

LeMagmixer™ Single-use Magnetic Mixing System Operator's manual



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前言 Preface

- 请注意供您使用的本操作手册产品范围，对比本手册所列数据是否与设备铭牌上的数据符合。

Please note the product range of this operating manual for your use and compare the data listed in this manual with the data on the nameplate of the device.

- 所有操作人员任何时候都要熟悉设备操作手册的内容，使用前请仔细阅读。

All operators should familiarize themselves with the contents of the equipment operation manual at all times and read them carefully before use.

- 本操作手册的适用对象：

Who is this manual for:

设备日常操作员

Equipment daily operator

设备维护人员

Equipment maintenance personnel

设备检修人员

Equipment maintenance personnel

安装调试人员

Installation and commissioning personnel

安全须知 Safety precautions

本手册内含有**警告**、**小心**等字样。为避免严重损伤和（或）可能导致设备损坏操作，请注意并仔细阅读下列资料。

This manual contains words such as **warning**, **caution**, etc. To avoid serious injury and/or operation that may result in damage to the equipment, please pay attention to and read the following information carefully.



警告

可能导致严重的人员伤亡/设备损坏的危险或不安全的操作，以及防范要

点。

Warnings

to equipment,

为避免触电或误操作，所有电气工作必须由注册合格电工进行，并遵从工业安全操作规程。

Dangerous or unsafe operations that may result in serious casualties/damage to equipment, and precautions.

To avoid electric shock or misoperation, all electrical work must be performed by a registered and qualified electrician and in accordance with industrial safety operating procedures.

All power supplies must be cut off and locked while the installation is being carried out.



小心

可能导致人员损伤和/或产品、财产损害的危险或不安全操作。

为避免可能的损伤，检查维修前，切断所有电源并上锁。为避免设备损坏，严禁异物进入。

damage to products or property.

Dangerous or unsafe handling that may result in injury to personnel and/or damage to products or property.

If the guardian is not present, do not operate, stop the machine, and perform cleaning, service or repairs. To avoid possible damage, cut off all power supply and lock it before inspecting the service. In order to avoid damage to the equipment, it is strictly forbidden for foreign objects to enter.

操作规范及注意事项

Operational specifications and precautions

- 设备出厂前参数已预设为标准值；如无特殊需要，请勿修改。

The parameters of the equipment have been preset to the standard value



before leaving the factory; Please do not modify unless you have a special need.

- 通电安装前必须要检查是否有接地。

It is necessary to check whether there is grounding before powering up the installation.

- 更换或安装搅拌袋前，必须保证断电，防范意外漏电风险。

Before replacing or installing the mixing bag, it is necessary to ensure that the power is cut off to prevent the risk of accidental leakage.

- 搅拌袋安装时，搅拌桨的位置必须严格对应磁力电机；拆除搅拌袋时请勿暴力拉扯，避免漏液风险，以及可能导致的磁力电机损坏。

When the stirring bag is installed, the position of the stirring paddle must strictly correspond to the magnetic motor; Do not pull violently when removing the mixing bag to avoid the risk of leakage and possible damage to the magnetic motor.



1. 目的 Purpose

本操作手册包含了安全和经济有效地使用设备的综合资料，提供了直接或间接操作设备的重要指南，建立配液系统操作规程，提供安全使用设备指导的重要意义。

This manual contains comprehensive information on the safe and cost-effective use of equipment, provides important guidelines for direct or indirect operation of equipment, establishes operating procedures for liquid dispensing systems, and provides guidance on the safe use of equipment.

2. 适用范围 Scope

适用于乐纯所有一次性磁力搅拌配液系统的的设备操作与日常维护。

It is suitable for the operation and routine maintenance of all LePure Single-use Magnetic Mixing Systems.

3. 职责 Duty

生产操作人员按照本规程进行作业。

Production operators operate in accordance with this regulation.

生产经理和 QA 负责监督本规程。

The Production Manager and QA are responsible for overseeing this procedure.

4. 系统概述 Overview

本设备为一次性磁力搅拌配液系统。本系统是上海乐纯生物自主研发的新型搅拌设备，适用于生物制药中的固-液混匀，液-液混匀。本设备经过测试，符合中国药品生产质量管理规范的要求，不锈钢包围式结构设计，便于操作、清洁、维护，或必要时进行的消毒。磁力搅拌系统与一次性搅拌袋配套使用，一次性抛弃式使用袋子，尽可能的降低了污染、交叉污染、混淆和差错的风险。

This device is a LeMagma™ Single-use Magnetic Mixing System. This system is a new type of mixing equipment independently developed by LePure, which is suitable for solid-liquid mixing and liquid-liquid mixing in biopharmaceuticals. This device has been tested to meet the requirements of the Chinese Good Manufacturing Practice and is designed with a stainless steel envelope structure for easy operation, cleaning, maintenance, or disinfection if necessary. The magnetic stirring system is used in conjunction with the single-use mixing bag, which is a single-use disposable bag that minimizes the risk of contamination, cross-contamination, mix-ups and errors.

5. 系统界面登录 Login screen

系统加载完成后自动进入系统登录主界面，输入初始“用户名”和“密码”，按回车键确认，点击登录键进入设备系统。

After the system is loaded, it will automatically enter the main interface of the system login, enter the initial "user name" and "password", press the enter key to confirm, and click the login button to enter the device system.

用户名: LP, 密码: 1

Username: LP, password: 1



6. 操作主界面说明 Main screen

系统登陆成功后，进入主页面

After the system logs in successfully, you will enter the main page

- 左侧是导航区，左侧的导航栏上一共有 7 个导航菜单按钮，分别为“首页”、“应用”、“日志”、“数据”、“用户”、“设置”、“退出用户”

On the left side is the navigation area, which is distributed with button navigation of "Operation Monitoring", "Trend Chart", "Data Report", "Alarm Parameters", "User Management", "Operation and Maintenance", and "System Settings".

- 右侧是功能模块, 分别有搅拌，称重等功能模块的实时参数画面。

On the right is the function module, which has the real-time parameter screen of the stirring, weighing and other function modules.

- 底部是报警信息栏，报警消音按钮、实时打印的选择按钮。

At the bottom is the alarm information bar, the alarm silencer button, and the real-time printing selection button.

6.1 搅拌/AGIT

搅拌功能操作面板，显示当前搅拌信息（设定转速、当前转速、最大转速、运行时间等）；

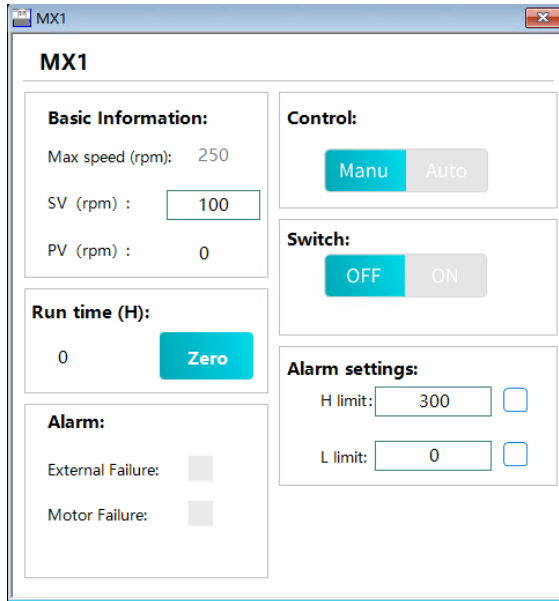
可设定及启用搅拌报警信息；可执行手自动切换，启动停止等操作。

可启停高限报警和低限报警功能。

Mixing function operation panel, displaying current mixing information (set speed, current speed, maximum speed, running time, etc.);

Can set and enable mixing alarm information; Can perform manual automatic switching, start stop and other operations.

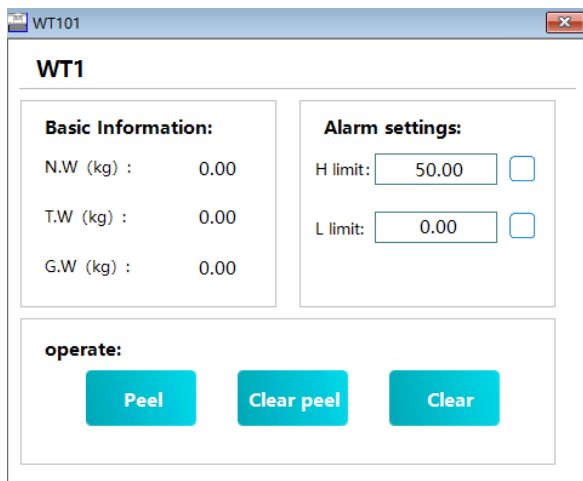
Can start and stop high limit alarm and low limit alarm functions.



6.2 称重系统/ Weighing

称重功能操作面板，显示当前称重信息（净重、皮重、总重）；可设定及启用重量报警信息；可执行去皮、清皮、清零等操作。

The weighing function operation panel displays the current weighing information (net weight, tare weight, total weight); Weight alarm information can be set and enabled; Can perform operations such as peeling, clearing, and zeroing



称重操作:可以进行“清零”、“去皮”和“清皮”操作。 点击“清零”，显示屏上所有重量值归零。 放入料液容器，点击“去皮”，显示屏上净重归零，皮重就是空容器的重量。 放入料液，净重值为料液重量。 在净重模式下，无法清零。

Weighing operation: "Zero", "Tare" and "Reset Tare" operations. Click "Zero" to zero all weight values on the screen. Put the material liquid into container and click "Tare". The net weight on the screen is zero. The tare weight is the weight of the vacuum. Put the material liquid, the net weight is the weight of the material

liquid. In the net weight mode, it cannot be cleared.

注：①重量模块中显示的重量值，总重=净重+皮重。

The total weight = net weight + tare weight.

②去皮操作可撤销，清零操作不可撤销。

The tare operation can be revoked, and the clearance operation is irrevocable.

6.3 pH

连接 pH 传感器接头，准备对应的 pH 缓冲液，拔掉 pH 电极螺帽，插入缓冲液，先进行电 pH 校准，校准成功后，将电导率电极插入需要测量的溶液，自动读取电导值并在 HMI 上显示。其中换缓冲液过程中需要用蒸馏水冲洗干净电极并把水擦拭干净。

Connect the pH sensor connector, prepare the corresponding pH buffer, unplug the pH electrode nut, insert the buffer, first perform electrical pH calibration, after successful calibration, insert the conductivity electrode into the solution to be measured, and automatically read the conductivity value and display it on the HMI. In the process of changing the buffer, it is necessary to rinse the electrode with distilled water and wipe the water clean.

6.4 急停功能/Emergency Stop

急停功能是搅拌系统的一项紧急停止安全保护措施，用于在紧急情况下立即停止搅拌器的转动，以确保人员和设备的安全。操作人员在遇到紧急情况（如发生火灾、设备故障等）时，可以迅速使用急停功能将搅拌器停止运行。

The emergency stop function is an emergency stop safety protection measure for the mixing system. It is used to immediately stop the rotation of the mixer in an emergency to ensure the safety of personnel and equipment. When operators encounter emergencies (such as fire, equipment failure, etc.), they can quickly use the emergency stop function to stop the mixer.

1) 急停按钮位置:

Emergency stop button position:

急停按钮位于搅拌系统的控制柜侧面面板上，通常是一个红色的按钮，明显标识为“急停”或“Emergency Stop”。

The emergency stop button is located on the side panel of the control cabinet of the mixing system. It is usually a red button clearly marked as "Emergency Stop".

2) 急停按钮使用方法:

How to use the emergency stop button:

① 检查确认紧急情况并确保使用急停功能是必要的。

Check to confirm the emergency situation and make sure the emergency stop function is used.

② 确保附近无人或人员已远离搅拌器，以免发生伤害。

Make sure no one is nearby or that people are well away from the mixer to avoid

injury.

- ③ 迅速按下控制面板上的红色急停按钮，确保按钮完全按下。

Quickly press the red emergency stop button on the control panel, making sure the button is fully depressed.

- ④ 急停按钮完全按下后，搅拌器将立即停止转动，系统其他功能将被安全停止。

After the emergency stop button is fully pressed, the mixer will immediately stop rotating and other functions of the system will be safely stopped.

3) 急停后的操作

Operation after emergency stop

- ① 紧急情况解除后，必须重新复位急停按钮，以便搅拌器恢复正常运行。

After the emergency stop is resolved, the emergency stop button must be reset so that the mixer can resume normal operation.

- ② 确保重新复位急停按钮之前，没有其他危险的情况存在。

Make sure there are no other dangerous situations before resetting the emergency stop button.

- ③ 当确认安全后，轻按急停按钮使之弹回到原位。

When safety is confirmed, lightly press the emergency stop button to pop it back to its original position.

- ④ 确保搅拌器的电源已打开，并进行必要的系统检查和维护，确保其正常运行。

Make sure the mixer is powered on and perform any necessary system inspections and maintenance to ensure it is operating properly.



注意事项

- ① 急停功能只适用于紧急情况，不应被用作正常停止搅拌器运行的手段。

The emergency stop function is only suitable for emergency situations and should not be used as a means to normally stop the operation of the mixer.

- ② 操作人员应熟悉急停功能的位置和使用方法，并经常进行演练，以保证在紧急情况下能够迅速使用急停功能。

Operators should be familiar with the location and use of the emergency stop function, and conduct frequent drills to ensure that the emergency stop function can be used quickly in an emergency.

- ② 搅拌系统的急停功能应定期检查和维护，确保其可靠性和有效性。

The emergency stop function of the mixing system should be inspected and maintained regularly to ensure its reliability and effectiveness.

6.5 趋势图/Trend

趋势图是一种用于实时监测和记录搅拌系统工作状况和参数变化的可视化工具。通过绘制相关参数的时

间变化曲线，可以帮助操作人员了解搅拌系统的运行情况，追踪过去的操作记录和趋势，以及预测将来的系统运行状态。

Trend chart is a visual tool used to monitor and record the working status and parameter changes of the mixing system in real time. By drawing the time change curve of relevant parameters, it can help operators understand the operation of the mixing system, track past operation records and trends, and predict future system operation status.

趋势图的显示参数: 在搅拌系统的趋势图中，常见的显示参数包括但不限于: 搅拌、称重、温度、pH、电导的趋势图。

Display parameters of the trend chart: In the trend chart of the mixing system, common display parameters include but are not limited to: trend charts of stirring, weighing, temperature, pH, and conductivity.

搅拌: 显示搅拌系统中的搅拌转速变化曲线。

Stirring: Display the stirring speed change trend in the stirring system

重量: 显示搅拌系统中的称重系统变化曲线。

Weight: Displays the change trend of the weighing system in the mixing system.

温度: 显示搅拌系统中的温度变化曲线，包括搅拌袋内部和设备控温 TCU 的温度。

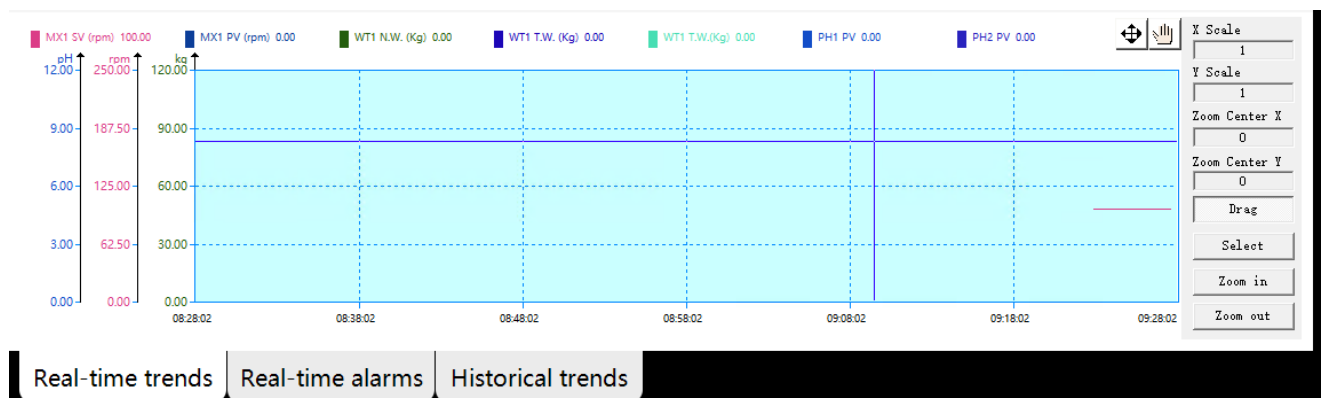
Temperature: Displays the temperature change trend in the mixing system, including the temperature inside the mixing bag and the equipment temperature control TCU.

pH 值: 显示搅拌系统中的酸碱度的变化曲线。

pH value: Displays the pH change trend in the stirring system.

电导率: 显示搅拌系统中的电导值的变化曲线。

Conductivity: Displays the change trend of the conductivity value in the stirring system



可根据设定开始时间和结束时间查询数据历史趋势图。

You can query the historical trend chart of data based on the set start time and end time.

7. 数据报表/Data report

数据报表用于汇总和呈现搅拌系统的关键参数和运行数据。通过数据报表，操作人员可以方便地查看和分析系统的工作情况，并对系统的运行进行监控和调整。

Data report is a way of recording and displaying data in the operation manual. It is used to summarize and present the key parameters and operating data of the mixing system.

Through data reports, operators can easily view and analyze the working status of the system, and monitor and adjust the operation of the system.

点击“日志”按钮，进入对应界面。在此界面中，可按开始时间和结束时间查询审计追踪和历史报警。

Click the "Logs" button to enter the corresponding interface. On this page, you can query audit trails and historical alerts by start time and end time.

7.1 审计追踪日志:所有用户对设备的操作会进行系统记录。

Operation records: All user operations on the device will be recorded by the system.

Batch No. 2024101501

2024/11/19 09:30:16 lp Administrator

Home Operate Log Data User Set up

Log out user

Audit Trail

Start Time	2024/11/19 09:25:10
End Time	2024/11/19 09:29:10
View Time	00Day00Hour04Min00sec
Equipment ID	L202407003-BM-26

ID	Date Time	Log Description	User	User Comment
1	2024/11/19 09:25:44	Login System: security check passed !	lp	
2	2024/11/19 09:29:01	View batch report, batch NO.: 2024101501	lp	

Oper. SIG.: SIG. time: Veri. SIG.: SIG. time:

Start time: 2024年11月19日 9:25:10

End time: 2024年11月19日 9:29:10

Data source selection: ☒ Active DB ☐ Archive DB

Confirm Print

Audit trail Historical alarm

选择开始时间和结束时间，点击“确认”按钮会显示选取时间内的报表，点击“打印”按钮会把审计追踪报表以 PDF 格式打印，保存在目录：D:\HistoryData\PDF\Audit。

7.2 报警数据:显示所有的报警信息。报警数据:显示所有的报警信息。

Alarm data: Display all alarm information. Alarm data: Display all alarm information.

Batch No: 2024101501

2024/11/19 09:31:48 lp Administrator

Home Operate Log Data User Set up

Alarm Record

Start Time	2024/11/19 09:31:18
End Time	2024/11/19 09:31:18
View Time	00Day00Hour00Min00Sec
Equipment ID	[Default]

ID	Start Time	End Time	Alarm State	Alarm Message
1	[ALM_FIRST_TIME]	[ALM_END_TIME]	[ALM_STATUS]	[ALM_MSG]

Oper. SIG.: SIG. time: Veri. SIG.: SIG. time:

Start time: 2024年11月19日 9:31:18

End time: 2024年11月19日 9:31:18

Data source selection:

☒ Active DB

☐ Archive DB

Confirm

Print

Log out user

Audit trail Historical alarm

选择开始时间和结束时间，点击“确认”按钮会显示选取时间内的报表，点击“打印”按钮会把报警报表以 PDF 格式打印，保存在目录：D:\HistoryData\PDF\Alarm。

7.3 批次: 可显示各个批次及相关信息。

Batch: Each batch and related information can be displayed.

点击“数据”按钮，进入对应界面。在“批报表”界面中，可按批号查询批次报告，包含“数据”、“趋势”、“报警”、“审计追踪”内容。点击“打印”按钮，即可打印此批次报表，报表格式为 PDF 形式。

Click the "Data" button to enter the corresponding interface. In the Batch Report page, you can query batch reports by batch number, including Data, Trend, Alarm, and Audit Trail. Click the "Print"

Batch Report

BatchNO	2024101501
Equipment ID	L202407003-BM-31
Operator	LP;lp
Start Time	2024/11/14 18:17:12
End Time	2024/11/19 9:32:16
Production Time	04Day15Hour15Min04Sec

Select batch No.: 2024101501

Time interval: 1 x 20 Sec

Data source selection:

☒ Active DB

☐ Archive DB

Show selection:

☒ Data

☒ Trend

☒ Alarm

☒ Audit

Confirm

Print

Batch report Historical data Calibration data DB management File management

button to print this batch of reports in PDF format.

在“历史数据”界面中，可按开始时间和结束时间查询，包含“数据”、“趋势”内容。

On the Historical Data page, you can query data and trends by start time and end time.

The screenshot displays the LEPURE software interface for historical data. The top header shows the batch number 'Batch No2024101501', the date '2024/11/19', the time '09:34:05', and the user 'lp Administrator'. The left sidebar contains navigation options: Home, Operate, Log, Data (selected), User, and Set up. The main content area is titled 'Data Record' and contains a table with the following data:

Start Time	End Time	View Time	Equipment ID
2024/11/18 09:33:31	2024/11/19 09:33:31	01Day00Hour00Min00Sec	L202407003-BM-26

On the right side, there are query filters: 'Start time' (2024年11月18日, 9:33:31), 'End time' (2024年11月19日, 9:33:31), 'Time interval' (6 x 20 Sec), 'Data source selection' (Active DB selected, Archive DB), and 'Show selection' (Data and Trend selected). At the bottom right are 'Confirm' and 'Print' buttons. The bottom navigation bar includes 'Batch report', 'Historical data' (active), 'Calibration data', 'DB management', and 'File management'. A 'Log out user' button is located at the bottom left of the sidebar.

在“校准数据”界面中，可按校验编号查询，包含“称重”等校准报告。

In the "Calibration Data" interface, you can query by calibration number, including calibration reports such as "Weighing".

LEPURE

Batch No2024101501

2024/11/19

09:36:26

lp Administrator

Home

Operate

Log

Data

User

Set up

Log out user

WT Calibration Record

ID	WT_20241117171048
Equipment ID	L202407003-BM-26
Operator	lp

Calibration To Zero Time	Rated Weight (kg)	Calibration Range Time	N. V. (kg)	T. V. (kg)	G. V. (kg)
2024/11/17 17:10:50	5.00	2024/11/17 17:11:37	23.75	0.00	23.75

Oper. SIG.:

SIG. time:

Veri. SIG.:

SIG. time:

Select calibration type:

WT

Select calibration No.:

WT_20241117171048

Data source selection:

Active DB

Archive DB

Confirm

Print

Batch report

Historical data

Calibration data

DB management

File management

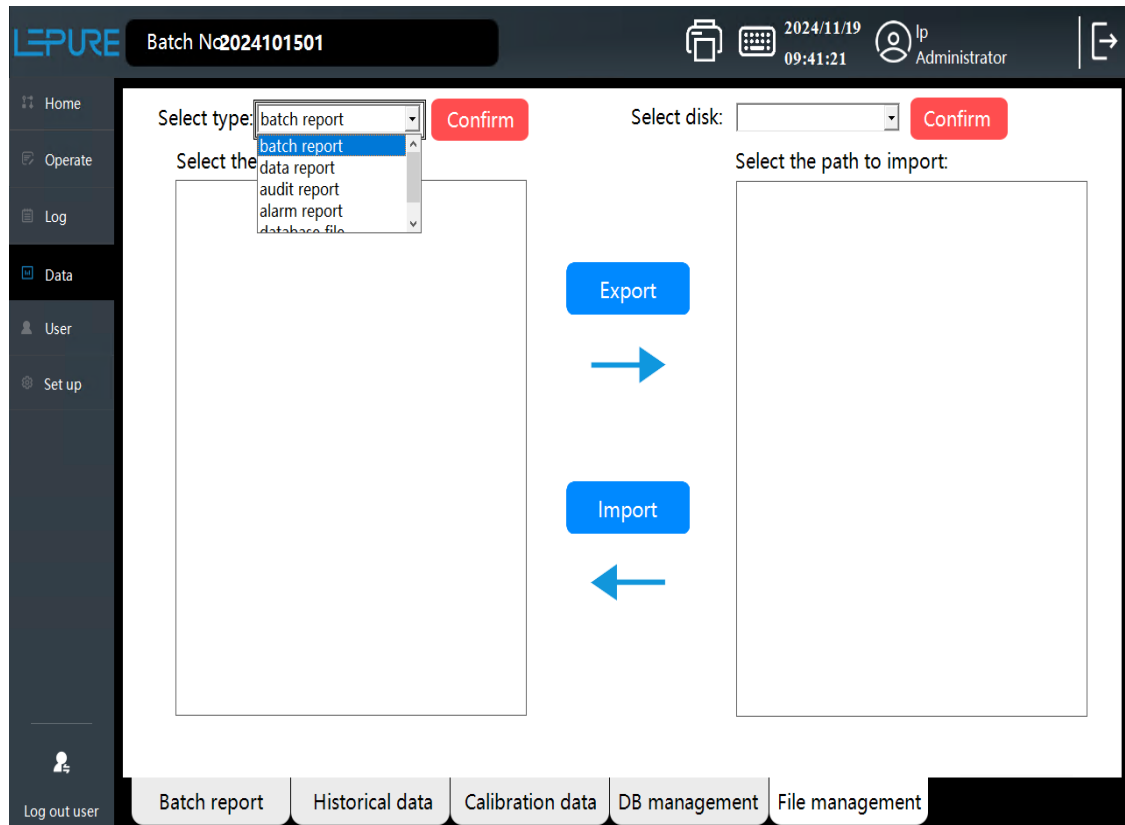
点击“数据库管理”按钮，进入对应界面。在此界面中，可点击“备份数据”对运行数据库进行备份；可以点击“链接归档数据”对已备份的数据进行链接。

Click the "Database Management" button to enter the corresponding interface. In this interface, you can click "Back up data" to back up the running database; You can click Link Archive Data to link the backed up data.

The screenshot displays the LEPURE system interface. At the top, the LEPURE logo is on the left, followed by 'Batch No 2024101501'. On the right, there are icons for a printer, a calendar showing '2024/11/19 09:37:44', a user profile icon labeled 'lp Administrator', and a refresh icon. A dark sidebar on the left contains navigation links: Home, Operate, Log, Data (highlighted), User, and Set up. At the bottom of the sidebar is a 'Log out user' button. The main content area is divided into several sections. 'Hard disk information' shows 'Disk C capacity (GB): 99', 'Disk D capacity (GB): 377', 'Free disk C capacity(GB): 67', and 'Free disk D capacity(GB): 373'. 'Database information' shows 'Database type: SQL Server', 'Active DB name: LPDS', and 'Active DB size (MB): 11'. Below this is a 'Database backup file' section with a table header: 'File name', 'Creation time', and 'File size(MB)'. The table body is empty. To the right of the table is a 'Database operations' section with two blue buttons: 'Backup DB' and 'Restore DB'. At the bottom of the interface is a navigation bar with buttons: 'Batch report', 'Historical data', 'Calibration data', 'DB management', and 'File management'.

点击“文件管理”按钮，进入对应界面。在此界面中，可选择导出文件的种类，报表、数据库等，把选择的文件导出到 U 盘目录中。也可以选择 U 盘中的文件，导入到系统对应的文件夹里。

Click the "File Management" button to enter the corresponding interface. In this interface, you can select the type of file to be exported, such as report, database, etc., and export the selected file to the USB flash drive directory. You can also select the files in the USB flash drive and import them to the corresponding folder of the system.



10.6 备份与恢复：

对报警数据，操作记录，生产数据进行备份,数据备份自动备份到D:\BackupDB\DataRecord 文件夹。

Alarm data, operation records, and production data are backed up, and the data backup is automatically backed up to the D:\BackupDB\DataRecord folder.

本系统所有数据均储存在本地 PC 中。PC 硬盘容量足以保存两年以上的数据，可将数据通过以太网存储至网络服务器。

历史数据报表可以选择时间间隔（最小间隔 10 秒）进行报表打印，格式为 PDF 文档，

存储在：/local disk D:\HistoryData\PDF\Data

校准报表可以按校验编号选择打印成 PDF 文档格式，

存储在：/local disk D:\HistoryData\PDF\Data

批报表可以选择时间间隔（最小间隔 10 秒）进行报表打印，格式为 PDF 文档，

存储在：/local disk D:\HistoryData\PDF\BatchReport

审计追踪日志可按时间查询，打印为 PDF 文档，

存储在：/local disk D:\HistoryData\PDF\Audit

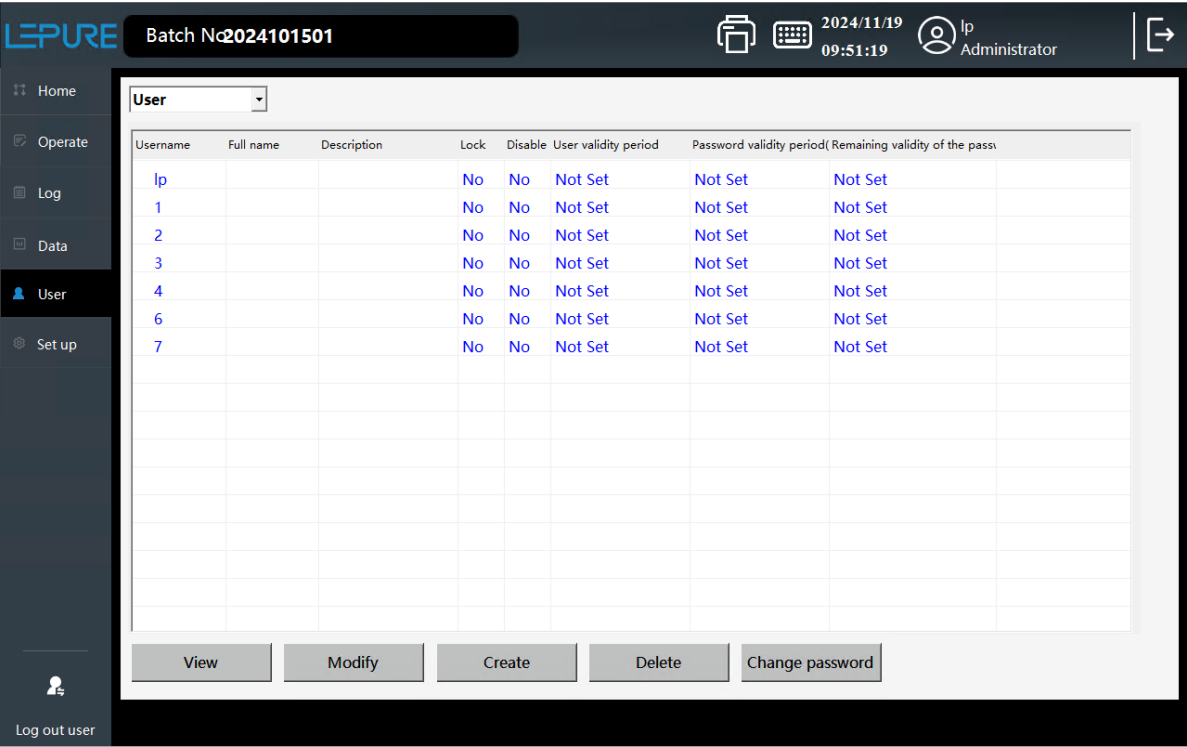
历史报警日志可按时间查询，打印为 PDF 文档，

存储在：/local disk D:\HistoryData\PDF\Alarm

8. 用户权限/User permissions

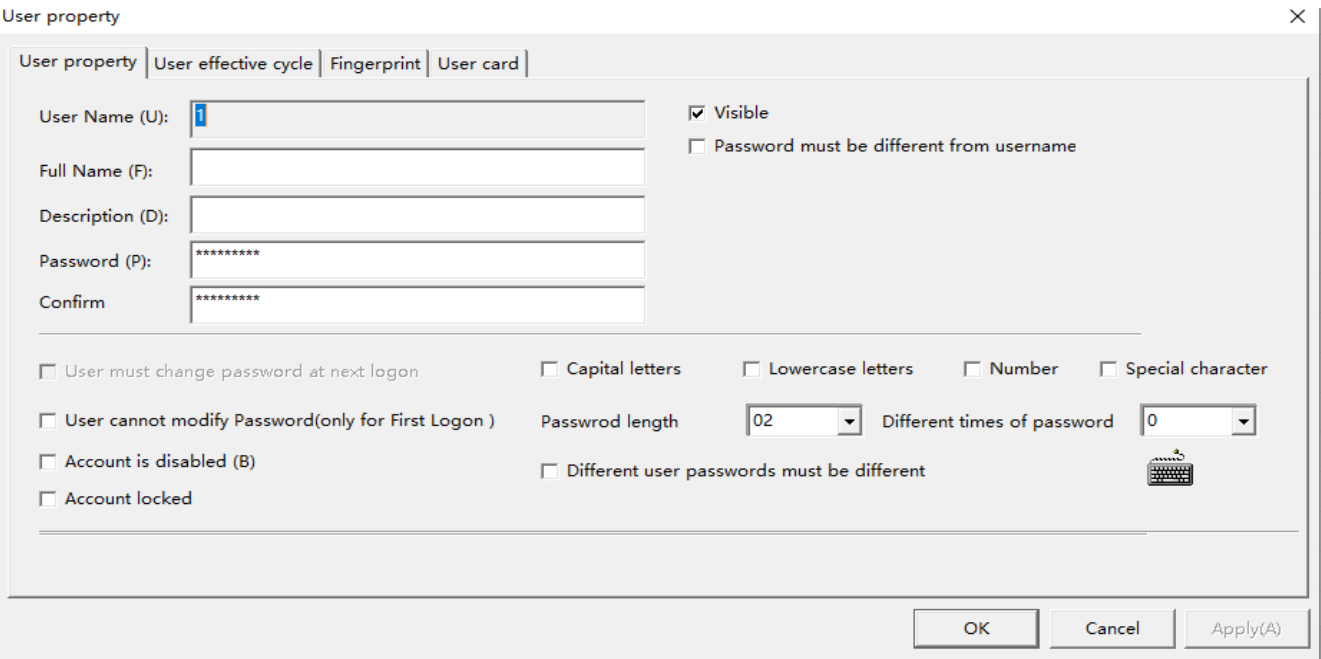
点击相应按钮, 进行登录用户, 注销用户, 和更改密码的操作。 初始账户: LP, 密码: 1。

Click the corresponding button to log in the user, log out the user, and change the password. Initial account:LP, password:1



选择用户后点击“修改”按钮，可以对用户的密码策略进行修改。

After selecting a user, click the "Modify" button to modify the user's password policy.



9. 运行维护设置/Maintenance

9.1 称重模块校准/Weight Calibration

N.W (kg) :	0.00
T.W (kg) :	0.00
G.W (kg) :	0.00

Peel

Clear peel

Clear

Calibrate zero point:

Calibrate zero point

Zero point calibration in progress
●

Zero point calibration successful
●

Enter calibrated weight:

0.00

Calibrated range:

Calibrated range

Range calibration in progress
●

Range calibration successful
●

Save data

第一步，清空罐子，保证罐子无干扰，移走罐子上的线缆和管路。

Step 1, empty the tank, make sure there is no interference with the tank, and remove the cables and tubes from the tank.

第二步，点击执行“零点校准”按钮进行零点校准。显示零点校准成功后，零点校准结束。

Step 2, click the "Zero Point Calibration" button to perform zero point calibration. After the successful zero point calibration is displayed, the zero point calibration is completed.

注：校准零点的时候把罐子清空，校准过程保证罐体无干扰。校准程序为操作维护程序，不需要每次使用前进行校准，定期进行校准维护即可。

Note: When calibrating the zero point, empty the tank to ensure there is no interference with the tank during the calibration process. The calibration procedure is an operation and maintenance procedure. It does not need to be calibrated before each use. Calibration and

maintenance can be performed regularly.

第三步，零点校准成功后，在罐内放入砝码，砝码重量可以自行决定，但不要太轻，至少要有满量程的 25%，在“总重量”中输入砝码的实际重量值。

Step 3: After the zero point calibration is successful, put a weight in the tank. The weight of the weight can be determined by yourself, but it should not be too light, and it must be at least full scale 25% of the weight, enter the actual weight value of the weight in "Total Weight".

第四步：点击“执行校准”按钮进行称重校准。

Step 4: Click the "Perform Calibration" button to perform weighing calibration.

第五步，校准过程结束，检查称重结果，保存称重校准数据，如无错误，称重模块可以使用。

Step 5: When the calibration process ends, check the weighing results and save the weighing calibration data. If there are no errors, the weighing module can be used.

9.2 pH 传感器校准/pH Calibration

第一步：提前准备好标准缓冲液、纯水、无屑纸，进入页面先点击“复位”

Step 1: Prepare standard buffer, pure water, and chip-free paper in advance, and click "Reset" button when entering the page.

第二步：点击“执行第一点”，进行 pH 校准，完成后冲洗电导，换标准溶液执行第二点校准。

Step 2: Click "first point" to execute pH calibration. After completion, rinse the conductivity and change the standard solution to perform the second point calibration.

第三步：校准后保存校准结果

Step 3: Save the calibration results after calibration

The screenshot displays the LEPURE system's 'Set up' menu. The top navigation bar includes the LEPURE logo, 'Batch No 2024101501', a printer icon, a calendar icon showing '2024/11/19 10:00:39', a user profile icon for 'LP Administrator', and an exit icon. The left sidebar lists 'Home', 'Operate', 'Log', 'Data', 'User', 'Set up' (highlighted), and 'Log out user'. The main content area is divided into three sections: 'Basic Information' with fields for Millivolt value (-11.03), Real-time temperature (17.20), Real-time pH (0.00), Usage time (789), and Calibration system (Hamilton), with buttons for 'Factory settings', 'Reset', and 'Confirm'; 'calibration:' with fields for Calibration point 1 (4.01), Calibration point 2 (7.00), Offset (0.00), Slope (0.00), and Standard temperature (0.00), with buttons for 'Save data', 'Confirm', and 'Cancel calibration'; and 'Offline calibration:' with a Calibration value (7.10) and a 'Confirm' button. A red note at the bottom states: 'Note: Please do not exit the window during calibration'. At the bottom of the interface are three tabs: 'WT calibration', 'pH calibration' (selected), and 'Advanced settings'.

10. 系统设置/System Setup

10.1:系统时间设置:点击“系统设置时间”按钮，输入实际时间，回车，点击“设置”按钮，返回。

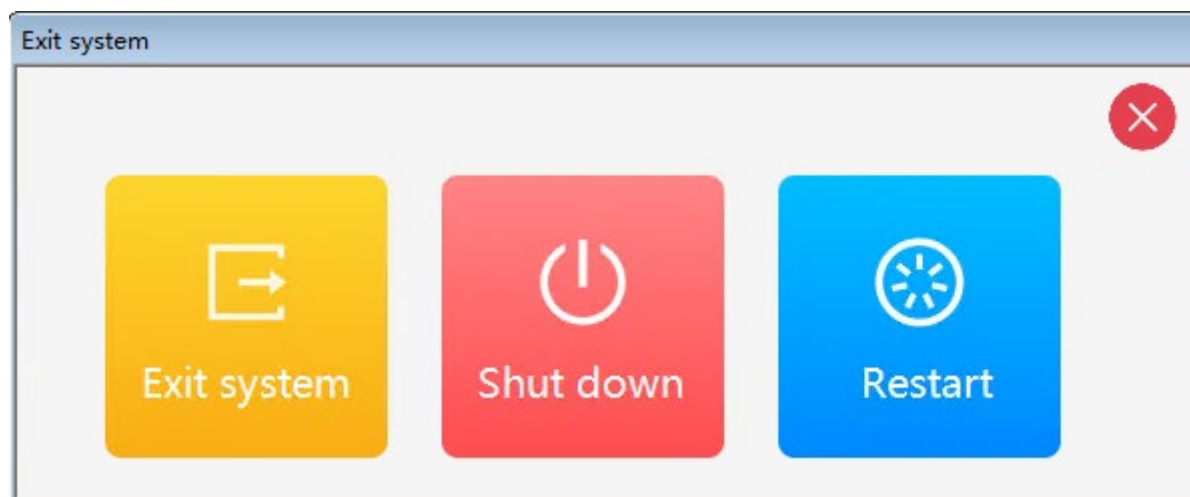
System Time Settings: Click the "System Settings Time" button, enter the actual time, click the "Confirm" button, and return

The screenshot shows the 'System time settings:' dialog. It features input fields for Year (2024), Moon (11), Day (19), hour (10), Min (1), and Sec (29), separated by hyphens and colons. A large red 'Set up' button is positioned to the right of the time fields.

11. 关机/Shut down



点击按钮，弹出退出系统选择框。



点击“退出系统”按钮，退出配液控制系统至 Windows 系统。

Click the "Exit System" button to exit the dispensing control system to Windows.

点击“关机”按钮，退出配液控制系统，关闭 Windows 系统。

Click the "Shut Down" button to exit the dispensing control system and shut down the Windows system.

点击“重启”按钮，退出配液控制系统，重启 Windows 系统。

Click the "Restart" button to exit the dispensing control system and restart the Windows system.

12. 常见故障排除/ Troubleshooting

常见故障及排除方案 Common Faults and Troubleshooting Solutions		
设备无法开机 The device cannot be turned on	未接电源 Not connected to power supply	确认电源连接正确且开关打开 Confirm that the power connection is correct and the switch is turned on
	跳闸保护 Trip protection	将断路器合闸 Close the circuit breaker
系统控制失灵 System control failure	接地不良 Poor grounding	改善设备接地情况 Improve equipment grounding conditions
	受强干扰影响 Affected by strong interference	断电后重启 Restart after power outage
桨叶时转时停 The blade rotates and stops at different times	直接将转速调到过大 Directly adjust the speed to too high	逐步调节转速 Gradually adjust the speed
	转速过大 Excessive rotational speed	调低转速 Reduce the speed
桨叶不转 The propeller blade does not rotate	转速设定值为 0 The speed setting value is 0	设置正确的转速 Set the correct rotational speed
	搅拌带内桨叶摩擦增大 The friction between the blades inside the mixing belt increases	调整软袋位置或更换新的袋子 Adjust the position of the soft bag or replace it with a new bag

13. 开箱及验收/ Open and accept

设备开箱验收过程需要注意以下事项：

Pay attention to the following matters:

1. 检查设备配件及文件。如有遗漏，请尽快联系供货方；

Check the equipment accessories and files. If there is any omissions, please contact the supplier as soon as possible;

2. 检查设备在运输过程中有无外力损伤；

The inspection equipment has external force damage during transportation;

3. 妥善保管好设备所有的技术文件，以便对设备的保养维修提供必要的技术依据；

Properly keep all the technical files of the device so that the necessary technical basis can be provided for the maintenance and maintenance of the equipment;

4. 如装箱单与接收到的设备不符或出现设备损伤的情况，应及时与 LEPURE 公司联系。

For example, if the packing order does not match the receiving equipment or the device damage occurs, contact the Lepure company in time.

（备注：设备一经安装使用，将被视为完整合格产品。）

(Remarks: Once the equipment is installed and used, it will be considered a complete qualified product.)

14. 售后服务/Service

- 1) 基本保修条例 自购买本机十二个月以内，本公司负责售后服务。

The basic warranty regulations are within 12 months of purchasing this machine, and the company is responsible for after-sales service.

如因用户人为原因造成设备故障，由用户承担责任及维修的相关费用。

If the equipment fails due to the user's artificial reasons, the user shall bear the responsibility and the relevant costs of maintenance.

- 2) 保修前提/ Warranty

须提供产品合格证、发票复印件以及设备编号。

Must provide product qualification certificate, invoice copy, and equipment number.

- 3) 排除性说明 自行拆装、改装内部结构的产品，不属于免费保修范围。

Demonstration of products that disassemble and modify internal structures are not the free warranty range.

- 4) 保修期外售后服务说明/ Explanation of after-sales service in the warranty period

保修期以外的产品，由本公司负责售后服务，费用由用户承担。

Products outside the warranty period shall be responsible for after-sales service, and the cost shall be borne by users.

- 5) 备注:以下情况下，以上保修条例不适用:

Remarks: In the following circumstances, the above warranty regulations are not applicable:

- ① 未按本公司使用说明书安装使用或操作不当所引起的故障。

Failure caused by the failure of the company's instructions or improper operation.

- ② 规范以外使用引起的故障。

Failure outside the specification.

- ③ 由于用户连接装置不当引起的故障。

Due to the failure of the user connection device.

- ④ 变更产品或变更结构而引起的故障。

Failure caused by changing products or changing structures.

- ⑤ 用户选用零件不符合规定而引起的故障。

The user's choice of parts do not meet the requirements.

- ⑥ 地震、水灾、火灾、海水及潮水、风灾害、煤气灾害、雷击及其不可抗拒的灾害引起的故障。

Earthquakes, floods, fires, seawater and tide, wind disasters, gas disasters, lightning strikes and irresistible disasters caused by faults.



⑦ 正常使用条件下，轴承、油封等易损件自然磨损、老化等。

Under normal use conditions, the natural wear, aging, etc.

（注：如技术参数或外观设计有变化，恕不另行通知。）

(Note: If technical parameters or appearance design changes, it will not be notified separately.)