# Diversity FPV Monitor HD588



# 5G8, 40CH 10.1 " Diversity FPV Monitor with DVR

#### 1. AOMWAY-HD588 Diversity Monitor

HD588 is the all-in-one monitor with DVR function that is elaborately designed for FPV purpose by presenting the most authentic image effect. It is well-equipped with 10.1 " display, LED backlight, dual built-in 40ch receiver modules with high sensitivity and integrated DVR is available for real-time recording.

**Major Features:** 

- FPV three proofing: no blank screen, no blue, no flicker.
- 450cd/m2 high brightness, 700:1 high contrast, 1920 x1200p
  full HD display.
- 10.1" IPS MIPI screen with long service time, LED backlight.
- Dual built-in diversity receiver module: 5.8Ghz / 40channels /
  -95dBm sensitivity
- Auto search for active channel ( scan all the 40 channels with one single button )
- Auto select NTSC/PAL format.

- OSD menu: Voltage, Channel, RSSI, Battery Status.
- FOV horizontal 85°/85°(Left/Right),FOV vertical 85°/85°(Up/Down).
- Two built-in high quality stereo speakers with adjustable volume bar displayed on screen.
- Integrated DVR for real time recording and playback, TF card support to maximum 64G.
- Built-in 2400mah Li-ion battery, after fully charged, working time extended to 100mins.
- Battery voltage status displayed on screen and low voltage alarm function is available.
- Resolution: D1, PAL: 720\*576, NTSC: 720\*480.
- Wide operating voltage range: 8~28V, using DC 5.5\*2.1 connector (positive inside, negative outside), both input and output ports are provided.
- Operating language: Chinese and English.
- Display aspect ratio: 16:9 and 4:3, supporting point-to-point display and zoom-in function allows viewing at a particular section.
- Standard 3.5mm AV in /AV out port.
- Standard 5.5\*2.1mm DC in and DC out port.
- USB for multimedia displayer and firmware upgrade.

- Support 1080p HDMI in display.
- Power consumption  $\leq$  9W.
- Dimensions: 246 x 172 x 20mm.

# 2. Push Button and Interface Illustration

## A. Front Control Panel Button Function:

 $\triangleleft \bigcirc \bigcirc \bigcirc$  $\bigcirc$ MENU BAND/-CH / + LED MODEIA SEARCH/▽ POWER

- POWER: power on/off
- SEARCH/ $\bigtriangledown$ : auto search for active channel / scroll down
- CH/+: channel selection / increase
- FR/-: band selection / decrease
- MENU: open or close menu on screen
- MODE /△: mode selection / scroll up
- Five-direction Joy Switch: multimedia displayer controller
  (up, down, left, right, center).
- Red LED light indicates power on and blue LED light indicates charging status.
- **B. Button Operation:** 
  - POWER: short press to power on, long press to power off.
  - SEARCH/ $\bigtriangledown$ : long press to start auto scan for active

channel once and pick up the strongest signal to display image.

- CH/+: each time press the button to increase the channel from 1 to 8 and finally back to CH1; after enter into a sub-menu, press "+ " to increase a selected value setting.
- FR/-: each time press the button, band changes from A to E and finally back to A; after enter into a sub-menu, press "- " to decrease a selected value setting.
- MENU: interface for setting up brightness, contrast, color temperature, voice, sharpness, upgrade, display ratio, image flip, language, system upgrade, reset, etc..
- MODE: single press to switch between different modes of
  DIV / DVR / AV IN / HDMI / Multimedia Player.

#### C. Multimedia Player Function:

Press MODE key first and select Multimedia mode and then you will be able to view the sub-menu.



a. 'L' and 'R' indicate the moving direction of cursor: left or right to select between music, movie or text file type.

- b. After enter into file selection page, 'L' and 'R': move joy stick left or right to select option; 'D': move stick downward for play or pause; 'U': move stick upward for return.
- c. When start playing, vertically press the stick down at center point ('C') to pull out menu panel; moving stick upward ('U') to exit player menu; When playing a file, moving the stick left or right ('L'/'R') to decrease and increase the volume; when player menu panel is displaying on screen, moving the stick left or right ('L'/'R') for different operation such as play, fast forward, fast backward, previous file, next file, stop, cycle play and single cycle, etc., and then press down the stick at center point ('C') to confirm.
- D. Right Side Port Illustration:



- 3.5mm AV in port for video signal input. (need to switch to AV IN mode).
- 3.5mm AV out /AAT port for ATT data transmission and video output.

- 3.5mm earphone jack for stereo audio out.
- 5.5\*2.1mm DC in/out port (positive inside and negative outside).
- E. Left Side Button and DVR Illustration:



- UP: rock the switch upward for scroll up or fast forward.
- DOWN: rock the switch downward for scroll down or fast backward.
- OK: vertically press down rocker switch at center for play or pause.
- TF card support to maximum 64G.
- LED light: indicate DVR is working or not, solid on for standby, flash for recording.
- HDMI\_C type connector: support 1080p, 720p HDMI input.
- USB\_A type connector: support firmware upgrade and multimedia application.

| CH<br>FR | CH1     | CH2     | CH3     | CH4     | CH5     | CH6     | CH7     | CH8     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|
| Α        | 5705MHz | 5685MHz | 5665MHz | 5645MHz | 5885MHz | 5905MHz | 5925MHz | 5945MHz |
| В        | 5733MHz | 5752MHz | 5771MHz | 5790MHz | 5809MHz | 5828MHz | 5847MHz | 5866MHz |
| С        | 5725MHz | 5745MHz | 5765MHz | 5785MHz | 5805MHz | 5825MHz | 5845MHz | 5865MHz |
| D        | 5740MHz | 5760MHz | 5780MHz | 5800MHz | 5820MHz | 5840MHz | 5860MHz | 5880MHz |
| E        | 5658MHz | 5695MHz | 5732MHz | 5769MHz | 5806MHz | 5843MHz | 5880MHz | 5917MHz |

# 3. DVR Recording & Playback Function:

**Operation:** 

- Playback function needs to be used under DVR mode, please use MODE key for correct mode selection.
- After enter into DVR mode, your screen will display the video image received by RF module, meanwhile DVR status is standby, LED light will be solid on.
- Single press REC key to start recording, LED light will start flashing while the dot cursor is blinking at the bottom right corner of screen.
- Press REC key again to stop recording, LED light will stay solid on and the blinking dot will disappear from screen.

# **DVR Menu & Playback:**

A. Long press OK key for 5 seconds to enter into DVR main

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menu. DVR menu will have three options to be selected by UP and DOWN key:

- 1. Playback Menu
- 2. Format TF Card
- 3. Language Selection

Long press REC key to exit DVR menu and DVR will stay standby.

B. Playback function, short press the center key to select and enter into sub-menu:

1. DOWN and UP for selecting the file for playback, short press the center key to confirm.

2. While playing a file, press DOWN for fast backward at different speed as X1, X2, X4 or X8.

3. Press UP for fast forward at different speed as X1, X2, X4 or X8.

4. Short press the center key is for play/pause.

5. Long press the center key to set DVR back to standby mode.

C. This DVR system automatically saves a separate recording file every 30 minutes.

#### 4. Battery Charging & Protection:

- This monitor is equipped with built-in high capacity Li-ion battery; please stay cautious of safety when using the battery.
- Trying to drive the battery voltage out of its high and low limit will damage this battery and shorten its lifetime. Suggest using a standard 15V, 2A battery charger for proper charging. The full charging process is about to take 3 hours long.
- Blue LED indicator on panel stays solid on when charging and it will go off after charging completed.
- After been fully charged, monitor's working time will be extended to 120 minutes. When battery voltage drops down to 10.3V, buzzer will start beeping as a low voltage alarm.

#### 5. System Upgrade:

Based on customer's actual need, AOMWAY will upgrade the system for better performance in the future; all firmware files will be published on online forum and our official website.

Upgrade Method : Download latest firmware file to your USB-Key, plug USB-Key to your device port and then Power on  $\rightarrow$ Enter into menu $\rightarrow$ Select System Upgrade $\rightarrow$ Press 'FRE' or 'CH' key to start $\rightarrow$ System starts upgrade process (data reading on top left of screen and later auto shut down after upgrade completed). Reject your USB-Key and delete the upgrading file later. After reboot your monitor, the monitor will be installed with the latest system.

#### WARNING!!!

<u>Must NOT disconnect the power supply during firmware upgrading</u> process, please unplug USB-Key and delete upgrading file after system has been successfully upgraded.

- 6. Package Contents:
  - **1 X FPV Monitor**
  - 2 X AV Cable

- 1 X Manual
- **1 X Battery Charger**
- 1 X 5db Dipole Antenna
- 1 X 6db 5G8 Patch Antenna





## 7. Caution:

- Note that the working environment for built-in battery is  $-10-60^{\circ}$ C.
- Multimedia player is not intended for playing back DVR recording file; please switch your monitor into DVR mode first.
- The internal buzzer for low voltage alarm is only taking effective when using the original built-in battery itself, using an external power source may cause false alarm or invalidate it.
- Operating voltage range for this monitor is DC8-26v with positive insider and negative outside. Your charger's output power should be at least above 15v.
- This monitor is made by PC plastic case and internal IPS screen, please avoid to stamp on, hard press or throw down the monitor.
- Suggest all ports on this monitor to connect with the original cables provided by AOMWAY for preventing from possible malfunction or damage.

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