Wasteland Industries

Spirit Halloween Ecto Goggle (Led) Upgrade Kit

Version 1.0

Dear customer,

Thank you for choosing the **Wasteland Industries Ecto Goggles LED Upgrade Kit**. This comprehensive guide will walk you through every step of transforming your Spirit Halloween Ecto Goggles into a fully functional LED-enhanced prop.

Follow each step carefully- failure to do so can damage the product and cause frustration!

Estimated Time: 60–90 minutes
Difficulty Level: Intermediate

Clear, safe, and beginner-friendly guide for back-plate removal, button replacement, and installing a flashing LED.

From this:

To this:

Contents

Before You Begin — Safety & Preparation

Safety First

- Power off the goggles and remove all batteries
- Work on a clean, well-lit, flat surface
- Wear safety glasses, especially during drilling operations
- Wear thin gloves to prevent cuts and fingerprints on components
- Keep a small container nearby for screws and loose parts
- Work slowly and deliberately—rushing causes mistakes
- Keep children and pets away from your workspace

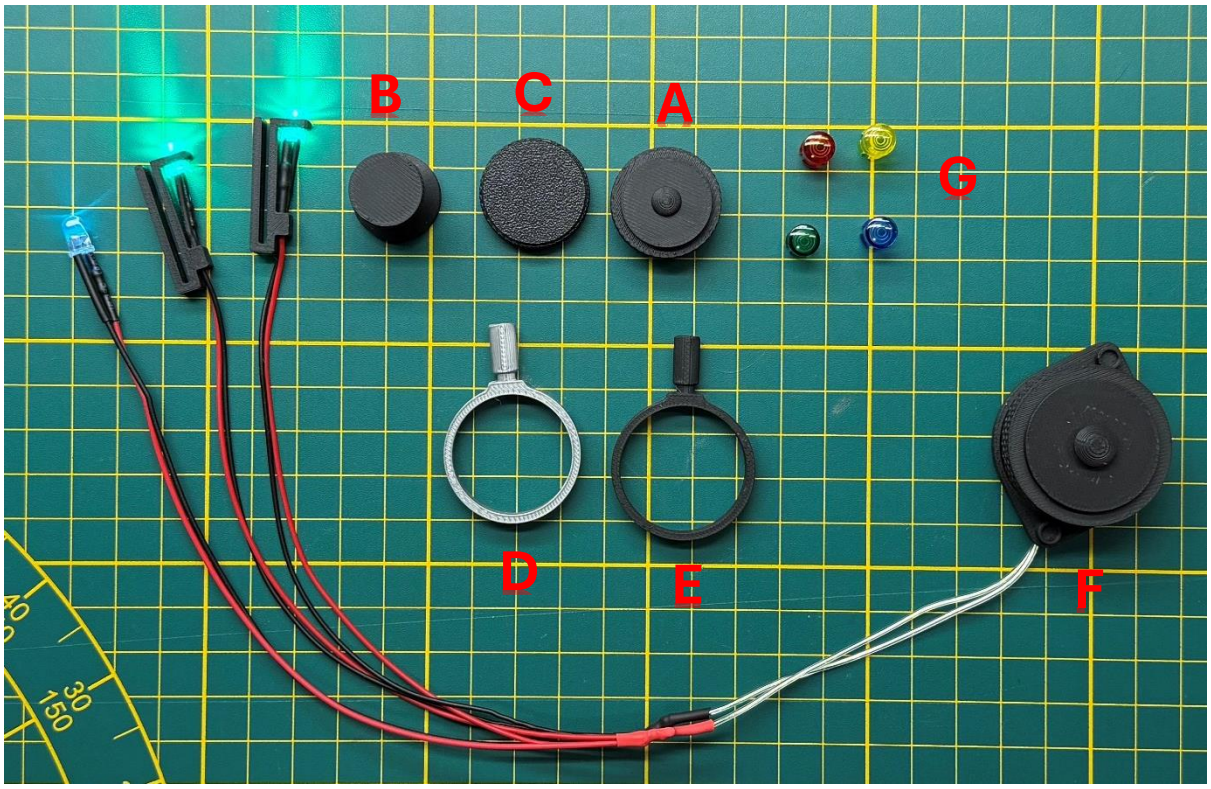
Tools & Materials Checklist

Before beginning, gather these items:

Essential Tools	Description
Flathead screwdriver or plastic pry tool	For removing panels without damage
Phillips screwdriver (optional)	If required for your model
Needle-nose pliers	For precise component handling
Drill with 3–6 mm bits	For LED lens installation
Tweezers or small push tool	For precise LED placement

Materials	Purpose
Super glue (cyanoacrylate)	Securing components (use sparingly)
Two CR2032 batteries	Powering the LED system
Fine-tip marker	Marking drill locations

Parts list



Use this list as a reference for identifying your components in the steps that follow:

A: Button A (bottom replacement)

B: Button B (additional bottom button)

C: Button C (on/off overlay)

D: Lens ring 1 (cosmetic enhancement)

E: Lens ring 2 (cosmetic enhancement)

F: Battery holder with integrated LED connections

G: Lens covers (mounting for flashing LED)

Step 1 — Remove the back plate

1. Locate the two-piece back plate: a **rubber cover** over a **plastic cover**.
2. **Remove the rubber cover first.**
    - Locate the rubber back cover on the rear of the goggles
    - Gently grasp an edge and pull steadily away from the frame
    - Apply light, consistent force—it should release with gradual pressure
    - Set aside in a safe location
3. **Remove the plastic cover.**

The plastic cover underneath may be glued in place.

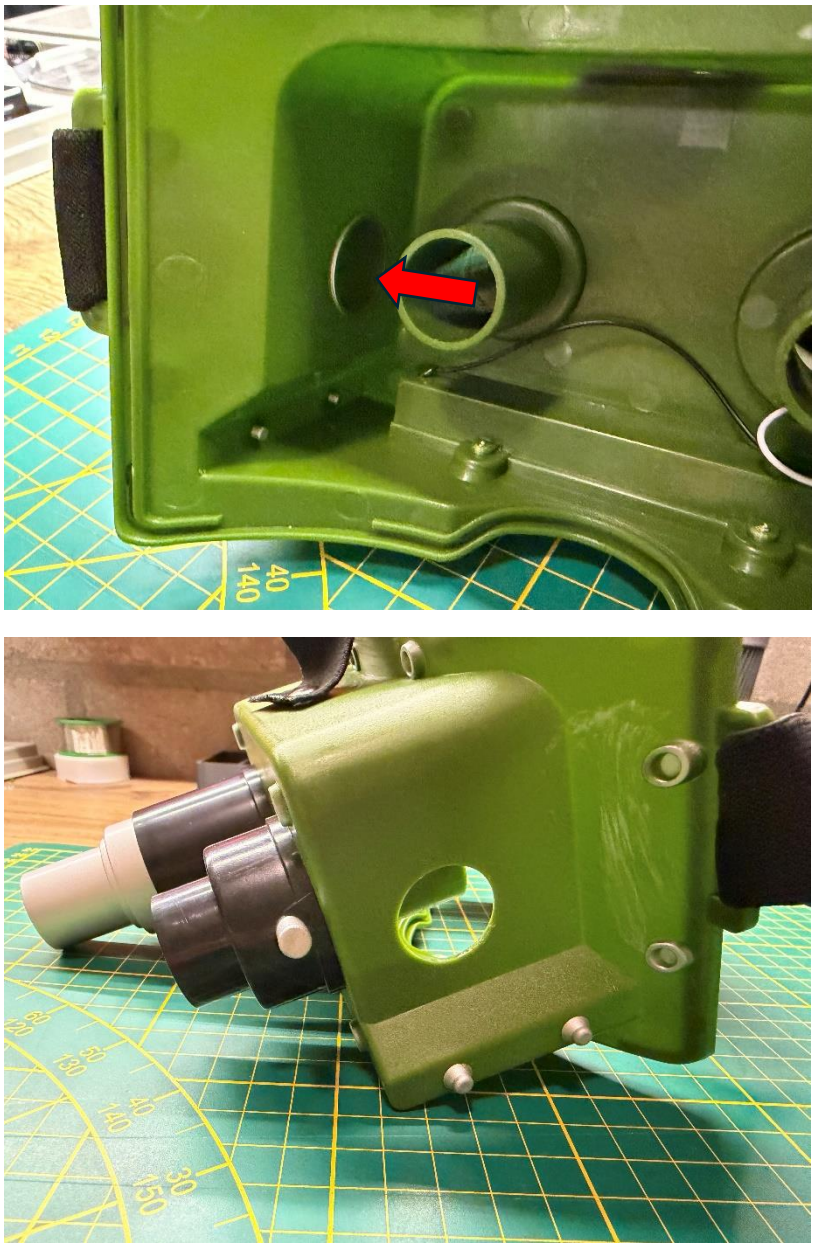
- Using a **flathead screwdriver or plastic pry tool**, work carefully around all edges
- Insert the tool gently into gaps and apply slow, steady pressure
- Work progressively around the perimeter—do not force from one spot
- If resistance is strong, pause and work a different section
- Gradually lift until the cover releases completely
- **Caution:** The internal electronics are now exposed—handle with care

Step 2 — Remove and replace buttons

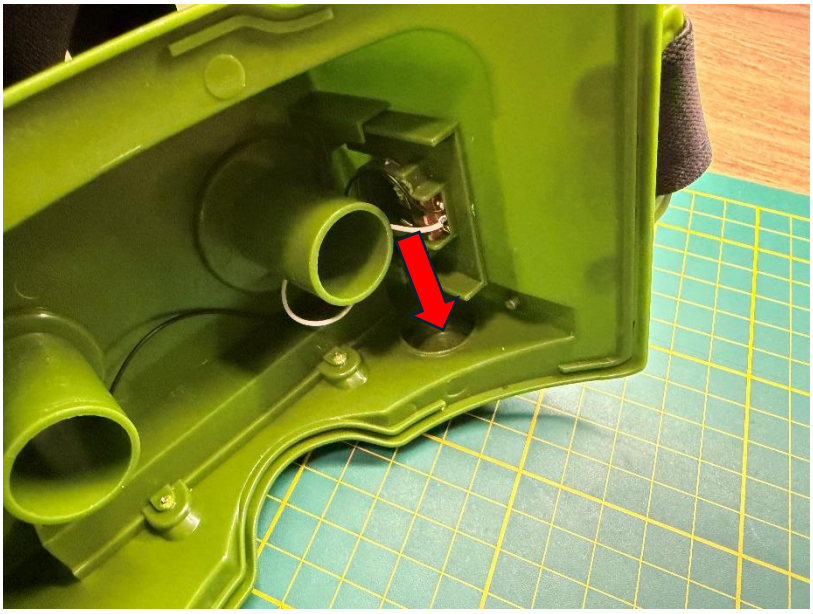
Important: All button work is done from the inside of the goggles.

A. Removing the two silver buttons

1. Identify the two silver buttons: one on the **side**, one on the **bottom**.
2. From **inside** the goggles, push the buttons out. Use a small push tool or the tip of a screwdriver to push them through the housing.
    - Keep removed buttons in your parts container.



Picture 1: Side button removal



Picture 2: Bottom button removal

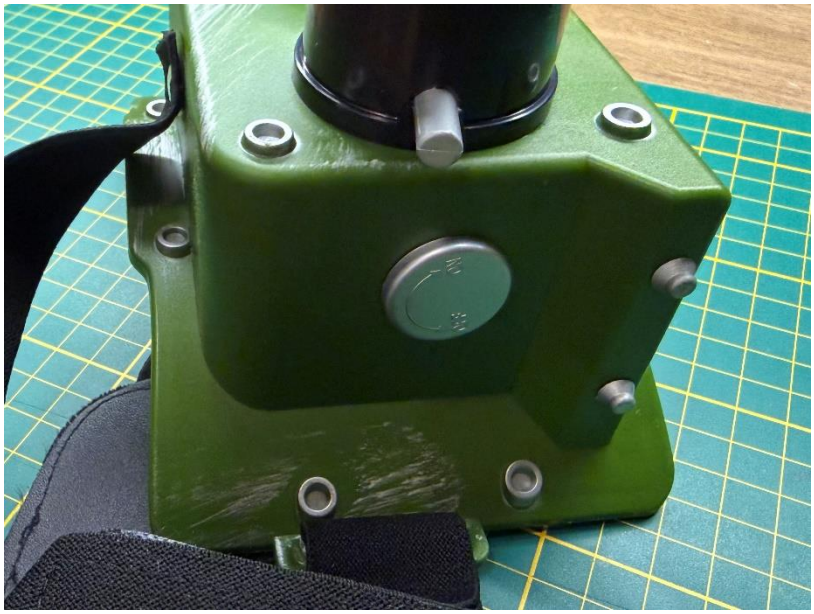
B. Installing the new bottom buttons

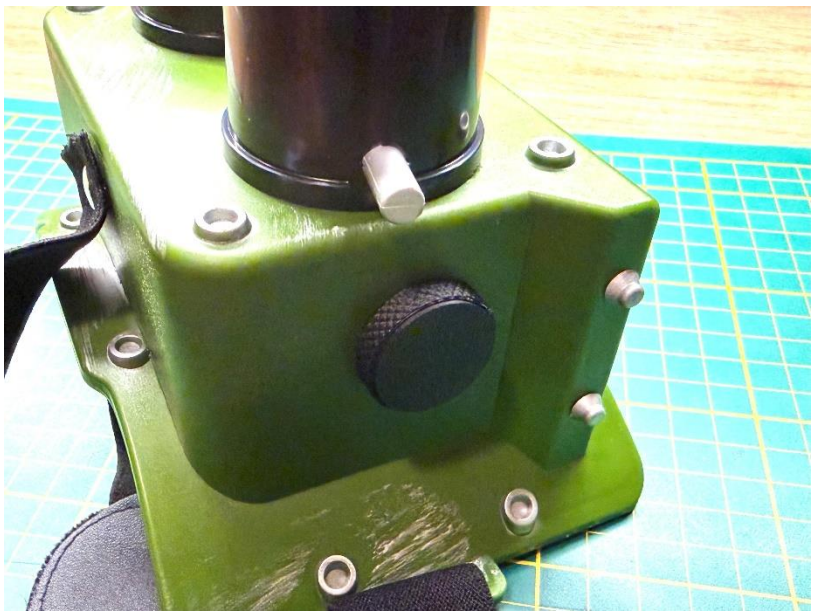
1. **Button A (bottom):** Snap this into the existing hole.
    - Align Button A with the existing opening in the bottom housing
    - Press firmly until it snaps into place
    - If the fit feels loose, apply a **tiny dot** of super glue at contact points only
    - Avoid excessive glue that could migrate into button mechanisms

2. **Button B (bottom):** This one is attached by applying super glue to its mounting face and pressing it into place on the bottom exterior.
    - Apply a small amount of super glue to the mounting face of Button B
    - Press it firmly into place on the bottom exterior of the goggles
    - Hold steady for 30–60 seconds until glue sets
    - Verify alignment before the glue fully cures

C. Installing the side/on-off overlay (Button C)

1. There’s no need to remove the original rotating on/off switch.
2. Slide **Button C** over the existing on/off rotating button. It should fit over the original without removing anything.
    - If fit is loose, apply a very small amount of super glue between Button C and the underlying surface — avoid getting glue into the rotating mechanism.
    -





Before / After photos: show Button C fitted over original on/off switch.

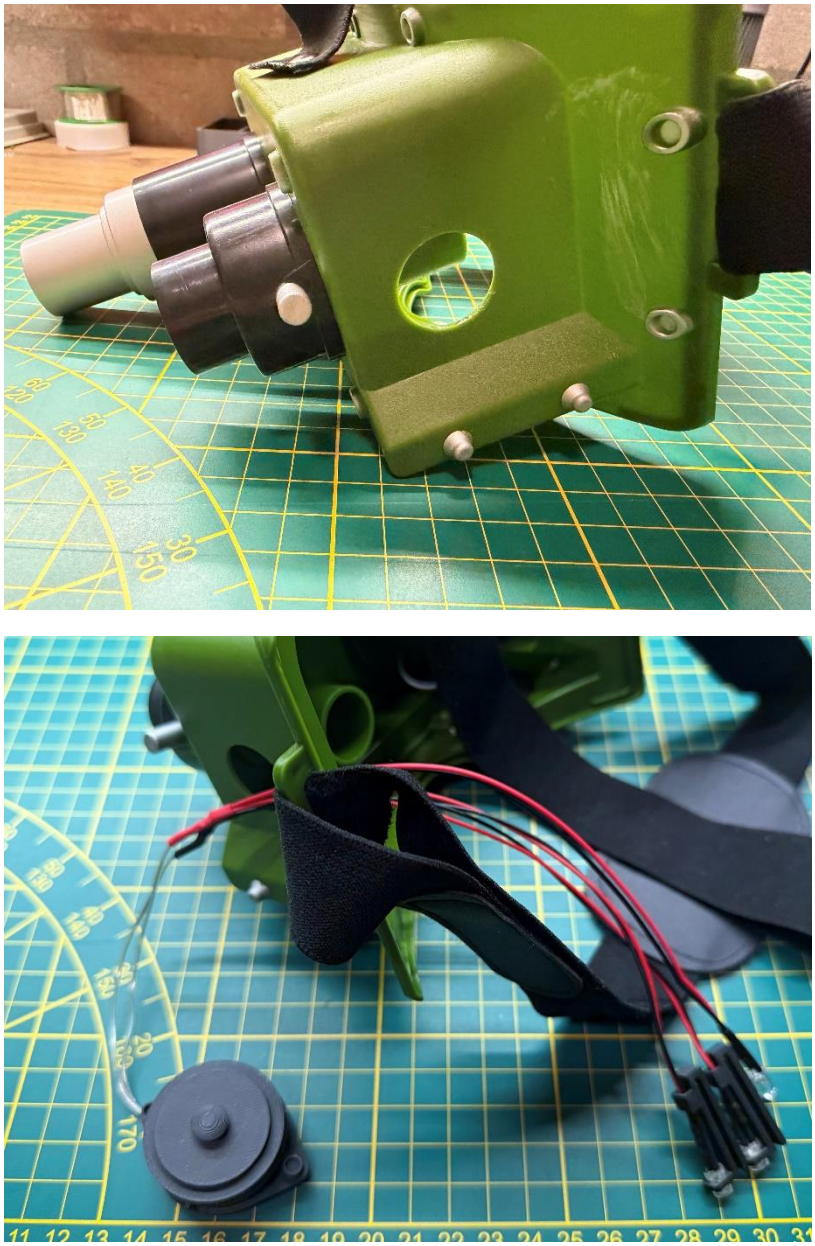
D. Adding additional lens rings (Parts D & E)

1. These rings **slide over** the goggles' lenses.
    - Align each ring and gently push it forward until it seats fully.
2. No glue required unless you want a permanent fit — in that case use a tiny amount of adhesive on the ring's inner lip.

Before / After photos: lens rings installed.

Step 3 — Placing the LED's and battery holder

- Insert the new LEDs into the holes created by removing the silver buttons in **Step 2A**
- Insert from the **outside** of the goggles—the LEDs will be secured in later steps
- Do not fully seat them yet; they will be properly positioned when wiring is complete



Picture 3: LEDs inserted into former button openings (placeholder)

Attach the Battery Holder (Part F)

- Position the battery holder on the **outside rear** of the goggles, near the bottom
- The base of the battery holder should align with any existing openings
- Secure using super glue applied sparingly to mounting points only
- Allow adequate curing time (refer to glue manufacturer instructions, typically 5–10 minutes for full strength)
- Verify that the battery compartment remains accessible for battery insertion

Picture 4: Battery holder placement and fit (placeholder)

Step 4 — Install the flashing LED and lens cover (drilling required)

Warning: Drilling alters the goggles. Proceed only if you are comfortable with small hand drilling and accept that this is permanent.

Pre-Drilling Preparation

1. Decide on your LED placement. **Common placement:** bottom front right of the goggles (recommended)
2. Alternative placements: anywhere that avoids internal electronics and maintains structural integrity
3. Using a **fine-tip marker**, mark your chosen location on the exterior with a small dot

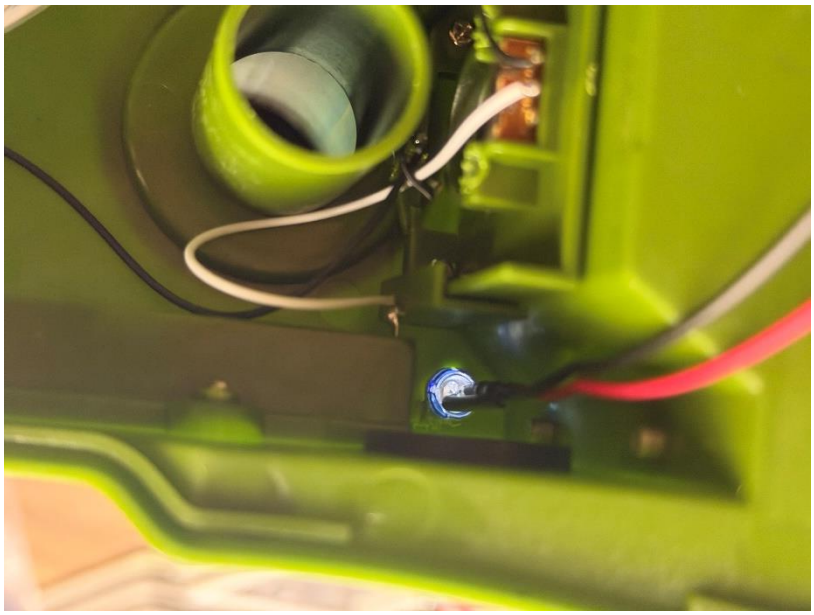
Drilling the LED Opening

Follow a **step-drill** process for precision and safety:

1. **Pilot hole (3–4 mm):** Start with your smallest drill bit and create an initial hole
    - Hold the goggles firmly in a stable position
    - Apply light pressure and drill slowly
    - Do not force the drill; let the bit do the work
2. **Enlargement (5–6 mm):** Gradually step up to a larger bit
    - Test-fit your lens cover frequently
    - Drill in small increments (0.5 mm at a time)
    - The lens cover should fit snugly without forcing
    - Stop when the fit is tight but manageable

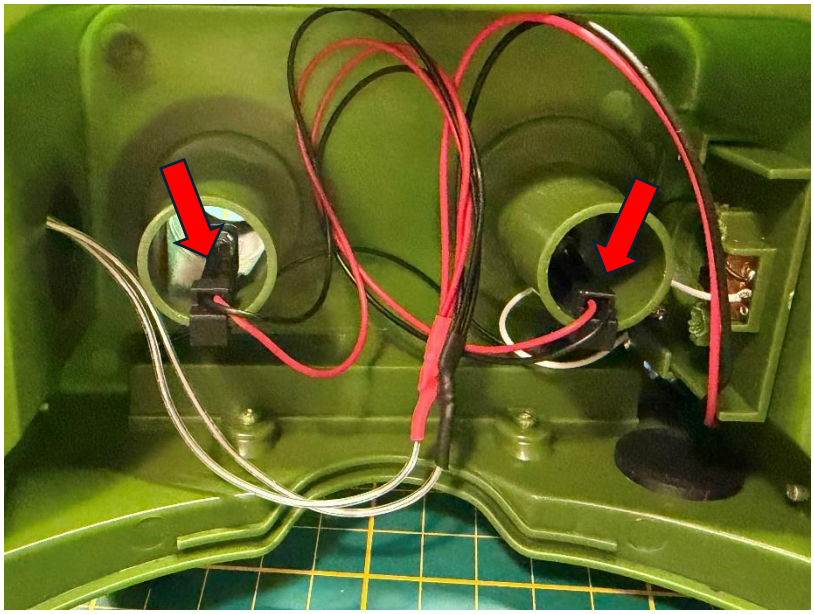
Installing the Flashing LED

1. From **inside** the goggles, insert the LED into the newly drilled hole
2. Route the wires carefully to avoid pinching during reassembly
3. Use tweezers or a small screwdriver to position the LED flush with the interior surface
4. Gently seat the lens cover into the hole from outside until flush with the surface
5. If needed, apply a small amount of glue around the **outside edge only**
6. **Do not glue the LED lens itself**—this will reduce light output



Step 5 — Install green LED’s inside the lenses

- Slide each **Green LED** into the existing lens holders.
- Ensure they sit fully inside the holders as shown.



Picture 5: Green LEDs inserted in lens holders (placeholder)

Modify Rubber Backplate

To accommodate wiring and allow the back plate to reseat:

1. Place the rubber back plate on a clean surface
2. Using a **small knife**, cut two small rectangular slots where wiring exits
3. Reference the placement shown in your parts diagram
4. Keep cuts small and neat—excessive cutting will compromise fit
5. Set the modified back plate aside for final reassembly

Picture 6: Rubber backplate cut-out locations (placeholder)

Final steps — test & reassemble

Battery Installation and Power-Up

- Unscrew the top of the battery holder
- Insert **two CR2032 batteries** (the standard coin-cell type)
- **Critical:** Ensure positive (+) and negative (–) sides align correctly with holder markings
- Replace the battery holder cap securely
- Locate the **small on/off switch** on the battery holder
- Switch to **ON** to power the LED system
- Observe all LEDs:
    - Green LEDs inside the lenses should glow steadily
    - Flashing LED should pulse at your chosen frequency
    - Side and bottom LEDs should illuminate

Reassembly

If all LEDs function correctly:

1. **Position the plastic back cover:** Align it with the frame and snap it back into place
2. If glue was loosened during disassembly, secure with minimal adhesive at contact points
3. **Apply the rubber back cover:** Press it over the plastic cover until fully seated
4. Perform a **final button test** to confirm all controls still operate smoothly
5. **Congratulations!** Your Ecto Goggles upgrade is complete

Troubleshooting tips

- **Button feels loose:** Add a tiny dab of super glue — avoid the mechanism itself.
- **LED won't sit flush:** Re-check hole diameter and step-drill slightly larger (in 0.5 mm increments).
- **LEDs Won't Power On**
    - Verify batteries are inserted correctly (+ and – aligned)
    - Check battery contacts are clean and making solid connection
    - Replace batteries with new CR2032 cells
    - Verify the on/off switch on the battery holder is in the ON position

Care and Maintenance

Battery Maintenance

- Remove batteries if the goggles will not be worn for more than two weeks
- Replace batteries annually or if LEDs appear dim
- Use only high-quality CR2032 batteries from reputable brands

Seasonal Storage

If storing for extended periods:

1. Remove all batteries
2. Store in a protective case or bag
3. Keep in a temperature-controlled environment
4. Inspect before wearing again after long storage

Manual Disclaimer

This User Manual—including all illustrations, text, specifications, and data—is based on the most current information available at the time of publication. Every effort has been made to ensure accuracy in its creation and verification.

As Wasteland Industries continually strives to provide updated and state-of-the-art products, technical modifications or improvements may be made over time. As a result, the information in this User Manual may change without notice.

Wasteland Industries has taken care to ensure the accuracy of the information provided, but assumes no responsibility for actions taken based on the contents of this manual, nor for any errors, omissions, misinterpretations, or resulting damages—direct or consequential—arising from the use or reliance on this manual or the products referenced within it.

If you notice that certain technical features or the appearance of your product differ from what is described in this manual, please contact Wasteland Industries.

Disclaimer of Liability:

The user assumes full responsibility for:

- Safe and lawful operation of the modified goggles
- Understanding all risks associated with drilling, gluing, and electrical components
- Compliance with all applicable local, state, and federal regulations
- Any property damage, personal injury, or other harm resulting from use or misuse

Wasteland Industries disclaims all liability for:

- Improper assembly or modification techniques
- Damage to the original goggles during modification
- Personal injury from drilling, glue, or electrical components
- Use of the modified goggles in any context
- Modification or adjustment made after manufacture

Users who are unwilling to accept these risks should not proceed and may contact Wasteland Industries for a refund subject to applicable return policies.

Again thank you for purchasing a Wasteland Industries kit and please do send us a picture of your project or tag us in your social media post!

Visit us @

www.wasteland-industries.com

www.etsy.com/shop/wastelandindustries

www.facebook.com/wastelandindustries

www.instagram.com/wastelandindustries

www.youtube.com/wastelandindustries