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IP Phone 9104

Installation Instructions



Teo IP Phone 9104 Installation Instructions

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Teo IP Phone 9104 Installation Instructions

Introduction

General Features

The **Teo IP Phone 9104** is a feature-rich desk phone for the modern office. It features two color displays, one of which is used for programmable labeling of multifunction keys. Up to 30 multifunction key functions can be programmed, displayed in selectable banks of 6 keys.

Features of the IP Phone 9104 include:

- Up to four SIP accounts
- Color displays
- Up to 30 programmable multifunction keys
- Desi-less key labeling
- DSS/BLF keys for one-touch station dialing and pickup with line status indication
- Local Directory (500 entries)
- Call log (600 entries, in/out/missed)
- Blacklist call blocking
- Keyboard lock
- Message waiting indicator
- Microphone mute/unmute
- Call hold / resume
- Call waiting
- Station-level multicast paging
- Caller ID display
- Time/date display
- Speed dial
- Call transfer (attended or blind)
- Call pickup
- Redial
- Local Do-Not-Disturb
- Voicemail access
- Local 3-way conference
- Hot / warm line
- GigE network and PC ports
- Power over Ethernet or optional local power
- Full duplex speakerphone
- Headset interface with EHS support for Plantronics headsets
- Desktop or wall mount installation

Various features may not be available with some SIP services.

Controls and Indicators



- 1) **Main Display** – color screen shows call progress, line states, missed calls, and other information. Softkey options are shown above the four softkeys.
- 2) **Softkeys** – select the function displayed above the key on the bottom line of the display.
- 3) **Navigation Keys** – navigate within menus. The **OK** key exits the current menu, saves any changes made, and returns to the previous menu options.
- 4) **Hold Key** – places a call on hold.
- 5) **Transfer Key** – places the current call on hold, and selects an idle line appearance for transferring the call. A second press completes a transfer.
- 6) **Conference Key** – adds parties to a conference call.
- 7) **Phonebook Key** – shows the Phonebook, where you can store up to 500 contacts.
- 8) **Call Log Key** – shows the log of incoming, outgoing, and missed calls.
- 9) **Message Waiting Indicator** – a red indicator flashes when messages are waiting; controlled by the network.

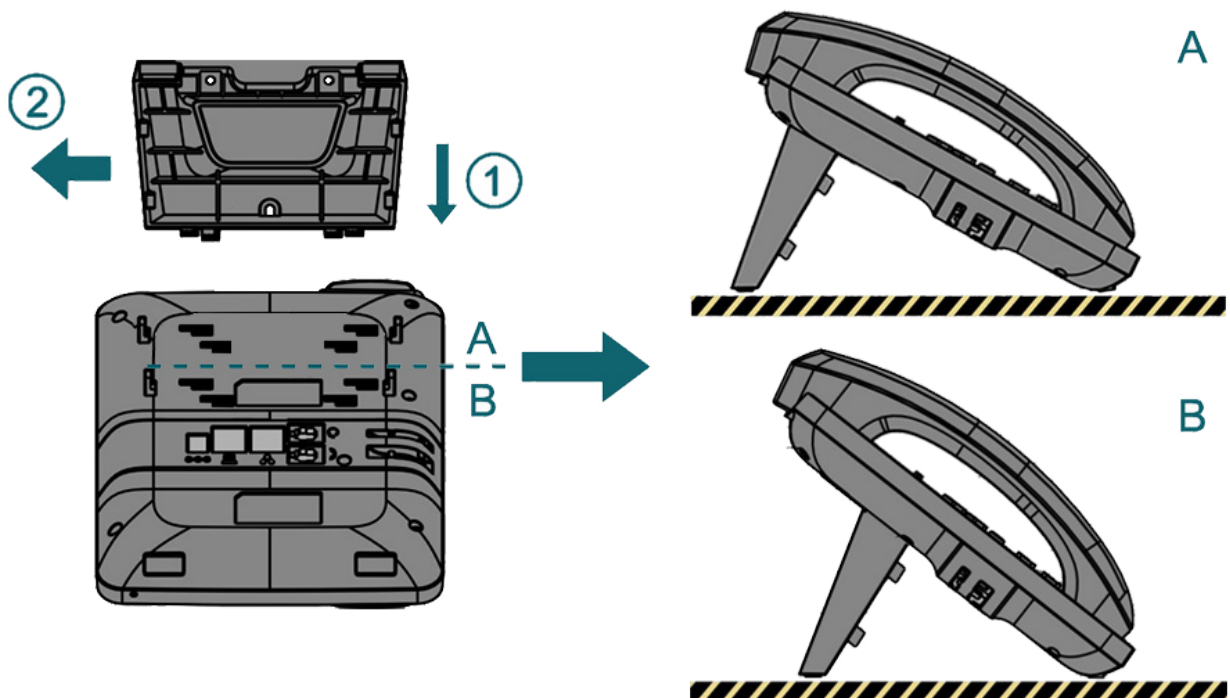
- 10) **Dial Pad** – dials telephone numbers, and sends DTMF tones to external equipment such as voice mail systems. The dial pad is also used for text and number entry.
- 11) **Key Display** – shows the functions assigned to six multifunction keys. Five selectable pages of six keys are available for a total of up to 30 keys.
- 12) **Multifunction Keys** – select the functions shown in the Key Display. Keys can be configured for Line Appearance, DSS/BLF, Speed Dial, Call Pickup, Voicemail, Headset, Multicast Paging, and Lock.
- 13) **Page Key** – changes the page of multifunction keys that is shown in the Key Display. Up to five pages of six keys are available.
- 14) **Volume Keys** – adjust the receiver/speaker volume when on a call; adjust the ringer volume when on-hook.
- 15) **Mute Key** – mutes the microphone when using the speakerphone or handset/headset. A mute icon is shown in the main display while mute is active.
- 16) **Redial Key** – press to access the Dialed Call Log, and then select a previously dialed call to redial.
- 17) **Speaker Key** – activates the speakerphone.
- 18) **Microphone** – used for hands-free (speakerphone) calling; located on the front edge of the phone.

Installation

Desktop Installation

The stand can be installed in two positions for desktop use. Select the position that provides the best screen readability and easy control operation for the phone's location.

- ① Insert the four tabs on the short edge of the stand into one of the pairs of inner slots on the phone. Use "A" slots for a low angle, or "B" slots for a high angle as shown.
- ② Press the stand toward the side of the phone until it locks into place.

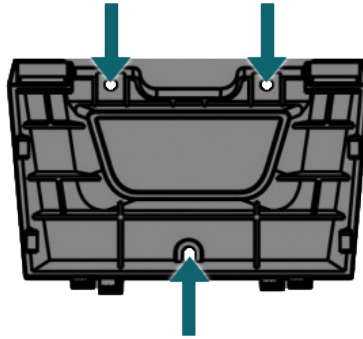


Wall Mounting

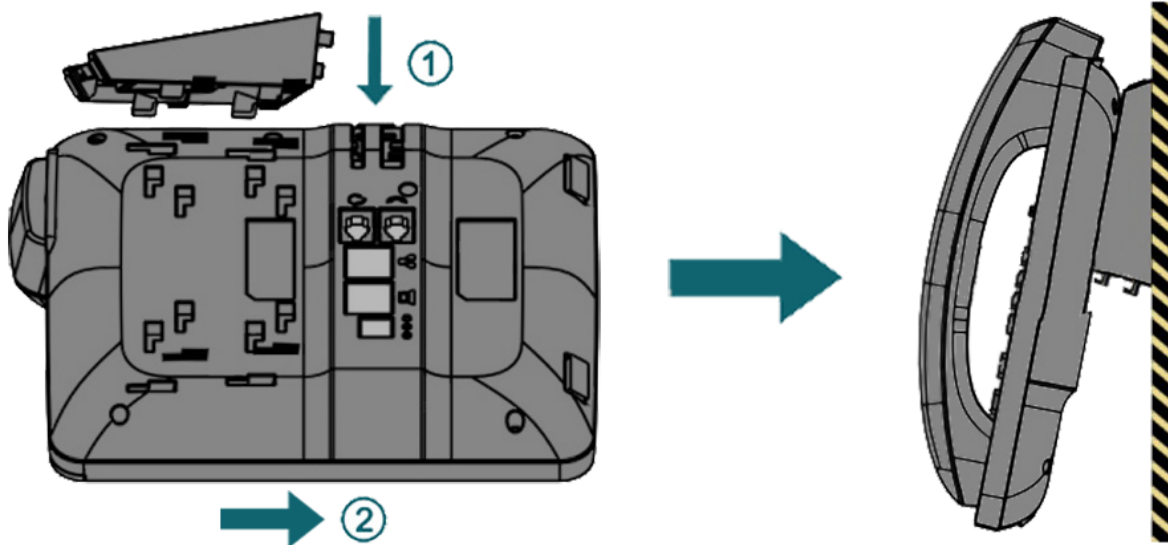
To save space, you can directly hang the phone on a wall. You need three screws that will fit the holes in the stand.

Note: Wall mounting screws are not supplied with the phone.

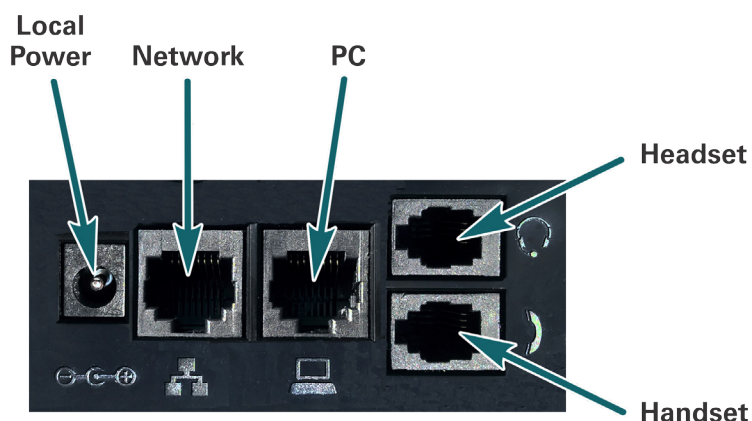
1. Mount the stand to the wall with the tabs facing out as shown, using three screws suitable for the wall material.




2. Connect cables to the phone (page 11).
3. To attach the phone to the stand, ① insert the four tabs on the long edge of the stand into the outer slots on the phone, and then ② press the phone down until it locks into place.




Connecting the Phone





Network Connection

Connect the LAN switch to the phone's  LAN jack using a Category 5e or better cable. If the network switch provides 802.3af Power over Ethernet (PoE), a local power supply connection is not needed.

PC Connection

If you want to use a PC on the same network connection, connect the PC network interface to the phone's  PC jack using a Category 5e or better cable.

Handset/Headset

Plug the supplied handset into the  Handset jack. Plug a compatible headset into the  Headset jack. Route the cords through the guides on the phone.

Power

The IP Phone 9104 is compatible with IEEE 802.3af Power over Ethernet, utilizing either power over spare cable pairs (midspan power source) or phantom power (powered switch/hub port). The phone provides an 802.3af PD Class 2 indication to the power sourcing equipment and requires a maximum of 5 watts of power.



Power may also be provided by an optional local power supply.

WARNING: Use a Listed ITE "Limited Power Source, LPS or Class 2" power supply rated 5 VDC, 1 A (**Teo Model PWR8**, Part Number 901058).

Connect power after all other connections are complete. If PoE is not provided, plug the power supply barrel connector into the round power jack on the back of the phone. Connect the power supply to a standard 100-240 VAC, 50-60 Hz power outlet.

Configuration

The IP Phone 9104 is typically configured by the Teo UCM (Unified Communications Manager) Admin Portal. Using the Admin Portal, you can simplify the deployment of multiple phones by creating reusable configuration templates.

Phone configuration is summarized in the following steps (details are in the following sections):

1. *(Optional)* Configure DHCP Options.
2. Configure the phone in the UCM Admin Portal
 - Add the device to a user extension. The default template will be used if a new one is not added.
 - Enter passwords and identifying label.
 - Enter the UC server address and other network options as needed.
 - Configure electronic hook switch, voice mode, and dialing mode options.
 - Configure multifunction keys/
3. Complete setup at the phone.
 - Reset to default configuration, if needed.
 - Configure login credentials.
4. Wait for the phone to read its configuration information from the UC server, update its settings, and complete registration with the system. This process can take up to two minutes.
5. Verify phone registration by making a test call.

DHCP Server Configuration

Automatic IP Configuration (DHCP)

DHCP (Dynamic Host Configuration Protocol) assigns IP addresses to telephones, and can provide other information to the phones, such as update server address. When using DHCP, phones do not need to be configured with static IP addresses.

The DHCP server can supply:

- Phone IP Address
- Phone Subnet Mask
- Domain Name
- Default Gateway IP Address (Router)
- DNS Server(s) IP Address(es)
- NTP Server IP Address
- Update Server IP Address (Boot Server Host Name)

Settings not supplied by DHCP must be entered locally at the phone, or in a configuration file which is supplied to the phone via the Teo UC update server.

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DHCP Server Available Options

The DHCP server requires a scope of IP addresses that can be assigned to the phones. The scope must be configured with the router address, vendor-specific info, and the update server address.

You can use an existing DHCP server for assigning IP addresses to the telephones, or add a new server.

Scope Options

The following scope options are supported:

1 Subnet Mask

Enter the network subnet mask for the phone IP address range.

3 Default Gateway

Enter the default gateway IP address.

6 DNS Server

Enter the DNS server IP address.

42 NTP Server

Enter the NTP server IP address.

66 Update Server (Boot Server Host Name)

Enter the Teo UC server IP address or fully qualified domain name with the protocol prefix "**teo://**". For example:

teo://10.10.10.10 (IP address) or
teo://myserver.com (fully qualified domain name)

This option allows the IP Phone 9104 to automatically download a configuration file from the Teo UC server at initialization.

Note: If DHCP Option 66 is not configured, the installer must manually enter the update server address at each phone (page 25).

Phone Configuration in Teo UCM

1. Log on to the UCM as an administrator.
2. If the server handles multiple tenants, select a tenant from the popup list at the lower left of the Dashboard screen.
3. Find or add the user that will be assigned to this phone (CONFIGURATION→USERS),
4. Click the **DEVICE ASSIGNMENTS** tab.

DEVICE TYPE	LABEL
TEO 9104	

TEO 9104 - DEFAULT ▼

+ ADD NEW DEVICE

5. From the **SELECT A DEVICE TEMPLATE** list, select a TEO 9104 template. Your system may have custom templates in addition to the default template.
6. Click **+ ADD NEW DEVICE**. The phone will be added to the list.
7. Select a device in the list to view or edit its options, as explained below.

Device Info and Passwords

DEVICE TYPE TEO 9104

LABEL

WEB PASSWORD

INSTALL PIN

LOCK PASSWORD

MAC ADDRESS ×

USER AGENT TEO 9104/2.0.3.3050_00a859dd3c42

- LABEL – enter a name to identify the phone (optional).
- WEB PASSWORD – restricts access to the phone's web-based configuration utility.
- INSTALL PIN – restricts access to Advanced Settings in the phone Menu.

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- **LOCK PASSWORD** – password used to unlock the phone keyboard. The phone can be locked by pressing and holding the # key or pressing the Lock multifunction key (if provisioned). If LOCK PASSWORD is blank, the phone cannot be locked.
- **MAC ADDRESS** – this read-only field is blank when a device configuration is created; it displays the MAC address of the phone after it is registered to the extension. To move a phone to a different extension number, or to replace the phone with a different one, you must first clear the registered MAC address by clicking the **X** at the right of this field, and then click **SAVE**.
- **USER AGENT** – displays the SIP User Agent string, which includes the phone's revision level and MAC address.

Call and Interface Options

The screenshot shows a configuration panel with the following settings:

- ELECTRONIC HOOK SWITCH**: A checkbox that is currently unchecked.
- VOICE MODE**: Two radio buttons. **HANDSET** is selected (indicated by a filled circle), and **HEADSET** is unselected (indicated by an empty circle).
- DIALING MODE**: A dropdown menu currently set to **WARM DIAL**.
- TIMEOUT (SEC)**: A numeric input field set to **9**.
- DESTINATION**: A text input field containing the number **1000**.

Electronic Hook Switch

When **ELECTRONIC HOOK SWITCH** is enabled, control signaling is provided on the Headset interface to allow remote on-hook/off-hook control using a cordless headset.

Note: this feature is only compatible with Plantronics CS500 and Savi headsets and requires an APD-80 adapter cable.

Voice Mode

- **HANDSET** – all operations that automatically go off-hook (such as Answer, speed dial or DSS) will connect to the speakerphone first. Ringing for incoming calls is heard on the speaker.
- **HEADSET** – automatic off-hook operations connect to the headset instead of the speakerphone. Ringing for incoming calls is heard in the headset.

Dialing Mode

Dialing Mode controls automatic dialing.

- **NORMAL** – after the user has entered all digits, they must select Dial or press OK to manually initiate dialing, or wait for the number of seconds set in **TIMEOUT (SEC)** for automatic dialing.
- **WARM DIAL** – when the phone goes offhook, it will automatically dial the number in the **DESTINATION** field after the number of seconds set in **TIMEOUT (SEC)**. A user can dial a different number before the timeout, canceling the automatic dialing.
- **HOT DIAL** – similar to **WARM DIAL**, but automatic dialing occurs immediately after the phone goes offhook (no timeout).

Network Resources

Basic network information is typically provided by DHCP. **SIP OPTIONS** and **SIP PROXY SERVERS** should be set explicitly via configuration download.

- IP Address – To set the IP address, subnet mask, and default gateway statically, uncheck **AUTOMATICALLY OBTAIN FROM DHCP**. Leaving the fields blank will allow static network information to be set locally at the phone, otherwise set values as desired.
- DNS – To set the DNS server(s) statically, uncheck **AUTOMATICALLY OBTAIN FROM DHCP**. Leaving the fields blank will allow static name server values to be set locally at the phone, otherwise set values as desired.
- NTP – To set the NTP server(s) statically, uncheck **AUTOMATICALLY OBTAIN FROM DHCP**. Leaving the field blank will allow the time server(s) to be set locally at the phone, otherwise set value as desired.
- SYSLOG – To manually enable syslog, check **ENABLE SYSLOG**, and fill in the **SERVER ID** and **LOG LEVEL** information.
- SIP OPTIONS – Change the **TRANSPORT**, **NAT KEEP ALIVE**, and **NAT TIMER (SEC)** options if required by your network.
- SIP PROXY SERVERS – Select **+PROXY** and enter the Teo UC server IP address or fully qualified domain name and port. If a backup server is installed, enter that address below the primary server. If no proxy server is entered, the primary server address is assumed to be the same as the Update Server address.

Multifunction Key Settings

Multifunction keys can be configured for a variety of functions described below. On the IP Phone 9104, multifunction keys are shown on up to five screen pages with six keys per page, for a total of 30 keys. A yellow bar at the bottom indicates the current page. Press the **Page** key to select a different page; additional pages of keys are available if they have been configured by the UCM.

You can allow the user to customize keys on a per-key basis locally on the phone. Keys that are designated “SET AT PHONE” can be configured by the user at the phone, and will not be overwritten by a configuration update.

Note: Do not set any keys to “SET AT PHONE” if the phone is configured for hot desking. This feature overwrites all key assignments.

These key functions are available:


- **LINE** – first appearance of the primary line (extension number); LED indicator shows line appearance status.
- **ADDITIONAL LINE** – additional appearances of the primary line; LED indicator shows line appearance status. LINE and ADDITIONAL LINE keys for a call appearance must be consecutive. The ADDITIONAL LINE option is available only if the preceding key is configured for a line appearance.
- **DSS/BLF (DIALOG)** – initiates a call or picks up a ringing call to an assigned extension; LED indicator shows the busy/ringing status of the assigned extension.
- **SPEED DIAL** – initiates a call to a preconfigured number.
- **CALL PICKUP** – initiates a directed call pickup.
- **HEADSET** – on-hook/off-hook control for the headset port.
- **VOICEMAIL** – initiates a call to the voicemail system; LED indicator shows message waiting status.
- **LOCK** – locks the phone to prevent unauthorized use, except for emergency calls; LED indicator is on red when phone is locked.
- **MULTICAST** – initiates a multicast page; LED indicator is on green when paging is active.
- **SET AT PHONE** – key is configured locally at the phone by the user. A configuration update will not override the user’s settings (*not compatible with hot desking*).
- **Blank** – key is unused and cleared at the phone.

Configuring Multifunction Keys

1. Click the **MULTIFUNCTION KEY SETTINGS** tab.

MULTIFUNCTION KEY SETTINGS

MULTICAST


THE TEO 9104 HAS 30 MULTIFUNCTION KEYS.

MULTIFUNCTION KEYS				
KEY	TYPE	LABEL	EXT	NUMBER
1	LINE	1008	1008	
2	ADDITIONAL LINE	1008	1008	
3	DSS/BLF (DIALOG)	Bob Smith	1234	1234#
4	LOCK	LOCK		
5	HEADSET	HEADSET		
6	VOICEMAIL	VOICEMAIL		
7	CALL PICKUP	CALL PICKUP		
8	SPEED DIAL	Teo		4253491000#
9	MULTICAST	Paging Zone 1		224.1.0.0:1366
10				

Key numbers in the UCM correspond to phone keys as shown in this table:

MF Key Page	MF Key Number	UCM Key
1	1	1
	2	2
	3	3
	4	4
	5	5
	6	6
2	1	7
	2	8
	3	9
	4	10
	5	11
	6	12
3	1	13
	2	14
	3	15
	4	16
	5	17
	6	18

MF Key Page	MF Key Number	UCM Key
4	1	19
	2	20
	3	21
	4	22
	5	23
	6	24
5	1	25
	2	26
	3	27
	4	28
	5	29
	6	30


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- Click a key in the list. Fields will be shown below the list, depending on the current key type.

TYPE	<input type="text" value="DSS/BLF"/>	EXTENSION	<input type="text"/>	<input type="text" value="Q"/>	LABEL	<input type="text"/>
SPEED DIAL	<input type="text"/>					

- Select a key type from the **TYPE** list.
- Enter a label in the **LABEL** field to identify the key.
- Fill out any additional fields, such as **SPEED DIAL** number.
- To delete a multifunction key (make it unused), hover over a key line in the table, and then click the **X** that appears to the right of the line.

3	SET AT PHONE				X
---	--------------	--	--	--	---

When finished with phone configuration, click  **SAVE** .

Multicast Paging

The IP Phone 9104 can be configured to respond to multicast pages and also to initiate multicast pages with multifunction keys. IP addresses and ports associated with paging zones must match between senders (multicast multifunction keys) and intended listeners. It is not required for a phone to have listener zones configured for each multicast sender key; a phone may page to zones it does not receive. Likewise, a phone can be configured to listen to zones without having paging keys for those zones.

Proper operation of IP multicasting for paging requires that your local networking equipment is configured to support the IGMP protocol, and multicasting. You should consult with your IT staff to ensure that your network is properly configured to support proper registration of multicast listeners using IGMP, and proper transmission of multicast traffic across all subnets where phones will be connected. Ports used for other services (such as SIP signaling) should not be selected for multicast paging.

Configuring Multicast Listeners

1. Click the **MULTICAST** tab.

PRIORITY	NAME	IP ADDRESS	PORT
1	Paging Zone 1	239.1.1.1	5000
2	Paging Zone 2	239.1.1.2	5001
3	Paging Zone 3	239.1.1.3	5002
4	Paging Zone 4	239.1.1.4	5003
5			0
6			0
7			0
8			0
9			0
10			0

2. If **ENABLE PRIORITY** is selected, paging zones are prioritized (1 is the highest priority) and will preempt lower priority zones. For example, a Priority 1 page will preempt a Priority 2 page in progress. If **ENABLE PRIORITY** is not checked, all paging zones have the same priority and will not preempt each other.
3. **NORMAL CALL PRIORITY** sets the priority of normal calls. For example, if a normal (non-multicast) call is in progress with **NORMAL CALL PRIORITY** = 2 and a Priority 1 multicast page is initiated, the phone will automatically place the call on hold and respond to the multicast page. If a Priority 1 multicast page is in progress when a normal call is placed to the phone, the incoming call will be immediately

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redirected to voicemail and the page will not be interrupted. Likewise, if the same or lower priority page (e.g. Priority 2) is initiated when the phone is on a normal call, the normal call will not be interrupted. If the same or lower priority multicast page is in progress when a normal call is placed to the phone, the phone will ring, allowing the user a choice of remaining on the page or answering the incoming call. If NORMAL CALL PRIORITY is set to DISABLED, normal calls are never preempted.


4. For each priority paging zone you wish to configure, click a row in the **MULTICAST LISTENERS** table. The IP Phone 9104 can be configured to listen to up to 10 multicast zones.
5. Enter a paging zone **NAME**, **IP ADDRESS** and **PORT**. The recommended IP address range is 239.0.0.2 to 239.255.255.254. Port numbers must be in the range of 1025 to 65535, and each zone should have a unique port number. IP addresses and port numbers must be consistent between sending and listening devices.
6. To change a paging zone's priority, click arrows in the rightmost column to move a paging zone up or down in the list.

Configuring Multicast Paging Keys

1. Click the **MULTIFUNCTION KEY SETTINGS** tab.
2. Select an unused key.

TYPE	MULTICAST	LABEL	Paging Zone 1
IP ADDRESS	239.1.1.1	PORT	5000

3. Set the key **TYPE** to MULTICAST.
4. Enter the paging zone name in the **LABEL** field to identify the key.
5. Enter the appropriate **IP ADDRESS** and **PORT** for the paging zone. The recommended IP address range is 239.0.0.2 to 239.255.255.254. Port number must be in the range of 1025 to 65535, and each zone should have a unique port number. IP addresses and port numbers must be consistent between sending and listening devices.

When finished with phone configuration, click  **SAVE**.

It may take a couple of minutes for the configuration to load into the phone.

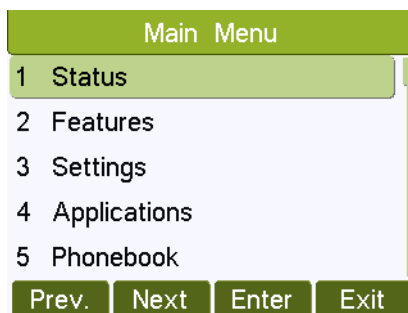
Completing Configuration at the Phone

After completing device setup in Teo UCM Admin Portal, perform the following steps at the phone.

Using Menus

Configuration items are accessed through the phone's menus.

1. Select **Menu** to enter the Main Menu.



2. Scroll through the list with the **Up** and **Down Navigation** keys, or by selecting **Prev./Next**.

Select **Enter** or press the **OK** key to select an item.

You can also press a dial pad key to jump to and select an item, e.g. **5** for Phonebook.

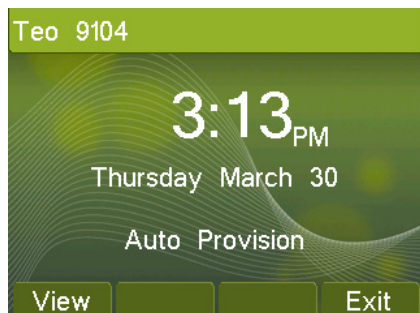
Advanced Settings may be password protected; the default password is 123. Refer to INSTALL PIN (page 15).

3. If a double-headed arrow is shown next to an item, you can change the value with the **Left** and **Right Navigation** keys, then select **Ok** or **Save** to retain the new setting.
4. Select **Exit** to return to the previous screen.

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Phone Configuration with DHCP Option 66 Server Address

1. If this phone was configured on another extension, it must be removed from Teo UCM and reset to factory defaults (*page 26*).
2. Within a minute after the phone initializes following power-up or reboot, the **Auto Provision** message will appear:



3. Select **View**, and then enter the authentication username and password.
User is the *extension number@tenant domain* (e.g. 1000@teo) for multitenant systems, or just the *extension number* (e.g. 1000) for single tenant systems.
Passwd is the SIP password assigned to the extension.

The screenshot shows the "Auto Provision" form on the phone's LCD. The title "Auto Provision" is in a green header bar. Below it, there are two input fields: "User" with the text "1000@teo" and "Passwd" with masked text "*****". At the bottom, there are four green buttons labeled "Delete", "2aB", "Start", and "Exit" in white text.

4. Select **Start**.
5. The phone will read its configuration information from the UC server, update its settings, and complete registration with the system
6. Verify phone registration by making a test call.

Phone Configuration with Static Server Address

Perform the following steps if your server does not have Option 66 configured with the Teo Update Server address. You will need to set the appropriate server address and login credentials in the phone menu to enable auto provisioning.

1. If this phone was configured on another extension, it must be removed from Teo UCM and reset to factory defaults (*page 26*).
2. Select **Static Provisioning Server**.
(Main Menu → Settings → Advanced Settings → Maintenance → Auto Provision → Static Provisioning Server).

*Advanced Settings may be password protected; the default password is 123. Refer to INSTALL PIN (*page 15*).*

3. Press the **Up** or **Down Navigation** key until Server is shown.

4. Enter the server address or fully qualified domain name with the dial pad.
5. Press the **Down Navigation** key to display User.
6. Enter *extension number@tenant domain* (e.g. 1000@teo) for multitenant systems, or just the *extension number* (e.g. 1000) for single tenant systems.
7. Press the **Down Navigation** key to display Password.
8. Enter the SIP password assigned to the extension.
9. Select **Save** to save Static Provisioning parameters.
10. From the main menu, select **Reboot System**.
(Main Menu → Reboot System)
11. After the phone has restarted, the provisioning process will start within 30 seconds. The phone will read its configuration information from the UC server, update its settings, and complete registration with the system
12. Verify phone registration by making a test call.

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Reset to Default Configuration

Use this procedure to reset a phone to the factory default configuration.

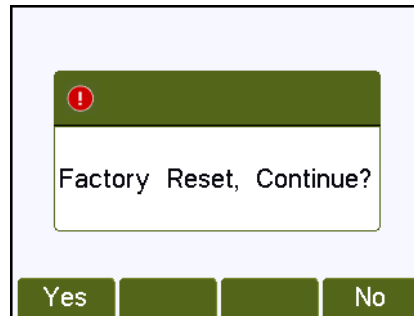
1. If this phone has been configured on another extension in the Teo UCM, remove the phone from the extension's Device Assignments list. Hover the pointer over the device name and click the **X** that appears at the right of the list.

Check the MAC address to make sure that the correct device is removed. The phone's MAC address is printed on a label attached to the bottom of the phone.

2. At the phone, select **Reset to Default**.

(Main Menu → Settings → Advanced Settings → Reset to Default)

*Advanced Settings may be password protected; the default password is 123. Refer to **INSTALL PIN** (page 15).*



3. Select **Yes** to continue.

The reset process will take about one minute.

Appendix A

Menu Tree

1 **Status** *(view only)*

- 1 **Mode** *(IP address mode)*
- 2 **IP** *(phone IP address)*
- 3 **Software** *(version)*
- 4 **WEB Portal** *(QR code for phone web portal)*
- 5 **More...**
 - 1 **Network**
 - 1 **MAC** *(phone MAC address)*
 - 2 **Mode** *(IP address mode)*
 - 3 **IP** *(phone IP address)*
 - 4 **Mask** *(subnet mask)*
 - 5 **Gateway**
 - 6 **DNS1**
 - 7 **DNS2**
 - 2 **Accounts**
 - 1 **SIP1**
 - 2 **SIP2**
 - 3 **SIP3**
 - 4 **SIP4**
 - 3 **Phone**
 - 1 **Model** *(model number)*
 - 2 **Hardware** *(version)*
 - 3 **Software** *(version)*
 - 4 **RAM** *(used / total memory)*
 - 5 **ROM** *(used / total memory)*
 - 4 **TR069** *(remote management)*

2 **Features**

- 1 **Call Forward** *(forward incoming calls)*
 - 1 **SIP1**
 - 1 **Unconditional** *(all calls)*
 - 2 **Busy** *(only when busy)*
 - 3 **No Answer** *(only when call not answered)*
 - 2 **SIP2**
- 2 **Auto Answer** *(answer incoming calls)*
 - 1 **SIP1**
 - 2 **SIP2**
 - 3 **SIP3**
 - 4 **SIP4**
- 3 **Auto Hangup**
- 4 **Call Waiting** *(alert for incoming calls when busy)*
- 5 **DND** *(reject incoming calls, per line or all lines)*
- 6 **Blocking Anonymous Call** *(block calls without caller ID)*
 - 1 **SIP1**

Teo IP Phone 9104 Installation Instructions

- 2 **SIP2**
- 3 **SIP3**
- 4 **SIP4**
- 7 **Ban Outgoing** *(prevent outgoing calls)*
- 8 **Hotline** *(auto dial number when going offhook)*
 - 1 **SIP1**
 - 2 **SIP2**
 - 3 **SIP3**
 - 4 **SIP4**
- 9 **Dial Plan** *(enable pressing # to dial)*
- 10 **Dial Peer** *(rules to simplify dialing)*
- 11 **Intercom** *(auto answer calls with Alert-Info SIP header)*
- 12 **Auto Redial** *(prompt to redial if busy or rejected)*
- 13 **Call Completion** *(prompt to redial when called line is idle)*
- 14 **Ring From Handset** *(plays ringtone in handset)*
- 15 **Hide DTMF**
- 16 **Password Dial** *(hide digits after password prefix)*
- 17 **Pre Dial** *(enable dialing before going offhook)*
- 18 **Call Logs** *(enable call logs)*
- 19 **Default Line** *(use a default line for outgoing calls)*
- 20 **Auto Switch Line** *(automatically select default line)*

3 Settings

1 Basic Settings

1 Keyboard

- 1 **DSS Key Settings** *(configure multifunction keys)*
 - 1 **DSS Key 1**
 - 2 **DSS Key 2**
 - ⋮
 - 30 **DSS Key 30**
- 2 **Programmable Keys** *(navigation key functions)*
 - 1 **OK**
 - 2 **Arrow Up**
 - 3 **Arrow Down**
 - 4 **Arrow Left**
 - 5 **Arrow Right**
- 3 **Desktop Long Pressed** *(navigation key functions when held down)*
 - 1 **OK**
 - 2 **Arrow Up**
 - 3 **Arrow Down**
 - 4 **Arrow Left**
 - 5 **Arrow Right**
- 4 **Softkey** *(idle screen softkey functions)*
 - 1 *(softkey 1)*
 - 2 *(softkey 2)*
 - 3 *(softkey 3)*
 - 4 *(softkey 4)*

2 Screen Settings

- 1 **Energysaving** *(screen dimming timeout)*

3 Ring Settings

- 1 **Ring Volume** *(default ring volume levels)*
 - 1 **Headset Volume**
 - 2 **Handsfree Volume**
- 2 **Ring Type** *(ringtones)*
- 4 **Voice Volume** *(default voice receive volume levels)*
 - 1 **Handset Volume**
 - 2 **Handsfree Volume**
 - 3 **Headset Volume**
- 5 **Time & Date** *(set automatically or manually)*
- 6 **Greeting Words** *(text at top of idle screen)*
- 7 **Language**
- 2 **Advanced Settings** *(password protected)*
 - 1 **Accounts**
 - 1 **SIP1**
 - 1 **Basic Settings** *(SIP server address)*
 - 2 **Advanced Settings** *(domain realm)*
 - 3 **Feature Code** *(custom codes to enable / disable features at server)*
 - 1 **Mode** *(enable sending feature codes to server)*
 - 2 **DND**
 - 3 **CFWD Unconditional**
 - 4 **CFWD on Busy**
 - 5 **CFWD on No Answer**
 - 6 **Blocking Anonymous Call**
 - 2 **SIP2**
 - 3 **SIP3**
 - 4 **SIP4**
 - 2 **Network**
 - 1 **Network Settings**
 - 1 **Connection Mode** *(IP address mode)*
 - 2 **Static IP Settings** *(static IP addresses and mask)*
 - 3 **DHCP Settings** *(DHCP DNS)*
 - 4 **PPPoE Settings** *(status and credentials)*
 - 2 **QoS&VLAN**
 - 1 **LLDP Settings**
 - 2 **QoS**
 - 3 **WAN VLAN**
 - 4 **LAN VLAN**
 - 3 **VPN** *(mode, server, credentials)*
 - 4 **Web Setting**
 - 1 **Web Server Type** *(protocol)*
 - 2 **Web Authentication** *(authentication type)*
 - 3 **Default WEB User** *(user type)*
 - 3 **Security**
 - 1 **Menu Password** *(password for Advanced Settings)*
 - 2 **Keyboard Status** *(locks phone keys)*
 - 3 **Keyboard Password** *(password to unlock phone keys)*
 - 4 **Maintenance**
 - 1 **Auto Provision**
 - 1 **DHCP Option**

Teo IP Phone 9104 Installation Instructions

- 2 **SIP Plug and Play**
- 3 **Static Provisioning Server**
- 2 **TR069**
 - 1 **Settings**
 - 2 **Status**
- 5 **Reset to Default** *(reset ALL settings to factory defaults)*

4 Applications

- 1 **SMS** *(view or send SMS text messages)*
- 2 **Memo**
- 3 **Voice Message**
 - 1 **SIP1**
 - 2 **SIP2**
 - 3 **SIP3**
 - 4 **SIP4**
- 4 **Ping** *(verifies connectivity to a network device)*

5 Phonebook

- 1 **Contacts** *(manage contacts)*
- 2 **Groups** *(manage groups of contacts)*
- 3 **Blacklist** *(reject calls from contacts)*
- 4 **Cloud Phonebook**
- 5 **LDAP**
- 6 **Speed Dial**
- 7 **Broadsoft Directory**

6 Call Logs

- 1 **Local Call Logs** *(view call activity logs)*
- 2 **Broadsoft Call Logs**

7 Agent

8 Reboot System *(restart the phone, settings are retained)*

Appendix B

Service and Warranty

Service

The Teo IP Phone 9104 has no user-serviceable parts inside; repair must be done by Teo.

Prior to equipment removal, call Teo Customer Technical Support for assistance in determining the source of the problem. This critical action can often prevent needless removal of equipment and subsequent customer inconvenience.

Teo
Technical Support Department
11609 49th Place West
Mukilteo, WA 98275-4255 USA

Phone: (425) 349-1000
(800) 524-0024

Fax: (425) 349-1010

E-mail: tech@teotech.com

Web: www.teotech.com

Teo is committed to meeting the product needs of our customers. Please write or call us with any suggestions for improvement.

Teo Product Warranty

For a period of one year from date of dealer purchase, but not to exceed 16 months from date of manufacture, Teo Technologies, Inc. (Teo) warrants its products to be free from defects in material and workmanship under conditions of normal use and service. Teo shall, at its option, repair or replace any defective product which, in its opinion, has not been misused, damaged, or improperly installed.

Repair or replacement under this warranty will be performed at Teo's factory. Authorization must be obtained from Teo prior to returning a product for repair. Freight must be prepaid for all units returned to Teo. Units repaired under warranty will be shipped UPS Ground (or equivalent), freight prepaid by Teo.

Products that are older than the warranty period, but less than 7 years old, or still manufactured by Teo may be repaired at the factory for a flat rate charge. Repaired out-of-warranty units are warranted for 90 days from the date of repair.

The repair or replacement of a product under this warranty represents the entire obligation of Teo; Teo shall not be liable for any special or consequential damages resulting from or caused by any defect, failure, incapacity or malfunction of any of its products.

The foregoing express warranty is in lieu of all other warranties, express or implied, including but not limited to any implied warranty of merchantability, fitness, or adequacy for any purpose or use, quality, productiveness or capacity; Teo, to the extent permitted by law, hereby disclaims all such other warranties.

Appendix C

Specifications

Contents of Shipping Container

- Telephone + Stand
- Handset
- Modular handset coil-cord
- Ethernet cable

Standards Compliance

- FCC Part 15
- Hearing Aid Compatible
- CE Listed

Network Compatibility

- 10/100/1000BaseT Ethernet

Power Requirements

- Power over Ethernet: 802.3af Class 2
- Optional Local Power: 5 VDC nominal @ 1 A max.

Physical Dimensions

- 8.2" H x 7.7" W x 2.9" D

Weight

- 1.75 lbs., including stand and handset

Environmental

- Operating Temperature: 32° to 104° F (0° to 40° C)
- Humidity: 10% to 65% non-condensing

Appendix D

Regulatory Statements



Important Safety Instructions

1. Read the installation instructions before connecting the system to its power source.
2. Installation of equipment must not route interconnecting cables or external power supply sources outdoors. This is defined as "Network Environment 0" by IEC TR 62101.
3. Never install network jacks in wet locations unless the jacks are specifically designed for wet locations.
4. Never touch uninsulated wires or terminals.
5. Do not connect this product to telephone network voltage (TNV) circuits. Some LAN and WAN ports both use RJ-45 connectors. Use caution when connecting cables.

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

6. Read and understand all instructions.
7. Follow all warnings and instructions marked on the product.
8. Unplug all cables before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
9. Do not use this product near water, for example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
10. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
11. This product should be operated only from the type of power source indicated on the marking label.
12. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.
13. Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
14. This product contains "No User-Serviceable Parts."
15. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - A. When the power supply cord or plug is damaged or frayed.
 - B. If liquid has been spilled into the product.
 - C. If the product has been exposed to rain or water.
 - D. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, because improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
 - E. If the product has been dropped or the case has been damaged.
 - F. If the product exhibits a distinct change in performance.

SAVE THESE INSTRUCTIONS

FCC Requirements

The Teo IP Phone 9104 is hearing-aid compatible (HAC) per Section 68.316, FCC Rules and Regulations.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.