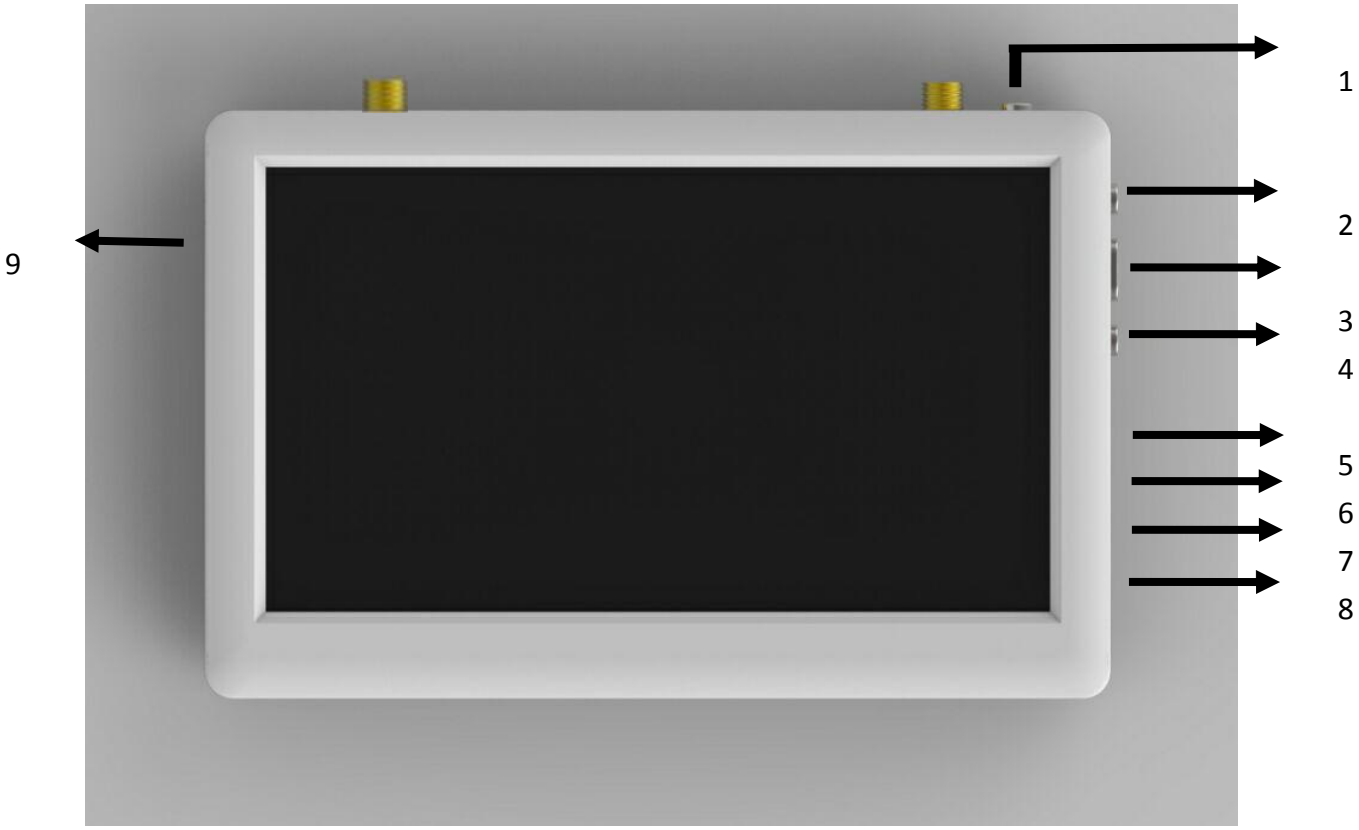
# Dual Receivers
# Built in Battery
# DVR - for tracking lost drones

Thanks for choosing Hawkeye!

-Hawkeye present

V3.0

## Specifications and Features:




1. Record /OK button
2. Increase button / Auto channel search button
3. Power / Menu button
4. Decrease button / Channel switching / Hot key for grid display
5. Video out
6. Video input
7. Battery charging status LED (will turn off when the battery is fully charged)
8. Micro USB charge port

9.SD card slot

| | | |
|---|---|---|
| LED Screen | Display resolution | 800×480 |
| | Backlight | LED |
| | Brightness | 700 Lux |
| | Aspect ratio | 16：9 / 4:3 |
| | Response time | <10ms |
| | Color system | PAL/NTSC |
| Battery | Battery life | About 2.5-3 hours |
| Input | Signal | Video（PAL/NTSC） |
| Specification | Monitor size | 128.5mm×83.5mm×16.8mm |
| | Gross weight | 220g |
| | 5.8G Sensitivity | -94dB |
| Matching antenna interface | interface | RP-SMA |
| Video RAM | Resolutions | PAL: 720*288<br>NTSC: 720*240 |
| SD Card | | 8-32G C10 |

## Features:

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

- ✓ **Video buffer**. Can record and playback on the monitor.
- ✓ **Built in battery** for 2.5 hours.
- ✓ **Dual receivers.**
- ✓ **High brightness**: 700 Lux.
- ✓ **No delay/blue /black screen.**
- ✓ **Auto/manual channel scan**: no need for DIP switch.

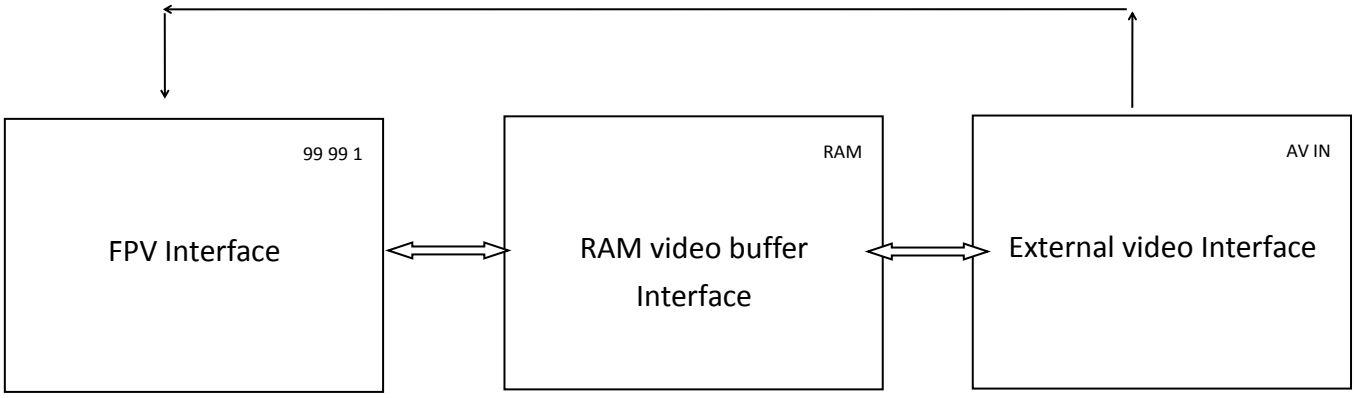
## ***Reminder: For better display/record quality, please set the camera to NTSC format.***

## Button Description

| Button name | Function | Shortcut function |
|---|---|---|
| Record | Start/Stop record / confirm format | |
| Adjustment button(+) | Item increase | Press 2 seconds for Auto channel search in FPV; Switch interface |
| Adjustment button(-) | Item decrease | Grid display /Press 2sec to switch channel |
| Power/Menu button | Enter menu | Press 3 seconds to Power on/off |

Note: Three display interfaces are:

**FPV interface, RAM interface(video buffer) ,External video interface.**




Press +/- buttons for 2 seconds to switch the interface .

## FPV Interface :




**Voltage indicator:** input voltage value is displayed.
**Time indicator:** monitor running time is displayed.
**Signal strength indicator:** the strength of both the signals received by ANT1 and ANT2 is displayed.
**SD card icon Green**: SD card ok.
**SD card icon Red**: No SD card.
**SD card icon Grey**: **Need to format SD card in the monitor. Format SD card for the first time.**
**Red "R"**: Recording .

## RAM Interface :

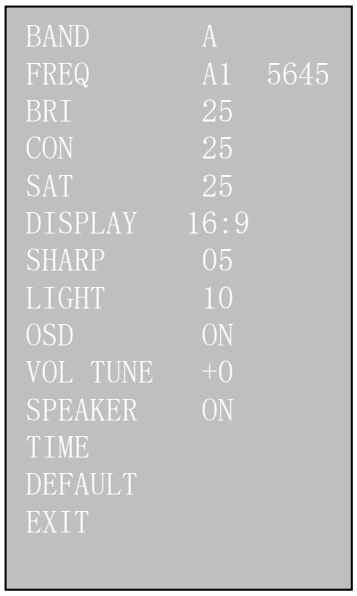


## External video Interface :




## Display Interface Setting:

Press Menu button to pop up menu :



**Frequency Group Selection:**

You can select the desired frequency from 6 groups: A、B、C、D、E and F:

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1 | 5.645G | 5.740G | 5.725G | 5.733G | 5.658G | 5.362G |
| 2 | 5.665G | 5.760G | 5.745G | 5.752G | 5.695G | 5.399G |
| 3 | 5.865G | 5.780G | 5.765G | 5.771G | 5.732G | 5.436G |
| 4 | 5.705G | 5.800G | 5.785G | 5.790G | 5.769G | 5.473G |
| 5 | 5.885G | 5.820G | 5.805G | 5.809G | 5.806G | 5.510G |
| 6 | 5.905G | 5.840G | 5.825G | 5.828G | 5.843G | 5.547G |
| 7 | 5.925G | 5.860G | 5.845G | 5.847G | 5.880G | 5.584G |
| 8 | 5.945G | 5.880G | 5.865G | 5.866G | 5.917G | 5.621G |

**Brightness:**

LEFT (-), RIGHT (+) to set in the menu.Range: 1-50.

**Contrast:**

LEFT (-), RIGHT (+) to set in the menu.Range: 1-50.

**Saturation:**

LEFT (-), RIGHT (+) to set in the menu.Range: 1-50.

**DISPLAY:**

Select display ratio 16:9 or 4:3;.

**SHARP:**

Sharpness of the image. Note: the sharpness of NTSC/PAL are saved independently.

**LIGHT:**

Set the brightness of the LED lights：1-10. Lower values make less power consumption.

**OSD:**

OSD display ON/OFF.

**VOLATGE TUNE:**

You can fine tune the value of the voltage display

**SPEAKER:**

Set speaker ON/OFF..

**DEFAULT:**

Reset to default settings.

**FORMAT:**

Format the SD card, Use -, + button to select YES/NO . Use Record/OK button to confirm.

Format the SD card at the first time.

Don't mixed use the SD cards with other machines.

**EXIT:**

Exit menu.

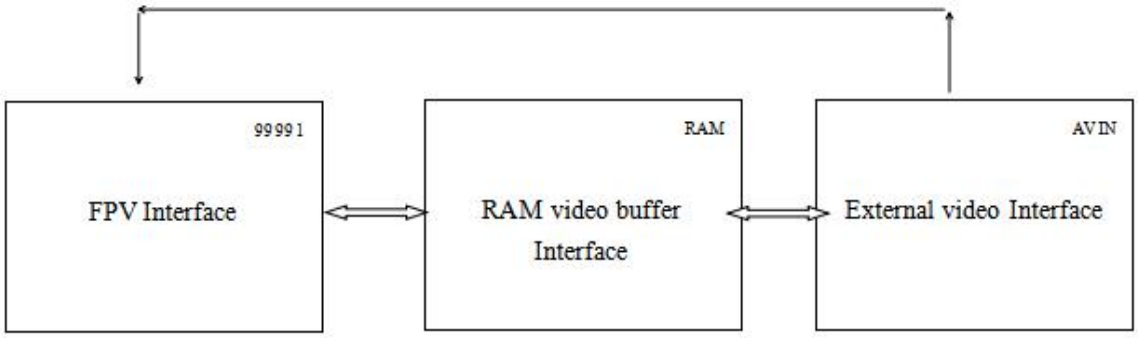
## Auto Channel Search

Press "+ button" for 2 seconds to start auto channel search. The channel with the strongest signal will be chosen.




## Interface switching

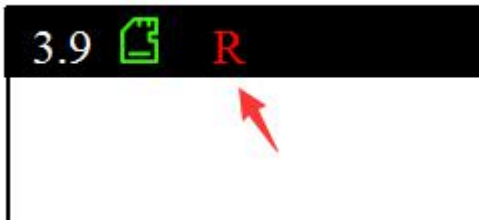
Press "+ " or " -" button for 2 seconds to switch.




## Recording：

**1.** Insert SD card, 8-32G, C10. **Note: It is recommended to equip a SD card separately and do not mix it with other equipment. Suggest Micro SD Card : Sandisk C10.**

2. Format SD card in the monitor for the first time to use.
3. Make sure you are in FPV interface.
4. Press Record / OK button, an red R will be shown:




5. Press again to stop record.

**6. Note: In Snow signal, the DVR won't record; until the video is in.**

7. When in External video interface, the monitor will record the external video.

**8. Note: The video was buffer in to the SD card, when the wireless signal is not stable, it will cause frame drop.**

**9. Note: How to format SD card please bar code check below. When format the SD card,the little pilot will allocate the storage of the SD card. When you check on computer, the SD card will show "full", that's normal, KEEP CALM.**

## Bad SD Card:

When detected bad SD card, the Little Pilot will pop up a menu; Please power off and then change a good SD card(Sandisk C10).




## Video Buffer Playback：

In FPV interface, press and hold - button for 2 seconds, the monitor switch to DVR interface . You can use Record/OK button to playback the video . Press Menu button to delete current file , Record/OK button to confirm.

Video buffer is only designed to track the lost drones.The video quality is not so good.**We suggested: VLC Player on computer.**

## Battery Charging

Connect the monitor to a phone charger via Micro USB cable. We suggested to use 1-2A chargers and turn off the monitor while charging. The Charging Status LED will turn OFF when the battery is fully charged.

## FAQ:

**Note： Reset all the settings in the menu if you meet any problem.**

**Not able to search channels automatically:**

- Auto channel scan only functions in the FPV interface.

**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)

**Can not power on:**

- Check if battery is low. Charge for half an hour and then try again.
- Hard Reset the machine by pressing the reset button .




**No channel can be received:**

- Install antennas, and move the monitor close to the 5.8 GHz transmitter.
- Connect video signal to the transmitter.

**Voltage and time do not display:**

- Make sure the OSD is "ON" .
- Reset the monitor.

**Frame Drop in playback:**

Its normal case. When the wireless signal is not stable, it will cause frame drop.Video buffer is only designed to track the lost drones.

**Playback on computer:**

- **Please set the player to 4:3 size.**
- **Player we suggested: VLC Player.**

**Scan for new firmware:**



***Youtube/Facebook/Instagram*** *channel:*

***Hawkeye Firefly Official***

***Youtube*** ***Facebook***





***Instagram***



FCC STATEMENT：
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

**Please refer to our website for manual updates: www.CNfpv.com**

**Our Facebook/Youtube/IG channel: Hawkeye Firefly**