



USER GUIDE

Connecting Your CCTV to CCTV Guard AI

A step-by-step guide for beginners: from finding the **RTSP address** on your DVR/NVR and connecting your CCTV to the internet, to seeing your cameras on your phone, watched over by AI.

📅 October 2026 edition 🤖 Android app ⌚ ±30–60 minutes

In short, just 5 steps

1

Install the app & get an account

Section 2

2

Choose a plan & pay

Section 3

3

Note your DVR details: IP, user, password, port

Sections 4–5

4

Open internet access: port forwarding or Tunnel Box

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5

Enter the RTSP address in the app

Section 8

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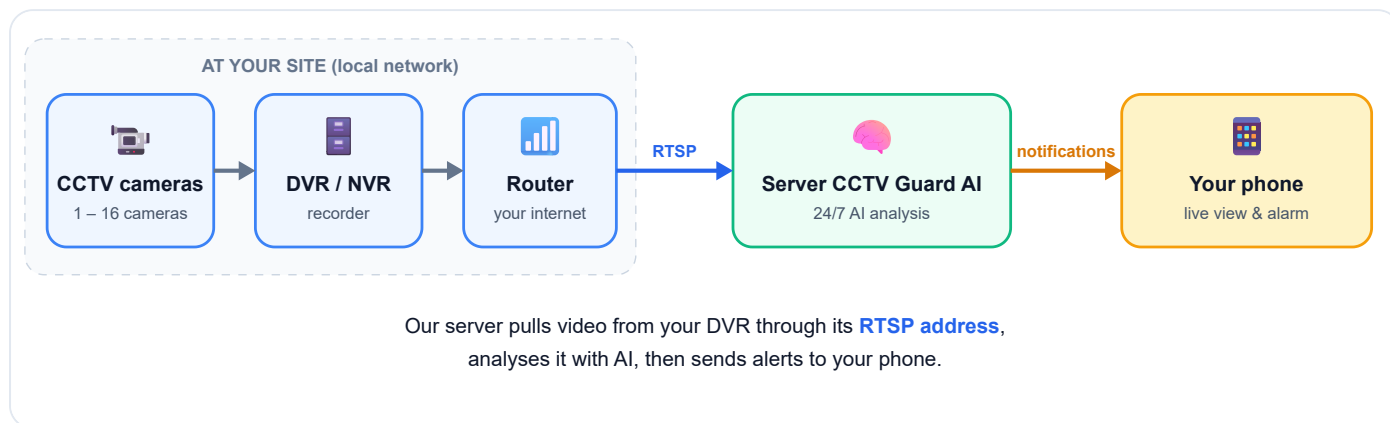
1. Getting Started: How It Works & What You Need
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 Markers    show the order of the parts to look at or tap. Images marked **ILLUSTRATION** are redrawn device menus; the screen on your device may differ slightly depending on its version.

 **About the screenshots:** the app screenshots in this guide show the **Indonesian** interface. Labels are written exactly as they appear on screen, followed by their meaning, for example **Simpan** (*Save*). You can switch the app language in **Pengaturan ▶ Bahasa** (*Settings ▶ Language*); some screens stay in Indonesian.

Getting Started: How It Works & What You Need

CCTV Guard AI **does not replace your CCTV**. Your existing cameras and DVR/NVR stay in place. Our server “watches” the live feed from your DVR over the internet, analyses it with AI (for example detecting fire, intruders or unknown people), and sends alerts to your phone.



What you need

- ✓ **CCTV with a DVR or NVR** that is already recording normally. Standalone IP cameras (without a DVR) also work.
- ✓ **The DVR/NVR connected to your internet router** with a LAN cable.
- ✓ **A stable internet connection** at the CCTV site (IndiHome, Biznet, MyRepublic, First Media, etc.).
- ✓ **The DVR username & password** you use to open the DVR menu or its own app (Hik-Connect, DMSS, XMEye).
- ✓ **An Android phone** for the CCTV Guard AI app.
- ✓ For testing: a **computer/laptop** or a phone with the free **VLC** app.

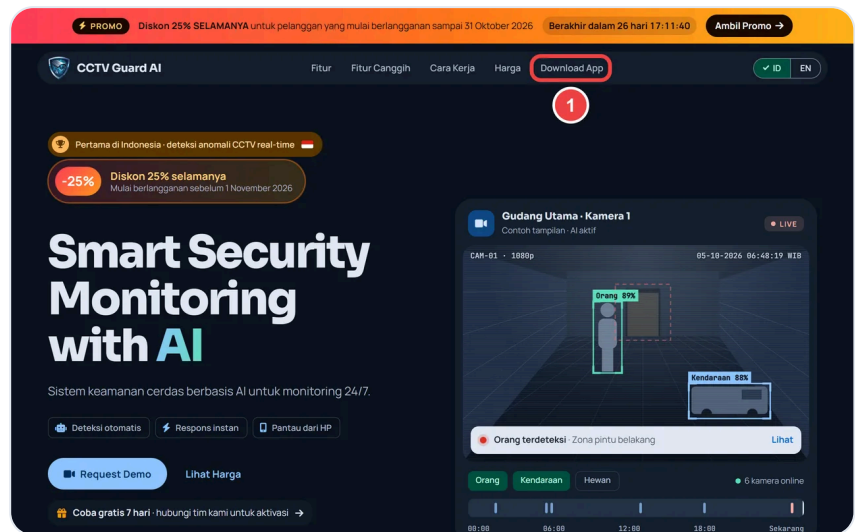
💡 **Quick terms.** A **DVR** records analogue cameras (coaxial cable). An **NVR** records IP cameras (LAN cable). Getting the RTSP address works almost the same way on both, so this guide calls both a “DVR”.

SECTION 2

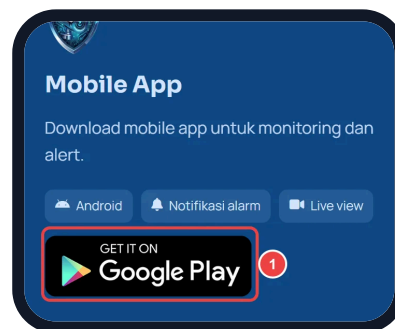
Install the App & Sign In

1 Download the app from Google Play

Open cctvguardai.com, tap **Download App** ¹, then tap the **Google Play** button. You can also search for “CCTV Guard AI” in the Play Store.



The “Download App” menu on the website



The Google Play button

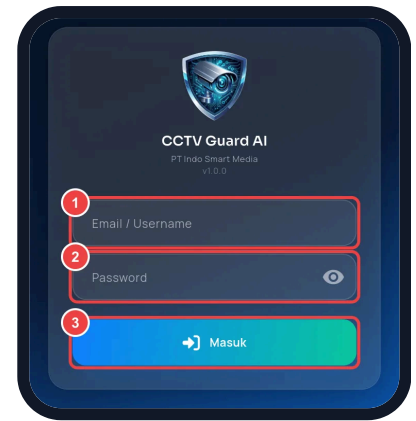
2 Get an account & sign in

CCTV Guard AI accounts are created by our team:

1. Contact us on WhatsApp +62 813-2345-9391. Tell us your **name**, **email**, **WhatsApp number** and **site type** (home, office, shophouse, warehouse or factory).
2. We create your account and send the **email/username** and an **initial password** to your WhatsApp.
3. Open the app, enter the **Email / Username** **(1)** and **Password** **(2)**, then tap **Masuk** (*Sign in*) **(3)**.



Change the initial password right after signing in: open **Pengaturan** ▶ **Ubah Password** (*Settings* ▶ *Change Password*). Use at least 10 characters and never share it with anyone, including people claiming to be from our team.



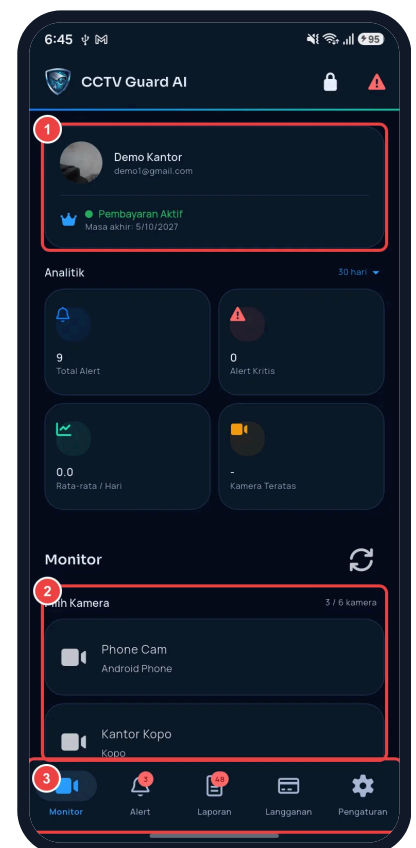
Sign-in screen

3 Get to know the main screen

After signing in you land on the **Monitor** tab:

- **(1) Profile card**: your account name and plan status (“Pembayaran Aktif” – *Payment Active* – and its expiry date).
- **(2) Camera list**: your cameras and quota, for example “3 / 6 kamera” (*3 of 6 cameras*).
- **(3) Bottom menu**: Monitor, Alert, Laporan (*Reports*), Langganan (*Subscription*), Pengaturan (*Settings*).

On a new account the camera list is still empty. That is normal – cameras are added in Section 8.



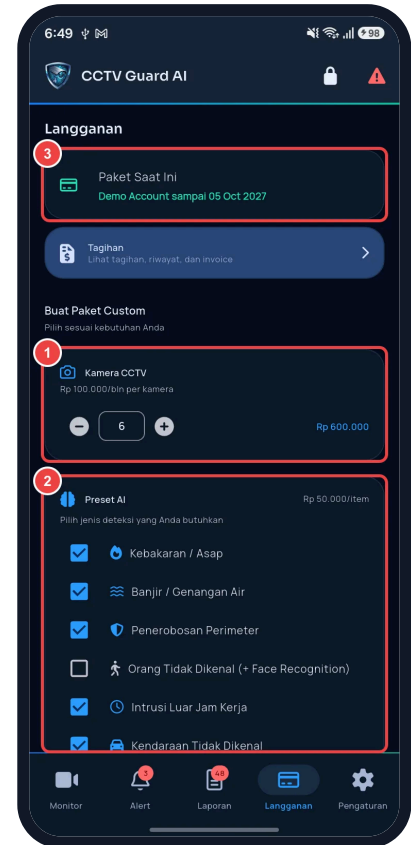
The Monitor tab

Choose a Plan & Pay

Plans are built to fit: you only pay for the number of cameras and the AI detection types you choose. All prices **include VAT (PPN)**.

1 Open the Langganan (Subscription) tab

- **1 Kamera CCTV** (*CCTV cameras*): tap + / - to set how many cameras the AI should watch.
- **2 Preset AI** (*AI presets*): tick the detections you need, for example Kebakaran/Asap (*Fire/Smoke*), Penerobosan Perimeter (*Perimeter Breach*) or Intrusi Luar Jam Kerja (*After-hours Intrusion*). At least one.
- **3 Paket Saat Ini** (*Current Plan*): your active plan and its expiry date.

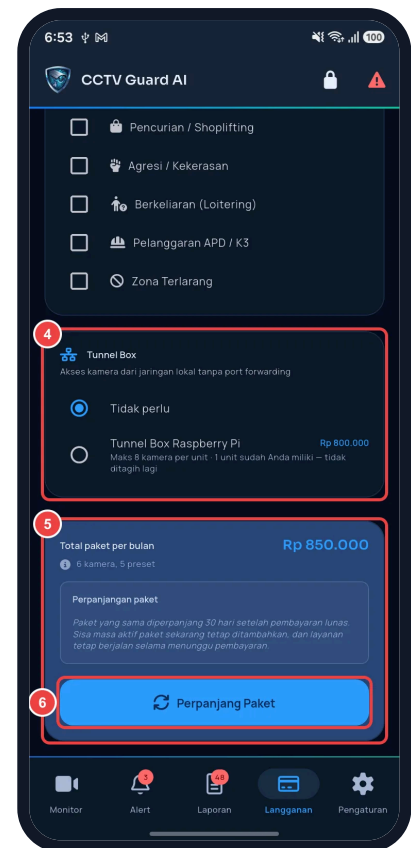


Set the number of cameras & AI presets

2 Decide on a Tunnel Box & pay

- **4 Tunnel Box:** choose **Tidak perlu** (*Not needed*) if you will use port forwarding. Choose **Tunnel Box Raspberry Pi** if you cannot or do not want to configure your router. Not sure? Read Section 6 first.
- **5** Check the **Total paket per bulan** (*monthly plan total*).
- **6** Tap **Langganan Sekarang** (*Subscribe Now*; existing customers see **Perpanjang / Upgrade Paket – Renew / Upgrade Plan**), then choose how to pay: **QRIS**, **Virtual Account** (BNI, Mandiri, BRI, Permata, CIMB, BSI), or a **payment code at a retail store**.

! Pay the **exact amount** shown. Once the payment is received, the plan **activates automatically** and you get a “Pembayaran Berhasil” (*Payment Successful*) notification. Invoices are under **Langganan → Tagihan** (*Subscription → Billing*).



Tunnel Box, total & pay button

Kamera CCTV

Rp 100.000/kamera / bulan

-

1

+

1

Rp 100.000

Preset AI

Rp 50.000 / item / bulan

2

Kebakaran / Asap

Banjir / Genangan

Penerobosan Perimeter

Orang Tak Dikenal (+ Face Recognition)

Intrusi Luar Jam

Kendaraan Tak Dikenal

Vandalisme

Pencurian

Agresi / Kekerasan

Berkeliaran

Pelanggaran APD

Zona Terlarang

⚠️

Pilih minimal 1 preset AI

3

Tunnel Box (optional)

Hanya diperlukan bila CCTV Anda belum bisa diakses dari internet

☒

Tidak perlu – CCTV saya sudah punya IP publik

☐

Perlu – CCTV saya hanya di jaringan lokal – Rp 800.000 sekali beli, tidak ditagih bulanan

4

Total / bulan

Rp 100.000

Rp 75.000

👉

Harga promo 25% – berlaku selamanya

1 kamera, 0 preset

QRIS / VA BNI / VA Mandiri / VA Permata / VA BRI / VA CIMB / VA BSI / Indomaret

Want to work out the cost before signing up? The same calculator is on the website under **Pricing**: ① number of cameras, ② AI presets, ③ Tunnel Box, ④ monthly total.

Understanding the RTSP Address

Think of your DVR as a **small TV station** where each camera is a **channel**. **RTSP** is the “broadcast address” of that channel. With it, our server can watch your camera, just like a TV tuned to a particular channel.

rtsp:// admin : DvrPassword @ 203.0.113.25 : 5541 / Streaming / Channels / 101

rtsp://

The prefix – always the same.

Username

The DVR user name, often `admin`.

Password

The DVR password, after a colon and followed by `@`.

Address (IP / domain)

Your site’s **internet** address (public IP or DDNS). See Section 6.

Port

The RTSP “door”. The DVR default is usually `554`.

Path

Points to a camera/channel. Differs by brand (Section 5).

⚠ **Important:** addresses such as `192.168.x.x` or `10.x.x.x` only work **inside** your home/office network. Our server is on the internet, so it **cannot** reach them. For your cameras to be monitored you need one of: **port forwarding** (the address becomes your public IP/DDNS) or a **Tunnel Box**. Both are explained in Section 6.

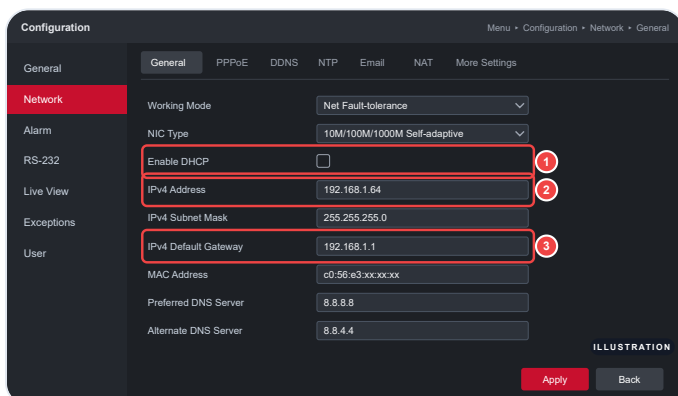
Finding the RTSP Details on Your DVR/NVR

Connect a monitor and mouse to the DVR, right-click on the screen, choose **Main Menu / Menu** and enter the DVR password. There are **5 details** to note down. Use the Worksheet at the end of this section.

A Find the DVR's local IP address & lock it in place

Open the **Network** menu, then:

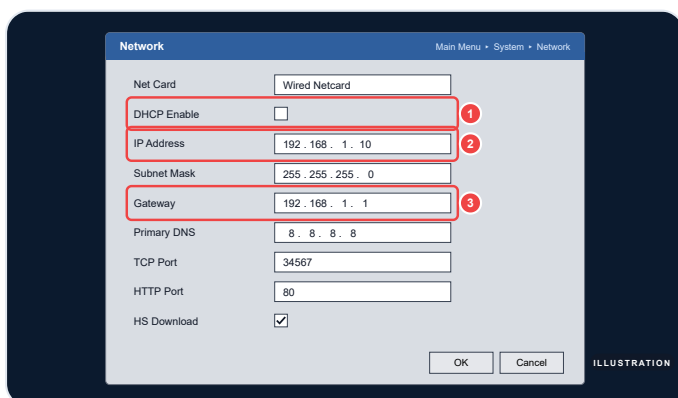
1. **Turn off DHCP** (untick it) so the DVR's IP **stays fixed** and does not change when the router restarts. This is required for port forwarding.
2. Note the DVR's **IP Address**, for example **192.168.1.64**.
3. Also note the **Gateway** – your router's address (for example **192.168.1.1**). You will use it to open the router in Section 6.
4. Press **Apply / Save / OK**.



Hikvision / HiLook / HiWatch: Menu ▶ Configuration ▶ Network ▶ General



Dahua / IMOU / XVR: Main Menu ▶ Setting ▶ Network ▶ TCP/IP



XMEye / Xiongmai (many local-brand DVRs): Main Menu ▶ System ▶ Network

💡 **No monitor on the DVR?** Open your router's app or web page (Section 6) and look at the list of **connected devices (DHCP Client List)**. The DVR usually shows up with a brand name such as "HIKVISION" or "Dahua". For Hikvision, the **SADP** tool on a laptop can also find the DVR's IP automatically.

B DVR username & password

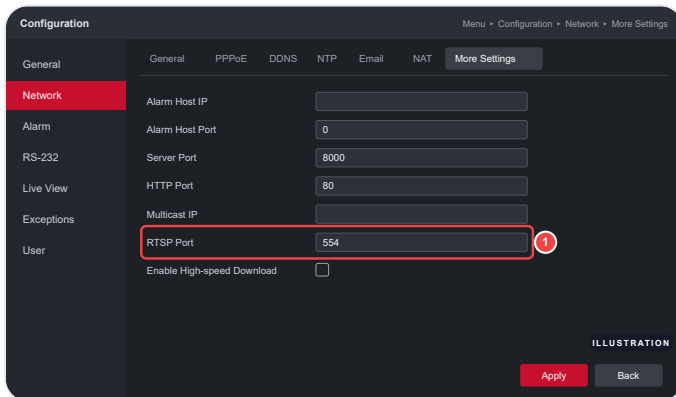
These are the same ones you use to open the DVR menu. The username is usually `admin`.

👤 **Safer: create a dedicated user.** In the DVR's **User / Account** menu, add a new user (for example `guardai`) with **Live View / Remote Live View** rights only. Use this user for RTSP instead of `admin`. If you ever want to cut off access, just delete that user.

🗂️ **Avoid symbols in the password** such as `@ # : / ? %` — they have special meaning inside an RTSP address. Letters and numbers only is safest. If you must use them, replace them: `@ → %40`, `# → %23`, `:` → `%3A`, `/ → %2F`, `? → %3F`, `% → %25`. Example: the password `Home@2026` is written `Home%402026`.

C RTSP port

Usually `554`, and rarely changed. To make sure:



Hikvision: Network ▶ More Settings ▶ RTSP Port



Dahua: Network ▶ Connection (Port) ▶ RTSP Port

XMEye usually uses RTSP port `554`. The other ports in the menu (TCP 34567, 37777, 8000, HTTP 80) are **not** the RTSP port — don't mix them up.

D Path by brand & channel number

Replace `USER`, `PASSWORD`, `ADDRESS`, `PORT` and the channel number with your own details.

DVR/NVR brand	RTSP address format	Example: camera/channel 2
Hikvision , HiLook, HiWatch, EZVIZ NVR	<code>rtsp://USER:PASSWORD@ADDRESS:PORT/Streaming/Channels/N01</code>	<code>.../Streaming/Channels/201</code>
Dahua , IMOU, Amcrest, many XVRs	<code>rtsp://USER:PASSWORD@ADDRESS:PORT/cam/realmonitor?channel=N&subtype=0</code>	<code>...?channel=2&subtype=0</code>
XMEye / Xiongmai (local brands, "iCSee")	<code>rtsp://ADDRESS:PORT/user=USER&password=PASSWORD&channel=N&stream=0.sdp?</code>	<code>...&channel=2&stream=0.sdp?</code>
Uniview (UNV)	<code>rtsp://USER:PASSWORD@ADDRESS:PORT/unicast/cN/s0/live</code>	<code>.../unicast/c2/s0/live</code>
TP-Link VIGI / Tapo (IP cameras)	<code>rtsp://USER:PASSWORD@ADDRESS:PORT/stream1</code>	one camera = one address

- **Channel number** = the camera's position on the DVR screen (CH1, CH2, ..., D1, D2, ...). Hikvision uses `101` = channel 1, `201` = channel 2, `1601` = channel 16.
- **Main stream vs sub stream**. Main stream = full quality (Hikvision `...01`, Dahua `subtype=0`, XMEye `s`
`tream=0`). Sub stream = light quality (`...02`, `subtype=1`, `stream=1`). For Hikvision & Dahua, **enter the main stream**: our system automatically uses the sub stream for live view to save data. For other brands on a slow upload connection, use the sub stream.
- Brand not in the table? Search Google for "*RTSP URL [your DVR brand]*", check the manual, or contact us – we will help you find it.

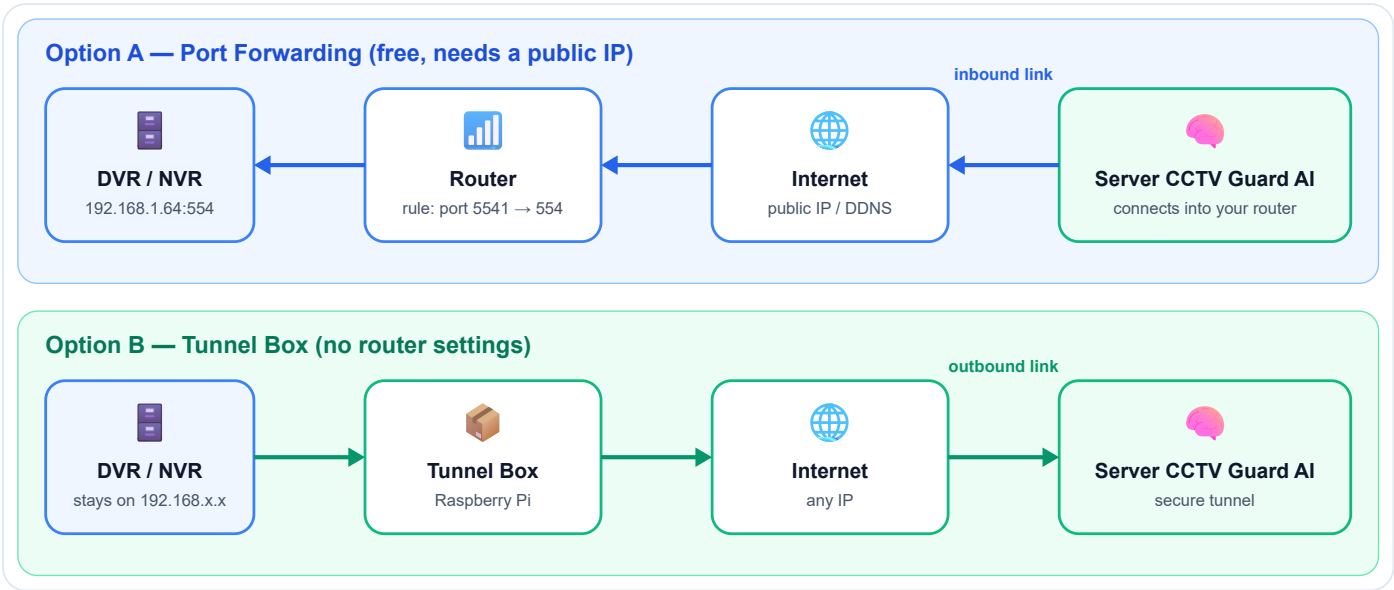
Worksheet

Print or copy this table and fill it in as you follow the steps above.

DVR/NVR brand	
DVR local IP (Step A)	<i>e.g. 192.168.1.64</i>
Router IP / Gateway	<i>e.g. 192.168.1.1</i>
DVR username	
DVR password	<i>keep it somewhere safe</i>
DVR RTSP port	<i>usually 554</i>
Number of cameras & channel numbers	
Public IP / DDNS (Section 6)	
Router external port (Section 6)	<i>e.g. 5541</i>

Making Your DVR Reachable from the Internet

Our server needs to “knock on your DVR’s door” from the internet. There are two ways:



	A. Port Forwarding	B. Tunnel Box
Cost	Free	Rp 800,000 one-off purchase, never billed monthly. Up to 8 cameras per unit.
Requirements	Your internet has a public IP & you can open your router’s settings	Just a free LAN port on your router
Difficulty	Moderate (router configuration)	Very easy (just plug it in)
Security	A DVR port is open to the internet – a strong password is a must	No ports are opened
Best for	People used to configuring routers / with a technician	Non-technical users, internet without a public IP

A. Port Forwarding: step by step

1 Check whether your internet has a public IP

Port forwarding **only works** if your router gets a public IP from your ISP. To check:

1. From a phone/laptop on the CCTV site’s Wi-Fi, open **google.com** and type “**what is my ip**”. Note the number shown, for example `203.0.113.25`.

2. Open the router page (step 2) and look at the **WAN IP**. On ZTE: *Status ▶ Network Interface ▶ WAN Connection*. On Huawei: *Status ▶ WAN Information*.
3. Compare the two:

✓ Exactly the same

You have a public IP. Continue to step 2.

✗ **Different**, or the WAN IP starts with **10.**, **100.64–100.127**, **172.16–172.31**, **192.168.**

Your internet uses **CGNAT** (an IP shared with other customers), so port forwarding **will not work**. Ask your ISP for a **public IP** service (usually paid), or use a **Tunnel Box**.

2 Open your router's settings page

1. Open a browser and type the **Gateway** address from your Worksheet. Usually **192.168.1.1** (ZTE, TP-Link) or **192.168.100.1** (Huawei).
2. Enter the router username & password, usually printed on the **sticker under the modem**.



On ISP modems (for example IndiHome), the account on the sticker is often **not an admin account**, so the port forwarding menu does not appear. In that case call your ISP and ask them to open port forwarding, or ask your CCTV technician. Give them the details from step 3 below.

3 Create a port forwarding rule

Look for a menu called **Port Forwarding**, **Port Mapping**, **Virtual Server** or **NAT**. Create one new rule:

Router field	Fill in	Example
Name	anything	CCTV-RTSP
Protocol	TCP	TCP
External / WAN port	any number 1024–65535, preferably not 554	5541
Destination IP / LAN Host / Internal host	the DVR's local IP (Section 5A)	192.168.1.64
Internal / LAN port	the DVR's RTSP port (Section 5C)	554

ZTE F609 / F670L: Application ▶ Port Forwarding. ① TCP, ② WAN port 5541, ③ DVR IP, ④ LAN port 554, ⑤ Add.

Huawei HG8245H / HG8145V5: Forward Rules ▶ Port Mapping Configuration ▶ New. ① DVR IP, ② TCP, ③ internal port 554 & external 5541, ④ Apply.

Other routers: **TP-Link** → Advanced ▶ NAT Forwarding ▶ Virtual Servers. **FiberHome** → Application ▶ Port Forwarding. **Mercusys / Tenda** → Advanced ▶ Port Forwarding / Virtual Server. One rule covers **all cameras** on one DVR, because channels are told apart by the path, not the port.

4 Deal with a changing IP (DDNS)

Home public IPs usually **change** when the modem restarts. To keep your RTSP address working, choose one:

- **DDNS** (free): register a name such as `myshop.ddns.net` with a DDNS service (for example No-IP), then enter it in the **DDNS** menu of your router or DVR. Use this name as the **ADDRESS** in RTSP.
- A **static IP** from your ISP (paid). The address never changes.

5 Put your RTSP address together

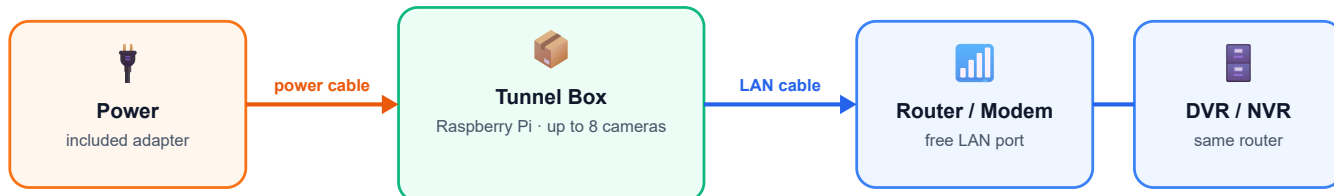
Combine the details from your Worksheet. Use the **public IP / DDNS** and the **external port**, not the local IP:

`rtsp://guardai:DvrPassword@myshop.ddns.net:5541/Streaming/Channels/101`

Security musts: (1) replace the DVR's default password with a strong one; (2) use a dedicated user with *live view* rights only; (3) open **only the RTSP port** – never the DVR web ports (80, 8000, 37777, 34567); (4) update the DVR firmware when a new version is available.

B. Tunnel Box: no router configuration

The Tunnel Box is a small device (Raspberry Pi) that builds a **secure tunnel** from your network to our server. The connection goes **out** from your site, so you need no public IP, no port forwarding and no DDNS.



Just 2 cables. We pre-configure the Tunnel Box — you never touch your router settings.

1. Order a Tunnel Box in **Langganan** (*Subscription*) — Section 3, option **4**. One unit covers up to **8 cameras**.
2. Send your DVR details to our team on WhatsApp: **brand, local IP, RTSP port, username & password** (preferably a dedicated user) and the **number of cameras**.
3. We ship the Tunnel Box **pre-configured**. Plug it into **power** and connect a **LAN cable** to the same router as the DVR.
4. Our team registers the cameras on your account and they appear on the **Monitor** tab. Go straight to Section 9.



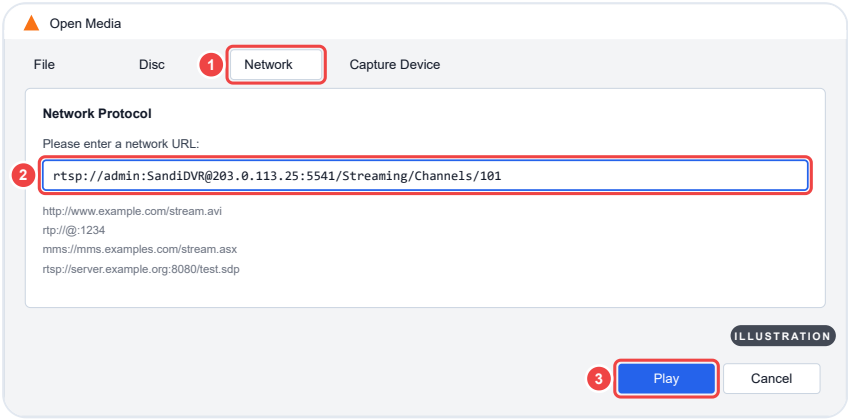
Keep the Tunnel Box plugged in. After a power or internet cut it **reconnects automatically**, and you get an alert if the device stays offline too long.

Testing the RTSP Address with VLC

Before entering it in the app, make sure your RTSP address is right. **If the video plays in VLC, it will almost certainly play in CCTV Guard AI too.**

1 On a computer

- 1. Download & install **VLC media player** from **videolan.org** (free).
- 2. Open **Media ▶ Open Network Stream...** (or press **Ctrl + N**).
The **Network** tab **1** opens.
- 3. Paste the RTSP address **2** and press **Play 3**.



2 Test from OUTSIDE the network

The most honest test is from outside the CCTV site, because our server is outside too. Install **VLC for Android** on your phone, **turn off Wi-Fi** and use **mobile data**, then go to **Browse ▶ New stream** and paste the RTSP address.

Result	What it means
Video plays	The address is correct. Continue to Section 8.
Asks for username/password again	Wrong username/password, or the password contains symbols (see Section 5B).
Plays on Wi-Fi, fails on mobile data	Port forwarding is not right yet, or your internet uses CGNAT (Section 6A, step 1).
Black screen / “Your input can’t be opened”	Wrong path or channel number, wrong port, or the DVR is off.

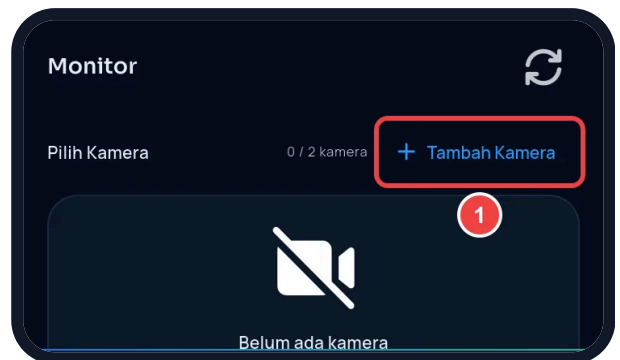
Adding Cameras to the App

Make sure your plan is active (Section 3) and your RTSP address passed the VLC test (Section 7).

1 Tap “Tambah Kamera” (Add Camera)

On the **Monitor** tab, scroll to the camera list and tap + **Tambah Kamera** (*Add Camera*) ¹. The number next to it, for example “0 / 2 kamera”, is your plan’s camera quota.

! Button greyed out? Your camera quota is used up or your plan is not active yet. Add cameras to your plan on the **Langganan** (*Subscription*) tab.



The + Tambah Kamera (Add Camera) button

2 Fill in the camera form

- **1 Nama Kamera** (*Camera name*): an easy-to-recognise name, for example “Front Porch” or “Back Warehouse”.
- **2 URL RTSP**: paste the complete RTSP address you tested in VLC. It must start with `rtsp://`.
- **3 Lokasi** (*Location*, optional), for example “1st floor”.
- **4** Tap **Simpan** (*Save*).

To avoid typos, **copy and paste** the RTSP address (for example from a phone note or a WhatsApp message to yourself) rather than typing it again.

Q Check the end of the address. The path must be complete up to the channel number, for example `...:554/Streaming/Channels/201`. An address copied from a truncated display, such as `...:554/Streami n...`, is not recognised by the DVR and causes “Gagal memulai stream” (*Failed to start stream*).



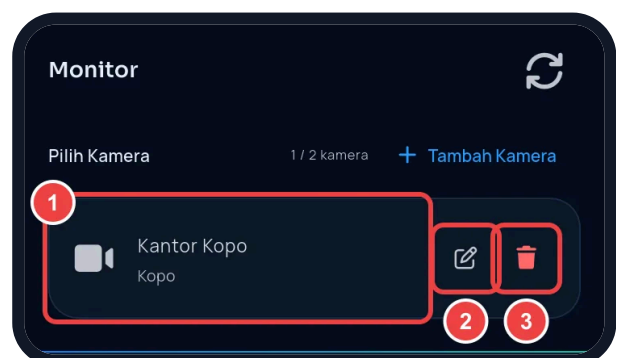
Example: Hikvision DVR, camera on channel 2 (password & IP masked)

3 Check the result

The new camera appears in the list **1**. Tap its name to open **live view** (Section 9). If no video appears, see Section 10.

- **2 Pencil icon** (*Edit*): change the name, RTSP URL or location. Use it when the DVR password or DDNS address changes.
- **3 Bin icon** (*Delete*): remove the camera.

Repeat steps 1–3 for each camera. On the same DVR you usually only need to change the **channel number** in the RTSP address.



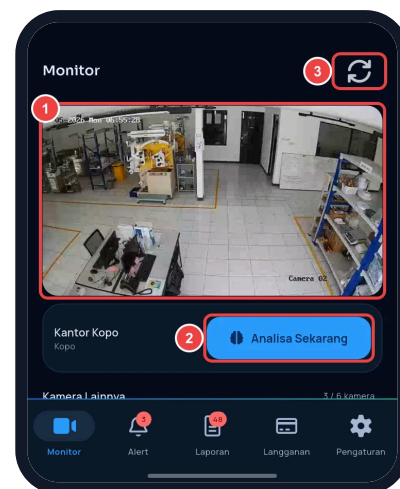
The camera is saved

Everyday Use

Live view

Tap a camera name on the **Monitor** tab:

- 1 Live video from the camera.
- 2 **Analisa Sekarang** (*Analyse Now*): ask the AI to check the current picture straight away.
- 3 **Reload** if the video stalls.



Live view

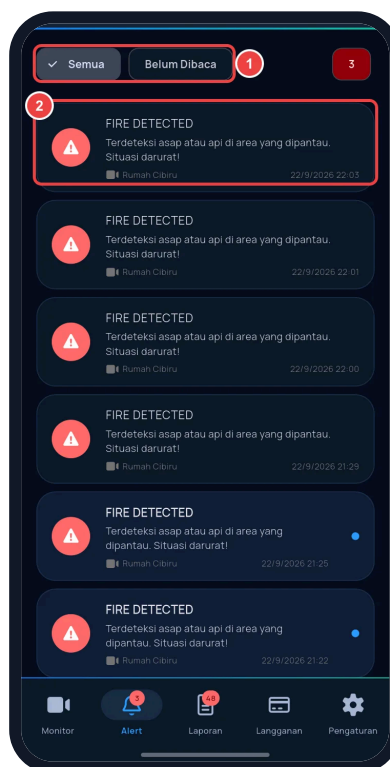
Alerts

Every event the AI detects appears on the **Alert** tab and is sent as a notification.

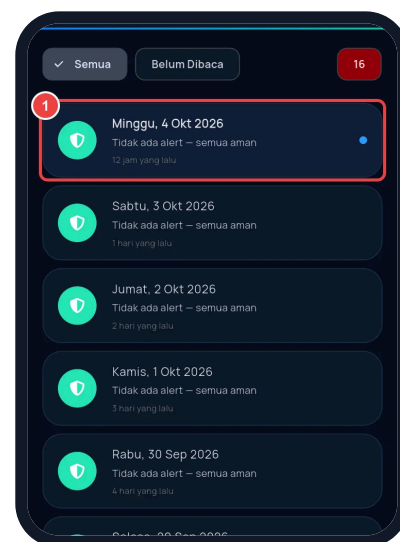
- 1 Filter by **Semua** (*All*) or **Belum Dibaca** (*Unread*).
- 2 Tap an alert to see its details, replay the event recording, download it or share it.

Daily reports

The **Laporan** (*Reports*) tab has a summary for each day, for example “Tidak ada alert – semua aman” (*No alerts – all clear*).



Alert tab

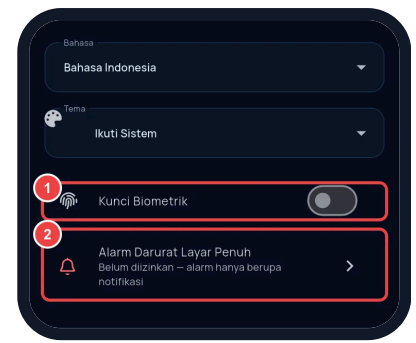


Laporan (Reports) tab

Important settings

- **1 Kunci Biometrik** (*Biometric Lock*): the app only opens with your fingerprint/face.
- **2 Alarm Darurat Layar Penuh** (*Full-Screen Emergency Alarm*): **strongly recommended**. Tap it and allow it, so critical events (such as a fire) sound an alarm and wake the screen even when the phone is locked.

The top-right corner has two buttons:  **Brankas Bukti** (*Evidence Locker*) to keep important recordings, and  **SOS** for emergencies.



Pengaturan (Settings) tab

Common Problems & Solutions

Symptom	Likely cause	Solution
"URL harus diawali rtsp://” (<i>URL must start with rtsp://</i>)	Address pasted wrongly or a space in front	Clear the field and paste the full address starting with rtsp:// .
"Gagal memulai stream. Cek RTSP URL atau jaringan.” (<i>Failed to start stream. Check RTSP URL or network.</i>)	Path cut off or wrong (for example the address ends at :554/), a local IP 192.168.x.x was used, port forwarding is not right, or the DVR is off	Open the pencil icon and check the address to the very end (Section 5D). Make sure you use the public IP/DDNS + external port (Section 6), then test over mobile data (Section 7).
Used to work, now no video	Public IP changed, DVR password changed, or the DVR IP changed because of DHCP	Use DDNS, turn off DHCP on the DVR (Section 5A), then update the URL with the pencil icon.
Choppy / slow video	Low upload speed at the site, or many cameras on main stream	For brands other than Hikvision/Dahua, switch to the sub stream. Check your upload speed with a speed test.
Black video with no error message	The camera on that channel is off or the channel number is wrong	Check the camera on the DVR screen. Match the channel number (Section 5D).
Forgot the DVR password	-	Reset it via the DVR's "Forgot password" menu, or contact your DVR technician/distributor.
"Tambah Kamera" (<i>Add Camera</i>) button greyed out	Camera quota used up or plan not active	Add cameras or activate your plan on the Langganan (<i>Subscription</i>) tab.
No notifications	Notification/alarm permission not granted, or battery saver mode	Turn on the Full-Screen Emergency Alarm (Section 9) and allow notifications for the app.

Need Help?

Our team is happy to help – including finding the RTSP address for your DVR brand or walking you through port forwarding remotely.



WhatsApp

+62 813-2345-9391



Website

cctvguardai.com

When you contact us, mention your DVR brand and your VLC test result (Section 7). **Never** send your DVR password over public social media.

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