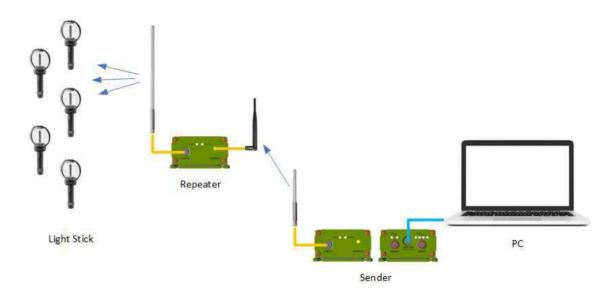
BigHit Repeater User Manual

This is the product manual regarding system configurations, product specifications, installation, and operation of senders and repeaters for controlling BigHit light sticks. The accessory specifications are subject to change in accordance with the developer's circumstances after a discussion with BigHit.



Rev 1.1 2021. 06. 18 Laonz

1. System Configuration



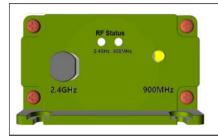
2. Production Specifications

Item		Description	Water- Proof
RF	Frequency	918.02 MHz, Sender to Repeater Communication	
		2.48 GHz, Repeater to Repeater Communication	
	Antenna	918.02 MHz, 2.48 GHz Patch Antenna	
	Connector	918.02 Mhz, SMA(SubMiniature version A) type Male	
		2.48 GHz, N type Male	
I/O Port	RF Connector	SMA Type (918.02 MHz), N type (2.48GHz)	Support
	Power & Data Connector	mini USB AB Type, USB 2.0 Receptacle	Support
	LED	Battery State = White Color, 2ea	Support
		Battery Capacity = White Color, 4ea	
		Mode = White Color Button LED 1ea	
		Power = White Color Button LED 1ea	
		RF State = White Color, 2ea	
	Button	Power = Push/Push Latch type LED Button	Support
		Mode = Push/Push Latch type LED Button	
Case	Size	106.3 (W) x 62 (H) x 110 (D) mm	Support
	Material	Aluminum	
	Color	Body (Silver), Frame (Metal Gray)	
Power	Specification	DC 5V/1A ± 10%	
	Connector	mini USB AB Type, USB 2.0 Receptacle	
	Battery	Rechargeable Battery, 3.7V/5000mA Li-Polymer	
Environmental	Operating temperature	0°C to 40°C	
	Operating humidity	90% maximum relative humidity, non-condensing	

3. Name and Feature of Each Part



Item / Description	Note
Power State = CHG / PG	
Battery Capacity = 0~20(LOW)/40/60/80~100(MAX) (%)	
Power = On (LED On) / Off (LED Off)	
Mode = Sender (LED On) / Repeater (LED Blink)	
Mini USB = Power & Data Communication	



Item / Description	Note		
RF Status 900MHz = 918MHz SMA Male Connector			
RF Status 2.4GHz = 2.48GHz N type Male Connector			
2.4GHz, 900MHz LED = Data Communication (Blink)			

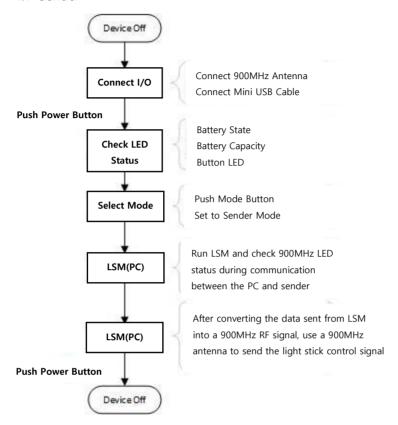
4. Device Configuration



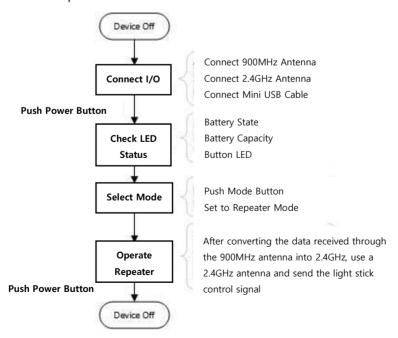
Sender & Repeater mini USB cable & Antenna cable 2.48GHz Antenna (2pcs) 918MHz Antenna (2pcs)

4. Instructions for Use

4.1 Sender



4.2 Repeater



4.3 I/O Connection

Connect 900MHz Antenna

Connect 2.4GMHz Antenna : Connect 2.4GHz antenna = Use a cable to connect the 2.4GHz antenna

Connect miniUSB Cable: Connect miniUSB cable: Connect the miniUSB plug to the USB A-type plug USB 2.0 cable to enable communication between the PC and sender.

** Only connect the cable in Sender Mode. Do not connect while in Repeater Mode.

- Power On/Off

Power On: Press the power button to power on the sender. Check if the button LED is on.

Power Off: Press the power button for at least 500msec while the sender is on.

The button LED will turn off and the sender will power off.

- Select Mode

Press the Mode button and choose between Sender or Repeater Mode.

Sender Mode = Button LED On Repeater Mode = Button LED Blink

- Check Status

LED Power Status

CHG = Check the LED status.

(Charging = On; if charging is complete or defective = Off)

PG = Check the power input status of the LED. (Normal = On; Abnormal = Off)

LED_Battery Capacity

Check the remaining battery based on whether the 4 LEDs are on or off. If the remaining battery is at 40% or less (if only 1 or 2 LED lights are on), use after charging the sender.

LED_900MHz, 2.4GHz

While RF is operating = LED Blink RF in standby = LED Off

5. Precautions

- Use a dedicated antenna and cable while in use
- Use a dedicated adapter while charging
- Be careful not to drop the device or cause external shock.
- Use the device under permitted environmental conditions.
- If there is a burnt smell coming from the device, immediately stop using the device.
- In the event of a radio shadow area during a concert, use a dedicated directional antenna and cable.
- Limit use of the device to 24 hours or less.
- The battery capacity guarantee period is limited to 6 months.

FCC Compliance Statement

This 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.

FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC ID: 2AD5K-BHR