Instruction Manual

MANSECURE01 REV-A 23/07/13

Motion Activated Security Camera

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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.

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General Information

1.1 Introduction

The Selecta Motion Activated Security Camera (also called Day & Night camera) can be triggered by sudden change of ambient temperature caused by movement in a region of interest (ROI), which is detected by a highly sensitive Passive Infra-Red (PIR) sensor, and then take pictures or video clips automatically.

SECURE01 features:

- 12 Mega Pixels Color CMOS
- Records Photos and/or Video
- Audio recording function available
- Sharp and bright color pictures in daytime and clear black/white pictures at night
- Low standby power consumption. *Extremely long in-field life (in standby mode, up to 3 months with 4 x AA batteries and 6 months with 8 x AA batteries). **Note:** * Requires good quality batteries, preferably camera batteries to achieve maximum standby time period without activity.
- Unique side Prep Sensor design provides wider sensing angle and enhances camera's response speed
- Perform in the most extreme temperatures from -30°C to 70°F
- Compact size (14 x 8.9 x 6.3cm).
- Trigger (or response) time 1 second
- Backpack-looking tree grabber makes mounting and aiming a snap
- Serial Number function enables you to record an 4 character alpha-numeric name onto photos. This helps multi-camera users identify the location when reviewing the photos
- Date, time can be stamped in the pictures
- Lockable and password protected

Note the **SECURE01** doesn't not feature MMS functionality (other premium models of this camera are made to feature MMS function and those cameras which have a SIM card slot in the camera). Some menu option refer to MMS however they will not effect the operation of the **SECURE01**.

1.2 Application

- Motion-triggered security camera, for home, office and community
- Trail camera for hunting, stock monitoring
- Event observation (also refer to time lapse function)
- All other indoor/outdoor surveillance where invasion evidence needed

1.3 Illustration

- Figure 1.1 shows the front view of the camera
- Figure 1.2 shows the bottom view of the camera
- Figure 1.3 shows the back view of the camera

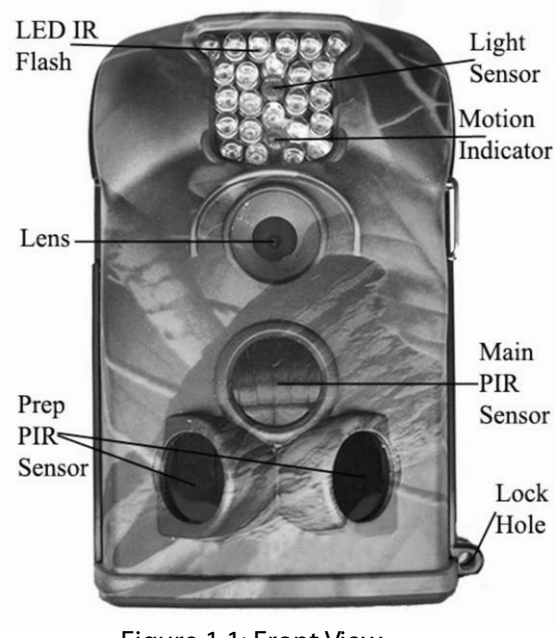

Figure 1.1: Front View

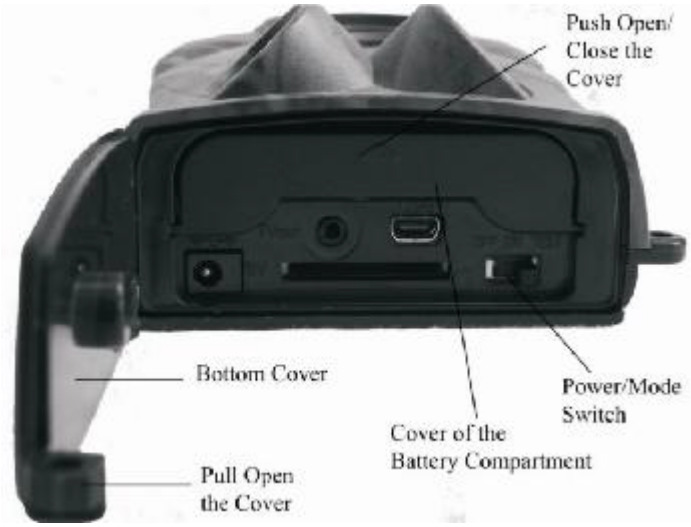

Figure 1.2: Bottom View-1

Figure 1.2: Bottom View-2

The camera provides the following connections for external devices: USB port, SD card slot, TV out jack, and external DC power in jack. The 3-way Power/Mode Switch is used to select the main operation modes: OFF, ON and TEST (Also called SET).

To supply power, it is recommended to use four new high-performance alkaline AA batteries, low self-discharge Ni-MH or Lithium rechargeable AA batteries with a high mAh rating. To achieve longer in-field time, install the additional battery box which contains four more AA batteries.

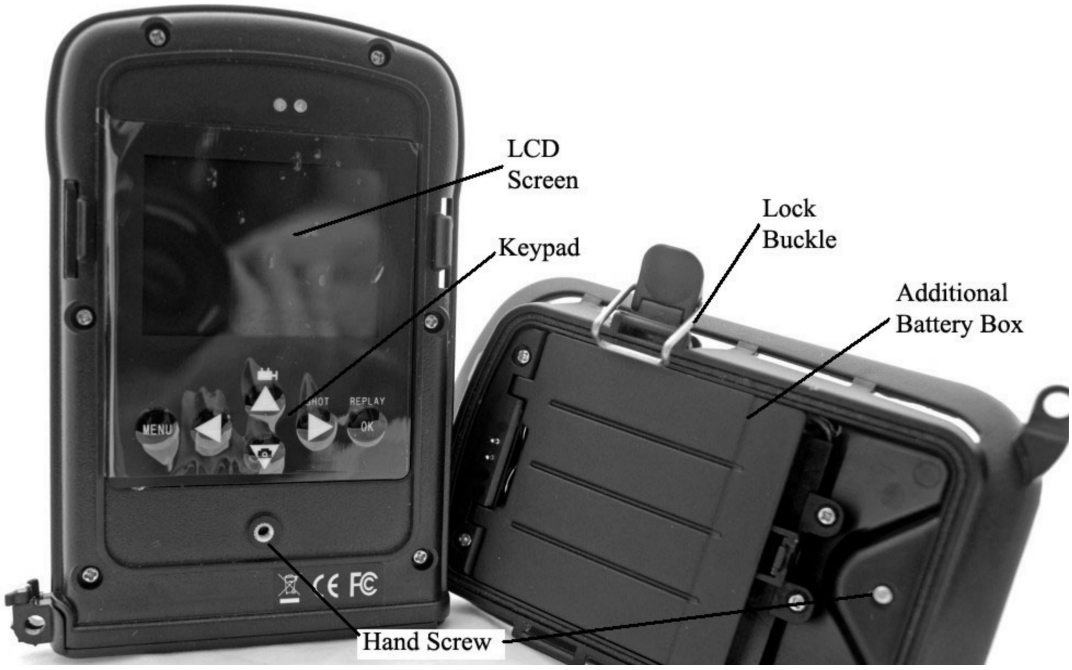

Figure 1.3: Back View

2.1 Load Batteries

Begin by loading the batteries. Please follow the instructions below.

- Open the bottom cover by pulling down the lock hole.
- Push the cover of the battery compartment and release. It will pop out.
- Install 4 AA batteries. Make sure the polarity matches the sign on the cover.
- Replace the cover.

Alternatively the camera can run on an external 6V DC power source (optional, user provided). When both external power and batteries are connected, the camera will be powered by the external one.

2.2 Insert SD Card

The camera does not come with internal memory. So it will not work without a SD (Secure Digital) memory card or SDHC (High Capacity) card. Before inserting the SD card into the card slot, please make sure the write-protect switch on the side of the SD card is “off” (NOT in the “Lock” position). The supported memory capacity is up to 16GB. If you use a card capable of above 16GB, make sure you test it before putting the camera in use.

Figure 2.1

CAUTION: ALWAYS SWITCH THE CAMERA TO OFF MODE BEFORE YOU INSTALL OR REMOVE THE BATTERIES OR THE SD CARD.

2.3 Enter Test mode

Switch to the **TEST** position to enter the Test mode. In this mode you can take pictures or video clips like a regular digital camera, or enter the Menu to set up parameters. On the keypad there are four "shortcut" functional keys (see Figure 2-1) working as below:

Figure 2.1

- Press the key to set the camera to shoot video clips.
- Press the key to set the camera to take still pictures.
- Press the SHOT key to manually trigger the shutter. A photo or video (depending on the camera setting) will be taken and saved to the SD card. If the display shows "CARD PROTECTED" when you press the SHOT key, switch the power OFF, remove the SD card and slide its write-protect switch to off.
- Press the REPLAY key to review/playback photos/videos on the LCD screen, or a connected TV monitor. Use and key to navigate.

There is another key, **MENU**, on the keypad that allows you to program the camera to work the way you want. Please make reference to 3.1 Parameter Settings in the Advanced Operation section.

Under the test mode, one useful function you would like is testing the work area of the PIR (Passive Infrared) sensor, specifically the sensing angle and monitoring distance. To perform the test:

- First strap the camera on a tree aiming the region of interest (ROI).
- Walk slowly from one side of the ROI to the other parallel to the camera. Try different distances and angles from the camera.
- If the Motion Indicator flashes blue, it indicates the position from where you were detected by one of the side Prep PIR sensors. If the Motion Indicator flashes red, it indicates the position from where you were captured by the main PIR sensor.

By doing this test, you can find the best placement when mounting and aiming the Our scouting camera. In general, you are recommended to place the camera 3 to 6 feet (1 to 2 meters) above the ground.

To avoid potential false triggers due to temperature and motion disturbances, please do not aim the camera at a heat source (i.e. the sun) or nearby tree branches and limbs. The ideal direction to aim at is North or South. Also, remove any limbs close to the front of the camera.

2.4 Enter Live Mode

Switch to the ON position to enter the live mode. The Motion Indicator will flash red for about 10 seconds and the camera starts working by itself without any manual handling. It will at once shoot pictures or record videos when objects enter the PIR area of the main sensor directly. If the object enters the PIR area of the prep sensors from the side, the prep sensors detect the movement and activate the camera. While the object keeps moving into the PIR area of the main sensor, the camera takes photos/videos immediately. If the object roams away after entering the PIR area of the prep sensors, the camera will power off and enter standby mode.

ADVANTAGES OF PREP SENSORS

In general, to save battery power, an Infer-Red camera is in "sleep" mode, with only the PIR sensor working. When motion is detected by the PIR sensor, the camera is powered on and starts shooting pictures. The time period from being activated to starting firing is the response time. The response time varies among different camera's generally from 0.85 to 2 plus seconds. The **SECURE01** has 1 second trigger time. However, when an object passes across very quickly, the picture may only capture the rear part of the body, and possibly nothing at all. With the unique side prep PIR sensors design, the **SECURE01** camera solves this issue. The combination of the two side prep sensors and the main sensor comes up with a 100 to 120° angle of induction, a very wide scope far outweighing the 50 ° angle of the camera lens. When a moving object first crosses the sensing area of the prep sensor, the camera is activated and ready to shoot after 1 second.

If the moving object continually enters into the area of the main sensor, the camera takes pictures immediately, therefore catching the whole body of the game. This split-second process could be as short as 0.2 second. In the case set up situations where the object moves within the area of the prep (side) sensors, to avoid the camera being powered on constantly, the system is designed to work in the following way: If the game does not enter the area of the main sensor and therefore not trigger the main sensor, the camera will power off after 3 seconds. If the trigger events consecutively happened twice only in the PIR area of the prep (side) sensors, the camera will not activate, but only by the main sensor. So later on when the object enters the PIR area of the main sensor eventually, since it is not in fast movement, the picture will by all means capture the whole body of the game based on our standard 1 second response time.

ADVANCED SETTINGS

The Scouting camera trail camera comes with preset manufacturer settings. You can change the settings to meet your requirements. Please make sure the camera is in the test mode.

3.1 Parameter Settings

Press "MENU" key to enter/exit the menu. Press  ,  to move the marker,  ,  to change the setting, and  to confirm the change. Always remember to press  to save the change. Otherwise you will lose your new setting.

Parameter	Settings (**Bold** = default)	Description
Mode	**Camera**, Video, Camera+Video	Select whether still photos or video clips are taken. In C**amera+Video** mode, can first take photos and then shoot videos afterward
Format	**Enter**	All files will be deleted after formatting the SD card. Highly recommend you format the SD card if it has been used previously in other devices. ***Caution: make sure wanted files on the SD card have been backed up first!***
Photo Size (affects still photos only)	1MP, 3MP, **5MP**, 8MP, 12MP available	Select desired resolution for still photos in mega pixels. **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 speed
Video Size (affects video clips only)	**1280 x 720** 720 x 480 640 x 480, 320 x 240	Select video resolution (pixels per frame). Higher resolution produces better quality videos, but creates larger files that take more of the SD card capacity.
Set Clock	**Enter**	Press **Enter** to set up date and time **Note:** The Time must be set every time batteries are changed or temporarily removed
Picture No. (affects still photos only)	**01 Photo**, 02 Photos, 03 Photos	Select the number of photos taken in sequence per motion event triggering the Camera.
Video Length (affects video clips only)	Optional from 1s to 60s. **Default is 10s**	Videos are in AVI format that can be played back on most video Players (or on the camera).
Interval	**1 Min**, optional from 1S to 60M	A high Interval prevents the SD card from filling up with too many redundant images when there is a lot of repeat activity i.e. animal standing at a watering trough. A low interval reduces the chance of missing activity but increased chance of recording too many photos using memory and battery life.
Sense Level (of PIR motion sensors)	**Normal**, High, Low	Select the sensitivity of the PIR sensor. The High setting suits indoors and environments with little interference, while the Normal/Low suits outdoors and environments with more interference. Temperature also affects the sensitivity. The High setting is suitable when the ambient temperature is warm, and the Low setting is helpful in cold weather.

Parameter	Settings (**Bold** = default)	Description
Date Stamp (affects still photos only)	**On**, Off	Select **On** if you want the date & time imprinted in every photo. Note: When **Date/Time** is additional details are recorded including **Serial No.** and temperature.
Timer Switch	**Off**, On	Select **On** if you only want the camera to work within a specified time period every day. For instance, if the starting time is set at 07:30 and the ending time at 18:25, the camera will function only within these times for instance to monitor a home property only when away at work.
Password Set	**Off**, On	Set up a password to protect your camera from unauthorized users utilizing the camera
Serial No.	**Off**, On	Select **On** to assign a name to each camera you have. You can use the combination of 4 digits and/or letters. This helps multi-camera users identify the location when reviewing the photos. (e.g. NTGT for North Gate). **Note:** The Date Stamp must be set on to record the Serial on the image. This helps multi-camera users identify the location when reviewing the photos
Time Lapse	**Off**, On	If set **On**, the camera will automatically take photos/videos according to the set interval. Time Lapse interval can be set from 1sec to 23h:59min:59sec. This is a novel function for observing processes such as of flowering, harvesting, building a house etc. Note: When Time lapse is active all motion sensing functions are disabled
Side PIR	**On**, Off	The default setting is **On**. The two side prep PIR sensors provide wider sensing angle and detect more potential triggers. In some situations, you only want to monitor a narrow spot. Too many irrelevant triggers by the side sensors outside of that spot will keep the camera on and off, which drains the battery power rapidly. Or in some other situations you have difficulty removing the interfering branches, or avoiding the sunlight. If so, you have the option to turn off the side sensors.
Audio	**On,**Off	The default setting is On, when it is on, the camera can record audio to video, otherwise ,the video will be silent.
Default Set		Press **OK Enter** to return all your previous settings back to the manufacturer default.

3.2 File format

The camera stores photos and videos in the folder \DCIM\100MEDIA in the SD card. Photos are saved with filenames like PICT0001.JPG and videos like VIDO0001.AVI.

In the **OFF** mode, you can use the provided USB cable to download the files to a computer. Or you can put the SD card to a SD card reader, plug in a computer, and browse the files on the computer without downloading.
The AVI video files can be played back on most popular media players, such as Windows Media Player, QuickTime, etc.

3.3 Review Picture or Video

There are two ways to review captured picture or video:

1) TV monitor (or a SD-card viewer with a TV-in jack) Connect the camera to a TV monitor with the supplied cable. Then enter the TEST mode. The last picture will be shown on the TV monitor after pressing the OK key. At any time pressing the OK key again will return to the TEST mode.
2) Computer (or a SD-card viewer with a USB port) Connect the camera to a PC with the supplied USB cable. Then use any image/video viewing program or image/video browser to view the pictures or videos.

Appendix: TECHNICAL SPECIFICATION

Model	Parameters
Image Sensor	12 Mega Pixels Colour CMOS
Lens	F=3.1; FOV=52°; Auto IR-Cut
IR Flash	20 Meters / 65 Feet (Non-Visible Flash, no glow LEDs)
LCD Screen	48x35.69mm(2.36"); 16.7M Colour
Operation Keypad	6 Keys
Memory Compatibility	SD Card (8MB ~16GB)
Picture Size (pixels)	12MP=4000x3000; 5MP = 2560x1920;
Video Size	1280x720p: 30fps; 720x480: 20fps; 640x480: 20fps; 320x240: 20fps
PIR (Motion) Sensitivity	High/Normal/Low
PIR Sensing Distance	20m /65ft (On the Normal sensitivity and temperature is below 25°C/77°F)
PIR (Motion) Sensors	1 x Central PIR Sensor, 2 x Side (Peripheral) PIR Sensors
Central PIR Sensing angle	35°
Side PIR Sensing Angle	When Side PIR active the total sense angle is 100°
Operation Mode	Day/Night
Trigger Time	1 Second (When using the 2G SD card)
Trigger Interval	0sec. - 60min; Programmable
Photo Playback Zoom	1~16 Times
Time Stamp	On /Off; Include serial no.,
Timer	On /Off; Timer Set
Password	4-Digit Numbers
Device Serial No.	4 character alphanumeric
Time Lapse	1 Second ~ 24 Hours
Audio	On/Off
Language	English/Chinese/French/Norwegian/Deutsch/Spanish/Portuguese/Japanese/Russian
Power Supply	4xAA; Expandable to 8xAA (With additional battery box)
Stand-by Current	0.4mA
Stand-by Time	Maximum 3 or 6 Months (using 4xAA or 8xAA)
Auto Power Off	Auto power off in 2 minutes while no keypad controlling
Power Consumption when activated by motion	150mA (+500mA when IR LED lights up)
Low Battery Alert	4.2~4.3V
Interface	TV out (NTSC); USB; SD Card Slot; 6V DC External
Mounting	Strap; Tripod Nail
Waterproof	IP54
Operation Temperature	-30 to 70°C (-22 to 158°F)
Operation Humidity	5% ~ 95%
Certificate	FCC & CE & RoHS

Installing the additional Battery Box (Tree Hugger)