

NO VOMARKII

Instruction Manual

Original Instructions

- 「NOVO MARK II」 is the roaster.
- Please read and comprehend this manual carefully for proper operations.
- Please keep this manual in sight for whom operates properly.



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The instructions shall state the substance of the following:

This machine can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the machine in a safe way and understand the hazards involved.

Children shall not play with the machine.

Cleaning and user maintenance shall not be made by children without supervision.

This machine is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.

1. Before use

1-1. Important notice for safety

This “NOVO MARK II” is exclusive use for Coffee or Cacao Roasting purpose ONLY.

Do not use for other than intended purpose.

「NOVO MARK II」 is safe, easy to use and high maintainability machine.

To keep this machine optimum condition, please operate correctly.

*All/some contents in this instruction may be changed or modified without notice.

Important notes before use

- Make sure the room is well ventilated during operation.
- Keep always in sight during operation.
- Lock the door to prevent electric shocks during operation.
- Turn off breaker circuits after operation.
- Some parts of this machine becomes extremely hot during and after operation.
Do not touch other than necessary parts.
- Operate by only fingertip on touch panel.
Contact with sharp edge-tool may cause liquid leak.
- Stop operation immediately in case of odd odor, smoke, soot occurs.
May be in signs of abnormal roasting.

Important notes after use

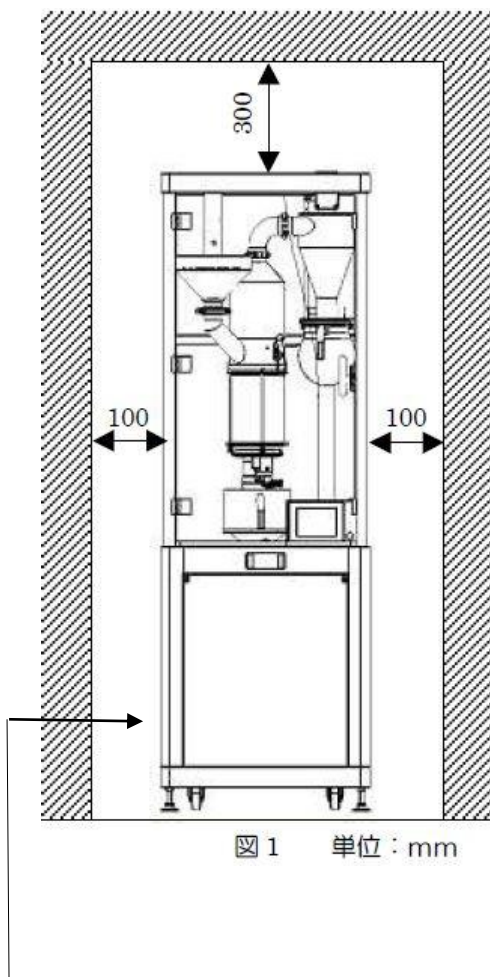
- Do not touch other than necessary parts. Some parts remain extremely hot even after shutting down.
- Turn off breaker circuits after operation.
For maintenance
- Annual overhaul should be done properly and professionally.
(Ask your mechanics for details)
- Roasting-Glass and Chaff-Bottle should be washed by detergent daily basis.
- Wipe off the dust on roasting machine daily basis.
- Stop operation immediately in case of any failures. Ask your mechanics to restore.
Any kind of personal modifications or repairs are strictly prohibited.
- Lifetime of electric devices or parts may vary depending on operating conditions.
5-years usage standard also may vary.
- If the malfunction yellow light goes on, appliance is malfunctioning.
Turn off or disconnect appliance from power supply and
have serviced by a qualified technician.

1-2. Where to place

Important notice

Do not place roasting machine as follows;

- Near flammable materials
- Under conditions of violent vibrations
- Under or on unstable objects
- Place generate flammable gas
- Place with much dust, moisture and/or metal powder
- Place with insufficient ventilation
- Place with unable to secure enough space around the machine
- Place where out of sight from anyone
- Equipment bonding is grounded only as functional purpose



1-3.Primary specification

- Machine size
 - width : 635mm
 - height : 1950mm
 - depth : 635mm
- power : 220-240VAC 40A 60Hz
- electric consumption : 8.5kw
- weight : 210kg
- operation temperature : 15℃～35℃
- storage and maintenance temperature : -20℃～55℃
- operation humidity : 45%～85% RH
- storage humidity : 45%～85% RH
- install location : less than 2000 m
- exhaust temperature : 100℃～260℃
- exhaust flow : 2.0 m³/min or less
- exhaust pressure loss : 0.5kpa or less
- pollution degree : 2
- overvoltage category : II
- noise level : less than 73db



Rating-label is at left-side of lower panel.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference whe the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instraction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Safety Precautions

Observe the following instructions to prevent injury to the user and others and damage to property. In addition, the precautions provided throughout this manual should be read carefully and the machine should be used correctly.

Precautions shown here

The harm or damage that could result from ignoring the following precautions and incorrectly using.

1-4. Preparation

Wiring connection should be strictly observed as follows;

- Wiring connection should be done by professional mechanics.
Power outlet not smaller than 240VAC, 40A.
- Ground connection should be done to prevent leakage current.
- Confirm that the machine is firmly fixed into a positions by levelers.

※Lighting

When one of the lighting goes off, shut down the machine and change Both light bulbs, otherwise may cause failure of electric transformer.

※Change the paper-filter daily basis to prevent uneven roasting by lowering air flow.

When you use up all filters, place an order with the buyer for it.

(TYPE: DDFILTER-A)

the machine are classified and explained using the following symbols and messages.

	Warning This symbol designates information that, if not followed, “could result in death or serious injury.”
	Caution This symbol designates information that, if not followed, “could result in injury or property damage.”

Examples of symbols

	The information calls for “warning or caution.”
	The information “prohibits” what must be not done.
	The information gives “instructions” about what must be not done.



To Prevent Electric Shock, Short Circuits, Ignition, and Fires

	● Use a 220 VAC or 240VAC power outlet by itself. ● Push the power plug all the way into the power outlet. ● Wipe off any dust from the plug prongs.
 JIS S8101 Contact prohibited	● Do not modify the machine. The machine should only be disassembled and repaired by a service technician.
 JIS S8101 Wet hands prohibited	● Do not insert or remove the plug with wet hands.
 JIS S8101 Wetting prohibited	● Do not put the machine, power plug, or the power cord in water or get water on them. - Do not place the machine where there is water. ● Do not use the machine or power plug if wet. (Could cause short-circuit, electric shock, or malfunction.) ● the machine must not be cleaned by a water jet.



- Do not use the machine if the power cord or power plug is damaged or if the power plug is loosened when plugged into the power outlet.
- Do not damage, modify, excessively bend, pull on, twist, or fold up the power cord or place it near a hot object or under a heavy object.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Do not insert a metal object, such as a pin or needle or other foreign object in the intake vent, exhaust vent, or gaps between components at the machine body.
- Do not allow unsupervised use by children and keep out of the reach of children.



- Immediately stop using the machine if anything is abnormal or malfunctioning.
 - If the power cord or power plug is abnormally hot.
 - If the electricity stops and starts flowing when the power cord is bent.
 - If you get shocked when touching the machine.
 - If there are abnormal sounds during operation.
 - If there are air leaks.
 - If there is another abnormality or malfunction.



Warning

To Prevent Burns

During operation



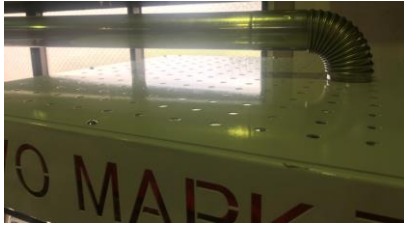
- During the machine operation the red part will be very hot, so never touch there.

During operation



- Beans immediately after roasted are very hot.
Never take beans-tray out
until cooling down is over.

※After cooling down, beans may be still hot.



- Exhaust air and air pipes
are very hot during operation.
Never touch
until the machine cooling down is over.

※After cooling down, Air pipes may be still hot.



Read Manual

This symbol designates information that,

“Always operate the machine while referring to this manual.”



Hot Caution

This symbol designates information that,

“Represents that the inside of the door is hot.”

- If any glass part break, stop use immediately and replace the broken part.
- If smoke comes from the lower part of the machine
or fire outbreak from the machine,
stop use immediately, turn off power, and contact buyer.

1-5. Machine outline



Hopper

This is where to place green beans.

Minimum 100g

Maximum 1kg



Roasting-Glass

This is where to roast green beans by hot air through the three nozzles from heater.



Beans-Tray

After roasting, all beans fell into this saucer.

Then cooling process starts automatically. Make sure to place this saucer before start roasting.



Chaff-bottle

All Chaffs derived by roasting are gathered into this bottle. Keep clean daily basis.



Touch panel

Operating this machine by Easy visual screen.



Main switch

Placed left-side of this machine.

Make sure to ventilate before turning on.

Controller	Made by Digital LT3300-T1-D24-C
Roasting Capacity	100g~1kg (estimate roasting time 5~10 min)
Max roasting kg/hr	8kg/hr
size	width : 635mm depth : 635mm
weight	height : 1950mm weight : 210 kg
Power • Consumption	220-240VAC, 60Hz 40A 8.5kw
Cooling method	Suction type cooling (2 min)

1-6. Touch panel

「NOVO MARK II」 is easy to roast for anyone by simply touching this panel.

① [Start screen]

After turning Main switch ON, [Start screen] appears on the panel as below.



By touching anywhere on the panel, automatically goes to [Menu screen]

Every operation starts from this screen.

Each button`s details is as follows;

② 「Menu screen」



WARMING-UP

By touching this button, pre-heating automatically starts for 10min.

After 10 min, machine will be ready to roast.



ALERT

This button will be lightend in occurrence of abnormality.

By touching this button, you can verify on going alert point, cause and records.



SETTING

By touching this button, you can create/modify data of each roasting program.

Detail setting will be explained in page 14.



SHUT DOWN

By touching this button, cooling-down process will be automatically start for 10 min.

After 10 min cooling, you can turn off the main switch.



MAINTANANCE

Use this button for maintenance of this machine.

Detail setting will be explained in page 50.



EJECT

Use this button in case of immediate stop for roasting, in occurrence of abnormality, or any other case of emergency.

By touching this button, on-going process will be forced terminated.



CHAFFS

Use for discharging chaffs and/or cleaning the chaffs bottle.



LIGHTING

Lighting will be ON/OFF by touching this button.

(Do not look directly at the light of lightings.)

(Do not touch switches of lights)



LOGO LIGHTING

LOGO lighting will be ON/OFF by touching this button.



NOW OPEN

Door will be closed and locked by touching this button.

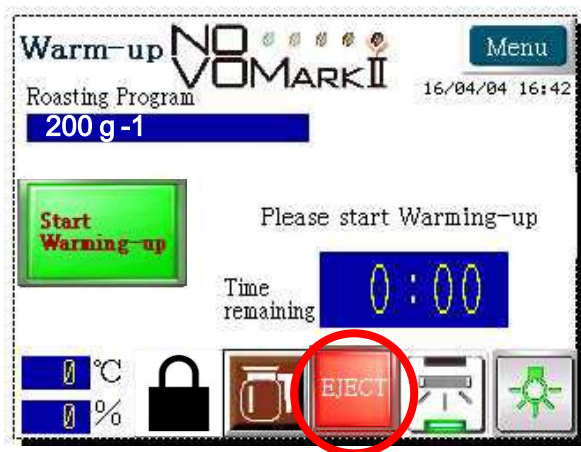


NOW CLOSE

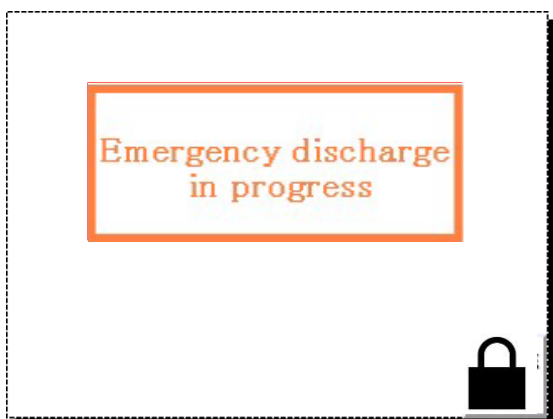
Door will be opened by touching this button. During main switch ON, door will be closed.

1-7. How to use Eject button

How to use this button in case of immediate stop for roasting, in occurrence of abnormality, or any other case of emergency.

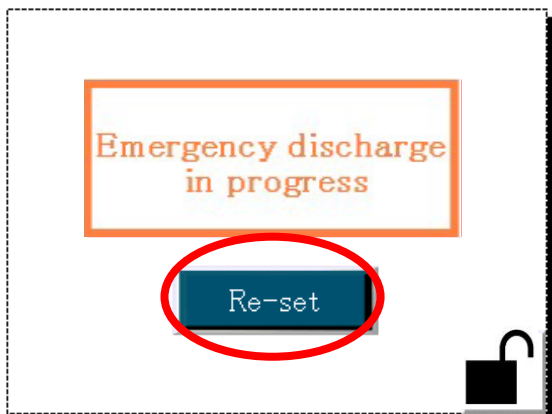


Touch this button.



Emergency shut-down will be displayed.
Blower will immediately stop and shutter will open automatically.

Remove any objects causing this stop.



Close the door.

By touching "Reset", shutter will be closed automatically and resume.

※ When Emergency shut-down activated during pre-heating, pre-heating process will proceed after resuming.

※ Any other time, it will be back to the screen before pre-heating.

1-8.Setting for roasting program

How to set up (create new, modify) Roasting program will be explained as follows;

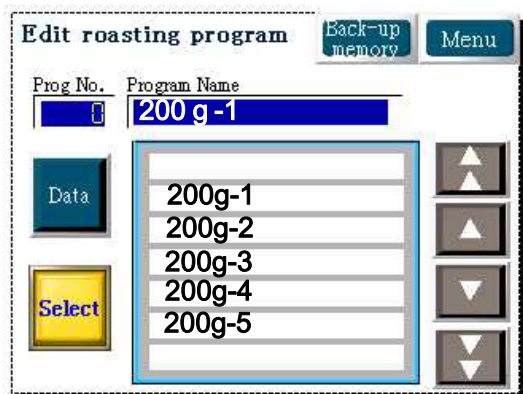


Warming Up



Roasting Program

By Touching Roasting Program name, “Edit roasting program” screen will be displayed.



“Edit roasting program”



By touching “Check the profile”
 , “Program Profile” screen will
 be displayed.



Selecting Roasting Program



Use this button for save or readout Roasting program.



Back to Main Menu

※After Pre-heating, “Start Warming
 up” becomes “Ready to Roast”
 automatically.

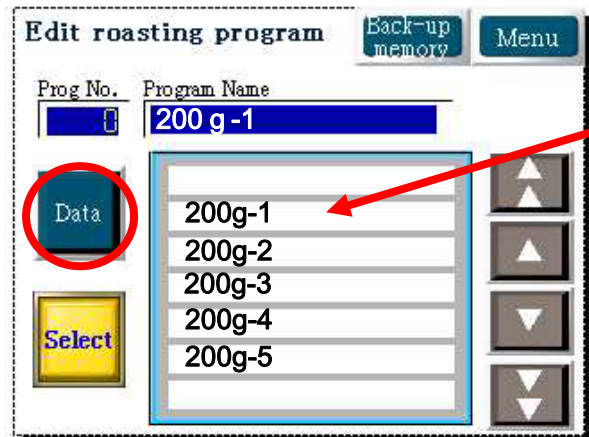


Choosing program by touching each one
 directly, or touching ▲▼ to move up/down.
 By hold pressing ▲▼, continuously move
 up/down.



Currently selected Roasting Program.

Here you can learn how to create new program by learning how to modify the program.



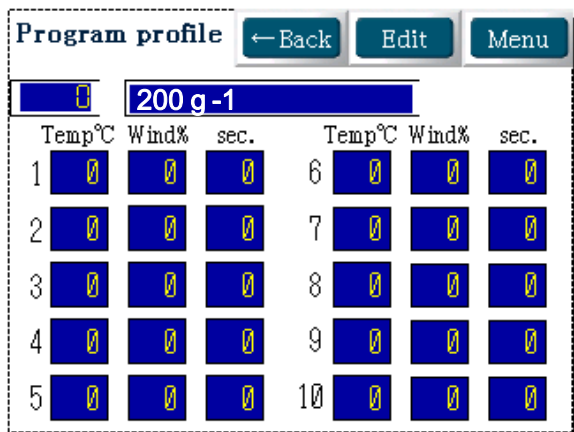
First, select the profile 「200g-1」

(Select the Blank one when creating new program.)

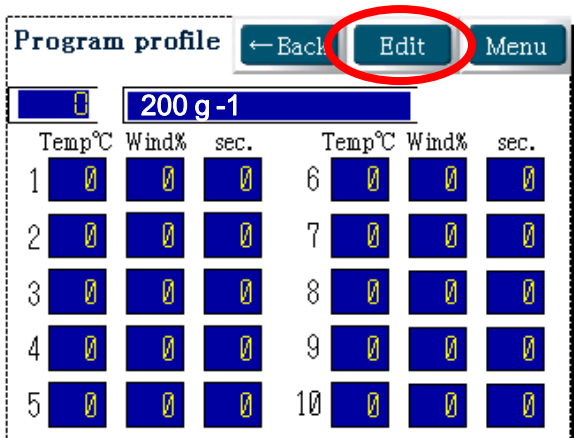
You can set upto 150 programs.

You cannot copy or search the program from this screen.

“Edit roasting program” screen



By touching “Select the profile”, profile editing screen will be displayed.



If you are just cheking the screen, touch “Back” to back to the previous screen.

※This screen are not for modification.

Press “Edit” to modify the selected program.



“Program profile” screen

Press the program

Roasting data edit

← Back Write

200g-1

	Temp°C	Wind%	sec.		Temp°C	Wind%	sec.
1	0	0	0	6	0	0	0
2	0	0	0	7	0	0	0
3	0	0	0	8	0	0	0
4	0	0	0	9	0	0	0
5	0	0	0	10	0	0	0

Editing Screen

Touch where you wish to create/modify.

Set the name of the Program

Here, how to name 「Roast 1」 as an example.

Roasting data edit

← Back Write

200g-1

ESC	←	→			▲	▼	CLR	DEL	BS
1	2	3	4	5	6	7	8	9	0
A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z	.	+	-	CAPS
FEP	カナ変換	SP/漢字	キャンセル	ENT					

Touch the name of the existing Program.

「200g-1」

Typing-Keys will be displayed automatically.

Touch 「CLR」 to erase [200g-1]

Roasting data edit ← Back Write

Roast 1

ESC	◀	▶			▲	▼	CLR	DEL	BS
1	2	3	4	5	6	7	8	9	0
A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z	.	+	-	CAPS
FEP	カナ変換	SP/漢字	キャンセル	ENT					

Input the name of the Program.

It switched uppercase and lowercase letters, when you touch 「CAPS」 .

Roasting data edit ← Back Write

Roast 1

	Temp°C	Wind%	sec.		Temp°C	Wind%	sec.
1	0	0	0	6	0	0	0
2	0	0	0	7	0	0	0
3	0	0	0	8	0	0	0
4	0	0	0	9	0	0	0
5	0	0	0	10	0	0	0

Touch the 「ENT」 , input is completed.
Changed section is flashing red.

By touching the 「Write」 ,
to confirm the edit.

How to create/modify the profile

Here add 8 stages as an example

Roasting data edit

← Back Write

Roast 1

Temp°C	Wind%	sec.	Temp°C	Wind%	sec.
1 0	0	0	6 0	0	0
2 0	0	0	7 0	0	0
3 0	0	0	8 0	0	0
4 0	0	0	9 0	0	0
5 0	0	0	10 0	0	0

Temperature(°C), Air-flow(%), Time (sec)

As an example, set 100°C, 75%, 25sec

You cannot enter 0 for temperature as well as air-flow.
When you wish to delete the stage, enter 0 for sec,
and touch

Write

Touching temperature you wish to set.

Roasting data ed

Roast 1

Temp°C	Wind%	sec.
1 0	0	0
2 0	0	0
3 0	0	0
4 0	0	0
5 0	0	0

Min: 0
Max: 100

0

← → CLR CANCEL

7 8 9 BS ▲

4 5 6 DEL ▼

1 2 3 + ENT

0 . - T

Numeric keypad will be displayed.

You can enter any number in between Min and Max.

Roasting data ed

Roast 1

Temp°C	Wind%	sec.
1 0	0	0
2 0	0	0
3 0	0	0
4 0	0	0
5 0	0	0

Min: 0
Max: 100

100

← → CLR CANCEL

7 8 9 BS ▲

4 5 6 DEL ▼

1 2 3 + ENT

0 . - T

Enter 「100」

Then press 「ENT」

※Press 「CANCEL」 to cancel

Roasting data edit

← Back Write

Roast 1

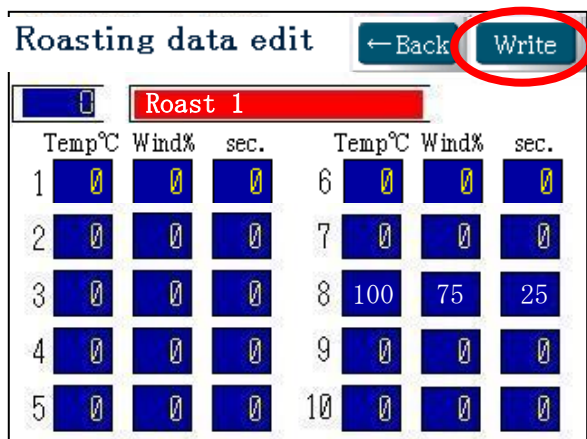
Temp°C	Wind%	sec.	Temp°C	Wind%	sec.
1 0	0	0	6 0	0	0
2 0	0	0	7 0	0	0
3 0	0	0	8 100	0	0
4 0	0	0	9 0	0	0
5 0	0	0	10 0	0	0

The data has been modified will be blinking in red.

Enter Air-flow and time as same.

※You cannot enter less than 50% on Air-flow to
prevent uneven-roasting.

Set the data



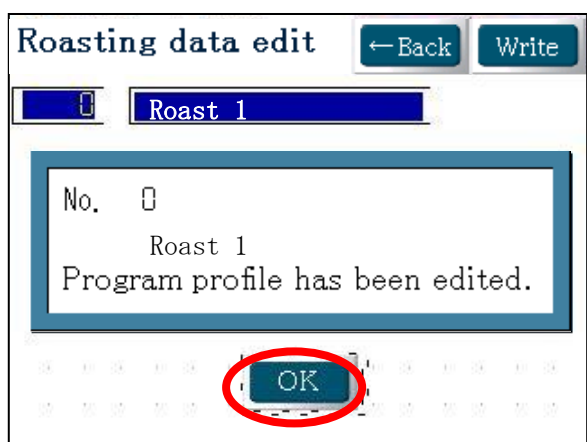
The screen is titled "Roasting data edit". At the top right are buttons for "← Back" and "Write". Below the title is a dropdown menu showing "Roast 1". The main area contains a table with 10 rows and 3 columns: Temp°C, Wind%, and sec. The data for row 8 is highlighted.

	Temp°C	Wind%	sec.
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	100	75	25
9	0	0	0
10	0	0	0

To set the data, press "Write"

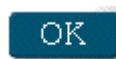


If you wish to undo modification, read next page for more detail.

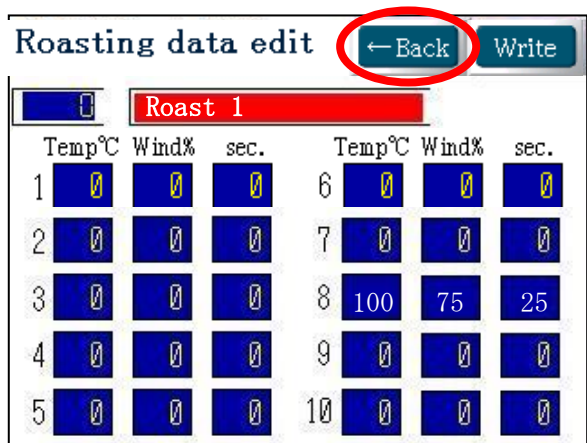


The screen is titled "Roasting data edit". At the top right are buttons for "← Back" and "Write". Below the title is a dropdown menu showing "Roast 1". A large blue-bordered box contains the text: "No. 0", "Roast 1", and "Program profile has been edited." At the bottom center is a button labeled "OK", which is circled in red.

Confirmation message will be displayed.



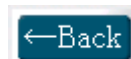
Press "OK"



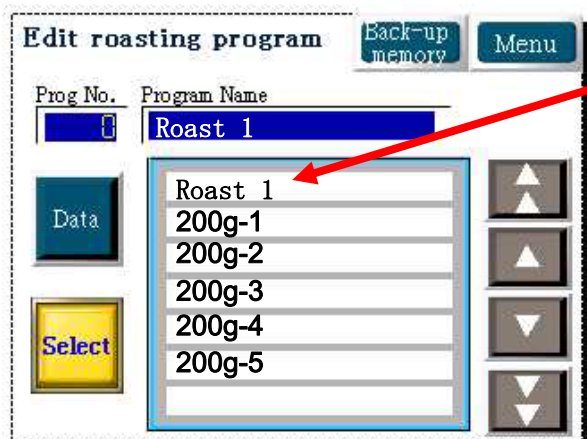
The screen is titled "Roasting data edit". At the top right are buttons for "← Back" and "Write". Below the title is a dropdown menu showing "Roast 1". The main area contains a table with 10 rows and 3 columns: Temp°C, Wind%, and sec. The data for row 8 is highlighted.

	Temp°C	Wind%	sec.
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	100	75	25
9	0	0	0
10	0	0	0

After checking edited data,



Press "BACK".



The screen is titled "Edit roasting program". At the top right are buttons for "Back-up memory" and "Menu". Below the title are fields for "Prog No." and "Program Name", both showing "Roast 1". A list of programs is displayed: "Roast 1", "200g-1", "200g-2", "200g-3", "200g-4", and "200g-5". A red arrow points to the "Roast 1" entry in the list. On the left are buttons for "Data" and "Select". On the right are four arrow buttons (up, down, left, right).

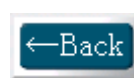
Roasting program has been renamed.

Changes or Suspension

Roasting data edit  

Prog No. 

	Temp°C	Wind%	sec.		Temp°C	Wind%	sec.
1				6			
2				7			
3				8			
4				9			
5				10			



You can suspense any time during blinking in red by pressing "Back".

Edit roasting program  

Prog No.  Program Name 

200g-1
200g-2
200g-3
200g-4
200g-5

Back to previous screen.

Nothing has modified.

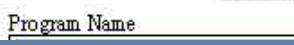
Press "name of the program" or ▲▼

Suspension has done.

Modification remains until selecting other program.

Re-changing (This is not for ordinary use, but for saving function.)

Edit roasting program  

Prog No.  Program Name 

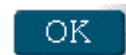
Program profile has been edited.
Press "Edit" or
Select the program again.





If press "Select" without selecting other program, confirmation message will be displayed.

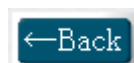
Press "OK".



Roasting data edit  

Prog No. 

	Temp°C	Wind%	sec.		Temp°C	Wind%	sec.
1				6			
2				7			
3				8			
4				9			
5				10			



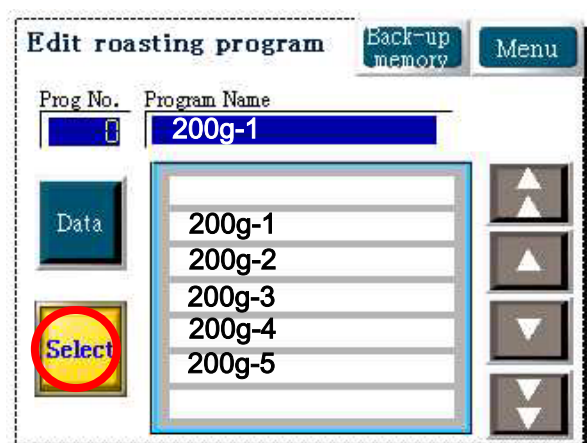
By pressing "Roasting Program", you can check the data remained modification.

Press "Edit" for re-modification.

Press "Back" for suspension.

1-9. Notes on editing/creating programs.

- When you edit the program which has been selected.



By press “Select” once again after editing, Roasting program will be updated.

- **Note for setting temperature**

Roasting Program goes from first stage to the 2nd, 3rd and so on.

Please avoid to set lower temperature than previous stages.

Of this Mechanical characteristic, for increasing temperature will accurately proceed; however, lowering may cause uneven-roasting by influence of outside temperature.

Not Recommended 1st stage 250°C 80% 25sec

2nd stage 210°C 60% 25sce

Above setting may cause not only unable to reach the target temperature but may cause higher temperature exceed 270°C by influence of lowering air-flow. Unrecommended usage may cause severe failure of the machine.

- **Outside temperature influences to roasting result**

Roasting temperatures are influenced by outside temperature.

Especially in case of outside temperature is lower than 20°C may cause unable to reach 260°C. By lowering air-flow may solve this case, place this machine where with as even room temperature as possible.

- **Note for setting air-flow**

First stage should be set no less than 80%.

Depends on moisture-percentage in green bean, by increasing air-flow in 1st through 3rd stage for enough drying, then increasing temperature will result in stable even roast.

The last stage, by lowering air-flow to keep the temperature even.

- **Note for setting time**

Standard total Roasting time will be recommended no more than 20min for 500g.

Unrecommended usage may cause severe failure of the machine.

1-10 Program management

You can store roasting program by using USB memory.

- How to store roasting program into USB memory.

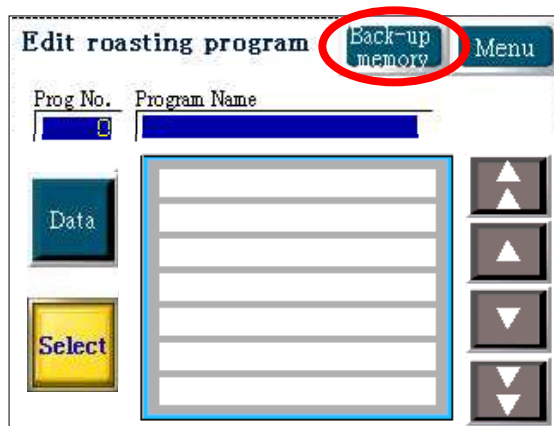
Insert USB memory into slot.



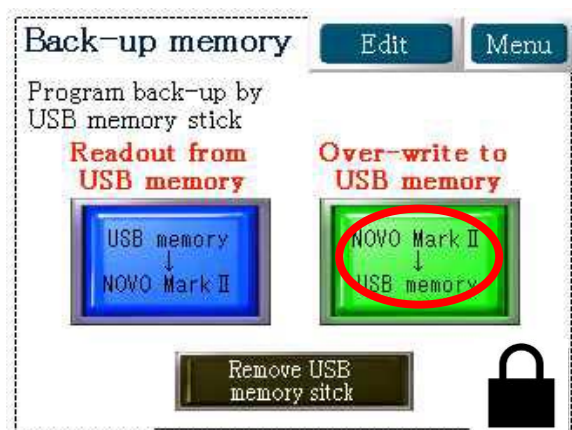
※ DO NOT take out USB memory while red-light blinking.

※ If roasting program stored in USB memory, will be over-written automatically.

Edit screen

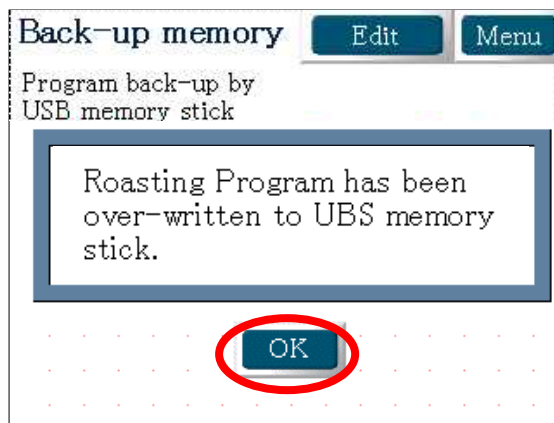


Press this button

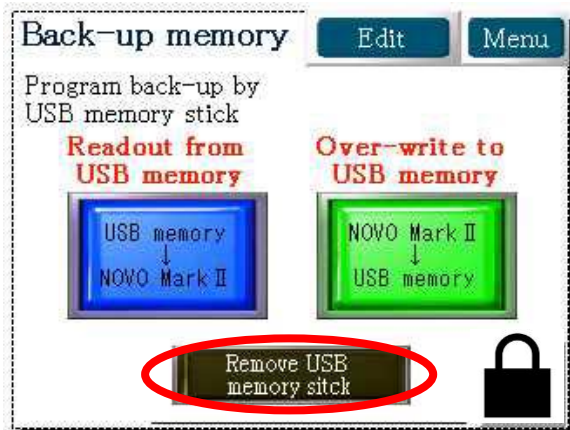


When left screen displayed, press this button.

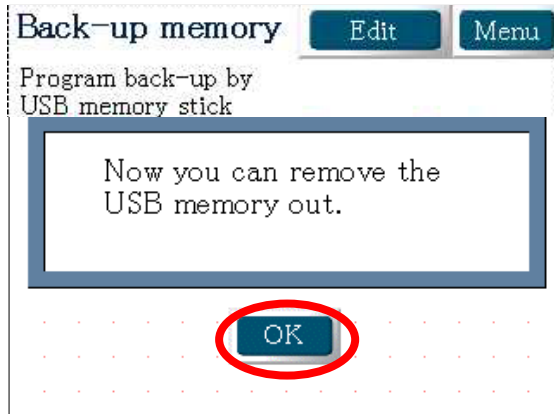




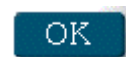
Press this button only after USB memory stop blinking.



To take out USB memory, press this button.



"Now you can remove the USB memory out" displays, press this button.



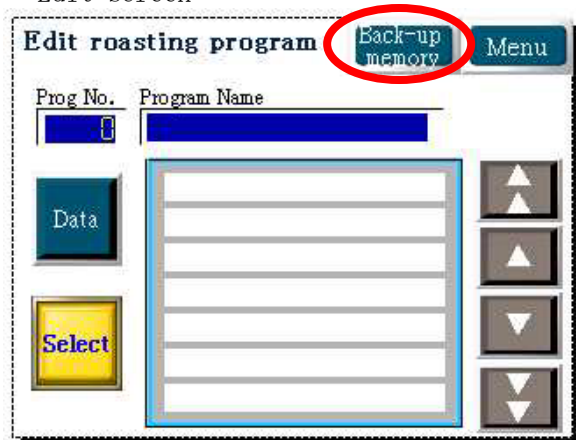
You can go back to main menu by pressing "Main Menu".

How to read out from USB memory.

Insert USB memory into slot.

※ DO NOT take out USB memory while red-light blinking.

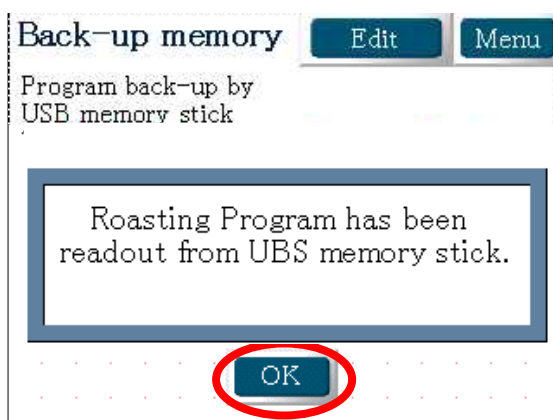
Edit screen



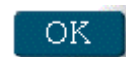
Press this button

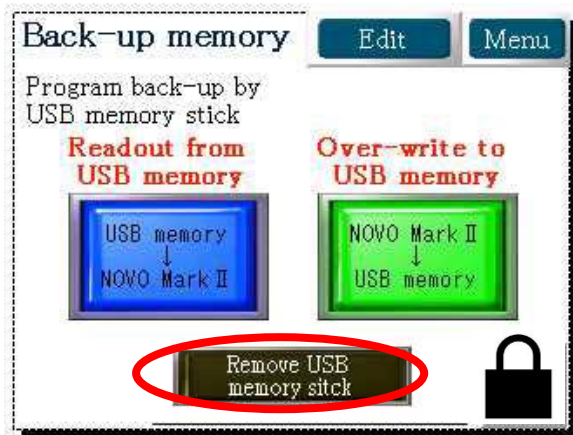


When left screen displayed, press this button.

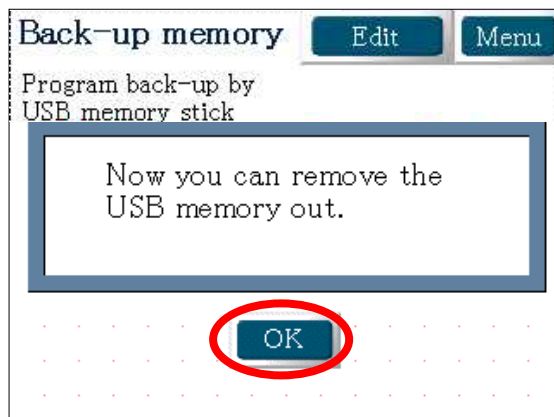


Press this button only after USB memory stop blinking.





To take out USB memory, press this button.



"Now you can remove the USB memory out" displays, press this button.



You can go back to main menu by pressing "Main Menu".

Important note

- In case of freezing computer while memory being forward, Turn of the main switch and try again.
- Do not press READOUT process from BLANK memory.
- Do not press READOUT nor OVERWRITE USB while memory being forward/blinking.
- When you edit programs on your PC, do not change the name of the file, leave as "file" and/or "F0001.BIN"

2 How to use

Preparation and check list before use.

- This “NOVO MARK II” is exclusive use for Coffee or Cacao Roasting purpose ONLY.
- Make sure the room is well ventilated during operation.
- Do not use this machine without ventilation.
- Make sure that front door being locked before use.
- During front door is opened, heater and shutter do not work.
- Some parts of this machine becomes extremely hot during and after operation.
Do not touch other than necessary parts.
- Keep always in sight during operation.

2-1 Start operation



Turn on the main switch located on right side of this machine.



Rotate the switch clockwise.



The main Switch should be as right pics when it's on.

2-2 Warming up



← LIGHTING

Turning on/off the light.

In the main menu screen, by pressing “WARMING-UP” will automatically move to Roasting screen.



Pressing “Start Warming-up”,

machine start warming up

followed by Hopper and Shatter movement check.

In case of failure of Hopper or Shatter movement, press “EJECT” button.



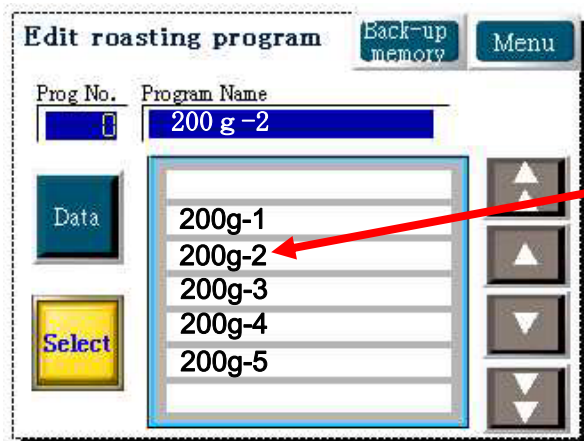
2-3 Selecting roasting program



After 10 min warming-up, automatically move to Ready screen.

← Roasting Program button

Pressing this button to select roasting program.



Selecting Program screen

▲▼ or press directly program name you which to select.
Here press 200g-2 as an example.



Press this button to select the program you have chosen.



Confirmation message will be displayed.



Press "OK".

By pressing "WARMING-UP" or "ROAST", back to Ready screen.

*"WARMING-UP" will be displayed while warming-up.



Ready screen

Now you can ready to roast
by 「200g-2」 roasting program.



Press "EJECT" in case of immediate stop for roasting, in occurrence of abnormality, or any other case of emergency.

2-4 Set Green beans



Hold down “SET” until the wind stop,
then press 
to set the green beans.



1 Open the door.

*Caution – some parts get extremely hot.

*Wear long sleeve and hand-glove
and do not touch inside metal and glass parts
for your safety.

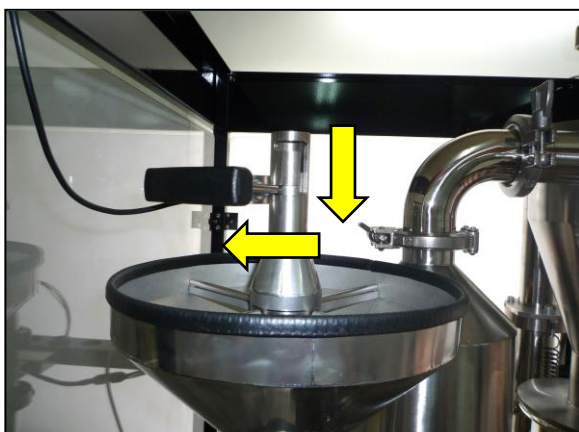
2 Set green beans from top of the Hopper.

You can set from 100g upto 1kg.



3 Move the lever to the right and upward.

Make sure all the green beans fall
into roasting glass.



4 Depress the lever then move to the left.

※Make sure to place the lever all the way
to the left until screen shows
“ROAST” automatically.

5 Close the front door.

(Make sure to set the saucer.)

Do not open the door
during roasting and cooling beans.

2-5 Start roasting



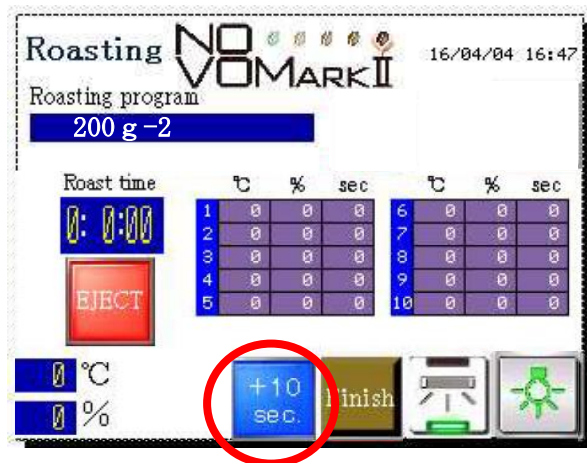
Roasting screen

After setting the green beans, close the door.
Then Press "Start Roasting"

Press "EJECT" in case of immediate stop
for roasting, in occurrence of
abnormality, or any other case of
emergency.



2-6 Roasting



During Roasting

If you wish to add extra time on each
stage, press "ADD 10 sec" button.
Each press adds extra 10 secs
on-going stage.



When you wish to stop roasting,
press "Finish" button.



2-7 Cooling Roasted beans



Cooling screen

After Roasting, cooling starts followed discharging
roasted beans by opening shutter automatically.

Cooling remaining time will be displayed.

If you wish to stop cooling process, Press this "STOP".
Move to Roast screen automatically.

Now you can take out saucer to get roasted beans.

If you wish to continue roasting, repeat from 2-4.

In case of a few beans left in roasting-grass after roasting.

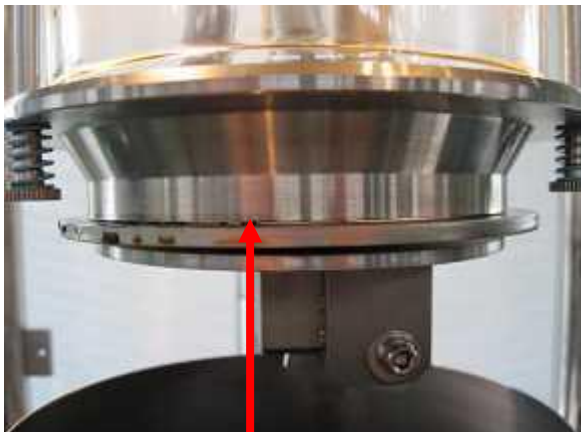
*this likely to happen when you dark-roast beans as beans oil seeped out and gets easy to stick to the grass or shatter.



Press “EJECT” and take out remained beans out from grass or shatter.

*Wear long sleeve and hand-glove and do not touch inside metal and glass parts for your safety.

To avoid this, wipe off the oil on the shatter surface when it is necessary.



Stucking the beans or a portion of the bean in between shutter causes air-leakage as left pics.



Shutter cannot close completely when the beans or most likely a portion sticks.



Roast screen



Press “EJECT” for cleaning.

Detail instruction refer in page 13.



CAUTION!

Shutter becomes extremely HOT!

Wear long sleeve and hand-glove and do not touch inside metal and glass parts for your safety.

Take off the portions and wipe off the oil.

Make sure to clean the bottom of the roasting-glass as per below pics.

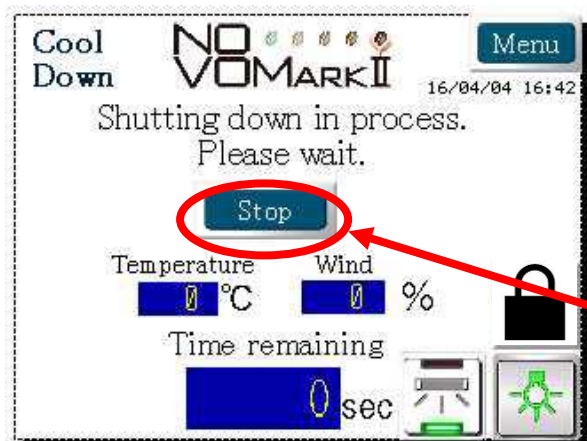


After cleaning, Press “RESET” and automatically WARMING-UP screen.

2-8 Shutting down



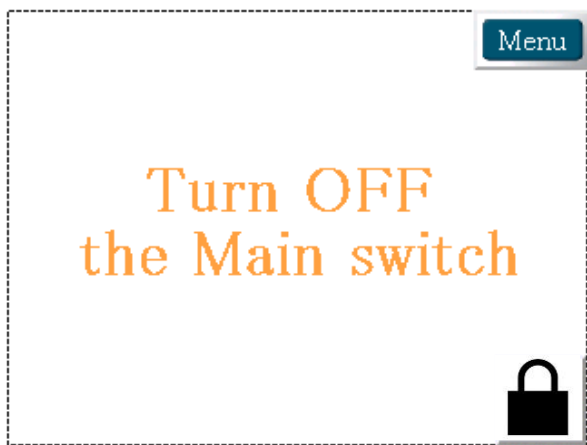
Hold “SHUT DOWN” for 2 sec to shutting down the



Cooling screen

Automatically starts 10 min cooling down.

Press “STOP” in case of immediate stop for roasting, in occurrence of abnormality, or any other case of emergency.



After 10 min cooling down, Hopper and shutter will be open and screen displays as left pic.

Now you can turn off the main switch.

Or press “MENU” to go back to main menu if you wish to continue roasting.

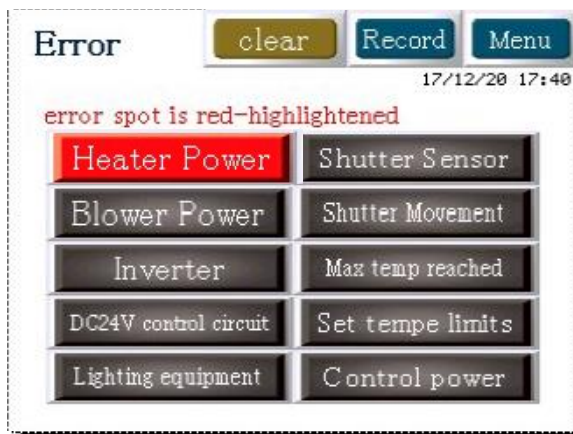


Turn off the main switch.

2-9 ALERT

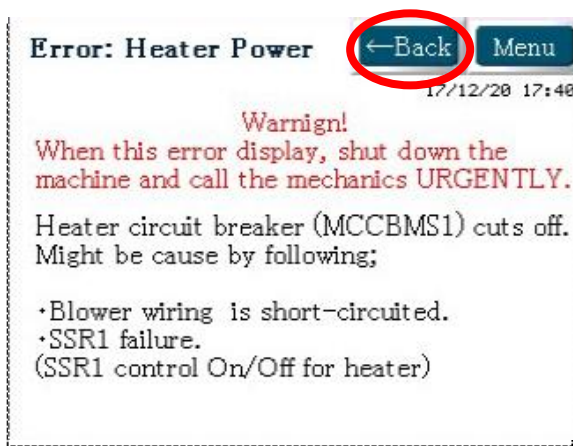


This button will be lightend in occurrence of abnormality. Press "ALERT" to verify on going alert point.

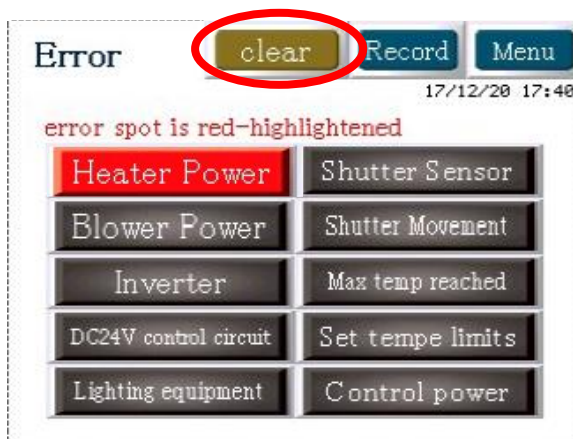
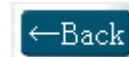


Alert screen

On going alert button will be red blinking. Press red button.



Brief explanation message will be displayed. Press "BACK" after confirmation.



Press "clear" to release this alert. If you cannot release the alert or happens continuously, call your mechanic.

Error list

Error: Heater Power ←Back Menu 17/12/20 17:42 Warnign! When this error display, shut down the machine and call the mechanics URGENTLY. Heater circuit breaker (MCCBMS1) cuts off. Might be cause by following; •Blower wiring is short-circuited. •SSR1 failure. (SSR1 control On/Off for heater)	Error: Shutter sensor ←Back Menu 17/12/20 17:40 Found both of Shutter sensors turned ON. Please check both sensors. Might be cause by following; •Out of alignment of either/both sensors. •Sensor wiring is short-circuited. •Sencor failure.
Heater Power	Shutter Sensor
Error: Blower Power ←Back Menu 17/12/20 17:40 Warnign! When this error display, shut down the machine and call the mechanics URGENTLY. Blower circuit breaker (MCCB2) cuts off. Might be cause by following; •Blower wiring is short-circuited. •Blower inverter failure.	Error: Abnormal behavior of Shutter ←Back Menu 17/12/20 17:40 Found abnormal behavior on Shutter. Please check as follows: *Out of alignment may cause this error. 1.Remove the cover-plate. 2.Check the movement by activate manually on "Maintanance Setting" screen. 3.If any abnomal movement found, ask for mechanics.
Blower Power	Shutter Movement
Error: Inverter ←Back Menu 17/12/20 17:40 Warnign! When this error display, shut down the machine and call the mechanics URGENTLY. Blower inverter failure. Detail	Error: Upper-limit temperature ←Back Menu 17/12/20 17:40 Warnign! When this error display, shut down the machine and call the mechanics URGENTLY. Air-nozzle temperature reached 300℃. Might be cause by following; •Sudden drop of air flow. •Sencor failure. •SSR1 failure.
Inverter	Max temp reached

Error:DC24V control circuit [←Back](#) [Menu](#)

17/12/20 17:40

Warnign!
When this error display, shut down the machine and call the mechanics URGENTLY.

DC24V control circuit breaker (CP1) cuts off.
Might be cause by following;

- Control circui wiring is short-circuited.
- Touch panel failure.
- Electric cylinder failure.

DC24V control circuit

Error: Set tempe limits [←Back](#) [Menu](#)

17/12/20 17:40

Warnign!
When this error display, shut down the machine and call the mechanics URGENTLY.

Temperature was away from the target temperature equal to or greater than the set value.
Might be cause by following;

- Unreasonable to the set value of the roasting program
- MCCB turned OFF.
- Heater failure.
- Temperature sensor failure.

Set temp limits

Error: Spot lighting [←Back](#) [Menu](#)

17/12/20 17:40

Warnign!
When this error display, shut down the machine and call the mechanics URGENTLY.

Spot lighting circuit breaker (CP2) cuts off.
Might be cause by following;

- Spot lighting wiring is short-circuited.

Lighting equipment

Error: Controlr Power [←Back](#) [Menu](#)

17/12/20 17:40

Warnign!
When this error display, shut down the machine and call the mechanics URGENTLY.

Control power circuit breaker (MCCB3) cuts off.
Might be cause by following;

- Control circui wiring is short-circuited.
- Power supply failure.

Control power

3 Maintenance

To keep the best performance of this machine, daily and yearly maintenance is strongly recommended.

Tools for maintenance

- Neutral Detergent
- Kitchen Sponge
- Copper Brush

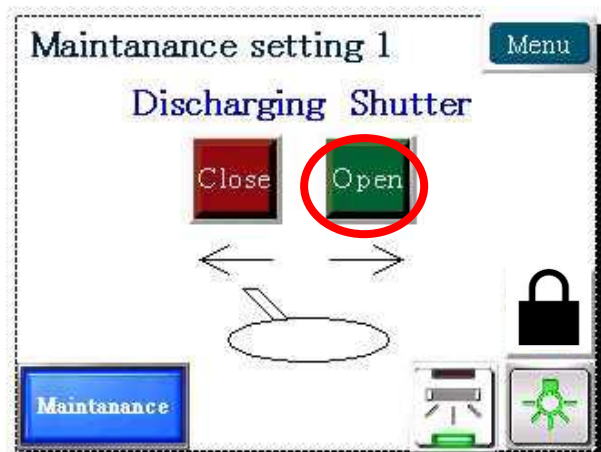
3-1 Daily maintenance

- Take out Roasting-Glass
- Washing Roasting-Glass



In Main screen, press “SETTING”.





Shutter Movement

Hold "OPEN" till shutter moves all way to right to stop.

Press Open/Close with interval more than 1 sec.

*Green turns Red by holding till stop. If color does not changes even after stop by holding button, sensor may be misplaced or sensor failure.

Call your mechanic with turning main switch OFF.



Turn off the main switch while taking out the Roasting-glass for your safety.



Take out the saucer.

Sauce should be washed with 60°C warm water with detergent.



Avoid mesh clogged and keep it clean.

Clogged mesh may cause reducing air flow and consequently may cause serious failure or fire.



Take out the shutter and wash by detergent.

Lock the arm of the shutter using metal hook.



Unlock the Roasting-glass lock as pics.

To avoid breakage by falling, grab the bottom of the glass by hand.



Unlock the back-side of the lock.



Keep the fitting parts upward.



Roasting-glass is caught by grooves, rotate clockwise and release.



Keep Roasting-glass horizontally and rotate clockwise to release.
Then carefully move downward.
CAUTION: Roasting-glass is heavier than as it looks.



How to take Roasting-glass to pieces.



Place on flat surface with Knurling-screw on upward.
*Upside down as it was loaded in the machine.



Rotate screw clockwise.



Take out 3 lods and springs.



Wash each parts by detergent.

Especially shutter gets burned by beans oil.

Keep them clean daily basis.

For metal parts, use tools or cleanse as pics for easy cleaning.

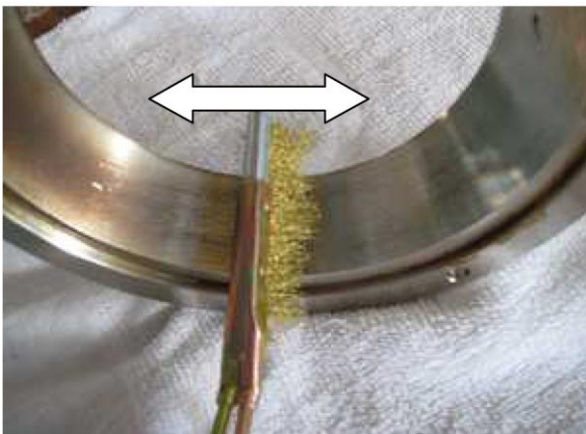


※DO NOT use cleanser on Glasses.

• Cleaning metal parts

Use Furbishing preparations with copper brush for easy cleaning.

With 40°C warm water would be better.



Rubbing along the line gently.

Caution

- Do not rub with much presser which bents tips of the metal hair.
- Wear hand grove for your safety.
- Do not use them on the glasses.



Assembly process is reverse order.

Place Roasting-glass on the metal parts.



Grooves part on upward.



Place metal part on the Roasting glass with its grooves.
Make sure to set properly.

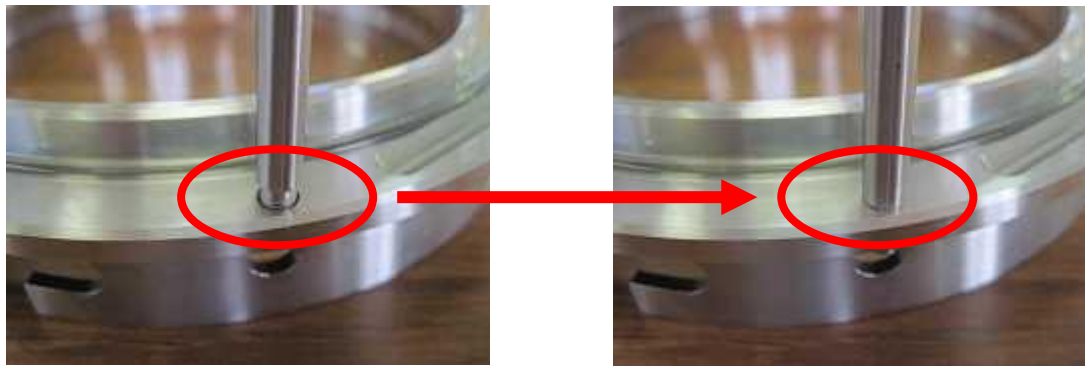


Adjust the holes of both metal parts for screws.
Place each lod perpendicularly.
Tightening each screw by hand.
*Do not use any tool for tightening.



WRONG example
Unable to tightening screws when each lod
is not set perpendicularly.

Tighten each screw until no space in between screw and metal parts.



After assembled, make sure with no space or backlash.
Note that glass moves a little as being just put
in between metal parts.



Place the Teflon-seal on top.



Place the Roasting-glass with adjusting with grooves.



Rotate the glass to set.



Lock with both fitting parts.



Take out the metal hook and place the shutter.

Now you can turn on the main switch and hold "CLOSE" button till stops in Setting screen.

Cleaning Nozzle

Although it is not necessary to clean the nozzle, clean as below instruction in case you wish to clean.

Use copper scrubbing brush. Do not use Stainless one causing scratches.

※ Caution: Make sure that machine is completely cooled down.

Take out the saucer, roasting-glass and chaff-bottle and cover the intake hole.



Caution

- Do not take out the nozzle.
- Avoid the nozzle gets wet.
- Do not put too much pressure.

Scrub with copper brush. DO Not use water nor detergent.



Cleaning Chaff-bottle

Take out Chaff-bottle

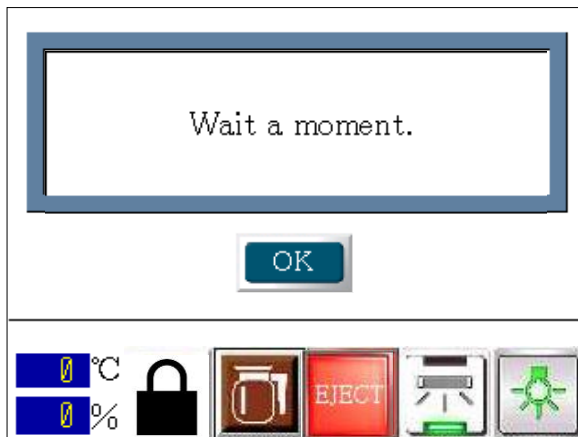
※ Caution: Make sure the bottle is completely cooled down.



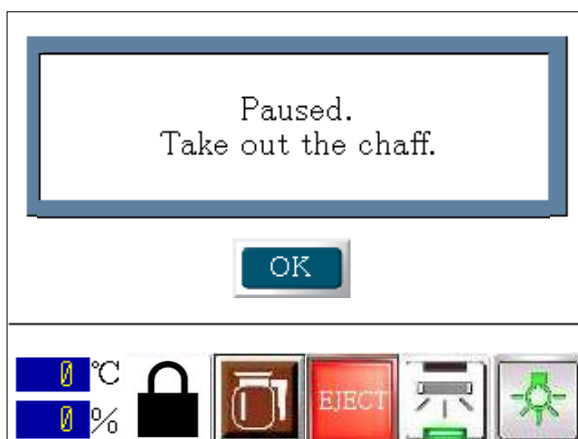
On Roast screen press this button.

Do not press this button during warming-up or roasting.

Discharge the chaffs when it fills more than half of the bottle.



Automatically Blower starts turning off, wait until "Pause" message displayed.



Press  button to open and take out Chaff-bottle.



Hold depressing lever, take out the Chaff-bottle.

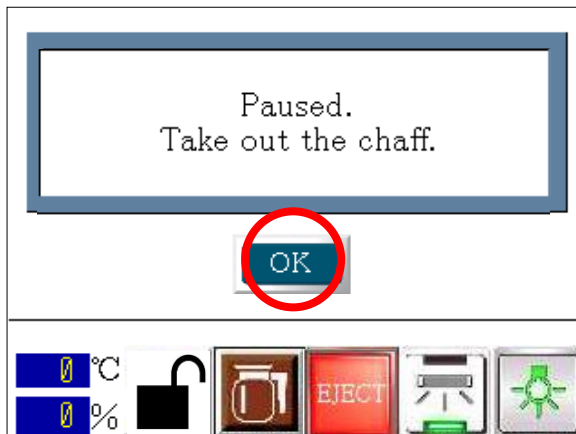
Discharge chaffs and clean the bottle.

Please be aware of breakage due to impact.

※ Remained chaffs on top of the bottle may cause air-leakage.



Hold Depressing lever, set the Chaff-bottle.
Make sure no space in between.



Close the door and press "OK",
automatically start warming up to be ready.



Make sure air is not leaking.

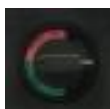
and press  to lock.

※Caution: Some parts get extremely hot.

Changing paper-filter

※Clogged filter may cause uneven roasting.

Change the filter daily basis.



Change the filter with turned off the main switch.

Take out the saucer.



Take out the filler by lifting upward.
Avoid to drop any objects in the intake hole.

※in case of any objects dropped in the hole,
call the mechanic to remove.



Change the filter and set.
When you use up all filters,
place an order with the buyer for it.
(TYPE: DDFILTER-A)

Check the air-leakage
Check the air-leakage daily basis.



※Caution: Some parts get extremely hot.

Weekly Maintenance

- Hopper cleaning

Clean the dust of green beans by vacuum cleaner.

Turn off the main switch and open the Hopper.

Clean with dry cloth or brush.

Close the Hopper.

Caution : Air leakage from Hopper may cause parts failure by hot air directly from Roasting room.

3-2 Instruction on touch panel for Maintenance

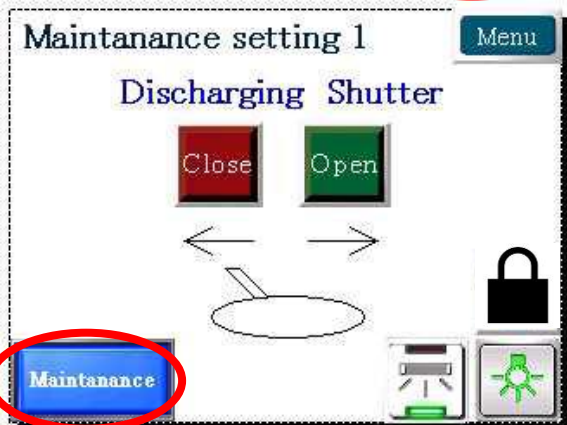
This setting for Maintenance ONLY.

You can only operate when adjusting time.

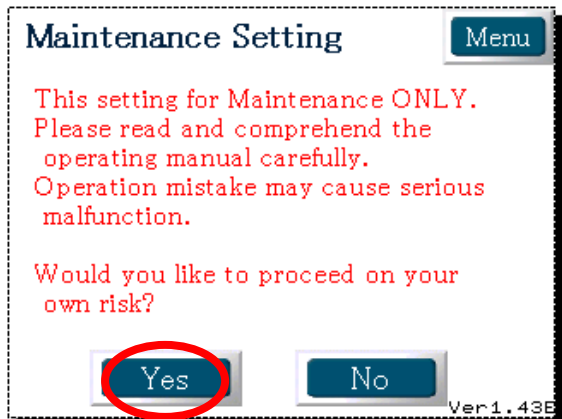
Main Menu



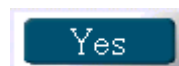
Press "SETTING".



Press "MAINTENANCE".



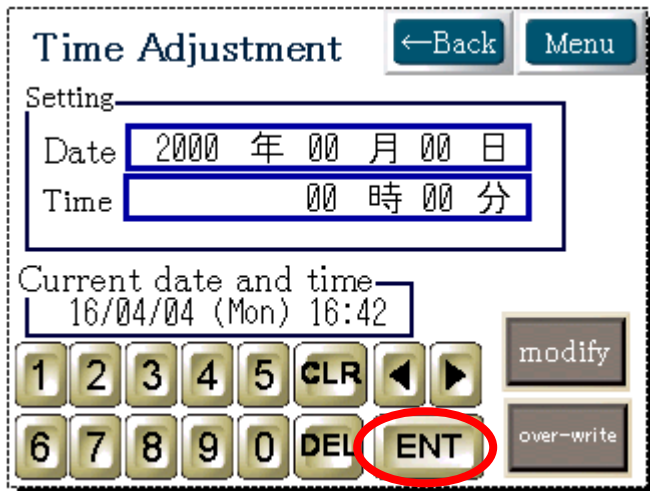
Press "YES" on confirmation screen.



Press "Time adjustment"



Time Adjust screen



Set in order by Year, Month, Day, Hour, Minute

ENT

Press "ENT" to start.



over-write

After adjusting time, press "over-write".

※Other Setting as "FUNCTION" "BASIC" and/or "OPERATE" is for professional mechanic ONLY.

Strongly recommended for NOT TO USE.

3-3 Lifetime prediction on each part

By changing each parts proper timing, keep this machine optimum condition and safety.

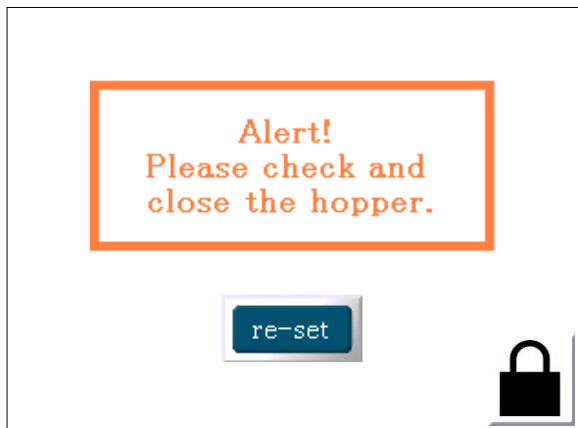
NOVO MARK II 運用目安

	使用期間									
	1年	2年	3年	4年	5年	6年	7年	8年	9年	10年
製品保証期間										
定期点検	○	○	○	○	○	○	○	○	○	○
パッキン類		☆		☆		☆		☆		☆
ガススプリング		☆		☆		☆		☆		☆
温度センサー			◇		◇			◇		◇
金属スプリング			★			★			★	
ヒーター			★			★			★	
電動シリンダ					□					□
インバータ					□					□
タッチパネル					□					□
その他電装関係					□					□
ブロー消耗品					□					□
ブロー本体										■
工場オーバーホール										△

※設置場所の温度や、湿度。ホコリ等で、機器の寿命は変わります。
 ※定期点検は指定業者によるオーバーホールです。

Above list is only predictions which may vary depends on usage, conditions, or any other factors.

4. How to restore Hopper Alert



This Alert appears when the Hopper keeps open for 60 sec.

Close the Hopper and automatically back to warming-up.

*In set of green beans, close the Hopper and press "SET" once again.



When Hopper is properly closed, green light will light as left.

5. In case of trouble

1 No power supply

No	Where to check	Cause	Solution
1	Circuit breaker	Circuit breaker is turned off.	Turn on the breaker.
2	Circuit breaker activated or cannot tuned on	Breaker activated by detecting failure.	Need to check the power supply. Call the mechanic for professional assistance.
3	Power outlet	Power outlet is not plugged.	Plugged into the outlet.
4	Main switch	Main switch turned off	Turn on the main switch
5	Other than above	Safety devise is activated	Call the mechanic for assistance.

2 Abnormal noise

No	Where to check	Cause	Solution
1	Chaff-bottle	Unusual objects are in the bottle.	Clean the bottle.
2	Roasting-glass	Unusual objects are in the Roasting-glass.	Stop roasting and clean the glass.
3	Abnormal noise from lower part of the machine	Dropping objects into intake hole, or Blower failure.	Call the mechanic for assistance.

3 Not reaching Target temperature

No	Where to check	Cause	Solution
1	Not reaching Target temperature in roasting	Unrecommended program	Check and edit the program
2	Not warming up or not reaching Target temperature with proper program	Heater failure	Call the mechanic for assistance.

4 Abnormal odour

No	Where to check	Cause	Solution
1	Roasting-glass, Chaff-bottle, or any other parts become hot.	Burned any objects stick in glass, bottle or any other hot surface.	Take off the object and clean after shutting down the machine.
2	Outlet	Burned dust out from outlet which is not properly connected	Call the mechanic for professional inspection. Continuous usage without proper inspection may cause fire.
3	Lower part of the machine	Failure of electric parts	Call the mechanic for professional inspection. Continuous usage without proper inspection may cause fire.

5 Uneven roasting, odd roasting, nozzle clogging

No	Where to check	Cause	Solution
1	Condition of green beans	Caused by higher percentage of moisture content and/or defect beans.	Check the quality of green beans.
2	Inhale filter	Lower air-flow caused by dirty filter.	Change the filter to clean one.
3	Shutter	Air-leakage caused by objects stuck in between.	Clean the shutter and glass after shutting down the machine.
4	Roasting Program	Caused by too-low air-pressure.	Set the air-flow more than 60% in any stages.
5	Blower	Lower air-flow caused by lower performance of blower.	Call the mechanic for professional cleaning.
6	Pipe	Lower air-flow caused by clogged pipe.	Call the mechanic for professional cleaning.
7	Exhaust pipe	Lower air-flow caused by clogged or dirty pipe	Check and clean the exhaust pipe.
8	Touch panel	Failure of electric parts which control air-flow percentage.	Call the mechanic.

6 Air-leakage

No	Where to check	Cause	Solution
1	Hopper	Objects stuck in between the Hopper.	Clean the Hopper after shutting down the machine.
2	Shutter	Objects stuck in between the Shutter.	Clean the shutter and glass after shutting down the machine.
3	Chaff-bottle	Bottle is not set properly.	Clean the Chaff-bottle and set properly.
4	Roasting-glass	Cracked or broken glass.	Check the glass and replace if any cracks or damages found.
5	Other connecting parts	Failure of connecting parts	Call for mechanics..

7 Hopper Alert

No	Where to check	Cause	Solution
1	Hopper	Objects stuck in between the Hopper.	Clean the Hopper after shutting down the machine.
2	Hopper inner valve	Loose or deformed parts.	Call for mechanics..
3	Alert	Security sensor detects any abnormal failures.	Check the Alert point by and recover as explained in 2-9.
4	Sensor	Out of positioning of sensor or its failure.	Check the positioning or Call for mechanics. if necessary.
5	Hopper inner parts	Parts failure	Call for mechanics..

8 Shutter Alert

No	Where to check	Cause	Solution
1	Shutter	Objects stuck in between the Shutter.	Clean the shutter and glass after shutting down the machine.
2	Roasting-glass	Wrong assemble of Roasting glass.	Perform proper assemble as per explained in 3-1.
3	Teflon-seal (for the specific model)	Missing Teflon-seal	Place the seal.
4	Shutter hook	Metal hook is locking the shutter.	Take out the hook.
5	Shutter plate	Missing the Shutter plate.	Place the plate.
6	Shutter	Stuck the shutter by beans oil.	Clean the shutter after shutting down the machine.
7	Green beans	Defect or any objects stuck between the Shutter.	Check the quality of the green beans.
8	Sensor	Out of positioning of sensor or its failure.	Check the positioning or Call for mechanics. if necessary.
9	Alert	Security sensor detects any abnormal failures.	Check the Alert point by and recover as explained in 2-9.
10	Internal parts	Out of positioning of internal parts.	Call for mechanics..
11	Shutter	Parts failure.	Call for mechanics..

9 Unfamiliar screen displayed

No	Where to check	Cause	Solution
1	No movement while transferring data through USB memory.	Processing stop by occurrence of error while transferring data.	Turn off the main switch and redo the operation as explained 1-10.
2	"Transferring time over" displayed in lower part of screen.	Internal parts failure.	Call for mechanics.
3	"Warning" displayed in lower part of screen.	Touch panel failure.	Call for mechanics.
4	Nothing displayed.	Touch panel failure.	Call for mechanics.
5	Yellow displayed.	Internal fan malfunction.	Call for mechanics.



Information on Disposal for Users of Waste Electrical & Electronic Equipment

This symbol on the product means that used electrical and electronic equipment should not be mixed with general household waste.

The correct disposal will help prevent potential negative effects on human health and the environment.

For proper treatment, recovery and recycling of old products, please take them to applicable collection points, in accordance with your national legislation.

For more information about collection and recycling of used products, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

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