

# Equipment

Details of the various equipment I use to record and photograph birds. Microphones, recorders, cameras, lenses, grips, cables, and more.

- [Bird recording equipment setup](#)
- [Bird photography equipment setup](#)

# Bird recording equipment setup



My complete bird recording gear setup.

# Equipment summary

This is the current equipment setup I am using with my shotgun microphone. The basic idea of components remains the same regardless of specific equipment.

Component	Equipment	Notes
Microphone	Sennheiser ME67, ME66	No longer available. Consider MKE600 or look on eBay
Recorder	MixPre-3 II, Zoom H4N Pro	
Peripherals	K6 Power Module	Optional but saves battery draw on the recorder
	Rycote Shock Mount Grip	
	Rycote Softie Windscreen	The fuzzier the better
	Over-the-ear headphones	Optional with this kind of microphone
	Angled XLR cable	

## Microphone

I originally selected this shotgun microphone after reading a guide from Audubon on recording bird songs. They have a fleet of these microphones in use. I like it for its directional sensitivity. It does a good job of filtering out ambient noise but not so much that a pair of headphones are required. The microphone can be powered by phantom draw (taking power from the recorder) or by using a K6 Power Module.

## Shotgun microphone



Sennheiser ME67 and K6 power module

Type	Shotgun
Brand	Sennheiser
Model	ME67
Accessory	K6 Power Module

# Recorder

## Dedicated recorder

### Sound Devices MixPre-3 II (a 32-bit float recorder)

This MixPre-3 II recorder by Sound Devices is an amazing piece of technology. Its ability to record in a format called 32-bit float allows you to not have to set gain levels while recording and prevents bird song audio files from clipping if they are unexpectedly loud.



Type	Dedicated recorder
Brand	Sound Devices
Model	MixPre-3 II

# Handheld recorder

## Zoom H4N Pro



Zoom H4N Pro handheld recorder

Type	Omnidirectional handheld
Brand	Zoom
Model	H4N Pro

# Peripherals

## Windscreen



This windscreen does a great job of reducing wind noise during recordings. It has a foam core with a faux fur exterior and slips over the shotgun microphone.



Brand	Auray
Model	WSS-2014 Professional Windshield - (14cm)
Wind noise reduction	up to 25dB

## Shock mount grip

This shock mount has a pistol grip handle and holds the microphone in a way that eliminates handling noise.



Brand	Rycote
-------	--------

Model	Rycote Lyre Pistol Grip Shock Mount
-------	-------------------------------------

## Cables

This angled cable enables the cable to flow a logical direction from the microphone into the shock mount.



Type	XLR M to Angled XLR
Length	1.5'

## Headphones

Headphones are used in my setup, but any over-the-ear ones should do. It will help you hear the bird better and ensure you are aiming decently enough.

## Links

Below are links to find the products used in this recording setup. These are Amazon and eBay Partner affiliate links that help support my birding hobby at no cost to you.

Component	Equipment
Microphone	<a href="#">Sennheiser ME67</a> , <a href="#">Sennheiser ME66 (now MKE600)</a>

Recorder	MixPre-3 II, Zoom H4N Pro
Peripherals	K6 Power Module
	Rycote Shock Mount Grip
	Auray Windscreen
	Over-the-ear headphones
	Angled XLR cable



# Bird photography equipment setup



My complete bird photography gear setup.

## Equipment summary

I spent my first nine years as a hobby photographer with my original Canon camera setup: a Rebel T5i and EF 400mm lens. In 2022, I upgraded my equipment to Canon's mirrorless lineup and RF lens line. I'm not a spec expert, but I'll share why I selected each piece and what I appreciate.

Camera	<a href="#">Canon EOS R6</a>
--------	------------------------------

Lens	RF 100 – 500mm F4.5-7.1 L is USM
Teleconverter	RF 1.4x Extender Teleconverter

# The camera body

## Canon EOS R6



Type	Mirrorless
Brand	Canon
Model	R6

### Why I chose it

In Canon’s mirrorless lineup, I chose the R6 because I didn’t need the added megapixels offered by the pricier R5.

### Favorite features

- Animal Eye Autofocus – The camera has a mode that detects animals and locks the focus on the subject’s eye. It works amazingly well.
- Focus anywhere – I love not being limited to specific focal targets on the viewfinder
- Electronic Viewfinder (EVF) – This mirrorless camera has a small OLED screen in the viewfinder. The benefit of this over a DSLR is that what you see in the viewfinder is what the image captured will look like. This enables you to adjust camera settings and see the results in real-time.
- In-body Stabilization – Helps reduce shake and improve sharpness.

# Lens



**RF 100-500mm**

Type	Telephoto
Brand	Canon
Model	RF 100-500mm

## Why I chose it

Coming from a 400mm prime EF lens, I was looking for a bit more reach and versatility. The 100-500mm RF lens hits the sweet spot. One of the reasons I chose it, other than the superior image quality, is the in-body stabilization. This works in concert with the stabilization in the R6 camera body. I love this for video and when shooting on the wide end of the zoom.

## Favorite features

- Customizable function ring that can be assigned to various settings
- Sharpness across the entire zoom range
- In-body stabilization

# Teleconverter

# RF 1.4 Extender Teleconverter



Zoom H4N Pro handheld recorder

Type	Teleconverter
Brand	Canon
Model	RF 1.4x

## Why I chose it

Birds are almost always small and far away. This recent addition to my setup gives 40% further zoom to every shot. It has the downside of letting less light into the camera and restricting the zoom range of the camera. It’s easy enough to pop on and off as needed.

## Favorite features

- No learning curve or large adjustment needed to benefit
- Passively enlarges your shots
- Compact and easy to add or remove

# Links

Below are links to find the products used in this recording setup. These are Amazon affiliate links that help support my birding hobby at no cost to you.

Component	Equipment
Camera	Canon EOS R6
Lens	RF 100 – 500mm F4.5-7.1 L is USM
Peripheral	RF 1.4x Extender Teleconverter