DIGIROSTO PRO 2500 OWNER'S MANUAL



IMEX CORPRATION LTD.

Dear Customers.

Thank you very much for purchasing of coffee roaster DIGIROSTO PRO2500 which is adapted totally new idea and new technology you have never experienced.

Since 1999 when we started manufacturing of new technology coffee roaster, we have continued research & development with all our strength. Now we are manufacturing 4th and 5th generation coffee roaster adapted high IT technology that is analyzed 100 years traditional roasting technology, and we expect PRO2500 digital coffee roaster to lead coffee roasting technology.

Even though PRO2500 is adapted advanced high-technology, PRO2500 is designed so that anybody can roast green beans simply just by mastering this user manual. Just read this user manual before you roast, and then you can roast gourmet coffee beans without prior skills and experiences.

We recommend you use a machine according to the direction in this manual to use a machine safely for a long time.

To keep a superior performance and to operate a machine accurately, please follow an installation method and keep machine's condition in this manual.

We are doing our best so that all our customers are satisfied with our machines. Thank you for your support and purchase again.

IMEX CORPORATION LTD. Quality Control Team

www.digirosto.com

<Technologies of IMEX are patented both in Korea and the U.S.A.>



- 1. Read all instructions carefully before use of PRO2500.
- 2. Do not touch top side of machine (around smoke eliminator) and air outlet (cooling table's right top side) as they get very hot during roasting.
- 3. Be careful when you take out chaff drawer and clean up right after roasting as chaff drawer and knob may be very hot.
- 4. While a machine is operated, please run a fan or change the room air.
- 5. If the temperature around machine is over 35C, there's might be operating error. Secure more than 50cm space at least around the machine so that auto-cooling is smooth.
- 6. Keep water tank clean, and fill water more than 1/3. Use purified drinking water only.
- 7. Before starting work, preheat a drum for auto cleaning and roasting.
- 8. Do not use wet duster around monitor.

9. Do not operate a machine more than 3 times continuously. After 1 hour's rest, machine can be operated again.

<Keep this user manual near a machine.>

TABLE OF CONTENTS

4

1. Installation	5 page
2. Check points	6 page
3. Description of the PRO 2500	7 page
4. Functions	8 page
5. How to Roasting	
(1) New Setting	12 page
(2) Pre Setting	18 page
6. Trouble Shooting	
(1) Online Trouble Shooting	22 page
(2) Manual Trouble Shooting	23 page
7. Management	
(1) Bean Report	25 page
(2) Daily Report	26 page
(3) Download Mode	27 page
(4) Time Set	28 page
8. Q & A	29 page

1. Notice for Installation

Electrical Circuit

- 1) Please confirm voltage AC220V or 385V, phase (single or Ø3 or 4 wire) and Hz (50Hz or 60Hz).
- 2) For power line, use 5.5m/m² if the machine is in 5~10m and 8.0m/m² above 10m from cabinet panel. (5.5m/m² can be used for AC385V in 15m)
- 3) Distribution switch should be 40A circuit breaker switch, and .its voltage leakage switch should not be under 5W.
- 4) Please connect earth wire with a machine without fail.
- 5) If voltage difference is more than 6V between initial and operating, check power line connection and switch.

Location of Installation

- 1) Secure more than 50cm space at least around the machine.
- 2) Furnish with a fan in 1~2m around machine. About 30cmX30cm fan on ceiling or top side of wall is ideal.
- 3) Be careful not to splash water around a machine in 1m.
- 4) Do not use gas around a machine in 1 meter.
- 5) The machine can be used connected with personal computer. In this case, set the machine in communication mode with blue tooth antenna. Blue Tooth Antenna is for separate purchase. Maximum distance between computer and blue tooth is about 50m (4~5 floors' distance).
- 6) Install a machine where the room temperature is around 25° and air circulation is smooth.

Installation

- 1) Locate a machine where you want and fix it adjusting wheel on machine's bottom. Keep machine horizontally using horizontal gauze if possible.
- 2) Confirm <u>'electric source line'</u>, <u>'neutral line'</u> and <u>'earth wire'</u> correctly before connecting a machine with cable breaker that should be 50A and with no leakage breaker.

2. Check points

<u>1. For the first Roast</u>

Fill up water tank with purified water, and press fire-extinguishing button around 15 seconds, and then check water spread in the chaff drawer.

2. Check points before Roasting

- 1) Check if there is enough water in water tank.
- 2) Check if water quenching switch is on.
- Check if water hose is full with water.
 Or pump up by pressing fire extinguishing button.
- 4) Check if there are remained coffee beans in a drum.

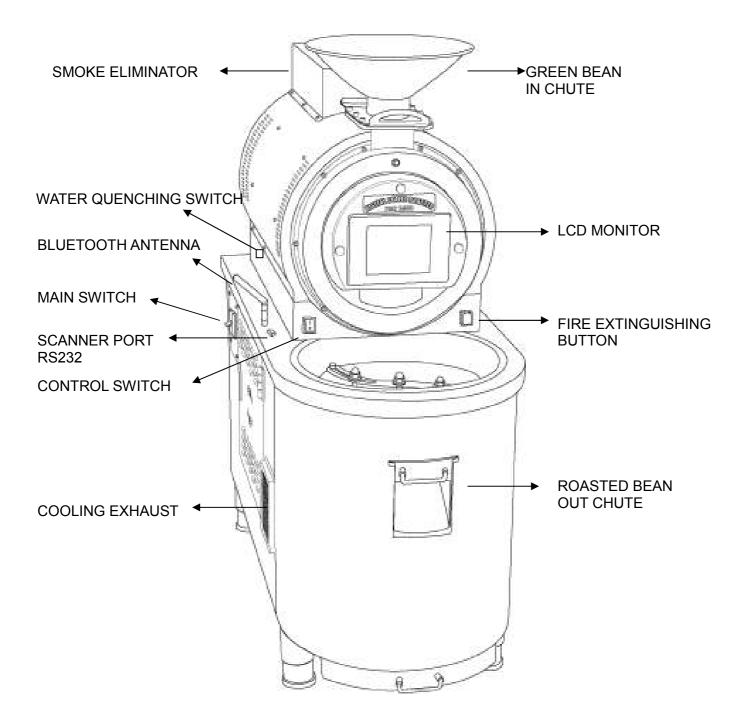
5) Check if a chaff drawer is cleaned and both locking knobs are tight to clockwise till 180 degrees of angle.

6) Check if bean peel or bean fragments are remained in cooling outlet.

3. Regular Check Points and Cleaning

- Chaff Drawer Cleaning : After every roasting, clean chaff drawer and inside of chaff drawer located place after taking out a chaff drawer. (Vacuum cleaning is recommended)
- 2) Check and clean filtering net which is located left bottom of cooling table.
- 3) Check water in water tank, and keep water more than half of tank. Use purified drinking water only.
- 4) Check operating of water pump and water spray by pressing fire extinguishing switch after replenishment of water.
- 5) Check battery (12V+2) every month.
- 6) Cooling exhaust wire mesh cover should be cleaned everyday.
- 7) Check Charcoal in Charcoal Filter Tray once in 6 months, and replace them if it is needed.

3. Description of the PRO 2500



4. Function

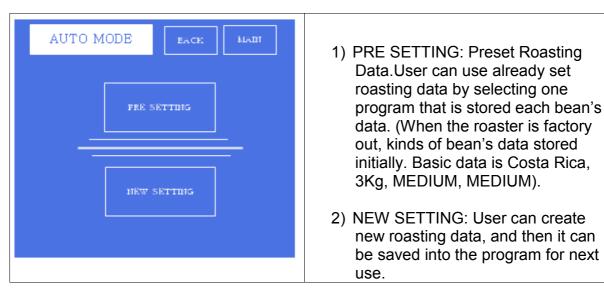
▲ Roasting Mode

(1) SCAN MODE

When scanning a barcode with a scanner or inputting barcode manually, SCAN MODE is used. The roaster is enabled to recognize the bean's data for roasting by reading a barcode, and this mode is mainly useful for Franchise Business.

PRO 250)O Water:OK	
SCAN MODE	Version H : 2.8 S: 2.2 Date Sept / 18 / 07 Nation Flores	
Jau/ 01/ 00 00:88:11 AUTO MODE		 Press the SCAN MODE button on the MAIN MENU.
	PREHEAT EEAN OUT1	
MANAGEMENT	COOLING EEAN OUT2	
Serial:00000000	Adr:0011B1B0EB9B	
SCAN M	ODE < Maint	2) Scan the barcode that sticks on the
SCA	AN BARCODE	pack of the green bean by using a scanner. Otherwise manual barcode's input is available. After touching the barcode, namely "Touch-Screen", press the ENTER button.
1 2 3	3 4 5 RESET	If pressing a wrong barcode number, delete it by using the soutton.
6 7 8	3 9 0 Enter	NOTE: To turn back to previous process from the present one, press the button.

(2) AUTO MODE



▲ MANAGEMENT & SETTING

Self-Diagnostic of a fault on the machine or seeking it through network connection with the main computer of the head office.

	There are five modes in the MANAGEMENT as below.
MANAGEMENT FACK MAIN	1) ONLINE TROUBLE SHOOTING: Finding a fault by the Internet connection between the roaster and the main computer of the head office.
OMLINE TROUELE SHOOTING	2) MANUAL TROUBLE SHOOTING: User's direct checking of a fault on the
MANUAL TROUBLE SHOOTING	main components such as Heater, Motor, Solenoid etc.
EEAN REPORT AGING CHECK	3) REPORTING REPORT: Display of the Green Bean's data that the user has
DOWNLOAD MODE THE SETTING	roasted, the roasting number and the beans weight up to present.
	4) AGING CHECK: Checking water quenching function after roasting.
	5) DOWNLOAD MODE: On-line program's upgrade is supported by connecting to the main computer of the head office.

(1) PREHEAT

PREHEAT is used for the status of waiting in case not of immediate continuous roasting. This makes the time shorter to be ready to roast again.

PRO 250	0 wa	ater: OK	
SCAN MODE	Date Se	: 2.8 S: 2.2 ept / 18 / 07 orea	1) Press the PREHEAT button on the
SCAN MODE		00:88:11 emp2 : 21	MAIN MENU.
	FREHEAT	EEAN OUT1	 While Preheating, the inside temperature of the Drum keeps 150°C.
SCAN MODE	COOLING	ERAN OUT2	
Serial: 00000000	Adv: 0011B1B0EB9B		

(2) COOLING

This is used for Cooling the roasted beans.

PRO 250	10 wa	ater: OK	
SCAN MODE	Date Se	: 2.8 5: 2.2 ept / 18 / 07 orea	
SCAN MODE		00:88:11 emp2 : 21	1) Press the COOLING button on the MAIN MENU.
	PREHEAT	EEAN OUT1	2) The Cooling fan of the Cooling Table begins to work and the Bean Brushes
SCAN MODE	COOLING	EEAN OUT2	installed inside makes the roasted beans cool by their rotation.
Serial:00000000	Adr: 0011B1B0F	2B9B	

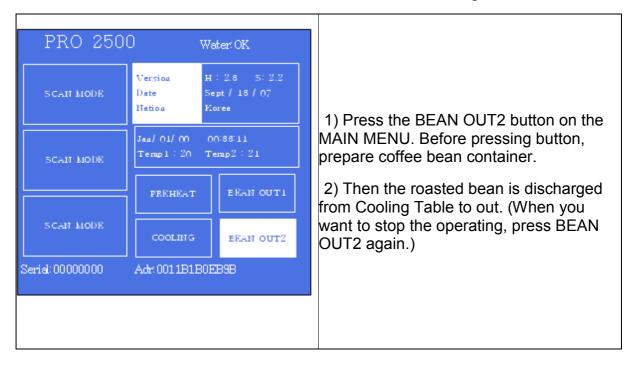
This is used for the roasted beans out from in the roaster drum.

SCAN MODE	Date Se	: 2.8 S: 2.2 spt / 18 / 07 orea
SCAN MODE	Jau/01/00 00 Temp1:20 Te	
	PREHEAT	BEAN OUT1
SCAN MODE	COOLING	EEAN OUT2
Serial: 00000000 Adr: 0011B1B0EB9B		

- 1) Press the BEAN OUT1 button on the MAIN MENU.
 - Then the roasted bean is discharged from roaster drum by working the BEAN DISCHARGE SOLENOID of the Cooling Table. (When you want to stop the operating, press BEAN OUT1 again.)

(4) BEAN OUT2

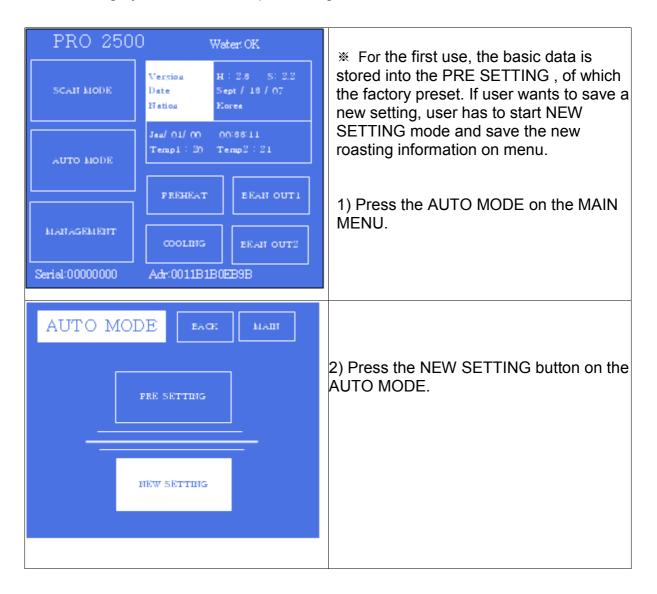
This is used for the roasted beans out from the Cooling Table.

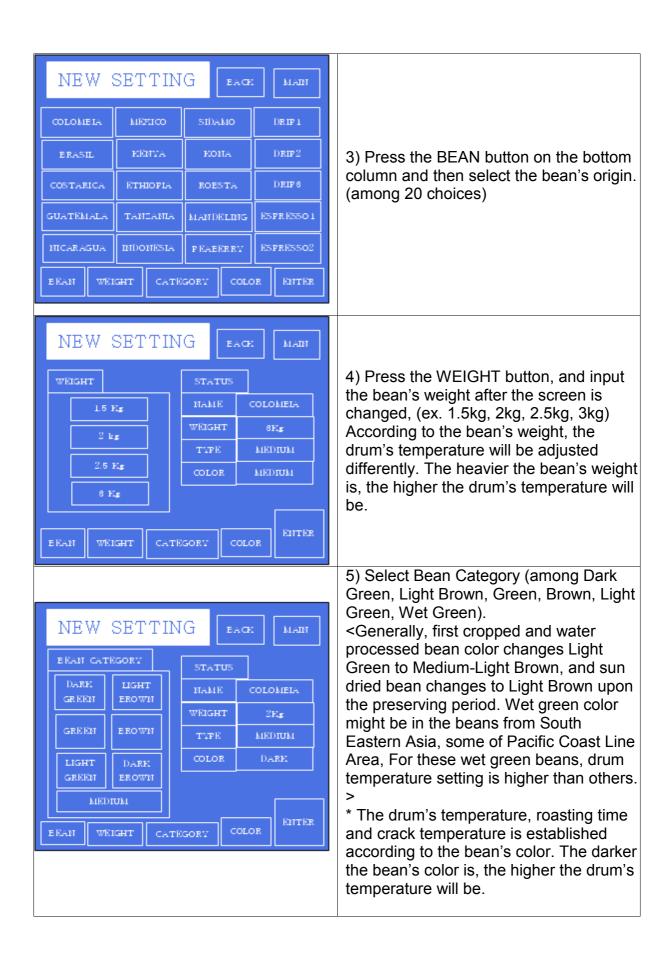


5. How to ROASTING

1. New Setting

User can roast bean upon its species by selection of a program among categories in the roaster. After this new setting, user can save roasting information and use this for next roasting by selection of this pre-setting.





NEW SETTING EACE MAIN COLOR STATUS LIGHT STATUS MEDIUM DARE COLOMELA WEIGHT SEX TVFE MEDIUM PITCH DARE E EAN WEIGHT CATEGORY COLOR	6) Press the COLOR button, and after the screen is changed, select the roasting color (Light, Medium, Dark, Pitch Dark) that you want. Then press the ENTER button.
NEW SETTING SAVE EACE CANCEL - PREHEAT + CURSOR + + + COSTARICA SE COND - 10C 191C 12S THIRD -5C 208C MEDIUM STOP < 0 >	 7) The drum's temperature and the crack's temperature are enabled to adjust manually. Press CURSOR button and then select one article that you want to adjust. After your selection, * is displayed on the right of the selected article and then change the temperature by using + or buttons. Also the color adjust is available to match to the Green Bean's color more correctly by pressing for c

			* Once pressing the SAVE button:
SETTING	Modify	MARI	9-1) Select one among the MENU bars(0~9) and press the SAVE button.
MENU MENU 8 MENU 2 MENU 7 MENU 8 MENU 7 MENU 8 MENU 8 MENU 8 MENU 9	MENU 1 SEG FREHEAT : PTEST 245 SECOMD - 10 THIRD -8 NEW DATA SEG PREHEAT : 240	NICARAGUA MEDIUM MEDIUM 180 15 191 11 208 NICARAGUA MEDIUM MEDIUM	NOTE: Prior to pressing the SAVE button, first check if the preset data is needed for future roasting or not because the preset data is deleted once pressing the SAVE button. However if pressing the MODIFY button,
SAVE START	FIRST 252 SECOND - 10 THEED - 8	180 15 191 12 208	it would be back to the previous setting data.
			9-2) Press the START button for pre-heat.
WATER CHECK AN	or, 125% 127% 101% 105% 00% 02% 10 WATER !! D THEN START T	O ROAST Maiameau	 10) Before you start roasting, the automatic diagnosis would be performed to search a defect of the machine, and then if there is no fault, the Roasting will go to next step automatically. For example, left picture is the message to alarm the vacant water tank. In this case, check the water tank and fill it. And then press 'roasting' for start.
Error Volt Check : Very Hi Halogea Heater : Err Top Heater : error, J Sheath Heater : OK, Ceramic Heater : OK Froat Smoke : OK, J Back Smoke : OK, J WATER CHECK AN	- or, 125% 127% 101% 105% 00% 02% 10 WATER !!	O ROAST Majameau	11) The machine diagnoses each part. I there's no problem it says ok, if the part is defected, error is shown. The more neare to 100% indicated, the more accurate the status.(Normally 80%~120% is safe.) I every part is ok, next operating commence automatically. If there's problem, three menus appears at the bottom same as lef picture. If press 'roasting', the machine roast continuously. Press management if you want to check the problem, and press 'main menu' if you want to go to 'main

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	 * This screen is displayed, step (12), in case of not pressing the SAVE button at the step of (8) described above. 12) When in preheat, the green bean's color is available to change more correctly. The changeable number is from –2 to +2, and as much as the number is smaller, the color is lighter. NOTE: If stop preheating, press the STOP button and then the roasting completed screen is displayed.
WAIT A MOMENT FOR POURING BEAN	13) Prior to reaching the preheat temperature, the pre-buzzer sounds, and then once approaching the exact preheat temperature, the buzzer sounds again with message as left picture. While this buzzer sounds, do not input green beans.
PLEASE PUT BEAN AND THEN PRESS NEXT BUTTON	14) Put the green beans and then press the NEXT button, and roasting is started. NOTE: After pressing NEXT button, Green Bean Put Door is closed.

	15) The present status of the roasting process monitors in a real time.
800 FREHEAT 220 250 FREHEAT 220 250 FREHEAT 200 250 FREHEAT 200 260 FREHEAT 200 150 FREHEAT 200 150 FREHEAT 200 0 5 10 150 FREHEAT 200 0 5 150 FREHEAT 200 0 5 10 15 200 FREHEAT 200 0 5 10 15 20 25 80 10 15 20 25 80 10 15 20 25 80 85 EEAN : EEAN : CURSOR + + + COSTARICA	While roasting, you can adjust the drum's temperature or the crack's temperature manually. Press CURSOR button and then select one article that you wish to adjust. * would be displayed on the right side of the selected article's number and then change the temperature by using
FIRST 255 C* 180 C* 125* SE COND -11C 191C 105 COLOR -8C 209C CURSOR - -	Also during roasting, the color's adjust is available. This adjust process is same to the step of (12) as above that was introduced previously.
	If pressing the STOP button while roasting, the roasted beans move down to the cooling table.
	 16) Once the roasting is completed, the aging begins automatically. 17) When the aging is finished, the announcing message is displayed and then the roasted beans moves down to the cooling table automatically. After that, the lamp turns off.
Roasting Completed	18) The cooling process is started automatically by rotating the cooling fan.
READY! Discharge Bean	19) When the cooling cycle is completed, press the BEAN OUT button. Prepare the container for putting the roasted beans in advance and pull them out of the cooling table.
EEAN OUT SAVE FINISH	20) If saving the setting data of the roast up to this step, press the SAVE button.
	21) Once one roasting cycle is ended, press the FINISH button to return to the MAIN MENU.
	NOTE: if not pressing the SAVE button, the roasted data up to this step would disappear.

SET	TING	Мо	DIFY	MAI	n
MEMU1	MEMU 6	MEM. 5HG		MICARAC MEDIUM MEDIUM	
MEMU 2	MENU7	FREHEAT	245	180	15
MENUS	MENUS	SECOND THIED	- 10 8 -	191 206	11
MENU4	METITI 8	new d 5rg	ATA	NICARAGUA MEDIUM	
MENU 5	MENUO	PE EHEAT FIEST	: 240 262	MEDIUM	15
SAVE	START	SECOND THUE D	- 10 8-	191 208	12

 In case of pressing the SAVE button on the step of (20):

22) For saving the roasted setting data, select one out of the MENU bars(0~9) and press the SAVE button.

NOTE: Prior to pressing the SAVE button, first check if the preset data of your selected MENU is necessary needed to you for future roasting or not. Because the preset date is deleted once pressing the SAVE button.

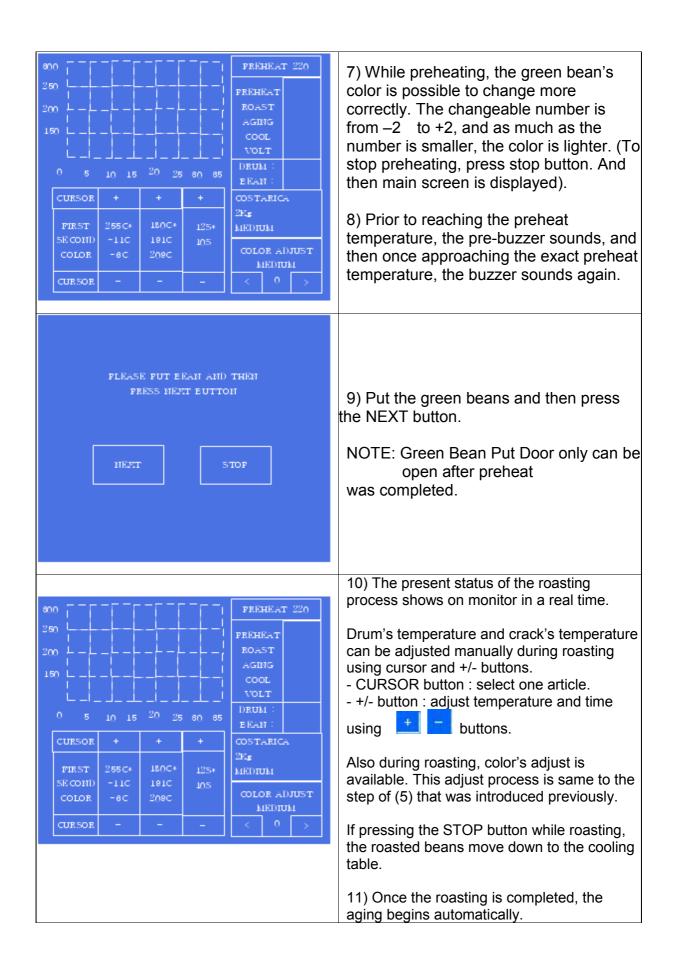
23) Since one roasting cycle is ended, press the FINISH button to return to the MAIN MENU.

2. PRE SETTING

Pre setting is roasting program made using new setting. (10 programs of initial menu are saved before shipment from factory. Basic Program is for Nicaragua, 5kg, medium.)

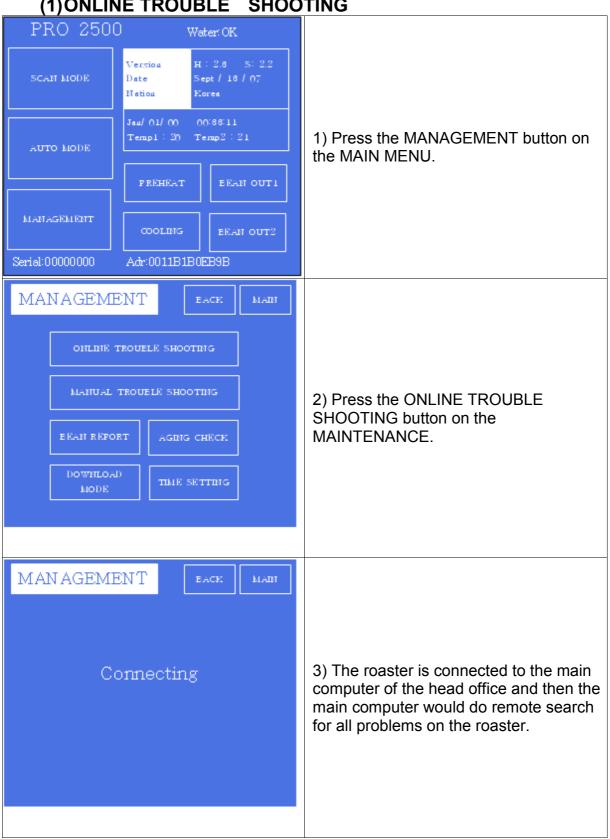
AUTO MODE EACE MAIN	
PRE SETTING	1) Press the AUTO MODE button on the MAIN MENU and then preheating begins automatically.
NEW SETTING	2) Press the PRE SETTING button on the AUTO MODE.

SETTING	MODIFY MA MENU 1 NICARA 5RG MEDIUK	3) Select one out of the MENU Bars(0~9) and check if the preset data of the
MENU 2 MENU7	PREHEAT : MEDIUM	selected MENU is that you wish to roast.
MENUS MENUS	FIRST 245 180 SECOMD - 10 191 THIRD - 8 208	4) Press START Button.
FIEMA FIEMA 6	NEW DATA NICARA	
MENU 5 MENUO	PREHEAT : 24) MEDIUM FIRST 252 180	data on the Scene of the SETTING only
SAVE START	SECOND - 10 191 THIRD -8 208	after finishing the roast,
WATER CHECK AND	or, 125% 27% 101% 105% N%	vacant water tank. Check if the water tank is filled with water, and restart roasting.
WATER CHECK AND	or, 125% 27% 101% 105% 0%	'roasting', the machine roast continuously. Press management if you want to check the problem, and press

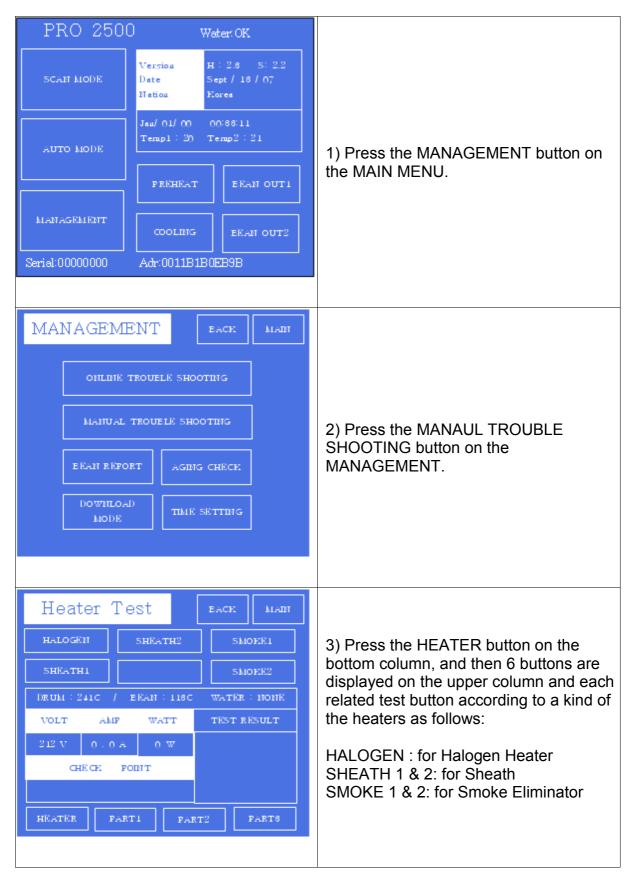


	sting Completed READY! Ischarge Bean SAVE FINISH	 12) When completing the aging, the announcing message is displayed and then the roasted beans moves down to the cooling table automatically. After that, the lamp turns off. 13) The cooling process is started automatically by rotating the cooling fan. 14) When the cooling cycle is completed, press the BEAN OUT button. Prepare the container for putting the roasted beans in advance and pull them out of the cooling table. 15) For saving the roasted setting data, select one out of the MENU bars(0~9) and press the SAVE button. 16) Once one roasting cycle is ended, press the FINISH button to return to the MAIN MENU.
SETTING	MODIFY	 In case of pressing the SAVE button on the step of (15):
MENU 1 MENU 8	MENU 1 NICARAGUA SEG MEDIUM PREHEAT : MEDIUM FREST 245 180 15	17) For saving the roasted setting data, select one out of the MENU bars(0~9) and press the SAVE button.
MENUS MENUS	SECOND - 10 191 11 THURD -8 208	NOTE: Prior to pressing the SAVE
MEMU4 MEMUS	I MARCOTTAN	button, first check if the preset data of
MENUS MENUC	PREHEAT : 240 MEDIUM	your selected MENU is necessary needed to you for future roasting or no
SAVE START	FREST 252 180 15 SECOMD - 10 191 12 THEED -8 208	Because the preset date is deleted once pressing the SAVE button.
		18) Since one roasting cycle is ended, press the FINISH button to return to the MAIN MENU.

6. Trouble Shooting

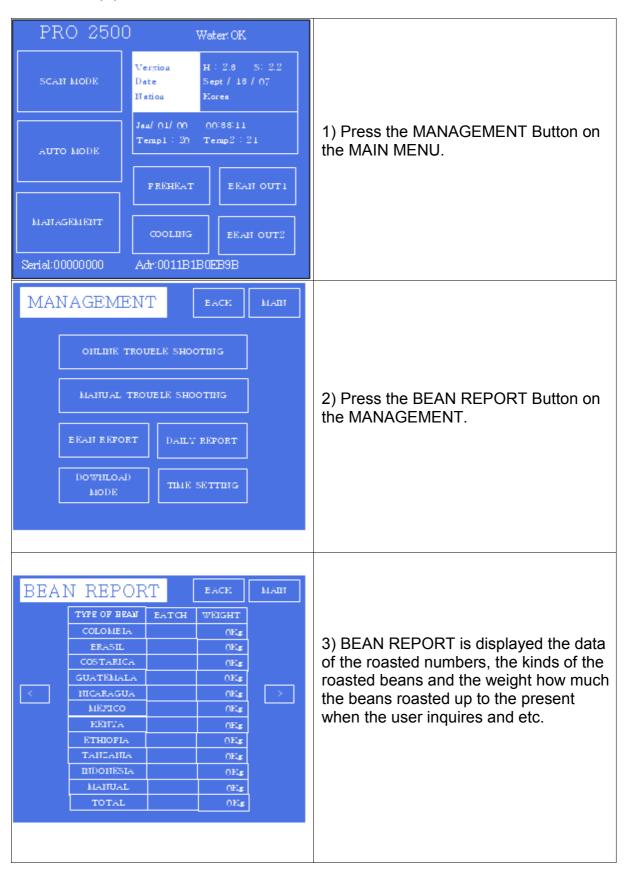


(1)ONLINE TROUBLE SHOOTING



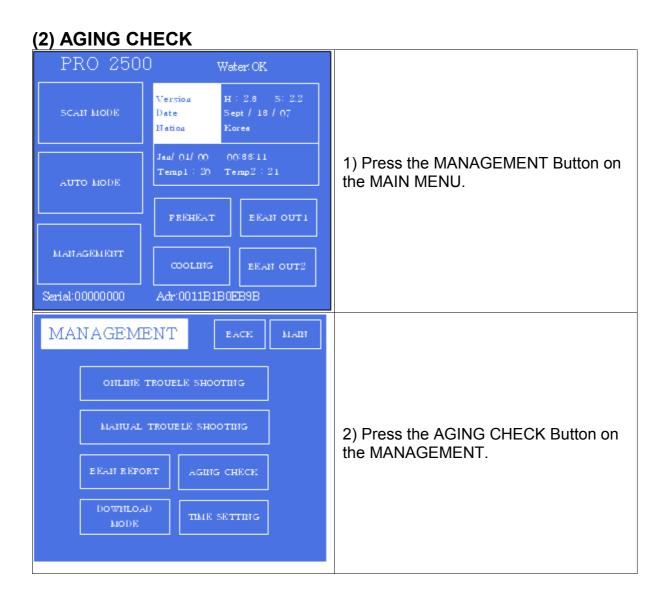
PARTI TEST EACE MAIN DOOR OFEN FRE LAMF	 4) Press the PART1 button on the bottom column, and then the machine test below parts. DOOR OPEN : for checking Opening DOOR CLOSE : for checking Closing PRE LAMP : for Blue color Lamp ROAST LAMP :for Red color Lamp
PART2 TEST EACE MAIN MOTOR IN WATER FUMF SCREEN+ MOTOR OUT SCREEN- DRUM : 25C / EEAN : 22C WATER : NONE VOLT AMP WATT TEST RESULT 212 V 0 . 0 A 0 W CHECK FOINT HEATER FART1 FART2 FART8	 5) Press PART2 button on the bottom column, and then the machine tests below parts. MOTOR IN & MOTOR OUT : for main motor's operating check. WATER PUMP : for test water motor operating. SCREEN+, SCREEN- : Adjust Screen's Light and Shade.
PARTS TEST EACE MAIN FILTER MOT STEAM COOL MOT FILTER FUMP DRUM : 25C / EEAN : 22C WATER : NONE VOLT AMP WATT TEST RESULT 212 V 0.0 A 0 W CHECE FOINT HEATER FARTI FART2 FART8	6) Press PART3 button on the bottom column, and then the machine tests below parts. FILTER MOT : Check Filter Motor. COOL MOT : Check Cooling Motor. STEAM : Check Steam. FILTER PUMP : Check Filter Pump.

7. Management

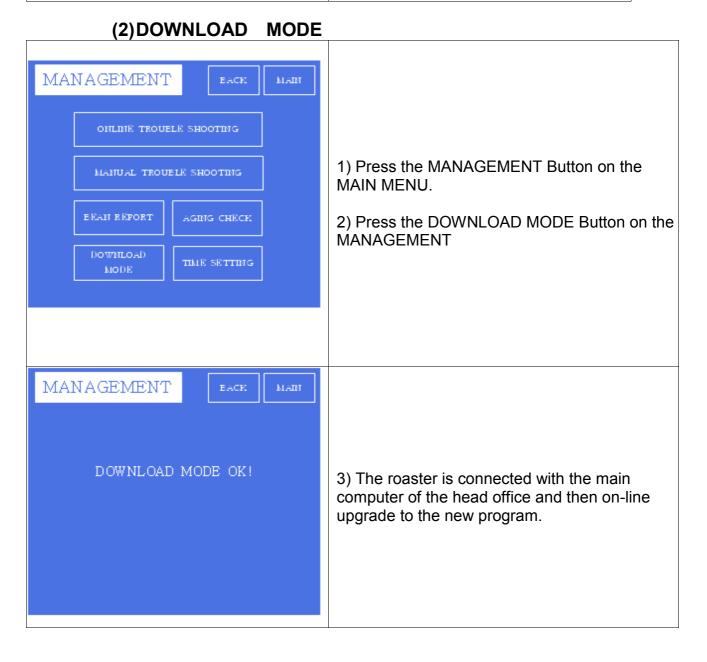


(1) BEAN REPORT

BEAI	N REPOR	T	BACK	MART	
<	TYPE OF BEAN SIDAMO KONA ROESTA MANDELING PEAEERRY DRIP1 DRIP2 DRIP2 DRIP3 ESFRESSO1 ESFRESSO2 MANUAL TOTAL	EATCH	WEIGHT OFE OFE OFE OFE OFE OFE OFE OFE OFE OFE		4) To go to the next step, press <,>. Total is sum of every item.



MANAGEMENT EACK MAIN	
TO BE CONTINUED WITH P .O .S PROGRAM	3) It would be operated with P.O.S.



MANAGEMENT EACE MAD	
ONLINE TROUELE SHOOTING	 * This is for setting the present time. 1) Prese the TIME OFT button on the
MANUAL TROUGLE SHOOTING	1) Press the TIME SET button on the MAIN MENU.
E EAN REPORT AGING CHECK	2) Press the YEAR button and input the number of the present year
DOWNLOAD MODE TIME SETTING	3) As for Month, Day, Hour, Minute, setting methods are same to the YEAR.
TIME SETTING EACK MAIN Vear Mouth Day Hour Minute 2006 10 21 08 41 1 2 8 4 5 0K 6 7 8 9 0 0K	 Press 'Year' and press the year and set the number. Set 'Month', 'Day', 'Hour', "Minutes in the same way with 'Year' setting. After input of number, press OK. If OK is not pressed, input data is not saved.

8. Q&A

(1) Error Message

Error Volt Check : Very High Halogea Heater : Error, 125% Top Heater : error, 127% Sheath Heater : OF, 101% Ceramic Heater : OF, 101% Ceramic Heater : OF, 101% Froat Smoke : OF, 100% Eack Smoke : OF, 102% NO WATER !! WATER CHECK AND THEN START TO ROAST	 Q : It says 'NO WATER POUR WATER AND THEN ROAST' on the screen. A: It is message the water tank is without water. Please fill water with water tank, and roast.
Error Signal Test : Error Volt Check : OK Halogen Heater : OK, 125% Top Heater : OK, 122% Sheath Heater : OK, 101% Ceramic Heater : OK, 101% Front Smoke : OK, 100% Back Smoke : OK, 102%	 Q : It says 'Signal Test : Error' on the screen. A : There's problem in flat cable 20pin, 40pin which connect touch screen and PCB. Please check this connection and correct if it is connected improperly.
Error Signal Test : CK Volt Check : Very High Halogen Heater : OK, 105% Top Heater : OK, 102% Sheath Heater : OK, 101% Ceramic Heater : OK, 101% Ceramic Heater : OK, 105% Front Smoke : OK, 100% Back Smoke : OK, 102%	Q : It says 'Volt Check : Very High or Very Low. A : Voltage connected with roaster is too high or too low. Please check if power line is well connected and connect proper voltage with roaster.

Error	
Signal Test : OK Volt Check : OK Halogen Heater : Error, 135% Top Heater : OK, 102% Sheath Heater : OK, 101%	Q : It says 'Heater: Error' or 'Smoke Error' on the screen.
Ceramic Heater : OK, 102% Front Smoke : OK, 100% Back Smoke : OK, 102%	A : Error is displayed when there's problem in power supply. First please check each part if it is proper in power supply.
Roactiug Mauagement Mainmenn	

(2) Q. The temperature is displayed too high suddenly.

A. Check if temperature sensor connected with PCB is proper, and plug in correctly. Check if the roaster is hot after pre-heating.

(3) Q. Started roasting without checking and filling up water tank.

A. If there's no water in the water tank, it is possible roasting is not good and there's also possibility of bean fire. Stop the roasting and fill the water tank or connect water supplying hose, and then re-start roasting.