 1.2.5 Touchpad 5 (OFF)

OFF offers the following options:

• During the selection of a HEATING FUNCTION and/or changing the HEATING TEMPERATURE and <u>before</u> HEATING OPERATION has started:

Touching OFF allows stepping in the reverse direction of the HEATING FUNCTIONS.



- During a running HEATING OPERATION: switch unit to OFF MODE.
- During a running FAST PREHEAT: FAST PREHEAT is terminated and unit continues to operate in selected HEATING OPERATION.
- During ADDITIONAL FUNCTION SELECT: exit ADDITIONAL FUNCTION SELECT menu.

## 1.3 Using the Unit

#### **1.3.1 Visibility of Activated Additional Functions**

An activated additional function can generally be

- displayed: the value of the chosen function, the related symbol and markers are displayed
- running in the background: the related symbol indicates that the function is active in the background

## 1.3.2 Connecting the Unit to the Mains

After connecting the unit to the mains, the unit automatically switches to the TIME of DAY mode. It is now possible to set the current TIME of DAY as described in chapter 1.3.4.

After connecting the unit to the mains it is possible to toggle between regular operation and EXHIBITION MODE within the first 2 minutes. Details are described in chapter 1.3.13. The last setting (regular mode or EXHIBITION MODE) of the unit is stored in the flash memory. This means that after connecting the unit to the mains again it starts in the mode that recently was set.



#### **1.3.3 OFF MODE**

During OFF MODE the display only shows TIME of DAY.

All heating elements are switched off, all timer functions are deactivated. In this mode the unit has the lowest standby energy consumption.



## 1.3.4 TIME of DAY

Select TIME of DAY

Directly after the unit has been connected to the mains, TIME of DAY is available automatically according to chapter 1.3.2.

After that, TIME of DAY can only be selected if the unit is in OFF MODE. Step through the sequence of available functions with Touchpad ADDITIONAL FUNCTION SELECT as described in chapter 1.2.2 until the symbols 🕘 and himin flash. The time itself is permanently lighted.



#### Set TIME of DAY

TIME of DAY can be set with Touchpad PLUS(+) and MINUS(-) according to chapter 1.2.3. Setting range: 00:00..... 23:59 h:min

5 seconds after the last setting, a set TIME of DAY is accepted and the unit switches back to OFF MODE.

#### **1.3.5 MINUTE MINDER**

Select MINUTE MINDER

MINUTE MINDER can be selected if the unit is in OFF MODE or in HEATING OPERATION. Step through the sequence of available functions with Touchpad ADDITIONAL FUNCTION SELECT as described in chapter 1.2.2 until the symbol 4 is flashing. Additionally the display shows **DDDhimin** permanently lighted.



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## Set MINUTE MINDER

MINUTE MINDER can be set with Touchpad PLUS(+) and MINUS(-) according to chapter 1.2.3.

Setting range: 0:00 .... 1:59 h:min.

## Modifying / Deleting MINUTE MINDER

The user first has to enter into MINUTE MINDER mode by using the touchpad ADDITIONAL FUNCTION SELECT until the symbol 4 is flashing. The remaining time of MINUTE MINDER can be changed anytime by using touchpad PLUS(+) and touchpad MINUS(-).

MINUTE MINDER is deleted by setting the time to **DOD himin**.

## MINUTE MINDER Runs Down

5 seconds after setting, MINUTE MINDER starts to count down in steps of minutes to 0.00 h:min. The display shows the symbol MINUTE MINDER 4. If no current HEATING OPERATION is running, the remaining time of MINUTE MINDER is permanently displayed.

If MINUTE MINDER has reached 0:01 h:min, the display changes to count down the remaining 60 seconds:

0:59, 0:58, 0:57, ... 0:01, 0:00. The symbols 4 and himin are indicated permanently lighted during the displayed seconds.

If the unit is running a HEATING OPERATION while MINUTE MINDER is active, the display returns to the running HEATING OPERATION and MINUTE MINDER counts down in a hidden mode in the background. This is indicated by the permanently lighted symbol 4.



MINUTE MINDER displayed



MINUTE MINDER running in the background

## MINUTE MINDER has expired

MINUTE MINDER has expired once MINUTE MINDER has reached

The symbol MINUTE MINDER 4 and the displayed "0:00" are flashing. ACOUSTIC SIGNAL No.3 according to chapter 1.5 occurs.

After touching any touchpad, MINUTE MINDER is terminated and the ACOUSTIC SIGNAL and the MINUTE MINDER symbol 4 are switched off.

If no touchpad is touched the ACOUSTIC SIGNAL runs over max. 7 minutes. After 7 minutes without touchpad activation the ACOUSTIC SIGNAL stops automatically.

If no HEATING OPERATION is running, the unit and the display automatically return to OFF MODE. If a HEATING OPERATION is running the display returns to this HEATING OPERATION.

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#### 1.3.6 COOKING TIME

#### Select COOKING TIME

COOKING TIME can only be selected if the unit is in HEATING OPERATION. Step through the sequence of available functions with Touchpad ADDITIONAL FUNCTION SELECT as described in chapter 1.2.2 until the symbol COOKING TIME  $\mapsto$  is flashing. Additionally the display statically shows 0:00 himin.



#### Set COOKING TIME

COOKING TIME can be set with Touchpad PLUS(+) and MINUS(-) according to chapter 1.2.3. Setting range: 00:00 .... 23:59 h:min.

#### Modifying / Deleting COOKING TIME

The user first has to enter into COOKING TIME mode by using the touchpad ADDITIONAL FUNCTION SELECT until the symbol  $\mapsto$  is flashing. The remaining COOKING TIME can be changed by using touchpad PLUS(+) and touchpad MINUS(-). COOKING TIME is deleted by setting the time to DDD himin.

#### AUTO COOK is Running

5 seconds after setting, COOKING TIME starts to count down in the background in steps of one minute. The display changes from the COOKING TIME menu to the HEATING OPERATION menu. To indicate that AUTO COOK mode is active in the background, the symbol AUTO COOK is permanently lighted.



Display right after setting COOKING TIME



COOKING TIME running in the background

#### AUTO COOK has expired

AUTO COOK has expired once COOKING TIME has reached **DOD humin**. The unit terminates the HEATING OPERATION and switches to OFF MODE showing TIME of DAY or to MINUTE MINDER if running in the background. ACOUSTIC SIGNAL No.4 according to chapter 1.5 occurs. Symbol is flashing to indicate AUTO COOK termination.



Unit in OFF MODE indicating expired AUTO COOK

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Unit in MINUTE MINDER mode indicating expired AUTO COOK

After 7 min. at the latest or after touching any touchpad or after opening the door, the ACOUSTIC SIGNAL stops. The symbol 🖄 stops flashing and disappears.





#### 1.3.7 END of COOKING TIME

Select END of COOKING TIME

END of COOKING TIME can only be selected if the unit is in HEATING OPERATION. Step through the sequence of available functions with touchpad ADDITIONAL FUNCTION SELECT as described in chapter 1.2.2 until the symbol END of COOKING TIME → is flashing.

If COOKING TIME has not been set before, the display shows the current TIME of DAY (see example 1). If COOKING TIME has been set before, the display shows the current TIME of DAY plus the set COOKING TIME (see example 2).



Example 1: Select END of COOKING TIME; TIME of DAY is 14:53; no COOKING TIME was set before.



Example 2: Select END of COOKING TIME; TIME of DAY is 14:53; COOKING TIME of 1:00 h:min was set before.

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## Set END of COOKING TIME

END of COOKING TIME can be set with Touchpad PLUS(+) and MINUS(-) according to chapter 1.2.3. Setting range: 00:00 .... 23:59 h:min.

END of COOKING TIME is limited to the current TIME of DAY plus 23:59 himin.

## Note 1:

If no COOKING TIME has been set before, setting END of COOKING TIME results in a COOKING TIME which is calculated by the unit. The HEATING OPERATION starts immediately after the data is entered into the unit.

## Note 2:

If COOKING TIME has been set before, setting END of COOKING TIME > 0 results in a DELAYED COOKING. The values for DELAYED COOKING are calculated by the unit (calculated START TIME and calculated COOKING TIME). First the unit switches to OFF MODE. When calculated START TIME is reached the unit switches into a HEATING OPERATION. HEATING OPERATION is terminated after calculated COOKING TIME has expired. Details about DELAYED COOKING see in chapter 1.3.8.

## Modifying / Deleting END of COOKING TIME

The user first has to enter into END of COOKING TIME mode by using the touchpad ADDITIONAL FUNCTION SELECT until the symbol  $\rightarrow$  is flashing. END of COOKING TIME can be changed by using touchpad PLUS(+) and touchpad MINUS(-).

If END of COOKING TIME was set without setting COOKING TIME first, the END of COOKING TIME can be deleted by counting back by MINUS(-) until it equals current TIME of DAY.

If both, END of COOKING TIME and COOKING TIME were set, END of COOKING TIME can be changed to closest END TIME of current TIME of DAY plus remaining COOKING TIME (refer to chapter 1.3.8 - example 2).

## AUTO COOK after END of COOKING TIME was set

5 seconds after setting END of COOKING TIME, the data is loaded into the unit.



Display right after setting END of COOKING TIME for 1:00; current TIME of DAY was 14:53.

If no COOKING TIME has been set before, the display changes from END of COOKING TIME to HEATING OPERATION. To indicate that AUTO COOK mode is active in the background, the symbol AUTO COOK is permanently lighted.



Automatic cooking with COOKING TIME running in the background

If COOKING TIME has been set before, and END of COOKING TIME was set > 0, this results in DELAYED COOKING. Details about DELAYED COOKING see in chapter 1.3.8.

## AUTO COOK has expired

Refer to chapter 1.3.6 (subchapter AUTO COOK has expired).



## **1.3.8 DELAYED COOKING**

Both, a COOKING TIME and an END of COOKING TIME can be entered. Depending on the values the user can "program" a delayed START TIME. First the unit remains in OFF MODE or displays MINUTE MINDER (if active) and switches to the selected HEATING OPERATION upon the calculated START TIME. After END of COOKING TIME is reached the unit switches back to OFF MODE or displays MINUTE MINDER (if active).



Example 2 shows that the earliest END of COOKING TIME equals to current TIME of DAY (in this case 10:00 h:min) plus COOKING TIME (in this case 1:15 h:min). Therefore in this case the earliest END of COOKING TIME is 11:15 h:min.

The unit switches to HEATING OPERATION as soon as START TIME is reached. To indicate that AUTO COOK mode is active in the background the symbol AUTO COOK dispersion is permanently lighted.

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#### Set DELAYED COOKING

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Set desired COOKING TIME (see chapter 1.3.6). Set desired END of COOKING TIME (see chapter 1.3.7).

#### Modifying / Deleting DELAYED COOKING

Modifying / Deleting of COOKING TIME (see chapter 1.3.6).

Modifying / Deleting of END of COOKING TIME (see chapter 1.3.7).

#### START TIME is not yet Reached

The unit stays in OFF MODE or displays MINUTE MINDER (if active). The symbol AUTO COOK M is flashing to indicate that AUTO COOK is programmed.



Unit in OFF MODE indicating programmed AUTO COOK



Unit in MINUTE MINDER mode indicating programmed AUTO COOK

#### AUTO COOK is Running

After START TIME has been reached the unit switches to the programmed HEATING OPERATION. To indicate that AUTO COOK mode is active in the background, the symbol AUTO COOK 🖄 is permanently lighted.



AUTO COOK with COOKING TIME running in the background

AUTO COOK Has Expired

Refer to chapter 1.3.6 (subchapter AUTO COOK has expired).

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### 1.3.9 Correlation of COOKING TIME, DELAYED COOKING and FAST PREHEAT

The image beyond shows the correlation of COOKING TIME, DELAYED COOKING and FAST PREHEAT, indicates the ACCOUSTIC SIGNAL and if any user interaction is needed.



#### 1.3.10 HEATING OPERATION

For a HEATING OPERATION a HEATING FUNCTION and a HEATING TEMPERATURE have to be selected.

#### Selecting a HEATING FUNCTION

A HEATING FUNCTION can be selected by using touchpad HEATING FUNCTION SELECT according to chapter 1.2.4. By touching touchpad HEATING FUNCTION SELECT for the first time the first HEATING FUNCTION "Oven Light" is selected. Every HEATING FUNCTION is connected with a HEATING TEMPERATURE pre-set.

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Example: Display after selecting HEATING FUNCTION "Fanned Heat". Therefore touchpad HEATING FUNCTION SELECT has to be pressed 2 times if the unit was in OFF MODE before. The unit proposes a HEATING TEMPERATURE of 180°C:

#### Changing the HEATING TEMPERATURE

The user can change the HEATING TEMPERATURE by using touchpads PLUS(+) and MINUS(-). The smallest temperature increment or decrement is 5 °C.

#### Changing the HEATING FUNCTION

While unit is not yet in HEATING OPERATION (within 5 s after last input of HEATING FUNCTION or HEATING TEMPERATURE) it is possible to step back in the reverse direction to select another HEATING FUNCTION by using touchpad OFF according to chapter 1.2.5.

#### Note:

After HEATING OPERATION has started, touching OFF terminates the HEATING OPERATION and sets the unit to the OFF MODE.

#### Starting a HEATING OPERATION

5 seconds after the last selected input (HEATING FUNCTION or HEATING TEMPERATURE) the data is entered into the unit and the HEATING OPERATION starts.

#### During HEATING OPERATION the user always can change HEATING FUNCTION and HEATING

TEMPERATURE by using the touchpad HEATING FUNCTION SELECT respective PLUS(+) and MINUS(-).

The new input is entered and executed after 5 seconds.

#### Indication of Oven Preheat Phase

If the HEATING OPERATION starts from a cold or only warm oven it takes some time until the SET TEMPERATURE is reached. This time is called "oven preheat time". The fact that the oven has not reached

its SET TEMPERATURE yet is indicated by the flashing symbol . This informs the user that the oven is still in the preheat phase. As soon as the oven has reached its SET TEMPERATURE the symbol stops flashing and is permanently lighted. Additionally ACOUSTIC SIGNAL No.2 according to chapter 1.5 occurs to inform the user that oven has reached its SET TEMPERATURE.



Oven is in the preheating phase



Oven has reached SET TEMPERATURE

#### Note:

During the preheat phase the same heating elements are used which are linked to the selected HEATING FUNCTION. The preheat phase is different to FAST PREHEAT, were different heating elements are used to

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speed up the time until the oven has reached its SET TEMPERATURE. For details about FAST PREHEAT see chapter 1.3.11.

#### Adding Timing Functions

After selecting a HEATING FUNCTION or even after a HEATING OPERATION already started, any timing functions like MINUTE MINDER (chapter 1.3.5), COOKING TIME (chapter 1.3.6), END of COOKING TIME (chapter 1.3.7) and DELAYED COOKING (chapter 1.3.8) can be activated.

#### Note:

In case of adding a DELAYED COOKING it can happen that the HEATING OPERATION, which just started some short time before is terminated by the unit, because the calculated START TIME lies in the future. In this case the HEATING OPERATION automatically starts again when current TIME of DAY equals START TIME.

#### Terminating a HEATING OPERATION

A HEATING OPERATION is terminated by pressing touchpad OFF according to chapter 1.2.5. The unit switches from HEATING OPERATION to OFF MODE showing the current TIME of DAY. If MINUTE MINDER is running the display shows the symbol and the remaining time value of the running MINUTE MINDER.

## 1.3.11 FAST PREHEAT

#### Functional Description

FAST PREHEAT is an additional function that can be activated after a HEATING FUNCTION has been selected. FAST PREHEAT is intended to reduce the time the oven needs to reach the HEATING TEMPERATURE by using a different set of heating elements with increased heating power. FAST PREHEAT is automatically terminated after a defined temperature condition is fulfilled. The behavior of the fast preheat termination is defined by the appliance manufacturer.

#### Selecting FAST PREHEAT

FAST PREHEAT can only be selected if the unit is in HEATING OPERATION. Step through the sequence of available functions with Touchpad ADDITIONAL FUNCTION SELECT as described in chapter 1.2.2 until the display shows the letters "FPH" (Fast PreHeat) permanently. The symbol of the already selected HEATING FUNCTION is permanently lighted during this selection phase.



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Example: HEATING FUNCTION "Baking" is running and FAST PREHEAT has been selected for activation.

#### Note:

Depending on the HEATING FUNCTION parameters, it is possible that some HEATING FUNCTIONS offer a FAST PREHEAT function and others not. If the selected HEATING FUNCTION is not connected with a FAST PREHEAT function, FAST PREHEAT cannot be selected as described before.

#### Activating/Deactivating FAST PREHEAT

FAST PREHEAT can be activated during the next 10 seconds after selection. During this time the display is showing the letters "FPH" as described before. The user has the following options during the next 10 seconds:

| Action  | Result                                    |
|---|---|
| Wait 10 seconds and do nothing                    | FAST PREHEAT is activated                 |
| Press touchpad PLUS(+) or MINUS(-) once within 10 | FAST PREHEAT is activated                 |
| seconds   |   |
| Press touchpad OFF once                           | FAST PREHEAT is deselected; selected      |
|   | HEATING OPERATION is continued            |
| Press touchpad ADDITIONAL FUNCTION SELECT (at     | FAST PREHEAT is deselected; selected      |
| least once)                                       | HEATING OPERATION is continued            |
| Press touchpad HEATING FUNCTION SELECT            | No valid operation. Unit confirms with an |
|   | ACOUSTIC SIGNAL.                          |

After activation of FAST PREHEAT the display shows the letters "FPH" alternating to the HEATING TEMPERATURE with a time period of 1 second each.

#### Deactivating FAST PREHEAT

The user can deactivate FAST PREHEAT after it has already been started by pressing touchpad OFF once. The unit terminates FAST PREHEAT and returns to beforehand selected HEATING OPERATION.

#### Termination of FAST PREHEAT

FAST PREHEAT is automatically terminated after the termination condition is fulfilled. The display changes from the alternating mode ("FPH" and HEATING TEMPERATURE) to a static display of HEATING TEMPERATURE. Additionally ACOUSTIC SIGNAL No. 2 occurs to inform the user that FAST PREHEAT has been automatically terminated. After this the unit continues with HEATING OPERATION with beforehand selected HEATING FUNCTION and HEATING TEMPERATURE.

#### Note 1:

If HEATING FUNCTION is changed while FAST PREHEAT is running, the new data is entered into the unit after 5 seconds. FAST PREHEAT is not affected by the modification. After automatic termination of FAST PREHEAT the unit continues with HEATING OPERATION with the newly applied HEATING FUNCTION. **Note 2**:

If HEATING TEMPERATURE is changed while FAST PREHEAT is running, the new data is entered into the unit after 5 seconds. FAST PREHEAT is affected in a way that the termination condition of FAST PREHEAT is now dependent on the newly applied HEATING TEMPERATURE.

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## 1.3.12 CHILD LOCK

#### Functional Description

CHILD LOCK is intended to keep the unit in OFF MODE and prevents unwanted activation of unit by locking the keys. CHILD LOCK can only be activated in OFF MODE.

#### Activation/Deactivation of CHILD LOCK

To activate/deactivate CHILD LOCK press touchpad 1 ADDITIONAL FUNCTION SELECT and keep it pressed. Then press touchpad 5 OFF 5 times while touchpad 1 ADDITIONAL FUNCTION SELECT is kept pressed. Activation/deactivation of CHILD LOCK is confirmed by ACOUSTIC SIGNAL No.2 according to chapter 1.5.

#### Display and ACOUSTIC SIGNAL During CHILD LOCK

Touching any of the touchpad keys while CHILD LOCK is activated causes ACOUSTIC SIGNAL No.5 according to chapter 1.5. Additionally instead of TIME of DAY the display shows the letters "LOC" for the duration of 2 seconds. After 2 seconds TIME of DAY is displayed again.



## 1.3.13 EXHIBITION MODE

#### Description

EXHIBITION MODE is intended to be used for fairs or exhibitions. Cavity light and fans are working regularly. HEATING FUNCTIONS, HEATING TEMPERATURES and additional functions can be selected and set and are displayed regularly. But during EXHIBITION MODE no heating elements are activated.

#### Activation/Deactivation

Entering/leaving EXHIBITION MODE is only possible within 2 minutes after the unit has been connected to the mains. The unit must be in OFF MODE. MINUTE MINDER must not be active.

To activate/deactivate EXIBITION MODE press touchpad OFF and keep it pressed. Then press touchpad ADDITIONAL FUNCTION SELECT 10 times while touchpad OFF is kept pressed.

#### Activation: Display and ACOUSTIC SIGNAL

Accepted activation of EXHIBITION MODE is confirmed by ACOUSTIC SIGNAL No. 2 according to chapter 1.5. Accepted activation of EXHIBITION MODE is displayed by the following letters:





Screen 2 for 2 seconds: "on"

Afterwards the unit continues with set TIME of DAY according to 1.3.2. The same screens are shown, if the unit is in EXHIBITION MODE and again has been connected to the mains to remind the user, that EXHIBITION MODE still is active.

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#### Deactivation: Display and ACOUSTIC SIGNAL

Accepted deactivation of EXHIBITION MODE is confirmed by ACOUSTIC SIGNAL No.2 according to chapter 1.5. Accepted deactivation of EXHIBITION MODE is displayed by the following letters:



Screen 1 for 2 seconds: "FAir"



Screen 2 for 2 seconds: "oFF"

Afterwards the unit continues with set TIME of DAY according to chapter 1.3.2.

## 1.4 Bluetooth LE - Pairing and Bonding

This chapter describes the Bluetooth Low Energy pairing and bonding process and how to operate and navigate at the EGO Simple Oven Control.

#### Note:

Manual operation input has priority over Bluetooth remote operation input due to safety reasons.

#### 1.4.1 Definitions and Terms

| BLE                  | Bluetooth Low Energy  |
|----------------------|---|
| Mobile device        | Smartphone or Tablet (iOS, Android or Windows)  |
| Connective appliance | E.G.O. home appliance control with BLE  |
| Flashing slowly      | 0.5 s off, 0.5 s on   |
| Flashing fast        | 0.1 s off, 0.1 s on   |
| Pairing              | Exchange of security data between two Bluetooth devices   |
| Bonding              | Permanent storage of the security data exchanged between 2 BLE devices                                    |
| Reconnection         | When bonded and disconnected, the connective appliance will scan cyclically for its paired mobile devices |

#### 1.4.2 General

If there is no further setting action within 30 seconds in the "Connectivity" menu, the menu will exit automatically.



## 1.4.3 Enable Connectivity Mode and Start Pairing

The connectivity mode and the binding process can only be selected if the oven is in OFF MODE. The current TIME of DAY is displayed.



- 1. Press button "T" together with the button "On/off" hold for app. 5 seconds until the 7-segment display appears as follows:
- 2. Release the pressed buttons. The connectivity mode is enabled and the state is stored in the non-volatile memory.
- 3. After 2 seconds, the appliance control starts advertisement "willing to pair" for max. 2 minutes (timeout).

In case of maximum No. of mobile devices are already bonded, continue according chapter 1.4.8.

The display shows as below and the connectivity symbol is flashing slowly until a mobile device has been paired and bonded or a timeout (2 minutes) occurs. See chapter 1.4.4.



4. If a mobile device has been paired and bonded, the appliance control leaves the connectivity settings. The display returns to the previous display before enter the setting menu. The connectivity icon is shown permanently while a mobile device is paired and bonded.





5. If a timeout occurs, because no mobile device has been paired, the display shows" - - - - " and the connectivity icon is switched off:



After 2 seconds the appliance control leaves the connectivity settings. The display returns to the previous display before enter the setting menu.



#### 1.4.4 Pairing and Bonding Process

To set a connection, the connective appliance must be set up as advertiser at first, whereas the mobile device must be set up to scanning mode. Once in connection the remote device changes its own role and becomes the Master (Server) and the connective appliance becomes the Slave (Client).

- 1. Enter the connectivity mode at Simple Oven control.
  - => The appliance starts with pairing advertisement.
- 2. Start the scan process at the mobile device in the settings menu.
- 3. Search for appliances on the mobile device before timeout occurs (2 minutes).
- 4. Connect with the appliance

=> The mobile device will be paired and bonded. All functions according to the E.G.O. App are now available. No PIN code is necessary.

=> If no connection will be set up within those 2 minutes, the appliance stops pairing process.

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#### Note:

If BLE mode is enabled <u>and</u> at minimum 1 mobile device has been paired and bonded <u>and</u> is in RF range

with the appliance, the connectivity Icon is shown permanent in the display.

#### 1.4.5 Out of Range

Once the mobile device comes out of the Bluetooth range, the connectivity symbol will disappear.

#### 1.4.6 Reconnect

If a known mobile device comes back in Bluetooth range, this will be automatically re-connected and the connectivity symbol appears.

#### 1.4.7 Bonding and Pairing an Additonal Mobile Device

Follow the procedure as described in chapter 1.4.3.

#### 1.4.8 Number of Bonded Devices Exceeded

Maximum 4 mobile devices can be bonded to a Simple Oven Control. If 4 mobile devices are already bonded, it is not possible to bond an additional one. Trying this, the display will show "FuLL" and no pairing process will be started.



Now there are 2 possibilities: Abort Pairing Process (see chapter 1.4.9) or Delete Bonded Devices and Start New Pairing (see chapter 1.4.10).

#### **1.4.9 Abort Pairing Process**

If no button is pressed within a timeout of 30 seconds or a manual abort according to chapter 1.4.13 is done, pairing is aborted and connectivity settings are left. The display returns to the previous display before entering the setting menu. The already bonded devices remain stored.

#### 1.4.10 Delete Bonded Devices and Start New Pairing

Pressing button "T" together with the button "On/Off" and hold for additional 5 seconds, all already bonded mobile devices will be deleted and the appliance control starts advertisement by searching for new devices as described in chapter 1.4.4.

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#### 1.4.11 Disable BLE Connectivity Mode

Press button "T" together with the button "On/Off" - hold for app. 10 seconds (**Note:** After 5 seconds the display shows "On" according 1.4.3) until the display shows:



After 2 seconds Simple Oven Control leaves the connectivity settings. The display returns to the previous display before entering the setting menu. Bonded mobile devices are still saved. The connectivity icon is switched off because connectivity mode is disabled.

#### 1.4.12 BLE Reset

A BLE Reset deletes all bonded devices and disables the connectivity mode. Press button "T" together with the button "On/Off" and hold for app. 15 seconds (**Note:** After 5 seconds the display shows "On" according to chapter 1.4.3. After 10 seconds the display changes to "OFF" according to chapter 1.4.11. After 15 seconds the display shows "clr"):



After 2 seconds the appliance control leaves the connectivity settings. The display returns to the previous display before entering the setting menu. Bluetooth Mode is switched off and bonded devices are deleted. The connectivity icon is switched off.



#### 1.4.13 BLE Abort Pairing

If Simple Oven Control is in Bluetooth settings mode and waiting for pairing with a mobile device or any other actions, this can be aborted by pressing the "On/Off" button until the display returns to the previous display before enter the settings menu.



# **1.5 Acoustic Signals**

| No. | Function                                     | Description  |
|-----|--|--|
| 1   | Key acknowledgement (click)                  | Any allowed touch operation  |
| 2   | Advice signal                                | e.g. end of preheat, end of FAST<br>PREHEAT, entering/exiting EXHIBITION<br>MODE |
| 3   | MINUTE MINDER expired                        | Max. 7 min   |
| 4   | COOKING TIME / END of COOKING TIME expired   | Max. 7 min   |
| 5   | Warning signal / touch operation not allowed | Invalid action / operation   |



## Note:

Signal no.3 and no.4 are continued until they are terminated by expiration time or by user operation input.

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# 2 Notes

# 2.1 Notes (FCC)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is
- connected.
- Consult the dealer or an experienced radio/TV technician for help.

## 2.2 Notes (ISED)

(EN) This Class B digital apparatus complies with Canadian ICES-003 and RSS-210. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

(FR) Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210. Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

## (EN) Radio frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Innovation, Science and Economic Development (ISED) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized. This device has also been evaluated and shown compliant with the ISED RF Exposure limits under mobile exposure conditions (antennas at least 20cm from a person's body).

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(FR) Informations concernant l'exposition aux fréquences radio (RF) La puissance de sortie émise par l'appareil de sans fil est inférieure à la limite d'exposition aux fréquences radio d'Innovation, Sciences et Développement économique Canada (ISDE). Utilisez l'appareil de sans fil de façon à minimiser les contacts humains lors du fonctionnement normal. Ce périphérique a également été évalué et démontré conforme aux limites d'exposition aux RF d'ISDE dans des conditions d'exposition à des appareils mobiles (les antennes se situent à moins de 20cm du corps d'une personne).



# 3 Changelog

| Rev. | Date       | Responsible | Changes         |
|------|------------|-------------|-----------------|
| 01   | 2018-02-08 | CHMIELEC    | Initial release |