

LA-POE Socket Communication
Sample Program
(Excel Macro VBA)

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1. Overview

This is an outline of sample programming to control LA6-POE via socket communication.

The programs are intended to control the unit using Excel Macro VBA control without using the DLLs provided by PATLITE.

1.1. System Overview

The system configuration diagram of this program is as follows.

The sample program controls one LA6-POE by socket communication.



2. Development environment

The development environment of the sample program is shown below.

Development Environment		Remarks
Development OS	Windows 10 64bit	
Development Language	VBA	Excel 2013
App Type	GUI application	

3. Application 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 an Excel spreadsheet with columns A through K. It contains various command identifiers and their corresponding parameters. Numbered callouts 1 through 9 highlight specific interactive elements:

- 1:** Execute button
- 2:** Command Identifier dropdown menu
- 3:** LED pattern selection (1-5)
- 4:** Detailed operation control command parameters (LED color, flashing, alarm pattern)
- 5:** STOP/pulse input command transmission value
- 6:** Buzzer ON/OFF setting
- 7:** STOP input/trigger input setting
- 8:** Password field
- 9:** Write command value (128)

No.	Item Name	Description
①	Execute Button	Executes a command with the specified command identifier
②	Command Identifier	Select the command identifier to execute.
③	Operation Control Command Transmission Value Setting	Set LED patterns 1 to 5 and alarm pattern to be used when executing Operation Control command
④	Detailed Operation Control Command Transmission Value Setting	Set LED color, flashing operation, and alarm pattern of LED units 1 to 5 used when executing Detailed Operation Control command

⑤	Smart Mode Control Command Transmission Value Setting	Set the group number to be used when executing Smart Mode Control commands
⑥	Mute Command Transmission Value Setting	Set the alarm being used ON/OFF when executing the Mute command.
⑦	STOP/ Pulse-input Command transmission Value Setting	Set STOP input/trigger input used when executing STOP/ Pulse input command.
⑧	Restart Command Transmission Value Setting	Set the password to use when executing the Restart command
⑨	Write Command Transmission Value Setting	Set the operation data to be used when executing the Write command.

3.1.1. Command list

Command name	Description
Smart Mode Control Commands	Run Smart Mode with the specified group number
Mute Command	Controlling ON/OFF of the alarm during smart mode
STOP/Pulse Input Command	When transmitted during time trigger mode, pattern stop/restart is controlled. When transmitted during pulse trigger mode, pattern transitions.
Operation Control Command	Controls LED unit pattern for each tier and alarm pattern (1 to 3).
Detailed Operation Control Commands	Controls the color and operation pattern for each LED unit tier and alarm pattern (1 to 11).
Clear Command	Turn off LED unit and stop alarm.
Restart Command	Restart LA6-POE
Status Acquisition Command	Used to acquire status of signal lines/contact inputs and the status of the LED unit and alarm.
Detailed Status Acquisition Command	Used to acquire status of signal lines/contact inputs, LED unit and alarm status, and color information for each tier.
Write Command	Controls continuous on and flashing patterns for LED Unit tiers 1-3 and alarm patterns 1 and 2.
Read Command	Used to acquire continuous on and flashing of LED Unit tiers 1-3 and alarm patterns 1 and 2.

3.1.2. Smart Mode Control Commands

Set the following values in Excel and then press the Execute button to execute the command.

No.	Configuration Parameters	Value
1	Command identifier	T
2	Group Number	1~15

3.1.3. Mute Control Commands

Set the following values in Excel and then press the Execute button to execute the command.

No.	Configuration Parameters	Value
1	Command Identifier	M
2	Alarm ON/OFF	ON:1, OFF:0

3.1.4. STOP/Pulse Input Command

Set the following values in Excel and then press the Execute button to execute the command.

No.	Configuration Parameters	Value
1	Command Identifier	P
2	STOP Input/Trigger Input	STOP input ON/Trigger input: 1, STOP input: 0

3.1.5. Operation Control Commands

Set the following values in Excel and then press the Execute button to execute the command.

No.	Configuration Parameters	Value
1	Command Identifier	S
2	LED Pattern 1	Off: 0 Continuous On: 1 Flash: 2 No change: 9
3	LED Pattern 2	
4	LED Pattern 3	
5	LED Pattern 4	
6	LED Pattern 5	
7	Alarm Pattern	Stop: 0 Pattern 1: 1 Pattern 2: 2 Alarm Sound when simultaneous alarm input: 3 No change: 9

3.1.6. Detailed Operation Control Commands

Set the following values in Excel and then press the Execute button to execute the command.

No.	Configuration Parameters	Value
1	Command Identifier	D
2	LED Unit 1	Off: 0 Red: 1 Amber: 2 Lemon: 3
3	LED Unit 2	
4	LED Unit 3	
5	LED Unit 4	

6	LED Unit 5	Green: 4 Sky: 5 Blue: 6 Purple: 7 Pink: 8 White: 9
7	Flashing Operation	Flashing OFF: 0 Flashing ON: 1
8	Alarm Pattern	Stop: 0 Pattern: 1 Pattern: 2 Pattern: 3 Pattern: 4 Pattern: 5 Pattern: 6 Pattern: 7 Pattern: 8 Pattern: 9 Pattern: 10 Pattern: 11

3.1.7. Clear Command

Set the following values in Excel and then press the Execute button to execute the command.

No.	Configuration Parameters	Value
1	Command Identifier	C

3.1.8. Restart Command

Set the following values in Excel and then press the Execute button to execute the command.

No.	Configuration Parameters	Value
1	Command Identifier	B
2	Password	Password set during password setup in the Web Setup Tool

3.1.9. Status Acquisition Command

Set the following values in Excel and then press the Execute button to execute the command.

No.	Configuration Parameters	Value
1	Command Identifier	G

3.1.10. Detailed Status Acquisition Command

Set the following values in Excel and then press the Execute button to execute the command.

No.	Configuration Parameters	Value
1	Command Identifier	E

3.1.11. Write command

Set the following values in Excel and then press the Execute button to execute the command.

No.	Configuration Parameters	Value
1	Command Identifier	W
2	Operation Data	Bit7: LED tier 3 Flashing (OFF:0, ON:1) Bit6: LED tier 2 Flashing (OFF:0, ON:1) Bit5: LED tier 1 Flashing (OFF:0, ON:1) Bit4: Alarm pattern 2 (OFF:0, ON:1) Bit3: Alarm pattern 1 (OFF:0, ON:1) Bit2: LED tier 3 Continuous On (OFF:0, ON:1) Bit1: LED tier 2 Continuous On (OFF:0, ON:1) Bit0: LED tier 1 Continuous On (OFF:0, ON:1)

Example :145

→ "LED tier 3 Flashing," "Alarm pattern 2," and "LED tier 1 Continuous On"

3.1.12. Read Command

Set the following values in Excel and then press the Execute button to execute the command.

No.	Configuration Parameters	Value
1	Command Identifier	R