

## DVR

Model	MP-VRM103
AV recorder resolution	640x480(VGA) / max 30 fps.
External Memory	SD Card memory slot (support up to SDHC 32GB) ●
Compression	MPEG 4 ASF file
Video	Synchronized audio & video recording/ playback
Function	AV In Mode , Play Mode , Preview OSD displaying icons , SD card Update , ISP Mode , Special circumstances , SETUP Rec Mode Normal REC Mode, loop overwrite REC Mode , motion detect , REC Mode , RTC date and time stamping Using SD CARD config profile , Snapshot: JPG IMAGE 640x480 ,
Video Output	TV out /AV in (NTSC/PAL)
PC Interface	USB1.1
Dimension	32 x 68 mm

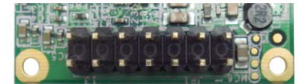


●Improve the SD SDHC Card 4GB ~32GB compatibility MP-VRM100 support for SDHC, SDHC card(OVER 4GB~32GB) must be special format processing ! through the pc to format SDHC Card Fat32 block size 16k  
process:  
WINDOWS SYSTEM  
1. Click [Start],  
2. then click the [running] 'button',  
3. [Open] box, type: "diskmgmt.msc", and then click [OK],  
then Right-click on SDHC CARD DISK and format block size 16 or 32k

### I/O Pin Define

PIN	VRB03 I/O PIN	SIGNAL LEVER
PIN1	(input)5V/350mA Power Supply	
PIN2	GND	
PIN3	(input)NTSC Composite Video in	
PIN4	(input)Mono Audio Line in	
PIN5	(output)NTSC Composite Video out	
PIN6	(output)Mono Audio Line out	
PIN7	(output)SD Card full or Error LED out(high: SD Card Fullor Error low: Normal)	Off  Off
PIN8	(output)Recording/Playing LED out Recording-> high :SD Card Recording low: Stop Playing->Flash High(1 Second high 1 Second low Repeater):Playing low: Stop	Off  Off
PIN9	(input)Rec Control pin(Normal High Low Active)	1 SEC
	On Preview screen delete file (1) Double click 2 times then delete file (2) Longer(2 seconds) for delete file	2 SEC

PIN	VRB03 I/O PIN	SIGNAL LEVER
Pin 10	(input)Play pin input(Normal High low active)	Play Pause
Pin 11	(input)Stop pin input(Normal High low active)	Stop
Pin 12	REC MODE: snapshot JPG image file 640 x 480 (Normal High low active) (input)Fast Forward input(Normal High low active)Short for next video longer(2 seconds) for Fast Forward  On Preview Screen, Longer(2 seconds) for jump to the last file	Nest Forward(2 SEC) Forward(2 SEC)
Pin 13	(input)Rewind input(Normal High low active) short for next video longer(2 seconds) for Rewind  On Preview Screen, Longer(2 seconds) for jump to the first file	Back Rewind (2 SEC) Rewind (2 SEC)



PIN14	PIN12	PIN10	PIN8	PIN6	PIN4	PIN2
PIN13	PIN11	PIN9	PIN7	PIN5	PIN3	PIN1

### Setting

1. SD connected computer and add folder "MISC"
2. After open "MISC" folder and then add TXT file "SYSCFG.TXT" and type:  
(Changing the TXT file to start what you need system)

#### [COMMON]

**DATE=2010-04-26** ..... Date=year-month-date  
**TIME=09:25** ..... time=Minutes:seconds

// NTSC/60, PAL/50

**SENSORTYPE=NTSC** ..... NTSC or PAL

**TVTYPE=NTSC** ..... NTSC or PAL

**TVFREQHz=60** ..... NTSC=60 or PAL=50

**RESET=0**

**[DVINFO]//60, 50**

**SENSORFREQHz=60** ..... NTSC=60 or PAL=50

// NORMAL, CYCLE, MOTION, MOTION\_CYCLE

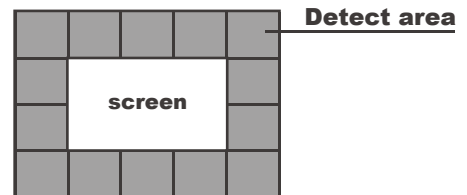
**DVRECTYPE=NORMAL** ..... NORMAL, CYCLE, MOTION, MOTION\_CYCLE

**DVRECTIMEBAR=YES** ..... YES or NO

**[DSCINFO]**

**#END**

### Motion Detect Area

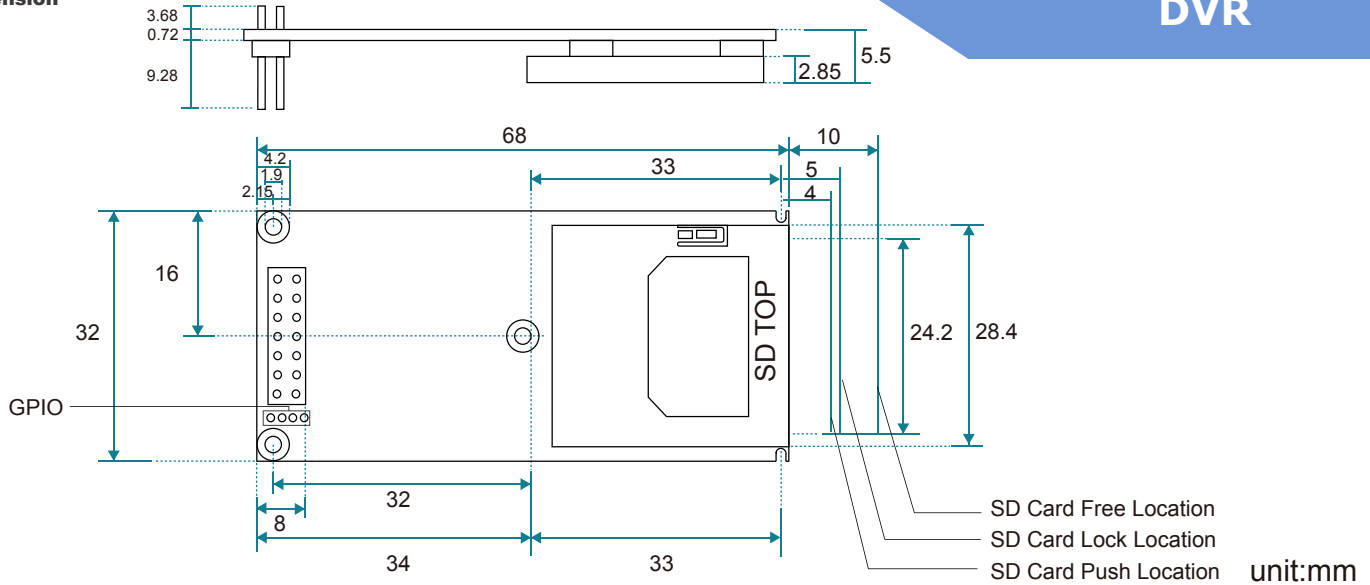


Motion Detect Area must be detected by around of screen

Motion detect and Loop Overwrite operation normally have to 4 GB SD card or more than 4GB SD card.

Boot after waiting for about 10 ~ 15 sec and off power, The system will read and delete the configuration file (do not perform other operations, will lead to a configuration parameter can not be saved)

**Dimension**



**IS/W Function Description**

- 1.** when turning on the device, LED D1, D2 on. after the device is already turned on, D1, D2 LED off
- 2.** after turning on the device and entering AV\_In Mode, at the same time AV\_Out, no OSD shown on the screen
- 3. Turn on setup option and default :**  
Key Sound: Off ,  
Volume:15 ,  
TV Type:NTSC , Format , Version , Exit ,  
Key function: Key(Play) → Enter Key(Forward) → Down Key(Rewind) → Up
- 4. AV\_In Mode :** When AV signal input, it can immediately output AV signal , To get into the screen of setup option, press Key(Forward + Rewind) at the same time , Set volume output default at 15
- 5. Play Mode:**  
When playing, pausing, forwarding, rewinding, keep D2 On/Off at an one second blink interval  
When playing, pausing, forwarding, rewinding, key (Rec) has no effect  
Press Key(Play) from AV\_In Mode. If the SD card is not plugged in, then OSD will appear "InsertMemory Card"  
If SD card is locked, OSD will appear "Memory Card Locked"  
If SD card has no more space, OSD will appear "Memory Card Full;  
If SD card is damaged, OSD appears "Memory Card Fail"  
If SD card has no file in it, OSD appears "No Record File"  
Problems of SD card appears in OSD is at AV\_In Mode screen  
Problems appear in OSD will automatically disappear after 3 seconds  
Press Key(Play) from AV\_In Mode then you will enter Play Mode monitor appears the screen last recorded  
Press Key(play) again to start playing the file  
Press Key(Play) to enter Pause Mode, press it again to continue playing the file  
When playing the video press Key(Forward) to directly play the next video  
Press Key(Forward) for 2 seconds to forward the video 2 times faster  
Press Key(Play) to stop forwarding  
When the video is being forwarded to the end, stop forwarding to automatically start playing the next video  
When playing the video press Key(Rewind) to directly play the previous video  
press key(Rewind) for 2 seconds to rewind the video 2 times faster until you press Key(Play) to stop rewinding  
When the video is being rewound to the end, stop rewinding to automatically play the previous video  
When playing the video press Key(Stop) to return to AV\_In Mode
- 6. Rec Mode :**  
When recording Key(Play + Stop + Rewind) has no effect. Press Rec key( voltage is at Low level) then start recording, press again key to stop recording.  
Press Forward & snapshot key star to Snapshot , image file 640 x 480 JPG(Normal High low active)  
When recording, keep D2 On/Off at an one second blink interval  
The recorded file's name is "File0001.asf";"File0002.asf".
- 7. Preview**  
Press Rec Key 2 times in a second or press it for two seconds to delete the preview file  
When the file is deleted, SOD appears "Delete File," it does not ask the user to confirm  
After the file is deleted then preview the next file  
For example: there are 5 files, after the third file is deleted it will preview the forth file  
If there is only one file, after deleting it the screen will return to AV\_In Mode  
Press Key(forward) for 2 seconds to preview the last file  
Press Key(Rewind) for 2 seconds to preview the first file
- 8. OSD displaying icons:** Play + Rec + Forward + Rewind + Pause
- 9. SD card Update**  
Under MISC catalogue of SD card there has to have 2 files  
Change the original file name to VRB03.bin and ISP\_38NR.bin Insert SD card  
Press Key(Stop) to turn on, make SD card Update Code  
During the Update process, D1  
After update is completed, turn D1 + D2 Off. At the same time power reset to restart.
- 10. ISP Mode**  
In order to use ISP Down Code, evaluation board need to be used at the same time.  
When downloading, need to keep D1 + D2 On/Off at an one second blink interval.  
After downloading turn off D1 + D2, at the same time power reset to restart.
- 11. Special circumstances**  
When turning on, set Key(Rec) at Low level. Execute Rec Mode after turning on.  
In order to use ISP Down Code, evaluation board need to be used at the same time.

Instruction Drawing & Description

**DVR**

