Mini Bluetooth

Network LED Controller

mini-BTnetwork
mini-BTnetwork-ext

User Manual

- 30-meter Coverage Radius
- Dynamic Synchronization
- Single-color to RGBW Models
- Unlimited Receivers
- Wireless RF Remote Control
- Unlimited Wireless Repeaters
- Bluetooth Smartphone Contol
- Simple Setup and Operation

Environmental Lights

Introduction

The Mini Bluetooth Network LED Controller serves as the hub of the wireless network. It can be linked with smartphones by Bluetooth as well as independent RF wireless remote controllers. Settings are wirelessly synchronized across all slave LED receivers. The mini-BTnetwork-ext is a wireless repeater to extend the wireless signal range of the Mini Bluetooth Network Controller.

The main housing of both products has a built-in antenna and can cover a 30-meter radius. Users can easily pair an unlimited number of slave LED receivers or signal repeaters to a Network LED Controller using the remote control.

The mini-BTnetwork is compatible with four separate smartphone apps to control RGBW, RGB, white adjustable or single color LEDs.

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1. Power Input Jack
Both products require a 12VDC power supply. Power can be supplied from the included adapter or any other 12VDC supply. The controller will enter pairing mode upon power-up. (See #7 for pairing details)
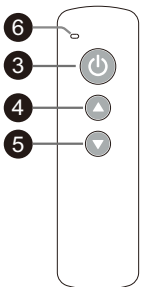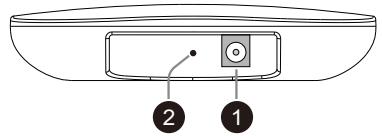
2. Indicator Light

The indicator shows the status of the main unit. It indicates the following:
Static on: normal operation.
Fast flashing: remote or slave pairing mode is activated.
Slow flash 3 times: remote or slave receiver pairing success.
Short single flash: command executed.

3. On/Off key
Press this key to turn the unit on or off. The unit will return to its previous state when powered-on (power-on memory).

4/5. Navigate Saved Scenes
Use these keys to cycle through saved settings. Saved settings can be modified in the app.

6. Remote indicator
This will flash when transmitting a signal. It will blink slowly when the remote battery is low and needs replacement.

Operation

7. Smartphone pairing
Mini-BTnetwork connects to smartphones via Bluetooth and must be paired to enable control through the app. At power-on, the controller will enter pairing mode for 90 seconds. In this window, it will be visible on the smartphone's Bluetooth settings page. It will show up as a device with name 'LED-XXX', where XXX is the serial number of the controller.

The smartphone and mini-BTnetwork can only be paired during the first 90 seconds after power-on.

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8. Bluetooth Auto Re-connect

By default, the app is set to automatically re-connect with the most recently paired mini-BTnetwork controller when in range. This setting can be disabled on the app's settings page while the controller and smartphone are connected.

When the auto re-connect feature is set to off, the user can manually connect to the controller at any time by tapping the device name on the smartphone's Bluetooth settings page. After the initial pairing, the mini-BTnetwork does not need to be in the 90 second pairing window.

9. RF Remote Pairing

The RF remote can power the controller on/off and cycle through saved settings from the app. It can also be used to pairing the slave LED receivers to the controller. One mini-BTnetwork unit can be paired with 5 RF remotes. New RF remotes ship un-paired. To pair a new RF remote to a mini-BTnetwork:

1. Make sure that remote control function is enabled in the app.
2. Unplug the power from the mini-BTnetwork for more than 5 seconds and power on again.
3. Within 5 seconds of power-on, press the on/off key and down arrow key together on the remote.
4. The indicator light will flash 3 times to show the remote has been paired.

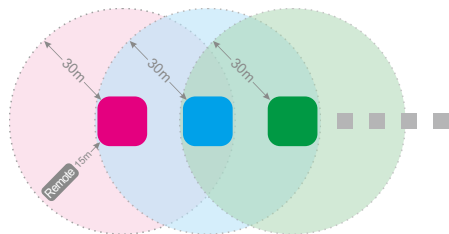### 10. Pair Slave LED Receivers to a mini-BTnetwork

To pair slave LED receivers to a mini-BTnetwork controller, perform the following steps with the controller on:
1. Power-off the receiver for at least 5 seconds and power it back up.
2. Press the on/off key and down arrow within 5 seconds of the receiver powering on.
3. The indicator on the receiver will flash 3 times to confirm the pairing.

mini-BTnetwork-ext Wireless Repeater

11. Using the Wireless Repeater

The mini-BTnetwork-ext is a wireless signal repeater used extend the signal range of mini-BTnetwork controllers. The controller covers a 30-meter radius. For greater range, an extender can be placed within that radius. Each extends the range by a 30-meter radius centered around itself. Extender units can be cascaded to infinitely extend the system range.

12 Pairing the repeater

Pairing a mini-BTnetwork-ext is the same as pairing a slave receiver. Refer to the steps in number 10.

Specifications

Working Voltage	12VDC
Power Consumption	<1W
Remote Control Frequency	433.92MHz
Smartphone Connection	Bluetooth 2.1 and up
Remote Control Distance	>15m in open area
Smartphone Control Distance	>10m in open area
Max Remote Amount	5pcs
Slave Synchronization Frequency	2.4GHz ISM band
2.4GHz Transmit Power	<20dBm
Slave Synchronization Distance	>30m in open area
Max. Number of Slaves	Infinite
Power-Off Memory	Yes

App Download

The apps can be found by searching the name "Color Easy".

	iOS App	Android App
Single Color		
White Adjustable		
RGB		
RGBW		