

# HD CCTV DVR

## QUICK START

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### ■ 2MP ~ 5MP Video Recording

Please read instructions thoroughly before operation and retain it for future reference.

For the actual display & operation, please refer to your device in hand.



Complete  
User Manual



Free PC CMS  
software (CMS Lite)

# EaZY NETWORKING SETUP



EaZy Networking is a free P2P cloud service to connect AVTECH devices to the Internet automatically by plug-and-play, enabling you to check the live view via your mobile device or laptop at anytime.

In most cases, the device is connected via P2P. Connection via the relay server is only applied to some complex environments such as the private IP-based network environment used by a large enterprise. There is no speed limitation of P2P connection. For connection via the relay server, the speed is up to 10FPS@512kbps. To obtain stable transmission, it's recommended to purchase our data plan of 1GB or 7GB. Each device will enclose a 2GB data plan for a free trial.

EaZy Networking could be configured via EagleEyes on an iOS / android device, or via Internet Explorer.

**Note:** The instructions below explain how to configure via the free mobile app, EagleEyes. To know how to configure via Internet Explorer, please check the complete user manual.



Before using this function, make sure:

- This DVR is connected to a switch or router, and the switch or router is ready for Internet connection.
- The network icon on the top right corner is , not .
- You have an iOS / Android mobile device with EagleEyes installed

## 1.1 Via EagleEyes on iOS / Android Device

### 1.1.1 Recorder Setup

Step1: Right-click to show the main menu, choose  (ADVANCED CONFIG), and select **NETWORK** → **WAN**.

Set **NETWORK TYPE** to **DHCP**, and make sure the network icon on the top right corner is changed from  to .

**Note:** **DHCP** allows your router to assign an IP address for your device automatically. There are also **STATIC** and **PPPOE** to choose for the network type. Please choose the one needed for your network environment and get the information needed from your installer or network service provider.

ADVANCED CONFIG	
CAMERA DETECTION ALERT	WAN   E-MAIL   DDNS   PROTOCOL   EaZy
<b>NETWORK</b>	NETWORK TYPE   DHCP   <input type="checkbox"/>
DISPLAY	IP   192.168.001.010
RECORD	GATEWAY   192.168.001.254
DEVICES	NETMASK   255.255.255.000
DCCS	PRIMARY DNS   8.8.8.8
IVS	SECONDARY DNS   168.95.1.1
NOTIFY	PORT   80
JOYSTICK	CHECK INTERNET AVAILABILITY BY ADDRESS   www.google.com
EXIT	MAC: 00:0E:53:EC:A7:B4

Step2: In the same menu, select **EaZy**. Enable EaZy Networking, and leave this page open. You'll need to scan the QR code later. You'll see either of the setup pages below. Go to "1.1.2 EagleEyes Setup" to know which option you should choose during setup.

#### Type 1 ("EaZy" on EagleEyes)

WAN	E-MAIL	DDNS	PROTOCOL	EaZy
ENABLE EAZY NETWORKING				ON
 000E532B8613				

#### Type 2 (Both "EaZy" and "QR Code" on EagleEyes)

WAN	E-MAIL	DDNS	PROTOCOL	EaZy
ENABLE EAZY NETWORKING				ON
MAC: 000E53ECA7B4				
UUID: e736dcbf-d4bb-4ca8-86fd-62658e2ec1				
PORT: 80				
				

## 1.1.2 EagleEyes Setup

Two options can be chosen for EaZy Networking: **EaZy** and **QR Code**. **EaZy** is used for both recorders and IP cameras while **QR Code** is used only for recorders.

When a device is configured to the internet via **EaZy**, the person who configures the device has the administrator permission of this device and also has the power to assign who can access the device remotely, by the web browser of Internet Explorer or the mobile app of EagleEyes.

When a device is configured to the internet via **QR Code**, everyone has the right to access the device as long as he/she is able to scan the QR code of the device. However, he/she can only access the device via the mobile app of EagleEyes. Internet Explorer is not supported.

### By QR Code (For Type 2 only)

Step1: Open EagleEyes on your mobile device, and select “...” on the top left corner in the address book. Then, click **QR Code**.

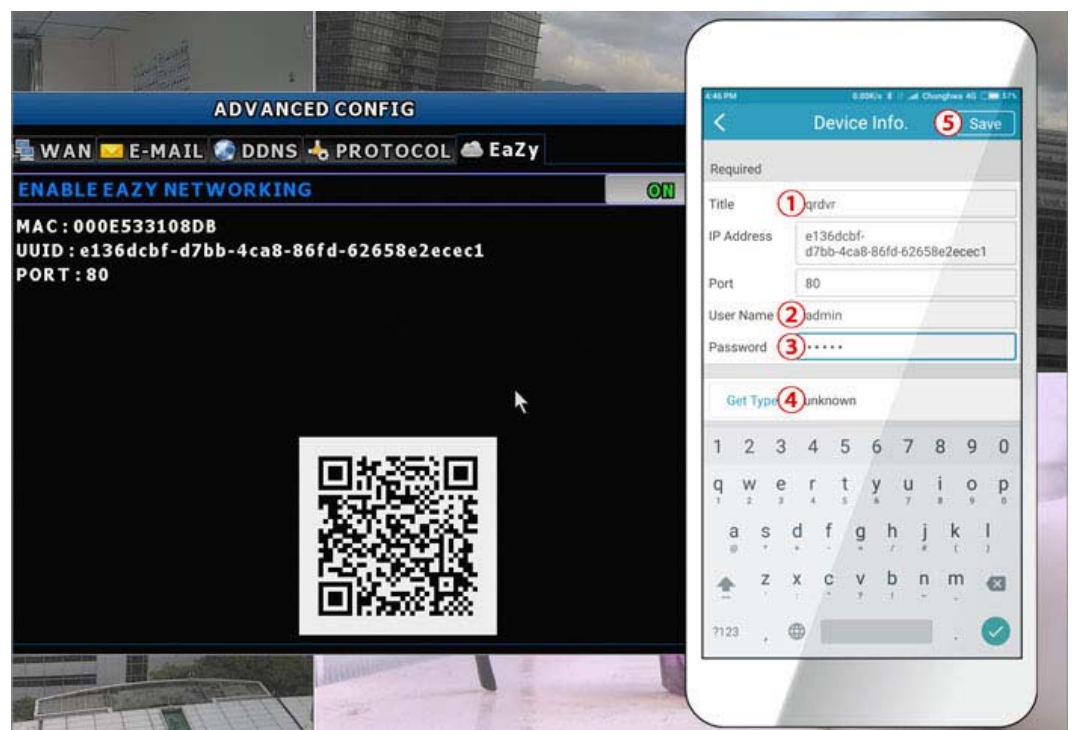
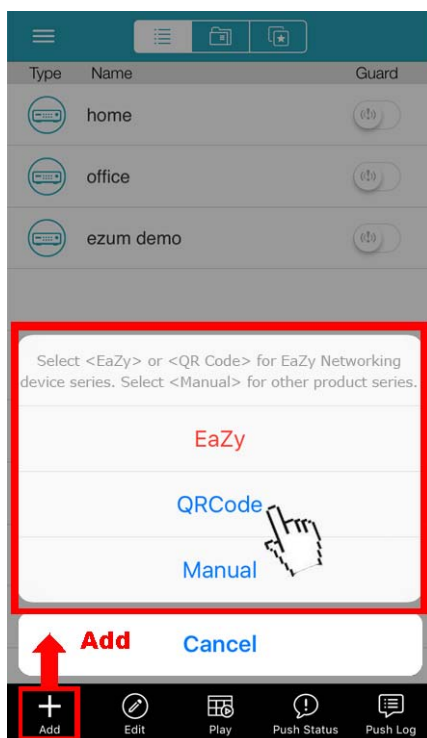
Step2: Scan the QR code shown on your recorder, and enter the title of this device and its user name and password.

Step3: Make sure you see the device type when you tap **Get Type**. If not, the device is not connected properly. Then, Tap **Apply** to complete the process, and you’re ready to see the live view.

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**Note:** For the first time to connect your device to the internet, the default user name and password are both **admin**. If it’s been configured before, make sure you’ve known its current user name and password since they may be changed for security purpose.

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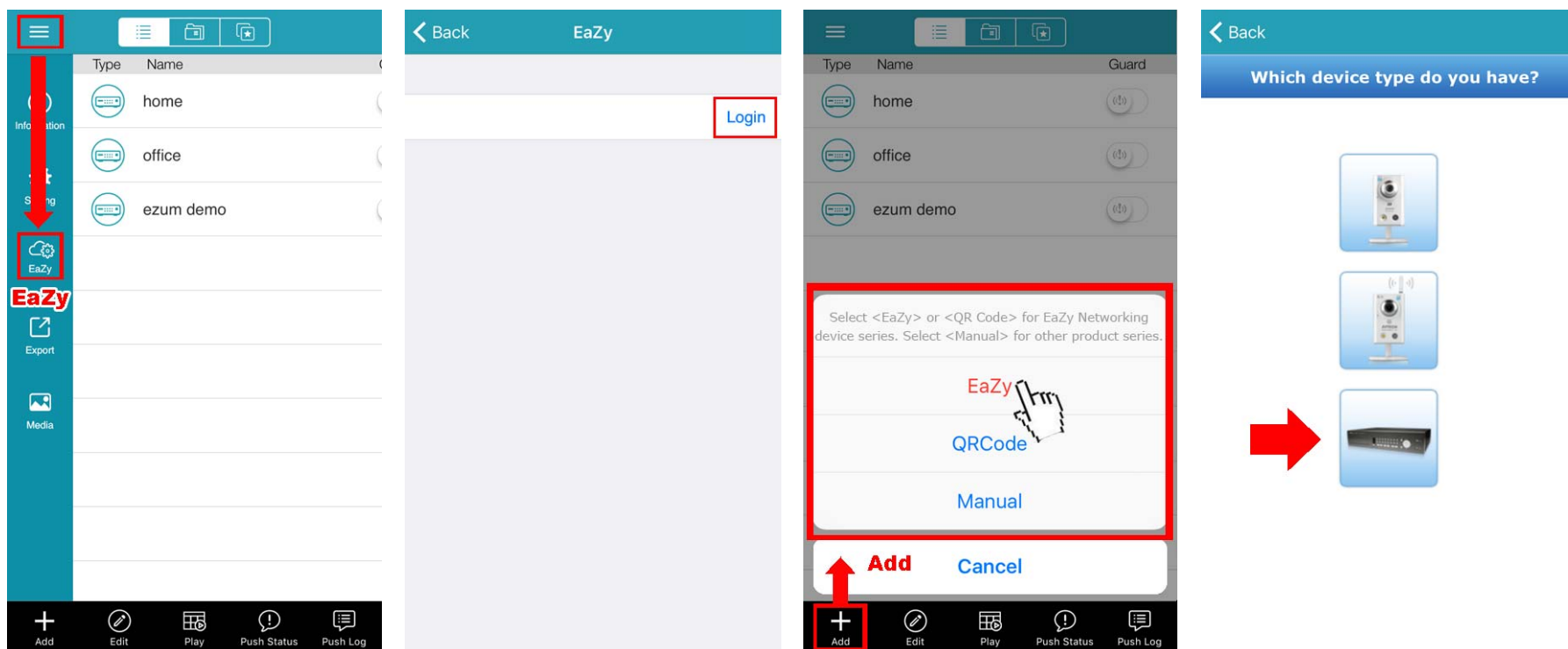



### By EaZy (For Type 1 and Type 2)

Step1: Open EagleEyes on your mobile device, and select “...” on the top left corner in the address book. Then, click **EaZy**.

Step2: Click **Login** and register an account for “Cloud Service”. If you’ve got an account, please just log in.

Step3: Go back to the address book and click **+** to add a new device. Select **EaZy**, and choose the recorder icon to continue.



Step4: Click  in the section of **MAC address** to open the QR code scan page, and scan the QR code on the recorder screen mentioned in Step2. The MAC address will be filled automatically. Fill in the Captcha code manually, and click **Apply**.

Step5: Follow the on-screen instruction to finish the rest of the settings, and see if this device is added successfully to the address book as a cloud device.

At the same time, you'll be prompted to confirm if you want to remove the default user name and password.

- When the default user name and password are removed, you can **ONLY** use the user name and password of the cloud service to access this recorder locally and remotely. If you forget the user name and password of the cloud service, you could only reset the recorder and do all configurations again.
- When the default user name and password are kept, other people might be able to access this recorder if they know the default user name and password of this recorder.

Confirm if you want to keep the default account to continue, and return to the address book. You'll see the newly-added device in the address with a cloud icon on it.



Step6: Click the newly-added device and see if you could access successfully.

## CONNECTION AND SETUP

Before the DVR is powered on, make sure you have installed a hard disk, connected at least one camera and a HDMI monitor. For details, please refer to the following sections.

**Note:** The DVR is designed to automatically detect the video system of the connected cameras (NTSC or PAL). To make sure the system detection is correct, please check if the cameras are connected to the DVR and power-supplied before the DVR is powered on.

### 2.1 SATA Hard Disk Installation

At least a hard disk is necessary for the recorder to save video footage, and firmware upgrade might be failed if there's no hard disk installed in this recorder.

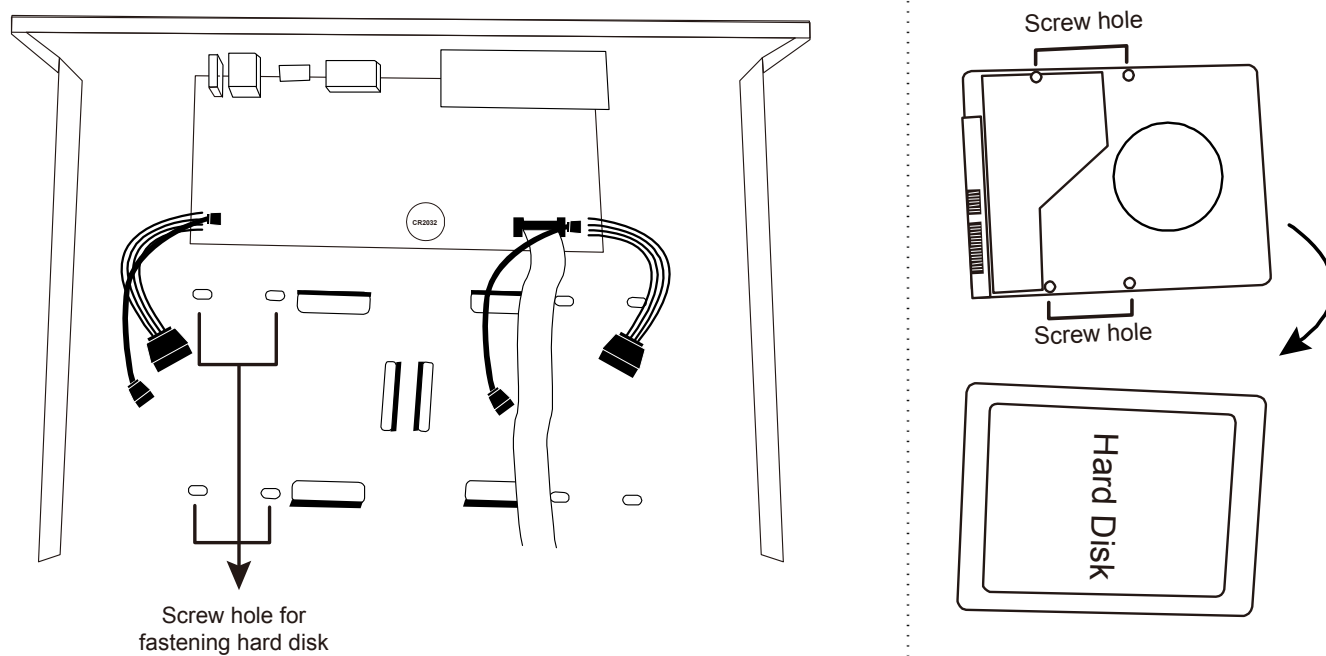
Either of the following two types of hard disk installation is applicable for your DVR model. Please check the instructions below to see which installation method is the right one for your DVR to install a hard disk.

**Note:** Here takes an 8CH model as an example of how to connect a hard disk to your device. To know how many hard disks could be installed, please refer to the specifications of your device.

Step1: Remove the top cover, and find where to install a hard disk.

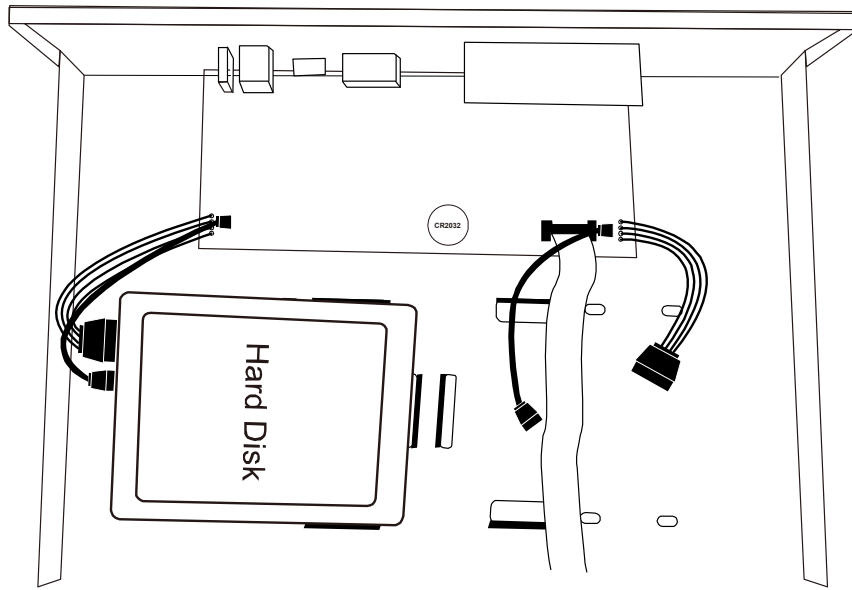
Step2: Get a compatible hard disk. With the PCB side facing down, find the screw holes on the DVR base, and place the hard disk in the DVR.

**Note:** To use a green hard disk, use **ONLY** the hard disk designed especially for surveillance to ensure the device works properly.



Step3: Align the screw holes on the DVR base and the hard disk. Then, fasten the hard disk to the DVR base with the supplied screws from the bottom side of the DVR.

Step4: Connect the data bus and power cable for the hard disk.



Step5: Replace the top cover and fasten the screws you loosened in Step1.

Step6: Remove the protective film on the bottom of the DVR if any to ensure the heat dissipation can work normally.

## 2.2 Camera Connection

Install the camera on the wall or ceiling based on your installation environment and camera type. For installation details, please refer to the user manual of your camera.

### 2.2.1 HD CCTV camera & our brand's speed dome camera











STEP 1: Connect the coaxial cable to the recorder.

STEP 2: Get a regulated adapter to connect the camera and power it on.

#### EZUM Camera Series

If the cameras you connected are our EZUM camera series, we have also designed a series of icons for quick camera setup. Based on the EZUM camera type connected, you may find some of the icons as listed below for quick camera configurations, and the sub-functions of each icon may also vary based on the camera connected.

**Path:** Bottom left on each camera channel view → 

	<b>Day &amp; Night</b> Configure the day and night modes of the camera		<b>IR Management</b> Manually adjust the brightness of IR LEDs.
	<b>Noise Reduction</b> Reduce image noise if needed.		<b>Optics</b> Manually change the shutter speed if needed.
	<b>Color</b> Manually adjust the color-related parameters if needed.		<b>Image Enhancement</b> Enhance the image performance for better sharpness and overall identification even in overexposure areas.
	<b>Zoom</b> Used with the motorized lens cameras for optical zoom.		<b>Hot Point</b> Click on the screen to move the surveillance area to the point just clicked.
	<b>PTZ Control</b> Open the PTZ control panel to pan, tilt, zoom and cruise the camera.		<b>Advanced</b> Set other camera parameters such as camera system, and mirroring or flipping camera images.




## 2.2.2 Other brand's speed dome camera

**Note:** The recorder must support RS485 connection to connect a speed dome camera. Please check the specifications of your recorder for details.

STEP 1: Connect the coaxial cable to the recorder.

STEP 2: Find where the connectors of RS485-A and RS485-B are located on the recorder rear panel, and follow the instructions of your camera manual to connect to the recorder. Then, power on the camera.

STEP 3: On the recorder side, right click to show the main menu, and go to  (ADVANCED CONFIG) → **DCCS** → **OSD MENU** to set the camera:

a) Select the device to **PTZ**.

b) Set the ID to the value the same as the one set in the camera.

c) Select the protocol to **P-P**, **P-D**, **S-T** or **S-E**.

**Note:** **P-P** and **P-D** are protocols used Pelco, and **S-T** and **S-E** are protocols used by Samsung.

d) Set the baud rate to the value the same as the one set in the camera.

e) Set the interface to **RS485**.

ADVANCED CONFIG	
CAMERA	CH1 CH2 CH3 CH4
DETECTION	DEVICE PTZ <input type="checkbox"/>
ALERT	ID 000
NETWORK	PROTOCOL P-P <input type="checkbox"/>
DISPLAY	RATE 2400 <input type="checkbox"/>
RECORD	INTERFACE RS485 <input type="checkbox"/>
<b>DEVICES</b>	
DCCS	
IVS	
NOTIFY	
JOYSTICK	
EXIT	

## 2.2.3 IP Camera


**Note:** Check the specifications of your recorder and see if your recorder supports IP camera connection.


STEP 1: Prepare a switch / router, and connect the recorder and the IP camera to the router with RJ45 network cables.

STEP 2: Make sure your camera supports DHCP function to allow the connected router to assign an IP address to the camera.

If your camera doesn't support this function, please check its user manual to know how to manually change the IP address of your camera and make sure its IP address is in the same network segment as the one your router uses.

STEP 3: Power on the camera.

STEP 4: On the recorder side, move the cursor to the left to show the quick bar, and choose  (IP Search) to find your camera.

IP SEARCH					
IP	PORT	MAC	TYPE	PROTOCOL	STATUS
192.168.1.12	88	00:0e:53:e5:9a:f1	IP CAMERA	AVTECH	UNUSED
192.168.1.12	88	UNKNOWN	IP CAMERA	ONVIF	UNUSED
			CONNECT	SETUP	EXIT

STEP 5: Select the IP address which is not used and select **CONNECT** to assign which channel the live video should be displayed.

## 2.3 DVR Power On

This device should be operated only with the type of power source indicated on the manufacturer's label. Connect the indicated AC power cord to the power adapter, and plug into an electrical outlet.

If your device has a power switch on the rear panel, turn it to “—”. The power LED will be on. If your device doesn't have a power switch on its rear panel, the power is on once the power source is connected.

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**Note:** Before the DVR is powered on, make sure (1) the cameras are connected and power-supplied for the detection of the camera video system to be correct, and (2) a monitor is connected to the DVR for correct video output detection.

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**Note:** To ensure that your DVR works constantly and properly, it's recommended to use an UPS, Uninterruptible Power Supply (Optional), for continuously operation.

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**Note:** When your DVR is powered on, please check the chapter of “3. FOR INITIAL USE” in the user manual to know how to configure this device and change the default user name and password. To download the user manual, please scan the QR code on the first page, or go to [www.surveillance-download.com/user/z2116.swf](http://www.surveillance-download.com/user/z2116.swf).

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