



User manual



Par 16 with GU10 Socket

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1. Safety instructions



- This device is suitable for indoor use only.
- All modifications to the device will void the warranty.
- Repairs are to carry out by skilled personnel only.
- Use only fuses of the same type and original parts as spare parts.
- Protect the unit from rain and humidity to avoid fire and electric shocks.
- Make sure to unplug the power supply before opening the housing.

1.1. FOR SAFE AND EFFICIENT OPERATION

Be careful with heat and extreme temperature

Avoid exposing it to direct rays of the sun or near a heating appliance.

Not put it in a temperature bellow 32°F /0°C, or ex ceeding 104°F /40°C.

Keep away from humidity, water and dust

Do not place the set in a location with high humidity or lots of dust.

Containers with water should not be placed on the set.

Keep away from sources of hum and noise

Such as transformer motor, tuner, TV set and amplifier.

To avoid placing on un-stable location

Select a level and stable location to avoid vibration.

Do not use chemicals or volatile liquids for cleaning

Use a clean dry cloth to wipe off the dust, or a wet soft cloth for stubborn dirt.

If out of work, contact sales agency immediately

Any troubles arose, remove the power plug soon, and contact with an engineer for repairing, do not open the cabinet by yourself, it might result a danger of electric shock.

Take care with the power cable

Never pull the power cable to remove the plug from the receptacle, be sure to hold the plug. When not using the device for an extended period of time, be sure to disconnect the plug from the receptacle.

Important: Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems. Make sure the electrical connection is carried out by qualified personnel. All electrical and mechanical connections have to be carried out according to the European safety standards.

2. Technical Data

Voltage	Max AC230V
Power consumption	Max 50W
Weight (without lamp)	0,2kg
Measures	92 x 92 x 120
Fitting lamps:	GU10, 230V/ 20W GU10, 230V/ 35W GU10, 230V/ 50W
Max Ambient temp Ta	45°C
Max lamp temp Tb	160°C
Min. Distance to burning mat.	0,5m

3. Description



Attention!

Keep away from moisture and humidity!

Make sure to unplug the power supply before opening the housing!

Please read the manual carefully before initial start-up.

All persons entrusted with installation, start-up, operation, maintenance and repair must:

- Have an equivalent qualification
- Follow this manual exactly
- Regard this manual as part of the product
- Keep this manual well over the entire lifespan of the product
- Pass this manual to following owners and users of the device
- Download the latest version of this manual from the internet

3.1. Introduction

Thank you for purchasing the Varytech Par 16. You've got yourself a very versatile and efficient product.

3.2. Safety guidelines



Attention!

Be very careful with handling dangerous mains voltages. You risk suffering an electric shock.

Please read:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

Don't turn on the fixture if it's been through severe temperature difference, e.g. after transportation, because it might damage the light due to the environmental changes. So make sure not to operate the fixture until it has reached a normal temperature.

This device falls under protection-class I. Therefore it is essential that the device is earthed. The electric connection must be carried out by a qualified person.

Avoid contact of the main cable with other cables. Be careful with the handling of main cable and mains connection. Do not touch them with wet hands.

Make sure the available voltage is not higher as stated.

Make sure the power cord is not crimped or damaged by sharp edges. Make sure by regular inspections that the device and the main cable do not show any signs of damage.

Always disconnect from the mains, when the device is not in use or before cleaning it.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.



DANGER OF BURNING! Never touch the device during operation. The unit heats up to the stabilized temperature T3.



Health risk!

Do not look directly at the light source. This may trigger an epileptic seizure in some people. This applies in particular to people who were diagnosed with epilepsy.

Keep children and amateurs away from the device!

3.3. Intended use of the device

The Varytech Par 16 is a spotlight casing for professional use and designed for large-scale live performances, discos, theatre, etc. The device is approved for max. AC 230V/50Hz and is suitable for indoor use only.

Regular breaks increase the lifespan of the product.

Avoid strong shaking and every kind of violence during installation and operation of the device.

Make sure the device is not exposed to high temperatures, humidity or dust. Make sure there are no loose cables. You risk endangering your own safety and that of third parties.

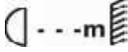
The device may not be operated or kept in an area with possible splashing water, rain, humidity or fog. Moisture and very high humidity can reduce the isolation of the device which can result in electric shocks. The device must never be exposed directly to the stream during the use of fog machines. Keep a minimum distance of 0.5 m to a fog machine. Make sure that the fog saturation enables a good visibility of at least 10 m.

Ambient temperature must be between -5°C and +45°C. Avoid exposing it to direct rays of the sun or heaters. This also applies to transportation in enclosed vehicles.

Relative humidity at an ambient temperature of 45°C may not exceed 50%.

The device may only be operated at a height between -20 and 2000 m above sea level.

Do not operate the device during thunderstorms. Overvoltage could destroy the device. Unplug this apparatus during lightning storms from the mains by pulling the plug

The symbol  denotes the minimum distance between the device and illuminated objects. The distance between light output and the surface which is to illuminate must not be less than 3 m!

During installation the use of the mounting bracket is required. Keep a free space of 50 cm around the device to ensure good air circulation.

Surrounding objects and surfaces may not be touched by the housing!

Make sure that during the projector assembly, projector setup and execution of maintenance work the area below the installation place is blocked in principle.

Projector and color frame must always be secured by a suitable safety rope.

The maximum ambient temperature must never exceed $T_a = 45^\circ\text{C}$.

Familiarize yourself with the functions of the device before operating it. Let the unit not be operated by persons who are not familiar with it. The most common cause of dysfunction is an improper use of the device.

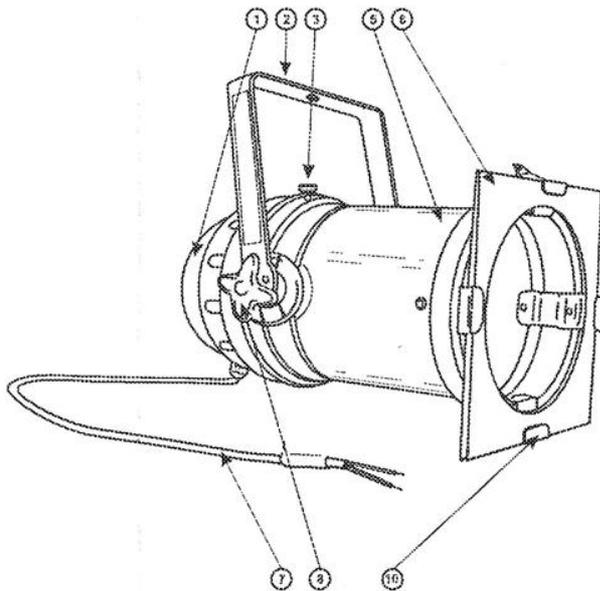
Never use solvents or abrasive products to clean the device. Use a soft, damp cloth instead.

Please use the original packaging for transportation to avoid damages. Make sure that the device is packed as it was delivered brand new.

All modifications of the device are forbidden for safety reasons.

A use of the device which differs from the use described in this manual may damage the product. This will void the warranty. In addition, it should be noted that any other kind of use involve a risk such as for example short circuit, fire, electric shock, lamp explosion, crash, etc.

4. Fixture Overview



- 1) Lampcover
- 2) Mounting bracket
- 3) Closing knob
- 4) Not at this item
- 5) Tubular
- 6) Color frame
- 7) Silicone cable
- 8) Holding screw
- 9) Not at this item
- 10) Frame holders

4.1. Installation

Lamp installation and lamp change



Danger!

Install lamp only when device is turned off! Disconnect the plug from the receptacle!



Attention!

If the lamp is damaged or deformed by heat, it has to be changed!

Isolate the device completely from the mains, before changing the lamp by disconnecting the plug. Let the lamp cool down by all means before changing it. This takes approximately 5 minutes.

Avoid touching the glass with bare hands and follow the manufacturer's instruction by all means.

Do not install lamps with higher performance specifications into the device. Lamps with higher performance cause higher temperatures during operation which the device hasn't been designed for. In case of non-observance the warranty becomes void.

For the installation a GU-10 lamp until 50W max. is required.

Course of action:

- Open the lamp cover, to do that pull the closing knob and open the cover.
- Insert the new lamp like it has to be. Make sure the two pins are at the right holes.
- Change the damaged lamp. First remove the damaged lamp the lamp socket.
- Put in the lamp carefully into the socket.
- Close the cover.



Remove the styrofoam ring, located at the rear end of the headlight, by all means before initial start-up!



Under no circumstances turn on the device before closing the casing cover!

5. Overhead installation

Danger!



During installation please follow the regulations of the BGV C1 (former VBG 70) and EN 60598-2-17! Installation may only be carried out by authorized specialized trade.

Projector's suspension devices have to be build and measured so they can withstand for an hour the tenfold of the payload without suffering a permanent detrimental deformation.

Basically installation has to be made by using a second separate suspension. This can be e.g. a suitable net. The second suspension must be designed and attached so no part of the installation can fall down in case of failure.

During construction, reconstruction and deconstruction unnecessary staying in the range of moving areas, on lightning bridges, under elevated work stations or any other danger zones is forbidden.

The user is responsible for getting experts to review safety-related and mechanical facilities before initial start-up or after crucial changes before restarting.

The user is obliged to get an expert to check safety-related and mechanical facilities within the limits of an acceptance inspection at least every four years.

The user is obliged to get an expert to check safety-related and mechanical facilities at least once a year.

Procedure:

The projector is ideally installed out of reach of public areas.

IMPORTANT! Overhead installation requires a high level of experience. This includes knowledge of calculating the payload, used installation material and safety inspections of the used installation material and the projector whereas the required experience is not limited to this. Under no circumstances try to carry out installation yourself under any if you are not qualified. Contact a professional installer. An inappropriate installation can lead to injuries and/or damaged properties.

The projector may not be installed within the reach of persons.

If the projector may hang from the ceiling or from high beams, the use of truss systems is mandatory. The projector may not be installed swinging in the room.

Attention! Crashing down projectors can cause serious injuries! DON'T install the projector, if you doubt the safety of a possible installation form.

Before installing the projector ensure that the installation space supports at least the tenfold point loading of the projector's deadweight.



Fire hazard!

Ensure no easily inflammable materials are within a distance of 1 m during installation of the projector.

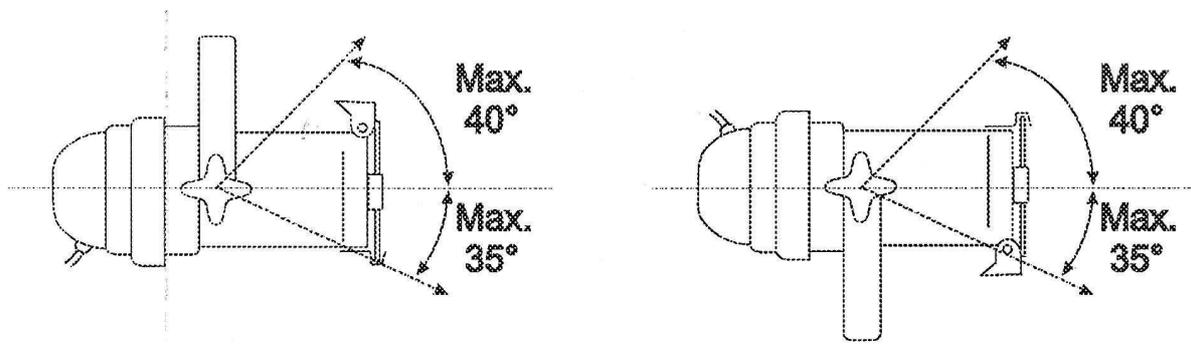
Mount the projector with the mounting bracket on an appropriate hook of a truss system.

During overhead installation the projector must be always secured by a safety rope which is designed to hold the twelfold weight of the device. Only safety ropes with quick-release safety fastener elements may be used. Hang up the safety rope in the hole of the mounting bracket. Direct the rope over the truss or an appropriate fastening point. Hang up the end in the fastening element and tie up the locking nut.

The maximum falling distance may not exceed 20 cm.

A safety rope once exposed to falling load or damaged may not be used furthermore.

The headlight may not be operated beyond the permitted operating burning position. Adjust the inclination exclusive within the following limits:



Adjust the inclination by the mounting bracket and tie up the locking screws tightly.

Mains connection**Danger!**

**Contact the authorized specialized trade for connection to the electric supply.
Do not carry it out yourself.**

Before mains connection is enabled a protective contact plug must be attached to the electric power line.

Configuration of the connection cables

Cable	PIN	International
Brown	Outer conductor	L
Blue	Neutral conductor	N
Yellow/Green	Earth conductor	⊕

The earth conductor must be connected by all means!

Connect the device via mains plug to the electric supply.

If the device is directly connected to the local electricity grid, the installation of a separator with at least a 3 mm contact hole for each pole is necessary.

The connection is exclusively permitted for electrical installation which complies with the VDE-regulations DIN VDE 0100. Indoor installation must be equipped with an earth leakage circuit breaker (RCD) with 30 mA rated current.

**Danger!**

An expert must check the installation before initial start-up.

5.1. Operation

After connecting the Par 16 to the electricity grid the spot can be used.

5.2. Cleaning and maintenance

The user is obliged to get an expert to check safety-related and mechanical facilities within the limits of an acceptance inspection at least every four years.

The user is obliged to get an expert to check safety-related and mechanical facilities at least once a year.

Thereby particular attention must be paid to the following items:

1. Ensure all screws attached to the device or parts of the device are very tight and not corroded.
2. Ensure there are no deformations of the housing, attachment and installation space. This also includes the ceiling, the suspension and the truss.
3. Electrical connection cables may show any signs of damage, depositions or material aging e.g. porous connections.



Danger!

Disconnect the device completely from the electricity grid during maintenance work!

Contaminations like dust should be removed regularly from the device. Use a damp, lint free, cloth. Avoid using alcohol or solvents by all means.

Use a vacuum or an airbrush for cleaning the projector's interior. Carry out an appropriate cleaning once a year.

Excluding the lamp no other parts inside the device need maintenance. Service and maintenance must be exclusively transferred to authorized specialized trade.

Please follow the instructions under the heading "Lamp installation and lamp change".

If you require spare parts for the device, please use only original spare parts.

If the access line is damaged it must be replaced by authorized specialized trade to avoid hazards.

For further information your specialized dealer will be glad to assist you.

Importer:

B & K Braun GmbH

Industriestraße 1

D-76307 Karlsbad

www.bkbraun.com

info@bkbraun.com

