Installation Guide

NookBox Video Door Phone

(P119048 / E6309682)

NookBox

Smart Home Security

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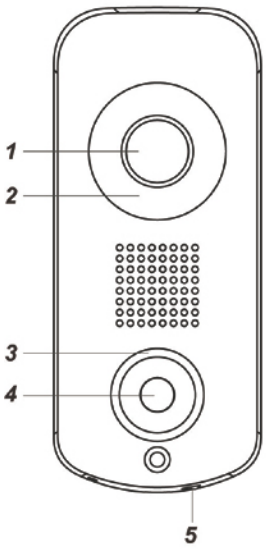
1. Introduction

NookBox Video Door Phone (P119048 / E6309682)

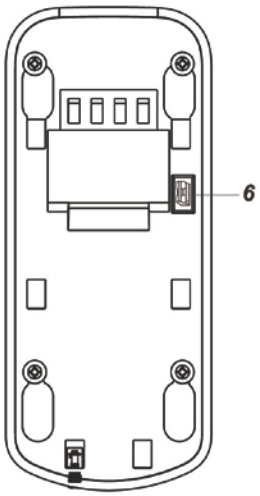
NookBox Video Door Phone (VDP??) is designed to replace conventional doorbell by providing remote video streaming access, two-way communication via WiFi network. The Video Door Phone functions as part of NookBox alarm system and must be connected with a NookBox security system Control Panel. Setup and remote access of Video Door Phone is performed via NookBox Home Portal Server, using provided smartphone application.

2. Application Overview

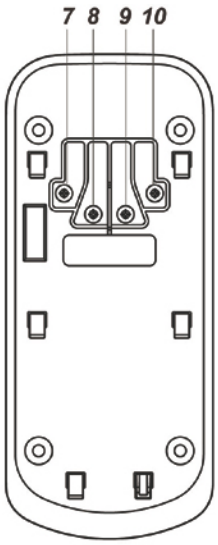
2.1 Parts Identification



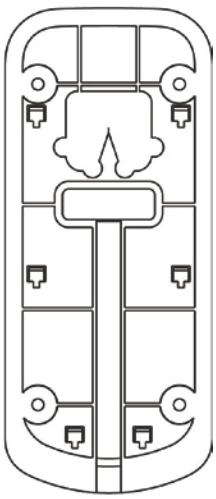
Front View



Back View (Without Bracket)



Bracket (Inside)



Bracket (Outside)

1. **Camera Lens**
2. **Night Light LED**
3. **LED Indicator (Blue / Amber)**
4. **Function Button**
5. **Bottom Screw**

The bottom screw should be loosened before hooking the VDP onto mounting bracket, and tightened after VDP is hooked to bracket. When tightened, the bottom screw fixes VDP to mounting bracket. VDP cannot be detached from bracket as long as screw is tightened.

6. **Doorbell Jumper Switch**

Jumper On
The jumper link is inserted connecting the two pins.

Jumper Off
If the jumper link is removed or "parked" on one pin.

- Jumper ON: Connect the Jumper Switch when using VDP with hardware doorbell.
- Jumper OFF: Disconnect the Jumper Switch when not using VDP with hardware Doorbell.

7. **24V ADC Power Input**
8. **Doorbell Terminal**
9. **Doorbell Terminal**
10. **24V ADC Power Input**

2.2. LED Indicator

The Video Door Phone has 2 sets of LED in Blue and Amber color, arranged in circular pattern around the button to indicate device status.

LED Color	Behavior	Indication
Blue	Flash every 3 seconds	VDP under Wi-Fi setup mode (AP mode)
	Spinning	VDP button pressed, waiting for answer
	ON	VDP under video streaming and two-way communication
Amber	ON for 3 seconds	VDP finish warm up upon power on, entering normal operation.
	Flash every 3 seconds	Wi-Fi connectivity problem*
	Flash every second	VDP unable to connect to server
	3 Flash then ON for 6 seconds	VDP reset to factory default

***NOTE**
It takes about 1 minute for VDP to connect to Wi-Fi after power on. Before the Wi-Fi connection is established, the Amber LED may flash momentarily.

2.3. The Power Supply

The VDP uses 24V±10% AC or DC power as power source. Connect power to the connector on the bracket, install the VDP on the bracket to power on the device.

3. Getting Started

3.1. Equipment required

The following equipment is required to use VDP:

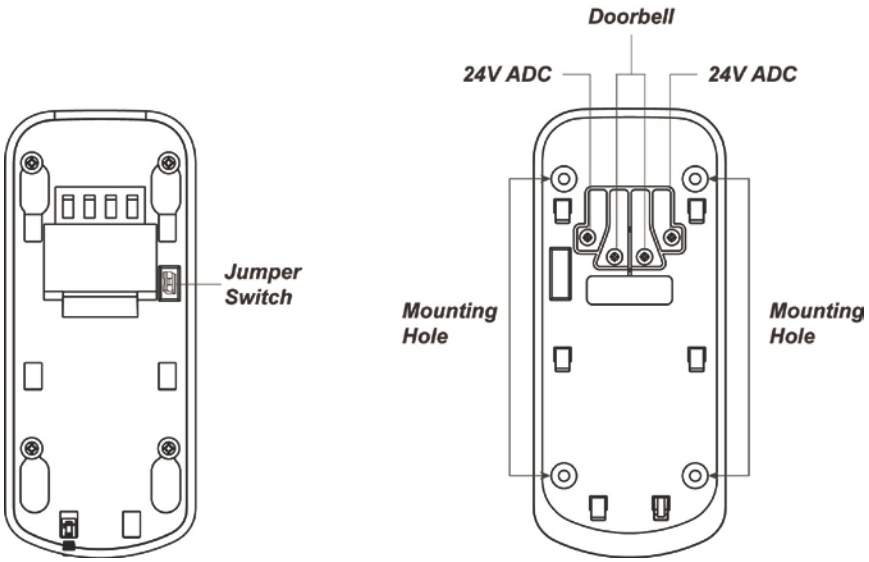
- A NookBox IP based security system alarm panel – The panel must be registered in NookBox Home Portal Server with a valid user account. Refer to panel and Home Portal Server user guide to complete panel setup and registration process.
- A router supporting 2.4 GHz Wi-Fi network. The NookBox panel should be connected to this router with access to internet and Home Portal Server.
- An iPhone or Android smartphone with NookBox app installed.
  Android version requirement: Android **5.1** or over.
  iPhone version requirement: iOS **8** or over

3.2. Hardware Installation

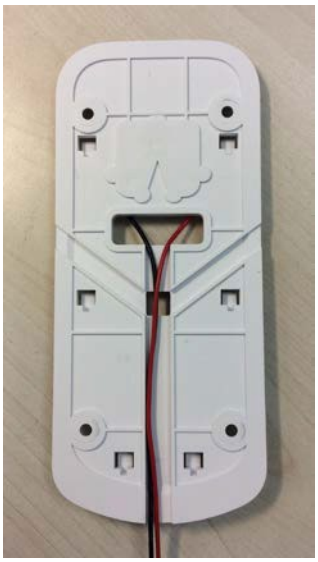
1. Determine whether the VDP would be connected to a conventional doorbell.
   If doorbell is used, connect the Jumper Switch.
   If doorbell is not used, do NOT connect the Jumper Switch.

Warning
The Jumper Switch setting **MUST** be adjusted according to doorbell usage. Make sure the jumper setting is correct before proceeding with installation. Incorrect setting may cause damage to VDP when wiring.

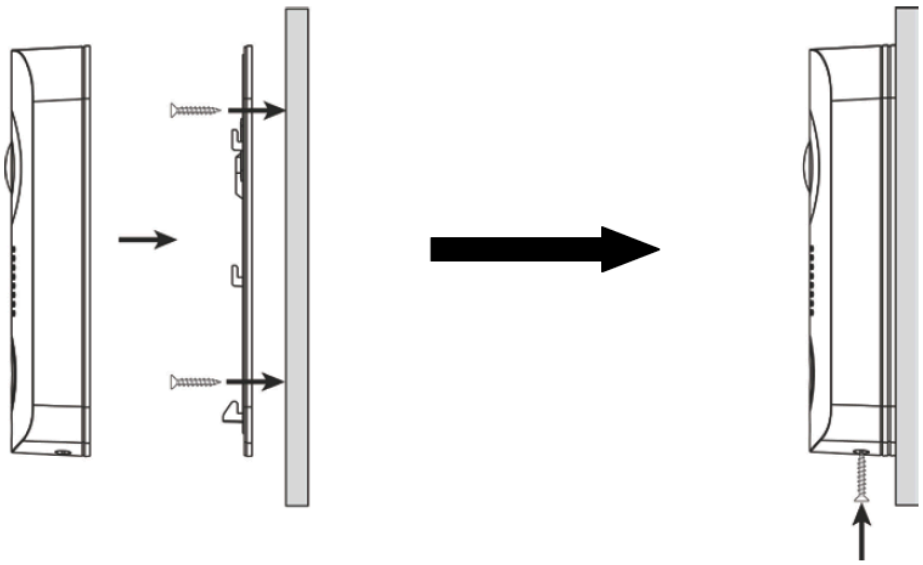
2. Find the wall mounting bracket, connect 24V±10% ADC power to the connector on the bracket. If doorbell is used, also connect the door bell.



The wiring should connect to the connector on the inside of bracket, pass through the opening on the bracket and tucked into the bracket's central cavity on the back.



3. The wall mounting bracket has 4 mounting holes. Use the mounting holes as template, mark mounting location on the wall, drill holes and insert wall plug if needed.
4. Screw the mounting bracket onto marked location.
5. Hook VDP onto the bracket. When VDP is hooked on the bracket, the connect come in contact with the device and VDP is powered on.
6. Tighten the bottom screw to lock VDP onto bracket.

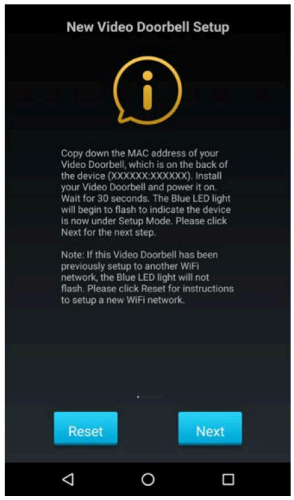


3.3. Wi-Fi Setup and Learning

1 Use your smartphone to open NookBox app and log into the user account registered by the control panel.

2 Select the Camera tab in the app. Press “New Video Doorbell” to begin setting.

3 Power up the Video Doorbell by applying AC power. The device will first warm up for about 30 seconds, then the Blue LED will begin to flash.
Flashing Blue LED indicates the Video Doorbell does not have a working Wi-Fi setting and it enter Wi-Fi setup mode (AP mode) automatically upon power up.



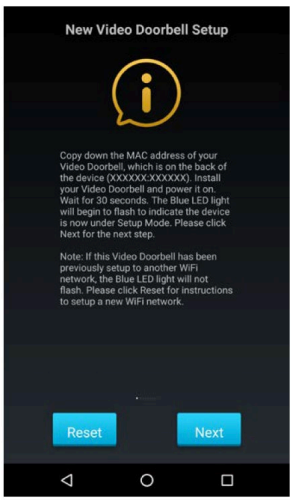
4 If the VDP has already finished Wi-Fi setting, it will not enter Wi-Fi setup mode upon power up and must be reset to factory default. Follow procedure below to factory reset:

a. Disconnect and reconnect AC power.

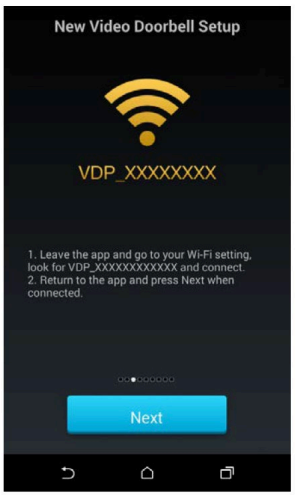
b. Press and hold VDP button as soon as AC power is reconnected. Do NOT wait for warm up to complete.

c. Keep holding the button for about 25 seconds until VDP Amber LED flashes 3 times, then stays ON, then release the button.

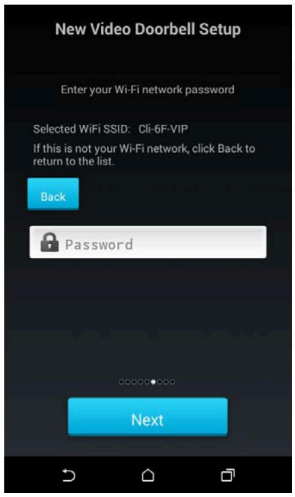
d. Factory Reset is complete, VDP will reboot and enter W-Fi setup mode.



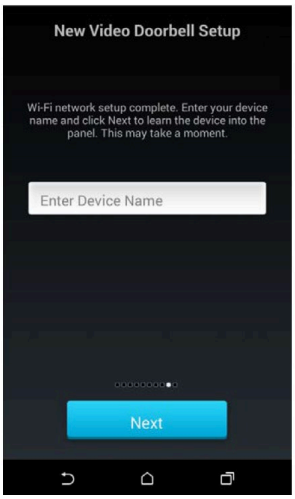
5 Leave the NookBox app in the background and access your Smartphone's Wi-Fi setting function. Look for wireless network named **VDP_XXXXXXXXXXXX.** (XXXXXXXXXXXX = device MAC address) Connect to this wire network, then return to NookBox app and continue.
If your smartphone warns the network has no internet access, ignore the warning and proceed.

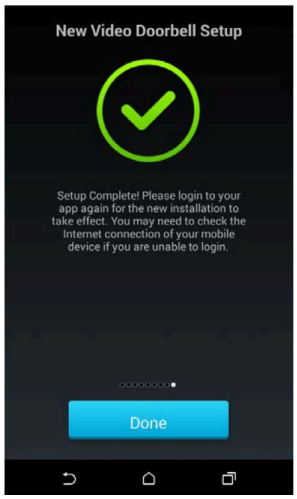


6 The app will search for available wireless network and display search result. Select the wireless network desired and enter password to join the network.
If you encounter error message, check your smartphone wireless setting to make sure the smartphone is still connected to the same **VDP_XXXXXXXXXXXX** network previously selected, then return to app and search the available network again.



7 After successfully joining network, the app proceeds to learn the Video Doorbell into the control panel. Enter the device name and proceed. When learning is complete, the app displays success message. Press Done and re-login to the app to start using Video Doorbell (The device will reboot upon complete learning, you may need to wait a short time for it to restart.)





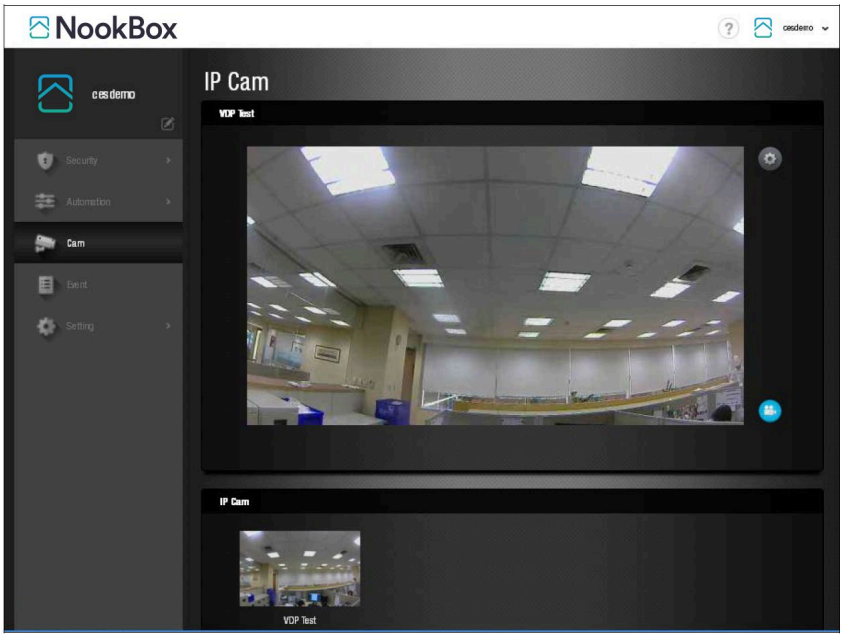
4. Operation

Operation of VDP should be performed via NookBox Home Portal Server, using the account registered by the Control Panel which VDP is learnt into.

4.1. Web Browser Access

When accessing the Home Portal Server account using a web browser, VDP is located under the Camera page and has the same function of a NookBox IP Camera.

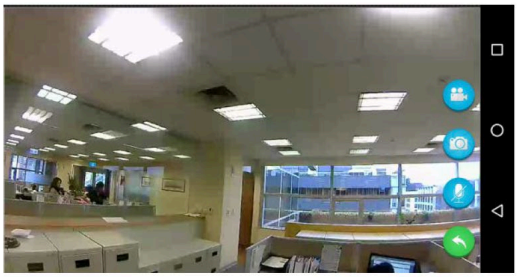
Two-way voice and doorbell functions are not enabled for web browser access. To uses these functions, a smartphone app is required. Please see **4.2. Smartphone Access** for detail.



- Press the Record Video button to record a video clip.

4.2. Smartphone Access

Smartphone application access to VDP provides two-way voice and doorbell push notification function.
Log into Home Portal Account and select Cam page to display VDP streaming thumbnail. Press the thumbnail image to enlarge to full screen.



The VDP full screen has 4 function buttons:

- Press the Record Video button to record a video clip.

  The video clip length is set to 30 seconds by default, composed of 10 seconds before button press and 20 seconds after button press.

- Press the Camera button to take a single picture.

- Press the Microphone button to toggle smartphone microphone.

Full screen VDP streaming will open voice channels automatically, allowing smartphone user to converse with VDP. Use the microphone button to control smartphone microphone and switch between one-way and two-way voice channel.

: Smartphone microphone OFF – One-way listen-in only.

: Smartphone Microphone ON – Two-way voice communication.

- Press the Return button to return to camera thumbnail page.

4.3. Doorbell Notification

The Doorbell Notification function allows VDP to inform the user remotely when its doorbell button is pressed. With Doorbell Notification, the user will be able to answer the doorbell remotely and converse with the guest via VDP using the smartphone even when away from home.

Before using the Doorbell Notification, the following settings should be completed:

- The VDP must be properly setup and learnt into Control Panel, as described in previous chapter.
- The Control Panel Home Portal Server account should be registered and working properly.
- The Control Panel Home Portal Server account's push notification setting must be enabled. To enable push notification function, Log into the Home Portal Server account and select Notification setting.

1 Press the doorbell button on VDP, VDP will sound a door chime. If any hard wired doorbell is connected to VDP, the doorbell will also be activated; the Blue LED will start spinning.

2 The user will receive a push notification message from its panel Home Portal Server Account, titled "Doorbell".

3 Press on the push notification message, the smartphone will launch NookBox app and log into registered account automatically. After login, the app will automatically jump to VDP page. VDP Blue LED will turn to steady ON to indicate.

4 After finishing conversation, press the return button to return to camera thumbnail page.

<NOTE>
- If the Doorbell Notification is not answered within 1 minute after button press, the VDP will time out and the Blue LED will stop spinning.
- When the button is pressed, VDP will take a picture which will be uploaded to the Home Portal Server.

4.4. Video / Picture Capture

VDP will take a picture or video during following occasions. All pictures and video clips taken will be uploaded to the server.

Picture

- Press the function button in front of VDP to take a picture.
- Press the camera icon on the app when streaming video to take a picture.

Video

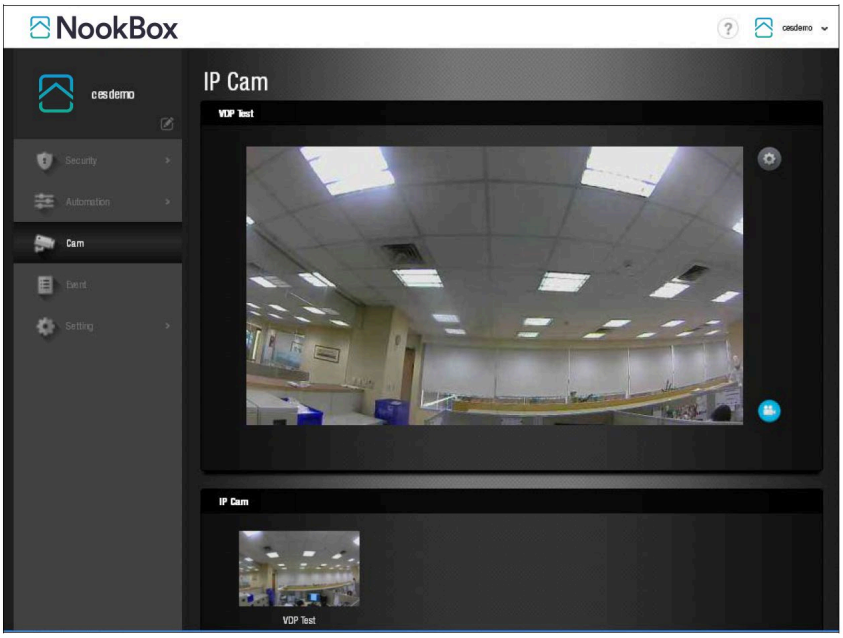
- Press the record video icon on the app or server webpage UI to record a video.
- Whenever an alarm is activated by the Control Panel, VDP will record a video immediately.

5. Programming

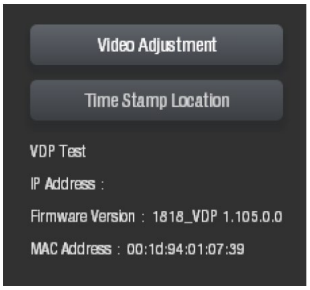
VDP setting program should be programmed via Home Portal Server web browser UI.

5.1. Video Setting

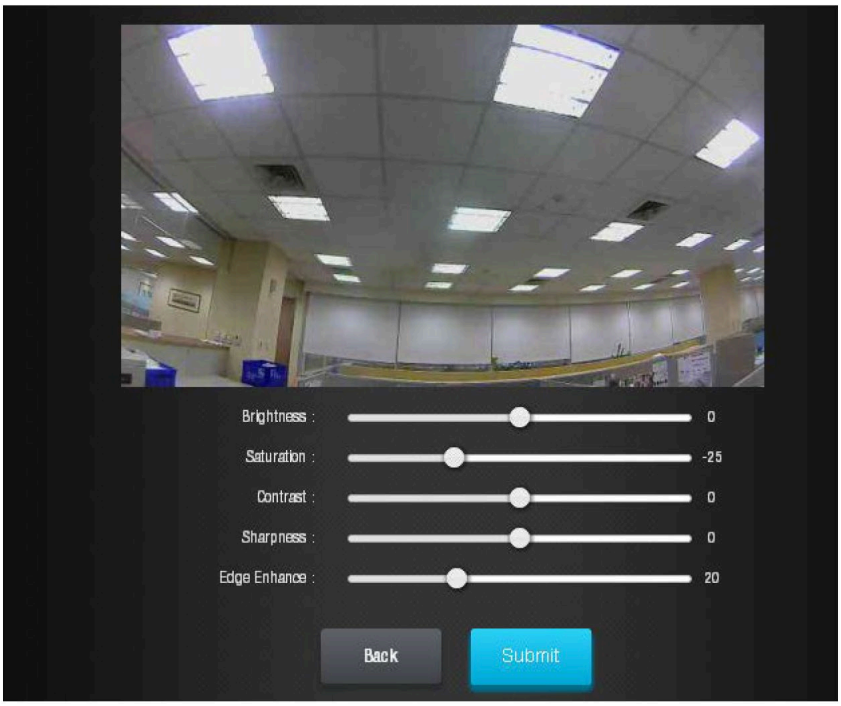
Video Setting options are accessed on the Home Portal Server web UI's Camera page.



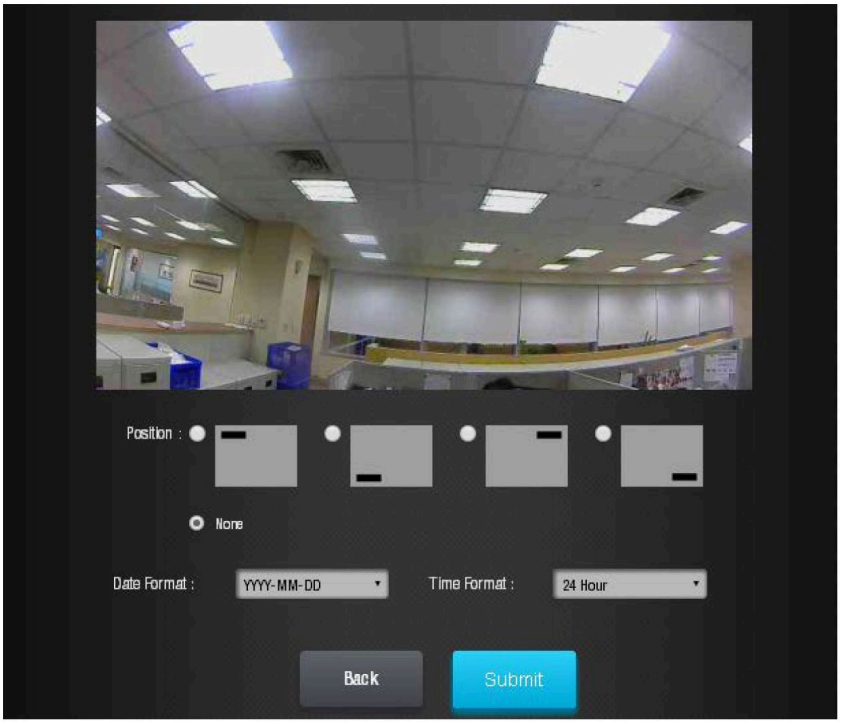
- Press the Video Setting icon to adjust video configuration:



Video Adjustment: For image tuning.



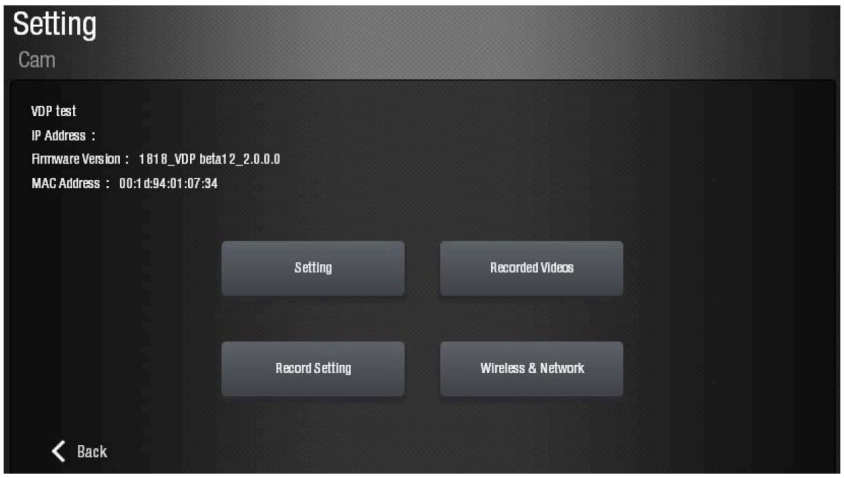
Time Stamp: Select the time stamp location on video.



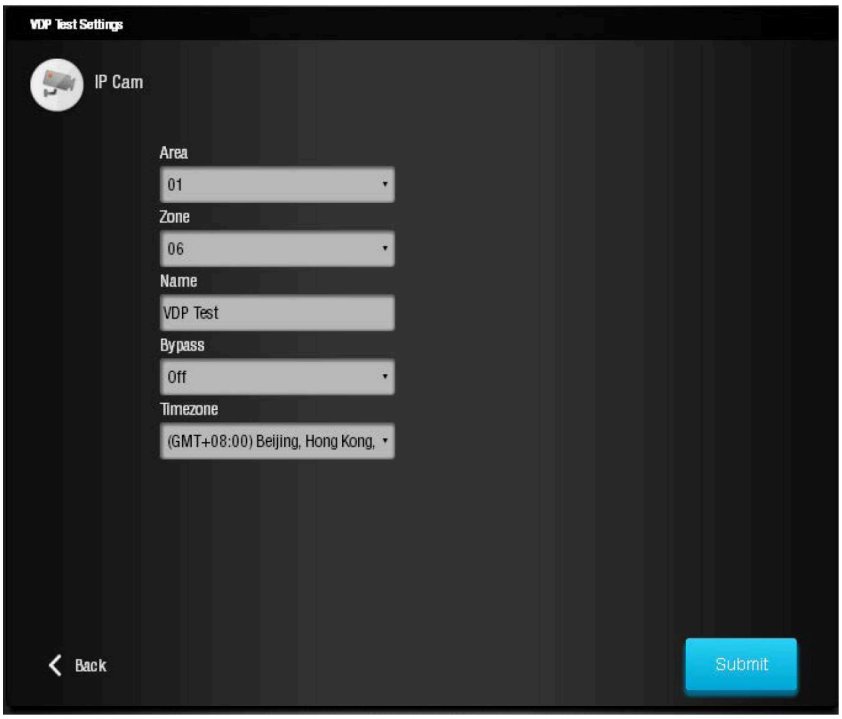
- Press the Record icon to record a video clip.

5.2. VDP Setting

VDP's own setting options are accessed on the Home Portal Server web UI's Edit Device page.



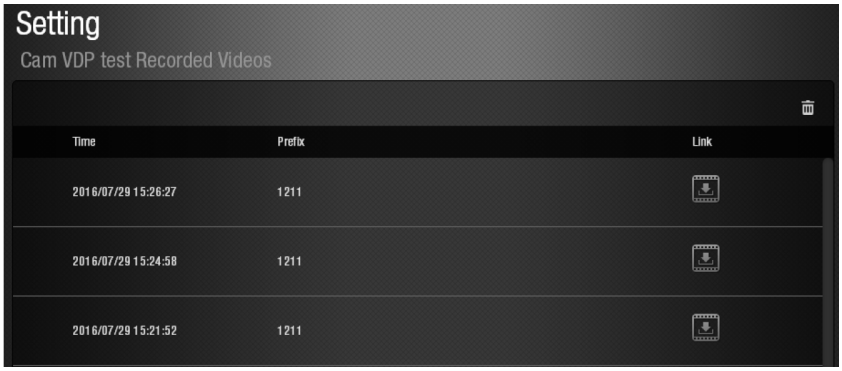
Setting



The setting page is used to set VDP zone number, device name and time zone setting. Please refer to your Control Panel's configuration webpage for option detail.

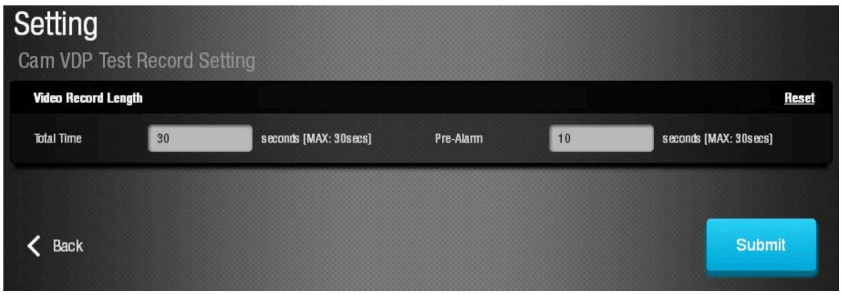
Recorded Video

The Recorded Video page stores video clips previously taken by VDP for download. Click the download link icon to down the file into your computer.



Recorded Setting

The Recorded setting page determines the video clip length when VDP is activated to record a video.

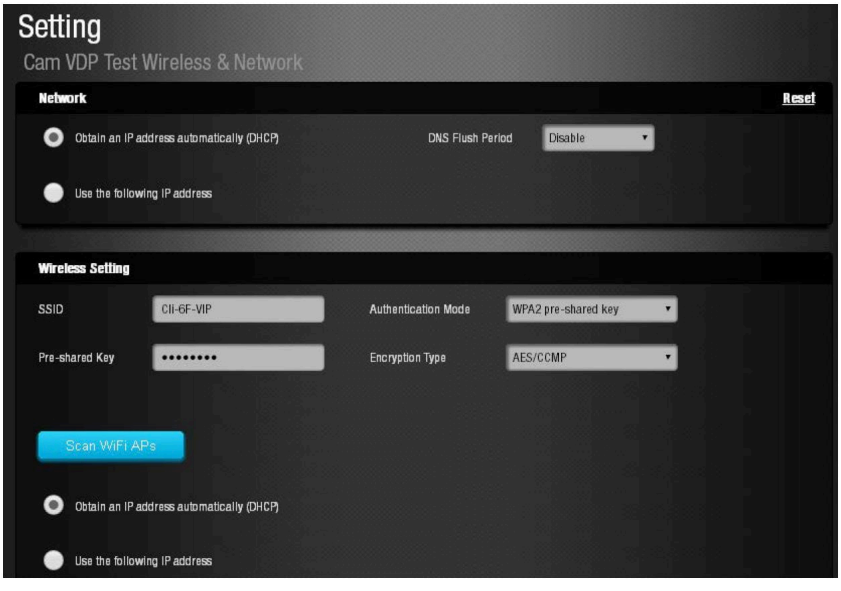


- **Total Time:**
  The total time length of each recorded video (Default: 30 seconds) The total video time length.

- **Pre-alarm:**
  This function is disabled for VDP, please ignore.

Wireless and Network

The Wireless Network webpage display current VDP Wi-Fi setting.



Wi-Fi setting can only be changed by factory resetting VDP and using NookBox app to reprogram Wi-Fi setting.
Wi-Fi setting cannot be changed on the webpage.

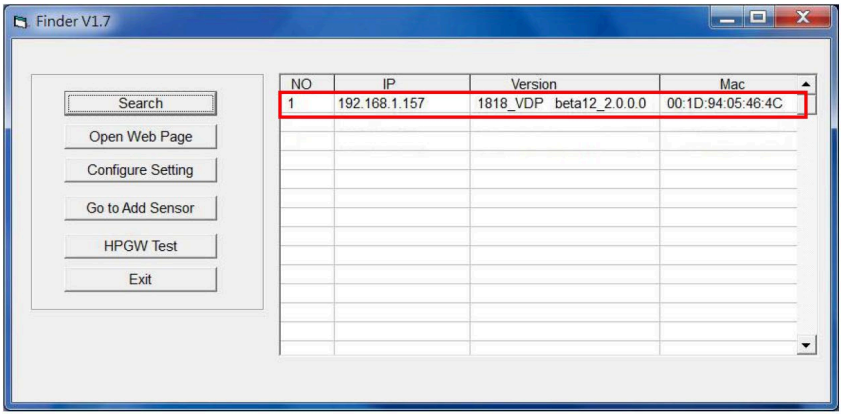
6. Local Programming Webpage

VDP also supports local programming webpage which may be access via LAN after completing Wi-Fi setting.
In order to locate VDP on local network, a specific “Finder” software is provided by
NookBox to locate VDP on LAN. To install the “**Finder**” software”.

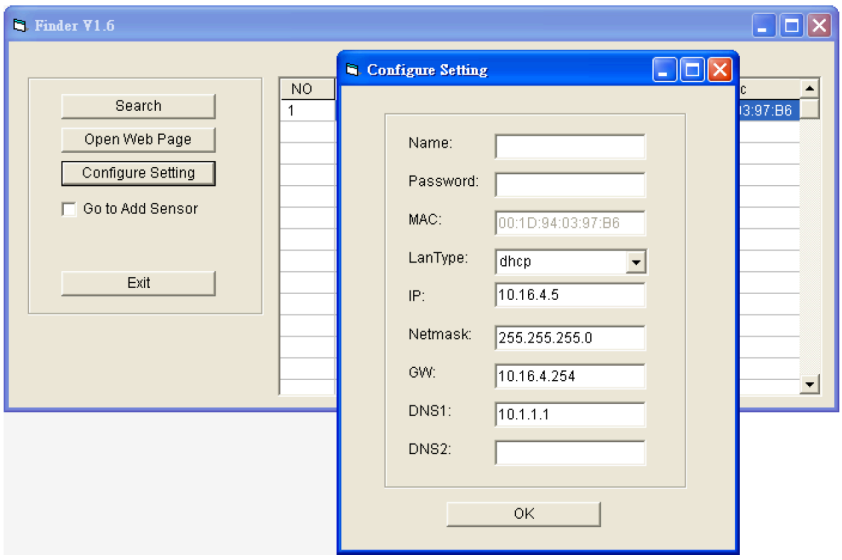
Step 1. Insert the supplied CD-ROM into your CD-ROM drive.

Step 2. Find the **Finder** software in the CD-ROM. Install and execute the Finder.

Step 3. Finder will automatically search for VDP on LAN and display its information. If available, the camera’s LAN IP address, Firmware version and MAC address will be displayed If VDP is not displayed, check VDP AC power and make sure its Wi-Fi is properly setup and click “**Search**” to update the panel information.



Step 4. **(Optional)** You can choose to edit the camera’s network setting manually by clicking on the panel column, then click “**Configure Setting**”.



The LanType is default to **DHCP** and does not require manual input of IP/Netmask/Gateawy/DNS setting. If you wish to configure these setting manually, change LanType to **Static**.

After finish changing network setting, enter the user name (default: **admin**) and password (default: **cX+HsA*7F1**) then click **OK** to confirm. The user name and password can be changed later in the camera’s configuration webpage.

Step 5. Click the camera information column and click on “**Open Web Page**”, or double click on the camera column to link to the panel configuration webpage. Your default browser will start automatically to connect to the LAN IP displayed in Finder.

6.1. Connecting to Webpage

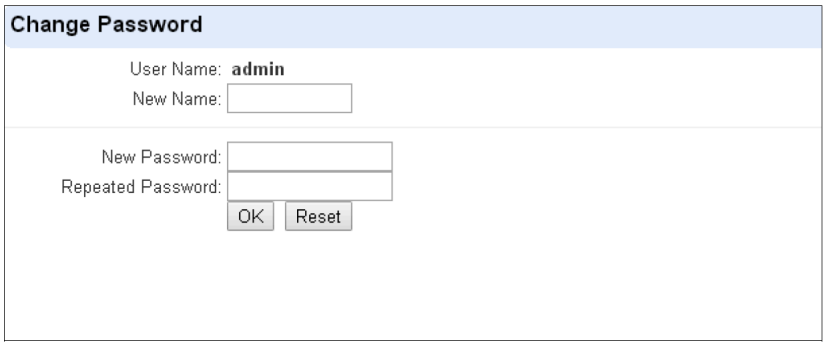
If default login user/password is not changed, webpage login will be disabled 1 hour after power on.
Please reboot the camera and retry connection.

Step 1. Double click the VDP column on Finder, or enter VDP's LAN IP Address in your browser.

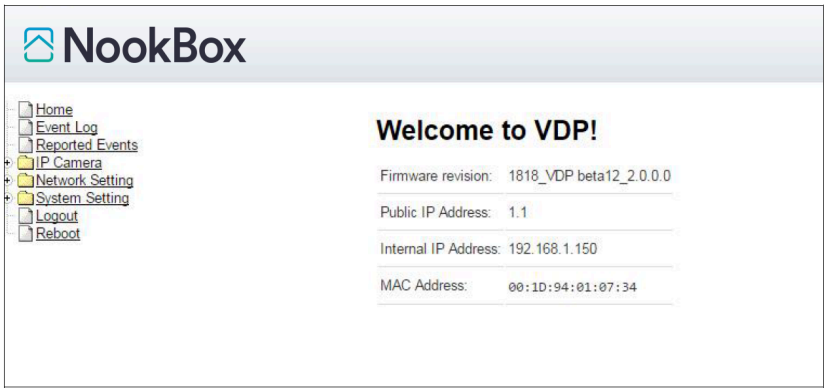
Step 2. Enter the login username and password.

Default username: **admin**
Default password: **cX+HsA*7F1**

Step 3. You will enter change password page. Enter and repeat a new password (username change is optional), take care that both username and password are case sensitive. Click OK to confirm.



Step 4. Upon confirming new username and password. You will enter camera Welcome page. The camera will prompt you to re login with new username and password.



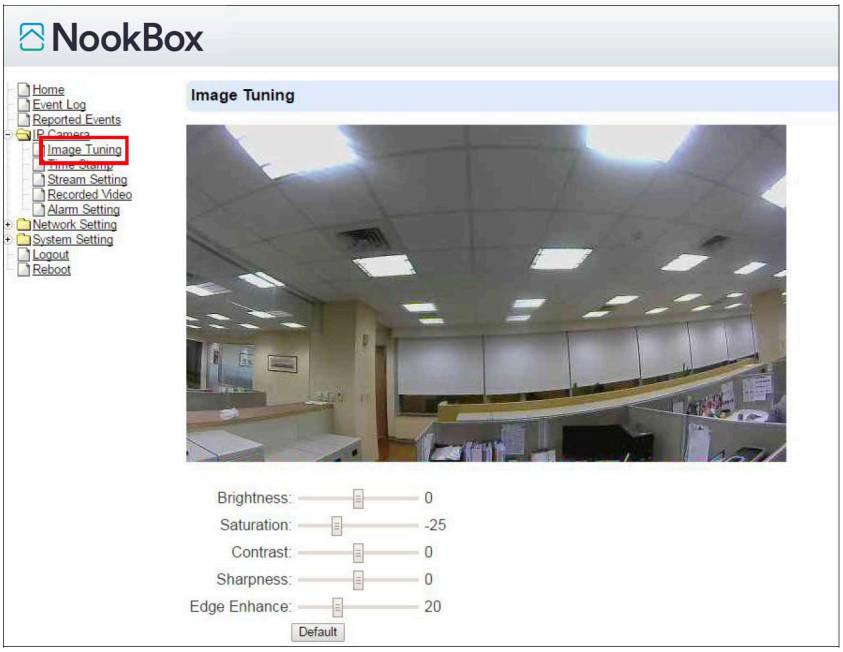
The Welcome page displays camera info. Click on the pages and folders on the left to access the camera's various functions.

7. IP Camera

The “**IP Camera**” folder on the left panel includes configuration webpages for you to manage your VDP and view videos.

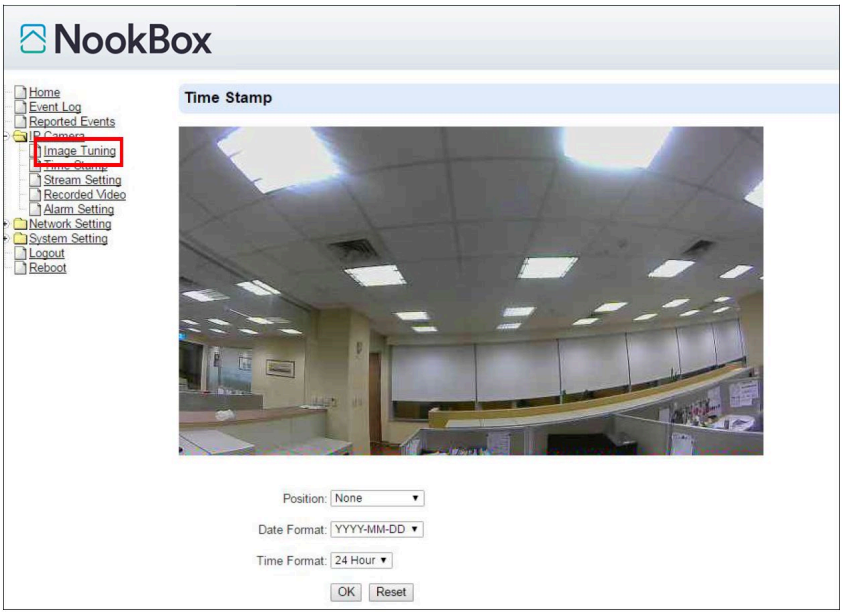
7.1. Image Tuning

Click on “**Image Tuning**” to adjust video preferences according to the below parameters:

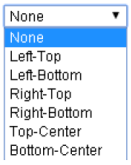


7.2. Time Stamp

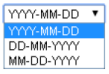
The “**Time Stamp**” webpage is for you to edit the Time Stamp format and location on the video.



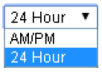
Position
The available options are:



Date Format
The available options are:



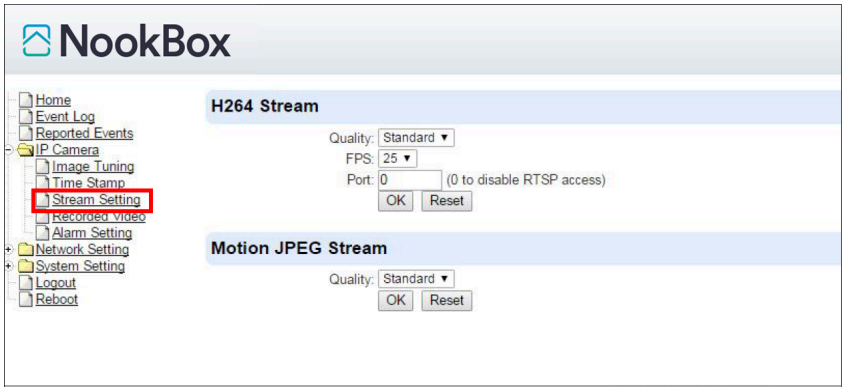
Time Format
The available options are:



Press “**OK**” to submit your adjusted parameters. Press “**Reset**” to re-select the parameters.

7.3. Stream Setting

The **"Stream Setting"** webpage determines quality of video streaming, and the port to be used when VDP is access remotely via Port Forwarding.



H264 Stream

H264 Stream Quality adjusts the quality of the stream.

Frames Per Second (FPS) are adjustable. Increasing FPS improves the quality of the live-stream. Click **"OK"** to confirm changes or click **"Reset"** to reset to the previously set parameters.

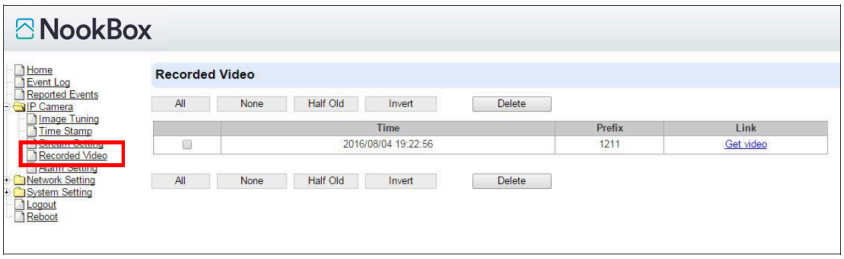
Port: The port number for obtaining HD 1280x720 resolution H264 video stream. The factory default is set to **0** and RTST access is disabled. To enable RTSP function, please set a port number.

Motion JPEG Stream

Quality adjusts the quality of the stream.

7.4. Recorded Files

This menu displays all the recorded files. The VDP has 20 mega-byte storage space for recorded video clips. The video files are stored in the camera's RAM memory and will be cleared if the camera is powered down.



Click on the buttons for the respective functions described below:

- **All:** to select all the recorded videos.
- **None:** to cancel selecting the recorded videos.
- **Half Old:** to select the older half the recorded videos.
- **Invert:** to invert the current selection. E.g. if **"All"** was selected, clicking **"Invert"** will clear all selections.
- **Delete:** to delete the currently selected (ticked) video.
- **Video link:** to download or play the video.

7.5. Alarm Setting

This menu displays the video recording options.

Video Record Length settings

Total Time: The total time length of each recorded video (Default: 30 seconds).

Recycle Recorded Video

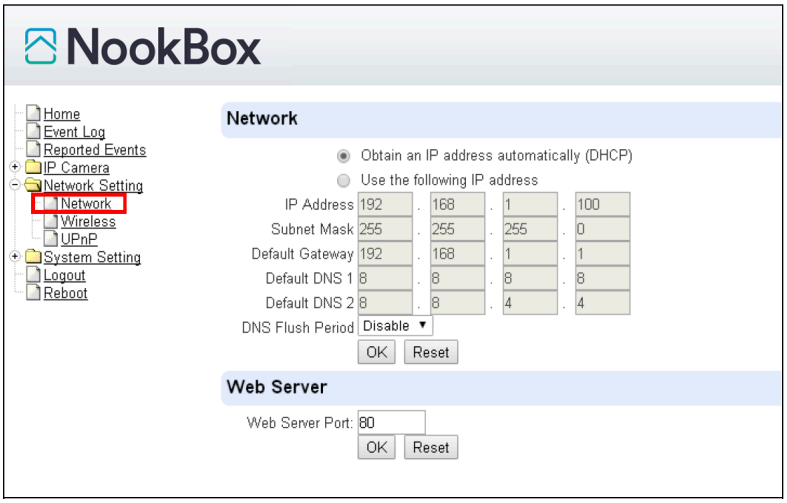
When this option is enabled, VDP will automatically delete the oldest videos to clear storage space in the camera when the memory is full.

- Press “**OK**” to submit the updated programmed parameters. Or press “**Reset**” to re-enter (“**Reset**” button resets the parameters to the previously set parameters).

8. Network Setting

8.1. Network

The following is displayed when you click on **“Network”** under the **“Network Setting”** option:



- **Obtain an IP address automatically (DHCP)**
  If **DHCP** is selected, the Network will obtain an IP address automatically with a valid Network DHCP Server. Therefore, manual settings are not required. This is only to be chosen if your Network environment supports DHCP. It will automatically generate all information.

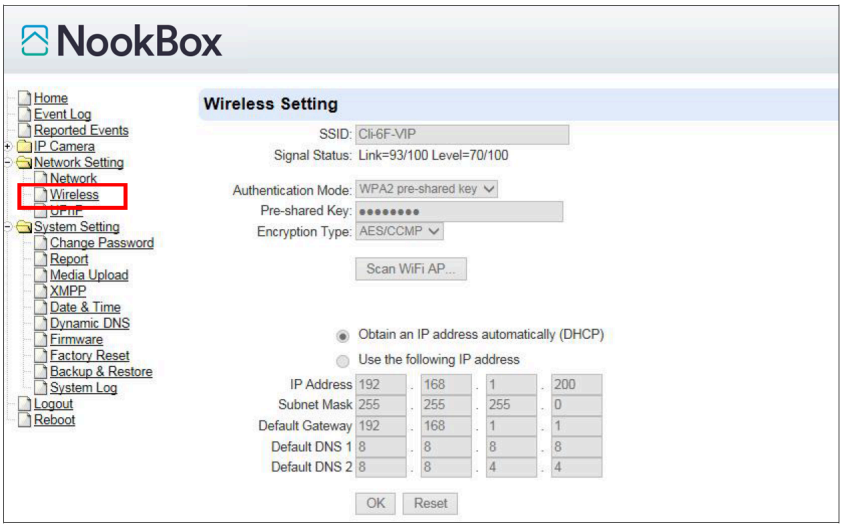
- **Use following IP address**
  You can also enter the Network information manually for **IP Address, Subnet Mask, Default Gateway, Default DNS 1** and **Default DNS 2.**

- **DNS Flush Period**
  You can set the system to clear current DNS resolution records for all entered URL settings (Reporting, Upload, XMPP...etc.) after a set time period. The system will then resolve the Domain Name again and acquire new IP address for the URL settings. This function is disabled by default.

- **Web Server**
  Set the port used to access VDP’s webpage. VDP will reset upon changing the web server port. After reset is complete, VDP will switch to using the new port number when opening its webpage.

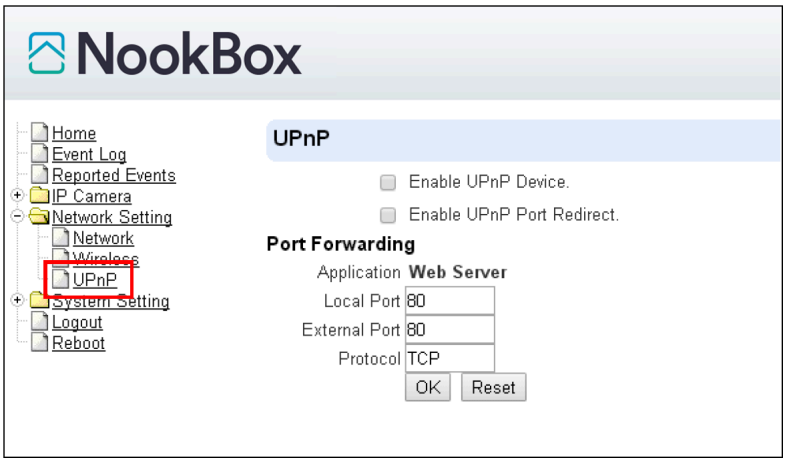
8.2. Wireless

The **"Wireless"** webpage display current VDP Wi-Fi setting. Wi-Fi setting can only be changed by factory resetting VDP and using NookBox app to reprogram Wi-Fi setting. Wi-Fi setting cannot be changed on the webpage.



8.3. UPnP

The following is displayed when you click on **"UPnP"**.



UPnP stands for Universal Plug and Play, which opens network architecture that leverages TCP/IP and the web technologies to enable seamless proximity networking in addition to control and data transfer among networked devices at home, office or public spaces. You can configure this setting to allow for Port Forwarding connection to VDP.

- **Enable UPnP Device:**
  When enabled, you will be able to see this device via any UPnP discovery tool.

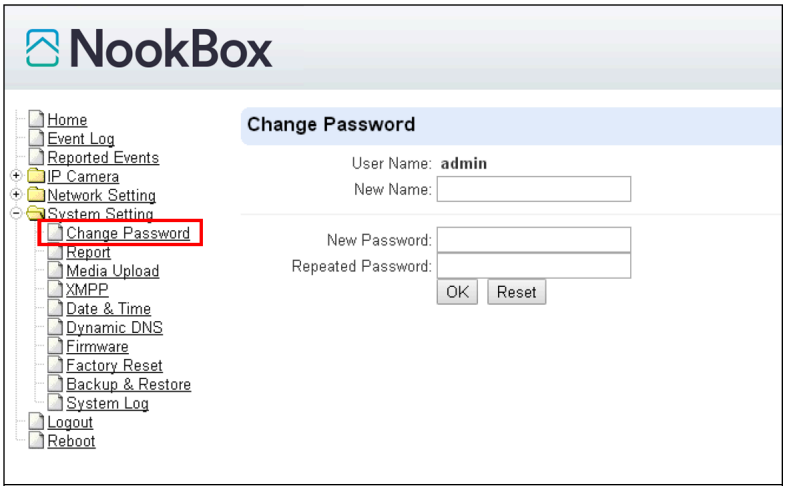
- **Enable UPnP Port Redirect:**
  The device will try to find an UPnP-supported router and set up the port to redirect to the router.

- **Port Forwarding:**
  1. Local Port
  2. External Port
  3. Protocol

9. System Setting

9.1. Change Password

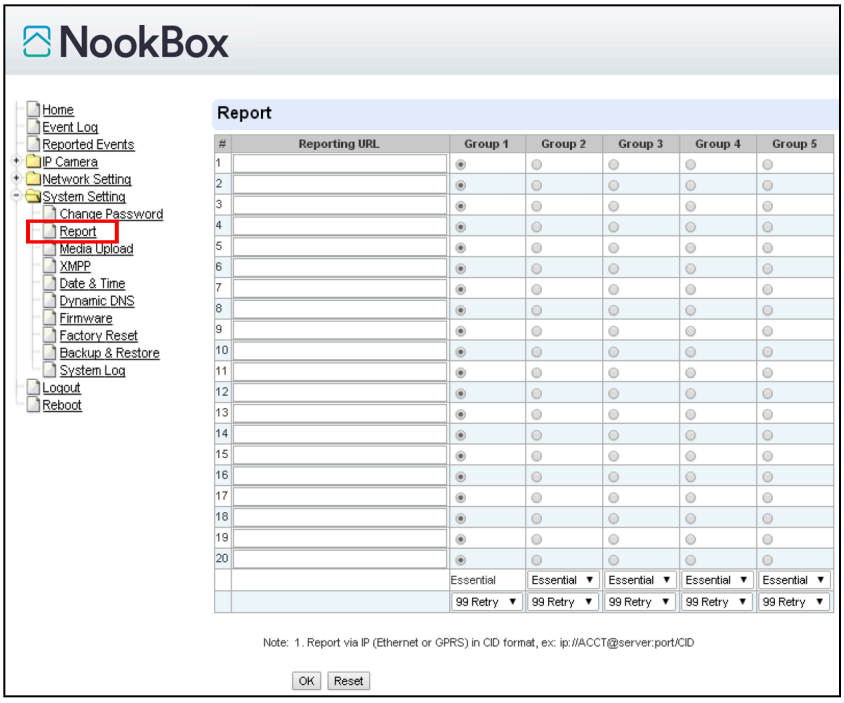
Edit the username and password used to log into VDP webpage under **“Change Password”** page.



Enter a new name or new password and click **“OK”** to confirm the username and password change.
The username and password are case sensitive.

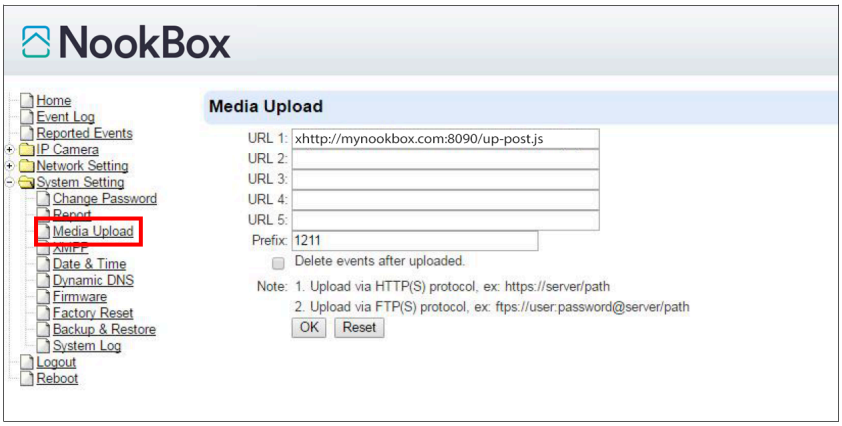
9.2. Report

The report function for VDP is reserved for use.



9.3. Media Upload

Program the camera's captured video upload destination under "**Media Upload**" page.

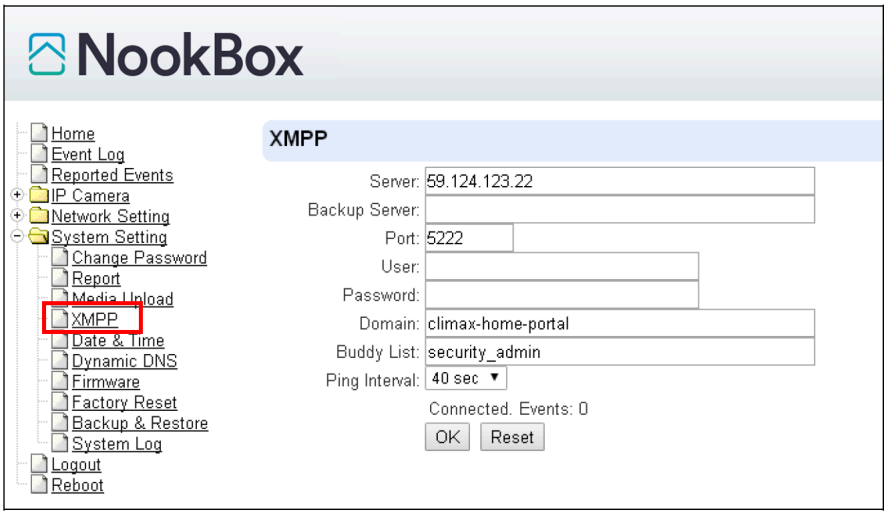


- **Upload to FTP:** ftp://user.password@server/path or ftps://user.password@server/path
- **Upload to server:** http://server/path or https://server/path

After the camera has been learnt into Control Panel, the first upload URL will be programmed automatically according to panel setting. Do NOT change this setting or it will cause video upload to server to fail.

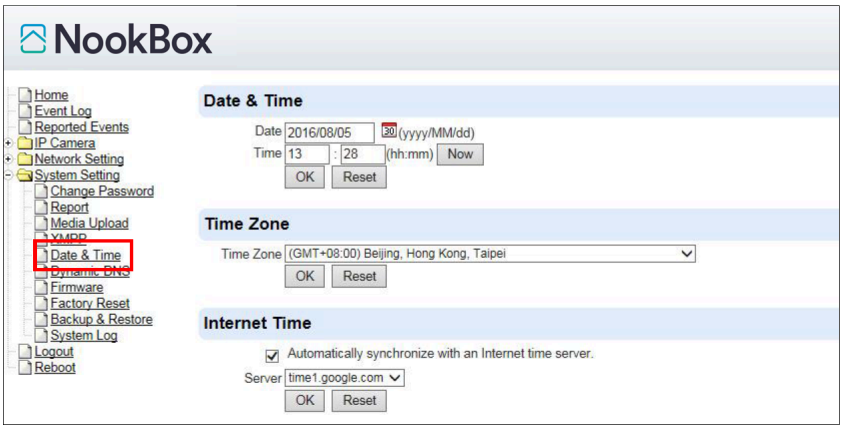
9.4. XMPP

The "**XMPP**" page allows the camera to connect to the Home Portal™ Server for remote control. Please do not modify any settings or the camera may lose connection with Home Portal Server.



9.5. Date & Time

The following page is displayed when you click on “**Date & Time**”:



Under the **Date & Time** heading, you can edit time and date. As the page does not automatically refresh itself with the time, you can click on “**Now**” to refresh to your current time.

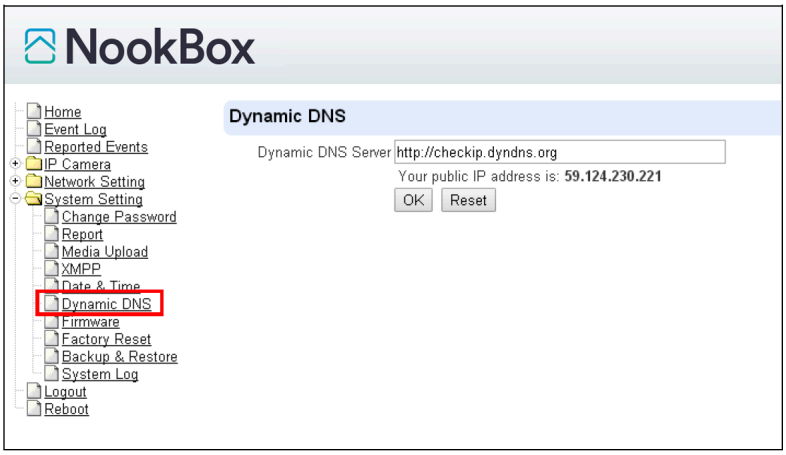
Under the **Time Zone** heading, you can choose your time zone.

Under the **Internet Time** heading, you can tick the box “Automatically synchronize with an Internet time server” to adjust to internet time. The scroll down bar of “Server” allows you to choose from a selection of time servers.

Click on “**OK**” to confirm the settings.

9.6. Dynamic DNS

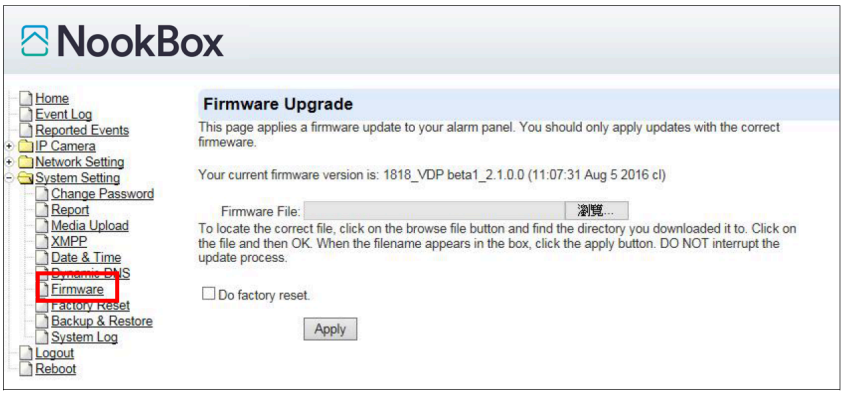
The “**Dynamic DNS**” page provides VDP public IP information.



- **Dynamic DNS Server:** Set the server used by VDP to acquire its public IP address.
- **Public IP address:** The public IP address shown is required to for remote access of the VDP via port forwarding.

9.7. Firmware

The following page is displayed when you click on “**Firmware**”.



You can update VDP firmware: Click the “**Choose File**” button, browse and find the correct file, and press “**Apply**” to apply the setting. Please follow the onscreen instruction to complete the update. It is also recommended to select “Do factory reset (recommended)” when upgrading a firmware.

9.8. Factory Reset

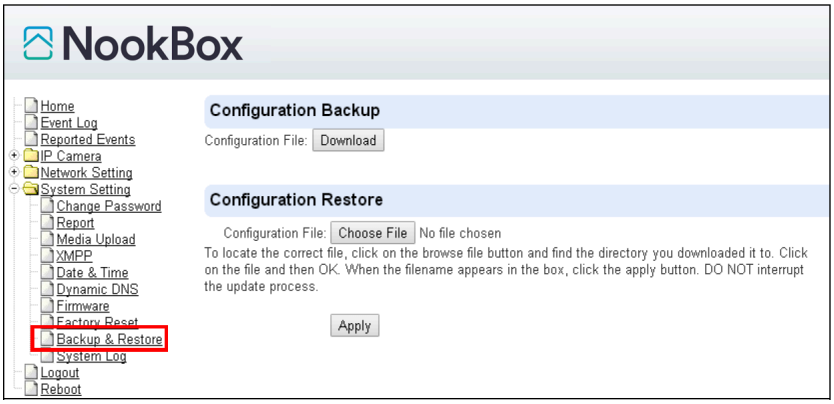
Factory Reset function will clear all VDP setting, event records and restore all settings to factory default.

You can choose to reset VDP to the factory default setting by clicking the “**Yes**” button.
After factory reset, delete VDP from panel device list, then user the NookBox app to setup VDP WiFI and learn VDP into panel again.

Hardware Factory Reset

1. Disconnect and reconnect AC power.
2. Press and hold VDP button as soon as AC power is reconnected. Do NOT wait for warm up to complete.
3. Keep holding the button for about 25 seconds until VDP Amber LED flashes 3 times, then stays ON, then release the button.
4. Factory Reset is complete, VDP will reboot and enter W-Fi setup mode.

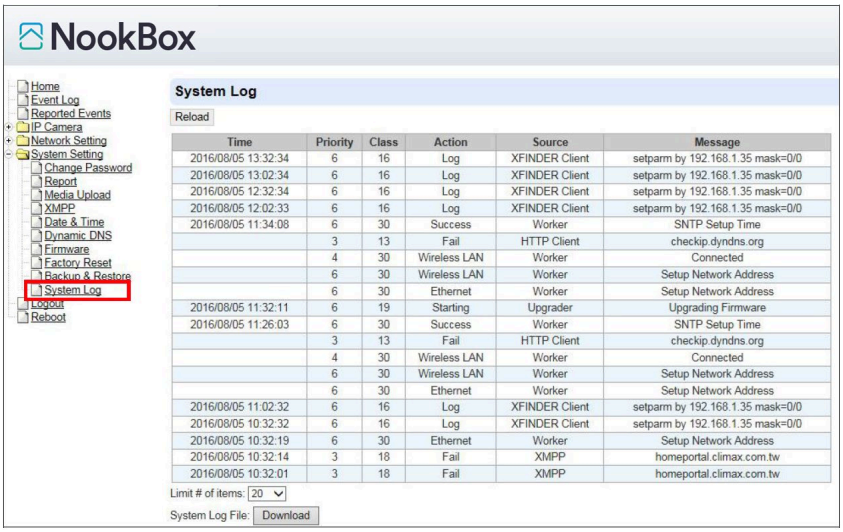
9.9. Backup & Restore



You can store the current settings by clicking on the “**Download**” button. If you wish to restore the previously stored file, click on “**Choose File**”, find the correct file and click on “**Apply**” to restore to the previous setting.

9.10. System Log

The “**System Log**” displays system operation history. You can choose how many reported events are displayed by selecting the drop down bar near the bottom of the page, or click “**Download**” button to download detailed system log file into your computer.

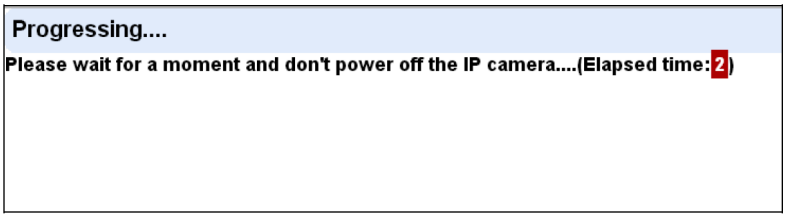


9.11. Logout

Click “**Logout**” and confirm the action to disconnect from VDP webpage.

9.12. Reboot

The Reboot function allows you to restart the VDP. Press “**Reboot**” and confirm, VDP will automatically start rebooting process and countdown the remaining time.



10. History

10.1. Event Log

The Event Log records system events.

You can choose how many events are displayed on the page by selecting the drop down bar near the bottom of the page.

10.2. Reported Events

The Reported Event page is reserved.

You can choose how many reported events are displayed by selecting the drop down bar near the bottom of the page.

NookBox

Smart Home Security

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