

SIP Intercom Basic Configuration Practice Guide

Dinstar Corporation



- This document is used to introduce the basic functions of SIP Intercom, application scenarios, basic configuration, basic maintenance.

Course Objective

Through this course
you will be able to



Understanding SIP Intercom
hardware and installation



Understanding the basic
configuration of SIP Intercom



Understanding the basic
maintenance of SIP Intercom

Contents

- 1 SIP Intercom hardware and installation
- 2 SIP Intercom Basic Configuration
- 3 SIP Intercom Basic Maintenance

Chapter One Course Introduce

01



1.1 Dinstar SIP Intercom List



1.2 Dinstar DPA Hardware Interface Description

1.1 Dinstar SIP Intercom List

Model	DP81	DP85	DP88	DP91	DP92	DP98	DPA	DP70
Picture								
Screen	×	×	2.3" Backlight	×	×	×	×	7-inch capacitive touch screen
IC/ID Card	×	√	√	×	Optional		×	×
Camera	×	200W pixel	200W pixel	×	×	200W pixel	External Connection	External Connection
SIP Account	2	2	2	2	2		2	1
Network	1*RJ45 10/100Mbps				1*RJ45 10/100Mbps		2*RJ45 10/100Mbps	1*RJ45 10/100 Mbps
PoE	√				√		√	√
ONVIF	√				√		√	√
4G	×	×	×	×	Optional		USB 4G Dongle	×

1.2 Dinstar SIP Intercom Hardware Interface Description



1. DPA SIP Paging Gateway(Front Panel)

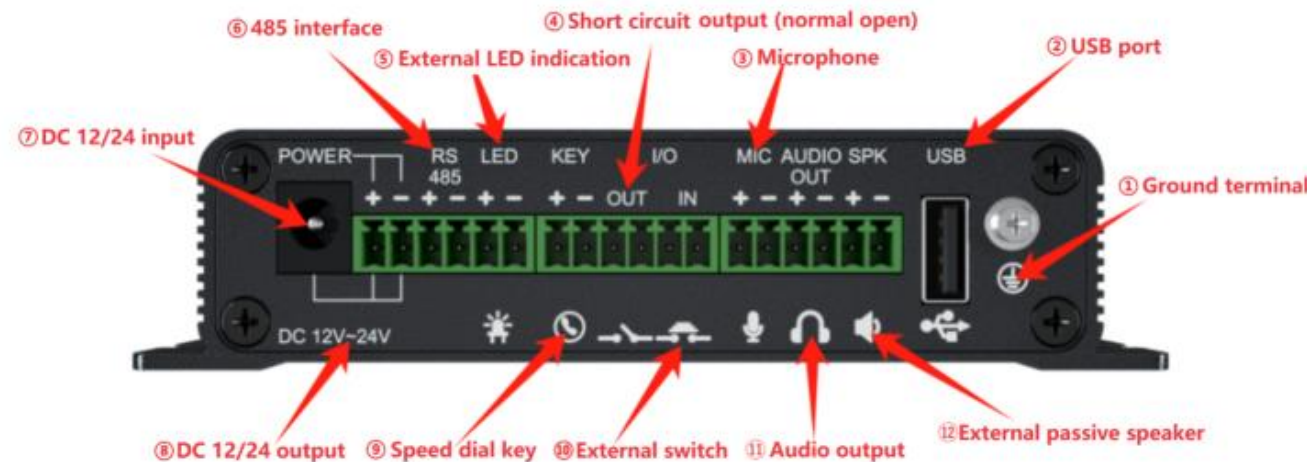


Number	Description
①	Ethernet interface: Standard RJ45 interface, 10/100M adaptive, it is recommended to use category five or super category five network cable
②	Camera network interface: external webcam can be connected to realize video call
③	Network status indication. No flash: no network connection. Slow flash: the network connection is normal. Fast flash: the SIP account has been registered successfully
④	External audio signal input, external background sound source can be connected
⑤	It can be connected to an external recorder to output the mixed signal of both sides of the intercom
⑥/⑧	Increase or decrease the volume. You can hear the change of ring tone in idle time. You can directly control the volume during a call
⑦	Long press to restore the default configuration of the device
⑨	Power indicator

1.2 Dinstar SIP Intercom Hardware Interface Description



2. DPA SIP Paging Gateway(Back Panel)

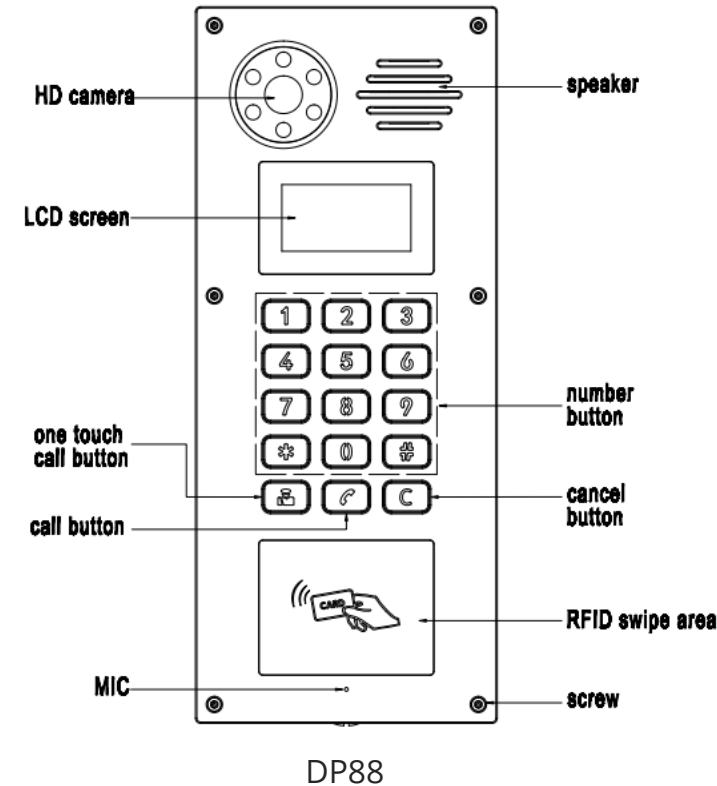
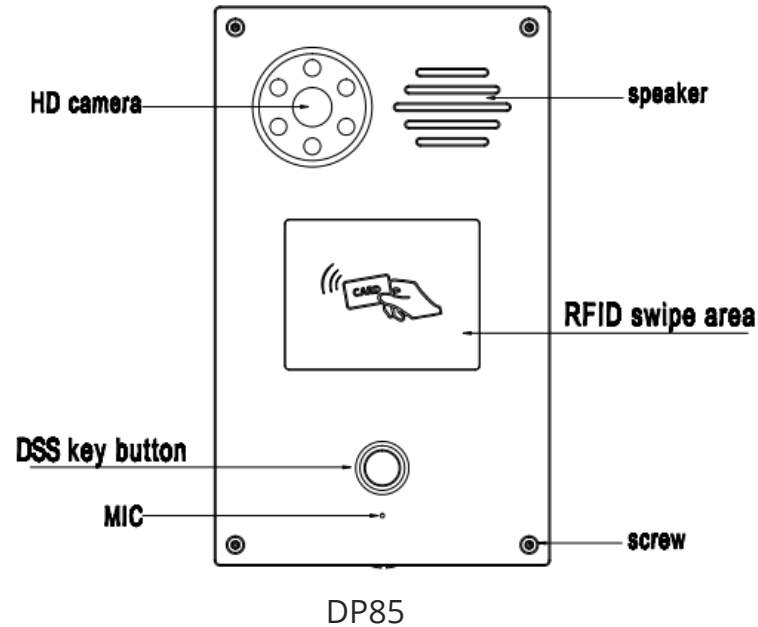
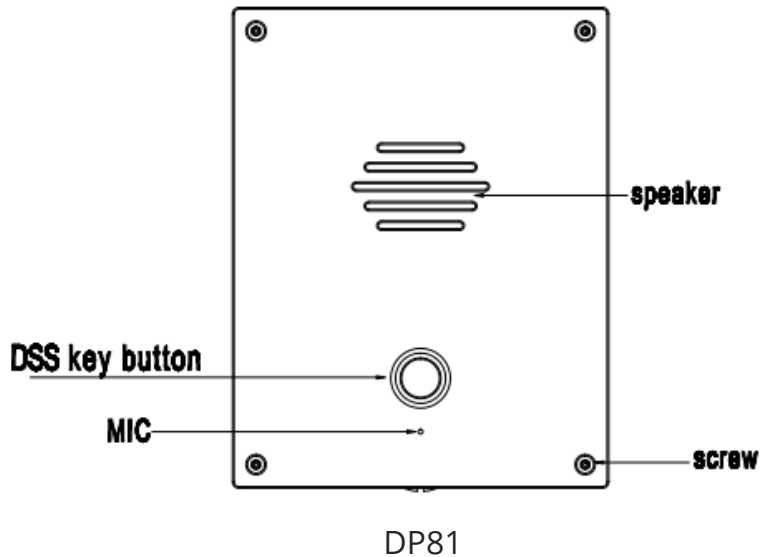


Number	Description
①	The grounding terminal shall be grounded in case of sound interference
②	USB port, which can be connected to USB flash disk, USB keyboard, 4G dongle, etc
③	Microphone input port
④	Short circuit switch output interface (normal open)
⑤	External LED indication interface
⑥	RS485 for PTZ/camera control
⑦	Power socket, DC12V-24V
⑧	DC12V/24V output interface
⑨	Speed dial key interface
⑩	The external switch can be used to directly control the short-circuit output interface or the input interface of other security equipment
⑪	Audio output port, can also be externally connected to the power amplifier
⑫	The external passive speaker interface can be externally connected to a passive speaker. Maximum output power 36W (corresponding to DC24V DC input)

1.2 Dinstar SIP Intercom Hardware Interface Description



3. DP8 Series Front Panel



DP81 Speed Dial Button

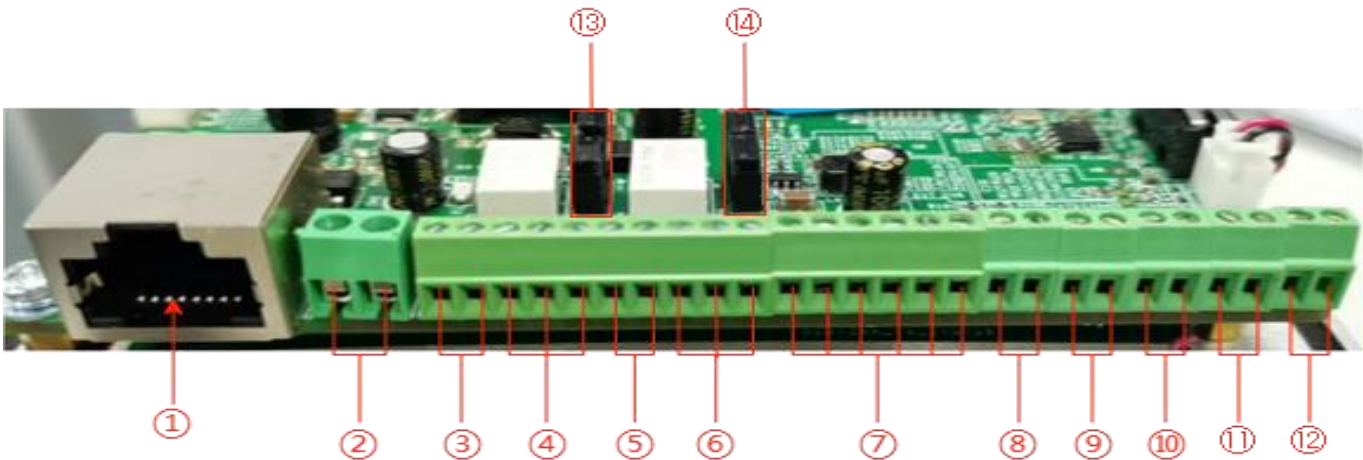
DP85 Speed Dial Button + Video + IC/ID Card Unlock

DP88 Multi-Button + Video + IC/ID Card Unlock + Local Password Unlock

1.2 Dinstar SIP Intercom Hardware Interface Description



4. DP8 Series Interface Description

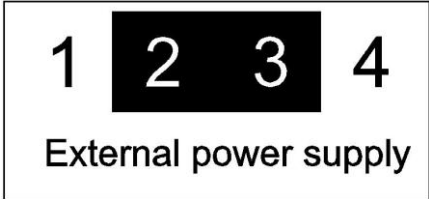
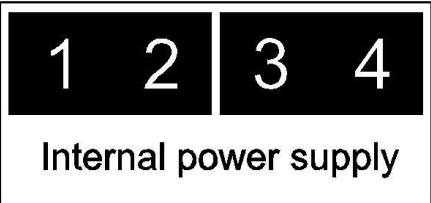
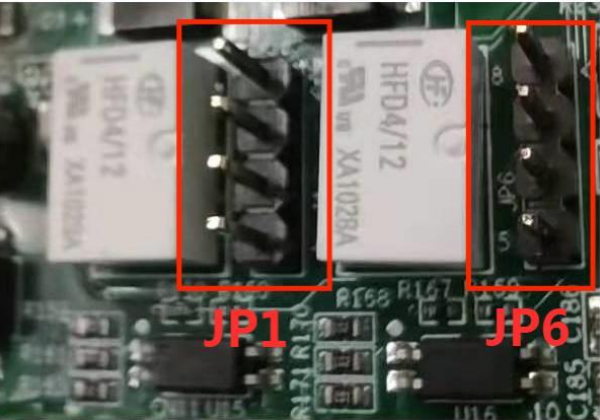


Number	Description
①	Ethernet interface: standard RJ45 interface, 10/100M adaptive, it is recommended to use five or five types of network cable
②	Power interface: 12V/1A input
③/⑤	Two sets of short-circuit input detection interfaces: for connecting switches, door magnets, vibration sensors and other input devices
④/⑥	Two sets of short-circuit output detection interfaces: for controlling the electric lock, alarm device, etc.
⑦	Wiegand interface
⑧/⑨	Two sets of door magnetic detection
⑩	Record output interface: to mix device voice and remote call voice, then release them together. One port is for record, another port is for GND
⑪	External active speaker interface: to realize audio power amplification. One is the audio signal line and the other is the bottom line. Note that the ground wire must be grounded, otherwise there will be noise
⑫	Audio Input: To connect an external audio signal
⑬	JP1 Jumper
⑭	JP2 Jumper

1.2 Dinstar SIP Intercom Hardware Interface Description



5. DP8 Series Interface Description



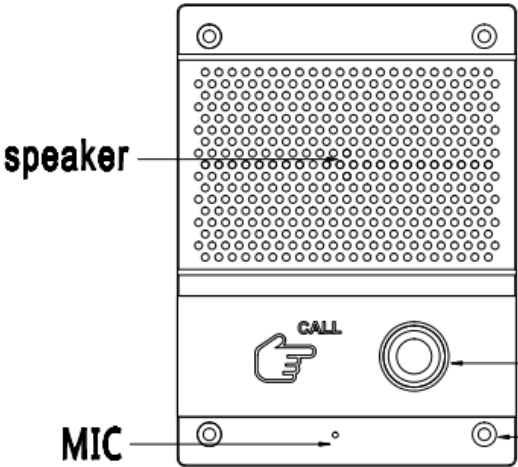
NO: Normal Open, idle status of the electric lock is opened
COM: COM1/COM2 interface
NC: Normal Closed, idle status of the electric lock is closed
Internal power supply: When the electric lock start-up current is less than 500mA/12V, the internal drive mode can be used, and the electric lock interface is a 12V DC output.

Power Supply Type		Electric Lock type		JP6 Jumper	Connections
Internal	External	Power off, door open	Power on, door open		
√		√			
√			√		
	√	√			
	√		√		

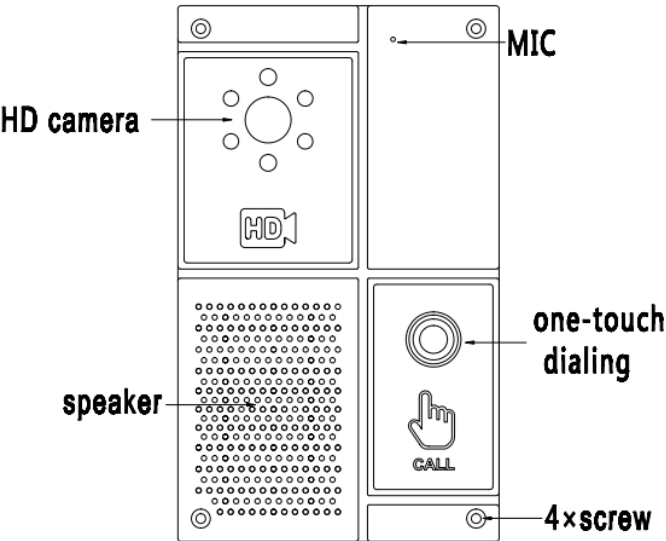
1.2 Dinstar SIP Intercom Hardware Interface Description



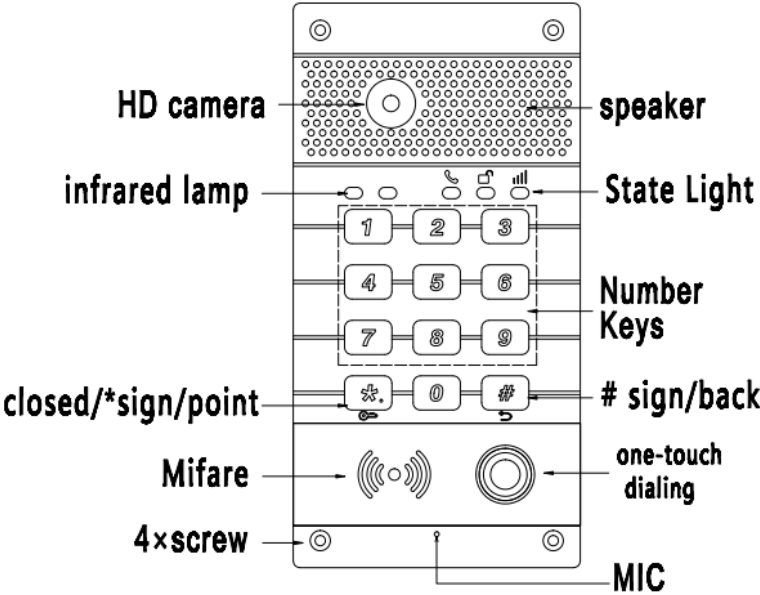
6. DP9 Series Front Panel



DP91



DP92V



DP98V

1.2 Dinstar SIP Intercom Hardware Interface Description



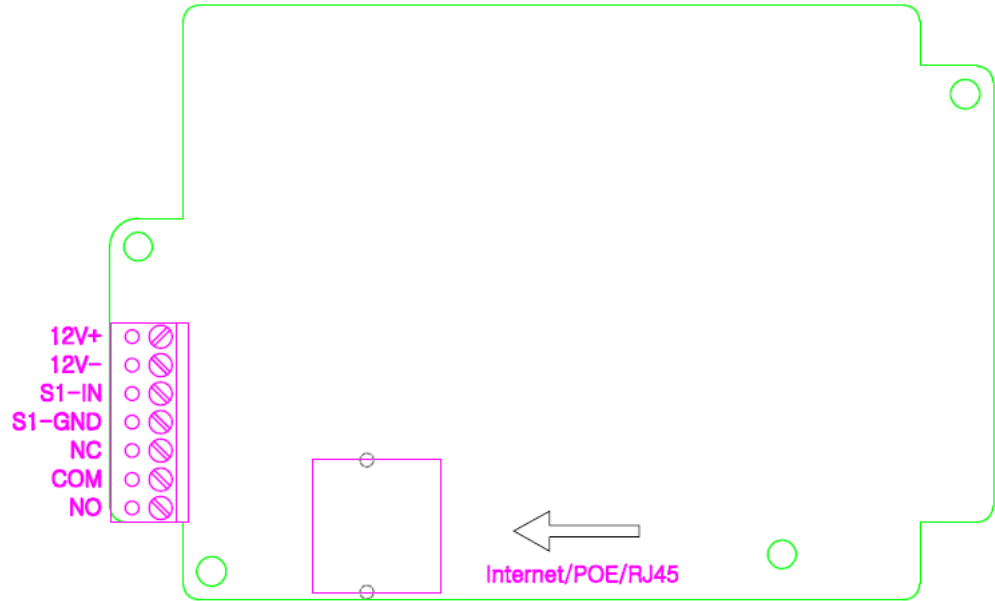
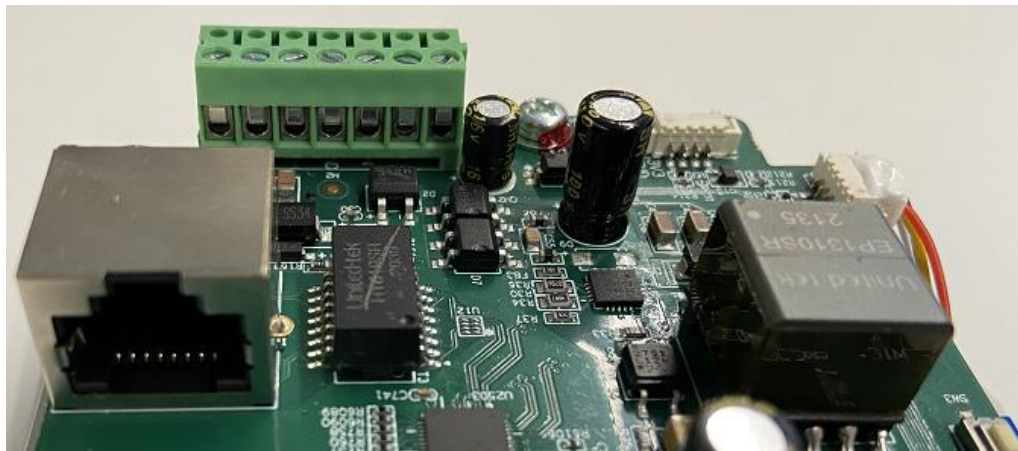
7. Differences between DP9 series

	Button	HD Camera	4G	Door Access
DP91-S	Single	×	×	DTMF tones
DP91-D	Double	×	×	DTMF tones
DP92-S	Single	×	×	DTMF tones
DP92-D	Double	×	×	DTMF tones
DP92-SG	Single	×	√	DTMF tones
DP92-DG	Double	×	√	DTMF tones
DP92V-S	Single	√	×	DTMF tones
DP92V-D	Double	√	×	DTMF tones
DP92V-SG	Single	√	√	DTMF tones
DP92V-DG	Double	√	√	DTMF tones
DP98-S	Single	×	×	DTMF tones
DP98-MS	Double	×	×	DTMF tones, RFID card
DP98V-S	Single	√	×	DTMF tones
DP98V-MS	Double	√	×	DTMF tones, RFID card

1.2 Dinstar SIP Intercom Hardware Interface Description



8. DP9 Series Interface Description



Name	Description
POE	Ethernet interface: standard RJ45 interface, 10/100M adaptive, it is recommended to use five or five types of network cable
12V+, 12V-	Power interface: 12V/1A input
S1-IN, S-GND	To connect indoor exit button or alarm input
NC, NO, COM	To connect door lock, alarm

1.2 Dinstar SIP Intercom Hardware Interface Description



9. D9 Series Interface Description

DP9 series only supports an external power supply to connect the electronic lock.
NO: Normal Open, idle status of the electric lock is opened
COM: COM1 interface
NC: Normal Closed, idle status of the electric lock is closed

External	Power off, door open	Power on, door open	Connections
√	√		
√		√	

Contents

- 1 SIP Intercom hardware and installation
- 2 SIP Intercom Basic Configuration
- 3 SIP Intercom Basic Maintenance

Chapter Two Course Introduce

02



2.1 Obtain the IP address of the access control device



2.2 Configure via the web interface

2.SIP Intercom Basic Configuration

2.1 Obtain the IP address of the access control device

1. **DP8x and DP9x:**After powering on, the DP8x and DP9x default to obtaining an IP address via DHCP. Press and hold the dial key on the sip intercom panel for 10 seconds, and the sip intercom device will announce the device's IP address via voice prompt.
2. **DP88:**After powering on, the DP88 defaults to obtaining an IP address via DHCP. Enter 963 on the device DTMF panel and press the dial key. The DP88 will then announce the device's IP address via voice prompt and display the IP address on the LCD screen.
3. **DPA:**After powering on, the DPA defaults to obtaining an IP address via DHCP. Press and hold the quick dial key on the DPA (you can use tweezers to short-circuit the dial interface) for 10 seconds, and the broadcast gateway will announce the device's IP address (a speaker must be connected).

Note:If DHCP IP address acquisition fails and the broadcast IP is 0.0.0.0, the network port has a default IP address of 192.168.11.1. You can try accessing this IP address.

2.SIP Intercom Basic Configuration

2.2 Configure via the web interface

Open the browser on the computer, enter the IP address of the sip intercom (e.g., http://192.168.11.110) in the address bar, enter “admin” in the username field of the login interface, enter “admin” in the password field, and click Login.

Door Phone

Username

Password

Language

English ▼

☐ Remember Username/Password

Login

2.SIP Intercom Basic Configuration

2.3 Setting SIP Calls——SIP Account configuration

Click **“Account → Basic”** to configure the basic information of the account.

Display Name: The display name shown in the “From” field when making outgoing calls;

Register Name: Provided by the SIP server/call platform (required);

Username: Provided by the SIP server/call platform (required);

Password: Provided by the SIP server/call platform (required);

Server IP: Provided by the SIP server/call platform (required);

Port: Provided by the SIP server/call platform (required).

The screenshot shows the DINSTAR web interface with the 'Account' tab selected. The left sidebar has 'Basic' selected. The main content area is titled 'SIP Account' and contains two sections: 'SIP Account' and 'SIP Server 1'.

SIP Account	
Status	Registered
Account	Account1: 6005
Active	Enabled
Display Name	6005
Register Name	6005
Username	6005
Password	*****

SIP Server 1	
Server IP	172.19.211.135
Registration Expires	1800
Port	5060
	(30~65535s)

2.SIP Intercom Basic Configuration

2.4 Setting SIP Calls——Time&Date configuration

Click “**Device** → **Time & Date**” page and set the correct time zone.

Make sure that the system time displayed in the upper right corner is the same as the local time.

The screenshot shows the DINSTAR web interface. At the top, there is a blue navigation bar with the DINSTAR logo and several tabs: Status, Account, Network, Door Phone (highlighted with a red box), PhoneBook, Maintenance, and Security. In the top right corner, the system time is displayed as 2025/07/14 09:58:53, with a warning message 'Default nassword. Please' above it. On the left side, there is a sidebar with a list of configuration options: Basic, Time&Date (highlighted with a red box), Call Feature, Voice, Ringtones, Action URL, Multicast, and Intercom. The main content area is titled 'Time&Date' and contains two radio buttons: 'Manual' and 'NTP' (selected). Below the radio buttons, there are input fields for Date (Year, Mon, Day) and Time (Hour, minutes, Seconds). Under the 'NTP' section, there is a 'Time Zone' dropdown menu set to '+8 China(Beijing)', and three input fields for 'Primary Server' (0.pool.ntp.org), 'Secondary Server' (1.pool.ntp.org), and 'Update Interval' (3600, with a note '>= 3600s').

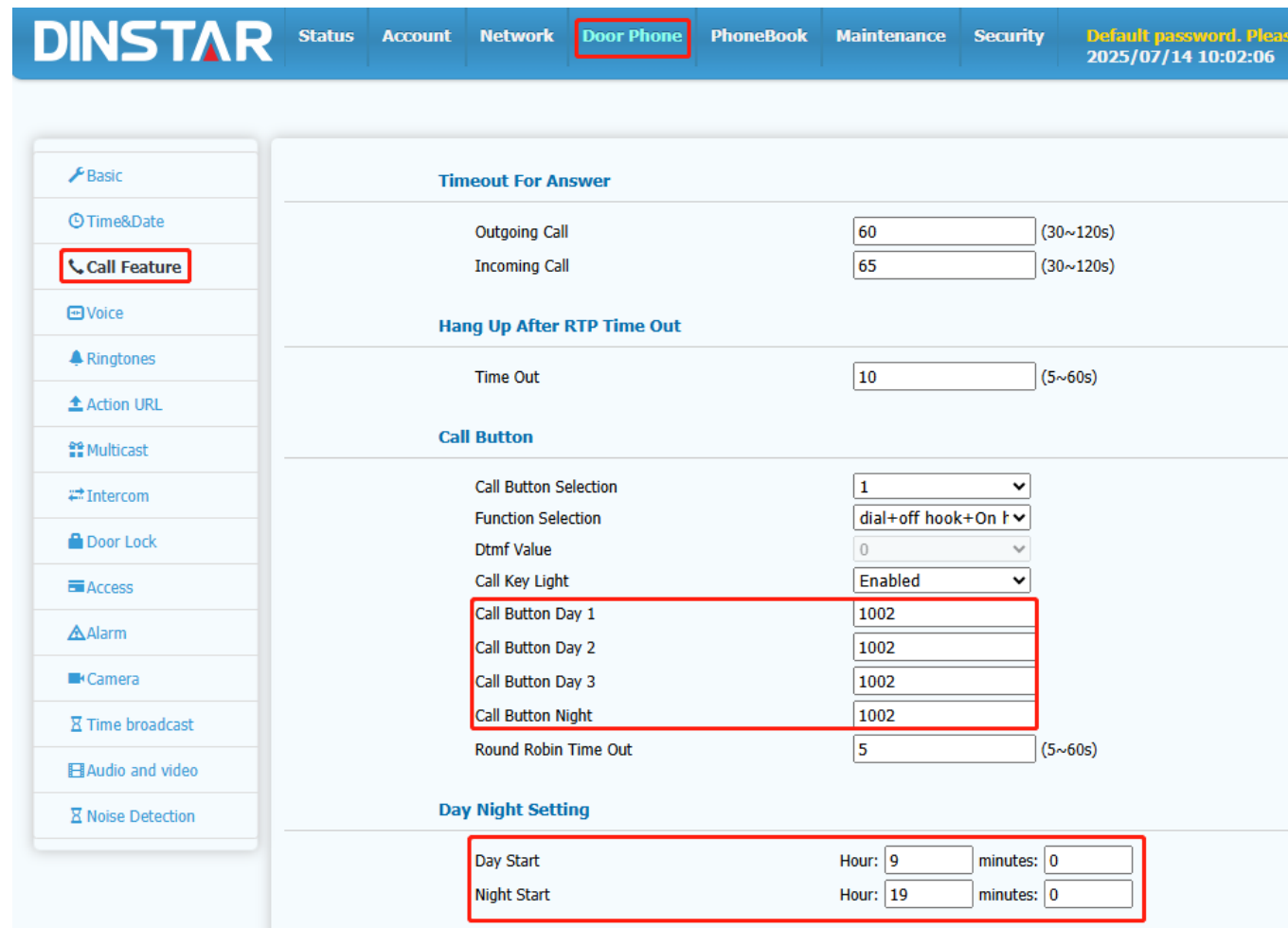
2.SIP Intercom Basic Configuration

2.5 Setting SIP Calls——Call Feature configuration

Click “**Device** → **Call Feature**” page.

1. Configure Day Night Setting (optional).
2. Configure daytime call numbers and nighttime call numbers.

Note: The configured numbers are the default numbers for speed dial keys. Daytime call numbers and nighttime call numbers are distinguished based on day and night times. If there is no distinction, you can configure them to be the same numbers.



DINSTAR Status Account Network **Door Phone** PhoneBook Maintenance Security Default password. Please change it! 2025/07/14 10:02:06

Basic Time&Date **Call Feature** Voice Ringtones Action URL Multicast Intercom Door Lock Access Alarm Camera Time broadcast Audio and video Noise Detection

Timeout For Answer

Outgoing Call	60	(30~120s)
Incoming Call	65	(30~120s)

Hang Up After RTP Time Out

Time Out	10	(5~60s)
----------	----	---------

Call Button

Call Button Selection	1	
Function Selection	dial+off hook+On t	
Dtmf Value	0	
Call Key Light	Enabled	
Call Button Day 1	1002	
Call Button Day 2	1002	
Call Button Day 3	1002	
Call Button Night	1002	
Round Robin Time Out	5	(5~60s)

Day Night Setting

Day Start	Hour: 9	minutes: 0
Night Start	Hour: 19	minutes: 0

2.SIP Intercom Basic Configuration

2.5 Setting SIP Calls——Call Feature configuration

Max Call Time		
Max Call Time	5	(1~30min, -1no hang up)
Local RTP		
Max RTP Port	12000	(1024~65535)
Min RTP Port	11800	(1024~65535)
Hang Up After Open Door		
Time Out	5	(0~15s, -1no hang up)
Multicast and SIP priority selection		
Multicast and SIP priority selection	Multicast	
Web Call		
Web Call		Auto Dial Out Hand Up
Others		
Auto Answer Delay	0	(0~5s)
Sound reminder time after hanging up	2	(0~30s)
Submit Cancel		

Click **"Device → Call Feature"** page:

1. Max Call Time(adjust as needed) :Maximum call duration
2. Auto-answer delay (adjust as needed) :Automatic answering delay time for SIP Intercom

Contents

- 1 SIP Intercom hardware and installation
- 2 SIP Intercom Basic Configuration
- 3 SIP Intercom Basic Maintenance

Chapter Three Course Introduce

03



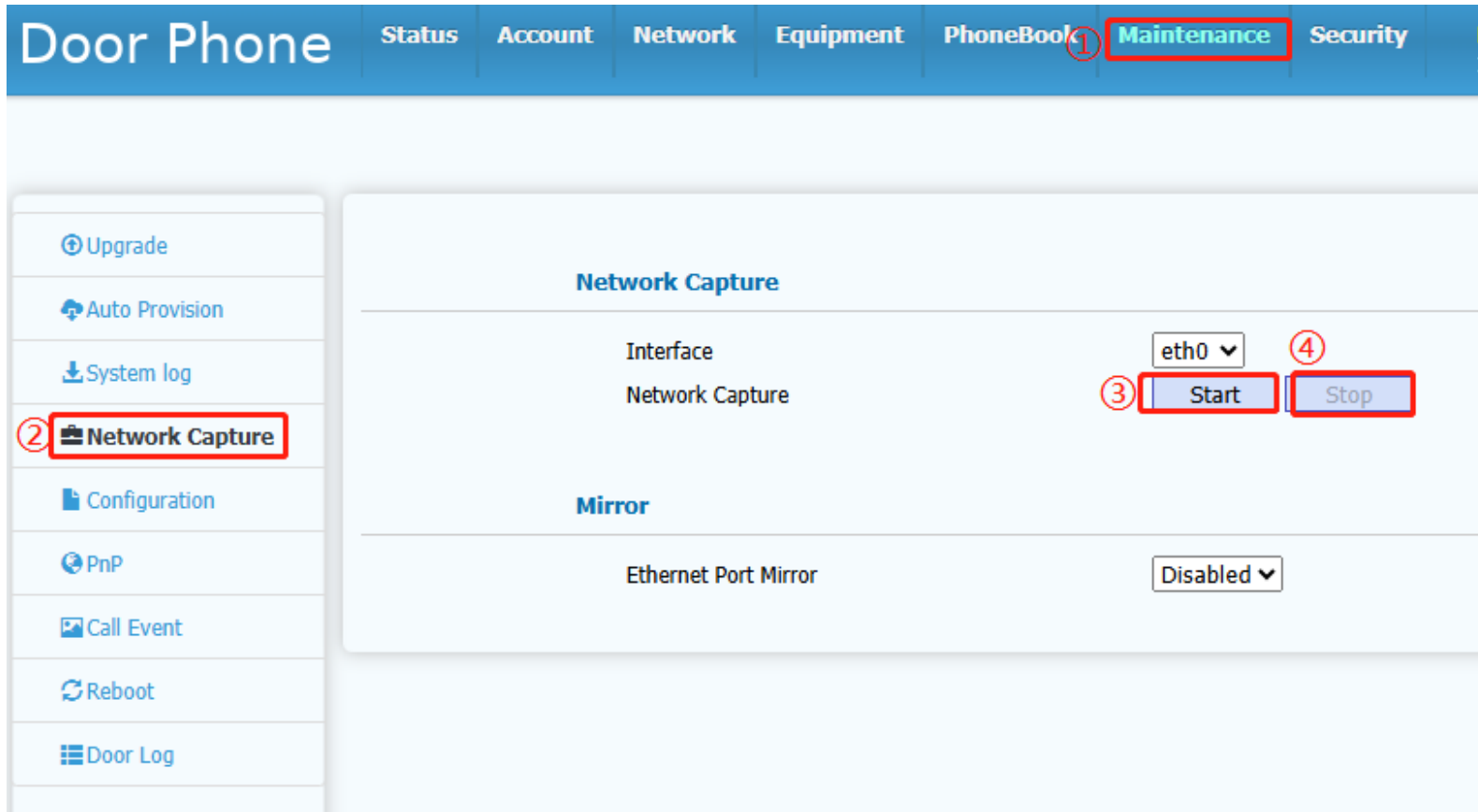
3.1 Getting network capture



3.2 Getting the log

3 SIP Intercom Basic Maintenance

3.1 Getting network capture



Log in to the SIP Intercom web interface, click “Maintenance --- Network Capture,” click “Start,” reproduce the issue, then click “Stop.” The packet capture is complete, and you can view the corresponding network packets in your browser's download section.

3 SIP Intercom Basic Maintenance

3.2 Getting the log

The screenshot displays the Dinstar SIP Intercom web interface. The top navigation bar includes tabs for Status, Account, Network, Equipment, PhoneBook, Maintenance (selected), and Security. The left sidebar contains links for Upgrade, Auto Provision, System log (highlighted with a red box and a circled '2'), Network Capture, Configuration, PnP, Call Event, Reboot, and Door Log. The main content area is titled 'System Log' and contains the following configuration options:

- Log Level: A dropdown menu set to '7' (circled '3').
- Export Log: A button highlighted with a red box and a circled '5'.
- Remote Syslog: A dropdown menu set to 'Disabled'.
- Remote Syslog Server: An empty text input field.
- Submit: A button highlighted with a red box and a circled '4'.
- Cancel: A button.

Log in to the SIP Intercom web interface, click “Maintenance > System Log,” set the log level to “7,” click “Submit,” and restart the device for the changes to take effect. After reproducing the issue, click “Export” to export the system log. You can view the downloaded log in your browser.



THANKS



sales@dinstar.com



www.dinstar.com



+86 755 6191 9966