

VC2100 / VC2100 32MB Digital Event Recorder

• Product Description :

This system includes one VS2100 single channel digital event recorder and one color camera. It will automatically have image capture or video recording once motion is detected by software, or manually by external alarm and will store in SD card (Not included). Simply press the "PLAY" button and the recorded picture or video can be found quickly and easily.

• Special Features :

1. Image Sensor: Color CMOS.
2. Resolution: 380 TV lines.
3. Scanning system: 2:1 interline.
4. Camera preset focus 3 meters.
5. S/N Ratio: >46dB.
6. Auto electronic Iris.
7. LED Illuminator: 5 IR LED.
8. Composite video input and output connections, compatible with most CCTV cameras.
9. Two video inputs, picture in picture monitoring (only selected channel can be recorded).
10. Video signal output can be NTSC or PAL system.
11. Resolution: 640 x 480.
12. Software motion detection
13. Automatic picture capture or video recording once motion is detected (with time and date).
14. Pictures auto play/review in Play mode.
15. LED indication for motion detection mode.
16. Slot for SD card up to 2GB (SD card is not included).
17. 85k per picture/ 640k per motion video (10 sec. long video)
18. External alarm output and input connections (Optional).
19. Includes AC adapter (100V~240V), 5VDC
20. Easy to set up in minutes.
21. Built in 32MB flash memory (for VS2100 32MB only).

● **Product layout :**

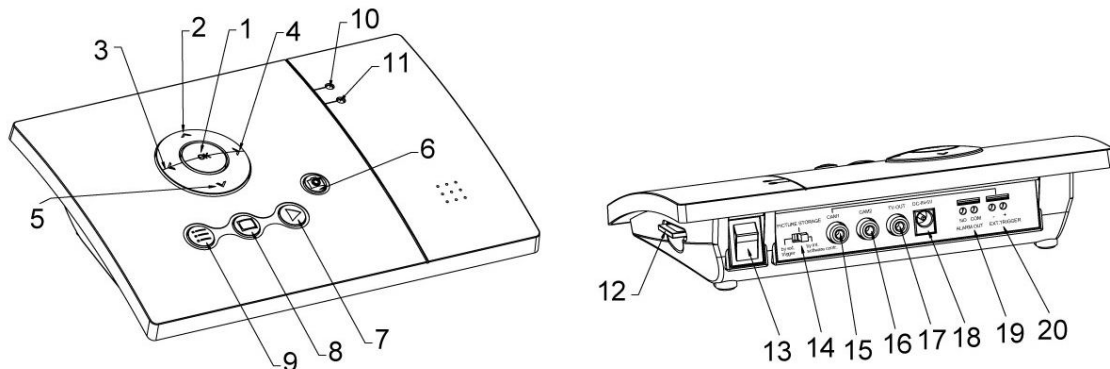


Fig. 1

1. OK SELECTION BUTTON

Confirm / Accept the option you select.

2. UP BUTTON / MOTION DETECTION ON, OFF

Normally it is used as the UP function selection button. When VS2100 is in standby status, MOTION DETECTION will be ON. Press this button as a quick access button. Press again to turn MOTION DETECTION OFF.

3. LEFT BUTTON

Left function selection button.

4. RIGHT BUTTON

Right function selection button.

5. DOWN BUTTON / IMAGE, VIDEO SWITCHING

Normally it is used as the DOWN function selection button. When in standby status, press this quick access button to select image capture or video recording mode.

6. QUICK SHOT BUTTON/ DELETE

Press this button to take a quick shot manually.

This button also functions as deleting captured image/AVI in “Play” mode.

7. PLAY BUTTON

Press this button to review the captured images or the videos. Press it once to show the latest single image/video; press it the second time to show 6 shots at the same time; press it the third time to show the file folders by date; and press it again to back to the selected channel.

8. DISPLAY BUTTON

Picture 1 / Picture 2 / Picture 1 in picture 2 / Picture 2 in picture 1 monitoring switching.

Note: We do not recommend customers to use Picture in Picture when MOTION DETECT IS ON.

9. MENU BUTTON

Press this button to enter menu setting.

10. POWER INDICATOR LED

LED is ON constantly when the VS2100 is switched on.

11. MOTION DETECT INDICATOR LED

LED flashes when picture capture / video recording is activated.

12. SD CARD SIOT

Insert SD card to store the captured photos/AVI.

13. POWER SWITCH

Turn ON / OFF VS2100.

14. PICTURE STORAGE SWITCH

Motion captured by internal software or external output triggering.

15. CAMERA 1 INPUT

Connect to camera 1.

16. CAMERA 2 INPUT

Connect to camera 2.

17. TV OUTPUT JACK

Connect to stand TV.

18. DC POWER ADAPTOR INPUT

Connect to power adaptor to have power supply. Input AC 100~240V, Output 5VDC 1A.

19. ALARM OUTPUT

A N/O output triggering signal will activate external alarms/devices for 10 seconds.

20. EXTERIOR TRIGGER INPUT JACK

Accepts triggering signal from exterior devices of PIR, door contact and switch only to activate VS2100 and have image capture/video recording.

Note: Maximum voltage for exterior trigger: DC 24V

• Contents :

1. CAMERA × 1. (A of Fig.3)
2. SCREW × 2. (B of Fig.3)
3. PLASTIC FILLER × 2. (C of Fig.3)
4. SIGNAL & DC CORD (15 Meters) × 2. (D of Fig.4)
5. DC POWER CORD (2 Meters) × 1. (E of Fig.4)
6. SCART (OPTION) × 1. (G of Fig.5)
7. VS2100/VS2100 32MB DIGITAL EVENT RECORDER × 1.
8. AV CABLE FOR VIDEO OUTPUT × 1. (F of Fig.4)
9. POWER ADAPTOR × 1.
10. USER'S INSTRUCTION MANUAL.

● **Initial set-up :**

1. CONNECTING TO CAMERAS

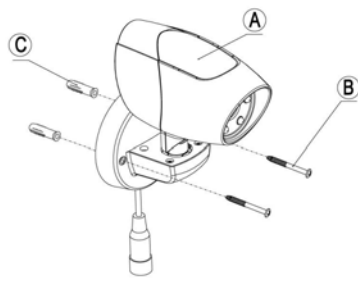


Fig. 2

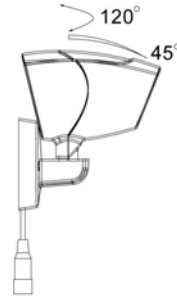


Fig. 3

- i) Please secure the CAMERA at suitable wall as you desire. (Fig.2 & Fig.3)
- ii) Refer to Fig.2 for bushing installation and then screw on the junction box.
- iii) Connect the 4 pin din plug of WIRE D to CAMERA. (Fig.4)
- iv) Connect the yellow RCA jack of WIRE D to the A/V terminal “CAM1” in digital event recorder. (Fig.4)

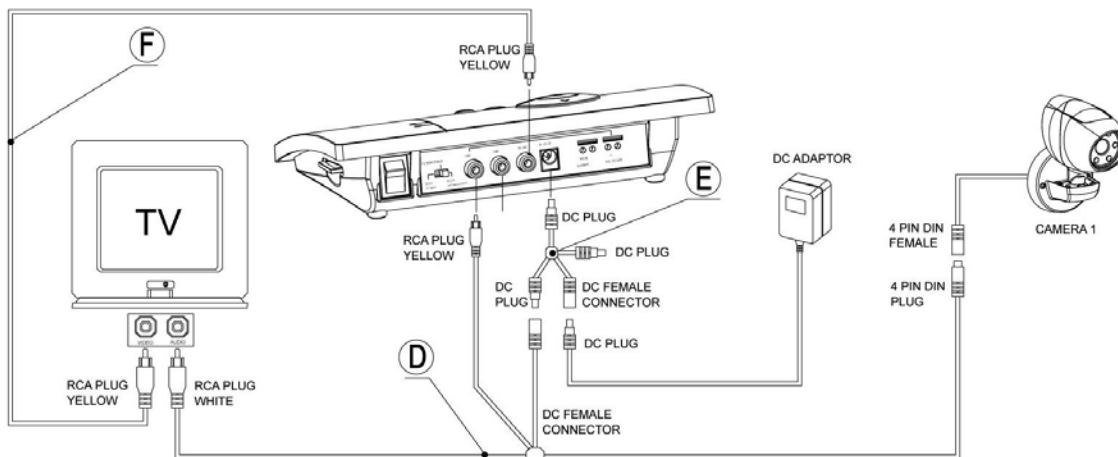


Fig. 4

2. CONNECTING TO POWER

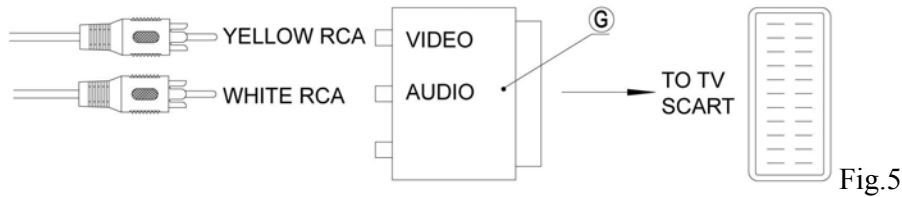
- i) Connect the DC plug of WIRE E to “DC IN 5V” in digital event recorder. (Fig.4)
- ii) Connect the DC female connector of WIRE D to DC plug of WIRE E. (Fig.4)
- iii) Connect the DC female connector of WIRE E to the DC adaptor. (Fig.4)

3. CONNECTING TO TV

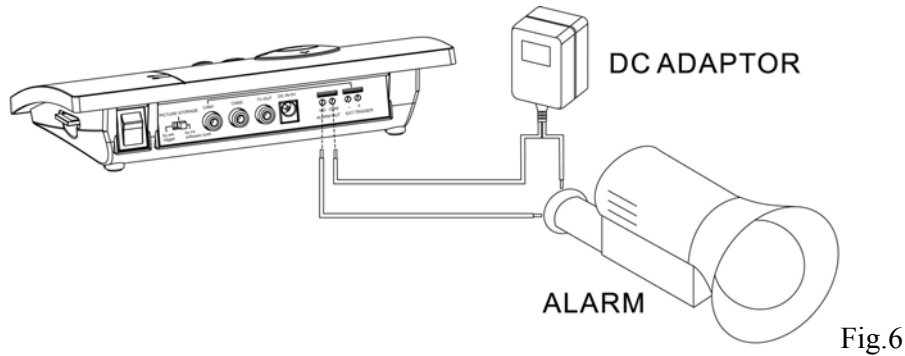
- i) Connect the yellow RCA jack of WIRE F to the A/V terminal “TV-out” in digital event recorder and “VIDEO INPUT” in TV. (Fig.4)
- ii) Connect the white RCA jack of WIRE D to the A/V terminal AUDIO INPUT in TV. (Fig.4)

4. SCART PLUG INSTALLATION (OPTION)

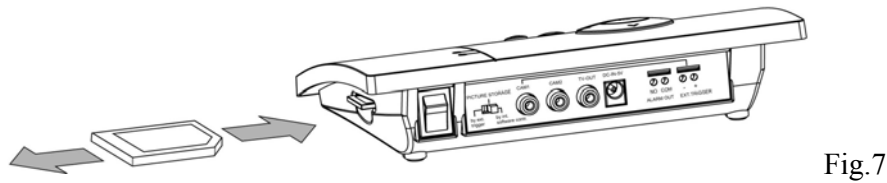
If your TV set has no RCA A/V terminal please refer to Fig. 5 for scart transfer.



5. CONNECTING TO ALARM (OPTION)



6. INSERT SD CARD (NOT INCLUDED)



Note:

- 1) **VS2100 can work without SD card and the images will be stored in internal temporary SDRAM or Flash memory (VS2100 32MB only). The temporary SDRAM can store about 50 pictures or 5 videos. However those captured images in SDRAM will be deleted after power off. Stored in SD card is highly recommended. The VS2100 32MB is able to store about 376 pictures and 50 videos in the built-in flash memory and all the captures images won't be affected when power is off.**
- 2) **Do not remove the memory card while in recording mode; it may damage the memory card and image data.**
- 3) **Please turn the power off before you remove or insert the SD card.**

7. SETTING TIME AND DATE

VS2100 has an on screen clock which will print the date and time on recorded images when movement is detected.

- i) Press "MENU" button to enter the setup page

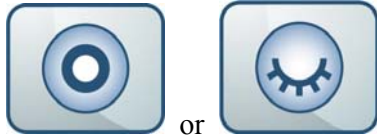


- ii) Select this icon and press “OK” button. Use “UP, DOWN, RIGHT and LEFT button” to adjust date and time.

Note: The programmed time and date can only keep 12 hours when Mains is off i.e. when the power adapter is unplugged.

8. SETTING MOTION DETECTION ON/OFF

- i) Press “MENU” button to enter setup page

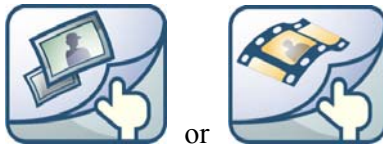


- ii) Select this icon or and press “OK” button to switch motion detection ON or OFF

Note: “Up arrow” button also functions as a direct access for setting motion detection mode on and off.

9. SETTING CAPTURE FORMAT PHOTO/AVI

- i) Press “MENU” button to enter setup page



- ii) Select this icon or and press “OK” button to switch capture format PHOTO or AVI

Note: “Down arrow” button also functions as a direct access for selecting the capture format of photo or AVI.

10. SETTING TV SYSTEM NTSC/PAL

- i) Press “MENU” button to enter setup page



- ii) Select this icon or and press “OK” to switch TV system NTSC or PAL

Note: In setup page, press “MENU” to return to standby status.

●Record mode :

You can either switch “MOTION DETECTION ON” in Setup page or press “UP” button as a quick access button to turn “MOTION DETECTION ON” when VS2100 is in standby status.

Press “UP” button again to turn “MOTION DETECTION OFF”.

Note: Motion detection mode will be on when every time power is switched on. This is VS2100 internal default.

1. When “motion detect” is ON, it will enter “self-learning mode” (the upper-left icon will keep flashing) automatically for about 60 seconds until it stops. The “self-learning mode” means the software will learn the current camera status to minimize false triggering. VS2100 will enter “self-learning mode” every time when you turn “MOTION DETECTION ON”
2. Don’t walk through the detection area when in “self-learning mode” because it will lower the detection sensitivity. When it triggers, the icon will become green and record a picture (.jpg format) /video (.avi format).
3. Make sure to be at picture 1 or picture 2 monitoring when “motion detection” is ON. Only the selected channel can be recorded. This unit can only record one channel. Do not program “motion detection” in “picture in picture” status.
4. In order to prevent and avoid false triggers, we recommend:
 - i) Do not aim camera at the sun
 - ii) Aim away from constant moving objects
 - iii) Avoid mirror and reflected light from bright surfaces
 - iv) Avoid areas which have shadow variation
5. When aiming the camera, bright areas will be more sensitive than dark areas.
6. When memory is full, the icon that is next to “MOTION DETECTION ON” icon will become RED in colour and the memory will overlap.
7. The pictures stored in the SD card can’t be displayed on general digital cameras.

Note: Please always restart the recorder when system malfunctions or crashes.

● **Play mode :**

1. Auto single- picture review:

Press “PLAY” button to review captured images or videos. Press “RIGHT or LEFT” button once will enter “Slide show” program to forward or reverse the pictures automatically. Press button again to stop and stay at the picture you want to review. Press “RIGHT or LEFT” again will continue the “Slide show” program. In single-picture review page, press “PLAY” again to show 6 pictures at the same time. Press it again to show folders by date; and press it again to back to the selected channel.



NOTE: The time and date stamping can be hidden when press “UP arrow” button in single-picture review mode. Press it again to show the time and date.
2. Six-picture review:

When VS2100 is in single photo review page, press “PLAY” to enter six-picture review page. Use “UP, DOWN, RIGHT and LEFT” button to select the picture you wish to review and then press “OK” to open it. Press “PLAY” again to return to six-picture review page.
3. File folders review:

When VS2100 is in six-photo review page, press “PLAY” button to enter file folders review


page. Use “UP and DOWN” button to select the folder you want to review and then press “OK” to open that folder.

● **Delete Pictures/AVI/folders :**

1. Press “PLAY” button to enter single-picture review page, press “RIGHT or LEFT” button once will enter “Slide show” program to forward or reverse the pictures automatically. Press button again to stop and stay at the picture you want to delete. Then press “ (QUICK SHOT) ” button, select “YES” and press “OK” button to delete.
2. When VS2100 is in single photo review page, press “PLAY” to enter six-picture review page and then press “PLAY” button again to enter file folders review page. Press “UP or DOWN arrow” button to select the file folder you want to delete. Then press “ (QUICK SHOT) ” button, select “YES” and press “OK” to delete.

Note: It may take a while to process when deleting folders if there are too many photos/AVI in folders.

● **Delete all photos and AVI / Format memory card :**

Press “PLAY” button to enter single-photo review page, and press “PLAY” again to enter six-photo review page. When VS2100 is in six-photo review page, press “PLAY” button once again to enter file folders review page. Press “ (QUICK SHOT) ” button, select “YES” and press “OK” to delete all photos and AVI.

Note: When you are in setup or Pictures /AVI/file folders review page, VS2100 will return to standby or motion detection status automatically after 3 minutes if no functional keys are pressed.

Specifications

Camera recording system	Colour	
Image sensor	Colour 1/3" CMOS	
Lens	F6.0mm	F2.0
Camera resolution	NTSC	PAL
	510H x 492V	628H x 582V
Min. illumination	3 Lux (F1.2)	
S/N ratio	More than 42dB	
System operating voltage	5V DC ± 5%	
Current consumption	0.65A	
Operating temperature	0°C - 40°C (32°F - 140°F)	

Dimensions(W x D x H)	196mm x 130mm x 48mm (Digital image recorder)	
	125mm x 112mm x 72mm (Camera)	

Video/Image recorder

Signal format	NTSC	PAL
Input signal	Composite 1.0Vp - p \pm 10% 75 Ω (RCA terminal x 2)	
Output signal	Composite 1.0Vp - p \pm 10% 75 Ω (RCA terminal x 1)	
Sampling resolution	704H x 240V	704H x 284V

Input / Output

EXT. trigger input	2 - 24V DC
Alarm output	Relay open circuit (closed to arm)

Memory

Compression format		JPEG	
Recording speed		1 Frame / per sec(Photo mode)	5 Frames / per sec(AVI mode)
		1 Frame / per trigger	10 Sec / per trigger
DPI		640H x 480V	320H x 240V
Memory card type	SD card	85 KB / per image	640 KB / per event
	32 MB	376 Pictures	50 Events
	128 MB	1504 Pictures	200 Events
	256 MB	3008 Pictures	400 Events
	512 MB	6016 Pictures	800 Events
	1 GB	12032 Pictures	1600 Events
	2 GB	24064 Pictures	3200 Events

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