

## **Audible Alarm**

# Instruction Manual

TYPE:EWHS

We thank you for purchasing PATLITE Audible Alarm.

Before you start using the product, please read this instruction manual carefully to use the product correctly. Please store this document in a safe place.

Be sure to read this document again when you are about to perform tasks such as maintenance and repair. And if you have any questions, contact a branch office or the technical support printed on the last page.

## Safety Precautions

The precautions which must be observed to prevent damage to the person using the product, to people around it, or to property are described in a manner shown below

■The seriousness of injury or damage caused by ignoring the indication and using the product in a wrong way is categorized with the indications below and descriptions are added to each of them

| Marning  | The sections with this indication contain "items which could cause death or serious injury" if ignored.        |  |
|----------|--|--|
| <u> </u> | The sections with this indication contain "items which could cause injury or property damage only" if ignored. |  |

# 1. Cautions Which Must Be Observed for Safety Use

# 

- ●Be sure to turn the power off before wiring or installing the product. Failure to do so may cause electric shock.
- Take care to perform wiring correctly. If the wiring in incorrect, internal circuit may be damaged by fire, and it may also be a cause of fire.
- •As for the power source, be sure to use this product within the allowable range of voltage. Failure to do so may be a cause of fire or damage to the product.
- Do not disassemble or convert the product. It may cause a fire or electric shock. For repair or inspection of the internal parts of the product, contact a branch office or the technical support printed on the last page.
- Be sure to let specialists perform installation task which requires construction work.
  Failure to do so may cause electric shock, fire, or falling.

# <u></u> Caution

- To protect the power source and the internal circuit of the body, be sure to insert an external fuse.
- •Be sure to use the product with the cover on the upper surface of the case fixed at the specified torque value. Entry of water or dust may cause malfunction.

#### Other Precautions

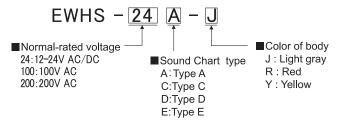
- ●Use the product in an environment where there are no high-intensity radiowaves or inductive noise. The horn may generate noise.
- •Use the product in an environment where there is no corrosive gas. Failure to do so may cause malfunction.
- In case the product is used for security purposes in which safety is emphasized, be sure to perform daily maintenance, and use the product in combination with other devices to prepare for the occurrence of unlikely events such as malfunction or failure.
- Perform installation of each part by fastening them with the recommended torque value.
- Before starting work on the product, discharge static electricity from your body to prevent electrostatic breakdown.
  The static electricity can be discharged by touching another grounded metal part with bare hands.
- Do not use the product in a location where there is more vibration than the value defined in the specifications. It may cause damage to or falling of the body.
- In case the product is to be used outdoors, be sure to insulate the parts of cable connection. Failure to do so may cause malfunction or electric shock.

Failures caused by using the product in ways not observing the Warnings and Cautions, by disassembling or converting the product, or by natural disaster are not covered under warranty.

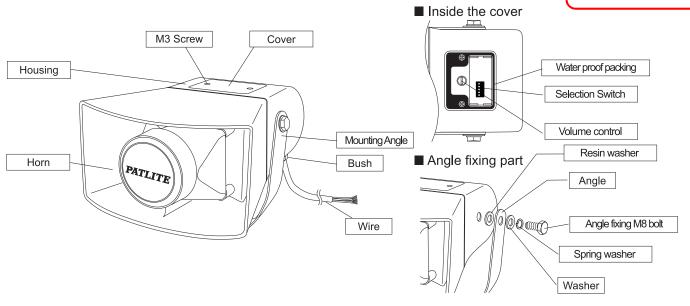
And do not use the product in ways other than the ways described in this document.

PATLITE Corporation has not applied for permission to use certain copyrighted music or songs recorded in EWHS-A, C and D types outside of Japan; therefore, please contact the local copyright association for permission before using the product in case this product is used outside of Japan. EWHS-E type is recommended for use outside of Japan as this model does not include copyrighted music or songs, and the permission is not required.

#### Model Indicating Format

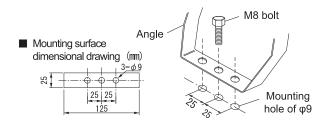


#### 3. Part Names

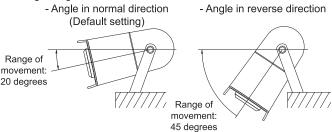


## 4. How to Install

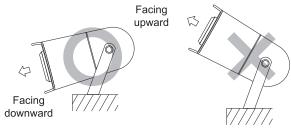
- The angle fixing M8 bolt is tightened only temporarily. Be sure to tighten it more securely when installing it. (Recommended tightening torque value: 12.0N · m)
- When installing it, fix the angle with the angle fixing M8 bolt at three locations.
   In case the product is installed in a place where vibrations are especially strong, fix the body to prevent it from falling.



- In case the angle is installed with the back side coming to the front, the horn's range of movement widens in the lower direction.
- To change the orientation of the angle, remove the angle fixing M8 bolts, mount the angle in the opposite direction, and then retighten it with the angle fixing M8 bolts.

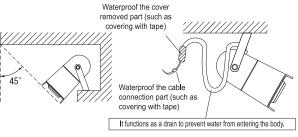


Do not install the horn facing upward.
 Water or dust may enter, and cause failure.



•When the product is installed outside the building, install the product inside a line drawn 45 degrees from the edge of the eaves to protect the product from direct exposure to strong wind and rainfall.
And as for the cables, be sure to waterproof the parts where the cover is removed or cables are connected, and connect the cable in slackened state.

If water enters through a part where the cover is removed, it may cause failure or electric shock.



\*Be sure the cover on top of the case is fixed before using the product. If water or dust enters the product, it may cause failure.



Be sure to turn the power off before installing the product. Failure to do so may cause electric shock.

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- •Ensure that the mounting surface has sufficient strength to support the weight of the product, and do not use the product in places where there is more vibration than the value defined in the specifications. Failure to do so may cause injury or damage to the product due to falling of the product.
- •Be sure to tighten the angle fixing M8 bolt with the recommended tightening torque. Failure to do so may cause injury or damage to the product due to the product falling over.

#### Other Precautions

• In case the product is installed in a place where strong vibrations occur, be sure to retighten the screws and bolts periodically.

# How to perform Wiring

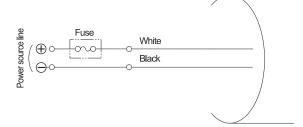
■There is no polarity of + or - for the AC type.

#### ★ Voltage rating

|          | J            |
|----------|--------------|
| EWHS-24  | 12-24V AC/DC |
| EWHS-100 | 100V AC      |
| EWHS-200 | 200V AC      |

| ★ Inrush currer | nt *1                 |
|-----------------|-----------------------|
| EWHS-24         | 42A or lower/1,5ms    |
| EWHS-100        | 1.5A or lower/2.0ms   |
| EWHS-200        | 204 or lower/300 // s |

## ■ Wiring example



★ Fuse capacity \*2

| EWHS-24  | 42A or lower/1.5ms        | EWHS- | -24 | 1A (Inrush current resistant) |
|----------|---------------------------|-------|-----|-------------------------------|
| EWHS-100 | 1.5A or lower/2.0ms       | EWHS- | 100 | 1A (Normal)                   |
| EWHS-200 | 2.0A or lower/300 $\mu$ s | EWHS- | 200 | 1A (Normal)                   |

- \*1 When the power is turned on with the maximum voltage in the allowed range,
- \*2 Use an inrush current resistant fuse for the EWHS-24. A normal fuse may be burned out by the inrush current.

## 

●Take care to perform the wiring correctly. Failure to do so may cause damage to the internal circuit by fire, and it may also cause fire.



● To protect the power source circuit and internal circuit of the body, be sure to install an external fuse.

#### Other Precautions

●In case a no-voltage contact circuit such as a relay switch is to be connected to the power source line, choose a relay switch or the like in consideration of the contact capacity and the value of the inrush current. Insufficient capacity may cause adhesion to the contact or malfunction.

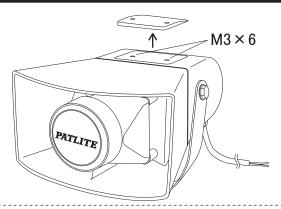
## 6. How to Operate

### 6-1. Removing and Fixing the Cover

When adjusting the volume or selecting the tone color, remove the cover.

- Remove or fix the cover according to the procedure shown below.
- 1) Remove the two mounting screws (M3 x 6).
- 2 Remove the cover.
- 3 After completing the task, mount the parts removed according to procedure ① and ② in reverse order.

(Recommended torque value for the cover mounting screw: 0.6N - m)



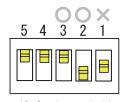
#### Other Precautions

- ●After completing the task, be sure to mount the cover. And be sure to operate this product with the cover being mounted. If it is not mounted, water or dust may enter, and it may cause failure.
- ●Tighten the cover mounting screws with the recommended torque value. Failure to do so may cause failure due to submersion under water.

#### 6-2. Selecting a Sound

A sound can be selected from the sound list 1 - 32.

- A sound is selected with the selection switch.
- Set the selection switch to the sound you want to play according to the sound list.



(Selection switch)

#### Other Precautions

Be sure to use a tool with a fine tip in selecting with the selection switch to move the knob to either end where ON or OFF is selected. When the knob is placed near the center as shown in the figure, the sound to be played may be uncertain.

# ● Sound Chart type A (Model:EWHS-□A)

★Sound list (※Factory default setting)

|   | į [       | 5 4 3 2 1 off on 2  | 2  | 5 4 3 2 1                         | 3  | 5 4 3 2 1                     | 4  | 5 4 3 2 1             | 5  | 5 4 3 2 1      | 6  | 5 4 3 2 1            | 7  | 5 4 3 2 1                | 8  | 5 4 3 2 1         |
|---|-----------|---|----|-----------------------------------|----|-------------------------------|----|-----------------------|----|----------------|----|----------------------|----|--------------------------|----|-------------------|
| Ľ | Be        | ep (slow intermittent horn)                                   | 3  | Stutter (rapid intermittent horn) |    | Bell (clear highpitched bell) |    | Yelp (rapid siren)    |    | Rapid Hi-Lo    |    | Melody Chime         |    | Synthesized Piano        |    | Synthesized Bell  |
| , | 9         | 5 4 3 2 1   | 0  | 5 4 3 2 1                         | 11 | 5 4 3 2 1                     | 12 | 5 4 3 2 1             | 13 | 5 4 3 2 1      | 14 | 5 4 3 2 1            | 15 | 5 4 3 2 1                | 16 | 5 4 3 2 1         |
|   | Stu<br>Be | itter (rapid intermittent horn)<br>I (clear highpitched bell) | 93 | Synthesized Melody Chime          |    | Chime                         |    | Call sign             |    | Fur Elise      |    | Maiden's Prayer      |    | Minuet                   |    | Annie Laurie      |
| 1 | 7         | 5 4 3 2 1   | 8  | 5 4 3 2 1                         | 19 | 5 4 3 2 1                     | 20 | 5 4 3 2 1             | 21 | 5 4 3 2 1      | 22 | 5 4 3 2 1            | 23 | 5 4 3 2 1                | 24 | 5 4 3 2 1         |
|   | Lo        | ndon Bridge is Falling Down                                   |    | Holdiridia                        |    | Mary Had a Little Lamb        |    | Camptown Races        |    | Kuck kuck      |    | Der Schmied im Walde |    | On the Bridge of Avignon |    | Daydream Believer |
| 2 | 5         | 5 4 3 2 1   | 6  | 5 4 3 2 1                         | 27 | 5 4 3 2 1                     | 28 | 5 4 3 2 1             | 29 | 5 4 3 2 1      | 30 | 5 4 3 2 1            | 31 | 5 4 3 2 1                | 32 | 5 4 3 2 1         |
| L |           | Amaryllis   | ı  | Mozart Symphony No. 40            |    | Itsy Bitsy Spider             |    | Ich bin ein Musikante |    | Jeux Interdits |    | Katuscha             |    | Grandfather's Clock      |    | Ave Maria         |

Author 13.BEETHOVEN VAN LUDWIG 14.BADARZEWSKA BARANOWSKA TEKLA 15.BACH JOHANN SEBASTIAN 16.SCOTT LADY JOHN DOUGLAS 17-16-21-25-28-29.TRADITIONAL 19-27-PD
27.FOSTER STEPHEN COLLINS 22.SONG authorized by the Ministry of Education 23.WERNER HEINRICH (DE 2) 24.STEWART JOHN CZ6.MOZART WOLFGANG AMADEUS 30BLANTER MATVEJ ISAAKOVICH
31.WORK HEINRY CLAY 32.SCHUBERT FRANZ

T-06B0152

# ● Sound Chart type C (Model:EWHS-□C) ★Sound list (※Factory default setting)

|   | <u>.</u> | teep (slow intermittent horn)   | 2  | 5 4 3 2 1  Stutter (rapid intermittent horn) | 3  | 5 4 3 2 1        | 4  | 5 4 3 2 1 Yelp (rapid siren) | 5  | 5 4 3 2 1 Rapid Hi-Lo | 6  | 5 4 3 2 1  Melody Chime | 7  | 5 4 3 2 1  Synthesized Piano | 8  | 5 4 3 2 1  Synthesized Bell                  |
|---|----------|---|----|--|----|------------------|----|------------------------------|----|-----------------------|----|-------------------------|----|------------------------------|----|--|
|   | 9        | 5 4 3 2 1   | 10 | 5 4 3 2 1                                    | 11 | 5 4 3 2 1        | 12 | 5 4 3 2 1                    | 13 | 5 4 3 2 1             | 14 | 5 4 3 2 1               | 15 | 5 4 3 2 1                    | 16 | 5 4 3 2 1                                    |
| - | 17       | tutter (rapid intermittent horn)<br>ell (clear highpitched bell)<br>5 4 3 2 1 | 18 | Synthesized Melody Chime                     | 19 | Chime  5 4 3 2 1 | 20 | Call sign                    | 21 |                       | 22 |                         | 23 |                              | 24 | Amazing Grace                                |
| 2 | 25       | mairono Kamino Otome  | 26 | Les Champs-Elysees                           | 27 | Canon 5 4 3 2 1  | 28 | Rara Sanshain                | 29 | Uchuusenkan Yamato    | 30 | Oshiete  5 4 3 2 1      | 31 | Makenaide  5 4 3 2 1         | 32 | Gonna Fly Now (Theme for "Rocky")  5 4 3 2 1 |
| Ļ | _        | Don't Want to Miss a Thing  |    | Yozorano Mukou                               |    | Aiwa Katsu       | Ш  | TRUTH                        |    | Gattsudaze            |    | Odoru Ponpokorin        |    | Imasugu Kisu Mi              |    | Haruyo Koi                                   |

<sup>13.</sup>CREWE BOB 14.CARPENTER RICHARD LYNN 15.JOPLIN SCOTT 16.CARRELL JAMES P 17.Kouichi Sugiyama 18.WILSHAW MICHAEL 19.PACHELBEL JOHANN 20.jichi Hiromasa 21.Hiroshi Miyagawa 22.Takeo Watanabe 23.30.Tetsuro Oda 24.CONTI BILL 25.WARREN DIANE EVE 26.Yuka Kawamura 27.KAN 28.Masahiro Andoh 29.Totasu Matsumoto 31.Tatsuya Hirakawa 32.Yumi Matsuntoya

# ● Sound Chart type D (Model:EWHS-□D) ★Sound list (※Factory default setting)

| 3 | ĸ 📙 | 5 4 3 2 1 off                | 2  | 5 4 3 2 1                         | 3  | 5 4 3 2 1                     | 4  | Yelp (rapid siren)       | 5  | 5 4 3 2 1                         | 6  | 5 4 3 2 1     | 7  | 5 4 3 2 1  Synthesized Piano   | 8  | 5 4 3 2 1        |
|---|-----|------------------------------|----|-----------------------------------|----|-------------------------------|----|--------------------------|----|-----------------------------------|----|---------------|----|--------------------------------|----|------------------|
| F | ľ   | eep (slow intermittent horn) |    | Stutter (rapid intermittent horn) |    | Bell (clear highpitched bell) |    | 5 4 3 2 1                | Н  | Rapid Hi-Lo                       |    | Melody Chime  |    | 5 4 3 2 1                      |    | Synthesized Bell |
| ŀ | 9   |                              | 10 |                                   | 11 |                               | 12 |                          | 13 |                                   | 14 |               | 15 |                                | 16 |                  |
| L |     | Chime                        |    | Call sign                         |    | Runner                        |    | Mamotte Agetai           | Ш  | Oribiao Kikinagara                |    | A September   |    | Doyoubino Koibito              |    | Akino Kehai      |
| 1 | 7   | 5 4 3 2 1                    | 18 | 5 4 3 2 1                         | 19 | 5 4 3 2 1                     | 20 | 5 4 3 2 1                | 21 | 5 4 3 2 1                         | 22 | 5 4 3 2 1     | 23 | 5 4 3 2 1                      | 24 | 5 4 3 2 1        |
|   | S   | aafu Tengoku Sukii Tengoku   |    | Iro Howaitoburendo                |    | Happy Birthday                |    | Hi Ho                    |    | I've been working on the Railroad |    | Bear Song     |    | Toys Go Cha Cha Cha            |    | Konnako Irukana  |
| 2 | :5  | 5 4 3 2 1                    | 26 | 5 4 3 2 1                         | 27 | 5 4 3 2 1                     | 28 | 5 4 3 2 1                | 29 | 5 4 3 2 1                         | 30 | 5 4 3 2 1     | 31 | 5 4 3 2 1                      | 32 | 5 4 3 2 1        |
| L |     | Wiegenlied                   |    | Rudolph the Red-nosed Reindeer    |    | She Wore a Yellow Ribbon      |    | Oh My Darling Clementine | Ш  | Yellow Rose of Texas              |    | Yankee Doodle |    | When the Saints Go Marching In |    | Londonderry Air  |

Author 11.New Funky Sueyoshi 12Yumi Matsutoya 13:Ami Ozaki 14:Tetsuji Hayashi 15:Tatsuro Yamashita 16:Kazumasa Oda 17:Yumi Matsutoya 18:Maria Takeuchi 19:HILL MILDRED J 20:CHURCHILL FRANK E 21:22:27:29:30:31:32:TRADITIONAL 23:Nobuyoshi Koshibe 24:Takeshi Shibuya 25:SCHUBERT FRANZ 26:MARKS JOHN D 28:American folk song

\*\*11, 13~18, 23~24, T-0710140

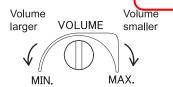
# ● Sound Chart type E (Model:EWHS-□E) ★Sound list (※Factory default setting)

| _ | _   | ound list (%)  | ٠  | actory default s              | <u> </u> | zuiig)                                   |    |                    |    |                          |    |                         |    |                              |    |                            |
|---|-----|--|----|-------------------------------|----------|--|----|--------------------|----|--------------------------|----|-------------------------|----|------------------------------|----|----------------------------|
| 3 | × þ | 5 4 3 2 1 off on 2   | 2  | 5 4 3 2 1                     | 3        | 5 4 3 2 1  Bell (clear highpitched bell) | 4  | Yelp (rapid siren) | 5  | 5 4 3 2 1<br>Rapid Hi-Lo | 6  | 5 4 3 2 1  Melody Chime | 7  | 5 4 3 2 1  Synthesized Piano | 8  | 5 4 3 2 1 Synthesized Bell |
| 9 | 9   | 5 4 3 2 1  | 0  | 5 4 3 2 1                     | 11       | 5 4 3 2 1                                | 12 | 5 4 3 2 1          | 13 | 5 4 3 2 1                | 14 | 5 4 3 2 1               | 15 |                              | 16 |                            |
| L | È   | Stutter (rapid intermittent horn)<br>Bell (clear highpitched bell) | 15 | Synthesizered Melody Chime    | Ц        | Chime                                    |    | Call sign          | Ц  | Train Ride               |    | Galloping Hi-Lo         |    | Alien Chatter                |    | Falling Crystals           |
| 1 | 17  | 5 4 3 2 1  | 8  | 5 4 3 2 1                     | 19       | 5 4 3 2 1                                | 20 | 5 4 3 2 1          | 21 | 5 4 3 2 1                | 22 | 5 4 3 2 1               | 23 | 5 4 3 2 1                    | 24 | 5 4 3 2 1                  |
|   |     | Inverted Reveille  | Γ  | Garactic Motor                |          | Ringing Phone                            |    | Two Tone           |    | Alarm Clock              |    | Ringing Hi-Lo           |    | Fur Elise                    |    | Minuet                     |
| 2 | 25  | 5 4 3 2 1  | 6  | 5 4 3 2 1                     | 27       | 5 4 3 2 1                                | 28 | 5 4 3 2 1          | 29 | 5 4 3 2 1                | 30 | 5 4 3 2 1               | 31 | 5 4 3 2 1                    | 32 | 5 4 3 2 1                  |
|   |     | Annie Laurie   | П  | London bridge is falling down |          | Mary had a little lamb                   |    | The camptown Races |    | Amaryllis                |    | Symphony No.40          |    | Ave Maria                    |    | Grandfather's Clock        |

# 6-3.Adjusting the Sound Volume

The sound volume can be adjusted using the volume control.

 Use a flat-blade screwdriver with the blade thickness of 1.0mm or thinner for turning the volume control.



Other Precautions

●Turn the volume control lightly. It may be damaged if a torque of 0.1N • m or more is applied.

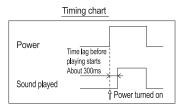
Information

- ●When the volume is set to high, the sound may be distorted in some tone colors.
- ●In some cases the volume may not be zero even if the volume control is set to the minimum.

### 6-4. How to Play Sound

The sound selected in Section 6-2. Selecting a Sound is played by turning on the power.

•A time lag of about 300ms occurs before playing a sound after turning on the power.



Information

- •A popping noise may be generated when the power is turned on or off. But this is normal.
- ●When multiple units are used in combination, there may be a difference in playing speed even if the power is turned on at the same time.

# 7.Before You Request a Repair

| Symptom                                | Points to be checked                                       | Coping strategies                                |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| No sound is played                     | Is the power supplied?                                     | Confirm the wiring and the power supply voltage. |  |  |  |  |  |
| No sound is played                     | Is the volume control not set to the minimum?              | Adjust the volume.                               |  |  |  |  |  |
| A sound of different channel is played | Is the selection made correctly with the selection switch? | Confirm the selection switch.                    |  |  |  |  |  |

<sup>※</sup>If the product does not operate correctly even after it is properly installed and handled, contact a branch office or the technical support printed on the last page.

## 8. Specifications

| Model   | EWHS-24□                           | EWHS-100□                                 | EWHS-200□                       |  |  |  |  |  |  |  |  |
|---|------------------------------------|---|---------------------------------|--|--|--|--|--|--|--|--|
| Rated voltage   | 12-24V AC/DC                       | 100V AC                                   | 200V AC                         |  |  |  |  |  |  |  |  |
| Operating voltage range   | 9V~35V DC 8V~26V AC                | 90V ~ 132V AC 50/60Hz                     | 180V ~ 260V AC 50/60Hz          |  |  |  |  |  |  |  |  |
| Power consumption   | Max. 8W                            | Max. 10W                                  | Max. 10W                        |  |  |  |  |  |  |  |  |
| Volume Max. 105dB ( at 1m ) Adjustable with volume control            |                                    |   |                                 |  |  |  |  |  |  |  |  |
| Volume may be less, depending on the sounds and operation conditions. |                                    |   |                                 |  |  |  |  |  |  |  |  |
| Audio output lag time   |                                    | Approx. 300msec                           |                                 |  |  |  |  |  |  |  |  |
| Selectable channels   |                                    | 32 Channels                               |                                 |  |  |  |  |  |  |  |  |
| Operating temp. range   |                                    | −20 <b>~</b> 50°C                         |                                 |  |  |  |  |  |  |  |  |
| Operating humidity  |                                    | Max. 85% RH (No condensation)             |                                 |  |  |  |  |  |  |  |  |
| Mounting direction  | Indoor : Nor                       | mal,Reverse and Lateral direction are pos | ssible                          |  |  |  |  |  |  |  |  |
| wounting direction  | Outdoor : Normal direction only (H | lowever,the horn opening should be down   | ward more than the horizontal.) |  |  |  |  |  |  |  |  |
| Protection Rating   |                                    | IP 53                                     |                                 |  |  |  |  |  |  |  |  |
| Vibration resistance  |                                    | 45m/s <sup>2</sup> ( JIS C0911-1984 )     |                                 |  |  |  |  |  |  |  |  |
| Mass  | 1.3kg±10% 1.5kg±10%                |   |                                 |  |  |  |  |  |  |  |  |

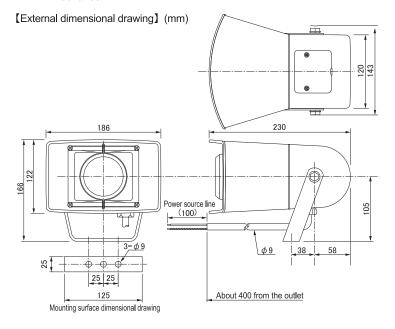
#### ● For Model EWHS-24□

This product conforms to EN standard and shows the CE Marking.

This product has been tested and found to comply with the limits for a Class A device, pursuant to EMC DIRECTIVE.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This product must not be used in residential areas.

- Please note that we will not be held responsible for the failure or damage caused by handling the product in ways
  not observing the warnings or cautions contained in this document.
- Please note also that the contents in this document may be changed for improvement without notification in advance.





| PATLITE Corp   | oration <sub>G2G</sub>  |
|--|---|
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