XORCOM

Quick Installation Guide

- **GW0048S-21** - 48 FXS HD Gateway, RJ21, 50 PIN
- **GW0072S-21** - 72 FXS HD Gateway, RJ21, 50 PIN
- **GW0096S-21** - 96 FXS HD Gateway, RJ21, 50 PIN
- **GW0048S-45** - 48 FXS HD Gateway, RJ45
- **GW0072S-45** - 72 FXS HD Gateway, RJ45
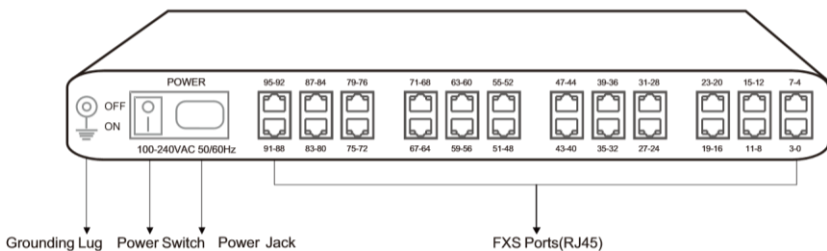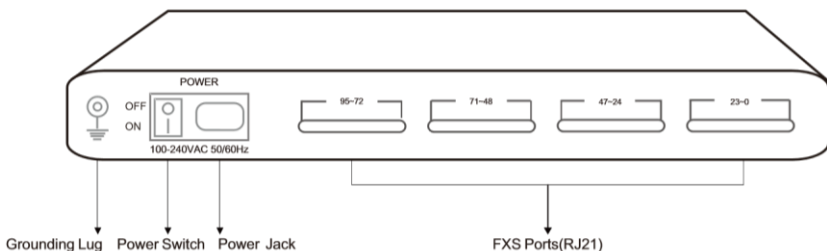- **GW0096S-45** - 96 FXS HD Gateway, RJ45

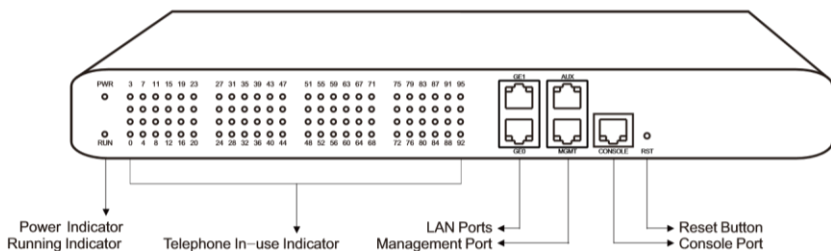## 1 Product Model & Number of Ports

Model	Networks Ports	RJ21	RJ45
GW0048S-21	3	2	-
GW0072S-21	3	3	-
GW0096S-21	3	4	-
GW0048S-45	3	-	12
GW0072S-45	3	-	18
GW0096S-45	3	-	24

2 Description of Indicators

Indicator	Definition	Status	Description
PWR	Power Indicator	On	The gateway is powered on
		Off	The gateway is powered off or there is no power supply
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
MGMT	Network Link Indicator	Green Flashing	The gateway is properly connected to network
		Off	The gateway is not connected to network or network connection is improper way.
	Network Speed Indicator	On	Work at 100Mbps
		Off	Work at 10Mbps
GE0/ GE1	Network Link Indicator	Green Flashing	The gateway is properly connected to network
		Off	The gateway is not connected to network or network connection is improper way.
	Network Speed Indicator	On	Work at 1000Mbps
		Off	Work at 10Mbps

3 Indicators & Interfaces

Power Indicator
Running Indicator
Telephone In-use Indicator
LAN Ports
Management Port
Reset Button
Console Port

POWER
OFF
ON
100-240VAC 50/60Hz
95-72
71-48
47-24
23-0

Grounding Lug   Power Switch   Power Jack   FXS Ports(RJ21)

POWER
OFF
ON
100-240VAC 50/60Hz

| 95-92 | 87-84 | 79-76 | 71-68 | 63-60 | 55-52 | 47-44 | 39-36 | 31-28 | 23-20 | 15-12 | 7-4 |
| 91-88 | 83-80 | 75-72 | 67-64 | 59-56 | 51-48 | 43-40 | 35-32 | 27-24 | 19-16 | 11-8 | 3-0 |

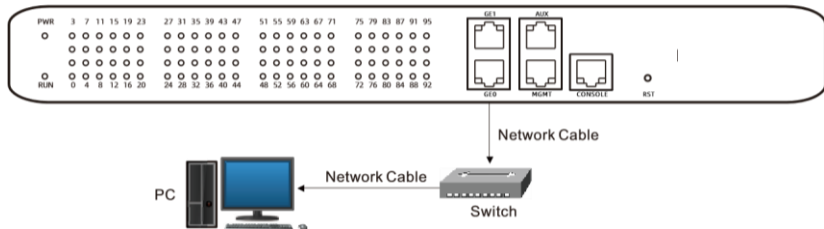Grounding Lug   Power Switch   Power Jack   FXS Ports(RJ45)

Note: Xorcom HD VoIP Gateways have a similar physical appearance except for the different number of ports.
The AUX port on the front panel is a reserved interface.
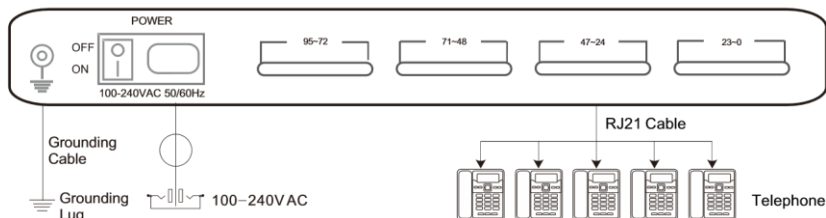
4 Installation Notes

- When installing the device, please confirm the type of telephone interface of the device: The telephone interface type of the Xorcom HD VoIP Gateway is RJ21 or RJ45;
- Please go to RJ45 & RJ21 Wire Sequence of this guideline to get more information about wire sequence.
- Anti-jamming: to reduce the interference with telephone calls, it's highly recommended that telephone lines connected to the gateway should be placed away from power cables.
- Power supply: the power adapter of the gateway accepts 100-240V AC power supply. Please ensure safe and stable power supply (Xorcom HD VoIP Gateway supports a dual 220v power supply or dual 48v power supply).
- Network bandwidth: please ensure there is enough network bandwidth so as to guarantee stabilized running of the gateway.
- 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.
- Ventilation: to avoid overheating, please do not pile up the gateway with other devices and make sure the gateway has good ventilation around.
- Mechanical load: please make sure the gateway is placed steadily to avoid damage. It's highly advised to horizontally place the gateway on a flat surface or a cabinet.

5 Installation Instructions

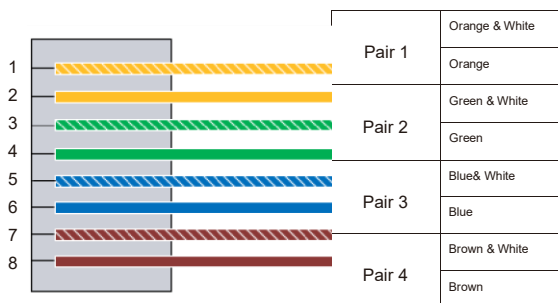- Connect gateway with network via a switch

- Connect FXS ports with analog phones, connect gateway with power input and grounding lug
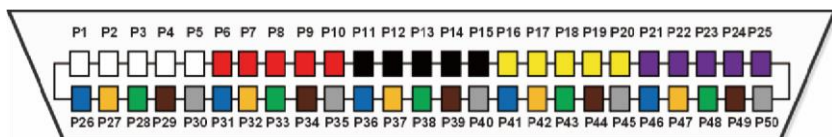

6 RJ45 & RJ21 Wire Sequence

- RJ45 Wire Sequence

Xorcom HD VoIP Gateways support RJ45 Interfaces for FXS connections. One RJ45 cable can be split into four pairs of RJ11 interfaces. The outlook wire sequence of RJ45 cable is shown as follows:

1	Pair 1	Orange & White
2		Orange
3	Pair 2	Green & White
4		Green
5	Pair 3	Blue& White
6		Blue
7	Pair 4	Brown & White
8		Brown

- RJ21 Wire Sequence

Xorcom HD VoIP Gateways support RJ21 Interfaces for FXS connections. One RJ21 cable has 25 pairs of wires, but the 25 pair of wires never used. It means that RJ21 interface only support 24 pairs of RJ11 interfaces.
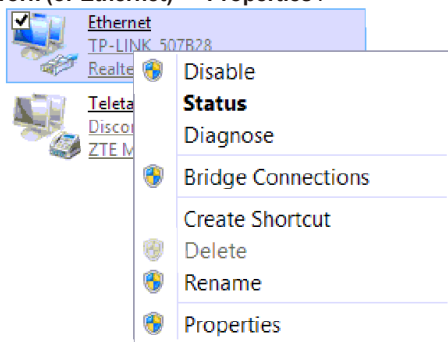
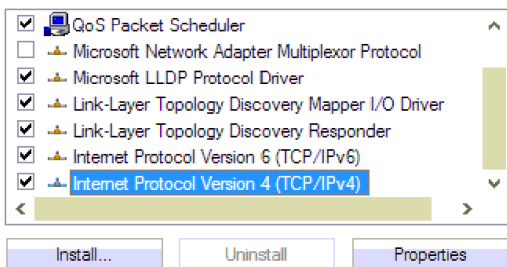|										
Call No.	0		1		2		3		4	
Colour	White	Blue	White	Orange	White	Green	White	Brown	White	Slate
PIN No.	P1	P26	P2	P27	P3	P28	P4	P29	P5	P30
Call No.	5		6		7		8		9	
Colour	Red	Blue	Red	Orange	Red	Green	Red	Brown	Red	Slate
PIN No.	P6	P31	P7	P32	P8	P33	P9	P34	P10	P35
Call No.	10		1		12		13		14	
Colour	Black	Blue	Black	Orange	Black	Green	Black	Brown	Black	Slate
PIN No.	P11	P36	P12	P37	P13	P38	P14	P39	P15	P40
Call No.	15		16		17		18		19	
Colour	Yellow	Blue	Yellow	Orange	Yellow	Green	Yellow	Brown	Yellow	Slate
PIN No.	P16	P41	P17	P42	P18	P43	P19	P44	P20	P45
Call No.	20		1		22		23		24	
Colour	Violet	Blue	Violet	Orange	Violet	Green	Violet	Brown	Violet	Slate
PIN No.	P21	P46	P22	P47	P23	P48	P24	P49	P25	P50

7   Modify PC's IP Address

To log in the Web Management System of the gateway, firstly, you need to modify the IP address of PC which is used to access the gateway and to make it at the same network segment with the gateway.

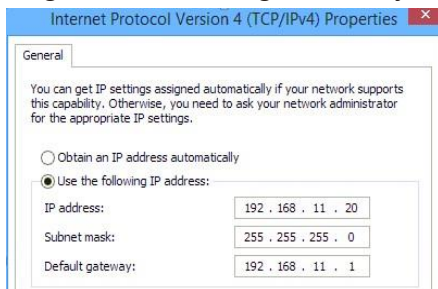1. On the PC, click '**Network (or Ethernet) → Properties**'.

2. Double-click '**Internet Protocol Version 4 (TCP/IPv4)**'.

This connection uses the following items:

- ☑ 🖳 QoS Packet Scheduler
- ☐ ⅃ Microsoft Network Adapter Multiplexor Protocol
- ☑ ⅃ Microsoft LLDP Protocol Driver
- ☑ ⅃ Link-Layer Topology Discovery Mapper I/O Driver
- ☑ ⅃ Link-Layer Topology Discovery Responder
- ☑ ⅃ Internet Protocol Version 6 (TCP/IPv6)
- ☑ ⅃ Internet Protocol Version 4 (TCP/IPv4)

| Install... | Uninstall | Properties |

3. 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'.

8 Log in Web Management System

Internet Protocol Version 4 (TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically
● Use the following IP address:

IP address: 192 . 168 . 11 . 20
Subnet mask: 255 . 255 . 255 . 0
Default gateway: 192 . 168 . 11 . 1

Enter the gateway's IP address in the browser (The default IP is 192.168.11.1).
Enter the administrator's username and password to access the Web GUI. (By default the admin password is **admin**).

9 Modify Gateway's IP Address

If you want to modify the IP address of the 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.

10 Configure Gateway

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 Add

Port	0
Disable Port	☐
Registration	☑ Enable
IP Profile	0 <default>
Tel Profile	0 <default>
Display Name	Amy
SIP User ID	201
Authenticate ID	201
Authenticate Password	••••••••

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

11 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 manualy;
(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.

12 More Details

This document only provides instructions for quick installation and basic configuration, for detailed configuration and parameter explanation, please refer to user manual or ask for online technical support at https://www.xorcom.com