

Large Square-bodied Lighted Pushbutton Switches

- Excellent operating sensitivity.
- Excellent illumination with even surface brightness.
- Three-color models (green, orange, red; chameleon lighting) included in lineup.



Refer to *Safety Precautions for All Pushbutton Switches/Indicators and Safety Precautions* on page 24.

List of Models

Model	Appearance
A3PJ (Rectangular)	
A3PA (Square)	
A3PT (Round)	

Note: The A3PJ is shown in the figure above as an example.

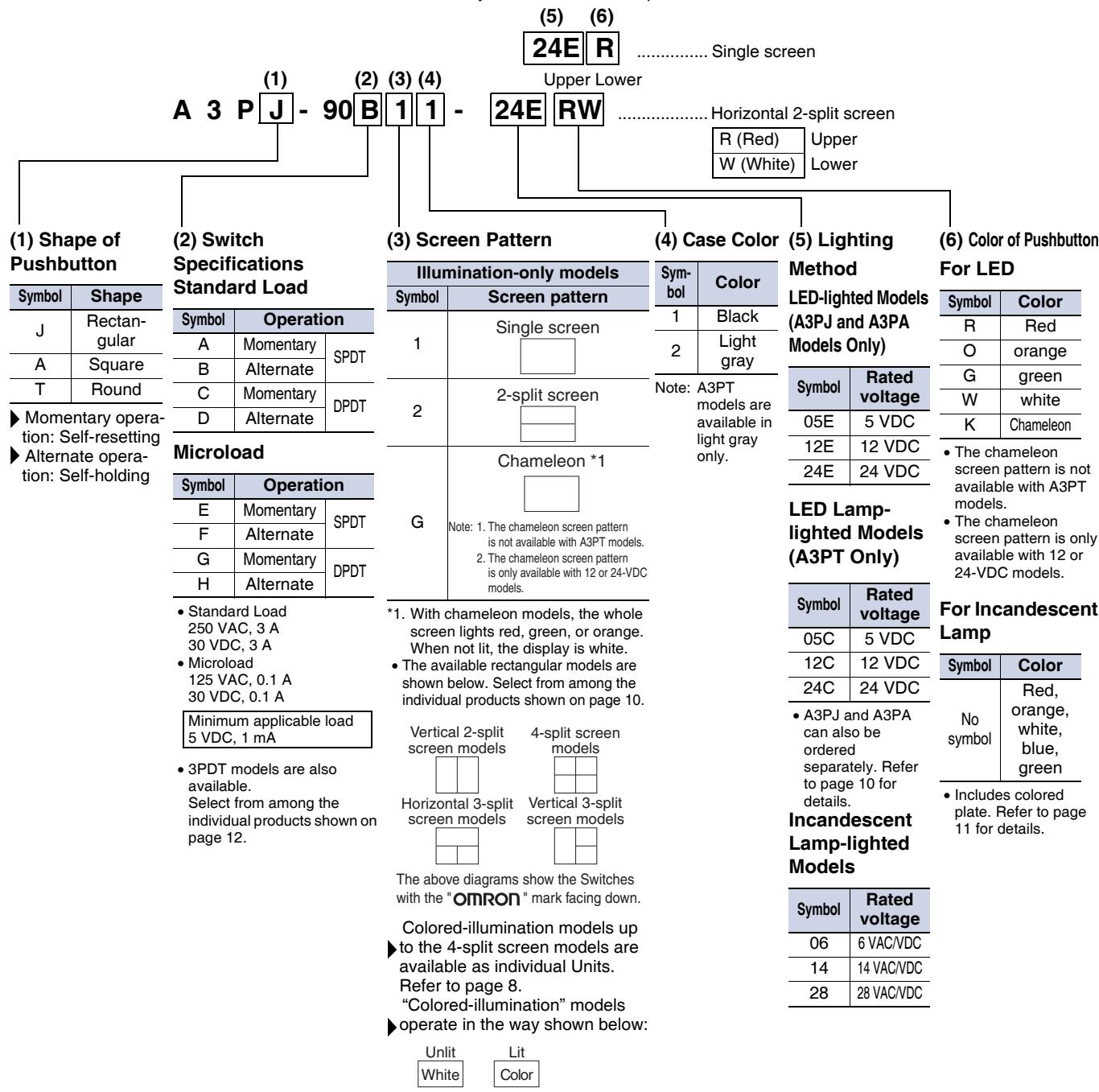
- Specifications: Refer to page 15. ■ Panel cutout: Refer to page 21. ■ Dimensions: Refer to page 18.
- Accessories, replacements, and tools: Refer to pages 13 to 15. ■ Precautions for correct use: Refer to page 24.

Model Number Structure

Model Number Legend The model numbers used to order sets of Units are illustrated below. One set comprises the Pushbutton, Lamp, and Switch.

For more information, refer to Ordering Information (pages 3 to 7).

Some forms may not be available for order depending on the combination of functions and specifications described below. Contact your OMRON sales representative for more detailed information.



Number of LED Lamps

Screen pattern	A3PJ	A3PA	A3PT
Single screen			2
Horizontal 2-split screen		Models with built-in LED	---
Vertical 2-split screen			
Horizontal 3-split screen			
Vertical 3-split screen			
4-split screen			

*2. These split screen models are available only as individual Units. They cannot be ordered as sets.

Number of Incandescent Lamps

Screen pattern	A3PJ	A3PA	A3PT
Single screen	2	1	2
Horizontal 2-split screen			2
Vertical 2-split screen			---
Horizontal 3-split screen			---
Vertical 3-split screen			---
4-split screen			---

Note: Lamp positions for single-screen A3PJ (rectangular model).



Ordering Information

Ordering as a Set The model numbers used to order sets of Units are given in the following tables. One set comprises the Pushbutton, Lamp, and Switch.
(Not all combinations are possible. Ask your OMRON representative for details.)



Standard Loads

Output	Lighting	Contact type Operation Case color	Standard load (250 VAC, 3 A; 30 VDC, 4 A)				Pushbutton color symbol	
			Momentary operation (Self-resetting)		Alternate operation (Self-holding)			
			Black	Light gray	Black	Light gray		
SPDT	LED	5 VDC	A3PJ-90A11-05E(1)	A3PJ-90A12-05E(1)	A3PJ-90B11-05E(1)	A3PJ-90B12-05E(1)	R O G W	
		12 VDC	A3PJ-90A11-12E(1)	A3PJ-90A12-12E(1)	A3PJ-90B11-12E(1)	A3PJ-90B12-12E(1)		
		24 VDC	A3PJ-90A11-24E(1)	A3PJ-90A12-24E(1)	A3PJ-90B11-24E(1)	A3PJ-90B12-24E(1)		
	Chameleon	12 VDC	A3PJ-90AG1-12EK	---	A3PJ-90BG1-12EK	A3PJ-90BG2-12EK	*1	
		24 VDC	A3PJ-90AG1-24EK	A3PJ-90AG2-24EK	A3PJ-90BG1-24EK	A3PJ-90BG2-24EK		
		6 VDC/VAC	A3PJ-90A11-06	A3PJ-90A12-06	A3PJ-90B11-06	A3PJ-90B12-06		
	Incandescent lamp	14 VDC/VAC	A3PJ-90A11-14	A3PJ-90A12-14	A3PJ-90B11-14	A3PJ-90B12-14	*2	
		28 VDC/VAC	A3PJ-90A11-28	A3PJ-90A12-28	A3PJ-90B11-28	A3PJ-90B12-28		
		5 VDC	A3PJ-90C11-05E(1)	A3PJ-90C12-05E(1)	A3PJ-90D11-05E(1)	A3PJ-90D12-05E(1)		
DPDT	LED	12 VDC	A3PJ-90C11-12E(1)	A3PJ-90C12-12E(1)	A3PJ-90D11-12E(1)	A3PJ-90D12-12E(1)	R O G W	
		24 VDC	A3PJ-90C11-24E(1)	A3PJ-90C12-24E(1)	A3PJ-90D11-24E(1)	A3PJ-90D12-24E(1)		
		12 VDC	A3PJ-90CG1-12EK	A3PJ-90CG2-12EK	A3PJ-90DG1-12EK	---	*1	
	Chameleon	24 VDC	A3PJ-90CG1-24EK	A3PJ-90CG2-24EK	A3PJ-90DG1-24EK	A3PJ-90DG2-24EK		
		6 VDC/VAC	A3PJ-90C11-06	A3PJ-90C12-06	A3PJ-90D11-06	A3PJ-90D12-06	*2	
		14 VDC/VAC	A3PJ-90C11-14	A3PJ-90C12-14	A3PJ-90D11-14	A3PJ-90D12-14		
	Incandescent lamp	28 VDC/VAC	A3PJ-90C11-28	A3PJ-90C12-28	A3PJ-90D11-28	A3PJ-90D12-28		
		5 VDC	A3PJ-90E11-05E(1)	A3PJ-90E12-05E(1)	A3PJ-90E11-12E(1)	A3PJ-90E12-12E(1)	R O G W	
		12 VDC	A3PJ-90E11-12E(1)	A3PJ-90E12-12E(1)	A3PJ-90E11-24E(1)	A3PJ-90E12-24E(1)		

Note: Enter the desired color symbol for the Pushbutton in (1). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: Red A3PJ-90A11-24ER

*1. You can change the screen colors of chameleon models between red, green, and orange, by changing the terminal wiring. Refer to page 20 for details.

*2. Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.

Microloads

Output	Lighting	Contact type Operation Case color	Microload (125 VAC, 0.1 A; 30 VDC, 0.1 A)		Pushbutton color symbol	
			Momentary operation (Self-resetting)			
			Black	Light gray		
SPDT	LED	5 VDC	A3PJ-90E11-05E(1)	A3PJ-90E12-05E(1)	R O G W	
		12 VDC	A3PJ-90E11-12E(1)	A3PJ-90E12-12E(1)		
		24 VDC	A3PJ-90E11-24E(1)	A3PJ-90E12-24E(1)		
	Chameleon	12 VDC	A3PJ-90EG1-12EK	---	*1	
		24 VDC	A3PJ-90EG1-24EK	A3PJ-90EG2-24EK		
		6 VDC/VAC	A3PJ-90E11-06	A3PJ-90E12-06		
	Incandescent lamp	14 VDC/VAC	A3PJ-90E11-14	---	*2	
		28 VDC/VAC	A3PJ-90E11-28	A3PJ-90E12-28		
		5 VDC	A3PJ-90G11-05E(1)	---	R O G W	
DPDT	LED	12 VDC	A3PJ-90G11-12E(1)	A3PJ-90G12-12E(1)		
		24 VDC	A3PJ-90G11-24E(1)	A3PJ-90G12-24E(1)		
		12 VDC	A3PJ-90GG1-12EK	---	*1	
	Chameleon	24 VDC	A3PJ-90GG1-24EK	---		
		6 VDC/VAC	A3PJ-90G11-06	A3PJ-90G12-06	*2	
		14 VDC/VAC	A3PJ-90G11-14	A3PJ-90G12-14		
		28 VDC/VAC	A3PJ-90G11-28	A3PJ-90G12-28		

Note: Enter the desired color symbol for the Pushbutton in (1). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: Red A3PJ-90E11-24ER

*1. You can change the screen colors of chameleon models between red, green, and orange, by changing the terminal wiring. Refer to page 20 for details.

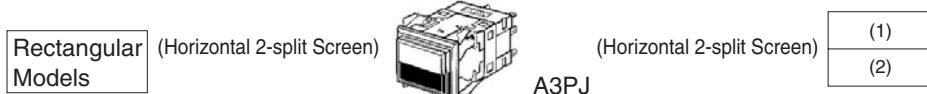
*2. Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.

Individual models: Refer to pages 9 to 12.
(The Pushbutton, Lamp, and Switch can be ordered separately.)

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18.
■ Accessories: Refer to pages 13 to 15.

Ordering Information

Ordering as a Set The model numbers used to order sets of Units are given in the following tables. One set comprises the Pushbutton, Lamp, and Switch.
(Not all combinations are possible. Ask your OMRON representative for details.)



Standard Loads

Output	Lighting	Case color	Standard load (250 VAC, 3 A; 30 VDC, 4 A)				Pushbutton color symbol	
			Momentary operation (Self-resetting)		Alternate operation (Self-holding)			
			Black	Light gray	Black	Light gray		
SPDT	LED	5 VDC	A3PJ-90A21-24E(1)(2)	A3PJ-90A22-24E(1)(2)	A3PJ-90B21-24E(1)(2)	A3PJ-90B22-24E(1)(2)	R O G W	
	Incandescent lamp	6 VDC/VAC	A3PJ-90A21-06	A3PJ-90A22-06	A3PJ-90B21-06	A3PJ-90B22-06	*	
		14 VDC/VAC	A3PJ-90A21-14	A3PJ-90A22-14	A3PJ-90B21-14	A3PJ-90B22-14		
		28 VDC/VAC	A3PJ-90A21-28	A3PJ-90A22-28	A3PJ-90B21-28	A3PJ-90B22-28		
DPDT	LED	24 VDC	A3PJ-90C21-24E(1)(2)	A3PJ-90C22-24E(1)(2)	A3PJ-90D21-24E(1)(2)	A3PJ-90D22-24E(1)(2)	R O G W	
	Incandescent lamp	6 VDC/VAC	A3PJ-90C21-06	A3PJ-90C22-06	A3PJ-90D21-06	A3PJ-90D22-06	*	
		14 VDC/VAC	A3PJ-90C21-14	A3PJ-90C22-14	A3PJ-90D21-14	A3PJ-90D22-14		
		28 VDC/VAC	A3PJ-90C21-28	A3PJ-90C22-28	A3PJ-90D21-28	A3PJ-90D22-28		

Note: Enter the desired color symbols for the Pushbutton in (1) and (2). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example:

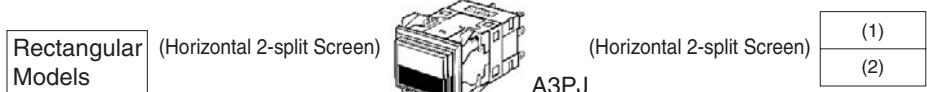
Red
White

 Upper A3PJ-90D21-24E[RW]

Red
White

 Lower Red White

* Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milky white and transparent). Use the appropriate combination.



Microloads

Output	Lighting	Case color	Microload (125 VAC, 0.1 A; 30 VDC, 0.1 A)		Pushbutton color symbol	
			Momentary operation (Self-resetting)			
			Black	Light gray		
SPDT	LED	5 VDC	A3PJ-90E21-24E(1)(2)	A3PJ-90E22-24E(1)(2)	R O G W	
	Incandescent lamp	6 VDC/VAC	A3PJ-90E21-06	A3PJ-90E22-06	*	
		14 VDC/VAC	A3PJ-90E21-14	A3PJ-90E22-14		
		28 VDC/VAC	A3PJ-90E21-28	A3PJ-90E22-28		
DPDT	LED	5 VDC	A3PJ-90G21-24E(1)(2)	A3PJ-90G22-24E(1)(2)	R O G W	
	Incandescent lamp	6 VDC/VAC	A3PJ-90G21-06	A3PJ-90G22-06	*	
		14 VDC/VAC	A3PJ-90G21-14	A3PJ-90G22-14		
		28 VDC/VAC	A3PJ-90G21-28	A3PJ-90G22-28		

Note: Enter the desired color symbols for the Pushbutton in (1) and (2). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example:

Red
White

 Upper A3PJ-90D21-24E[RW]

Red
White

 Lower Red White

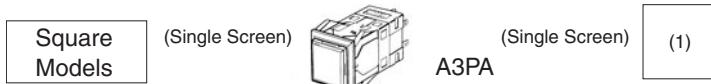
* Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milky-white and transparent). Use the appropriate combination.

Individual models: Refer to pages 9 to 12.
(The Pushbutton, Lamp, and Switch can be ordered separately.)

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18.
■ Accessories: Refer to pages 13 to 15.

Ordering Information

Ordering as a Set The model numbers used to order sets of Units are given in the following tables. One set comprises the Pushbutton, Lamp, and Switch.
(Not all combinations are possible. Ask your OMRON representative for details.)



Standard Loads

Output	Lighting	Contact type Operation Case color	Standard load (250 VAC, 3 A; 30 VDC, 4 A)				Pushbutton color symbol	
			Momentary operation (Self-resetting)		Alternate operation (Self-holding)			
			Black	Light gray	Black	Light gray		
SPDT	LED	5 VDC	A3PA-90A11-05E(1)	A3PA-90A12-05E(1)	A3PA-90B11-05E(1)	A3PA-90B12-05E(1)	R O G W	
		12 VDC	A3PA-90A11-12E(1)	A3PA-90A12-12E(1)	A3PA-90B11-12E(1)	A3PA-90B12-12E(1)		
		24 VDC	A3PA-90A11-24E(1)	A3PA-90A12-24E(1)	A3PA-90B11-24E(1)	A3PA-90B12-24E(1)		
	Chameleon	12 VDC	A3PA-90AG1-12EK	A3PA-90AG2-12EK	A3PA-90BG1-12EK	A3PA-90BG2-12EK	*1	
		24 VDC	A3PA-90AG1-24EK	A3PA-90AG2-24EK	A3PA-90BG1-24EK	A3PA-90BG2-24EK		
	Incandescent lamp	6 VDC/VAC	A3PA-90A11-06	A3PA-90A12-06	A3PA-90B11-06	A3PA-90B12-06	*2	
DPDT		14 VDC/VAC	A3PA-90A11-14	A3PA-90A12-14	A3PA-90B11-14	A3PA-90B12-14		
		28 VDC/VAC	A3PA-90A11-28	A3PA-90A12-28	A3PA-90B11-28	A3PA-90B12-28		
LED	5 VDC	A3PA-90C11-05E(1)	A3PA-90C12-05E(1)	A3PA-90D11-05E(1)	A3PA-90D12-05E(1)	R O G W		
	12 VDC	A3PA-90C11-12E(1)	A3PA-90C12-12E(1)	A3PA-90D11-12E(1)	A3PA-90D12-12E(1)			
	24 VDC	A3PA-90C11-24E(1)	A3PA-90C12-24E(1)	A3PA-90D11-24E(1)	A3PA-90D12-24E(1)			
Chameleon	12 VDC	A3PA-90CG1-12EK	A3PA-90CG2-12EK	A3PA-90DG1-12EK	A3PA-90DG2-12EK	*1		
	24 VDC	A3PA-90CG1-24EK	A3PA-90CG2-24EK	A3PA-90DG1-24EK	A3PA-90DG2-24EK			
Incandescent lamp	6 VDC/VAC	A3PA-90C11-06	A3PA-90C12-06	A3PA-90D11-06	A3PA-90D12-06	*2		
	14 VDC/VAC	A3PA-90C11-14	A3PA-90C12-14	A3PA-90D11-14	A3PA-90D12-14			
	28 VDC/VAC	A3PA-90C11-28	A3PA-90C12-28	A3PA-90D11-28	A3PA-90D12-28			

Note: Enter the desired color symbol for the Pushbutton in (1). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: Red A3PA-90A11-24ER

*1. You can change the screen colors of chameleon models between red, green, and orange, by changing the terminal wiring. Refer to page 20 for details.

*2. Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.

Microloads

Output	Lighting	Contact type Operation Case color	Microload (125 VAC, 0.1 A; 30 VDC, 0.1 A)		Pushbutton color symbol	
			Momentary operation (Self-resetting)			
			Black	Light gray		
SPDT	LED	5 VDC	A3PA-90E11-05E(1)	A3PA-90E12-05E(1)	R O G W	
		12 VDC	A3PA-90E11-12E(1)	A3PA-90E12-12E(1)		
		24 VDC	A3PA-90E11-24E(1)	A3PA-90E12-24E(1)		
	Chameleon	12 VDC	A3PA-90EG1-12EK	---	*1	
		24 VDC	A3PA-90EG1-24EK	A3PA-90EG2-24EK		
	Incandescent lamp	6 VDC/VAC	A3PA-90E11-06	A3PA-90E12-06	*2	
DPDT		14 VDC/VAC	---	A3PA-90E12-14		
		28 VDC/VAC	A3PA-90E11-28	A3PA-90E12-28		
LED	5 VDC	---	---	R O G W		
	12 VDC	A3PA-90G11-12E(1)	A3PA-90G12-12E(1)			
	24 VDC	A3PA-90G11-24E(1)	A3PA-90G12-24E(1)			
Chameleon	12 VDC	A3PA-90GG1-12EK	---	*1		
	24 VDC	A3PA-90GG1-24EK	---			
Incandescent lamp	6 VDC/VAC	A3PA-90G11-06	A3PA-90G12-06	*2		
	14 VDC/VAC	---	---			
	28 VDC/VAC	A3PA-90G11-28	A3PA-90G12-28			

Note: Enter the desired color symbol for the Pushbutton in (1). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: Red A3PA-90E11-24ER

*1. You can change the screen colors of chameleon models between red, green, and orange, by changing the terminal wiring. Refer to page 20 for details.

*2. Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.

Individual models: Refer to pages 9 to 12.
(The Pushbutton, Lamp, and Switch can be ordered separately.)

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18.
■ Accessories: Refer to pages 13 to 15.

Ordering Information

Ordering as a Set The model numbers used to order sets of Units are given in the following tables. One set comprises the Pushbutton, Lamp, and Switch.
(Not all combinations are possible. Ask your OMRON representative for details.)



(Horizontal 2-split Screen)



(Horizontal 2-split Screen)



(1)

(2)

Standard Loads

Output	Lighting	Contact type Operation	Standard load (250 VAC, 3 A; 30 VDC, 4 A)				Pushbutton color symbol	
			Momentary operation (Self-resetting)		Alternate operation (Self-holding)			
			Black	Light gray	Black	Light gray		
SPDT	Incandescent lamp	LED	24 VDC	A3PA-90A21-24E(1)(2)	A3PA-90A22-24E(1)(2)	A3PA-90B21-24E(1)(2)	A3PA-90B22-24E(1)(2)	R O G W
		6 VDC/VAC	6 VDC/VAC	A3PA-90A21-06	A3PA-90A22-06	A3PA-90B21-06	A3PA-90B22-06	*
		14 VDC/VAC	14 VDC/VAC	A3PA-90A21-14	A3PA-90A22-14	A3PA-90B21-14	A3PA-90B22-14	*
		28 VDC/VAC	28 VDC/VAC	A3PA-90A21-28	A3PA-90A22-28	A3PA-90B21-28	A3PA-90B22-28	*
DPDT	Incandescent lamp	LED	24 VDC	A3PA-90C21-24E(1)(2)	A3PA-90C22-24E(1)(2)	A3PA-90D21-24E(1)(2)	A3PA-90D22-24E(1)(2)	R O G W
		6 VDC/VAC	6 VDC/VAC	A3PA-90C21-06	A3PA-90C22-06	A3PA-90D21-06	A3PA-90D22-06	*
		14 VDC/VAC	14 VDC/VAC	A3PA-90C21-14	A3PA-90C22-14	A3PA-90D21-14	A3PA-90D22-14	*
		28 VDC/VAC	28 VDC/VAC	A3PA-90C21-28	A3PA-90C22-28	A3PA-90D21-28	A3PA-90D22-28	*

Note: Enter the desired color symbols for the Pushbutton in (1) and (2). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example:

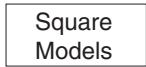
Red
White

 Upper A3PA-90D21-24E[R|W]

Red
White

 Lower Red White

* Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.



(Horizontal 2-split Screen)



(Horizontal 2-split Screen)



(1)

(2)

Microloads

Output	Lighting	Contact type Operation	Microload (125 VAC, 0.1 A; 30 VDC, 0.1 A)		Pushbutton color symbol	
			Momentary operation (Self-resetting)			
			Black	Light gray		
SPDT	Incandescent lamp	LED	24 VDC	A3PA-90E21-24E(1)(2)	A3PA-90E22-24E(1)(2)	R O G W
		6 VDC/VAC	6 VDC/VAC	A3PA-90E21-06	A3PA-90E22-06	*
		14 VDC/VAC	14 VDC/VAC	A3PA-90E21-14	A3PA-90E22-14	*
		28 VDC/VAC	28 VDC/VAC	A3PA-90E21-28	A3PA-90E22-28	*
DPDT	Incandescent lamp	LED	24 VDC	A3PA-90G21-24E(1)(2)	A3PA-90G22-24E(1)(2)	R O G W
		6 VDC/VAC	6 VDC/VAC	A3PA-90G21-06	A3PA-90G22-06	*
		14 VDC/VAC	14 VDC/VAC	A3PA-90G21-14	A3PA-90G22-14	*
		28 VDC/VAC	28 VDC/VAC	A3PA-90G21-28	A3PA-90G22-28	*

Note: Enter the desired color symbols for the Pushbutton in (1) and (2). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example:

Red
White

 Upper A3PA-90D21-24E[R|W]

Red
White

 Lower Red White

* Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.

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(The Pushbutton, Lamp, and Switch can be ordered separately.)

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18.

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Ordering as a Set The model numbers used to order sets of Units are given in the following tables. One set comprises the Pushbutton, Lamp, and Switch.



Standard Loads

Output	Lighting	Case color	Contact type		Pushbutton color symbol	
			Standard load (250 VAC, 3 A; 30 VDC, 4 A)			
			Momentary operation (Self-resetting)	Alternate operation (Self-holding)		
SPDT	Incandescent lamp		Light gray	Light gray	R O G W	
			24 VDC	A3PT-90A12-24C(1)		
			6 VDC/VAC	A3PT-90A12-06		
			14 VDC/VAC	A3PT-90A12-14		
DPDT	Incandescent lamp		28 VDC/VAC	A3PT-90A12-28	R O G W	
			24 VDC	A3PT-90C12-24C(1)		
			6 VDC/VAC	A3PT-90C12-06		
			14 VDC/VAC	A3PT-90C12-14		
			28 VDC/VAC	A3PT-90C12-28	R O G W	

Note: Enter the desired color symbols for the Pushbutton in (1) and (2). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: (Red) A3PT-90A12-24C[R]

* Incandescent lamps are supplied with a colored plates (white, red, green, blue, and orange). Use the appropriate combination. Models A3PT (round models), however, are not supplied with legend plates.



Microloads

Output	Lighting	Case color	Contact type		Pushbutton color symbol	
			Microload (125 VAC, 0.1 A; 30 VDC, 0.1 A)			
			Momentary operation (Self-resetting)			
SPDT	LED	24 VDC	A3PT-90E12-24C(1)	R O G W		
	Incandescent lamp	28 VDC/VAC	A3PT-90E12-28	*		
DPDT	LED	24 VDC	A3PT-90G12-24C(1)	G W		
	Incandescent lamp	28 VDC/VAC	A3PT-90G12-28	*		

Note: Enter the desired color symbols for the Pushbutton in (1). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: (Red) A3PT-90E12-24C[R]

* Incandescent lamps are supplied with a colored plates (white, red, green, blue, and orange). Use the appropriate combination. Models A3PT (round models), however, are not supplied with legend plates.

Individual models: Refer to pages 9 to 12.
(The Pushbutton, Lamp, and Switch can be ordered separately.)

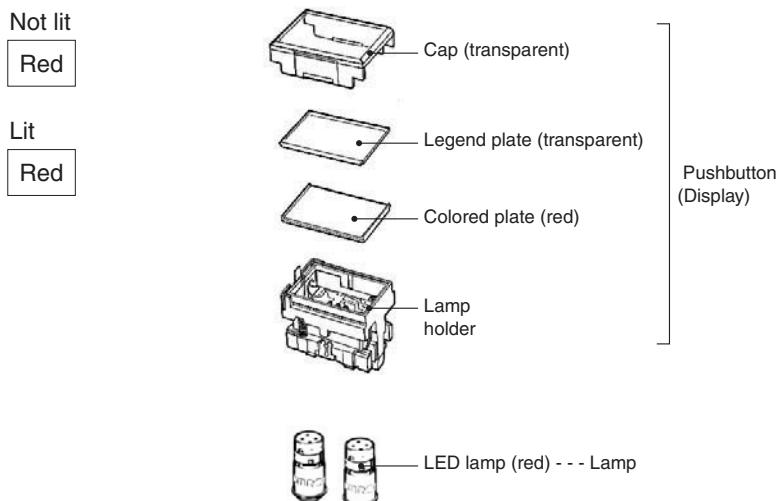
■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18.
■ Accessories: Refer to pages 13 to 15.

Ordering Information

Illumination-only and Colored-illumination LED Models

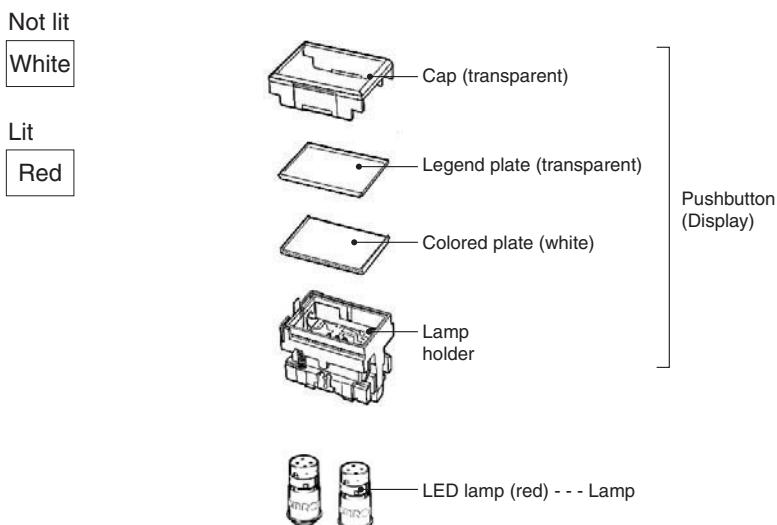
“Illumination only” describes LED models for which the screen color is the same whether the LED is lit or not. The screen simply becomes brighter when the LED lights.

Example: Red LED



“Colored illumination” describes LED models for which the screen color is white when the LED is not lit and changes to the color of the LED lamp when the LED is lit.

Example: Red LED



Ordering: With colored-illumination models, order the Pushbutton, Lamp, and Switch as shown in the following table.

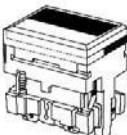
Pushbutton	Lamp	Switch
Select the LED lamp-lighted model required from the selection on page 10. Each assembly includes the number of white colored plates required to enable colored illumination for the corresponding screen-split configuration. For example, 4-split screen models include 4 white colored plates.	Select the LED lamps to suit your desired coloration from the selection on page 12. Number of necessary LED lamps (standard) A3PJ (rectangular): 4 A3PA (square): 2 A3PT (round): 2	Select from the Switches on page 12.

Ordering Information

Ordering Individually Pushbuttons, Lamps, and Switches can be ordered separately. Combinations that are not available as sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

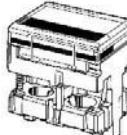
LED-lighted/Chameleon Models

(LED is built into the Pushbutton.)

Pushbutton
Round (A3PT) models not available.  · For Pushbutton Switch A3P□-5□□□-□□E

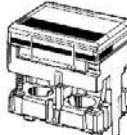
LED Lamp-lighted Models

(LED lamp and Pushbutton are separate.)

Pushbutton
 · For Pushbutton Switch A3P□-502□

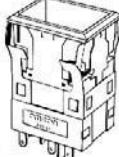
Incandescent Lamp-lighted Models

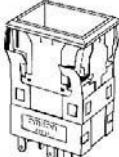
(Incandescent lamp and Pushbutton are separate.)

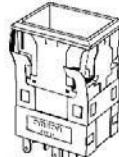
Pushbutton
 · For Pushbutton Switch A3P□-501□



Switch *

Switch *
Round (A3PT) models not available.  · For Pushbutton Switch A3P□-7□□□-□

Switch *
 · For Pushbutton Switch A3P□-7□□□-□

Switch *
 · For Pushbutton Switch A3P□-7□□□-□

* The Switch is compatible with LED-lighted models, LED lamp-lighted models, and incandescent lamp-lighted models.

*1. Number of necessary LED lamps.

Screen pattern	A3PJ	A3PA	A3PT
Single screen	2	2	
Horizontal 2-split screen	2	--	
Vertical 2-split screen			
Vertical 3-split screen			
Horizontal 3-split screen			
4-split screen			

*2. Number of necessary incandescent lamps.

Screen pattern	A3PJ	A3PA	A3PT
Single screen	2	1	2
Horizontal 2-split screen		2	--
Vertical 2-split screen			
Vertical 3-split screen			
Horizontal 3-split screen			
4-split screen			

Ordering set combinations: Refer to page 3 to 7.

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18.

■ Accessories: Refer to pages 13 to 15.

Ordering Information

Ordering IndividuallyPushbuttons, Lamps, and Switches can be ordered separately. Combinations that are not available as sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

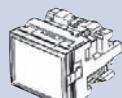
Pushbutton

LED-lighted Models (LED is built-in.)

Appearance	Split-screen color (color symbol)	White (W)	Red (R)	Green (G)	Orange (O)	Selection precautions	
Rectangular models 	Single screen		A3PJ-5701 -□□E	A3PJ-5702 -□□E	A3PJ-5703 -□□E	A3PJ-5706 -□□E	<ul style="list-style-type: none"> Enter the voltage to be used in the □ at the end of the model number. <p>Examples of voltages used: 5V=05E 12V=12E 24V=24E Horizontal 2-split screen models support only 24V.</p> <ul style="list-style-type: none"> For the color of the shaded part, select the model according to the colors given at the top of the table.
	Horizontal 2-split screen		A3PJ-5711 -□□E	A3PJ-5712 -□□E	A3PJ-5713 -□□E	A3PJ-5716 -□□E	
			A3PJ-5721 -□□E	A3PJ-5722 -□□E	A3PJ-5723 -□□E	A3PJ-5726 -□□E	
			A3PJ-5731 -□□E	A3PJ-5732 -□□E	A3PJ-5733 -□□E	A3PJ-5736 -□□E	
			A3PJ-5741 -□□E	A3PJ-5742 -□□E	A3PJ-5743 -□□E	A3PJ-5746 -□□E	
Square models 	Single screen		A3PA-5701 -□□E	A3PA-5702 -□□E	A3PA-5703 -□□E	A3PA-5706 -□□E	<ul style="list-style-type: none"> For the color of the shaded part, select the model according to the colors given at the top of the table.
	Horizontal 2-split screen		A3PA-5711 -□□E	A3PA-5712 -□□E	A3PA-5713 -□□E	A3PA-5716 -□□E	
			A3PA-5721 -□□E	A3PA-5722 -□□E	A3PA-5723 -□□E	A3PA-5726 -□□E	
			A3PA-5731 -□□E	A3PA-5732 -□□E	A3PA-5733 -□□E	A3PA-5736 -□□E	
			A3PA-5741 -□□E	A3PA-5742 -□□E	A3PA-5743 -□□E	A3PA-5746 -□□E	

Note: 1. A cap, legend plate (transparent), colored plate, white plunger case, and LED (with a current-limiting resistor) are built into the standard lighting unit.
2. Split-screen coloring configurations are given with the OMRON mark on the Switch facing down.
3. The LED is built-in and cannot be replaced individually.

LED Lamp-lighted Models (LED is not built-in.)

Appearance	Rectangular models 	Square models 		Round models 	Selection precautions							
Screen pattern	Screen	Model	Screen	Model	Screen	Model	Screen pattern	White	Red	Green	Orange	
Single screen		A3PJ-5021		A3PA-5021		A3PT-5021	<ul style="list-style-type: none"> Parts included: Colored plates (white, red, green, and orange), a legend plate (transparent), and a light baffle (split-screen models only) are included. Use the appropriate combination for the LED coloring required. The number of white colored plates required to enable colored illumination for the corresponding screen-split configuration is included. (For example, 4-split screen models include 4 white colored plates). The number of colored plates included for each model are shown in the following table. 	1	1	1	1	
Horizontal 2-split screen		A3PJ-5022		A3PA-5022	--			2	1	1	1	
Vertical 2-split screen		A3PJ-5023	--		--			3	2	2	2	
Horizontal 3-split screen		A3PJ-5024	--		--			4	1	1	1	
Vertical 3-split screen		A3PJ-5025	--		--			* The following types of colored plates are included with Horizontal and Vertical 3-split Screen Switches. White: One colored plate for a 2-split screen and two colored plates for a 4-split screen. Red, green, or orange: One colored plate for a 2-split screen and one colored plates for a 4-split screen.				
4-split screen		A3PJ-5026	--		--							

* The following types of colored plates are included with Horizontal and Vertical 3-split Screen Switches.

White: One colored plate for a 2-split screen and two colored plates for a 4-split screen.

Red, green, or orange: One colored plate for a 2-split screen and one colored plates for a 4-split screen.

Ordering set combinations: Refer to page 3 to 7.

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18.

■ Accessories: Refer to pages 13 to 15.

Ordering Information

Ordering Individually Pushbuttons, Lamps, and Switches can be ordered separately. Combinations that are not available as sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

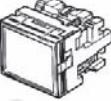
Pushbutton

Incandescent Lamp-lighted Models (Incandescent lamp is not built-in.)

Appearance	Rectangular models		Square models		Round models		Selection precautions																																										
Screen pattern	Screen	Model	Screen	Model	Screen	Model																																											
Single screen		A3PJ-5011		A3PA-5011		A3PT-5011 *	<ul style="list-style-type: none"> Parts included: Colored plates (white, red, green, orange, and blue), legend plates (transparent and milk white), and a light baffle (split-screen models only) are supplied. * A3PT (round) models do not contain a legend plate. The number of colored plates included is shown in the following table. <table border="1"> <thead> <tr> <th>Screen pattern</th><th>White</th><th>Red</th><th>Green</th><th>Orange</th><th>Blue</th></tr> </thead> <tbody> <tr> <td>Single screen</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr> <td>Horizontal 2-split screen</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr> <td>Vertical 2-split screen</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr> <tr> <td>Horizontal 3-split screen</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr> <tr> <td>Vertical 3-split screen</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr> <tr> <td>4-split screen</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr> </tbody> </table>	Screen pattern	White	Red	Green	Orange	Blue	Single screen	1	1	1	1	1	Horizontal 2-split screen	1	1	1	1	1	Vertical 2-split screen	2	2	2	2	2	Horizontal 3-split screen	2	2	2	2	2	Vertical 3-split screen	2	2	2	2	2	4-split screen	2	2	2	2	2
Screen pattern	White	Red	Green	Orange	Blue																																												
Single screen	1	1	1	1	1																																												
Horizontal 2-split screen	1	1	1	1	1																																												
Vertical 2-split screen	2	2	2	2	2																																												
Horizontal 3-split screen	2	2	2	2	2																																												
Vertical 3-split screen	2	2	2	2	2																																												
4-split screen	2	2	2	2	2																																												
Horizontal 2-split screen		A3PJ-5012		A3PA-5012	--																																												
Vertical 2-split screen		A3PJ-5013	--		--																																												
Horizontal 3-split screen		A3PJ-5014	--		--																																												
Vertical 3-split screen		A3PJ-5015	--		--																																												
4-split screen		A3PJ-5016	--		--																																												

* The following types of colored plates are included with Horizontal and Vertical 3-splitScreen Switches.
All colors: One colored plate for a 2-split screen and one colored plate for a 4-split screen.

Chameleon Models (with Built-in LED)

Appearance	Rated voltage	Chameleon pushbutton switch
	12 VDC	A3PJ-5800-12E
	24 VDC	A3PJ-5800-24E
	12 VDC	A3PA-5800-12E
	24 VDC	A3PA-5800-24E

Note: 1. With chameleon models the whole screen lights red, green, or orange (i.e., red and green simultaneously).
2. A cap, legend plate (transparent), white colored plate, and LED (with a current-limiting resistor) are built into the Pushbutton.

Ordering set combinations: Refer to page 3 to 7.

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18.
■ Accessories: Refer to pages 13 to 15.

Ordering Information

Ordering Individually Pushbuttons, Lamps, and Switches can be ordered separately. Combinations that are not available as sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

Pushbutton (For information on mounting, refer to page 25.)

LED Lamp

Color	5 VDC	12 VDC	24 VDC	Applicable cap (color) (colored plate)	Selection precautions
	Model (DC only)	Model (DC only)	Model (DC only)		
Red	SLL-05ER	SLL-12ER	SLL-24ER	Red	In the standard setup, 4 LED lamps are used with A3PJ models and 2 LED lamps are used with A3PA and A3PT models.
Yellow	SLL-05EY	SLL-12EY	SLL-24EY	Orange	
Green	SLL-05EG	SLL-12EG	SLL-24EG	Green	
White	SLL-05EW	SLL-12EW	SLL-24EW	White	

Incandescent Lamp

Voltage	Lamp type	Standard lamp	Low-power lamp	Selection precautions
5 VAC/VDC	SLL-06	SLL-06	SLL-06H	<ul style="list-style-type: none"> In the standard setup for A3PJ models, 2 lamps are used with single screen models, and 4 lamps are used with split-screen models. If 3 or 4 lamps are lit continuously, use low-power lamps. In the standard setup for A3PA models, 1 lamp is used with single screen models, and 2 lamps are used with split-screen models. In the standard setup for A3PT models, 2 lamps are used.
12 VAC/VDC		SLL-14	SLL-14H	
24 VAC/VDC		SLL-28	SLL-28H	

Switch (common to both incandescent lamp-lighted models and LED models)

Contact type	Switch Number of outputs	Operation	Appearance			Selection precautions	
			Rectangular models	Square models	Round models		
Standard load	Silver alloy contact	1	Momentary operation	A3PJ-7010-1	A3PA-7010-1	A3PT-7010-2	<ul style="list-style-type: none"> The end digit denotes the color of the flange: -1 denotes a black flange, and -2 denotes a light gray flange. Round switches are available only in light gray, and not in black. Use the Switch in combination with the same shape Lamp (rectangular, square or round). Example: For rectangular Lamp A3PJ-5011, select Switch A3PJ-7□□0-□. On the Switch itself, however, only 3 digits are shown, as follows: A3PJ-7□□. Momentary operation is self-resetting, and alternate operation is self-holding (i.e., push-on, push-off).
		2	Momentary operation	A3PJ-7020-1	A3PA-7020-1	A3PT-7020-2	
		3	Momentary operation	A3PJ-7030-1	A3PA-7030-1	A3PT-7030-2	
	Gold alloy contact	1	Momentary operation	A3PJ-7040-1	A3PA-7040-1	A3PT-7040-2	
		2	Momentary operation	A3PJ-7150-1	--	--	
		3	Momentary operation	A3PJ-7160-1	--	--	
Microload	Gold alloy contact	1	Momentary operation	A3PJ-7050-1	A3PA-7050-1	A3PT-7050-2	<ul style="list-style-type: none"> Momentary operation is self-resetting, and alternate operation is self-holding (i.e., push-on, push-off).
		2	Momentary operation	A3PJ-7060-1	A3PA-7060-1	A3PT-7060-2	
		3	Momentary operation	A3PJ-7070-1	A3PA-7070-1	A3PT-7070-2	
	Gold alloy contact	1	Momentary operation	A3PJ-7080-1	A3PA-7080-1	A3PT-7080-2	
		2	Momentary operation	A3PJ-7170-1	--	--	
		3	Momentary operation	A3PJ-7180-1	--	--	

Ordering set combinations: Refer to page 3 to 7.

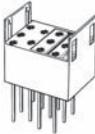
■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18.

■ Accessories: Refer to pages 13 to 15.

Ordering Information

Accessories, Replacements, and Tools

Accessories

Name	Appearance	Classification	Rectangular	Square	Application precautions
Socket		Wire-wrap terminal	A3PJ-4101	A3PA-4101	<ul style="list-style-type: none"> The Socket cannot be used with when mounting multiple Switches or with 3C models. You can use the same Sockets for the A3P Ultra Bright Lighted Pushbutton Switches.
		PCB terminal	A3PJ-4102	A3PA-4102	
		Solder terminal	A3PJ-4103	A3PA-4103	
Barrier		Short edge barrier (Horizontal mounting) (1 pair)	Black Light gray	A3PJ-4001 A3PJ-4002	A3PA-4001 A3PA-4002
		Long edge barrier (Vertical mounting) (1 pair)	Black Light gray	A3PJ-4004 A3PJ-4005	--
		Short intermediate barrier (Horizontal mounting)	Black Light gray	A3PJ-4007 A3PJ-4008	
		Long intermediate barrier (Vertical mounting)	Black	A3PJ-4010	--
			Light gray	A3PJ-4011	
Switch guard		For horizontal mounting (with OMRON logo facing down)		A3PJN-5050	A3PAN-5050
		For vertical mounting (with OMRON logo facing to the right)		A3PJN-5055	A3PAN-5055
Seal cover		--		A3PJ-5060	A3PA-5060
Long mounting plate		--		A3PJ-3002	--

Ordering Information

Accessories

Name	Appearances	Classification	A3PJ	A3PA	Application precautions	
Colored plate for incandescent lamp		Single screen	White Red Green Blue Yellow Orange	A3PJ-5101 A3PJ-5102 A3PJ-5103 A3PJ-5104 A3PJ-5105 A3PJ-5106	A3PA-5101 A3PA-5102 A3PA-5103 A3PA-5104 A3PA-5105 A3PA-5106	<ul style="list-style-type: none"> Keep mounted at all times. Contact your OMRON representative for color changes or other specifications. For details on mounting, refer to page 25. You cannot use the same Colored Plates for Incandescent Lamps for the A3P Ultra Bright Lighted Pushbutton Switches.
Colored plate for LED		Horizontal 2-split screen	White Red Green Blue Yellow Orange	A3PJ-5121 A3PJ-5122 A3PJ-5123 A3PJ-5124 A3PJ-5125 A3PJ-5126	A3PA-5121 A3PA-5122 A3PA-5123 A3PA-5124 A3PA-5125 A3PA-5126	<ul style="list-style-type: none"> Keep mounted at all times. If the colored plate is lost or damaged, contact OMRON. Use in accordance with coloring of the built-in LED. For details on mounting, refer to page 25. You cannot use the same Colored Plates for Incandescent Lamps for the A3P Ultra Bright Lighted Pushbutton Switches.
Light baffle		Vertical 2-split screen	White Red Green Yellow Orange	A3PJ-5131 A3PJ-5132 A3PJ-5133 A3PJ-5134 A3PJ-5136	---	<ul style="list-style-type: none"> Keep mounted at all times. If the light baffle is lost, contact OMRON. Used in LED lamp-lighted models. Cannot be used in LED-lighted models. You cannot use the same Colored Plates for Incandescent Lamps for the A3P Ultra Bright Lighted Pushbutton Switches.
Legend plate		4-split screen	White Red Green Blue Yellow Orange	A3PJ-5161 A3PJ-5162 A3PJ-5163 ---	---	<ul style="list-style-type: none"> Keep mounted at all times. If the light baffle is lost, contact OMRON. Used in LED lamp-lighted models. Cannot be used in LED-lighted models. You cannot use the same Colored Plates for Incandescent Lamps for the A3P Ultra Bright Lighted Pushbutton Switches.
Cap		Horizontal 2-split screen	White	A3PJ-4302	A3PA-4302	<ul style="list-style-type: none"> Keep mounted at all times. If the light baffle is lost, contact OMRON. Used in LED lamp-lighted models. Cannot be used in LED-lighted models. You cannot use the same Colored Plates for Incandescent Lamps for the A3P Ultra Bright Lighted Pushbutton Switches.
		Vertical 2-split screen	White	A3PJ-4303	---	
		Horizontal 3-split screen	Long axis Short axis	A3PJ-4304 A3PJ-4305	---	
		Vertical 3-split screen	Long axis Short axis	A3PJ-4306 A3PJ-4307	---	
		4-split screen	Long axis Short axis	A3PJ-4304 A3PJ-4308	---	
		Transparent legend plate		A3PJ-5202	A3PA-5202	<ul style="list-style-type: none"> A transparent legend plate is mounted on the Pushbutton. You cannot use the same Colored Plates for Incandescent Lamps for the A3P Ultra Bright Lighted Pushbutton Switches.
		Milk-white legend plate		A3PJ-5201	A3PA-5201	<ul style="list-style-type: none"> You cannot use the same Colored Plates for Incandescent Lamps for the A3P Ultra Bright Lighted Pushbutton Switches.
		Transparent cap		A3PJ-5600	A3PA-5600	<ul style="list-style-type: none"> You can use the same Sockets for the A3P Ultra Bright Lighted Pushbutton Switches.
		Crimp-processed transparent cap		A3PJ-5600-A	A3PA-5600-A	<ul style="list-style-type: none"> The surface is crimp-processed, so there is no reflection. You can use the same Sockets for the A3P Ultra Bright Lighted Pushbutton Switches.

Ordering Information

Tools

Name	Appearance	Classification	Model	Application precautions
Extractor		--	A3PJ-5080	<ul style="list-style-type: none"> Use to extract components when replacing the Pushbutton. You can use the same Sockets for the A3P Ultra Bright Lighted Pushbutton Switches.

Specifications

Approved Standard Ratings

UL (File No. E41515), CSA (File No. LR45258)

Standard Load: 5 A at 125 VAC
3 A at 250 VAC

Microload: 0.1 A at 125 VAC
0.1 A at 30 VDC

Note: Certification has been obtained for the Switch Unit.

For detailed information on individual products that have received certification, consult your supplier.

CCC (GB14048.5)

Standard Load: 3 A at 250 VAC
4 A at 30 VDC

Microload: 0.1 A at 125 VAC
0.1 A at 30 VDC

Ratings

Contact Ratings

Silver Alloy Contacts (for Standard Loads)

Rated voltage (V)	Non-inductive load (A)				Inductive load (A)			
	Resistive load		Lamp load		Inductive load		Motor load	
	NC	NO	NC	NO	NC	NO	NC	NO
125 VAC	5		0.7		3		1.3	
250 VAC	3		0.5		2		0.8	
8 VDC	5		2		4		3	
14 VDC	5		2		4		3	
30 VDC	4		2		3		3	
125 VDC	0.4		0.05		0.4		0.05	
250 VDC	0.2		0.03		0.2		0.03	

Note: 1. The above values are for steady-state currents.

2. Inductive load: Power factor = 0.4; time constant = 7 ms.

3. The lamp load has an inrush current of 10 times the steady-state current.

4. The motor load has an inrush current of 6 times the steady-state current.

Standard testing condition

(1) Ambient temperature: 20 ± 2°C

(2) Ambient humidity: 65 ± 5%RH

(3) Operating frequency: 20 times/min.

Gold Alloy Contacts (for Microloads)

Rated voltage (V)	0.1 A at 30 VDC (resistive load); 0.1 A at 125 VAC (resistive load)
Minimum applicable load	1 mA at 5 VDC

LED and Incandescent Lamp Ratings

LED for LED-lighted Models

Applied voltage	Rated voltage	A3PJ/M2PJ		A3PA/M2PA	
		Rated current	Rated current	Rated current	Rated current
Single screen	2-split screen	Single screen	2-split screen	Single screen	2-split screen
5 VDC±5%	5 VDC	80 mA	---	80 mA	---
12 VDC±5%	12 VDC	40 mA	---	40 mA	---
24 VDC±5%	24 VDC	20 mA	15 mA × 2	20 mA	13 mA × 2

LED for Chameleon Models

Applied voltage	Rated voltage	Rated current	
		Green	Red
12 VDC±5%	12 VDC	26 mA	20 mA
24 VDC±5%	24 VDC	13 mA	10 mA

Incandescent Lamp

Applied voltage	Rated voltage	Standard lamp		Low-power lamp	
		Rated current	Model	Rated current	Model
5 VDC	6 V	200 mA	SLL-06	100 mA	SLL-06H
12 VDC	14 V	80 mA	SLL-14	40 mA	SLL-14H
24 VDC	28 V	40 mA	SLL-28	25 mA	SLL-28H

LED Lamp (for LED Lamp-lighted Models)

Type	Applied voltage	Rated voltage	Rated current	Model
DC only	5 VDC±5%	5 VDC	30 mA	SLL-05E□
	12 VDC±5%	12 VDC	15 mA	SLL-12E□
	24 VDC±5%	24 VDC	12.5 mA	SLL-24E□

Characteristics

Operating frequency	Mechanical	120 operations/minute max.*1
Insulation resistance	Electrical	30 operations/minute max.
Contact resistance	Standard load	100 MΩ min. (at 500 VDC)
	Microload	40 mΩ max. (initial value)
Dielectric strength	Between terminals of same polarity	1,000 VAC, 50/60 Hz for 1 minute*2
	Between terminals of different polarity	2,000 VAC, 50/60 Hz for 1 minute
	Between current-carrying metal part and ground	2,000 VAC, 50/60 Hz for 1 minute
	Between each terminal and non-current-carrying metal part	2,000 VAC, 50/60 Hz for 1 minute
	Between lamp terminals	1,000 VAC, 50/60 Hz for 1 minute*3
Vibration resistance	Malfunction	10 to 55 Hz, 1.5 mm double amplitude (1 ms max.)
Shock resistance	Destruction	500 m/s ² max.
	Malfunction	200 m/s ² max. (1 ms max.)
Life expectancy	Mechanical	Momentary operation models: 1,000,000 operations min. Alternate operation models: 200,000 operations min. (One operation consists of set and reset operations.)
Weight	Electrical	100,000 operations min.
Inrush current	NC	Approx. 30 g
	NO	Silver contact: 10 A max.
		Silver contact: 10 A max.
Ambient operating temperature		LED-lighted models: -10°C to 40°C (with no icing or condensation) Incandescent lamp-lighted models: -10°C to 50°C (with no icing or condensation)
Ambient operating humidity		35% to 85%RH
Ambient storage temperature		-25°C to 65°C
Degree of protection		IP40
Electric shock protection class		Class II
PTI (proof tracking index)		175
Pollution degree		3 (IEC947-5-1)

*1. With alternate operation models, 60 operations/minute max. One operation cycle consists of set and reset operations.

*2. 600 VAC for microloads.

*3. With no incandescent lamp or LED lamp mounted.

Specifications

Operating Characteristics

Model		A3PJ series		A3PA series		A3PT series	
		Momentary operation models	Alternate operation models	Momentary operation models	Alternate operation models	Momentary operation models	Alternate operation models
Operating force	OF max.	5.88 N	6.86 N	5.88 N	6.86 N	3.92 N	4.90 N
Releasing force	RF min.	0.39 N	0.29 N	0.39 N	0.29 N	0.39 N	0.29 N
Total travel	TT	Approx. 3.5 mm					
Pretravel	PT max.	3 mm					
Lock travel alternate	LTA min.	--	0.5 mm	--	0.5 mm	--	0.5 mm

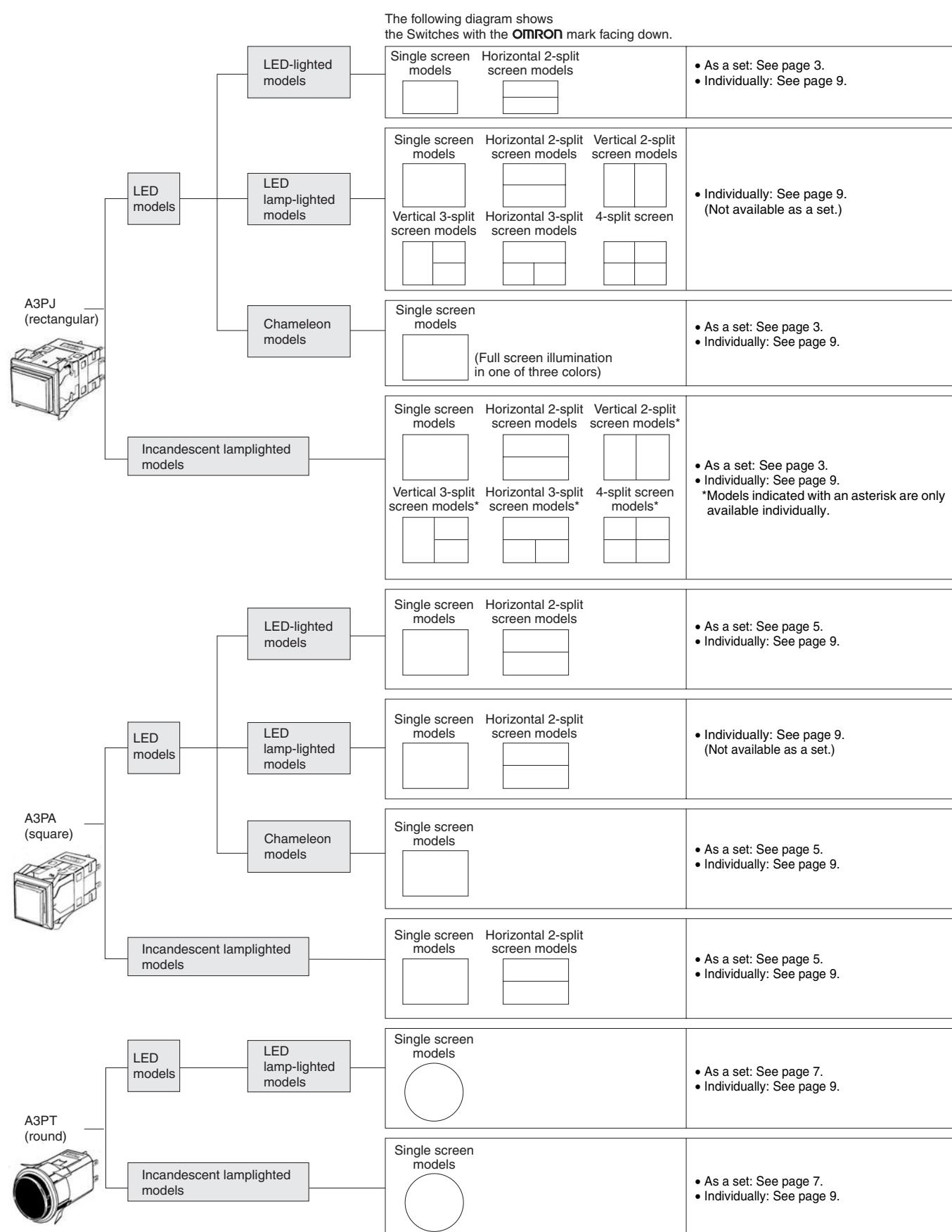
Nomenclature

Model Structure

Lighting method	LED-lighted models (LED is built-in.)		LED lamp-lighted models (LED lamp is not built-in.)			Incandescent lamp-lighted models (Incandescent lamp is not built-in.)		
Models	A3PJ	A3PA	A3PJ	A3PA	A3PT	A3PJ	A3PA	A3PT
Screen patterns	Single screen 	Single screen 	Single screen 	Vertical 3-split screen 	Single screen 	Single screen 	Single screen 	Single screen
	Horizontal 2-split screen 	Horizontal 2-split screen 	Horizontal 2-split screen 	Horizontal 3-split screen 	Horizontal 2-split screen 		Horizontal 2-split screen 	Horizontal 2-split screen
	Chameleon (3-color) 	Chameleon (3-color) 	Vertical 2-split screen 	4-split screen 			Vertical 2-split screen 	4-split screen
LED-lighted models			LED lamp-lighted models			Incandescent lamp-lighted models		

Nomenclature

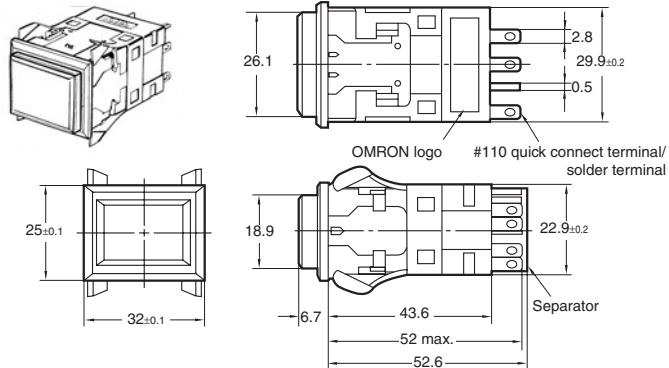
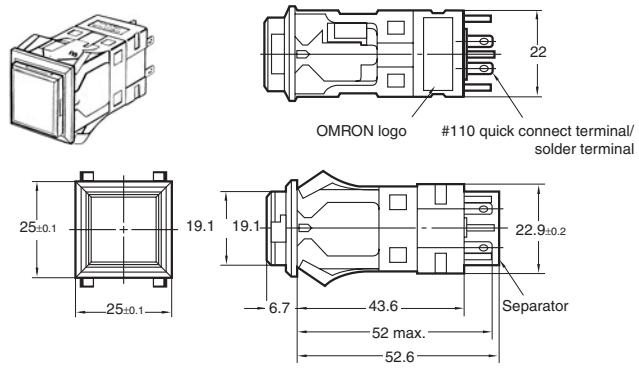
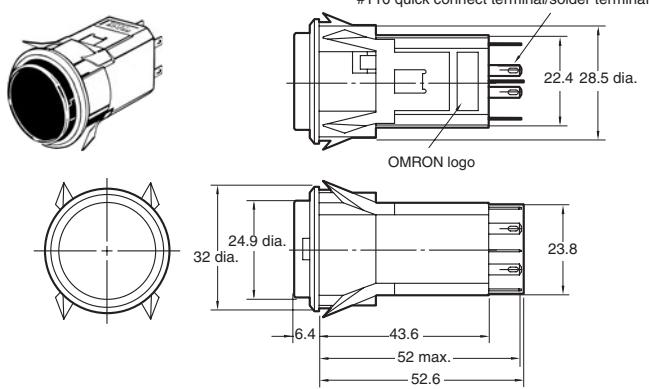
A3P Lighting Method Diagram



Dimensions

The Dimension shows 2-switch outputs.

(Unit: mm)

A3PJ (Rectangular) Models**A3PA (Square) Models****A3PT (Round) Models**

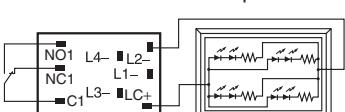
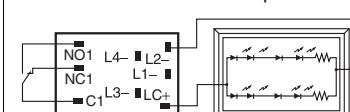
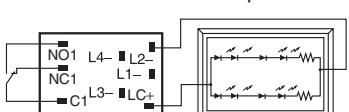
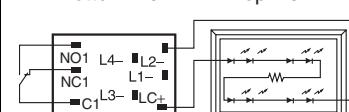
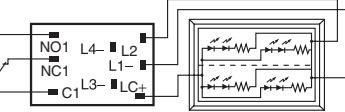
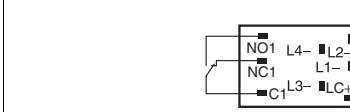
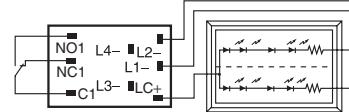
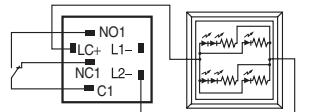
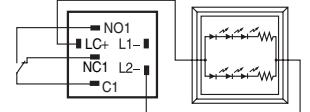
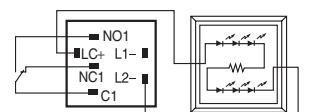
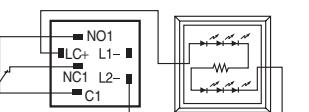
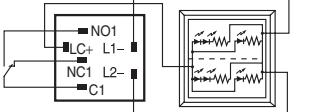
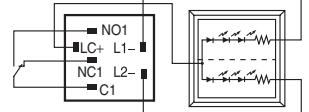
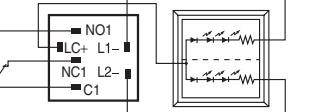
Note: The thickness of tab terminals #110 and solder terminals is 0.5 mm.

Dimensions

Terminal connections

LED-lighted Models

(The terminal arrangement diagram shows a 1-switch output. Connections to terminals from the lighting block are the same for 2 outputs.)

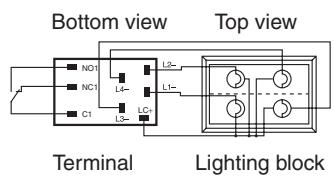
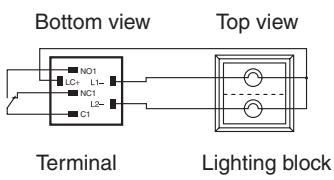
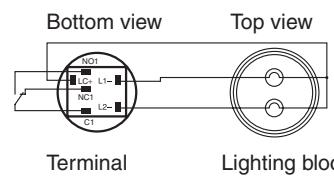
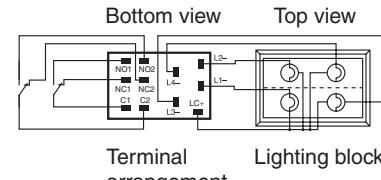
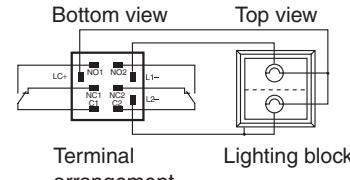
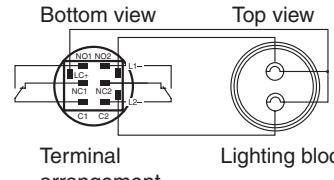
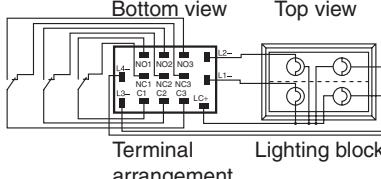
Model	Rated voltage Screen pattern	5 VDC	12 VDC	24 VDC	
A3PJ	Single screen	 Terminal arrangement	 Lighting block	 Terminal arrangement	 Lighting block
	Horizontal 2-split screen	 Terminal arrangement	 Lighting block	 Lighting block	
A3PA	Single screen	 Terminal arrangement	 Lighting block	 Terminal arrangement	 Lighting block
	2-split screen	 Terminal arrangement	 Lighting block	 Lighting block	

Dimensions

(Unit: mm)

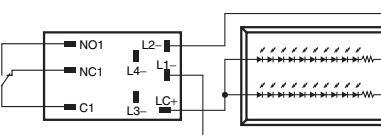
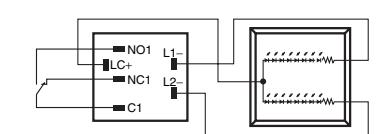
Incandescent Lamp-lighted/LED Lamp-lighted Models

(All are shown with the OMRON logo facing down. The terminal arrangements are the same as for the LED-lighted models.)

Model Output	Rectangular A3PJ models	Square A3PA models	Round A3PT models
SPDT	 Bottom view Top view Terminal arrangement Lighting block	 Bottom view Top view Terminal arrangement Lighting block	 Bottom view Top view Terminal arrangement Lighting block
PPDT	 Bottom view Top view Terminal arrangement Lighting block	 Bottom view Top view Terminal arrangement Lighting block	 Bottom view Top view Terminal arrangement Lighting block
3PDT	 Bottom view Top view Terminal arrangement Lighting block	---	---

LED Chameleon Models

(The terminal arrangement diagram shows a 1-switch output. Connections to terminals from the lighting block are the same for 2 outputs.)

Model	24 VDC
Rectangular A3PJ model	
Square A3PA model	

Terminal Arrangement and Coloring

Chameleon Models

Wiring	LC+	LC+	LC+
	L1-	L2-	L1- and L2- shorted
Coloring	Green	Red	Orange

Dimensions

Panel Cutout (If using a Switch Guard or Seal Cover, refer to the panel cutout diagrams on page 23.)
A3PJ (Rectangular) Models

Classification		Mounting design	Panel cutout	Remarks
Flange mount models	Individual mounting (Horizontal)		30.5±0.3 23.5±0.3	Panel cutout spacing between rows of Units:
	Multiple mounting (Horizontal)		32n-1.5±0.3 23.5±0.3	
	Individual mounting (Vertical)		23.5±0.3 30.5±0.3	
	Multiple mounting (Vertical)		25n-1.5±0.3 30.5±0.3	
Barrier mount models	Individual mounting (Horizontal)		36.4±0.3 23.5±0.3	For barrier mount models, refer to Accessories on page 13. Panel cutout spacing between rows of Units: (Dotted line indicates the position of each mounting barrier.)
	Multiple mounting (Horizontal)		32.9n+3.5±0.3 23.5±0.3	
	Individual mounting (Horizontal)		29.4±0.3 30.5±0.3	
	Multiple mounting (Vertical)		25.9n+3.5±0.3 30.5±0.3	

Note: 1. n: Number of Units

2. Recommended panel thickness: 1 to 5 mm

3. Mount the panel before mounting the Switch Guard.

4. If the panel is to be finished (e.g., coated), make sure that the panel meets the specified dimensions after the coating.

A3PA (Square) Models

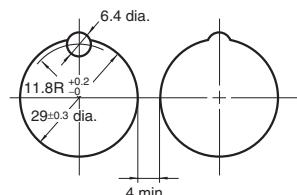
Classification		Mounting design	Panel cutout	Remarks
Flange mount models	Individual mounting		23.5±0.3 22.5±0.3	Panel cutout spacing between rows of Units:
	Multiple mounting		23.5±0.3 25n-2.5±0.3	
Barrier mount models	Individual mounting		23.5±0.3 27.8±0.3	Panel cutout spacing between rows of Units: (Dotted line indicates the position of each mounting barrier.)
	Multiple mounting		23.5±0.3 26n+2.5±0.3	

Note: 1. n: Number of Units

2. Recommended panel thickness: 1 to 5 mm

3. Mount the panel before mounting the Switch Guard.

4. If the panel is to be finished (e.g., coated), make sure that the panel meets the specified dimensions after the coating.

A3PT (Round) Models

Note: 1. Recommended panel thickness: 1 to 5 mm
 2. If the panel is to be finished (e.g., coated), make sure that the panel meets the specified dimensions after the coating.

Dimensions

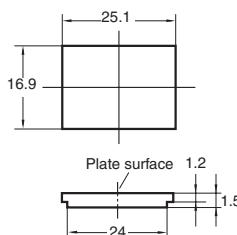
(Unit: mm)

Accessory Mounting Dimensions

Legend Plate

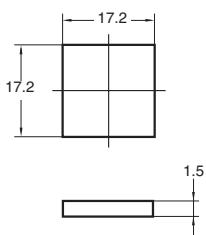
Rectangular Models

A3PJ-5201/-5202



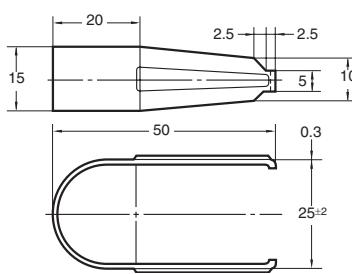
Square Models

A3PA-5201/-5202



Extractor

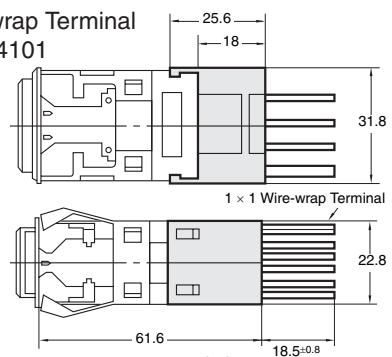
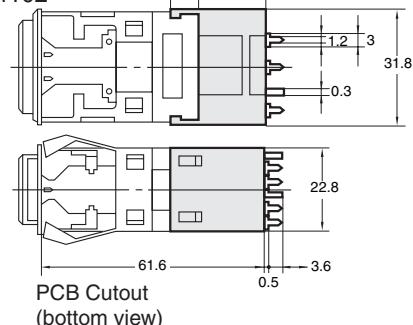
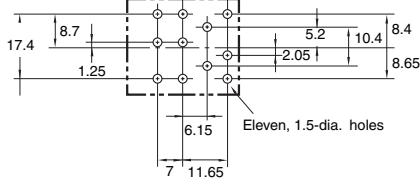
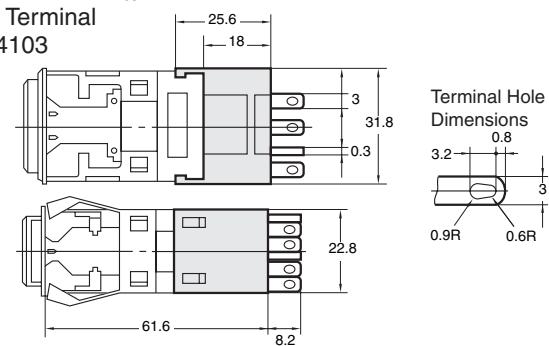
A3PJ-5080



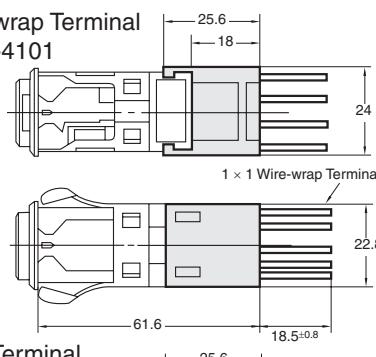
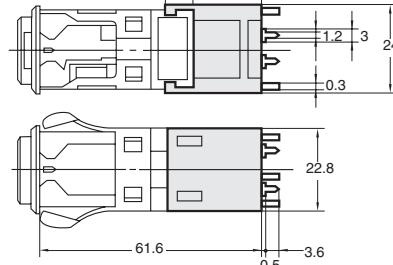
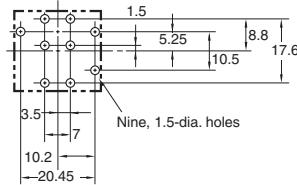
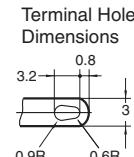
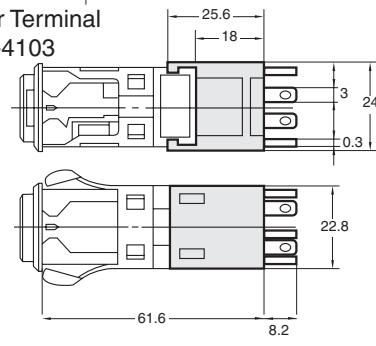
Note: Made from stainless steel.

Socket-mounting Dimensions

Rectangular Models A3PJ (M2PJ)

Wire-wrap Terminal
A3PJ-4101PCB Terminal
A3PJ-4102PCB Cutout
(bottom view)Solder Terminal
A3PJ-4103

Square Models A3PA (M2PA)

Wire-wrap Terminal
A3PA-4101PCB Terminal
A3PA-4102PCB Cutout
(bottom view)Solder Terminal
A3PA-4103

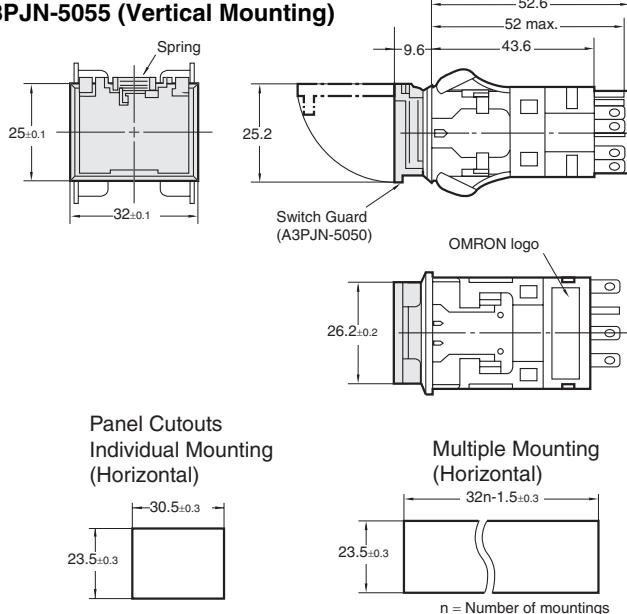
Note: PCB cutout dimensions show the switch mounted to the socket with the OMRON logo facing down.

Dimensions

(Unit: mm)

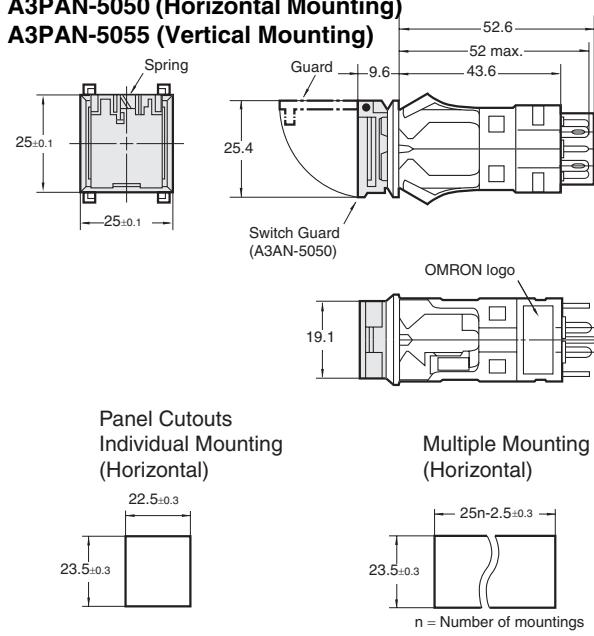
Switch and Guard Mounting Dimensions

Rectangular Models

A3PJN-5050 (Horizontal Mounting)
A3PJN-5055 (Vertical Mounting)

Note: Multiple vertical mounting is not possible.

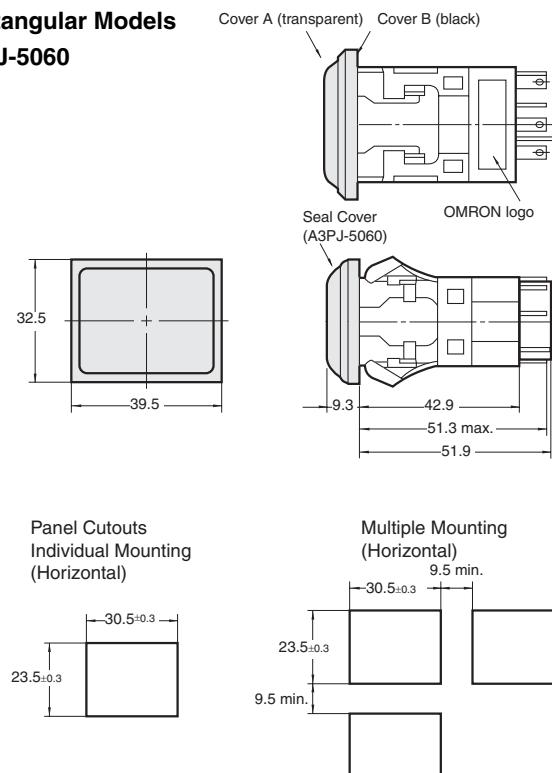
Square Models

A3PAN-5050 (Horizontal Mounting)
A3PAN-5055 (Vertical Mounting)

Note: Multiple vertical mounting is not possible.

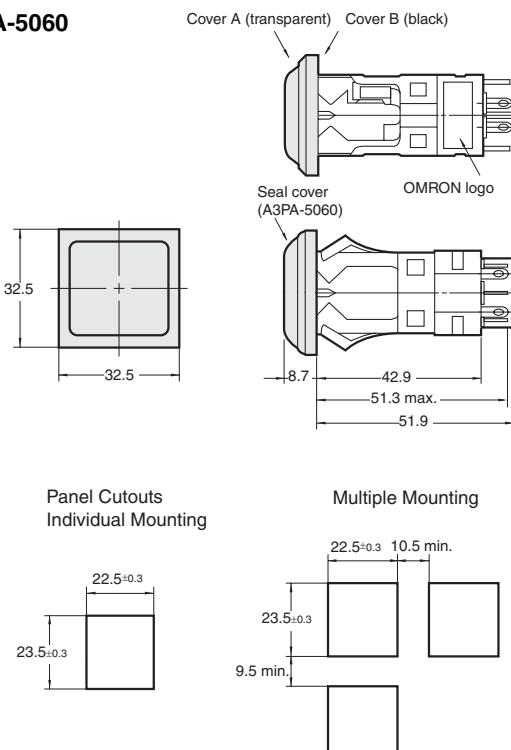
Seal Cover Mounting Dimensions

Rectangular Models

A3PJ-5060

Note: 1. Recommended panel thickness: 1 to 5 mm
 2. Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

Square Models

A3PA-5060

Safety Precautions

Refer to **Safety Precautions for all Pushbutton Switches/Indicators.**

Caution

Do not apply a voltage higher than the maximum rated operating voltage between the lamp terminals, as there is a risk that the incandescent lamp or LED will be damaged, and the Pushbutton will be ejected.



When replacing the incandescent lamp, first turn OFF the power supply, and then wait 10 minutes before performing replacement, as the lamp is still hot immediately after the power is turned OFF, so there is a risk of burns.



Precautions for Correct Use

1. Always make sure that the power is turned OFF before mounting, removing, or wiring the Switch, or performing maintenance. Electric shock or fire may occur.
2. After wiring the Switch, make sure that there is a suitable isolation distance.

Wiring

- Solder quickly and correctly at 350°C max and for 3 s or less. Wait for one minute after soldering before exerting any external force on the solder.

Operating Environment

- Do not use in locations that are subject to dust, oil, or metal filings as these may penetrate the interior of the Switch and cause malfunction.

LED (for VDC)

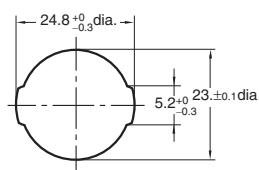
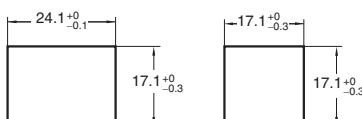
- Check the terminal polarity when wiring.
- The rated voltage is shown on the plate on the back of the lighting unit, so be sure to use within the voltage shown.
- An LED current-limiting resistor is built in, so there is no need to mount an external resistor.

Incandescent Lamp

- Apply 80% of the rated voltage (operating voltage) to the incandescent lamp to improve life expectancy and incandescence.

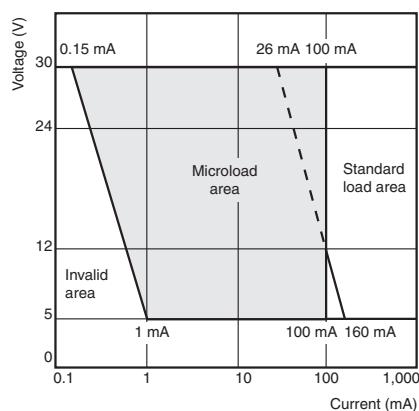
Character Plate (Character Film)

- If preparing the character plate separately, use a heat-resistant film with a thickness of 0.1 to 0.3 mm.



Using Microloads

• Using a standard load switch when a microload circuit is opened or closed may cause contact failure on the contacts. Use the switch within the operating range. (Refer to the diagram below.) Even when using microload models within the operating range shown below, if inrush current occurs when the contact is opened or closed, it may cause the contact surface to become rough, and so decrease life expectancy. Therefore, insert a contact protection circuit where necessary. The minimum applicable load is the N-level reference value. This value indicates the malfunction reference level for the reliability level of 60% (λ_{60}) (conforming to JIS C5003). The equation, $\lambda_{60} = 0.5 \times 10^{-6}/\text{time}$ indicates that the estimated malfunction rate is less than 1/2,000,000 with a reliability level of 60%.



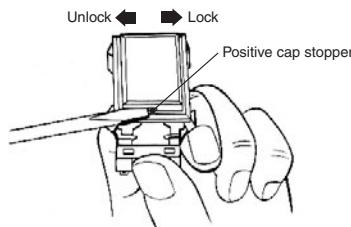
Others

- If the panel is to be finished (e.g., coated), make sure that the panel meets the specified dimensions after the coating.

Assembly/Disassembly

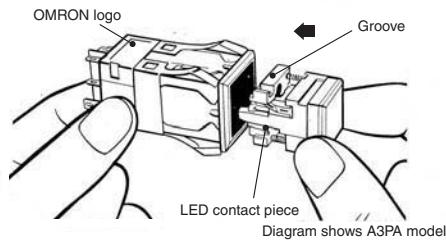
A3PJ/M2PJ (Rectangular Models), A3PA/M2PA (Square Models)

Locking/Unlocking Positive Cap Lock Mechanism



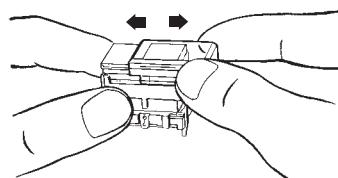
Mounting Pushbutton

- Be sure to mount the Pushbutton with the correct orientation. Align the groove on the Pushbutton, the projections in the Switch, and the LED contact piece before pushing the Pushbutton into the Switch.
- When dismounting the Pushbutton, use the Extractor (A3PJ-5080) for easy dismounting.



Removing/Mounting Cap

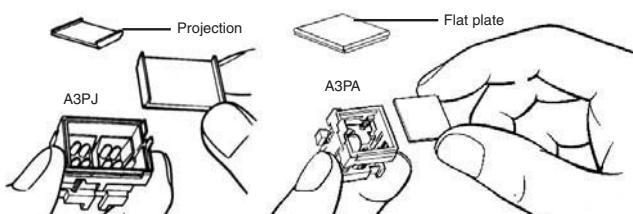
Insert the A3PA from the open side into the theft-prevention stopper.



Mounting Colored Plate

Place the colored plate on the plunger case with the dull side of the colored plate facing downward.

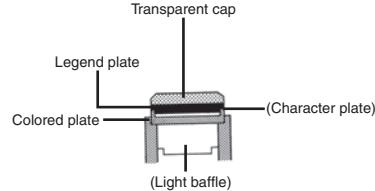
With A3PJ split-screen models, be sure that the projections on the upper surface of the colored plate face outward. For the A3PA, make sure that the flat plate is facing upwards.



Mounting Character Plate (Character Frame) and Legend Plate

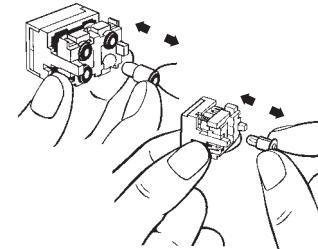
Plate

Mount the legend plate for the A3PJ under the layered surfaces and mount the cap, as shown below.



Mounting and Replacing LED and Incandescent Lamps

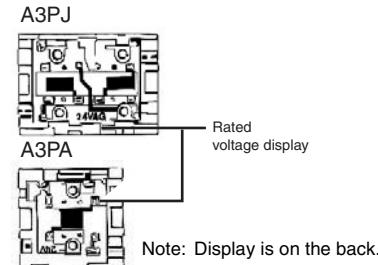
If using an A3PA (square) model with one incandescent lamp, insert the lamp in the center hole.



Note: Built-in LEDs cannot be replaced.

LED Rated Voltage Display (LED Models Only)

The LED rated voltage is shown between the built-in resistors on the back of the lighting unit. Use within a range of $\pm 5\%$.

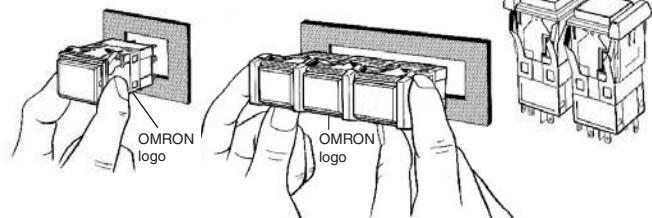


Mounting Switch onto Panel

- Individual Mounting and Barrier Mounting

When mounting the Switch, push it into the panel cutout from the front of the mounting panel by holding it with the logo mark "OMRON" facing downward.
- Multiple Barrier Mounting (A3PJ)

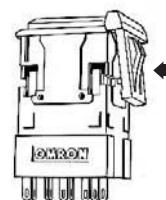
When mounting a number of Switches in line on the panel, link the Switches with spacing barriers in between, attach mounting barriers at both sides of this block of Switches and, pushing in on the mounting barriers at the side, insert the Switches into the panel cutout together.



Mounting Barriers

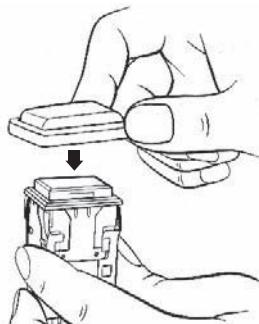
Mount each part by pushing it in the direction of the arrow shown in the corresponding illustration below.

Barrier mounting



Mounting Seal Cover

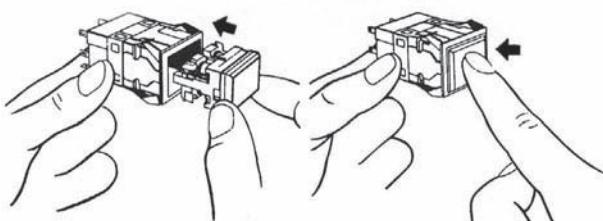
After mounting the seal cover onto the flange of the Switch, push the Switch into the panel cutout.

**Inscribing the Legend Plate**

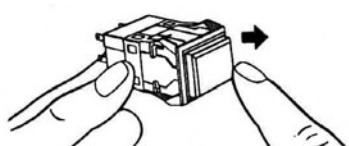
- Inscribe the legend plate to a depth of 0.5 mm max.
- The legend plate is made from polycarbonate resin. To coat the legend plate, use an alcohol-based coating such as melamine, phthalic acid, or acrylic.

Maintenance Lock

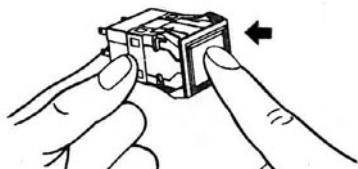
1. First, when you insert the transparent lens while pressing the center, the maintenance lock mechanism will be activated, and the Switch will not operate. Lamp replacement and other maintenance can be performed without turning OFF the power supply to devices and equipment. Use an insertion force of 4 kg.



2. Next, when you remove your finger from the Switch, the lock will be released.



3. The Switch will start to operate when the lighting unit is pressed the second time.



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