

MANUAL

NEOS3000A-3G



QUICK GUIDE

For NEOS3000A-3G Series

Please read below of our instructions :

1. Prepare one sim card and one standard telephone

Disable this "enter pin code" . If you have enable this functions, please disable this function before insert sim card into our NEOS3000A-3G. Our NEOS3000A-3G can't do it if it is exist, please try to disable this function from your handset mobile phone . (Warning: Disconnect the power before insert SIM card)

2. Installation

2-1 : Open sim card cover by removing

2-2 : Open the sim card holder and gently insert your sim card in a slot card of the sim card holder

2-3: Close the sim card harder.

Hint: Make sure the sim card is aligned properly with the directional arrow the holder .

3. Connect the Antenna

Connect the antenna to the NEOS3000A-3G and tightened the antenna (Do not over-tighten the antenna)

4. connect to AC power

Plug the power into the AC power outlet, connect the AC/DC adapter to the DC Jack of the NEOS3000A-3G.

5. Check the cellular Signal Strength

Put this Antenna to the right Position and move NEOS3000A-3G until you find the best signal possible see the LED status indicators section of this Manual.

6. Attach telephone

7-1.Plug on the end of a stand phone cord into a phone

7-2.Connect the other end the phone cord on the side of the NEOS3000A-3G (phone port)

Safe operation instruction before use

1. Do not expose the unit to rain or moisture and keep dry place.
2. Please disable "Enter pin" functions from your mobile phone before insert sim card into NEOS3000A-3G.
3. Cellular signal strength, choose a location where is above ground and near the windows if it is hard to receive signal .
4. Disconnect the power before insert/remove SIM card.
5. If the answer party MIC volume level on the phone is too large, please adjust the levels for echo sound
 - * To disable echo sound press 593 (See manual)
 - * To enable echo sound press 594 (See manual)
6. When it is integrated with PBX systems, and it is need to use polarity reversal. Please adjust polarity reversal to be the same level for PSTN and GSM .
7. If require all reset, please press 999 to factory default

Others please read below manual

Our factory defaults :

- **CONNECT phone jack to MO(phone port)only : When you dial any number, this outgoing call will dial via GSM network.**

Testing : Hook off phone handset and hear dial tone ,ready to dial .

- **CONNECT phone jack to MO and CO (phone port & line port) : when you dial any number , this outgoing call will dial via PSTN line (line port) (IF YOU NEED TO MAKE ANY MOBILE PHONE NUMBER, YOU NEED TO SET THIS FUNCTIONS CODE for prefix number ... see below)**

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SIMPLE SETTING :

- 1.Pick up handset
2. Enter [****#] and follow [1234#]
- 3.follow [80XXXXX#] - XXXXXX is your GSM prefix number

If you would like the dialer to route all destination number start with 01xxx, 02xxx to GSM network, and other to PSTN network. , Press 8001# and follow press 8002#

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For more change see below setting mode :

Setting mode : (see our function code)

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Note: Every time when you need to change function code , it is necessary to proceed the following steps :

---Before change function code--

1. Please press setup mode " * * * * # "
2. Please press password code "1234#" (default)
3. Now it's ready for enter any code to change function code

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Now you can change function code :

b) Q: If destination number start with 00xxx use PSTN.

A: (Outgoing call by PSTN) When our NEOS connect to PSTN, You don't need to setup this function please dial directly. (If our NEOS only connect to telephone, it is like a mobile phone, every time you dial , it will call out via GSM network) .

c) Q: If destination number start with 0xxxx use mobile network.

A: (Outgoing call by GSM) if you connect to PSTN , please See "Permissible Dialing" function code "80xxx#" i.e. : enter " 80 x x x x #" is okay.

d) Q: If destination number start with 1,2, 3, Until 9xxxx use PSTN (local calls).

A: (Outgoing call by PSTN) When our NEOS connect to PSTN, You don't need to setup this function , please dial directly

e) Q: In case if I want to dial to 00xxxxx by using mobile network just for this call temporary), what should I do?

A: (Outgoing call by GSM) If our NEOS connect to PSTN, Same "c" . enter 8000xxxx .

f) Q: In case if I want to dial to 012xxxx by using PSTN network just for this call (temporary), what should I do?

A: (Outgoing call by PSTN) If you have setup above "c" ..USE PSTN line. It will cause facing problems, you can find the first permission for 2 code are "01~09" numbers. Thus you need to delete "c" (see "permissible dialing") and after finished you can set up this functions to enter "8012xxx" . You can only choose one of them (c) & (f) when connect to PSTN.

All RESET back to FACTORY DEFAULT , PRESS 999 . (All functions will be back to factory default)

A. INTRODUCTION

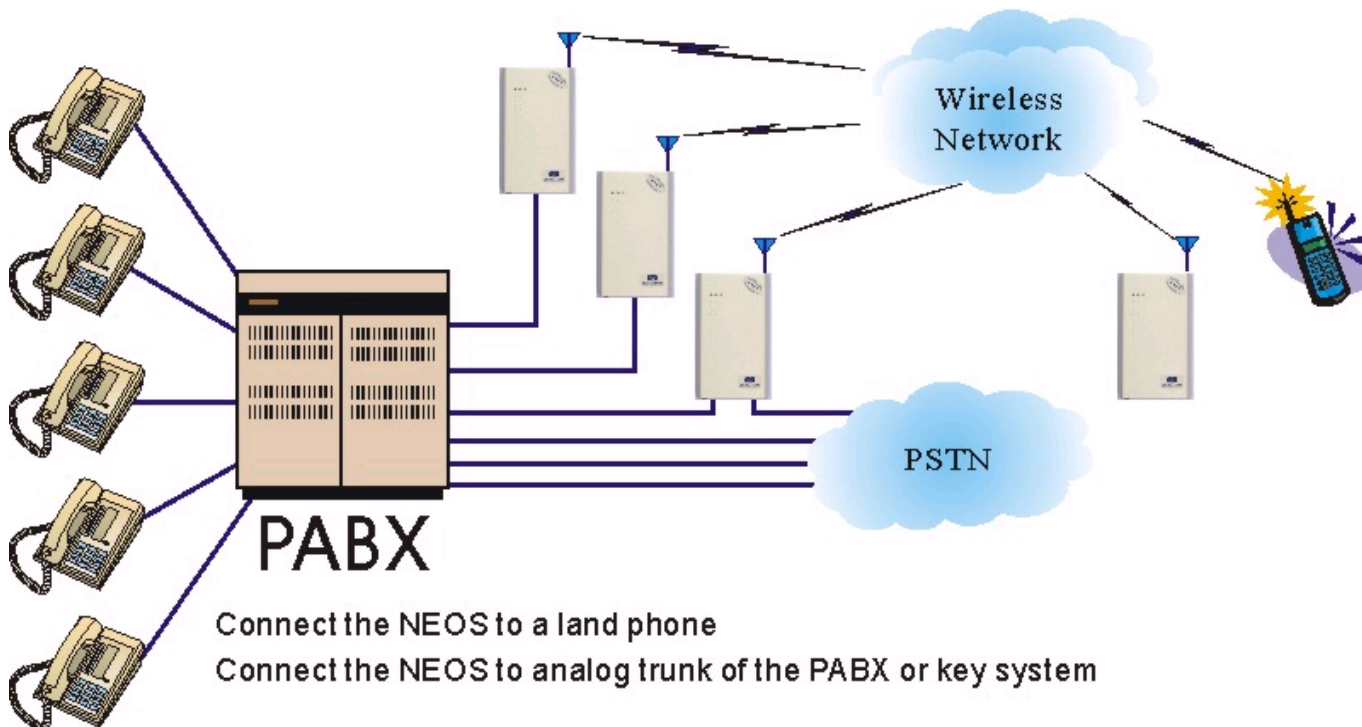
Thank you for choosing the **NEOS3000A-3G** series product from Gainwise. This innovative product make you connect to standard telephone equipment with GSM engine into a cellular network for total communications flexibility. You can connect the **NEOS3000A-3G** to the land phone or the analog trunk of the PABX or key system.

B. CHECKING YOUR PARTS

Item	Description	Qty	Included	Optional
1	NEOS3000A-3G	1	⊙	
2	DC12V/1A Switching Adapter	1	⊙	
3	Phone Cord	1	⊙	
4	Telephone Box	1	⊙	
5	Male SMA Antenna	1	⊙	
6	Operation Manual	1	⊙	
7	Data Cable (USB)	1	⊙	
8	SOFTWARE	1	⊙	
7	LCM (liquid Crystal Display Module)	1		⊙
9	SCM50 SIM CARD MANAGER	1		⊙
10	BATTERY PACK	1		⊙

C. SYSTEM ARCHITECTURE

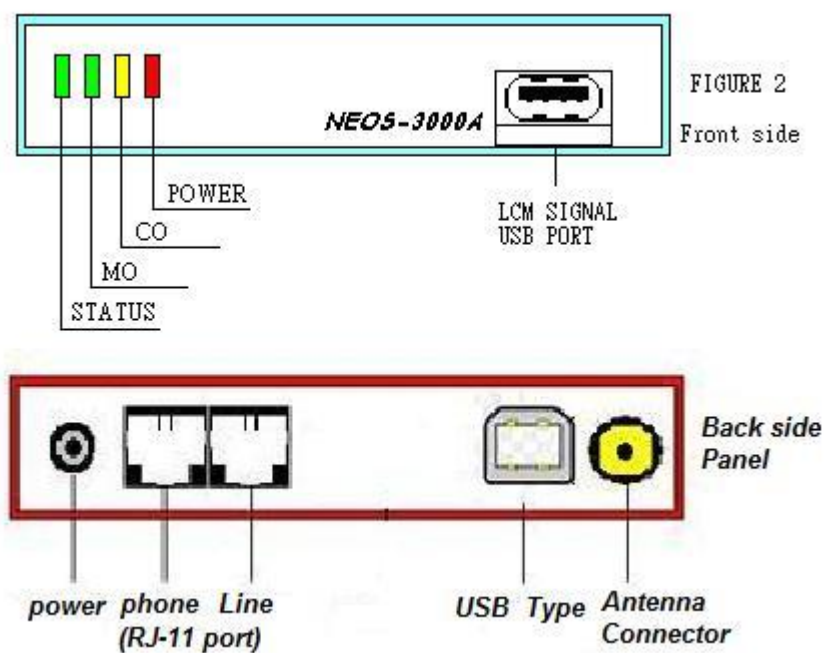
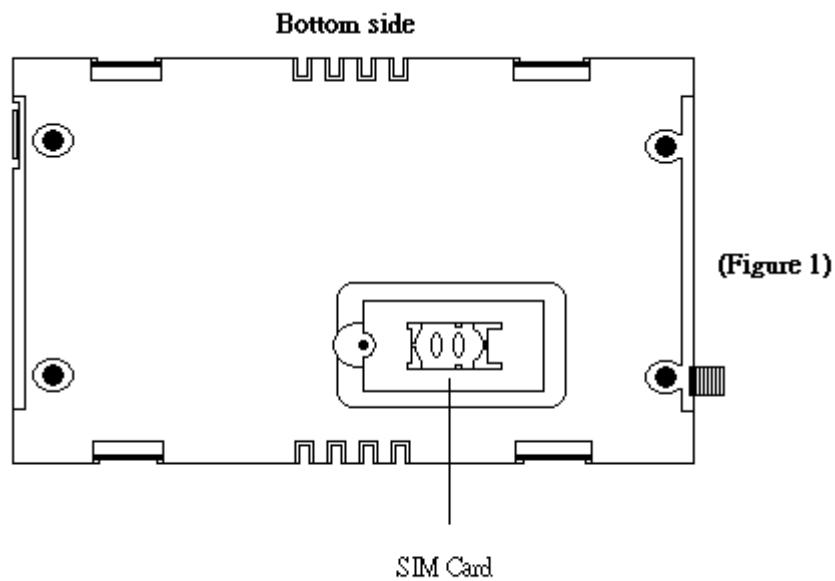
Trunk Side Application



D. INSTALLATION (see diagram below)

1. SIM Card Installation (figure 1)
 - 1-1. Remove the 12VDC switching adapter
 - 1-2. Gently insert the mini-SIM card in the slot of bottom of NEOS3000A-3G

- 1-3. Make sure the SIM card is put exactly
- 1-4. Attach the 12VDC switching adapter
2. Connect the antenna to the SMA antenna connector on the back of NEOS3000A-3G.
3. Connect The Power and Plug In Your Telephone Equipment (figure 2 and 3)
 - 3-1. Connect the LINE port of NEOS3000A-3G with wall jack of PSTN.
(If you don't have PSTN or need LCR, you don't do it.)
 - 3-2. Connect one end of phone cord to the PHONE port of NEOS3000A-3G and the other end to the analog port of the PABX. (or key system or the land phone)
 - 3-3. Connect the switching adapter to the DC jack of NEOS and AC power.
 - 3-4. All steps are finished, the red led and green led turn on.



4. connect to PC for data transmission and Internet browse (see Configure PC for dial-up internet(3.5G HSDPA))

5. LED Status Indicators (1: POWER, 2: CO (pstn) 3: MO(GSM/WCDMA), 4: STATUS)

Position	LED Color	LED Activity	Description
1	RED	Continuous ON or OFF	The DC power is ON or OFF
2	YELLOW	Continuous ON	The PSTN line is idle.
2	YELLOW	Flashing(0.05sec ON / 0.05sec OFF)	The PSTN line is talking.
3	GREEN	Continuous ON	The GSM phone is idle.
3	GREEN	Flashing(0.05sec ON / 0.05sec OFF)	The GSM line is talking.
3	GREEN	Flashing(0.25sec ON / 0.25sec OFF)	The redial tone of NEOS.
3	GREEN	Flashing(0.5sec ON / 0.5sec OFF)	The busy tone of NEOS.
4	GREEN	Continuous OFF	The engine is OFF, in SLEEP, ALARM
4	GREEN	Flashing(0.6sec ON / 0.6sec OFF)	No SIM card, no PIN entered, network searching
4	GREEN	Flashing(0.075sec ON / 3sec OFF)	Logged on a network but no call in progress
4	GREEN	Continuous ON	Connected to remote party
2&3	GREEN and YELLOW	Flashing three time in one second	Enter the Setup Mode
2&3	GREEN and YELLOW	Flashing(0.25sec ON / 1.75sec OFF)	Enter the Programming Mode
When data is connecting this LED status indicators :			
4	GREEN	Flashing	Ready for connect internet
4	GREEN	Blinking	Connecting to internet and working

E. HOW TO USE

1. Pick up your telephone handset.
2. Listen for dial tone. (If there is no tone, you have to check the GSM engine signal)
3. Dial the phone number.

F. PROGRAMMING MODE

1. Pick up the telephone handset and listen for the dial tone. Press the **【 * * * * # 】** then enter the setup mode. You can hear the Du Du Du tone (three times per second).
2. Press the password to enter programming mode, the default value is **【 1234 # 】**
 - 2-1. When the password is correct, the green LED and yellow LED of NEOS will flash and you hear short Du tone (one time per second). We call it setup tone.
 - 2-2. When the password is wrong, the green LED and yellow LED of NEOS will flash and you hear three Du tones then back to the setup mode.
3. In programming mode you can press the function code to program the feature you want. (check the table of function code)
 - 3-1. If the programming is successful, the green LED and yellow LED of NEOS will flash one time and you can hear one Du tone. You can program the other function.
 - 3-2. If the programming is fail, the green LED and yellow LED of NEOS will flash three times and you can hear three Du tones. If you hear setup tone, you can reprogram the function
 - 3-3. You can hang up the handset to cancel this programming when you press wrong code.

- 3-4. Press **【**00#】** or hang up the handset over two second if you want to quit the programming mode.

FUNCTION DESCRIPTION (See FUNCTION CODE TABLE)

1. Outgoing Time Control

- 1-1. NEOS will emit three Du Du Du tones at 25 seconds before the end of the outgoing time that you program. It reminds you that this call will be finished.
- 1-2. Press **【90X】** to set the outgoing time from 1 to 9 minutes. X is 1 to 9.
- 1-3. Press **【911】** to disable NEOS to finish the call when outgoing time is up. But NEOS will emit the reminding tone per minute.
- 1-4. Press **【912】** to enable NEOS to finish the call when outgoing time is up.
- 1-5. Press **【900】** to set that NEOS don't restrict the outgoing time.

2. Call Restriction (It is useful when you remove phone cord from line port of NEOS)

- 2-1. Press **【916】** to enable the call restriction. You can call when the prefix of phone number match permissible dialing number or else you can not call and hear Du Du Du tone.
- 2-2. Press **【915】** to disable the call restriction. You can call all number when you don't connect wall jack to line of NEOS.

Note: If you press **【916】** to enable the call restriction and the permissible dialing number is empty, you can not call at all.

3. Permissible Dialing Number

- 3-1. Press **【80XXXXXXXX#】** to add the prefix number. X represents digit of number. One prefix is up to 9 numbers and total is up to 50 sets.
- 3-2. Press **【70XXXXXXXX#】** to delete the prefix number.
- 3-3. Press **【998】** to clear all permissible dialing number.
- 3-4. If you connect wall jack to NEOS, the permissible dialing number will become router between PSTN and GSM network.

4. Outgoing Tone

- 4-1. Press **【927】** to disable the beeping tone when you call via GSM network.
- 4-2. Press **【928】** to enable the beeping tone when you call via GSM network.

5. Polarity Reversal

5-1. Polarity reversal of outgoing call description

When the outgoing call is connecting NEOS will reverse the polarity. If anyone hangs up the phone, then NEOS reverse the polarity back.

5-2. Polarity reversal of incoming call description

When you pick up your handset NEOS reverse the polarity. If anyone hangs up the phone, then NEOS reverse the polarity back.

5-3. Polarity reversal Option

Press **【963】** to disable polarity reversal of outgoing.

Press **【964】** to enable polarity reversal of outgoing.

Press **【967】** to disable polarity reversal of incoming.

Press **【968】** to enable polarity reversal of incoming

6. Factory Default Setting

Press **【999】** to enable the default setting.

G. INSTALLTION TIPS

1. Make sure that GSM engine logged to a network. Check the receive signal strength and move the antenna until you achieve the best signal possibly.
2. RF energy from GSM engine may affect the other standard telephone equipment. Don't place the NEOS beside equipment too close.
3. When you connect NEOS with PABX, please notice the polarity of PSTN line.
4. Please disable the PIN entered of SIM card. Disable the feature of call waiting, call forwarding and voice mail.

H. FUNCTION CODE TABLE

Feature	Function Code	Description
Setup Mode	**** #	Enter the setup mode
	**00 #	Escape the setup mode and enter normal mode
Password	0XXXX #	Set the password. It is up to 8 digits. The default is set " 1234 # " .
	913	Disable to press password
	914	Enable to press password. It is default.
Outgoing Time Control	900	Disable outgoing time control
	90X	Set the outgoing time. X is 1 to 9 minutes.
	911	Disable NEOS to cut the call when outgoing time is up. But NEOS will emit the reminding tone per minute
	912	Enable NEOS to cut the call when outgoing time is up.
Call Restriction	915	Disable limiting dial. It is default.
	916	Enable limiting dial.
Permissible Dialing Number	80XXXXXXXX #	Add the prefix number.
	70XXXXXXXX #	Delete the prefix number.
	998	Clear all permissible dialing number.
Outgoing Tone	927	Disable
	928	Enable
Polarity Reversal	963	Disable polarity reversal of outgoing. It is default.
	964	Enable polarity reversal of outgoing
	967	Disable polarity reversal of incoming. It is default.
	968	Enable polarity reversal of incoming.
Receive Volume	53X	X is 0 to 4. Adjust the receive volume of engine.
Reset Default	999	Enable the default setting
Factory Default setting		Password is " 1234 # " .
		Outgoing time is not limited.
		Disable limiting dial

Frequently Asked Questions (FAQ):

Q: The light "PWR" does not light on after power on?

A: Check the power adapter or no electricity in the socket

Q: Where to check the LED status?

A: Please see Page 4 LED Status indicator List

Q: When the telephone is hook off, I can't hear any dial tone?

A: 1. Check the phone machine situation
2. Check the phone cable line is Normal or loosen
3. Check the LED light is correct

Q: When the telephone is hook off and heard "DOMISO" music?

A: 1. The mobile network is off service or registering to the telecom system unsuccessful.
2. Take the sim card insert into mobile phone to check this situation and disable this "ENTER PIN CODE" functions.
3. If it is not successful, please contact local dealer.

Q: I can't hear the answer party sound

A: 1. Please redial this number more than once and if it is successful that this problem was caused by Telecom Network are not catching the signal properly temporary.
2. If it is still problems exist, please contact local dealer.

Q: When incoming call go through GSM network, and dialer still hear the answer party is ringing but nobody answer?

A: 1. Check and dial tone and try to dial again from another telephone machine
2. If the answer party is ringing and nobody answer, please contact local dealer.
3. If it will happen temporary , the GSM network are on RESET situation.

Q: This machine can't hear any dial tone?

A: 1. Disconnect this power
2. Check the outgoing call is still can go through by PSTN line, if outgoing call can't go through PSTN, This telephone machine or PBX system is damaged.
3. Change another Telephone machine and check again follow above procedure.

LED Display Indicator

The led indicators are activated when the neos is powered on.
Please see below tables of the indicators led light as below:

LIGHT "POWER"CHECK

LED	ACTIVITY	RESULTS
RED	CONTINUOUS	POWER ON
RED	OFF	POWER OFF

LIGHT "CO"CHECK

LED	ACTIVITY	RESULTS
YELLOW	CONTINUOUS	PSTN READY
YELLOW	FLASHING	PSTN BUSY
YELLOW	OFF	PSTN DISCONNECT

LIGHT "MO"CHECK

LED	ACTIVITY	RESULTS
GREEN	CONTINUOUS	MOBILE READY
GREEN	FLASHING	GSM LINE BUSY
GREEN	OFF	NO SIM CARD

LIGHT "STATUS"CHECK

LED	ACTIVITY	RESULTS
GREEN	CONTINUOUS	GSM LINE BUSY
GREEN	FLASHING 0.6 SEC.ON/0.6 SEC. OFF	CHECK SIM CARD(NO SERVICE)
GREEN	FLASHING 0.075 SEC.ON/0.075 SEC. OFF	IN SERVICE
GREEN	OFF	GSM POWER OFF
DATA CONNECTING :		
GREEN	FLASHING	READY FOR CONNECT
GREEN	BLINKING	CONNECT TO INTERNET

LED PROBLEMS CHECK

STATUS	MO	CO	POWER	SOUND	RESULTS
0.6/0.6 SECOND FLASHING	OFF	1.5/1.5 SECOND FLASHING	ON	DOMISO	NO INSERT CARD
0.6/0.6 SECOND FLASHING	1.5/1.5 SECOND FLASHING	ON	ON	DOMISO	SIM CARD No REGISTERED

