



NESTBOX WITH COLOUR CCTV CAMERA

Includes a 12v DC power adapter, a SCART adapter and a 20m cable to allow you to watch and hear garden birds on your TV as they nest and raise a family.

This system is designed to show the nest box pictures on a TV set or video monitor equipped with AV IN. To connect this system to a computer, you will need a video capture device and suitable software.

Connecting up your BTO nest box camera kit

Open the roof by turning the catch on the back left hand side of the nest box, just above the roof. This is what you should see when the long cable is installed and the front cover on the white trunking (down the right outside wall of the nest box) is removed.

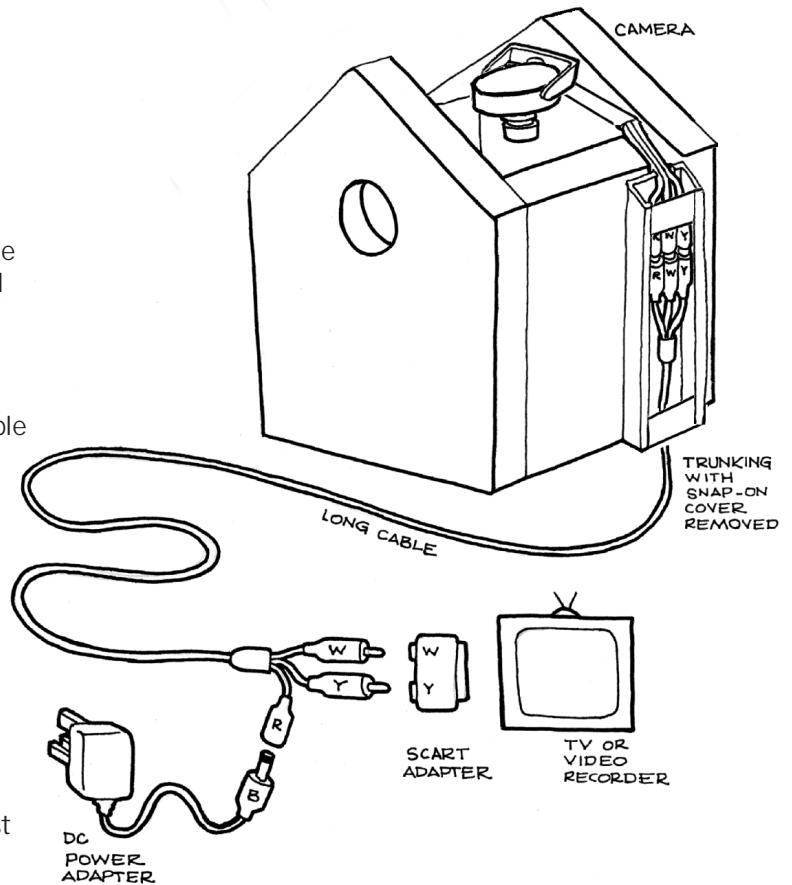
The camera is a colour CMOS CCTV camera. It has six invisible infra-red LEDs on the front of its case to enable it to see clearly in pitch darkness, so you can watch day and night without disturbing the birds. The camera is mounted on the back panel by means of a stainless steel bolt. If you ever need to remove the camera, simply unscrew the bolt and lift the camera out. Please note that it has a little black lens cover over front of the lens to protect it. **This black cover should be removed before use – it simply pushes on and pulls off.**

There is a wire with three connectors hanging out of the camera. The yellow connector carries the nest box picture (video) back to your TV, the white connector carries the nest box sound (audio) back to your TV and the red connector carries the low voltage power (12v DC) to the camera.

The three little wires from the camera go out through a slot in the top of the right side wall so that the three connectors hang down inside the white trunking on the right outside of the nest box. The trunking has a cover that dips off and on – if the cover ever becomes too loose, squeeze the walls of the trunking outwards to improve its grip on the cover.

The kit also includes a long 20m cable, with three connectors on each end. The yellow and white connectors are the same on both ends, but the red connectors are different – one end is a red plug (the TV end) and the other end is a red socket (the nest box camera end). This enables the picture, sound and power to be carried in one cable.

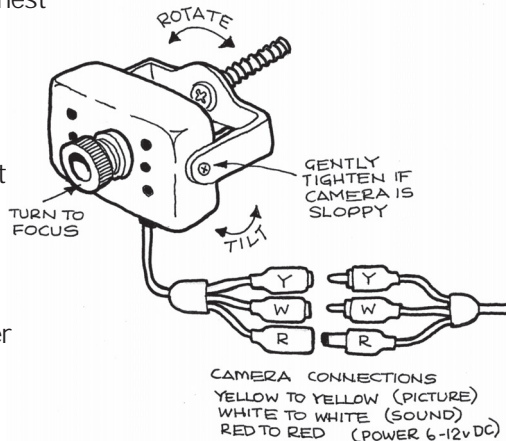
To connect the long cable to the camera, open the trunking on the right outside of the nest box and simply connect the 'long cable' connectors to the camera cable connectors – yellow to yellow, white to white and red to red. Don't forget – the red power connectors on the long cable are different at each end, so if one red end doesn't fit, the other red end will.



Indoors, at the TV end of the cable, you can plug the yellow and white connectors into their corresponding yellow and white AV sockets on your TV if it has them (little round sockets, usually on the front of the TV). Alternatively, you can plug the yellow and white connectors on the long cable into the SCART adapter provided, and then plug the SCART adapter into the SCART socket on your TV (as shown in the diagram above).

Now connect the power. Make sure the switch is turned off at a wall socket, then plug in the 12v DC power adapter. Plug the little black plug on the end of the power adapter into the red socket on the end of the long cable.

When you turn on the wall socket, you should get a picture of the inside of the nest box on your TV's AV channel. If not, switch off the wall socket, make sure it is all connected up properly, the TV is on and the lens cap has been taken off the camera, then turn it on again.

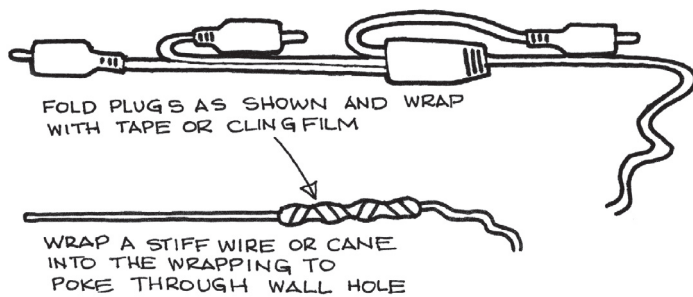


You can try out this whole procedure indoors to check that everything is working and acquaint yourself with the kit, although you might get a loud howl of feedback if the volume is too high on the TV and the camera is too near the TV. To get rid of any feedback, simply move the nest box and camera further away from the TV and turn the volume down. When you put the nest box outside, feedback won't be a problem. When you test the system indoors, you may get some fuzziness or interference on the picture because the long cable is still coiled up. If it should happen, this problem is caused by inductance due to the signal going round and round the circular coil of cable and it won't happen when the cable is laid out. To test the picture focus, place something about 1" (25mm) thick, inside, on the floor of the nest box. This is where the eggs and babies can be expected after a nest is built.

Please note that the camera can swivel on its bolt and tilt on its cradle, so it can point anywhere in the nest box. The focus is adjusted by rotating the lens.

When you are happy that everything is working, switch the system off at the wall, disconnect the long cable and then you can hang the nest box outside. You can bring the long cable indoors through an open window or through a hole drilled through the wall, but the hole should be at least 16mm diameter but 19mm (3/4") is better, and even then, you will have to wrap the connectors with cling film or tape, one behind the other in single file, in order to feed them through such a tight hole. It is best to wrap them onto a thin, stiff "draw" wire, so you can poke the wire through the hole first and use it to gently draw the plugs through the hole.

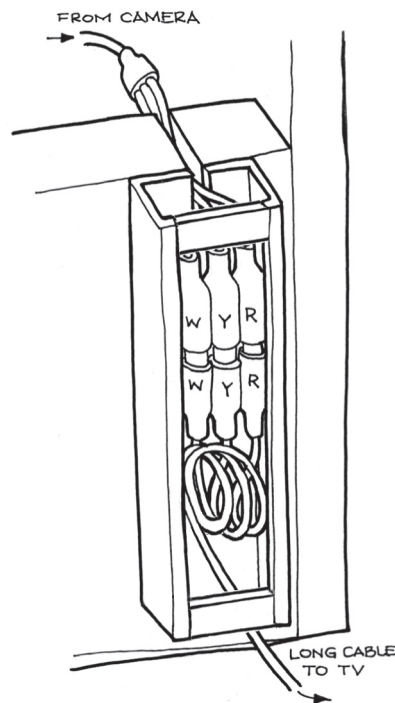
Work very, very carefully when feeding cable and plugs through a hole - more systems are damaged by pulling plugs off when feeding cables through walls than at any other time.



Warranty

The camera and accessories are guaranteed for twelve months from date of purchase and defective components will be replaced provided the system has been used in accordance with these instructions and no other manufacturer's parts (cameras, power supplies, etc) have been attached to this system. Damage, user modifications or opened cameras are not covered by guarantee.

There are white foam bungs inside the trunking that can be removed and replaced when the cable is installed inside the trunking to keep insects, etc out of the trunking (see diagram below). There is also a small packet of cable clips to fix the cabling to walls, fences, etc. - the bottom hole inside the trunking can be used to fix a cable clip over the cable if preferred. Then refit the cover on the trunking.



Siting

If fixing your nest box to a tree, use the aluminium nail provided. Steel nails and screws left in trees can shatter a chainsaw blade if the tree is felled one day - chainsaws can cut through aluminium nails in safety.

To rotate the rear fixing panel to the required position, remove both screws. Once in place, replace both screws securely.

Site out of reach of predators and shelter from prevailing wind, rain and strong sunlight. Do not place adjacent to bird tables or other feeding devices. The nest box should be tilted down slightly at the front and be between 1m and 5m above the ground. It should be placed within easy reach of the 20m length of the cable.

Do not disturb the nest box until the fledglings have left. Clean out the nest box during late September or early October so that it can be used as a roosting site and will be ready for the next seasons nesting attempts.

You can help us to understand wild birds more fully by recording the results of nesting by entering information on the British Trust for Ornithology's Nest Records Scheme at www.bto.org.uk



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