GSM Gate, Barrier, Shutter, Garage Door and Door opener
Open gate or garage door with a FREE call from your mobile phone!
Remote switching machines with a FREE call from your mobile phone!

GSM Gate Opener
GSM Remote Switch
RTU5015 Plus
User Manual
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**About RTU5015 Plus:**

The GSM Gate Opener RTU5015Plus is a very simple device which can be used for authorized door access, controlling gates, switching of remote equipments, car parking systems. Actually the GSM Gate Opener RTU5015Plus can also be used in places where require turning ON/OFF your system, machines, equipments remotely with a FREE call from your mobile phone and protect your assets.

Just dial from Authorized User number then the Barrier and doors are opened, or the machine are turn on or off by the GSM Gate Opener. There are no call costs, the GSM Gate Opener rejects the call from authorized number then carries out the turn ON/OFF action.

Moreover, the RTU5015Plus has 2 digital inputs for alarm inputs, when any one of the inputs triggered, will send SMS Alert to owners immediately, in the meanwhile, the RTU5015Plus start the siren+ (DC12V) out for 5 seconds. This is very useful if you need protect your assets with low cost solution.

**The Device LEDs and terminal descriptions are the following:**

<table>
<thead>
<tr>
<th>Device</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relay</td>
<td>Relay Status, calling in, the relay will work, this LED Indicator will on. When the wired sensor triggered, the LED indicator will on, Otherwise, is off.</td>
</tr>
<tr>
<td>GSM</td>
<td>When insert the SIMcard into the Slot, will flash per0.5S with <strong>Orange color</strong>. When registered GSM Network successful, will <strong>keep LED lit with Red color</strong>. When calling in, the relay works, will flash per 0.5S with <strong>Green color.</strong></td>
</tr>
<tr>
<td>Power</td>
<td>External 12VDC Power LED indicator</td>
</tr>
<tr>
<td>Battery</td>
<td>When battery is fully charged, Led is OFF. No battery or charging time, Led is ON</td>
</tr>
<tr>
<td>O1 +</td>
<td>Output 1+, the relay rating is 3A/240VAC; connect to the switch of the lock or devices.</td>
</tr>
<tr>
<td>O1 -</td>
<td>Output 1-, the relay rating is 3A/240VAC; connect to the switch of the lock or devices.</td>
</tr>
<tr>
<td>Siren+</td>
<td>Siren connector, connect to the Siren Positive.</td>
</tr>
<tr>
<td>NA</td>
<td>If need the siren start when the sensor triggered, must connect this connector with 12VDC connector. If not use the siren, then needn’t connect it.</td>
</tr>
<tr>
<td>12VDC</td>
<td>Connect to the NA Point, when sensor triggered, will start the siren for 5Seconds. Also, it can be connected to wired sensor to supply 12VDC power for sensors if need.</td>
</tr>
<tr>
<td>$\frac{1}{3}$</td>
<td>Common, connect to Siren Negative, another wire of the two wired sensors.</td>
</tr>
<tr>
<td>IN1+</td>
<td>Digital input 1+, connect to one wire of the first wired sensor.</td>
</tr>
<tr>
<td>IN2+</td>
<td>Digital input 2+, connect to one wire of the second wired sensor.</td>
</tr>
<tr>
<td>+12VDC</td>
<td>The external power input. 12VDC, 1A.</td>
</tr>
</tbody>
</table>

**Quick Start to Use:**

1. Insert the SIM card from the slide slot and connect the GSM antenna
2. Power on the device with DC12V and the “Power” Led will be lit
3. “GSM” Led will start to flash around 20 seconds, then will keep lit
4. Use your mobile phone to call the SIM card number inside the device, if the device can reject your calling, that means the device is connected to the GSM net successfully.
The SMS commands used in the GSM Gate Opener are the following:

1. **About password**
   1.1 **Setup New Password** (Only use four digital number as the password)
      
      pwd#PWDnewpassword#PWDnewpassword#

      If successful, the unit will return: PWD SETUP OK.

      For example, the original password is 1234, you want change it to 6666, then you can send the command below: **1234#PWD6666#PWD6666#**

   1.2 **Reset the Password**
      
      If you want to reset to factory default, then please send “RESET ” to it within 2 minutes after switch on the RTU5015. (After 2 minutes working, then the RTU5015 can not respond this command)

2. **About Authorized numbers**
   2.1 **Setup Authorized number**
      
      pwd#TELAuthorized Number#Serial Number#

      E.g.: if you want to setup 63648495 as the first user number, and the password is 1234, then you can send **1234#TEL63648495#001#** to the RTU5015 unit.

   2.2 **Inquiry the Serial Number’s Authorized number**
      
      pwd#TELSerial Number?#

      E.g.: If you want to know the authorized number at position 2, and the password is 1234, then you can send **1234#TEL002?#** to check it.

   2.3 **Search a Phone number in the RTU5015 memory**
      
      pwd#FINDphone number#

      E.g.: If you forget which position of the number: **63648495**, then you can send **1234#FIND63648495#** to search it in the memory.

   2.4 **Remove the Authorized Number**
      
      pwd#0000#Serial Number#

      E.g.: if you want to remove the authorized number at position 12, and the password is 1234, then you can send **1234#TEL#0000#012#**, then will overwrite the position with number “0000” to remove it.

3. **About system parameters**
   3.1 **Working mode selection (security mode or free control mode)**
      
      pwd#AU# This command allows only the authorized numbers can access

      pwd#AA# This command allows any numbers to call the SIM number to access

      pwd#AC?# Check the setting of working mode

   3.2 **Setup the relay close time**
      
      pwd#GOTTime#

      The GOT parameters should be in 0~60000 (0~30000 seconds)

      This command is used to setup the Relay working time when triggered. The default time is 5.0 seconds. You can change it with the GOT command. The relay closed time is half as the number you set, e.g.: if you set **pwd#GOT19#**, means the relay closed 19/2=9.5Seconds.

      To check the value, you can use the command **pwd#GOT?#**, the unit will reply the current value.

      If you want to let the relay works at switch mode, then you can set the time as 00.
4. About input alarm port

4.1 Disable the digital inputs
pwd#DA#

Tips: if you want to use the digital inputs, please enable it firstly.

4.2 Enable the digital inputs
pwd#EA#

Tips: if you enable the digital inputs function, the sensors will enter Armed status after 10 minutes of the latest dial-in. In the first 10 minutes, when the sensor triggered, will not alarm, after 10 minutes, the unit in armed mode, when any sensor triggered, will start the siren (if you connected) or switch on the light (if you connect it) around 5 seconds and send SMS to the Position 01 and 02 authorized numbers immediately.

Siren+ output is DC12V output, it can’t be controlled by SMS command. It only will be triggered around 5 seconds when alarm input triggered.

4.3 Inquiry Alarm Setting
pwd#AL?

Reply: Alarm Inputs Disabled or Alarm Inputs Enabled.


4.4 Alarm input working mode selection
pwd#M2#

For M2 working mode, alarm would be triggered according to your KEYNO or KEYNC selection

pwd#M3#

For M3 working mode, Alarm input status is changed, then will trigger the alarm

4.5 Modify the digital input type (Working for M2 mode)
pwd#KEYNC#

Modify the digital input type as NC; if the sensor you used with this unit is NC, then you should set the unit as NC type.

pwd#KEYNO#

Modify the digital input type as NO; if the sensor you used with this unit is NO, then you should set the unit as NO type.

4.6 Alarm SMS Text presetting
Predefined your customized SMS Text message for alarm In1 and In2 (if password is 1234)

In1 Open Alarm Content: 1234#TEXT1Owsd1Openalarm#
In1 Close Alarm Content: 1234#TEXT1Cwsd1Closealarm#
In2 Open Alarm Content: 1234#TEXT2Owsd2Openalarm#
In2 Close Alarm Content: 1234#TEXT2Cwsd2Closealarm#

wsd1Openalarm, wsd1Closealarm, wsd2Openalarm, wsd2Closealarm are the Customized Message text to be sent when alarm happen

4.7 Check the Alarm SMS Text
pwd#ALARMTEXT?#

5. About Customized SMS Command
Tips: Normally you can use the phone calling to control the device, but sometimes maybe you need to use the SMS to control the output with a temporarily timer control or temporarily ON or OFF, and you don’t need to change the device setting.

Customize Relay Output ON Command: 1234#ON-TEXT=XXXXXX
Customize Relay Output OFF Command: 1234#OFF-TEXT=XXXXX
Customize Relay Output Timer Control: 1234#TOG-TEXT=XXXXX
E.g.: If you can setup the Timer control command: **1234#TOG=asm#**, then the authorized numbers can only send SMS: **asm**, device will be triggered with the GOT timer, and if want to trigger the output with a temporarily Timer, then just send “ **asm=20** ”, the output will be triggered for 10 seconds

For customized SMS command, no need to put the password in front of the Text.

If you forget the SMS text, then use the command to check it:

**pwd#QUE-TEST?**

Reply SMS from device: **ON-TEXT=won,OFF-TEXT=woff,TOG-TEXT=asm**

### 6. About the Backup battery for power off alarm

RTU5015Plus has a built-in Rechargeable lithium battery, that is only used for Main power supply failure alarm, Every time when power off, then RTU5015 plus will send out the alarm SMS and then it will power off the GSM module to save the battery power, so when during main power supply off, you can not control it or send the SMS. During power failure, RTU5015Plus still monitor the alarm input port, if the alarm input is triggered, it will still send the alarm SMS.

**Important Tips:**

*When power off time over five minutes or first time to use. Only when normal power supply time is more than 2 minutes, then battery start to work.*

**How to power off the RTU5015Plus completely when the battery connected:**

Firstly Power off the DC12V for more than 6 minutes, Then quickly repeat Power ON and OFF the DC12V for three times till all LED lights go out.

### 7. About the device status change report

For RTU5015 Standard version, that Report is limited to the relay status change, but for RTU5015Plus, any device status change or SMS command will be reported.

**pwd#N#**. When device change, no report

**pwd#R#**. When device change, will send the SMS report to TEL01 and TEL02

To check the settings, you can use the command: **pwd#M?** it will return:

Relay action return SMS **ON** or Relay action return SMS **OFF**.

### 8. Read the device status and the parameters

For RTU5015Plus you can use one SMS command to check the device information

**pwd#STATUS?#**

Device will reply as:

**DEVICE:AU,EA,R,KEYNC,GOT=05.0S,CSQ=12,ACP00,M2,OUT=00**
**RTU5015PLUS Terminal Map**

- **Relay-1**: 3A, 30VAC/DC (normally open contacts)
  - This output is controlled by phoning the RTU5015 caller-ID allows the RTU5015 to identify the caller and will then hang up the calling. Because the call is never initiated, no phone charge will be incurred.

- **Relay-2**: 3A, 30VAC/DC (normally open contacts)
  - Siren+ output will be triggered for 6 seconds when input alarm happen
  - Siren output can't be controlled by SMS

- **Input-1**: (Negative trigger)
  - Trigging this input will send a customized SMS message to phone numbers 1 and 2 only.
  - Default messages:
    - Input closed = Door1 Open Alarm!
    - Input reset = Door1 Closed Alarm!
  - Note: Inputs must be activated in programming

- **Input-2**: (Negative trigger)
  - Trigging this input will send a customized SMS message to phone numbers 1 and 2 only.
  - Default messages:
    - Input closed = Door2 Open Alarm!
    - Input reset = Door2 Closed Alarm!
  - Note: Inputs must be activated in programming

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**RTU5015Plus Connection**

1. Siren+ is DC12V output, when "+12V" is shorted to to "NA"
2. Siren+ is only used for DC12V siren or light
3. Siren output can't be controlled with SMS
4. Siren output is automatically triggered when alarm input is triggered
5. O1+ and O1- is working as a switch, so there is no voltage output directly, you can use this this switch to switch OFF and ON the other electric devices.