Quick Installation Guide

☑ DAG1000-4S4O
☑ DAG2000-8S8O

Thanks for Choosing Dinstar's VoIP Gateway!

Please read this guide carefully before installing the gateway. If you need any technical support, please contact us.
Tel: +86 755 61919966
Email: support@dinstar.com
Website: www.dinstar.com

1 Product Model & Number of Ports

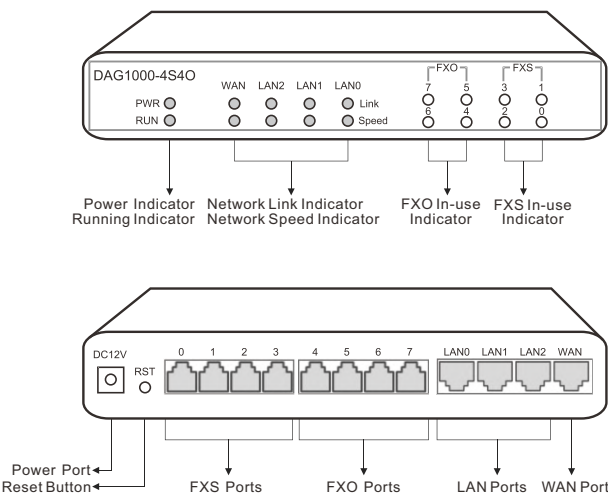| Port Type / Model	WAN	LAN	FXS	FXO
DAG1000-4S4O	1	3	4	4
DAG2000-8S8O	0	4	8	8

Please check the model of your gateway before installation,and then refer to corresponding installation instructions.
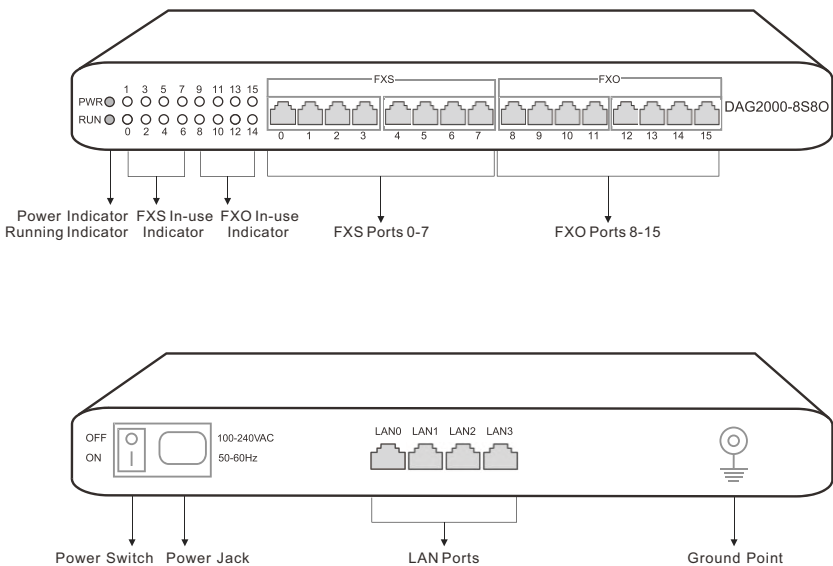
2 Description of Indicators

Indicator	Definition	Status	Description
PWR	Power Indicator	On	The gateway is powered on
		Off	The gateway has no power input or power supply is abnormal
RUN	Running Indicator	Slow Flashing	The gateway is running properly
		Fast Flashing	SIP account is registered successfully
		Off	The gateway is running improperly
FXS	Telephone In-use Indicator	On	FXS port is currently occupied by a call
		Off	FXS port is idle or faulty
FXO	FXO In-use Indicator	On	FXO Port is currently occupied
		Off	FXO Port is idle or faulty
WAN/LAN	Link (Green)	Flashing	The gateway is properly connected to network
		Off	The gateway is not connected to network or network connection is improper
	Speed	On	Work at 100Mbps
		Off	Work at 10Mbps

3 Indicators & Interfaces

▶ DAG1000-4S4O

DAG1000-4S4O

	WAN	LAN2	LAN1	LAN0	FXO		FXS	
PWR					7	5	3	1
RUN				Link	6	4	2	0
				Speed				

Power Indicator | Network Link Indicator | FXO In-use | FXS In-use
Running Indicator | Network Speed Indicator | Indicator | Indicator

DC12V   RST   0 1 2 3   4 5 6 7   LAN0 LAN1 LAN2 WAN

Power Port
Reset Button   FXS Ports   FXO Ports   LAN Ports WAN Port

▶ DAG2000-8S8O

	1 3 5 7 9 11 13 15	FXS	FXO	DAG2000-8S8O
PWR		0 1 2 3 4 5 6 7	8 9 10 11 12 13 14 15	
RUN	0 2 4 6 8 10 12 14			

Power Indicator FXS In-use FXO In-use
Running Indicator Indicator Indicator   FXS Ports 0-7   FXO Ports 8-15

OFF   100-240VAC   LAN0 LAN1 LAN2 LAN3
ON   50-60Hz

Power Switch Power Jack   LAN Ports   Ground Point

4 Installation Attentions

◆ Product model: please check the model of your gateway before installation;

◆ Anti-jamming: to reduce interference, it's highly recommended that telephone lines and PSTN lines connected to the gateway should be placed away from power cables;

◆ Power supply: DAG1000-4S4O is equipped with 12VDC power adapter, while DAG2000-8S8O accepts AC input voltage of 100-240V. Please ensure safe and stable power supply;

◆ Network bandwidth: please ensure there is enough network bandwidth so as to guarantee stabilized running of the gateway;

◆ Ventilation: to avoid overheating, please do not pile up the gateway with other devices and make sure the gateway has good ventilation around;

◆ Temperature and humidity: to avoid any accident that might cause malfunction, it's advised to install the gateway in an equipment room where temperature and humidity are appropriate;

◆ Mechanical load: It's highly advised to horizontally place the gateway on a flat surface or a cabinet.

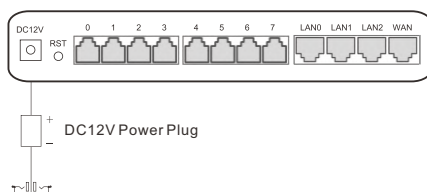# *5* Installation Instructions

▶ Connection Diagram for DAG1000-4S4O

● Connect gateway with network
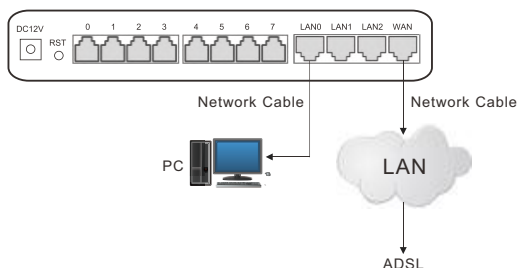
Network Cable   Network Cable

PC   LAN

ADSL

● Connect FXS port with Telephone line
  Connect FXO port with PSTN line

RJ11 Telephone Line   PSTN Line

Telephone   PSTN

● Connect gateway with power input

DC12V Power Plug
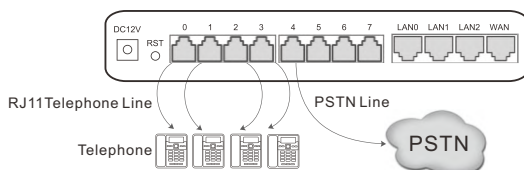
▶ Connection Diagram for DAG2000-8S8O
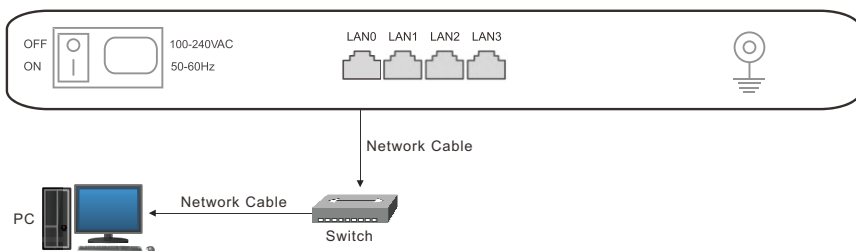
● Connect gateway with network

| OFF | 100-240VAC | LAN0 LAN1 LAN2 LAN3 |
| ON | 50-60Hz | |

Network Cable

Network Cable

PC

Switch

● Connect FXS port with Telephone line
Connect FXO port with PSTN line

FXS   FXO

PWR   1 3 5 7 9 11 13 15
RUN   0 2 4 6 8 10 12 14

0 1 2 3   4 5 6 7   8 9 10 11   12 13 14 15   DAG2000-8S8O

RJ11 Telephone Line

PSTN Line

Telephone

PSTN

● Connect gateway with power input

| OFF | 100-240VAC | LAN0 LAN1 LAN2 LAN3 |
| ON | 50-60Hz | |

AC 100~240V

Grounding Cable
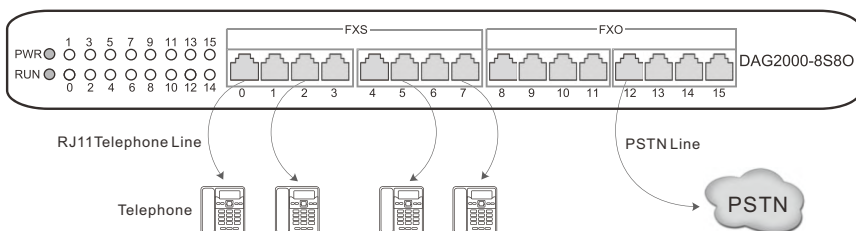
Ground Point
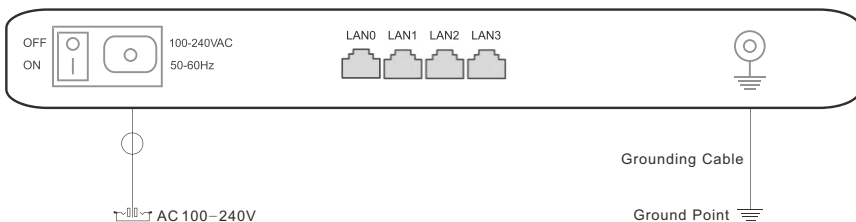
6 Modify PC's IP Address

To log in the Web Management System of the gateway, you need to modify the IP address of PC first to make it at the same network segment with the gateway.
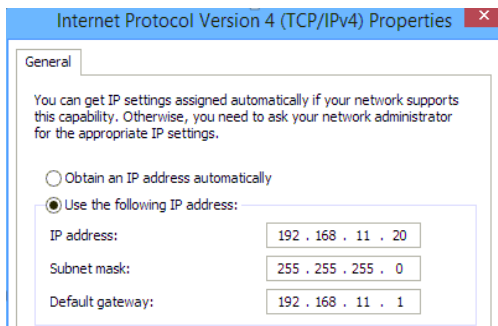
❶ On the PC, click '**Network (or Ethernet) → Properties**'.
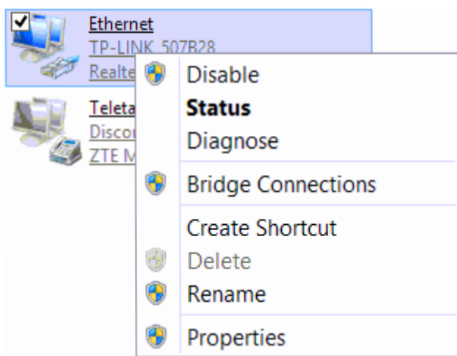
❷ Double-click '**Internet Protocol Version 4 (TCP/IPv4)**'.
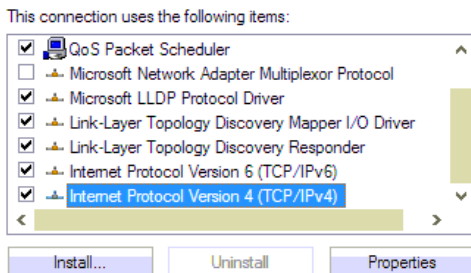
❸ Select '**Use the following IP address**', and then enter an available IP address '192.168.11.XXX' which is at the same network segment with '192.168.11.1'.

7   Log in Web Management System

Open a web browser and enter the gateway's IP address (default IP is 192.168.11.1). Then input username and password in the displayed login GUI. Both the default username and password are admin.

8   Modify Gateway's IP Address

If you want to modify the IP address of the DAG gateway, please click '**Network →** **Local Network**' in the navigation tree on the left of the Web Management System, and then input new IP address and DNS server address on the displayed interface.

9   Basic Configurations of FXS

(1) Configure SIP Server

Log in the Web Management System of the gateway, and then click **SIP Server** in the navigation tree and then enter the address of the SIP server which is to be registered. Click **Save** in the last.

SIP Server	
Primary SIP Server	
Primary SIP Server Address	172.16.95.110
Primary SIP Server Port (Default: 5060)	5060
Registration Expires (Default: 1800)	1800 s
Heartbeat	☐ Enable

(2) Configure SIP Account Information

Click **Port** in the navigation tree on the left, and then click **Add**. Input the SIP account and authentication password assigned by the SIP server.

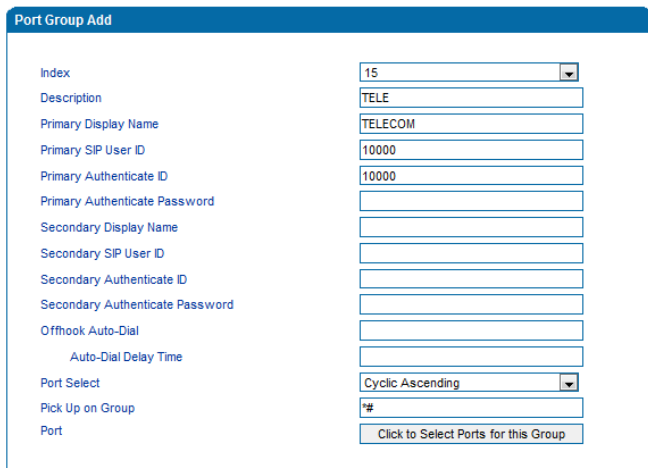| Port Modify	
Port	1
Disable Port	☐
Registration	☑ Enable
Primary Display Name	Bob
Primary SIP User ID	10000
Primary Authenticate ID	10000
Primary Authenticate Password	
Secondary Display Name	
Secondary SIP User ID	
Secondary Authenticate ID	
Secondary Authenticate Password	

Click **Save** and then restart the gateway for the new configurations to take effect.

10 Basic Configurations of FXO

(1) Create Port Group

You are advised to divide PSTN lines into several groups and then distribute them to different port groups. Generally, PSTN lines belonging to a same telecom operator are distributed to a same port group.

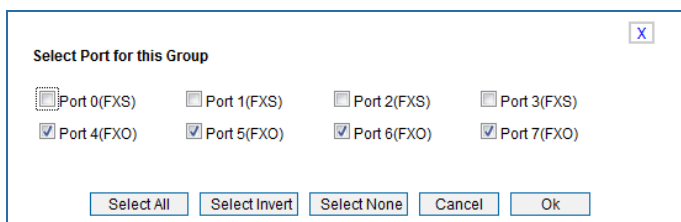Click Call&Routing →Port Group, and then click **Add** on the displayed interface.

Port Group Add	
Index	15
Description	TELE
Primary Display Name	TELECOM
Primary SIP User ID	10000
Primary Authenticate ID	10000
Primary Authenticate Password	
Secondary Display Name	
Secondary SIP User ID	
Secondary Authenticate ID	
Secondary Authenticate Password	
Offhook Auto-Dial	
Auto-Dial Delay Time	
Port Select	Cyclic Ascending
Pick Up on Group	*#
Port	Click to Select Ports for this Group

When calls come from PSTN to the gateway, the offhook auto-dial number is generally regarded as the DID (Direct-inward-dial) number or destination number of the SIP server.

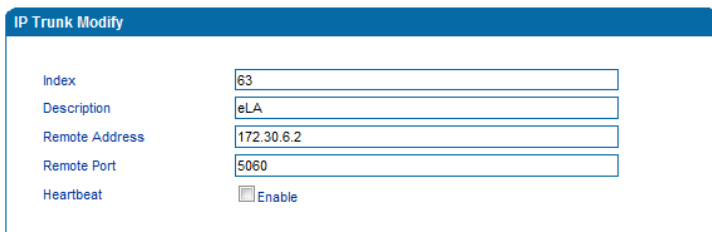Click **Click to select to select ports for this group**, and the following interface will be displayed.

Select Port for this Group   X

☐ Port 0(FXS)   ☐ Port 1(FXS)   ☐ Port 2(FXS)   ☐ Port 3(FXS)
☑ Port 4(FXO)   ☑ Port 5(FXO)   ☑ Port 6(FXO)   ☑ Port 7(FXO)

Select All   Select Invert   Select None   Cancel   Ok

(2) Create IP Trunk

On the Call & Routing→IP Trunk interface, click **Add** to create an IP trunk which connects to a peer SIP server.

IP Trunk Modify	
Index	63
Description	eLA
Remote Address	172.30.6.2
Remote Port	5060
Heartbeat	☐ Enable

(3) Create Outbound Route

On the Call & Routing→<IP→Tel Routing> interface，click **Add** to create an outbound route for the IP trunk.

As shown in the following figure, Caller/Callee Prefix is set as 'any' and calls from IP trunk 63<eLA> are routed to port group 15<TELE>.

(4) Create Inbound Route

On the Call & Routing→<Tel→IP/Tel Routing> interface，click **Add** to create an inbound route for the IP trunk. As shown in the following figure, Caller Prefix is set as 'any' and calls from port group 15<TELE> are routed to IP trunk 63<eLA>.

11 Configure FXO Parameters

On the Advanced →FXS/FXO interface,configure the gateway to detect CID after ring or before ring,and enable 'Send Original CID when call from PSTN'.Format of "from" field is set as 'CID/CID' when CID is available,while format of "from" field is set as 'Display/User ID' when CID is unavailable.

12 Basic Operations

◆ Dial *158# to query the IP address of LAN port of the gateway;

◆ Dial *159# to query the IP address of WAN port of the gateway;

◆ Dial *114# to query the telephone number of a FXS port;

◆ Dial *165*000000# to restore default IP address, username and password;

◆ Restore factory default settings:
    (1) dial *166*000000#;
    (2) press the **RST** button for 7 seconds; then restart by manual;
    (3) Log in the gateway and then click '**Tools → Factory Reset**',then click **Apply** and restart the gateway.

◆ Restart the gateway:
    (1) Dial *111# to restart the gateway.
    (2) Log in Web Management System, click '**Tools → Restart**' in the navigation tree on the left, and then click **Restart** on the displayed interface.

13 More Details

This document only provides instructions for quick installation and basic configuration, For detailed configuration and parameter explanation, please make reference to user manual or ask for online technical support.

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