User's Guide

Welcome to use multi-routes wireless access terminal to enter a novel communication world, which absorbs high-tech and delicate design out of your imagine.

The multi-routes wireless access terminal enable you to quickly achieve the GSM cell telephone communication just via simple operations of wired telephone.

This user's guidebook helps you understand the function of multi-routes wireless access terminal step by step. Before using that equipments, please read the user's guidebook in detail.


话机1
话机2
话机3

Attention!

● **Please read the following specific rules.**

Against the rules will cause danger or violate the law.

●**Echo off**

Before using this equipment, please make sure your position has no echo off function for wireless radio frequency signal.

●**Interference**

The similar to all mobile telephones, it is subject to the interference, which affects functions of the telephone.

●**Explosion district**

At explosion districts or places signed" close wireless transmitting devices", please do not use the equipments.

●**Latent explosion environment**

At environment that there is latent explode possibility, such as gas station, chemistry product, combustible liquid, air conveyance car or store warehouse etc., please do not use the equipments.

●**Children**

Do not let the children play the equipment. Children may be stabbed or hurt other people with the antenna. Children may damage the interface, or make telephone calls freely to increase your telephone expenditure.

●**Maintenance**

Only the qualified technicians can install or maintain the equipments. If the equipments abort, please contact the dealer. Don't open the equipments or maintain them by groups and individuals without authorization to prevent damaging the equipments.

●**Antenna**

Only approval antenna can be used, do not link the antenna which do not match with the equipments. The unqualified antenna in use will damage the equipments. Antenna must keep vertical and off the telephone, the antenna cable can not be bound with telephone line together. Do not touch antenna or approach antenna in range of 10cm during calling.

●**Power**

The equipments regularly use 110-220V AC.

●**Installation and connect**

Make sure the " power switch" on the front panel is placed in break (the switch is placed in the " ○ " position) when installing the equipments and connecting with other equipments according to the guidebook. Operating with electricity may damage the equipments.

● **Configuration**

After the equipments installed, only after each route of the equipments has been system initially configured by dealers or network service provider, the equipments can perform formally. Only dealer or network service provider can initially configure the equipments' system, avoiding the equipments damage due

to the mistake of system configuration.

● **Connecting to other equipments**

While connecting to other equipments, please read the user's guide carefully to acquire detailed safety guide. Do not connect to the products which do not match with the equipments.

1、 Summary

The design of the multi-routes wireless access terminal aims to provide a kind of standard frequency telephone in the area covered by the GSM digital mobile net.

The interface of multi-routes wireless access terminal provides a transparent connection between the standard telephone and the mobile net, which has the function of emulation exchange and offers the following function:

- Dialing tone
- Dialing a number with DTMF
- The bell flow signal
- Versa pole signal

The exterior interface of multi-routes wireless access terminal has:

- RJ-11 electric outlets connecting to telephone or fee counter.
- Antenna electric outlet(FME)
- Pick up or hang up the telephone handset indicator
- The strong or weak signal indicator

2、Configuration and installation

1、 The whole pack of multi-routes wireless access terminal includes:

●Multi-routes wireless access terminal (host)	1 set
●900MHz/1800Mhz/1900Mhz antenna(FME)	8 pieces
●110-220V AC power line	1 piece
●User's guide	1 copy
●Qualified certificate	1 copy

2、 Installation procedure

The equipment provides digital GSM network communication, which requires a valid SIM card.

①Put the multi-routes wireless access terminal in the standard 1 U pedestal.

②Switch off the power on the behind-panel (switch is kept at " O").

③Insert the valid SIM card .

a) Screw off the two fixed screws in the upper front-panel, and remove the upper front-panel.

b) Insert the SIM card in the correct direction (the most right-hind route is from left to right, others are from right to left).

c) Press the switch key of the each route, and the power indicator beside the switch is off.

d) Fix the top cover, and tighten the screws.

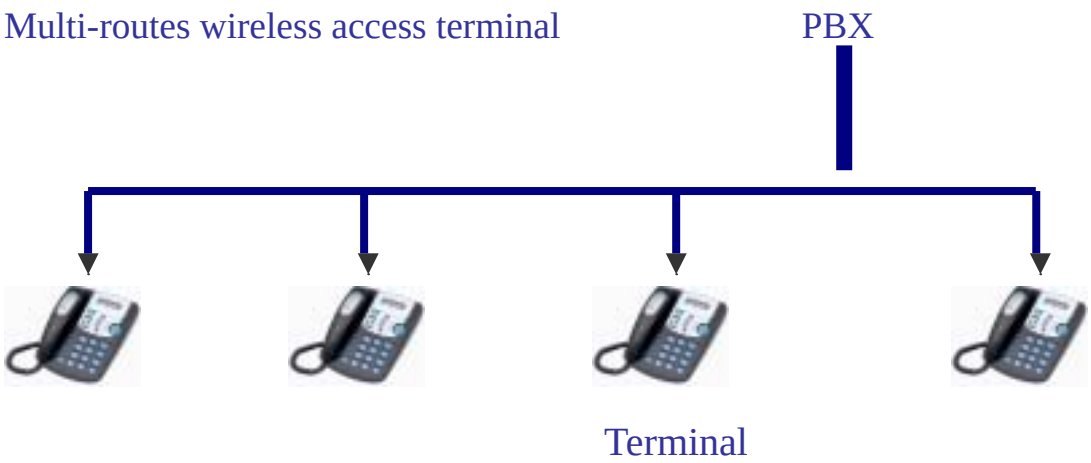
④Wring antenna into antenna electric outlet.

⑤Connect one end of the line with the RJ-11 telephone outlet , and the other end with the telephone(fee counter)
⑥Connect one end of An 220V AC power line into 220V power outlet, the other end into 220V power outlet on behind-panel.
⑦Open the power switch on behind-panel (switch is placed in"-" appearance)

After the equipments installed, each route of the equipments has to be initially systematic configured by dealer or network service provider to assure the formal operation of equipments.

3、 Instruction

1、 Whole machine conjunction figure:



2、 The front-panel indicator appearance illumination

There are pick-up or hang-up handset indicator and strong or weak signal indicator for each route of multi-routes wireless access terminal.

Pick up or hang up the handset: If pick up a route of multi-routes wireless access terminal machine, the pick up or hang up indicator keep bright. (red LED)

Strong or weak signal: Indicating the received signal of each route of multi-routes wireless access terminal. The stronger the signal is, the more the bright lights will show. In the state of system configuration, four lights flash (green LED).

3、Make a call

When the "strong or weak signal" indicator indicates there is enough receiving signal, pick up the telephone which connecting with multi-routes wireless access terminal, and you can hear the dialing tone immediately; If connecting the machine with the fee counter, it will show the telephone number you dial. After the other side picks up the phone handset, the charging machine starts working.

For shortening the network conjunction time, it is suggested to press the "#" key after dialing the telephone number (means to press the" accelerates dial" key). Without dialing more numbers in 7 seconds after first dial, the first telephone number will be redialed automatically.

4、 Call in

When there is a call in, the telephone rings. Pick up the phone and converse.

5、 The operation method of the charge machine

Please read the charge machine manual about the detailed operation method.

6、 Replacing SIM card

If the SIM card needs to be often replaced, the user can replace the single route SIM card without influencing other routes. Open the front upper-cover and press the key of route which needs to replace SIM card, the LED light aside the SIM card will go off. Then the SIM card can be、placing, press the key again, and the LED light aside the SIM card will shine bright. If other SIM cards need to be changed, it's the similar with above steps.

4、Technique parameter

1、Main technique parameter

Items	Parameter	Remarks
Work power supply	110-220V AC	Special electric voltage and temp required need to be made by order
Environment temp.	0℃--45℃	
humidity	45%-95%	
Atmospheric pressure	86-106Kpa	
Environment noise	<60dB	
Shoot the power	2W	
Intelligent degree	<-104dBm	
Antenna gain	>1.5dB	

2、Dual frequency line connects parameter (RJ-11 telephone interface)

Items	Parameters
Dialing tone frequency	450Hz
Hang the phone electric voltage	45V
Pick up the phone electric current	30mA/41mA

- Frequency band support GSM900/DCS1800MHz/PCS1900

- Support protocol GSM07.10
- Maximum RF power output ：1－2W
- Dialing tone：450Hz continuum
- Busy tone：450Hz 0.35S/0.35S
- Size：495X340X48 mm 550X400X105 mm for packing box
- Product shell：Steel
- Gross Weight：6 Kg
- RF parameter:

a) Receiver

Receive Frequency

	Band
GSM 900	935-960MHz
DCS1800	1805-1880MHz
PCS1900	1930-1990MHz

Receive Sensitivity

	Min	Type	Max	
GSM	-104	-106		dBm
DCS 1800	-102	-104		dBm
PCS 1900	-102	-104		dBm

b) Transmitter

Transmit Frequency

	Band
GSM	890-915MHz
DCS1800	1710-1785MHz
PCS1900	1850-1910MHz

- Modulation -0.3GMSK
- Channel interval 200Khz
- Frequency difference ≤0.1ppm
- Antenna gain inside keeping 2.5db/outside keeping 4.5db
- Antenna resistance 50 ohm
- Standby current <15mA
- Average communicating current <300mA
- Support 3.0v/1.8v SIM card adaptively

5、Exception handles

1、 Network

After opening the multi-routes wireless access terminal, the equipment needs about 10 seconds to search for the local network of GSM. When searching the most right-hand" signal strong or weak" indicator would flash once per second until searching completes, then the" strong or weak signal " indicator starts indicating to make a phone call.

2、 Power

Connect to power supply and make sure you have opened the " power switch"

behind the multi-routes wireless access terminal, (" power switch" is placed in"-" appearance) and the switch key on the each route inside the equipment. While turning on the equipment, all indicators on front panel will flash once.

A) Check out the 220V AC power line connecting well with an alternate current electric outlet, and with the AC outlet of multi-routes wireless access terminal intact.

B) If the above check can't expel the breakdown yet, please contact the dealer.

3、 Speakerphone

If the Speakerphone can't work normally, please check whether the operation is correct, and the connecting with multi-routes wireless access terminal is well. Otherwise, try to change another telephone to test whether the condition and internal circuits of the equipment work normally or not. Due to the strong shooting power of the equipment, it is suggested to use the telephone with anti-electromagnetism interference to prevent headphone from interference voice.