Instruction Manual

MANSECURE06 REV-A 11/08/2016

V60 Motion Activated Security Camera

SILVAN AUSTRALIA PTY. LTD.

ABN 48 099 851 144

VICTORIA (HEAD OFFICE)
244- 264 Greens Rd,
Dandenong South, 3175 Australia
Telephone: +61 (03) 9215 2700
Facsimile: +61 (03) 9215 2701
www.silvan.com.au

NEW ZEALAND
22 Sunshine Avenue
Te Rapa, Hamilton, 2001 New Zealand
Telephone: +64 (07) 8496030
Fax: +64 (07) 8496070
www.silvannz.co.nz

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Silvan Warranty

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

We warrant our goods to be free from defects in materials and workmanship for the warranty period of 12 months from the date the product is delivered to the consumer.
Silvan warrants its authorised Dealer, who in turn warrants the original purchaser (consumer) of each new Silvan product that it will repair or replace the product, or, pay the cost of repair or replacement, as determined by Silvan without charge for labour or any defective or malfunctioning parts in accordance with the warranty limitations below.
This Warranty is in addition to any other rights and remedies available to consumers under the law

This Warranty Covers

Only conditions resulting directly from defects in workmanship or material under normal use and service.

Warranty Exclusions

The Warranty does not cover:

- Conditions resulting from misuse, use of incompatible chemicals, exceeding machine specifications including overloading, impact damage, negligence, accidental damage or failure to perform recommended maintenance services as specified in the Owner/Operator Manual applicable to the product.
- Damage caused by continued use of a product after initial failure
- Any product which has been repaired by other than an authorised Silvan service outlet in a way which, in the sole and absolute judgment of Silvan, adversely affect its performance or reliability.
- The replacement of maintenance items such as diaphragms, batteries, V belts and ground engaging components, etc.

How to claim Warranty

Return the goods to the place of purchase at your cost and within the warranty period along with evidence of the purchase date. If the original supplier cannot be contacted then contact Silvan as below and we can direct you on how to proceed with your warranty claim.

How your claim will be managed

The repair of a defective product qualifying under this warranty will be performed by any authorised Silvan service outlet within a reasonable time following the delivery of the product, at the cost of the owner, to the service outlet's place of business. The product will be repaired or replaced depending on the extent of the problem at the discretion of Silvan and the Silvan dealer.

Silvan Australia Pty Ltd
264 -266 Greens Rd, Dandenong Sth, Victoria 3164
1300 SILVAN (745 826) support@silvanaust.com

Product Warnings

Ensure you have read and understood this manual and all other support documentation in its entirety before attempting to operate or install

Read and take note of all following safety warnings and notices.

Failure to comply with these warnings may result in serious injury or death.

Warning ! This product is requires batteries to operate. Position batteries in proper polarity and do not install batteries of different types, charge levels or capacities together as this risks battery leaks, fire and or equipment damage.

Warning ! Do not leave flat batteries within this device. Flat batteries have high risk of leaking and the leaked chemicals are corrosive and damaging to equipment

Warning ! Keep out of reach of children. Batteries if swallowed present a significant health hazard

Warning ! Never allow an inadequately trained person to install or operate.

Warning ! Camera's are often placed at elevated positions or in hard to access areas. Take suitable safety precautions when installing to prevent acident or injury to the installer and ensure that the installed dose not risk or endanger people or property if resulting in any kind of failure.

Warning ! This device can be used for Surveilance. The owner and operator are responsible for the operation of this device and should ensure operation is compliant with relevant laws and regulations.

Important Note ! States and Territories may have their own laws covering the use of surveilance devices. The State of Victoria uses the *Surveillance Devices Act* which may provide useful guidance although it is reccomended to seek professional advice to ensure applications are compliant with relevant legislation.

Important Note ! This device when used for security applications should oly be one element of a comprehensive security plan that encompases a range of security measures to enhance the overall security. A comprehensive security plan should include multiple overlapping elements that allows the system to continue working in situations where an unexpected event takes place or where one element was not operating or obscured from collecting useful data.

Other items that may contribute to a security plan with active and passive effects

- Motion Activated Cameras
- Motion (Driveway) alert systems
- Area lighting
- Sturdy Chain Locks and padlocks
- CCTV systems
- Key Safes for ourdoor equipment
- Security warning signs
- Fences and closed gates

Important Note ! Results may vary. The total setup of this product has great effect to the outcome and the following should be considered to optimise preformance.

- Battery Quality
- Frequency of activity in the area
- Camera placement (area of view)
- Camera Settings
- Understanding type of activity intended to capture
- Environmental movement such trees, grass and bushes in the wind
- Ambient lighting such as street lights or direct sun light to lens
- Distance to moving object and its size
- Reflective surfaces that may flare the lens

General Information

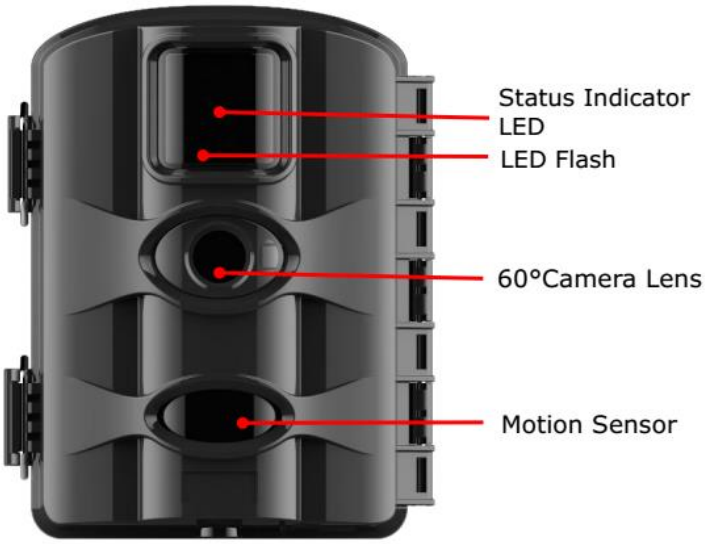
The V60 Motion activated security camera is a self-contained camera systems that operates automatically according to the parameters as set. Using a PIR motion sensor the V60 activates when motion is detected to record activity in the area.

Main Features

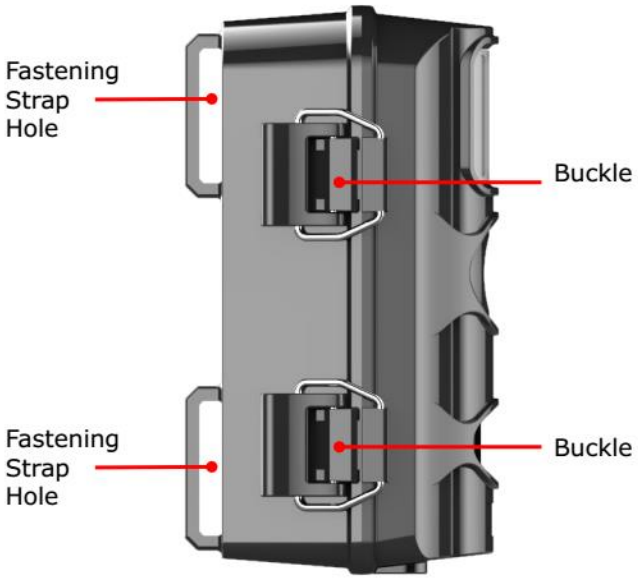
- 12 Mega Pixels Color CMOS
- 60 degree field of view lens
- Fast trigger response (down to 0.6 seconds when using 2GB SD card)
- 2.4" Color LCD Screen for setup and image review
- Records Photos and/or Video
- Day & Night operation with No-Glow infra-red night vision up to 15m
- Date Stamp recording to photos
- Battery Operated using 4/8 AA batteries
- IP54 Water and Dust resistant for outdoor use

Other Features

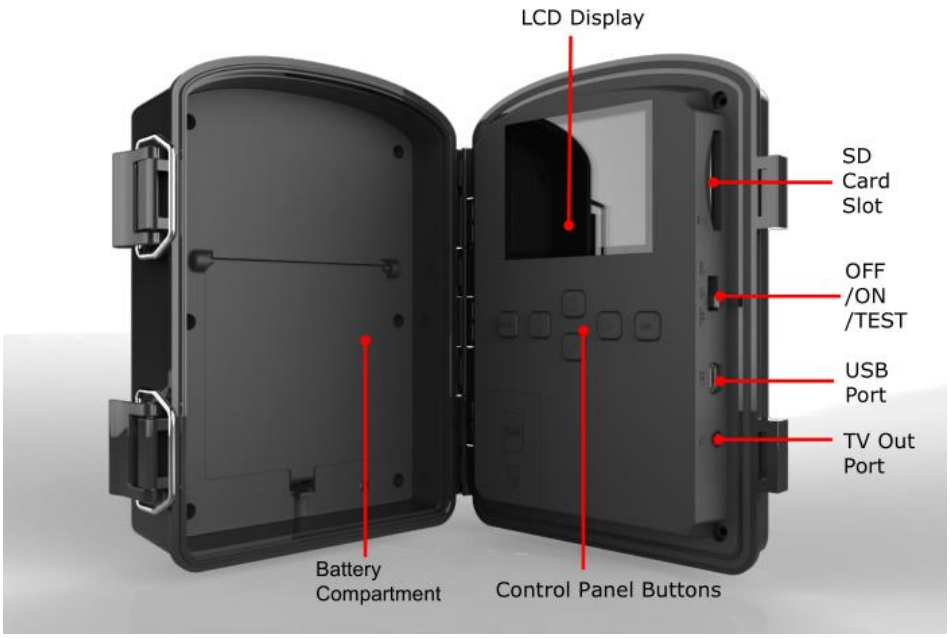
- Timer On/Off Function
- Password entry
- Serial number recording to images
- Audio recording to video
- Rugged plastic body with hinge open case and buckle closures
- Range of installation options: Strap mounting, Hook hang-able or optional camera mounting bracket



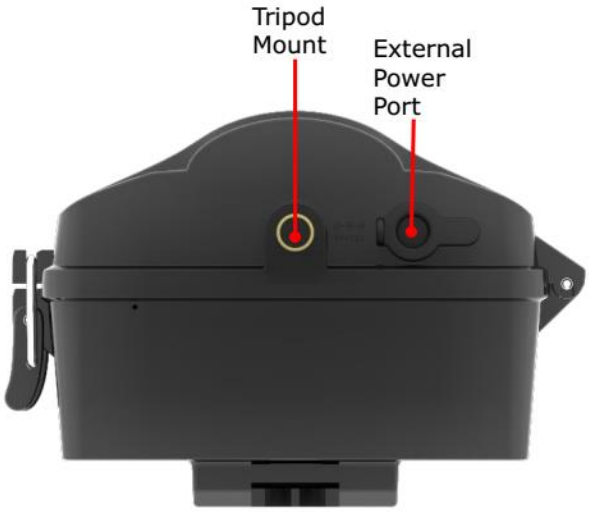
Front View



Side View



Interior View



Bottom View

Rear View

Package Contents

1x	V60 Motion Activated Camera
1x	USB Cable
1x	Mounting Strap
1x	8GB SD memory card
1x	Express set-up guide (with link to this operators manual)

Setting up and connecting

If you are not familiar with the operation of this camera, the following instructions will help you get a quick overview. Before doing any operation, please make sure you have loaded batteries and plugged the SD card correctly.

Power supply

- To insert batteries in the device, first open the buckle of the device.
- Insert 8 x 1.5 V AA batteries into the **battery compartment** (can fit 4 on left side to operate but requires 8 battery for improved standby time).
- Please pay close attention to the polarity, which is marked in the battery compartment. Otherwise the device will not work and can be damaged.
- Recommend you use best AA batteries designed for digital camera's such as high performance alkaline or lithium batteries. Alternatively 8x high capacity rechargeable* batteries could be used
- You can also connect an external power supply and rechargeable battery; please sure that voltage matches the camera.
- An external power port at the base of the camera allows external batteries of the 6-12V range to be connected such as a large rechargeable battery. When connecting an external power supply or battery, the camera will use the external power preferentially.

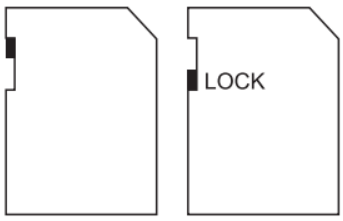
Note: Rechargeable batteries are usually 1.2V cells instead of the 1.5V cells as specified. This means that the total volts is lower than non-rechargeable batteries so it is important to use 8 batteries for best performance.

Inserting SD Card

Since the camera has no built-in memory, it can only work if an SD memory card is inserted.

- To insert an SD memory card into the memory card slot of the device, push it into the slot until it clicks into place.

- To remove an SD memory card from the memory card slot of the device, press the protruding edge of the memory card in a little way until it pops out. Then remove the card.
- The contact surfaces of the memory card must be facing towards the front of the camera.
- SD memory cards have a locking system to prevent accidental erasure of images. To protect the card from write access, slide the switch on the side of the card to the "LOCK" position. However, the camera can only save data onto the card if the switch is in the other position.



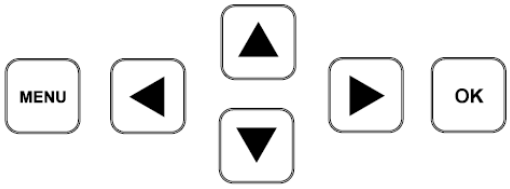
Note

- The device supports SD memory cards with a capacity of up to 32 GB.
- To avoid malfunctions, keep the memory card away from moisture and avoid strong vibration, dust, heat sources and direct sunlight.
- Insert the memory card as indicated by the icon on the slot.
- Never force the memory card into the slot. Never bend or twist the memory card.
- Major fluctuations in temperature or humidity can lead to condensation which could cause an electrical short-circuit. Keep the memory card in the protective case.

Interface Overview

The camera contains a LCD screen and keypad allowing settings to be adjusted or images reviewed. After connecting a power supply, move the power switch to the "TEST" position which turns on the LCD screen to allow test and setup functions.

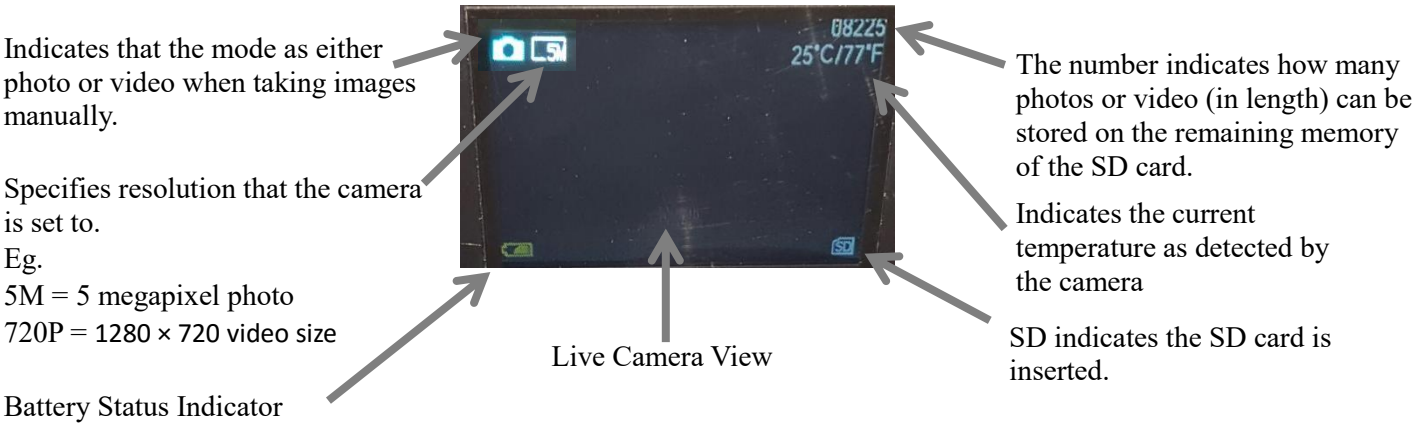
Press the MENU button to enter/exit the main menu, navigate menu options through ▲, ▼, ◀ , ▶. All settings should press OK button to confirm. Always remember to press OK to save the change. Otherwise you will lose your new setting.



NOTE: If you do not open the setting menu in 3 minutes, the camera will enter into sleep mode, and the screen will be turned off, but it will be turned on if any key pressed. If you do not open the setting menu within thirty minutes, the camera will power off automatically.

Understanding the screen icons

When the menus are closed the default view will be a live image from the camera where the screen has different status icons.



Manual Photo/ Video Capture

When the menus are closed the default view will be a live image from the camera.

1) Press ▲ button to switch to set manual video mode to shoot video clips.
As indicated top left of screen with video icon and resolution indicator.
Press the ▶ button to start video recording with a timer on screen.
Press the ▶ button again to stop the video recording

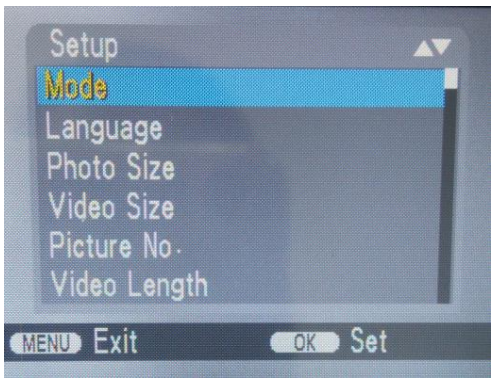
2) Press ▼ button to switch from video to photo mode to take still photos.
As indicated top left of screen with camera icon and resolution indicator.
Press the ▶ button to snap a single photo

The camera will automatically decide if to take a day or night shot when the ▶ button is pressed. When shooting video the camera will not change between day or night mode during a recording. Hence a video beginning in night mode will continue in night mode even if lighting changes in the testing period. For testing purposes to force a camera to change between day/night mode the lighting in front of the camera must change enough before beginning another recording.

Press the **MENU** button to open the settings menu.
1) Press the ▲/▼ buttons to select the desired menu entry which you can then activate with the **OK** button. If you change settings, you must always confirm your changes with "OK". Use the **MENU** button to navigate one menu level backwards.

Mode

To select whether photos or videos are to be recorded in motion detection mode. In "Cam + Video" mode, the camera first takes a photo and then starts filming video.
In “Camera” mode the menu options ”Video Size” and ”Video Length” are unavailable; And in “Video” mode the menu options ”Photo Size” and ”Picture No.” are unavailable.



Language

Here you can change the language from English to Chinese, German, Finnish, Swedish, Danish, French, Czech, Norwegian, Slovak, Russian, Italian, Spanish or Portuguese etc.

Photo Size

Select a photo size in megapixels: 1 MP, 3 MP, 5 MP (default), 8 MP, 12MP. The larger the file size, the more detailed the image.

Video Size

Select the screen resolution: 1280 × 720, 720 × 480, 640 × 480 or 320 × 240. The higher the resolution, the sooner the capacity limit of the memory card will be reached.

Photo size	
Resolution	8GB SD card max photo capacity
1M	33926
3M	13252
5M	8274
8M	5217
12M	3474

Video size		
Resolution (Home Screen)	Resolution (image size)	8GB SD card video storage capacity max (hours:minutes:seconds)
QVGA	320x240	3:12:45
VGA	640x480	1:34:56
D1	720x480	1:10:40
720P	1280x720P	0:53:00

Photo No.

Like a photo burst you can select the number of photos that are to be taken in succession when the camera is activated in photo mode. In addition to single shot mode (01 photo), you can take 2 photos in series (02 photo) or 3 photos in series (03 photo).

Video length

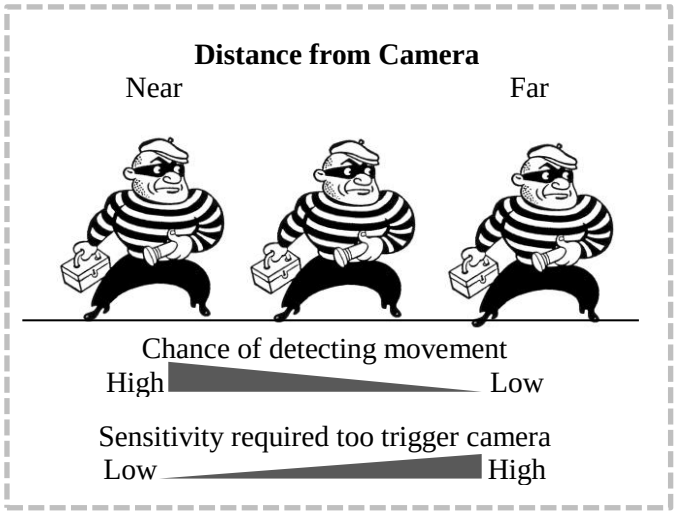
Videos are in AVI format that can be played back on most video players. Use the ▲/▼ buttons to select the length of the video recording (between 3 seconds–10 minutes) that is to be made when video recording is activated. The longer the recording time selected, the shorter the operating time. **Important note: Recording of video is highly demanding on battery power and triply so for night vision recording as the camera has to operate an invisible infrared torchlight at night. Longer length recordings and or high frequency of recordings will lead to short battery operating times.**

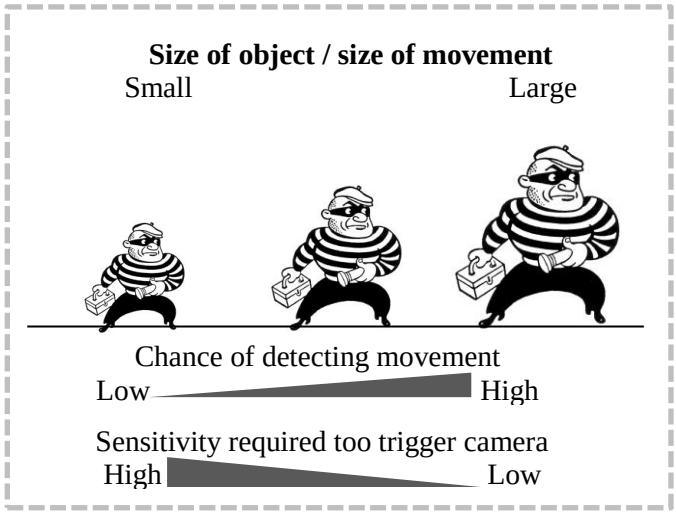
Interval

Use the ▲/▼ buttons to select the minimum time period that the camera should wait before reacting to subsequent activation of the main sensor after the initial recording. During the selected interval, the camera will not record any images or videos. Longer interval times preserve battery life and prevent the memory card from being filled up with too many recordings of the same event. You can select between 5–59 seconds or 1–60 minutes.

Sense Level

The sensitivity of the main motion sensor is set here. Sensitivity sets a threshold of what can be interpreted as movement to trigger the camera. There is a dynamic connection between the size of the moving object and distance from the camera. Low sensitivity may allow for some small environmental movements to be ignored but can then mean that person may need to be a little closer to the camera to trigger it. In the same way high sensitivity could allow for smaller objects or movements to trigger the camera. Consider the below examples and adjust accordingly when testing your set-up.





For interior areas and environments with little interference, such as branches blowing in the wind, select "High". Select "Normal" for exterior areas and environments with a normal amount of interference, and select "Low"for environments with a high level of interference. The temperature can also affect the sensitivity. The "High" setting is suitable for warm ambient temperatures, whereas "Low" should be selected for cold environments.
The general rule of thumb is the motion detection range is 20m however a large moving object at greater distance may trigger the camera. A large temperature differential may trigger the camera such as a heating vent or ground shadow if there is a large moving temperature contrast in view.

Set Date & Time

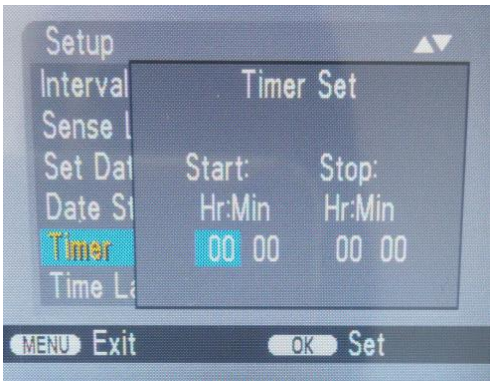
Here you can set the time and date. Use the ◀ / ▶ buttons to switch between the values and change the selected value with the ▲/▼buttons. Confirm your settings with the OK button.
Date and time is displayed in the UAS format Year/Month/Day Hours: minute (with hours in 24Hr time)
It is important to set the correct details as it effects the accuracy of the datestamp to photos, the timer function and the date/time of images is also written against the file details on the memory card (visible when reviewing files on a PC).

Date stamp

Here you can choose whether to save your photos with a time stamp.
Date, Time, Temperature, Moon Phase will be stamped on the photos and videos if you choose “Date/Time”.

Timer

Select "On" if the camera should only be active during a certain time period. In the screen menu that subsequently appears, you can then set the start and end time for the active phase:

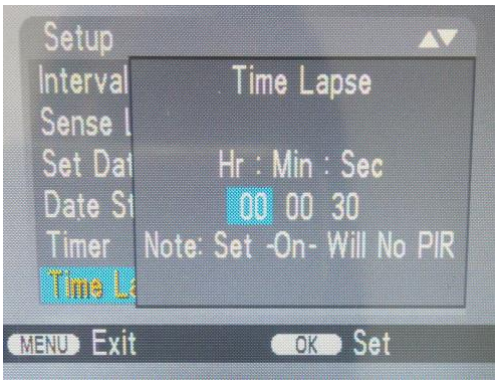


Press the▲/▼ buttons to set the hour for the start of the active phase.
Then switch to the next field using the ▶ button. Press the ▲/▼ buttons to set the minutes for the start of the active phase. Then switch to the next field using the ▶ button.
Press the ▲/▼ buttons to set the hour for the end of the active phase.
Then switch to the next field using the ▶button. Press the ▲/▼ buttons to set the minutes for the end of the active phase.
The settings made here apply every day. The camera will not record any images outside of the active phase.
Confirm your selection with the **OK** button. Afterwards, press the **MENU** button to close this sub-menu.

Note: Hours are in the 24hr format ie 14 hours = 2pm.

Time lapse

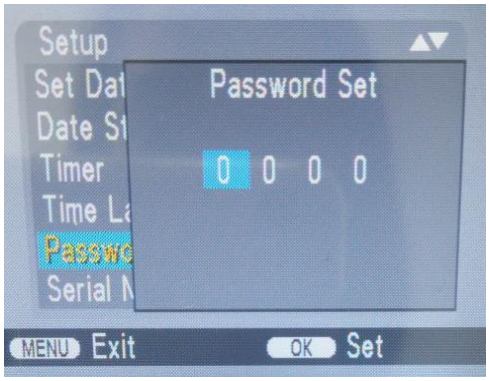
With this function the camera automatically takes pictures at adjustable intervals. This is useful if you want to observe the blooming of plants or processes that are not the like, for example. When you confirm "On" with the **OK** button, you can then set the desired time interval using the menu that now appears:



Press the ▲/▼buttons to set the hour of the desired time interval.Then switch to the next field, "Min", using the ▶ button. Press the▲/▼buttons to set the minutes of the desired time interval. Then switch to the next field, "Sec", using the ▶ button. Press the ▲/▼buttons to set the seconds of the desired time interval.
Confirm your selection with the **OK** button. Afterwards, press the **MENU** button to close this sub-menu.
Note: If Time Lapse is “ON”,”Interval”and ”Sense Level” function are unavailable as the motion sensor is turned off.

Password Set

Select "On" if you want to use a password to protect the camera from unwanted access. In the following screen menu, you can set a 4-digit combination:



Press the▲/▼ buttons to select the desired number between 0-9. Then switch to the next field using the ▶button until all 4 spaces are set.

Confirm your selection with the OK button. Afterwards, press the MENU button to close this sub-menu.
The set number combination must now be entered each time the camera is switched on in TEST mode before the unit can be operated.

The password prevents others from accessing the camera or changing settings. The password does not stop people from physically accessing the memory card.

Password Reset

If you forget the number combination, proceed as follows to unlock the camera and to reset it to its factory default settings:

- Keep the ▶RIGHT BUTTON pressed while moving the operating mode selector switch to the TEST position. Keep the button pressed until you see the boot screen.
- After about 5 seconds the camera will switch on and can now be used without a password.

NOTE: This procedure will permanently delete any previously made settings setting the camera back to the default settings..

Serial NO.

Select On to assign a serial number to each camera you have. You can use the combination of 4 digits and/or alphabets to record the location in the photos. This helps multi-camera users identify the location when reviewing the photos.

Audio

If you want the camera to record sound when recording videos,select "On" here.

Format

Formatting the memory card will permanently delete all data on it.Before you use a new memory card in the camera or a card that has previously been used in another device, you should first format the memory card. Select "Yes" with the **OK** button and confirm the following prompt with the **OK** button. The formatting process starts.While the card is being formatted, the message "Please wait" appears.

CAUTION

► Ensure that the memory card does not still contain any files that you need!

Default settings

If you select "Yes" the menu item and then slide the select bar in the following prompt to "OK" using the ▲/▼ buttons and then press the OK button, all previously made camera settings including any password will be deleted and the factory settings will be restored.

Version

Here show the version number of camera firmware. We periodically release firmware update with new feature or performance enhancements which will show as an updated number on newer cameras.

Activating Live Mode

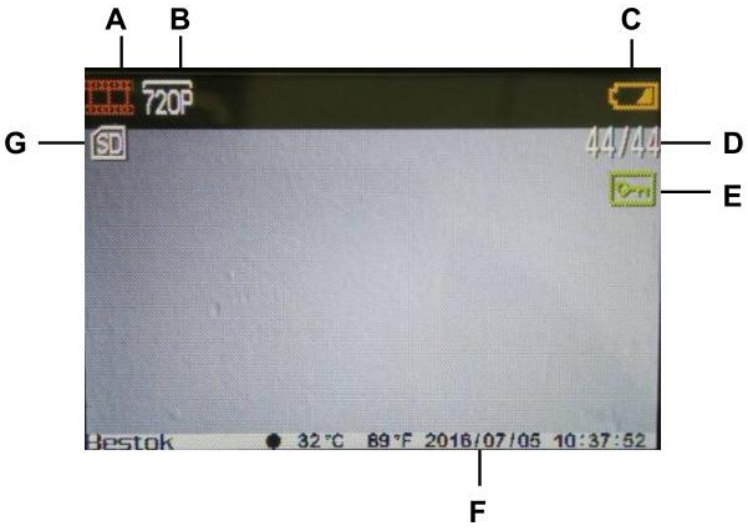
The normal operating mode of the camera is so-called live mode.
In this mode, recordings are triggered via the motion sensors .

To set live mode, slide the operating mode selector switch to the "ON" position, and at this time, the display screen will count down from 10 before switching off to save batteries. Then the camera will start to operate independently and will go into standby mode. As soon as any wild animals or similar enter the detection range of the central sensor zone, the camera will start capturing photos and/or videos (depending on the configuration).

Reviewing recording on camera

Slide the operating mode selector switch to the "TEST" position. Now you will see the live picture from the camera. Press the OK button to activate media playback. The following appears on the display:

A: Shows that the selected recording is a video.
If this does not appear, the selected recording is a photo.
B: Shows the resolution of the selected video or photo
C: Battery charge level display
D: Shows the current recording number as well as the total number of recordings.
E: Write protection status of the selected file
F: Date/Time recording was made
G: Indicator for type of SD card being used



You can use the ▲/▼buttons to scroll through the recordings and view them on the display .
Press the ◀ button to zoom in on the image on the display. Press the ▶button to zoom out again. Press the ▲or▼button briefly to move the image section up or down. Hold down the▲or▼button to move the image section sideways. If the image is zoomed, the corresponding zoom factor is also shown on the display.

If the currently selected recording is a video, press the ▶button to play back the video. Press the button again to stop the video. If you press the◀ button, the video will run backwards to the beginning.

If you now press the **MENU** button, the settings menu opens:

♦ Press the▲/▼buttons to select the desired menu entry which you can then activate with the OK button. Use the MENU button to navigate one menu level backwards.

Delete One

You can use this function to delete individual recordings from the memory card . After you have called up this function, move the select bar to "**Delete** " and press **OK** to delete the selected recording.

Delete All

You can use this function to delete all recordings from the memory card . After you have called up this function, move the select bar to "**Delete**" and press **OK** to delete all recordings.

Slide show

This function can be used to play back the photos stored on the memory card automatically. Each photo is shown for about 2 seconds. To stop the slide show and keep the current image permanently on the screen, press the **OK** button.

Protect

This function can be used to protect individual recordings or all saved recordings from accidental deletion.
If you select a write-protected file, the write protection symbol will appears on the display.

Reviewing recordings through external equipment

Transferring recording to a computer

Method 1. Connect the USB plug of the supplied USB cable to the USB port on the camera and the USB plug to a free USB 2.0 port of a switched-on computer. This will now recognize the device as "mass storage". When you have confirmed this message of the camera with "OK", the camera connects to the computer and the content of the SD/SDHC memory card will appear as a new drive on the computer. Now carry out the required file operations.

Method 2. Remove the SD card and connect the SD card reader /computer. Card will appear as new drive on the computer where files can be accessed.

Note: Computers are able to review images and video's much faster than through the Camera's LCD screen. When reviewing images on the camera is may not be obvious as to what triggered the camera until you connect to a computer where you can rapidly compare photographs making it easier to see subtly changes such as tree branches moving in the wind.

Viewing through a TV

The side of the camera features a TV out plug that allows the camera screen to be mirrored to an AV (analog) connection to a television. The image display is larger but because it is analog the image will not have sharpness or clarity seen when connecting to a computer. A cable is required to connect the camera to a television and the camera must be in TEST mode. (TV cable is not included)

Technical Specifications

Category	Parameters
Image Sensor	12 Mega Pixels Color CMOS
Maximum Pixel	4000 x 3000
Lens Angle	60° Camera Lens, Auto IR-Cut
IR LED	Up to 65ft/20m
LCD Screen	48x35mm(2.36")
Operation Keypad	6 Button Keypad
Storage Support	SD card (8MB ~32GB)
Image Size	12MP=4000 x 3000; 8MP= 3264×2488;5MP = 2560x1920; 3MP=2048 x 1536;1MP=1280 x 960
Video Size	1280x720p: 30fps; 720x480: 30fps; 640x480: 30fps; 320x240: 30fps
PIR sensitivity	High/Standard/Low
Operation Mode	Day/Night
Trigger Time	The fastest reach up to 0.6 second
Trigger interval	5 seconds-60 minutes adjustable
Video Length	3 seconds-10 minutes adjustable
Camera+Video	Take photo first then take video
Playback Zoom In	1-8 times
Date Stamp	Optional, You can add date label in the picture you shot, you can show shooting time, temperature phase and so on.
Timer	On/Off; Programmable
Password setting	4-Digit Numbers
Serial number	Support the 4 number composed by letters and numbers freely
Time Lapse	On/Off; 1 Second ~ 24 Hours Programmable
Audio	On /Off
Languages	English/Chinese/French/Norwegian/German/Spanish/Portuguese/Japanese/Russian/Czech/Italian/Romanian/Finnish etc.
Battery	Support 8 x 1.5 AA batteries (Can operate with only 4)
Standby time	Up to 6 months (With 8 premium AA batteries) **Note:** Common Alkaline batteries will run the camera however they operate at reduced capacity. Premium Lithium or Alkaline batteries for cameras have better run times. **Note:** Most Rechargeable AA batteries are 1.2V instead of 1.5V which means the overall voltage will be lower so its better to use the higher capacity rechargeable batteries to sustain voltage for longer.
Interface	TV output (NTSC); USB; SD card; 6V DC External
Mounting	Support Strap fixed and tripod fixed
Waterproof	IP65
Work Temperature	-22~+158°F/-30 ~+70°C
Work Humidity	5% ~ 95%
Certificate	FCC & CE & ROHS

Understanding your application

Before you add your batteries and strap a camera to a tree it is important to understand what you will be trying to achieve in order to identify the type of settings to adjust, where to position a camera and how to tailor the environment to suit use with a camera.

Break your application down with some of the following questions.

- Many thefts are crimes of opportunity because something was “easy to steal”
    - Are there other things that can be done to bolster security?
      Addition of Warning signs, padlocks to gates, heavy duty chain locks through equipment wheels, area lighting to highlight intruders or key safes to make it harder to access outdoor machinery all can make the difference by adding difficulty to an intruder and increasing the change of being noticed or caught in the act. Other measures such as keeping valuables distant from entryways reduce the chance of being taken where intruders have limited time.
- What would likely be targeted for theft/vandalism?
    - Can items be easily covered with 1 camera or should more security measures be in place?
- From where would a person approach from/leave?
    - Can you add a camera along these areas?
    - Can you install other security measures to cover other areas or add obstacles or deterrents?
    - A good security plan will have multiple preventative and deterrent measures
- The camera can see a 60° Field of View. This means that at very close range a moving target may be partly clipped out of shot.
    - Can you find a position for the camera where a person will be at the 10-15m range from the camera?
- How quick can the camera respond to motion to take a photograph?
    - The Camera can respond as quick as 0.6 Seconds with a 2GB SD card. However when taking multiple shots in burst setting (Pic no setting) there is a delay between taking photos effected by the resolution of the image with higher resolution images requiring more time to write to SD card.
    - Camera response time means that a fast moving item like a car moving left to right past the camera at close range could be out of shot before the photo is taken
    - The camera is better situated near a bends in a track, gateways or places where a person/vehicle must slow down/stop. Adding an obstacle that requires more time in front of the camera improves chance of getting the right photo.
- How long should I set the camera interval for minimum time between photographs?
    - A low interval setting means the camera can be triggered more frequently, improving the change of capturing more than one image of important activity. The same setting also means the camera will also be more active and respond all sorts of other activity at a cost of battery life.
    - By adjusting the sensitivity at the same time you can possibly reduce some unwanted movements from triggering the camera but also risk the camera ignoring significant events at longer range
- Where could a camera be fitted?
    - Where is a safe stable place to fit a camera that is above 0.5m over ground and not at eye height?
    - Night vision operation is up to 15m max with fully charged batteries. Night vision the range diminishes with battery power so it is better to be conservative when aiming the camera for night targets.
- Does the area have much movement/activity normally?
    - The camera can only respond to 1 activity at a time. If there is multiple movement at once or 2 motion events in close succession it is possible that the camera could photograph a non-event like a tree in the wind right before an important event. You can adjust the interval time so the camera is ready to take another photograph ad the cost of battery life. Alternatively review the cameras placement to avoid or remove environmental movement by eliminating long grass or aiming the camera away from trees and bushes.
- Is there a specific time of day that that wanted activity is most likely to occur?
    - If yes you can set the timer to the camera is only active part of the day

- What could effect night mode operation?
    - Night Photography requires an invisible flash to supply infrared light to the camera. Anything reflective like windows or license plates or objects close to the camera can reflect back intense light washing out the image and reducing details.
    - Night operation requires more power as the camera must supply the light source at added expense to battery life and lower battery power equals shorter night vision range. It is highly important to manage the setup to minimize non-required photography to conserve power and prolong the night vision range.
    - Night vision is a black and white type of photography using infrared light. Objects reflect differently under infrared light to visible light which when shown in a black and white photo may give a false impression of color or brightness.
    - Ambient light or light directly on the camera sensors can direct it to use Day or night mode which may not be lead to the most optimal image.

Unsuitable applications.
It is important to remember that motion activated cameras are battery operated equipment intended to monitor areas of low or infrequent activity; higher levels of usage are less suitable for battery operation.

In environments where there is higher frequency of activity or both significant and insignificant activity occurring at the same time tend to favor video capture over photos which also has higher power demands, such environments are more suited to CCTV type systems.

CCTV Advantages
- Can record 24/7 or just when motion detected
- Single system can manage multiple cameras from one point
- Quality of performance unaffected by battery power (ie. Night vision range is always optimal)
- Powered by 240V means no batteries

CCTV Disadvantages
- Requiring constant power from a 240V source
- Often use Low-glow night vision which are not as covertly operating
- Installation locations for cameras are more limited
- Only capture video

Motion Activated Camera Advantage
- Covert operating with no-glow night vision
- Covert operating with camouflage design
- Battery operated = Wide range locations where can be installed
- Can capture Pictures or video

Motion Activated Camera Disadvantage
- Battery operated = Requires batteries to be changed
- Must access camera to review images
- Night vision range is effected by battery quality and charge

SECURE06 **EXPRESS CAMERA SETUP.** 20/07/2016

Read manual for full detail and positioning information.

This is a motion activated camera designed to monitor areas of low movement activity. Results are affected by:

1. The environment the camera is aimed at
2. Understanding the type of activity you wish to monitor
3. The camera parameters (settings) dictate how the device can operate
4. Quality of batteries used.

Follow this guide for information about key settings

The full operators manual can be found at www.silvan.com by entering SECURE06 to the search prompt or alternatively you can scan the QR code.

Camera Positioning: Set minimum 1m above ground avoiding positions at average head height to reduce chance of being seen by the casual observer. Eliminate from view anything that may move triggering the camera being conscious of the effect of wind on trees, long grass etc. Reflective surfaces can create photo glare or create flash back with night shots and should be avoided.

Key considerations when setting the cameras parameters

The camera will behave according to its settings and the environment surrounding it, the most important settings to be tweaked are **Sense Level** and **Interval. Sense Level** adjusts the motion sensitivity effecting what can trigger the camera. **Interval** effects the minimum time that the camera can be potentially triggered similar to a cool-down time from last camera activation.

Initial set up: When setting a camera it is important to review performance so that you can adjust the camera position, camera settings and/or alter the environment to increase the chance of capturing a significant event and limit unwanted events being captured. Set the camera to actively take photos as intended then review after progressively longer periods of time 20mins, 2hr, 1day, 4 days. Count the photos taken per period and review what has triggered the camera as indicator of future camera activity levels. Use this information to eliminate moving objects and adjust the settings to limit undesired camera activity.To maximise battery life the camera must be in an environment of minimum environmental movement, camera set to not activate too frequently.

Hint: Reviewing images on a computer is much faster and allows for subtle changes in images to be more easily noticed. This can be done by connecting the camera to a PC or by connecting the memory card directly to the computer.

TEST / ON / OFF Power switch explained

Test: LCD screen is on to allow image review and adjustment of settings

On: Camera automatically active according to settings for motion activation (after 10 second count down on the LCD screen when first switched to **ON**

Key camera settings are detailed over page. For full explanation of all camera setting refer to the operators manual

Parameter	Settings (**Bold** = default)	Description
Mode	**Camera**, Video, Camera+Video	Select whether still photos or video clips are taken. **Camera+Video** mode first takes photos then shoot videos afterward.
Format	**Enter**	Erases entire contents of the SD card.
Photo Size (affects still photos only)	1MP, 3MP, **5MP**, 8MP, 12MP available	Select desired resolution for still photos in megapixels. **Note**: Lower resolution setting allows for smaller file size and faster camera reaction speed. High resolution photos require more time to record to memory hence slower camera reaction.
Video Size (affects video clips only)	**1280×720,** 720×480, 640×480, 320×240	Select video resolution (pixels per frame). Higher resolution produces better quality videos, but creates larger files that use more of the SD card capacity.
Set Clock	**Enter**	Press **Enter** to set up date and time using the up/down < > buttons to nagigate
Picture No.	**01 Photo**, 02 Photos, 03 Photos	Select the number of photos taken in sequence per motion event triggering the Camera.
Video Length	**Default is 10s**	Videos are in AVI format that can be played back on most video players (or on the camera). Note: capturing video at night is very battery intensive.
Interval (Acts as a cool down after camera is triggered)	**1 Min**, optional from 1S to 60M	Very low interval times lead to excessive camera activation draining battery life. Only set Interval low enough not to miss a required event while adjusting the **Sense Level** and camera position to reduce opportunity for the camera to be triggered by unintended events or movement.
Date Stamp	**Off,** Date, Date/Time	Select **Date/Time** to imprint date & time in every photo, ideally used for easy reference or evidence. Note: When **Date/Time** is additional details are recorded including **Serial No.** and temperature.
Sense Level (Of PIR motion sensors)	**Normal**, High, Low	Select the sensitivity of the PIR motion sensor(s). Adjust this setting to **Low** to ignore smaller objects and distant motion, the **High** setting will detect smaller movements or objects at more distant range.
Timer	**Off**, On	Select **On** if you only want the camera to work within a specified time period each day, ideal for activating the camera when typically away for example set from 8am-6pm when away at work
Default Set		Press **OK Enter** to return all your previous settings back to the manufacturer default.

Defect	Possible cause	Remedy
The camera does not power on (When Power switch set to TEST).	No batteries inserted.	Insert 8 x 1.5 V batteries into the battery slots
	Battery Polarity	1 or more batteries fitted with wrong polarity (remove immediately)
	The batteries are low or dead.	Replace the batteries.
Battery Leak	Flat battery left in camera	Remove Batteries. Refer to product support for advice before further use.
	Electrical short	
	Battery Polarity	1 or more batteries fitted with wrong polarity has caused leak. Remove immediately.
There are no recordings on the memory card after period of planned wildlife observation.	You have installed the camera such that no wildlife can enter the detection range of the motion sensors.	Change the alignment of the camera.
	Memory Card was "Locked"	Remove Memory card, move the small "lock" tab on side of card towards the metal contacts to unlock
The images are overexposed.	Light is blinding the camera or reflections from night vision is overexposing image.	Direct sunlight may be shining onto the device, possibly only at certain times of the day (pay attention to the position of the sun). Re-aim camera in northerly or southerly direction to prevent sun blinding.
		Reflective objects or Flash back of night vision can reflect light to cause overexposure. Re-aim camera or remove reflective surfaces
The camera is making too many unwanted recordings.	The camera could be being triggered by branches moving in the wind.	Change the installation location and/or the alignment of the camera.
	The sensitivity of the motion sensors may be set too high.	Reduce the sensitivity of the motion sensors.

SILVAN AUSTRALIA PTY. LTD.

ABN 48 099 851 144

VICTORIA (HEAD OFFICE)
244- 264 Greens Rd,
Dandenong South, 3175 Australia
Telephone: +61 (03) 9215 2700
Facsimile: +61 (03) 9215 2701
www.silvan.com.au

NEW ZEALAND
22 Sunshine Avenue
Te Rapa, Hamilton, 2001 New Zealand
Telephone: +64 (07) 8496030
Fax: +64 (07) 8496070
www.silvannz.co.nz