



User Guide – for iPECS (iPKTS)

Please read this manual carefully before operating Phone.
Retain it for future reference.

iPECS is an Ericsson-LG Brand



What is new in this release?

Issue	Date	Change of Contents
1.0	Jan., 2016	Initial Release
1.1	Aug., 2016	Added Opensource and corrected the minor errors.
1.2	Jan., 2017	1) Method of receiving message has been changed from Unified SMB P2.1 see changed part at 'Receive a Message' section. 2) New menu named as 'Allow Video Request Automatically' is added in the 'Video Call Preference' section. 3) New USB mini type WIFI dongle is added 4) New USB EHS cable adaptor support

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Regulatory and Safety Notices

European Union Declarations of Conformity

Ericsson-LG Enterprise Co., Ltd. declare that the equipment specified in this document bearing the “CE” mark conforms to the European Union Radio and Telecommunications Terminal Equipment Directive(R&TTE 1999/5/EC), including the Electromagnetic Compatibility Directive(2004/108/EC), Low Voltage Directive(2006/95/EC) and Regulation (EC) 801/2013.

Copies of these Declarations of Conformity (DoCs) can be obtained by contacting your local sales representative.

Energy Efficiency

This device is an Energy Related Product (ErP) with High Network Availability (HiNA), and automatically switches to a sleep mode within 15 minutes (default set) of inactivity. If it is not needed during certain periods of time, it can be unplugged to save energy.

LIP-9071:

1. Networked standby mode: 5.0 watts

Note

- The power consumption of the product in networked standby if all wired network ports are connected and all wireless network ports are activated.

2. How to activate and deactivate wireless network ports.

2.1 Wi-Fi ON/OFF (If a Wi-Fi dongle connected to the USB port)

- 1) Touch Settings > Wireless & networks > Wi-Fi.
- 2) Slide the Wi-Fi switch to the on position.

2.2 Bluetooth ON/OFF (If a Bluetooth dongle connected to the USB port)

- 1) Touch Settings > Wireless & networks > Bluetooth.
- 2) Slide the Bluetooth switch to the on position.

[USA/Canada]

FCC/IC Certificate Number

FCC ID: 2ABGALIP9071

IC: 11597A-LIP9071

FCC/IC Interference Statement

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:

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

This device complies with part 15 /RSS-GEN of the FCC/IC rules. Operation is subject to the following two conditions:

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

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CAN ICES-3 (B)/NMB-3(B)

The use of this device in a system operating either partially or completely outdoors may require the user to obtain a license for the system according to the Canadian regulations.

CAUTION: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ATTENTION: Tout changement ou modification dans la construction de cet appareil qui ne sont pas expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur à utiliser l'équipement

Portable Device RF Exposure Statement:

This device has been evaluated for compliance with FCC/IC RF exposure limits in a portable configuration. At least 20 cm (8 inches) of separation distance between the *IP Gigabit Video Phone, LIP-9071*, device and the user's body must be maintained at all times. This device must not be used with any other antenna or transmitter that has not been approved to operate in conjunction with this device.

Regulatory Information / Disclaimers

"Privacy of communications may not be ensured when using this telephone".

Any changes or modifications made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

The Manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution or attachment of connecting cables and equipment other than those specified by the manufacturer. It is the responsibility for the user to correct any interference caused by such unauthorized modification, substitution or attachment.

The manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failure to comply with these guideline.

The use of this device in a system operating either partially or completely outdoors may require the user to obtain a license for the system according to the Canadian regulations.

For further information contact your Local Industry Canada office.

Important Safety Instructions

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

- Please read and understand all instructions.
 - Follow all warnings and instructions marked on the product.
 - To prevent the risk of fire, electric shock or energy hazard, do not use this product near water or expose this product to rain or any type of moisture at any time.
 - Do not place this product on an unstable table, stand, or card table; the product may fall, causing serious damage to the product or serious injury to those nearby.
 - This product should be operated only from the type of power source indicated on the product label. If you are not sure of the type of power supply at your location, consult your dealer or local power company.
 - Do not allow anything to rest on the wiring to the product. Do not locate this product where the cords or wiring could be abused by people walking on it.
 - Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
 - To reduce the risk of electric shock, do not disassemble this product. Instead, take it to a qualified person when service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risk. Incorrect reassemble can cause electric shock when the appliance is subsequently used.
 - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power supply cord, plug or other wiring to the product is damaged or frayed.
 - If liquid has been spilled into the product.
 - If the product has been exposed to rain or water.
 - If the product does not operate normally by following the operating instructions.
 - If the product has been dropped.
 - If the product exhibits a distinct change in performance.
 - If a failure occurs which exposes any internal parts, disconnect the power supply cord and wiring immediately and contact your system administrator.
-

- Keep the product away from heating appliances and electrical noise generating devices such as florescent lamps, motors and televisions. These noise sources can interfere with the performance of iPECS system.
- This product should be kept free of dust, moisture, high temperature (more than 40 degrees) and vibration, and should not be exposed to direct sunlight.
- Avoid using the telephone during an electrical storm; there is a remote risk of electric shock from lightning.
- In the event of a gas leak, do not use the telephone near the leak.
- Never attempt to insert wires, pins, etc. into the product. If the product does not operate properly, the equipment should be repaired by an authorized Ericsson-LG Enterprise service center.
- Do not use benzene, paint thinner, or an abrasive powder to clean the product. Wipe it with a soft cloth only.

Disposal of Old Appliance

When the displayed symbol (crossed-out wheeled bin) is adhered to a product, it designates the product is covered by the European Directive 2012/19/EU.



- ✓ All electric and electronic products should be disposed of only in special collection facilities appointed by government or local/municipal authorities.
 - ✓ The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
 - ✓ For more detailed information about disposal of your old appliances, please contact your city office, waste disposal service or the place of product purchase.
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1 Introduction

LIP-9071 phone is an advanced business communications terminal that employs the iPKTS Protocol standards to control and manage real-time communications. The phone employs a Mini-tab running the Android OS as a display and user control interface. The Phone application is permanently installed and provides the user with access to all the features and functions of the Call server host plus the interaction with other communications aware apps with a truly intuitive user touch interface. In addition, the Mini-tab is loaded with apps for Contacts, Calendar, Video, etc. to improve productivity and ease of use.



Note

- Before installing 3rd party applications to this handset, please ensure that the application is compatible with the handset current Android operating system.

2 Installation

2.1 Overview

LIP-9071 phone is shipped with LIP-9071 phone, handset, pedestal, 6-ft Cat 5 cable terminated in RJ-45 connectors and the Quick Guide. An optional AC/DC adapter is available for use when the network connection does not support IEEE 802.3af up to class 4 PoE (Power over Ethernet). The figures below present line drawings of the front and top of LIP-9071 phone identifying major elements of the user interface and external connections.

2.2 Front view

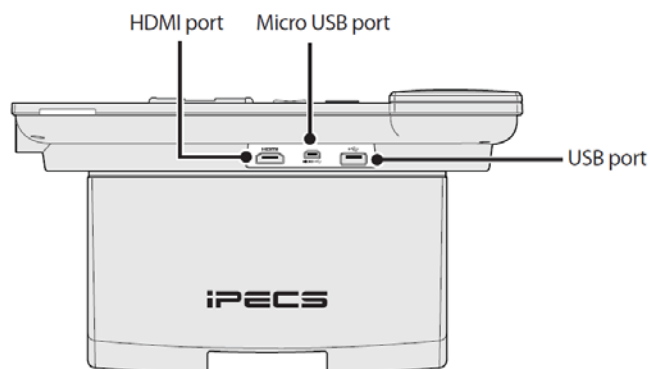
LIP-9071 has hardware button interface with touch interface as well. The front camera provides slide cover to hide camera lens for security purpose.



2.3 Top view

LIP-9071 has external device interface for USB, Micro USB and HDMI display. USB devices can be connected via the USB port. For example, connect a USB flash drive to save pictures or MP3 files. And Connect display device to the HDMI port using standard HDMI cable.

* The main purpose of micro USB is for debugging by installation engineer.



2.4 Hardware specification

The hardware specifications listed in this guide can be changed without notification to maintain quality of the product.

Description	
CPU	Cortex-A9 dual core
OS	Android 4.3 Jelly Bean
DDR (RAM)	1GB DDR3
eMMC Flash	8GB eMMC
External Memory	USB stick up to 32GB
Network	Ethernet switch 2ports (10/100/1000), RJ45
Audio	Handset: standard RJ11 Headset : USB type Speakerphone : Full duplex
Keypad	SPK, Volume +/- Home, Menu, Back DND, Message, Hold, Headset, Mute, Transfer, EC)
Power	Power adaptor: 48V/0.3A (option) PoE (802.3af): up to Class 4
USB	Micro USB (for debug), Host USB
HDMI	HDMI A type connector
LCD size	7 inch
LCD resolution	1024 x 600
Touch screen	Multi touch capacitive type

2.4.1 Mounting USB devices

An USB can be installed in the USB host connector slot on the rear top side of the phone. The USB connection expands the features of LIP-9071 phone.

To support from USB host:

1. Mouse
2. Keyboard
3. Memory stick up to 32GB
4. WiFi dongle – limited support
5. Bluetooth dongle –limited support
 - The available Bluetooth dongle uses CSR chipset.
6. USB Camera – limited support
 - The available USB camera is as follows up to now:
 - 1) Logitech Webcam 905
 - 2) Logitech Webcam C170
 - 3) Logitech Webcam C920

7. USB Headset – limited support

- The available wired headset is as follows up to now:

- 1) Plantronics Blackwire 500 series
- 2) Plantronics Blackwire 600 series

We can't guarantee the quality of voice if customers use the other wired headset.

8. USB hands-free speaker – limited support

9. USB EHS cable – limited support

- The available USB EHS cable is as follows up to now:

- 1) Plantronics APU-75 cable (Refer to <http://www.plantronics.com/us/product/apu-75>)

APU-75 EHS cable can work with Plantronics CS500 Series or CS500 XD Series headset.

* USB EHS cable does not support to control of Music play and pause. It just control of connect and disconnect of sound path of EHS headset.

** After user plug in USB EHS cable to LIP-9071, based on default EHS setting playing music sound could make link automatically to EHS headset. So user can hear music from headset paired with EHS through USB EHS cable

- 2) Jabra Link 14201-30 cable

(Refer to http://www.jabra.com/products/accessories/remote_call_control/jabra_link_14201_30)

Link 14201-30 cable can work with Jabra Pro 9450 headset.

* It's working with our Call Application and does not support Music play.

To safely remove the USB memory stick from the phone, the stick must first be unmounted.

To remove the USB memory stick,

1. Select 'Unmount USB memory stick' from the System Settings Storage menu.
2. Carefully pull out the stick from the slot.

Note

- Do not remove the USB stick while files are being accessed or transferred. If the stick is removed in such circumstances, loss or damage to data may result.

2.4.2 Connecting HDMI device

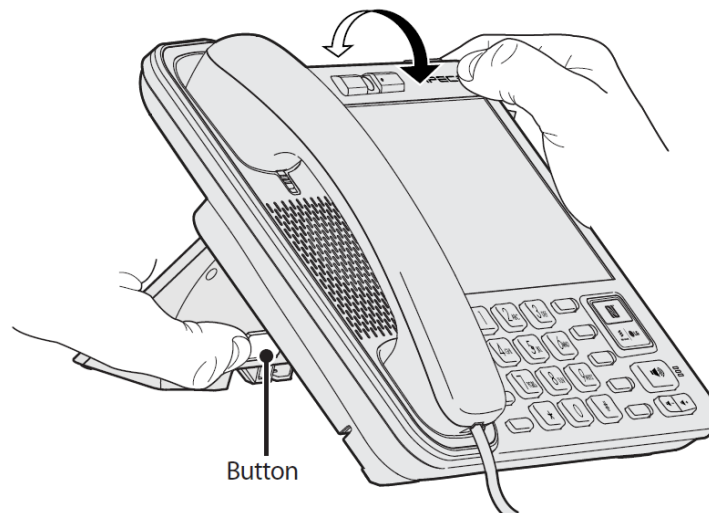
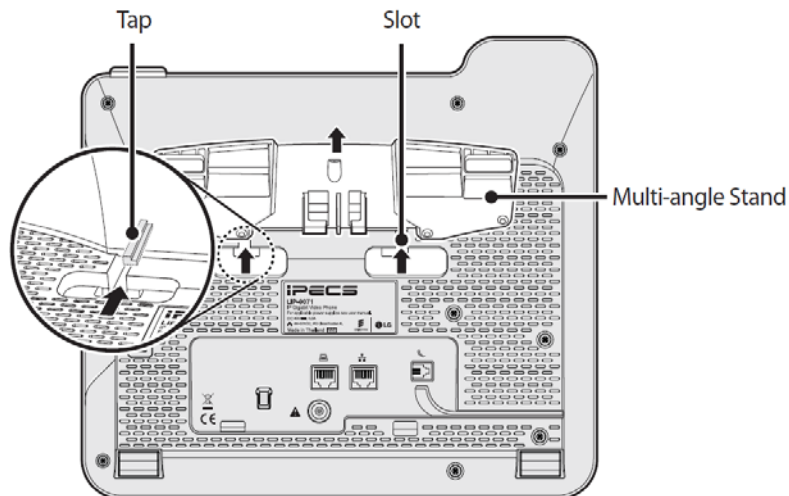
An HDMI cable can be connected in the HDMI connector slot on the rear top side of LIP-9071 phone.

1. Plug one end of the HDMI cable into the HDMI port on LIP-9071.
2. Plug the other end of the HDMI cable into the HDMI port on the LCD display or TV. User needs to adjust the resolution on the LCD display or TV for proper display if it is needed.
3. On LIP-9071, it does not need to go Settings because it set as automatically when connected. Just make sure the HDMI cable is correctly connected between devices.
4. The pictures displayed on the remote HDMI device will always be same as LIP-9071's LCD display.

2.5 Mounting the Phone and Stand

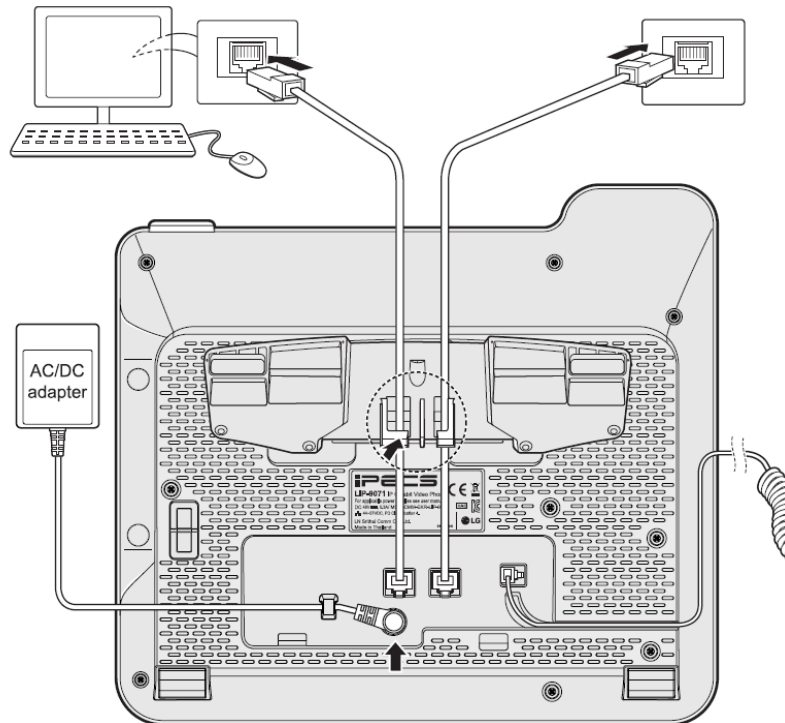
The phone attaches to the pedestal in either a 40° or 60° angle and should be adjusted at installation for the preferred viewing angle. To mount the phone on the pedestal,

1. Remove the wiring cover.
2. Select which side of the pedestal to use, 40° or 60°, and align the grooves in the base of the phone with the appropriate hooks on the pedestal.
3. Pull down at the top of the phone to engage the hooks of the pedestal with the slots in the phone base.



2.6 Network Connections

LIP-9071 phone has two RJ-45 Ethernet LAN jacks on the bottom of the phone. One of the jacks is the interface to a local IEEE 10/100/1000 Base-T Network port. The other jack is a 10/100/1000 Base-T port for connection to a PC.

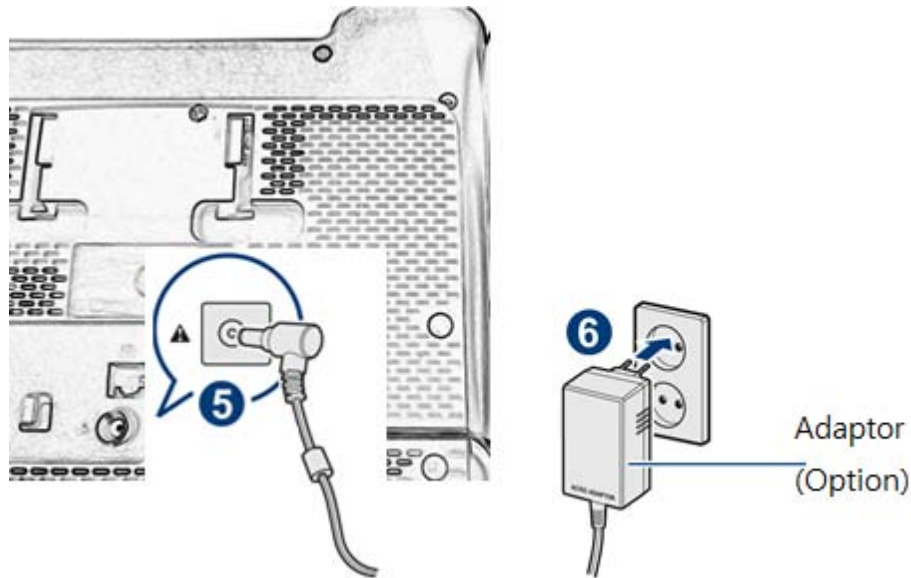


The network interface port jack is wired as a standard MDI connection and the PC port is wired as an MDIX connection. This wiring structure allows use of straight-through cables.

LIP-9071 phone network and PC ports support Auto negotiation for MDI/MDIX, speed and duplex (full or half). The MDI and MDIX wiring for LIP-9071 phone network and PC connections are in accordance with TIA/EIA standard 568.

2.7 Optional AC/DC Adapter Connections

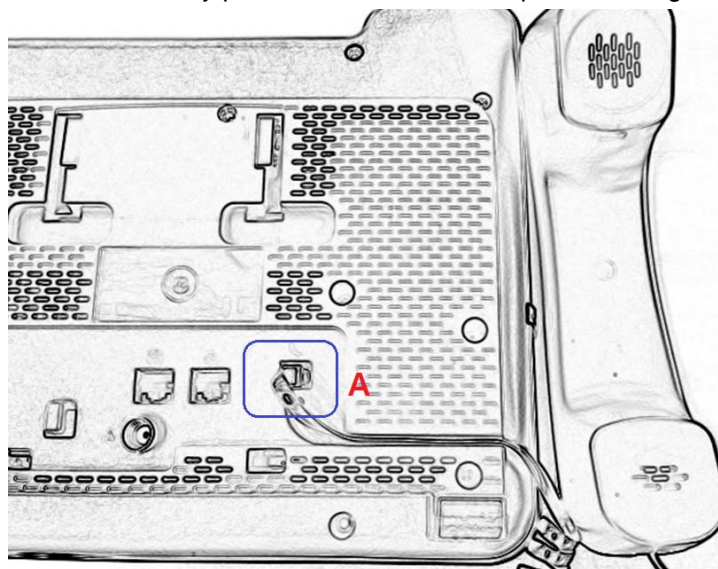
The optional AC/DC adapter is used when the network connection is not PoE compatible. In this case, the AC/DC adapter converts the normal AC power input to the 48 VDC at 0.3 amps required by LIP-9071 phone. The adapter is plugged into a standard AC wall outlet and the DC connector is inserted in the DC jack located on the bottom of the phone.



2.8 Connect the Handset

The handset connectors are located slightly to the right center on the bottom of the phone. The handset coil cord RJ-9 is plugged into the upper RJ-9 jack of the phone (A) and handset.

After connecting the handset coil cord , firmly place the cords in the respective wiring channel to protect the wiring.



2.9 Wall Mount

LIP-9071 phone can be wall mounted as needed. The following instructions describe how to perform a wall mount installation.

1. Align the wall-mount bracket (not included) over the back of the phone, then press the bracket forward applying steady pressure until it clicks into place.
2. Mark and drill two 7mm holes for plastic wall anchors (not included).
3. Insert the two anchors into the holes and insert and tighten the two screws (not included) leaving about 2.5 mm (1/8-inch) exposed.
4. Slide LIP-9071 phone over the screws and assure the phone is secure.
5. Reverse the handset hook and re-install in the phone so that the hook catches the groove in the handset receiver.
6. Hang the handset up on the handset hook.

Note

- It may be necessary to remove the phone and tighten or loosen the screws for a secure mounting.

2.10 Connecting expansion module

The button kit for LIP-9071 phone provides the following additional line/programmable feature keys. You can place the phone and button kit on your desktop or you can wall-mount them.

Up to three different types of button kits are supported on a single phone.

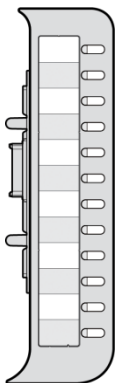
The available button kit is as follows:

- LIP-9012DSS: 12 flexible button with 3 colors LED
- LIP-9024DSS: 24 flexible button with 3 colors LED
- LIP-9048DSS: 48 flexible button with 3 colors LED

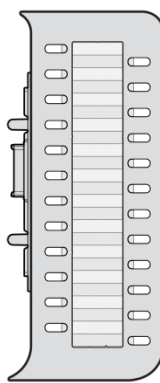
Note) for more information about LIP-9000 Series DSS, refer to Quick Installation Guide.

2.10.1 LIP-9012DSS & LIP-9024DSS

For LIP-9012DSS & 24DSS, connect power to the phone. The phone and button kit will power up. The button kit uses the electrical connection of the phone for power.



LIP-9012DSS



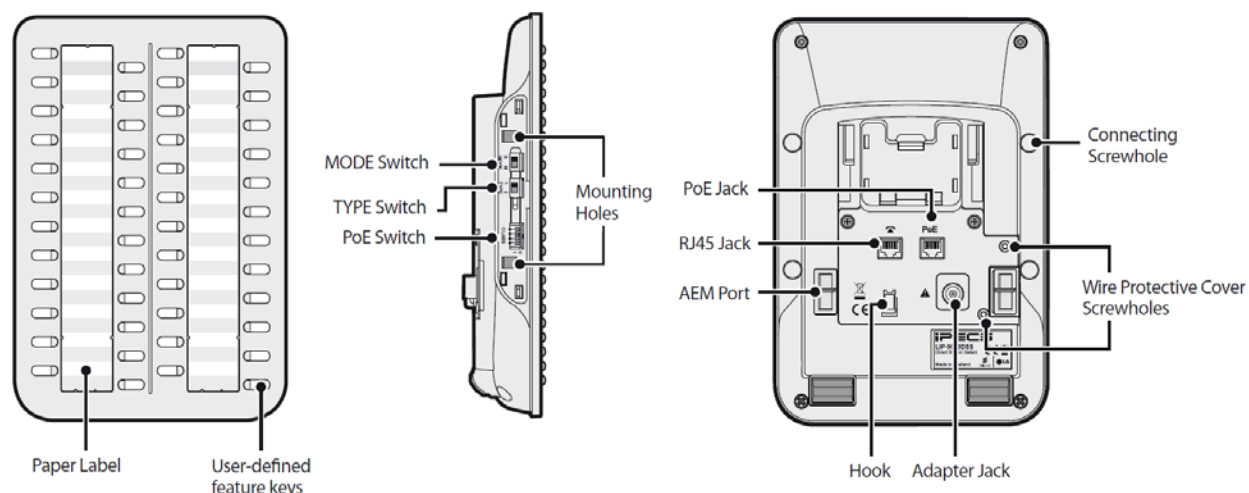
LIP-9024DSS

2.10.2 Cascade the external consoles (LIP-9048DSS)

LIP-9048 external consoles are powered through the external 48V adaptor or from PoE. And the flat cable used to connect the console to LIP-9071 phone. Be sure to verify the serial DSS capacities with iPECS System to ensure usability. It's up to 2 consoles (DSS) can be chain-link connected to the phone. Also a mater LIP-9048DSS can provide power to the phone side and to the secondary DSS.

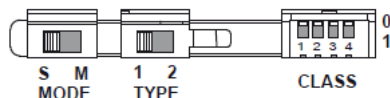
Note) A Linked Pair slave station cannot use a serial DSS.

The name of LIP-9048DSS



Setting

The setting switches are hidden on the back of right side of DSS module. Before you begin, remove the protective cover from the DSS module.



Power Mode

The MODE switch is used to choose the power mode between Slave and Master.

Symbol	Mode	Power	Description
S	Slave	5V	LIP-9048DSS receives power from another DSS.
M	Master	48V	LIP-9048DSS provides power itself.

Protocol Type

The TYPE switch is used to choose a call protocol type between iPKTS and SIP.

Symbol	Type	Description
1	iPKTS	iPKTS protocol type of communication supported.
2	SIP	SIP protocol type of communication supported.

Note

- Protocol type must be set to SIP.

PoE Class

The Class switch is used to select the PoE class. To connect LIP-9071 phone, you set the class on 4. The default position of Switch is '0'; 0 means the power is off and it does not support PoE power, 1 means the power is on and it supports PoE power.

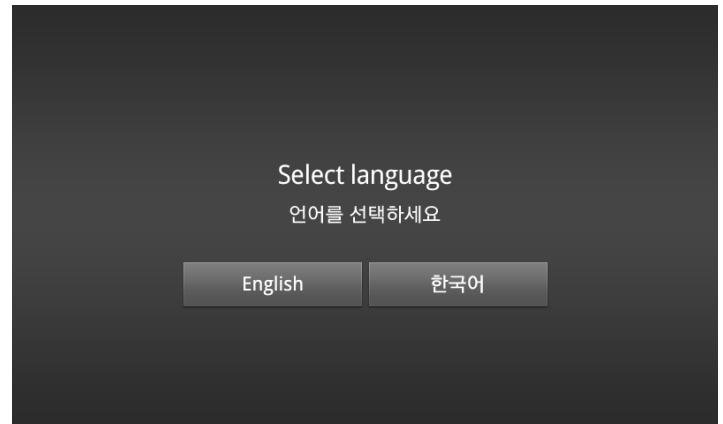
AC/DC power adapter is not available when the DSS module is connected to LIP-9071. So you can use only PoE.

3 Power up and Setup Wizard

When connected to power, the phone will perform Setup Wizard for language selection. This step 'Setup Wizard' only should be performed in the factory default of the phone.

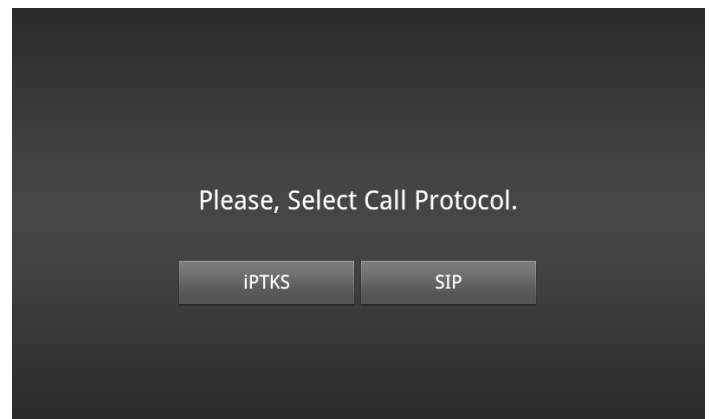
3.1 Language Selection

When connected to power, the phone will perform language selection. User can choose Language to be used for the Phone. Base on this selection, the software keyboard and IME for phone will be changed.



3.2 Protocol Selection

After select language it could be guided to select call protocol. To use LIP-9071 as iPECS iPKTS phone, choose iPKTS protocol from below selection screen. Then will restart automatically.



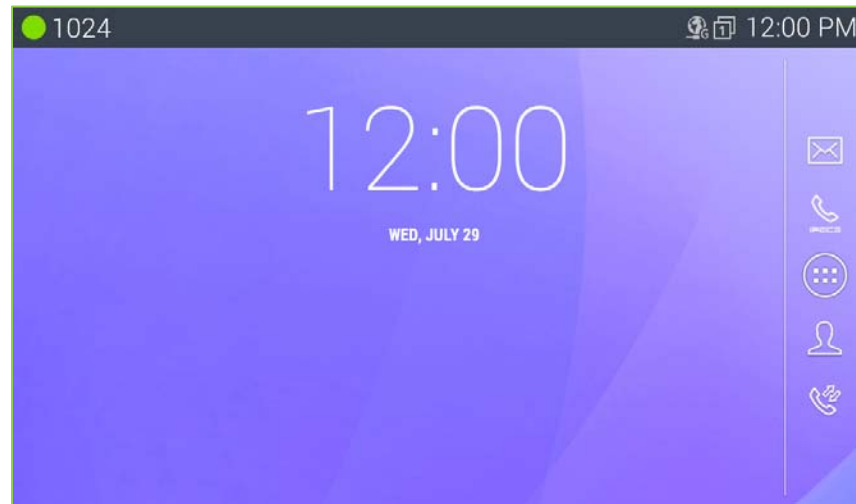
3.3 Registration

When connected to power and the network, the phone will perform its power-up routine and then attempt to locate and register with iPECS system. During the process the display will indicate status including 'Searching for MFIM', which is iPECS call server. In a default configuration, iPECS will permit registration of the phone, and will assign a station number and other characteristics to the phone. Once complete the phone is fully operational and displays the Home screen with the Station Number and status (On Line) shown above the clock.

If iPECS network settings have been changed or the phone is installed in a remote location, the phone will not be able to complete registration. The phone screen will display a No Acknowledgement or other fault message. In this case, assistance of iPECS administrator may be required. iPECS may require configuration to allow registration of LIP-9071. In addition, the IP settings of the phone and the System Configuration data may require modification with the assistance of iPECS administrator.

4 Basics Operation for iPECS system

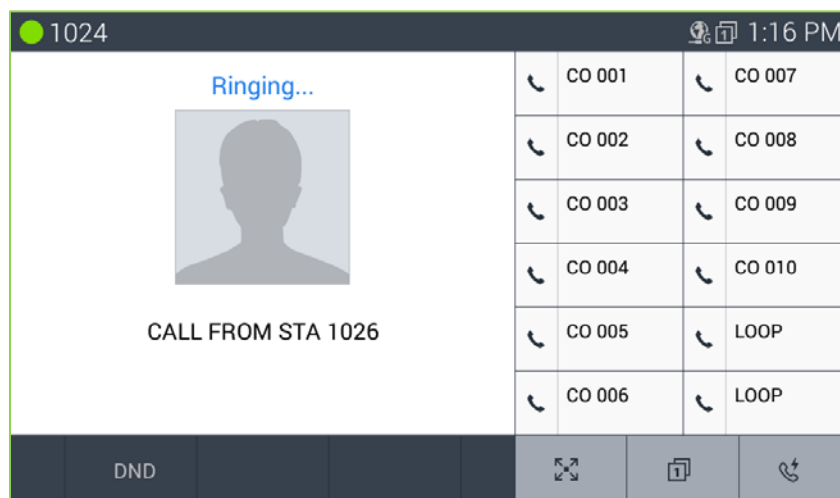
iPECS Phone application is fully available once LIP-9071 completes registration with iPECS host as outlined in Registration section. iPECS Call icon in the Apps Dock opens iPECS Phone app where calls can be managed. Details for using iPECS Phone window beyond the basics are covered in Mini-Tab Phone Display Basics section.



4.1 Incoming Calls

When a call is received, the Call screen displays the Caller Id for the call and the phone rings. If the Caller Id matches the number for a contact, the contact icon and name of the Contact are shown.

To answer the call, lift the handset or press the speakerphone button.



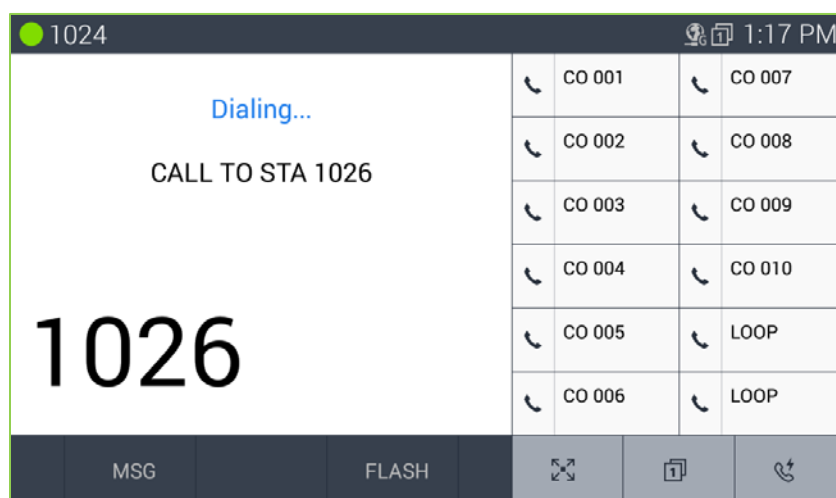
Note

- The DND button is available to activate One-time DND. For details refer to iPECS Phone user guide.

4.2 Outgoing Calls

LIP-9071 employs a “live dial pad” meaning that you need not lift the handset or press the Speakerphone button to start a call. To place a call, dial the desired number. This will activate the speakerphone, send the digits to iPECS host and show the dialing screen. When sufficient digits have been dialed, iPECS host routes the call.

Outgoing calls can also be placed from the Contacts and Logs as well as Speed dial refer to Contact and Call log section.



Note

- The user may go off-hook (press the Speakerphone button or lift the handset) before dialing. In this case, the phone receives dial tone from iPECS host.

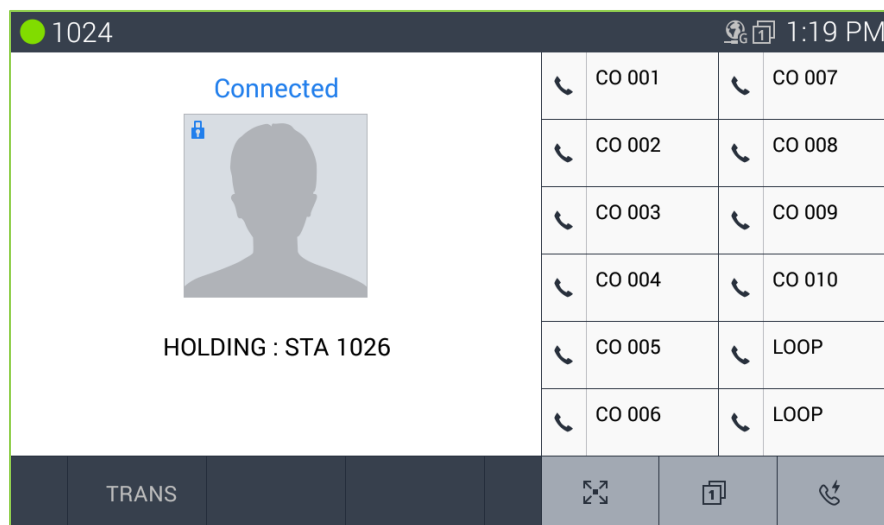
4.3 Holding Calls

You can place a call in a waiting state where the caller is connected to the Music on Hold source of iPECS system, freeing you for other activities. The call will remain on hold for the hold recall time then the user is recalled.

To place a call on Hold, touch the Hold/Save button, the button will light to indicate the held call.

4.4 Transferring a Call

Once connected to a call the Transfer Button, as is left bottom of dial and function button layout, is used to send the call to another destination. After touching the Transfer icon, dial the station to receive the call. The call transfer can be unannounced (simply hang-up) or announced (after the receiving party answers, announce the call and hang-up).



Note

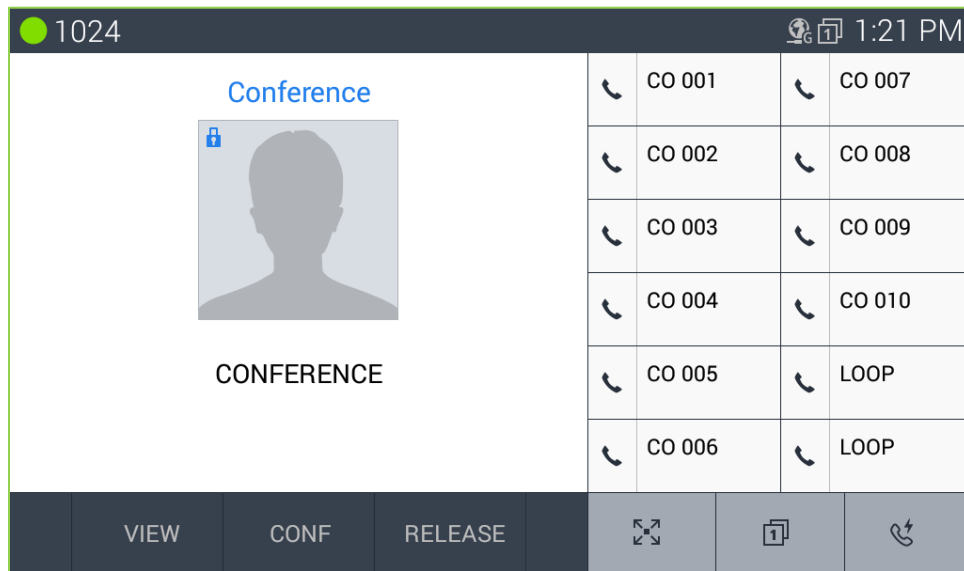
- A transfer can be accomplished by touching a Flex button assigned as a DSS for another station in iPECS host.

4.5 Conference

An active call can be joined with another call to establish a conference. If iPECS host is equipped with a Conference bridge, up to 32 parties can be included in a conference.

To conference calls,

1. Place/receive first call as usual.
2. Touch the CONF soft button.
3. Place next call and press the CONF soft button.
4. Repeat step 3 for additional parties
5. Press the CONF soft button again to connect all parties.

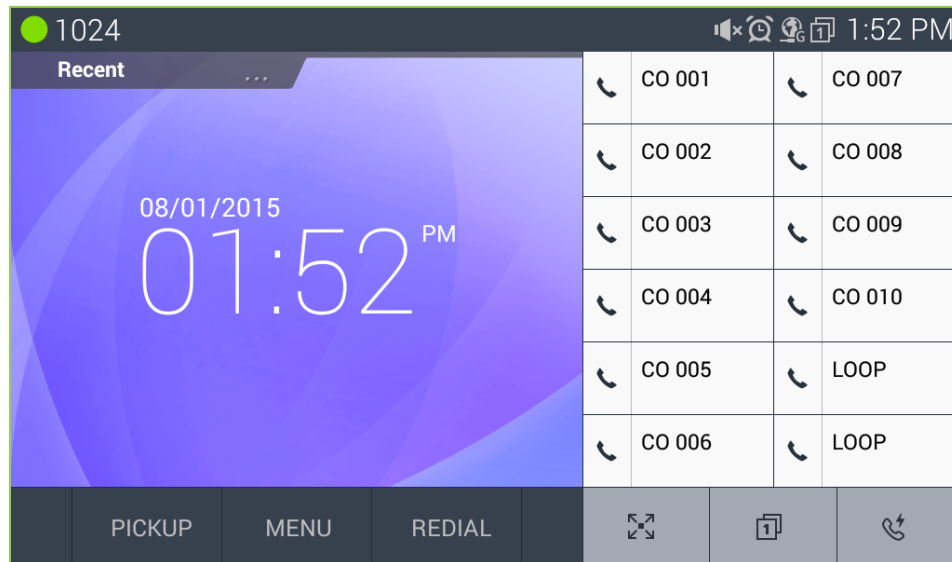


Note

- LIP-9071 supports a 3-party conference without the need of a Conference bridge. If conferences with more than three parties are required, iPECS host must be equipped with a conferencing bridge such as the MCIM.

5 iPECS Phone for iPECS system

iPECS Phone application is accessed with the icon in the Apps Dock, a Launcher screen or automatically when answering a call. iPECS Phone window is a virtual construction of the functional elements of an advance business telephone. Along the left are the first six (6) programmable 'Flex' buttons. These allow access to CO Lines/Trunks, calls to other stations or activation of an iPECS system feature. In the center of the window is the Call information screen that displays information about active, incoming and held calls.



On the left at the top is the Station identifier with the Station Name or number

Across the bottom are two menus. In the left menu are three soft keys that are context sensitive and show available call functions from iPECS host. If more than three selections are available a left/right arrow is exposed to access the additional items. The idle mode iPECS menu presents:

Pickup: answer calls ringing another station.

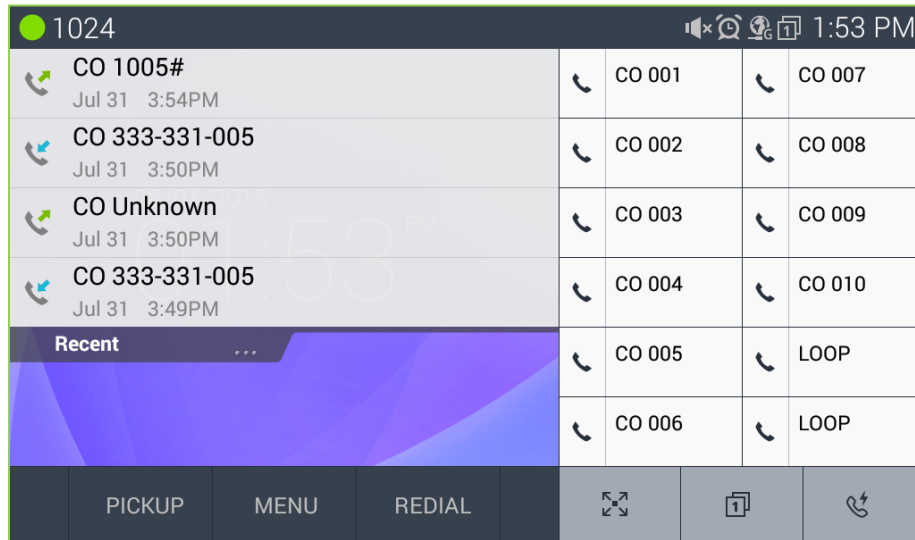
Menu: access the Station User or Phone local main menu,

Redial: redial one of the last 10 dialed numbers.

** When user touch 'Redial' soft button then user does not touch any button or screen for 10 seconds, the screen goes back to call idle screen by system command.

The second menu is the three fixed iPECS phone feature buttons.

- Extended flexible buttons
- Flexible buttons access to button pages of 13 to 48
- Speed button



The Recent call list can display in the Call screen by touching the 'Recent' tab.

Note

- Several of the buttons and icons provide multiple functions based on the state of the phone. For example the Hold/Save button places an active call on hold and saves entries made by the user when entering speed dials and other information.
- LIP-9071 does not support as same as legacy iPECS Muted Ring feature. It support with notification message on top bar as "new call wait" with one time beep tone. This is almost same as what normal mobile phone call waiting service.

5.1 Speed

5.1.1 Using Auto dialing

IPECS system includes several automatic dialing features accessed with the Speed button.



Redial number

The user selects from a list of the last ten (10) numbers dialed for redialing.

Saved Number Redial

The user saves a number during a call and then recalls the saved number for redialing.

Directory Dial

Dial-by-name directories to call other users or dial a Station or System speed dial. Characters are entered with two dial pad digits.

System and Station Speed Dial

Storage is allocated in iPECS for System Speed dial numbers, numbers available to all system users, and Station Speed dial numbers, numbers available and configured by the station user.

To use an auto dial feature

1. Press the Speed button.
2. Dial the code for the auto dial feature desired.
 - a. To dial a number in a Speed dial, dial the Speed dial bin number.
 - b. Press Call.

A number must be stored in the Speed Dial bin. System Speed numbers are stored by the Attendant. The user may assign Station Speed Dial numbers.

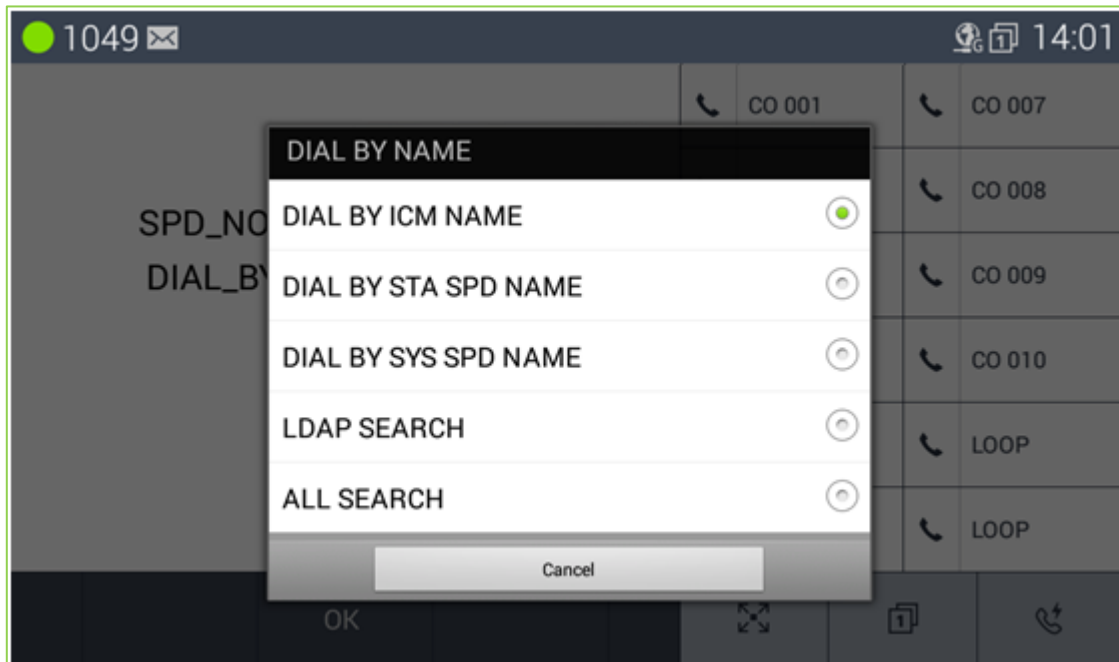
- a. For Redial, press '*'.
 - b. Select one of the ten numbers from the list.
 - c. Press Call.
- a. For Saved Number Redial, press '#'.
 - b. Press Call.

A number must be saved during a previous call.

- a. For Directory Dial, press the Speed button a second time.
- b. Select the desired directory, Internal, System Speed or Station Speed.
- c. Use the dial pad to enter characters/scroll.

d. When the desired Name highlights, select Call.

** When user goes into DIAL BY NAME by touch SPEED button in the Speed menu, then user does not touch any button or screen then screen goes back to call idle screen by system command.



5.1.2 Setting up a Station Speed Dial

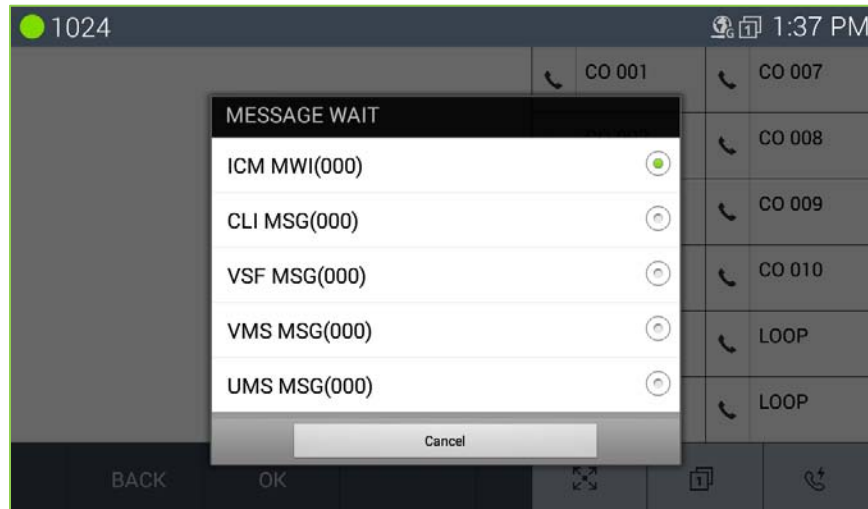
Station Speed Dial numbers are somewhat like Contacts except with Speed Dial only a name and a phone number are assigned. The number of bins available will be from 20 to 100 depending on iPECS system. A Speed Dial can be up to 48 digits in length and may include special characters. For more details, see the Feature and Operation manual for iPECS system.

To configure a Station Speed Dial number

1. Touch the PGM button to access the Station User menu.
2. Touch the Speed button.
3. Dial the CO Line/Trunk access code.
4. Dial the Speed Dial bin number (00 to 19 or 00 to 99).
5. Dial the telephone number for the Speed dial.
6. Touch the Hold/Save button.
7. Enter an optional Name using the dial pad with two digits for each character.
8. Touch the Hold/Save button to complete the Speed Dial entry.

5.2 Call Back Message Wait

When calling another station in iPECS system and the call is not answered, you can leave a request for a call back and activate an Intercom Message Wait to the called user.



To activate a Call Back message wait

1. While receiving no answer on an internal call, press Message button. A Call Back Message wait is activated and the called station user receives a message waiting indication for the Intercom (ICM) call.

To respond to a Call Back message

1. Press the flashing Message button.
2. Select the ICM MWI radial button.
3. Select the Station to call back from the Station message list.

5.3 Flex Buttons

Flex buttons, which are programmable, access resources of iPECS such as CO Lines and paging as well as call other stations and activate features of iPECS. Buttons that access external networks such as a CO Line or Loop button are assigned by administrative users only. The user can configure buttons assigned to other functions or unassigned buttons. For details on configuring a Flex button see Appendix A.



In addition to configuring Flex buttons, the user may assign a label to the button as discussed in Flexible Buttons section.

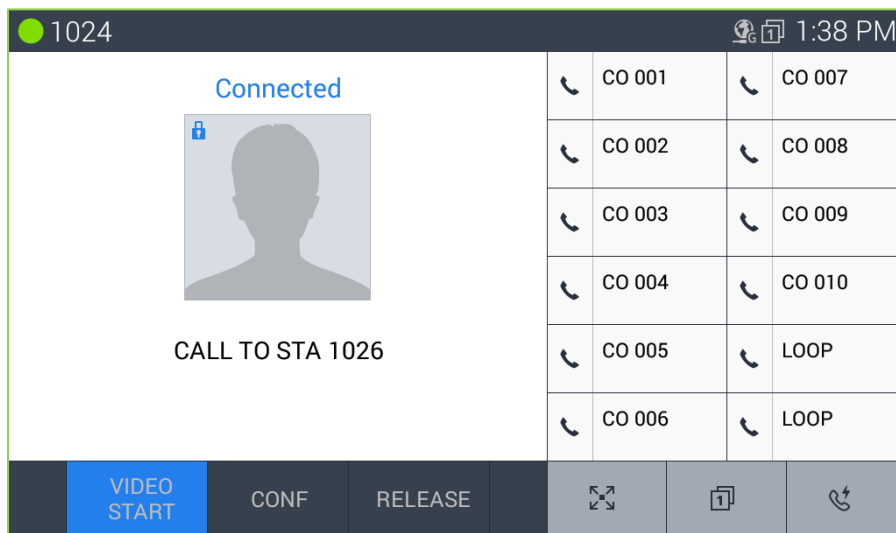
iPECS Phone screen displays the first six (6) Flex buttons on the left of the screen. The full (48) Flex buttons including first (6) Flex buttons can be displayed in iPECS Phone screen using the Flex button icon. The buttons are shown with dial pad icon button under full 48 buttons layout. Also can go back to dial pad idle screen using dial pad icon or it can be maintained as idle screen

Note

- Buttons that are not assigned appear with no label in the button display.

5.4 Video Calling

Once a voice call is established you can initiate or accept a video call. To start or respond to a Video Call invitation, press the Video Start button, which will open the Video Call window. On the right side of the window is a thumbnail of the video sent from LIP-9071 and controls for the Video call including:

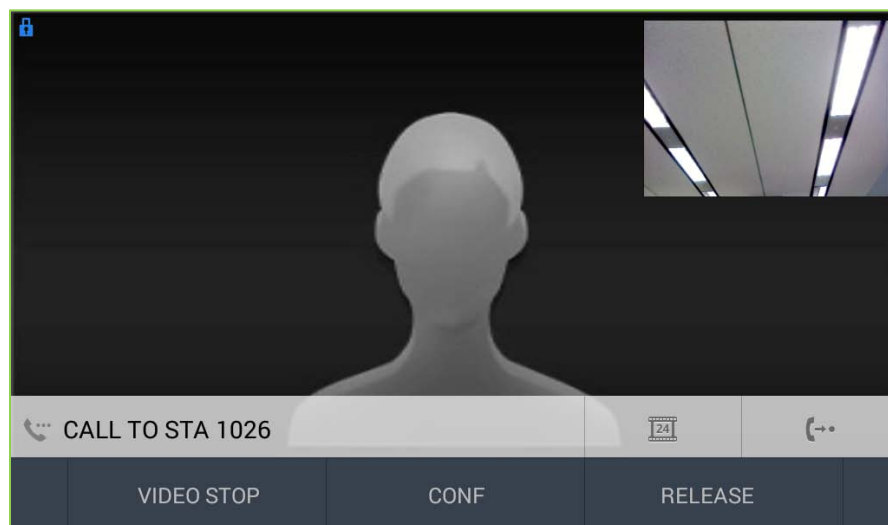


Frame Rate: set the frame rate from 5 to 24 frames per second. Higher frame rates improve quality but require higher bandwidth.



Transfer: send the call to another destination.

The background is the main video screen that displays video sent from the connected party. The video is sent after the party accepts the Video call. Note it may take a few moments to display the received video when the call begins.



At the bottom of the screen are the soft menu buttons. The buttons include,

- **Video Stop/Start:** pause and restart video transmission.
- **Conf:** initiate a voice conference.

- *Mute/Unmute*: turn the microphone on or off, to control the speakerphone, handset or wired headset microphone.

Note

- The video call supports multiple video codecs including {H.264, H.263}. The codec for a given call is negotiated between the devices.
- LIP-9071 video call function requires below bandwidth based on the codec employed.
Ericsson-LG Enterprise uses following values as technical descriptions
 - H.263 : max=2048kbps @CIF 24fps, typical = 768kbps @CIF 24fps
 - H.264 : max=2048kbps @CIF 24fps, typical = 768kbps @CIF 24fps
- Since the recovery for data losses and errors is not robust when using H.263 and H.263 is for low bitrate video while H.264 can encode both low and high quality videos, also, H.264 is far more efficient on bandwidth with the same video quality, the usage of H.264 codec is recommended.

5.5 iPECS Phone Call Settings

The Call Settings for iPECS Phone impacts call handling, button appearance, sounds and other characteristics of the phone. To view the Call Settings menu,



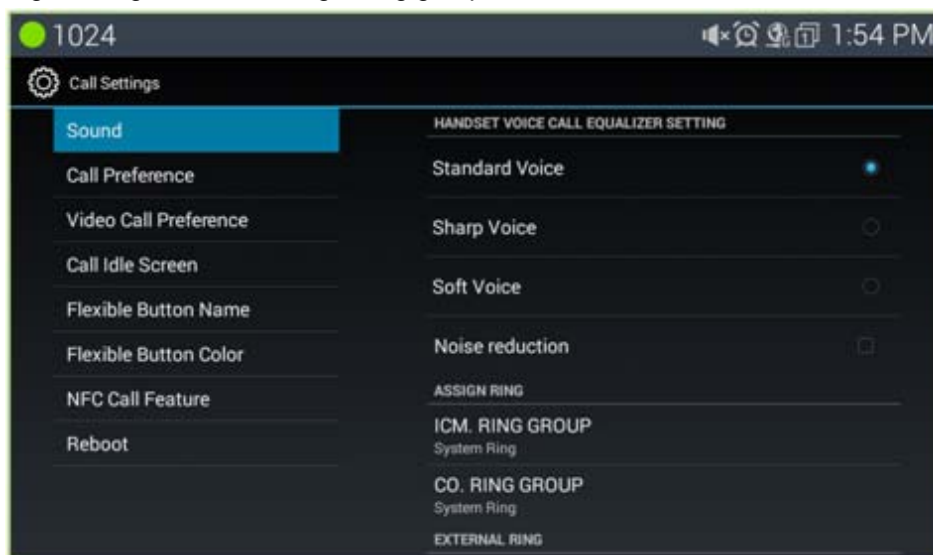
1. While on iPECS phone screen, press the Menu button.
2. Select the Call Settings icon.

The Call Settings menu includes,

- *Sound*: select the hand piece voice equalizer and assign ringtone for incoming external calls.
- *Call Preferences*: set signaling and answer for internal calls, configure wired headset operation, etc.
- *Video Call Preference*: manage characteristics of the video call settings.
- *Call Idle Screen*: manage characteristics of the phone including the clock type, background image, etc.
- *Flexible Button (Name)*: assign a name or label for each Flex button.
- *Flexible Button color*: assign a name or label for each Flex button.
- *NFC Call Features*: assigns the system feature through NFC function
- *Reboot*: restart LIP-9071 phone.

5.5.1 Sound

IPECS system includes 15 Tone-type ringtones and many music ringtones in memory that can be used for external incoming call ringtones. To assign Ring group for ICM or CO.



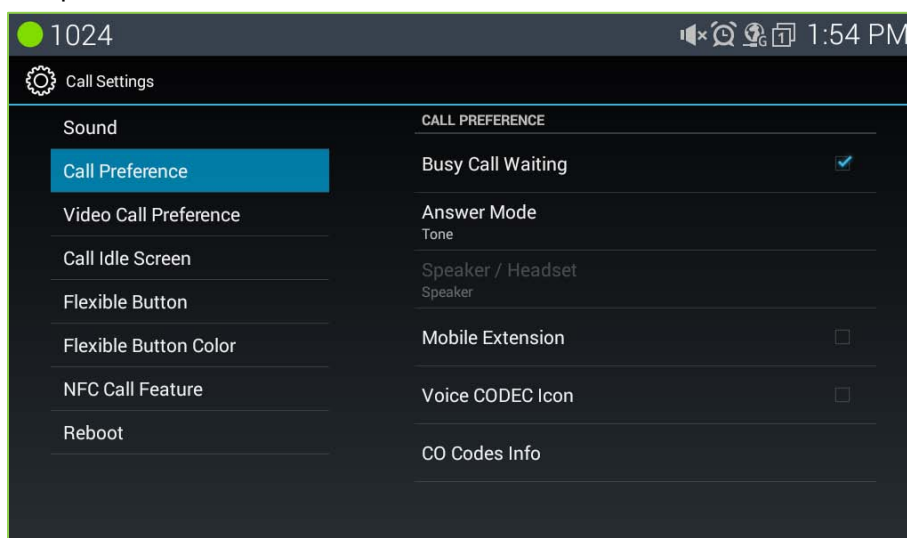
1. In the Call Setting screen, select Sound.
2. Select the ICM (internal) or External Ring Group down arrow.
3. Select the desired ringtone.
4. Click 'Apply' to save the selection.

Note

- Voice Call Equalizer Setting works only on Handset (hand piece) of LIP-9071.

5.5.2 Call Preference

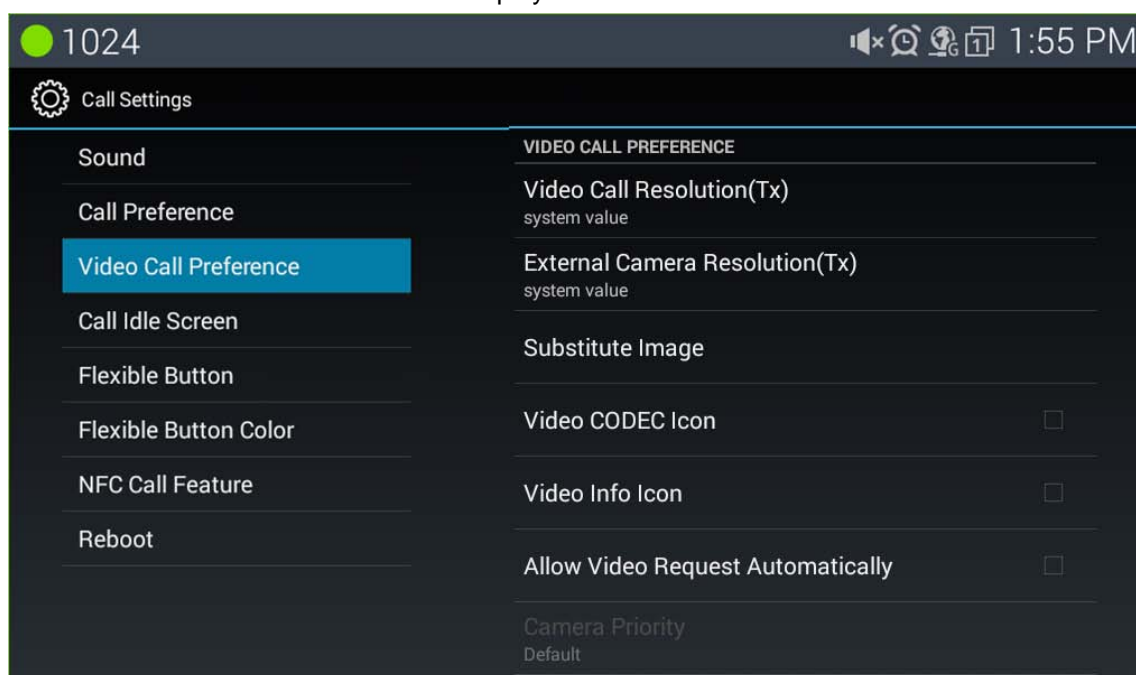
Call Preferences determine how calls to a busy station are handled, how calls are answered and if calls are sent to the user's mobile phone.



- *Busy Call Waiting*: while the user is busy on a call, new DID and DISA calls can be delivered to the phone or, when disabled, the call routes based on the busy call routing configured in iPECS system.
- *Answer Mode*: set the Intercom Call Answer Mode as HF (Hands-free Answerback to Voice announced calls), Privacy (lift the handset or press the Speakerphone button to answer a Voice announced call) or Tone ring.
- *Headset/Speaker*: configure the audio path when the speaker button is touched, route audio to the headset or speakerphone.
- *Mobile Extension*: send calls to a mobile phone associated with the station.
- *Voice CODEC Icon*: while the user is on a call, it shows CODEC information as an icon
- *CO Codes Info*: It shows current CO codes which come from iPECS system.

5.5.3 Video Call Preference

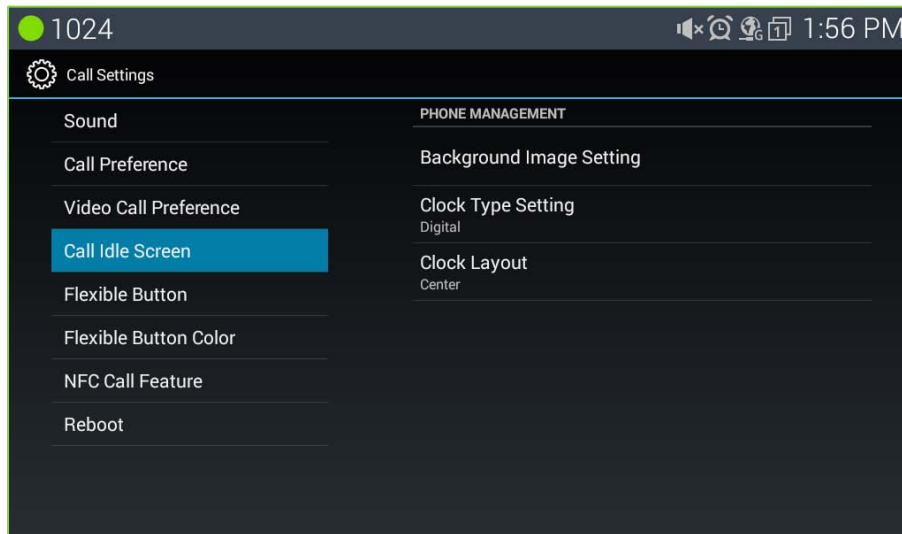
The user can manage characteristics of the video settings including the resolution, substitute image as well as the Video CODEC icon and Video Info icon for the display.



- *Video Call Resolution (Tx)*: it sets the resolution of transmitting video as manually.
- *External Video Camera Resolution (Tx)*: it sets the external USB camera resolution when transmitting video as manually.
- *Substitute Image*: It sets an image which will be sent while user stops video for a moment.
- *Background Image Setting*: User can change background image what user want to see.
- *Video CODEC Icon*: while the user is on a video call, it shows Video CODEC information as an icon
- *Video info Icon*: while the user is on a video call, it shows Video call information(resolution) as an icon
- *Allow Video Request Automatically*: with this option enable user can start own video automatically when answer an incoming video call.
- *Camera Priority*: User can select camera for video call one of built in camera or external USB camera if available.

5.5.4 Call Idle Screen

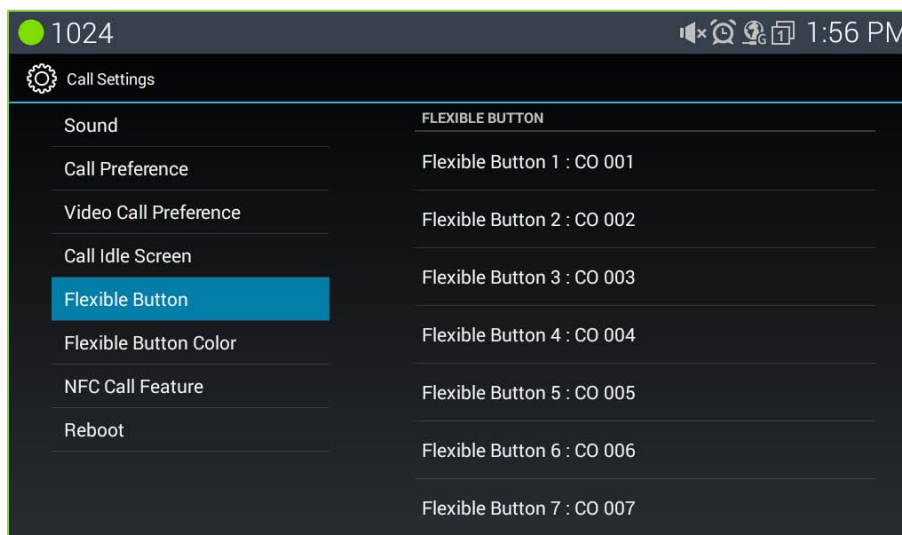
The user can manage characteristics of the phone including the name, password and number as well as the contact icon and language for the display.



- *Background Image Setting:* User can change background image what user want to see.
- *Clock Type Setting:* User can choose idle screen clock type as digital or analog type.
- *Clock Layout:* User can adjust the position of clock along the left area of idle screen

5.5.5 Flexible Button (Name)

A Name field, up to 12 characters can be configured for each Flex button by the user. If a label is not configured the default name based on the type button is used.

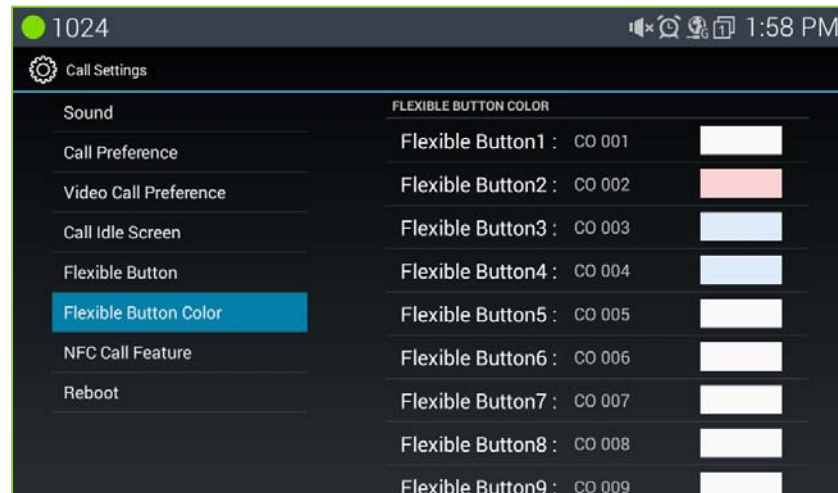


To configure a button label,

1. In the Call Setting screen, select Flexible Button.
2. Select the desired Flex button, scrolling to display the Flex button.
3. Enter the label, up to 16 characters.
4. Press Save to store the label.

5.5.6 Flex Button Color

Each Flexible button can be assigned with a color by the user. If a color is not configured, the default white color based on the shape button is used.



5.5.7 NFC Call Feature

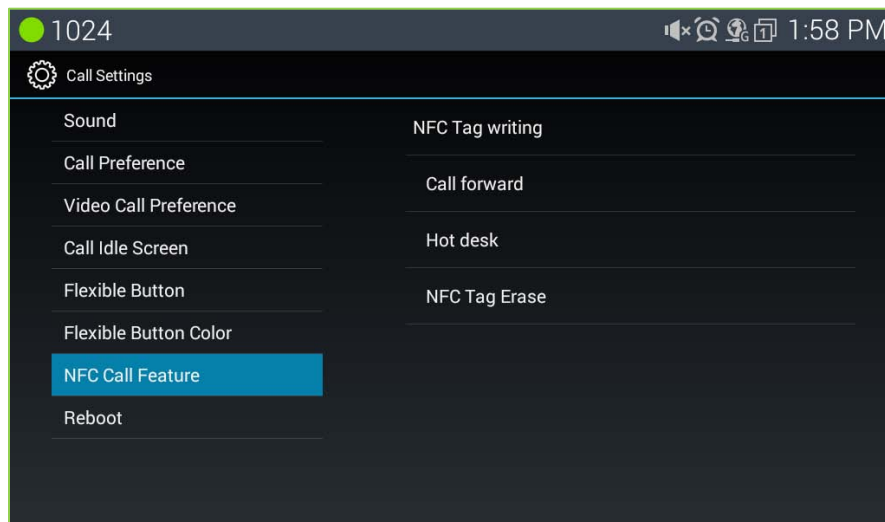
All NFC call related features are managed at this menu. LIP-9071 can simply execute call settings by tagging an NFC Forum-compliant tag. For example User can execute call setting by on touch tagging without complicated menu control when using a call setting.

For these features, LIP-9071 provides NFC tag write and read features.

In case of tag write, User can write call setting information to an NFC tag in the "NFC Call Features" of "Call Settings" menu. User can execute call setting by using the NFC tag recorded at the "NFC Call Feature" menu.

Warning! User must check if iPECS system supports this feature before operation.

The followings are two call setting features and one tag erase function supported an NFC tag in LIP-9071.



- ✓ *Call Forward*
- ✓ *Hot Desk*
- ✓ *NFC Tag Erase*

5.5.7.1 NFC Call Forward

LIP-9071 can configure call forward of call settings by using an NFC Forum-compliant tag. Call forward is the same feature as basic call forward.

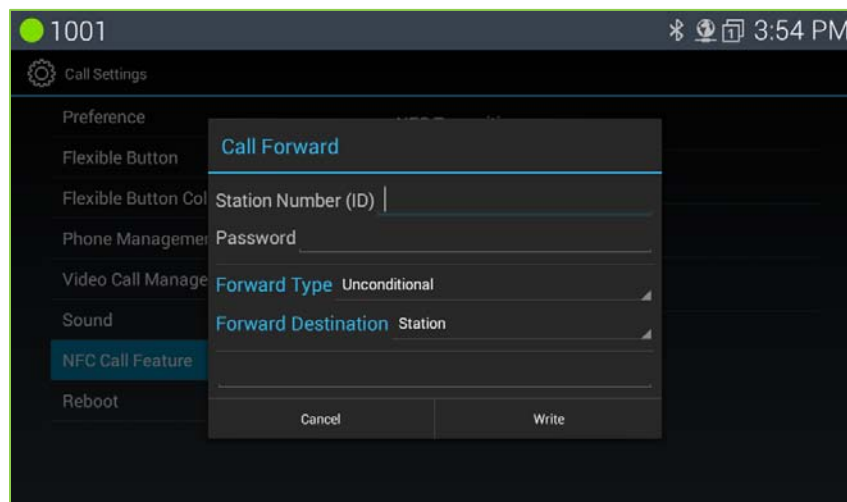
User first needs to write call forward information to an NFC tag. NFC tag write is provided at the “NFC Call Feature” of “Call Settings” menu.

Making NFC Call Forward tag

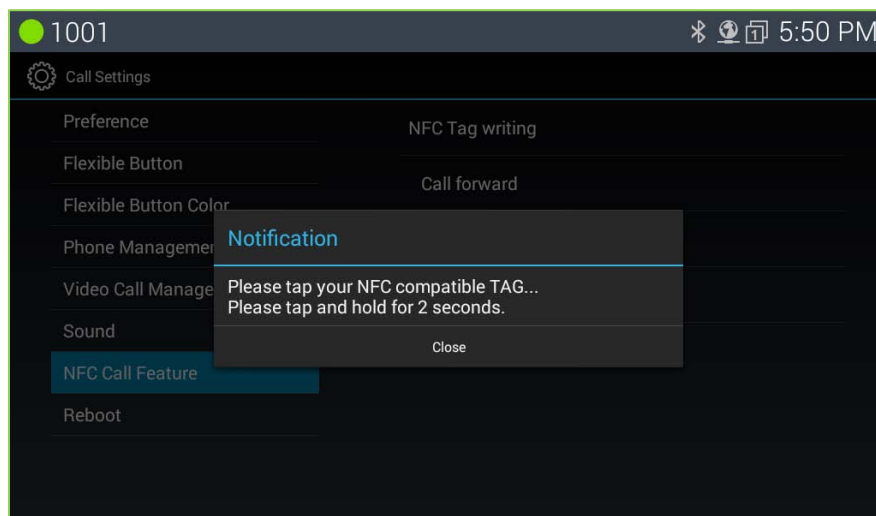
In order to make an NFC call forward tag, User must enter the following information for call forward feature.

1. Station Number (ID): station number.
2. Password: It must be configured by Web admin before setting Call Forward on LIP-9071.
3. Forward Type : There are four types (Unconditional, Busy, No Answer, Busy / No Answer)
4. Forward Destination: There are four destinations (Station, Group, Speed, Tel num).
5. Forward Number: Forward number.

After entering right information for each item, touch “Write” button, otherwise touch “Cancel” for cancel.

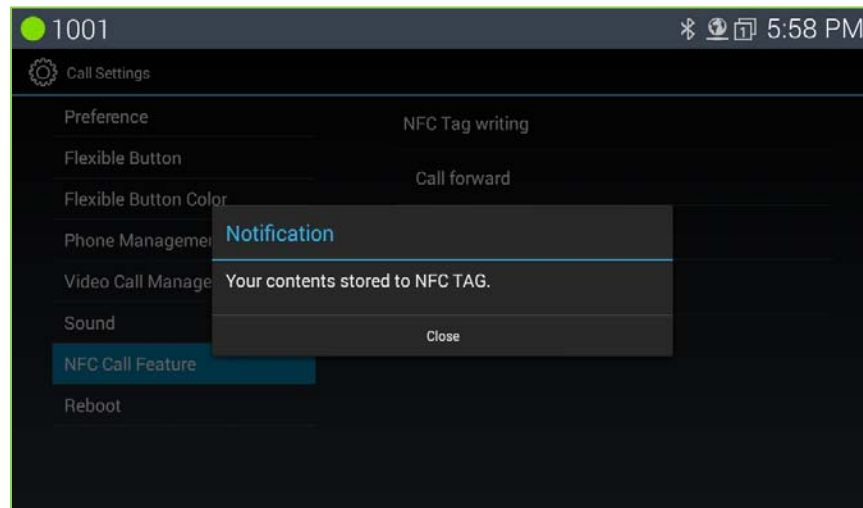


After touching “Write” button, the following screen is shown.



Then, tag the prepared NFC tag on the tag pad. User can cancel writing tag in this step by pressing “Close” button.

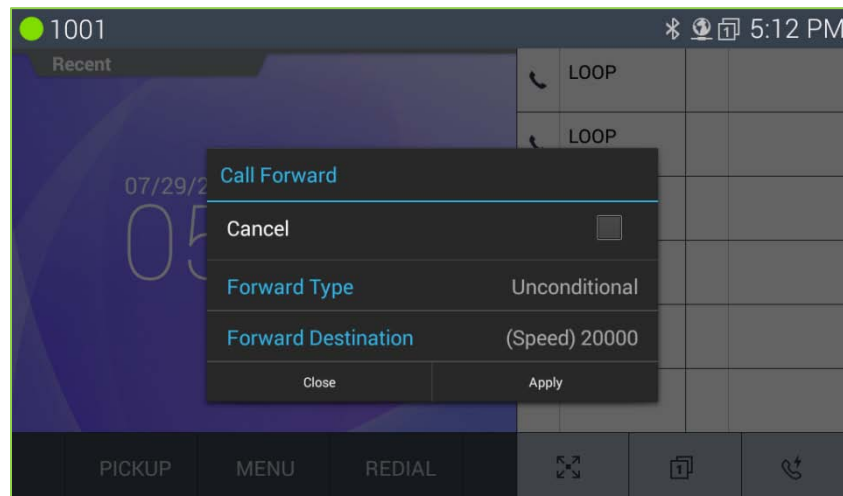
After writing is success, LIP-9071 shows the following screen.



Read NFC Call Forward tag (Using NFC Call Forward tag)

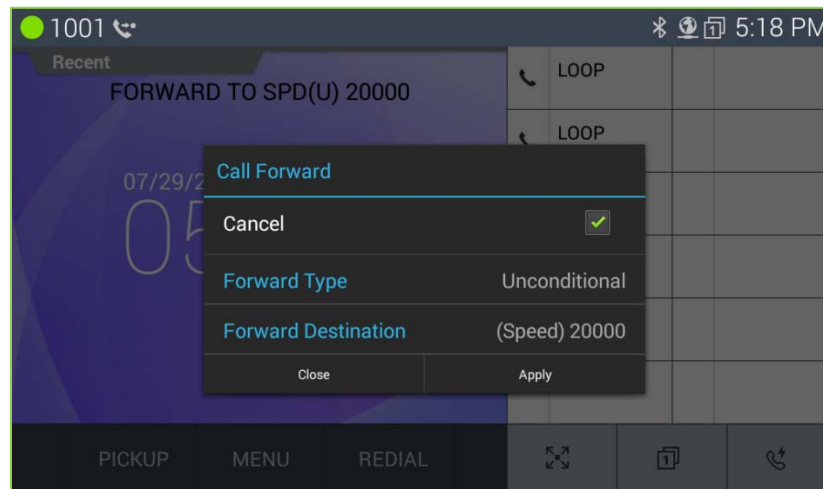
User can executes call forward feature by an NFC call forward tag previously recorded. And user can re-write the tag if user needs to change the information of the tag.

In order to use the NFC call forward tag, user just tags the NFC tag on the tag pad of LIP-9071
The following is the screen by tagging the NFC call forward tag.



First make sure that the information shown is correct. User touch "Apply" button for call forward setting. Otherwise, touch "Close".

User must tag one more time to cancel call forward setting by using the same tag and check the check box for cancel on the dialog window. Then Use can cancel the call forward by pressing "Apply" button.



5.5.7.2 NFC Hot Desk

LIP-9071 can configure hot desk of call settings by using an NFC Forum-compliant tag. Hot desk is the same feature as basic hot desk.

User first needs to write hot desk information to an NFC tag. NFC tag write is provided at the “NFC Call Feature” of “Call Settings” menu.

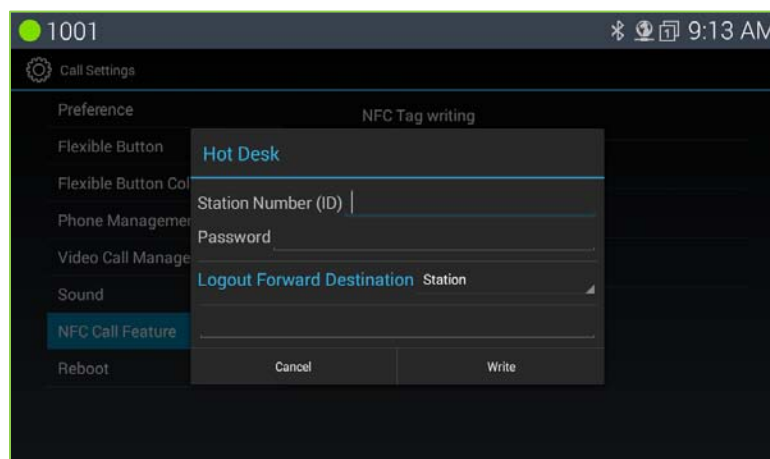
Write NFC Hot Desk tag

The followings are the information required for hot desk feature and screen

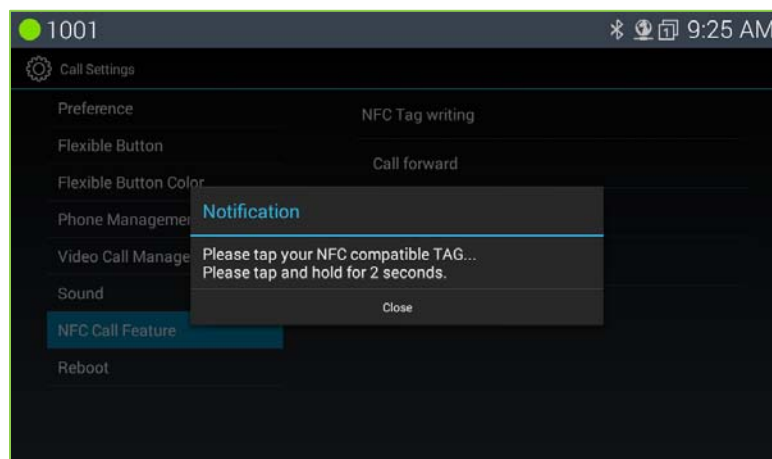
1. Station Number (ID): station number
2. Password: It must be previously configured by admin
3. Logout Forward Destination: 4 destinations (Station, Group, Speed, Tel num, No Forward Change)
4. Logout Forward Number: Forward number (optional for Tel num and No Forward Change)

After entering right information for each item, touch “Write” button, otherwise touch “Cancel” for cancel.

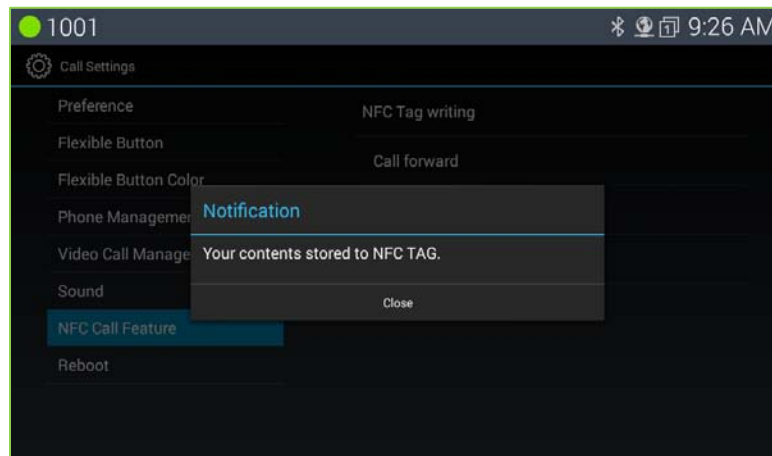
Except for the hot desk information input into the dialog window, and the rest of the process is the same as call forward writing.



After touching “Write” button, the following screen is shown.



Then, tag the prepared NFC tag on the tag pad. User can cancel writing tag in this step by pressing “Close” button. After writing is success, LIP-9071 shows the following screen.

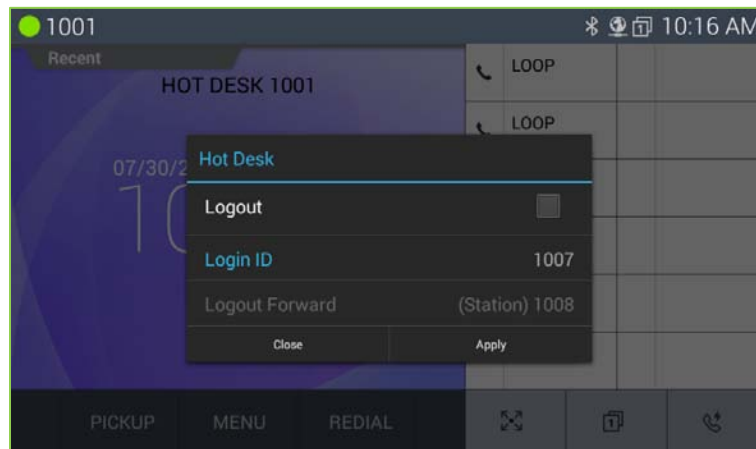


Read NFC Hot Desk tag (Using NFC Hot Desk tag)

User can execute hot desk feature by an NFC hot desk tag previously recorded. And user can re-write the tag if user needs to change the information of the tag.

Basically the way to use an NFC hot desk tag is the same as a call forward tag. If user tags the NFC tag on the tag pad of LIP-9071, LIP-9071 shows the recorded hot desk information on the screen.

The following is the screen by tagging the NFC hot desk tag.

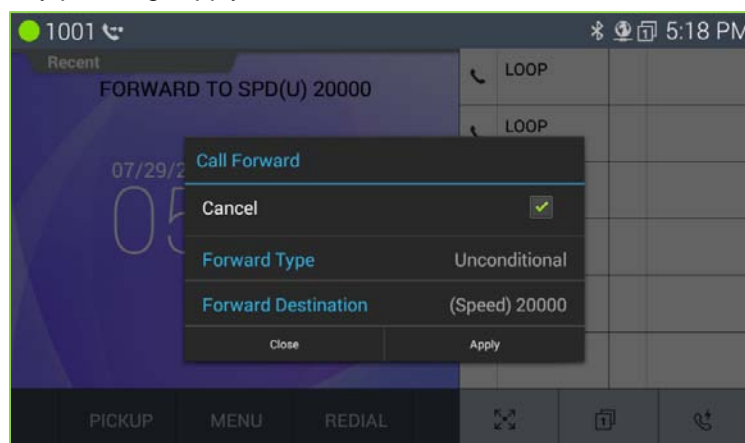


First make sure that the information shown is correct. The hot desk screen shows new station number and call forward information when user logs out from hot desk station.

User touch "Apply" button for hot desk setting, otherwise touch "Close".

User must tag one more time to cancel call forward setting by using the same tag and check the check box for cancel on the dialog window. If user checks the check box for hot desk logout, the forward number will be highlighted.

User can cancel the hot desk by pressing "Apply" button.

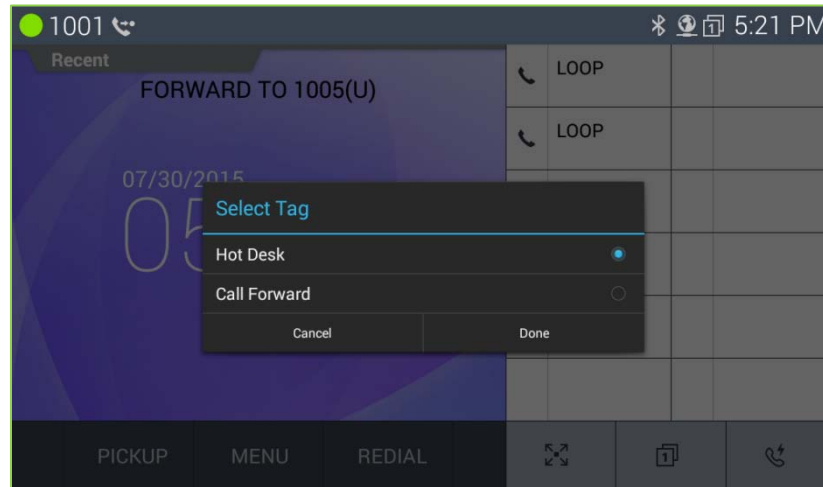


5.5.7.3 Select Dual Setting on a Tag

LIP-9071 supports NFC forum compliant tag. User can use an NFC tag with various memory types. LIP-9071 can save up to two NFC call setting features.

In case that an NFC tag has two call settings, LIP-9071 shows a dialog window for user to select the call setting.

After user selects one, the following process is the same as each call setting.

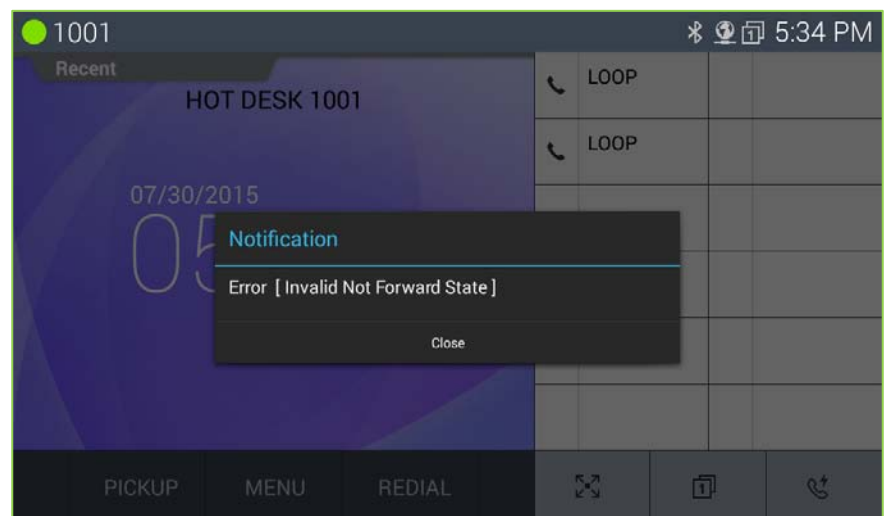


5.5.7.4 Invalid Response

When user executes a call setting by using an NFC tag, LIP-9071 shows an appropriate error message for some reason. In this case user can ask administrator.

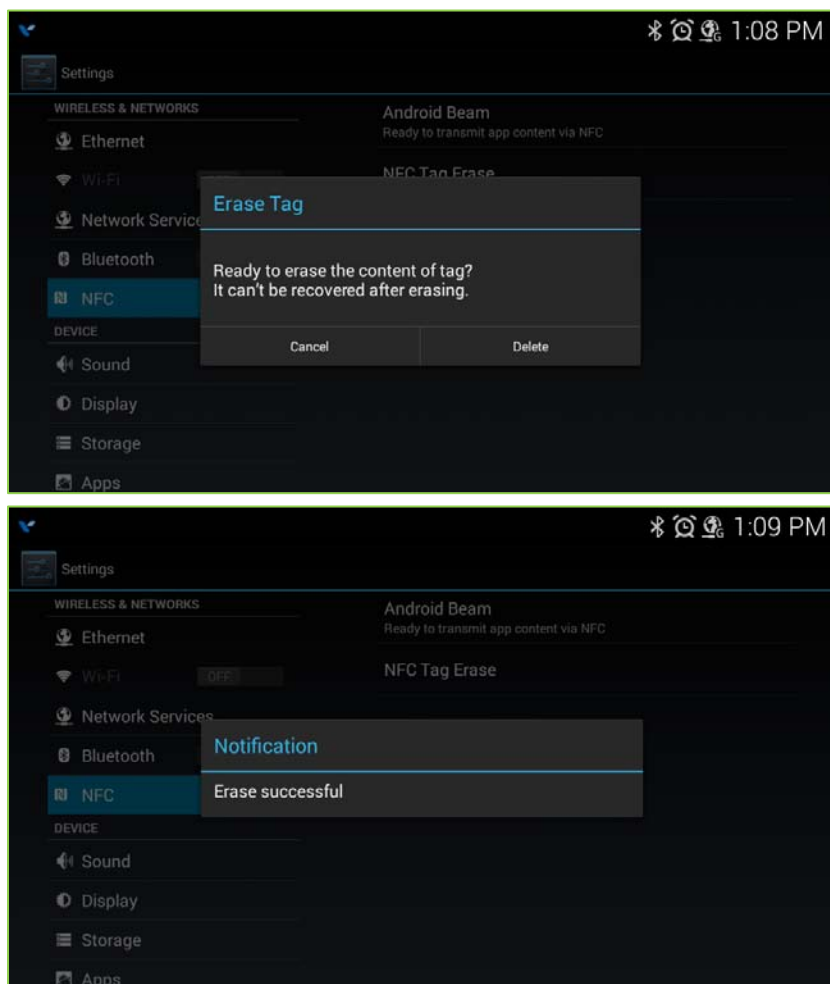
The followings are invalid error message and error screen:

1. Invalid Common
2. Invalid Input Type
3. Invalid Station (Log ID)
4. Invalid Password
5. Invalid Forward Type
6. Invalid Forward Number
7. Invalid Logout Type
8. Invalid Logout Number
9. Invalid Not Forward State
10. Invalid Not Idle State
11. Invalid Not Agent Number
12. Invalid Not Dummy Station
13. Invalid Not VSF Access
14. Invalid Not M-ext Enable



5.5.7.5 NFC Tag Erase

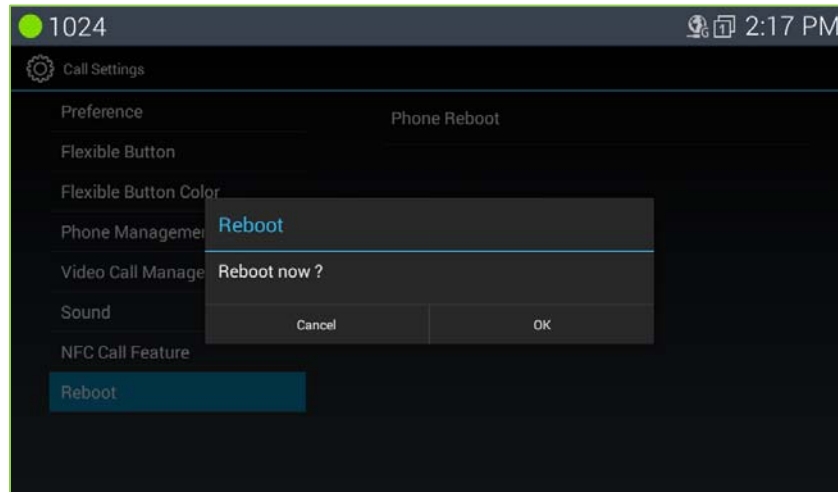
LIP-9071 provides erase function for NFC Tag which has some information already. If user taps the tag with Erase Tag option, all tag information will be deleted.



5.5.8 Reboot

After modifying the System Configuration, it is necessary to reboot LIP-9071.

To reboot, operate the following procedures:



1. With iPECS Phone screen display, select the Menu button.
2. Touch the Call Settings icon.
3. Select Reboot from the Call settings.
4. Select OK to reboot.

LIP-9071 phone will restart and register with iPECS system.

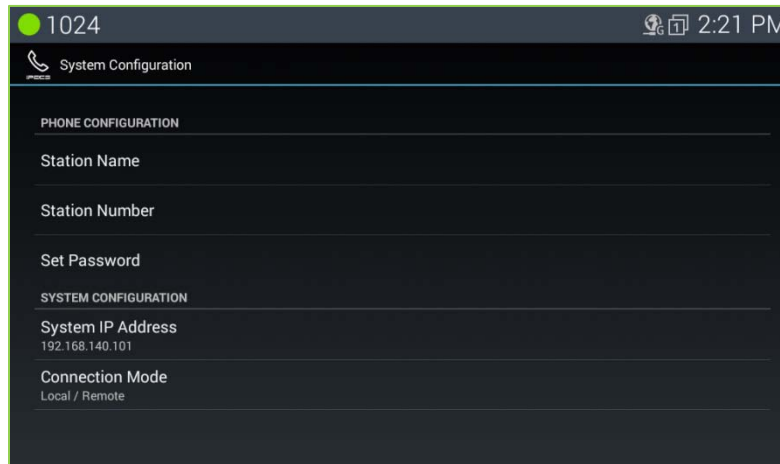
5.6 iPECS Phone System Configuration

The System Configuration for iPECS Phone impacts Station name, number, password and system IP address. To view the System Configuration menu,



5.6.1 Phone Configuration

The System Configuration menu allows input of the Phone and System configuration.

A screenshot of a mobile application interface. At the top, a status bar shows a green circle with '1024', signal strength, and '2:21 PM'. Below is a dark header with a phone icon and 'System Configuration'. The main area is divided into two sections: 'PHONE CONFIGURATION' and 'SYSTEM CONFIGURATION'. Under 'PHONE CONFIGURATION', there are three input fields labeled 'Station Name', 'Station Number', and 'Set Password'. Under 'SYSTEM CONFIGURATION', there are two input fields: 'System IP Address' (with the value '192.168.140.101') and 'Connection Mode' (with a dropdown menu showing 'Local / Remote').

- *Station Name*: set the display name for the station that is delivered to other internal parties during a call, 12 characters.
- *Station Number*: select a desired Station number that will be requested by the phone during registration. If available, iPECS will assign the Station with the requested number.
- *Set Password*: set the phone password, 12 digits.

5.6.2 System Configuration

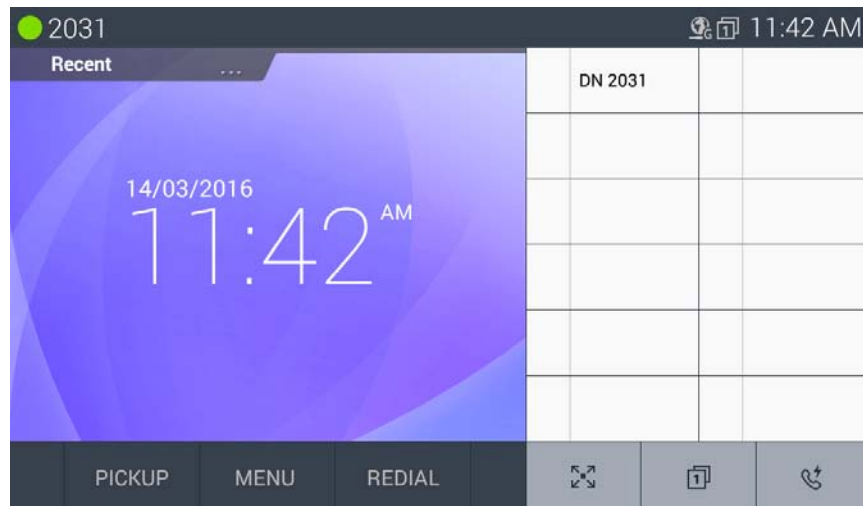
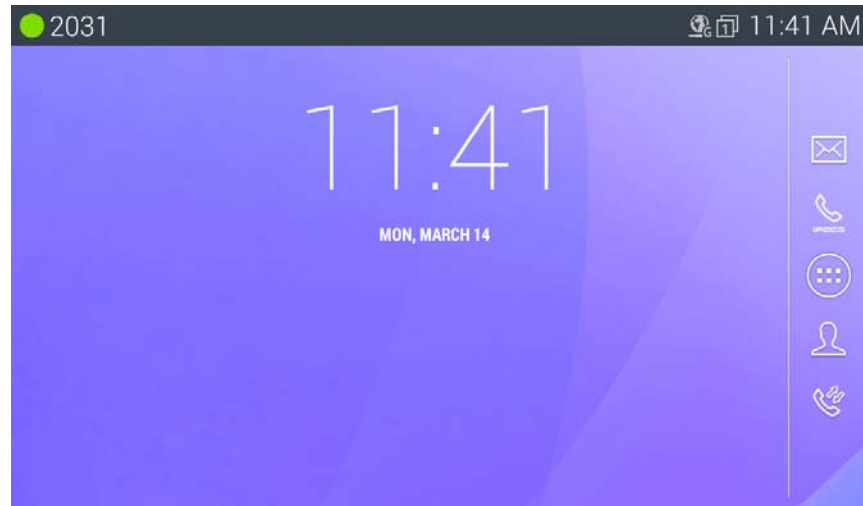
The System Configuration menu allows input of the IP address for iPECS system and the connection mode (local, remote and local/remote).

To change the system IP address or the connection mode,

1. In the Call Setting screen, select System Configuration.
2. Select the desired item.
3. Enter the IP address or select the connection mode.

6 Basics Operation for iPECS CM

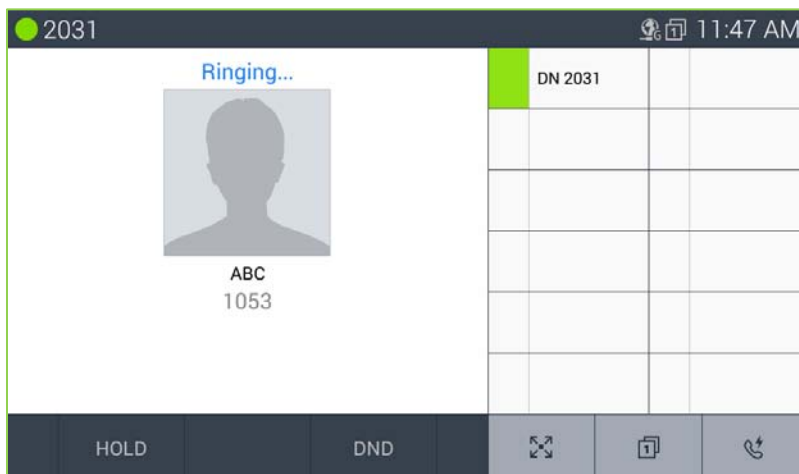
iPECS Phone application is fully available once LIP-9071 completes registration with iPECS CM host as outlined in Registration section. iPECS Call icon in the Apps Dock opens iPECS Phone app where calls can be managed. Details for using iPECS Phone window beyond the basics are covered in Mini-Tab Phone Display Basics section.



6.1 Incoming Calls

When a call is received, the Call screen displays the Caller ID for the call and the phone rings. If the Caller ID matches the number for a contact, the contact icon and name of the Contact are shown.

To answer the call, lift the handset or press the speakerphone button.



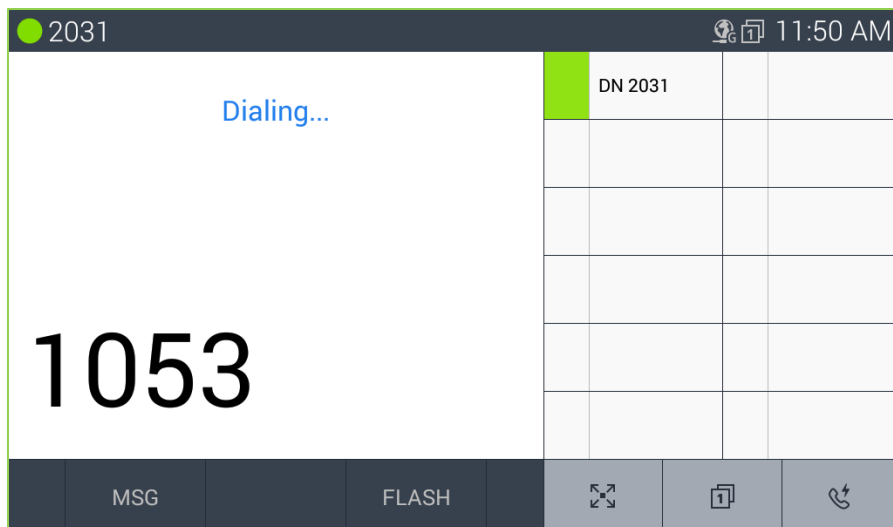
Note

- The DND button is available to activate One-time DND.

6.2 Outgoing Calls

LIP-9071 employs a “live dial pad” meaning that you need not lift the handset or press the Speakerphone button to start a call. To place a call, dial the desired number. This will activate the speakerphone, send the digits to iPECS host and show the dialing screen. When sufficient digits have been dialed, iPECS host routes the call.

Outgoing calls can also be placed from the Contacts and Logs as well as Speed dial refer to Contact and Call log section.



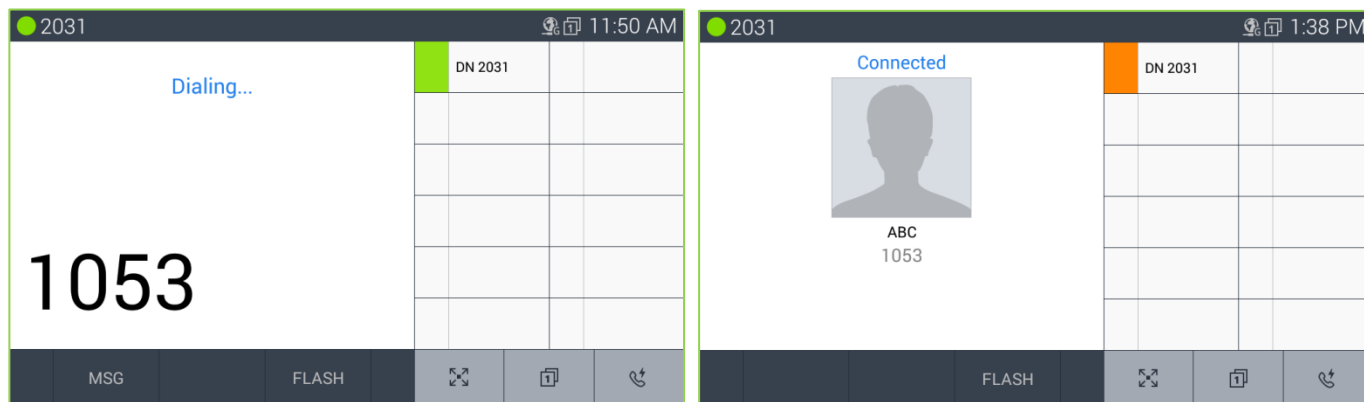
Note

- The user may go off-hook (press the Speakerphone button or lift the handset) before dialing. In this case, the phone receives dial tone from iPECS host.

6.3 Holding Calls

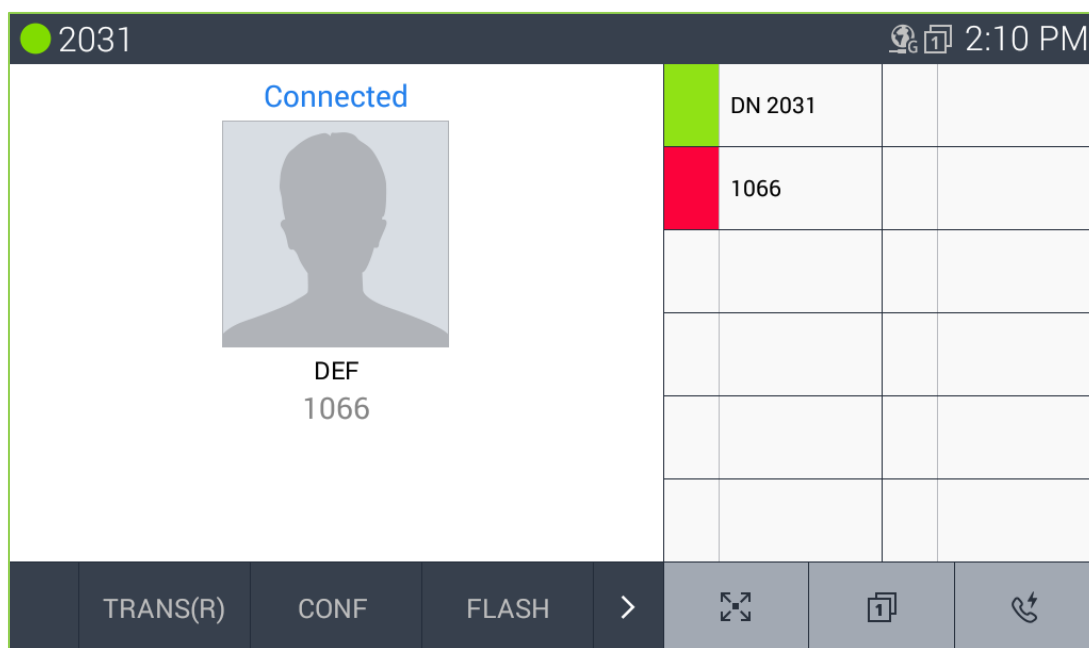
You can place a call in a waiting state where the caller hears the prompt “Place a hold” of iPECS CM system, freeing you for other activities. The call will remain on hold for the hold recall time then the user is recalled.

To place a call on Hold, touch the Hold/Save button, the LED of flexible button will light to indicate the held call as the left figure below.



6.4 Transferring a Call

Once connected to a call, Transfer Button, as is left bottom of dial and function button layout, is used to send the call to another destination. After touching the Transfer icon, dial the station to receive the call. The call transfer can be unannounced (simply hang-up) or announced (after the receiving party answers, announce the call and hang-up).



Note

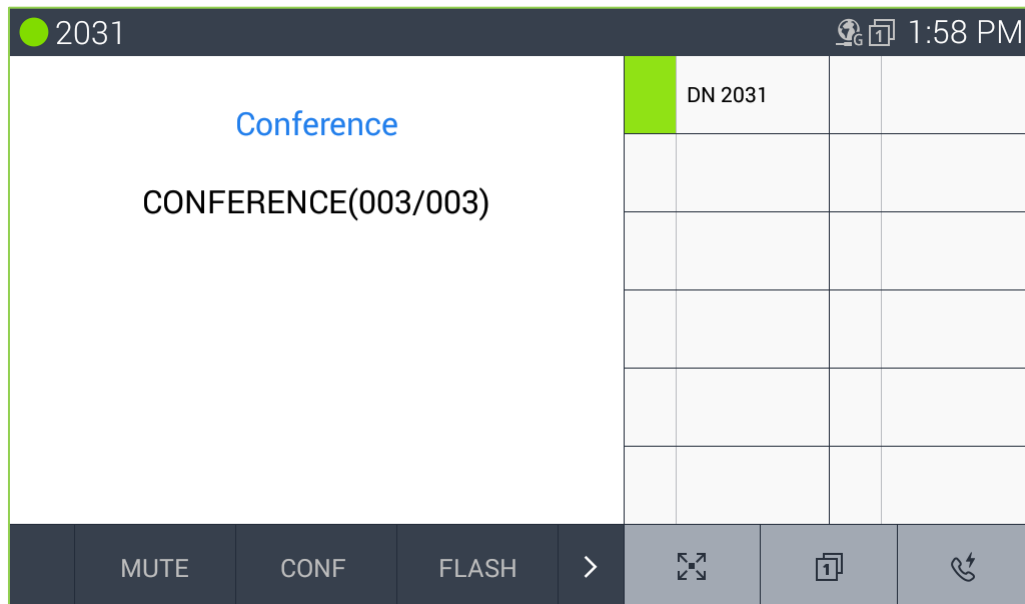
- A transfer can be accomplished by touching a Flex button assigned as a DSS for another station in iPECS host.

6.5 Conference

An active call can be joined with another call to establish a conference. If iPECS host is equipped with a Conference bridge, up to 128 parties can be included in a conference.

To conference calls,

1. Place/receive first call as usual.
2. Touch the CONF soft button.
3. Place next call and press the CONF soft button.
4. Repeat step 3 for additional parties
5. Press the CONF soft button again to connect all parties.

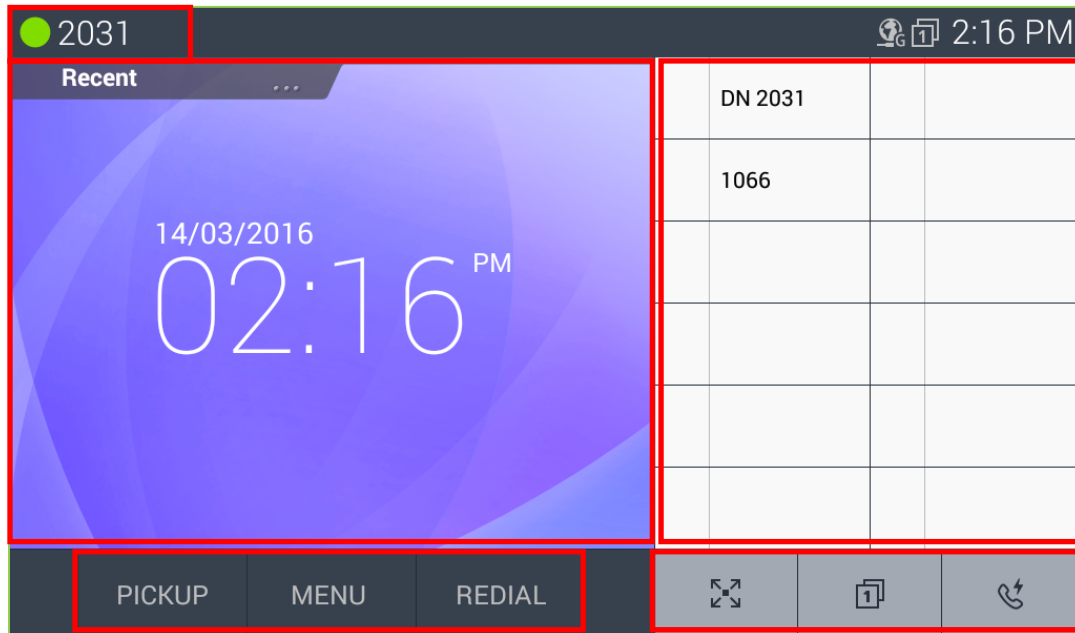


Note

- LIP-9071 supports a 3-party conference without the need of a Conference bridge. If conferences with more than three parties are required, iPECS host must be equipped with a conferencing bridge such as the VPCM.

7 iPECS Phone for iPECS CM

iPECS Phone application is accessed with the icon in the Apps Dock, a Launcher screen or automatically when answering a call. iPECS Phone window is a virtual construction of the functional elements of an advance business telephone. Along the left are the first six (6) programmable 'Flex' buttons. Basically, the first flexible button is assigned his/her phone number. These allow access to other stations or activation of an iPECS system feature. In the center of the window is the Call information screen that displays information about active, incoming and held calls.



On the left at the top is the Station identifier with the Station Name or number




Across the bottom are two menus. In the left menu are three soft keys that are context sensitive and show available call functions from iPECS host. If more than three selections are available a left/right arrow is exposed to access the additional items. The idle mode iPECS menu presents:

Pickup: answer calls ringing at another station.

Menu: access the Station User or Phone local main menu.

Redial: redial one of the last 10 dialed numbers.

The second menu is the three fixed iPECS phone feature buttons.

-  : Extended flexible buttons
-  : Flexible button page from 1 to 4 each 12 button
-  : Speed button (System Speed and Station Name)



The Recent call list can display in the Call screen by touching the 'Recent' tab.

Note

- Several of the buttons and icons provide multiple functions based on the state of the phone. For example the Hold/Save button places an active call on hold and saves entries made by the user when entering speed dials and other information.
- LIP-9071 does not support as same as legacy iPECS Muted Ring feature. It support with notification message on top bar as "new call wait" with one time beep tone. This is almost same as what normal mobile phone call waiting service.

7.1 Speed

7.1.1 Using Speed button

iPECS CM can store up to 3,000 System Speed Dial numbers, which can be used by all system users and can be set with WMS. Each System Speed Dial number can be programmed with up to 24-digit numbers. Search the station number or name by using Station Name.

The screenshot shows a mobile application interface for iPECS CM. At the top, there is a status bar with a green circle icon, the number '2031', and the time '3:32 PM'. Below this is a table with two columns. The first column contains the text 'ENTER, (UP/DOWN/OK)' and '1 System Speed' followed by '2 Station Name'. The second column contains 'DN 2031' and '1066'. Below the table is a navigation bar with buttons labeled 'OK', 'EXIT', and a red box highlighting a button with a lightning bolt icon.

ENTER, (UP/DOWN/OK)	DN 2031
1 System Speed	1066
2 Station Name	

Navigation bar: OK, EXIT, [Red Box: Lightning Bolt Icon]

System Speed and Station Name

Storage is allocated in iPECS CM system for System Speed (0001~3,000), numbers available to all system users, and Station Name, name or numbers available and configured by the station user.

To use System speed,

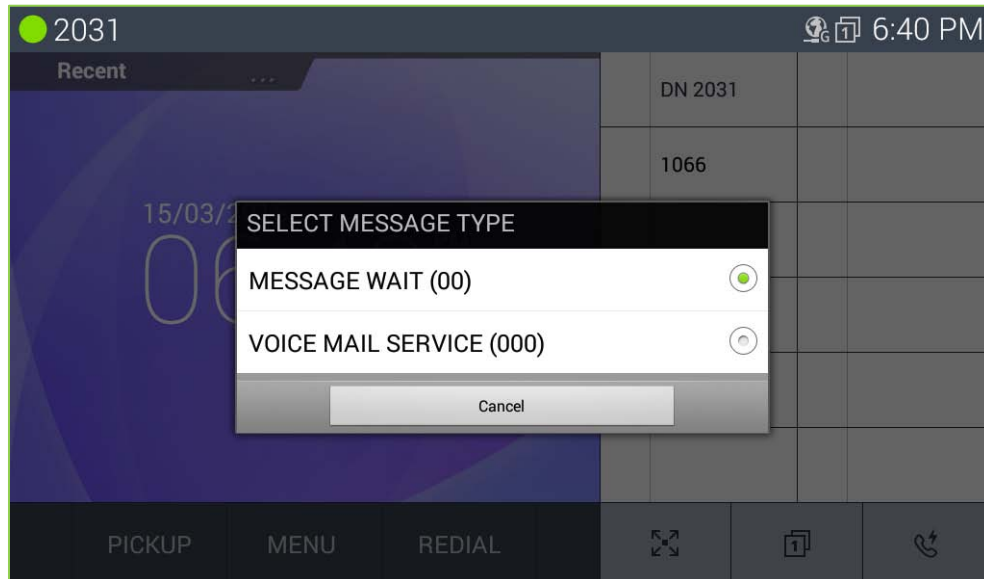
1. Touch the Speed button.
2. Select '1 System Speed'.
3. Enter the desired system speed index.

To use Station name,

1. Touch the Speed button.
2. Select '2 System Name'.
3. Enter the desired number or Name and display the matched number or Name.
4. Touch the desired number.

7.2 Call Back Message Wait

When calling another station in iPECS CM system and the call is not answered, you can leave a request for a call back and activate an Intercom Message Wait to the called user.



To activate a Call Back message wait,

1. While receiving no answer on an internal call, press Message button. A Call Back Message wait is activated and the called station user receives a message waiting indication for the Intercom (ICM) call.

To respond to a Call Back message of Message wait

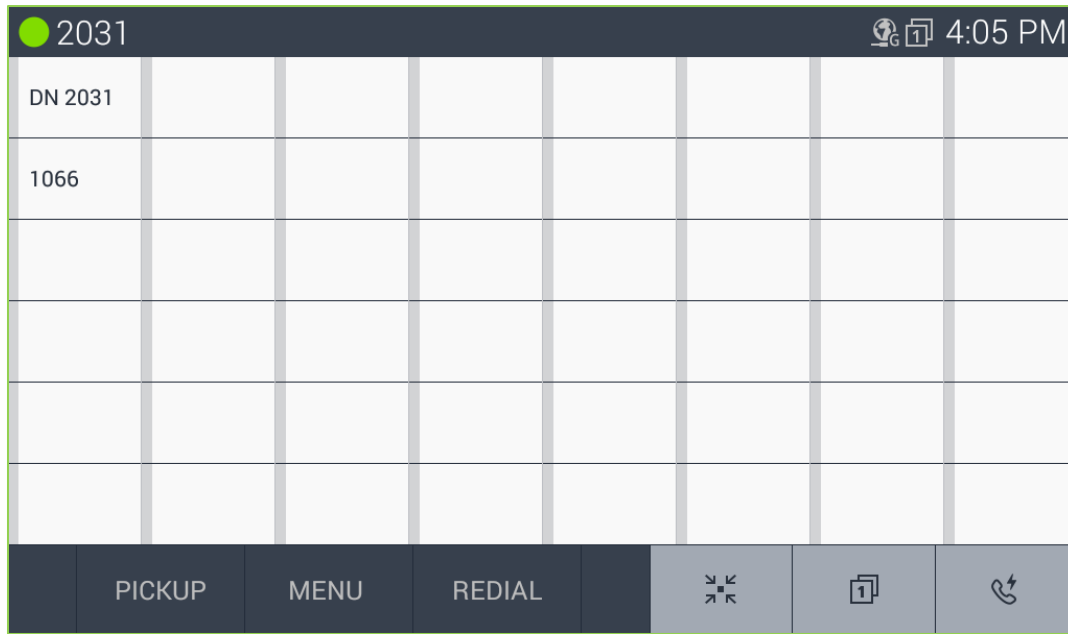
1. Press the flashing Message button.
2. Select the message type 'Message Wait' radial button.
3. Select the Station to call back from the Station message list.

To check the voice mail service

1. Press the flashing Message button.
2. Select the message type 'Voice Mail Service' radial button.
3. Enter the authorization code (password).
4. Check the Voice mail message by prompt.

7.3 Flex Buttons

Flex buttons, which are programmable, access resources of iPECS such as CO Lines and paging as well as call other stations and activate features of iPECS CM system. Buttons that access external networks such as a CO Line or Features code are assigned by administrative users only. The user can configure buttons assigned to other functions or unassigned buttons. For details on configuring a Flex button section.



In addition to configuring Flex buttons, the user may assign a label to the button as discussed in Flexible Buttons section.

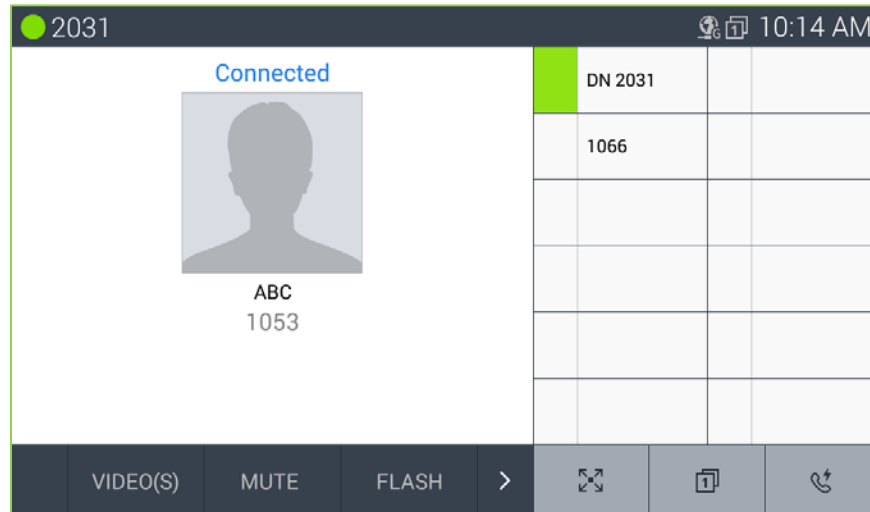
iPECS Phone screen displays the first six (6) Flex buttons on the left of the screen. The full (48) Flex buttons including first (6) Flex buttons can be displayed in iPECS Phone screen using the Flex button icon. The buttons are shown with dial pad icon button under full 48 buttons layout. Also can go back to dial pad idle screen using dial pad icon or it can be maintained as idle screen

Note

- Buttons that are not assigned appear with no label in the button display.

7.4 Video Calling

Once a voice call is established you can initiate or accept a video call. To start or respond to a Video Call invitation, press the Video(S) button, which will open the Video Call window. On the right side of the window is a thumbnail of the video sent from LIP-9071 and controls for the Video call including:

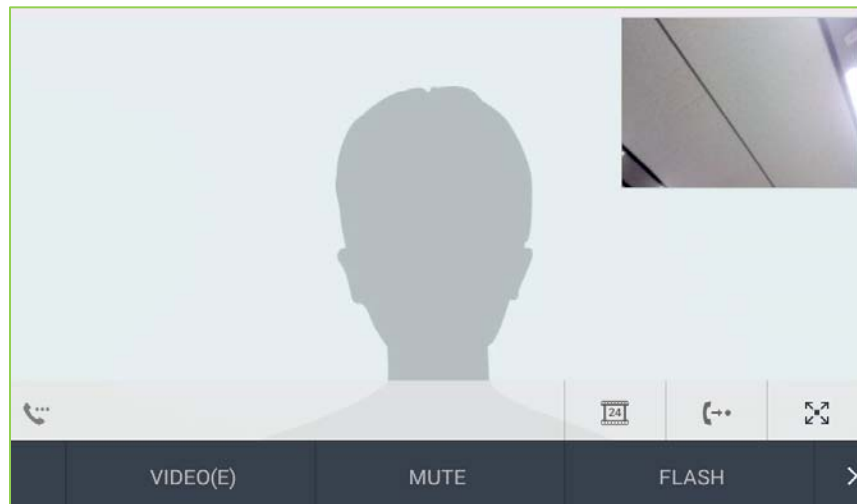


Frame Rate: set the frame rate from 5 to 24 frames per second. Higher frame rates improve quality but require higher bandwidth.



Transfer: send the call to another destination.

The background is the main video screen that displays video sent from the connected party. The video is sent after the party accepts the Video call. Note it may take a few moments to display the received video when the call begins.



At the bottom of the screen are the soft menu buttons. The buttons include,

- **Video(E):** pause and restart video transmission.
- **Mute/Speak:** turn the microphone on or off, to control the speakerphone, handset or wired headset microphone.
- **Flash:** End the call and start a new call.

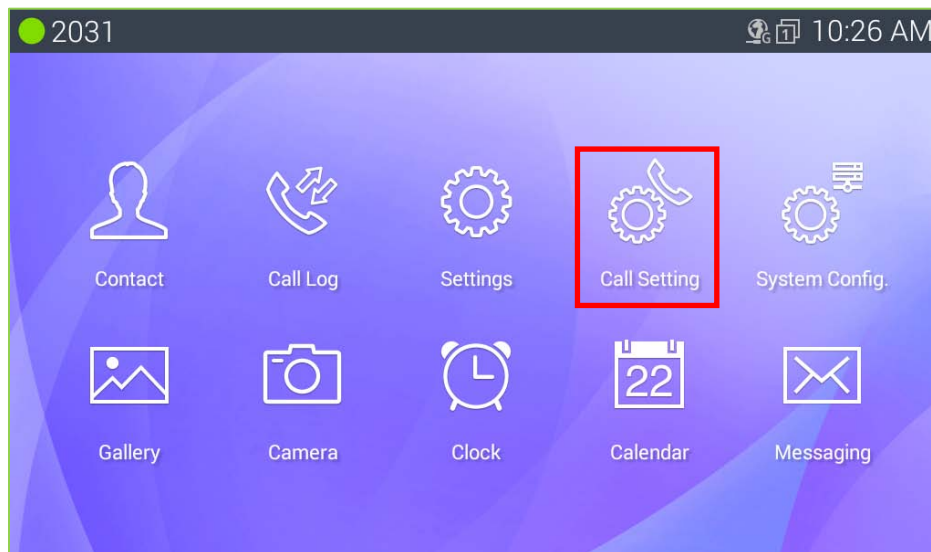
- *Trans*: Transfer the call to another station.
- *Conf*: initiate a voice conference.

Note

- The video call supports multiple video codecs including {H.264, H.263}. The codec for a given call is negotiated between the devices.
- LIP-9071 video call function requires below bandwidth based on the codec employed.
Ericsson-LG Enterprise uses following values as technical descriptions
 - H.263 : max=2048kbps @CIF 24fps, typical = 768kbps @CIF 24fps
 - H.264 : max=2048kbps @CIF 24fps, typical = 768kbps @CIF 24fps
- Since the recovery for data losses and errors is not robust when using H.263 and H.263 is for low bitrate video while H.264 can encode both low and high quality videos, also, H.264 is far more efficient on bandwidth with the same video quality, the usage of H.264 codec is recommended.

7.5 iPECS Phone Call Settings

Call Settings for iPECS Phone impacts call handling, button appearance, sounds and other characteristics of the phone. To view the Call Settings menu,



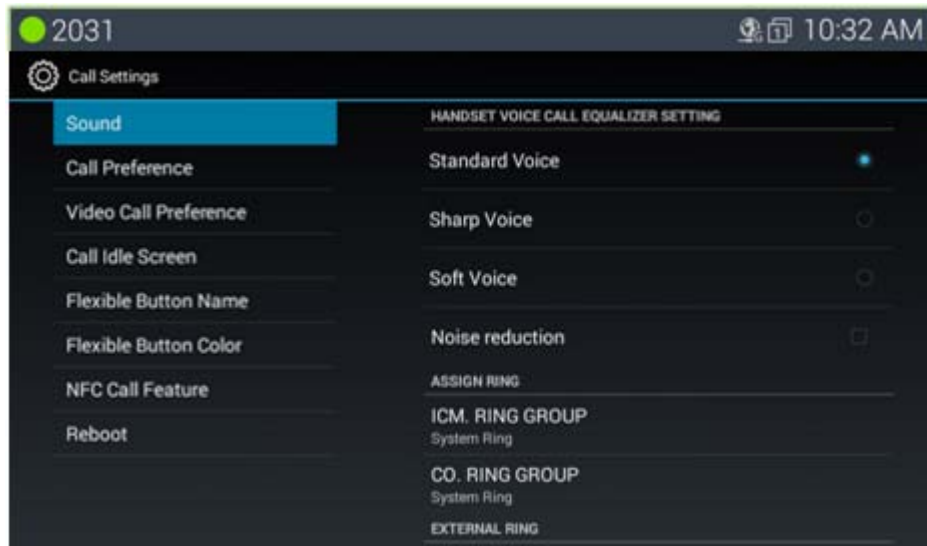
1. While on iPECS phone screen, press the Menu button.
2. Select the Call Settings icon.

The Call Settings menu includes,

- *Sound*: select the hand piece voice equalizer and assign ringtone for incoming external calls.
- *Call Preferences*: set signaling and answer for internal calls, configure wired headset operation, etc.
- *Video Call Preference*: manage characteristics of the video call settings.
- *Call Idle Screen*: manage characteristics of the phone including the clock type, background image, etc.
- *Flexible Button Name*: assign a name or label for each Flex button.
- *Flexible Button color*: assign a name or label for each Flex button.
- *NFC Call Features*: assigns the system feature through NFC function
- *Reboot*: restart LIP-9071 phone.

7.5.1 Sound

iPECS CM system includes 15 Tone-type ringtones and many music ringtones in memory that can be used for external incoming call ringtones. To assign Ring group for ICM or CO.



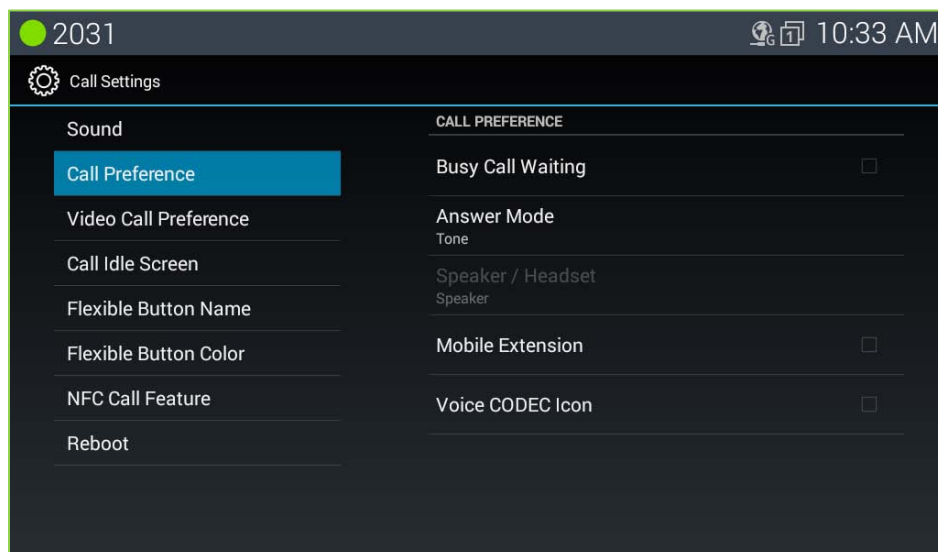
1. In the Call Setting screen, select Sound.
2. Select the ICM (internal) or External Ring Group down arrow.
3. Select the desired ringtone.
4. Click 'Apply' to save the selection.

Note

- Voice Call Equalizer Setting works only on Handset (hand piece) of LIP-9071.

7.5.2 Call Preference

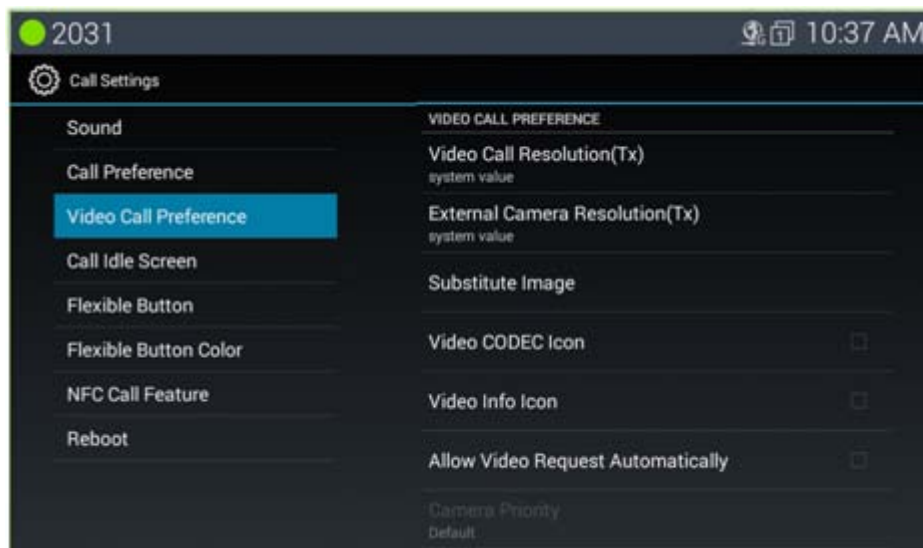
Call Preferences determine how calls to a busy station are handled, how calls are answered and if calls are sent to the user's mobile phone.



- *Busy Call Waiting*: while the user is busy on a call, new DID and DISA calls can be delivered to the phone or, when disabled, the call routes based on the busy call routing configured in iPECS CM system.
- *Answer Mode*: set the Intercom Call Answer Mode as HF (Hands-free Answerback to Voice announced calls), Privacy (lift the handset or press the Speakerphone button to answer a Voice announced call) or Tone ring.
- *Headset/Speaker*: configure the audio path when the speaker button is touched, route audio to the headset or speakerphone.
- *Mobile Extension*: send calls to a mobile phone associated with the station.
- *Voice CODEC Icon*: while the user is on a call, it shows CODEC information as an icon

7.5.3 Video Call Preference

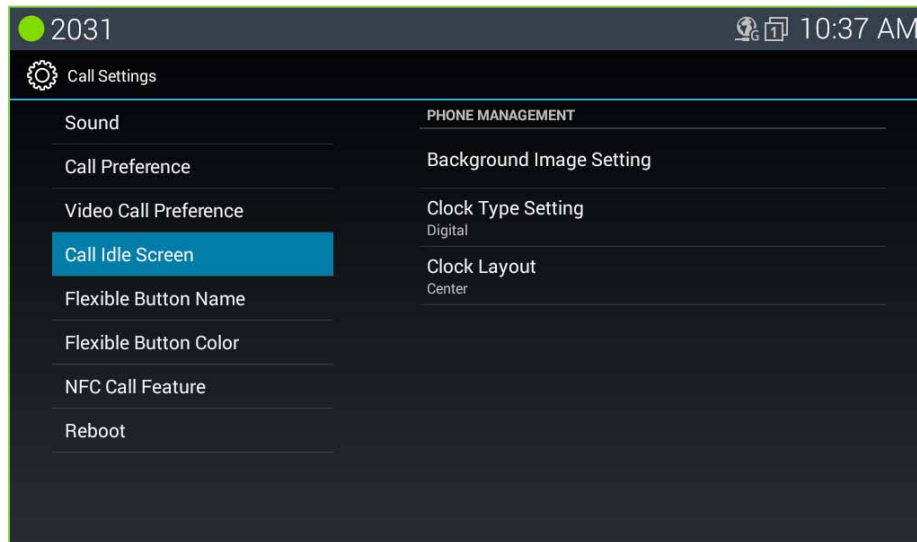
The user can manage characteristics of the video settings including the resolution, substitute image as well as the Video CODEC icon and Video Info icon for the display.



- *Video Call Resolution (Tx)*: it sets the resolution of transmitting video as manually.
- *External Video Camera Resolution (Tx)*: it sets the external USB camera resolution when transmitting video as manually.
- *Substitute Image*: It sets an image which will be sent while user stops video for a moment.
- *Video CODEC Icon*: while the user is on a video call, it shows Video CODEC information as an icon
- *Video info Icon*: while the user is on a video call, it shows Video call information(resolution) as an icon
- *Allow Video Request Automatically*: with this option enable user can start own video automatically when answer an incoming video call.
- *Camera Priority*: User can select camera for video call one of built in camera or external USB camera if available.

7.5.4 Call Idle Screen

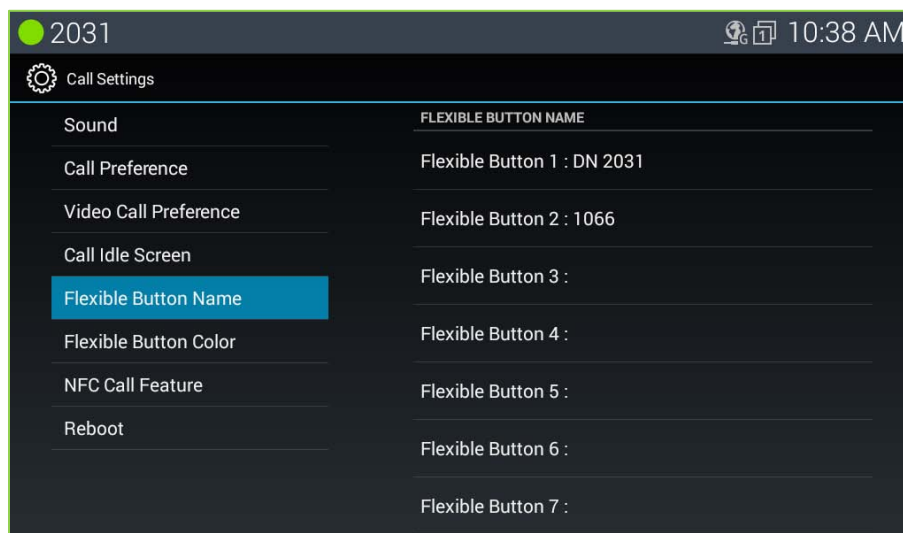
The user can manage characteristics of the phone including the name, password and number as well as the contact icon and language for the display.



- *Background Image Setting:* User can change background image what user want to see.
- *Clock Type Setting:* User can choose idle screen clock type as digital or analog type.
- *Clock Layout:* User can adjust the position of clock along the left area of idle screen

7.5.5 Flexible Button Name

A Name field, up to 15 characters can be configured for each Flex button by the user. If a label is not configured the default name based on the type button is blank.

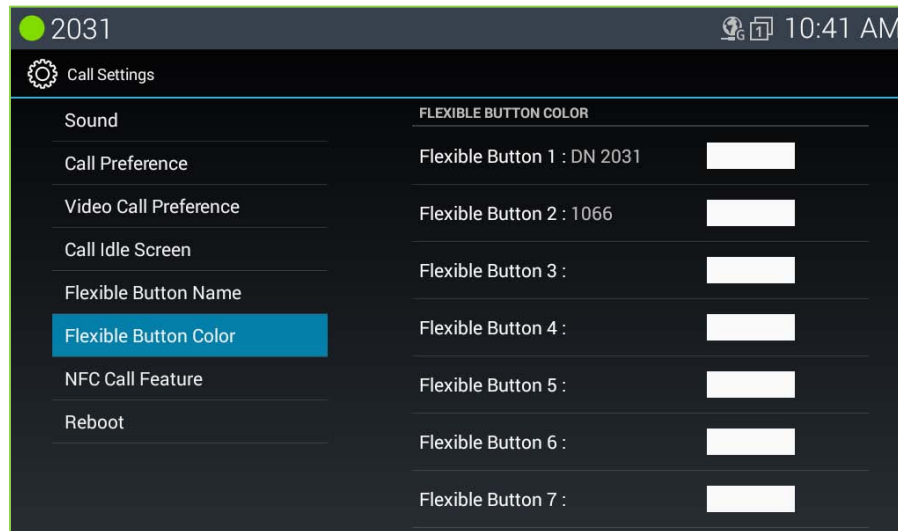


To configure a button label,

1. In the Call Setting screen, select Flexible Button name.
2. Select the desired Flex button, scrolling to display the Flex button.
3. Enter the label, up to 15 characters.
4. Press OK to store the label.

7.5.6 Flex Button Color

Each Flexible button can be assigned with a color by the user. If a color is not configured, the default white color based on the shape button is used.



7.5.7 NFC Call Feature

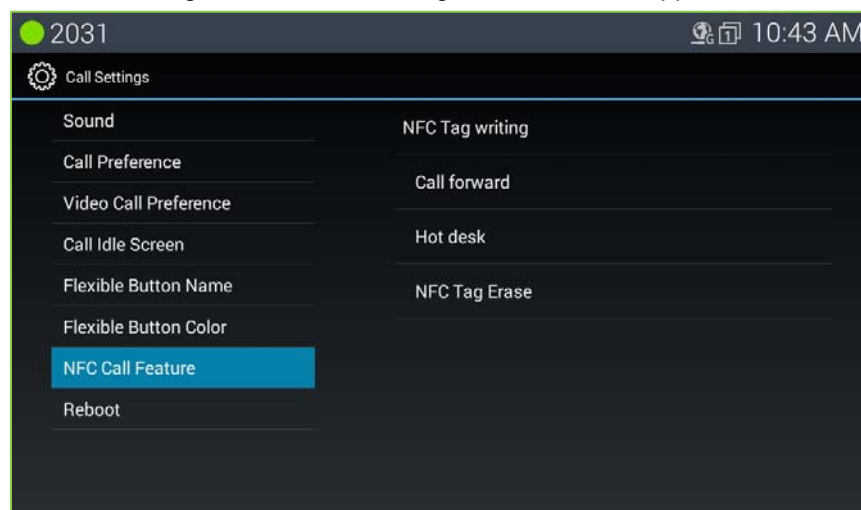
All NFC call related features are managed at this menu. LIP-9071 can simply execute call settings by tagging an NFC Forum-compliant tag. For example User can execute call setting by on touch tagging without complicated menu control when using a call setting.

For these features, LIP-9071 provides NFC tag write and read features.

In case of tag write, User can write call setting information to an NFC tag in the "NFC Call Features" of "Call Settings" menu. User can execute call setting by using the NFC tag recorded at the "NFC Call Feature" menu.

Warning! User must check if iPECS CM system supports this feature before operation.

The followings are two call setting features and one tag erase function supported an NFC tag in LIP-9071.



- ✓ *Call Forward*
- ✓ *Hot Desk*
- ✓ *NFC Tag Erase*

7.5.7.1 NFC Call Forward

LIP-9071 can configure call forward of call settings by using an NFC Forum-compliant tag. Call forward is the same feature as basic call forward.

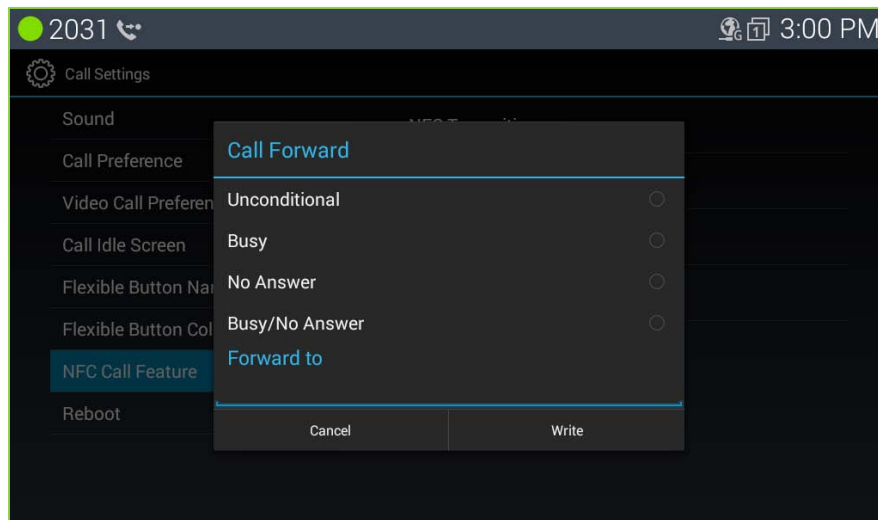
User first needs to write call forward information to an NFC tag. NFC tag write is provided at the “NFC Call Feature” of “Call Settings” menu.

Making NFC Call Forward tag

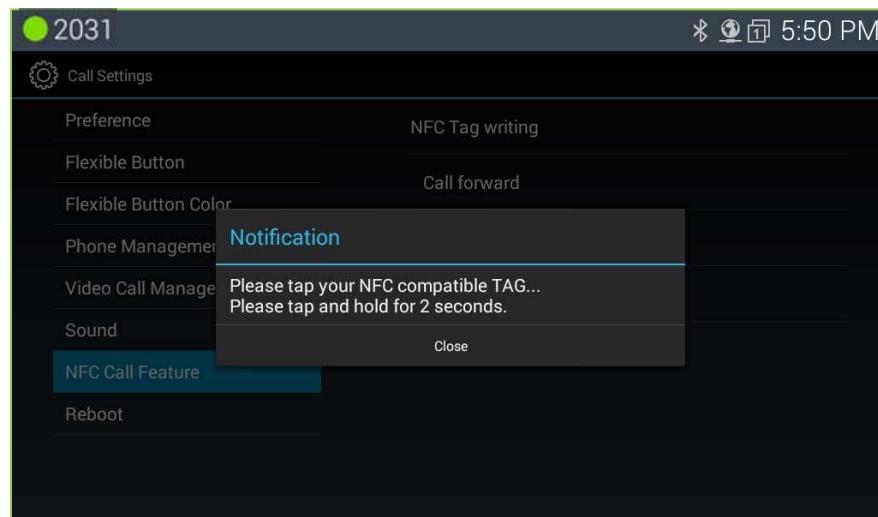
In order to make an NFC call forward tag, User must enter the following information for call forward feature.

1. Forward Type : There are four types (Unconditional, Busy, No Answer, Busy/No Answer)
2. Forward Destination: There are four destinations (Station, Group, Speed, Tel Num.).

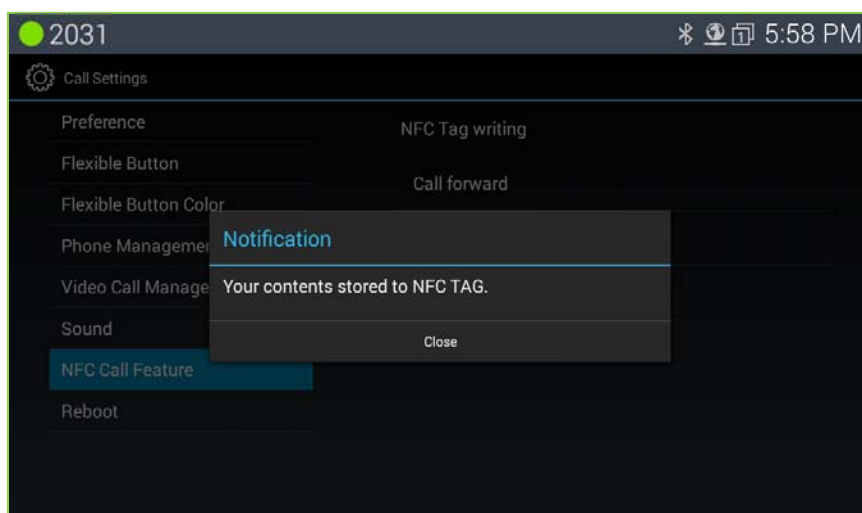
After entering right information for each item, touch “Write” button, otherwise touch “Cancel” for cancel.



After touching “Write” button, the following screen is shown.



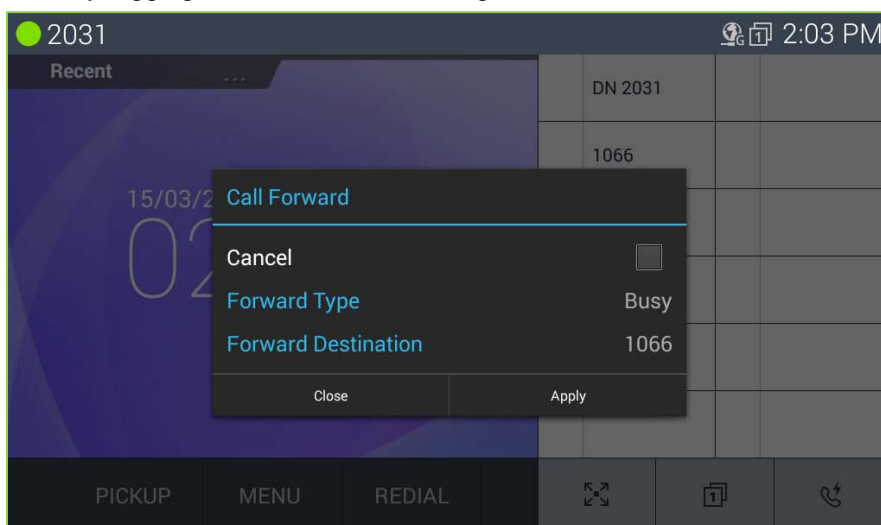
Then, tag the prepared NFC tag on the tag pad. User can cancel writing tag in this step by pressing “Close” button. After writing is success, LIP-9071 shows the following screen.



Read NFC Call Forward tag (Using NFC Call Forward tag)

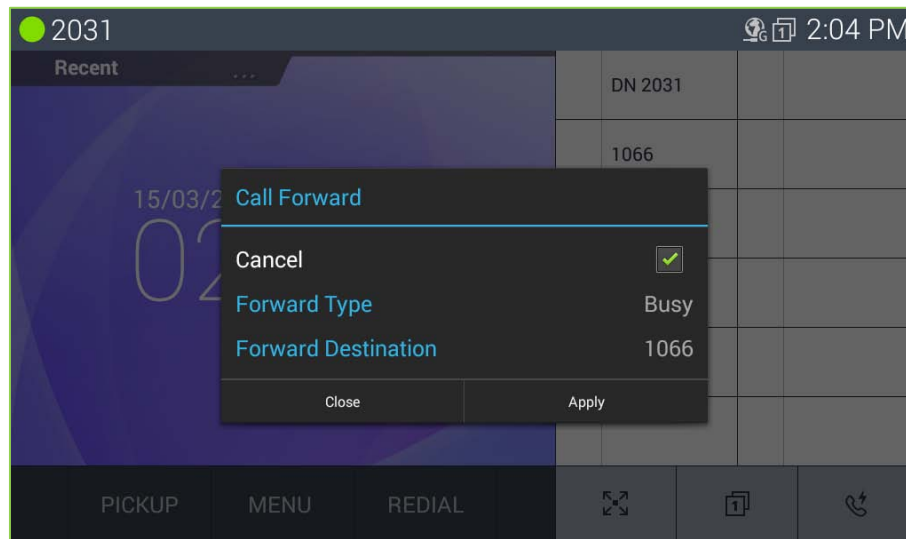
User can executes call forward feature by an NFC call forward tag previously recorded. And user can re-write the tag if user needs to change the information of the tag.

In order to use the NFC call forward tag, user just tags the NFC tag on the tag pad of LIP-9071. The following is the screen by tagging the NFC call forward tag.



First make sure that the information shown is correct. User touch “Apply” button for call forward setting. Otherwise, touch “Close”.

User must tag one more time to cancel call forward setting by using the same tag and check the check box for cancel on the dialog window. Then Use can cancel the call forward by pressing “Apply” button.



7.5.7.2 NFC Hot Desk

LIP-9071 can configure hot desk of call settings by using an NFC Forum-compliant tag. Hot desk is the same feature as basic hot desk.

User first needs to write hot desk information to an NFC tag. NFC tag write is provided at the “NFC Call Feature” of “Call Settings” menu.

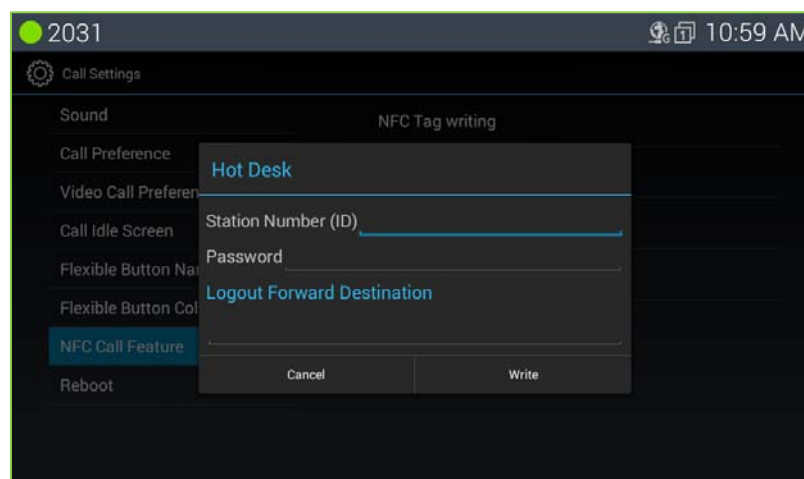
Write NFC Hot Desk tag

The followings are the information required for hot desk feature and screen

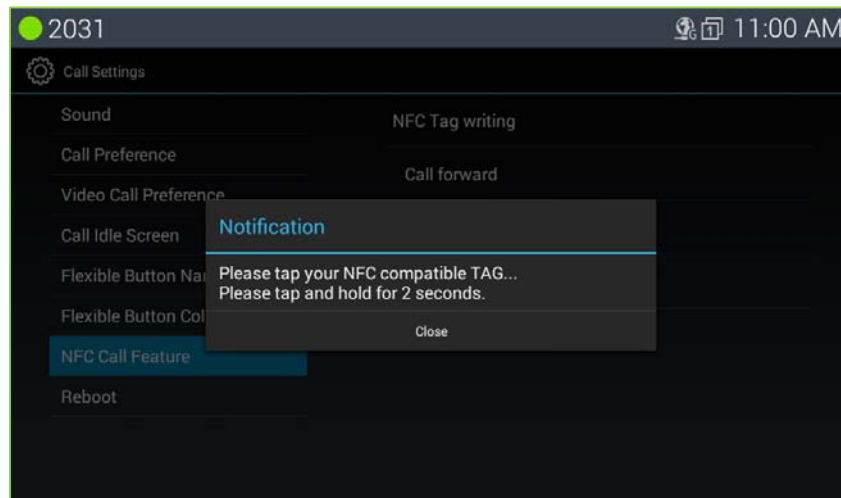
1. Station Number (ID): station number
2. Password: It must be previously configured by admin
3. Logout Forward Destination: 4 destinations (Station, Group, Speed, Tel num, No Forward Change)

After entering right information for each item, touch “Write” button, otherwise touch “Cancel” for cancel.

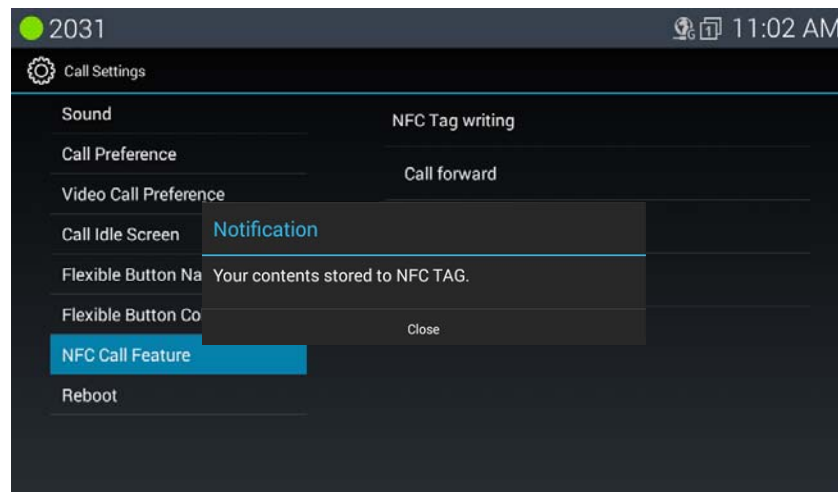
Except for the hot desk information input into the dialog window, and the rest of the process is the same as call forward writing.



After touching “Write” button, the following screen is shown.



Then, tag the prepared NFC tag on the tag pad. User can cancel writing tag in this step by pressing “Close” button. After writing is success, LIP-9071 shows the following screen.

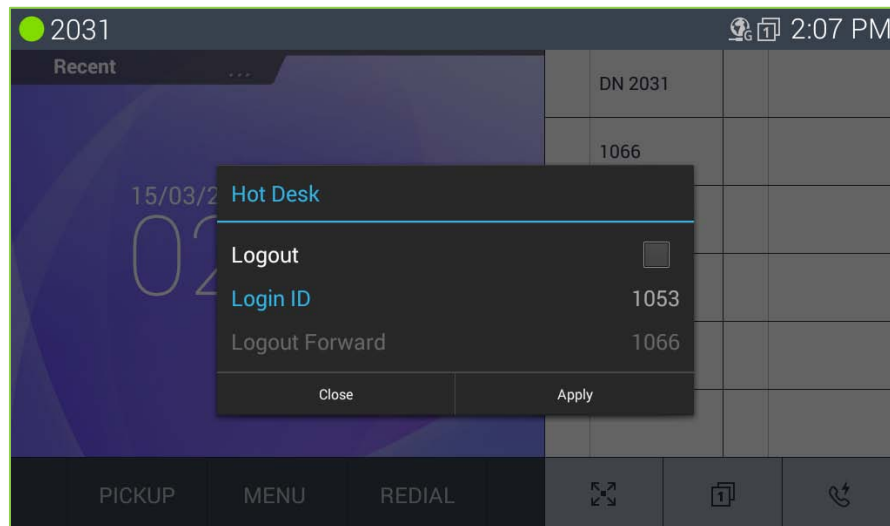


Read NFC Hot Desk tag (Using NFC Hot Desk tag)

User can executes hot desk feature by an NFC hot desk tag previously recorded. And user can re-write the tag if user needs to change the information of the tag.

Basically the way to use an NFC hot desk tag is the same as a call forward tag. If user tags the NFC tag on the tag pad of LIP-9071, LIP-9071 shows the recorded hot desk information on the screen.

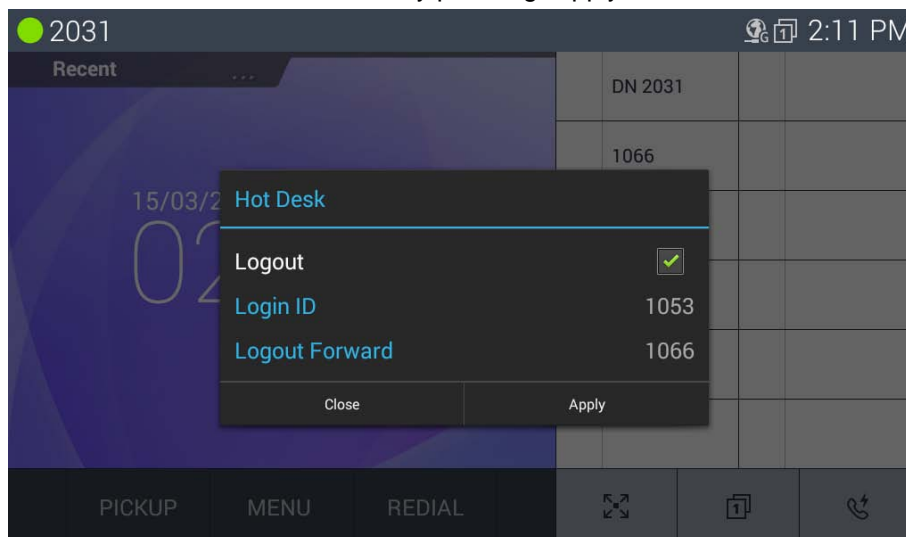
The following is the screen by tagging the NFC hot desk tag.



First make sure that the information shown is correct. The hot desk screen shows new station number and call forward information when user logs out from hot desk station.

User touch “Apply” button for hot desk setting, otherwise touch “Close”.

User must tag one more time to cancel Hot Desk setting by using the same tag and check the check box for cancel on the dialog window. Then Use can cancel the hot desk by pressing “Apply” button.

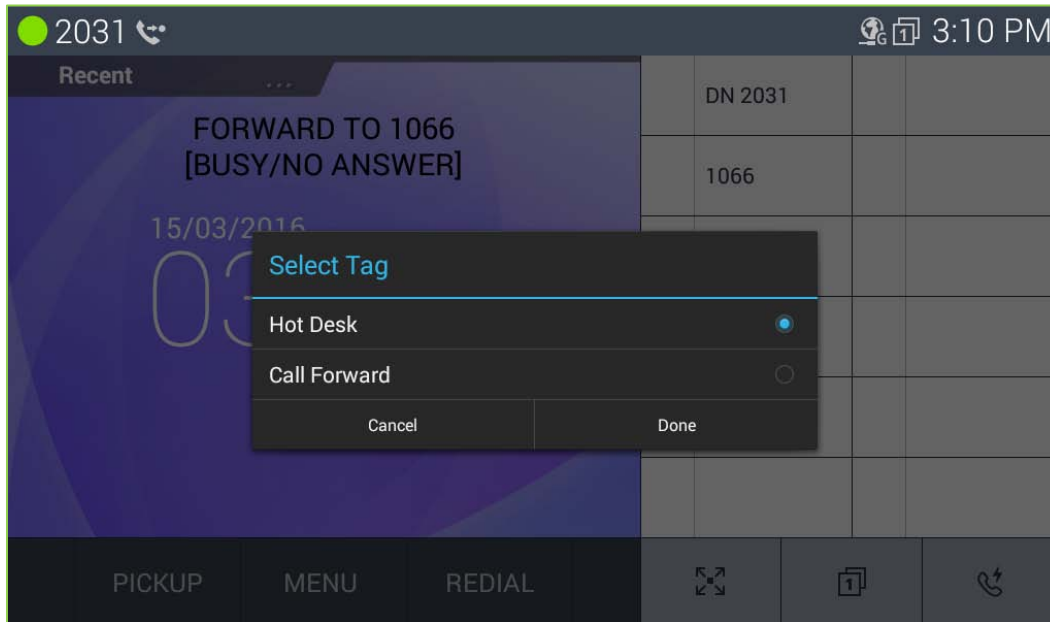


7.5.7.3 Select Dual Setting on a Tag

LIP-9071 supports NFC forum compliant tag. User can use an NFC tag with various memory types. LIP-9071 can save up to two NFC call setting features.

In case that an NFC tag has two call settings, LIP-9071 shows a dialog window for user to select the call setting.

After user selects one, the following process is the same as each call setting.

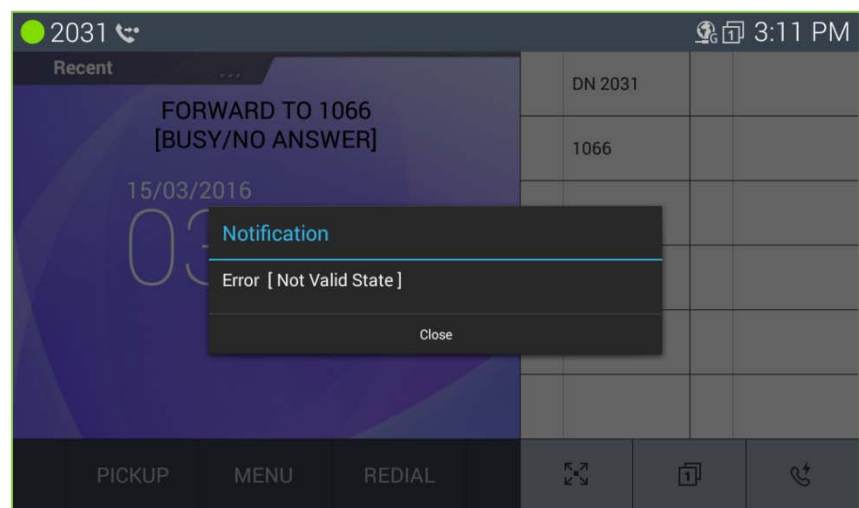


7.5.7.4 Invalid Response

When user executes a call setting by using an NFC tag, LIP-9071 shows an appropriate error message for some reason. In this case user can ask administrator.

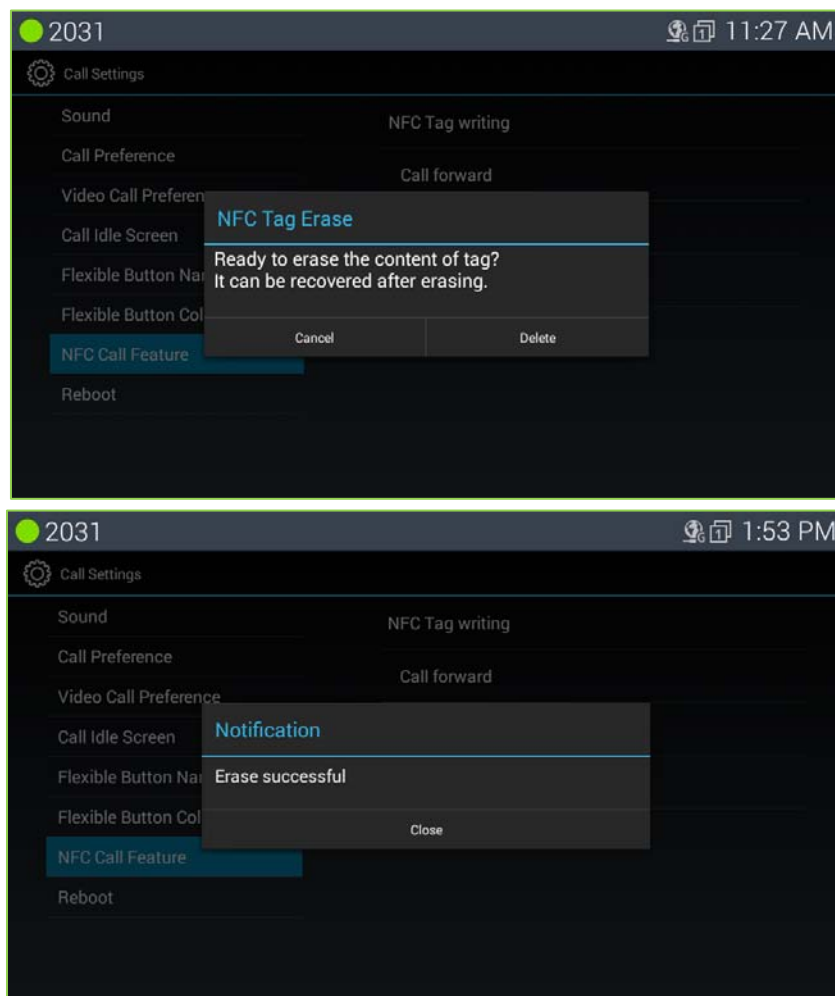
The followings are invalid error message and error screen:

1. Invalid Common
2. Invalid Input Type
3. Invalid Station (Log ID)
4. Invalid Password
5. Invalid Forward Type
6. Invalid Forward Number
7. Invalid Logout Type
8. Invalid Logout Number
9. Invalid Not Forward State
10. Invalid Not Idle State
11. Invalid Not Agent Number
12. Invalid Not Dummy Station
13. Invalid Not VSF Access
14. Invalid Not M-ext Enable



7.5.7.5 NFC Tag Erase

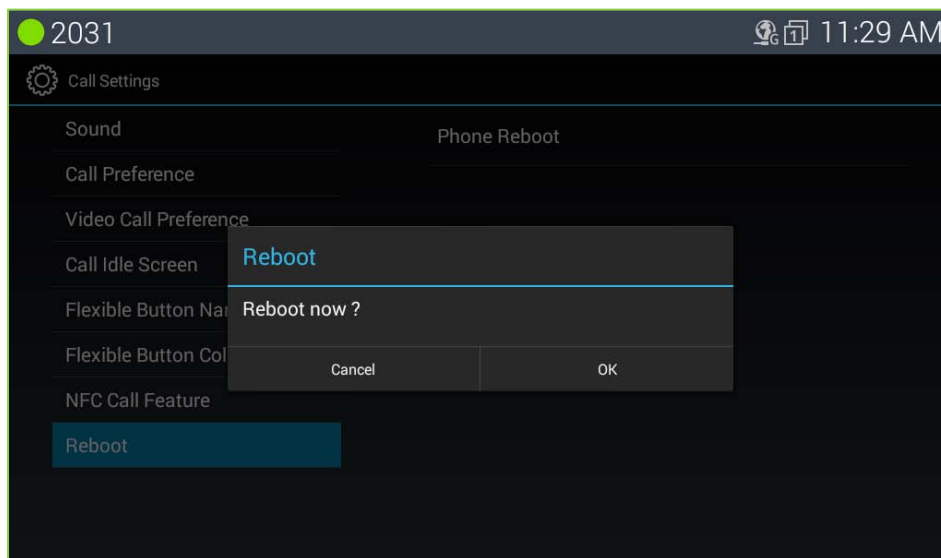
LIP-9071 provides erase function for NFC Tag which has some information already. If user taps the tag with Erase Tag option, all tag information will be deleted.



7.5.8 Reboot

After modifying the System Configuration, it is necessary to reboot LIP-9071.

To reboot, operate the following procedures:

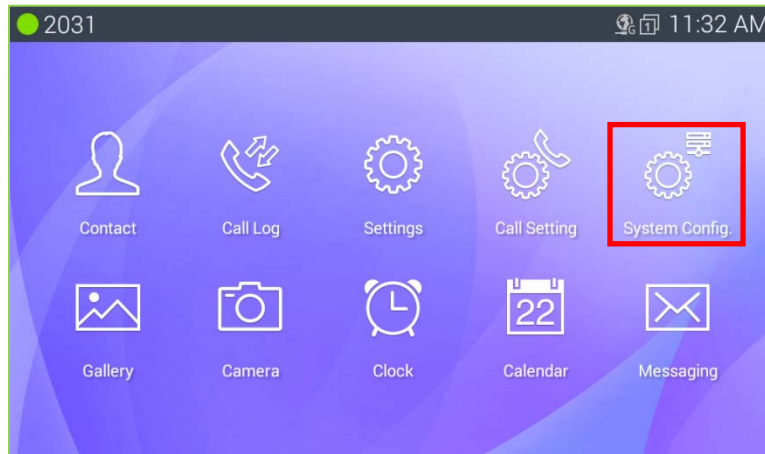


1. With iPECS Phone screen display, select the Menu button.
2. Touch the Call Settings icon.
3. Select Reboot from the Call settings.
4. Select OK to reboot.

LIP-9071 phone will restart and register with iPECS CM system.

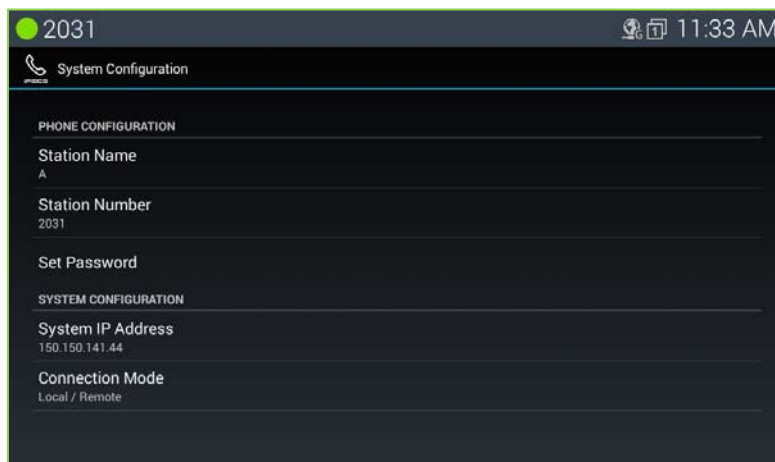
7.6 iPECS System Configuration

The System Configuration for iPECS Phone impacts Station name, number, password and system IP address. To view the System Configuration menu, touch 'System Confi.'.



7.6.1 Phone Configuration

The System Configuration menu allows input of the Phone and System configuration.



- *Station Name*: set the display name for the station that is delivered to other internal parties during a call, 16 characters.
- *Station Number*: select a desired Station number that will be requested by the phone during registration. If available, iPECS will assign the Station with the requested number.
- *Set Password*: set the phone password, 12 digits.

7.6.2 System Configuration

The System Configuration menu allows input of the IP address for iPECS CM system and the connection mode (local, remote and local/remote).

To change the system IP address or the connection mode,

1. In the Call Setting screen, select System Configuration.
2. Select the desired item.
3. Enter the IP address or select the connection mode.

8 Mini-Tab Phone Display Basics

LIP-9071 phone employs a Mini-tab running the Android OS as the phone display and the main user input device. The Mini-tab is equipped with several Apps and Widgets which are discussed in separate sections of this manual as below.

1. Browser
2. Calculator
3. Calendar
4. Call (iPECS)
5. Call log
6. Camera
7. Clock
8. Contacts
9. Downloads
10. Email
11. Gallery
12. Message
13. Music
14. Play Store
15. Settings
16. Sound Record

In addition to the major applications above, several widgets are installed in LIP-9071 phone. Widgets are small applications that display on a Launcher screen and are self-contained, that is no additional screens are needed by the widget. Widgets may open a related application but are primarily intended to provide information such as the time, date or status of music playing. And there are many default widgets in the phone.

- Clock widget
- Play Music widget
- Calendar widget
- Etc.

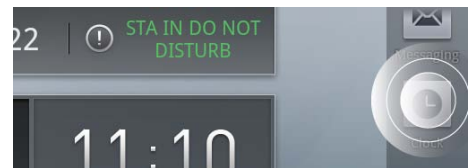
8.1 Basic User Gestures

The Mini-tab uses a touchscreen as the user interface. There are several finger gestures supported by the Mini-tab for user interaction.

- *Touch or Tap:* To select items such as application icons, to press onscreen buttons, or to type using the onscreen keyboard, touch or tap the item.



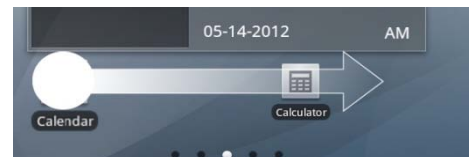
- *Touch and Hold:* To open the Context menu for an item, touch and maintain contact with the screen until an action occurs.



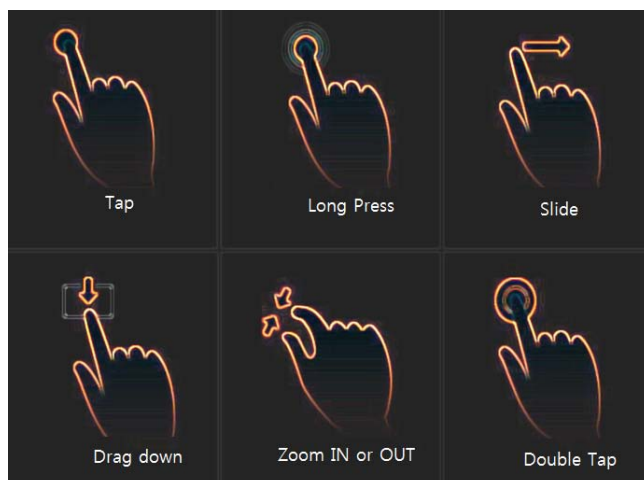
- *Swipe or Flick:* To move from one Launcher screen to another or view the next or previous picture, touch the screen and quickly move the finger across the surface of the screen.



- *Drag and drop:* To move an app or icon on the Launcher screens, touch and hold momentarily then, while maintaining contact with the screen, drag the item on the Launcher screen.

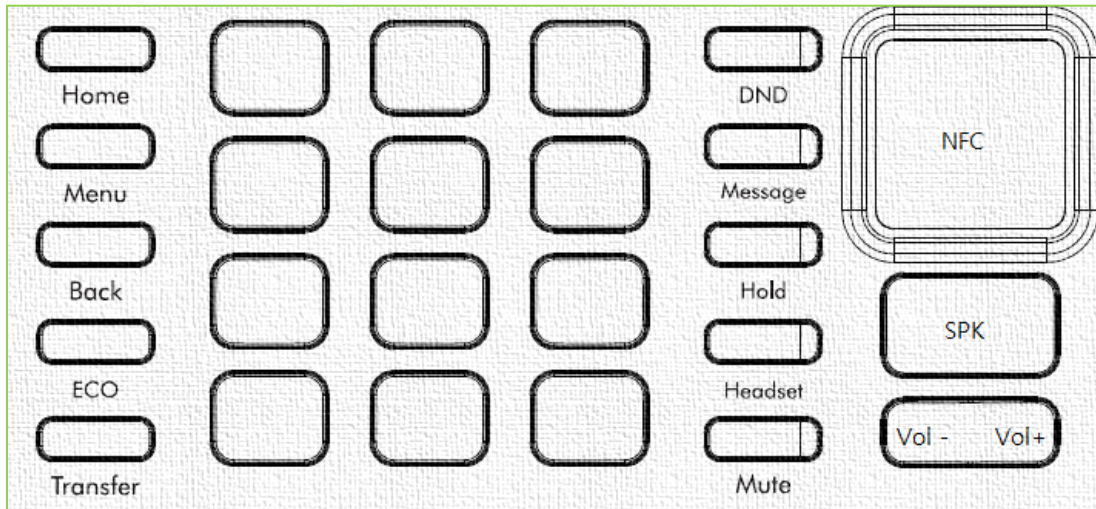


- *Pinch:* To zoom in and out on a picture, touch the screen with the thumb and forefinger and bring together or separate the fingers to shrink or enlarge a picture.



8.2 Function Buttons

LIP-9071 phone has three function buttons related to the Android OS as shown to the right. The function buttons are:



- *Home*: return to the Home screen.
- *Menu*: menu associated with the viewed screen. The menu displays in the bottom of the screen.
- *Back*: return to the previous screen. If a keyboard or numeric keypad is shown in the screen, touching the Back button closes the keyboard or keypad.
- *ECO*: turning off the screen.

8.3 Mini-Tab Menus

The Mini-tab has several menus structured by the Android OS. Three basic menu types are employed the screen Option menu, the touch and hold Context menu and general purpose popup menus.

8.3.1 Screen Option Menus (Option menu and Menu button)

Many screens, including the Launcher screens, have an Option menu that is accessed by touching the Option Menu icon in the upper right that is related screen. The menu, which is specific to a screen, displays along the bottom of the screen. A 'Option menu' selection is shown if there are more menu items then can be displayed comfortably and displayed in a popup list in the upper right.

Some screens, including the Launcher screens, have an Option menu that is accessed by pressing Menu button in related screen. The menu, which is specific to a screen, displays along the bottom of the screen.

8.3.2 Touch and Hold Context Menus

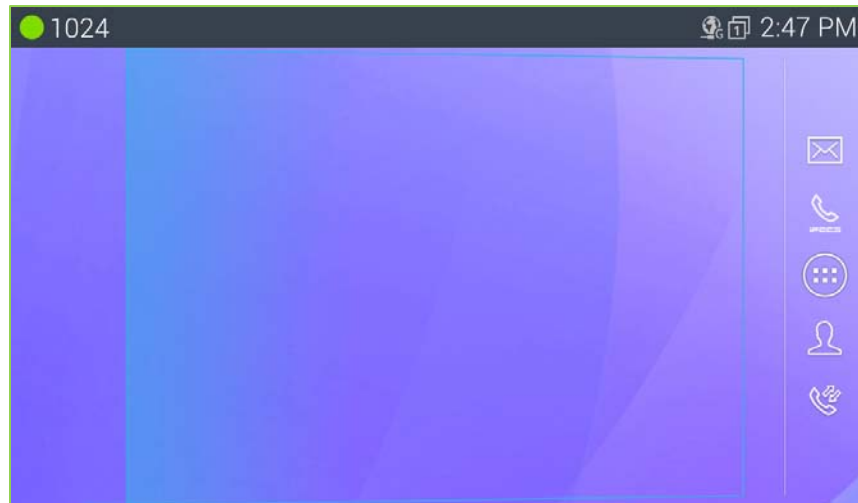
The Context menus impact an Individual item or record such as a contact, scheduled event, or song. These menus display in a popup in response to the 'Touch and Hold' gesture.

8.3.3 Dialogs and Popups

Dialog boxes are employed when a user entry is required such as a contact name. Popups are used to inform the user of potential issues or warning messages such as 'Bluetooth not connected'.

8.4 Launcher Screens

The Launcher is divided into five (5) screens where shortcut icons and widgets can be located. Selecting an application icon from one of the Launcher screens opens the application. The Launcher Home screen displays upon power-up. Other Launcher screens can be viewed employing the flick gesture. Each Launcher screen can be customized by adding, deleting or moving application icons and widgets.



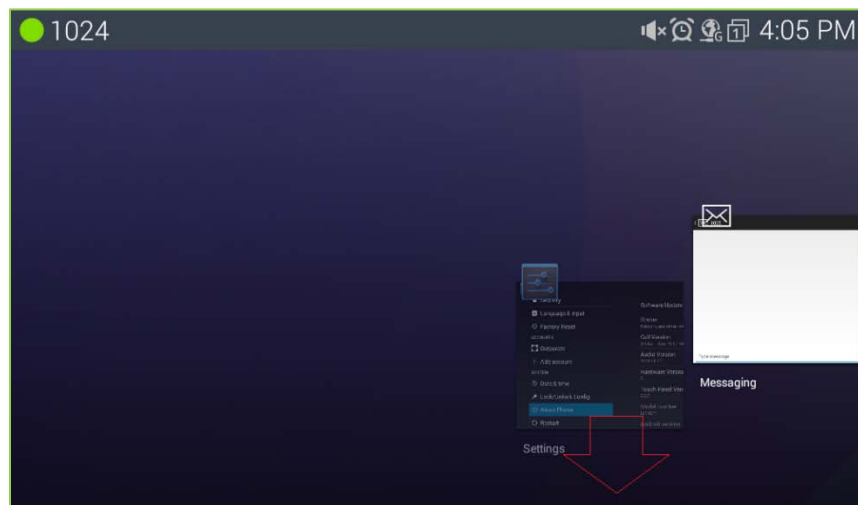
8.5 Home Screen

The Home screen, as with all the Launcher screens, is composed of the Notification and Status bar at the top of the screen, the main display area where application icons and widgets are displayed and the App Dock on the right. The dots on the bottom of the screen indicate the exposed Launcher screen, 1 to 5, with the center screen '3' as the Home screen.

8.5.1 Managing running App

On LIP-9071 Phone, press the Home button for about 2 seconds (long press). Users could use the Android thread manager to do stop an application.

Slide the running thread to the up or down to stop (remove) the application.

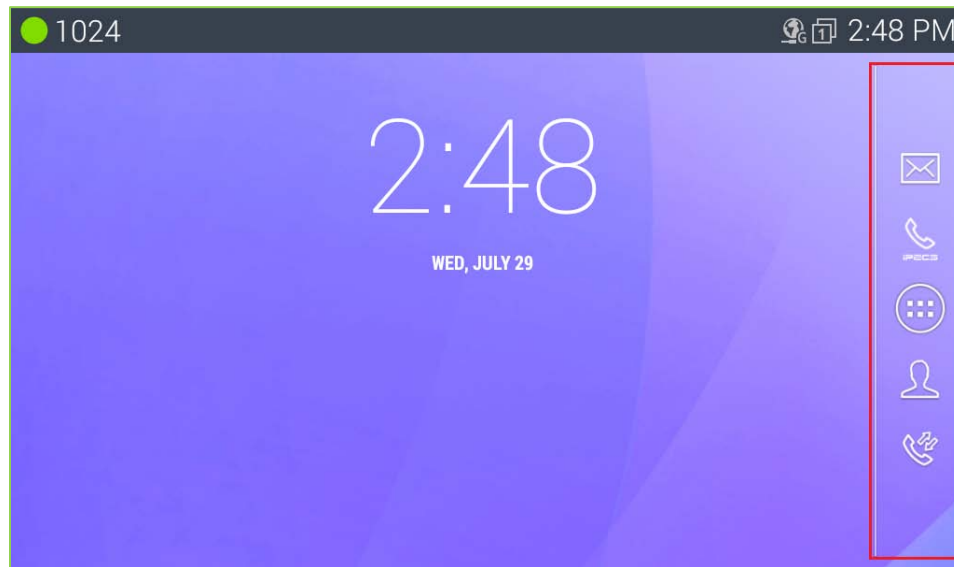


8.6 Application Dock

The Application Dock is scrollable and displays up to twenty dock locations for application icons. The scrollable App Dock appears on the right side of all the Launcher screens to permit quicker access to apps than moving across the Launcher screens. The first eight dock locations are available and the first four are fixed with icons for applications in LIP-9071 iPECS phone including:

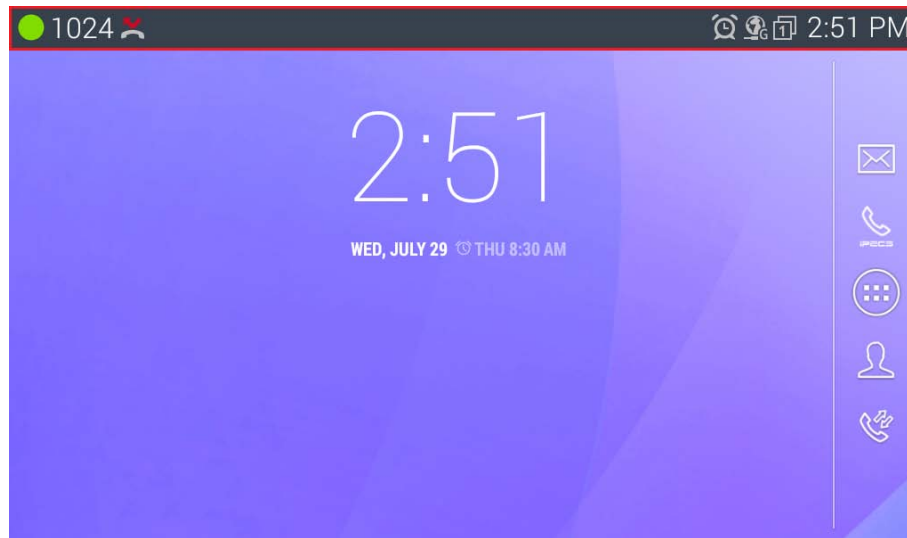
8.6.1 Managing the App Dock

The icon for any installed application can be added to the dock, deleted from the dock by dragging an icon to desktop or to the trash can. The number of available dock positions changed by put several icons at a place



8.7 Notification and Status Bar

At the top of the screen is the Notifications and Status bar. Icons to the right indicate the status of connections to the phone, the speaker and alarms. Icons to the left are notifications of new events such as a new SMS and missed call or ongoing events such as call forward or mute. Icons displayed for notifications and states are shown in the chart below in red box.



















When a Notification is given, a summary is displayed briefly along with the icon. The user can view details of the notification and, in most cases, respond from the Notifications panel. The panel is a scrollable list of all active notifications starting with ongoing events.























To view the Notification panel,

1. Touch anywhere along the Notification and Status bar to expose the Notification tab and drag the tab down to open the panel.
2. Scroll the list to review the notifications.
3. Touch a notification to respond.
4. Touch 'Clear' to delete all notifications. This does not delete on-going events such as Call Forward.
5. Touch the Back button to return to the previous screen.

8.7.1 Notification Icons

Icons	Description
	State of properly connected from the Call Sever
	State of being disconnected from the registered Call Sever
	IP Address collision between nodes
	Memory removed unexpectedly was not unmounted properly
	External memory being mounted
	New messages
	Missed calls
	Call is on line with other party
	Call is set to transfer
	Alarm Snooze
	Now music is playing
	Reminder of an upcoming event
	You have a new voice mail
	Headset is enabled
	Download file is exist
	Upload file is exist

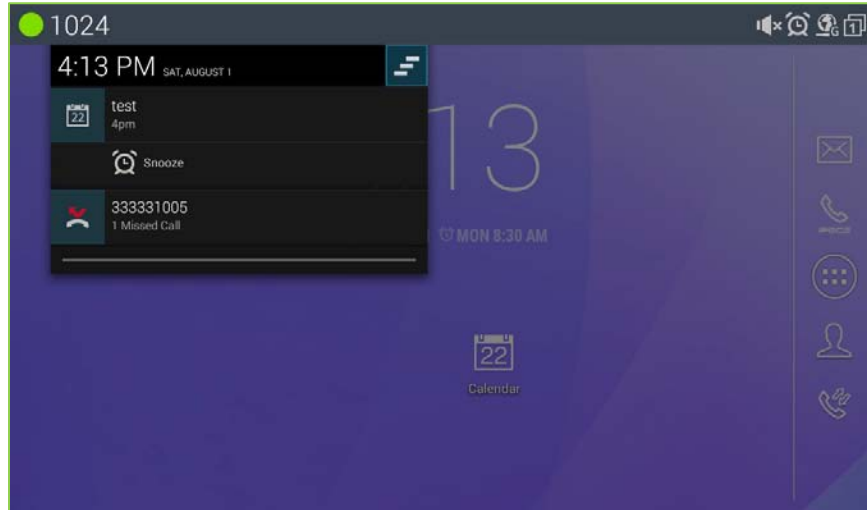
8.7.2 Status icons

Icons	Description
	Bluetooth is enabled, but not connected
	Bluetooth interface active and now it is in connection
	LAN connected and available
	LAN is connected but the internet is unavailable
	LAN is not connected properly
	Connected to a Wi-Fi network and working properly through wireless connection
	Network interface is selected as Wi-Fi network but not set parameter yet
	Wi-Fi network parameter settings are not properly completed
	Alarm clock set
	Speaker of speakerphone off, music and alarms still sound
	PC port has a connection
	Shows current flexible button location(up to 4 pages)
	VPN is enabled
	Phone is connected to a network through TLS
	VPN is enabled
	Phone is connected to a network using VPN
	VLAN is set as enable
	VLAN is enabled and working on the network, there is no problem
	802.1x security is set as enable
	802.1x security is active at network
	LLDP is enabled
	Phone is connected to a network using LLDP

Remark) WPA represents the security status of 802.1x.

8.7.3 Managing Status Bar

The status bar on the top of LIP-9071 screen provides visual notifications for the system settings and status, as well as quick access for important system settings. To access it, slowly slide down from the top to the bottom of the screen as the following figure shows.

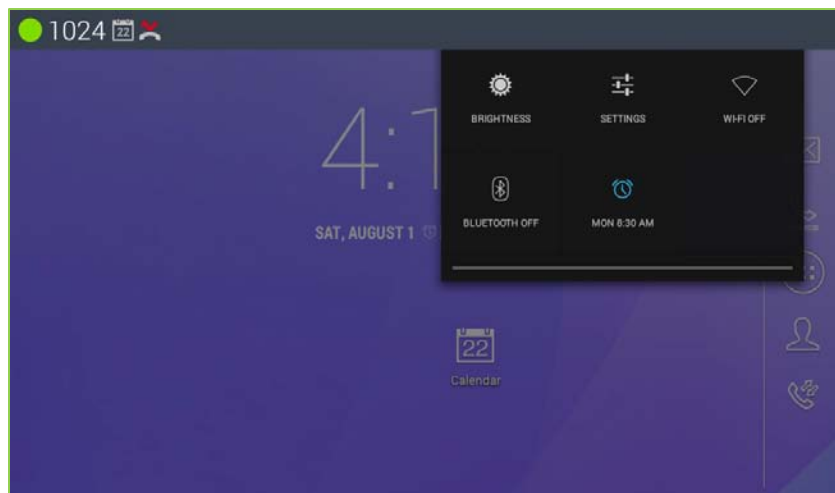


The running process will show up in the list. For example, the following items indicate a Calendar event, Alarm event and a Missed call.

- Tap on the notification message to view the details.
- Slide the notification message to left side to remove it.

8.7.4 Managing System Setting Status Bar

Slide down the top status bar and select **System Settings**. Users will see the following quick system settings.



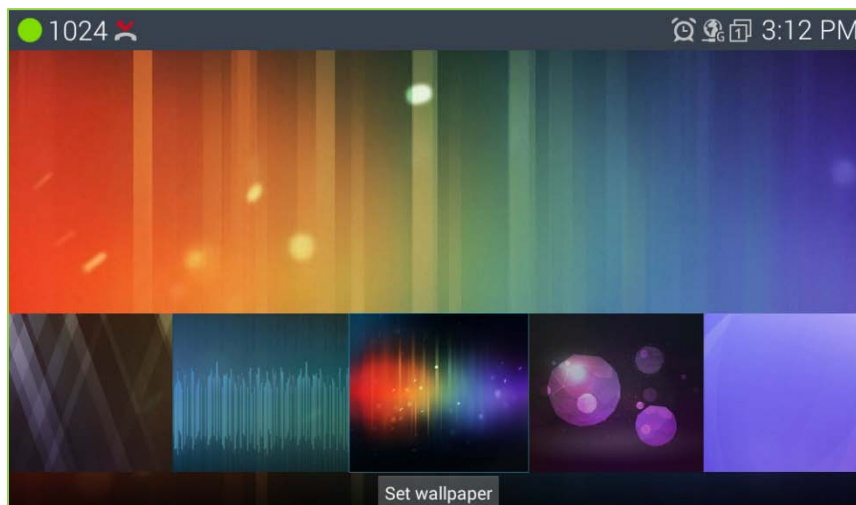
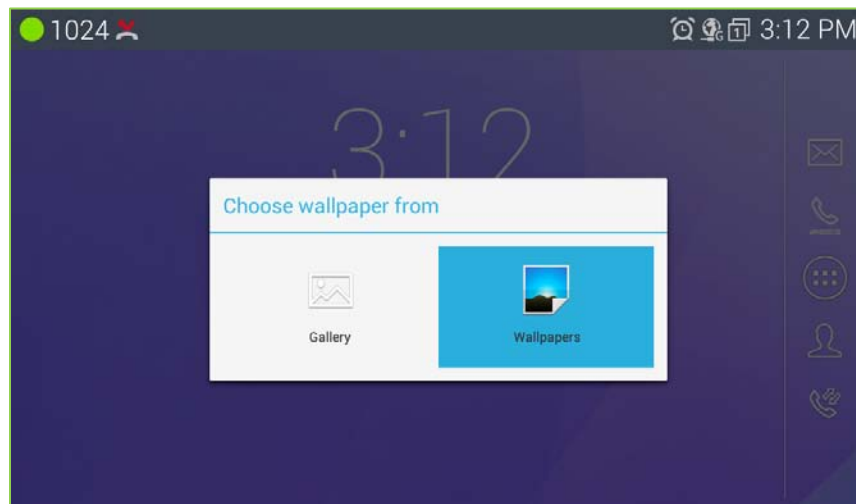
8.8 Customize the Launcher Screens

Each of the Launcher screens display application icons, widgets and shortcuts to a favorites, playlists, etc. The icons and widgets can be added to or deleted from the Launcher screens or repositioned on the screens. Also, the background wallpaper can be changed.

8.8.1 Change wallpaper

To add a shortcut icon or widget to a Launcher screen,

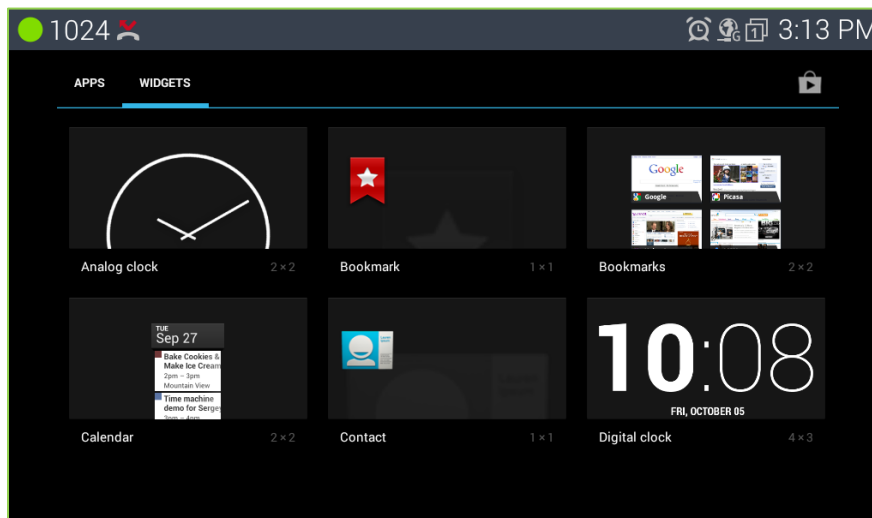
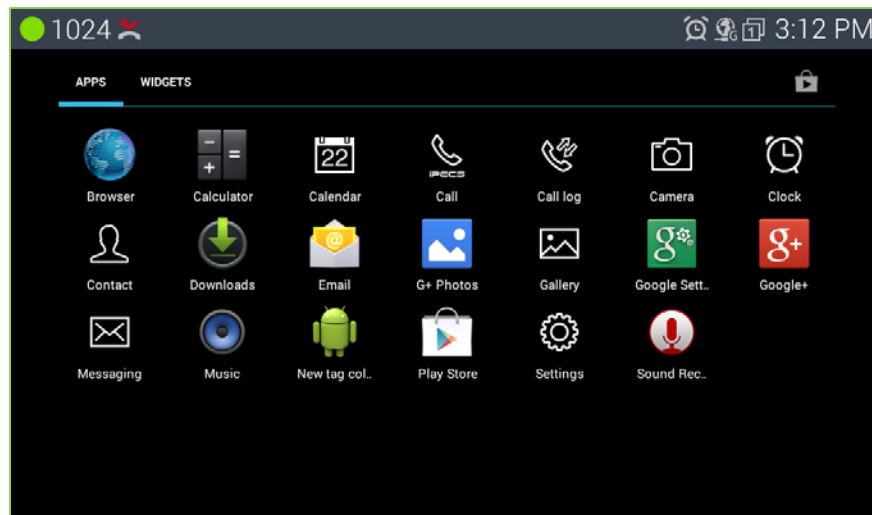
1. Touch and hold an empty spot on the screen or on the desired Launcher screen, press the Menu button and touch the Option menu button at the right side bottom of window and touch 'Wallpapers'.
2. Select the type of application from.
3. In the gallery, select the specific item to add and touch 'Set wallpaper'.



8.8.2 Adding Apps and Widget

To add a shortcut icon or widget to a Launcher screen,

1. Touch an app list button from the dock on the screen.
2. Select the type of item and hold (application shortcut icon, widgets).
3. Launch holding icons on the home screen.



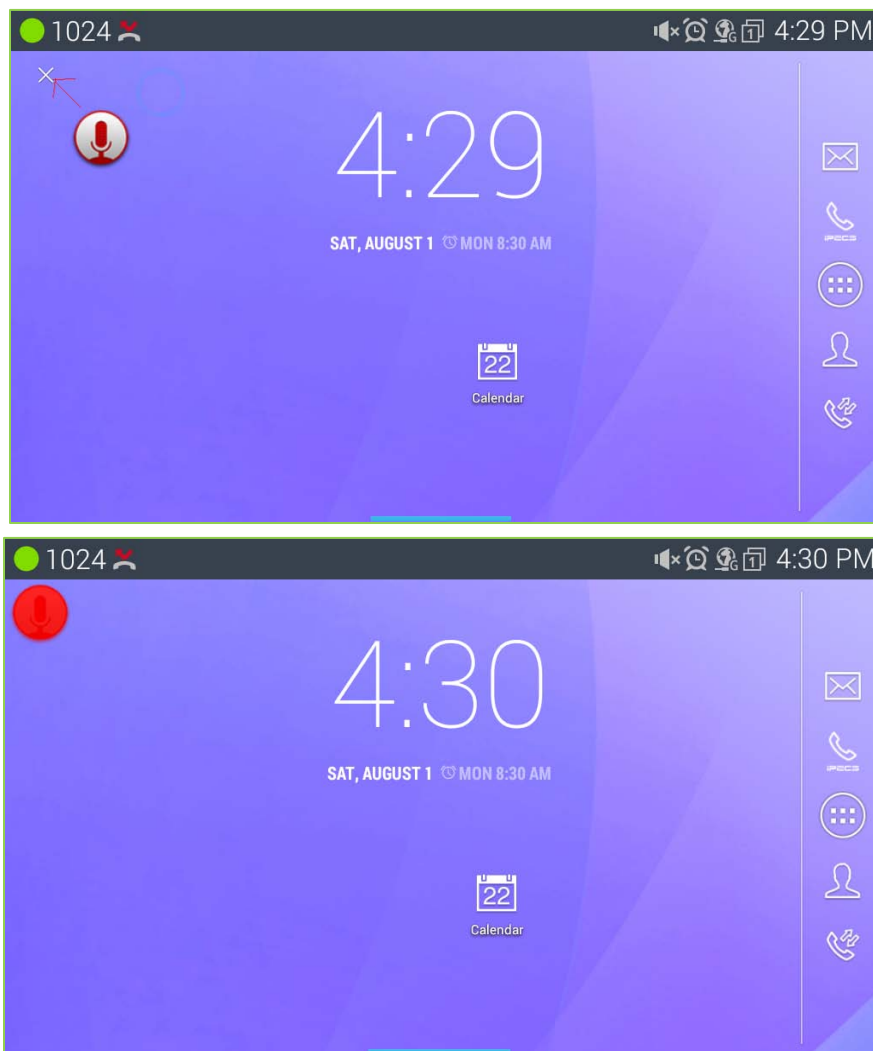
Note

- If there is no available space on a Launcher screen, the Add selection in the Options menu will be grey out.
- To place another widget or icon on the screen an existing icon or widget must be deleted.
- A picture taken with the Camera app can be used as wallpaper.
- Deleting an app or widget from a screen does not delete the application from LIP-9071 phone.

8.8.3 Reposition or Delete a Screen Item

To reposition or delete an icon or widget, use the drag and drop gesture.

1. Touch and hold the application until the Waste-can appears to the left.
2. Drag the icon across the screen, releasing the item at the desired location or on Waste-can to delete.
3. Release the item to reposition or delete it.



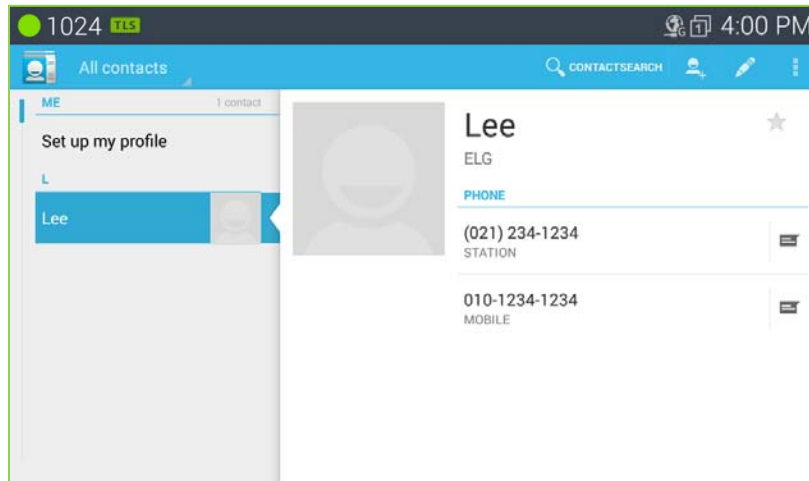
Note

- When an item is dragged to the Waste-can 'X' which will change to a red color.

9 Working with Contacts

With Contacts users have quick access to a database of up to 1000 commonly called contacts. The database can be searched and communication with a contact established. Users can manage the database, adding, deleting and editing contact information.

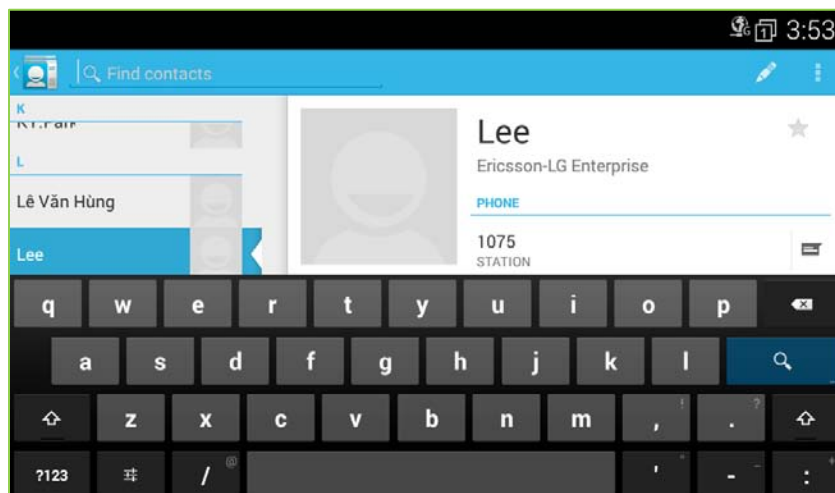
Contact information is stored in a VCard format that can be imported to or exported from an USB stick or an optional Bluetooth device.



The Contacts list is opened with the Contacts icon in the Apps Dock.

9.1 Searching the Contacts

The Contact list can be searched to quickly locate a contact for further activity such as calling the contact.



To search for a contact,

1. Open the Contact app by touching the Contact icon in the Apps Dock.
2. Touch the Search button in the upper right.
3. Touch the Search text box to display the soft keyboard.
4. Enter the search text. As characters are entered, matching records display.

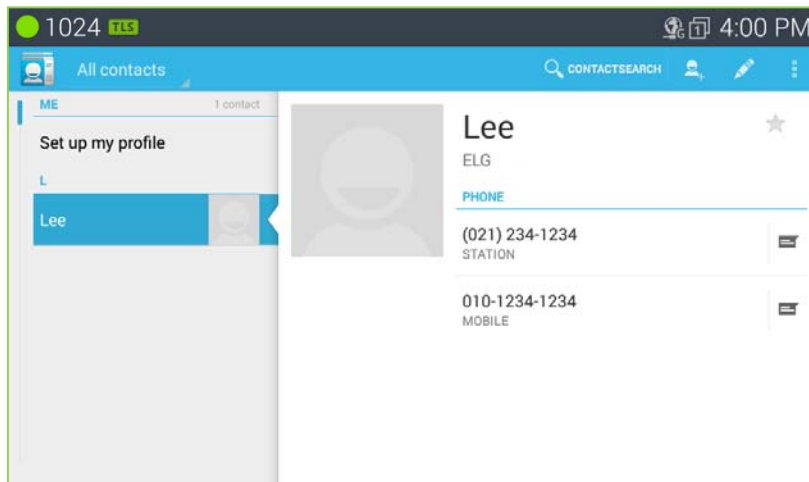
Once located, the Contact can be called or the Contact Option menu can be opened to manage the contact.

9.2 Communicating with Contacts

After locating a contact, the contact is selected (tapped) to display the options available for communicating with the contact. When an option is selected, the appropriate screen opens for the communication, the Call window or the SMS screen.

To use Contacts to set up a communication,

1. Open the Contacts list by touching the Contacts icon in the Apps Dock.
2. Locate and touch the desired contact on the left list.
3. Touch the icon on the right to send an SMS. Touch the Number on the right to call. The appropriate screen for the communication option selected opens.

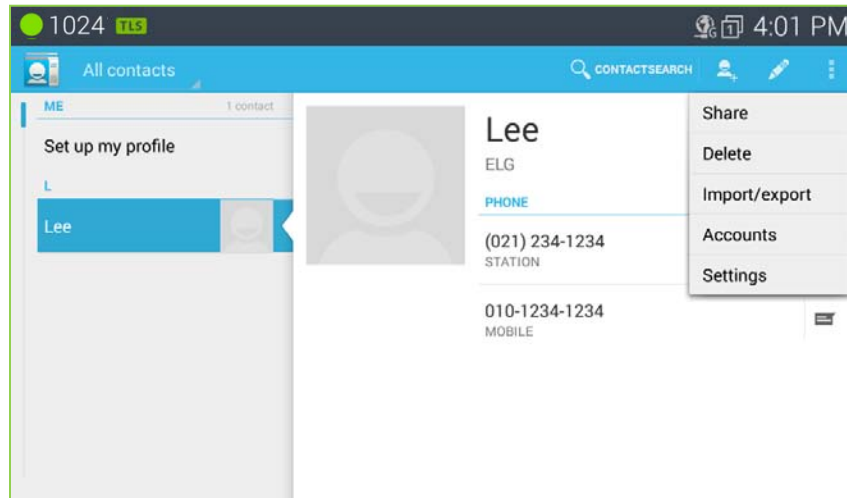


The Option menu for the Contact screen includes tools as listed below.

- *Share*: share the contact information with a connected Bluetooth device.
- *Delete contact*: delete the contact.
- *Import/export*: import or export contact via Bluetooth interface.
- *Accounts*: select options for the account of contact such as local or network server.
- *Settings*: select some options for the contact such as display option or delete all contact.

9.3 Managing the Contact Database

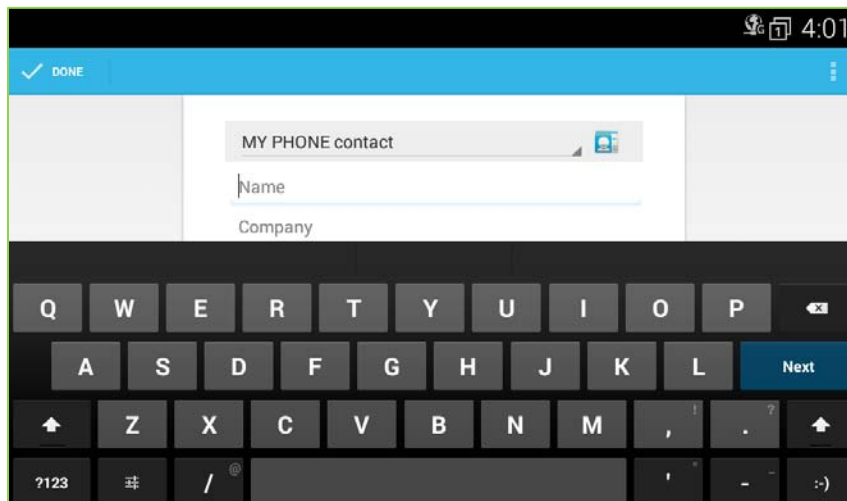
Contacts are managed through one of two menus. The Contacts list Option menu impacts the Contacts list as a whole and permits contacts to be added, imported or exported.

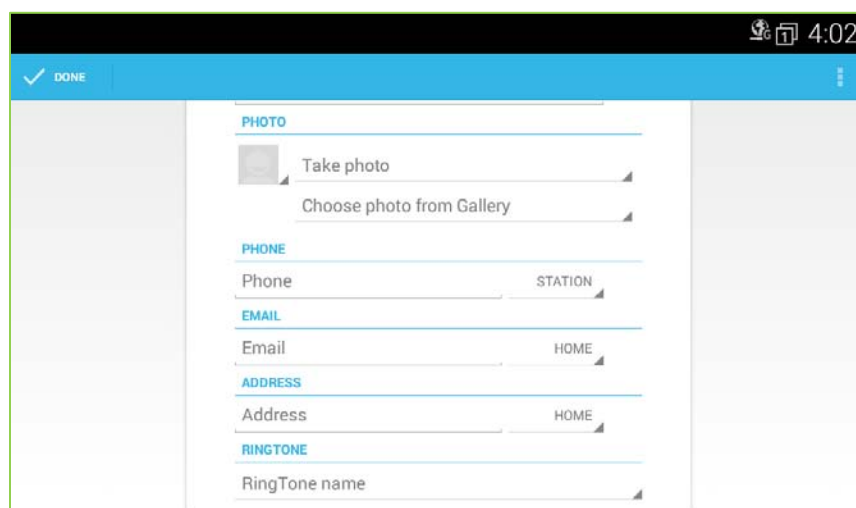


9.3.1 Adding a Contact

To add a Contact,

1. Open the Contacts list by touching the Contact icon in the Apps Dock.
2. Touch the new contact icon in the upper right.
3. Touch and complete entries in the 'New' contact form and select 'Done'. Use the flick gesture to scroll to additional entries in the 'New contact' form.



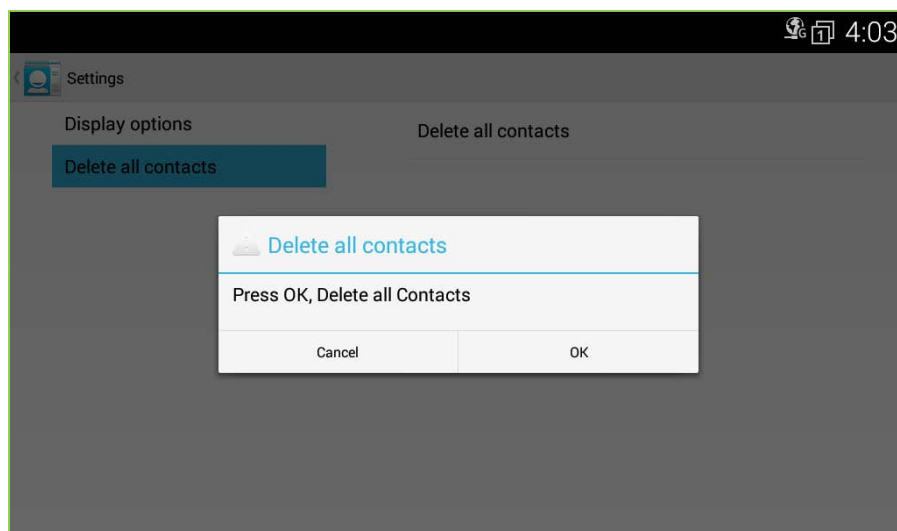


9.3.2 Delete all contacts

The Delete all contacts menu provides a way to delete all contact at once.

To delete all contacts,

1. Open the Contacts database by touching the Contact icon in the Apps Dock.
2. Touch the Option menu in the upper right.
3. Select 'Settings'.
4. Touch 'OK' to delete all contacts.

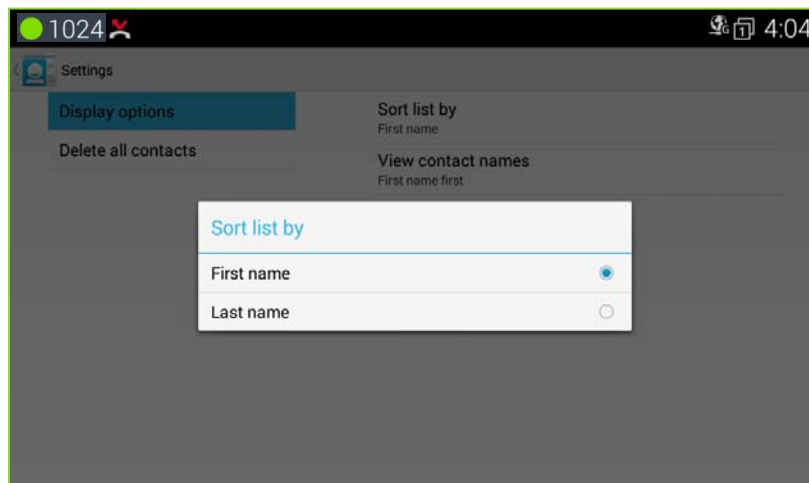


9.3.3 Display Options

The Display options determine the displayed records, the sorting options for the Contact list and the way names are displayed.

To change the Display options:

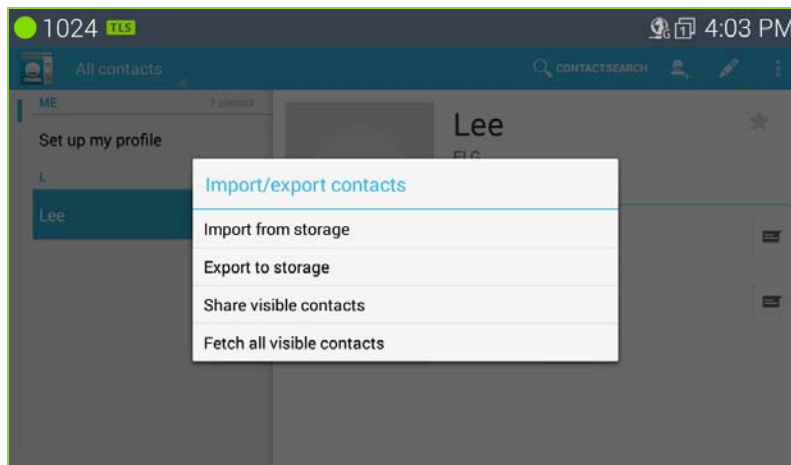
1. Open the Contacts database by touching the Contact icon in the Apps Dock.
2. Touch the Option menu in the upper right.
3. Select 'Settings' and 'Display options'.
4. Select the desired option for Sort list by or View contact names. The changed setting will be displayed on LCD as below.



9.3.4 Import and Export Contacts

Import from Storage

1. Open the Contact application.
2. Touch the Option menu in the upper right.
3. Select Import/Export.
4. Select 'Import from Storage'.
5. If multiple VCard files exist on the USB stick, identify the files to import. The files are imported to the Contacts database.

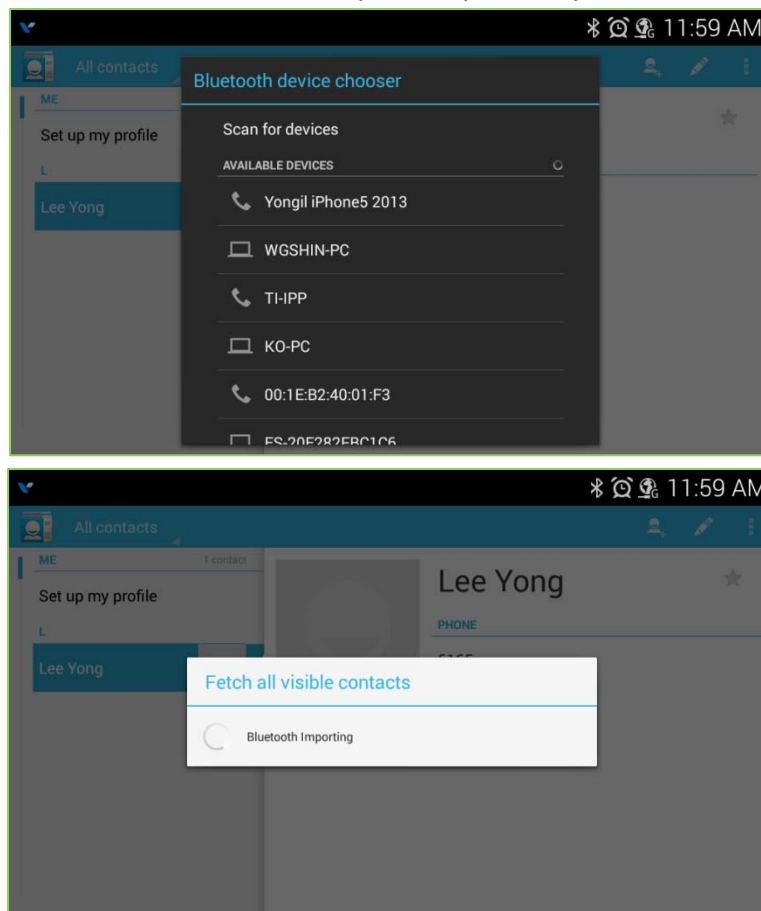


Export to storage

1. Open the Contact application.
2. Touch the Option menu in the upper right.
3. Select Import/Export.
4. Select 'Export to Storage'.
5. Touch Apply. The contacts are exported as a group VCard file with the vcf file extension. Files are named with the year, month and date with the vcf extension.

Import with Bluetooth - Fetch all visible contacts -

1. Open the Contact application.
2. Touch the Option menu in the upper right.
3. Select Import/Export.
4. Select 'Fetch all visible contacts'.
5. In the popup, select 'Import to Storage' (the USB stick) or the Contacts database. The phone scans for and displays a list of nearby Bluetooth devices.
6. Select the desired Bluetooth device for the import, the phone imports the V-card files.

*Export with Bluetooth - Share all visible contacts -*

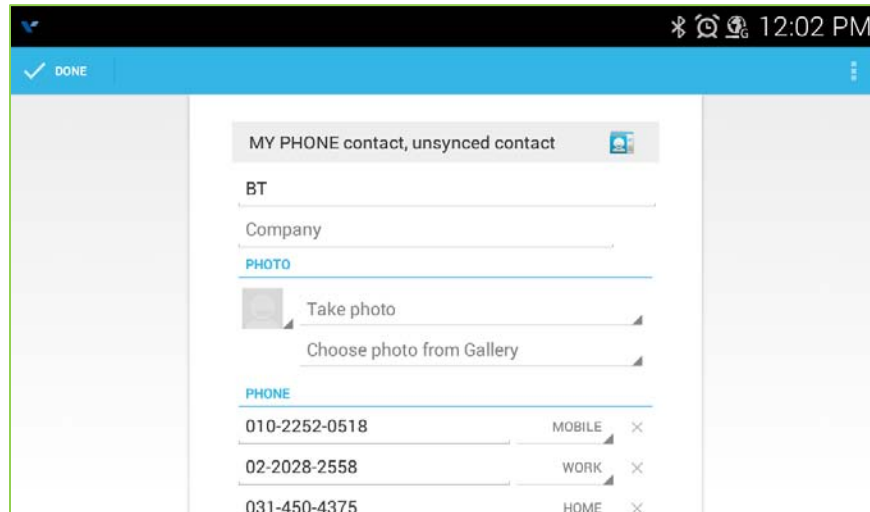
1. Open the Contact application.
2. Touch the Option menu in the upper right.
3. Select Import/Export.
4. Select 'Share all visible contacts'. The phone scans for and displays a list of nearby Bluetooth devices.
5. Select the desired Bluetooth device to receive the export, the phone exports the V-card files.

9.4 Managing a Contact Record

9.4.1 Edit Contact Information

To edit the information for a Contact,

1. Open the Contacts list by touching the Contact icon in the Apps Dock.
2. Touch the desired Contact.
3. Touch the Edit icon in the upper right.
4. Modify the desired information and Touch DONE in the upper left.



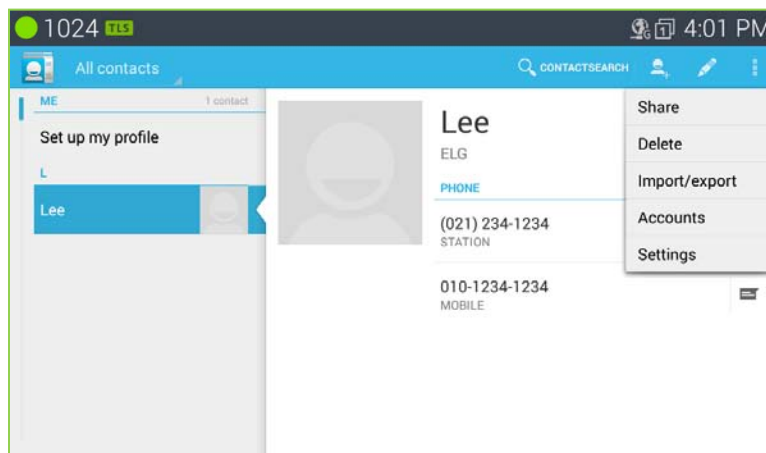
Note

- Returns to the previous screen by pressing 'Back' button.

9.4.2 Deleting a Contact

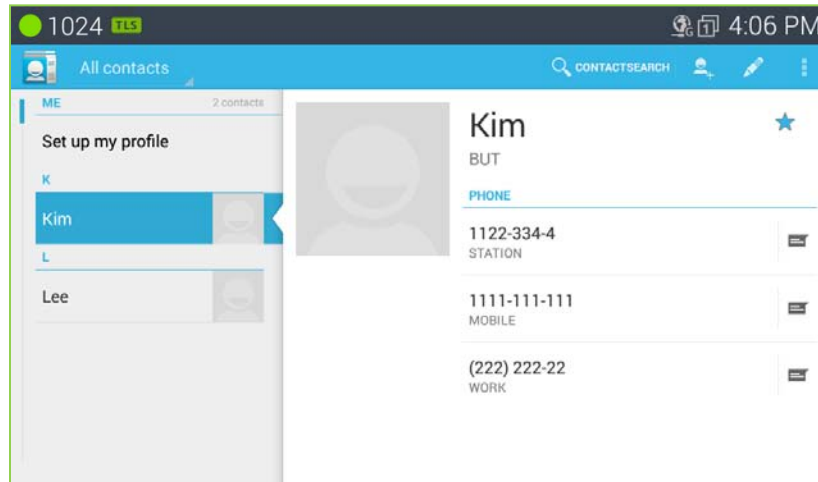
To delete a Contact,

1. Open the Contacts list by touching the Contact icon in the Apps Dock.
2. Touch the desired Contact.
3. Touch the Option menu in the upper right.
4. Select 'Delete'.



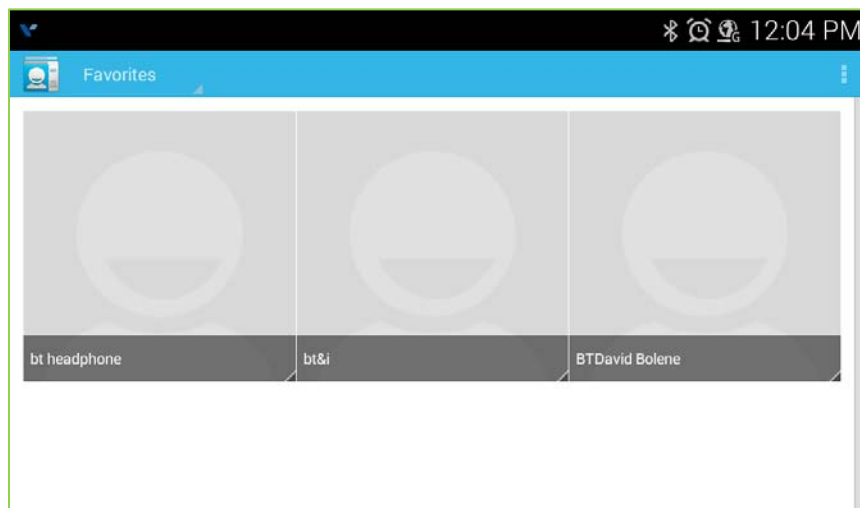
9.5 Favorites

When a large number of Contacts are entered in the database, it can be helpful to have a smaller list of Favorite contacts for quicker access. Contacts marked as a favorite, display when the Favorite tab of the Call Log/Contact screen is selected. The list shows the Favorite Contacts sorted alphabetically followed by a listing of recent calls.



To assign a Contact to the Favorites list,

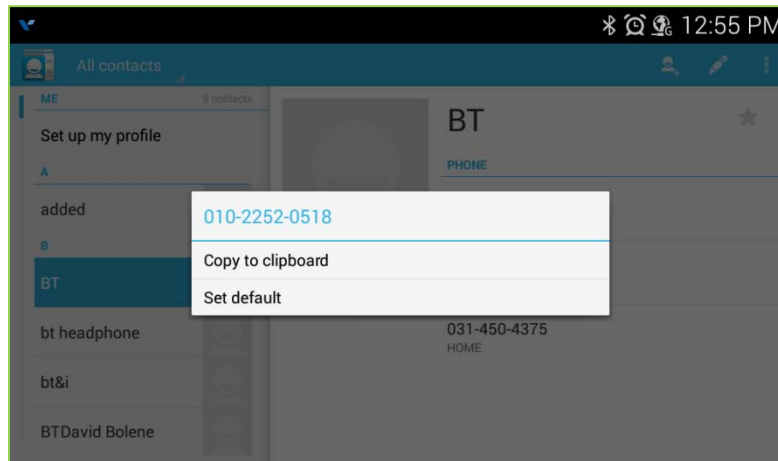
1. Open the Contacts list by touching the Contacts icon in the Apps Dock.
2. Locate and touch the desired contact.
3. Touch the star icon to the right of the Contact name to toggle the Favorite status of the contact. The star icon is changed to blue color for a favorite.



9.6 Miscellaneous Contact Options

9.6.1 Contact's Default Number

The Contact's default number is used when the contact record is touched and held to place a call. The default number, which can be changed, is marked with a check in the Contact's detailed information.



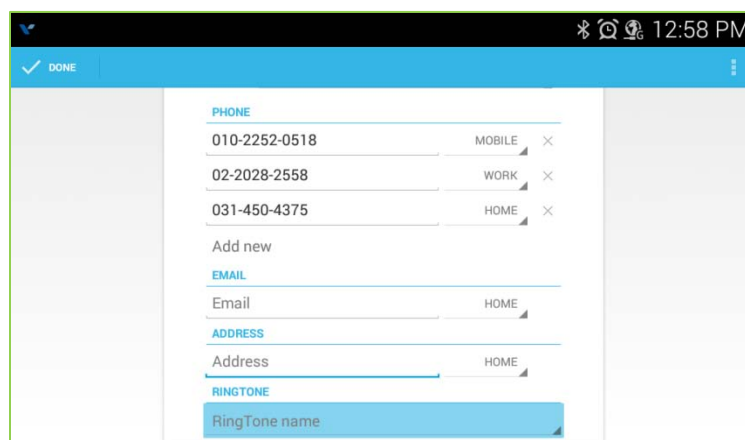
To change the default number,

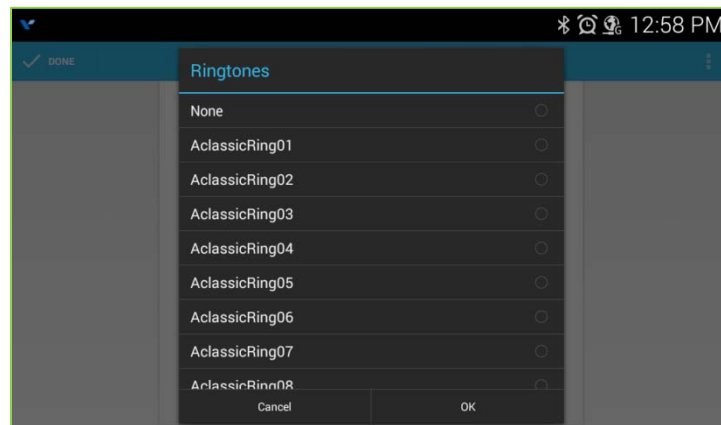
1. Open the Contacts or Favorites list.
2. Touch the name of a contact in the list to view the Contact's details.
3. Touch & hold the phone number to use as the default number.
4. Touch 'Make default number' in the Context menu.

9.6.2 Contact Ringtone

The ringtone received when a call from the contact is received can be customized allowing the user to quickly identify the calling party. To set the ringtone for a Contact,

1. Open the Contacts list by touching the Contacts icon in the Apps Dock.
2. Locate and touch the desired contact.
3. Touch the Edit icon.
4. Select RINGTONE.
5. From the scrollable list of ringtones that opens, select the desired ringtone, a sample of the ringtone plays.
6. Touch Apply.

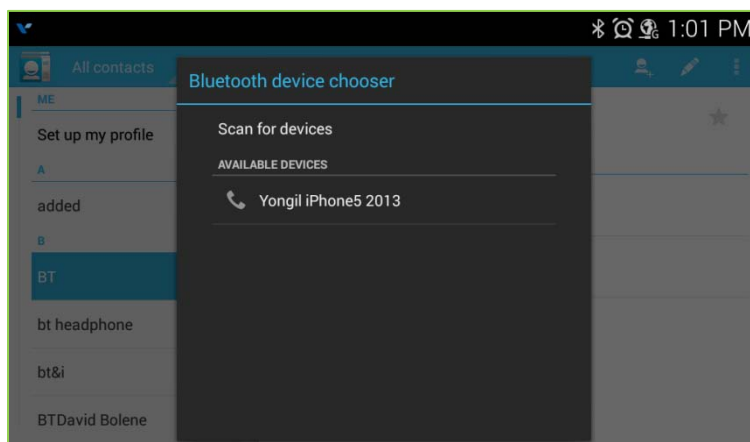
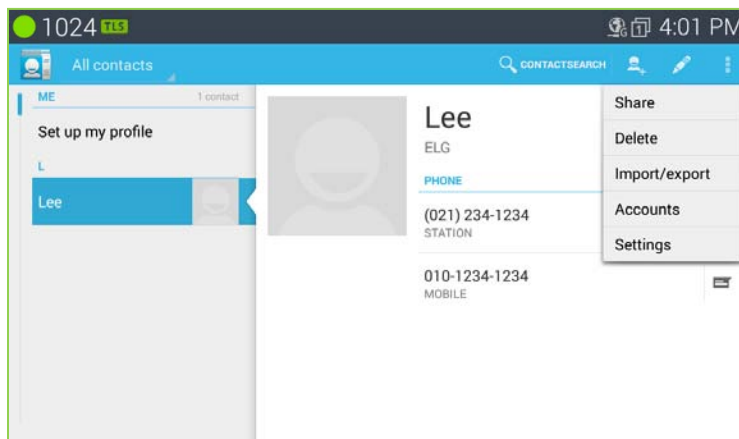




9.6.3 Share a Contact

A Contact record can be shared with an external device employing Bluetooth. The record is sent as a Vcf file with the contact's first and last name as the file name (John Smith.vcf). To share a contact,

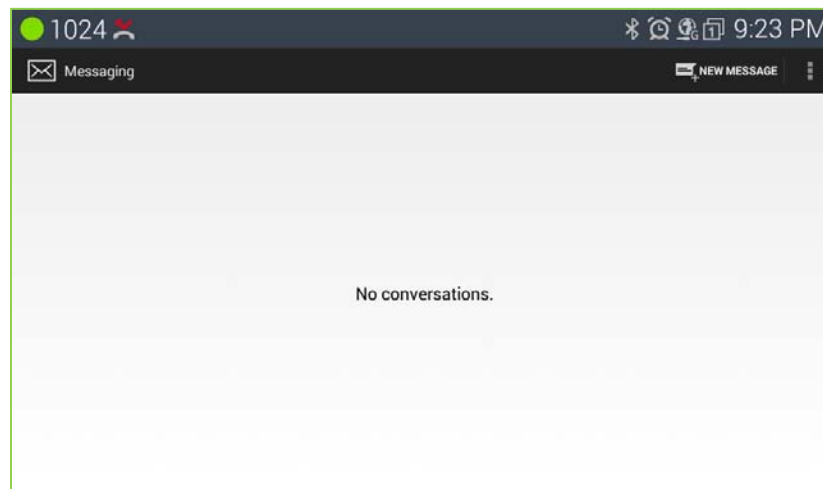
1. Open the Contacts list by touching the Contacts icon in the Apps Dock.
2. Touch the desired contact.
3. Touch the Option menu in the upper right.
4. In the menu, selecting 'Share' displays the Bluetooth device screen.
5. Select the Bluetooth device to receive the record, the record is sent.



10 Using Message (for iPECS station only)

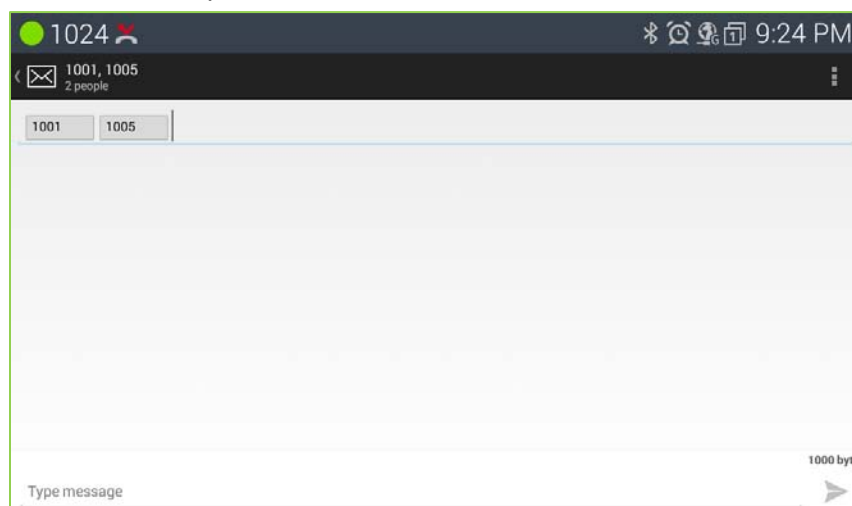
LIP-9071 phone incorporates an iPECS station SMS application so users of the phones can send and receive short text messages to other iPECS phone(station) users only. Each message can be a maximum of 80 characters. With LIP-9071 phone messages are stored as a conversation or thread between two specific users and linked for display purposes. That is, all the messages sent to or received from a user or group of users are shown as a single thread in the Messaging screen. Up to 100 threads with up to 100 messages each can be stored.

The Messaging screen is shown when the Message icon in a Launcher screen or the message button is pressed, or when a 'New' message notification is selected from the Notifications screen.



10.1 Send a Message

From the Messaging screen or from the Messaging screen Option menu, see below screen shot section, a new message can be prepared and sent to up to 4 users.



To send a message,

1. From the Messaging screen select 'New message' from the Option menu. The Compose screen appears.
2. Touch the 'To' entry box, a number pad appears.

3. Enter the receiving station number.

Note for a receiver that is a Contact, the QWERTY keyboard can be displayed by touching 'ABC' on the number pad, and then enter the name. Matches are displayed for selection as characters are entered.

Repeat steps 2 and 3 for up to four (4) receivers.

Touch the 'Type message' entry box and enter the message. As characters are entered, the number of bytes shown to the right of the box is reduced to provide an indication of the remaining characters allowed.

After complete message typing, touch Send by touching the Option menu in the upper right. The Messaging screen displays with the new message added to the appropriate thread.

Prior to sending the message, the message can be edited, or smile faces can be added.

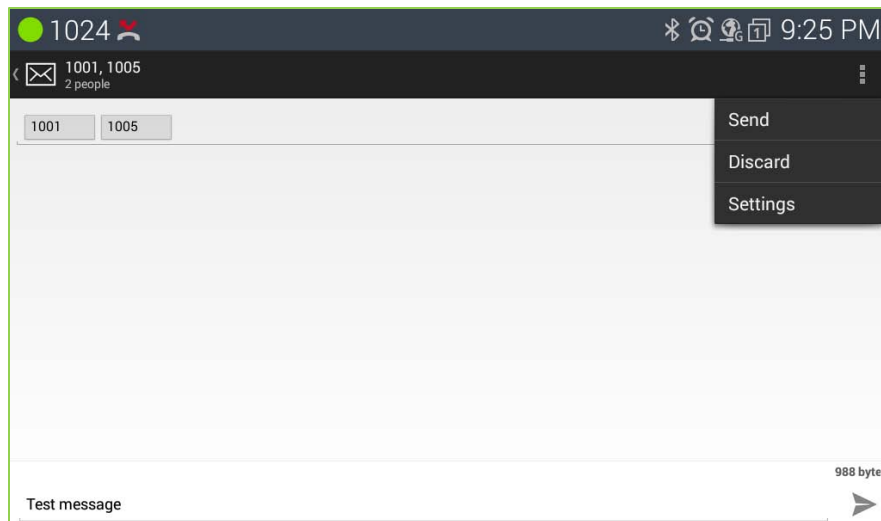
Note

- To hide the keyboard, press the Back button.

10.2 Compose Screen Options Menu

The Compose screen has an Option menu with the following tools.

- *Send*: send the message.
- *Discard*: erase the message and return to the Messaging screen.
- *Settings*: move to Message setting screen.

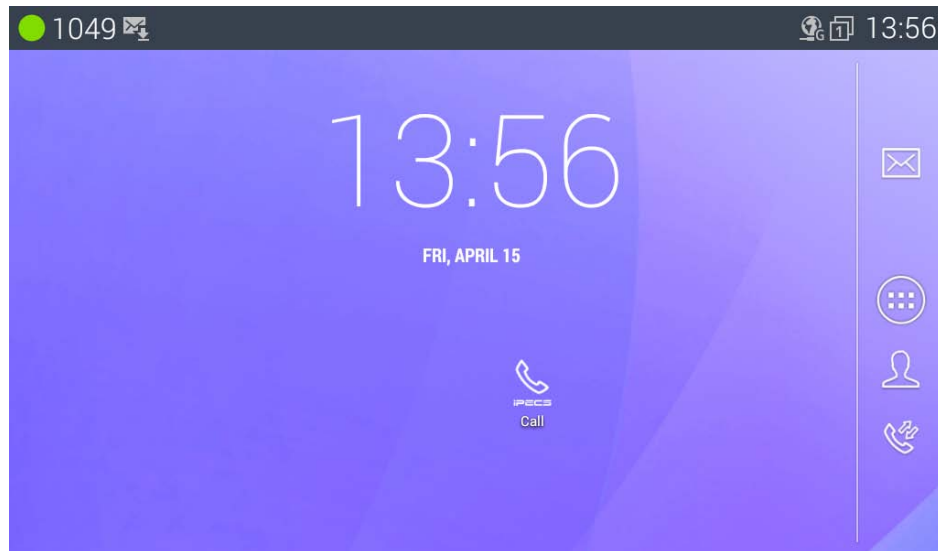


10.3 Receive a Message

When a new message arrives at system, the available SMS ready icon appears in the Notifications bar.

When user drags down notification bar and select available message icon then the SMS icon appears in the Notifications bar along with the sender and part of the message. To view the full contents of the message,

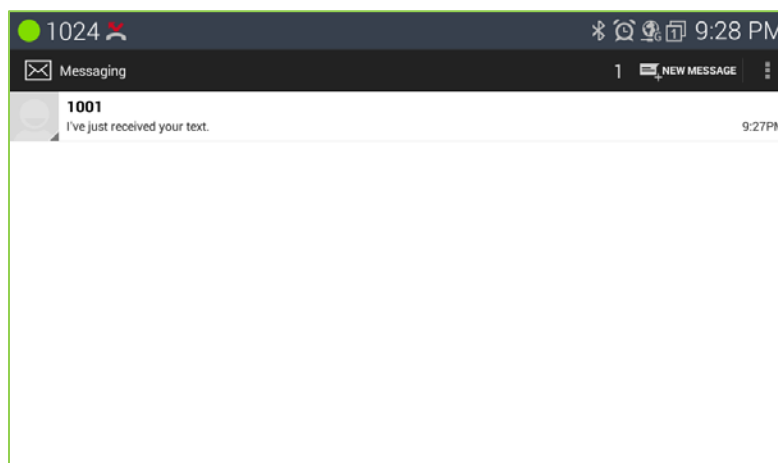
* The available SMS notification icon shows only when phone operate with iPECS Unified systems.
And the icon will be shown as below screen shot.



1. Drag down the Notifications bar to expose the Notification detail and select the SMS notification.
Or Select the SMS icon from a home screen or application list screen.
2. Screen will be moved to list of message at SMS application
3. Touch the highlighted thread.

The most recent messages in the thread are displayed and previous messages can be viewed with the swipe gesture. The sender of the message is identified followed by the message. Below the sender and message, the time received is indicated.

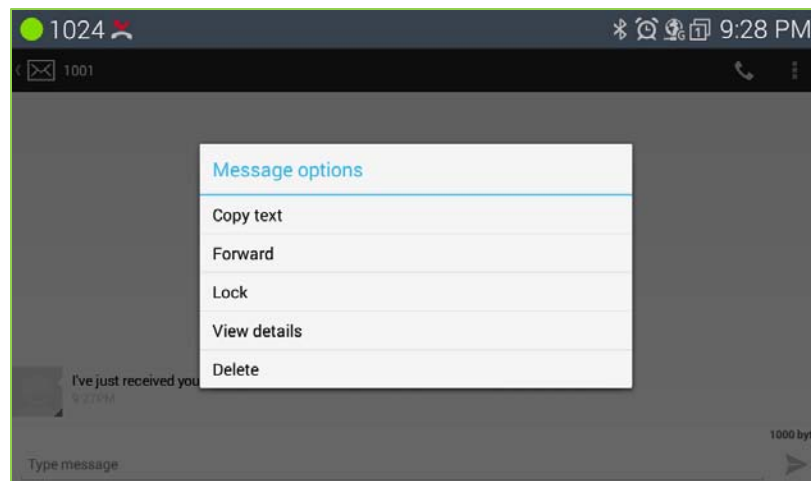
The thread screen includes the 'Type message' box so that the user may quickly compose a return message.



10.4 Message Options

Several actions can be taken relative to a message employing the Context menu. To view the menu, touch and hold a message. In the menu, the following tools are available.

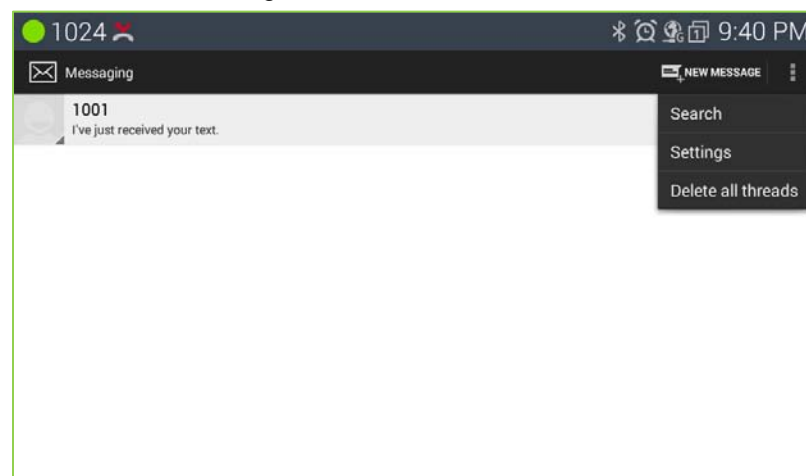
- *Copy Text*: copy a selected message, enter the 'To' user and send.
- *Forward*: send a copy of the message to another user.
- *Lock*: lock a message to avoid accidental deletion. If a message is locked, a pad lock icon appears to the right of the message record. To unlock a message, touch and hold the message record.
- *View details*: view details including date and time sent or received and receiver or sender.
- *Delete*: delete the message. If the message is locked, an alert is provided before deletion. Also if the message is to/from a user that is not a contact, the user can be added to the Contacts database before deletion of the message.



10.5 Messaging Screen Options Menu

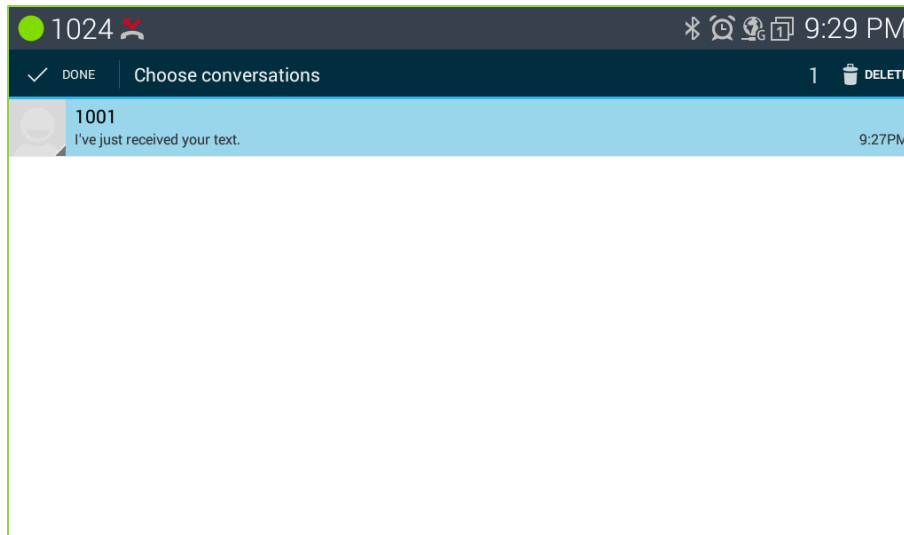
The Messaging screen Options menu is displayed when the Option menu is touched while viewing the Messaging screen. The Options menu includes the following tools.

- *Search*: searching text or string matches in the message thread.
- *Settings*: set message retention and notifications.
- *Delete all threads*: delete all messages in a thread.



10.6 Deleting a Message Thread

All messages in a thread can be deleted. When a thread is deleted that contains a locked message, the delete confirmation includes a check box to delete the locked messages as well as the unlocked messages in the thread. In addition, if the sender/receiver is not a contact, a popup menu appears to allow the sender/receiver to be added to the Contacts database.

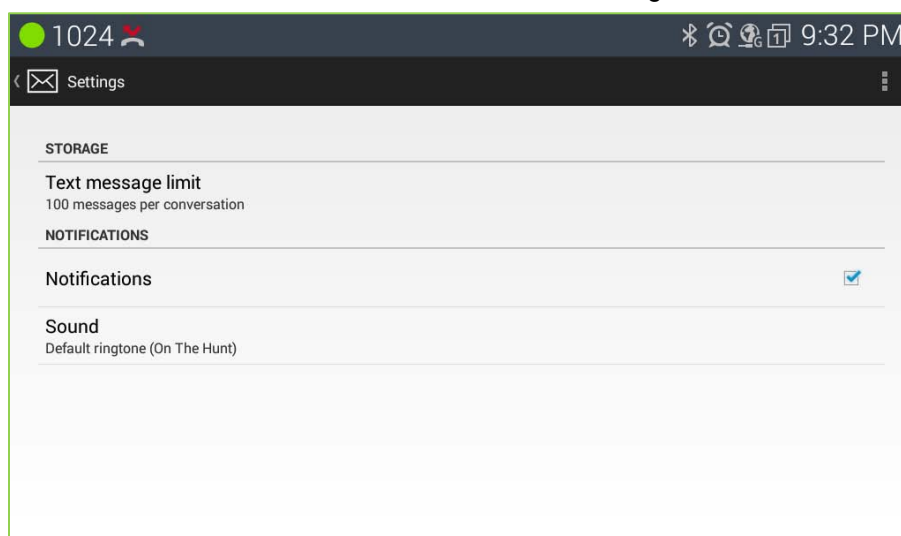


* Old messages are deleted automatically when the message limits are reached.

10.7 Messaging Settings

The Settings for the Messaging screen includes items for managing the message retention and activating new message notification.

- *Text message limit*: set the maximum number of messages for each thread, 1 to 100.
- *Notifications*: check the box to receive new SMS message notifications in the Status bar.
- *Sound*: set the alarm sound when it receives new SMS message notifications in the Status bar.



11 Using NFC

Near field communication (NFC) lets you get things done just by tapping your phone on NFC touch points – quickly change your phone settings, for example, or open a website featured on an advertising poster without typing the Web address, and lots more. Users can use an Android Beam function and a tag with Ndef format defined by NFC forum (<http://nfc-forum.org/>). NFC is very intuitive user interface. Therefore users can easily use many features with a NFC enabled smartphone or a NFC tag.

11.1 General NFC features

Beam screen content

You can beam a web page, video or other content from your screen to another device by bringing the devices together (typically back of smart phone).

Make sure both devices are unlocked; other devices support Near Field Communication (NFC), and have other devices NFC and Android Beam turned on. (LIP-9071 support NFC and Android beam always)

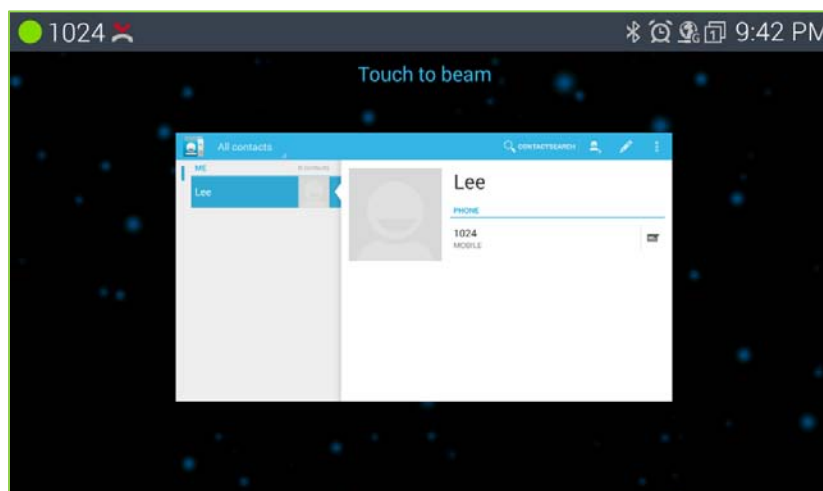
Normally follow these steps:

1. Open a screen that contains something you'd like to share, such as a Browser page, YouTube video, or place page in Maps.
2. Move the back of your mobile phone toward the front of the tagging area on LIP-9071 device.
3. When the devices connect, you hear a sound, the image on your screen reduces in size, and you see the message Touch to beam.
4. Touch your screen anywhere.

Your mobile device displays the transferred content. Or, if the necessary app isn't installed, Android Market opens to a screen where your mobile phone can download the app.

In case of Android Beam function, users can transfer contact, web link, photo and movie file to the terminal in the same way as with the smartphone. At this time, the terminal needs a Bluetooth dongle for transferring large file.

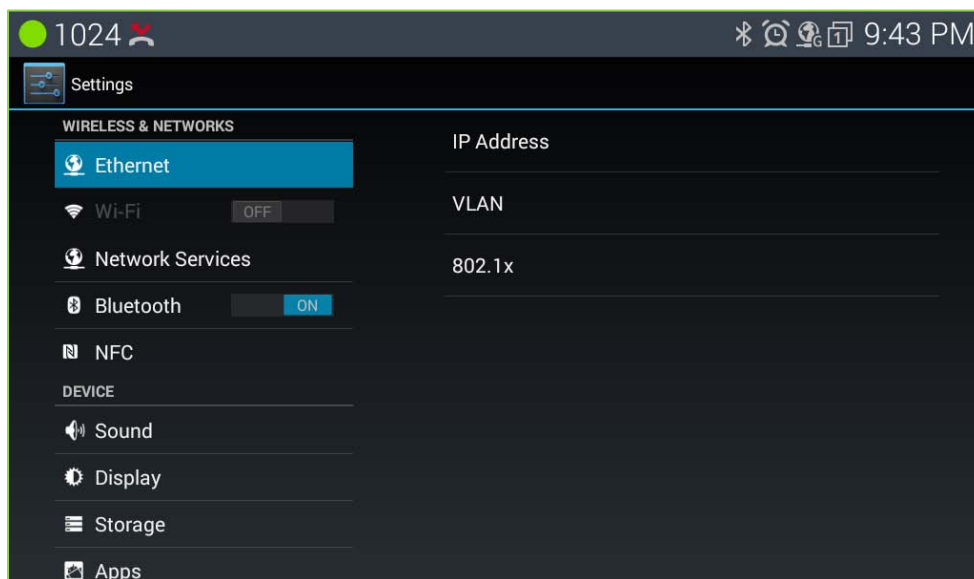
A NFC tag complied with NFC forum is available to this terminal. User can use a general NFC tag, such as contact, web link. The following screen shows when tagging a NFC tag with contact information.



12 Settings

The System Settings menu, which is accessed with the Setting icon in the Dock or the Home screen option menu, contains items that have a global effect on operation of LIP-9071 phone. In general, your administrator should configure the Settings. The settings include:

- ✓ *Ethernet*: assign characteristics of the LAN
- ✓ *Wi-Fi*: assign characteristics of the Wireless network
- ✓ *Network Services*: provide VPN and LLDP and Ping test features.
- ✓ *Bluetooth*: assign characteristics of the Bluetooth interface.
- ✓ *NFC*: provide characteristics of the NFC Tag erase feature.
- ✓ *Sound*: adjust audio level, assign incoming call ringtone and ringtone for Notifications.
- ✓ *Display*: adjust display brightness, enable animations and configure the screen time-out.
- ✓ *Storage*: view storage of built-in memory and external USB stick, manage USB and unmounts the USB.
- ✓ *Applications*: manage and control applications, and view storage use.
- ✓ *Location access*: set the location of the phone.
- ✓ *Security*: lock the screen, allowing only outgoing calls from the phone.
- ✓ *Language & Input*: select language, select keyboard type and configure Asian keyboards
- ✓ *Factory reset*: return the phone to factory default and erase contacts and all user data from memory.
- ✓ *Add account*: add individual account information
- ✓ *Date & Time*: configure Network Time Protocol server.
- ✓ *Lock/Unlock Config*: set the menu as locked or unlock with password setting.
- ✓ *About phone*: phone version display and update software.
- ✓ *Restart*: restart the device.





Note

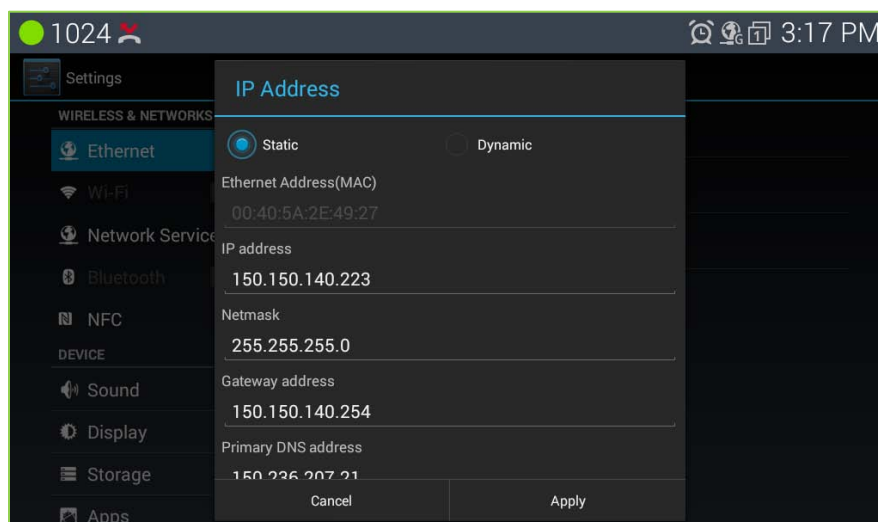
- You may need to scroll down the screen to see all selections.

12.1 Ethernet

Ethernet connection is set on as DHCP by default. If you would like to use Ethernet connection for network access, please make sure the Ethernet cable is plugged in to the LAN port on the back of LIP-9071.

The Ethernet setting includes:

- *IP address*
- *VLAN*
- *802.1x*



The Ethernet settings permit configuration of LIP-9071 phone network interface and the local PC connection. Configurable characteristics include:

- *IP Address setting*: select the type of addressing (Static or Dynamic), for Static addressing, configure the IP address, subnet and default Gateway address, also assign DNS server address.
- *VLAN setting*: configure Virtual LAN id, and priority for the LAN and PC ports.
- *802.1x setting*: assign the Id and password for 802.1x authentications.

Note

- On the right side of the Notifications bar an icon, as below, displays showing the settings that are enabled and active. If enabled but not active, the icon is colored in grey.

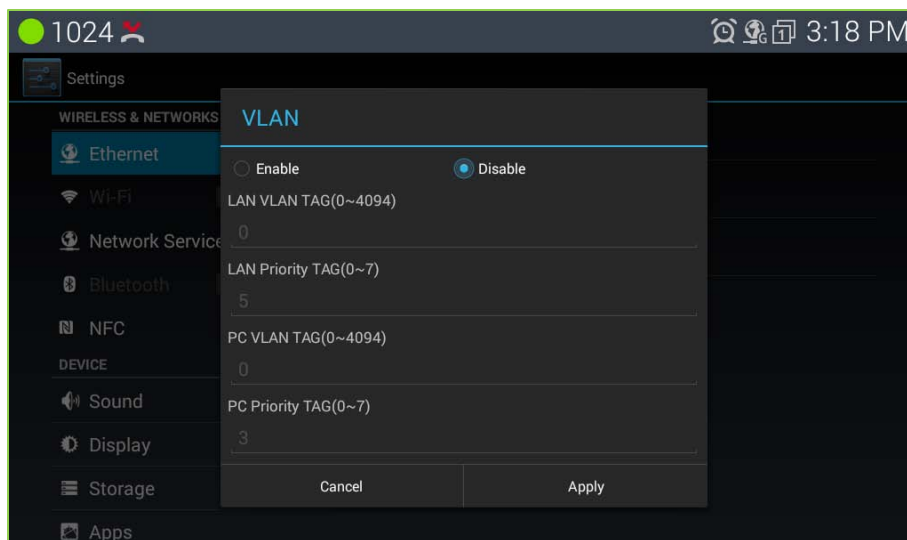
12.1.1 IP address

To configure Ethernet IP address settings on LIP-9071,

1. Go to Settings → Ethernet → IP address
2. Select address type one of DHCP or Static mode.
3. For DHCP, just save the setting and LIP-9071 can be able to get IP address from the DHCP server in the network.
4. For static mode, enter IP Address, Subnet Mask, Default Gateway, DNS Server and Alternative DNS server to correctly connect to network.

12.1.2 VLAN

VLAN settings define the Ethernet frame priority and VLAN identification in accordance with IEEE 802.1p/Q standards. Separate VLAN tags are assigned for the IP Phone PC port and the LAN (voice) port. With a VLAN Id assigned, only frames with the assigned Id are accepted, and all and voice frames sent by LIP-9071 include the VLAN Id assigned to the LAN port.



The LAN VLAN TAG assigns the identification for Ethernet frames for the IP Phone voice port including signaling and voice payloads. LAN Priority TAG establishes the priority for Ethernet frames from the LIP-9071 voice port including signaling and voice packets.

The PC VLAN TAG assigns the identification for Ethernet frames for the IP Phone PC port. The PC Priority TAG establishes the priority for Ethernet frames for the IP Phone PC port.

Setting the LAN VLAN TAG or PC VLAN TAG to zero(0) disables VLAN framing and the IP Phone uses only standard Ethernet frames for each port.

The top status bar shows the VLAN indication icon with green color when VLAN is enabled and working well on the network.

For proper operation, other network elements (LAN switches and default gateway) must support and be configured with proper VLAN parameters.

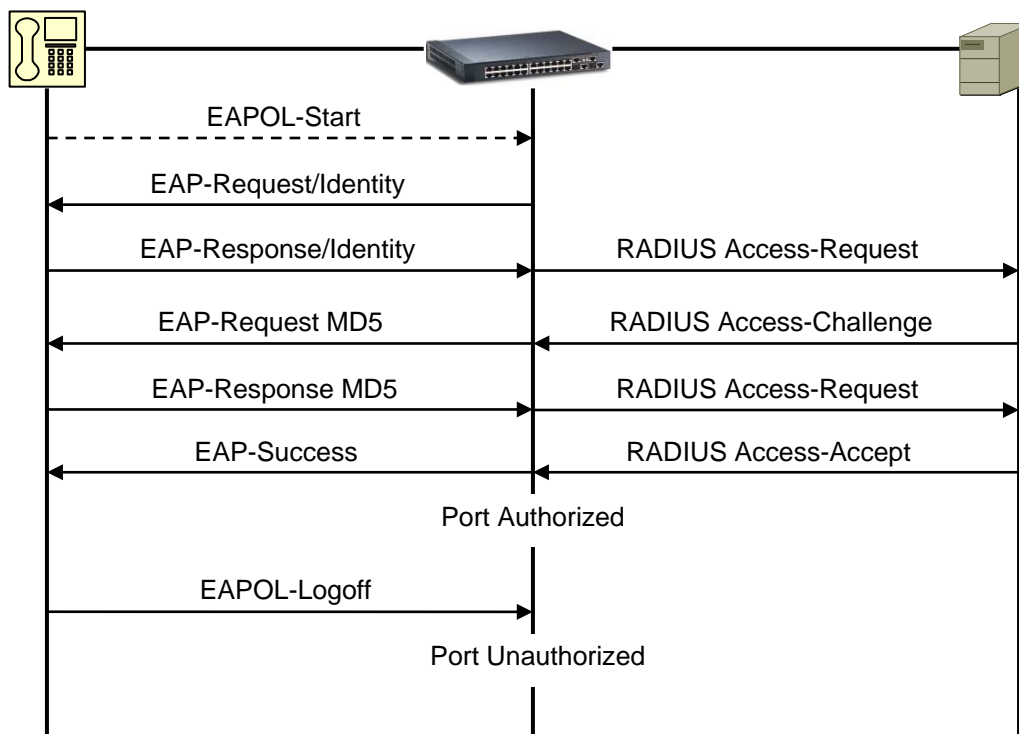
VLAN settings can be overwritten if LLDP is enabled.

12.1.3 802.1x

The 802.1x protocol is an IEEE standard for media-level access control offering the capability to permit or deny network connectivity, control LAN access, and apply traffic policy, based on user or machine identity. The 802.1x protocol consists of three components (or entities):

- Supplicant – a port access entity (PAE) that requests access to the network. For example, IP phone and the attached PC can be 802.1x supplicants.
- Authenticator – a PAE that facilitates the authentication of the supplicant. For example, the switch as an authenticator PAE that controls the physical access to the network based on the authentication status of a supplicant.
- Authentication server – a PAE, typically a Remote Authentication Dial-In User Service (RADIUS) server that actually provides authentication service.

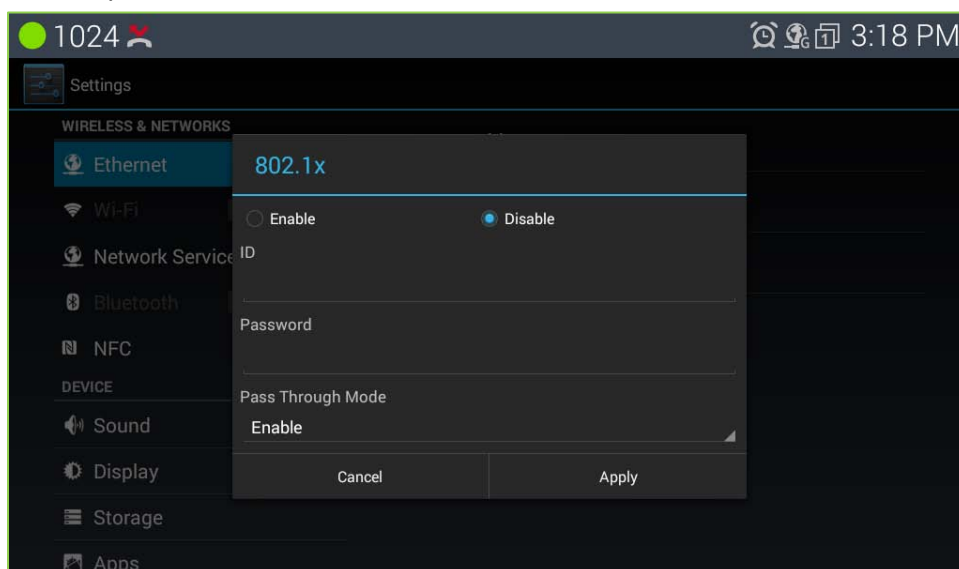
The 802.1x protocol makes use of Extensible Authentication Protocol (EAP) messages. The protocol in 802.1x is called EAP encapsulation over LANs (EAPOL). The Authenticator becomes the middleman for relaying EAP received in 802.1x packets to an authentication server by using the RADIUS format to carry the EAP information.



1. Supplicant sends EAPOL-Start frame to Authenticator.
2. Authenticator sends EAP-Request/Identity packet to Supplicant.
3. Supplicant sends EAP-Response/Identity packet includes User ID to Authenticator.
4. Authenticator sends it as a RADIUS Access-Request packet to Authentication Server.
5. Authentication Server sends RADIUS Access-Challenge packet to Authenticator to decide the EAP Method.
6. If Authentication Server and Supplicant agree with EAP Method, exchange EAP Request and Response between Authentication Server and Supplicant through the Authenticator.
7. Authentication Server sends EAP-Success (RADIUS Access-Accept) or EAP-Fail (RADIUS Access-Reject.).

12.1.3.1 802.1x Setting

LIP-9071 phone supports Layer 2 (Ethernet) security employing 802.1x port-based Network Access Control. EAP-MD5 method is used for ID and password authentication for access to the network. The ID and password can be up to 128 characters each.



1. 802.1x Activation
Select whether the telephone responds or not responds as a supplicant.
2. ID / Password
The IP Phone requires accessing the network by specifying a username and password when supplicant option enabled.
Authentication user names and passwords for each Supplicant device must be provisioned in the RADIUS server
3. Pass Through Mode
The IP Phone has Ethernet Port for PC or other Ethernet device. The IP Phone need control 802.1x traffic of that port. There are three modes for that.
 - o *enable: IP Phone pass 802.1x traffic from network to PC Port.*
 - o *disable: IP Phone block 802.1x traffic from network to PC Port.*
 - o *Proxy Log Off: IP phone send 802.1x Log Off packet instead of the device which is connected to PC Port, when the device is disconnected from PC port.*

12.2 Wi-Fi

Wi-Fi is a wireless networking technology that can provide internet access at distances of up to 30 meters, depending on the Wi-Fi router and your surroundings. This device has no Wi-Fi Module. You must connect Wi-Fi dongle to device's USB port to use Wi-Fi.

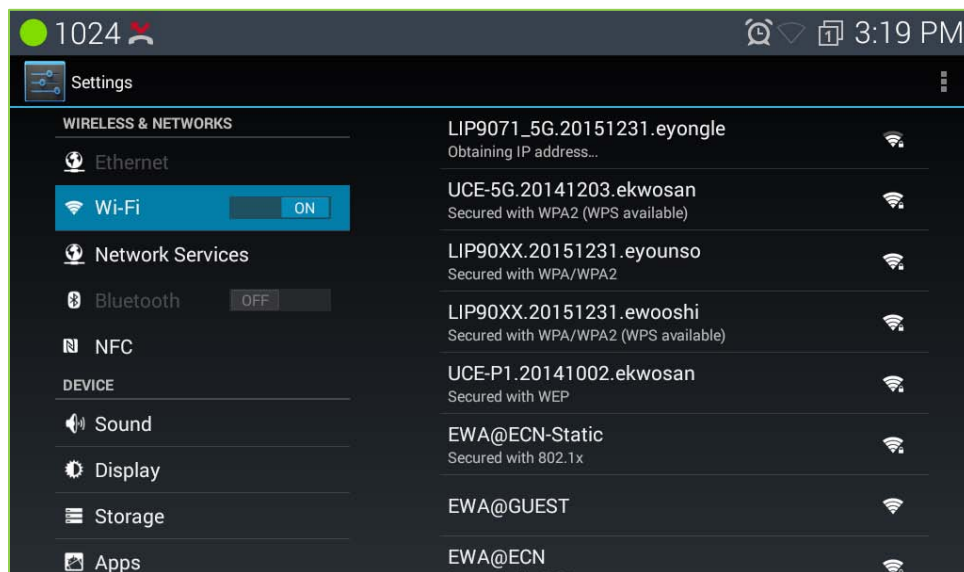
To use Wi-Fi, you connect to a wireless access point, or "hotspot." some hotspots are open and you can simply connect to them. Others implement security features that require other steps to set up, such as certificates or other ways to ensure that only authorized users can connect.

Note

- The available Wi-Fi Modules are
 - 'DWA-182' made by D-Link and supports 802.11n.
 - 'DWA-171' made by D-Link and supports 802.11n.
 - 'TL-WN823N' made by TP-LINK and supports 802.11n.
 - 'Archer T4U' made by TP-LINK and supports 802.11ac.

12.2.1 Turn Wi-Fi on & connect to a Wi-Fi network

If you're adding a Wi-Fi network when first setting up your device, Wi-Fi is turned on automatically.



1. Touch Settings > Wireless & networks > Wi-Fi.
2. Slide the Wi-Fi switch to the on position.
3. The device scans for available Wi-Fi networks and displays the names of those it finds. Secured networks are indicated with a Lock icon. If the device finds a network that you connected to previously, it connects to it.
4. Touch a network name to see more details or connect to it, and type a password if necessary.

Or, if your Wi-Fi router supports Wi-Fi Protected setup, touch the WPs icon on your tablet, and then touch the same button on your router.

To modify a network's settings, touch & hold the network name.

12.2.2 Add a Wi-Fi network

You can add a Wi-Fi network so that your device will remember it, along with any security credentials, and connect to it automatically when it's in range. You must also add a Wi-Fi network if the network does not broadcast its name (SSID), or to add a Wi-Fi network when you are out of range.

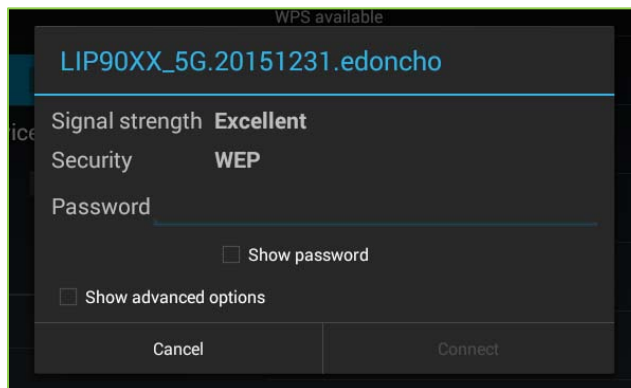
To join a secured network, you first need to learn security details from the network's administrator.

1. Turn on Wi-Fi, if it's not already on.
2. Touch the Plus icon at the top of the screen.
3. Enter the SSID (name) of the network. If necessary, enter security or other network configuration details.
4. Touch Save.

The information about the network is saved. Your tablet will connect to this network automatically the next time you come within range.

12.2.3 Forget a Wi-Fi network

You can make the tablet forget about the detail of a Wi-Fi network that you added - for example, if you don't want the device to connect to it automatically or if it's a network that you no longer use.

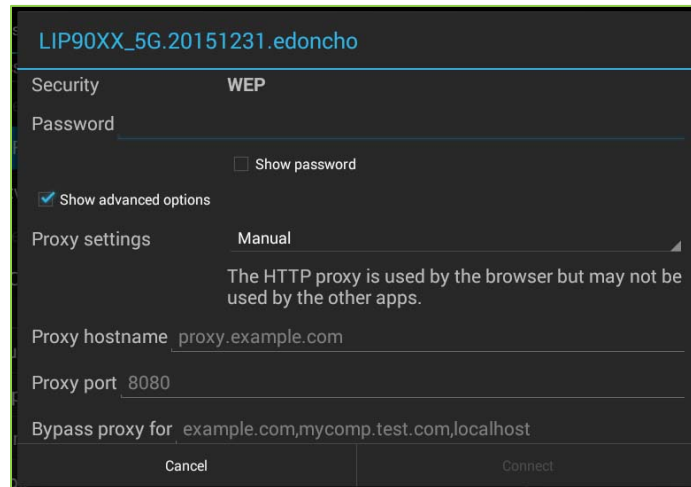


1. Turn on Wi-Fi, if it's not already on.
2. In the Wi-Fi settings screen, touch the name of the network.
3. Touch Forget in the dialog that opens.

12.2.4 Configure proxy settings for a Wi-Fi network

Some network administrators require you to connect to internal or external network resources via a proxy server. By default, the Wi-Fi networks you add are not configured to connect via a proxy, but you can change that for each Wi-Fi network you've added.

Proxy settings are used by browser but may not be used by other apps.



1. Touch & hold a network in the list of Wi-Fi networks you've added.
2. Touch Modify network in the dialog that opens.
3. Select Show advanced options.
4. If the network has no proxy settings, touch none under Proxy settings, then touch **Manual** in the menu that opens.
5. Enter the proxy settings supplied by your network administrator.
6. Touch Save.

The proxy settings apply only to the Wi-Fi network you modified. To change the proxy settings for other Wi-Fi networks, modify them individually.

12.2.5 Wi-Fi static IP Settings

To work with advanced Wi-Fi settings:

1. Turn on Wi-Fi, if it's not already on.
2. In the Wi-Fi settings screen, touch: Menu -> Advanced -> Static

LIP90XX_5G.20151231.edoncho

Proxy port 8080

Bypass proxy for example.com,mycomp.test.com,localhost

IP settings Static

IP address 192.168.1.128

Gateway 192.168.1.1

Network prefix length 24

DNS 1 8.8.8.8

DNS 2 8.8.4.4

Cancel Connect

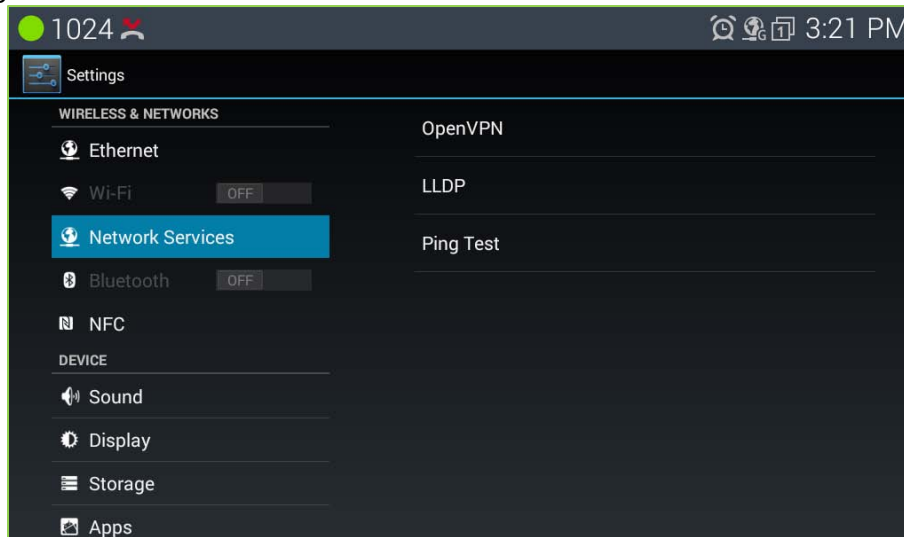
This screen also displays the following information:

- IP address. The Internet Protocol (IP) address assigned to the tablet by the Wi-Fi network you are connected to (unless you used the IP settings to assign it a static IP address).

12.3 Network Services

The Network Services menu includes:

- *OpenVPN*
- *LLDP*
- *Ping Test*

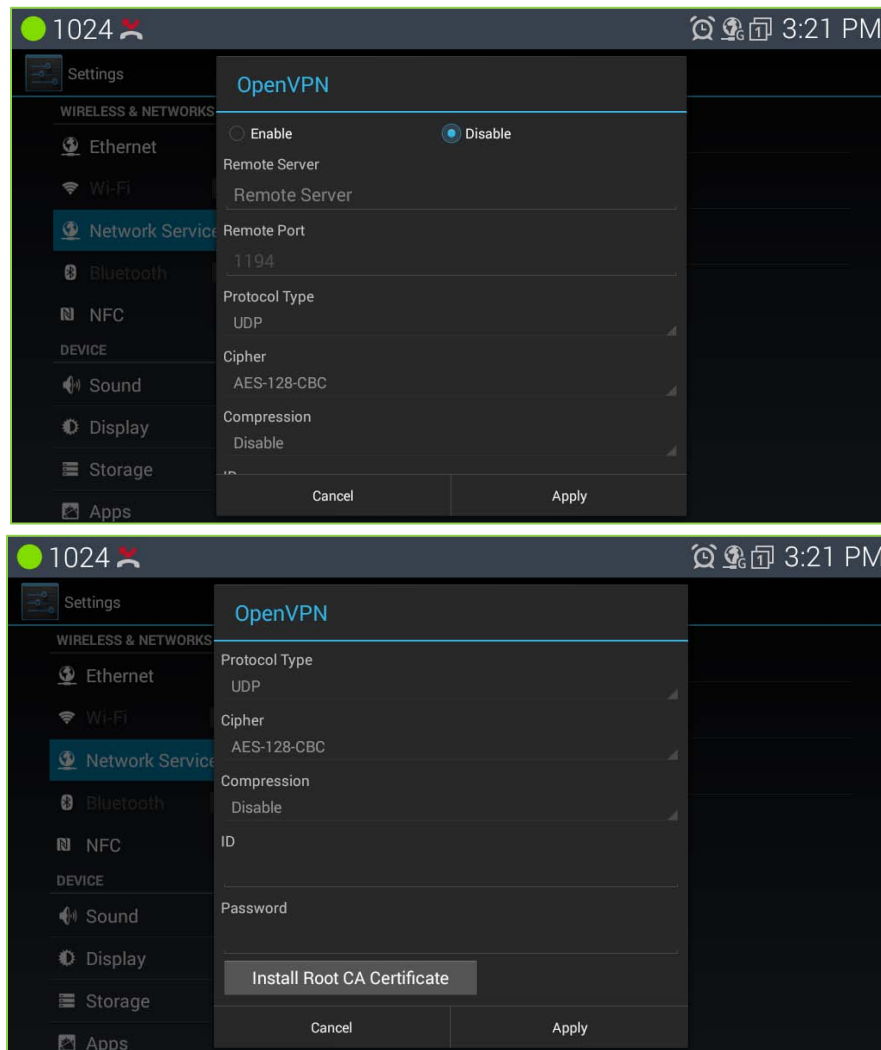


12.3.1 OpenVPN

OpenVPN settings define the security priority. OpenVPN implements virtual private network technology employing an open source software application. The phone OpenVPN implements User name/password or certificates for authentication utilizing SSL/TLS (Secure Socket Layer/Transport Layer Security).

OpenVPN is a tried and true VPN solution. It's totally secure and infinitely configurable. You can install and run this function without relying on a special configuration.

OpenVPN can be a little daunting to configure the first time you jump into it, but once you get your configuration worked out, it's a pleasure to use. After you have the software running on your network, it's possible to seamlessly perform a great number of tasks. One of the most popular and practical uses for OpenVPN is its ability to enable secure surfing and from home to office network access—whether you're out traveling or you're on an open wi-fi access point. It can also be used to connect separate remote networks together into one large network that is fully routable. As you can see, there's really no limit to what you can do with OpenVPN.

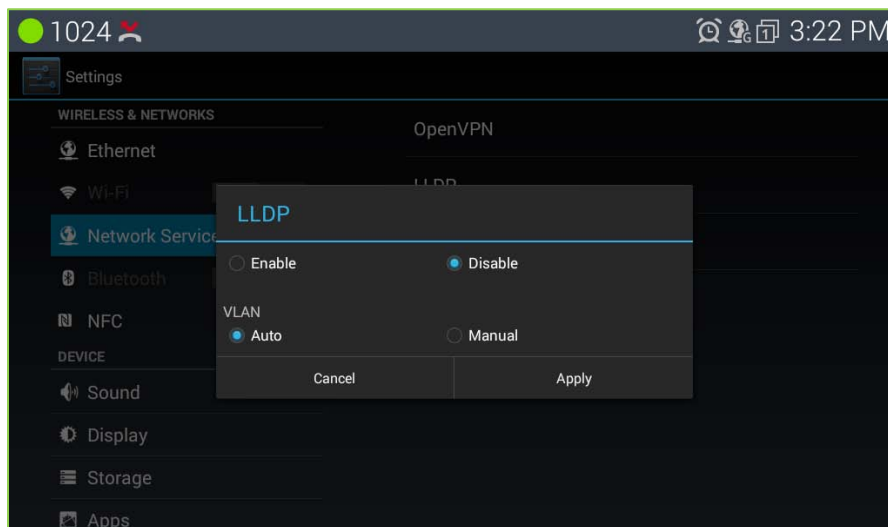


The openVPN setting menu provides the following 9 settings.

1. Enable/Disable the OpenVPN.
2. Setting the remote server address for OpenVPN. It can be up to 128 characters.
3. Setting the remote server port for OpenVPN.
4. Setting the protocol type for OpenVPN. It can be TCP or UDP.
5. Setting the default crypto. It can be BF-CBC, AES-128-CBC, DES-EDE3-CBC.
6. Enable/Disable the Compression Mode.
7. Setting the ID of VPN. It can be up to 128 characters.
8. Setting the Password of VPN. It can be up to 128 characters.
9. Installing the Root CA Certificate.

12.3.2 LLDP Setting

When enabled, LIP-9071 phone employs LLDP (Link Layer Discovery Protocol) to advertise capabilities and determine characteristics of the surrounding network environment. The phone can determine and automatically configure VLAN settings for the LAN port when LLDP is enabled and VLAN policy is Auto.



The IEEE 802.1AB Link Layer Discovery Protocol (LLDP) defines a standard method for LAN devices to inform each other about their configurations. The 802.1AB standard defines a set of advertisement messages, called type-length-values (TLVs).

LLDP Media Endpoint Discovery (LLDP-MED) protocol is an enhancement to the 802.1AB standard that provides “plug and play” capability for VoIP networks.

LIP-9071 phone supports for LLDP and LLDP-MED extensions provides the ability to use discovered information such as device type, software version and serial number, and other information for inventory management.

Through the LLDP protocol, LIP-9071 phone communicates with the switch to learn the voice VLAN ID. There is no longer a need to configure VLAN tagging manually.

Note 1

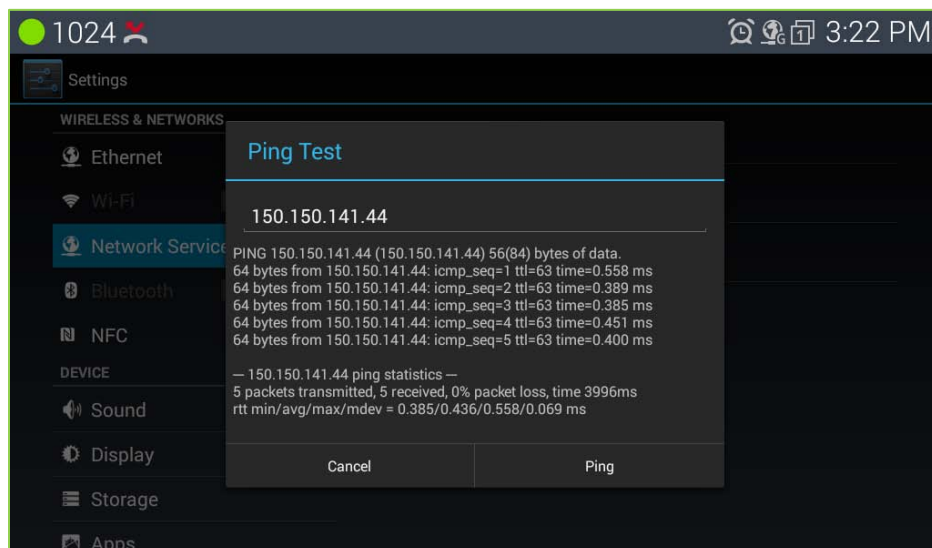
The following is a list of supported TLVs:

No	Name	Information
1	Chassis-Id	IP address of phone (4 bytes) Note: 0.0.0.0 is sent until the phone has a valid IP address.
2	Port-Id	MAC address of phone (6 bytes)
3	Time-To-Live	Number of seconds that the recipient should consider the LLDP information to be valid, 120 seconds.
4	System Name	iPECS LIP-9071
5	System Description	Model name, Package Version
6	Capabilities	Telephone and Bridge if the phone has PC port support
7	Management Address	IP address of phone
8	LLDP-MED Capabilities	Identifies the types of LLDP MED capabilities supported by the phone. Capabilities - 0x33 (LLDP-Med capabilities, Network policy, Extended Power Via MDI-PD, Inventory)

No	Name	Information
		Class Type III
9	Network Policy	specifies the VLAN ID, the 802.1 priority, and the differentiated-services-code-point (DSCP) value Application Type: Voice (1), Policy: (Unknown(=1)/Defined(=0) Unknown, if phone is in booting stage or if switch doesn't support network policy TLV. Defined, if phone is operational stage and Network policy TLV is received from the switch.), Tagged/Untagged, VlanId, L2 priority and DSCP
10	Extended Power Via-MDI	Contains information related to how the device is powered, power priority, and also how much power the device needs. LIP-9071 needs 12000 mw.
11	LLDP-MED inventory Hardware revision	H/W version of phone
12	LLDP-MED inventory Firmware revision	Package version of phone
13	LLDP-MED inventory Software revision	Package version of phone
14	LLDP-MED inventory Serial number	Mac address of phone (ASCII string)
15	LLDP-MED inventory manufacturer name	iPECS
16	LLDP-MED inventory Model name	LIP-9071
17	End of LLDPDU	Indicates the end of an LLDP data unit

12.3.3 Ping Test

LIP-9071 phone supports basic ping test menu. Input destination IP address then press 'Ping Test' button. It will take few second to see the result.



12.4 Bluetooth

LIP-9071 supports Bluetooth version 2.0 and 4.0 dongle. You must connect USB Bluetooth dongle to the device's USB port to use. Users could use Bluetooth to transfer files, share contact information with other Bluetooth portable devices, use Bluetooth headset for making calls and listen to media (music or other audio output) from LIP-9071.

To connect to a Bluetooth device, turn on LIP-9071's Bluetooth dongle radio. The first time when using a new Bluetooth device with LIP-9071, "pair" the device with LIP-9071 so that both devices know how to connect properly to each other. After pairing completed, users could simply connect to a paired device.

Bluetooth settings are under 'Settings-> Bluetooth

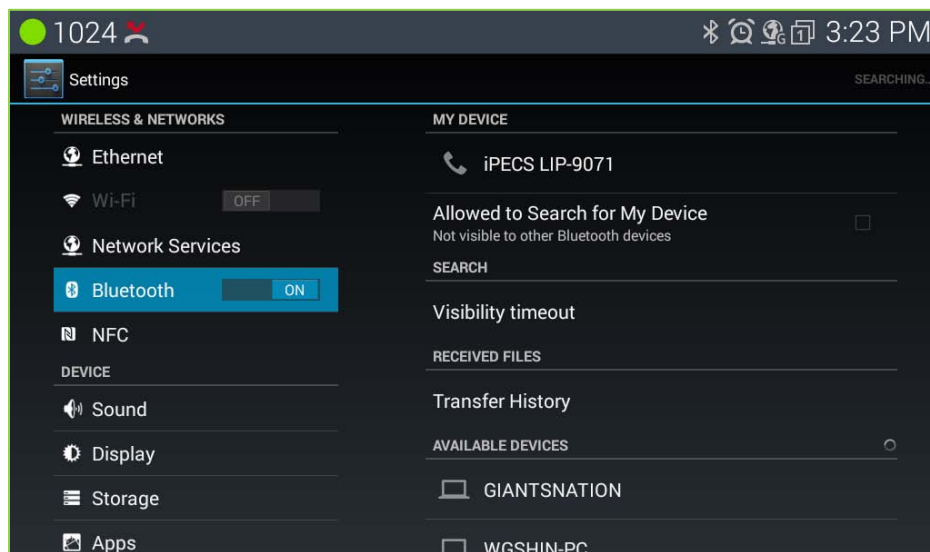
12.4.1 Bluetooth ON/OFF

At the Bluetooth menu check or uncheck (slide the on/off button) the option for Bluetooth.

Or, users could open the top right status bar → System Settings and tap on Bluetooth icon to turn it on/off.

Settings for the Bluetooth interface are:

- *My Device Name*: enter a name that is advertised to other devices.
- *Allowed to Search for My Device*: check to allow other Bluetooth devices to detect the phone, the interface advertises for 2 minutes as default.
- *Visibility timeout*: select allowed searching time out period.
 - 2minutes (Default)
 - 5minutes
 - 1hour or always on
- *Transfer History*: shows file receive history.
- *Available devices*: scan and list local Bluetooth devices, and show status and type icon, click to connect manually.



Note

- You may need to scroll down the screen to see all selections of scanned device list.

12.4.2 My device

LIP-9071 uses "iPECS LIP-9071" as my device name by default. The device name will be visible to other devices when connecting them. And just touch the current device name to change or modify the name.

12.4.3 Pairing

Before using LIP-9071 with other Bluetooth devices, users must pair them first. They will stay paired afterwards unless they are unpaired.

1. Tap on the Bluetooth device to enable it visible to all nearby Bluetooth devices.
2. LIP-9071 scans and displays the IDs (devices name) of all available Bluetooth devices in range. If the device you would like to pair with does not show up in the list, ensure that the other device is turned on and set to be discoverable.
3. If LIP-9071 stops scanning before the other device are ready, tap "SEARCH DEVICES" on top right corner.
4. Once the Bluetooth device shows up in the result, tap on it to start pairing. Confirm the passkey in the prompted message (if use normally Bluetooth version 2.0). Or if passcode is required, please refer to the device's documentation or other procedures to obtain the passcode.

12.4.4 Unpair

Tap on the Bluetooth paired device want to unpair device and select 'Unpair'.

12.4.5 Bluetooth Headset

The headset connection delivers audio from the phone to the Bluetooth headset paired with the phone. A fixed button is assigned for the Headset function and, when the button is touched, the audio is delivered to the headset and the button illuminates. Touching the button again disconnects the call. When the handset is lifted, the active voice device is changed to the handset. Also, the phone can be configured to deliver ringtone to the headset in place of the speaker. In this case, if the headset is active, ringing and audio are sent to the headset.

The following is a list of known compatible headsets:

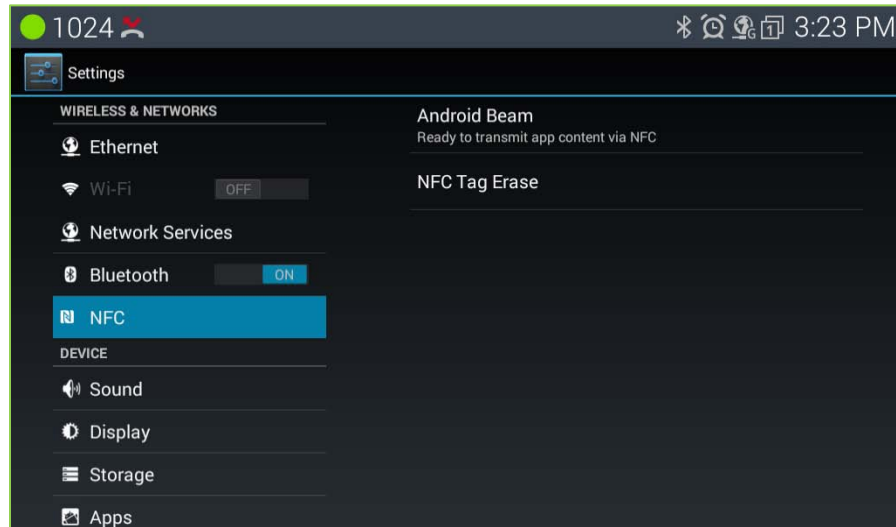
- Plantronics Explorer 500
 - 1) Support only for Headset profile.
 - 2) Press [Call] button to answer the incoming call.
 - 3) Press [Call] button to terminate the conversation.
 - 4) 'Call Reject' and 'Call Redial' function is not available.
 - 5) User can't dial by pressing [Call] button on Bluetooth headset when LIP-9071 phone is in idle state.

Note

- Use of a headset with mini size Bluetooth dongle is not recommended because call progress tones (dial tone, ring back tone, etc.) or even voice might be distorted.

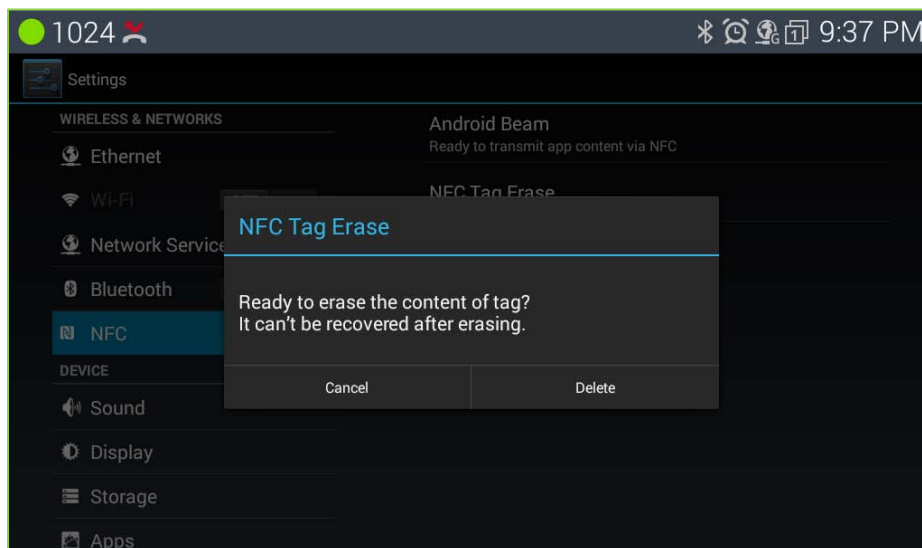
12.5 NFC

Near field communication (NFC) lets you get things done just by tapping your phone on NFC touch points – quickly change your phone settings, for example, or open a website featured on an advertising poster without typing the Web address, and lots more.



12.5.1 NFC Tag Erase

This terminal provides erase function for NFC Tag which has some information already. If user taps the tag with Erase Tag option, all tag information will be deleted.

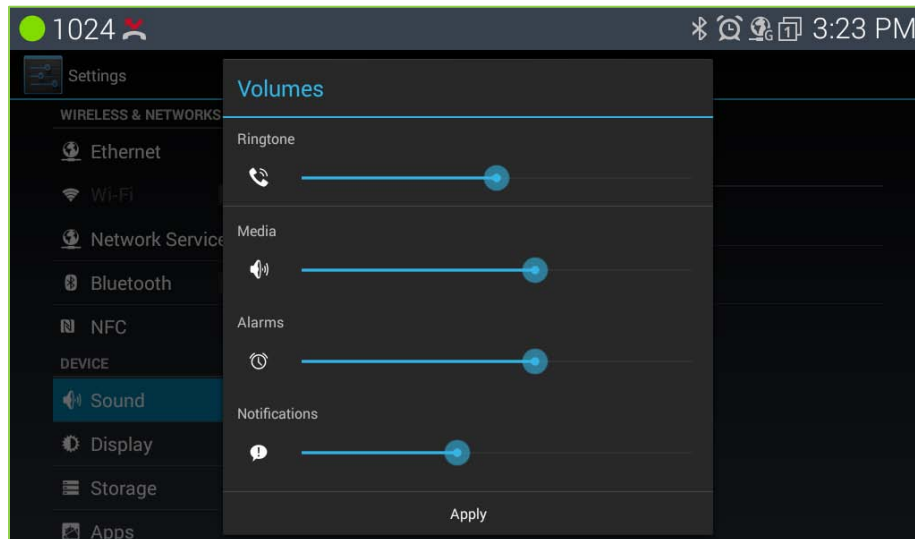


12.6 Sound

Sound settings control the ringtones and volume for incoming calls and Notifications.

The Sound settings include:

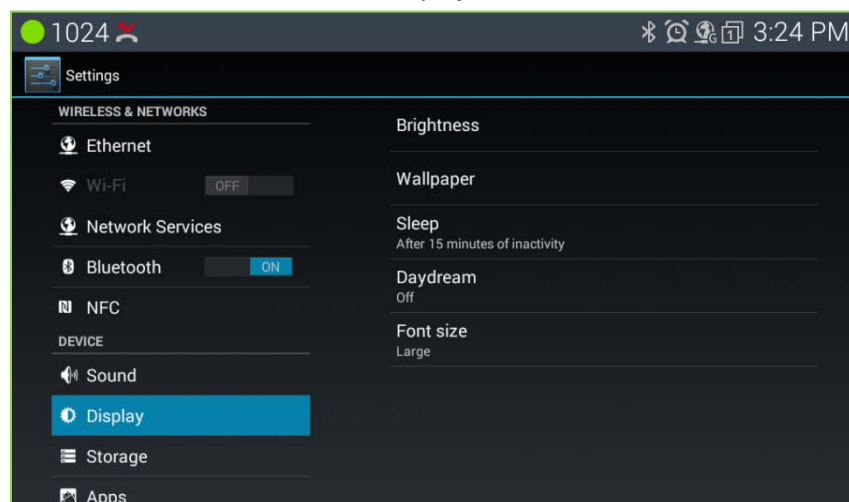
- *Volume*: set the volume level for ringtones, voice and alarm signals.
- *Ringtone*: select the tone for incoming intercom calls.
- *Default notification sound*: select the ringtone for new message and missed call notifications.



12.7 Display

Display settings include:

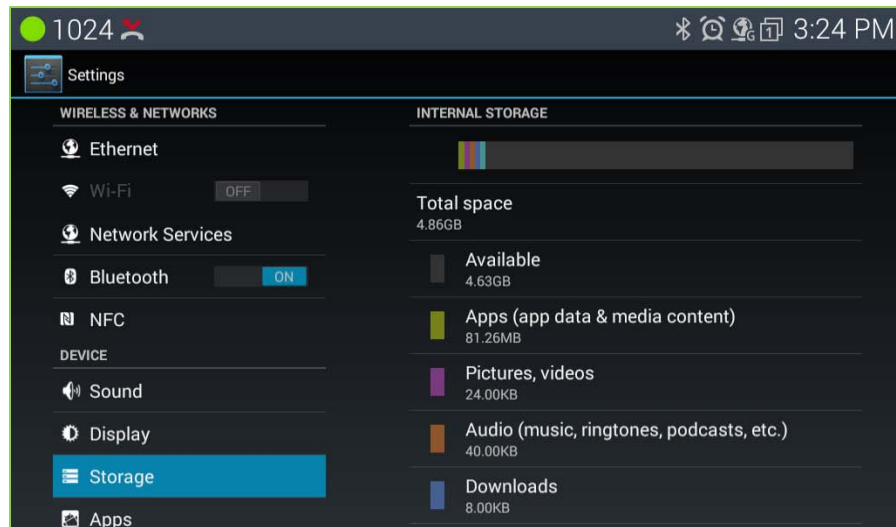
- *Brightness*: set the screen brightness.
- *Wallpaper*: set screen home wall appearance picture.
- *Sleep*: set the duration the screen will stay on when the user takes no action with the phone.
- *Daydream*: set the type of the screen save type on the phone.
- *Font size*: set the default font size for the all displayed font size.



12.8 Storage

The Storage settings are provided to view and manage the internal memory and the USB stick. Settings include:

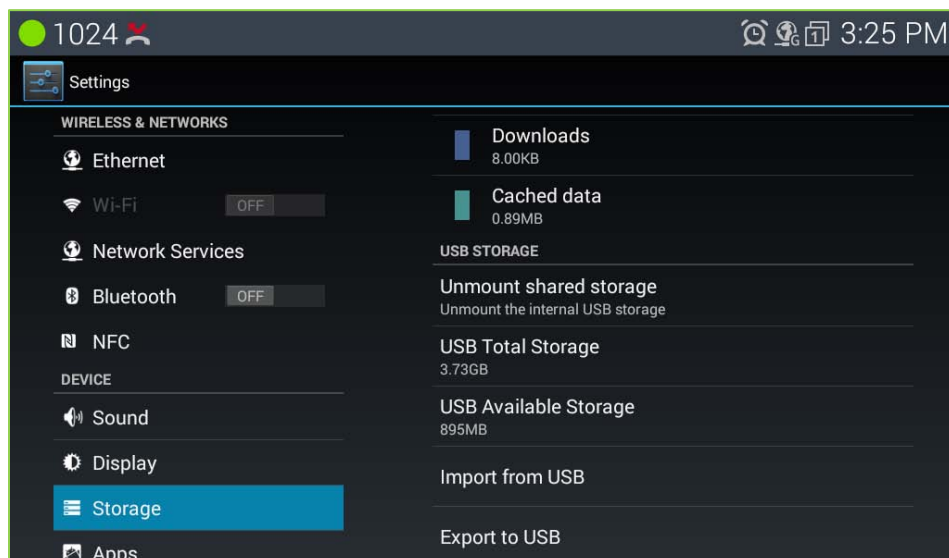
- *Internal Storage*: view the status of the system memory.
- *Available space*: memory space available for user data.
- *USB Storage*: view and manage contents of USB stick.

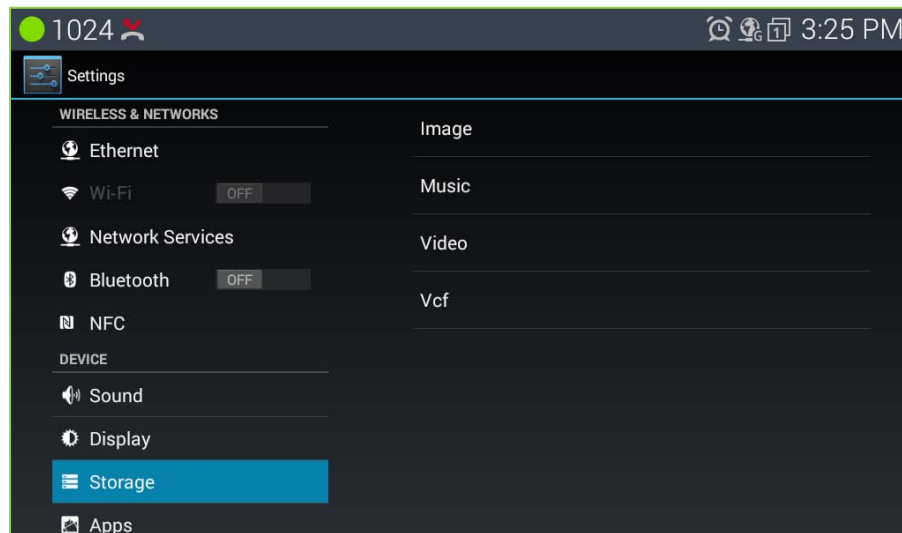


12.8.1 USB Storage

A USB stick can be inserted in the USB host slot on the rear upper side of LIP-9071 phone. With the USB stick Settings, the total and available memory on the stick displays, a stick can be safely removed with the Unmount command and the data on the card may be erased. Also support of importing or exporting media files to or from USB stick.

Media files are showed with click box to selected copy to internal storage.

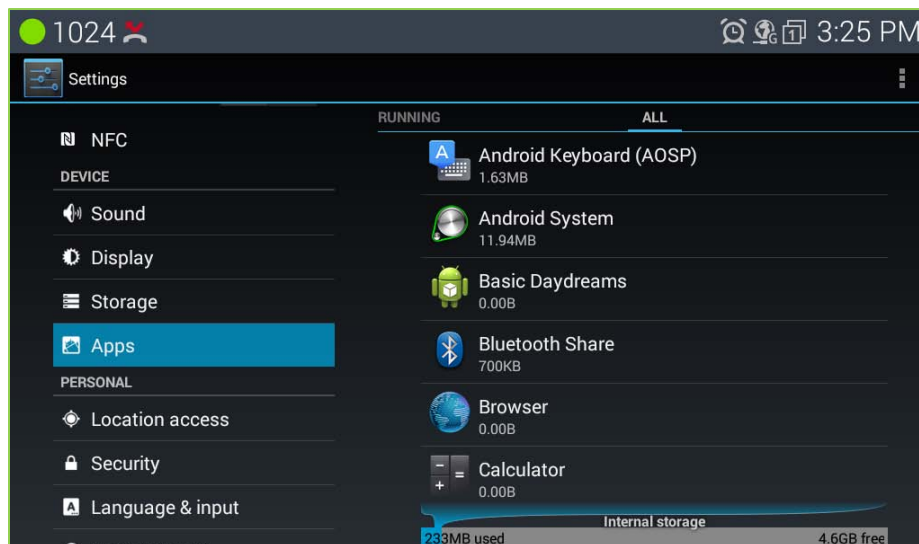




12.9 Applications

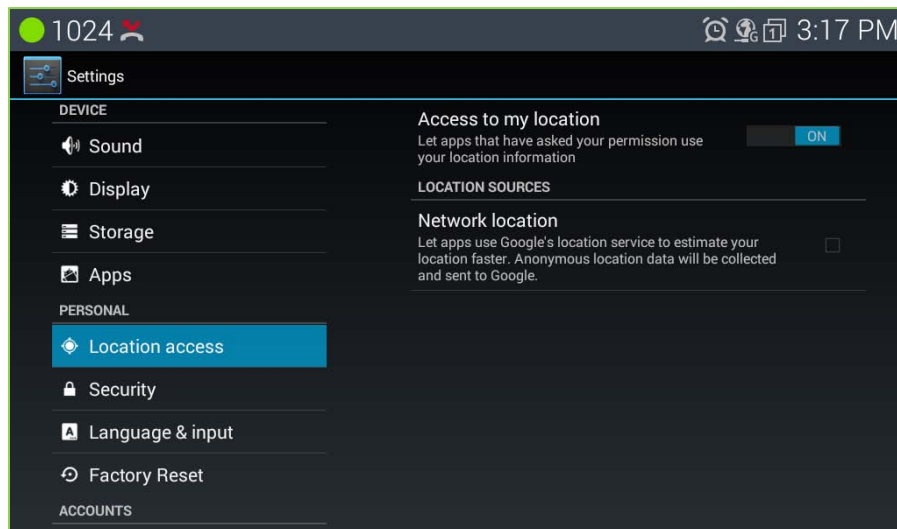
The Applications settings menu is used to manage and view the status of Android applications in the phone. Selections include:

- *Downloaded sources*: list of applications from Android apps store or other places.
- *Running sources*: manage active process and services.
- *Storage use*: view the storage in use by active applications.



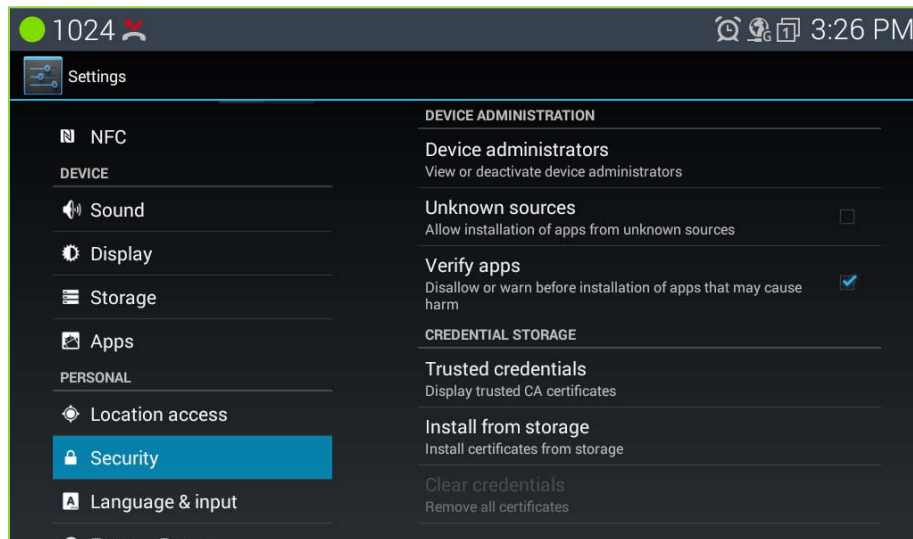
12.10 Location access

The access to my location of LIP-9071 phone can be allowed or not by On/Off control.



12.11 Security

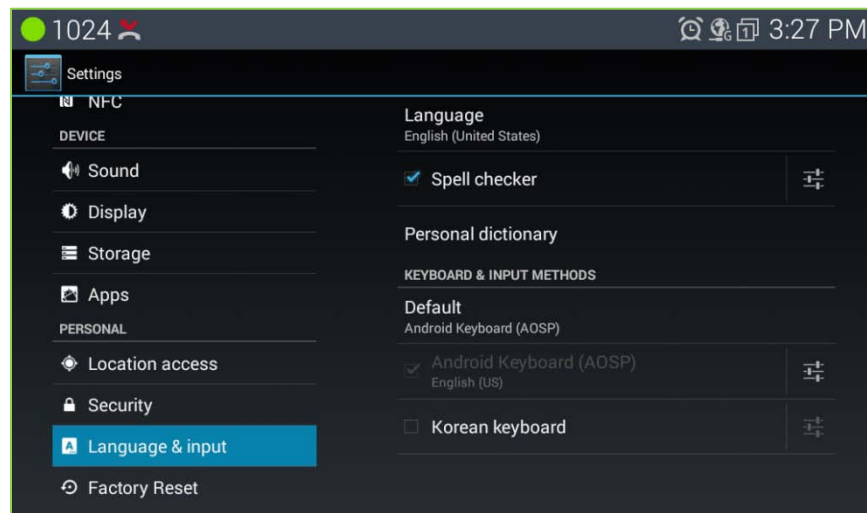
The display of LIP-9071 phone can be locked so that none of the apps are exposed and only an outgoing call can be made. To set-up the screen lock, the user will receive instructions to connect a series of on-screen dots. The pattern must link a minimum of four (4) dots. Once the pattern is accepted, the idle screen will display the dots with the date, time and an outgoing call icon, as shown below. While an outgoing call may be placed, other functions of the phone are unavailable until the user connects the dots in the recorded pattern.



12.12 Language & input

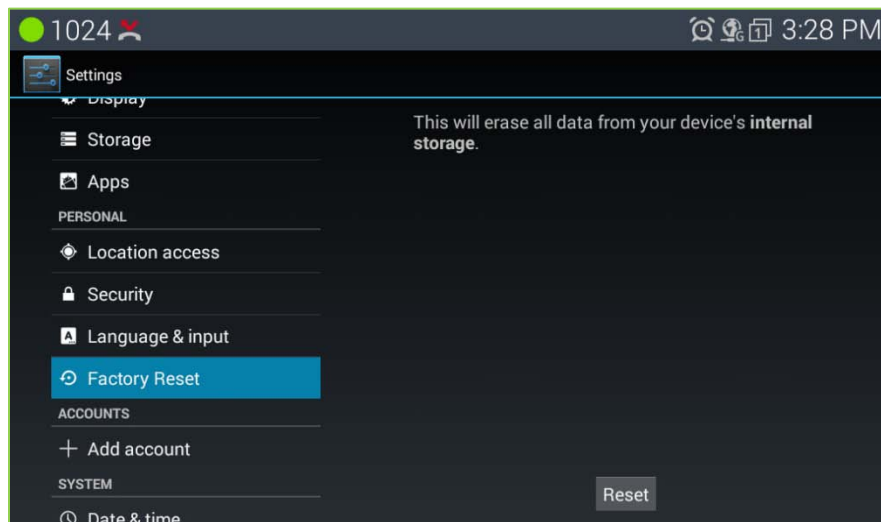
The Language and Keyboard menu includes:

- *Select language*: select from the available display languages.
- *Personal dictionary*: selects the dictionary.
- *Android keyboard*: select and configure the standard Android QWERTY keyboard.
- *Korean keyboard*: select and configure the Korean keyboard.



12.13 Factory Reset

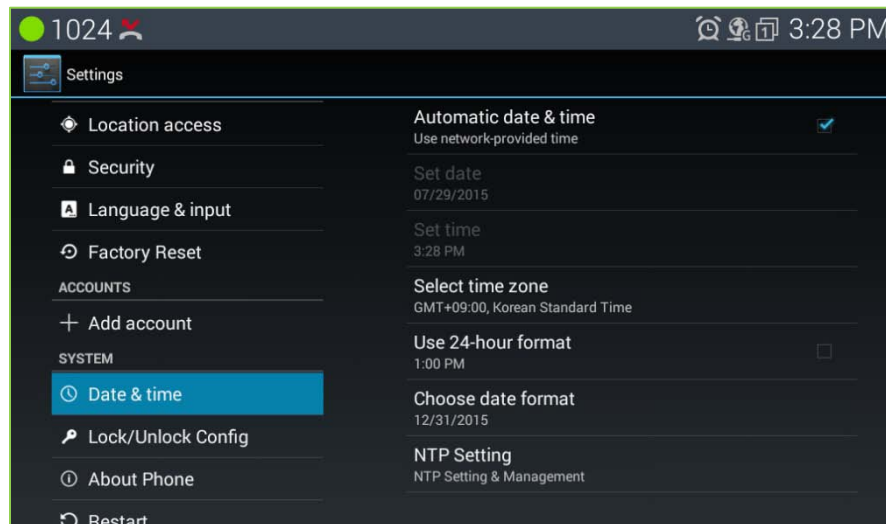
Privacy is used to return LIP-9071 phone to the default configuration. The reset removes all entries in the Contacts and Calendar databases, and all other personal data stored in the internal Flash memory. Note the reset to default does not impact information stored on the USB stick.



12.14 Date & time settings

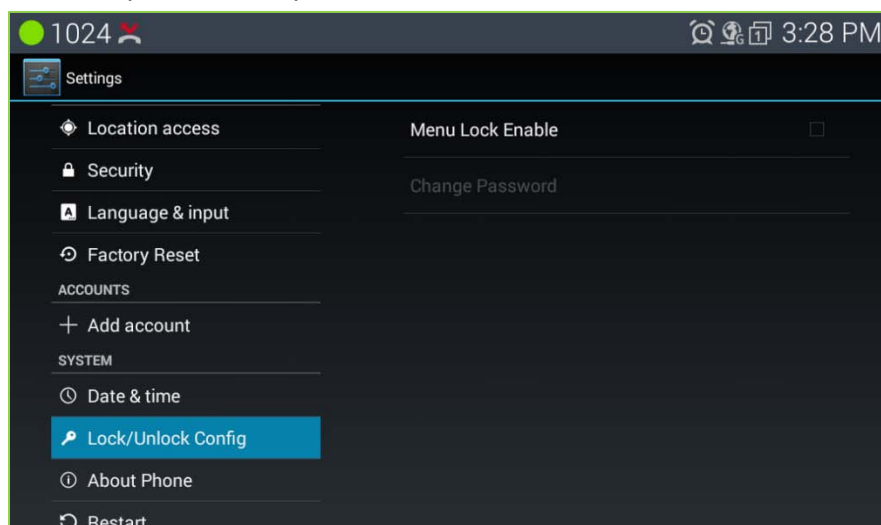
The Date and Time can be configured automatically or manually and the format of the Date and Time display can be adjusted.

- *Automatic*: use the Date and Time from the Host Call server.
- *Set date/time*: set the date and time when Automatic is not used.
- *Select Time Zone*: select the Time zone.
- *Use 24-hour format*: select time to display in the 24 or 12 hour format.
- *Select date format*: select to display date as year/month/day or month/day/year.
- *NTP settings*: enter the URL of the NTP (Network Time Protocol Server).



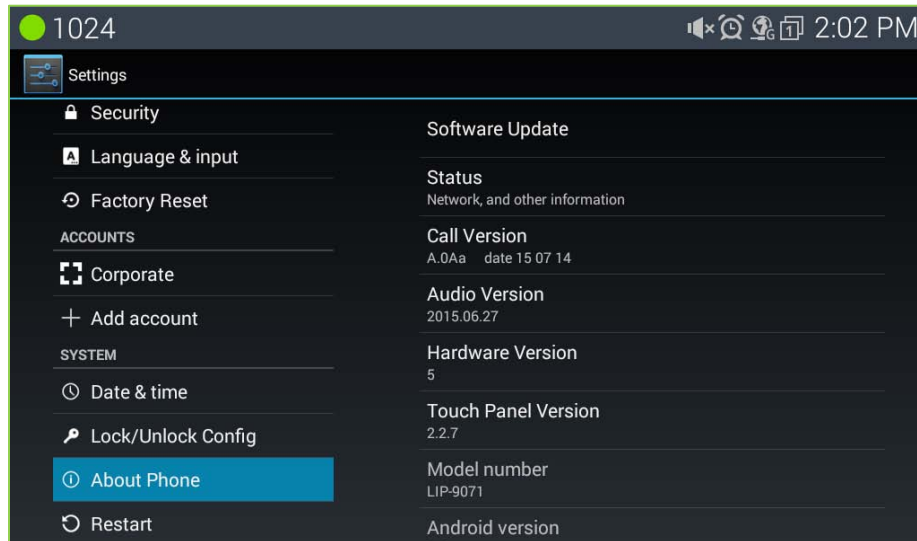
12.15 Lock/Unlock config

About some important menus can be controlled by password lock setting. And this menu provide setting password for that purpose. The default password is 'lip'.



12.16 About phone

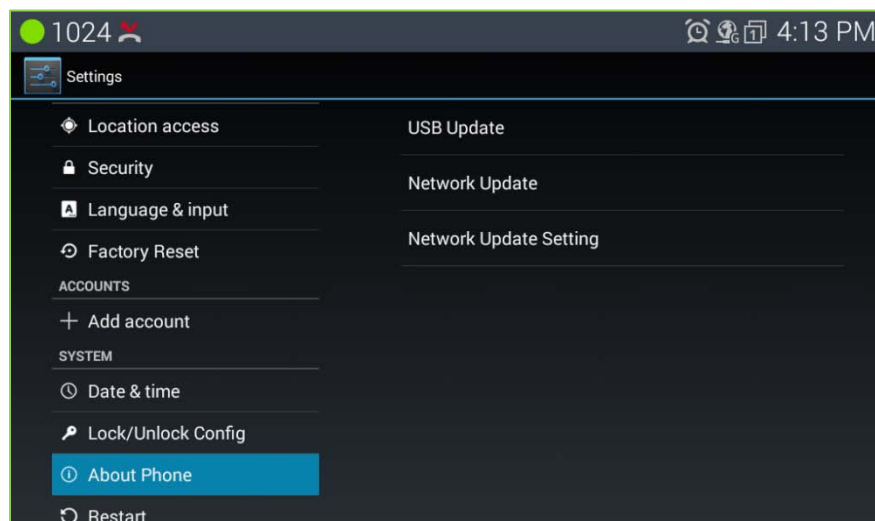
About displays information about LIP-9071 phone including the OS version, build and MAC address. In addition, System Updates can be selected to update the phone software from the USB stick.

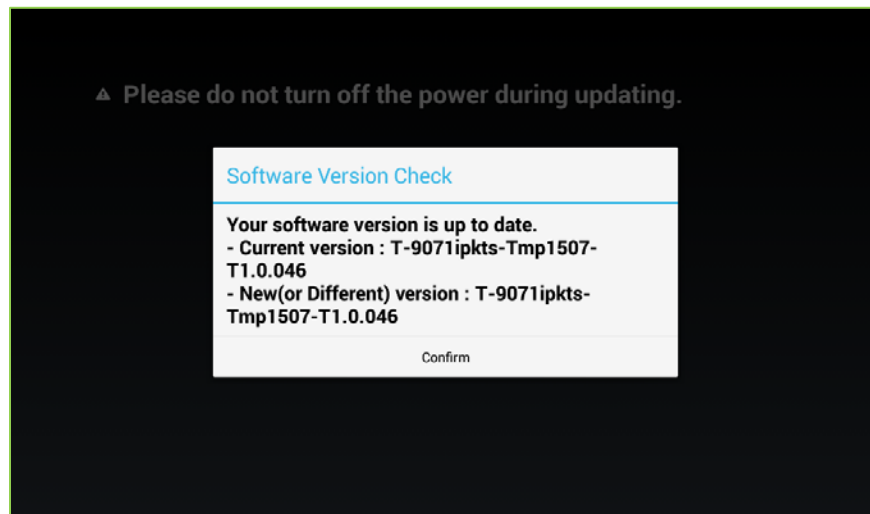


Note

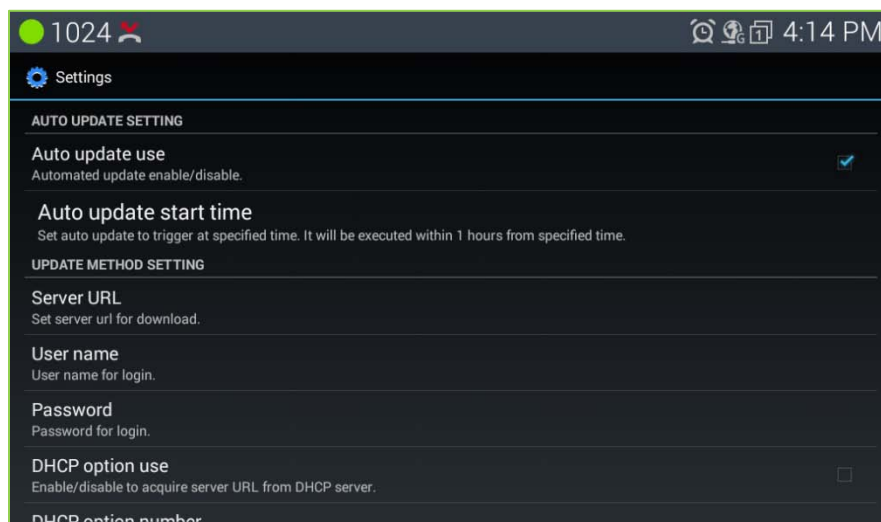
- You may need to scroll down the screen to see all selections.

12.16.1 Software Updates



**Note**

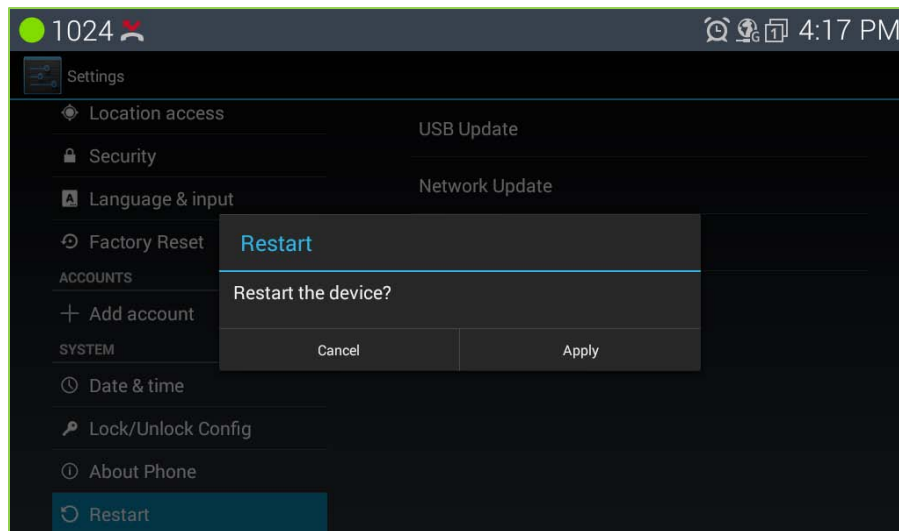
- During the update procedure, do NOT unplug or remove the phone from the power source.

**Note**

- Available update options can be managed through Network Update Setting menu.

12.17 Restart

The soft restart of the phone can be started at this menu without power plug out from the Phone.



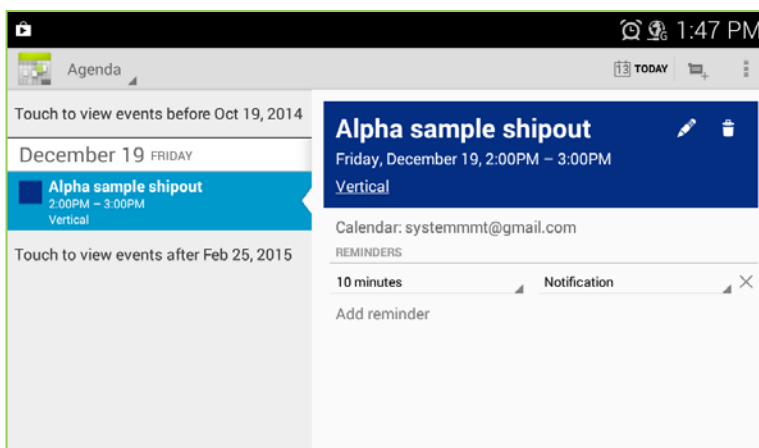
13 General Purpose Apps

13.1 Appointment Calendar

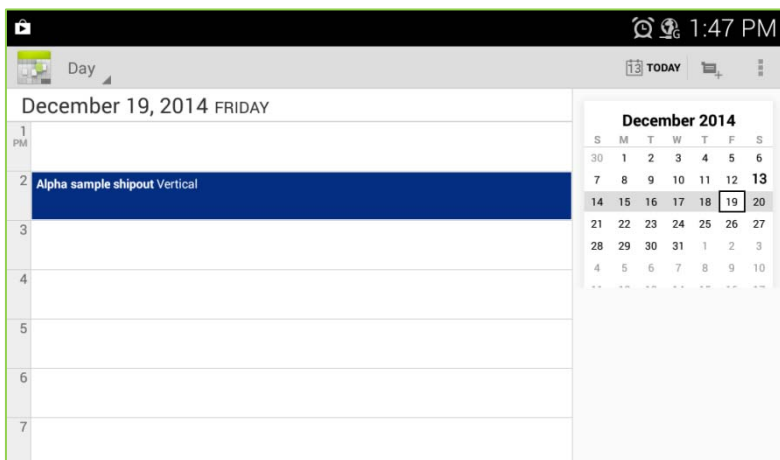
In the Appointment Calendar application appointments and events are scheduled and reminders for the schedules are assigned. The application sends a notification at the scheduled event reminder times. The Calendar is presented in four (4) views:

- Agenda displays events in chronological order beginning with the next upcoming event.
- Day displays the day's schedule with the hour on the right side and events highlighted over the hours the event is scheduled.
- Week displays the week schedules with the hour on the right side, the day across the top and events highlighted over the hours the event is scheduled.
- Month displays the month schedules.

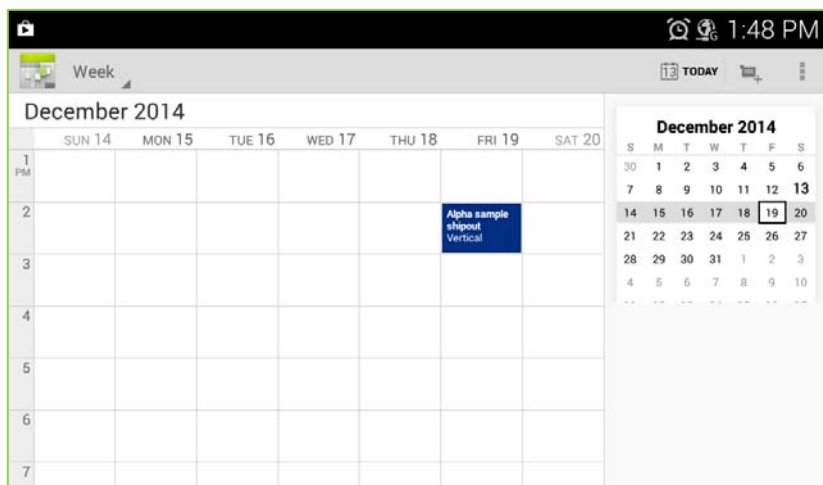
Agenda View



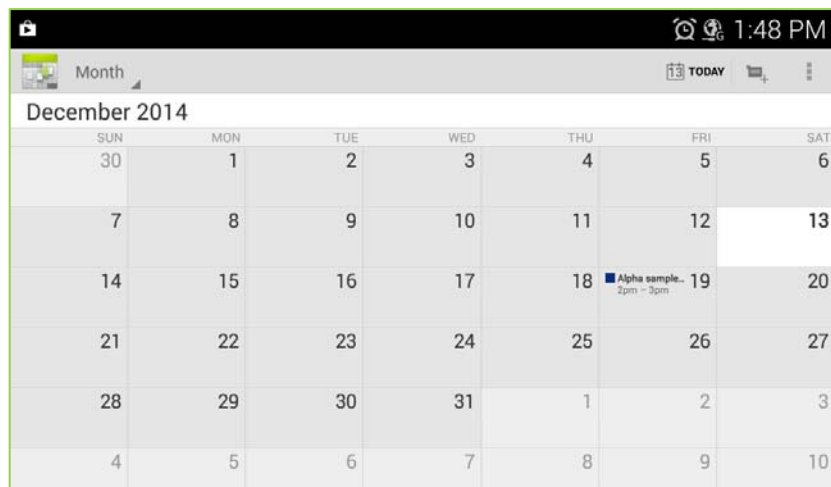
Day View



Week View



Month View



In the Day, Week and Month views, the swipe gesture can be used to display the next or previous Day, Week or Month, as appropriate.

To select the schedule view,

1. Touch the Appointment Calendar icon in a Launcher screen or the Apps Dock.
2. Touch Week text in the upper right.
3. Select the desired view (Agenda, Day, Week or Month).

Note

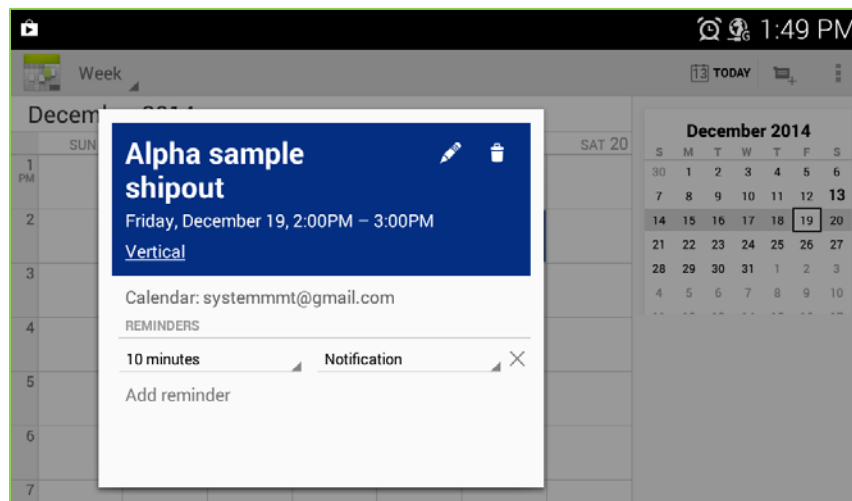
- The Event Calendar does not work with the Google Calendar calendaring service.

13.1.1 Viewing Schedule details

The details of a scheduled event display by touching the event in any of the Schedule views. The details provided include the Event name, Calendar location, the time and date for the event, and the reminder setting.

To view the details,

1. Touch the event to display the details screen.



13.1.2 Managing Schedules

Event schedules can be managed from the day, week or month view using the Context (touch and hold) menu. Also, event schedules can be added from the Options menu of any schedule view.

13.1.2.1 Add an Event Schedule

An event can be scheduled in the Day, Week or Month view with the Context menu or from any view using the New event icon.

To schedule an event,

1. In any view, touch the New event icon in the upper right.
or
Touch and hold a spot in the Day, Week or Month view.

2. In the popup, select 'New event', the Event details screen appears.
3. In the Event details screen touch and enter the:
 - Event Name,
 - Start time
 - End time
 - Location,
 - Event description,
 - Repetition
 - Reminder, time to begin reminder prior to the actual occurrence, multiple reminders can be assigned
 - Etc.
4. Touch 'Done' when finished. To return to the previous view, press Back button or touch Cancel icon in the upper right.

13.1.2.2 Edit an Event Schedule

To edit an event schedule,

1. In the Day, Week or Month view, touch a scheduled event.
2. Pop up the event and select 'Edit icon'.
3. In the popup Event details screen, touch an item and enter new information.
4. Touch 'Done' when finished. To return to the previous view, press Back button or touch Cancel icon in the upper right.

13.1.2.3 Delete an Event Schedule

To delete an event schedule,

1. In the Day, Week or Month view, touch a scheduled event.
2. Pop up the event and select 'Delete icon'.
3. In the popup, select Apply.

13.1.3 Responding to a Reminder

At the scheduled event reminder time, the event notification icon appears in the Notifications and Status bar and, if assigned, the audible reminder tone plays. Also, the event name displays briefly in the Notification and Status bar. The notification icon remains until the notification response.

To respond to a notification,

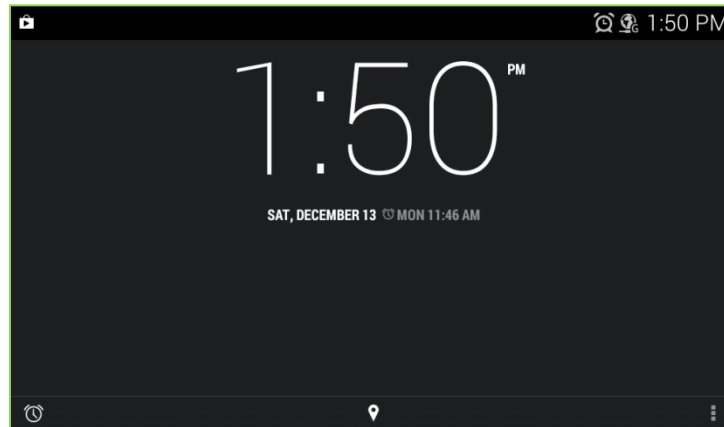
1. Touch the Notification and Status bar and drag the bar down to display the Notifications screen. The screen displays all active notifications with ongoing events (DND, Forward, Alarms) followed by one-time events such as scheduled event reminders.
2. Touch the notification desired.
3. In the popup select snooze or dismiss.
Or, for more than one reminder, touch the desired reminder, the event detail screen displays and the notification is cancelled.

Note

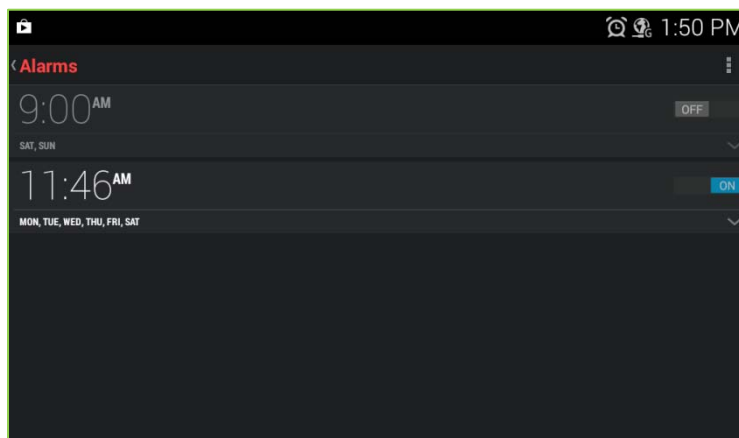
- When viewing the Phone window, access to Notifications screen is not allowed. Move to another screen to view the notifications or use the Option menu.

13.2 Setting the Alarm Clock

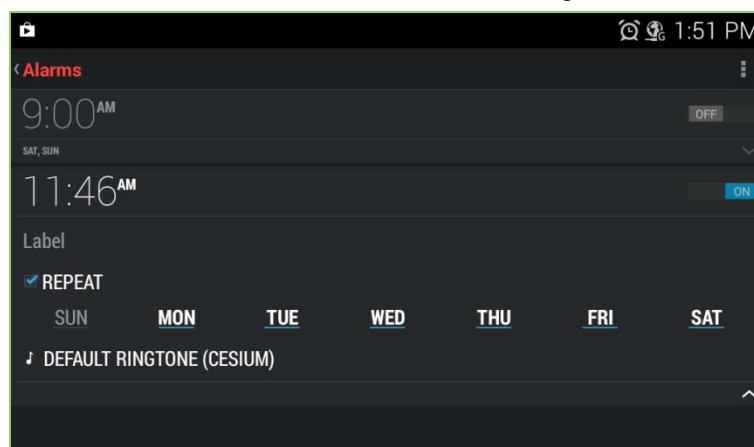
LIP-9071 phone includes an Alarm Clock app. Selecting the Alarm Clock icon displays the list of Alarms that have been set. Alarms can be set as a single alarm or can be set to repeat on selected days of the week. Alarms can be added, edited, turned on or off, or deleted.



Touch 'Add Alarm icon' at the left side bottom of window to add an alarm, then follow the on-screen instructions. The Alarm time, days of week and state (on/off) for the alarm can be set.



To edit, change the alarm state or delete an alarm, touch Arrow mark of the desired Alarm then select the desired function. Then enter the modified alarm information and save the changes.



13.3 Handling Pictures and Videos

Pictures and videos have two associated applications. The Camera application takes pictures and records videos with the built-in camera. Pictures and videos are stored on the USB stick can be shared. In addition, pictures can be used as wallpaper or a user contact icon. The Gallery application organizes pictures and videos into albums that can be viewed and managed.

The camera is a 1.3 Mega-pixel CMOS camera and can be tilted manually for the best view. Pictures taken by the Camera are stored as the jpeg file type. Videos employ the 3GPP file types.

13.3.1 Taking Pictures

Touching the Camera icon in the App Dock or on a Launcher screen, opens the Camera screen in the landscape orientation. The right side of the screen includes several controls.

Picture Thumbnail: displays a thumbnail of the last picture or Video in the upper right of the screen.

Picture/Video Control: switch the Camera mode between still shots or video.

Shutter/Record: take picture or start/stop video recording.

To take a picture,

1. Frame the subject in the display.
2. Touch and hold the shutter icon. The camera focuses on the subject and takes the picture.



The picture is displayed for a few moments then the display is cleared and a thumbnail of the last picture displays in the upper right of the screen.

13.3.2 Recording Videos

As a default, when the Picture application opens, the camera mode is set for single shot pictures. By changing the camera mode, videos up to 30 minutes in length can be recorded. To record a video,

1. Change the Camera control to the Video Camera
2. Touch the Record button. The video recording starts with the recording duration displayed at the bottom left of the screen. Once completed a thumbnail of the video displays in the upper right corner.

To stop recording video,

1. Touch the Record button.

**Note**

- Videos and pictures taken with the camera are stored in the user dedicated 2G memory.
- A video can be a maximum of 30 minutes.

13.3.3 Review Pictures and Videos

Pictures and videos stored in the Camera application memory can be viewed, edited, deleted or rotated. The Pinch gesture can be used to control zoom and, if the left/right arrow displays, the Flick gesture will display the next/previous picture.

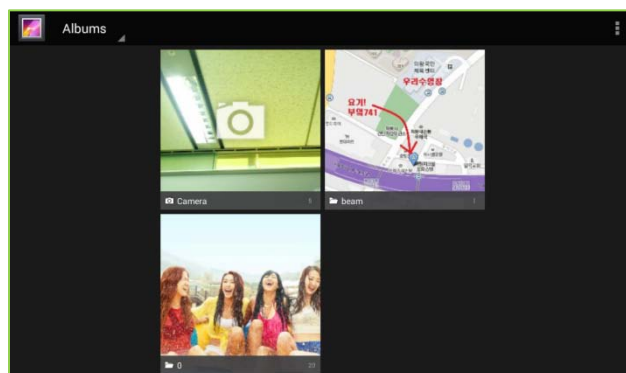
The Picture review screen opens when a thumbnail in the upper right corner of the Camera screen is touched. The screen includes the following Picture tools.

- *Delete*: delete the picture, a confirmation is required.
- *Slide show*: It will start showing pictures with slide show mode.
- *Rotate Left*: rotate the picture 90° counterclockwise.
- *Rotate Right*: rotate the picture 90° clockwise.
- *Details*: display details for the picture including name, type of file, date and album.

To return to the Camera, move to the first picture by Flick gesture and you will see the camera button.

13.3.4 Using the Gallery and Albums

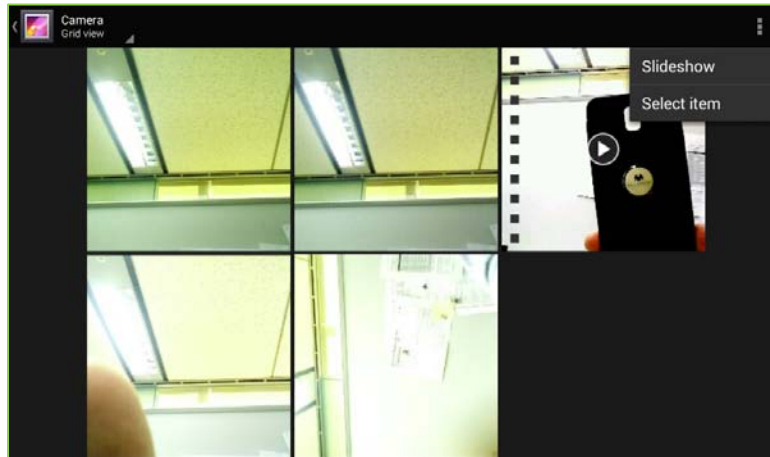
The Gallery application organizes and displays picture albums on the USB stick and in the Camera. Items in the album are shown in a grid view with thumbnails of each picture or video. The Gallery displays files of the JPEG, PNG, BMP and GIF types as pictures, and H.264 and MPEG4 files as videos. At the top of Gallery screen is the name of the Gallery and, at the top right, is the View Control. At the bottom is the navigation control to view the next or previous album. The navigation displays thumbnails for additional pictures and videos organized by date.



- *Slideshow*: show all pictures in album as a slide show.
- *Select item*: select multiple items to rotate or delete.

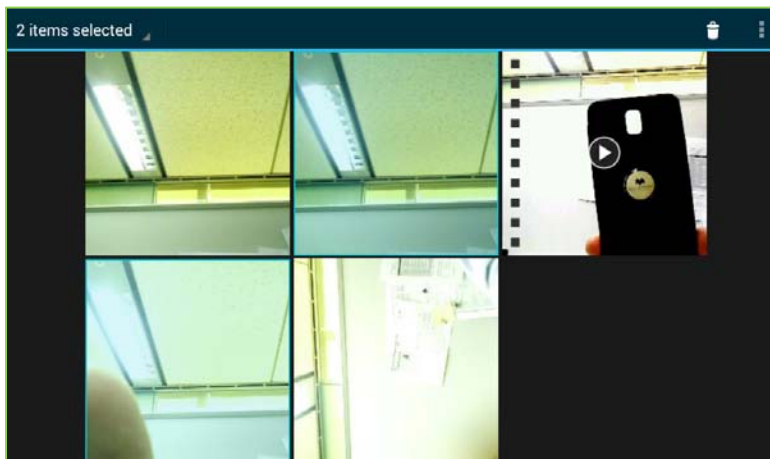
13.3.4.1 Viewing a Slide show

When the Slide show view is selected in the Gallery, the Slide show screen appears. Each picture and first video frame display. Each is displayed for about 2 seconds and the next picture or video displays. Videos display with the play arrow, when touched the video plays. The navigation arrow is used to view the next or previous picture in the album. In addition, the Picture tools are available under the Menu button to modify the picture.



13.3.4.2 Selecting Multiple Pictures

Multiple pictures can be selected with the 'Multiple select' view. Once selected, the pictures can be rotated with a Bluetooth device or deleted.



13.3.4.3 Viewing Pictures

In the Gallery, pictures can be selected for display.

To display a picture,

1. Touch the picture thumbnail.



13.3.4.4 Viewing Videos

In the Gallery, videos can be selected for display.

To display a video,

1. Touch the video thumbnail. The initial frame in the video displays.
2. Touch the video frame to display the Video controls for fast forward or reverse as well as the play-pause control.



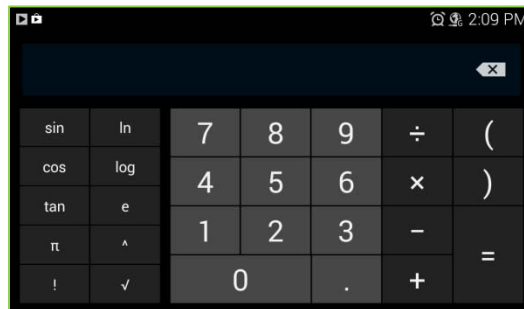
14 Android Basic Apps

LIP-9071 has some basic Android Applications.

14.1 Using the Calculator

The Calculator has the common arithmetic functions and with a left flick, the advanced mathematic function calculator is exposed.

The Calculator icon opens the basic calculator. Use the keypad to enter digits and the functions buttons to complete an operation. Touch and hold the number in the calculator display to show the Result menu where the results can be copied to other applications or other tools can be accessed.

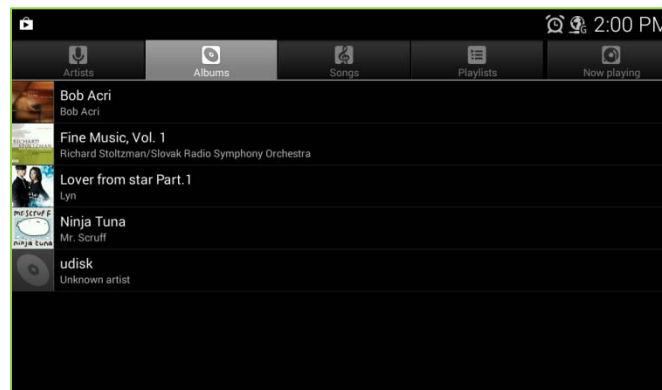


Note

- Touch clear to erase the last entry or touch and hold to erase the displayed value.
- Left flick on the basic Calculator to show the advanced mathematics function calculator.

14.2 Playing Music

The Music application organizes, manages and plays music and other audio files located on the USB stick. When the Music icon in the Dock or Launcher screen is selected, the Music app builds a Music Library from information in the audio files (MP3, MIDI and OOG Vorbis formats) on the USB stick. Constructing the catalog takes a short period of several seconds or longer depending on the number of files on the USB stick. When complete, the Music Library screen opens where music is cataloged and sorted by Artists, Albums, Songs, Playlists and 'Now' playing. To view the contents of a list, select the tab.



Music can be selected ad hoc, from an album or playlist, or randomly selected.

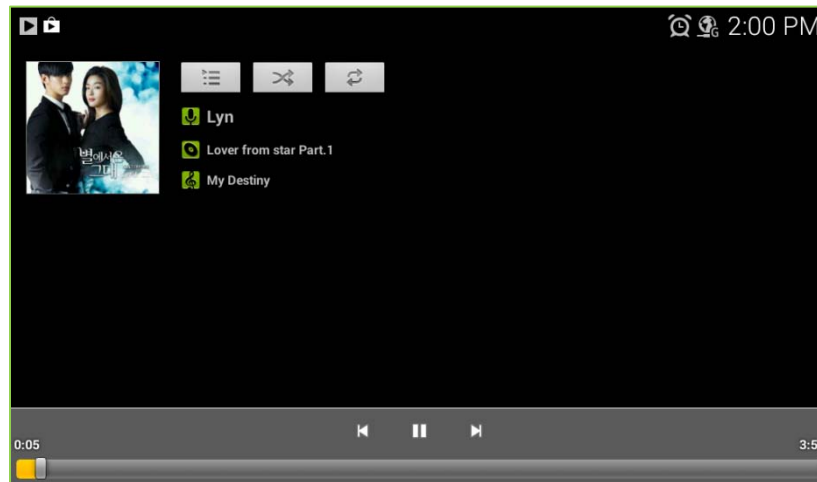
The Music Library screen Option menu varies slightly based on the specific library in view. The menu has song shuffling tools appropriate for the view.

Note

- Albums may include a tag indicating a Gallery photo to use as the Thumbnail. If the tag is included, LIP-9071 will display the thumbnail.

14.2.1 Playing Songs

To play a song, select a song or playlist from the Music Library, or in the Songs or Album list, press Menu and Play All. The playback screen appears and the song plays over the speaker of the phone.



At the bottom of the playback screen is the progress bar indicating the playback time and total length of the song. Above the progress bar are the common next and previous track controls along with the pause/resume button.

On-screen is information from the files such as album cover, artist, song, etc. In addition, there are three icon tools,



Playlist: open the current Playlist.



Shuffle: shuffle the current playlist for random order playback.



Repeat: repeat the current song, album or playlist.

Note

- The music will continue to play even when you switch applications. Music stops when the last song in the playlist is reached, unless the repeat option is active, or if playback is stopped by the user.

14.2.2 Playing a Party-Shuffle

When Party Shuffle is selected, LIP-9071 phone plays songs from the USB stick in a random order.

To play a Party Shuffle,

1. In the Music Library screen, press the Menu button.
2. Select Party Shuffle. Twelve tracks are selected at random from the USB stick and played as the current Playlist. When the dozen tracks are completed, another twelve tracks are selected and played.

If desired, a song can be added to the Party Shuffle playlist.

To add a song to the end of the current Party Shuffle playlist,

1. In the Music Library, touch and hold a song from a list.
2. Press the Menu button.
3. Select 'Add to Playlist' and select 'Current Playlist'.

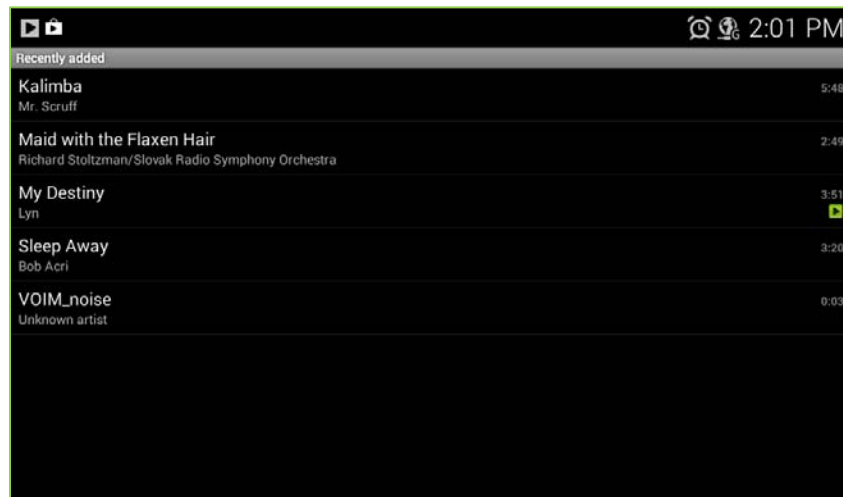
14.2.3 Play songs from a Playlist

To play songs in a Playlist,

1. In the Music Library, select Playlist.
2. Select the desired Playlist. Songs in the Playlist are played.

14.2.4 Managing Playlists

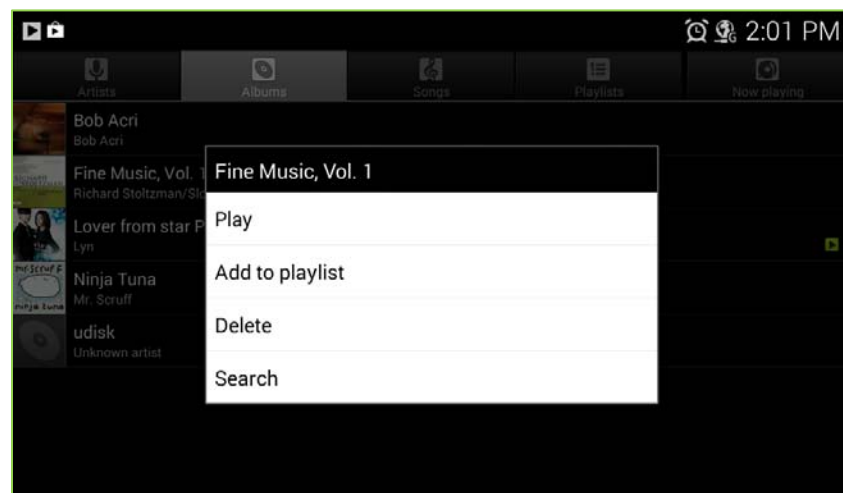
A Playlist is a set of songs that have been organized in a group. Songs in the Playlist are played in the order entered in the Playlist or the list can be shuffled before playback.



14.2.4.1 Create a Playlist

To create a new Playlist,

1. From a Library, touch and hold the first song title to add to the new Playlist.
2. In the menu touch 'Add to Playlist'.
3. Touch 'New' in the popup menu and enter a name.
4. Touch Save.



A song currently playing in the playback window can be added as the first song in Playlist

1. In the playback screen press the Menu button.
2. Touch 'Add to Playlist'.
3. Touch New in the menu and enter a name.

An entire Album can be saved as a Playlist as follows.

1. From the Music Library, select a list and touch and hold a song title from an Album.
2. From the menu touch 'Save As Playlist'.
3. In the popup, enter a name.
4. Press Save to store the new playlist.

14.2.4.2 Add Songs to a Playlist

To add a song to a Playlist,

1. From a Library list, touch and hold a song title.
2. Touch 'Add to Playlist'.
3. Select the Playlist to receive the song, the song is added to the Playlist.

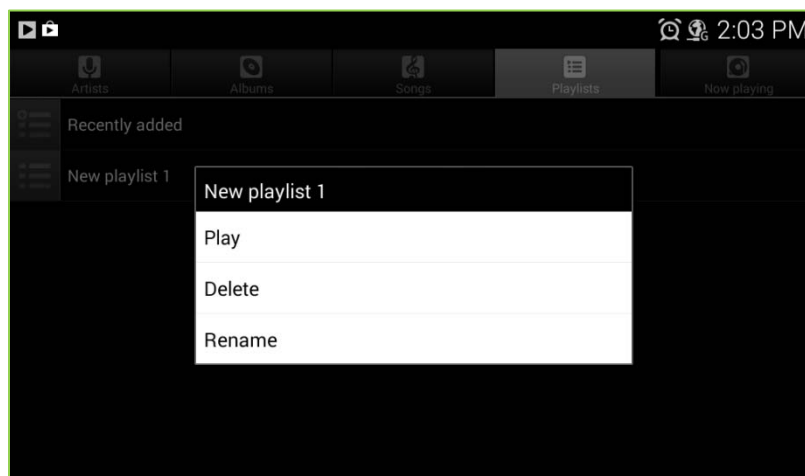
A song that is playing can be added to a Playlist as follows,

1. While the song is playing in the Playback screen, press the Menu button.
2. Select Add to Playlist in the menu.
3. Select the Playlist to receive the song.

14.2.4.3 Rename a Playlist

To rename a Playlist,

1. Touch and hold the Playlist from the Music Library.
2. In the menu, touch Rename.
3. Enter the new name for the Playlist.



14.2.4.4 Delete a Playlist

To delete a Playlist,

1. Touch and hold the Playlist from the Music Library.
2. In the menu, touch Delete.

Note

- The 'Recently Added' item in the Playlist cannot be deleted.

14.2.4.5 Delete Song from Playlist

To delete a song from a Playlist,

1. Select the Playlist from the Music Library.
2. From the list, touch and hold the song to delete.
3. In the menu, select Remove from Playlist. The song is removed from the playlist but remains on the USB stick.

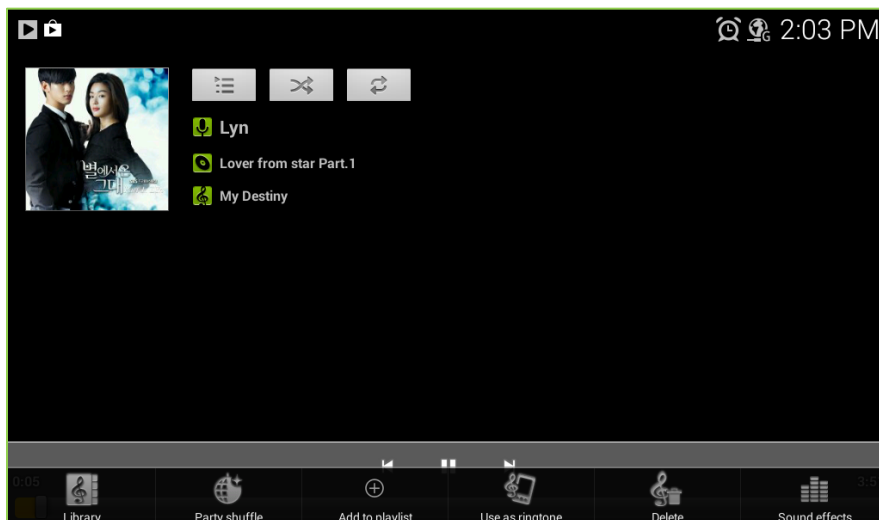
14.2.5 Use as Ringtone

A song in the Music library can be assigned for use as a Ringtone. To assign a song as a Ringtone,

1. Select a music library.
2. From the library list, touch and hold the song to be used as a Ringtone.
3. In the menu, select Use as Desk Phone ringtone.

Or

1. During playback of a song, press the Menu button.
2. In the menu, select 'Use as Ringtone'.



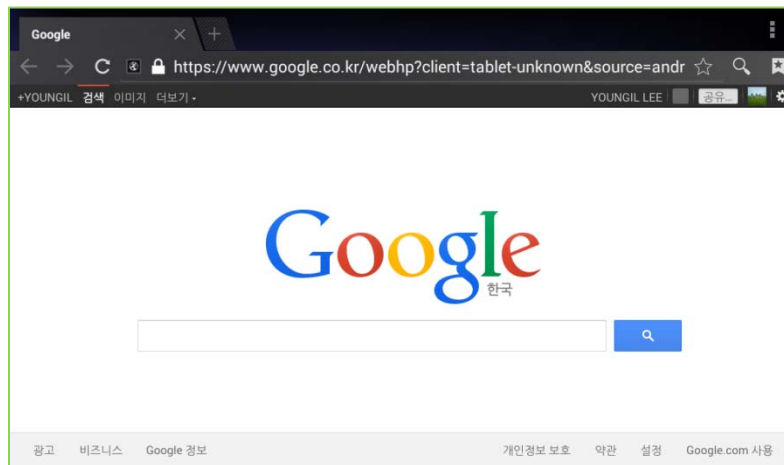
14.3 Browser

Use Browser to view web pages and to search for information on the web.

14.3.1 Opening Browser

Use Browser to surf the web.

Some websites have two versions of their sites: full-size for computer-based web browsers and another for mobile devices. They may allow you to switch back and forth. Full-size sites are often harder to navigate on a mobile browser than sites designed for use on mobile devices.



14.3.1.1 Open Browser

Touch the application icon in the Dock and then touch Browser icon.

Browser also opens when you touch a web link—for example, in an email or text message.

When you open Browser, the last webpage you were viewing is displayed. If you have not used Browser recently, your home page opens.

The web address (URL) of the current page is displayed at the top of the window, unless a mobile site scrolls the URL bar off the top of the screen (if so, just drag the page down to bring the URL bar into view).

14.3.1.2 Open a webpage or search the web

1. Touch the URL box at the top of the Browser screen.
If the URL box isn't visible, press Menu or just drag the page down until the URL box comes into view.
2. Enter the address (URL) of a webpage. Or enter terms you want to search for.
As you enter text, your web search engine makes suggestions of web pages and queries.
3. Touch a suggestion or enter an address and touch the arrow icon.
If you touch a suggested page or enter an address and touch the arrow icon that webpage opens.
If you touch a suggested query, your web search engine opens with the results.

14.3.1.3 Refresh the current page

Press Menu and touch Refresh.

The webpage is reopened, updating any content that has changed.

14.3.1.4 Stop opening a page

If a webpage is taking a long time to open, or if you change your mind, you can stop it from opening.

Touch the Cancel icon to the right of the URL.

14.3.1.5 Get more information about the current page

Press Menu and touch Page info.

A dialog opens with the page's title and full address (URL).

14.3.1.6 Set your home page

Your home page opens when you open a new Browser window, and when you start Browser after restarting your phone or after not using it for a while.

1. Browse to the page you want to set as your home page.
2. Press Menu and touch Settings > Set home page > General > Set homepage.
3. Touch Use current page. Or enter a different page's address (URL).
4. Touch OK.

If you prefer to open new Browser windows without opening a webpage by default, leave this field blank. This can make new Browser windows open more quickly.

14.3.2 Navigating within a webpage

Web pages that are optimized for mobile devices typically open at a size appropriate for your phone. Often, you can't zoom or even scroll their contents.

Web pages that aren't designed specifically for mobile devices typically open in overview mode—the page is zoomed out so you can get the big picture. You can change how pages open.

14.3.2.1 Scroll a webpage

Slide your finger on the screen if the pages are longer enough than screen height.

14.3.2.2 Zoom in or out on a webpage

You may not be able to zoom in or out on web pages designed for mobile devices.

1. Slide your finger slightly on the screen to reveal the Zoom control.
2. Touch the plus or minus side of the Zoom control to zoom in or out.

14.3.2.3 Quickly zoom into a section of a webpage

You may not be able to zoom in or out on web pages designed for mobile devices.

Double-tap on the section of the webpage you want to view.

The webpage zooms in so that you can read all the text in that section by scrolling up and down.

If you adjust your zoom level in this view, Browser remembers your preference while you stay on that page.

To return to the default zoom level, double-tap again.

Touch an area with two fingers at once and pinch them together to zoom out; spread them apart to zoom in. Double-tap after zooming in this way, to reflow a column of text to fit the screen

14.3.2.4 Find text on a webpage

1. Press Menu and touch Find on page.
2. Enter the text you're looking for.
As you type, the first word with matching characters is highlighted on the screen, and subsequent matches are boxed.
3. Touch the left or right arrow to scroll to and highlight the previous or next matching word.

14.3.3 Navigating among web pages

You can open links on a webpage, navigate back and forward, and review your browsing history, just as in any web browser. You can also take advantage of some shortcuts for working with links and other kinds of information.

14.3.3.1 Open a link

Touch a link to open it.

Links that you touch are highlighted in orange until the webpage they refer to opens in the window.

Go back and forward among the pages you've opened.

Press the Back button. Or, touch the previous arrow.

14.3.3.2 View your Browser history

As you browse the web, Browser keeps track of the pages you visit, to help you find your way back later. "Changing Browser settings" describes the setting that clears your history.

1. Touch the bookmark icon at the top right of the screen.
2. Touch the History tab.
You can also press & hold the Back button when viewing a webpage to open the History tab.
The pages you've visited are grouped chronologically. Bookmarked pages have a grey star. Touch a star to add or remove that page from your bookmarks.
3. Touch a time period to view the pages you've visited.
4. Touch & hold a page in the list to open a menu with options for opening the page adding it or removing it from you bookmarks, sharing page, removing it from your history, and so on.
5. Touch a page in the history to reopen it.

14.3.3.3 View your most frequently visited pages

1. Touch the bookmarks icon at the top right of the screen.
2. Touch the Most visited tab.
The pages you've visited most frequently are listed in order. Bookmarked pages have a gold star. Touch a star to add or remove that page from your bookmarks.
3. Touch & hold a page in the list to open a menu with options for opening the page adding it or removing it from your bookmarks, sharing page, removing it from your history, and so on.
4. Touch a page to open it.

14.3.3.4 Follow shortcuts for links, phone numbers, and addresses

Browser recognizes links, as well as some phone numbers, addresses, and similar information, as information that you may want to act on directly.

Touch & hold a link to open a menu with shortcuts for opening, bookmarking, saving, and sending the link via email.

Touch a phone number to open the Phone application with the number entered.

Touch a street address to open it in Maps.

14.3.4 Working with multiple Browser windows

You can open up to eight Browser windows at once and switch among them.

14.3.4.1 Open a new Browser window

Press Menu and touch New Tab.

Press Menu and touch New tab. In the screen that opens, touch New tab.

New windows open with your home page.

14.3.4.2 Switch Browser windows

1. Press Menu and touch New tab.
Your open windows are displayed.
2. Touch New tab to open it.

14.3.4.3 Close a Browser window

1. Press Menu and touch Windows.
All open windows are displayed in a scrolling list of thumbnails.
2. Touch the Close 'X' on the window to close it.

14.3.4.4 Downloading files

You can download files and even applications from web pages. The files that you download are stored on your phone's internal storage. Viewing, reopening, and deleting your downloaded files is described in "Managing downloads".

14.3.4.5 Allow installing applications from the web or email

By default, your phone is configured to prevent you from installing applications that you download from the web or receive with an email message.

Warning! Applications downloaded from the web can be from unknown sources. To protect your phone and personal data, download applications only from trusted sources, such as Android Market.

1. Press Home, then press Menu and touch System settings > Apps (Applications).
2. Check Unknown sources.
3. Touch OK in the dialog to confirm you want to allow downloading applications from sources other than Market.

14.3.4.6 Download a file

Different web pages offer different mechanisms for downloading pictures, documents, applications, and other files.

Touch & hold an image or a link to a file or to another webpage. In the menu that opens, touch Save.

If the file is in a format supported by an application on the phone, it is downloaded to your USB storage.

14.3.4.7 Cancel a download

If you change your mind about downloading a file, or start downloading one by accident, you can cancel the download in progress.

1. Press Menu and touch Downloads.
2. Touch & hold an item in the list and in the menu that opens, touch Cancel download. Or press Menu again and touch Cancel all downloads.

14.3.4.8 View the files you've downloaded

Press Menu and touch Downloads.

The Downloads application opens, with a list of the files you've downloaded in Browser and other applications.

See "Managing downloads".

14.3.5 Working with bookmarks

You can bookmark web pages so that you can quickly return to them.

14.3.5.1 Bookmark a webpage

1. Open the webpage to bookmark.
2. Touch the bookmark icon at the top of the screen (or press Menu and touch Bookmarks) and at the top of the Bookmarks screen, touch Add. You can also press Menu and touch Add bookmark icon.
3. Edit the name and the address if necessary and touch OK. The bookmark is added to your list of bookmarks.

14.3.5.2 Open a bookmark

1. Touch the bookmark icon at the top of the screen.
Or, press Menu and touch Bookmarks. A window opens with a list of your bookmarks, sorted by how often you visit them. Bookmarks are displayed in thumbnail view by default. To see them as a list, press Menu and touch List view.

2. Touch a bookmark to open it.

The bookmark opens in the current window. If you prefer to open it in a new window, touch & hold the bookmark and touch Open in new window in the menu.

14.3.5.3 Edit a bookmark

1. Touch the bookmark icon at the top of the screen.
Or, press Menu and touch Bookmarks.
2. Touch & hold the bookmark to edit.
3. Touch Edit bookmark in the menu
4. Edit the name or address in the dialog that opens.
5. Touch OK.

14.3.5.4 Share a bookmark

1. Touch the bookmark icon at the top of the screen.
Or, press Menu and touch Bookmarks.
2. Touch & hold the bookmark to share.
3. Touch Share link in the menu.
4. Touch the application you want to use to send the bookmark. The application opens with the bookmark's address entered.

14.3.5.5 Add a bookmark shortcut to the Home screen

You can add a shortcut to your phone's Home screen that you can touch to open one of your bookmarks in a Browser window.

1. Touch & hold an empty spot on your phone's Home screen.
2. Touch Shortcut.
3. Touch Bookmarks.
4. Touch a bookmark to add it.

The bookmark icon is added to the Home screen.

14.3.5.6 Delete a bookmark

1. Touch the bookmark icon at the top of the screen.
Or, press Menu and touch Bookmarks.
2. Touch & hold a bookmark to delete it.
3. Touch Delete bookmark in the menu.
4. Touch OK.

14.3.6 Changing Browser settings

You can configure a number of Browser settings, including several that you can use to manage your privacy. To open the Browser settings screen, touch Option menu and touch Settings.

14.3.6.1 Privacy settings

Clear cache

The browser stores the text and images of the web pages you visit so that they open more quickly when you revisit them. Touch Clear cache to delete these temporary files.

Clear history

The browser keeps track of the web pages you visit, so you can quickly find them and open them again later. (See “View your Browser history”) Touch Clear history to delete this record.

Show security warnings

The browser shows warnings if there is a problem with a site's security.

Accept cookies

Many web pages store, read, and update files called cookies on your phone, for your convenience. For example, some password-protected sites use cookies so you don't have to sign in each time you visit. Other sites use cookies to remember your preferences. Uncheck to prevent web pages from storing cookies on your phone.

Clear all cookie data

Touch it to delete all cookies from your phone.

Remember form data

Browser remembers what you enter in some form fields on a site and helps you reenter that text the next time you use that form. Uncheck to disable this feature.

Clear form data

Touch it to delete all the information the Browser remembers about what you've entered in forms.

Enable location Check to permit websites with location-specific content to ask whether you want to share your location, using your phone's location information. To provide a website with your location, you must also have location sharing enabled in the Settings application. See “Privacy settings”.

Enable location

Allow sites to request access to your location.

Clear location access

Opens a dialog where you can clear the permissions you've granted to websites in the past, to access your location. If those websites want permission to access your location again, you must grant it again.

14.3.6.2 Security settings

Remember passwords

Browser can remember your passwords for some web pages that require you to sign in, to make it quicker to sign into those pages on repeat visits. Uncheck to prevent Browser from storing passwords.

Clear passwords

Touch it to delete any passwords that Browser has stored. Show security warnings Uncheck to prevent Browser from warning you about websites with common security problems, such as outdated or invalid certificates.

14.3.6.3 Accessibility

Force enable zoom

Override a website's request to control zoom behavior when displaying web pages.

Text size

Opens a dialog where you can increase or decrease the size of the text that Browser uses when displaying web pages.

Text scaling

Control a dialog where you can increase or decrease the magnification level of text that Browser uses when opening a webpage.

Zoom on double-tap

Control a dialog where you can increase or decrease the magnification level that Browser opens a webpage.

Minimum font size

Control a dialog where you can increase or decrease the font that Browser uses on a webpage.

Inverted screen rendering

Control to make black becomes to white and vice versa when Browser open a webpage.

14.3.6.4 Advanced

Default zoom

Opens a dialog where you can increase or decrease the magnification level that Browser uses when first opening a webpage.

Open pages in overview

Uncheck to open web pages displaying their top-left corners at 100% size. Check to open web pages zoomed out, in an overview.

Auto-fit pages

Check to have Browser optimize the presentation of text and other elements of web pages to fit your phone's screen. Checking this option also causes the browser to reflow a column of text to fit the screen if you double-tap the screen directly after zooming with your fingers. Uncheck to view pages as designed for a computer screen, and to cause double-tapping to simply switch between zoomed-in and default view.

Block pop-ups

Check to prevent websites from opening windows unless you request it.

Text encoding

Opens a dialog where you can change the character-encoding standard that Browser uses when displaying text on a webpage.

Reset to default

Touch to delete all Browser data, including your browsing history, cookies, passwords, and bookmarks, and to restore all the Browser settings to their original values.

14.3.6.5 Bandwidth management

Search result preloading

Allow browser to preloading high confidence search result in the background.

Web page preloading

Allow browser to preload linked web pages in the background.

Load images

Uncheck to omit images when Browser displays a webpage. This speeds webpage display, which can be useful if you have a slow connection, but many websites make little sense with text alone.

14.3.6.6 Others

Quick menu style

Slide thumb from the left or right edge to open quick menu and hide app and URL bars.

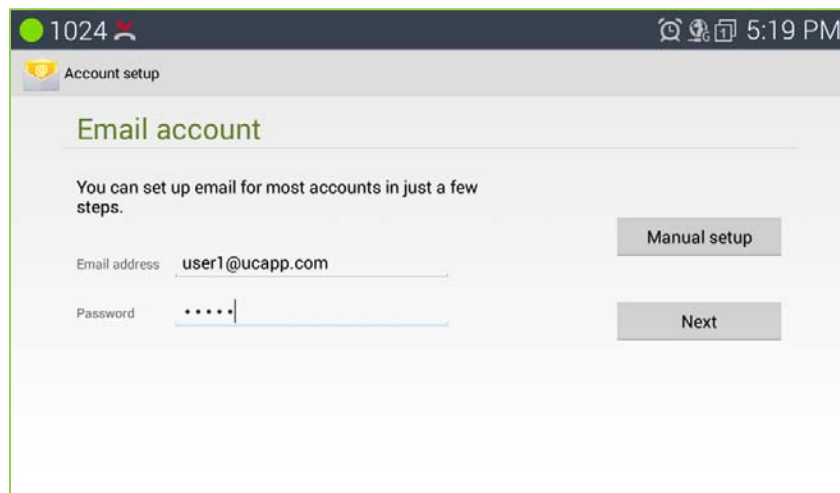
14.4 Email

LIP-9071 provides built-in Email application for users to access personal or business Email account. User can use this Email application to read and send email from services other than Gmail. Email includes a wizard that makes it easy to configure it for several popular email service providers. Fully fill the below wizard form as your account information.

Use the Email application to view individual email account inboxes or a combined inbox. The Email application supports POP3, IMAP, and Exchange email accounts.

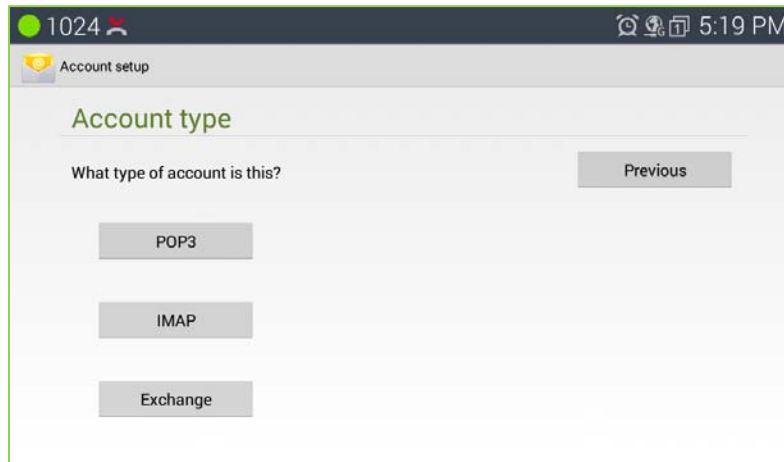
14.4.1 Sign in email

When launching the Email application for the first time, a wizard will be provided for users to set up the Email account step by step.

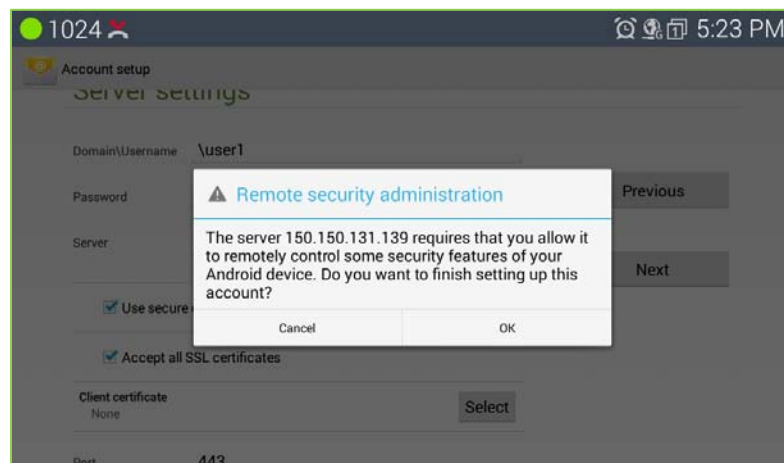


1. Enter the Email address and Password.
2. Tap on "Next" for quick setup, or tap on "Manual setup" to manually configure more options.

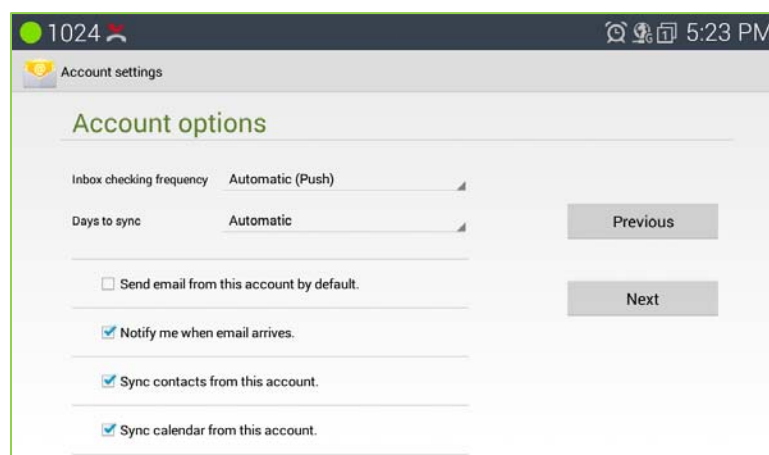
3. If "Manual setup" is selected in step 2, users will need to choose the account type "POP3" "IMAP" or "EXCHANGE" depending on the type of your Email account.



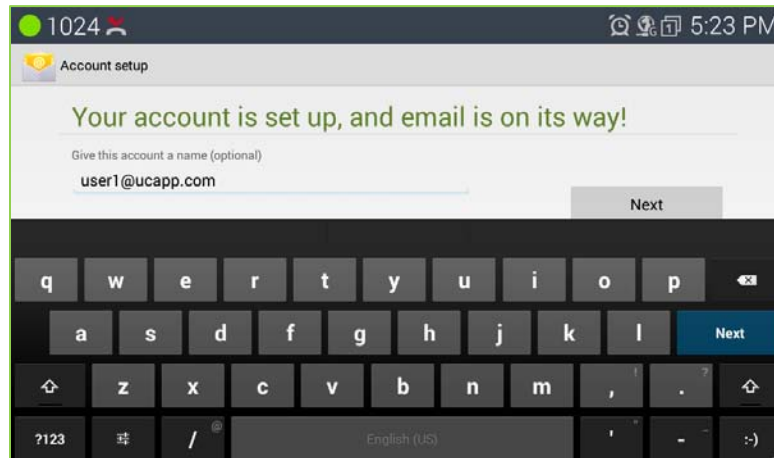
- EXCHANGE setup. When using EXCHANGE, all Emails are stored in the central Exchange mail server and can be checked using capable mail client such as Microsoft Outlook. Please check with your network administrators for the correct Email account settings for EXCHANGE.
- After account complete communication with exchange server it will guide security warning.



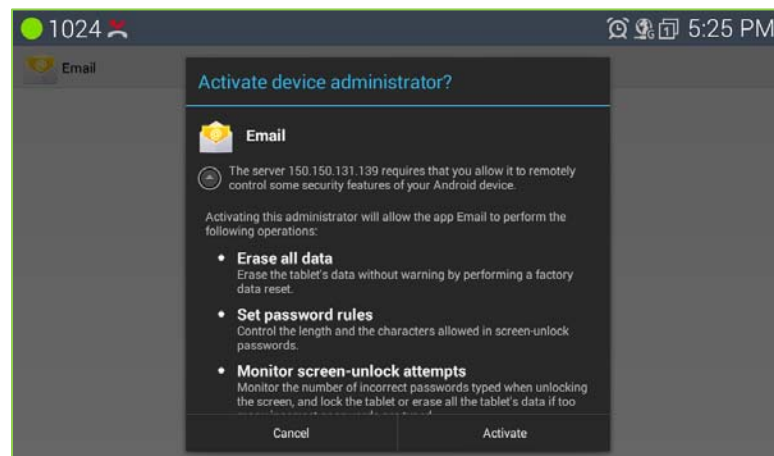
4. After select 'OK' if "Next" is selected in step 2, users will see the following default account settings. Tap on "Next" again.



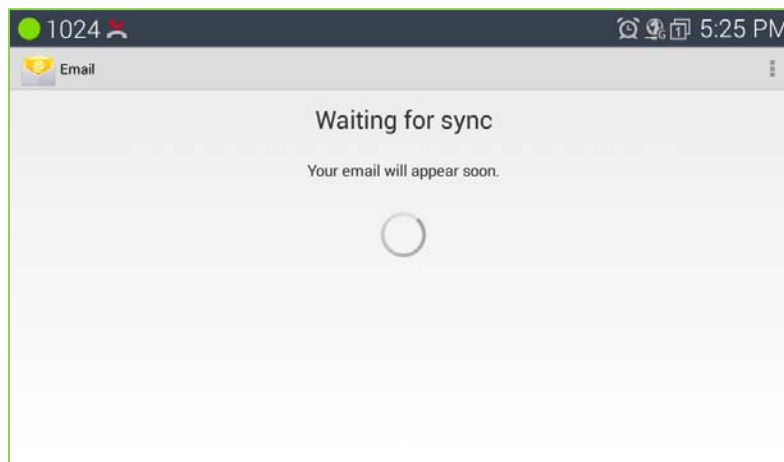
- Set up "Your name" to be displayed on the outgoing messages and tap on "Next" again. Users should be able to start using the Email account now.



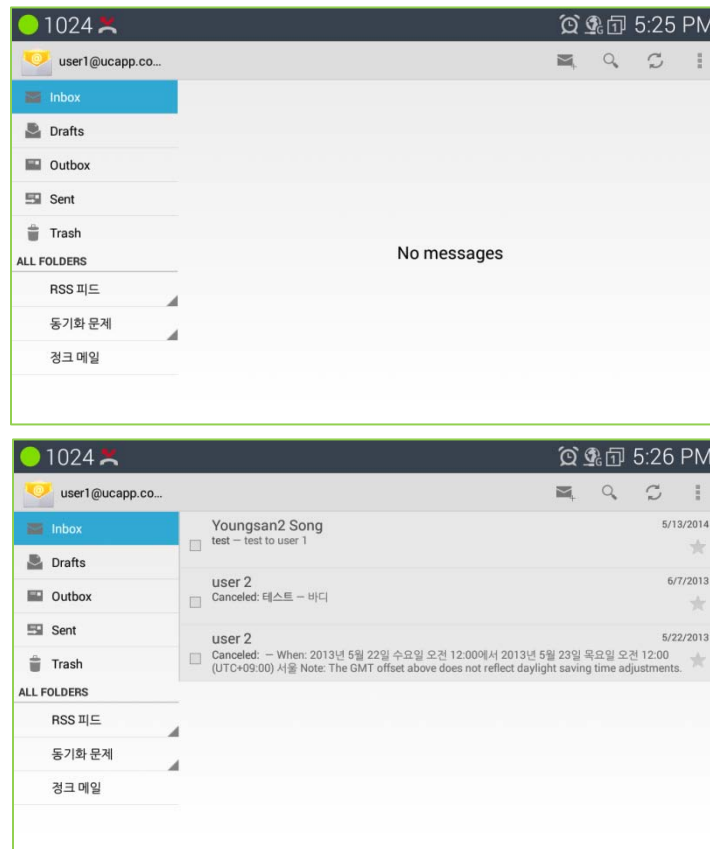
- Depending on the server setting, email application need to send Activation request to server. If server need to get activation pop-up window will be guided to set.



- After success of activation email application start sync to account.



8. After complete of synchronization user can use email app.



14.4.2 Inbox

Accounts are listed in the tab on the left side, followed by a summary of folders with new messages.

Folders are listed on the left side.

You can view email messages from an individual or a combined inbox. While an email message open, the inbox is displayed in the left tab.

1. Refresh Inbox: tap sync icon.
2. Sort Mailbox.
 - 1) Tap "... " (menu).
 - 2) Tap Sorting Options.
 - 3) Select a sorting method.
3. Search Email Messages.
 - 1) Tap "search" icon.
 - 2) Select the type of search.
 - 3) Enter your search query in the search bar.

14.4.3 Send Email Message

- 1) Tap "+" icon
- 2) Enter the recipient email address, enter the subject and compose the message
- 3) Tap "Send"

14.5 Managing Download

Files, applications, and other items you downloaded in Browser, Gmail, or Email are stored on your phone's internal storage. You can use the Downloads application to view, reopen, or delete what you've downloaded.

14.5.1 Open Downloads and manage downloaded files

Touch the Downloads icon on the Home screen or in the App list.

- 1) Touch an item to reopen it.
- 2) Touch headings for earlier downloads to view them.
- 3) Check items you want to delete; then touch Delete. The item is deleted from your phone's USB storage.
- 4) Press Menu button, and touch Sort by size or Sort by time to switch back and forth.

14.5.2 Downloads and install application

1. Open Playstore market and find the app you would like to install.
2. Tap on "Install" softkey for the app. It will start downloading.
3. Once downloaded, the installation process will start automatically.
4. Tap on to view the downloaded apps and installed apps from Play Store market account.

14.5.3 Uninstall application

1. Open Settings and tap on to access one of the installed apps.
2. In detail user can see "Uninstall" option for each app.
3. Tap on "Uninstall" for the app you would like to uninstall and tap 'OK' for confirmation.

15 Appendix

15.1 DHCP option 156

LIP-9071 series terminals incorporate software routines to automatically provision the configuration of the phone. To initialize LAN VLAN and Call Server Setting, DHCP gather basic network, VLAN and Call Server from DHCP Server, set VLAN configuration and Call Server with options from that.

Note usually the VLAN configuration will be applied by user or LLDP protocol. But, some users want to set VLAN with their DHCP server. This option is for those users.

15.1.1 DHCP

During the initial and subsequent boot-up cycles, the phone requests various data options from the DHCP server. The following is the requested option.

- DHCP Option #156 Call Server and VLAN Configuration.

15.1.2 Option 156 format

The parameter and syntax of option 156 is below.

Parameter	Description	Syntax
cs	Call server IP address	IPv4 address Format
vid	LAN VLAN id	1~4094
priority	LAN VLAN priority	0~7
cmod	Connection Mode	local, remote, localremote

* If there is no parameter and the value is IP address format, it indicates Call Server address.

* Only a parameter that needs to be set is added. If not, it doesn't need to be added.

* Valid format is 'parameter=value'.

* When there are one more parameters, a comma (,) is added between them.

Examples of valid DHCP option string:

150.150.140.101

cs=150.150.140.107,vid=20,priority=6

cs=150.150.140.109,vid=2,cmod=remote

cs=150.150.140.109,vid=4090,priority=6,cmod=localremote

15.1.3 VLAN Setting

When LIP-9071 gets VLAN options (vid, priority) from DHCP, it applied those values to network setting. It based on LLDP and VLAN configuration related to VLAN configuration. The condition to apply those options is defined in Condition section. It doesn't change the device setting.

15.1.4 Call Server Setting

When LIP-9071 gets Call sever for iPKTS and Connection mode for iPKTS. After receiving those values, it will apply that to system setting. If those setting are changed, the iPKTS call tries to connect to Call server with new values.

Condition

LLDP menu	VLAN menu	DHCP Option(156)	Set VLAN with
Disable	N/A	N/A	N/A
	Set	Set ¹⁾	DHCP option(156)
Enable (VLAN policy : AUTO)	N/A	N/A	Discovered LLDP
		Set ¹⁾	Discovered LLDP
	Set	N/A	Discovered LLDP
		Set ¹⁾	Discovered LLDP
Enable (VLAN policy: Manual)	N/A	N/A	N/A
		Set	DHCP option(156)
	Set	N/A	VLAN menu
		Set ¹⁾	VLAN menu

¹⁾ vid & priority parameter is ignored and cs & cmod parameter is applied.

15.1.5 Web admin setting

If you want to enable option 156, you must set DHCP option Use enable in Update Setting pages.

Update Setting		
HTTP/HTTPS	URL	
	DHCP Option Use	Use ▼
	DHCP Option Number	160
	ID	
Target to update	Password	
	S/W	Enable ▼
	Configuration	Disable ▼
Auto Update	Use	Not Use ▼
	Start Time	AM ▼ Hour 02 ▼ Min 00 ▼
<div>Submit Setting</div> <div>Execute Update</div>		

15.2 DHCP Option 60

During the initial and subsequent boot-up cycles, the phone requests various data options from the DHCP server. Some DHCP server requests DHCP client to send its identifier to reply with options for that DHCP Client. To support this feature, DHCP client should add its identifier to DHCP Discover & Request Message.

15.2.1 Option 60

DHCP option 60 is "Vendor Class Identifier".

Note

- Usually if DHCP client send option 60, the DHCP client may send option 43(Vendor-specific information). Currently, LIP-9071 had no Specification for Option 43.

15.3 Web admin

LIP-9071 phone incorporates a Web server used to configure LIP-9071 phone IP addressing, Call server parameters, Network setting characteristics, flexible buttons, etc. The Web Manager allows for remote access through the LAN port and is intended for use by the system administrator.

To access to the web admin page, please try through HTTPS connection with default port or port number as 8000. (e.g.: <https://192.168.140.100:8000>)

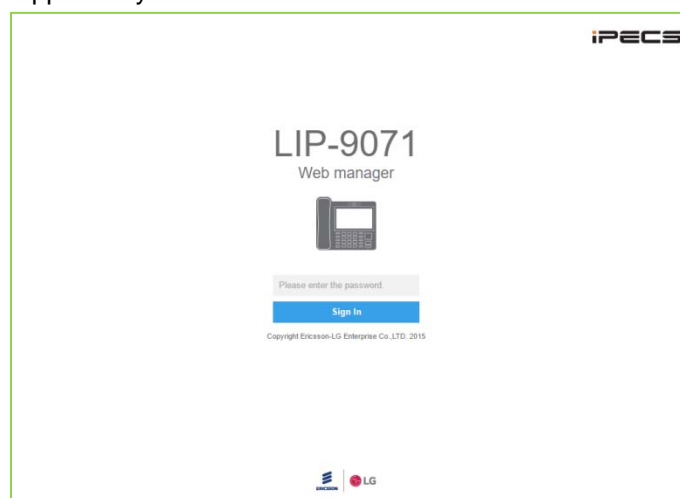
Note


- LIP-9071 web admin pages are supported with IE10.0 or higher version and Chrome browser. And it could not compatible with lower version of IE browser.

15.3.1 Web Manager Login


To access the Web Manager, point the browser to the IP address of LIP-9071 phone at TCP port 8000 as *<ip address:8000>*. The Web Manager may be password protected. At the Login screen enter the password and touch the Authenticate button. There is default password as 'lip'. So after first login with default password user must change new password with strong type.

Please note that LIP-9071 support only HTTPS interface.



 LIP-9071


Later

**Your password stored is not valid. Please change it.**
Complying the following rule is recommended for security.

Password must meet the following requirements:

- Minimum 9 characters in length
- Contains at least 3 of these following items:
 - Uppercase Letters
 - Lowercase Letters
 - Numbers
 - Symbols
- More than 3 sequential characters not allowed(e.g. abc(X), 123(X), abd(O), 124(O))
- More than 3 consecutive characters not allowed(e.g. aaa(X), 111(X), aab(O), 112(O))

Change

 LIP-9071

Change Password

New password

Confirm new password

Submit

Password must meet the following requirements:

- Minimum 9 characters in length
- Contains at least 3 of these following items:
 - Uppercase Letters
 - Lowercase Letters
 - Numbers
 - Symbols
- More than 3 sequential characters not allowed(e.g. abc(X), 123(X), abd(O), 124(O))
- More than 3 consecutive characters not allowed(e.g. aaa(X), 111(X), aab(O), 112(O))

15.3.2 Overview Screen

At login, the Overview screen displays a list of menus on the left and general information for the phone. Touching the menu item in the left navigation exposes the menu where data can be entered and saved.

Phone Information	
Model	LIP-9071
Package Version	T-9071ipkts-Rls1612-1.0.120
Call Version	call apk: 1.2Ar date 17 01 02
Audio Version	2016.11.11 STD
HW Version	7
Bootrom Version	U-Boot2009.08 (Jan 02 2017 - 12:11:13)
Kernel Version	Release:3.0.35, Version:#1 SMP PREEMPT Mon Jan 2 12:04:07 KST 2017
Touch Panel Version	2.2.7
OpenSSL Version	OpenSSL 1.0.1s 1 Mar 2016
System Uptime	0day, 0h, 2m, 8s
IP Address	150.150.140.37
MAC Address	B0:61:C7:0F:4F:BF
Change Password	Password Locked

15.3.3 Language (web admin) setting

The change language menu for language selection between English and Korean is only for LIP-9071 web admin screen

Language (언어 설정)

Language (언어) English (영어) ▼

Submit (변경)

15.3.4 Change password

The change password menu permits the definition of a password of up to 20 characters. When entered it must follow strong password rule, the strong password will be required in LIP-9071 phone Web Manager Login screen.

The screenshot shows the LIP-9071 web manager interface. On the left is a sidebar menu with a gear icon and the text 'LIP-9071'. The menu items are: Overview, Language(web admin), Change Password (highlighted), System Setting, Device Number, Flexible Button Label, Network, VLAN, Open VPN, LLDP, 802.1x, Time Setting, DiffServ, Video Setting, Update Setting, Update History, Diagnosis, Reboot, and Logout. The main content area is titled 'Change Password'. It contains two input fields: 'New password' and 'Confirm new password'. Below these fields is a 'Submit' button.

15.3.5 System Setting

The System Setting assigns the IP address of iPECS system and the type of connection that can be local, remote or Local/remote. If these values are changed, the phone must restart to properly register with iPECS system.

The screenshot shows the LIP-9071 web manager interface. On the left is a sidebar menu with a gear icon and the text 'LIP-9071'. The menu items are: Overview, Language(web admin), Change Password, System Setting (highlighted), Device Number, Flexible Button Label, Network, VLAN, Open VPN, LLDP, 802.1x, Time Setting, DiffServ, Video Setting, Update Setting, Update History, Diagnosis, Reboot, and Logout. The main content area is titled 'System Setting'. It contains two input fields: 'MFIM IP Address' with the value '150.150.141.95' and 'Connection Mode' with a dropdown menu showing 'Local/Remote'. Below these fields is a 'Submit' button.

15.3.6 Device Number

A desired station number can be configured in the Device Number menu. At registration the phone will request the station number desired. If available, iPECS allows use of the desired number.

15.3.7 Flexible Button Label

LIP-9071 has a group of fourth eight (48) Flexible or Flex buttons. The function for each button is configured in iPECS or through the Station User Programming. For more on Flex button assignments see the host iPECS manuals. For example if user attach LIP-9012DSS button kit to LIP-9071 then screen shows the button of extra 12 buttons as well.

The Flex button menu defines a label for the button of up to 16 characters. The Flex buttons are assigned in single layout menus with 48 buttons.

Enter a custom label for each of the displayed Flex buttons and save the changes. If no custom label is assigned, a default label based on the button function or blank for unassigned buttons is used.

Default		12 DSS	
B01 CO 001	B07 CO 007	B49	
B02 CO 002	B08 CO 008	B50	
B03 CO 003	B09 CO 009	B51	
B04 CO 004	B10 CO 010	B52	
B05 CO 005	B11 LOOP	B53	
B06 CO 006	B12 LOOP	B54	
B13 STA 1101	B19	B55	
B14	B20	B56	
B15	B21	B57	
B16	B22	B58	
B17	B23	B59	
B18	B24	B60	
B25	B31		
B26	B32		
B27	B33		
B28	B34		
B29	B35		
B30	B36		
B37	B43		
B38	B44		
B39	B45		

15.3.8 Network Settings

The Network Setting menu configures the address Mode, Static or Dynamic. If static addressing is employed, the IP and Gateway address as well as the subnet mask must be defined. In addition a Primary and secondary DNS (Directory Name Server) can be configured to support VPN installations.

For the Wi-Fi interface user can set the same parameter field of Ethernet.

15.3.9 VLAN Settings

The VLAN Setting menu configures the Id and password of Virtual LANs for both the LAN and PC port. Enable the VLAN Status, enter a priority and id for both the LAN and PC port and save the changes.

The PC port should have a lower priority than the terminal; typically a PC priority of 3 and Terminal priority of 5 provide acceptable performance. Also, in general, the PC VLAN id will be 0, while the Terminal VLAN id will be a number between 1 and 4094.

15.3.10 Open VPN

OpenVPN implements virtual private network technology employing an open source software application. LIP-9071 OpenVPN implements User name/password for authentication utilizing SSL/TLS (Secure Socket Layer/Transport Layer Security).

Among the needed parameters, once the Status is enabled, the remote server must be identified and the authentication parameters, ID, and Password must be defined.

LIP-9071

Open VPN

Status	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Remote Server Address	<input type="text"/>
Remote Server Port	<input type="text" value="1194"/>
Protocol Type	<input checked="" type="radio"/> UDP <input type="radio"/> TCP
Cipher	<input type="text" value="AES128-CBC"/>
Compression	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
ID	<input type="text"/>
Password	<input type="text"/>
Root CA Status	Please, install Root CA Certificate
	<input type="button" value="파일 선택"/> 선택된 파일 없음

15.3.11 LLDP

When enabled, LIP-9071 employs LLDP (Link Layer Discovery Protocol) to advertise capabilities and determine characteristics of the surrounding network environment. The phone can determine and automatically configure VLAN settings for both the LAN and PC ports when LLDP is enabled and VLAN policy is Auto.

LIP-9071

LLDP

Status	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
VLAN	<input checked="" type="radio"/> Auto <input type="radio"/> Manual

15.3.12 802.1x

LIP-9071 supports Layer 2 (Ethernet) security employing 802.1x port based Network Access Control. EAP-MD5 method is used for ID and password authentication for access to the network.

The Id and password can be a maximum of 128 characters.

15.3.13 Time Setting

NTP (Network Time Protocol) Server Configuration defines the URL of an NTP sever LIP-9071 will employ to determine the time when verifying VPN certificates.

15.3.14 DiffServ Menu

The Diffserv (Audio / Video) menu establishes the DSCP applied to Audio/video packets only. DSCP or ToS establishes the priority of voice packets. Compatible routers apply the DSCP for packet priority, handling higher priority packets first. However, at congested routers, higher priority packets are discarded first. Thus, a median value for DSCP is recommended.

DiffServ

Audio **Video**

DiffServ Mode ☐ Disable ☒ Enable

☐ Default Expected (DE)
Codepoint: 000000

☐ Assured Forwarding(AF)

	Class 1	Class 2	Class 3	Class 4
Low Drop Prec	<input checked="" type="radio"/> 001010	<input type="radio"/> 010010	<input type="radio"/> 011010	<input type="radio"/> 100010
Med Drop Prec	<input type="radio"/> 001100	<input type="radio"/> 010100	<input type="radio"/> 011100	<input type="radio"/> 100100
High Drop Prec	<input type="radio"/> 001110	<input type="radio"/> 010110	<input type="radio"/> 011110	<input type="radio"/> 100110

☐ Expedited Forwarding(EF)
Codepoint: 101110

☒ User Defined(UD)
Codepoint:

Submit

15.3.15 Video setting

LIP-9071 provides 5 options for video frame rate. It can be chosen depending on the network traffic or the video quality. And it provides 14 transmission video resolutions with bitrate setting.

Video Setting

Frame rate: 24 frames

Resolution(Tx): system

Video Bitrate: 768

Submit

15.3.16 Update setting

From time to time LIP-9071 phone software may be modified or upgraded to improve performance or add features. LIP-9071 software can be upgraded to the modified software. The upgrade may include updates to the Android operating system as well as iPECS Phone application. The upgrade software file named *LIP-9071_XXXX.tgz* is placed on an http/https server. The software is then downloaded by the phone. The phone reboots and loads the new software. Note that the upgrade software on the server may be a previous or newer version than is running on LIP-9071.

Note

- The upgrade software file, LIP-9071_XXXX.tgz can be obtained from the local Ericsson-LG representative.
- During the upgrade procedure, do NOT unplug or remove the phone from the power source or LAN.
- An upgrade will return the Call Preferences, Flex button labels and Call Sound settings to the default values.

15.3.16.1 Firmware Upgrade Configuration

Prior to upgrading the software, the phone must be configured with the upgrade server information. The information required includes the server IP address or URL and for https, the Authentication ID and password. The phone may request the server IP address or URL from the local DHCP server using Option 160 as the server address or URL.

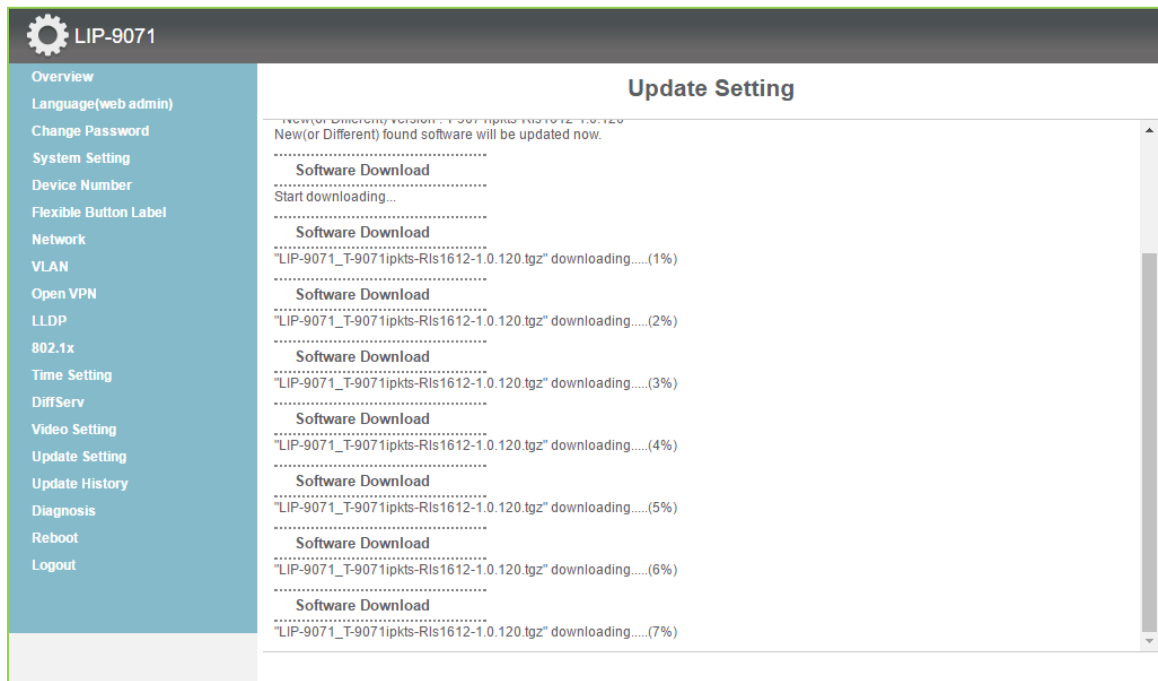
Note

- LIP-9071 uses HTTP/S protocol to upgrade the phone software.

15.3.16.2 Execute Firmware Upgrade

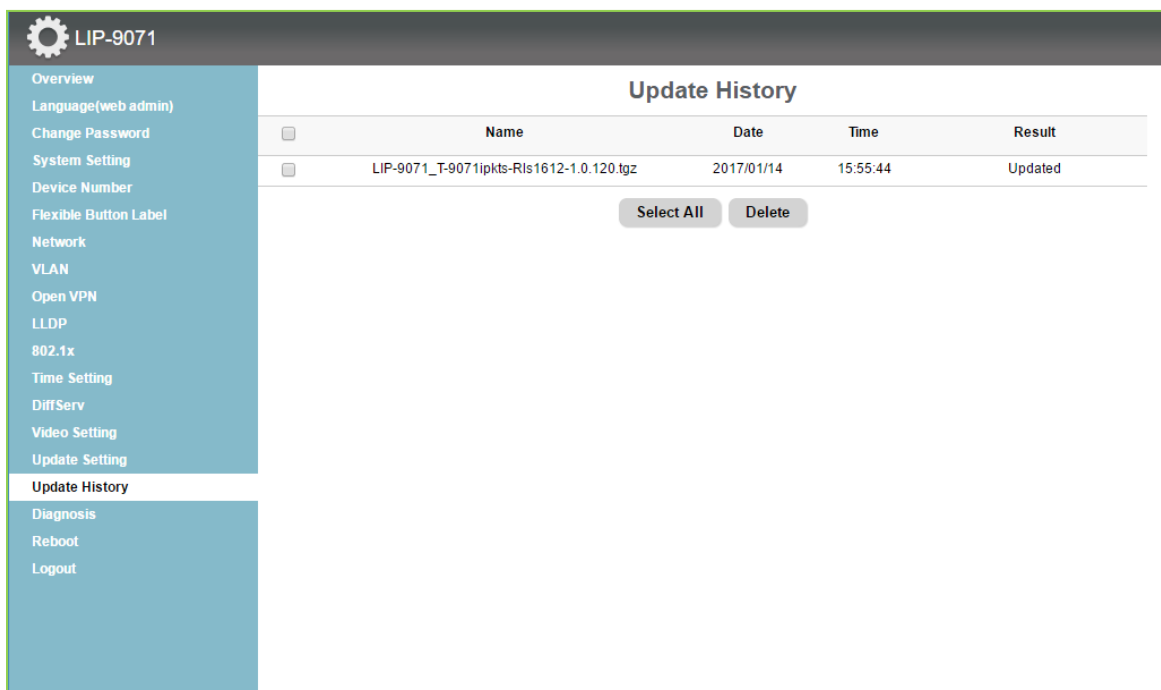
Once the software is loaded on the upgrade server and the phone configured with the server information, the software can be upgraded. To upgrade the software,

1. Select 'Execute Firmware Upgrade'.
2. LIP-9071 contacts the upgrade server and downloads the firmware.



15.3.17 Update History

Update history shows all package installation history of LIP-9071. Also selected history list can be deleted using Delete button.

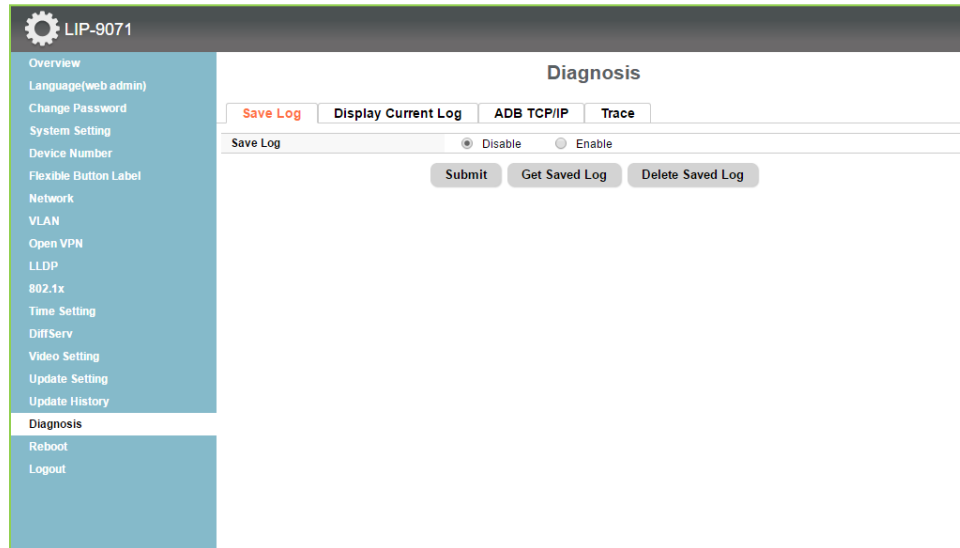


15.3.18 Diagnosis

For troubleshooting some problems that a user may encounter while using LIP-9071, LIP-9071 provides feedback by such as logcat log files and ADB, which can help an administrator more easily find the problem and fix it.

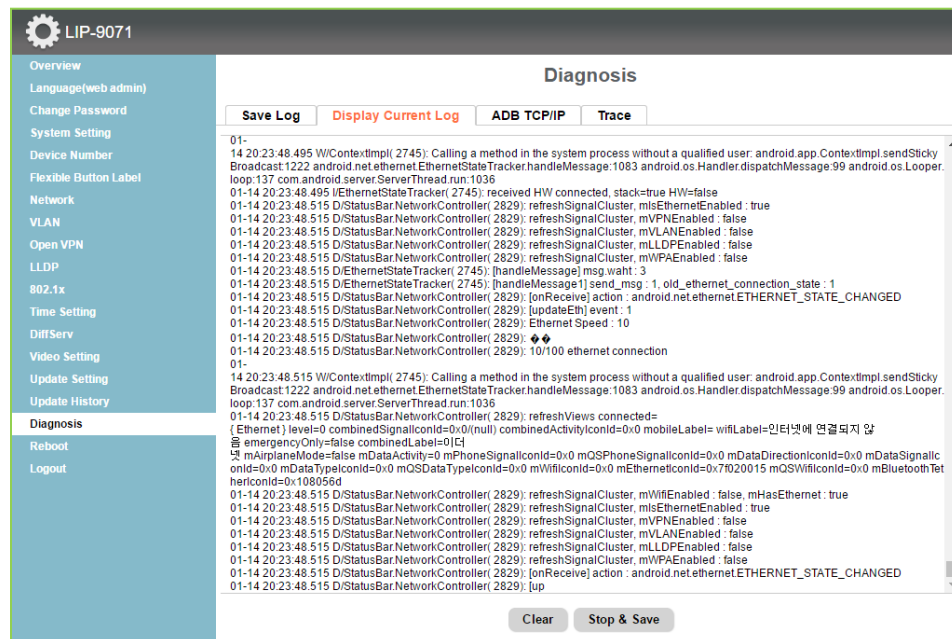
15.3.18.1 Save Log

Logcat is a command-line tool that dumps a log of system messages, including stack traces when an Android device throws an error and messages. When Save Log is enabled, Logcat log history can be saved as separate files and it can be downloaded to PC.



15.3.18.2 Display Current Log

The current logcat log is displayed in the Web screen and it can be saved to the file.



15.3.18.3 ADB TCP/IP

ADB (Android Debug Bridge) is a command line tool to communicate with a connected Android device. ADB TCP/IP is TCP/IP-based Remote ADB. ADB can connect to the remote LIP-9071 via the Data Network and used to maintain the connected terminals.

The screenshot shows the LIP-9071 web interface. On the left is a sidebar menu with options: Overview, Language(web admin), Change Password, System Setting, Device Number, Flexible Button Label, Network, VLAN, Open VPN, LLDP, 802.1x, Time Setting, DiffServ, Video Setting, Update Setting, Update History, Diagnosis, Reboot, and Logout. The 'Diagnosis' menu item is highlighted. The main content area is titled 'Diagnosis' and contains four tabs: 'Save Log', 'Display Current Log', 'ADB TCP/IP' (which is active), and 'Trace'. Under the 'ADB TCP/IP' tab, there are three sections: 'Mode' with radio buttons for 'Disable' (selected) and 'Enable'; 'Port No' with a text input field containing '5555'; and 'Key Status' with a text input field containing the message 'Please, install Key (Ex: c:\Users\USERNAME\android\adbkey.pub)' and a file selection button labeled '파일 선택'. A 'Submit' button is located at the bottom right of the configuration area.

15.3.18.4 Trace

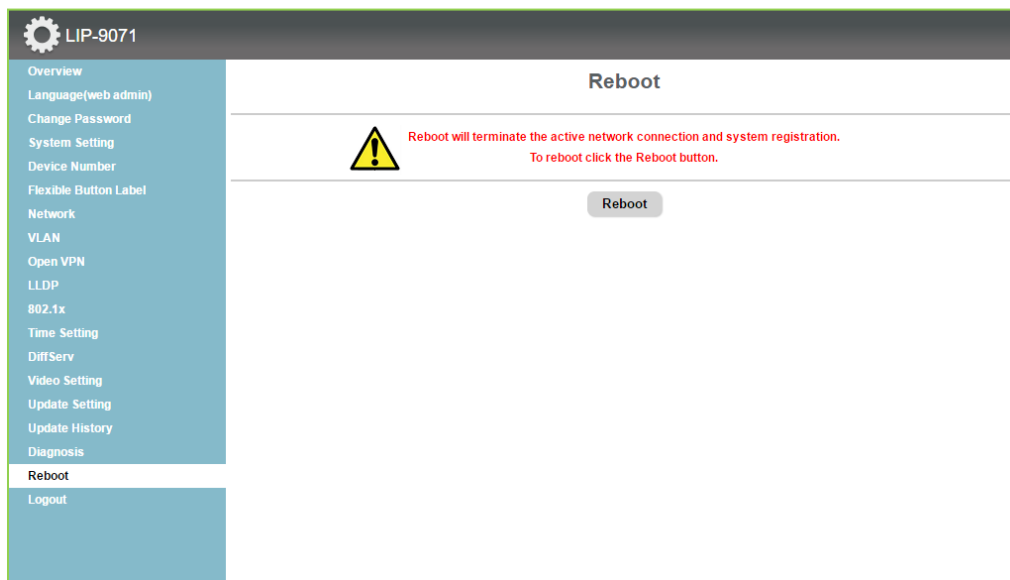
Trace level to debug the VoIP module can be set as from 0 to 10 level.

The screenshot shows the LIP-9071 web interface with the same sidebar menu as the previous image. The 'Diagnosis' menu item is highlighted. The main content area is titled 'Diagnosis' and contains four tabs: 'Save Log', 'Display Current Log', 'ADB TCP/IP', and 'Trace' (which is active). Under the 'Trace' tab, there is a 'VoIP Trace Level' section with a dropdown menu currently set to '0'. A 'Submit' button is located at the bottom right of the configuration area.

15.3.19 Reboot

When certain parameters, see list below, are modified, the phone will require a reboot to modify the active configuration.

A reboot will terminate all network connections and registrations with an iPECS host. After the reboot the phone will establish the network connection and register with iPECS.



Appendix: Open Source Software Notice

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