DP-201

Outdoor SIP IP Video Door Phone

V-Bell

USER MANUAL

www.avadesign.com.tw

AADESGN TECHNOLOGY CO.

WELCOME

Congratulations on purchasing the V-Bell DP-201 Outdoor SIP IP Video Door Phone. This door phone is suitable for all your business, and home, door entry communication needs. The DP-201 Outdoor SIP IP Video Door Phone connects to your computer network and allows either peer to peer (P2P) calls (calls direct to an IP address of another VoIP device) or calls to another number via the SIP server, moreover, it is easily to setup and configuration via a web browser.

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Chapter 1 Introduction

DP-201 SIP IP door phone with flush mount and water proof, run on the Internet and provide more services for access control system, is coming soon. It can be combined with IP Phone as a tool to open the door. It can also be combined with a smartphone (supported both iOS and Android system) as a tool to open the door. Let users no longer limited by time and place. No matter where you are, can talk with visitors who at your door and remote open the door for visitors.

The DP-201 outdoor SIP IP video door phone adopts VoIP SIP protocol, and supports SIP register mode and peer to peer mode. It can work with most modern IP-PBX such as Asterisk...etc. It also allows users make a call by inputting the IP address of the call receiver directly. No IP-PBX is needed, which saves the cost for the system implementation.

The DP-201 outdoor SIP IP video door phone is a new, elegant video door intercom with a compact shape and waterproof rain cover that has an easy-to-install embedded mount. There is a call button to call five numbers of simultaneous calls. It is available with a built-in IP camera supporting up to 720P high density resolution video, can display clearer image, and provides card reader function.

1.1 Features

- COMS 1280 x 720 HD Camera Sensor
- Lens : 112 degrees Wide Range Video View angle
- Support VoIP SIP (FRC3261) protocol
- Support RTSP Protocol
- Supports SIP Registered mode and P2P mode
- Support H.264 , Motion-JPEG Video codec
- Support G711u, AAC voice codec
- By WEB browser to watch the video
- Supports Auto-answer
- Water proof Level: IP54
- Infrared fill light
- Embedded mount
- Build-in One Relay output (control door lock or Lighting)
- Build-in One DI port (for Door sensor, PIR, Emergency button)
- Build-in RFID MiFare Card Reader
- Aluminum brushed metal panel

Chapter 2 Quick Install

The V-Bell DP-201 Outdoor SIP IP Video Door Phone requires minimal configuration for a typical installation.

2.1 Open carton

Open the carton and take out the DP-104 Door Phone. Your package should include:

- One DP-201 Outdoor SIP IP Video Door Phone
- One DI/DO cable
- One fixing screw
- One Quick Installation Guide

If items are missing or damaged, notify your Avadesign representative. Keep the carton and packing material.

2.2 What else you need

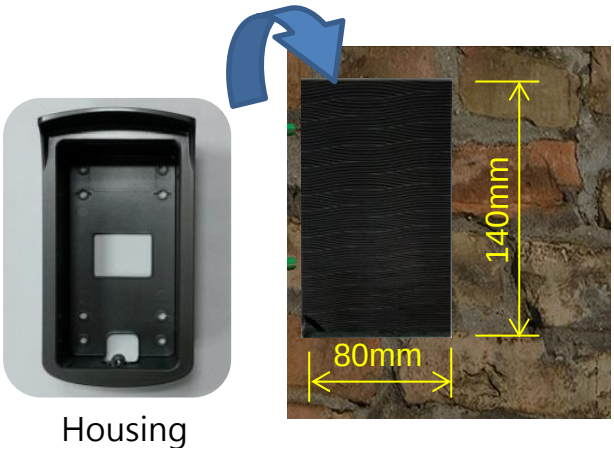
- One RJ-45 cable

2.3 Hardware Overview

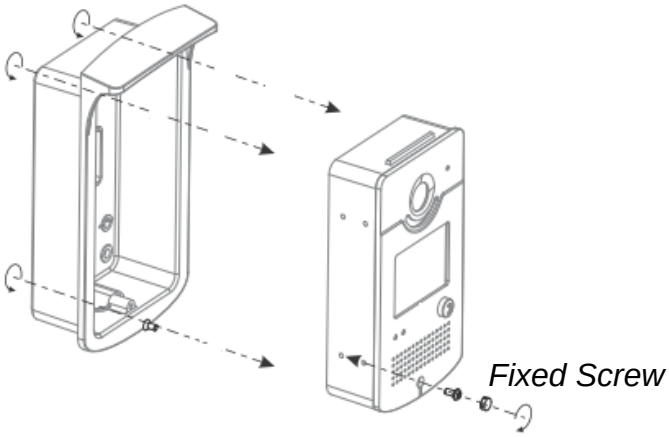
Each part of the V-Bell DP-201 Outdoor SIP IP Video Door Phone is described as shown below.

2.4 Wiring and embedded installation

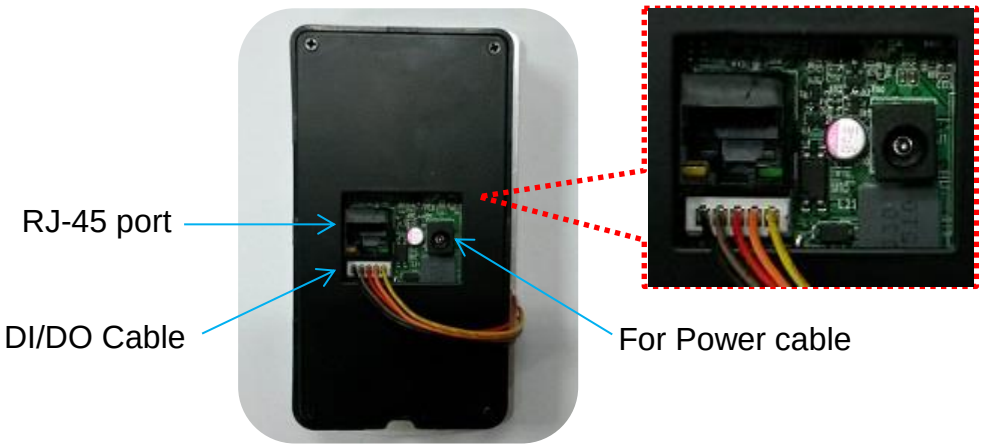
Step 1: Select a location; open a rectangular hole with dimensions 80X140mm on the wall that shown as below. Embed the housing of DP-201 into the rectangular hole on the wall.



Step 2: Then mount the body of DP-201 into the housing.



Step 3: Connect RJ-45 cable and power supply to DP-201.



Step 4: Fix the DP-201 door phone on the wall using a fixing screw.

VBell Service

The VBell Service is the cloud service and free charge that provided by Avadesign Technology for the DP-201 application.

2.5 Access Cloud Service

The DP-201 will access the cloud service directly and start to work automatically.

Now, you can test the DP-201. The DP-201 allows entry with the simple press of a key. Caller at the front door and press “CALL” button, person inside the building can talk to callers, look at caller, then open the door.

Chapter 3 Full Web Configurations

You can login the web configure page of DP-201 to set up your DP-201 Outdoor SIP IP video door phone.

3.1. Enter web configure page

Default network settings of the DP-201 is DHCP, when unable to obtain an IP, the IP will be temporarily fixed at 192.168.1.100, type http://192.168.1.100 in the address bar and press Enter. The screen is shown as follows.

Login page

Please input with username: admin and password: admin then click “Login” button on the screen.

Web configuration consists of left menu bar for major function categories and displays detailed setting for each function as clicks.

- **Status**
- **Service**
- **Device**
- **System**

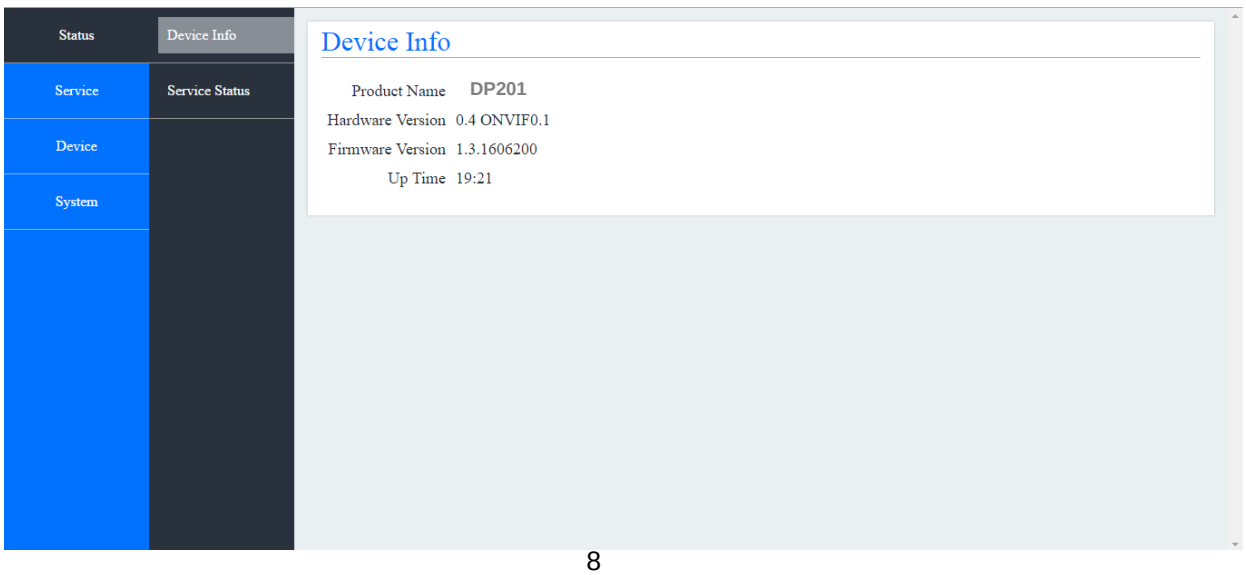
The various configuration menus are explained below.

3.2 Status

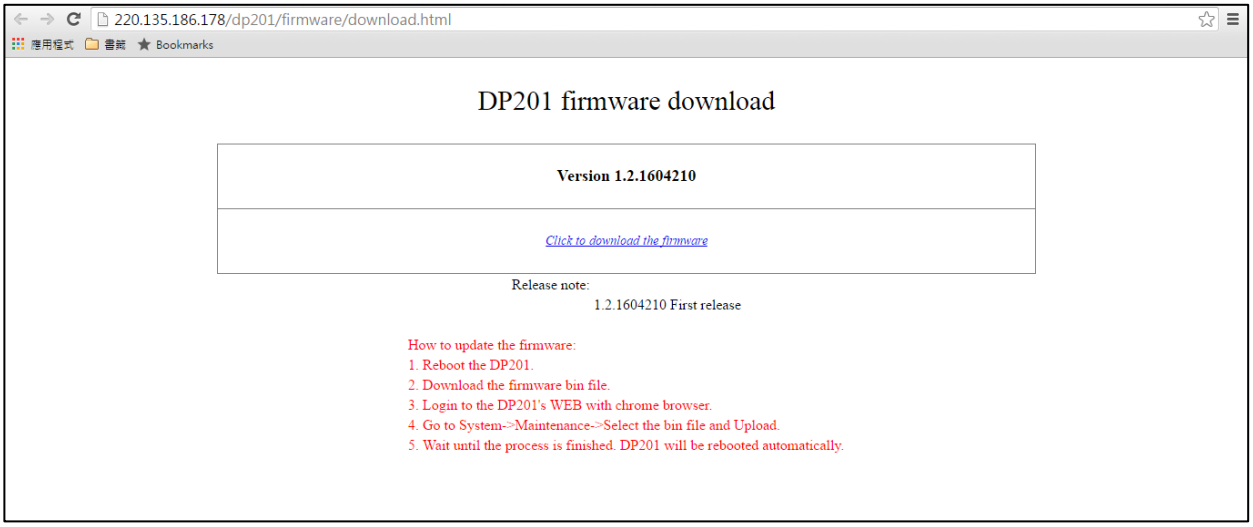
3.2.1 Device Info

Then you can see the screen as below which show the device information:

Status — Device Info



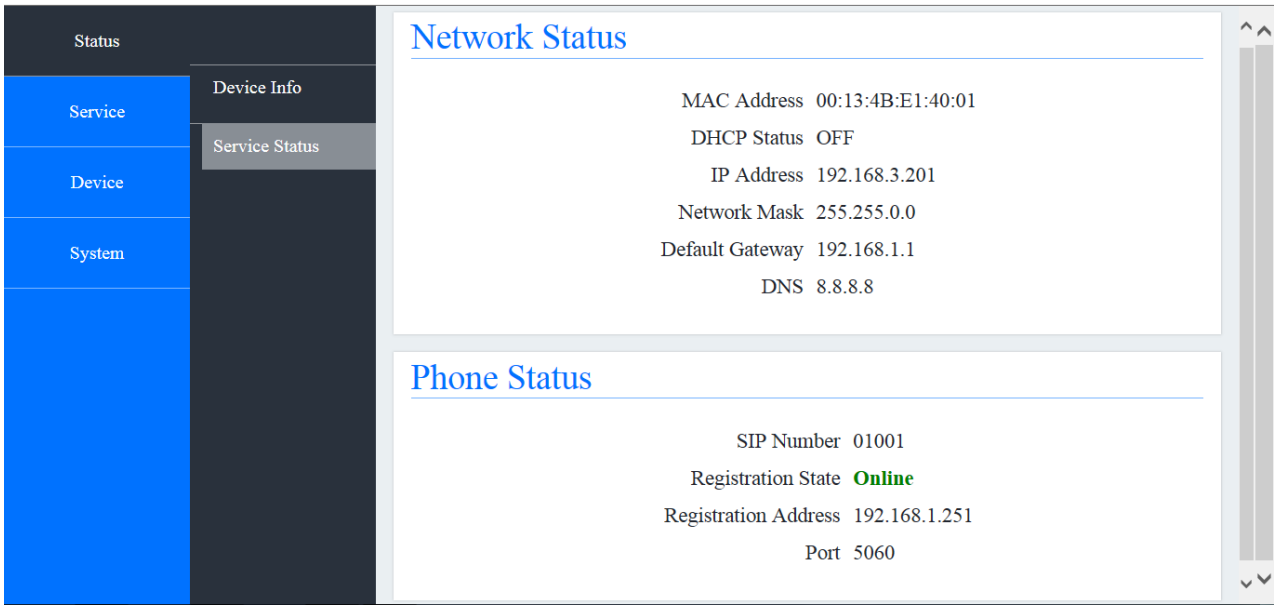
Firmware version of the above screen will be updated with change over time, please go to http://220.135.186.178/dp201/firmware/download.html to download the latest version and read its content. You also can refer to this manual about firmware upgrade described in Section 3.5.3.1.



3.2.2 Service Status

You also can see the service status as below:

Status — Service Status



3.3 Service

3.3.1 SIP

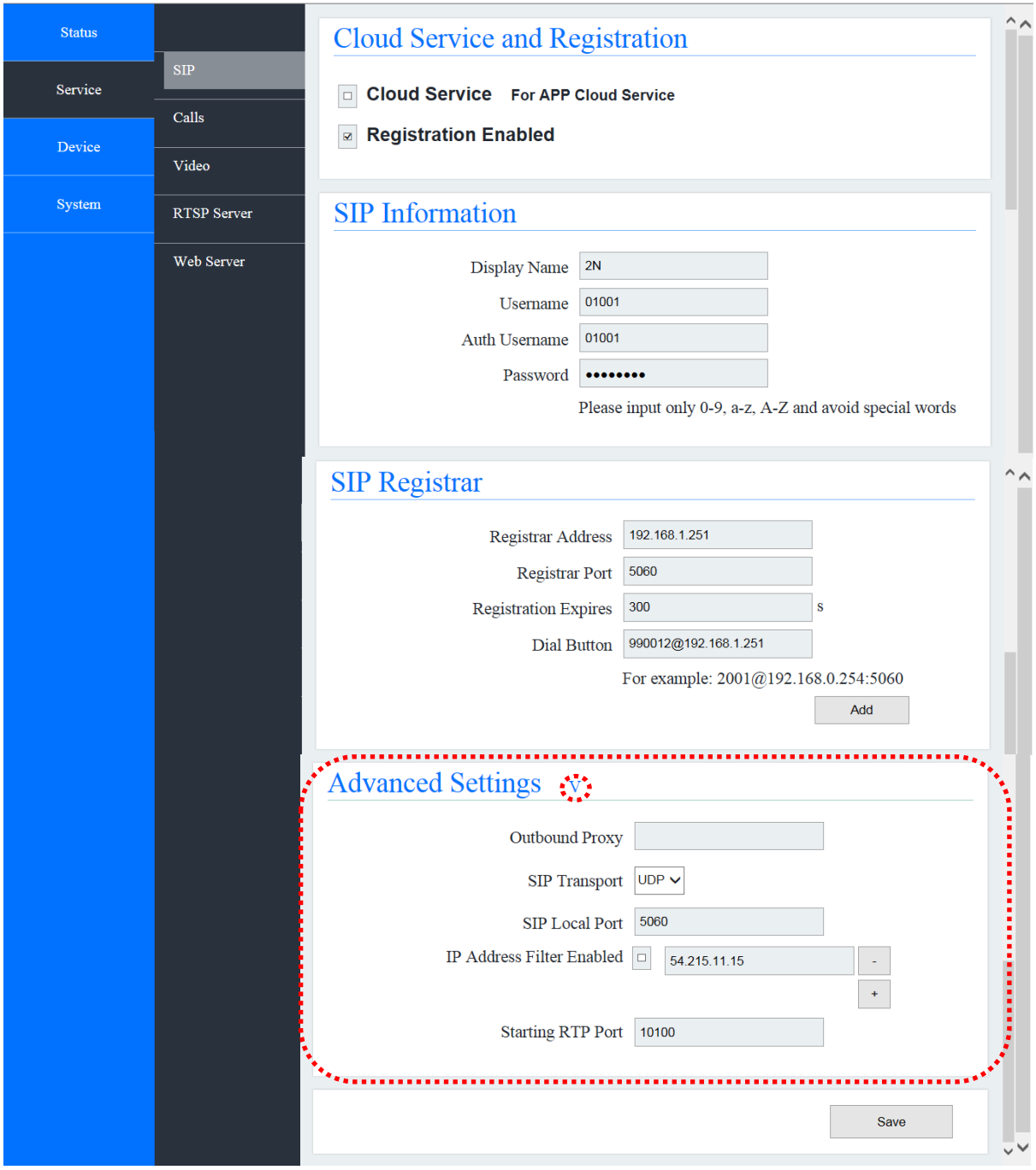
Now you can select “service” in the first level of menu then click on “SIP” bar in the second level of menu to register your DP-201 Outdoor SIP IP video door phone to SIP server.

Disable Cloud Service. And input your data to each fields.

When you have finished the input data of each field, clicking on “save” button on the

screen to save your registration data. The screen is shown as follows.

Service — SIP

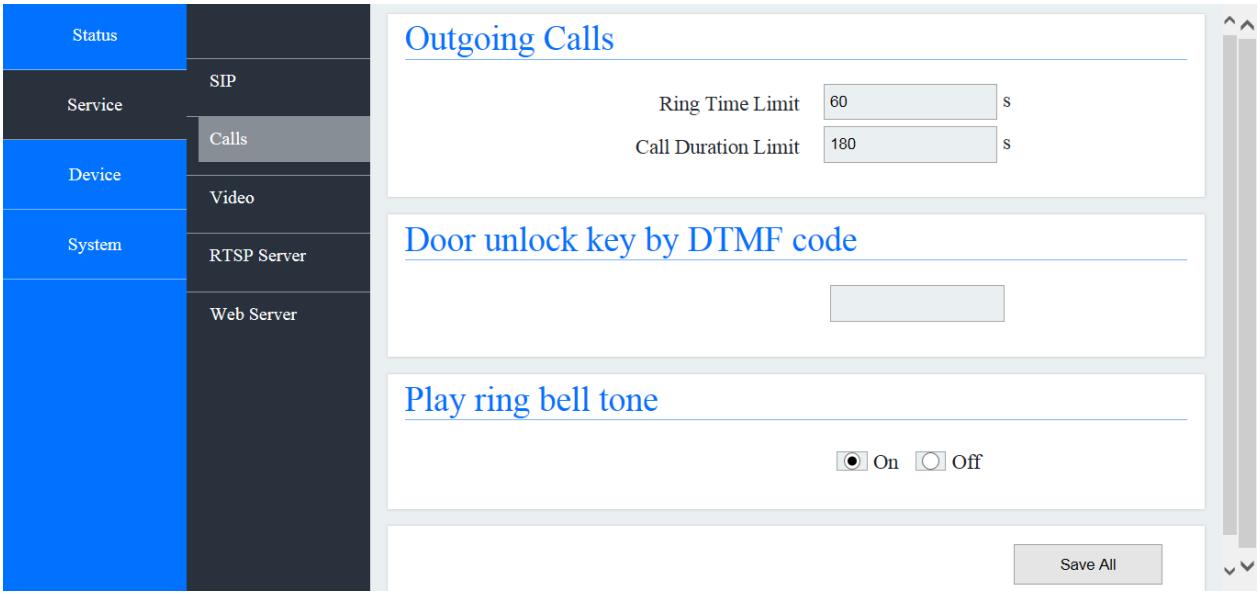


If you would like to make SIP transport, local port…and so on advance setup, please move the cursor to the arrow sign which at the end of “Advanced Settings” and click the left button of your mouse. Then you can input data for advance setting as above.

3.3.2 Calls

Next step, you can setup the ring time and call duration for outgoing calls of the DP-201 Outdoor SIP IP video door phone by clicking on “Phone→Calls” bar in the second level of menu. You also can input a DTMF code to unlock the door that shown as follows.

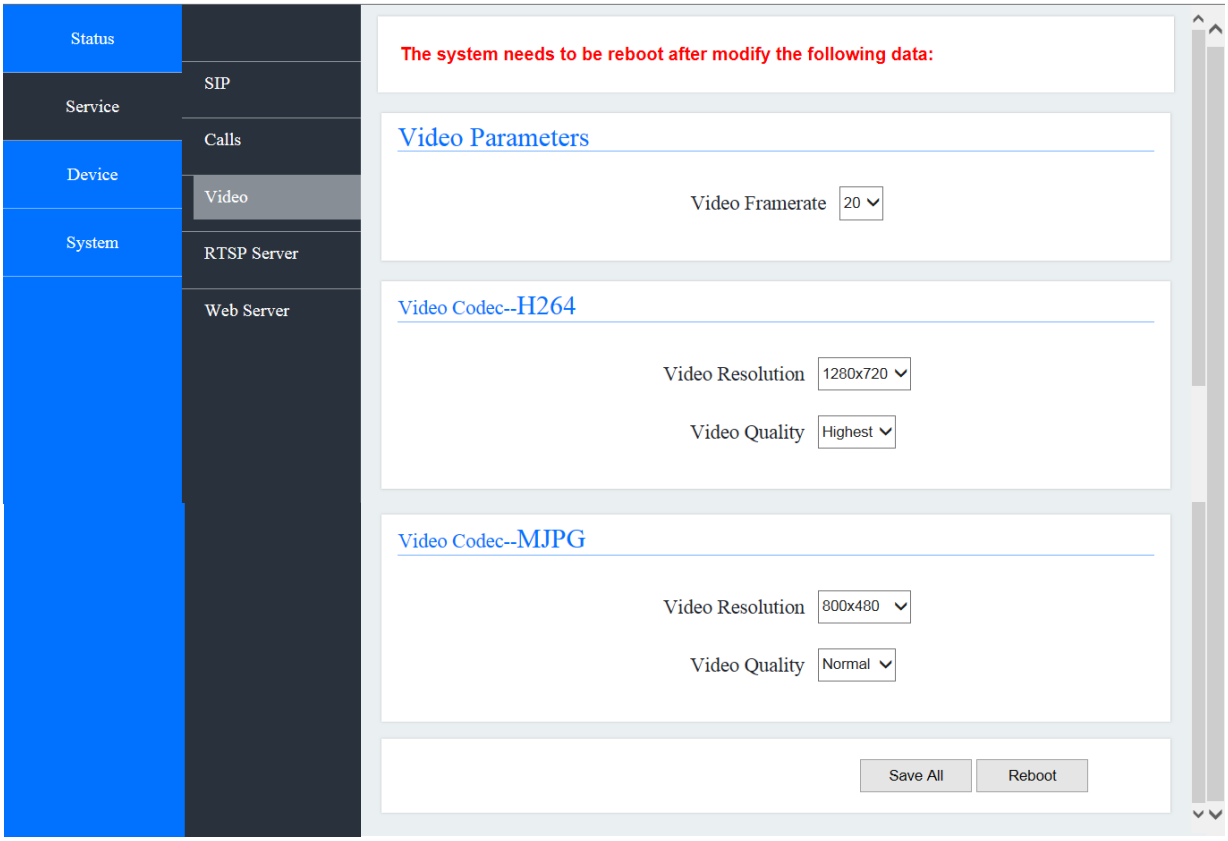
Service — Calls



3.3.3 Video

You can setup the resolution of image, video frame rate and video quality for the live video of IP camera of the DP-201 Outdoor SIP IP video door phone that shown as follows. Please remember that after you change its data, the system need to reboot.

Service — Video

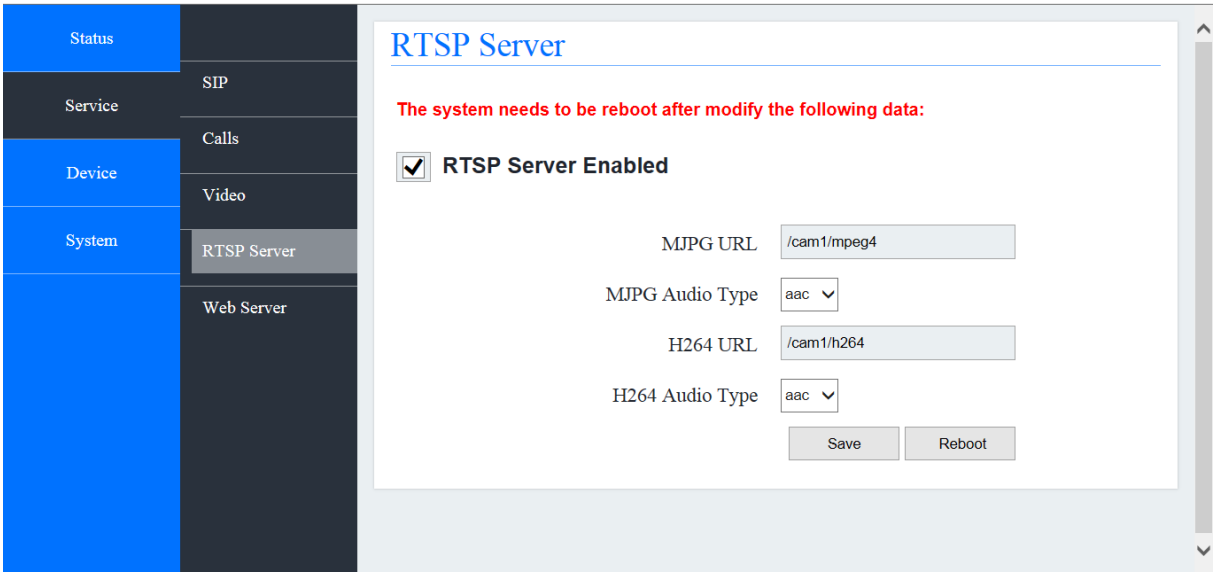


3.3.4 RTSP Server

The Real Time Streaming Protocol (RTSP) enables you to watch live video from DP-201 Outdoor SIP IP video door phone connected to the RTSP server.

Now you can enable RTSP server by clicking on “RTSP Server” bar in the second level of menu for real-time watching who is at your door. Please remember that after you change its data, the system need to reboot.

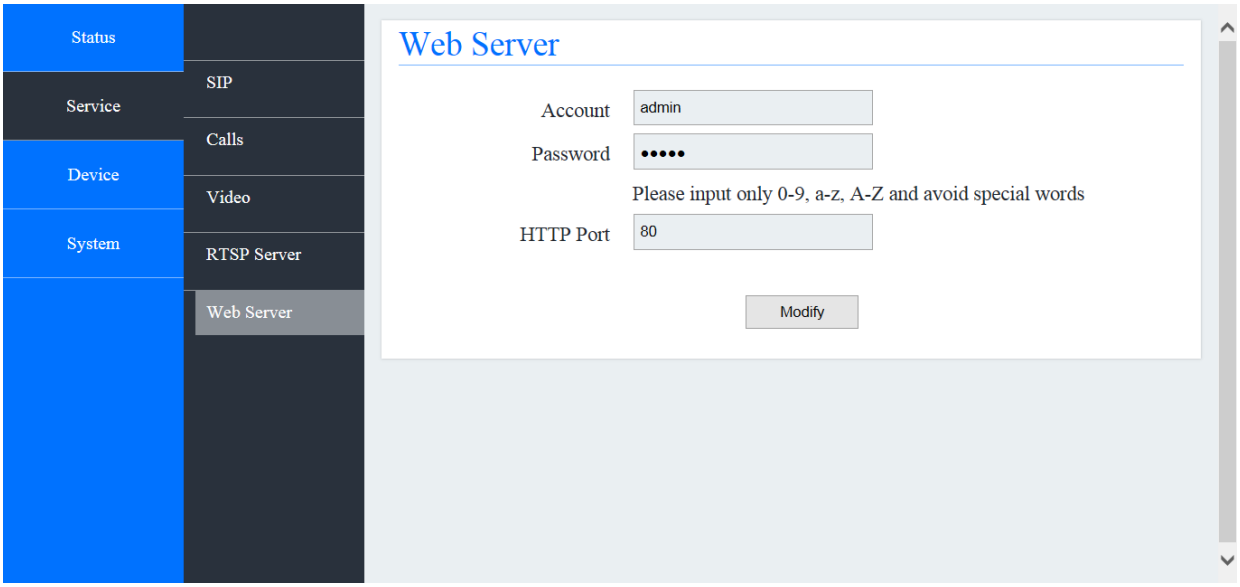
Service — RTSP Server



3.3.5 Web Server

If you would like to change the account name and password, please click on “web server” bar in the second level of menu as follows.

Service — Web Server

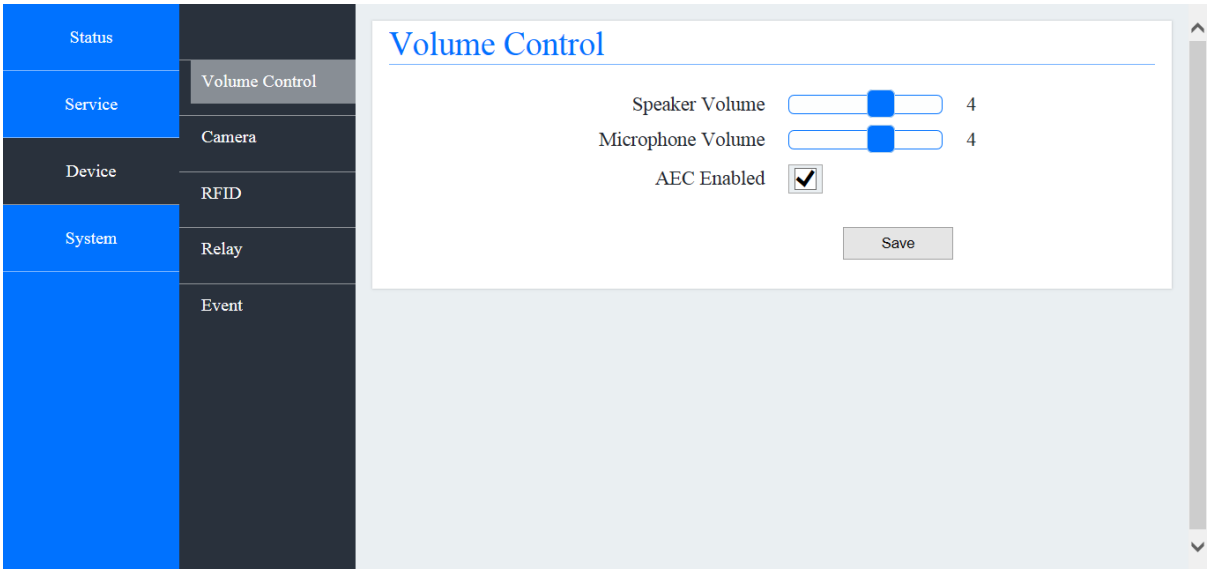


3.4 Devices

3.4.1 Volume Control

If you would like to adjust the volume of speaker and microphone, please select “device” in the first level of menu and click on “Volume Control” bar in the second level of menu as follows:

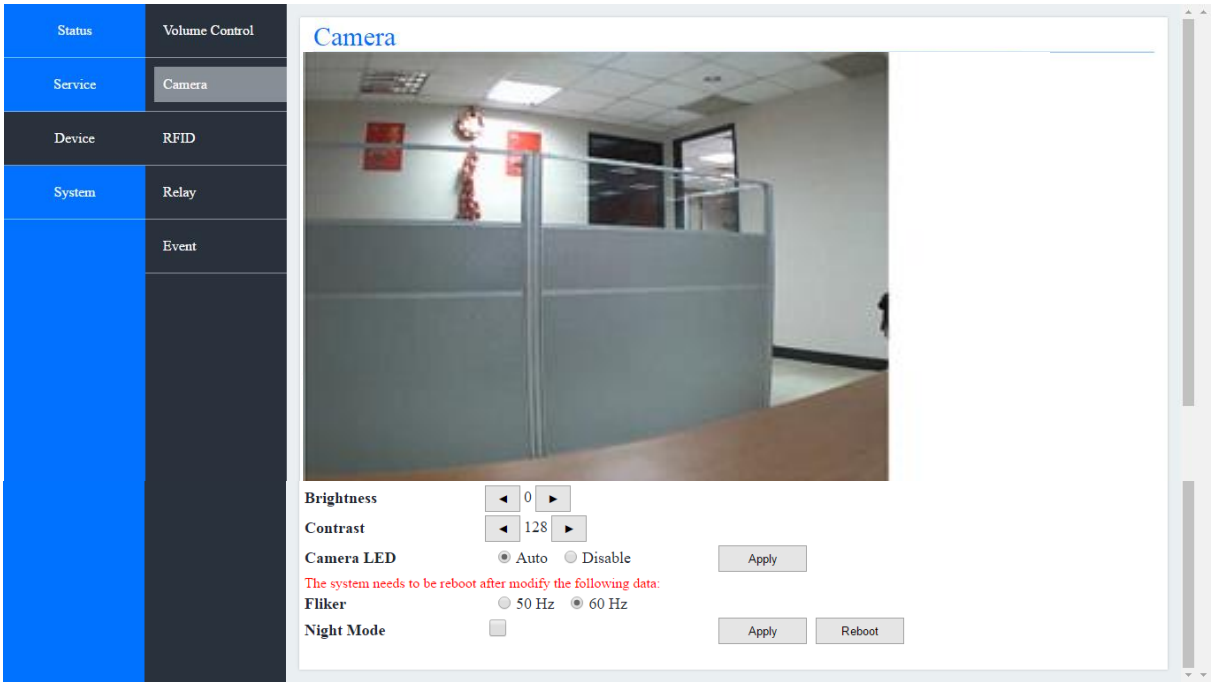
Device — Volume Control



3.4.2 Camera

If you would like to adjust the brightness and contrast of IP camera of the DP-201 Outdoor SIP IP video door phone, please select “device” in the first level of menu and click on “Camera” bar in the second level of menu. You also can decide to open or close the light of the camera LED that shown as follows:

Device — Camera



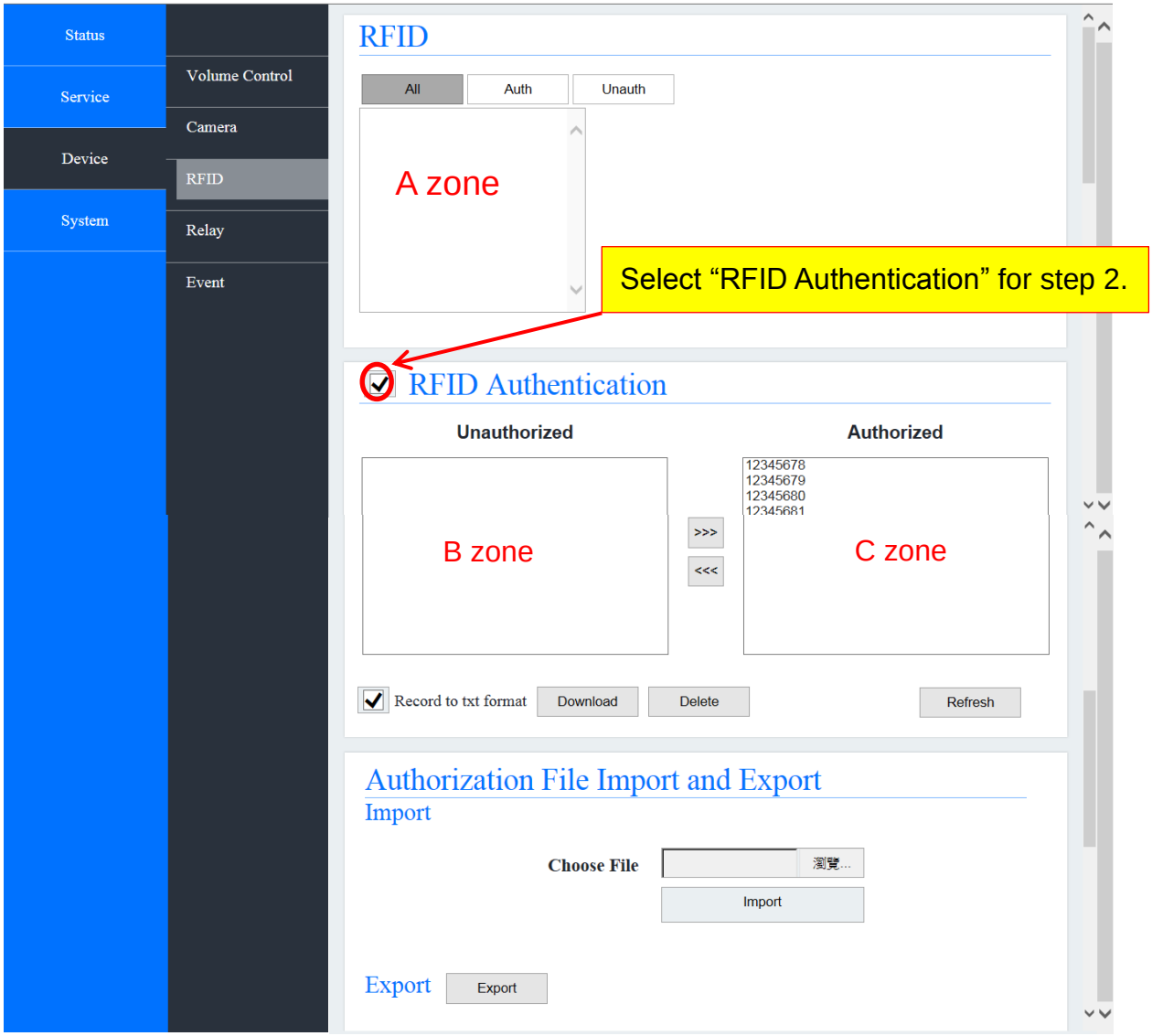
3.4.3 RFID

DP-201 supports RFID reader for MiFare. Therefore the MiFare card can connect to DP-201 device. There is a unique ID for RFID card and can NOT be revised and copied. Because of this characteristic, user can apply it as a recognizable identify.

Users can input 100 ID into the memory of DP-201 on web configure page. When the read ID number and the ID number which in the memory match, user can open the door.

Now we describe how to do RFID (Radio Frequency Identification) set up here. Please select “device” in the first level of menu and click on “RFID” bar in the second level of menu as follows:

Device — RFID (For RFID Setting)



Step 1: You can set up the RFID device through Web Configure which provides by Avadesign.

Step 2: After log in Web Configure page, you will see the interface as above diagram and you can place your card on the sensor area of DP-201 more than 2 seconds and the card number will be shown on A zone and B zone after device read card. If you would like

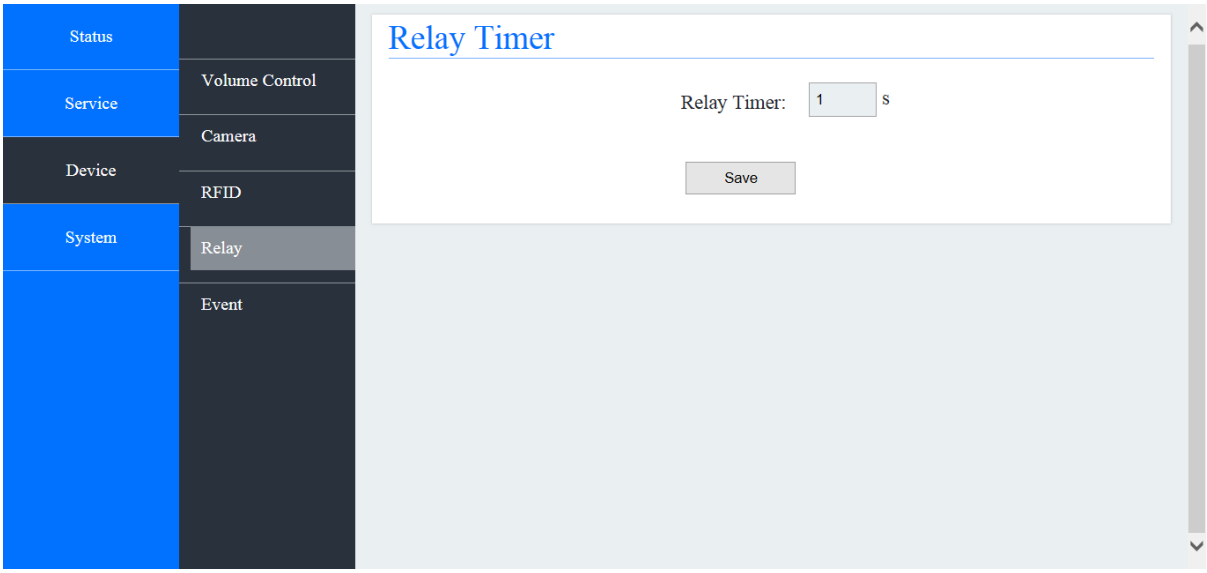
to set up ID identified, choose the card number from B zone and transfer to C zone. Also you need to select RFID Authentication. Then the card owner which is in C zone can open the door. Now, you finish the setting procedure.

Step 3: You also can check history to realize which card pass in RFID log because it could recode last 100 unit data

3.4.4 Relay

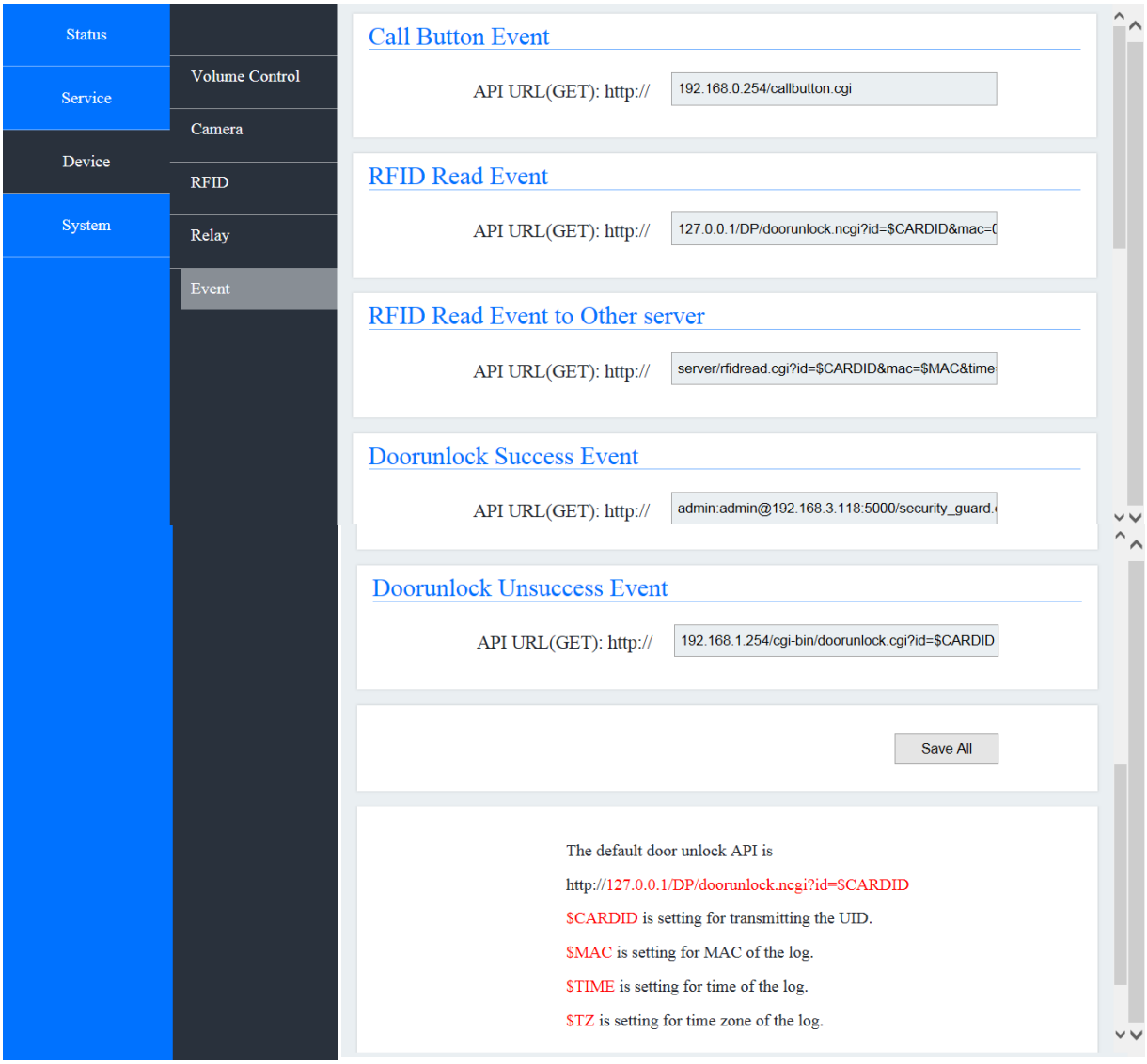
This feature allows you to set relay timer as shown below:

Device — Relay



3.4.5 Event

This feature allows you to set up event as shown below:



DP-201 can be used to integrate other applications, you can also specify the card ID transmitted to a remote server by key in your service IP to API URL (GET): http:// via HTTP protocol and response data by the server to determine whether open the door or not. In this step, please don't select RFID Authentication.

3.5 System

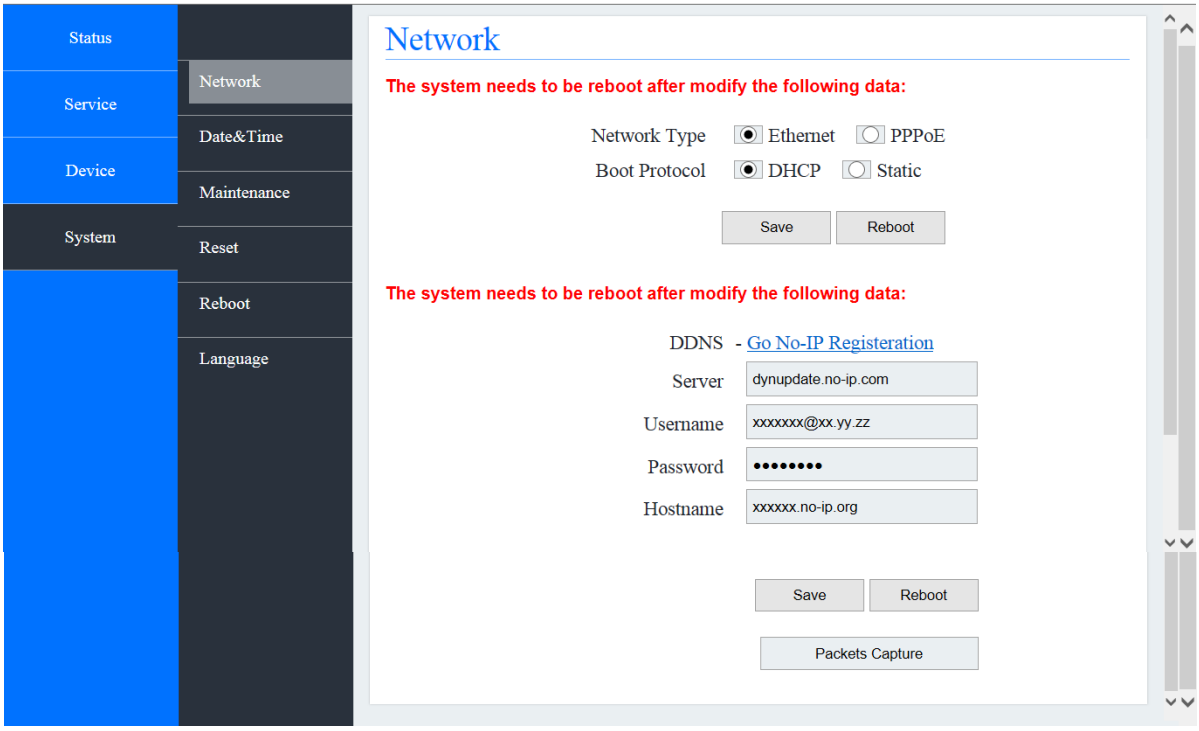
3.5.1 Network

The network settings can be found in the menu "Network". Depend on different network environment for each user. You can go to "System" item in the first level of menu and click on "Network" bar in the second level of menu to define the type of your network.

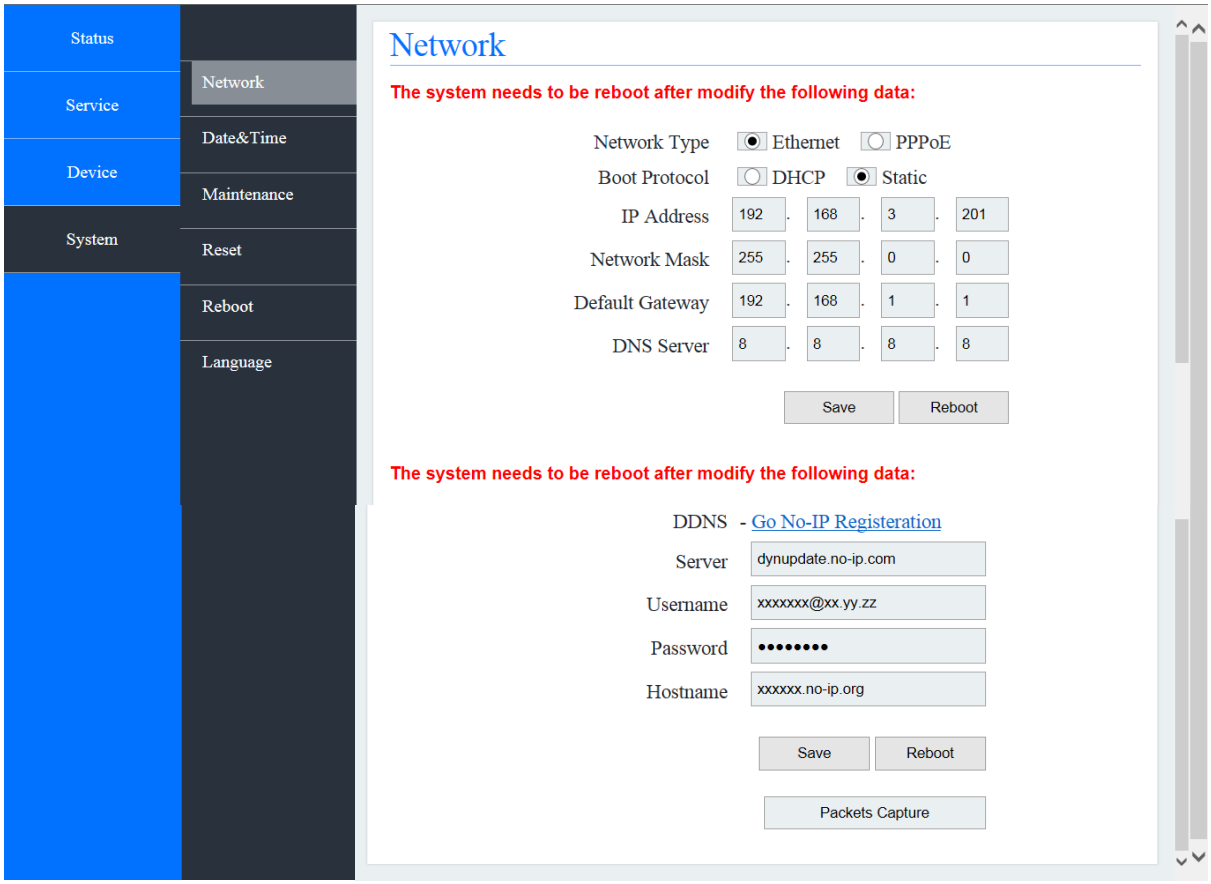
DP-201 Outdoor SIP IP video door phone supports Ethernet and PPPoE. Ethernet is the most widely-installed local area network (LAN) technology. The Point-to-Point Protocol over Ethernet (PPPoE) is a network protocol for encapsulating PPP frames inside Ethernet frames.

If you click Ethernet, please choose DHCP or Static IP that shown as below. The Dynamic Host Configuration Protocol (DHCP) is a standardized network protocol used on Internet Protocol (IP) networks for dynamically distributing network configuration parameters, such as IP addresses for interfaces and services.

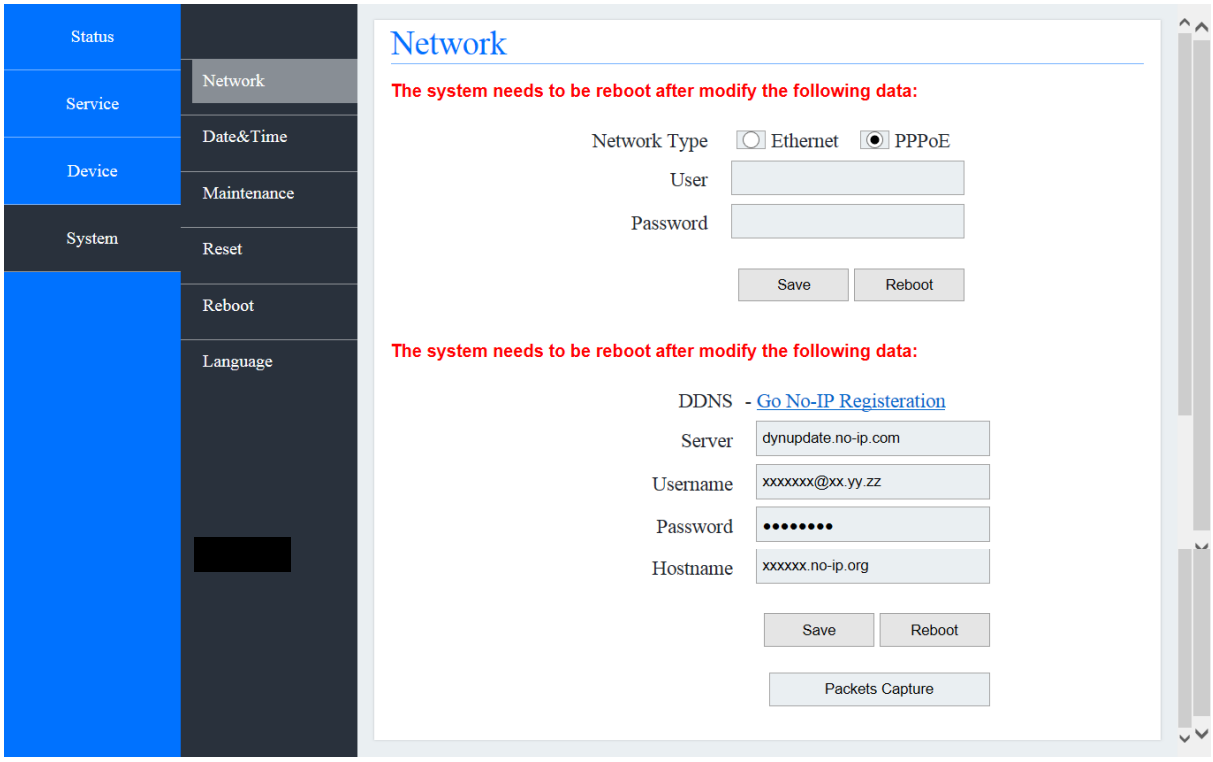
System — Network — Ethernet — DHCP



System — Network — Ethernet — Static



System — Network — PPPoE

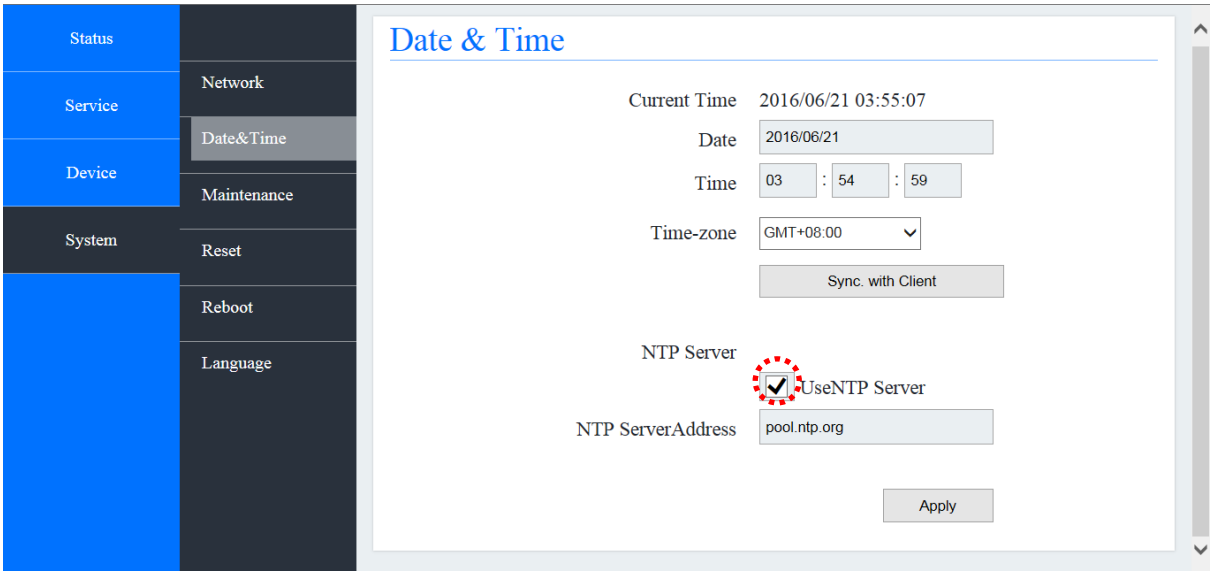


3.5.2 Date & Time

You can set up the date and time of the DP-201 Outdoor SIP IP video door phone by manual or NTP (Network Time Protocol) server. If you choose to setup the date and time by manual, please input data for “Date”, “Time”, and “Time-zone” fields then click on the button of “synchronize with client”.

If you would like to synchronize the time automatically, please enable the NTP server that shown as below.

System — Date & Time



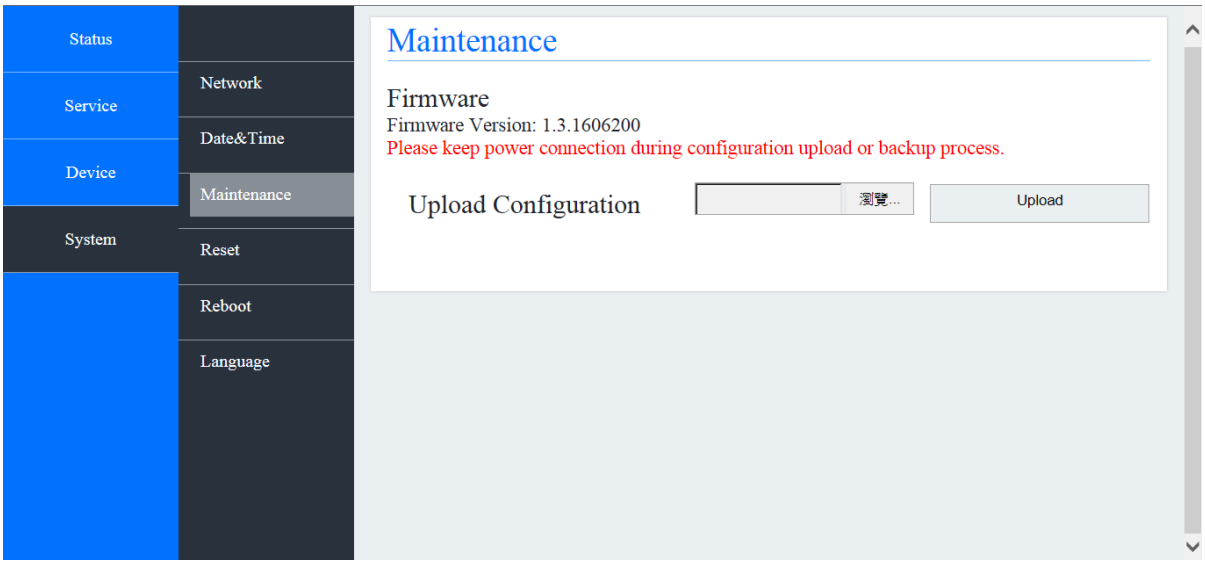
3.5.3 Maintenance

3.5.3.1 Upgrade DP-201 Firmware

Before you select “System” in the first level of menu and click on “Maintenance” bar in the second level of menu to make new configuration, you need to download the firmware file of the DP-201 Outdoor SIP IP video door phone. Please visit http:/220.135.186.178/dp201/firmware to download the firmware file and save in your computer.

During upload the file for configuration, please keep the power supply is connect to plug-in. After the upgrade is complete, please check and confirm the firmware version has changed.

System — Maintenance

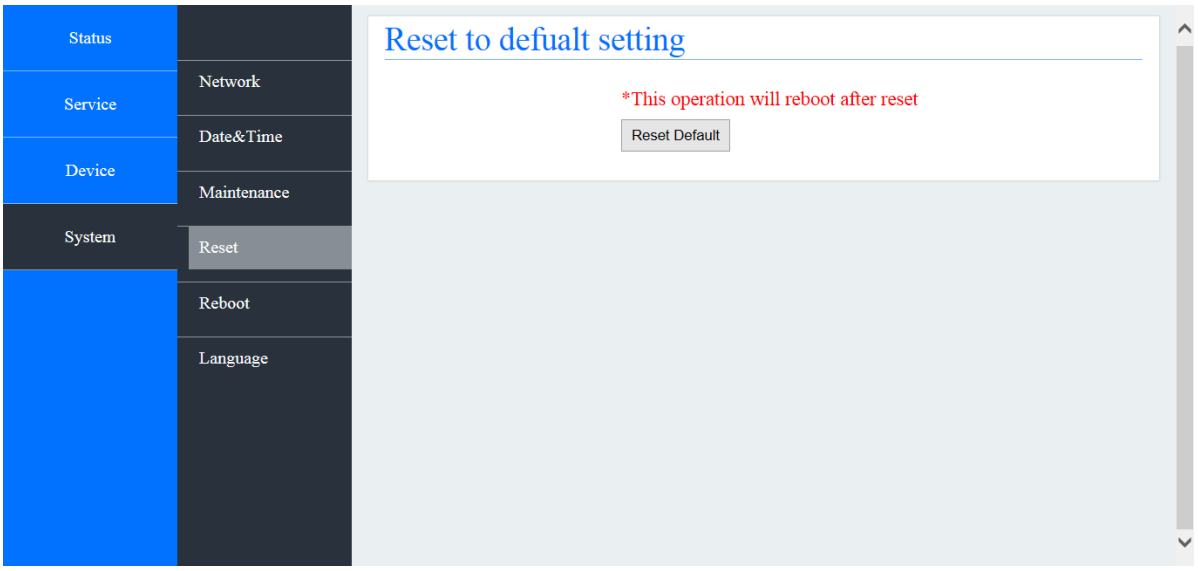


3.5.4 Reset

You can select “System” in the first level of menu and click on “Reset” bar in the second level of menu to recover the default setting. Please refer to the following diagram.

p.s. This operation will reboot the system after resetting.

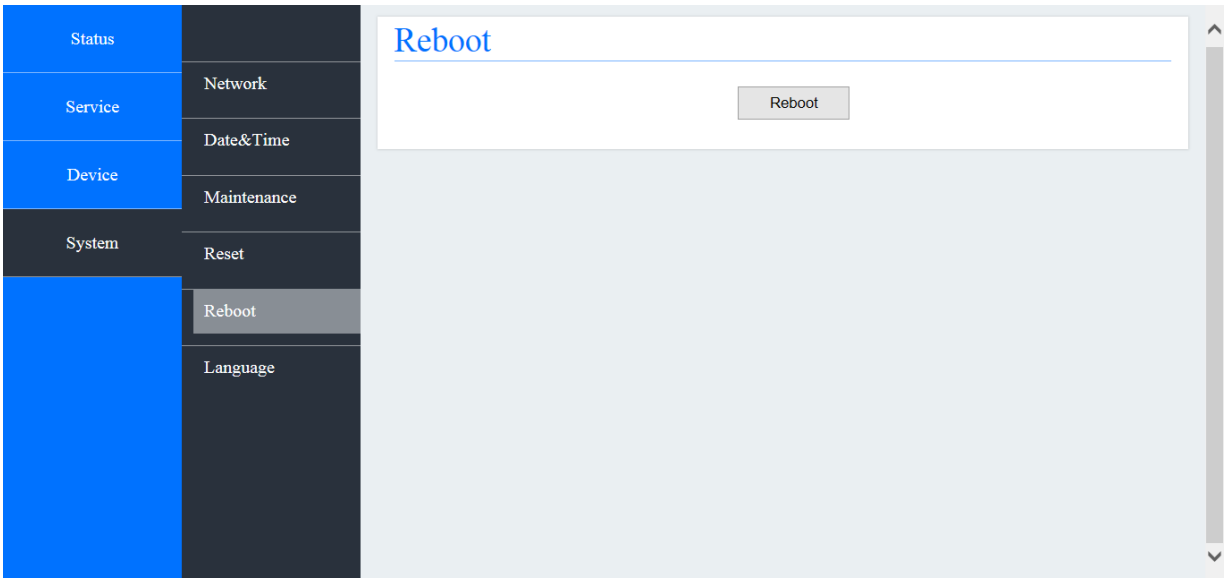
System — Reset



3.5.5 Reboot

This function is provided to reboot your DP-201 system that shown as below diagram. You can also click on “Reboot” button to execute reboot work under Network function that described in section 3.5.1 of this manual.

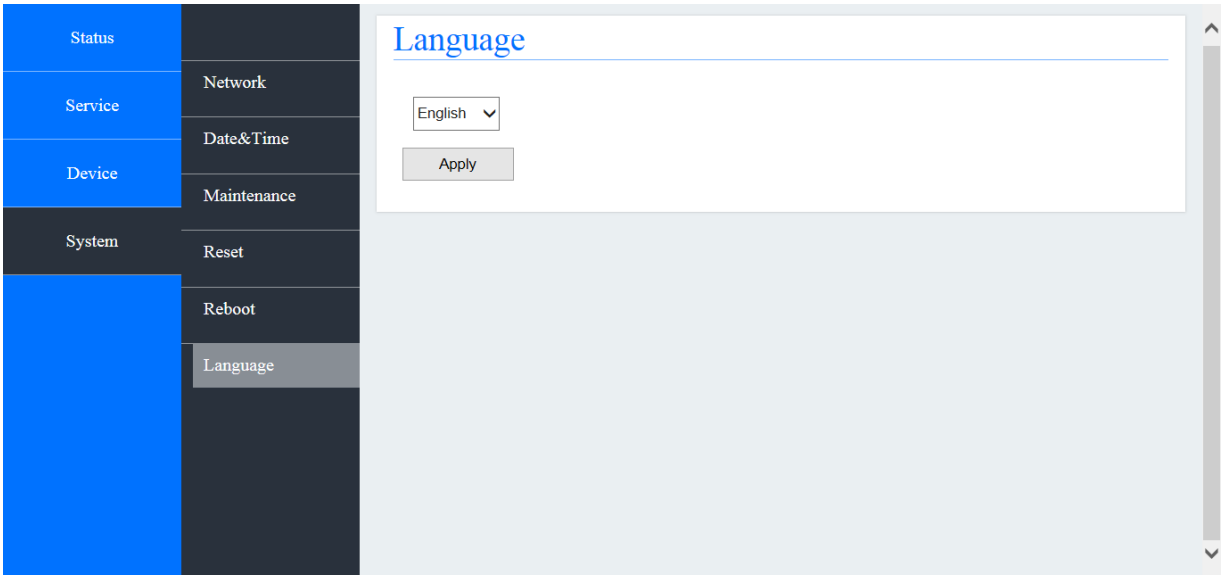
System — Reboot



3.5.6 Language

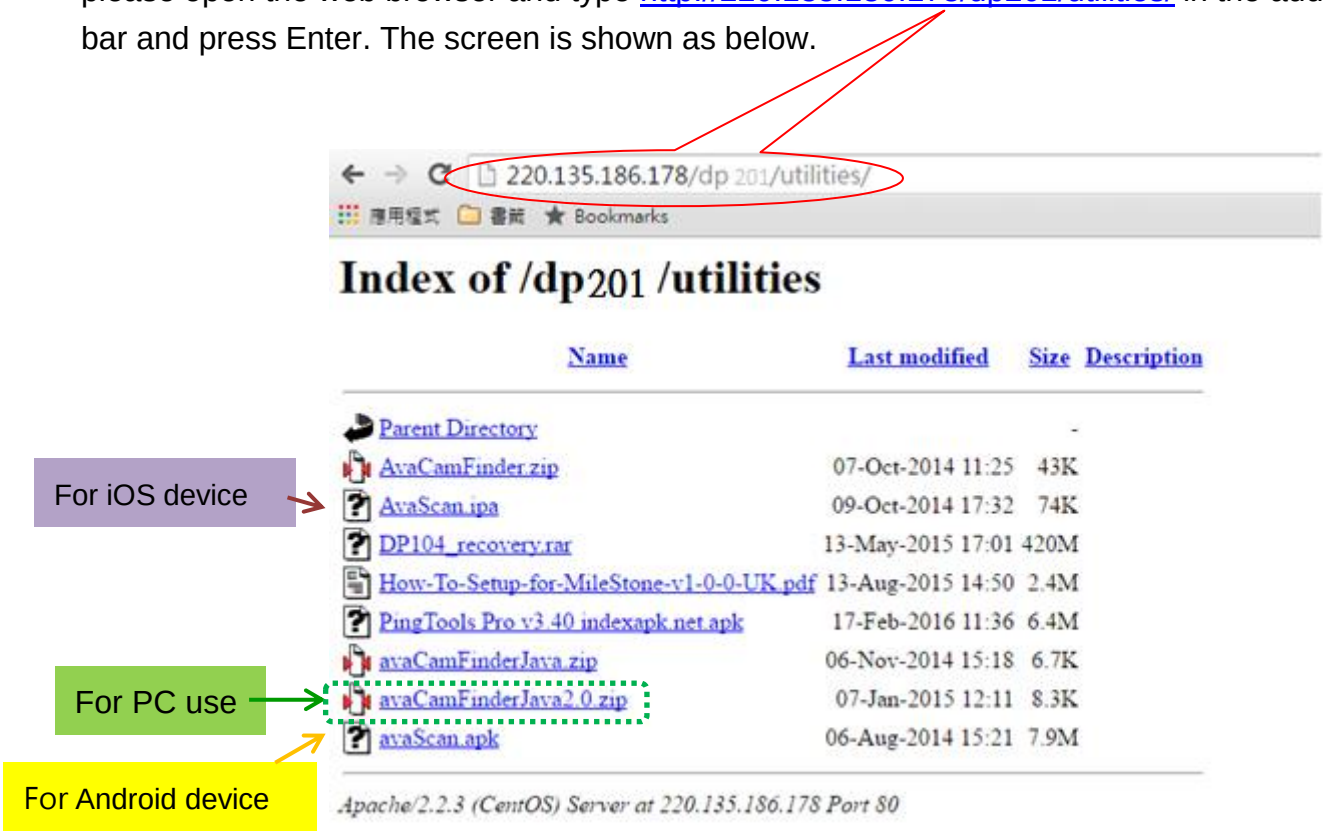
This function is available for you to setup DP-201 system web page language. You can choose Traditional Chinese or English that shown as following diagram.

System — Language

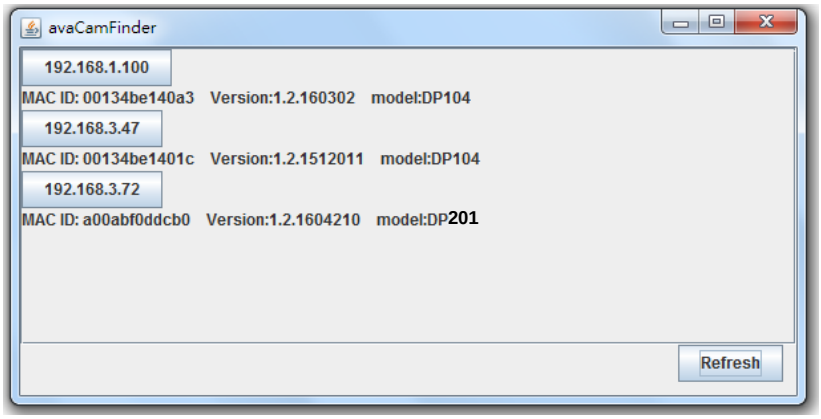


Chapter 4 How to find the IP address of your DP-201 Outdoor SIP IP Video Door Phone

If find out the IP address of DP-201 Outdoor SIP IP video door phone is difficult for you, please open the web browser and type http://220.135.186.178/dp201/utilities/ in the address bar and press Enter. The screen is shown as below.

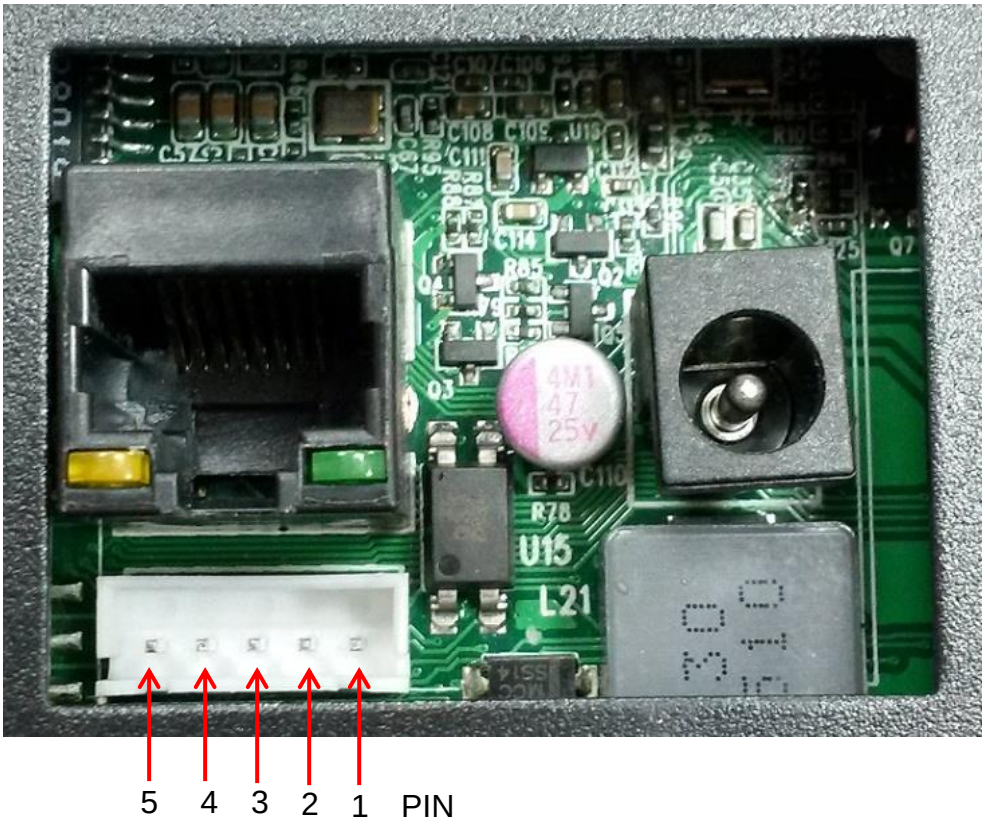


AvaCamFinder.zip is used for your computer. Please click on “AvaCamFinder.zip “and download the file to your PC or Notebook. Then install it. You will find the IP address of your DP-201 Outdoor SIP IP video door phone shows on the screen as follows.



Chapter 5 DI/DO of DP-201 Outdoor SIP IP video door phone instruction

This section describes how to connect door lock/unlock control signal or alarm signal on the printed circuit board (PCB) of DP-201 Outdoor SIP IP video door phone.



DP-201 JP10 illustration:

PIN 1: DI+

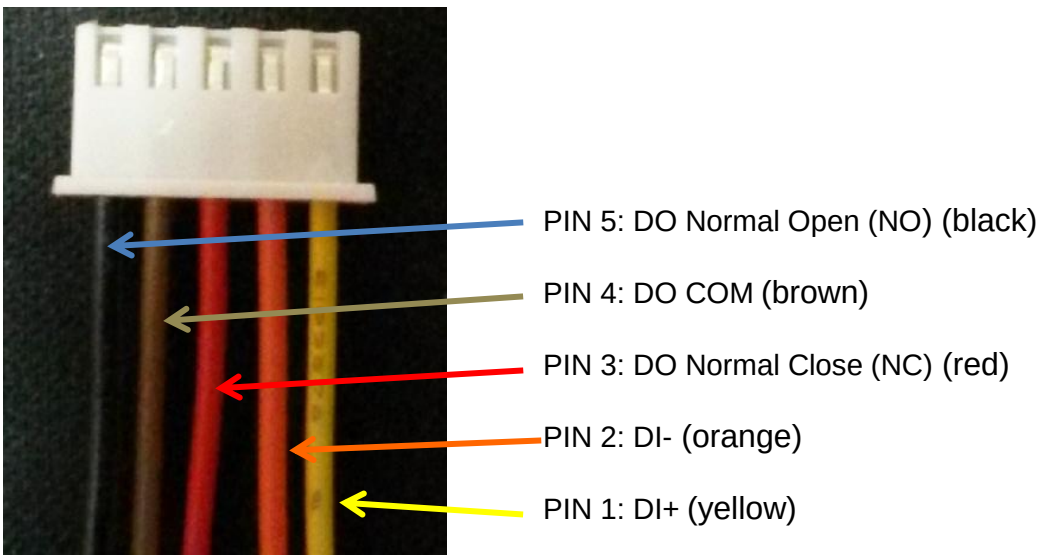
PIN 2: DI-

PIN 3: DO Normal Close (NC)

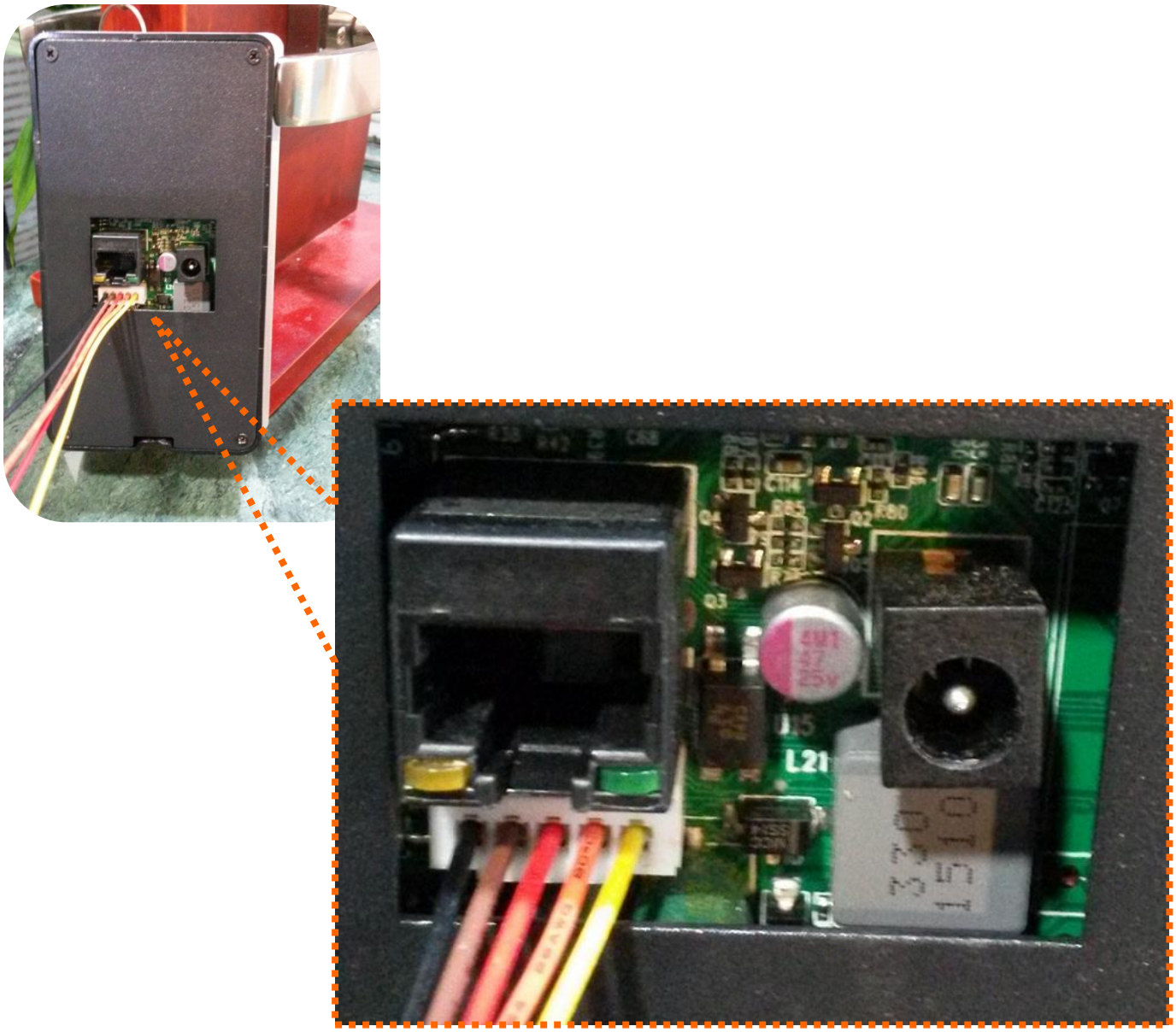
PIN 4: DO COM

PIN 5: DO Normal Open (NO)

Avadesign provides a DI/DO cable for users as below:



Please connect a DI/DO cable to JP-10 slot of the DP-201 that shown as follows.



DI connects to the sensor for notifying the status, so that the CPU to do the appropriate action. DO connect to control device. According to the status of device can be accessed (NC—COM) or (NO—COM). The PCB controls the power ON/OFF status of device by relay.