WIRELESS INSPECTION CAMERA WITH MONITOR

GUTTER
vacuum systems

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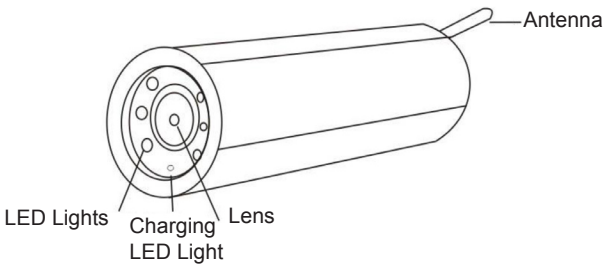
technical specifications

WIRELESS INSPECTION CAMERA

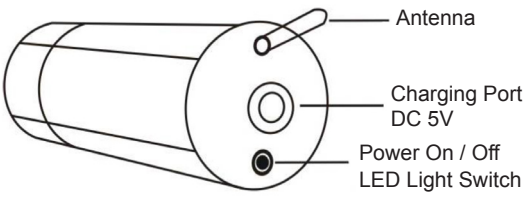
FREQUENCY (Hz)		2414Mhz (CH1)
RF OUTPUT POWER		50mW (300 feet in line of sight)
TOTAL PIXELS		PAL:720 X 576 NSTC:720 X 480
MINIMUM ILLUMINATION		0.01Lux / F1.2
LENS FOCUS		1-100cm (adjustable)
VIEW ANGLE		90°
LI-BATTERY CAPACITY		380MAH
WORKING TIME		1.5 Hours
CHARGING TIME		1.5 Hours
VOLTAGE		DC 5V
CURRENT		Lamp Off:450mA, Lamp On:500mA, Lamp Highlight:550mA
SIZE (D x L)		20mm x 84mm
WEIGHT (G)		35G
LIGHT SOURCE	LED	2200mcd x 6 Range of LED Lamp:5 Meters
	IR/940nm	70mW x 6 Range of IR940 Lamp:5 Meters
	IR/850nm	70mW x 6 Range of IR850 Lamp:8 Meters

TECHNICAL DRAWING

WIRELESS INSPECTION CAMERA



FRONT VIEW



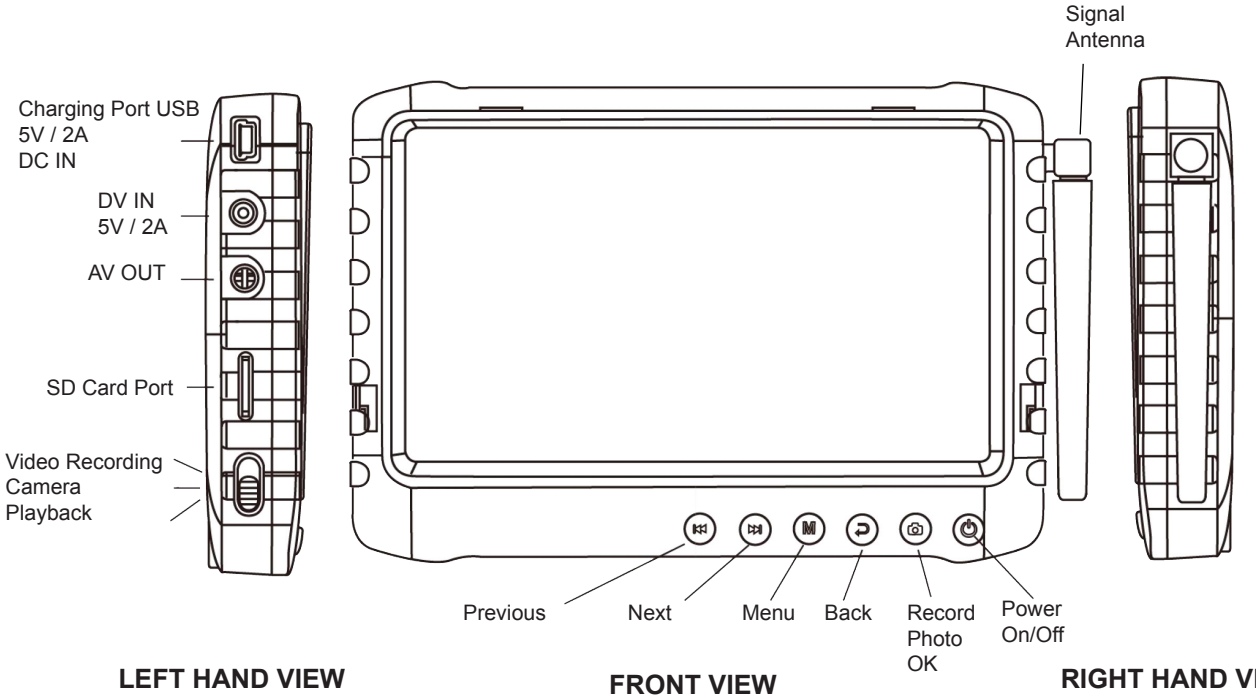
BACK VIEW

MONITOR

WIRELESS RECEIVING	5.8GHz 40 channels	A1: 5.740GHz; A2: 5.760GHz; A3: 5.780GHz; A4: 5.800GHz A5: 5.820GHz; A6: 5.840GHz; A7: 5.860GHz; A8: SPI B1: 5.725GHz; B2: 5.745GHz; B3: 5.765GHz; B4: 5.785GHz B5: 5.805GHz; B6: 5.825GHz; B7: 5.845GHz; B8: 5.865GHz C1: 5.733GHz; C2: 5.752GHz; C3: 5.771GHz; C4: 5.790GHz C5: 5.809GHz; C6: 5.828GHz; C7: 5.847GHz; C8: 5.866GHz D1: 5.705GHz; D2: 5.685GHz; D3: 5.665GHz; D4: 5.645GHz D5: 5.885GHz; D6: 5.905GHz; D7: 5.925GHz; D8: 5.945GHz E1: 5.658GHz; E2: 5.695GHz; E3: 5.732GHz; E4: 5.769GHz E5: 5.806GHz; E6: 5.843GHz; E7: 5.880GHz; E8: 5.917GHz
	2.4GHz 8 channels	A1: 2414MHz; A2: 2432MHz; A3: 2450MHz; A4: 2468MHz. A5: 2490MHz; A6: 2510MHz; A7: 2390MHz; A8: 2370MHz
	SENSITIVITY	-88Db;-92dB;-103dB
AV IN	TV SYSTEM	NTSC / PAL
	OUTPUT VOLTAGE	3.6-4.2 V
AV OUT	TV SYSTEM	NTSC / PAL
HD 5-INCH LCD SCREEN	ACTIVE AREA	108mm(W) x 64.8mm(H)
	RESOLUTION	800 X 480 Pixel
	LUMINANCE FOR LCM	500 cd/m²
VIDEO	RESOLUTION	720*576 / 720*480
	VIDEO COMPRESS	MPEG-AVI 30fps
	PLAY FORMAT	MPEG-AVI
AUDIO	FREQUENCY	20HZ-20KHz stereo
	EARPHONE OUTPUT	Left: 20MW+ right 20mW [16O] (suit to largest volume)
	SPEAKER	1W
PHOTO	FORMAT	JPG/JPEG
STORAGE	EXTERNAL SD CARD	TF card 1GB-32GB (optional)
	32GB RECORDING TIME	10-32 hours
	1GB PHOTOS	15625pcs
OPERATING SYSTEM	PC	Windows & Mac OS
	PORT	USB 2.0
	LANGUAGE	Multiple
POWER	VOLTAGE	DC 5V
	CURRENT (RECEIVING MODE)	660MA
	CURRENT (RECORDING MODE)	680MA
	CURRENT (RECORDING WITH OFF SCREEN MODE)	340MA
	AC ADAPTER	DC 5V 2A
	BUILT-IN BATTERY	Li-battery 4500Mah
STAND BY TIME	WIRELESS RECORD	≥9.5 hours (off-screen); ≥5hours (on-screen)
	WIRED RECORD	≥12 hours (off-screen); ≥6hours (on-screen) *LED camera not included.
SIZE: (L x W x H) (mm)	WITHOUT SUNSHADE	131mm x 90.5mm x 18mm
	WITH SUNSHADE	131mm x 90.5mm x 28mm
WEIGHT (G)	WITHOUT SUNSHADE	215G
	WITH SUNSHADE	260G

TECHNICAL DRAWING

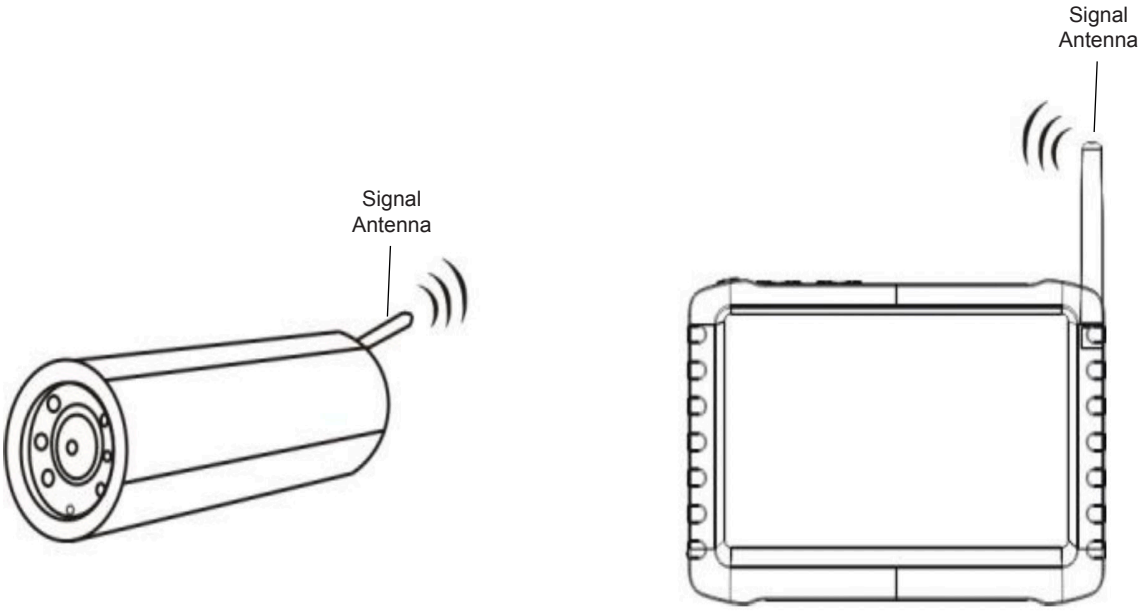
MONITOR



LEFT HAND VIEW **FRONT VIEW** **RIGHT HAND VIEW**

KEY SYMBOLS:

VIDEO (RECORDING) **CAMERA (PHOTOS)** **LOOP (RECORDING)** **SD CARD (CAPACITY)** **BATTERY**

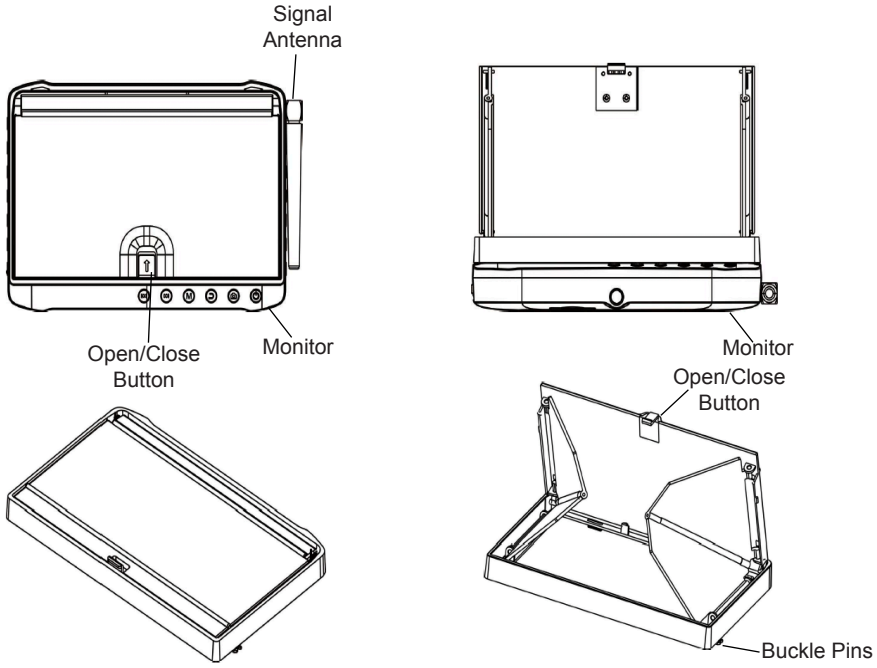


WIRELESS INSPECTION CAMERA WITH MONITOR

HOW TO INSTALL SUNSHADE COVER FOR MONITOR

How to install the sunshade onto your monitor

1. Place the sunshade over the top of your monitor so the 2 buckle pins align with the button holes on the monitor.
2. Gently push and slide so the sunshade locks into place. You will hear it click into place.
3. To remove the sunshade, gently push up in the opposite direction. You will hear it click out of position.
4. To open up the sunshade, push up on the middle button.
5. To close the sunshade gently push back down and it will click into the middle button.



CLOSED SUNSHADE **OPEN SUNSHADE**

HOW TO CHARGE YOUR WIRELESS INSPECTION CAMERA AND MONITOR

WIRELESS INSPECTION CAMERA

Plug the camera charger into the DC socket of camera.
You will see a red light indicating it is charging.
Once the camera is fully charged, the LED light will automatically turn off.

MONITOR

Battery capacity symbols:

- Plug the USB (AC) charger to the USB (DC) socket of monitor.
- Charge monitor for 4-6 hours for full charge.
- For first time use, it is recommend to charge between 6-10 hours.

QUICK START GUIDE

CONNECTING WIRELESS INSPECTION CAMERA AND MONITOR

1. Attach the antenna to the monitor.
2. Press the power button to turn on the monitor.
3. Attach sunshade if needed.
4. Press the power button on the camera.
5. Use the switch on the side of the monitor to select the desired working mode (e.g., Camera or Video).
6. Select the channel the camera is on. The correct channel will be obvious when a clear picture appears on the monitor.
7. See page 10 on how to take photos and videos with your monitor.

OPERATION

WIRELESS INSPECTION CAMERA

How to turn the camera on/off

Press the power on/off button on the rear of camera for 3 seconds to power on the camera. When turned on, the cameras lights will be on. To see that your camera is working correctly, point it to any object in front of you and power on your monitor to check visuals.

To turn the camera off, press the power on/off button for 3 seconds. The lamps will turn off and camera will stop working.

How to adjust the camera lights

To adjust your camera lights, press the on/off button to increase and decrease illumination of camera lights. It cycles in this turn: lamps on, lamps brighten, lamps off.

MONITOR

How to turn your monitor on/off

To turn on your monitor, press ⏻ for 3 seconds. The screen of the monitor will turn on.
To turn off your monitor, press ⏻ for 3 seconds.

Switching working modes

To change the working modes of the monitor, use the switch that is located in the left hand corner of the monitor.

When you switch modes, you will be able to switch between:

📷 Camera mode - for taking photos.

📹 Recording mode - receiving / recording video.

▶ Playback mode - view photos and play videos.

Automatic scanning

The monitor is in auto-scan mode by default.
To change the signal channel, use ⏮ ⏭ the scan function to go through channels A1 to A8. You should choose the channel with the strongest signal. To test this, turn on your wireless inspection camera and as you scan through the channels, you will see a clear picture.

External storage card

You will need a SD card to be able to save video recording and photos. The screen will show the symbol of the SD card and its capacity.

View photos and videos on your computer

Connect the monitor via USB to your computer or remove the SD card, inserting into a card reader. You will be able to view your photos and videos. This will be in a removable disk folder under “DCIM”.

HOW TO RECORD & TAKE PHOTOS - MONITOR

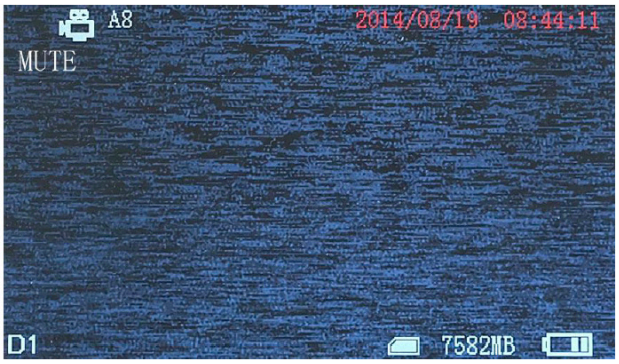
How to record videos

Put the monitor into recording mode and press . This will start the recording and it will show on screen REC.

Press to pause and the screen will show and to continue recording pressing the button again.

Press the back button to stop the recording - this will save onto your SD Card.

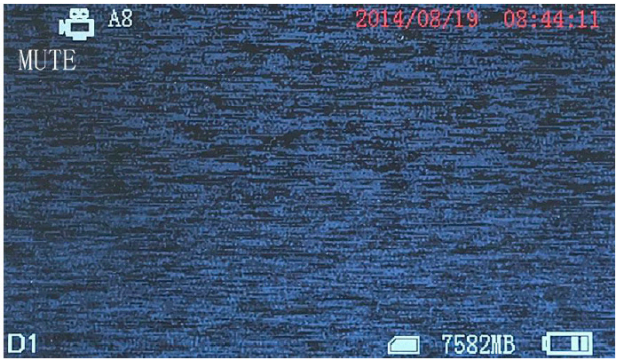
If you have the overwrite function turned on, do not press the camera button to end the recording, this will overwrite the earliest saved recordings if your SD card is full.



How to take photos

Put the monitor into camera mode using the switch on the left hand side.

Press once to take a photo, the screen will flash once and will take one photo.

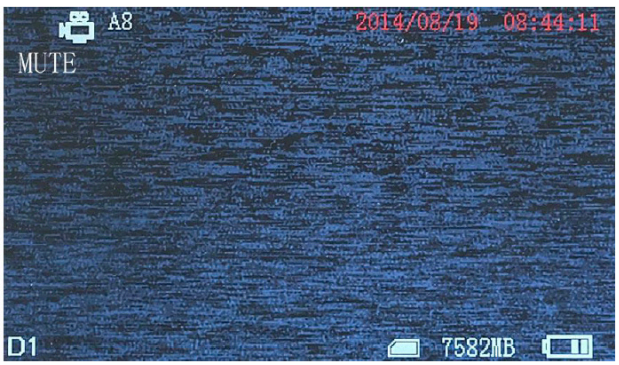


How to turn the sound on/off for video recordings

When in recording mode , the sound is automatically mute. You will see that the screen displays “MUTE”. To put sound on for your video recordings, press the back button , this will clear the MUTE displayed on the screen and the sound will come on.

Please note mute setting will not affect earphones.

Sound is mute



HOW TO PLAY VIDEO/ PHOTOS

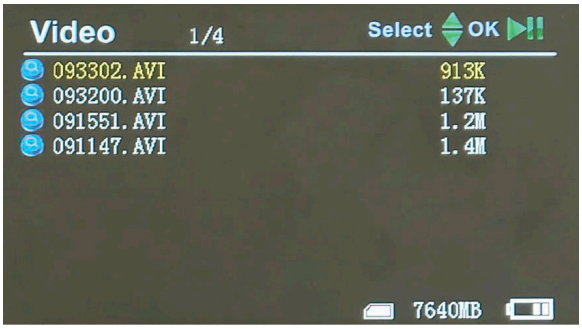
To view the photos and videos, use the switch on the left hand side to put the monitor into playback mode ⊙. Use ⏮ ⏭ to select either photos or video. Press 📷 to select and ⏮ ⏭ to view. Press ⮌ to exit and back to the main menu.

How to view videos

Select the video option and press 📷 to enter the video date folder (video files).

Press ⏮ ⏭ to select date and 📷 to enter into time phased video files. Press ⏮ ⏭ to select, and press 📷 to play video. Press ⏮ ⏭ to adjust volume. Hold down ⏮ ⏭ to rewind video forward or backward.

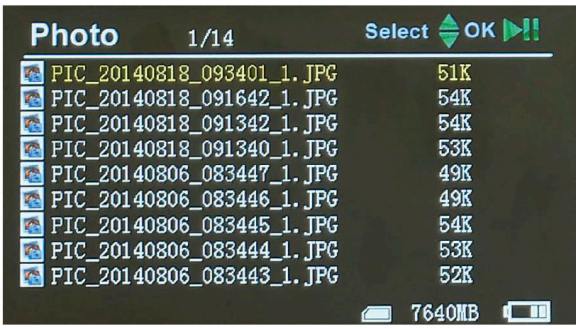
Press 📷 to pause the video and press ⮌ to exit.



How to view photos

Select the photo option and press 📷 to enter into photo files.

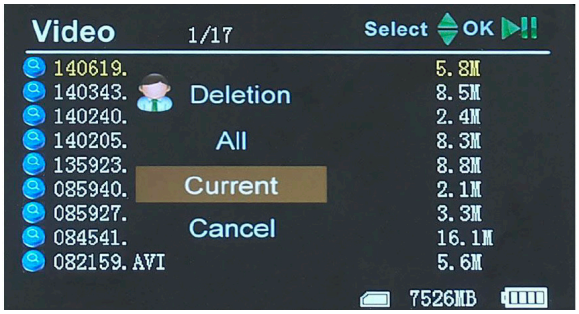
Press ⏮ ⏭ to select the photos and press 📷 to view. Press ⏮ ⏭ to view next photo and previous photo and press ⮌ to exit.



How to delete photos & videos

Under working mode, press ⏮ ⏭ to select files. Press Ⓜ to get a dialogue.

Press ⏮ ⏭ to select “All”/”Current”/“Cancel”. Press 📷 to confirm.

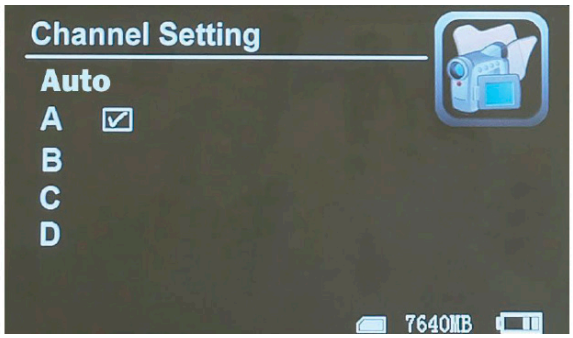


FUNCTION SETTINGS - MONITOR

To access the function settings for the video mode . Press on the Ⓜ button and use ⏮ ⏭ to select the function option and press 📷 to enter into function menu.

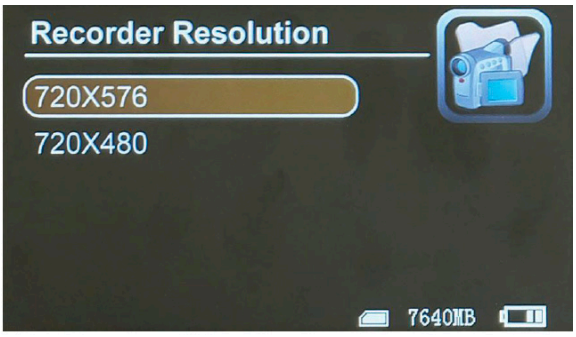
Channel Setting

Use ⏮ ⏭ to select the 'Channel Setting' and press 📷 to enter. Use ⏮ ⏭ to select Auto, A,B,C,D and press 📷 to select and exit.



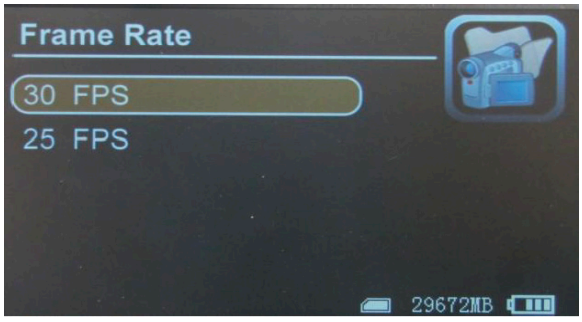
Recorder Resolution

Use ⏮ ⏭ to select 'Recorder Resolution' and press 📷 to enter. Use ⏮ ⏭ select your resolution either 720x576 or 720x480 and press 📷 to select and exit.



Frame Rate

Use ⏮ ⏭ to select 'Frame Rate' and press 📷 to enter. Use ⏮ ⏭ select your frame rate either 30 FPS or 25 FPS and press 📷 to select and exit.

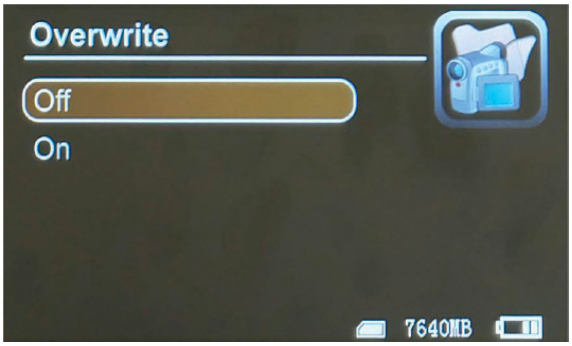


Video Segment Sizes

Use ⏮ ⏭ to select the 'Video Segment Sizes' and press 📷 to enter. Use ⏮ ⏭ to select 10 Min, 30 Min, 60 Min and press 📷 to select and exit.

Overwrite

Use ⏮ ⏭ to select 'Overwrite' and press 📷 to enter. Use ⏮ ⏭ to select On or Off. Press 📷 to confirm and exit. If "Overwrite" is on, your monitor will cycle record, and save the latest video.



Time Stamp

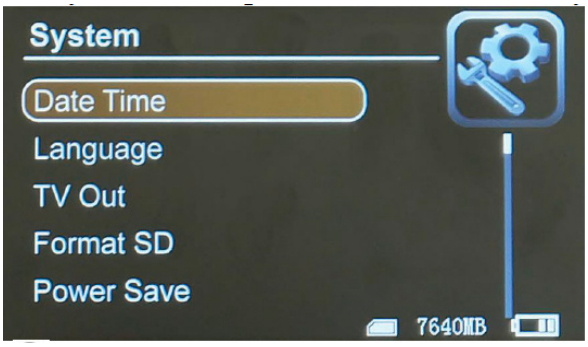
Use ⏮ ⏭ to select the 'Time Stamp' and press to enter. Use ⏮ ⏭ to select Off or On and press 📷 to confirm and exit. If it's on, video will be saved with synchronous time.

Video Setting

Use ⏮ ⏭ to select 'Video Setting' and press 📷 to enter. Use ⏮ ⏭ select your adjust your brightness or contrast. Press 📷 to select the option and then use ⏮ ⏭ to adjust press 📷 to select and exit.

SYSTEM SETTINGS - MONITOR

To access the system settings, press Ⓜ (menu) button and use ⏮ ⏭ to select 'System' option. Press 📷 to enter into system settings menu.



Date Time

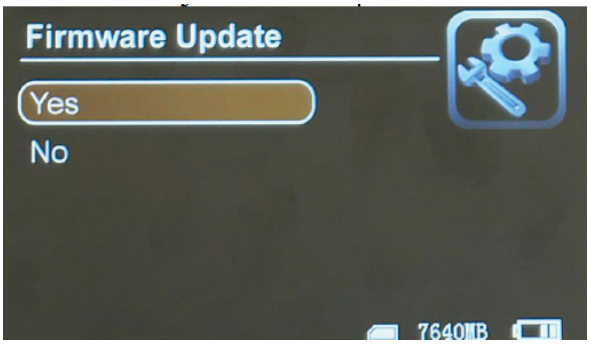
Use ⏮ ⏭ to select the 'Date Time' and press 📷 to enter. Use ⏮ ⏭ to adjust the date and time. Press 📷 to confirm the adjustments. Press ⮌ to exit.

Language

Use ⏮ ⏭ to select the 'Language' and press 📷 to enter. Use ⏮ ⏭ to select your language. Press 📷 to confirm and exit.

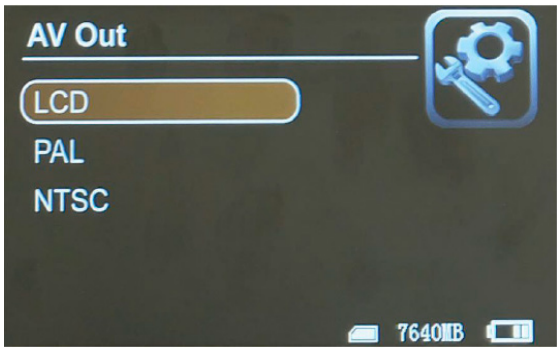
Firmware Update

Use ⏮ ⏭ to select the 'Firmware Update' and press 📷 to enter. Use ⏮ ⏭ to select yes or no and press 📷 to start update. Please remember to save update file "zburnT_C11.run.elf " at root directory of SD card.



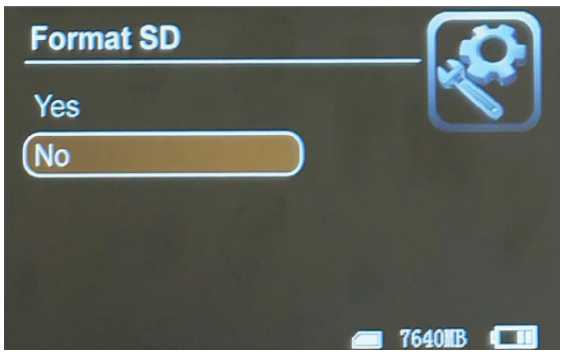
AV Out

Use ⏮ ⏭ to choose 'AV Out' and press 📷 to enter. Use ⏮ ⏭ to choose LCD, PAL OR NTSC. Press 📷 to confirm video displayed on TV screen. When you remove the AV cable, the video will come back on the monitor screen.



Format

Use ⏮ ⏭ to select the 'Format' and press 📷 to enter. Use ⏮ ⏭ to choose Yes. Press 📷 to confirm and exit.

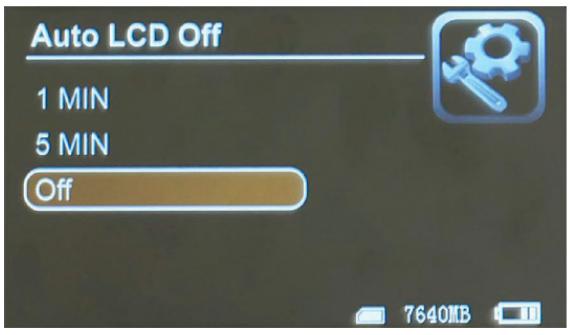


Power Save

Use ⏮ ⏭ to select 'Power Save' and press 📷 to enter.

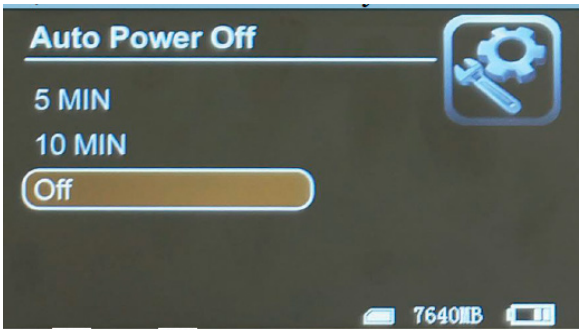
Auto LCD Off

Use ⏮ ⏭ to select the 'Auto LCD Off' and press to enter. Press ⏮ ⏭ to select either 1 Min, 5 Min or off. Press 📷 to confirm & exit.



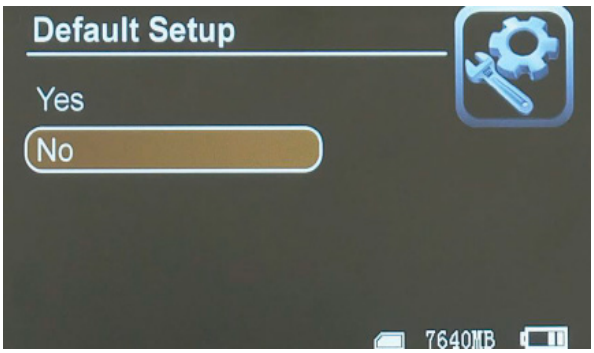
Auto Power Off

Use ⏮ ⏭ to select the 'Auto Power Off' and press 📷 to enter. Use ⏮ ⏭ to select either 1 Min, 5 Min or off. Press 📷 to confirm & exit. If time is selected, the monitor will automatically shut off when the set time is due.



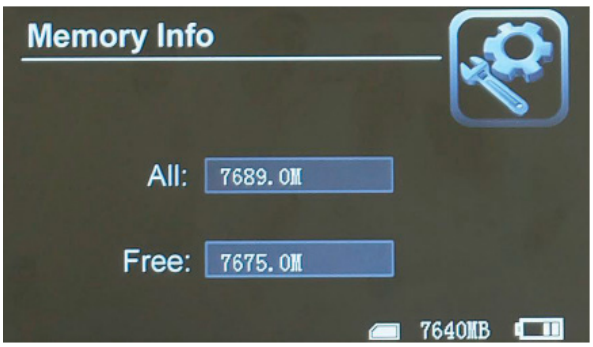
Default Setup

Use ⏮ ⏭ to select the ‘Default Setup’ and press 📷 to enter. Use ⏮ ⏭ to select Yes or No and press 📷 to confirm. Press ↩ to exit back to main menu.



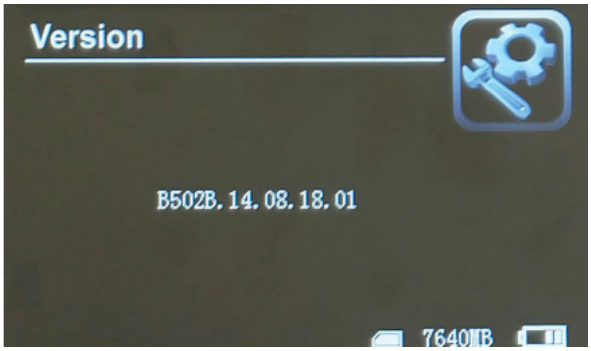
Memory Info

Use ⏮ ⏭ to select the ‘Memory Info’ and press 📷 to view capacity of SD card. Press ↩ to exit.



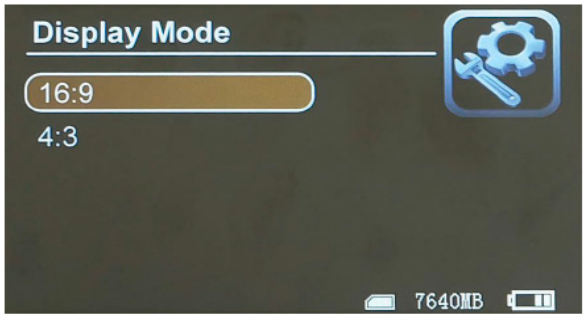
Version

Use ⏮ ⏭ to select the ‘Version’ and press 📷 to view version information.



Display Mode

Use ⏮ ⏭ to choose ‘Display Mode’’ and press 📷 to enter. Use ⏮ ⏭ to choose your display screen size either 16:9 or 4:3. Press 📷 to confirm and press ↩ to exit.



TROUBLE SHOOTING - MONITOR

1. It does not power on: Attempt a full charge.
2. System halted: Press the RESET key to turn on player again.
3. It does not play, maybe the format of the video file is not supported by this DVR, please convert it into the supported format.
4. The test is in a messy code: Make sure the correct language is selected.
5. It does not upload / download files or cannot find the disk in PC: Replace USB cable/USB port.
6. It does not save file: SD card is not in DVR, please insert SD card; or SD card memory is full, please delete some files to release memory; or there is damage area in memory, please format it.