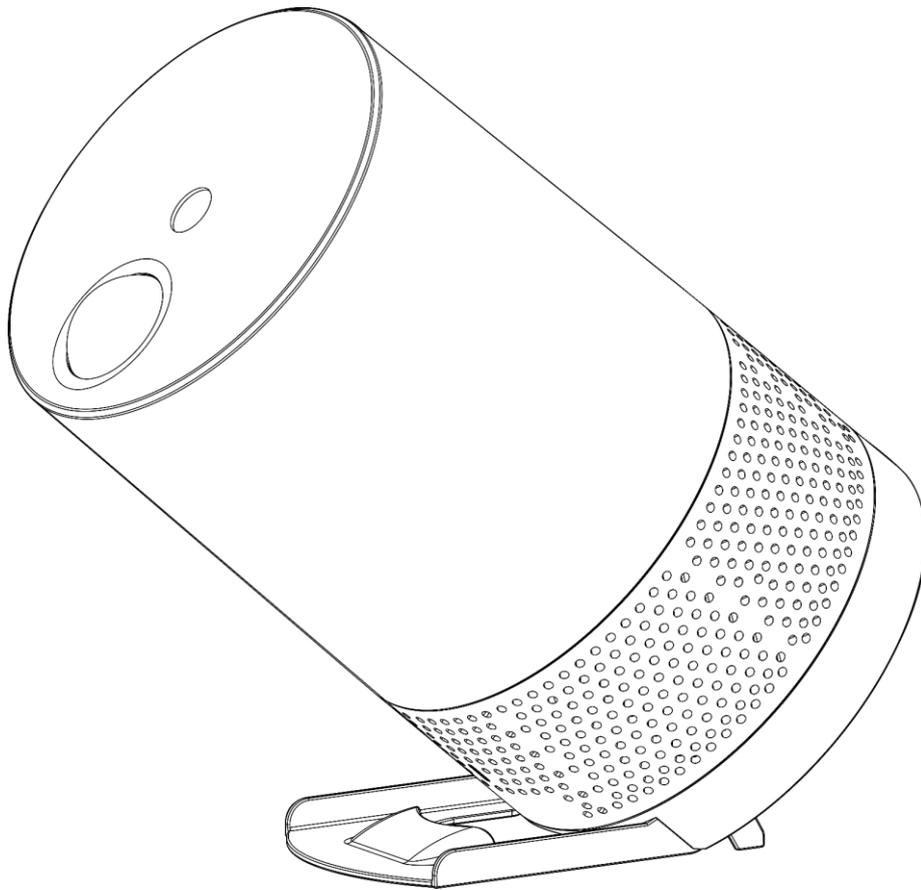




MANUAL



ENGLISH

VIBE FX Polar Beat

V1

Ordercode: 950300

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Warning



**For your own safety, please read this user manual carefully
before your initial start-up!**

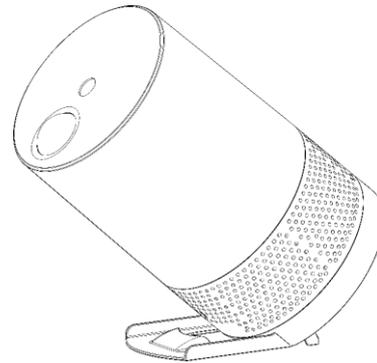


Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Your shipment includes:

- Showgear VIBE FX Polar Beat
- Audio cable (0,6 m)
- USB cable (0,6 m)
- User manual



LED Expected Lifespan

LEDs gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason, when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. If improving the lifespan is of higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.



CAUTION!

**Keep this device away from rain and moisture!
Unplug mains lead before opening the housing!**



Safety Instructions

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow the instructions of this manual



**CAUTION! Be careful with your operations.
With a dangerous voltage you can suffer
a dangerous electric shock when touching the wires!**



Before the initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes contained in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

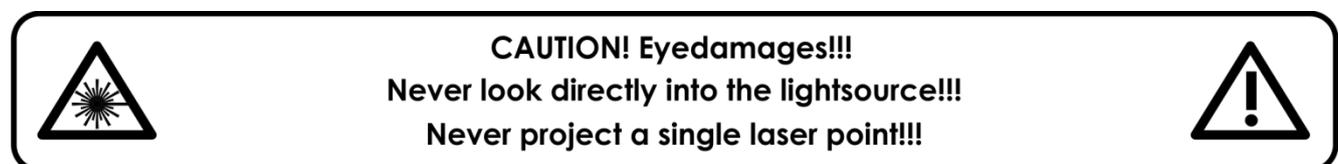
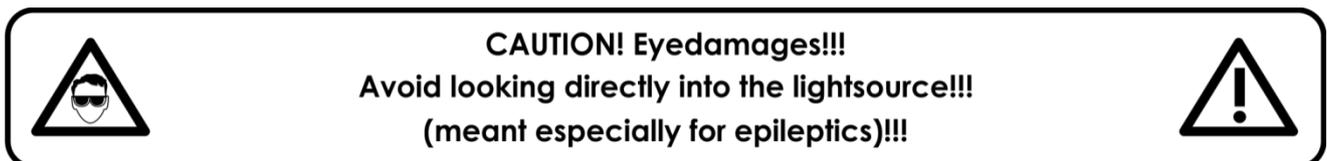
This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- Never let the power cord come into contact with other cables! Handle the power cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never lift the fixture holding it by the projector-head, as the mechanics may be damaged. Always hold the fixture by the transport handles.
- Never place any material over the lens.
- Never look directly into the light source.
- Never leave any cables lying around.
- Never aim the laser beam at people or animals!
- Never use the device during thunderstorms, unplug the device immediately.
- Never point a laser at aircraft, this is a federal offense.
- Never point unterminated laser beams into the sky.
- Never open the laser housing. The high laser power levels inside of the protective housing can start fires, burn skin and will cause instant eye injury.
- Do not connect this device to a dimmer pack.
- Do not open the device and do not modify the device.
- Do not point lasers at highly reflective surfaces such as windows, mirrors and shiny metal. Even laser reflections can be hazardous.
- Do not expose the output optic (aperture) to cleaning chemicals.
- Do not use laser if the laser appears to be emitting only one or two beams.
- Do not use laser if housing is damaged or open, or if optics appear damaged in any way.
- Do not operate laser without first reading and understanding all safety and technical data in this manual. Never look into the laser aperture or laser beams.
- Do not switch the device on and off in short intervals, as this will reduce the device's life.
- Do not touch the device's housing bare-handed during its operation (housing becomes very hot). Allow the fixture to cool for at least 5 minutes before handling.
- Do not shake the device. Avoid brute force when installing or operating the device.
- After set up and prior to public use, test laser to ensure proper function. Do not use the laser if any defect is detected. Do not use, if the laser emits only one or two laser beams rather than dozens/hundreds, as this could indicate damage to the diffraction grating optic, and could allow emission of higher laser levels.
- Only use the device indoors, avoid contact with water or other liquids.
- Only operate the fixture after having checked if the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always check the regulations when using a class 2 laser product.
- Always check and position the laser before anybody enters the room, when the laser is facing an area with people.
- Always keep the case closed while operating.
- Always allow a free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power cord holding it by the plug. Never pull out the plug by tugging the power cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power cord is never crimped or damaged. Check the device and the power cord from time to time.
- If the external cable is damaged, it has to be replaced by a qualified technician.

- If the lens is obviously damaged, it has to be replaced, so that its functions are not impaired due to cracks or deep scratches.
- If device was dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If your Showgear device fails to work properly, discontinue the use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showgear dealer for service.
- For adult use only. The fixture must be installed beyond the reach of children. Never leave the unit running unattended.
- Never attempt to bypass the thermostatic switch or fuses.
- For replacement use fuses of same type and rating only.
- The operation of a class 2 laser show laser is only allowed if the show is controlled by a skilled and well-trained operator familiar with the data included in this manual.
- The user is responsible for correct positioning and operating of the Polar Beat. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- The laser will only work between 10-40°C.
- After 3 hours working, you must shut off the laser and let the laser diode cool off for 30 minutes. Otherwise the laser could become damaged and the warranty becomes void.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.



Operating Determinations

- This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.
- The minimum distance between light output and the illuminated surface must be bigger than 1 meter.
- The maximum ambient temperature $t_a = 40^\circ\text{C}$ must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40°C .
- If this device is operated in any other way than the one described in this manual, the product may suffer damages and the warranty becomes void.
- Any other operation may lead to dangers like short-circuit, burns, electric shock, crash, etc.

You endanger your own safety and the safety of others!

Laser Safety For a Class 2 Laser Product

Laser Light is different from any other light source with which you may be familiar with. The light from this product can potentially cause instant eye injury if not set up and used properly. Laser light is thousands of times more concentrated than light from any other kind of light source. This concentration of light power can cause instant eye injuries, primarily by burning the retina (the light sensitive portion at the back of the eye). Even if you cannot feel "heat" from a laser beam, it can still potentially injure or blind you or your audience. Even very small amounts of laser light are potentially hazardous even at long distances. Laser eye injuries can happen quicker than you can blink. It is incorrect to think that because these laser products split the laser into hundreds of beams or the laser beam is scanned out in high speed, that an individual laser beam is safe for eye exposure. This laser product uses dozens of milliwatts of laser power (Class 2 levels internally). Many of the individual beams are potentially hazardous to the eyes.

It is also incorrect to assume that because the laser light is moving, it is safe. This is not true. Nor, do the laser beams always move. Since eye injuries can occur instantly, it is critical to prevent the possibility of any direct eye exposure. According to the laser safety regulation, it is not legal to aim Class 2 lasers in areas which people can get exposed. This is true even if it is aimed below people's faces, such as on a dance floor.

CAUTION! Only Laser Safety Officers who are officially certified by a regulatory body or authorized training organization are allowed to use class 2 lasers in public. The Laser Safety Officer is responsible for all aspects when using this laser, including following all locally applicable safety laws and regulations. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this laser.



CAUTION: AVOID EXPOSURE TO BEAM: Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser radiation.

Compliance Statement

Your Polar Beat laser has been designed to comply with FDA and IEC Standards for its classification. The Polar Beat is a Class 2 laser product.

Laser Safety and Compliance Information

The Polar Beat is manufactured to comply with the IEC 60825-1 and in accordance with U.S. Food and Drug Administration (FDA) Standards Listed under FDA Document 21 CFR 1040 and subsequent laser notices.

Product Classification and Manufacturing Label Identification

Laser Classification	Class 2
Laser medium	wavelength 650 nm / Red (Laser Diode) ; Output >100mW wavelength 532 nm / Green (Laser Diode); Output >30mW
Output	130mW

VIBE FX Polar Beat

The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.

Further guidelines and safety programs for safe use of lasers can be found in the ANSI Z136.1 Standard "For Safe Use of Lasers", available from www.laserinstitute.org. Many local governments, corporations, agencies, military and others, require all lasers to be used under the guidelines of ANSI Z136.1. Laser Display guidance can be obtained via the International Laser Display Association, www.laserist.org.

CAUTION: The use of corrective eye wear or optics for viewing at distances such as telescopes or binoculars within a distance of 100mm may pose an eye hazard.

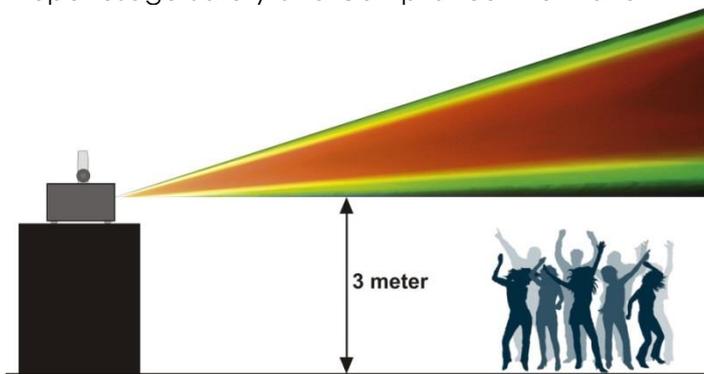


This laser product is a Class 2 laser.



There are no user serviceable parts inside. Tampering or removing warranty seals will void your products limited warranty.

Proper Usage Safety and Compliance Information



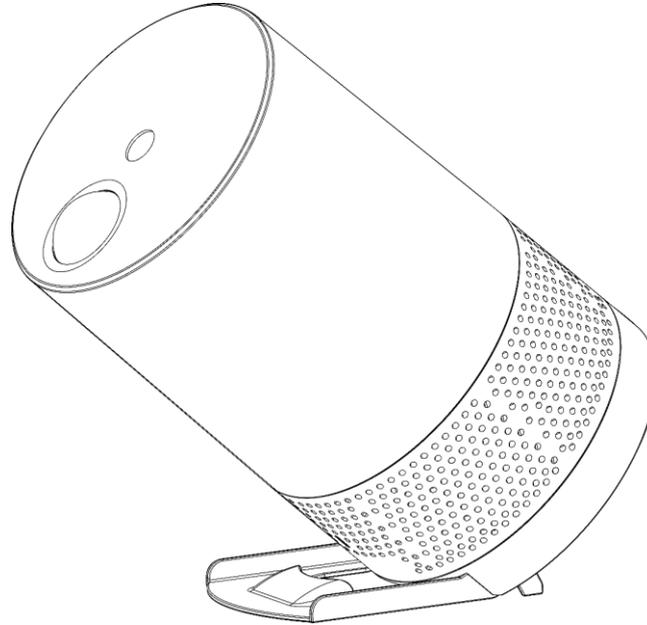
According to FDA Regulations you should operate this product as stated on the left.

Rigging

Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

Do not attempt the installation yourself !

Always let the installation be carried out by an authorized dealer !



The VIBE FX Polar Beat can ONLY be placed on a flat stage floor.

Improper installation can cause serious injuries and/or damage of property!

Connection with the mains

Connect the device to the mains with the power-plug.

Always check if the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	PHASE
N	BLUE	BLACK	SILVER	NEUTRAL
	YELLOW/GREEN	GREEN	GREEN	PROTECTIVE GROUND

Make sure that the device is always properly connected to the earth!

Improper installation can cause serious injuries and/or damage of property!



Return Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail offersales@highlite.nl and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

- 01) Your name
- 02) Your address
- 03) Your phone number
- 04) A brief description of the symptoms

Claims

The client has the obligation to check the delivered goods immediately upon delivery for any shortcomings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to report and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless agreed otherwise in writing.

Complaints against us must be prepared in writing or sent by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement from which the obligation is resulting.

Backside

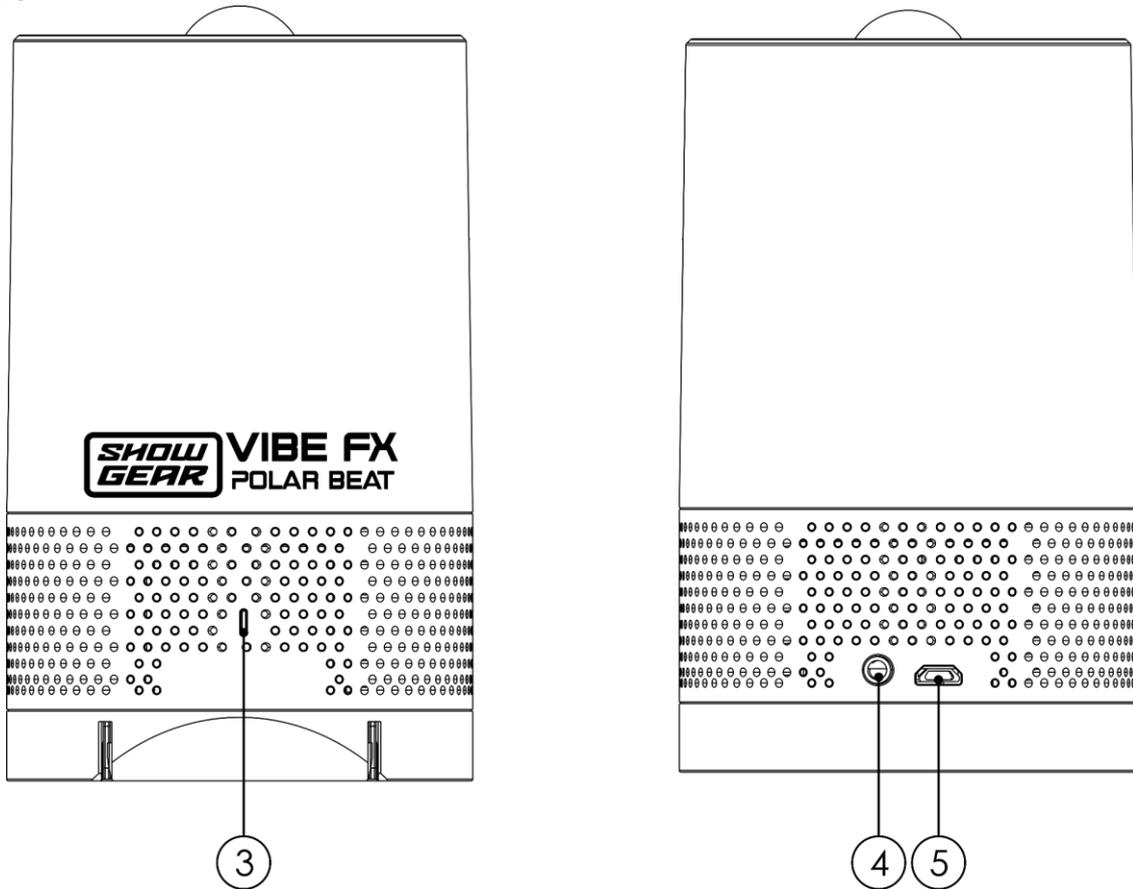


Fig. 02

03) LED indicator

The LED indicator shows the current status of the Polar Beat.

Bluetooth mode:

- When the Polar Beat **is not paired** with an external Bluetooth device, the LED will **flash in blue**.
- When the Polar Beat **is paired** with an external Bluetooth device, the LED will **light in blue**.

Battery charging:

- When the battery is being charged, the LED will **light in red**.
- When the battery is fully charged, the LED will **light in green**.
- When you are using the Polar Beat and, at the same time, you are charging the battery, the LED will **light in purple**.

04) Audio IN

Connect the Polar Beat to a music source (TV, PC, mobile phone, MP3 player, etc.) by means of the included audio cable.

05) Micro USB IN

In order to recharge the battery, connect the Polar Beat to a 5V/1A DC power adapter or to a PC (by means of the included USB cable).

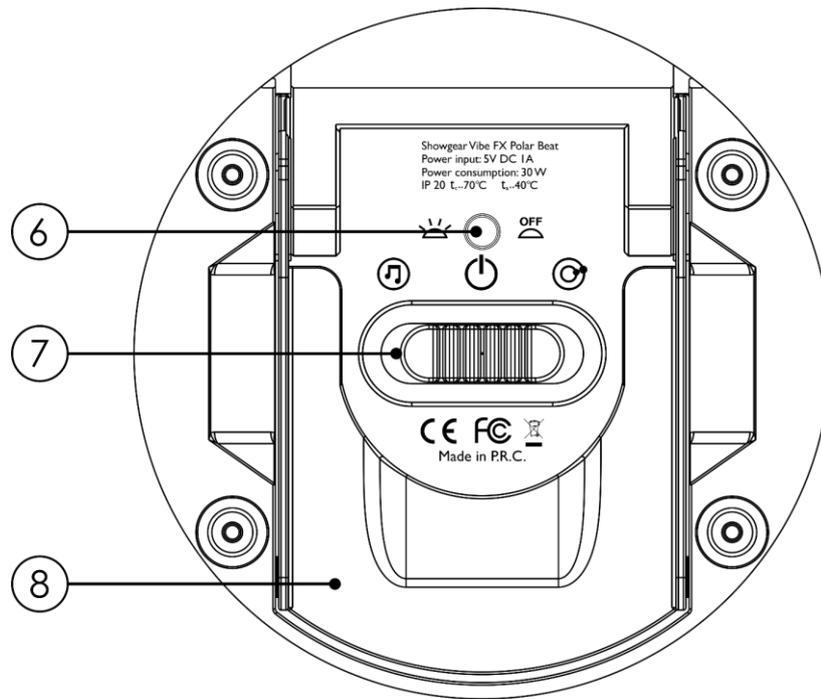


Fig. 03

06) **Effect switch ON/OFF**

While in Auto, Sound-controlled or Bluetooth mode, press the button to switch the effects on/off. Each press of the button corresponds with a different setting. There are 3 settings:

- Laser ON, LED OFF
- Laser OFF, LED OFF
- Laser ON, LED ON

07) **Control mode/power switch**

Move the switch to the **left**, to activate Sound-controlled mode.
 Move the switch to the **right**, to activate Auto mode.
 Move the switch to the **center**, to switch the Polar Beat off.

08) **Bracket**

Installation

Remove all packing materials from the VIBE FX Polar Beat. Check if all foam and plastic padding is removed. Connect all cables.

Do not supply power before the whole system is set up and connected properly.

Always disconnect from electric mains power supply before cleaning or servicing.

Damages caused by non-observance are not subject to warranty.

Set Up and Operation

Follow the directions below, as they pertain to your preferred operation mode.

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

Connect the device to the main power supply.

Exclusion of Liability

Be aware that in some countries, there are additional regulations, regarding the use of laser devices. Therefore, we strongly advise you to verify your national laws with your authorities: We do not take any responsibility for eventual discrepancies, changes or adaptations regarding lawful use of laser devices.

Power ON/OFF

- 01) Move the switch **(07)** to the left/right, to activate the desired control mode. You will hear a sound indicating that the device is on.
- 02) Move the switch **(07)** to the center, to switch the Polar Beat off.

Control Modes

1. Auto Mode

- 01) Move the switch **(07)** to the right, to activate Auto mode.
- 02) The device will now run the built-in laser show.

2. Sound-controlled Mode

- 01) Move the switch **(07)** to the left, to activate Sound-controlled mode.
- 02) The device will now react to the beat of the background music.

3. Bluetooth Mode

While in Auto mode or Sound-controlled mode, using Bluetooth, you can play your own music via the built-in speaker.

- 01) Activate Bluetooth on an external device (e.g. a mobile phone, tablet, etc.) and search for new Bluetooth devices. The Polar Beat's Bluetooth name is **BLP-200S**.
- 02) Pair the Polar Beat with the external device. The LED indicator **(03)** will flash in blue. Once the devices have been successfully paired, the LED will light in blue and you will hear a sound.
- 03) Now, play music by means of your Bluetooth device. It will be audible on the Polar Beat.

Tips For Achieving Maximum Performance

- Keep the distance between the paired Bluetooth devices as short as possible.
- Avoid placing the Bluetooth devices near metal surfaces and obstructions.
- Perform a walk-through before performance or presentation. If dead spots are found, adjust the location of the Bluetooth devices. If dead spots remain, mark the dead spots and avoid them.

Maintenance

The operator has to make sure that safety-related and machine-technical installations are to be inspected by an expert after every year in the course of an acceptance test.

The operator has to make sure that safety-related and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

- 01) All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
- 02) There may not be any deformations on housings, fixations and installation spots.
- 03) Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
- 04) The electric power supply cables must not show any damages or material fatigue.

The VIBE FX Polar Beat requires almost no maintenance. However, you should keep the unit clean.

Otherwise, the fixture's light output will be significantly reduced. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe lens clean with glass cleaner and a soft cloth. Do not use alcohol or solvents.

The front lens will require weekly cleaning, as smoke-fluid tends to build up residues, reducing the light output very quickly.

Please clean internal components once a year with a light brush and vacuum cleaner.

Troubleshooting

This troubleshooting guide is meant to help solve simple problems.

If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

No Light

If the light effect does not operate properly, refer servicing to a technician.

Suspect three potential problem areas as: the power supply, the laser and the LEDs.

01) Power supply. Check if the unit is plugged into an appropriate power supply.

02) The laser. Return the Polar Beat to your Showgear dealer.

03) The LEDs. Return the Polar Beat to your Showgear dealer.

04) If all of the above appears to be O.K., plug the unit in again.

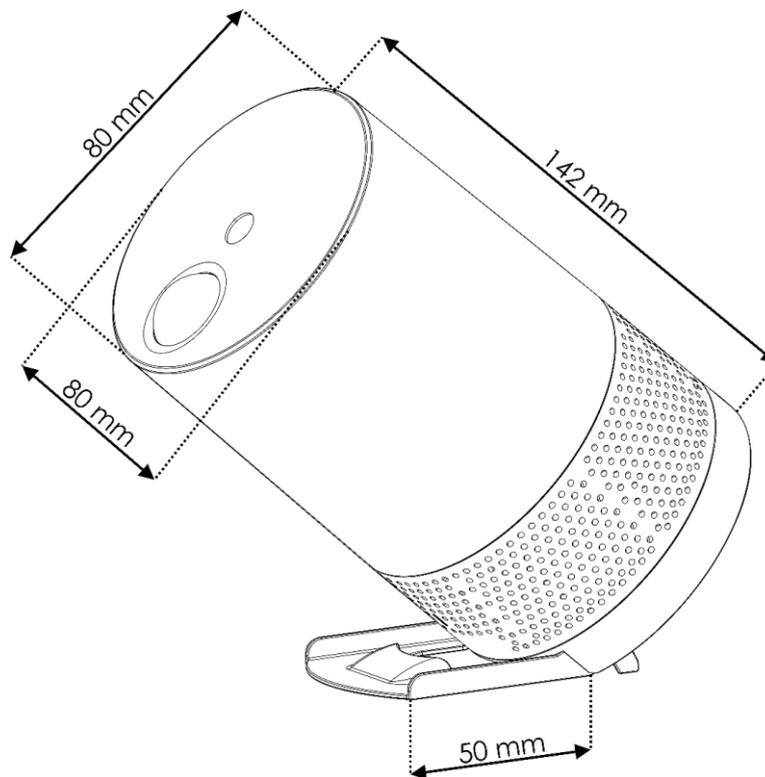
05) If you are unable to determine the cause of the problem, do not open the Polar Beat, as this may damage the unit and the warranty will become void.

06) Return the device to your Showgear dealer.

Problem	Probable cause(s)	Remedy
The fixture does not function at all	No power to the fixture.	<ul style="list-style-type: none"> • Check if power is switched on.
	Internal fuse blown.	<ul style="list-style-type: none"> • Disconnect fixture and return to your dealer.
No light or LEDs/laser cut out intermittently	Fixture is too hot.	<ul style="list-style-type: none"> • Allow fixture to cool. • Turn up the air conditioning .
	LEDs/laser damaged	<ul style="list-style-type: none"> • Disconnect fixture and return to your dealer.
	The power supply settings do not match local voltage and frequency.	<ul style="list-style-type: none"> • Disconnect fixture. Check settings and correct if necessary.

Product Specifications

Model:	Showgear VIBE FX Polar Beat
Power supply:	5V/1A DC power adapter (not included)
Dimensions:	142 x 80 x 80 mm (LxWxH)
Weight:	0,4 kg
Electro-mechanical effects	
Laser class:	2
Light source:	1 x 3W Blue LED
Laser color:	Red, Green
Laser power:	130mW (100mW 650nm Red, 30mW 532nm Green)
Battery:	Rechargeable, 2600mAh/3,7V
Battery life:	3,5 hours
Battery charge time:	3,5 hours
Control modes:	Auto, Sound, Bluetooth
Housing:	Metal & flame-retardant plastic
Connections:	Micro USB IN; 3,5mm jack IN
Laser Safety:	EN/IEC 60825-1 Ed 2, 2007-03
IP rating:	IP-20
Max. ambient temperature t_a :	40°C
Max. housing temperature t_B :	70°C
Minimum distance:	
Minimum distance from flammable surfaces:	0.5 m
Minimum distance to lighted object:	1 m



Design and product specifications are subject to change without prior notice.



Email: service@highlite.nl



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