

WIRELESS **4GB** SECURITY SYSTEM

CAMERAS INCLUDED

USER'S MANUAL

Models

DWH-471 1 Camera Included

DWH-472 2 Cameras Included



H.264
VIDEO
COMPRESSION

7in
7" LCD
TOUCH SCREEN

4GB
SD CARD
INCLUDED

MOBILE PHONE/
WEB READY

AUTO IR
CUT FILTER

AUDIO
SURVEILLANCE

INDOOR/OUTDOOR
CAMERAS

NIGHT
VISION



WELCOME

Thank you for choosing First Alert for your security needs!

For more than half a century, First Alert has made the home-safety and security products that make your job easier. Our products are built to the highest standard which has earned us a leadership role in the home-safety and security product categories. We are committed to serving our customers, from the professionals who install our products, to the families and businesses who count on them. First Alert has been helping families and businesses stay safe for over 50 years. By having a First Alert Security System, you're taking the first step in protecting your home or business from damage or theft. We're watching, even when you're not.

This manual is written for the DWH-471 and DWH-472 Wireless DVR systems. It was accurate at the time it was completed. However, because of our ongoing effort to constantly improve our products, additional features and functions may have been added since that time and on-screen displays may change. We encourage you to visit our website at www.brkelectronics.com to check for the latest manuals (English and Spanish), firmware updates, downloads, other security camera products and announcements. You'll find this product line under Products >> Security Cameras >> Wireless Cameras.



The DVR "Device ID" is provided on a label applied at the back of the LCD Monitor (behind the pull out stand). The "Device ID" and "Password" are displayed in the "NETWORK INFORMATION" section of the DVR and are needed for remote viewing.

For security, it is recommended you copy the "Device ID" and "Password" information to the user manual. Please store this manual in a safe place to protect the device ID and password information for future reference.

DEVICE ID: _____

PASSWORD: _____

MAIN DESCRIPTION

Four channel H.264 wireless digital video recorder with 7" 16:9 LCD Touch Screen and internet access suitable for applications such as high-end residential - new or remodel, light commercial, small business/retail, small warehouse or small grocery.

PRODUCT FEATURES

- 7" 16:9 LCD Touch Screen
- 2.4 GHz Digital Frequency Hopping Spread Spectrum (FHSS) Technology
- H.264 Compression
- Supports real-time AV preview and recording up to 25 FPS (Single Camera Mode) or 12fps/CH (Multiple camera mode)
- 4GB SD Card Included. Supports a maximum of 32GB SDHC memory card.
- Simultaneously preview & record from all 4 wireless cameras
- Independent motion-detect recording
- Multiple recording mode selectable (Manual/Motion-detect/Scheduling)
- Remote View via iPhone, iPad, iTouch with iOS 5.0.1 or above and Android smart phone or tablet version 2.3X or above. (Note: Not suitable for Windows Mobile or Blackberry Smart phones)
- User-friendly interface: true color, semi-transparent GUI with notes for selected menu items
- 2X digital zoom with 5 Zone Selection Feature
- 1800mAh/3.7V Lithium Ion-Polymer Rechargeable Battery with 3 hour battery life (Power Saving Off)
- Audio surveillance cameras
- 24/7 Scheduled Recording
- OmniVision OV7725 1/4" CMOS color cameras with 25 IR LED's for up to 60' night vision
- Camera has automatic IR cut filter for truer color representation
- IP66 weather rating

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INTRODUCTION

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SAFETY PRECAUTIONS

- Do not drop, puncture, or disassemble the cameras or DVR.
- Do not tug on the power adapter. Use the plug to remove it from the wall.
- Do not expose the cameras or DVR to high temperatures.
- For your own safety, avoid using the DVR when there is a storm or lightning in your area.
- Use the cameras and DVR with care. Avoid pressing hard on the cameras or DVR body.
- Do not crush or damage the power cable

LITHIUM-POLYMER BATTERY WARNING

- This equipment contains a rechargeable lithium-polymer battery.
- Do not charge the battery in temperatures below 32° F (0° C) or higher than 113° F (45° C).
- Do not open or mutilate the battery.
- The rechargeable batteries contained in this equipment may explode if disposed of in a fire.
- Do not short-circuit the battery.
- Do not charge the rechargeable battery pack used in this equipment with any charger other than the one designed to charge this battery pack as specified in the owner's manual. Using another charger may damage the battery pack or cause the battery pack to explode.
- CAUTION! Rechargeable Batteries Must Be Recycled or Disposed of Properly.

FCC COMPLIANCE STATEMENT

This equipment has been tested and found to comply with the limits for an intentional radiator, pursuant to Part 15, subpart C of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that of the receiver.
- Consult the dealer or an experienced radio or TV technician for help.

Notice: Only peripherals complying with FCC limits may be attached to this equipment. Operation with non-compliant peripherals or peripherals not recommended by First Alert / BRK Brands, Inc. is likely to result in interference to radio and TV reception. Changes or modifications to the product, not expressly approved by First Alert / BRK Brands, Inc., could void the user's authority to operate the equipment.

We, First Alert / BRK Brands, Inc. declare under our sole responsibility that the device to which this declaration relates: Complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Certification

This device contains a radio transmitter. Accordingly, it has been certified as compliant with 47 CFR Part 15 of the FCC Rules for intentional radiators. Products that contain a radio transmitter are labeled with an FCC ID.

DISPOSAL



This symbol indicates that it is prohibited to dispose of these batteries in the household waste. Take spent batteries that can no longer be charged to the designated collection points in your community.



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PRODUCT OVERVIEW PACKAGE CONTENTS

WHAT'S IN THE BOX



Digital Wireless Receiver
with 7" LCD Touch Screen



Digital Wireless Camera,
Antenna and Stand
DWH-471: 1 Camera
DWH-472: 2 Cameras



2 Window
Warning Decals



User's Manual



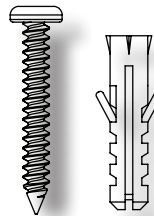
English and Spanish
Manuals



RJ-45 Ethernet Cable
(Color may vary)



Power Supplies for
DVR and Cameras
2 - DWH-471
3 - DWH-472



Mounting Hardware
(3 screws and 3 plastic
anchors per Camera)



4GB SD Memory Card
(Brand may vary)

FRONT & SIDE PANELS



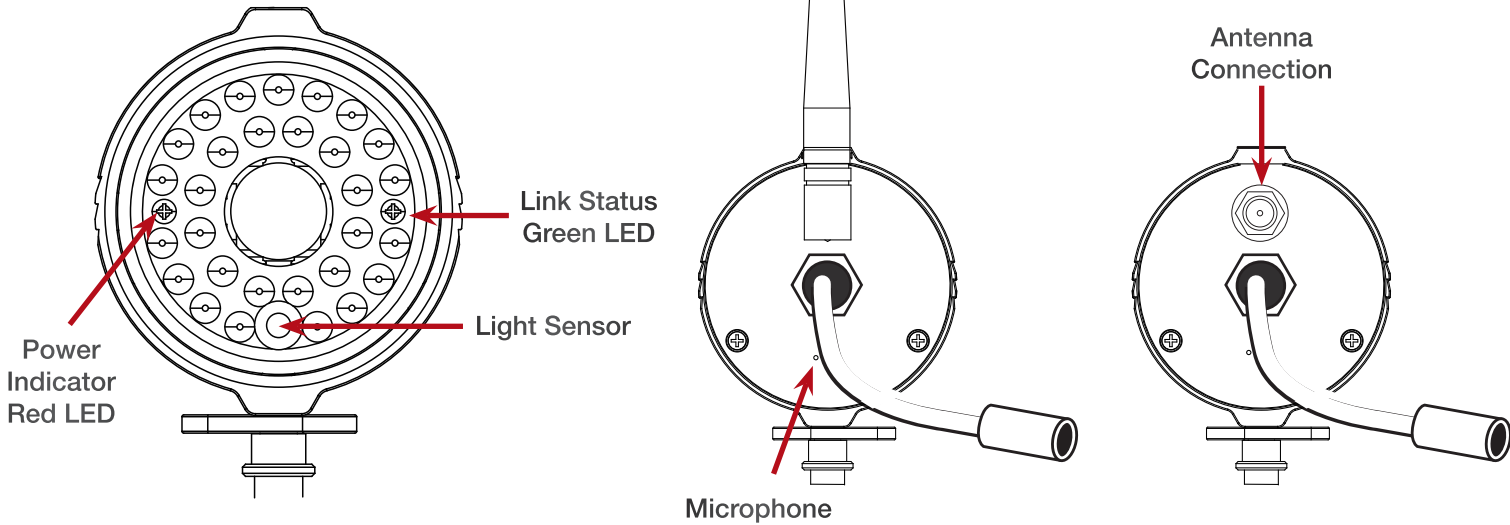
DOCKING CRADLE



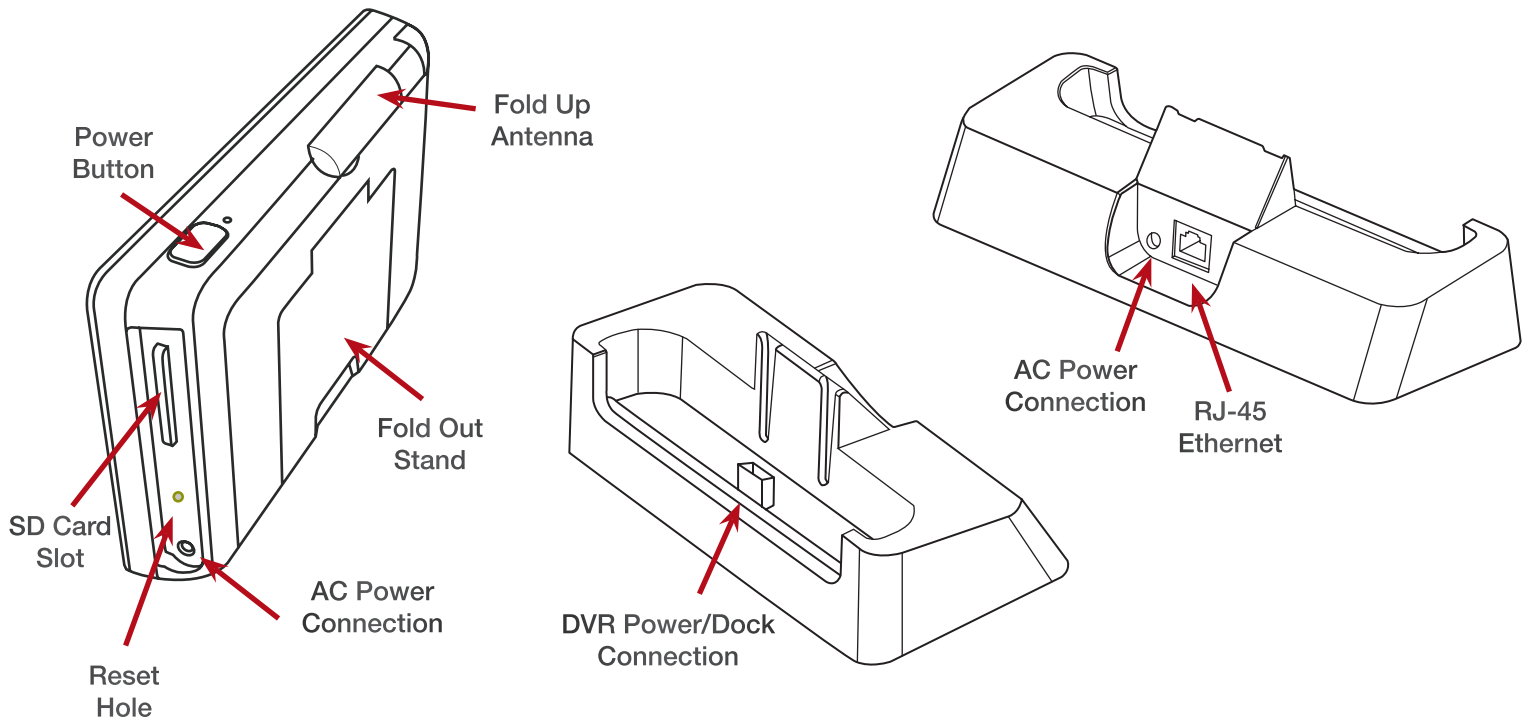
3

PRODUCT OVERVIEW CAMERA, DVR & DOCKING CRADLE

CAMERA



DVR & DOCKING CRADLE

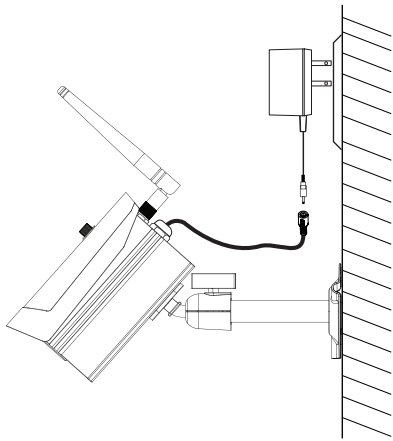
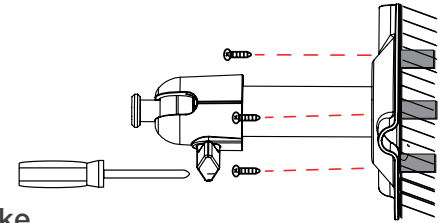


Rechargeable Battery

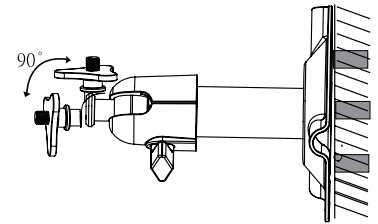
Caution: The 7" monitor is fitted a 3.7V 1800mAH (LI-ON) rechargeable battery pack. At the end of life, it should not be disposed of with household waste. Please recycle where the facilities exist. Check with your local authority or retailer for recycling advise.

INSTALLING CAMERAS

1. Select the position for the camera and secure the camera stand. (Screws and anchors are supplied. Use an appropriate screw type for the mounting surface.)
2. Screw the camera onto the bracket.



3. Adjust camera to the proper view angle. Make sure the lens is upright relative to your subject. Tighten the thumb bolt.
4. Screw the antenna into place on the rear of the camera. Adjust the antenna to an upright position.
5. Connect the power cable to the DC IN of the camera.
6. Plug the power supply into the electrical outlet.
7. Once the camera is connected, see Camera Setup, Camera Pairing to link the camera(s) to the receiver.



Camera Orientation

It's important the camera is mounted correctly to ensure the image is not upside down as the camera lens can only be positioned one way.

SETTING UP THE WIRELESS RECEIVER

1. Flip out the stand, extend the antenna, connect AC/DC adapter to the input on the side of the monitor.
2. Press and hold the POWER button on the top of the monitor for 3 - 4 seconds to power it up.
3. The receiver displays Welcome Screen for a few seconds and then transitions to the LIVE view.
4. Place the SD card into the SD card slot located on the side of the monitor.
5. Once the receiver is connected, see Camera Setup, Pairing (Operating Menus) to link the camera(s) to the receiver.

Note: The screen remains dark until the cameras are powered up. The monitor is fitted with a rechargeable battery and can operate for up to 2 hours on battery power once fully charged (w/Power Saving function activated). The monitor can be carried around anywhere within operating range of the camera(s), but should be used in a dry environment as it is not weatherproof. Operating range is up to approximately 500 feet (152 meters) line of sight. Typical range is 150' - 200' (46 - 61 meters) through normal household obstructions. Increased metal objects such as aluminum siding, metal beams, pipes, metal racking may reduce range.

Battery Used In the LCD Monitor

The LCD monitor is fitted with a 3.7V 1800mAH (Li-ON) rechargeable battery pack. If the power supply adaptor is kept connected to the monitor then the battery will begin recharging until fully charged. The monitor can still be used if left connected to the power supply adaptor even the battery is fully charged.

Note:

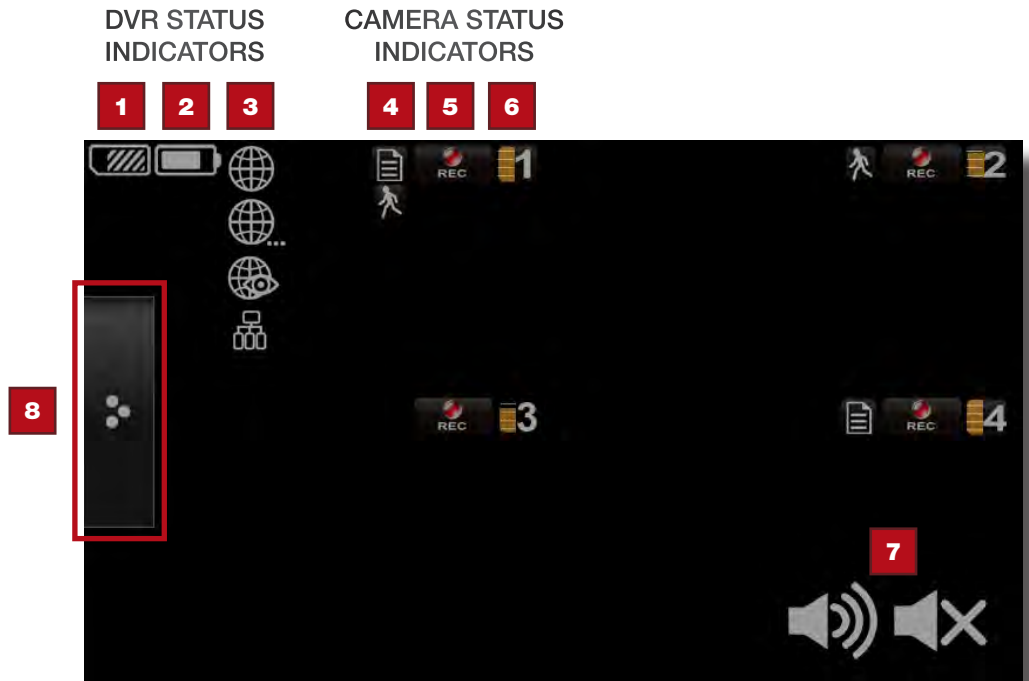
1. From zero charge, the rechargeable battery takes approximately 8 hours to reach full charge.
2. The rechargeable battery will maintain 80% of its efficiency within the 300 charge-discharge cycle.
3. The rechargeable battery is not user replaceable. Do not try to change the battery or remove the battery.

5

SYSTEM OPERATION LIVE VIEW SCREEN

LIVE VIEW MAIN SCREEN

Your DVR operates through a series of screens that let you choose groups of operations. The Live View Screen lets you view the connected camera transmissions. It also lets you set up your screen display and make adjustments to it. Icons on the screen let you monitor the DVR and camera status.




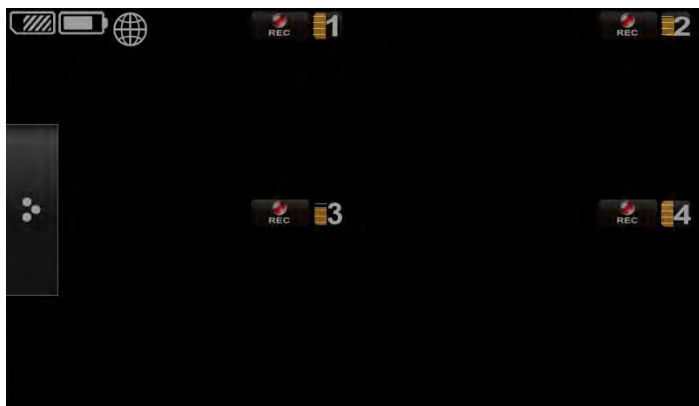
Live View Main Screen

ITEM	INDICATOR NAME	ICON	DESCRIPTION	INDICATORS
1	SD Card Status		SD Card memory capacity	
			No SD inserted or it is damaged	
2	Battery Indicator		Battery nearly full	
			Battery nearly empty	
3	Internet Connection Status (Only one icon will be displayed in position 3 depending on internet connection status)		Connecting to Internet	
			Connected to Internet	
			Remote view via Internet in progress	
			Connected to Intranet	
4	Recording Type Indicator (Only one icon is displayed at a time)		Motion detection recording in progress	
			Schedule recording in progress	
5	Recording Status		Tap to start or stop recording for that camera Steady on - Not recording; Flashing - Recording	
6	Camera Number/Signal Strength		Displays the camera number and signal strength through the status lines to the left of the number	
7	Audio On/Mute Indicator		Indicates audio/mute feature is enabled. Tap icon to toggle mode. Note: only one icon is displayed at a time.	
8	Pop-up Menu Tab		Opens and closes the main screen pop up menu display. See next page "Main Screen Pop-up Menus".	

LIVE VIEW SCREENS

The Live View Screen displays in 2 views - Quad View or Full View. Quad View displays the images in 4 quadrants (only displays cameras that are ON). Tap a quadrant to display single camera view / full view. Tap on that image again to return to Quad View.

On the Live View Screen, tap the  icon by each camera to begin recording of that camera. Tap it again to stop recording. You can record all cameras at the same time. With manual recording, each recording session (video clip per camera) is two minutes in length. Note: In Full View, recording is only available (record icon is displayed) with one camera activated. All other cameras must be turned off. During recording, if you tap one of the cameras to Full View mode, recording will be stopped.




Live View - Quad View



Live View - Full View

5 Zone Zoom Feature

To zoom into a particular area,

1. Go to full view, then tap the magnifying glass  to activate zoom mode.
2. Select by tapping the zone area to view zoom full screen into that area. Tap again to zoom back out.

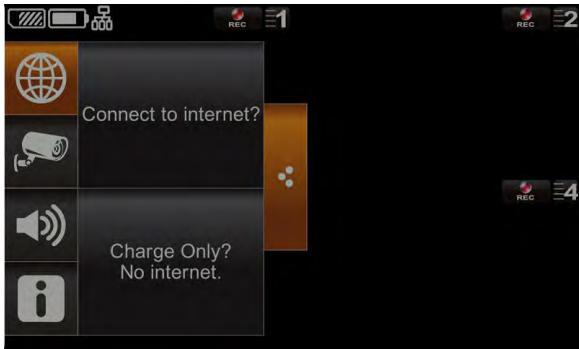
Tap the  icon to return to the Full View mode.



Live View - 5 Zone Zoom View

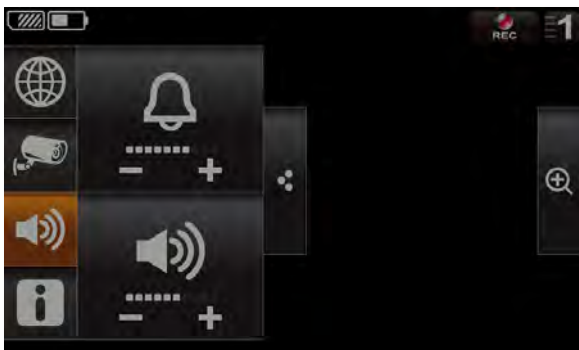
MAIN SCREEN POP-UP MENUS

Tapping on the Pop-up Menu tab brings you to the Main Menu icons. From here you can configure your Internet, Cameras, adjust the volume and get to the system settings menus.





Internet Connection Menu

1. Connects your system to the internet/intranet or just charge the monitor. See page 32 for details on connecting to the internet.





Adjust Monitor Volume Menu

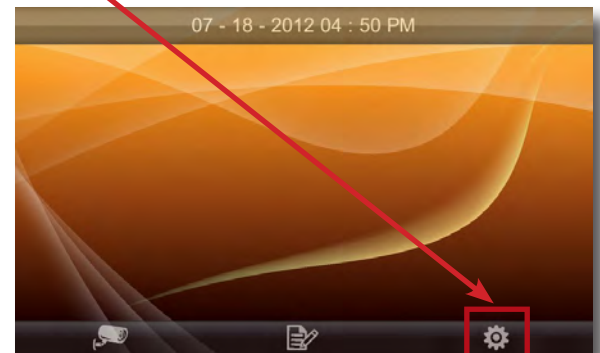
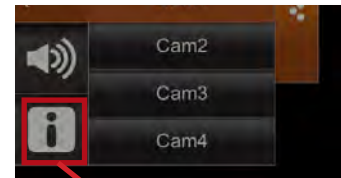
3. Adjusts the volume level of the monitor.
Note: If the camera is located within 1m (3.3 ft.) to 1.5m (4.9 ft.) from the monitor and the camera's volume on the receiver is turned on, then you may hear feedback picked up by the microphone. Locate the camera further away from the monitor to prevent this noise.

4. Tapping the "System Settings" icon  on the Pop-up Menu and then the  icon gets you to the System Setup Menu of the DVR. From here you can setup Cameras, Recorder, Network, Alarm and System parameters. You can also access Quick Tips.



Camera View Menu

2. Allows you to configure your Live View screen. You can scan between cameras (5 seconds each), show all cameras on a single screen (Quad view), or only display a specific camera. Tap  or  icon to toggle between Audio On and Mute.



Access System Settings



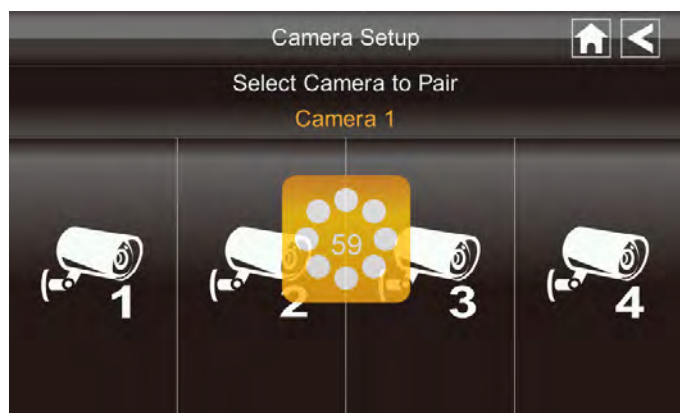
System Setup Menu

CAMERA SETUP MENU

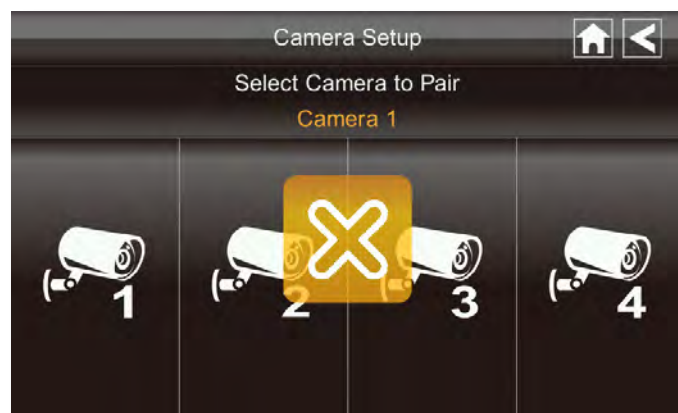
Tap CAMERA SETUP from the System Setup Menu to access the camera setup options: Pairing, Camera On and Brightness.



CAMERA PAIRING



Pairing Timer

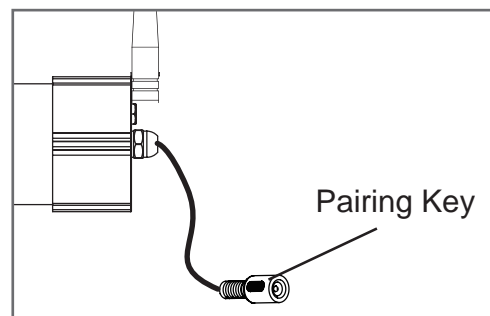


Pairing Failed

Your camera is paired to the monitor at the factory to channel 1. To add new camera(s) to your system, you have to pair it to the different channel(s). Tap the camera number you want to pair. A processing icon displays for a 60 second countdown. Press the Pairing Key button on Camera power cord. The Pairing LED on camera will blink once then will begin blinking continuously indicating data transmission is in process.

System will confirm pairing process is successful when pairing is complete. The system will turn the camera on automatically. The system will indicate pairing process failed with "X" displaying on screen.

Tap the Home icon  to return to Live View Screen.



CAMERA ACTIVATION

*Camera Setup-Camera Activation*

An X indicates a camera is OFF, a check indicates ON. Tap on the camera to turn it ON or OFF.

NOTE: Ensure the cameras are paired to the receiver for SCAN or QUAD to function properly. Camera "ON" can only be selected when camera has been paired to system. Audio can only be recorded on one camera at a time. All other Cameras must be turned off.

CAMERA BRIGHTNESS ADJUSTMENT

*Camera Setup-Adjust Brightness*

Tap the camera to change brightness level. The default brightness is 0, and the range is from -2 to 2.

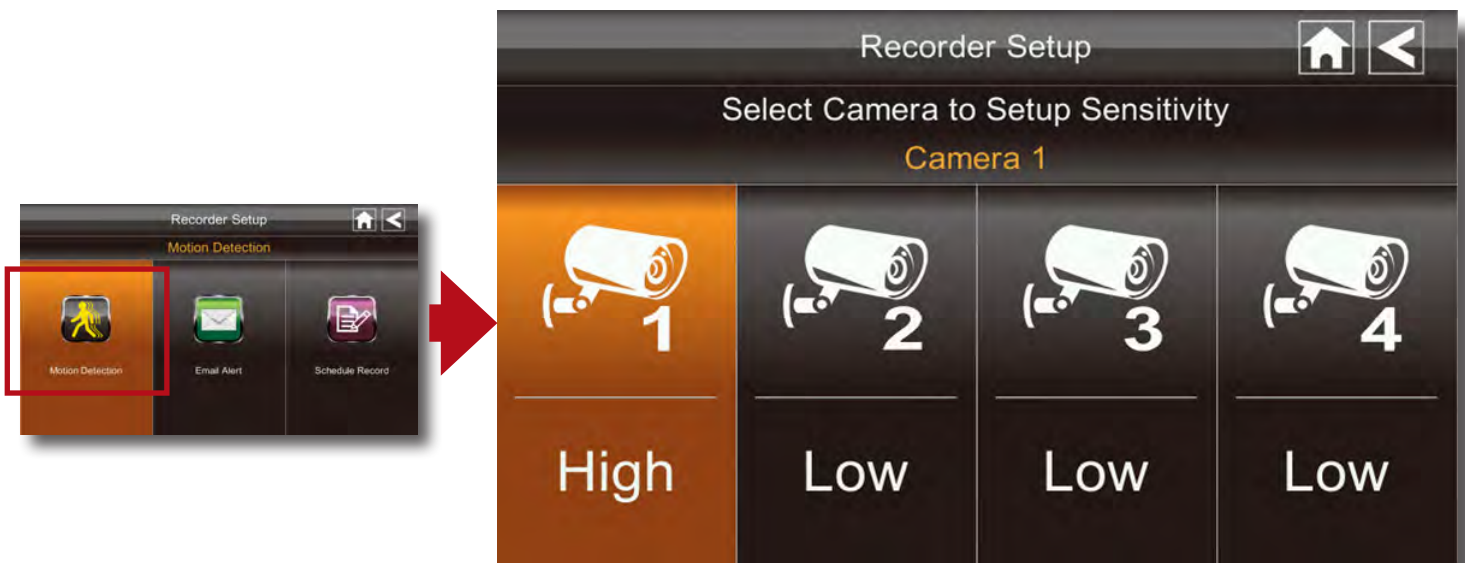
RECORDER SETUP MENU

Tap RECORDER SETUP from the System Setup Menu to access the Recorder setup options: Motion Detection, E-mail Alert and Schedule Record.




Record Setup Menu

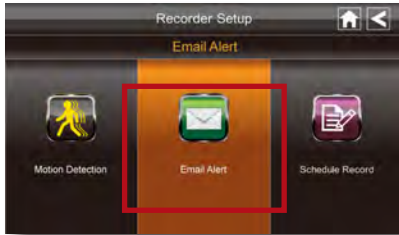
MOTION DETECTION SENSITIVITY



Recorder Setup-Motion Detection Sensitivity

Tap the camera's to set the sensitivity to Off, Low or High. Default = low. The screen will return to the Motion Detection screen after 10 seconds or when you press the Back icon . When activated by motion, the DVR will record for 2 minutes.

E-MAIL ALERT



Recorder Setup-Email Alert


The system can notify you when it detects motion from any camera by sending you an email alert. The email alert contains information such as the time that motion was detected and by which camera. In order to enable the Email Alert function, you must enter both incoming and outgoing email addresses.

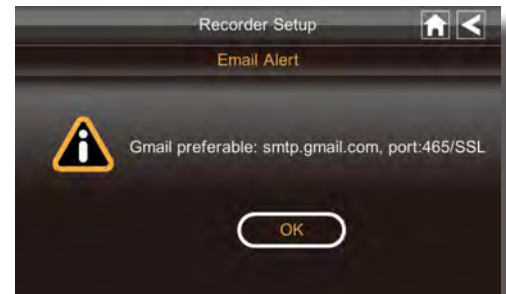
We strongly recommend you use Gmail to set up as the outgoing email server.

The outgoing mail server (SMTP server) is responsible for sending out the email notification to tell users when the system detects motion from any camera (Motion Detection must be activated).

The incoming mail server (Email To) receives the email notification sent from the SMTP server. The user must be able to receive email on a Windows PC or on mobile devices (such as an iPhone, iPad, or Android smartphone or tablet) to receive e-mail alerts from the system. When you receive an email alert, you can view live video from your Windows PC, an iPhone, iPad, Android smartphone or Android tablet through apps. Apps are available through the iTunes App store or the Android Market.

1. Tap Enable to activate Email Alert or Disable to deactivate it.
2. Tap on the SMTP Server field. A "Gmail preferable" alert is displayed. Tap OK to display the Keyboard entry screen.
3. Enter your outgoing e-mail SMTP server (example: johndoe@gmail.com). You can switch the keyboard from alphabetical characters to numbers/symbols and back again by tapping the field to the left of the space bar. Tap ENTER key when done to return to the Email Setup screen.
4. Enter your PASSWORD. Note: The password entered here must be the same password as the password for the outgoing email account.
5. Enter your EMAIL TO field data. Only one incoming email account will be accepted by the system. The incoming email account can be different from the Outgoing Email account.
6. Tap OK to save the settings,

then tap  to return to the previous screen. If you are using Gmail as the outgoing SMTP server, check SSL and use the data in the table:



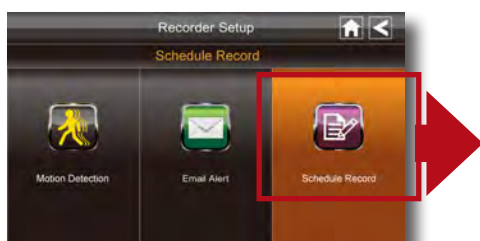
Gmail Alert



Keyboard for Data Entry

Gmail Data		
SMTP SERVER	Smtplib.gmail.com	Enter this
SMTP PORT	465	Enter this
USERNAME	XXXX@gmail.com	Enter your gmail address in full, including @gmail.com.
PASSWORD	XXXXXXXXXX	Enter the password for this gmail account.
Email To	XXXX@gmail.com	Enter the email address where you want the alerts sent.

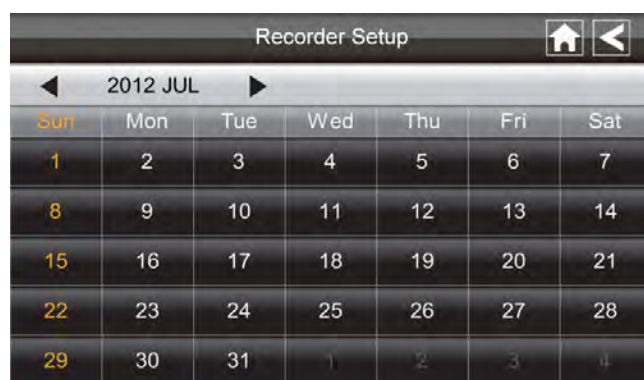
SCHEDULE RECORD



Recorder Schedule Setup Menu

Up to 5 scheduled recording sessions are available in a single day. You are limited to the size of the SD card for how long a total recording time you have. These recording sessions must begin and end within a single 24-hour period. They cannot cross into the next day.

1. Tap the camera/channel number you want to record (1 - 4). Multiple cameras can be selected.
2. Set the recording start and end time. Tap the hour and minutes boxes separately and use the UP and DOWN arrows to scroll through the times.
3. Tap the AM/PM block to toggle between them.
4. Tap on the blank DATE box. The Schedule Record Calendar screen displays.
5. Tap on the date you want schedule the recording. The previous screen displays with the date selected.
6. Tap SAVE. To schedule another recording session repeat steps 1-6.



Schedule Record Calendar

Clear a Scheduled Recording

1. Access the Schedule Record screen.
2. Tap on the scheduled recording you want to clear (1-5). The screen displays the settings for that schedule.
3. Tap CLEAR. The screen resets to the default values for that recording slot.

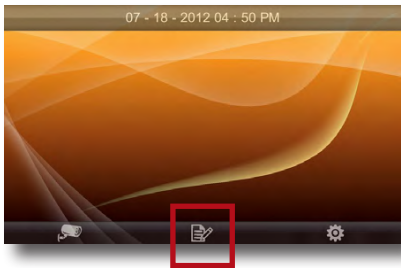
NOTE: Recording will not work if there is no memory card inserted into the DVR.



Audio/Video Recording

Caution: Audio surveillance in some states is illegal or requires permission from one or both parties to record someone's voice. Laws are also different from residential vs. commercial applications. Some federal, state, and local laws prohibit certain surveillance activities and/or the use or distribution of the information obtained from such activities. Prior to using this system, you should become familiar with the pertinent laws to ensure compliance with those applicable to surveillance activities.

RECORD LIST



Record List						
2012 JUL						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

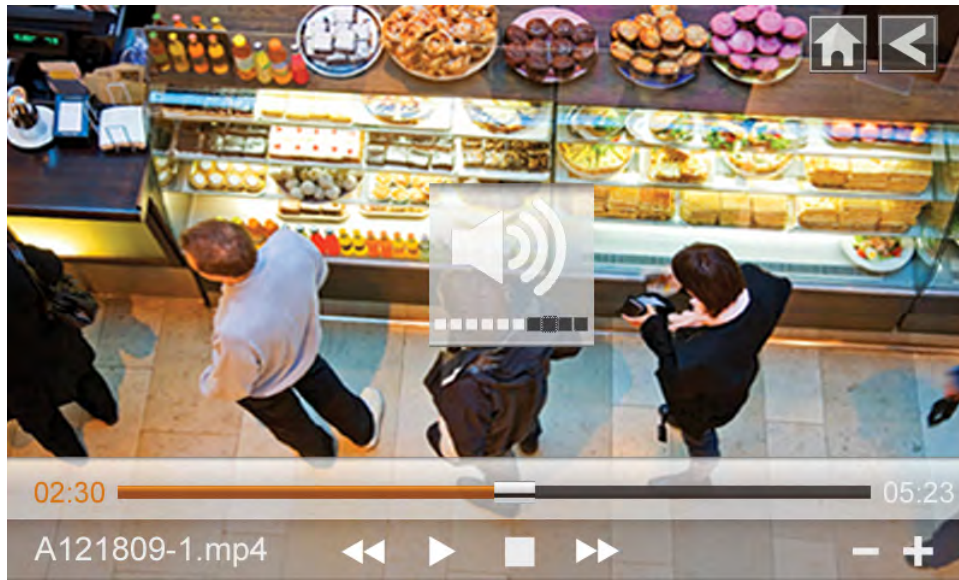
Playback-Date Folder Menu

Tap on the highlighted day containing the recording you want to view. The RECORD LIST screen will display that day's recordings listed in a folder. If you tap on a day that is not highlighted, a folder displays with no recordings listed.



Record List	
07-18-2012	
A121809-1.mp4	
A030456-3.mp4	
A030317-1.mp4	

Record List

PLAYBACK CONTROLS



Playback Controls

1. Tap on the recording you want to view. It displays on the screen.
2. Tap on any area of the screen that does not have control icons to bring up the playback progress bar. Tap that area again to close it.
3. While playback progress is visible, you can fast forward/rewind by dragging the playback bar.
4. Tap the “+” or “-” icons to adjust the volume up or down.
5. When playback ends, tap  to return to the Record List screen or tap the Home icon  to return to Live View Screen

PLAYBACK ON A PC OR MAC

The files generated by this DVR are in mp4 format. There are many playback software programs that can play your recordings on your PC or MAC computer such as Windows Media Player and Apple QuickTime.

SD CARD CAPACITY	CARD CAPACITIES	
	SINGLE CAMERA (480 x 272)	MULTIPLE CAMERAS (320 x 240 QVGA)
1GB	200 Minutes (3.3 hours)	130 Minutes (2.2 hours)
2GB	400 Minutes (6.7 hours)	260 Minutes (4.3 hours)
8GB	1,600 Minutes (26.7 hours)	1,040 Minutes (17.3 hours)
16GB	3,200 Minutes (53.3 hours)	2,080 Minutes (34.7 hours)
32GB	6,400 Minutes (106.7 hours)	4,160 Minutes (69.3 hours)

RECORDING TIME FOR MEMORY CARDS

Note: All numbers are approximate and are for estimating only. Many factors influence actual storage capacities including size of data, quality, aspect ratio and compression used.


ALARM SETUP



Alarm Setup Menu

PERIOD

This selection allows you to select the alarm/ siren duration.


1. Tap Period. The Set Siren Duration screen displays.
2. Select the alarm duration time required.
3. Tap  to return to the previous screen

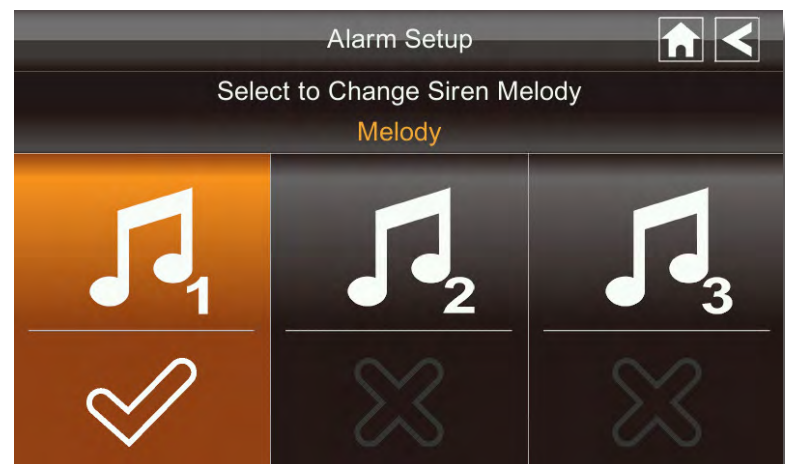


Alarm Setup - Change Siren Duration

MELODY

This selection allows you to select a melody for the siren.

1. Tap Melody. The Change Siren Melody screen displays.
2. Select the melody required.
3. Tap  to return to the previous screen



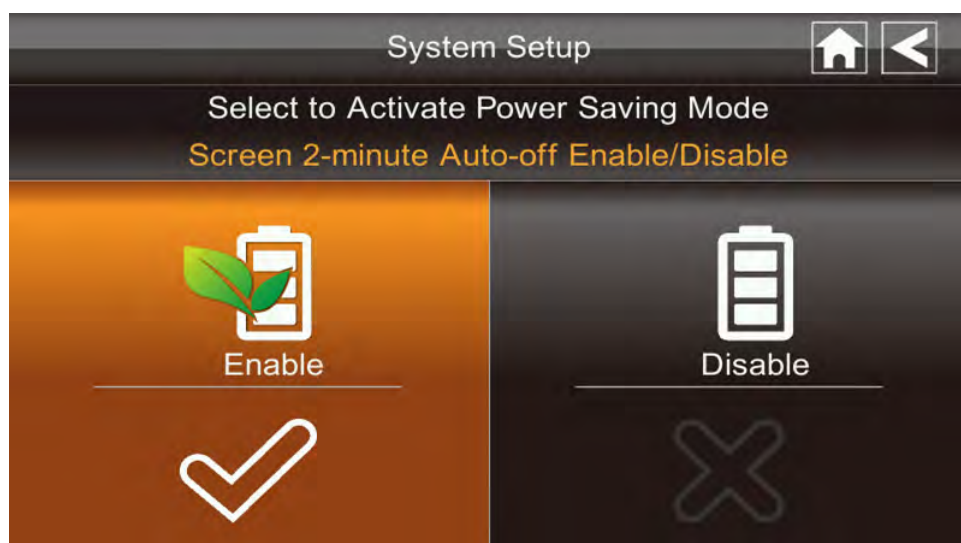
Alarm Setup - Change Siren Melody

SYSTEM SETUP




System Setup Menu

POWER SAVING

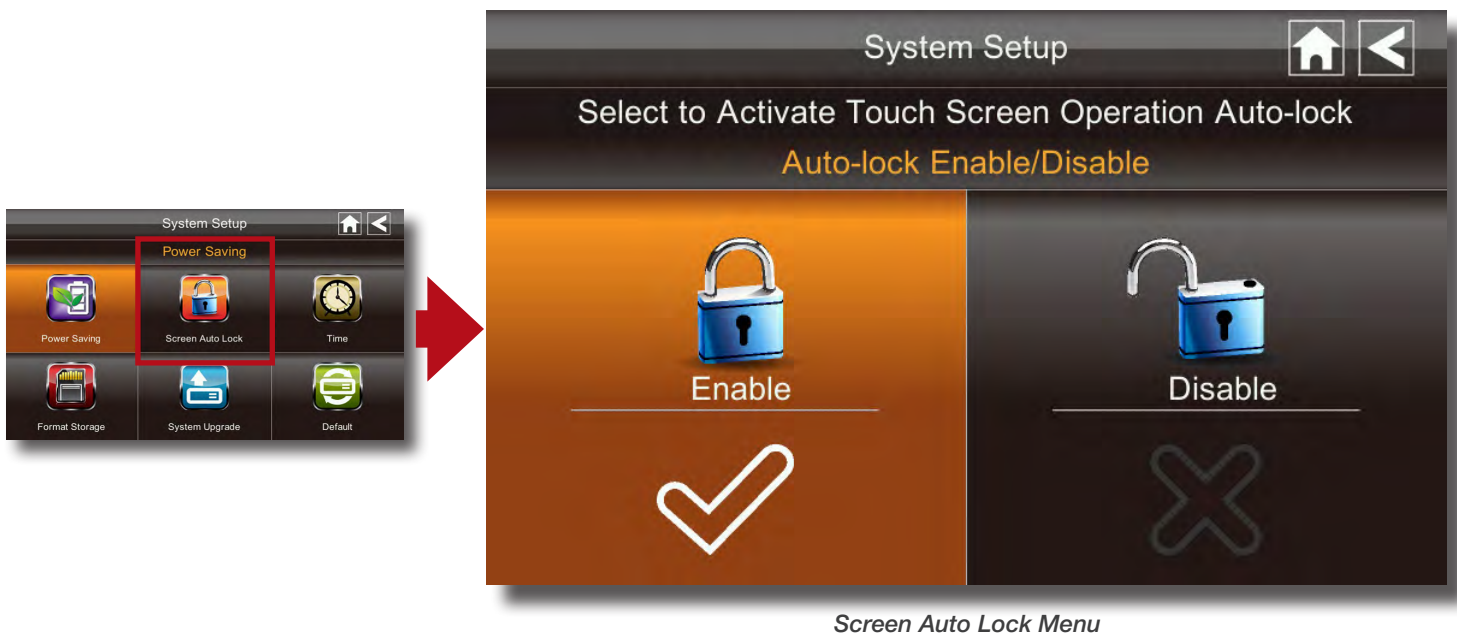


Power Saving Setup Menu


In Power Saving mode, the monitor will shut off the monitor after being idle for 2 minutes. Press Power button on top of the Monitor once to reactive the monitor. If a motion detection event or scheduled recording begins, the monitor turns back on automatically.

1. Tap Power Saving Enable to activate power saving. Default is off. A check mark appears on your selection.
2. Tap  to return to the previous screen

SCREEN AUTO LOCK

*Screen Auto Lock Menu*

In Auto Lock mode, the monitor will enter screen lock mode after it has been idle for 2 minutes. Auto Lock disables the touch screen and removes the icons from the display.

1. Tap Screen Auto Lock Enable to activate auto lock. Default is off.
2. A check mark appears on your selection.
3. Tap  to return to the previous screen.

Note: From the Live screen, tap the Power button once to unlock the screen and return to normal touch screen operation.

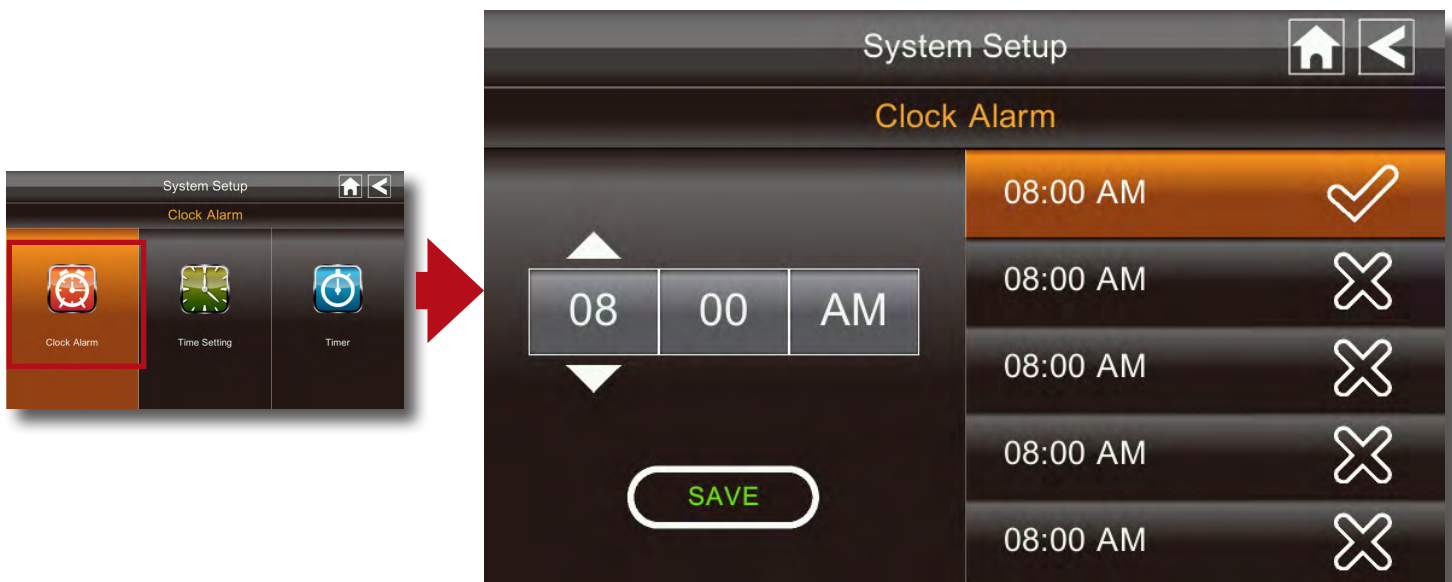
TIME



Date, Time, Clock Alarm and Timer Setup Menu

From the TIME icon you can access the CLOCK ALARM, TIME SETTING and TIMER menus.



Clock Alarm



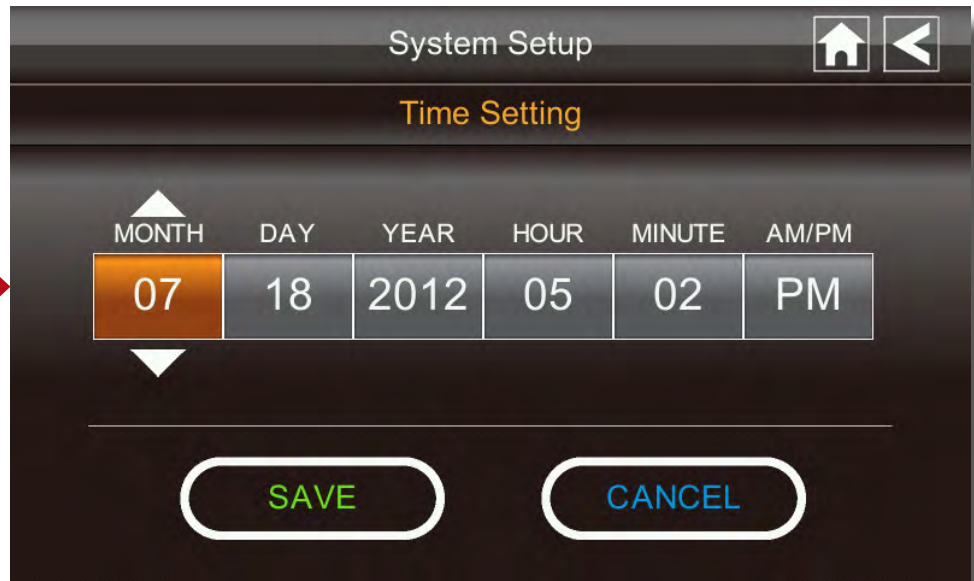
Clock Alarm Menu

This feature operates as an independent alarm clock. It does not affect the operation of live video or recording video.

Tap CLOCK ALARM on the SYSTEM SETUP/TIME screen to display the Clock Alarm screen.


1. Tap one of the 5 alarm buttons at the right until a  appears.
2. Tap on the hour/minutes block then UP/DOWN arrows to set the time.
3. Tap on AM/PM to toggle between the two.
4. Tap SAVE and repeat for the other Clock Alarms if desired.
5. Tap  to return to the previous screen.

Time Setting

*Time Setting Menu*

This screen contains fields to set the Month, Day, Year, Hour, Minute and AM/PM.

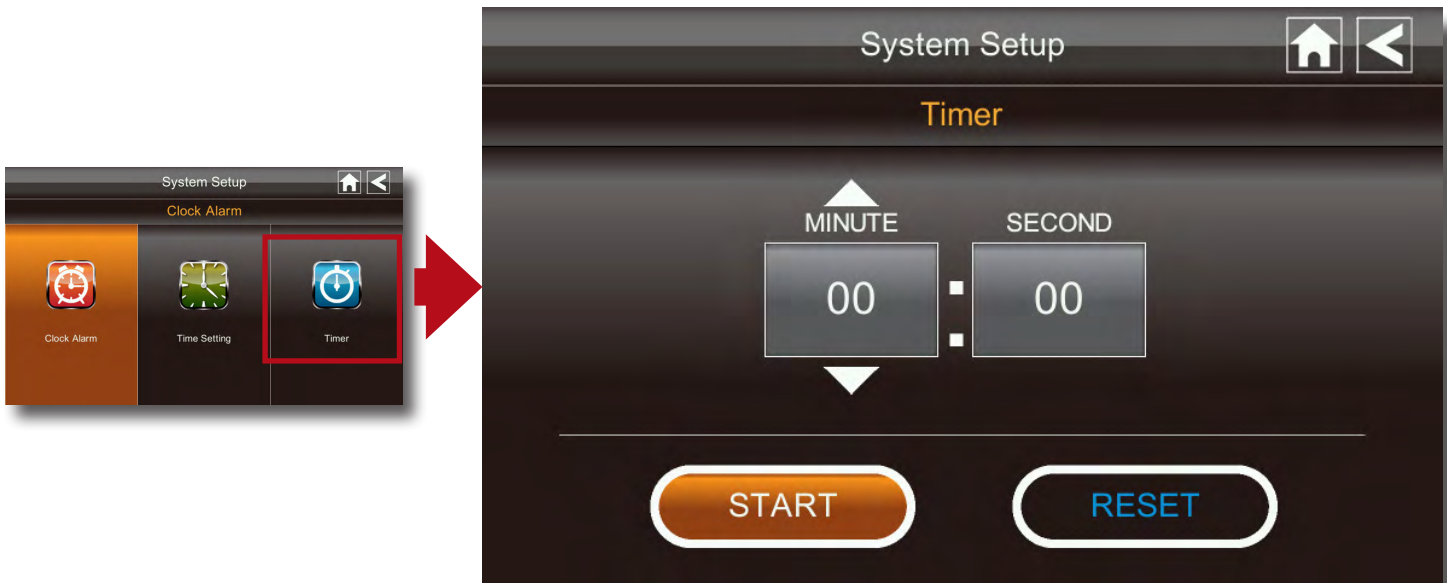
Tap TIME SETTING on the SYSTEM SETUP/TIME screen to display the Time Setting screen.

1. Tap on each field to set it. Use UP/DOWN arrows to set the field or tap on AM/PM to toggle between the two choices.
2. Tap SAVE when completed or CANCEL to discard inputs.
3. Tap  to return to the previous screen.

**Why Set a Date & Time?**

It's important to set the proper date and time before continuing so that you can easily locate recorded events. Inaccurate dates and times on files may affect their admissibility as evidence in court. In addition, when changing current time settings, to avoid possible confusion with the time stamps on recorded and currently recording files, stop all ongoing recording processes before altering the system time and restart recording using the new settings.


Timer

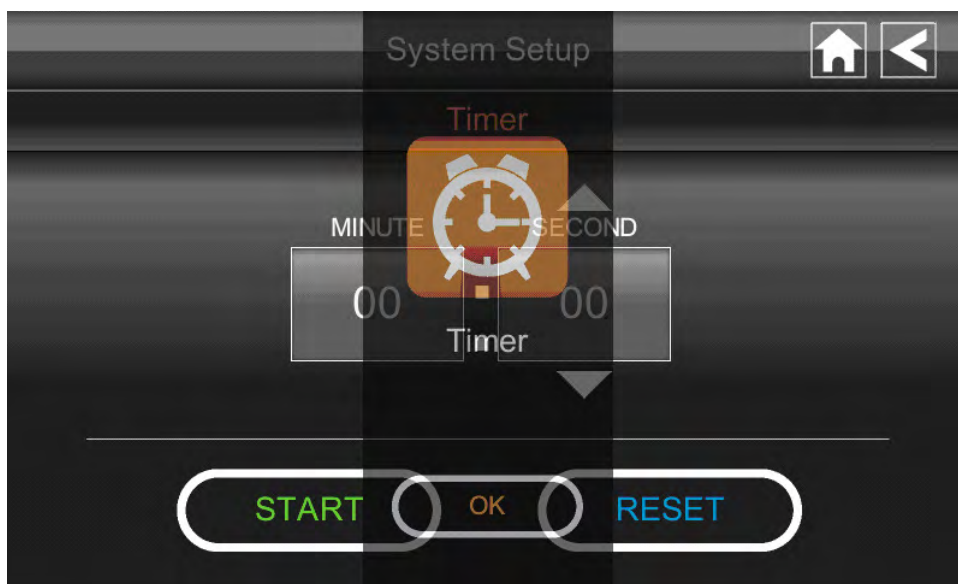


Timer Menu

This feature operates as an independent countdown timer. It does not affect the operation of live video or recording video.

Tap **TIMER** on the **SYSTEM SETUP/TIME** screen to display the Timer Setting screen.

1. Tap on each field to set it. Use UP/DOWN arrows to set the field.
2. Tap **START** to begin the time. When the time reaches 00:00, an alarm beeps until you tap **OK**.
3. Tap  to return to the previous screen.




Timer-Ringing

FORMAT STORAGE

*Format Storage Screen*

When using an SD card other than the one provided, it is highly recommended that you format the card using these procedures. Formatting any SD card deletes all files on that card.

1. Tap on **START**; a warning statement displays.
2. Tap **OK** to proceed to format storage or tap **CANCEL** to discontinue.
3. Tap  to return to the previous screen.

*Format Storage Warning Screen*

SYSTEM UPGRADE



Format Storage Screen

To upgrade the firmware from the vendor website, you must download and store it in the SD card root directory.

1. Tap on **START**; a confirmation statement displays.
2. Tap **OK** to proceed to format storage or tap **CANCEL** to discontinue.
3. System will count down and automatically turn off after a few seconds.
4. You will need to restart your DVR by pressing the Start button.



System Upgrade Confirmation Screen

MAINTAINING YOUR DVR

Please make sure to upgrade your DVR firmware to the latest version. Check your system firmware version on the **NETWORK INFORMATION** screen on page xx. Go to www.brkelectronics.com Products>>Security Cameras>>Wireless Cameras>>DWH-471 or DWH-472>>Download Tab to check for updates for this model. Upgrade if available by:


1. Remove SD card from this DVR.
2. Copy the latest version from the BRK website onto the SD card and reinstall back in this DVR.
3. Upgrade firmware per instructions above.

LANGUAGE



Language & Frequency Selection Menu

The DEFAULT icon is where you change the language for the DVR. English is the default language. If you change the language, all system settings default to the original factory settings. You will have to reenter any specialized settings.

1. Select the language required. The Restore Default Settings screen displays.
2. Tap OK to continue. The system will shutdown in about 5 seconds.
3. When the system restarts, it will ask you to perform the touch screen calibration. Follow the instructions on the screen.
4. Select the frequency setting by tapping the frequency icon (50Hz /60Hz). Make sure the frequency setting complies with local electrical regulations. Note: In general the frequency for the United States and Canada is 120V at 60 Hz frequency; Europe is 220-240 volt, at 50Hz frequency.
5. Tap  to return to the previous screen.

Note: From the Live screen, tap the Power button once to unlock the screen and return to normal touch screen operation.

REMOTE ACCESS

This DWH Series Video Security System lets you view live video from your iPhone, iPad, or Android smart phone or tablet. Apps are available through the iTunes App Store or the Android Market. We recommend OMGuard as it has been tested with this DVR. Up to 2 remote users can access live video at the same time as long as they have the User ID (DID) code and security code. *Note: The monitor must be placed on the docking cradle and an Ethernet cable with internet access must be connected for Remote Access. If the DVR is removed from the cradle then the camera(s) can only be viewed on the monitor.*



OMGuard Icon

Supported Devices:

Remote View via iPhone, iPad, iTouch with iOS 5.0.1 or above and Android smart phone or tablet version 2.3X or above. (Note: Not suitable for Windows 7 or Blackberry Smart phones).

Recommended Minimum Internet Upload Speed:

512Kbps upload speed (or bandwidth) to achieve up to an average of 2FPS viewing speed. Average viewing speed will depend on other restrictions by your ISP (internet service providers).

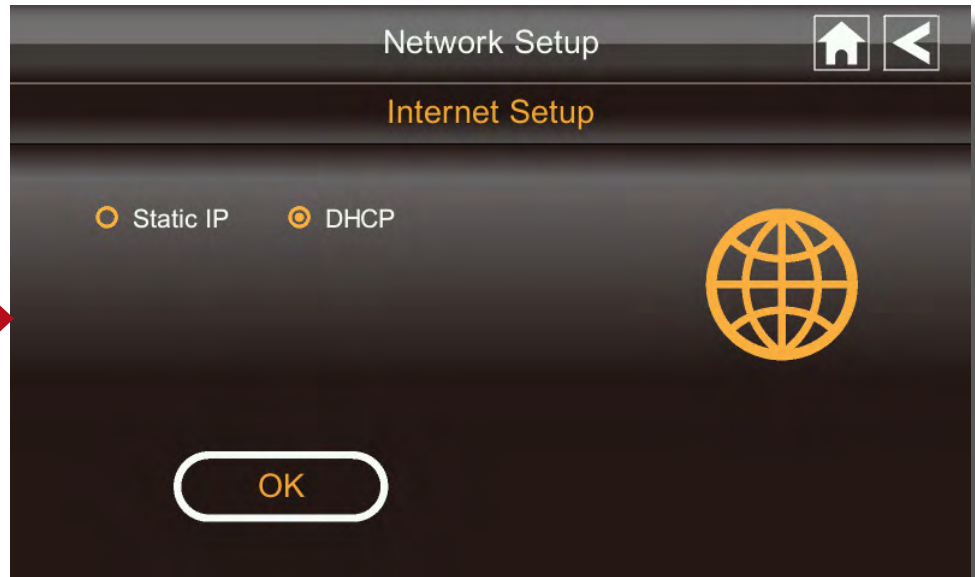
NETWORK SETUP




Network Setup Menu

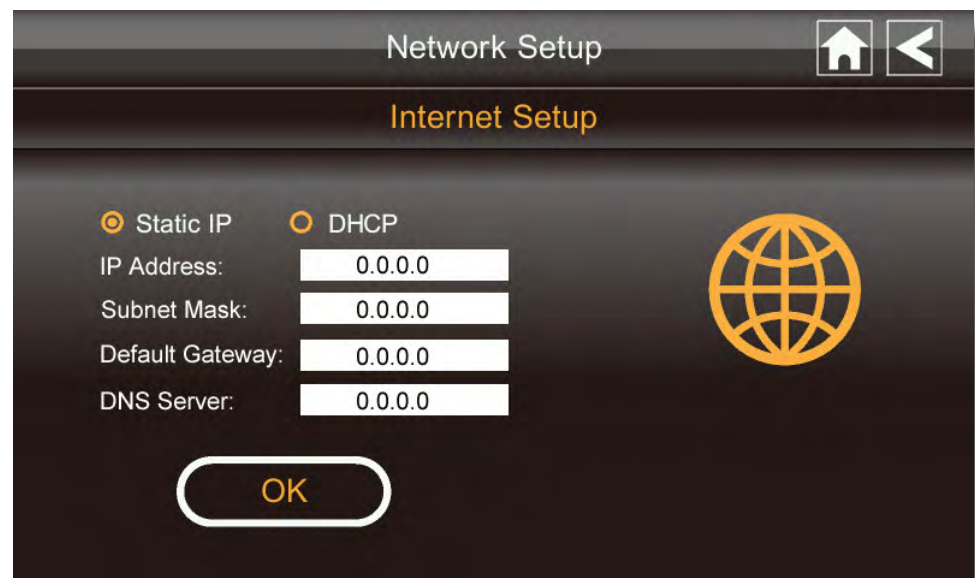
From the NETWORK SETUP icon you can access the INTERNET SETUP, SECURITY CODE and NETWORK INFORMATION menus.

Internet Setup

*Internet Setup - DHCP*

Tap INTERNET SETUP icon to display the Internet Setup screen. From there select either Static IP and DHCP (Dynamic Host Configuration Protocol), depending on the type of internet connect you have. DHCP is a protocol used by networked devices (clients) to obtain various parameters necessary for the clients to operate in an Internet Protocol (IP) network. It allows you to quickly connect to your network and obtain an IP address from the router. Static IP is for those that have the ability to specify an IP address. This is not as common as there usually is a charge from your IP Provider for this service.

1. DHCP required no further data entry.
2. Static IP requires the entry of your IP Address, Subnet Mask, Default Gateway, DNS Server. You may need to contact your IT Department or IP Provider for this information.
3. Tap OK to save your information.
4. Tap  to return to the previous screen


*Internet Setup - Static IP*

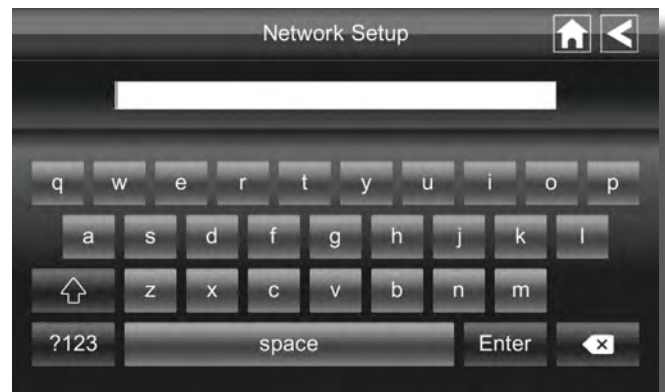
Security Code



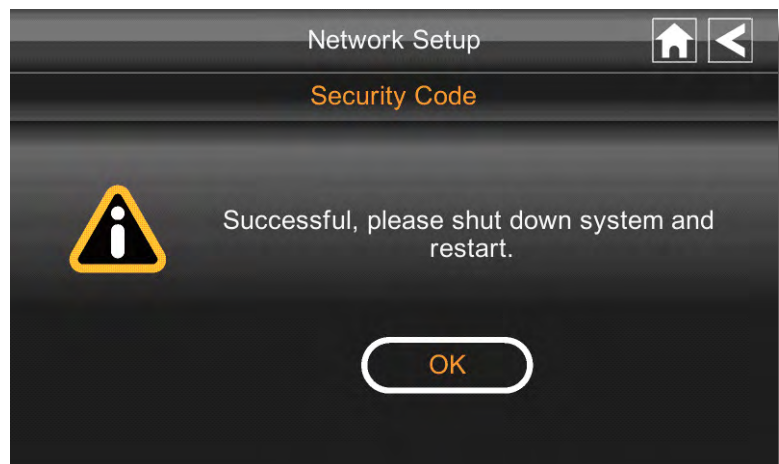
Security Code

Set up your security code to limit who can have access to the system from a remote location. The default is 123456. *Note: A Security Code must be entered to gain remote access.*

1. Tap the SECURITY CODE icon to display the Security Code screen. If you have previously entered a code, the screen will display your current code otherwise the factory default code is shown.
2. Tap on the Change Code field. A keyboard screen displays. Enter your new Security Code.
3. Tap OK and the System Restart message appears briefly then returns to the NETWORK SETUP screen. You must turn your DVR off then back on for the security code change to take effect.
4. Tap  to return to the previous screen

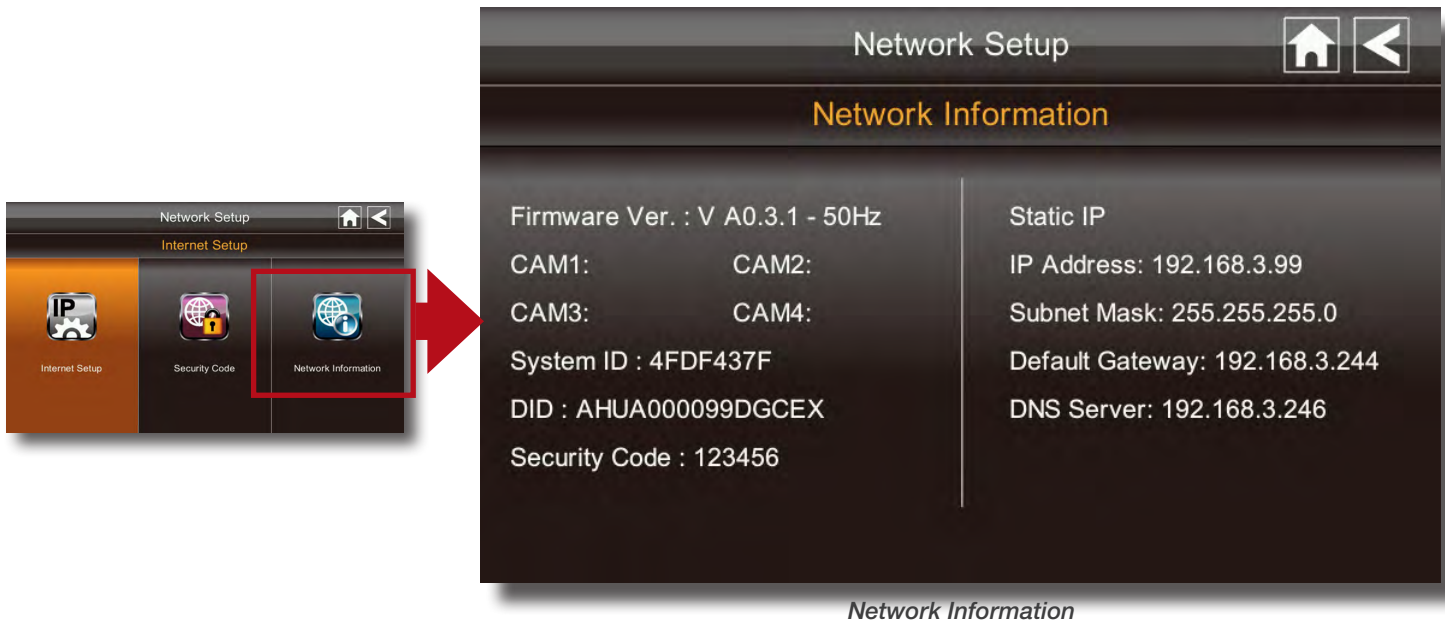


Keyboard for Data Entry




Restart Message

Network Information

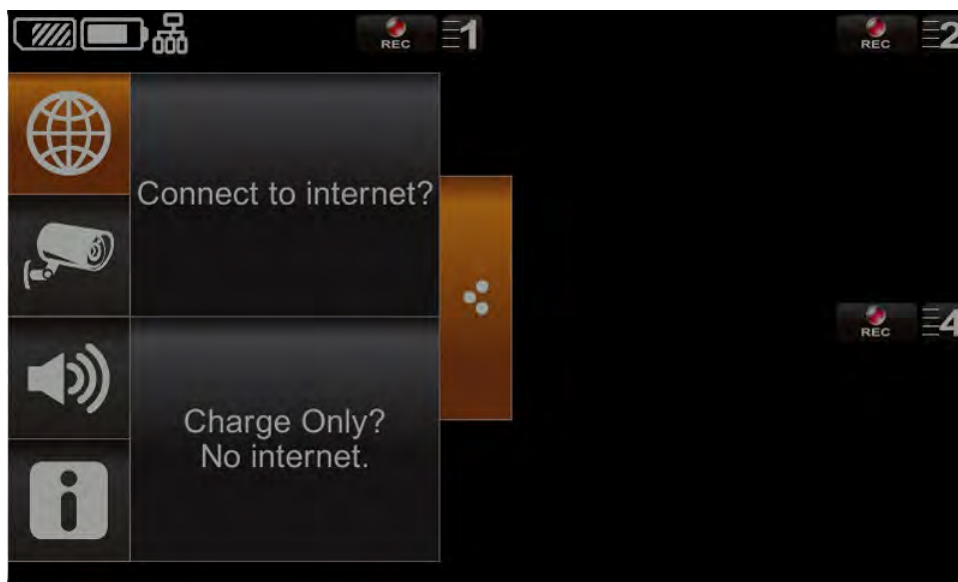


Network Information

Tap NETWORK INFORMATION icon to display the Network Information screen. This screen provides information about your firmware for your DVR and and of the four cameras that have been paired to your system. You will see a System ID and a DID code. The DID is a unique code specific to your monitor and is required to gain remote access to your cameras over the internet. The information in the DHCP setting is assigned to your monitor from your home router. You will enter this code along with your security code in your software on your smart phone or tablet device to gain remote access to your system. If you set up your system through a Static IP address, that will be displayed in the right half of the screen.

1. Tap  to return to the previous screen

CONNECTING TO THE INTERNET



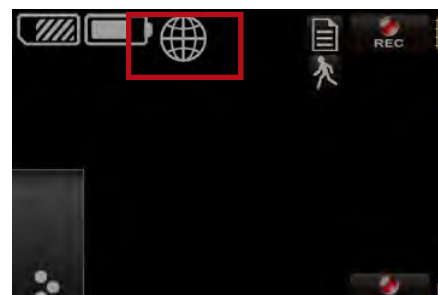
Connecting to the Internet

CONNECTING TO THE INTERNET (continued)

The docking cradle charges your monitor as well as provides an internet connection. When you are connected to the internet, live video will continue to display on the monitor, but the monitor's touch operation will become limited.

The monitor's touch operation will resume to normal operation after disconnecting from the internet by selecting the Charge Only option from the pop up menu, or remove the monitor from the docking cradle.

1. Connect the AC adapter to the docking cradle.
2. Connect the RJ45 (Ethernet) cable from the back of the cradle to your primary router (from your internet service provider).
3. Insert the monitor into the cradle. A screen is displayed asking if you want to connect to the internet or only charge the monitor.
4. Tap "Connect to Internet?". The Internet Connection Status Indicator appears on the upper left of the Live screen indicating that the system is connected to the internet (See Internet Status Indicators below). While the system is connected to the internet, the LIVE screen display rate may be reduced to 2 - 3 frames per second.
5. When you connect remotely to the monitor, the Internet Connection Status Indicator shows that remote view is in progress (See below). You can now view live video through your mobile devices. Once internet connectivity is set, the system will memorize the setting and the next time you place the monitor back into the cradle, the system will automatically connect to the internet.



Connection Status Indicator
Position on Live View Screen

CONNECTING TO THE INTRANET (HOME NETWORK)

When the monitor is placed in the cradle and "Charge Only? No Internet." is selected, you can still access your live video from a smart phone or tablet as long as those devices are also connected to the same network as the monitor. For example, if your smartphone is connected to your home network via WiFi, live video is still accesable and will be displayed on your smart phone in addition to the DVR monitor.

Note: the AC adaptor must be connected to the cradle and not the monitor for this to work.



Internet Status Indicators



Internet
Connecting



Internet
Connected




Intranet
Connected

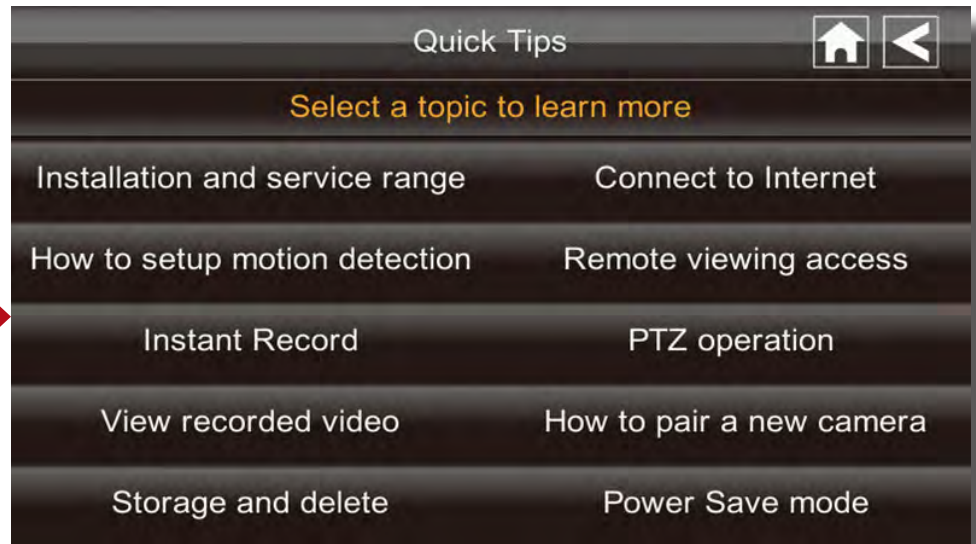


Internet Re-
mote Viewing
In Progress

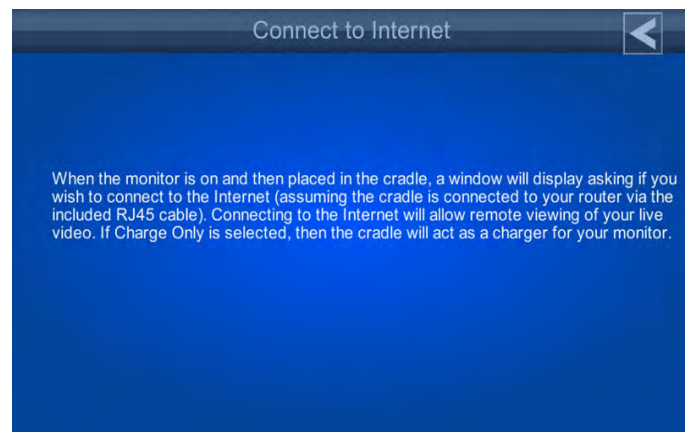
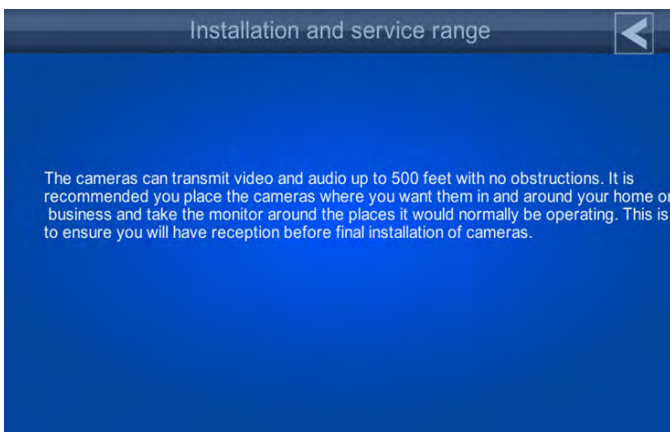
QUICK TIPS

The Quick Tips screen provides additional details on important subjects of system operation.


1. Tap on a subject to display the information.
2. Tap  to return to the previous screen



Quick Tips Main Menu



How to setup motion detection




To setup motion detection, follow the steps above to select the icons from the TAB menu and main menu. Each camera's motion detection can be set individually to Low, High or Off.

Remote viewing access




The diagram illustrates remote viewing access. A monitor is connected to the Internet. Two smartphones, labeled DID, are shown accessing the system via the Internet.

Instant Record



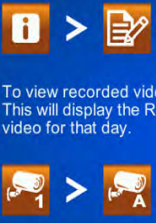
While watching live video of any camera, you can select the icon from live video screen to instantly start a recording of what you are watching. This icon will start to blink to indicate recording mode. Select it again to stop recording.

PTZ operation



To zoom in from a full screen view of live video, select the + icon. This will divide the screen into 5 sections. Select the section you would like to zoom in on and it will be enlarged to full screen. To zoom on another section, select the X icon and make another selection. Selecting the X icon again exits PTZ.

View recorded video



To view recorded video files, follow the steps indicated to select the icons from menu. This will display the Record List calendar. Highlighted days indicate there is recorded video for that day.


Select one camera number icon to see files sorted by camera or select "A" icon to view all. Select a file from the list and it will start to play. While watching a video file, you can tap on the video and a progress bar will display. Tap again to hide.

How to pair a new camera




To pair a new camera or change which camera channel you would like to see video, follow the steps above to select the icons from menu. Select the camera channel you would like to pair the new camera to. "Processing" will display for 60 seconds. During this time, press the "Pairing" button on the camera's power cable.

Storage and delete



For long term storage of recorded video files, it is recommended you transfer them to a PC. Remove the storage card and insert it into your PC to transfer. The files are in a H.264 format and can be played in QuickTime Player. Files can be deleted directly from the Record list on the monitor by selecting the X icon next to the file or, when inserted into a PC, can be deleted directly from the card.

Power Save mode

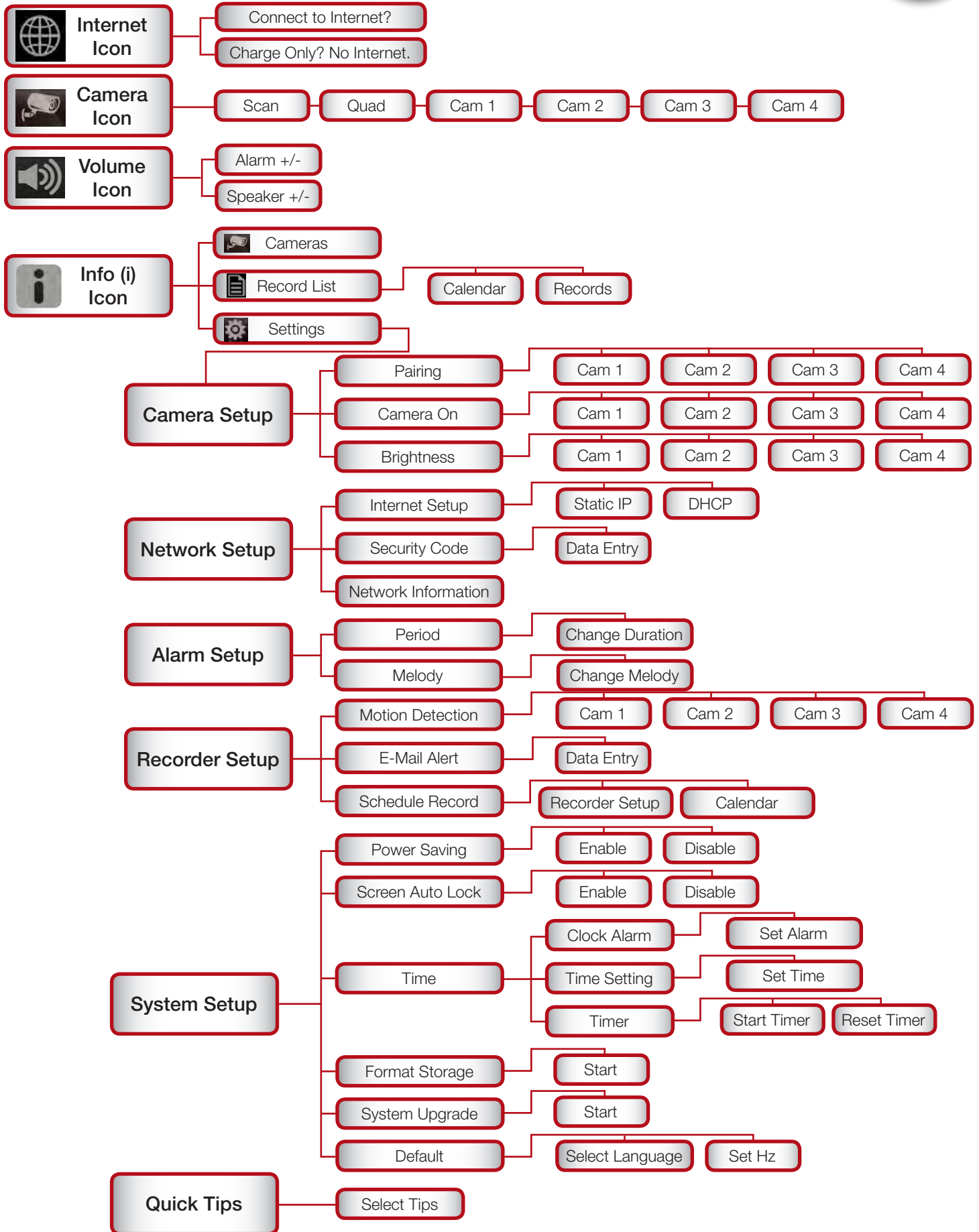


When Power Save mode is enabled, the LCD screen will turn off after two minutes of inactivity on the monitor (no user input). If motion detection turned on and is activated, the LCD will light back up to display video. To manually turn LCD back on, just press the Power button on the top right side.

TROUBLESHOOTING

ERROR	POSSIBLE CAUSE	SOLUTIONS
System is not receiving power or is not powering up	Cable from power adapter is loose or is unplugged. No power at electrical outlet.	<ul style="list-style-type: none"> • Confirm that all cables are connected correctly. • Confirm that the power adapter is securely connected to the back of the unit. • Confirm power is on at electrical outlet.
The receiver and cameras are on but there is no image on the screen	Screen lock may be on.	<ul style="list-style-type: none"> • Tap the Power button to unlock the screen. • Disable Screen Auto-lock
Live View Screen has no icons	Screen lock may be on.	<ul style="list-style-type: none"> • Tap the Power button to unlock the screen. • Disable Screen Auto-lock
SD Card is not detected by the system	SD Card is not formatted	<ul style="list-style-type: none"> • Format SD card per instructions.
There is no picture on selected channels/camera picture is not being displayed	Camera out of range	<ul style="list-style-type: none"> • Locate camera closer to receiver.
	Camera not "Paired"	<ul style="list-style-type: none"> • Connect camera through Camera Pairing menu.
	Signal is blocked	<ul style="list-style-type: none"> • If possible, remove major obstacles in between the camera and the receiver. Or, relocate the camera to another location.
	The power supply for the camera is not plugged in	<ul style="list-style-type: none"> • Confirm camera power supply is connected correctly.
No power being received at the electrical outlet		<ul style="list-style-type: none"> • Confirm power is on at electrical outlet
At night, only white appears on the screen	The camera's infra-red LEDs shine invisible light that reflects of surfaces such as glass causing white light	<ul style="list-style-type: none"> • Place the camera on the other side of windows to try to improve the night vision or place in a well lit area.
A black and white image appears at night	This is normal operation for night vision	<ul style="list-style-type: none"> • No action required.
The system will not record under SCHEDULE/MOTION detection setting	System not set up correctly or memory card is missing	<ul style="list-style-type: none"> • Ensure correct DATE AND TIME has been set and the Record Schedule setup correctly. • Ensure the memory card is inserted into DVR and formatted
SD Card is full (0% remaining) and the unit is no longer recording. "MEMORY FULL PLEASE FORMAT" is on the screen.	Memory Card Full	<ul style="list-style-type: none"> • Re-format memory card.
The recording on the DVR appears but does not have sound	Mute is on and more than one camera is activated	<ul style="list-style-type: none"> • Turn Mute off and activate only one camera. This feature is used to record images without sound for legal purposes. See page 17 for audio recording caution statement and details.
Channel(s) disappear during auto or manual scan	Channel(s) has been turned OFF	<ul style="list-style-type: none"> • Turn Camera (s) ON in Camera Setup menu.
Poor image quality	Interference	<ul style="list-style-type: none"> • Place the camera and/or receiver antenna at a new angle or readjust its position to make an improvement. • Remove obstacles between the camera and receiver that might affect the signal (e.g., furniture, cabinets, and walls.) • Relocate the camera closer to the receiver.
	Antenna direction is limited	<ul style="list-style-type: none"> • Adjust the camera antenna and receiver position
Low or unstable signal	Signal has been blocked	<ul style="list-style-type: none"> • If possible, remove major obstacles in between the camera and receiver. Or, relocate the camera to another location.
	Strong radio signal nearby	<ul style="list-style-type: none"> • Keep WIFI router away from the camera and/or receiver.
	Strong electromagnetic interference nearby	<ul style="list-style-type: none"> • Keep active appliances such as hair dryers, heat fans, air conditioners, water pumps, or microwave ovens away from the camera and/or receiver.
Audio Feedback	Camera and receiver are too close	<ul style="list-style-type: none"> • The camera has a high sensitivity microphone. Keep the camera at least 10 feet away from the receiver. If the camera must be within 10 feet of the receiver, keep the volume down.

SYSTEM MAP



TECHNICAL SPECIFICATIONS

ITEM	DEVICE PARAMETER	SPECIFICATION	SPECIFICATIONS
Receiver	Channels	4	
	Screen Type	7" LCD 16:9	
	Monitor Resolution	800 x 480	
	Video Format	NTSC (default)/PAL	
	Wireless Parameters	2.4 GHz secure digital wireless with 15 transmission channels using Frequency Hopping Spread Spectrum (FHSS) technology	
	Compression Format	H.264	
	Recording Resolution	Single Camera: 480 x 272, Quad Mode (4 cam) 320 x 240 (QVGA)	
	Communication Range	Approximately 500 feet (150 meters) open space line of sight	
	Recording Modes	Manual/Schedule/Motion Detection	
	Output	Supports real-time AV preview and recording up to 25 FPS(Single Camera Mode) or 12 fps/CH (Multiple camera mode)	
	Language	English, Spanish, French	
	Zoom	2X Digital Zoom with 5 Zone Selection Feature	
	Memory Card	4GB SD card included. Supports max. to 32GB SDHC memory card.	
	Operating Temperature	14 °F to 122 °F (-10 °C to 50°C)	
	Operating Voltage	DC 5V / 1A	
	Current Consumption	800mA (max)	
	Battery	Rechargeable 3.7V 1800mAH (LI-ON); Life: 3 hours (Power Saving Off)	
Dimensions	7.2" (184mm) x 5.0" (128mm) x 1.1" (28mm)		
Camera	Camera Resolution	640 x 480	
	Image Sensor	OmniVision OV7725 1/4" CMOS	
	IR LED's	25	
	IR Cut Filter	Automatic for daytime true color	
	Weather Resistant Rating	IP-66	
	Night Vision	60' (18m)	
	Operating Temperature	14 °F to 122 °F (-10 °C to 50°C)	
	Operating Voltage	DC 5V / 1A	
	Current Consumption	IR LED ON :550mA ; IR LED OFF :350mA	
	Dimensions	4.2"D (106mm) x 2.4"W (61mm) x 2.7"H (68mm) camera barrel only 4.8"D (122mm) x 2.8"W (71mm) x 8.0"H (203mm) w/stand and antenna	

WARRANTY

PRODUCT LIMITED WARRANTY

BRK Brands, Inc., (“BRK”) the maker of First Alert® brand products warrants that for a period of one year from the date of purchase (the “Warranty Period”), this product will be free from defects in material and workmanship. BRK, at its sole option, will repair or replace this product or any component of the product found to be defective during the Warranty Period. Replacement or repair will be made with a new or remanufactured product or component. If the product is no longer available, replacement may be made with a similar product of equal or greater value. This is your exclusive warranty.

This warranty is valid for the original retail purchaser only from the date of initial retail purchase and is not transferable. In order to obtain warranty service, you must keep the original sales receipt and proof of purchase in the form of the UPC code from the package. BRK dealers, service centers, or retail stores selling BRK products do not have the right to alter, modify or any way change the terms and conditions of this warranty.

WARRANTY EXCLUSIONS

Parts and Labor: 1 year limited (warranted parts do not include bulbs, LEDs, and batteries)

This warranty does not apply to bulbs, LEDs, and batteries supplied with or forming part of the product.

This warranty is invalidated if non- BRK accessories are or have been used in or in connection with the product or in any modification or repair is made to the product.

This warranty does not apply to defects or damages arising by use of the product in other than normal (including normal atmospheric, moisture and humidity) conditions or by installation or use of the product other than in strict accordance with the instructions contained in the product owner’s manual.

This warranty does not apply to defects in or damages to the product caused by (i) negligent use of the product, (ii) misuse, abuse, neglect, alteration, repair or improper installation of the product, (iii) electrical short circuits or transients, (iv) usage not in accordance with product installation, (v) use of replacement parts not supplied by BRK, (vi) improper product maintenance, or (vii) accident, fire, flood or other Acts of God.

This warranty does not cover the performance or functionality of any computer software included in the package with the product. BRK makes no warranty that the software provided with the product will function without interruption or otherwise be free of anomalies, errors, or “Bugs.” This warranty does not cover any costs relating to removal or replacement of any product or software installed on your computer.

BRK reserves the right to make changes in design or to make additions to or improvements in its products without incurring any obligations to modify any product which has already been manufactured. BRK will make every effort to provide updates and fixes to its software via its website. This warranty does not cover any alteration or damage to any other software that may be or may become resident on the users system as a result of installing the software provided. This warranty is in lieu of other warranties, expressed or implied, and BRK neither assumes nor authorizes any person to assume for it any other obligation or liability in connection with the sale or service of the product. In no event shall BRK be liable for any special or consequential damages arising from the use of the product or arising from the malfunctioning or non-functioning of the product, or for any delay in the performance of this warranty due to any cause beyond its control.

BRK does not make any claims or warranties of any kind whatsoever regarding the product’s potential, ability, or effectiveness to prevent, minimize, or in any way affect personal or property damage or injury. BRK is not responsible for any personal damage, loss, or theft related to the product or to its use for any harm, whether physical or mental related thereto. Any and all claims or statements, whether written or verbal, by salespeople, retailers, dealers, or distributors to the contrary are not authorized by BRK, and do not affect this provision of this warranty.

BRK’s responsibility under this, or any other warranty, implied or expressed, is limited to repair, replacement or refund, as set forth above. These remedies are the sole and exclusive remedies for any breach of warranty. BRK is not responsible for direct, special, incidental, or consequential damages resulting from any breach of warranty or under any other legal theory including but not limited to, loss profits, downtime, goodwill, damage to or replacement of equipment and property and any costs of recovering, reprogramming or reproducing any program or data stored in or used with a system containing the product accompanying software. BRK does not warrant the software will operate with any other software except that which is indicated. BRK cannot be responsible for characteristics of their party hardware or software which may effect the operation of the software included.

Except to the extent prohibited by applicable law, any implied warranty of merchantability or fitness for a particular purpose is limited in duration to the duration of the above Warranty Period. Some states, provinces, or jurisdictions do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state, or province to province, or jurisdiction to jurisdiction.

OBTAINING SERVICE

If service is required, do not return the product to your place of purchase. In order to obtain warranty service, contact the Consumer Affairs Division at 1-800-323-9005, 7:30 a.m. – 5:00 p.m. Central Standard Time, Monday through Friday. To assist us in serving you, please have the model number and date of purchase available when calling.

After contacting the Consumer Affairs Division and it is determined that the product should be returned for Warranty Service, please mail the product to: BRK Brands, Inc., 3901 Liberty Street Road, Aurora, IL 60504-8122.



First Alert[®]

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