SAC921

Single-Door Access Controller

User Manual v1.0

Complete solution for single door access control with multiple readers.

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1 Specifications

1.1 Technical Parameters

User Capacity	3,000
Record Capacity	30,000
Access Group	32 Timezones, 16 Access Groups
Access Interfaces	Relay Output *1, Exit Button *1, Alarm Input *1,Door Sensor*1
Communication	WiFi, TCP/IP, Wiegand, OSDP over RS485
Working Temperature	10°C~60°C(14F~140°F)
Working Humidity	20% to 90%
Power Input	DC12V 1A/POE 802.3af

1.2 Factory Default



Default IP	192.168.0.218
User Name	Admin
Password	12345

1.3 Light Indicates:

Power_Orange light	The device is powered up
Pass_Green light	Access is granted
Fail/Alarm_Red light	Access is denied, or the Alarm is triggered

2 Installation Guide



On the Left:

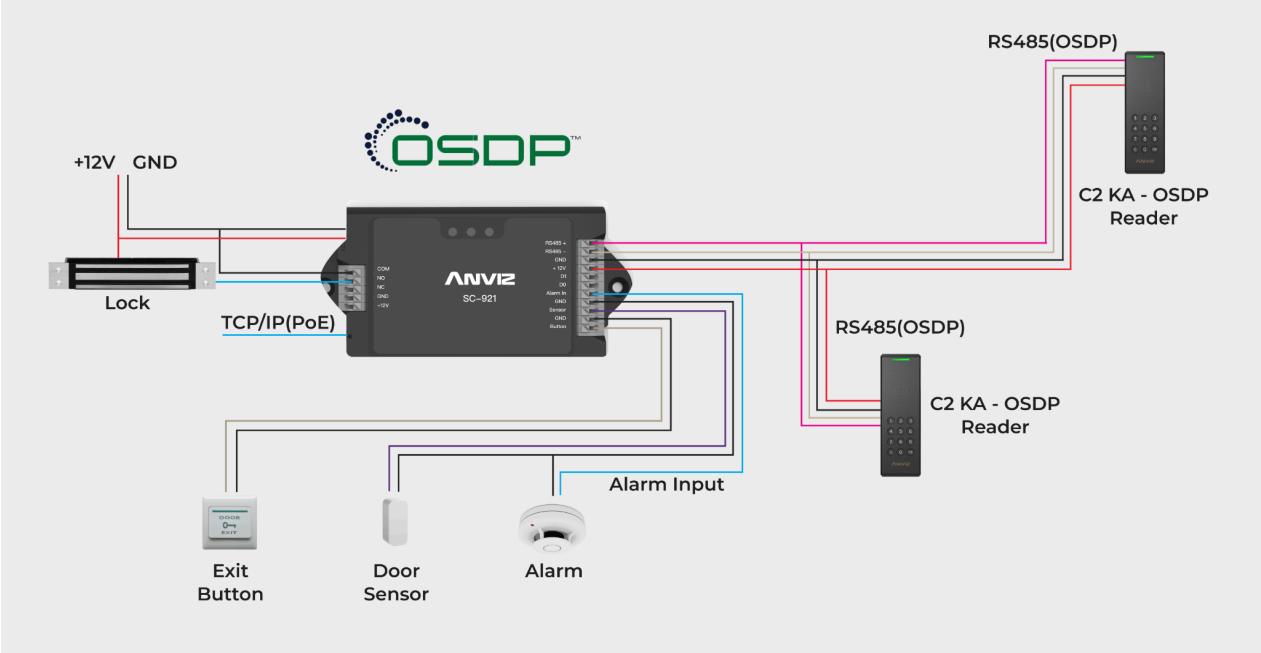
No	Mark	Interfaces/ Function
1	DC12V	Power Supply
2	COM	Relay COM Output
3	NO	Relay NO Output
4	NC	Relay NC Output
5	GND	Voltage Output 12V
6	12V OUT	
7		TCP/IP RJ45

On the Right:

No	Mark	Interfaces/ Function
1	RS485A	OSDP over RS485 Input
2	RS485A	
3	12V IN	Power Supply Input
4	GND	

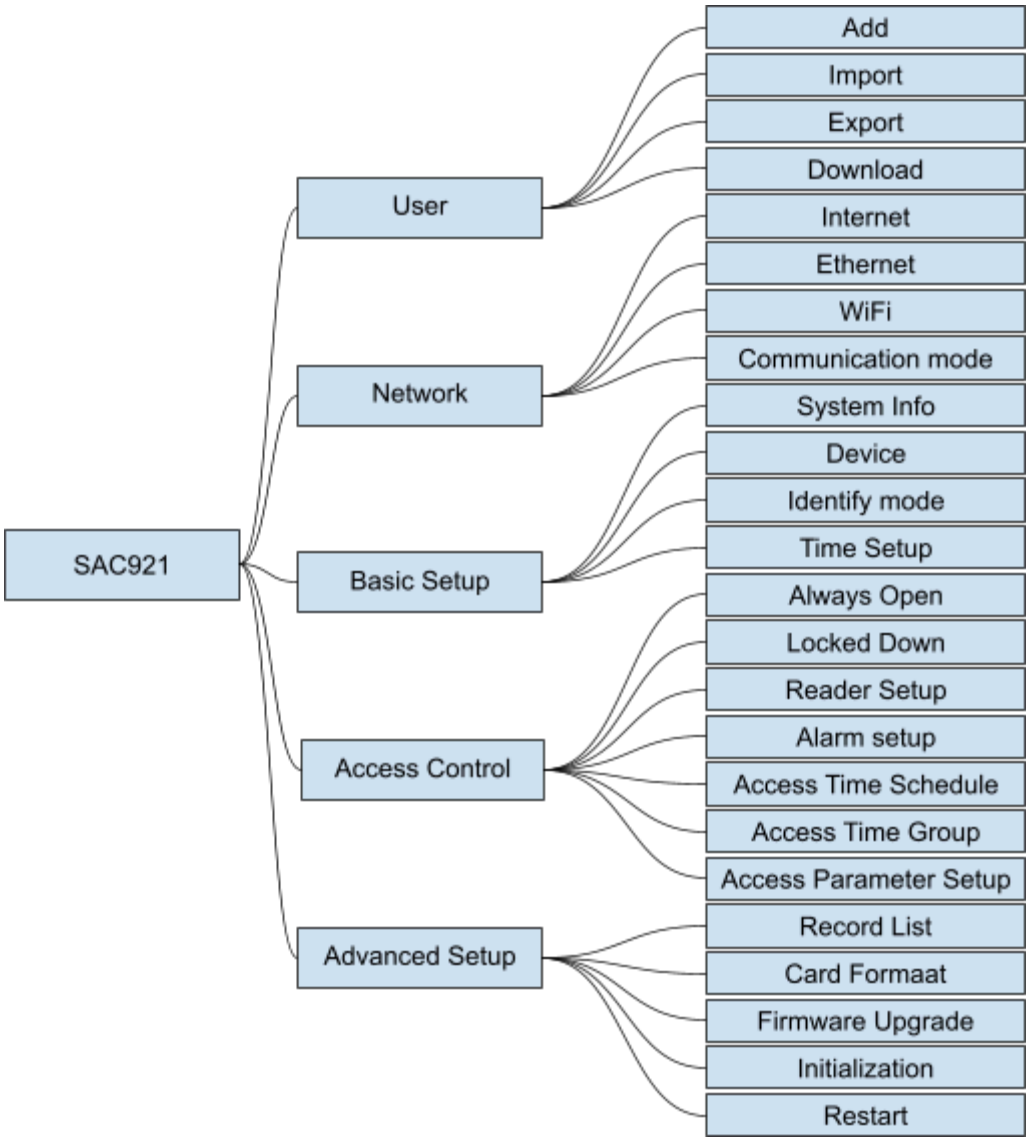
5	D1	Wiegand Signal Input
6	D0	
7	Alarm	Alarm Signal Input
8	GND	
9	Sensor	Door Sensor Input
10	GND	
11	Button	Exit Button

2.1 Wiring Diagram



3 Programming Guide

3.1 Webserver Structure



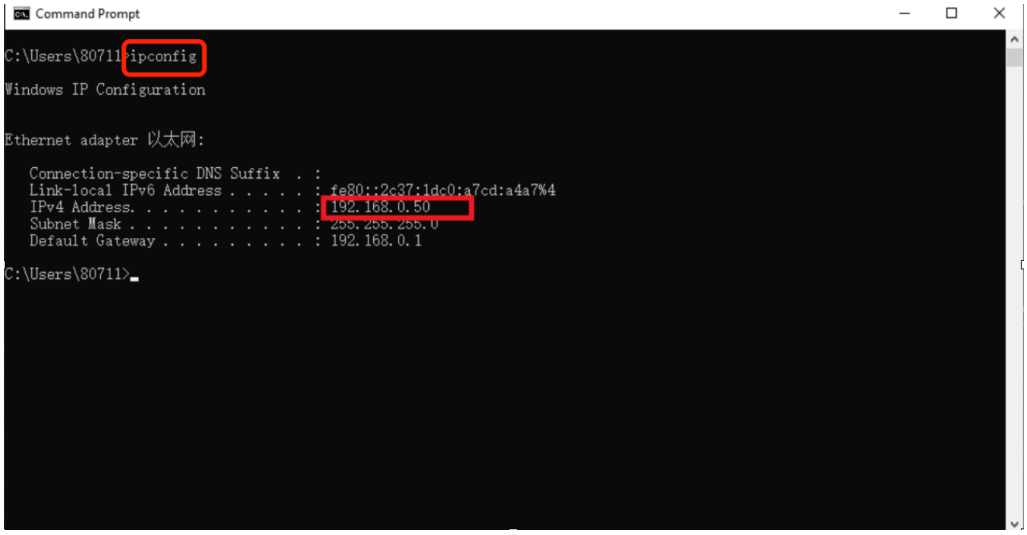
SAC921 uses Webserver for device management, including user management, network setup, access control setup, and firmware upgrade.

➪ **Note**: The default IP Address: **192.168.0.218**, User Name: **Admin**/ Password: **12345**.

3.2 Device Management

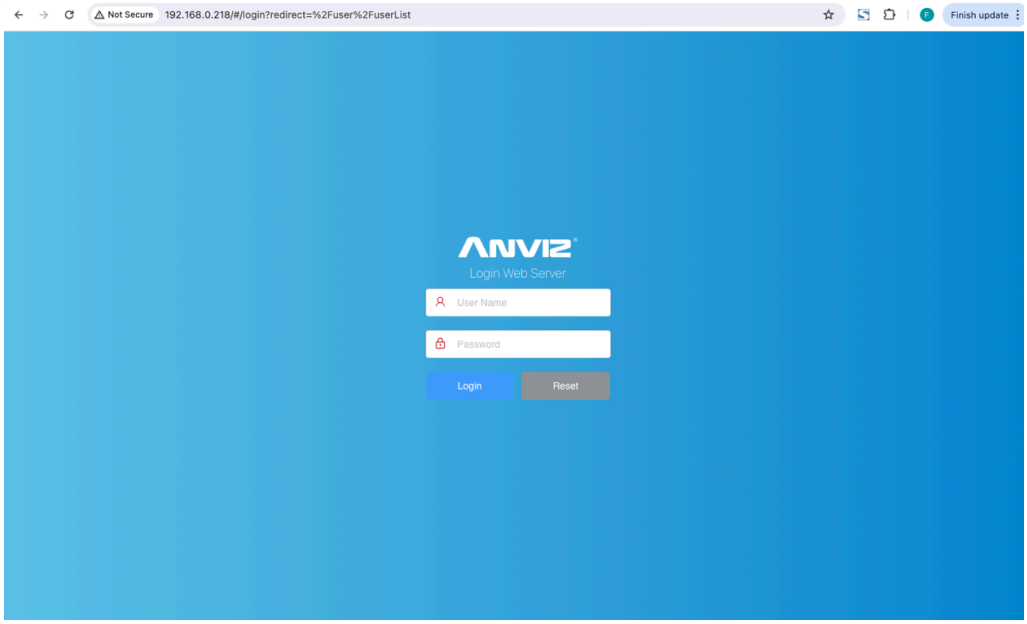
You can follow the below steps to load the device's Webserver.

Step 1: Confirm the current IP segment of the management computer in **Command Prompt**.



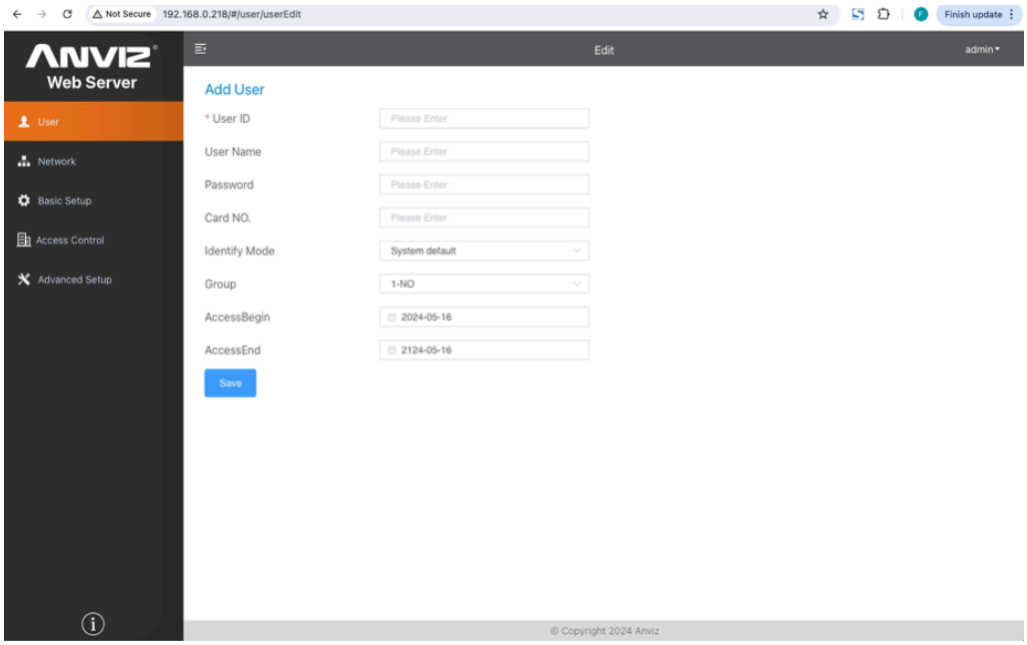
Step 2: Make sure the IP segment is the same as the controller's IP segment, which, in this case, is 192.168.0.XXX.

Step 3: Connect the device by TCP/IP with the computer, open a browser, preferably Google Chrome, and input **192.168.0.218** (default).



3.3 User management

You can register and edit user information on this page.



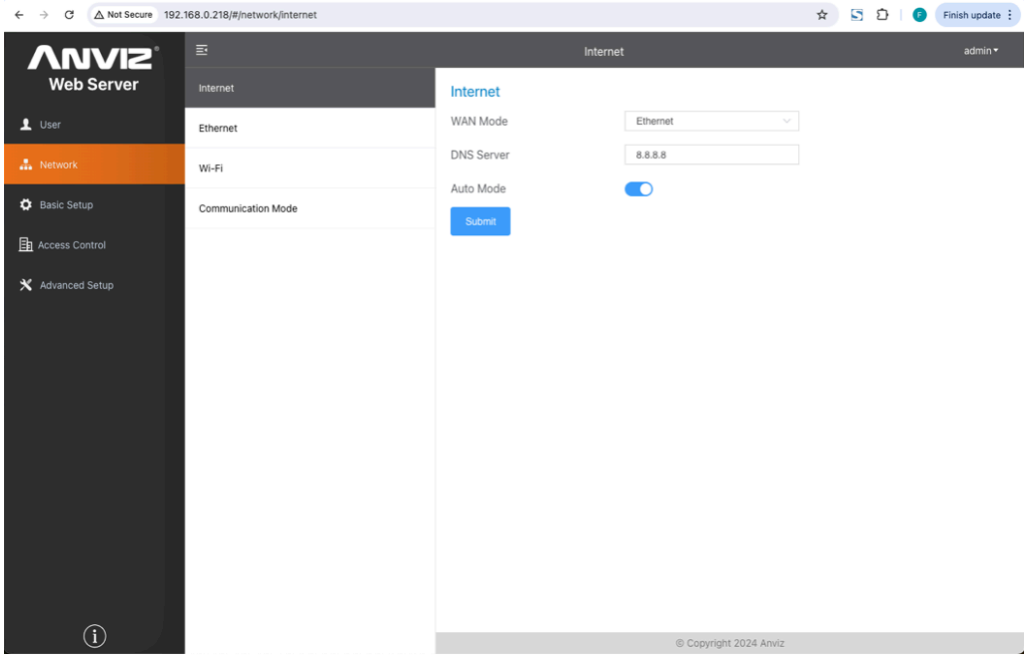
User ID: Input the user ID number, which is the unique identifier.
User Name: Input User Name.
Password: Input the User's password for verification.
Card No.: Input the User's card number for verification.
Identify Mode: Select from multiple identify modes: **System default**, **Card, Card->PW**, **IP->PW**, and **Card/ ID->PW.**
Group: Select the Access Time Group for the User.
Start Date of Validity: Select when the User's access rights begin.
End Date of Validity: Select when the User's access rights end.

➪ **Note**: You can **Import**, **Export,** or **Download** all the User info from the Webserver in Excel format.

3.4 Network Setup

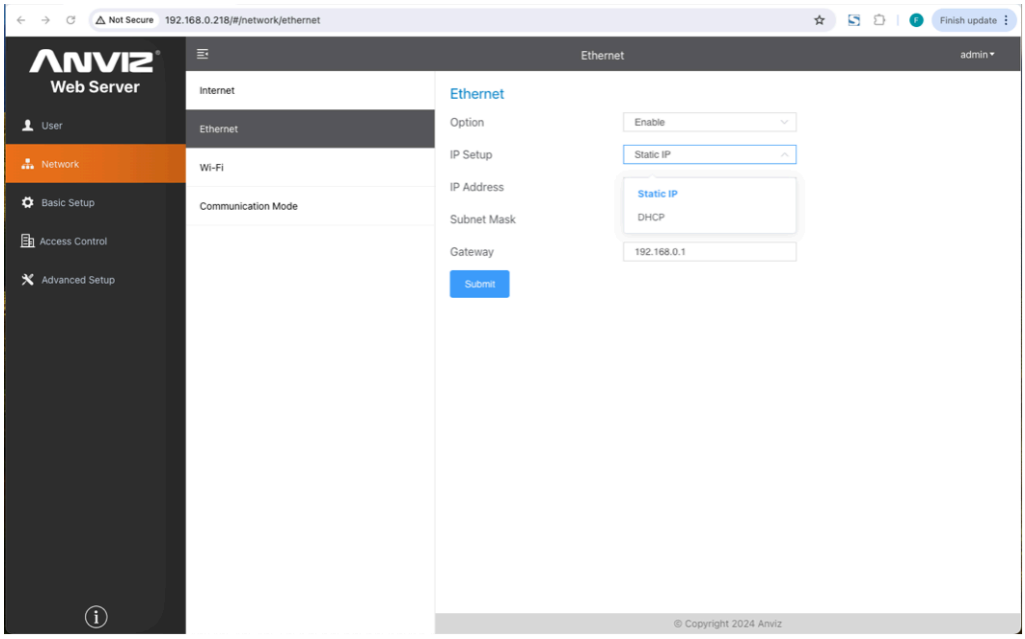
You can set up the device's network connection using Ethernet or WiFi.

3.4.1 Internet



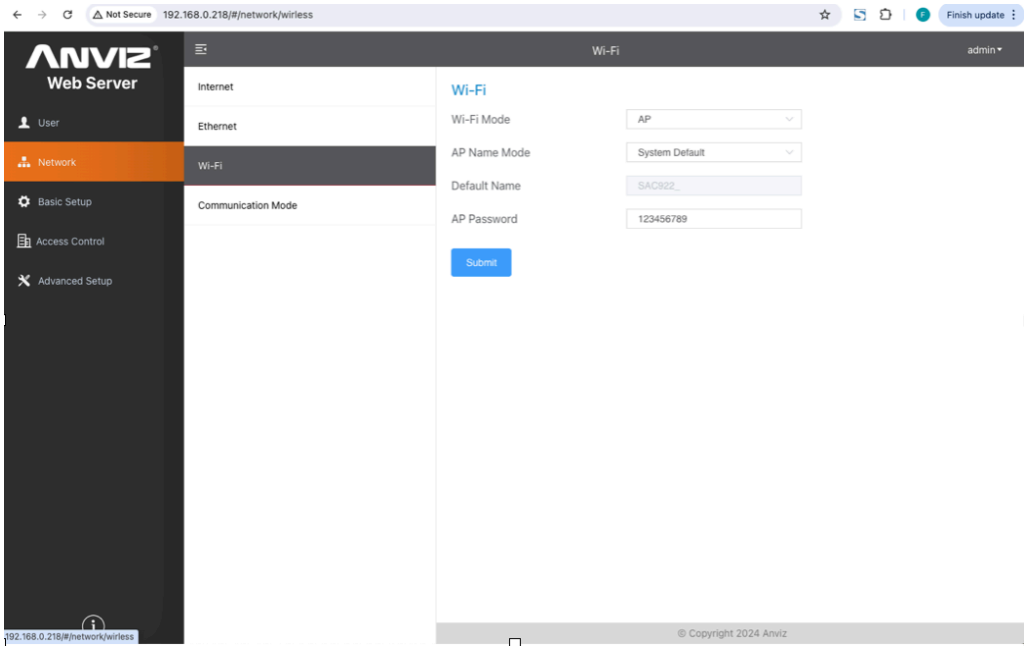
WAN Mode: Select the internet connection mode from **Ethernet** (cable) or **WIFI**.
DNS Server: The default DNS address is 8.8.8.8.
Auto Mode: The device will switch to a WAN mode with the best connection.

3.4.2 Ethernet



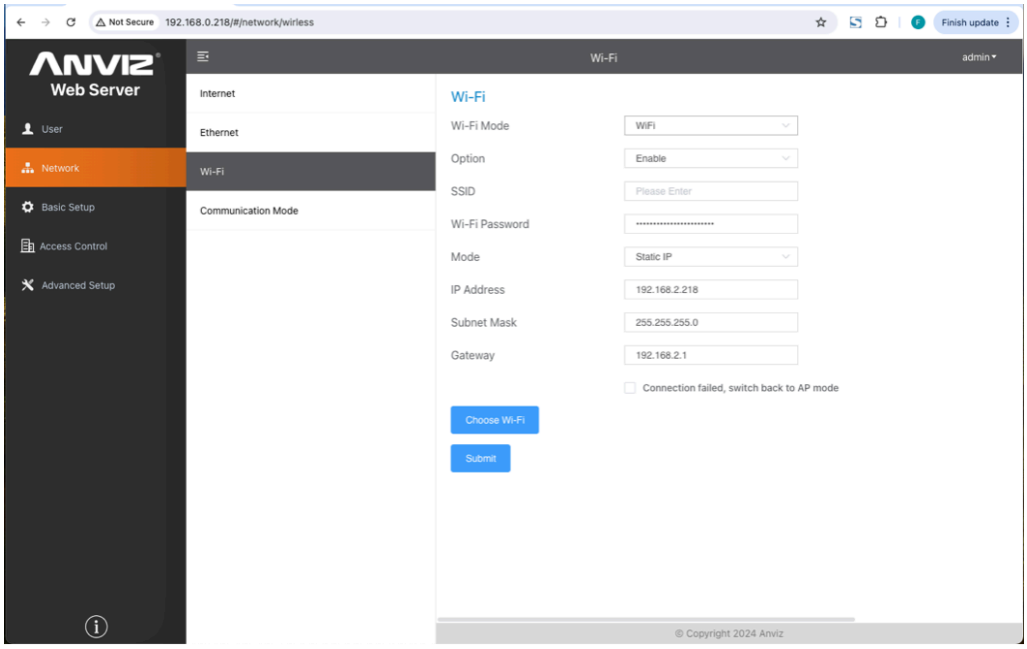
Option: Enable Ethernet mode.
IP Setup: Select the **Static IP** or **DHCP** to set the device IP address.
IP Address: Input the device IP Address (Default: 192.168.0.218).
Subnet Mask: Input the device Subnet Mask (Default: 255.255.255.0).
Gateway: Input the device Gateway (Default: 192.168.0.1).

3.4.3 Wi-Fi (AP)



WIFI Mode: Enable Wi-FI and select AP or WIFI.
AP Name Mode: Set the name by **System Default** or **Custom**.
AP Password: Display the AP password for network connection.

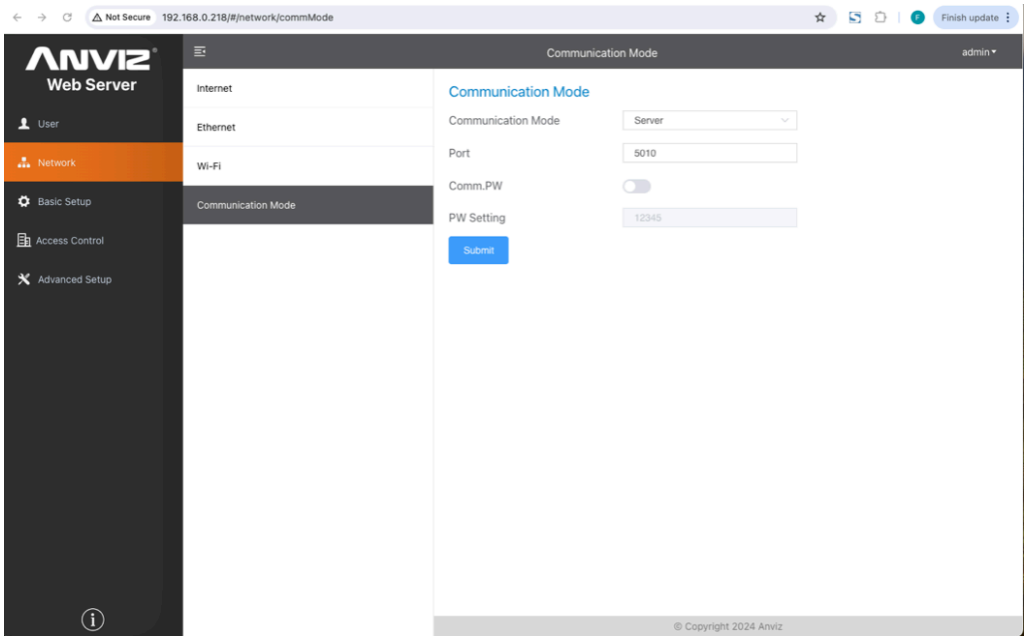
3.4.4 Wi-FI (WiFi)



Option: Enable WiFi mode.
SSID: Input the WiFi name (SSID Namer).
WiFi Password: Input WiFi password for network connection.

You can **Choose WiFi** for network connection. If you can't find the WiFI you need, you can manually input the SSID and Password for the WiFi connection.

3.4.5 Communication Mode

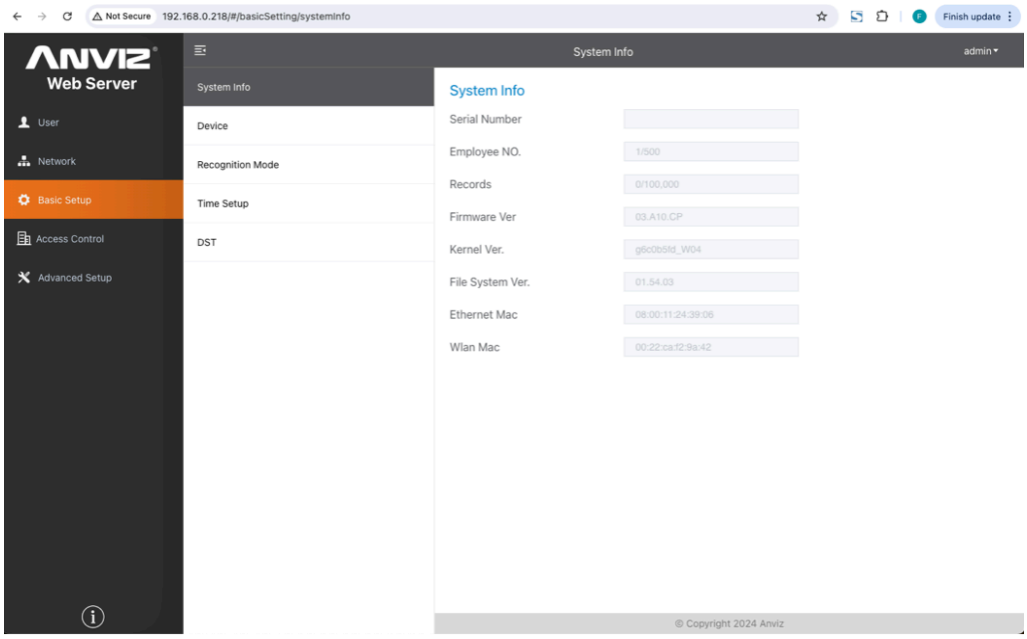


Communication Mode: Select the device's **Server**, **Client,** or **RS485**.
Port: Input the network communication port (Default: 5010).
Comm PW: Activate the communication password.
PW Setting: Input the password for applications like CrossChex Standard to communicate with the device.

3.5 Basic Setup

You can find all the device information on this page, including the system info, device ID, time, and DST.

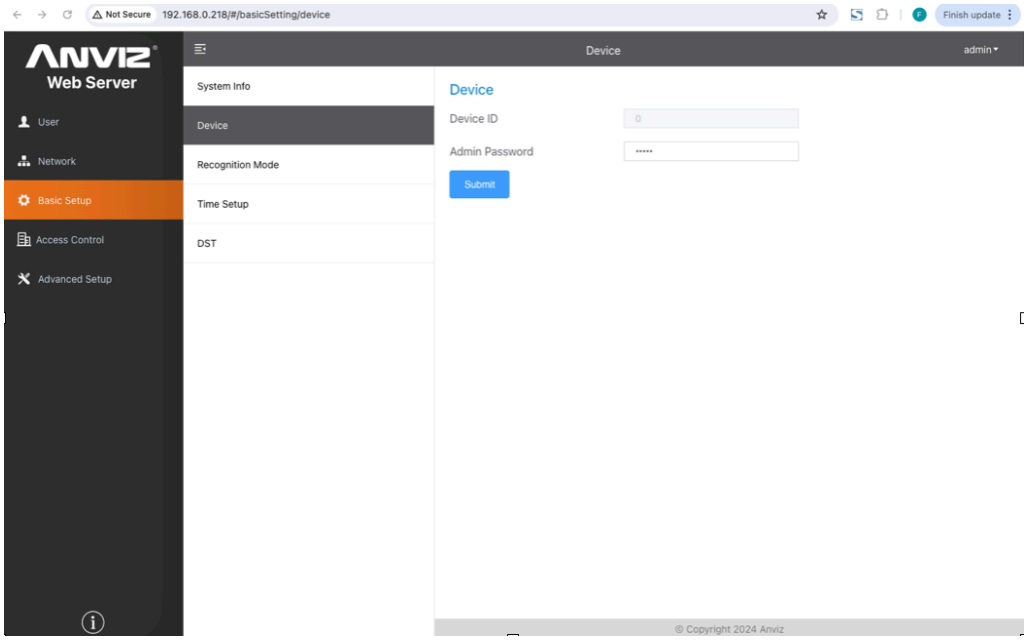
3.5.1 System Info



Check the basic parameter information, such as **Serial Number**, **Firmware Version**, User, and Record Capacity, and the Mac addresses for Ethernet and WLAN.

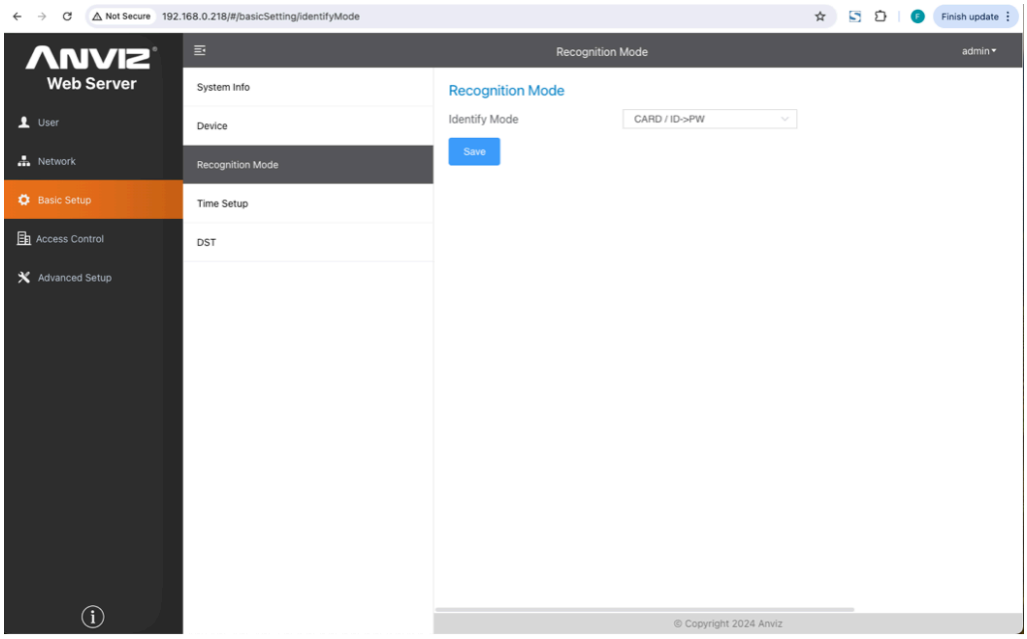
➪ **Note**: You can find how many users, cards, and records the device has registered on this page.

3.5.2 Device



Device ID: The default Device ID is the last eight digits of the device's serial number.
Admin Password: Input the Admin password (Default: 12345).

3.5.3 Identify Mode

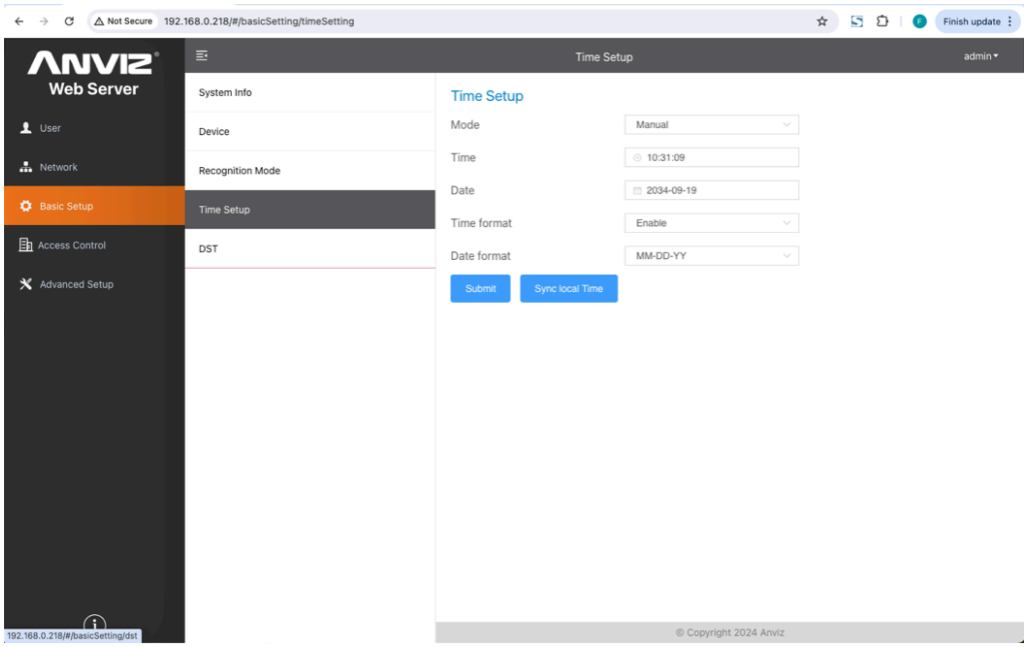


Identify Mode: Set up the device verify mode.

It supports **Card**, **Card->PW**, **ID->PW,** and **Card/ID->PW** (Default).

➪ **Note**: The controller has no card reading module or keypad. An extra card reader, such as Anviz C2KA, is needed to build the T&A system.

3.5.4 Time Setup



Mode: Select the time mode, **Manual** or **Auto**.

Manual mode: Set your time manually.

Auto mode: Input the NTP server to get time automatically.

Timezone: Select the Timezone for the device.

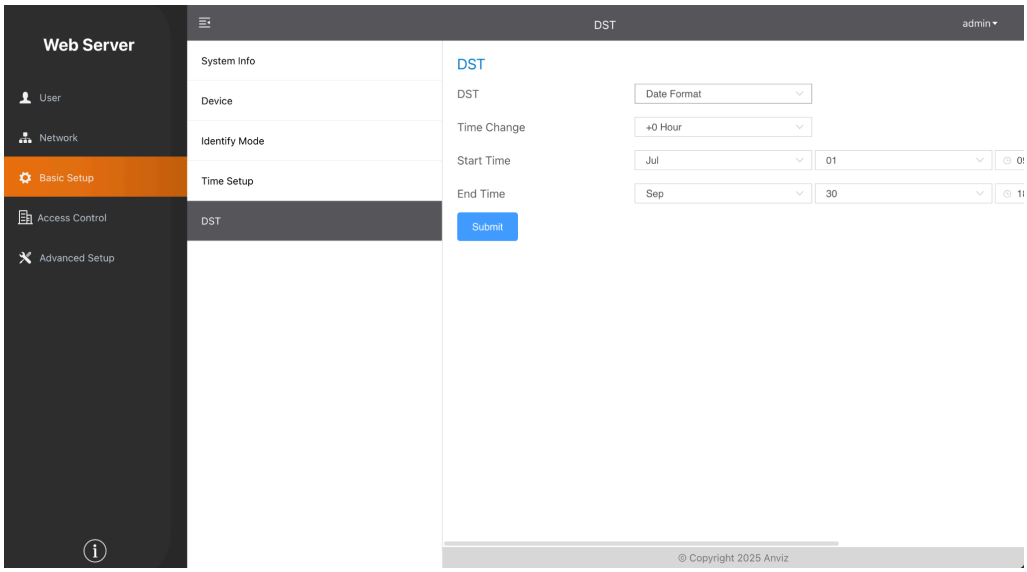
Time Format: Set the Time Format, 12 hours or 24 hours (Default).

Data Format: Set the Data Format, **YY-MM-DD** (Default), **MM-DD-YY**, or **DD-MM-YY**.

You can **Sync Local Time** of the local computer with the device.

➪ **Note**: To ensure a correct device time, please set the **Timezone to** the same as the local computer.

3.5.5 DST

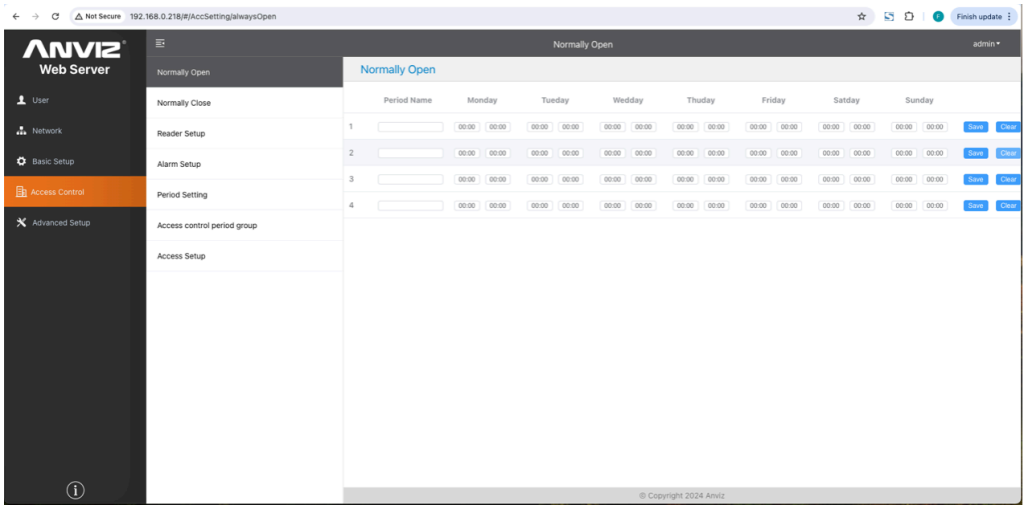


DST: Enable the DST and choose the DST format, **Date Format,** or **Week Format.**
Time Change: Set the Time Bias for the DST
Start & End Time: Set the DST active date and time.

➪ **Note**: Before setting DST, please remember to confirm the details.

3.6 Access Control

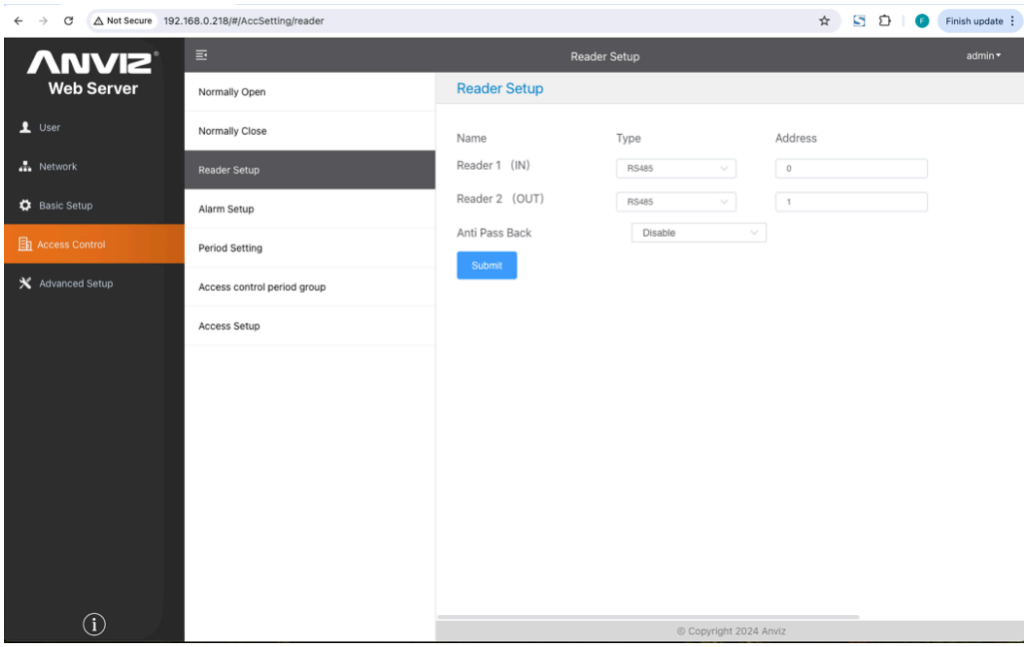
3.6.1 Always Open/ Locked Down



You can set the **Always Open** or **Locked Down** time using a **7-day /week** cycle. During the time set, the controller will keep the access control system constantly open or locked down.

➪ **Note**: You can set 4 different periods for each day at most.

3.6.2 Reader Setup



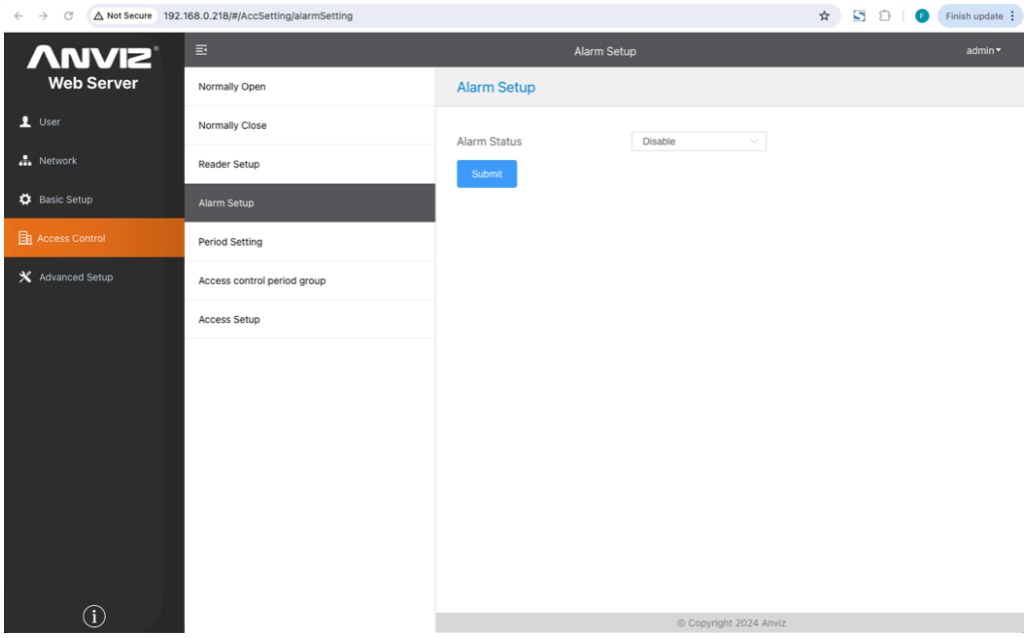
SAC921 supports adding Wiegand and RS485 readers to build an access control system.

Setup Readers
Reader 1 (IN): Set by default as the entry reader
Reader 2 (OUT): Set by default as the exit reader.
Address: Enter the actual address of the Wiegand or RS485 readers.

Besides, the Controller supports **Anti Pass Back** for a single door.

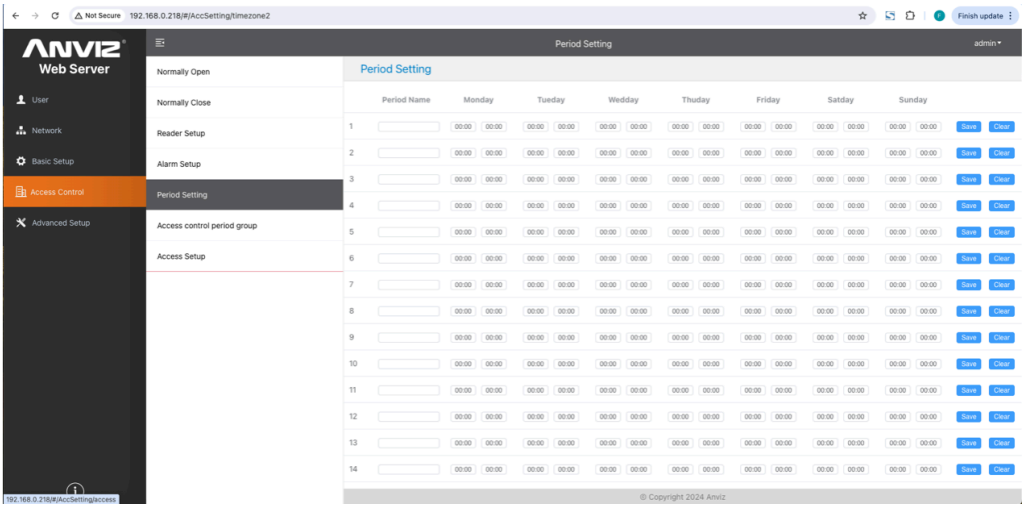
➪ **Note**: The SAC921 supports only one channel of standard Wiegand RFID reader and two channels of Anviz RS485 readers.

3.6.3 Alarm Setup



Alarm Status: Support alarm signal input.
Relay Release (NO): Upon receiving an alarm signal, the relay switches to a normally open state, for instance, in the event of a fire.
Relay Engage (NC): Upon receiving an alarm signal, the relay switches to a normally closed state in such cases as theft.

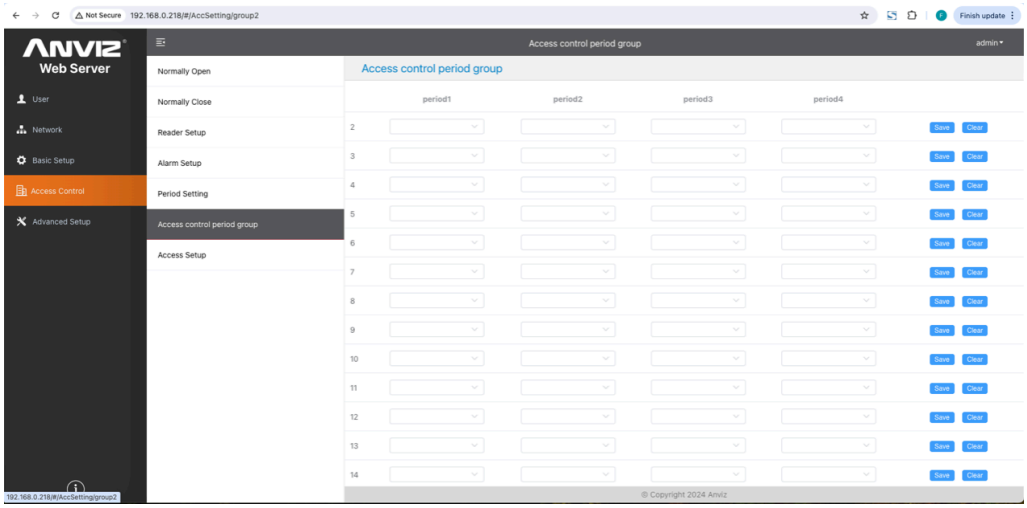
3.6.4 Access Time Schedule



It supports setting 24 time periods using a 7-day/week cycle. You can configure the time slot for access control setup.

➪ **Note**: Please click “**Save**” to save the configuration.

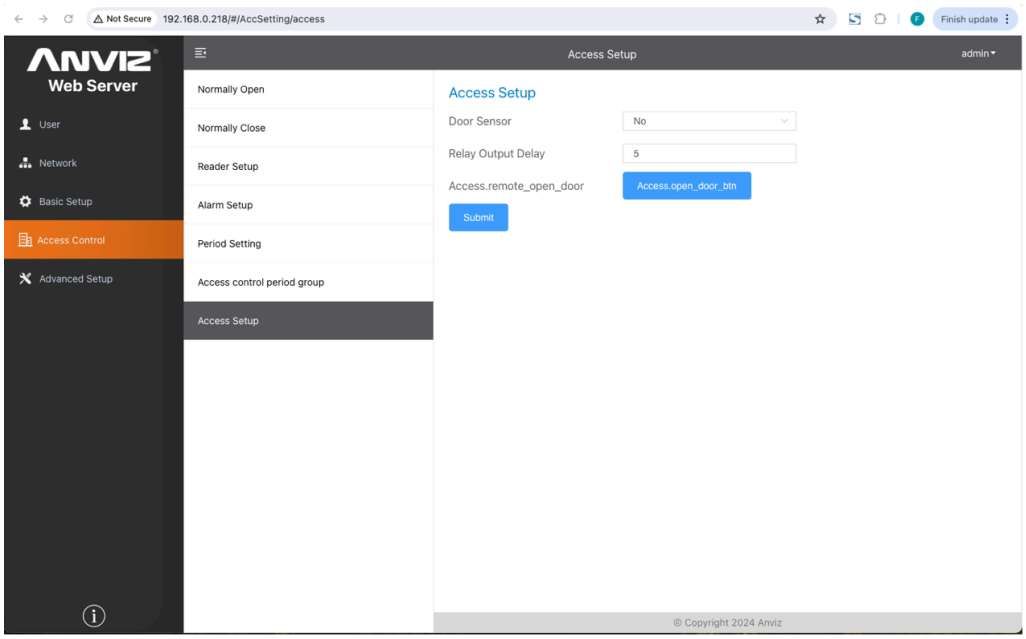
3.6.5 Access Time Group



It supports setting 15 groups of four different schedules. You can select the **Access Time Schedules** you have configured above and group them based on the needs of your access control system.

➪ **Note**: The default **Group 0** and **Group 1** are **Normal Open Group** and **Normal Close Group,** respectively.

3.6.6 Access Parameter Setup



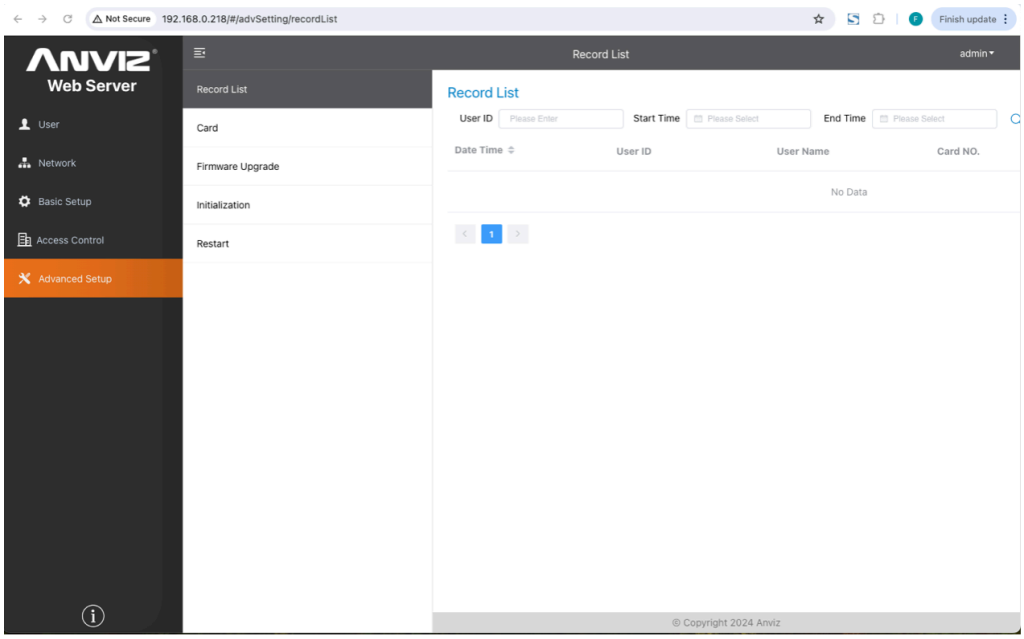
Door Sensor: Enable the Door sensor and set the alarm trigger time.
Relay Output Delay: Set up delay time (Default: 5s) for the relay to reset.

You can click **Remote Open** to open the door remotely.

3.7 Advanced Setup

On this page, you can check the Record list, Card Format, Firmware upgrade, Initialization, and Restart.

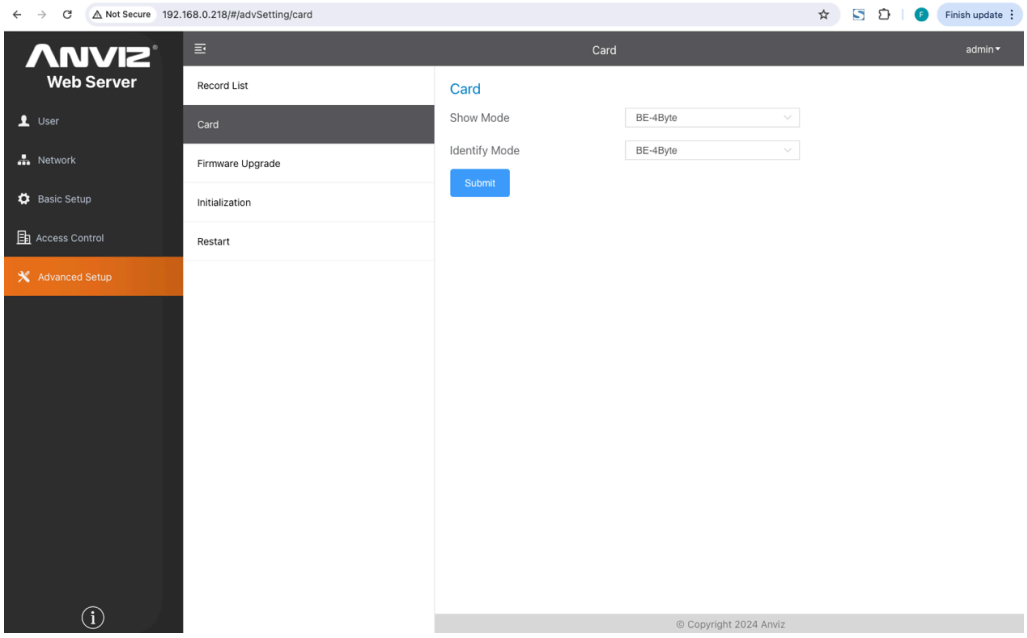
3.7.1 Record List



You can view all the punch records made by users and search for the records using **User ID** and **Start & End Time**.

It supports downloading records in txt and xls formats.

3.7.2 Card Format

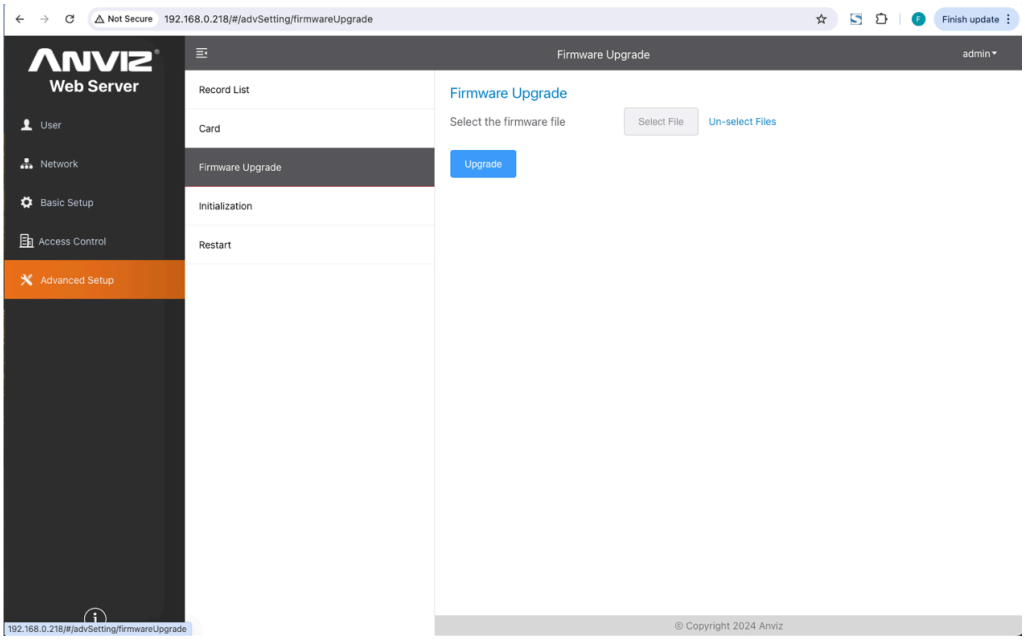


You can set up the RFID Card for the access control system.

Show Mode: Set up the Card show mode in the system, supporting **Big Endian 4 Byte**, **Low Endian 4 Byte**, **Big Endian 3 Byte**, and **Low Endian Byte**.
Identify Mode: Set up the device center to configure the card number information for comparison.

➪ **Note**: Please keep both options in the same mode to prevent confusion.

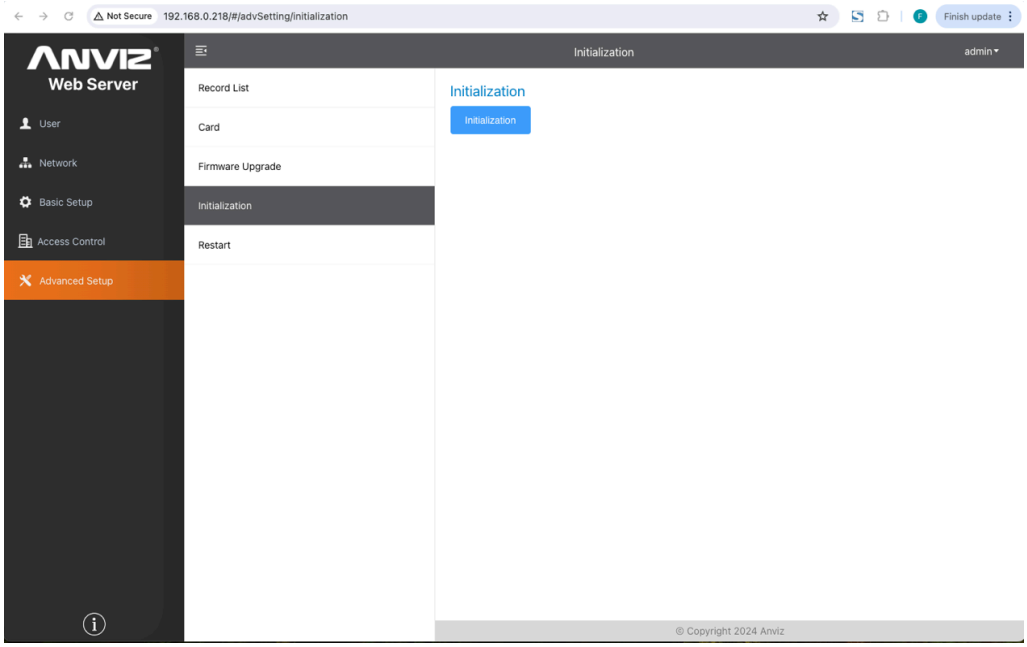
3.7.3 Firmware Upgrade



This interface supports firmware upgrades for the device. You can click to select and upgrade the firmware.

➪ **Note**: You can check the link below on how to upgrade the firmware by force (https://www.anviz.com/faq/56.html#WF.)

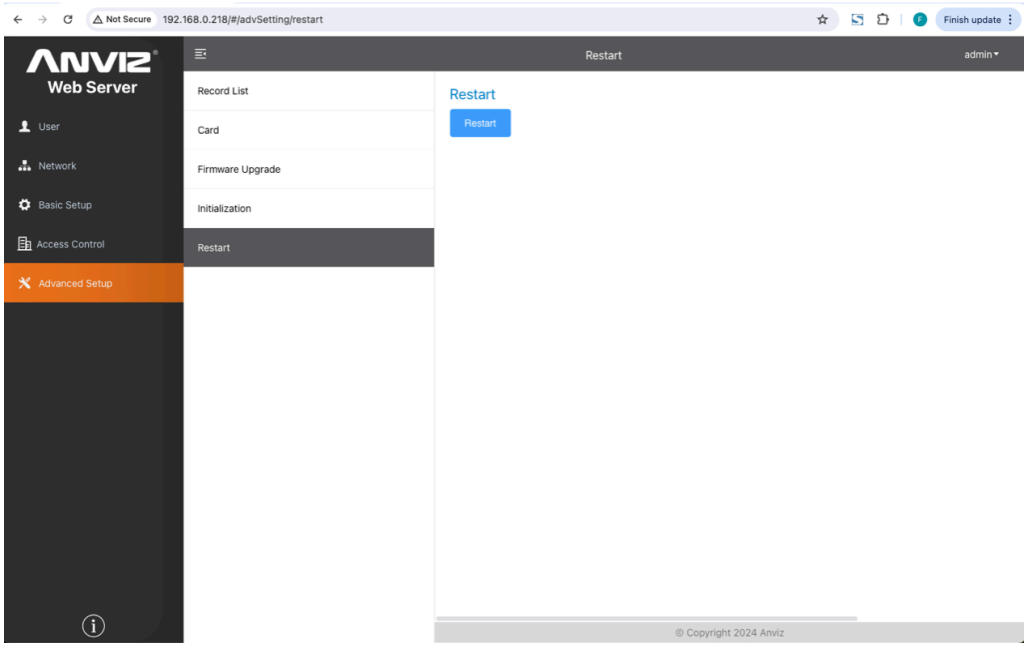
3.7.4 Initialization



Initialization: Initialize the device.

➪ **Note**: Please proceed cautiously, as the **Initialization** will reset all data on the device to factory settings.

3.7.5 Restart



Restart: Restart the device without deleting any information.

4 Frequently Asked Questions (FAQs)

- **No.1**

Q: How many card types are supported in this SAC921&C2KA OSDP system?

A: The system, more specifically, **the C2KA reader,** supports dual RFID 125Khz EM & 13.56MHz Mifare, such as Mifare Classic, Mifare Plus, and Mifare DESFire EV1, EV2, and EV3.

- **No.2**

Q: Will the system be connected by CrossChex Standard or CrossChex Cloud?

A: Yes, you can manage the system using CrossChex Standard. But we're sorry that it doesn't support CrossChex Cloud for now.

- **No.3**

Q: How can I set the anti-passback system using this controller, SAC921?

A: Yes, it supports Anti-passback for one single door. You can check "Reader Setup" to select the devices for anti-passback.

- **No.4**

Q: What's the warranty policy of SAC921?

A: We offer a device warranty of a period of three (**3**) years from the date of shipment by Anviz ("**Warranty Period**"). For more details regarding the warranty policy, you can check the link below: https://support.anviz.com/hc/en-us/articles/41632270016281-Anviz-Global-General-Warranty-Policy