

BirdCam v4 - Datasheet

Mr. Lee Science Line

Overview



The BirdCam is a small waterproof digital video camera. It is intended to be attached to birds such as Gannets or other small animal for scientific projects and wildlife research.

A special enclosure makes the camera dive proof which makes it ideal for diving seabirds. Power consumption and weight are optimized to provide longest operation and least possible stress to the animal.

Optimized for scientific use, BirdCam offers the following features:

- Magnetic switch to activate, deactivate and programming
- ThermoSeal hermetic enclosure
- Light sensor
- Super clear camera window
- Records videos in an adjustable time interval



The camera has been developed in cooperation with different scientists since 2011. It has been used for multiple studies. We have now matured to version 4.

It offers a very good balance between weight, operation time and size.

Furthermore the BirdCam can be customized according to specific project needs.

This camera is part of our Scientific Product Line. Please visit our website www.mr-lee.com for more information.



BirdCam v4 - Datasheet

Mr. Lee Science Line

Functional Features

The BirdCam mini video recorder offers a number of features to maximize the operation time.

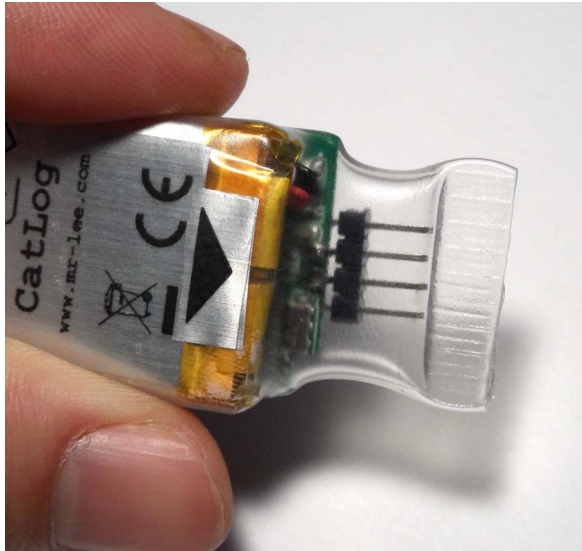
Delayed start	Enables operation after an adjustable delay time
Adjustable Interval Recording	Spreads the recording over a longer duration by allowing the user to set recording and standby durations.
Light sensor	Prevents the camera from recording in darkness
Magnetic switch	Enable the device after it is attached to the animal

Specification

Device weight	24g with 650mAh battery
Device dimensions	70mm x 26mm x 17mm (incl. 650mAh battery)
Battery	Rechargeable Lithium Polymer, 650mAh capacity
Enclosure	ThermoSeal (Sealed shrink tubing)
Operation temperature	-10 to +60 degrees Celsius (based on Lithium Polymer chemistry)
Dive depth	50m+ using ThermoSeal
Activation	Magnetic switch
Status visualization	LED lights
Memory consumption	8GB / hour (dynamic scene, may be lower in case of static scene)
Energy consumption	150mAh / hour (recording)
Maximum memory size	32GB
Shortest recording	15 minutes (1 time unit)
Shortest standby	15 minutes (1 time unit)
Video Resolution	1280*720
Video Framerate	30fps
Video Format	AVI M-JPEG
Overlaid time stamp	Yes
Interface	Serial Micro USB

ThermoSeal Enclosure

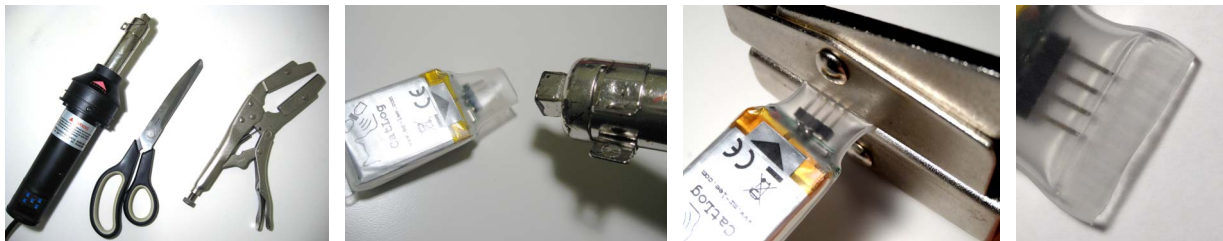
One key feature of the device is the ThermoSeal enclosure that offers the best environmental protection for the least weight. It is a special heat shrink tubing with outstanding characteristics.



ThermoSeal™ Features:

- Provides reliable water tightness and is absolutely corrosion and pressure resistant.
- Reusable seal, just heat it up to open it and seal it again with heat!
- Sufficient wall thickness to mechanically protect the device
- Sticks to tape for universal deployment
- Allows to create special attachment fixtures
- Cheap, clean, economic, simple!

Seal temperature range: 160-200 degrees Celsius (320 – 390 Fahrenheit)



Process description is part of the User Manual.