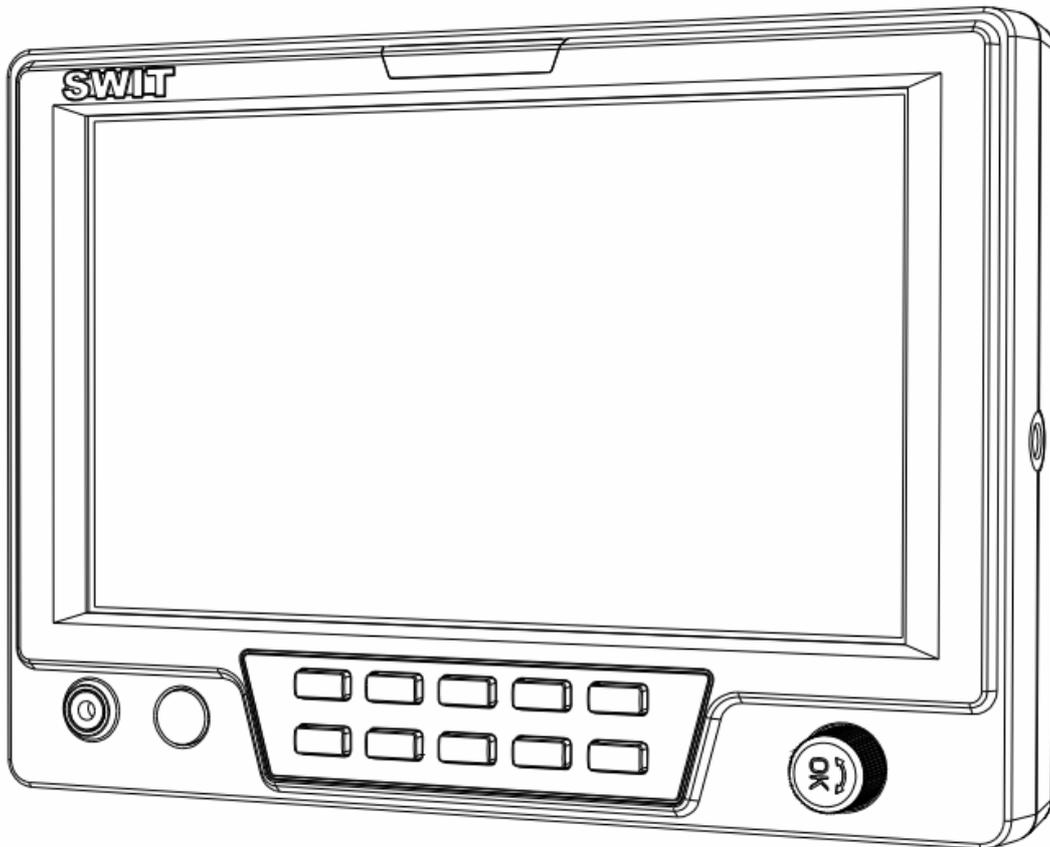


# SWIT®

Model: **S-1071F(EFP)**

7" EFP Field On-camera LCD Monitor



## User Manual

Please read this User Manual throughout before using.

## Preface

Congratulations on your purchase of this product. Please read this user manual carefully.

1. All internal technologies of this product are protected, including device, software and trademark. Reproduction in whole or in part without written permission is prohibited.
2. All brands and trademarks of SWIT Electronics Co., Ltd. are protected and other relative trademarks in this user manual are the property of their respective owners.
3. Due to constant effort of product development, SWIT reserves the right to make changes and improvements to the product described in this manual without prior notice.
4. The warranty period of this product is 2 years, and does not cover the following:
  - (1) Physical damage to the surface of the products, including scratches, cracks or other damage to the LCD screen or other externally exposed parts;
  - (2) Misuse, abuse or negligent operation to the product;
  - (3) The product is disassembled by anyone other than an authorized service center.It is considered normal that the LCD bright dot defects are not to exceed three.
5. For any suggestions and requirements on this product, please contact us through phone, fax, Email, etc.

---

### **SWIT Electronics Co., Ltd.**

Address: 10 Hengtong Road, Nanjing Economic and Technological Development Zone,  
Nanjing 210038, P.R.China

Phone: +86-25-85805753

Fax: +86-25-85805296

Email: [contact@swit.cc](mailto:contact@swit.cc)

Website: <http://www.swit.cc>

## Maintenance

- **The Monitor**

1. Please keep the signal terminals and the cooling vent away from knife-edge, metal or liquid in order to avoid short-circuit and damage.
2. Please don't try to disassemble any parts of the monitor by yourself, which would probably damage the monitor and do harm to human body, and it will cause the invalidation of product warranty.
3. Please don't touch the screen with your fingers, which would probably deface the screen.
4. Please don't press the screen; the LCD is extremely exquisite and flimsy.

- **The power**

Please use the power adapter provided or recommended by the manufacturer in order to avoid damage. For a third party power adapter, please make sure the voltage range, supplied power, and polarity of power lead are fit.

Please disconnect the power cable under the following situations:

1. If you do not operate this monitor for a period of time;
2. If the power cable or power adaptor is damaged;
3. If the monitor housing is broken.

- **Working Environment**

1. Please don't lay this product on the unstable place.
2. Please don't lay this product in hot, cold or wet location.

- **Cleaning**

1. Please clean the screen with dry and downy cloth or special LCD cleanser.
2. Please do not press hard when cleaning the screen.
3. Please do not use water or other chemical cleanser to clean the screen. The chemical may damage the LCD.
4. For first time use, please tear off the factory LCD film. To protect the LCD screen, please post the LCD protection film offered in the package.

## 1. Features

### ◆ High resolution 7-inch LCD Panel

16:9, 1024×600, 16.77 million colors, 900:1 contrast, and H160° / V160° viewing angle.

### ◆ Multiple inputs

HD/SD-SDI, HDMI and Composite input

### ◆ Loop through outputs

Each of the 2 input HD/SD-SDI and HDMI has loop through output.

### ◆ Picture-in-Picture

The Picture-in-Picture mode is for cameraman to see the switcher returned video as an overlay window on the local camera monitoring, which is widely used in EFP system.

Under SDI, PIP display another SDI or CVBS

Under HDMI, PIP display another CVBS

### ◆ Overlay window adjustable

The position of picture-in-picture window is adjustable from 4 corners or center.

### ◆ Multi-functional DB-9 port

To simplify the cable connection, the EFP field monitor provides a Multi-functional DB-9 port, for TALLY signal input, CVBS returned video input, PIP window on/off switcher input, and DC 6.5-17V power input.

### ◆ Waveform (Y, Cb, Cr, R, G, B) and full scale

There are totally 6 kinds of waveform display, available under both SDI and HDMI, to check the Luminance (Y), Blue-difference (Cb), Red-difference (Cr), Red (R), Green (G), Blue (B), and the Y, Cb, Cr can be simultaneously displayed, R, G, B can be simultaneously displayed, and each of the waveforms can be set to full scale display.

### ◆ Vector scope

The displayed vector scope pattern is available under both SDI and HDMI, represents saturation as distance from the center of the circle, and hue as the angle, in standard position, around it.

### ◆ Histogram (R, G, B)

The histogram is a bar graph that shows the distribution of luminance values in the picture. There're R, G, B histograms that individually displayed simultaneously, available under both SDI and HDMI.

### ◆ 2-ch audio meter

Under SDI or HDMI, the monitor displays 2 channels embedded audio bars with mark. The audio bar is green, and will turn yellow when audio exceeds -20dB, and turn red when exceeds -10dB.

### ◆ SDI timecode

Under SDI input, it can display the SMPTE timecode, which is used extensively for synchronization, and for logging and identifying material in recorded media.

### ◆ Peaking focus assist (red/blue switch)

The Peaking focus assist function is to mark the sharpest edges of the image with red or blue color, for users to check if the subjects are focused.

### ◆ Zebra stripes

Zebra Stripes are used to check if the image is over exposed or not by showing black and white lines on the monitor. It is considered over exposed when luminance value exceeds 90%.

### ◆ False color

The false color is used to aid in the setting of camera exposure. Under false color mode, there's a false color key on the bottom of screen for reference. The over exposed subjects (above 101 IRE) on the monitor will display as RED, and the underexposed subjects will display as BLUE. For correct exposed subjects, it will display as green and pink.

### ◆ Blue Only

Under the Blue Only Mode, only the blue pixels are used to generate the image, because hue and saturation can be adjusted quicker and more accurately.

### ◆ DSLR scale zoom in

The Canon DSLR outputs the CMOS sensor ratio HDMI and this zoom in mode can make the effective image scale full screen on the monitor.

### ◆ User definable function keys

There are 3 function keys on the monitor front panel that permit users to define shortcuts for the various functions.

### ◆ User editable video title

User can edit a video title for the current camera, and the title will display on the top of screen.

### ◆ Front and Rear 2-color TALLY light

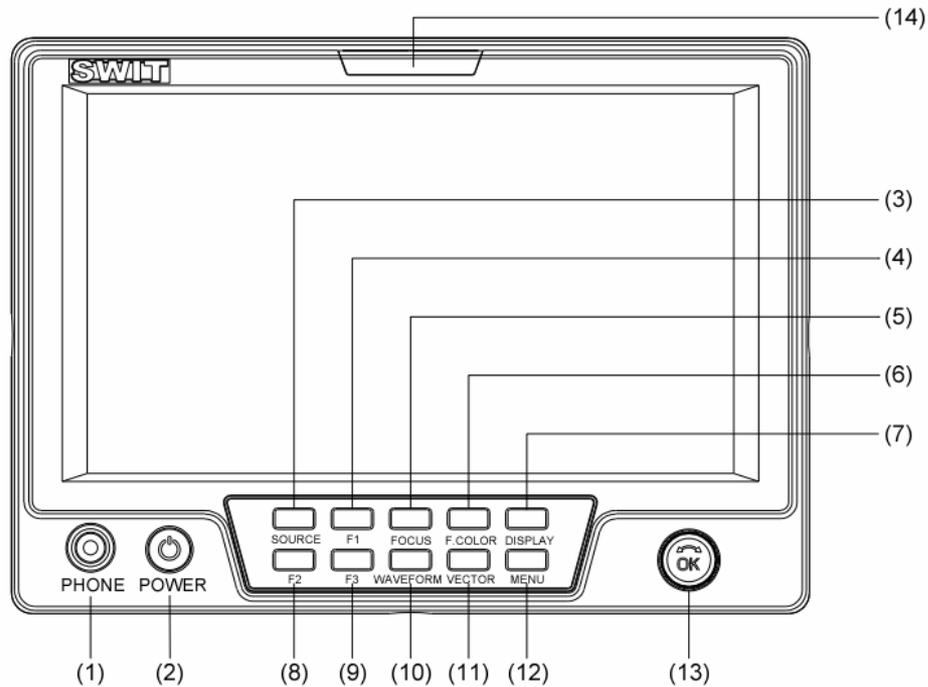
2 TALLY lights design, to give "live" signals to people in front of the camera, as well as the camera operator behind.

### ◆ Image Flip

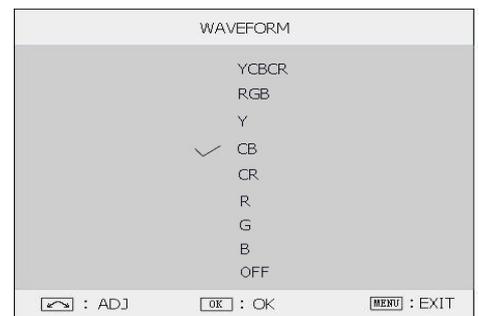
Set image to rotate by 180°

## 2. Panel Instruction

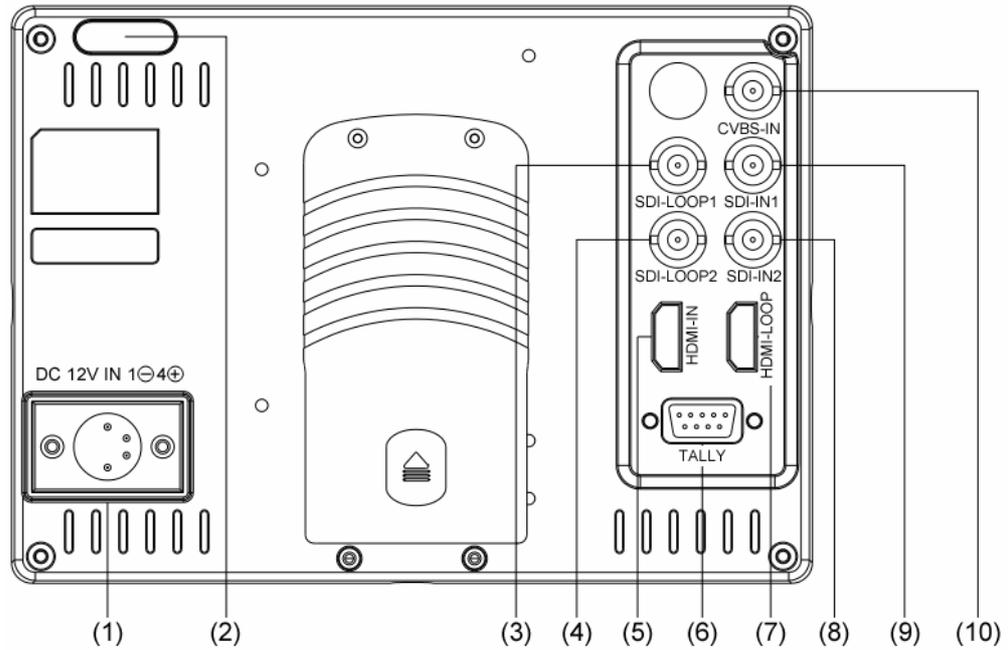
### Front view



- (1) **PHONE:** Earphone jack, for SDI embedded audio, HDMI embedded audio monitoring
- (2) **POWER:** Power on/off  
Connect with power cable, press the “POWER” to switch on the monitor. Press again to switch off.  
Disconnect with power cable if the monitor will not be used for a period of time.
- (3) **SOURCE:** Input signal selection  
Press “SOURCE” and revolve the “OK” to select the input video signal.
- (4) **F1:** User definable function key 1
- (5) **FOCUS:** Peaking Focus Assist  
Press “FOCUS” once, it will display the current peaking on/off status. Press “FOCUS” again to switch on RED line focus assist, switch on BLUE line focus assist, and switch off in turn.
- (6) **F.COLOR:** False color  
Press “F.COLOR” once, it will display the current false color on/off status. Press “F.COLOR” again to switch on/off the false color mode.
- (7) **DISPLAY:** Display current settings  
Press “Display” to display safety mark, title and the current input signal information
- (8) **F2:** User definable function key 2
- (9) **F3:** User definable function key 3
- (10) **WAVEFORM:** Display waveform  
Press “WAVEFORM” once, it will display the waveform menu as:  
Revolve “OK” to select a waveform display mode and turn it on.  
The selected waveform will display on the screen.
- (11) **VECTOR:** Display vector scope  
Press “VECTOR” to switched on/off the Vector scope
- (12) **MENU:** Press to enter Menu
- (13) **OK:** Select and Apply in Menu system  
Out of Menu system, and with PIP window on, revolve “OK” to adjust the window position;  
Out of Menu system, and without PIP window, revolve “OK” to adjust volume..
- (14) **TALLY Light:** Red and Green 2-color TALLY indicator



## Rear view



- (1) **DC 12V IN:** Connect with the package supplied DC12V 4-pin XLR power adapter.  
For 3-party power adapter, please ensure the voltage is 6.5-17V, and Pin 1: Negative, Pin 4: Positive.
- (2) **TALLY Light:** Red and Green 2-color TALLY indicator
- (3) **SDI-LOOP1:** HD/SD-SDI loop through output from SDI-IN1 (BNC connector)
- (4) **SDI-LOOP2:** HD/SD-SDI loop through output from SDI-IN2 (BNC connector)
- (5) **HDMI-IN:** HDMI input
- (6) **Multi-functional DB-9 port:** See details in Chapter 4, “DB-9 Terminal Description”
- (7) **HDMI-LOOP:** HDMI loop through output
- (8) **SDI-IN2:** HD/SD-SDI input (BNC connector)
- (9) **SDI-IN1:** HD/SD-SDI input (BNC connector)
- (10) **CVBS-IN:** Composite video input (BNC connector)

## Input formats

Input		Supported formats	
CVBS		PAL / NTSC	
HDMI		480i / 576i / 480P / 576P	
		1080i (60 / 59.94 / 50)	
		720p (60 / 59.94 / 50)	
SDI		1080p (60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98)	
		SMPTE-274M	1080i (60 / 59.94 / 50)
		SMPTE-RP211	1080p (30 / 29.97 / 25 / 24 / 23.98)
		SMPTE-296M	720p (60 / 59.94 / 50)
		SMPTE-125M	480i (59.94)
ITU-R BT.656		576i (50)	

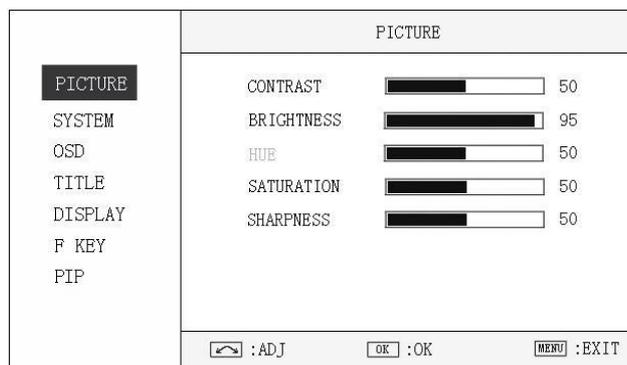
### 3. Menu Operation

- (1) Press "MENU" and it will display menu system
  - (2) Revolve "OK" to select an item. The selected item will be highlighted display.
  - (3) Press "OK" to enter the selected item.
  - (4) Under menu system, press "MENU" to back to previous menu.
- \*The menu will automatically save and quit if it remains idle.

#### 3.1 PICTURE submenu

The PICTURE submenu includes:

- (1) **CONTRAST:** 0-100 value adjustment
- (2) **BRIGHTNESS:** 0-100 value adjustment
- (3) **HUE:** 0-100 value adjustment  
(Only available under CVBS NTSC input)
- (4) **SATURATION:** 0-100 value adjustment
- (5) **SHARPNESS:** 0-100 value adjustment



#### 3.2 SYSTEM submenu

The SYSTEM submenu includes:

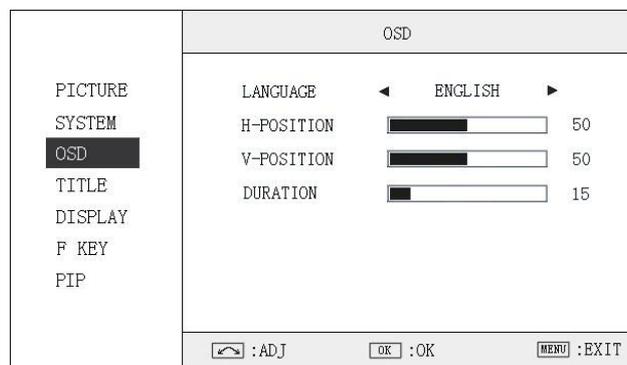
- (1) **RATIO:** Aspect ratio "16:9" / "4:3" selection
- (2) **SCAN:** "UNDERSCAN" / "OVERSCAN" selection
- (3) **ZOOM:** "OFF", "ZOOM1" and "ZOOM2" selection  
ZOOM1: Canon DSLR scale zoom-in  
ZOOM2: Pixel to Pixel zoom-in
- (4) **MARKER:** Select and set the safe area scale from 80%, 85%, 90% and 95%.
- (5) **FLIP:** Select "ON" to flip the picture by 180°.
- (6) **RESET:** Select "YES" to recover all to factory setting.



#### 3.3 OSD submenu

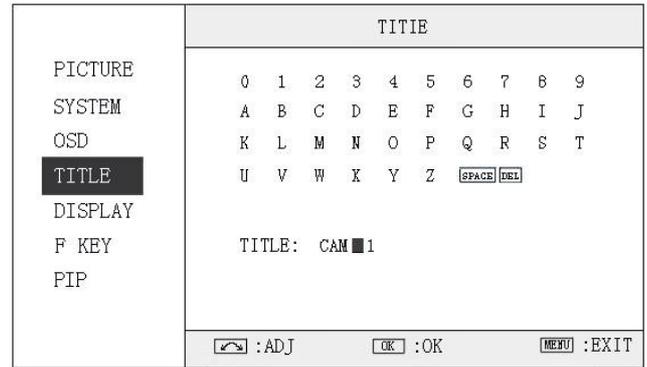
The OSD submenu includes:

- (1) **LANGUAGE:** Menu language selection
- (2) **H-POSITION:** Menu horizontal position (0-100) adjustment, real-time preview and default value: 50.
- (3) **V-POSITION:** Menu vertical position (0-100) adjustment, real-time preview and default value: 50.
- (4) **DURATION:** Menu timeout setting (5-60)  
Set a time (in seconds) in which the menu will automatically quit if remains idle. Default: 15.



### 3.4 TITLE submenu

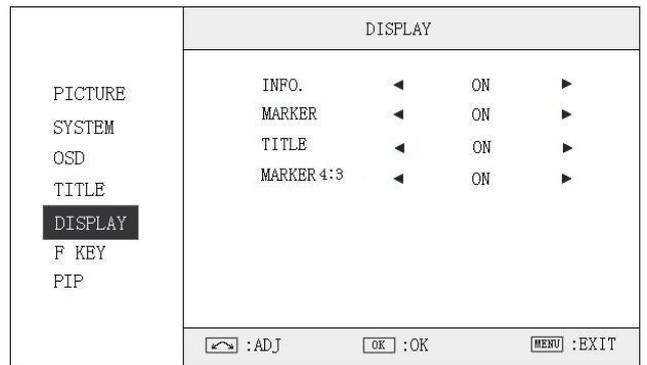
Revolve "OK" button to select the letters, and press "OK" to input. Select SPACE to input space and DEL to delete the left letter. Max 10 letters are supported. After setting, press "MENU", the system will save data to current user and quit menu. The menu will automatically save and quit if it remains idle.



### 3.5 DISPLAY submenu

The DISPLAY submenu is to select the items to be displayed on screen when 'DISPLAY' button is pressed. Revolve "OK" to turn on/off the items:

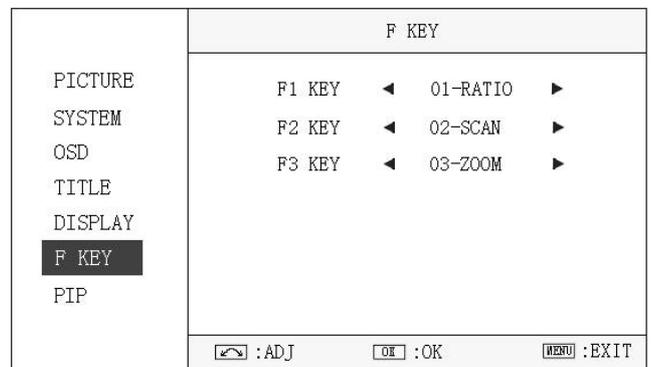
- (1) **INFO:** Including Input format, aspect ratio, underscan/overscan, zoom status
- (2) **MARKER:** Safe area
- (3) **TITLE:** User edited title
- (4) **MARKER4:3:** The 4:3 scale mark on 16:9 image. (Only available under HD input)



### 3.6 F KEY submenu

The F KEY Settings Submenu is to define Function Key F1, F2 and F3. The available function items are:

- 01- RATIO:** Aspect ratio 16:9 / 4:3 switch
- 02- SCAN:** Underscan / Overscan switch
- 03- ZOOM:** Picture Zoom-in
- 04- B/W:** Color / Black & white switch
- 05- BLUE ONLY:** Blue only mode switch on/off
- 06- ZEBRA:** Zebra over exposure switch on/off
- 07- VECTOR:** Vector scope switch on/off
- 08- PATTERN:** Internal colorbar switch on/off
- 09- RGB HIST:** R, G, B Histogram switch on/off
- 10- TIMECODE:** SDI timecode display switch on/off
- 11- F.COLOR:** False color mode switch on/off
- 12- AUDIO BAR:** Audio meter display switch on/off
- 13- FOCUS:** Peaking focus assist switch on/off,
- 14- FLIP:** Image flip
- 15- PIP:** PIP mode switch on/off

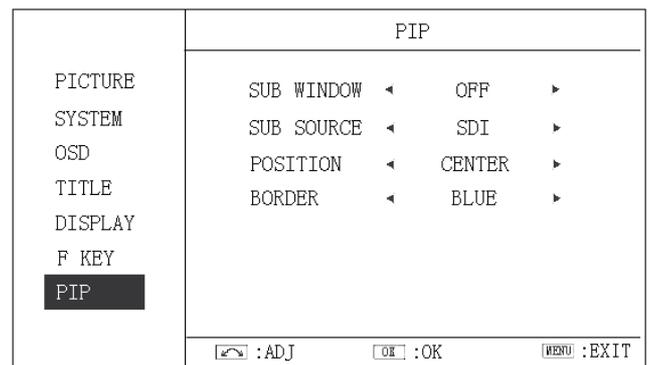


### 3.7 PIP submenu

The PIP Settings submenu includes:

- (1) **SUB WINDOW:** Switch on/off the PIP window
- (2) **SUB SOURCE:** Select SDI or CVBS as the PIP window video source
- (3) **POSITION:** Select the PIP window position from "CENTER", "TOP RIGHT", "BOT RIGHT", "BOT LEFT" and "TOP LEFT"
- (4) **BORDER:** Select the border color of PIP window from "BLUE" and "BLACK"

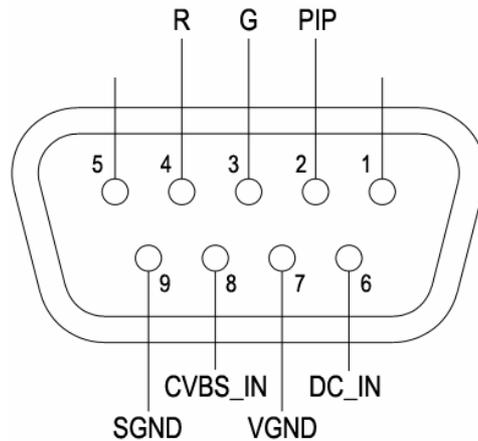
Remark: If the **SUB WINDOW** is off, the **SUB SOURCE**, **POSITION** and **BORDER** are unavailable to adjust.



## 4. DB-9 Terminal Description

The Multi-functional DB-9 port centralized DC power input, CVBS input, picture-in-picture switch on/off and TALLY light controlling. In your build-up EFP system, you can use only one DB-9 cable to input everything, instead of the complex cable work.

The terminal description is as follows:



Terminal	1	2	3	4	5	6	7	8	9
Description		PIP	G	R		DC_IN	VGND	CVBS_IN	SGND

Terminal 1: Factory firmware burning

Terminal 2: Connect “PIP” with “VGND” to switch on the PIP window, and disconnect to switch off

Terminal 3: Connect “R” with “VGND” to switch on the Red TALLY light, and disconnect to switch off

Terminal 4: Connect “G” with “VGND” to switch on the Green TALLY light, and disconnect to switch off

Terminal 5: Factory firmware burning

Terminal 6: DC input, support 6.5V-17V wide range voltage

(Lower voltage will generate high current, and please use the high quality of DB-9 connector.)

Terminal 7: Ground port for DC power and controlling signal

Terminal 8: Composite video input

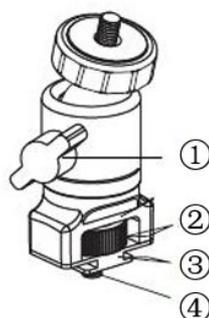
(The screen will not display if both BNC CVBS-IN and DB-9 CVBS-IN are connected)

Terminal 9: Ground port for CVBS signal

## 5. Cold Shoe Bracket

The provided monitor bracket supports both cold shoe and screw mount for camera connection.

1. For cold shoe: anticlockwise screw the knob to draw the bolt back, slide the cold shoe mount into camera, and then clockwise adjust the knob to fasten.
2. For screw mount: clockwise screw the knob to draw the bolt directly into the screw thread of camera till fastened.
3. Screw the ball head knob into monitors, and lock the ball head.



- ① Lock
- ② Knob
- ③ Cold shoe mount
- ④ Screw bolt

## 6. Specifications

<b>LCD Performance</b>		
Size	7 inches	
Display area	153.6×90mm	
Resolution	1024×RGB×600	
Aspect ratio	16:9/4:3	
Brightness	400cd/m <sup>2</sup>	
Contrast	900:1	
Color	16.77 million colors	
Viewing angle	Horizontal: 160° Vertical: 160°	
<b>Video Format</b>		
CVBS	NTSC / PAL	
SDI	SMPTE-274M	1080i (60 / 59.94 / 50)
		1080p (30 / 29.97 / 25 / 24 / 23.98)
	SMPTE-RP211	1080psf (30 / 29.97 / 25 / 24 / 23.98)
	SMPTE-296M	720p (60 / 59.94 / 50)
	SMPTE-125M	480i (59.94)
	ITU-R BT.656	576i (50)
HDMI		480I / 576I / 480P / 576P
		1080i (60 / 59.94 / 50)
		720p (60 / 59.94 / 50)
		1080p (60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98)
<b>General</b>		
Input voltage	DC 6.5V-17V	
Power consumption	≤12W	
Working temperature	0℃~+40℃	
Working humidity	10%~90%	
Storage temperature	-15℃~+60℃	
Storage humidity	10%~90%	
Dimensions	192×139×48mm	
Net weight (main body)	565g	

## 7. Packing List

<b>Simple Package</b>	<b>Luxury Package</b>
1. Monitor	1. Monitor
2. User Manual	2. User Manual
3. Power adaptor	3. Power adaptor
4. Power cable	4. Power cable
5. Cold shoe bracket	5. Cold shoe bracket
6. Sun hood	6. Sun hood
7. LCD protection film	7. LCD protection film
	8. Mini HDMI to standard HDMI cable
	9. D-tap to 4-pin XLR cable
	10. Pan-tilt arm trestle
	11. Carrying case



**SWIT®**