



Laboratory Equipment Pty Ltd

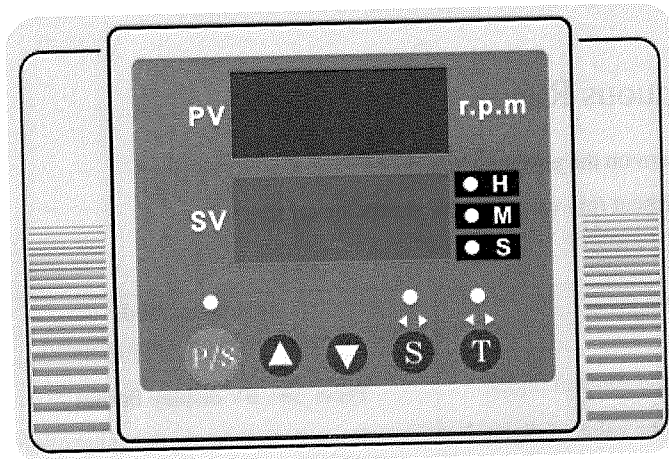
INSTRUCTION MANUAL FOR LABEC SHAKERS

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1. Panel, Keys and Displays



Symbols	Description/Function
PV	Display actual RPM (revolutions per minute)
SV	Display setting RPM or TIME
● H	Hour indicator Lamp
● M	Minute indicator Lamp
● S	Second indicator Lamp
● P/S	To suspend / start working Indicator light on when suspend. Press P/S for 5 seconds to power on/off
▲	To increase the value of digits.
▼	To decrease the value of digits.
○ S	Setting speed / parameter
○ T	Timing setting Locking keys

2. Operation:

2.1 For a continuous Run

Press and hold P/S to turn on the power switch.

PV display shows the present rpm value and SV shows the set rpm value.

Default rpm value: 100

At operation mode	At suspend mode Indicator light on when suspend.
Press \blacktriangle to increase the value of digits. Press \blacktriangledown to decrease the value of digits.	Press S , SV display flashes Press \blacktriangle to increase the value of digits. Press \blacktriangledown to decrease the value of digits. Press S to store the value.

2.2 For a Timed Run

Press P/S to suspend

Press T to set timing, indicator light on.

Use the appropriate \blacktriangle , \blacktriangledown to change to your desired set time in hours, minutes and seconds and press T to lock in the value.

Press P/S to start.

During timer mode, press S to display RPM and T to display remaining time

Cancellation of time setting: At suspend mode, press S to set speed. T indicator light off.
Timer function closed.

3. Setting parameter

3.1 Setting the Allowed Speed

Press and hold Ⓢ to enter parameter setup, if display "LOCK" please refers to 3.2 to unlock it.

Use the Ⓢ to change Lo or Hi or Adj

Use the appropriate \blacktriangle , \blacktriangledown to change the value to your desired settable RPM.

Lo - Set lowest speed (default value: 20 RPM)

Hi - Set highest value (default value: 250 RPM)

Adj - Adjust inaccuracy

3.2 Lock

Press and hold Ⓢ to enter parameter *Loct*

nonE - Unlock (default)

SEt - Set parameter to lock (Please unlock if need to change Ⓢ parameter value)

ALL - Set all keys to lock (Except for Ⓢ key, no key is operative. Displays *Loct*)

4. Troubleshooting Guide

Problem	Possible Cause	Remedy
Signal lamp lights, but motor does not turn.	<ol style="list-style-type: none"> 1. Coil of motor is broken 2. Speed control PCB is defective. 3. Door safety switch is disconnected. 4. Pulley belt is loose and belt has fallen off. 5. Drive counter weight is loose. 	Replace motor. Replace speed control board. Check and replace switch. Tighten pulley, reinstall belt and adjust its tension. Remove platform and tighten counter weight nut.
Motor is noisy.	Bearing(s) are old, polluted or oxygenated.	Replace motor.
Platform is noisy.	<ol style="list-style-type: none"> 1. Load is not balanced. 2. Platform is not secured. 3. Flasks are loose in clamps. 	Balance load. Tighten screws. Bend each arm of clamp inwards.
Shaker is wobbly	RPM is set too high or too low.	Operate at a lower speed that is acceptable or make sure load is evenly distributed.
Speed cannot be controlled	<ol style="list-style-type: none"> 1. Speed control PC board is defective. 2. Power switch is off. 	Replace speed control board. Turn switch on.

5. Spare Part List

NO.	Item No.	Description
1.	F044-41K25RA-A	Motor
2.	F363-RPM-1	Speed motherboard
3.	F363-RPM-2	RPM display board
4.	F048-K23	Belt

6. General Maintenance

1. Wipe machine with wet cloth first then wipe with dry cloth again every time after using. Please clean it with neutral lotion if there is any dirt.
2. Please plug out for not using machine for a long time.
3. Please don't put overweight article on the shelf to extend its service life.
4. When shaking, any liquid flowing from machine please wipe off immediately.
5. If possible, do not change default value to avoid parameter error.