

Bigshot

Instruction Manual



Build · Learn · Use

www.bigshotcamera.com

**science
TECH™** 

Ages 8 - 108 years

Contents

Safety P.1

Build

A Getting Started P.2

B Power Generator P.3

C Electronics P.5

D Lens Wheel P.8

E LED Flash P.10

Use

A Camera Parts P.11

B Charging the Battery P.12

C Bigshot Software P.13

Safety

Always ensure that the camera is operated according to the instructions below, which are intended to prevent injuries to yourself and other persons, or prevent damage to the camera.

WARNING: Possibility of serious injury

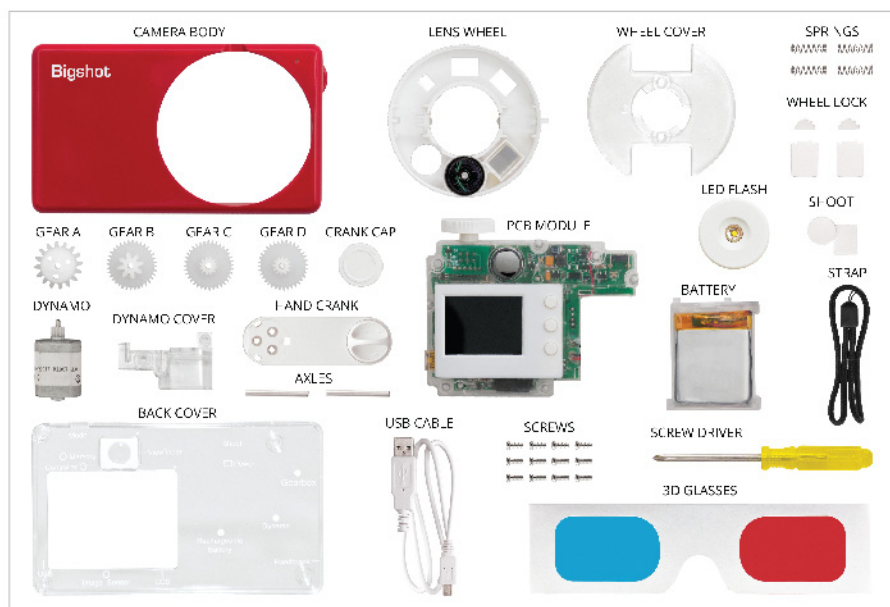
1. Do not trigger the flash in close proximity to people's eyes. Exposure to the intense light produced by the flash could damage eyesight. In particular, keep the camera at least one meter away from infants when using the flash.
2. Store the camera equipment out of reach of children below 8 years. It is dangerous if any of the components are swallowed. If this occurs, contact a doctor immediately. Putting the strap around a child's neck could result in asphyxiation.
3. Do not allow liquids to enter the camera. This could result in fire or electric shock. Do not use organic solvents such as alcohol, benzene, or thinner to clean the camera. If liquid or foreign objects come into contact with the camera interior, immediately turn the camera power off.
4. Use only USB outlets to recharge the camera. Use of other power sources could result in fire or electric shock.
5. The camera's battery is not replaceable. Use of other batteries could result in explosions, fire or electric shock.
6. Do not place battery near or in direct flame. Do not attempt to disassemble or alter the battery. Avoid dropping or subjecting battery to severe impacts. In the event that the battery leaks and the eyes, mouth, skin or clothing contacts these substances, immediately flush with water and seek medical assistance.

CAUTION: Possibility of injury or damage to the camera

1. Avoid using/storing camera in strong sunlight and high temperatures. These could cause leakage, overheating or an explosion of the battery resulting in electric shock, fire, burns and other injuries. High temperatures may also cause deformation of the camera casing and other components.
2. Do not sit down with the camera in your pocket. Doing so may cause malfunction or damage the LCD.
3. Do not put the camera and keys or other sharp objects into the same pocket. The camera lenses or LCD may get scratched.

Build

A Getting Started



A1. Bigshot can only be assembled in one specific sequence. Make sure you follow the sections and the steps of each section in order.



A2. Safety Warning: Do not open the plastic casing of the (a) printed circuit board, (b) rechargeable battery, or (c) LED flash as it could make the camera malfunction or cause injury to you.

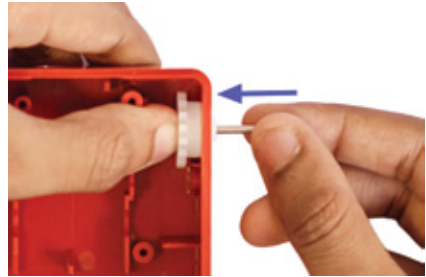
A3. Safety Warning: (a) Handle the small parts delicately, (b) do not over tighten the screws, and (c) do not touch the lenses. Have fun!

Build

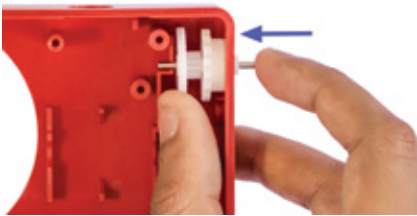
B Power Generator



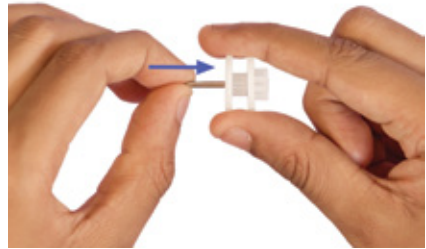
B1. Slide gear A into the hole on the side of the camera body. The blue arrow tells you the direction in which to slide the gear.



B2. While holding the gear in place with one finger, insert one of the axle rods into the middle hole of the gear. Push the rod in until it touches the finger holding the gear.



B3. Place gear C next to the first gear as shown, and push the rod through both the gears until it is all the way in. The left end of the axle should now sit in the notch on the camera body and the two gears should be free to spin.



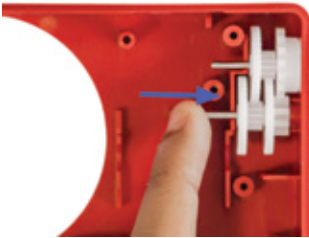
B4. Take gear B and gear D and hold them together as shown. Now push the second axle rod through both gears such that it pops out just a bit at the other end.



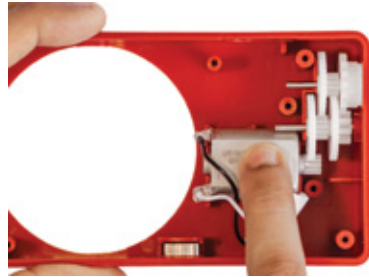
B5. Take the gear assembly you just made and place it below the first set of gears, as shown. Make sure the left end of the rod rests in the notch in the camera body.

Build

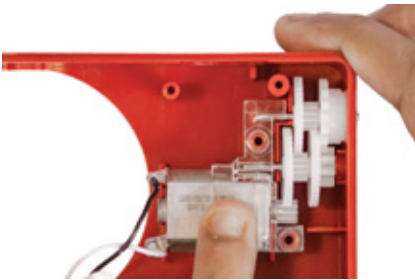
B Power Generator



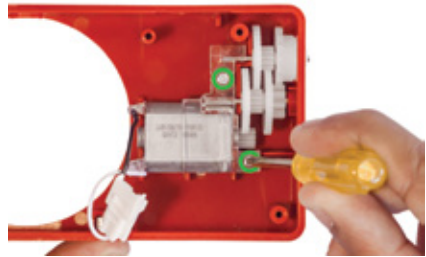
- B6.** Push the axel rod from the left all the way so that it enters the hole in the camera body on the right.



- B7.** Place the dynamo into the camera body. Make sure the dynamo gear meshes correctly with gear B. Don't try to rotate any of the gears as it may cause the axle rods to pop out of their positions.



- B8.** Place the bracket on the dynamo so that it secures the dynamo and the two axle rods in place.



- B9.** Fasten the bracket in place with two screws, as shown above.



- B10.** Take the hand crank and push-fit its triangular notch onto the triangular head of gear A of the gearbox.



- B11.** Fasten the hand crank onto gear A using three screws, as shown.

Learn about dynamo
<http://www.bigshotcamera.com/learn/power/dynamo>

Learn about power generator
<http://www.bigshotcamera.com/learn/power/index>

Build

B Power Generator



B12. Rotate the hand crank clockwise. If it does not rotate smoothly, one of the parts of the gearbox may be misaligned. Carefully undo the previous steps and reassemble the gearbox.



B13. Clip the white crank cap onto the hand crank so that it covers the three screws. Before snapping the cover in place, make sure you have lined up the three tabs on the cover with the slots on the hand crank.

Build

C Electronics



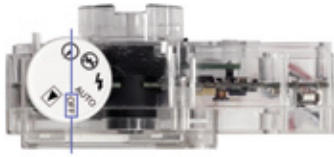
C1. Place the shoot button into the hole on the top face of the camera body. You will have to insert it at an angle, as shown.



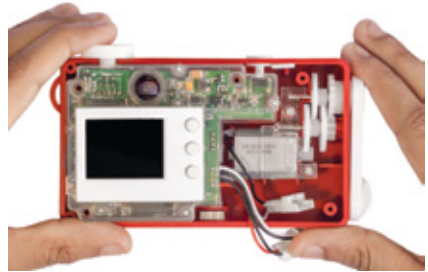
C2. While the shoot button is in the hole, rotate its arm clockwise until the arm slides into the notch on the camera body.

Build

C Electronics



- C3.** Pick up the PCB module and turn the mode knob to the position shown above.



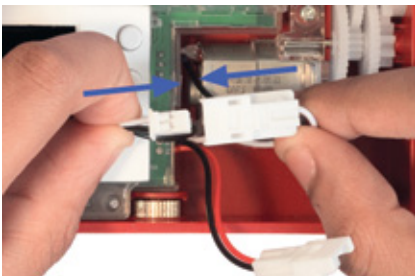
- C4.** Insert the PCB module into the camera body. Make sure the pillars in the camera body go through the holes in the PCB module.



- C5.** Fasten the PCB module onto the camera body using three screws.



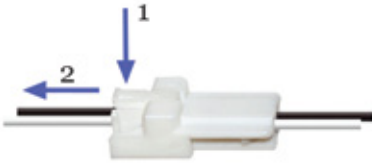
- C6.** Now set the mode knob to the OFF position. It must remain in the OFF position during the remaining assembly process.



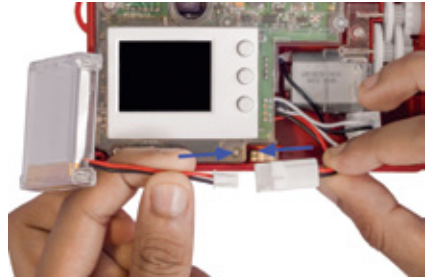
- C7.** Find the connector attached to the pair of wires from the PCB that have the same color combination as the wires from the dynamo. Hold the two connectors in each hand and gently join them until they click.

Build

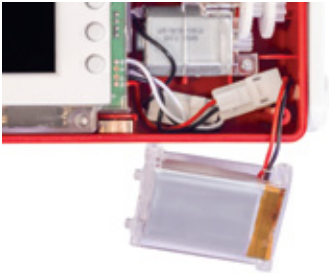
C Electronics



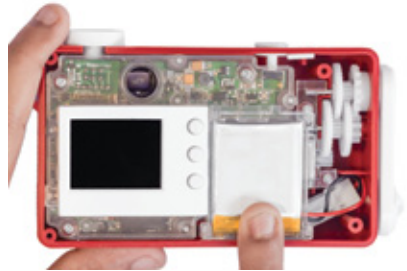
C8. If you want to disconnect the wires, then press down on the smaller connector and pull it out as shown above.



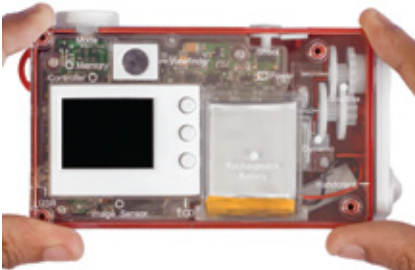
C9. Take the remaining connector from the PCB module and the connector from the battery. Gently connect the connectors so that they click.



C10. Place the connectors from the dynamo and the battery into the space at the bottom of the camera body. Make sure that the wires do not touch the gears.



C11. Now set the battery into the camera body as shown.



C12. Place the clear back cover on top of the camera body. Make sure the screw holes on the cover align with the screw inserts on the camera body.

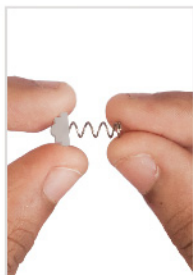
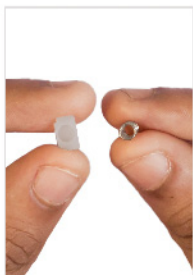


C13. Fasten the back cover with four screws.

Learn about rechargeable battery
<http://www.bigshotcamera.com/learn/power/battery>

Build

D Lens Wheel



D1. Take one of the four springs and one of the two locks and insert the spring into the circular pit in the lock.

D2. Insert the free end of the spring into the small bump (purple circle) on the lens wheel, as shown on the left. Now slowly push the lock to compress the spring, as shown on the right. The lock will slide into the lens wheel and should snap into its notch on the wheel.



D3. Use the same method to attach the second lock to the opposite side of the wheel.

D4. Place the spring cover on top of one of the springs and push it in. The cover should snap into the lens wheel so that it does not stick out of the wheel.

Build

D Lens Wheel



D5. Now cover the second spring with the second spring cover.



D6. Push-fit the lens wheel into the casing of the PCB module. Make sure the two locks on the lens wheel align correctly with the two notches on the PCB module, as illustrated by the blue and purple boxes.



D7. After you have attached the lens wheel, try gently rotating it in each direction. It should snap into each of the three lens settings.



D8. Place the lens cover on top of the lens wheel so that the two screw holes on the cover and the wheel are aligned.



D9. Then, fasten the lens cover with two screws.

Learn about the imaging lens
<http://www.bigshotcamera.com/learn/imaging-lens/index>

Learn about the stereo prism
<http://www.bigshotcamera.com/learn/lens-wheel/stereo>

Build

E LED Flash



- E1.** Take the LED flash module and insert it into the PCB module. The flash module can be inserted in only one orientation. Make sure that you match and align the tabs on the flash module with the notches on the PCB module (see blue and purple boxes), before pushing the flash module into the PCB module.



- E2.** Turn the LED flash module clockwise to lock it into the PCB module.



- E3.** The wrist strap has a tiny loop and a large loop. Squeeze the tiny loop together and slide it through the eyelet on the side of the camera body.



- E4.** Pass the big loop through the little loop as shown on the left.



- E5.** Then, pull on the big loop to tighten the strap.



- E6.** Congratulations. You're done!

Learn about the LED flash
<http://www.bigshotcamera.com/learn/led-flash/index>

Use

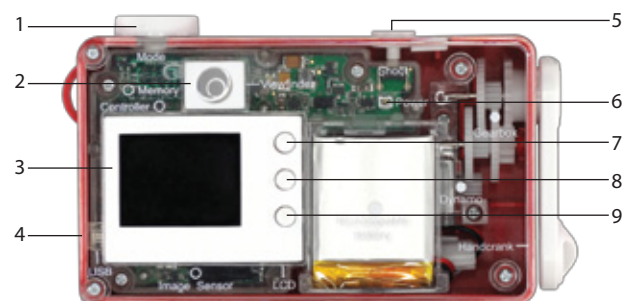
A Camera Parts

Front of the Camera



1. Shoot button
2. Hand crank
3. Mode dial
4. Timer LED
5. Lens wheel
6. LED flash
7. Regular lens
8. Wide Angle lens
9. Stereo/3D prism
10. USB Connector

Back of the Camera



1. Mode dial
2. Viewfinder
3. Display
4. USB connector
5. Shoot button
6. Power indicator
7. Top button
8. Middle button
9. Bottom button

Use

B Charging the Battery

Before you start using the camera, you will have to charge the battery. There are two ways to charge the battery: using a USB charger or using the hand crank. We suggest you use the first method whenever possible, and reserve the second method for when you do not have access to a computer.

Using USB charger



Connect the camera to your PC/Mac using the USB cable provided. Do not use force or attempt to insert the connectors at an angle.



The power indicator LED will start blinking either green (when charge is low) or red (when charge is extremely low) to indicate that the camera is charging.



Charging is complete when the power indicator stops blinking and turns solid green.

Using hand crank

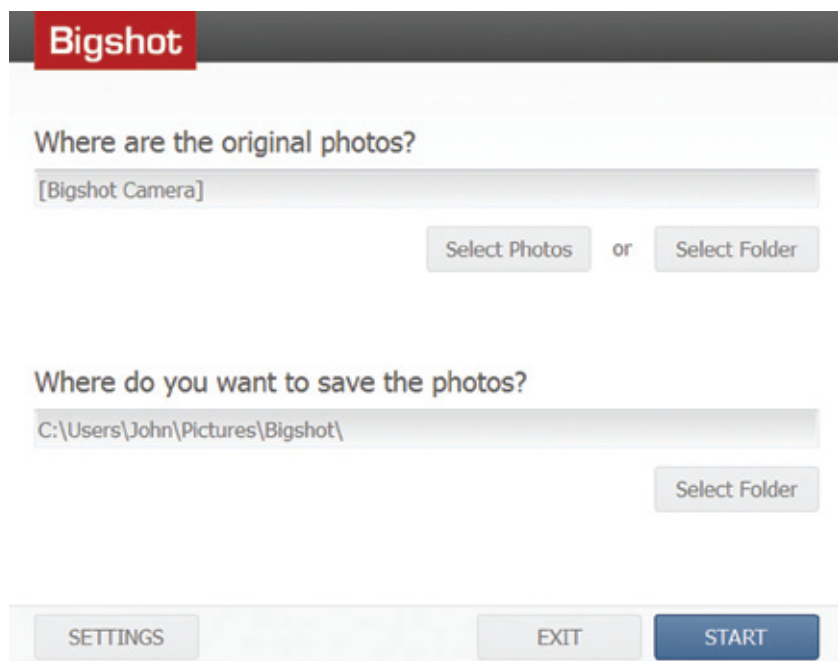


Turn off the camera by setting the mode dial to OFF position. Gently rotate the hand crank clockwise as shown in the figure. Maintain a speed of 30 to 60 rotations per minute (rpm). The camera can take one picture for every 5 to 7 rotations. But it is better to rotate about 40 times so that multiple photos can be taken.

Warning: Rotating the hand crank at less than 30rpm will not charge the battery fast enough. Also, if you try to rotate faster than 60rpm and by applying greater force on the hand crank, you may damage the gear box.

Use

Bigshot Software



The image shows the Bigshot software interface. At the top is a dark grey header with the 'Bigshot' logo in white text on a red background. Below the header, the main window has a light grey background. The first section is titled 'Where are the original photos?' and contains a text input field with '[Bigshot Camera]' inside. To the right of the input field are two buttons: 'Select Photos' and 'Select Folder', separated by the word 'or'. The second section is titled 'Where do you want to save the photos?' and contains a text input field with 'C:\Users\John\Pictures\Bigshot\' inside. To the right of the input field is a 'Select Folder' button. At the bottom of the window is a dark grey footer bar containing three buttons: 'SETTINGS', 'EXIT', and 'START'.

Bigshot

Where are the original photos?

[Bigshot Camera]

Select Photos or Select Folder

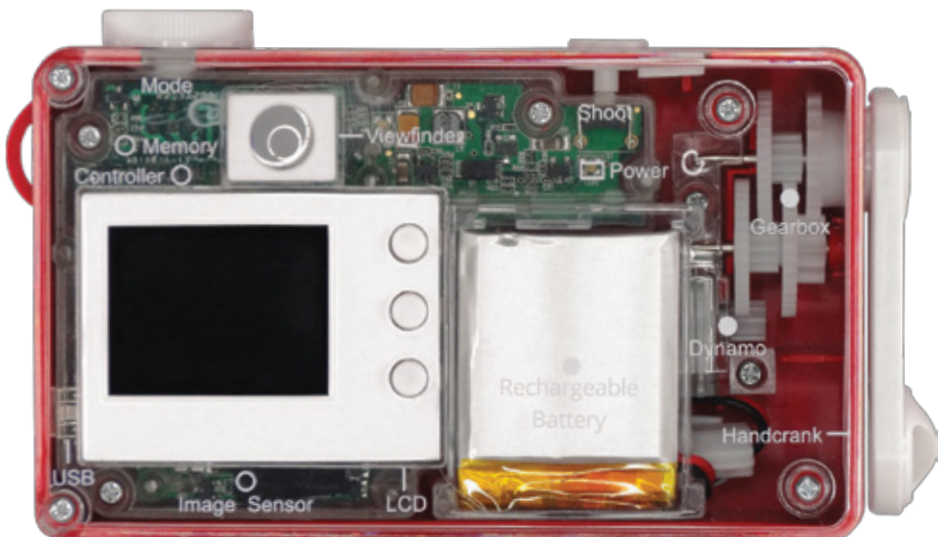
Where do you want to save the photos?

C:\Users\John\Pictures\Bigshot\

Select Folder

SETTINGS EXIT START

Please download Bigshot software from:
www.bigshotcamera.com



Build · Learn · Use

www.bigshotcamera.com

ScienceTech is a registered trademark of Edu-Science (H.K.) Ltd.
Bigshot is a registered trademark of Kimera LLC, NY.
Copyright © 2013 Kimera LLC. All rights reserved.



P38-EL362-81001000