

Installation Guide

Yeastar P-Series Appliance Edition



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About this Guide

This guide describes hardware ports and indicators on Yeastar P-Series PBX System, gives instructions on how to install the PBX and telephony modules, and quickly log in to the PBX web portal.

Audience

This guide is intended for the person who is responsible for installing Yeastar P-Series PBX System, and for the administrator who accesses Yeastar P-Series PBX System for the first time.

Product covered

- Yeastar P520
- Yeastar P550
- Yeastar P560
- Yeastar P570

Reliability metric

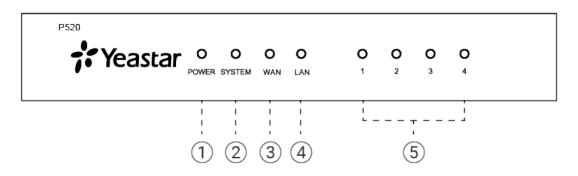
The Mean Time Between Failure (MTBF) for different product models is shown below:

- **P550**: MTBF ≥ 655.3K hrs. MIL-HDBK-217F (25°C)
- **P560 & P570**: MTBF ≥ 563K hrs. MIL-HDBK-217F (25°C)

Hardware Overview

Yeastar P520 Overview

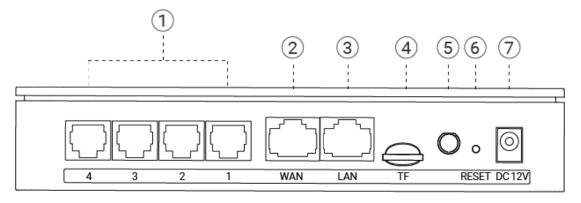
Front panel



No.	Indicator	Description
1)	Power Indicator	Indicate the power status.
2	System Indicator	 Indicate the system status. Blinking: The system is working properly. Static/Off: The system goes wrong.
3	WAN Indicator	Indicate the WAN connection status.
4	LAN Indicator	Indicate the LAN connection status.
(S)	1-4 LED (RJ11 port status)	Indicate the ports' status. • FXS: • Green: static: The analog phone or fax machine is idle. • Green: blinking: The analog phone or fax machine is busy. • GSM/3G/4G LTE: • Red: static: The GSM/3G/4G LTE trunk is idle. • Red: blinking slowly: No SIM card. • Red: blinking rapidly: The GSM/3G/4G LTE trunk is in use. • BRI: • Orange: static: The BRI line is connected or in use.

No.	Indicator	Description
		 Orange: blinking: The BRI line is
		disconnected.
		• FXO:
		 Red: static: The PSTN line is idle.
		 Red: blinking slowly: No PSTN line is
		connected to the FXO port.
		 Red: blinking rapidly: The PSTN line is busy.

Rear panel



NO.	Button or Interface	Description
1)	1-4 port (RJ11 ports)	 FXS port (green light): For the connection of analog phones or fax machines. BRI port (orange light): For the connection of ISDN BRI lines. FXO port (red light): For the connection of PSTN lines or FXS ports of traditional PBX.
2	WAN Port	For connection to Wide Area Network (WAN).
3	LAN Port	For connection to Local Area Network (LAN).
4	TF Card Slot	Insert a TF card into the TF Card Slot.
(5)	Antenna Socket	Rotate the antenna into the Antenna Socket.
6	Reset Button	Press the button and hold for 10 seconds to restore to factory defaults.
7	Power Interface: DC 12V	Connect the supplied power supply to the port.

Yeastar P550 Overview

Front panel

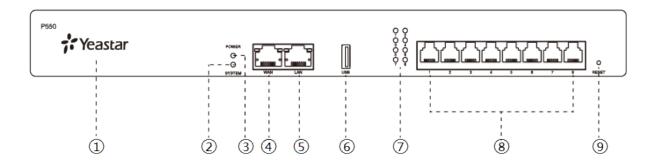


Table 1.

i abie i.		
No.	Indicator, Button or Interface	Description
1	NFC Tag	Tap NFC-capable mobile phone's back against Yeastar logo to quickly configure network settings.
2	System Indicator	 Indicate the system status. Blinking: The system is working properly. Static/Off: The system goes wrong.
3	Power Indicator	Indicate the power status.
4	WAN Port	For connection to Wide Area Network (WAN).
(5)	LAN Port	For connection to Local Area Network (LAN).
6	USB Slot	Insert a USB flash drive to store voicemails, logs, or recording files.
7	1-8 LED (RJ11 port status)	Prescription FXS: Green: static: The analog phone or fax machine is idle. Green: blinking: The analog phone or fax machine is busy. GSM/3G/4G LTE: Red: static: The GSM/3G/4G LTE trunk is idle. Red: blinking slowly: No SIM card. Red: blinking rapidly: The GSM/3G/4G LTE trunk is in use.

Table 1. (continued)

No.	Indicator, Button or Interface	Description
		Orange: static: The BRI line is connected or in use. Orange: blinking: The BRI line is disconnected. FXO: Red: static: The PSTN line is idle. Red: blinking slowly: No PSTN line is connected to the FXO port. Red: blinking rapidly: The PSTN line is busy.
(8)	1-8 port (RJ11 ports)	 FXS port (green light): For the connection of analog phones or fax machines. BRI port (orange light): For the connection of ISDN BRI lines. FXO port (red light): For the connection of PSTN lines or FXS ports of traditional PBX.
9	Reset button	Press the button and hold for 10 seconds to restore to factory defaults.

Rear panel

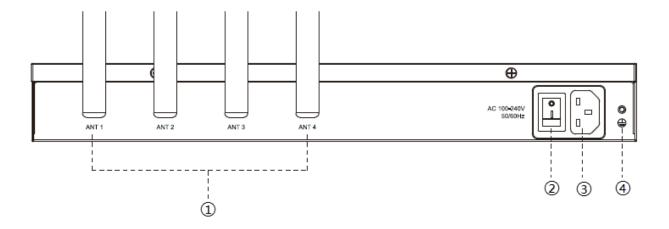


Table 2.

No.	Button or Interface	Description
1	Antenna Socket	Rotate the antenna into the Antenna Socket.

Table 2. (continued)

No.	Button or Interface	Description
2	Power Switch	Press this button to switch on/off the device.
3	Power Inlet	Connect the supplied power supply to the port.
4	Protective Earth	Connect to the ground to reduce the risk of electrocution to the user or protect the PBX from bad effects of external noise in case of a lightning strike.

Yeastar P560 Overview

Front panel

Yeastar P560 supports 1 expansion board. You can install either EX08 board or EX30 board according to your needs.

Figure 1.Yeastar P560 front panel with an EX08 expansion board

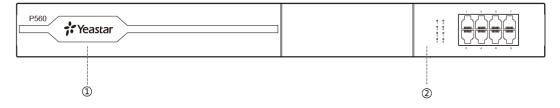


Figure 2.Yeastar P560 front panel with an EX30 expansion board

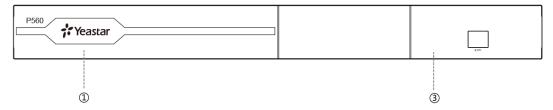


Table 3.

No.	Interface or Expansion Board	Description
1	NFC tag	Tap NFC-capable mobile phone's back against Yeastar logo to quickly configure network settings.
2	EX08 Expansion Board	Up to 4 modules and 8 RJ11 ports are supported on the expansion board.

Table 3. (continued)

No.	Interface or Expansion Board	Description
		The 8 RJ11 ports can be used to connect to different objects:
		 FXS port (green light): For the connection of analog phones or fax machines.
		 BRI port (orange light): For the connection of BRI lines. FXO port(red light): For the connection of PSTN lines or
		FXS ports of traditional PBX.
3	EX30 Expansion Board	Used to connect an E1/T1/J1 line.

Rear panel

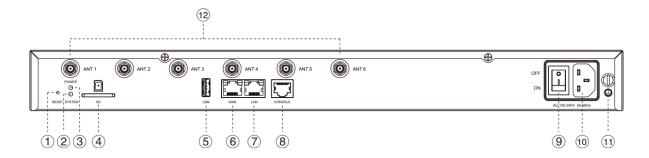


Table 4.

No.	Indicator, Button, or Interface	Description
1	Reset button	Press the button and hold for 10 seconds to restore to factory defaults.
2	System Indicator	 Indicate the system status. Blinking: The system is working properly. Static/Off: The system goes wrong.
3	Power Indicator	Indicate the power status.
4	SD Slot	Insert an SD card to store recording files, voicemails, or logs.
(5)	USB Slot	Insert a USB flash drive to storage recording files, voicemails, or logs.
6	WAN Port	For connection to Wide Area Network (WAN).
7	LAN Port	For connection to Local Area Network (LAN).

Table 4. (continued)

No.	Indicator, Button, or Interface	Description
8	Console	Connect RS232 line to debug the system.
9	Power Switch	Press this button to switch on/off the device.
10	Power Inlet	Connect the supplied power supply to the port.
11)	Protective Earth	Connect to the ground to reduce the risk of electrocution to the user or protect the PBX from bad effects of external noise in case of a lightning strike.
12	Antenna Socket	Rotate the antenna into the Antenna Socket.

Yeastar P570 Overview

Front panel

Yeastar P570 supports 2 expansion boards. You can install EX08 board or EX30 board according to your needs.

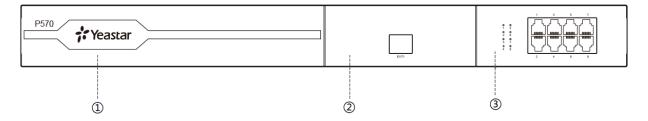


Table 5.

No.	Interface or Expansion Board	Description
1)	NFC tag	Tap NFC-capable mobile phone's back against Yeastar logo to quickly configure network settings.
2	EX30 Expansion Board	Used to connect an E1/T1/J1 line.
3	EX08 Expansion Board	Up to 4 modules and 8 RJ11 ports are supported on the expansion board.
		The 8 RJ11 ports can be used to connect to different objects:
		 FXS port (green light): For the connection of analog phones or fax machines. BRI port (orange light): For the connection of BRI lines.

Table 5. (continued)

No.	Interface or Expansion Board	Description
		 FXO port(red light): For the connection of PSTN lines or FXS ports of traditional PBX.

Rear panel

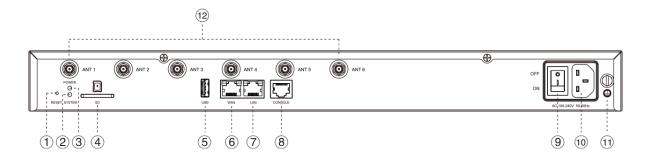


Table 6.

No.	Indicator, Button, or Interface	Description
1	Reset button	Press the button and hold for 10 seconds to restore to factory defaults.
2	System Indicator	 Indicate the system status. Blinking: The system is working properly. Static/Off: The system goes wrong.
3	Power Indicator	Indicate the power status.
4	SD Slot	Insert an SD card to store recording files, voicemails, or logs.
(5)	USB Slot	Insert a USB flash drive to storage recording files, voicemails, or logs.
6	WAN Port	For connection to Wide Area Network (WAN).
7	LAN Port	For connection to Local Area Network (LAN).
8	Console	Connect RS232 line to debug the system.
9	Power Switch	Press this button to switch on/off the device.
10	Power Inlet	Connect the supplied power supply to the port.

Table 6. (continued)

No.	Indicator, Button, or Interface	Description
11)	Protective Earth	Connect to the ground to reduce the risk of electrocution to the user or protect the PBX from bad effects of external noise in case of a lightning strike.
12)	Antenna Socket	Rotate the antenna into the Antenna Socket.

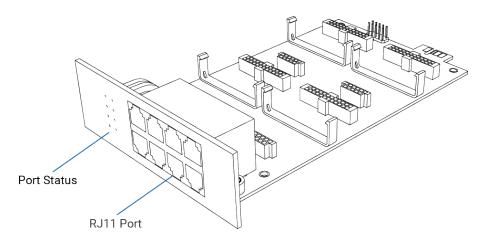
Expansion Board

Yeastar P560 and P570 are expandable.

- Yeastar P560 supports 1 Expansion Board (EX08 or EX30) and 1 D30 Module.
- Yeastar P570 supports 2 Expansion Boards (EX08 or EX30) and 2 D30 Modules.

EX08 Expansion Board

EX08 board supports up to 4 modules (8 RJ11 ports).

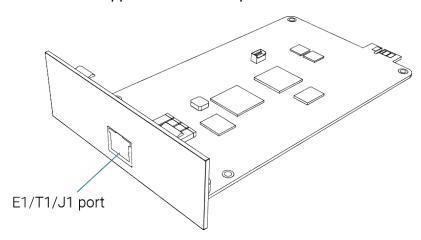


Optional modules on EX08 board

- 02 Module
- S2 Module
- SO Module
- B2 Module
- GSM/3G/4G LTE Module

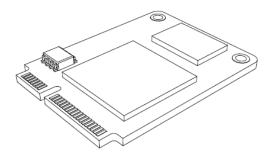
EX30 Expansion Board

EX30 board supports 1 E1/T1/J1 port.



D30 Module

D30 is a DSP module, used to expand the capacity of PBX. With a D30 module added, the number of extensions increases by 100 and concurrent calls increases by 30 additionally.



Install PBX

Installation Warnings

To avoid unexpected accident, personal injury, or device damage, read the safety disclaimers and installation warnings.

Power Safety

- Use only the power cord provided with the PBX.
- Keep the power off during the installation of the PBX and modules.
- Make sure that the supply voltage matches the specifications indicated on the rear panel of the device.
- To avoid electric accident, do not open or remove the cover of PBX when it is working as well as off the power.
- Before cleaning the device, cut off the power supply.

Environment

Install the PBX in a location that is clean, free from vibration, electric shock, and temperature/humidity extremes.

The operating temperature should be kept below 104°F (40°C).

Package Contents

Before you begin to install the PBX, check the package contents. If there are any problems, contact your provider.

Package Contents of P520

- 1* Yeastar P520 Appliance
- 1* Ethernet Cable
- 1* Power Adapter
- 4* Rubber Feet
- 1* Quick Installation Guide
- 1* Warranty Card

Package Contents of P550

- 1* Yeastar P550 Appliance
- 1* Power Cord
- 1* Ethernet Cable
- 2* Rack Mounting Kits
- 1* Grounding Stud & Nut
- 4* Rubber Feet
- 1* Warranty Card
- 1* Quick Installation Guide

Package Contents of P560

- 1* Yeastar P560 Appliance
- 1* Power Cord
- 1* Ethernet Cable
- 2* Rack Mounting Kits
- 1* Grounding Stud & Nut
- 4* Rubber Feet
- 1* Warranty Card
- 1* Quick Installation Guide

Package Contents of P570

- 1* Yeastar P570 Appliance
- 1* Power Cord
- 1* Ethernet Cable
- 2* Rack Mounting Kits
- 1* Grounding Stud & Nut
- 4* Rubber Feet
- 1* Warranty Card
- 1* Quick Installation Guide

Install Yeastar P520

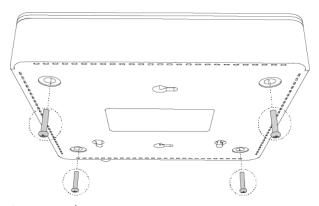
Install SIM card



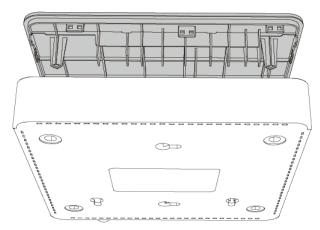
Note:

Before installing the SIM card, make sure GSM/3G/4G LTE module is inserted on Slot_1.

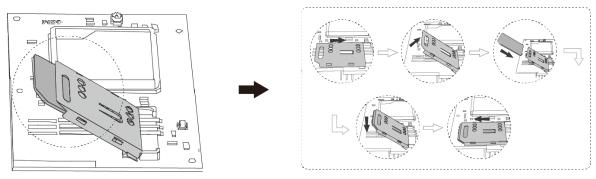
1. Loosen the screws on the bottom of the device.



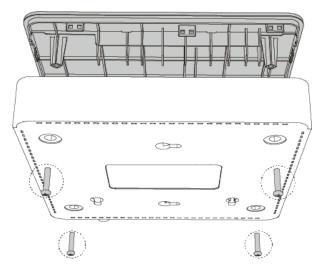
2. Remove the upper cover.



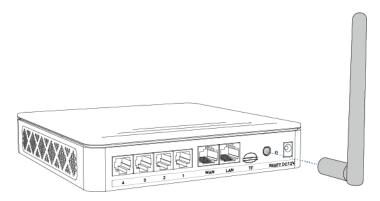
3. Follow the instructions to insert a SIM card on the GSM/3G/4G LTE module and then insert the module to the Module Slot.



4. Close the cover and fix the screws.



5. Rotate the antenna into the Antenna Socket.



Install Yeastar P550

Install Telephony Module

Yeastar P550 supports up to 4 modules. The optional modules are as below:

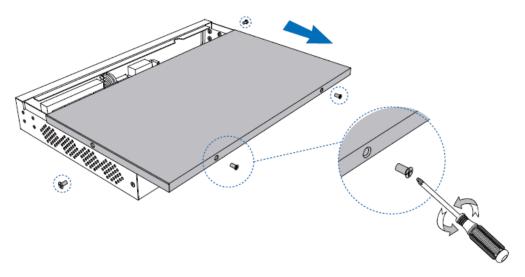
- S2 Module
- 02 Module
- B2 Module
- SO Module
- GSM Module
- 3G Module
- 4G LTE Module



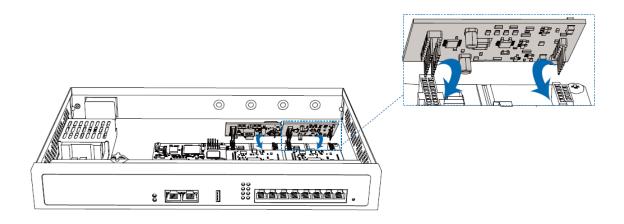
Note:

Before installing the module, check if the module is clean and intact.

1. Loosen the screws at the bottom of the device and remove the upper cover.



2. Insert the module to the Module Slot.

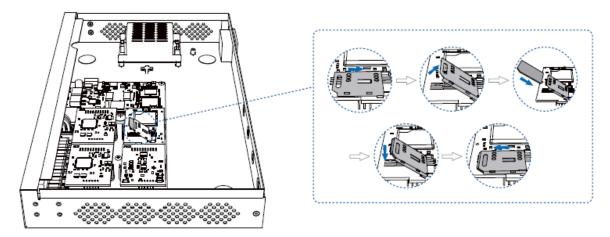


3. Follow the instructions to insert a SIM card on the GSM/3G/4G LTE module.

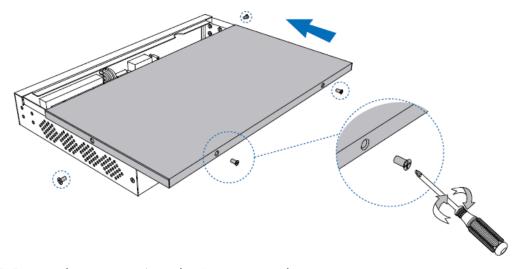


Note:

Skip this step if no GSM/3G/4G LTE module is installed.



4. Close the cover and fix the screws.

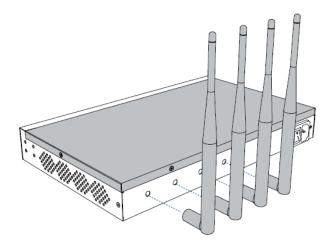


5. Rotate the antenna into the Antenna Socket.

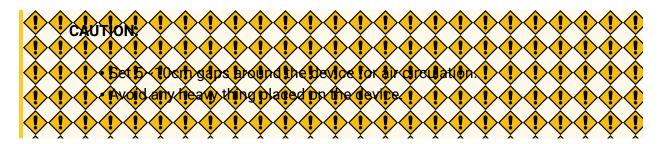


Note:

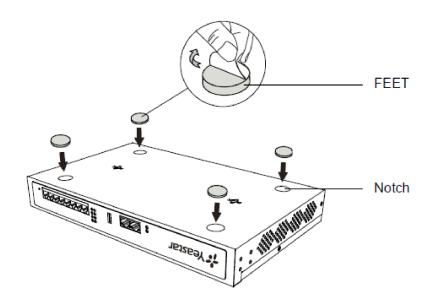
Skip this step if no GSM/3G/4G LTE module installed.



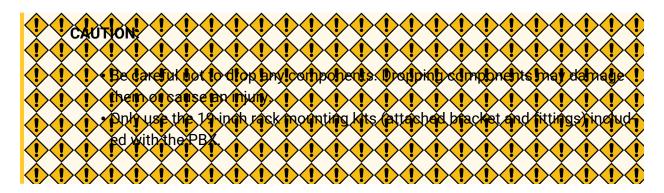
Desktop Installation



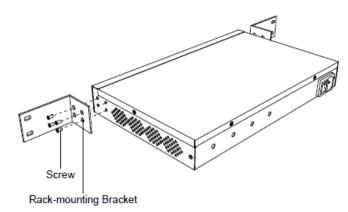
- 1. Place the PBX on a steady platform.
- 2. Remove the adhesive backing paper from the rubber feet.
- 3. Turn over the device and attach the supplied rubber feet to the recessed areas on the bottom at each corner of the device.



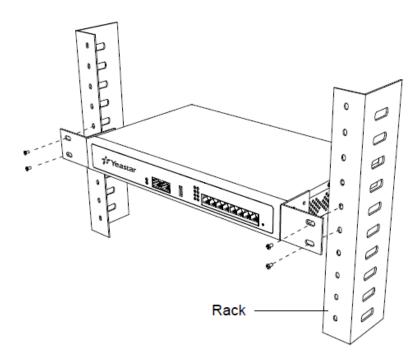
Rack Installation



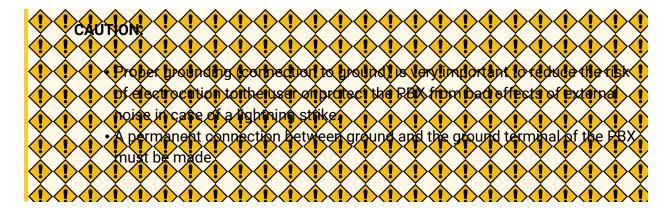
1. Fix the brackets to the left and right sides of the PBX with 4 screws.



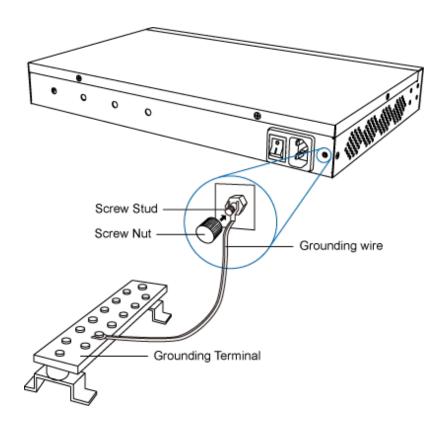
2. Place the PBX in the 19-inch rack and fix both brackets to the rack with the rack's proprietary mounting equipment.



Ground Connection



- 1. Tighten the provided screw stud into the Grounding port on PBX.
- 2. Insert an 18AWG grounding wire (user supplied).
- 3. Tighten the provided screw nut.
- 4. Attach the grounding wire to the grounding terminal.



Install Yeastar P560

Install Telephony Module

Yeastar P560 supports the followings:

- Max. 1 Expansion Board (EX08 or EX30)
- Max. 4 Telephony Modules
- Max. 1 D30 Module

The optional telephony modules are as below:

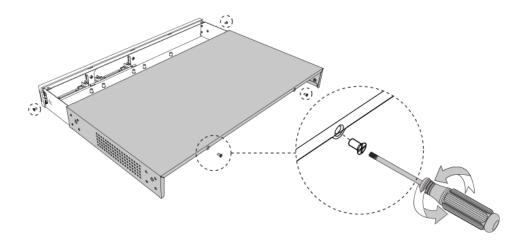
- S2 Module
- 02 Module
- B2 Module
- SO Module
- GSM Module
- 3G Module
- 4G LTE Module



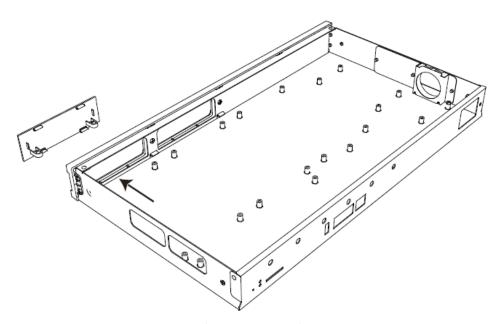
Note:

Before installing the module, check if the module is clean and intact.

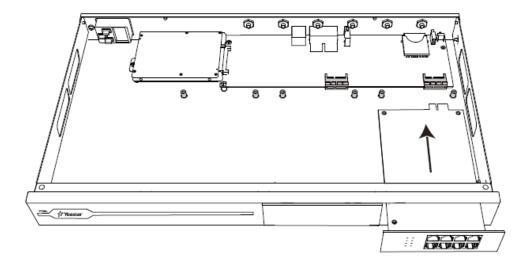
1. Loosen the screws at the bottom of the device and remove the upper cover.



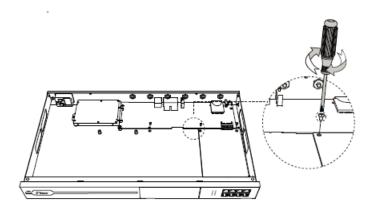
2. Push out the empty board from the inside of the device.



3. Push in the Expansion Board (EX08 or EX30).



4. Lock the screws to fix the Expansion Board.

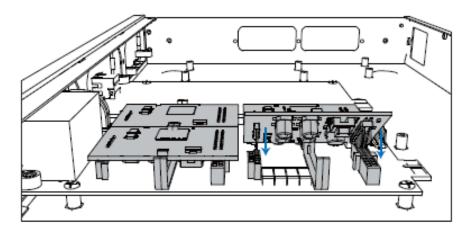


5. Insert the Telephony Modules on the EX08 Board.



Note:

Skip this step for EX30 Board.

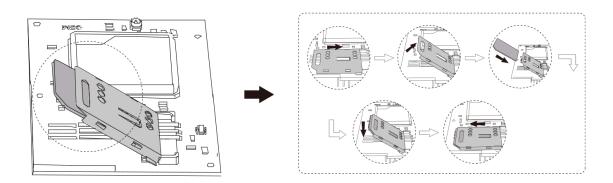


6. Follow the instructions to insert a SIM card on the GSM/3G/4G LTE module.

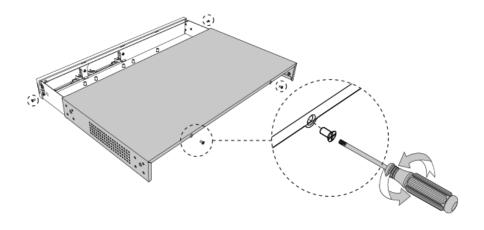


Note:

Skip this step if no GSM/3G/4G LTE module is installed.



7. Close the cover and fix the screws.

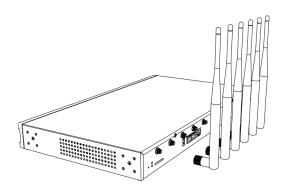


8. Rotate the antenna into the Antenna Socket.



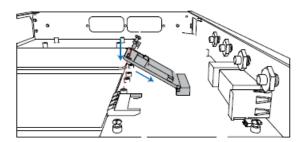
Note:

Skip this step if no GSM/3G/4G LTE module installed.

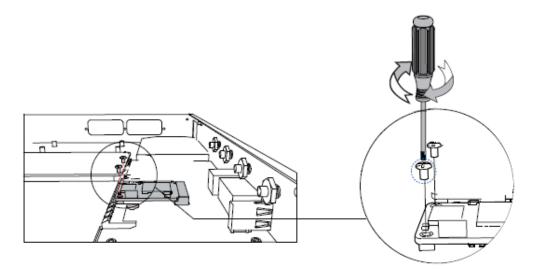


Install DSP Module

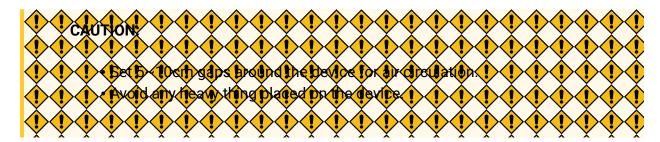
1. Open the device upper cover and insert the DSP module (D30) into the D-Slot from a tilt angle and then press it down.



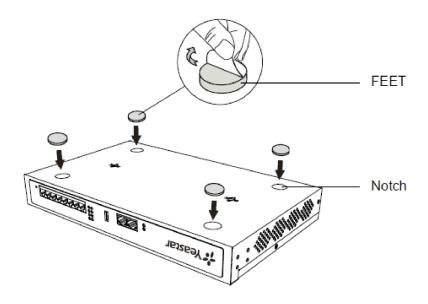
2. Lock the screws to fix the D30 module board.



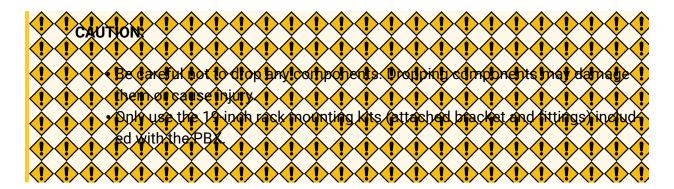
Desktop Installation



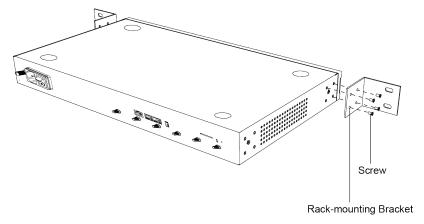
- 1. Place the PBX on a steady platform.
- 2. Remove the adhesive backing paper from the rubber feet.
- 3. Turn over the device and attach the supplied rubber feet to the recessed areas on the bottom at each corner of the device.



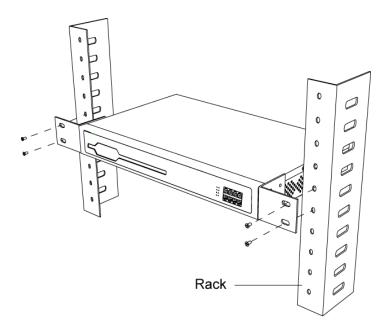
Rack Installation



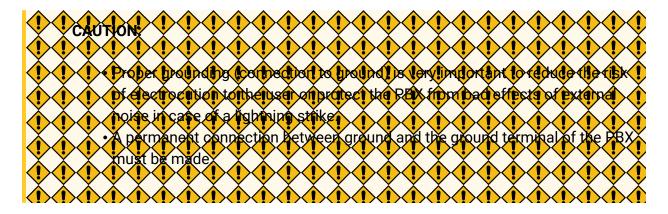
1. Fix the brackets to the left and right sides of the PBX with 4 screws.



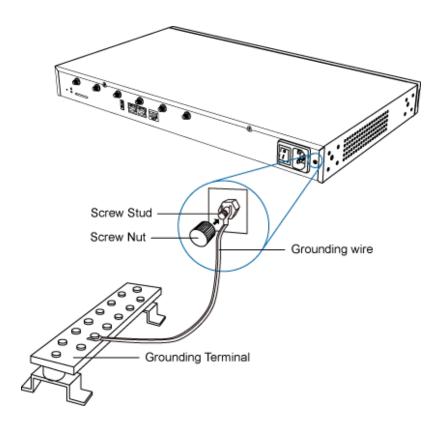
2. Place the PBX in the 19-inch rack and fix both brackets to the rack with the rack's proprietary mounting equipment.



Ground Connection



- 1. Tighten the provided screw stud into the Grounding port on PBX.
- 2. Insert an 18AWG grounding wire (user supplied).
- 3. Tighten the provided screw nut.
- 4. Attach the grounding wire to the grounding terminal.



Install Yeastar P570

Install Telephony Module

Yeastar P570 supports the followings:

- Max. 2 Expansion Boards (EX08 or EX30)
- Max. 8 Telephony Modules
- Max. 2 D30 Modules

The optional telephony modules are as below:

- S2 Module
- 02 Module
- B2 Module
- SO Module
- GSM Module
- 3G Module

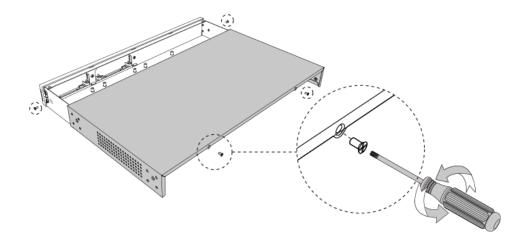
• 4G LTE Module



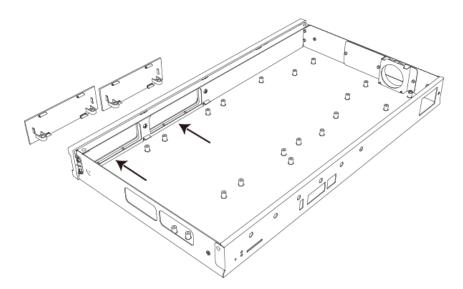
Note:

Before installing the module, check if the module is clean and intact.

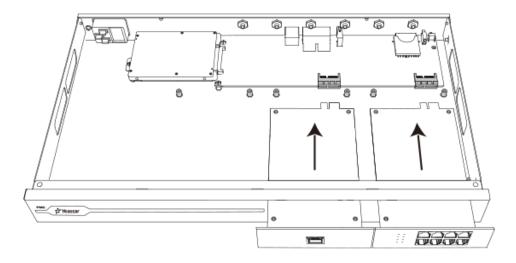
1. Loosen the screws at the bottom of the device and remove the upper cover.



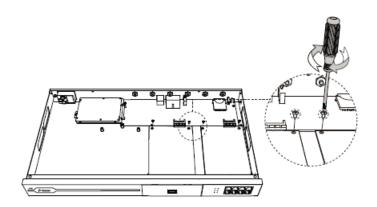
2. Push out the empty board from the inside of the device.



3. Push in the Expansion Board (EX08 or EX30).



4. Lock the screws to fix the Expansion Board.

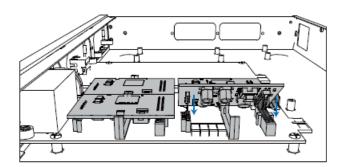


5. Insert the Telephony Modules on the EX08 Board.



Note:

Skip this step for EX30 Board.

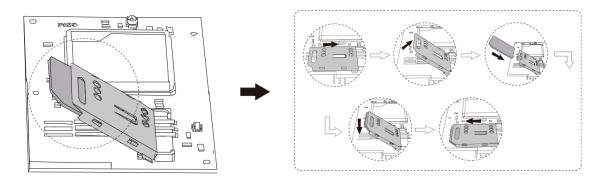


6. Follow the instructions to insert a SIM card on the GSM/3G/4G LTE module.

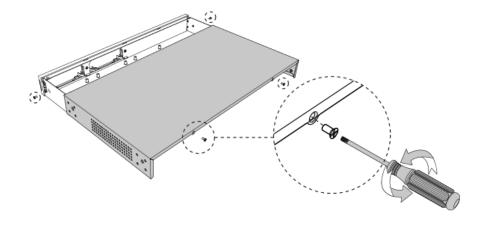


Note:

Skip this step if no GSM/3G/4G LTE module is installed.



7. Close the cover and fix the screws.

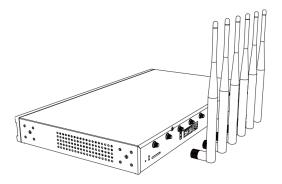


8. Rotate the antenna into the Antenna Socket.



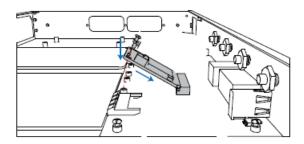
Note:

Skip this step if no GSM/3G/4G LTE module installed.

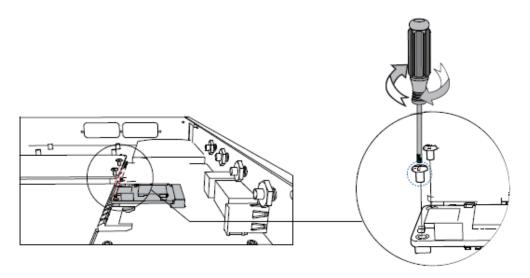


Install DSP Module

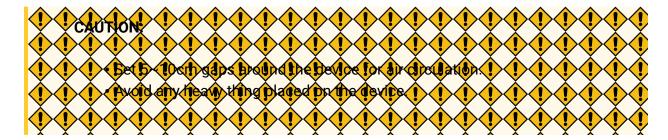
1. Open the device upper cover and insert the DSP module (D30) into the D-Slot from a tilt angle and then press it down.



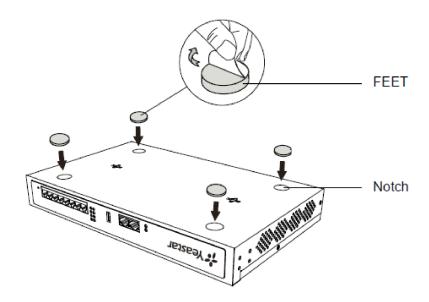
2. Lock the screws to fix the D30 module board.



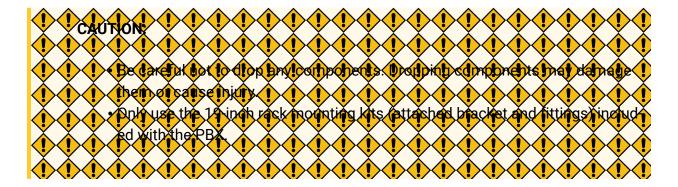
Desktop Installation



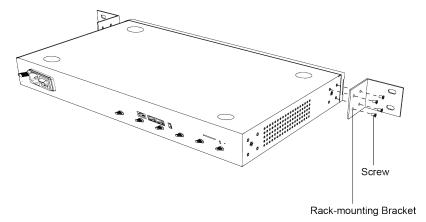
- 1. Place the PBX on a steady platform.
- 2. Remove the adhesive backing paper from the rubber feet.
- 3. Turn over the device and attach the supplied rubber feet to the recessed areas on the bottom at each corner of the device.



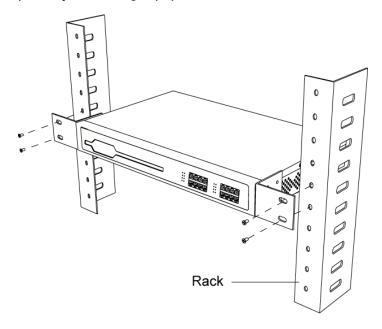
Rack Installation



1. Fix the brackets to the left and right sides of the PBX with 4 screws.



2. Place the PBX in the 19-inch rack and fix both brackets to the rack with the rack's proprietary mounting equipment.

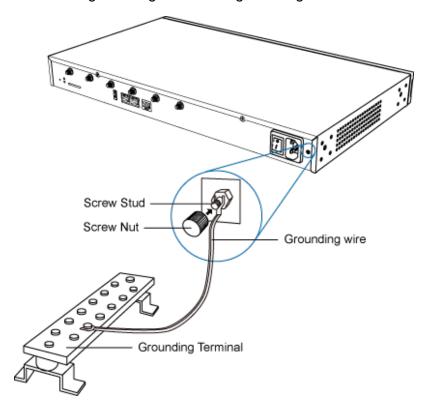


Ground Connection





- 1. Tighten the provided screw stud into the Grounding port on PBX.
- 2. Insert an 18AWG grounding wire (user supplied).
- 3. Tighten the provided screw nut.
- 4. Attach the grounding wire to the grounding terminal.



Connect Your PBX

Connect your PBX to the local network, and connect telephony lines to the PBX.

Connect P520

1. Connect your PBX to the network.

Connect one end of an Ethernet cable to the LAN port of your PBX, and the other end to any port of your company's LAN switch/router.

2. Power on your PBX.

Plug the provided power adapter into the power inlet of the PBX, and the other end to a standard electrical wall socket.

Wait for the system to boot up till the SYSTEM LED starts to blink.

3. Connect your PBX to the telephony lines.



Note:

Connect BRI/PSTN/analog phone/fax machine to the corresponding port based on the color of port indicator.

RJ11 Port	Operation
FXS	Connect one end of a RJ11 phone cable to the port. Connect the other end to an analog phone or fax machine.
FXO	Connect an RJ11 cable to the FXO port. Connect the other end to a PSTN line.
BRI	Connect one end of the cable provided by the ISDN BRI provider to the BRI port. Connect the other end to the equipment of ISDN provider.

- 4. Access the PBX system.
 - a. Connect your computer to the same network as the PBX.
 - b. Open a web browser, enter the PBX's default IP address 192.168.5.150 in the address bar, and press **Enter**.

You will find the Installation Wizard appears.



Note:



For configuration details in the Installation Wizard, see <u>Initial Setup Using the Installation Wizard</u>.

Connect P550/P560/P570

1. Connect your PBX to the network.

Connect one end of an Ethernet cable to the LAN port of your PBX, and the other end to any port of your company's LAN switch/router.

2. Power on your PBX.

Plug the provided power cord into the power inlet of the PBX, and the other end to a standard electrical wall socket.

Wait for the system to boot up till the SYSTEM LED starts to blink.

3. Connect your PBX to the telephony lines.



Note:

Connect BRI/PSTN/analog phone/fax machine to the corresponding port based on the color of port indicator.

RJ11 Port	Operation	
FXS	Connect one end of a RJ11 phone cable to the port. Connect the other end to an analog phone or fax machine.	
FXO	Connect an RJ11 cable to the FXO port. Connect the other end to a PSTN line.	
BRI	Connect one end of the cable provided by the ISDN BRI provider to the BRI port. Connect the other end to the equipment of ISDN provider.	
E1/T1/J1 Port	Operation	
E1/T1/J1	Connect one end of the E1/T1/J1 cable to the E1/T1/J1 port. Connect the other end to the E1/T1/J1 Provider's equipment.	
	Note: The operation is ONLY available for P560 and P570.	

4. Change the PBX's default IP address via NFC to the same subnet as your computer, then access this new IP address from your computer.

Change PBX Default IP Address via NFC

This topic describes how to use NFC to quickly set up network of Yeastar P-Series PBX System by Linkus Mobile Client.



Note:

Only Yeastar P550, P560, and P570 support NFC functionality.

Background information

Yeastar P-Series PBX System has a physical NFC tag containing NFC chip behind Yeastar logo, which allows an NFC-capable phone with Linkus Mobile Client installed to write network data to or read network data from the chip.

The default IP address is **192.168.5.150**. When the PBX is in factory state, you can use NFC to change the PBX's IP address, and then access the PBX management portal directly via the newly assigned IP address.

Restrictions & Requirements

Restrictions

- Only when the system is in factory state can you write configurations to the system by NFC.
- You can use NFC to write configuration only ONCE. After the writing is completed, the NFC feature can only be used to read configuration.

Requirements

Your mobile phone and Linkus Mobile Client must meet the following requirements:

Table 7.

Device	Requirement
Mobile phone	 For Android: Any phones that have activated NFC feature.
	 For iOS: Phones that meet all of the followings: iPhone 8 or later. iOS 13 or later.

Table 7. (continued)

Device	Requirement
	 NFC feature has been enabled.
Linkus Mobile Client	 Linkus Android Client: Version 3.4.18 or later. Linkus iOS Client: Version 3.4.18 or later.

Procedure

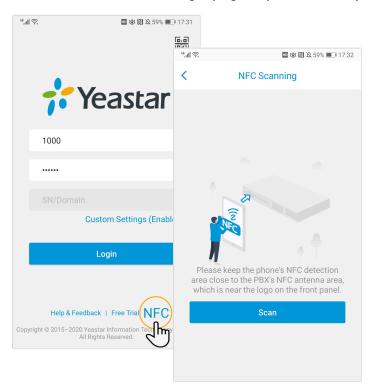
Follow the instructions below to write network data to the system when the system is powered on.



Note:

You can also write network data to the NFC chip, and then power on the PBX.

- 1. Open NFC scanning page on Linkus Mobile Client.
 - a. Open Linkus Mobile Client.
 - b. At the bottom of Linkus login page, tap **NFC** and tap **Scan**.



- 2. Scan the PBX's NFC tag.
 - a. Keep your phone's NFC detection area against the Yeastar logo that is on the PBX's front panel.

The NFC chip is detected and you're redirected to the network configuration page.

- 3. Configure PBX network.
 - a. In the **Basic** section, select an Ethernet mode from the drop-down list.
 - Single: Only LAN port is used for connection, WAN port is disabled.
 - Bridge: LAN port is used for connection, WAN port is used as bridge for PC connection.
 - **Dual**: Both LAN port and WAN port are used for connection.



Note:

You need to specify a default network interface for the PBX, the traffic will be routed to the default interface.

- b. Configure network settings, and tap **Next**.
- c. In the pop-up dialog box, tap **Confirm**.
- 4. Write NFC data to the PBX.
 - a. Keep your phone's NFC detection area against the Yeastar logo that is on the PBX's front panel till you are prompted "Writing successfully".
 - Device information and network settings of the PBX are displayed on the page.
 - b. Reboot the PBX to take effect.

Result

- On web browser, access the IP address that you have configured, you will find the Installation Wizard appears. For configuration details in the Installation Wizard, see Initial Setup Using the Installation Wizard.
- Keep your phone's NFC detection area against the Yeastar logo again, you will find the network settings can only be READ.