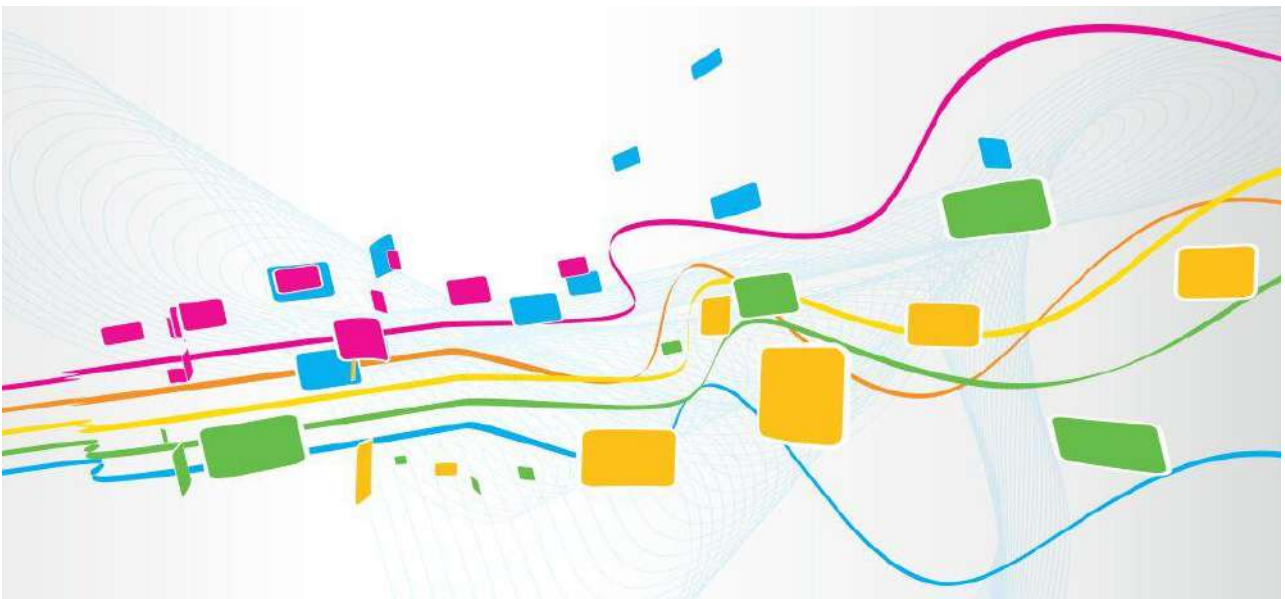# Dinstar DXP60 Expansion Module

User Manual

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Preface

Welcome

Thanks for choosing the DXP60 Expansion Module！ We hope you will make full use of this color-screen expansion module, contact us if you need any technical support: 0755-61919966.

About This Manual

This manual provides information mainly about the introduction of the expansion module, Installation method, Key setting, Web configuration and Common functions. Please read this document carefully before installing the DXP60 Expansion Module.

Intended Audience

This manual is aimed primarily at the following people:

- IP phone Users
- Engineers who install, configure and maintain the DXP60 Expansion Module.

Document Information

Document Name	Dinstar DXP60 Expansion Module User manual
Version	1.0
Applicable IP Phone Model	C63 /C64 /C66 Series IP Phone
IP Phone Firmware Version	2.66.7.11.2
Author	Jenny Tang
Date	2023/08/22

Conventions

The device mentioned in this document refers to the DXP60 Expansion Module. "Note" marked in the document is what users need to pay attention to.

Revision Record

Version	Date	Revision	Reason	Author
V1.0	2023/08/22	Refine the content of the first draft	Required for new product launches	Jenny Tang

Contents

1 Overview

1.1 Introduction

The DXP60 Expansion Module is a multifunctional key expansion device. It is characterized by simplicity and cost-effectiveness, and is suitable for call centers, dispatch centers and other busy application scenarios. The expansion module can be used in cooperation with the IP phone to provide a convenient office environment.

The DXP60 features a 4.3-inch pixel color display screen with backlight, providing users with a rich visual experience. In addition, the friendly interface and powerful call handling capabilities can improve the users' productivity. It supports 20 physical keys with dual-color LEDs, offering 3 display pages and up to 60 programmable keys. Moreover, the DXP60 is compatible with Dinstar C63/C64/C66 series IP phones. The IP phone supports up to 3 expansion modules cascaded with up to 180 programmable keys. Programmable keys support speed dial, call transfer, call hold, call park, BLF, etc which can facilitate users to conveniently handle numerous incoming calls.

1.2 Function and Feature

➢ **Key Feature**

● User-friendly design

The DXP60 features a 4.3-inch pixel color display screen with backlight, providing users with a new visual and operational experience, preventing dimming and blurring of the screen in side view. Adjust the tilt angle of the expansion module flexibly with two stand installation modes for a brighter and clearer screen display.

● Rich visual experience

The DXP60 features a 4.3-inch pixel color display screen with backlight, providing users with a rich visual experience. Programmable keys with dual-color LEDs and support for function color icon display can provide a new user operating experience. Page up and page

down keys to quickly switch between pages. The screensaver function allows users to customize their own DXP60 expansion module according to their personal preferences.

● High expandability

The DXP60 Expansion Module is fully compatible with C66/C64/C63 series SIP phones and supports up to 3 expansion modules cascaded with up to 180 programmable keys. Users are allowed to use up to 32 IP phone features, such as speed dial, call transfer, call hold, call park, BLF, etc.

➤ **Display**

● 4.3" 272 x 480-pixel color display screen with backlight

● 16 bit depth color

● Three page views are possible

● Different color icons for each function shown on the LCD

➤ **Keys and Indicators**

● Number of programmable keys: 20 programmable keys on each page

● Maximum number of pages: 3 pages

● Maximum programmable keys: 60

● Programmable keys with dual-color LED indicators

● Independent page Up/Down keys

● Supports various call functions such as speed dial, call transfer, call hold, and BLF

➤ **Features**

● Screensaver

● Stand with 2 adjustable angles

● For support of two or three Expansion Modules, an external power adapter (5V/1A) is required

● Supports up to 3 modules daisy-chain

● Up to three DXP60 can be attached on Dinstar C63 /C64 /C66 series IP phones

● Operating temperature: -10~50℃

● Operating humidity:10~95%

1.3 **Product Appearance**

1.3.1 **Front View and Keypad Description**
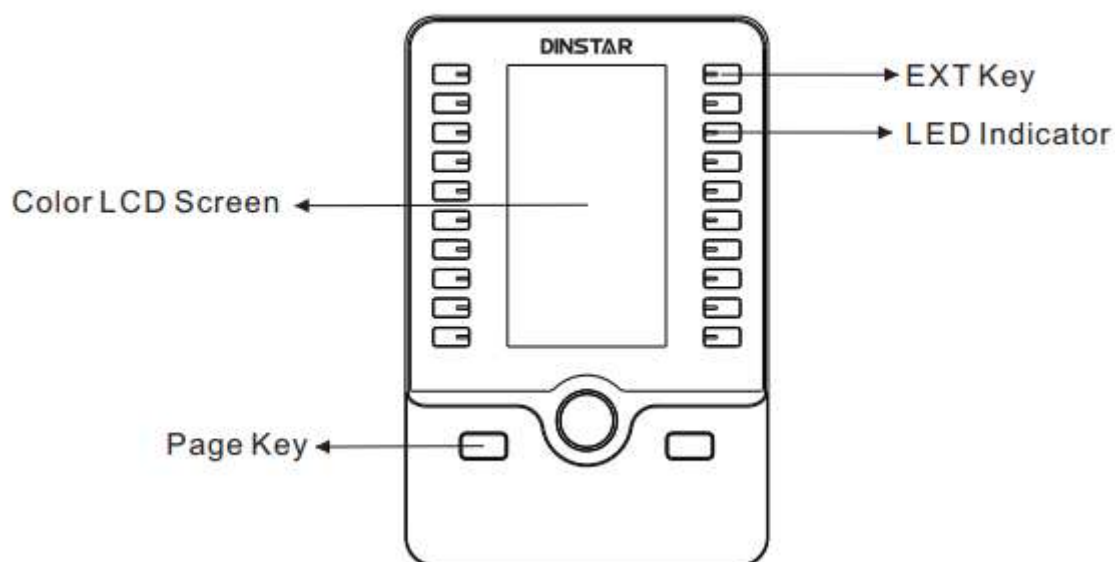
Front view

Name	Description
Color LCD Screen	Displays the connection status of the expansion module, the key feature and located page.
EXT Key	It is used to activate SIP accounts and configure various functions. It supports up to 60 EXT keys.
Page Key	Presses these keys to navigate to corresponding page to view more keys
LED Indicator	Indicates the EXT key status.

1.3.2 **Rear View and Panel Descriptions**

PC Port ←

Ext out Port ←

→ Internet Port

→ Power Port

→ Ext in Port
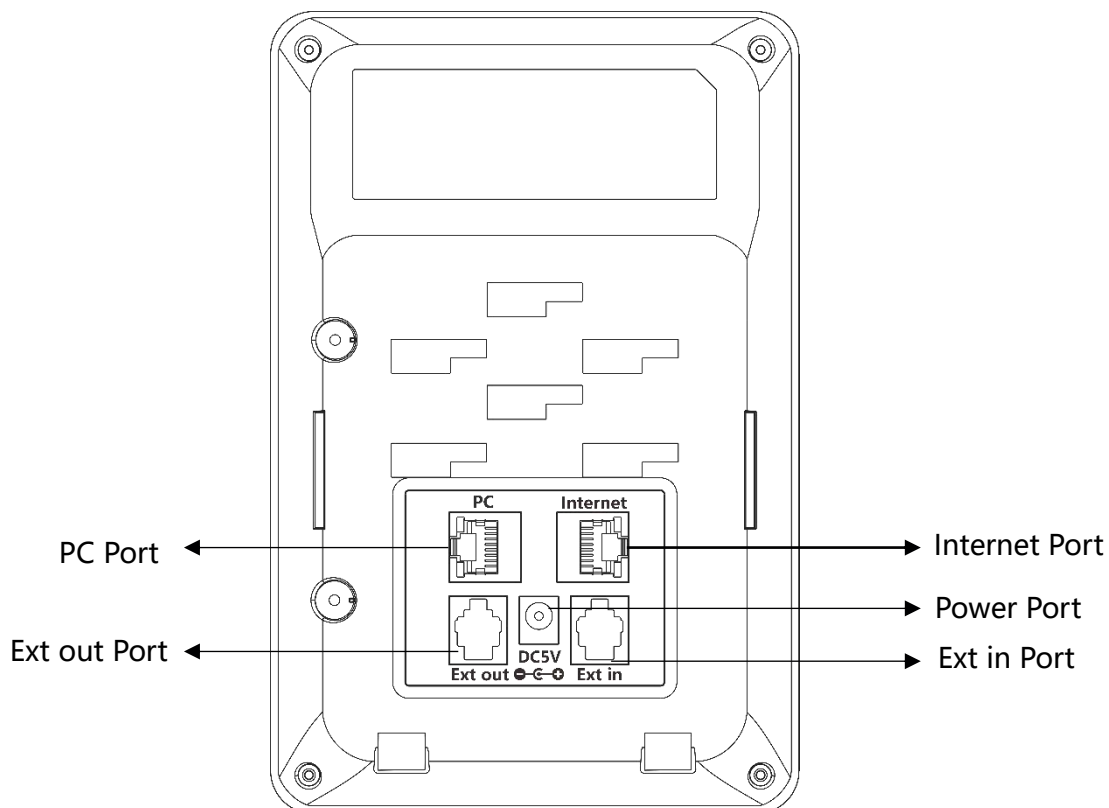
Rear view

Name	Description
Internet Port	Connect to the PC Port or superior expansion module via the network cable.
PC Port	Connect to the inferior expansion module via the network cable
Power Port	Connect to power adapter (Input: 5V DC 1A)
Ext in Port	Connect to the IP phone EXT Port or superior expansion module via the EXT cable
Ext out Port	Connect to the inferior expansion module via the EXT cable

1.3.3 **LCD Interface**

The DXP60 expansion module LCD interface consist of wallpaper, Programmable keys' indicate labels and current page logo, The expansion module is shown in the following figure:

Common EXT key function icons and descriptions are as follows:

Icons	Description	Icons	Description
	Registered		DND
	Register failed		Redial
	Registering		ACD
	Register Disabled		BLF
	Speed Dial		BLF List
	Intercom		Call Back
	Fwd		Record
	Pickup		Hot Desking
	Multicast Paging		Call Park
	Prefix		XML PhoneBook

2 Getting Started

2.1 Inspection

The following items are included in your package. If you find anything missing, please contact our supporting and customer service center.
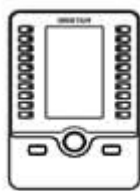
| Expansion Module | Stand | Connecting Sheet and Screws | Ethernet Cable | EXT Cable |

Name	Quantity
Expansion Module	1
Stand	1
Connecting Sheet and Screws	1
Ethernet Cable	1
EXT Cable	1

Note: To support two or three expansion modules, an external power adapter (5V/1A) is required. The package box does not include the power adapter by default, users need to purchase an external power adapter.

2.2 **Installation**

DXP60 expansion module supports Dinstar C63/C64/ C66 series IP phones. Please choose the correct IP phone model before installing and configure the expansion module.

The IP phone supports up to 3 modules daisy-chain. When connecting two or more expansion modules, the power adapter is required, otherwise the expansion modules will be in trouble with startup and usage.

Remove the Handset, Ethernet Cable, and Power Adapter (optional) from the IP phone before installing the expansion module. Remove the IP phone from the phone stand and place it on a flat tabletop.

Step 1: Connect IP Phone with Expansion Module

1. Put the IP phone and the expansion module on a flat tabletop, and then connect the IP phone and the expansion module connecting with sheet and screws supplied.
2. Connect the EXT port on the IP phone (or expansion module) to the EXT port on the expansion module by using the supplied EXT cable.
3. Connect the PC port on the IP phone (or expansion module) to the Internet port on the expansion module by using the supplied ethernet cable.

Connecting one expansion module on a single IP phone is shown as below:
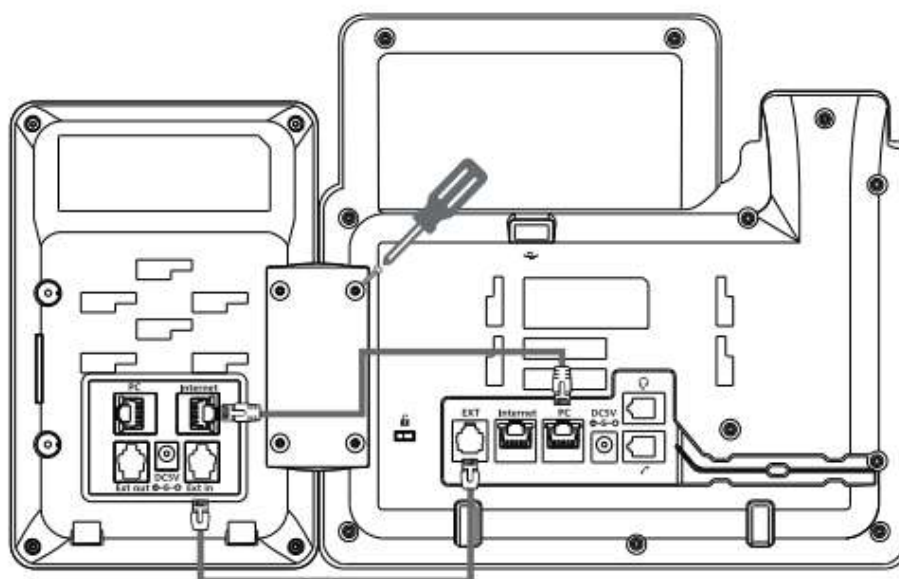
Connecting two or more expansion modules on a single IP phone is shown as below:
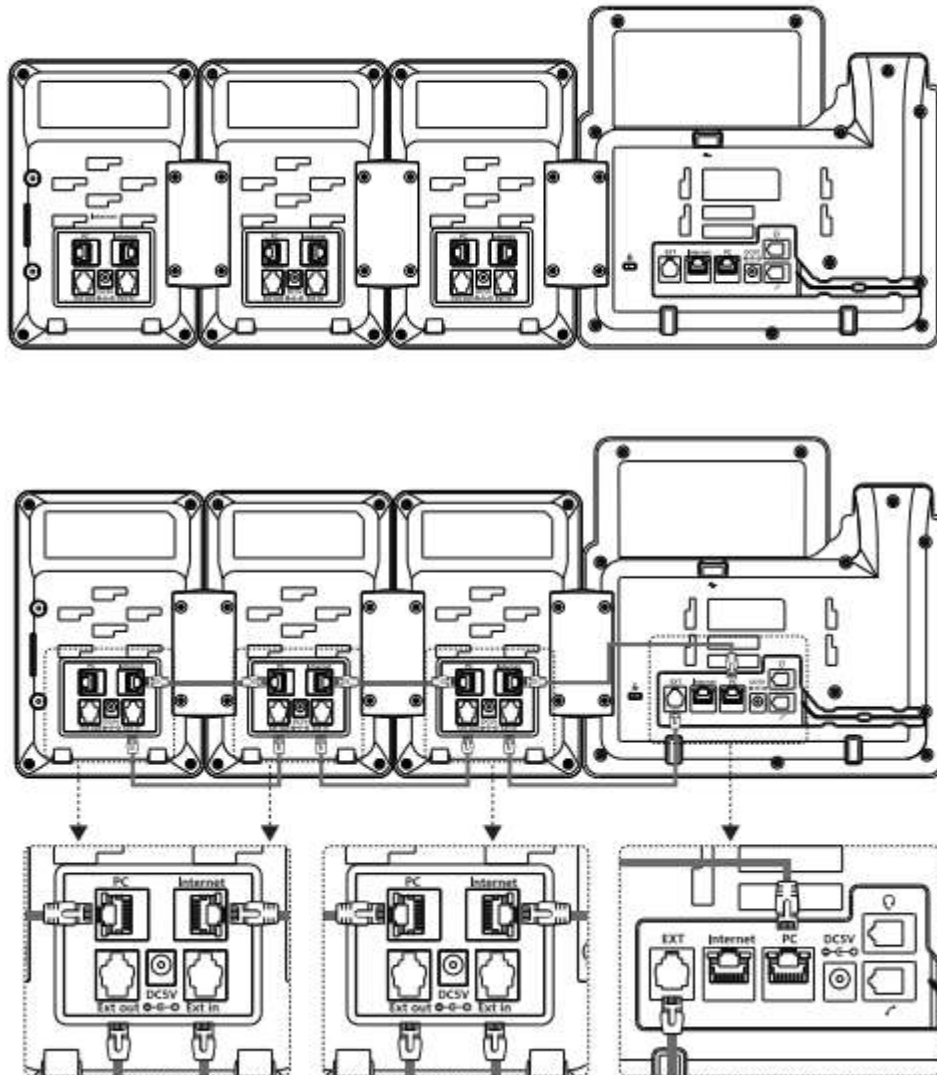
Note: The electricity of module has been automatically provided from the IP phone to the expansion module(s) upon connection. If you want to use more than one expansion modules on a single phone, you need to connect an additional power adapter (5V/1A) to any one of the expansion modules.

Step 2: Attach the stand

The DXP60 Expansion Module Supports two types of angle attach, you can choose A or B attachment method according to your usage habits and scenarios. Push the stand to the left side by centering it on the deck and pushing it evenly, and gently shake the stand to make sure it's secured.
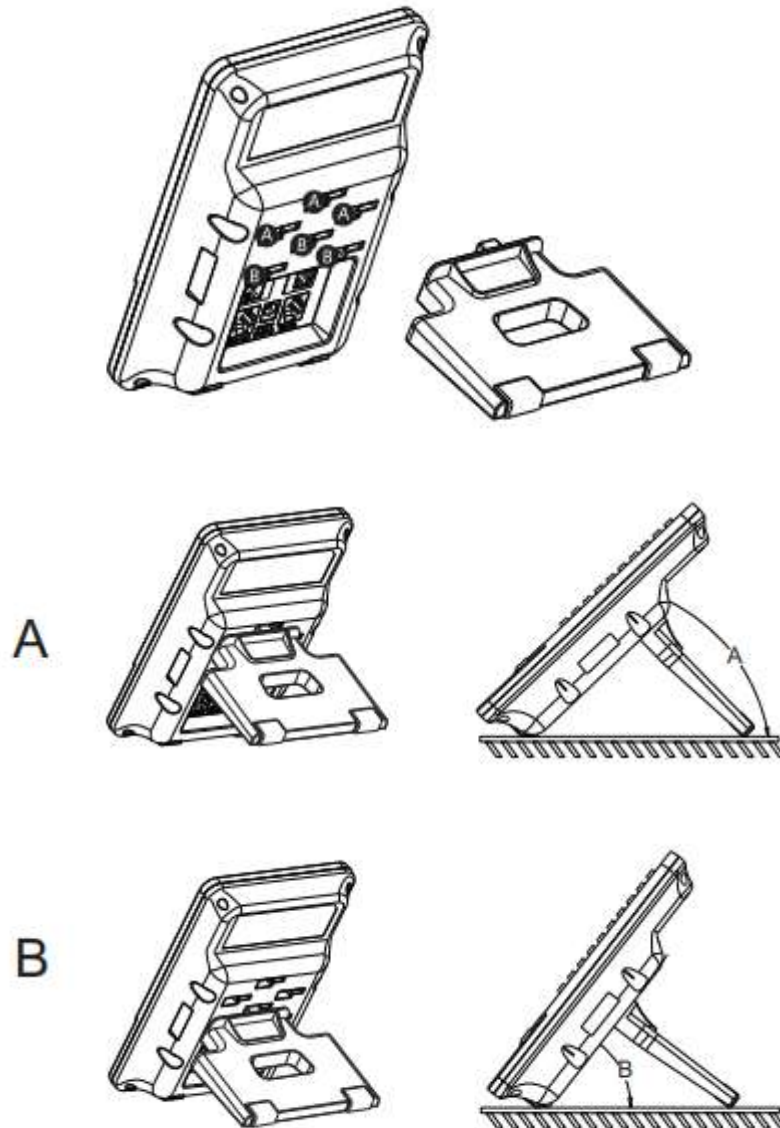
diagram of attach the stand

Note:	Please do not use a power adapter other than the one provided with DXP60 Expansion Module.

3 Configure Expansion Module

After the IP phone is powered on and connected to network, the IP phone and expansion module will start up automatically. And then the IP phone will be automatically bounded to the Expansion Module via the EXT cable and the Ethernet cable. You can configure the phone via the phone's screen or the web user interface.

3.1 Configure via the Web interface on your PC

Log into the Web interface of the IP Phone, users can configure the expansion module in the "**Phone-> Expansion Module**" page.

The Expansion Module configuration pages consist of three parts: Expansion Key, Expansion List and Expansion Debug

1. Expansion Key

Expansion Key

Index	1 ⌄			Page	1 ⌄	
Key	Type	Label	Value	Account		Extension
Key 1	DND ⌄			Account 1 ⌄		
Key 2	Menu ⌄			Account 2 ⌄		
Key 3	SMS ⌄			Account 3 ⌄		
Key 4	Status ⌄			Account 4 ⌄		
Key 5	Fwd ⌄			Account 1 ⌄		
Key 6	PickUp ⌄			Account 1 ⌄		
Key 7	Book ⌄		All ⌄	Account 1 ⌄		
Key 8	Speed Dial ⌄			Account 1 ⌄		
Key 9	History ⌄			Account 1 ⌄		
Key 10	Favorites ⌄			Account 1 ⌄		
Key 11	Redial ⌄			Account 1 ⌄		
Key 12	ACD ⌄			Account 1 ⌄		
Key 13	BLF/NewCa ⌄			Account 1 ⌄		
Key 14	BLF List ⌄			Account 1 ⌄		
Key 15	XML History ⌄			Account 1 ⌄		
Key 16	Multicast Pa ⌄			Account 1 ⌄		
Key 17	Voice Messi ⌄			Account 1 ⌄		
Key 18	Account ⌄			Account 1 ⌄		
Key 19	Call Park ⌄			Account 1 ⌄		
Key 20	Prefix ⌄		0731	Account 1 ⌄		

The Index in the Expansion key configuration page is the index of the expansion module that has been successfully bounded to the IP phone. Currently supports up to 3 modules daisy-chain.

The page in the Expansion key configuration page is the current page of the expansion module, currently supports up to 3 pages on single expansion module.

The keys in the Expansion key configuration page are the specific expansion keys, users can configure specific function types for expansion keys.

2. Expansion List

Expansion List

Expansion Index	Expansion MAC	Expansion IP
1	F8:A0:00:03:03:03	
2		
3		

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After the expansion module has been successfully connected to the IP phone, users can check the MAC address in the expansion list.

3. Expansion Debug
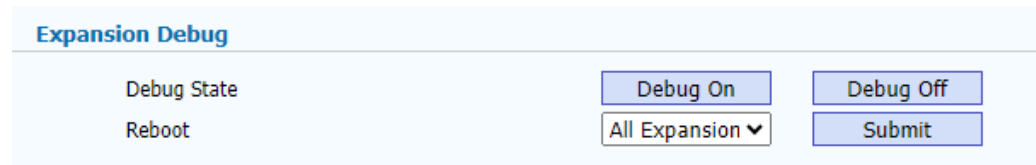
If any issue occurred, users can use the expansion debug to check problems.

3.2 **Configure via the interface on the IP Phone**

Configure Expansion Module

Ensure that the IP phone and expansion module are successfully connected before configuration, specific configurations please refer to 2.2 Installation for more details.

1. Click " **Menu→Settings→Basic Setting→Expansion** ", enter the expansion module configuration page:
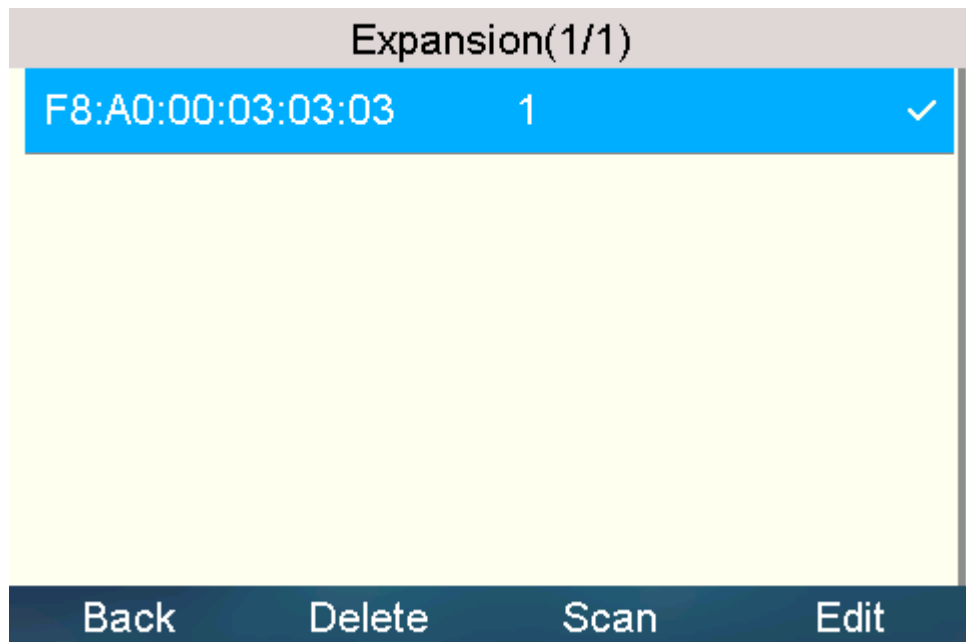
2. Click "Scan", Scanning and completing the IP phone automatically bound to the expansion module.
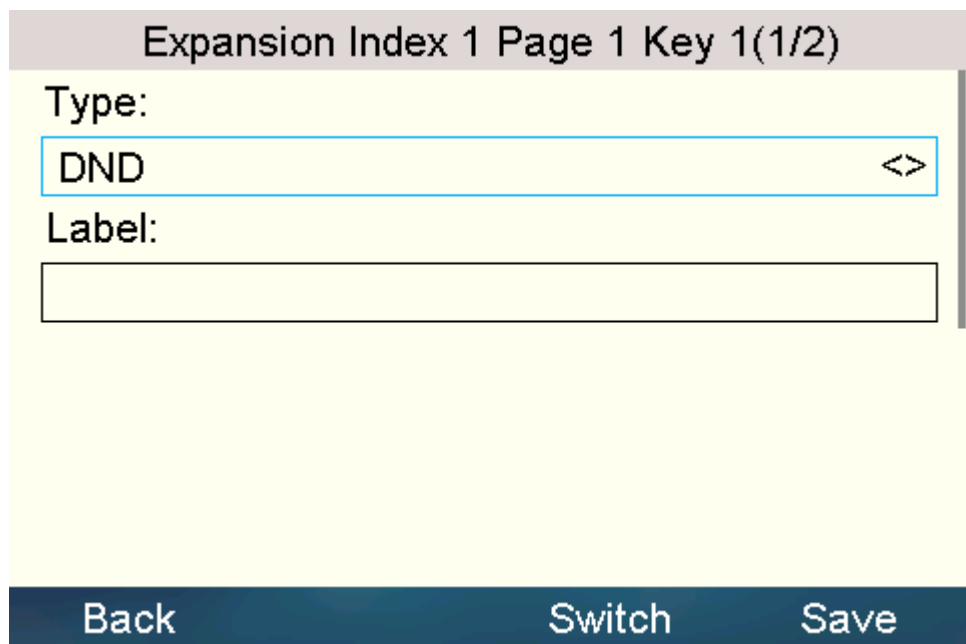
3.   Press the **Up/Down** keys to select the specific expansion module, Press **Edit** key to modify the serial number of the expansion module.

> **Note:**   It is generally not recommended that users edit the serial number of an expansion because it is automatically bounded.

4.   Press the **Up/Down** keys to select the specific expansion module, Press the **delete** key to delete the expansion module.

Configure Expansion Key

1. Select any Expansion key on the expansion module, then press and hold it for more than one second, and the Expansion key configuration page will be displayed on the screen of the IP phone.

2. Press **left/right** on the IP phone to select the type of key, and press **up/down** to enter the corresponding value.

3. Press the **Save** soft key to keep the change.

> **Note:**   The number of features that can be configured for the Expansion key is 32, please refer to chapter 4 for more details.

4 Functions

The DXP60 expansion module supports up to 60 expansion keys. Users can set up 60 expansion keys by using the page keys and can assign functions to each EXT key through the IP phone or Web GUI. There are 32 expansion keys to configure the functions, configurable functions are as follows:

Configurable functions for expansion keys			
DND	Menu	SMS	Status
Fwd	PickUp	Intercom	History
Favorites	Redial	Account	ACD
Prefix	Callback	Record	DTMF
Book	Transfer	Group Pickup	Speed Dial
Hot Desking	Visual Park	XML Browser	Multicast Paging
BLF/NewCall	BLF/BXFER	BLF/AXFER	BLF List
Voice Message	Call Park	XML History	XML PhoneBook

4.1 Account

Configure account function through the IP phone:

1. Select any Expansion key, then press and hold it for more than one second, and the Expansion key configuration page will be displayed on the screen of the IP phone.

2. Press the **left/right** function keys or press **Switch** to enable or disable account.

3. Press the **Up/Down** function keys to set the corresponding value.

4. Press the **Save** key to complete the above operation.

Configure account function through the Web page:

Click "**Phone->Expansion Module-> Expansion Key**"

Log into the web interface, Set the expansion module Index and pages, Configure the Expansion key to be the account function key.

4.1.1 **Making a Call**

Making a call on the expansion module

Configure the EXT key function as account, after the account has been successfully registered, the LED and icon corresponding to the account are shown in green color. Users can make calls via the account key.

Procedure:

1. Press the account EXT key
2. Input the number on the phone or select matched people
3. Press soft key **Send** or select **Dial Key** ⬚ from keypad

4.1.2 **Answering the Call**

Manually answer incoming calls from expansion module accounts

The LED of the account key corresponding to the expansion module blinks when the expansion module account receives a call, and the phone will ring and displays the incoming call screen. You can answer the call manually.

Procedures:

Do one of the following:

- Pick up the handset to answer

- Press the **Speakerphone Key** ⬚ to answer

- Press the **Headset Key** ⬚ to answer

- Press the **Answer** soft key or press the corresponding account key on the expansion module. In this case, the speakerphone mode will be activated to answer incoming calls

4.1.3 **Neglecting or Rejecting the Call**

Neglect the expansion module call

If you neglect the incoming call, the phone will no longer ring, but the incoming call information is still displayed on the phone screen.

Procedure:

- Select the **Mute** soft key or press the **Mute Key**

Manually reject the expansion module calls

When the phone receives an incoming call, you can reject it. The rejected call will be displayed in the history of received calls.

Procedure:

- Select the **Reject** soft key to reject the incoming call

Using Do Not Disturb (DND) to reject all calls

If you don't want to be disturbed by incoming calls, you can use the Do Not Disturb function to automatically reject all incoming calls or all incoming calls from a specified account. Specific configurations please refer to the DND function for more details.

Using the Do Not Disturb (DND) to reject all calls from a specified account

By default, the DND mode applies to all accounts. You can set the mode through the web system to the customized mode, and then you can enable the DND function of a specific account on the expansion module. Specific configurations please refer to the DND function for more details.

4.1.4 **Ending Calls**

You can end the current call at any time, either the phone account or expansion module account.

Procedures:

- If the phone works in handset mode, press the **Cancel** soft key or hang up the call
- If the phone works in headset mode, press the **Cancel** soft key
- If the phone works in speakerphone mode, press the **Speakerphone key** or press the **Cancel** soft key

4.1.5 **Mute**

When you enable the mute function during a call, the other party will not receive your voice message, but you can.

Procedures:

1) Press the **Mute Key** 🎤 to Enable silent mode. At this time, the mute icon 🎤 is displayed on the LCD screen, and the mute key lights up in red

2) Press the **Mute Key** 🎤 again to disable the mute mode

4.1.6 **Holding and Resuming Call**

When a new incoming call is received while you are on a call, you can select to put a call on hold or resume the call. The held party may hear the music sent from the PBX server while waiting.

Procedures:

1) During the call, press the **Hold Key** 📞 or select the soft key **Hold.** At this time, the screen will flash the hold icon and information, and the hold key will be in red.

2) Press the **Hold Key** 📞 again or select **Resume,** the hold key LED is off and the call resumes.

Note: When there are multiple calls, you can switch to a different line call by pressing the corresponding line , either the line key on the phone or on the expansion module.

4.2 **DND**

You can configure an Ext key as the DND key. If the DND mode is configured to" **Phone**", press the DND key when the phone is idle to activate or deactivate DND for all accounts. If the DND mode is configured to" **Custom** ", press the DND key when the phone is idle to activate or deactivate DND for specific account. You can set the phone mode and DND function period setting on the Web page.

Expansion Key

Index	1			Page	1	
Key	Type	Label	Value	Account		Extension
Key 1	DND			Account 1		

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DND function is enabled in default mode

Procedures:

Do these followings on the expansion module:

- Configure an Ext key as the DND key
- Press the **DND** key, The screen of the phone will display the DND icon ⊘

DND function is enabled in custom mode

1. Configure the phone mode to the custom mode

Sync Feature Code

Active	Enabled
Mode	○ Phone ● Custom

Login to the phone Web page, Navigate to " **Phone> Forward & DND** ". Select the phone mode on this page, and click **Submit** to save the configuration.

2. Enable the specific account DND

Procedures:

- Configure an Ext key as the DND key, and select the account to be configured
- Press the **DND** key, you can turn on the current account's DND

Note: You can use the **Up/Down** keys to switch different sip accounts.

Enable DND timer

You can enable the DND timer according to your habits, and reject all calls during the period you set. There are three sets. The ranges of the three periods can overlap.

Login to the phone Web page, Navigate to " **Phone> Forward & DND** "**,** enable the DND timed start setting and then set each of the three sets of timers. and click **Submit** to save the configuration.

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4.3 Forward

You can configure an Ext key as the Forward key to forward the call to a specified number (static forward) or to forward the call when the phone rings (dynamic forward).

Note:	If the DND feature is turned on, calls will not be forwarded even if you turn on No Answer Forward.

Setting the type of forwarding calls:

Always Forward: All incoming calls will be automatically forwarded to the pre-configured number.

Busy Forward: When the phone is busy, the incoming call will be forwarded to the pre-configured number.

No Answer Forward: When the phone does not answer within the set time, the incoming call will be forwarded to the pre-configured number.

You can enable forward for the phone, and you can enable forward for a specific account or all accounts, depending on the mode of forward. The mode of forward is described as follows.

Phone Mode（default）: The forward will be applied to all accounts on the phone.

Custom Mode: You can enable forward for a specific account or all accounts.

Forwarding all calls

1. Log in to the phone web page, select "**Phone->Forward & DND** ", set forward mode to "**Phone**" mode, enable forward and select the type.

Sync Feature Code

Active	Disabled
Mode	◉ Phone ◯ Custom

Forward Transfer

Account	All Account
Always Forward	Disabled
Target Number	
On Code	
Off Code	
Busy Forward	Disabled
Target Number	
On Code	
Off Code	
No Answer Forward	Disabled
No Answer Ring Time	30
Target Number	
On Code	
Off Code	

> **Note:** Some servers need to set the enable code and the disable code for call forwarding. Please consult your system administrator for further information.

2. Configure an EXT key as the Forward key.
3. When the phone receives a call, press the **Forward** key.

Forwarding the call to the designated account

By default, enabling call forwarding applies to all accounts. You can enable call forwarding for specific account by setting the phone mode to the custom mode.

1. Setting the phone mode to the custom mode

Log in to the phone web page ,select "**Phone->Forward & DND**" , set forward mode to Custom mode, click on **Submit** to save the configuration.

2. Setting call forward for designated account on the phone

Select a specific account to configure the type of forwarding for this account.

Procedures:

- Configure an EXT key as the Forward key
- Press the **Forward** key to enable the forward on this account

4.4 **Pickup**

You can use the pickup feature to answer calls from others.

There are following two pickup modes:

Directed Pickup: Answer incoming calls from designated number.

Group Pickup: Pickup calls from any member in the same group. Group pickup needs to set up group members in advance.

You can configure an Ext key as the pickup key to realize this function. The pickup value can be set to specify either directed pickup or group pickup.

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4.4.1 **Directed Pickup**

You can answer incoming calls from a designated number.

Procedures:

- Configure an EXT key as the pickup key , and enter:*20*100 in the pickup value area
- Select **Save**
- When the target number 100 is called, press the pickup key and you can answer the call from that user

4.4.2 **Group Pickup**

You can answer an incoming call in the same group. If the group receives multiple incoming calls, it will answer the first by default.

Procedures:

- Configure an EXT key as the pickup key , and enter: *20* in the pickup value area
- Select **Save**
- When any member of the group receives an incoming call, press the **Pickup** key to answer the call

4.5 **Intercom**

The intercom is a quick way to connect to a target number. By default, when you press the intercom key to connect to a target number, the target extension will automatically answer the incoming intercom call. Users can set the EXT key as an intercom key to enable intercom calls.

For example, in the 3CX server, you can set the intercom key value to *998100. The *998 is the feature code for intercom and 100 is the target extension number. When you press the intercom key, the call is automatically initiated and connected to the target extension number to realize the intercom call.

This setting makes it easy to make intercom calls quickly and easily, especially for scenarios where you need to communicate with a target number quickly.

Procedures:

- Configure an EXT key as the intercom key , and enter: *998100 in the intercom value area
- Select **Save**
- After the configuration, press the **Intercom** key to initiate an intercom call to the target account, then the target account will be answered automatically

4.6 Speed Dial

You can use the speed dial to quickly dial the specified number. Users can set the EXT key as speed dial key to realize one-touch auto dialing.

Expansion Key

Index	1			Page	1		
Key	Type	Label		Value	Account		Extension
Key 1	Speed Dial			100	Account 1		

Procedures:

- Configure an EXT key as the intercom key , and enter the target number to be dialed in the value area.
- Select **Save**
- Press the **Speed dial** key when the phone is idle, and the selected account will automatically dial the preset number

4.7 Callback

You can make the last call through the call back key. The user can set the EXT key to be the call back key.

Expansion Key

Index	1			Page	1		
Key	Type	Label		Value	Account		Extension
Key 1	Callback				Account 1		

Procedures:

- Configure an EXT key as the call back key
- Select **Save**
- Press the **Callback** key on the phone to automatically dial the last call

4.8 **Redial**

The redial allows the phone to redial the last dialed number. The user can set the EXT key to be the redial key.

Procedures:

- Configure an EXT key as the redial key
- Select **Save**
- Press the **Redial** key in the standby interface of the phone, the phone will automatically redial the last dialed number

4.9 **ACD**

The ACD feature is often used in customer service centers, such as call centers. The ACD system queues a large number of incoming calls and automatically assigns them to available users or agents based on specific rules and policies, allowing the use of IP telephony in call center roles. ACD is supported by SIP server. ACD is disabled on the phone by default. Users can configure the EXT key to be an ACD key, after successful configuration, the phone will be able to log in to the ACD system and handle the calls assigned by the system.

Procedures:

- Configure an EXT key as the ACD key
- Select **Save**
- Press the **ACD** key to select an account and log in to the ACD system to handle calls assigned by the system

4.10 **BLF**

BLF allows you to monitor the status changes of a user. For example, you can configure the BLF on a supervisor's phone to monitor a user's status. when the monitored user is on a call, the busy indicator on the supervisor's phone indicates that the user's phone is in use. Our phone supports three types of BLF:

BLF/New Call: This type is when the monitored line is idle, pressing the BLF key will make a new call to the monitored account.

BLF/BXFER: This type is to blindly transfer the current call to the monitored account when the line is idle.

BLF/AXFER: This type is to attended transfer the current call to the monitored account when the account is idle.

4.10.1 **Setting the BLF Key**

Configure the EXT key to be a BLF key to monitor account status.

Configure the BLF key:

Expansion Key					
Index	1		Page	1	
Key	Type	Label	Value	Account	Extension
Key 1	BLF/NewCa ⌄		620	Account 1 ⌄	*20*620

Procedures:

- Log in to the Web page of the phone ,select "**Phone->Expansion Module->EXT Key**"
- Set the EXT key type to any of the BLF types, and enter the account number to be monitored in the value area
- Select **Save**

4.10.2 **Picking Up a Call by BLF Key**

If you configure the pickup account and pickup code of the BLF key, when the monitored line receives an incoming call, you can answer the incoming call on your phone.

- When the monitored line receives a call, and the BLF pickup is enabled on the phone, the pickup Reminder window will be displayed on the phone interface.

- Press the **BLF** key or the **Pickup** soft key to answer an incoming call from a monitored account.

4.10.3 **Blind Transfer a Call by BLF Key**

If the type is BLF/BXFER for BLF key. Then the current call can be blind transfer when the monitored account is idle.

Procedures:

- Configure the EXT key as a BLF/BXFER key ,setting up the pickup account and pickup code
- Check the status of the monitoring account whether it is free before the call is transferred to the monitoring account
- If the monitoring account is idle, press the BLF/BXFER key to initiate a blind transfer
- The monitored account can continue to talk to the original caller

4.10.4 **Attended Transfer a Call by BLF Key**

If the type is BLF/AXFER for BLF key. Then the current call can be attended transfer when the monitored account is idle

Procedures:

- Configure the EXT key as a BLF/AXFER key ,setting up the pickup account and pickup code
- Check the status of the monitoring account whether it is idle before the call would be transferred to the monitoring account
- If the monitoring account is idle, press the BLF/AXFER key to initiate an attended transfer
- The monitored account can continue to talk to the original caller

4.11 **BLF List**

You can use the BLF list to monitor a set of phone numbers that are preconfigured by the server administrator. For example, your server platform supports the BLF list feature and your administrator creates a BLF list URI containing a set of user1, user2, and user3 on the server point(such as blf list@test.com). If configured successfully, the BLF List key will display the

label and status of user1, user2, and user3. When the status of these users changes, the BLF List LED will flash red or green.

Expansion Key

Index	1			Page	1	
Key	Type	Label	Value	Account	Extension
Key 1	BLF List			Account 1	

Procedures:
- Configure the EXT key as a BLF List key
- Select **Save**

Note: You can press the **BLF** key to answer an incoming call when any account in the BLF List receives a call.

4.12 Call Park

You can use the call park function to maintain the current conversation, and then resume the call on another(for example ,on another office or another call in the conference room). Call Park, the call is on hold and you can also resume the call by pressing the resume soft key. You can configure the EXT key as a Call Park key.

Expansion Key

Index	1			Page	1	
Key	Type	Label	Value	Account	Extension
Key 1	Call Park			Account 1	

Procedures:
- Configure the EXT key as a Call Park key
- Enter a call park code or an extension number in the value area. During a call, If you enter the call park code of the server, press the **Call Park key** to hold the current call, You can retrieve a parked call by dialing "Retrieve Parked Code" from another phone. If the extension number is entered in the value area. During a call, press the **Call Park key** to direct the call to the parked number

Note: Not every server supports call park and the support methods are also different. Please contact your administrator to confirm whether this feature is available.

4.13 **Hot Desking**

You can press the Hot Desking key to clear the registration information of all accounts on the phone when the phone is idle. Then register the account you want to. Through this function, more users can share this phone at different periods. Especially suitable for some public places. You can configure the EXT key to use the Hot Desking key.

Procedures:

- Configure the EXT key as a Hot Desking key
- Select **Save**

Use the Hot Desking:

1. After setting up the Hot Desking key, return to the interface in the idle state of the phone.
2. Press the **Hot Desking** key and a message on the screen, " Clear all account config?"
3. If you press the **Clear** soft key on the screen, the registration information for all accounts on the phone will be cleared immediately. The default is to clear the previous account information. If you press the **Cancel** soft key, you will exit the Hot Desking screen.
4. If you press the key on the screen to clear the account information, the phone will automatically enter the Account 1 configuration page ,including the registered name, user name and password.
5. After entering the Account 1 information, press **Save** . Then return to the Home screen to begin using the new account. The new Account 1 information you enter here should have the same server IP address as the previous Account 1. Otherwise, the new Account 1 may not be registered successfully.

4.14 **Record**

You can record by pressing the record button on the phone. The device sends a SIP INFO message with the "Record: on/off" header to trigger the server to record the call. You can set the EXT key as the record key.

Index	1		Page	1	
Key	Type	Label	Value	Account	Extension
Key 1	Record			Account 1	

Note:	1). Not all servers support the call recording feature, please consult your administrator for further information. 2). Before recording calls, especially those involving analog telephone, you must understand all the rules and restrictions governing call recording in your country. 3). Similarly, before recording, inform all the callers that you are recording and obtain their consent.

Procedures:

- Configure the EXT key as a Record key
- Select **Save**
- Press the **Record** key during a call. If recording successfully, the LCD screen displays the icon ⏸, and record button LED blinks slowly
- Press the **Record** key again to stop recording. The recording icon on the screen disappears, and the record key LED stops flashing

4.15 **XML Browser**

The XML browser allows users to deploy custom services on the server. Users can quickly access it using the XML browser key. This feature requires pre-configuration of custom services on the server, such as news, weather reports, and inventory information. The information will be received from the server and displayed on the screen, and all information will be transmitted in the form of XML. You can configure EXT keys to be a XML Browser key.

Index	1		Page	1	
Key	Type	Label	Value	Account	Extension
Key 1	XML Brows		http://172.28.1	Account 1	

Procedures:

- Configure the EXT key as a Record key ,enter the URL where the XML file is located
- Select **Save**

When the phone is idle, press the **XML Browser** key to accesses the URL address and fetches the XML file. Upon successful retrieval, the phone screen will display the XML file.

4.16 **DTMF**

DTMF function supports users to send DTMF messages to the other end during a call, which is suitable for users to input information during voice interaction, such as password or PIN code. You can configure EXT keys to be a DTMF key.

Expansion Key					
Index	1 ⌄		Page	1 ⌄	
Key	Type	Label	Value	Account	Extension
Key 1	DTMF ⌄		12345678	Account 1 ⌄	

Procedures:

- Configure the EXT key as a DTMF key, enter the string to be sent in the value area
- Select **Save**
- Press the **DTMF** key during a call, the phone will send a pre-set DTMF message to the other end

4.17 **Multicast Paging**

The multicast paging is a network communication technique used to send messages or data to multiple devices within the same group. It uses multicast IP addresses and ports to identify groups of devices. Devices can receive multicast messages by joining a multicast group. Configure multicast paging so that a user can instantly page all phones on the network, or page a group of phones without involving the server. You can set the EXT key to be a Multicast Paging key so that users can initiate a multicast call with a single keystroke.

Expansion Key					
Index	1 ⌄		Page	1 ⌄	
Key	Type	Label	Value	Account	Extension
Key 1	Multicast Pa ⌄		224.0.0.75:100(	Account 1 ⌄	

Procedures:

- Configure the EXT key as a Multicast Paging key, enter the multicast address and port in the value area
- Select **Save**
- Press the **Multicast Paging** key when the phone is idle, and the phone will initiate a multicast call to the multicast address and port

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4.18 **Prefix**

Prefix supports users to add prefixes to numbers with one key when dialing, thus saving users' dialing time. You can set the EXT key as the prefix key.

Procedures:

- Configure the EXT key as a Multicast Paging key, enter the number prefix in the value area
- Select **Save**
- Pressing the **Prefix** key while dialing will cause a pre-set number prefix to appear on the phone's dialing screen

4.19 **SMS**

To ensure that you can still communicate and interact effectively with the called party when you unable to conduct real-time voice communications. The phone provides text and voice messaging capabilities. For text messages, you can send a text message to a recipient. At the same time, you can save the edited message as a draft message. The voice message supports the configuration of different voice mailbox numbers for different accounts, the default is: *170*2#. and the voice message on the server can be obtained through subscription messages.

Note: Not all servers support the voice message. Please consult your system administrator for further information..

4.19.1 **Text Message**

Text messages can be stored in the inbox, sent messages, outbox, and draft box, each of which can store 100 text messages. If the number of text messages exceeds, the phone will delete the farthest text message.

This limitation is to ensure that the storage space of the phone will not be occupied excessively and also to remind users to organize and clean up text messages in time to maintain a good communication record and effective use of storage space. If you want to keep important text

messages, it is recommended that you save them locally or back them up to the cloud in a timely manner.

- Configure the EXT key as a Text Message key.
- Press the **Message** key, users can open the text message interface to edit the sent message or view the received message.

Expansion Key					
Index	1		Page	1	
Key	Type	Label	Value	Account	Extension
Key 1	SMS			Account 1	

Reading a text message

You can read text messages through the inbox.

Procedures:

- Press the **Message** Key, select Inbox and press the **Enter** soft key to enter Inbox
- Press **Up/Down** Function Key to select the message to be viewed, press **Enter** Soft Key to view message

Note: When the screen prompts you to receive a new text message, you can press the View soft key to read it.

Sending a text message

Procedures:

- Press the **Message** Key, select new message and press the **Enter** soft key to enter the message editing interface
- After editing the message, press **Send** to enter the contact information screen.
- Fill in the number in the to area
- Select **Send**

Replying a text message

Procedures:

- Press the **Message** Key, select Inbox and press the **Enter** soft key to enter Inbox
- Press **Up/Down** Function Key to select the message to be viewed, press **Enter** Soft Key to view message
- Press the **Reply** soft key to enter the message editing page
- After editing the message, press **Send** to enter the contact information screen.

- Fill in the number in the to area
- Select **Send**

4.19.2 **Voice Message**

When a user fails to answer an incoming call in a timely manner, the incoming call can be transferred to voicemail to allow the caller to leave a voicemail message. Users need to configure the server to use the voicemail feature, not all servers support the voicemail feature.

- Configure the EXT key as a Voice Message key.
- Press the **Voice Message** key, you can view the voice message of the current account.

Expansion Key					
Index	1 ▾		Page	1 ▾	
Key	Type	Label	Value	Account	Extension
Key 1	Voice Mess: ▾			Account 1 ▾	

Setting the voice message code

Before viewing or listening to your voice message, you need to set the voice mail access code in advance (the code default: *170*2#).

Procedures:

- Setting up voice mail feature codes for each account
- Select **Save**

Listening the voice message

You can view and listen to voice messages on the phone.

Procedures:

- Press the **Voice Message** key to enter the voice message interface
- Press the **up/down** function keys to select an account with voice message
- Press **Connection** soft key to connect to the voice server
- Follow the voice prompts to complete the message listening

Note: When the screen shows you to receive a new message, you can press the **View** soft key to listen to the new voice message.

4.20 **Menu**

The device can configure the EXT key as a Menu key, so that the menu function key is equivalent to the menu soft function key of the phone interface, which can open the menu interface of the phone.

Expansion Key

Index	1			Page	1	
Key	Type	Label	Value	Account		Extension
Key 1	Menu			Account 1		

After the user presses the **Menu** key, the menu screen opens, which contains Status, Functions, Settings, Messages, History, and Phonebook.

4.21 **Status**

The device can configure the EXT key as a Status key, so that the Status key is equivalent to the **OK** key of the phone interface, which can open the phone's status information display interface.

Expansion Key

Index	1			Page	1	
Key	Type	Label	Value	Account		Extension
Key 1	Status			Account 1		

After the user presses the **Status** key, then it will open the status message display screen.

4.22 **History**

The device can configure the EXT key as a History key, making the History key equivalent to the history soft function key of the phone interface, which can open the call history information display screen of the phone.

Expansion Key

Index	1			Page	1	
Key	Type	Label	Value	Account		Extension
Key 1	History			Account 1		

Press the **History** key to open the call history display interface, in which you can initiate a call based on the history call information, delete the history information, view the details, etc.

4.23 **Favorites**

Favorites enables users to store some important or frequently used contacts from the local contacts in the Favorites phonebook. When there is a lot of information in the phonebook, the favorite phonebook can facilitate the user to quickly find the frequently used contacts. The device can be configured as a Favorites key, when the key is pressed, the favorite phonebook will be opened and the user can select one of the contacts to initiate a call.

Press **Favorites** key, you can open the favorite phonebook, in this interface you can select one of the contacts and then **Dial** it.

4.24 **Visual Park**

Virtual Park is a parking feature developed only to support PortSIP servers. It is similar to the normal parking feature. When Phone A is configured with a VisualPark key, while users B and C are on a call, one of them can park the call to Phone A by blind transferring *68 + Phone A number. Phones A can then press the **Visual Park** key to enable a call to the parked side. At the same time, the user can configure the EXT key as a Visual Park key to view the parked call or resume the parked call.

5 **Troubleshooting**

Issue 1: The LCD does not light up

- Check the AC power adapter, make sure it is the one provided in your package. To support more than two or three expansion modules, be sure to use an external power supply.

Issue 2: Unable to take effect after configuring the function key

- Some function keys need to be configured on the server or phone to take effect. Please contact the official technical support staff for information on how to use the features and the configuration procedure.

Issue 3: Unable to connect to the expansion module via SSH

- The expansion module does not have an IP address by default, so it is unable to access the expansion module via SSH. If you need to enable SSH access to the expansion, please enable the debugging function of the expansion first, so that it can get the IP address and open the SSH connection.

Issue 4: Expansion Module reports configuration conflicts

- The expansion is automatically bounded to the phone by default when it is powered up. The device reports this error when an expansion module is connected to another phone. The user needs to delete the bound expansion module on the original bound phone. After deleting and refreshing the phone, the error will no longer be displayed.

6 **Appendix**

6.1 **Abbreviations**

Abbreviation	Explanation
ACD	Automatic Call Distribution
BLF	Busy Lamp Field
CID	Caller Identity
DND	Do NOT Disturb
DTMF	Dual Tone Multi Frequency
DNS	Domain Name System
DHCP	Dynamic Host Configuration Protocol
NAT	Network Address Translation
LDAP	Lightweight Directory Access Protocol
LLDP	Link Layer Discovery Protocol
SNMP	Simple Network Management Protocol
TR069	Technical Report - 069
NMS	Network management system
PNP	Plug-and-Play
PPPoE	point-to-point protocol over Ethernet
NTP	Network Time Protocol
RTP	Real Time Protocol
SIP	Session Initiation Protocol
TCP	Transmission Control Protocol
UDP	User Datagram Protocol
802.1X	IEEE 802.1X:IEEE
VPN	Virtual Private Network

Abbreviation	Explanation
WLAN	Wireless Local Area Network