# LAMP **HES INSTALLATION MANUAL** FOR HES3D-120 CONCEALED HINGE (3-DIMENSIONAL ADJUSTABLE HINGE)

Read all instructions carefully for proper use.

## COMPONENT PARTS

## **HINGE PARTS**

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Hinge

body

- CONCEALED HINGE 2 pcs
- Screw Cover 2 pcs.ea. (Door side, Frame side)
- Flat Head Screw  $(5 \times 20)$  $4 \text{ pcs} \times 2$
- Hex Key (Key size 3) 1 pc
- Template 1 pc
- INSTALLATION MANUAL ٠

## **ITEM NO. / FINISH**

ITEM NO.	FINISH
HES3D-120DC	Silver
HES3D-120DN	Champagne Gold
HES3D-120BL	Black

## **DOOR SPECIFICATIONS**

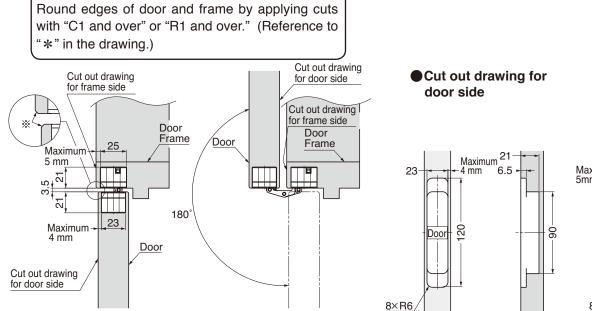
Recommended door dimensions :		
Maximum Door Weight	30kg (66lbs) per 2 hinges	
Maximum Door weight	40kg (88lbs) per 3 hinges	
Minimum Door Thickness	29mm (1-9/64)	
Maximum Door Height	2400mm (94)	
Maximum Door Width	900mm (36)	

## **ADJUSTMENTS**

Vertical adjustment	±2.5mm
Horizontal adjustment	±2mm
Front / back adjustment	±1mm

## **CUT OUT DRAWING**

## ▲Caution ·



### 25 21 Maximum 6.5 5mm Door 20 6 Frame 8×R6

- For indoor use only. Not suitable for areas where it can be in direct contact with water.
- · Use in conjunction with a door closer is not recommended. For soft-close option, we recommend Sugatsune LDD-V or LDD-S door damper.
- · Regarding usage with other types of concealed door closers we recommend using the hinge HES3D-160 instead.

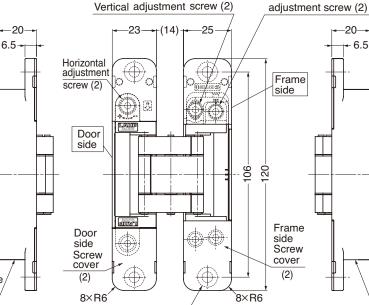


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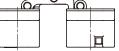
Base

frame

Front / back

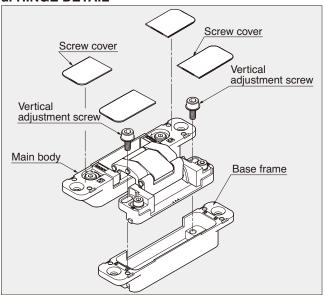


Screw hole \$5.5/\$10.3

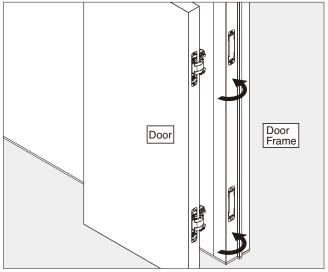


Cut out drawing for frame side

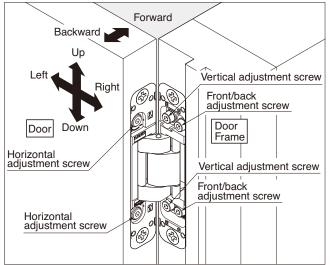
#### a. HINGE DETAIL



### **b. DOOR INSTALLATION**



### ADJUSTMENTS



### INSTALLATION PROCESS

Remove screw cover and vertical adjustment screw from hinge body. Separate door side leaf and base frame. Repeat process for remaining hinge.

Install door side leaf into the cut out of the door with installation screws. Then, with screws, install the base frame into the cut out of the door frame. Repeat process for remaining hinge.

Refer to Figure B. Temporarily hang the door by inserting both upper and lower main hinge bodies into the upper and lower base frames at the same time. The door will be temporarily held in place by the easy installation function.

Insert vertical adjustment screws (removed in Step 1) into vertical adjustment holes. With a hex key, loosely fasten screws to temporarily hold frame side leaf in place.

## **∕**∧Caution

Make sure the base frame is set firmly in the proper direction before installing into the cut out of the frame. Do not open/close door with excessive force, or door may fall.

## ADJUSTMENTS

Make adjustments in each (vertical and front/back) direction. **Vertical adjustment** 

Using hex key, loosen vertical adjustment screw just one turn. Temporarily hold door in place during adjustment of door height by inserting a piece of wood in gap between floor and bottom of door. Then tighten screws. Fastening torque is 3N·m (30.6kgf·cm).

### Front/back adjustment

Loosen front/back adjustment screw just one turn using hex key. Adjust the door. Then tighten screws. Fastening torque is 3N·m (30.6kgf·cm).

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To prevent door from falling, do not remove front/back adjustment screw.

### Horizontal adjustment

To widen the gap between door and door frame (on the hinged side of door), turn the horizontal adjustment screw in clockwise direction. (Maximum adjustment is 2 mm). To narrow the gap, turn the screw in counter clockwise direction.

### - 🕂 Caution -

Gently turn adjustment screws, alternating from one screw to the other and back again. Do not force turning of screws. Do not loosen adjustment screw (Maximum adjustment is 2mm) in clockwise direction, as door may fall.

### Finally, replace screw cover.

#### - 🕂 Caution -

Do not handle the covers with excessive force, as they may break.

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