

VANGUARD II 16x8H Plus

16CH / H.265 / Hybrid DVR

Quick Installation Guide



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Safety Precautions

Refer all work related to the installation of this product to qualified service personnel or system installers.

- Do not block the ventilation openings or slots on the cover.
 - Do not drop metallic parts through slots. This could permanently damage the appliance. Turn the power off immediately and contact qualified service personnel for service.
 - Do not attempt to disassemble the appliance. To prevent electric shock, do not remove screws or covers. There are no user-serviceable parts inside. Contact qualified service personnel for maintenance. Handle the appliance with care. Do not strike or shake, as this may damage the appliance.
 - Do not expose the appliance to water or moisture, nor try to operate it in wet areas. Do take immediate action if the appliance becomes wet. Turn the power off and refer servicing to qualified service personnel. Moisture may damage the appliance and also may cause electric shock.
 - Do not use strong or abrasive detergents when cleaning the appliance body. Use a dry cloth to clean the appliance when it is dirty. When the dirt is hard to remove, use a mild detergent and wipe gently.
 - Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.
 - Do not operate the appliance beyond its specified temperature, humidity or power source ratings. Do not use the appliance in an extreme environment where high temperature or high humidity exists. Use the DVR at temperatures within 0°C~40°C / 32°F~104°F (Storage). The input power source is 12VDC 5A.
 - **Read Instructions**
All the safety and operating instructions should be read before the unit is operated.
 - **Retain Instructions**
The safety and operating instructions should be retained for future reference.
 - **Heed Warnings**
All warnings on the unit and in the operating instructions should be adhered to.
 - **Follow Instructions**
All operating and use instructions should be followed.
 - **Cleaning**
Unplug the unit from the outlet before cleaning. Do not use liquid cleaners, abrasive or aerosol cleaners. Use a damp cloth for cleaning
 - **Attachments**
Do not use attachments not recommended by the product manufacturer as they may cause hazards.
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➤ **Water and Moisture**

Do not use this unit near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, near a swimming pool, in an unprotected outdoor installation, or any area which is classified as a wet location.

➤ **Servicing**

Do not attempt to service this unit by yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

➤ **Power Cord Protection**

Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.

➤ **Object and Liquid Entry**

Never push objects of any kind into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the unit.

➤ **Battery**

Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

- a. Use only two AAA dry cell batteries.
- b. Do not dispose of the batteries in a fire as it may explode.

➤ **RTC (Real Time Clock) Battery**

When encounter failure of time calibration of your DVR, the issue may be caused by running-out of RTC battery. Users will have to change the RTC battery on the main board of the DVR.



ATTENTION! This is a class A product which may cause radio interference in a domestic environment; in this case, the user may be urged to take adequate measures.



Federal Communication Commission Interference 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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the users' authority to operate this equipment.



This Product is RoHS compliant.



Your EverFocus product is designed and manufactured with high quality materials and components which can be recycled and reused. This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste. Please, dispose of this equipment at your local community waste collection/recycling centre. In the European Union there are separate collection systems for used electrical and electronic product.

Please, help us to conserve the environment we live in!



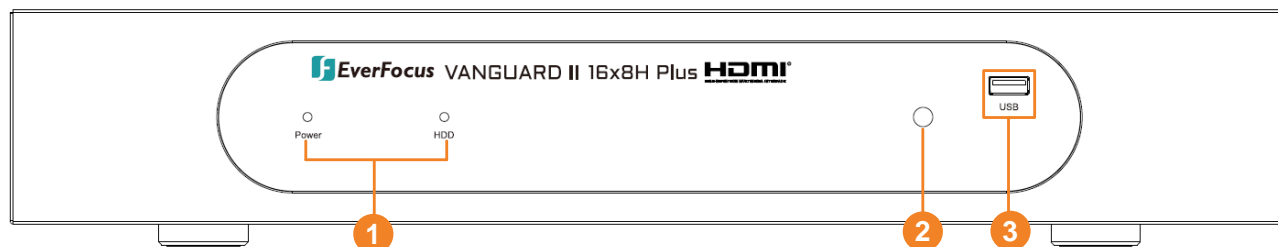
This product complies with the High-Definition Multimedia Interface (HDMI) Specification Adopter Agreement.

The information in this manual was current upon publication. The manufacturer reserves the right to revise and improve his products. Therefore, all specifications are subject to change without prior notice. Manufacturer is not responsible for misprints or typographical errors.

Please read this manual carefully before installing and using this unit. Be sure to keep it handy for later reference.

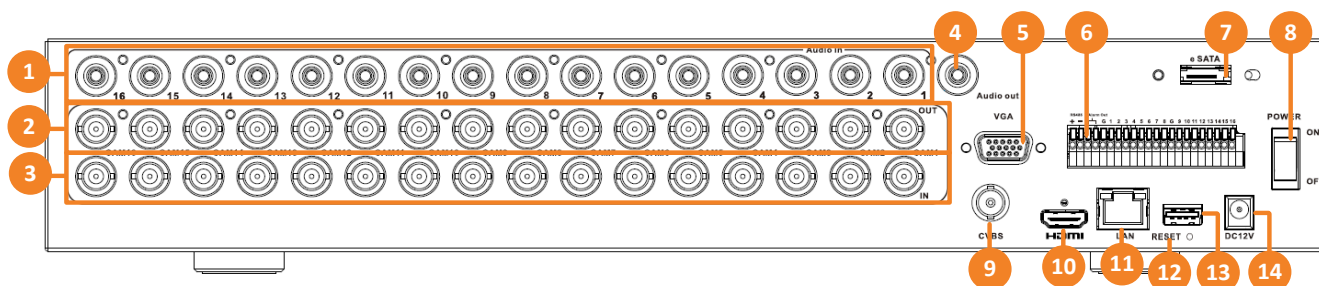
1. Overview

1.1 Front Panel



No.	Name	Description
1	LED Indicator	Power: When power is on, the LED will continue lighting in green. HDD: When power is on, the LED will continue lighting in red. When HDD is reading/writing data, the LED will flashes red.
2	IR Receiver	Receiver for signals from the IR remote control.
3	USB2.0 Port	USB2.0 port for connecting to a mouse or an external storage device.

1.2 Rear Panel



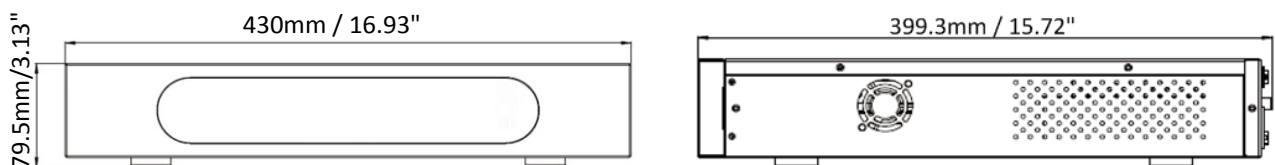
No.	Name	Description
1	Audio Input	Connects to audio input devices, such as microphones. Note that the microphones with a (built-in) amplifier and external power supply are required.
2	Video Output	Connects the analog cameras to the Video Output.
3	Video Input	Connects the analog cameras to the Video Input.
4	Audio Output	Connects to an audio output device, such as speakers. Note that the speakers with a (built-in) amplifier and external power supply are required.
5	VGA Port	Connects to a monitor using a VGA cable.

6	Terminal Block	The Terminal Block provides alarm inputs, alarm output and RS-485 connection (see 3.1 Terminal Block).
7	e-SATA Port	Connects to external HDD.
8	Power Switch	Press to turn on or off the power.
9	CVBS	CVBS video output connection.
10	HDMI Port	Connects to a monitor using a HDMI cable.
11	LAN	Connects to the Network.
12	Reset	Press to reset.
13	USB Port	The USB port for connecting to a mouse or external storage device.
14	Power Port	Connects to a 12VDC power source.

1.3 Packing List

<ul style="list-style-type: none"> • DVR x 1 • Power Cord x 1 • Mouse x 1 • HDD Bracket x 4 • Screw Pack x 1 (Sliver Screw x 16, Washer Head Screw x 8, M3 (φ6.8) Screw x 4) 	<ul style="list-style-type: none"> • Quick Installation Guide x 1 • Rack Ear x 2 • IR Remote Control x 1 (with two AAA batteries) *Please see Note 4.
<p>Note:</p> <ol style="list-style-type: none"> 1. Equipment configurations and supplied accessories vary by country. Please consult your local EverFocus office or agents for more information. Please also keep the shipping carton for possible future use. 2. Contact the shipper if any items appear to have been damaged in the shipping process. 3. Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions. <ol style="list-style-type: none"> a. Use only two AAA dry cell batteries. b. Do not dispose of the batteries in a fire as it may explode. 	

1.4 Dimensions



2. Basic Installation

2.1 Rack Ear Installation

1. Remove the M3 ($\phi 6.8$) screws on the sides of the DVR.
2. Screw the supplied Rack Ears onto the sides of the DVR with the screws.



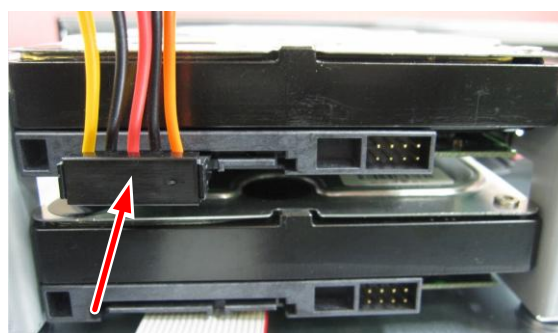
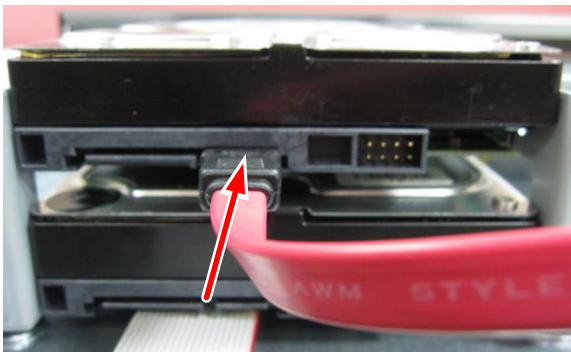
2.2 Hard Disk Installation

You can install four 3.5" HDDs inside the DVR for recording videos. The maximum capacity of each HDD is 8TB.

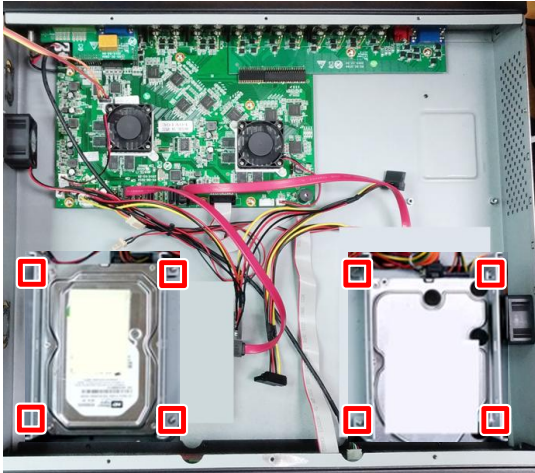
3. Make sure the DVR is power-off.
4. Unscrew the ten housing screws on the DVR, and remove the housing cover from the DVR.



5. Find the SATA cable inside the DVR, and connect the SATA cable to the SATA port on the HDD (left image). Find the internal power cable, and connect the internal power cable to the HDD (right image).



3. Place the HDDs inside the DVR, screw the HDDs from the bottom side of the DVR using the supplied Screws. After installing the HDDs, screw the housing cover back to the DVR.



4. Screw the housing cover back to the DVR.

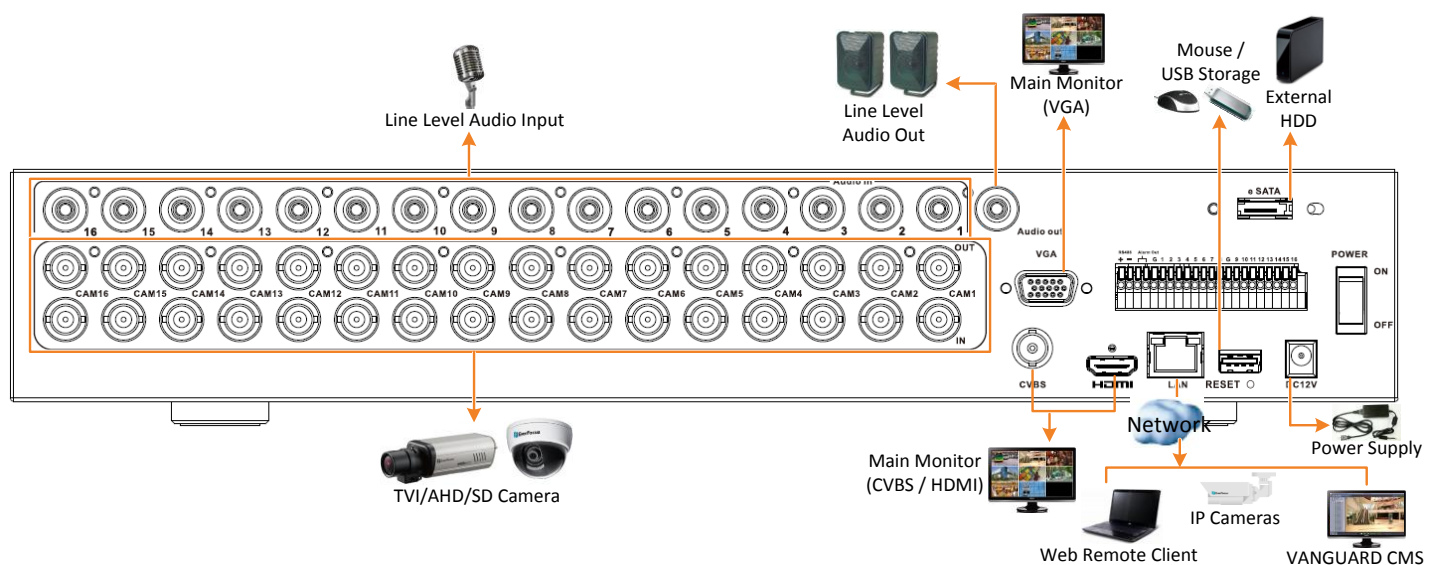
2.3 Hard Disk Compatibility List

Please go to EverFocus' Website www.everfocus.com.tw, and go to Support > Product Marketing to search for and download the Storage Compatibility Table. It's recommended to use the hard disk models listed on the table to ensure your hard disks will be compatible.

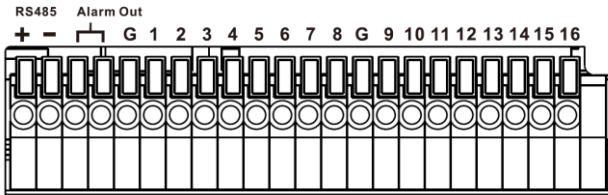
Note: If using two or more hard disks, please choose the hard disks with the same capacity.

3. Basic Connection

The demonstration below shows the basic connections to the DVR.



3.1 Terminal Block



Alarm Input: 16
Alarm Output: 1
RS-485: 1

4. Turning On / Off the Power

Before powering on the DVR, please make sure the internal HDD have been installed properly. Once you have completed the basic cable connections, you are ready to turn on the DVR. Simply plug in the power source and then press the **Power Switch** on the rear panel of the DVR. The POWER LED will light up if power is normal and the DVR will enter the System Initialization process.

When the process is done, it's required to set up a password for the administrator account immediately in order to protect your privacy.

The screenshot shows the 'Login' screen of a DVR. It has a dark blue header with the word 'Login' in white. Below the header, there are several input fields and a button. The fields are: 'Language' with a dropdown menu showing 'English'; 'Device ID' with a text box containing '000000' and '(000000)' to its right; 'New Admin Name' with a text box containing 'admin'; 'Password Strength' with a progress bar showing red, yellow, and green segments, and the word 'High' to its right; 'New Admin Password' with a text box containing 10 dots and a 'Show Password' checkbox; 'Confirm Password' with a text box containing 10 dots and a 'Show Password' checkbox; and 'Enable Unlock Pattern' with a dropdown menu showing 'Disable'. At the bottom center, there is a blue button labeled 'Apply'.

To turn off the power, click the **Shutdown** button on the Exit page (OSD menu > Exit > Shutdown) and then press the **Power Switch** on the rear panel of the DVR.

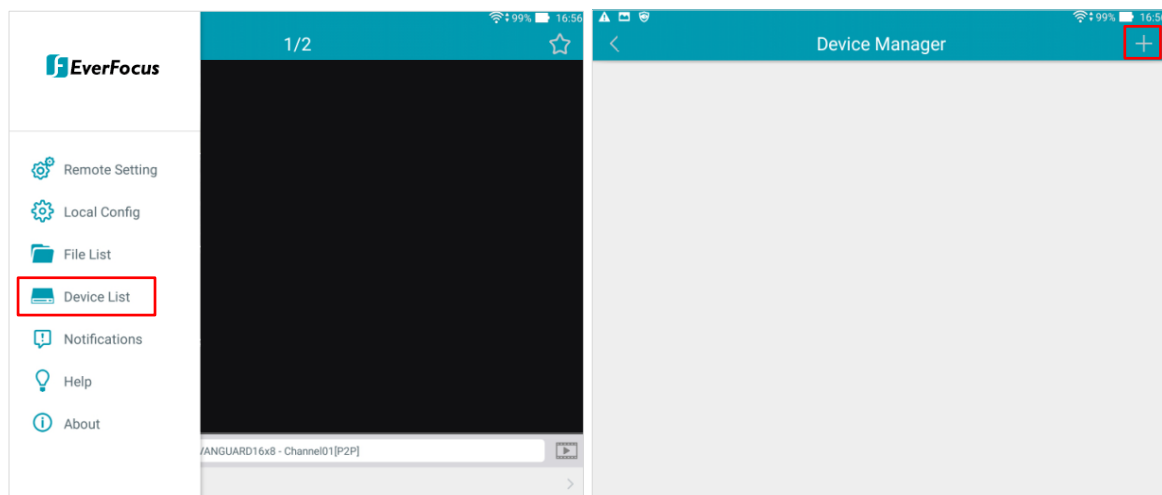
5. P2P Function

The **P2P** function allows users to add DVRs to EverFocus' **eFVMS App** through QR code.

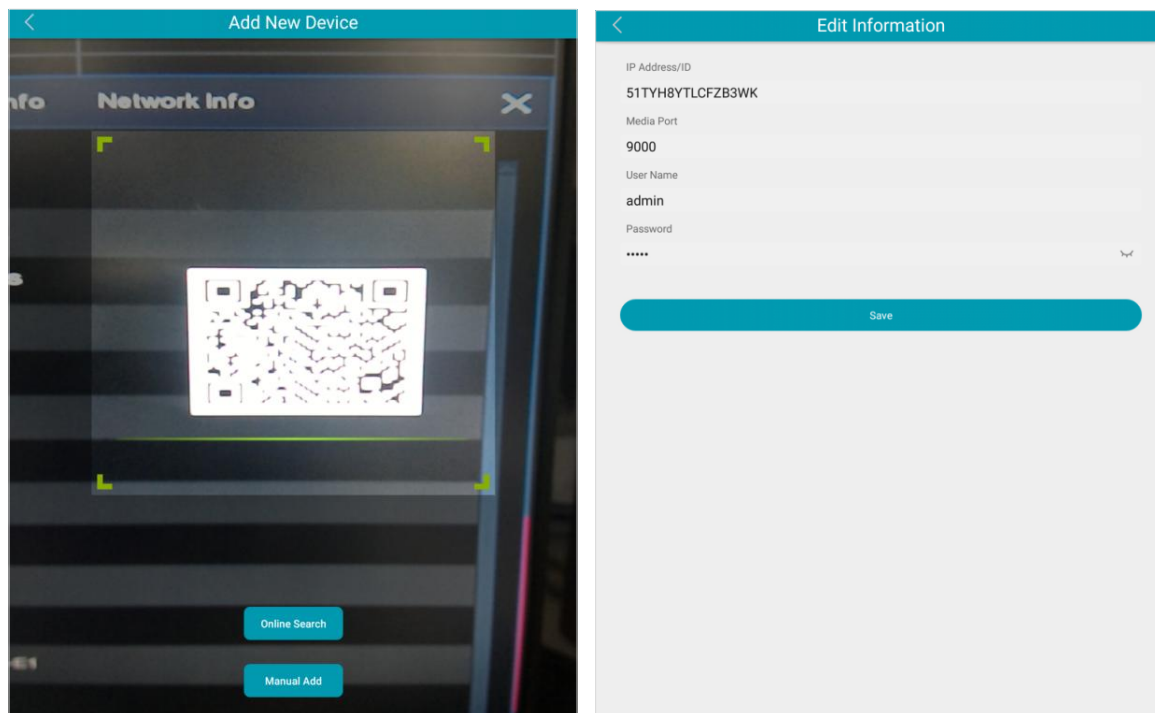
1. Install **EverFocus eFVMS App**. For Android users, go to Google Play Store. For iOS users, go to Apple Store. After the installation process is complete, start **eFVMS App**.



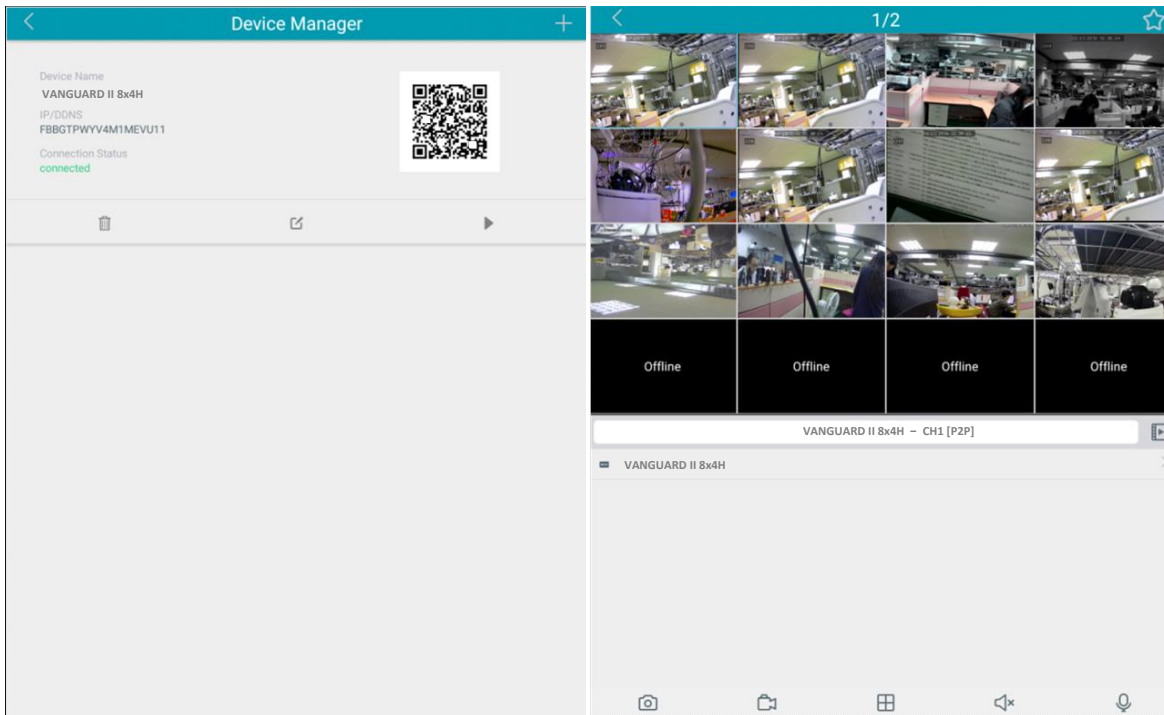
2. To add a DVR through P2P, tap **Menu** > **Device List**, and then tap the “+” button on the upper-right corner.



3. Scan the DVR's **QR code** on the System Info page of the DVR OSD menu. Input the DVR ID, password and Media Port 8000. Tap the **Save** button.



4. The DVR is now added and connected to the App. You can start accessing the DVR.



6. IR Remote Control

