


This document currently does not cover the settings on devices. That will be added at a later date

Setting up recorders

Button on device

Items in menus

1. Insert external microphone in top of recorder
2. Secure the mic with two strips of gaffer tape, on the front and the back
3. Verify the usb battery pack is charged
 - a. Press the button
 - b. All 4 lights should show
4. Attach the recorder to the battery pack with the dual lock attached to both the recorder and the batter pack
 - a. The button of the battery pack should be visible
 - b. The mic should extend above the battery pack
5. Connect the recorder to the battery pack with the 90degree micro usb to USB A cable
6. Press the button on the battery pack
 - a. All 4 lights should show
7. Power on the recorder by holding the **power/home/stop** button
8. Press the **play** button to select *bus power*
9. A USB symbol  should show in the top right corner of the screen
10. Format the memory card so it is empty and ready to record
 - a. Press **menu>system>fullformat**
 - b. Yes you are sure *all data will be erased*
 - c. Press **home** to get back to the home screen
11. Set the time accurately
 - a. Press **menu>others>date/time**
 - b. Set the time based on <https://www.time.gov/>
 - c. Press **home** when it is set
12. Lay out the bags and match each recorder to a bag
 - a. Place a desiccant packet in each bag
 - b. Just set the recorder on the bag for now
13. Set the level to 70 on each recorder
 - a. Press **record** once
 - b. The record light should blink
 - c. Use the **left/Right** button
 - d. The *input level* should say 70
14. Start recording
 - a. Press **record**
 - b. The record light should be solid and the timer should be counting up
15. Set the hold switch on the side to hold
16. Say the following things loud and clear
 - a. "Testing on *month and day*"

- b. "The time will be *nearest minute on <https://www.time.gov/> * on mark"
 - c. "Mark!" at the correct time
- 17. Place the recorder in the bag with the labeled edge of the bag facing you
- 18. Roll the top of the bag over 3 times and buckle the buckle
- 19. Slide a zip tie through the buckle where it attaches to the bag so that it cannot be unbuckled without cutting the zip tie, secure it, and trim it
- 20. You are now ready to deploy recorders

Setting up Camera Battery Box

- 1. Verify that the battery pack is charged
 - a. Press the button on the battery pack
 - b. Make sure all the lights come on. They are very dim
- 2. Open the waterproof box
- 3. Plug the USB A right angle connector connected to the USB cable in the left most USB port
- 4. Place the battery pack in the box
 - a. Make sure the battery pack is flat on the bottom of the box
 - b. Make sure the cord slack is on top of the battery pack
- 5. Close and latch the box
 - a. Make sure the cord does not get caught in the edge of the box
- 6. Verify that all ziptie mounts are securely stuck down to the box.
 - a. If needed replace lose ones
- 7. Battery pack is ready for deployment

Setting up Gopro

note: directions are in the orientation of you holding the gopro looking at the main screen

- 1. Turn on the gopro by holding the button on the left side of the camera
 - a. The camera should beep and boot up
 - b. If it does not it means the internal battery is not charged
- 2. Wait for all the icons to show up on the screen
- 3. Verify that the internal battery is fully charged by checking the icon in the upper right
- 4. Swipe down from the top of the screen to unlock the screen
 - a. You will then need to touch the unlock screen icon
- 5. Swipe up from the bottom of the screen to get to the media
- 6. Hit the trash can icon in the bottom left to delete any clips on the camera
 - a. We want the memory card empty
- 7. Power down the camera.
- 8. The Gopro is ready for deployment

Deployment of Recorders

- 1. Take recorders in bags out to the field
- 2. Use zipties to attach recorders to poles

- a. Sometimes this will require the use of multiple zipties to have enough length. If this is the case attach the zipties together first. Give them just a few clicks to attach them together
3. Slide the ziptie through both of the tabs attached to side of the bag
4. Secure the bag to the pole with the buckled side facing away from the pole
 - a. If the recorder was inserted correctly in the the bag this will put the battery pack against the pole rather than the recorder
5. Tighten the zipties down and then clip off the excess to reduce tampering.

Deployment of Gopros

1. Take the Gopro and the battery box out into the field
2. Attach the gopro to the deployment location
 - a. Slide a ziptie through each hole in the gopro mount
 - i. Sometimes this will require the use of multiple zipties to have enough length. If this is the case attach the zipties together first. Give them just a few clicks to attach them together
 - b. Place the camera in the location you want it
 - c. Hold the camera while you secure the zipties
3. Attach the battery box nearby the camera
 - a. Orient the battery box so that the cord is coming out the bottom
 - b. Slide a ziptie through the top loop that is part of the battery box
 - c. Slide a ziptie through the ziptie mounts on the back of the box
 - i. Sometimes this will require the use of multiple zipties to have enough length. If this is the case attach the zipties together first. Give them just a few clicks to attach them together
 - d. Secure the box nearby the camera using the zipties
4. Connect the battery to the camera
 - a. Connect the USB C cable to the camera on the right side of the camera
5. Turn on the gopro by holding the button on the left side of the camera
 - a. The camera should beep and boot up
6. Wait for the icons to show up
7. Verify that the battery pack is providing power to the camera
 - a. The battery icon should show a lightning bolt symbol
 - i. If not then you will need to open the battery box and press the button and look for the LEDs on the battery pack to light
 1. This can be hard as the LEDs are so dim
8. Lock the battery box latch with the key
9. Do your best to verify that the camera is showing what you want on the display
10. Press the record button on top of the camera.
 - a. A red LED should start blinking on both the front and back of the camera
 - b. The clock should show in red at the top of the screen
11. Hold your phone in front of the camera showing <https://www.time.gov/> zoomed in on the time.
 - a. You can use the front screen to make sure it is visible in the video

- b. Be careful of sun and glare
- c. Let the time roll over a round minute and then give it an extra 10 seconds or so

Finalizing Deployment

1. In order to sync devices blow a loud whistle and note the time based on <https://www.time.gov/>
 - a. Do this from a centralized location of the recorders
 - b. If it is a large deployment you may do this multiple times
 - i. Blow one more blast per subsequent whistle
 - c. If you have shown the camera a time stamp when you start it recording you do not need to hold a time up to it at the time of the whistle blast.
2. Note down the recorder and camera numbers and locations for the spreadsheet