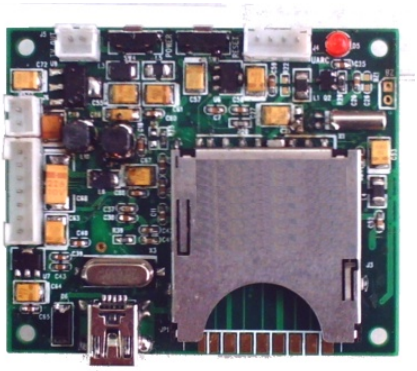
## Description

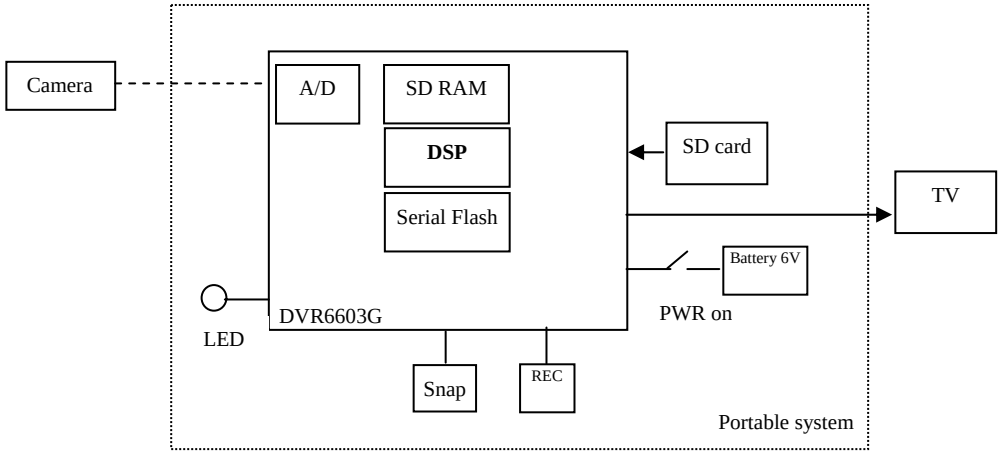
This portable DVR module has very simple operation, accept analog video signal input, doing snap shot and video recording by just a click.



## Features

- ✓ Small in size (50x60mm)
- ✓ 1-channel video input
- ✓ JPG – 720x480 (NTSC)
  / 720x576 (PAL)
- ✓ AVI – 720x480 (NTSC) 30fps MJPEG
  / 720x576 (PAL) 25fps MJPEG
- ✓ Video clip length 1-120sec
- ✓ SD card support up to 16G
- ✓ USB Mass Storage
- ✓ CVBS out to TV monitor
- ✓ Operation voltage 6V
- ✓ Low battery detect
- ✓ Different LED flash pattern to show status

## Block Diagram




## Electrical Characteristics (at room temperature 25C)

| Parameter | Condition | Min | Type | Max | Unit |
|---|---|---|---|---|---|
| **Operation Voltage** | | 4 | 6 | 6.5 | V |
| **Operation Current** | Idle | | 200 | | mA |

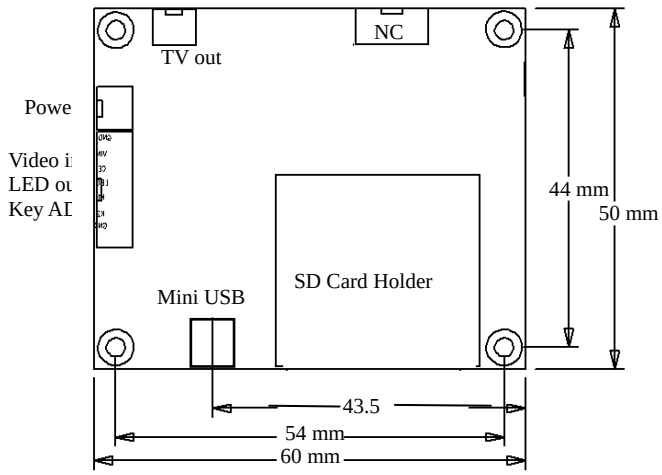
## Key Definition

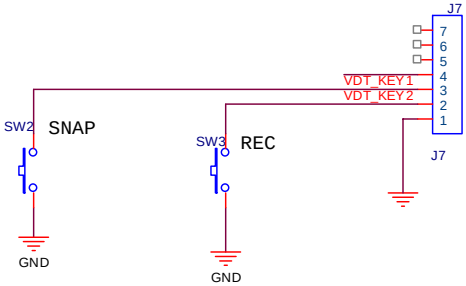
| Key | Function |
|---|---|
| **SNAP** | Take a JPG picture |
| **REC** | Recording, press to start, press it again to stop |

## Operation

1 SD card: it should be present before further operation.
2 Power on the device, LED will be blinking at 1Hz, indicates the device is ready. If the LED flashing in other mode, means the device is not ready to use.
3 Take a snap shot –make sure the unit is ready, press **SNAP** key to take a photo. When taking a picture, the LED will flash once then blinking.
4 Take a video –make sure the unit is ready, press **REC** once to start recording, press it again to stop. If the recording time exceeds 2min, it will stop recording automatically. During recording, the LED will be flashing in 1Hz.
5 Battery detect –when battery is low(<4.4V), the LED will be flash at 1/2 Hz. If it is not sufficient to allow unit operation, the LED will be flash once and power off automatically.
6 Download files to PC
  6.1 Pull out the SD card and plug it to PC and download the images files to PC.
  6.2 Connect the unit to PC thru USB cable, it performs as a mass storage device and manages as external memory device.
7 Connect to TV: it is for testing purpose. Only preview video is available, no playback. This allows user to check the device functionality.
8 Connect to pc thru USB: when connected to PC using mini-USB, it performs as mass storage and USB logo will be shown on TV. This device can be powered by USB. When the device is powered on, plug in USB, it will change to USB immediately. If the device has not been powered, plug in the USB, it will power up automatically, then go into USB, it will take little bit longer time for PC to recognize the mass storage exists.
9 File system: Only one folder is available, named “DCIM6603”. The module has its own counter to name the file increased from IMG0001.JPG (.AVI) to IMG9999.JPG (.AVI) and cycling.
10 Status LED:
- ON: power on.
- Flashing in 1Hz 1/4 duty cycle: system ready.
- Flash once: snap shot.
- Flashing in 1Hz, 1/2 duty cycle: recording AVI.
- Flashing in 1/2Hz: battery is low.
- Flashing in 3Hz: memory is full; SD card is not inserted; connected to PC thru USB.

## Mechanical Size and connectors




## Keyboard circuit