



Hawkeye Captain **H(High FRQ)** 10.2 inch FPV Monitor DVR HDMI IN 6-7-8GHZ **232CH**

- ✓ Dual 6-7- 8G receivers
 - ✓ 232 Channels
- ✓ 1000lux High brightness
 - ✓ -99db high sensitivity
 - ✓ Auto channel search
 - ✓ Tracking mode



The latest version:

<https://drive.google.com/file/d/10M5WjBE4JyT2lvUvnt0DihKO0FQTIY2G/view?usp=sharing>

V1.0

Specifications and Features:	4
Features:	4
Button Functions:	5
DVR Control Buttons:.....	5
Display Control Buttons:.....	6
FPV Interface	7
Frequency Group Selection:.....	8
DVR Interface :	9
External video input Interface:	9
HDMI Interface:	9
Track mode Interface:	9
Display Interface Setting:.....	10
Frequency Group Selection:.....	11
FORMAT:.....	12
Brightness:.....	12
Contrast:	12
Saturation:	12
Sharp:	12
Latitude:	12
SPEAKER:	12
Black light:	12
ZOOM:	12
VOLADJ:	12
LED:	12
Source:.....	12
Language:	12
Reset:.....	13
DVR Interface :	13
Video Playback.....	13
Recording Settings:	14
Resolution:	14
Cycle Recording:.....	14
Motion Detection:	15
Motion Detection Sensitivity:	15
Date Stamp:	15
Image Quality:.....	16
Auto power up recording:	16
Advanced Settings:.....	16
Format:	16
Date/Time:.....	17

Language: 17

TV Mode: 17

Default Settings: 18

Quick Access Descriptions:..... 18

 Interface Switch: 18

 Show/Hide Indication Windows: 18

 Show Help Menu:..... 18

 The power indicator light: 18

Packing and Accessories : 19

 Size and Weight:..... 19

 Accessories:..... 19

FAQ: 19

 Not able to search channels automatically: 19

 The video displayed is black-and-white:..... 19

 Can not start after connected to power:..... 19

 No channel can be received:..... 19

Check on www.CNfpv.com for new firmware/Manual updates. 20

Specifications and Features:



LED Screen	Display resolution	1024×600
	Backlight	LED
	Brightness	1000 Lux
	Aspect ratio	16: 9
	Response time	10ms
	Color system	PAL/NTSC
Power Supply	Working voltage	DC: 3S-6S battery
	Current	1.3A @3S; 600MA @6S;
Input	Signal	Video (PAL/NTSC), HDMI
Output	Signal	Video
	5V(input power >12V)	1A
DVR	Resolution	D1/VGA/QVGA
	TF card supported	Max 64G
Specification	Packing size	300mm×200mm×60mm
	Monitor size	265mm×170mm×31mm
	Gross weight	1.13kg
	Sensitivity	-99dB
Matching antenna interface	interface	SMA

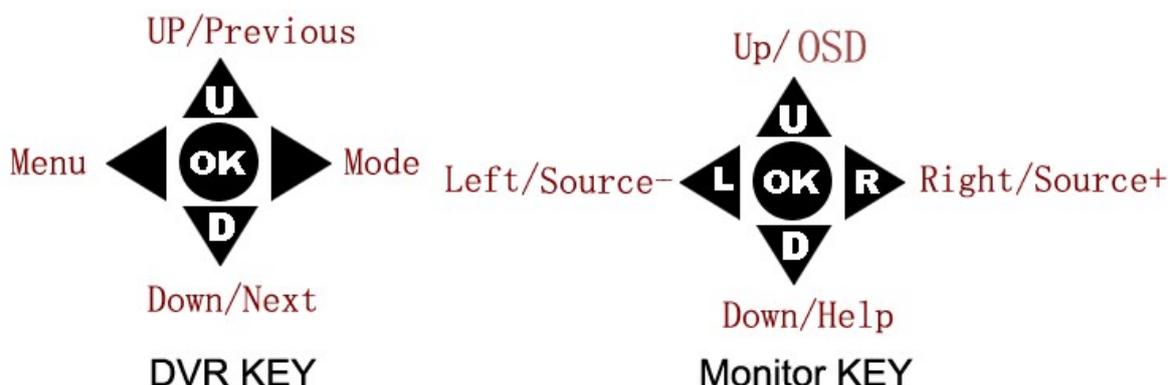
Features:

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

- ✓ **High brightness:** 1000 Lux.
- ✓ **Dual receiver:** built-in dual receivers.
- ✓ **DVR :** 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.
- ✓ **HDMI input.**
- ✓ **Tracking mode.**

Button Functions:

At the back of the monitor, there are 2 groups (5 directions button) of buttons, one for DVR control , the other for display control.



DVR Control Buttons:

Button Name	Functions
UP	Move cursor up
DOWN	Move cursor down
MENU (Left button)	Pop up/exit menu/sub menu
MODE (Right button)	Enter/exit video playback mode
OK	Record/ Confirm selection /play/stop

Note: SD card supports 4-64G , FAT32 system. Make sure to format sd card for the first time.

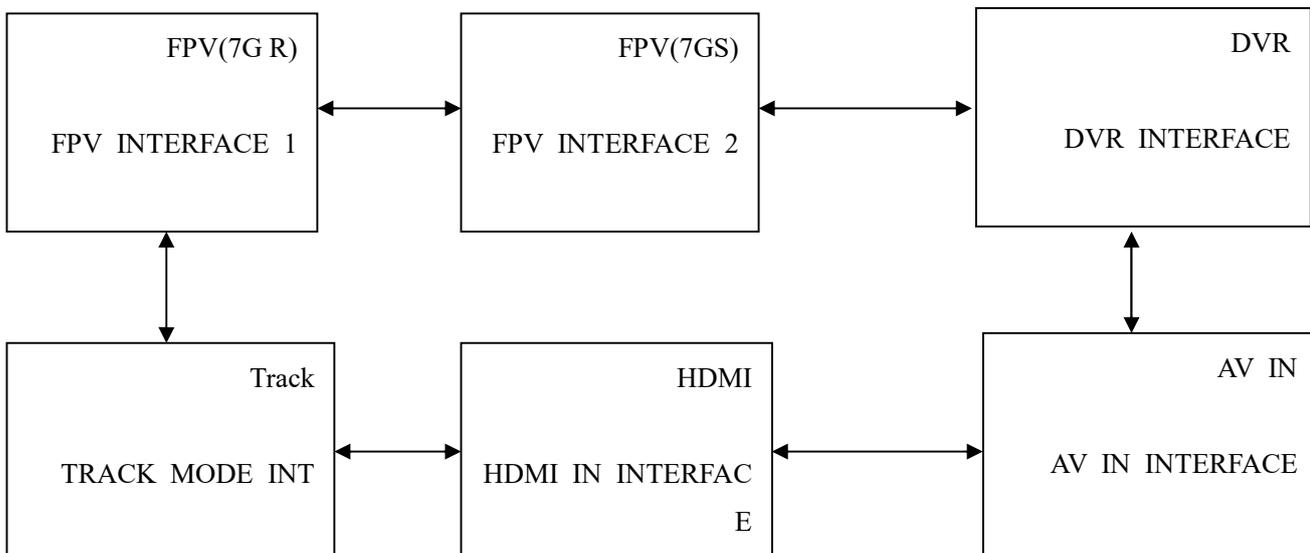
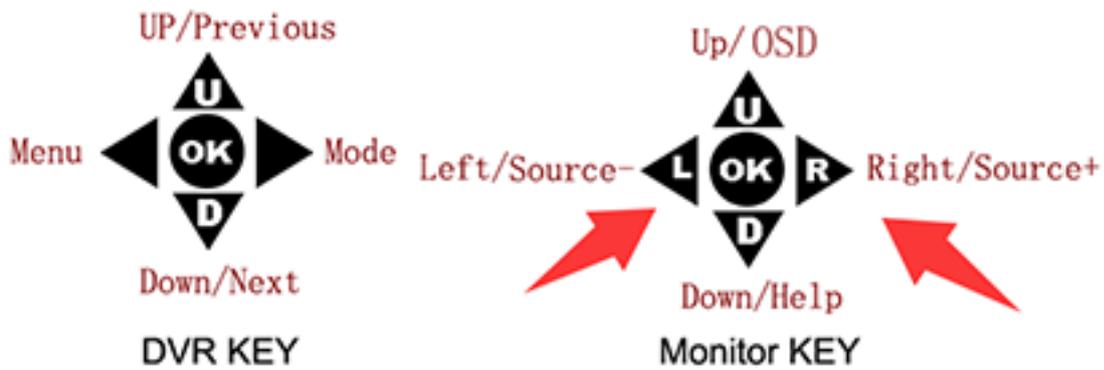
Record video: Press OK BUTTON to record video/stop. This operation can be done in any interface.

Monitor Buttons:

	Functions	Shortcut key
UP	Move cursor up	Hiding OSD/ Press 2 seconds for Auto channel search in FPV
DOWN	Move cursor down	Popping up HELP menu
LEFT / -	Adjustment key(-)	Popping up former interface
Right / +	Adjustment key(+)	Popping up next interface
OK	Po pup menu/confirm selections	

Note: Interface of the monitor : **FPV (7G R / 7GS)** interface, **DVR** interface, **AV input** interface, **HDMI** interface, and **Track mode** interface.

Toggle LEFT /RIGHT buttons (shortcut key) to switch the interface:



FPV Interface

FPV interface is the default boot interface. There're 7G R(80 channels)/ 7G S (152) channels interface. There're many frequencies in 6G to 8G, so it is divided to 2.

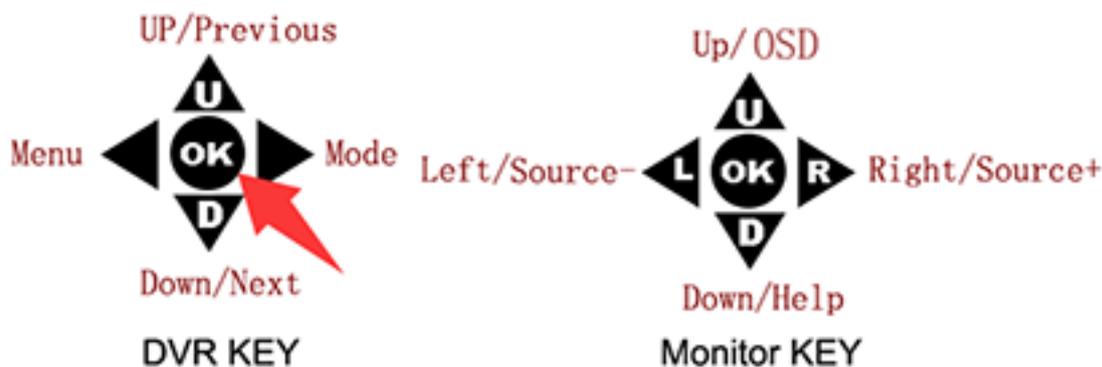
Note: FPV interface gets more clear footage. Use this interface for FPV.

Voltage Time RSSI / Channel in use



Recording indicator: Press OK button to record video, a red “R” will flash on the screen. **11.5 R**

Notes: FPV interface gets more clear footages. So only playback video in DVR mode.



Voltage indicator: input voltage value is displayed; Display from 10V to 26 V. When the battery is low, the menu turns red and starts flashing. When the battery is too low, the blue light flashes faster and faster in the lower left corner and the buzzer alarms. Please replace the battery immediately to avoid damage to the battery.

11.5 R

Time indicator: monitor running time is displayed.

00:30

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

25 20 14

Frequency Group Selection:**7GR****7G R** Frequency table: 80 channels.

	A	B	E	F	R	L	J	X	U	H
1	6110	6270	6430	6590	6750	6910	7070	6115	6000	6860
2	6130	6290	6450	6610	6770	6930	7090	6265	6012	7060
3	6150	6310	6470	6630	6790	6950	7110	6425	6024	7260
4	6170	6330	6490	6650	6810	6970	7130	6585	6036	7460
5	6190	6350	6510	6670	6830	6990	7150	6745	6048	7660
6	6210	6370	6530	6690	6850	7010	7170	6905	6060	7860
7	6230	6390	6550	6710	6870	7030	7190	7065	6080	8060
8	6250	6410	6570	6730	6890	7050	7210	7185	6100	8260

Notes: You can manually input the frequency in H BAND.**7G S** Frequency table: 152 channels.**7GS**

	A	B	E	F	R	L	J	X	U	I	K	Z	Z1	Z2	Z3	Z4	Z5	Z6	H
1	6002	6200	6360	6520	6240	6400	6560	6720	6880	7040	7200	7360	7500	7660	7820	7980	8140	8300	8460
2	6028	6220	6380	6540	6260	6420	6580	6740	6900	7060	7220	7380	7520	7680	7840	8000	8160	8320	8480
3	6054	6240	6400	6560	6280	6440	6600	6760	6920	7080	7240	7400	7540	7700	7860	8020	8180	8340	8500
4	6080	6260	6420	6580	6300	6460	6620	6780	6940	7100	7260	7420	7560	7720	7880	8040	8200	8360	8520
5	6106	6280	6440	6600	6320	6480	6640	6800	6960	7120	7280	7440	7580	7740	7900	8060	8220	8380	8540
6	6132	6300	6460	6620	6340	6500	6660	6820	6980	7140	7300	7460	7600	7760	7920	8080	8240	8400	8560
7	6158	6320	6480	6640	6360	6520	6680	6840	7000	7160	7320	7480	7620	7780	7940	8100	8260	8420	8580
8	6184	6340	6500	6660	6380	6540	6700	6860	7020	7180	7340	7500	7640	7800	7960	8120	8280	8440	8600

Notes: You can manually input the frequency in H BAND.

DVR Interface :



External video input Interface:



HDMI Interface:



HDMI input :480i/p, 576i/p, 720p, 1080i/p.

Track mode Interface:



In track mode, the monitor will loop searching all the channels (or selection channel group). When the RSSI value larger than the setting value, it will pause (and beeps) for 5 seconds until button pressed.

Display Interface Setting:

Press OK button to popup menu setting:

FRQA	SCAN
FRQB	A1 6110
FRQADJ	OFF
FORMAT	AUTO
BRI	20
CON	20
SAT	20
SHARP	07
GAMA	C0
LIGHT	20
ZOOM	16:9
VOLADJ	+0.0V
LED	ON
LAN	EN
RESET	
EXIT	

Frequency Group Selection:

7G R Frequency table: 80 channels.

	A	B	E	F	R	L	J	X	U	H
1	6110	6270	6430	6590	6750	6910	7070	6115	6000	6860
2	6130	6290	6450	6610	6770	6930	7090	6265	6012	7060
3	6150	6310	6470	6630	6790	6950	7110	6425	6024	7260
4	6170	6330	6490	6650	6810	6970	7130	6585	6036	7460
5	6190	6350	6510	6670	6830	6990	7150	6745	6048	7660
6	6210	6370	6530	6690	6850	7010	7170	6905	6060	7860
7	6230	6390	6550	6710	6870	7030	7190	7065	6080	8060
8	6250	6410	6570	6730	6890	7050	7210	7185	6100	8260

Notes: You can manually input the frequency in H BAND by press OK button.

7G S Frequency table: 152 channels.

	A	B	E	F	R	L	J	X	U	I	K	Z	Z1	Z2	Z3	Z4	Z5	Z6	H
1	6002	6200	6360	6520	6240	6400	6560	6720	6880	7040	7200	7360	7500	7660	7820	7980	8140	8300	8460
2	6028	6220	6380	6540	6260	6420	6580	6740	6900	7060	7220	7380	7520	7680	7840	8000	8160	8320	8480
3	6054	6240	6400	6560	6280	6440	6600	6760	6920	7080	7240	7400	7540	7700	7860	8020	8180	8340	8500
4	6080	6260	6420	6580	6300	6460	6620	6780	6940	7100	7260	7420	7560	7720	7880	8040	8200	8360	8520
5	6106	6280	6440	6600	6320	6480	6640	6800	6960	7120	7280	7440	7580	7740	7900	8060	8220	8380	8540
6	6132	6300	6460	6620	6340	6500	6660	6820	6980	7140	7300	7460	7600	7760	7920	8080	8240	8400	8560
7	6158	6320	6480	6640	6360	6520	6680	6840	7000	7160	7320	7480	7620	7780	7940	8100	8260	8420	8580
8	6184	6340	6500	6660	6380	6540	6700	6860	7020	7180	7340	7500	7640	7800	7960	8120	8280	8440	8600

Notes: You can manually input the frequency in H BAND by press OK button.

FRQA	H
FRQB	8460
FRQADJ	OFF
FORMAT	AUTO
BRI	20
CON	20
SAT	20
SHARP	07
GAMA	C0
LIGHT	20
ZOOM	16:9
VOLADJ	+0.0V
LED	ON
LAN	EN
RESET	
EXIT	

Press LEFT and RIGHT button to select the group, press "OK" to confirm.

FORMAT:

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.

Brightness:

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

Contrast:

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

Saturation:

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

Sharp:

Control buttons: LEFT (-), RIGHT (+).Range: 1-15.

Latitude:

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

SPEAKER:

Control buttons: LEFT (-), RIGHT (+).Range: 1 to 40. **For HDMI input only.**

Black light:

Adjust LED light brightness, Auto, High, Low.

ZOOM:

Press LEFT or RIGHT button to enter system setting, 16:9 / 4:3

VOLADJ:

Control buttons: LEFT (-), RIGHT (+).Range: -5 to +5

LED:

Adjust the power indicator light, ON/ OFF.

Source:

Select receiver 1 / 2 OR AUTO.

Language:

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

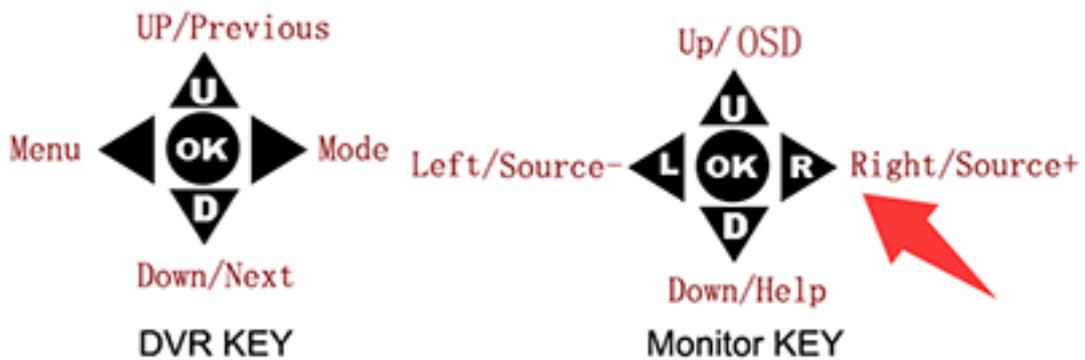
Reset:

Reset values to default.

DVR Interface :

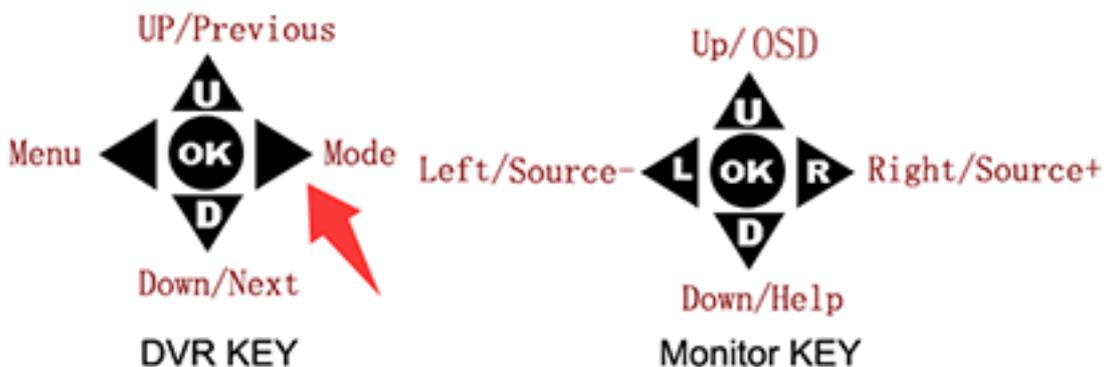
Note: Please back up your data in TF card; when the TF card is used for the first time, it will be auto formatted.

Press RIGHT button switch to DVR interface, press LEFT button again to switch back to FPV interface.



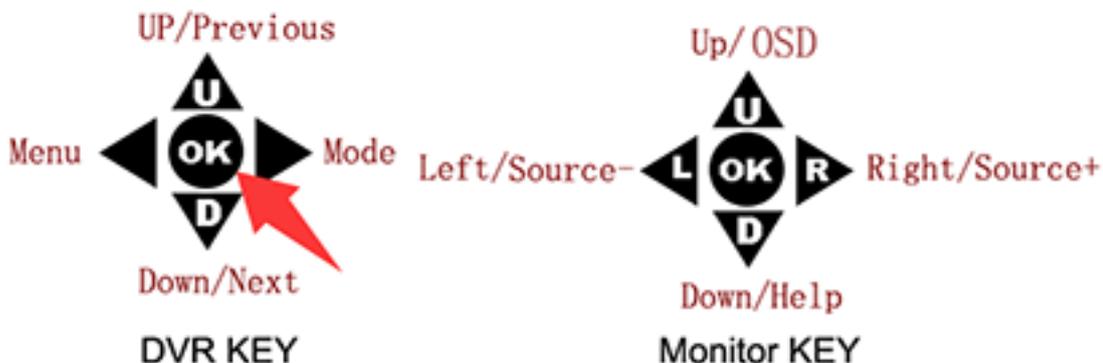
Video Playback

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.



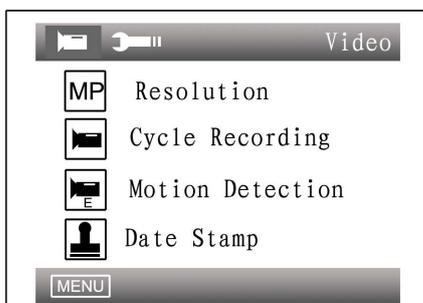
	Functions
UP	Move cursor up
DOWN	Move cursor down
MENU (LEFT)	Pop up/exit menu/sub menu
MODE (RIGHT)	Enter/exit video playback mode
OK	Confirm selection /play/stop

DVR can run front-end or back-end. 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.



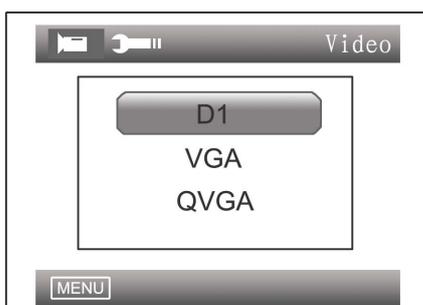
Recording Settings:

Press MENU button to select sub menu:



Resolution:

D1(720×576 (PAL)), 720×480 (NTSC), VGA(640×480) QVGA (320×240) .



Cycle Recording:

If Cycle Recording is selected, the latest videos recorded will cover the earliest ones when the TF card is full.

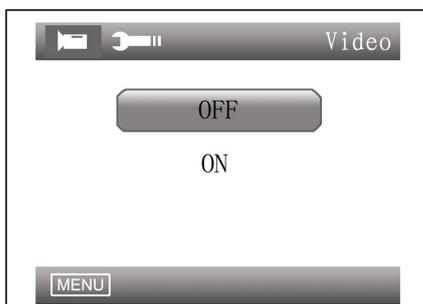
“OFF”: if Cycle Recording function is closed, video files will not be cut into small segments;

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.



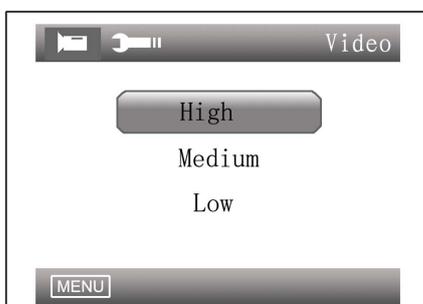
Motion Detection:

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.



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;

When resolution D1(720×576 (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

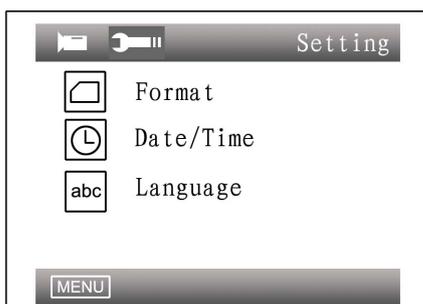


Auto power up recording:

Select YES/ON to decide whether videos need to be auto recorded when power up.

Advanced Settings:

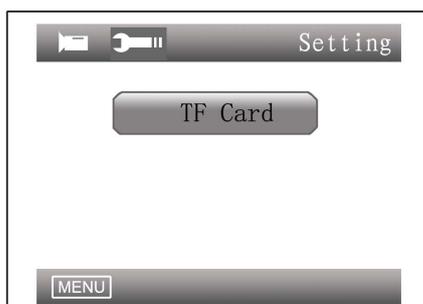
Press the MENU button twice will pop up the Advanced Setting options including Format, Date/Time and Language.



Format:

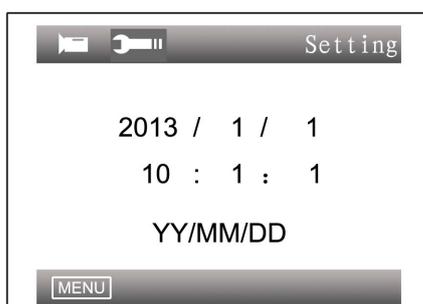
Enter Advanced Settings, and select Format option to format the TF card. In order to optimize the file system ,DVR will format the TF card, if it's used for the first time; **Please back up your data in TF Card.**

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. Select the system according to which country you are in. (Keep it in PAL, do not change)



Default Settings:

This option leads back to factory default settings.



Quick Access Descriptions:

In any mode except menu setting, Monitor keys can be used as shortcuts described as follows:

Interface Switch:

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

The power indicator light:

When the system starts, if the power indicator is on, it indicates that the power is on.

In any of the FPV, DVR and external video interfaces , When recording, the LED will flash.

When the battery is too low and the system alarms, the LED will flash.

The power indicator is very important, but for humane settings, you can enter the

menu to turn it off at night if you feel dazzling.



Packing and Accessories :

Size and Weight:

Specification	Packing size	300mm×200mm×60mm
	Gross weight (dual receiver + DVR)	1.13kg

Accessories:

Accessories	Female XT60 plug to male DC connector cable	1
	3.5mm connector cable	1
	antenna	2
	Bracket	1

3.5mm cable Interface descriptions	Yellow	Video output
	White	Video input
	Red	-

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)

Cannot 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 3S battery is being used, try a 4S battery for testing.
- Check whether it is caused by poor contact of the DC-plug and battery cable.
- Check whether the power source is correctly connected to positive

No channel can be received:

- Install antennas, and move the monitor close to the 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.

NOTE:

Check on www.CNfpv.com for new firmware/Manual updates.

For more information please check our

Youtube/Facebook/Instagram channel:

HawkeyeFPV

Youtube

Facebook



Instagram

