

The given maintenance manual is intended for people who are to install, adjust and operate Microlight outdoor cameras. This document covers all video cameras' models given in the table below. Video camera installation should be carried out by a professional in accordance with this manual.

➔ **Product purpose**

Microlight outdoor camera is designed for continuous video surveillance in different weather conditions as part of CCTV.

➔ **Specification**

Model	B&W				Color			
	MLB 420 12DC	MLB 420 E 12DC	MLB 600 12DC	MLB 600 E 12DC	MLC 400 12DC	MLC 400 E 12DC	MLC 500 12DC	MLC 500 E 12DC
CCD array	1/3" Sony							
Resolution, TVL	420		600		400		500	
Sensitivity, lux (F2)	0,01	0,005	0,1	0,01	0,2	0,06	0,2	0,1
Signal/noise, dB	>48 (AGC is off)							
Lens (focus/ horizontal field of view, mm/°)	Build-in zoom lens (4-9/65-30)							
Video output:	Composite video signal 1V, 75 Ohm							
Supply voltage, V	12±10%							
Direct current not more than, mA	350							
Operating temperature range at continuous running, °C	-40... +50							
Dimensions, mm	240x206x72							
Weight, kg	0,950							
IP Protection Standard	IP66							

➔ **Delivery set**

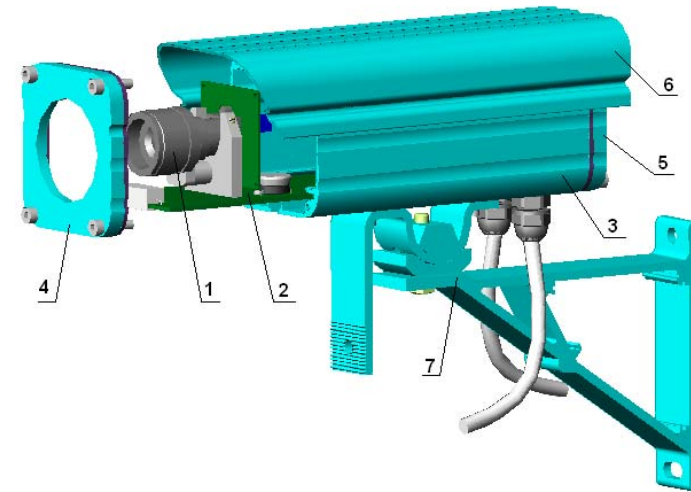
Outdoor camera -1 pc., bracket- 1 pc., tool kit – 1 pc., technical datasheet – 1 pc., packing – 1 pc.

➔ **Camera structure and principle of operation**

Microlight outdoor camera consists of a modular black-and-white or color (depending on model) video camera fixed on a housing board, a housing with a sun visor and a bracket which enables to fix the camera in different directions. The ball stud of the bracket has a place to fix an infrared illuminator.

The housing of an outdoor camera is made of aluminum alloy which protects the video camera from unfavourable climatic conditions. Heating of the inner space enables to use camera at low temperatures and saves it from fogging and glass frosting.

Outdoor camera CCD array generates a CCIR signal which is shown on equipment for video processing.



MICROLIGHT outdoor camera. General view.

1 – modular camera, 2 – housing board, 3 – housing, 4 – front cover, 5 – back cover, 6 – sun visor, 7 – bracket.

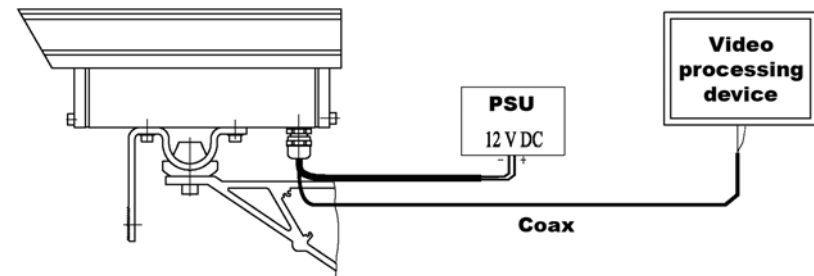
It can be a monitor, a VCR, a video switch, a quad splitter, a multiplexer, a digital video recorder etc. Video camera power supply is carried out from an external stabilized source of 12 V (not included in the delivery set).

➔ **Installation and connection**

All outdoor camera installation and connection works should be carried out when the power supply is turned off.

With the help of self-tapping screws fix the bracket on the vertical surface, join the housing with the ball stud by means of screws (included) using an allen key 3 mm., loosen the bracket screw by means of an allen key 5 mm., point the camera on the surveillance object, fix it firmly by tightening up the screw.

**Connect the outdoor camera as it is shown on the connecting circuit. Follow polarity connection: (+) of supply – red or brown; (-) of supply – black or blue.**



➔ **Operating rules**

Before installing, the device should be kept at temperature from +15° C for at least an hour.

Microlight outdoor camera is designed for continuous work at parameters not exceeding overload capacities. It is not recommended to switch off the power supply for a long period of time at temperature lower than -20° C.

#### Image adjustment

To adjust an image it is necessary:

- to move the sun visor;
- take off the front cover by turning off the screws;
- move out the housing board;
- loosen the retainer screw on the front part of the lens, set required focal distance, fix the lens ring;
- loosen the holder of the lens back part, focus the image and tighten up the retainer screw;
- push the board and the video camera into the housing firmly, fix the front cover, tighten up the screws;
- pull out the sun visor.



**Attention!** When fixing the front cover, tighten up the screws without jerks. This will ensure correct adjoining of a rubber edge and camera hermeticity.

#### Transport and storage regulations

Goods in the manufacturer's packing are transported by all types of covered transport in compliance with the State Standard 12297-84 and rules effective in relation to this type of transport.

Camera storage is carried out in an enclosed space in acid- and alkali fumes free environment. Ambient temperature is from  $-50^{\circ}$  up to  $+50^{\circ}$  C; upper relative air humidity is 80% at temperature  $+25^{\circ}$ C.

#### Warranty

The Manufacturer or supplier guarantees Microlight outdoor camera's compliance with technical requirements given that consumers follow storage and maintenance requirements indicated in this document. Warranty life is 36 months from the day of sale. Warranty is expired in the case of consumer non-observance of installation, connection, storage or maintenance requirements, case crippling or unassisted repair, renovation, modernization etc.

#### Test certificate

Serial number \_\_\_\_\_

Outdoor camera has been tested and is ready for operation.

QC (Quality Control) stamp \_\_\_\_\_

Test date \_\_\_\_\_

Commercial organization \_\_\_\_\_  
(Stamp here)

Date of sale \_\_\_\_\_

Customer's signature \_\_\_\_\_

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**MICROLIGHT OUTDOOR CAMERA**  
Technical datasheet