



User Manual 4G GSM Gate Opener (SGA-LINK4G)

Features:

Advantages

- Quad-band, can work in the worldwide GSM Networks;
- No call charges, the GSM GPRS Relay Switch rejects the call from authorized number then carries out the turn ON/OFF action on the first 'ring';
- Multiple applications. (gates, bollards, barriers, garage doors, shutters and access doors or machines);
- Secure Using caller-ID for identification, unknown callers are ignored;
- Can be operated from anywhere, no distance limit;
- Add or remove users by SMS Text command;
- No need to provide a remote control or keys for different users;
- > Up to 200 authorized phone numbers can be configured at the specified time;
- One output with relay rating 3A/240VAC for connecting the switch of the door or machines;
- > The relay action will return a SMS confirmation to the owner or authorized call in number, this function is editable by user;
- The relay close or open time is programmable;
- Multiple applications. (gates, bollards, barriers, garage doors, shutters and access doors or machines);

Device Specifications & Overview :

GSM Frequency	Quad-band 850/900/1800/1900MHz
Digital Output	NC/NO dry contact, 3A/240VAC
DC Power supply	9~24VDC/2A
Power consumption	12V input Max. 50mA/Average 25mA
SIM Card	Support 3V SIM Card
Antenna	50Ω SMA Antenna interface
Temperature range	-20~+60 °C
Humidity range	Relative humidity 90%
Exterior dimension	W102mm*D76mm*H27mm
Net Weight	180 g

INDICATORS					
Relay	ON: Relay closed (ON). OFF: Relay open (OFF)				
	Flash per 0.8 second(quickly): registering to cellular network.				
al	Flash per 2 seconds: Normal status.				
	OFF: can't connect to SIM card or unregistered to the cellular network				
Connection Terminals					
Power	+	Power supply input, Positive wire (Red).			
	-	Power supply input, Negative wire (Black).			
Relay Output	NO	Normally Open port			
	СОМ	Common port			
	NC	Normally Close port			
ANT	Connect to GSM antenna.				



Typical Wiring Connection:

(For V2-TORQ 500D Gate Motor)



GSM Opener (+) terminal goes to Motor E1 (+V DC) terminal GSM Opener (-) terminal goes to Motor E2 (COM) terminal GSM Opener (NO) terminal goes to Motor J1 (START) terminal GSM Opener (COM) terminal goes to Motor J4 (COM) terminal

For Other Brand of Gate Openers:

GSM Opener (+) terminal is to be connected to Aux. DC voltage; **9-24 V DC (Never Connect AC Voltage)** GSM Opener (-) terminal is to be connected to 0 Volt; **COM/ GND/ 0V** GSM Opener (NO) terminal goes to motor's triggering input; **OPEN/ OSC/ PB/ START/ TRG** GSM Opener (COM) terminal goes to motor's common terminal of triggering input; **COM**



QUICK SET-UP:

- Insert the active SIM card in to the slot given in GSM opener as shown in below picture.
- Skip the Reset Step if network LED starts blinking within 5-6 seconds after turning the power ON.

Reset: Press and hold the RESET button(closed to the SIM card holder), then power ON, after 6 seconds later, the RTU5024 will restart, then release the RESET button.

This operation will reset the password to default 1234 and other parameters, but the authorized users numbers will remain on the memory.



Steps for Test Messages (All text messages need to be sent to SIM mobile number from Admin's phone):

- 1. Save the SIM card mobile number in Admin's (Main User) phone as per your choice like gate opener/ driveway gate/ garage etc.
- 2. Type & send text message 1234TELSIM Mobile Number prefixed with 0061 Australian Code # to SIM mobile number saved in Admin's phone

Example: 1234TEL0061xxxxxxx# Admin will receive return message: Set Success! Now the GSM unit is set to Australian Current Time

3. Adding Users:

Up to 200 users can be added to one GSM opener with different serial numbers (001-200) Type & send text message 1234AUser's Serial Number# User's Mobile number prefixed with 0061 Austrian Code# to SIM mobile number saved in Admin's phone

Example: 1234A001#0061xxxxxxx# (User 1) 1234A002#0061xxxxxxx# (User 2) 1234A003#0061xxxxxxx# (User 3)

Now all added users can ring the SIM mobile number to open the gate!



ADVANCED SETTINGS:

Note:

- 1. The default password is 1234.
- 2. Remember that the SMS messages must be in CAPITAL LETTERS, its TEL not tel, it's A not a etc. Don't add spaces or any other characters in SMS commands.
- 3. If you can't call to control the device or can't send or receive any SMS message from it then try to add +61 in front of mobile number or add 0061 in front of mobile number (Its digit zero not letter O).



<u>Steps for Test Messages</u> (All text messages need to be sent to SIM mobile number from Admin's phone):

1. Set Current Time Automatically:

Send pwdTELphone number of the SIM CARD#

This is so that the device can adjust its time.

Type & send text message 1234TELSIM Mobile Number prefixed with 0061 Australian Code # to SIM mobile number saved in Admin's phone

Example: 1234TEL0061xxxxxxx#

Admin will receive return message: Set Success!

Now the GSM unit is set to Australian Current Time



2. Set Current Time Manually (If step 1 is not able to set the time correctly) :

Send to the d

to the device for adjust the time manually.

E.g.: 1234T 1905111300# (1pm 11th of May 2019)

T:Command Code.

Current Time: yy(year)mm(month)dd(day)hh(hour)mm(minute).

Return: Set Time OK!

3. Adding Authorized Users:

pwdA serial number # phone number # start time # end time #

A:command code.

serial number: the authorized user's position, from 001~200.

start time: yy(year)mm(month)dd(day)hh(hour)mm(minute).the start time of this number can call in to control.

end time: yy(year)mm(month)dd(day)hh(hour)mm(minute).the end time of this number can call in to control.

Without start time and end time means: Always can call in to control.

E.g.: 1234A003#123456# to set the phone no.123456 at the 3rd position and always can call in to control.

E.g.: **1234A016#123456#1502050800#1502051000#** to set the phone number 123456 at the 16th position, this number can call in to control during Feb 5th 8:00a.m.(1502050800) to Feb 5th 10:00a.m.(1502051000).

Note: 1. The authorized number means the one who can dial the device to control the relay.

2. The Serial Number is the position to store the authorized users, from 001~200.

4. Inquire the Authorized User's Number on Serial Number:

pwdAserial number#

E.g.: 1234A002# to check the number on the 2nd position(serial number2).



5. Inquire User Numbers in Batch:

pwdALserial number start#serial number end#

E.g.: **1234AL002#050#** to inquire the authorized numbers from the 2nd to the 50th, The device will return several SMS with the numbers list (10 numbers on each SMS).

6. Delete the Authorized User Number:

pwdAserial number##

E.g.: 1234A002## to delete the 2nd authorized number.

RELAY Control Settings:

1. Allow Any Number to Call-In to Control (Public Mode, Not Recommended Unless Necessary):

pwdALL#

2. Allow Only Authorized Numbers to Call-In to Control (Private Mode, Highly Recommended):

pwdAUT#

3. How Long To Latch The Relay (ON) After Phone Call-In:

pwdGOTclose time#

close time=000~999. Unit: Second

close time=000: relay close 0.5 second then open (use the relay as momentry). USE THIS FOR AUTOMATIC GATES

close time=999: relay will always keep close(ON) after call in until the next call in.

E.g.: 1234GOT030# to set relay close 30 seconds(ON) and then open(OFF) after call in.



4. Who Will Receive the SMS Confirmation Message When The Relay is ON/OFF:

ID code		RTU5024 send notify SMS to	
а	b	The 1 st number	Caller number
0	0		
0	1		\checkmark
1	0	~	
1	1	\checkmark	\checkmark

E.g.: 1234GON11#Door Open#

The 1st number & the caller number receive confirmation SMS when relay is ON(door opened).

E.g.: 1234GOFF00#Door Close#

The 1st number & the caller number will not receive confirmation SMS when relay is OFF(door closed).

pwdGONab#content#

for relay ON,

for relay OFF.

ab: the ID code of the 1st number(a) and the caller number(b), =0 means disable, =1 means enable.

pwdGOFFab#content#

content: confirmation SMS content.

5. No Need Of SMS Confirmation When Relay is ON/OFF:

pwdGON## pwdGOFF##

IMPORTANT INFORMATION:

- 1) Please read the User Manual carefully before you install and control the device.
- 2) Install the device in a hidden place.
- 3) Install in a place where the unit will not get wet.
- 4) Have a secure connection to the main power supply.

(Required Input Voltage for SGA-LINK4G GSM Receiver is 9-24V DC – Never Connect AC Power to It)