NA502S
Multiple RF Home Gate-way

User Guide

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Document Version: 1.2

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Chapter 1
Introduction

This Chapter provides an overview of the Multiple RF Home Gateway's features and capabilities.

Congratulations on the purchase of your new Multiple RF Home Gateway. The Multiple RF Home Gateway is a consumer electronic device, which is designed to bridge all appliances of your home, from IP cameras to sensors, and allow you to monitor and manage them over the Internet. Most of the devices can be paired with the gateway via a single button push.

Package Contents

The following items should be included:

- Multiple RF Home Gateway Unit x 1
- Power Adapter x 1

If any of the above items are damaged or missing, please contact your dealer immediately.

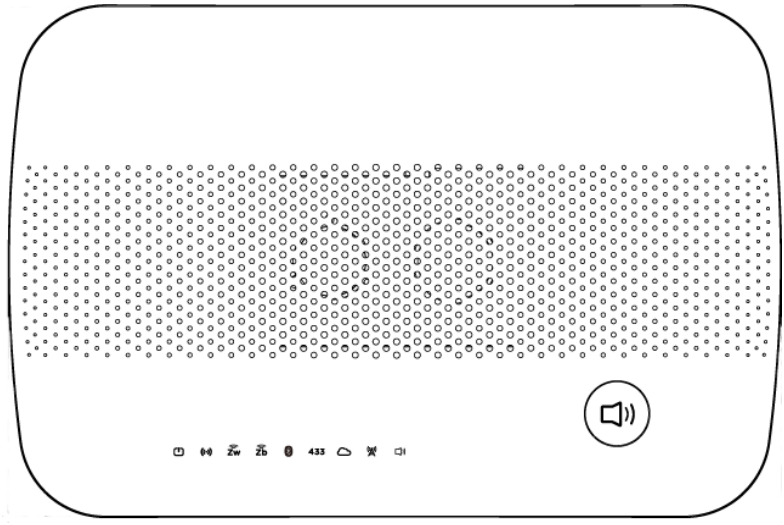
Features

- MT7621S processor with128MB Flash and 512MB RAM
- One 10/100/1000 Ethernet port with RJ45 connector
- Front Panel LEDs
- Z-Wave Transceiver
- ZigBee Transceiver
- Bluetooth Transceiver
- 3G Wireless
- USB 2.0 port
- Battery Backup (2~4 hours)
- SIM Card Slot
- Built-in Siren
- Two-way Voice
- Internal antenna for WiFi, ZigBee, Z-Wave, Bluetooth, 433/345 and 3G

LEDs

Front Panel

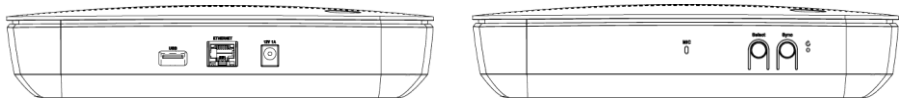
The Multiple RF Home Gateway has 9 LEDs.



POWER (Green)	• **On -** Power On/Normal Operation • **Off -** Power Off • Flashing - Rebooting.
WiFi (Green)	• **On** - WPS mode is selected. • **On (5 seconds)** - WiFi connection is established. • **Off** - No WiFi connection available. • **Flashing** - Data is being transmitted or received via the Wireless connection.
Z-Wave (Green)	• **On** - Z-Wave mode is selected. • **On (5 seconds)** - Z-Wave sensor added or synchronization is successful. • **Off** - Z-Wave module is in idle mode. • **Flashing** - Z-Wave module is in active mode.
ZigBee (Green)	• **On** - ZigBee mode is selected. • **On (5 seconds)** - ZigBee sensor added or synchronization is successful. • **Off** - ZigBee module is in idle mode. • **Flashing** - ZigBee module is in active mode.
Bluetooth LE	• **On** - Bluetooth mode is selected.

(Green)	• **On (5 seconds)** - Bluetooth sensor added or synchronization is successful. • **Off** - Bluetooth module is in idle mode. • **Flashing** - Bluetooth module is in active mode.
3G (Green)	• **On -** 3G connection established. • **Off -** No active 3G connection. • **Flashing -** Data is being transmitted or received via the 3G connection.
433MHz/345MHz (Green)	• **On** - 433MHz/345MHz mode is selected. • **On (5 seconds)** - 433MHz/345MHz sensor added or synchronization is successful. • **Off** - 433MHz/345MHz module is in idle mode. • **Flashing** - 433MHz/345MHz module is in active mode.
Service (Green)	• **On -** Cloud service is available and working properly. • **Off -** Cloud service is not available. • **Flashing -** Cloud service is not sending data properly.
Voice (Green)	• **On -** Voice function is enabled. • **Off -** Voice function is disabled. • **Flashing -** A voice call is proceeding.
Voice Button	• Push the *Voice* button on the device to start the voice call. • Push the *Voice* button for three seconds again to stop the voice call.

Rear/Side Panel



Power Port	Connect the supplied power adapter here.
ETHERNET Port	Use a standard LAN cable (RJ45 connector) to connect your PC to the port.
USB Port	The connector is USB host with support for mass storage device.
Mic	The built-in microphone is located on the side of the device.
Select Button	• Push the *Select* button on the device to choose the desired RF mode (WiFi/Z-Wave/ZigBee/Bluetooth LE/433MHz), and then the LED of the selected mode will be on. • Push the *Select* button for three seconds again to unselect the RF mode if needed.

Sync Button	• After selecting the RF mode, push the *Sync* button to synchronize the gateway and sensors. • Push the *Sync* button for three seconds again to stop the synchronization process if needed.
Reset	This button has two (2) functions: • **Reboot**. When pressed and released, the Multiple RF Home Gateway will reboot (restart). • **Clear All Data**. This button can also be used to clear ALL data and restore ALL settings to the factory default values. To Clear All Date and restore the factory default values: 1. Power On. 2. Keep holding the *Reset* Button down for 3 seconds. Release the Reset Button. The Multiple RF Home Gateway is now using the factory default values.

Chapter 2
Initial Installation

This Chapter covers the software installation of the Multiple RF Home Gateway.

Requirements

- Use a standard 10/100/1000 BaseT network (UTP) cable with RJ45 connector.

Procedure

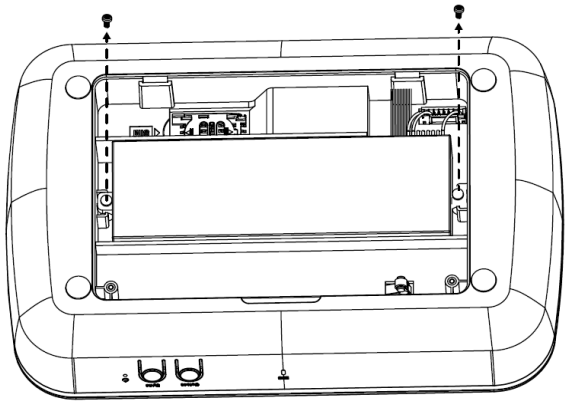
1. Choose an Installation Site

Select a suitable place to install the Multiple RF Home Gateway.

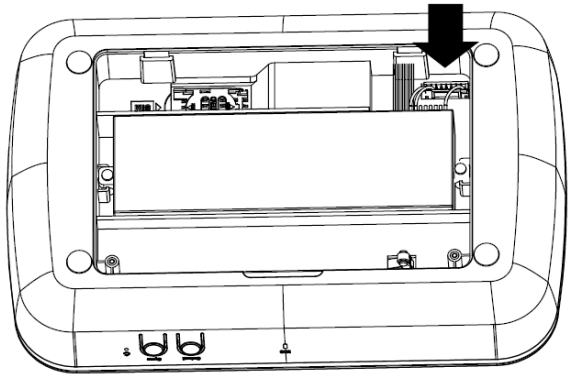
2. Connect Battery Plug Connector

The supplied backup battery can provide excellent continuous power source when disconnecting power to the device.

1. Remove the screws on the back cover of the device with a screwdriver.



2. Put the battery connector into the plug, and this will charge and maintain your device's backup battery.



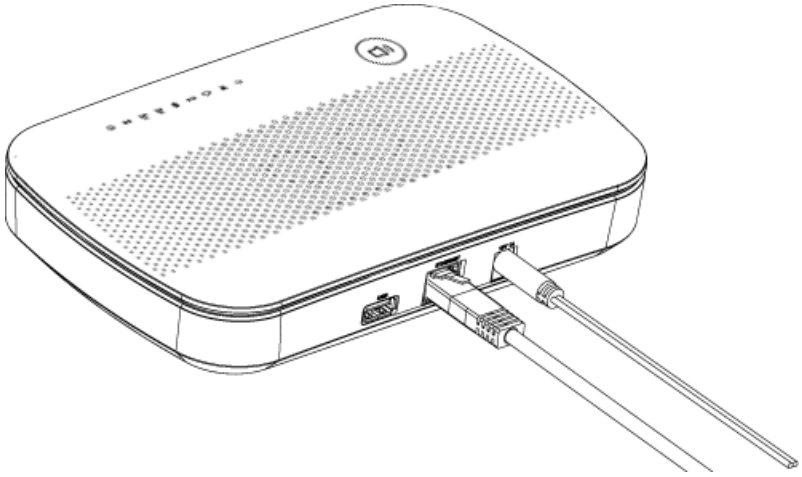
3. Attach the back cover to the device with the screws.

3. Connect LAN Cable

Use a standard LAN cable to connect the device to the Ethernet port on the Multiple RF Home Gateway.

4. Power Up

Connect the supplied power adapter to the Multiple RF Home Gateway. Use only the power adapter provided. Using a different one may cause hardware damage.

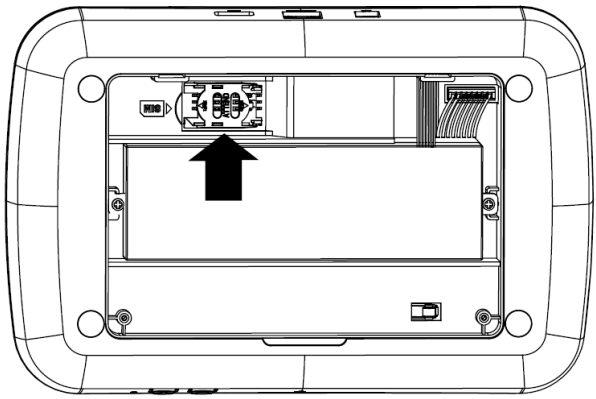


5. Check the LEDs

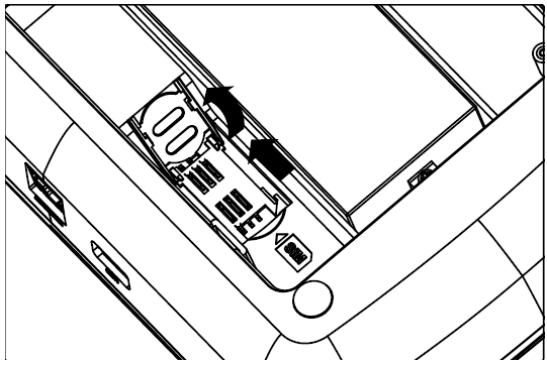
- The *Power* LED should be ON.
- The *WiFi* LED should be ON (provided the PC is also ON.)

SIM Card Installation

1. Ensured the device is powered off.
2. Remove the screws on the back cover of the device with a screwdriver.
3. Find the location of the SIM card tray.



4. Push the SIM card cover upward.



5. Insert the SIM card into the slot. Make sure the SIM card is installed correctly.
6. Put the SIM card cover back.
7. Attach the back cover to the device with the screws.

Chapter 3
Configuration

This Chapter provides Setup details of the Gateway.

Configuration

The Multiple RF Home Gateway can offer customers with seamless communication between devices and clouds while at home or away. This gateway is designed to provide complete connectivity with all certified devices including cameras, security systems and WiFi/ZigBee/Z-Wave/Bluetooth/3G devices.

Preparation

Before attempting to configure the Multiple RF Home Gateway, please ensure that:

- Your PC can establish a physical connection to the Multiple RF Home Gateway. The PC and the Multiple RF Home Gateway must be directly connected (using the Hub port on the Multiple RF Home Gateway) or on the same LAN segment.
- The Multiple RF Home Gateway must be installed and powered ON.
- Choose the desired RF mode by using the *Select* button of the gateway, and then push the *Sync* button for pairing the gateway and sensors. Make sure that the gateway and added sensors are synchronized successfully before using.

After completing the preparation, the Multiple RF Home Gateway is ready to be used.

Appendix A
Specifications

Multiple RF Home Gateway

Model	Multiple RF Home Gateway
Dimensions	222mm(W) * 148mm(D) * 48mm(H)
Operating Temperature	0° C to 40° C
Buttons	4
Network Protocol:	TCP/IP
Network Interface:	1 * 10/100/1000BaseT (RJ45) LAN connection
LEDs	9
Battery	2S1P 18650 Battery
USB Port	1 * USB 2.0 Type A Port
SIM Card Slot	1
Power Adapter	12V, 2A

Regulatory Approvals

FCC Statement

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this 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.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Country Code selection feature to be disabled for products marketed to the US/CANADA

Operation of this device is restricted to indoor use only