

DVR8105

Video Recording Module

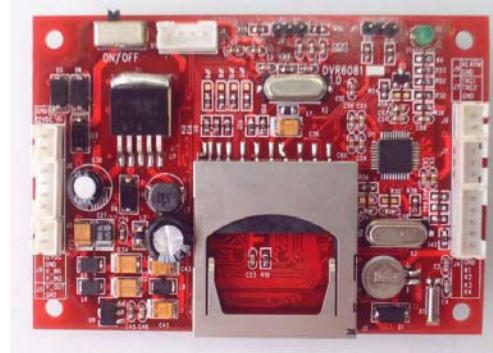
VCR operation format

Description

This video recording module is specially designed for slow motion capture in VGA format, therefore it can play in high quality video like Video Cassette Tape(VCR). It is good for surveillance system.

Features

- ✓ Small in size: 80x55mm
- ✓ Single channel input
- ✓ Image size VGA
- ✓ Playback like VCR
- ✓ On board Flash memory (option)
- ✓ On board SD card (option)
- ✓ DC12V operation
- ✓ Video output to TV
- ✓ 4-bit Keys operation
- ✓ Preset NTSC or PAL TV system input
- ✓ 2mm pin connectors



Connector Description

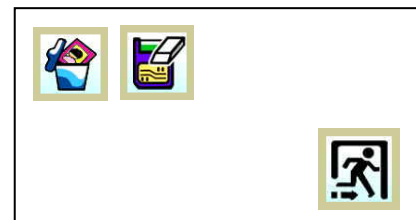
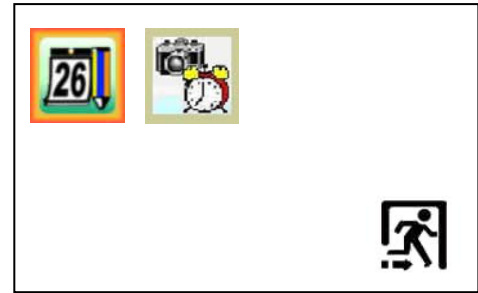
Connector	Function	Remark
JP1	Select NTSC/PAL	Need to be selected before power up
J1	NC	For debug purpose,
J2	SD card slot	Support up to 2G SD card
J3	NC	
J4	Keyboard input	4 bit binary input with common ground, internal pull high
J5	Video out	2-pins, To output video signal to TV set
J6	Camera input	4-pins, for video signal in and power supply
J7	NC	
J8	Power	Aux power input, 12V DC, if J6 power no connected
J9	NC	

Key Definition

Key	Name	Key	Name
0001	NOP	0111	Menu
0010	OK	1000	NOP
0011	Down	1001	Left
0100	NOP	1010	UP
0101	Right	1011	Mode
0110	NOP	1100	NOP

Operation

- 1 System Setup: At preview mode press Menu to enter setup menu
 - 1.1 Day-time setup
 - 1.1.1 Use LF/RT to select item, UP/DN to increase digit, OK to confirm
 - 1.1.2 Select Quit icon or press Menu save and quit
 - 1.2 Frame Rate setup: to set up the frame rate of video: 10/30/60 sec per frame
 - 1.2.1 Use OK to toggle, LF/RT to leave
 - 1.2.2 Select Quit icon or press menu key to quit menu
- 3 Video Recording – this device will perform continue still image recording at a predefined frame rate in set up menu.
 - 3.1 At preview mode, press OK to start capture,
 - 3.2 Press any key to stop capture
 - 3.3 During recording, there is an icon flashing to indicate it is working
- 4 Playback Video
 - 4.1 At preview, press mode key to enter playback mode, the file list will be showed
 - 4.2 Use UP/DN to select file, press OK to confirm and start playing, playing icon will be flashing
 - 4.3 Manipulate the playback function
 - 4.3.1 Pause: when playing, press OK to pause, pause icon (||) will be shown. The image information will be shown
 - 4.3.2 Resume playing from Pause, press LF to resume forward (▶)
 - 4.3.3 Backward playing: at pause, press RT for backward(◀)
 - 4.3.4 Play frame by frame: at pause, press UP to previous frame, press DN to next frame
 - 4.3.5 Fast Forward: when playing, press LF for fast forward(▶▶),
 - 4.3.6 Fast Backward: when playing, press RT for fast backward(◀◀),
 - 4.3.7 To play at normal speed from other play mode, need to pause then play normal speed
 - 4.3.8 Stop playing: during playing, press UP key to stop
 - 4.4 Press mode key at non playing stage to enter preview
- 5 Delete Files
 - 5.1 At Playback mode, press menu to enter delete menu, select delete one to delete current file. If want to delete all, use format
 - 5.2 Use UP/DN to confirm or cancel the action
- 6 Format and delete all files
 - 6.1 At Playback mode, press menu to enter delete menu, select Format to delete all files
 - 6.2 Use UP/DN to confirm or cancel the action



Summary of Key Operation

Key	Preview Mode	Play Back Mode	1. D/T Set up 2. format	Delete Menu
Mode	Change to Playback	Change to preview	-	-
Menu	Enter Setup	Enter Delete	Quit	Quit
UP	-		count up at D/T setting	
DN	-			
OK	Start Recording		Confirm	Confirm
LF	-		Move cursor	
RT	-		Move cursor	

Keys operation during playback

Key	Forward	Pause	FF	FB
UP	Stop	Previous frame	Stop	Stop
DN	-	Next frame		
OK	Pause	Stop	Pause	Pause
LF	FF	Forward		
RT	FB	Backward		

Specification

1. Electrical Characteristics (at room temperature 25C)

Parameter	Condition	Min	Type	Max	Unit
Operation Voltage		7.5	12	13.5	V
Operation Current		238	145	128	mA
Standby Current	No Video o/p	215	130	120	mA

2. Image and file storage information

Image format	JPG
Image size	VGA (640x480)
File size per image	~30KB (depends on scene)
Interval per image capture	10, 30, 60sec selectable
Playback as AVI- Normal speed	8fps
- Fast forward	10fps
Max image number per folder	1024 images
Max folder number per card	1024 folders
Max memory size for SD card	2G

3. Folder and File Name Format

- i. Folder Name: AVI\mmdd-nn; mm-month; dd-day, nn-no of clip in the same day.
- ii. File Name: compose of 8 characters, representing month(x), day(y), hour(HH), minute(MM) and sec(SS)
Eg. Xyhmmss.jpg
X: 1 -January, 2 - February and etc, A – Oct, B – Nov, C – Dec
Y: 1-9 means 1-9, A for 10, B for 11 and so on, till V for 31st
Eg. Image capture at Jan 16, 18:51:04 will be 1G185104.JPG