



LEGEND<sup>®</sup> ROTARY

# HERO

## TATTOO PEN



2022

### **USER MANUAL**

For customer support: (951) 260-0000

## **Notice**

These operating instructions in this user manual are created and applied to the Hero Tattoo Pen Machine, developed by Legend Rotary. This manual contains important information regarding how to operate and maintain these products safely and in the intended manner. These operating instructions in the entirety of this user manual do not contain all of the information needed for safe operation of the Hero Tattoo Pen and its accessories. Additional information, instructions, and manuals may be needed in regards to the operating instructions for an external power unit, battery pack (if applicable), a foot switch (if applicable); information about safety cartridge needles and tattoo inks; as well as the health and safety information and provisions relating to tattooing.

General safety information:

- Read these operating instructions carefully and completely.
- Keep these operating instructions in an accessible location for persons who uses, cleans, disinfects, stores, and/or transports this machine.
- When handing the Hero Tattoo Pen on to another individual for use, always enclose these operating instructions and user manual.
- Follow the safety regulations and industry standards applicable to tattooing in your state and/or country.
- Federal law restricts this device to be used by or on the order of qualified practitioners of tattoo as determined by the states.
- Keep your tattoo studio and tattoo workstation in a hygienic, clean condition and provide sufficient lighting.
- Use the Hero Tattoo Pen, its accessories, and the power unit/battery pack as well as all connecting cables in perfect technical condition.
- Only use genuine, professional quality grade cartridges, accessories, and spare parts from Legend Rotary or partnered manufactures.

This machine is not to be operated by individuals with reduced physical, sensory or mental capabilities or lack of experience and knowledge in the skill, craft, or practice.

## **Intended Use**

The Legend Hero Pen is a professional tattooing machine for the application of tattoos to the human skin in dry, clean, and smoke-free environments, and under hygienic conditions. It must be prepared, used, and maintained in the proper manner as described in these operating instructions and manual.

## **Machine Protection Barrier**

It is strongly advised and recommended to use a barrier, wrap, or grip tape for this product to protect your machine from foreign substances that might be harmful to the machine and its user.

## **Machine Overview**

The Hero Pen is the next generation of tattoo pens developed by Legend Rotary. Compatible with most power supplies and battery packs on the market, the Hero Pen offers convenience and ease to the user. The Hero Pen is constructed to be an all-in-one solution for artists' needs, being great for lining, shading, and color packing. Embodying the idea that a premium machine shouldn't break the bank, the Hero Pen is crafted with high grade aircraft aluminum and features a powerful motor with a speed of 13000 RPM. Thoroughly designed to offer the most optimal torque, RPM, and voltage, coupled with a 4.0mm stroke, the Hero Pen delivers the biggest punch in the most minimal and sleek design possible.

## **Specifications**

The Legend Hero Pen is a high performance device and is much quieter and vibrates less than conventional tattooing machines. It has powerful skin piercing power and frequency.

Some special features of the Hero Pen include:

- Lower vibration and volume than comparable machines
- Stroke from 4.0mm
- Compatible with most standard membrane cartridge tattoo needles
- Ideal for lining, color packing, and solid color pieces
- Precise and responsive piercing to reduce skin trauma
- Centered balance to allow for easily resting when handling

## **Technical Info**

|                       |                                |
|-----------------------|--------------------------------|
| Operating voltage     | 3 - 12 V DC                    |
| Optimal voltage       | 7 - 10 V                       |
| Stitch frequency      | 50 - 160 Hz                    |
| Stroke                | 4.0 mm                         |
| Connection            | 3.5 mm RCA connection          |
| Drive                 | Coreless Motor - DC            |
| Speed                 | 13000 RPM                      |
| Operating mode        | Continuous operation           |
| Machine body diameter | 32 mm (1.25")                  |
| Grip size             | 28 mm (1.1"), 32 mm (Max grip) |
| Overall length        | 104 mm (4.09")                 |
| Weight                | ~175 g (6.15 oz)               |

# THE HERO

## UNLEASH YOUR POTENTIAL



Powerful coreless motor system designed to meet your tattooing needs.



Twin O-rings for extra stability and handling control.



Built in adjustable needle depth system.



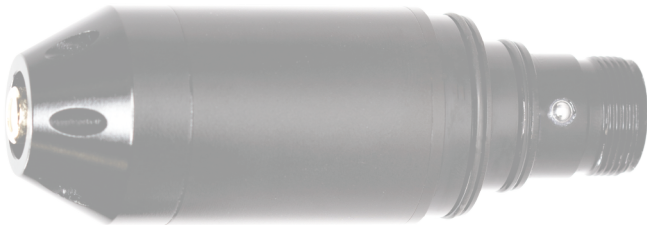
Ergonomic grip design for precise handling.

Optional MAX grip for a thicker feel and control.



## **Grip Design**

Constructed from aircraft grade aluminum, the Hero Pen grip features a similar design to the original Legend Mini Pen. With the tapered look, the standard grip is a 32mm grip that extends and tapers off into a 28mm (~1 inch) grip. Allowing artists the full control necessary to create their masterpieces, the Hero Pen offers an standard ergonomic grip design. Built to be compatible with most membrane cartridge needles on the market, this pen is an all-in-one powerhouse. The matte finished, anodized grip is safe to be sterilized under steam or spray.



## **Adjustable Features**

Turning the grip in either the direction or opposite the direction of the arrow allows for the artist to adjust the length of the needle. With precision in mind, the Hero Tattoo Pen is designed as an extremely user-friendly, efficient tattoo machine. With a dual metal bead system, this pen offers quick and easy adjustability at the turn of your finger tips.



## RCA Connection

The Hero Tattoo Pen features a connecting terminal that is compatible with most RCA cables and RCA connection type battery packs on the market. For consistent connection and machine longevity, use a premium, high quality RCA cable or a RCA cable manufactured strictly by Legend Rotary.

Industry standard RCA connector design



## How to Properly Connect the Hero

To properly connect your Hero Tattoo Pen to a power supply or battery pack, follow the directions below:

- Insert the RCA into the back of the Hero Tattoo Pen Motor and connect to a professional grade power unit or battery pack.
- Notice that most tattoo power supplies will take 1/4" mono jacks. However, if your power supply uses a 1/8" or a 3.5mm jack (similar to a headphone jack), you will need to use a reduction from 1/4" female to 3.5mm jack or use a cable that goes from a male RCA to a 3.5mm male jack. In such cases, an adapter may be appropriate.
- Follow the direct specifications and instructions by properly inserting the RCA connecting cable or RCA battery pack fully into the machine. Improper insertion could result in shortages or restrictions in power output.



Improper connection



Proper connection



Improper connection



Proper connection

## **Needle Depth Adjustment**

The Hero Tattoo Pen's grip is capable of adjusting the needle depth. To adjust, hold the machine body and motor housing while turning either clockwise or counter-clockwise the grip. A clockwise turn will increase the depth of the needle, while a counter-clockwise turn will decrease the depth. Each time you turn the grip, you may feel the tactile feedback of the ratchet mechanism which is also the metal beads. Each click or turn dial will increase or decrease the needle by 0.25mm and allow you to precisely set your needle depth accordingly and to your specifications for tattooing.

At locked capacity, the needle will not display, which means it is at resting position.

Turning the grip clockwise will allow the needle to become visible. Adjust to the desired preference.



## **Cartridge Insertion**

The Hero Tattoo Pen is designed to be compatible with most cartridge needles that feature a membrane rebound system. To properly use cartridge needles, insert the needle into the grip, press tightly, and while pressing, turn the cartridge clockwise to lock the cartridge needle in place for stability. Improper locking may result in the cartridge needle being loose and possibly fly out.





## **Voltage Restrictions**

While voltage is a guideline that will vary between artists, this machine is designed to be tested and operated at a minimum voltage of around 3 Voltz. The maximum capacity for which the Hero Tattoo Pen can operate is 12 Voltz. Dependant on the type of power unit or battery pack as well as the needle configuration and brand of cartridge needles you use, you may choose to adjust the voltage parameters accordingly to obtain the desired performance for your tattoo. However, improper usage and settings of voltage outside of the voltage parameters operable for this machine may cause unnecessary damage. Exceeding the recommended voltage for this machine, which is 7 to 10 Voltz is not recommended.

## **Cartridge Needles**

It is advised the use specific cartridge needles that have an internal membrane as a rebound system, instead of other cartridges in the market such as ones with a rubber band rebound system. By using the correct cartridges, this will avoid accidental contamination and possible ink spitback into the machine, causing damage. Fluids such as water, tattoo ink, oils, processing ointments, and etc. will void any warranty or possibility to having the machine repaired or replaced.

## **Maintenance and Tips**

- The Hero Tattoo Pen is properly and pre-lubricated from the manufacturer. This does not require internal or additional lubrication.
- It is advised to prevent to the best of your ability any foreign, external elements or substances from enter the inside of the machine as they will disrupt the motor and motion of the machine and possibly contaminate the lubricant of the machine.
- The grip of the machine is capable of sterilization. Use only steam at specific temperatures no higher than 250 degrees Fahrenheit or 125 degrees Celsius.
- The machine body and motor can be sterilized from the outside using a cold sterilization, spray, or wipe.
- Never attempt to open the machine body to access the motor as this will damage the full performance of the machine and structure.
- Never spray the surface directly to prevent any fluids from entering the core of the machine. Only spray on a towel or paper cloth, then wipe the outer body as desired.
- The machine should never be disassembled for repair. For any disassembling or repairs, please contact Legend Rotary directly.
- Any missing components or additional parts needed for repairs must be addressed to Legend Rotary's maintenance and machine support team.
- Always proper handle, secure, and store your machine. Store your machine in a room temperature, dry environment to prevent any humidity or liquids from entering the machine.
- Dropping the machine may result in damage to the magnets, beads, grips, machine body, motor, etc.
- Use only cartridges with membranes
- Use premium, professional grade cartridges, power units, batteries, and supplies while operating this machine.
- Do not lubricate this machine unless instructed.