HOW TO INSTALL NEST BOX CAMERAS IN SCHWEGLER NO. 17 SWIFT NEST BOXES

By Lynda and Chris Huxley
natureofireland@eircom.net
January 2015

1. The nest box cameras are colour in daylight, plus infrared in darkness or low light, with sound. They are about the size of match box and cause no disturbance to the birds. We buy the camera and cable kit from spycameracctv in the UK https://www.spycameracctv.com.

   Be sure to order the <u>wired</u>, not wireless. The kit that you can see in the image below from spycameracctv includes 20 metres of cable. If you need more than 20 metres of cable just contact them for a quote.

Cable from camera fed through hole in roof of the box

Infra red source

Screws (one each side) attaching camera to bracket.

Focus lens by twisting

Camera installed in nestbox

2. The cable has three RCA connections on each end – one end attaches to the cable on the camera and one to the tv. Depending on the model of tv, a scart connector may need to be used.
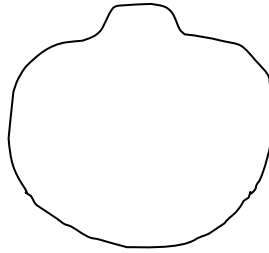

RCA connections

Yellow = image

White and red = audio

3. Test the camera by connecting it to a tv to ensure it is working and to find out which is the right way up.

4. Drill a hole in the centre of the side wall of the nest box, just enough to allow the bolt that holds the camera bracket to go through. The hole should be 27mm from the top of the box.

27mm

5. Drill another hole in the top (roof) of the box about 1 cm from the end wall and close to the back wall. This hole should be about 1.5 cm in diameter and then filed out so that you can just squeeze the cable junction into it. Ideally, it should be this shape:

The size of this hole is very important because if it is too small the cables will not pass through, but if it is too big the junction box will not fit tightly. It is worth taking care over this.

6. Place the camera in the box on the floor and pass one of the connectors and its cable up through the roof hole. By holding the cable in the indentation in the hole, it should be possible to pass the next connector and cable through and then the third. With all three cables through, pull the junction box up into the hole. If you have made the hole perfectly, the junction box will jam nicely into it. If you have made the hole too big the junction box will be loose and you will have to use sealant to hold it in place.

Junction box jammed tightly into hole in roof.

7. Remove the camera from its bracket. Put the bolt through the hole in the bracket and re-attach the camera to the bracket, ensuring that it is the right way up!. Tighten the bracket screws so that the camera is at approximately the angle required (adjustment comes later). Push the bolt through the hole in the end wall of the box, fit the washer and nut and tighten until secure so that the camera will not move.
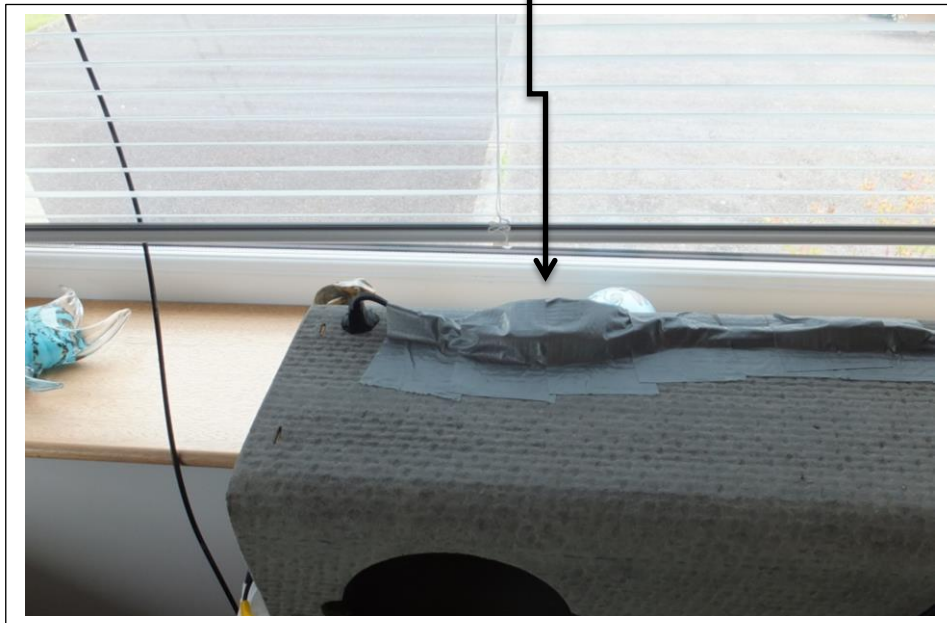
8. Prepare a piece of paper with large words or picture on it and place this inside the box on the far wall of the box. This will be used to help focus the camera – see point 9.

9. Join the camera wires to the cable, connect to tv, plug in. Remove the dust cap from the camera lens and test the camera. Turn the lens until the words/picture are in focus. By using a tiny screwdriver you can slightly loosen one of the screws on the camera bracket so that you can alter the angle of the camera to ensure it is aimed directly at the image. This screw must be tightened securely once the angle is correct to prevent the camera from moving.

10. Seal the hole in the top of the box (the one through which you pulled the wires) around the junction box with either plasticine or a black sealant. This is to ensure that no rain or light enters through this hole.

7. Finally stick the cabling to the box (ensure the place where the RCA connectors join is well covered) with duct tape to protect it from the weather.

8. If you install more than one camera then you will either need a tv to connect each camera to or use a three way splitter to plug three cameras in to one tv and you'll then be able to switch between cameras.