



ELR

INSTRUCTION MANUAL

CONTENTS

03	<u>Your Valkyrie EIR</u>
03	<u>Intended Use</u>
04	<u>Valkyrie EIR Package Contents</u>
05	<u>Warning and Safety Guidelines</u>
09	<u>Valkyrie EIR & Accessories</u>
11	<u>Directions for Use</u>
12	<u>General Usage Guidelines</u>
12	<u>Recharging Valkyrie EIR</u>
13	<u>Basic Troubleshooting</u>
14	<u>Pad Placement Guidelines</u>
19	<u>Armband Placement Guidelines</u>
23	<u>Valkyrie EIR Maintenance</u>
24	<u>Valkyrie EIR Warranty</u>
25	<u>Technical Specifications</u>
26	<u>Manufacturer & After-sale Services</u>

VALKYRIE EIR DK1

Thank you for purchasing Valkyrie EIR.

Valkyrie EIR uses electrical muscle stimulation (EMS) technology to stimulate your upper arm muscles, triceps and biceps muscles, in virtual reality.

To use your Valkyrie EIR in the most effective and safest way, please read this manual carefully before you start.

Contact Info for Customer Support: support@valkyrie-vr.com

INTENDED USE

Valkyrie EIR is intended for the stimulation of upper arm muscles in order to provide real-time resistive feedback to the triceps and biceps as you're engaging with virtual reality (VR).

Valkyrie EIR is designed to enhance virtual reality (VR) experiences through its patented electrical muscle stimulation (EMS) technology.

In addition, electrical muscle stimulation (EMS) can improve and facilitate muscle performance and tone muscles.

This product is intended for research and development purposes only and is not for end consumers.

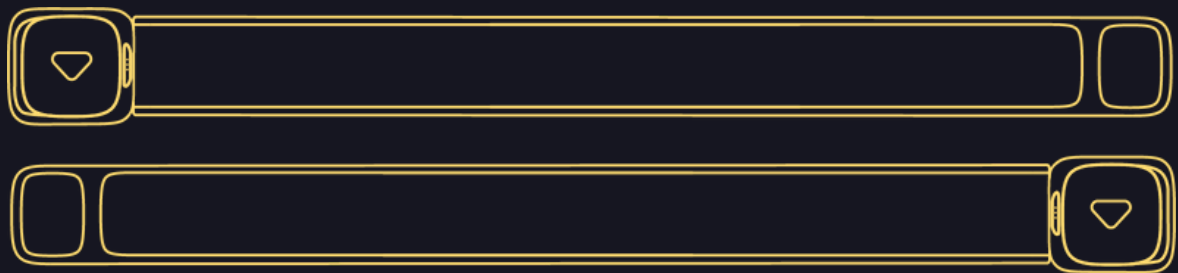
Not for resale.



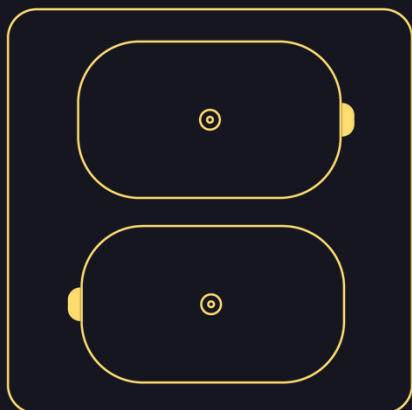
VALKYRIE EIR DK1 PACKAGE CONTENTS

- 2 x Valkyrie EIR Armbands
- 4 x Adhesive Electrode Pads
- 2 x USB Charging Cables
- 1 x Carry Case

2 x



4 x



2 x



1 x



VALKYRIE EIR

Sends electrical impulses, via electrode pads, to your upper arm muscles.

ADHESIVE ELECTRODE PADS

Self-adhesive electrode pads are connected to Valkyrie EIR through magnetic snaps. Always follow the pad placement instructions found in this manual.

CARRY CASE

For storing and carrying your Valkyrie EIR between your sessions.

USB CHARGING CABLES

For charging and recharging Valkyrie EIR.

WARNING AND SAFETY GUIDELINES

COUNTER-INDICATIONS

NEVER use Valkyrie EIR if you have ANY of the following:

- Cardiac Stimulator (Pacemaker). Such use could cause electric shock, burns, electrical interference or death.

- Any heart problem or condition
- Pregnancy

USAGE PRECAUTIONS

CONSULT YOUR DOCTOR before using Valkyrie EIR if you have ANY of the following:

- After trauma or a recent operation (less than 6 months prior).
- Muscle atrophy.
- Persistent pain.

SAFETY MEASURES

- Do not apply stimulation near the area of an implant, pacemakers, electrical or skeletal anchorage implants or any other active implanted or body-worn devices. Such use could cause electric shock, burns, implantable/body-worn device malfunction due to electrical interference or death.



- Do not apply stimulation near metal. Remove any removable metallic product or device in the area of stimulation.
- Do not use Valkyrie EIR in a water or humid atmosphere.
- Do not apply stimulation in the bath or shower.
- Do not use Valkyrie EIR in an oxygen-rich atmosphere.
- Do not connect pads to the other objects.
- Do not connect Valkyrie EIR to other parts of the body.
- Keep Valkyrie EIR and its package content out of reach of children and pets. Do not allow any foreign objects (soil, water, metal, etc.) to get into the device.
- Do not exert yourself when using Valkyrie EIR. Any EMS calibration should be at a level comfortable for you.
- Do not use Valkyrie EIR on children.
- Sudden temperature changes can cause condensation to build up inside the stimulator. Only use the device once it has reached ambient temperature.
- Do not use Valkyrie EIR at altitudes of over 3,000 meters.
- Do not use Valkyrie EIR in areas where unprotected devices are used to emit electromagnetic radiation. Portable communications equipment, RFID and electromagnetic security systems (e.g. metal detectors and EAS) can interfere with Valkyrie EIR and alter the current generated by it.
- Do not use Valkyrie EIR in close proximity to medical



devices such as MRI, CT, diathermy, or X-ray as those could alter the current generated by Valkyrie EIR, cause tissue damage, and can result in severe injury or death.

PAD PLACEMENT PRECAUTIONS

NEVER attach electrode pads near any area of your body, contrary to what is shown in this manual.

PAD USAGE PRECAUTIONS

- Only use electrode pads supplied by Valkyrie Industries Ltd. Other electrodes may cause potential allergic reactions due to poor biocompatibility, or have electrical properties that are unsuitable for the Valkyrie EIR.
- Replacement electrodes can be obtained from Valkyrie Industries Ltd.
- Do not immerse the pads in water.
- Do not apply solvents of any kind to the pads.
- For best results, wash and clean the skin of any oil and dry it before attaching the pads.
- When attaching the pads, please ensure that the entire surface is in contact with the skin.
- For hygienic reasons, each user must have his/her own set of pads. Do not use the same pads on different people.
- Never use adhesive pads that have lost their stickiness, as their bonding power deteriorates over time. Optimal contact is crucial for both user comfort and stimulation efficacy, so it's important to replace the pads when their bonding power diminishes.



- Do not apply electrodes over broken skin, open wounds, bony prominences and eyes.
- Return the electrodes to the release liners when not in use to prevent dry-out.
- The electrode pads are reusable, with a potential for more than 20 uses. The lifespan of adhesive pads may vary based on factors such as individual skin conditions, proper preparation, and storage conditions.
- Store them in a dry place, in protective packaging or in the Valkyrie EIR carry case.

You should stop using Valkyrie EIR and consult with your physician if you experience adverse reactions from the device.

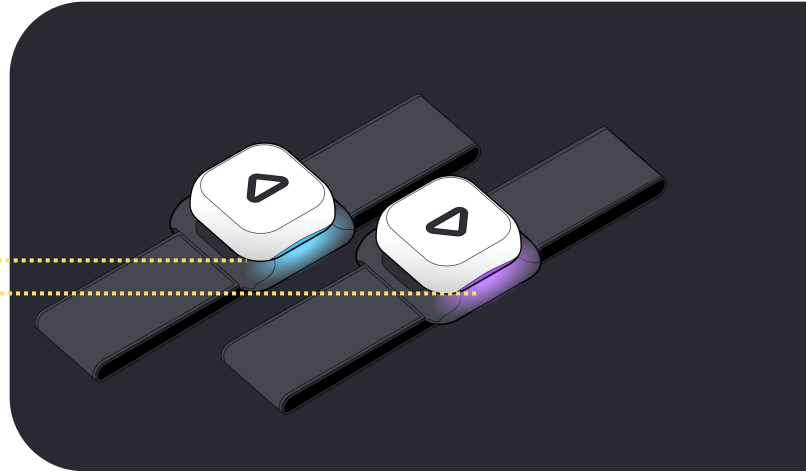
ADVERSE REACTIONS

- Some people with very sensitive skin may experience redness under the pads after the stimulation session. Avoid starting a stimulation session on the same area until the redness is no longer visible. If redness persists, stop using Valkyrie EIR in the area and consult the physician.

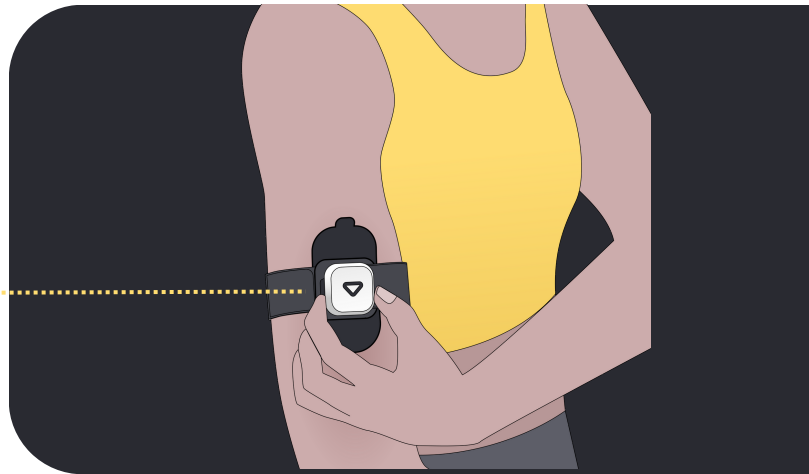


VALKYRIE EIR & ACCESSORIES

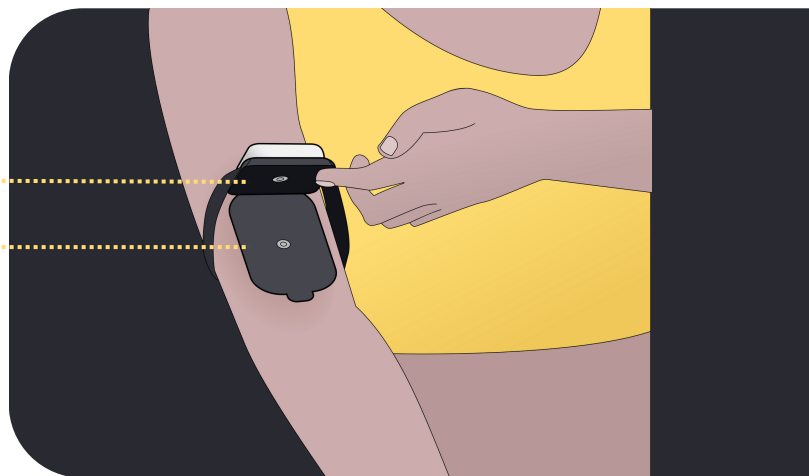
1 POWER/PAIRING/
STIMULATION/
UNPAIRING INDICATORS



2 ON BUTTON



3 MAGNETIC SNAPS
4 ELECTRODE PADS



POWER INDICATORS 1:

Left → Purple & Right → Light Blue (When Valkyrie EIR is on or standby mode)

PAIRING/STIMULATION

INDICATORS 1:

Dark Blue (When it's connected and being used for stimulation)

UNPAIRING INDICATORS 1:

Left → Purple & Right → Light Blue

ON BUTTON 2:

Hold for 1 second. Valkyrie EIR will be ON.

(Left → Purple & Right → Light Blue lights are ON).

Valkyrie EIR is OFF (No lights).

You don't need to take any action to turn it off; it automatically shuts down after unpairing.

MAGNETIC SNAPS 3:

Used to attach and connect to electrode pad connectors.

DO NOT start stimulation without ensuring the connection between the armband magnetic snaps and the electrode pad connectors. Such use could cause electric shock, burn or death.

ELECTRODE PADS 4:

Valkyrie EIR uses four electrode pads. Valkyrie EIR electrode pads use a unique biocompatible hydrogel with superb conductive qualities and adhesiveness. The lifetime of the pads depends a lot on your individual skin properties, level of hairlessness and the quality of the maintenance. On average, each pad lasts around 30 stimulation sessions. After that, the adhesiveness and conductive properties of the pads may start deteriorating.

Store your pads inside the safety film and dry environment. Make sure you attach the pads to clean and dry skin!



DIRECTIONS FOR USE

1. PLACING ELECTRODE PADS

Detach the electrode pads from their safety film and stick them to your biceps and triceps, according to the pad placement visual guidelines found in this user manual.

2. WEARING VALKYRIE EIR

Check the indicators R and L to identify your left and right arms. Wear your armbands and adjust them to fit comfortably on your arms. Make sure that Valkyrie EIR's magnetic snaps attach to electrode pad connectors.

DO NOT start stimulation without ensuring the connection between the armband magnetic snaps and electrode pad connectors. Such use could cause electric shock, burn or death.

Ensure Valkyrie EIR is in the correct position according to the armband placement visual guideline, found in this user manual.

ALWAYS thoroughly inspect the electrode pads and Valkyrie EIR for any signs of damage **BEFORE** every session. Do not use damaged accessories or devices. For your safety, please be sure to replace them immediately.

3. TURNING VALKYRIE EIR ON

To turn on your Valkyrie EIR, click the ON Button for approximately 1 second, until you see the power light turn on (Left → **Purple** & Right → **Light Blue**).

4. CARRYING & STORING VALKYRIE EIR

The Valkyrie EIR carry case is specifically designed for carrying and storing your armbands, cables and electrode pads. To keep electrode pads clean and make them last longer, always re-attach them to the safety film in between uses, then store them in your carrying case pocket.



5. TURNING VALKYRIE EIR OFF

You don't need to take any action to turn it off; it automatically shuts down after unpairing. Valkyrie EIR is OFF (No lights).

GENERAL USAGE GUIDELINES

ALWAYS follow the pad placement and armband placement guidelines found in this manual. The manufacturer disclaims all responsibility for injuries, damages, and other consequences arising from simulations where the pad and armband placement recommendations were ignored.

RE-CHARGING VALKYRIE EIR

Valkyrie EIR can be recharged from any reliable USB connection. It takes around 1 hour for the device to go from zero to full charge.

ALWAYS use the original charging cable provided in your Valkyrie EIR package.

NEVER charge or recharge your Valkyrie EIR from unreliable or problematic sources!

Valkyrie EIR uses a LiPo 350 mAh battery, which requires recharging after approximately 2 hours of continuous use.

When you see the **RED** light, this means your Valkyrie EIR is running out of battery. Once Valkyrie EIR is fully charged, the indicator colour will turn **OSCILLATING YELLOW**.



BASIC TROUBLESHOOTING

DURING THE SETUP, VALKYRIE EIR IS NOT CONNECTED

The unique feature of Valkyrie EIR is that it's controlled and connected through Bluetooth technology. Valkyrie EIR is specifically designed to be used together with compatible VR headsets.

Once the armbands are disconnected, the indicator colours change to PURPLE and LIGHT BLUE. If your VR headset couldn't connect to Valkyrie EIR, please click "Connect" again. You will need to wait for the connection process to finish. You might need to click "Connect" several more times. Make sure that when trying to connect, Valkyrie EIR's indicator colours are purple and light blue. Once the armbands are reconnected, the indicator colours change to dark blue.

If the VR headset continues having trouble connecting to Valkyrie EIR after several attempts, consider restarting the app, turning

OFF/ON Valkyrie EIR or restarting the VR headset.

STIMULATION DOES NOT PRODUCE THE USUAL SENSATION

Check that your electrode pads are firmly attached to your body and are correctly positioned (as advised in this manual). Put the stimulation on pause, re-attach the pads and Valkyrie EIR, and then restart the session.

ELECTRODE PADS DO NOT STICK TO THE BODY, OR THE STIMULATION IS VERY WEAK EVEN ON HIGH INTENSITIES

Replace your electrode pads. Most probably they're worn out.

THE STIMULATION CAUSES DISCOMFORT

If you're using standard intensity modes, then most probably your pads are worn out and/or losing their bonding strength. Pause the stimulation and re-attach your pads firmly, then resume stimulation. If the same sensation continues, stop the stimulation and replace your pads.



PAD PLACEMENT GUIDELINES

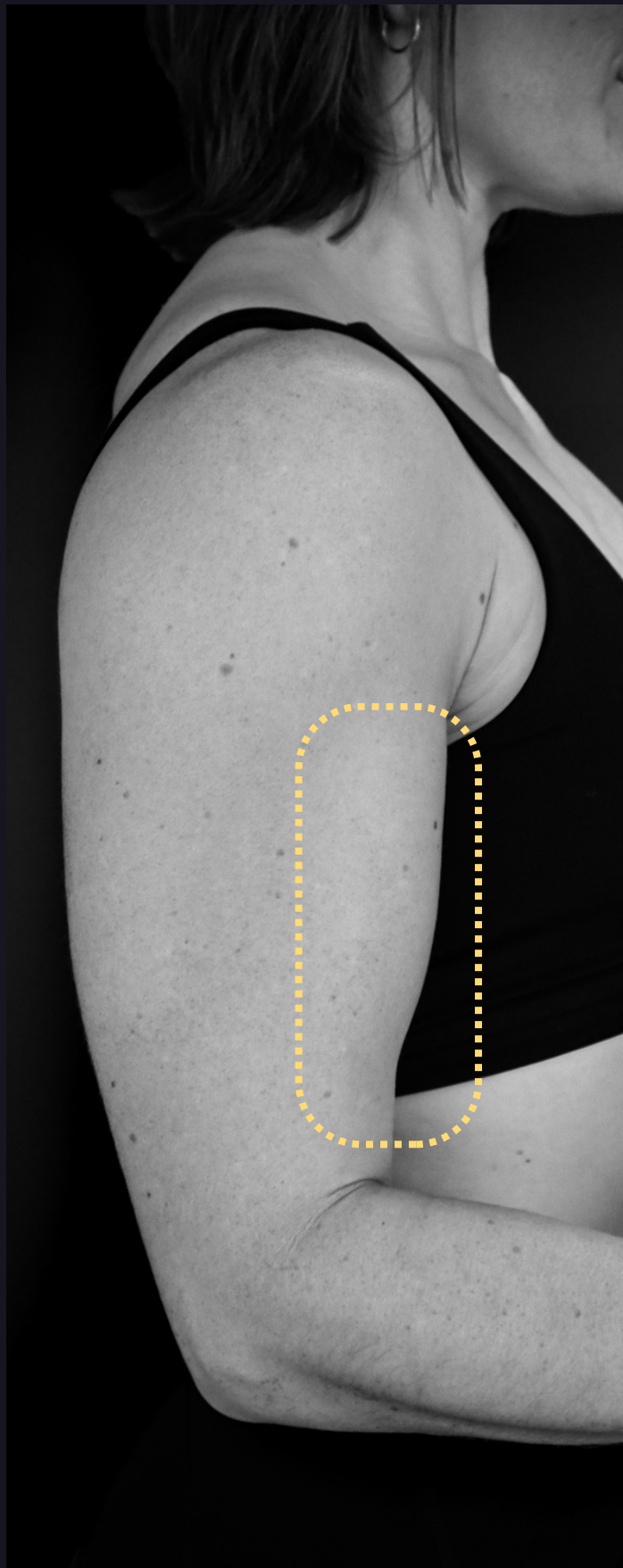
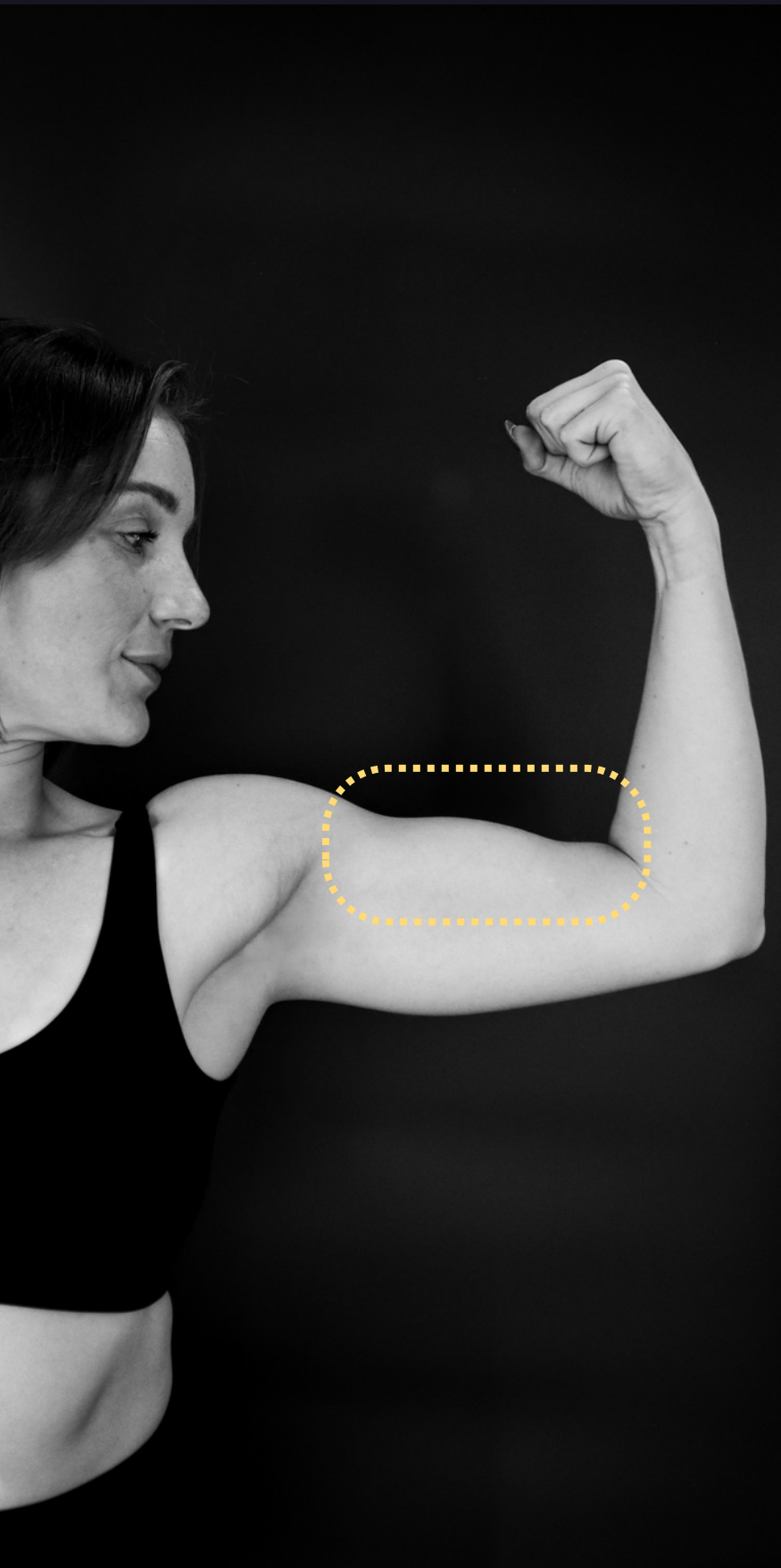
To maximise stimulation effectiveness and safety, please **STRICTLY** follow the following visual pad placement instructions.

NEVER attach electrode pads near any area of your body, contrary to what is shown in the photos.

Do not apply electrodes over broken skin, open wounds, bony prominences, and eyes.



1. Contract your muscles and locate your biceps, as demonstrated in the photos.



BICEPS

2. Place gel pads on both biceps, in a linear array covering muscles.



BICEPS

3. Contract your muscles and locate your triceps, as demonstrated in the photos.



TRICEPS

4. Place gel pads on both triceps, in a linear array covering muscles.



TRICEPS

VALKYRIE EIR PLACEMENT GUIDELINES

To maximise your stimulation effectiveness and safety, please **STRICTLY** follow the following visual Valkyrie EIR placement instructions.

Wear your armbands and adjust them to fit comfortably on your arms. Please check the indicators R and L to identify your left and right arms.



Valkyrie EIR's magnetic snaps will find the connection easily.



Ensure Valkyrie EIR is in the correct position as shown in the photos.



Ensure Valkyrie EIR is in the correct position as shown in the photos.



VALKYRIE EIR MAINTENANCE

Valkyrie EIR, together with its package content, should be kept in the Valkyrie EIR carry case and carefully stored on a secure surface and protected from conditions listed in the Warnings above.

- Keep replacing your electrode pads after 25-30 uses as recommended. Deteriorated and worn-out pads can cause major discomfort during stimulation, affect the effectiveness of the stimulation, and even lead to minor injury.
- Cleaning: Only clean your Valkyrie EIR hub using a dry soft cloth.
- Keep Valkyrie EIR and electrode pads away from water. Store them in a dry place, in protective packaging or in the Valkyrie EIR carry case.
- The manufacturer states that Valkyrie EIR cannot be repaired by personnel external to the company. Any work of this nature carried out by personnel not authorised by the manufacturer will be classified as tampering with the unit, releasing the manufacturer from any responsibility with regard to the warranty and hazards that the operator or user may be exposed to.



VALKYRIE EIR WARRANTY

Legal rights are not affected by this warranty.

Valkyrie EIR is covered by a limited warranty of one year, which comes into effect on the date of purchase of the device (proof of purchase is required).

The warranty does not apply to the electrode pads and carry cases.

Within the warranty period, the manufacturer will replace your faulty Valkyrie EIR at no charge (except shipping and handling fees in some cases), provided that the product:

- Has been used for the intended purpose and in the manner described in this manual.
- Has not been subjected to misuse or neglect.
- Has not been modified or repaired.
- Has not been damaged further by shock.



TECHNICAL SPECIFICATIONS

Battery	LiPo 350mAh
Charging Input	USB-Type C
Stimulation Channels	One Per Device
Stimulation Waveforms	Biphasic Pulsed
Supported Stimulation Frequency Range	1 Hz to 255 Hz
Supported Stimulation Pulse Width	1Us to 255 Us
Maximum Output Voltage/Amperage	100V Peak-to-peak
Bluetooth	LE
Compatibility	All Meta Quest Headsets
Device Dimensions	42 cm L x 4 cm H (Completely open & laid flat)
Device Weight	85 grams (Weight of 2 armbands)
Maximum Arm Size	15 cm (Diameter)
Minimum Arm Size	6 cm (Diameter)



MANUFACTURER & AFTER-SALE SERVICE

MANUFACTURER

Valkyrie Industries Ltd.
Red Lion Ct, Park St,
London SE1 9EQ
United Kingdom

STRAP MANUFACTURER

Valkyrie Industries Ltd.
Red Lion Ct, Park St,
London SE1 9EQ
United Kingdom

ELECTRODE PADS

MANUFACTURER

ZMI Electronics Ltd.
6F-1, No: 286-4, Shin Ya Road,
Chien Chen District,
Kaohsiung, Taiwan, R.O.C.

AFTER-SALE SERVICE

support@valkyrie-vr.com



