



# **WP10**

## Installation manual





### Preserve this manual as a reference for future needs.

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Although considerable care has been taken to ensure a correct and suitably comprehensive description of all relevant product components, this manual may nonetheless contain errors and inaccuracies. We invite you to offer your suggestions and comments by email via <a href="mailto:info@tkhsecurity.com">info@tkhsecurity.com</a> Your feedback will help us to further improve our documentation.

#### How to contact us

If you have any comments or queries concerning any aspect related to the product, do not hesitate to contact:

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Used electrical, electronic and stainless steel products should not be mixed with general waste. For proper treatment, recovery and recycling of old products, take them to applicable collection points, in accordance with your national legislation and the Directives 2011/65/EU and 2012/19/EU.

By disposing of these products correctly, you help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. For more information about collection and recycling of old products, contact your local municipality or your waste disposal service. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

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# **Description**

The WP10 series has been designed to operate on camera housings with wash wiper system, such as the SA industrial/marine camera series, the UP traffic PTZ series and the HSG04 outdoor housing.

The WP10 is powered by 24 Vac and 100 Vac ~ 240 Vac 50/60Hz supply voltage.

The units can be controlled using a 24 Vac control signal or a dry contact / open collector signal.

The WP10 is fitted with a float switch that prevents the pump from running dry and indicates an "empty tank" by an contact-closure output.

# Before you continue

Prior to installation and operation, carefully read all instructions in this manual and heed all warnings.

Unpack this equipment and handle it carefully. If the package appears to be damaged, notify the shipper immediately.

Use the original packaging to transport the unit. Disconnect power supply before moving it. In case of returning the equipment, the original packaging must be used.

Any change performed on the unit that is not previously approved by the manufacturer will void both the EU Declaration of Conformity and its warranty.

This equipment has been designed to fit in harsh environments requiring little or no maintenance. Suggested inspection interval is 6 months, but extremely harsh environments may require more frequent inspection and maintenance checks. On each inspection check cables, electrical connections and mounting hardware for integrity and tightness. Replace or tighten any damaged/loose part, when necessary.



Make sure that the installation surface can support at least four times the weight of a fully filled unit. In case of excessive external stress (e.g. vibration, strong winds or impact), the equipment may need additional means of protection.

Proper stainless steel hardware should be carefully chosen to mount the unit.

Clean the surface of product with a damp cotton cloth.

To maintain the IP rating of the unit, adequate cable glands must be used. The unit must be tightly closed when operating.

Open only the covers pointed out in this installation manual.

The internal pump must not run dry to prevent failure. A float switch with an "empty tank alarm" is available to prevent such damages.

The unit is intended to be used with water or with water/ethanol solutions. Other mixtures could obstruct the nozzle. If the solution used has residual, it must be filtered before use. Keep the unit empty until the end of the installation.



Before performing any operation, turn off the power. The installation of the unit can be performed only by qualified personnel in accordance with the relevant local and national standards including but not limited to the use of special pipes, tapes, sealants, cables and glands.

An all-pole mains switch with an opening distance between the contacts at least 3 mm in each pole must be incorporated in the electrical installation. The switch must be equipped with protection against the fault current towards the ground (differential) and the overcurrent (magnetothermal, maximum 15A). It must be very quickly recognizable and readily accessible. A suitable blow fuse must also be installed for protection.

For connection to the mains, use a multipolar cable having minimum 3x1,5 mm2 (15 AWG). The main cable must be at least protected by an ordinary PVC sheath.

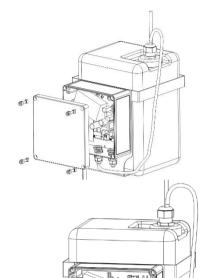
Ensure that the unit case is properly earthed, connecting all the earth ground studs. Earth cable should be about 10mm longer than the other cables on the connector, in such way that it won't be accidentally disconnected if the cable is stretched or pulled.

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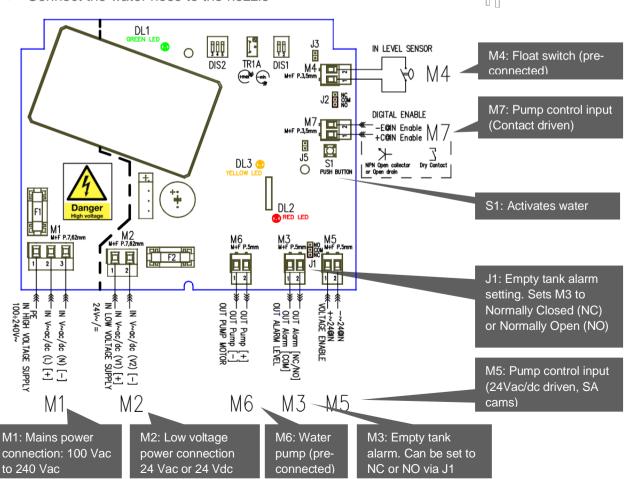
## Install the unit

## Open the plastic box

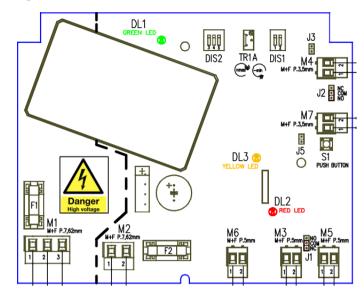
Remove the cover of the plastic box by loosening the four screws



- Lead the power supply cable and control cable through the cable glands into the plastic box.
- > Tighten the cable glands (with an 3 Nm torque). Do not remove caps from unused cable glands.
- Connect the power cable and control cable according the instructions below.
- Close the plastic box tightly
- Connect the water hose to the nozzle



## **Control boardsettings**

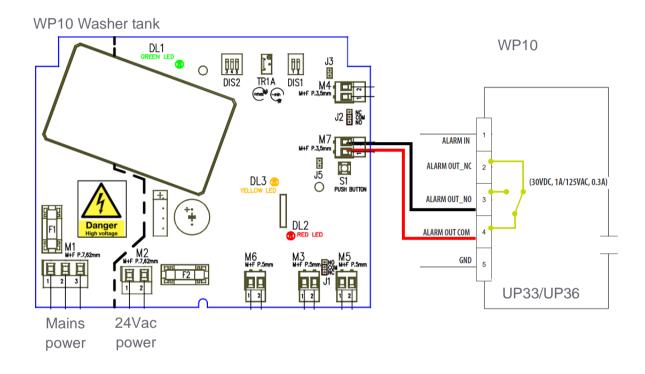


M1	WARNING HIGH VOLTAGE Power Supply input 100÷240VAC (+/- 10%) 60W max	
M2	Low Voltage Power Supply Input 24VAC/DC (+/- 10%) 60W max	
МЗ	Level Alarm Output: when the tank is empty, normally open or closed based on J1	
M4	Level Sensor Input, connected to a Float Switch, configurable normally open or closed by J2	
M5	Voltage Enable Input, activates the Pump Motor when 24VAC/DC (+/- 10%) is applied	
M6	Pump Motor Output, connected to the Water Pump	
M7	Digital Enable Input, activates the Water Pump when the input is closed	
DIS1-1	Power Supply Input Configuration: 100~240Vac or 24Vdc: SW1= OFF (0) 24Vac (by default) SW1= ON (1)	
DIS1-2	Pump Motor Output Level Configuration: SW2 shall always be OFF (0)	
J1	Level Alarm Output configuration (NC or NO)	
J2	Reserved	
J3	reserved	
J5	Pump motor Output Enabler, turns the Water Pump always ON	
S1	Pump Motor Output Test Button, when pressed enables the Water Pump	
F1	HIGH VOLTAGE Power Supply Fuse: T 4A (250VAC)	
F2	Low Voltage Power Supply Fuse: T 6,3A (250VAC)	
DL1	Power Supply GREEN LED turns ON when a power supply is provided	
DL2	Water Level Alarm RED LED, turns ON when empty tank is detected	
DL3	Pump Motor Output YELLOW LED, turns ON when the Water Pump is enabled	

# **Connecting the UPxx series**

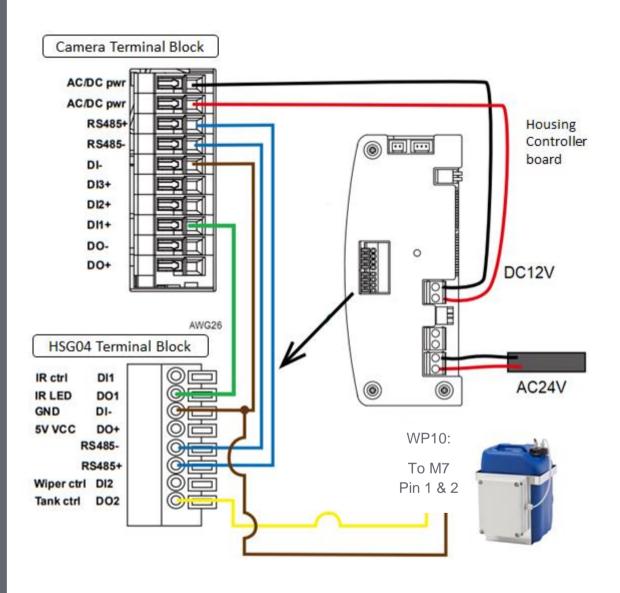
The washer control is connected by the ALARM-out wires of the UPxx camera.

Cable Label	Cable colour	Remarks
ALARM IN	Black	Not used
GND	Brown	
ALARM OUT NO	Red	Normally open (Washer)
ALARM OUT NC	Orange	Normally closed
ALARM OUT COM	Yellow	Common (Washer)

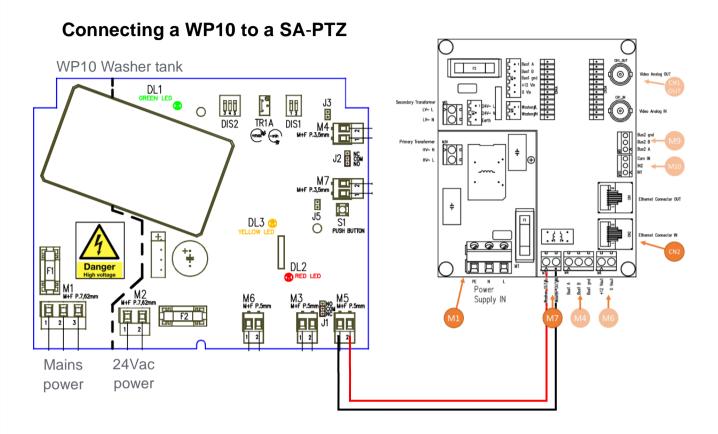


# **Connecting the HSG04**

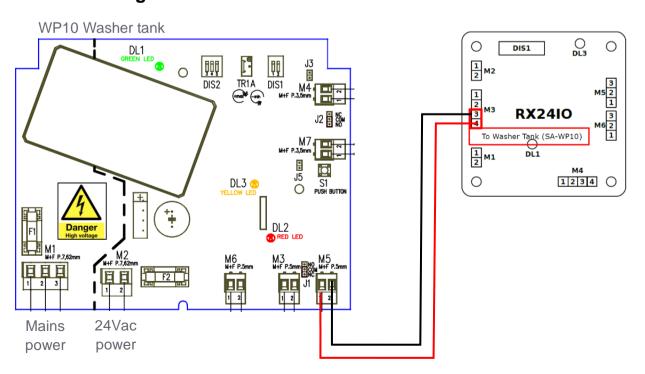
The washer is controlled by alarm output (DO2) from HSG04. The movement will be maintained by camera installed in HSG04. Detailed configuration please refer to HSG04 quick start guide.



# Connecting the SA camera series

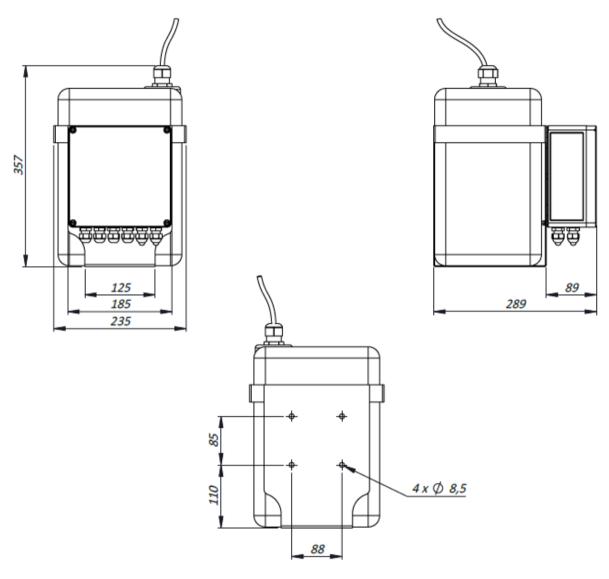


## Connecting a WP10 to a SA-FIX W

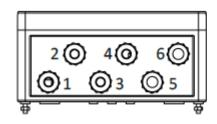


## **Dimensions**

Dimensions in mm



Cable gland position



1	Input voltage	
2	Enable	
3	Float switch	
4	Pump	
5	5 Cable gland with balnk	
6	Alarm	



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