



CAPTURE THE MOMENT

Product name:CYCLEVISION HELMET

Model:CVHC-01-01,CVHC-01,CVHC-01-02

INSTRUCTION MANUAL

TABLE OF CONTENTS

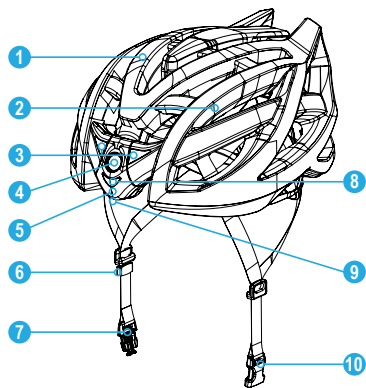
YOUR CYCLEVISION HELMET	4
SAFETY PRECAUTIONS	6
CERTIFICATION	7
PACKAGING CONTENTS	8
GETTING STARTED	9
SETTING UP CYCLEVISION HELMET	10
CHARGING CYCLEVISION HELMET	13
CHARGING WITH A POWER BANK	15
POWERING ON/OFF CYCLEVISION	16
BATTERY LEVEL INDICATOR	17
DUAL CAMERA FUNCTION	18

TABLE OF CONTENTS

CYCLEVISION APP	19
WI-FI, SSID AND PASSWORD	20
CONNECTING TO WI-FI	22
USING THE APP	23
APP SETTINGS	26
TRANSFERRING VIDEO/S TO PC/MAC	31
PCB & CPU RESET	33
MAINTENANCE	34
PRODUCT GUARANTEE	36
REGULATORY INFORMATION	38
CUSTOMER SUPPORT	39

YOUR CYCLEVISION HELMET

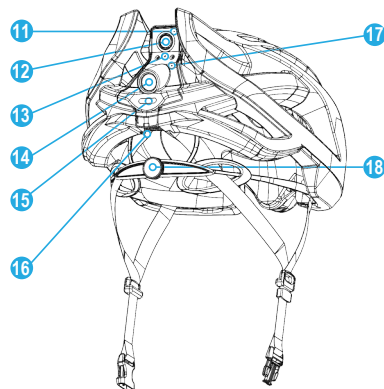
FRONT



- | | |
|-------------------------------|---|
| 1. Cyclevision Helmet Shell | 7. Right Hand-side Male Buckle |
| 2. Inner Lining | 8. Forward Camera Operational Status Light |
| 3. Forward PCB/CPU Heat Sinks | 9. Forward Camera Micro USB Vision/Sound Data Connection Port |
| 4. Forward HD Camera | 10. Left Hand-side Female Buckle |
| 5. Forward Microphone | |
| 6. Strap Sliders | |

YOUR CYCLEVISION HELMET

REAR



- | | |
|--|---|
| 11. Helmet Electronics 'Reset' Button | 16. Rear Camera Micro USB Vision/Sound Data and Battery Recharge Port |
| 12. On/Off Button | 17. Rear Camera Operational Status Light |
| 13. Rear Microphone | 18. Rotary Headset Restraint Head Sizing Adjustment Dial |
| 14. Rear HD Camera | |
| 15. Battery Power Status LED Light Pipes | |

SAFETY PRECAUTIONS

- Warning! The Cyclevision Helmet must be adjusted before each ride.
- The Cyclevision Helmet must feel comfortable on the head, if not the helmet straps must be readjusted to ensure a comfortable firm fit.
- The Cyclevision Helmet must cover your forehead and be correctly positioned.
- The Cyclevision Helmet is not a motorcycle helmet and is not suitable for any motorsport use.
- The Cyclevision Helmet has been designed and tested to withstand high speed water injection, but is not designed nor suitable for water sports.
- The Cyclevision Helmet must not be used for water sports or any other applications other than that of a cycling helmet.
- The Cyclevision Helmet must be replaced if it is involved in a crash or is damaged.
- The Cyclevision Helmet is not a toy.
- Always be aware of your surroundings to avoid injury to yourself or others.

CERTIFICATION

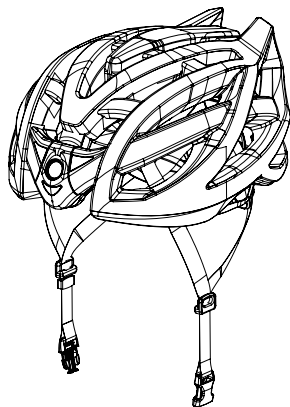
Your Cyclevision Helmet complies with destructive testing standards

1. Australian and New Zealand AS/NZS 2006/2008: A1-2009
2. European (including UK) EN 1078:2012 +A1-2012
3. North American (including Canada) 16CFR 1203

Your Cyclevision Helmet complies with electrical conformance standards CE, FCC & C-Tick.

Your Cyclevision Helmet complies with European chemical testing standards REACH, Annex XVII, EN 12472, AZO Dye stuff, EN 420, EN ISO 3071.

PACKAGING CONTENTS



Package contents:

- 1x Cyclevision Helmet
- 1x Instruction Manual
- 1x Quick Guide
- 1x Micro USB Data/Power Transfer Cable
- 1x Spare Helmet Liner

GETTING STARTED

Congratulations on purchasing your Cyclevision Helmet. Please refer to SETTING UP CYCLEVISION HELMET to make sure you properly adjust the Cyclevision Helmet to suit.

For the best experience, we recommend fully charging the internal 3250mA Lithium Polymer Battery before first use. Full charge is indicated by illumination of 4X battery status indicator lights.

The Cyclevision Helmet comes with dual integrated 32GB memory cards and are not removable, upgradable or interchangeable. Do not attempt to open the helmet to change the cards under any circumstances. The housings have been sealed and damage to the housings, camera and PCB may occur. Any attempt to open the camera housing will result in voiding of the warranty.

Each camera records in 1080p = 1920 x 1080 x 30fps HD Vision. Each memory card is written at approximately 100Mb per minute of record time, the vision data files are recorded in 2 minute loops; if the integrated memory becomes full during recording, the older video files will be overwritten by the newer video files. This process (under normal circumstances) will occur every 4 hours of recording time.

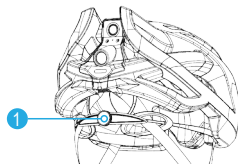
The Cyclevision Helmet also records sound and the microphone holes must never be poked with foreign objects or damage to microphone components will occur.

SETTING UP CYCLEVISION HELMET

WARNING! The Cyclevision Helmet must be adjusted before each ride.

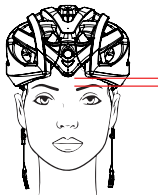
Step 1 - Retention System

Before putting on the Cyclevision Helmet, completely loosen the rotary retention dial (1), place the Helmet on your head and rotate the dial to tighten the Helmet for a snug and comfortable fit. The Helmet should not feel loose on the head.



Step 2 - Position

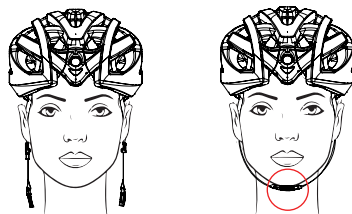
The Cyclevision Helmet should sit level on your head about one or two finger-widths above your eyebrows. The Helmet should not be worn sloping back off your head. Tighten the retention system until the Helmet feels snug.



SETTING UP CYCLEVISION HELMET

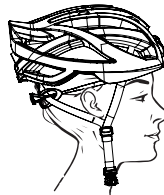
Step 3 - Buckle Strap Adjustment

Connect the male/female retention strap buckles, centering them under the chin. The straps can be adjusted to lengthen or shorten them so the Helmet stays firm on your head and the straps maintain a firm fit under your chin.



Step 4 - Side Strap Slider Adjustment

The side strap must be adjusted using the slider to form a "V" shape under and in front of the ears.



SETTING UP CYCLEVISION HELMET

Step 5 - Final Check

The Cyclevision Helmet must be properly secured on the head without rocking forward over the eyes and/or backward on the head.

This does not only provide correct protection in case of a crash but is necessary for the quality of the video recording. Both the front and rear camera angles are preset for correct helmet positioning.

Cyclevision cannot be held responsible for vision data capture angle differences if the Helmet is not correctly placed and secured on the head.



CHARGING CYCLEVISION HELMET

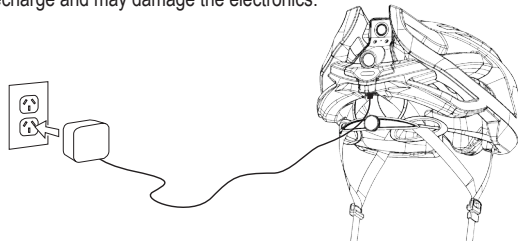
Charging the Battery

The Cyclevision Helmet comes fully assembled with an internal 3250mA Lithium Polymer Battery.

The Battery is fully enclosed in its own separate housing and is not removable from the Cyclevision Helmet. Do not attempt to open the Helmet to change the battery under any circumstances. The battery housing has been sealed therefore damage to the housing, camera and PCB may occur if tampered with. Any attempt to open the camera housing will result in voiding of the warranty.

To charge the Cyclevision Helmet plug one end of the USB cable into any wall power outlet, we recommend a DC5V - 2A USB charger adapter, and place the other end of the Micro USB cable into the **REAR** Micro USB Port.

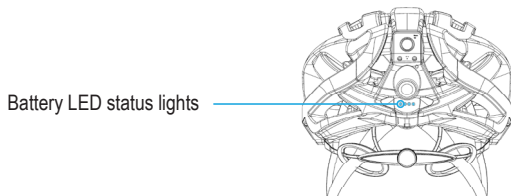
Do not plug power into the front USB port – this will not result in battery recharge and may damage the electronics.



CHARGING CYCLEVISION HELMET

Battery recharge will commence immediately once the USB cable is plugged into the rear USB port, and the rear Battery LED status lights will illuminate indicating the battery is recharging.

Charger Requirements: Output current: DC 5V $\equiv$ 2.0A



Note: Both USB ports are open to the weather. They are both sealed inside the helmet and are of waterproof nature so no damage can be done if water is sprayed into this area.

WARNING!

DO NOT PLUG THE USB CABLE INTO BOTH THE FRONT AND REAR USB PORTS AT THE SAME TIME UNDER ANY CIRCUMSTANCES! THIS WILL DAMAGE THE ELECTRONIC CIRCUITRY. DO NOT SWITCH CAMERA ON WHILST HELMET IS CHARGING AS IT MAY CAUSE CAMERA TO OVERHEAT.

CHARGING WITH A POWER BANK

If using a Power Bank to charge the Cyclevision Helmet, turn ON the Helmet and make sure it is in RECORDING mode, then plug-in the Power Bank connection.

Note: If charging the Cyclevision Helmet by Power Bank whilst in RECORDING mode, the charging speed will be very slow due to insufficient charging current given from the Power Bank.

The Cyclevision Helmet can be topped up with a Power Bank once the Helmet has been turned on and is operating correctly.

Turn the Cyclevision Helmet ON let the 10 second start sequence complete. When both red LEDs are flashing, plug in your remote Power Bank to the rear micro USB port, the Helmet will now be accepting a power top up whilst continuing to record.

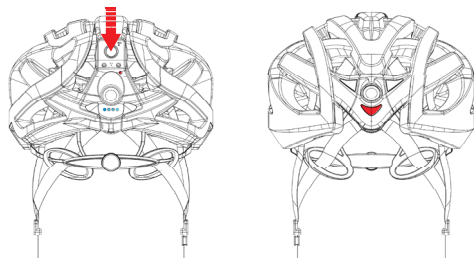
The Cyclevision Helmet has a 3250Ma battery. The useable life can be extended approximately by 1000Ma for every hour. For example, a 2000Ma power bank will extend the runtime for approximately 2 hours if fully charged.

WARNING!

DO NOT USE A POWER BANK TO CHARGE THE BATTERY IN DIRECT SUNLIGHT. DURING CHARGING, THE TEMPERATURE SHOULD NOT BE OVER 45°C.

POWERING ON / OFF CYCLEVISION

Power ON / OFF



Powering On: Press the On/Off button on the back of the Cyclevision Helmet for at least 1.5 seconds to power on. The camera start sequence will commence which takes approximately 10 seconds. Once the start sequence has been activated do not press the ON/OFF button again until the start sequence has fully completed.

The rear camera status light located to the top right hand side of the rear camera lens tube will illuminate as a solid Red light for approximately 4 seconds. Additionally, the front camera status light will illuminate red and follow the same start sequence as the rear.

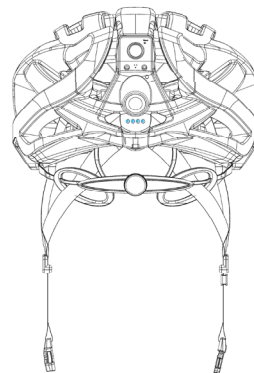
Powering Off: To turn the helmet OFF hold the power button down for 2 seconds then release. The helmet will take 3 seconds and then shut down, all lights will turn off indicating power OFF.

BATTERY LEVEL INDICATOR

Once the ON/OFF button has been pressed, the red front and rear camera status lights are illuminated, and all 4 Blue LED battery level indicators will illuminate for approximately 4 seconds, then revert back to display the remaining useable battery charge.

When fully charged the 3250 mA battery will run the helmet continually for approximately 2.5 hours without WIFI running.

- 4 LED lights = 4/4 full charge
- 3 LED lights = 3/4 charge
- 2 LED lights = 1/2 charge
- 1 LED light = 1/4 charge



DUAL CAMERA FUNCTION

During the start up sequence, both the front and rear camera status lights will go off for approximately 3 seconds, then come back on as solid red lights for another 3 seconds, after which the front and rear camera status lights will start flashing, indicating that the front and rear cameras are both in simultaneous operation and recording correctly.

If there is a solid Red light being omitted from either the front or rear camera status lights, then this indicates that the camera is not recording.

For example, once the helmet has been turned on and has completed its 10 second start sequence, if the front camera status light is flashing and the rear camera status light is displaying as a solid red, then this indicates that only the front camera is recording, and the rear camera is not recording.

To recap:

LED flashing Red - Camera Recording

LED solid Red - Camera not recording

CYCLEVISION APP

Connecting to Streaming App

Your Cyclevision helmet functions in conjunction with the 'Cyclevision' App. Before using the Cyclevision camera it will be necessary to download and install the App onto your smartphone.

The 'Cyclevision' App lets you stream the footage from the Cyclevision Helmet during recording. This allows the user to use their mobile device as a rear view camera.

Download the free 'Cyclevision' App from either:



Connecting to the Helmet

Turn your Cyclevision Helmet ON and open your smartphone settings. Search available wireless networks.

Please note that WIFI is turned off by default, a short press of the ON/OFF button can turn WIFI on/off.

The Cyclevision helmet can stream live vision to your smartphone through the 'Cyclevision' App from either the front or rear cameras.

WI-FI, SSISS AND PASSWORD

WIFI

The Cyclevision Helmet is set by 'factory default' to the following:

For viewing vision from the rear camera:

MTEK_b_WIFI

Password 87654321

For viewing vision from the front camera:

MTEK_f_WIFI

Password 87654321

SSID

The 'SSID' and name of the viewing camera can be changed to suit the user i.e.

MTEK_b_WIFI –change to- ROB_b_WIFI

MTEK_f_WIFI – change to- ROB_f_WIFI

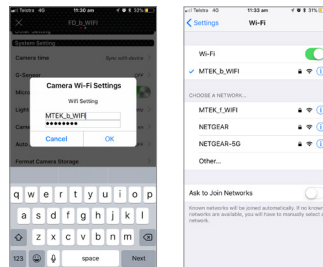
Password

The password (87654321) can also be changed to suit the users preference; however just by changing the SSID name, is more than satisfactory to uniquely electronically mark your Cyclevision camera helmet.

Refer to 'Camera WIFI Settings' for full details. This is found in App Settings.

CONNECTING TO WI-FI

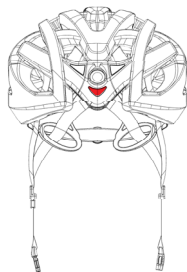
After selecting either MTEK_b_WIFI or MTEK_f_WIFI, enter the default password 87654321. A small blue tick will come up next to the Wi-Fi network connection once it has successfully connected. The Password can be changed at a later date in the App settings.



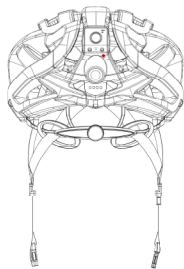
The pairing of Wi-Fi with the 'Cyclevision' App merely allows the use of a mobile smart phone to be used as an 'electronic rear vision mirror' when mounted on the bicycle handlebars, suitable for the display of rearview approaching traffic. The pairing of Wi-Fi is not necessary to continue helmet recording functions. All vision and sound data is stored within the Cyclevision Helmet on twin Micro SD Cards and not in the App.

CONNECTING TO WI-FI

To show that either of the front or rear helmet cameras have been paired with your smartphone, the default Red camera status LED lights will revert from flashing Red to flashing Green.



Front



Rear

Once the Wi-Fi connection has been made, close Settings on your smartphone and open the 'Cyclevision' App.

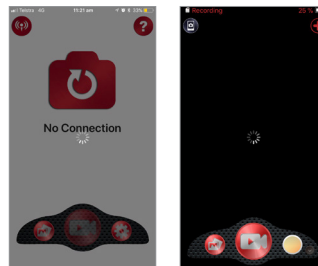


USING THE APP

Open the Cyclevision App

The first time you open the Cyclevision App you will get the connection screen, and the spiral connection icons will appear. In later times you will get a black screen while loading.

In this example we have chosen the rear camera to view Wi-Fi streaming MTEK_b_WIFI.

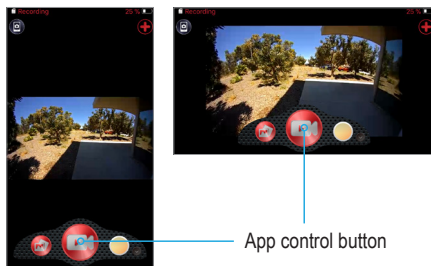


The Cyclevision App start screen will appear and the rear helmet camera will connect to the App. This will take approximately 4 seconds and then live vision will be displayed from the rear camera.

USING THE APP

The smartphone screen can be rotated from portrait to landscape modes to suit user preference.

Landscape mode is the preference for viewing rearward approaching traffic, because this provides a larger screen display.



App control button

The large central Red App control button on your smart phone screen will be flashing when in record mode. If the button is not flashing press to activate the record mode.

USING THE APP

If the red control button within the app is flashing, so will the green helmet camera status light, indicating the camera is in record mode.

If you press the flashing button so that it becomes solid red, the helmet camera status light will also show solid green, indicating that it is not recording from that helmet camera.

If the helmet camera has been turned on and the front or rear camera status lights are displaying one red flashing light, and one solid red light, then the associated non flashing camera status light indicates that the camera is not in record mode and the user must change the settings in the 'Cyclevision' App.

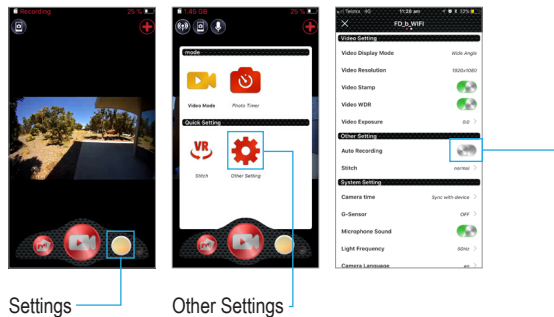
The underlying reason the rear camera does not record immediately upon helmet camera 'start-up' is the 'Auto Recording' mode is not engaged. Go to 'Settings' and make sure 'Auto Recording' is turned ON.

APP SETTINGS

How to access App Settings

Step 1 - Select the round yellow settings button on the vision screen.

Step 2 - Select 'Other Settings' located under 'Quick Settings'.



For example, if you find the 'Auto Recording' feature is off, go to 'Other Settings' and you will find 'Auto Recording' as the 6th option down. Simply move the slide bar to the right to expose the green 'ON' mode. The Helmet will now function with the rear camera in operation every time the Helmet is turned ON.

APP SETTINGS

The Cyclevision App has various other functions and controls including the ability to control the operation of either the front or rear helmet cameras, but also the mode of viewing and vision data recording.

Select **Mirror Mode** ON to view rearwards approaching traffic on the correct side of the rider, as seen on your smartphone when mounted on the bicycle handlebars facing the rider.

CAUTION : If the **Mirror Mode** setting is OFF rearwards approaching vehicles will appear on your smartphone screen on the opposite side to the rider

Note: The red camera control button must always be OFF (not flashing) before any setting or mode changes can take place. Pressing this button will turn OFF the associated camera while you make setting adjustments. Remember to turn the red camera control button back ON again after adjusting any of the App settings.

VIDEO SETTINGS

Video Display

This will mirror the current vision data capture mode that the App has been set to, and highlight in yellow.

Video Resolution

By default, this is set at 1920x1080 = equal to true HD recording and is not adjustable.

APP SETTINGS

Video Stamp

Select this from screen overlay of day and date time stamping, if selected, this will appear in all the downloaded vision data on the lower bottom part of the screen

Video WDR

Cameras with wide dynamic range (WDR) have special software that allows them to balance that lighting for a clear image. Select WDR to improve the overall exposure throughout your entire image. It enables the camera to pick up greater detail in dark shadows, while making sure that the highlights don't get blown-out, the result is a natural looking video.

Video Exposure

The Cyclevision camera has terrific ability to record astounding vision clarity while riding directly into or towards the sun or very bright objects, by default the setting is 0.0, if riding in low light situations or at night, then select this option and change the setting to +2.0 this will do two things:

1. Lighten the smartphone viewing screen.
2. Open the camera aperture to allow more light onto the image sensor and enable low light recording

Remember when the Cyclevision Helmet or 'Cyclevision' App is subsequently shut down the last settings will be maintained, and if for example you rode at night and adjusted the App to suit, remember to readjust back to 0.0 for riding in bright sunlight, to prevent overexposure of the next loop of recorded image.

APP SETTINGS

OTHER SETTINGS

Auto Recording

This must be selected to ON, so that when the Cyclevision Helmet has been turned OFF and then back ON it continues to automatically record without any need for user intervention.

SYSTEM SETTINGS

Camera Time

Press this button to sync the front and rear cameras – this can be done by selecting Auto (same as the smartphone device time) or manually.

G-Sensor

Not a feature with the Cyclevision Helmet, can be left ON or OFF.

Microphone sound

Select sound ON to record from the rear or front cameras, select sound OFF to stop sound recording.

Light frequency

Please leave it remaining at 50Hz. This is the recommended Cyclevision Helmet Camera setting.

APP SETTINGS

Camera Language

Select English

Auto Power Off

By default, this is set to 'never'. If changed to 1, 3, or 5 minutes the Cyclevision Helmet will automatically shut the cameras down after the specified time. If you select this remember when you next turn the helmet ON the same feature will be enabled and the Cyclevision Helmet will continue to shut down at the specified time, unless you change the settings back to 'Never'.

Format Camera Storage

Reformatting the camera is not normally necessary unless you are experiencing difficulty with memory card storage. Selecting and confirming Format Camera Storage will wipe any existing data from the internal memory card storage and reset it like new.

Reset Camera Settings

Returns all 'Cyclevision' App settings to the factory default.

Camera Wi-Fi Settings

You are able to personalise your Cyclevision Helmet WIFI name and password.

TRANSFERRING VIDEO/S TO PC/MAC

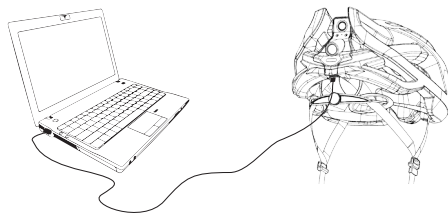
Viewing Your Video Footage

To playback your video, you must first transfer the video file/s to your computer.

Downloading Vision Data From Either The Front Or Rear Cameras

The Cyclevision Helmet has two separate high definition cameras, thus creating two separate video files each time you record.

Simply connect the USB Cable provided to the desired camera and connect the other end to a computer and turn ON the Cyclevision Helmet. Browse the internal memory card and select the video/s you want to transfer to your computer.



WARNING!

DO NOT PLUG THE USB CABLE INTO BOTH THE FRONT AND REAR USB PORTS AT THE SAME TIME! THIS WILL DAMAGE THE SEALED (UNREMOVABLE) INTERNAL BATTERY.

TRANSFERRING VIDEO/S TO PC/MAC

Your computer will take up to 14 seconds to detect the Cyslevision Helmet camera and once detected simply follow the onscreen prompts to download the vision data files to your storage area of preference.

The Cyclevision Helmet records in true HD 1920 x 1080 x 30fps which is equal to 100 MB per minute. This is a reference point only, environmental factors may vary file size.

The vision data is recorded in 2 minute loop sequences, i.e. if the inbuilt 32GB memory card were empty and the camera activated the first 2 minute loop will be recorded followed immediately by another 2 minute loop and so on. When the card becomes full the programming will dump the very first loop recorded (oldest loop) and replace it with the newest loop, (and so on).

If you do not download the vision the loops will simply continue to overwrite each other ad infinitum.

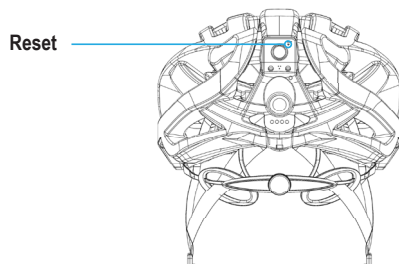
A 32 GB memory card when full will download approximately 120 x 2 minute loops of vision and sound. This is why Cyclevision has kept the default card to 32GB, if we elected to install a 64 GB memory card (approximately 8 hours of storage) it would require 240 files to be transferred and downloaded and you may be quite annoyed at the length of time it takes to do this.

BCB & CPU RESET

The Cyclevision Helmet has a reset button located on the top right hand side of the ON/OFF button.

If the helmet is not functioning correctly, refuses to shut down correctly or has any other troubling issues, use a paper clip and gently insert it into the hole and feel for the reset button, located slightly to the top corner of the reset hole.

Push this button to interrupt the power supply and reset the CPUs.



Rear

MAINTENANCE

Caring for your Cyclevision Helmet

- Do not reuse the Cyclevision Helmet if it is dropped, damaged or has been involved in a crash.
- The Cyclevision Helmet is water and splash resistant only and cannot be submerged in any liquid.
- The Cyclevision Helmet is not designed for swimming, diving or any other watersport applications.
- After every use in a wet environment, carefully wipe the Cyclevision Helmet with a soft, dry cloth and leave to dry.
- A spare Cyclevision Helmet Liner has been provided.
- For best audio performance, pat dry both microphone holes at the front and back of the Cyclevision Helmet.
- Do not use compressed air to blow water out of the Cyclevision Helmet microphone holes.
- Do not leave the Cyclevision Helmet near direct or indirect heat.
- We recommend replacing the Cyclevision Helmet every 3-5 years from the date of purchase.

MAINTENANCE

- Clean the Cyclevision Helmet using only a soft cloth, warm water and mild soap.
- Do not use harsh chemicals such as Petroleum based solvents.
- Use a soft, lint-free cloth to clean both lenses of the Cyclevision.
- Do not use harsh cleaning chemicals on the camera lens.
- Do not insert foreign objects around the lens.
- Do not insert a pin or paper clip into the front or rear microphones holes - as it will damage internal microphone components.

PRODUCT GUARANTEE

The manufacturer makes every effort to ensure that its products are manufactured without any defect. However, in the rare event of defects due to faulty workmanship or materials, we guarantee to repair or replace the product, or any part thereof, free of charge.

The guarantee is granted to the original purchaser only and is valid for one year from the date of purchase indicated by the sales receipt.

This guarantee does not apply if the product is altered or repaired or otherwise tampered with by unauthorised persons and/or is used other than in accordance with manufacturer's instructions and/or is subject to other than reasonable use of a product of its nature.

This guarantee in no way affects your rights under the statutory law.

If you think your product might be faulty, contact Cyclevision Pty Ltd at info@cyclevision.com.au to arrange for the product to be repaired or replaced.

PRODUCT GUARANTEE

Our goods come with a guarantee that complies with Australian Consumer Law. You are entitled to a replacement or refund for a major failure. You are also entitled to have the goods repaired or replaced if the faulty helmet is returned to Cyclevision or the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Any replacement helmet will be posted/freighted out to the consumer (normal standard) post/freight at cost to Cyclevision.

For further information on consumer law, please visit:
<https://www.accc.gov.au/consumers/consumer-rights-guarantees>

REGULATORY INFORMATION



This symbol means that according to local laws and regulations your product should be disposed of separately from household waste.

Electrical Ratings

3.7V  3200mAh



CUSTOMER SUPPORT

For customer support, visit:

www.cyclevision.com.au

or email us:

info@cyclevision.com.au

CYCLEVISION PTY LTD

PO Box 438,

Brisbane,

Queensland

4000

Australia.

+61 (0)475 931 808

FCC Caution.

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.

Any Changes or modifications 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 equipment generates uses and can radiate radio frequency energy and, if not installed and used 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 to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into 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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

CYCLEVISION 

CAPTURE THE MOMENT

CYCLEVISION.COM.AU