General Notes

Miscellaneous...

SQ11 Info

Useful info on sq11 mini cam...

sq11_info.txt

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Operating Instructions SQ11

Charging
Attention! Before using for the first time, fully charge the mini
camera
battery!

This mini video camera has a built-in lithium-ion battery. You can
perform
charging in one of the following ways:
1. Connect the mini video camera to the USB port of your PC, stop
recording
   first.
2. Connect the mini camera to a charger from a 220V network or a
portable 5V
   charger. In this case, you can continue to use the mini-camera in
the
   charging process. In the charging process, the blue and red LEDs
will light
   constantly.

After the mini camera battery is fully charged, the blue LED will light
constantly and the red LED will turn off.

- If the built-in battery is empty or there is not enough space on the
memory
  card to continue, the blue and red LEDs on the mini camcorder will
blink for
  5 seconds simultaneously, after which the mini camcorder will save
the
  recorded video and automatically turn off.
- If the memory card is not installed, the blue and red LEDs of the
Mini
  Recorder will blink simultaneously for 5 seconds, after which the
Mini Camera
  will automatically turn off.
- If the camcorder is in the standby mode and does not take any action
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on it,
  the camcorder automatically turns off after 1 minute to save the
charge of
  the built-in battery.

Video recording

- Shooting video with a resolution of 1280X720P
Press the <On / Off> button to turn on the mini camera - the blue LED
will
light up - the mini camcorder is in the video recording standby mode
with 720p
quality. Press the <On / Off> button once to start recording video -
the blue
LED will blink 3 times and go out - 720p video is recorded. The video
will be
automatically saved every 5 minutes. To stop recording, press the <On /
Off>
button.

- Shooting video with a resolution of 1920X1080P
Press the <On / Off> button to turn on the mini camera - the blue LED
will
light constantly. Press the <Mode> button once to enter the video
capture mode
with 1080p resolution - the red and blue LEDs will light
simultaneously, the
mini camera is in the video recording standby mode with 1080p quality.
To start
recording, press the <On / Off> button once - the blue LED will go out,
and the
red LED will blink 3 times and go out - the video is recorded with a
quality of
1080p. The video will be automatically saved every 5 minutes. To stop
recording, press the <On / Off> button.

- Motion sensor video recording
To do this, while in the 720p or 1080p video recording standby mode,
press and
hold the <Mode> button of the mini video camera for 3 seconds - the
camcorder
enters the motion sensor recording mode. If motion is detected, the
video
recording will start automatically, with red and blue LEDs blinking at
the same
time. When recording motion sensor, the video recording is
automatically saved
every 5 minutes.

- Photo
Press the <On / Off> button to turn on the camera - the blue LED will
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light up.
Press the <Mode> button twice to enter the photographing mode - the red
LED
will stay lit. To take a picture, press the <On / Off> button once -
the red
LED blinks once, the photo is saved. The resolution of the received
photos is
4032x3024.

- Night light
Press the <On / Off> button to turn it on. Press and hold the <On /
Off> button
for 2 seconds - the red LED will blink twice - the night illumination
is on. To
turn off the night illumination, press and hold the <On / Off> button
for 2
seconds, the red LED will blink three times - the night illumination is
turned
off.

- Shutdown
To turn off the camcorder, press and hold the <On / Off> button for 6
seconds.
If the Mini Camcorder is in the standby mode and is not in use, it
automatically turns off after 1 minute.
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Solar panel stuff

solar_power_system_calc.txt

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- inverter?
- battery?
- solar panel?

1) load calculation
- assume 4x25w led light, 2x80w fan, 1x40w tube light, 1x50w tv
- total power = 100w + 160w + 40w + 50w = 350w

2) inverter selection
- load = 350w (oonsider: 500w)
- recommended: 800w-1000w

3) battery selection
- assume 12v dc battery
- for 350w ac load, i(dc) = 350w/12v = ~30a
- assume battery operation of 8h
- battery capacity = 30a x 8h = 240ah
# 250ah battery available!
```

```
4) battery charging current calculation
- assume 250ah
- charging current = ~10% current rating (Ah)
- charging current = 25A

5) solar panel selection
- solar panel current = charging current + load current = 25 + 30 = 55A
- solar panel power = 12v x 55A = 660W
- solar panel options: 125w / 180w / 375w / 440w
- solar panel count = 660W / 180W = ~4!
```