WLS-T02

Congratulations! ·······································

Thanks for purchasing the WLS-T02 module – Wireless Location System Transmitter. This Quick Start will provide related information which needed to get start with the WLS-T02 module.

What's In the Box! ·································

In addition to this guide, the package includes the following items:

WLS-T02

CR-123A 3.0v Lithium battery (4SI11G0000009)

Quick Start

Technical Support ·······························

- **WLS-T02 Website**

  http://m2m.icpdas.com/WLS-T02.html

- **ICP DAS Website**

  http://www.icpdas.com/

◢ Appearance

No.	Description
1	LED Indicator
2	Buzzer
3	Up
4	Down
5	CR-123A 3.0v battery

◢ Preparing the Device

Use the Phillips screwdriver to loosen the back cover screws, open the case and place the CR123A 3.0v battery as shown in Figure 1。(CAUTION: Do not reverse the installation of the battery, and the battery is a disposable non-rechargeable lithium battery, do not use the charger to charge)

Loosen the back cover screws

overturned

Fig1. Battery installation

Mode, Button function and LED description

WLS-T02 has built-in two modes, "Running mode" and "Setting mode".

The functions of these two modes are described as follows:

1. Running mode: This mode is used to transmit location package every 3 seconds in the background. In this mode, the user can press the button to enter the setting mode. When the pre-job as above section is completed, WLS-T02 will default to the "Running Mode".

2. Setting mode: This mode is used to transmit Node ID forcefully to WLS-CFG, or enter to "long time sleep status". If the user does not press any button for 8 seconds, the module will automatically save and directly enable the setting value, and then leave the "Setting Mode". Then, if WLS-T02 doesn't enter "long time sleep status", it will return to the "Running Mode".

In the above two modes, pressing different buttons will correspond to different functions, and various functions will be indicated by the different blinking frequency of LED. Please refer to Fig2, Fig3, Table1 and Table2:
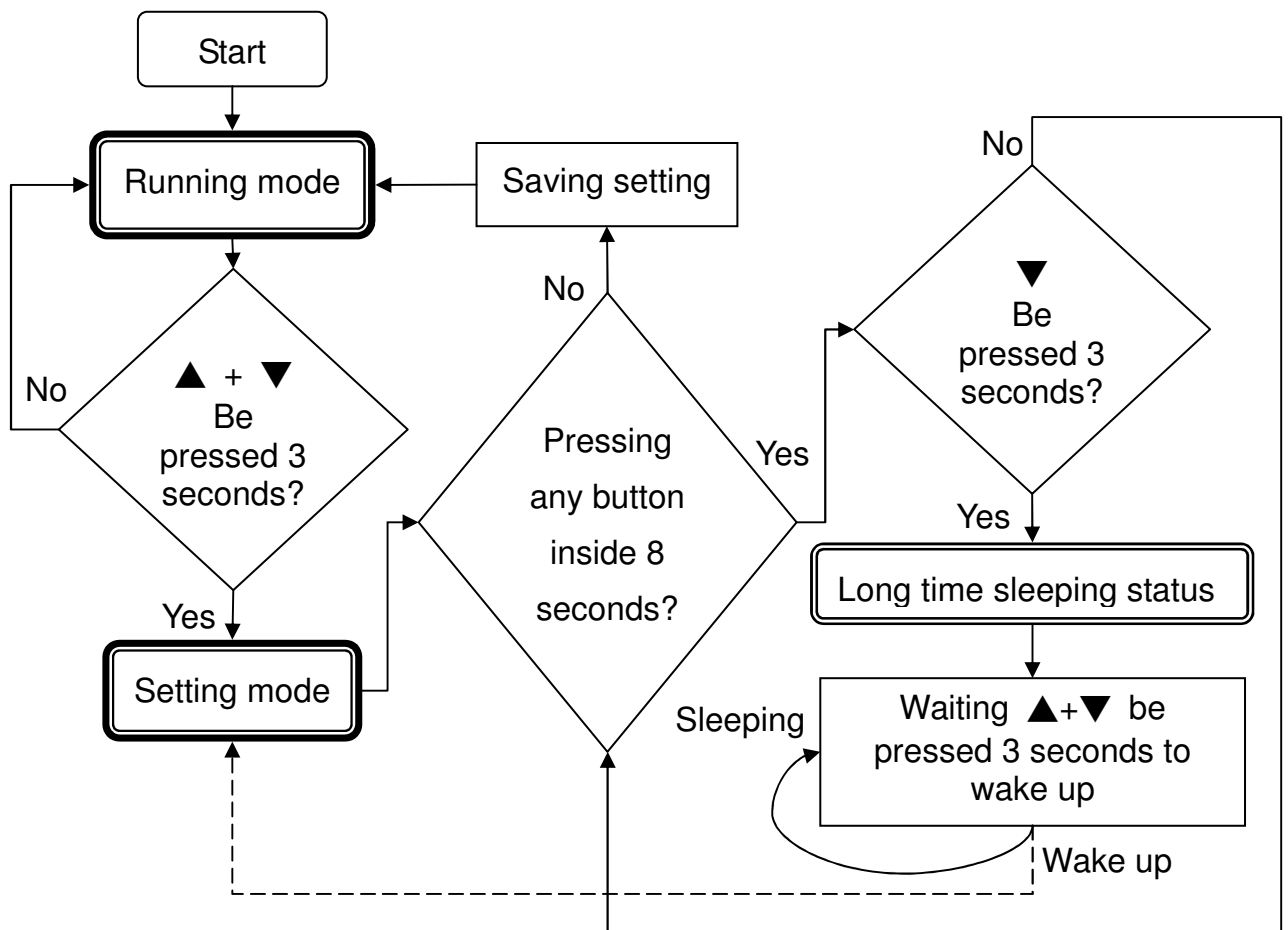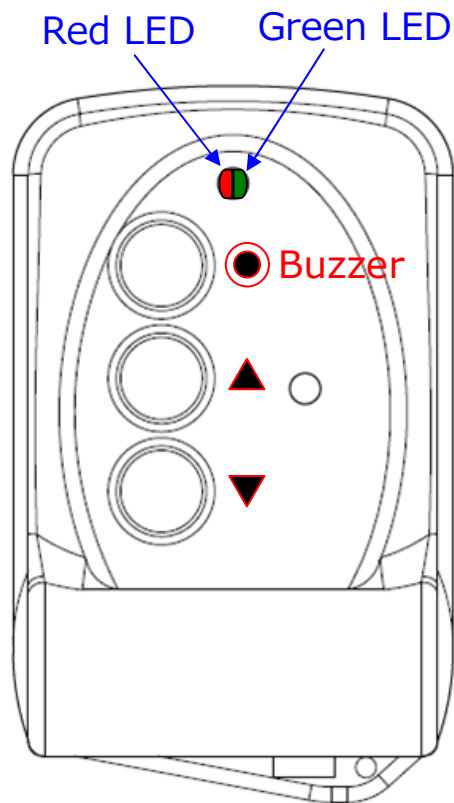

Fig2. State flow chart

Fig3. LED indicator

Table1. Running mode description

Running mode (default)			
Item	**Button**	**LED status**	**Description**
1	●	None	Buzzer is installed, the button has no effect.
2	▲ + ▼	Green LED blink every 0.5 second, and it change to red LED blink after 3 second. At this time, WLS-T02 has entered setting mode.	Pressing the two buttons together for 3 second will enter setting mode.
3	No pressing	Red LED blinks every 3 second.	Battery is low power.

Table2. Setting mode description

Setting mode			
Item	**Button**	**LED status**	**Description**
1	●: None ▲: None ▼: Long time sleeping	A Red LED blinks every 0.2 second. B Pressing the ▼ button for 3 seconds, and then the green LED and red LED will blink together for 1 second. At this time, WLS-T02 has entered long time sleeping status.	Automatically transmit Node ID of module every 1 second, and supply the selection whether enter long time sleeping status. If WLS-T02 doesn't enter long time sleeping status, it will leave automatically setting mode to running mode after 8 seconds.

Long time sleeping status			
Item	**Button**	**LED status**	**Description**
1	●：None ▲：Wake up ▼：Wake up	A Single press ▲ or ▼, LED has no effect。 B Pressing ▲ and ▼ together for 3 seconds will enter setting mode and wake up the system.	In this status, the system will enter long time sleeping to reduce power consumption. The user can use ▲ and ▼ together to wake up the system.

◤ Start to use

Wireless Location System (WLS) includes the modules that RFU-400, WLS-T02, WLS-R01 and WLS software (WLS-analyzer), as show in figure 4. The user needs to check the wireless setting of each module as below. If the user need more detail about parameters of wireless setting, please refer to the user manual of each module.
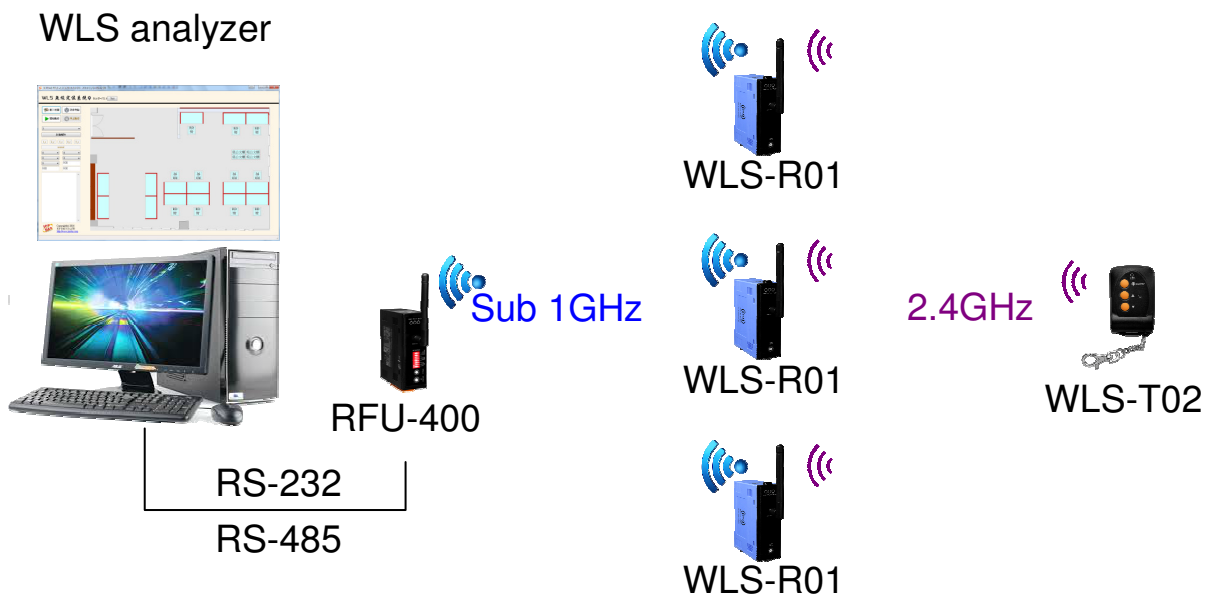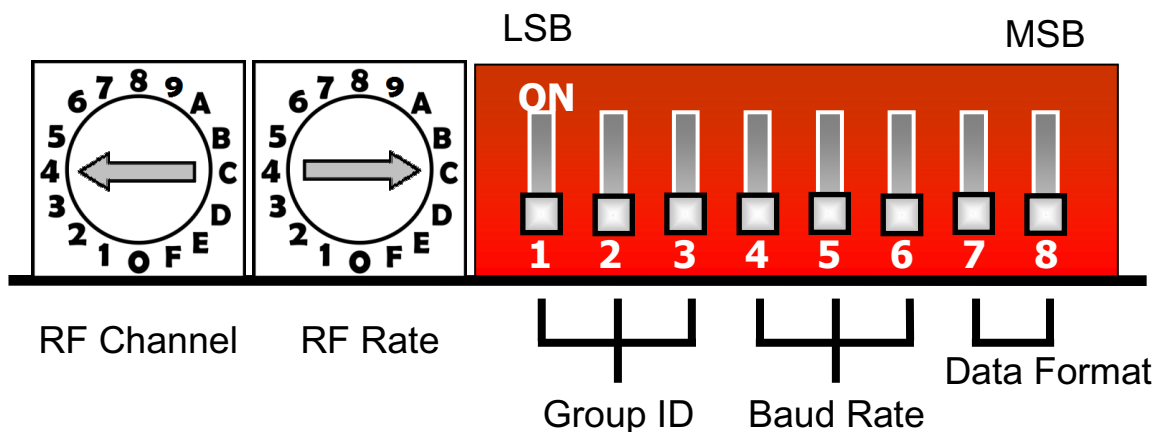
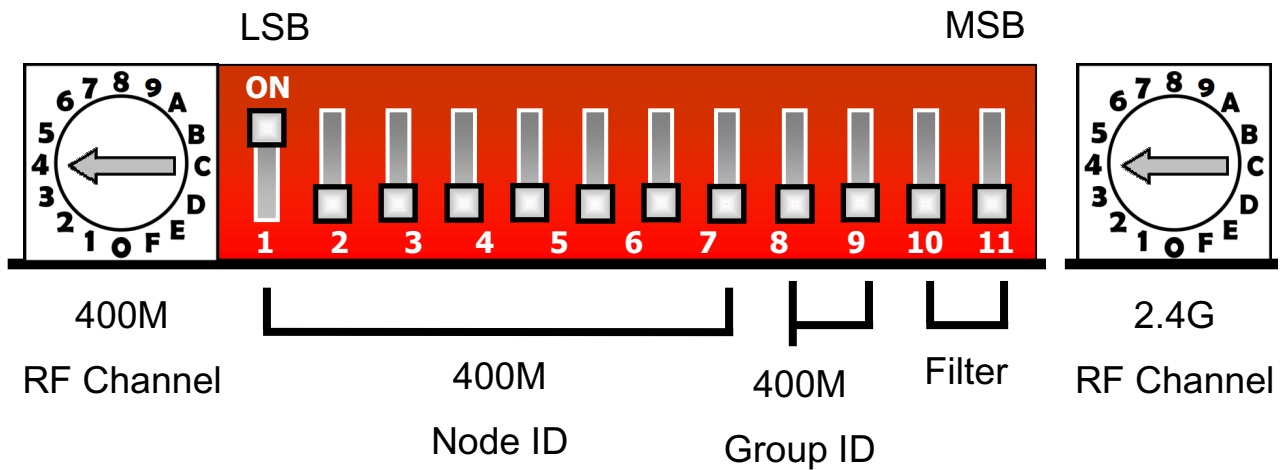WLS analyzer

Fig4. Wireless Location System Architecture

1. RFU-400：

2. WLS-T02：

It is not required to adjust the wireless setting of WLS-T02. The default value about RF channel is 4, RF power is F, Node ID is the last two bytes of build-in IEEE address. If the user adjust WLS-R01 2.4GHz RF channel to 4, the WLS-R01 will can receive the wireless package.

3. WLS-R01：

� Remarks

1. If you encounter any difficulties, please send the problem description to the service@icpdas.com mailbox, there will be someone to serve you.
2. If the user needs to replace the lithium battery, you can purchase in electronic business, or refer to accessories in the product page.