WOMBAT
USER MANUAL

Table Of Contents

By using this product, you agree that you have read the following list of guidelines and terms and conditions, and will follow all instructions outlined in this quick guide.

Included Parts:

5200 mAh Battery

## Crawler Battery Charger

Battery Charging Cable

Controller Charging Cable & Brick

Tweezers for SD Card
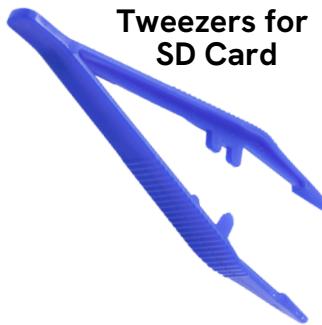
Spare Parts

MicroSD Card & Adaptor

1 Setup Checklist:

- Ensure all components arrived undamaged from shipping.

- Remove protective covers and information tags from both the crawler and the controller.

- Fully charge the crawler battery and controller. (See page 16 and 17)

## 2 Safety Warnings — Read Before Operation:

- NEVER use the controller without the antennas attached.

- NEVER use or leave the crawler powered on when the battery shows 0 bars.

- NEVER keep driving if a wheel is stuck and immobile.

- NEVER leave the crawler or controller powered on when unattended.

- NEVER use or charge a battery that is damaged, swollen, or completely empty (0 bars). Replace it instead.

- NEVER use or store the crawler in extreme temperatures (below 32°F / 0°C or above 120°F / 49°C).

- NEVER operate the crawler in wet conditions or spray it with liquid.

- NEVER use the crawler in areas where gas or flammable fumes may be present.

1 Power On the Controller:

❶ Press ⏻ Release   ❷ Press ⏻ Hold
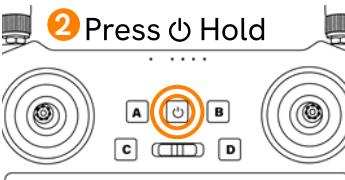
Press and release, then press and hold power button until screen turns on.

2 Select the FPV App to Begin Connecting:

UplinkRoboticsApp   FPV   Begin Your Inspection

Touch the FPV app icon on the home screen to start connection process.

3 Uninstall the Lid:

A

UPLINKROBOTICS

B

UPLINKROBOTICS
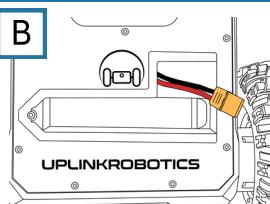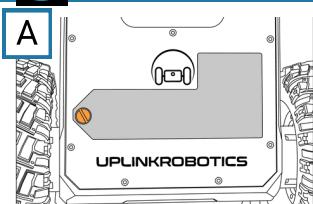
Remove the battery compartment lid by turning screw counterclockwise.

4 Connect the Battery:

A

UPLINKROBOTICS

B

KROBOTICS

C

UPLINKROBOTICS
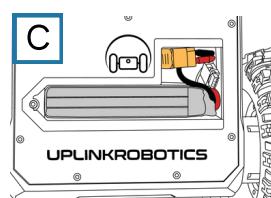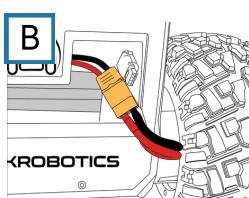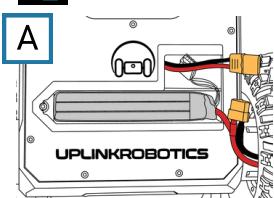
Insert battery & connect the yellow 2-pin connector.

Prefer to watch a video tutorial?
**Scan the QR code or visit uplr.us/YTqstart**

5 Reinstall the Lid:

A

B
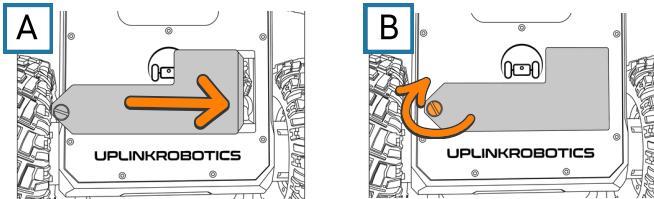
Replace lid and screw clockwise until finger-tight. Ensure wires don't get pinched.

6 Power On the Crawler:
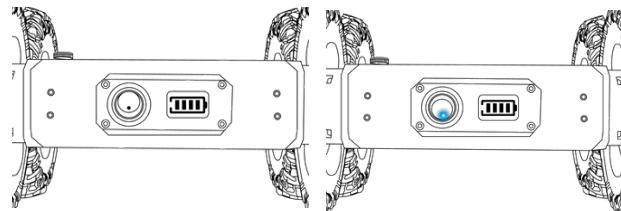
Press power switch on back of crawler. Crawler will play startup jingle and LEDs will 'breathe' with periodic beeps while waiting to connect. Once connected, crawler plays connection jingle and is ready for operation.

## 7 Wait Until the LED Indicator Turns Green:
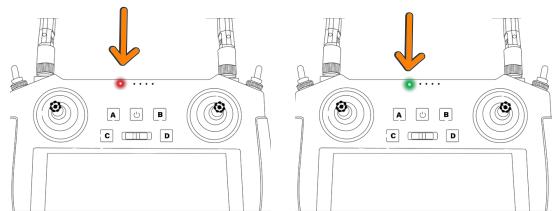
Connection takes 45–90 seconds. Controller lights flash until connected, then the crawler plays a connection jingle and is ready to use. For accurate timestamps, connect to Wi-Fi to auto-update date/time, or set manually through the controller menu.

Prefer to watch a video tutorial?
Scan the QR code or visit uplr.us/YTqstart

Reserved for Future Use

Touchscreen Display
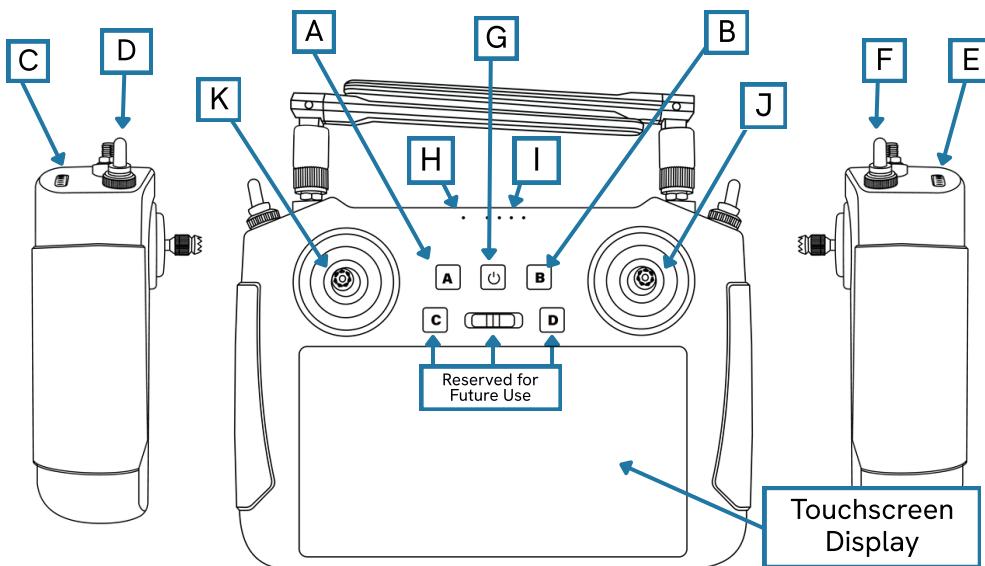
LABEL	PART	FUNCTION
A	Photo Button	Captures a still photo.
B	Record Button	Starts/stops video recording.
C	LED Brightness Dial	Adjusts crawler LED brightness (when dimmable mode is active).
D	LED Mode Switch	Switches between full brightness, dimmable, or lights off.
E	Camera Zoom Dial	Zooms camera in or out (up to 6x, depending on resolution).
F	Driving Mode Switch	Selects Travel, Inspection (recommended), or Turbo (extra power for getting unstuck).
G	Power Button	Turns controller on/off. *(On: press, release, press + hold. Off: hold and confirm on screen.)*
H	Connection Status Light	Shows link with crawler (green = connected, red = disconnected, flashing = searching).
I	Controller Battery Display	Shows controller's battery level.
J	Right Stick (Drive Stick)	Moves crawler forward/backward and steers left/right.
K	Left Stick (Camera Tilt)	Tilts the camera up or down.

Light Modes Overview
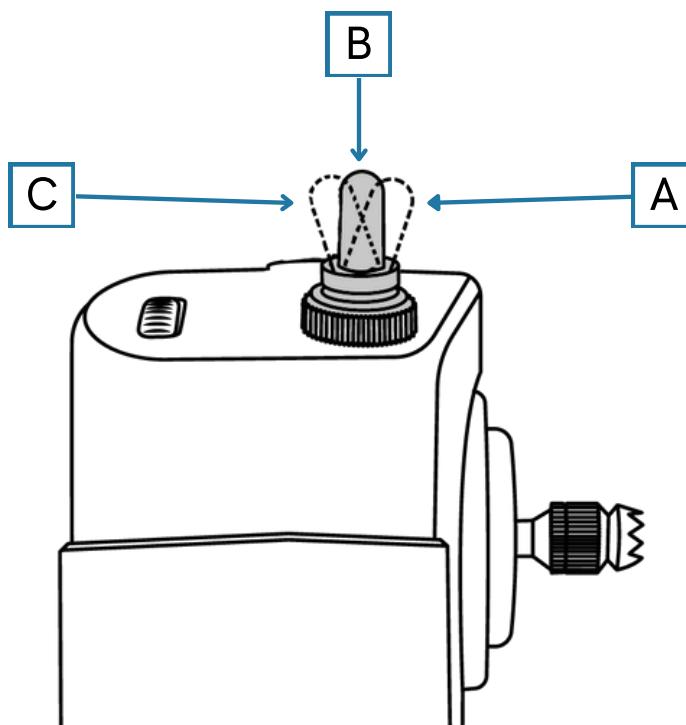
LABEL	TYPE	USE CASE
A	Full Brightness	Maximum illumination for dark spaces
B	Dimmable Lights	Adjustable brightness with dial control
C	Turned OFF	No lighting
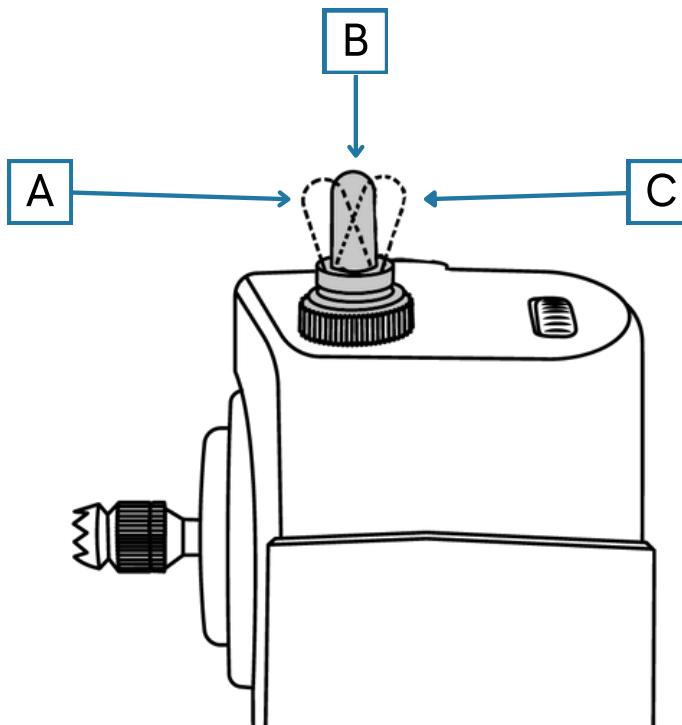
LABEL	TYPE	USE CASE
A	Inspection	Precise control for detailed inspections and tight spaces
B	Travel	Balanced speed and control for general navigation
C	Turbo	Maximum power for getting unstuck (10 second limit)

Controller Specifications

7.5"

5.26"

5.8"
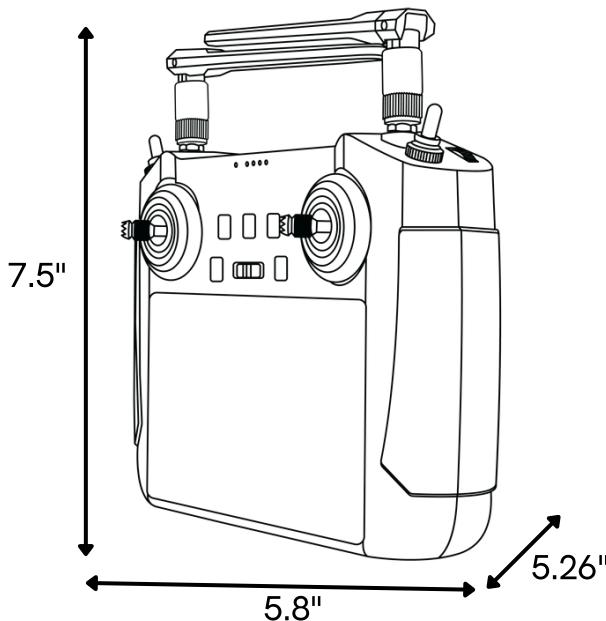
FEATURE	SPECIFICATION
Screen Size	5.5 inches diagonal
Screen Brightness	1000 nits
Transmitter Dimensions	5.8" W x 7.5" H x 5.26" D
Controller Run Time	Up to 13 hours
Photo Resolution	Up to 8 MP (dependent on video mode)
Photo Format	JPEG
Video Resolution	Default: 2K Resolution
Video Format	MP4
Live Stream	720HD real-time
Storage location	/DCIM/PHOTOS/ on SD card Sorted by date/time
Photo/Video Capture	Can capture both simultaneously

6.75"

14.75"

15.5"
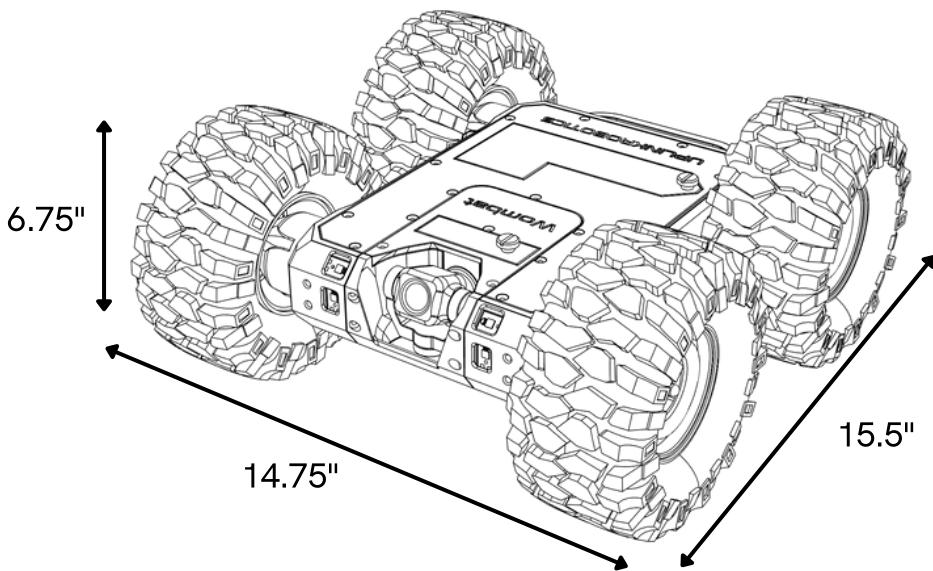
FEATURE	SPECIFICATION
Crawler Dimensions	14.75"×15.5"×6.75" (L x W x H)
Max Crawler Speed	2.25 mph
Battery Life	Up to 3 hours (typical use), 5 hours (standby)
Crawler Battery	5200mAh 3S LiPo (Quick-Swappable)
Operating Range (Line of Sight)	Up to 1000 feet
Field of View (FOV)	81∘ Horizontal
Water Resistance	None. Designed for dry or damp environments.
Storage	128GB microSD Card (Included)
Digital Zoom	Default is 3.5x magnification, dependent on selected resolution (Page 13)
Camera Gimbal Pitch	+90° up to -30° down
Lighting System	>1000 Lumen Dimmable & Switchable LEDs
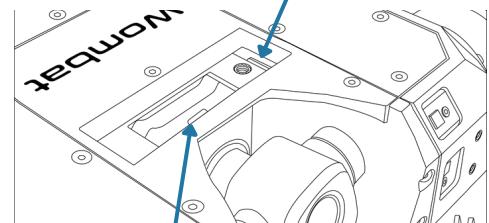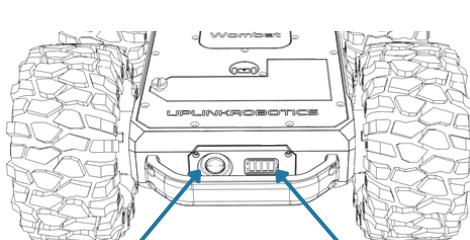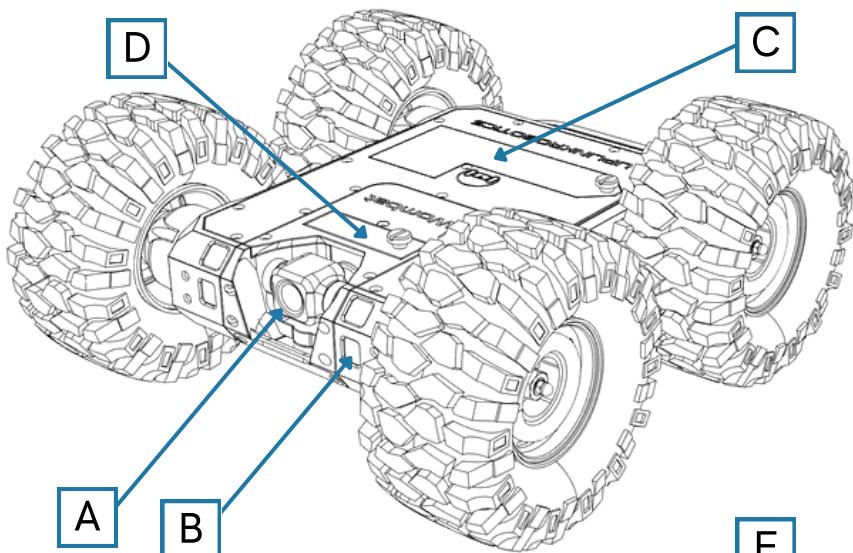
Do not use this USB-C port unless directed by UplinkRobotics

LABEL	PART
A	Camera Gimbal
B	LED Lights
C	Battery Compartment
D	SD Card Compartment
E	MicroSD Card Slot
F	Power Button
G	Battery Level Indicator

1 IMPORTANT: AUTHORIZED SETTINGS ONLY

In the FPV App on the controller, only adjust Gimbal Mode (FPV or Follow) and Recording Resolution (higher resolution = better quality, less zoom). Changing any other settings may cause system malfunctions. **All other settings must remain at factory defaults.**

2 How to Change Resolution:

1. Select the FPV App within the controller

2. Ensure crawler and controller are connected (Page 6)

3. Press the three dots in the top right corner of the screen

4. Navigate to the Camera Section (only appears when connected to crawler) indicated with this icon 📷

5. Scroll down on the touchscreen until you see Resolution

6. Choose your desired resolution from the available options

3 Resolution & Zoom Chart:

RESOLUTION	DIGITAL ZOOM	BEST USE CASE
720p	6x	Maximum zoom only when image quality is not critical
1080p	5.5x	Balanced quality and zoom for most applications
2K (Default)	**3.5x**	**High quality with moderate zoom**
4K	0x*	Maximum quality, close-up work

Note: 2K Resolution is the default and most recommended but 4K captures can still be zoomed digitally when viewed on phones/computers after capture.

Prefer to watch a video tutorial?
Scan the QR code or visit uplr.us/YTrezoom

1 Photo Capture Process:

1. Frame your shot using the live video feed on the controller screen

2. Adjust zoom if needed using the right dial or +/- icons on screen

3. Position camera angle using the left control stick (+90° up to -30° down)

4. Press the Photo Button (Button A) to capture the image

5. Photo automatically saves to the SD card in JPEG format

NOTE: *Photos and videos can be captured simultaneously - take photos while recording video without interrupting the recording.*

2 Video Capture Process:

1. Frame your shot using the live video feed

2. Adjust zoom if needed using the right dial or +/- icons on screen

3. Press the Record Button (Button B) to start recording

4. Red recording indicator will appear on screen

5. Continue normal operation - drive, adjust camera angle, take photos

6. Press the Record Button (Button B) again to stop recording

7. Video automatically saves to SD card in MP4 format

Prefer to watch a video tutorial?
Scan the QR code or visit uplr.us/YTcapvid

NOTE: *The SD card comes pre-installed in the crawler upon arrival. MicroSD to SD card adapter included*

1   Remove the MicroSD Card & Extract Files:

IMPORTANT: *Always power down the crawler before removing the SD card to prevent file corruption.*

1. Stop Recording, then Power down the crawler completely

2. Open the compartment closest to the camera by twisting the thumbscrew off and removing the cover

3. Press SD card gently until it clicks and releases

4. Use tweezers (included in spare parts kit) to remove the SD card gently

5. Insert SD card into the computer/card reader (SD card reader for computer not included)

6. Files auto-saved in the DCIM Folder sorted into Photos (JEPG) and Videos (MP4)

2   Reinserting the MicroSD Card:
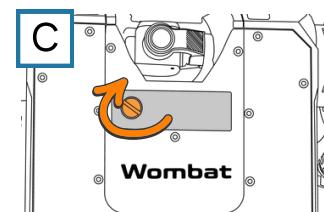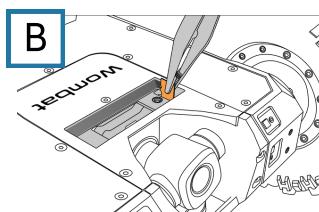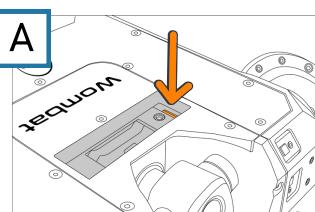
Use tweezers to insert MicroSD card, push until secure, and replace lid.

1 Controller Safety Guidelines:

- Use included charger only - third-party chargers may damage the controller

- Controller will not charge when powered on, ensure the controller is powered off before charging

- Do not charge unattended for extended periods

- Avoid charging in extreme temperatures (below 32°F/0°C or above 104°F/40°C)

- Disconnect immediately and contact support if you smell burning, see smoke, or notice excessive heat

- Do not use damaged charging cables or connectors

- Keep charging area clean and dry

2 How to Charge the Controller:

A

B

C

D
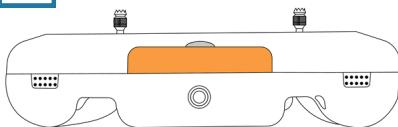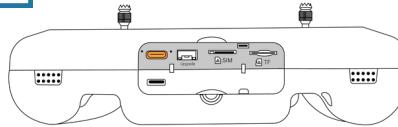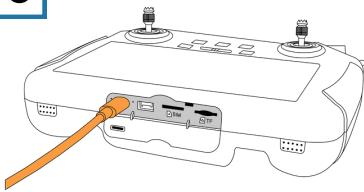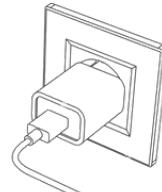
1 Crawler Battery Safety Guidelines:

- Use dedicated battery charger only
- Never charge damaged batteries - inspect for cracks, swelling, or damage before charging
- Only use white 4-pin connector for charging - yellow 2-pin is for operation only
- Do not charge unattended - lithium polymer batteries require monitoring
- Avoid extreme temperatures during charging (50-104°F / 0-40°C range recommended)
- Store at 50-60% charge for long-term storage (over 14 days)
- Never leave battery connected to crawler for extended periods when not in use - this can permanently damage the battery and reduce its lifespan significantly
- Contact support immediately if battery becomes hot, swells, or shows any signs of damage

2 How to Charge the Crawler Battery:
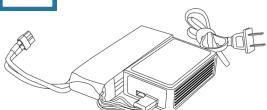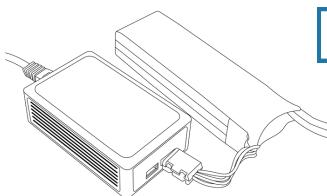
A   B   C
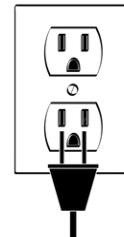
Remove battery from crawler & connect the white 4-pin connector to battery charger.

1 After Every Use:

Basic Cleaning & Inspection:
- Clean exterior with dry cloth or soft bristle brush
- Hold gimbal steady & gently spray with compressed air
- Check for loose screws or damaged parts
- Inspect battery connections for corrosion or damage
- Store in carry case when finished

2 Weekly Maintenance:

Detailed Inspection:
- Clean camera lens with microfiber cloth
- Inspect all moving parts for wear or debris
- Test all control functions (driving, camera, lights)
- Check and tighten screws as needed
- Tighten wheel couplers to ensure secure connection. Torque small bolts to 40 in-lbs and large bolts to 100 in-lbs.

3 Important Maintenance Notes:

What to Avoid:
- Do not use water or liquid cleaners on the crawler
- Do not force any stuck or tight components
- Do not disassemble beyond basic battery/SD card removal unless specifically instructed by the UplinkRobotics team

Maintenance Log

1 Maintenance Schedule:

HOURS OF USE	MAINTENANCE REQUIRED	COMPLETED ✓
5 Hours	Basic inspection and cleaning	☐
15 Hours	Detailed inspection	☐
25 Hours	Repeat Basic Inspection & Detailed Visual Inspection	☐

2 Maintenance Schedule:

Record your maintenance activities:

DATE	HOURS OF USE	SERVICE PERFORMED

Q **Why does the FPV app only show a blank screen that says "disconnected" even though the crawler is working?**

A. This usually happens when the Ethernet setting is disconnected. It can occur occasionally through no fault of the user. To fix this, go into the app settings, select Network and Internet, then select Ethernet and make sure it is turned on.

Q **Why are the tires deflated when I receive my crawler?**

A. UplinkRobotics is located at 7,200 ft elevation, where the air pressure is lower. At lower elevations, higher air pressure compresses the tires and makes them look flat. Just loosen a few beadlock screws, pull the tire to let air in, and re-inflate before tightening the screws again.

Q **Why isn't my crawler working?**

A. Please ensure you are connected to the controller, as this can take up to a minute. Also make sure the battery is fully charged and properly plugged in. Finally, verify that both the controller and the crawler are turned on—with the controller always powered on first.

Q **What comes in my spare parts bag?**

A. Your spare parts bag includes:
- 7mm nylock securing nut
- Two M3x10 Loctite screws
- M3x16 screw
- M3x20 screw
- Four 7mm crush washers
- Two M3x12 screws

Important: Please contact our support team at support@uplinkrobotics.com before using any spare parts.

For technical support or repair inquiries:

307.225.9210
support@uplinkrobotics.com

For general inquiries or feedback:

307.225.9210
info@uplinkrobotics.com

UplinkRobotics Products

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V.   UplinkRobotics does not make any representation or warranty regarding the fitness of its products for any specific tasks or functions. UplinkRobotics products are supplemental tools that may assist you in your activities but do not guarantee any results or outcomes. You are solely responsible for determining the suitability and compatibility of the products for your intended use

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I. These terms and conditions are governed by and construed in accordance with the laws of the State of Wyoming, USA. Any disputes arising from or related to these terms and conditions or the use of the products shall be subject to the exclusive jurisdiction of the courts located in Albany County, Wyoming. You consent to the personal jurisdiction and venue of such courts and waive any objections thereto

2. Severability

I. If any provision of these terms and conditions is found to be invalid or unenforceable by a court of competent jurisdiction, such provision shall be severed from the rest of the terms and conditions and the remaining provisions shall remain in full force and effect.

3. Entire Agreement

I. These terms and conditions constitute the entire agreement between you and UplinkRobotics regarding the use of the products. No other representations or promises have been made or relied upon by either party. Any modifications or amendments to these terms and conditions must be in writing and signed by both parties.

Laws vary by region and could affect the legality of operating this technology. Before using this device, please ensure it meets your local regulations for video and control transmission. We urge you to research or consult local authorities to comply with all relevant regulations. Responsibility for legal and safe operation rests with the user.

Controller FCC ID: 2AZBB-MK15TX

Wi-Fi FCC ID: 2AC7Z-ESPWROOM32UE

UPLINKROBOTICS

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