

# **Digital Wireless Lighting Cam**



Version 0.1

01/Apr

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## A. Camera kit contents

- SLDCRF Digital Lighting Camera\_Camera
- SLDCRF Receiver box
- SLDCRF Remote controller
- USB Cable
- AV out cable
- AC/DC adaptor
- CDROM, Content with SLDCRF Webcam driver
- User Manual

# **B. SLDCRF overview**

## 1. Front view of camera



- **Floodlight**: It can be rotate and tilting to adjust the lighting area. The max rotation is +/-30 Deg, tilting angle is 10 Deg.
- **Flood light screw**: Release to open the flood light case to replace the halogen lamp
- Flood light cover: Open to replace lamp
- **Halogen lamp**: For lighting purpose, please use the correct voltage and wattage of halogen light for this product. Halogen lamp R7S, Max power: 300W.
- Front cover locker: Use to open or lock the front cover
- Front cover
- PIR: Passive Infrared movement sensor.
- **Cam Lens**: This is the digital camera lens. Please use a soft cloth to clear if necessary,
- **TEST Indicator**: It is a red LED to indicate the PIR detection coverage area.
- **Camera body**: It can be rotate and tilting to adjust PIR detection area. The max rotation is +/-30 Deg, tilting angle is 30 Deg.

- Wall mount bracket: Use to mount the SLDCRF to the wall by provided screws
- **EVA foam**: Install between wall and wall mount bracket to prevent the water leaking.

## 2. Control panel view of camera

After open the front cover, you will find control panel as below

• **PAIR**: It uses to matching pair with receiver box.



3. View of receiver box





- MENU Button: Press to go tparameter settings.
- **UP/DOWN button**: To program the camera parameters as Still image/Video/Resolutions/Date/Time/Video recording time/ Image and video capturing interval time...
- **OK button**: Press to confirm the settings.
- **SD memory card slot**: To install a SD memory card. Ensure card is unlocked and it firmly pushed in. Press again to release and remove.
- **POWER button**: Press to turn on the power of Receiver box while it is power off.
- DC 5V socket: Power source connector, connecting to provided AC/DC adaptor
- **AV OUT socket**: Video and Audio signal output port, connecting to provided AV cable to TV
- **USB socket**: To connect the USB cable from SLDCRF to PC to access the captured image/video.
- **Infrared receiver**: To receive the remote control signal from REMOTE controller.

• **Operation indicator**: Shows the operation status of Camera and Receiver box.

**Blinking**: Indicating data is transmitting from camera to receiver box.

Light up: Indicating the SLDCRF is operating.

• LCD display



**CAMERA**: Still image capture icon. Indicates your SLDCRF will capture a single image.

**VIDEO**: Video-capturing icon. Indicating your SLDCRF is in video capturing mode and recording time will depend on the video recording time setting.

**18-88-88**: Image/video counter to show how many images or videos have been captured. And at parameter settings, it shows the Date and Time setting.

**RESOLUTION HIGH**: Indicates the SLDCRF is in highresolution still image capturing or video capturing.

**RESOLUTION LOW**: Indicates the SLDCRF is in Lowresolution still image capturing or video capturing.

DATE: Indicates the SLDCRF is in Date setting.

TIME: Indicates the SLDCRF is in Time setting.

**TIME OUT**: Indicates the SLDCRF is in Time interval setting.

**FORMAT**: Indicates the SLDCRF is in SD card Format setting.

4. View of Remote controller



• **POWER button**: Press once to turn on the power of Receiver box while power is off. Pressing and hold it 2 seconds to turn off the power of Receiver box while it is power on.

It is same function of POWER button on the receiver box.

- **AV button**: When receiver box is connected to TV by provided AV cable, pressing and hold AV button 2 seconds to switch the receiver box to AV OUT mode from receiving mode.
- **SET button**: Pressing and hold 2 seconds to switch the receiver box back to receiving mode
- MENU Button: Press to go to parameter settings.
- **UP/DOWN button**: To program the camera parameters as Still image/Video/Resolutions/Date/Time/Video recording time/ Image and video capturing interval time...
- **OK button**: Pressing to confirm the settings.
- **Infrared transmitter**: To transmit remote control data from remote controller to receiver box.

#### 5. Picture / Image Capacity

SD card	High 1.3M 1280 x 800	Low VGA 640 x 480	Base CIF 384 x 240	AVI VGA 10 seconds
1G	2500	5000	10000	200
2G	5000	10000	20000	400
4G	10000	20000	40000	800

**NOTE**: Picture / Image Capacity Chart shows the approximate number of images or video clips that can be stored based on the resolution setting and the size of memory card. These figures may vary depending on the amount of detail in the image.

#### Memory Options - Up to 4GB SD card

Your SLDCRF wireless lighting camera is equipped with 32MB built in SDRAM memory. Please note that the built in memory is only for storage buffer and data processing buffer only, the captured image or video cannot store on internal memory, please install the memory card to memory card slot of receiver box. The memory card slot capable of accepting up to 4GB SD card (sold separately). With no memory card inserted into the

slot, the display will show " **Err** " to indicate non memory card installed. Also, it is not recommended that a card is inserted or removed during operation as this can cause malfunction.

## C. Mounting the camera

Mount the SLDCRF to a solid surface more than  $\frac{1}{2}$ " or 12.7mm thick in a secure location overseeing the area to monitor. We suggest you mount the camera between 2 meters off the ground with the camera pointing at a downward angle 15 degrees. Be sure to avoid mounting the camera facing east or west as the rising and setting of the sun may produce false triggers and overexposed images.

Ensure the front of your SLDCRF is clear of any branches and other debris so your camera view or PIR sensor are not obscured.



1. Connect the SLDCRF to AC power.



Please make sure your SLDCRF is rated for your voltage before connection. Incorrect voltage will damage the camera.

**BLUE WIRE FOR NEUTRAL** 



YELLOW / GREEN WIRE FOR EARTH

BROWN WIRE FOR LIVE

# IMPORTANT

- Observe correct wiring as failure to do so will damage unit and void warranty
- We recommend using a supply that you can switch off if required. Once wired correctly, turn on the mains supply.
- When connected, if the environmental brightness is not enough, the SLDCRF lamp will turn on for approximately 60 seconds. This 60 seconds to inform user leave the capturing area, then it is ready for operation and will begin recording images each time the motion sensor is triggered.

2. Replacing the halogen lamp.

# CAUTION SLDCRF lamp will be very hot.

- Always disconnect the power to your SLDCRF before opening.
- Release the floodlight screw to open the floodlight cover.
- Carefully remove the Halogen lamp it may be HOT.
- Insert a new Halogen lamp making sure you do not touch the lamp with bare skin. Halogen Lamp : Max 300W R7S
- Close the floodlight cover and screw together carefully.

## D. Setup – getting started

## 1. Connecting the power to receiver box

- Place the receiver box at a desk or somewhere easy to access and easy for remote controller to access.
- Plug the provided AC adaptor to wall AC outlet as below
- Plug the small plug to receiver box DC 5V as below.
- Please make sure the output voltage of AC outlet is correct to match the operation AC voltage of AC adaptor. The operation voltage of AC adaptor is 100 ~ 240 volts.





- 2. Inserting SD card receiver box
  - SD cards must not contain any other images and you must ensure your SLDCRF receiver box is power off when adding or removing an SD memory card, and make sure the SD card is unlock. Failure to observe these rules may result in malfunction.
  - Inserting the SD memory card into the SD card slot completely and in the correct direction as shown on the inside of the housing.
  - ✤ DO NOT FORCE THE SD CARD
  - To remove the SD memory card by pushing the SD card in, and it will spring out, now pull out the card gently.

#### 3. Matching pair of Camera with Receiver box

- After mounting the SLDCRF Camera to wall properly.
- Using the hex screw driver to release the screw from front cover, then turn front cover anti-clockwise and then take front cover off.
- A PAIR button will be found on the control panel.
- Press the POWER button of receiver box to turn on the receiver power.
- Press UP, DOWN and OK button at the same time once within 30 seconds of power up.
- The display of receiver box will show **P10** and start counting down.
- Press the PAIR button of camera once.
- The display of receiver box will stop counting down and after 3 seconds, the operation indicator will turn on.
- SLDCRF Camera is now matched pair with receiver box.

#### 4. Testing the capturing area PIR coverage area

The testing is to make sure that the capturing and PIR coverage area is correct.

 After completing above matching pair steps, connect the provided AV cable to AV OUT of receiver box and AV IN of TV as below



- Changing the TV to play the AV
- The TV will show live footage of camera.
- Adjust the position of your SLDCRF if necessary, until the desired coverage area is achieved.

• When you have completed the coverage area testing, please disconnect the AV cable from receiver box and TV, or press the **SET** button from the remote control unit to switch receiver box back to capturing mode.

## E. Program the parameters

## 1. Default Settings.

You can change the parameters on your SLDCRF from receiver box. The default values are shown below.

Setting	Default	
Time	12:00	HH:MM
Date	01:01:10	MM:DD:YY
Image capture interval	1 minute	01-59
Resolution	High	High/Low/Base
Burst	2P	1 - 3P
Image capture method	Photo	Video/Photo
Floodlight control	Auto	Auto
Video recording time	10 seconds	05 - 60

Your SLDCRF can be used straight away but before use you may wish to change some or all of the settings – see the next sections.

#### 2. Set the Resolution

After power on the receiver box, press the SET button then MENU button within 30 seconds to enter programming.

If MENU button is not pressed within 30 seconds, camera will automatically enter PIR detection mode.

The first program setting is resolution.

- After pressed the MENU button
- The word RESOLUTION will be blinking on the display.
- Press OK button to choose the selection.
- Press the UP or DOWN button to select the desired resolution HIGH / LOW or BASE
- And then press OK to save and exit to CAPTURING setting.

#### 3. Set the capturing sequence

Set the Still Image Mode. Your SLDCRF can be programmed to shoot 1~3 pictures per triggering.

- After exit the resolution setting, the word CAMERA will be blinking on the display
- Press OK button to choose the selection.
- Then the number of burst mode will now blink. Press the UP or DOWN button to select the desired burst mode setting (1P to 3P of pictures per triggering).

The number of burst mode is 1P to 3P.

Press OK to save your selection and exit to TIME OUT settings.

# Set the Video Mode: Your SLDCRF can program to record 5~60 seconds of video per triggering.

- After pressing the MENU button, press UP button twice to enter video setting mode. The word VIDEO will be blinking on the display
- Press the OK button and the video length in seconds will be blinking.
- Press the UP or DOWN button to select the desired video length (from 5 seconds to 60 seconds in 5 second increments).

• Press the OK button to save and exit to TIME OUT setting.

## 4. Set the Time out

- The word TIME OUT will be blinking on the display
- Press the OK button and the time out time will now blink.
- Press the UP or DOWN button to increase or decrease the interval time value in minutes from 01 to 59 minutes.
- Press the OK to save your selection and exit to Date & Time setting.
- 5. Set the Date and Time: This SLDCRF uses the 24hr military time format.
  - The word TIME will be blinking on the display.
  - Press the OK button to enter minute setting first.
  - Minute digit will be blinking. Press UP or DOWN to increase or decrease the minute value (0 59)
  - Press OK to confirm the minute setting and enter hours setting.
  - Hour digit will be blinking. Press UP or DOWN to increase or decrease the hour value (00 23)

- Press OK to confirm the hour setting and enter year setting.
- Year digit will be blinking. Press UP or DOWN to increase or decrease the year value.
- Once this is done, press OK and enter month setting.
- Month digit will be blinking. Press UP or DOWN to increase or decrease the month value. (01 12)
- Press OK to confirm the month setting and enter date setting.
- Date digit will be blinking. Press UP or DOWN to increase or decrease the date value. (1 – 31)
- Once this is done, press OK to save. You'll see the word "- dEL -" blinking. Now press [MENU] to exit program setting and go back to status screen.
- NOTE: Settings and images stored on internal memory may be lost in the event of a power failure. Always ensure you reset your SLDCRF following a loss of power.

#### 6. Deleting images without viewing screen

- After pressing the MENU button, press DWON button once to enter the delete mode. The word "- dEL -" is blinking.
- Press the OK button to enter the DELETE & FORMAT menu.
- Using the UP and DOWN buttons to select the desired function. NO-dl (No Delete), (d-ONE) Delete one, (d-ALL) Delete ALL, or FORMAT.



- Pressing the OK to confirm your selection.
- If you choose to delete one picture at a time, (d-ONE), it will delete the last picture from the memory card,
- Press MENU button to return the capturing mode, and you will find the image/video counter decreased one.
- If you choose to delete all images (d-ALL), it will delete all images.
- Press MENU button to return the capturing mode, and

you will find the image counter is return to 00000

- If you choose to format your memory, it will erase all images. This feature is particularly useful if you don't want to look through the images one at a time.
- To exit the delete setting, press UP or DN button to select NO-dl (No Delete) then press [MENU] to back to capturing mode.

## F. Viewing images via PC and TV

- You can connect directly to the receiver box of your SLDCRF using the provided USB cable to PC. Alternatively you can use a card reader or a digital camera to read the SD card.
- When connected the SD card will show as a removable hard drive and you can use Windows Explorer to see your SLDCRF captured images or video. You can copy the images to your PC or delete them from your PC directly.



- 1. Viewing images via your receiver box directly on your PC
  - Connect the provided USB cable to your PC
  - Press and hold the MENU button then plug the USB cable to USB socket of your receiver box, then release the MENU button
  - The receiver box of our SLDCRF will automatically change to USB mode and the display will show **USb**.
  - Your PC will setup automatically.
  - The SD memory card will now show on your computer as a removable drive.
  - Click the removable drive to open the file, an VIDEO file will be found under root directory
  - This VIDEO file contains all the captured images/videos by folder, and folder name is the date of created, and the image name is the captured time and sequence.
  - Now you can view all the captured image or video from your PC.

- 2. Viewing the image via your recevier box diectly on your TV
  - Connect the provided AV cable to AV OUT of receiver box and AV IN of TV as below



- Change the TV to view the AV Channel
- Press the MENU button once to switch the receiver box to TV out mode.
- The captured image/video files will be shown on the TV.
- Press the UP or DOWN button to play the captured image or video.

#### 3. Viewing a live image from SLDCRF

#### Your SLDCRF can also be used as a web cam

- Please install the SLDCRF Webcam driver to your PC first.
- Install the provided CDROM to your PC, and then click SETUP. EXE to install the driver.
- Connect the provided USB cable to your PC and other side to USB socket of your SLDCRF receiver box.
- The receiver box of your SLDCRF will automatically change to web cam mode and the display will show **PCC**
- Your PC will setup the installed driver automatically.
- Now you can use Windows application software to view a live image.
- Viewing a live image from SLDCRF is only available for Win 2000, Win XP and Win Vista.
- Note: If you are using a long USB cable or your computer's USB port is unable to provide enough power for the SLDCRF you may experience difficulties such as no operation, black and white or 33

poor picture quality. Please try a different USB port or shorter cable.

#### G. Control the receiver box by remote controller

The Remote controller is a full operation infrared transmitter; you can use it to access the receiver box within 7 metre and +/- 12 deg.

- All the buttons functions and operation are same as the button of receiver box, please refer to Program the parameter section and view of the remote controller section to access the receiver box, and play the captured image/video.
- The remote controller uses a button cell battery, please follow the figure on the back side of remote controller to replace the battery when battery is low.



## **H.** Technical Specifications

- 1. System Requirements and Compatibility
  - Windows 2000/Me/XP/Vista/Win 7.

## Live viewing is not support with Win 7.

- Pentium 1GMHz or equivalent processor.
- 256MB SDRAM or above.
- VGA Video Card with 32MB RAM minimum
- Colour 32 bit or higher.
- Sound Card.
- An available CDROM driver and an available USB Port.
- 20GB free hard disc space.
- If you have any questions regarding your PC specifications please refer to your PC manufacturer.

#### 2. Features and specification

- PIR detection angle 52 Deg and detection range up to 9M.
- Low Lux colour CMOS Image Sensor 1.3M pixels.
- Max Resolution: 1.3M pixels, 1280 x 800 pixels.
- 2 Capture options: Still image 1P to 3P burst capturing, and video recording
- Image performance for video stream:

20 fps at 640 x 480 pixels

- Built in 32MB SDRAM for image buffer
- Built in status LCD display on the receiver box
- Built in SD card slot for SD memory card on the receiver box and support up to 4GB.
- Automatic exposure control, white balance and sharpness
- Auto Date & Time stamp on the captured image/video file and file name
- High precision 4 piece glass lens with IR coating
- Focusing: 1.5m (minimum) to Infinity

- Effective viewing angle: 48 deg
- Built in USB plug for PC access
- Interface type: USB 1.1
- Image format: JPG, Motion JPEG
- Powered by AC 230V.
- Floodlight tube is 300W, type R7S
- Auto light sensor.
- Infrared remote controller with full control buttons
- Product measurements: H300 x W170 x T85mm. Weight 1.2Kg, SLDCRF Camera only.
- Operating Environment: 14 to 104 deg F (-10 to 40 deg C). 20-85% relative humidity, non-condensation.

## I. General Information and safety

### Storing conditions

• Storage conditions: -20°C to 55°C, 20-85% R.H., noncondensing

#### Special care instructions.

- The SLDCRF is designed only to be weather resistant. Never attempt to immerse the unit in water or any other liquid. This will damage the unit and void the warranty.
- Use a soft lens cloth for cleaning lens. Avoid touching lens with fingers.
- Remove dirt or stains with a soft cloth dampened with water or mild detergent. Keep the SLDCRF in a dry and cool dust-free environment or container when it is NOT used.
- Do not open the SLDCRF for unauthorised service. This could cause serious damage to the unit and will void your warranty.
- This SLDCRF is a precision electronic device. Do not attempt to service this camera yourself, as opening or removing covers may expose you to dangerous voltage

points or other risks.

• Do not touch the floodlight when the power is on, it is extremely hot.



### **J. FCC Information**

This device 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.

Warning: Changes or modification to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limited for Class B digital device, pursuant to Part 15 of the FCC Rules. Their 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 interference will not occur in a particular installation. If the 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 to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

SLDCRF\_R0.1.

Challenger Security Products 4 Arkwright Court Fylde Industrial Estate Blackpool Lancashire FY4 5DR Tel: 01253 791888 Fax: 01253 791887 Email: <u>sales.challenger@adivision.co.uk</u> Web: <u>www.challenger.co.uk</u>