

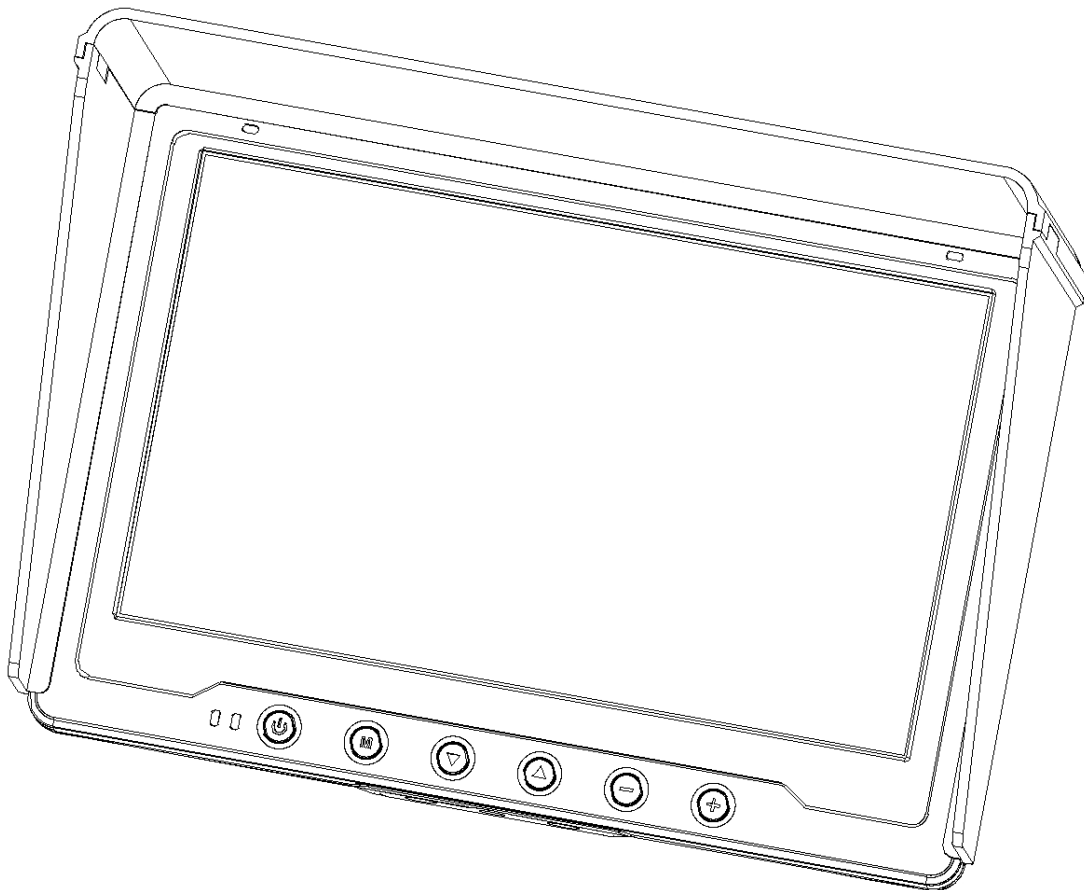
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# BLACK PEARL RC801

7 " H D   S c r e e n   F P V   D i v e r s i t y   R X

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## Instruction Manual



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Before operating the unit, please read this manual thoroughly, and retain it for future reference.

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# Safety Notice

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## Warning

- In order to reduce the damage of fire, electric shock or product hazard, do not expose the unit to rain or moisture.
  - Please use only the recommended accessories.
  - Do not disassemble this product, it should be repaired by the professional people.
- 

## Battery---**Not included for the current product itself!**

- DO NOT dismantle the battery.
  - DO NOT make the battery short or its terminals in touch with metal objects, there is explosion danger.
  - DO NOT use any damaged or leaking battery.
  - DO NOT throw the battery into fire
  - DO NOT put the battery in the place over 65°C.
  - DO NOT expose the battery to strike, fall, etc..
  - Be sure to keep the battery out of children's reach.
  - Please replace the battery immediately if its working life becomes short significantly.
  - Replace the battery with the same one or the equivalent recommended by the manufacturer.
  - This device uses Li battery, which is recyclable resources, to deal with the waste battery, please send it to the resource recycling.
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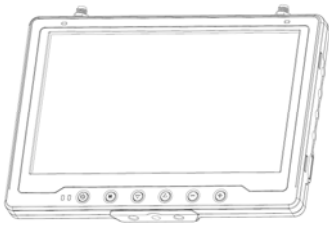
## Caution

- The magnetic field with certain frequency may affect the image and sound of this device.
- DO NOT install or store this device in book cabinet, closet or other closed spaces to avoid such risks as electronic shock, fire and so on due to overheat.
- DO NOT place this device near open fire.
- This device is not dustproof, waterproof, please note when using.

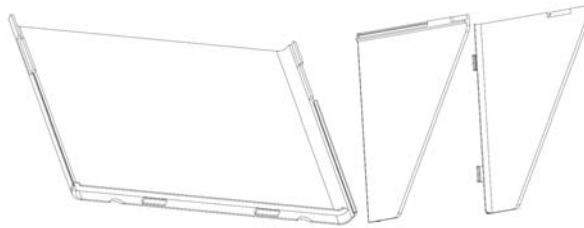
# Packing List

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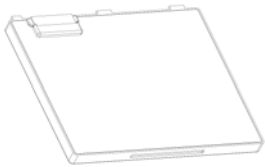
①Main Body



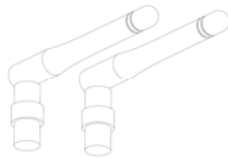
②Sun Shadow



③Battery



④Antenna



⑤AV Cable



⑥DC Input Cable



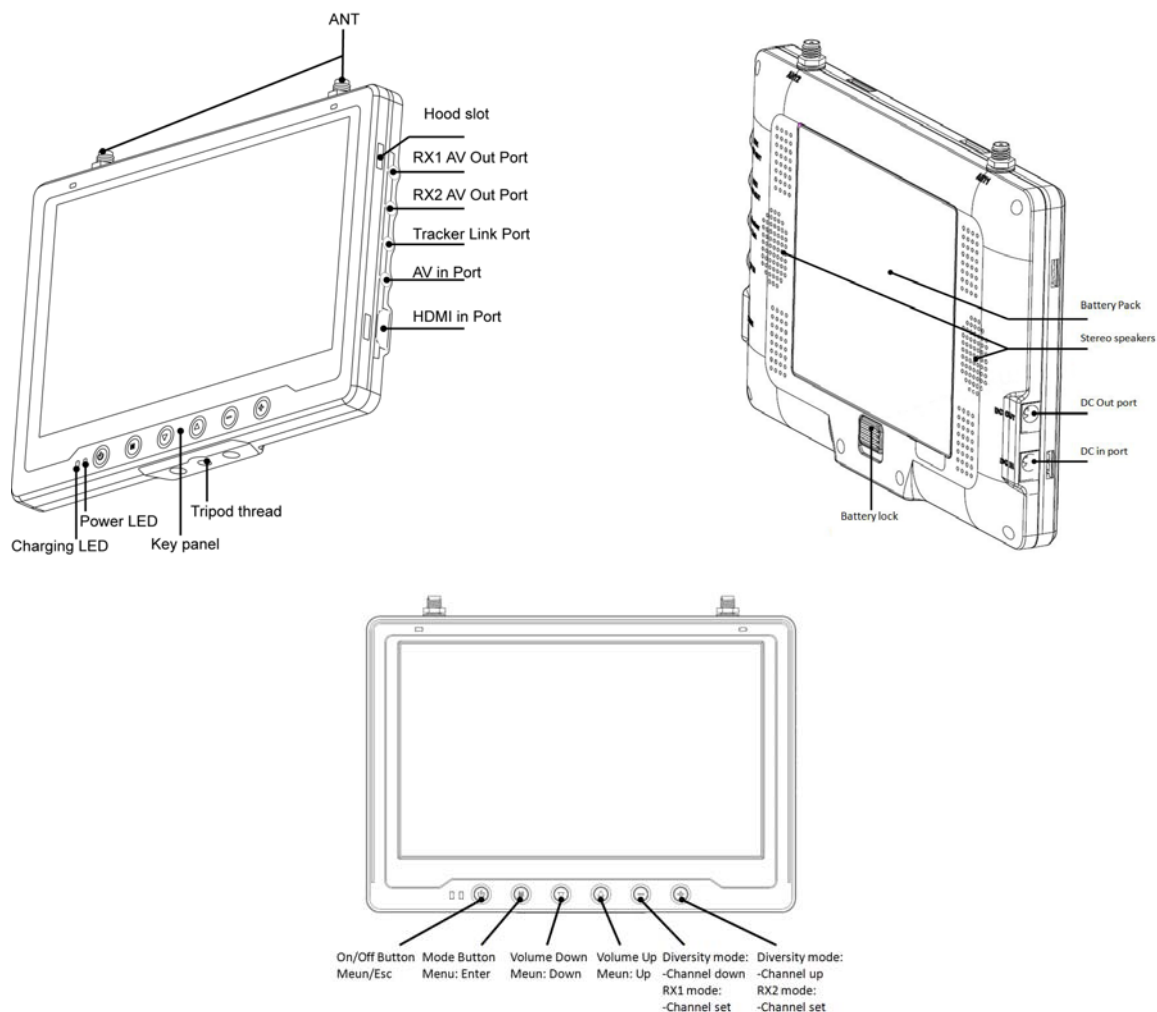
⑦DC Output Cab






# Icons

## Function Icons



## Screen Icons

- There are different icons in different working modes.
- When battery icons shows as , it means the batter need be recharged or changed.

Operating Mode    Receive band    Receive channel    Battery icon



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# Operation Instruction

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## Power on/off

- Press the power button until the device is on,the red indicated light will be on.
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## Working Mode

- Press mode button can set up: DIV、RX1、RX2、AV IN、HDMI IN model.
  - Video TV system set-up(except HDMI mode): Press menu button to enter 'function' ,then 'Video sys' to choose PAL or NTSC.
  - Under DIV、RX1、RX2 modes,you need press menu button first to enter RF to set up the frequency band to make sure,the device Work with the transmitter in the same band.
- 

## Diversity Mode

- The due antenna diversity receiver is made up of ANT1、ANT2 and receiving circuit,according to their RSSI output,the device can keep receive the strongest signal all the time. and maximize image display stability.
  - Antenna LED will show the current stronger one.
  - < - > and < + > button controls the channel change.
  - DIV AV OUT outputs diversity receiving signal for video recorder and external display purposes. DIV AV OUT ONLY works under the diversity mode.
- 

## RX1 and RX2 Mode

- Under this mode, the channel of RX1 and RX2 can be set up separately; can set up the current shown video signal of RX1 or RX2 by mode button.
- < - > button controls RX1 channel,< + > button controls RX2 channel.
- RX1 AV OUT and RX2 AV OUT output the corresponding channel of themselves,the device can receiver the video signals from 2different transmitters at the same time.

If there is only one transmitter working, there is no different to use RX1 and RX2.

If there are two transmitters working,Please pay attention to adjust the bang and the channel,let each other dose not affect the image effect.

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## AV IN Mode

- For inputting external video and audio signal.
  - In AV IN mode, wireless receiving circuit automatically shut down to save battery life.
- 

## HDMI Mode

- HDMI can input HD video to show much clearer image,and automatically adapt to the resolution (the maximum input 1920X1080/60Hz).
- In HDMI mode,wireless receiving circuit automatically shut down to save battery life.

Press the mode button in the HDMI mode, may slow response, this is a normal phenomenon, because HDMI mode requires multiple attempts to connect with an external device, after success connecting,the device can quickly display.

# Function Instruction

## ZOOM Function

### ● Vertical Scaling

Use this function, can make vertical scaling, only show 16:9 moving image region of 4:3 picture on the screen.

Support shortcut keys: Long press <+> button to ZOOM IN, long press <=> button to ZOOM OUT (back to original scale)

Attention: NOT Support HDMI video vertical scaling.

For example: original scale



ZOOM IN



### ● Horizontal Scaling

Use this function, can make horizontal scaling, change input 4:3 image into 16:9 image displayed on the screen.

The default in 16:9 mode (ZOOM IN full screen display), to change settings, please enter the menu->Function-> Display

Ratio to choose 4: 3 or 16: 9 displaying.

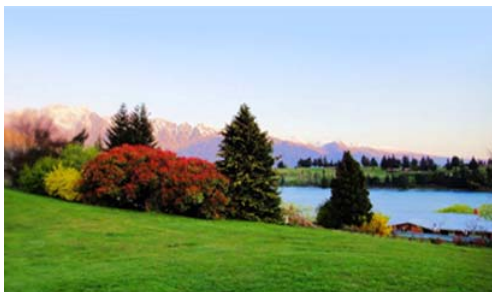
For example: Original scale



16:9(ZOOM IN)



Through these functions can realize image full screen easily display, in order to obtain the best display effect, enable the above functions at the same time can also obtain the following display effect:





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## DNR

When external signal is input,due to various reasons,for example: signal source is interference transmission line caused by EMI,which may cause more image noise and more serious picture ripples;set up DNR function can improve these phenomenas.When you set DNR to “High” ,you Will reduce the noise to the maximum extent to improve the display effect.

**-When there is some serious noise interference, the DNR features may not function.**

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## Display Direction

In the menu,Flip Horizontal、 Flip Vertical can control video display direction, Flip Horizontal is for image mirror display,Flip Vertical is for image upside down display.

**-This feature helps CAMERA inverted installation,the reversed image display on the screen; open the two functions at the same time can make sure the image displayed in normal correct direction for ever.**





**-Attention: this function starts, the screen icon will also change the display direction**

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# Menu

**(Works in black for explaining the menu function)**

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Press  button into menu setup; these menu consists of 4 directories: Color、Audio、Function、Wireless; Press  button to enter settings, press  or  button to browse options and adjust value.

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## Color

- Picture Mode  
**most image display**
    - Bright Standard **Default setup, we advise to use this setup, which applies to**
    - Soft  
User-Brightness、 Contrast、 Saturation、 Sharpness
  - Color Temp
    - Warm
    - Normal
    - Cool
  - DNR
    - off **turn off DNR**
    - Low **light noise**
    - Mid **middle noise**
    - High **strengthening noise, may reduce the quality of the image**
- 

## Sound

- Sound Mode
    - Standard
    - Class
    - Dance
    - Live
    - Pop
    - Rock
    - User-Bass、 Treble
  - Balance 0~20 adjust the volume balance of speakers; the default is 10, two speakers with the same volume.
- 

## Function

- Language English、 French、 German、 Spanish、 Portuguese、 Japanese、 Russian、 Italian
  - OSD setting OSD Timeout 0~60S, **can set up the menu shown time on the screen**  
Transparency 0~4 level, **control menu into a translucent display effect**
  - Display Ratio
    - 4: 3
    - 16: 9
    - Auto **default automatically that video will display full screen according to input resolution**
  - Reset **all specifications are back to factory settings**
  - Auto Power Off Off、 15Mins、 30 Mins、 45 Mins、 60 Mins
  - Flip Horizontal On、 Off **mirror image display control**
  - Flip Vertical On、 Off **image 180 degree rotating display control**
  - Icon On、 5 Sec、 10 Sec、 15Sec、 20 Sec、 25 Sec、 30 Sec、 35 Sec、 40 Sec、 45 Sec、 50 Sec、 55 Sec、 60 Sec  
**set the status icon on the screen shown all the time or hidden automatically according to set time**
  - Video Sys PAL 、 NTSC
- 

## Wireless

- -Diversity band A、 B、 F
- -RX1 band A、 B、 F
- -RX2 band A、 B、 F

# Specification

Display Screen	Diagonal	7 inch								
	Resolution	1024X600								
	Contrast	700:1								
	Luminance	300cd/m²								
Wireless Receiving	Working frequency	ISM 5.8GHz								
		Band	CH 1	CH2	CH3	CH4	CH5	CH6	CH7	
		A	5865M	5845M	5825M	5805M	5785M	5765M	5745M	
		B	5733M	5752M	5771M	5790M	5809M	5828M	5847M	
		F	5740M	5760M	5780M	5800M	5820M	5840M	5860M	
	Sensitivity	-90dBm±1dBm								
	Channel	21Channel ( 3 Band X 7 Channel )								
	Antenna Port	2 X SMA,50ohm								
	Diversity receiving	Antenna diversity								
	TV System	NTSC/PAL								
	Video output level	1.0Vp-p Typ,75ohm								
	Audio output level	1.0Vp-p Typ,10Kohm								
AV Port	RX1 AV OUT	Video、Audio output								
	RX2 AV OUT	Video、Audio output								
	DIV AV OUT	Diversity receiving, Video、Audio output								
	AV IN	Video、Stereo Audio input								
	HDMI IN(A Type)	Support HDMI 1.3 Digital Input, Support HDMI Audio in								
	Built-in Microphone	8Ω/1W X 2								
Power Supply	DC IN	7~28V/ 2A								
	DC OUT	Output Voltage: DC IN or battery voltage Output Current: 1A								
	Battery	11.1V/1000mAh(3 series LiPo cells)								
	Consumption	12V input:7.8W								
Dimensions	Main Body	183X126X19.5mm(not include sun shadow)								
	Battery	105X87.5X6.7 mm(not include prominent part)								
Tripod connector		General 1/4 "thread								
Working Temperature		-10℃~+65℃								

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#### FCC STATEMENT

1. 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.
  - (2) This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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.