

# Vertex-Link Mini

User Manual

Version: 1.8.2



For ages 6+



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**Why can't I connect to the Vertex-Link Mini with my phone device?**

*Please make sure the followings:*

- You have downloaded the App from App Store / Google Play
- The power is on, and the blue LED is blinking
- You have turned on the Wi-Fi on your phone device
- You select the correct ID on your phone device Wi-Fi page
- The Vertex-Link Mini is within the operating range, and the battery power is not low.

**Sometimes no sound is recorded when I do the video recording, why?**

*Vertex-Link Mini will turn off the audio recording if it is in movement.*

**Annoying sound comes out when I put my phone device near the Vertex-Link Mini, why?**

*It is the echo between the Vertex-Link Mini and the phone device, try to turn the volume lower, or step back a little bit.*

**Why is my VLM drift to left or right?**

*Please use the movement slot to adjust straight line movement of the vehicle.*

## **Q AND A**

**It is taking a long time for the blue LED connection, is this normal?**

*It can take up to 30 seconds for the blue LED connection (blink).*

**The video transmission quality is poor (freezing or discoloration)**

*The Vertex-Link Mini is out of maximum operating range, battery is low.*

*Please also check the battery level of your phone device as well.*

**The video capture has turned to black and white**

*Please check if the night vision mode is turned on.*

**Can I have multiple Vertex-Link Mini(s) in the same area?**

*Yes, each Vertex-Link Mini comes with an unique ID (printed on the bottom of the device), and you can connect to your own Vertex-Link Mini by selecting the proper ID on your phone device.*

**Can I use Vertex-Link Mini outdoor?**

*Vertex-Link Mini is not weather resistant. We recommend playing the Vertex-Link Mini at a cozy, dry and clean area.*

**What happens if I receive a phone call while I am playing with the Vertex-Link Mini?**

*The program will exit. We recommend you to run the Vertex-Link Mini under airplane mode to avoid interruption.*

## **VERTEX-LINK MINI QUICK START**

**1.**

Download the free app “VLM” from App Store or Google Play. Insert batteries.

**2.**

Turn on the power. When the blue LED flashes, connect your phone device to the SSID of the VLM inside the Wi-Fi setting.

**3.**

Run the “VLM” app and you are ready to go.

## **IMPORTANT SAFETY INSTRUCTIONS**

Please read the instructions carefully before operating the product.

### **WARNING**

Close supervision is necessary when this unit is used by or near children or mentally disabled individuals.

Use this unit only for its intended use as described in this manual.

The unit should be situated away from direct sunlight or heat sources. This product can be operated in the EU without restrictions indoor, but can't be operated outdoors in France in the whole of the band, only in frequency from 2400MHz to 2454MHz.

### **CAUTION**

For ages 6 and up.

Keep the unit away from face, eyes and hair at all times. Keep fingers away from wheels, belts while they are in motion.

Make sure there are no insurmountable obstacles or breakable objects in the unit's path.

Do not drop in, spray with or submerge unit in water.

### **CHOKING**

**WARNING:** This product may contain small parts, which may pose a choking hazard to children.

### **BATTERY PRECAUTIONS**

Dispose of the old batteries properly. Do not dispose of the old batteries in a fire.

Do not leave the batteries where a child or pet could play with or swallow them. If the batteries are swallowed, contact a physician

## **SPECIFICATION**

Product Dimension.....	Length: 202mm Width: 148mm Height: 85mm
Weight.....	0.55Kg
Battery.....	4 x AA (not included)
Running time.....	About 1 hour
Distance.....	About 60 meter (unobstructed) About 30 meter (obstructed)
Camera.....	320 x 240 @ 25 frames per second
Wi-Fi supports.....	802.11b/g/n
Night Vision lens.....	850nm
Software name.....	VLM
Supported list.....	iOS™4.3 and up Android™2.2.0 and up
CPU.....	800MHz and up
RAM.....	521MB
SD CARD.....	256MB (video recording)

## **RESET**

Please use the end of the paperclip to press the RESET button for 7 seconds, in order to reset the product back to factory setting.

**Notes: The path recorded will be erased after reset.**

## **CARE AND MAINTENANCE**

- Switch off the power of the Vertex-Link Mini before cleaning.
- Apply soft and dry cloth onto the product ONLY.
- Make sure there is no hair or lint caught between the wheels, the drive shafts and the camera joint. Clean carefully with your fingers or a pair of tweezers.

immediately.

The batteries may explode if mistreated. Do not attempt to recharge or disassemble the batteries.

Use only fresh batteries of the required size and type. Do not mix old and new batteries, Do not mix alkaline, standard (carbon-zinc), or rechargeable(nickel-cadmium)batteries.

Non-rechargeable batteries are not to be recharged.

Rechargeable batteries are to be removed from the toy before being charged.

Rechargeable batteries are only to be charged under adult supervision.

Exhausted batteries are to be removed from the toy.

The supply terminals are not to be short-circuited.

## **CE INFORMATION**



The items comply with the requirement R & TTE of EN 301489-17, EN 301489-1, EN 300 328, EN 62311, EN71-1, EN71-2, EN71-3, EN62115, EN60825-1, ROHS 2 (Directive

2011/65/EU), Cadmium Content (Directive 91/338/EC), Phthalates Content 2005/84/EEC.



The items comply with the requirement of WEEE directive 2002/96/EC.

## **FCC INFORMATION**



"This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This unit generates uses and can radiate radio frequency energy and if not installed and used

unsynchronized video and sound clips.



## **INFORMATION**

For iOS™ user, press  to enter the information page. The page shows the software version, firmware version, application icon and name, as well as the connected SSID. This also shows the car with the IP address and port.

For Android™ user, you can also press the Menu key of your device to enter the information page. The page shows the software version, firmware version, application icon and name, as well as the connected SSID. This also shows the car with the IP address and port and return to the main page by pressing the Back key of your device.

Press  again to stop the video recording.

For iOS™, the recorded video is in MOV format and is stored at the default photo folder.

For Android™, the recorded video is in AVI format and is stored at /sdcard/VLM/Video, using the current timestamp as the file name.

**Note: If the “battery is low” warning message pops up at the iOS™ device, the recording process will stop, while the recorded video will be stored.**

**Video can't be recorded if Android™ device does not have SD CARD.**

For Android™ user, please use VLM APP to play the recorded video or other third party software with AVI format playing capability.

**Due to the complexity of multiple hardware platforms of Android™ device, some low-end devices might suffer from**

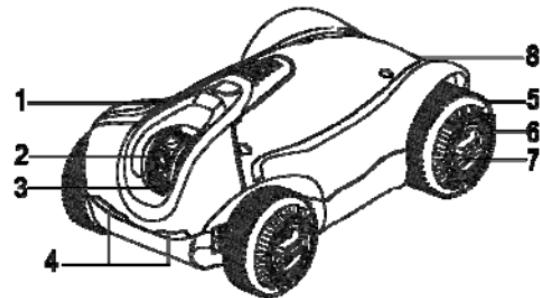
in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**WARNING:** To comply with FCC's RF radiation exposure limits for general population/uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

## VERTEX-LINK MINI PARTS

1. Body	5. Tire(4)
2. Night vision lens	6. Wheel(4)
3. Camera	7. Wheel cap(4)
4. Headlight(2)	8. Tail-light



is pressed again.

**Note: The playback or patrol will be stopped when the joystick or the Gravity sensor is activated.**

**The recorded action will be overwritten if a new set of action is recorded.**

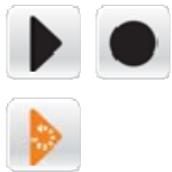
**The recorded action will be erased if Vertex-Link Mini is reset.**

**Please be careful about the memory usage of the device if the recording action involves snapshot taking, and/or video recording.**



## VIDEO RECORDING

Press  to start the video recording function. Vertex-Link Mini records the video, as well as the audio capture from the car and stores at the device.



## ACTION RECORDING, PLAYBACK & PATROL

Vertex-Link Mini can record up to around 60 seconds of action, such as a driving path, snapshot taking, or even video recording.

Record: press , control the Vertex-Link Mini, take snapshot, or even record a video.

Stop: press  again to stop.

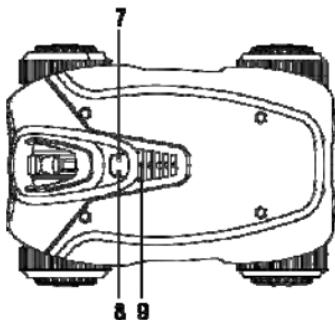
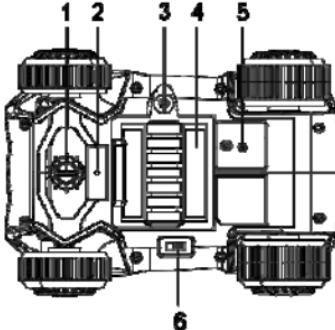
Play: press  to play back the actions you have recorded automatically.

Patrol: double-click the , the button will change to .

Vertex-Link Mini will play the recorded actions over and over, until

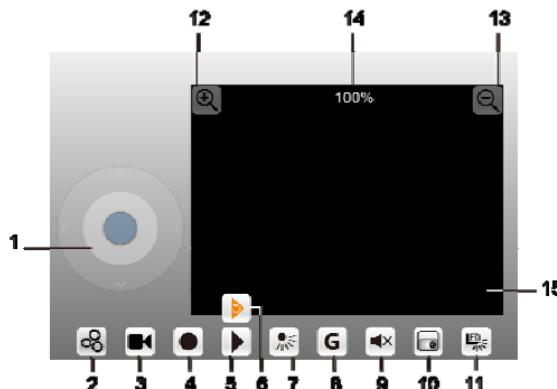
## VERTEX-LINK MINI PARTS

1. Straight line movement slot
2. SSID label
3. Screws for battery compartment
4. Battery door
5. Reset
6. Power switch
7. Power LED
8. Connection LED
9. Microphone



## VERTEX-LINK MINI APP INTERFACE

1. Direction Control	2. Information
3. Video record	4. Record path
5. Play path	6. Play path in N loops
7. Night Vision	8. Gravity sensor
9. Sound level	10. Snapshot
11. Headlight/Tail-light	12. Zoom in
13. Zoom out	14. Zoom ratio
15. Video screen	



### NIGHT VISION

Press  to activate the night vision sensor, press  again to turn off the night vision.

**Note: During the night vision mode is on, the video stream will be in black and white.**



### HEADLIGHT/TAIL-LIGHT

Press  to turn on this function. Headlight will be turned on when this function is on and vehicle is moving forward. Tail-light will be turned on when vehicle is making turns or moving backward.

Press  again to turn off this function.



## SNAPSHOT TAKING

Press  to activate this function. Pictures will be saved to your device.

**Note: Number of pictures can be saved depends on the size of your device. Pictures will be saved at “Pictures” folder at iOS™ devices, and will be at “VLM” directory of “/sdcard/VLM/Picture” on the SD card of Android™ devices.**



## ZOOM IN AND OUT

To zoom in on an object, press  on your device screen. To zoom out, press . Current zoom ratio will be displayed on the device's screen accordingly.

\* Please note different control layout might apply

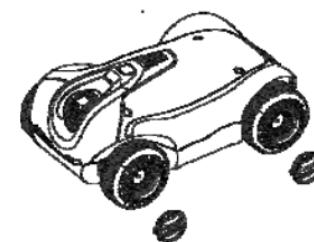
## SOFTWARE INSTALLATION

iOS™ go to App Store , Android™ go to Google play search for VLM and download the free app.



## REPLACEMENT OF WHEELS

Wheels are interchangeable (Sold separately). Twist the wheel cap in clockwise direction to tighten and in anti-clockwise direction to loosen.

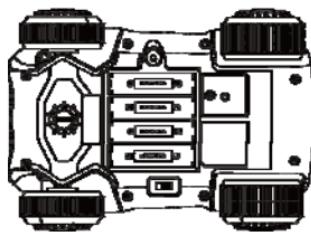


## BATTERY INSTALLATION

Remove the BATTERY DOOR by unscrewing the access screw on the cover with a small screwdriver.

Remove the cover and insert 4 x AA batteries according to the polarity indicators inside the compartment.

Replace the BATTERY DOOR and tighten the screw to secure.



## POWER AND CONNECTION

Slide the switch on the bottom of Vertex-Link Mini to on. The ORANGE LED will light up. Wait approximately 30 seconds, the connection BLUE LED will begin to blink.

disappear from your device's screen. To drive, just tilt your device in the direction you would like to drive. Press the **G** button again to turn off this function. The manual drive buttons will reappear on your screen.

**Note:** The horizontal 0° is set to the angle when you press the **G** button every time.

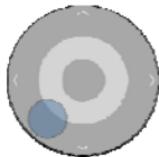


## AUDIO FROM THE CAR

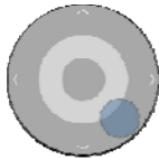
Press  button to activate this function. iOS™ will have slide bar to control the volume. Android™ will have control through individual hardware settings.

**Note:** Audio will only transmit to device when the car is in still motion, no audio will transmit when the car is in movement.

Turn left-backward: Move the joystick position to lower left.



Turn right-backward: Move the joystick position to lower right.



**Stop:** release all buttons.



## GRAVITY SENSOR

Press the **G** button on your device's screen. The joystick will



## LED STATUS CONVENTION:

LED color	State	Description
ORANGE	Solid (30seconds)	Power is on, product is preparing.
BLUE	Blink	Product is ready to be connected.
BLUE	Solid	Product is connected and App is opened.

On your phone device, go to Settings and turn Wi-Fi on. The SSID address (begins with VLM\_ with 12 digits follows) will appear as an available connection.

**Note:** Each Vertex-Link Mini has a unique SSID address (printed on the bottom of the unit). If there is more than one Vertex-Link Mini within the proximity, individual SSID will appear as a list of the available Wi-Fi connections. Switching the phone device to “Airplane Mode” is recommended with playing with the product.

Select the SSID, you shall be able to see the Wi-Fi connection logo appears at the top of your device's screen “”, or before the SSID,

it shows “√”.

Exit out of the Settings and open the Vertex-Link Mini App.

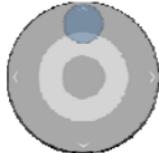
The BLUE LED will turn from blinking to solid.

You will see the view taking from the Vertex-Link Mini on the device and you are ready to go.

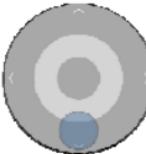


## MOVEMENT CONTROL

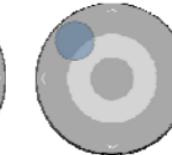
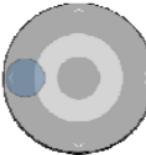
Forward: Move the joystick position to upper top.



Backward: Move the joystick position to lower bottom.



Turn left-forward: Move the joystick position to left or left upper top.



Turn right-forward: Move the joystick position to right or right upper top.

