

***CB2470***

***Bluetooth Wireless  
Audio Adapter***

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***User's Guide***

## ***FCC Caution***

1. The 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.
2. FCC RF Radiation Exposure Statement: The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.
3. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
4. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

## ***FCC Statement***

This device is intended only for OEM integrators under the following

- 1) The antenna must be installed such that 20 cm is maintained between antenna and users, and
- 2) The transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 conditions above are met, further transmitter test will not required. However, the OEM integrator is still responsible for testing end-product for any additional compliance requirements required with module installed (for example, digital device emissions, PC peripheral requirements, etc.).

## ***Important Note***

In the event that these conditions can not be example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid the FCC ID can not be used on the final product. In these circumstances, OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

## ***End Product Labeling***

This transmitter module is authorized only for use in device where antenna may be installed such that 20 cm may be maintained between antenna and users (for example access points, routers, wireless ADSL and similar equipment). The final end product must be labeled in a area with the following: “Contains TX FCC ID: I4L-MS6855”.

## ***Manual Information for End Users***

The end user must not have manual instructions to remove or install device. The user manual for end users must include the following information in a prominent location: “IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located operating in conjunction with any other antenna or transmitter.” as a result of e-mail transmission.”

## ***Important Safety Precautions***

Always read and follow these basic safety precautions carefully when handling any piece of electronic component.

1. Keep this *User's Guide* for future reference.
2. Keep this equipment away from humidity.
3. Lay this equipment on a reliable flat surface before setting it up.
4. The openings on the enclosure are for air convection hence protects the equipment from overheating.
5. All cautions and warnings on the equipment should be noted.
6. Never pour any liquid into the opening that could damage or cause electrical shock.
7. If any of the following situations arises, get the equipment checked by a service personnel:
  - Liquid has penetrated into the equipment
  - The equipment has been exposed to moisture
  - The equipment has not work well or you can not get it work according to User's Manual
  - The equipment has dropped and damaged
  - If the equipment has obvious sign of breakage
8. DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT UNCONDITIONED, STORAGE TEMPERATURE ABOVE 60°C OR BELOW -20°C, IT MAY DAMAGE THE EQUIPMENT.

# 1

# Introduction

## >>> 1.1 Bluetooth Wireless Audio Adapter

The **Bluetooth Wireless Audio Adapter - CB2470** (hereafter called CB2470), compliant with Bluetooth Specification v1.2, is a high-efficiency wireless audio adapter for MP3 players, mobile phones and PCs. The transmission distance can be up to 30 meters.

With CB2470, you can use MP3 players, mobile phones and PCs wirelessly through Bluetooth connection.

The CB2470 is compatible with above devices without drivers needed. Just plug it into the to line-out and pair with your Bluetooth earphone, then you can get rid of the limitaion of the lines..

## >>> 1.2 How CB2470 Works

**Step 1:** Press and hold the Power/Pair button for 3-secs irregardless of whether unit is in Stand-By mode or Pair and Connect mode. The Bicolor LED will then alternate between blue and green.

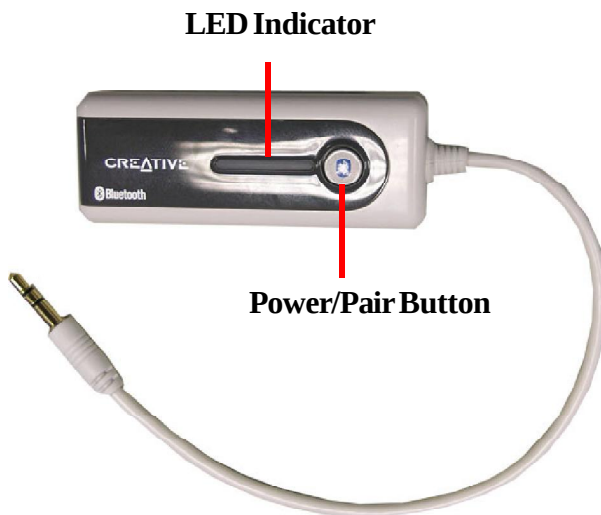
**Step 2:** When paired successfully, the LED will convert to blue colour and will start to blink once every 5-sec. Blue LED will blink once every 10-sec when audio streaming and once every 5-sec when not.

When pairing fails, LED will switch to green (Standby Mode) two minutes later and will auto power off after 3 mins.

If paired device is not within range, LED will turn to green colour and will blink once every 5 sec.



## >>> 1.3 Product View



### **Turning on the audio adapter**

Press and hold the Power/Pair button for five seconds. LED will light up for 0.3 sec. Thereafter the audio adapter will auto-detect and connect to the paired devices.

### **Turning off the audio adapter**

Press and hold the Power/Pair button for five seconds. Thereafter, all LEDs will then turn off after lighting up for 0.3 sec.

## >>> 1.4 Specifications

### 1.4.1 General

|                       |                                                                                                  |
|-----------------------|--------------------------------------------------------------------------------------------------|
| Power Source          | 1 x AAA Battery                                                                                  |
| Storage Temperature   | 0°C - 70°C                                                                                       |
| Operating Temperature | 5°C - 55°C                                                                                       |
| Firmware Upgrade      | To be upgraded at Factory Level via contact points located at Batter Chamber.                    |
| Low Battery Indicator | Green LED will blink twice rapidly in succession for every 5 sec interval.                       |
| LED                   | One Bi-Colour LED (Blue - Device in Bluetooth operation/Green - Standby stage) or Separated LEDs |
| Buttons               | Power / Pair Button                                                                              |
| Auto-Power Off        | Device will auto-power off after 3 minutes in standby mode.                                      |

### 1.4.2 Audio Features

|                         |                                  |
|-------------------------|----------------------------------|
| Audio Sampling          | 44.1 kHz, 16 bit                 |
| Line input gain control | AGC (Disable)                    |
| Impedance               | 16 Ohms to 32 Ohms @ 3.5 mm jack |
| Stereo Line             | 2v Vp-p                          |

### 1.4.3 Bluetooth Interface

|          |                                                                           |
|----------|---------------------------------------------------------------------------|
| Standard | Bluetooth Specification v1.2                                              |
| Profile  | A2DP                                                                      |
| RF Power | Bluetooth Class 2, (PCB caters for class 1; 18 dBm Power Amp. Foot Print) |
| Chipset  | CSR BC03 or equivalent SubBand Codec                                      |
| Distance | 30 meters                                                                 |

### 1.4.4 Play Time

|                 |         |
|-----------------|---------|
| Audio Streaming | 10 Hrs  |
| Standby         | 200 Hrs |