DK-HT3-S

Battery-powered camouflage camera

Product description

DK-HT3-S is a camera with video recorder on SD card in a waterproof and camouflage case developed for outdoor surveillance. Includes a microphone for recording audio.

It is powered by 8 AA batteries and records on internal SD card memory. Batteries and SD card are not included. Thanks to its infrared sensor, the camera remains on stand-by for a very long time, consuming very little battery and only starts recording in the presence of movements. The camera has an infrared illuminator with invisible LEDs which allows viewing in the dark up to approximately 30 metres.

Inserting batteries

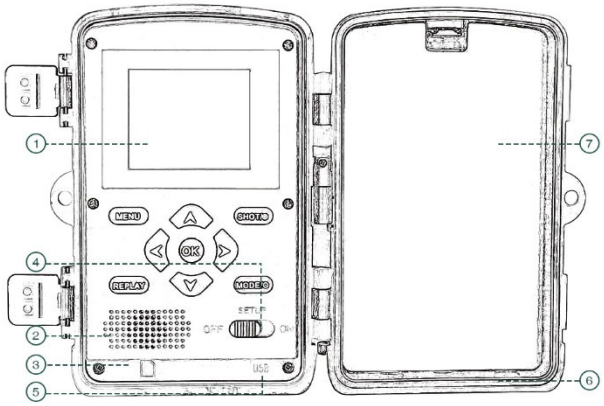
The cameras are battery powered so they can be used anywhere. DK-HT3-S works with normal AA batteries, both normal and rechargeable. 4 or 8 can be inserted depending on the autonomy required. With 8 batteries the camera has an autonomy of approximately 6 months in stand-by.

Mains powered

If you have electricity available, you can also power the network camera with a USB power supply (not included) using the supplied USB-minijack cable.
The DC power connector is located on the outside of the camera at the bottom of the case

ATTENTION – Not And possible use simultaneously mains and battery power. If you connect the mains power cable, you must remove the batteries.

Hardware



1 – LCD monitor
2 – Speaker to play audio 3 – Slot for micro SD card
4 – OFF-TEST-ON ignition selector
5 – microUSB port for connection to computer 6 – 6VDC mains power cable connector included 7 – Compartment for 4 or 8 AA batteries

Inserting the SD card

The first thing to do to be able to record is to insert a micro SD card into the appropriate slot in the camera.

You can use any micro SD card with capacity of**4 at 256 GB in CLASS 10**or higher. Use only new SD cards.

Pay attention to the direction of insertion of the SD card which will slide into its seat only in the direction indicated by the figure on the slot, as shown in the photo above.
The package does not include any SD card, nor the SD card reader for computers which you must purchase separately in the size you prefer.

Registration

The camera records audio and video in adjustable resolution VGA, 720P, 1080P and 2.7MP (2560x1440) with H264 compression. 1 minute of footage at maximum resolution takes up approximately 150MB. A 256GB SD card can hold over 28 hours of video.

Note that the camera does not record continuously, but only in the presence of people, so the capacity of the card is more than sufficient to cover all the battery life.

In addition to video, the camera can also take sequential photos with adjustable resolution up to 58MP
The camera also records audio.

IR illumination 940 nm

The camera is equipped with a completely invisible infrared illuminator. Unlike normal surveillance cameras, this camera uses 940nm LEDs so the lit LEDs do not emit any light visible to the human eye, even if looked at closely so as not to detect the presence of the camera at night.

The IR illuminator turns on by itself in the dark and allows clear B/W shooting up to about 20 meters.

Motion detection with PIR infrared sensor

The camera records in motion detection, i.e. it records only in the presence of living beings in front of it. The word living beings is not accidental because this camera does not use, like almost all our other systems, the modification of the pixels to detect the intruder but rather aPIR infrared sensor like those used in burglar alarm systems. The PIR sensor detects the temperature of the human body or animals and in this way movements of objects such as bushes or branches are ignored and, consuming very little in stand-by, it can remain waiting for an intrusion for months. This camera has an intervention time between PIR detection and image recording of less than a second.

The camera isdesigned to monitor areas where there is normally no passage of people . In this way the camera can monitor for many days and record when the intrusion occurs.

Do not install the camera in areas where there is a lot of traffic because it would intervene too much frequently and consequently the battery life would be significantly reduced.

Power switch

The camera is equipped with a 3-position power switch

OFF–Appliance turned off
TEST–Accessed device with monitor running for positioning and configuration
Hon–Device turned on with monitor off and surveillance in progress.

Normally, the device is turned on by bringing the selector to the central TEST position, positioning is carried out by checking the shot and settings on the monitor, then the selector is turned to ON and the watertight container is closed.

More camera buttons

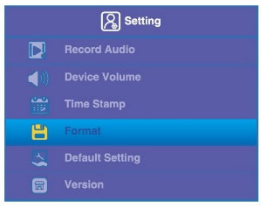
There are other buttons inside the camera. These buttons work only when the dial is in the TEST position and the monitor is turned on.

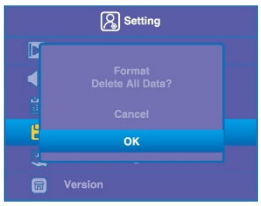
MENU–Opens the configuration menu **SHOT**–
Take a photo
REPLAY–Opens playback of recorded files **MODE**–Select the recording mode: Photo or Video

ARROWS/OK–To move in the configuration menu

First power-on and SD formatting

If you have inserted batteries and SD card you can proceed with the first startup.
Turn the ignition selector to the center TEST position. Wait a few seconds and the monitor will turn on. TEST mode is the mode used to position the camera and set functions. In this TEST mode it is also possible to take photos with the SHOT button. First of all it is necessaryformat the SD card . Press MENU to display the menu, then move down with the arrows to the FORMAT item and press OK twice





After formatting the SD card is ready to record. You only need to format it the first time you use it.

Video surveillance

After formatting the SD card the camera is ready to record. Turn the switch to the ON position. A red LED on the front of the camera flashes 5 times then turns off and no active components remain visible in the camera. The camera is now in video surveillance mode, you can close it and secure it securely with the included strap so that it faces the area to be monitored. You can hide it among the vegetation, but be careful that there is no foliage entering the frame because it could jeopardize the correct functioning.

You can now leave the camera running and walk away. The camera will remain in stand-by, consuming very little battery. When the front PIR sensor detects a human or animal presence, the camera will activate and record photos or videos based on the settings. After the expected recording time, the camera will return to stand-by, waiting for a new intrusion.

Camera positioning

When shooting in a natural environment, the position of the camera is essential for a good result.
First you need to position the camera so that sunlight is not directed at the lens during the day.

The useful shooting angle is approximately 120° and the PIR motion sensor has approximately 120° of action spectrum.

It is advisable to position the camera so as to frame the path of the probable target for a long period. For example, if you are shooting a path, it is best to shoot almost parallel to the passage and not transversely to have a greater chance of capturing significant images.

The motion sensor has a range of approximately 20 m so it is best to position the camera at a distance between 5 and 20 m from the target.
The camera is supplied with a fixing band and the back is designed to be solidly anchored to a branch or tree.

It is best, if possible, to position the camera at a height between 3 and 5 m so as to make it less visible and allow a better viewing angle.
Remember that the PIR sensor detects an abnormal temperature that moves so it will not detect you if you remain stationary in one position.
If your application allows, there is a photographic standard threaded hole in the base of the fixture for a tripod.

Once the appliance has been firmly fixed, close the watertight cover, making sure that the gasket is well seated in its seat to ensure waterproofness.

Configuration

To use the configuration menu, move the switch to the central TEST position. When the screen turns on, press the menu button

To operate in the menu use the arrow buttons and the central MENU button to save

MODE –Following detection of the IR sensor, the camera can: take photos (PHOTO), record a video (VIDEO) or record both photos and videos (PHOTO
+ VIDEO).
PHOTO PIXELS –Set the resolution of photos taken by the DVR from 9 to 58MP
CONTINUOUS SHOOTING – Indicate how many photos consecutively triggered following an intrusion detection (from 1 to 5)
VIDEO LENGTH –Indicates the duration of the video to record following a detection (from 5 seconds or 10 minutes) **VIDEO RESOLUTION** –Set video resolution from VGA to 2.7MP.

PIR SENSITIVITY –Sets the sensitivity of infrared (PIR) motion sensor detection. It is possible to set High, Medium, Low. Generally, high sensitivity is required in ambient temperature conditions above 30°.

PIR INTERVAL –Here you set a possible waiting time between one sensor detection and the next. It is useful if it is not necessary to document every movement, but a video/photo every now and then is sufficient.
TIMER –Enable detection control based on time of day. If you enable this function, sensor detection will only be active in the time slots set below.

TIME LAPSE –If you enable this function, the motion sensor is excluded and the DVR only performs a detection every now and then. It is possible to set the cadence in seconds, minutes or hours. Time lapse shooting is useful for documenting evolutions of a scene over long periods, for example to document natural phenomena or the construction of a building.

AUTO POWER OFF – The device turns off automatically if it is left in SETUP without user operations for the set time.
LANGUAGE –You can leave the default English or select Italian

DATE TIME –Here you manually enter the current date and time.

AUDIO RECORDS –Enable audio recording from the front microphone
DEVICE SOUND –Adjusts the volume of the key sound **TIME PRINT** –Enable date and time stamping on recorded images

FORMAT -In this situation the SD memory card is formatted, erasing all its contents. You need to format the SD card the first time you use it. **DEFAULT SETTING** -This option restores the DVR to factory settings

VERSION –Product version

Other commands in TEST mode
The test mode, in addition to showing the image to allow you to best position the camera, allows the following functions.

- REVIEW RECORDINGS – Press the REPLAY button

- CONFIGURE THE OPTIONS – Press MENU and arrows
- RECORD AS IN DETECTION – SHOOT button
- QUICK CHANGE RECORDING MODE (PHOTO/VIDEO) – MODE buttons

Local movie playback
You can review videos and photos directly on the DVR screen. Open the DVR and set the power switch to TEST. Review the videos with the REPLAY button

Viewing files and connecting to PC
To review and manage the files recorded by the DVR you can use a PC and an SD card reader (not supplied). You need to turn off the DVR, remove the SD card and insert it into a computer SD card reader.

It is also possible to directly connect the camera to your computer using the included USB cable. To do this, turn the selector to SET so that the display turns on

connect the provided USB cable. The device is detected in the computer resources as a removable disk and behaves like a common USB stick. Depending on your operating system, an automatic procedure may start or you will have to browse the contents of your PC to find the new disk.

It is possible to copy the videos to the PC and play them with any video player (VLC - VideoLan recommended).
It is also possible to play video files directly from the SD card, without copying them to the PC, but this could compromise the playback quality so it is recommended only to obtain a preview and then download.

Connection to PC
You can review the recorded videos even without removing the SD card by connecting the DVR to a PC via the mini USB port with the cable provided. You can explore the contents of the memory directly with Windows Explorer.

Main technical characteristics

Sensor	CMOS
Maximum resolution	Adjustable from VGA at 2.7MP 30 f/s
Video format	MOV
Photo format	JPG
Overlay	Date time (excludable)
Functions	Motion recording I take photos Motion + Photo Timelapse
IR illuminator	IR LED 940 nm range 20 m.
Detector movement	Passive infrared, 20 m range. 120° detection area
Band detection hours	Yes 1 band
Video storage	Over 28 hours on 256 GB at max resolution.
Temperature operation	- 30° +70°C
Memory	SD Class 10 or higher
Memory capacity	4..256GB
Monitors	Built-in 2” TFT
Diet	4 or 8 stacks AA or 6VDC external power supply
Weight	256 g (without batteries)
Dimensions	134x90x70 mm