CONTENTS

1. YOUR NEW PIPETTE FILLER..... 2
2. UNPACKING AND PREPARING THE PIPETTE FILLER FOR USE…2
2.1 Charging the Pipette Filler……... 2
2.2. Electrical specifications…… 3
3. Pipette Filler OVERVIEW……..... 3
4. Pipette Filler DESCRIPTION……... 4
4.1. Operating buttons…….. 4
4.2 Speed adjustment button……. 4
4.3 Nose cone and silicon adapter…….. 4
4.4. Filters……... 4
5. OPERATING THE PIPETTE FILLER……..…….. 4
5.1. Setting the operating speed…… 4
5.2. Inserting a pipette…….. 5
5.3. Aspiration……... 5
5.4. Dispensing…….. 5
5.5. Other pipetting recommendations……... 6
6. MAINTENANCE……. 6
6.1. Decontamination…… 6
6.2. Changing the nose cone, silicone adapter and filter……... 6
6.3. Changing the battery…… 7
7. STORAGE……. 7
8. TROUBLE SHOOTING……... 8
9. WARRANTY INFORMATION…….. 8

1230042拼版.indd 1 2014-4-25 09:49:38

1. YOUR NEW PIPETTE FILLER

The Pipette Filler has been carefully designed and man- ufactured as a lightweight, cordless pipette filler. Pipette Filler offers simple, efficient pipettng performance and maximum pipetting comfort.

It can be used with all plastic or glass pipettes between 0.1-100ml.

2. UNPACKING AND PREPARING THE PIPETTE FILLER FOR USE

The Pipette Filler package contains the following items:

- pipette filler (1)
- AC-adapter (1)
- 0.45μm hydrophobic filter (2)
- Instruction Manual (1)
- Quality control certificate (1)
- Battery (1)
- Wall-mouted Holder (1)

If you are missing any of the above items, please contact your representative.

2.1 Charging the Pipette Filler

Before the first startup the battery must be charged 10 hours in the pipette filler. Allow the unit to charge anywhere from 2 to 3 hours later.

- Before connecting the AC-adapter to the electrical outlet, check that its voltage setting corresponding to the voltage of your electrical outlet.
- Connect the AC-adapter to the electrical outlet as well as to the electrical fitting at the base of the handle of the Pipette Filler (Fig. 1).

Note: The Pipette Filler should only be charged with the AC-adapter provided.

Fig.1

1230042拼版.indd 2 2014-4-25 09:49:39

A icon on the LCD display indicates the level of battery charge - the more bars, the greater the charge.

Special circuitry that makes it impossible to overcharge the battery and that allows the pipette filler to be charged or partially charged at any convenient time.

2.2. Electrical specifications

Battery: 3.7V , 1100 mA, rechargeable lithium-ion battery
Approx. 20 hours service life when fully charged
Charging time 10 hours for completely empty batteries

AC-adapter: Input AC 100-240V
Output voltage 4.2V, 500mA.

3. Pipette Filler OVERIVIEW (Fig. 2)

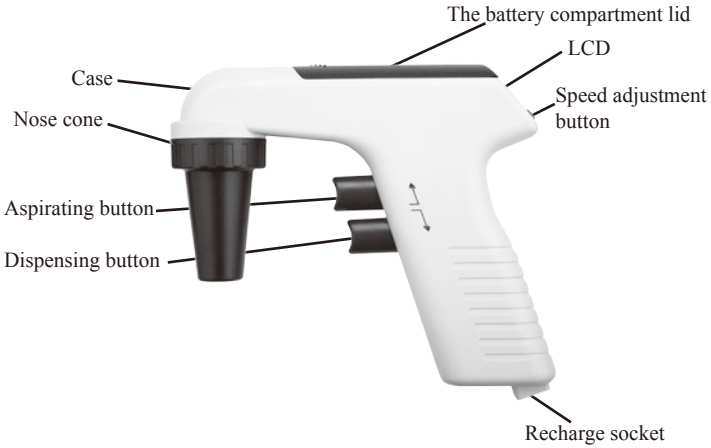

Fig.2

1230042拼版.indd 3 2014-4-25 09:49:40

4. Pipette Filler DESCRIPTION

4.1 Operating buttons

The Pipette Filler has two operating buttons located at the front of the handle. The upper button enables aspiration for as long as the button is held down. The lower button allows for dispensing. The aspiration and dispensing speeds can be fine-tuned during operation by applying varying finger pressure to the operating buttons.

4.2 SPeed adjustment button

The speed adjustment button is located at the upper part of thehandle. The desired speed is set by push the speed adjustment button.

4.3 Nose cone and silicon adaptor

The pipette adapter provided with the Pipette Filler allows the use of all standard plastic and glass pipettes(graduated and non-graduated) including Pasteur pipettes.The pipettes adapter of the Pipette Filler consists of the nose cone and silicon adapter. The silicon adapter enables a pipette to fit securely in place.Thus creating a proper vacuum level and preventing leakage.

4.4. Filters

Removing the nose cone exposes a hydrophobic filter(0.45micron), located at the top of the nose piece. The filter protects the Pipette Filler from accidental overaspirations.It is strongly recommended to use only the original filters supplied by the manufacturer with the Pipette Filler. Note:the Pipette Filler cannot be operated without a filter. Wetting of filter due to overfilling will slow or prevent fluid movement.If overfilling occurs, change the filter immediately.

5. OPERATING THE PIPETTE FILLER

5.1. Setting the operating speed

Button at the upper part of the handle allow you to set your aspiration and dispensing speeds (Fig. 3). Eight speeds are available for each function-simply push”+” for faster and “-” for slower. Your selection will be displayed on the LCD.

Fig.3

1230042拼版.indd 4 2014-4-25 09:49:40

The Pipette Filler can self-regulate the aspiration and dispensing speeds by circuit feedback.

Note: The aspiration and dispensing speeds can be fine-tuned during operation by applying a varying amount of finger pressure to the operating buttons.

5.2. Inserting a pipette

Gently push a pipette into the silicone adapter and ensure that it fits securely. To insert the pipette safely, hold the Pipette Filler from above the nose cone and the pipette from the top end of the tube.

5.3. Aspiration

- Select a speed and fill the pipette by pressing the aspirating button. Fill the pipette just above the desired level.
- Remove the pipette from the sample container by drawing it up against the inside wall of the container.
- Adjust the volume of the sample by pressing the dispensing button until the menisus is at the required level.

5.4. Dispensing

The Pipette Filler offers two different dispensing modes:

- If the dispensing button is pressed only up to a point where a check can be felt, the dispensing function will be based on the force of gravity and the liquid will simply flow out.
- Pressing the dispensing button further down engages the motor and activates the blow-out function.

Note: Finger pressure can be varied to fine-tune the speed within each mode.

5.5 Other pipetting recommendations

- Use the instrument within the limits of its chemical resistance.
- Never use with highly flammable liquids.
- Observe the reagent manufacturer's safety information.
- Never use the instrument in an atmosphere with a danger of explosion.
- Never use force with the Pipette Filler.
- Should the instrument fail to function properly, stop pipetting and check the Trouble Shooting section.

1230042拼版.indd 5 2014-4-25 09:49:40

6. MAINTENANCE

The Pipette Filler has been designed for easy in-house maintenance. However, the manufacturer also provides complete servicing and repair including a service report and a performance certificate. Please return your Pipette Filler to the local representative for repair. Before returning it, make sure that it is free from all contamination.

Note: Please advise the service representative of any hazardous materials which may have come to contact with your Pipette Filler.

6.1. Decontamination

To decontaminate, lightly spray the outside of the Pipette Filler with thedecontamination spray and wipe dry with a clean cloth.

6.2. Changing the nose cone, silicone adapter and filter (Fig. 5)

To change the nose cone, silicon adapter and filter, first press the nose cone , rotate the nose cone anticlockwise and pull out the nose cone and the silicon adapter. The filter can be removed by simply pulling it out once the nose cone and the silicon adapter have been disengaged. Position the new filter with the colored side upwards. To reassemble, insert the adapter and nose cone and twist the nose cone gently clockwise.

Fig.5

Note: It is recommended to change the silicon adapter every six months, or when necessary, to prevent a loss of vacuum. Spare adapters can be ordered from the manufacturer or your local distributor.

Product
silicon adapter for Pipette Filler
nose cone for Pipette Filler
Filter 0.45μm
Filter 0.2μm

1230042拼版.indd 6 2014-4-25 09:49:41

Note: The Pipette Filler cannot be operated without a filter. Wetting of filter due to overfilling will slow or prevent fluid movement. If overfilling occurs, change the filter immediately.

Only use the original filters supplied by the manufacturer.

6.3. Changing the battery

If the battery need be replaced follow these steps to replace the battery:

- Take the lid off the battery compartment to expose the battery compartment (Fig. 6).
- Disconnect the plug of the Li-ion battery to the instrument (Fig. 7).
- Connect the plug of the new Li-ion battery to the instrument.
- Replace the battery compartment lid.
- Dispose of the battery appropriately.

Note: Only use the original battery supplied by the manufacturer.

Fig.6

Fig.7

7. STORAGE

The Pipette Filler should not be stored for a long period of time without removing the pipette. It is recommended to disconnect the Pipette Filler from the AC-adapter if the unit is not used for a lengthy period of time.

1230042拼版.indd 7 2014-4-25 09:49:41

8. TROUBLE SHOOTING

Problem	Cause	Solution
Reduced aspiration capacity or the Levo Plus blocked	Filter blocked, dirty or damaged Battery low	Replace the filter Recharge
Pipette drips	Pipette not securely attached Silicon adapter or nose cone loose Silicon adapter or pipette damaged	Reattach Reassembly/change silicon adapter Replace
Reduced operating time	Battery worn	Replace battery

9. WARRANTY INFORMATION

The Pipette Filler Plus is warranted for one year against defects in materials and workmanship (Battery is warranted for three months only). Should your Pipette Filler fail to function according to speci-fications at any time, please contact the local represent-ative immediately. The warranty will not cover defects caused by normal wear or by a breach of the manufacturer's recommendations.

Each Pipette Filler is tested before shipping by the man-ufacturer. The Quality Assurance Procedure guarantees that the Pipette Filler you have purchased is ready for use.

1230042拼版.indd 8 2014-4-25 09:49:42