#### **WARRANTY CARD**

- KH Trading machines and tools are covered by 6/24 months warranty, starting on the date of purchase, as described in the Civil Code (proof of purchase or invoice receipt must be enclosed with the warranty card when making a claim).
- 2. This warranty does not cover defects caused by unprofessional handling, machine overloads, not complying with instructions contained in this manual, using accessories that are not approved, unauthorized repair, regular wear and tear and damages occurred during transport. Further, this warranty does not cover parts and accessories such as the motor, carbon brushes, seals and hot-air operated parts and parts that need to be changed regularly.
- 3. If the repair is to be found as not covered by the warranty policy, all costs including the repair and shipping to and from the repair centre will be paid by the customer, according to valid price list. See www.
- 4. When making a claim, you must present the warranty card, showing the date of the purchase, the serial number of the machine, vendor stamp and signature of sales clerk, as well as the proof of purchase receipt.
- 5. Warranty claim shall be made at the vendor shop where you bought your machine or you may mail it to a service centre. The vendor is obligated to fill out the warranty card (date of sale, serial number, vendor stamp and signature). All these information must be filled in at the time of sale.
- 6. The warranty period will be extended for the period of time for which the machine has been in the service centre possession. If the repair or defect is not covered by the warranty policy, all costs including the repair and shipping will be paid by the owner of the machine / tool. We recommend sending the machine in its original packaging. Please, also enclose brief description of the defect with the packaging.
- 7. Before sending the machine for repair, clean it thoroughly. If the received machine is dirty, it may be rejected by the service shop or you may be charged a cleaning fee.

#### SERVICE

Logistic centre Klecany Topolová 483 250 67 Klecany Czech Republic

Claim department phone number: 266 190 156 T-mobile: 603 414 975 266 190 111 O2: 601 218 255 Fax: 260 190 100 Vodafone: 608 227 255

http://www.KHnet.cz

Product: LASER FINDER LM63A		
Type: Im63A	Serial number (product series):	
Date of manufacture:	Repair centre notes:	
Date of sale, stamp, signature:		

Without the correctly filled warranty card or without proof of purchase receipt, including the product type (invoice, purchase receipt) no warranty claim will be processed.



# **USER'S MANUAL**

# LASER FINDER LM 63A



Im<sub>63</sub>A

Dear customer. Thank you for purchasing equipment from KH Trading, s.r.o.

Our company is ready to offer you our services - before, during and after you buy our product.

If you have any question, comment or idea, please contact our business centre. We will do our best to address your comment or question in timely matter.

Before first use, please read this manual carefully. It is your responsibility to study all instructions, necessary for safe use and operation and to understand all risks that may be involved during the use of power machines.

WARNING! Do not try to use this machine before reading this entire manual and before you know how to handle it. Keep this manual for future reference. Pay special attention to safety instructions. Not complying with safety rules may cause injury to the operating person or to people standing by or it may cause damage to the machine or to the work piece. Pay special attention to safety notes and safety labels on the machine. Never remove or damage them.

Please, write information such as the invoice number	
and the number of the sale receipt here in this box.	

### **DESCRIPTION**

Use of laser in production and assembly brings significant savings in the scope of determining the exact position of the part. For example, on saws you can determine the cut path and hence optimise the throughcut. On milling cutters or flame cutting devices, lasers enable quick, cheap and precise setup of work pieces in the outout position. At present, when the price of lasers is affordable, with their help it is possible to improve the quality and work tempo of every workshop, or at assembly sites. A protective circuit is installed, which brightens the beam within 5 minutes of being turned on.

## **TECHNICAL SPECIFICATIONS**

Voltage (external source) $ -230 \pm 5\% \text{ V/50 Hz} $ Current $ -40 - 60 \text{ mA} $ Power output $ -5 \text{ mW} $ Wave length $ -635 - 670 \text{ nm} $ Laser category $ -111.a $ beam width $ -2 \pm 0.5 \text{ mm / 5 m} $ beam shape $ -110^{\circ} - 10^{\circ} $ Effective range (depends on the conditions of light) $ -15 \text{ m} $ Operation temperature $ -10 - +45^{\circ}\text{C} $
Laser head dimensions
Length       .113 mm         Width       .38 mm         Height       .38 mm         Gross weight       .0.440 kg         Net weight       .0.250 kg

The accuracy of instructions, graphs and information contained herein, depends on the printing date. Due to continuous product improvement, the manufacturer reserves the right to change technical parameters of the product, without prior customer notification.

## **REPAIR AND MAINTENANCE REPORT**

Report and maintenance report:

DATE	REPAIR AND MAINTENANCE REPORT	SERVICE SHOP

## **REVISION REPORT**

The user is obligated to perform tests and revisions of electrical equipment of the machine in accordance with valid rules and regulations. Result report:

DATE	REVISION REPORT	REVISION TECHNICIAN Number / SIGNATURE

## **SAFETY PRECAUTIONS**

- This device may be used by a qualified person, 18 years or older who has been trained in work and environmental safety procedures.
- Any person using this equipment must possess a medical certificate demonstrating his eligibility to operate this equipment.

We recommend placing warning labels on conspicuous places around your workplace:

"Prevent most common injuries" - LASER PRODUCTS

#### Symbols used in this manual



/ Warning!

This symbol informs you about the risk of personal injury or damage to the machine or materials.



Caution! You are using an electrically powered device!! Electrical hazard.



Warning!

Danger of damage.



Note:

Additional information.



Laser product. Risk of eye injuries

## . General instructions

- Plastic bags and packaging materials pose danger for small children and animals.
- · Make sure you know your tool or machine and you are familiar with its operating procedure. Know the hazards if not used correctly.
- · Person using this machine must be properly trained and must know how to safely operate this equipment. He must be also aware of the hazards and risks that may occur if not used correctly.
- Pay special attention to safety notes and safety labels. Do not remove or damage them. If the warning label becomes unreadable or damaged please, contact your vendor.
- Maintain your working area clean. Disorganized and dirty working area may cause accidents.
- . Never work in tight spaces or in purely lit rooms. Make sure the floor is solid and stable and that you can move around easily. Maintain stable posture during work.
- . Stay focused and use all your senses. Pay attention to the working procedure. Do not continue to work if you cannot pay attention.
- Maintain your tools clean.

- · Handles must be kept free of grease and dirt.
- Make sure no children, unauthorized persons or animals have access to your workshop.
- Never leave your machine unattended during operation.
- Use only for purposes for which it has been designed.
- Do not underestimate your abilities and know your limits. Use both hands.
- Never work under the influence of alcohol or other drugs.
- Do not use the machine/tool if you feel dizzy or week.
- . Any modifications or improvements to the machine are strictly prohibited. DO NOT USE if you discover bent part, crack or other damage.
- Never perform any maintenance during operation.
- If you see any unusual sign or hear any strange sound, switch off your machine and stop working
- Before use, make sure all screws are tighten securely.
- · Perform maintenance regularly. Before use make sure the device is in good working conditions and without any damage.
- · Use only original spare parts during repairs.
- Using extension pieces or accessories not approved by the manufacturer may cause injuries to the operating personnel.
- Do not expose to extremely high temperature or direct sunlight.
- This machine is not design for use in humid environments or under water.
- if you are not using your machine, store it in a dry and safe place, out of reach of children.
- If not stated otherwise in this manual, all damaged parts must be repaired or changed.

#### Laser product

- Laser product class II. (EN60825-1: 1997).
- . Due to safety reasons it is strictly prohibited to look directly into the laser beam with bare eyes or using any optical apparatus or lens.
- Do not aim the laser light at persons or animals. Risk of eye injuries
- Do not touch the laser lens.
- · Laser pointer is not a toy!



## \* Fine mechanics

- Never use vise to hold your tool/machine.
- Protect you device from impact and fall.



## Assembly

• Do not use the machine unless completely assembled.



## / High voltage

- The head is a very tight unit and contains parts, which may never be repaired by the user.
- The head must be operated without a covering. Danger of damage to eyesight and electric shock.

#### **DISPOSAL**

When the operational life of your device is over, dispose off it in accordance with valid rules and regulations. Your product is made of metal and plastic parts that may be recycled when separated.

- Disassemble all parts.
- 2. Separate all parts according to the material they are made of (e.g. metals, rubber, plastics, etc.). Take the separated parts to the recycling facility near you.
- 3. Electrical waste (used electrical power tools, electric motors, recharging equipment, electronics, accumulators, batteries etc.).

Dear customer. In accordance with the valid regional rules and regulations describing the management of electrical waste, electrical waste is considered dangerous.

Disposal of electrical waste must be therefore handled as dangerous waste in accordance with waste management rules valid in the state you are in.

It is prohibited to mix electrical waste with regular household waste.

You may return your used electrical appliance to a recycling facility near you. More information about electrical and dangerous waste disposal may be obtained from your local authority or from the Internet.

#### CAUTION

If the machine breaks down, send it back to the vendor for quick repair.

Please, enclose brief description of the defect. That makes repair easier. If the machine is still covered by warranty, enclose the warranty card and proof of purchase receipt. After the warranty period expires, we repair your machine for a special price.

To prevent possible damages during shipping, packed the machine carefully or use the original packaging material. We are not liable for shipping damages due to incorrect packaging of your machine. If making a claim at the shipping company the level and method of packaging plays a major role during claim evaluation process

Note: Pictures and contents in this manual may slightly differ from the actual product or accessories. It is due to continuous improvement of our products. Such small differences have no effect on the product functionality.

#### /1\ Electrical equipment

- Observe all basic safety rules when using electrical equipment to prevent risk of fire, injuries by electrical shock and other hazards. Before using this device, read this manual entirely and follow all safety instructions.
- Make sure the power cable plug is plugged into the correct wall outlet. o Make sure the electrical system uses the same voltage as your device. Otherwise you may damage your device.
- Before connecting the power supply cable make sure that the main switch is in the Off position. When you finished your work, disconnect the power plug from the wall outlet and switch off the main switch.
- Never carry electric power tools and equipment by their cable. o When disconnecting the plug from the wall outlet, never pull the cable by its cord.
- Protect the power cable from high temperatures, oils, paint thinners and make sure that the cable is not hanging over sharp edges.
- Inspect the power cable regularly. If damaged have it replaced by qualified technician. Inspect extension cables regularly. If damaged, have it replaced.
- If you need to use an extension cable, use cable with appropriate power rating. Use only completely unwound. Inspect extension cables regularly. Damaged cables must be repair immediately.
- . Before performing any maintenance, repair or adjustment, switch off the main switch and disconnect the power cable from the wall outlet.
- Do not use in environments where explosives are stored or used (paint shops, warehouse with flammables etc.).
- Do not use in humid environments or if wet.

### **ASSEMBLY**

- . Before throwing the packaging material out, make sure no part is left inside. If so, take it out and install it. Use the part listing for check-up and the installation drawing for guidance.
- Before turning on the adapter in the electric power, always connect its end to the laser head first. See instructional figures hereinafter.

## **OPERATION**

#### CAUTION

- For reasons to protect the electric circuits of the laser device and for reasons due to the prolongation of its life, brightening of the beam, which takes approx. 5 minutes was started in model year 2001.
- The life of the laser is limited to approx. 2000 working hours. During this period the intensity of the beam may weaken.
- Before connecting it to electric power, shift the switch into the Off position see fig. further in the text.
- If the switch were in the On position, the laser would begin to emit radiation with a delay of approx. 5 sec - this is why you have to make sure it can not reach contact with eyes (of persons or animals, directly or via reflected beam).
- Place the stand in a convenient position with the head in the required position.
- Start the device by shifting the switch into the On position.

#### Instructional diagrams

Switch position On



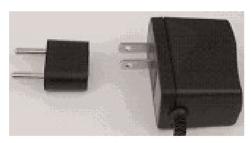
Switch position Off



Output = 5 V from the adapter connected to the connector of the rear side of the laser head.

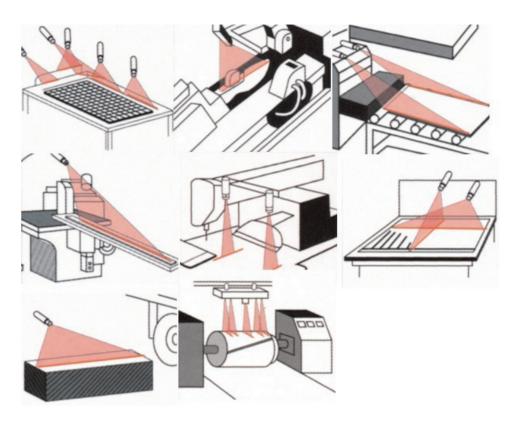


- To connect the adapter to the electric power use the adapter.
- Rotating the radiated beam can only be done once the head has been installed by releasing the stopping screw - white arrow on the cover of the head and by rotating the output grooved cylinder - yellow arrow.
- Once the beam direction has been setup, secure the position by tightening the stopping screw slightly.





Forms of use



## **MAINTENANCE**

- Keep your device clean. Dirt from tools may enter the inner device mechanism and cause damages to the
  device.
- Do not use aggressive cleaning solution or paint thinners to clean your device.
- Clean plastic parts with soft cloth dipped in soapy water.
- If you are not using your device, lubricate it with suitable grease and store it in a dry place to prevent corrosion.



Detailed description of the use of this device is not included in this manual, because the manufacturer / distributor assumes that the user is experienced in similar type of work. Also according to the applicable law, this device is considered as a commonly sold and used tool. If the user is unfamiliar with the use of this device, we recommend finding out more information about using this device at the Department of work safety.