# ASR-P3xU Demo App

# for Windows

# User’s Manual

# Revision History

| Version | Description | Date |
|---|---|---|
| V1.0 | Initial version | 2023/9/13 |
| | | |

# Contents

# Preface

This document describes the correct operation method of the "ASR-P3xU Demo App" for Windows. Be sure to read this carefully before using the app.
If you have any comments or questions about this manual, please don't hesitate to get in touch with us at:

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# About the Demo App for ASR-P3xU

The "ASR-P3xU Demo App" (hereinafter referred to as "Demo App") is an application that customers can use together with our company's ASR-P3xU devices (hereinafter referred to as "P3xU"), including the P35U and P37U.
Please download this application from the link below.

https://asreader.com/products/asr-p35u/?SDK

Note: The ASR-P3xU Demo App is a dedicated Demo App for ASR-P3xU devices.

# 1 How to Connect

## 1.1. How to Connect P3xU to Windows device

1. Switch the DIP Switches of the P3xU to "Serial mode" (1: OFF 2: ON)


**FIG. 1-1-1 DIP Switch**

2. Connect the POWER/PC port of the P3xU and a Windows device using a USB-C cable. When the connection is successful, the LED will light up and it will beep twice.

**FIG. 1-1-2 Connect the P3xU to a Windows device**

## 1.2. Start the App

Double click "AsReaderP3xU_Demo.exe".

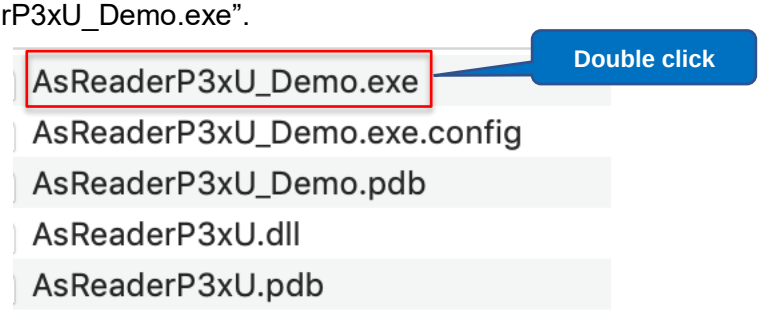



**FIG. 1-2-1 Starting the app**

The screen below is displayed after starting the app.

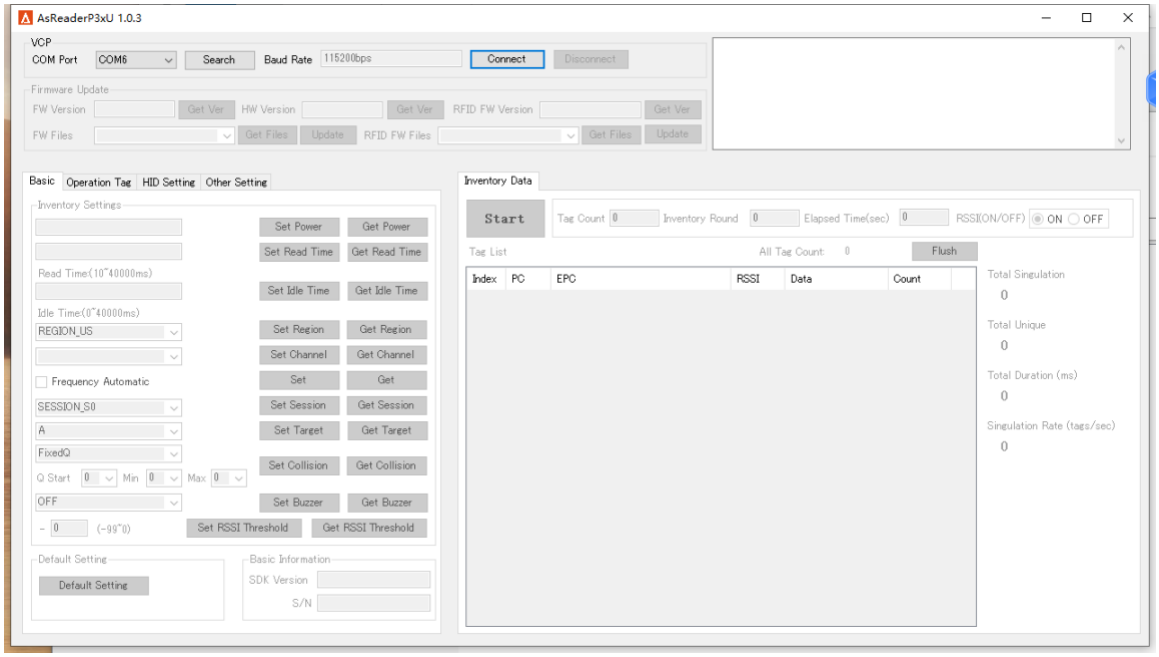



**FIG. 1-2-2 Screen displayed after starting the app**

**Note: If the software is started before the P3xU is connected, the COM Port box may be empty. Click the "Search" button to get the COM Port.**

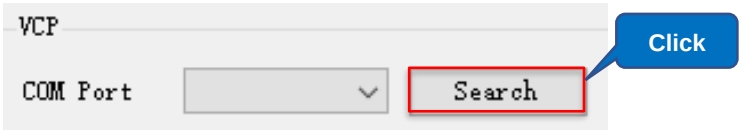



**FIG. 1-2-3 Getting the COM Port**

## 1.3. How to Connect

Select the correct COM Port, then click the "Connect" button to connect to the P3xU.

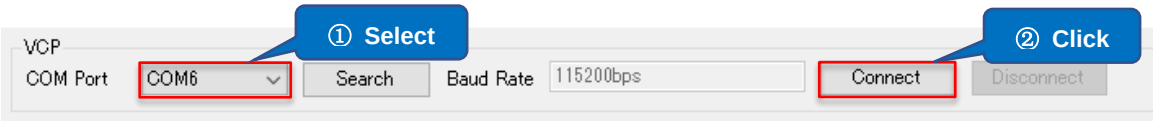



**FIG. 1-3-1 How to connect**

The screen below is displayed once connected.

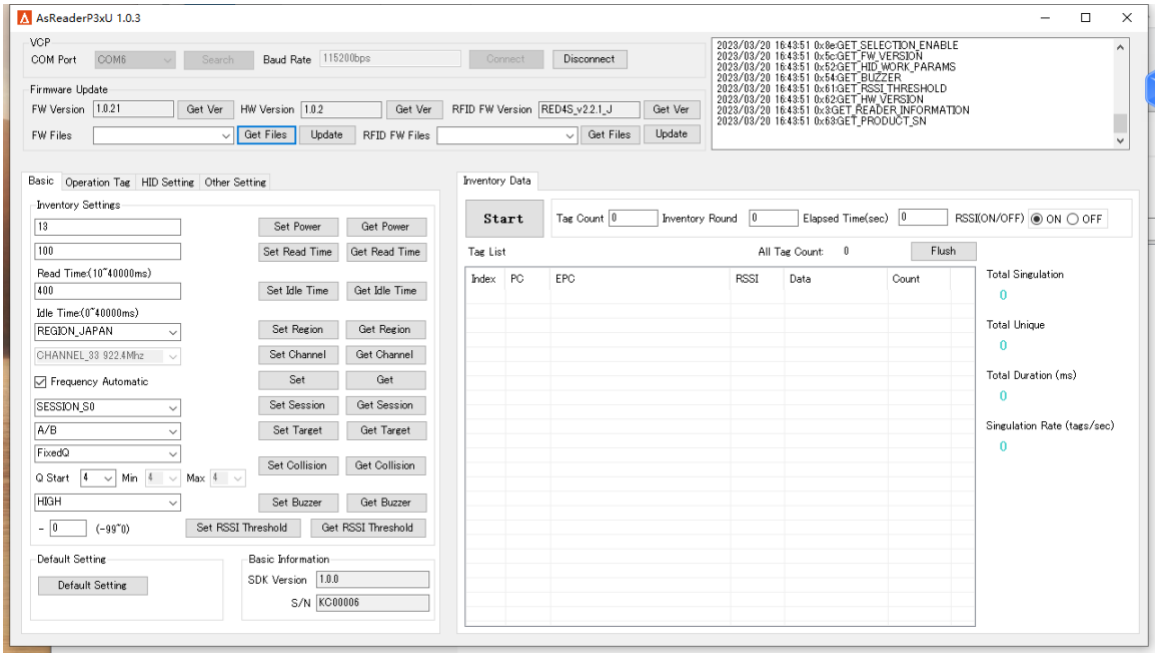



**FIG. 1-3-2 Connected successfully**

## 1.4. How to Disconnect

Click the Disconnect button to disconnect from the P3xU.

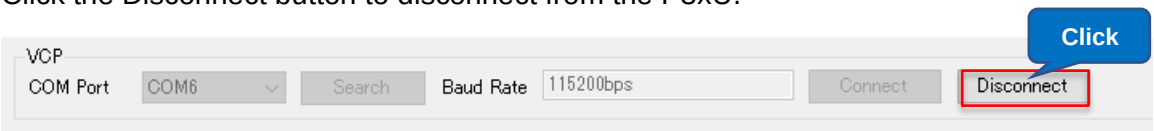



**FIG. 1-4-1 How to disconnect**

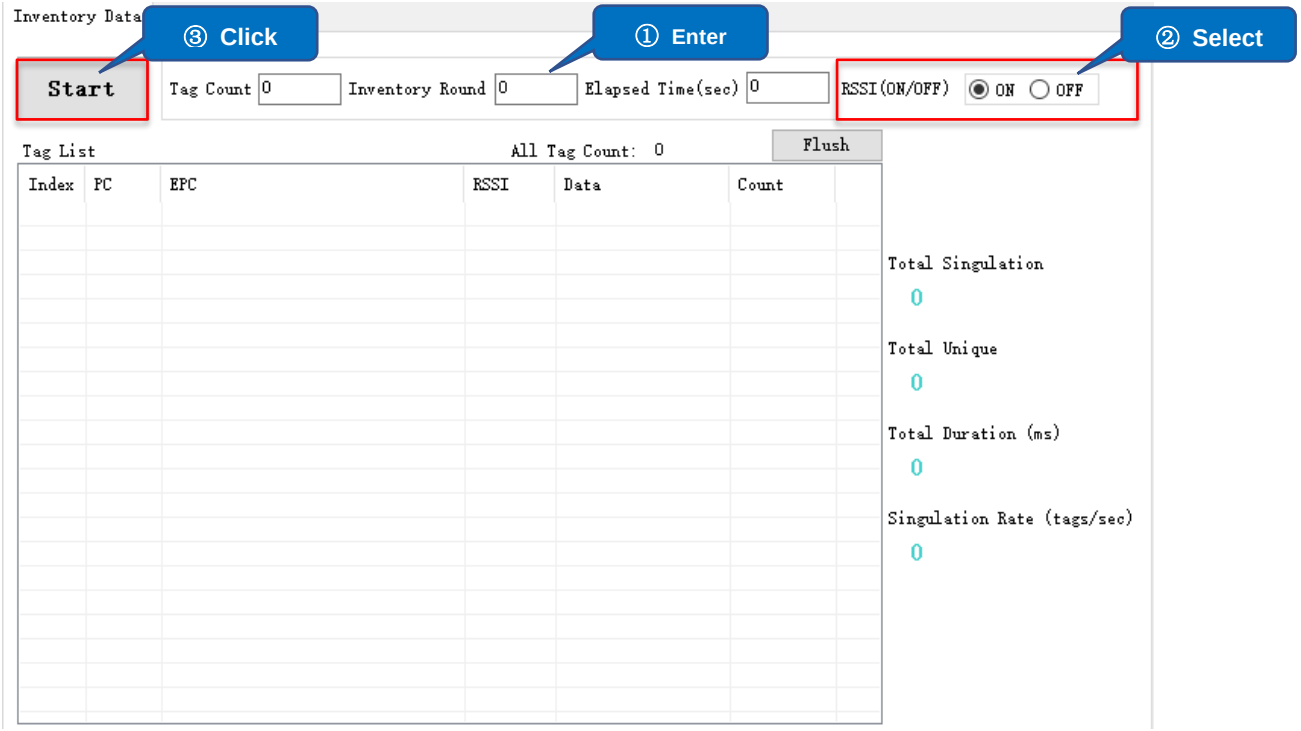
# 2 Inventory

This page is for inventory. All parameters on this page are not saved.

## 2.1. Inventory

**Operating steps:**

1. Set the Tag Count/Inventory Round/Elapsed Time of RFID tags that are supposed to be inventoried.
2. Set whether to display RSSI data of RFID tags or not.
3. Click the "Start" button. Once clicked, the text on the button changes to "Stop" and the P3xU will start the inventory and display the data of the inventory in real-time. You can also start an inventory by pressing the SCAN button on the P3xU.
4. Click the "Stop" button (or press the P3xU SCAN button again) to stop the inventory.
5. Click "Flush" to clear all data in the Inventory Data area and the Notification area.



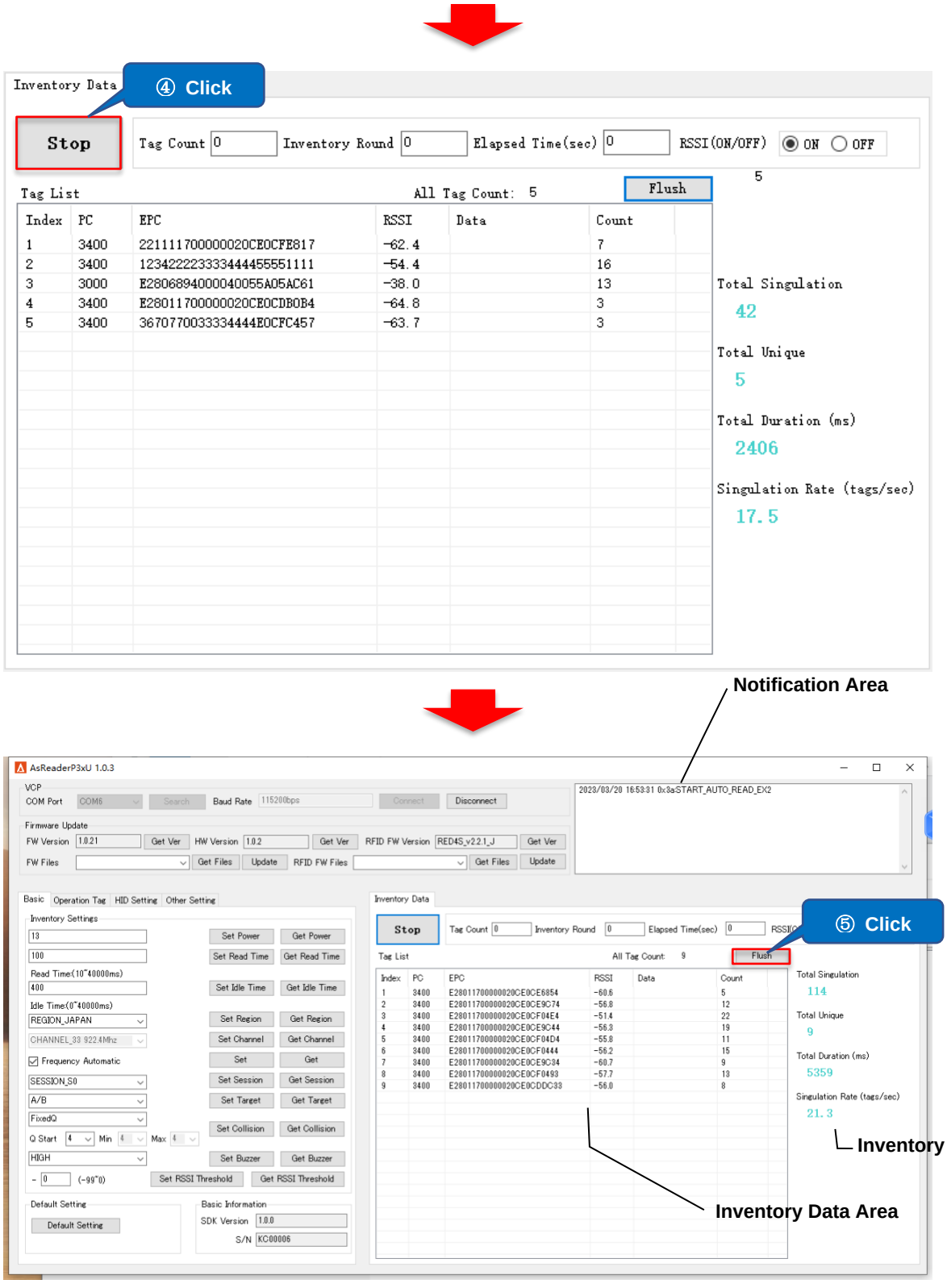



**FIG. 2-1-1 Inventory**

The descriptions of the fields in the Tag List:

| Fields | Descriptions |
|---|---|
| Index | The sequence number of data |
| PC | PC bank of RFID tag |
| EPC | EPC bank of RFID tag |
| RSSI (dBm) | The signal strength of the RFID tag for the last inventory |
| Data | Data returned after the Read operation is performed on the Operation Tag page |
| Count | The count of the RFID tag reading |

The descriptions of the fields in the Inventory Results:

| Fields | Descriptions |
|---|---|
| All Tag Count | Number of RFID tags in inventory (counting only once if the same tags are repeatedly inventoried) |
| Total Singulation | Total inventory times (if the same tag is repeatedly inventoried, each count will be counted) |
| Total Unique | Number of RFID tags in inventory (counting only once if the same tags are repeatedly inventoried) |
| Total Duration (ms) | The inventory duration after each click of the "Start" button. (Unit: ms. (milliseconds)) |
| Singulation Rate (tags/sec) | Inventory speed, Unit: "number of tags per second" |

**Note: If the data save path is set in advance, the RFID tag data will be automatically saved when clicking the "Stop" button to stop the inventory each time. If the data save path is not set, the inventory data will not be saved when the inventory is stopped. (For details about how to set the data save path, see 6.1 Export Path.)**

## 2.2. Tag Count

Tag Count: Configure the upper limit of the number of RFID tags to inventory. The inventory automatically stops when the set number of RFID tags is inventoried. Value range: 0 to 255. 0 means "No limit of tags to inventory"


**FIG. 2-2-1 Tag Count**

## 2.3. Inventory Round

Inventory Round: Configure the upper limit of the number of query cycles. The inventory automatically stops when the set number of inventory rounds is reached.

Value range: 0~65535. 0 means "No limit to the number of query cycles"


**FIG. 2-3-1 Inventory Round**

## 2.4. Elapsed Time

Elapsed Time: Configure the upper limit of the inventory time. The inventory automatically stops when the set duration is reached.

Value range: 0~255. 0 means "No limit on the duration of the inventory"

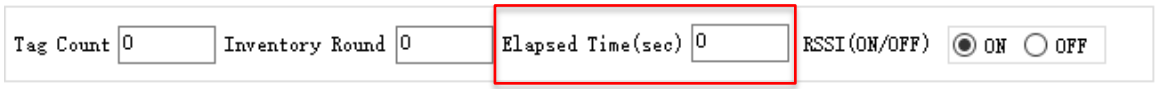



**FIG. 2-4-1 Elapsed Time**

## 2.5. RSSI

Select whether to display the signal strength of RFID tags during the inventory.

ON: display

OFF: hide


**FIG. 2-5-1 RSSI**

# 3 Basic

This chapter describes how to set RFID-related parameters and the volume of beep sounds. All parameters on this page are saved in the P3xU.

## 3.1. Power

Set/Get the output power of the P3xU (dBm). In general, the larger the value of power is set, the farther the reading distance is.

The available settings of the power vary by region or country.

Japan: 13~23dBm (20~200mW)

Most other regions/countries: 13~27dBm (20~500mW)


**FIG. 3-1-1 Power**

## 3.2. Read Time

Set/Get the duration of the radio waves emitted when the RFID tags are being inventoried. The longer the Read Time is, the faster the inventory is.

Value range: 10~40,000ms.


**FIG. 3-2-1 Read Time**

## 3.3. Idle Time

Set/Get the duration of time to stop emitting the radio waves when the RFID tags are being inventoried.

Value range: 0~40,000ms.


**FIG. 3-3-1 Idle Time**

**Note: Under the laws of various countries on the use of radio waves, the Read Time and the Idle Time should be set according to the following table.**

| Regulations | Inventory Time | Idle Time |
|---|---|---|
| Radio law (JP) | Not more than 4000ms | Not less than 50ms |
| FCC (US) | Not more than 400ms | Not less than 20ms |
| CE (EU) | Not more than 4000ms | Not less than 100ms |

## 3.4. Region

Set/Get the region (or country).


**FIG. 3-4-1 Region**

## 3.5. Channel

Set/Get the channel.

When Frequency Automatic is selected, this setting is not available.


When Frequency Automatic is not selected, this setting is available.


**FIG. 3-5-1 Channel**

## 3.6. Frequency Automatic

Set/Get Frequency hopping/fixed frequency.

Frequency hopping: Randomly select frequencies from the frequency list corresponding to the current frequency band for inventory

Fixed frequency: Use a specific frequency for the inventory


**FIG. 3-6-1 Frequency Automatic**

## 3.7. Session

Sets/Gets Session.


**FIG. 3-7-1 Session**

"Session" and "Target" can be set to adjust the response time of RFID tags. (Response time varies with RFID tag specifications.)

Please set parameters according to the number of RFID tags to be inventoried referring to the following table.

| Session / Target | S0 | S1 | S2/S3 |
|---|---|---|---|
| **A** | The RFID tags that have been inventoried will immediately become ready to be inventoried again after receiving the radio waves. | The RFID tags that have been inventoried cannot be inventoried again within 0.5~5 seconds after being inventoried. | The RFID tags that have been inventoried cannot be inventoried again within 2~60 seconds after being inventoried. |
| **B** | RFID tags in the initial state cannot be inventoried. | The same as S0. | The same as S0. |
| **A/B** | The RFID tags that have been inventoried will immediately become ready to be inventoried again after receiving the radio waves. | The same as S0. | The same as S0. |

## 3.8. Target

Set/Get Target.


**FIG. 3-8-1 Target**

## 3.9. Collision

Set/Get Collision parameters.

**Q:** The number of the slots used by the anti-collision algorithm is equal to $2^Q$ and whether the Q value is fixed is up to the user.

- **Setting Fixed Q**


**FIG. 3-9-1 Fixed Q**

**Fixed Q:** Q is fixed when inventorying.

**Q Start:** Specify a Q value if Fixed Q is selected.

- **Setting Dynamic Q**

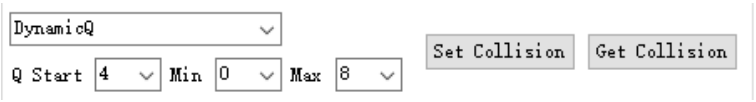



**FIG. 3-9-2 Dynamic Q**

**Dynamic Q:** The Q value changes within a given range during the inventory.

**Min:** In the case of Dynamic Q, specify the minimum value of Q.

**Max:** In the case of Dynamic Q, specify the maximum value of Q.

**Note:**

1) **If Dynamic Q is set, the value of Q must meet the following conditions: Min ≤ Q Start ≤ Max.**
2) **If Dynamic Q is set, the Min, the Q Start, and the Max cannot be set to the same value (automatically set to Fixed Q).**

## 3.10. Buzzer

Set/Get the beep sounds setting. This setting can be set to High, Low, or Off.

When it is turned on, the P3xU will beep at the set volume at the following times:

a) When the P3xU is turned on
b) When the P3xU inventories RFID tags
c) When an RFID tag is read, written, locked, or killed


**FIG. 3-10-1 Buzzer**

## 3.11. RSSI Threshold

When the tag RSSI value (signal strength) is lower than the set RSSI Threshold value, the tag data will not be received.

Default value: 0

Value range: -99~0

For example, when -60 is entered, the tag data is not displayed in the tag list if the RSSI value is less than -60.


**FIG. 3-11-1 RSSI Threshold**

## 3.12. Default Setting

Click this button to restore some parameters to factory defaults. The following parameters can be restored: (1) All parameters on the Basic page. (2) All parameters on the HID Setting page.


**FIG. 3-12-1 Default Setting**

## 3.13. Basic Information

Once connected to P3xU, the SDK version and serial number of P3xU are displayed in this area.

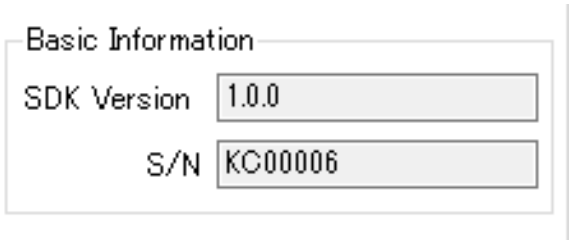



**FIG. 3-13-1 Basic Information**

# 4 Tag Operation

This section is focused on setting RFID tag Mask parameters and executing RFID tag read, write, lock, kill, and other operations. All parameters on this page are not saved.

## 4.1. Selecting Tag

When inventorying a large number of tags, you can set Mask parameters to inventory only specific RFID tags.

**Operating steps:**

- **Setting the Mask parameters:**

**Example: Inventorying only the RFID tags starting with "E280" in the EPC area.**

1. Select a memory bank: EPC.
2. Enter the value to be picked up (Mask): E280.
3. Enter the Start Address: 2.
4. Select a Target: SESSION_S0.
5. Select an Action: ACTION_ASLINVA_DSLINVB.
6. Click the "Set Selection" button.
7. Set Target to A on the Basic page.

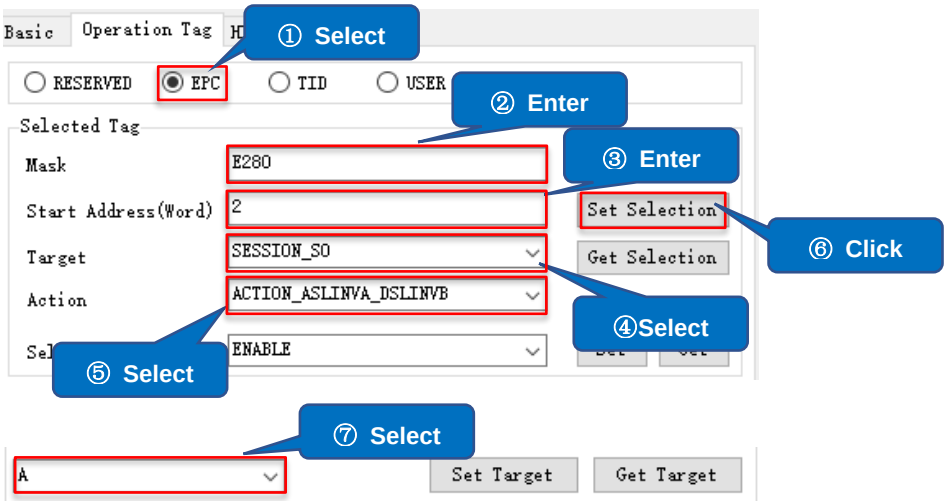
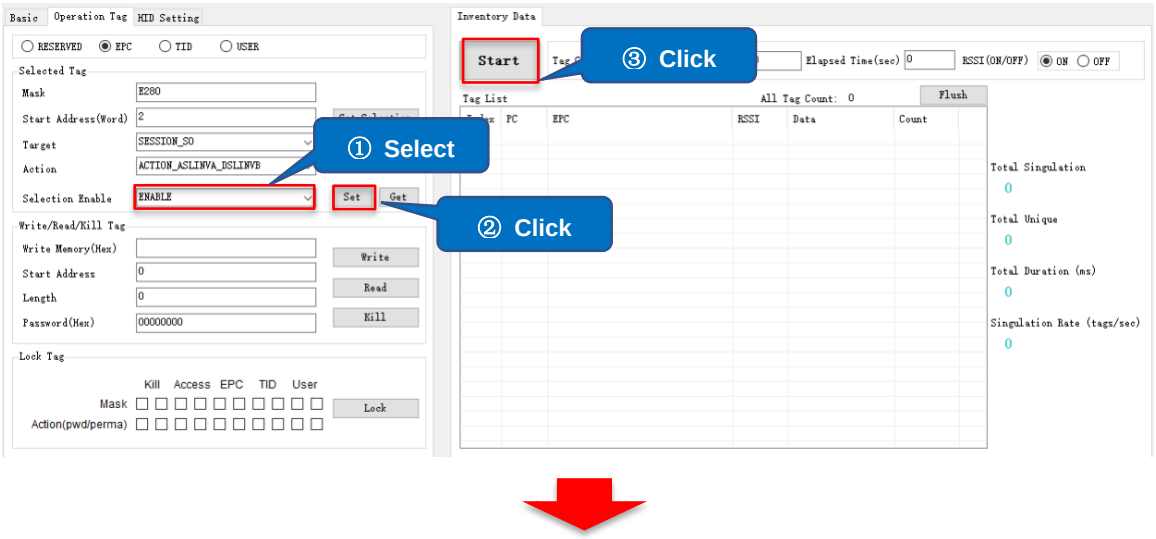



**FIG. 4-1-1 Set mask parameters**

**Note:**

1) **The "Target" on the Operation Tag page and the "Session" on the Basic page must be set to the same value when selecting tags to read.**
2) **When EPC is selected for the memory bank, the start address is 0 for CRC, 1 for PC, and 2 for the EPC area.**
3) **The Reserved area does not support Mask.**

- **Inventorying only selected RFID tags:**
  1. Set Selection Enable to Enable.
  2. Click the "Set" button to complete the settings.
  3. Click the "Start" button to inventory RFID tags (or execute Read, Write, Lock, Kill and other operations), and only the RFID tag data that meets the Mask conditions will be displayed.



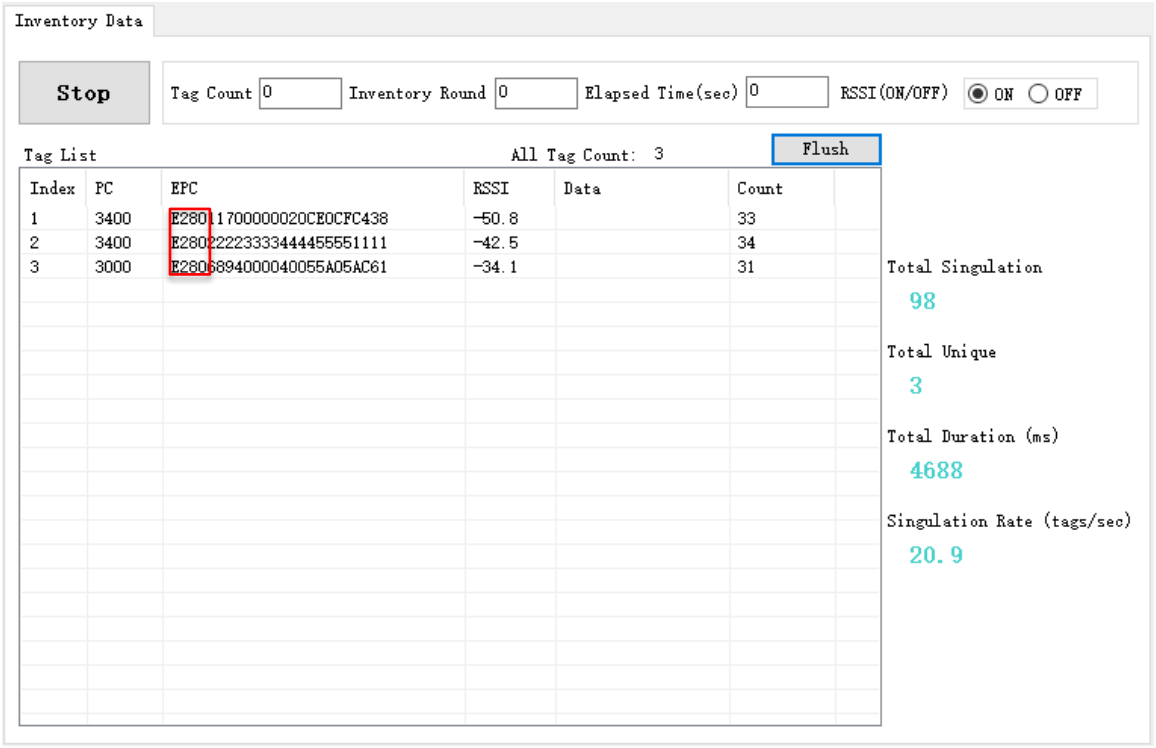
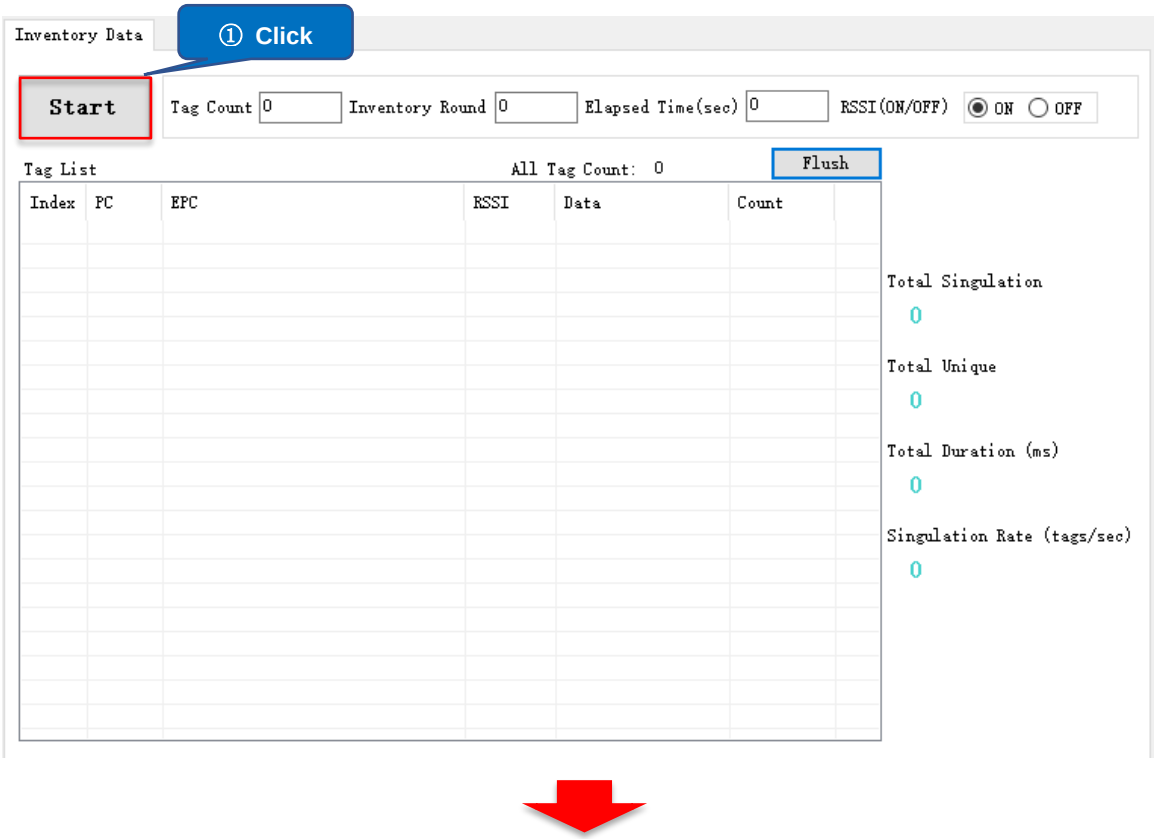


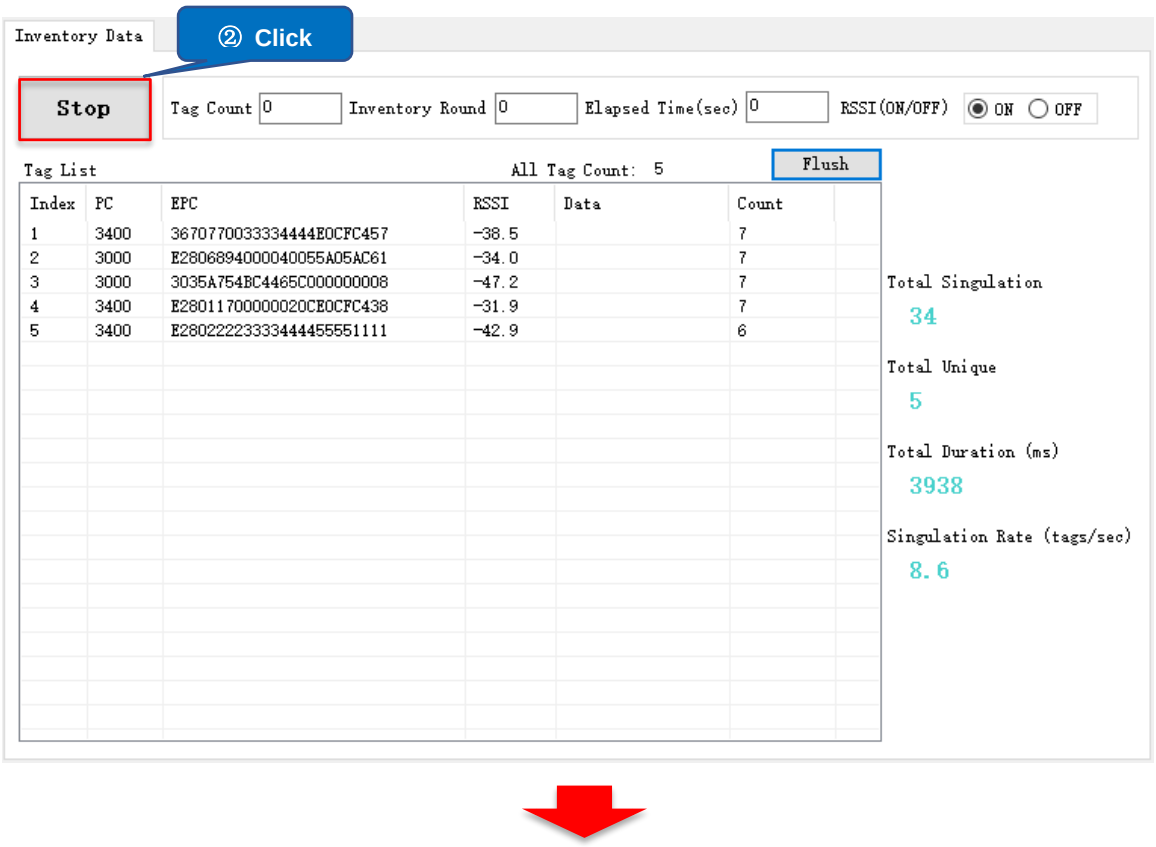

**FIG. 4-1-2 Inventorying RFID tags**

## 4.2. Select a Tag to Read / Write / Lock / Kill

To execute Read, Write, Lock, and Kill, you must select a single RFID tag to be executed. Below is an example of how to select.

1. Click the "Start" button to start inventorying RFID tags.
2. Click the "Stop" button to stop the inventory.
3. Click a Tag displayed in the Tag List.
4. At this point, the EPC of this RFID tag is displayed in the Mask text box. Subsequent operations such as read, write, lock, and kill will only be executed on the selected RFID tag.


Inventory Data
① Click
Start
Tag Count 0
Inventory Round 0
Elapsed Time(sec) 0
RSSI(ON/OFF)
ON
OFF
Tag List
All Tag Count: 0
Flush
Index
PC
EPC
RSSI
Data
Count
Total Singulation
0
Total Unique
0
Total Duration (ms)
0
Singulation Rate (tags/sec)
0


Inventory Data
② Click
Stop
Tag Count 0
Inventory Round 0
Elapsed Time(sec) 0
RSSI(ON/OFF)
ON
OFF
Tag List
All Tag Count: 5
Flush
Index PC EPC RSSI Data Count
1 3400 3670770033334444E0CFC457 -38.5 7
2 3000 E28068940000040055A05AC61 -34.0 7
3 3000 3035A754BC4465C000000008 -47.2 7
4 3400 E28011700000020CE0CFC438 -31.9 7
5 3400 E2802222333344445555111 1 -42.9 6
Total Singulation
34
Total Unique
5
Total Duration (ms)
3938
Singulation Rate (tags/sec)
8.6

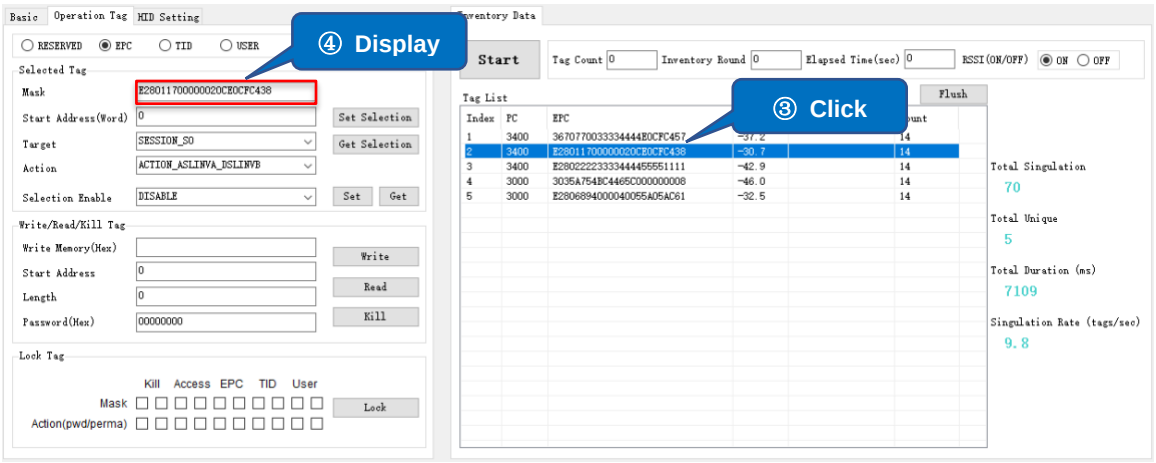



**FIG. 4-2-1 Selecting a tag to execute**

# 4.3. Read / Write / Lock / Kill

## 4.3.1. Basics

**Write Memory (Hex)**: Writing to the tag

**Start Address:**

0 indicates the operation is executed from the first word in the specified memory bank.

1 indicates the operation executed from the second word in the specified memory bank.

**Length:** indicates the length of the read data (unit: word, 0 indicates the entire length from the Start Address).

**Password (Hex):** Access password/ Kill password. The default value is 00000000.

## 4.3.2. Reading Tag

**Example: reading the data with the start address of 2 and the length of 2 in the EPC area.**

**Operating steps:**

1. Select the tag to read (for details, see 4.2 Select a Tag to Operate).
2. Select the memory bank to be read: EPC.
3. Enter the Start Address: 2.
4. Enter the read Length: 2.
5. Enter the Access Password of the RFID tag.
6. Click the "Read" button.

7. If reading succeeds, the text "READ_TYPE_C_TAG_DATA" is displayed in the notification area. The read Data will be displayed in the Data column of the corresponding RFID Tag in the Tag List of the Inventory Data page.

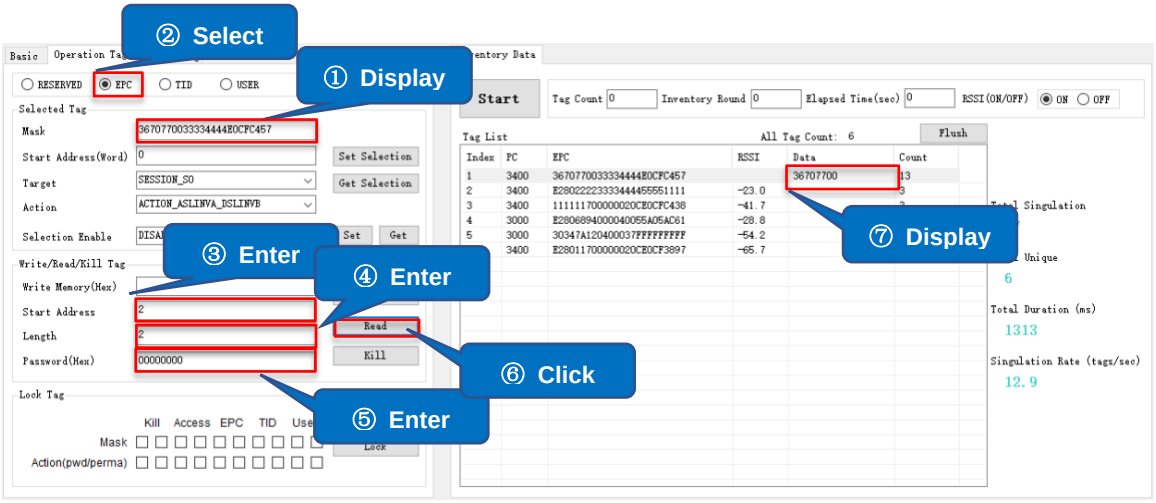



**FIG. 4-3-2-1 Read tag data**

**Note: If the specified RFID tag is not read by P3xU, "HANDLE_ACQUISITION_FAILURE" is displayed in the notification area.**

### 4.3.3. Writing to Tag

#### 4.3.3.1 Writing to Tag

**Example: writing "1234" with the start address of 2 to the EPC area in a tag with an access password "Password."**

**Operating steps:**

1. Select the tag to write to. (For details, see 4.2 Select a Tag to Read / Write / Lock / Kill)
2. Select the memory bank to write to: EPC
3. Enter the data to write to in the "Write Memory" text box (the number of characters must be a multiple of 4): 1234
4. Enter the Start Address: 2
5. Enter the Access Password of the RFID tag.
   If the selected memory bank (such as the EPC area) is not locked, enter the default password (00000000)
6. Click the "Write" button.

7. When the writing succeeds, "READ_TYPE_C_TAG_DATA" is displayed in the notification area and the data of the tag is displayed in the Data column of the corresponding RFID Tag in the Tag List of the Inventory Data page.

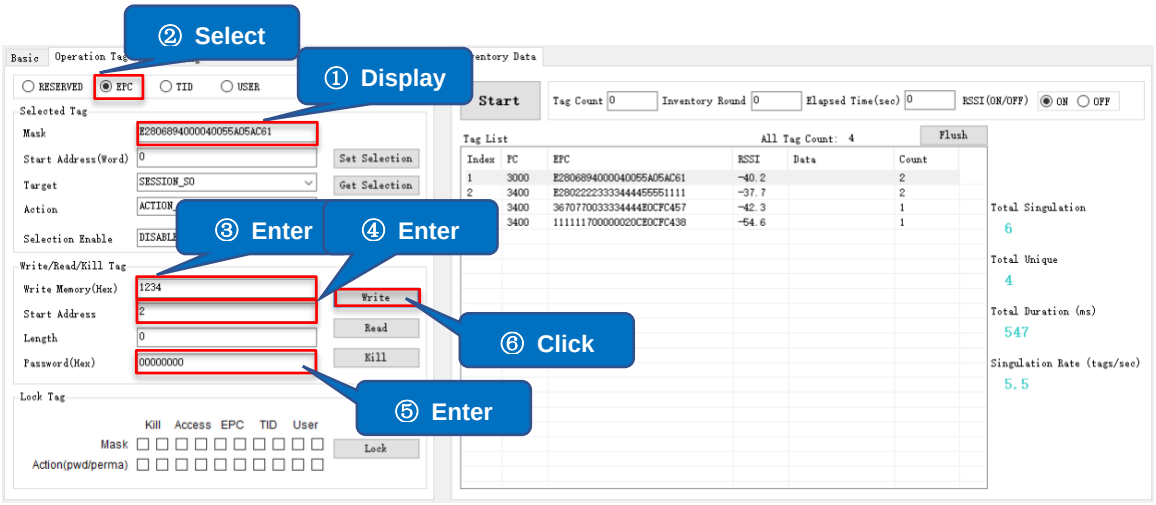



**FIG. 4-3-3-1-1 Writing data to a tag**

### 4.3.3.2 Changing the Access Password

**Example: Changing the Access Password of the RFID tag to "12345678".**

**Operating steps:**

1. Select the tag to change the password (For details, see 4.2 Select a Tag to Read / Write / Lock / Kill)
2. Select a memory bank: RESERVED
3. Enter the Access Password "12345678" in the "Write Memory" text box
4. Enter the Start Address: 2.
5. Enter the Access Password of the RFID tag
   When the RESERVED bank is not locked, enter the default password (00000000)
6. Click the "Write" button.
7. When the writing succeeds, "WRITE_TYPE_C_TAG_DATA" is displayed in the notification area.

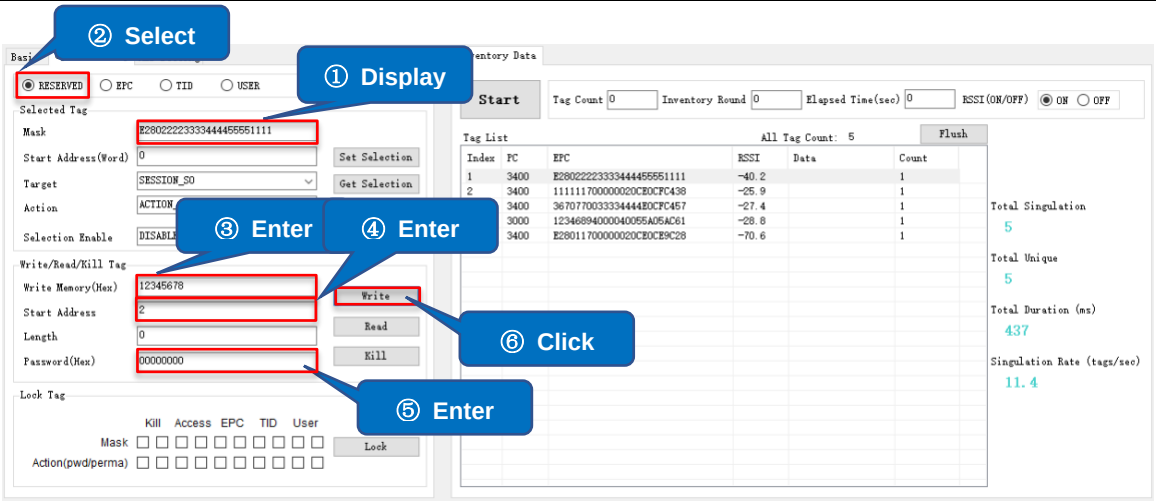



**FIG. 4-3-3-2-1 Changing Access Password**

### 4.3.3.3 Changing the Kill Password

The operating steps are the same as 4.3.3.2 How to Change the Access Password.

Difference: The Start Address in step 4 is 0.

## 4.3.4. Lock Tag

Lock, unlock, or permanently lock the selected memory bank.

**Example: Locking the EPC area of the RFID tag**

**Operating steps:**

1. Select the tag to lock (For details, see 4.2 Select a Tag to Read / Write / Lock / Kill)
2. Enter the Access Password. The Access Password cannot be 00000000. To change it, see 4.3.3.2 Changing the Access Password.
3. Select the memory bank to lock: EPC.
4. Select the Action: pwd (see the figure below)
5. Click the "Lock" button.
6. When the lock operation succeeds, "LOCK_TYPE_C_TAG" is displayed in the notification area.

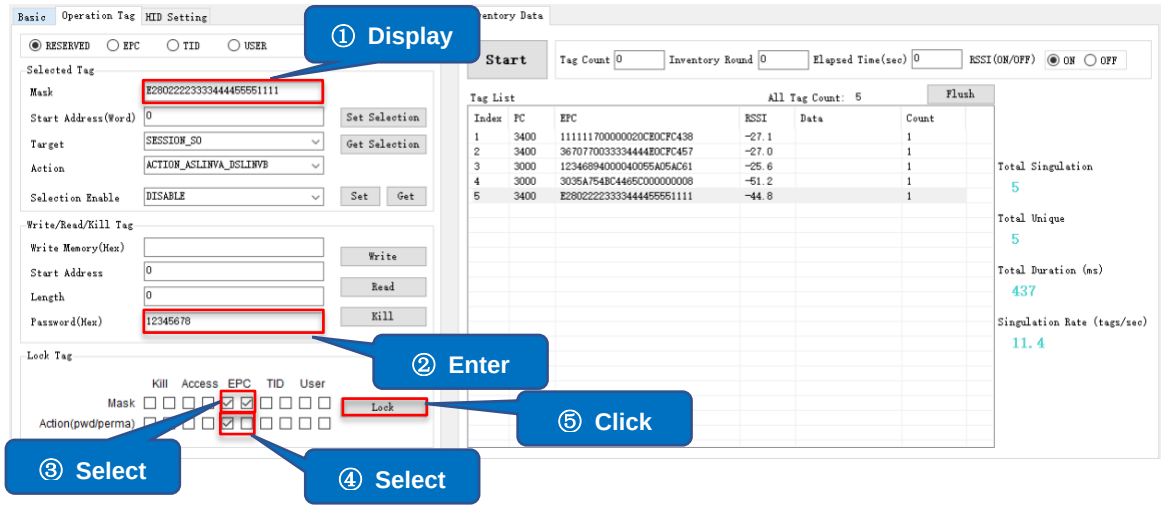



**FIG. 4-3-4-1 Lock**

For other operations (such as Unlock and Permanently Lock), the operation steps are the same as Lock. Select the Action as shown in the following figures:

- Unlock

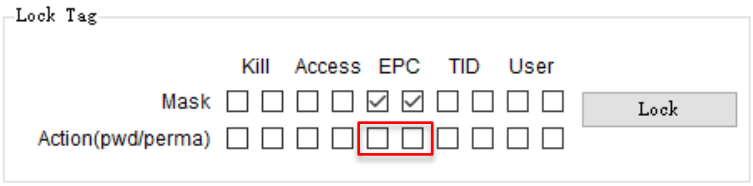



**FIG. 4-3-4-2 Unlock**

- Permanently Lock:

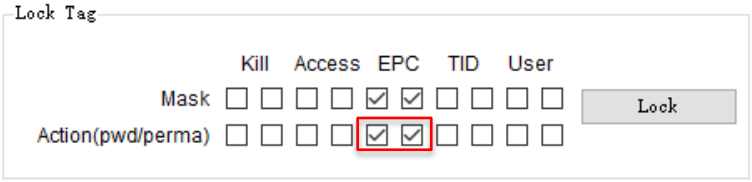



**FIG. 4-3-4-3 Lock permanently**

**Note:**

1) **When the Kill Password or Access Password of the RFID tag is locked, the default password "00000000" cannot be used to write or read the memory bank; If any other memory bank is locked, data cannot be written to the memory bank but can be read using the default password "00000000".**
2) **When the RESERVED bank of the tag is permanently locked, it cannot be written to or unlocked.**

### 4.3.5. Killing Tag

**Operating steps:**

1. Select the tag to kill. (For details, see 4.2 Select a Tag to Read / Write / Lock / Kill)
2. Enter the Kill Password. The password cannot be 00000000. For changing the Kill Password, see 4.3.3.3 How to Change the Kill Password.
3. Click the "Kill" button.

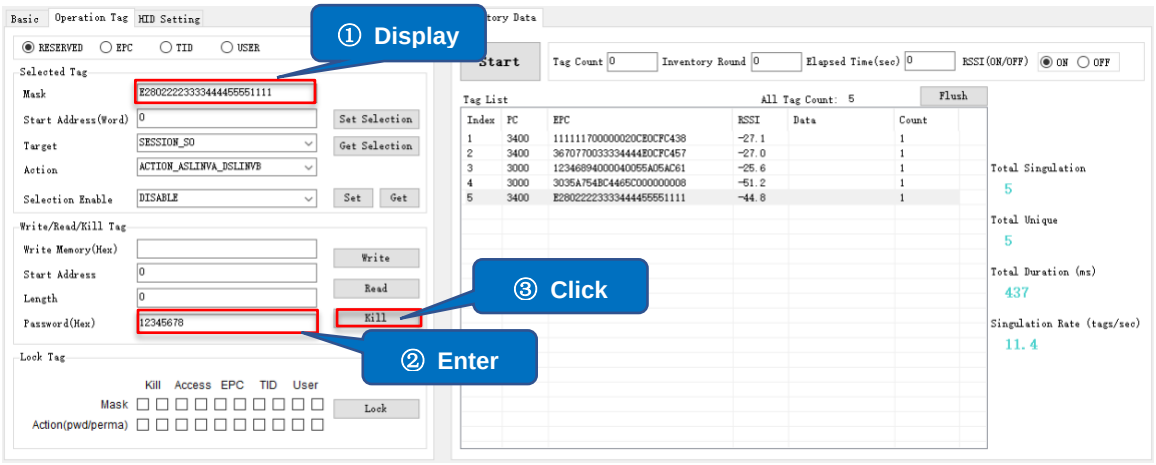



**FIG. 4-3-5-1 Killing an RFID tag**

# 5 HID Setting

This section is focused on configuring the settings in HID mode. All the parameters on this page are saved to P3xU.

The settings include the configuration of parameters such as mask, inventory interval, data output suffix, etc. The "Set" button is to set the parameters of the P3xU in HID mode. The "Get" button is used to get the current parameters of the P3xU in HID mode.

**HID (Human Interface Device) mode:**

When the P3xU is connected to a mobile device (or a PC) in HID mode, it is recognized as a keyboard and the data read by it is sent to the mobile device (or the PC) and displayed as a text input tool. There is no need to use an app with a dedicated SDK. HID mode supports Android and Windows devices.

**How to read RFID tags in HID mode:**

Power on the P3xU and place RFID tags at a close distance to the antenna. Press the SCAN Button and the data of RFID tags will be entered at the cursor location on the screen of the Android device or the Windows device with the P3xU's blue LED light flashing. Press the SCAN Button again to stop reading.

**Switching to HID mode:**

1. Switch both DIP Switches of P3xU to the OFF position.


**FIG. 5-1 DIP switches**

3. Connect the POWER/PC port of the P3xU and a Windows device using a USB-C cable. When the connection is successful, the LED will light up and it will beep twice.

## 5.1. Mask

With this setting, the data of RFID tags with a specified memory bank, start address, and length can be output to the connected device.

**Example: Set to output data with EPC area whose length is 2.**

**Operating steps:**

1. Select a memory bank: EPC
2. Enter the Start Address: 1
3. Enter the Read Length: 2
4. Click the "Set" button to finish setting

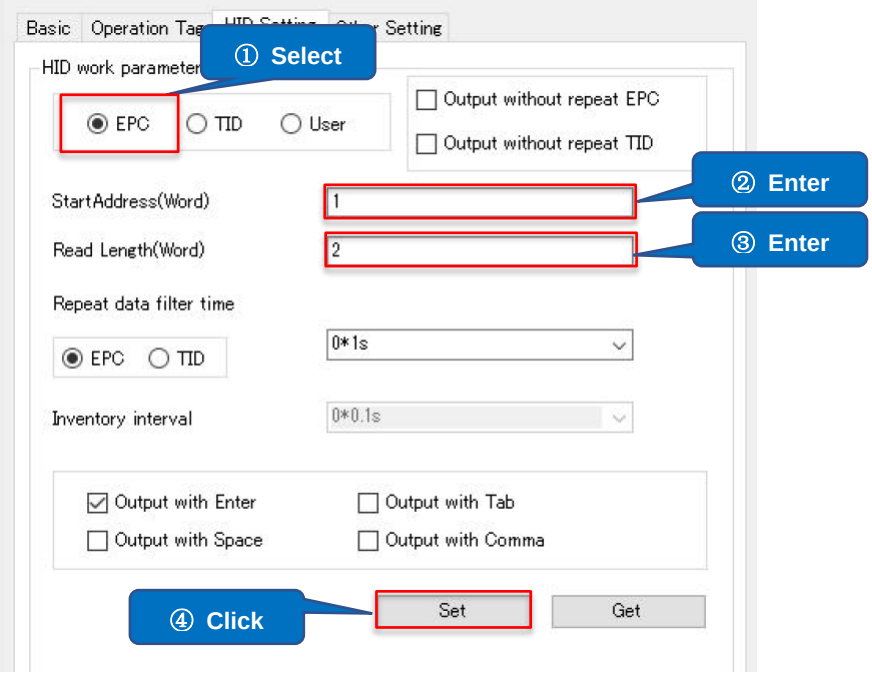



**FIG. 5-1-1 HID Mask settings**

Switch the P3xU to HID mode and connect to an Android/Windows device. Next, open an app that supports text input, such as Notepad. Then, press the SCAN Button of the P3xU to inventory RFID tags and the data is entered as in the figure below:

30347A12
36707700
30347A12
E2802222
36707700
30347A12

**FIG. 5-1-1-2 HID mode output data**

**Note:**

1) **If EPC is selected for the memory bank and the Start Address is 0, the data in the PC area is output. If the Start Address is 1, the data in the EPC area is output.**
2) **When EPC is selected as the memory bank and the Start Address and the Read Length are set to 0, the PC and EPC data are output.**
3) **When TID or USER is selected for the memory bank and the Start Address and the Read Length are set to 0, no data is output.**

## 5.2. Output without Repeat EPC or Output without Repeat TID

Output without repeat EPC and Output without repeat TID cannot be selected at the same time.

If one of them is selected, the data of the RFID tags with repeated EPC or TID within the reading range of the antenna is output only once and is not repeatedly output. When neither of them is selected, the RFID tag data within the reading range of the antenna will be repeatedly output.

**Example: Selecting Output without repeat EPC**

**Operating steps:**

1. Click "Output without repeat EPC" to select
2. Click the "Set" button to complete the setting.

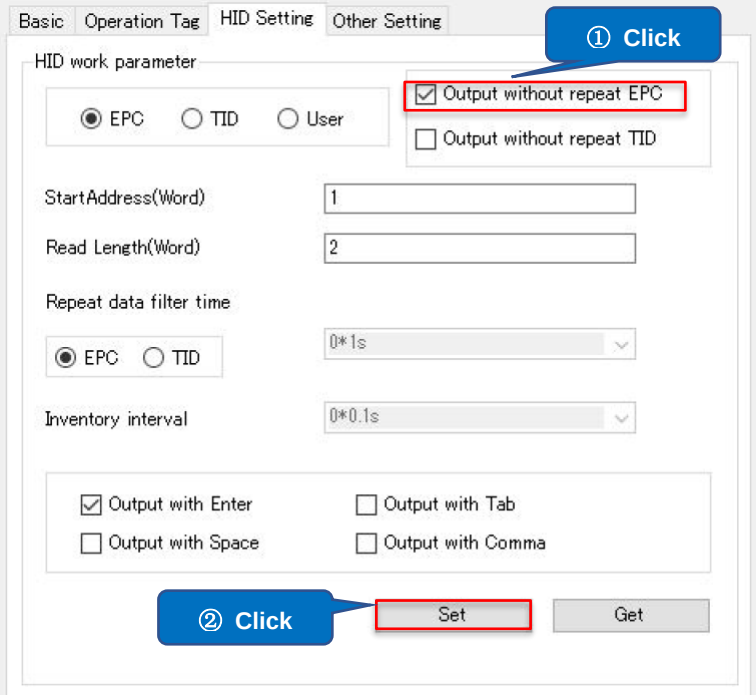



**FIG. 5-2-1 Selecting output without Repeat EPC/TID**

**Note: Output without repeat EPC and Output without repeat TID cannot be selected when both Start Address and Read Length are 0.**

## 5.3. Repeat data filter time

Set the interval between repeated outputs of the same RFID tag data. The range is 0*1s to 99*1s. When the Repeat data filter time is set to 10*1s and there is only one RFID tag within the reading range of the antenna, the data of the tag can only be output again after 10 seconds from each time it is output.

**Example: Setting to output the same EPC tag data every 1 second**

**Operating steps:**

1. Confirm that Output without repeat EPC and Output without repeat TID are both unchecked.
2. Select "EPC"
3. Select "1*1s" from the drop-down list
4. Click the "Set" button to complete the setting.

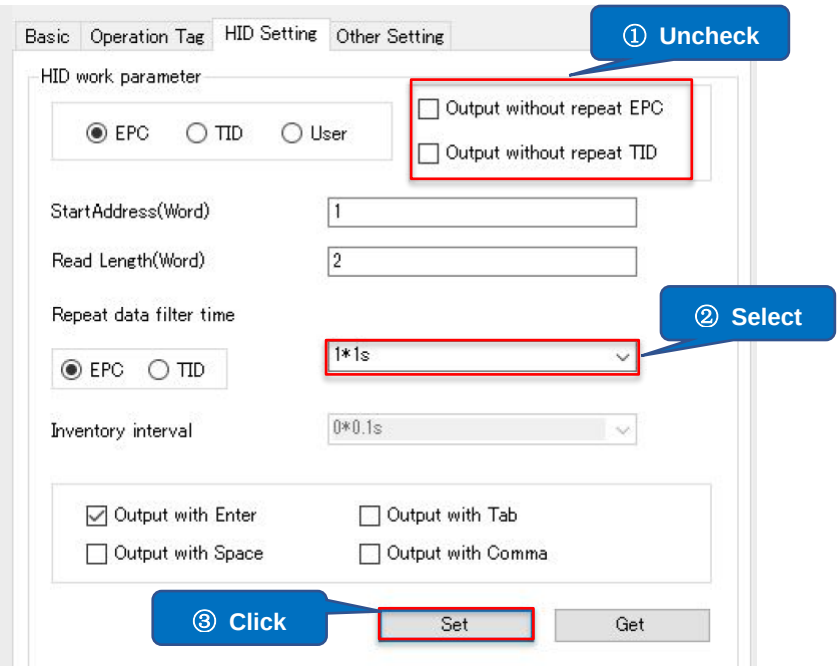



**FIG. 5-3-1 Setting Repeat data filter time**

**Note:**

1) **When one of Output without repeat EPC and Output without repeat TID is selected, Repeat data filter time cannot be selected. Repeat data filter time takes effect only when neither Output without repeat EPC nor Output without repeat TID is selected.**
2) **When Start Address and Read Length are both 0, Repeat data filter time is fixed to 0*1s.**
3) **When both Start Address and Read Length are not 0, Repeat data filter time can be selected.**

## 5.4. Inventory interval

Set the interval between taking inventories. The range is 0*0.1s to 10*0.1s.

**Operating steps:**

1. Select the interval time from the drop-down list.
2. Click the "Set" button to complete the setting.

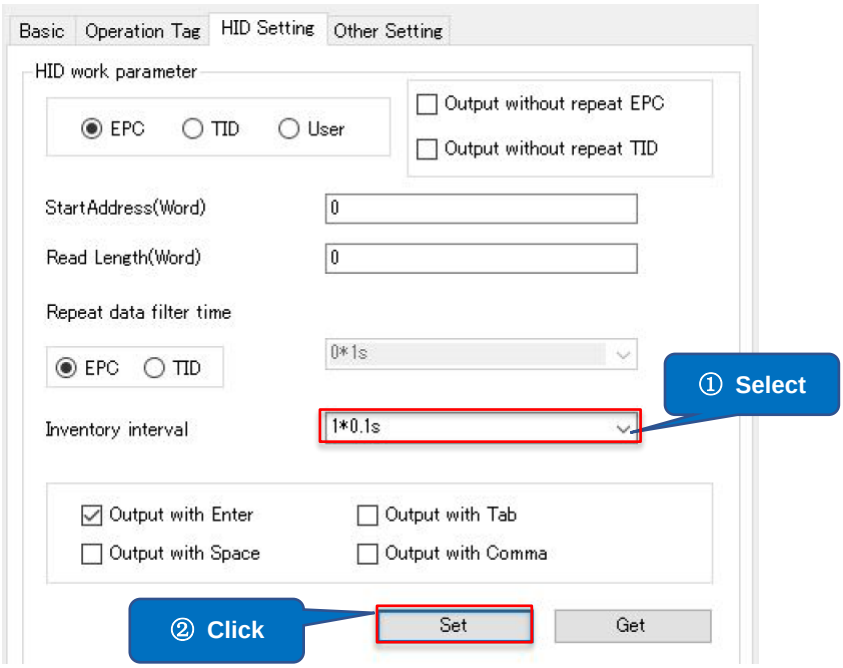



**FIG. 5-4-1 Inventory interval**

**Note: Inventory Interval can be selected only when EPC is selected as the memory bank and both Start Address and Read Length are set to 0. Otherwise, Inventory Interval cannot be selected and defaults to 0*0.1s.**

## 5.5. Output suffix

Set the suffix of the output data.

The suffix can be selected from Enter (default), Tab, Space, Comma, and None (not selecting). Only one of the options can be selected.

**Operating steps:**

1. Select the output suffix
2. Click the "Set" button to complete the setting

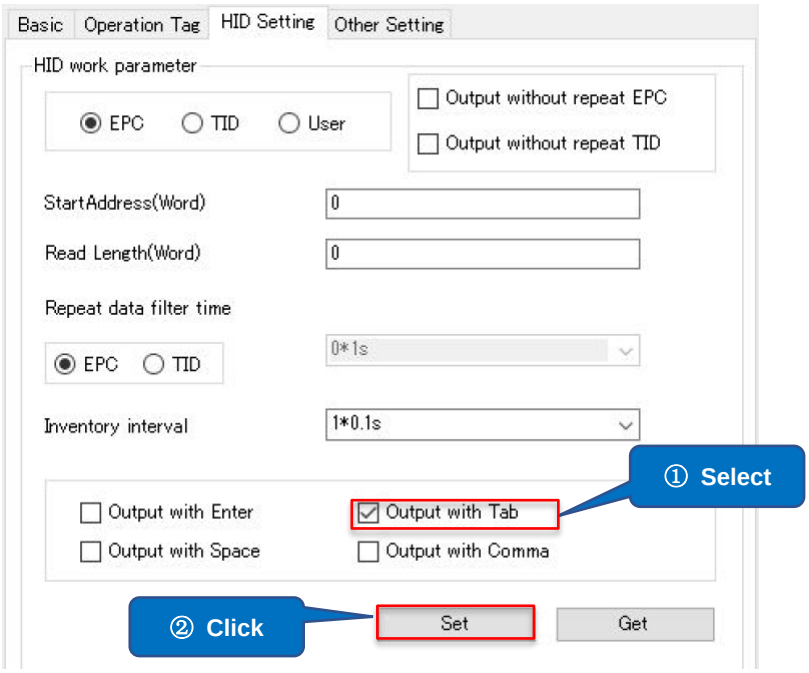



**FIG. 5-5-1 Setting output suffix**

# 6 Other Settings

This section is focused on setting automatic inventories of RFID tags during the selected periods of time and the path for saving the tag data. The set parameters are saved to the app.


**FIG. 6-1 Other Setting**

## 6.1. Export Path

Set the path for automatic saving of RFID tag data during the inventory. The field is empty by default, and you can select the data saving path by clicking the "Choose Path" button as shown in the figure below. You can also enter it manually.

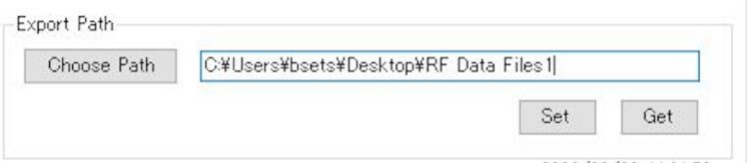



**FIG. 6-1-1 Setting Export Path**

When the Export Path is set, the data of read tags during inventory (including manual inventory and scheduled inventory) is automatically saved to this path each time the P3xU

stops inventorying. The data of tags read during the inventory is not saved automatically when Export Path is not selected. The exported data files are named after the start and end time of the inventories (24-hour format, accurate to milliseconds) and the file format is .csv.

**For example:**

20230209141000896_20230209142000327.csv

## 6.2. Scheduled Inventory

Set the parameters for scheduled auto-inventory of RFID tags. The auto-inventories are executed on a weekly basis. Once this is set to on, even when the app runs in the background, the scheduled inventories are executed at the scheduled times.

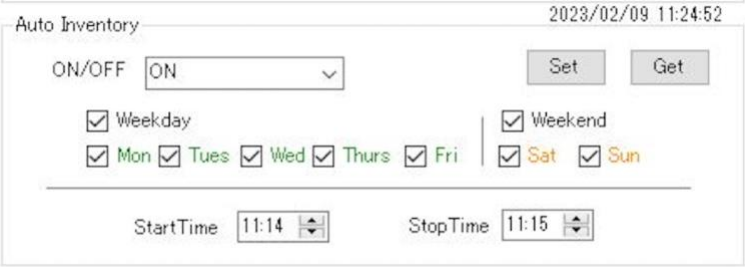



**FIG. 6-2-1. Scheduled Inventory**

- ON/OFF: Select to ON/OFF scheduled auto-inventory in the drop-down list.
- Start Time: The start time of the inventory. Format: HH: MM
- Stop Time: The end time of the inventory. Format: HH: MM

**Operating steps of scheduled auto-inventory:**

1. Select the days of the week to execute auto-inventories. Multiple selections are available.
2. Set the start and end times for inventory. The end time cannot be earlier than the start time.
3. Click the "Set" button to complete the settings. After the settings are completed, click the "Get" button to confirm that the parameters are set successfully.
4. Select ON in the ON/OFF drop-down list to set this function to ON (selecting OFF does not delete the set parameters).

**Note:**

1) **In order to execute scheduled tasks, the app needs to be running and successfully connected to the P3xU.**
2) **Automatic inventory can only be executed once a day, and this time period cannot be set overnight.**
3) **When the app is started during the automatic inventory period, the inventory starts automatically as soon as the app is started.**
4) **Example 1.**

   **The scheduled automatic inventory time is 15:00~16:00 and the inventory is stopped by clicking the "Stop" button at 15:30.**

   **In this situation, when the "Start" button is clicked again between 15:30 and 16:00, the inventory is automatically stopped without clicking the "Stop" button at the scheduled "Stop" of 16:00. If a data saving path is set, the two sets of data will be saved, with the end time being 15:30 and 16:00, respectively.**
5) **Example 2.**

   **The scheduled automatic inventory period is 15:00~16:00 and the "Start" button is clicked at 14:30 to start the inventory. In this case, the scheduled "Stop" won't happen until 16:00. If a data saving path is set, the one set of data will be saved, with the start and end times being 14:30 and 16:00, respectively.**

# 7 Firmware Update

## 7.1. P3xU Firmware Update

This function is used to update the P3xU firmware. This function requires a WAN connection to the Internet.

**Operating steps:**

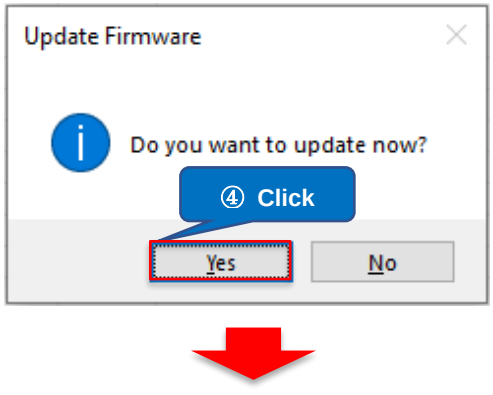
1. Click the "Get Files" button to get a list of firmware files that can be updated.


**FIG. 7-1-1 Getting Files**

2. The firmware update files are displayed in the FW Files drop-down list. Select the firmware update file to use from the drop-down list.
3. Click the "Update" button.


**FIG. 7-1-2 FW Files**

4. Click the "Yes" button to start updating the firmware. The Notification area displays the update progress.



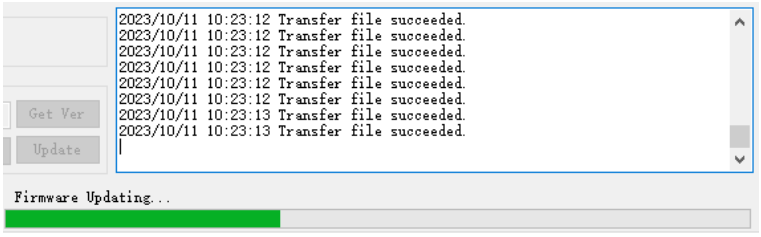



**FIG. 7-1-3 Firmware Updating**

5. After the update is complete, the message below is displayed on the screen. Click the "Yes" button to restart the P3xU if you want to use the updated firmware. Otherwise, the firmware remains as the one before the update until it is rebooted.

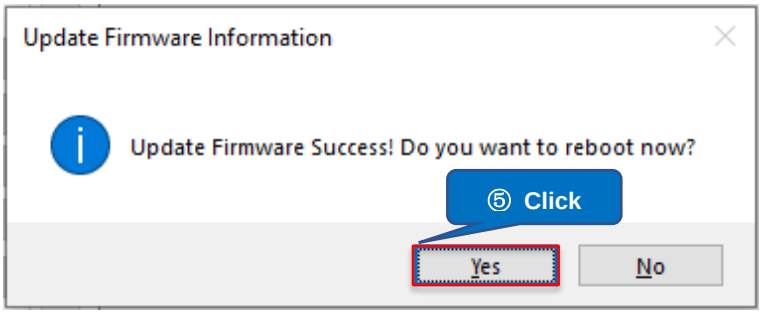



**FIG. 7-1-4 Update Complete**

6. The LED indicator and two beep sounds indicate a successful restart. Click the "OK" button to disconnect.

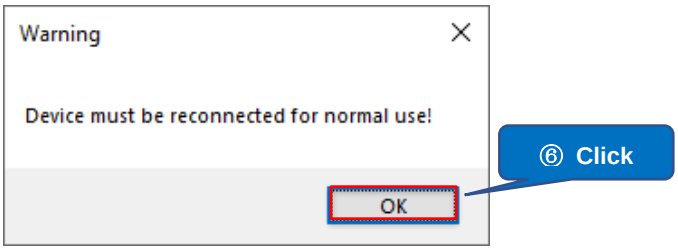
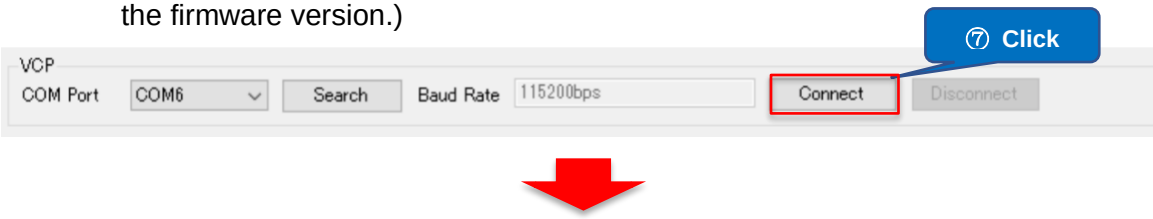



**FIG. 7-1-5 Disconnecting**

7. Click the "Connect" button to reconnect. Once connected, the firmware version will be automatically downloaded. (You can also click the "Get Ver" button to get the firmware version.)



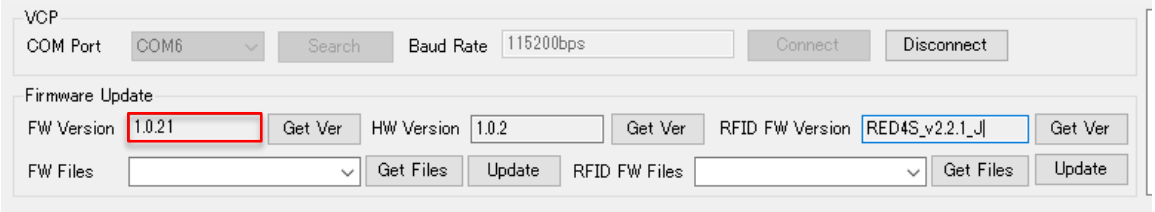



**FIG. 7-1-6 Reconnecting**

## 7.2. RFID Module Firmware Update

This function is used to update the firmware of the RFID module of the P3xU. This function requires a WAN connection to the Internet.

**Operating steps:**

1. Click the "Get Files" button to get the list of RFID module firmware files that can be updated to.

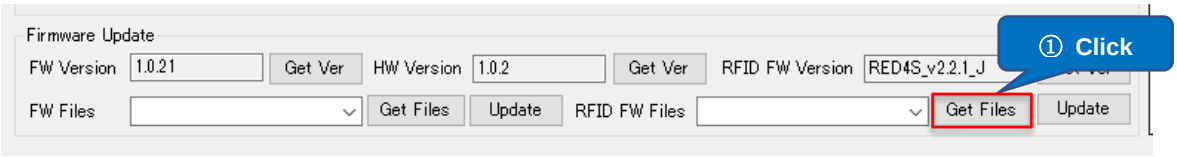



**FIG. 7-2-1 Get Files**

2. The firmware update files will be displayed in the "RFID FW Files" drop-down list. Select the firmware update file to use from the drop-down list.
3. Click the "Update" button.

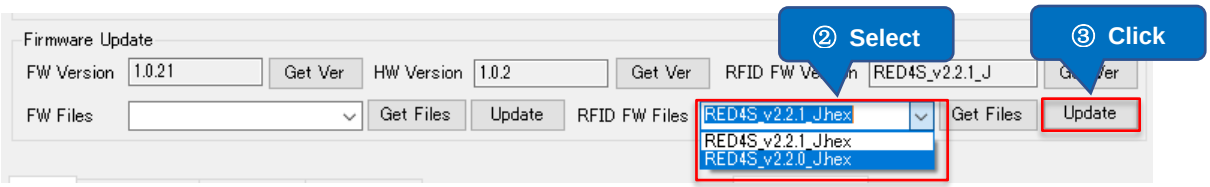



**FIG. 7-2-2 FW Files**

4. Click the "Yes" button to start updating the firmware. The Notification area displays the update progress.

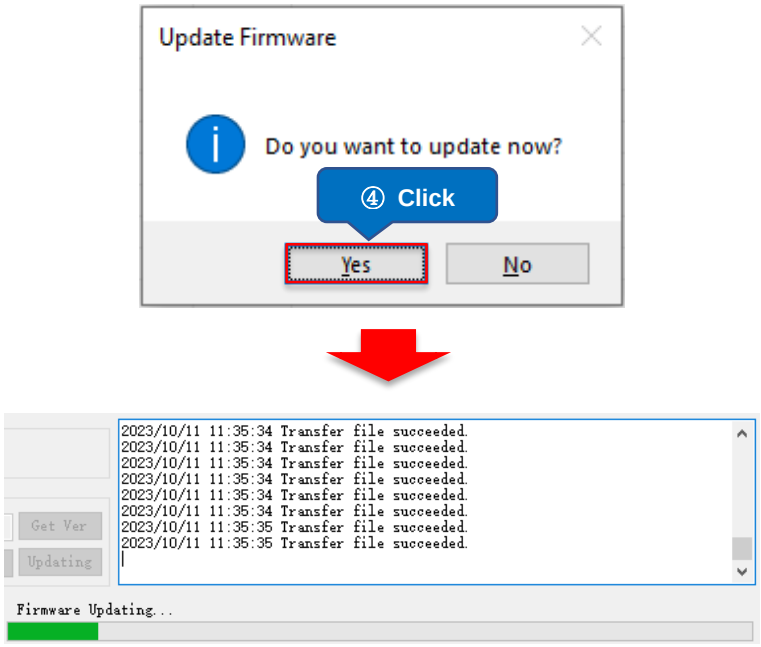



**FIG. 7-2-3 Firmware Updating**

5. After the update is complete, the message below is displayed on the screen.

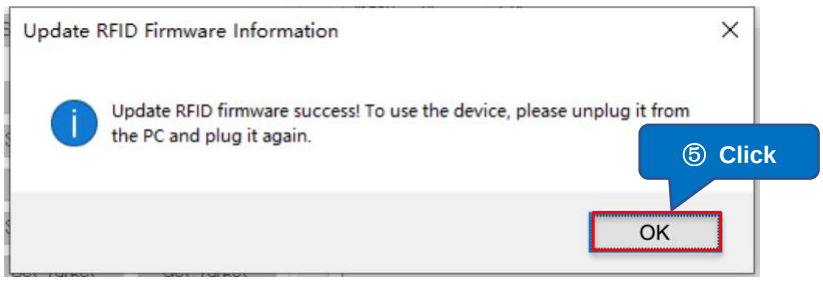
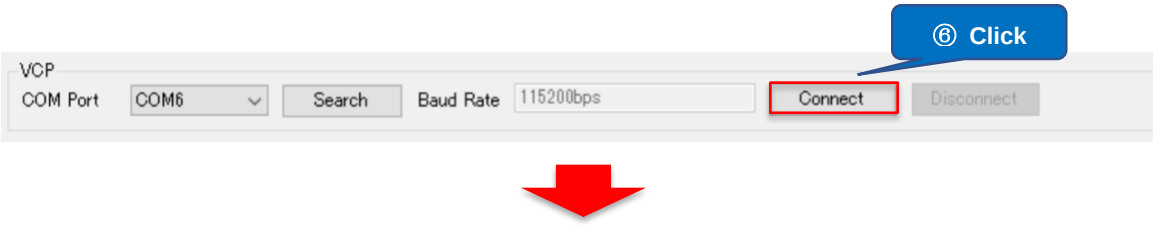



**FIG. 7-2-4 Update Complete**

6. Disconnect the device from the PC physically and then reconnect it. The LED indicator and two beep sounds indicate a successful restart. Click the "Connect" button to reconnect. Once connected, the firmware version of the RFID module is automatically downloaded. (You can also click the "Get Ver" button to get the firmware version.)



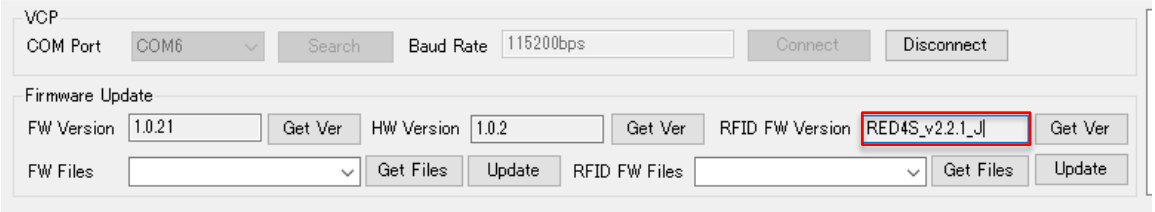



**FIG. 7-2-5 Reconnecting**

**ASR-P3xU C# Demo**

# User Manual

**Sep. 2023 1st Edition**

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