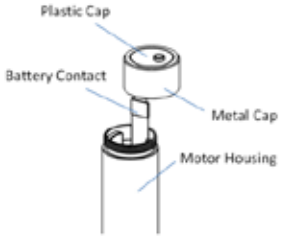
Rollocam

HERCULES MOTORIZED CAMERA SYSTEMS

Instruction Manual

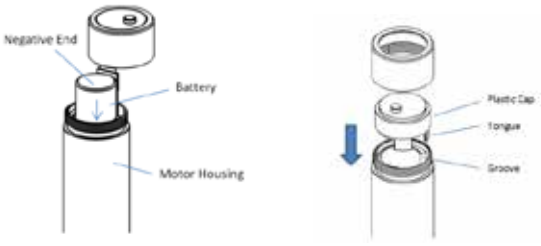
IMPORTANT: RETAIN FOR FUTURE REFERENCE, READ CAREFULLY

REV 2.2



To insert the battery, remove the battery cap first. To do this, twist the metal cap counter clockwise until it is completely removed. Slowly pull out and swing the plastic cap to one side until battery can be inserted into the motor housing. Do not pull the plastic cap out quickly as that might tear the flex cable.

NOTE: The battery contact is the rectangle silver pad on the flat cable. The gold spring under the cap is not the battery contact.



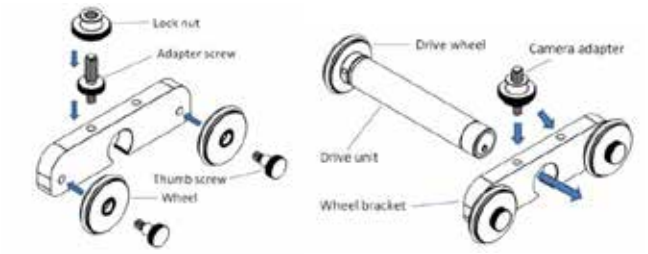
Insert the positive end of the battery into the motor housing while making sure that the battery reaches the bottom. The device uses one AAA battery (1.5vdc or less). Before tightening the cap back onto the motor housing, make sure that the tongue of the plastic cap is inserted into the groove inside the aluminum housing as shown. Twist the metal cap gently to ensure that the plastic cap does not rotate.

NOTE: The battery contact should wrap over the negative end of the battery. If it is difficult to slide the battery into the motor housing, check to make sure that the battery is not on the wrong side of the flat cable. The battery should not make direct contact with the gold spring.

WARNING: Twisting the metal cap when the tongue is not inside the groove may cause the plastic cap to rotate and tear the flex cable.

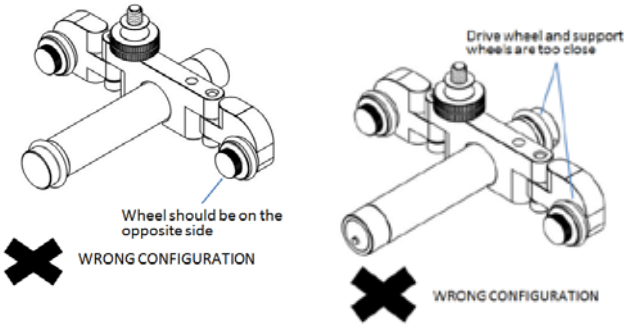
Attach wheels: insert the thumb screw through the wheel and gently twist the screw clockwise until tightened.

Assemble camera adapter: gently twist the lock nut over the adapter screw.



Attach camera adapter: twist the camera adapter into one of two threaded holes of the wheel bracket. If the camera is easily tipped over on one side, attach the adapter into the other threaded hole.

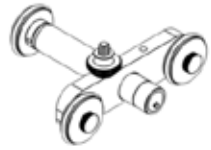
Insert drive unit: gently push the drive unit through the opening of the wheel bracket.



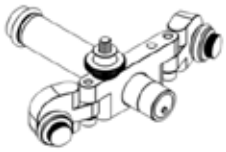
WARNING: When inserting or removing the drive unit, DO NOT push, pull or bend the drive wheel. Doing so may lock the gear motor.

When inserting or removing the drive unit, DO NOT push on the button as that may damage the circuit board.

HERCULES CONFIGURATIONS



Inline Wheel Bracket

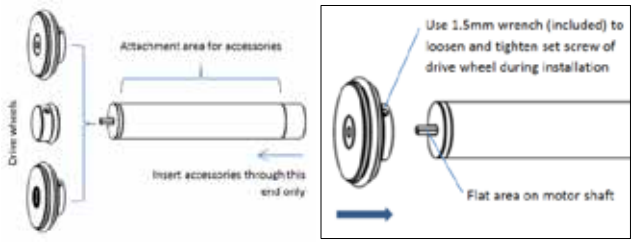


Curve Wheel Bracket

Panoramic Base

HERCULES DRIVE UNIT

Assemble and disassemble drive wheels: gently insert the drive wheels into the shaft of the drive unit. Make sure that the set screw is aligned with the flat of the shaft.

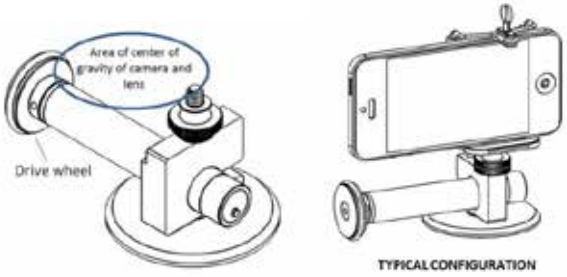


If the drive wheel is difficult to insert, loosen the set screw using the 1.5 mm wrench and try again. Once the drive wheel is inserted, tighten the set screw.

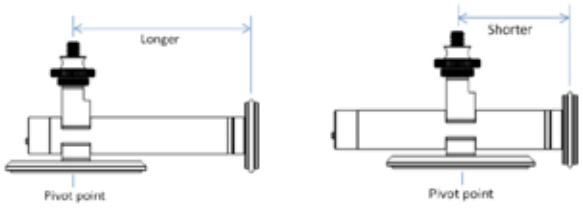
WARNING: When inserting or removing accessories such as wheel brackets, panoramic base, or the cheese plate, DO NOT push or pull or bend the drive wheel. Doing so might lock the gear motor. Similarly, DO NOT push too hard on the button as that may damage the circuit board.

DO NOT manually turn the drive wheel with your hand. Doing so might damage the gear motor.

PANORAMIC BASE

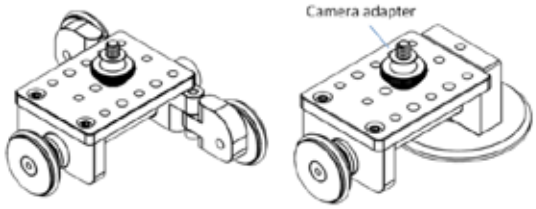


When using the Hercules with the panoramic base, make sure that the large drive wheel is installed onto the Hercules drive unit. Refer to the INSTALL DRIVE WHEELS section for reference. It is recommended to work on a flat and smooth surface such as a counter top or the back of a laptop. Attach the camera so that the center of gravity of the camera and lens is between the drive wheel and the pivoting point.

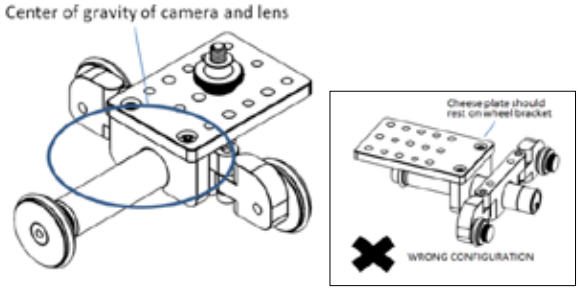


When using the panoramic base, the farther away the drive wheel is from the pivot point the slower the rate of rotation. In the above picture, the Hercules in the configuration on the left will rotate slower than the Hercules in the configuration on the right even when both are programmed with the same speed parameter.

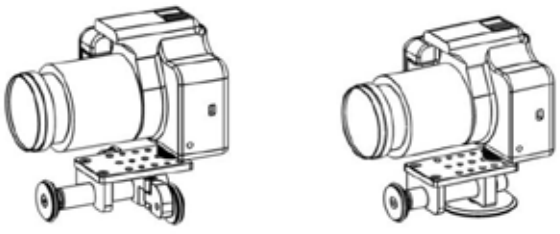
CHEESE PLATE



The cheese plate has both 5mm threaded holes for mounting the camera adapter and ¼-20 holes for mounting accessories such as a phone clamp and a ball head. When installing, always slide the cheese plate on first before sliding the wheel bracket or the panoramic base. To remove, slide the wheel bracket or the panoramic base off first before removing the cheese plate.

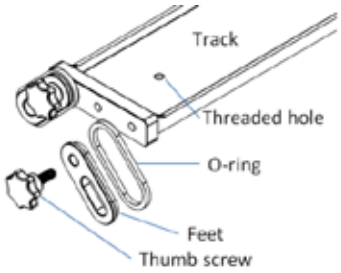


When mounting the camera on the cheese plate, test to make sure that the center of gravity of the camera and lens is located between the wheels. Slide the cheese plate over the wheel bracket if needed as shown above.



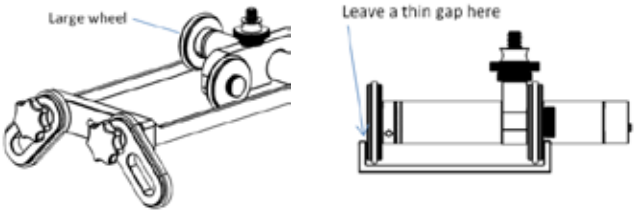
SLIDER TRACK

When using a camera with a longer lens, slide the cheese plate back toward the wheel bracket so that the center of gravity of the camera and lens is centered between the wheels.



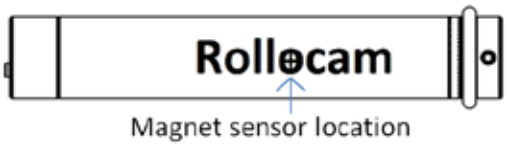
The track comes with 4 threaded thumb screws, 4 feet, and 4 O-rings. First attach the O-rings to the feet. Next attach the feet to the track, insert the thumb screws through the clearance hole of the feet and twist it into the threaded holes. When the track is sitting at a desired position, tighten the thumbscrews to lock the feet in place.

The track also has 3 universal threaded holes to attach to a tripod. One threaded hole is located near each end of the track and one in the middle of the track.



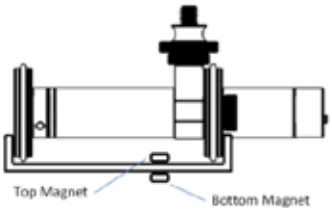
When placing the Hercules onto the track, use the large wheelset so there is enough clearance space between the drive unit and the wall of the track. Leave a thin gap between the drive wheel and the wall of the track to prevent binding during operation.

MAGNETIC SENSOR



The Hercules has a magnetic sensing feature that enables the device to detect the presence of a magnet. The magnets can be used to set end limit stops in continuous rolling mode or to trigger a move in stop motion mode. The location of the sensor is on the second "O" on Rollocam as shown in the picture above.

When placing the magnets on the track, make sure to position them directly underneath the sensor location. Rotate the drive unit so that the word "Rollocam" is pointed downward toward the magnet. **Place the magnets at least 5 inches apart so that the Hercules can have sufficient time to detect both magnets.**



Place 4 magnets on the track to act as limit switches with 2 magnets on top of the track and 2 magnets at the bottom to hold the top magnets in place. In continuous rolling mode, the Hercules advances toward one of the magnets. When it senses the magnet, it ramps down to a complete stop, delays for a short duration, then ramps up in speed in the opposite direction.

WARNING: Always test the Hercules at "continuous" rolling speed to make sure the Hercules senses the magnets first before letting the Hercules run unattended. This test procedure will give you a visual indication whether the magnets and the sensor are directly facing each other.

In continuous mode, the Hercules will travel past the magnet for a short distance so you must account for this distance when positioning the magnets near the ends of the track.

PROGRAMMING THE DRIVER

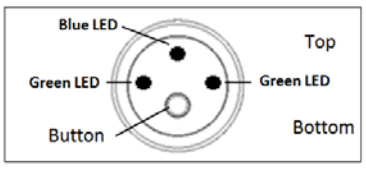
Quick guide for programming a continuous movement or stop motion:

1. Select a mode
2. Select motor direction
3. Select motor speed/increment

Quick guide for programming incremental movement for time lapse:

1. Select a mode
2. Select motor direction
3. Select motor increment
4. Select time interval

Step 1: SELECT MODE:



1. Position device with button at the bottom. Press button, then release to **start**
2. When 3 LEDs turn ON, hold down button to scroll through 3 different modes
3. Release button when the following LED is **ON** to select a desired mode
    a. Left green is **continuous rolling mode**
    b. Blue is **stop motion mode**

c. Right green is **time lapse (incremental) rolling mode**

4. EXAMPLE: to select continuous rolling mode, hold down button until left green LED turns ON, then release button

Step 2: SELECT MOTOR DIRECTION:

1. When left and right green LEDs turn ON at the same time, hold down button to scroll through left and right direction
2. Release button when the following LED is ON to select desired direction
    a. Left green LED is **rolling towards left side**
    b. Right green LED is **rolling towards right side**
3. EXAMPLE: to select rolling right, hold down button until right green LED turns ON, then release button

Step 3: SELECT SPEED (CONTINUOUS ROLLING MODE):

1. When a blue LED and a green LED turn ON at the same time, hold down button to scroll through 5 speed settings.
2. Release button when the following LEDs are ON to select desired speed
    a. 0.2in(5mm)/second (left green LED turn ON)
    b. 0.4in(10mm)/sec. (left green & blue LEDs turn ON)
    c. 0.6in(15mm)/sec. (left green & blue & right green LEDs turn ON)
    d. 0.8in(20mm)/sec. (blue & right green LEDs stay ON)
    e. 1in(25mm)/sec. (right green LEDs stay ON)
3. EXAMPLE: to select a speed of 0.6 inch(15mm)/sec., hold down button until left green & blue & right green LEDs turn ON, then release button

Step 3: SELECT INCREMENT DISTANCE (TIME LAPSE & STOP MOTION MODE):

1. When a blue LED and a green LED turn ON at the same time, hold down button to scroll through 5 increment settings.
2. Release button when the following LEDs are ON to select desired increment
    a. 0.01in/0.3mm (left green LED turn ON)
    b. 0.03in/.6mm (left green & blue LEDs turn ON)
    c. 0.05in/1.3mm (left green & blue & right green LEDs turn ON)
    d. 0.125in/3.1mm (blue & right green LEDs stay ON)
    e. 0.25in/6.3mm (right green LEDs stay ON)

Step 4: SELECT TIME INTERVAL (TIME LAPSE MODE):

1. When the blue LED turns ON, hold down button to scroll through 5 time intervals.
2. Release button when the following LEDs are ON to select desired time interval
    a. 1 second (left green LED turn ON)
    b. 5 seconds (left green & blue LEDs turn ON)
    c. 10 seconds (left green & blue & right green LEDs turn ON)
    d. 30 seconds (blue & right green LEDs stay ON)
    e. 60 seconds (right green LEDs stay ON)

START, PAUSE, AND RESTART MOTOR (CONTINUOUS MOVEMENT):

1. After programming motor, the motor will then run after a 2 second delay.
2. At any time during operation, a quick press and release (in less than one second) of the button will pause the motor. When the motor is paused, a quick press and release of the button will run the motor again.
3. At any time during operation, press and hold button for 3 seconds, then release to turn on/off flashing LED. This LED is only to indicate that the motor is running.

START A MOVE IN STOP MOTION MODE:

1. Place a magnet in front of the second "O" in the word Rollocam and remove quickly to start a forward move.
2. Place a magnet in front of the second "O" in the word Rollocam for 3 seconds and remove to start a backward move.

RESET MOTOR:

1. Press and hold the button for 5 seconds or until Blue LED flashes 3 times quickly to indicate system reset.
2. Removing the battery will cause a system reset.
3. **Remove battery after use to increase the life of the battery.**

WARRANTY & DISCLAIMER

Rollocam products are guaranteed to be free from defects in materials and workmanship when properly used for their intended purpose and in their intended operating environment for six months from the original purchase date. If any product proves to be defective and is covered by the warranty, we will repair or, at our option, replace your Hercules unit without charge. We are not responsible for shipping costs associated with warranty returns. If your Hercules needs service, or if you are not sure and want to see if your Hercules needs to be serviced, please start by contacting our support team at support@rollocam.com. Many issues that seem like they may require a Hercules unit to be repaired or replaced under warranty can actually be solved without sending the unit in. If we need to repair or replace your Hercules under warranty coverage, our support team will provide you with return shipping instructions and work hard to get you a working Hercules as quickly as possible.

NOTE: This warranty is valid if the product is used for the purpose for which it was designed. It does not cover (i) products which have been damaged by negligence or willful actions, misuse or accident, or which have been modified or repaired by unauthorized persons; (ii) cracked or broken motor, or units damaged by excessive heat; (iii) the cost of shipping this product to the Factory Service Center and its return to the owner.

In no event will Rollocam Inc. or any of its affiliates, contractors, resellers, their officers, directors, shareholders, members or agents be liable to you or any third party for any consequential or incidental damages, any lost profits, actual, exemplary or punitive damages.

Your acknowledgement and agreement to fully and completely abide by the above mentioned disclaimer of warranty is contractually binding to you upon your transfer of currency (money order, cashier's check, or credit card) for purchase of your Rollocam product.