

FLOOR STANDING SHAKING INCUBATOR



Instruction Manual



Model : LFSI-300B

Please read this manual carefully before using the instrument

Labnics Equipment

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CHAPTER 1. BEFORE USE:-

Thank you for choosing LABNICS Laboratory Products.

Please read this operation manual carefully before using the instrument for your safety and optimum operating performance.

If you have any query, please contact our sales representatives or service department.

CHAPTER 2. SAFETY PRECAUTION:-

This manual contains important operating and safety information. You must carefully read and understand the contents of this manual prior to the use of this equipment.



Warning:-

Warning alert you to a possibility of personal injury



Caution:-

Caution alerts you to a possibility of damage to the equipment.

2.1 Power Connection:-



Caution

- Your Shaking Incubator is designed for 110VAC 60Hz 1P or 220VAC 50Hz 1P or 220VAC 60Hz 1P.
- Check electrical requirement on the name plate before using the instrument.
- Connect to receptacle with ground connection.
- Be sure to connect on sufficient electrical current receptacle.

2.2 Installation:-



Caution

- Do not use the instrument in high humid environment
 - May cause Electrical leakage.
 - Corrosion may occur.
- Do not use in high temperature environment or so not use it beside instrument generating heat.
- Keep it on flat, rigid and leveled surface.

2.3 Operation :



Warning

- Hot surface or parts may cause serious injury.
- Moving parts in the chamber may cause serious injury.
- Do not put volatile, flammable and explosive material inside the chamber.
- Do not put volatile, flammable and explosive material nearby the instrument.
- Moving parts may cause serious injury during operation. Be sure to put or withdraw samples or containers in the rack after shaking motion is completely stopped.



Caution :

- Be careful not to spill liquid on the control panel
- When you place samples or containers on the flask holders or spring rack, be sure about the weight balanced. Wrong balanced weight may cause damage to motor or shaking mechanism and may cause noise or vibration.

2.4. Maintenance:-



Caution

- Do not pour water or any liquid while cleaning the chamber.
- Do not use highly organic solvent for cleaning the surface of chamber.
- Do not modify or alter electrical circuit or hardware.

CHAPTER 3. PRODUCT FEATURE:-

LABNICS LFSI-300B Shaking Incubator is.....

Ideal for any shaking application requiring controlled temperature and speed for microbiology, cell biology, cell culture, tissue culture, biochemistry, molecular biology, environmental engineering, soil testing field.

Feature:-

1. Temperature Range:- +10 ~ 60°C
2. Built-in heating and cooling system and also provided with integrated controller.
3. Integrated digital PID controller enables temperature control at 0.1°C resolution and speed control at 1 rpm. Equipped with wait-off timer, alarm, auto-tuning and in-built temperature calibration functions.
4. Coaxial fan blade for air circulation in the chamber to keep homogeneous temperature throughout the chamber.
5. Transparent acrylic window for sample observation during operation without opening the door.
6. Shaking motion automatically cut-off to protect user from moving parts when door is open.
7. Dual over-temperature protection safety and electrical leakage breaker.
8. Universal spring rack to accommodate various shapes of containers.
9. Size adjustable flask holder made by ABS resin with platform for convenience 10.
10. Light bulb in the chamber and on/off switch

FRAME:-

- SPCC metallic body with heavy duty epoxy powder coating in white and green
- No. 1 self balanced door with shock absorber with dark transparent acrylic viewing window. Height adjustable feet for balancing and anti-vibration.

INTERNAL CHAMBER:-

- Stainless Steel 304 Polished (ANSI 304) with insulation Utility lamp and on/off switch.

CONTROL SYSTEM:-

- Integrated Digital PID microprocessor control system for temperature and speed.
- Digital display of PV and SV for temperature, rpm and time.
- Control of temperature, cooler, speed and timer independently or integral timer: 99min 59sec / 99hr 59min / continuous time scale selectable adjustable start and stop speed in rpm/sec.
- Class A, PT100 control sensor.

REFRIGERATION SYSTEM:-

- Hermetically sealed compressor

SAFETY:-

- Shaking motion stops when door is open.
- Adjustable over-temp. Cut-off safety thermostat
- Over current cut-off: Electrical leakage breaker

ALARM SYSTEM:-

Audible and visual alarm system for–

- Over temperature.
- Shaking motion failure.
- Disconnection of sensor

CHAPTER 4.SPECIFICATIONS:-

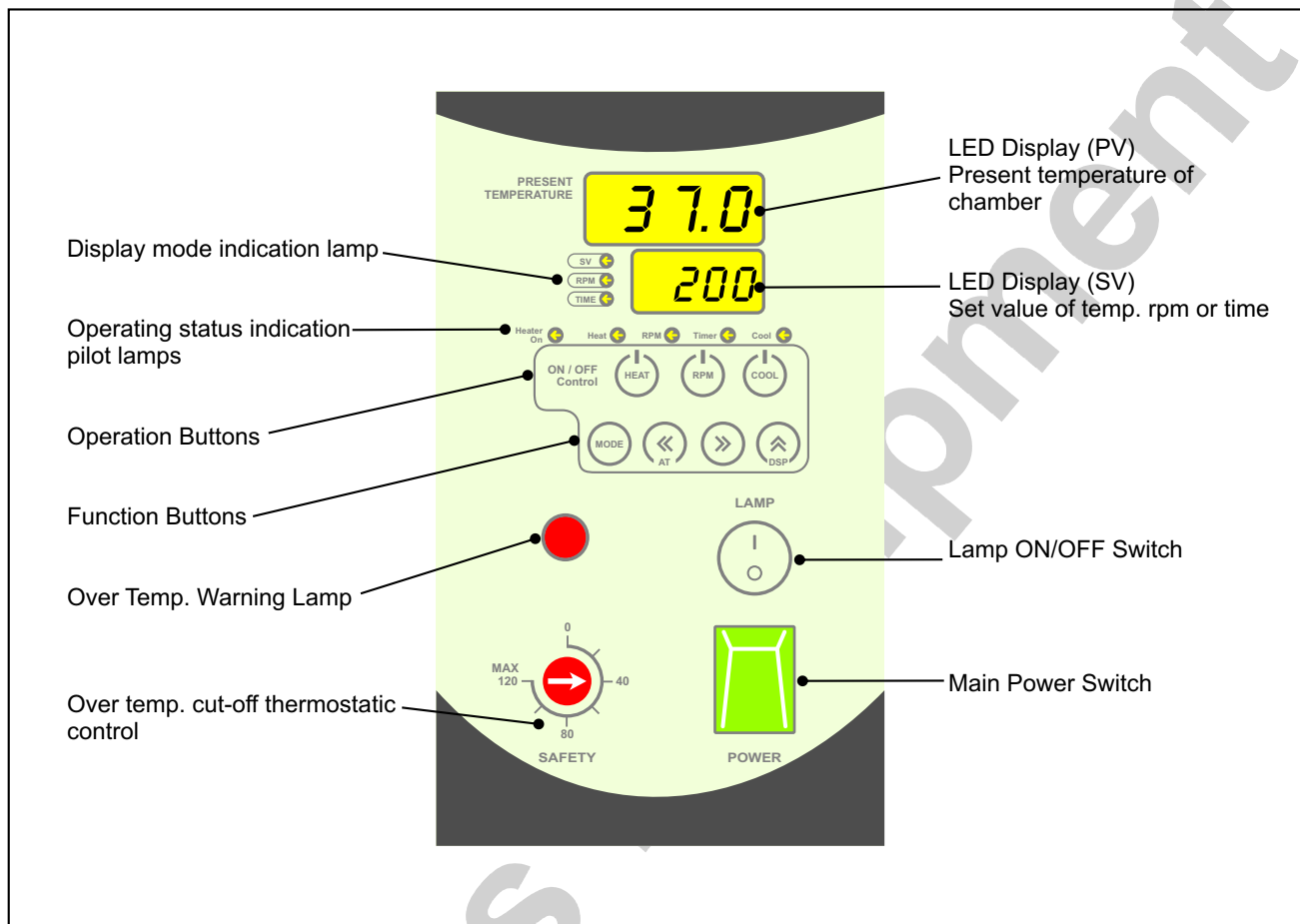
Model No.		LFSI-300B
Chamber Volume		216 Litre
Temperature	Heating Type	Forced Convection
	Range	10 to 60°C with cooling system
	Accuracy	±0.1°C at 25°C
	Uniformity	±1.0°C at 25°C
Illumination		FL lamp 20 watt x 4EA
Shaking Speed/Stroke		60 ~ 300 rpm / 20 mm orbital motion
Control	Main Controller	Digital PID Controller with Timer, Auto-Tuning, Calibration Function
	Wait off Timer	mm:ss / hh:mm / continuous selectable
	Sensor	Pt 100
Material	Internal	Stainless Steel 0.8T polished (SUS304)
	External	Steel 1T with epoxy powder coating
	Door	Self balanced door with Transparent tempered safety glass window
Utility	Lamp	25 Watt Crypton Lamp in Chamber
Electrical Requirement		120VAC 60Hz 1P or 220VAC 50Hz 1P or 220VAC 60Hz 1P
Safety Device	Temperature	Hydraulic over temperature protection safety device
	Electrical	Electrical leakage breaker
Dimensions (WxDxH) mm	Chamber	750 x 720 x 400
	Overall	1050 x 820 x 1000
	Platform	700W x 650D
Catalog No.		18150202

Optional Accessories :

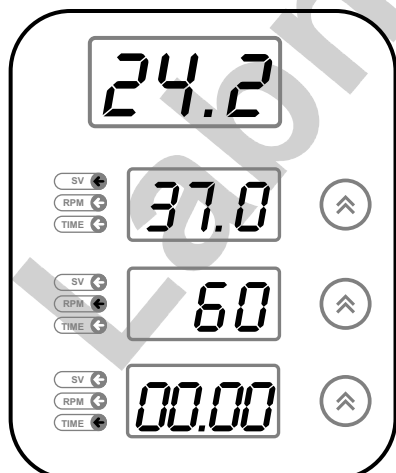
Order No.	Descriptions
18150221	Spring Rack 700 x 650 x 140 mm
18150222	Flask Holder 50 ~ 100ml, 50ml Max 77 ea or 100ml Max 49 ea
18150223	Flask Holder 200 ~ 300ml, 300ml Max 26 ea
18150224	Flask Holder 500 ~ 1000ml, 500ml Max 21 ea or 1000ml Max 16 ea

CHAPTER 5. PARTS AND FUNCTIONS

5.1 Main Controller:-



5.2 Main Controller Parts and Descriptions:-



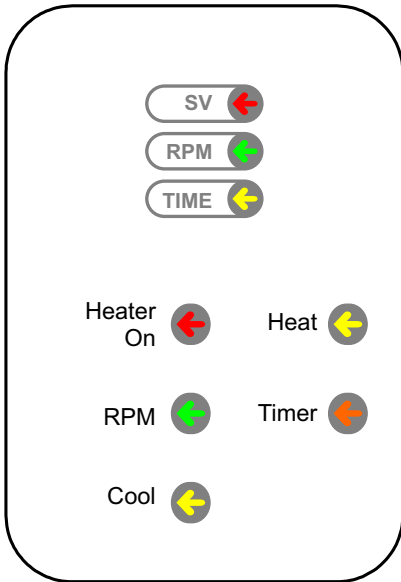
< DISPLAYS >

PV Digital LED Display

- PRESENT TEMPERATURE
- Displays present temperature in the chamber.

SV Digital LED Display

- Displays set value of temperature, rpm and time alternatively by pressing INC button
- Display mode indication lamp lit when SV displays Temp., rpm or time accordingly.



<PILOT LAMPS>

Display Mode Indication Lamp:-

- SV pilot lamp lit when SV LED displays set temperature.
- RPM pilot lamp lit when SV LED displays set rpm.
- TIME pilot lamp lit when SV LED displays time.

Operating Status Indication Lamp:-

- Heater On: Turned on when controller give output to heater. ON and OFF during PID control.
- Heat: Turned on when heating starts by pressing HEAT button.
- RPM: Turned on when shaking starts by pressing RPM button.
- TIMER: Turned on when user set wait-off timer and time starts count down by press HEAT or RPM button.
- COOL: Blinks when cooler stops Lit on when cooler is running.

<OPERATION BUTTONS>

HEAT BUTTON:-

- Start and stop heating (Press to ON and press again to OFF).

RPM BUTTON:-

- Start and stop shaking (Press to ON and press again to OFF).

COOL BUTTON:-

- Press to turn on cooling system.

MODE Button :

- Press to set temp. rpm and time.
- Press to set factory parameters. (see how to set factor y parameters on SETTING PARAMETER section)

LEFT SHIFT Button :

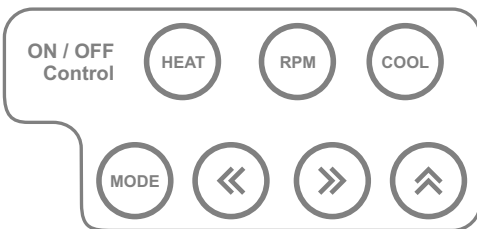
- Press to shift cursor to left digit when setting temp., rpm or time.

AUTO-TUNING Function

- Press and hold for 5 seconds to start auto-tuning
- Your Shaking Incubator was auto-tuned and calibrated before shipment.

RIGHT SHIFT Button

- Press to shift cursor to right digit when setting temp. rpm or time.



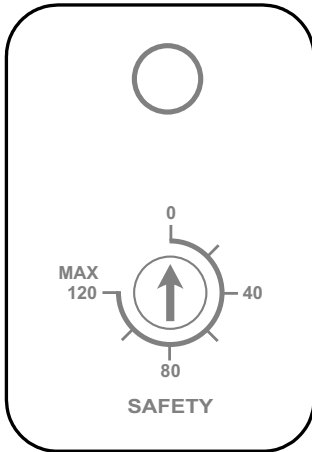


INC Button

- Increase values by 1 increment.

DSP Function

- In normal display mode, press INC button to change display on SV LED display to show set temp. rpm or time alternatively.

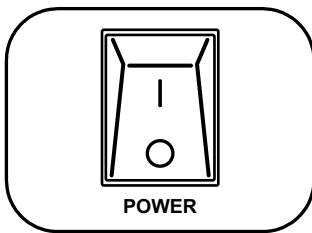


SAFETY LAMP/OVER-TEMP. CUT-OFF SAFETY THERMOSTAT

- Safety lamp turned on indicating current chamber temperature is higher than over temp. cut-off setting.

Turn over temp, cut-off safety thermostat to 20% higher than normal operating temperature.

(Ex. Your operating temperature is 40°C, set safety thermostat at 60°C, if chamber temperature increase higher than 60°C by any reason, thermostat automatically cut-off heater and lamp is turned on.)



POWER SWITCH

- Main Power Switch.

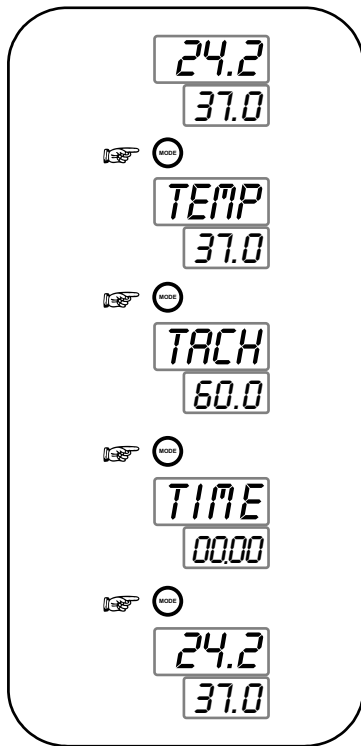
CHAPTER 6. OPERATION:-

Before Operation:-

- Check electrical requirement on the name plate before connect to consent.
- Place your Shaking Incubator on the flat and level surface
Remove packing material in the chamber.
- Be sure to place shaking wire rack on the right position and well balanced.
- Connect power plug in rear panel to wall mount receptacle

Getting Started:-

- Load sample containers on the Spring Wire Rack or Flask Holders
- Be careful sample containers are weight balanced symmetrically.
- Turn the circuit breaker on located on the back. Turn the POWER switch on. The PV LED READOUT displays current temperature of the

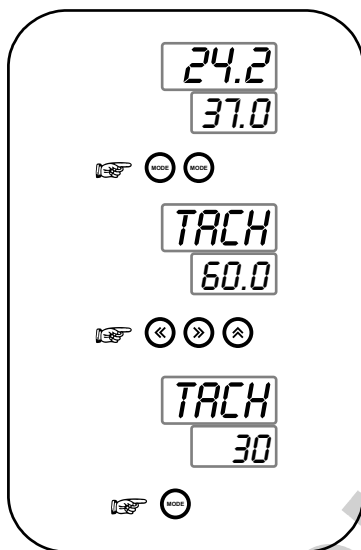


Setting Temperature, RPM and Time:-

- You can change operating temperature, rpm and time by using MODE button.
- Setting mode changes as left figure.

Setting Temperature:-

- Press **MODE** button to set temperature in normal display mode.
- PV Digital LED displays "**TEMP**" and **SV Digital LED** displays current SV temperature and prompt user input.
- Press **SHIFT** button to move left or right digit.
- Press **INC** button to increase or decrease values
- Press **MODE** button again to go RPM setting.
- Press **MODE** button twice to go normal display Mode.
- (Illust shown how to change operating temperature from 37.0°C to 40.0°C.)



Setting RPM:-

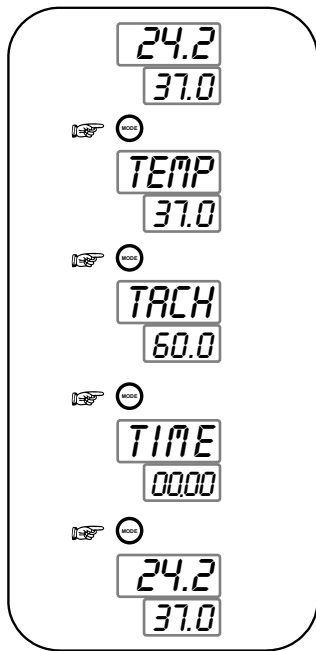
- Press **MODE** button twice to set **RPM** in normal display mode.
- PV Digital LED displays "**TACH**" and **SV Digital LED** displays current SV RPM and prompt user input.
- Press **SHIFT** button to move left or right digit.
- Press **INC** button to increase or decrease value.
- RPM can be set from 20 ~ 220 rpm.
- Press **MODE** button again to go TIMER setting.
- Press **MODE** button to go to normal display mode.
- (Illust shown how to change operating RPM from 60 to 30)
- *Maximum operating RPM may less than specification when sample is loaded in the shaking platform. RPM may affected by weight of load or other operating conditions.

ERROR MESSAGE (Err0):-

- If motor cannot be start within 15 seconds after pressing RPM button, controller warning error by audio visual message. Controller displays ERR0 and keep beep sound.
- Press RPM button to escape from error status.

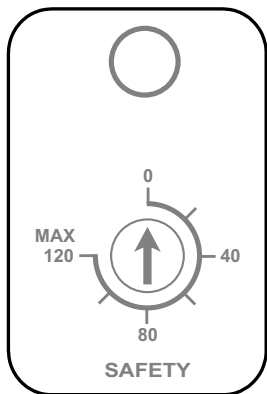
TROUBLE SHOOTING:-

- Check any obstacle which may obstruct shaking motion.
- Check total weight of sample loaded in the platform is do not exceed maximum load (less than 30kgs).
- Check platform is well positioned to move back and forth.



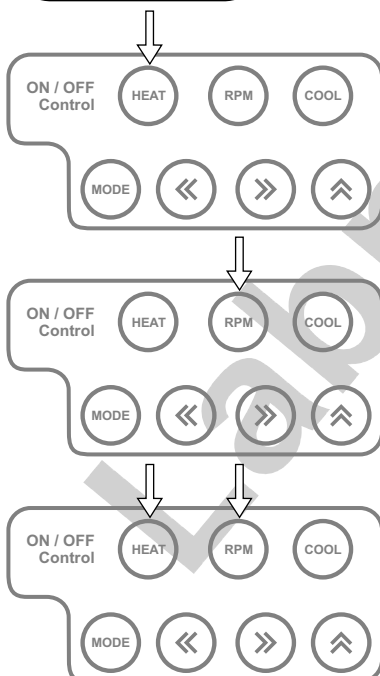
Setting Timer:-

- Press **MODE** button three times to set timer in normal display mode.
- PV Digital LED displays "**TIME**" and "**SV Digital LED**" displays current time and prompt user input.
- Press **SHIFT** button to move left or right digit
- Press **INC** button to increase or decrease value.
- For continuous operation set time at 00.00
- Timer can be set from 1 Min to 99 Hr 59 Min
- Press **MODE** button to go normal display mode
- (Illustration shown how to change operating time from continuous to 1 Hr)
 - * Time scale can be changed in min:sec.
 - * Refer factory parameter setting to change time scale



Over Temperature Protection:-

- Safety lamp turned on indicating current chamber temperature is higher than over temp. cut-off setting.
- Turn over temp, cut-off safety thermostat to 20% higher than normal operating temperature.
(ex. Your operating temperature is 40°C, set safety thermostat at 60°C, if chamber temperature increase higher than 60°C by any reason, thermostat automatically cut-off heater and lamp is turned on.)



Start Temperature Control Only:-

- Press **HEAT** button to start temperature control.
- Press **HEAT** button again to stop temperature control.

Start Shaking Control Only:-

- Press **RPM** button to start temperature control.
- Press **HEAT** button again to stop temperature control.

Start Temperature & Shaking Control :

- Press **HEAT (COOL)** and **RPM** button.
- Press **HEAT** button again to stop temperature control.

CHAPTER 7. FREQUENTLY ASKED QUESTION:-

1. Temperature keep increasing and decreasing under operating temperature?

CAUSE: - SAFETY setting is lower than operating temperature.

Solution: - Turn SAFETY setting clockwise higher than operating temperature.

CAUSE: - Alteration of optimum factory parameters.

Solution: - Auto-tune again.

2. LED displays uuuu and beep?

Cause: Over heat higher than 61°C. Call service.

Solution: Your Shaking Incubator cannot be used over 60°C. If temperature increase over 61°C, controller warning high temperature and cut-off heater.

CHAPTER 8. TROUBLE SHOOTING:-

Error Symbol	Cause	Solution
uuuu	Over heat higher than 61°C	Call for Service
nnnn	Sensor disconnection	Call for Service
ErrO	Motor failure or shaking disabled	Remove obstacle Lesser weight load Check motor

CHAPTER 9. SETTING FACTORY PARAMETERS:-

To set factory parameter A, press and hold **MODE** Button for 5 seconds.

Press **SHIFT** and **INC** Button to change values.

Press **MODE** Button to go next parameter.

To escape from Parameter mode to normal display mode, press and hold **MODE** Button for 6 seconds.

Factory Parameter A

Parameter Symbol	Name of Parameter	Setting Range & Descriptions	Factory Default	User Set Value
BEEP	BEEP ON TIME	0 ~ 99 SEC	30	
	Beep on time in seconds after timer is over. If the value is set at 0, continuously beep until press RPM button			

Adj	Temperature Adjustment	- 99.9 ~ 299.9	Calibrated value																														
	Compensate temperature deviation If the actual temperature measured by standard thermometer is different from temperature which controller read, user can compensate temperature difference by Adj function Ex) Actual temp = 100.0 Displayed temp = 99.9 Set Adj at 0.1 Actual temp = 99.5 Displayed temp = 100.0 Set Adj at - 0.5																																
COOL	COOLER ON TEMP.	- 99.9 ~ T-Lt value	35																														
	SET Temp. > Cool value -> Cooler off SET Temp. < Cool value -> Cooler on Cooler turned on when set temp. is less than 35																																
ALH	ALARM LIMIT HIGH	00.0 ~ 99.9	0.2																														
	If temp. increase higher than the set temp. + ALH, heater turned off automatically for safety.																																
ALL	ALARM LIMIT LOW	00.0 ~ 99.9	0.3																														
	If temp. decrease lower than the set temp. - ALL, cooler turned off automatically for safety.																																
USLP	Speed increment per sec.	1 ~ 59 RPM	16	DO NOT CHANGE																													
	Acceleration and deceleration rate when start up and stop shaking For smooth start-up and stop motion, keep this value high																																
HYS	HYSTERESIS																																
	Hysteresis range of ALH and ALL																																
FRPM	Fix rpm speed display	0 ~ 99	2																														
	Fix displayed operating RPM within a range. Control rpm drift																																
DLOC	LOCK PASSWORD	0000, 1111	0000																														
	Protect set values and parameters from unauthorized change <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 15%;">N3</th> <th style="width: 15%;">N2</th> <th style="width: 15%;">N1</th> <th style="width: 15%;">N0</th> </tr> </thead> <tbody> <tr> <td>Available value to set</td> <td>0 or 1</td> <td>0 or 1</td> <td>0 or 1</td> <td>0 or 1</td> </tr> <tr> <td>Where</td> <td>N3 : KEY LOCK</td> <td>1 : LOCK</td> <td>0 : UNLOCK</td> <td></td> </tr> <tr> <td></td> <td>N2 : RESERVED</td> <td>1 :</td> <td>0 :</td> <td></td> </tr> <tr> <td></td> <td>N1 : PARAMETER DATA LOCK</td> <td>1 : LOCK</td> <td>0 : UNLOCK</td> <td></td> </tr> <tr> <td></td> <td>N0 : SET VALUE DATA LOCK</td> <td>1 : LOCK</td> <td>0 : UNLOCK</td> <td></td> </tr> </tbody> </table> N3 (KEY LOCK) : Protect pressing button. N1 (PARAMETER DATA LOCK) : Protect parameter values stored in the controller N0 (SET VALUE DATA LOCK) : Protect user set values such as temperature and time					N3	N2	N1	N0	Available value to set	0 or 1	0 or 1	0 or 1	0 or 1	Where	N3 : KEY LOCK	1 : LOCK	0 : UNLOCK			N2 : RESERVED	1 :	0 :			N1 : PARAMETER DATA LOCK	1 : LOCK	0 : UNLOCK			N0 : SET VALUE DATA LOCK	1 : LOCK	0 : UNLOCK
	N3	N2	N1	N0																													
Available value to set	0 or 1	0 or 1	0 or 1	0 or 1																													
Where	N3 : KEY LOCK	1 : LOCK	0 : UNLOCK																														
	N2 : RESERVED	1 :	0 :																														
	N1 : PARAMETER DATA LOCK	1 : LOCK	0 : UNLOCK																														
	N0 : SET VALUE DATA LOCK	1 : LOCK	0 : UNLOCK																														

To set factory parameter B,

Get back to normal display mode

Press and hold SET Button for 30 seconds.

LED displays "**PASS**" and waiting for user input.

Press **SHIFT** and **INC** Button to change values.

Press MODE Button to go next parameter.

To escape from Parameter mode to normal display mode, press and hold MODE Button for 6 seconds.

Factory Parameter B

Parameter Symbol	Name of Parameter	Setting Range & Descriptions	Factory Default	User Set Value
PASS	Password to enter Factory Parameter B Setting Mode	7777	7777	DO NOT CHANGE
T-LT	Maximum temperature limit to set	-99.9 ~ 299.9°C	61	DO NOT CHANGE
	Maximum temperature available to set. If T-Lt value set at 61°C, user cannot input operating temperature higher than 61°C. If operating temperature exceeding this value, controller stop heating and warning by alarm uuuu message and beep sound for safety.			
R-LT	Maximum speed limit to set	0 ~ 1500 RPM	350	DO NOT CHANGE
	Maximum RPM available to set. If R-LT value set at 350 RPM, user cannot input operating RPM higher than 350. If operating RPM exceeding this value, controller stop shaking and warning by alarm uuuu message and beep sound.			
GEAR	Gear Rate	1.0 ~ 60.0	3.2	DO NOT CHANGE
	Geared motor ratio. User can calibrate shaking speed by changing this value. Setting range should be within 3.0 ~ 3.5. RPM can be calibrated by changing Gear Rate.			
PRD	Period (Output Interval)	1 ~ 99 sec.	5	DO NOT CHANGE
	Controller sensing temperature within the PRD interval (ex. 5 seconds) and decide heat-up or not. User can change this value for fine control. For air as a heating media, 5 seconds is optimum interval to control.			
P	Proportion	0 ~ 6999	Auto-tuned value	DO NOT CHANGE
A	Anti-Integral	0 ~ 6999	Auto-tuned value	DO NOT CHANGE
I	Integral	0 ~ 6999	Auto-tuned value	DO NOT CHANGE
D	Differential	0 ~ 6999	Auto-tuned value	DO NOT CHANGE

MODE1	OPERATING MODE CONTROL	0000~1111	0111	
	Available value to set	N3 0 or 1	N2 0 or 1	N1 0 or 1 or 2
	Where	N0 0 or 1	N3: TEMP. & TIMER 1 : KEEP OPERATING TEMP. AFTER TIMER 0 : STOP TEMP. CONTROL N2: MOTOR STOP 1 : STOP SLOWLY 0: STOP IMMEDIATELY N1: TIME SCALE 1 : HH :MM (00.00 ~ 99 hours 59 min) 0 : MM:SS (00.00 ~ 99 min 59 sec) N0 : POWER ON RESTORE 1 : ON 0 : OFF (During operation, if the electrical supply is turn out and get back again, restore the last operating condition and resume operating when POWER ON RESTORE function is ON).	
MODE2	OPERATING MODE CONTROL	0000~1111	1000	
	Available value to set	N3 0 or 1	N2 0 or 1	N1 0 or 1
	Where	N0 0 or 1	N3 : DECIMAL PLACE DISPLAY 1 : YES (0.1°C) 0 : NO (1°C) N2 : ALARM HIGH DATA TYPE 1 : ABSOLUTE 0 : RELATIVE N1 : ALARM LOW DATA TYPE 1 : ABSOLUTE 0 : RELATIVE N0 : HEATER OUTPUT CONTROL WHEN DOOR OPEN 1 : HEATER ON 0 : HEATER OFF	
MODE3	OPERATING MODE CONTROL	0000	0000	
	Available value to set	N3 0 or 1	N2 0 or 1	N1 0 or 1
	Where	N0 0 or 1	N3 : RESERVED N2 : RESERVED N1 : ALH 1 : START RELAY OFF 0 : START RELAY ON N0 : RESERVED	
CTON	Defrost cycle time in minutes		400	
CTOF	Defrost duration time in minutes		15	
CDLY	Delay time of compressor start		1	
DRAN	Fix drift of temperature display within the set value		0.1	
	Temperature drifts during operation owing to several reasons. To eliminate temperature drift, set DrAn value to fix temperature within the value			
DTON	Fix drift of temperature display within the set value during defrost		20	

CHAPTER 10 . INSPECTION LOG FOR SHAKING INCUBATOR:-

Model:- **LFSI-300B** Serial No. _____ Client:- _____

Date & Time:- _____ Amb. Temp.:- _____ Electricity:- VAC HZ

Refrigerant:- _____

LFSI-300B Pretest check list (Initial after each Checkpoint)

If Non-Applicable enter N/A

Termination of each electrical connections		Equipped with proper accessories	
Surge protection termination		Esthetics ok	
Control panel key switch tight			

LFSI-300B TEST AREA, TEST LOG (NOTE) If units fails any portion of the test enter "NG" in the blank space adjacent to that check point.

Technician		Setpoint security verified	
Volts at plug / terminal strip / Hz		Labeling on components correct	
Cut in voltage		Molded plug not overheated	
Surge			
Verify over temp. protection			
Temperature Stability @ 37.0°C	± °C		
Temperature Stability @ 50.0°C	± °C		
Auto-tuning			
Minimum RPM @ 20 rpm			
Maximum RPM @ 300 RPM			
RPM stability @ 60 RPM	1 rpm		
No contact on moving parts			
No noise during operation			

Released from test by:

From#QCF001frm

Approval:-

SERVICE REPORT

Customer's Address : _____ _____	Tel.No.: _____ Fax No.: _____ Weekly Off.: _____
Contact Person / Designation : _____	Dept.: _____

Date	Time		System Configuration	Model	Serial No.	Date :		SR. No.	
	From	To				Status : OK	Not OK	Installation	Warranty
							<input type="checkbox"/>	Not OK	<input type="checkbox"/>
						Installation	<input type="checkbox"/>	Warranty	<input type="checkbox"/>
						Demonstration	<input type="checkbox"/>		
						Maintenance	<input type="checkbox"/>	Contract	<input type="checkbox"/>
						Repairs	<input type="checkbox"/>		
						Application	<input type="checkbox"/>	Billable	<input type="checkbox"/>
						Calibration	<input type="checkbox"/>		
						Validation	<input type="checkbox"/>	Courtesy	<input type="checkbox"/>

Nature of Problem : _____

Observation & Action Taken : _____

Customer's Remarks : _____

Parts Replaced : _____

Parts Recommended / Action Required : Yes No Requisition Number : _____

Service Engineer's Name & Signature	Customer's Name, Signature, Date & Stamp

CHAPTER 13. CERTIFICATE OF WARRANTY:-

Descriptions	Shaking Incubator
Model	LFSI-300B
Serial No.	
Warranty Period	12 Months after purchase
Date of Purchase	
Purchase From	

WARRANTY COVERAGE

Labnics warranty obligations for the products are limited to the terms set forth below:

Labnics warrants the product against defects in materials and workmanship for a period of one (1) year from the date of original purchase ("**Warranty Period**"), providing that the unit is operated according to the instruction in the operating manual.

The guarantee comprises removal of all damages that arises during the guarantee period and that are proven to be due to faulty material or poor workmanship.

If a defect arises and a valid claim is received by **Labnics** within the Warranty Period, at its option, **Labnics** will (1) repair the product at no charge, using new or refurbished replacement parts, (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product.

If a defect arises and a valid claim is received by **Labnics** after the first one hundred and eighty (180) days of the Warranty Period, a shipping and handling charge will apply to any repair or exchange of the product undertaken by **Labnics**.

Labnics warrants replacement products or parts provided under this warranty against defects in materials and workmanship from the date of the replacement or repair for ninety (90) days or for the remaining portion of the original product's warranty, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes **Labnics** property. When a refund is given, your product becomes **Labnics's** property.

EXCLUSIONS AND LIMITATIONS

This Limited Warranty applies only to the product manufactured by or for **Labnics** that can be identified by Name Plate.

Labnics is not liable for any damage to or loss of any products or material stored or tested in the instruments or programs, data, or other information stored on any media contained within the product, or any non-Labnics product or part not covered by this warranty. Recovery or reinstallation of programs, data or other information is not covered under this Limited Warranty.

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FOR CONSUMERS WHO HAVE THE BENEFIT OF CONSUMER PROTECTION LAWS OR REGULATIONS IN THEIR COUNTRY OF PURCHASE OR, IF DIFFERENT, THEIR COUNTRY OF RESIDENCE, THE BENEFITS CONFERRED BY THIS WARRANTY ARE IN ADDITION TO ALL RIGHTS AND REMEDIES CONVEYED BY SUCH CONSUMER PROTECTION LAWS AND REGULATIONS. TO THE EXTENT THAT LIABILITY UNDER SUCH CONSUMER PROTECTION LAWS AND REGULATIONS MAY BE LIMITED, LABNICS LIABILITY IS LIMITED, AT ITS SOLE OPTION TO REPLACEMENT OR REPAIR OF THE PRODUCT OR SUPPLY OF THE REPAIR SERVICE AGAIN.

Note: Before you deliver your product for warranty service it is your responsibility to remove all products or materials stored in the instrument.

Before returning a defective unit, please contact local representative or **Labnics** Support Center at info@labnics.com

Labnics will issue RGA number for authorized return .

If we agree to the unit being returned, arrange for careful packing and send the unit to

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