

## TROUBLE SHOOTING

PROBLEM	CAUSE	SOLUTION
Liquid dripping from the Pipette	Pipette is not firmly fixed	Check the fitment.
	Leakage in the collet assembly	Ensure proper fitment of Collet
	Leakage from the inside connections	Send the instrument to your nearest dealer
Pump is not functioning	Battery is discharged	Charge the battery
	Connection is broken	Send the instrument to the nearest dealer
	Speed controller is on the Lowest position	Adjust speed controller

## ROUTINE SERVICING:

The liquid may accidentally enter into the collet assembly and choke the filter. In this event, unscrew the collet assembly from the body and change the filter. Replace collet assembly and start working normally.

## WARNING:

- During charging ensure that the battery charger is set on proper voltage as per the line voltage.
- Battery should not be allowed to discharge completely.
- Pipette should be firmly fixed to avoid accidental fall during operation.
- Care should be taken during aspiration to avoid liquid entering into the collet assembly.
- Fuming liquids and solvents should be avoided as dripping will occur and the fumes might damage the inside components of the instrument.

Accessories : Adaptor for Battery Charging

Specification : Input : 100 -250 V

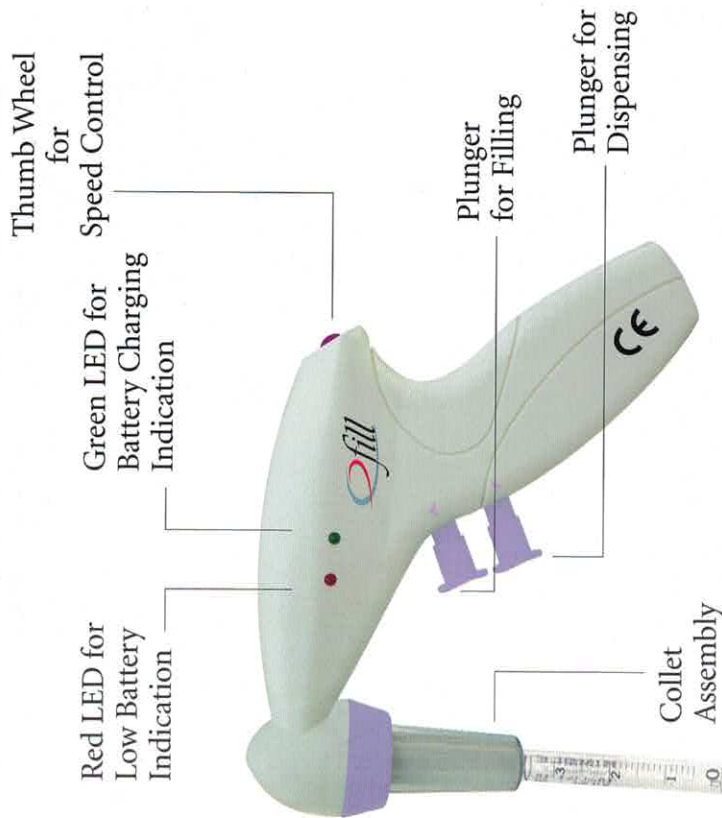
Output : 9 V

# OPERATION MANUAL



*Pipette Filling Device*

# PRODUCT



## GENERAL DESCRIPTION OF THE PRODUCT:

E-fill is a Scientific Laboratory equipment used for filling and dispensing liquid in graduated and one-mark pipettes from 0.1ml to 100ml. It is a pump operated instrument and offers a safe, efficient and easy alternative for mouth and finger tip pipetting.

## PRODUCT FEATURES:

- Suitable for Pipettes of 0.1ml to 100ml size.
- 0.2um PTFE hydrophobic filter is provided in the collet assembly to avoid liquid entering the instrument body.
- Inside collet knurlings facilitate tight fit even with wet pipettes.
- High aspirating and flow-out speed.
- Single finger control for the Flow-out and blow-out functions.
- Cordless work for up to eight hours, continuing directly after recharging.
- Autoclavable pipette adapters and filter holders.
- Charging status and battery status is indicated on the body by red and green L.E.D.s.

## OPERATION:

**FILLING AND DISPENSING:** Insert the pipette (Glass or Plastic) into the collet. The inside knurlings allows a tight fit. Press the upward plunger to aspirate liquid into the Pipette and downward plunger for dispensing. The upward and downward mark next to the plunger allows easy identification.

**SPEED CONTROL:** Thumb wheel is provided at the back of the instrument which can be easily identified. Clockwise motion increases the pump speed and anti-clockwise motion reduces the pump speed. User can adjust the speed according to his or her convenience.

**AUTOCCLAVING:** Collet assembly is fully autoclavable. It contains a 0.2um hydrophobic filter which is also autoclavable at 120 C and 15psi pressure. For autoclaving unscrew the collet assembly for direct autoclaving.

Note: Only Collet assembly is Autoclavable and NOT the full instrument.

**BATTERY STATUS AND CHARGING STATUS:** Low battery charge is indicated when the red L.E.D is continuously illuminated. Green L.E.D. will be continuously illuminated at the time of charging.

Note: Instrument can be used during charging also.

