iPECS

Communicator for Android

User Guide

Document Information

S/W Version	Issue	Changes	Release Date
1.0Ad	1.0	Phase 2 update & release	2013-11-13
1.0Ad	1.1	Applied new BI	2013-12-19
2.0Ak	1.2	General update	2014-09-23

Table of Contents

Before Use

Introduction to iPECS Communicator

iPECS Communicator is an Android-based multimedia telecommunication application that supports most of functions available from the iPECS IP desk phone.

The main window of iPECS Communicator is divided into several functional modules designed for simple and effective use.

iPECS Communicator is compatible with the various iPECS platforms including iPECS-UCP, iPECS-CM, iPECS-LIK, SBG-1000, and iPECS-eMG80.

About This User Guide

This guide is intended for users of iPECS Communicator. The guide provides user-related information.

Introduction of the Document

This guide introduces iPECS Communicator, and explains how to install and correctly use iPECS Communicator. Product figures and screen images used in this guide may be different from those of the actual product.

Organization of the Document

This guide consists of seven chapters, the appendix, and this Before Use section as follows:

- Before Use
- **Chapter 1:** Installation
- **Chapter 2:** Phone Registration
- **Chapter 3:** Telephone Functions
- **Chapter 4:** Call Log
- **Chapter 5:** Contacts
- **Chapter 6:** SMS & Voice Mail Messages
- **Chapter 7:** Communicator Client Setting
- **Appendix:** Useful Information

Explanation of Symbols

The following symbols are used in this manual. Information presented with these symbols must be observed for the correct use of the application.

CAUTION

This mark warns a situation in which light injury or product damage (hardware, software or data) could occur if the instructions are not followed.

NOTE

This mark provides additional explanation, emphasis on important information or reference for related information that is required for the correct use of the application.

Installation

Chapter 1

This chapter explains hardware requirements for installing the application on your phone and the process for installation of iPECS Communicator.

Before Installation

Please verify compatibility of your phone with the requirements below before installing the application.

Requirements for the Mobile Phone Hardware

Minimum requirements for running iPECS Communicator are as follows.

Minimum Specification:

- **Operating System:** Android 2.3

- **CPU:** 600MHz or higher

- **Storage:** 10Mbytes RAM or more of free memory

Recommended Specification:

- **Operating System:** Android 2.3 or higher

- **CPU:** 1GHz or higher

- **Resolution:** 480 * 800

- **Firmware:** 2.3.4 or higher

NOTE

iPECS Communicator is optimized to the 480 x 800 resolution. If the device resolution is not 480 x 800, the image sizes and screens may appear different.

Contact names may appear different for different mobile phone manufacturers.

Android 3.0 Tablet is not supported.

When iPECS Communicator runs in background, standby time may be impacted depending on the power saving performance of mobile phones.

Bluetooth headset is not supported.

If connected through Wi-Fi, call or registration cutoff may occur from delay and message loss due to load on the AP (Access Point) and the AP performance.

Installation of iPECS Communicator

The iPECS Communicator application is downloaded and installed from Google Play Store.

1. Execute **Play Store** in your phone.

2. When Play Store has been executed, input "iPECS Communicator" in the search window and press **Search** to move to the corresponding screen.
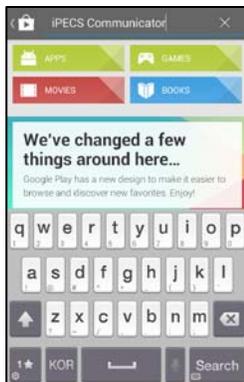
3. Select **iPECS COMMUNICATOR 2** from the list of searched applications.
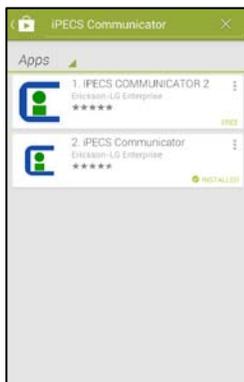
4. Press **Install** at the right of the iPECS Communicator installation screen and then press **Agree and Download** to start the install process.

5. When installation is complete, the iPECS Communicator shortcut icon is installed on the home screen, and selecting the icon will execute iPECS Communicator.

Phone Registration

If the application has been installed, necessary information such as your user account must be entered in your phone before use. This chapter explains settings required for using the application.

Login Setting

You must set the SIP account information before iPECS Communicator can function properly.

SIP Account Setting

The SIP server address, display name, name, authentication name, authentication password and protocol are entered in this setting.

1. Execute iPECS Communicator by selecting the shortcut icon.
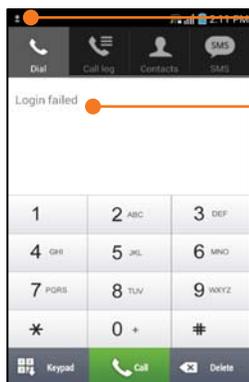
indicates the registration status of the application installed in your phone

- Icon in the status window indicates registration status.

2. Open the setting screen by pressing **Menu** (≡) then **Setting**.

3. Select **SIP Account Settings**.
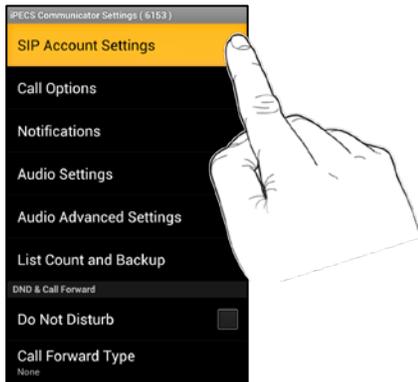
- Press **Back** (⬅️) to cancel setting of a selected item or move to the previous screen.

4. Select the item to be set by scrolling up and down the screen. Once an item has been selected, select the sub-menu or option, view registered information, or set (input or change) a value.
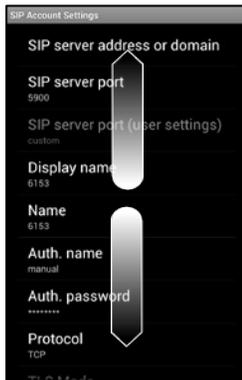
- Refer to **SIP Account Settings** on page 37 for detailed information.

5. After entering a setting, move to the standby mode by pressing **Back**. (⬅️).

6. For registration, press **Menu** (☰) then **Register**.

- If the settings have been properly entered and a WiFi signal is available, the 'Login succeeded' message appears for a short time then the status and phone number display in the input window.

- The login status icon will illuminate in a green color to indicate successful registration. One of two icons displays, the basic protocol icon (🟢) or the TLS icon (🔲 TLS). If Communicator is in the DND (Do Not Disturb) state, the icon will appear in red.

7. Select **Service on OS startup**.
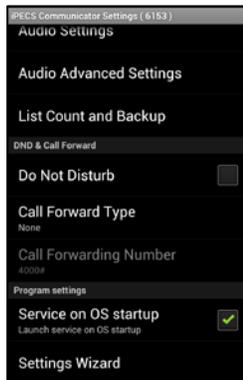
- If **Service on OS startup** is enabled, iPECS Communicator will attempt to register when you turn on your phone. This is the default setting.

Subscriber Status Information

You can verify and modify the subscriber information including the number, SIP account, call option and notification setting.

1. Select **Menu** (☰) then **Setting**.

2. Select an item to be changed or checked by scrolling up and down the setting screen.

3. After selecting an item, the sub-menu or option is displayed. At this point, you may change the setting for the item.
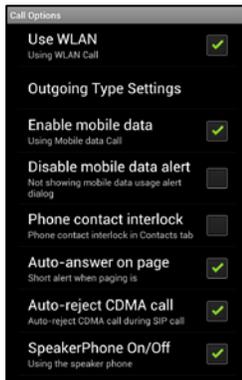
   ●   Please refer to **Communicator Client Settings** on page 37 for detailed information.

Unregister and re-register your phone.

In some situations, such as a loss of the WiFi or Mobile data signal, the device may lose registration. In such a case, you may unregister and then re-register iPECS Communicator.

1. Press **Menu** (≡) then **Unregister & Exit**.

2. Select **OK** to **Unregister & Exit**.

- Re-register your phone as discussed in the **SIP Account Setting** on page 6.

Phone Functions

iPECS Communicator provides telephone functions using internet protocols to communicate with an iPECS host communication platform. This chapter explains how to make and receive a call, and useful functions that can be used during a call. On the Home screen, touch the application shortcut to run the iPECS Communicator.

Making Calls

You can place a call in various ways including direct input of a phone number, or selecting an item in the call log or from the contacts at the top of the screen.

make or answer a call

check the recent calls you have made or received and make a call or view additional information

search an item in the contact list and make a call

The number to call displays here. If a searched item in the recent call list has been lightly pressed, the corresponding number will display.

Recent call log is displayed. If there is more than one item, you may scroll through the log to select a number.

Use Delete to remove a digit. Pressing **Delete** for a short time removes a single digit. Press and hold **Delete** to remove all digits.

Use Keypad to display the dial pad and dial a number.

Dialing a Phone Number

1. Press **Dial** button that is located on the top left of the screen.

2. Input the desired number by pressing the keypad digits then press **Call**.

   - Correct any mistyped digit by pressing **Delete** then input the correct digit.

   - You may adjust the volume using the **Volume** button located on the left side of your phone.

3. Press **End** to terminate your call.

⚠️ **CAUTION**

The ear microphone allows you to answer and end calls easily, but when you use the ear microphone, your ability to hear outside sounds may be affected. Do not use the ear microphone where their use may endanger your safety.

Redialing the Last Number

1. Press and hold **Call**, the last dialed number will be selected.

2. Release and press **Call** to dial the number.

Dialing from Call log

iPECS Communicator stores the last 500 numbers for calls you placed or received. You can place a call using the numbers stored in the log.

1. Press **Call log** and search the list.

   - The type of call is indicated to the left of the number. For your contacts, the name and type of call will display.

     – 📞 : Indicates outgoing calls made from your phone.

     – 📞 : Indicates received calls that were answered.

     – 📞 : Indicates missed calls.

2. Select a phone number and press **Dial** to place the call.
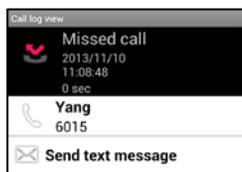
Dialing from Contacts

You can search your contacts to place a call.

1. Press **Contacts**.

2. Select the contact search window and input a name or number to match.

Contact search window

input numbers by pressing a button.
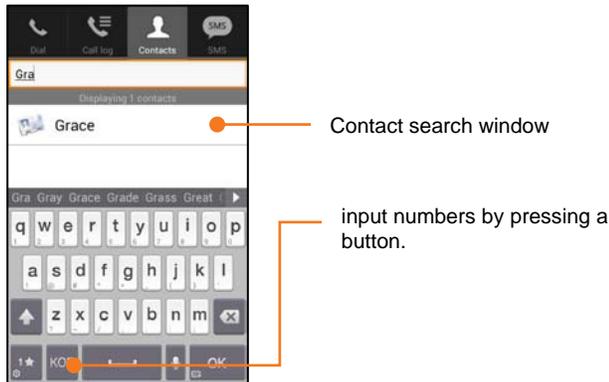
3. Select a contact from the list of matching entries then select the desired number (work, mobile, or home) for the contact, and press the **handset** icon to place the call.

Dialing using Finding Number

1. Press **Call**.

2. Input a phone number with four or more digits.

   - The more digits you enter, the more precise the search.

3. Select a number from the search list and press **Call**.

   - If you touch and hold the number, an information popup window will appear.

Call Option Setting

This section explains the call option settings that are available for placing calls. Refer to **Call Options Setting** in page 38 for details.

Setting Outbound Call Type

When making a call on your mobile phone, the Outbound Call Type selection can determine if the call is made through iPECS Communicator or over the mobile voice network (General Call).

1. Select **Menu (☰)**, **Setting**, **Call Options**, **Outgoing Type Settings** then select **Outbound Selection Call Type**.

   - This menu is shown if 'Outbound Selection Call Type' has been enabled.

2. Select an outbound call type. The default setting is **General Call only**.

   - **iPECS Communicator only:** calls placed from your mobile phone screen are connected using iPECS Communicator over an available Wi-Fi or mobile data network.

   - **iPECS Communicator, when available:** calls placed from your mobile phone screen are connected using iPECS Communicator if a Wi-Fi or mobile data network is available.

   - **General Call only:** calls placed from your mobile phone screen are connected over the mobile voice network.

   - **Always ask:** for calls placed from your mobile phone screen, you will be requested to select iPECS Communicator or General Call to connect the call.

NOTE

If the call type is set to **Always ask**, a video call is changed to a mobile voice call. Video calling in this mode cannot be supported, as messages are different for various phone makers.

Dialing with Call Back

Callback permits you to place a call using iPECS Communicator but the call is connected over the mobile voice network. When the call is received by the iPECS host, the host will call back to your phone over the mobile voice network then, after you answer, will place the call to the desired party. In regions where you only pay for outgoing mobile voice calls, using callback eliminates the call charge.

To Set

1. Select **Menu (☰)**, **Setting**, **Call Options** then **Outgoing Type Settings.**

2. Select **Use** to enable the integrated dial features.

   - If the function has been set, a check mark will appear in the box next to the **Integrated dial feature type** item, otherwise the box will be empty.

3. Select **Call Back** in the **Integrated dial features type**.

   - This menu is only shown if integrated dial features are enabled.

4. Select **Call Back** or **Call Through** server, and input the server address.

   - Contact your iPECS host system manager for the server address.

To Use Callback

1. Press **Dial.**

2. Input a phone number and press **Call**.

    ● If the callback is set-up using the mobile data network, a data fee message is shown. You must select **Confirm** to continue. You may disable this message using **Disable mobile data alert** as discussed on page 40. For Wi-Fi connections, the callback proceeds normally.

3. Select **Callback** in the 'Callback Select Type' then select **OK**.

    ● The 'Callback Request…' message displays for a short time.

4. When the iPECS host calls back, answer the call then the iPECS host will place the call to the phone number you entered.

Alternate Device Call Back

Similar to callback, with Alternate Device Callback the iPECS host will callback to a number you specify rather than your mobile phone.

To Set

1. Select **Menu (≡)**, **Setting**, **Call Options** then select **Outgoing Type Settings**.

2. Select **Use** to enable the integrated dial features.

    ● If the function has been set, a check mark will appear in the box next to the **Integrated dial feature type** item, otherwise the box will be empty.

3. Select **Call Back** in the **Integrated dial features type**.

    ● This menu is shown if integrated dial features are enabled.

4. Select **Call Back** (alternate call back number) and input the desired callback phone number (internal IP phone, mobile phone, etc.) to receive the Call Back call.

5. Select **Call Back** or **Call Through** server, and input the server address.

    ● Contact your iPECS system manager for the server address.

To Use

1. Press **Dial**.

2. Input a phone number and press **Call**.

    ● If the callback is set-up using the mobile data network, a data fee message is shown. You must select **Confirm** to continue. You may disable this message using **Disable mobile data alert** as discussed on page 40. For Wi-Fi connections, the callback proceeds normally.

3. Select the phone number entered in the **Callback Select Type**, or select **Direct Input** and dial the desired number to receive the callback (internal IP phone, mobile phone, etc.) then select **OK**.

    ● The 'Callback Request…' message displays for a short time.

4. When the iPECS host calls back, answer the call then the iPECS host will place the call to the phone number you entered.

Dialing with Call Through

Call Through permits you to place a call with iPECS Communicator through the iPECS host employing mobile voice network services. This may be convenient when roaming should the Wi-Fi connection become unstable or to save cost of certain calls. With Call Through, you dial the desired number then request a call through. iPECS Communicator notifies the host of the request and places a mobile voice call to the DID number of the Communicator. The iPECS host answers the DID call then places the call to the desired phone number.

To Set

1. Select **Menu ( )**, **Setting**, **Call Options** then select **Outgoing Type Settings**.

2. Select **Use** to enable the integrated dial features.

   - If the function has been set, a check mark will appear in the box next to the **Integrated dial feature type** item, otherwise the box will be empty.

3. Select **Call Through** from the **Integrated dial features type** menu.

   - This menu is shown if integrated dial features are enabled.

4. Select **Call Through** (phone number of the server) and input the DID number associated with the iPECS Communicator.

   - Your iPECS system manager can provide the DID number assigned in the host database.

5. Select **Call Back** or **Call Through** server, and input the server address.

   - Your iPECS system manager can provide the server address.

To Use

1. Press **Dial**.

2. Input a phone number and press **Call**.

3. Select **Call Through** as the **Callback Select Type**.

   - The mobile phone will make a call to the assigned DID phone number using the mobile voice network.

4. The call connection tone will be heard and the call will be connected to your party.

Making a Call with VCC

When you are on a call through the iPECS host and the Wi-Fi signal is weak, VCC (Voice Call Continuity) can switch to a mobile voice connection so that you may continue the call. The switchover is activated using Call Through. Should the Wi-Fi signal return to acceptable levels, the call switches back to the Wi-Fi connection. You can set the Wi-Fi signal thresholds to allow the switch back to Wi-Fi as detailed on page 39.

To Set

1. Select **Menu ( )**, **Setting**, **Call Options** then select **Outgoing Type Settings**.

2. Select **Use** to enable the integrated dial features.

   - If the function has been set, a check mark will appear in the box next to the **Integrated dial feature type** item, otherwise the box will be empty.

3. Select **VCC** in the **Integrated dial features type** menu.

- This menu is shown if integrated dial features are enabled.

4. Select **Call Through** (phone number of the server) and input the DID number associated with the iPECS Communicator.

- Your iPECS system manager can provide the DID number assigned in the host database.

5. Select **Call Back** or **Call Through** server, and input the server address.

- Your iPECS system manager can provide the server address.

To Use

1. Press **Dial**.

2. Input a phone number and press **Call**.

3. You will receive call connection tone and when your party responds, the call is connected over the mobile voice network. Refer to page 39 for details on setting the mobile voice to Wi-Fi switchover thresholds.

- Call Through and iPECS calls switch according to the strength of the Wi-Fi signal.

- VCC may not function properly for an internal iPECS host call, i.e. a call to another extension.

Answering Calls

To answer an incoming call, use the **Call** button. If you are using an ear microphone connected to your smartphone, press the Call/End button on the ear microphone to answer.

When the Screen Is Unlocked

When you receive a call, the screen displays the caller id. Press **Call** to answer.

Press and hold the call icon for the option menu.

Caller Id received or from your contacts

touch for caller detail CID Lookup function

the display name for the caller's number is shown
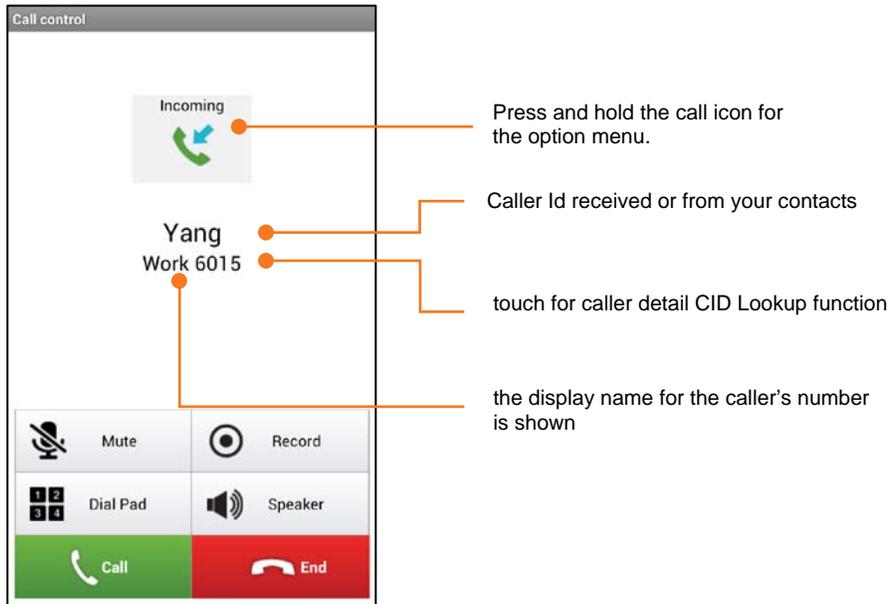
- When the phone rings, you may press the **Volume** button usually located on the left side of the phone to adjust the volume of the ring or switch to the vibration status.

- While you are on a call, the incoming call screen appears for a new incoming call. You can ignore or answer the second call.

When the Screen Is Locked

If the screen is locked, drag the slider to answer the call.

Hanging Up

To end your call, press **End**. When a call is disconnected or unanswered, '**End Call (Declined)**' and ' ' display, and the call duration is displayed in minutes and seconds.

Call Options during a Call

During a call, usable options and buttons display on the screen.

Call service quality, for details, refer to 'Service Quality (QoS)' on page 24.

press to hold the current call.

Turns your microphone on and off

Display the dial pad to place or enter digits

Press to record a conversation

Activates and deactivates the speakerphone of your smartphone

Terminates an active call

Transfer the call to another party
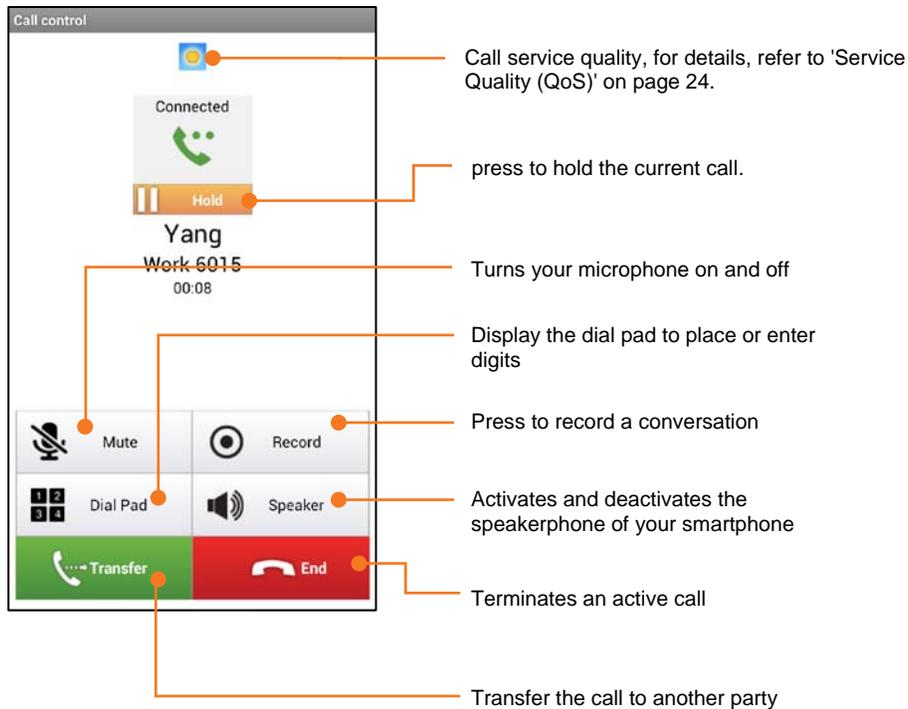
Place a Call on Hold

You can place an active call in a waiting state where the held party will receive music on hold and you will be free to place another call or for other activity.

1. During the call, press **Hold**.

   - The caller is placed on hold receiving MOH and **Holding** displays.

2. The following functions can be used with a call on hold.

   - **Release Hold:** to connect with the held party, press **Release**.

   - **Call Transfer:** to transfer the call press **Transfer** and enter a phone number for call transfer, then press **End** when the receiving party answers.

   - **Three-party Conference:** to conference the held call, press **Transfer** and enter a phone number for a third party, press **Call** then press **Release**.

Call Transfer

The Call Transfer feature redirects an active or held call to another number on the iPECS system.

Screened Transfer

You can advise the receiving party of the call, screened call transfer.

1. Press **Transfer** during a call.

   - The call is placed on hold.

2. Enter a phone number to receive the transfer and press **Call**. When the party responds, announce the transfer.

3. Press **End** to complete the transfer or **Cancel** to cancel the transfer.

Unscreened Transfer

You can transfer the call without announcing it to the recipient.

1. Press **Transfer** during a call.

   - The call is placed on hold.

2. Enter a phone number to receive the transfer and press **Call**.

3. Press **End** to complete the unscreened transfer.

Conference Calls

You can join several calls in a three party conference.

1. Place or answer your first call.

   - The call is placed on hold.

   - If you press and hold **Transfer**, the option menu displays.

2. Place or answer your second call.

3. When the second call is connected, release the first call from hold by pressing **Release Hold** to establish the three-way conference.

   - You may place individual parties on hold during the conference with **Hold**.

Mute

During a call, you can turn off you phone's microphone. The other party cannot hear you, but you can still hear them.

1. During a call with your party, press **Mute**.

    ● The mute icon (🎙) shows the mute status.

2. Press **UnMute** to activate the microphone.

Call Recording

You can record a call to the memory of your phone. The conversation is recorded from the point the recording is activated.

Recording during a Call

1. During a call, press **Record**.

    ● A notification message, 'Call to start recording.' appears, call recording starts and the red recording icon (🔴) is displays.

2. Press **Stop** to end recording of the call.

Playing Call Recording

A call recording can be played with a media player or file manager application that can play your mobile's music. iPECS Communicator does not support the playback function. The directory path where your media player can locate the file is sdcard/iPECS-Communicator/yymmddhhmmss.wav

Speakerphone

iPECS Communicator can make use of your smartphones speakerphone function.

Using the Speakerphone

1. Press **Speaker** to toggle the speakerphone on and off.

    ● Echo may occur in some phones or locations when using the speakerphone.

Setting Speakerphone

If a notification message appears when you press **Speaker**, you will need to enable the speakerphone function.

To set the function, select **Menu (☰)**, **Setting**, **Call Options** then select **Speakerphone On/Off.**

    ● If the function has been set, a check mark will appear in the box next to the **Speakerphone** menu item, otherwise the box will be empty.

Handling Mobile Calls during an iPECS call

iPECS Communicator employs Wi-Fi and mobile data for connection to the iPECS host. Thus, you may still receive incoming mobile voice calls while on an iPECS call. In such a case, you may receive a notification and you can accept or reject the mobile call. Use **Call** to answer the mobile call and place your iPECS call on hold, or press **End** to reject the mobile call.

Auto-reject Mobile Calls

You can set iPECS Communicator to reject incoming mobile voice calls automatically while you are on an active iPECS call.

Setting Auto-reject General Call

To set the Auto reject function, select **Menu (☰)**, **Setting**, **Call Options** then select **Auto-reject CDMA Call**.

- If the function has been set, a check mark will appear in the box next to the **Auto-reject CDMA Call**, otherwise the box will be empty.

Do Not Disturb

You can place your iPECS Communicator in DND (Do Not Disturb) and incoming iPECS Calls are refused automatically. The calls are routed as configured in the iPECS host

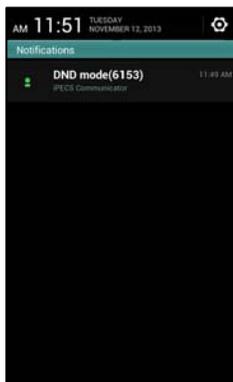To set the DND function select **Menu (☰)**, **Setting**, then **Do Not Disturb**.

- If the function has been set, a check mark will appear in the box next to the **DND** item, otherwise the box will be empty.

- DND can also be activated from the Status bar, drag the status bar down and select the DND notification.

Call Forwarding

You can request the iPECS host temporarily route your calls to another destination. You may define the type of call (all, busy, or no-answer) and select a destination.

Selecting the Call Forward Type

1. Select **Menu (≡)**, **Setting**, then **Call Forward Type**.

2. Select the call forward type.

   - **None:** selecting None disables Call Forwarding.

   - **Uncondition FWD:** forwards all incoming iPECS calls.

   - **Busy FWD:** forwards incoming calls while you are on another call.

   - **No Answer FWD:** forwards an incoming call after the pre-set no-answer time.

Entering the Forward to Number

1. Select **Menu (≡)**, **Setting**, then **Call Forwarding Number**.

2. Enter the phone number to receive your calls.

Missed Call Notification

If missed call notification is active, the missed call icon ( ) display in the status bar if a call is not answered. Dragging down the status bar and selecting the missed call notification shows you the call log screen.

To set the missed call function, select to **Menu (≡)**, **Setting**, **Notifications**, then **Missed call**.

- If the function has been set, a check mark will appear in the box next to **Missed Call**, otherwise the box will be empty.
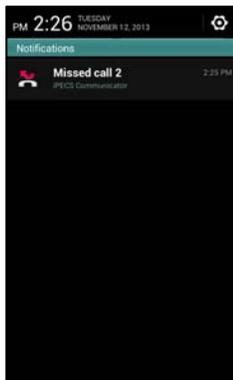
Service Quality (QoS)

iPECS Communicator monitors the transmission and error rates to determine the quality of the connection. This information is then displayed to indicate the Quality of Service as indicated below with a Sun indicating a good condition.

- : **Sunny** is Good
- : **Cloudy** is Poor
- : **Rainy** is Impossible

Call Log

The call log maintains a record of all calls placed from or received by your phone. This chapter explains how to use the call log.

Viewing the Call Log
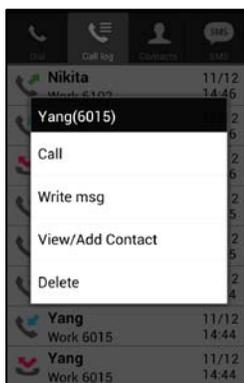
If a phone number has been saved in contacts, the Contact name will be displayed.

1. Press **Call log**.

- 📞 : indicates outgoing calls made from your phone.
- 📞 : indicates received calls that were answered.
- 📞 : indicates missed calls.

2. Select the desired call log item by scrolling up and down the screen. You can use the option menu by pressing and holding the item.

---

3. Select **Menu (≡)** then **View by** to select the type of displayed call logs.

- **Delete All:** You can permanently erase all items from the Call log.

4. Select the desired view type. You can select to view all your calls or just missed, incoming or outgoing calls.
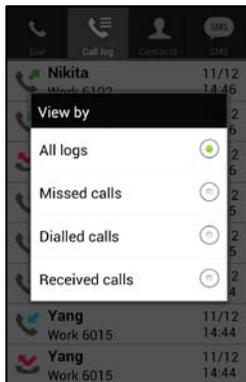
Using the Call log

Several functions are available when you touch a specific call log item as discussed below.
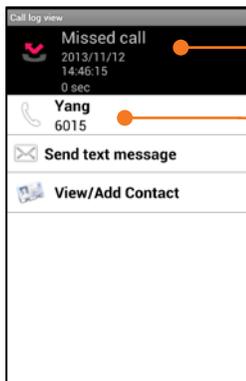
Detail view of the call type, date and time of the call

Caller ID name, from Contacts if assigned

- ☎ : call the corresponding number.

- ✉ : write and send an SMS message.

- 👤 : add the caller to your contacts or view the contact's details

---

Contents

Contacts help you stay in touch with the people you call most by keeping track of their Contact information. This chapter explains how to use your **Contacts** database.

Searching a Contact

You can search for information for a contact using the contact name or number.

1. Press **Contacts**.

2. In the Contacts screen, touch the search box then input the contact name or number. As you type, the search is updated.

Search box
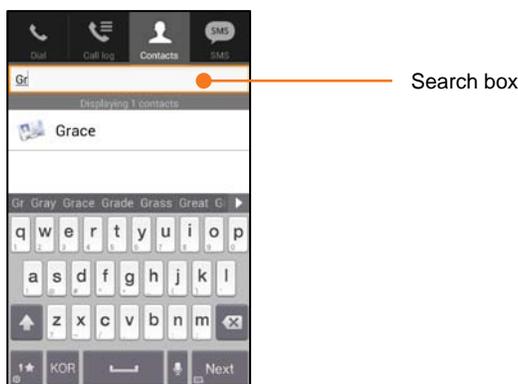
3. Select the desired Contact by scrolling through the on-screen list and touching the desired contact. The screen displays the Contact view where you can call the contact, send an SMS text message or e-mail to the contact.

Contact name

E-mail will appear only if the e-mail address has been registered for the contact.
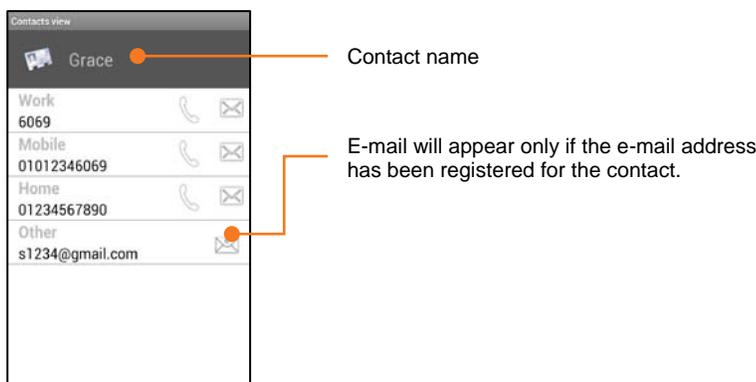
- ☎ : select to call the contact at the selected number
- ✉ : write and send a message.
- ✉ : write an e-mail to the contact. The e-mail address must be entered for the contact.

The Contacts Option menu

You may access the option menu by pressing and holding an item in the Contact list. From the option menu, you may edit or delete the selected contact.

You can use a variety of functions by pressing the searched contact.
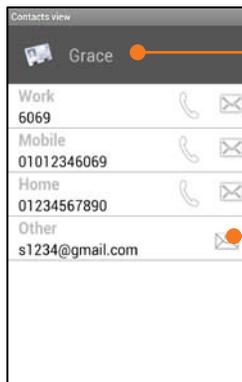
the name stored in contacts.

E-mail will appear only if the e-mail address has been registered in contacts.

- ☏ : select and place a call to the phone number of the contact.
- ✉ : write and send a message to the contact.
- ✉ : write an e-mail to the contact if the e-mail address has been registered in Contacts.

Managing your Contacts

You can add, edit or delete contact information in the Contacts or add a contact from your Call Logs. Contact information includes name, phone numbers, and e-mail address.

Adding a New Contact

1. Select **Menu ( )** then touch **Add to Contact**.
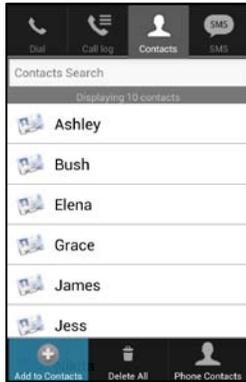
2. The name and phone number must be entered for every Contact and other fields are optional.
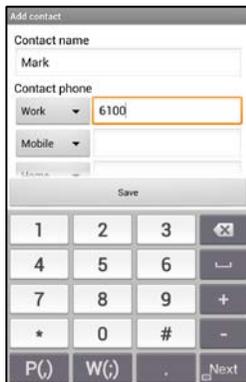
    - **Contact name:** select the input field and enter a name.
    - **Contact phone:** select the input field and enter a phone number. It is possible to save up to 500 contacts, each with up to four different phone numbers.
    - **Contact email:** select the input field and enter an email address.

3. When complete, press **Save**.

    - A phone number can be assigned to one contact only; attempting to save a contact with the same number is not allowed.

Adding Contacts from the Smartphone Phonebook

You can add a Contact from the Phonebook in your Smartphone.

1. Select **Menu (☰)** then **Phone Contacts**.
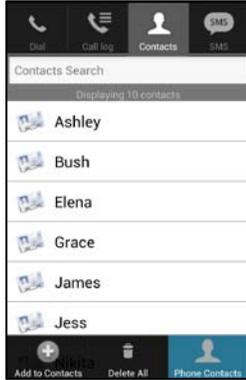
2. Press the search box and input search contents. You can search by the contact name or number.

3. Select a contact entry by pressing and holding the contact record.
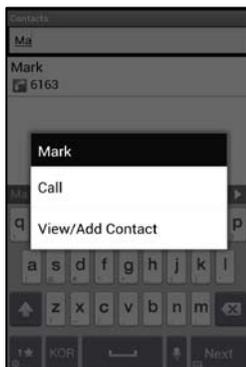
- **Call:** call the selected phonebook contact.
- **View/Add Contact:** add the Phonebook contact to your iPECS Communicator Contacts list.

4. Select **View/Add Contact** then press **Save**.

- If the Smartphone Phonebook has been linked to iPECS Communicator, the Phonebook contacts are included in the iPECS Communicator Contacts automatically. Please refer to **Call Options Setting** on page 38 for details.

Adding a Contact from the Call log

You can store a Call Log as a Contact.

1. Press **Call log**, scroll through the on-screen list.

2. Press and hold the item to display the Option menu.

3. Select View/Add Contact.

4. Enter Contact information by referring to **Adding a New Contact** on page 29.

Editing Contacts

You can modify the information for a contact or delete one or all Contacts.

To modify a Contact,

1. Press and hold the Contact record in the Contact list then select **Edit** in the option menu.

2. Modify Contact information as desired and press **Save**.

To Delete a Contact

1. Select a Contact to be deleted by scrolling up and down the screen.

2. Press and hold the Contact record in the Contact list then select **Delete** in the option menu.

3. Select **OK** to delete the selected Contact.

To Delete All the Contacts,

1. Press **Menu (▬)** then press **Delete All**.
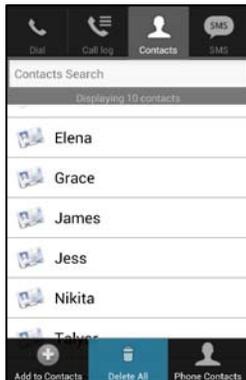
2. Select **OK** to delete all Contact information.

SMS & Voice Mail Messages   Chapter 6

This chapter explains the messaging services available to your iPECS Communicator. iPECS Communicator incorporates text based Short Message Service (SMS) function and your Voice Mail message service.

Using SMS (Sort Messaging Service)

Short Message Service (SMS) enables you to exchange text messages with other users. When an SMS is received, you are notified with an audible or vibration alert, and the new SMS status icon. Each SMS is stored in an SMS message box. You have four separate SMS message boxes; the Inbox, Sent box, Draft box, and Inbox & Sent box combined.

Viewing new SMS Messages

When you receive a new SMS, the new SMS icon (⊠) appears for a short time in the Status bar. Dragging down the status bar and selecting the SMS notification item will move you to the new message screen. In the new message screen, you will see the message, the sender, and the date and time. You can call the sender, reply to the message or delete the message with the selections at the bottom of the message screen. You may also forward the message by pressing **Menu** (≡) and selecting **Forward**.

new SMS message

Message status (read or unread)

sender information, and received date and time
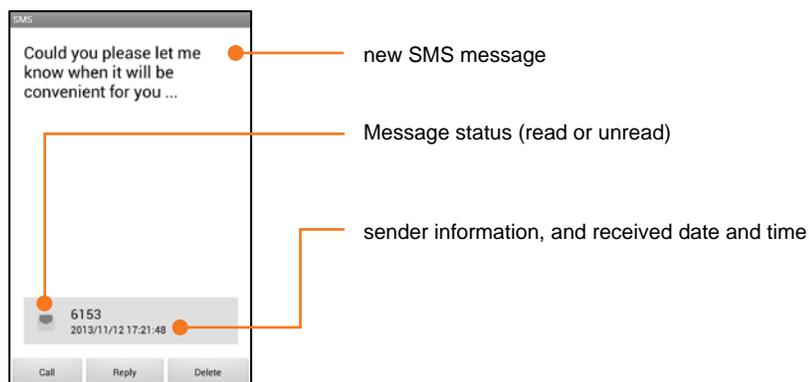
- **Call:** call the sender
- **Reply:** reply to the sender with an SMS message.
- **Delete:** delete the message.

Sending an SMS Message

You can send an SMS to other users. The size of the message varies based on the iPECS platform but will not be less than 80 bytes. The bytes used and total available are shown on the screen as you enter your message.

To send an SMS,

1. Press **SMS**.

2. Select **Write msg**. at the bottom of the screen.

3. Input the phone number of the recipient. You can input multiple phone numbers, maximum 10, to receive the message, separating each number with a comma.
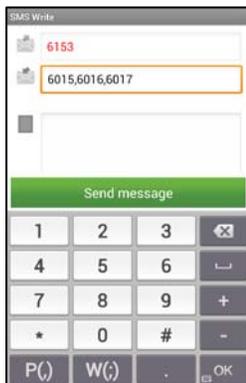
4. Enter your message text and press **Send message**.

Managing your SMS Messages

You manage SMS messages through the SMS screen. Here you can view your messages, forward messages to others, delete messages, etc. When viewing messages you can select the message box to view.

1. Press **SMS**.
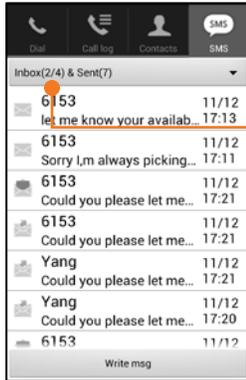
the message box that is presently viewed, and indicates the number of messages, for the Inbox the new and total message count displays

- ⬜ : unread message
- ⬜ : sent message
- ⬛ : Inbox read message

To view a specific message box,

1. Press the down arrow (▼) in the message box bar then select the message box.
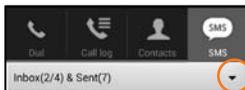
Press arrow to select a message box

To forward the message,

1. Select the desired message from the message screen.
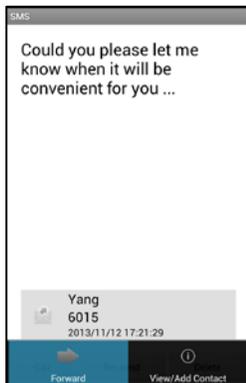
2. At the bottom of the message screen, select **Forward** and follow the on screen instructions.

To add the sender to your contacts,

1. Select the desired message from the message screen.

2. At the bottom of the screen, select View/Add Contact then enter the contact name and other information for the contact.
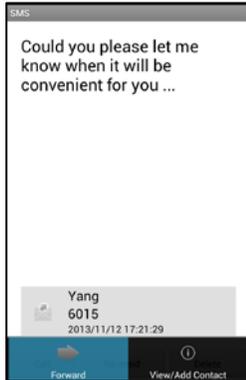
The SMS Option menu

The SMS Option menu permits you to select a different message type, call the sender, write a new message, add the sender to your contacts or delete the message.

To use the Option menu,

1. From the Message screen, touch and hold a message. The Option menu will appear.
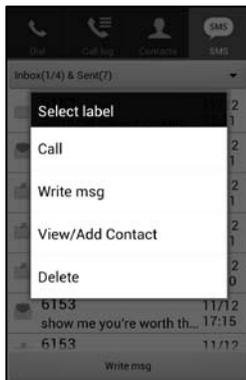
- **Select Label:** select the message box
- **Call:** place a call to the sender
- **Write msg:** prepare a new SMS
- **View/Add Contact:** view the contact information or add the sender to your contacts
- **Delete:** delete the message

2. Select the desired item from the menu. Note you can delete all messages using **Menu** (▤) then touch **Delete All**.

Use of Voice Mail Service

When you receive a new voice message the iPECS system will notify iPECS Communicator, which then displays the new Voice Mail icon (🎤) in the Status bar.

Checking Voice Messages

1. Drag the status bar down and select the **Unchecked voice message** notification item.
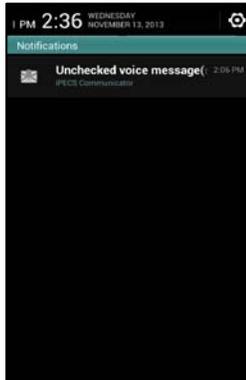
2. Press **OK** in the pop-up screen to check your new voice messages.

3. You will be connected to the voicemail system automatically.

4. Follow the instructions from the Voice Mail to manage your Voice messages.

NOTE

The **Connection number**, refer to page 41 for details, must be configured under Notifications settings for proper operation.

Communicator Client Settings Chapter 7

iPECS Communicator includes settings to establish the user account, call options, notifications, audio characteristics, and activate certain features. This chapter explains how to use these tools to configure the iPECS Communicator settings to meet your needs.

Access the Settings Menu

To access the **Settings** menu, touch **Menu (≡)** then touch **Setting**. The various menus are displayed on the screen and you can select the desired function. Each of the main menu items is discussed in the following sections.
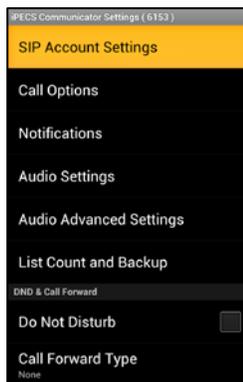
SIP Account Settings

SIP Account Settings establish how iPECS Communicator communicates with the iPECS call server and the user account parameters. To access the menu, press **SIP Account Settings** then select the function to be set. For additional details on the basic account settings, refer to **SIP Account Setting** on page 6.

- **SIP server address or domain:** defines the IP address or domain of the iPECS host.
  - **Main Server:** assigns the IP address or domain for the main call server.
  - **Backup Server:** assigns the IP address or domain of the backup call server when redundancy is implemented.
  - **Multi Server:** when the host is an iPECS-CM, this field assigns the redundant call server IP address or domain.
- **SIP server port:** defines a standard port as the TCP/IP port for signaling information to the call server. The **Custom** setting permits none-standard ports to be assigned under the **SIP server port (user settings)** field.

- **SIP server port (user settings):** defines the TCP/IP port when the **SIP server port** above is assigned as **Custom**.

- **Display name:** assigns the name that is displayed to other users when receiving your calls. The display name can be up to 12 characters and should not contain symbols.

- **Name:** assigns the user name, generally the iPECS phone number, for the user account.

- **Authentication name:** assigns the name iPECS Communicator will send to the host iPECS to authenticate the client.

- **Authentication password:** assigns the password iPECS Communicator will send to the host iPECS for authenticating the client.

- **Protocol:** defines the transmission protocol for communication between iPECS Communicator and the host iPECS. When using mobile data for connections, the TCP protocol is recommended. Note that iPECS MG supports UDP only.

- **TLS mode:** sets the Encryption algorithm to enable Transport Layer Security encryption for communication between the client and the iPECS host. Note the **SIP server port** must be set to 5061 and the **Protocol** must be set to TLS (security connections). Also, note the iPECS-MG does not support **TLS mode**.

- **Use Provisioning:** enables automatic provisioning of the certificates, encryption rules, etc. from the iPECS host. Only the iPECS-CM host supports provisioning.

- **Provisioning Server Address:** defines the address of the server with the provisioning data when the iPECS-CM automatic provisioning is used.

- **Local IP Address:** displays the IP address of the iPECS Communicator. When static addressing is employed, the address may be changed.

- **Server Information:** displays information for the server that is hosting the registered client.

- **Device Information:** displays the cellular IMEI (International Mobile Equipment Identity) of the smartphone.

- **Wi-Fi Mac Address:** displays the MAC address of the client. Note **Use WLAN** must be enabled under the **Call Options** settings.

Call Options Setting

Call options configures various characteristics for connections between iPECS Communicator and the call server, call audio, and the outbound call path. To access this menu, press **Call Options** then select the desired function. Additional details are provided in **Call Options during a Call** discussed on page 19. Note that iPECS-MG does not support iPECS Communicator Callback, Call-through, and VCC features.

- **Use WLAN:** enables the use of the local Wi-Fi network to register and establish calls with the iPECS host. When not enabled, iPECS Communicator must use a mobile data connection to register with the iPECS call server.

- **Outbound Type Setting:** sets the method (iPECS or mobile voice) the smartphone will employ when placing a call using iPECS Communicator.

  - **Outbound Type use:** enables use of the **Outbound Type** function.

  - **Outbound Type:** defines the outbound call method when **Outbound Type use** is enabled. The selections are:

- **iPECS Communicator only:** outbound calls are placed using iPECS Communicator over a Wi-Fi or mobile data network.

- **iPECS Communicator, when available:** outbound calls are placed using iPECS Communicator if a Wi-Fi or mobile data network signal is available.

- **General Call only:** outbound calls are placed using mobile phone over the mobile voice network only.

- **Always ask:** when placing an outbound call, iPECS Communicator will request you select the calling method, iPECS Communicator or mobile phone.

– **Integrated dial features type use:** enables use of the Integrated dial feature selected under the **Integrated dial features type** below.

– **Integrated dial features type:** defines the integrated dial features available when **Integrated dial feature type use** is enabled. The feature types available are:

- **SIP:** permits use of a Wi-Fi or mobile data network connection to place calls over an IP network through the iPECS host.

- **Call Back:** enables use of the Call Back and Alternate callback features. Note the call server IP address must be assigned under the **Callback, Call Through Server** item below.

- **Call Through:** enables use of Call Through to place a call. The call server Call through number and IP address must be defined in the **Call Through (Phone number of server)** and **Callback, Call Through Server** items below.

- **VCC:** enables the Voice Call Continuity feature, which allows the iPECS Communicator and host to switch a call to the mobile voice network if the Wi-Fi signal is too weak to provide a quality voice connection. Note the call may switch back to a Wi-Fi connection if the signal strength permits. Also, note the **Wi-Fi signal strength settings** below establish the signal strength for the switchover.

– **Call Back (Alternate callback number):** assigns the phone number (internal IP phone, mobile phone, etc.) to receive the callback when the Alternate Callback feature is used.

– **Call Through (Phone number of server):** assigns the DID phone number for use with the Call Through and VCC features.

– **Wi-Fi signal strength settings:** assigns the Wi-Fi signal strength that will cause the VCC feature to activate, switching the call to the mobile voice network. Note the call may switch back to the Wi-Fi network automatically if the signal is 12 dbm higher than the switchover setting.

- Signal strength: -60 ~ -80 dbm, default -70 (dbm)

– **Useable from Wi-Fi to 3G Voice:** disables the automatic switchover of a call from the mobile voice network back to a Wi-Fi network. Disabling the switchover will avoid any inconvenience due to repeated switchovers between Wi-Fi and mobile voice networks.

– **Callback, Callthrough Server:** assigns the call server IP address and port when the Call Back or Call Through feature is enabled. Normally, TCP port 7878 is used but the port may be changed by entering the port number after the IP address with a colon between the address and port, i.e. 111.222.333.444:5678

- **Enable Mobile data:** enables use of the mobile data network to register and connect to the iPECS host to place and receive calls. This may be useful when the Wi-Fi signal is weak or WiFi security is enabled in the Wi-Fi access point. Note when the mobile data network is used, mobile data charges will apply.

  – When making a call through mobile data, the mobile data alert window displays and the call will be placed after selecting **OK**.

  – If the integrated dialing features are enabled, the **call through mobile data** window displays to alert you of the potential mobile data charges for the call.

  – When using mobile data with iPECS Communicator, the **TCP** transmission protocol is recommended for stable operation.

- **Disable mobile data alert:** disables the alert window that indicates a call will connect using the mobile data network and mobile data charges will apply.

- **Phone contact interlock:** enables display and use of the smartphone phonebook under the iPECS Communicator **Contacts** tab.

- **Auto-answer on page:** enables iPECS Communicator to play paging announcement from the iPECS host automatically. Note that when disabled, you must "answer' the page signal to receive the announcement. iPECS Communicator will return to the idle state when the page announcement is complete.

- **Auto-reject CDMA call:** enables automatic refusal of a mobile voice call while on an iPECS call. In general, if a call is refused, the call will be routed to your mobile Voice mailbox.

- **Speaker Phone On/Off:** Activates the speakerphone for your call.

- **Trunk Access Code:** To provide consistent dialing between iPECS Communicator and your Smartphone, the iPECS host Trunk Access Codes and SSDP (Station Start Digits Pattern) can be set allowing iPECS Communicator to insert the access code as needed.

  – **Trunk Access Code:** assigns the code to insert at the beginning of the number for calls external to the iPECS host. If the number of dialed digits exceeds 6-digits, the iPECS host assumes the call is an outside call and will insert the Trunk Access Code. Generally, the digit '9' is used for trunk access.

  – **SSDP (Station Start Digits Pattern):** assigns the first digits of station numbers in the iPECS host. In cases where the station number plan exceeds 6-digits, entering the SSDP will eliminate insertion of the Trunk Access Code when the dialed digits match the SSDP digits assigned.

- **sRTP:** selects the encryption algorithm used for secure Real-time Transport Protocol for the audio or video signals between the iPECS host and iPECS Communicator. Use of sRTP minimizes the ability of others to monitor your calls. Note sRTP is not supported by IPECS-MG.

  – **Supported encryption algorithm:** AES (AES_CM_128_HMAC_SHA1_80), ARIA (ARIA_CM_128_HMAC_SHA1_80)

- **DTMF type:** assigns the type of DTMF signals sent by iPECS Communicator during a call to facilities such as an automated banking or external Voice mail system. The DTMF type may be assigned as In Band, RFC2833, or INFO with INFO as the default setting.

- **Codec sequence:** assigns the priority of the codec used to convert audio signals to and from digital signals. Available codec selections are PCMU (G.711 for NA), PCMA (G.711 for Europe), or G.729 with G.729 as the default selection.

Notifications Setting

iPECS Communicator notifies you of certain events such as new messages using icons in the Status bar and a notification message. You can control the events that will provide a notification using Notification settings. To access the menu, press **Notifications** then select the function to be set. Note the settings for audible and vibration alert for the smartphone may take precedence over these iPECS Communicator settings.

- **Missed call:** enables notification for incoming calls that are not answered.
- **SMS:** enables notification of new SMS messages you receive.
- **SMS notification:** enables audio notification when you receive a new SMS. This menu is available only if **SMS** notification above is active.
- **Set vibration:** enables notifying you of an incoming iPECS call and message with vibration.
- **Connection number:** assigns and enables notification of new messages in your iPECS host Voice Mailbox. The number of the Voice Mail group in the iPECS host must be entered for the notification to function properly.

Audio Settings

You can set the default or starting volume level for the earpiece and microphone gains through the Audio Settings menu. To access the menu, press **Audio Settings** then select the function to be set.

- **Earpiece gain:** selects the desired sound volume of the speaker.
- **Microphone gain:** selects the desired sound volume of the microphone.
- **Headset earpiece gain:** selects the desired sound volume of the headset earpiece.
- **Headset mic gain:** selects the desired sound volume of the headset microphone.

Advanced Audio Settings

iPECS Communicator supports advanced audio setting to adjust noise suppression, automatic gain control, echo and other audio characteristics. To access this menu, press **Advanced Audio Setting** then select the function to be set.

- **NS (Noise Suppression):** establishes the noise suppression levels to minimize background noise from the call audio.
    - **Use NS:** default setting is use
    - **NS mode:** default setting is 3
        - 0 : NS_UNCHANGED
        - 1 : NS_DEFAULT
        - 2 : NS_CONFERENCE
        - 3 : NS_LOW_SUPPRESSION
        - 4 : NS_MODERATE_SUPPRESSION
        - 5 : NS_HIGH_SUPPRESSION
        - 6 : NS_VERY_HIGH_SUPPRESSION

- **AGC (Automatic Gain Control):** establishes the level of automatic gain control to minimize fluctuation in the audio output of the speaker and microphone.
  - **Use AGC:** default setting is no use
  - **AGC mode:** default setting is 3
    - 0 : AGC_UNCHANGED
    - 1 : AGC_DEFAULT
    - 2 : AGC_ADAPTIVE_ANALOG
    - 3 : AGC_ADAPTIVE_DIGITAL
    - 4 : AGC_FIXED_DIGITAL
- **EC (Echo Cancellation):** establishes the degree of echo cancellation to minimize echo in the received audio.
  - **Use EC:** default setting is no use
  - **EC mode:** default setting is 5
    - 0 : EC_UNCHANGED
    - 1 : EC_DEFAULT
    - 2 : EC_CONFERENCE
    - 3 : EC_AEC
    - 4 : EC_AES
    - 5 : EC_AECM
    - 6 : EC_NEC_IAD
- **AES Mode, AES Attenuation:** is not implemented at this time.
- **AECM (Acoustic Echo Cancellation Mode):** establishes the acoustic echo cancelation to minimize the effect of audio feedback while using the speakerphone
  - **AECM Mode:** default setting is 3
    - 0 : AECM_QUIET_EARPIECE_OR_HEADSET
    - 1 : AECM_EARPIECE
    - 2 : AECM_LOUD_EARPIECE
    - 3 : AECM_SPEAKERPHONE
    - 4 : AECM_LOUD_SPEAKERPHONE
- **Enable CNG (Comport Noise Generation):** enables generation of comfort noise providing an indication the connection is maintained when Voice Activity Detection below is enabled.
- **VAD (Voice Activity Detection):** enables and sets Voice Activity detection level to return silence or comfort noise when no voice signal is present.
  - **Use VAD:** default setting is disabled
  - **VAD mode:** default setting is 0
    - 0 : VAD_CONVENTIONAL

- 1 : VAD_AGGRESSIVE_LOW

- 2 : VAD_AGGRESSIVE_MID

- 3 : VAD_AGGRESSIVE_HIGH

– **VAD disable DTX:** disables use of discontinuous transmission mode for VAD by the mobile carrier.

- **Volume scaling:** adjusts the volume of the speaker. The default setting is 1.2.

List Count and Backup

iPECS Communicator maintains several lists or logs including the Call Log, Contact List and SMS list. For your convenience, the number of items in a list or log can be limited. In addition, these lists and the iPECS Communicator configuration file can be exported and imported, which allows you to backup and restore the list or configuration. To access this menu, press **List Count and Backup** then select the function to be set.

- **Count of call log list:** The number of records for the Call Log can be set from 29 to 999 records with a default of 500. Note when the number of records reaches the assigned limit, new records replace the oldest records; the oldest record is deleted and the new record is stored.

- **Count of contacts list:** The number of records for the **Contacts** database can be set from 11 to 999 with a default of 999. Note when the number of records reaches the assigned limit, new records replace the oldest records; the oldest record is deleted and the new record is stored.

- **Count of sms list:** The number of records in the new SMS message store can be set from 12 to 3000 with the default of 500. Note when the number of records reaches the assigned limit, new records replace the oldest records; the oldest record is deleted and the new record is stored.

- **Data Export/Import:** The lists and logs as well as the iPECS Communicator configuration data can be exported as an XML file. At any time, you can import the XML file back to restore or replace the existing file. The log and list xml files are exported to and imported from the directory **sdcard/iPECS Communicator/User_Data.xml**. The configuration file is exported to and imported from the directory **sdcard/iPECS-Communicator/System_Config.xml**.

  – **Data export:** Select an item to export and press **Export**. The contents of the file may be viewed with a file management application. iPECS Communicator does not included a file management application.

  – **Data import:** Select an item to import and press **Import**, a notification message is provided indicating the import progress. Once the import is complete, the new data replaces any existing data for the imported item and the new data can be viewed in the corresponding menu. For example, if the contacts xml file is imported, the contents can be viewed under the **Contacts** tab.

Do Not Disturb

The Do Not Disturb menu item activates and deactivates the DND feature that automatically rejects iPECS calls while DND is active. The iPECS host will route the call as configured in the host database while iPECS Communicator is in DND. Note activating Call Forward automatically deactivates DND.

Call Forward Type

You can direct the iPECS host to redirect your calls to another location. You select the condition for the call forward then, under **Call Forwarding Number**, assign the destination number. The conditions for call forward include all calls (unconditional), calls that encounter busy, and calls that are not answered in the preset no-answer time. To set Call Forward, select **Call Forward Type**, select the condition then, under **Call Forwarding Number**, enter the destination.

- **None:** disables Call Forwarding.

- **Uncondition FWD:** forwards all incoming calls.

- **Busy FWD:** forwards incoming calls while you are on a call.

- **No Answer FWD:** forwards an incoming call after the pre-set no-answer time.

Call Forwarding Number

If a condition has been selected for the **Call Forward Type**, the destination is entered under this menu. Select **Call Forwarding Number** then enter the destination number.

Service on OS startup

For your convenience, iPECS Communicator can be configured to open and register when the smartphone is turned on so that you do not need to open and register iPECS Communicator separately.

Settings Wizard

iPECS Communicator incorporates a Settings Wizard that will reset all configuration data to the default values. In addition, you may select one of two preset audio configurations. To access this menu, select **Settings Wizard** then select the desired item.

- **Reset Settings:** returns the configuration data including SIP account setting, call option setting, notification setting, audio setting, advanced audio setting, number of list items setting, refusal of answering, automatic execution of the service, etc. to the default values.

- **Audio easy setting 1:** You can select one of two audio settings for a general office environment. Setting 1 has a slightly higher Automatic Gain Control than setting 2. The setting 1 configuration is shown below.

  - **Use of NS :** enabled
  - **NS Mode:** 3
  - **Use of AGC :** enabled
  - **AGC Mode:** 3
  - **Use of EC :** disabled

- **AECM Mode:** 3
- **Use of CNG :** disabled
- **Use of VAD :** disabled

- **Audio easy setting 2:** You can select one of two audio settings for a general office environment. Setting 2 has a slightly lower Automatic Gain Control than setting 1. The setting 2 configuration is shown below.
  - **Use of NS :** enabled
  - **NS Mode:** 3
  - **Use of AGC :** enabled
  - **AGC Mode:** 1
  - **Use of EC :** disabled
  - **AECM Mode:** 3
  - **Use of CNG :** disabled
  - **Use of VAD :** disabled

NOTE

In noisy environments, calls may disconnect or speech quality may be degraded. Employing a higher level of NS (Noise Suppression) may alleviate the situation.

Useful Information
Appendix

This chapter provides guidance to solve problems that may occur when using iPECS Communicator. In addition, icons used in the Status bar and information on the use of open source software according to the GPL (General Public License) license contract are provided.

Problem Solving Guide

Should you experience problems when using iPECS Communicator the following may assist you in identifying and correcting the problem.

The call does not terminate when you touch End

In cases where the network or radio connection fails during a call, **End** may not terminate the call. In this case, if you press **Back** (⬅️) a warning message is displayed. Press **OK** to terminate the call.

There is excessive echo during the call

Echo can result from high delay on the network or acoustic echo when using the speakerphone built-in your smartphone. You may increase the echo cancellation or employ the earphone normally included with the mobile phone.

The screen turns off during a call

As part of the smartphone power-saving algorithm, the screen and backlight may turn off after a preset time. Generally, turning the phone will return the screen.   You may also be able to change the preset timer in the smartphone settings.

The Voice Mail does not respond to digits you dial

With Voice over IP connections, DTMF digits may be transmitted to an end-point is one several manners. The DTMF type configured in iPECS Communicator must be set to match the Voice Mail system. Verify the DTMF type in iPECS Communicator is configured to match the Voice Mail server; Select **Setting**, **Call Options**, **DTMF Type** then select the type. The default setting is **INFO**.

Calls cannot be placed or received even though iPECS Communicator displays the registered icon

In cases where the Wi-Fi setting has changed or the network connection fails, iPECS Communicator may maintain the registration status for the register timer, up to 1-hour. In this case, unregister and reregister iPECS Communicator.

Certain functions do not operate properly

When specific functions do not operate properly, an older version of the Android OS may be running on the smartphone. Verify Android 2.3 or higher is installed.

If incoming voice is disconnected during the call

With certain smartphones, connecting the charger during a call can cause the call to disconnect. Also, if the radio signal strength is too weak, the call may also disconnect.

Error Messages

Error messages are provided to assist in diagnosing problems. Messages are provided for registration issues as well as call set-up as listed below.

Errors in Registration

- **Login error (401):** indicates an error in authentication.

- **Registration error (404):** indicates that the authentication credentials do not match the information in the iPECS host.

- **Registration error (408):** indicates the registration has timed out and iPECS Communicator has not been able to reregister. This is commonly due to a loss of network or radio connection.

Errors in Call Set-up

- **Call ended (480):** indicates a connection error, typically due to a temporary network issue.

- **Call ended (busy):** indicates the called party is busy and thus is unable to take the call.

- **Call ended (unanswered):** indicates the call set-up has been terminated due to no-answer.

- **Call ended (unregistered):** indicates the call set-up has been terminated because the called number is not registered.

- **Call ended (refused):** indicates the called party has refused the call and the call set-up has been terminated.

- **Call ended (connected to another phone 200):** indicates the call has been answered by a phone other than the called number. Note this call will not be registered in the Call Logs.

- **Call ended (connected to another phone 400):** indicates the call has been answered by a phone other than the called number. Note this call will be added to the Call Logs

Status Bar Icons

Below is a description of the icons shown in the Status bar. The order of the icons is generally left to right but may vary based on the Smartphone model and manufacturer. In addition, other icons may display depending on manufacturer.

Icon		It means
	Registration status	green indicates registered with iPECS host.
	Registration status	red indicates not registered or registered but in DND or Call Forward.
	Missed Call	an incoming call was not answered.
	Voice Message	one or more new Voice messages have been received.
	SMS	one or more SMS messages have been received.
	Audible Alert	the phone is in silent alert mode, no ring tone is provided.
	Rotation	auto-rotation is active.
	GPS	GPS is active.
	Bluetooth	Bluetooth wireless connection active.
	Wi-Fi	Wi-Fi network connected.
	RSSI (Received Signal Strength Indicator)	typically one to four bars depending on strength of received signal.
	Battery state	green color indicates battery condition is good.

Open Source Software Notice

This following General Public Licensed (GPL) software used in this product are subject to the GPL License Agreements.

You can obtain a copy of the GPL licenses from the Ericsson-LG Enterprise Web Site (www.ericssonlg-enterprise.com).

GPL License:

Used Open Source	Applied Function or Application	License (GPL, LGPL, MPL, BSD-style)
ld-2.3.1.so	Shared library	LGPL
libc-2.3.1.so	GNU C library	LGPL
libcrypt-2.3.1.so	Security-related library	LGPL
libcrypto.so.0.9.8	Security-related library	LGPL
libdl-2.3.1.so	Dynamic linking library	LGPL
libm-2.3.1.so	Math library	LGPL
libnss_detailed instructions.so	Name service switch library	LGPL
libpthread-0.10.so	POSIX thread library	LGPL
librt-2.3.1.so	POSIX real-time extension interface	LGPL
libssl.so.0.9.8	SSL	LGPL
libz.so.1.1.4	Compression library	LGPL
RTP	RTP	LGPL
sRTP	sRTP	LGPL
SIP	SIP Protocol	LGPL
OpenSSL	Secure Network	BSD

Ericsson-LG Enterprise offers to provide source code to you on CD-ROM for a charge covering the cost of performing such distribution, such as the cost of media, shipping and handling upon e-mail request to Ericsson-LG Enterprise at opensource@lgericsson.com.

This offer is valid for a period of three (3) years from the date of the distribution of this product by Ericsson-LG Enterprise.

ABOUT US

With over 3,000 systems installed in the UK, Digitel is a recognised leader in the design, installation and maintenance of communications solutions.

Digitel has been working with Ericsson-LG for over 20 years and over this period Digitel has received many top awards, including international recognition from Ericsson-LG. Digitel's most recent award included a 'Special Achievement' Award at Ericsson-LG's Global partners conference with 53 countries in attendance.

Whilst these awards take into consideration sales performance, they also reflect Digitel's on-going commitment to Ericsson-LG products and excellence in customer support. Digitel are a unified communications solutions provider of any-where, any-time communications. Our end-to-end all-in-one solutions directly help businesses to reduce communications costs, increase operating efficiency and enhance customer service. We achieve this by enabling people to communicate and collaborate more effectively, streamlining processes and helping companies bring innovative multi-media solutions and services into their businesses to meet and exceed their customers' requirements.

Digitel Europe Ltd
Communications Centre
1 Ivy Street
Priory Industrial Estate
Birkenhead CH41 5EE

Tel: 0151 650 0065
Fax: 0151 6501162
Service: 0151 650 1123
E-mail: mail@digiteleurope.co.uk
Web: www.digiteleurope.co.uk