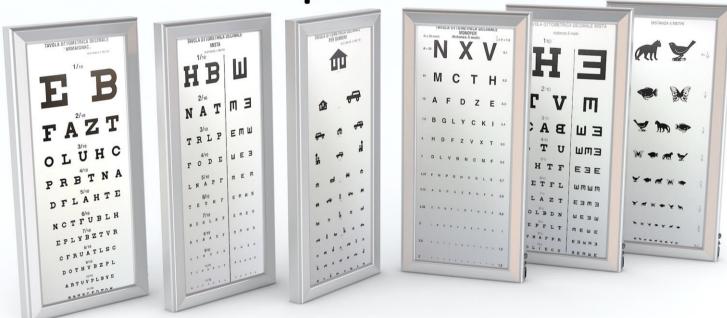


# PROFESSIONAL MEDICAL PRODUCTS ARTICOLI E APPARECCHI PER MEDICINA

SLIM LED optotypes SLIM LED ottotipi



User Manual

**GIMA SPA** 

Via Marconi 1 - 20060 Gessate (MI)- Italia

E-mail: gima@gimaitaly.com - www.gimaitaly.com

Tel.: 02 95 38 541 - Fax: 02 95 38 11 67

English

Italiano

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Please read this manual with special care, before installing and operating the device.



ATTENTION: this symbol indicates the manual's sections that the user must fully understand and follow in order to avoid any potential damage to people and also to the equipment itself.

### 1. INTRODUCTION

Dear Customer,

your choice of our appliance means, for our Company, your particular recognition of the care of our designers, in the achievement of an ergonomic, reliable and pleasant design product.

We would thank you to trust our Company and we are at your complete disposal for everything you need.



# 2. IMPORTANT ADVICE NOTE

You are kindly requested to pay particular attention to this manual, before using the appliance, as it contains important recommendations on the correct installation, use and maintenance of the product.

As a matter of fact it is the shortest way of communication between the Supplier and the end User (p. 7.2.3 UNI EN ISO 13485:2012).

Have a good work!

# 3. PRODUCT DESTINATION

Our equipment has been specially designed to achieve the best backlinght of optometric tables, that are those essential devices for the measurement of visual capacity.

The use of this equipment, different from that one it was designed for, is to be considered improper and can be potentially dangerous.

In this case the manufacturer can't be held responsible for any resulting damage.

# 4. INFORMATION

The optotype SLIM LED is a device for reading the optometric tables based on the uses of LEDs, the most advanced technology in the lighting field, at the time.

The use of LEDs technology, makes the optotype particularly competitive compared to those ones normally sold, still based on the use of fluorescent lamps, since it allows to obtain considerable advantages:

# 1) OPERATIVE ADVANTAGES

- luminance increase and its regulation opportunity from 30% to 100%
- · uniform distribution of light with a color more suitable to read the optometric tables
- total elimination of flickering

#### 2) ECONOMICAL ADVANTAGES

- long life of the optotype (LEDs average lifespan of 80.000/100.000 hours)
- low energy consumption

# 3) OTHER ADVANTAGES

- optotype thickness of only 3 cm
- hight resistance to shocks, vibrations, etc. due to the use of "solid state" components
- eco-compatibility, since all the components have a low environmental impact

The chassis is made of anodized aluminum, with consequent elimination of aging phenomena of the structure.

### 5. TECHNICAL DATA

CODE	Version	Electrical Supply	Power VA	External dimensions, WxDxH cm
BFSL 27.67AL	Mixed decimal 3 mt	110V-230V 50-60Hz	40W	34 x 3 x 72
BFSL 27.67BL	Monoyer 3 mt	110V-230V 50-60Hz	40W	34 x 3 x 72
BFSL 27.67CL	Children 3 mt	110V-230V 50-60Hz	40W	34 x 3 x 72
BFSL 27.67DL	Mixed decimal 5 mt	110V-230V 50-60Hz	40W	34 x 3 x 72
BFSL 27.67EL	Armagnac 5 mt	110V-230V 50-60Hz	40W	34 x 3 x 72
BFSL 27.67FL	Children 5 mt	110V-230V 50-60Hz	40W	34 x 3 x 72

Specifications could be changed anytime.

# 6. PACKAGING HANDLING

After taking away the packaging, do not leave the different elements (carton boxes, plastic bags, polystyrene foam, etc.) in the environment and do not leave them in children hands, as they can be dangerous.

Anyway do not throw away the packaging before verifying the correct operation of the device, as in case of giving it back to the supplier, the device has to be put in its own original packaging.

All the different elements of the packaging, have to be handled following the local Directives regarding the disposal of the waste.

If it is necessary to dispose the SLIM LED viewer, at the end of its useful life, or for other reasons, it is important to consider that the SLIM LED viewer has to be disposed following the directions of the Directives that regulate the electromechanical/electrical devices, for which the same Directives

require to reutilization/recycle the parts of the device, to avoid damages to the environment and consequently for the people health.

Ignoring the Directives regarding the disposal of the waste, please contact the qualified local Authorities.

## 7. GENERAL WARNING



After removing the packaging, check that the product has not been damaged in transit.

In case of doubt, do not attempt to repair or use the machine. Seek advice from a suitably qualified person. Packaging materials (plastic bags, polystyrene rubber, etc.) must be kept away from children, as they could cause harm.

This machine must only be used for the purpose for which it was designed.

All other uses must be considered dangerous.

# The safe use of any electrical appliance involves the observance of certain basic rules, in particular:

- do not touch the appliance with damp hands;
- do not use the appliance while bare-foot;
- o do not pull the plug from power socket by the power cord of the appliance itself:
- o do not expose the appliance to adverse elements (sun, rain, etc.);
- o do not let the children use the advice.

The manufacturer can't be considered responsible for damages caused by an incorrect use of the product.

### 8. SPECIAL WARNING



In case of any doubt on the safety of the advice, do not use it, and ask to a qualified person.

The electrical safety of this appliance is only guaranteed when it is correctly installed and connected to the grounded network, according to the latest issue of the Regulations Conformity with these requirements must be ensured and, in case of doubt, seek advice from a suitable qualified person.

Our Company can't be held responsible for any damage caused because the appliance has not been installed and earthed correctly.

Besides it is important to respect the following recommendations:

check that the current carrying capacity of the wirings and socket are suitable for the maximum power of the device as shown on the label. In case of doubt, seek advice from a suitable qualified person

- o to avoid dangerous overheating, it is advisable to fully unroll the power cord
- do not leave the appliance plugged in when unnecessarily.

If power cord becomes damaged, replace it promptly with the power cord: EN 60 320-C15 - **outlet** CEI 23-16/VII (SCHUKO CEE 7-S.S. VII).

The manufacturer can't be considered responsible for any damage caused by an incorrect installation and earthing of the appliance.

#### 9. INSTALLATION

The SLIM LED is tested in the factory and its luminance was calibrated to 100% of its maximum, so it doesn't need any further calibration or adjustment after installation.

For the optotype SLIM LED installation observe the following warnings:

- the optotype SLIM LED is to be hung to a wall that is both stable and vertical, fixing it with suitable supports to be placed at a distance between them equal to the distance of the fixing slots on the rear of the optotype same;
- 2. do not install the optotype SLIM LED near the water that could cause short circuit to the electrical system;
- 3. do not install the the optotype SLIM LED near heat sources;

#### **10. OPERATING**

The optotype SLIM LED is equipped with an **O** / **I** switch located in the lower part of its right side. The optotype is also fitted with a small keypad, located on the lower side, to activate the function of adjusting the luminance (v. fig. below)



The optotype is normally delivered with luminance adjusted at its maximum of 100%.

For its activation, proceed as follows:

- 1. connect the SLIM LED optotype to the power outlet in the wall, trought the power cord supplied, making sure that this does not result never bent or damaged;
- 2. turn on the device by moving the switch on the right side from the position **O** to position **I**.

Under these conditions, the light (A) begins to flash in the center of the keybord and you can operate in the following two ways:

#### **TRADITIONAL**

In the condition described in the step 2, with light (A) flashing, press the ON/OFF button (D), located at the extreme left of the keypad.

When the light (A) stops flashing and remains on, press the A/M key (E).

The optotype illuminates with a luminance of 100% and is already in a position to operate normally.

### **DIMMER**

At the request of the Market, the optotype SLIM LED was also equipped with a dimmer, that is, a device that allows you to adjust the luminance.

The luminance may be adjusted directly by the operator himself, if he considers it appropriate. The luminance can be adjusted in a range between 30% and 100% of the maximum, by pressing the left arrow (B) to decrease the value of the luminance or the right arrow (C) for increase.

### 11. MAINTENANCE / CLEANING DIRECTIONS

The optotype SLIM LED doesn't need preventive maintenance, but, if it does not light on, check and replace the fuse if damaged (1A).

In the case of persistence of malfunction, contact your supplier.

Before carrying out any cleaning, make sure the appliance is unplugged from the electrical outlet.

Perform cleaning with a damp cloth and don't make use of corrosive products. Don't use solvents.

# **12. GUARANTEE**

The manufacturer guarantees the good quality of the parts of the device, assuring, during the warranty period, to repair or replace as soon as possible, defected parts, if it depends on the manufacturer itself.

We always guarantee our devices for 24 months, from the date of the purchase.

Parts acquired from other manufacturers have the same guarantee that is given us by the manufacturer.

Parts subject to normal wear as plastic parts, glass, neon, starter, etc., are excluded from the gurantee.

Shipping costs are paid by the Customer.

All risks during the transport are under responsibility of the Customer.

The repairing actions do not modify the expiry date of guarantee.

The Customer must send the device to manufacturer, with a photocopy of the purchase invoice, where is signed the date of the purchase and the appliance number.

Further claims from the purchaser for reimbursement of damages not attributable to the manufacturer, are obviously not taken in consideration.