Eight, common problems and solutions

common problem		Solution Connect
Can not boot	battery drained	the power adapter to charge and then turn it on
	The key is pressed for too short a time	Please press and hold for at least 3 seconds
Unable to turn off button press time is too short		Please press and hold for at least 3 seconds, but no more than 10 seconds
3G/4G cannot connect to the Internet	no SIM card inserted	Please insert a valid SIM card
	SIM card in arrears	Please recharge or replace the SIM card
	If the SIM card is not activated for 3G/4G network, please	contact the operator to activate it
	Current location 3G/4G signal is not covered or weak	Change the ball position
WIFI unable to connect	Select SSID is wrong	Select the corresponding SSID
	WIFI password error	Enter the correct encryption type and password
	Weak WIFI signal	Appropriately close to the ball machine position
	WIFI signal is strong but connection is unstable	The current channel interference is serious, replace the relatively idle wireless channel
Unable to locate the control ball Unable to locate successfully		The satellite signal needs to be received outdoors where the sky is visible, but cannot be received indoors; the problem of inability to locate may also occur under the viaduct.

9. Appendix: Instructions for using the built-in router

1. Setup preparation

1.1 Connecting the device

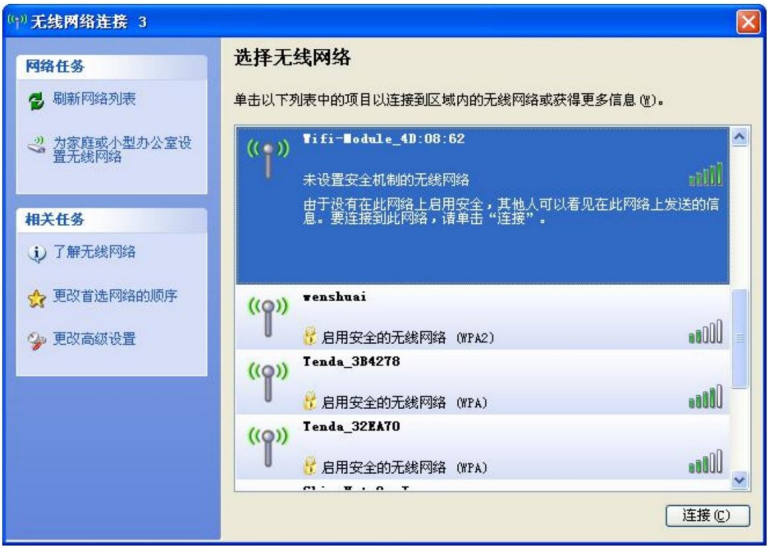
You can connect your computer and router by following steps.

1.1.1 Set the IP address of the computer

Before accessing the web settings page, it is recommended that you set your computer to "Obtain an IP address automatically" and "Obtain DNS server address automatically", the IP address is automatically assigned by the router. if you need To assign a static IP address to a computer, you need to associate the computer's IP address with the router's LAN port. The IP address is set in the same subnet (the default IP address of the router's LAN port is: 192.168.1.1, The subnet mask is 255.255.255.0).

1.1.2 Connect via WiFi

Detect the wireless network connection of the wireless router, then click the 'connect' button to establish the connection, wireless The password is: 12345678.



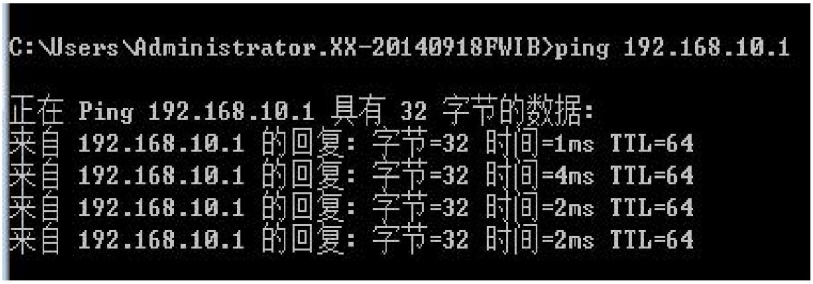
1.1.3 Confirm that the computer is connected to the router

After your computer shows that the IP has been successfully obtained, use the Ping command to confirm that the computer and

Whether the connection between routers is successful.

For example, in Windows XP environment, execute the Ping command: Ping 192.168.1.1. like

If the following screen is displayed, it means that the computer has successfully established a connection with the router.



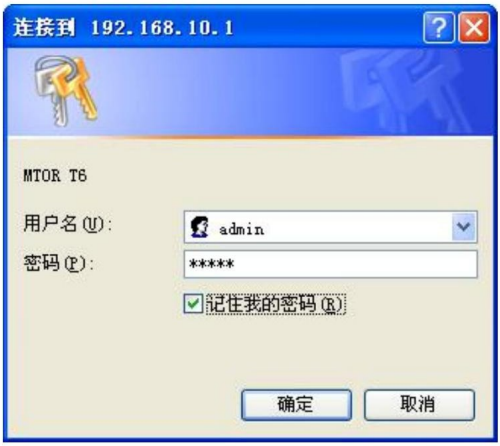
1.2 Log in to the router

Next you will land on the router web settings page.

Enter "http://192.168.1.1" in the address bar of the web browser, and enter in the pop-up box

Login username and password.

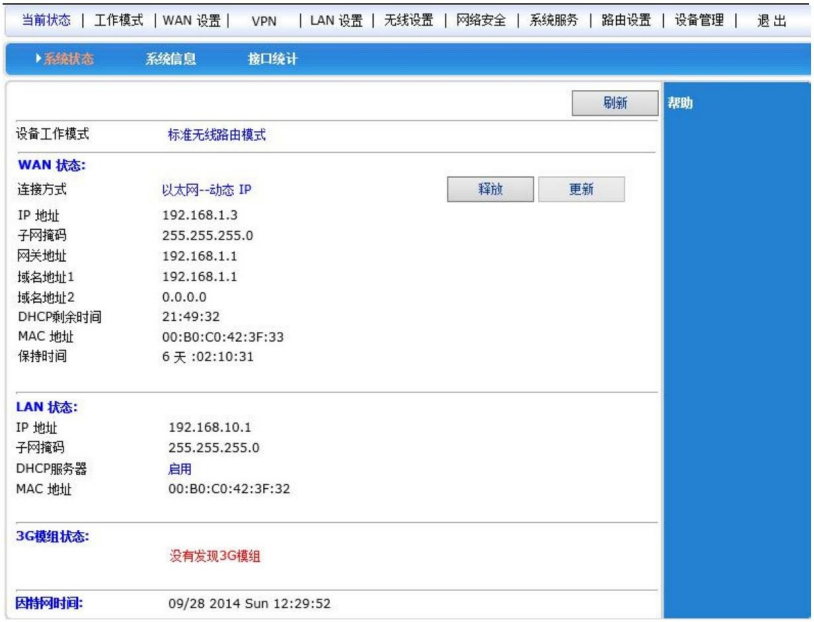
When you log in for the first time, please enter the default username: admin, password: admin.



1.3 Enter the router web settings page

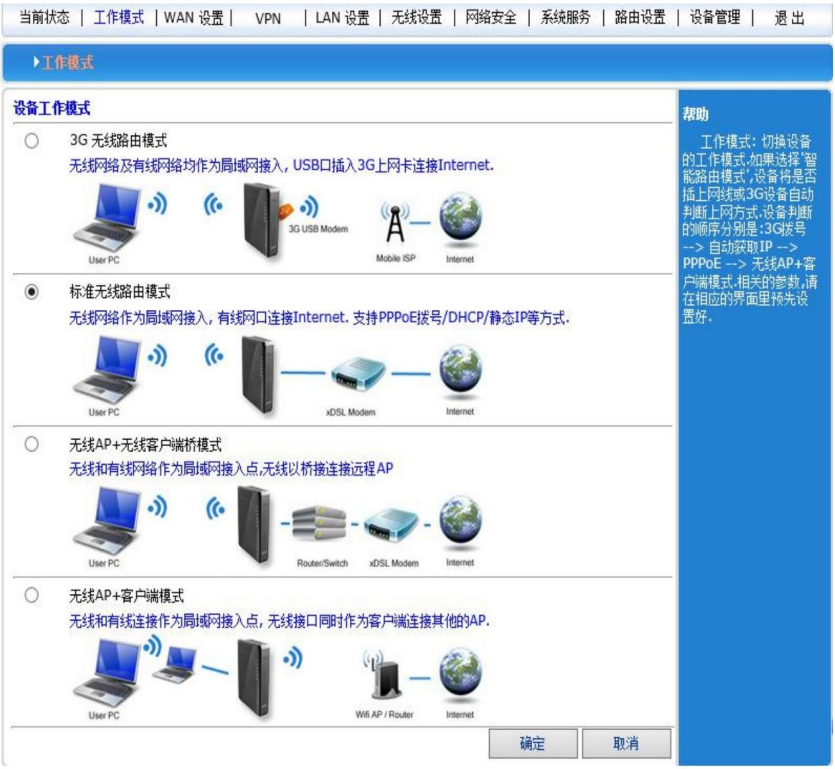
After successful login, enter the web setting page, then you can set and manage the router.

made sense.



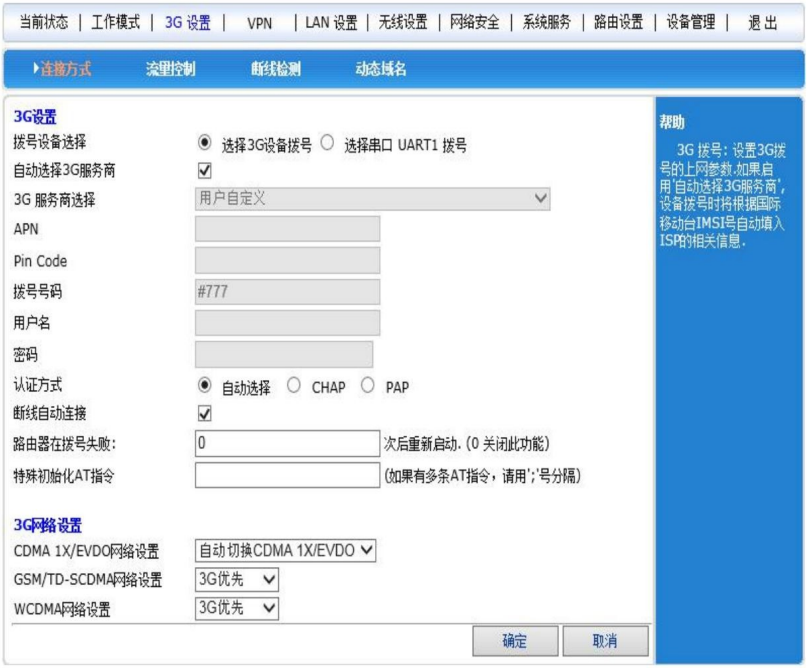
2. Working mode

Provides 4 working modes: 3G/4G wireless routing mode (default), standard wireless routing mode, Wireless AP+wireless client bridge mode, wireless AP+wireless client mode:



2.1 3G/4G wireless routing mode.

The default of the dome router is 3G/4G wireless routing mode, insert the 3G/4G tariff card, the router will Automatically identify 3G/4G network. You can also define the network operator you need to choose.



Carrier 3G/4G	Network	APN	Dial-Up Number	Username	Password
China Mobile	TD-SCDMA	cmnet	*99# or *98*1#	card	card
China Telecom	CDMA2000	null	#777	Card	card
China Unicom	WCDMA	3G/4Gnet	*99#	sky	sky

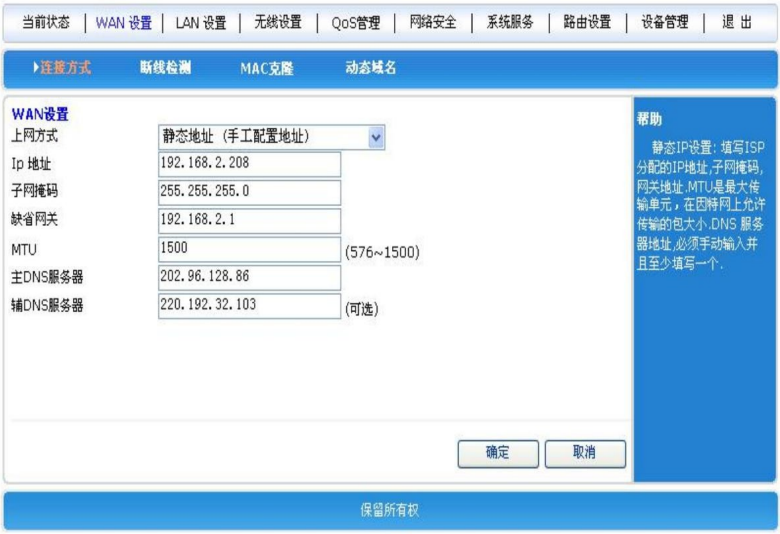
2.2 Wired Access Standard Routing Mode

2.2.1 Static Internet access

Enter the router management interface and select the standard routing mode for the working mode, and select the WAN setting to connect to the Internet.

Select a static address, enter the IP address, network mask, gateway, DNS and other related parameters provided by the ISP,

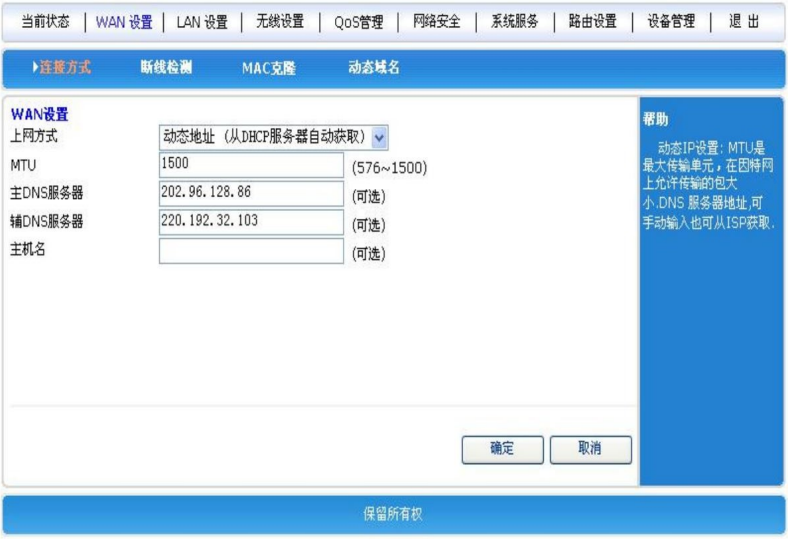
Click to confirm.



2.2.2 Dynamic Internet access

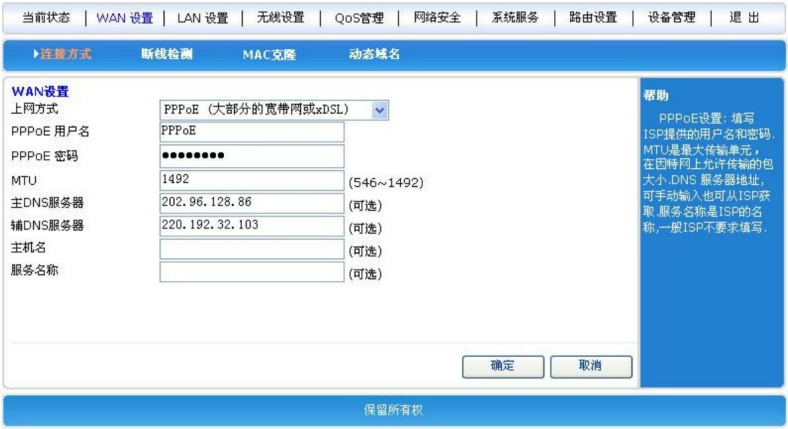
Enter the working mode of the router management interface, select the standard routing mode, and set the WAN Internet access mode.

Select the dynamic address, click OK, the router will automatically obtain the parameters assigned by the ISP.



2.2.3 PPPoE Internet Access Mode

Enter the router management interface working mode, standard routing mode, WAN settings Internet access mode selection PPPoE, enter the user name, password and other related parameters provided by the ISP, and click OK.



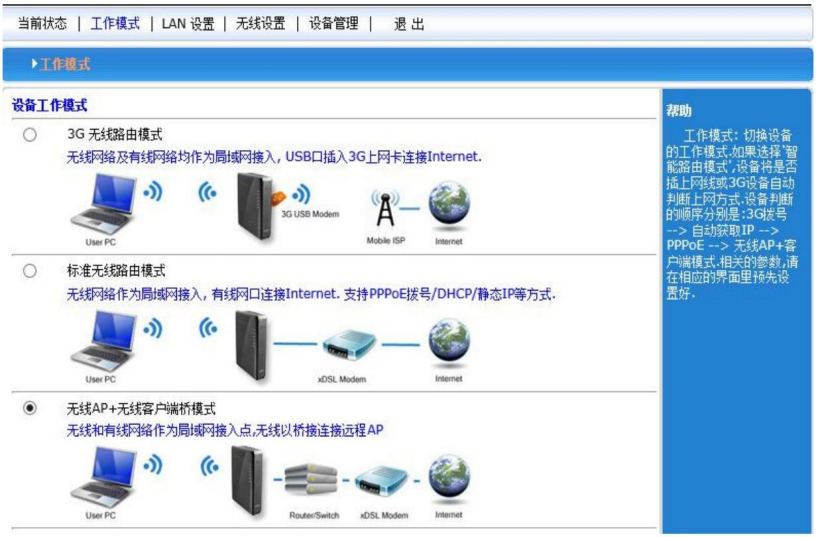
2.3 Wireless AP+Client Bridge Mode

After selecting this mode, we can use the dome router as a bridge AP for bridge

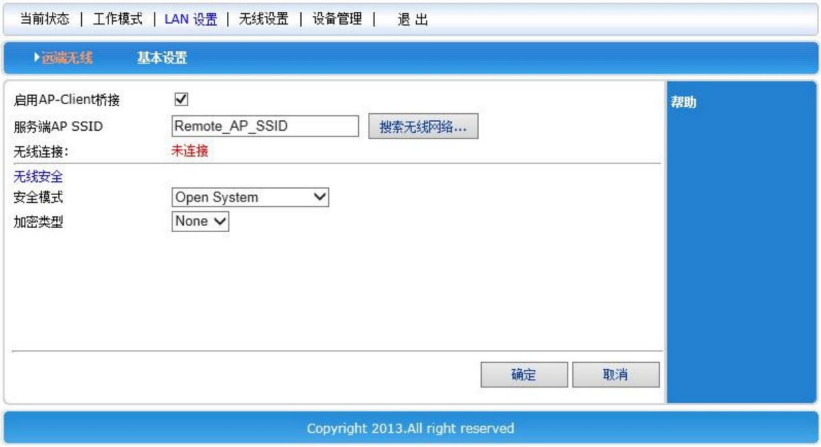
Connect to the previous wireless router

2.3.1 First set the local IP of the computer to 192.168.1.100, connect the LAN2 interface through the network cable,

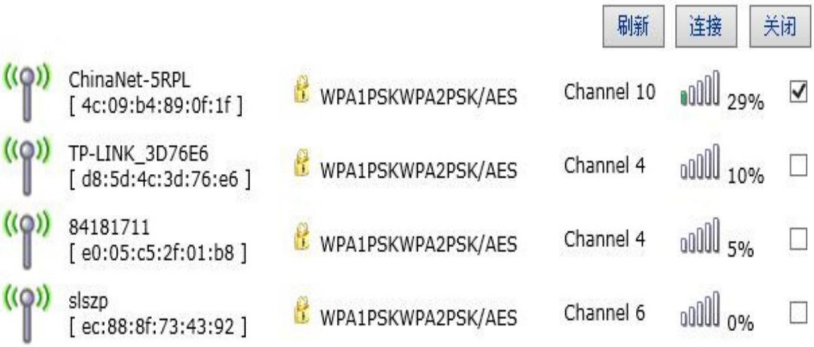
Enter the router management interface and select the wireless AP+client bridge mode.



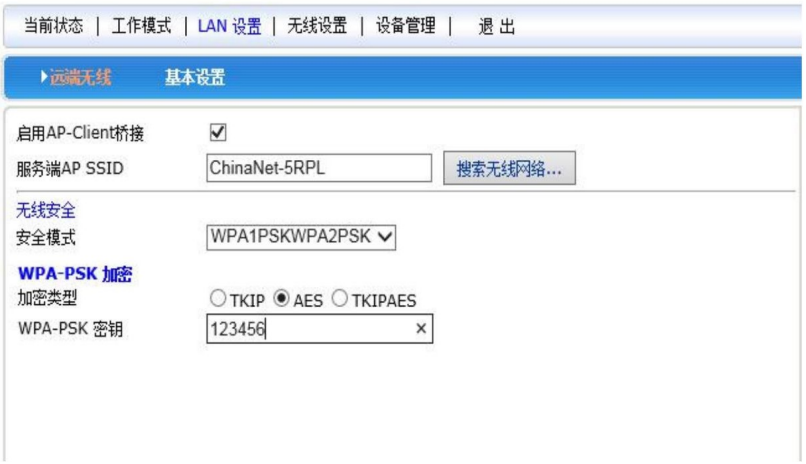
2.3.2 Click LAN settings, search for wireless networks,



2.3.3 You can see the valid wireless AP names within the current range, select the corresponding wireless AP



2.3.4 Enter the selected wireless AP password to bridge the previous wireless AP.



2.4 Wireless AP+Client Mode

Router management interface - working mode - wireless AP + client mode, click OK.

Wireless Connection - Select ApClinet-Dynamic Address (from the DHCP service) from the drop-down menu

automatically acquired by the device), click to search for wireless networks, and all the wireless networks found will be automatically popped up at this time.

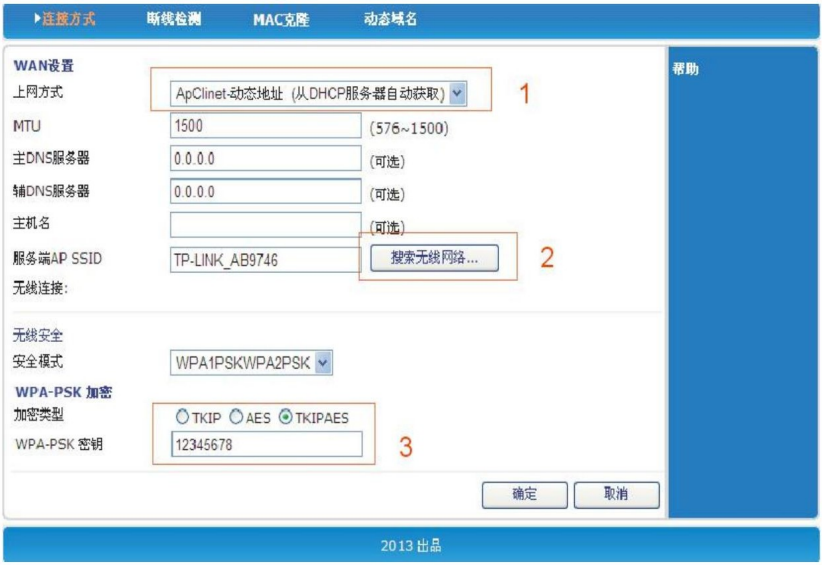
Network selection dialog box, select the WIFI network to be connected, pay attention to check the channel of the selected network

That is, what is the Channel, click to connect. If the selected WIFI has a password, please

Enter the corresponding password. At this time, pay attention to whether the password is character or hexadecimal. point

Click to confirm.

Select the corresponding Channel in the router management interface - wireless settings - wireless channel.



3. Wireless Security Settings

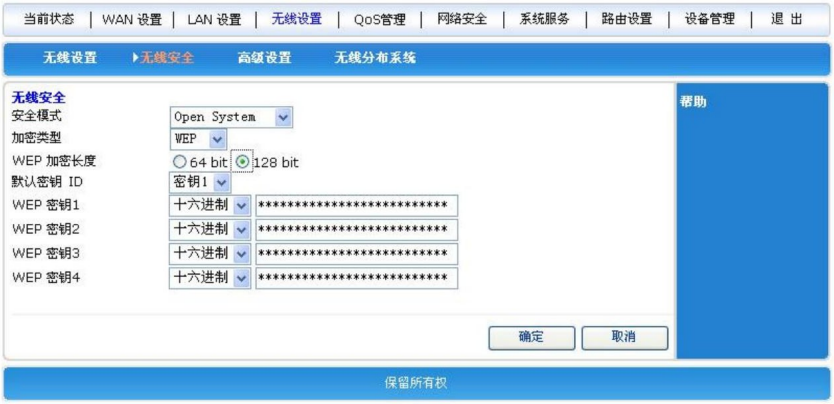
3.1 Wireless Security

There are the following types of wireless security modes, and you can choose different security modes according to your needs.

- deactivate
- Open System
- WPA
- WPA-PSK
- WPA2
- WPA2-PSK
- WPAPSKWPA2PSK (ie mixed mode of WPA-PSK and WPA2-PSK)
- WPA1WPA2 (ie WPA and WPA2 mixed mode)

3.1.1 Open System

The encryption types in this security mode are: None and WEP.



The interface description is as follows:

interface item	describe
encryption type	There are two encryption types to choose from: None and WEP. Select None to not add After selecting WEP encryption, the setting interface is as shown below.
WEP encryption length	There are two encryption lengths to choose from: 64bit and 128bit. The default value is 64bit.
Default key ID	4 keys can be set at the same time, but only 1 key can be selected to be used at the moment. This item selects the key to be used currently. The default is key 1.
WEP key	You can choose the type of key to set and set the key. There are two key types available Choices: Hex and Character. According to different encryption length and key type type, set a different key.

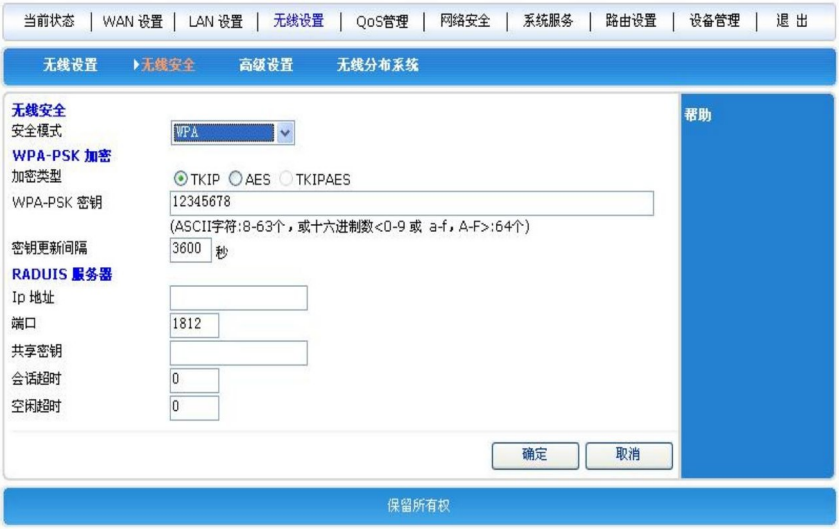
Key settings:

64bit encryption: 10-bit hexadecimal or 5-bit char.

128bit encryption: 26-bit hexadecimal or 13-bit character.

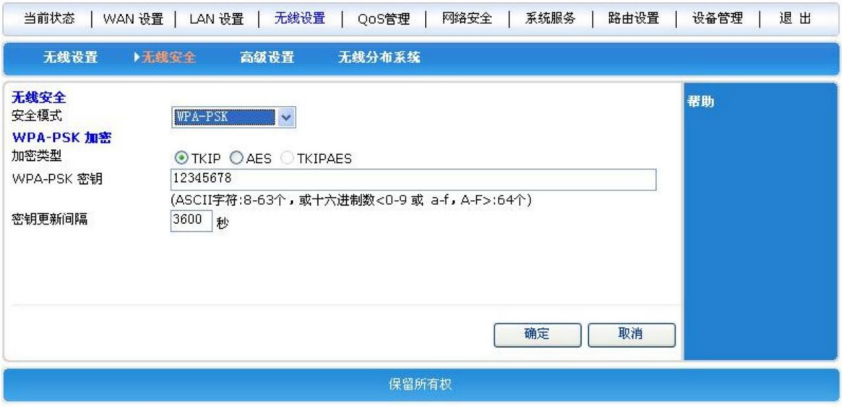
3.1.2 WPA

This security mode provides WPA-PSK encryption and Raduis server authentication.



3.1.3 WPA-PSK

This security mode is the WPA-PSK encryption mode.

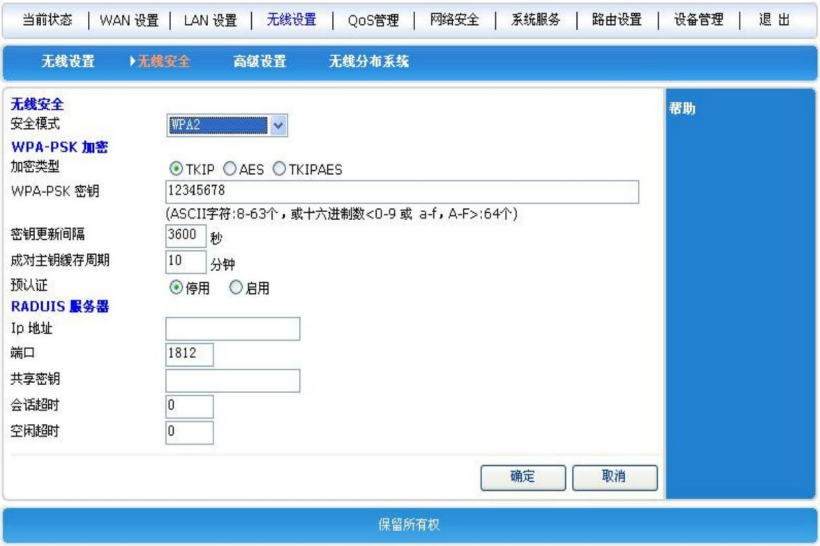


The interface description is as follows:

interface item	describe
Select WPA-PSK for safe mode.	
There are two encryption types to choose from: TKIP and AES.	
WPA-PSK key	Set the key, the legal key length is: 8-63 ASCII characters or 64 ten Hexadecimal number (0 to 9, a to f, or A to F).
Key Update Interval Set the key update interval, in seconds.	

3.1.4 WPA2

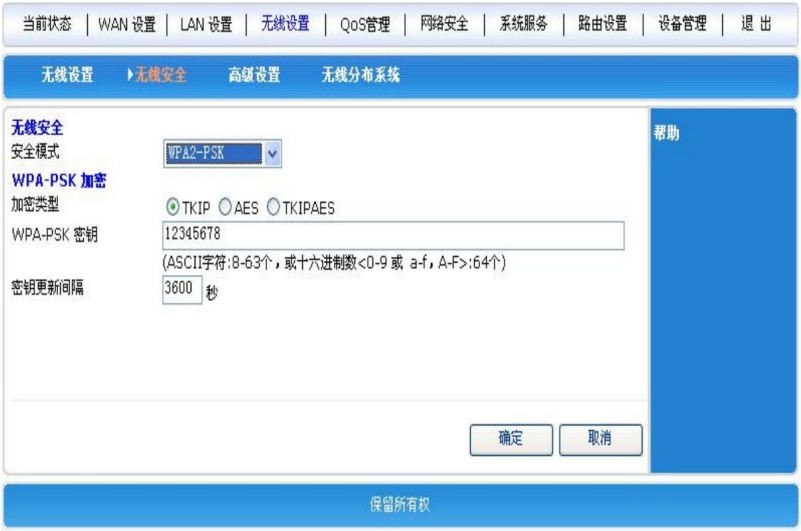
This security mode provides WPA-PSK encryption and Raduis server authentication.



The interface description is as follows:

interface item description	
Select WPA2 for safe mode.	
WPA-PSK Plus dense	Set WPA-PSK encryption information. Encryption Type: Select the encryption type, there are three options: TKIP, AES and TKIPAESÿ ·WPA-PSK key: set the key, the legal key length is: 8-63 ASCII characters or 64 hexadecimal numbers (0 to 9, a to f, or A to F). ·Key update interval: Set the key update interval, in seconds. · Paired master key cache period: · Pre-authentication:
RADUIS suit instrument	Set RADUIS server authentication information. ·IP Address: The IP address of the RADUIS server. ·Port: The communication port used by the RADUIS server. Shared key: the shared key set on the RADUIS server, which must be set here The wireless router can communicate with the RADUIS server only after the same shared key is determined. Session timeout: · Idle Timeout:

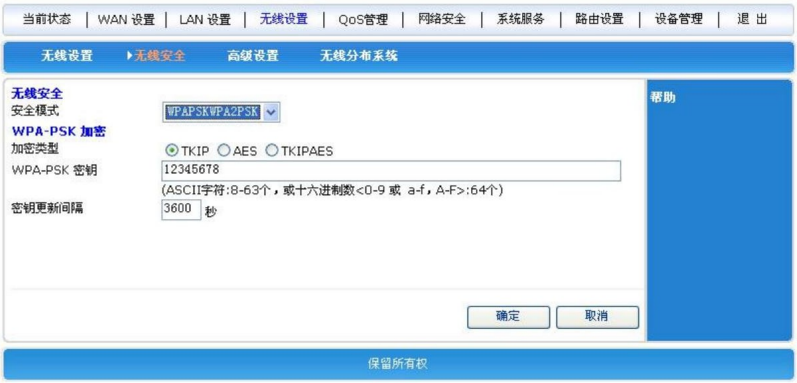
3.1.5 WPA2-PSK



The interface description is as follows:

interface item	describe
Select WPA2-PSK for safe mode.	
Three encryption types are available: TKIP, AES, and TKIPAES.	
WPA-PSK key	Set the key, the legal key length is: 8-63 ASCII characters or 64 ten Hexadecimal number (0 to 9, a to f, or A to F).
Key Update Interval Set the key update interval, in seconds.	

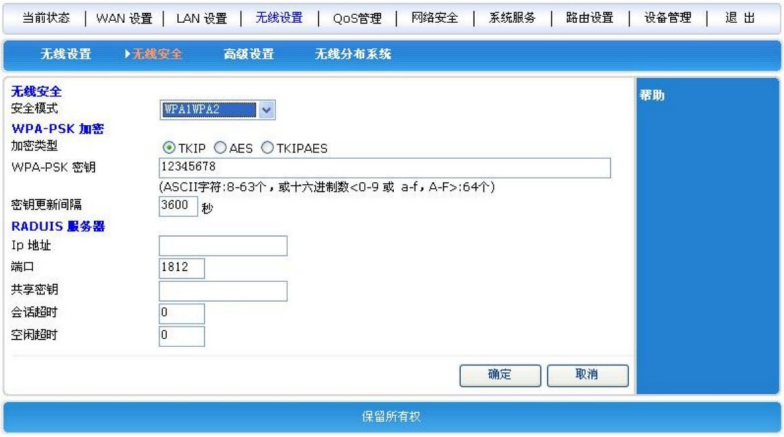
3.1.6 WPAPSKWPA2PSK



The interface description is as follows:

interface item	describe
Safe mode select WPAPSKWPA2PSK.	
Three encryption types are available: TKIP, AES, and TKIPAES.	
WPA-PSK key	Set the key, the legal key length is: 8-63 ASCII characters or 64 ten Hexadecimal number (0 to 9, a to f, or A to F).
Key Update Interval Set the key update interval, in seconds.	

3.1.7 WPA1WPA2



The interface description is as follows:

interface item	describe
Select WPA1WPA2 for security mode.	
WPA-PSK encryption	Set WPA-PSK encryption information. Encryption type: select the encryption type, there are three options: TKIP, AES and TKIPAES. ·WPA-PSK key: set the key, the legal key length is: 8-63 ASCII characters or 64 hexadecimal numbers (0 to 9, a to f, or A to F). ·Key update interval: Set the key update interval, in seconds.
RADUIS server	Set RADUIS server authentication information. ·IP Address: The IP address of the RADUIS server. ·port: The communication port used by the RADUIS server. ·Shared key: The shared key set on the RADUIS server, which must be Set the same shared key so that the wireless router can authenticate with the RADUIS server communicate. Session timeout: · Idle Timeout:

4. Device Management

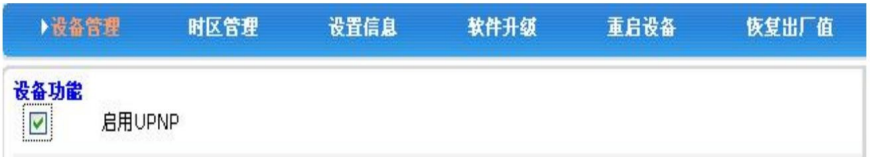
4.1 Device function

The UPnP protocol is used by Windows ME, 2000, XP and other systems. If this feature is enabled, the Causes these operating systems to automatically find routers through this protocol.

UPnP (Universal Plug and Play) is mainly used to realize the Intelligent interconnection, without user participation and use of the main server, can automatically discover and control data from various manufacturers various network equipment of the manufacturer.

When the UPnP function is enabled, the router can realize NAT traversal: when the computers in the LAN pass through.

When the wireless router communicates with the Internet, the wireless router can be automatically added and deleted as needed NAT mapping table, so as to solve the problem that some traditional services (such as MSN voice, video) cannot pass through NAT question.



Check the radio box, press the <OK> button, the setting is completed.

4.2 Software upgrade

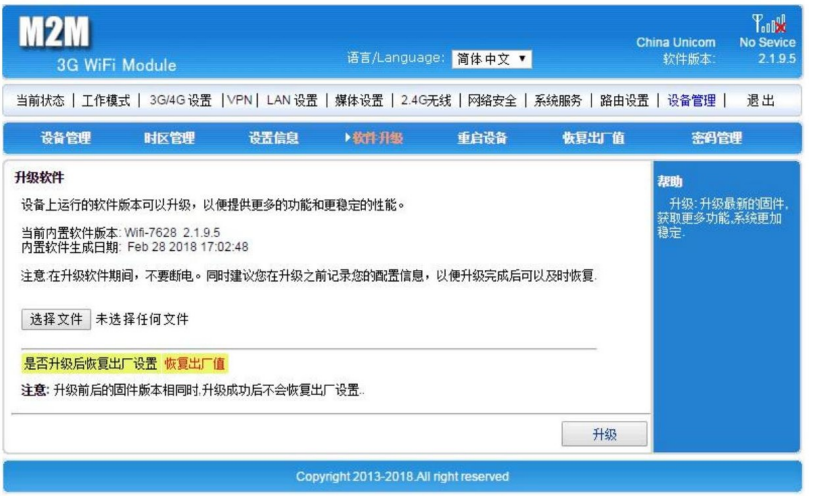
Through software upgrade, you can load the latest version of the software to the router to get more functions and more stable performance.

The software upgrade steps are as follows:

(1) Save the upgrade file of the router to the local computer.

(2) Click the <Browse> button to select the software to be upgraded.

(3) Click the <Upgrade> button to start the upgrade.



4.3 Restore factory defaults

• During the reset process, the wireless router will restart.

Restoring to factory settings will clear all setting information of the wireless router and restore it to its original state. Should

The function is generally used when the device is changed from one network environment to another different network environment.

Restore to factory settings, and then reset to suit the current network.

Click the <Restore Factory Defaults> button, and after confirmation, restore the factory settings.

4.4 Password Management

The default user name/password of the wireless router is admin, the user name cannot be changed, and the password can be changed.

For security reasons, it is recommended to modify this password and keep the password information.

The setting steps are as follows:

(1) Enter the original password in the <Original Password> text box; enter the original password in the <New Password> text box

To confirm the new password, re-enter the new password in the <Confirm Password> text box.

(2) Click the <OK> button to complete the password modification.

FCC Statement

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

The distance between user and products should be no less than 20cm.