(13). BLACK-G

When "VR" is enabled, pedestal volume for green can be changed between -100 and 100 by rotating the knob.

(14). BLACK-B

When "VR" is enabled, pedestal volume for blue can be changed between -100 and 100 by rotating the knob.

(15). VR

This button enables the operation of Color Gain knob and Black Level Gain knob. The button lights up when it is enabled.

(16). AUTO

Press it to make Auto Iris on. The button lights up when Auto Iris is on.

(17). Iris Value LED

Display the current camcorder Iris value.

(18). M.PED

This is used to setup the master pedestal. Adjusting the knob, value is between -200 and 200.

(19). IRIS

It is used to adjust the iris of the camcorder. In manual iris mode, the iris can be adjusted from CLOSE to OPEN by pushing up.

3. Specification

Model	E-5010
Working Voltage	DC 12V（9V~16V）
Power Consumption	2.5W
Working temperature	0℃~40℃
Storage temperature	-20℃~60℃
Working humidity	10%~80%
Dimensions(W x H x L)	64mm x 36mm x 245mm
Weight	Approx.450g
Input/Output CAM/BS:	Round 10 pin
Video Output	Not available
Max. Cable length	50m

4. Cable connection

A 50cm, 150cm two specifications of cables are supplied to connect the RCU with camcorder.
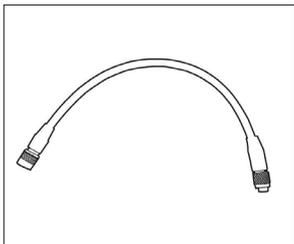
	50cm	150cm
	Camcorder	RCU
	HR10A-10P-10P(Hirose Electric)	HR10A-10P10S（Hirose Electric）
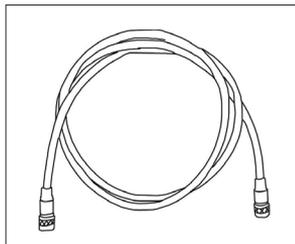
CAM CONT(H)	1		1	CAM CONT(H)
CAM DATA(C)	2	Twisted pair	2	CAM DATA(C)
CAM CONT(H)	3		3	CAM CONT(H)
CAM CONT(L)	4	Twisted pair	4	CAM CONT(L)
ECU_ON	5		5	ECU_ON
VIDEO OUTPUT	6		6	
GND (VIDEO)	7		7	
STANDBY	8	1. 5C-2V	8	
+12V(IN)	9	≦3Ω	9	+12V(IN)
GND	10	≦3Ω	10	GND
GND				GND
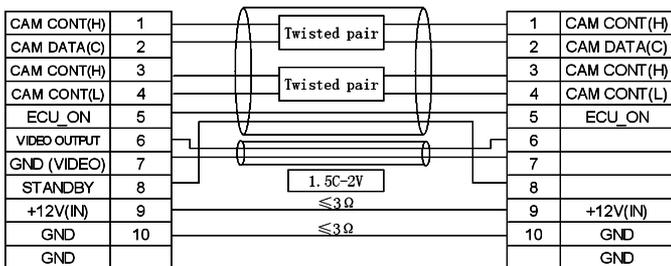
5. Trouble-shooting

Possible Causes	Solution
No display on LCD.	Check the connection of cables and equipments. Make sure Pin 9 and 10 are connected well.
Channel number display is not correct with corresponding connection.	See details in "2. Function" to set the buttons.
No response after pressing buttons	Check if control panel is enabled.
E-5010 can not communicate with camcorder.	Change the connection cable. Check the software version and camcorder model.
IRIS can not be controlled	Check if the camcorder's IRIS is turned to "AUTO". It should be in "AUTO" to work.
AWB does not work.	Check PRE/A/B. Make sure it is not in PRE, it should be in A or B.

SWIT®
Model: E-5010
Remote Control Unit for Camcorder
Ver:A.2

User Manual

Please read this User Manual through before using

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http://www.swit.cc
E-mail: contact@swit.cc
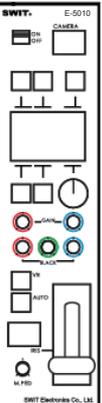
Preface

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 product,
   (2) Misuse, abuse or negligent operation to the product;
   (3) Signal attenuation in special environment;
   (4) Any damage caused by using third-party power adaptors;
   (5) Any damage or breakdown not caused by the product design, workmanship, or manufacturing quality, etc.
5. For any suggestions and requirements on this product, please contact us through phone, fax, Email, etc.

Maintenance

Product

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 product by yourself, which would probably damage the product and do harm to human body, and it will cause the invalidation of product warranty.

The Power

When using AC or DC power supply, 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 product for a period of time;
2. If the power cable or power adaptor is damaged;
3. If the product 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 or near equipment which powerful magnetic field can be formed.

1. Feature

User can choose the software version of E-5010 to control Panasonic or SONY camcorder. Table 1 is the list of software versions and the corresponding camcorder.

Software Version	Camcorder Model
SYS_S V1.3A	HDW-790P
SYS_S V1.3B	PDW-580
SYS_S V1.3C	PDW-680
SYS_P V1.3A	AJ_HDX-400E
SYS_P V1.3B	AG-HPX500MC
SYS_P V1.3C	AG-HPX265MC

Table 1

Note: "SYS_S xxx" indicates software version for Sony camcorder control, "SYS_P xxx" indicates software version for Panasonic camcorder control.

E-5010 can be divided into three areas：Panel status display and control area, LCD hot button control area and frequently-used function area, as shown in Figure 1.

Panel status display and control area

LCD hot button control area

Frequently-used function area
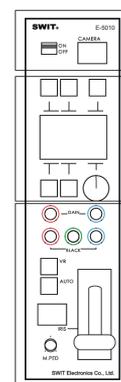
Figure 1

2. Function

Panel Status Display and Control Area

This area consists of active switcher of the control panel and channel number display.
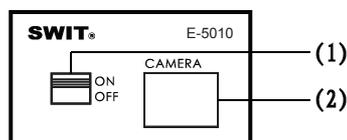
(1). RCU_ON

Turn the switcher to "ON" position, and the screen will display "Initial ...." Now the control panel is trying to communicate with camcorder. After initializing, it will display the camcorder status on the screen and the control panel is activated.

Note: if it always displays "Initial...." it means the panel failed to communicate with camcorder. Please check if the connection cable connects with camcorder well and if the software version fits the model of camcorder.

Turn the switcher to "OFF" position, and it will display "SWIT" and software version. Now only ON-OFF switcher works, and the other buttons are inhibited, as shown in down below:

Under this status, you can select the software version. Press and hold the orange button until the color of version on the screen reverses. Rotate the knob 9 to change software version, press knob 9 to select and quit software version selection mode. Then pull the connection cable out of E-5010, and re-plug in the cable. The E-5010 will work in new selected software version.

(2). Channel Number Display

Display current channel number.

LCD Hot Button Area
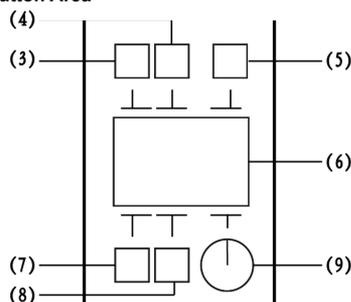
This area consists of 5 buttons, one knob and a LCD. The functions of the buttons are displayed on the LCD.

Buttons in this area can be setup to three different modes. Buttons will have different functions in different modes.

Mode 1 and Mode 2 are camcorder status control modes. Mode 3 is control panel status control mode. Following are the three display modes.

| Mode 1 | Mode 2 | Mode 3 |
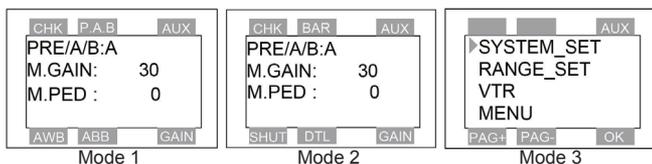
In Mode 3, there are four options, "SYSTEM_SET", "RANGE_SET", "VTR" and "MENU". The small triangle on the right side can be moved to the selected item by rotating the knob 9. Press knob 9 to enter. Rotate knob 9 to adjust and press again to finish the setting. Press "BAK" to quick.

Channel number can be changed in "SYSTEM_SET".

Adjusting Range of gains can be revised in "RANGE_SET".

"VTR" can remote control the camcorder video recording, enter into "VTR", the screen will display "VTR" control interface which will display the current camcorder VTR status. Specific remote control need to be coordinate with the buttons, and "VTR" button is to open panel "VTR" module function. "CHK" is to control camcorder to playback the recording video of the last few seconds. "REC" is to start or to pause recording, the recording time information will display on the screen.

"MENU" can remote control the camcorder menu settings, enter into "MENU", the screen will display "MENU" control interface which will display the current camcorder MENU status. Specific remote control need to be coordinate with the buttons, and "MENU" button is to call up the camcorder's menu. "CHAR" can control camcorder to output video with menu information or not. "EXIT" is to quit menu function. Under "MENU" setting mode, camcorder menu settings can be adjusted and confirmed through control panel.

Note: As camcorder models are different, the internal system and interface definition are different. "VTR" and "MENU" functions can be compatible with limited camcorder models, such as: Panasonic AG-HPX265MC, Panasonic AG-HPX500MC. Some of the Sony camcorders can only support "VTR" function.

(3). Function Button "CHK"

This knob has the same function in Mode 1 and Mode 2. It can switch the window to 5 different interfaces following the sequence of Master Gain Value Display, Shutter Parameter Display, Master Detail Display, Color Gain Value display and Black Level Gain Display. See the following pictures:
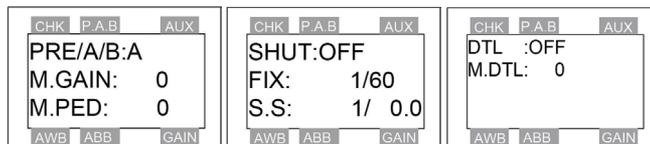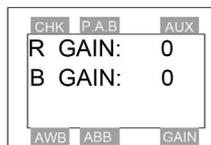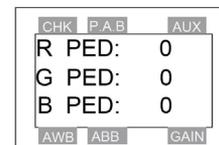
| Master Gain Value Display | Shutter Parameter Display | Master Detail Display |

| Color Gain Value display | | Black Level Gain Display |

Note: This function button is invalid under Mode 3.

(4). Function Key "P.A.B/BAR"

In mode 1, this button is "P.A.B". It has the same function as "WHITE BAL" on camcorder. The camcorder status can be switched to "PRE", "A", "B" by pressing it.

In mode 2, this button is "BAR". You can switch Color bar signal or video by pressing it. When output color bar signal, the indicator will light up.

Note: This function button is invalid under Mode 3.

(5). Mode Switch Button "AUX"

Press it to switch the E-5010 into three different modes.

(6). Display Window

It displays parameters of the camcorder.

(7). Function Button "AWB/SHUT"

In mode 1, this button is "AWB". Press it, and the camcorder begins auto white balance. The button lights up in operation. If AWB finishes successfully, it will light off. If AWB failed, the button will blink for 5 seconds, and then light off. In mode 2, this button is "SHUT". It can control the shutter. The button lights up when the shutter is open. The button lights off when the shutter is closed.

(8). Function Button "ABB/DTL"

In mode 1, this button is "ABB". Press it, the camcorder begins auto black balance. The button lights up in operation. It will light off after ABB finishes successfully. If ABB failed, the button will blink for 5 seconds, and then light off.

In mode 2, this button is "DTL". It used to choose the status of the detail compensation. The button lights up when "DTL" is open. The button lights off when "DTL" is closed.

(9). Control Knob

This knob has the same function in Mode 1 and Mode 2. It can adjust the parameters of M. Gain, Electronic shutter, Electronic synchro scan and M. DTL. Press the knob to switch to Main Gain, Electronic Shutter, Electronic synchro Scan or Master detail. Then rotate the knob to adjust the parameter.

Frequently-used function area
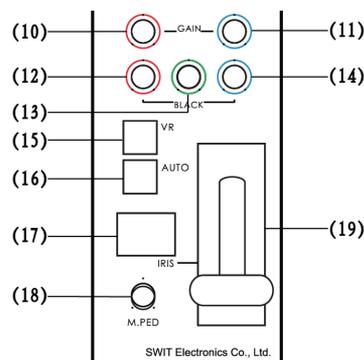
This area consists of 6 knobs, 2 buttons, one joystick and an Iris Value LED. Because the buttons and knobs are frequently-used, changing control mode will not affect the operations in this area.

(10). GAIN-R

When "VR" is enabled, Gain-R volume can be changed between -100 and 100 by rotating the knob.

(11). GAIN-B

When "VR" is enabled, Gain-B volume can be changed between -100 and 100 by rotating the knob.

(12). BLACK-R

When "VR" is enabled, pedestal volume for red can be changed between -100 and 100 by rotating the knob.