

#### Specifications

nting/Wiring

WJ Direct Mount/Cable

LA6

LED Tiers -

3 3 Tiers 5 5 Tiers

Rated Voltage

D DC24V

A AC100~240V

| Model                    |           | LA6   |          |                             |  | LA6-POE                                |  |  |
|--------------------------|-----------|---|----------|-----------------------------|--|--|--|--|
| Rated Voltage            |           | DC24V/AC100~240V(50Hz/60Hz)   |          |                             |  | DC24V/DC48(PoE)                        |  |  |
| Operating Voltage        | Range     | DC24V±10  | %/AC90   | ~250V(50Hz/60Hz)            |  | DC24V±10%/DC36~57V(PoE)                |  |  |
|                          |           | LA6-5D N-RYGBC  | 5W       | LA6-5D B-RYGBC              | 6.5W   |  |  |  |
|                          | Standard  | LA6-3D N-RYG  | 3.5W     | LA6-3D B-RYG                | 4.5W   | 7.2W (DC24V) /8.6W (PoE)               |  |  |
|                          | Charlouro | LA6-5AWJWB-RYGBC  | 6.5W     |                             |  |  |  |  |
| Rated Power              |           | LA6-5D N-YYYYY  | 7W       | LA6-5D B-YYYYY              | 8W   |  |  |  |
| Consumption              | Maximum   | LA6-3D N-YYY  | 4.5W     | LA6-3D B-YYY                | 5.5W   | 12.9W (DC26.4V) / 12.5W (PoE)          |  |  |
|                          |           | LA6-5AWJWB-YYYYY  | 7.5W     |                             |  |  |  |  |
| Signal Line Curr         | ent       | Max.70mA (at D  | C24V)/Ma | ax.20mA (at AC100-240V)     |  | Max. 420mA (at DC26.4V)/10mA (for PoE) |  |  |
| perating Temperatur      | re Range  |   | -25°C to | 0 +60℃                      | -10°C to +50°C   |  |  |  |
| Operating Humidity Range |           | Less than   | 90% RH   | , no condensation           | Less than 90% RH, no freezing or condensation  |  |  |  |
| Mounting Direction       |           | Upright/Inverted  |          |                             |  | Upright                                |  |  |
| Protection Rating        |           | IP65 (with Buzzer: IP54) (IEC 60529)  |          |                             | IP54 (Stationary type: IP20) (IEC 60529)   |  |  |  |
| Environmental Conditions |           |   |          | Tested while                | mounted  | in the upright position                |  |  |
| Mounting Location        |           |   |          |                             | s Only   |  |  |  |
| Insulation Resistance    |           | More than 1M $\Omega$ at DC500V between the power input lead and chassis.   |          |                             |  |  |  |  |
| Withstand Volta          | ge        | 500VAC for 1 minute between terminals and chassis without breaking insulation.  |          |                             |  |  |  |  |
| Display Color Varia      | ations    | Signal Mode: 9 colors/Smart Mode: 21 colors   |          |                             |  |  |  |  |
| Buzzer Sound             | s         | 11 Sounds   |          |                             |  |  |  |  |
| Sound Level              |           |   |          | m 85dB                      |  |  |  |  |
| Environmental Conditions |           |   | Buzzer   | Sound No.1, in an upright p | ith a distance from Buzzer opening at 1meter   |  |  |  |
| Operation Method         |           | Signal Control  |          |                             | Signal/Command Control   |  |  |  |
| Standard<br>Compliances  |           | <ul> <li>DC24V</li> <li>EMC Directive (EN 61000-6-4, EN 61000-6-2), RoHS Directive (EN 50581), UL508, CSA-C22.2 No. 14, FCC Part 15, Subpart B Class A, KC (KN 61000-6-4, KN 61000-6-2)</li> <li>AC100-240V</li> <li>EMC Directive (EN 61000-6-4, EN 61000-6-3), RoHS Directive (EN 50581), Low-voltage Directive (IEC/EN 60947-5-1, EN 62471)</li> </ul> |          |                             | EMC Directive (EN 61000-6-4, EN 61000-6-2, EN55032 Class A, EN 55024,<br>ROHS Directive (EN 50581), FCC Part 15, Subpart B Class A,<br>KC (KN 61000-6-4, KN 61000-6-2), UL 60950-1,<br>CAN/CSA-C22.2 No. UL 60950-1-07, Recognized Component (File No. E480103),<br>* The DC24V Direct Mount type conforms to the following conformities:<br>UL508, CAN/CSA C22.2 No. 14 Recognized Component (File No. E215669) |  |  |  |

#### Lineup

| Model          | Tiers    | Voltage | Body Color | Туре                                |
|----------------|----------|---------|------------|-------------------------------------|
| LA6-3DTNWB-RYG |          | DC24V   |            | Direct Mount/Terminal/Buzzer        |
| LA6-3DTNWN-RYG |          |         | Off-white  | Direct Mount/Terminal/No Buzzer     |
| LA6-3DWJWB-RYG | 3 Tiers  |         |            | Direct Mount/Cable/Buzzer           |
| LA6-3DWJWN-RYG |          |         |            | Direct Mount/Cable/No Buzzer        |
| LA6-3DTNUB-RYG |          |         | Silver     | Direct Mount/Terminal/Buzzer        |
| LA6-3DTNUN-RYG | - Sincis |         |            | Direct Mount/Terminal/No Buzzer     |
| LA6-3DWJUB-RYG |          |         |            | Direct Mount/Cable/Buzzer           |
| LA6-3DWJUN-RYG |          |         |            | Direct Mount/Cable/No Buzzer        |
| LA6-3DLJWB-RYG |          |         | Off-white  | L-Bracket with Pole/Cable/Buzzer    |
| LA6-3DLJWN-RYG | 1        |         | On-white   | L-Bracket with Pole/Cable/No Buzzer |

| Model            | Tiers   | Voltage      | Body Color | Туре                                  |
|------------------|---------|--------------|------------|---------------------------------------|
| LA6-5DTNWB-RYGBC |         |              |            | Direct Mount/Cable/Buzzer             |
| LA6-5DTNWN-RYGBC | 5 Tiers | : DC24V      | Off-white  | Direct Mount/Cable/No Buzzer          |
| LA6-5DWJWB-RYGBC |         |              |            | Direct Mount/Terminal/Buzzer          |
| LA6-5DWJWN-RYGBC |         |              |            | Direct Mount/Terminal/No Buzzer       |
| LA6-5DTNUB-RYGBC |         |              | Silver     | Direct Mount/Terminal/Buzzer          |
| LA6-5DTNUN-RYGBC | Stiers  |              |            | Direct Mount/Terminal/No Buzzer       |
| LA6-5DWJUB-RYGBC |         |              |            | Direct Mount/Cable/Buzzer             |
| LA6-5DWJUN-RYGBC |         |              |            | Direct Mount/Cable/No Buzzer          |
| LA6-5DLJWB-RYGBC |         |              |            | L-Bracket with Pole/Cable/Buzzer      |
| LA6-5DLJWN-RYGBC | 1       |              |            | L-Bracket with Pole/Cable/No Buzzer   |
| LA6-5AWJWB-RYGBC |         | AC100 - 240V |            | Direct Mount/Cable/Buzzer             |
| LA6-5DTNWB-POE   |         | DC24V or     |            | Direct Mount/Terminal/Ethernet/Buzzer |
| LA6-5DSNWB-POE   | 1       | PoE (DC48V)  |            | Stationary/Terminal/Ethernet/Buzzer   |



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# LA6 SERIES

patlite.com

Sleek Design. Fully Customizable. Endless Possibilities.

# **A SIGNAL TOWER DESIGNED TO** SHOW MORE SO YOU CAN DO MORE



## COMMON ON-SITE OCCURRENCES

We now need to reconfigure the color modules on our signal towers.

### **OUR MACHINE LINE IS EXPERIENCING** TOO MANY STOPPAGES.

We need to make our workers better aware of machine status so they can take quicker corrective measures.

### WE ARE EXPERIENCING DOWN TIME DUE TO MATERIAL MANAGEMENT. We need earlier notifications prior to materials

completely depleting to avoid delays.

### **PRODUCTION STOPPAGES ARE OCCURRING** AS A RESULT OF UNEVEN WORKFLOW.

Variations in work output is creating bottlenecks that can be smoothed out with a Takt system.

# WE NEED TO IMPLEMENT REMOTE MONITORING

We need to monitor the operating status of equipment with long processing time, as well as abnormal stoppages or delays as they occur.

## LA6 SOLUTION

| Color<br>Change                  | The LA6 doe<br>or wiring cha<br>The LA6 car<br>anywhere w |
|----------------------------------|---|
| Status<br>Condition              | The LA6 is at<br>dynamic visu<br>response by              |
| <b>Level Meter</b><br>Monitoring | The LA6 can<br>a visual level<br>and material             |
| <b>Cycle</b> Time                | The LA6 has<br>allowing you<br>a streamline               |
| <b>Remote</b><br>Monitoring      | The LA6 is al<br>other LA6 de<br>via its mirror           |

esn't require any hardware anges to reconfigure colors. n be easily programmed vithout tools.

ble to create better, more al signals to elicit a quicker workers.

be programmed to act as to help manage materials levels.

an internal timer function to create visual timers for ed Takt system.

ble to send information to evices in remote locations ring function.



# **ADVANCED OPTIONS TO SOLVE ANY APPLICATION**



# IMPROVE VISIBILITY WITHOUT RECONFIGURING HARDWARE









# INCREASE EFFICIENCY WITH MORE DYNAMIC VISUAL WARNINGS



The LA6 is able to display more detailed information such as the status severity level or specific abnormality conditions that workers normally would have to look for on a equipment panel or HMI.

#### Display the level of status severity





# WIRING MADE EASY WITH LAN CONNECTIVITY



## **REDUCE DOWNTIME** WITH LEVEL MONITORING

By displaying current material levels, workers can more accurately respond to changes, reducing downtime. As material levels reach certain thresholds, the LA6 can provide earlier visual and audible notifications. Display remaining tank levels in stages Tank Full Mid Point Tank Low



The LA6 conveniently integrates into your facilities' existing LAN infrastructure. By connecting to a PoE (Power over Ethernet) compliant HUB, the LA6 can be controlled and powered through a single cable.



# **REDUCE BOTTLENECKS WITH A VISUAL TAKT SYSTEM**



## PROBLEM

Idle time or delays on the production assembly line is sometimes caused by variations in the rate of worker output.

With the LA6 visual takt system, workers will be more aware of the progress of the entire line, minimizing delays, and resulting in a smoother work flow.

## PROBLEM

Due to high volumes of products to inspect, some defective products may be overlooked and pass inspection.



Balance the assembly line with a Takt system



# **cle** Time

With the LA6 internal timer function, inspectors are allotted proper time for each inspection resulting in an improved yield rate by accurately detecting inferior goods.

### Prevent defective product outflow during inspection

# OBTAIN EQUIPMENT INOFRMATION FROM REMOTE LOCATIONS



## PROBLEM

Tanks located in remote buildings tend to be overlooked until the tanks are completely depleted.

## **MPLEMENTATION MERIT**

The LA6 can be used as an economical level meter system capable of alerting remote personnel of equipment changes in real-time.



## PROBLEM

Managers in remote offices need to monitor machinery status on the factory floor in real-time.



 Factory
 Administration Building

 Image: Command of the status
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### See equipment status from multiple locations



## **Remote** Monitoring

## IMPLEMENTATION MERIT

With LA6-POE's built-in mirroring function, equipment status, takt time, etc., can be communicated to other LA6 POE devices in remote locations via a LAN connection. This data can also be sent to 3rd party software through the LAN connection for data analysis or Andon monitoring.



# LA6 SIGNAL TOWER

## LA6 DC24V / 3 and 5 Tier Types

The LA6 alarm feature has a total of 11 sounds to match various applications





#### **Multi-function Switch for various setups**

BUZZER SOUND SETUP The built-in volume adjustment switch has 4 selectable settings. High (approx. 85dB) -> Mid (approx. 80dB) -> Low (approx. 75dB) -> Off

#### COLOR SETUP

The built-in switch also allows you to select up to 9 colors for each tier manually.

11 selectable alarm sounds to match

can be set to each display pattern.

A newly developed compact loudspeaker not

only transmits clear sound (85dB at 1m) but is

also water resistant. A different alarm sound

various applications



A new lens design optimizes visibility.

The newly developed lens design efficiently diffuses LED light so that it is unmistakably visible, even from great distances

Free editing software to freely change

the LA6 colors and patterns



Silver

Lighting

Off White Flashing / Buzzer

Steel Pole Type (LJ)

### LA6-POE Direct Mount / Stationery type





Conveniently connects to an existing network with PoE support

PoE (Power over Ethernet) is a technology that lets network cables carry electrical power. PoE can bring many advantages such as reducing costs of installing electrical cabling and/or the flexibility of not having to be tethered to an electrical outlet.

#### **Detachable Terminal Block**

Has 8 inputs for connecting PLC or discrete I/O. Data through these inputs can be transferred to a server over Ethernet. DC power can also be wired if a LAN connection is not available.



Optional Parts

# For LA6/LA6-POE

Stationary Bracket Model:SZK-003W Direct Mount type



## LA6 High Voltage / 5 Tier Types



#### **PNS** Command

By using a PNC Command, the LED unit colors for tiers 1-5 can be controlled.

Access and control all LA6-POE functions remotely in various network types with

3rd Party Software LA6-POE can send machine status data over Ethernet to centralized software for remote Andon monitoring or data analysis.

PC

#### For LA6-POE



Desktop Bracket Model: SZW-060W Convert direct mount to desktop



] Wall Mount Bracket Model: NH-WST2 Stationary type

PLC

Editing Software Free

### Easy Setup



http://www.patlite.com

## LA6 SERIES

# **DIMENSIONS AND WIRING**



Connector Inputs

#### LA6 (Terminal Type)

|     | 11 Purple | Mode Change                   |
|-----|-----------|-------------------------------|
|     | 10 Black  | Power Line (Signal-line Side) |
| R D | 9 Gray    | Flashing/Pulse Enable Common  |
|     | 8 Yellow  | Power Wire                    |
|     | 7 Black   | Alarm 2/Input 7               |
| NQ. | 6 Gray    | Alarm 1/Input 6               |
|     | 5 White   | LED 5/Input 5                 |
|     | 4 Blue    | LED 4/Input 4                 |
|     | 3 Green   | LED 3/Input 3                 |
|     | 2 Orange  | LED 2/Input 2                 |
|     | 1 Red     | LED 1/Input 1                 |

|  |  |  | L | A | 6- | P | 0 | Е |  |
|--|--|--|---|---|----|---|---|---|--|
|--|--|--|---|---|----|---|---|---|--|



| Smart Mode Inputs        | for Mode Change) |
|--------------------------|------------------|
| - onnar en roue in parts | ion mode change, |

|          |             | ①Time-trigger<br>Type        | ②Pulse-trigger<br>Type             | ③Single-display<br>Type      |  |
|----------|-------------|------------------------------|------------------------------------|------------------------------|--|
| Input1   | Red         |                              |                                    |                              |  |
| Input2   | Amber       | Display Input                | Display Input                      | Display Input                |  |
| Input3   | Green       | (Binary Input<br>Maximum 15) | (Binary Input<br>Maximum 15)       | (Binary Input<br>Maximum 31) |  |
| Input4   | Blue        |                              |                                    |                              |  |
| Input5   | White       | STOP                         | Trigger                            |                              |  |
| Input6   | Purple      | Mute                         | Mute                               | Mute                         |  |
| Input7   | Sky Blue    | Clear                        | Clear                              | Clear                        |  |
| Mode Cha | ange Pink   |                              | At Input                           |                              |  |
| 4        | A SIGI<br>C | nal Input<br>Change (F       | MODE, AF<br>TO THE M<br>PINK) WIRE | NODE<br>E.                   |  |



| MEMO | <ul> <li>Be sure to use the IEEE802.3af compliant products for the PoE power feeder systems.</li> <li>Priority is given to the DC24V power supply when both the DC24V power source and PoE power feeder systems are connected simultaneously.</li> <li>If both power sources are simultaneously connected, when disconnecting the DC24V source, this product may reboot.</li> </ul> |
|------|---|
|------|---|