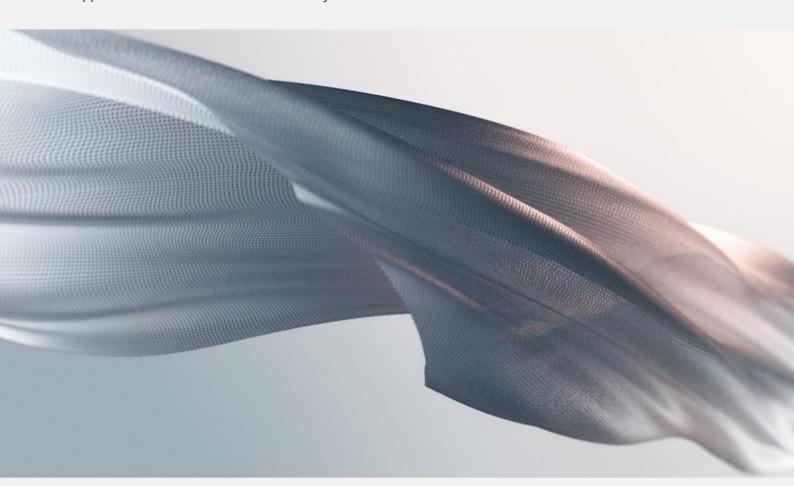
Ejointech

SMS Gateway User Manual

Welcome to the Ejointech User Manual. This document aims to help you understand how the device works more clearly.

Applicable to ACOM6XX SMS Gateway Series Products



DISCLAIMER

The materials used in this publication are copyright and are not to be duplicated, copied, or used without the prior consent of the copyright holder. Technical specifications and information in this document is subject to change without prior notice being given.

COPYRIGHT

Copyright©Shenzhen Ejoin Technology of Co., Ltd. No part of this document may be reproduced, transmitted, or translated, in any form without prior written permission. Offenders are liable to the payment of damages. All rights are reserved in the event of grant of a patent or the registration of a utility model or design. All specifications supplied herein are subject to change without notice at any time.

DEFINITIONS AND INTERPRETATIONS

"You" "Your" "User" "Customer" or "Client" or refers to you, the individual or business entity acquiring a Ejointech gateway.

"Ejoin", "We", "Us", and "Our" refer to Ejoin Technology ("Ejointech").

"Device", "Modem", and "Gateway" refer to Ejointech gateway.

"Update" means maintenance of, or a fix to, a version of Ejointech Software, including, but not limited to a hot fix, patch, or enhancement, none of which function as a standalone service or other software package and which do not have an additional cost for an existing Licensee.

Purpose

This agreement outlines the permitted use of SMS gateway devices sold by Ejoin Technology, and sets out the responsibilities of the buyer in ensuring legal and ethical usage of the product.

Safety Notice & AGREEMENT

By using Ejointech VoIP and SMS gateways, you agree to the following terms:1.) Ejointech VoIP and SMS gateways are strictly prohibited from being used in mainland China. This restriction is non-negotiable and strictly enforced; 2.) Any gateways used within mainland China will not be granted a license or technical support;3.)Always install antennas in locations with a strong cellular signal and avoid metallic enclosures.

Prohibited Use

Buyer must not use the device, or allow it to be used: To send unsolicited or bulk SMS ("spam") without user consent For phishing, fraud, scams, or illegal marketing

Ejointech ACOM6XX User Manual

To harass or threaten any individual or entity In violation of any local, national, or international law With forged sender IDs or misleading message content

Termination and Enforcement

Violation of this policy may result in: Immediate suspension of support and warranty Reporting to carriers, regulators, or government agencies Refusal of future sales to the offending party

Content

COPYRIGHT	
DEFINITIONS AND INTERPRETATIONS	2
AGREEMENT	2
1 Product Brief	6
1.1 Get to Know Connectors, Ports , Sim Slots	
2 Get Ready to Start	6
2.1 What's in the Box	6
2.2 Install Antennas	7
2.3 Insert SIM Card	8
2.4 Network Connection	8
2.5 Power Connection	9
2.6 USB Serial Connection	10
3 Configure IP Settings	10
3.1 Login Credential	10
3.2 Configure Static IP /DHCP Settings(OPTIONAL)	11
3.3 Basic Setting	
4 Gateway Settings	
4.1 Enable/Disable Port	
4.2 IMEI Change	
4.3 PIN Settings	
4.4 Sim Card Auto Enable	
4.5 Configure the Sim Number	
4.6 Billing Settings	
4.7 AT Command	
4.8 USSD Command	
4.9 Sim Slot Switch	
4.10 Port Inter-Calling	
4.11 Internet Settings	
5 SMS Send/Receive	
5.1 Port Status	
5.2 SMS Sending	
5.3 SMS Receiving	
5.4 SMS Filter	
5.5 SMS Forward	
5.6 SMS Port Inter-Sending	
5.7 Message SMS-Send Control	
5.8 SMPP Settings	
5.9 EIMS (Bulk SMS Software) Connection	
5.10 Prefix Route	
5.11 MMS Send	
6 Application Settings	
6.1 Translation Settings	
6.2 SIM Pool Settings	
6.3 Auto Recharge	
6.4 State Notification	
7 Advanced Setting	
7.1 Network & VPN Settings	
7.2 Port Settings	
7.3 LED Settings	
7.4 Other Settings	
8 System Settings	
8.1 User Mgmt	
8.2 Role Mgmt (STMS Comparties)	
8.3 Device Mgmt (ETMS Connection)	
8.4 File Management	66

Ejointech ACOM6XX User Manual

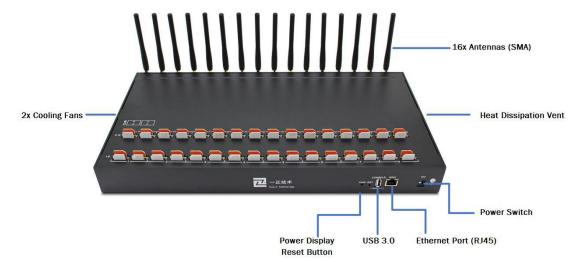
8.5 System Update	66
8.6 Test Network	67
8.7 Monitor System	68
8.8 System Warning	71
9 Running Status	72
9.1 Where to Check Sim Cards Status	72
9.2 System Status	
9.3 Inter-Calling Statistics	74
9.4 SMS Statistics	74
9.5 SMS Inter Send	75
9.6 Traffic Statistics	75
9.7 SMS Record	76
10 Save and Reboot	76
11 Frequently Asked Questions (FAQs)	77
11.1 What is the Login Information?	77
11.2 How Can I Reset the Device to Factory Settings?	77
11.3 What Should I Do if the SIM Card Registration Fails?	77
11.4 How Do I Update the Firmware?	78
11.5 Where Do I Download Ejoin Gateway Http API Document	78
11.6 Why are My Settings Changes not Taking Effect?	78
11.7 How to Make My Device Remotely Manage in Different Locations?	78
11.8 How to Install EIMS Bulk SMS Software	79

1 Product Brief

This manual is for the Ejointech ACOM6XX Series SMS Gateway, a powerful and flexible device for sending and receiving SMS messages using multiple SIM cards. The gateway is widely used for SMS marketing, two-factor authentication, USSD querying, and more. It supports 8 to 64 ports and up to 512 SIM cards.

1.1 Hardware Overview

The front panel includes ports for SIM cards, Ethernet/WAN, power, and status LEDs. Ports are typically grouped in banks of 8 and correspond to the internal 4G modems.



2 Get Ready to Start

2.1 What's in the Box

- Ejointech ACOM6XX Gateway Device
- External Antennas (SMA Connectors)
- Power Adapter (AC 100-240V INPUT)
- Ethernet Cable and USB Cable
- Mounting Brackets



Your Ejointech Device is designed so that user can set it up quickly and start using it right away. Follow the steps below to get started.

2.2 Install Antennas

ANTENNA INSTALLATION GUIDELINES

- Install antennas in a location with access to a cellular network radio signal.
- Antennas must not be installed inside metal cases.



2.3 Insert SIM Card

The device supports hot-swapping, allowing SIM cards to be inserted or removed without the need to power off. Ensure SIM card chips connect with the SIM tray's interface.

The SIM cards should be Standard SIM Cards 2FF (25mm×15mm×0.8mm).

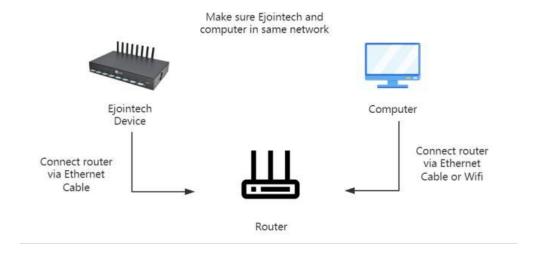


2.4 Network Connection

a. Wan Connection

Connect one end of the Ethernet cable to the WAN port of the gateway and the other end to the router. Make sure the gateway and computer connect with same network and login with default information; which typically takes 1-2 minutes.

Video Reference: <u>How to Set Up Ejointech New Gateway (YouTube)</u>



b. Wifi Connection

This feature only applies to special model.

Click on menu position "Basic Settings" and navigate to tab "Wifi Settings"



Click on the "Running Status" position, navigate to the "System Settings" tab, and check the Wan Status to see if the wifi connection mode is successfully selected.

It should be "Wifi" if connected.



2.5 Power Connection

Connect the smaller end of the power cable to the power input on the back panel, and insert the other end of the cable into a 100-220V power outlet.



2.6 USB Serial Connection

The USB interface is only used for initial setup in case the user cannot find the IP or for troubleshooting by the EJointech technical team to resolve bugs. It is not required to be connected when the device is operating normally.



3 Accessing the Web Interface

3.1 Login Credential

• Default IP: 192.168.1.67

Username: root Password: root

Ensure your computer is on the same subnet (e.g., 192.168.1.xxx) and access the device via a

browser.

The default WAN IP address of the device is 192.168.1.67. Here are the considerations regarding its compatibility with the router's LAN IP:

- 1. If the router's LAN IP is set to 192.168.1.1, the default IP of the device will work fine without any changes.
- 2. If the router's LAN IP is different from 192.168.1.1, say 192.168.0.1, then the default IP of the device needs to be adjusted. <u>So, how can you change it?</u>



3.2 Network Configuration

You can set the device IP via Static, DHCP, or PPPoE. Navigate to 'Basic Settings' > 'WAN Settings'.

- Static IP (default): 192.168.1.67
- DHCP: Automatically obtains an IP address from the router.
- PPPoE: Use if ISP requires username/password.



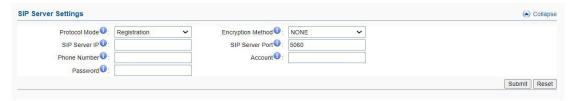
Enable Wan Type. Fill IP settings, submit to take effect.

Items	Description
WAN Type	Static IP: Manually set up gateway IP.
	Dynamic IP: Automatically obtain IP from local network (DHCP)
	PPPoE: Requires ISP to provide account and password. Use this mode when there is no router in the local network.
WAN IP	The WAN IP address of the gateway.
IP Mask	The subnet mask of the gateway.
Default Gateway	IP address of the default gateway. Example: router IP.
DNS Gateway	Domain name server IP address. Example: 8.8.8.8.

3.3 Basic Setting

a. SIP Server Connection

Click on menu position "Basic Settings" and navigate to tab "Sip Server Settings"



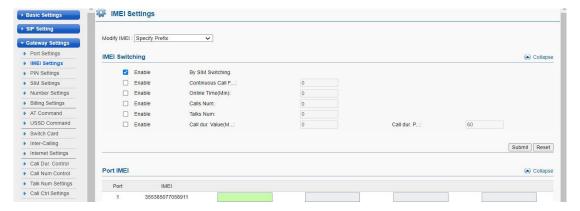
- Under this section, users can configure settings to connect with their softswitch or SIP server.
- This format clearly presents each setting and its description.

Item	Description
Protocol Mode	Two modes available: Registration and Point-to-Point. Note: Point-to-Point is only for gateways and servers in the same LAN or with public IPs.
Encryption Method	Two methods available: Ejointech's and VOS2000. Note: Selecting "EJOIN" requires configuring the proxy server and port

	first.
SIP Server IP	IP or domain name of the softswitch directing traffic to the gateway. Example: VOS IP.
SIP Server Port	The SIP port of the softswitch, default is 5060.
Phone Number	Caller phone number for the SIP client, also serves as the callable SIP port number.
Account	SIP registration account provided by softswitch. Example: Routing gateway ID on VOS.
Password	Password for the SIP registration account.

4 Gateway Settings

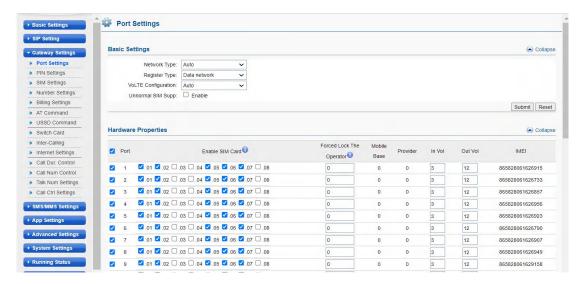
In this section, users can perform basic configurations for the device, such as changing the IMEI, automatically obtaining numbers, setting billing options, configuring SIM card switching and etc.



4.1 Enable/Disable Port

Click on menu position "Gateway Setting" and navigate to tab "Port Setting".

In this section, users can manually enable or disable ports, slots, and select the network information for registration. Generally, it is recommended to keep the Basic Settings in this section at their default values. The device will intelligently select the network for registration based on the situation. Arbitrary changes may result in the SIM card failing to register.

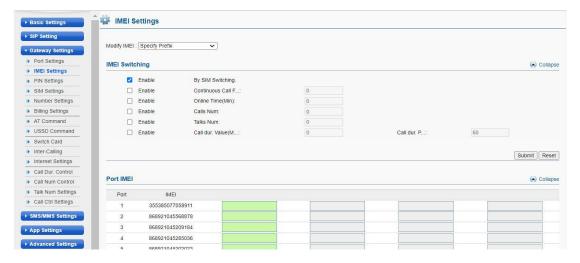


In this section, users can lock the operator. Generally, no additional settings are required by the user.

√ Click 'Submit' at the bottom of the page to save your settings

4.2 IMEI Change

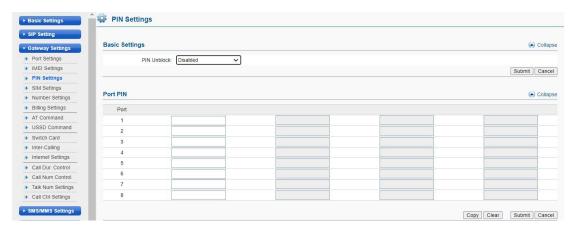
IMEI (International Mobile Equipment Identity) is a 15-digit number. The gateway supports IMEI modification to protect SIM cards .users can automatically change or generate IMEIs as needed.



- It supports automatic import and export of IMEIs.
- When selecting the IMEI prefix auto-fill option to change the IMEI, users can copy the first 6-8 digits of the IMEI, enter them into a designated field, click "Copy," and then select "Auto Complete" to automatically generate the IMEI.

- For detailed instructions, please refer to the video tutorial https://www.youtube.com/watch?v=jLuAiWcuRrY
- Additionally, users can activate automatic IMEI switching and modification based on SIM card locking or other relevant conditions.

4.3 PIN Settings

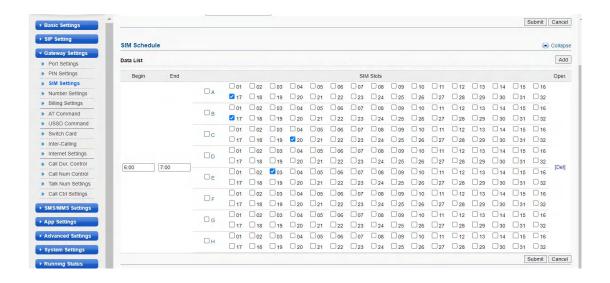


PIN (Personal Identification Number) Most SIM cards do not have a PIN code. If a SIM card does have a PIN, enter the PIN code in the corresponding slot and enable "PIN Unblock" for the SIM card to function properly.

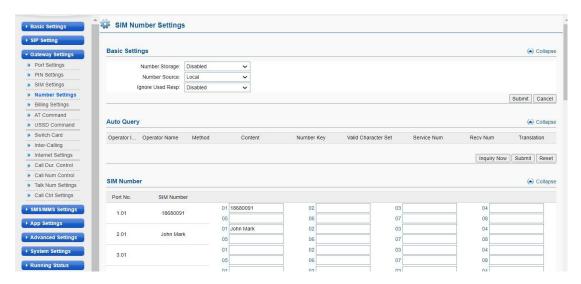
4.4 Sim Card Auto Enable

Click on menu position "Sim Setting" and navigate to tab "SIM Schedule".

This feature is suitable for multi-SIM devices and allows for automatic activation of SIM cards at different time intervals for more flexible management. For instance, user can activate SIM card 1 from 06:00 to 07:00 and SIM card 2 from 08:00 to 09:00.



4.5 Configure the Sim Number



a. Automatically Retrieve Sim Number

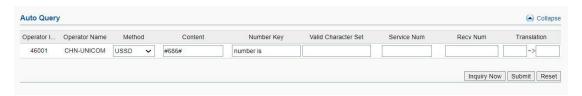
There are three ways to automatically retrieve the card number depending on user's mobile carrier (USSD code, SMS message, SIM card calling). For example, using **T-Mobile** in the United States:

- Access the "Number settings" under the "Gateway Setting" section on the device page.
- Fill in the information under the "Auto Query" section.

Operator ID: 310260Operator Name: T-Mobile

Method: USSDContent: #686#

Click "Submit" to apply the changes.



• This method is also applicable for USSD or SMS number queries.

Operator ID: Auto-select **Operator Name:** Auto-select

Method: USSD/SMS

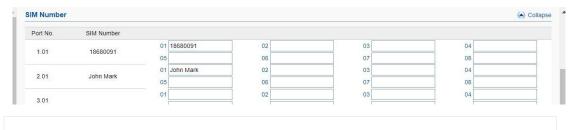
Content: USSD code or the phone number for SMS queries

Number Key: The keyword in the response from the recipient. (For example: if the USSD response is "Your SIM number is 923345556978," the keyword would be "number," which is typically the word that appears just before the SIM number).

Prefix Translation: If user receive the number as 923345556978 but do not need the country code, user can use prefix translation to delete "923" and add "0" instead.

b. Manual Entry Sim Card Number

If sim cards do not support automatic number retrieval or if automatic retrieval fails, please use manual entry mode. The page supports manually entering the sim card number into the corresponding sim card slot.

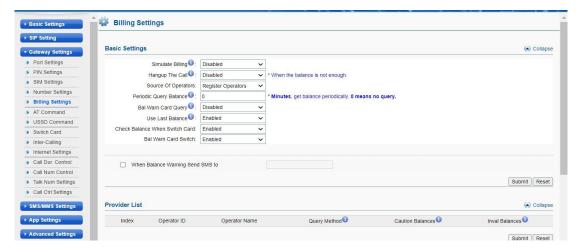


√ Click "Submit" at the bottom of the page to apply the changes.

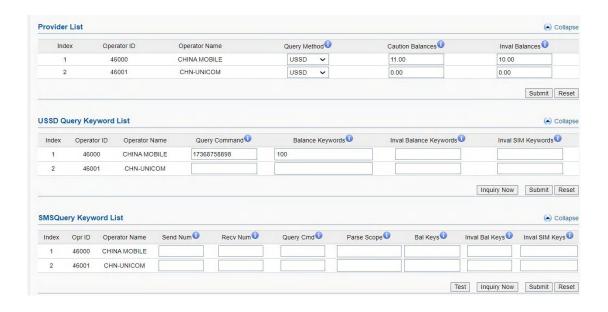
 Extended Prompt: When users enable port-to-port calling or messaging, they need to enter the number on this interface.

4.6 Billing Settings

This is the billing system page, widely used for automatically querying balance to remind customers to recharge or replace SIM cards with no balance. The billing system works by getting an accurate balance for each SIM card from USSD or SMS responses, then deducting money during each billing period based on the set tariff. Note that this method may have some deviations.



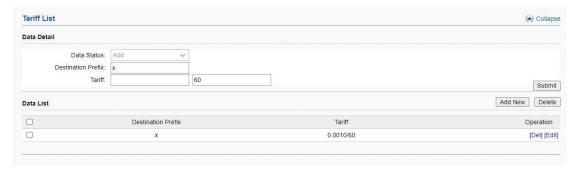
Items	Description
Billing	Enable this to activate the billing system.
Hangup The Call	If enabled, the call will be hung up when the balance is lower than the invalid balance value.
Source of Operators	Use this setting when the operator ID and IMSI are different.
Periodic Query Balance	Enable to periodically query the balance for more accuracy.
Bal Warn Card Query	If enabled, it will query the balance when it is lower than the caution balance value.
Use Last Balance	- Enable: If the balance query fails, use the last known balance Disable: If the balance query fails, the balance shows as N/A, and the SIM can't be used if it is lower than the invalid balance value, indicated by a yellow SIM LED.



Items	Description	
Query Method	USSD or SMS for querying balance.	
Caution Balances	When the balance is lower than the caution balance value, the billing system will send a USSD or SMS to recalibrate the balance.	
Invalid Balances	The SIM can't be used if it is lower than the invalid balance value.	
Query Command	The HTTP or SMS command for querying balance.	
Balance Keywords	The balance keywords in the USSD or SMS response. For example: in "Your credit balance is AED 45.82," AED can be the keyword.	
Invalid Balance Keywords	Keywords indicating an invalid balance.	
Invalid SIM Keywords	If the SIM is blocked by the operator, it may get a response like "Sorry, your SIM is blocked now." You can set "blocked" as an invalid SIM keyword. The card will show as invalid.	
Service Num	The operator number that will send an SMS back to you.	
Query Cmd	SMS command for querying balance.	
Balance Keys	Same as balance keywords.	

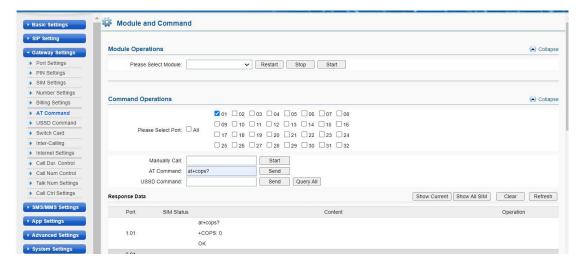
Invalid Bal Keys	Same as USSD.
Invalid SIM Keys	Same as USSD.

Click "Add New" to set a tariff list with different destination prefixes. "x" means for all prefixes. User can also perform delete and edit operations here.



4.7 AT Command

AT Command is used for communicating with and controlling gateways. These commands are used to check the status of the SIM card, send USSD commands, make calls, and perform other operations necessary for managing the gateway.

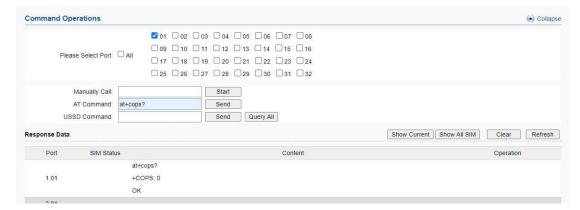


Module Operations

User can select different modules and perform operations such as restart, stop, and start.

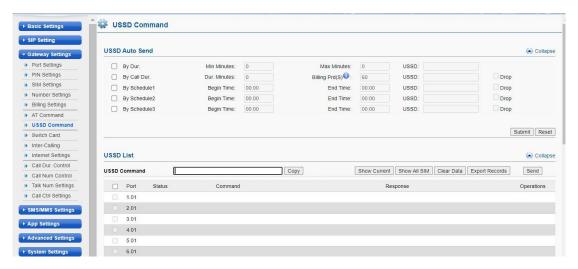
Command Operations

Select Port	Choose the port to perform command operations.
Manually Call	Test if the SIM card can make a call.
AT Command	Send AT commands to check the SIM status.
USSD Command	Send USSD commands for balance inquiry, number retrieval, and recharge.
SIM Status	Display the current status of the SIM card.
Content	The response received after executing a USSD or AT command.



4.8 USSD Command

USSD Command is used for sending USSD (Unstructured Supplementary Service Data) messages. These commands allow users to query balances, retrieve numbers, recharge accounts, and perform other operations on the SIM card.



USSD Auto Send

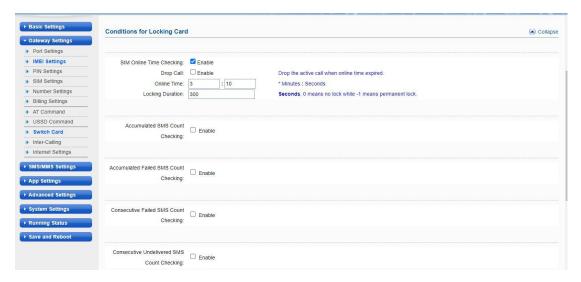
USSD commands are automatically sent based on specific conditions. "Drop" means ending the current call after the specified call duration is reached.

On this page, can manually send USSD commands and receive responses easily.

Items	Description	
Сору	Copy the USSD command to another channel.	
Show Current	Display the active SIM cards.	
Show ALL SIM	Display all SIM cards.	
Clear Data	Clear the USSD response data.	
Send	Execute the USSD command.	

4.9 Sim Slot Switch

This feature is only applicable to devices with multiple card slots per port. Ejointech devices allow only one SIM card to be online per port. When using a multi-card device, this interface for configuring the conditions for locking SIM cards in an Ejointech SMS device. Users can set various conditions under which a SIM card should be locked or switched out. It allows users to switch SIM cards under various conditions.



a. Automatic SIM Card Switching

In the SIM card switching section, users can configure the conditions under which SIM cards will be automatically switched. When a SIM card meets the specified conditions, it will automatically switch to the next card slot.

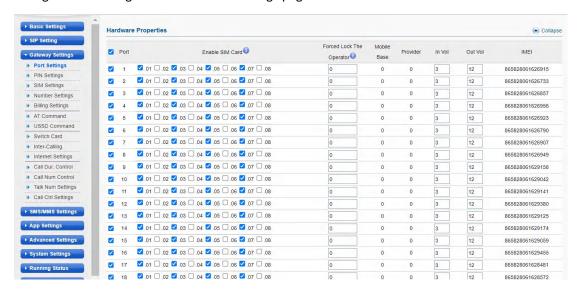
• For receiving SMS messages, it is recommended to enable the following conditions and set the Sim card's online duration to be no less than 3 minutes to ensure stable card registration and reception.



- To check which SIM cards are active, navigate to "Running Status" > "Port Status" in the interface.
- Click 'Submit' at the bottom of the page to save your settings

b. SIM Card Switch by Manual

For manual SIM card switching, users need to navigate to the "Gateway Setting" section and configure the settings under the "Port Setting" page.

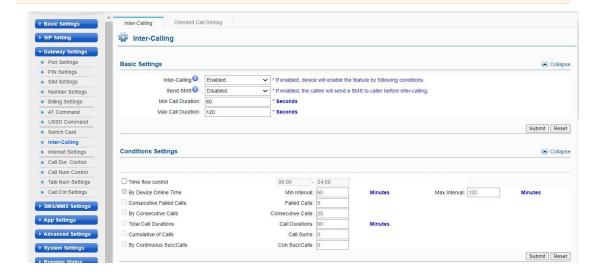


- Enable/Disable SIM Cards:
 - Check the SIM slots to enable the SIM card in that slot.
 - Uncheck the SIM slots to disable the SIM card in that slot.
 - > Use this option to manually enable or disable SIM cards as needed.
- Click 'Submit' at the bottom of the page to save your settings

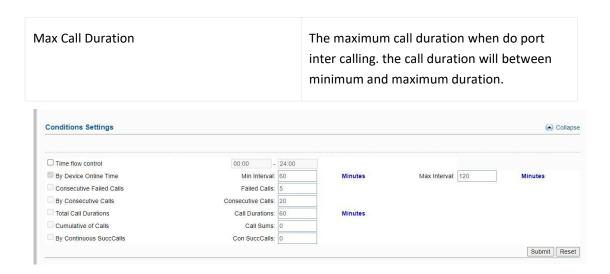
4.10 Port Inter-Calling

In this section, users can configure different ports and slots to call each other under specific conditions.

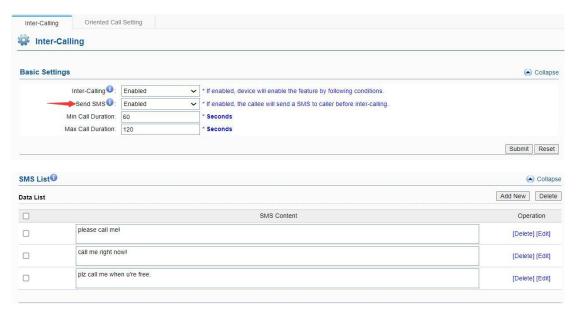
- Before enabling port-to-port calling, user need to go to the "Gateway Setting" section
 and enter the numbers in the "Number Setting" to ensure the software recognizes the
 corresponding card numbers for sending.
- Once the SIM numbers are filled, create the groups user need for the task, set the
 required conditions, and the idle ports will call each other randomly once the conditions
 are triggered.



Items	Description
Port Inter-Calling	The function will work if it is enabled. (need to set SIM number for every port first).
Send SMS	If it is enabled, the callee will send a SMS to caller before inter-calling
Min Call Duration	The minimum call duration when do port inter calling



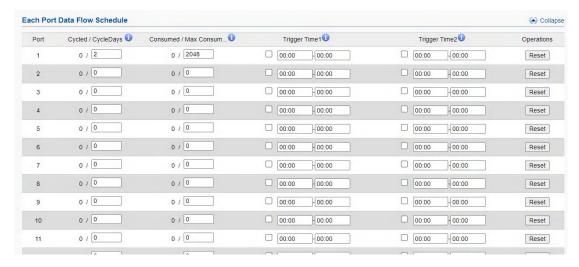
 If needed, users can choose to send an SMS before making a call to simulate human behavior.



The callee will select an SMS content first, then send it to the caller before inter-calling. User
can click the "Add New" button to add new SMS content, as well as delete or edit the
existing SMS content.

4.11 Internet Settings

Under this section, users can configure a simulated internet connection to reduce the risk of their cards being blocked.



• The screenshot below shows which URL the device will surf for consuming data.



 This feature requires configuring the APN and activating data services to ensure that the card can access the internet.

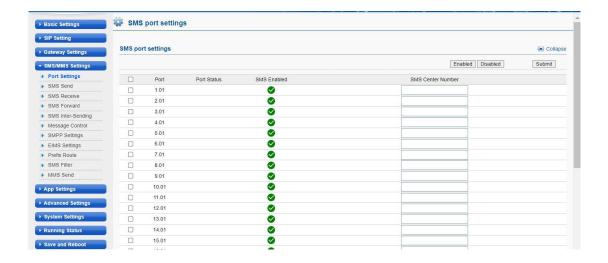


5 SMS Send/Receive

This section is primarily for configuring settings related to SMS receiving and sending.

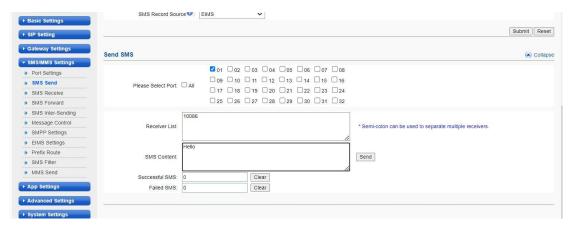
5.1 Port Status

This section is designed to display the registration status of the ports

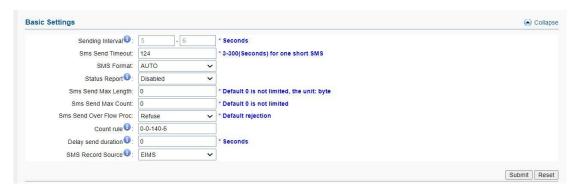


5.2 SMS Sending

On this page, users can select one or multiple ports to send SMS messages to multiple contacts.



In the "Basic Setting" section, the "Sending Interval" allows users to set the time interval between sending SMS messages, thereby controlling the delay between two consecutive messages. If no value is set, the SIM card will send the second SMS immediately after the first one. If a value is set, the SIM card will wait for the specified interval before sending the second SMS.

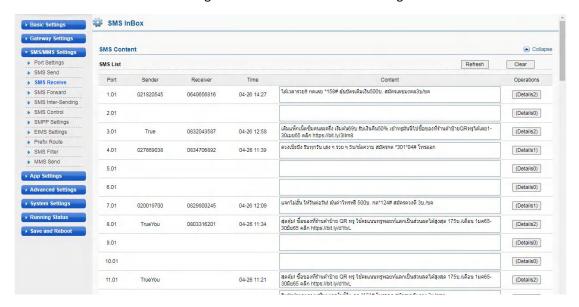


- SMS Format can be PDU and TXT.
- SMS Status Report: When this feature is enabled, the system will receive a status report

from the operator after an SMS is sent, confirming whether the message was successfully delivered.

5.3 SMS Receiving

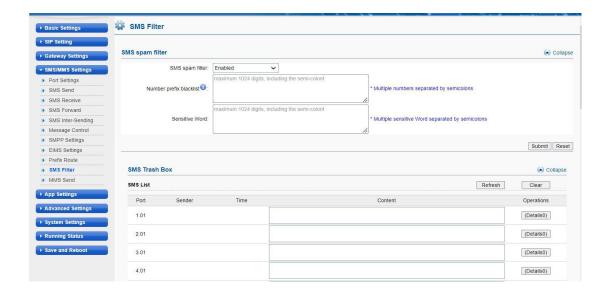
The SMS inbox allows user to view received messages, including the sender and recipient. Use 'Refresh' to view the latest messages and 'Clear' to delete all messages.



 To display the number or remark in the receiver field, please navigate to the "Gateway Setting" section, and under "Number Setting", enter the corresponding sim slot's number in advance.

5.4 SMS Filter

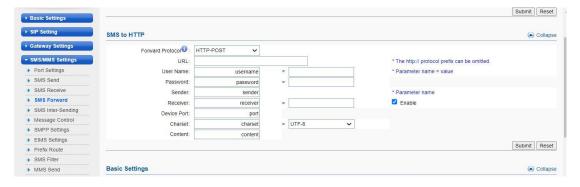
In this section, user can filter out related numbers by setting a number prefix. User can also filter messages containing specific keywords by setting up keyword filters.



5.5 SMS Forward

a. SMS to HTTP

- The feature "SMS forward" allows to forward incoming SMS messages to one/more recipients/Servers according to defined rules.
- Click on Position "Gateway Setting", Navigate to "SMS Forward", enable SMS to HTTP



 Users can refer to the Ejoin Gateway HTTP API Document to configure the relevant parameters.

Download Ejoin Gateway HTTP API Document

Parameter	Description
Forward protocol	GET : The SMS content will be in the request line.

	POST : The SMS content will be in the request body.
URL	The URL to which the SMS is forwarded.
User name	Use this field when the destination URL requires the 'username' parameter; user may leave it blank.
Password	Use this field when the destination URL requires the 'password' parameter; user may leave it blank.
Sender	The SIM number that sends SMS messages to the SIM card in the gateway.
Receiver	If the 'receiver' parameter is filled, it will display the value of that parameter. If it's not set, but the SIM card number is configured, it will display as the SIM card number. If the SIM card number is not set, this parameter will be empty.
Device Port	The device port.
Charset	UTF-8 or BASE64.

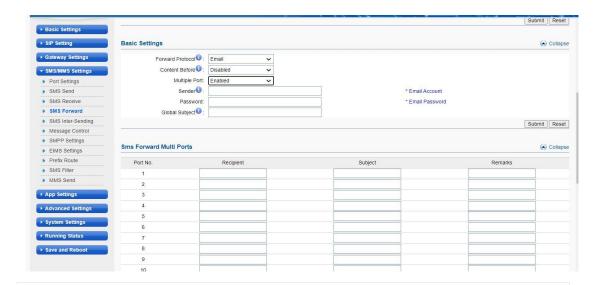
b. SMS to Email

The SMS to Email feature allows user to forward incoming SMS messages to one or multiple email addresses. Please ensure that your gateway is connected to the internet for it to work.

- 1. Open the Gmail sender email settings page, enable IMAP and POP, and keep them enabled.
- 2. Go to **Gmail "Account" > Security** and turn on two-step verification for login.
- 3. Search "APP PASSWORDS" on the search bar ,enter to create an app password.
- 4. Copy the password, remove any spaces, and enter it in the **email password** field on the device page.
- 5. Enter the Gmail recipient email in the device settings page.
- 5. Save and reboot the device to take effect.

Here are detailed steps

• Click on the "Gateway Setting" > "SMS Forwarding" > "Basic Setting", and select Email email in the forwarding protocol box.



√ The current version only supports forwarding to GMAIL email addresses. We will use a Gmail email address as an example to demonstrate the setup.

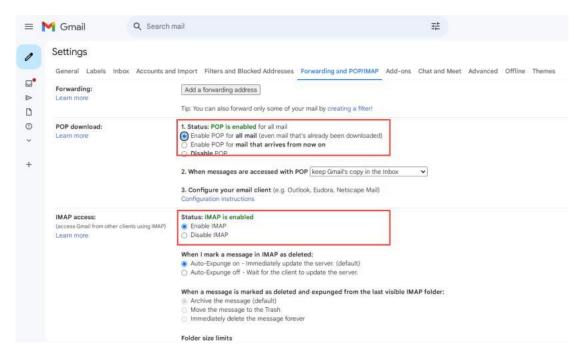
- The plugin can be used in two modes:
- Forward all incoming SMS to one fixed email address
- Forward incoming SMS from each port to different email address

Parameter	Description
Forward protocol	After receiving a text message, the device forwards it to the destination email address in the form of an email.
Multiple Port	After enabling it, user can configure forwarding email addresses for each port
Sender	The sender's email address for emails sent to the destination email
Password	The sender's email password
Recipient	Recipient's email inbox

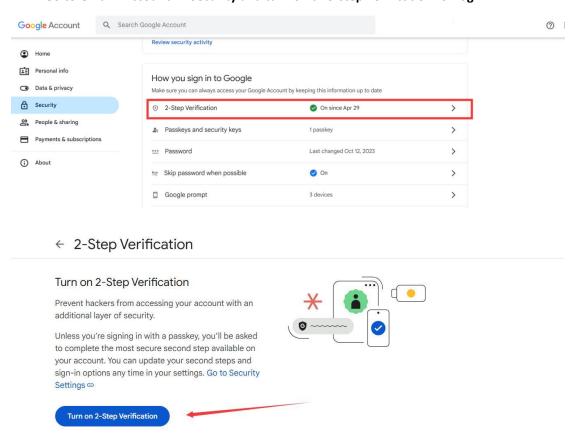
Setup Instructions

1. Open the Gmail sender email settings page. Enable POP an IMAP on Gmail

Ejointech ACOM6XX User Manual

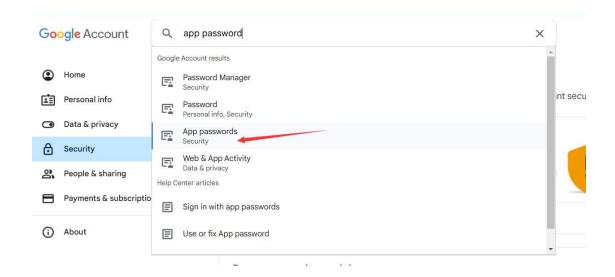


Go to Gmail "Account" > Security and turn on two-step verification for login.



3. Search "APP passwords" on the GOOGLE Account Search and enter APP passwords and create password.

Ejointech ACOM6XX User Manual

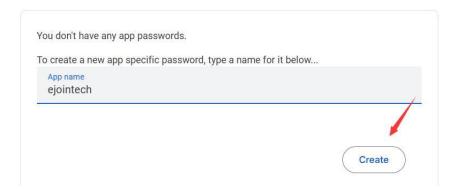


← App passwords

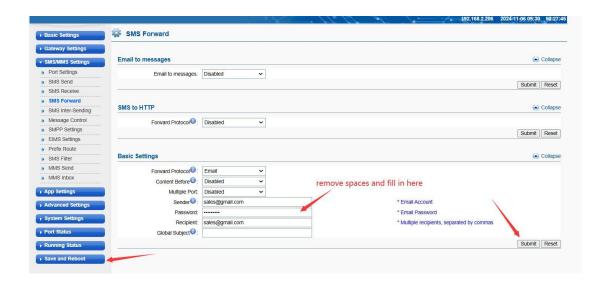
App passwords help you sign into your Google Account on older apps and services that don't support modern security standards.

App passwords are less secure than using up-to-date apps and services that use modern security standards. Before you create an app password, you should check to see if your app needs this in order to sign in.

Learn more



- 4. Copy the password ,remove the spaces and fill in below tab. Submit
- 5. Save and Reboot device to take effect.



c. Example Email Text Sent from Plugin

Sender: +16738126421

Receiver: "port.sim slot number" +8618281110000

• **SMSC**: 8613800758500

• **SCTS**: 23090516464932

SMS Message Content

√ Requires App-Specific Password rather than regular Gmail email password

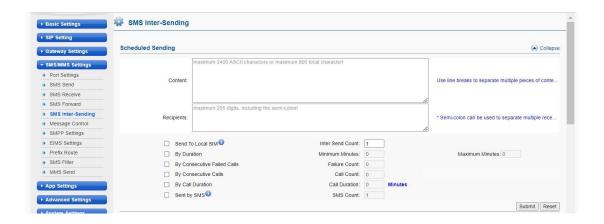
√ Save and reboot to take effect after enabling and filling in the Gmail account details

5.6 SMS Port Inter-Sending

a. Port SMS Auto-Send

Scheduled Sending

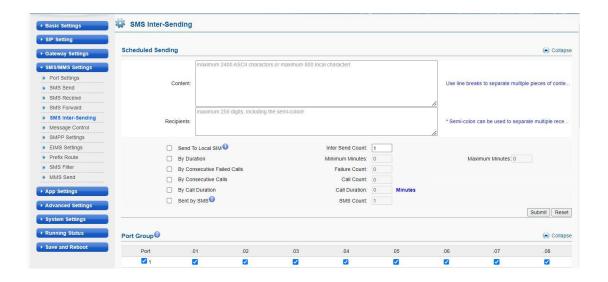
Scheduled Sending allows user to customize the content user need to send and the numbers user want to send it to. When the conditions are triggered, the port will automatically send the SMS to the numbers user have entered.



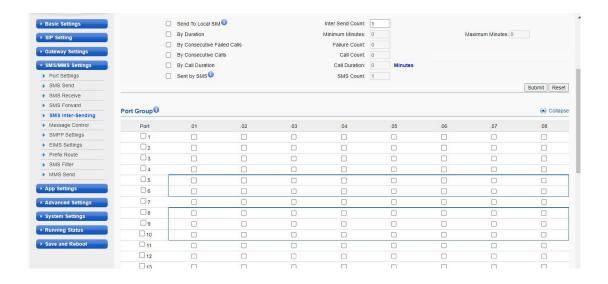
b. Port Inter-Send

In this section, users can configure different ports and slots to send SMS messages to each other under specific conditions.

Before enabling port-to-port sending, user need to go to the "Gateway Setting" section and enter the numbers in the "Number Setting" to ensure the software recognizes the corresponding card numbers for sending.



• Once the sim numbers are filled, create the groups user need for the task, set the required conditions, and then activate this feature.



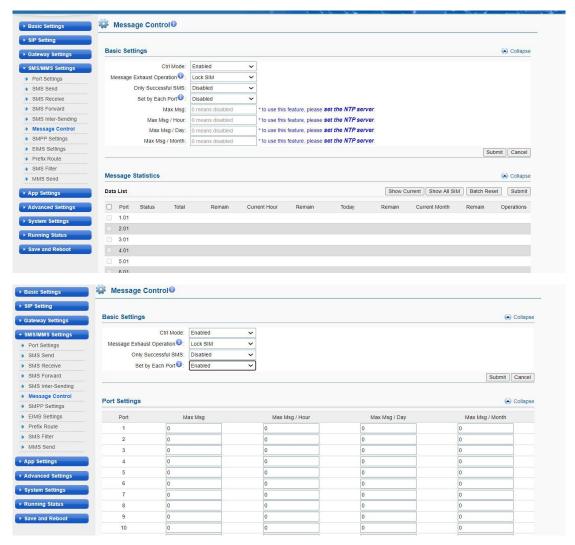
c. Parameter Definition

Item	Description
Content	The SMS content user need to set for port-to-port sending. Maximum 2400 ASCII characters or maximum 800 local characters!
Recipients	The recipient numbers user want to send to. Use a semi-colon to separate multiple receivers.
Send To Local SIM	Enable this option to allow the gateway to send inter-port SMS (SIM numbers must be filled in "Number Setting" first). For example, channel 1 sends SMS to port 3.
By Duration	Send SMS based on the device's online time, within the specified minimum and maximum minutes.
By Consecutive Failed Calls	Send SMS based on consecutive failed calls.
By Consecutive Calls	Send SMS based on consecutive calls.
By Call Duration	Send SMS based on the SIM's call duration.

5.7 Message SMS-Send Control

In this section, users can control the sending volume for each port by adjusting the settings.

When user set Max Msg, Max Msg / Hour, Max Msg / Day, and Max Msg / Month, user need to configure the correct time zone (NTP Server). This setting resets every day at (0:00am).

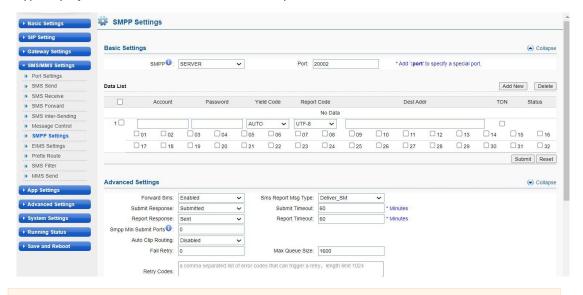


Item	Description
SMS Control Mode	Enable this mode by using the flash option.
Switch SIM	Switch the SIM card when one SIM card reaches the set limit.
Only Count Successful SMS	Enabled: Failed SMS will not be counted.Disabled: Failed SMS will be counted.
Set by Each Port	Enabled: Each port uses different SMS limit values. br>Disabled: All ports use the same SMS limit value.

Max SMS	The maximum number of SMS messages a SIM card can send.
Max SMS/Day	The maximum number of SMS messages a SIM card can send in a day.
Max SMS/Month	The maximum number of SMS messages a SIM card can send in a month.
Show Current SIM	Show only active SIM cards (default).
Show All SIMs	Show all SIM cards, including inactive ones.
Batch Reset	Manually reset the SMS count.

5.8 SMPP Settings

Ejointech devices support SMPP V3.4 and can function as both an SMPP client and server. Typically, Ejointech devices are more commonly used as SMPP servers.



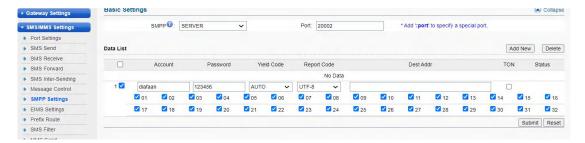
We will demonstrate how to connect an Ejointech device to a Diafaan server to show how the connection is made.

The sending process is: Diafaan SMS server \rightarrow Ejointech SMS gateway \rightarrow Mobile.

a. Steps to Connect Diafaan SMS Server with Ejointech Device:

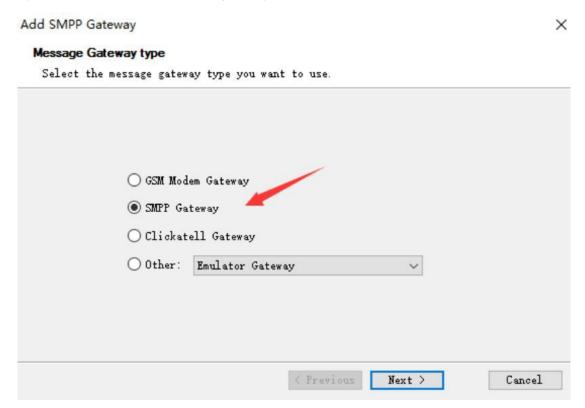
Create SMPP Port, Account, and Password in Ejointech Device

Set the port, account, and select all ports as shown in the screenshot above. Leave other fields blank.



b. Add SMPP Gateway in Diafaan

Open Diafaan and add a new SMPP gateway.



c. Configure the SMPP Gateway in Diafaan

Enter the SMPP server account details created on the Ejointech device in step 1:

Host or IP: Device IP address (if Diafaan and the device are not in the same local network, forward the SMPP port).

Ejointech ACOM6XX User Manual

Server Port: 20002

SMPP Version: v3.4

Username: Diafaan

Password: 123456

Add SMPP Gateway

×

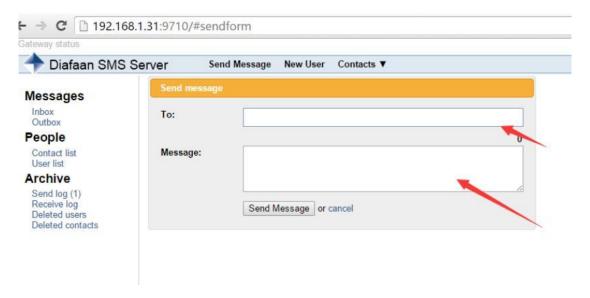
SMPP server

Enter your SMPP server account details.



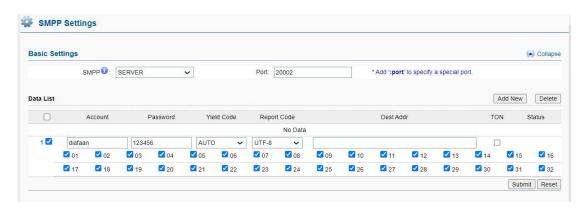
d. Send a Test SMS

After configuring, send a test SMS to verify the connection.



This will guide user through connecting the Diafaan SMS server with an Ejointech device for SMS transmission.

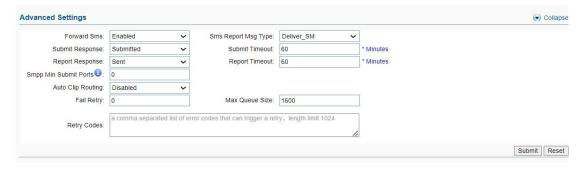
e. Parameter Explanation



Item	Description
SMPP	client: Device works as an SMPP client. server : Device works as an SMPP server. If the device is in NAT, the SMPP port needs to be forwarded first.
Port	Device SMPP port.

Account	SMPP account for SMPP client registration.
Password	SMPP account password.
Yield Code	When the device receives an SMS, it will encode the message using this code.
Report Code	The code for the delivery report.
Dest Addr	Destination address. When the device receives an SMS, it will send the SMS to the SMPP client, and the recipient address will be the destination address.
TON	NPI and TON are set to 0x01 if enabled.
Status	When an SMPP client is registered in the device, it will show as "transceiver".
Select Ports	Selecting all ports means all ports will use one SMPP account.

f. Parameter Explanation



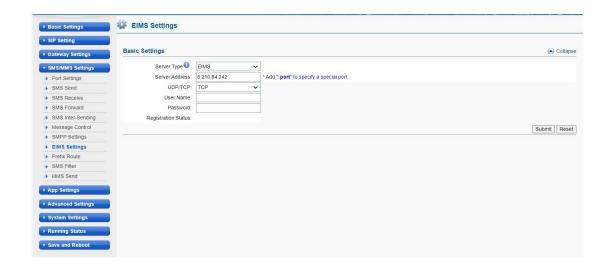
Item	Description
Forward SMS	Enabled: Forward SMS to SMPP client. Disabled: Do not forward SMS to SMPP client.
SMS Report Msg Type	SMS report message type, default is Deliver_SM.
Submit Response	Submitted: When the device receives a request, it sends back "submit ok". Sent: When the device sends SMS to SMSC successfully, it sends back "submit ok".

	Delivered :When the destination mobile receives SMS, it sends back "submit ok".
Submit Timeout	Submit "ok" timeout value. After 60 minutes, it will timeout.
Report Response	Sent: When the device sends SMS to SMSC successfully, it sends back a delivery report. Delivered: When the destination mobile receives SMS, it sends back a delivery report. No Response: Do not send a delivery report.
Report Timeout	Report timeout value, default is 60 minutes.
Auto Clip Routing	Send: When an SMS is sent from one port, the next time, the same recipient number will also use that port. Receive: When SMPP sends an SMS from a device port, the next time this port receives an SMS, it will forward to the destination address using the original address from the first time.
Cache Time	The auto clip routing cache time.

5.9 EIMS (Bulk SMS Software) Connection

EIMS is a bulk SMS system developed by Ejointech for its devices. In this section, users can register their devices to connect to EIMS for bulk sms. The installation of EIMS requires the user to provide a cloud server with LINUX CENTOS7.

For detailed instructions, please refer to the documentation <u>Ejointech EIMS Quickstart User Guide</u>. This page only guides users on how to register to EIMS.



a. Here are the steps for setting remote management for user's devices.

- 1. **Prepare VPS:** Set up a VPS running Linux CentOS 7.
- 2. Install EIMS: Contact the Ejointech technical team to install the EIMS system on your VPS.
- 3. Register Device:
- Login EIME Link Ejointech installed and Click on Position "Basic Setting", navigate to "Device Mgnt" to create new account for gateway.
- b. Go to the "EIMS Setting" section on the SMS/MMS Settings.
- c. Select "EIMS" as the server type.
- d. Enter the EIMS server IP and choose TCP Port.
- e. Enter the account credentials user created on EIMS.
- f. Click "Submit" to register user's device with the EIMS system.
- g. Save and Reboot to take effect.

Video Reference: How to Register Ejointech Device with EIMS (YouTube)

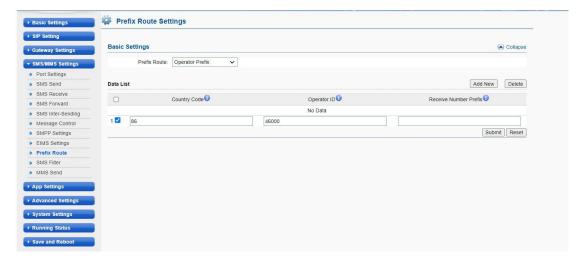
5.10 Prefix Route

The SMS will be routed to the ports that match the specified prefix, which helps save communication expenses. There are two modes for prefix settings: operator prefix and port prefix.

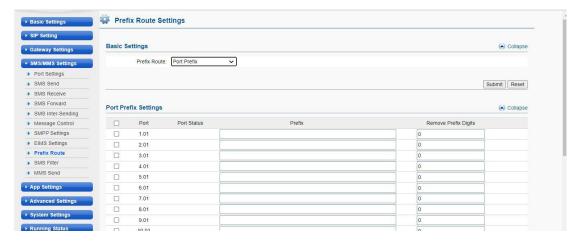
• **Operator Prefix:** This mode is used when one device has SIM cards from different operators. By configuring the operator prefix, the device will use the same operator to send SMS

traffic routed to it.

• The screenshot below shows the operator prefix setup. When SMS traffic is sent to the device, it will use the SIM card from the same operator to send the SMS.



• **Port Prefix:** This mode routes SMS traffic based on the port prefix settings. When SMS traffic is sent to the device, it will route the SMS according to the specified port prefix



5.11 MMS Send

Ejointech 4G devices support MMS sending. Currently, receiving MMS can only be achieved via HTTP API.

When configuring MMS sending, ensure that the SIM cards inserted in the device have data enabled. Additionally, user need to configure some related settings on the device to ensure successful sending.

Configuration Steps:

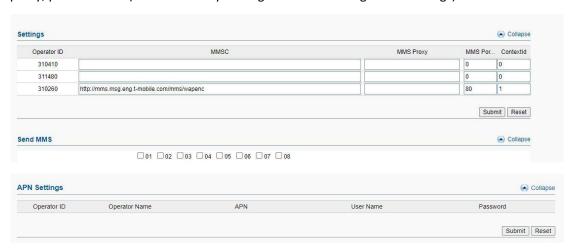
1. **Ensure Data Activation:** Make sure that the SIM cards inserted in the device have an active data plan.

2. Configure APN information

- If user do not know the APN information for user's SIM card, insert the SIM card into an Android phone and navigate to the "Access Point Names" (APN) settings to find the information. Alternatively, user can contact SIM card provider or mobile carrier for this information.
- The image below is an example of the APN information for a specific mobile carrier.



3. **Configure MMS Settings:** On the device, configure the necessary settings such as MMSC, MMS proxy, port and APN (Under Gateway Settings>Internet Settings>APN Settings).



- 4. **Select Ports:** Choose one or more ports for sending MMS to different recipients.
- 5. Monitor Records: Check the records of successful and failed MMS sends displayed below.

For receiving MMS, set up the HTTP API according to the provided guidelines.

Remind to save and reboot the software to take effect.

6 Application Settings

6.1 Translation Settings

a. SIP to LTE Translation List

Using the example in the figure above:

- Callee Number: 25670123456

- Prefix: 2567

- Digits Stripped: 3 digits

- Added Digit: 0

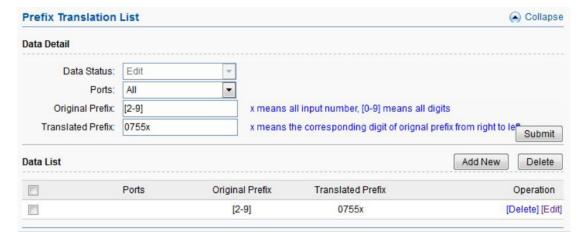
The callee number 25670123456 will be translated to 070123456 after stripping the first 3 digits and adding a 0.

If the ports are set to `*`, the translation will apply to all ports.



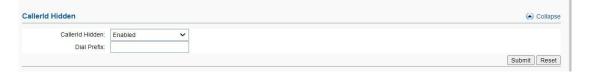
b. LTE->SIP Translation List

Using the example in the figure above, when calling the SIM in the gateway, user will hear an IVR message: "Please dial a number." If user dial 85245166, it will be translated to 075585245166.



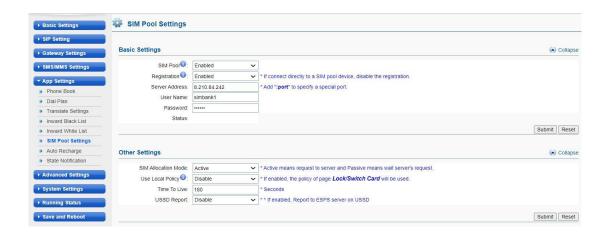
c. Caller ID Hidden

This feature requires support from the carrier. If the carrier in the user's country does not support it, this feature will not be available on the user's device. Some operator's SIM cards can also hide the caller ID by adding a dial prefix.



6.2 SIM Pool Settings

This page is used to register for the Ejointech Simbank system(ESPS). When users purchase a Simbank and a Gateway, they need to provide a VPS Linux Centos 7 for Ejointech to install the Simbank system (Called ESPS). The Gateway can then be registered to the SIMBANK system using this page.



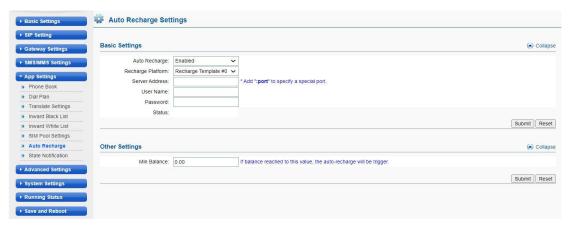
Steps for Connecting Gateway with Simbank Server (ESPS)

- 1. Create a Gateway device account in the ESPS system.
- 2. Enter the ESPS link IP and the created device account.
- 3. Save the settings and restart the device.

6.3 Auto Recharge

Auto recharge is based on the billing system. If user want to enable auto recharge, please configure the billing system first.

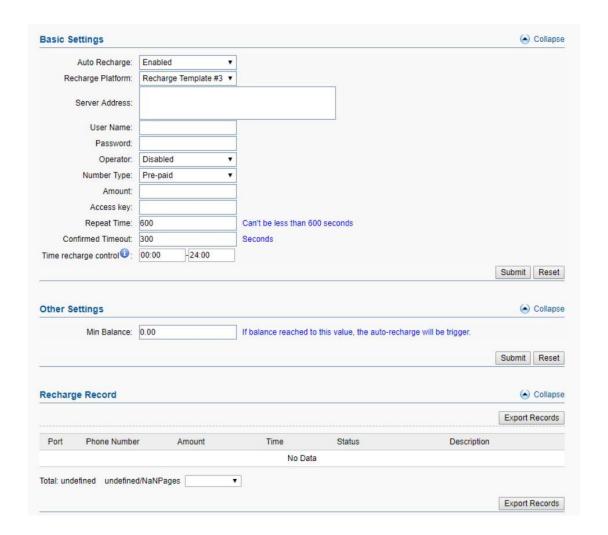
- Recharge Template #0: Connects with the Ejointech auto recharge system.
- Recharge Templates #1-#4: Connect with third-party recharge systems in Bangladesh.



Auto Recharge Parameter

Item	Description
------	-------------

Server Address	The auto recharge server address (the server with the Ejointech EAR system).
Username	The username created in the Ejointech EAR system.
Password	The password created in the Ejointech EAR system.
Status	Displays the registration status.
Min Balance	If the balance is lower than this value, the EAR system will perform an auto recharge.



Auto Recharge Configuration

Item Description	
------------------	--

Server Address	The address of the third-party recharge system.
Username	The username created in the recharge system.
Password	The password created in the recharge system.
Operator	The operator ID.
Number Type	Specifies whether the SIM card is prepaid or postpaid.
Amount	The amount to be refilled.
Access Key	The access key created in the recharge system.
Repeat Time	The time interval during which the SIM card cannot be recharged again after a recharge.
Confirmed Timeout	The time to query the balance.
Time Recharge Control	The time period during which recharges are enabled.
Recharge Record	Displays the recharge records on this page.

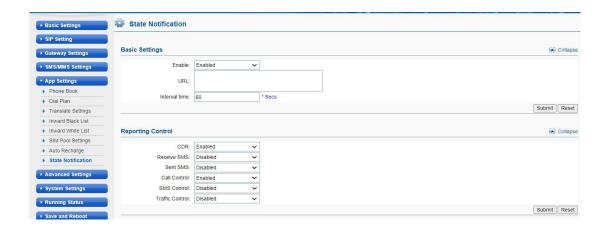
6.4 State Notification

• This feature is used to send various types of reports from the device to a configured URL. The reports include data such as Call Detail Records (CDR), SMS data, call duration, SMS counts, and traffic counts. The information is transmitted using HTTP, and detailed implementation can be found in the API documentation.

The device sends reports to a configured URL. These reports include:

- Call Detail Records (CDR)
- SMS data
- Call duration data
- SMS counts
- Traffic counts

The reporting is based on HTTP. For more details, please refer to the Ejointech Gateway Http API document.



Device Reporting Configuration

Item	Description
URL	The URL to which the HTTP report is sent.
Interval Time	The interval at which reports are sent.
CDR	Call Detail Records.
Receive SMS	The SMS messages received by the device.
Sent SMS	The SMS messages sent from the device via HTTP, SMPP, and web.
Call Control	Call duration data, including SIM cards' call duration and remaining time.
SMS Control	SMS counts, including SIM cards' SMS count and remaining SMS count.
Traffic Control	Data usage of the SIM cards.

This configuration allows the device to send various reports to a specified URL at defined intervals.

7 Advanced Setting

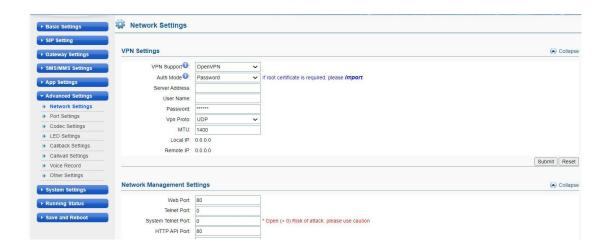
This section allows for detailed customization and management of the device's advanced functions.

7.1 Network & VPN Settings

The Network and VPN settings allow users to configure how the device connects to and interacts with other networks.

a. VPN Settings

• This device operates only as a VPN client (PPTP and OpenVPN). To use the VPN function, please enter the VPN parameters on the VPN settings page.



Network Settings

There are three ways to access the device:

- Web (default port: 80)
- Telnet (default port: 23)
- Serial (the COM port user insert)
- Web configuration is the most commonly used method for this device.



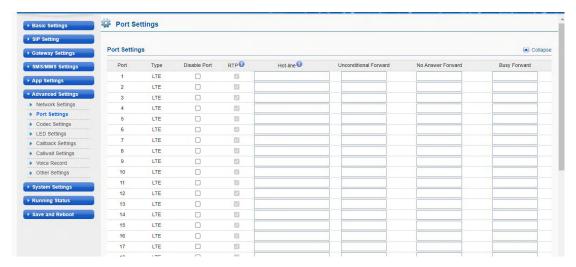
Network Settings

Item	Description
Web Port	Device web management port
Telnet Port	Device telnet port (0 means disabled)
System Telnet Port	Device system shell access via telnet (0 means disabled)
HTTP API Port	HTTP API port (default is the same as web port)



7.2 Port Settings

This section allows users to control how calls are managed and forwarded on the device's various channels.



Port Settings Description

Item	Description
Туре	Indicates the current type of network (LTE).

Disable	If disabled, this channel will be locked by the gateway.
Hot-line	When a client calls this channel, the gateway will automatically forward the call to the specified hot-line (Mobile to VoIP). Leave blank if not needed.
Unconditional Forward	When a client calls this channel, the gateway will forward the call to another mobile unconditionally.
No Answer Forward	When a client calls this channel and there is no answer, the gateway will forward the call to another mobile.
Busy Forward	When a client calls this channel and the channel is busy, the gateway will forward the call to another mobile.

7.3 LED Settings

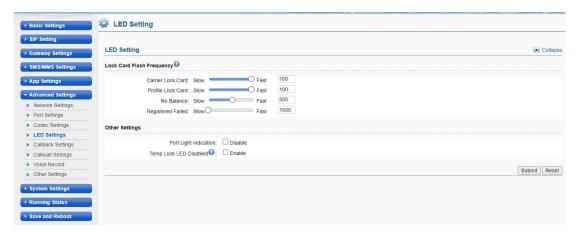
The "LED Setting" page allows users to configure the LED indicators for SIM card status. Each SIM slot has an LED that displays the current status of the SIM card. If there is an issue with the SIM card, such as carrier lock, profile lock, no balance, or registration failure, the LED will flash. The flash frequency can be adjusted for different conditions.

Settings Overview:

- Lock Card Flash Frequency:
- Carrier Lock Card: Adjusts the flash speed when the SIM card is locked by the carrier
- Profile Lock Card: Adjusts the flash speed when the SIM card profile is locked.
- **No Balance:** Adjusts the flash speed when the SIM card has no balance.
- Registered Failed: Adjusts the flash speed when the SIM card fails to register.
- Other Settings:
- Port Light Indication: Option to disable or enable the port light indicator.
- Temp Lock LED Disabled: Option to enable or disable the temporary lock LED.

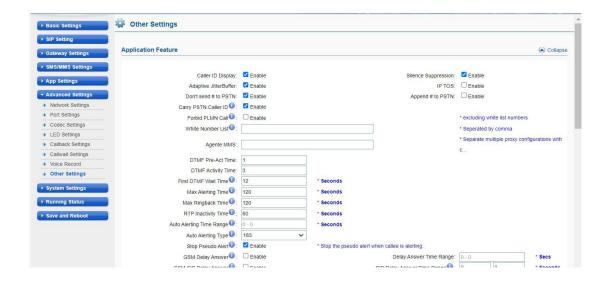
This page is used to set how the LEDs will behave to indicate various statuses and issues with the

SIM cards in the device.



7.4 Other Settings

This section provide comprehensive control over the device's behavior, allowing for customization to meet specific operational requirements.



a. Application Feature Settings Overview

This page provides a variety of settings to configure advanced features and behaviors of the gateway device. Below is an explanation of each section and how to use them.

- 1. Caller ID and Jitter Buffer Settings
- Caller ID Display: Enable or disable caller ID display.
- Adaptive JitterBuffer: Enable or disable adaptive jitter buffer to help manage variations in

packet arrival times.

- Silence Suppression: Enable to avoid transmitting silence packets.
- IP TOS: Enable to set Type of Service for IP packets.
- Don't send # to PSTN: Enable to prevent sending '#' to PSTN.
- Append # to PSTN: Enable to append '#' to PSTN.

2. Call Forwarding and DTMF Settings

- Carry PSTN Caller ID: Enable to carry PSTN caller ID.
- Forbid PLMN Call: Enable to forbid PLMN calls (excluding white list numbers).
- White Number List: Enter numbers separated by commas.
- Agente MMS: Configure multiple proxy configurations separated by commas.
- **DTMF Pre-Act Time:** Set the pre-action time for DTMF.
- DTMF Activity Time: Set the activity time for DTMF.
- **First DTMF Wait Time:** Set the wait time for the first DTMF.
- Max Alerting Time: Set the maximum alerting time.
- Max Ringback Time: Set the maximum ringback time.
- RTP Inactivity Time: Set the RTP inactivity time.
- Auto Alerting Time Range: Set the time range for auto alerting.
- Auto Alerting Type: Set the type of auto alerting (default is 183).
- Stop Pseudo Alert: Enable to stop pseudo alert when the callee is alerting.

3. Delay and Interval Settings

- LTE Delay Answer: Enable to delay answer for LTE.
- **Delay Answer Time Range:** Set the delay answer time range for LTE.
- LTE SIP Delay Answer: Enable to delay answer for LTE SIP.
- SIP Delay Answer Time Range: Set the delay answer time range for SIP.
- SIP Delay Answer Call Dur.: Set the call duration for SIP delay answer.
- VoIP Delay Answer: Enable to delay answer for VoIP.
- Delay Answer Time: Set the delay answer time.
- Call interval Model: Set the call interval model (default is Refuse).
- Call interval Time Range: Set the call interval time range.

- Auto Redial Times: Set the number of auto redial attempts.
- Call Wait Settings Times: Set the call wait settings times.
- DTMF Mode: Set the DTMF mode (default is RFC2833).
- RFC2833 Payload Type: Set the payload type for RFC2833.
- DTMF Quiet Duration: Set the quiet duration for DTMF.
- RTP Ptime: Set the RTP packetization time.
- RTP Start Port: Set the RTP start port.
- RTP End Port: Set the RTP end port.
- Hotline Number Dial Delay: Set the dial delay for hotline numbers.
- Network Compatible Count: Set the network compatible count.
- **Network Compatible Dur.:** Set the network compatible duration.
- Check Balance TimeOut: Set the timeout for checking balance.
- Module Reg Timeout: Set the module registration timeout.
- Auto Reply: Enable to auto-reply to messages.
- Busy Tone Det: Enable busy tone detection.
- TE Char Set: Set the TE character set (default is LTE).
- Wireless Mod Heartbeat Det: Set the heartbeat detection for the wireless module.
- Switch Mode: Set the switch mode (default is qsimsw).
- **SIM Card Init Judge:** Enable SIM card initialization judge.
- Volte Call Only: Enable to allow only VolTE calls.
- SMS Failed Retries: Set the number of retries for failed SMS.
- **Signal Period:** Set the signal period.
- **SIMVOL:** Set the SIM volume (default is Auto).
- Echo Canceller: Set the echo canceller settings.
- IVR: Enable IVR functionality.
- IVR Play Time: Set the playtime for IVR.
- Dial Is Alert: Enable dial as alert.
- IVR Delay Answer Time Range: Set the IVR delay answer time range.
- Auto Fail Sim Switch: Enable automatic SIM switch on failure.
- Optimize Msg: Enable message optimization.
- Receive Method: Set the receive method (default is Default).
- Receive Period: Set the receive period.
- SRA2: Enable SRA2.

HTTP client wait time: Set the HTTP client wait time.

4. Auto Drop Settings

- Enable Drop After Start: Enable and set the drop time after start.
- Enable Drop After Alert: Enable and set the drop time after alert.
- Enable Drop After Talk: Enable and set the drop time after talk.

b. How to Use:

Adjust General Settings:

Enable or disable features like caller ID display, jitter buffer, silence suppression, etc.

Configure Call Handling:

Set up DTMF settings, alerting times, and call forwarding options.

3. Set Delay and Interval Parameters:

Configure delay answers, auto redial times, and call intervals.

4. Manage RTP and Network Settings:

Set RTP ports, network compatibility, and module registration timeouts.

5. Activate Special Features:

Enable features like auto reply, busy tone detection, IVR, and auto SIM switch on failure.

6. Define Auto Drop Conditions:

Set conditions for automatically dropping calls after start, alert, or talk.

Save and Apply:

Items	Description
Caller ID Display	If it is disabled, caller ID will not show on "call status" page.

Silence Suppression	If it is enabled, half of the bandwidth will be saved.
Adaptive Jitter Buffer	A jitter buffer is a shared data area where voice packets can be collected, stored, and sent to the voice processor in evenly spaced intervals.
IP TOS	TOS of IP packets.
Don't send # to PSTN	If it is enabled, the last digit # of callee number will be removed.
Append # to PSTN	If it is enabled, # will be appended in the callee number
Carry PSTN Caller ID	SIP extension will show the mobile number when user call the SIM in gateway.
Forbid PLMN call	Calls will be rejected when calling the SIM in gateway.
White Number List	The numbers in white list will not be rejected if forbid LTE call is enabled.
DTMF Pre-Act time	The prepare time until DTMF tone is detected.
DTMF Activity time	The minimum of DTMF activity time.
First DTMF wait time	Send a call to the sim card in device, after the call connected, if don't dial number, the call will be hangup after 12 seconds.
Max Alerting Time	The maximum time of alerting.
Max Ringback Time	The maximum time of ring back.
RTP Inactivity Time	The maximum duration of silence from gateway. System will hang up the call automatically if the silence duration reaches this value

Auto Alerting Time	Fake ring back time, gateway will do fake ring back when reaches this value.
Stop Pseudo Time	Stopping fake ring back when the callee is alerting.
LTE Auto Answer	Applying to calls from LTE network. The gateway will answer the incoming calls automatically when reaches the value.
VoIP Call Auto Answer	Applying to calls from IP network. The gateway will answer the calls automatically when reaches the value.
Call Interval Mode	Refuse: in interval time, the call will be reject by 503 code Keep: in interval time, the call will hold, then send out by this sim.
Call Interval Time Range	The call interval time value, can set time range
Auto Redial Time	LTE redial time
Call Wait Settings Times	Example: if set to 3 seconds, when sim card A in device is calling mobile B, then mobile C call A, A will connected C, and hold the call with B, after 3 seconds, A disconnect C, talk with B again. This settings is used for sim blocking.
DTMF Mode	RFC2833, SIP INFO and IN-BAND. The default one is RFC2833.
RFC2833 Payload Type	RTP Payload for DTMF, the default is 101.
RTP Ptime	The interval of RTP packages.
RTP Start Port	The initial port when RTP voice stream transmit the IP network.
RTP End Port	The maximum rtp port

Hotline Number Dial Delay	Incoming call delay to send to sip server
Network Compatible Count	Sim card registered two times, after failed, shows registered failed
Network Compatible Dur	Sim card registered time period, every time 180s
Check Balance Timeout	The time of query balance
Auto reply	One caller send call from one port to a mobile, next time, this mobile call back, the call will forward to the caller and ignore hotline number settings.
Busy Tone Det	Detect the busy tone, then hangup the call, need to confirm the busy tone frequency first.
TE Char Set	Set character for USSD response.
Wireless mod Heartbeat Det	The module heartbeat detect time
SIM Card Init Judge	If enabled, the sim card need to read phone before registered
SMS failed Retries	Sms send failed, will retry 5 times
Echo Canceller	Echo canceller parameter setting

Items	Description
Drop after start	The call drop automatically after the call start value
Drop after alert	The call drop automatically after the call ringing value
Drop after talk	The call drop automatically after the call connected value

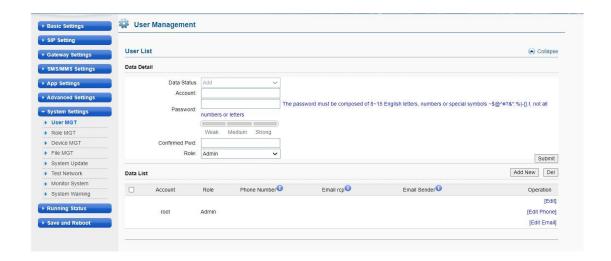
8 System Settings

This section is used for managing various system-related configurations and functions.

8.1 User Mgmt

User MGT (Management) is used to manage user accounts and control IP access to the system.

The default username/password of gateway are root/root. User are allowed to change the password and add new users on this page. Every account has a role, different roles have different right of permissions. Role "admin" has the highest right of permission, role can be added in page "role mgmt".



The User Management page allows administrators to:

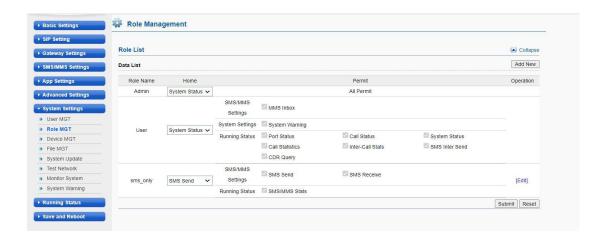
- 1. **Manage User Accounts:** Add, edit, and delete user accounts, including updating phone numbers and email addresses.
- 2. **Control Access:** Define which IP addresses are allowed or not allowed to access the system, enhancing security by restricting access to trusted IP addresses only.

This ensures that only authorized users can access and manage the system, and access can be controlled based on IP addresses for added security.

8.2 Role Mgmt

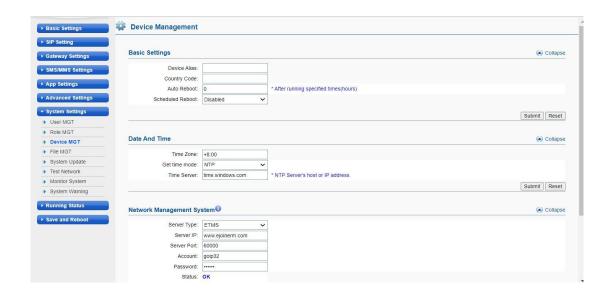
The "Role Management" page is used to manage user roles and their permissions within the system. This allows administrators to control access to various features and functionalities based on the role assigned to a user.

- **Create and Manage Roles:** Define different roles within the system and assign appropriate permissions to each role.
- **Control Access:** Ensure that users only have access to the features and settings necessary for their role, enhancing security and operational efficiency.
- Modify Permissions: Easily update and manage permissions for existing roles as needed.



8.3 Device Mgmt (ETMS Connection)

The "Device Management" section is essential for ensuring that the device is properly configured, operates within the correct time zone, and has the necessary settings for **cloud management**.

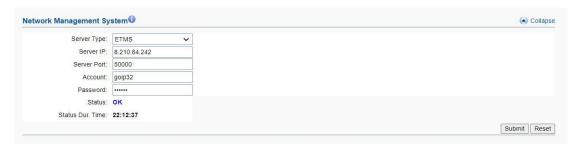


The Device Management page allows administrators to:

- Configure Basic Device Settings: Set device alias, country code, and configure automatic or scheduled reboots.
- **Set Date and Time:** Ensure the device has the correct time settings by configuring the time zone and synchronizing with an NTP server.
- **Manage Network Settings:** Connect the device to a network management system for remote management and monitoring.

a. Device Cloud Management (ETMS Connection)

Ejointech devices support cloud-based remote management. If user need to manage devices remotely via the cloud, user will need to provide a VPS running Linux CentOS 7 for the Ejointech technical team to install the ETMS system. Once installed, users can register their device with the ETMS using the options provided in the Network Management System section.



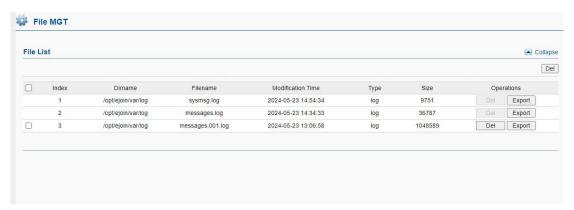
b. Enabling Cloud-Based Remote Management (ETMS):

- 1. **Prepare VPS:** Set up a VPS running Linux CentOS 7 or Centos 8.
- Install ETMS: Contact the Ejointech technical team to install the ETMS system on your VPS.
- 3. Register Device:
 - a. Login ETMS Link Ejointech installed and Click on Position "Basic Setting", navigate to "Device user" to create new account for gateway.
 - b. Go to the "Network Management System" section on the Device Management page.
 - c. Select "ETMS" as the server type.
 - d. Enter the ETMS server IP and Server Port 50000.
 - e. Enter the account credentials you created on ETMS.
 - f. Click "Submit" to register your device with the ETMS system.

Video Reference: How to Register Ejointech Device with ETMS

8.4 File Management

The "File Management" (File MGT) section is used to manage log files generated by the device. This page allows administrators to view, export, and delete log files as needed.

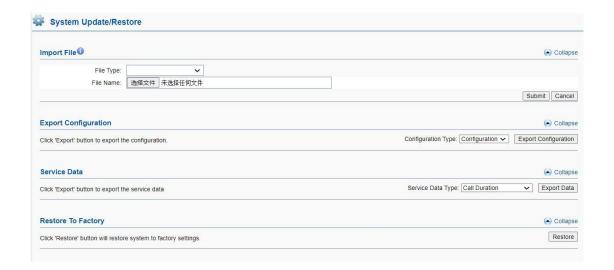


The File Management page is essential for:

- ① Log Management: Keeping track of log files that record system activities and events.
- ② Maintenance: Deleting old or unnecessary log files to free up storage space.
- 3 Analysis: Exporting log files for detailed analysis, troubleshooting, and record-keeping.

8.5 System Update

The "System Update/Restore" section is used to manage firmware updates, export and import configurations, export service data, and restore the device to factory settings. Here's a detailed explanation of each section and their purposes:



a. Import File

Use this section to import new firmware updates or configuration files to the device. Select the

appropriate file type, choose the file, and click "Submit" to apply the update or configuration.

b. Export Configuration

This section allows user to export the current configuration of the device for backup or transfer to another device. Choose the configuration type and click "Export Configuration" to download the file.

c. Export Service Data

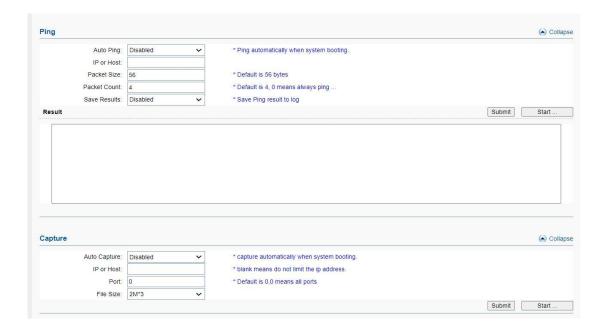
Export specific service data, such as call duration records, for analysis or record-keeping. Select the data type and click "Export Data" to download the information.

d. Restore to Factory:

If user need to reset the device to its original factory settings, use this section. Clicking "Restore" will erase all custom settings and data, restoring the device to its default state.

8.6 Test Network

The "Ping and Capture" section is used for network diagnostics and traffic capture. This subsection allows user to configure and execute ping tests to diagnose network connectivity.



a. Ping

Configure Auto Ping:

Enable auto ping if user want the system to perform ping tests automatically upon booting.

Manual Ping Test:

Enter the IP address or hostname, packet size, and packet count.

Click "Start" to initiate the ping test.

View the results in the "Result" section to diagnose connectivity issues.

b. Capture

1. Configure Auto Capture:

Enable auto capture if user want the system to start capturing network traffic automatically upon booting.

2. Manual Traffic Capture:

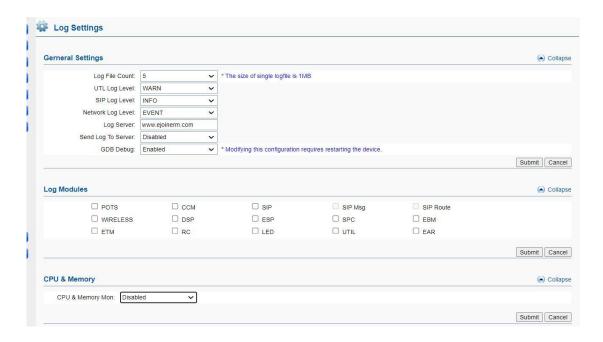
Specify the IP address and port (if needed) and select the file size.

Click "Start" to begin capturing network traffic.

Use the captured data for detailed network analysis.

8.7 Monitor System

The "Log Settings" page is used to configure how the system logs various events and activities. This allows administrators to monitor, debug, and analyze the performance and behavior of the device.



a. General Settings

- Log File Count: Specifies the number of log files to keep. Each log file is 1MB in size.
- UTL Log Level: Sets the log level for utility logs (e.g., WARN, INFO, ERROR).
- SIP Log Level: Sets the log level for SIP-related logs (e.g., INFO, DEBUG).
- Network Log Level: Sets the log level for network events (e.g., EVENT, ERROR).
- Log Server: Specifies the server where logs will be sent, if configured.
- Send Log To Server: Enables or disables sending logs to the specified server.
- **GDB Debug:** Enables or disables GDB debugging. Note that modifying this setting requires restarting the device.

b. Log Modules

Allows users to select which modules to log. Modules include:

- POTS: Plain Old Telephone Service
- WIRELESS: Wireless communication logs
- ETM: Event and Transaction Management
- CCM: Call Control Management
- DSP: Digital Signal Processing
- RC: Remote Control
- SIP: Session Initiation Protocol

Ejointech ACOM6XX User Manual

SIP Msg: SIP Messages

SIP Route: SIP Routing

ESP: Event Streaming Processing

SPC: Service Provider Control

LED: LED status logs

UTIL: Utility logs

EBM: External Business Management

EAR: Event and Alarm Reporting

c. CPU & Memory

• CPU & Memory Mon.: Enables or disables monitoring of CPU and memory usage.

d. How to Use

1. Configure General Settings:

Set the desired log file count.

Choose appropriate log levels for UTL, SIP, and Network logs.

Specify the log server if logs need to be sent to an external server.

Enable or disable GDB debugging as needed.

2. Select Log Modules:

Check the boxes for the modules user want to log. This will ensure that logs for these specific components are recorded.

Enable CPU & Memory Monitoring:

If needed, enable monitoring of CPU and memory usage to keep track of the system's resource consumption.

4. Submit Changes:

After configuring the settings, click the "Submit" button to save changes.

Use the "Cancel" button to discard any changes.

The Log Settings page is essential for:

- 1. **Monitoring System Performance:** By configuring log levels and modules, administrators can keep track of system performance and diagnose issues.
- 2. **Debugging:** Detailed logs help in troubleshooting and resolving technical problems.
- 3. **Analysis:** Logs provide valuable insights for analyzing the device's behavior and performance over time.

8.8 System Warning

The "System Warning" page is used to display the current status and potential risks associated with the device. It provides alerts and warnings about various aspects of the system that may require attention.



a. Warnings Displayed:

1. License

Status: Indicates whether the device license is normal or if there is an issue.

Example: "Device License Normal" means the device license is functioning correctly.

Account Risk

Status: Shows if there are any risks associated with the device accounts.

Example: "Device account no risk" means there are no detected issues with the device accounts.

ETM Account Risk

Status: Indicates the security status of the ETM account.

Example: "The etm account is not secure, please contact the server administrator to change the password." This means the ETM account is at risk and needs attention.

4. Receive All Call

Status: Displays the status of the "Receive All Call" setting.

Example: "Receive all call close" means the setting to receive all calls is turned off.

9 Running Status

The "Running Status" section serves as a monitoring tool for various operational aspects of the device. It provides detailed statistics and status information on ports, calls, SMS, and more.

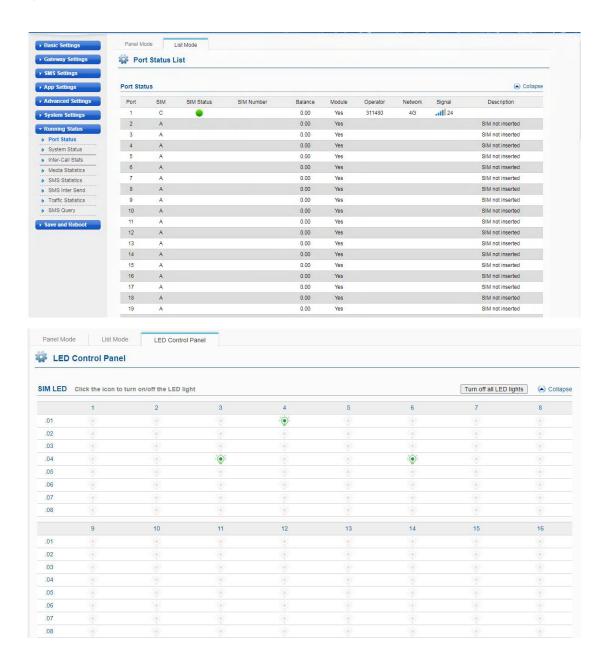
9.1 Where to Check Sim Cards Status

Navigate to the **Port Status** page under the **Running Status** section.

In this section, user can monitor the registration status and signal strength of different SIM cards in real-time.

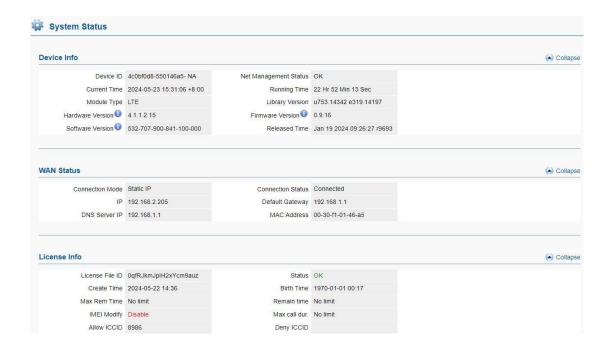
- Panel Mode: Check SIM Cards Register Status
- List Mode: Check SIM Cards signal strength, SIM card number, etc.
- LED Control Panel: Locate specific SIM cards on the device by controlling LEDs.





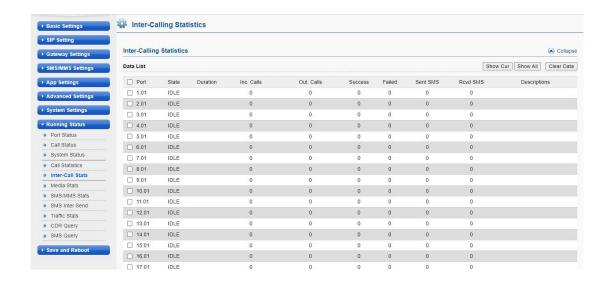
9.2 System Status

This page provides information on the system status, device information, WAN (Wide Area Network) status, and license details.



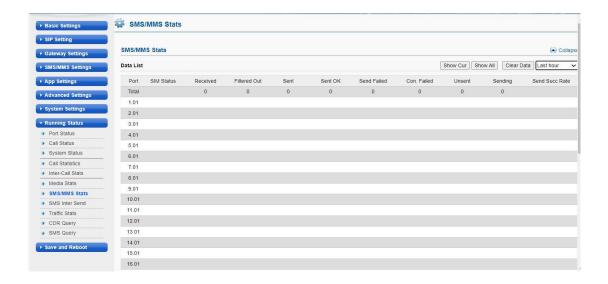
9.3 Inter-Calling Statistics

"Call statistics for the Port Inter-Calling setting. user can review the statistics within this section after enabling Port Inter-Calling."



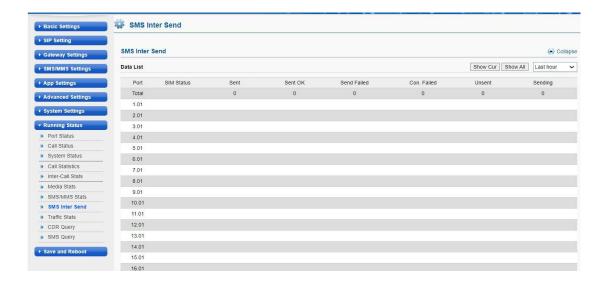
9.4 SMS Statistics

This page displays SMS/MMS statistics for each port over different time.



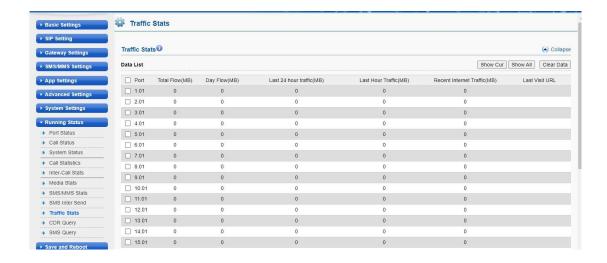
9.5 SMS Inter Send

Call statistics for the Port Inter-Send setting. user can review the statistics within this section after enabling Port Inter-Send.



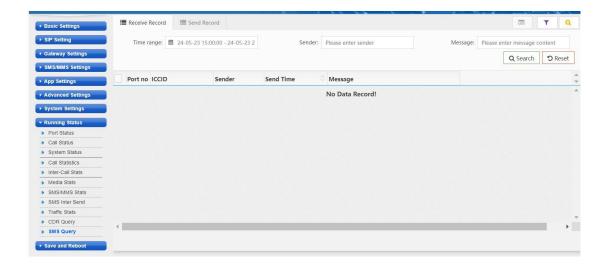
9.6 Traffic Statistics

This page allows user to view how much data SIM card has consumed. It is only applicable when users have enabled "Internet Setting" and are simulating internet usage.



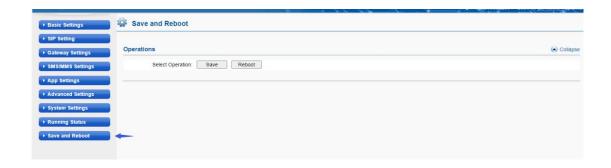
9.7 SMS Record

"SMS Query": In this section, user can view partial data of received and sent SMS messages. The device retains a maximum of 50 received SMS messages for each port and does not store sent SMS records. To preserve and access all SMS records, it's necessary to establish a connection with the EIMS server beforehand.



10 Save and Reboot

The modifications will take effect after user save and reboot the gateway. After users save their modifications and initiate a reboot, the settings will persist, although data will be lost. Ongoing calls will be interrupted during this process.



11 Frequently Asked Questions (FAQs)

11.1 What is the Login Information?

Default IP: 192.168.1.67

Username: root
Password: root

11.2 How Can I Reset the Device to Factory Settings?

Press and hold the "RST" button near the power button for 10 seconds to reset the device to factory settings.

11.3 What Should I Do if the SIM Card Registration Fails?

- Ensure the antenna is properly installed.
- Ensure the SIM card is inserted in the correct direction.
- If the previous two steps are not problematic, please swap the SIM cards between the ports
 - a. Navigate to the "Port Status" section.
 - b. Browse the list of available ports to see if there are any other ports available.
 - c. If other ports are available, select one.
 - d. Remove the failed SIM card from the current port and insert it into the selected new port.
 - e. Ensure the antenna is properly installed.
 - f. Wait for a moment as the device automatically detects the new SIM card.
 - g. Check if the SIM card works in the selected new port.

- h. If the SIM card still fails to register, consult the SIM card provider or check if the SIM card is functional.
- If the SIM card registers successfully, please consult the Ejointech Support Team for further debugging.

11.4 How Do I Update the Firmware?

- a. Navigate to "System Settings" > "System Update".
- b. Upload the firmware file and submit.
- c. The device will reboot automatically after saving the changes.
- d. Flash the page in 3 minutes and get the software back online.

11.5 Where Do I Download Ejoin Gateway Http API Document

Download **Ejoin Gateway HTTP API Document**

11.6 Why are My Settings Changes not Taking Effect?

- a. Save the changes made to settings.
- b. Reboot the device for the new configuration to take effect.

11.7 How to Make My Device Remotely Manage in Different Locations?

Here are the steps for setting remote management for your devices.

- Prepare VPS: Set up a VPS running Linux CentOS 7.
- Install ETMS: Contact the Ejoin technical team to install the ETMS system on your VPS.
- Register Device:
 - a. Login ETMS Link Ejoin installed and Click on Position "Basic Setting", navigate to "Device user" to create new account for gateway.
 - b. Go to the "Network Management System" section on the Device Management page.
 - c. Select "ETMS" as the server type.
 - d. Enter the ETMS server IP and Server Port 50000.
 - e. Enter the account credentials you created on ETMS.

f. Click "Submit" to register your device with the ETMS system.

11.8 How to Install EIMS Bulk SMS Software

Here are the steps for setting remote management for your devices.

- **Prepare VPS:** Set up a VPS running Linux CentOS 7.
- Install ETMS: Contact the Ejoin technical team to install the EIMS system on your VPS.
- Register Device:
 - a. Login EIME Link Ejoin installed and Click on Position "Basic Setting", navigate to "Device Mgnt" to create new account for gateway.
 - b. Go to the "EIMS Setting" section on the SMS/MMS Settings.
 - c. Select "EIMS" as the server type.
 - d. Enter the EIMS server IP and choose TCP Port.
 - e. Enter the account credentials you created on EIMS.
 - f. Click "Submit" to register your device with the EIMS system.
 - g. Save and Reboot to take effect.

FCC Statement

This device complies with part 15 of the FCC 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.

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

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pur suant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harm ful 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 install ation. If this equipment does cause harmful interference to radio or television reception, which can be deter mined 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 important announcement .

Radiation Exposure Statement

To comply with FCC RF exposure compliance requirements, this grant is applicable to only mobile configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 120 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.