



APOLLO

Cartridge Machine

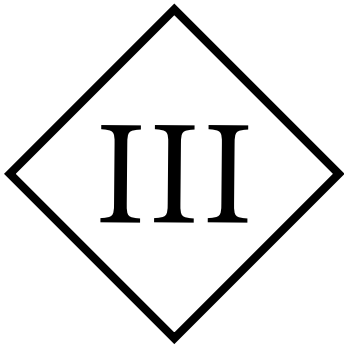
USER MANUAL



2019

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SAFETY NOTICE

**CLASS III SYMBOL**

A Class III appliance is designed to be powered by a separated/safety extra-low voltage (SELV) power source. The voltage from a SELV supply is low enough that under normal conditions, a person can safely come into contact with it without risk of electrical shock. The extra safety features built into Class I and Class II appliances are therefore not required. For medical devices, compliance with Class III is not considered sufficient protection. Therefore, more stringent regulations apply to such equipment.

TECHNICAL DATA

Operating Voltage:	4-9.5 V DC
Current:	.3 A
Stitch Frequency:	25 - 160 Hz
Stroke:	2.3 mm
Connection:	AIR Mini DC cable
Drive:	Brush DC motor & drive
Operating Mode:	Continuous operation
Ambient Temperature:	+10 - +35 °C / 50 - 95°F
Relative Humidity:	30 to 75%
Dimensions (Ø X L):	24 x 117 mm
Weight:	Approx. 3.7oz / 106g

**BARRIER PROTECTING YOUR MACHINE**

Although the grip is autoclavable, we strongly suggest the use of barrier products to protect your machine. For a visual demonstration of various barrier protection methods, please visit our YouTube channel at [YouTube.com/fkiron](https://www.youtube.com/fkiron).

"This machine is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge"

MACHINE OVERVIEW



THE APOLLO

Changing SMP
Forever

The first pen style machine providing artists full control of parameters that unleash their creative vision. Compatible with most power supplies on the market, the Bellar is a tool solution for all your Micropigmentation (MP) needs.



THE GRIP



Apollo Grip



Autoclavable Ergonomic Grip design



Compatible with most membrane needle cartridges on the market

THE GRIP

The Apollo offers artists an ergonomic grip design and never-before-seen full machine control. The standard grip tapers from 24mm to

21mm. Other grip options may be available. The Grip is crafted from a solid rod of 6061 T6 aircraft-grade aluminum. This polished and anodized grip is

steam sterilization safe, cold sanitation solutions safe and autoclave safe.

THE BODY



Apollo Body



THE BODY

The Body is the core of the machine that houses all the machine components. Constructed from a solid rod of 6061 T6 aircraft- grade aluminum, this module **should be sanitized** by wiping it with cold sterilization solutions only. **Caution: Do not introduce any types of liquid inside the system.**



Body isometric view



Body posterior view

CONNECTING YOUR MACHINE




1 Plug the AIR mini DC cord into the Xion DC connector



 Best connection



 Improper connection

HOW TO
CONNECT
YOUR
MACHINE

Insert the AIR mini DC (xxmm x 1.7mm) into the back of the MotorBolt and connect to a Power Supply. The RCA connector jack is concealed by the MotorBolt housing.

Only use AIR mini DC cord provided with the machine and sold by any of our companies. (Microbeau, DarkLab, FK Irons)

ADJUSTING NEEDLE DEPTH

ADJUSTING
NEEDLE
DEPTH

To adjust needle depth, hold the machine body and MotorBolt while turning the Grip. *A counterclockwise turn decreases depth, while a clockwise turn increases depth (also known as needle hang).*

Each time you turn the grip it allows you to set your needle precisely without involuntarily turning while tattooing.



ADDITIONAL INFORMATION

VOLTAGE PARAMETERS

While voltage is a parameter that will vary from artist to artist, this machine has been tested to operate at a minimum voltage of around 4 Volts with a maximum voltage of 9.5 Volts.

Depending on the type of needle configuration or brand you use, feel free to adjust the voltage to obtain the desired performance.

Note: Exceeding 9.5 Volts is not recommended.

ACCEPTED NEEDLES

Use cartridge needles with internal membrane. This will avoid accidental contamination inside your machine. Fluids such as ink, water or oil inside the machine will void warranty of the device, and may require replacement of internal parts.

MAINTENANCE

- Apollo is sold pre-lubricated from the factory and does not require internal lubrication.
- Prevent any type of external elements from entering inside the machine as they will disrupt the motion of the component and contaminate lubrication.
- The grip of the machine is autoclavable. Use only steam autoclaves at temperatures no higher than 270° Fahrenheit or 132.222° Celsius. Add a hint of ointment or PTFE grease around internal opening of grip or on stabilizing friction O-rings for optimal functionality after autoclaving. Refer to page 5 for additional information.
- Machine Body and MotorBolt can be sanitized from the outside with cold sterilization products.
- Never spray the surface directly to prevent fluids from entering the machine. Always use pads or disposable paper towels to apply sterilization products.

WARRANTY

- All the housing components (Grip, Machine Body and MotorHousing) are covered by a lifetime warranty.
- Internal parts are subject to wear and the motor itself will be covered by a 1-year warranty from the date of purchase.
- Motor warranty is void if motor shows signs of being dropped, internal fluids enter the motor and/or motor shows signs of being tampered with in any way.

ADDITIONAL INFORMATION

HANDY TIPS

The following tips will help you get the most out of your Apollo and avoid potential issues:

- Always secure your machine. Dropping the machine can cause damage to the magnets, bearings and motor brushes.
- Use only cartridges with membranes to avoid contamination.
- Do not exceed the suggested voltage.
- Always use power supplies with at least 1Amp of current supply.
- Rinse your needle frequently to avoid pigment drying up and slowing down your cartridges.
- When rinsing your needle, ensure to dip only the tip of the cartridge to avoid fluids back flow.
- Inspect your needles prior to use.
- Use only quality cables. A good connection will ensure consistent performance.
- Avoid scratching the surface of the embodiments.
- Use only FDA-approved cold sterilization solutions for disinfection.
- Do not lubricate machine unless instructed otherwise.
- Store your machine in a secure place.

TROUBLESHOOTING

1.- Machine manufacturer

FK Irons: 1771 NW 79th Avenue, Doral, Florida 33126

2.- Servicing your machine

Just like any mechanical device subject to use, FK Irons strongly suggests that you service your product at least once a year to ensure that a proper diagnosis of all working parts is conducted. This ensures the optimal condition of all working parts including internal machine clean up and fresh lubrication. Routine servicing will ensure that your machine remains functioning like the very first day. Service is subject to fees.

3.- Warning

Disconnect machine from any power before making any adjustments.

For service inquiries, please contact service@fkirons.com.

For additional tips and tutorials, please visit [Youtube.com/fkirons](https://www.youtube.com/fkirons)