

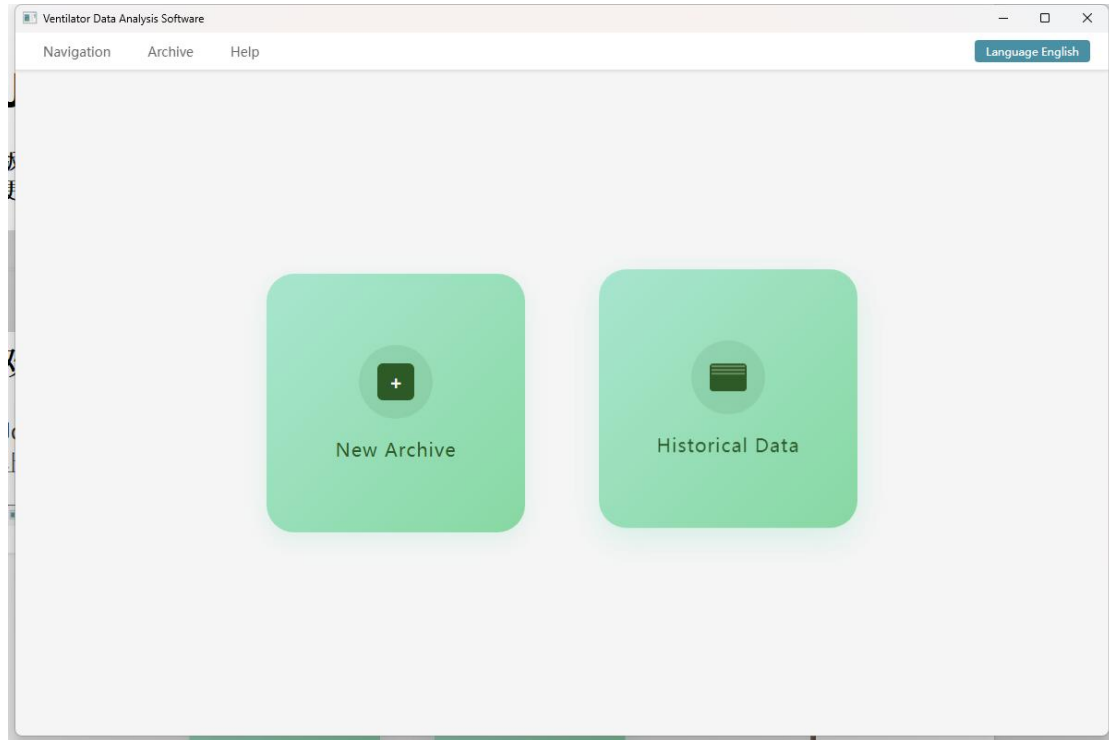
# JoyBreath User Guide

**Version:** 1.0.0

**Updated:** October 16, 2025

Welcome to JoyBreath!

JoyBreath is a software application designed to help you analyze data from your CPAP (Continuous Positive Airway Pressure) therapy. With intuitive charts and reports, it allows you to easily understand the effectiveness of your sleep therapy each night.



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- I. First-Time Setup
- II. Viewing Analysis Results
- III. Exporting Reports
- IV. Daily Use

## I. First-Time Setup

### 1.1 Installing the Software

#### 1.1.1 For Windows Users

- 1) Locate the downloaded installation file (usually in your Downloads folder).
- 2) Double-click the JoyBreath-Windows-x64\_Setup.exe file.



**Screenshot example:** Shows the Windows installer file icon with the filename clearly visible.

- 3) If a security warning appears:
- 4) Click More info.
- 5) Then click Run anyway.
- 6) Follow the installation wizard to complete the setup. You may change the installation location or use the default path.
- 7) It is recommended to check Create desktop shortcut.

#### 1.1.2 For macOS Users

- 1) Double-click the downloaded JoyBreath-MacOS-x64.dmg  
/JoyBreath-MacOS-arm64.dmg file.
- 2) Drag the JoyBreath icon into the Applications folder.
- 3) When opening the app for the first time, right-click the JoyBreath icon and select Open.



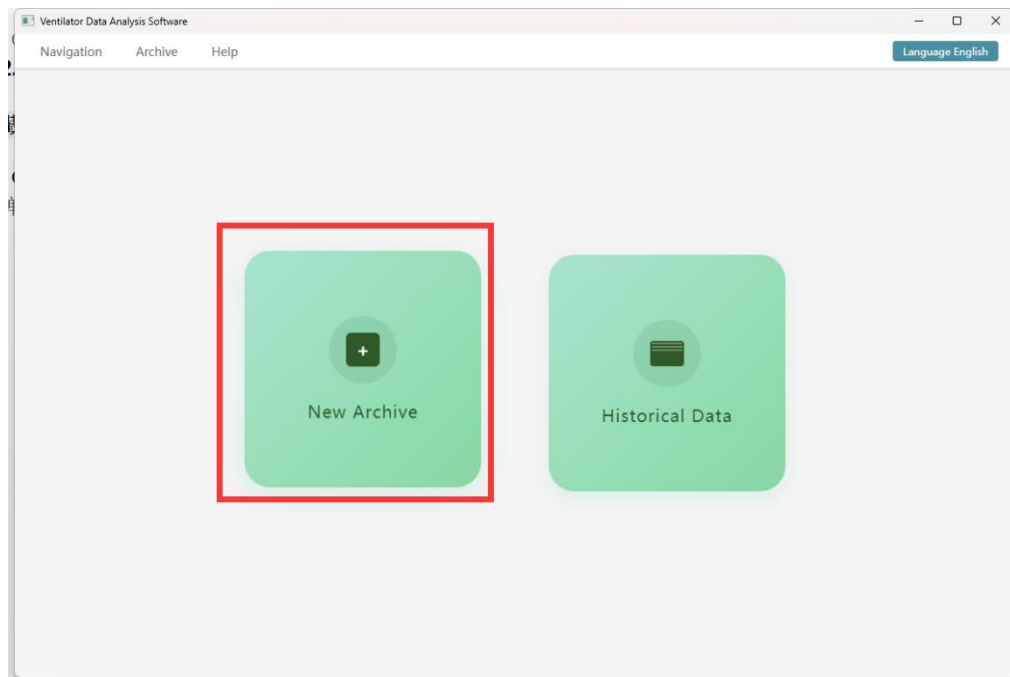
**Screenshot example:** Shows the macOS installer file icon with the filename clearly visible.

### 1.2 Creating a Patient Profile

### 1.2.1 Launching the Software

- 1) Windows: Double-click the JoyBreath icon on your desktop.
- 2) Mac: Find and open JoyBreath from the Launchpad.

### 1.2.2. Click the New Archive button.



**Screenshot example:** Shows the home screen with the “New Archive” button highlighted in a red box.

1) In the pop-up form, enter the following patient information:

The screenshot shows a 'Patient Information' form with a dark green header and a light green background. It has two tabs: 'Basic Information' (selected) and 'Diagnosis Information'. The 'Basic Information' tab contains the following fields:

- Name\***: A text input field with a placeholder 'Name'.
- Gender\***: A dropdown menu with 'Please Select' as the placeholder.
- Birth Date\***: Three dropdown menus for 'Year', 'Month', and 'Day'.
- Age**: A text input field.
- Height(cm)\***: A text input field with a placeholder 'Height(cm)' and a unit 'cm'.
- Weight(kg)\***: A text input field with a placeholder 'Weight(kg)' and a unit 'kg'.
- BMI**: A text input field.
- ID**: A text input field.
- AHI (Pre-treatment)**: A text input field.
- Device Mode**: A text input field.
- Phone**: A text input field.
- Email**: A text input field.
- Address**: A text input field.
- Hospital Name**: A text input field.

An 'Import Data' button is located at the bottom right of the form.

**Screenshot example:** Shows a blank patient information form with all input fields clearly visible.

2) Required fields (marked with an asterisk \*):

- **Name:** Enter the patient's full name.
- **Gender:** Select Male or Female.
- **Date of Birth:** Click the calendar icon to choose a date.
- **Height and Weight:** Enter the patient's height and weight. After both are entered, the software will automatically calculate the BMI value.

3) Optional fields:

- **Basic Information:** (Fields without an asterisk \*).
- **Diagnostic Information.**

## 1.3 Importing Data

### 1.3.1 Preparing SD Card Data

- 1) Remove the SD card from the CPAP device.
- 2) Insert the SD card into your computer's SD card reader.
- 3) Alternatively, copy the files from the SD card to your computer.

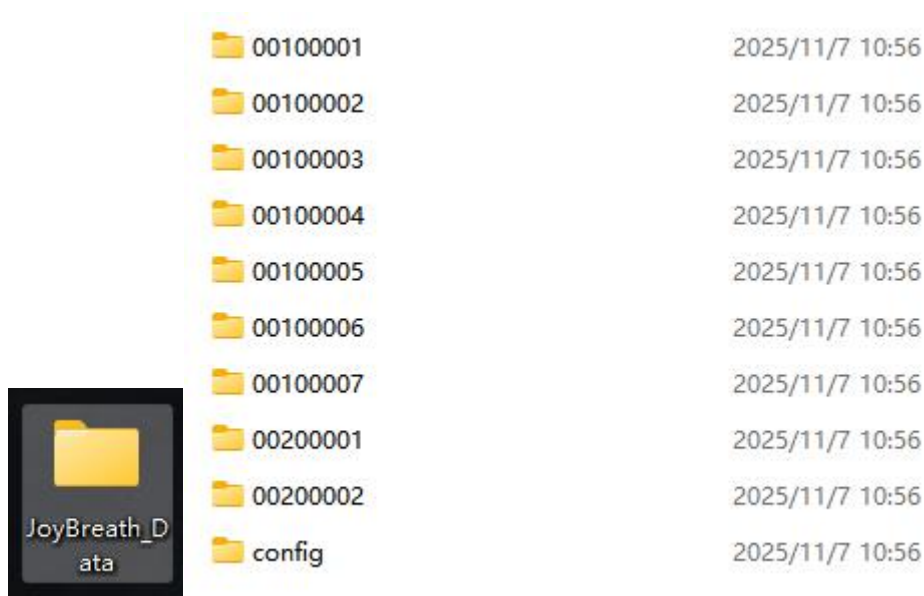
### 1.3.2 Clicking the “Import Data” Button

After entering the patient information:



**Screenshot example:** Shows the “Import Data” button at the bottom of the basic information form.

### 1.3.3 Selecting the Data Folder



**Screenshot example:** Shows the Windows file selection dialog for choosing the data folder.

### 1.3.4 Waiting for the Import to Complete

The software will automatically:

- Scan the folder for data files.

- Read and parse the data.
- Organize the data chronologically.

Once the import is successful, a confirmation message will appear, and the software will automatically navigate to the data analysis page.

## II. Viewing Analysis Results

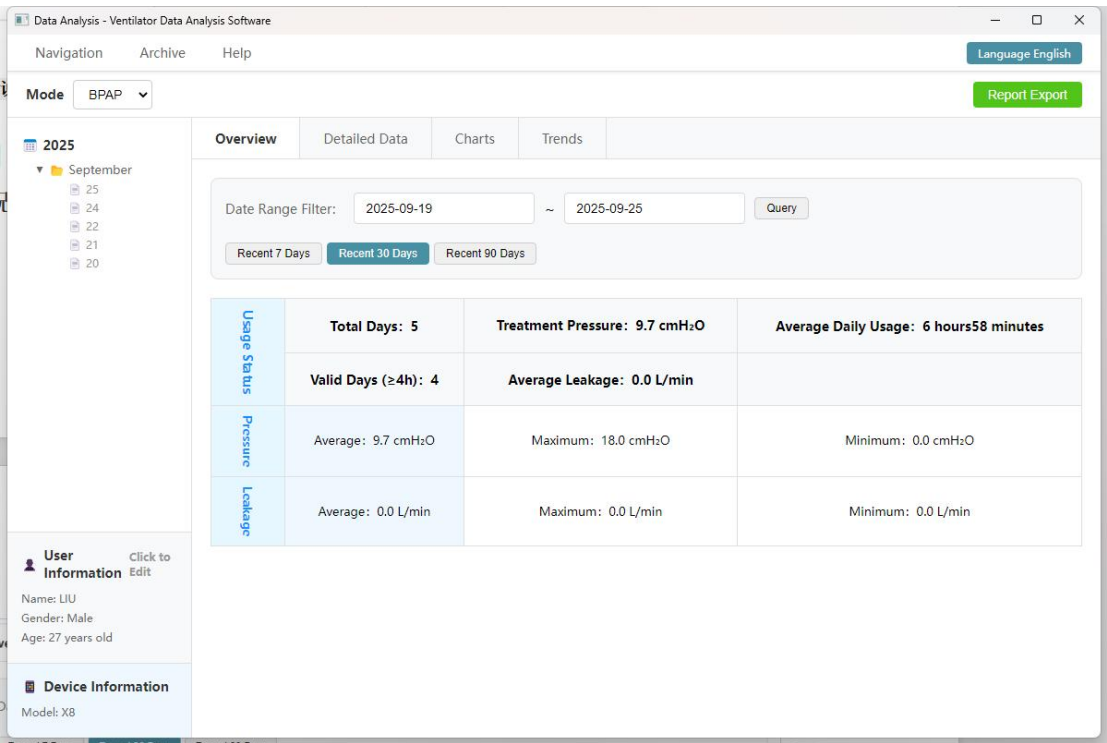
After importing the data, you will see the Data Analysis interface. There are four tabs, each displaying different types of information.



**Screenshot example:** Shows the full data analysis interface with the four tabs highlighted: Overview, Detailed Data, Charts, and Trends.

### 2.1 Overview

The Overview tab shows a summary of therapy over a period of time, allowing you to quickly understand your treatment effectiveness.



**Screenshot example:** Shows the Overview tab content, including the statistics table and usage duration distribution chart.

2.1.1 Usage Days and Duration

- 1) Total number of days the device was used.
- 2) Average daily usage duration.
- 3) Number of days with usage over 4 hours.

2.1.2 Pressure and Leaks

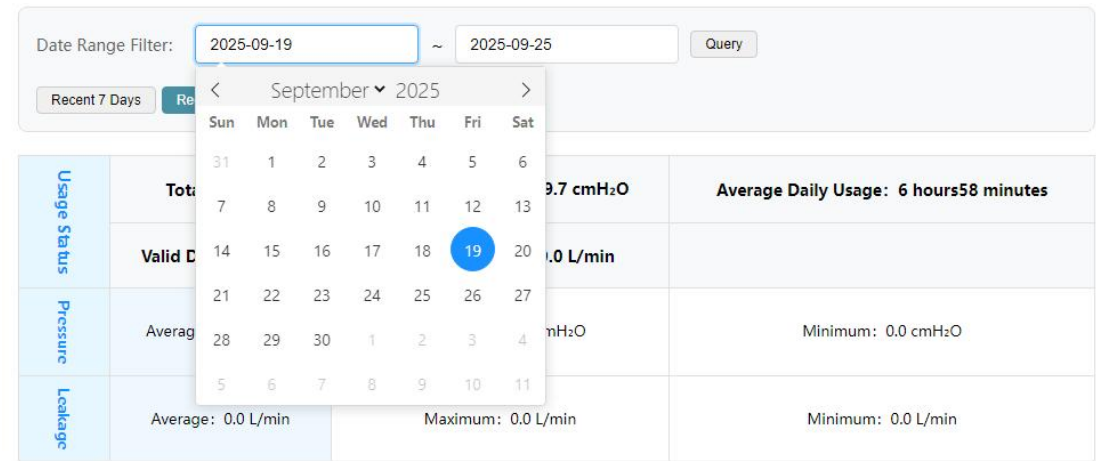
- 1) Average therapy pressure.
- 2) Mask leak information.

2.1.3 Clicking the Time Range Selector in the Upper-right Corner



*Screenshot example: Shows the “Recent 7 Days,” “Recent 30 Days,” and “Recent 90 Days” buttons.*

- 1) View the statistics table to understand overall trends.
- 2) Scroll down to see the usage duration distribution chart.

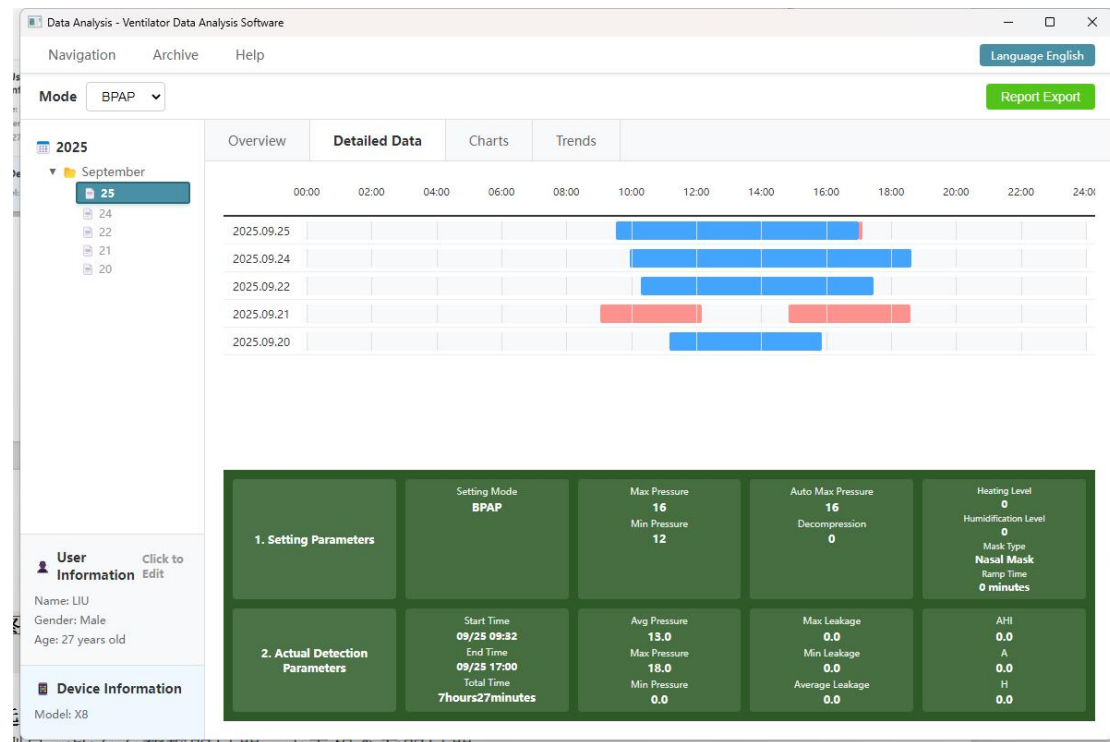


*Screenshot example: Shows the start and end date selection controls.*

2.2 Detailed Data

The Detailed Data tab allows you to view the specific therapy data for each day.

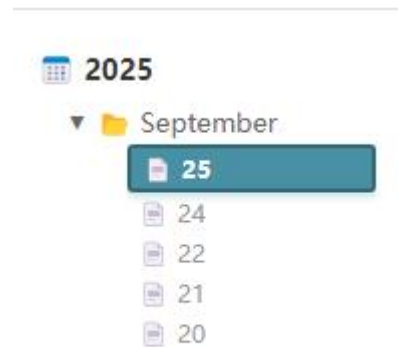




**Screenshot example:** Shows the full Detailed Data tab interface, with the date list on the left and detailed data on the right.

### 2.2.1 Selecting a Date

The left panel displays all dates with available data. Click the date you want to view.



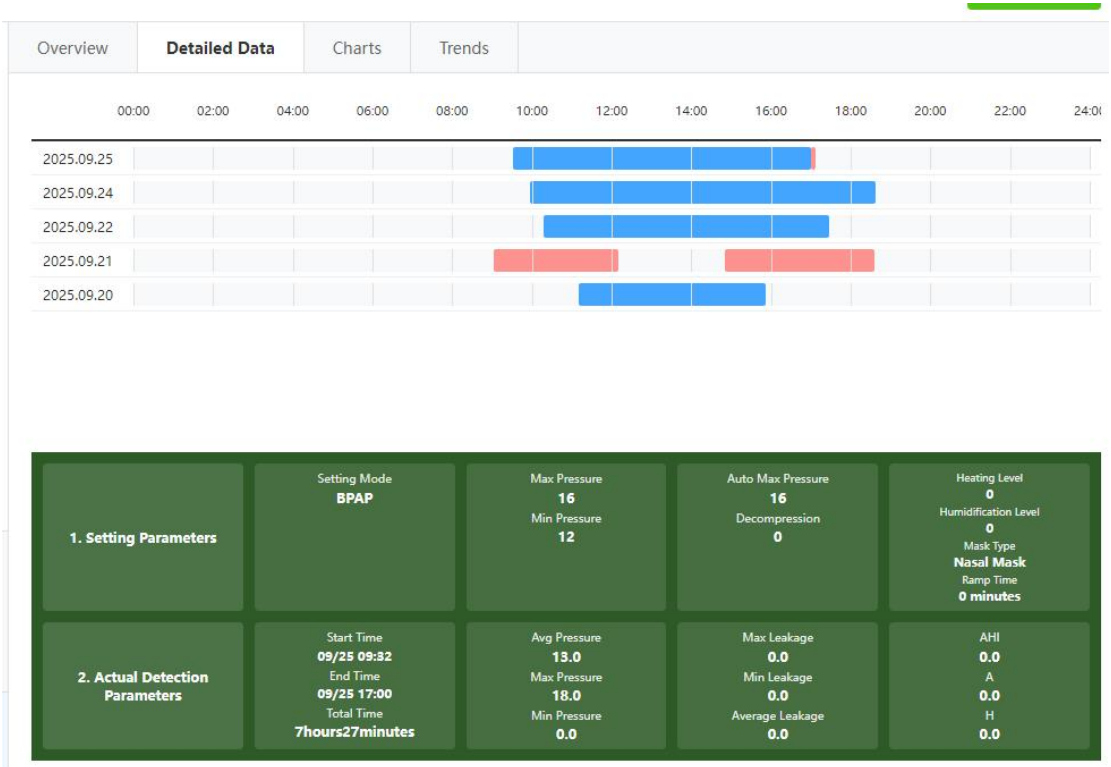
**Screenshot example:** Shows the left-side date list, with the selected date highlighted in blue and the click position labeled with a number.

### 2.2.2 Viewing Daily Data

The right panel displays detailed information for the selected date:

- 1) Usage duration
- 2) Pressure values (average, minimum, maximum)

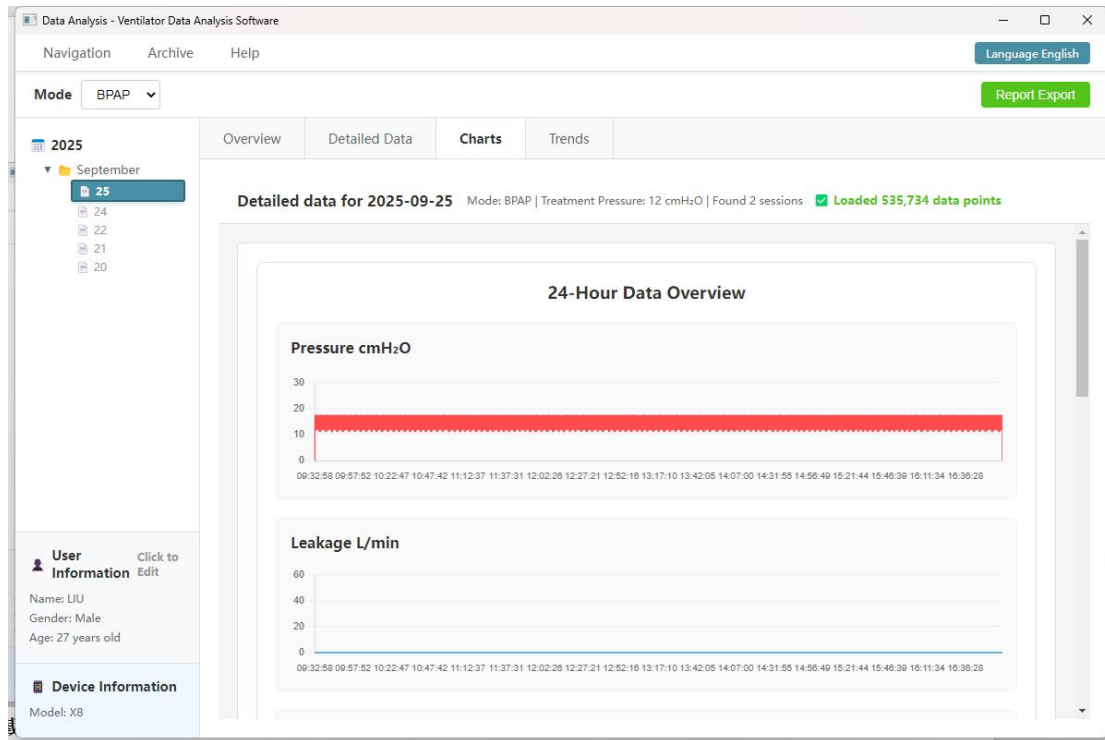
- 3) Mask leak data
- 4) AHI and other parameter indicators



*Screenshot example: Shows the daily detailed data table on the right side.*

2.3 Charts

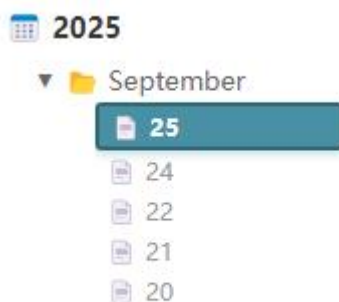
The Charts tab displays real-time therapy data changes in a graphical format.



**Screenshot example:** Shows the Charts tab interface, including date selection, session selection, and the waveform display area.

## How to Use

### 2.3.1 Selecting a Date You Want to View



**Screenshot example:** Shows the date list on the left, with the selected date highlighted in blue and the click position indicated with a number.

### 2.3.2 Viewing Waveform Charts

The software will display the following waveforms:

- 1) Pressure Curve: Changes in therapy pressure over time.
- 2) Flow Curve: Changes in respiratory airflow over time.

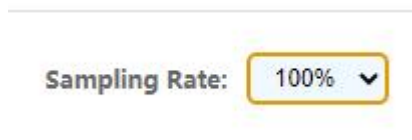
- 3) Leakage Curve: Changes in mask leak volume over time.
- 4) AHI Curve: Timing and frequency of AHI events.



**Screenshot example:** Shows three waveform charts.

### 2.3.3 Adjusting the Display

If the waveform appears as a dense cluster of lines, adjust the Data Density setting to Highest.



**Screenshot example:** Shows the Data Density selector with an arrow pointing to the “Highest” option.

You can also use the mouse scroll wheel to zoom in on the chart.



**Screenshot example:** Shows a zoomed-in, clearer waveform with an icon indicating mouse scroll action.

### 2.3.4 Viewing Specific Values

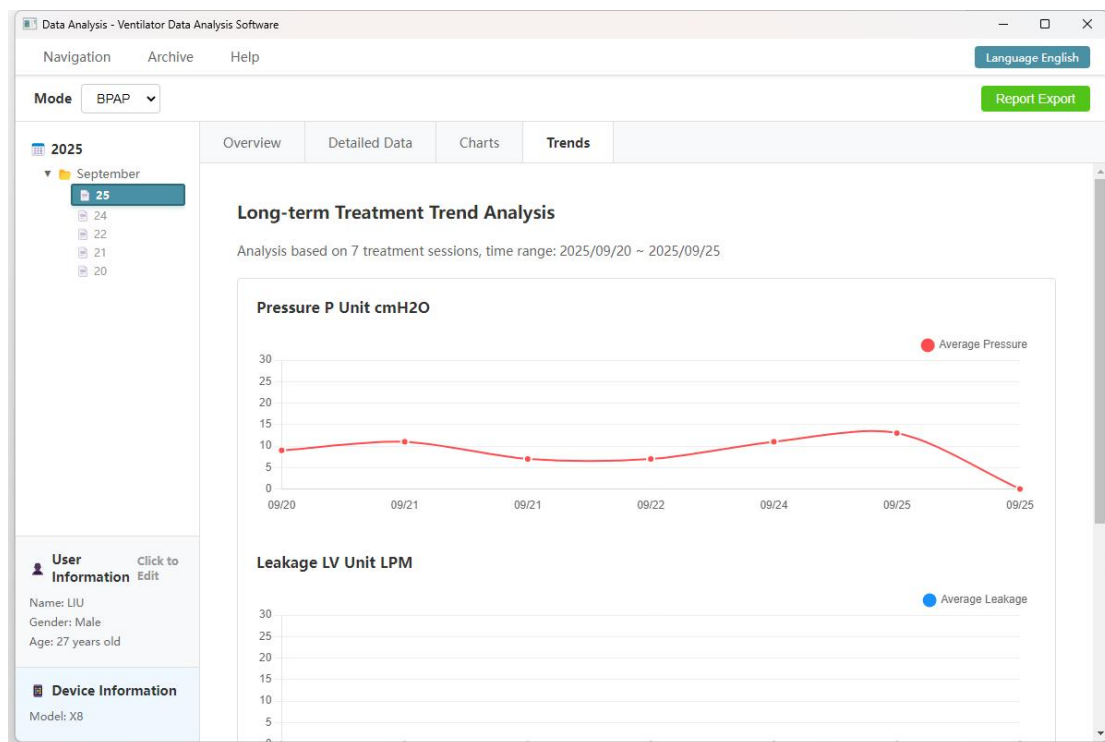
Hover your mouse over the waveform to view detailed values for that specific time point.



**Screenshot example:** Shows a tooltip displaying value information when the cursor hovers over the waveform.

## 2.4 Trends

The Trends tab displays long-term changes in therapy data, helping you understand whether your treatment effectiveness is improving.



**Screenshot example:** Shows the Trends tab with multiple line charts displaying long-term trends for different parameters.

### 2.4.1 Pressure Trend

- 1) Review changes in therapy pressure over time.
- 2) Observe whether the pressure remains stable.

### 2.4.2 Leakage Trend

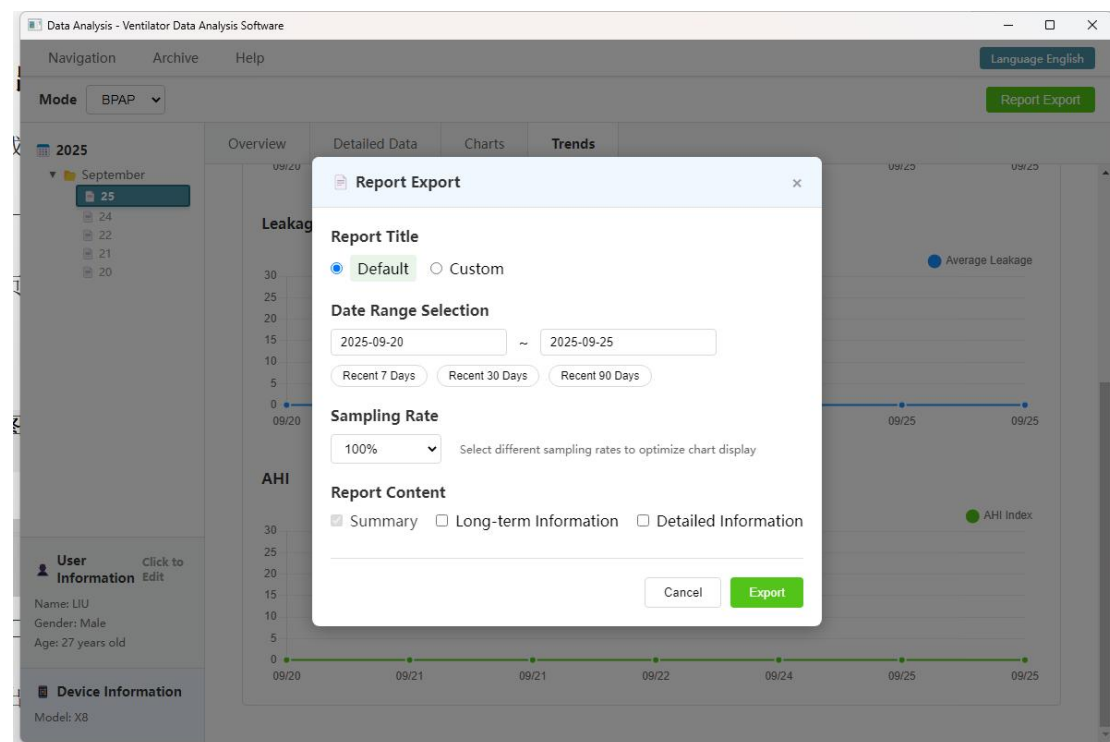
- 1) Excessive leakage indicates that the mask may not be fitted correctly.
- 2) Adjust the mask position or consider changing to a different mask model.

### 2.4.3 AHI Trend

- 1) Check whether the AHI is decreasing over time.

## III. Exporting Reports

After completing your data analysis, you can generate a professional PDF report for easy printing or sharing with your doctor.



**Screenshot example:** Shows the report export interface.

### 3.1 Clicking the “Export Report” Button

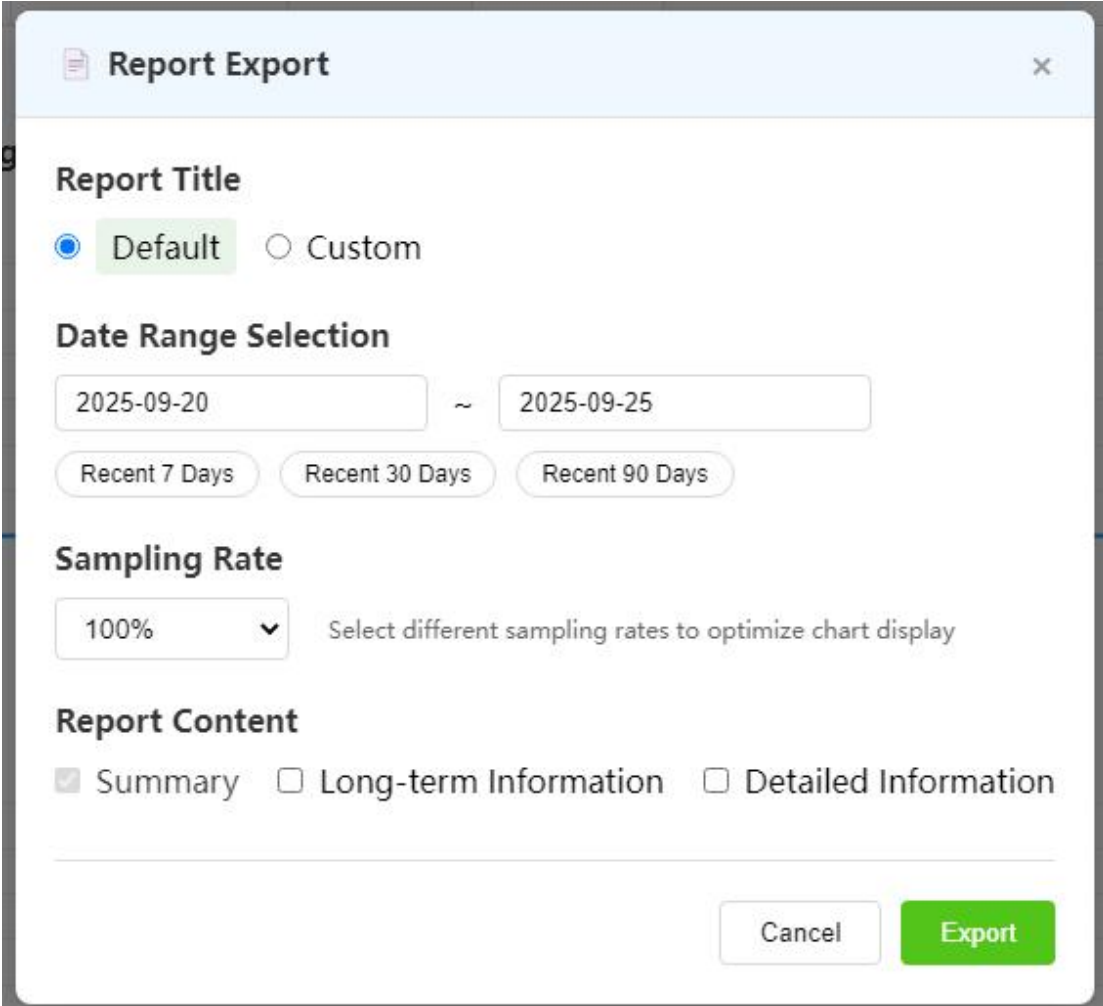
Locate and click the Export Report button at the top of the page.



**Screenshot example:** Shows the toolbar at the top of the Data Analysis page with the “Export Report” button highlighted.

### 3.2 Setting Report Parameters

A report settings dialog box will appear.



The screenshot shows a 'Report Export' dialog box with the following sections and options:

- Report Title:** Two radio buttons are present: 'Default' (selected) and 'Custom'.
- Date Range Selection:** Two date input fields show '2025-09-20' and '2025-09-25' separated by a tilde '~'. Below these are three buttons: 'Recent 7 Days', 'Recent 30 Days', and 'Recent 90 Days'.
- Sampling Rate:** A dropdown menu is set to '100%'. To its right is the text: 'Select different sampling rates to optimize chart display'.
- Report Content:** Three checkboxes are shown: 'Summary' (checked), 'Long-term Information' (unchecked), and 'Detailed Information' (unchecked).
- Buttons:** At the bottom right are 'Cancel' and 'Export' buttons.

**Screenshot example:** Shows the full Report Settings dialog box with all available options clearly visible.

### 3.3 Report Title

Choose whether to use the default title or a custom one:

- 1) Default: Uses the patient's name as the report title.
- 2) Custom: Enter your preferred title manually.

### 3.4 Selecting the Date Range

Choose which dates to include in the report. Click the date fields to select specific start and end dates.

**Screenshot example:** Shows the date range selection area, including start and end date input boxes and quick-select buttons such as “Recent 7 Days,” “Recent 30 Days,” and “Recent 90 Days.”

### 3.5 Selecting Report Content

Check the items you want to include in the report:

#### Report Content

☒ Summary ☐ Long-term Information ☐ Detailed Information

**Screenshot example:** Shows the report content checkbox list, highlighting the options “Summary,” “Long-term Information,” and “Detailed Information.”

- 1) Summary (required, cannot be deselected)
- 2) Long-term Information
- 3) Detailed Information

### 3.6 Viewing the Generated Report



Patient Information	
Name:	LIU
Birth Date:	12/08/1998
Gender:	Male
Age:	27
Height(cm):	175 cm
Weight(kg):	65 kg
BMI:	21.2
ID:	NC
Phone:	10086
Email:	1008610012qq.com
Address:	NC
Disease Category:	Mixed Sleep Apnea
Systolic Blood Pressure:	120 mmHg
Diastolic Blood Pressure:	80 mmHg
AHI (Pre-treatment):	12
AHI (Post-treatment):	0.0

Device Parameters	
Device Model:	X8
Work Mode:	BPAP

**Screenshot example:** Shows the opened report with the first page displayed, including patient information and therapy overview.

The report includes:

- 1) Patient basic information
- 2) Therapy statistics summary
- 3) Detailed data tables
- 4) Waveform charts
- 5) Trend analysis charts

### 3.7 Diagnostic Notes

You can add the doctor's diagnosis opinion in the top section of the report.

Diagnosis Opinion

The doctor's diagnosis opinion: |

Historical Diagnosis Opinions

Search...

2025-10-27 患者张某某  
TEST  
[Click to copy](#)

2025-10-27 患者张某某  
TEST  
[Click to copy](#)

2025-10-27 患者张某某  
TEST  
[Click to copy](#)

Cancel Save

**Screenshot example:** Shows where the doctor can enter the diagnosis opinion and save it within the report.

### 3.8 Exporting the Report as a PDF

1) Click the Export PDF button.



**Screenshot example:** Shows the “Export PDF” button at the top of the report dialog.

2) Click the Export button at the bottom of the dialog.

Ventilator Usage Report - Usage Report\_20251027\_033515.pdf

## Ventilator Usage Report

Sleep Apnea Treatment Report

Generated Date: 2025/10/27 11:35:15

Usage Report

### Patient Information

Name:	LIU	Birth Date:	12/08/1998
Gender:	Male	Age:	27
Height(cm):	175 cm	Weight(kg):	65 kg
BMI:	21.2	ID:	NC
Phone:	10086	Email:	1008610012qq.com
Address:	NC	Disease Category:	Mixed Sleep Apnea
Systolic Blood Pressure:	120 mmHg	Diastolic Blood Pressure:	80 mmHg
AHI (Pre-treatment):	12	AHI (Post-treatment):	10

**Export PDF**

**Screenshot example:** Shows the report export dialog, where you can click the “Export PDF” button.

3) Choose **Export PDF** and click **Print**.

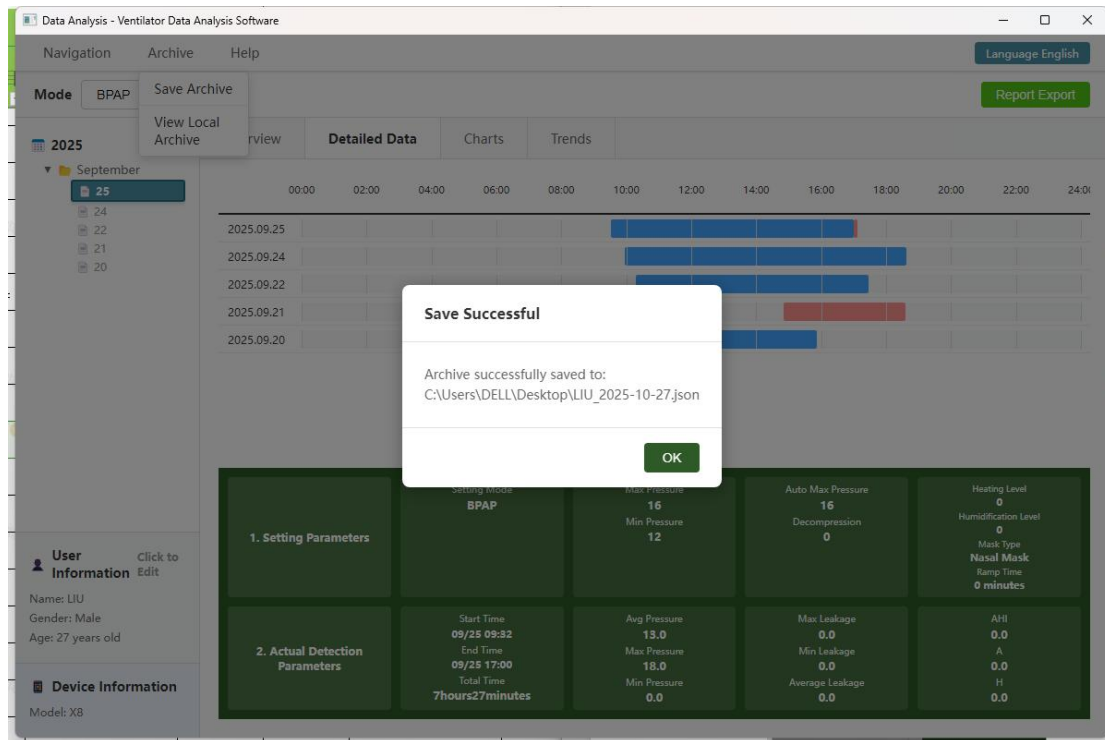
4) Select the save location and file name, then click **Start** and wait for the PDF generation to complete.

## IV. Daily Use

### 4.1 Saving a Profile

After completing data analysis, remember to save the profile so you can reopen it next time to continue.

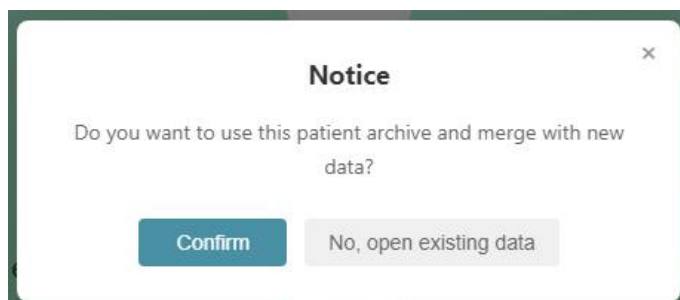
- 1) Click File in the menu bar.
- 2) Select Save Profile.
- 3) Choose the save location.
- 4) Click the Save button. A confirmation message will appear once the profile is saved successfully.



**Screenshot example:** Shows the “Archive successfully saved” confirmation message.

## 4.2 Viewing Saved Profiles

- 1) Click the File menu and select “View Local Profiles”.
- 2) Choose the profile file you previously saved (a .json file) and click “Open”.
- 3) Select how to open the file. The system will ask whether to merge new data.



**Screenshot example:** Shows the data merge confirmation dialog with the two option buttons highlighted.

If there is no new data, click “No, open existing data”.

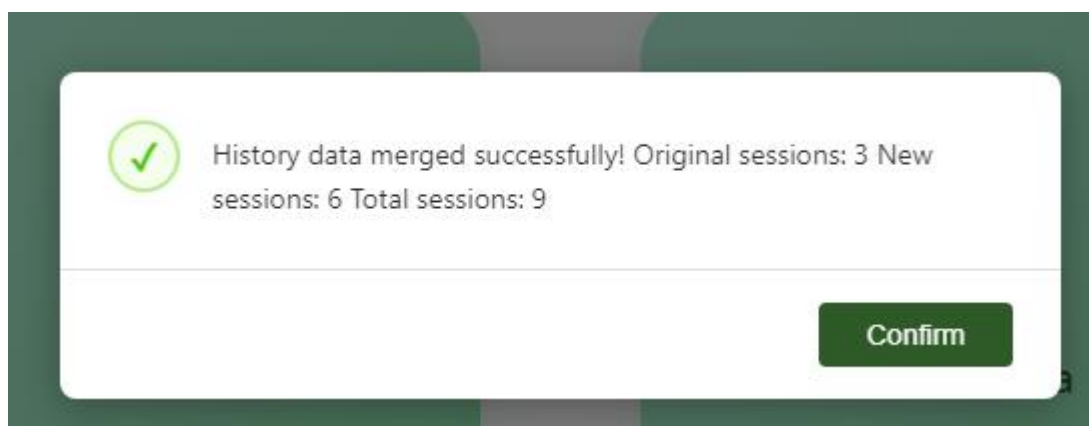
If there is new data to add, click “Confirm” to merge new data, then select the folder containing the new SD card files.

### 4.3 Quickly Opening History Records

- 1) On the home page, click the “History Data” button.
- 2) View the history records list. Each record displays the patient’s name, date, data path, and other information.
- 3) Click the record you want to view and select Open.
- 4) Choose how to open the record, just like when viewing saved profiles, and decide whether to merge new data.

### 4.4 Merging New Data

- 1) If you already have a profile and want to add the most recent therapy data: open the profile (using the same steps as viewing saved profiles or history records) and select “Confirm (Merge New Data)”.
- 2) Choose Merge.
- 3) Select the folder containing the new SD card data files.
- 4) Wait for the data to merge. The software will automatically read the new data, merge it with the existing data, remove duplicates, and sort everything chronologically.
- 5) Review the merge results.

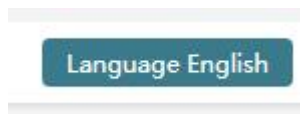


**Screenshot example:** Shows the “Merge Successful” confirmation, displaying the original data volume and the newly added data amount.

- 6) Remember to save the merged data. Click File → Save Profile to save the updated profile.

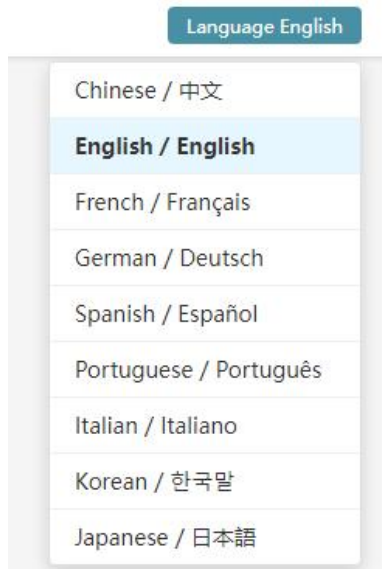
### 4.5 Changing the Language

1) JoyBreath supports **9 languages**, which can be switched at any time.



**Screenshot example:** Shows the top-right corner of the interface, with the “Language” button highlighted in a red circle.

2) Click the button to view the language list.



**Screenshot example:** Shows the language dropdown menu listing all supported languages.

3) Click the desired language. The interface will immediately switch to the selected language. Changing the language does not affect saved data; it only changes the display language.