WiSing Quick Installation Manual

Statement :

The instructions and manuals are subject to change without notice. Not in conformity with the use of product specifications, installation and failure to fulfill the need of preventive maintenance or non-original products authorized by trying to adjust, repair or support, leading to the products and manuals for any errors, omissions or discrepancies directly or indirectly by the damage, the company does not afford liability.

Hardware Notes :

‧ Requests the steps in sequence, the first is install the wireless coordinator, followed by the installation of a wireless router and wireless transmitter.
‧ If not for the light of information described in the instructions, it means that poor or signal blockage, please check the relevant equipment and re-supply.
‧ Demand due to the project and regional differences, factory does not provide power supply and connecting cable, the client may be matching or self-purchase for 3C certification.

Software Notes :

‧ Application installation CD-ROM is provided in accordance with complementary products.
‧ Recommended operating system is Window XP or Windows Server2003 more.
‧ Implementation of software products required to install the Dotnetfx35 driver.
‧ Operating software product that can not set or connection occurs, please check the relevant equipment and re-start the software platform and re-supply.
‧ Operation of the wireless USB transmission interface modules that be installed CO.USB driver.
‧ RS232 To USB operation of the wireless transmission interface modules required to install the RS232 To USB drivers.
‧ RS-232 and RS-485 interface, the wireless transmitter because of the different transport mechanisms can not be use DataCenter Basic® monitoring software.

Software products, the statement :

This product is subsequently attached to the installation of software (hereinafter referred to as "Software Product") belong to the SensingTEK science and technology of all, only install and make use of this product. Please comply with the associated license software products, Ming ban on copying, reproduction, or outside of this product installed in other devices or storage media, Shall not be reproduced or transmitted in any manner, publish, distribute, modify, edit, or unauthorized use of this product to any software products.

Software inventory :

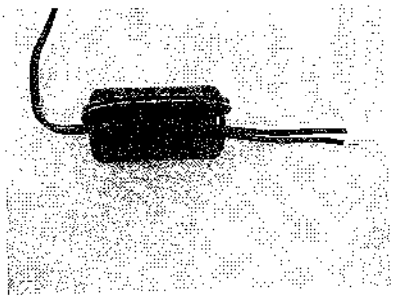
"SensingTEK software products"
(a)RF Engineering Tool®
(b)Zigbee Engineering Tool®
(c)DataCenter Basic®
(d)DataCenter OPC®

"Driver list"
(a)Dotnetfx35 Driver
(b)CO.USB Driver
(c)RS232 To USB Driver

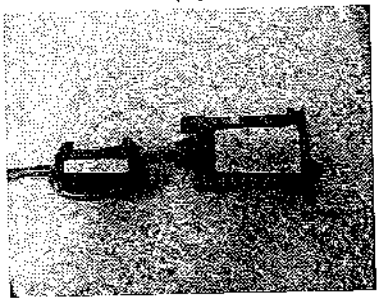
Basic Package contents : (Subject to the actual number of factory)

Wireless Coordinator *1
Wireless Transmitter *1
Omni-directional antenna *1
Application installation CD-ROM *1(With Quick Installation Manual)
Ferrite core (1) / brand: CHILISIN, model: ZLF-110 *1
Ferrite core (2) / brand: EROCORE, model: PH0900B-2 *1 (only for cable RS-232)
Note: Please add ferrite core (1) on the power cable & ferrite core (2) on cable RS-232 such as following before use.

(1)



(2)



Zigbee/HighPower Hardware manual

Guide Directory :

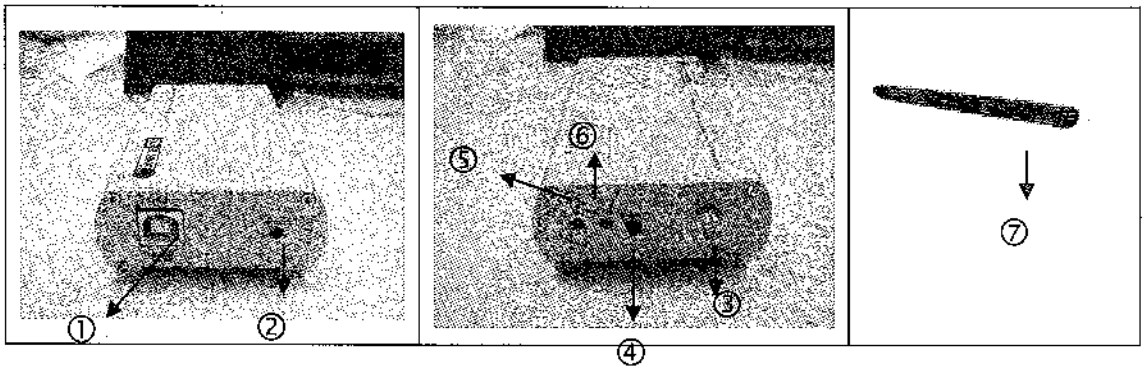
A) Product before the operation instructions

1) To confirm contents of this package type and quantity of products.
2) Prepare product external equipment and related tools.
3) Products manufactured in accordance with the attached application installed on the computer side.
4) Hardware installation and software configuration steps: First install the wireless Coordinator, followed by the installation of a wireless router, wireless transmitters.
5) In accordance with the wireless Coordinator transmission interface, manually set the computer IP address or search for a computer COM Port.
6) Open the software products (configuration software / monitoring software), and use the guide to operate the product in accordance with.

‣A-1 In accordance with the wireless Coordinator transmission interface, perform the following steps :

▪"configure IP address by hand"
If you are using Ethernet transmission interface, a wireless Coordinator, in the manually set IP address to be given to know the following information on the wireless coordinator factory default values:
IP Address: 192.168.0.99
Mask: 255.255.255.0
In the."Regional Online-Internet Protocol" set up a personal computer IP address, the address must be manually set in the same domain. For example: IP Address 192.168.0.XXX XXX Can be 1-254 (not the same as the Coordinator IP address), and has not been occupied by other devices any one

Zigbee Wireless Coordinator (USB)



model : COZ101

① USB Port	Transmission Interface
② Reset	Hardware Power Supply Reset
③ SMA	Antenna connector
④ FUNC	Mode switching
⑤ LED Green	Communication signal
⑥ LED Red	Set / transmit signals
⑦ Antenna	5dBi Omni-directional antenna

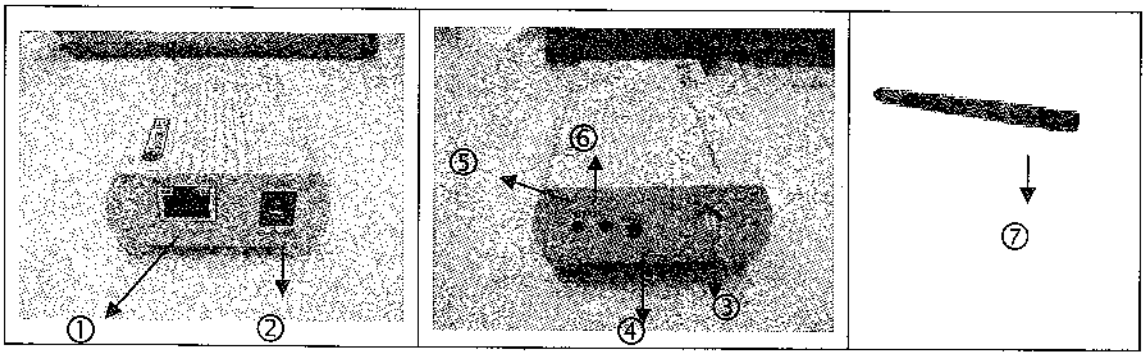
Communication mode

1. The USB cable to connect the wireless Coordinator and a separate computer terminals.
2. After connecting power, LED Green blink three times before, LED Red, after successive flashes off, until the LED Green constant light, that is modes of communication.
3. Communication process, LED Red showed flashes state reception.

Set Mode

1. Hold down the FUNC key to the Coordinator first, and then into the power supply. To be the first flashing LED Green 3, the follow-LED Red Light-up can release FUNC key to enter the setting mode operation method.
2. Configuration mode, LED Green constant light, LED Red flashing.
3. Refer to "RF to set the software operation manual (B)" the implementation of group settings.
4. After setting up, re-plug USB cable or press the Reset button, you can enter the communication mode.

Zigbee Wireless Coordinator (Ethernet)



model : COZ100

① Ethernet Port	Transmission Interface
② Power Supply Port	Hardware Power Supply Reset
③ SMA	Power supply ports
④ FUNC	Antenna connector
⑤ LED Green	Communication signal
⑥ LED Red	Set / transmit signals
⑦ Antenna	5dBi Omni-directional antenna

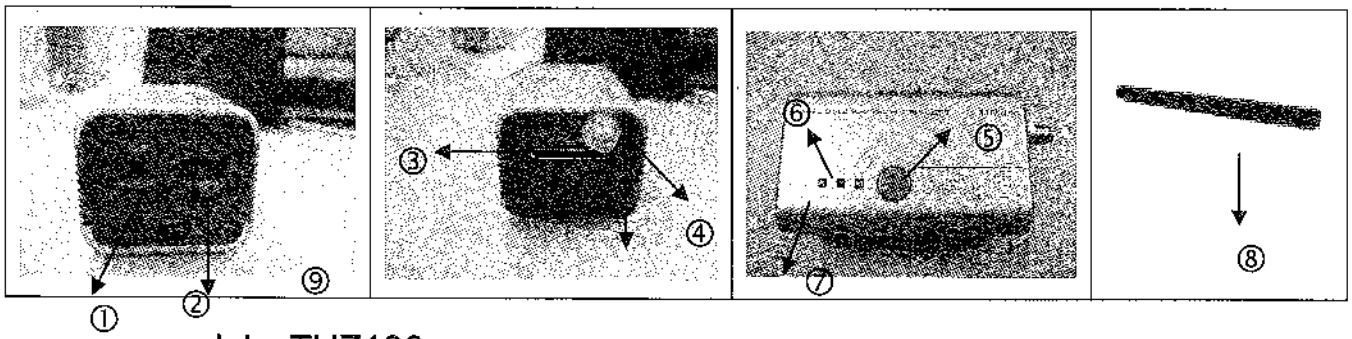
Communication mode

1. Ethernet cable to connect the wireless Coordinator and a separate computer terminal.
2. After connecting power, LED Green blink three times before, LED Red, after successive flashes off, until the LED Green constant light, that is modes of communication.
3. Communication process, LED Red showed flashes state reception.

Set Mode

1. Hold down the FUNC key to the Coordinator first, and then into the power supply. To be the first flashing LED Green 3, the follow-LED Red Light-up can release FUNC key to enter the setting mode operation method.
2. Configuration mode, LED Green constant light, LED Red flashing.
3. Refer to "RF to set the software operation manual (B)" the implementation of group settings.
4. Is set up, re-plug the power or press the Reset button, you can enter the communication mode.

Zigbee Wireless temperature and humidity devices



model : THZ100

① Power	Power Switch
② Power Supply Port	Power Supply Port
③ External Connector	External expansion ports
④ Sensing Stack	Sensor window slot
⑤ FUNC	Mode switching
⑥ LED Green	Communication signal
⑦ LED Red	Set / transmit signals
⑧ Antenna	5dBi Omni-directional antenna
⑨ Battery Stack	The battery cover switch (AA alkaline batteries * 2)
⑩ SMA	Power supply ports

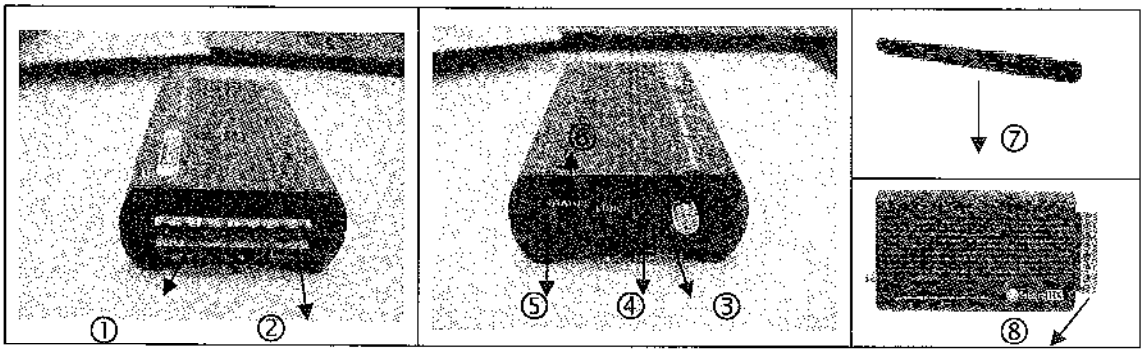
Communication mode

1. Confirmed that the wireless Coordinator for the communications status.
2. After the wireless transmitter to connect the power, LED Green blink three times before, LED Blue, after successive flashes out, that is modes of communication.
3. Communication process, LED Blue showed flashes as a signal transmission state.

Set Mode

1. Before the transmitter set to be given on, it must to be sure the wireless Coordinator is set up.
2. Hold down the FUNC key transmitter first, and then into the power supply. Be LED Green flashes three times after the stop, according to a follow-FUNC key to enter the setting mode operation method.
3. Configuration mode, LED Green off, LED Blue constant light.
4. Refer to "RF to set the software operation manual (D)" the implementation of group settings
5. Is set up, re-open the power supply, you can enter the communication mode.

Zigbee Wireless Analog Input Transmitter



Model : AIZ100

① Analogy Input	Three groups of external analog signal
② DC IN	Power Supply Port
③ SMA	Antenna connector
④ FUNC	Mode switching
⑤ LED Green	Communication signal
⑥ LED Red	Set / transmit signals
⑦ Antenna	5dBi Omni-directional antenna
⑧ Connector	8pins Strip

Communication mode

1. Confirmed that the wireless Coordinator for the communications status.
2. The wireless transmitter and detection equipment setup.
3. After connecting power, LED Green blink three times before, LED Red, after successive flashes off, until the LED Green constant light, that is, modes of communication.
4. Communication process, LED Red showed flashes state signal transmission.

Set Mode

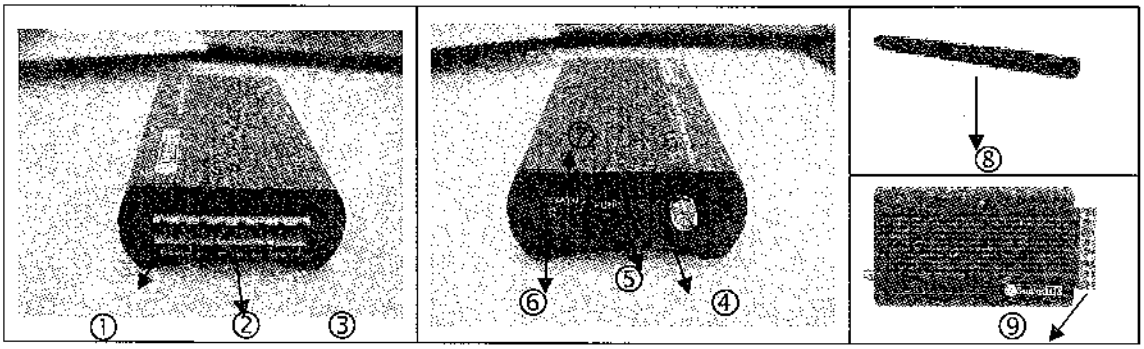
1. Before the transmitter set to be given on, it must to be sure the wireless Coordinator is set up. 2. Hold down the FUNC key transmitter first, and then into the power supply. To be the first LED Green blinking three times, LED Red, after successive flashes off, and then once a FUNC key to enter the setting mode operation method.
3. Configuration mode, LED Green off, LED Red constant light.
4. Refer to "RF to set the software operation manual (D)" the implementation of group settings.

5. The implementation of this module the software settings, （A / D Range）

be the same as with the Jump settings. (See Annex D-1)

6. Is set up, re-plug power supply, you can enter the communication mode.

Zigbee Wireless Digital Input Transmitter



model : DIZ100

① GND	Total Venue
② Digital Input	External four digital signals
③ DC IN	Power Supply Port
④ SMA	Antenna connector
⑤ FUNC	Mode switching
⑥ LED Green	Communication signal
⑦ LED Red	Set / transmit signals
⑧ Antenna	5dBi Omni-directional antenna
⑨ Connector	8pins Strip

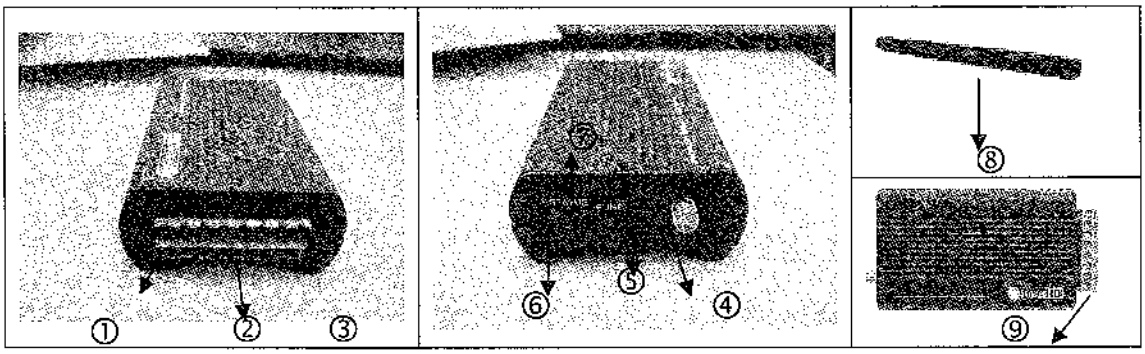
Communication mode

1. Confirmed that the wireless Coordinator for the communications status.
2. The wireless transmitter and detection equipment setup.
3. After connecting power, LED Green blink three times before, LED Red, after successive flashes off, until the LED Green constant light, that is, modes of communication.
4. Communication process, LED Red showed flashes the status of the signal transmission.

Set Mode

1. Before the transmitter set to be given on, it must to be sure the wireless Coordinator is set up.
2. Transmitter holding down the FUNC key first, and then into the power supply. To be the first LED Green blinking three times, LED Red, after successive flashes off, and then once a FUNC key to enter the setting mode operation method.
3. Configuration mode, LED Green off, LED Red constant light.
4. Reference to "Zigbee setup software manual (D)" the implementation of group settings.
5. Is set up, re-plug power supply, you can enter the communication mode.

Zigbee Wireless Digital Output Transmitter



model : DOZ100

① Digital Output	Add three digital signals
② DO Port Enable Switch	Dry-contact switch
③ DC IN	Power Supply Interface
④ SMA	Antenna connector
⑤ FUNC	Mode switching
⑥ LED Green	Communication signal
⑦ LED Red	Set / transmit signals
⑧ Antenna	5dBi Omni-directional antenna
⑨ Connector	8pins Strip

Communication mode

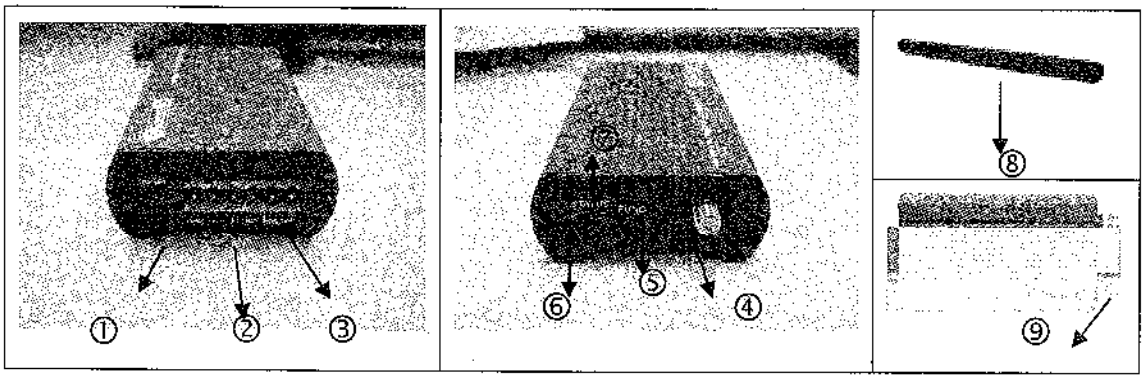
1. Confirmed that the wireless Coordinator for the communications status.
2. The wireless transmitter and detection equipment is set to complete.
3. After connecting power, LED Green blink three times before, LED Red, after successive flashes off, until the LED Green constant light, that is, modes of communication.
4. Communication process, LED Red showed flashes state signal transmission.

Set Mode

1. Before the transmitter set to be given on, it must to be sure the wireless Coordinator is set up.
2. Transmitter holding down the FUNC key first, and then into the power supply. To be the first LED Green blinking three times, LED Red, after successive flashes off, and then once a FUNC key to enter the setting mode operation method.
3. Configuration mode, LED Green off, LED Red constant light.
4. Reference to "Zigbee setup software manual (D)" the implementation of group settings.

5. Is set up, re-plug power supply, you can enter the communication mode.

Zigbee Wireless RS-485 Interface Transmitter



Model : RSZ485

① GND	Add three digital signals
② RS-485 Port	Dry-contact switch
③ DC IN	Power Supply Interface
④ SMA	Antenna connector
⑤ FUNC	Mode switching
⑥ LED Green	Communication signal
⑦ LED Red	Set / transmit signals
⑧ Antenna	5dBi Omni-directional antenna
⑨ Connector	6pins Strip

Communication mode

1. Confirmed that the wireless Coordinator for the communications status.
2. The wireless transmitter and detection equipment is set to complete.
3. After connecting power, LED Green blink three times before, LED Red, after successive flashes off, until the LED Green constant light, that is, modes of communication.
4. Communication process, LED Red showed flashes state signal transmission.

Set Mode

1. Before the transmitter set to be given on, it must to be sure the wireless Coordinator is set up.
2. Transmitter holding down the FUNC key first, and then into the power supply.

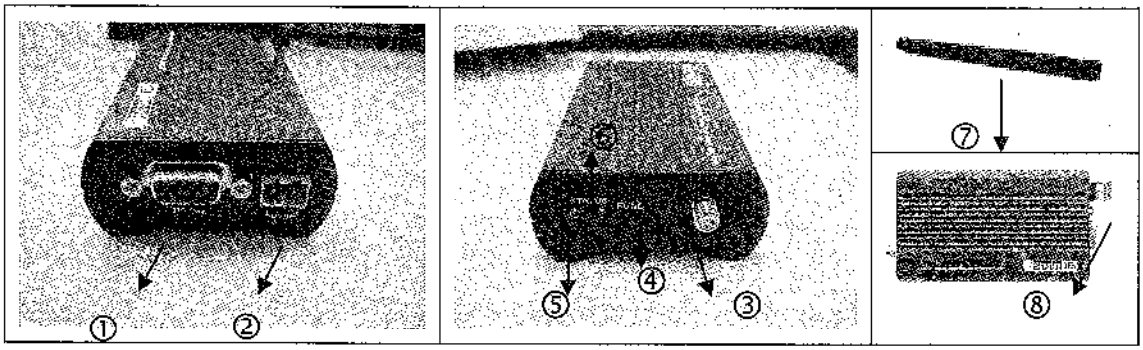
To be the first LED Green blinking three times, LED Red, after successive flashes off, and then once a FUNC key to enter the setting mode operation method.

3. Configuration mode, LED Green off, LED Red constant light.

4. Reference to "Zigbee setup software manual (D)" the implementation of group settings.

5. Is set up, re-plug power supply, you can enter the communication mode.

Zigbee Wireless RS-232 Interface Transmitter



model : RSZ232,RSH232

① RS-232 Port	Add three digital signals
② DC IN	Dry-contact switch
③ SMA	Power Supply Interface
④ FUNC	Antenna connector
⑤ LED Green	Communication signal
⑥ LED Red	Set / transmit signals
⑦ Antenna	5dBiOmni-directional antenna
⑧ Connector	2pins Strip

Communication mode

1. Confirmed that the wireless Coordinator for the communications status.

2. The wireless transmitter and detection equipment is set to complete.

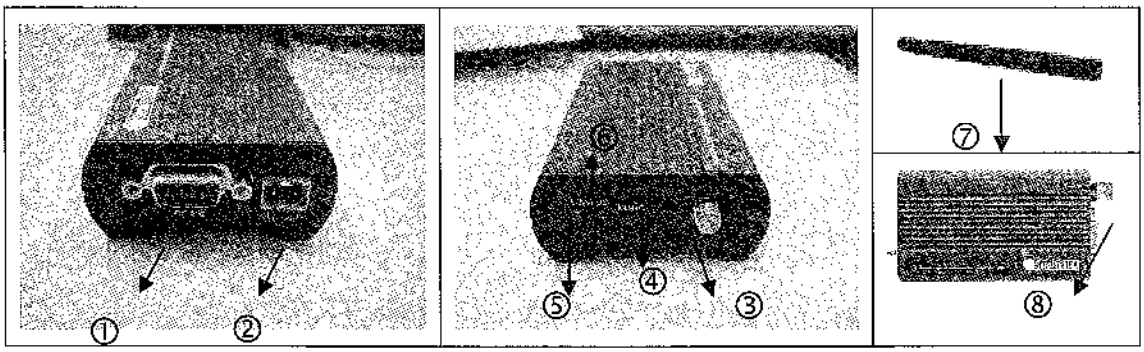
3. After connecting power, LED Green blink three times before, LED Red, after successive flashes off, until the LED Green constant light, that is, modes of communication.

4. Communication process, LED Red showed flashes state signal transmission.

Set Mode

1. Before the transmitter set to be given on, it must to be sure the wireless Coordinator is set up.
2. Transmitter holding down the FUNC key first, and then into the power supply. To be the first LED Green blinking three times, LED Red, after successive flashes off, and then once a FUNC key to enter the setting mode operation method.
3. Configuration mode, LED Green off, LED Red constant light.
4. Reference to "Zigbee setup software manual (D)" the implementation of group settings.
5. Is set up, re-plug power supply, you can enter the communication mode.

Wireless Router RS-232 interface



model : RSZ232,RSH232

① RS-232 Port	Add three digital signals
② DC IN	Power Supply Interface
③ SMA	Antenna connector
④ FUNC	Mode switching
⑤ LED Green	Communication signal
⑥ LED Red	Set / transmit signals
⑦ Antenna	5dBiOmni-directional antenna
⑧ Connector	2pins Strip

Communication mode

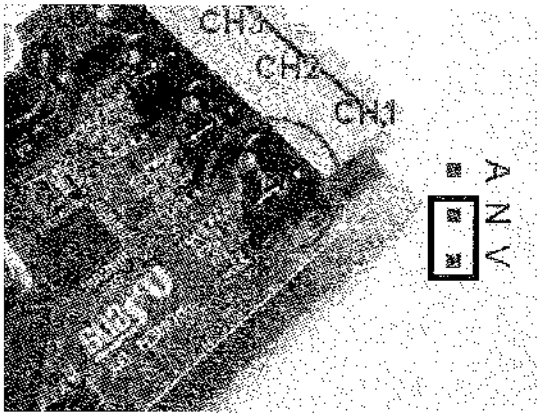
1. Confirmed that the wireless Coordinator for the communications status.
2. The wireless transmitter and detection equipment is set to complete.
3. After connecting power, LED Green blink three times before, LED Red, after successive flashes off, until the LED Green constant light, that is, modes of communication.
4. Communication process, LED Red showed flashes state signal transmission.

Set Mode

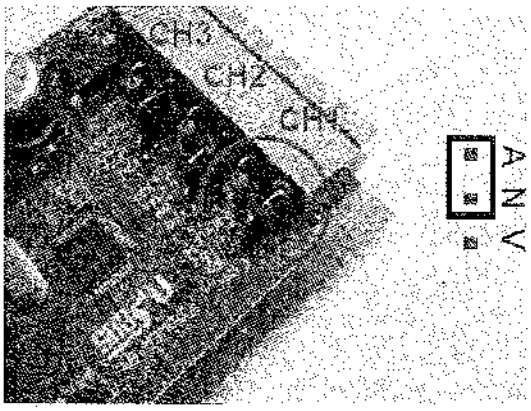
1. Before the transmitter set to be given on, it must to be sure the wireless Coordinator is set up.
2. Transmitter holding down the FUNC key first, and then into the power supply. To be the first LED Green blinking three times, LED Red, after successive flashes off, and then once a FUNC key to enter the setting mode operation method.
3. Configuration mode, LED Green off, LED Red constant light.
4. Reference to "Zigbee setup software manual (D)" the implementation of group settings.
5. Is set up, re-plug power supply, you can enter the communication mode.

D) Accessories

›D-1 Jump Set Description



0-1V,0-5V,0-10V Jump place



0-20mA,4-20mA Jump place

Steps

1. Confirmed detection equipment signal conversion mode (V / mA).
2. Cross-clamp removal by the shell.
3. Each wireless transmitter is only set up the same analog input signal mode.
4. Jump location in accordance with the icon to install assembly shell to complete the Jump setting.

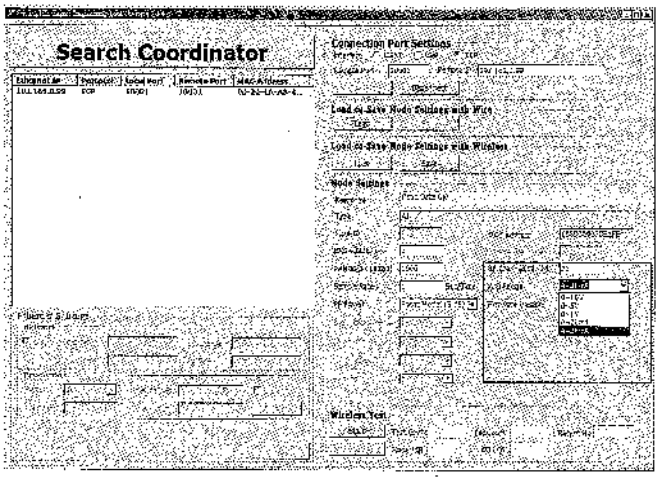
Notes :

Software settings on the RF

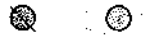
will be displayed （ A / D

Range ） option (see right);

depending on the device to adjust the signal conversion mode, and with the module to set the same as Jump.



› D-2 LED Light shows

State	Show		Description
Normal Light		LED Green has been lit , LED Red Scintillation	The normal communication state; blinking cycle of sending and receiving signals based on the module which is different from the interval in seconds
		LED Green quench , LED Red has been lit	For (THZ100) the normal communication state; blinking cycle of the module to send signals based on the number of seconds which is different from the interval
Distress signal		LED Green has been lit , LED Red has been lit	Set the mode of state for the Coordinator (COZ101, COZ100) / node (AIR100, DOZ100)
		LED Green quench , LED Red has been lit	Set Mode Status for the node (DIZ100, RSZ485, RSZ232,RSH232)
		LED Green has been lit , LED Blue Scintillation	Set mode status for the node (THZ100) setting mode status
Abnormal signal		LED Green and ED RedFlashing at the same time continuing	In the communication state, show that the light changes, as offline, check network group communication whether it is normal / modules communication distance is blocked
		LED Green with LED Red sustained have been lit	In the communication state, show that the signal change is for the signal transmission / reception of signals blocked, please check the relevant equipment and re-supply

Note:

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating to conjunction with any other antenna or transmitter.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Affixed to the body of the FCC product labels:

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.

Note:

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 instruction, may cause harmful interference to radio communication. However, there is no grantee that interference will not occur in a particular installation. If this equipment dose 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 or more 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.