U.motion

U.motion Communication

Technical Manual

Intercom app for Android devices

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Schneider Electric

GENERAL INFORMATION

Schneider Electric SAS
If you have technical questions, please contact the Customer Care Centre in your country.
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Note: please read the manual **before** beginning and keep the manual for later use.

Audience: the manual has been conceived and written for users who are experienced in the use of PCs and automation technology.

CONVENTIONS

[KEY]	Keys that are to be pressed by the user are given in square brackets, e.g. [CTRL] or [DEL]
Courier	On-screen messages are given in the Courier font, e.g. C:\>
Courier bold	input to be made by the user are given in Courier bold, e.g. **C:\>DIR**).
„…" (double quotes)	Names of buttons to be pressed, menus or other onscreen elements and product names are given within double quotes. (e.g. "Configuration").
Symbolic	In this manual the following symbolic are used to indicate particular text blocs.

Caution!
A dangerous situation may arise that may cause damage to material.

Note.
Hint and additional notes

INDEX:

1 GENERAL OVERVIEW

1.1 INTRODUCTION

The app U.motion Communication makes video communication possible also on supported devices with Android operating system. The app permits as well to communicate with a connected IP intercom as also to show the video signal of the external unit.

Note: This manual was created for the usage of the app on Android based mobile devices. If you are using the app on U.motion Client Touch 7, please refer to the TECHNICAL MANUAL of it, since beneath the explanations of the apps it contains also important additional information.

1.2 REQUIREMENTS

U.motion Communication requires a smartphone or tablet with operating system Android 2.3 or higher with active SIP support. If the app on your device should show an error message referring to a missing SIP support, please contact the manufacturer of your Android device. Often the SIP support is locked from the manufacturer as factory default and has to be manually unlocked.

For a correct usage of the app, beneath a compatible IP intercom unit also a VoIP Server with SIP support is required, on which the app can be registered. Generally, this VoIP server will be included in your U.motion KNX Server Plus / U.motion KNX Server Plus Touch.

Note: because of the high amount of Android devices, the app could not be tested on all of them! If you should experience any problems installing / configuring / using this app on your Android product, please contact our support!

2 SETUP

2.1 INTRODUCTION

U.motion Communication can be downloaded for free from the Google Play Store and afterwards permits to be connected to a VoIP server.

2.2 INSTALLATION

In order to install U.motion Communication on your Android device, please access the Play Store, search for "U.motion Communication" and select the free U.motion Communication app. At completed download the app can be started through the corresponding icon.
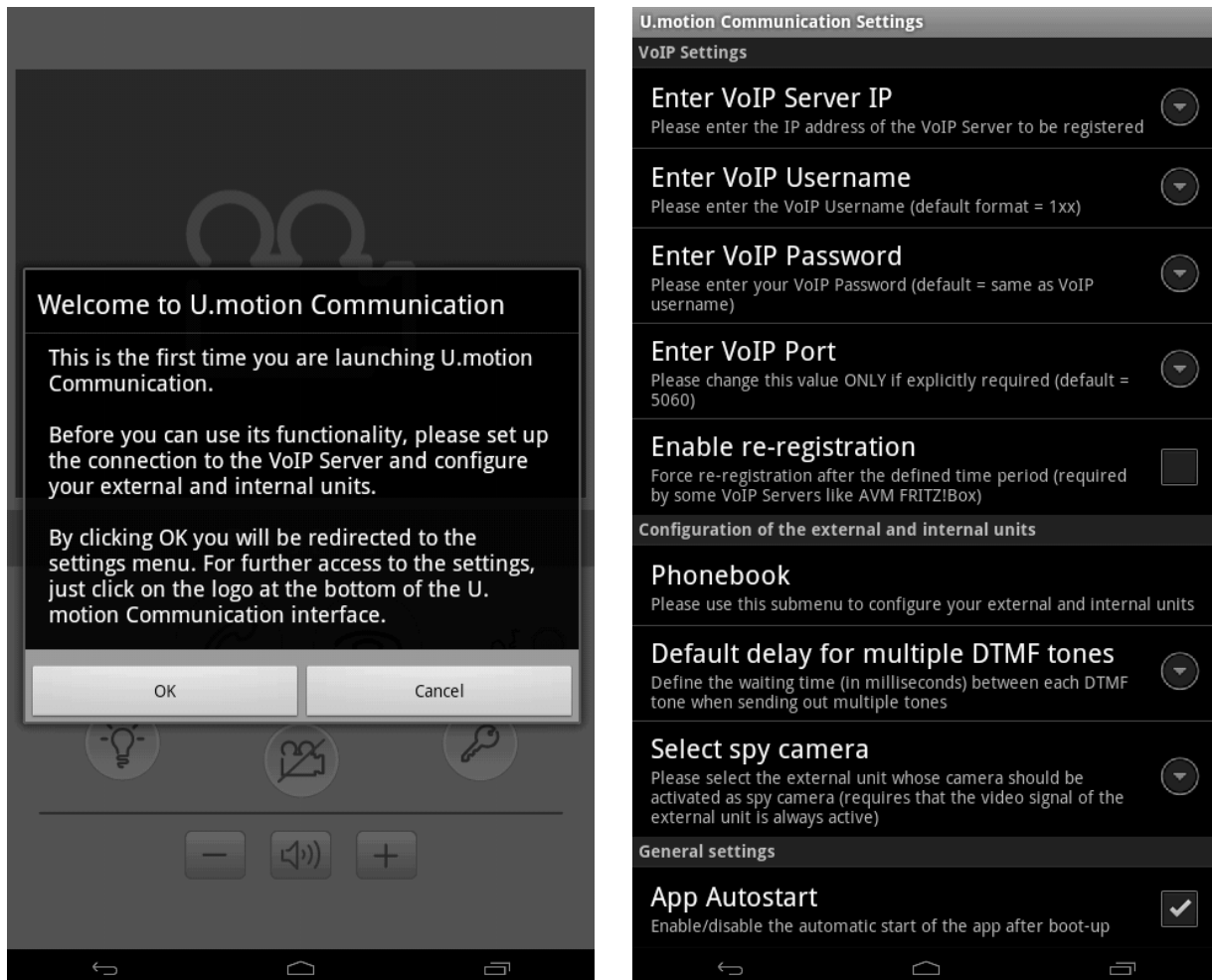
2.3 CONFIGURATION

The following pages show how to correctly configure the app. This manual exclusively shows the configuration of the U.motion Communication app and does not go deeper into the intercom topic. Depending on the system in use, you can find more details regarding the whole setup in the INTERCOM manual of the U.motion devices. In order to use the app it is required that a configured and working VoIP Server is present in the system and that a user for your mobile device has been configured correctly.

When starting the app for the first time, it will show a welcome message with some useful information. Before being able to use the app, it namely has to be configured and integrated as VoIP member into the existing system.

Note: all screenshots within this manual were made on an Android device, which according to the Android specification is classified as display type „LARGE" and screen density „MDPI". Depending on the used device the visualisation of the app may slightly vary. Nevertheless the available options within the app are always the same.

The following screenshots show the welcome message at first start as well as the configuration menu that is opened automatically when confirming the welcome message through the „OK" button (for further access to the settings menu, just use the menu button on your Android device):

In order to use at least the minimal functionality of the app, the settings regarding the VoIP registration (the first 5 settings) have to be configured correctly. In the connection it will already be possible to reach other members of the VoIP server / to receive calls from other members.

The 5 settings in detail:

Setting	Description
Enter VoIP Server IP	In this field the IP address of the targeted VoIP Server must be entered.
Enter VoIP Username	The username that has to be inserted in this field previously needs to be created on VoIP Server side. If a U.motion device is used as VoIP server, you will have to create an internal unit for your android device in the corresponding configuration menu on the server. More information regarding this topic can be found in the manual of the server.
Enter VoIP Password	The VoIP password must be the one you have set during the creation of the corresponding user on the VoIP server.
Enter VoIP Port	Defines the VoIP port, through which the VoIP Server accepts registrations (normally ALWAYS „5060", please change only in special cases).

Enable re-registration	If this option is enabled, an additional field named „Registration timeout" will be shown, which allows the input of a time period in minutes. After this timeout the registration on the VoIP Server will be force-closed and renewed. TAKE CARE: this option is not required in combination with U.motion devices and is therefore disabled by default. Only when using certain third party systems (please check out also the note below) this setting can be required in order to get correct functionality.

Note: the app U.motion Communication was designed for the use in combination with U.motion devices. Since the app is based completely on the SIP standard, it will also be possible to use it with arbitrary VoIP Servers. Nevertheless, the support for the app will only be granted when the app is used in combination with a system defined as compatible.

As already mentioned, those 5 settings are enough to register on the VoIP server and therefore to make calls between your mobile device and other VoIP members. If also external units should be handled and the video signals of cameras should be displayed, also the following settings have to be configured correctly.

The menu entry „Phonebook" opens a sub menu that permits to configure up to 10 external units and 20 internal units. On top of the sub menu a drop down menu permits to switch between external and internal units; furthermore, a help button that informs about the parameters to be set in this page and a back button (that also works as saving button) are present. The area below those buttons can be scrolled vertically and gives access to each of the external / internal units.

The internal units will show the following parameters:
- VoIP ID: This value must match the VoIP-ID (username) of the internal unit, as configured within the VoIP Server
- Display name: Optionally a display name can be specified, which is shown in the status bar during incoming calls of the corresponding number (overwrites eventual values sent by the VoIP Server)
- QuickDial button: If this checkbox is enabled, the dial window (check out page 11) will show a corresponding QuickDial button with the VoIP ID (or the display name, if previously configured), which permits to call the internal unit directly
- Image file: Optionally a picture can be defined, which will be shown at incoming calls of the selected internal unit; it is possible either to select a local picture file or to specify the URL of an image in the world wide web
- Ringtone: Optionally a separated ringtone can be selected, which will be played at incoming calls of the selected internal unit

Every external unit instead shows the following parameters:
- Type: The type of the external unit can be selected through a selection popup
- VoIP ID: This value must match the VoIP-ID (username) of the external unit, as configured within the VoIP Server
- Display name: Optionally a display name can be specified, which is shown in the status bar during incoming calls of the corresponding number (overwrites eventual values sent by the VoIP Server)
- Ringtone: Optionally a separated ringtone can be selected, which will be played at incoming calls of the selected external unit
- Main camera - IP: In this field the IP address of the camera of the external unit, which should be shown automatically during an incoming call, has to be inserted
- Add. camera – path: Optionally the path of a 2. Video signal (either image- or video-path) can be specified. In the main window it will then be possible to change between main and additional camera using horizontal swipe gesture
- QuickDial button: If this checkbox is enabled, the dial window (check out page 11) will show a corresponding QuickDial button with the VoIP ID (or the display name, if previously configured), which permits to call the external unit directly

The following screenshots show the configuration sub menu of the external units as well as the selection popup of the type of the external unit:
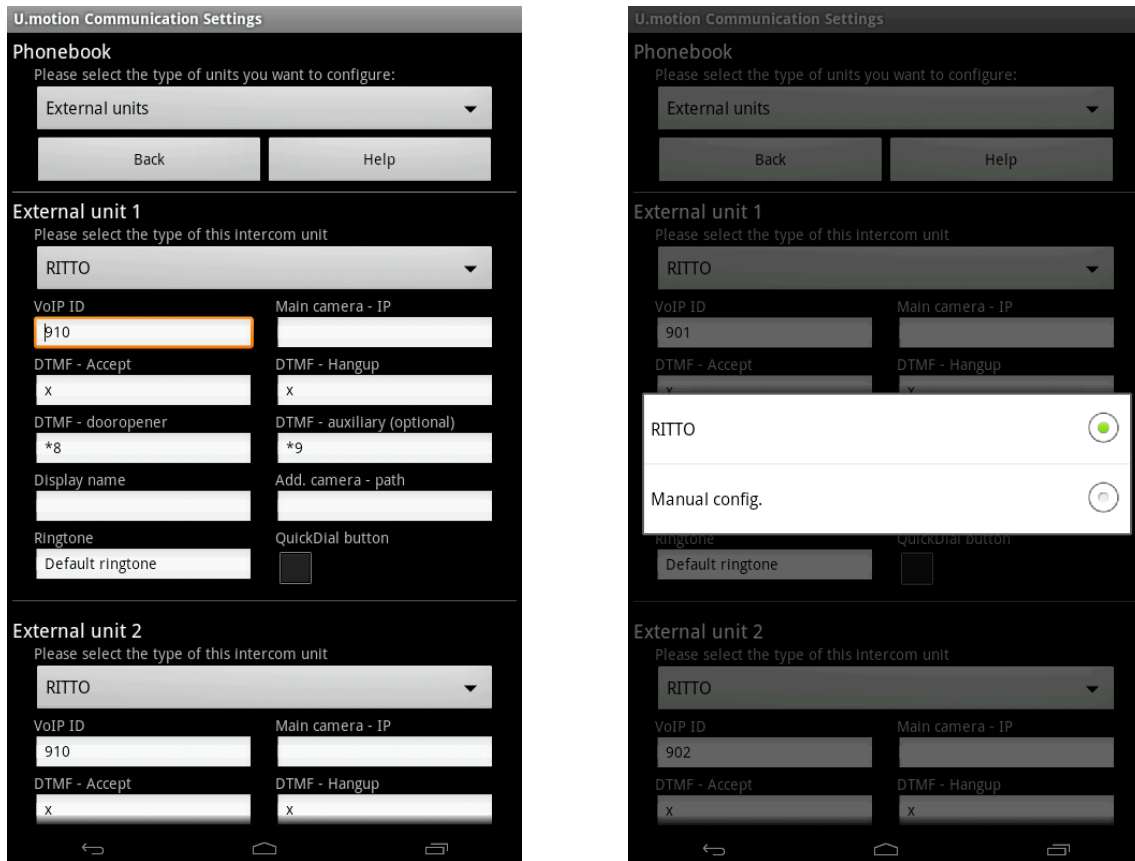
The selection popup of the external units – besides the default entry "RITTO" - contains the entry „Manual Config.", which permits the integration of external units, whose type is not directly supported. In both cases, beneath the fields already described on the previous page, also the following 4 entries will be shown for the external unit:

- DTMF - Accept: DTMF tone for starting the conversation
- DTMF – dooropener: DTMF tone to control the door opener, is connected to the KEY-
                                   icon in the app
- DTMF - Hangup: DTMF tone for closing the conversation
- DTMF - auxiliary (optional):   DTMF tone to control the auxiliary relay, is connected to the LIGHT-
                                   icon in the app

When selecting the RITTO template, those values will already be filled out, where "x" will be used for both "Accept" and "Hangup" (and therefore the DTMF tone will be ignored), "*8" will be used for the dooropener and "*9" will be used for the auxiliary contact. Those values can be freely adapted, as also for the manual configuration. The main difference when using the manual configuration, is therefore that the IP address of the camera must be inserted as full path to the motion-jpeg stream of the camera instead of only using the bare IP address.

Note: please give special attention to the allocation of the VoIP IDs of the external units: only if the external unit effectively uses the VoIP ID, for which the configurations have been made, the camera signal and the DTMF tones will be assigned correctly. Please also note that the IDs are already preconfigured (901-910); for example, if you want to configure the external unit 910, please use the external unit 10 and don't just rename the external unit 1 from 901 to 910. The same applies for the internal units, which are pre-configured from 101 to 120.

Once the external units are configured at wish, the changes can be saved by clicking on the back button on top of the page, as already mentioned before.

The next menu entry "Default delay for multiple DTMF tones" permits to set a waiting time (in milliseconds) when sending more than one DTMF tone; this is required by some external units for a correct function.

The menu entry „Select spy camera" allows defining one external unit as door spy and therefore enable the camera of the external unit through the CAMERA icon of the app, even when there are no active calls. Take care, this functionality requires that the external unit provides the camera signal permanently and not only when there are active calls.

The menu entry "App Autostart" permits to define whether the app should be started automatically at completed boot of the android device or not.

The following screenshots show as well the selection popup for the door spy external unit as also the selection popup of the next settings entry, "Select ringtone":
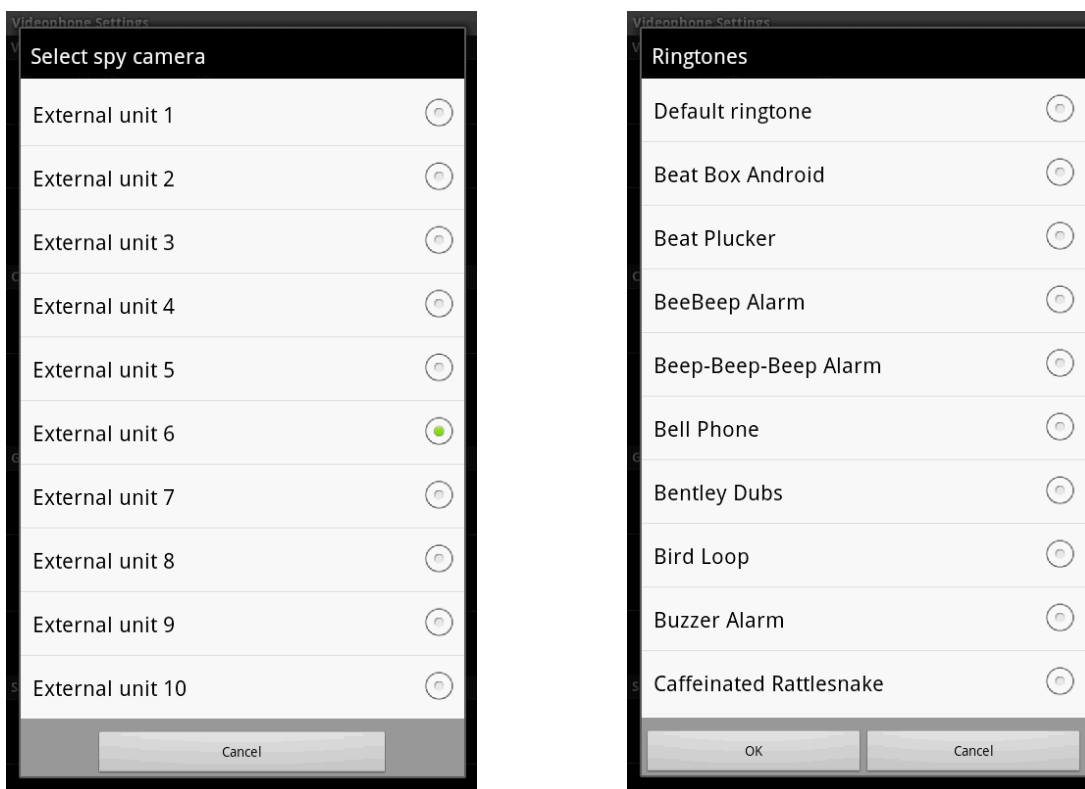
The default ringtone used for the app can be selected among the different ringtones present in the Android system. Android supports also adding custom ringtones; in order to accomplish this task, please refer to the documentation of Android or use one of the tutorials present in the World Wide Web.

The menu entry „Enable auto-hide" permits to set a timeout after which the app is closed automatically. This prevents that the app remains permanently in front and hides other applications (for example when an incoming call is not answered). If the timeout is set to „0" or left empty, this function is disabled.

The point „Password protection" permits to define a password which protects the access to the settings menu. If this field is left empty, the access to the settings is unprotected.

The last menu entry „Back" closes the configuration page of U.motion Communication and brings you back to the interface of the app.

3 USAGE

The following screenshot shows the app in use. On the right side of the screenshot you can find some explanations regarding the elements of the interface:

Video area, in this window the video signal of the external unit / the door spy will be shown.

Status bar, informs about the registration state on the VoIP Server and about incoming calls

Action area with different buttons, please check out the table below for functionality description

Button	Description
KEY	Button to send the door opener DTMF tone (only active during calls)
LIGHT	Button to send the auxiliary relay DTMF tone (only active during calls)
CAMERA	Toggle button to show / hide the camera signal / door spy camera
VOLUME +/-	Buttons to control the volume
SPEAKER	Toggle button (between + and -) to mute / unmute microphone/ speaker
PHONE GREEN	Button to accept calls / start new calls
PHONE RED	Button to decline / terminate calls

The following screenshots show some samples of the app in different states:

- Screenshot upper left: app with active video signal
- Screenshot upper right: message when clicking a button active only during calls
- Screenshot lower left: volume changes through the +/- buttons
- Screenshot lower right: dial pad to call other VoIP members (with empty area for QuickDial buttons)
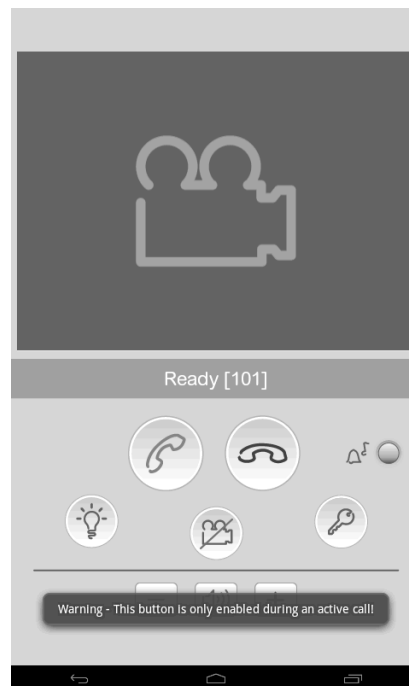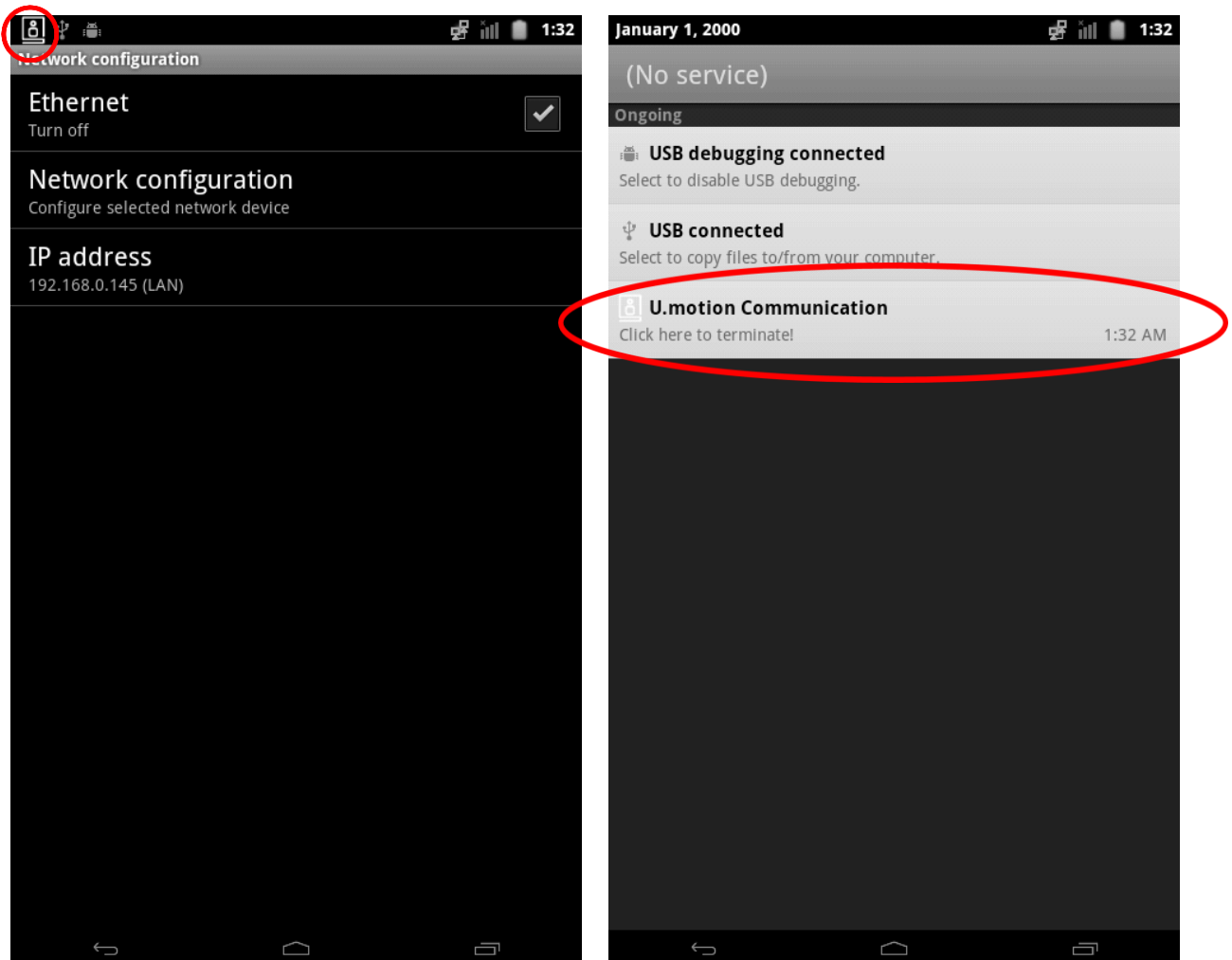
Even when the U.motion Communication app is closed, it must be reachable for incoming calls and open its interface automatically. In order to realize this, also the U.motion Communication app – in the same way as the U.motion Control app – uses a background service that handles the registration on the VoIP Server and manages incoming calls.

Caution!
By using the app on device without permanent power connection (like for example smartphones or tablets on battery use), the execution of the background service can reduce battery life. Therefore it is possible to terminate the app and its service at any time through the notification bar of Android (please check out the following two screenshots).

Further information about the U.motion Communication app can be requested by contacting the technical support.

I. NOTES

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