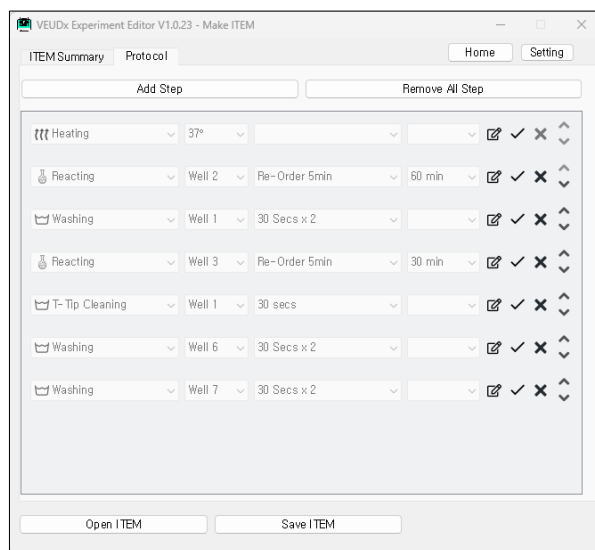
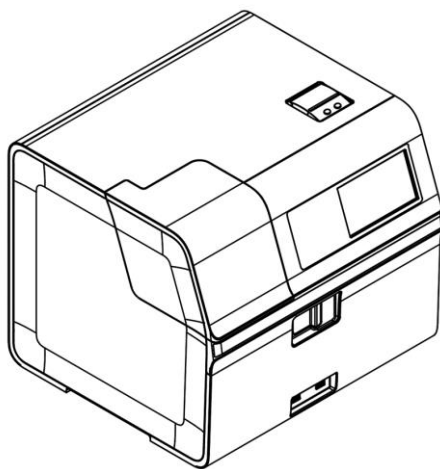


Operation Manual

VEUDx Experiment Editor



UM-VEUDx-1.0

Index

1. Installation.....	3
2. Term definition.....	5
2.1 ITEM	5
2.2 LOT	5
3. Start.....	6
3.1 Start screen.....	6
4. Make ITEM.....	6
4.1 ITEM creation start screen	6
4.2 Edit ITEM Summary	7
4.3 Edit Protocol	8
4.4 Save ITEM and Installation	9
5. Make LOT	10
5.1 Select ITEM file	10
5.2 Make LOT	10
6. Settings.....	13
6.1 Open Settings.....	13
6.2 Unit.....	13
6.3 Development menu.....	13

1. Installation

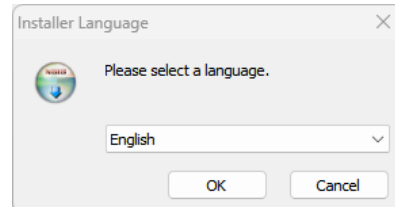
1.1 Installation

1.1.1 Execution

Execute VEUDx Experiment Editor Setup V1.x.x.exe on PC.

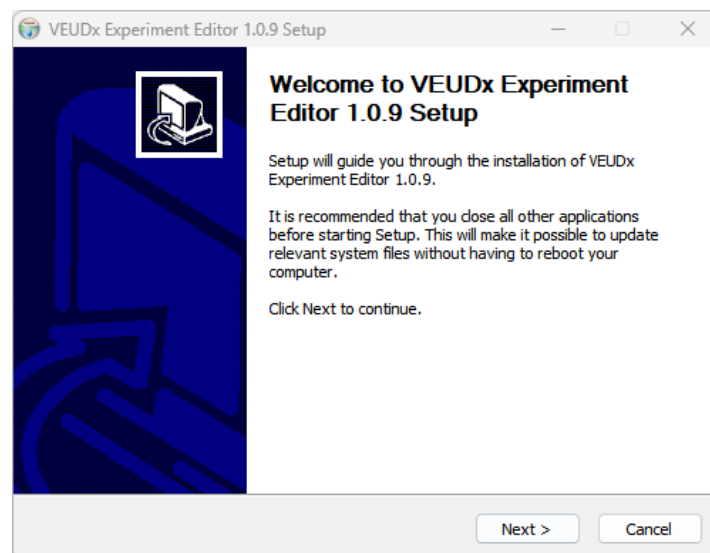
1.1.2 Language selection

Choose the language you want to use



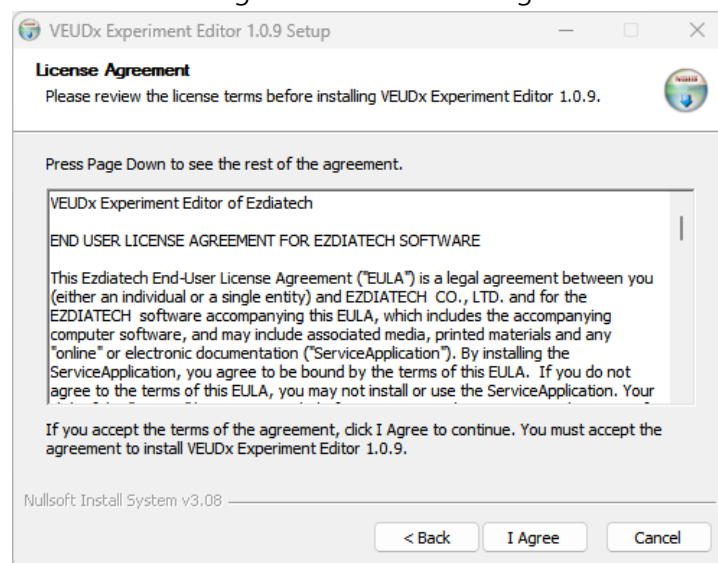
1.1.3 Start installation

Check the contents and click 'Next'.



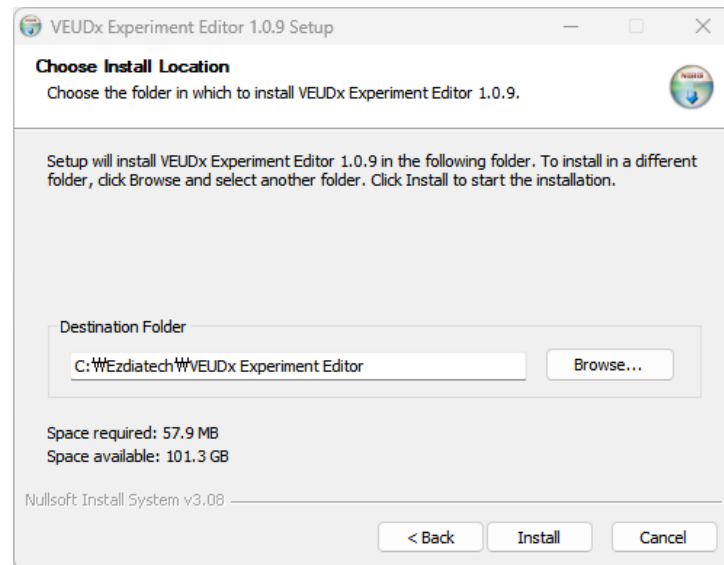
1.1.4 Check License

Read the license agreement and click 'I Agree'.

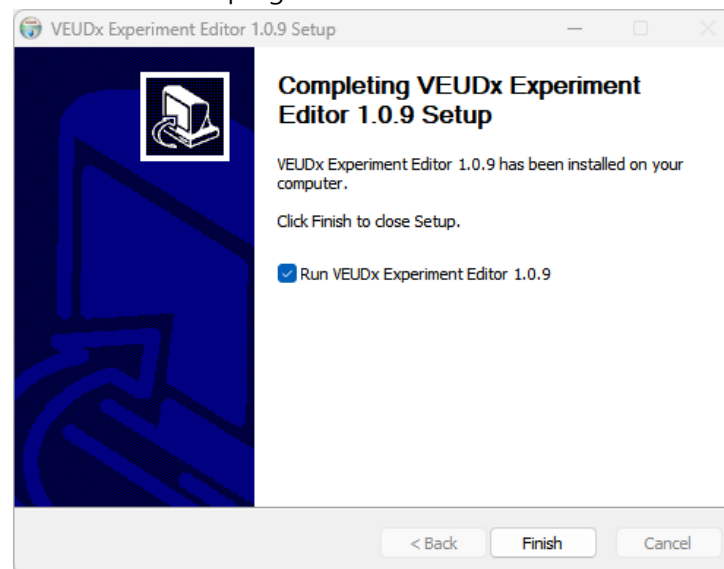


1.1.5 Installation

Check the installation path and click 'Install'.

location**1.1.6 Installation completion**

Check to run the program and click 'Finish'.



2. Term definition

2.1 ITEM

2.1.1 ITEM	ITEM consists of ITEM name(ex) TBI, Neurology), Marker name, Pixel Cut, Experiment Protocol, etc.
2.1.2 Protocol	Protocol is a collection of experimental procedures (Steps).
2.1.3 Step	This is the procedure for each well. (ex) Well 6 Washing 1 min)
2.1.3 ITEM file	ITEM File is created as VEUDxITEM_ITEM_name.zip file. (ex, VEUDxITEM_TBI.zip)

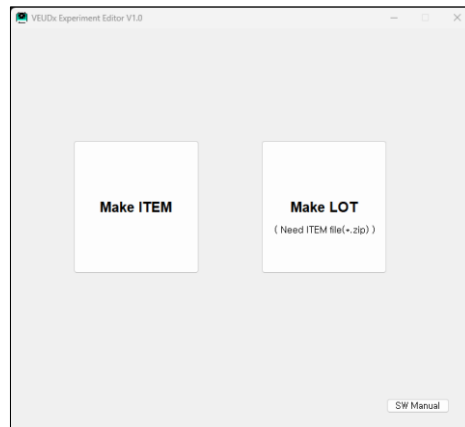
2.2 LOT

2.1.1 LOT	Depending on the produced LOT, it consists of calibration, concentration cut-off value, etc. An ITEM file is required to create a LOT.
2.1.2 LOT file	A LOT XML file that stores LOT information and a Barcode PDF file are created. Ex) VEUDxLOT_TBI_EZTB22111601.xml VEUDxLOT_TBI_EZTB22111601_BarCode.pdf

3. Start

3.1 Start screen

3.1.1 Start screen On the start screen, you can select 'Make ITEM', 'Make LOT', or 'SW Manual'.



4. Make ITEM

4.1 ITEM creation start screen

4.1.1 Start screen ITEM Open, save and edit are possible.

- In the ITEM Summary tab, you can edit the item name, maker name by RSMP length, unit, pixel cut, experiment time, Dilution Factor, Fluorescence Exposure Time, Optical photography only, etc.
- You can edit steps in the Protocol tab.

VEUDx Experiment Editor V1.0.23 - Make ITEM

ITEM Summary Protocol Home Setting

ITEM Name Initialize

Length	Marker	Unit	Pixel Cut (%)
200	<input type="text"/>	pg/ml	Bottom 25
250	<input type="text"/>	pg/ml	Top 5
300	<input type="text"/>	pg/ml	
350	<input type="text"/>	pg/ml	Dilution Factor 4
400	<input type="text"/>	pg/ml	
450	<input type="text"/>	pg/ml	Fluorescence Exposure Time1
500	<input type="text"/>	pg/ml	500

Total Estimated Time (Min.)

+ RT 6 samples assumptions

Reacting Time Only

☐ Optical photography only
☐ Optical + Demagnetization only
☐ Make RSMP QC Data

Open ITEM Save ITEM

4.2 Edit ITEM Summary

4.2.1 Open ITEM

Press the "Open ITEM" button to select the previously created ITEM file.

ITEM files are in *.zip. (ex, VEUDxITEM_TBI.zip)

VEUDx Experiment Editor V1.0.23 - Make ITEM

Home Setting

ITEM Name: TBI Initialize

Length	Marker	Unit	Pixel Cut (%)
200	UCH-L1	pg/ml	Bottom 25
250		pg/ml	Top 5
300	GFAP	pg/ml	Dilution Factor 4
350		pg/ml	Fluorescence Exposure Time1 500
400		pg/ml	
450		pg/ml	
500		pg/ml	

Total Estimated Time (Min.)

* RT 6 samples assumptions

Reacting Time Only

☐ Optical photography only
☐ Optical + Demagnetization only
☐ Make RSMP QC Data

Open ITEM Save ITEM

4.2.2 Edit ITEM Summary

- Item name
- Marker name used by RSMP length
- Unit used by RSMP length
- Total experiment time
- Pixel Cut Bottom, Top
- Dilution Factor
- Fluorescence Exposure Time
- Optical photography only
- Optical + Demagnetization only
- Make RSMP QC Data

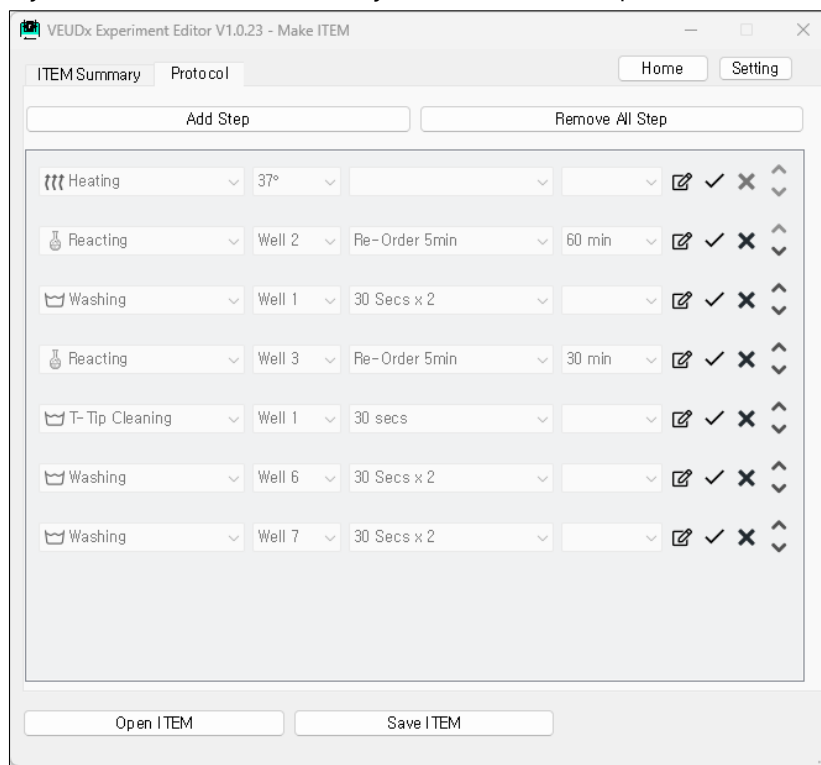
Editable.

- If "Optical photography only" is selected, only optical photography is performed for the cartridge that has been tested.
- If "Optical + Demagnetization only" is selected, only optical photography and "Demagnetization" is performed for the cartridge that has been tested.

4.3 Edit Protocol

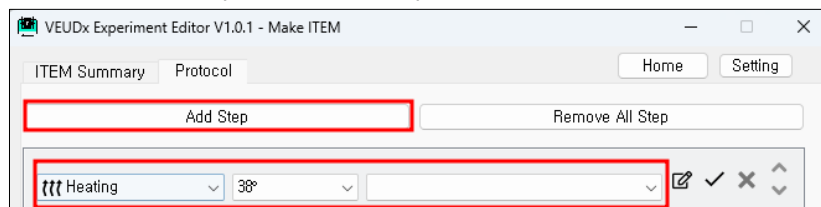
4.3.1 Protocol tab

If you select the Protocol tab, you can edit the Step.



4.3.2 Add Step

Click the "Add Step" box at the top and add an item.



- Selection by Category

.Heating : 30° / 35° / 37° / 38° / 39° / X / RT selectable

.Reacting : Reaction Well (Well 2~5) selectable

- Re-Order 2min (Change the location of RSMP every 2 minutes.)

-> 1~30 min selectable

- Re-Order 5min (Change the location of RSMP every 5 minutes.)

-> 1~480 min selectable

.Washing: Well1~7 and time (30 secs, 20 secsX2, 30 secsX2) selectable

.T-Tip Cleaning: Well1~7 and time (30 secs) selectable



Heating can be selected only once and must be located only in the first step.

4.3.3 Edit Step



- : Change edit Step mode
- : Save Step
- : Delete Step
- : Change Step Order

4.4 Save ITEM and Installation

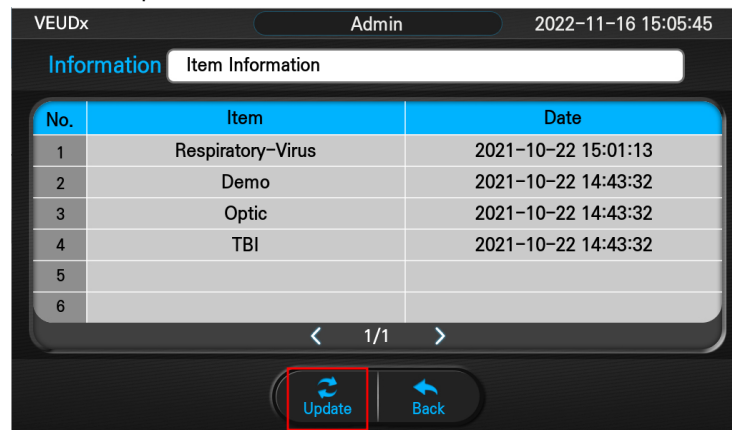
4.4.1 Save ITEM to PC

Click the "Save ITEM" button to create an ITEM zip file.

*For how to save only protocol (script) for development reference, refer to the setting section.

4.4.2 ITEM installation on VEUDx equipment

1. Copy the ITEM file created above to an external USB memory
2. Run VEUDx equipment
3. Admin Login (Initial Admin Password: 0000)
4. Click Settings
5. Click Information
6. Click Item
7. Mounting on an external USB memory device
8. Select Update



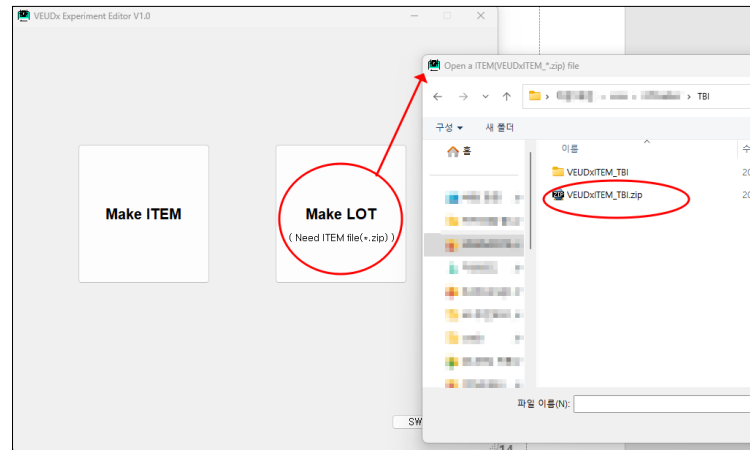
9. Select ITEM to update
10. ITEM update complete
11. Restart after shutting down the equipment

5. Make LOT

5.1 Select ITEM file

5.1.1 Select ITEM file

Select ITEM file to make LOT.



5.2 Make LOT

5.2.1 Start

VEUDx Experiment Editor V1.0.23 - Make LOT

LOT Bar Code: Home Setting

Barcode Name:

ITEM Name: QC-ex5-W3-H37-2 Initialize

4PL Parameters

Length	Marker	a	b	c	d	
200	200um	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Make
250		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Make
300	300um	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Make
350		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Make
400	400um	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Make
450		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Make
500	500um	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Make

LOT ID: Maker: EZ, ITEM Abbr.: QC, Made date: 2023-05-16, LOT Serial: 01

Bar Code Version: VI, Expire Date: 2023-11-12

Note:

Open LOT Save LOT(+ PDF)

The ITEM name and Marker name read from the ITEM file are displayed.

5.2.2 Enter LOT information

- 4PL Parameters (a, b, c, d)
- LOT creation date

5.2.3 Save LOT

Click the "Save LOT(+PDF)" button

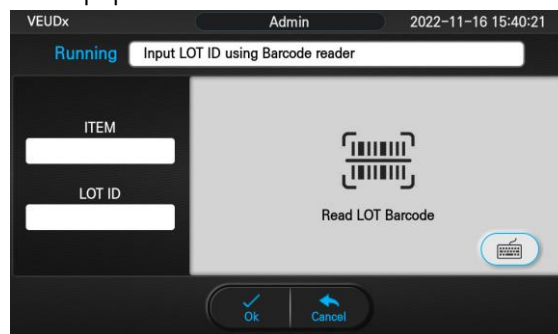
Two LOT XML files and Barcode PDF files are created.

- LOT XML file (ex, VEUDxLOT_TBI_EZTB22111601.xml) Used to save work

When using VEUDx equipment, it can be used when there is no Barcode Reader equipment.

- Barcode PDF file (ex, VEUDxLOT_TBI_EZTB22111601_BarCode.pdf)

It is used for reading VEUDx equipment LOT/Strip Barcode by printing it out on paper.



< VEUDx equipment LOT reading screen >



< PDF file for LOT Barcode output >

5.2.4 Open LOT

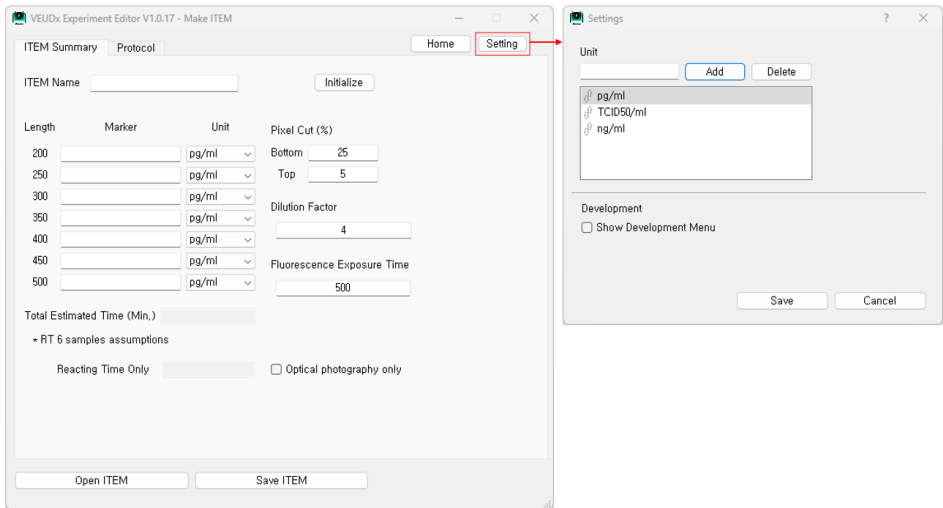
Editing is possible by selecting the saved LOT XML by pressing the "Open LOT" button.

6. Settings

6.1 Open Settings

6.1.1 Open Settings

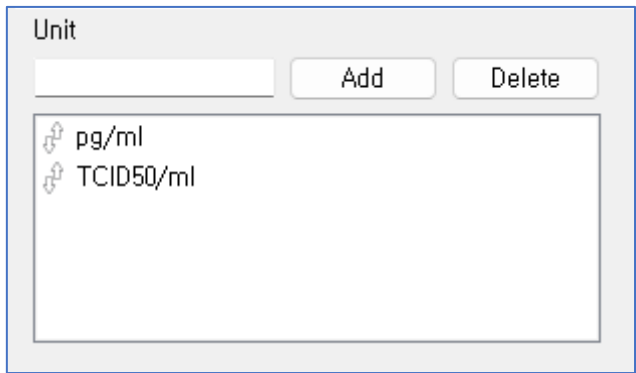
'Press the 'Settings' button.



6.2 Unit

6.2.1 Unit

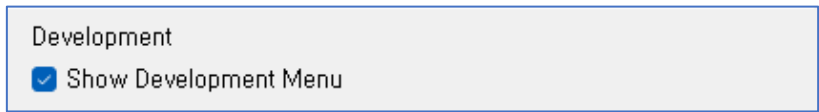
Units to be displayed in the Unit Combo List of the ITEM Summary tab can be edited.

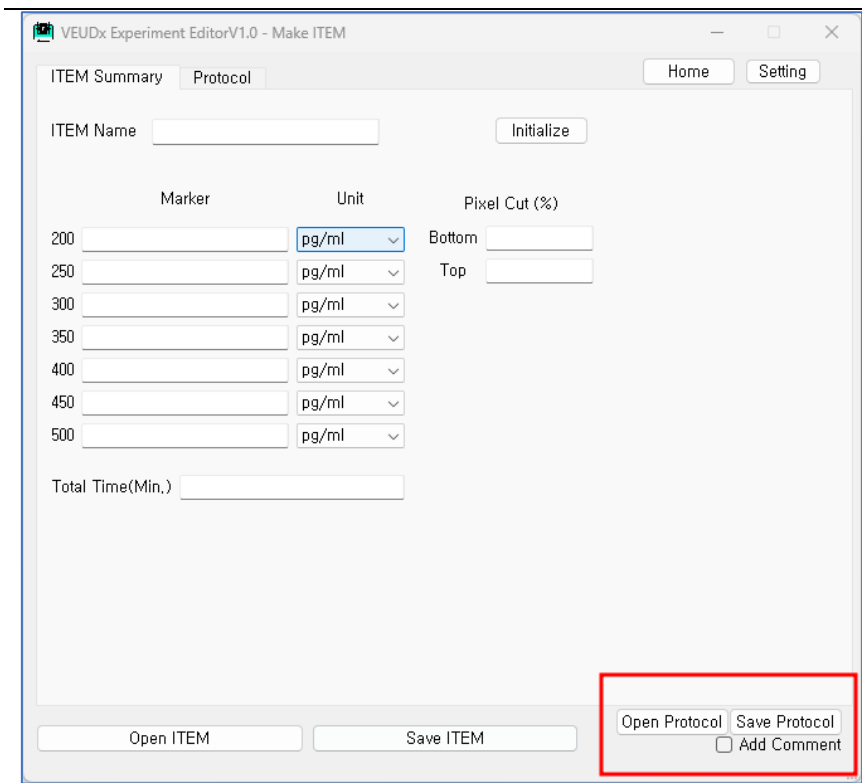


6.3 Development menu

6.3.1 Development menu

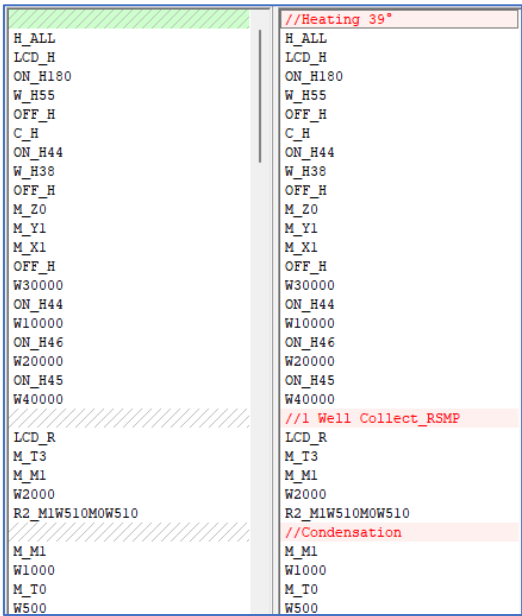
If you select the development menu, you can open/save only the protocol and display comments for analysis.





6.4.2 Save protocol file

If you press the 'Save Protocol' button, only the Protocol (Script) file can be saved separately.
This is a development file and **cannot** be installed on a machine.
When "Add Comment", comments are displayed on the Protocol (Script).



< Protocol display according to annotation options >