OPERATING TIMES with a NiCd battery (With full battery, perpetual usage)

NiMH Battery		NiCd Battery	
Bulb	Operating time	Bulb	Operating time
6W	8h	6W	5h 20min
10W	5h	10W	3h

The operating time for a continuous signalling LED is over 18 hours.

Install a bulb according to the lamp operating time or the operating requirements. The greater the light output the less operating time. Only use bulbs supplied and tested by MICA dealers.

TECHNICAL SPECIFICATIONS

Battery ----------NiCd 6V 5.5Ah
----------NIMH 6V 8.5Ah
Glass lens----------109,5 x 5mm
Reflector ----------aluminium
Operating temperature –20°C...+40°C
Enclosure class ----------IP-66
Measurements (h x w x l) 121 x 121 x 216mm
Weight ----------NiCd battery 1,4kg NiMH battery 1.5kg

TERMS OF WARRANTY

There is one year warranty for MICA lamps and charging holders from the purchase date covering potential manufacturing and raw material defects generally applied in accordance with the terms of warranty. The warranty is not valid if the control values of the electronic component have changed or the components have been damaged otherwise. For an after-sales service send the lamp and the charging holder as well as a copy of the voucher along with the product. N.B. The new MICA light fixture/battery has to be brought into use or recharged three (3) months after production.

MICA—SERIES' LAMPS AND ACCESSORIES

Mica Elektro Oy LTD is specialised in high-quality chargeable MICA lamps and safety light arrangement planning and manufacturing. Contact us for information on your nearest MICA retailer. *You can also become acquainted with our products following the address:* ***www.mica.fi***

MICA ML-600/1/2	Small chargeable hand lamp series
MICA SL----------	Forehead and helmet lamps
MICA HL-150/200	Forehead and helmet lamps for professional use
MICA IL-80 ATEX	Hand lamp for explosion-hazardous areas
MICA IL-80 ATEX em	Ex-model for safety lighting arrangement
MICA HL-800 ATEX	Forehead and helmet lamps for explosion-hazardous areas
MICA ML-800 ATEX	Small hand lamps for explosion-hazardous areas

CONTACT INFORMATION OF THE MANUFACTURER

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mica-halogen®

MICA IL-61 and IL-61 NiMH Hand lamp manual

Get familiar with this manual to fully benefit from your MICA lamp. Keep the manual if you want to use it later.

INTRODUCTION

The battery discharges when stored. The lamp needs to be charged in the MICA ILC charging holder before commissioning. The charging time of the battery is 8...11 hours depending on the temperature of the battery and its capacity. A new battery is charged to its capacity after approx. ten chargings/dischargings.

NOTICE:
The first charging of a new lamp must take at least 12 continuous hours !

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OPERATION

The electronically controlled pressure switches turn the lamp's operation on and off (**control switch "A"** in the front of the handle) as well as change the light source between the halogen bulb and the signal LEDs (**selector switch "B"** situated below). The charge state of the battery is indicated by a small bar beneath the handle of the lamp. When only one of the four indicator lights is illuminated and the halogen bulb of the lamp and/or the signal LEDs start to flash at intervals of 15 seconds the battery of the lamp becomes flat (then approx. 10-20 min of time is left). The lamp's control electronics switches the power off automatically before deep discharge danger. The lamp can still be used for a short time in case of an emergency but this reduces the battery's lifetime. The full operating time of the battery varies depending on the bulb, the used light output and the capacity of the battery. The overall operating time of the lamp is extended if it is used over short periods.

IMPORTANT FOR OPERATION

To gain a maximum lifetime of the battery the lamp should be discharged now and then by leaving the lamp switched on until it switches off automatically. Especially NiCd batteries should be discharged approx. once a month. Then a memory effect of the battery is avoided which reduces the operating time of the lamp. The operating time of the lamp decreases also with an ageing battery. If the operating time according to graphic values is reduced significantly despite a fully charged battery the battery of the lamp needs to be changed. Please note that no NiMH batteries are to be placed into the NiCd lamp!

CHARGING and KEEPING

The lamps are charged in a MICA ILC charging holder. On the equipment identification plate of the lamp it is marked which battery is in the lamp. All IL lamps are kept in the holder when not used. The MICA charging holders keep the battery always ready to use. Become acquainted with the manual of the charging holder as well! *Please note that charging of NIMH batteries equipped lamps in old MICA IL-35 charging holders is strictly prohibited*!

MAINTENANCE

Handle bulb and reflector with care as impurities inside diminish the light output and bulbs' lifetime. The contaminated reflector or bulb can be cleaned with a piece of cloth and with a suitable solution. When dismounting the lamp pay attention to the cable positions and the right polarity. *During the warranty period only a representative of MICA-Service may replace parts and as interchangeable items only original MICA spare parts may be used.*

Bulb replacement: First switch off the electricity (operating switch A) and make sure that the battery charge level indicator lights are off. To replace the bulb twist off the lock ring and loosen the glass lens by holding it at the rim. Use a clean piece of cloth to protect your fingers, when you open the lock ring of the bulb and loosen/change the bulb. If you still touch the bulb with your hands, clean it with a solution.

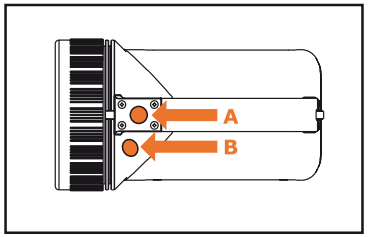
Dismounting the lamp: After removal of the bulb unscrew the clamping bolt of the reflector using a wide screw driver and remove the reflector. Loosen the contacts by unscrewing the phillips screws on the bottom of the lamp in order to get the carrier unit out of the housing. If the carrier is stuck, tap the lamp slightly against the table edge. Pull the carrier half way out of the housing and disconnect the operation switch miniature connector (black wires). Disconnect also the three wires of the selector switch from the terminals. Pull out the carrier entirely from the housing.

Battery package: Disconnect the battery connectors (wires red and black). The battery package can now be taken out of the carrier.

Electronic module: Unscrew the fastening screws inside the charging contacts. Afterwards remove the rear fastening screw of the electronic module. The electronic module can now be released from the carrier.

Push-on/off switches: The push switch (on/off) detachment starts from the outside of the housing by unscrewing the four switch cover plate screws. Remove the switch cover and the rubber cap and remove the switch from the inside of the housing. The selector switch rubber cap is removed and the switch is just pushed into the housing. At the same time make sure that the switch rubber caps are intact as their condition affect the lamp ingress protection substantially.

Assembly: The lamp is assembled in the reverse order. Refer to picture "PIC 1" for correct connection of the switch terminals. The three selector switch connectors are connected as follows: the white wire to the circuit card, the red wire to the red line and the black wire from the switch to the blue line.



1	H0051_1	Battery 8,5 Ah NiMH, battery wire abiko
1	H0051_2	Battery 5,5 Ah NiCd, battery wire abiko
2	H0056_1	Charging contacts (i.e. screws and seals)
3	H0100_5	IL-61 lamp's housing orange
3	H0100_6	IL-61 lamp's housing red
4	H0101_1	IL-lamp's switch fitting grey
4	H0101_2	IL-lamp's switch fitting black
5	H0102_1	IL-lamp switch's new terminal block
6	H0104_1	IL-lamp's lock ring grey
6	H0104_2	IL-lamp's lock ring black
7	H0105_1	IL lamp's glass lens
7	H0105_2	IL square light lens
8	H0106_1	IL lamp o-ring seal
9	H0107_5	IL-61 lamp's circuit card
10	H0108_3	IL lamp's bulb base Px 13.5,
11	H0109_2	IL lamp's bulb fitting
12	H0111_7	IL lamp's 12 LED reflector wedge
12	H0111_8	IL lamp's 12 LED reflector medium
12	H0111_9	IL lamp's 12 LED reflector orange
13	H0112_1	IL inner carrier whole set
14	H0032_1	Bulb Px 13,5 2,4W
14	H0032_2	Bulb Px 13,5 4W
14	H0032_3	Bulb Px 13,5 6W
	H0118_1	Gas discharge valve NiMH battery
15	H0119_1	IL-61 12 red Led card
16	H0120_1	IL-61 selector switch and rubber cap

All parts of your handlamp are available as spare parts through Mica Elektro Oy Ltd. NOTICE: When ordering spare parts please tell the type and serial number of your lamp/charger.