

NE-USB USB Communication
Sample Program
(Excel Macro VBA 64-bit Version)

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1. Overview

This is an outline of sample programming to control LR-USB via USB communication.

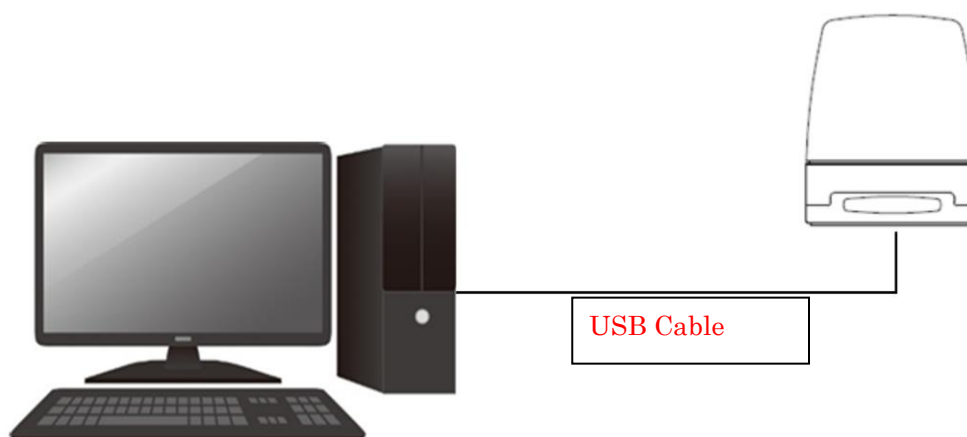
The programs are intended to control the unit using VBA (64-bit version) without the use of DLLs provided by PATLITE.

This program is only a sample and additional design for abnormalities are necessary.

1.1. System Overview

The system configuration diagram of this program is as follows.

This program controls one NE-USB by USB communication.



2. Development Environment

The development environment of the sample program is shown below.

2.1. Windows Environment

Development Environment		Remarks
Development OS	Windows10	
Development Language	VBA	Excel 2013

3. Sample Source Overview

3.1. Screen Operation

In Excel, the command for each action is executed by clicking the Execute button with the identifier of the command to be executed and the parameters to be used are specified

The screenshot shows the PATLITE Excel interface with several dropdown menus and buttons. Numbered callouts identify the following elements:

- ①: Execute button (実行)
- ②: Command Identifier dropdown (コマンド識別子の値)
- ③: LED Color dropdown (LED色の値)
- ④: LED Pattern dropdown (LEDパターンの値)
- ⑤: Alarm Pattern dropdown (ブザーパターンの値)
- ⑥: Alarm Continuous Operation and Number of Cycles dropdown (ブザーの連続動作・回数動作の値)
- ⑦: Alarm Volume dropdown (ブザー音量の値)
- ⑧: Connection Display Settings dropdown (接続表示の設定)

No	Item Name	Description
①	Execute Button	Executes the command with the specified Command Identifier
②	Command Identifier	Select the Command Identifier to execute
③	LED Color	Set LED color to light
④	LED Pattern	Alarm sound pattern
⑤	Alarm Pattern	Alarm sound pattern
⑥	Alarm Continuous Operation and Number of Cycles	Set the number of times the alarm sounds
⑦	Alarm Volume	Set the alarm volume
⑧	Connection Display Settings	Set the display when NE-USB is connected to USB

3.1.1. Command List

Command Name	Description
LED Control	Set LED color and LED pattern to display and activate it.
Control Alarm Pattern	Set the alarm pattern and the number of cycles.
Control Alarm Volume	Set alarm volume and activate it.
Control Alarm Pattern and Volume	Set alarm pattern, number of times, and volume and activate it.
Connection Display Settings	Change the display settings when connecting.

Acquire input status of Touch sensor (Only for NE-ST-USB/NE-WT-USB)	Message box display the input status of the touch sensor.
Reset	Turn off all LED units and stop the alarm.

3.1.2. LED Control

Set the following values on Excel and press the execute button to execute the command.

No	Command Line Arguments	Value
1	Command Identifier	1
2	LED Color	Off: 0 Red: 1 Green: 2 Amber: 3 Blue: 4 Purple: 5 Sky Blue: 6 White: 7 No change: 15
3	LED Pattern	Off: 0 Lit: 1 LED pattern 1: 2 LED pattern 2: 3 LED pattern 3: 4 LED pattern 4: 5 LED pattern 5: 6 LED pattern 6: 7 No change: 15

3.1.3. Control Alarm Pattern

Set the following values on Excel and press the execute button to execute the command.

No	Command Line Arguments	Value
1	Command Identifier	2
2	Alarm Pattern	Stop: 0 Sounding (Continuous): 1 Sweep sound: 2 Intermittent sound: 3 Weak warning sound: 4 Strong warning sound: 5 Twinkle, Twinkle Little Star: 6 London Bridge: 7 No change: 15

3	Alarm Continuous Operation and Number of Cycles	Continuous cycles: 0 Number of cycles: 1 to 1 4 No change: 15
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3.1.4. Control Alarm Volume

Set the following values on Excel and press the execute button to execute the command.

No	Command Line Arguments	Value
1	Command Identifier	3
2	Alarm Volume	Mute: 0 Volume: 1-9 Maximum volume: 10 No change: 15

3.1.5. Control Alarm Pattern and Volume

Set the following values on Excel and press the execute button to execute the command.

No	Command Line Arguments	Value
1	Command Identifier	4
2	Alarm Pattern	Stop: 0 Sounding (Continuous): 1 Sweep sound: 2 Intermittent sound: 3 Weak warning sound: 4 Strong warning sound: 5 Twinkle, Twinkle Little Star: 6 London Bridge: 7 No change: 15
3	Alarm Continuous Operation and Number of Cycles	Continuous operation: 0 Number of cycles: 1 to 14 No change: 15
4	Alarm Volume	Mute: 0 Volume: 1-9 Maximum volume: 10 No change: 15

3.1.6. Connection display settings

Set the following values on Excel and press the execute button to execute the command.

No	Command Line Arguments	Value
1	Command Identifier	5
2	Connection Display Settings	OFF: 0 ON: 1

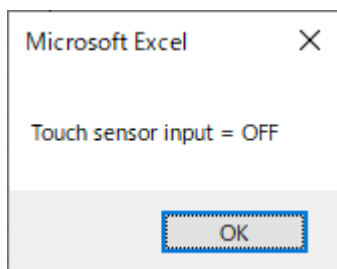
3.1.7. Acquire input status of Touch sensor (only for NE-ST-USB/NE-WT-USB)

Set the following values on Excel and press the execute button to execute the command.

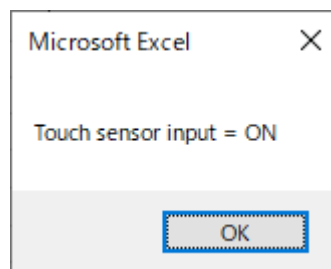
No	Command Line Arguments	Value
.		
1	Command Identifier	6

Touch sensor input status will appear on the message box when execute button is pressed.

<When touch sensor input status is OFF>



<When touch sensor input status is ON>



3.1.8. Reset

Set the following values on Excel and press the execute button to execute the command.

No	Command Line Arguments	Value
.		
1	Command Identifier	7