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BROODTECH INCUBATOR PROGRAM V1.1

USER'S GUIDE

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CHAPTER 1. START PAGE

When you power on the machine, you will see this picture screen below:



Picture 1: Initial Screen

For enter the main screen, please touch the ENTER button.

Notice: If you can't see this screen at the startup or if the colors are different, please call the service.

Chapter 2 : MAIN SCREEN

On the main screen, there are some scenarios and some symbols. All the parts are exist in this manual. If you can't understand completely, please call the information service.



Picture 2- Main screen first scenario

2.A Temperature

The temperature indicator, shows to you the current temperature in the machine by Fahrenheit.

2.A.1 Target Temperature

The target temperature input, provides to you to set the target temperature for the heating or cooling. Touch the indicator for set target temperature.



Picture 4- Keyboard

And you will see the keyboard for set this. For using keyboard, please see chapter 3

2.B Humidity

The humidity indicator, shows to you the current humidity in the machine by Fahrenheit(Wet Bulb).

2.B.1 Target Humidity

The target humidity input, provides to you to set the target humidity for the moisture. Touch the indicator for set target humidity.



On the main screen, the pulsator symbol have two visuals. First symbol, a stopped fan when the machine stopped. Second symbol is an animation, plays when the machine runs. If you press the symbol anytime, you will see the menu screen below:



Picture 5- Pulsator Screen

Pulsator alarm button, if you have proximity sensor in the machine, you must set on this button for count fan speed for look the pulsator running. (For alarm.) And you will see the pulsator speed on this screen by the rpm.

2.2 Program Mode

The program mode indicator, shows to you the current program mode.



Picture 6- Program Mode

If the program mode is automatic, you can not set the target temperature, target humidity and minimum and maximum ventilation.

For using automatic program, please see the chapter 4.

2.3 Lighting the machine

The light switch, allows the lighting the machine, if you touch the button, the light turns on and off. If you forget turning the light to off, the machine turns the light to off after 3 minutes.



2.4 Run/Stop the machine



If you press the start/stop button, this screen will be appears:



Picture 7- Start/Stop

2.4.1 Start The Machine

If you press start button, you will see the screen below:



Picture-8 Starting The Machine

If you press the YES button, the machine starts. After you can set the incubation time from time settings.(See Chapter 2.14)

2.4.2 Pre-Heating Mode

If you press this button, you will see:



Picture 9 - Pre Heating Mode

Pre-Heating mode for heating the machine before starting the incubation. If you use this mode, the target temperature will be set by 77.0 degree fahrenheit, target humidity 83.0 degree fahrenheit and minimum ventilation is %70 and maximum ventilation will be set %100 until the set duration time by the user. (By hours.

Warning : After the pre-heating mode, the machine program will be set to automatic mode. Please enter incubation chart from program table before starting the pre-heating mode.

2.4.3 Stop the machine

If you press this button, you will see the screen below:



Picture 10 - Stopping The Machine

Be careful! If you press YES button, the machine and incubation will be stop completely.

2.5 Alarm Menu Button



This button is for enter the alarm page. For see this page, please see chapter 5

2.6 Horizontal Button



This button sets the turner to horizontal position.

Be careful! If you forget to set the turner to automatic mode, the turner will be stop on horizontal mode and you will receive the TURNER ALARM

2.6.1 Automatic Button

This button sets the turner to automatic mode. In automatic mode, if you press again the button, the turner will be turn the other position. (i.e. if the turner turned the left and you pressed the button, the turner will be turn to right position.)

2.7 Menu button for settings menu



If you press this button, you will see:



Picture 11 - Settings Menu

2.7.1 Time Settings



Attention: This settings are for INCUBATION time , for real time settings, please see chapter 5.

DAY	HOUR	MINUTE	SECOND
0	0	0	0
0	0	0	0
			SET

The time settings menu:

You can set the incubation time in this page. The textboxes are up, shows you the current incubation time, the down textboxes you can change time as you like. After changes, if you press the set button, the time will be change.

2.7.2 Calibration Menu





Picture 13 - Calibration Menu

Be Careful! You can set the temperature and humidity values as you see on the calibration probe.

Screen values are current values, thermometer values are calibration probe values. After changes, press set button for save.

2.7.3 Machine mode

You can set the machine mode by this switch. If you set to hatcher mode, the machine will not give the turner alarm.



2.7.4 Turner Settings



Picture 14 - Turner Period Settings

You can set the turner period from this page. (i.e. if you set 01:00, the turner will be turns by one hour periods.)

And you can see how many remain time next turning.

2.7.5 History Menu





Picture 15 - History View Selection



FILTER	You can see the history
History Time Settings Start Time: Start Time: End Time: 5.07.2017 16:50:32 + OK Cancel	By pressing the filter button, you will see this window for selection time range for see history
NOW	You can see now
4 MINUTES 1 HOUR 1 MINUTE	You can select the view range
VAL	You can see detailed values



2.7.6 Program Menu



Picture 18 - Program Menu

You can enter the program table for set incubation program (Chapter 4)

You can set the program mode by pressing automatic button or manual button.



2.7.7 Cooling Mode

Picture 19 - Cooling Mode

You can select the cooling mode by pressing select button at the bottom of water cooling and air cooling mode.

Bottom of page, you can set the cooling start delays by the second, this setting is seperated for air and water.

2.7.8 Starting delay

When the electric power cut-off, after power on, the machine starts after this delay time by the seconds.



Picture 20 - Delayed Start

2.8 Pre-Heating Indicator

If you select the pre-heating from start menu, this indicator will be appears.



2.9 Heating Symbol



If the machine's heaters started for heating, this indicator will be flash.

2.10 Cooling Symbol



If the machine's coolers started for cooling, this indicator will be flash.

2.11 Humiditing(Moisturing) Symbol



If the machine's humidifiers started for moisturing, this indicator will be flash.

2.13 Ventilation



This value shows to you current ventilation percent. If you press this area, you will see:



Picture 21 - Set Ventilation

You can set the target minimum ventilation and maximum ventilation by the percent.

2.14 Incubation Time



You can see current incubation time from here. If you want to change, go to: Settings-Time Settings.

2.16 Turner counter

You can see the turner count from here. If you press and hold a few seconds, it will reset.



2.17 Pre-Heating Countdown

You can see the pre-heating countdown from here by HH:MM

PRE-HEATING				
0	0			

Chapter 3/4: INCUBATION PROGRAM



Enter the program table from program menu by pressing the button

	Day	Hour	Temp.	Hum.	Min.Vent	Max.Vent	
1	0	0	0,0	0,0	0	0	
2	0	0	0,0	0,0	0	0	×
3	0	0	0,0	0,0	0	0	×
4	0	0	0,0	0,0	0	0	×
5	0	0	0,0	0,0	0	0	×
6	0	0	0,0	0,0	0	0	×
7	0	0	0,0	0,0	0	0	×
8	0	0	0,0	0,0	0	0	×
9	0	0	0,0	0,0	0	0	×
10	0	0	0,0	0,0	0	0	×
11	0	0	0,0	0,0	0	0	×
12	0	0	0,0	0,0	0	0	×

Picture 24 - Program Chart

Program table have 12 rows and 7 cols.

Col 1 & 2 for day & hour: The incubation time for accept values

Col 3: Target humidity at the entered incubation time.

Col 4: Target temperature at the entered incubation time.

Col 5&6 : Target of minimum and maximum ventilation at the entered incubation time by percent.

Col 7: if you entered all the cols, press this and accept the row completely.

Attention! Don't apply the tick if you have 0 degree fahrenheit value in the humidity and temperature cols at the current row!

Chapter 5 : ALARM

ATTENTION: Alarms are very important for incubation





Picture 26 - Alarms



5.1 High Temperature Alarm

If current temperature is over than target temperature about 1.5 degree Fahrenheit, this alarm will appears.

5.2 Low Temperature Alarm

If current temperature is lower than target temperature about 1.5 degree Fahrenheit, this alarm will appears.

5.3 High Humidity Alarm

If current humidity is over than target humidity about 2 degree Fahrenheit, this alarm will appears.

5.4 Low Humidity Alarm

If current humidity is lower than target humidity about 2 degree Fahrenheit, this alarm will appears.

5.5 Ventilation Alarm

If servomotor in ventilation system has a problem, this alarm will appears. Please check servomotor.

5.6 Over Load Alarm

If motor have over load, this alarm will appears. Please check thermal relay.

5.7 Pulsator Speed Alarm

If pulsator fan blades have any problem and if machine have a proximity sensor, this alarm will appears. Please check fan or check proximity sensor. If you have not proximity sensor or sensor is broken please close pulsator alarm from pulsator setting screen until provide a new proximity sensor.

5.8 Door Alarm

If doors are opened, this alarm will appears. Please close doors, if doors are closed, please check door switches.

5.9 Turner Alarm

If turner system have any problem, this alarm will appears. Please check turner system and horizontal switch.

5.10 Belt Breaks

If motorbelt is broken, this alarm will appears. Please renew the motorbelt.

5.11 Pulsator Alarm

If pulsator motor contactor is broken, this alarm will appears. Please check the contactor in switchbox.

5.12 High Carbon Dioxide Alarm

If current carbon dioxide value over than target carbon dioxide value, this alarm will appears. Please check the ventilation. If you haven't a carbon dioxide sensor or sensor is broken, close the co2 system from co2 menu until provide a new sensor.

5.13 Emergency Alarm

If you press the emergency button front of the machine, the machine will completely stopped and you will see this screen



Picture 27 - Emergency Alarm

After problem solution, release the button and restart the machine.

5.A Alarm Reset 3 Minutes Button



This button for mute alarm system until 3 minutes.

5.B Alarm Reset 10 Minutes Button



This button for mute alarm system until 10 minutes.

5.C Humidity Alarm Switch



This button for switch the humidity alarms by on/off.

5.D Real Time Indicator

This indicator shows the Real Time. If you press this indicator, you would change the Real Time



5.E Alarm Logs

You can see the current alarms from this page.

Text	Ack Selected
	Ack All
	Filter
	Text

This page shows to you the alarm history day by day. You can select the date from filter.

Chapter 6: SYSTEM MENU



In settings page, if you pres this button, you will see the page below:





IP SETTINGS	Views ip settings menu
USER LOGS	Views user logs page
BACKLIGHT	Views backlight settings window
	Changes Language
MODBUS	Views connection settings

6.1 User Logs Page





Description	Time Stamp	UserName	- ·
UserLogs	5.07.2017 16:56:08	admin	
Change IP	5.07.2017 16:56:08	admin	
Change IP	5.07.2017 16:56:07	admin	
DateTime Realtime	5.07.2017 16:56:05	admin	
System Page	5.07.2017 16:55:25	admin	
Users Page	5.07.2017 16:53:24	admin	
Setter/Hatcher Toggle	5.07.2017 16:53:01	admin	
	5.07.2017 16:52:12	admin	
Nozzle Test	5.07.2017 16:52:09	admin	
Nozzie Test	5.07.2017 16:52:08	admin	3
Nozzie Test	5.07.2017 16:51:57	admin	0
Delayed Start Page	5.07.2017 16:51:50	admin	
	5.07.2017 16:51:45	admin	
Delayed Start Page	5.07.2017 16:51:38	admin	
	5.07.2017 16:51:36	admin	
Water Cooling On/Off	5.07.2017 16:51:29	admin	
Air Cooling On/Off	5.07.2017 16:51:28	admin	
Water Cooling On/Off	5.07.2017 16:51:21	admin	
Air Cooling On/Off	5.07.2017 16:51:15	admin	
Water Cooling On/Off	5.07.2017 16:51:13	admin	
Cooling Page	5.07.2017 16:51:06	admin	
	5.07.2017 16:51:05	admin	-
	E AR BALRAS FAIR	1.1.1	

6.2 Connection Settings



If You have a Broodtech Alarm Monitor, please check to modbus.

ATTENTION : DO NOT REMOVE THE CONTROLLER1 CHECK

ATTENTION : THE MACHINE STOPS IF ANY ALARM APPEARED LIST BELOW:

- 1. Over Load Alarm
- 2. Belt Break Alarm
- 3. Door Open Alarm
- 4. Pulsator Contactor Alarm

The machine restarts automatically after problem solution.

5. Emergency Alarm (Completely Stopped)