Cloud Access Gateway

GWB-1248 Instruction Manual

Dear customer, Thank you for using GWB-1248, in order to facilitate your correct operation of this product, please read the instructions before use

GWB-1482 Manual

1. Introduction

GWB-1482 is a kind of gateway device that is used to help improve the performance of Leviton BitWise controllers (especially BC4 controller). The key feature is to allow you controlling the Leviton BitWise controller from remote using 3G/4G or your office's WiFi connection. There are 3 kind of licenses available for use: Basic, Advanced, Ultimate. Each license key is bound with a specified GWB-1248.

Basic license: This license enables your Leviton BitWise controller to be controlled remotely without any DDNS service or port forwarding. What you need to do is to make sure that GWB-1248 connected to Internet. We take care of the remote connection. Also you need your iPhone/iPad to be able to connect to Internet too.

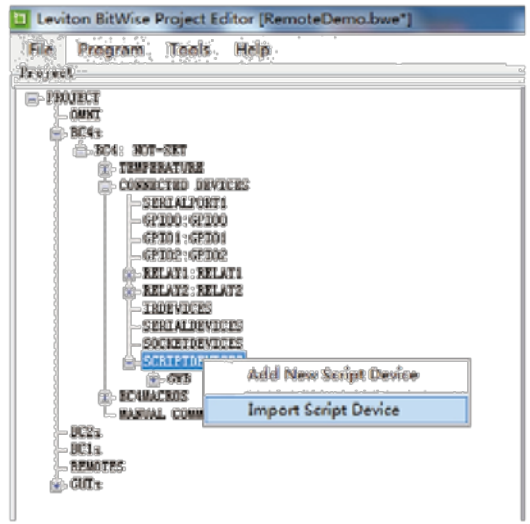
Advanced license: This license enables the unlimited tcp client connections for BC4 controller which has only one tcp client connection ability. Since BC2/BC1 has unlimited tcp client ability too, this feature is only good for BC4 controller.

Ultimate license: Since we have extra ports for extension for BCs controllers. This license will enable you using them. You can use your BCs controller for controlling devices using our extension ports. We have:

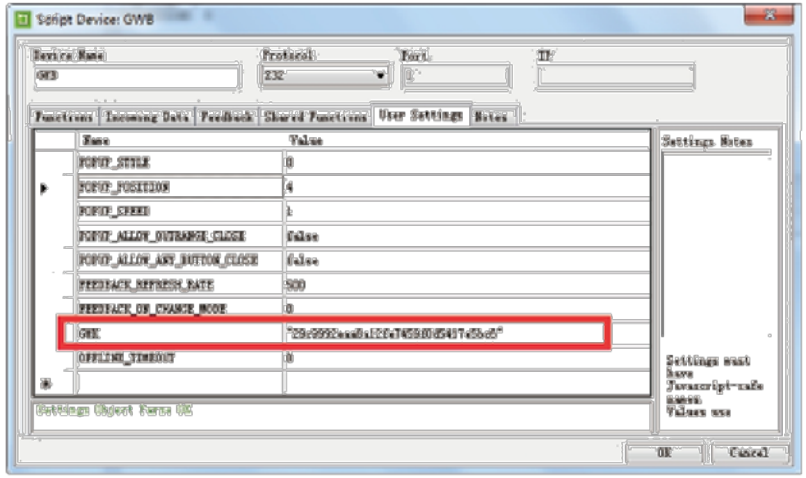
1) RS485 x1
2) High Power Relay x 4 (220VAC/10A)
3) Dry contact input ports x 8
4) USB x 2

2. Product picture

1) Open your existing BitWise UI file using Project Editor and import our GWB script device.



2) Right click the GWB and clicked at the "Properties" and then fill the GWK field with your gateway's GWK code listed in the GWB-1248's web page.



Please note that you should include wrap your GWK code with "".

Now just upload GUI pages to your iPhone/iPad and see what is happening. If you have successfully sent your BitWise command to your BCs controller, there will be a tick flag showing that the command sent successfully in the user interface. You can use Location 2 for remote use.

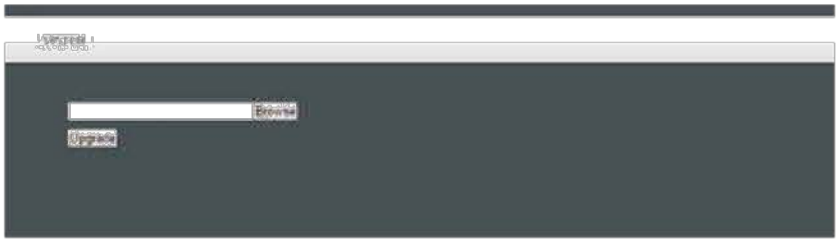
Please note that the gateway will reboot after the ip address is set. Please make sure you have entered the correct DNS setting or if you use DHCP please make sure that your router's DNS setting is correct. You can check the cloud connection in "System Information" page as below:

Please note that if the gateway is not connected to cloud server, it will show "Not connected" in red font. Otherwise it will show "Connected" in green font.

3) Firmware

If you need to upgrade the firmware for some upgrade or bug fixing purpose. You can upgrade the firmware from this sub menu.

I) Click the firmware sub menu, and it will show the below firmware upgrade page.



II) Click the "Browse" button and select the firmware file and then click open. The file path of the firmware file will be shown in the input box.

III) Click the "Upgrade" button and the upgrade will start. After the upgrade finish, it will show the below page.

Firmware upgrade success, the gateway is rebooting ...

Click to go back home page.

IV) You can click the "Click to go back home page" and check for the new firmware version.

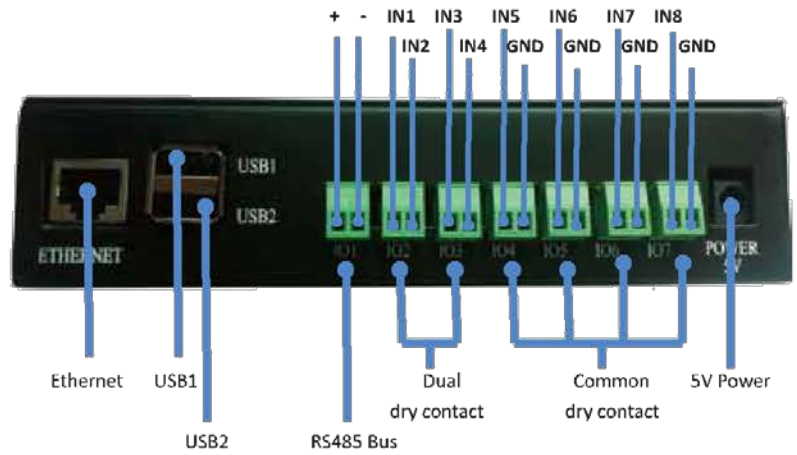
6. BitWise GUI setting

Enabling your BitWise UI program to controlling remotely is very simple, there are only two steps as below:

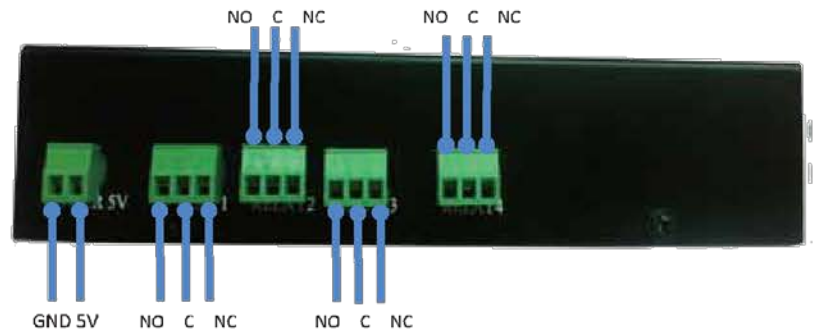
3. Datasheet

Dimension	16.5 cm x 4.0 cm x 8.7 cm (W x H x D, without terminals) 16.5 cm x 4.0 cm x 10.6 cm (W x H x D, Includes terminals)
CPU	700MHz ARM1176JZF x 1
Memory	512MB SDRAM
Power	2.1mm x 5.5mm DC Power Jack, 5V @ 1A DC or 3.5mm phoenix terminals
RS485 Bus	IO1 is RS485, Supports Modbus protocol
IO	IO2-IO8, dry contact input x 8 (below for details)
Ethernet	10/100M ethernet RJ45 connection
Clock	No battery, sync time using internet
USB	2 USB ports, for extension of RS232/RS485 or other USB modules
OS	Debian GNU/Linux 3.18.7

Front:



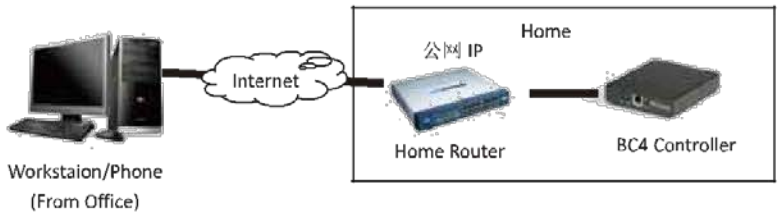
Rear:



4. DDNS compare with Cloud Access

1) DDNS

Below please find the system structure of the way using DDNS for controlling remotely.



DDNS advantage:

A No need extra cloud server.

B Direct from iPhone to your home.

DDNS fault:

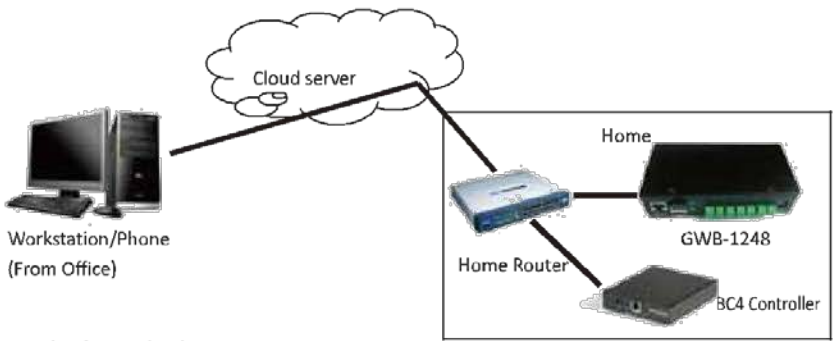
A Need a public ip address in your home, if your network is from a LAN network, it is quite hard to connect from remote to your home's BCs controller.

B Need to do the port forwarding configuration in your router.

C If you are sending one-way commands via BitWise Touch, you don't even know if the command is successfully sent to your home controller or not.

2) Cloud access

We recommend cloud access since it is more stable and least dependence on the network situation. The only thing you need to confirm is that your gateway is able to connect to Internet. Below is the system structure of cloud access.



Cloud access's advantage:

A Low dependence for user, user does not need to have public ip.

B No need to do any configuration(like port forwarding) in your router.

C Very stable, when the user home's wan ip changed, the cloud access is still working while DDNS will cause an interrupt for a period of time.

D We offer a feedback to show if the command is sent to your home controller or not, that makes remote controlling really useful because you know what is happening.

Cloud access's fault:

A Need extra cloud server, will take extra cost.

5. Configuration

GWB-1248 has the default ip address of "192.168.10.20" and you can access its configuration page using web browser(http://192.168.10.20). You will see the below configuration page.

1) System information

This is the first page when you open the configuration page, you can see the detailed information about this gateway including model, firmware version, mac address, gateway cloud key(GWK) and license type.

What is GWK?

GWK is the key code to allow our cloud server to identify the unique id of each gateway, with this GWK filled in our GWB script device, all of the Leviton BitWise commands will be sent from remote to the LAN network where your BCs controllers located.

Please note that you can update the license to grant more features of GWB-1248.

2) IP Setting

When you move your mouse over the "SYSTEM" menu, it will drop down a menu and 3 sub menus: About, IP Settting and Firware.

The about sub menus show the System information page when you have seen first.

By clicking the "IP Setting" sub menu, you can access the page where you can set the ip address of this gateway. It is very easy to do that.