2.4GHz Wireless 7 Inch LCD Quad DVR
i: Brief Introduction

This product is a cost-effective wireless digital security system for home use, this device adopt dynamic detecting technology, SD Card recording, It supports single screen and 4 channel's screen display, video recording and photos simultaneously. It can record and take photos manually, also can record and take photos automatically when there are moving objects.

ii: Application

warehouses, shopping malls, home security, care for children and the elderly

iii: Features

- Support standard NTSC/PAL TV system video output
- Support single screen and 4 channel's screen display simultaneously
- Support synchronized video and audio recording function
- Support system information display in the screen(OSD)
- Support 32 GB SD Card
- Support real-time clock display
- High definition CMOS image sensor
- Support Motion Detection recording and photos at any period time
- Support overwrite function
- Single and 4 Channel's video and photo simultaneously
- Support record audio simultaneously when recording video in single scene
- 7 Inch 800*480 High Resolution LCD Screen Display

iv: Function key Illustration

4.1: Camera key illustration

1: Power/Pair Switch: Long press 1-2 second to switch on, work indicator is on all the time; Short press to switch off. Long press this key for 3 seconds to begin pairing process after switching on, work indicator led flicker continuously.

2: When the work indicator led is Red, it means the battery voltage is too low, please charge the battery.

3: When the light of the camera is lower than the night vision control light, it will switch on the night vision led automatically, realize 24-hours monitoring.

4.2 Receiver key illustration
Work Indicator Led
Power Switch
Menu/ESC Key
Down/Voice adjustment key
UP/Talk intercom Key
Right 4 channel screen, Single picture cycle, display switch key for single picture
Left/Channel switch key
Confirm/Take photos manually
Bracket

DC Power Input
A/V OUT, connect TV to display
SD Card Slot

4.2.1: Receiver key illustration
A/V OUT: Audio/Video output; AV input for connecting to LCD monitor or TV
DC IN: DC 12v/1000ma Power Input
LED: Power Switch Key, Long press to switch on/off.

LED: Status indicator, it flashes interval if it is not online with camera; it will be on all the time after online.
SD: SD card slot, support 32 GB SD card maximum
MENU/ESC: Press this key to enter to Main Menu, press this key again to return to previous mode or exit Menu.
OK: confirmation key, Press this key to take photos manually or recording (If you set it as recording, it will start recording; If you set it as photos, it will start taking photos.) in preview mode.

<: Left Key, Move left direction in Menu mode; Switch camera channel (CH1-CH4) in monitoring mode
>: Right Key, Move right in Menu mode; Switch 4 channel screen, single screen looping, and single screen display format.
▲: Up Key, Move up and adjust parameters in Menu mode; Long press to talk intercom in Preview mode, and LCD screen display "T" letter.
▼: Down Key, Move down and adjust parameters in Menu mode; Adjust voice volume in monitoring mode.

4.3: Remote control function illustration
OK: same as the LCD Monitor
MENU: same as "Menu/ESC" function of LCD Monitor
UP: Move up and adjust parameters in Menu mode
DOWN: same as "Down" function of LCD Monitor
LEFT: same as "Left" function of LCD Monitor
RIGHT: same as "Right" function of LCD Monitor

v: SD Card notice:
- Human body's static electricity can cause permanent damage to the SD card, do not touch the SD Card's metal part by hand directly.
- Please format the SD card first when you use the SD card in this device for the first time.
- Recommend you use not less than 2GB Class 6 SD Card and it can support 32 GB SD Card maximum.
- Please cut off the power before plug in/out the SD Card.
- Prohibit to plug in/out the SD card during the recognition SD Card process.
- If you use the video recording function for a long time, suggest that you should format the SD card and repair the disk timely to ensure the stability.

vi: Operating instruction
6.1: Switch ON/OFF Operation
A: Camera switch
After connecting the power, long press 1-2 second to switch on, and the green Led is on all the time.
B. Receiver switch
After connecting the power, long press power switch key for 3 seconds to switch on, LED is bright. It will enter preview mode directly after switch-on mode.

6.2. Menu Setting
Press Menu key to enter to Main menu, and press Menu key to exit main Menu.

- Playback Menu
- Recording Setting Menu
- Channel Setting
- Brightness/Contrast Setting
- Timing Recording Setting Menu
- Motion Detection Setting
- Advanced Setting Menu
- Exit Menu

Playback Menu
Press UP/Down/Left/Right keys to move to icon, and press OK key to enter. It will appear VIDEO and PICTURE two file folder, then press UP/Down/Left/Right keys to move, and press OK key to confirm. Press MENU key to return to previous mode, every file folder is named according to Year/Month/Date.

For Example: 2012/07/16. It means the file is recorded or taken on July 16th, 2012, the files in this folder is classified according to the time. Such as 15:00, it means the file is recorded at 15:00 on July 16th, 2012, and so on.

Press MENU key to choose whether delete the file in playback mode, select "YES" to delete, select "NO" not to delete the file.

Note: this Menu only can be operated after insert the SD Card. LCD screen will display icon after insert the SD Card. And it will not display SD Card icon without insert SD card or unrecognized SD card.

Recording Setting Menu:
Press UP/Down/Left/Right keys to move to Recording Setting, then press OK key to enter. Press UP/Down/Left/Right keys to move to the selections which need to setting, and press OK key to enter, press MENU key to return, there are 5 selections.


Setting:
- Take 1 Photo: Press OK key to take 1 photo in the preview mode;
- Take 3 Photo: Press OK key to take 3 photos continuously in the preview mode;
- Take 5 Photo: Press OK key to take 5 photos continuously in the preview mode;
- 5s Video: Press OK Key to record 1 video for 5 seconds in the preview mode, then it will stop recording automatically;
- 10s Video: Press OK key to record 1 video for 10 seconds in the preview mode, then it will stop recording automatically;
- 30s Video: Press OK key to record 1 video for 30 seconds in the preview mode, then it will stop recording automatically;
- 1Min Video: Press OK key to record 1 video for 1 minute in the preview mode, then it will stop recording automatically;
- Manual: Press OK key to start recording video after setting in the preview mode. Each video is 30 minutes for manual recording, you can stop during the recording process. It will save 1 video and continue to record without any stop, unless the SD Card memory is full.

Exit: Press UP/Down/Left/Right keys to move to this option, and press OK key to return to previous menu, or press MENU key to return to previous menu directly.

2. Loop recording
Enable:
ON: Open looping recording, it will appear icon in the preview mode after opening Looping recording option. During the Motion detection, it will delete the oldest files automatically when the SD card memory is full.
OFF: Close Looping recording. It will appear icon in the preview mode, and it will not record files when the SD card memory is full.

3. SD Format:
NO: Not format.
YES: Format.

Note: Please format the SD Card first in this device when you insert any new SD Card.

4. SD Info: SD Card Information Display.
Size: Maximum capacity display.
Size used: Used capacity display.
Size remain: Remain capacity display.

5. Exit: Press UP/Down/Left/Right keys to move to this option, press OK key to return to previous menu, or press MENU key to return to previous menu directly.

Channel Setting

Press UP/Down/Left/Right keys to move to channel setting, and press OK key to enter. Then press UP/Down to move, and press OK key to confirm and exit.
CAM1: Channel 1 switch, press OK key to return to preview mode, and it will work in Channel 1;
CAM2: Channel 2 switch, press OK key to return to preview mode, and it will work in Channel 2;
CAM3: Channel 3 switch, press OK key to return to preview mode, and it will work in Channel 3;
CAM4: Channel 4 switch, press OK key to return to preview mode, and it will work in Channel 4;
Quad: View 4 channel screen display simultaneously, press OK key to return to Preview mode, it will display 4 channel simultaneously.

Brightness/Contrast Setting

Press UP/Down/Left/Right keys to move to Brightness/Contrast Setting option, and press OK key to enter, press UP/Down Key to move, and press Left/Right Key to adjust parameters.
Contrast: Contrast 0-9 grade is adjustable;
Brightness: Brightness 0-9 grade is adjustable.

Timing Recording Setting

Press UP/Down/Left/Right keys to move to Timing recording setting option, and press OK key to enter, press UP/Down to move, and press Left/Right Key to adjust parameters.
Enable: Open/Close timing recording.
ON: Open timing recording, Set timing recording and motion detection recording in "ON" position, motion detection can work.
OFF: Close timing recording; It is useless no matter you open motion detection or close motion detection when you set this option;
Start Time: Set the motion detection start time.
End Time: Set the motion detection end time.

Motion Detection Setting

Press UP/Down/Left/Right keys to move to Motion Detection Setting option, and press OK key to enter, press Left/Right key to adjust parameters.
Enable: Open/Close Motion Detection.
ON: Open Motion Detection Function. It will display icon in the preview mode after set this option, also set timing recording in "ON" position, it will take photos and record videos automatically when there are moving objects in the setting work time.
OFF: Close Motion Detection Function, It will not display icon in the preview mode after set this option, and it will not record video or take photos when there are moving objects.
Sensitivity: Detect sensitivity setting.
Low: Low Sensitivity.
High: High Sensitivity.
Standard: Medium Sensitivity.

Advanced Menu Setting

Press UP/Down/Left/Right keys to move to Advanced Menu Setting option, and press OK key to enter.

1. Pair: Pair setting, press UP/Down/Left/Right keys to move and press OK key to confirm.
CAM1 Pair: It will display unpair when you have not pair the camera or the pair is not successful, press UP/Down/Left/Right keys to move to CAM1 position, and press OK key to start pair, it will display pairing, meanwhile, press camera power key for 3 seconds to begin pair after switch on the camera. And it will display "Paired" after the pair is successful.
Other Channel CAM2, CAM3, CAM4, the pair operating is the same as CAM1. Please move to Exit or MENU key to exit Pair menu after you finish the pairing process.

2. Date&Time Setting:
Press OK key to begin setting, press Left/Right key to move, and press UP/Down key to adjust parameter; font will be Red when you move to which setting option, and press OK key to confirm after setting.
Date: Date setting Format is year/month/date;
Time: Time Setting, Format is Hour/Minute.
Stamp: Days of printing.
ON: It will display time and date in the preview mode (when there is a camera image), and it will also display date for the recording files.
OFF: It will not display the time and date in the preview mode and recording files when switch off this option.

3. Auto Switch Setting:
Press UP/Down key to move, and press Left/Right key to adjust parameter. 
CAM1—CAM4: 4 Channels can not choose until each channel has finished the pair successfully. And Unpair camera can not choose this option. Also the selected cycle channel will have “Tick” display.
Switch Time: Press Left/Right key to adjust parameter, press OK key to confirm and exit. 
5 sec: switch to next Channel automatically every 5 seconds interval in selected cycle channel.
10 sec: switch to next Channel automatically every 10 seconds interval in selected cycle channel.
30 sec: switch to next Channel automatically every 30 seconds interval in selected cycle channel.
1 minute: switch to next Channel automatically every 1 minute interval in selected cycle channel.
It will display cycle icon in each cycle channel.

4. Temperature Setting:
Press UP/Down Key to move, press Left/Right key to adjust parameter, and press OK key to confirm and exit.
Unit: Unit Display
C: Temperature display XX °C
F: Temperature display XX °F

5. VOX Setting:
Press UP/Down Key to move, and press Left/Right key to adjust parameter.
Alarm: Open/Close VOX.
ON: LCD screen will display icon after set this option, and LCD Monitor will switch off screen automatically if there is without any voice (Setting time) from the camera. And LCD monitor will switch on screen when there is any voice from the camera (sound level is higher than the voice control sound level).
OFF: LCD Monitor is on all the time after set this option, and LCD screen without display.
Sensitivity: VOX Sensitivity Adjustment
LOW: When the sound level of camera is above 75db, it will trigger the receiver to open LCD display;
High: When the sound level is above 65db, it will trigger the receiver to open LCD display.

There are 4 selections, 30 seconds, 1 minute, 5 minutes, 10 minutes. There are without any sound from the camera in the setting time, or sound level is lower than the voice control sound level, LCD monitor will switch off screen automatically and enter to save-electricity status. When set the VOX in “ON” position, there are sound from the camera (higher than voice control sound level), it will trigger receiver to open LCD display. And press MENU key to exit after finish the setting.

6. Advanced Setting:
Press UP/Down key to move, and press Left/Right key to adjust parameter.
Quality: Image quality selection.
High: The recording file capacity will be slightly higher.
Low: The recording file capacity will be slightly lower.
TV out Format: PAL TV system and NTSC TV system, LCD screen will display the corresponding icon, for example, PAL system display icon.
Talk Volume: Camera’s voice volume adjustment, 0-6 grade is adjustable. Press MENU key to exit after finish the setting.

7. Reset to Factory Default:
Press UP/Down key to move to YES, then press OK key to confirm Factory Default setting, and select No not to reset to Factory Default.


9: Exit: Exit Advanced Setting Menu.

Exit Menu:
Press UP/Down/Left/Right keys to move to icon, and press OK key to exit setting menu and return to preview mode, or press MENU key to exit directly.

vii. Parameters

<table>
<thead>
<tr>
<th>A: Receiver</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>2.4G ISM Digital public band</td>
</tr>
<tr>
<td>Work method</td>
<td>AFH and TDMA</td>
</tr>
<tr>
<td>Receiver Sensitivity</td>
<td>-90dBm</td>
</tr>
<tr>
<td>Work Voltage</td>
<td>DC12V /1000MA</td>
</tr>
<tr>
<td>LCD Size</td>
<td>7 inch</td>
</tr>
<tr>
<td>LCD Resolution</td>
<td>800*480 RGB</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Work current</td>
<td>≥600MA</td>
</tr>
<tr>
<td>Video output</td>
<td>1Vp-p CVBS</td>
</tr>
<tr>
<td>Video output system</td>
<td>PAL and NTSC</td>
</tr>
<tr>
<td>Video format</td>
<td>A4f. play on computer with Specific software</td>
</tr>
<tr>
<td></td>
<td>Single screen status: 640*480 @25fps</td>
</tr>
<tr>
<td></td>
<td>4 screen status: 320*240 @25fps</td>
</tr>
<tr>
<td>Photo format</td>
<td>Single screen status: 640*480 JPG</td>
</tr>
<tr>
<td>SNR</td>
<td>46dB</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0℃~50℃</td>
</tr>
</tbody>
</table>

**B: Transmitter**

<table>
<thead>
<tr>
<th>Work Voltage</th>
<th>DC5V/1000MA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>2.4G ISM Digital public band</td>
</tr>
<tr>
<td>Transmit power</td>
<td>17dBm</td>
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<tr>
<td>Operating Range</td>
<td>Open field: 150-250meters</td>
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<tr>
<td>Work Current</td>
<td>No night vision: 550MA MAX With night vision: 650MA MAX</td>
</tr>
<tr>
<td>Camera Resolution</td>
<td>0.3 Mega Pixel</td>
</tr>
<tr>
<td>Battery Capacity</td>
<td>800MAH</td>
</tr>
<tr>
<td>Continuous use time</td>
<td>50-70Minutes</td>
</tr>
<tr>
<td>Night vision range</td>
<td>3-5 Meters</td>
</tr>
</tbody>
</table>

**viii. Note**

1: Please do not operate in high temperature, high magnetic and strong light field.
2: Use the designated power adaptor and battery in case any serious damage of this product.
3: Do not put this product in those places which the temperature is extremely low or high.
4: Please avoid water and dust.
5: Please do not plug in/out the SD card when it is hot, and please format it first when you use it for the first time.

**ix. Problems & Solutions**

1: No image

Answer: Check whether the power adaptor is connected well, and check whether the camera and receiver is in the same channel after the paring, or try to make paring again.

2: The image is not stable when it is single screen

Answer: Please check whether the camera is set in the Channel cycle status, if it is in Channel cycle status, it will switch and display automatically.