

## LHB-G-BM manual instructions For LHB-G150-A connected

(150 High bay G series connected with Microwave Bluetooth Sensor)

<u>Please Note:</u> The Microwave sensor needs to be reset before use (the light will stay OFF when powered on with the sensor installed).

#### A. RESET THE MICROWAVE SENSOR (Part name: LHB-G-BM)

#### By Magnet:

- 1. Place the magnet to the [reset] position for 4 seconds then remove it
- 2. After 2 seconds, the light will turn flash twice.
- 3. The sensor has now been reset.
- 4. You can now add the light to the device.

**Please note**: You can place the magnet to the "reset" position until the light flashes twice and then stays ON.

#### By LHB-G-RC remote (only be used for resetting)

- 1. Aim the remote controller to the microwave sensor
- 2. Press [RESET] button
- 3. Then press [ON/OFF] button
- 4. About 2 seconds later, the light will flash twice
- 5. You can now add the light to the device.

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#### Please note:

- 1. The reset process duration depends on the Bluetooth performance of the phone.
- 2. If the sensor is still bound to another account and has not been unbound, you need to reset it using the remote before connecting it to your own phone. Otherwise, the connection will not be possible.
- 3. Power on the light unit but light is turned off, and the green indicator on the sensor keeps flashing every second; this means the light was turned OFF in the GEBC APP "settings or on devices page", as the sensor had previously been added to the GEBC APP. If it was set to OFF in the APP, it will remain off continuously. This behaviour is not related to uninstalling the APP. Reset the sensor by remote, otherwise, the connection will not be possible.

#### **Factory default setting:**

Sensors: Brightness: 100%, 1st Time Delay: 5minutes, 2nd Time Delay: 10minutes, Dimming Level: 30%. Motion Sensor Sensitivity: High, Daylight harvesting: OFF, Group Linkage: OFF.

#### B. Download GEBC APP

Search GEBC App. on:

- Google Play for Android
- App Store for iPhone



#### Step to do the job

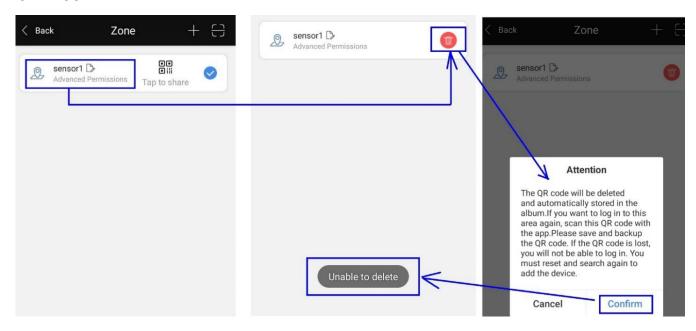
- 1. Add a new ZONE (go to the [More] page, then enter the [Zones] page).
- 2. Tap [+] in [Devices], then search to list up the LIGHTS (maximin 10 devices at a time).
- 3. Tap [+] again to complete adding them to the [Devices] page.



**Please note:** The devices will be removed from the [Devices] page when the app is closed unless [+] is tapped to confirm adding them.

- 4. Group the lights as required.
- 5. Always return to the [Devices] page and swipe down to refresh after configuring the functions.

#### **Open App**



Enter [More], then enter [Zone], then enter [More], you can see [sensor1] already existing.

- Which is the selected zone, it cannot be deleted.
- We suggest creating a second zone, then switching the current zone into the new zone, and after that, the previous zone can be deleted

#### C. Adding Zone and Light

Five Tab pages on GEBC APP



#### **ADDING ZONES**

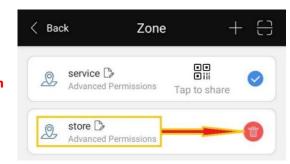
#### Create a new zone

- 1. Open GEBC app
- Click [More] to enter this page, then click [Zones]
- 3. Then click [+] to create new zone name
- 4. Add a new zone name, then [Confirm]
- 5. Choose the zone name
- 6. Then switching the current zone into the new zone, and after that, the previous zone can be deleted.

#### Delete a zone

- 1. Open GEBC APP
- 2. Click [More],
- 3. Choose the zone
- 4. Press and hold the zone you want to delete until the **red bin** appears
- 5. Then click on the **red bin ICON** to delete the zone

**Please note:** The zone will be unable to delete if it is current active.





#### Re-name a zone

- 1. Open GEBC APP
- 2. Click [More],
- 3. Click on the zone you want to re-name
- 4. Then place a new name on the [Change zone name] input
- 5. Then click [Confirm] to confirm the replacement of the zone name.

# Service Advanced Permissions Store Advanced Permissions Change zone name Change zone name Flabel a new zone name here Cancel Confirm

#### **ADDING DEVICES**

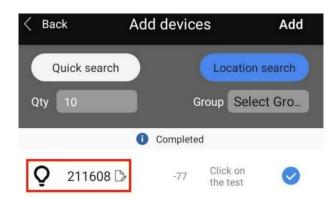
#### Location adding mode

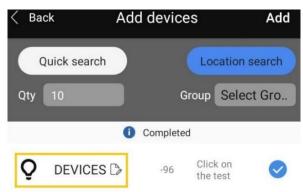
- 1. Enter [Devices] page, then click [+]
- 2. [Location search] is default, tap on [Search]
- Press [Stop searching] after DEVICES have been found.
   <u>Note:</u> Input the quantity being max. 10 devices at a time as recommended).

# Quick search Quick search Qty 10 Group Select Gro.. Completed Click on the test

#### **Quick adding mode**

- 1. Enter [Devices] page, then click [+]
- 2. Tap on [Quick search], then [Search]. The app will now look for Bluetooth devices.
- 3. Tap on [Stop searching] after **DEVICES** have been found.
- 4. After about 15 seconds, depending on the Bluetooth connection of the phone, tap on [Click on the test]/Devices to locate the position of device, the light will flash 5 times to confirm.
- 5. Then rename the device, then click [OK], the light will turn flash twice to confirm. \*\*
- 6. Tap [add] to add the light to the APP, the light will turn flash twice to confirm.
- 7. Do the same to another device, then click [Add]
- 8. Click [Back] to take you back to the [Devices] page and the light will appear on the list





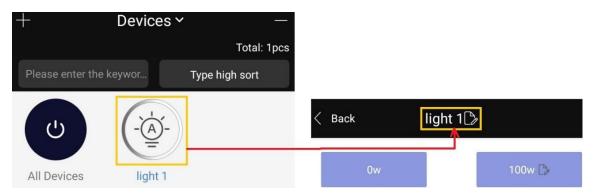
<u>Please note:</u> If a "NUMBER" appears on the [Add Devices] page instead of the word "DEVICES" (as shown above) while the app is in Searching Mode, it means the sensor is still bound to another account.

The sensor needs to reset by the remote before connecting it to your own phone, otherwise, the connection will not be possible.

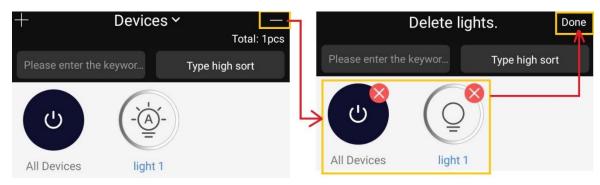


#### \*\* RE-NAME THE LIGHT

- 1. Open [Devices] page
- 2. Press and hold the light you want to re-name
- 3. Click on "Edit" as figure shown below
- 4. Change the light name, then click [Confirm] to confirm the replacement of the light name.



#### D. Delete a Light



#### **DELETE THE LIGHT**

- 1. Click [-] at the top right corner of [Devices] page, select the device to delete
- 2. Tap on [Done] to confirm the light you want to remove from the GEBC APP
- 3. The deleted light will be On and Off once to confirm

**Note:** The device can be searched after being deleted

#### E. Dimming Adjustment and Functions Configuration

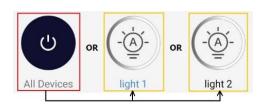
#### Please Note:

Colour temperature can ONLY be adjusted on the LHB-G150-A using the dipswitch located on the light itself, not via the GEBC APP.

#### MANUALLY DIMMING ADJUSMENT

- 1. Open [Devices] page
- 2. Press and hold the light or [All Devices] you want to adjust
- 3. Turn the "knob" on the power button to set the desired brightness level (from bright to dim)

**Please note:** Sensor setting should be set [Manual] mode.



<sup>\*</sup> If you change your mind, **do not** press the **[x]** on the light's button and instead press [Done] or close the APP, the light will be remained on the [Devices] page when the APP open again.



#### F. Sensor Settings

#### SENSOR FEARTURES

#### **Motion sensor (Movement detection)**

- 1. Detects movement of people, animals, or objects.
- 2. Turns lights on when motion is detected and off after no movement is detected for a set time.

#### Daylight Harvesting Sensor (LUX sensor/Light sensor)

- 1. Detects ambient light levels in the environment according.
- 2. The light that only turns on at dusk and stays off during daylight.

#### Photocell sensor (also called a photo sensor, light sensor, or photoelectric sensor)

- 1. Detect ambient light levels
- 1. It measures the natural light in a space and automatically dims or brightens lighting to maintain a constant desired illumination level.

#### **FUNCTIONS**

Mode 1: Manual (Motion sensor and daylight harvesting sensor all off)

Mode 2: Occupancy sensor (Auto on/auto off, daylight harvesting sensor off)

Mode 3: Daylight harvesting sensor (Motion sensor off ,Daylight sensor on)

Mode 4: Occupancy +Daylight Harvesting sensor(Auto on/auto off, daylight harvesting sensor on)

Mode 5: Vacancy sensor(Manual on/auto off, daylight harvesting sensor off)

Mode 6: Vacancy + Daylight Harvesting Sensor (Manual on/auto off, daylight harvesting sensor on)

Mode 7: Photocell Sensor(Photocell Sensor on, Motion Sensor off)

Mode 8: Occupancy +Photocell Sensor(Auto on/Auto off, photocell Sensor on)

Manual
Motion senior and Disylight Harvesting sensor at off
Occupancy Sensor
Auto on/Auto off, Daylight Harvesting sensor off
Daylight Harvesting Sensor
Motion sensor off, Daylight Harvesting sensor on
Occupancy + Daylight Harvesting sensor on
Vacancy Sensor
Manual on/Auto off, Daylight Harvesting sensor on
Vacancy-Daylight Harvesting sensor off
Vacancy-Daylight Harvesting sensor off
Vacancy-Daylight Harvesting sensor off
Assume on/Auto off, Daylight Harvesting sensor on
Photocell Sensor
Photocell Sensor
Photocell sensor
Auto on/Auto off, Daylight Harvesting sensor on

**Mode 1**: Manually turn the lights ON and OFF. All sensors are disabled.

#### Mode 2:

- Daylight Harvesting Sensor is Disable
- Motion Sensor is Enable (Dimmable).
- The lights automatically turn ON and then.
- Automatically detects movement to turn the lights ON, then turn them OFF after the preset time with no motion is detected.

#### **❖** Feature:

- Motion sensor setting:
- Sensing the 1st stage brightness and delay time should be set for sensing.
- 2<sup>nd</sup> stage dimming level should be set if necessary.
- Motion sensor sensitivity should be set to Low, Middle or High level
- Click [Done] to confirm.
- Click [Back] 3 times to come back [Devices] then flick down this page to Refreshing

#### Mode 3:

- Motion sensor is Disable.
- Daylight Harvesting Sensor is Enable.
- The daylight sensor detects light levels according. You can set the lights to Low LUX for dusk and High LUX for dawn, depending on how dark or bright you want the light to activate.
- ❖ Feature:





- Daylight Harvesting setting:
- Current brightness level set
- Brightness Change Rate to Low, Middle or High level
- LUX Precision Setting to Low, Middle or High level
- Click [Done] to confirm.
- Click [Back] 3 times to come back [Devices] and swipe down to refresh after configuring the functions

#### Mode 4:

- Daylight Harvesting Sensor is Enable.
- Automatically turn the lights ON and OFF (Dimmable).
- Motion Sensor is Enable (the lights will turn ON when movement is detected)
- The daylight sensor detects light levels according. You can set the lights to Low LUX for dusk and High LUX for dawn, depending on how dark or bright you want the light to activate.
- **❖** Feature:
- Motion sensor setting:
  - Sensing the 1st stage brightness and delay time should be set for sensing.
  - 2<sup>nd</sup> stage dimming level should be set if necessary.
  - Motion sensor sensitivity should be set to Low, Middle or High level
  - Click [Next] to enter the page below

#### Daylight Harvesting setting:

- Current brightness level set
- Brightness Change Rate to Low, Middle or High level
- LUX Precision Setting to Low, Middle or High level
- Click [Done] to confirm all set.
- Click [Back] 3 times to come back [Devices] and swipe down to refresh after configuring the functions.

#### Mode 5:

- Motion Sensor is Enable.
- Daylight Harvesting Sensor is Disable
- Manually turn the lights ON
- Automatically turn them OFF after the preset time configured (the dimming level can be adjusted).

#### ❖ Feature:

- Motion sensor setting:
- Sensing the 1<sup>st</sup> stage brightness and delay time should be set for sensing.
- 2<sup>nd</sup> stage dimming level should be set if necessary.
- Motion sensor sensitivity should be set to Low, Middle or High level
- Click [Done] to confirm.
- Click [Back] 3 times to come back [Devices] then flick down this page to Refreshing

#### Mode 6:

- Daylight Harvesting Sensor is Enable.
- Brightness/Dimming level Enable. Need to be preset if necessary. \*\*
- Motion Sensor is activated during the time the lights are turned ON.
- Manually turn the lights ON.
- The daylight sensor detects light levels according. You can set the lights to Low LUX for dusk and High LUX for dawn, depending on how dark or bright you want the light to activate. The lights will then automatically turn OFF at the preset time.

\*\*<u>Please note:</u> If the light has been set to another mode, should be readjustment the Brightness, Dimming level, and Time delay sliders again, it will flash once because it is switching between modes (brightness and dimming) automatically, otherwise this mode won't work.

#### **❖** Feature:

#### Motion sensor setting:

- Sensing the 1st stage brightness and delay time should be set for sensing.
- 2<sup>nd</sup> stage dimming level should be set if necessary.
- Motion sensor sensitivity should be set to Low, Middle or High level
- Click [Done] to confirm.
- Click [Back] 3 times to come back [Devices] then flick down this page to Refreshing





#### Daylight Harvesting setting:

- Current brightness level set
- Brightness Change Rate to Low, Middle or High level
- LUX Precision Setting to Low, Middle or High level
- Click [Done] to confirm
- Click [Back] 3 times to come back [Devices] and swipe down to refresh after configuring the functions

#### Mode 7:

- Photocell sensor is Enable.
- Motion sensor is Disable.
- ❖ Feature:

#### ❖ Photocell Setting:

- LUX level will set manually: it responds quickly to natural light changes if set at 100LUX,
- Set Low, Middle, and High of light sensitivity mode.
- The maximum brightness the light will reach is 90% of its full output at "High-End Trim"
- The minimum brightness is limited to 20% output at "Low-End Trim"
- [The maximise LUX is 2500] show on APP. (daylight time)
- Click [Done] to confirm.
- Click [Back] 3 times to come back [Devices] and swipe down to refresh after configuring the functions

#### Mode 8:

- · Automatically turn the lights ON and OFF.
- Motion Sensor is Enable with dimmable.
- Set 100 LUX, it responds quickly to natural light changes,
- Set Low, Middle, and High of light sensitivity mode.
- Automatically turn the lights OFF after the preset time configured, if no
- **❖** Feature:

#### Motion sensor setting:

- Sensing the 1st stage brightness and delay time should be set for sensing.
- 2<sup>nd</sup> stage dimming level should be set if necessary.
- Motion sensor sensitivity should be set to Low, Middle or High level
- Click [Next] to enter the page below

#### Photocell Setting:

- LUX level will set manually: it responds quickly to natural light changes if set at 100LUX,
- Set Low, Middle, and High of light sensitivity mode.
- The maximum brightness the light will reach is 90% of its full output at "High-End Trim"
- The minimum brightness is limited to 20% output at "Low-End Trim"
- [The maximise LUX is 2500] show on APP. (daylight time)
- Click [Done] to confirm.
- Click [Back] 3 times to come back [Devices] and swipe down to refresh after configuring the functions

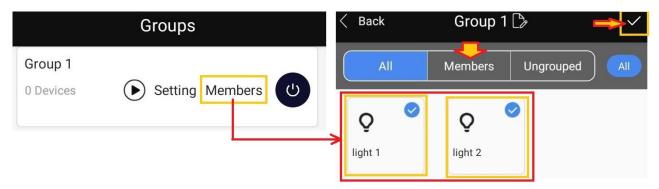
PLEASE NOTE: go back to [Devices] page then flick the page down to "Refreshing" the APP when Mode is configured.

#### **G. Linkage Function**

When the light is not triggered by motion, but other lights in the same group sense movement and turn on the linkage setting of this group, the other light will be triggered to the linkage brightness. The linkage brightness is calculated in proportion to the normal working brightness.

**Please note:** The maximum Bluetooth Microwave Sensor range between sensor is 60M.





#### **GROUP LIGHTING**

- 1. Enter [Groups] page.
- 2. Choose a group (start from Group 1 to)
- 3. Click [Members] to add lights to the group.
- 4. Select the lights to include, then click the [Tick] icon to confirm.
- 5. The lights will flash to confirm.
- 6. To verify, go back to the [Groups] page, click switch the lights on the group will be turning to on to confirm.

#### **UNGROUP LIGHTING**

- 1. Enter [Groups] page.
- 2. Open [Members] in the group that contains the lights you want to remove.
- 3. Enter [Members] "untick" the lights you want to ungroup.
- 4. Tap [Ungroup] pad
- 5. Then tap the [Tick] icon.
- 6. The selected lights will flash to confirm.
- 7. Back to [Groups] page.
- 8. Open [Setting] page
- 9. Click on [Motion] icon \infty
- 10. Enable [Linkage Function]
- 11. You can change the brightness to 25% (depending on how bright the following lights you want), then click [Done] icon to confirm. The lights will flash twice to confirm.
- 12. Click [Done]
- 13. Click [Back]
- 14. Go to [Devices] to enter [Devices] page and swipe down to refresh after configuring the functions

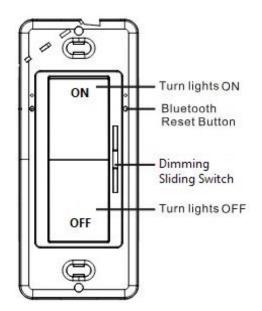
#### H. Dimmer Wall Switch

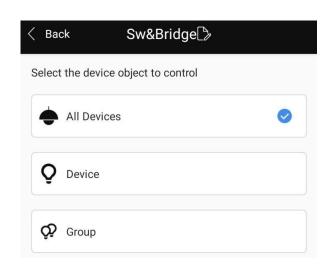
Part name: LHB-G-BD

#### Adding the Wall Switch to GEBC APP

- 1. Open GEBC APP
- 2. Enter [Control] page
- 3. Insert the pin to the reset button hold of the LHB-G-BD press and hold for 5 seconds to reset switch until the red indicator
- 4. Click [+] on GEBC APP
- 5. Click [Search] at [Location search] page
- 6. Press [Stop searching] after [Sw&Bridge] have been found.
- 7. Enter [Sw&Bridge] page (allowing to rename the control switch by enter [Edit] page
- 8. Enter the [Sw&Bridge] page the
- 9. Choose [All Devices], [Device], or [Group] depending on which device or group you want to control.







### Light Fade to Dim/Off Rate This feature always used in offices with wall switches

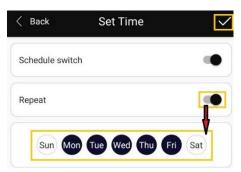
#### I. Schedule (Timming to turn the lights off then on automatically)

- 1. Open GEBC app
- 2. Click [More] to enter this page, then click [Zones]
- 3. Click on [Schedule]
- 4. Click [+]

#### • Schedule switch is Enable

- Set the time to turn the lights **OFF** (ex: time set at 14hours and 08 minutes, that means 02:08PM), lights will turn off and won't turn on even if there is motion
- Enter [Edit associated action list]
- Choose [Devices], [Device group] or [Scene] to set the schedule time, then [Tick] to confirm
- Enter the [Device/Group] has been selected at the {Select] page to change their mode to [Switch off]
- Click [Tick] to confirm, the light will flash to confirm.
- Then it will show the date and time to turn the lights OFF on the schedule list
- Set the time to turn the lights **ON** (ex: time set at 14hours and 09 minutes, that means 02:09PM)
- Choose [Devices], [Device group] or [Scene] which has been set the time OFF to set the schedule time, then
   [Tick] to confirm
- Enter the [Device/Group] has been selected at the [Select] page
- Change the mode to [Light on/Auto] or [Dimming]
- Click [Tick] to confirm.
- The schedule list will then display the date and time for the lights to turn to ON.

**Please note:** Repeat is Disable and you can swipe the sliding button to Enable to repeat the settings.





#### J. Lighting Delivery

- 1. Open GEBC APP
- 2. Click [More]
- 5. Enter [Data Synchronisation]
- 6. Click [Upload] then click [Download]
- 7. [Configuration Download Successful]
- 8. Click [Zones]
- 9. Choose a zone
- 10. Choose the permission according to your demand
- 11. Click [Save to your album]
- 12. [Picture saved successful]
- 13. Find it in your **Gallery**, then scan it to locate where the light is installed.

#### K. Unuse the features below

- 1. Fade-to-Off-Rate: LHB-G-BD required (Dimmable Wall Switch)
- 2. Data acquisition (DAQ): BRI819-G-BLE-GE required adding gateway (more information about power consumption please refer to the USB Gateway GT-001-GE)