

User Manual

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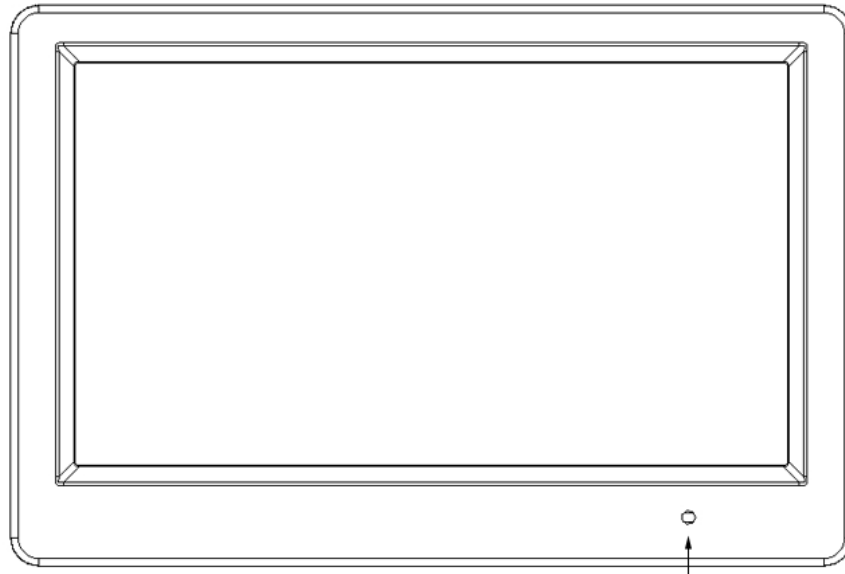
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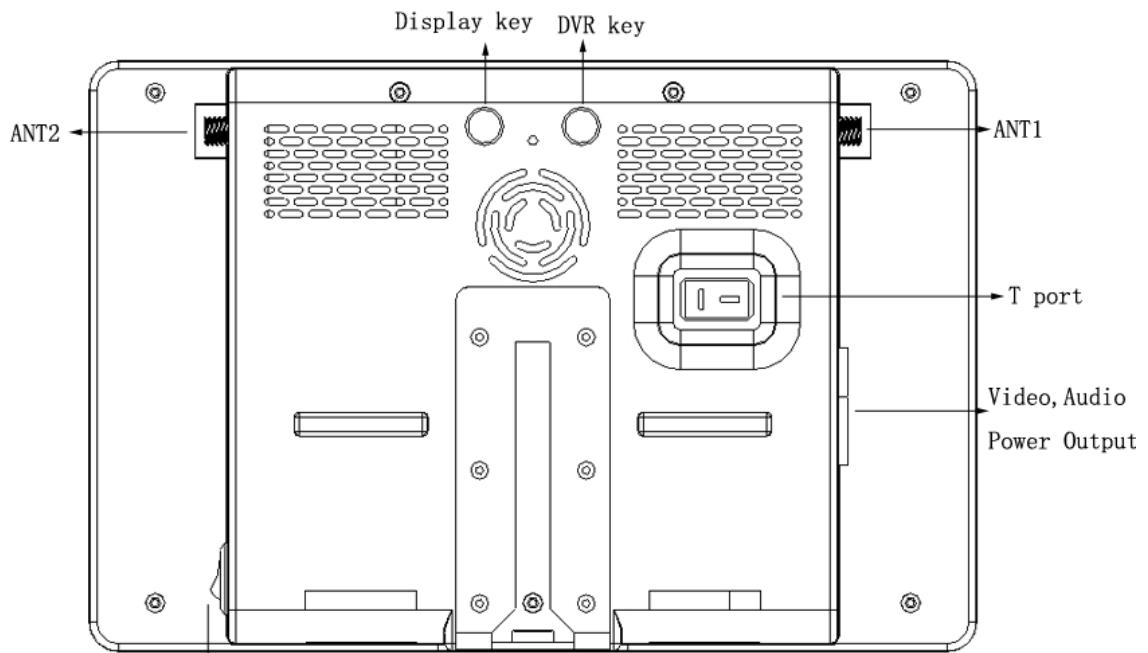
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Specifications and Features:

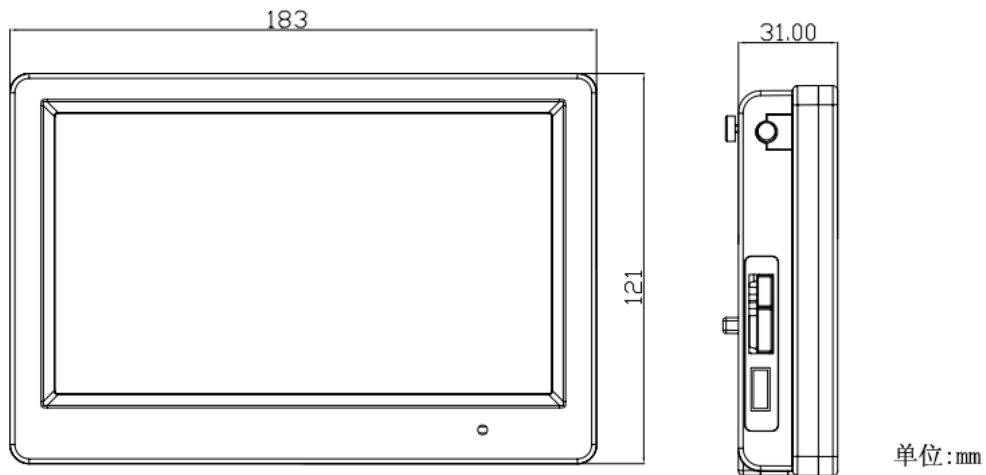


Top View

State LED



Bottom view



LED Screen	Display resolution	800×480
	Backlight	LED
	Brightness	700 Lux
	Aspect ratio	16 : 9
	Response time	10ms
	Color system	PAL/NTSC
Power Supply	Working voltage	DC : 2S-4S battery
	Current	850MA @ 12V
Input	Signal	Video (PAL/NTSC) , Audio
Output	Signal	Video , Audio
	12V	100mA
DVR	Resolution	D1/VGA/QVGA
	TF card supported	Max 32G
Specification	Packing size	205mm×130mm×106mm
	Monitor size	183mm×121mm×31mm
	Gross weight	0.66kg

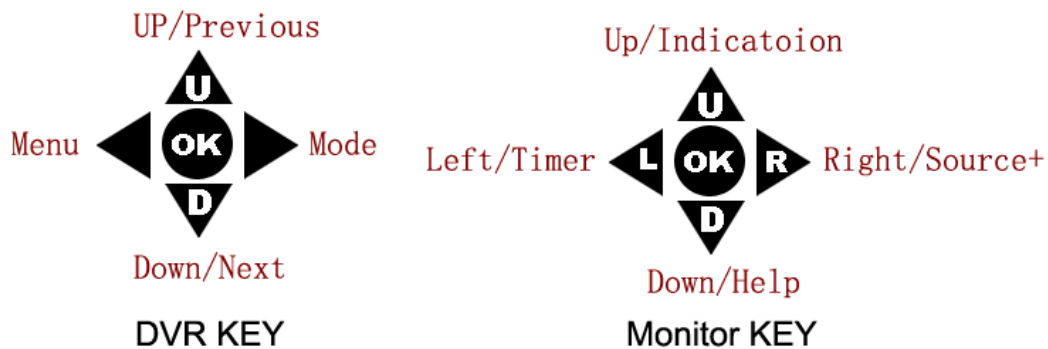
Features:

Specially designed for aerial photography system, Sharp Vision all-in-one monitor has the following features:

- ✓ High brightness: up to 700 Lux.
- ✓ Dual receiver: built-in dual receivers.
- ✓ DVR black box background system: integrated DVR black box can run in the background for recording.
- ✓ No delay/anti blue screen/anti black screen: the built-in DVR system won't cause any delay in receiving signal; blue screen or black screen will definitely not occur.
- ✓ Auto/manual channel scan: no need for DIP switch.

Button Functions:

At the back of the monitor, there are 2 groups of buttons, one for DVR control and the other for display control.



DVR Control Buttons:

	Functions	Quick Access to
UP	Move cursor up	-
DOWN	Move cursor down	-
MENU (left button)	Popup/exit menu/sub menu	-
MODE (right button)	Enter/exit video playback mode	-
OK	Confirm selection /play/stop	-

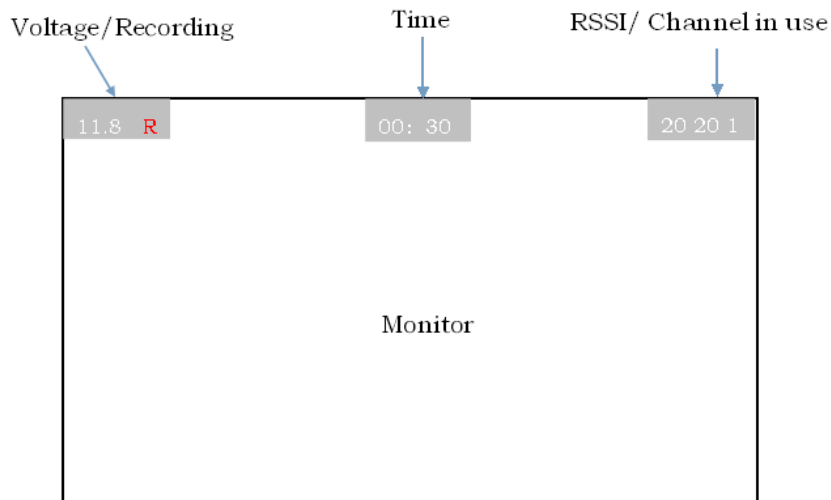
Display Control Buttons:

	Functions	Quick Access to
UP	Move cursor up	Hiding indication windows
DOWN	Move cursor down	Popping up HELP menu
LEFT/ -	Adjustment key(-)	Popping up former interface/ pausing time/resetting time if long press
Right/+	Adjustment key(+)	Popping up next interface
OK	Popup menu/confirm selections	-

Note: Three display resource types of this monitor are: **FPV interface**, **DVR interface** and **External video input interface**. Use **LEFT** key to switch the interface.

FPV Interface Descriptions

FPV interface is the default boot interface.



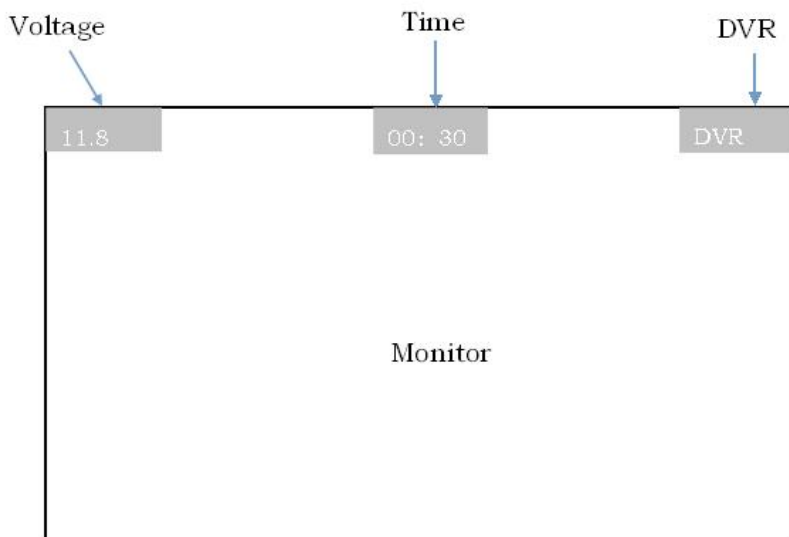
Voltage indicator: input voltage value is displayed; Display from 6.5V to 12.8V.

Recording indicator: a red "R" flashes when DVR is working in the background.

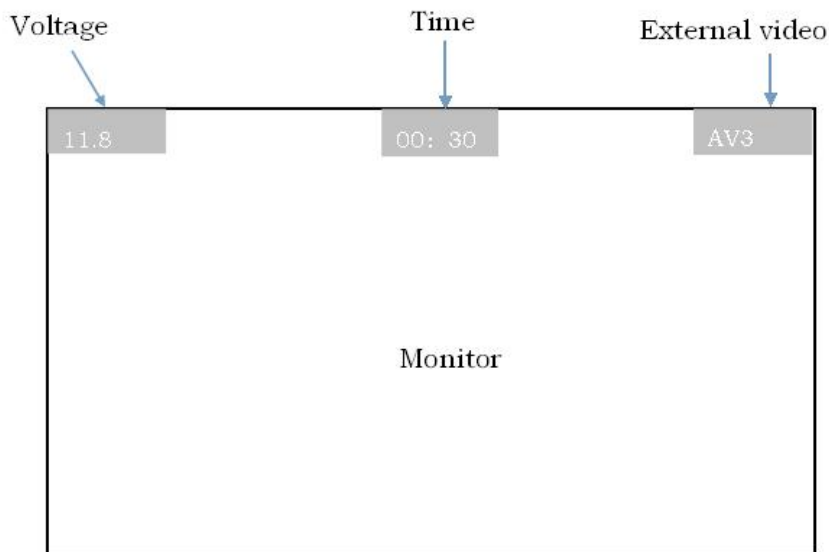
Time indicator: monitor running time is displayed.

Signal strength indicator: the strength of both the signals received by ANT1 and ANT2 is displayed.

DVR Interface (IF Have):



External video input Interface (IF Have):



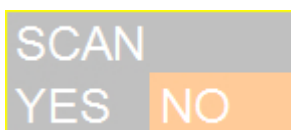
Display Interface Setting:

Press OK button to popup menu setting:

FRQA	SCAN
FRQB	A 5760
FORMAT	AUTO
VOL	20
GAMA	C0
BRI	20
CON	20
SAT	20
BURST	P0
LAN	CN
LIGHT	AUTO
RESET	
EXIT	

Frequency Group Selection:

You can manually select the desired frequency from 4 groups: A, B, C and D, or select SCAN option to start auto search.



Press LEFT, RIGHT or OK button to stop searching.

Dual 5.8G receivers cover 31 channels:

A1: 5.705G	B1: 5.740G	C1: 5.725G	D1: 5.733G
A2: 5.645G	B2: 5.760G	C2: 5.745G	D2: 5.752G
A3: 5.665G	B3: 5.780G	C3: 5.765G	D3: 5.771G
A4: 5.685G	B4: 5.800G	C4: 5.785G	D4: 5.790G
A5: 5.885G	B5: 5.820G	C5: 5.805G	D5: 5.809G
A6: 5.905G	B6: 5.840G	C6: 5.825G	D6: 5.828G
A7: 5.925G	B7: 5.860G	C7: 5.845G	D7: 5.847G
A8: 5.945G		C8: 5.865G	D8: 5.866G

System:

Press LEFT or RIGHT button to enter system setting, 3 options are provided: AUTO/ PAL/NTSC. If AUTO selected, the input video system will be automatically identified. System setting will cause display failure.

Volume:

Control buttons: LEFT (-), RIGHT (+).Range: 1 to 40.

Latitude:

Control buttons: LEFT (-), RIGHT (+).Range: C1-C3.

Brightness:

Control buttons: LEFT (-), RIGHT (+).Range: 1-40.

Contrast:

Control buttons: LEFT (-), RIGHT (+).Range: 1-40.

Saturation:

Control buttons: LEFT (-), RIGHT (+).Range: 1-40.

Burst:

Adjust Color Burst to get colorful image. Control buttons: LEFT (-), RIGHT (+).Range: P0-P7.

Language

Control buttons: LEFT (-), RIGHT (+).Options: Chinese/English.

DVR Interface Descriptions(IF Have):

Pressing RIGHT button can switch FPV interface to DVR interface and pressing LEFT button can switch back to FPV interface.

Video Playback

First,switch to the DVR interface, pressing MODE (RIGHT) button can start video

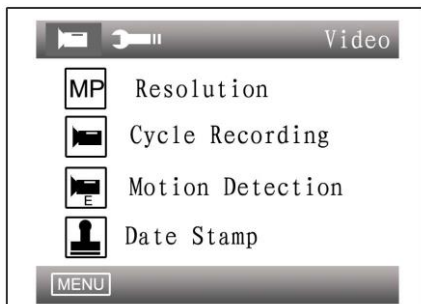
playback. Press UP or DOWN button to select a desired file, then press OK button to start playing it.

	Functions
UP	Move cursor up
DOWN	Move cursor down
MENU (LEFT)	Popup/exit menu/sub menu
MODE (RIGHT)	Enter/exit video playback mode
OK	Confirm selection /play/stop

DVR can run frontend or backend. In any interface except DVR setting and video playback mode, pressing OK button (middle one of DVR control group) can start recording in the background, without affecting FPV use.

Recording Settings:

Press MENU button to select sub menu: Resolution, Cycle Recording, Motion Detection and Date Stamp:



Resolution:

D1(720x576 (PAL)) , 720x480 (NTSC) ,VGA(640x480) QVGA (320x240) , higher resolution results in clearer video images and larger video file.



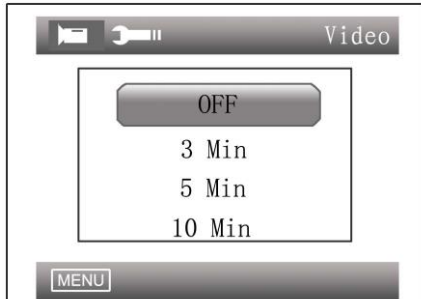
Cycle Recording:

If Cycle Recording is selected, the latest videos recorded will cover the earliest ones when the TF card is full. The TF cards used in our DVR can be used for a longer time than those used in other common DVR as they will be

initialized in our DVR system adopting a special algorithm.

“OFF”: if Cycle Recording function is closed, video files will not be cut into small segments;

If you select 3 min to 10 min, Cycle Recording function is open then; the length of each video segment is corresponding to the selected value.



Motion Detection:

If Motion Detection is selected, the DVR will automatically start recording according to its internal algorithm when any motion is detected.



Motion Detection Sensitivity:

Motion Detection Sensitivity can be adjusted by 3 levels: High/Medium/Low; the higher level is selected, the more easily the DVR is triggered to record.



Date Stamp:

Select ON/OFF to decide whether date and time will be showed at the bottom of the video images.



Audio Acquisition:

Select ON/Off to decide whether sounds can be recorded real-time into video files.



Image Quality:

Image definition and video file size can be adjusted by 3 levels. Higher image quality results in higher image definition and larger video file; as the camera is connected externally, the image definition largely depends on the resolution of the camera.

When resolution D1(720x576 (PAL)) is selected, the file sizes of videos recorded at different Image Quality options are as follows:

Best: 1.7G/h

Good: 1.2G/h

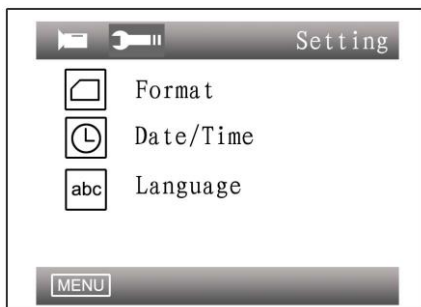
Standard: 800M/h



Advanced Settings:

Press the MENU button twice will pop up the Advanced Setting options including

Format, Date/Time and Language.



Format:

Enter Advanced Settings, and select Format option to format the TF card in order to optimize the file system when the DVR is used for the first time; the system will prompt you “customer size wrong, please format” if the TF card has not been formatted.

Note: all files stored in the TF card will be deleted after the card is formatted.



Date/Time:

Enter Advanced Settings → select Date/Time option → press UP/DOWN button to select a desired date/time → press MENU button to exit.



Language:

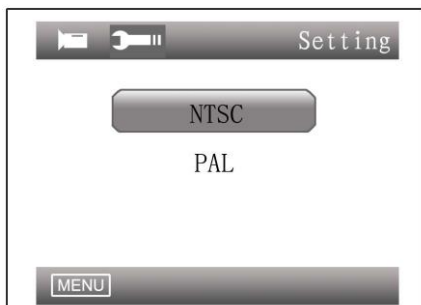
Enter Advanced Settings → select Language option → press UP/DOWN button

to select a desired language from 8 languages provided → press MENU button to exit.



TV Mode:

Video output system can be selected and video input system will be automatically identified. When D1 Resolution selected, if video input is PAL, the video size will be 720×576; if video input is NTSC, the video file size will be 720×480. Select the system according to which country you are in.



Default Settings:

This option leads back to factory default settings.



Quick Access Descriptions:

Timer Stop/Start:

In the FPV or external video interface, pressing LEFT button (of the display

control group) once can stop the timer, and pressing LEFT again can restart it.

Reset Timer:

In the FPV or external video interface, long pressing LEFT button (of the display control group) can reset the timer. The time displayed will restart from zero.

Interface Switch:

Pressing RIGHT button can switch between FPV, DVR and external video interfaces.

Show/Hide Indication Windows:

In any interface, pressing UP button (of the display control group) once can hide the indication windows, and pressing UP again can show them again.

Show Help Menu:

In any interface, pressing DOWN button (of the display control group) can show Help menu, pressing DOWN again can make it disappear.

Packing and Accessories:

Size and Weight:

Specification	Packing size	205mm×130mm×106mm
	Gross weight (dual receiver + DVR)	0.66kg

Accessories:



Accessories	Light blocking drape	1
	Velcro cable tie	1
	Female T-plug to male XT60 plug connector cable	1
	Female to female T-plug connector extension cable	1
	AV input/output cable	1
	Power supply output cable	1

Interface descriptions	Yellow	Video input
	Red	Audio input
	Black	Video output
	White	Audio output

FAQ:

Not able to search channels automatically:

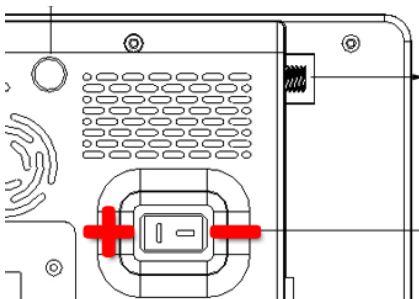
- Auto channel scan only functions in the FPV interface. In the DVR interface, users should search channels manually.

The video displayed is black-and-white:

- Check whether the camera output is black-and-white (some cameras might automatically shift to black-and-white in low-light conditions)
- If it normally displays in full color in the DVR interface, users can adjust the "BURST" in menu from P0 to P7.

Can not start after connected to power:

- First fully charge the battery, and make sure its discharge current at least reaches 1.4A. Check whether the battery power is enough. If a 2S battery is being used, try a 3S battery for testing.
- Check whether it is caused by poor contact of the T-plug and battery cable.
- Check whether the power source is correctly connected to positive and negative poles.



No channel can be received:

- Install antennas, and move the monitor close to the 5.8 GHz transmitter.
- Connect video signal to the transmitter.
- Check whether the channel provided by the transmitter is one of those listed in the channels-able-to-be-received-table; check with other channels.

Volume is too low:

- Turn it to full volume.
- Check whether the microphone of the transmitter works well.