CYCLOPS-2

Wireless Pole Camera System
User Guide

July 10, 2023

**Cyclops-2 is designed to provide
clear views of inaccessible, dangerous or dark areas
with an extendable pole and cameras streamed wirelessly to a controller.
This document outlines instructions on how to operate and look after your pole camera system.**

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SAFETY AND CARE

🚫
- Some environments may cause a malfunction of the pole camera system
  - Do not immerse it in water
  - Do not expose it to open flame or keep it under direct sunlight for prolonged periods
- Do not use pole camera for breaking glass
- Do not open the pole camera head – this should only be done by Techmatics or under their instruction
- Do not store with the batteries flat (as it will damage the cells in the battery)
- All charging of the pole camera and controller should be done in a clean and dry area away from any liquids
- Ensure that the camera head is securely attached to the pole (proper connection indicated by a click)
- Do not overtighten the grips or undo the top-most grip beneath the gooseneck

⚠️
- If there is smoke or fire coming from the pole camera head, power it off immediately (by disconnecting from the pole).
- With increasing distance between the pole camera and the controller the video and the controls will become less reliable

✔️
- Always keep the pole camera in the case provided while traveling
- Check the battery percentage after every use
- Charge the pole camera after every use
- Use the the bottom section of the pole with the grip hold it

1 HD Camera

Provides a clear view

2 Infrared Cut Filter

This can be used to reduce unwanted IR light from indoor lights or the sun

3 Infrared and White Lights
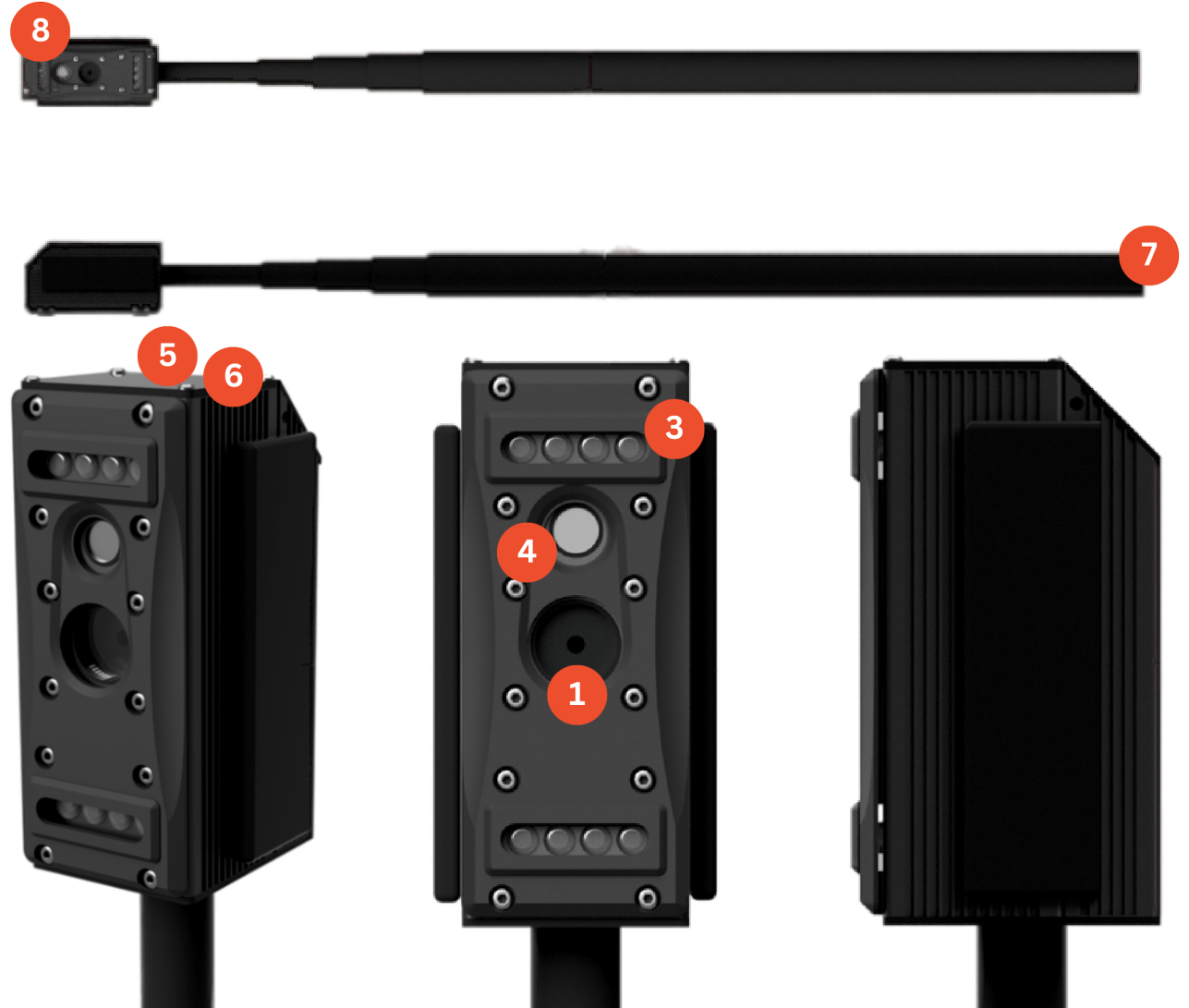
Allows the HD camera to be used both day and night

4 Thermal Camera

Allows heat signatures to be identified

5 Charging Port

A USB C port for charging the batteries in the camera head

6 Charging Lights

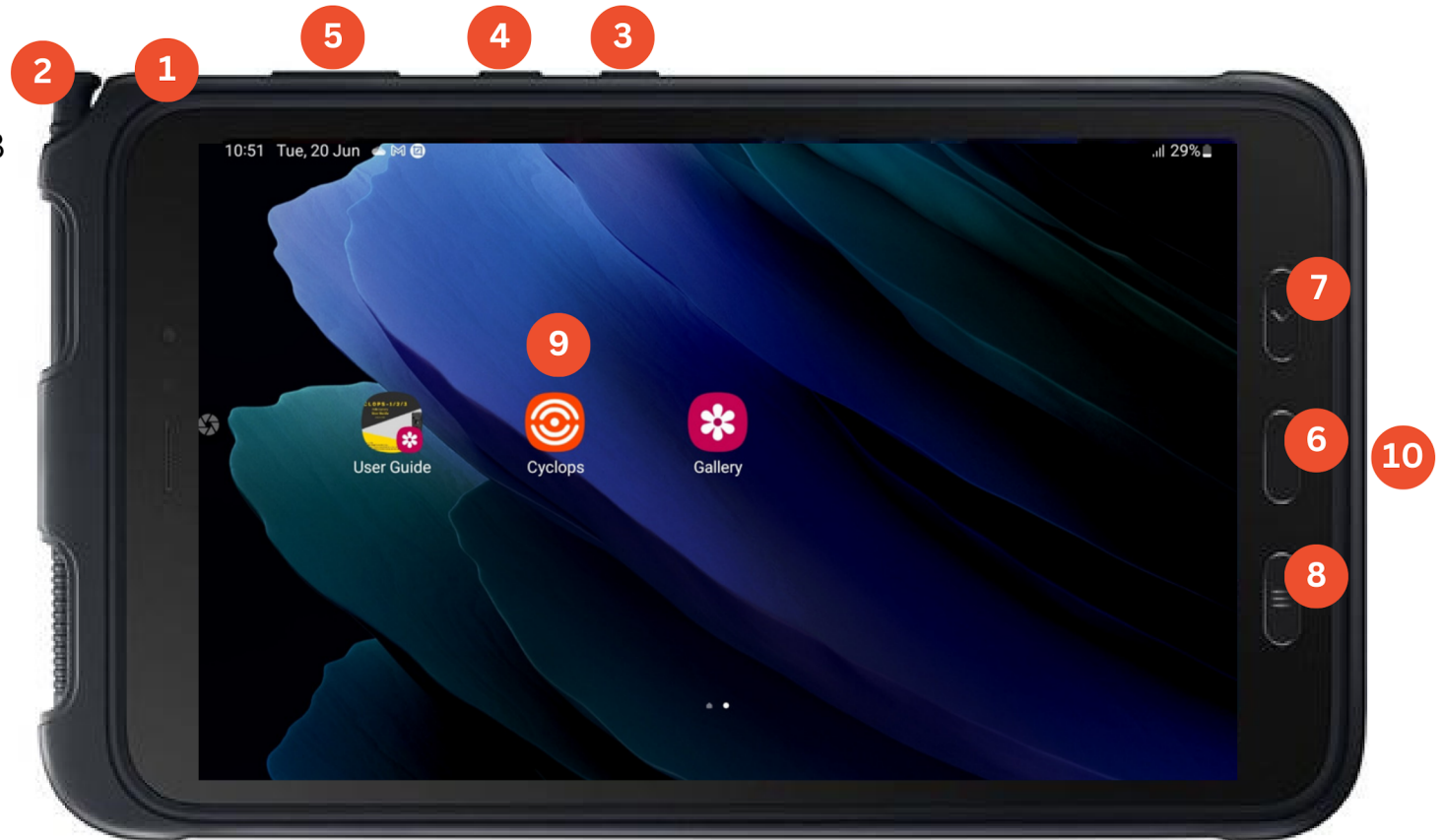For indicating whether the pole camera is on/off or charging/charged

7 Pole

A telescopic pole that can extend up to 3 meters

8 Camera Head

The enclosure that attached to the end of the pole

TABLET CONTROLLER

1 Samsung Galaxy Active3
8" Android tablet with case (IP68 water/dust resistant)

2 S Pen
For use with gloves, drawing or writing

3 Active Key (Red)
Short press: Opens **Cyclops** app
Long press: Opens **Gallery**

4 Power/Sleep Button
For waking/sleeping and turning on/off the tablet.

5 Volume Buttons
Left press: Increase in volume
Right press: Decrease in volume

6 Home Button
To close an app (goes to the home screen)

7 Back Button
For going back in an app or closing an app

9 Apps
Icons on the home screen to open the **User Guide**, the **Cyclops** app or the **Gallery** app

8 Multitasking Button
Opens the Android multitasking screen for switching between apps

10 USB C Port
For charging the tablet

10:51 Tue, 20 Jun

User Guide

Cyclops

Gallery

Turning on

Connect the camera head to the end of the pole (make sure the connector locks in place with a clicking sound. Power on is indicated by an **orange** light.

Turning off

Disconnect the camera head from the pole (press in the button to unlock).

Charging the camera head

Plug a USB C cable connected to a power supply into the port on the top of the camera head. The charging state is indicated by light colours:

Charging: **purple**
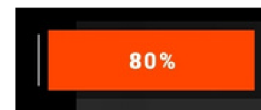Almost charged: **purple/red** flashing (ready to use)
Fully charged: **red**

Monitoring the remaining battery charge

The battery percentage is displayed at the top left of the screen in the app on the tablet. When the battery is fully charged the indicator displays **CHARGED**. When the battery has less than 10% remaining the indicator displays **EMPTY**.

Connector Button

USB C Port

80%

Turning on the tablet

Hold down the power/sleep button on the side of the tablet until the tablet vibrates and the screen turns on.

Turning off the tablet

Hold down the volume down key and the power/sleep button to bring up a menu. Then press the **Power off** icon two times.

Charging the tablet

Plug a USB C cable connected to a power supply into the port of the tablet (in the middle of one side). The percentage charged can be seen at the top right of the screen.

.ıll 100%

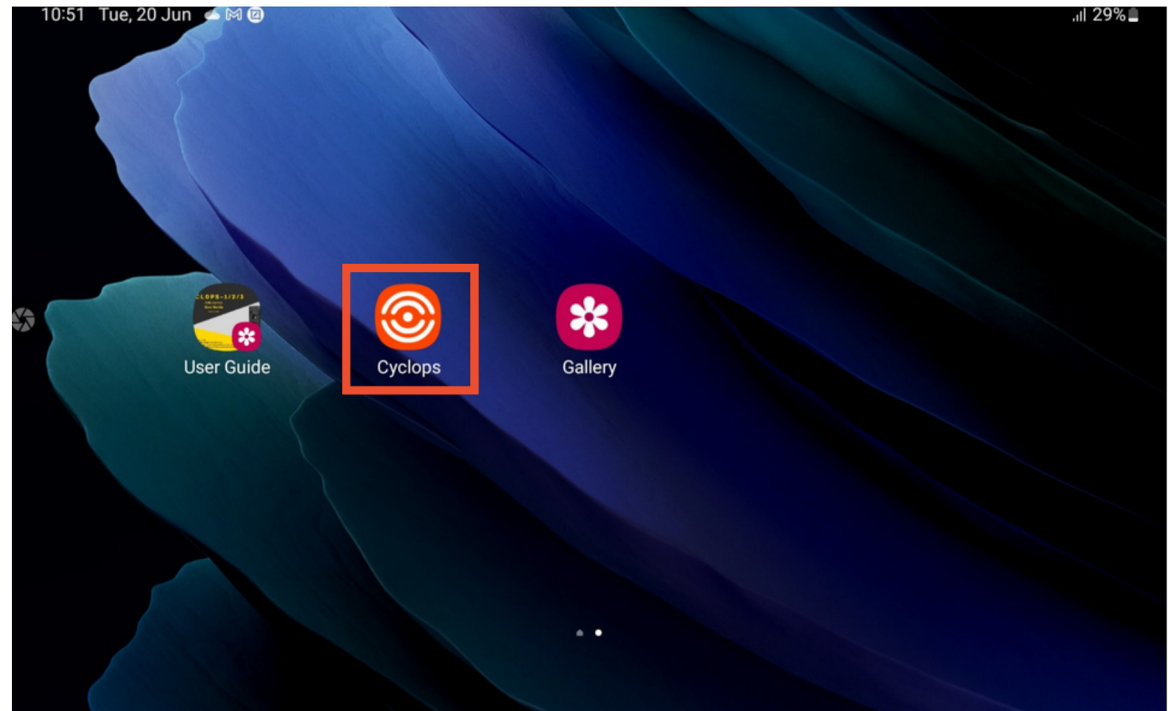## 1. Waking and unlocking the tablet

Press the power/sleep button or the Home button (middle button) on the front once to wake the tablet. Swipe in any direction on the screen to unlock the device.

2. Opening the Cyclops app

Press the red button on the side of the tablet or tap the icon on the home screen.

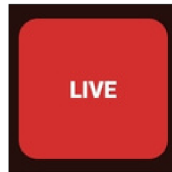## 3. Connecting to the camera head

The tablet will connect to the camera head automatically (30-45 seconds). Note that all the views in the app appear black until a connection is made. If nothing happens make sure that the camera head is powered on and check whether it is connected to a Wi-Fi network called cyclops-network (in Wi-Fi settings).
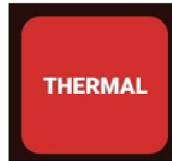
DISPLAYING CAMERA VIEWS

Live Camera View
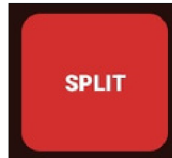Tap to show the main camera view (fullscreen).

LIVE

Thermal Camera View
Tap to show the thermal camera view (fullscreen).

THERMAL

Live/Thermal Camera Split View
Tap to show the live camera and the thermal camera (side-by-side).

SPLIT

White Lights
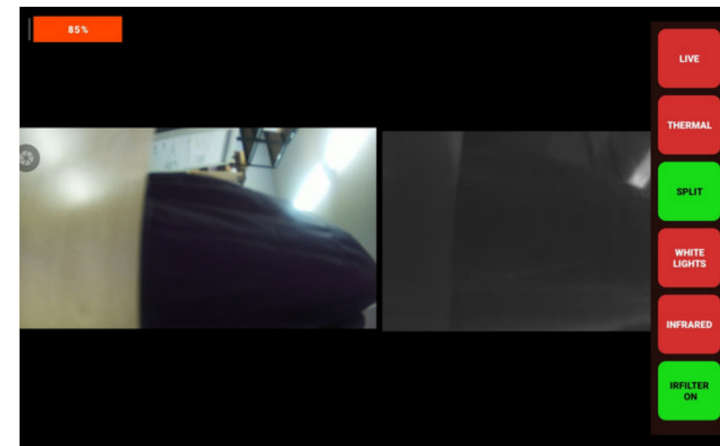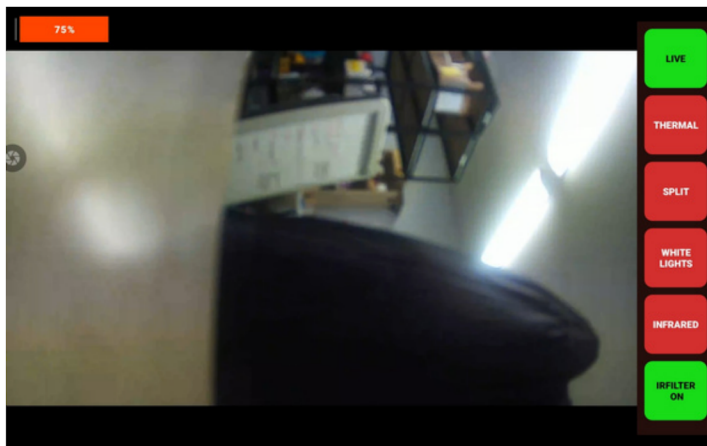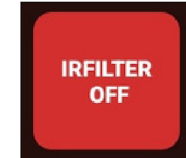Tap 1: Enables white lights
Tap 2: Disables white lights

WHITE LIGHTS

Infrared (IR) Lights
Tap 1: Enables IR lights
Tap 2: Disables IR lights

INFRARED

Infrared Cut Filter
Tap 1: Enables IR filter
Tap 2: Disables IR filter

IRFILTER OFF

ADJUSTING THE POLE LENGTH

- The pole consists of five sections (1 main for holding, 4 adjustable) and a flexible gooseneck
- Each section has a rotating grip that can tighten or loosen the connection to the next section
- Start by loosening the bottom grip first
- The pole can fully extend to approximately 3 meters
- The gooseneck is stiff and can be bent in any direction
- **Do not undo the top-most grip beneath the gooseneck**
- **Be careful not to overtighten any of the grips**
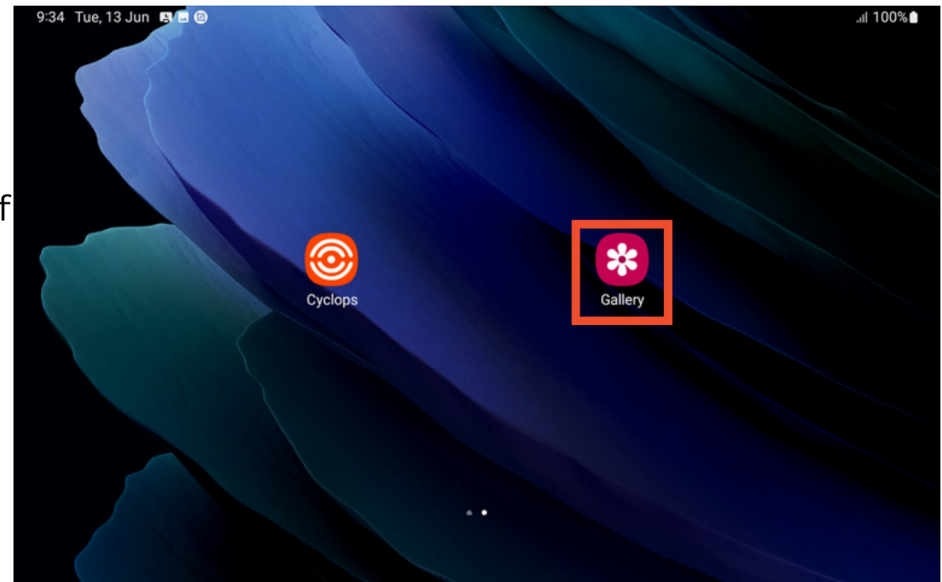- **Be careful not to get your fingers jammed between one section falling on another**

1. Double-tap the screenshot button to capture what is on the screen
2. Or single-tap the screenshot button to immediately crop a screenshot
   a. Drag the rectangle surrounding the image to change its size
   b. When ready, tap the **Save** button at the bottom of the screen.
3. Note that this button can be repositioned on the screen by dragging it
4. To maximize captured detail, take screenshots with a video feed mode that fills the entire screen.
5. Once captured, the screenshot will be available in the gallery app on the controller

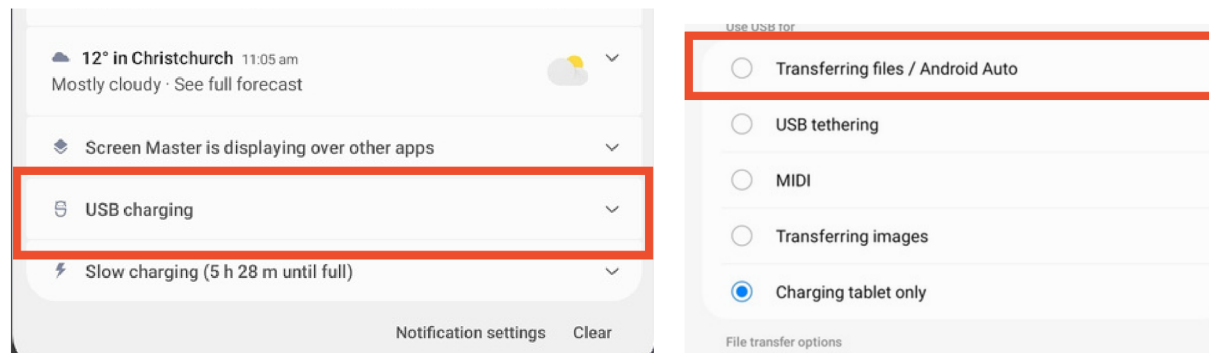**Screenshot (floating button)**

User Guide   Cyclops   Gallery

1. Open the **Gallery** app
2. Here you will be able to navigate and view saved pictures or videos
   a. Press the three lines icon (if visible) at the top left of the screen to show a navigation side bar. This is where the album view can be changed.
   b. It may be necessary to press the back arrow at the top left of the screen to exit the user guide
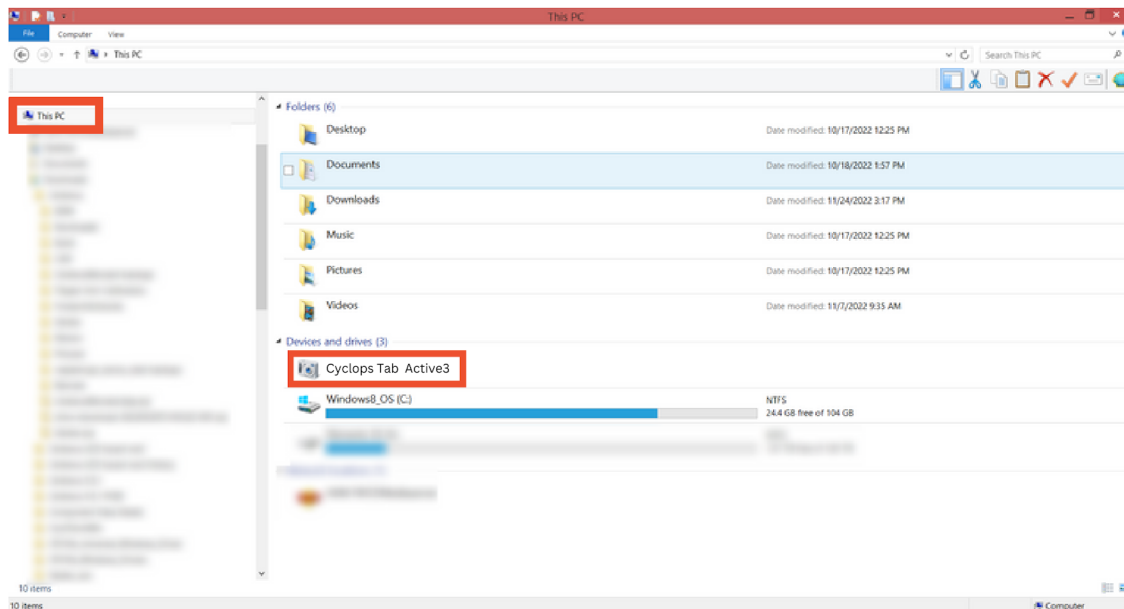   c. Photos taken with Screen Master will be in the ScreenMaster album

Via USB

1. Connect the USB C cable from the controller to a computer

2. The tablet will automatically be set to transfer files mode when you connect by USB. If it is not, follow these instructions:

    a. On the controller, swipe down from the top of the screen to open notifications and find the line with **USB charging**.

    b. Select this notification

    c. Change from **Charge tablet only** to **Transferring files**. If this doesn't work try the **Transferring images** option which works in a similar way.

    d. To access the files on your computer, the instructions for Windows and Mac, respectively, are on the following pages.

Via USB - Windows

1. Open File Explorer

2. Find the devices connected to your computer by navigating to **This PC**

3. Note that the controller device appears as Cyclops Tab Active3

4. Open the controller device. Then open the folder **Internal Shared Storage**. From here you can open **Screen Master** for pictures.

5. You can now copy these files to your computer

Via USB - Mac

1. Download and install a free piece of software called <u>Android File Transfer</u>.

2. Open Android File Transfer. This may automatically open when you connect your device.

3. Once opened, you will be able to access the filesystem on the controller

4. In the **Screen Master** folder are pictures.

5. To copy files to your computer, select the files of interest and drag them to a folder on your computer.