

**HUB- TS**  
**HUB- TSHB**

## Operational Manual

### Professional Camera Housing - Side Opening

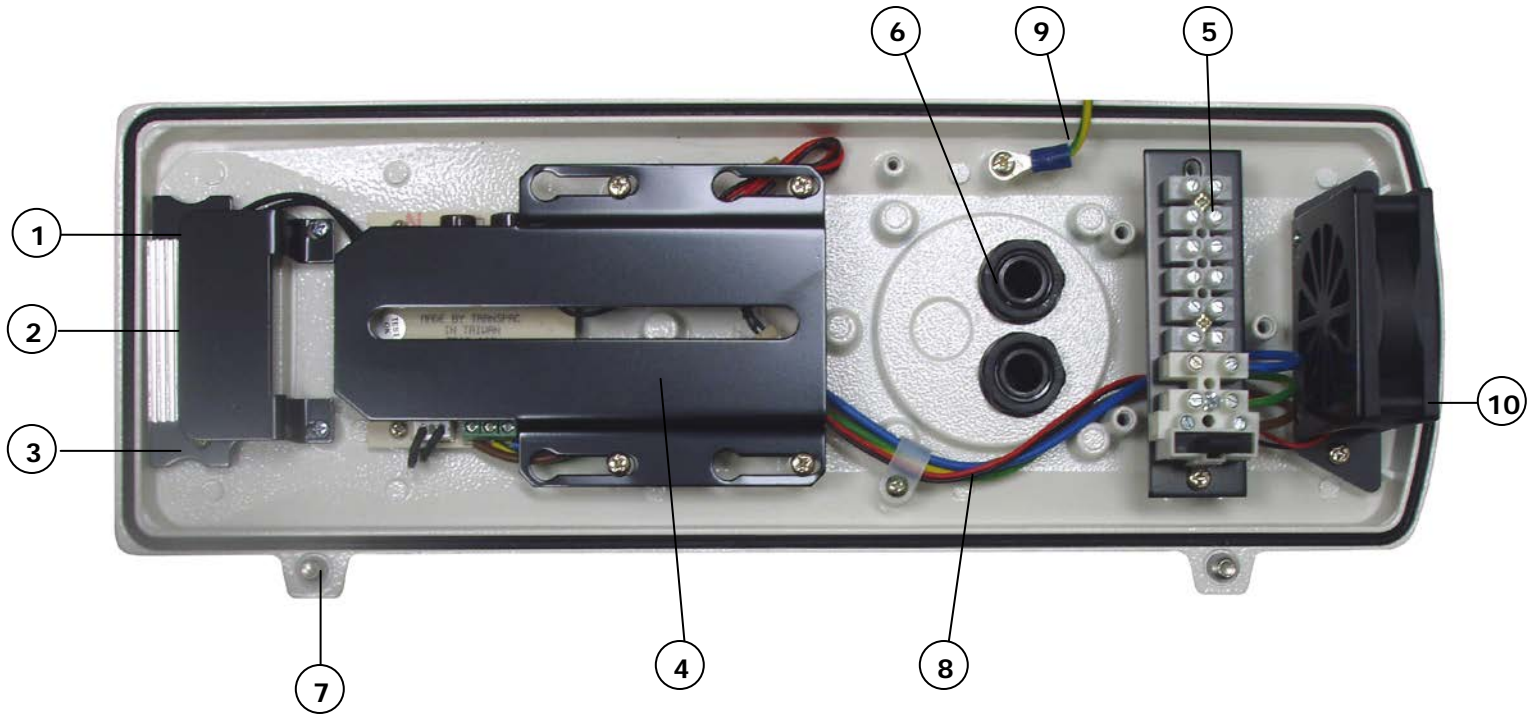
**HUB-TS****HUB-TSHB**CE  RoHS

\* UL certification only refers to the power converter and the power module

## FEATURES

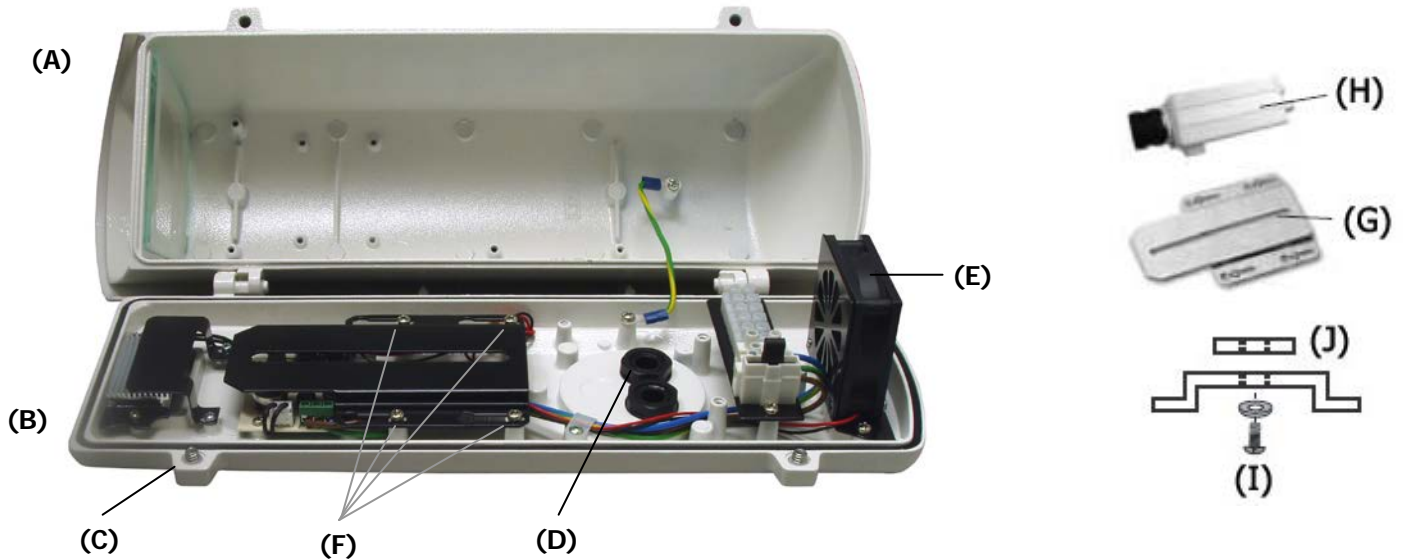
- Constructed from die-cast aluminum alloy and is powder coated with stove finish
- IP68 Rating – designed and manufactured to the highest technical standard with environmental protection
- Fully-Cable Managed Bracket
- Uses professional rust-proof stainless steel screws
- Includes Heater & Blower for HUB-TSHB
- 24V AC, 40VA

## PART DESCRIPTION



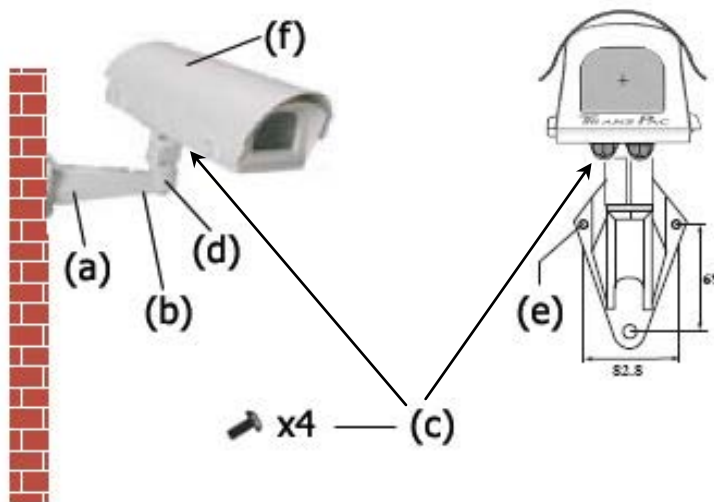
- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1. Heater (Only for HUB-TSHB)</li> <li>2. Heat Shield (Only for HUB-TSHB)</li> <li>3. Thermal control board</li> <li>4. Camera mounting platform</li> <li>5. Terminal block assembly</li> </ul> | <ul style="list-style-type: none"> <li>6. Cable conduits x2</li> <li>7. Captive retaining screws x2</li> <li>8. Heater &amp; blower wires, Ground wire</li> <li>9. Ground Wire</li> <li>10. Blower (Only for HUB-TSHB)</li> </ul> |
|--|---|

## FITTING INSTRUCTIONS



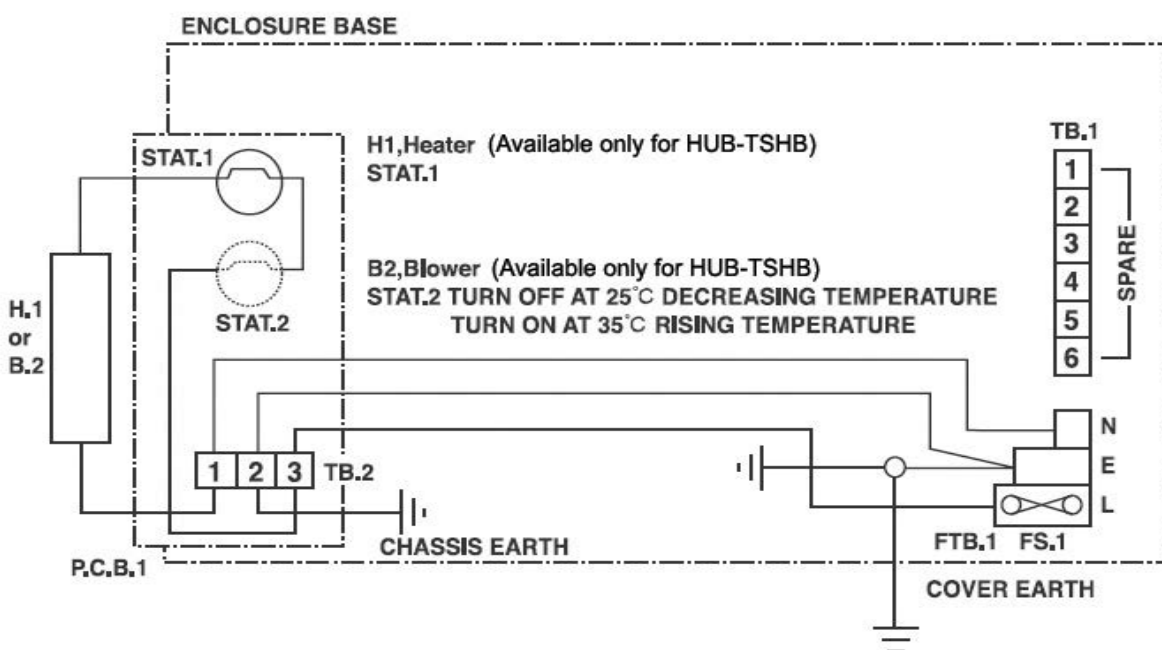
1. Unscrew the 2 captive Retaining Screws **(C)** and remove the Housing Cover **(A)** from the Housing Base **(B)**.
2. Release the 4 Keyhole Screws **(F)** and then slide and withdraw the Camera Platform **(G)** from the Housing Base **(B)**.
3. Mount the Camera (not included) **(H)** onto Platform **(G)** using the 1/4" UNC Screw **(I)** Supplied, ensuring that the Insulation Pad **(J)** is mounted between the Platform and the Camera. Always check that the Camera is firmly attached to the Platform.
4. Connect the Camera / Heater power cable to the rear Terminal Block **(E)** through the first Cable Conduit **(D)** referring to the circuit diagram shown in the **WIRING DIAGRAM** section of the manual for the terminal designations.
5. Connect the video cable to the Camera through the second Cable Conduit **(D)**.

## MOUNTING CONFIGURATION



1. Use the rear section of the Mounting Bracket **(a)** as a template for marking the position on the wall of the Mounting Holes **(e)**. Remove & drill to pattern required.
2. Attach the Mounting Bracket arm to the wall using the raw plugs and screws provided.
3. Use 4 of 1/4" x 14.7mm Trilobular screws **(c)** to attach the main housing enclosure **(f)**.
4. Release Screw **(b)** on the Mounting Bracket to pan the Housing and release screw **(d)** to tilt the Housing. Position the Housing as required for the correct Camera coverage then tighten both Screws to secure.
5. Feed cables through internal of bracket from enclosure **(f)** to the wall or by using cable conduits as required.

## WIRING DIAGRAM



The figure above shows the internal wiring diagram of the HUB-TS & HUB-TSHB for the window demister. A spare 6-way terminal block is provided at the rear of the enclosure for the camera when necessary and lens connections. Circuit identified as follows:

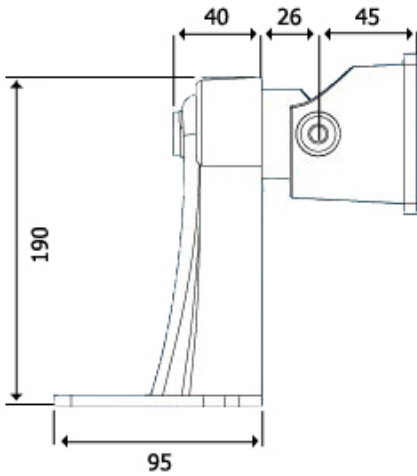
TB.1	6-way terminal block	H.1	Heater	12V DC 9	<input type="checkbox"/>
TB.2	3-way terminal block		Heater	24V AC 9	<input type="checkbox"/>
FTB.1	Fused terminal block		Heater	110V AC 9	<input type="checkbox"/>
FS.1	3 Amp Fuse		Heater	30V AC 9	<input type="checkbox"/>
STAT.1	28 Thermostat	B.2	Blower	12V DC 9	<input type="checkbox"/>
STAT.2	35 Thermostat		Blower	24V AC 9	<input type="checkbox"/>
P.C.B.1	Thermal control circuit board			24V AC	

## DIMENSIONS (mm)

### HUB-TS / HUB-TSHB:



### Fully-Cable Managed Bracket:



- Max Load: 3500g
- Material: Die-cast aluminum alloy with light ivory powder coated and stove finish
- Scan Angle: 180°
- Tilt Angle: 90°
- Net Weight: 900g
- Fixing: 3 Screws with bushings

## GENERAL SPECIFICATIONS

Model	HUB-TS	HUB-TSHB
IP Rating	IP68	
Mounting Bracket	Full-Cable Management	
Construction	Die-Cast Aluminum Alloy	
Coating	Ivory Powder Stove	
Heater	No	Yes
Blower	No	Yes
Required Power Supply / Transformer *	No	24V AC (+/-10%), 40VA
Dimension	15.94"(L) x 5.91"(W) x 5.91"(H) / 405mm(L) x 150mm(W) x 150mm(H)	
Weight	7.28 lbs / 3300g (with bracket)	8.16 lbs / 3700g (with bracket)

\* Power supply / transformer not included

## PACKAGE CONTENTS

- One (1) HUB-TS or HUB-TSHB Camera Housing
- One (1) Fully-Cable Managed Bracket
- One (1) Operational Manual
- One (1) Main Accessories Pack
  - Three (3) Rust-proof Stainless Steel Wall Screws
  - Three (3) Rust-proof Stainless Steel Mounting Screws
  - Three (3) Stainless Steel Washers
  - Three (3) Plastic Washers
  - One (1) Allen Wrench
- One (1) Secondary Accessories Pack
  - Two (2) Rust-proof Stainless Steel Camera Mounting Screws
  - One (1) Rubber Pad
  - One (1) Plastic Washer

\* For any returns, please include all components listed above with original packaging in **Resalable Condition**. **Absolutely No Returns** will be accepted if any component is missing/damaged or if any cable is cut or tampered with.



## WARRANTY

OKINA USA Products are covered under warranty for one year from the date of purchase. The warranty will automatically be voided if any of the following occurs:

### 1. Product sticker is removed

If the product sticker is removed, we will not be able to confirm any information regarding when and where the product was purchased. We have no other way to verify the purchase record without the serial number on the product sticker; therefore, it should not be removed.

### 2. Product is modified in any way

If the product is scratched, damaged, or modified in a manner not described in this manual, the warranty will be voided immediately. It is the customer's responsibility to keep the product in good condition.

### 3. Power cable is cut

The power cable and any other cable should not be tampered with. Cutting or modifying of the cables will result in termination of the warranty.



## IMPORTANT NOTE

Always unplug the top section of the earth wire from the base wire when disassembling the housing. Remember to plug the top and bottom together again when reassembling the housing. UL certification refers only to power converter & power module.

### 1. Read and follow instructions

All operating and user instructions should be read and followed before the unit is to be operated.

### 2. Secure all screws

Please make sure all rust-proof stainless steel screws are installed securely to ensure a waterproof seal.

### 3. Electrical connections

Only a qualified electrician should be allowed to make electrical connections.

### 4. Do not disassemble the product

Do not disassemble the product as it is dangerous and may cause damage to the product. Refer all servicing to qualified service personnel.

### 5. Handle the product with care

Be careful when handling the product. Do not drop it or subject it to strong shock or vibrations in order to prevent any damage to the product. Do not handle the product in a wet environment or when your hands are wet.

### 6. Reducing risk

To reduce risk of fire or electric shock, do not remove cover. Do not open product in wet weather. No user serviceable parts inside. Refer servicing to qualified service personnel.

### 7. Unpacking

Unpack carefully. Electronic components can be damaged if improperly handled or dropped. If an item appears to have been damaged during shipment, please place it properly in its carton and notify the shipper.

### 8. Installation notice

Tropical, coastal salt water environment:

If you plan to install this product into a tropical, sea, coastal salt water or corrosive industrial water/mist environment, please seal each stainless screw and fitting with a silicon grease compound. This will help prevent electrolysis corrosion occurring and extend the lifespan of the product and housing and prevent premature deterioration.



**Why PRO Series?**

- Constructed from Heavy Duty Die-Cast Aluminum Alloy
- User adjustable IR LED intensity (VR)
- Uses professional rust-proof Stainless Steel Screws
- Fully-cable managed mounting bracket (except for IR7-TIR)
- IP66 rating or above on most products

**High Resolution IR LED Day & Night Camera with ICR**  
**SIV7-T54AI922**

- 1/3" Sony Super HAD CCD, 540 TV Lines
- 7 Super Power IR LED, IR Distance 200~250ft / 60~80m
- 9.0mm~22.0mm Auto Iris ED-IR Lens
- Built-in IR Cut Filter Removable (ICR)
- 24V AC, 60VA



**IR LED Illuminator with Housing & Bracket**  
**HI7-TKHBL** **HI11-TKHBL**

- 7 Super Power IR LED
- IR Distance up to 250ft / 80m
- 24V AC, 60VA

- 11 Super Power IR LED
- IR Distance up to 395ft / 120m
- 24V AC, 60VA



**Housing & Bracket**  
**Front Opening**  
**HUB-TF**  
**HUB-TFHB**



- IP67 Rating
- Includes Heater & Blower for HUB-TFHB
- 24V AC, 40VA

**Housing & Bracket**  
**Side Opening**  
**HUB-TS**  
**HUB-TSHB**



- IP68 Rating
- Includes Heater & Blower for HUB-TSHB
- 24V AC, 40VA

**IR LED Illuminator** Possible Applications:  
**IR7-TIR**

- 7 Super Power IR LED
- IR Distance up to 150~200ft / 45~70m
- Includes 1 Side & 1 Underneath Mounting Plate
- 24V AC, 40VA



**Ceiling Mount Adaptor**  
**HUA-TCE**



**Corner Mount Adaptor**  
**HUA-TCO**



**Pole Mount Adaptor**  
**HUA-TPO**

