

External Camera Enclosure

CE IP66

Type TPH 1000 Series

User's Manual

Model No.	Features		Single heater		Double heaters*		Blower (IP44)		PSU (power supply unit)			
			1. Turn on at 18 °C 2. Turn off at 28 °C		1. Turn on at 18 °C Turn off at 28 °C 2. Turn on at 0 °C Turn off at 10 °C		1. Turn on at 35 °C 2. Turn off at 25 °C		1. 880 (80-260Vac input, 1x12Vdc output ,1A) 2. 080 (80-260Vac input, 4x12Vdc output ,3.5A) 3. 324 (24Vac input, 4x12Vdc output ,3.5A) 4. 424 (24Vac input, 1x12Vdc output ,1.5A)			
	12Vdc / 24Vac	110 / 230Vac	12Vdc / 24Vac	110 / 230Vac	12Vdc	24Vac	880	080	324	424		
TPH 1000												
TPH 1000-12/24HS	•											
TPH 1000-12/24HD			•									
TPH1000-110/230HS		•										
TPH1000-110/230HD				•								
TPH1000-080								•				
TPH1000-080/HS	•							•				
TPH1000-080/HD			•					•				
TPH1000-324									•			
TPH1000-324/H	•								•			
TPH1000-324/HC**	•								•			
TPH1000-880							•					
TPH1000-880/HC**		•					•					
TPH1000-424										•		
TPH1000-424/HC**	•									•		

* First heater prevents moisture on the window glass till weather temperature -25 °C, second heater is heating in enclosure for camera operation properly till weather temperature -40 °C

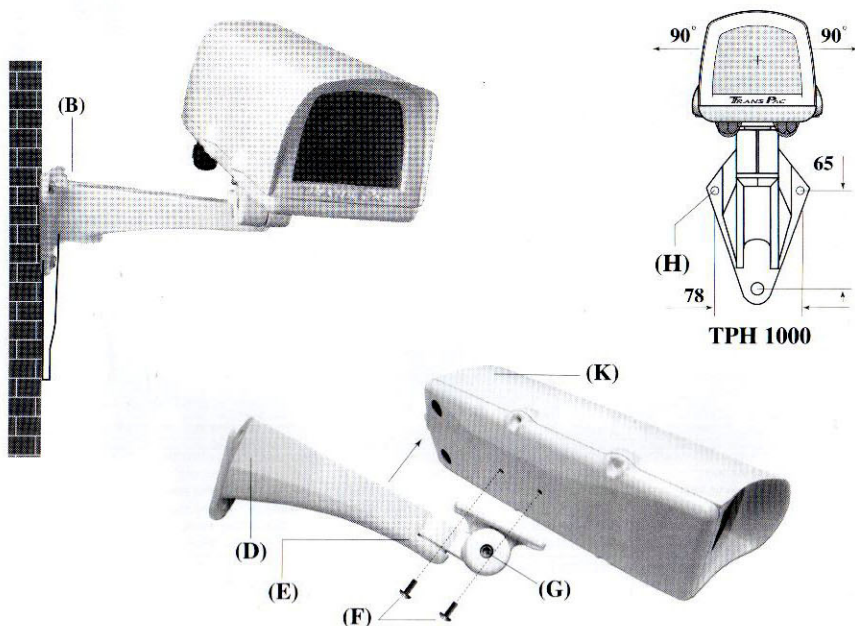
** With 12Vdc camera jet

I . Introduction

The **TPH 1000** series Camera Housing is constructed by die-cast aluminium alloy and is powder coated and stove finished. The design and manufacture is to the highest technical standard with environmental protection to level IP66. The Housing is supplied completely with an adjustable Semi-Cable Managed Mounting Bracket.

II . Mounting configuration of TPH 1000

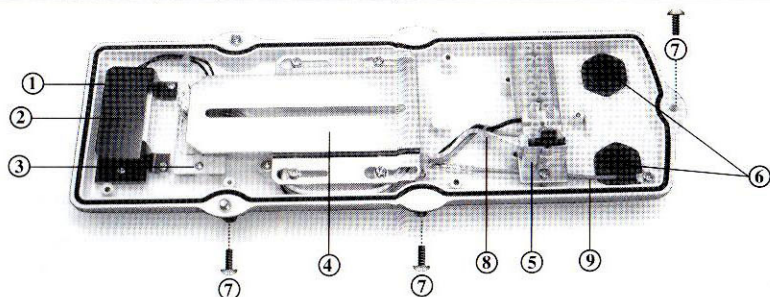
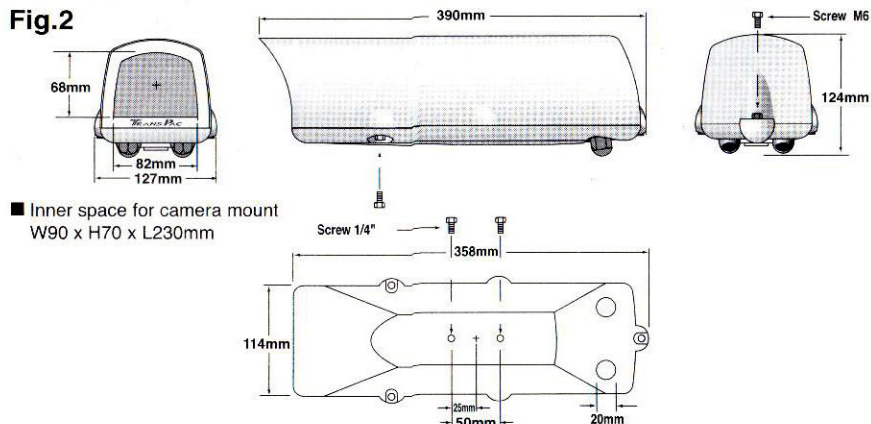
Fig.1



1. Use the rear section of the Mounting Bracket (D) as a template for marking the position on the wall of the Mounting Holes (H). Remove & drill to pattern required.
2. Attach the Mounting Bracket arm to the wall using the rawlplugs and screws provided.
3. Attach the main Housing enclosure (K) to the Mounting Bracket with 2 of 1/4" x 14.7 mm Trilobular screws (F) provided.
4. Release Screw (E) on the Mounting Bracket to pan the Housing and release screw (G) to tilt the Housing. Position the Housing as required for the correct Camera coverage then tighten both Screws to secure.
5. Feed cables through the hole of Cover Plate (B) on the Mounting Bracket from the wall or by using cable conduits as required.

III. Fitting instructions for camera

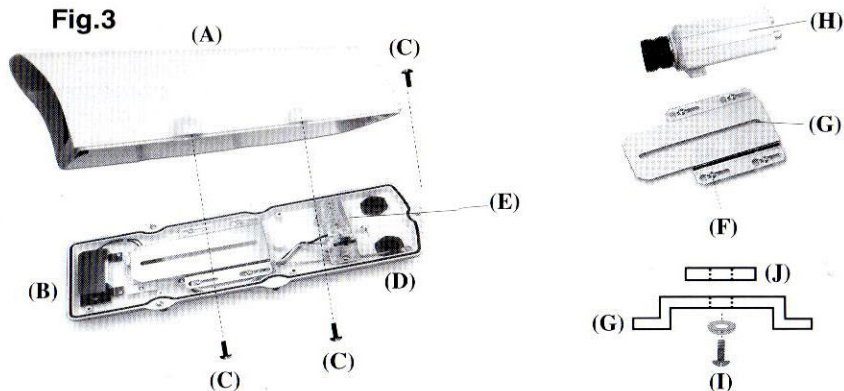
Fig.2



- ① Heater (12VDC, 24/110/230 VAC)
- ② Heat shield
- ③ Thermal control board
- ④ Camera mounting platform
- ⑤ Terminal block assembly

- ⑥ Cable conduits PGB13.5 x 2
- ⑦ Captive retaining 1/4" Screws x 3
- ⑧ Heater wires, Ground wire
- ⑨ Ground wire

Fig.3



1. Unscrew the 3 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 (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 section IV. for the terminal designations.
5. Connect the video cable to the Camera through the second Cable Conduit(D).

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.

IV. Wiring diagram

Fig.4 shows the internal wiring diagram of TPH 1000 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
TB.2	3 way terminal block	PSU	Power Supply Unit 80-260Vac or 24Vac
FTB.1	Fused terminal block	P.C.B.1	Thermal control circuit board
STAT.1	28°C Thermostat	FS.1	3 Amp. Fuse

Fig.4 Wiring diagram of TPH 1000
ENCLOSURE BASE

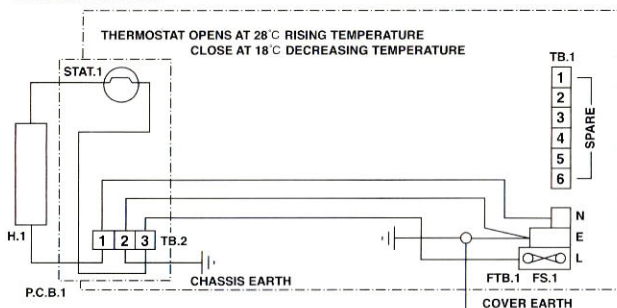
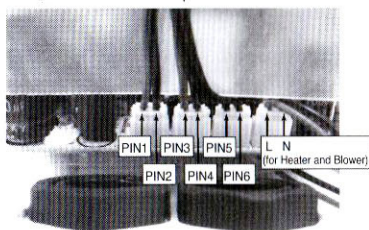


Fig.6 shows DC output of PSU connectors

1. Pin1,2 and pin3,4 is DC12V output for motor lens, IR illuminator, siren or speaker use. IF no use please remove cable from connector.
2. Pin5,6 is for DC12V output for camera.



V. INSTALLATION SUGGESTION:
TROPICAL, COASTAL SALTWATER ENVIRONMENTS:
If you plan to install this camera into a TROPICAL, SEA COASTAL, SALTWATER or CORROSIVE INDUSTRIAL water / mist environment, please seal each Stainless steel Screw and Fittings with a SILICON GREASE COMPOUND. This will help prevent ELECTROLYSIS CORROSIVE occurring and extend the Lifespan of the Camera and Housing.

Fig.7 AC power connection

Shows how to connect the AC power cord to the FTB.1 connector.

