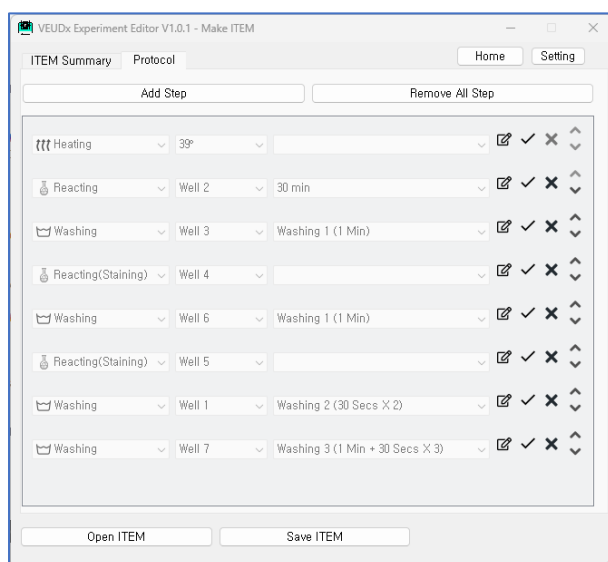
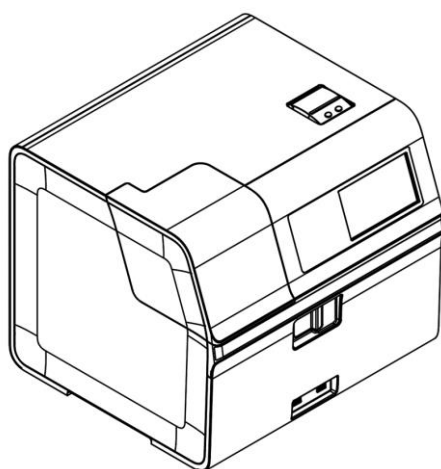


Operation Manual

VEUDx Experiment Editor



UM-VEUDx-1.0

User Manual History

Rev. No.	Date	Major Change
1	2022.11.15	Initial Vesion
2	2022.12.06	V1.0.1 Step editing UI change
3		
4		
5		
6		

index

1. Installation.....	4
2. Term definition.....	6
2.1 ITEM	6
2.2 LOT	6
3. Start.....	7
3.1 Start screen.....	7
4. Make ITEM.....	7
4.1 ITEM creation start screen	7
4.2 Edit ITEM Summary	8
4.3 Edit Protocol	8
4.4 Save ITEM and Installation	10
5. Make LOT	10
5.1 Select ITEM file	10
5.2 Make LOT	11
6. Settings.....	13
6.1 Open Settings.....	13
6.2 TBI Calibration.....	13
6.3 Unit.....	14
6.4 Development menu.....	14

1. Installation

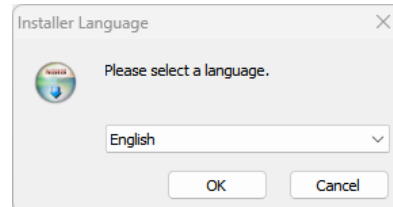
1.1 Installation

1.1.1 Execution

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

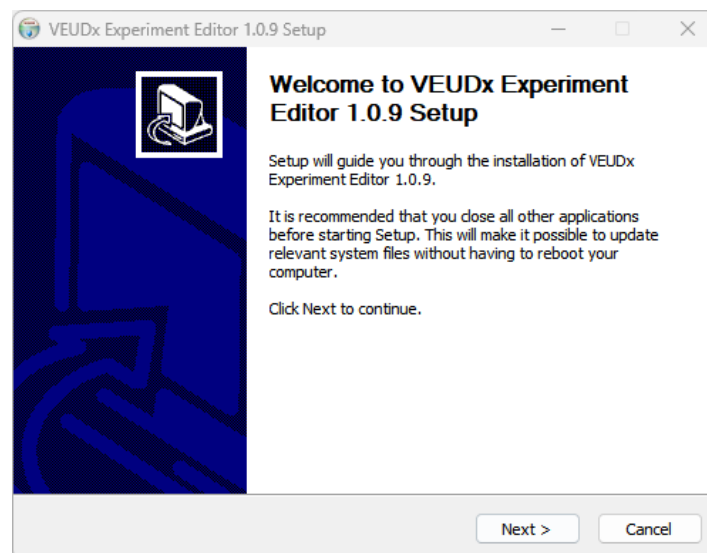
1.1.2 Language selection

Choose the language you want to use



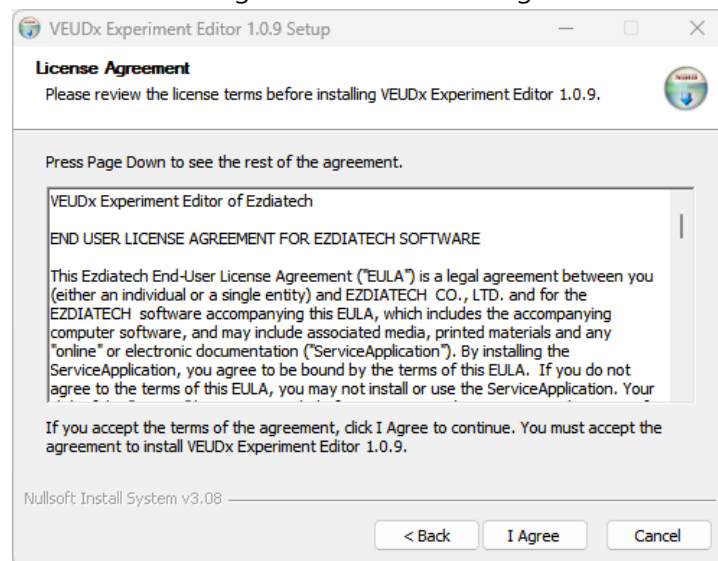
1.1.3 Start installation

Check the contents and click 'Next'.



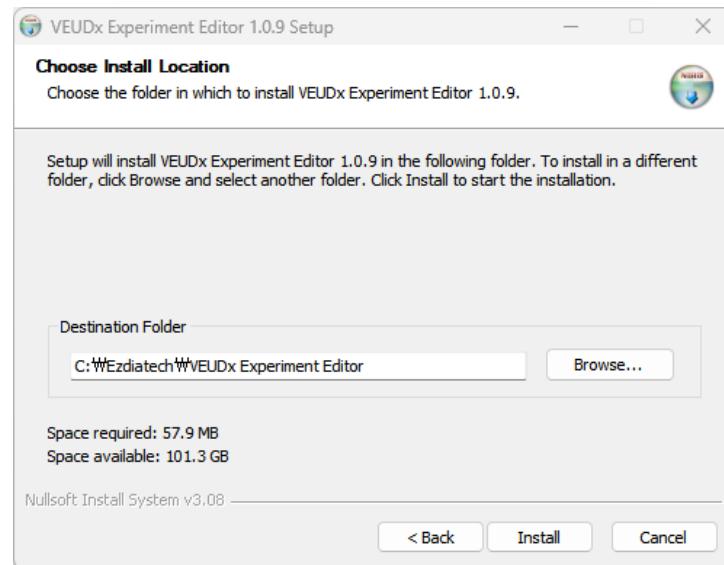
1.1.4 Check License

Read the license agreement and click 'I Agree'.

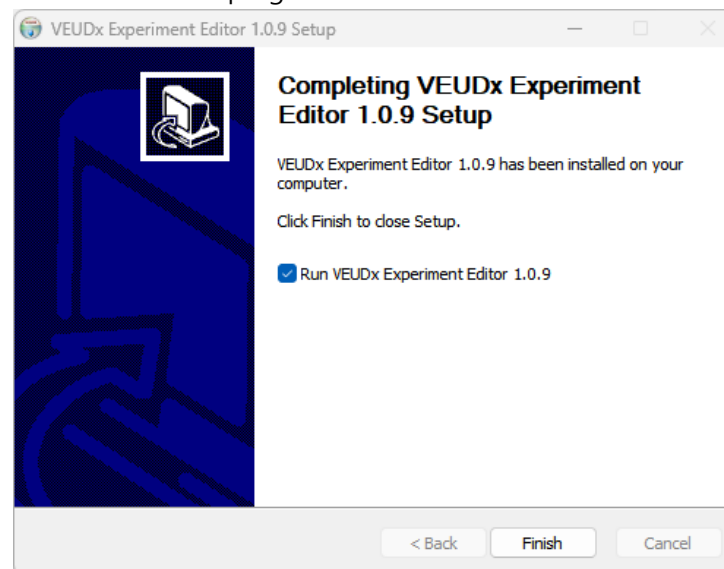


1.1.5 Installation

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

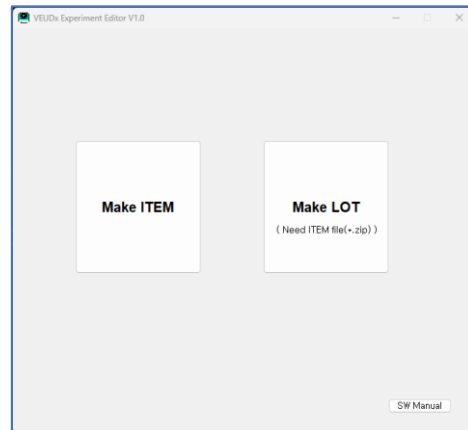
2.1.1 LOT	Depending on the produced LOT, it consists of calibration, concentration cut-off value, etc. An ITEM file is required to create a LOT.
2.1.2 LOT file	A LOT XML file that stores LOT information and a Barcode PDF file are created. Ex) VEUDxLOT_TBI_EZTB22111601.xml VEUDxLOT_TBI_EZTB22111601_BarCode.pdf

3. Start

3.1 Start screen

3.1.1 Start screen

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



4. Make ITEM

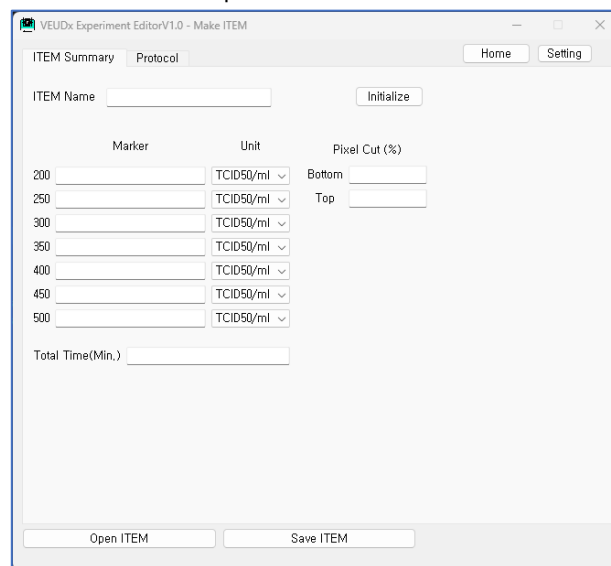
4.1 ITEM creation start screen

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, etc.

- You can edit steps in the Protocol tab.



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 EditorV1.0 - Make ITEM

ITEM Summary Protocol Home Setting

ITEM Name Initialize

	Marker	Unit	Pixel Cut (%)
200	UCH-L1	pg/ml	Bottom 25
250		TCID50/ml	Top 5
300	GFAP	pg/ml	
350		TCID50/ml	
400		TCID50/ml	
450		TCID50/ml	
500		TCID50/ml	

Total Time(Min.)

Open ITEM Save ITEM

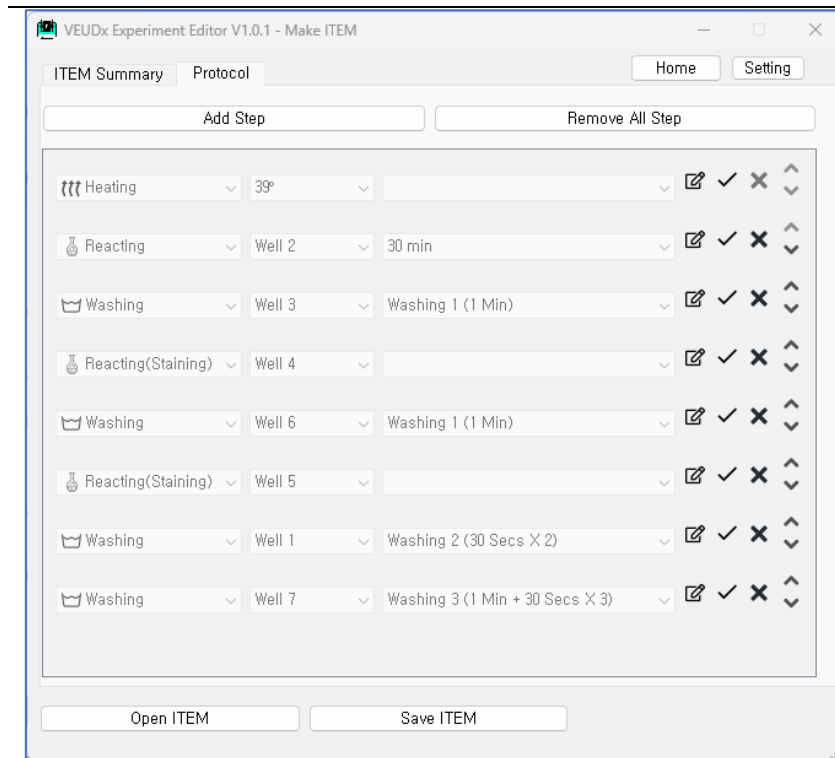
4.2.2 Edit ITEM Summary

- Item name
- Marker name used by RSMP length
- Unit used by RSMP length
- Total experiment time
- Pixel Cut Bottom, Top Editable.

4.3 Edit Protocol

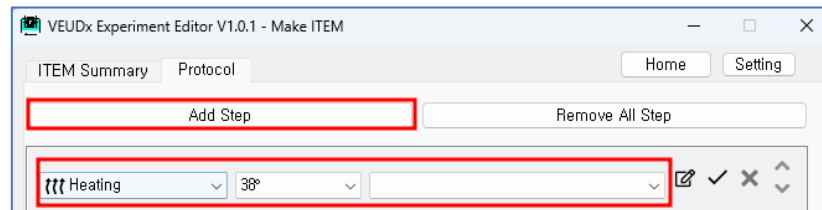
4.3.1 Protocol tab

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 : 38° / 39° / X / RT selectable

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

.Reacting: Reaction well (Well 2~5) and time (5min~100min) selectable

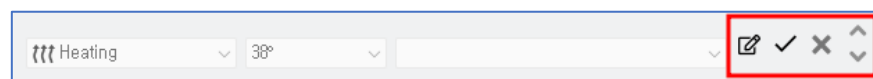
.Washing: Well1~7 and time (20 secs, 30 secs, 1 min) selectable


.Deep Washing: Well1~7 and time (20 secs, 30 secs, 1 min, 30 secsX2,
1 min+30 secs X 3) selectable



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

4.3.3 Edit Step



-  : Step Change edit mode

- ✓ : Save Step
- ✕ : Delete Step
- ⬆️ ⬇️ : Change Step Order

4.4 Save ITEM and Installation

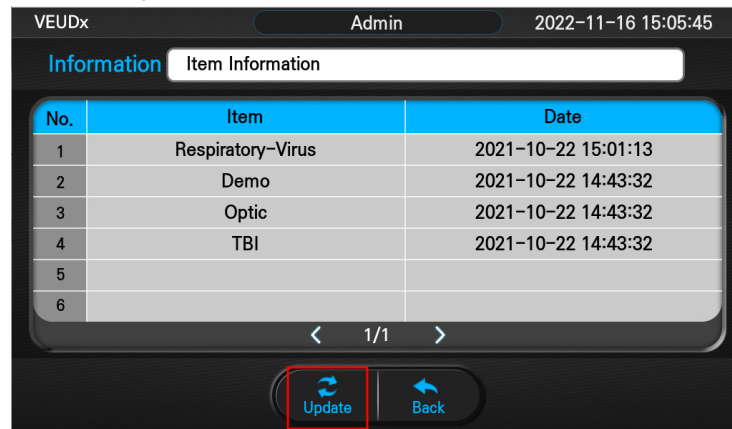
4.4.1 Save ITEM to PC

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: aaaa1234)
4. Click Settings
5. Click Information
6. Click Item
7. Mounting on an external USB memory device
8. Select Update



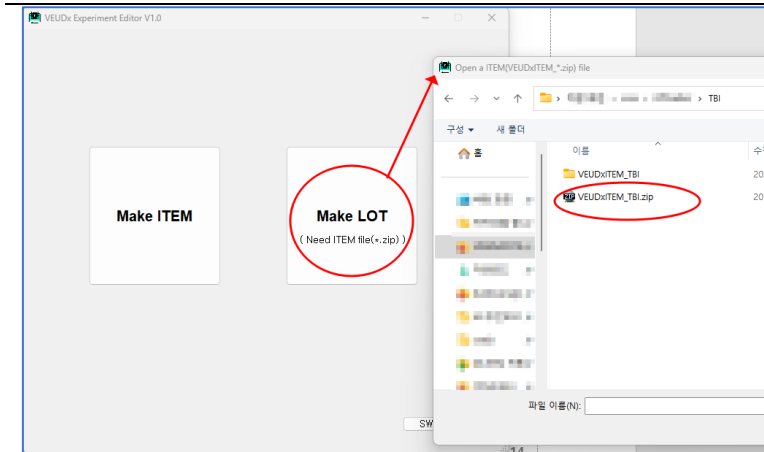
9. Select ITEM to update
10. ITEM update complete
11. Restart after shutting down the equipment

5. Make LOT

5.1 Select ITEM file

5.1.1 Select

Select ITEM file to make LOT.

ITEM file**5.2 Make LOT****5.2.1 Start**

Marker	Cal Value				Cut-Off(0~65535)	
	a	b	c	d	Max	Min
200					65535	0
250					65535	0
300 pTau231					65535	0
350					65535	0
400 pTau181					65535	0
450					65535	0
500 Tau					65535	0

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

5.2.2 Enter LOT information

- Cal Value (a, b, c, d),
- Concentration Cut-Off Max/Min
- LOT creation date
- LOT Serial
- LOT Expire Date can be entered.

*Barcode Name, Note can be used as a reference.

*For TBI ITEM, TBI Calibration min can be used. (Refer to Setting item)

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/Scrip Barcode by printing it out on paper.



< VEUDx equipment LOT reading screen >



< PDF file for LOT Barcode output >

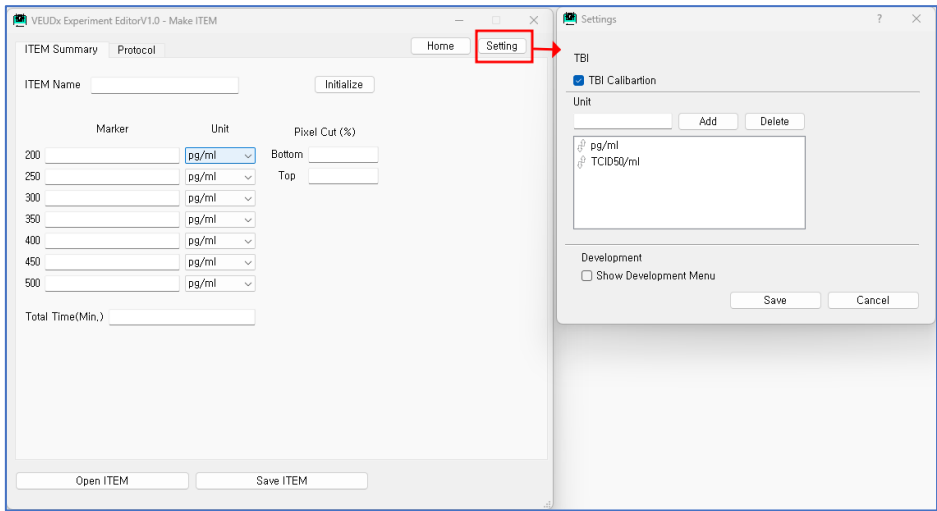
5.2.4 Open LOT Editing is possible by selecting the saved LOT XML by pressing the "Open LOT" button.

6. Settings

6.1 Open Settings

6.1.1 Open Settings

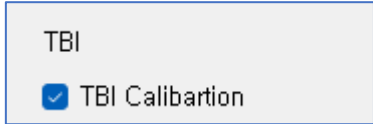
'Press the 'Settings' button.



6.2 TBI Calibration

6.2.1 TBI Calibration

If TBI Calibration is checked, 'TBI Calibration min' menu is displayed
*** This is a dedicated menu for "TBI" ITEM, and other items can be used if necessary.**



VEUDx Experiment EditorV1.0 - Make LOT

Home Setting

Barcode Name

ITEM Name Neurology-3plex

Initialize

Marker	Cal Value				Cut-Off(0~65535)		TBI Calibration Min(%)
	a	b	c	d	Max	Min	
200					65535	0	
250					65535	0	
300 pTau231					65535	0	
350					65535	0	
400 pTau181					65535	0	
450					65535	0	
500 Tau					65535	0	

LOT ID

Maker	ITEM Abbr.	Made date	LOT Serial
EZ	Ne	2022-11-16	01

Bar Code Version V1

Expire Date 2022-01-01

Note

Open LOT Save LOT(+ PDF)

6.3 Unit

6.2.1 Unit

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

Unit

Add Delete

pg/ml

TCID50/ml

6.4 Development menu

6.4.1 Development menu

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

Development

☒ Show Development Menu

VEUDx Experiment EditorV1.0 - Make ITEM

ITEM Summary Protocol Home Setting

ITEM Name Initialize

Marker	Unit	Pixel Cut (%)
200	pg/ml	Bottom
250	pg/ml	Top
300	pg/ml	
350	pg/ml	
400	pg/ml	
450	pg/ml	
500	pg/ml	

Total Time(Min.)

Open ITEM Save ITEM Open Protocol Save Protocol Add Comment

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).

```

H_ALL
LCD_H
ON_H180
W_H55
OFF_H
C_H
ON_H44
W_H38
OFF_H
M_Z0
M_Y1
M_X1
OFF_H
W30000
ON_H44
W10000
ON_H46
W20000
ON_H45
W40000
LCD_R
M_T3
M_M1
W2000
R2_MIW510MOW510
M_M1
W1000
M_T0
W500
//Heating 39°
H_ALL
LCD_H
ON_H180
W_H55
OFF_H
C_H
ON_H44
W_H38
OFF_H
M_Z0
M_Y1
M_X1
OFF_H
W30000
ON_H44
W10000
ON_H46
W20000
ON_H45
W40000
//1 Well Collect_RSMP
LCD_R
M_T3
M_M1
W2000
R2_MIW510MOW510
//Condensation
M_M1
W1000
M_T0
W500

```

< Protocol display according to annotation options >