## LED Steady/Flash \& Electric Horn QAD100H-N/ QAD125H-N



Thank you for purchasing Qlight's products. Please read this user manual carefully
 prior to installation and operation to ensure safe and correct use.

## $\triangle$ Precautions for Safety

Failure to follow the instructions below may cause a loss of life or serious physical injury.

1. During wiring or maintenance, please completely turn off the Power of the product. (Failure to follow this may lead to an electric shock.)
2. Do not install the product in locations that subjects it to excessive dust or water other than the conditions designated by the IP protection ratings indicated for each product. (Failure to follow these instructions may cause a fire to the product, electric shock, physical injury, malfunction or damage to the product.)
3. Do not alter or repair this product. If maintenance or repair service is required, please contact your local Qlight contact point. (Failure to follow these instructions may lead to fire, electric shock, or product damage.)
4. Please apply the correct voltage to the product. (Failure to follow these instructions may lead to fire, electric shock, or product damage.)
5. When the product is applied to a condition that may impact lives or property, please make sure to have a double safety device. (Failure to follow this may cause damage to property, fire, electric shock and loss of life.)

## $\triangle$ Precautions for Correct Use

Failure to follow the proper instructions may cause damage to property, the product, or malfunction of the product that would void the warranty.

1. Please remove any objects that can interrupt ventilation around the product.
2. Please turn off the Power of the product immediately if it fails to operate properly.
3. Carefully wire the product according to each product's specification.
4. Please be careful in preventing chemicals such as thinner, benzene, etc. in contact with the surface of the product.
5. Do not apply excessive force/impact to the product.
6. Failure to follow any of the instructions above may cause malfunction or damage to the product, fire, and electric shock.

## Ordering Specifications

| QAD100H-N | 110/220 | R |
| :---: | :---: | :---: |
| [Model number] | [Voltage] | [Color] |
| 1 | 1 | 1 |
| - QAD100H-N | -12/24-DC12V-24V | R-Red |
| - QAD125H-N | -110/220 | A-Amber |
|  | - AC110V-220V | G-Green |
|  |  | B-Blue |

Product Specifications

| Model number | Voltage | Current | Sound pattern and volume | Certificates | Weight | Color |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| QAD100H | $\begin{gathered} \text { DC12V } \\ -24 \mathrm{~V} \end{gathered}$ | $\begin{aligned} & \text { Max. } \\ & 1.270 \mathrm{~A} \end{aligned}$ | - Bit Input : 5Ch <br> - Binary Input : 30Ch <br> - Built-in sounds <br> : Max.100dB <br> (Based on WA-Ch4) | C $\epsilon$ | 0.92 Kg | R-Red <br> A-Amber G-Green B-Blue |
|  | $\begin{aligned} & \text { AC110V- } \\ & 220 \mathrm{~V} \end{aligned}$ | $\begin{gathered} \text { Max. } \\ 0.250 \mathrm{~A} \end{gathered}$ |  |  |  |  |
| QAD125H | $\begin{gathered} \text { DC12V } \\ -24 \mathrm{~V} \end{gathered}$ | $\begin{gathered} \text { Max. } \\ 1.130 \mathrm{~A} \end{gathered}$ | - Bit Input : 5Ch <br> - Binary Input: 30Ch <br> - Built-in sounds : Max.115dB (Based on WA-Ch4) |  | 1.12 Kg |  |
|  | $\begin{aligned} & \text { AC110V- } \\ & 220 \mathrm{~V} \end{aligned}$ | $\begin{gathered} \text { Max. } \\ 0.275 \mathrm{~A} \end{gathered}$ |  |  |  |  |

- Protection rating : IP65
- Ambient operating temperature : $-30^{\circ} \mathrm{C}$ to $+50^{\circ} \mathrm{C}$

Please scan the QR code for more detailed product information.

## QAD100H-N




QAD125H-N



Wiring Instructions


- External Power line - UL1015 AWG18(0.75sq) x 2C 400mm External signal line - UL1007 AWG22(0.3sq) 400mm
- QAD100H-N : This product can be wired regardless of polarity.
- QAD125H-N : Black output line is negative(-).


## - Bit Input Mode

- Bit input mode(using external line) allows you to select one of five sound options by switching on one of the 5 channels (Ch1-Ch5).
- Total of 5 sound options are configurable.
- Binary Input Mode
- Binary input mode(using external line) allows you to receive multiple inputs by using the 5 channels(Ch1-Ch5) to configure one of 30 sound options.
- Total of 30 sound options are configurable.
※ The channel selection method using a transistor is the same as the external contact method, please refer to the figure on the right.
※ The switch figure to the right explains how to wire the external contacts of a signal line product. If the product is not a signal line product, use the channel selection switch attached inside the product.

| switch attached inside the | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bit input modeCan select up to 5 sound options | 1 | 1 | 0 | 0 | 0 | 0 |
|  | 2 | 0 | 1 | 0 | 0 | 0 |
|  | 3 | 0 | 0 | 1 | 0 | 0 |
|  | 4 | 0 | 0 | 0 | 1 | 0 |
|  | 5 | 0 | 0 | 0 | 0 | 1 |
|  | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 1 | 0 | 0 | 0 | 0 | 1 |
| Binary input mode | 2 | 0 | 0 | 0 | 1 | 0 |
| Can select up to 30 sound options1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 30 | 1 | 1 | 1 | 1 | 0 |

## Parts Definition/ Installation/ Mounting Hole Specifications

## - Parts Definition/ Installation



- First, machine taps or holes on the mounting surface.
- The mounting hole of this product is 6 mm in diameter.
- When machining taps, fasten the bolt through the mounting hole of the product.
- When machining holes, insert the bolt through the hole of the product, and tighten the nut from the opposite side of the mounting surface.
- Install a flat washer and a spring washer to the bolt if the product can experience severe vibration and shock.


## Installation Environment and Protection Rating

- This product is designed for use with protection rating of IP65.
- If the product is installed in locations that subject it to excessive dust or water other than the designated IP protection rating indicated(IP65), it may cause malfunction or damage to the product.
- For further information, please visit our website (www.qlight.com).

Top Control Configuration


## Sound Setting



- Built-in sounds can be selected by using a switch either bit or binary sounds.
- Please be conscious of the number selected for your desired sound option.
- Switch No. 1 : Select Bit or Binary
- Switch No. 2,3,4 : Select Built-in sound group

- It is being used when built-in sound is selected.
- Select between the six sound groups.
- Every group has 5 type of sounds.

| How to select bit type sound group |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ON(1) OFF(0) | $\square$ |  |  | Sounds |
| No. | 2 | 3 | 4 |  |
| 1 | 0 | 0 | 1 | 5 Warning Sounds |
| 2 | 0 | 1 | 0 | 5 Special Warning Sounds (1st Group) |
| 3 | 0 | 1 | 1 | 5 Melodies |
| 4 | 1 | 0 | 0 | 5 Alarms |
| 5 | 1 | 0 | 1 | 5 Special Warning Sounds (2nd Group) |
| 6 | 1 | 1 | 0 | 5 Special Warning Sounds (3rd Group) |

Select built-in Bit sound group or Binary sound group


- In bit input mode, Please set switch no. 1 to off(0).


## Volume Adjustment

- The volume output of this product is adjustable.
- Turn the volume dial clockwise to increase the volume, and turn counter clockwise to decrease the volume.
- There will be no sound when the dial is put at MIN.



## Light Function Selection

- Please refer to the chart below to use light function selection switch located inside the product.


L : Steady


- LF : Flashing
- Default function is set at steady LED. Select the desired function for your application during installation.


## Sound Type and Combination Manual

## - Bit Input - Playing Built-in Sound

- In bit input mode, you can chooses one sound from 1 sound by configuring the 5 channels.
- For sound configurations, refer to the table below.

| Bit input method sound configuration |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\left\lvert\, \begin{aligned} & \operatorname{ON(1)} \\ & \operatorname{OFF(0)} \end{aligned}\right.$ | Ch1 | $\begin{gathered} \text { Ch2 } \\ \Pi \end{gathered}$ | $\begin{gathered} \text { ch3 } \\ \square \end{gathered}$ | Ch4 | ch5 <br> $\square$ | Type of sound (WS group as an example) |
| No. | 1 | 2 | 3 | 4 | 5 |  |
| 0 | 0 | 0 | 0 | 0 | 0 | No sound |
| 1 | 1 | 0 | 0 | 0 | 0 | Fire.A-ANG(560Hz-1.5kHz) |
| 2 | 0 | 1 | 0 | 0 | 0 | Emergency WA-U ( $600 \mathrm{~Hz}-1.5 \mathrm{kHz}$ ) |
| 3 | 0 | 0 | 1 | 0 | 0 | Ambulance PI-PO (450Hz-900Hz) |
| 4 | 0 | 0 | 0 | 1 | 0 | Machinery Fault(820Hz) |
| 5 | 0 | 0 | 0 | 0 | 1 | High Expansion(1kHz) |

※Please be noted that the configuration chart above is explaining how to wire terminal blocks. The actual product does not have a switch.

## - Sound Type by Group

| Bit input method sound configuration |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Group | Channel | Type of sound |
| WS | 5 Warning Sounds | Ch1 | Fire.A-ANG ( $560 \mathrm{~Hz}-1.5 \mathrm{kHz}$ ) |
|  |  | Ch2 | Emergency WA-U ( $600 \mathrm{~Hz}-1.5 \mathrm{kHz}$ ) |
|  |  | Ch3 | Ambulance PI-PO ( $450 \mathrm{~Hz}-900 \mathrm{~Hz}$ ) |
|  |  | Ch4 | Machinery Fault (820Hz) |
|  |  | Ch5 | High Expansion (1kHz) |
| WP | 5 Special Warning Sounds (1st Group) | Ch1 | Fire.A-ANG ( $560 \mathrm{~Hz}-1.5 \mathrm{kHz}$ ) |
|  |  | Ch2 | Abandon Alarm (820Hz) |
|  |  | Ch3 | Machinery Fault (820Hz) |
|  |  | Ch4 | High Expansion (1kHz) |
|  |  | Ch5 | 7 Short PI. / 1 Long (1kHz) |
| WM | 5 Melodies | Ch1 | Sweet Home |
|  |  | Ch2 | For Elise |
|  |  | Ch3 | Cuckoo's Waltz |
|  |  | Ch4 | Piano Sonata |
|  |  | Ch5 | Turkish March |
| WA | 5 Alarms | Ch1 | Beep Intermittent |
|  |  | Ch2 | Door Chime |
|  |  | Ch3 | Phone Ring |
|  |  | Ch4 | PI.PI.PI Short |
|  |  | Ch5 | Tripping Beat |
| WO | 5 Special Warning Sounds (2nd Group) | Ch1 | Rel rel rel ( $730 \mathrm{~Hz}-920 \mathrm{~Hz}$ ) |
|  |  | Ch2 | Slow Ambulance PI-PO ( $820 \mathrm{~Hz}-1.05 \mathrm{kHz}$ ) |
|  |  | Ch3 | Wye yong Wye yong ( $770 \mathrm{~Hz}-1.2 \mathrm{kHz}$ ) |
|  |  | Ch4 | Phone ring 2 ( $740 \mathrm{~Hz}-910 \mathrm{~Hz}$ ) |
|  |  | Ch5 | Fire.A-ANG (770Hz-1.11kHz) |
| WN | 5 Special Warning Sounds (3rd Group) | Ch1 | Oit Oit ( $500 \mathrm{~Hz}-1.11 \mathrm{kHz}$ ) |
|  |  | Ch2 | Pio Pio o (940Hz-2.19kHz) |
|  |  | Ch3 | $\begin{aligned} & \text { Slow Di o Di o } \\ & \text { (680Hz-840Hz) } \end{aligned}$ |
|  |  | Ch4 | Li long Li ling ( $420 \mathrm{~Hz}-470 \mathrm{~Hz}$ ) |
|  |  | Ch5 | 911 Siren ( $150 \mathrm{~Hz}-1 \mathrm{kHz}$ ) |

## - Binary Input - Playing Built-in Sound

- In binary input mode, you can chooses one sound from 30 sounds by configuring the 5 channels.
- For sound configurations, refer to the table below.
- Please be aware that the configuration for sound using the binary input method is different from the bit input method.

| Binary input method sound configuration |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { ch1 } \\ \square \end{gathered}$ |  | Ch3 | Ch4 |  | Type of sound |
| No. | 1 | 2 | 3 | 4 | 5 |  |
| 0 | 0 | 0 | 0 | 0 | 0 | No sound |
| 1 | 0 | 0 | 0 | 0 | 1 | Fire.A-ANG ( $560 \mathrm{~Hz}-1.5 \mathrm{kHz}$ ) |
| 2 | 0 | 0 | 0 | 1 | 0 | Emergency WA-U ( $600 \mathrm{~Hz}-1.5 \mathrm{kHz}$ ) |
| 3 | 0 | 0 | 0 | 1 | 1 | Ambulance PI-PO ( $450 \mathrm{~Hz}-900 \mathrm{~Hz}$ ) |
| 4 | 0 | 0 | 1 | 0 | 0 | Pi-ik Pi-ik (800Hz) |
| 5 | 0 | 0 | 1 | 0 | 1 | Machinery Fault (820Hz) |
| 6 | 0 | 0 | 1 | 1 | 0 | High Expansion (1kHz) |
| 7 | 0 | 0 | 1 | 1 | 1 | Alarm (1kHz) |
| 8 | 0 | 1 | 0 | 0 | 0 | Sweet Home |
| 9 | 0 | 1 | 0 | 0 | 1 | For Elise |
| 10 | 0 | 1 | 0 | 1 | 0 | Cuckoo's Waltz |
| 11 | 0 | 1 | 0 | 1 | 1 | Piano Sonata |
| 12 | 0 | 1 | 1 | 0 | 0 | Turkish March |
| 13 | 0 | 1 | 1 | 0 | 1 | Magic Flute |
| 14 | 0 | 1 | 1 | 1 | 0 | Badinerie |
| 15 | 0 | 1 | 1 | 1 | 1 | Pineapple Rag |
| 16 | 1 | 0 | 0 | 0 | 0 | Beep Intermittent |
| 17 | 1 | 0 | 0 | 0 | 1 | Door Chime |
| 18 | 1 | 0 | 0 | 1 | 0 | Phone Ring |
| 19 | 1 | 0 | 0 | 1 | 1 | PI.PI.PI Short |
| 20 | 1 | 0 | 1 | 0 | 0 | Tripping Beat |
| 21 | 1 | 0 | 1 | 0 | 1 | Rel rel rel ( $730 \mathrm{~Hz}-920 \mathrm{~Hz}$ ) |
| 22 | 1 | 0 | 1 | 1 | 0 | Slow Ambulance PI-PO <br> ( $820 \mathrm{~Hz}-1.05 \mathrm{kHz}$ ) |
| 23 | 1 | 0 | 1 | 1 | 1 | Wye yong Wye yong ( $770 \mathrm{~Hz}-1.2 \mathrm{kHz}$ ) |
| 24 | 1 | 1 | 0 | 0 | 0 | Phone ring 2 ( $740 \mathrm{~Hz}-910 \mathrm{~Hz}$ ) |
| 25 | 1 | 1 | 0 | 0 | 1 | Fire.A-ANG (770Hz-1.11kHz) |
| 26 | 1 | 1 | 0 | 1 | 0 | Oit Oit ( $500 \mathrm{~Hz}-1.11 \mathrm{kHz}$ ) |
| 27 | 1 | 1 | 0 | 1 | 1 | Pi o Pi o (940Hz-2.19kHz) |
| 28 | 1 | 1 | 1 | 0 | 0 | Slow Di o Di o (680Hz-840Hz) |
| 29 | 1 | 1 | 1 | 0 | 1 | Li long Li ling ( $420 \mathrm{~Hz}-470 \mathrm{~Hz}$ ) |
| 30 | 1 | 1 | 1 | 1 | 0 | 911 Siren ( $150 \mathrm{~Hz}-1 \mathrm{kHz}$ ) |

※Please be noted that the configuration chart above is explaining how to wire terminal blocks. The actual product does not have a switch.

| When Using a Built-in Sound Source |  |
| :---: | :---: |
| Bit input | Binary input |
| Play one of five sounds from |  |
| 6 groups |  |$\quad$ Play one of 30 sounds |  |
| :--- |

## ■ When using a built-in sound source in bit input mode

※ Sound switch setting $\rightarrow$ Channel selection

1. Please set switch no. 1 to off.

- For more information, see page 4 'Sound Selection' section.

2. Use one of the SOUND setting switches 2,3 and 4 to select one of the 6 groups.

- For more information, see page 4 'Sound Selection' section.

3. Use the terminal block on the back to select one of the five built-in sounds.

- For more information, please refer to page 5 'Sound Type and Combination for Built-in Sound' - 'Bit Input' section.

■ When using a built-in sound source in binary input mode
※ Sound switch setting $\rightarrow$ Channel selection

1. Please set switch no. 1 to ON.

- For more information, see page 4 'Sound' section.

2. Use the terminal block on the back to select one of the 30 built-in sounds.

- For details, please refer to page 5 'Sound Type and Combination for Built-in Sound' - 'Binary input' section.

■ Install the product in accordance with the manual. Otherwise rainwater or moisture may penetrate into the product.

- BEACON/SIGNALING LIGHT
※ For products with a protection rating of less than IPX4, please install it vertically.
Power cord inlet part shall not be facing the sky.



## - ELECTRONIC SOUNDER/SIGNAL HORN

Sounder part shall not be facing the sky.


- HEAVY-DUTY \& EXPLOSION PROOF SIGNALINGS

Sounder part shall not be facing the sky.


- SIGNAL TOWER LIGHTS
※ For products with a protection rating of less than IPX4, please install it vertically.
Power cord inlet part shall not be facing the sky.


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You can expect prompt service if you have exact information such as model name, symptom, telephone number and address.
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