
Go Wild in Your Garden

Barry Jerome

After watching the Bill Oddie, Kate Humble and Simon King BBC programme "Go Wild in Your Garden" in 2003, my wife and I became very interested in getting a close-up view of our own garden wildlife. For many years, we have put up bird boxes in the garden and usually have blue tits, great tits, robins, wrens and blackbirds using them. It's not possible, however, to see the activity in close-up. As a result of the TV programme, I decided to buy a bird box containing a camera for my wife for Christmas, and chose a Birdcam - one of very few options on the market at the time.

What is a Birdcam?

Birdcam is a bird box with an integral micro camera and microphone, which is able to send composite video and mono audio signals directly to your TV set. There are several designs available and the one I chose was a 'Tit Box' with a black and white camera plus infrared lighting so that it's possible to watch what's happening at any time of day or night (much more interesting than "Big Brother"!).



Birdcam in situ - note the cable coming out from under the roof and going round the back where it goes into the house through a hole in the wall

What do you get?

The electronics are on a small printed circuit board (pcb) mounted in the roof of the bird box. The pcb contains all of the circuitry plus the micro camera and microphone. Also connected to the pcb is the cable which takes the composite video and audio signals from the bird box and supplies the power to the electronics from a 12V adapter (provided). The cable is about 20 metres long to give plenty of distance to reach a TV set.

When the Birdcam arrived by post, it was well packed and I tested it to make sure it worked (before wrapping for Christmas).

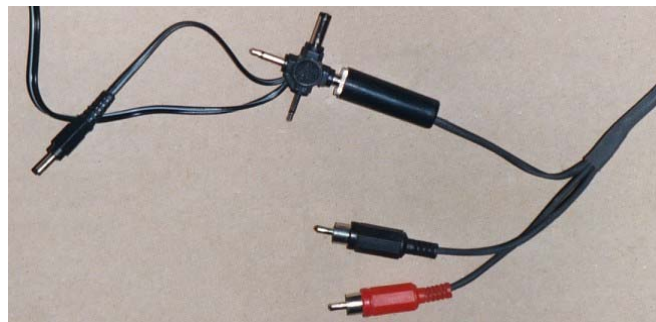
It all worked, but I was a little disappointed with the clarity of the picture as the instructions said it was pre-focused. I was going to phone the contact number but thought that the Birdcam may have been jolted in the post and so I investigated. Once the lid of the bird box was removed, I could see the camera and there was a small focussing wheel around the lens. With a little adjustment, I soon had it perfectly focussed. I achieved this by putting my fingers through the entrance hole and adjusting the wheel until my fingers and the base of the box were in focus at the same time.

Where should we position it?

Once Christmas Day had passed, the question was where to position the box for the best chance of it being used, and also within reach of a TV set. The chosen site was on the outside wall above the door from the utility room. This wall faces southeast, which is a good position for a bird box. We have had a home-made bird box there for several years which gets used every year by blue tits. It's also a reasonable distance to take the cable to the TV in the kitchen.

Installation

Our utility room is a single storey extension on the kitchen and has a very convenient roof space for the installation. I drilled a hole through the cavity wall (with a slight downward angle from inside to out to avoid any water problems) and put a short section of overflow pipe through the hole. This was then sealed to the wall. Birdcam was mounted on the wall near the pipe, replacing the home-made bird box. The composite video/audio/power lead was threaded through the pipe and the gap was filled with sealant to make it water-tight.



The cable has a socket (top) to connect to the power adapter plug and two phono plugs which carry the audio signal (black) and composite video signal (red) to the TV set.

For convenience, I installed a power point in the utility room roof space so that I could plug the power adapter into it. I also ran a narrow coax cable and shielded audio cable from the utility room roof to the kitchen and installed phono sockets at each end. This wasn't a necessary part of the installation as more than enough cable was provided with the Birdcam. My reasons were that I wanted to make it easy to move the Birdcam elsewhere if it wasn't used in that position. I thought that installing sockets in the utility room roof would facilitate this. There was a convenient route for the cables from the roof to the kitchen via the boxing-in for the central heating pipes. This may not be ideal because of the proximity of the hot water pipes, but it hasn't proved to be a problem so far.

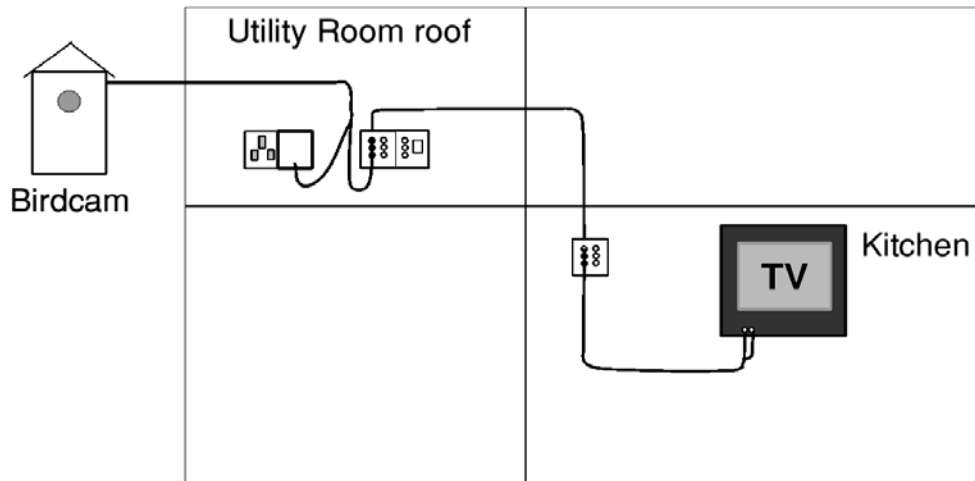


Diagram of the cabling from the Birdcam to the TV set

I made up a lead to take the video and audio signals from the phono sockets in the kitchen to the TV set. Again, this was only necessary as I had installed the sockets. Once it was all connected up, the channel could be easily selected using the remote control.

If you don't want to go to the bother of installing cables and sockets, all of the cables and plugs are provided to enable you to reach 20 metres from the Birdcam and plug directly into your TV set. This is what I used when testing the camera and electronics when it first arrived.

Birdcam was now set up and switched on, but would it be used?



I installed three sets of three phono sockets in the utility room roof space (each set has a composite video, right audio and left audio). The left two sets go to the kitchen and the right set (next to an RJ45 socket) goes to the lounge. Birdcam is plugged into the cabling to the kitchen, but could be plugged into the lounge sockets. (The RJ45 AVI socket will be the subject of another article!)

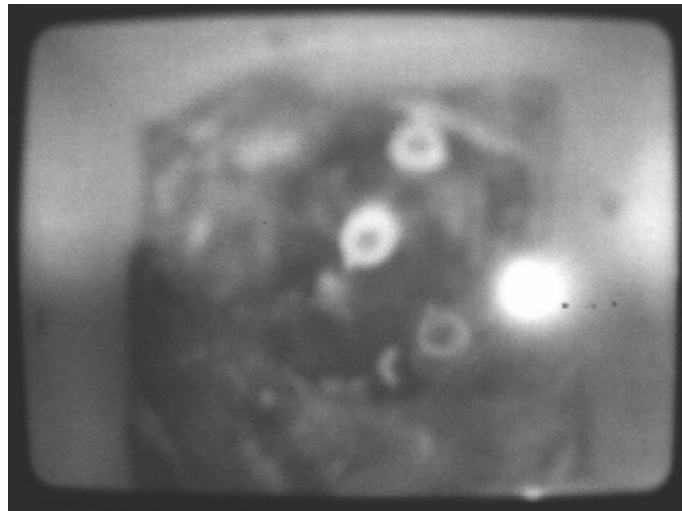
Undesirable residence?

The first month or two was disappointing as the Birdcam wasn't used. Other home-made bird boxes in the garden were being used. We had a family of blue tits in one box, a great tit and starlings squabbling over another (large) box. The starlings won and the great tits used another nearby box. Birdcam had still not been used, and we had switched off the power thinking that we should have to move it to an alternative location.

A new tenant

We had given up our expectations of a brood this year. Then, one morning, my wife was standing by the utility room door when she heard 'tweeting' coming from the box. With great excitement, we switched on the power and, sure enough, there was a family of seven very young blue tits in the Birdcam box. We had completely missed the nest building and egg laying but we now had a brood of newly hatched blue tits.

Describing watching the birds sounds as if there is nothing much to it, but over the next three weeks, it became the most watched channel on the TV. It also coincided with the 2004 Bill Oddie, et al. TV programme, and we were able to compare the progress of 'our' blue tits with those on the BBC programme.



A newly hatched brood of blue tit chicks with open mouths awaiting food. This picture doesn't represent the clarity of the TV pictures, only my inability to get a good photo from the screen.

Compulsive watching

We don't normally watch breakfast TV, but we found ourselves saying, "We'll just switch on to see what the birds are doing". We also became very emotionally involved. There were a few crises which we experienced at first hand. On one occasion, when we were watching, the light was suddenly blocked out and a large black head of a bird appeared through the entrance hole. We rushed outside in time to see a starling looking into the box! It soon moved on and the crisis passed.

Having the infrared lights was very useful as we could see what was happening at any time of day or night. For the first week, one of the adult birds sat on the chicks overnight but it can't have managed to get any sleep. There was constant movement from one or more of the chicks. After a week, the adults slept somewhere else and the chicks looked after themselves overnight.

Another crisis

I mentioned that we became emotionally involved, and one of the anxieties was the amount of time between arrivals at the nest box with food. During the second week of the brood, the weather turned wet and cold, and times between arrivals with food were getting longer and longer. At this point, we decided we had to send for miniature mealworms. The mealworms arrived by post two days later, and we pinned a small pot to the fence near the bird box. The adults found the mealworms almost immediately, and there were frequent trips from the pot to the nest box.

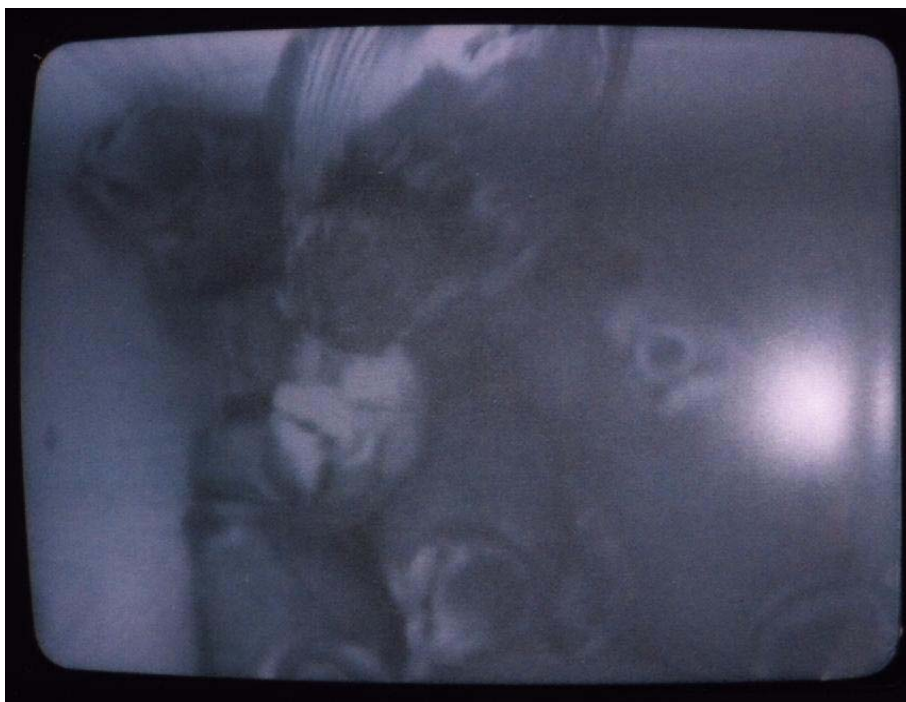


Birdcam positioned over the door into the utility room

Because of the position of the TV in the kitchen, we were able to see the adults through the kitchen window fetching beakfuls of mealworms, then appearing on the TV screen feeding the chicks in the Birdcam. By the end of the third week, the chicks were getting ready to leave the nest, flexing their wings and becoming very interested in everything in the box (including the camera that was watching them).

We almost missed them leaving the nest box. We switched the TV on at breakfast, and there were only two chicks left in the nest. Watching them being enticed out of the box for their first flight was fascinating. After they had all left, the nest box became strangely silent. For about a week afterwards, we would switch the TV on to see if the box was being used, but it remained empty, except for the nest material.

We did see 'our' family of blue tits regularly in the garden though. The adults continued to come back for mealworms to feed the young birds for a week or so. Then, throughout the summer, there was a group of blue tits which regularly appeared at the bird feeders in the garden.



View from the inside, with the parent bird at the top of the screen, and the young birds looking up; the one on the right has its mouth open. Again the picture is nowhere near as clear as what you actually see on the TV.

Was it worth it?

Was it worth the expense of the Birdcam and the effort involved in installing the cabling and power supply for three weeks of TV? The answer is a resounding YES! The enjoyment from those three weeks of TV equated to months of ordinary TV programmes. It was a real life drama happening in realtime that we were able to get personally involved with. It was sad when the birds left the box but it also provided an enormous sense of satisfaction that 'our' blue tit family had survived and continued to frequent the garden during the summer.

Where do you get a Birdcam?

If this article has stimulated your interest in watching your own family of nesting birds then, unless you are sufficiently accomplished to build your own box with camera, microphone and electronics, the Birdcam is probably the best option. You can find the selection of nest boxes plus contact details at <http://www.birdcam.co.uk>, and there's a friendly voice at the other end of the telephone to offer advice if you have any questions.

We are very pleased with our purchase, and can't wait until next spring for another three weeks of enthralling TV.



A bedraggled blue tit returning with more food for the brood in the Birdcam

Barry Jerome
