INKCLAW

3.0 Compact Series

Wireless Tattoo Battery Grip

One-Handed Tattoo Battery Control

3.0 DL-T | 3.0 DL-L | 3.0 OR

USER MANUAL

PRODUCT OVERVIEW

Inkclaw 3.0 Compact Wireless Tattoo Battery Grip is designed for use with tattoo needle cartridges and is compatible with most rotary, direct-drive, and spring-type tattoo machines. It delivers an output of 2.0–15.0 V, adjustable in 0.1 V steps. You can set upper and lower voltage limits to suit your machine and save two voltage presets for quick recall during tattooing.

Inkclaw redesigned the Wireless Tattoo Battery Grip based on feedback from professional tattoo artists.

The 3.0 Compact Series includes three models that differ mainly in how you adjust needle protrusion (needlehang)**:DL-T**, **DL-L**, and **OR**.

DL-T — Direction-Locked Thread Adjustment

The needle cartridge remains facing forward. Adjust needle protrusion by moving the needle-locking mechanism in or out using the threaded adjuster.

DL-L — Direction-Locked Lift Adjustment

The needle cartridge remains facing forward. Adjust needle protrusion by raising or lowering the grip body.

OR — Rotating Grip

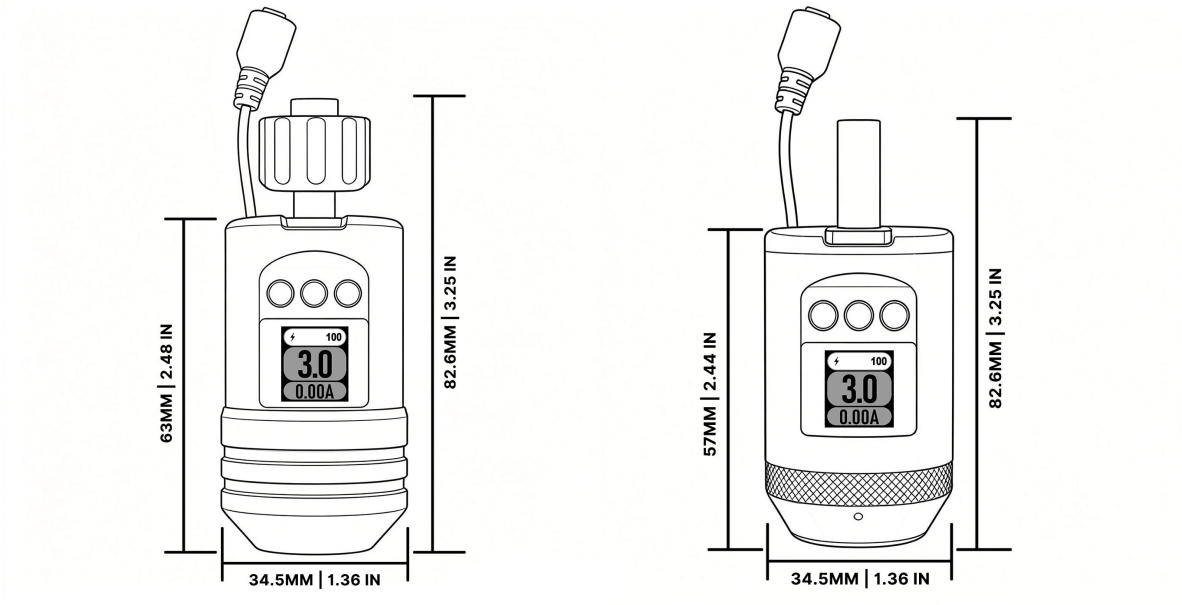
The needle cartridge rotates with the grip. The needle-locking mechanism is integrated into the grip body, so turning the grip adjusts needle protrusion.



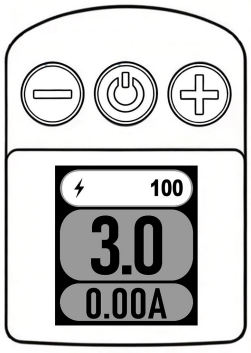
1. Magnetic Connection Cable
2. Battery Body
3. Display
4. Grip
5. Backstem Tube
6. Type-C Charging Dock
7. Backstem Locking Hole

SPECIFICATIONS

Item	Specification
Output Voltage	2 – 15 V, adjustable in 0.1 V steps
Charging Input	USB Type-C: 5 V, 0.8 A
Maximum Output Current	1 A (3 A momentary)
Battery Capacity and Runtime	1,200 mAh; 2–5 hours per battery, depending on operating conditions (**coil machines** excluded)
Cartridge Compatibility	Universal-style tattoo needle cartridges
Size | Weight	W 34.5 mm × L 65 mm Approx. 110 g (3.9 oz)
Material	6061-T6 aluminum alloy
Connection Options	RCA, clip cord, 3.5 mm jack (Cheyenne)
Backstem Options	39 mm straight tube; M16 × 1.0 threaded tube (Cheyenne)



FEATURES



1. Controls & Layout

- Front-facing display
- Left button (–): Decrease voltage
- Right button (+): Increase voltage
- Center button (Power): Turn the device on or off; start or pause operation

1.1 Button Operation

- Press and hold the Power button for 3 seconds to turn the device on or off.
- Press – or + once to adjust the voltage in 0.1 V steps. Hold either button to adjust it quickly.
- Press and hold – and + together to enter or exit the menu.
- Press and hold – and Power together to recall Preset 1.
- Press and hold + and Power together to recall Preset 2.

1.2 Display States:

- Paused: The voltage appears in white.
- Running: The voltage appears in black.

2. Menu

- **DISPLAY**: **AMP** shows the current drawn by the motor. **Time** shows the elapsed time.
- **JMP START**: Jump Start applies 8 V for 0.3 seconds, then returns to the set voltage. A red lightning bolt appears on the main screen when Jump Start is active. Jump Start does not engage if the preset voltage is above 8 V. Avoid using this feature with coil machines.
- **TIMER RST**: Open the submenu and select “Yes” to reset the timer.
- **VOLT LIMIT**: You can set the lower and upper voltage limits (default: 2–15 V) to suit your equipment. You can recall a preset outside these limits. If you then adjust the voltage, it returns to the set range.
  Warning: Check your machine’s voltage requirements before use. Never exceed its maximum rated voltage. The device will not start below the lower limit.
- **PRESET**: Press the **Power** button once to open the Preset submenu. Select **Preset 1** or **Preset 2** and press Power again. Adjust the voltage when the digits turn yellow. Confirm the setting to return to the main menu. Reopen the submenu to set the other preset. To recall Preset 1, press and hold **–** and **Power** together. To recall Preset 2, press and hold **+** and **Power** together.

2.1 Menu Navigation & Controls

- **Enter or Exit the Menu:** Press and hold **–** and **+** together to open the main menu. Repeat at any time to exit.
- **Navigate:** Press **–** for the previous option or + for the next option.
- **Confirm:** Press the **Power** button once to confirm a selection.
- **Auto-Return:** After you confirm a setting, the device returns to the main menu.

3. Timer Function

- Turning off the device does not reset the timer.

4. Screen Dimming

- The screen dims automatically after 30 seconds of inactivity.

5. Standby Mode

- The device enters standby mode after 5 minutes of inactivity.
- Press the Power button once to return to the previous state.

6. Auto Shutdown

- The device turns off automatically after 15 minutes of inactivity.

ADJUSTING NEEDLE PROTRUSION

DL-T — Direction-Locked Thread Adjustment

The needle cartridge remains facing forward. Adjust needle protrusion by moving the needle-locking mechanism in or out using the threaded adjuster.

Hold the grip body securely. Turn the adjuster to change needle protrusion:

- **Needle Protrusion Adjustment**
  - **Clockwise:** Retracts the needle-locking mechanism to **increase** needle protrusion.

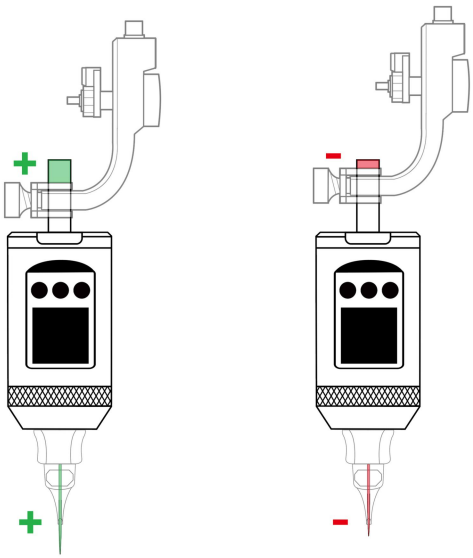
  - **Counterclockwise:** Extends the needle-locking mechanism to **decrease** needle protrusion.
- **Adjustment Range (From Flush Position):**
  When the needle-locking mechanism is flush with the **grip opening**:
  - **Inward (Clockwise):** Retracts up to **1 mm**. Change in needle protrusion: up to **+1 mm**.
  - **Outward (Counterclockwise):** Extends up to **3 mm**. Change in needle protrusion: down to **−3 mm**.



DL-L — Direction-Locked Lift Adjustment

The needle cartridge remains facing forward. Adjust needle protrusion by raising or lowering the grip body.

- **Needle Protrusion Adjustment**
  On this model, turning the grip does not adjust needle protrusion. Use either of the following methods:
  - **Grip Positioning:** Mount the grip **closer to the machine body** to increase needle protrusion, or **farther from the machine body** to decrease it.
  - **Plunger Bar Selection:** Install a shorter or longer **plunger bar** to set the desired needle protrusion.



OR — Rotating Grip

The needle cartridge rotates with the grip. The needle-locking mechanism is integrated into the grip body, so turning the grip adjusts needle protrusion.

- **Needle Protrusion Adjustment**
  - **Clockwise:** Retracts the needle-locking mechanism to **increase** needle protrusion.
  - **Counterclockwise:** Extends the needle-locking mechanism to **decrease** needle protrusion.



Installing and Removing the Backstem

Inkclaw offers two types of backstem kits: a **straight tube** for most tattoo machines that accept user-installed plunger bars, and a **threaded sleeve** with an M16 × 1.0 connector for machines with connection systems like those used by Cheyenne or Inkjecta.

An M2.5 hex socket set screw in the side of the grip secures the backstem tube. Use a 1.5 mm hex key (Allen wrench) to tighten the screw clockwise or loosen it counterclockwise. **Note:** You do not need to remove the screw completely to detach the backstem tube.

Cleaning, Disinfection, and Sterilization

⚠ **WARNING**:

Do NOT autoclave the electronic battery unit. Only detachable metal components explicitly rated as autoclavable may be steam sterilized.

• Keep liquids out of the device. Do not immerse it or use dripping wipes. Liquid entering seams or ports can cause a short circuit and permanent damage.

• High-level disinfection does not reliably eliminate all bacterial spores. Always use disposable barrier film during tattooing.

Required Supplies:

Hospital-grade disinfectant wipes or solution, cotton swabs, 70% isopropyl alcohol (IPA) wipes, disposable gloves, storage pouches, and an approved sharps container.

Step-by-Step Procedure:

1. Preclean and Disassemble (Contaminated Zone)

• Turn off the device. Wearing gloves, remove all contaminated barriers and immediately discard used needle cartridges in an approved sharps container.

• Put on fresh gloves. Detach any removable metal grip tips or inner tubes from the battery unit.

2. Disinfect External Surfaces

• Wipe all external surfaces, including buttons, seams, the display, and connectors, with a hospital-grade disinfectant wipe. Keep the surfaces visibly wet for the full contact time specified on the disinfectant label.

3. Clean and Disinfect the Inner Tube

• Wipe the inside of the tube with a cotton swab moistened with disinfectant. Pull a fresh disinfectant wipe through the tube until no residue remains. Follow the contact time on the disinfectant label.

4. Steam Sterilize Rated Metal Parts

• If your model has metal parts rated for steam sterilization, sterilize them separately using the validated cycle for those parts. Let the parts cool and dry completely before reassembly.

5. Final Wipe & Storage (Clean Zone)

• Move the parts to a clean area and put on fresh gloves.

• Perform a final wipe-down. If the disinfectant instructions call for it, use a 70% IPA wipe to remove residue once the surface is dry.

• Let all parts air-dry completely before reassembly. If you will not reuse the dry unit that day, seal it in a clean storage pouch.

ADDITIONAL INFORMATION & TROUBLESHOOTING

Warning: This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or insufficient experience or knowledge, unless a person responsible for their safety supervises them or instructs them on safe use. Children should be supervised to ensure that they do not play with the appliance.

Applying a Barrier to the Grip

Before use, wrap the grip with 1–2 layers of clear medical-grade **barrier film**. Next, apply **grip wrap** around the handle, making sure to leave the display screen uncovered.

Important: Always wrap the upper and lower sections separately. Keep the display visible and leave the two sections free to move. A single wrap around both sections can restrict movement and make needle protrusion difficult to adjust.

Voltage Compatibility & Disclaimer

The **Inkclaw 3.0 Compact Wireless Tattoo Battery Grip** provides an adjustable voltage output ranging from **2 V to 15 V**. Check your tattoo machine’s maximum voltage rating before use.

Disclaimer: Inkclaw assumes no liability for any damage to your machine or equipment resulting from improper use, operation above the rated voltage, or failure to follow these instructions.

Operating Tips

- Depending on the cartridge brand, you may need to loosen the grip slightly for the motor to run properly.
- Do not exceed your tattoo machine’s maximum rated voltage.
- Use only disinfectants labeled for the intended use and compatible with the parts being treated.
- Do not autoclave the electronic battery unit.

WARRANTY

INKCLAW warrants that this product will be free from defects in materials and workmanship under normal use for a period of one (1) year from the date of original purchase. During this period, INKCLAW will, at its sole discretion, repair or replace any defective product at no charge.

The battery unit is considered a consumable component and is covered by a limited warranty of six (6) months from the date of purchase.

This warranty does not cover damage caused by misuse, abuse, improper handling, unauthorized modification, or failure to follow operating and maintenance instructions. This warranty will be void if the device shows signs of having been tampered with, disassembled, handled roughly, dropped, overexposed to moisture, used with cartridges without a membrane, or otherwise damaged in a way that compromises functionality.

Keep the battery charged during storage. Storing it fully discharged for an extended period can permanently damage the cell through overdischarge and prevent it from recharging. This warranty does not cover damage caused by improper battery maintenance.