



Yealink SIP Phones Integrated with Metaswitch Configuring Guide

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Hereby, Yealink Network Technology CO., LTD. declares that this phone is in conformity with the essential requirements and other relevant provisions of the CE, FCC.

CE Mark Warning

This device is marked with the CE mark in compliance with EC Directives 2006/95/EC and 2004/108/EC.

Part 15 FCC Rules

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device is compliant with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Class B Digital Device or Peripheral

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

WEEE Warning



To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

Customer Feedback

We are striving to improve our documentation quality and we appreciate your feedback. Email your opinions and comments to DocsFeedback@yealink.com.

GNU GPL INFORMATION

Yealink IP phone firmware contains third-party software under the GNU General Public License (GPL). Yealink uses software under the specific terms of the GPL. Please refer to the GPL for the exact terms and conditions of the license.

The original GPL license, source code of components licensed under GPL and used in Yealink products can be downloaded online: http://www.yealink.com/onepage_83.html.

About This Guide

Thank you for choosing the Yealink SIP IP phones. The purpose of this guide introduces how to configure Yealink SIP IP phones via CommPortal phone configurator.

The configuration process outlined in this guide applies to the following phone models:

Phone Model	Firmware
T19P-E2	53.80.202.1 or later
T40P	54.80.202.1 or later
T27G, T29G, T40G, T41S, T42S, T46S, T48S	X.82.0.1 or later
T54S/T52S	70.82.0.10 or later
W60B	77.81.0.16 or later
CP920	78.81.0.15 or later
T58A/T58V/T56A	58.83.0.15 or later
CP960	73.83.0.25 or later
T57W/T54W/T53W/T53	X.84.0.65 or later
W70B	146.85.0.15 or later
W80	103.83.0.55 or later
W90	130.85.0.15 or later
VP59	91.85.0.X or later

Note

The configuration process described in this guide takes the Yealink SIP-T42S IP phone as an example.

In This Guide

Topics provided in this guide include:

- Chapter 1 [Configuration Methods](#)
- Chapter 2 [Customizing Your Phone](#)
- Chapter 3 [Downloading Configuration Files to Phones](#)
- Chapter 4 [Basic Call Features](#)
- Chapter 5 [Advanced Phone Features](#)
- Chapter 6 [Troubleshooting](#)

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Configuration Methods

There are two ways to configure Yealink SIP IP phones.

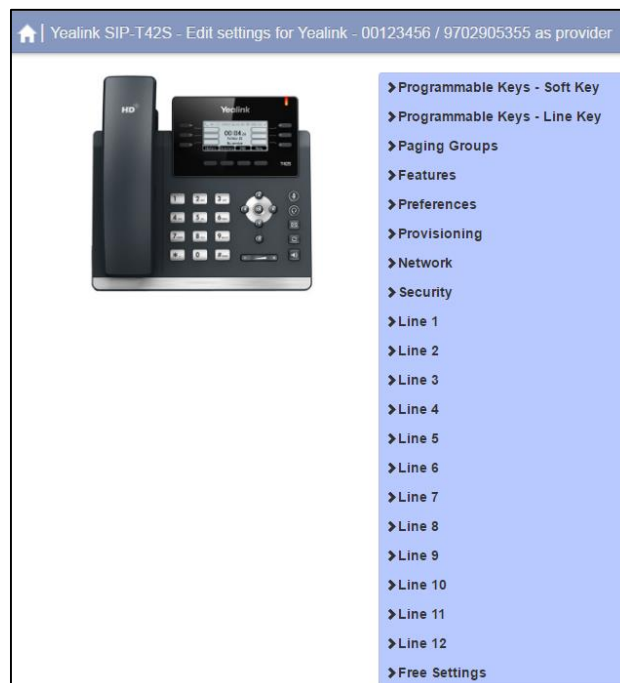
- **Phone user interface:** if you want to deploy a small number of phones, you can configure IP phones one by one via phone user interface.
- **CommPortal Phone Configurator:** if you want to deploy a mass of IP phones, you can configure IP phones via CommPortal phone configurator.

Phone User Interface

The phone user interface is made up of keypad and LCD screen, allowing users to perform all call operations and change basic configuration settings directly on the phone.

CommPortal Phone Configurator

The CommPortal Phone Configurator is an online graphical user interface for the Metaview SIP provisioning server. You can configure the phone by using this simple and intuitive interface. For more information, refer to: www.metaswitch.com.



CommPortal Phone Configurator

Customizing Your Phone

IPv4 and IPv6 Network Settings

After your phones are connected to the wired network, the phones can obtain the IPv4 or IPv6 network settings from a Dynamic Host Configuration Protocol (DHCP) server if your network supports it.

You can also configure IPv4 or IPv6 network settings manually.

Choosing IP Addressing Mode

Yealink IP Phones support IPv4 addressing mode, IPv6 addressing mode, as well as an IPv4&IPv6 dual-stack addressing mode. Choose one according to your environment.

It is not applicable to W80/W90.

To configure the IP addressing mode via CommPortal phone configurator:

1. Click **Network->IP Setting**.
2. Select **IPv4**, **IPv6** or **IPv4 & IPv6** from the **Internet Port Mode(IPv4/IPv6)** field.

link - 00004343 / 9702981673 as provider Filter settings...

Network

IP Setting

Internet Port Mode(IPv4/IPv6) ? IPv4 ▼ 🔒 Default

Internet Port Type for IPv4 ? DHCP ▼

Static IP Address ?

Subnet Mask ?

Gateway ?

Static DNS ? ☐ Enabled ☒ Disabled

Primary DNS ?

Secondary DNS ?

3. Click **Save changes** to accept the change.
4. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring a Static IPv4 Address

To configure a static IPv4 address via CommPortal phone configurator:

1. Click **Network->IP Setting**.
Make sure that the IP addressing mode is configured as **IPv4** or **IPv4 & IPv6**.
2. Select **Static IP Address** from the drop-down menu of **Internet Port Type for IPV4**.
3. Enter the desired values in the **Static IP Address**, **Subnet Mask**, **Gateway**, **Primary DNS** and **Secondary DNS** fields respectively.

link - 00004343 / 9702981673 as provider Filter settings...

▼ Network

▼ IP Setting

Internet Port Mode(IPv4/IPv6) ? IPv4 ▼ 🔒

*Internet Port Type for IPV4 ? Static IP Address ▼

*Static IP Address ? 192.168.1.10

*Subnet Mask ? 255.255.255.0

*Gateway ? 192.168.1.1

Static DNS ? ☐ Enabled ☒ Disabled

*Primary DNS ? 202.101.103.65

Secondary DNS ? 202.101.103.56 ✕

4. Press the **Save** soft key to accept the change.
5. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring a Static IPv6 Address

It is not applicable to W80/W90.

To configure a static IPv6 address via CommPortal phone configurator:

1. Click **Network > IP Setting**.
Make sure that the IP addressing mode is configured as **IPv6** or **IPv4 & IPv6**.
2. Select **Static IP Address** from the drop-down menu of **Internet Port Type for IPV6**.

- Enter the desired values in the **Static IP Address**, **IPv6 Prefix**, **Gateway**, **Primary DNS** and **Secondary DNS** fields respectively.

0004343 / 9702981673 as provider

Filter settings... Clear

▼ Network

▼ IP Setting

*Internet Port Mode(IPv4/IPv6) IPv6 [Lock] [Reset]

*Internet Port Type for IPv6 Static IP Address

*Static IP Address 2005:1:1:1::25

IPv6 Prefix 64

*Gateway 2005:1:1:1::1

Static DNS ☐ Enabled ☒ Disabled

*Primary DNS 2005:1:1:1::89

*Secondary DNS 2005:1:1:1::90

► PC Port

- Click **Save changes** to accept the change.
- Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Registering Accounts

You can register one or multiple accounts on the SIP IP phone.

Note

The SIP-T19 (P) E2, CP920 and CP960 phones only support one account at most.

To register an account via CommPortal phone configurator:

- Click **Line X->User**.
- Enter the desired values in **Directory Number** and **Display Name** fields respectively.
- Select the desired value from the **Description** field.
- Depending on your selection:
 - If you select **Use directory number**, the directory number will act as the account label to be displayed on the idle screen.
 - If you select **Use extension**, the extension will act as the account label to be displayed on the idle screen.
 - If you select **Custom description**, you can customize the label to be displayed on the idle screen in the **Custom Description** field.
- Click **Line X->SIP Server**.

6. Enter the desired values in the **SIP Server Address** field. Contact your system administrator for more information.

The screenshot shows the configuration interface for a Yealink IP phone. The top bar indicates the phone number '004343 / 9702981673 as provider' and a 'Filter setting' button. The interface is divided into two main sections: 'User' and 'SIP Server'.

User Section:

- Directory Number: 9702981673
- *Display Name: 9702981673
- Description: Custom description
- *Custom Description: 9702981673

SIP Server Section:

- Enable Outbound Proxy Server: ☐ Enabled ☒ Disabled
- Outbound Proxy:
- Outbound Proxy Port: 5060
- Backup Outbound Proxy:
- Backup Outbound Proxy Port: 5060
- Proxy Fallback Interval: 3600
- Transport: UDP
- SIP Registration Retry Timer: 60
- SIP Server Address: example.com

Red boxes highlight the 'Display Name', 'Custom Description', and 'SIP Server Address' fields.

You can repeat steps 2 to 7 to register more accounts.

7. Click **Save changes** to accept the change.
8. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

SIP Session Timer

SIP session timers T1, T2 and T4 are SIP transaction layer timers defined in RFC 3261. These session timers are configurable on IP phones.

Timer T1

Timer T1 is an estimate of the Round Trip Time (RTT) of transactions between a SIP client and SIP server.

Timer T2

Timer T2 represents the maximum retransmitting time of any SIP request message. The re-transmitting and doubling of T1 will continue until the retransmitting time reaches the T2 value.

Example:

The user registers a SIP account for the IP phone and then set the value of Timer T1, Timer T2 respectively (Timer T1: 0.5, Timer T2: 4). The SIP registration request message will be re-transmitted between the IP phone and SIP server. The re-transmitting and doubling of Timer T1 (0.5) will continue until the retransmitting time reaches the Timer T2 (4). The total registration request retry time will be less than 64 times of T1 ($64 * 0.5 = 32$). The re-transmitting interval in sequence is: 0.5s, 1s, 2s, 4s, 4s, 4s, 4s, 4s and 4s.

Timer T4

Timer T4 represents that the network will take to clear messages between the SIP client and server.

Configuring SIP Session Timer

To configure SIP session timer via CommPortal phone configurator:

1. Click **Preference->SIP**.
2. Enter the desired value in the **SIP Session Timer T1** field.
The valid value is 0.5-10s, and the default value is 0.5s.
3. Enter the desired value in the **SIP Session Timer T2** field.
The valid value is 2-40s, and the default value is 4s.
4. Enter the desired value in the **SIP Session Timer T4** field.
The valid value is 2.5-60s, and the default value is 5s.

004343 / 9702981673 as provider		Filter settings...	Clear
SIP			
SIP NAT STUN Enable	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled		Default
SIP NAT STUN Server			Default
SIP NAT STUN Server Port	3478		Default
SIP Session Timer T1	0.5		Default
SIP Session Timer T2	4		Default
SIP Session Timer T4	5		Default
Local SIP Port	5060		Default
TLS SIP Port	5061		Default
Accept SIP Messages From Trusted Server	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled		Default

5. Click **Save changes** to accept the change.
6. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Time & Date

Yealink IP phones maintain a local clock. You can choose to get the time and date from SNTP (Simple Network Time Protocol) time server to have the most accurate time and set DST (Daylight Saving Time) to make better use of daylight and to conserve energy, or you can set the time and date manually. The time and date can be displayed in several formats on the phone.

Time Zone

The following table lists the values you can use to set the time zone location.

Time Zone	Time Zone Name	Time Zone	Time Zone Name
-12	Eniwetok,Kwajalein	+2	Estonia(Tallinn)
-11	Midway Island	+2	Finland(Helsinki)
-11	Samoa	+2	Gaza Strip(Gaza)
-10	United States-Hawaii-Aleutian	+2	Greece(Athens)
-10	United States-Alaska-Aleutian	+2	Israel(Tel Aviv)
-9:30	French Polynesia	+2	Jordan(Amman)
-9	United States-Alaska Time	+2	Latvia(Riga)
-8	Canada(Vancouver,Whitehorse)	+2	Lebanon(Beirut)
-8	Mexico(Tijuana,Mexicali)	+2	Moldova(Kishinev)
-8	United States-Pacific Time	+2	Jerusalem
-8	Baja California	+2	Russia(Kaliningrad)
-7	Canada(Edmonton,Calgary)	+2	Bulgaria(Sofia)
-7	Mexico(Mazatlan,Chihuahua)	+2	Lithuania(Vilnius)
-7	United States-Mountain Time	+2	Cairo
-7	United States-MST no DST	+2	Istanbul
-7	Chihuahua,La Paz	+2	E.Europe
-7	Arizona	+2	Harare,Pretoria
-6	Guatemala	+2	Tripoli
-6	El Salvador	+2	Romania(Bucharest)
-6	Honduras	+2	Syria(Damascus)
-6	Nicaragua	+2	Turkey(Ankara)
-6	Costa Rica	+2	Ukraine(Kyiv, Odessa)
-6	Belize	+3	East Africa Time

Time Zone	Time Zone Name	Time Zone	Time Zone Name
-6	Canada-Manitoba(Winnipeg)	+3	Iraq(Baghdad)
-6	Chile(Easter Islands)	+3	Russia(Moscow)
-6	Guadalajara	+3	St.Petersburg
-6	Monterrey	+3	Kuwait,Riyadh
-6	Mexico(Mexico City,Acapulco)	+3	Nairobi
-6	Saskatchewan	+3	Minsk
-6	United States-Central Time	+3	Volgograd (RTZ 2)
-5	Bogota,Lima	+3:30	Iran(Teheran)
-5	Quito	+4	Armenia(Yerevan)
-5	Peru	+4	Azerbaijan(Baku)
-5	Indiana (East)	+4	Georgia(Tbilisi)
-5	Bahamas(Nassau)	+4	Kazakhstan(Aktau)
-5	Canada(Montreal,Ottawa,Quebec)	+4	Russia(Samara)
-5	Cuba(Havana)	+4	Abu Dhabi,Muscat
-5	United States-Eastern Time	+4	Izhevsk,Samara (RTZ 3)
-4:30	Venezuela(Caracas)	+4	Port Louis
-4	Canada(Halifax,Saint John)	+4:30	Afghanistan(Kabul)
-4	Atlantic Time (Canada)	+5	Kazakhstan(Aqtobe)
-4	San Juan	+5	Kyrgyzstan(Bishkek)
-4	Manaus,Cuiaba	+5	Ekaterinburg (RTZ 4)
-4	Georgetown	+5	Karachi
-4	Chile(Santiago)	+5	Tashkent
-4	Paraguay(Asuncion)	+5	Pakistan(Islamabad)
-4	United Kingdom-Bermuda(Bermuda)	+5	Russia(Chelyabinsk)
-4	United Kingdom(Falkland Islands)	+5:30	India(Calcutta)
-4	Trinidad&Tobago	+5:30	Mumbai,Chennai
-3:30	Canada-New Foundland(St.Johns)	+5:30	Kolkata,New Delhi
-3	Greenland(Nuuk)	+5:30	Sri Jayawardenepura
-3	Argentina(Buenos Aires)	+5:45	Nepal(Katmandu)
-3	Brazil(no DST)	+6	Kazakhstan(Astana, Almaty)
-3	Brasilia	+6	Russia(Novosibirsk,Omsk)

Time Zone	Time Zone Name	Time Zone	Time Zone Name
-3	Cayenne,Fortaleza	+6	Bangladesh(Dhaka)
-3	Montevideo	+6:30	Myanmar(Naypyitaw)
-3	Salvador	+6:30	Yangon (Rangoon)
-3	Brazil(DST)	+7	Russia(Krasnoyarsk)
-2:30	Newfoundland and Labrador	+7	Thailand(Bangkok)
-2	Brazil(no DST)	+7	Vietnam(Hanoi)
-2	Mid-Atlantic	+7	Jakarta
-1	Portugal(Azores)	+8	China(Beijing)
-1	Cape Verde Islands	+8	Singapore(Singapore)
0	GMT	+8	Hong Kong,Urumqi
0	Western Europe Time	+8	Taipei
0	Monrovia	+8	Kuala Lumpur
0	Reykjavik	+8	Australia(Perth)
0	Casablanca	+8	Russia(Irkutsk, Ulan-Ude)
0	Denmark-Faroe Islands(Torshavn)	+8	Ulaanbaatar
0	Ireland(Dublin)	+8:45	Eucla
0	Edinburgh	+9	Korea(Seoul)
0	Portugal(Lisboa,Porto,Funchal)	+9	Japan(Tokyo)
0	Spain-Canary Islands(Las Palmas)	+9	Russia(Yakutsk,Chita)
0	United Kingdom(London)	+9:30	Australia(Adelaide)
0	Lisbon	+9:30	Australia(Darwin)
0	Morocco	+10	Australia(Sydney,Melbourne,Canberra)
+1	Albania(Tirane)	+10	Australia(Brisbane)
+1	Austria(Vienna)	+10	Australia(Hobart)
+1	Belgium(Brussels)	+10	Russia(Vladivostok)
+1	Caicos	+10	Magadan (RTZ 9)
+1	Belgrade	+10	Guam,Port Moresby
+1	Bratislava	+10	Solomon Islands
+1	Ljubljana	+10:30	Australia(Lord Howe Islands)
+1	Chad	+11	New Caledonia(Noumea)
+1	Copenhagen	+11	Chokurdakh (RTZ 10)

Time Zone	Time Zone Name	Time Zone	Time Zone Name
+1	West Central Africa	+11	Russia(Srednekolymsk Time)
+1	Poland(Warsaw)	+11:30	Norfolk Island
+1	Spain(Madrid)	+12	New Zealand(Wellington,Auckland)
+1	Croatia(Zagreb)	+12	Fiji Islands
+1	Czech Republic(Prague)	+12	Russia(Kamchatka Time)
+1	Denmark(Kopenhagen)	+12	Anadyr
+1	France(Paris)	+12	Petropavlovsk-Kamchatsky (RTZ 11)
+1	Germany(Berlin)	+12	Marshall Islands
+1	Hungary(Budapest)	+12:45	New Zealand(Chatham Islands)
+1	Italy(Rome)	+13	Nuku'alofa
+1	Switzerland(Bern)	+13	Tonga(Nukualofa)
+1	Sweden(Stockholm)	+13:30	Chatham Islands
+1	Luxembourg(Luxembourg)	+14	Kiribati
+1	Macedonia(Skopje)		
+1	Netherlands(Amsterdam)		
+1	Namibia(Windhoek)		

Configuring NTP Server

You can set an NTP time server for the desired area as required. The NTP time server address can be offered by the DHCP server or configured manually.

To configure the NTP settings via CommPortal phone configurator:

1. Click **Preferences->Time&Date**.
2. Select **NTP** from the drop-down menu of **Obtain Time Method**.
3. Select the priority for the IP phone to use the NTP server address offered by the DHCP server.
 - High, the phone uses the NTP server address offered by the DHCP server preferentially.
 - Low, the phone uses the NTP server address configured manually preferentially.
4. Enter the domain names or IP addresses in the **Primary NTP Server** and **Secondary NTP Server** fields respectively.

- Enter the desired interval to update time and date from the NTP server in the **NTP Query Interval** field.

Time&Date			
DHCP Time	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled		Default
Time Format	<input checked="" type="radio"/> 12 Hour Clock <input type="radio"/> 24 Hour Clock		Default
Date Format	WWW MMM DD		Default
Lcl Date Format			Default
Time Zone	Match My Account		Default
Daylight Savings	Enabled		Default
Obtain Time Method	NTP		Default
NTP by DHCP Priority	<input type="radio"/> Low <input checked="" type="radio"/> High		Default
Primary NTP Server	cn.pool.ntp.org		Default
Secondary NTP Server	cn.pool.ntp.org		Default
NTP Query Interval	1000		Default

- Click **Save changes** to accept the change.
- Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring Daylight Saving Time

You can set daylight saving time (DST) for the desired area as required. By default, the DST is set to Automatic, so it can be adjusted automatically from the current time zone configuration.

The time zone and corresponding DST pre-configurations exist in the AutoDST file. If the DST is set to Automatic, the IP phone obtains the DST configuration from the AutoDST file.

You can customize the AutoDST file if required. The AutoDST file allows you to add or modify time zone and DST settings for your area each year.

Obtaining DST Settings Automatically

To obtain the DST settings automatically via CommPortal phone configurator:

- Click **Preferences->Time&Date**.

2. Select **Automatic** from the drop-down menu of **Daylight Savings**.

The screenshot shows the 'Time&Date' configuration page. It includes settings for DHCP Time, Time Format, Date Format, Lcl Date Format, Time Zone, and Daylight Savings. The 'Daylight Savings' dropdown menu is highlighted with a red box and is set to 'Automatic'. A 'Reset' button is visible at the bottom right.

3. Click **Save changes** to accept the change.
4. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring DST Settings Manually

To configure the DST settings via CommPortal phone configurator:

1. Click **Preferences->Time&Date**.
2. Select **Enabled** from the drop-down menu of **Daylight Savings**.
3. Do one of the following:
 - a) Select **DST By Date** from the **Fixed Type** field.
 - 1) Enter the start time in the **Start Date** field.
 - 2) Enter the end time in the **End Date** field.

Value format is: Month/Day/Hour.

The mapping is:

 - **For month:** 1=Jan, 2=Feb,..., 12=Dec;
 - **For day:** 1=the first day in a month,..., 31= the last day in a month;
 - **For hour:** 0=0am, 1=1am,..., 23=11pm.

- 3) Enter the desired offset time in the **Offset (minutes)** field.

The screenshot shows the configuration page for a Yealink IP phone. The 'Fixed Type' field is highlighted with a red box and set to 'DST By Date'. Below it, the 'Start Date' is set to '1/1/0' and the 'End Date' is set to '12/31/23'. The 'Offset (minutes)' field is at the bottom, currently empty.

- b) Select **DST By Week** from the **Fixed Type** field.

- 1) Enter the start time in the **Start Date** field.

- 2) Enter the end time in the **End Date** field.

Value format is: Month/ Day of Week/ Day of Week Last in Month/ Hour of Day.

The mapping is:

- **For Month:** 1=Jan, 2=Feb,..., 12=Dec;
- **For Day of Week:** 1=Jan, 2=Feb,..., 12=Dec;
- **For Day of Week Last in Month:** 1=the first week in a month,..., 5=the last week in a month;
- **For Hour of Day:** 0=0am, 1=1am,..., 23=11pm.

- 3) Enter the desired offset time in the **Offset (minutes)** field.

The screenshot shows the configuration page for a Yealink IP phone. The 'Fixed Type' field is highlighted with a red box and set to 'DST By Week'. Below it, the 'Start Date' is set to '1/1/4/7' and the 'End Date' is set to '2/2/4/8'. The 'Offset (minutes)' field is at the bottom, set to '1'.

4. Click **Save changes** to accept the change.
5. Perform auto provisioning on the phone to download above configurations. For more

information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Disabling DST Settings

To disable the DST settings automatically via CommPortal phone configurator:

1. Click **Preferences->Time&Date**.
2. Select **Disabled** from the drop-down menu of **Daylight Savings**.

The screenshot shows the 'Time&Date' configuration page in the CommPortal phone configurator. The page has a blue header with 'Preferences' and 'Time&Date' sections. The 'Time&Date' section contains several settings:

- DHCP Time**: Radio buttons for 'Enabled' and 'Disabled' (selected). A lock icon and 'Default' label are on the right.
- Time Format**: Radio buttons for '12 Hour Clock' (selected) and '24 Hour Clock'. A lock icon and 'Default' label are on the right.
- Date Format**: A dropdown menu showing 'WWW MMM DD'. A lock icon and 'Default' label are on the right.
- Lcl Date Format**: An empty text input field. A lock icon and 'Default' label are on the right.
- Time Zone**: A dropdown menu showing 'Match My Account'. A lock icon and 'Default' label are on the right.
- *Daylight Savings**: A dropdown menu showing 'Disabled'. This row is highlighted with a red border. A lock icon and a 'Reset' button are on the right.
- Obtain Time Method**: A dropdown menu showing 'NTP'. A lock icon and 'Default' label are on the right.

3. Click **Save changes** to accept the change.
4. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring the Method to Obtain Time and Date

By default, the phones obtain the time and date from the NTP time server, you can also set the time and date manually.

To configure the time and date format via CommPortal phone configurator:

1. Click **Preferences->Time&Date**.

2. Select the desired value from the drop-down menu of **Obtain Time Method**.

The screenshot shows the 'Preferences' section of the configuration interface, specifically the 'Time&Date' tab. The 'Obtain Time Method' dropdown menu is highlighted with a red border and is currently set to 'NTP'. Other visible settings include 'DHCP Time' (Disabled), 'Time Format' (12 Hour Clock), 'Date Format' (WWW MMM DD), 'Lcl Date Format' (empty), 'Time Zone' (Match My Account), and '*Daylight Savings' (Disabled). Each setting has a lock icon and a 'Default' label.

3. Click **Save changes** to accept the change.
4. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring Time and Date Format

You can customize the time and date by choosing between a variety of time and date formats.

The available date formats are as follow:

Date Format	Example (2018-07-27)
WWW MMM DD	Fri Jul 27
DD-MMM-YY	27- Jul -18
YYYY-MM-DD	2018-07-27
DD/MM/YYYY	27/07/2018
MM/DD/YY	07/27/18
DD MMM YYYY	27 Jul, 2018
WWW DD MMM	Fri 27, Jul

To configure the time and date format via CommPortal phone configurator:

1. Click **Preferences->Time&Date**.
2. Mark the desired radio box of the **Time Format** field.

3. Select the desired date format from the drop-down menu of **Date Format**.

The screenshot shows the 'Preferences' section of the phone configuration interface. Under the 'Time & Date' category, there are three settings: 'DHCP Time' (set to Disabled), 'Time Format' (set to 12 Hour Clock), and 'Date Format' (set to WWW MMM DD). Each setting has a 'Default' button to its right. A red rectangular box highlights the 'Time Format' and 'Date Format' settings and their options.

4. Click **Save changes** to accept the change.
5. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Directory

The directory provides easy access to frequently used lists. The lists may contain Local Directory, History, Remote Phone Book, LDAP, Network Contacts and Network Call List.

Note

If Remote Phone Book, LDAP, Network Contacts and Network Call List are not configured in advance, you cannot see them on the phone user interface.

For more information on Remote Phone Book, refer to [Remote Phone Book](#) on page 18.

For more information on the LDAP, refer to [LDAP Directory on Yealink IP Phones](#).

Not all phones support Network Contacts and Network Call List. For more information, refer to *Yealink SIP Phones Integrated with Metaswitch CommPortal Phone Applications User Guide*.

You cannot configure Directory via CommPortal phone configurator for CP960 IP phones.

Configuring the Display Priority of the Directory

You can configure the display priority of your directory.

To configure the display priority of directory via CommPortal phone configurator:

1. Click **Features->Directory**
2. Select the desired priority for Local Directory, History, Remote Phone Book, LDAP, Network Contacts and Network Call List.
 - 1 is the highest priority and 6 is the lowest priority. The location of the selected list is displayed according to this priority when user presses the **Directory** soft key.

- If the priority is set to **Disabled**, the selected list is not displayed when user presses the **Directory** soft key.

▼ Directory			
Local Directory Priority ⓘ	1	🔒	Default
*History Priority ⓘ	2	🔒	Reset
*Remote Phone Book Priority ⓘ	3	🔒	Reset
*LDAP Priority ⓘ	4	🔒	Reset
*Network Contacts Priority ⓘ	5	🔒	Reset
*Network Call List Priority ⓘ	6	🔒	Reset

3. Click **Save changes** to accept the change.
4. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Viewing the Directory on the Phone

To view the directory via phone user interface:

1. Press the **Directory** soft key when the phone is idle.

The enabled list(s) will be ordered from highest priority to lowest.



Remote Phone Book

The remote phone book is a centrally maintained phone book, stored on the remote server. Users only need the access URL of the remote phone book. The IP phone can establish a connection with the remote server and download the phone book, and then display the remote phone book entries on the phone.

Configuring Access URL of the Remote Phone Book

To configure an access URL for a remote phone book via CommPortal phone configurator:

1. Click **Features->Remote Phone Book**.
2. Enter the access URL in the **Remote Phonebook URL N** field.

3. Enter the name in the **Display Item Name N** field.

0004343 / 9702981673 as provider		Filter settings...	Cle
Remote Phonebook URL 1	HTTP://SSS.COM	Reset	
*Display Item Name 1	Sale	Reset	
*Remote Phonebook URL 2		Reset	
*Display Item Name 2		Reset	
*Remote Phonebook URL 3		Reset	
*Display Item Name 3		Reset	
Remote Phonebook URL 4		Default	
Display Item Name 4		Default	
Remote Phonebook URL 5		Default	
Display Item Name 5		Default	

4. Click **Save changes** to accept the change.
5. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Enabling Presenting the Caller Identity

You can enable the phone to present the caller identity when you receive a call from the contact in the remote phone book.

To enable the presentation of a caller identity via CommPortal phone configurator:

1. Click **Features->Remote Phone Book**.
2. Mark the **Enabled** radio box of the **Search Remote Phonebook Name** field.
3. Enter the desired period to refresh the remote phone book in the **Search Flash Time (Seconds)** field.

The default value is 21600 seconds.

0004343 / 9702981673 as provider		Filter settings...	Cle
▼ Remote Phone Book			
*Display Name		Default	
*Search Remote Phonebook Name	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	Reset	
Search Flash Time (Seconds)	21600	Default	
*Refresh When Accessing Remote	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	Reset	
Phonebook			

4. Click **Confirm** to accept the change.
5. Click **Save changes** to accept the change.
6. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Downloading the Business Group Contacts

You can download the business group contacts for SIP-T19(P) E2, T27G and T29G IP phones only. If you enable this feature, the phone can download the business group contacts to the remote phone book 1. If you have configured a remote phone book 1 on the phone, its contacts will be overwritten by the business group contacts after downloading.

To enable the phone to download business group contacts via CommPortal phone configurator:

1. Click **Features->Remote Phone Book**.
2. Mark the **Enabled** radio box of the **Download Business Group Contacts** field.
3. Enter the desired group name in the **Display Item Name 1** field.

00004343 / 9702981673 as provider Filter settings... Clear

▼ Remote Phone Book

Display Name	<input type="text"/>		Default
Search Remote Phonebook Name	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled		Default
Search Flash Time (Seconds)	<input type="text" value="21600"/>		Default
Refresh When Accessing Remote	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled		Default
Phonebook	<input type="text"/>		
Download Business Group Contacts	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled		Reset
Display Item Name 1	<input type="text" value="BG"/>		Reset
Remote Phonebook URL 2	<input type="text"/>		Default

4. Click **Save changes** to accept the change.
5. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Viewing Remote Phone Book on the Phone

To view your remote phone book via phone user interface:

1. Do one of the following.
 - Press **Directory-> Remote Phone Book** (If display priority of the Remote Phone Book is not set to Disabled).
 - Press **Menu->Directory->Remote Phone Book**.
 2. Select the desired group, and then press the **Enter** soft key.
- The phone connects to the remote phone book and proceeds to load it.

Searching for a Contact in the Remote Phone Book

To search for a contact in the remote phone book:

1. Do one of the following.
 - Press **Directory-> Remote Phone Book** (If display priority of the Remote Phone Book is not set to Disabled).
 - Press **Menu->Directory->Remote Phone Book**.
2. Select the desired remote group, and then press the **Enter** soft key.
3. Press the **Search** soft key.
4. Enter the search criteria.

The contacts whose name or phone number matches the characters entered will appear on the LCD screen.

Placing a Call from Remote Phone Book

To place a call from the remote phone book:

1. Do one of the following.
 - Press **Directory-> Remote Phone Book** (If display priority of the Remote Phone Book is not set to Disabled).
 - Press **Menu->Directory->Remote Phone Book**.
2. Select the desired remote group, and then press the **Enter** soft key.
3. Select the desired contact in the remote phone book.
4. Press the **Send** soft key.

Search Source List in Dialing

Search source list in dialing allows you to search entries from the source list when the phone is on the pre-dialing/dialing screen. You can select the desired entry to dial out quickly.

Note

You cannot configure search source list in dialing via CommPortal phone configurator for CP960 IP phones.

Configuring Search Source List

The search source lists can be Local Directory, History, Remote Phone Book, LDAP, Network Contacts and Network Call List.

Note

If Remote Phone Book, LDAP, Network Contacts and Network Call List are not configured in advance, you cannot search them.

For more information on Remote Phone Book, refer to [Remote Phone Book](#) on page 18.

For more information on the LDAP, refer to [LDAP Directory on Yealink IP Phones](#).

Not all phones support Network Contacts and Network Call List. For more information, refer to *Yealink SIP Phones Integrated with Metaswitch CommPortal Phone Applications User Guide*.

To configure the search priority of the directory via CommPortal phone configurator:

1. Click **Features->Search Source List In Dialing**.
2. Select the desired search priority for Local Directory, History, Remote Phone Book, LDAP, Network Contacts and Network Call List.
 - 1 is the highest priority and 6 is the lowest priority.
 - If the priority is set to **Disabled**, the IP phone cannot search the list.

004343 / 9702981673 as provider Filter setting		
▼ Search Source List In Dialing		
Local Directory Priority ⓘ	1	
History Priority ⓘ	2	
*Remote Phone Book Priority ⓘ	3	
*LDAP Priority ⓘ	4	
*Network Contacts Priority ⓘ	5	
*Network Call List Priority ⓘ	6	

3. Click **Save changes** to accept the change.
4. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Line Keys Configuration

You can assign predefined features to line keys. So that you can quickly access features.

Note

Line key is not applicable to SIP-T19 (P) E2, CP920, W60B, W70B, W80, and W90 phones.

To assign features to line keys via CommPortal phone configurator:

1. Click **Programmable Keys - Line Key->Key X**.
2. Select desired key type from the **Soft key action** field.
3. Assign a feature to the key.
For more information, refer to [Line Key Features](#) on page 23.
4. (Optional.) Enter a string that will appear on the LCD screen in the **Label** field.

The screenshot shows a web interface for configuring a phone's programmable keys. The top bar indicates the provider is 'ealink - 00004343 / 9702981673'. Below this, there's a 'Filter settings...' button and a 'Clear' button. The main content area is titled '▼ Programmable Keys - Line Key'. Underneath, there's a section for '▶ Key Capabilities'. A red box highlights the configuration for '▼ Key 1'. Inside this box, there are four fields: 'Soft key action' with a dropdown menu set to 'Line', a lock icon, and the word 'Default'; 'Line' with a dropdown menu set to 'Line 1'; 'Mode' with a dropdown menu set to 'Default'; and 'Label' with an empty text input field.

5. Click **Save changes** to accept the change.
6. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Line Key Features

You can assign the following features to your line keys. Some features may vary in different phone models.

Line	Automatic Call Back	Automatic Recall	Conference	Directed Pickup	Directory	DND	Enhanced Call Park
Enhanced Monitor Extension	Forward	Group Listening	Group Pickup	Hold	Intercom/PTT	KeyPad Lock	Last Caller ID Erasure
LDAP	Line Identity	Multicast Paging	Paging List	Park Call	Prefix	Private Call Hold	Retrieved Parked Call
Speed Dial	Trace Call	Transfer	VoiceMail	XML Group	Zero Touch	ACD	Log Out
Network Contacts	History	Messages List	Record	Custom Key			

Line

You can use this key feature to accept incoming calls, place active calls on hold or resume a held call.

Dependencies: *Soft key action (Line)*

Line (the account this feature will be applied to)

Mode (Default/Lock)

Label (key label displayed on the LCD screen)

Usage: When receiving an incoming call, the Line key LED flashes green:

1. Press the DSS key to accept the incoming call.
2. Press the DSS key to place a new call and the active call is placed on hold.
3. Press the DSS key again to resume the held call.

If you select **Lock** from the **Mode** field, the line keys located in the same position of the other page will be automatically assigned the Line feature. Then you can use this key on every page.

If you select **Default** from the **Mode** field, you can only use this key on the current page.

Automatic Call Back

This feature allows the user, after making a call and experiencing a busy signal, to queue a callback request when that line is free.

Dependencies: *Soft key action (Automatic Call Back)*

Line (the account this feature will be applied to)

Access code (the automatic call back access code)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key to queue a callback request for the busy number you last dialed, and then the phone will automatically call back when the line is free.

Automatic Recall

This feature allows the user to find the number of the last received call, and return a call to that number.

Dependencies: *Soft key action (Automatic Recall)*

Line (the account this feature will be applied to)

Access code (the automatic recall access code)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key to place a call to the last received call.

Conference

You can use this key feature to set up a conference call. When you are in a call, you can press the conference key to invite the third party to join a conference. For more information, refer to [Local Conference Call](#) on page 46.

Dependencies: *Soft key action (Conference)*

Number (the number you want to add to the conference)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key during an active call to set up a conference with the number specified in the *Number* field.

Note

If the Number field is left blank, the DSS key performs the same as the Conf soft key during a call.

Directed Pickup

You can use this key feature to answer someone else's incoming call on the phone. For more information, refer to [Directed Pickup](#) on page 51.

Dependencies: *Soft key action (Directed Pickup)*

Line (the account this feature will be applied to)

Access Code (the directed pickup access code)

Extension (the target phone number)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key on your phone when the target phone number receives an incoming call. The call is then answered on your phone.

Group Pickup

You can use this key feature to pick up incoming calls within a pre-defined group of phone numbers. For more information, refer to [Group Pickup](#) on page 52.

Dependencies: *Soft key action (Group Pickup)*

Line (the account this feature will be applied to)

Access Code (the group pickup access code)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key on your phone when a phone number in the group receives an incoming call. The call is answered on your phone.

Directory

You can use this key feature to easily access frequently used lists.

Dependencies: *Soft key action (Directory)*

Label (key label displayed on the LCD screen)

Usage: Press the DSS key to immediately access to frequently used lists.

Note

The DSS key performs the same function as the Directory soft key when the phone is idle.

DND (Do Not Disturb)

You can use this key feature to activate or deactivate the DND mode. You can also use this key feature to access the custom DND screen. For more information, refer to [Do Not Disturb](#) on page 43.

Dependencies: *Soft key action (DND)*

Label (key label displayed on the LCD screen)

Usage:

When DND is in phone mode:

1. Press the DSS key to activate DND.
2. Press the DSS key again to deactivate DND.

When DND is in custom mode:

1. Press the DSS key to access the custom DND screen. You can activate or deactivate DND for one or all accounts.

Note
When DND is activated, the DND key LED will illuminate solid green, and the incoming calls will be rejected automatically.

Park Call

You can use this key feature to park an active call to an available orbit. For more information, refer to [Call Park and Call Retrieve](#) on page 48.

Dependencies: *Soft key action (Park Call)*

Access Code (the park call access code)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key during an active call to park an active call to an available orbit.

Enhanced Call Park

You can use this key feature to park an active call to a designated orbit by pressing the enhanced call park key on the phone. For more information, refer to [Configuring an Enhanced Park Call Key](#) on page 49.

Dependencies: *Soft key action (Enhanced Call Park)*

Line (the account this feature will be applied to)

Park Orbit (the orbit where your call will be parked)

Label (key label displayed on the LCD screen)

Usage:

Press the DSS key to park an active call the orbit specified in the **Park Orbit** field.

Retrieved Parked Call

You can use this key feature to retrieve a parked call by pressing the retrieved parked call key on the phone. For more information, refer to [Retrieving a Call](#) on page 51.

Dependencies: *Soft key action (Retrieved Parked Call)*

Line (the account this feature will be applied to)

Park Orbit (the orbit where you retrieve the parked call)

Label (key label displayed on the LCD screen)

Usage:

Press the DSS key to retrieve the parked call specified in the Park Orbit field.

Enhanced Monitor Extension

You can use this key feature to monitor a specific line for status changes on the phone.

You can press an enhanced monitor extension key to dial out the monitored phone number when the monitored line is idle. You can receive a visual or/and an audio alert (if enabled), and also pick up calls that are received on the monitored line. For more information, refer to [Enhanced Monitor Extension](#) on page 55.

Dependencies: *Soft key action (Enhanced Monitor Extension)*

Line (the account this feature will be applied to)

Extension (the extension you want to monitor)

Label (key label displayed on the LCD screen)

Forward

You can use this key feature to forward an incoming call to someone else.

Dependencies: *Soft key action (forward)*

Number (the number you want to forward to)

Label (key label displayed on the LCD screen)

Usage:

Press the DSS key to forward an incoming call to the number specified in the **Number** field.

Note

If the **Value** field is left blank, the DSS key performs the same as the **Forward** soft key when receiving an incoming call.

Group Listening

You can use this key feature to activate the Speakerphone and Handset/Headset mode at the same time. It is suitable for the group conversations which have more than one person present at one end. You are able to speak and listen through the handset/headset, while the others nearby can only listen through the speaker.

Dependencies: *Soft key action (Group Listening)*

Label (key label displayed on the LCD screen)

Usage:

1. During a call, press the DSS key to activate the group listening mode.

You can then speak and listen through the handset/headset, while other people at your side

can only listen through the speaker at the same time.

2. Press the DSS key again to deactivate the group listening mode.

Hold

You can use this key feature to place an active call on hold or retrieve a held call.

Dependencies: *Soft key action (Hold)*

Label (key label displayed on the LCD screen)

Usage:

1. Press the DSS key during an active call to place the call on hold.
2. Press the DSS key again to retrieve the held call.

Intercom/PTT

You can use this key feature to quickly connect with the operator or the secretary. For more information on how to configure intercom and push-to-talk, refer to [Intercom and Push-to-Talk](#) on page 57.

Dependencies: *Soft key action (Intercom/PTT)*

Line (the account this feature will be applied to)

Number (the target extension number)

Label (key label displayed on the LCD screen)

Usage:

1. Press the DSS key to automatically connect with a pre-configured target extension for outgoing intercom calls
2. If the push-to-talk mode is enabled, long press the DSS key to automatically connect with a pre-configured target extension for outgoing intercom calls, and you need to keep pressing the DSS key during the call and release it to end the call.

KeyPad Lock

You can use this key feature to lock your phone temporarily when you are not using it. To use this key, you need to enable the keypad lock feature in advance. For more information on how to configure the keypad lock, refer to [Keypad Lock](#) on page 33.

Dependencies: *Soft key action (KeyPad Lock)*

Label (key label displayed on the LCD screen)

Usage: Press the DSS key to lock the phone immediately when the phone is idle.

Last Caller ID Erasure

You can use this key feature to delete the record of the last received call. This is provided for privacy reasons. This will also clear all call lists from the CommPortal feature. This feature will not clear any call lists from the phone.

Dependencies: *Soft key action (Last Caller ID Erasure)*

Line (the account this feature will be applied to)

Access code (the last caller ID erasure access code)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key to delete the record of the last received call.

LDAP

You can use this key feature to quickly access an LDAP search screen.

Dependencies: **Soft key action (LDAP)**

Label (key label displayed on the LCD screen)

Usage:

1. Press the DSS key to access the LDAP search screen.
2. Enter a few continuous characters of the contact name or continuous numbers of the contact number using the keypad.

The contacts whose name or phone number matches the characters entered will appear on the LCD screen.

Line Identity

You can use this key feature to announce the full Directory Number of the line back to the caller.

Dependencies: **Soft key action (Line Identity)**

Line (the account this feature will be applied to)

Access code (the Line Identity access code)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key when the phone is idle, the full Directory Number of your line will be announced back.

Multicast Paging

You can use this key feature to quickly and easily broadcast time-sensitive announcements to users who are listening to a specific multicast group. For more information on how to configure multicast paging, refer to [Multicast Paging](#) on page 60.

Dependencies: **Soft key action (multicast paging)**

IP Address (multicast IP address)

Port (multicast IP port)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key to send a Real-time Transport Protocol (RTP) stream to the pre-configured multicast address(es).

Paging List

You can use this key feature to view a list of multicast paging groups. For more information, refer to [Multicast Paging](#) on page 60.

Dependencies: *Soft key action (Paging List)*

Label (key label displayed on the LCD screen)

Usage: Press the DSS key to view a list of multicast paging groups.

Prefix

You can use this key feature to add a specified prefix number before the dialed number.

Dependencies: *Soft key action (Prefix)*

Number (the prefix number)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key when the phone is idle, the phone will then enter the pre-dialing screen and display the prefix number that you specified in the **Number** field. You can enter the remaining digits and then dial out.

Private Call Hold

Hold feature allows any shared line to retrieve the held call. While private call hold only allows the hold party to retrieve the held call.

Dependencies: *Soft key action (private call hold)*

Label (key label displayed on the LCD screen)

Usage: Press the DSS key to place the active call on private hold.

Speed Dial

You can use this key feature to speed up dialing the numbers frequently used or hard to remember.

Dependencies: *Soft key action (Speed Dial)*

Line (the account this feature will be applied to)

Label (key label displayed on the LCD screen)

Number (the number you want to dial out)

Usage: Press the DSS key to dial out the number specified in the **Number** field, using the account selected from the **Line** field.

Trace Call

Customer Originated Trace allows users to record the details of any malicious or harassing incoming calls to their lines. The user can press the trace call key either during (using a separate Call Appearance on the line the unwanted call was received on) or after the call. This produces a record that the Service Provider can access, and will contain the calling party ID if this is available,

regardless of whether the caller withheld their number. The service provider can then provide this information to law enforcement upon request.

Dependencies: *Soft key action (Trace Call)*

Line (the account this feature will be applied to)

Access code (the trace call access code)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key during or after the call to trace the call.

Transfer

When there is an active call on the phone, you can use this key feature to handle the call differently depending on the transfer mode assigned to the DSS key.

Dependencies: *Soft key action (Transfer)*

Number (the number you want to transfer to)

Label (key label displayed on the LCD screen)

Usage:

- When the transfer mode on DSS key is **Blind Transfer**, press the DSS key to complete the blind transfer to the number specified in the **Value** field.
- When the transfer mode on DSS key is **Attended Transfer**, press the DSS key to dial out the number specified in the **Value** field, and then perform the attended or semi-attended transfer.
- When the transfer mode on DSS key is **New Call**, press the DSS key to place a new call to the number specified in the **Value** field.

Note

Transfer mode via DSS key is configurable via CommPortal phone configurator at the path **Features->Transfer->Transfer Mode Via Dsskey**.

If the **Value** field is left blank, the DSS key performs the same as the TRANSFER key or the **Transfer** soft key during a call.

VoiceMail

You can use this key feature to quickly connect voice mail.

Dependencies: *Soft key action (VoiceMail)*

Line (the account this feature will be applied to)

Access code (the voice mail access code)

Label (key label displayed on the LCD screen)

Usage: Press the DSS key to dial out the voice mail access code. Then follow the voice prompt to listen to the voice mails.

XML Group

You can use this key feature to quickly access a remote group in your remote phone book. You

should configure remote phone book in advance. For more information, refer to [Remote Phone Book](#) on page 18.

Dependencies: *Soft key action (XML Group)*

***XML Group** (the remote group URL you want to access if remote phone book is configured)*

***Label** (key label displayed on the LCD screen)*

Usage: Press the DSS key to access the remote group specified in the **XML Group** field.

Zero Touch

You can use this key feature to quickly configure auto provision and network parameters.

Dependencies: *Soft key action (Zero Touch)*

***Label** (key label displayed on the LCD screen)*

Usage:

1. Press the DSS key to access the zero touch screen.
2. Press the **OK** soft key within a few seconds.
3. Configure the network parameters in the corresponding fields.
4. Press the **Next** soft key.
5. Configure the auto provision parameters in the corresponding fields.
6. Press the **OK** soft key to update configurations.

ACD

You can use this key to log into the ACD system. For more information, refer to *Yealink SIP Phones Integrated with Metaswitch CommPortal Phone Applications User Guide*.

Dependencies: *Soft key action (ACD)*

***Label** (key label displayed on the LCD screen)*

Log Out

You can use this key to log out of existing accounts and then log into a new account. As a result, many users can share the phone resource at different times. For more information, refer to *Yealink SIP Phones Integrated with Metaswitch CommPortal Phone Applications User Guide*.

Dependencies: *Soft key action (Log Out)*

***Label** (key label displayed on the LCD screen)*

Network Contacts

You can use this key feature to quickly access network contacts. For more information, refer to *Yealink SIP Phones Integrated with Metaswitch CommPortal Phone Applications User Guide*.

Dependencies: *Soft key action (Log Out)*

***Label** (key label displayed on the LCD screen)*

History

You can use this key feature to quickly access network call lists. For more information, refer to *Yealink SIP Phones Integrated with Metaswitch CommPortal Phone Applications User Guide*.

Dependencies: *Soft key action (History)*

Label (key label displayed on the LCD screen)

Messages List

You can use this key feature to quickly access the message lists. For more information, refer to *Yealink SIP Phones Integrated with Metaswitch CommPortal Phone Applications User Guide*.

Dependencies: *Soft key action (Message List)*

Label (key label displayed on the LCD screen)

Record

You can use this key feature to record calls.

Dependencies: *Soft key action (Record)*

Label (key label displayed on the LCD screen)

Custom

You can assign functions to custom soft keys.

Dependencies: *Soft key action (Custom key)*

Action (action or function for custom soft key)

Label (key label displayed on the LCD screen)

For more information, refer to [Using Enhanced DSS Keys on Yealink IP](#)

[Phones](#).

Keypad Lock

You can lock the IP phone to prevent it from unauthorized use. Once the IP phone is locked, anyone must enter the password to unlock it.

It is not applicable to W80/W90.

Yealink IP phones offer three types for phone lock:

- **Lock the Menu soft key:** it prevents unauthorized users from accessing the menu, changing the personal settings for your phone.
- **Lock the Function keys:** it only allows unauthorized users to use the keypad for placing a call, answering or rejecting an incoming call and ending a call.
- **Lock all keys:** it only allows unauthorized users to use the keypad for dialing an emergency number or authorized numbers that set up by your administrator, answer, or reject an incoming call and ending a call. VP59, SIP-T56A, SIP-T58A/V, CP960, SIP-T57W, SIP-T48S, W60B, and W70B IP phones only support this type.

You can set a waiting time to lock the phone automatically. If the waiting time is set to 0, the phone will not be automatically locked. You need to lock the phone manually.

Note

The Volume key, HEADSET key and Speakerphone key are always available when you lock the phone.

Configuring the Keypad Lock

You can configure keypad lock type via CommPortal phone configurator. This is not applicable to VP59, SIP-T56A, SIP-T58A/V, CP960, SIP-T57W, SIP-T48S, W60B and W70B phones.

To configure the keypad lock via CommPortal phone configurator:

1. Click **Preferences->KeyPad Lock**.
2. Mark the **Enabled** radio box of the **KeyPad Lock Enabled** field.
3. Select the desired type from the **KeyPad Lock Type** field.

The screenshot shows the 'KeyPad Lock' configuration page in the CommPortal phone configurator. The page title is '1004343 / 9702981673 as provider'. The 'KeyPad Lock' section is expanded, showing the following settings:

- *KeyPad Lock Enable:** Radio buttons for 'Enabled' (selected) and 'Disabled'. There is a lock icon and a 'Reset' button.
- Keypad Lock Type:** A dropdown menu currently showing 'All Keys'.
- Phone Unlock PIN:** A text input field containing '123'.
- Phone Lock Time Out:** A text input field containing '0'.
- Emergency Phone Number:** A text input field containing '110,911,120'.

4. Enter the unlock PIN in the **Phone Unlock PIN** field.
5. Enter the desired interval of automatic phone lock in the **Lock Time Out** field.
The default timeout is 0. It means the phone will not be automatically locked. the phone will be locked when the inactive time reaches the designated time (in seconds).
6. Enter the emergency number in the **Emergency Phone Number** field.
You can dial an emergency number even when the phone is locked.
7. Click **Save changes** to accept the change.
8. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Note

The emergency number setting, if desired, must be set before lock activation.
You can dial the emergency number even though the phone is locked.

Unlocking the Phone

To unlock the phone via phone user interface:

1. Press any locked key.

2. Enter the PIN in the **Unlock PIN** field.
3. Press the **OK** soft key to unlock the phone.

Note

You can also unlock the phone by entering the administrator password. When you enter the administrator password to unlock the phone, the phone will turn to the **Change PIN** interface.

Dial-now

You can configure one or more dial-now rules. When the dialed number matches the dial-now string, the number will be dialed out automatically. This is not applicable to W60B/W70B/W80/W90 phones.

Basic expression syntaxes you need to know:

Syntax	Description
.	The dot "." can be used as a placeholder or multiple placeholders for any character. Example: "12." would match "123", "1234", "12345", "12abc", etc.
x	An "x" can be used as a placeholder for any character. Example: "12x" would match "121", "122", "123", "12a", etc.
-	Numeric ranges are allowed within the brackets: Digit "-" Digit. Example: "[5-7]" would match the number "5", "6" or "7".
[]	The square brackets "[]" can be used as a placeholder for a single character which matches any of a set of characters. Example: "91[5-7]1234" would match "9151234", "9161234", "9171234".
()	The parentheses "(" ")" can be used to group together patterns, for instance, to logically combine two or more patterns. Example: "([1-9])([2-7])3" would match "923", "153", "773", etc.
\$	The "\$" followed by the sequence number of a parenthesis means the characters placed in the parenthesis. The sequence number stands for the corresponding parenthesis. Example: A replace rule configuration, Prefix: "001(xxx)45(xx)", Replace: "9001\$145\$2". When you dial out "0012354599" on your phone, the IP phone will replace the number with "90012354599". "\$1" means 3 digits in the first parenthesis, that is, "235". "\$2" means 2 digits in the second parenthesis, that is, "99".

Adding a Dial-now Rule

To add a dial-now rule via CommPortal phone configurator:

1. Click **Line X->Dial Plan**.
2. Enter the desired value (for example: 1xxx) in the **Dial-Now Rule** field.
3. Select the desired value from the **Applicable to Line** field (not applicable to CP920

conference phones).

- If you select **All Lines**, the dial-now rule will apply to all accounts on the phone.
- If you select **Current Lines**, the dial-now rule will only apply to the current account.

link - 00004343 / 9702981673 as provider Filter settings...

▼ Line 1

► User

► SIP Server

► Ring Tone

► VoiceMail

▼ Dial Plan

Dial-Now Rule ⓘ 1xx ✕ 🔒

Applicable to Line ⓘ All Lines ▼ 🔒

4. Click **Save changes** to accept the change.
5. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning refer to [Downloading Configuration Files](#) on page 39.

For example, a dial-now rule is configured as "1xx", any entered three-digit string beginning with 1 will be dialed out automatically.

Configuring the Delay Time for Dial-now Rules

You can configure the delay time for all dial-now rules. That is, you can configure your phone to automatically dial out the phone numbers which match a dial-now rule, after the designated delay time.

To configure the delay time for dial-now rule via CommPortal phone configurator:

1. Click **Features->Dial Plan**.
2. Select the desired value from the **Time Out for all Dial-Now Rules** field.

0004343 / 9702981673 as provider Filter setting

▼ Features

► General

▼ Dial Plan

Live Dialpad Enabled ⓘ ☒ Enabled ☐ Disabled 🔒

Automatically Outgoing Delay ⓘ 4 (s) ▼ 🔒

Time Out for all Dial-Now Rules ⓘ 4 (s) ▼ 🔒

3. Click **Save changes** to accept the change.

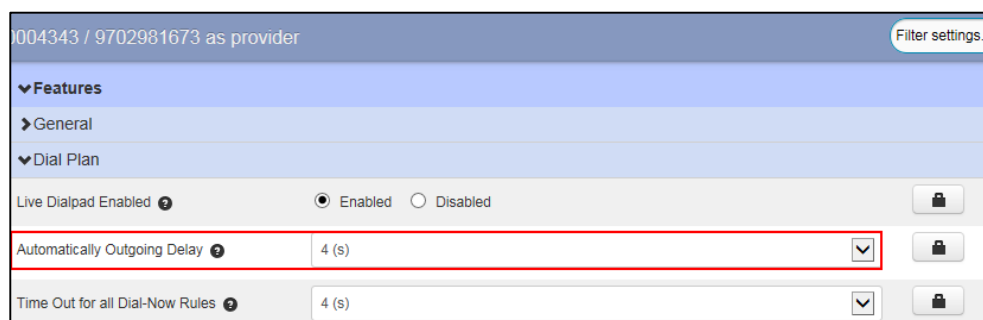
4. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring Live Dialpad

Live dialpad allows IP phones to automatically dial out the entered phone number without pressing the send key after a designated period of time. This is not applicable to W60B/W70B/W80/W90 phones.

To enable the live dialpad via CommPortal phone configurator:

1. Click **Features->Dial Plan**.
2. Mark the **Enabled** radio box of the **Live Dialpad Enabled** field.
3. Select the delay time from the **Automatically Outgoing Delay** field.



0004343 / 9702981673 as provider Filter settings...

▼ Features

► General

▼ Dial Plan

Live Dialpad Enabled ? ☒ Enabled ☐ Disabled 🔒

Automatically Outgoing Delay ? 4 (s) ▼ 🔒

Time Out for all Dial-Now Rules ? 4 (s) ▼ 🔒

4. Click **Save changes** to accept the change.
5. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Downloading Configuration Files to Phones

After you configuring features on the CommPortal phone configurator, you need to deploy your phones to download all the configuration files from it.

You can use MAC authentication method to deploy phones. For more information on MAC authentication, refer to: www.metaswitch.com. You can also use HTTP digest authentication as defined in RFC 2617 to deploy phones. You only need to provide authentication user name and password to the users, and then users can complete phone deployment on their own.

The following takes HTTP digest authentication method as an example to introduce phone deployment.

Obtaining the Provisioning Server Address

Yealink IP phones support many ways to obtain the provisioning server address, for example:

- Obtain the provisioning server address automatically by detecting DHCP options 66.
- Obtain the provisioning server address automatically by contacting Redirection & Provisioning Server (RPS).
- Enter provisioning server address manually.

When using DHCP option 66 or RPS to obtain the provisioning server address, make sure DHCP server or Redirection & Provisioning server are configured in advance.

Note

Contact your system administrator for the provisioning server address.

Triggering the Phone to Perform Auto Provisioning

If you use RPS to obtain the provisioning server address, the phone will perform auto provisioning automatically. This method takes effect only once.

If you use DHCP option to obtain the provisioning server address, the phone performs auto provisioning automatically after it is powered on. If you want to trigger the phone to perform auto provisioning again, you can use one of the following commonly used methods:

- Power On
- Re-plug the Ethernet cable
- Auto Provision Now

If you enter provisioning server address into the phone manually, you can trigger the phone to perform auto provisioning using one of the following commonly used methods:

- Power On
- Auto Provision Now

- Zero Touch

The following sections introduce common methods to trigger the phone to perform auto provisioning.

- [Power On](#)
- [Auto Provision Now](#)
- [Zero Touch](#)

Power On

You can power on the phone to trigger it to perform auto provisioning.

To trigger auto provisioning via powered on:

1. After powered on, the phone needs your provisioning credentials to download configuration files from the CommPortal phone configurator.



If you enter valid provisioning credential, the phone will download configuration files successfully. If not, the phone enters the idle screen:



2. Press the **Login** soft key to enter the Auto Provision screen again.
3. Enter your provisioning credentials.



4. Press the **OK** soft key.

The phone reboots and download configurations from the CommonPortal phone configurator.

Auto Provision Now

You can use the Auto Provision Now method to trigger the IP phone to perform the auto provisioning immediately.

To trigger auto provisioning via auto provision now:

1. Press **Menu->Settings->Advanced Settings->Auto Provision**.
2. Enter the provisioning server address in the **Server URL** field.
3. Enter valid provisioning credential in the **User Name** and **Password** fields.
4. Press the **Save** soft key.

The LCD screen will be displayed as below:



5. Press the **Ok** soft key.

The phone reboots and download configurations from the CommonPortal phone configurator.

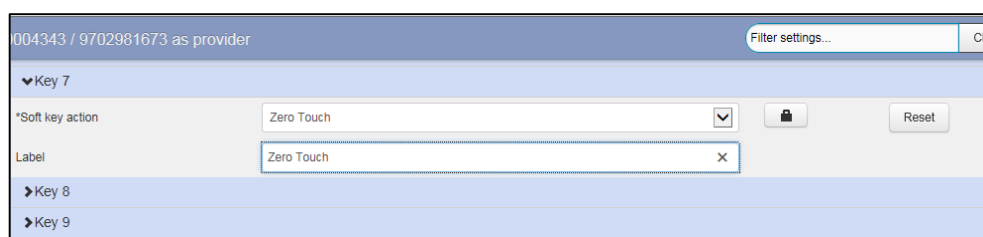
Zero Touch

If you change the parameter settings on the CommPortal phone configurator, you can press the zero touch key (if configured) to quickly perform auto provisioning to apply the changes to your phone.

Configuring a Zero Touch Key

To configure a zero touch key via CommPortal phone configurator:

1. Click **Programmable Keys - Line Key->Key X**.
2. Select **Zero Touch** from the **Soft key action** field.
3. (Optional.) Enter the string that will appear on the LCD screen in the **Label** field.



4. Click **Save changes** to accept the change.
5. Perform auto provisioning on the phone according to the above content.

The phone reboots and download configurations from the CommonPortal phone configurator. Your phone appears a Zero Touch key.

Note

Line key is not applicable to SIP T19(P) E2, CP920, W60B, W70B, W80, and W90 phones.

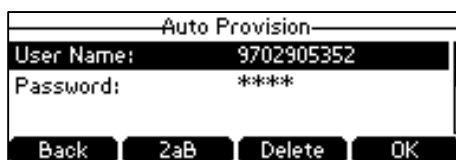
Triggering Auto Provisioning via Zero Touch

To trigger auto provisioning via zero touch:

1. Press the Zero Touch key when the phone is idle.

The LCD screen prompts "Update now? 5s".

2. Press the **OK** soft key.
3. Press the **Next** soft key skip network settings.



4. Enter valid provisioning credential, and then press the **OK** soft key.
5. Press the **OK** soft key.

The phone reboots and download configurations from the CommonPortal phone configurator.

For more information on auto provisioning, refer to *Yealink IP Phones Auto Provisioning Guide*, available online: <http://www.yealink.com/DocumentDownload.aspx?CatId=142&flag=142>

Basic Call Features

The SIP IP phone is designed to be easily used like a regular phone on a public switched telephone network (PSTN). You can place calls, answer calls, transfer a call to someone else, or conduct a conference call.

Most features on the phones are intuitive. So this chapter only provides the detailed instructions about a few features that may not be so intuitive. Topics include:

- [Do Not Disturb](#)
- [Transferring Calls](#)
- [Local Conference Call](#)
- [Call Park and Call Retrieve](#)
- [Directed Pickup](#)
- [Group Pickup](#)

If you require additional information or assistance with your new phone, contact your system administrator.

Do Not Disturb

You can use DND to reject incoming calls automatically on the phone. The prompt message "**n New Missed Call(s)**" ("n" indicates the number of missed calls) will appear on the LCD screen, and callers will receive a busy message. All calls you receive while DND is enabled are logged to your missed calls list.

Choosing a DND Mode

You can enable DND for the phone system, or you can customize DND for each or all accounts.

Note

The SIP-T19 (P) E2, CP920 and CP960 phones only support one account at most. So that DND is effective for the phone system only.
You cannot configure DND via CommPortal phone configurator for W60B/W70B/W80/W90 phones.

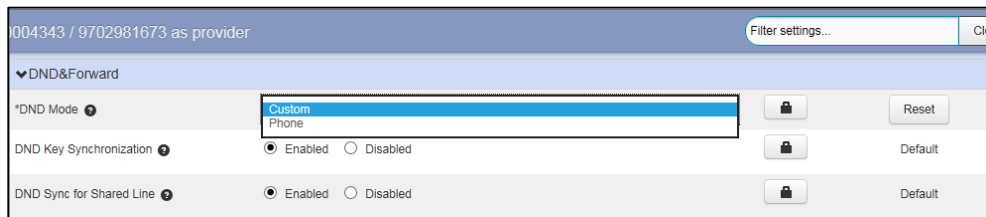
There are two DND modes:

- **Phone:** DND is effective for the phone system.
- **Custom:** DND can be configured for each or all accounts

To choose the DND mode via CommPortal phone configurator:

1. Click **Features-> DND & Forward**.

2. Select the desired DND mode from the **DND Mode** field.



3. Click **Save changes** to accept the change.
4. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Activating DND in Phone Mode

To activate DND in phone mode:

1. Press the **DND** soft key when the phone is idle.
The **DND** icon on the status bar indicates that DND is enabled.

Activating DND in Custom Mode for a Specific Account

To activate DND in custom mode for a specific account:

1. Press the **DND** soft key when the phone is idle.
The LCD screen displays a list of accounts registered on the phone.
2. Enable DND for the desired account.
3. Press the **Save** soft key to accept the change.

Activating DND in Custom Mode for All Accounts

To activate DND in custom mode for all accounts:

1. Press the **DND** soft key when the phone is idle.
The LCD screen displays a list of accounts registered on the phone.
2. Press the **All On** soft key to activate DND for all accounts.
3. Press the **Save** soft key to accept the change.

Enabling DND Key Synchronization

DND key synchronization feature is enabled by default. When you change a user's DND status on the IP phone, the IP phone will notify the Metaswitch server of the status change, the

Metaswitch server will synchronously change the DND status for the user. Conversely, if you change a user's DND status on the Metaswitch server, the Metaswitch server will notify the phone of the status change and the phone will change the DND status for the user.

To configure DND key synchronization feature via CommPortal phone configurator:

1. Click **Feature->DND&Forward**.
2. Mark the desired radio box in the **DND Key Synchronization** field.



3. Click **Save changes** to accept the change.
4. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Transferring Calls

During a call, you can transfer the call to another contact in one of three ways:

- **Blind Transfer:** Transfer a call directly to the third party without consulting.
- **Semi-Attended Transfer:** Transfer a call when receiving ringback.
- **Attended Transfer (Consultative Transfer):** Transfer a call with prior consulting.

Performing a Blind Transfer

You can transfer calls to other contacts immediately without consulting with them first.

To perform a blind transfer:

1. Press the **Transfer** soft key during a call.
2. Enter the number you want to transfer the call to.
3. Press the **Transfer** soft key to complete the transfer.

Performing a Semi-Attended/Attended Transfer

You can transfer calls to other contacts immediately when receiving ringback or after consulting with them first.

To perform a semi-attended transfer:

1. Press the **Transfer** soft key during a call.
2. Do one of the following:
 - Enter the number you want to transfer the call to.
 - Press the **Directory** soft key to select the desired contact.
3. Press the OK key or **Send**.
4. Do one of the following:
 - When you hear the ringback tone, press the **Transfer** soft key to finish a semi-attended transfer.
 - After the contact answers the call, press the **Transfer** soft key to finish an attended transfer.

Local Conference Call

Setting Up a Local Conference Call

The IP phones support three-way (including yourself) conference call.

To set up a conference call:

1. Place a call to the first party.
2. When the first party answers the call, press the **Conference (Conf)** soft key to place a new call.

The active call is placed on hold.

3. Enter the number of the second party and press the **Send** soft key.
4. When the second party answers the call, press the **Conference (Conf)** soft key again to join all parties in the conference.

Joining Two Calls in a Conference

You can select a hold call to join into a conference call with the active call.

To join two calls in a conference:

1. Place two or more calls using the same or different accounts on the phone.
2. Select the call for a conference and ensure that the call is active.
3. Press the **Conference (Conf)** soft key.
4. Select the desired hold call, and then press the **Send** soft key.

Managing Conference Participants

You can manage conference participants in the following ways:

- Mute a participant
- Hold a participant
- Remove a participant from the conference

Note

You cannot manage conference participants on W60B/W70B/W80/W90 phones.

Do the following during the conference call, do the following:

1. Press the **Manage** soft key.
2. Do one of the following:
 - Press the **Far Mute** soft key to mute the party. The muted party can hear everyone, but no one can hear the muted party.
 - Press the **Far Hold** soft key to hold the party. The held party cannot hear anyone, and no one can hear the held party.
 - Press the **Remove** soft key to remove the party from the conference call.
 - Press the **Back** soft key to return to the previous screen.

Configuring Transfer On Conference Hang up

If the conference initiator drops the conference call, the remaining parties stay connected by default. You can disable the Transfer On Conference Hang up feature, so that the conference call ends when conference initiator drops the conference call.

Note

For W60B/W70B/W80/W90 phones, the remaining parties stay connected when the conference initiator drops the conference call, which cannot be changed via CommPortal phone configurator.

To configure the transfer on conference hang up feature via the CommPortal phone configurator:

1. Click **Features->Transfer**.
2. Mark the desired radio box in the **Transfer on Conference Hang up** field.
 - If you select **Enabled**, the other two parties remain connected when the conference initiator drops the conference call.

- If you select **Disabled**, the conference ends.

0004343 / 9702981673 as provider

Filter settings

Call Waiting

Call Log

DND&Forward

Transfer

Blind Transfer on Hook ☒ Enabled ☐ Disabled

Semi-Attend Transfer on Hook ☒ Enabled ☐ Disabled

***Transfer on Conference Hang up ☒ Enabled ☐ Disabled**

Transfer Mode via Dsskey Blind Transfer

Ring for Transfailed Ring1.wav

3. Click **Save changes** to accept the change.
4. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Call Park and Call Retrieve

You can use this feature to park a call, and then retrieve the call either from your phone or another phone. After you park a call, the call is placed on hold, you can continue the conversation after retrieving it.

IP phone supports park call and enhanced park call.

- Park call feature, the server will automatically hunt for the first available orbit in the call park orbits and parks the call there. The call park orbits should be predefined, contact your system administrator for more information.
- Enhanced park call feature, you should specify a target orbit where you want to park the call to.

Configuring a Park Call Key

You can configure a Park Call key to park an active call.

Note

You cannot configure a park call key via CommPortal phone configurator for SIP-T19(P) E2, CP920, VP59, SIP-T56A, SIP-T58A/V, CP960, W60B, W70B, W80, and W90 phones.

To configure a Park Call key via the CommPortal phone configurator:

1. Click **Programmable Keys - Line Key->Key X**.
2. Select **Park Call** from the **Soft key action** field.
3. Select the desired line to apply this feature from the **Line** field.
4. Enter the access code for parking call in the **Access Code** field.

- Enter the string that will appear on the LCD screen in the **Label** field.

Yalink - 00004343 / 9702981675 as provider

Filter settings...

▼Key 11

*Soft key action: Park Call

Line: Line 1

*Access Code: *301

Label: Park Call

- Click **Save changes** to accept the change.
- Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring an Enhanced Park Call Key

You can configure an Enhanced Call Park key, so that you can park an active call by pressing the Enhanced Call Park key.

Note

You cannot configure an enhanced park call key via CommPortal phone configurator for SIP-T19(P) E2, CP920, W60B, W70B, W80, and W90 phones.

To configure an Enhanced Call Park key via the CommPortal phone configurator:

- Click **Programmable Keys - Line Key->Key X**.
- Select **Enhanced Call Park** from the **Soft key action** field.
- Select the desired orbit where you want to park the call from the **Park Orbit** field.
- Enter the string that will appear on the LCD screen in the **Label** field.

Yalink - 00004343 / 9702981673 as provider

Filter settings... Clear

▼Key 10

*Soft key action: Enhanced Call Park

*Line: Line 1

*Park Orbit: 100

*Label: Enhanced Call Park

- Click **Save changes** to accept the change.
- Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring a Retrieve Parked Call Key

You can retrieve the parked call by pressing a retrieve parked call key or dialing the retrieve access code followed by the orbit number (for example: *302100).

To configure a retrieve parked call key via the CommPortal phone configurator:

1. Click **Programmable Keys - Line Key->Key X**.
2. Select **Retrieve Parked Call** from the **Soft key action** field.
3. Select the desired line to apply this feature from the **Line** field.
4. Enter the access code for retrieving parked call in the **Access Code** field.
5. Select the desired orbit where you want to retrieve the parked call from the **Park Orbit** field.
6. Enter the string that will appear on the LCD screen in the **Label** field.

0004343 / 9702981673 as provider Filter settings

▼ Key 9	Retrieve Parked Call
Soft key action	Retrieve Parked Call
Line	Line 1
Access Code	*302
Park Orbit	100
Label	Retrieve Parked Call

7. Click **Save changes** to accept the change.
8. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Parking a Call

To park a call on the phone:

1. During a call, do one of the following:
 - If you press the park call key:
When the call is parked successfully, you will hear a voice prompt informing you of the extension where the call is parked.
Press the **Transfer** soft key to complete the park.
 - If you press the enhanced park call key:
The call will be parked to the orbit you designated in the Park Orbit field.

Retrieving a Call

To retrieve a call on the phone:

Dial the call park retrieve code followed by the target orbit (for example: *302100) or press the retrieve parked call key to retrieve the parked call.

Note

If the parked call is not retrieved within a period of time assigned by the system, the phone performing call park will receive a call back.

Directed Pickup

Directed call pickup is used for picking up an incoming call on a specific extension. You can answer a call that rings on a specific phone. If there are multiple incoming calls on the phone at the same time, you can only pick up the first incoming call.

Note

You cannot configure call pickup feature via CommPortal phone configurator for W60B/W70B/W80/W90 phones.

Configuring a Directed Pickup key

You can set a Directed Pickup key, and specify a contact whose calls you want to pick up.

To configure a directed pickup key via the CommPortal phone configurator:

1. Click **Programmable Keys - Line Key->Key X**.
2. Select **Directed Pickup** from the **Soft key action** field.
3. Enter the directed pickup code in the **Access Code** field.
4. Enter the target phone number in the **Extension** field.

5. Enter the string that will appear on the LCD screen in the **Label** field.

The screenshot shows the 'Key 11' configuration page for a Yealink phone. The title bar indicates the provider is 'Yealink - 00004343 / 9702981673'. The page is titled 'Directed Pickup'. The 'Soft key action' is set to 'Directed Pickup'. The 'Line' is set to 'Line 1'. The 'Access Code' is set to '*12'. The '*Extension' is set to '9702981675'. The 'Label' field is set to 'Directed Pickup'. There is a 'Filter settings...' button in the top right corner and a 'Reset' button in the bottom right corner.

6. Click **Save changes** to accept the change.
7. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

When the target phone number receives an incoming call, you can press the directed pickup key to answer the call on your phone.

Picking up a Call

When the target number (for example: 9702981675) receives an incoming call, you can dial the directed pickup code followed by the target number (for example: *129702981675) or press the directed pickup key (if configured) to pick up the parked call directly.

Group Pickup

Group call pickup is used for picking up incoming calls within a pre-defined group. When any phone within a predefined group of phones receives an incoming call, you can pick up that call easily on the phone.

Note

You cannot configure call pickup feature via CommPortal phone configurator for W60B/W70B/W80/W90 phones.

Configuring a Directed Pickup key

You can set a group pickup key, and use it to pick up incoming calls for your group.

To configure a group pickup key via the CommPortal phone configurator:

1. Click **Programmable Keys - Line Key->Key X**.
2. Select **Group Pickup** from the **Soft key action** field.

3. Enter the group pickup code in the **Access Code** field.
4. Enter the string that will appear on the LCD screen in the **Label** field.

The screenshot shows a web-based configuration interface for a Yealink phone. At the top, it says "for Yealink - 00004343 / 9702981673 as provider" and has a "Filter settings..." button. Below this is a header for "Key 12" and "Group Pickup". The main configuration area has four rows: "Soft key action" with a dropdown menu set to "Group Pickup", a lock icon, and a "Reset" button; "Line" with a dropdown menu set to "Line 1"; "Access Code" with a text input field containing "*11"; and "Label" with a text input field containing "Group Pickup".

5. Click **Save changes** to accept the change.
6. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Picking up a Call for a Group

When a phone in the predefined group receives an incoming call, you can dial the group pickup code (for example: *11) or press the group pickup key to pick up the call directly. The call will be answered on your phone.

Advanced Phone Features

This chapter provides operating instructions for the advanced features of the IP phone. Topics include:

- [Enhanced Monitor Extension](#)
- [Intercom and Push-to-Talk](#)
- [Multicast Paging](#)
- [DTMF](#)
- [Call Jump](#)

Enhanced Monitor Extension

You can use enhanced monitor extension feature to monitor a specific line for status changes on the phone.

Note

Enhanced monitor extension feature is not applicable to SIP-T19(P) E2, CP920, W60B, W70B, W80, and W90 phones.

Configuring an Enhanced Monitor Extension key

You can configure an enhanced monitor extension key on the phone to monitor the status of a desired phone number. You can press an enhanced monitor extension key to dial out the monitored phone number when the monitored line is idle.

To configure an enhanced monitor extension key via CommPortal phone configurator:

1. Click **Programmable Keys - Line Key->Key X**.
2. Select **Enhanced Monitor Extension** from the **Soft key action** field.
3. Select the desired line to apply this feature from the **Line** field.
4. Enter the phone number or extension you want to monitor in the **Extension** field.
5. Enter the string that will appear on the LCD screen in the **Label** field.

▼Key 11	9702981675
Soft key action	Enhanced Monitor Extension <input type="button" value="Reset"/>
Line	Line 1
*Extension	9702981675
*Label	9702981675

6. Click **Save changes** to accept the change.
7. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

LED Indicator

The following table shows the LED indicator associated with the line you are monitoring.

LED Status	Description
Solid green	The monitored user is idle.
Fast flashing red (200ms)	The monitored user receives an incoming call.
Solid red	The monitored user is busy. The monitored user's conversation is placed on hold (This LED status requires server support).
Slow flashing red (1s)	The call is parked against the monitored user's phone number.
Off	The monitored user does not exist.

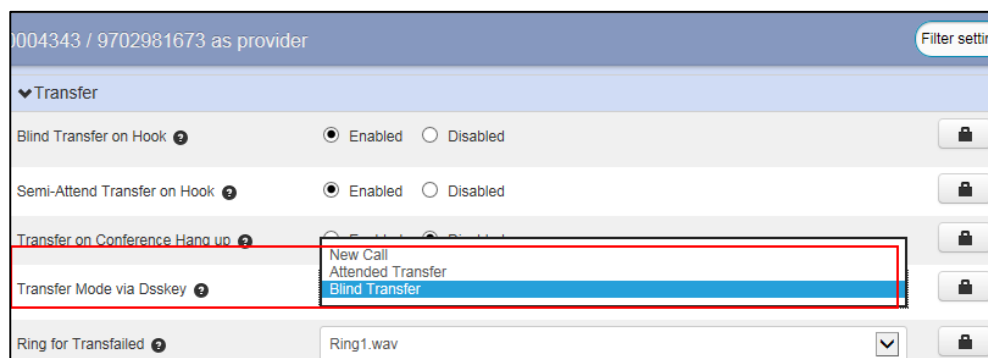
Configuring Transfer Mode via Dsskey Feature

When there is an active call on your phone, you can transfer the active call to the monitored phone number directly by pressing the enhanced monitor extension key. The phone handles the active call differently depending on the transfer mode via DSS key.

To configure Transfer Mode via Dsskey feature via CommPortal phone configurator:

1. Click **Features->Transfer**.
2. Select the desired type from the **Transfer Mode via Dsskey** field.
3. Depending on your selection:
 - If you select **Blind Transfer**, press the enhanced monitor extension key to complete the blind transfer to the monitored number.
 - If you select **Attended Transfer**, press the enhanced monitor extension key to dial out the monitored number, and then perform the attended or semi-attended transfer.

- If you select **New Call**, press the enhanced monitor extension key to place a new call to the monitored number.



4. Click **Save changes** to accept the change.
5. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Intercom and Push-to-Talk

Intercom is a useful feature in an office environment to quickly connect with the operator or the secretary. You can short press the Intercom/PTT key to automatically connect with a pre-configured target extension for outgoing intercom calls, and the target extension will automatically answer incoming intercom calls by default.

Push-to-talk is a variant of Intercom, you need to press and hold the Intercom/PTT key during the push-to-talk call. As soon as the key is released, the push-to-talk call is disconnected.

Note

You cannot configure Intercom and Push-to-Talk via CommPortal phone configurator for SIP-T19(P) E2/W80/W90 phones.

Enabling Push to Talk Mode

You can enable or disable the push-to-talk mode for the phone. If the push-to-talk mode is enabled, you can long press the Intercom/PTT key for 1.5 seconds to automatically connect with a pre-configured target extension, and the target extension will automatically answer incoming intercom calls by default. You need to press and hold the Intercom/PTT key during the push-to-talk call and release it to end the call.

If the push-to-talk mode is disabled, the Intercom/PTT key works as an Intercom key only.

Note

The push-to-talk mode is not applicable to SIP T19(P) E2, CP920, CP960, W60B, W70B, W80, and W90 phones.

To enable push-to-talk mode via CommPortal phone configurator:

1. Click **Features->Intercom**.

2. Mark the desired radio box in the **Push to Talk Mode Enable** field.

0004343 / 9702981673 as provider Filter settings...

▼ Intercom

Push to Talk Mode Enable ?	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	
Accept Intercom ?	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	
Intercom Mute ?	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	
Intercom Tone ?	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	
Intercom Barge ?	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	

3. Click **Save changes** to accept the change.
4. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring an Intercom/PTT Key

You can configure an Intercom/PTT key to provide users the ability to initiate intercom calls directly to the specified contact.

Note

Intercom/PTT key is not applicable to SIP T19(P) E2, W60B, W70B, W80, and W90 phones.

To configure an Intercom/PTT key via CommPortal phone configurator:

1. Click **Programmable Keys - Line Key->Key X**.
2. Select **Intercom/PTT** from the **Soft key action** field.
3. Select the desired line to apply this feature from the **Line** field.
4. Enter the target extension number in the **Number** field.
5. Enter the string that will appear on the LCD screen in the **Label** field.

0004343 / 9702981675 as provider Filter settings...

▼ Key 10

*Soft key action	Intercom/PTT		Reset
Line ?	Line 1		
Number ?			
Label			

6. Click **Save changes** to accept the change.
7. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Using Push-to-Talk

To use push-to-talk on the phone:

1. Long press the Intercom/PTT key for 1.5 seconds when the phone is idle.
The called destination plays a warning tone and automatically answers the call in the speakerphone mode by default.
2. Keep pressing the Intercom/PTT key during the push-to-talk call.
3. To end the push-to-talk call, release the Intercom/PTT key.

Placing an Intercom Call

To place an Intercom call on the phone:

1. Short press the Intercom/PTT key when the phone is idle.
The called destination plays a warning tone and automatically answers the call in the speakerphone mode by default.
2. To end the intercom call, press the Intercom/PTT key again or the **EndCall** soft key.

Configuring Incoming Intercom/PTT Calls

The IP phone can process incoming calls differently depending on the following settings.

Note

You cannot configure incoming Intercom/PTT calls via CommPortal phone configurator for SIP-T19(P) E2, W60B, W70B, W80, and W90 phones.

Intercom Feature	Description
Accept Intercom	Enable or disable the IP phone to automatically answer an incoming intercom call.
Intercom Mute	Enable or disable the IP phone to mute the microphone when answering an intercom call.
Intercom Tone	Enable or disable the IP phone to play a warning tone when answering an intercom call.
Intercom Barge	Enables or disables the IP phone to answer an incoming intercom call while there is already an active call on the IP phone.

To configure intercom feature via CommPortal phone configurator:

1. Click **Features->Intercom**.
2. Mark the desired radio box in the **Accept Intercom** field.
3. Mark the desired radio box in the **Intercom Mute** field.

4. Mark the desired radio box in the **Intercom Tone** field.
5. Mark the desired radio box in the **Intercom Barge** field.

0004343 / 9702981673 as provider Filter settings

▼ Intercom

Push to Talk Mode Enable ☒ Enabled ☐ Disabled 🔒

Accept Intercom ☒ Enabled ☐ Disabled 🔒

Intercom Mute ☒ Enabled ☐ Disabled 🔒

Intercom Tone ☒ Enabled ☐ Disabled 🔒

Intercom Barge ☒ Enabled ☐ Disabled 🔒

6. Click **Save changes** to accept the change.
7. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Multicast Paging

You can use multicast paging to quickly and easily broadcast time-sensitive announcements to users who are listening to a specific multicast group.

Note

You cannot configure multicast paging via CommPortal phone configurator for SIP-T19(P) E2, and W60B/W70B/W80/W90 phones.

Configuring a Multicast Paging key

You can configure a multicast paging key, which allows you to send a Real-time Transport Protocol (RTP) stream to the pre-configured multicast address(es) without involving SIP signaling.

To configure a multicast paging key via the CommPortal phone configurator:

1. Click on **Programmable Keys - Line Key->Key X**.
2. Select **Multicast Paging** from the **Soft key action** field.
3. Enter the multicast IP address (for example: 224.5.6.20:10008) in the **IP address** field.
The valid multicast IP addresses range from 224.0.0.0 to 239.255.255.255.
4. Enter the multicast IP port number (for example: 10008) in the **Port** field.

5. Enter the string that will appear on the LCD screen in the **Label** field.

The screenshot shows the 'Key 7 Multicast Paging' configuration page. At the top, it says '004343 / 9702981673 as provider' and has a 'Filter settings...' button. The configuration fields are as follows:

*Soft key action	Multicast Paging	<input type="button" value="Reset"/>
*IP address	224.5.6.20	
*Port	10008	
*Label	Multicast Paging	

6. Click **Save changes** to accept the change.
7. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configure a Paging List key

You can configure a paging list key on the phone, which allows you to view a list of pre-configured multicast address(es), you can send a Real-time Transport Protocol (RTP) stream to the pre-configured multicast address(es) without involving SIP signaling. For more information, refer to [Configuring Paging List](#) on page 61.

To configure a paging list key via the CommPortal phone configurator:

1. Click on **Programmable Keys - Line Key->Key X**.
2. Select **Paging List** from the **Soft key action** field.
3. Enter the string that will appear on the LCD screen in the **Label** field.

The screenshot shows the 'Key 8 Paging List' configuration page. At the top, it says '004343 / 9702981673 as provider' and has a 'Filter settings...' button. The configuration fields are as follows:

*Soft key action	Paging List	<input type="button" value="Reset"/>
Label	Paging List	

4. Click **Save changes** to accept the change.
5. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring Paging List

You can configure the IP address and port number of the multicast paging group to be displayed in the paging list.

To configure paging list via CommPortal phone configurator:

1. Click on **Paging Groups->Paging Group N**.
2. Enter the group name in the **Description** field.

- Enter the multicast IP address (for example: 224.5.6.20) in the **Address** field.
The valid multicast IP addresses range from 224.0.0.0 to 239.255.255.255.
- Enter the multicast IP port number (for example: 10008) in the **Port** field.

- Repeat the step 2-4, you can add more paging groups.
- Click **Save changes** to accept the change.
- Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Configuring a Codec for Multicast Paging

To configure a default codec for multicast paging via web user interface:

- Click on **Paging Groups->Setting**.
- Select the desired codec from the drop-down menu of **Outgoing Page Codec**.

The default codec is G722.

- Click **Save changes** to accept the change.
- Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Note

If G722 codec is used for multicast paging, the LCD screen will display the HD icon to indicate that high definition voice is provided.

Configuring Multicast Listening Addresses

You can configure the phone to receive a Real-time Transport Protocol (RTP) stream from the pre-configured multicast address(es) without involving SIP signaling. You can specify up to 10 multicast addresses that the phone listens to on the network.

To configure multicast listening addresses via web user interface:

1. Click on **Paging Groups->Listening Group N**.
2. Enter the group name in the **Description** field.
3. Enter the multicast IP address (for example: 224.5.6.21) in the **IP Address** field.
The valid multicast IP addresses range from 224.0.0.0 to 239.255.255.255.
4. Enter the multicast IP port number (for example: 10008) in the **Port** field.

The screenshot shows a web interface for configuring a phone. At the top, it says '0004343 / 9702981673 as provider'. Below this, there's a 'Filter settings...' button. The main content area is titled 'Programable Keys - Line Key' and contains a 'Paging Groups' section. Under 'Paging Groups', there's a 'Setting' section and a 'Listening Group 1' section. The 'Listening Group 1' section has three fields: '*Description' with the value 'Listening', '*IP Address' with the value '224.5.6.21', and 'Port' with the value '10008'. Each field has a 'Reset' button. There's also a 'Default' button for the Port field. Below the 'Listening Group 1' section, there's a 'Listening Group 2' section.

5. Repeat the step 2-4, you can add more listening groups.
6. Click **Save changes** to accept the change.
7. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Handling Incoming Multicast Paging Calls

How the phone handles incoming multicast paging calls depends on Paging Barge and Paging Priority Active parameters configured via CommPortal phone configurator.

Priority Paging Group

The priority paging group defines the priority of the voice call in progress. If the priority of an incoming multicast paging call is lower than that of the active call, it will be ignored automatically. If priority paging group is disabled, the voice call in progress will take precedence over all incoming multicast paging calls. Valid values in the priority paging group field:

- **1 to 10:** Define the priority of the active call, 1 with the highest priority, 10 with the lowest.
- **0:** The voice call in progress will take precedence over all incoming paging calls.

Paging Priority Enable

The paging priority enable parameter decides how the phone handles incoming multicast paging calls when there is already a multicast paging call on the phone. If enabled, the phone will ignore incoming multicast paging calls with lower priorities, otherwise, the phone will answer incoming multicast paging calls automatically and place the previous multicast paging call on hold. If disabled, the phone will automatically ignore all incoming multicast paging calls.

To handle incoming multicast paging calls via CommPortal phone configurator:

1. Click on **Paging Groups->Setting**.
2. Mark the desired radio box in the **Paging Priority Enable** field.
3. Select the desired value from the drop-down menu of **Priority Paging Group**.

0004343 / 9702981673 as provider Filter setting

► Programmable Keys - Line Key

▼ Paging Groups

▼ Setting

Outgoing Page Codec ⓘ G722 ▼ 🔒

Paging Priority Enable ⓘ ☒ Enabled ☐ Disabled 🔒

Priority Paging Group ⓘ 10 ▼ 🔒

4. Click **Save changes** to accept the change.
5. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Sending RTP Stream via a Multicast Paging Key

To send RTP stream via a multicast paging key when the receiver's phone is idle:

1. Press the multicast paging key when the phone is idle.
 The phone sends RTP to a pre-configured multicast address (IP: Port).
 Both the sender's and receiver's phones play a warning tone and the receiver automatically answers the multicast RTP session in the speakerphone mode.
 The multicast paging key LED illuminates solid green.
2. To place the current multicast RTP session on hold, press the **Hold** soft key.
 The sender's phone places the multicast RTP session on hold and receiver's phone releases the session.
3. To resume the held multicast RTP session, press the **Resume** soft key.
 The multicast RTP session is established again.

4. To end the multicast RTP session, press the multicast paging key again or press the **EndCall** soft key.

Note

Multicast RTP is one way only from the sender to the multicast address(es) (receiver). For outgoing RTP multicasts, all other existing calls on the phone will be placed on hold.

Sending RTP Stream via a Paging List Key

To send RTP stream via a paging key list when the receiver's phone is idle:

1. Press the paging list key when the phone is idle.
2. Select the desired group.
3. Press the **Paging** soft key to send RTP.
4. To place the current multicast RTP session on hold, press the **Hold** soft key.
The sender's phone places the multicast RTP session on hold and receiver's phone releases the session.
5. To resume the held multicast RTP session, press the **Resume** soft key.
The multicast RTP session is established again.
6. To end the multicast RTP session, press the multicast paging key again or press the **EndCall** soft key.

DTMF

DTMF is the signal sent from the IP phone to the network, which is generated when pressing the IP phone's keypad during a call. Each key pressed on the IP phone generates one sinusoidal tone of two frequencies. One is generated from a high-frequency group and the other from a low-frequency group.

DTMF Keypad

The DTMF keypad is laid out in a 4x4 matrix, with each row representing a low-frequency, and each column representing a high frequency. Pressing a digit key (such as '1') will generate a sinusoidal tone for each of two frequencies (697 and 1209 hertz (Hz)).

DTMF Keypad Frequencies:

	1209 Hz	1336 Hz	1477 Hz	1633 Hz
697 Hz	1	2	3	A
770 Hz	4	5	6	B
852 Hz	7	8	9	C
941 Hz	*	0	#	D

Transmitting DTMF Digit

Three methods of transmitting DTMF digits on SIP calls:

- **RFC 2833** -- DTMF digits are transmitted by RTP Events compliant with RFC 2833. You can configure the payload type and sending times of the end RTP Event packet. The RTP Event packet contains 4 bytes. The 4 bytes are distributed over several fields denoted as Event, End bit, R-bit, Volume and Duration. If the End bit is set to 1, the packet contains the end of the DTMF event. You can configure the sending times of the end RTP Event packet.
- **INBAND** -- DTMF digits are transmitted in the voice band. It uses the same codec as your voice and is audible to conversation partners.
- **SIP INFO** -- DTMF digits are transmitted by SIP INFO messages. DTMF digits are transmitted by the SIP INFO messages when the voice stream is established after a successful SIP 200 OK-ACK message sequence. The SIP INFO message can transmit DTMF digits in three ways: DTMF, DTMF-Relay and Telephone-Event.

Configuring Transmitting DTMF Digit Method

To configure the method of transmitting DTMF digits via CommPortal phone configurator:

1. Click **Line X->DTMF**.
2. Select the desired value from the drop-down menu of **DTMF Type**.
3. If **SIP INFO** or **AUTO** or **SIP INFO** is selected, select the desired value from the drop-down menu of **DTMF Info Type**.
4. Enter the desired value in the **DTMF Payload Type (96~127)** field to configure the RFC 2833 payload type.

004343 / 9702981673 as provider		Filter settings...	Cle
▶ Codec			
▶ NAT			
▼ DTMF			
DTMF Type	RFC2833		Default
DTMF Info Type	DTMF-Relay		Default
DTMF Payload Type(96-127)	101		Default

5. Click **Save changes** to accept the change.
6. Perform auto provisioning on the phone to download above configurations. For more information on how to perform auto provisioning, refer to [Downloading Configuration Files](#) on page 39.

Call Jump

Call Jump allows users to seamlessly jump the current call to a predefined alternate or wireless

number by entering the designated hotkey.

The main difference between call jump and call transfer is that when you transfer a call via call jump, the current call stays connected instead of being placed on hold.

The following table lists the default call jump hotkeys configured by Metaswitch. Internet Telephony Service Provider can modify the hotkeys, depending on your actual needs.

Hotkey	Description
*94	Dial *94 to jump to the number that jumps the call to you.
*95	Dial *95 to jump to your alternate number.
*96	Dial *96 to jump to your wireless number.
*90	Dial *90 to temporarily disable call jump feature temporarily for avoiding hotkey conflict issues.

Note

The hotkey is transmitted through DTMF. To use call jump feature, you need to set the value of the DTMF Type to AUTO or SIP INFO and the value of the DTMF Info Type to DTMF-Relay. For more information on how to configure the method of transmitting DTMF digits, refer to [Configuring Transmitting DTMF Digit Method](#) on page 66.

Scenarios A:

A and B are during a call, and then A jump this call to C. C can dial *94 to jump the call to A.

Scenarios B:

The system administrator has configured the alternate number (B) that phone A may want to transfer calls to.

To transfer an active call to an alternate extension:

If C needs to consult A and B frequently, A can dial *95 to jump the call to B during a call with C, then C can continue consulting B. Before B answers the call, A and C will stay connected.

Scenarios C:

The system administrator has configured a wireless number that phone A may want to transfer calls to.

To transfer an active call to an alternate wireless device:

If A and C have chatted on a phone for a long time, but A needs to leave home. In this case, A can dial *96 to quickly jump the current call to a wireless number without interrupting the conversation. Before A uses the mobile phone to answer the call, the call stays connected.

Scenarios D:

To avoid hotkey conflict issues when listening to voice mails:

User A dials the voice mail access code to listen to voice mails. To avoid the call jump hotkeys to conflict with voice mailbox hotkeys, User A can dial *90 to disable the call jump feature temporarily when listening to voice mails. After A hangs up the call, the call jump hotkeys will

work again.

Note

The destination you want to jump your call to must be predefined in CommPortal. For more information, contact your administrator.

Troubleshooting

This section describes solutions to common issues that may occur while using the IP phone. Upon encountering a scenario not listed in this section, contact your Yealink reseller for further support.

IP Address Issues

Why doesn't the IP phone get an IP address?

Do one of the following:

If your phone connects to the wired network:

- Ensure that the Ethernet cable is plugged into the Internet port on the IP phone and the Ethernet cable is not loose.
- Ensure that the Ethernet cable is not damaged.
- Ensure that the IP address and related network parameters are set correctly.
- Ensure that your network switch or hub is operational.
- Ensure that the Wi-Fi feature is disabled.

If your phone connects to the wireless network:

- If the network is secure, ensure the entered password is right.
- Ensure your gateway/router enables the wireless network feature.

How to solve the IP conflict problem?

Do one of the following:

- Reset another available IP address for the IP phone.
- Check network configuration via phone user interface at the path
Menu->Settings->Advanced Settings(default password: admin) **->Network->WAN Port->IPv4** (or **IPv6**). If the Static IP is selected, select DHCP instead.

Time and Date Issues

Why doesn't the IP phone display time and date correctly?

Check if the IP phone is configured to obtain the time and date from the NTP server

automatically. If your phone is unable to access the NTP server, configure the time and date manually.

Display Issues

Why is the LCD screen blank?

Do one of the following:

- Ensure that the IP phone is properly plugged into a functional AC outlet.
- Ensure that the IP phone is plugged into a socket controlled by a switch that is on.
- If the IP phone is plugged into a power strip, try plugging it directly into a wall outlet.
- If your phone is PoE powered, ensure that you are using a PoE-compliant switch or hub.

Why does the IP phone display “No Service”?

The LCD screen prompts “No Service” message when there is no available SIP account on the IP phone.

- Ensure that an account is actively registered on the IP phone at the path
Menu->Status->More->Accounts.

Phone Book Issues

What is the difference between a remote phone book and a local directory?

A remote phone book is placed on a server, while a local phone book is placed on the IP phone flash. A remote phone book can be used by everyone that can access the server, while a local phone book can only be used by a specific phone. A remote phone book is always used as a central phone book for a company; each employee can load it to obtain the real-time data from the same server.

Audio Issues

How to increase or decrease the volume?

Press the volume key to increase or decrease the ringer volume when the IP phone is idle or ringing, or to adjust the volume of engaged audio device (handset, speakerphone or headset)

when there is an active call in progress.

Why do I get poor sound quality during a call?

If you have poor sound quality/acoustics like intermittent voice, low volume, echo or other noises, the possible reasons could be:

- Users are seated too far out of recommended microphone range and sound faint, or are seated too close to sensitive microphones and cause echo.
- The intermittent voice is mainly caused by packet loss, due to network congestion, and jitter, due to message recombination of transmission or receiving equipment (for example, timeout handling, retransmission mechanism, buffer under run).
- Noisy equipment, such as a computer or a fan, may cause voice interference. Turn off any noisy equipment.
- Line issues can also cause this problem; disconnect the old line and redial the call to ensure another line may provide a better connection.

Wi-Fi and Bluetooth Issues

Why is the wireless signal strength low?

Ensure the IP phone and your gateway/ router are within the working range and there is no obvious interference (walls, doors, and so on.) between them.

Why can't I connect the Bluetooth device with the IP phone all the time?

Try to delete the registration information of the Bluetooth device on both IP phone and Bluetooth device, and then pair and connect it again. Contact Yealink field application engineer and your Bluetooth device manufacturer for more information.

Why the Bluetooth headset affects IP phone's voice quality?

You may not experience the best voice quality if you use a Bluetooth headset while the 2.4 GHz band is enabled or while you are in an environment with many other Bluetooth devices. This possible loss in voice quality is due to inherent limitations with Bluetooth technology.

Firmware and Upgrading Issues

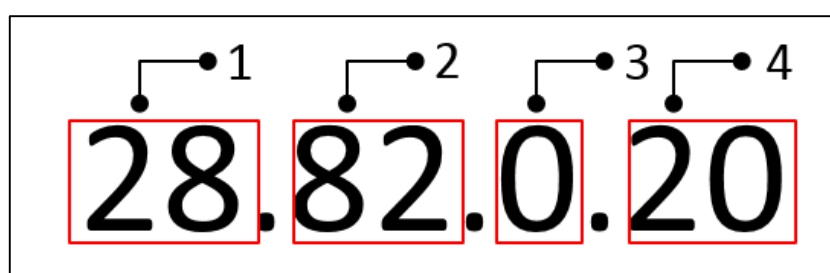
Why doesn't the IP phone upgrade firmware successfully?

Do one of the following:

- Ensure that the target firmware is not the same as the current firmware.
- Ensure that the target firmware is applicable to the IP phone model.
- Ensure that the current or the target firmware is not protected.
- Ensure that the power is on and the network is available in the process of upgrading.
- Ensure that the web browser is not closed or refreshed when upgrading firmware via web user interface.

How can I verify the firmware generation and version of the phone?

Press the **OK/√** key when the IP phone is idle to check the firmware version. For example: 28.82.0.20.



	Item	Description
1	28	Firmware ID. The firmware ID for each IP phone model is: <ul style="list-style-type: none">• 97: T57W• 96: T54W• 95: T53W/T53• 78: CP920• 70: SIP-T54S/T52S• 66: SIP-T48S/T46S/T42S/T41S• 54: SIP-T40P• 76: SIP-T40G

	Item	Description
		<ul style="list-style-type: none"> • 46: SIP-T29G • 45: SIP-T27P • 69: SIP-T27G • 53: SIP-T19(P) E2
2	82	Firmware generation. Note: The larger it is, the newer the firmware generation is.
3	0	A fixed number.
4	20	Firmware version. Note: With the same firmware generation, the larger it is, the newer the firmware version is.

Why doesn't the IP phone update the configuration?

Do one of the following:

- Ensure that the configuration is set correctly.
- Reboot the phone. Some configurations require a reboot to take effect.
- Ensure that the configuration is applicable to the IP phone model.
- The configuration may depend on support from a server.

Resetting Issues

Generally, some common issues may occur while using the IP phone. You can reset your phone to factory configurations after you have tried all troubleshooting suggestions but do not solve the problem. Resetting the phone to factory configurations clears the flash parameters, removes log files, user data, and cached data, and resets the administrator password to admin. All custom settings will be overwritten after resetting.

How to reset the IP phone to factory configurations?

To reset the phone via phone user interface:

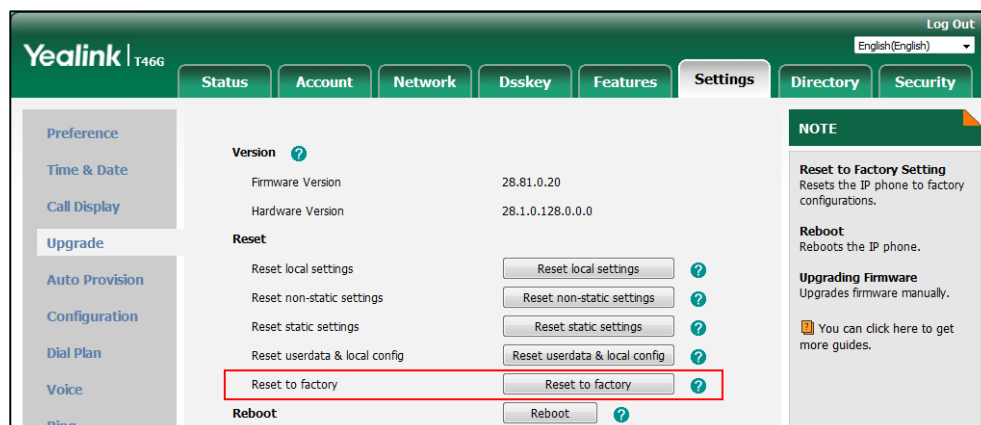
1. Press **Menu->Settings->Advanced Settings ->Reset Config**.
2. In the **Reset to Factory Settings** field, press the **Enter** soft key.
3. Press the **OK** soft key.

Note

Reset of your phone may take a few minutes. Do not power off until the phone starts successfully.

To reset the IP phone via web user interface:

1. Click on **Settings->Upgrade**.
2. Click **Reset to factory** in the **Reset to factory** field.



The web user interface prompts the message “Do you want to reset to factory?”.

3. Click **OK** to confirm the resetting.

The IP phone will be reset to factory successfully after startup.

Note

Reset of your phone may take a few minutes. Do not power off until the phone starts up successfully.

Rebooting Issues

How to reboot the IP phone?

To reboot the phone via phone user interface:

1. Press **Menu->Settings->Basic Settings ->Reboot**.
2. Press **OK** to reboot.

Protocols and Ports Issues

What communication protocols and ports do Yealink IP phones support?

Source Device	Source IP	Source Port	Destination Device	Destination IP	Destination Port (Listening port)	Protocol	Description of destination port
IP phones	IP address of IP phones	2~65535	IP phone or voice gateway	IP address of IP phone or voice gateway	Determined by the destination device.	UDP	RTP protocol port, it is used to send or receive the audio stream.
		1024~65535	SIP Server	IP address of SIP server	Determined by the destination device.	UDP/TCP	SIP protocol port, it is used for signaling interaction with the SIP server.
		1024~65535	TR-069 Server	IP address of TR-069 server	Determined by the destination device.	TCP	TR-069 protocol port, it is used to communicate with TR-069server.
		1024~65535	File server	IP address of file server	Determined by the destination device.	TCP	HTTP protocol port, it is used to download the file.
		1024~65535	Remote phone book server	IP address of remote phone book server	Determined by the destination device.	TCP	HTTP protocol port, it is used to access the remote phone book.
		1024~65535	AA	IP address of AA	Determined by the destination device.	TCP	HTTP protocol port, it is used for AA communication.

Source Device	Source IP	Source Port	Destination Device	Destination IP	Destination Port (Listening port)	Protocol	Description of destination port
		68	DHCP Server	IP address of DHCP server	67	UDP	DHCP protocol port, it is used to obtain IP address from DHCP server.
		1024~65535	LDAP Server	IP address of LDAP server	Determined by the destination device.	TCP	LDAP protocol port, it is used to obtain the contact information from LDAP server.
		1024~65535	NTP Server	IP address of NTP server	123	UDP	NTP protocol port, it is used to synchronize time from NTP time server.
		1024~65535	Syslog Server	IP address of syslog server	514	UDP	Syslog protocol port, it is used for IP phones to upload syslog information to syslog server.
		1024~65535	PNP Server	IP address of PNP server (Default value: 224.0.1.75)	5059	UDP/TCP	Protocol port, it is used to obtain the URL of updating file from PNP server.
			Multipaging	Multipaging	65000 65001		
PC	IP address of PC	Determined		IP address of IP	1~65535	TCP	HTTP port (default value: 80)
					1~65535	TCP	HTTP port (default value: 443)
SIP Server	IP address of SIP Server				1024~65534	UDP/TCP	SIP protocol port, it is used for signaling interaction with the SIP server.
IP phone	IP address				2~65535	UDP	RTP protocol port, it is used by

Source Device	Source IP	Source Port	Destination Device	Destination IP	Destination Port (Listening port)	Protocol	Description of destination port
of voice gateway	of IP phone or voice gateway	by the destination device.	IP phones	phones			destination device to send or receive the audio stream.
TR-069 Server	IP address of TR-069 Server				1024~65535	TCP	TR-069 protocol port, it is used to communicate with TR-069server.

Password Issues

How to restore the administrator password?

Factory reset can restore the original password. All custom settings will be overwritten after reset.

Power and Startup Issues

What will happen if I connect both PoE cable and power adapter? Which has the higher priority?

IP phones use the PoE preferentially.

Why does the IP phone have no power?

If no lights appear on the IP phone when it is powered up, do one of the following:

- Reboot your IP phone.
- Replace the power adapter.

Why is the LCD screen black?

If the power indicator LED is on, the keypad is usable but the LCD screen is black, please reboot your IP phone.

Regulatory Notices

Service Agreements

Contact your Yealink Authorized Reseller for information on service agreements applicable to your product.

Limitations of Liability

TO THE FULL EXTENT ALLOWED BY LAW, YEALINK EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCTS, EVEN IF YEALINK OR ITS AUTHORIZED RESELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT YEALINK'S OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

Safety Instructions

Save these instructions. Read these safety instructions before use!

The following basic safety precautions should always be followed to reduce the risk of fire, electrical shock, and other personal injury.



General Requirements

- Before you install and use the device, read the safety instructions carefully and observe the situation during operation.
- During the process of storage, transportation, and operation, please always keep the device dry and clean.
- During the process of storage, transportation, and operation, please avoid collision and crash of the device.
- Please do not attempt to dismantle the device by yourself. In case of any discrepancy, please contact the appointed maintenance center for repair.
- Without prior written consent, no organization or individual is permitted to make any change to the structure or the safety design of the device. Yealink is under no circumstances liable to consequences or legal issues caused by such changes.
- Please refer to the relevant laws and statutes while using the device. Legal rights of others should also be respected as well.



Environmental Requirements

- Place the device at a well-ventilated place. Do not expose the device under direct sunlight.
- Keep the device dry and free of dust.
- Place the device on a stable and level platform.
- Please do not place heavy objects on the device in case of damage and deformation caused by the heavy load.
- Keep at least 10 cm between the device and the closest object for heat dissipation.
- Do not place the device on or near any inflammable or fire-vulnerable object, such as rubber-made materials.
- Keep the device away from any heat source or bare fire, such as a candle or an electric heater.
- Keep the device away from any household appliance with a strong magnetic field or electromagnetic field, such as a microwave oven or a refrigerator.



Operating Requirements

- Do not let a child operate the device without guidance.
- Do not let a child play with the device or any accessory in case of accidental swallowing.
- Please only use the accessories provided or authorized by the manufacturer.
- The power supply of the device must meet the requirements of the input voltage of the device. Please use the provided surge protection power socket only.
- Before plugging or unplugging any cable, make sure that your hands are completely dry.
- Do not spill liquid of any kind on the product or use the equipment near water, for example, near a bathtub, washbowl, kitchen sink, wet basement or near a swimming pool.
- Do not tread on, pull, or over-bend any cable in case of malfunction of the device.
- During a thunderstorm, stop using the device and disconnect it from the power supply. Unplug the power plug and the Asymmetric Digital Subscriber Line (ADSL) twisted pair (the radio frequency cable) to avoid lightning strike.
- If the device is left unused for a rather long time, disconnect it from the power supply and unplug the power plug.
- When there is smoke emitted from the device, or some abnormal noise or smell, disconnect the device from the power supply, and unplug the power plug immediately. Contact the specified maintenance center for repair.
- Do not insert any object into equipment slots that are not part of the product or auxiliary product.
- Before connecting a cable, connect the grounding cable of the device first. Do not disconnect the grounding cable until you have disconnected all other cables.



Cleaning Requirements

- Before cleaning the device, stop using it and disconnect it from the power supply.
- Use a piece of soft, dry and anti-static cloth to clean the device.

- Keep the power plug clean and dry. Using a dirty or wet power plug may lead to electric shock or other perils.

